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Results of Open Testing for the Program to Assess the Reliability of Emerging Nondestructive Techniques

Manuscript Completed: December 2016
Date Published: August 2017

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ABSTRACT

The U.S. Nuclear Regulatory Commission (NRC) has established the Program to Assess the Reliability of Emerging Nondestructive Techniques (PARENT) whose goal was to investigate the performance of current emerging and perspective novel nondestructive examination (NDE) procedures and techniques to find flaws in nickel-alloy welds and base materials. This was performed by conducting a series of open and blind international round-robin tests on a set of nickel alloy piping components that include large-bore dissimilar metal welds (LBDMW), small-bore dissimilar metal welds (SBDMW), and bottom-mounted instrumentation (BMI) penetration welds. The project was split into open and blind testing portions for the purpose of separating the evaluation of novel techniques that are at a stage of relative immaturity for field testing and which were implemented by teams that may not have significant experience in conducting field examinations (open testing) from the evaluation of more established techniques implemented by commercial inspection vendors (blind testing). This report is focused on documenting the open testing activity and results. The motivation for evaluating emerging NDE techniques includes the desire to identify more effective methods for detecting and characterizing rapidly growing forms of degradation, such as primary water stress corrosion cracking (PWSCC) and interdendritic stress corrosion cracking (IDSCC).

PARENT was a follow-on to the Program for Inspection of Nickel Alloy Components (PINAC), which was based on the Bilateral International Agreements with participants and the in-kind contribution of resources from organizations of Finland, Japan, Republic of Korea, Sweden, and the United States of America to evaluate several nondestructive techniques for detection and characterization of PWSCC and IDSCC in SBDMW and BMI components. In February 2012, the NRC conducted new agreements with VTT Technical Research Centre of Finland, Nuclear Regulation Authority of Japan, Korea Institute of Nuclear Safety, Swedish Radiation Safety Authority, and Swiss Federal Nuclear Safety Inspectorate to establish PARENT to conduct a series of round-robin tests on SBDMWs, BMIs, and LBDMWs. The open testing portion of PARENT was performed with knowledge of true-state information in the open test blocks provided to teams conducting tests. As a result, no detection performance analyses were performed on open test data. Thus, the evaluation of open test data is based on statistical analyses of sizing data and qualitative review of data response images.

FOREWORD

Leakage events due to primary water stress corrosion cracking (PWSCC) or interdendritic stress corrosion cracking (IDSCC) have been recorded in the United States and internationally. This cracking has been observed at several weld locations in reactor coolant systems including penetrations to the reactor vessel (e.g., control rod drive mechanism [CRDM] penetrations, bottom-mounted instrumentation [BMI] penetrations, and nozzle penetrations), and nozzle penetrations on steam generator and pressurizer components. Inservice inspections (ISI) are conducted at nuclear power plants to detect cracks before leakage occurs. The effectiveness of ISI is dependent on several factors such as the frequency with which periodic examinations occur, human factors, the performance capability of the nondestructive examination (NDE) procedures and techniques used, etc. Leakage events, both domestic and internationally, have indicated a need for additional research to evaluate the performance of NDE procedures and techniques for the detection and sizing of PWSCC and IDSCC flaws in reactor components.

In February 2012, the U.S. Nuclear Regulatory Commission executed agreements with organizations in Finland, Japan, Republic of Korea, Sweden, Switzerland, and the United States to establish the Program to Assess the Reliability of Emerging Nondestructive Techniques (PARENT) to investigate the performance of current and emerging NDE techniques to find flaws in nickel-alloy welds and base material. This assessment was performed by conducting a series of open and blind international round-robin tests on a set of mockups. The project was split into open and blind testing to separate the evaluation of novel techniques implemented by nonqualified teams from the evaluation of more established techniques implemented by commercial inspection service providers. The objective of the blind testing was to obtain quantitative empirical estimates of the performance of contemporary NDE inspection procedures and techniques used within the industry to determine which may be more reliable for detecting and accurate sizing PWSCC or IDSCC flaws. The objective of the open testing was to evaluate the performance of novel NDE procedures and techniques that have not yet reached the maturity level for field testing. The motivation for evaluating novel NDE procedures and techniques was to explore their potential for improving the performance of NDE in comparison to established techniques. Analysis of the open test data included a quantitative evaluation of sizing performance and qualitative evaluation of signal response images.

The purpose of this report was to publish the results of the sizing analyses and the qualitative evaluation of signal response images for data collected in open testing for PARENT. The open test assessed several novel and non-standard NDE procedures and techniques such as nonlinear ultrasonic testing (NLUT) and advanced phased array UT (ADVPAUT). Some highlights obtained from the results of the sizing analysis include observations that ADVPAUT and NLUT procedures exhibited more consistent depth sizing error over the range of flaw depths sampled in comparison to established PAUT procedures. Further, sub-harmonic NLUT procedures exhibited better overall depth sizing performance than higher-harmonic NLUT procedures. Highlights of the qualitative analysis of data response images included the observation that identifying stress corrosion crack tip signals with established PAUT procedures can be difficult and that crack tip signal identification by image analysis is, in part, a subjective determination. Further, for both PAUT and ADVPAUT procedures, data response images illustrate the difficulty in distinguishing noise from SCC crack tip responses. The results obtained in open testing can be considered optimistic to what would be anticipated under blind test conditions or field conditions. Thus, the PARENT open test results have illustrated that NDE procedures and techniques are limited to less than ideal performance by their fundamental capability and that overall ISI effectiveness could benefit from NDE technology advancements

that improve upon fundamental capability. Finally, the data generated from PARENT open testing provides an understanding of the state of art in NDE capabilities and can be used to evaluate emerging inspection techniques in the future.

TABLE OF CONTENTS

ABSTRACT	iii
FOREWORD	v
LIST OF FIGURES	xi
LIST OF TABLES	xix
EXECUTIVE SUMMARY	xxiii
ACKNOWLEDGMENTS	xxvii
ACRONYMS AND ABBREVIATIONS	xxix
1 INTRODUCTION	1-1
1.1 Laboratory Grown SCC Specimens	1-2
1.2 Open NDE Techniques Report	1-2
1.3 Atlas Information Tool	1-3
1.4 PARENT Organization	1-3
1.5 Organization of Report	1-3
2 TEST BLOCK DESCRIPTIONS	2-1
2.1 Full Circumference Large Bore and Small Bore Dissimilar Metal Weld Test Blocks	2-1
2.2 Partial Circumference Large Bore Dissimilar Metal Weld Test Blocks	2-4
2.3 Flat Bar Test Blocks	2-5
2.4 Bottom-Mounted Instrumentation Test Blocks	2-7
2.5 Simulated Flaw Types	2-9
2.5.1 Laboratory-Grown SCC (P12, P28, P29, P31, P32, and P38)	2-10
2.5.2 Thermal Fatigue Cracks (P1, P4, and P5)	2-14
2.5.3 Weld Solidification Cracks (P7, P37, and P41)	2-14
2.5.4 Electrical Discharge Machined Notches (P1, P12, P42, P21, P22, P23, and P24)	2-15
2.5.5 Mechanical Fatigue Cracks (P30)	2-15
2.5.6 Welding Defects (P37)	2-15
2.6 True-State Determination	2-15
3 TECHNIQUE DESCRIPTIONS	3-1
3.1 Ultrasonic Techniques	3-1
3.1.1 Through Transmission of Longitudinal Waves	3-1
3.1.2 Phased Array Ultrasonic Testing	3-3
3.1.3 Three-Dimensional Synthetic Aperture Focusing Technique	3-4
3.1.4 Phased Array Time Reversal Technique	3-6
3.1.5 Phased Array Asymmetrical Beam Time of Flight Diffraction	3-7
3.1.6 Phased Array Twin Probe	3-9
3.1.7 Subharmonic Phased Array	3-10
3.1.8 Large Amplitude Excitation Subharmonic	3-13
3.1.9 Higher Harmonic Ultrasonic Technique	3-13

3.1.10	Nonlinear Resonant Ultrasound Spectroscopy	3-15
3.1.11	Guided Ultrasonic Waves	3-16
3.1.12	Laser Ultrasound Visualization	3-18
3.1.13	Ultrasound Infrared Thermography.....	3-18
3.2	Eddy Current Techniques.....	3-20
3.2.1	Exciter-Pickup Eddy Current Techniques	3-20
3.2.2	Controlled Excitation ECT	3-21
3.2.3	Orthogonal Coil Array Eddy Current Technique.....	3-23
3.2.4	Pulsed Excitation Eddy Current Technique.....	3-23
3.3	Other Techniques.....	3-24
3.3.1	Microwave Near Field Microscope.....	3-24
3.3.2	Radiography Techniques.....	3-25
4	DATA OVERVIEW.....	4-1
4.1	Data Reporting	4-1
4.2	Records Collection Overview Summary	4-5
4.3	Procedure Type Categorization	4-5
4.4	Scoring Procedure Used for PARENT Open Testing.....	4-5
4.5	Substitution for X1, X2, Y1, and Y2 Indication Fields.....	4-9
4.6	Multiple Indications Associated with One Flaw	4-11
4.7	Analysis of PARENT Open Round Robin Data.....	4-12
5	DATA ANALYSIS RESULTS	5-1
5.1	DMW Depth Sizing Results	5-1
5.1.1	Depth Sizing Regression Plots for ADVPAUT Procedure Types.....	5-5
5.1.2	Depth Sizing Regression Plots for NLUT Procedure Types.....	5-9
5.1.3	Depth Sizing Regression Plots for PAUT Procedure Types.....	5-11
5.1.4	Depth Sizing Regression Plots for RT Procedure Types.....	5-13
5.1.5	Depth Sizing Regression Plots for UIR Procedure Types	5-15
5.1.6	Depth Sizing Regression Plots for Conventional UT Procedure Types	5-17
5.2	DMW Length Sizing Results.....	5-19
5.2.1	Length Sizing Regression Plots for ADVPAUT Procedure Types	5-21
5.2.2	Length Sizing Regression Plots for NLUT Procedure Types.....	5-22
5.2.3	Length Sizing Regression Plots for PAUT Procedure Types	5-23
5.2.4	Length Sizing Regression Plots for Conventional UT Procedure Types	5-25
5.2.5	Length Sizing Regression Plots for ECT Procedure Types.....	5-26
5.2.6	Length Sizing Regression Plots for MM Procedure Types	5-27
5.3	BMI Data Analysis Results	5-28
5.4	Indication Plots.....	5-28

6	ANALYSIS OF RESULTS	6-1
6.1	Comparison of ADVPAUT and PAUT Procedure Types	6-1
6.2	Comparison of NLUT with PAUT and ADVPAUT Procedure Types.....	6-7
6.3	Analysis of FB Test Block Results	6-11
6.4	Comparison of Linear and Sectorial PAUT by Team 122.....	6-15
6.5	UIR Results	6-17
6.6	RT, Conventional UT, and ECT Results	6-18
6.7	Analysis of Data Response Images from FB Test Blocks	6-21
6.7.1	Comparison of PAATOFD.29.2 Responses from P42, P30, and P32.....	6-21
6.7.2	Comparison of SAFT.17 Responses from P42, P30, and P32.....	6-24
6.7.3	PAUT.122.1 Responses from SCC Flaws.....	6-31
6.7.4	Team 22 SAFT and PATRT Responses from P29.....	6-38
6.7.5	SAFT.17 Depth Measurement on P46.....	6-40
6.8	Procedures with Sparsely Populated Datasheets	6-44
6.9	Discussion of Test Block Appropriateness.....	6-48
6.10	Techniques to Consider for Blind Testing	6-49
7	CONCLUSIONS AND FUTURE WORK	7-1
8	REFERENCES	8-1
APPENDIX A	11th ICNDE PAPERS	A-1
APPENDIX B	SUMMARY TABLE OF OPEN NDE TECHNIQUES	B-1
APPENDIX C	SUMMARIES OF OPEN NDE TECHNIQUES.....	C-1
APPENDIX D	TEST BLOCK INFORMATION	D-1
APPENDIX E	TRUE-STATE SUMMARY	E-1
APPENDIX F	DEPTH SIZING RESULTS.....	F-1
APPENDIX G	LENGTH SIZING RESULTS	G-1
APPENDIX H	INDICATION PLOTS	H-1

LIST OF FIGURES

Figure 1.1	Organization Chart for Steering Committee and Task Groups	1-3
Figure 2.1	Coordinate System Definition for SBDMW Test Blocks P41 and LBDMW Test Block P37	2-2
Figure 2.2	Coordinate System Definition for SBDMW Test Blocks P1.....	2-3
Figure 2.3	Coordinate System Definition for SBDMW Test Blocks P4.....	2-4
Figure 2.4	Coordinate System Definition and Illustration of LBDMW Partial Circumference Test Block P12.....	2-5
Figure 2.5	Coordinate System Definition and Illustration of LBDMW Partial Circumference Test Blocks P23 and P24.....	2-5
Figure 2.6	Coordinate System Definition, Dimensions, and Illustrations of FB Test Blocks P28, P29, P30, P31, P32, P42, and P46	2-6
Figure 2.7	Coordinate System Definition, Dimensions, and Illustrations of FB Test Block P38	2-6
Figure 2.8	Coordinate System Used for BMI Test Blocks: P5 and P7	2-7
Figure 2.9	Depiction of Configuration for BMI Test Blocks P21 and P22 with Coordinate System and Dimensions Labeled	2-8
Figure 2.10	Depiction of Configuration for BMI Test Blocks P5 and P7 with Labeled Dimensions	2-9
Figure 2.11	Depiction of the Approach Used to Produce a Laboratory-Grown SCC in Test Block P12.....	2-11
Figure 2.12	Flowchart of the Process Used to Produce a Laboratory-Grown PWSCC/IDSCC	2-11
Figure 2.13	Photograph and Depiction of FB Test Block Cut Out into Standard Fracture Mechanic Specimen from Reactor Pressure Vessel Material.....	2-12
Figure 2.14	Depiction of laboratory Autoclave Set-up for Growing SCC Flaws in FB Specimens under BWR and PWR Conditions.....	2-12
Figure 2.15	Typical Micro-Fractographic Appearance of Laboratory-Grown SCC in FB Specimens	2-13
Figure 2.16	Uncracked Ligaments and Finger-Like Local Laboratory SCC Crack Growth in Destructively Analyzed FB Specimen	2-14
Figure 3.1	Illustration of Mechanized Scanning Through-Transmission Longitudinal Pitch/Catch Technique.....	3-2
Figure 3.2	The C-scan Shows the Received Amplitude Color Coded (0% full screen height, FSH [<i>white</i>] to 100% FSH [<i>red</i>].....	3-2
Figure 3.3	Illustration of Time Delay Sequencing of Excitation of PAUT Transducer Elements to Achieve Beam Steering and Focusing.....	3-3
Figure 3.4	PAUT Data Represented as A-scan (<i>top left</i>), C-scan (<i>top right</i>), B-scan (<i>bottom left</i>), and D scan (<i>bottom right</i>).....	3-4

Figure 3.5	2D Illustration of SAFT Correction for Focusing Distortion in Ultrasonic Inspections (<i>left</i>); B-scan Illustrating Distortion Caused by Beam Focusing Effects (<i>right</i>)	3-5
Figure 3.6	Implementation of 3D SAFT Using a Matrix Array Transducer. Individual elements are excited in sequence, while all elements “listen” for echoes.....	3-6
Figure 3.7	Illustration of the Time Reversal Technique Concept for Focusing Ultrasonic Energy	3-7
Figure 3.8	Schematic Illustration of the PAATOFD Technique.....	3-8
Figure 3.9	Data from Multiple Scan Angles and Depths of Focus are Synthesized in PAATOFD to Help Discriminate Crack Tip Signals from Noise.....	3-8
Figure 3.10	Schematic Illustration of the PATP Technique	3-9
Figure 3.11	Data from Multiple Scan Angles and Depths of Focus are Synthesized in PATP to Help Discriminate Crack Tip Signals from Noise	3-10
Figure 3.12	Illustration of the Crack Face “Clapping” Phenomena that is the Basis for Subharmonic Generation when Elastic Waves are Applied to Tight Cracks	3-11
Figure 3.13	Illustration of SPACE Implementation in SAW Mode to Assess Detection and Length Sizing Capability and in Bulk Wave Mode to Assess Depth Sizing Capability	3-12
Figure 3.14	Illustration of SHPA Data Analysis for Length and Depth Sizing of Flaws	3-12
Figure 3.15	Depiction of the LASH Technique Implementation	3-13
Figure 3.16	Illustration of Higher Harmonic Generation Because of the CAN Phenomenon	3-14
Figure 3.17	Illustration of HHUT Implementation in PE (<i>left</i>) and TR (<i>right</i>) Modes.....	3-14
Figure 3.18	Resonance Frequency Shift in a Compact Tension Specimen in the Early Stage of Crack Initiation (<i>top</i>) and a Compact Tension Specimen with Crack Length of 7.0 mm (<i>bottom</i>)	3-15
Figure 3.19	Schematic Drawing of Possible Piezoelectric Sensor Configuration.....	3-16
Figure 3.20	Illustration of GUW Formation and Propagation in Test Material.....	3-16
Figure 3.21	Guided Wave Dispersion Curves on Cylindrical Coordinate: (a) phase velocity dispersion curve; (b) group velocity dispersion curve	3-17
Figure 3.22	Schematic of the Envisioned LUV System	3-18
Figure 3.23	Illustration of the UIR Concept	3-19
Figure 3.24	UIR Image of a Test Specimen with Crack.....	3-19
Figure 3.25	Depiction of a Single Coil Eddy Current Probe with an Alternating Current Excitation, Induced Magnetic Fields, and Induced Eddy Currents. Disturbance of eddy current flow can be caused by existence of a defect.....	3-21
Figure 3.26	Schematic Illustration of an Eddy Current Probe with Separate Coils for Field Excitation and for Signal Detection.....	3-21

Figure 3.27	Illustration Showing that the Phase Response of CEECT has a Significant Correlation to Flaw Depth over a Large Range of Flaw Depth Values, Including for Deep Cracks	3-22
Figure 3.28	Illustration of the CEECT Probe for Measuring the Depth of Flaws	3-22
Figure 3.29	Illustration of Orthogonal Coil Pair and Relative Orientation to Surface Crack Profiles	3-23
Figure 3.30	Comparison of Pulsed Excitation for PECT (<i>left</i>) to Continuous Sine-Wave Excitation for Conventional ECT (<i>right</i>) and Illustration of the Frequency Spectrum Associated with Each Type of Excitation Source	3-24
Figure 3.31	Illustration of the MM Technique for Crack Detection	3-25
Figure 3.32	Illustration of a Radiographic Examination and Interaction of Source X-rays with Density Discontinuities such as Flaws	3-26
Figure 3.33	Illustration Depicting the Sensitivity of Conventional Radiography Signal to Planar Flaw Orientation	3-27
Figure 4.1	Technique Datasheets for Techniques ET400Hz and TOFD.Ax for Fictitious Inspection 12.P89.1	4-3
Figure 4.2	Technique Datasheet for Technique TOFD.Circ for Fictitious Inspection 12.P89.1	4-4
Figure 4.3	Inspection Summary Datasheet for Fictitious Inspection 12.P89.1	4-4
Figure 4.4	Diagram Illustrating How Procedures are Classified by Procedure Types for Data Analysis Purposes	4-8
Figure 4.5	Illustration of Tolerance (δX and δY) Applied Flaw True-State (in red) Dimensions for the Purpose of Scoring in PARENT	4-9
Figure 4.6	Depiction of Indication Plot Illustrating 2-D Representation of Test Block. The red filled rectangles represent the true-state (actual flaws), while red empty rectangles surrounding the flaws depict the scoring tolerance. Indications are shown as black empty rectangles.	4-9
Figure 4.7	Inspection Summary Datasheet for Inspection of Test block P1 by Procedure LASH.18 showing unpopulated X1, X2, Y1 and Y2 fields	4-10
Figure 4.8	Indication Plot for Procedure LASH.18 Applied to Test Block P1 in PARENT Open Testing (X – Y view)	4-11
Figure 4.9	Indication Plot for Procedure LASH.18 Applied to Test Block P1 in PARENT Open Testing (X – Z view)	4-11
Figure 4.10	Indication Plot Illustrating Two Indications Intersecting the Region Bounded by the Tolerance Box	4-12
Figure 4.11	Illustration of Tolerance Divided Between Flaw and Multiple Indications Intersecting the Region Bounded by the Flaw Tolerance Box	4-12
Figure 4.12	Indication Plot for Procedure HHUT.27 Inspection of Test Block P1	4-14
Figure 4.13	Length Sizing Regression for ADVPAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)	4-14

Figure 4.14	Depth Sizing Regression (in mm) for Procedure PAUT.131.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)	4-15
Figure 4.15	Depth Sizing Regression for NLUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)	4-16
Figure 4.16	Depth Sizing Regression (in mm) for Procedure HHUT.30 on SBDMW Test Blocks in PARENT Open Testing (I.D. access – w/ FB test blocks).....	4-16
Figure 5.1	Depth Sizing Regression for ADVPAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks).....	5-6
Figure 5.2	Depth Sizing Regression for ADVPAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks).....	5-6
Figure 5.3	Depth Sizing Regression for ADVPAUT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access).....	5-7
Figure 5.4	Depth Sizing Regression for ADVPAUT Procedures on FB Test Blocks in PARENT Open Testing (I.D. access)	5-7
Figure 5.5	Depth Sizing Regression for ADVPAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)	5-8
Figure 5.6	Depth Sizing Regression for ADVPAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)	5-8
Figure 5.7	Depth Sizing Regression for NLUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)	5-9
Figure 5.8	Depth Sizing Regression for NLUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)	5-10
Figure 5.9	Depth Sizing Regression for NLUT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)	5-10
Figure 5.10	Depth Sizing Regression for PAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks).....	5-11
Figure 5.11	Depth Sizing Regression for PAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)	5-12
Figure 5.12	Depth Sizing Regression for PAUT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)	5-12
Figure 5.13	Depth Sizing Regression for PAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)	5-13
Figure 5.14	Depth Sizing Regression for RT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks).....	5-14
Figure 5.15	Depth Sizing Regression for RT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks).....	5-14
Figure 5.16	Depth Sizing Regression for RT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)	5-15
Figure 5.17	Depth Sizing Regression for UIR Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks).....	5-16

Figure 5.18	Depth Sizing Regression for UIR Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)	5-16
Figure 5.19	Depth Sizing Regression for Conventional UT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks).....	5-17
Figure 5.20	Depth Sizing Regression for Conventional UT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)	5-18
Figure 5.21	Depth Sizing Regression for Conventional UT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)	5-18
Figure 5.22	Length Sizing Regression for ADVPAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)	5-21
Figure 5.23	Length Sizing Regression for ADVPAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)	5-22
Figure 5.24	Length Sizing Regression for NLUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)	5-23
Figure 5.25	Length Sizing Regression for PAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)	5-24
Figure 5.26	Length Sizing Regression for PAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)	5-24
Figure 5.27	Length Sizing Regression for PAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)	5-25
Figure 5.28	Length Sizing Regression for Conventional UT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)	5-25
Figure 5.29	Length Sizing Regression for ECT Procedures on SBDMW Test Blocks in PARENT Open Testing (I.D. access)	5-26
Figure 5.30	Length Sizing Regression for ECT Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)	5-27
Figure 5.31	Length Sizing Regression for MM Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)	5-27
Figure 6.1	Depth Sizing Regression for ADVPAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks).....	6-2
Figure 6.2	Depth Sizing Regression for PAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks).....	6-3
Figure 6.3	Depth Sizing Regression for ADVPAUT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access).....	6-3
Figure 6.4	Depth Sizing Regression for PAUT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)	6-4
Figure 6.5	Length Sizing Regression for PAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)	6-6
Figure 6.6	Length Sizing Regression for ADVPAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)	6-7

Figure 6.7	Depth Sizing Regression Plot for HHUT.27.1 Applied to SBDMW Test Blocks (w/o FB test blocks) with O.D. Access	6-8
Figure 6.8	Depth Sizing Regression Plot for SHPA.6.1 Applied to SBDMW Test Blocks (w/o FB test blocks) with O.D. Access	6-9
Figure 6.9	Depth Sizing Regression Plot for LASH.18 Applied to SBDMW Test Blocks (w/o FB test blocks) with O.D. Access	6-9
Figure 6.10	Depth Sizing Regression Plot for HHUT.27.2 Applied to FB Test Blocks with O.D. Access	6-10
Figure 6.11	Depth Sizing Regression Plot for SHPA.6.3 Applied to FB Test Blocks with O.D. Access	6-10
Figure 6.12	Depth Sizing Regression Plot for LASH.18 Applied to FB Test Blocks with O.D. Access	6-11
Figure 6.13	Depth Sizing Regression for Procedure PAUT.122.1 (Linear) for FB Test Blocks by O.D. Access.....	6-16
Figure 6.14	Depth Sizing Regression for Procedure PAUT.122.2 (Sectorial) FB Test Blocks by O.D. Access.....	6-16
Figure 6.15	UIR Image of FB Test Block P29 (view from side surface).....	6-17
Figure 6.16	UIR Image of FB Test Block P29 (view from side surface).....	6-17
Figure 6.17	UIR Image of FB Test Block P29 (view of surface from which crack initiates)	6-17
Figure 6.18	Length Sizing Regression Plot for Procedure AECT.33 Applied to SBDMW Test Blocks with I.D. Access	6-19
Figure 6.19	Length Sizing Regression Plot for Procedure ECT.16 Applied to SBDMW Test Blocks with I.D. Access	6-20
Figure 6.20	Length Sizing Regression Plot for Procedure AECT.33 Applied to LBDMW Test Blocks with I.D. Access.....	6-20
Figure 6.21	PAATOFD.29.2 Inspection of P42 (EDM) from O.D.	6-21
Figure 6.22	PAATOFD.29.2 Inspection of P42 (EDM) from I.D.	6-22
Figure 6.23	PAATOFD.29.2 Inspection of P30 (MFC) from O.D.	6-22
Figure 6.24	PAATOFD.29.2 Inspection of P30 (MFC) from I.D.	6-23
Figure 6.25	PAATOFD.29.2 Inspection of P32 (SCC) from O.D.	6-23
Figure 6.26	PAATOFD.29.2 Inspection of P32 (SCC) from I.D.	6-24
Figure 6.27	Data Images of Responses Obtained by SAFT-17 on Test Block P42 with EDM Notch.....	6-25
Figure 6.28	Data Images of Responses Obtained by SAFT-17 on Test Block P30 with MFC Flaw	6-26
Figure 6.29	Data Images of Responses Obtained by SAFT-17 on Test Block P32 with SCC Flaw	6-27
Figure 6.30	Indication Depth Profile Obtained by SAFT-17 on Test Block P42 with EDM Notch	6-28

Figure 6.31	Indication Depth Profile Obtained by SAFT-17 on Test Block P30 with MFC Flaw	6-29
Figure 6.32	Indication Depth Profile Obtained by SAFT-17 on Test Block P32 with SCC Flaw	6-30
Figure 6.33	Indication Plot for Procedure SAFT.17 Applied to Test Block P42 in PARENT Open Testing (X – Z view)	6-30
Figure 6.34	Indication Plot for Procedure SAFT.17 Applied to Test Block P30 in PARENT Open Testing (X – Z view)	6-31
Figure 6.35	Indication Plot for Procedure SAFT.17 Applied to Test Block P32 in PARENT Open Testing (X – Z view)	6-31
Figure 6.36	Data Image Response for PAUT.122.1 Inspection of SCC Flaw in P28 Viewed from the Right Side of Weld. The Inspection was performed by linear scanning with longitudinal wave modes from TRL probe at 60°. Two possible crack tip signals are highlighted by arrows in the image.	6-32
Figure 6.37	Data Image Response for PAUT.122.1 Inspection of SCC Flaw in P28 Viewed from the Right Side of Weld. The Inspection was performed by linear scanning with longitudinal wave modes from TRL probe at 50°. The likely crack tip signal is identified with the white circle.	6-33
Figure 6.38	Data Image Response for PAUT.122.1 Inspection of SCC Flaw in P32 Viewed from the Right Side of Weld. The inspection was performed by linear scanning with longitudinal wave modes from TRL probe at 50°. The white circle indicates that it is difficult to separate the tip response from noise.	6-34
Figure 6.39	Data Image Response for PAUT.122.1 Inspection of SCC Flaw in P32 Viewed from the Left Side of Weld. The inspection was performed by linear scanning with longitudinal wave modes from TRL probe at 55°. The white arrow highlights a weak signal considered to be the crack tip response.	6-35
Figure 6.40	Data Image Response for PAUT.122.1 Inspection of SCC Flaw in P32 Viewed from the Left Side of Weld. The inspection was performed by linear scanning with longitudinal wave modes from TRL probe at 45°. The white circle highlights the signal considered to be the crack tip response.	6-36
Figure 6.41	Data Image Response for PAUT.122.1 Inspection of MFC Flaw in P30 Viewed from the Left Side of Weld. The inspection was performed by linear scanning with longitudinal wave modes from TRL Probe at 50°. The white circle highlights the signal considered to be the tip response.	6-37
Figure 6.42	Data Image Response for PAUT.122.1 Inspection of EDM Notch in P42 Viewed from the Right Side of Weld. The inspection was performed by linear scanning with longitudinal wave modes from TRL probe at 50°. The white circle highlights the signal considered to be the tip response.	6-38
Figure 6.43	Image of Response for Team 22 SAFT Response with L-waves	6-39

Figure 6.44	Image of Response for Team 22 SAFT Response with S-waves	6-39
Figure 6.45	Image of Response for Team 22 PATRT Response with L-waves	6-39
Figure 6.46	Image of Response for Team 22 PATRT Response with S-waves.....	6-40
Figure 6.47	Coordinate System Definition, Dimensions, and Illustrations of FB Test Block P46	6-40
Figure 6.48	Data Images of Responses Obtained by SAFT-17 on Test Block P46 from y-position 103.6 mm	6-41
Figure 6.49	Indication Depth Profile Obtained by SAFT-17 on Test Block P46 from y-position 103.6 mm.....	6-42
Figure 6.50	Data Images of Responses Obtained by SAFT-17 on Test Block P46 from y-position 120 mm	6-43
Figure 6.51	Indication Depth Profile Obtained by SAFT-17 on Test Block P46 from y-position 120 mm	6-44
Figure 6.52	Example of Datasheet Submission for Procedures MM.28.1 and MM.28.2 with Non-Numerical Data in X, Y, and Z Fields for Indications.....	6-45
Figure 6.53	Example of Datasheet Submission for Procedure GUW.21 with Blank X, Y, and Z Fields for Indications.....	6-46
Figure 6.54	Example of Datasheet Submission for Procedures PECT.11 with Non- Numerical Data in X, Y, and Z Fields for Indications	6-47
Figure 6.55	Example of Datasheet Submission for Procedures NRUS.11 with Non- Numerical Data in X, Y, and Z Fields for Indications	6-48

LIST OF TABLES

Table 1.1	Summary of Members of the PARENT Steering Committee, NDE Task Group, Atlas Task Group, and Invigilator/DAG.....	1-4
Table 2.1	Summary of Categories into which Test Blocks for Open Testing are Classified.....	2-1
Table 2.2	Summary of Dimensions for LBDMW Full Circumference Test Blocks.....	2-2
Table 2.3	Summary of Dimensions for SBDMW Full Circumference Test Blocks.....	2-3
Table 2.4	Summary of Dimensions for LBDMW Partial Circumference Test Blocks.....	2-5
Table 2.5	Tabulation of BMI Test Block P5 and P7 Dimensions.....	2-9
Table 2.6	Summary of Flaw Simulation Methods Used for Each Test Block and Quantities of Each Type of Simulated Flaw.....	2-10
Table 4.1	Definitions of Data Fields for “Technique Datasheets” and “Inspection Summary Datasheets”.....	4-2
Table 4.2	Number of Inspection Summary Records by Procedure and Test Block Type.....	4-6
Table 4.3	Number of Inspection Summary Records for Procedure Types and Block Types by Access.....	4-7
Table 4.4	Summary of Number of Flaw Observations (NOBS) for Different Flaw Types in Each Test Block Type.....	4-7
Table 4.5	Summary of Number of Flaw Observations (NOBS) by Flaw Orientation in Each Test Block Type.....	4-7
Table 5.1	Depth Sizing Results for Procedure Types Applied to SBDMW Test Blocks with O.D. Access w/ FB Test Blocks.....	5-1
Table 5.2	Depth Sizing Results for Procedure Types Applied to SBDMW Test Blocks with O.D. Access w/o FB Test Blocks.....	5-2
Table 5.3	Depth Sizing Results for Procedure Types Applied to SBDMW Test Blocks with O.D. Access (only FB test blocks).....	5-2
Table 5.4	Depth Sizing Results for Procedure Types Applied to SBDMW Test Blocks with I.D. Access (only FB test blocks).....	5-2
Table 5.5	Depth Sizing Results for Procedure Types Applied to LBDMW Test Blocks with O.D. Access.....	5-2
Table 5.6	Depth Sizing Results for Procedure Types Applied to LBDMW Test Blocks with I.D. Access.....	5-3
Table 5.7	Depth Sizing Results for Procedures Applied to SBDMW Test Blocks with O.D. Access w/ FB Test Blocks.....	5-3
Table 5.8	Depth Sizing Results for Procedures Applied to SBDMW Test Blocks with O.D. Access w/o FB Test Blocks.....	5-4
Table 5.9	Depth Sizing Results for Procedures Applied to SBDMW Test Blocks with O.D. Access (only FB blocks).....	5-4

Table 5.10	Depth Sizing Results for Procedures Applied to SBDMW Test Blocks with I.D. Access (only FB test blocks)	5-5
Table 5.11	Depth Sizing Results for Procedures Applied to LBDMW Test Blocks with O.D. Access	5-5
Table 5.12	Depth Sizing Results for Procedures Applied to LBDMW Test Blocks with I.D. Access	5-5
Table 5.13	Length Sizing Results for Procedure Types Applied to SBDMW Test Blocks with O.D. Access	5-19
Table 5.14	Length Sizing Results for Procedure Types Applied to SBDMW Test Blocks with I.D. Access.....	5-19
Table 5.15	Length Sizing Results for Procedure Types Applied to LBDMW Test Blocks with O.D. Access	5-19
Table 5.16	Length Sizing Results for Procedure Types Applied to LBDMW Test Blocks with I.D. Access.....	5-20
Table 5.17	Length Sizing Results for Procedures Applied to SBDMW Test Blocks with O.D. Access	5-20
Table 5.18	Length Sizing Results for Procedures Applied to SBDMW Test Blocks with I.D. Access	5-20
Table 5.19	Length Sizing Results for Procedures Applied to LBDMW Test Blocks with O.D. Access	5-20
Table 5.20	Length Sizing Results for Procedures Applied to LBDMW Test Blocks with I.D. Access	5-21
Table 5.21	Length Sizing Results for Procedures Applied to BMI Test Blocks with J-Groove Weld Surface Access	5-28
Table 6.1	Summary of Depth Sizing RMSEs for ADVPAUT and PAUT Techniques Applied to SBDMW and LBDMW Test Blocks with O.D. and I.D. Access.....	6-2
Table 6.2	Summary of Depth Sizing Performances for ADVPAUT Procedure Types Applied to SBDMW Test Blocks with O.D. Access w/o FB Test Blocks.....	6-5
Table 6.3	Summary of Depth Sizing Performances for ADVPAUT Procedure Types Applied to FB Test Blocks with O.D. Access	6-5
Table 6.4	Summary of Depth Sizing Performances for PAUT Procedure Types Applied to SBDMW Test Blocks with O.D. Access w/o FB Test Blocks.....	6-5
Table 6.5	Summary of Depth Sizing Performances for PAUT Procedure Types Applied to FB Test Blocks with O.D. Access	6-5
Table 6.6	Summary of Length Sizing RMSEs for ADVPAUT and PAUT Techniques Applied to SBDMW and LBDMW Test Blocks with O.D. Access.....	6-6
Table 6.7	Summary of Length Sizing Performances for ADVPAUT Procedure Types Applied to SBDMW Test Blocks with O.D. Access w/o FB Test Blocks.....	6-6

Table 6.8	Summary of Length Sizing Performances for PAUT Procedure Types Applied to SBDMW Test Blocks with O.D. Access w/o FB Test Blocks.....	6-6
Table 6.9	Comparison of Depth Sizing Performances for FB Test Blocks.....	6-12
Table 6.10	Depth Sizing Results for P28 by Procedure Type for I.D. Access	6-12
Table 6.11	Depth Sizing Results for P29 by Procedure Type for I.D. Access	6-12
Table 6.12	Depth Sizing Results for P30 by Procedure Type for I.D. Access	6-12
Table 6.13	Depth Sizing Results for P31 by Procedure Type for I.D. Access	6-12
Table 6.14	Depth Sizing Results for P32 by Procedure Type for I.D. Access	6-13
Table 6.15	Depth Sizing Results for P38 by Procedure Type for I.D. Access	6-13
Table 6.16	Depth Sizing Results for P42 by Procedure Type for I.D. Access	6-13
Table 6.17	Depth Sizing Results for P28 by Procedure Type for O.D. Access.....	6-13
Table 6.18	Depth Sizing Results for P29 by Procedure Type for O.D. Access.....	6-13
Table 6.19	Depth Sizing Results for P30 by Procedure Type for O.D. Access.....	6-14
Table 6.20	Depth Sizing Results for P31 by Procedure Type for O.D. Access.....	6-14
Table 6.21	Depth Sizing Results for P32 by Procedure Type for O.D. Access.....	6-14
Table 6.22	Depth Sizing Results for P38 by Procedure Type for O.D. Access.....	6-15
Table 6.23	Depth Sizing Results for P42 by Procedure Type for O.D. Access.....	6-15
Table 6.24	Summary of Depth Sizing Performances for Procedures PAUT.122.1 and PAUT.122.2	6-15

EXECUTIVE SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) has established the Program to Assess the Reliability of Emerging Nondestructive Techniques (PARENT) whose goal is to investigate the performance of current emerging and perspective novel nondestructive examination (NDE) procedures and techniques to find flaws in nickel-alloy welds and base materials. This was performed by conducting a series of open and blind international round-robin tests on a set of piping components that include large-bore dissimilar metal welds (LBDMW), small-bore dissimilar metal welds (SBDMW), and bottom-mounted instrumentation (BMI) penetration welds. In February 2012, the NRC entered into agreements with VTT Technical Research Centre of Finland, Nuclear Regulation Authority of Japan (NRA), Korea Institute of Nuclear Safety (KINS), Swedish Radiation Safety Authority (SSM), and Swiss Federal Nuclear Safety Inspectorate (ENSI) to establish PARENT to conduct a series of round-robin tests on SBDMWs, BMIs, and LBDMWs. PARENT activities were split into blind testing and open testing activities. Blind testing was performed in PARENT to quantitatively estimate the performance of established NDE methods in the nuclear power industry and the results from blind testing are documented in another report that is under preparation. This report is focused on documenting the open testing activity and results.

Open testing was performed on a set of test blocks with true-state information that was open and provided to teams performing the testing. The objective of open testing was to evaluate the performance of emerging NDE techniques, which are still in relatively early stages of development. The performances of emerging NDE techniques were evaluated based on quantitative sizing analyses and qualitative analysis of data response images. The motivation for evaluating emerging NDE techniques includes the desire to identify more effective methods for detecting and characterizing rapidly growing forms of degradation, such as primary water stress corrosion cracking (PWSCC) and interdendritic stress corrosion cracking (IDSCC). Inspections with emerging NDE techniques were carried out by a variety of organizations including universities, industry organizations, and government research organizations.

This report describes open testing performed in PARENT including a description of the test blocks used, an overview of the NDE techniques applied, and analysis of the data. Data were collected for procedures incorporating novel NDE techniques on SBDMW, LBDMW, and BMI test blocks. There were 226 inspections performed on 4 BMI test blocks, 4 LBDMW test blocks, and 11 SBDMW test blocks. Some significant conclusions drawn for the results documented in this report include:

- A general trend was observed for oversizing shallow flaws and undersizing deep flaws with the exception of advanced phased array ultrasonic testing (ADVPAUT) procedure types and non-linear ultrasonic testing (NLUT) procedure types based on sub-harmonic techniques, which exhibit a more consistent error over the range of flaw depths considered.
- NLUT procedures incorporating sub-harmonic techniques exhibited better depth sizing performance than NLUT procedures incorporating higher harmonic techniques based on overall root mean square error (RMSE) and regression analysis.
- ADVPAUT procedure types did not exhibit better overall depth sizing accuracy than phased array ultrasonic testing (PAUT) procedure types in this study based on RMSE.

- Overall, NLUT procedure types did not exhibit better overall depth sizing accuracy in comparison to ADVPAUT and PAUT procedure types based on RMSE.
- PAUT procedures exhibited a more consistent length sizing error over the range of flaw lengths considered for SBDMW test blocks in comparison to ADVPAUT, which exhibited a tendency to oversize short flaws and undersize long flaws.
- Better depth sizing performance was observed on flat bar (FB) test blocks (most with laboratory-grown SCC flaws) for ADVPAUT, NLUT, and conventional UT procedure types in comparison to SBDMW test blocks (with weld solidification cracks). PAUT procedure types exhibited better depth sizing performance on SBDMW test blocks in comparison to FB test blocks.
- Eddy current testing (ECT) exhibits a more consistent length sizing error over the range of flaw lengths considered for SBDMW test blocks in comparison to "Advanced" ECT procedures (AECT.33), which tend to oversize short flaws and undersize long flaws.
- Depth sizing data for ultrasound infrared thermography (UIR) was obtained in a way that would not be practical in a field environment. However, the results indicated a capability for flaw detection and flaw length sizing.
- Data response images for ADVPAUT techniques illustrate that SCC flaws result in weaker crack tip responses in comparison to mechanical fatigue crack (MFC) and electro-discharge machine (EDM) notch flaws.
- Data response images for PAUT techniques illustrate that identifying crack tip signals with PAUT can be difficult and that crack tip signal identification by image pattern analysis is, in part, a subjective determination.
- Data response images for ADVPAUT and PAUT techniques illustrate difficulty in distinguishing noise from crack tip responses.
- Tip diffraction signals with low signal-to-noise ratio (SNR) were easier to detect under open testing conditions with flaw information provided to test participants. Detecting tip diffraction signals with low SNR under blind test conditions will be more challenging.

Based on the results documented in this report and the conclusions outlined above, the following recommendations can be made:

- Blind testing of some of the open test procedures described in this report could be conducted based on the open testing results to obtain an estimate of detection performance and more realistic estimates of sizing performance. The specific techniques for which blind testing is recommended are summarized below:
 - ADVPAUT
 - PAATOFD.29.0
 - PAATOFD.29.1
 - PAATOFD.29.2
 - PAATOFD.29.3
 - PATP.29

- PATRT.22
- SAFT.17
- NLUT
 - SHPA.6.1
 - SHPA.6.2
 - SHPA.6.3
 - LASH.18
 - HHUT.27.1
 - HHUT.27.2
 - HHUT.30
- ECT
 - ECT.7
 - AECT.33
 - ECT.6
- Procedures UIR.20 and LUV.170 incorporated stand-off inspection techniques that have the potential for deployment during reactor operation. Evaluation of these procedures should be based on test pieces subject to relevant field conditions.
- NLUT procedure types, which incorporated techniques that are sensitive to degradation in early stages (i.e., before large cracks form), should be evaluated using test blocks with simulated early degradation to better evaluate their potential.
- Procedure GUW.21 had difficulty detecting flaws due to the geometrical limitations of the test blocks used in PARENT. Future efforts to evaluate GUW testing should ensure the dimensions of the test blocks are sufficient so that boundaries do not significantly influence the response.

ACKNOWLEDGMENTS

There have been significant contributions made by a number of people and organizations to accomplish this work. The authors express appreciation to Iouri Prokofiev, Stephen Cumblidge, and Aladar Csontos, of the NRC for their leadership in helping to organize and start the Program to Assess the Reliability of Emerging Nondestructive Techniques (PARENT) program; to David Rudland of the NRC for his continued commitment to PARENT; to Stephen Cumblidge for continuing to provide technical and philosophical input to PARENT; and to Iouri Prokofiev for his continuous leadership of PARENT. Brett Braatz was the original Project Manager for PARENT and was responsible for the complex task of organizing and executing test block shipping and data collection. The authors also acknowledge the tireless efforts of the PARENT invigilators—Tommy Zetterwall (Europe), Ichiro Komura (Japan), and Kyung-cho Kim (South Korea)—who reviewed inspection procedures and monitored the work of inspection teams in their respective regions. The author also acknowledges contributions to the open testing portion of PARENT from the following organizations:

- Organizations from Japan
 - Nuclear Regulation Authority (NRA)
 - Ultrasonic Materials Diagnosis Laboratory (UMDL)
 - Institute of Nuclear Safety System, Incorporated (INSS)
 - Tohoku University
 - Nagoya University
 - Toyama University
 - Japan Power Engineering and Inspection Corporation (JAPEIC)

- Organizations from Europe
 - Swedish Radiation Safety Authority (SSM)
 - Swiss Federal Nuclear Safety Inspectorate (ENSI)
 - Swedish Qualification Center (SQC)
 - Swiss Association for Technical Inspections, Nuclear Inspectorate (SVTI)
 - VTT Technical Research Centre of Finland Ltd.
 - Alstom Power Products [Switzerland]
 - Swiss Federal Laboratories for Materials Science and Technology (EMPA)
 - Chalmers Institute of Technology [Sweden]
 - Paul Scherer Institute (PSI) [Switzerland]

- Organizations from Korea
 - Korea Institute of Nuclear Safety (KINS)
 - Korea Plant Service KPS
 - Korea Atomic Energy Research Institute (KAERI)
 - Korea Research Institute of Standards and Science (KRISS)
 - Pusan National University (PNU)
 - Sungkyunkwan University (SKKU)
 - Hanyang University (HYU)

- Organizations from the USA
 - Nuclear Regulatory Commission (NRC)

- IHI Southwest Technologies and Southwest Research Institute (SwRI)
- AlphaSense
- Pacific Northwest National Laboratory (PNNL)

Finally, the authors thank Ms. Kay Hass for typing and editing versions and revisions of this document.

ACRONYMS AND ABBREVIATIONS

2D	two-dimensional
3D	three-dimensional
ADVPAUT	advanced phased array ultrasonic testing
AECT	advanced ECT technique
BMI	bottom-mounted instrumentation
BWR	boiling water reactor
CAN	contact acoustic nonlinearity
CCD	charge coupled device
CEECT	controlled excitation eddy current technique
CT	computed tomography
DMW	dissimilar metal weld
ECT	eddy current techniques
EDM	electrical discharge machining
EPRI	Electric Power Research Institute
FB	flat bar
FFT	Fast Fourier Transform
FSH	full screen height
GUW	guided ultrasonic waves
HHUT	higher harmonic ultrasonic technique
I.D.	inner diameter
ID	identification
IGSCC	intergranular stress corrosion cracking
IQI	image quality indicators
IR	infrared
ISI	inservice inspection
LASH	large amplitude excitation subharmonic UT
LBDMW	large bore dissimilar metal weld
LOB	lack of bond
LOF	lack of fusion
LUV	laser ultrasound visualization
MA Method	Multi-angle Synthesis Method
MFC	mechanical fatigue crack
MM	microwave near-field microscopy
NDE	nondestructive examination

NLUT	nonlinear ultrasonic testing
NOBS	number of observations
NRUS	nonlinear resonant ultrasound spectroscopy
O.D.	outer diameter
OCECT	orthogonal coil eddy current technique
PA	phased array
PAATOFD	phased array asymmetrical beam time-of-flight diffraction
PARENT	Program to Assess the Reliability of Emerging Nondestructive Techniques
PATP	phased array twin probe
PAUT	phased-array ultrasonic techniques
PC	pitch/catch
PE	pulse-echo
PECT	pulsed excitation eddy current technique
photo-emf	photo electromotive force
PINC	Program for the Inspection of Nickel Alloy Components
POD	probability of detection
PWR	pressurized water reactor
PWSCC	primary water stress corrosion cracking
PZT	piezoelectric transducer
RMSE	root mean square error
SAFT	synthetic aperture focusing technique
SAW	surface acoustic waves
SBDMW	small bore dissimilar metal weld
SC	weld solidification cracks
SCC	stress corrosion cracking
SHPA	subharmonic phased array
SI	slag inclusion
SPACE	subharmonic phased array for crack evaluation
stdev	standard deviation
TFC	thermal fatigue cracks
TOFD	time-of-flight diffraction
TR	transmit-receive
TRL	transmit-receive longitudinal
PATRT	phased array time reversal technique
UIR	ultrasound infrared thermography
w/	with
w/o	without

Definitions

Bottom-mounted instrumentation (BMI)	A cylindrical penetration in the bottom head of a nuclear reactor pressure vessel, into which a tube is welded. Typical inside diameters are a few centimeters.
Dendrite	weld grain (columnar or tree-like)
Dissimilar metal weld (DMW)	Weldments joining components made of different alloys. In the context of PINC and PARENT, refers primarily to nozzle welds.
Heat-affected zone	a volume of base metal, adjacent to the fusion zone, changed by the heat of welding
Interdendritic	between the tree-like grains, such as can form in castings or weld metal
Intergranular	between the metal crystals rather than through them
J-groove weld	a weld with profile shaped as the letter “J,” the seal weld of a CRDM or BMI penetration
Lack of fusion	missing metallic bond either between the sidewall of a weld with the base metal or between weld passes (inter-run)
Partial penetration weld	the weld performed to eliminate leakage paths, also called a seal weld
Primary water stress corrosion cracking (PWSCC)	The intergranular or interdendritic cracking of nickel-base alloys that occurs in service and originates from the surfaces of a component that are wetted by the primary water of a pressurized water reactor (PWR)
Program for the Inspection of Nickel-Alloy Components (PINC)	An international cooperative research program, The purpose of PINC is to assess the capabilities of current and emerging NDE techniques to detect and size flaws associated with PWSCC in nuclear reactors. This information tool is the definitive source of information on PINC.
Round-robin test (RRT)	a test performed independently several times (usually at multiple testing facilities)

APPENDIX D

TEST BLOCK INFORMATION

APPENDIX D

TEST BLOCK INFORMATION

D.1	BMI Test Blocks	D-1
D.2	SBDMW Test Blocks	D-3
D.3	LBDMW Test Blocks	D-14
D.1	<u>BMI Test Blocks</u>	



Figure D.1 BMI Test Block P21



Figure D.2 BMI Test Block P22



Figure D.3 BMI Test Block P5



Figure D.4 BMI Test Block P7

D.2 SBDMW Test Blocks



Figure D.5 SBDMW Test Block P1

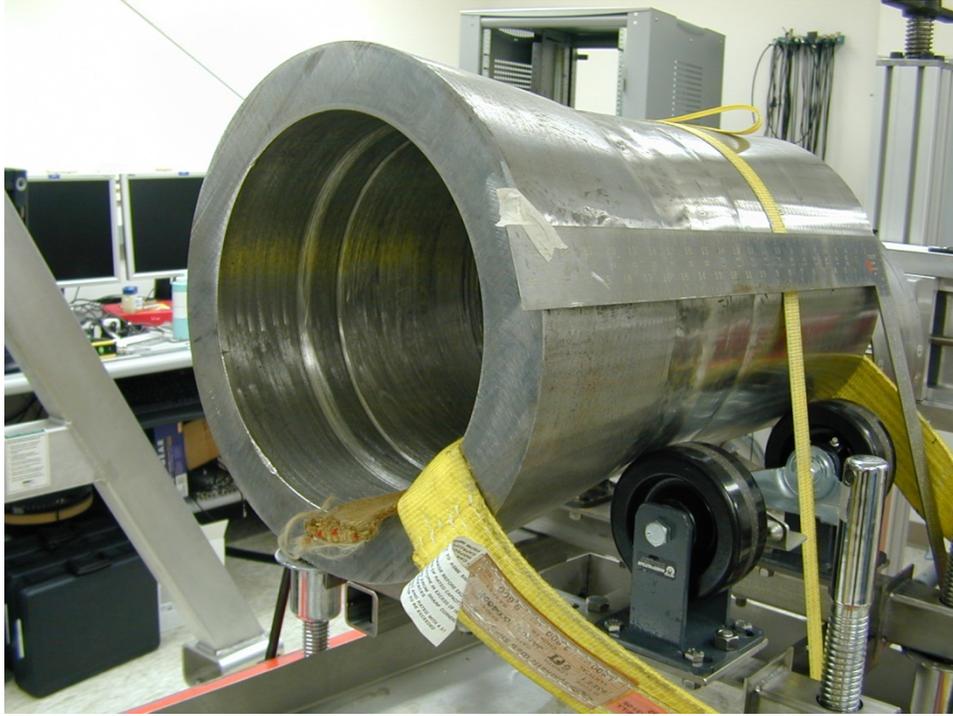


Figure D.6 SBDMW Test Block P4

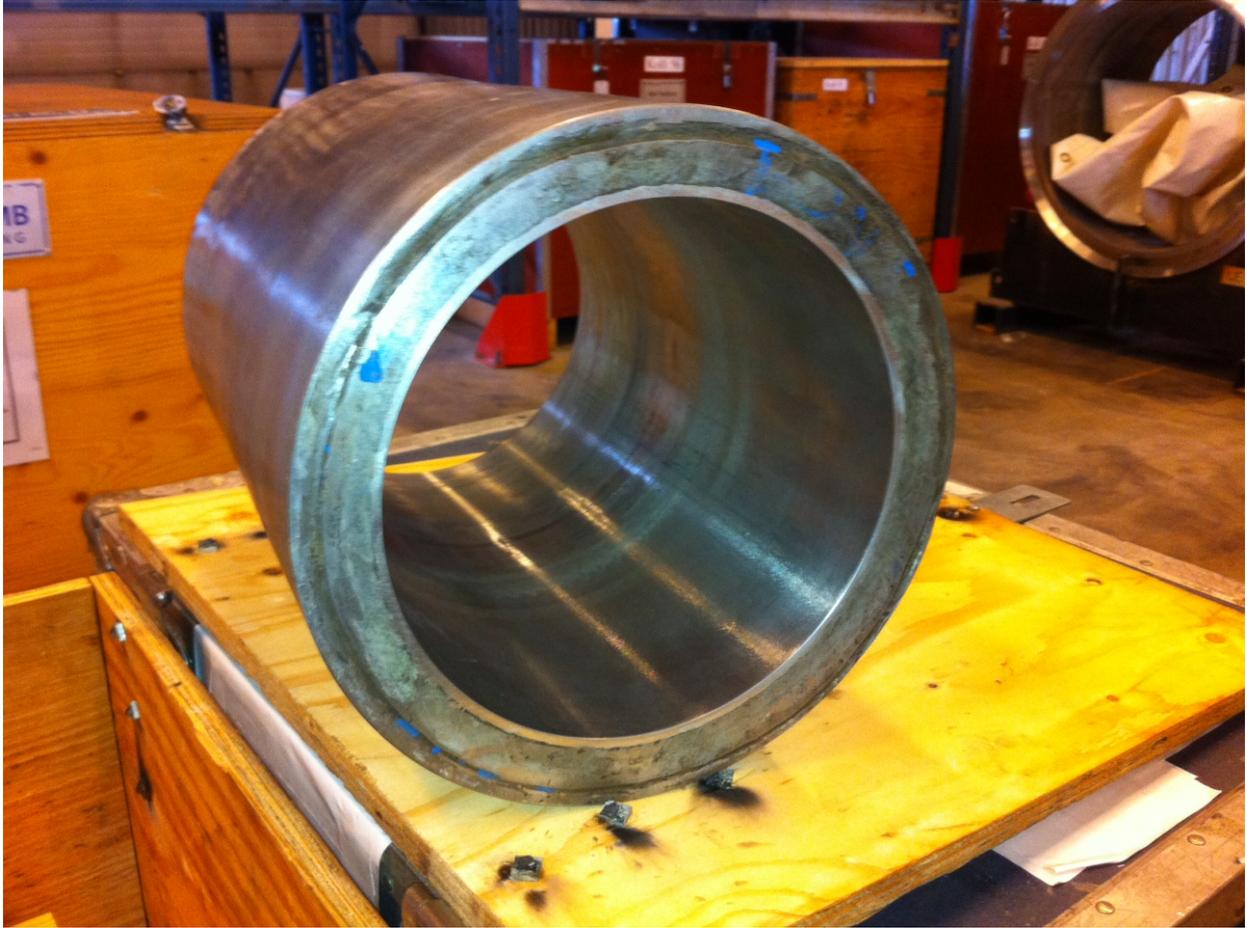


Figure D.7 SBDMW Test Block P41

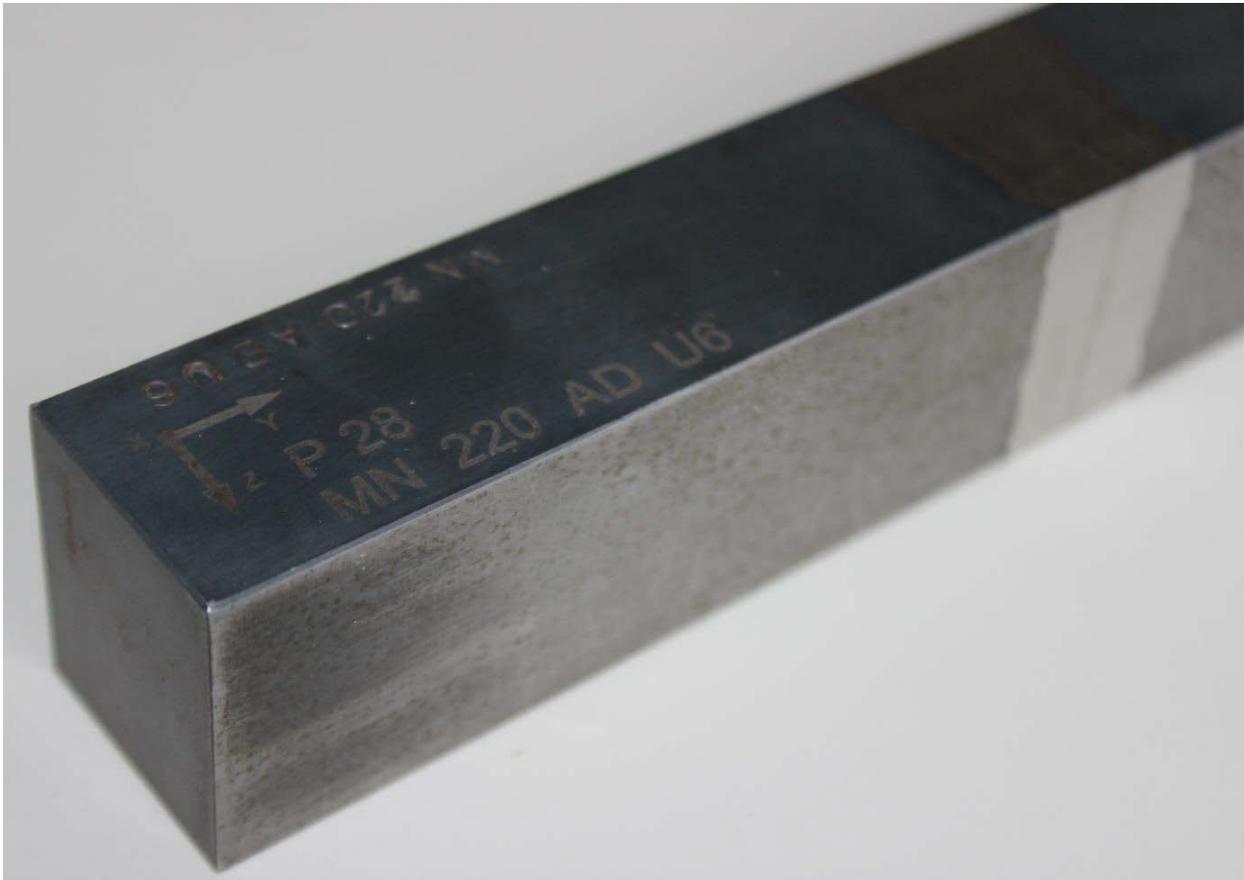


Figure D.8 SBDMW Test Block P28

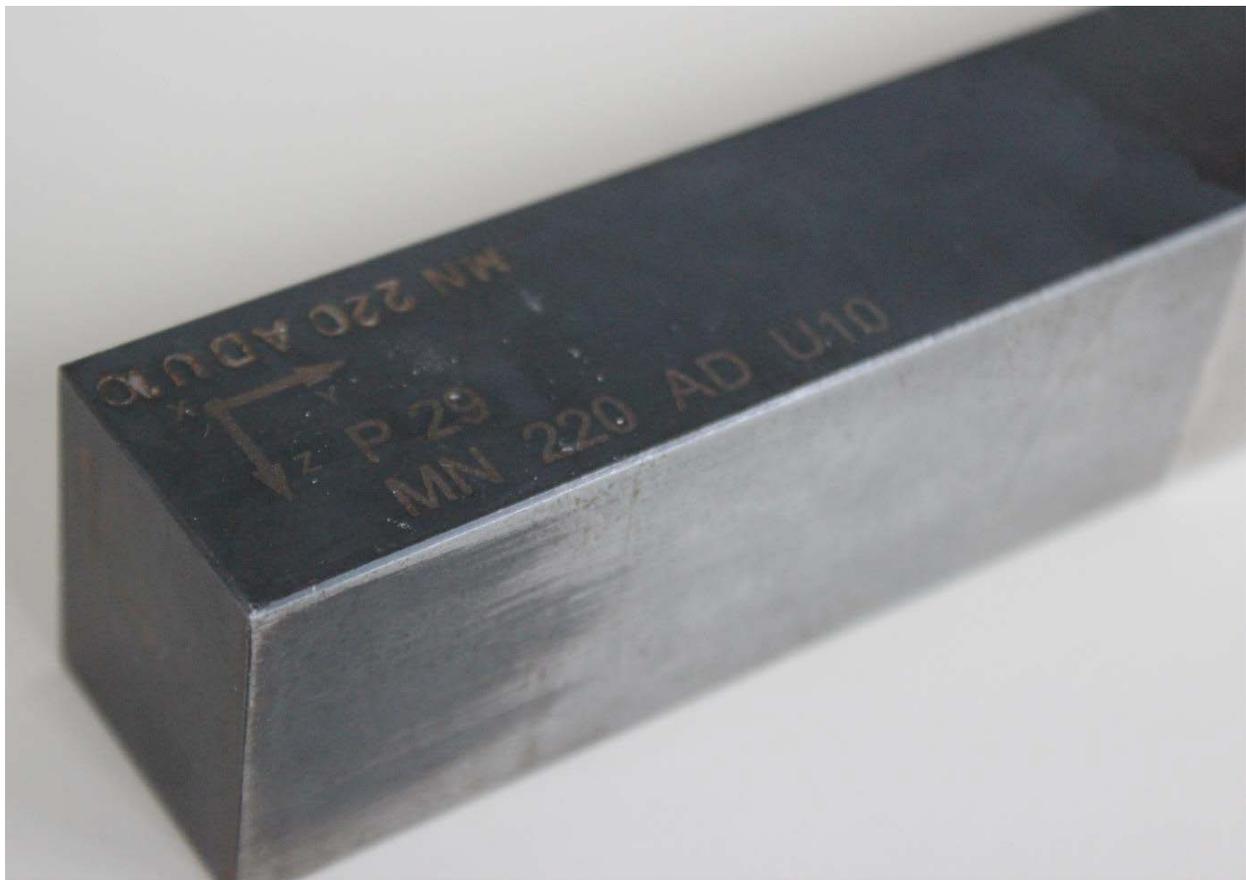


Figure D.9 SBDMW Test Block P29

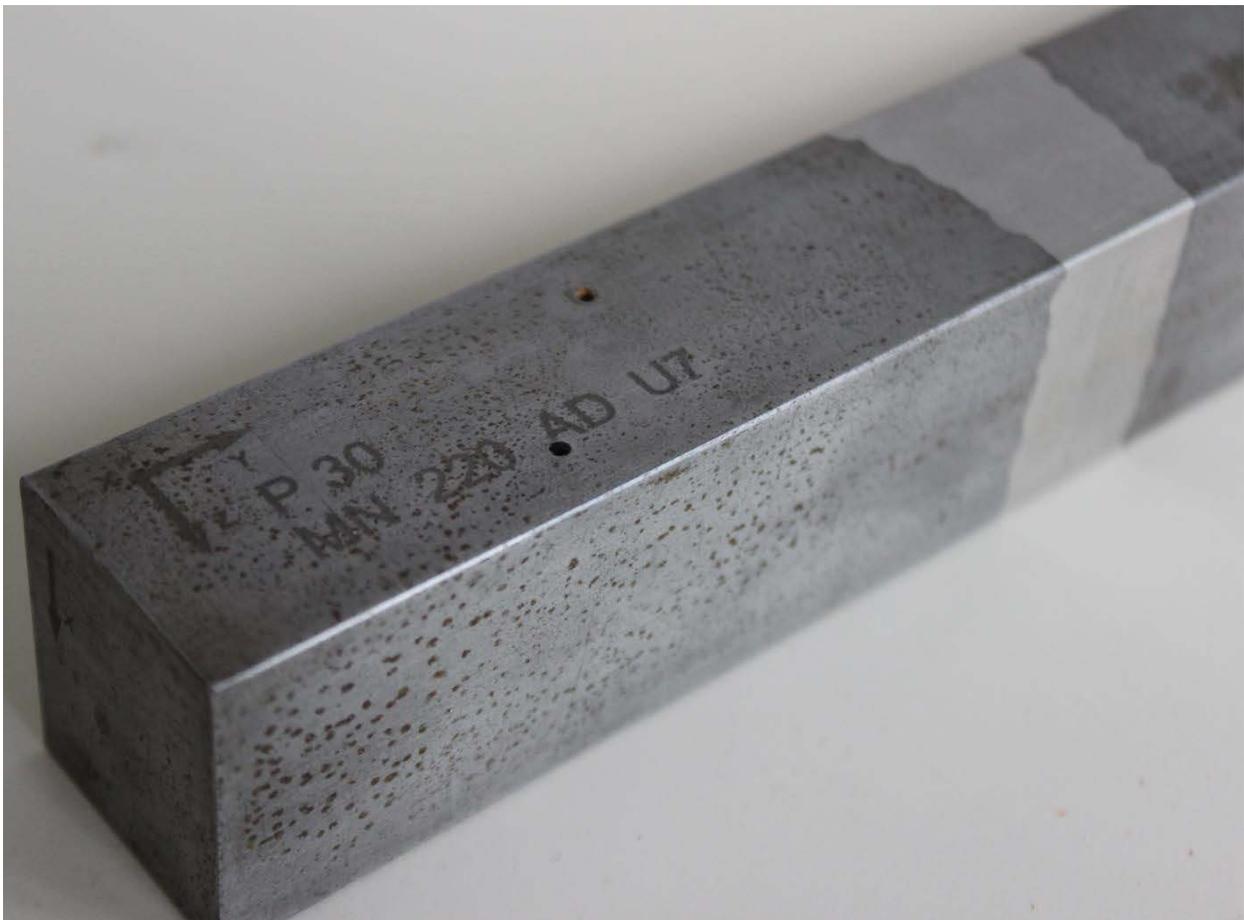
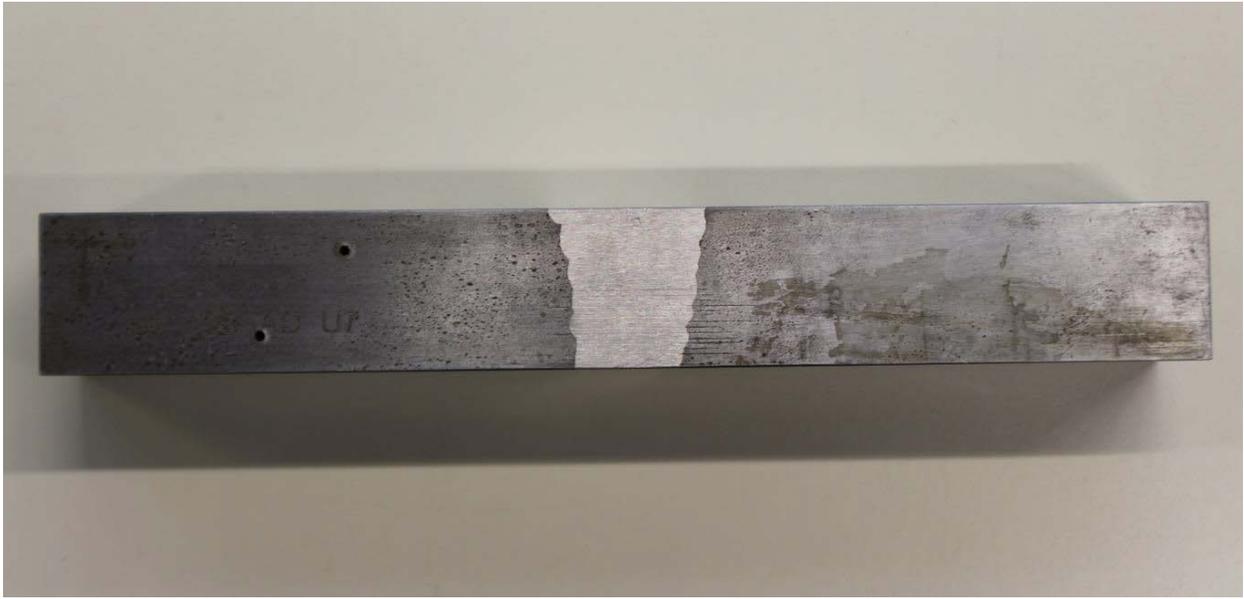


Figure D.10 SBDMW Test Block P30



Figure D.11 SBDMW Test Block P31



Figure D.12 SBDMW Test Block P32

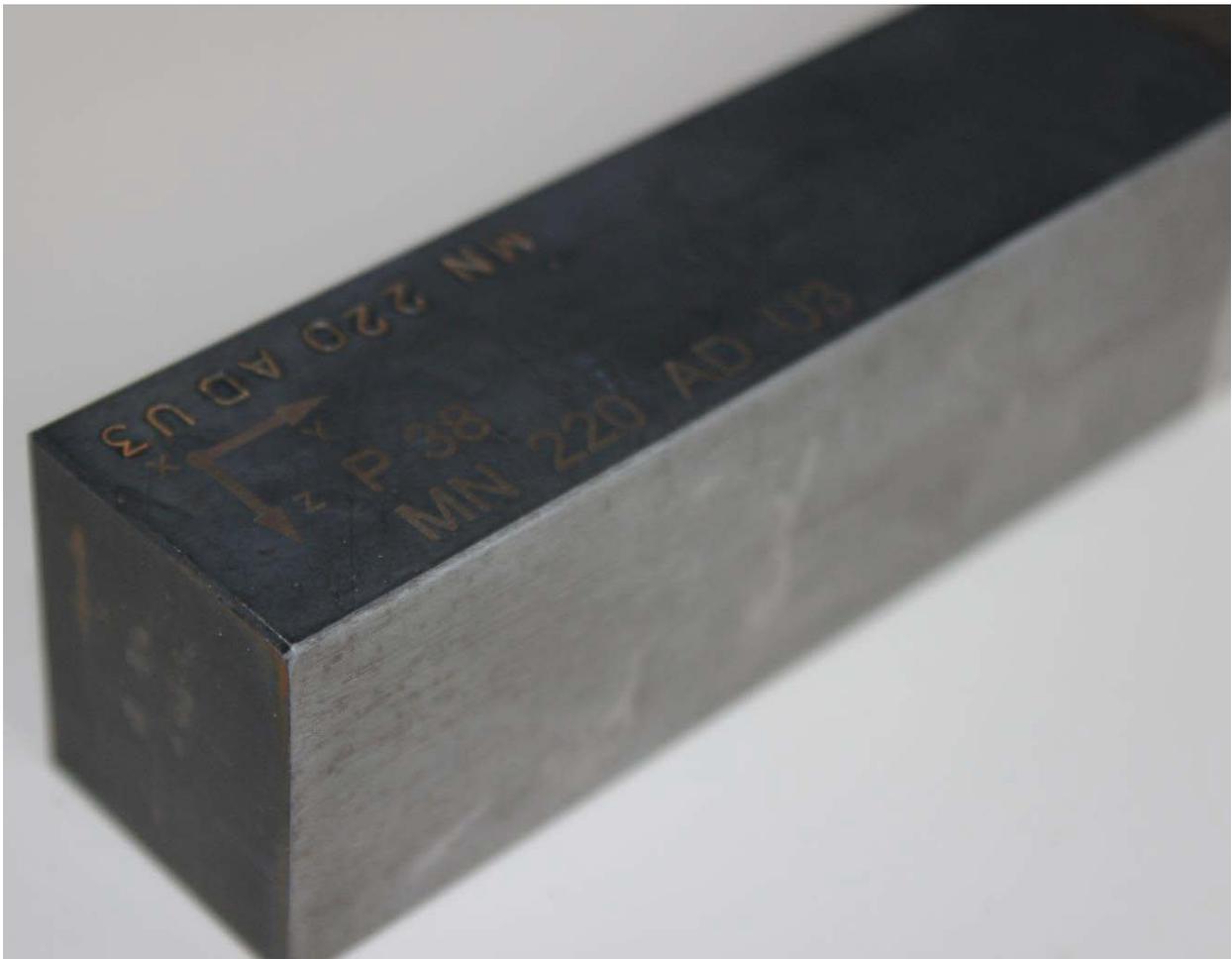


Figure D.13 SBDMW Test Block P38



Figure D.14 SBDMW Test Block P42



Figure D.15 SBDMW Test Block P46

D.3 LBDMW Test Blocks



Figure D.16 LBDMW Test Block P12

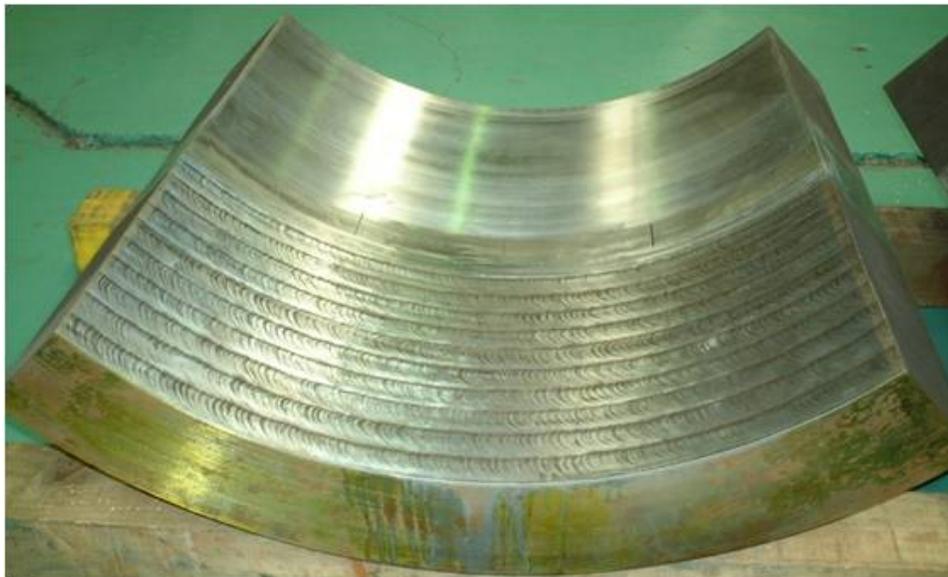


Figure D.17 LBDMW Test Block P23



Figure D.18 LBDMW Test Block P24



Figure D.19 LBDMW Test Block P37

APPENDIX E

TRUE-STATE SUMMARY

APPENDIX E

TRUE-STATE SUMMARY

E.1	True States for Open BMI Test Blocks	E-2
E.2	True States for Open SBDMW Test Blocks	E-3
E.3	True States for Open Flat Bar Test Blocks.....	E-4
E.4	True States for Open LBDMW Test Blocks	E-5

E.1 True States for Open BMI Test Blocks

Flaw ID	Test														Surface	
	Block ID	u1	u2	u3	u4	u5	u6	Type	Orientation	Depth	Length	Breaking	Breaking	Breaking		
P5.1	P5	9.5	18.9	34	37	0	3	TFC	CA	3	6	Yes	Yes	Yes		
P5.2	P5	149.3	157.1	39.6	40.9	0	2	TFC	C	2	5	Yes	Yes	Yes		
P5.3	P5	287.3	291.7	30.9	37.6	0	1	TFC	CA	1	7	Yes	Yes	Yes		
P21.1	P21	0	0	29.1	31.1	0	0.5	EDM	A	0.5	2	Yes	Yes	Yes		
P21.2	P21	270	270	29.1	31.1	0	2	EDM	A	2	2	Yes	Yes	Yes		
P21.3	P21	180	180	27.6	32.6	0	2	EDM	A	2	5	Yes	Yes	Yes		
P21.4	P21	90	90	25.1	35.1	0	10	EDM	A	10	10	Yes	Yes	Yes		
P22.1	P22	356.2	3.8	29.8	30.1	0	0.5	EDM	C	0.5	4	Yes	Yes	Yes		
P22.2	P22	266.2	273.8	28.9	30.1	0	2	EDM	C	2	4	Yes	Yes	Yes		
P22.3	P22	170.5	189.5	27.2	30.1	0	5	EDM	C	5	10	Yes	Yes	Yes		
P22.4	P22	71.6	108.4	24.3	30.1	0	10	EDM	CA	10	17	Yes	Yes	Yes		
P7.1	P7	64.3	65.2	42.4	50.5	0	7	SC	A	7	8	Yes	Yes	Yes		
P7.2	P7	103.7	103.8	41.9	47.7	0	1	SC	A	1	6	Yes	Yes	Yes		
P7.3	P7	165	165	33	36	0	6	SC	A	6	3	Yes	Yes	Yes		
P7.4	P7	283	287	42	50	0	3	SC	CA	3	8	Yes	Yes	Yes		

EDM = electrical discharge machining A = axial
 SC = weld solidification crack C = circumferential
 TFC = thermal fatigue crack CA = circumferential + axial

E.2 True States for Open SBDMW Test Blocks

Flaw ID	Test												Surface	
	Block ID	u1	u2	u3	u4	u5	u6	Type	Orientation	Depth	Length	Breaking		
P41.1	P41	61	87	-10	-10	26	32	SC	C	6	20	Yes		
P41.2	P41	144	144	-20	0	26	32	SC	A	6	20	Yes		
P41.3	P41	202	202	-20	0	15	32	SC	A	17	20	Yes		
P41.4	P41	260	324	-8	-8	15	32	SC	C	17	50	Yes		
P41.5	P41	383	383	-20	0	26	32	SC	A	6	20	Yes		
P41.6	P41	441	467	-10	-10	26	32	SC	C	6	20	Yes		
P41.7	P41	524	524	-19	1	6	32	SC	A	26	20	Yes		
P41.8	P41	582	646	-9	-9	6	32	SC	C	26	50	Yes		
P41.9	P41	705	705	-15	-9	29	32	SC	A	3	6	Yes		
P41.10	P41	763	763	-14	-4	30	32	SC	A	2	10	Yes		
P41.11	P41	821	829	-9	-9	29	32	SC	C	3	6	Yes		
P41.12	P41	885	898	-7	-7	30	32	SC	C	2	10	Yes		
P1.1	P1	92	121.3	-13.9	-13.7	30.4	38.1	TFC	C	7.7	23	Yes		
P1.2	P1	438.9	475.4	-13.3	-8.3	21.6	36	TFC	C	14.4	29	Yes		
P1.3	P1	641	700	-13.7	-13.4	15.1	38.1	TFC	C	23	46	Yes		
P1.4	P1	976.9	1004.4	-11.7	-9.3	25.2	36	TFC	C	10.8	22	Yes		
P4.1	P4	973.2	44.2	-6.2	-6.2	22	33.7	EDM	C	11.7	70	Yes		
P4.2	P4	222.1	286.6	-5.3	-5.3	26.6	33.7	EDM	C	7.1	51	Yes		
P4.3	P4	463.6	553.8	-8.6	-6.3	19.5	33.7	TFC	C	14.2	71	Yes		
P4.4	P4	726.4	799.7	-7.8	-5	24.4	33.7	TFC	C	9.3	58	Yes		

E.3 True States for Open Flat Bar Test Blocks

Flaw ID	Test										Surface	
	Block ID	u1	u2	u3	u4	u5	u6	Type	Orientation	Depth	Length	Breaking
P28.1	P28	0	35	110	110	18.3	30.3	SCC	C	12	35	Yes
P29.1	P29	0	35	110	110	20.3	30.3	SCC	C	10	35	Yes
P30.1	P30	0	35	110	110	12.3	30.3	MFC	C	18	35	Yes
P31.1	P31	0	35	110	110	26.3	30.3	SCC	C	4	35	Yes
P32.1	P32	0	35	110	110	15.3	30.3	SCC	C	26	35	Yes
P38.1	P38	0	35	110	110	25.3	30.3	SCC	C	5	35	Yes
P42.1	P42	0	35	110	110	20	30.3	EDM	C	10.3	35	Yes

E.4 True States for Open LBDMW Test Blocks

Flaw ID	Test											Surface	
	Block ID	u1	u2	u3	u4	u5	u6	Type	Orientation	Depth	Length	Breaking	
P37.1	P37	340	400	-5	0	54	76	SC	C	22	49	No	
P37.2	P37	543	543	-17.5	17.5	59	76	SC	A	17	35	No	
P37.3	P37	726	726	-3	4	78	79	SC	A	1	7	Yes	
P37.4	P37	882	906	-89	-89	69	72	SI	C	3	20	No	
P37.5	P37	1339	1370	71	75	72	76	LOB/LOF	C	4	26	No	
P37.6	P37	1509	1516	-105	-105	78	79	SC	C	1	6	Yes	
P37.7	P37	1666	1666	-8	5	73	79	SC	A	6	13	Yes	
P37.8	P37	1869	1869	-17.5	17.5	51	79	SC	A	28	35	Yes	
P37.9	P37	2130	2137	8	8	78	79	SC	C	1	6	Yes	
P37.10	P37	2282	2294	-1	-1	73	79	SC	C	6	10	Yes	
P37.11	P37	2667	2713	3	3	51	79	SC	C	28	38	Yes	
P12.1	P12	36.6	36.6	-27	7	53.9	77	EDM	A	23.1	34	Yes	
P12.2	P12	91.5	91.5	-20	0	71.5	77	SCC	A	5.5	20	Yes	
P23.1	P23	352.9	352.9	-30.2	-3.8	79	87.7	EDM	A	8.7	26	Yes	
P23.2	P23	512.6	512.6	-30.5	12.5	65.8	87.7	EDM	A	21.9	43	Yes	
P23.3	P23	193.1	193.1	-38.5	4.5	43.8	87.7	EDM	A	43.9	43	Yes	
P24.1	P24	123.6	156.3	0	0	79	87.7	EDM	C	8.7	26	Yes	
P24.2	P24	531.3	612.7	0	0	65.8	87.7	EDM	C	21.9	66	Yes	
P24.3	P24	273.8	436.9	0	0	43.8	87.7	EDM	C	43.9	132	Yes	

APPENDIX F

DEPTH SIZING RESULTS

APPENDIX F

DEPTH SIZING RESULTS

F.1	Depth Sizing Results for Procedures Applied to SBDMW Test Blocks and FB Test Blocks with O.D. Access	F-2
F.2	Depth Sizing Results for Procedures Types Applied to SBDMW Test Blocks and FB Test Blocks with O.D. Access	F-13
F.3	Depth Sizing Results for Procedures Applied to SBDMW Test Blocks and FB Test Blocks with I.D. Access.....	F-17
F.4	Depth Sizing Results for Procedure Types Applied to SBDMW Test Blocks and FB Test Blocks with I.D. Access.....	F-20
F.5	Depth Sizing Results for Procedures Applied to SBDMW Test Blocks, Excluding FB Test Blocks, and with O.D. Access	F-22
F.6	Depth Sizing Results for Procedure Types Applied to SBDMW Test Blocks, Excluding FB Test Blocks, and with O.D. Access	F-29
F.7	Depth Sizing Results for Procedures Applied to FB Test Blocks with O.D. Access	F-32
F.8	Depth Sizing Results for Procedure Types Applied to FB Test Blocks with O.D. Access.....	F-40
F.9	Depth Sizing Results for Procedures Applied to FB Test Blocks with I.D. Access	F-44
F.10	Depth Sizing Results for Procedure Types Applied to FB Test Blocks with I.D. Access	F-46
F.11	Depth Sizing Results for Procedures Applied to LBDMW Test Blocks with O.D. Access.....	F-48
F.12	Depth Sizing Results for Procedure Types Applied to LBDMW Test Blocks with O.D. Access.....	F-51
F.13	Depth Sizing Results for Procedures Applied to LBDMW Test Blocks with I.D. Access	F-53
F.14	Depth Sizing Results for Procedure Types Applied to LBDMW Test Blocks with I.D. Access	F-54

F.1 Depth Sizing Results for Procedures Applied to SBDMW Test Blocks and FB Test Blocks with O.D. Access

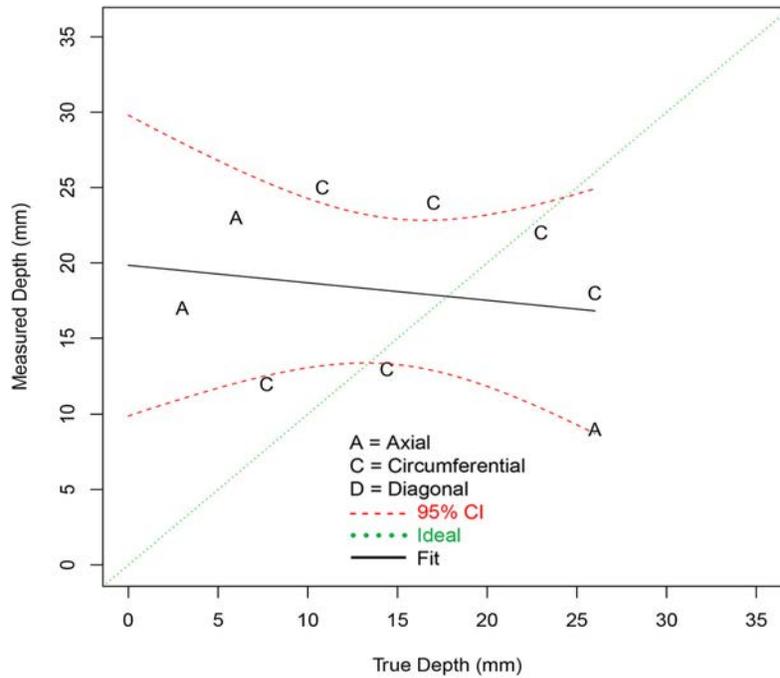


Figure F.1 Depth Sizing Regression (in mm) for Procedure HHUT.27.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

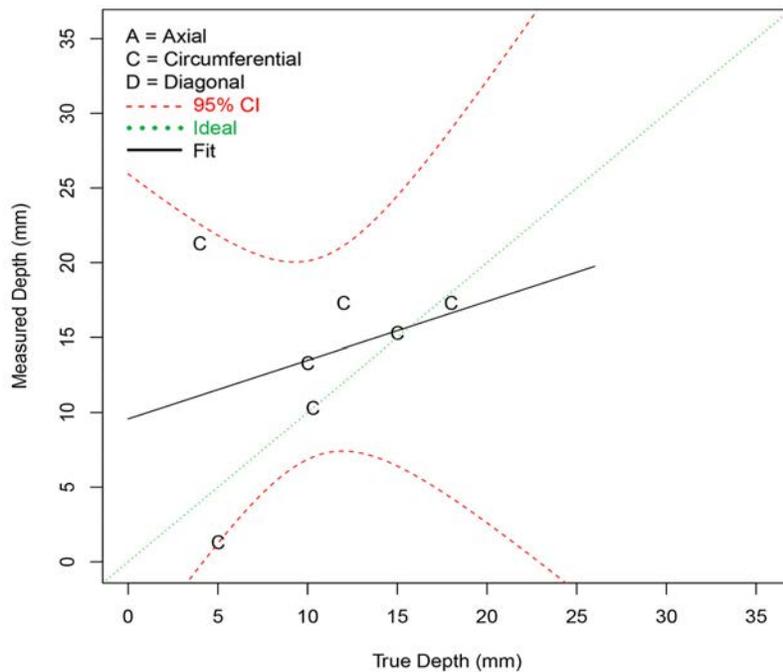


Figure F.2 Depth Sizing Regression (in mm) for Procedure HHUT.27.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

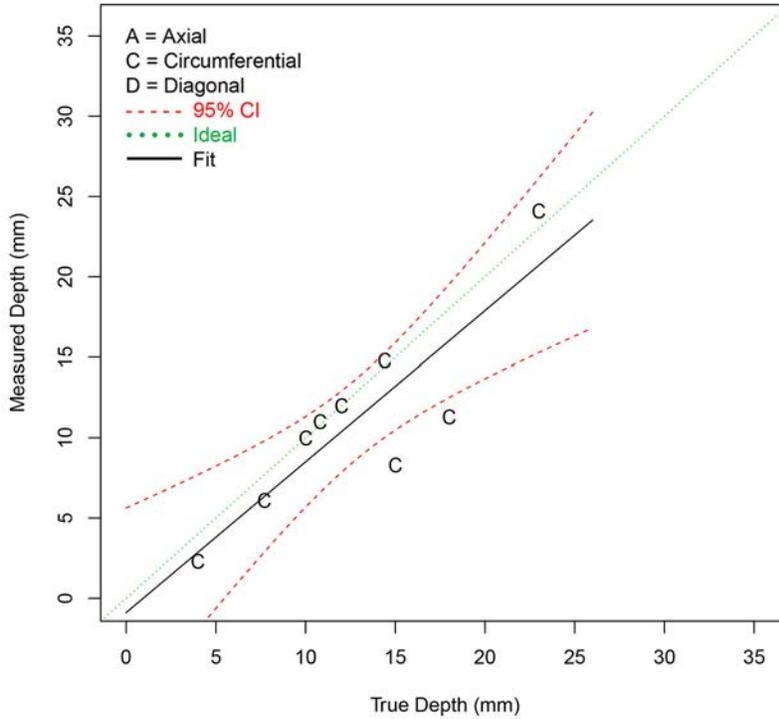


Figure F.3 Depth Sizing Regression (in mm) for Procedure LASH.18 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

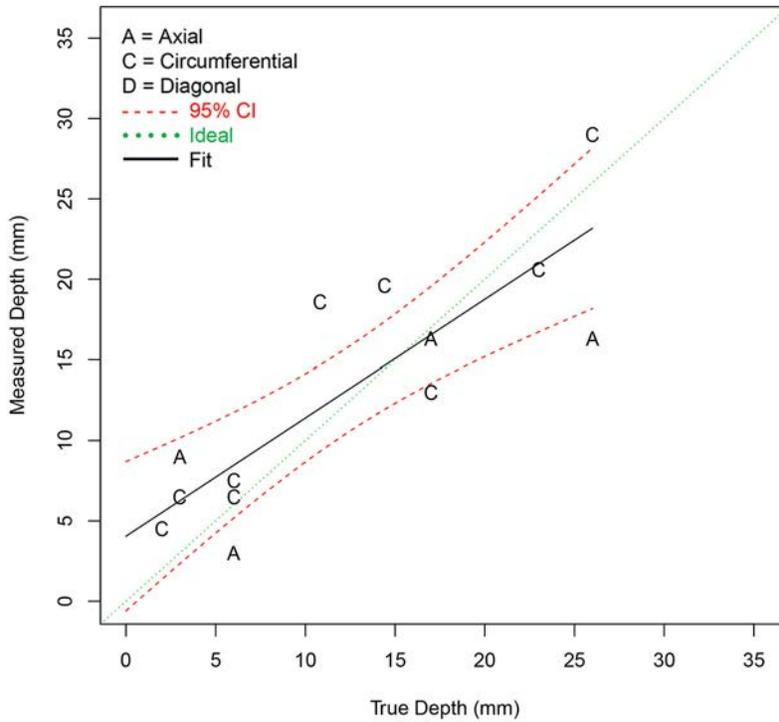


Figure F.4 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.0 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

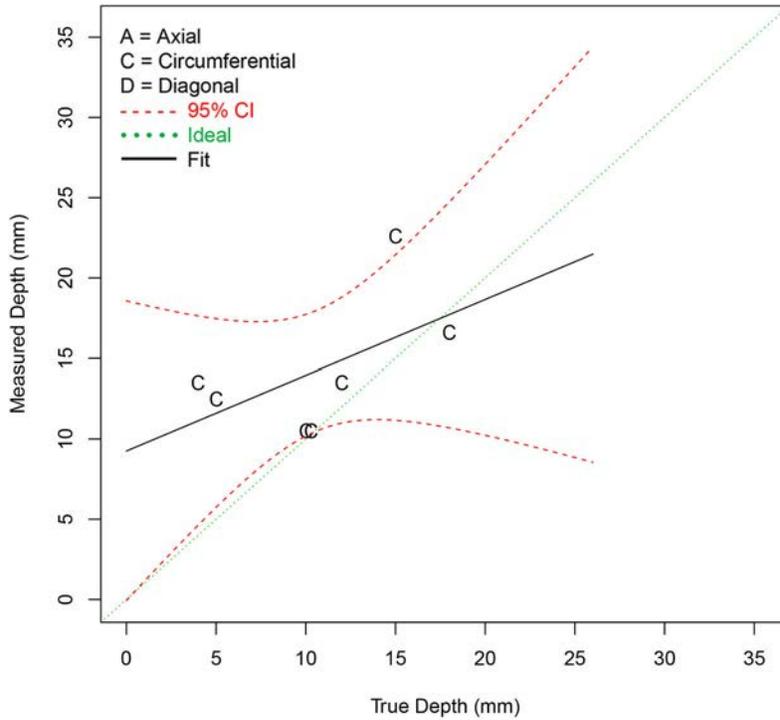


Figure F.5 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

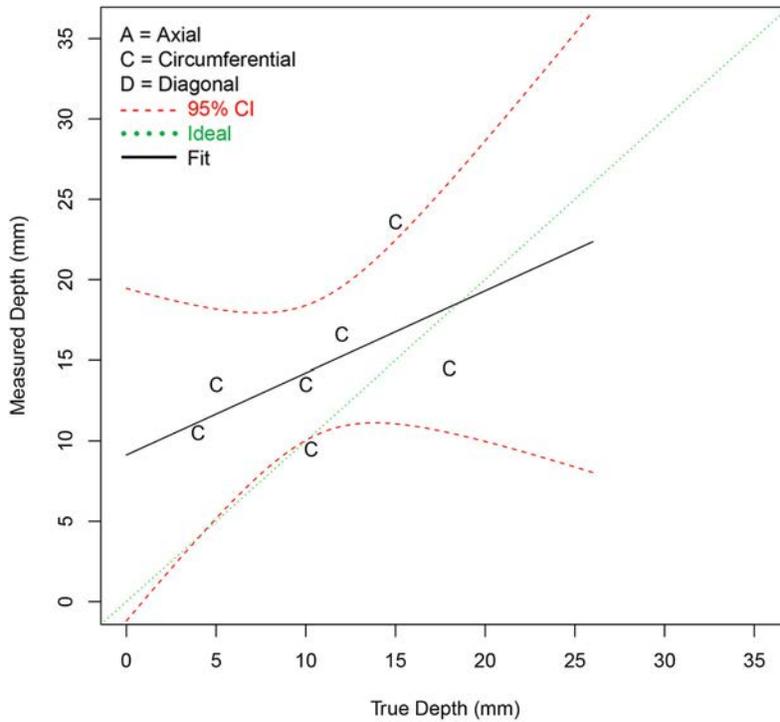


Figure F.6 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

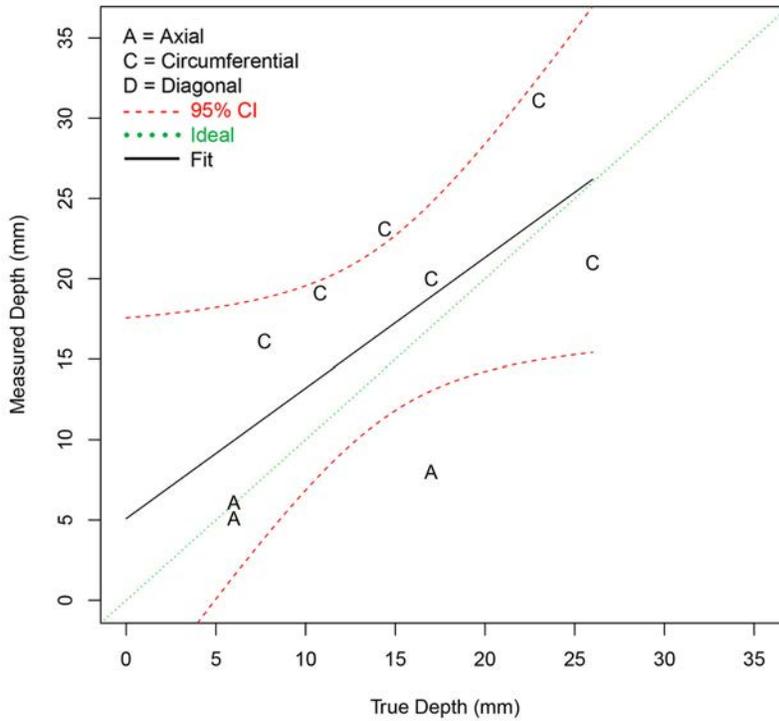


Figure F.7 Depth Sizing Regression (in mm) for Procedure PATP.29 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

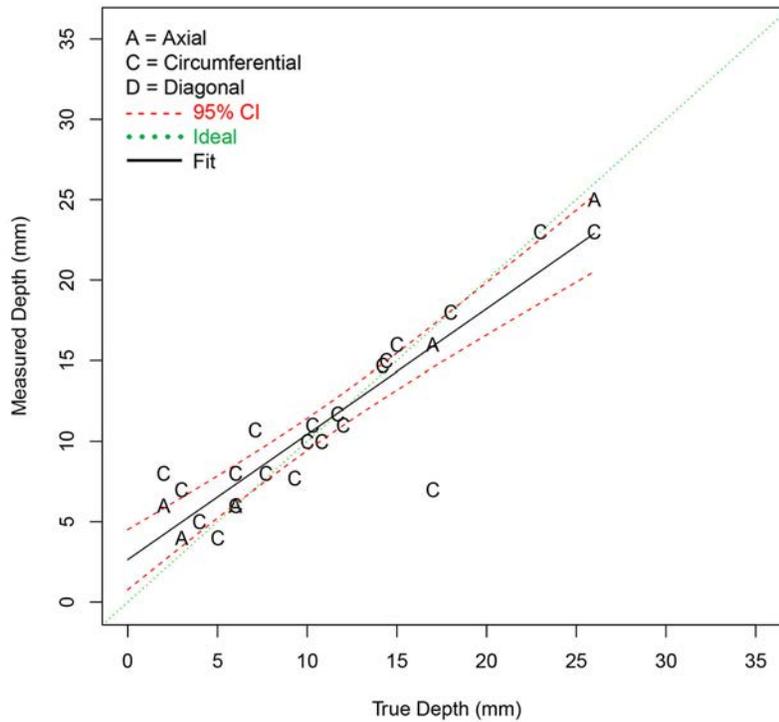


Figure F.8 Depth Sizing Regression (in mm) for Procedure PAUT.114 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

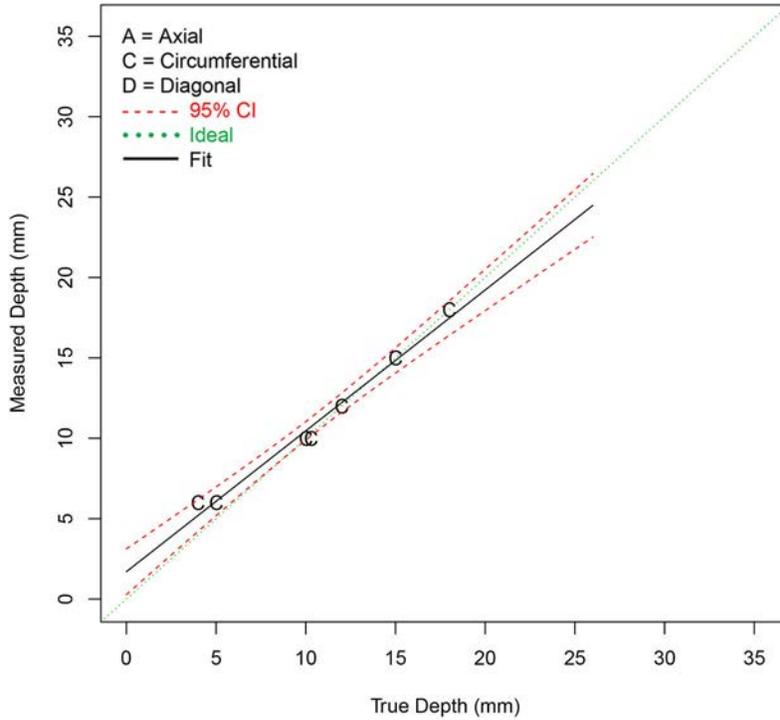


Figure F.9 Depth Sizing Regression (in mm) for Procedure PAUT.122.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

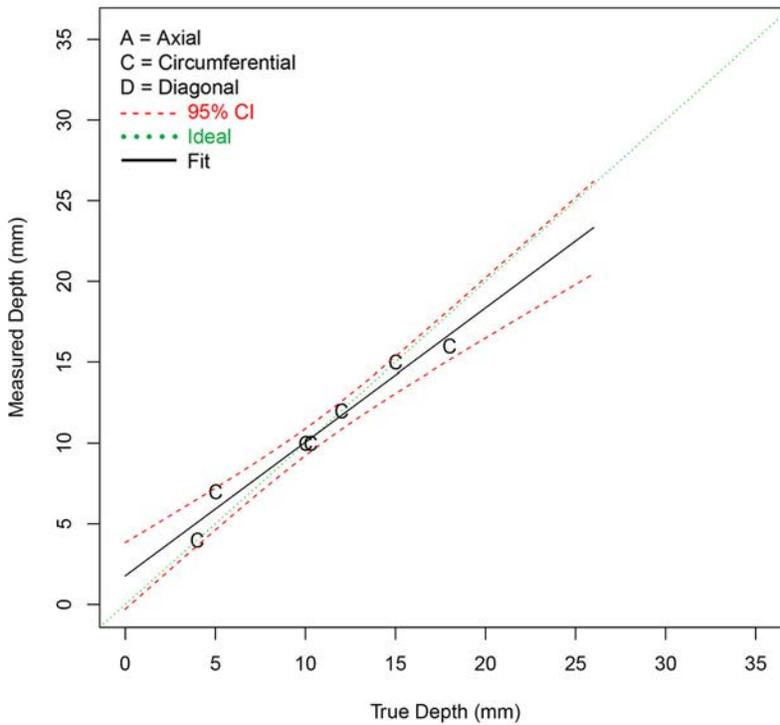


Figure F.10 Depth Sizing Regression (in mm) for Procedure PAUT.122.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

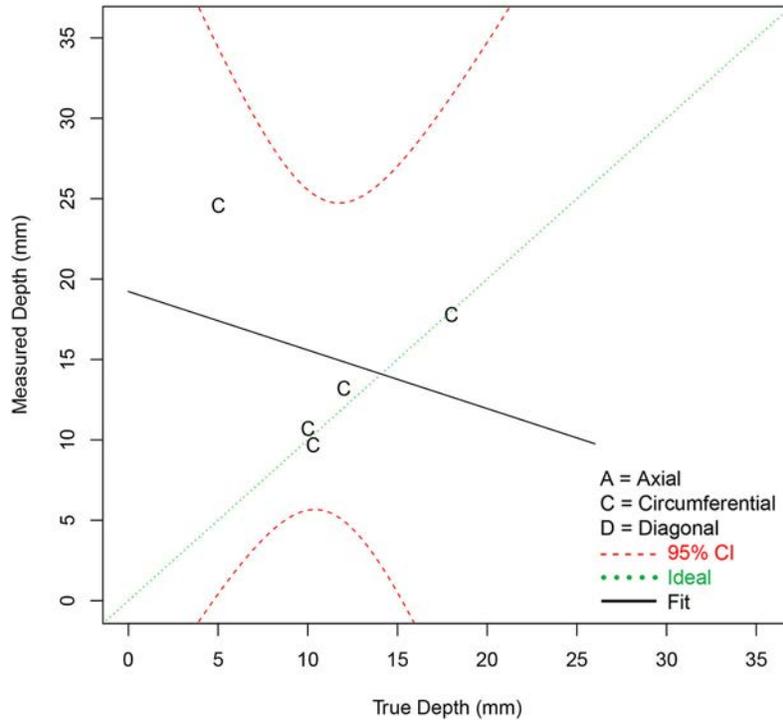


Figure F.11 Depth Sizing Regression (in mm) for Procedure PAUT.131.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

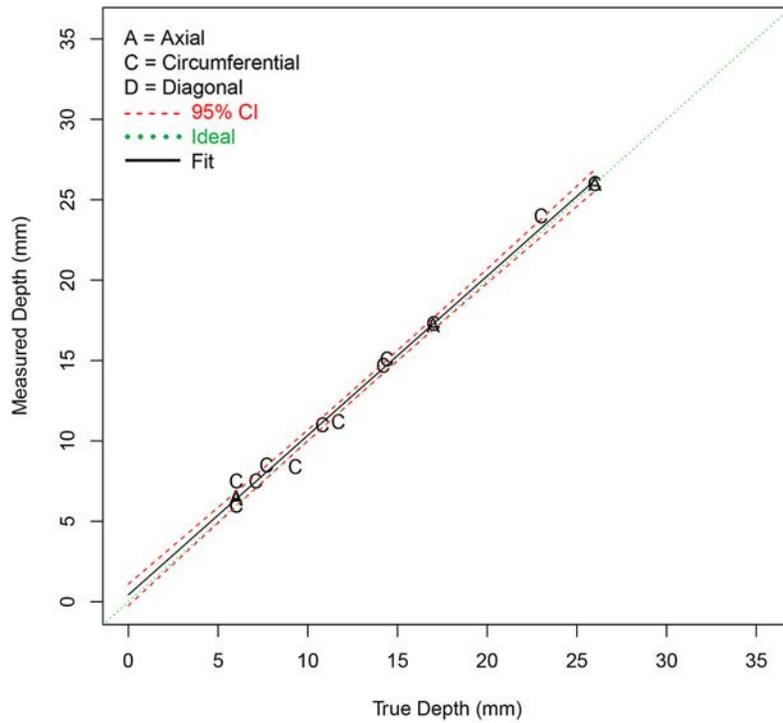


Figure F.12 Depth Sizing Regression (in mm) for Procedure PAUT.131.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

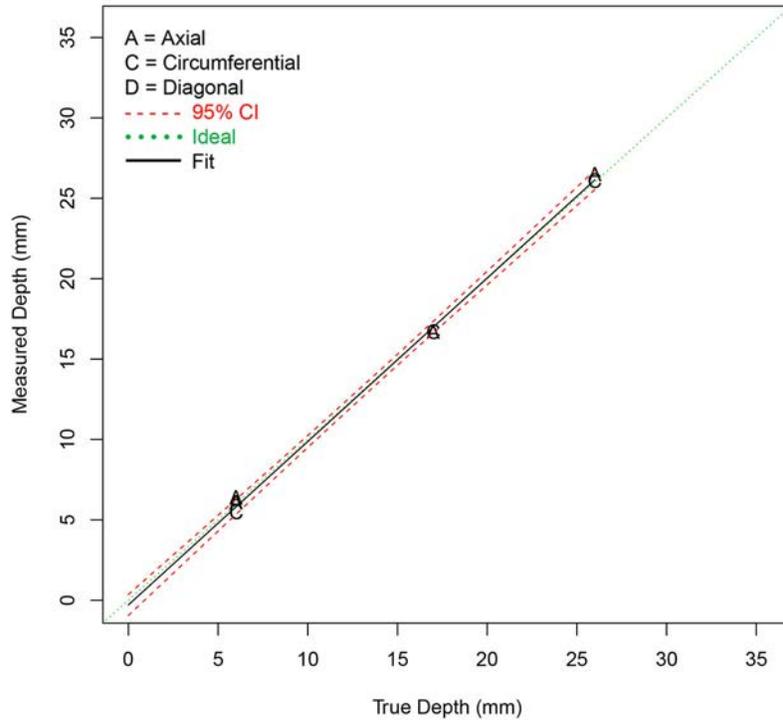


Figure F.13 Depth Sizing Regression (in mm) for Procedure PAUT.131.4 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

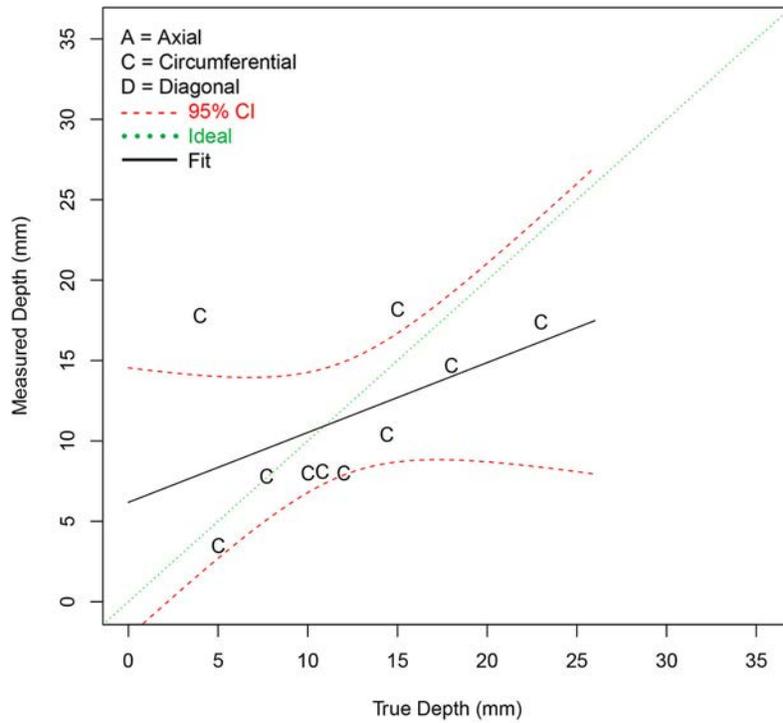


Figure F.14 Depth Sizing Regression (in mm) for Procedure PAUT.20 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

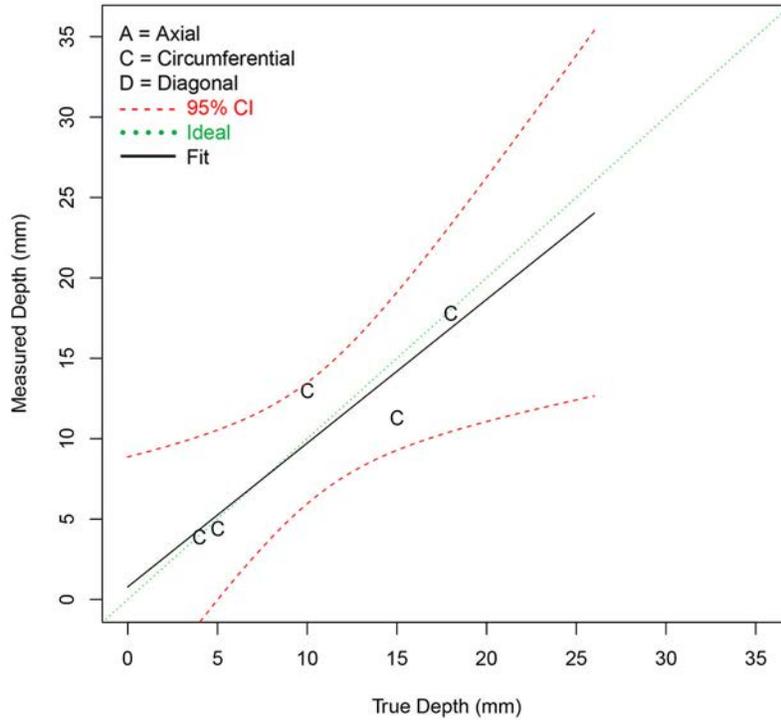


Figure F.15 Depth Sizing Regression (in mm) for Procedure RT.109 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

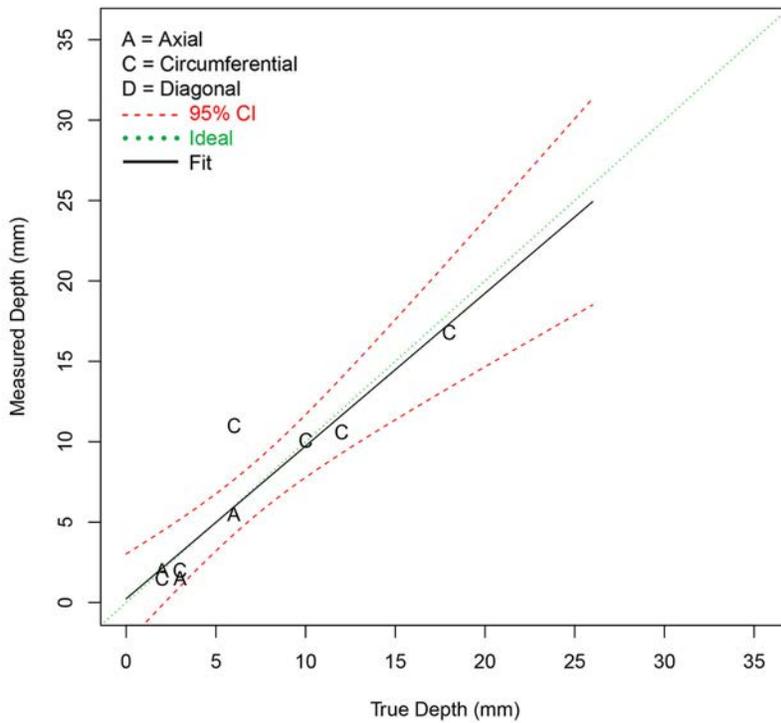


Figure F.16 Depth Sizing Regression (in mm) for Procedure RT.112 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

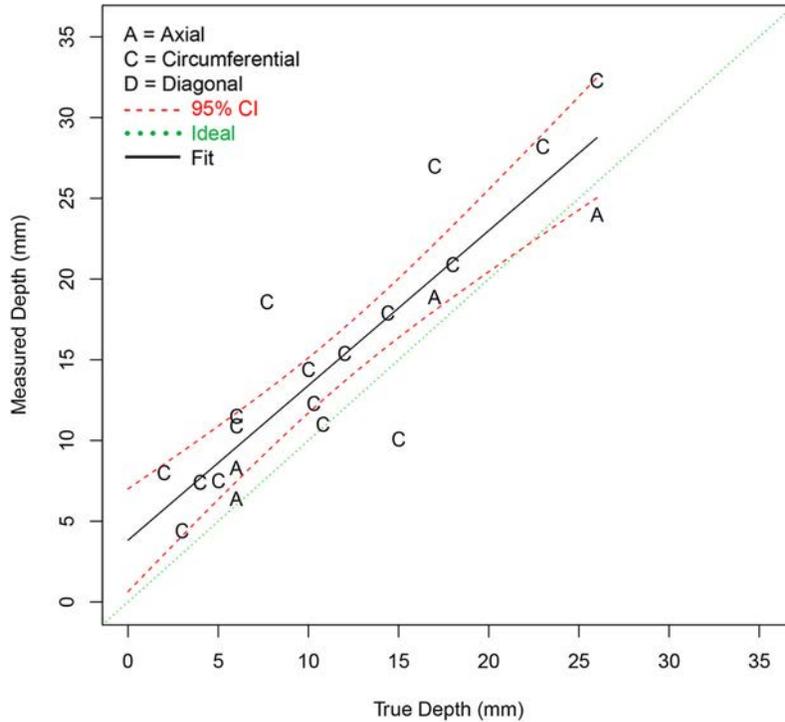


Figure F.17 Depth Sizing Regression (in mm) for Procedure SAFT.17 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

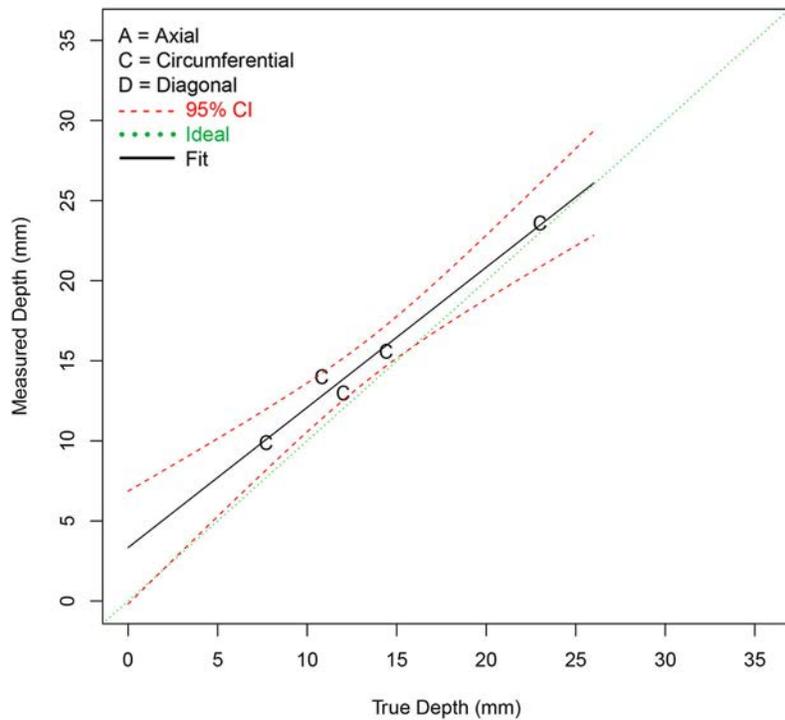


Figure F.18 Depth Sizing Regression (in mm) for Procedure SHPA.6.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

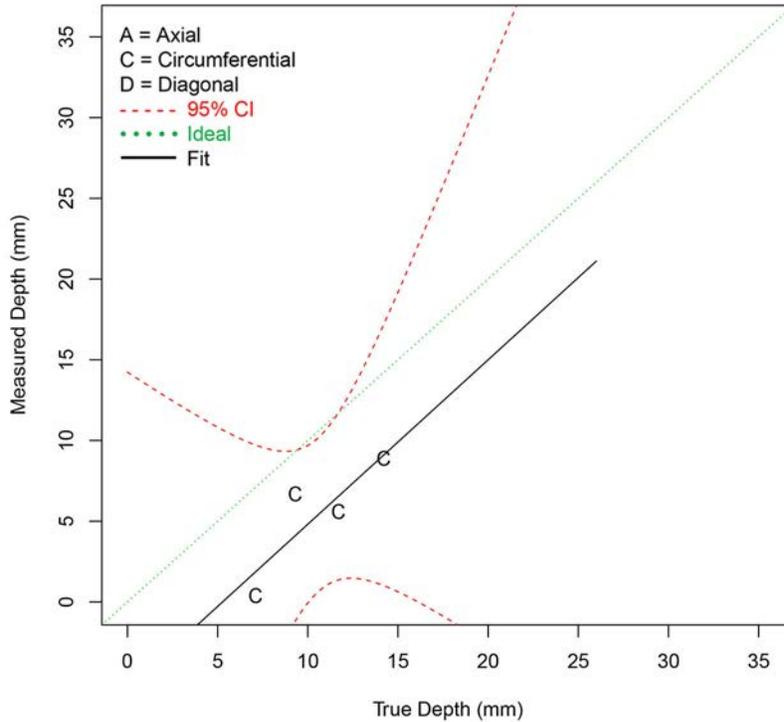


Figure F.19 Depth Sizing Regression (in mm) for Procedure SHPA.6.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

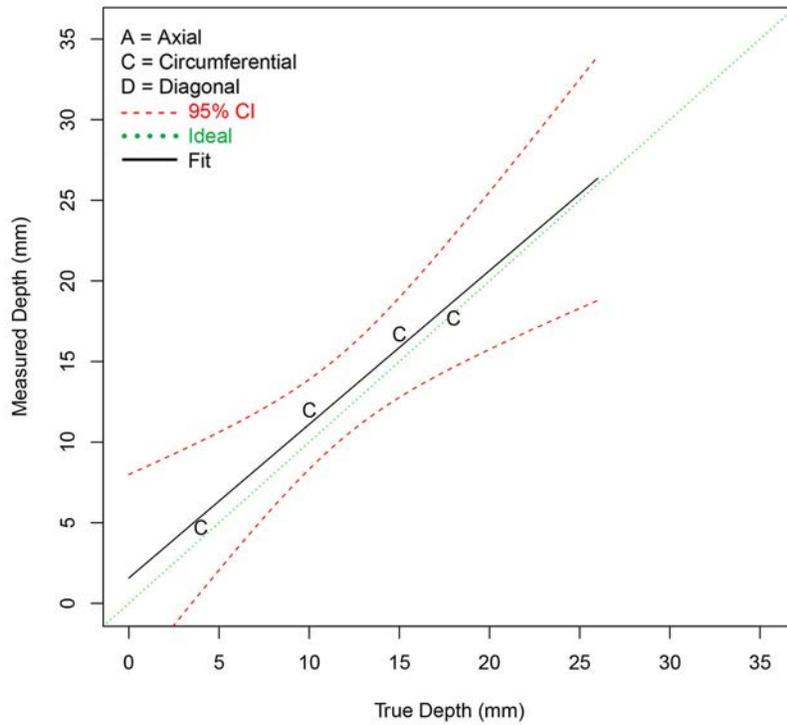


Figure F.20 Depth Sizing Regression (in mm) for Procedure SHPA.6.3 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

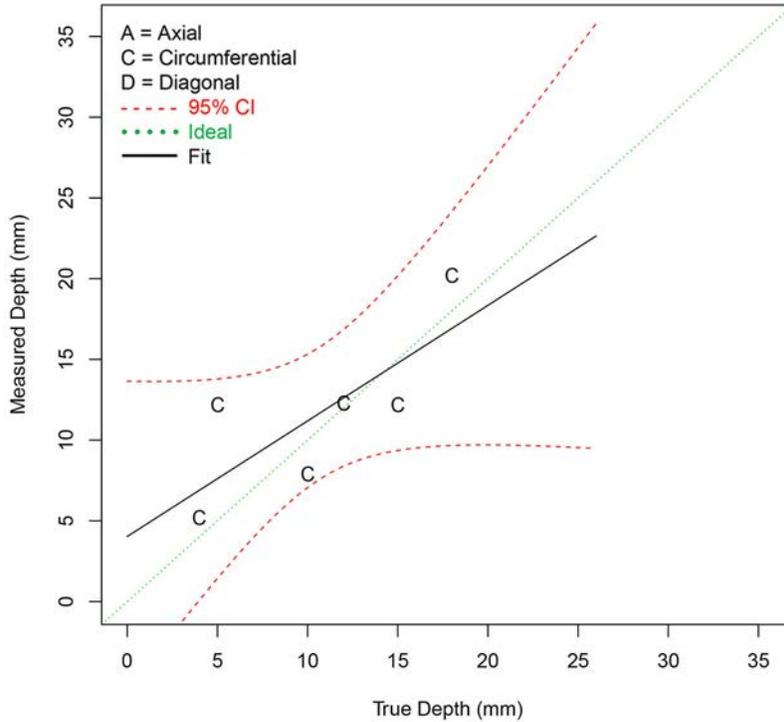


Figure F.21 Depth Sizing Regression (in mm) for Procedure UIR.20 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

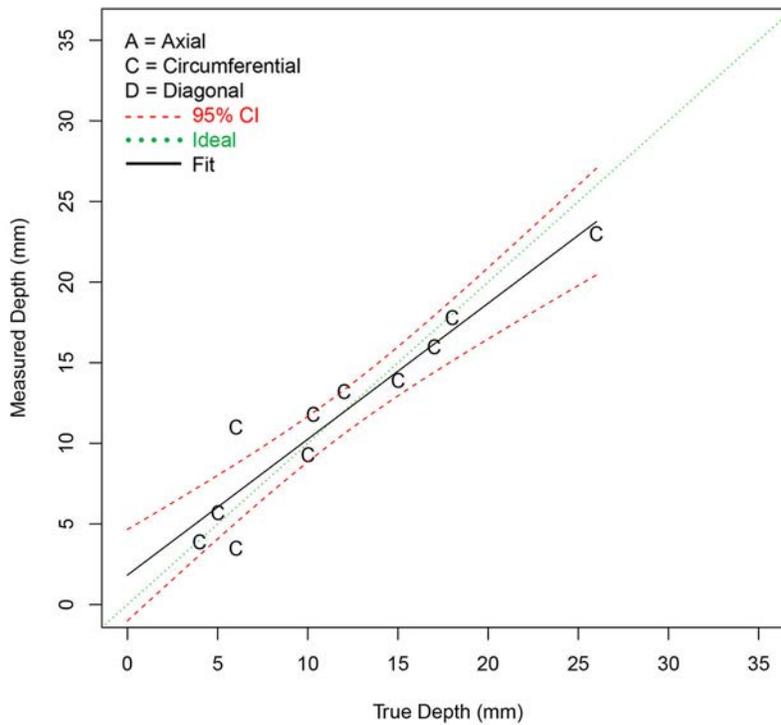


Figure F.22 Depth Sizing Regression (in mm) for Procedure UT.104 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

F.2 Depth Sizing Results for Procedures Types Applied to SBDMW Test Blocks and FB Test Blocks with O.D. Access

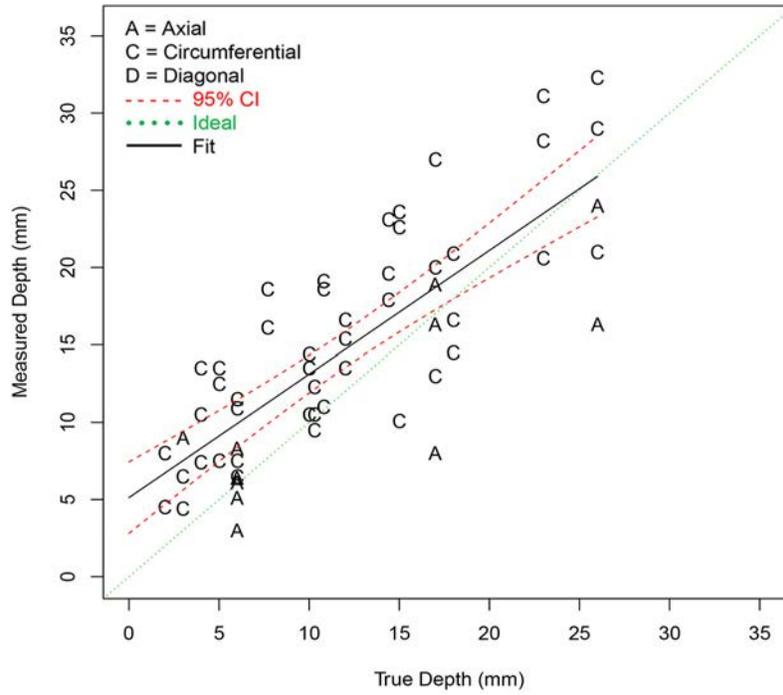


Figure F.23 Depth Sizing Regression (in mm) for ADVPAUT Procedures SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

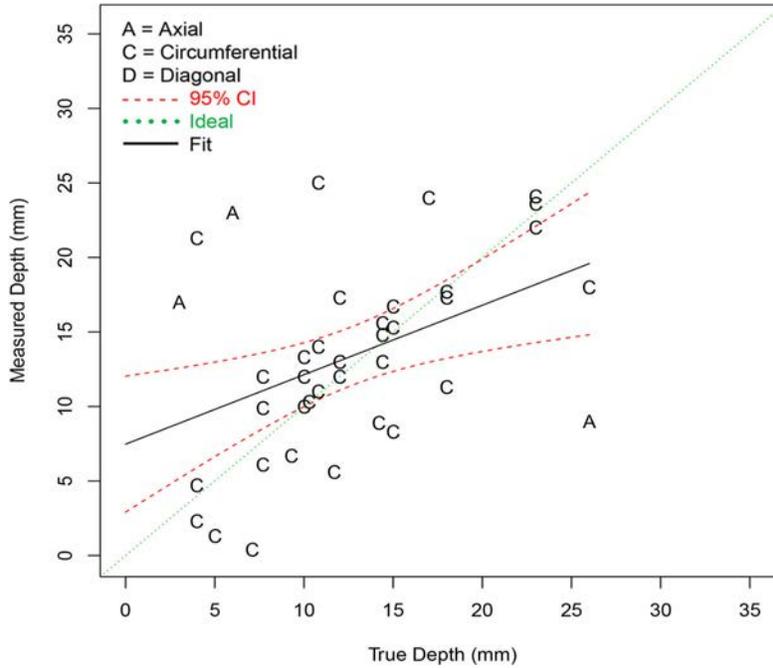


Figure F.24 Depth Sizing Regression (in mm) for NLUT Procedures SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

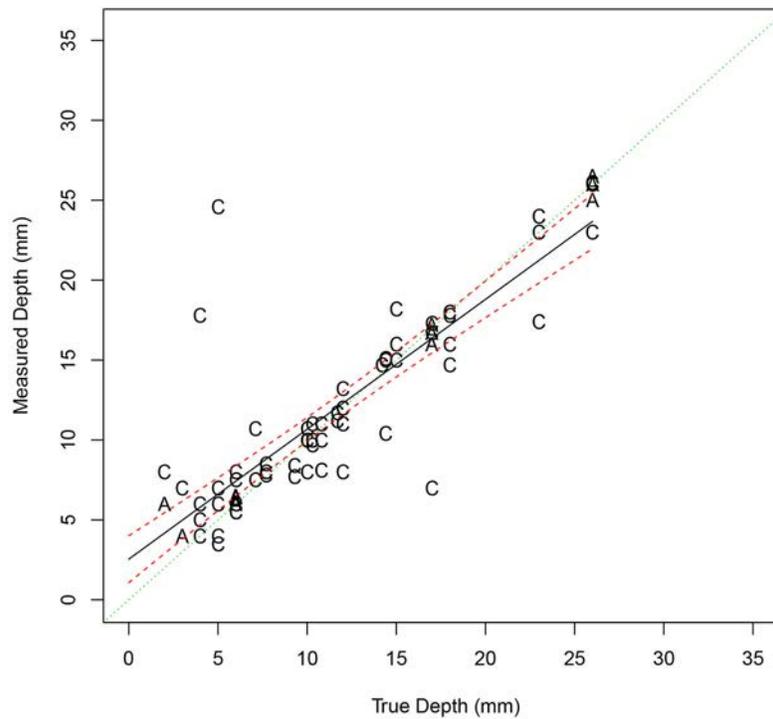


Figure F.25 Depth Sizing Regression (in mm) for PAUT Procedures SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

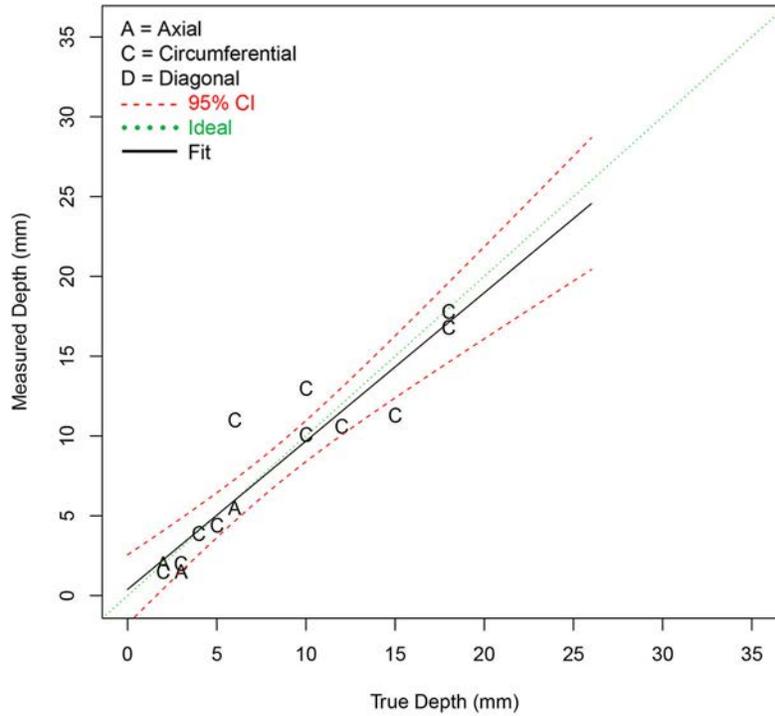


Figure F.26 Depth Sizing Regression (in mm) for RT Procedures SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

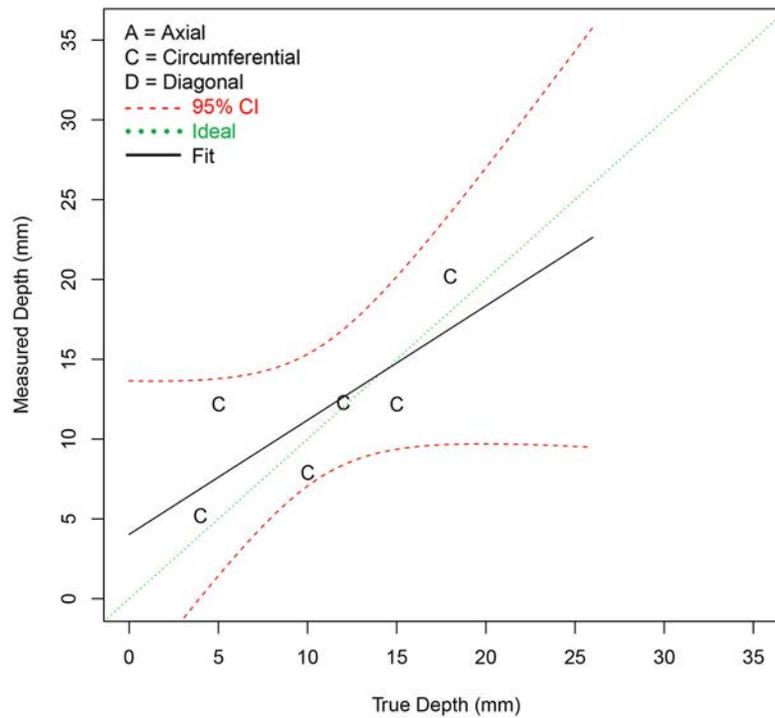


Figure F.27 Depth Sizing Regression (in mm) for UIR Procedures SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

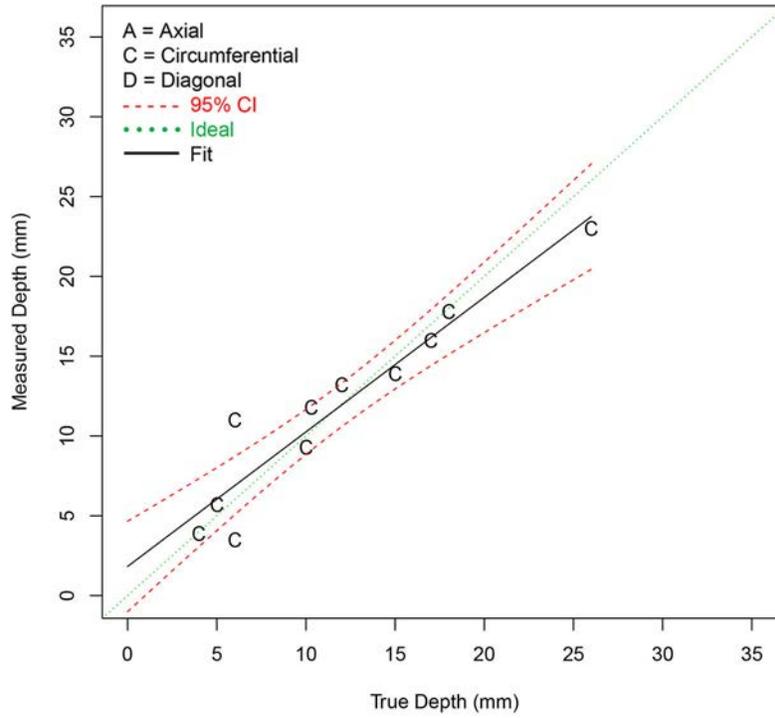


Figure F.28 Depth Sizing Regression (in mm) for UT Procedures SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/ FB test blocks)

F.3 Depth Sizing Results for Procedures Applied to SBDMW Test Blocks and FB Test Blocks with I.D. Access

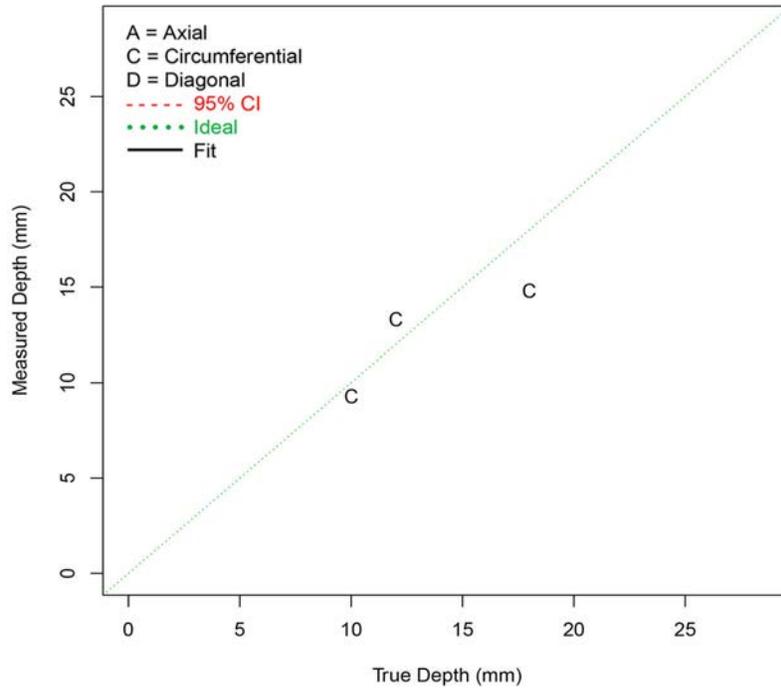


Figure F.29 Depth Sizing Regression (in mm) for Procedure HHUT.30 on SBDMW Test Blocks in PARENT Open Testing (I.D. access – w/ FB test blocks)

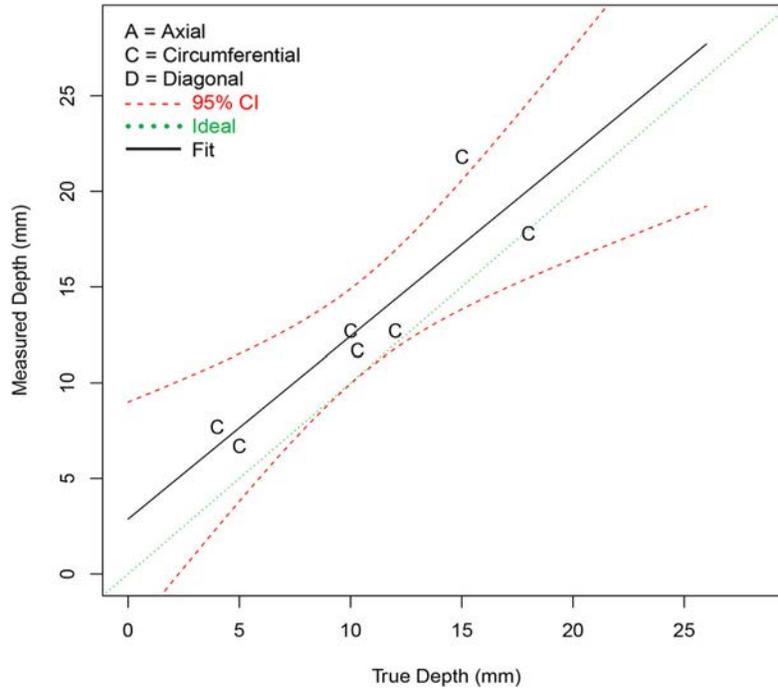


Figure F.30 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.1 on SBDMW Test Blocks in PARENT Open Testing (I.D. access – w/ FB test blocks)

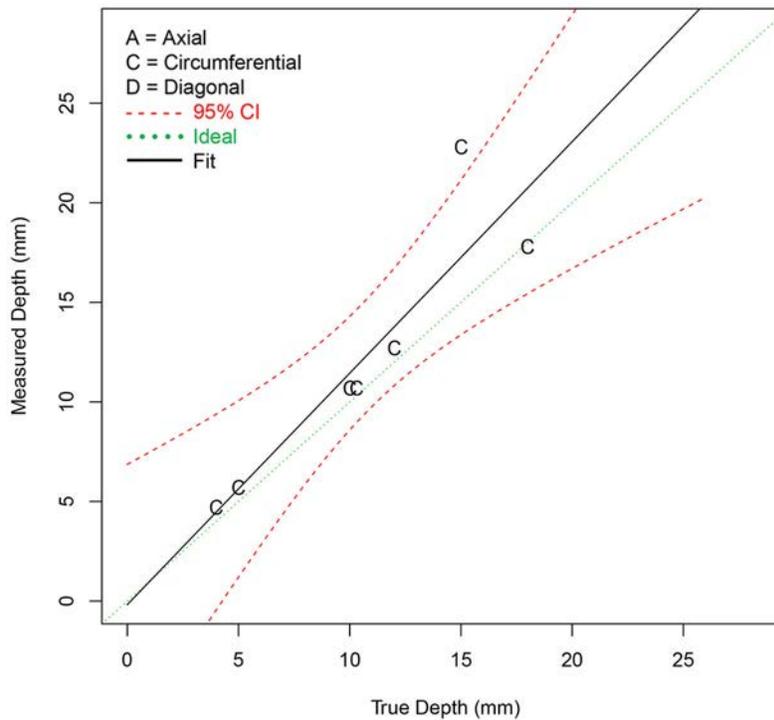


Figure F.31 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.2 on SBDMW Test Blocks in PARENT Open Testing (I.D. access – w/ FB test blocks)

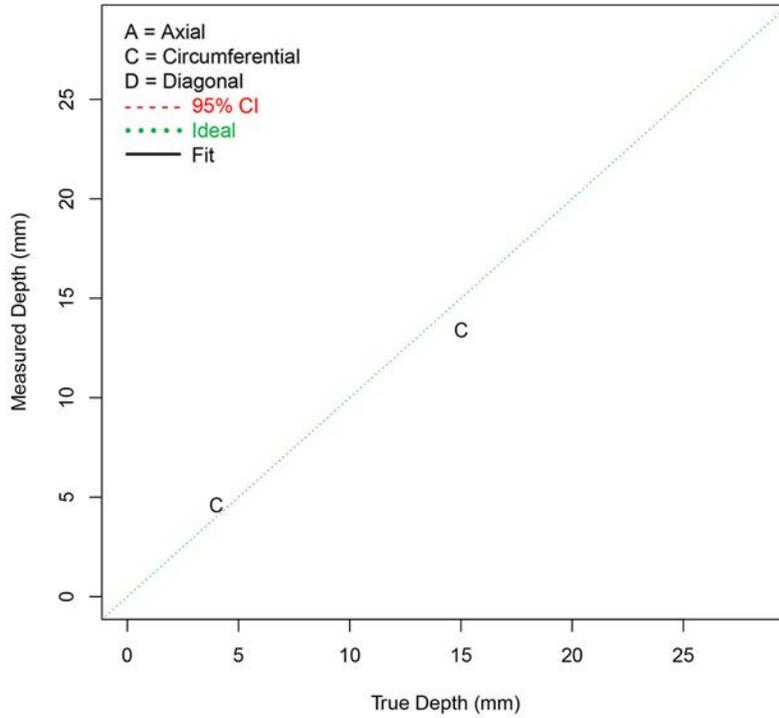


Figure F.32 Depth Sizing Regression (in mm) for Procedure PAUT.131.1 on SBDMW Test Blocks in PARENT Open Testing (I.D. access – w/ FB test blocks)

F.4 Depth Sizing Results for Procedure Types Applied to SBDMW Test Blocks and FB Test Blocks with I.D. Access

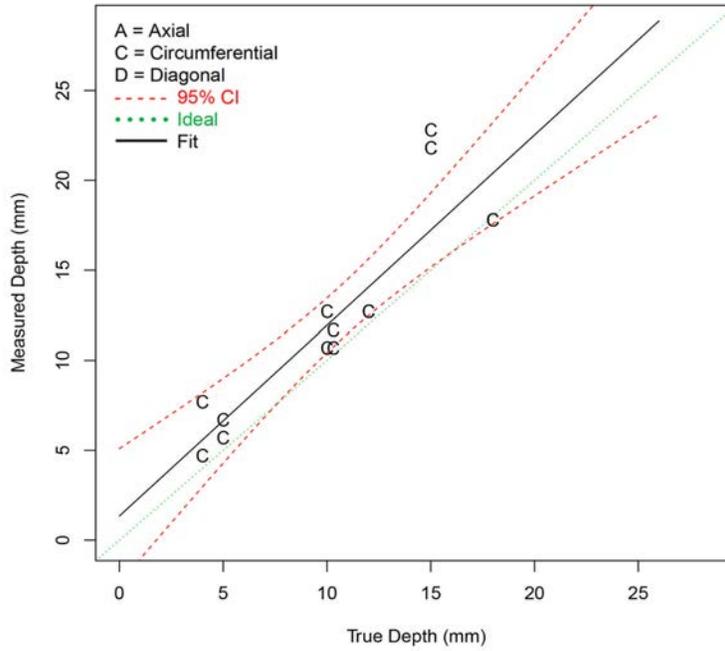


Figure F.33 Depth Sizing Regression (in mm) for ADVPAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (I.D. access – w/ FB test blocks)

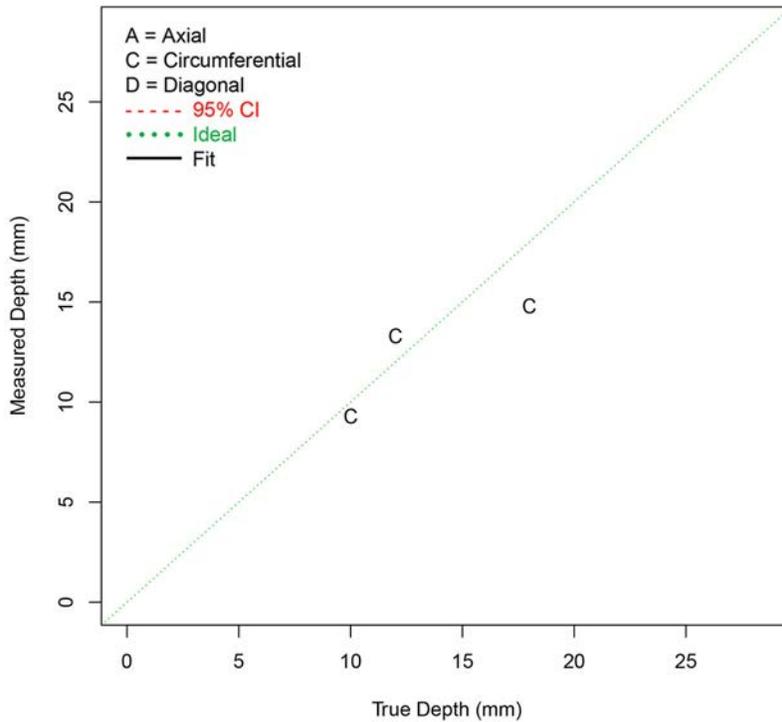


Figure F.34 Depth Sizing Regression (in mm) for NLUT Procedures on SBDMW Test Blocks in PARENT Open Testing (I.D. access – w/ FB test blocks)

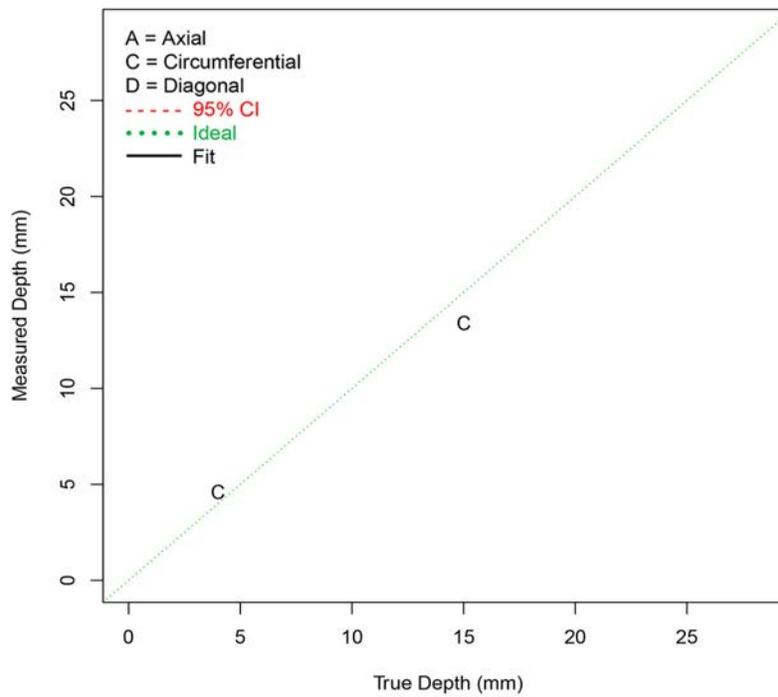


Figure F.35 Depth Sizing Regression (in mm) for PAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (I.D. access – w/ FB test blocks)

F.5 Depth Sizing Results for Procedures Applied to SBDMW Test Blocks, Excluding FB Test Blocks, and with O.D. Access

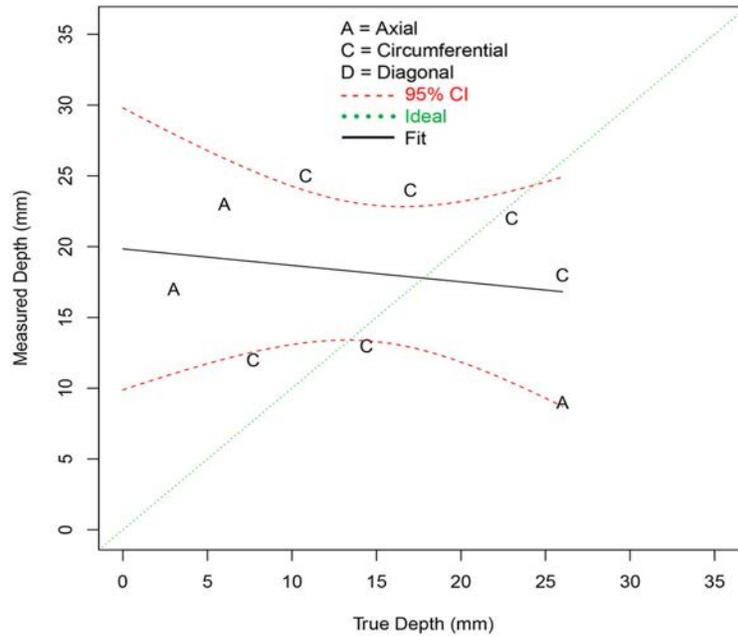


Figure F.36 Depth Sizing Regression (in mm) for Procedure HHUT.27.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

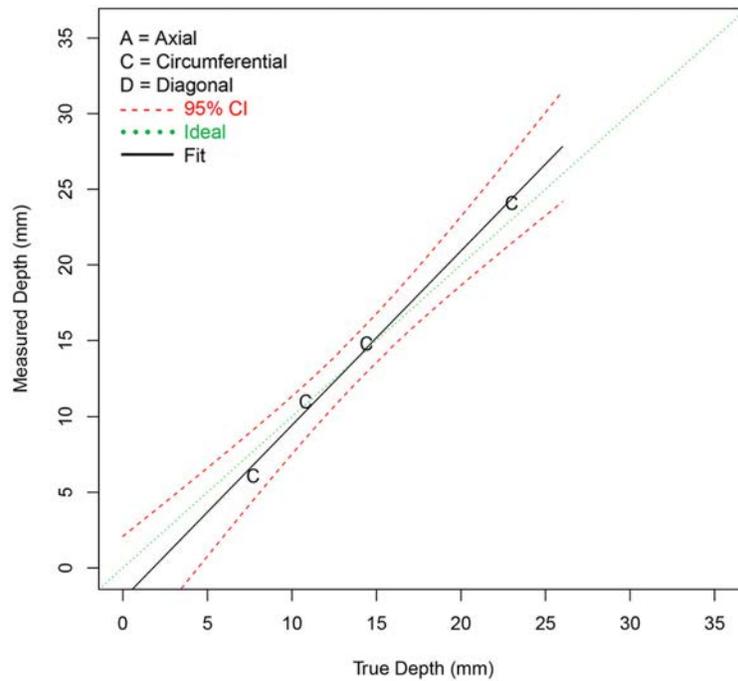


Figure F.37 Depth Sizing Regression (in mm) for Procedure LASH.18 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

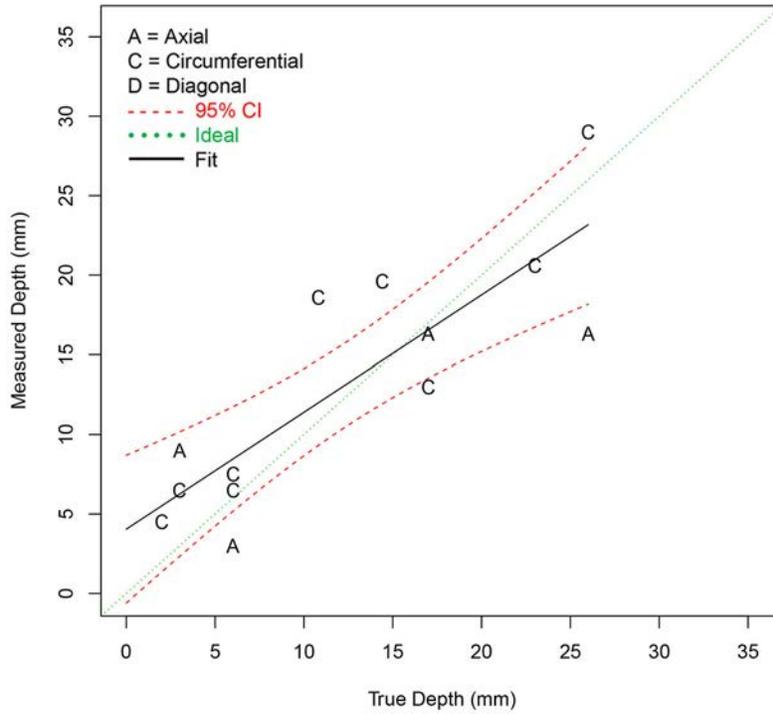


Figure F.38 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.0 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

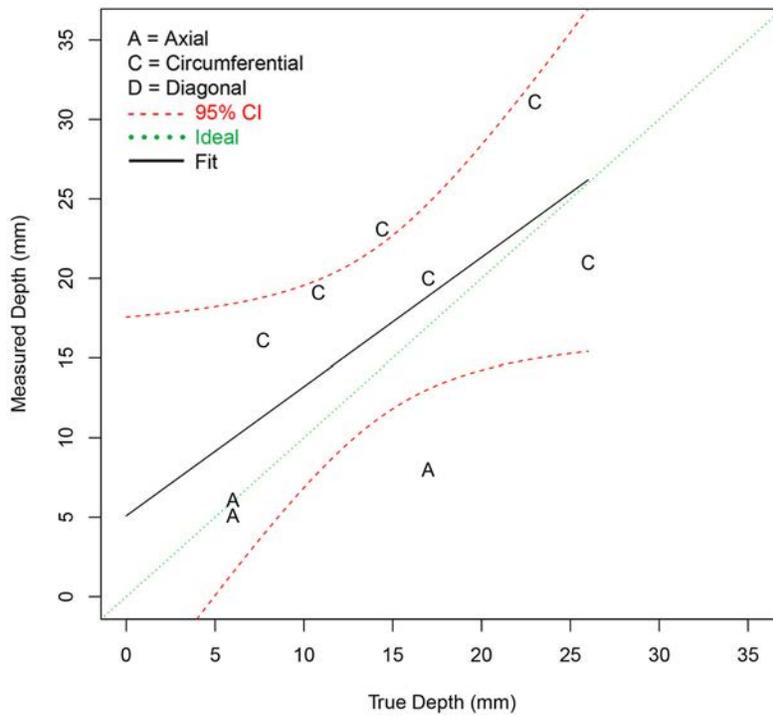


Figure F.39 Depth Sizing Regression (in mm) for Procedure PATP.29 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

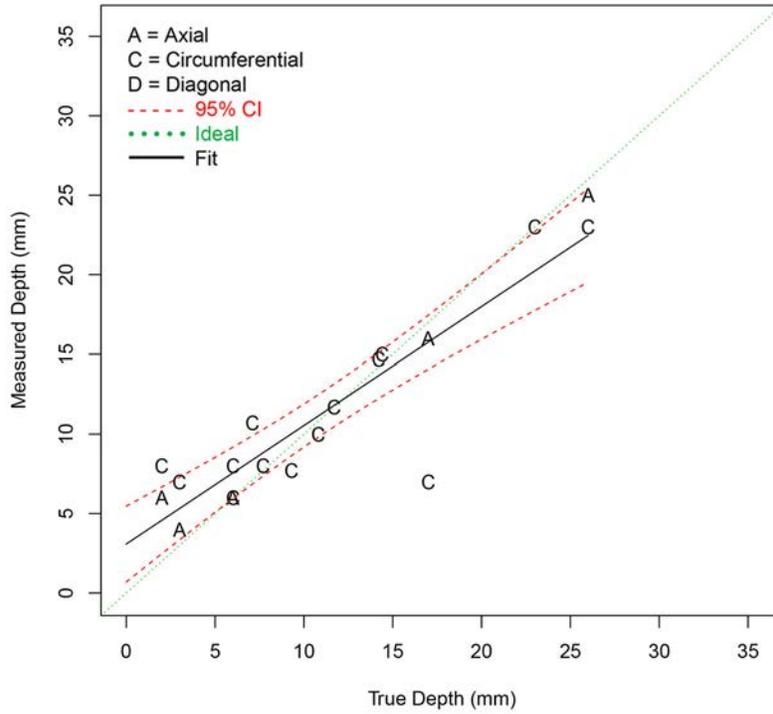


Figure F.40 Depth Sizing Regression (in mm) for Procedure PAUT.114 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

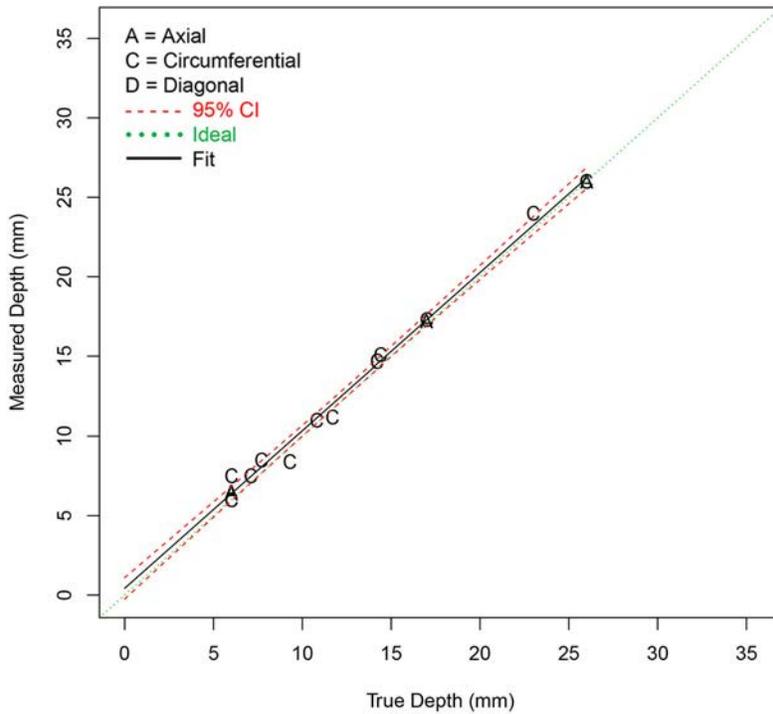


Figure F.41 Depth Sizing Regression (in mm) for Procedure PAUT.131.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

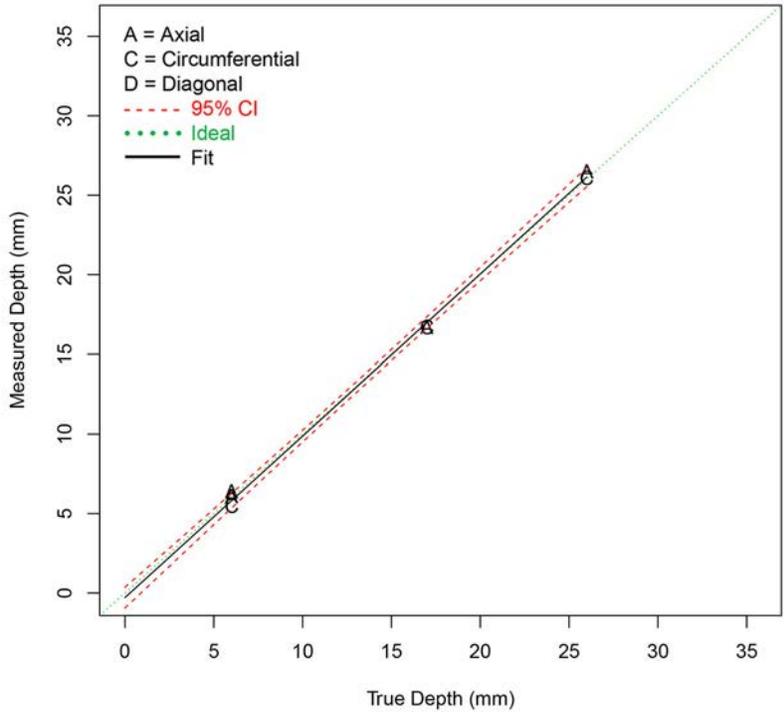


Figure F.42 Depth Sizing Regression (in mm) for Procedure 131.4 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

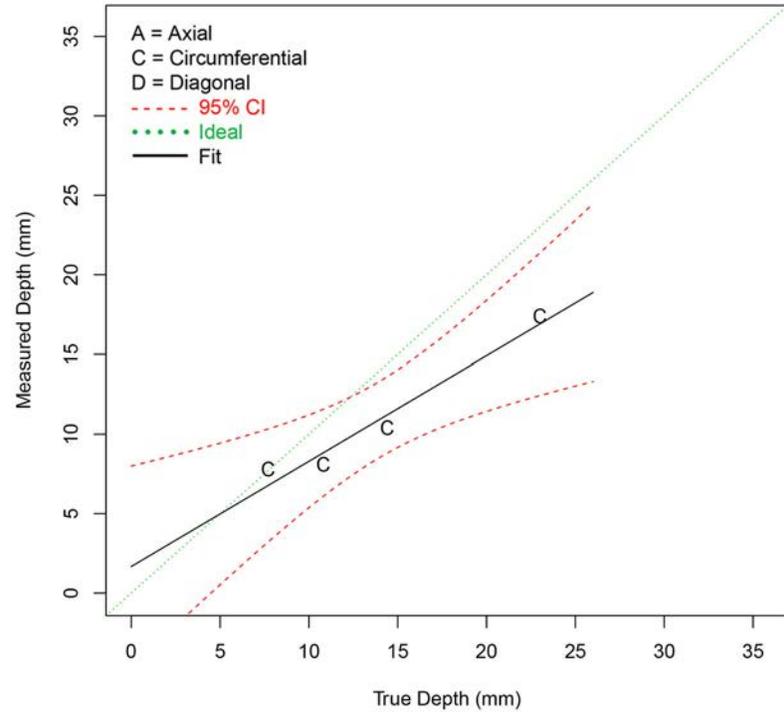


Figure F.43 Depth Sizing Regression (in mm) for Procedure PAUT.20 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

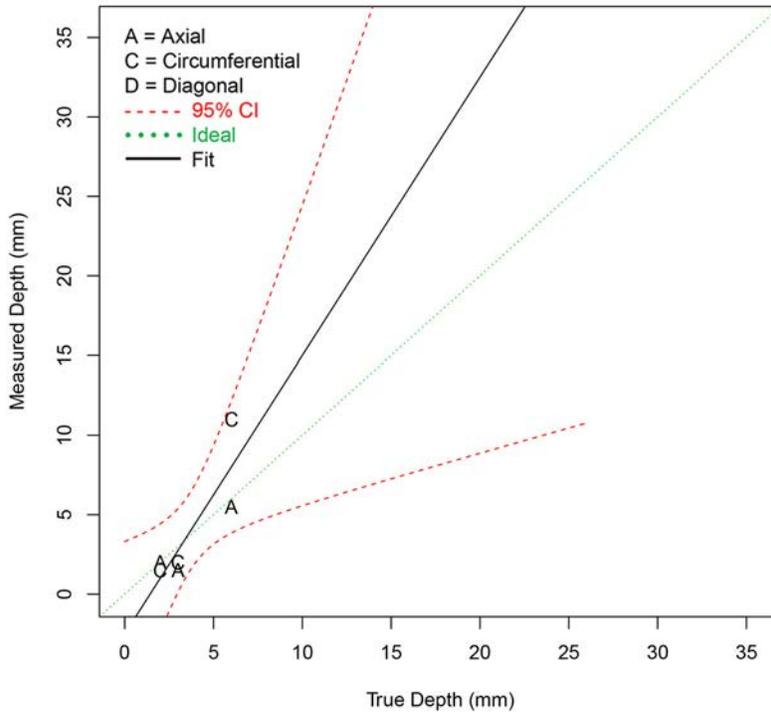


Figure F.44 Depth Sizing Regression (in mm) for Procedure RT.112 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

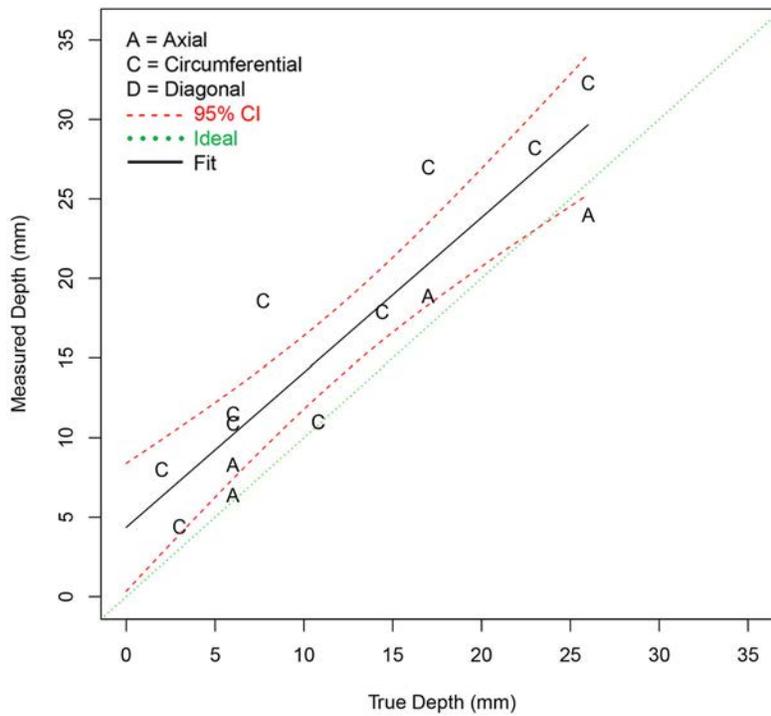


Figure F.45 Depth Sizing Regression (in mm) for Procedure SAFT.17 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

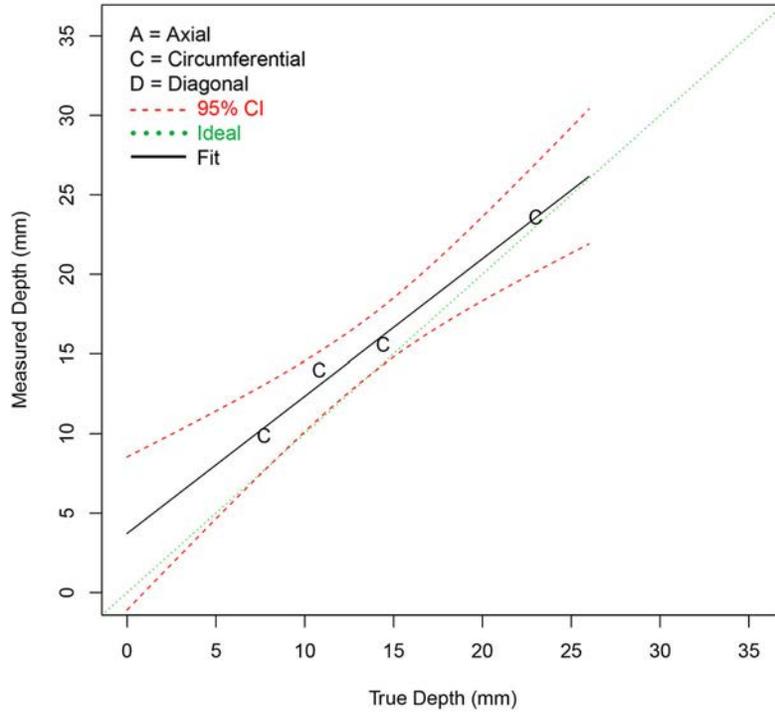


Figure F.46 Depth Sizing Regression (in mm) for Procedure SHPA.6.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

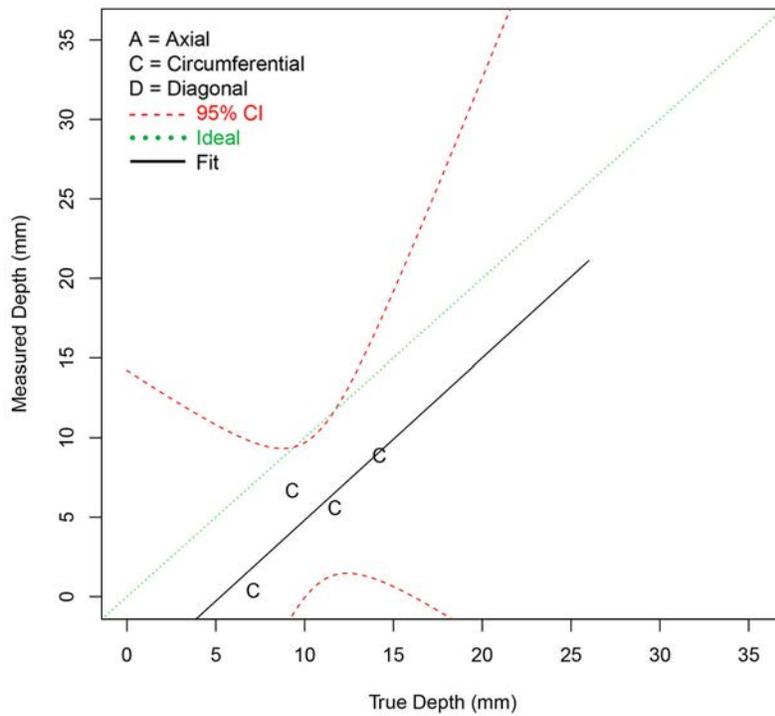


Figure F.47 Depth Sizing Regression (in mm) for Procedure SHPA.6.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

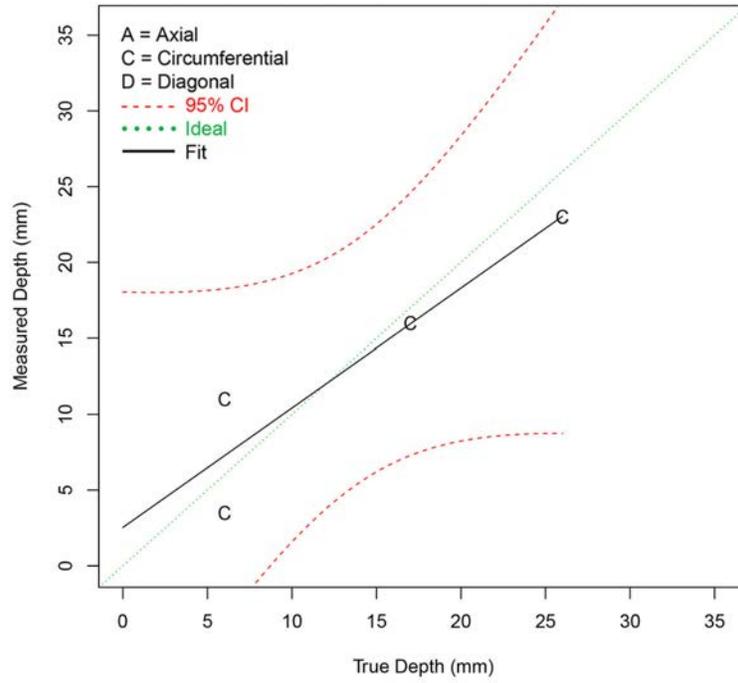


Figure F.48 Depth Sizing Regression (in mm) for Procedure UT.104 on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

F.6 Depth Sizing Results for Procedure Types Applied to SBDMW Test Blocks, Excluding FB Test Blocks, and with O.D. Access

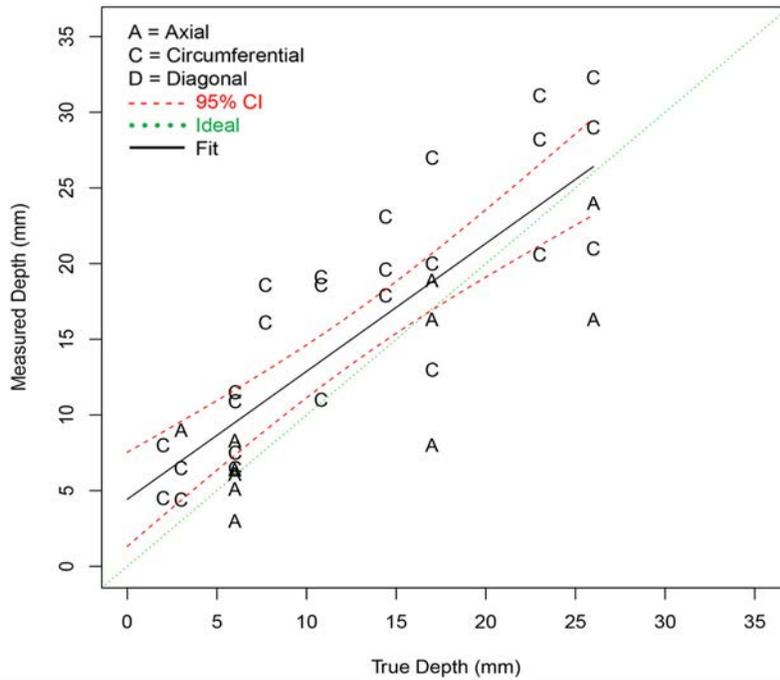


Figure F.49 Depth Sizing Regression (in mm) for ADVPAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

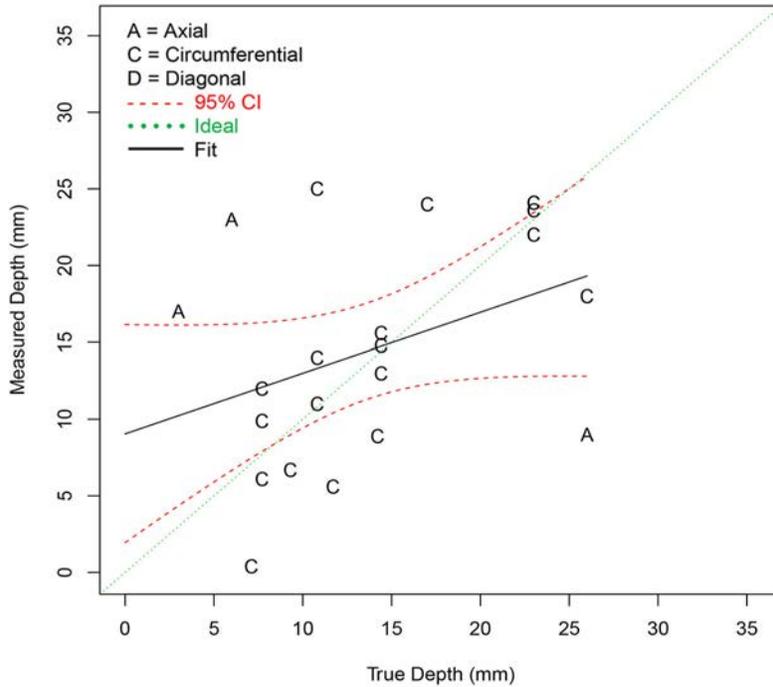


Figure F.50 Depth Sizing Regression (in mm) for NLUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

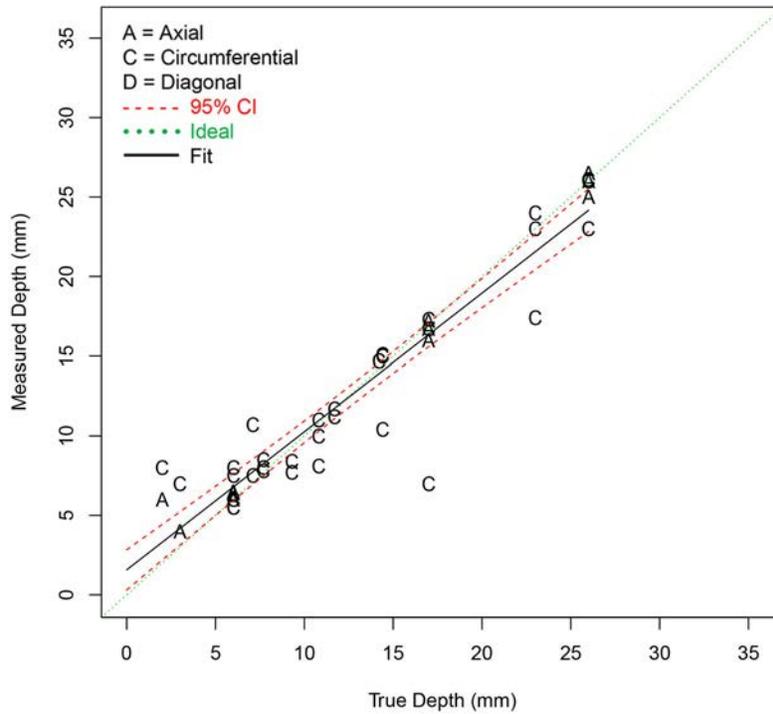


Figure F.51 Depth Sizing Regression (in mm) for PAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

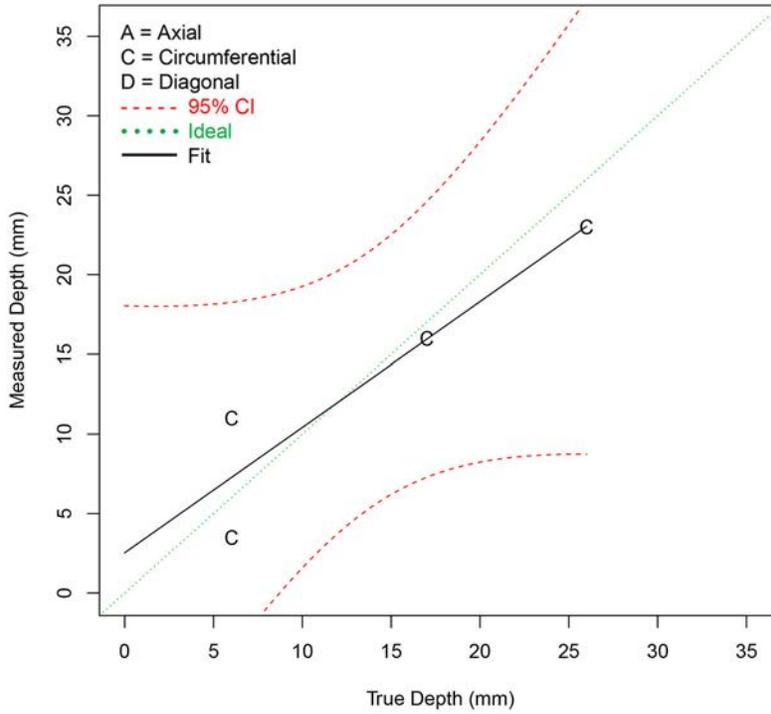


Figure F.52 Depth Sizing Regression (in mm) for RT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

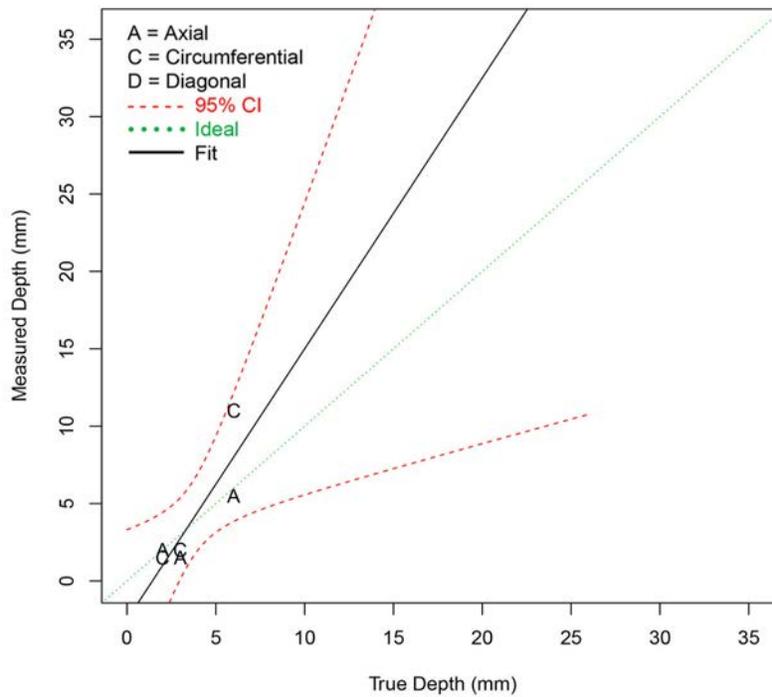


Figure F.53 Depth Sizing Regression (in mm) for UT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access – w/o FB test blocks)

F.7 Depth Sizing Results for Procedures Applied to FB Test Blocks with O.D. Access

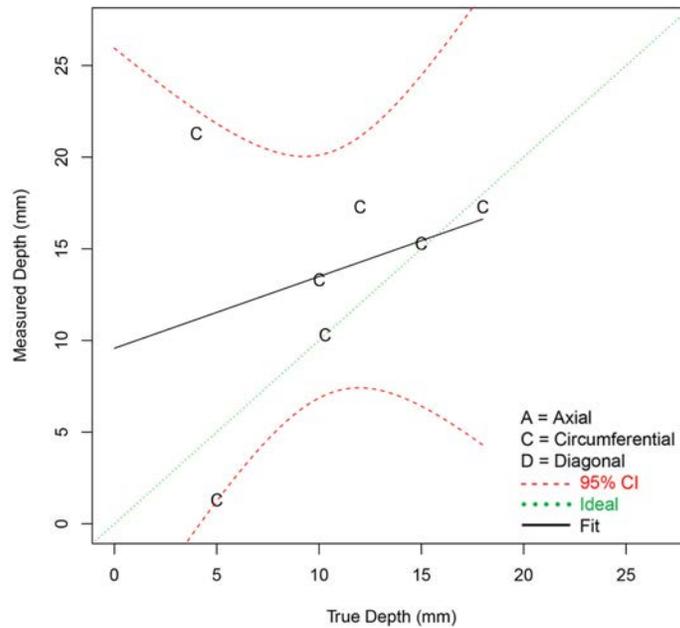


Figure F.54 Depth Sizing Regression (in mm) for Procedure HHUT.27.2 on FB Test Blocks in PARENT Open Testing (O.D. access)

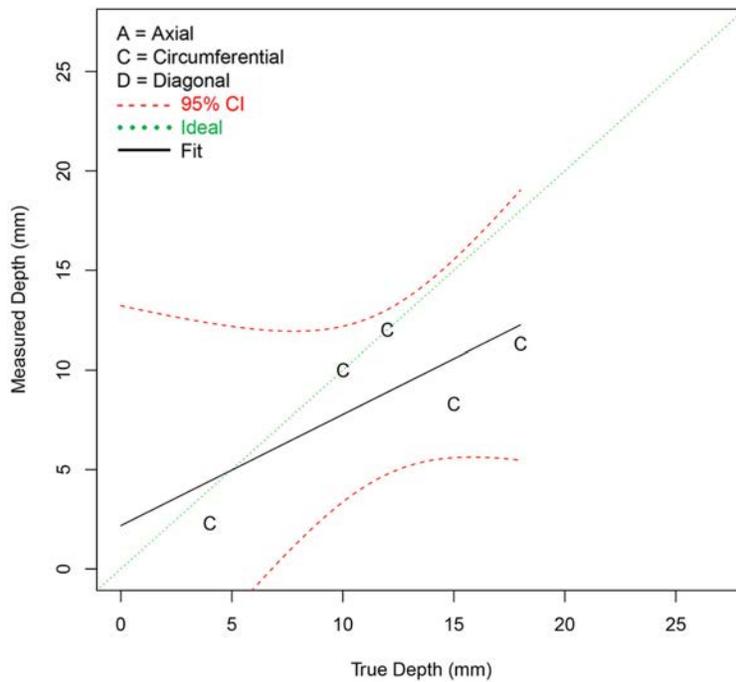


Figure F.55 Depth Sizing Regression (in mm) for Procedure LASH.18 on FB Test Blocks in PARENT Open Testing (O.D. access)

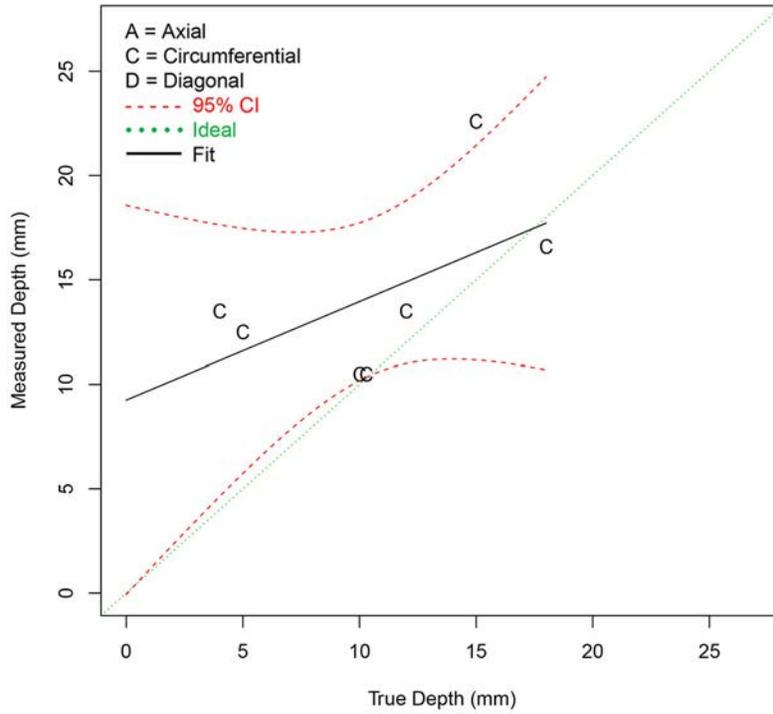


Figure F.56 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.1 on FB Test Blocks in PARENT Open Testing (O.D. access)

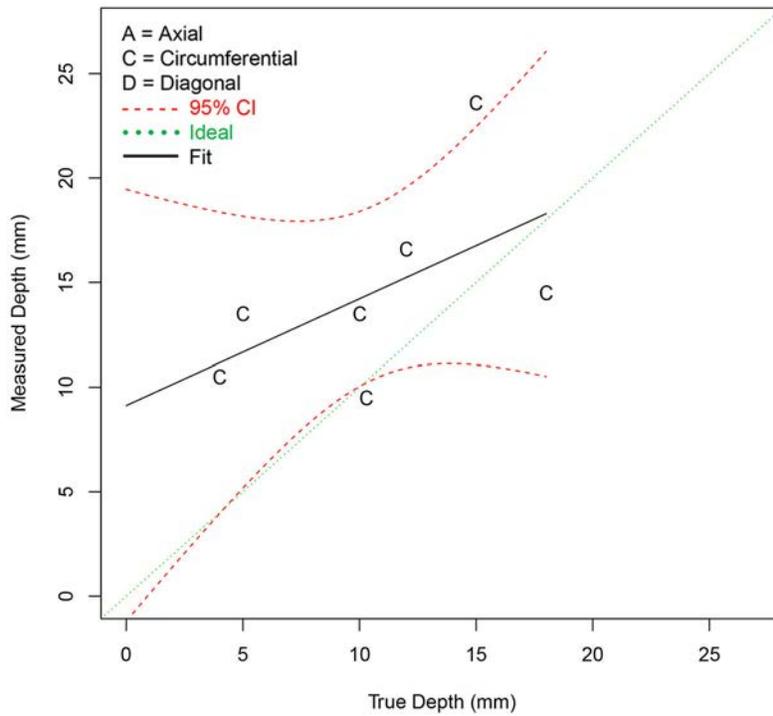


Figure F.57 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.2 on FB Test Blocks in PARENT Open Testing (O.D. access)

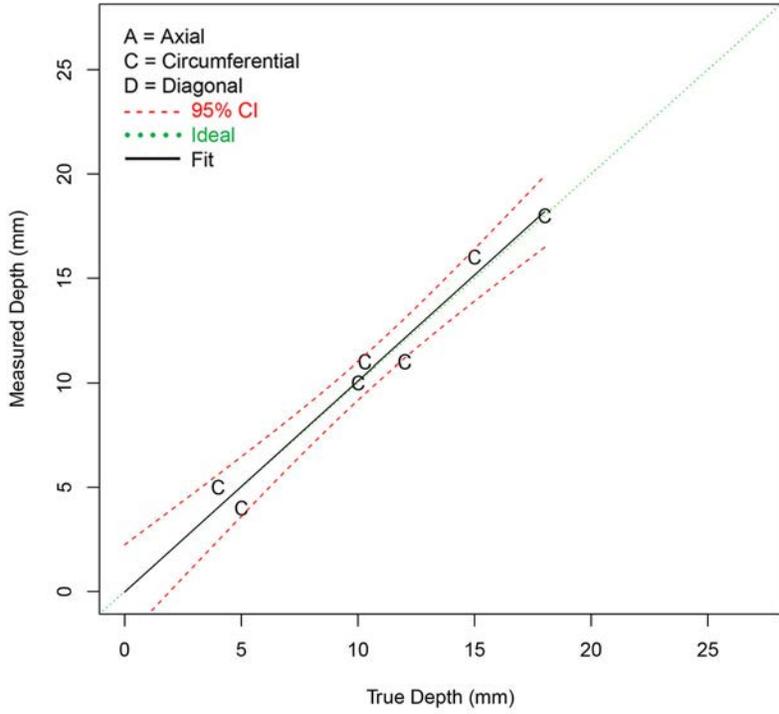


Figure F.58 Depth Sizing Regression (in mm) for Procedure PAUT.114 on FB Test Blocks in PARENT Open Testing (O.D. access)

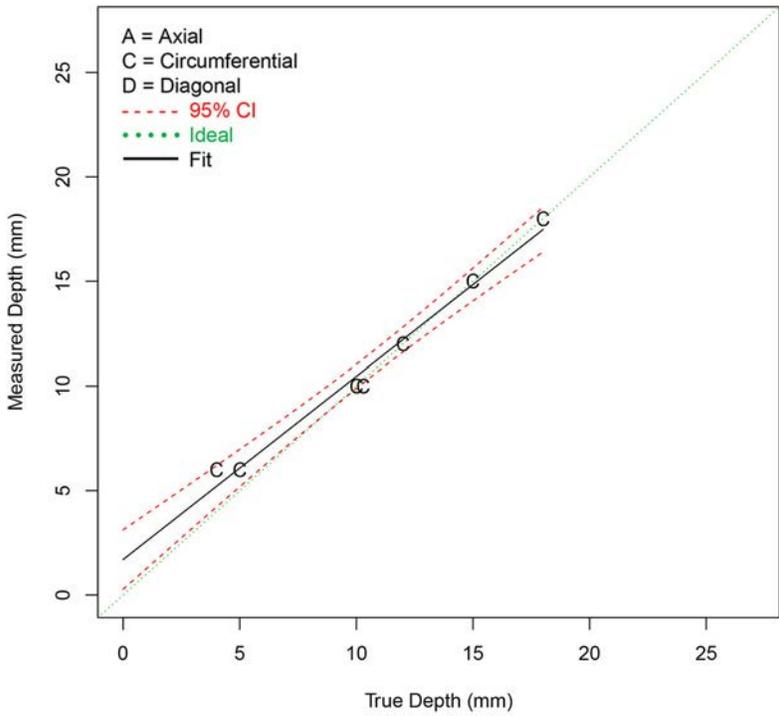


Figure F.59 Depth Sizing Regression (in mm) for Procedure PAUT.122.1 on FB Test Blocks in PARENT Open Testing (O.D. access)

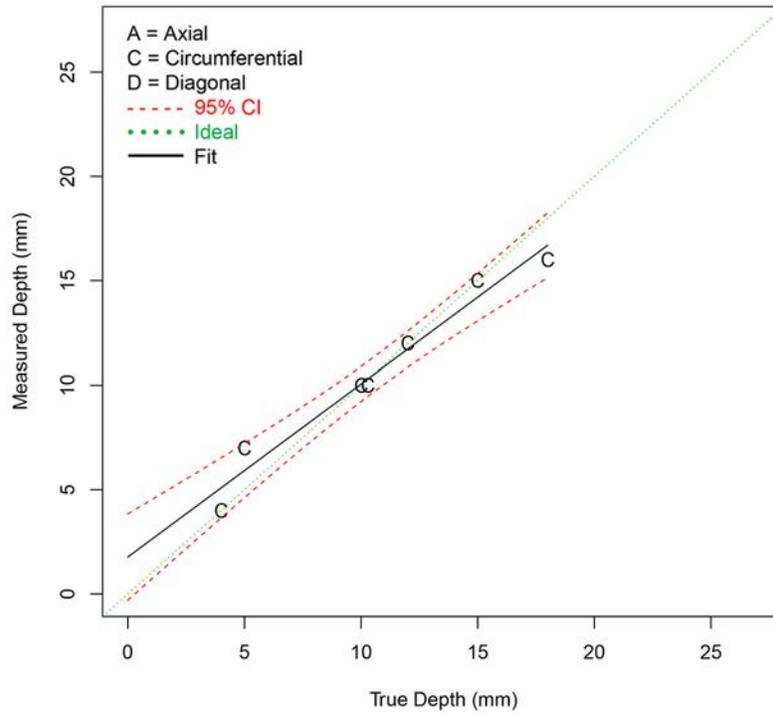


Figure F.60 Depth Sizing Regression (in mm) for Procedure PAUT.122.2 on FB Test Blocks in PARENT Open Testing (O.D. access)

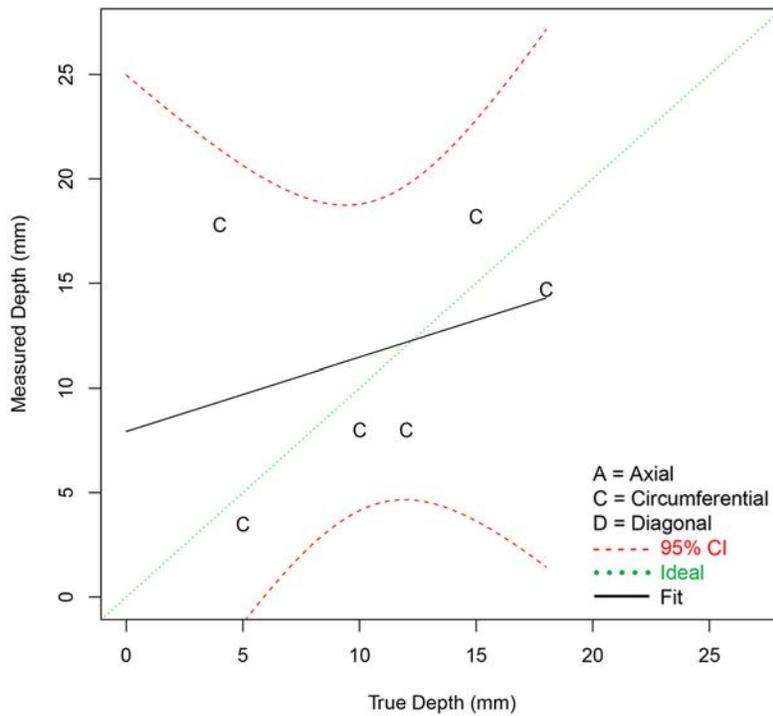


Figure F.61 Depth Sizing Regression (in mm) for Procedure PAUT.131.1 on FB Test Blocks in PARENT Open Testing (O.D. access)

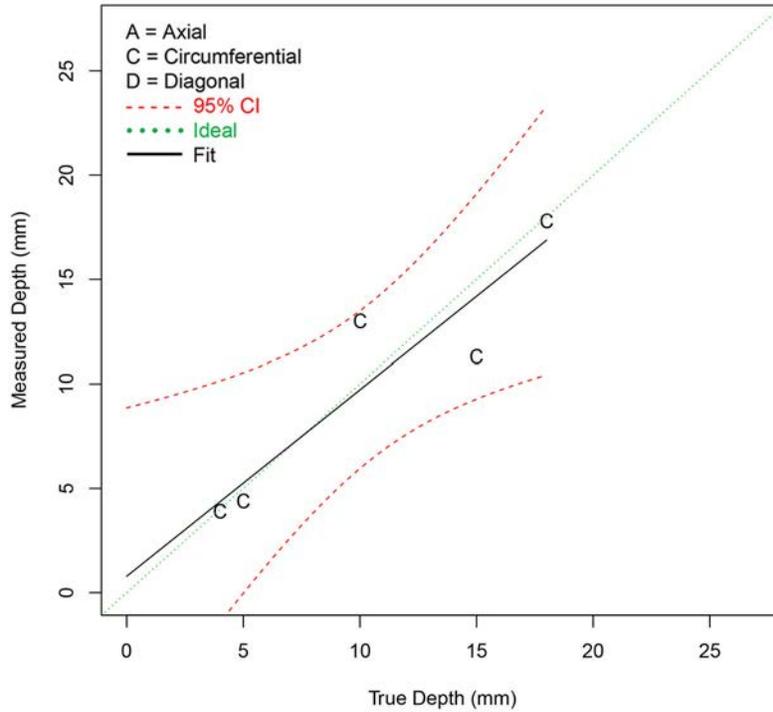


Figure F.62 Depth Sizing Regression (in mm) for Procedure PAUT.20 on FB Test Blocks in PARENT Open Testing (O.D. access)

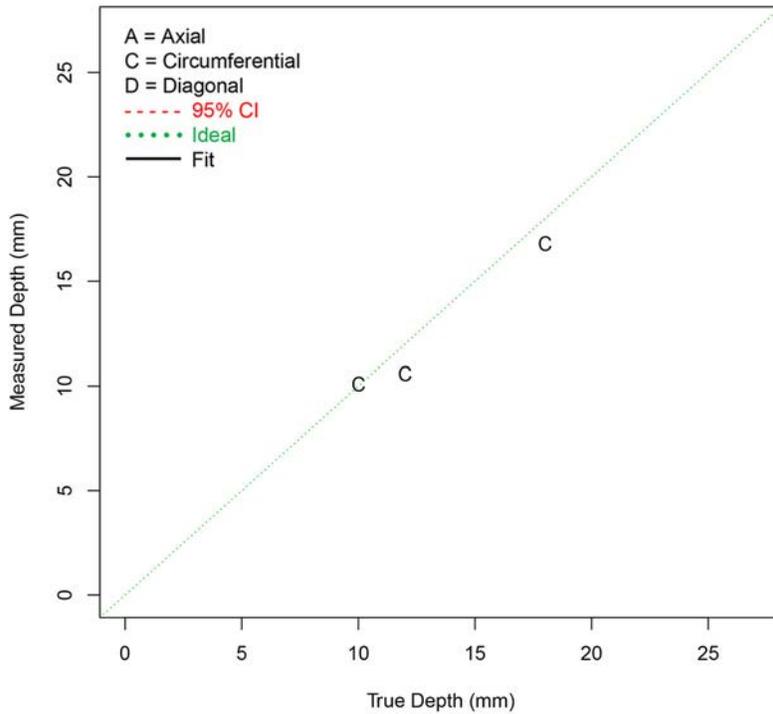


Figure F.63 Depth Sizing Regression (in mm) for Procedure RT.109 on FB Test Blocks in PARENT Open Testing (O.D. access)

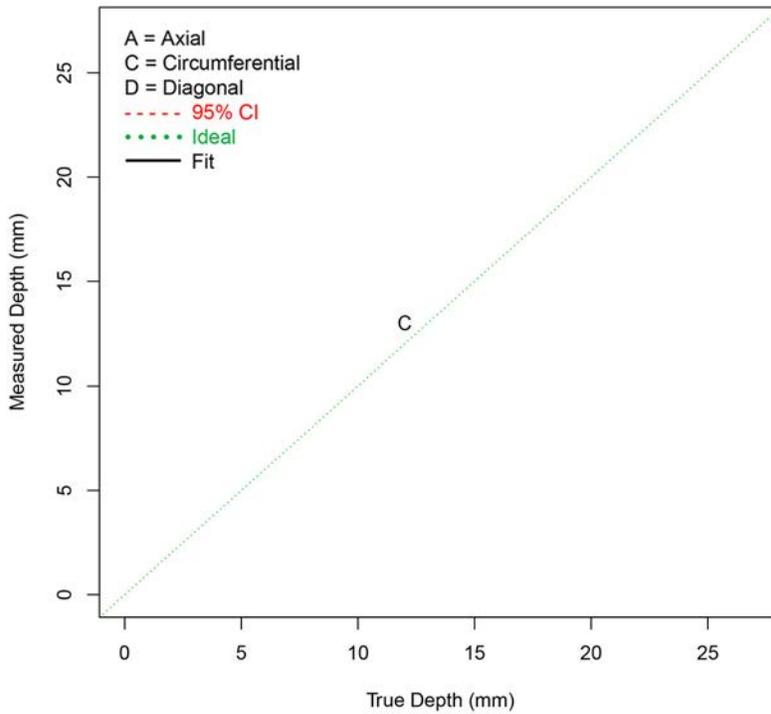


Figure F.64 Depth Sizing Regression (in mm) for Procedure RT.112 on FB Test Blocks in PARENT Open Testing (O.D. access)

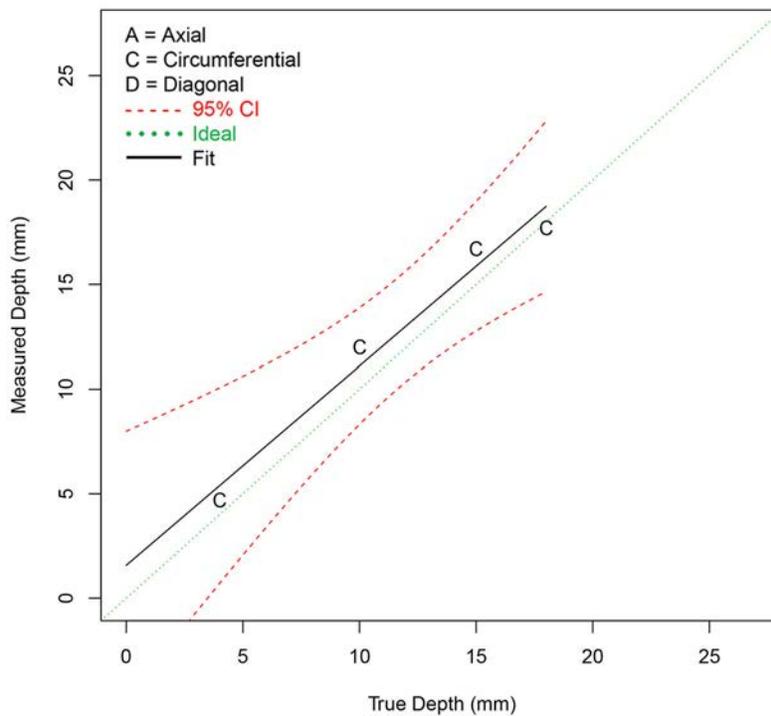


Figure F.65 Depth Sizing Regression (in mm) for Procedure SAFT.17 on FB Test Blocks in PARENT Open Testing (O.D. access)

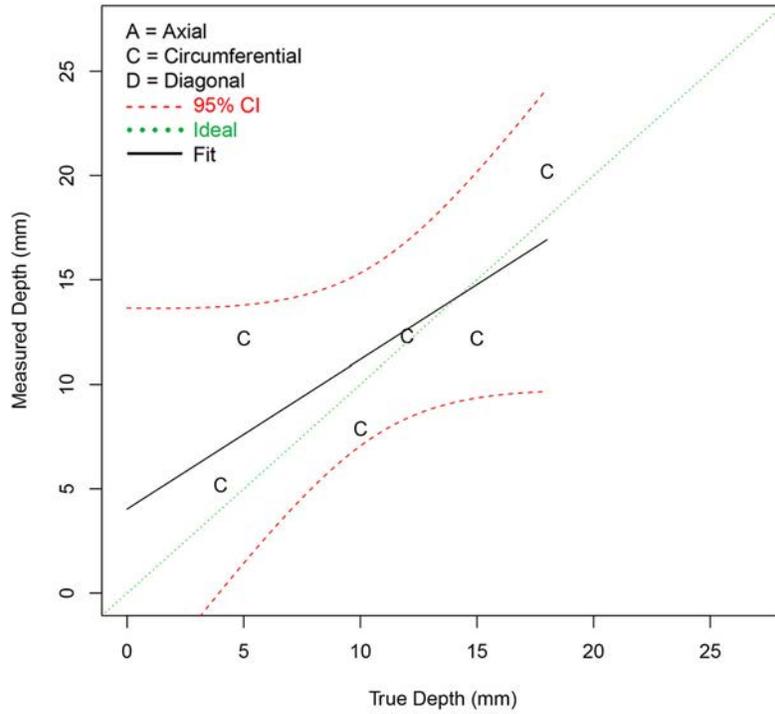


Figure F.66 Depth Sizing Regression (in mm) for Procedure SHPA.6.1 on FB Test Blocks in PARENT Open Testing (O.D. access)

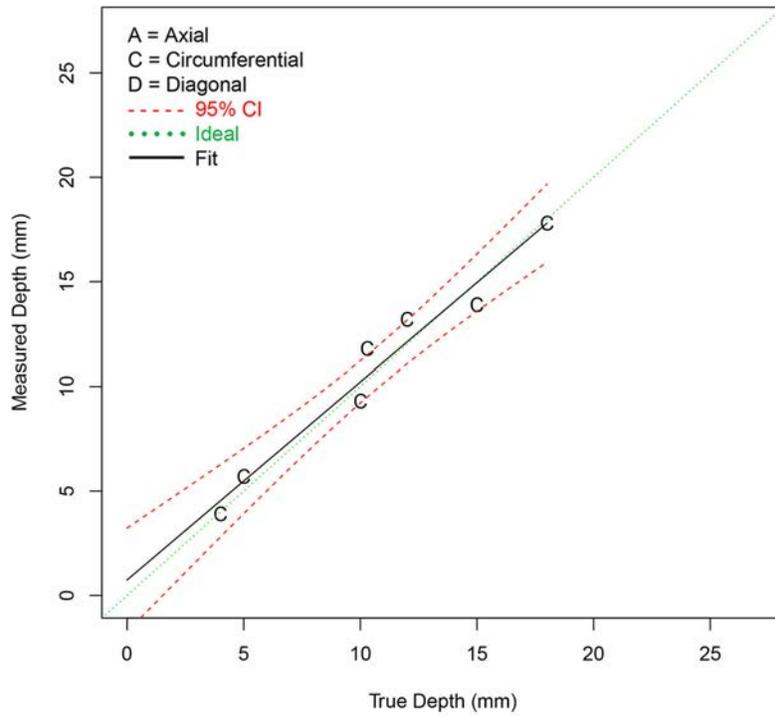


Figure F.67 Depth Sizing Regression (in mm) for Procedure SHPA.6.3 on FB Test Blocks in PARENT Open Testing (O.D. access)

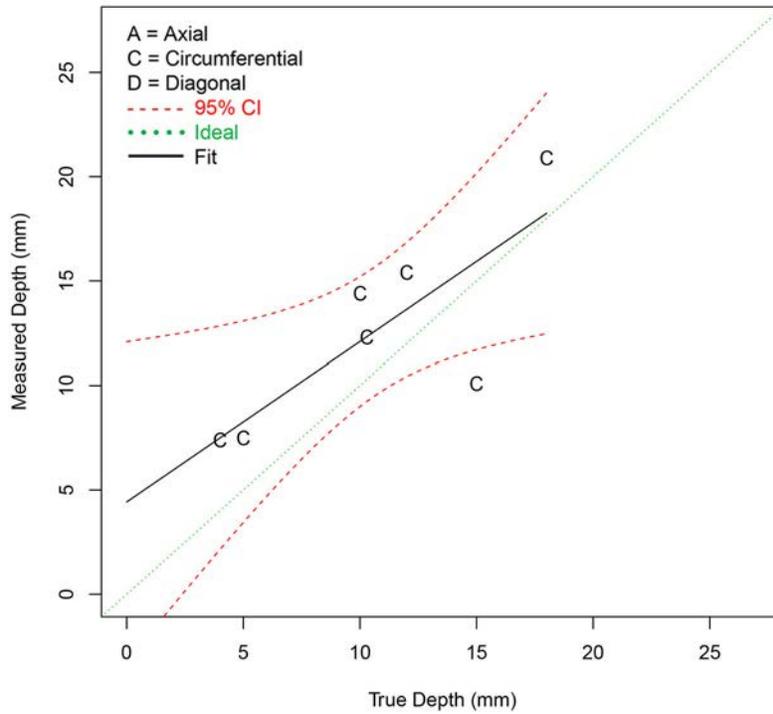


Figure F.68 Depth Sizing Regression (in mm) for Procedure UIR.20 on FB Test Blocks in PARENT Open Testing (O.D. access)

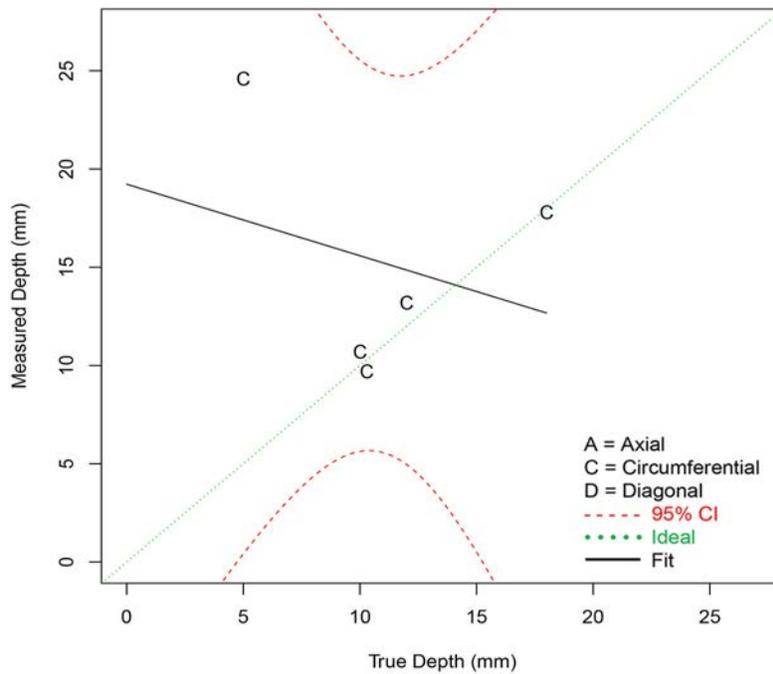


Figure F.69 Depth Sizing Regression (in mm) for Procedure UT.104 on FB Test Blocks in PARENT Open Testing (O.D. access)

F.8 Depth Sizing Results for Procedure Types Applied to FB Test Blocks with O.D. Access

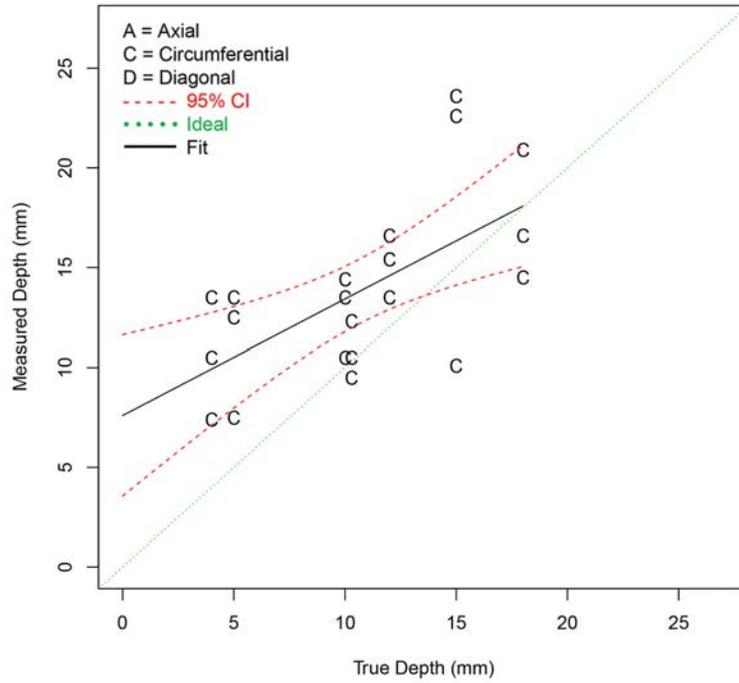


Figure F.70 Depth Sizing Regression (in mm) for ADVPAUT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)

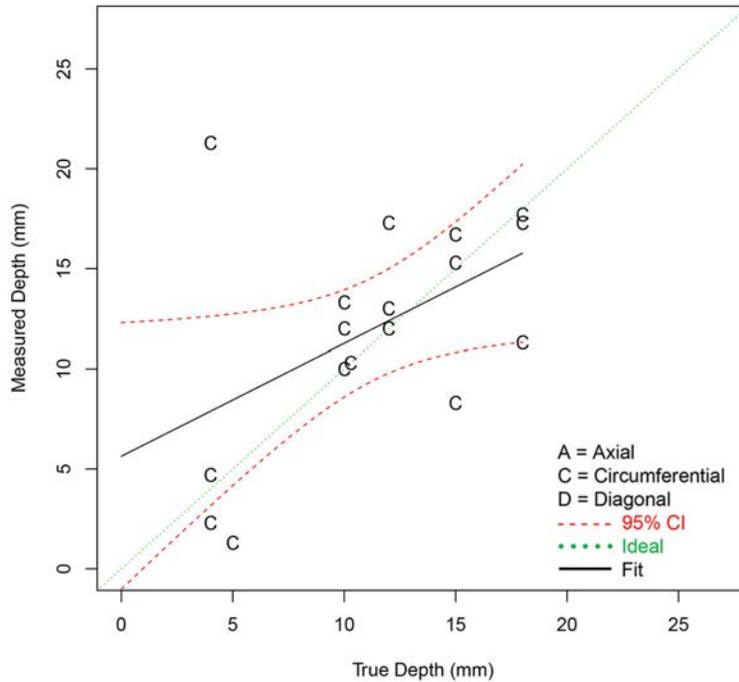


Figure F.71 Depth Sizing Regression (in mm) for NLUT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)

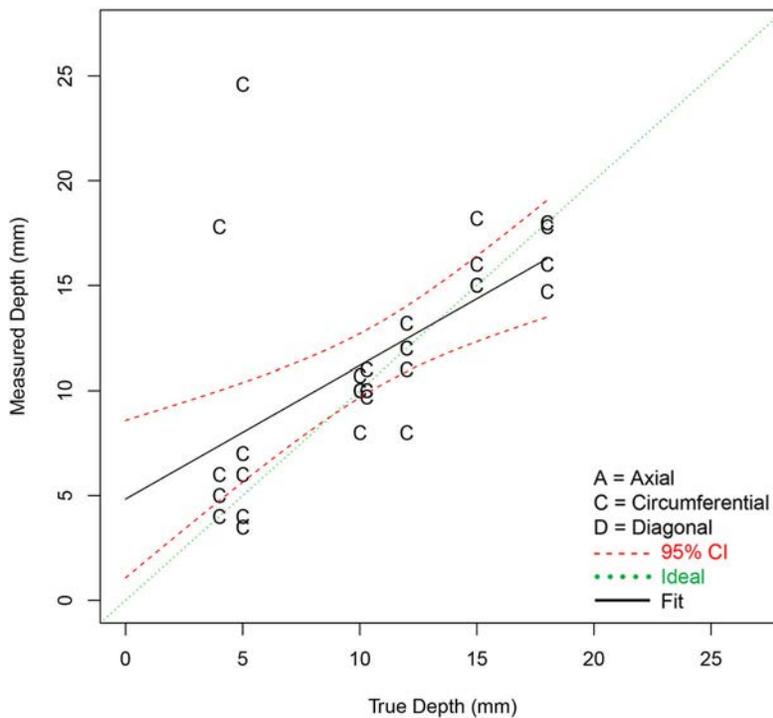


Figure F.72 Depth Sizing Regression (in mm) for PAUT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)

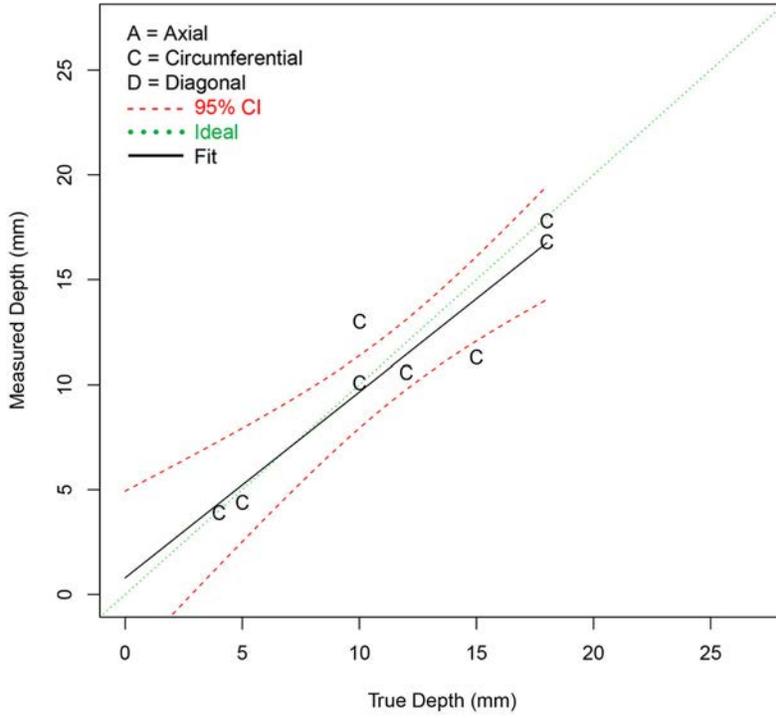


Figure F.73 Depth Sizing Regression (in mm) for RT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)

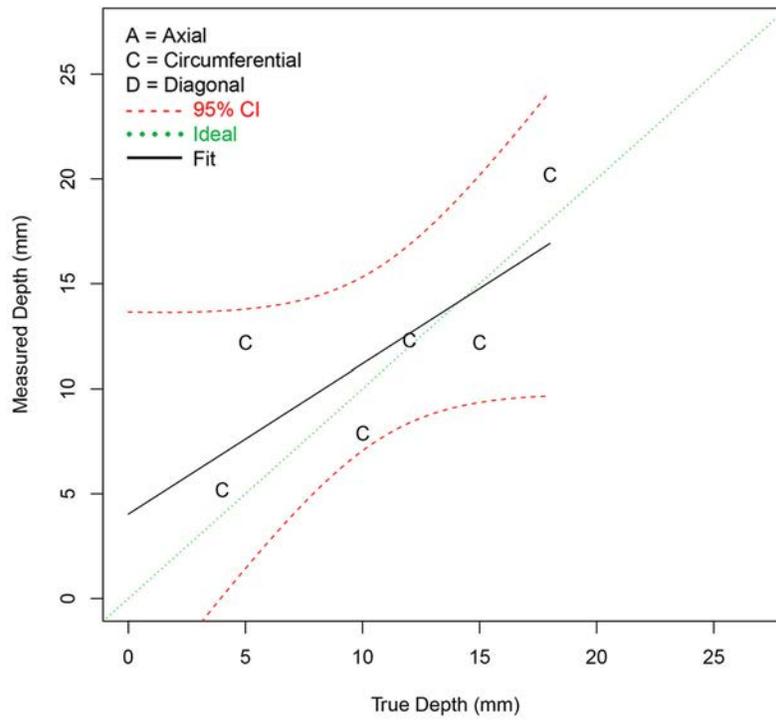


Figure F.74 Depth Sizing Regression (in mm) for UIR Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)

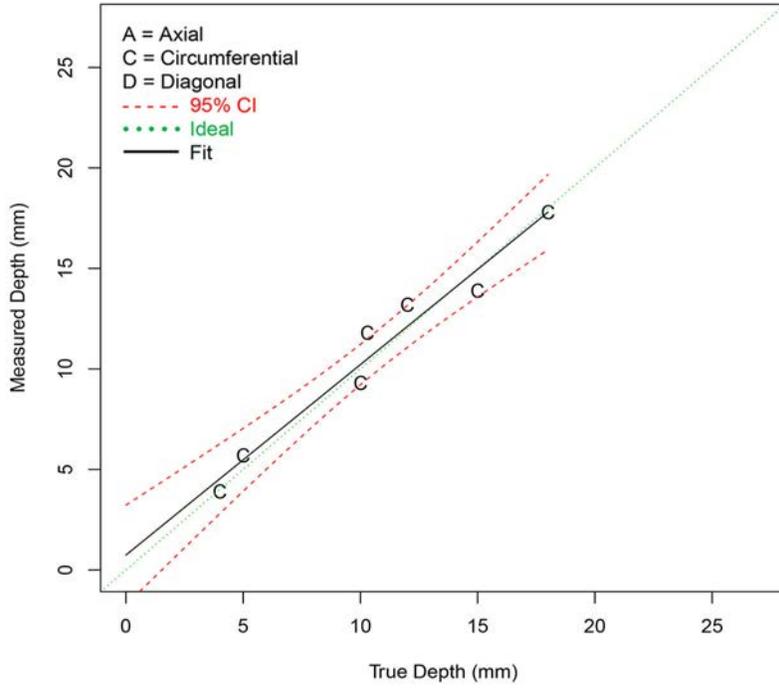


Figure F.75 Depth Sizing Regression (in mm) for UT Procedures on FB Test Blocks in PARENT Open Testing (O.D. access)

F.9 Depth Sizing Results for Procedures Applied to FB Test Blocks with I.D. Access

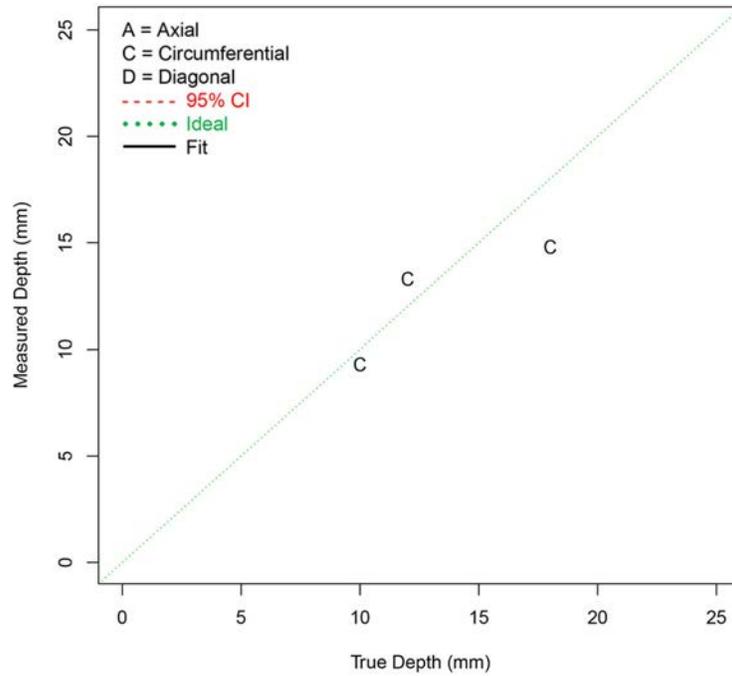


Figure F.76 Depth Sizing Regression (in mm) for Procedure HHUT.30 on FB Test Blocks in PARENT Open Testing (I.D. access)

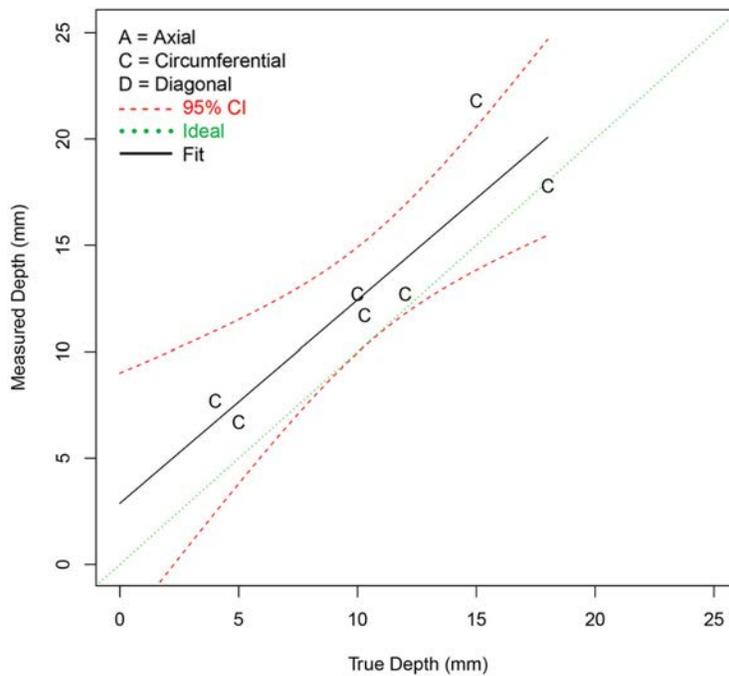


Figure F.77 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.1 on FB Test Blocks in PARENT Open Testing (I.D. access)

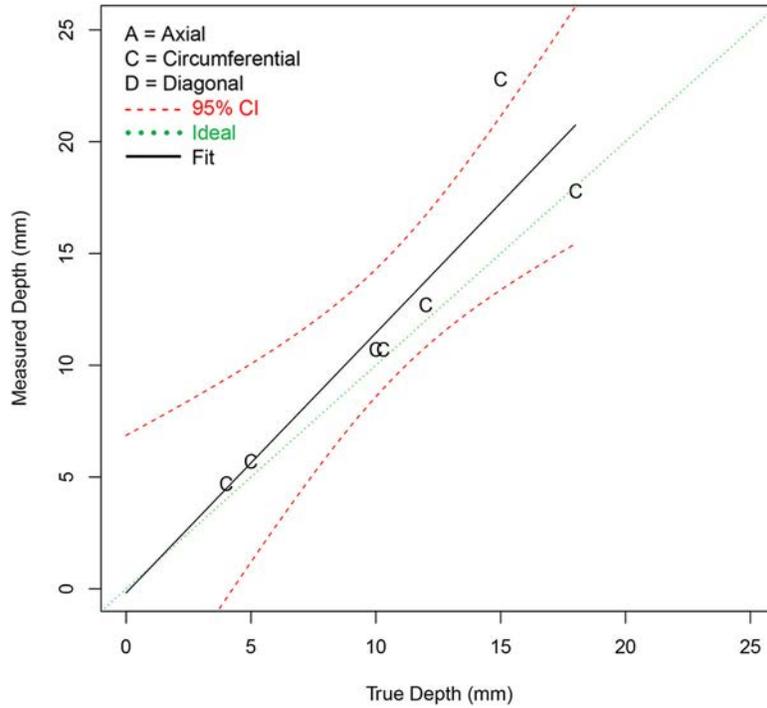


Figure F.78 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.2 on FB Test Blocks in PARENT Open Testing (I.D. access)

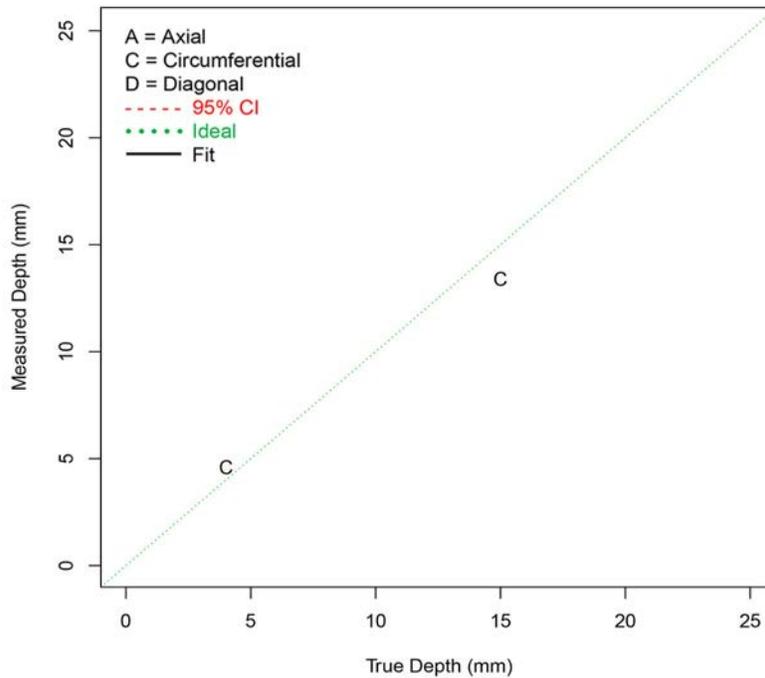


Figure F.79 Depth Sizing Regression (in mm) for Procedure PAUT.131.1 on FB Test Blocks in PARENT Open Testing (I.D. access)

F.10 Depth Sizing Results for Procedure Types Applied to FB Test Blocks with I.D. Access

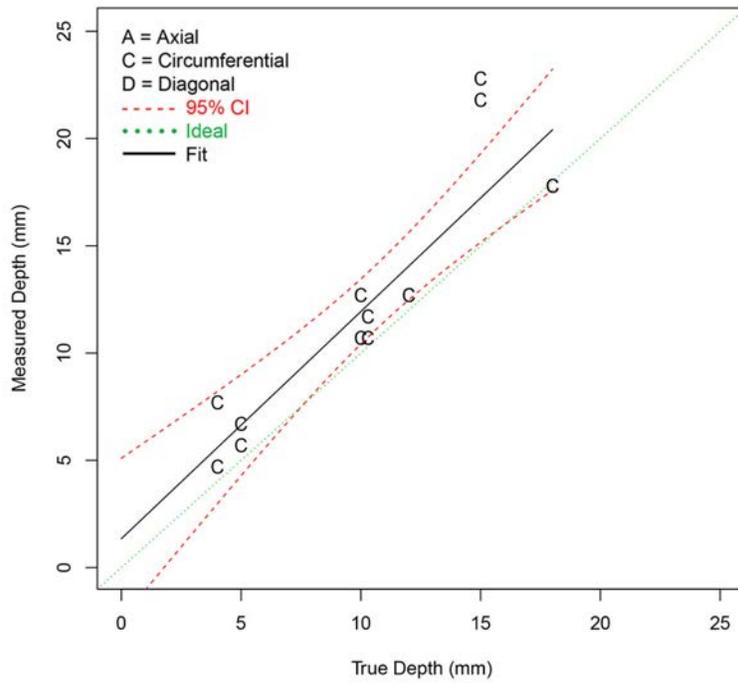


Figure F.80 Depth Sizing Regression (in mm) for ADVPAUT Procedures on FB Test Blocks in PARENT Open Testing (I.D. access)

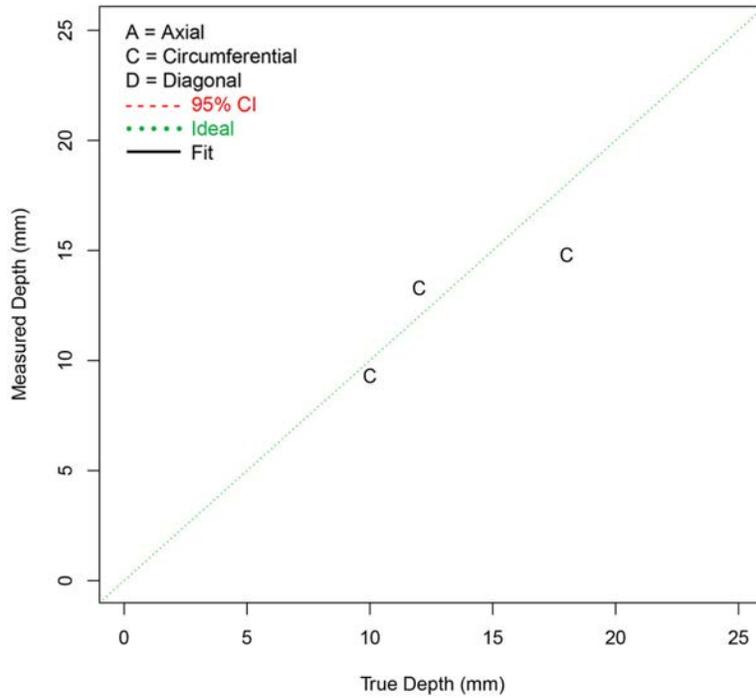


Figure F.81 Depth Sizing Regression (in mm) for NLUT Procedures on FB Test Blocks in PARENT Open Testing (I.D. access)

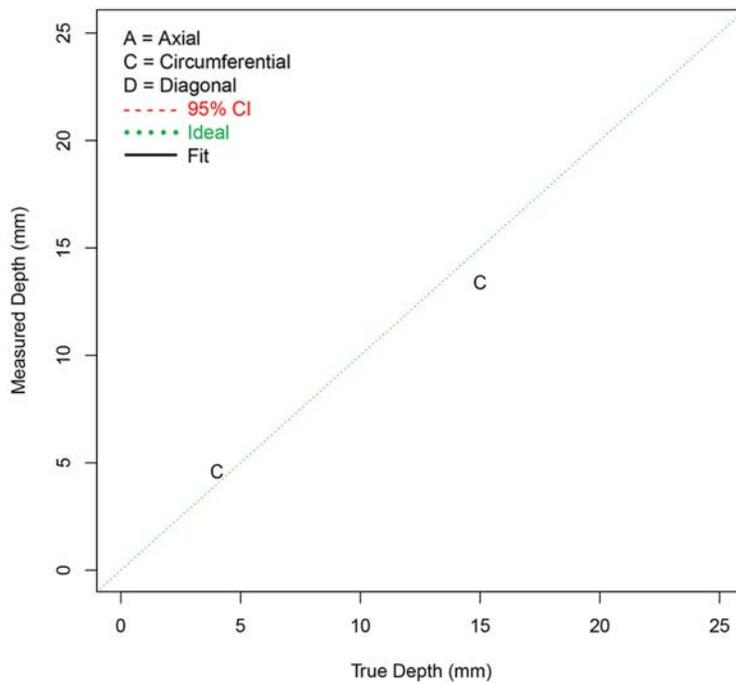


Figure F.82 Depth Sizing Regression (in mm) for PAUT Procedures on FB Test Blocks in PARENT Open Testing (I.D. access)

F.11 Depth Sizing Results for Procedures Applied to LBDMW Test Blocks with O.D. Access

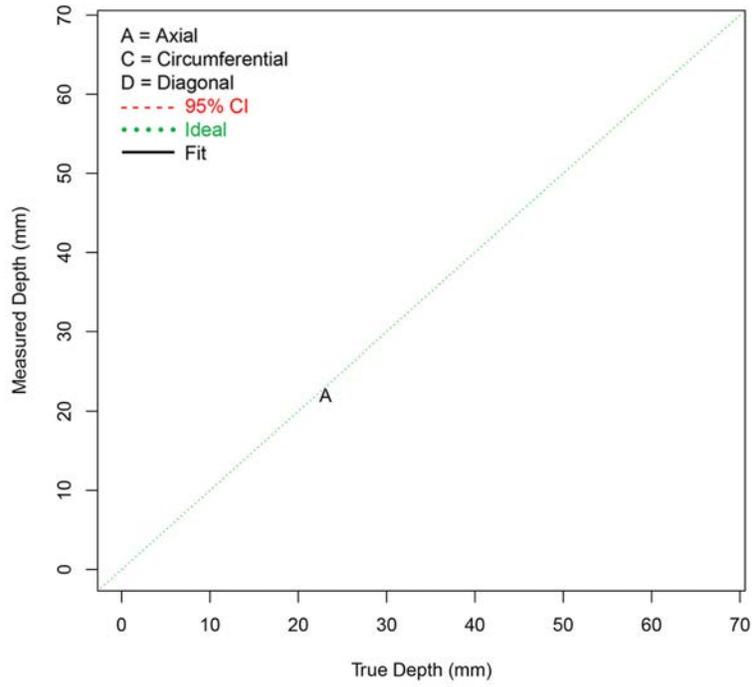


Figure F.83 Depth Sizing Regression (in mm) for Procedure LASH.18 on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

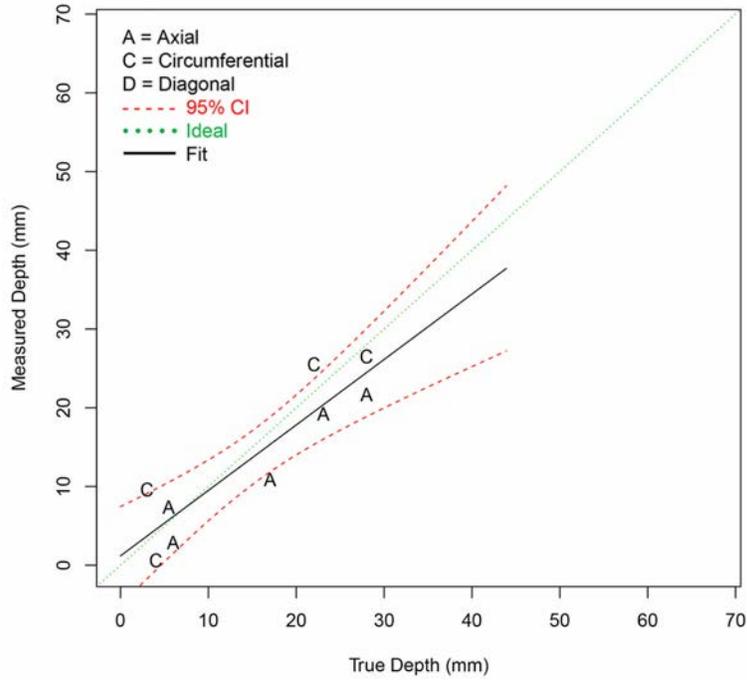


Figure F.84 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.0 on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

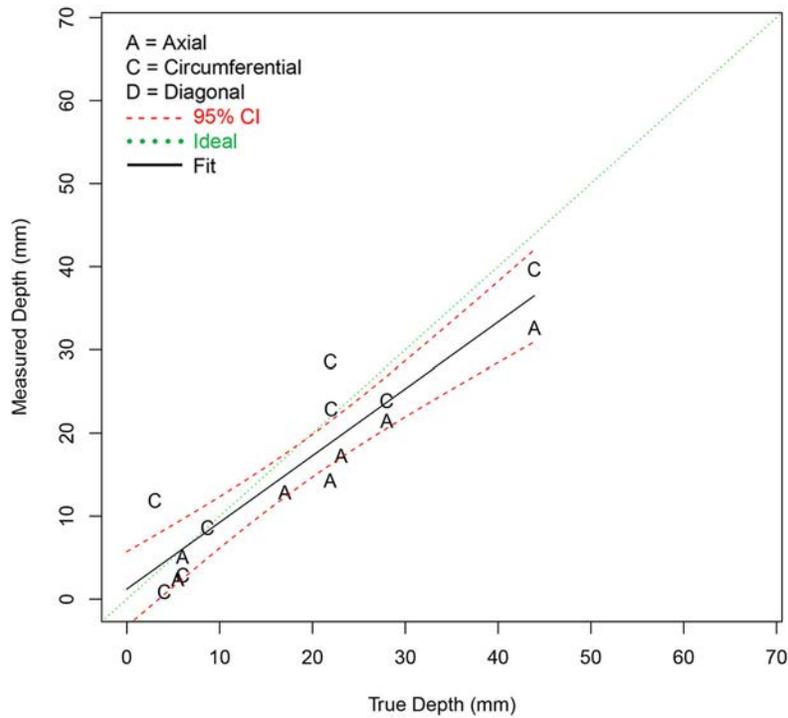


Figure F.85 Depth Sizing Regression (in mm) for Procedure PATP.29 on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

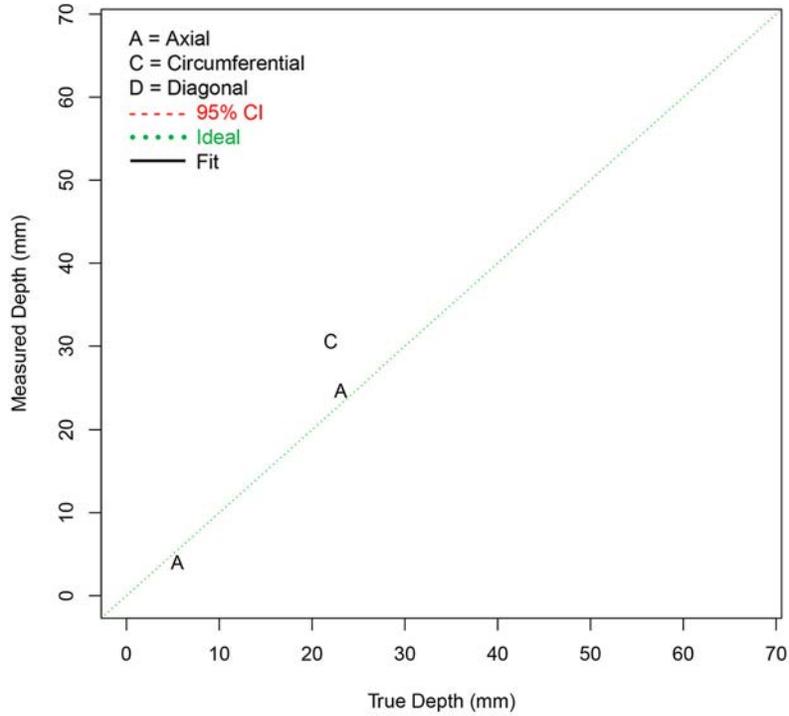


Figure F.86 Depth Sizing Regression (in mm) for Procedure PAUT.150 on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

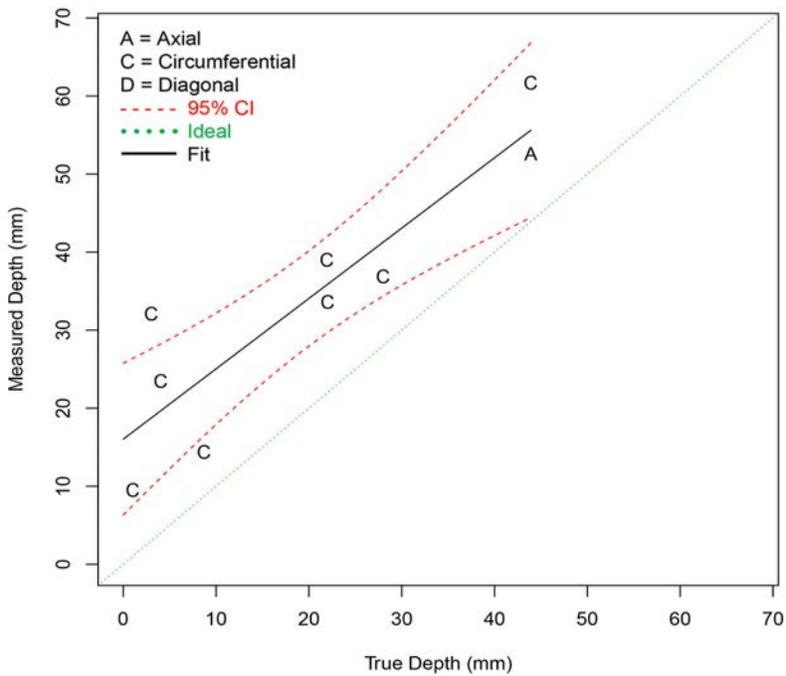


Figure F.87 Depth Sizing Regression (in mm) for Procedure SAFT.17 on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

F.12 Depth Sizing Results for Procedure Types Applied to LBDMW Test Blocks with O.D. Access

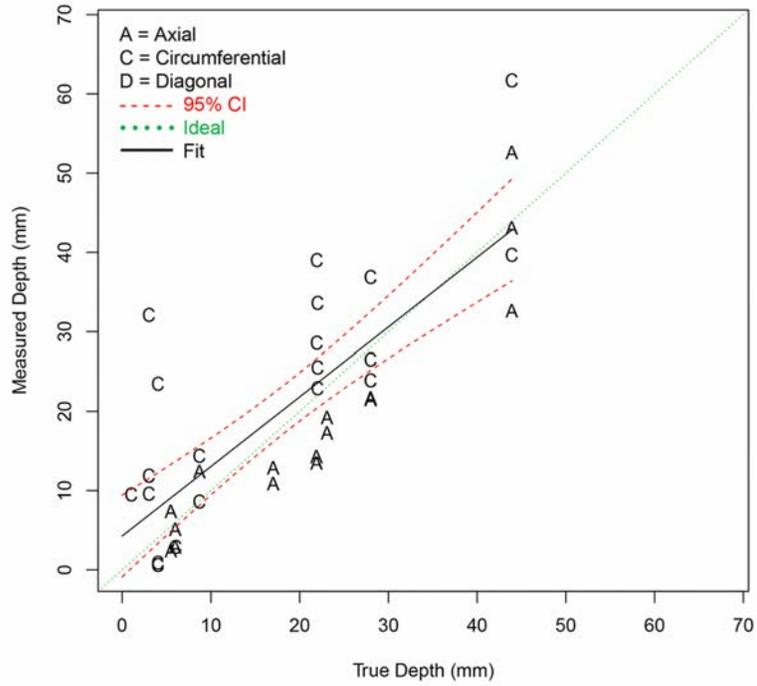


Figure F.88 Depth Sizing Regression (in mm) for ADVPAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

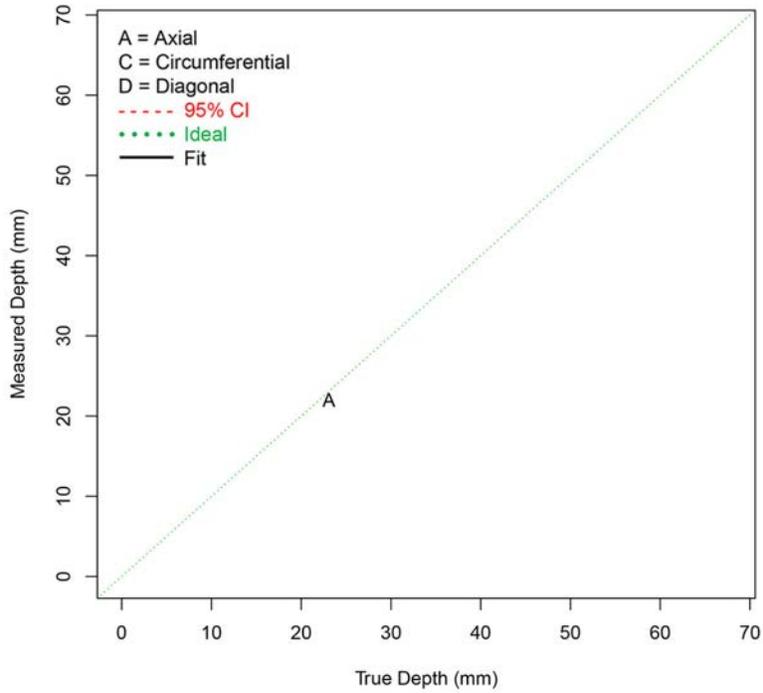


Figure F.89 Depth Sizing Regression (in mm) for NLUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

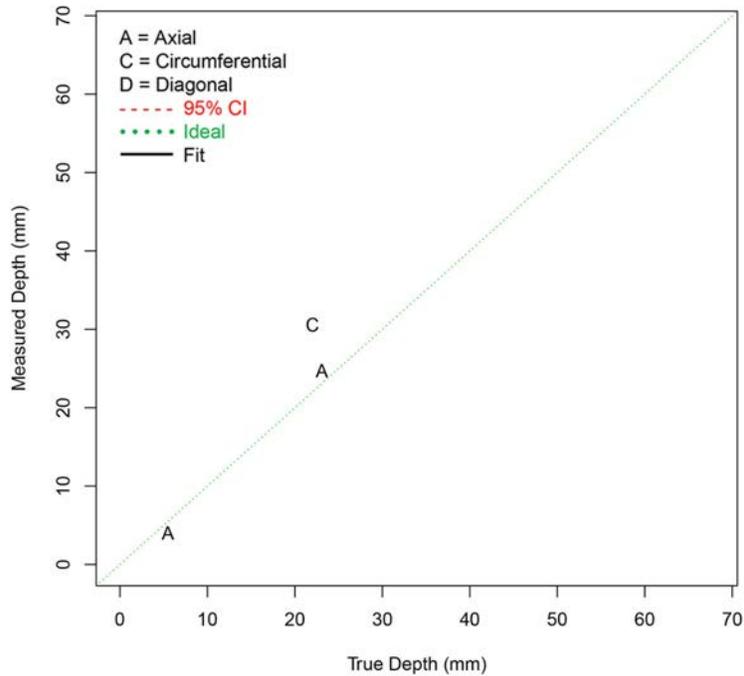


Figure F.90 Depth Sizing Regression (in mm) for PAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

F.13 Depth Sizing Results for Procedures Applied to LBDMW Test Blocks with I.D. Access

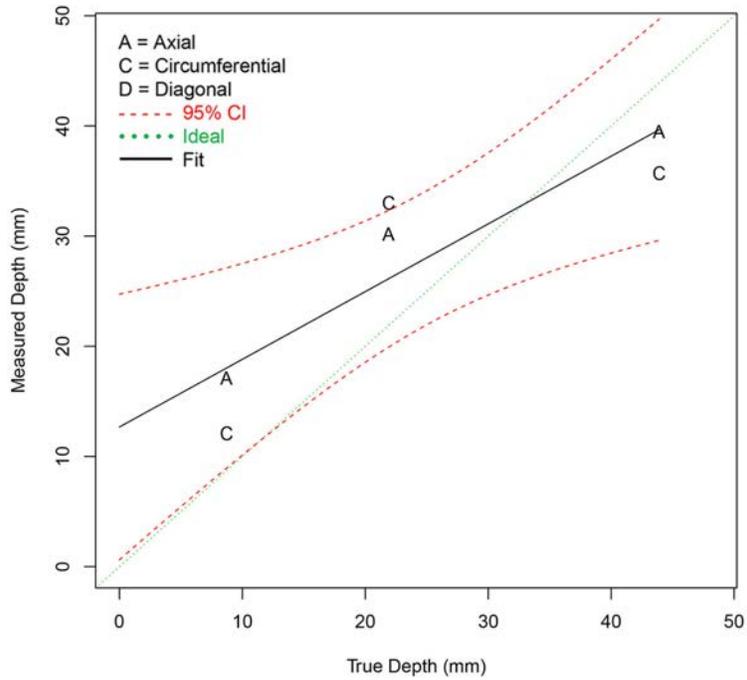


Figure F.91 Depth Sizing Regression (in mm) for Procedure PAATOFD.29.1 on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

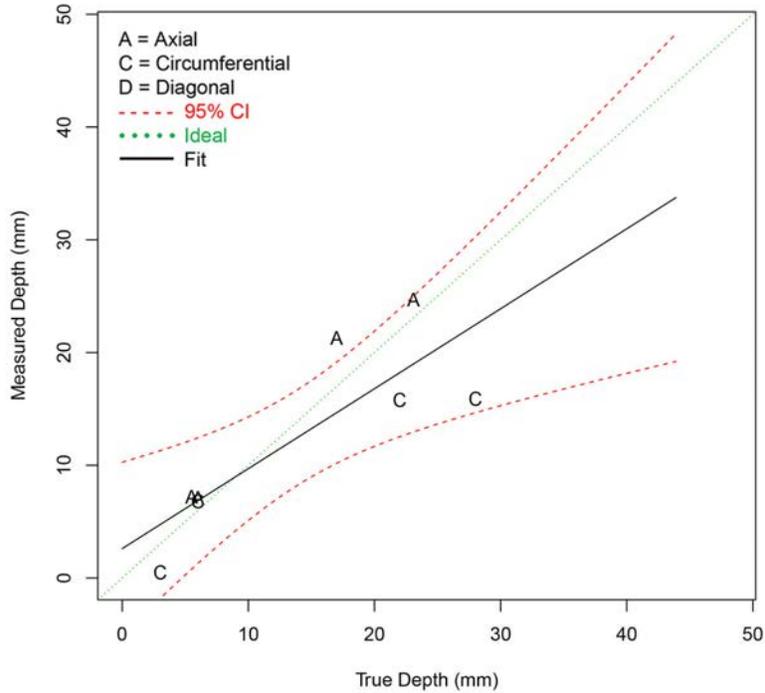


Figure F.92 Depth Sizing Regression (in mm) for Procedure PAUT.7 on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

F.14 Depth Sizing Results for Procedure Types Applied to LBDMW Test Blocks with I.D. Access

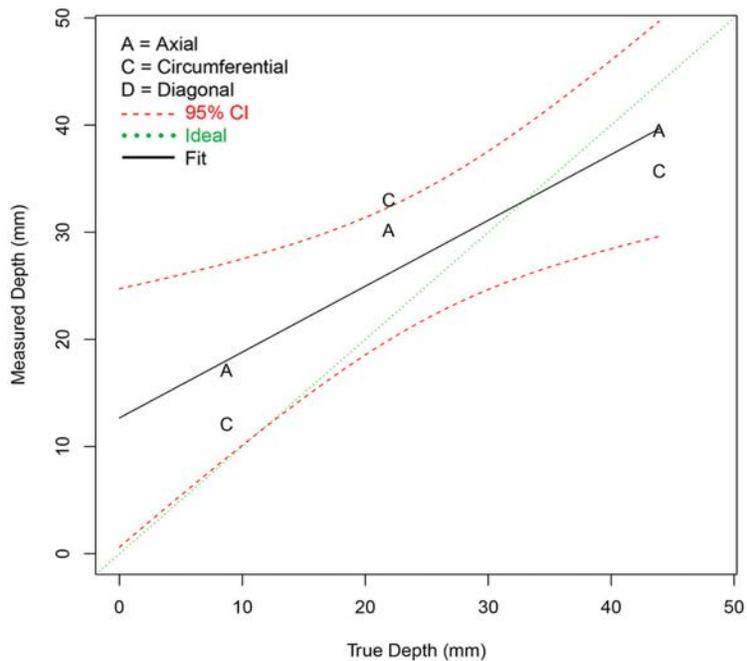


Figure F.93 Depth Sizing Regression (in mm) for ADVPAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

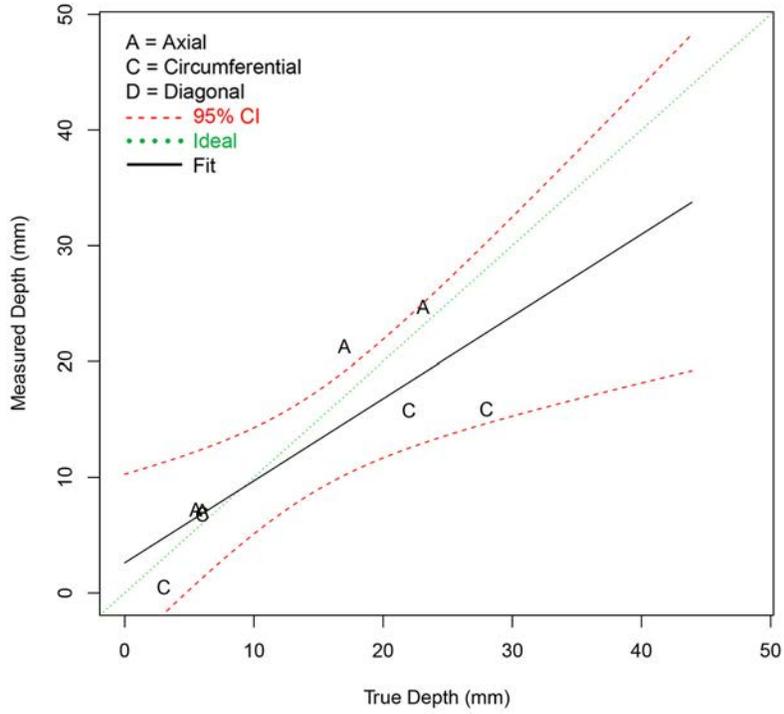


Figure F.94 Depth Sizing Regression (in mm) for PAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

APPENDIX G

LENGTH SIZING RESULTS

APPENDIX G

LENGTH SIZING RESULTS

G.1	Length Sizing Results for Procedures Applied to SBDMW Test Blocks with O.D. Access.....	G-2
G.2	Length Sizing Results for Procedure Types Applied to SBDMW Test Blocks with O.D. Access.....	G-6
G.3	Length Sizing Results for Procedures Applied to SBDMW Test Blocks with I.D. Access	G-9
G.4	Length Sizing Results for Procedure Types Applied to SBDMW Test Blocks with I.D. Access	G-10
G.5	Length Sizing Results for Procedures Applied to LBDMW Test Blocks with O.D. Access.....	G-11
G.6	Length Sizing Results for Procedure Types Applied to LBDMW Test Blocks with O.D. Access.....	G-13
G.7	Length Sizing Results for Procedures Applied to LBDMW Test Blocks with I.D. Access	G-15
G.8	Length Sizing Results for Procedure Types Applied to LBDMW Test Blocks with I.D. Access	G-18
G.9	Length Sizing Results for Procedures Applied to BMI Test Blocks with J-Groove Weld Access	G-20

G.1 Length Sizing Results for Procedures Applied to SBDMW Test Blocks with O.D. Access

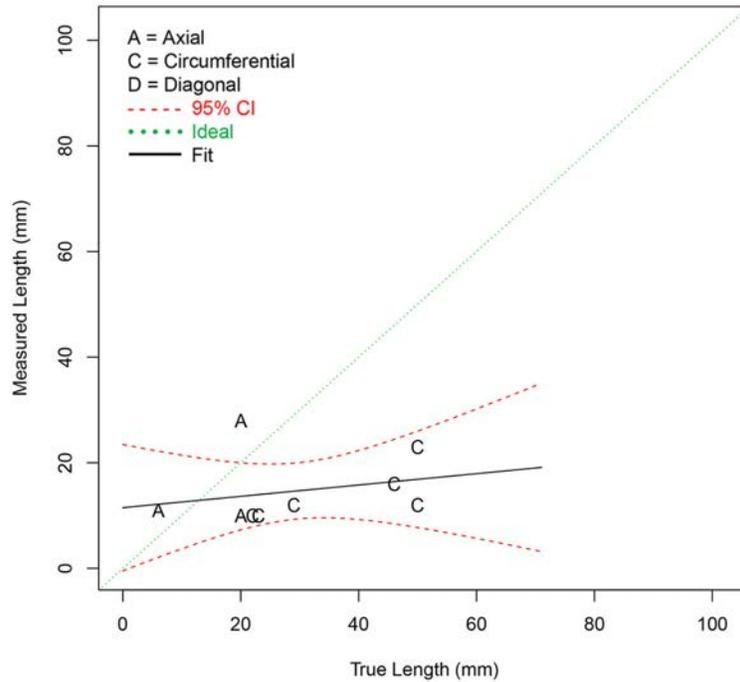


Figure G.1 Length Sizing Regression (in mm) for Procedure HHUT.27.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

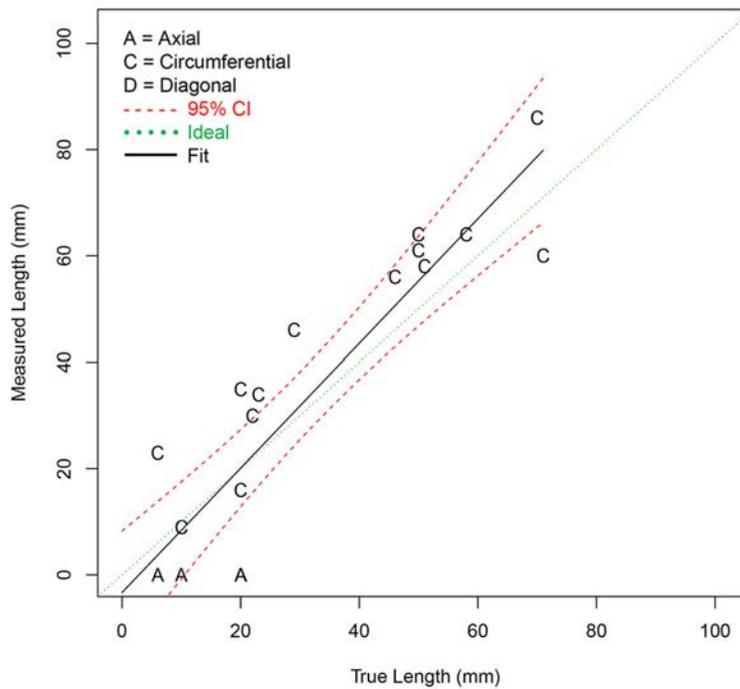


Figure G.2 Length Sizing Regression (in mm) for Procedure PAUT.114 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

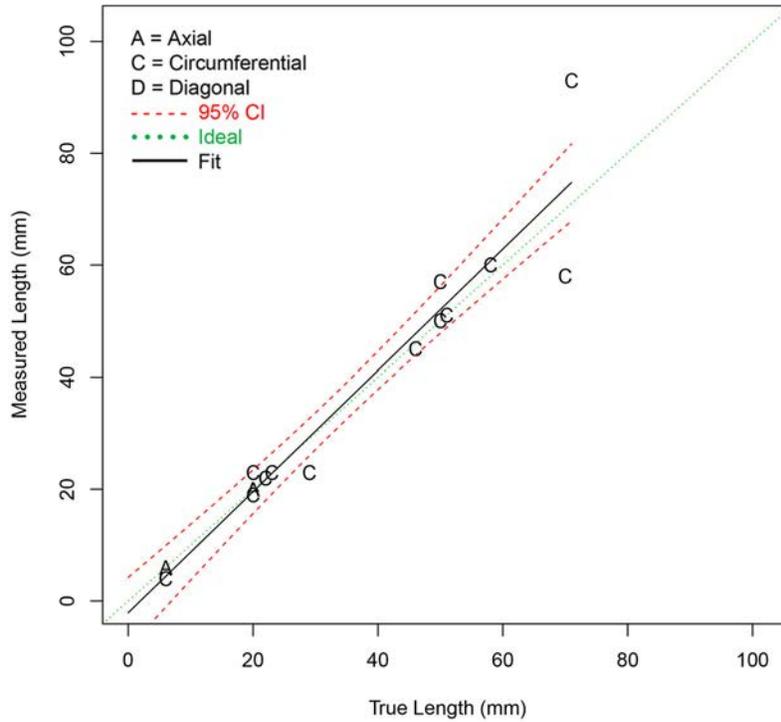


Figure G.3 Length Sizing Regression (in mm) for Procedure PAUT.131.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

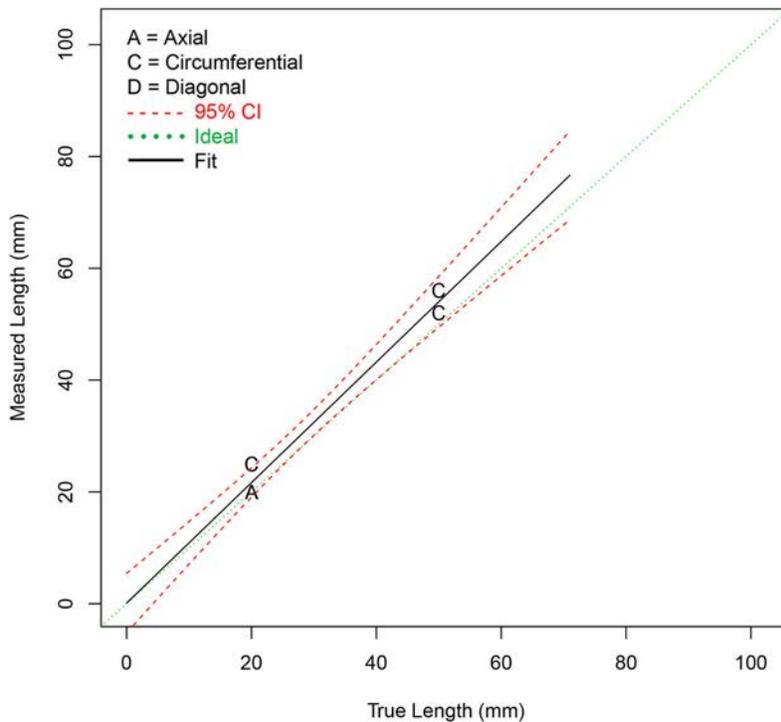


Figure G.4 Length Sizing Regression (in mm) for Procedure PAUT.131.4 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

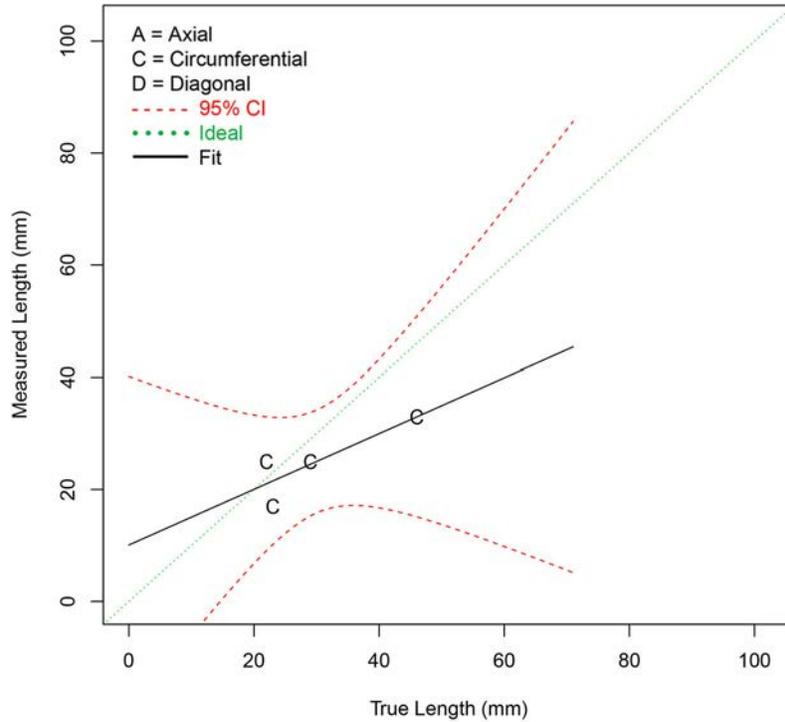


Figure G.5 Length Sizing Regression (in mm) for Procedure PAUT.20 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

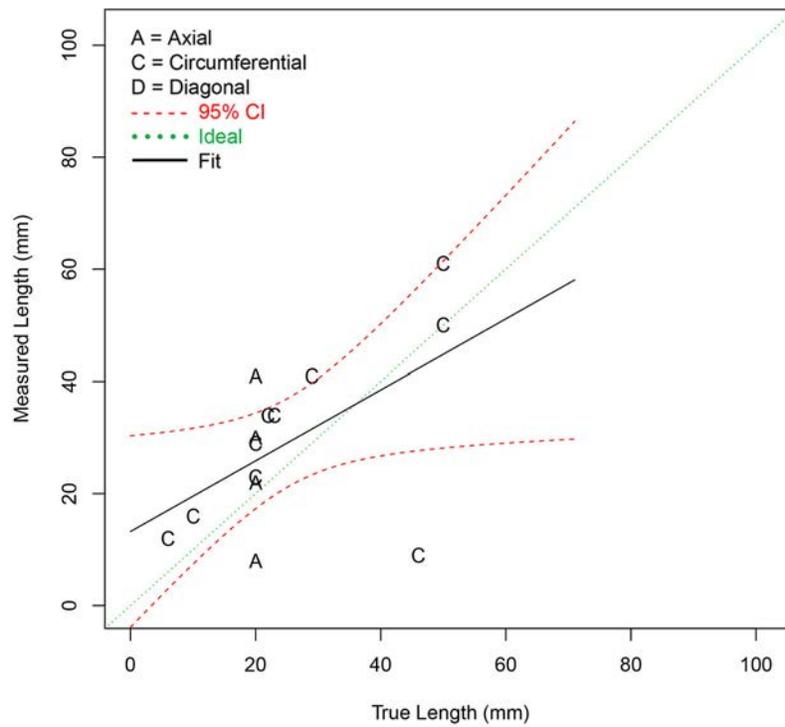


Figure G.6 Length Sizing Regression (in mm) for Procedure SAFT.17 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

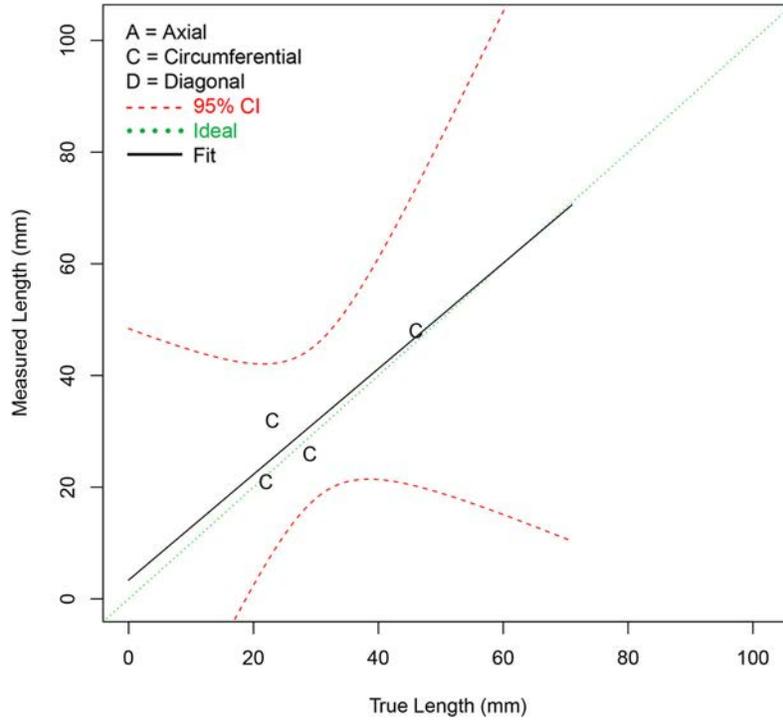


Figure G.7 Length Sizing Regression (in mm) for Procedure SHPA.6.1 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

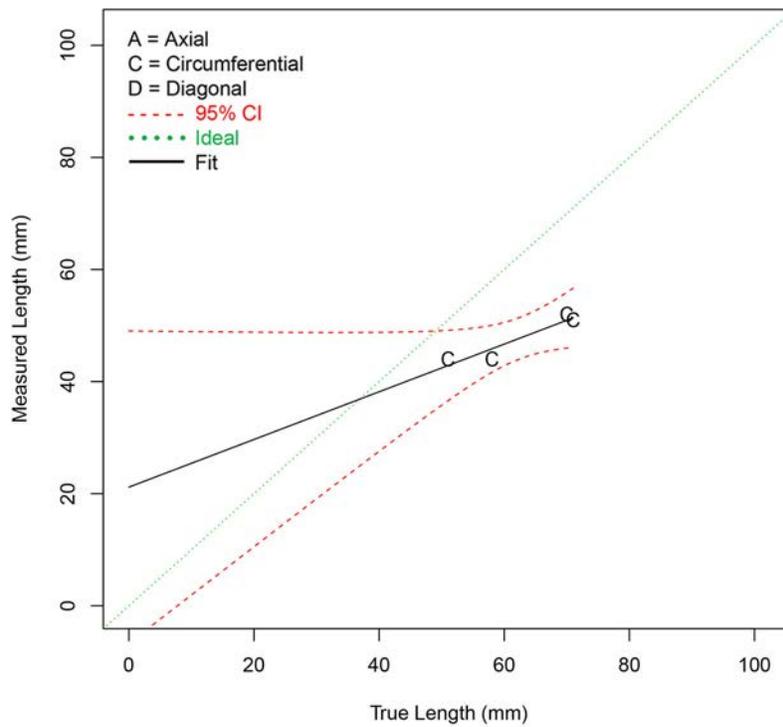


Figure G.8 Length Sizing Regression (in mm) for Procedure SHPA.6.2 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

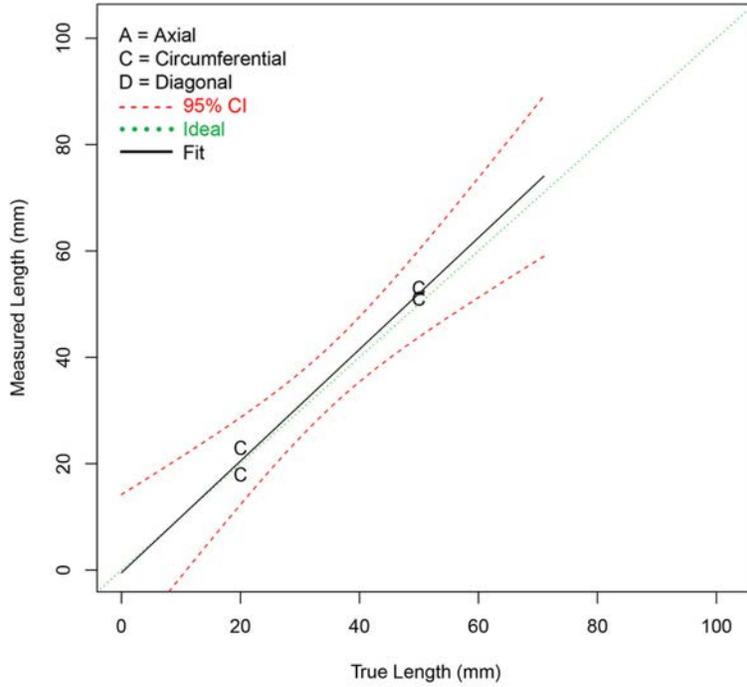


Figure G.9 Length Sizing Regression (in mm) for Procedure UT.104 on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

G.2 Length Sizing Results for Procedure Types Applied to SBDMW Test Blocks with O.D. Access

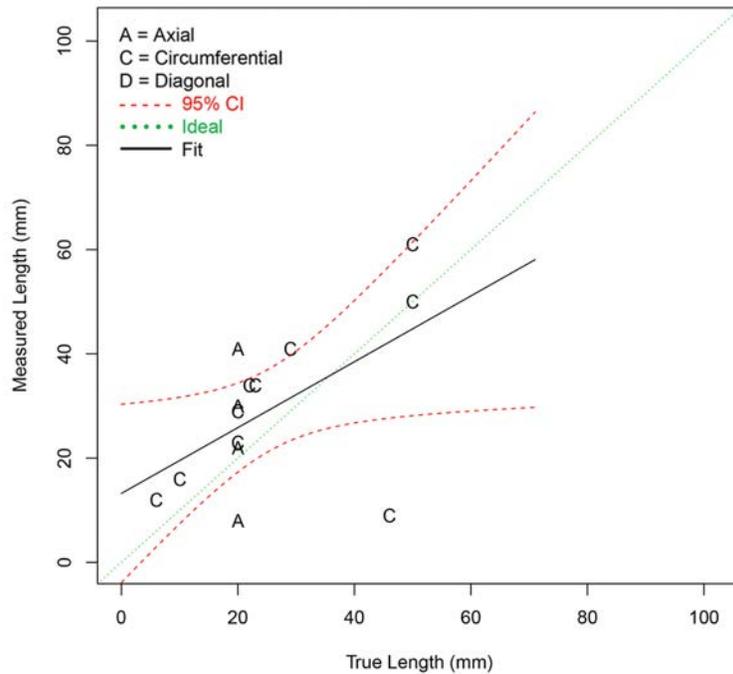


Figure G.10 Length Sizing Regression (in mm) for ADVPAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

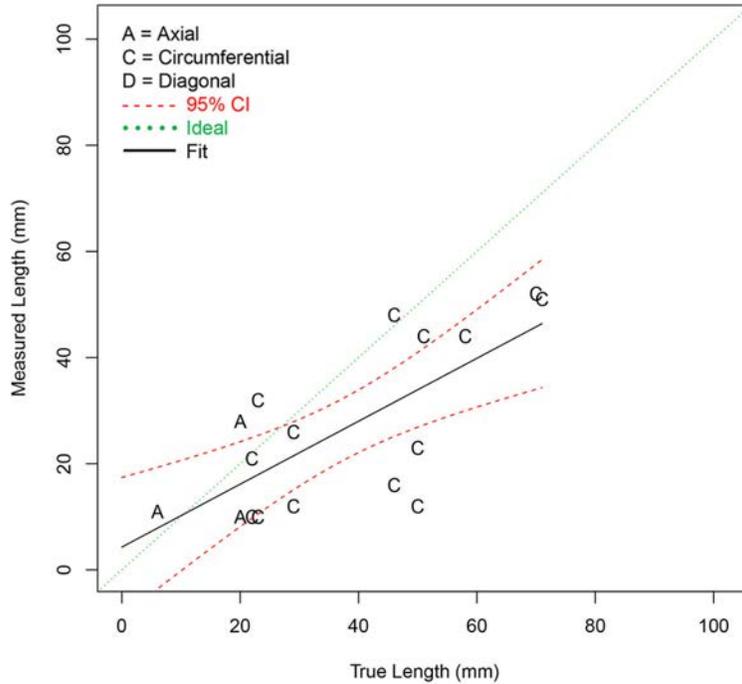


Figure G.11 Length Sizing Regression (in mm) for NLUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

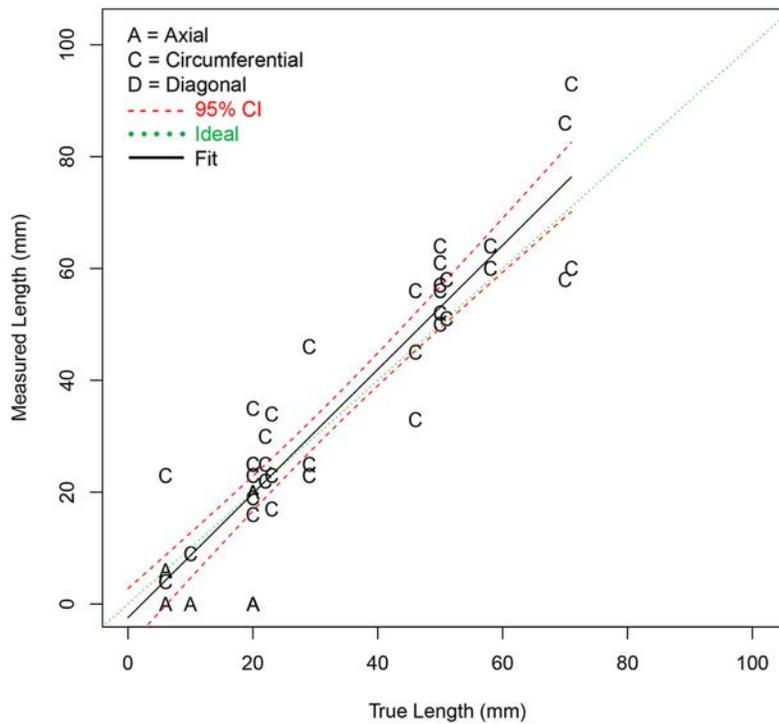


Figure G.12 Length Sizing Regression (in mm) for PAUT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

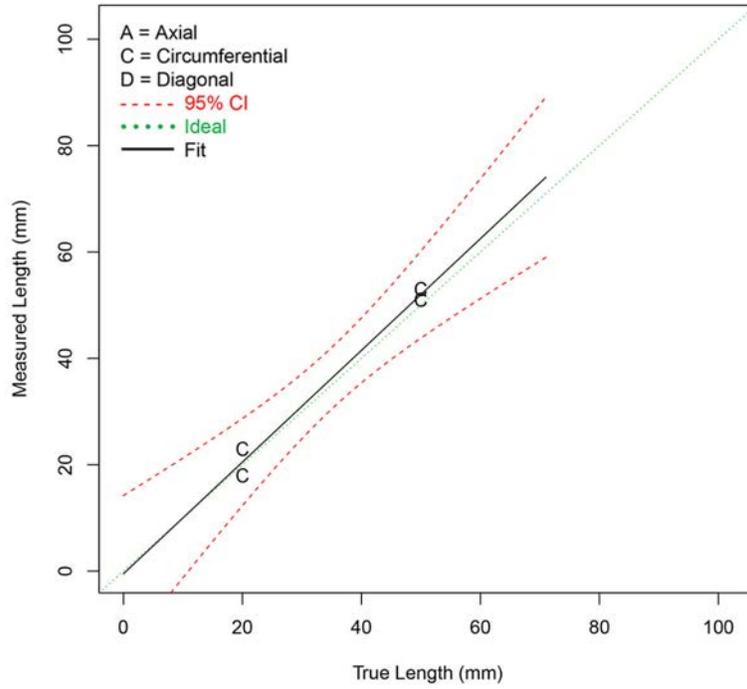


Figure G.13 Length Sizing Regression (in mm) for UT Procedures on SBDMW Test Blocks in PARENT Open Testing (O.D. access)

G.3 Length Sizing Results for Procedures Applied to SBDMW Test Blocks with I.D. Access

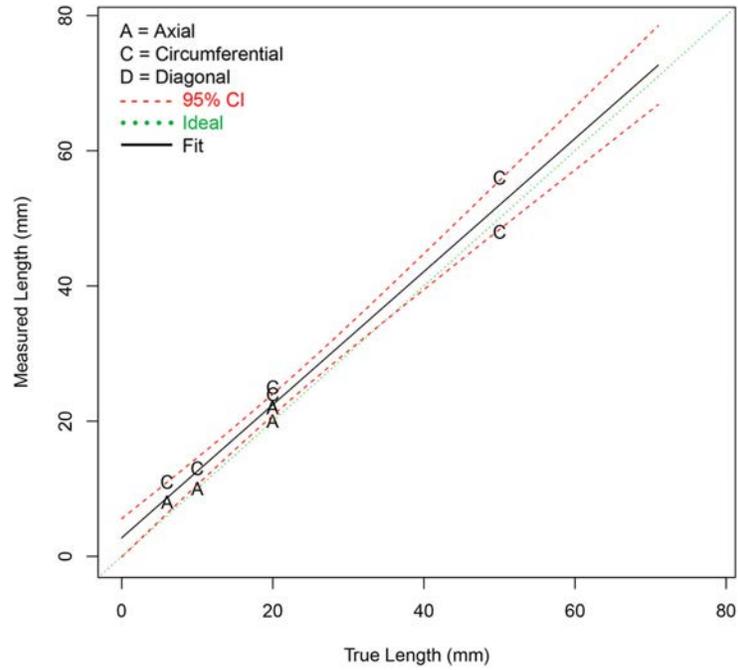


Figure G.14 Length Sizing Regression (in mm) for Procedure AECT.33 on SBDMW Test Blocks in PARENT Open Testing (I.D. access)

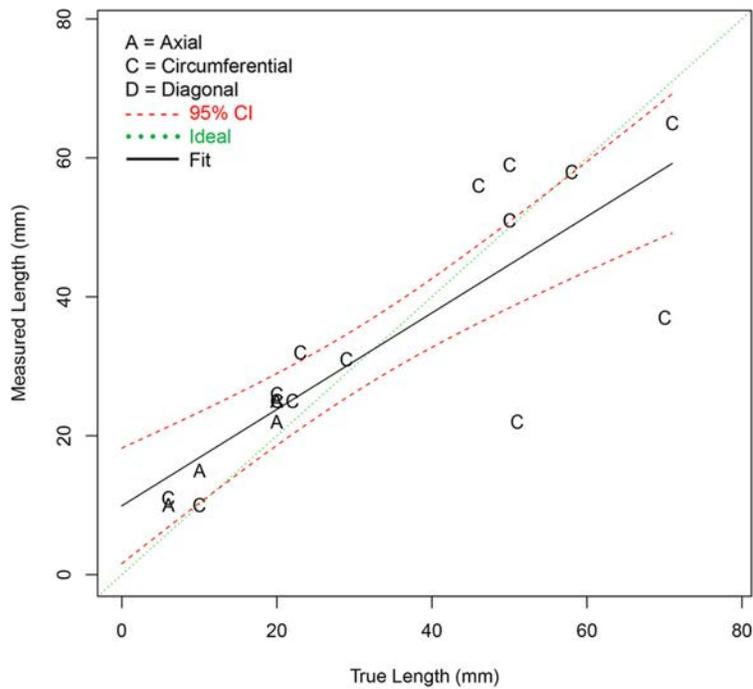


Figure G.15 Length Sizing Regression (in mm) for Procedure ECT.16 on SBDMW Test Blocks in PARENT Open Testing (I.D. access)

G.4 Length Sizing Results for Procedure Types Applied to SBDMW Test Blocks with I.D. Access

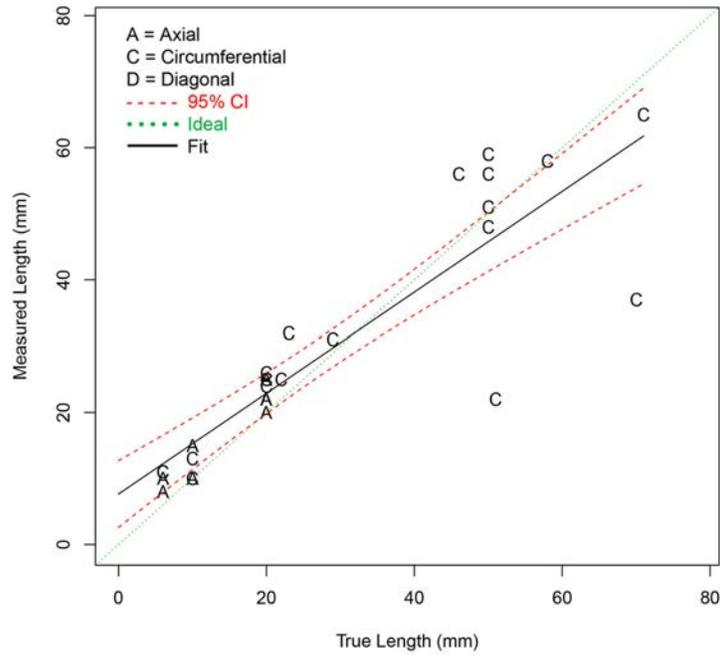


Figure G.16 Length Sizing Regression (in mm) for ECT Procedures on SBDMW Test Blocks in PARENT Open Testing (I.D. access)

G.5 Length Sizing Results for Procedures Applied to LBDMW Test Blocks with O.D. Access

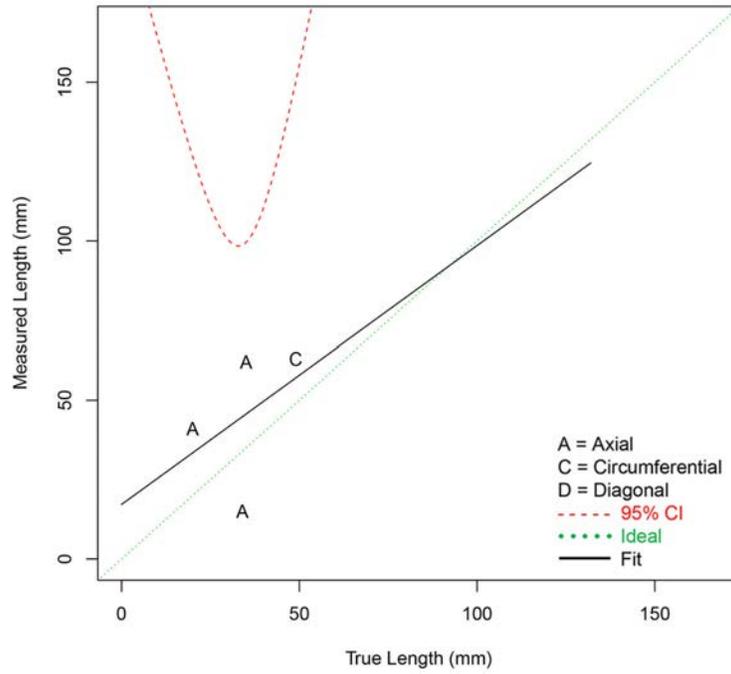


Figure G.17 Length Sizing Regression (in mm) for Procedure PAUT.150 on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

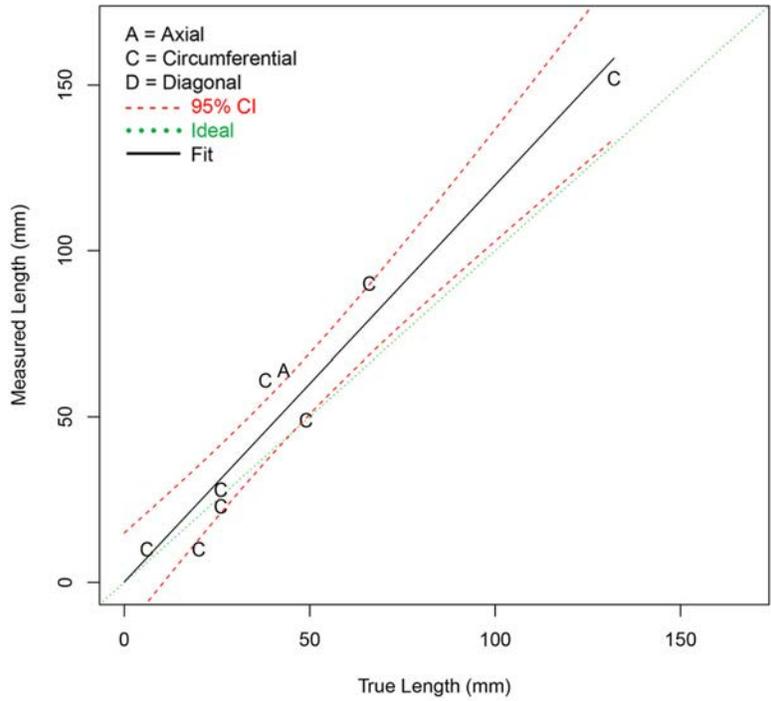


Figure G.18 Length Sizing Regression (in mm) for Procedure SAFT.17 on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

G.6 Length Sizing Results for Procedure Types Applied to LBDMW Test Blocks with O.D. Access

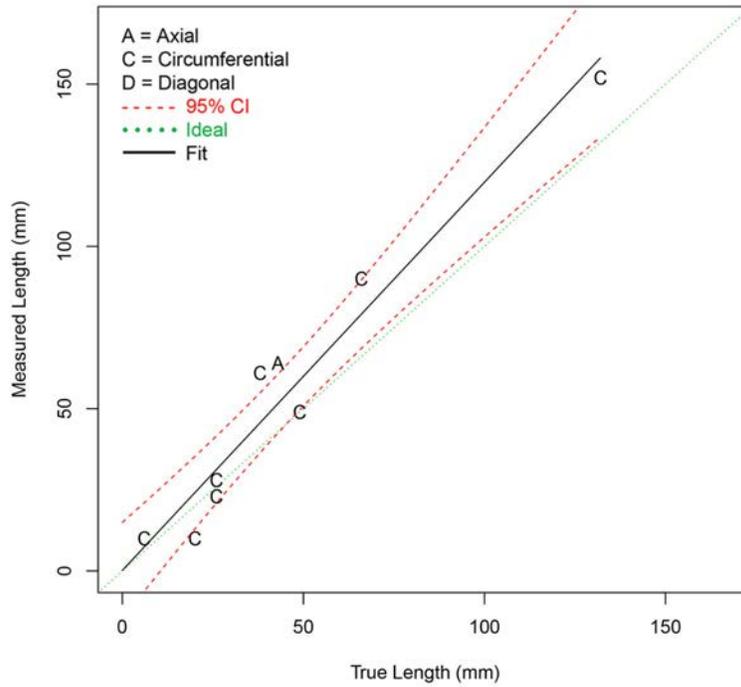


Figure G.19 Length Sizing Regression (in mm) for ADVPAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

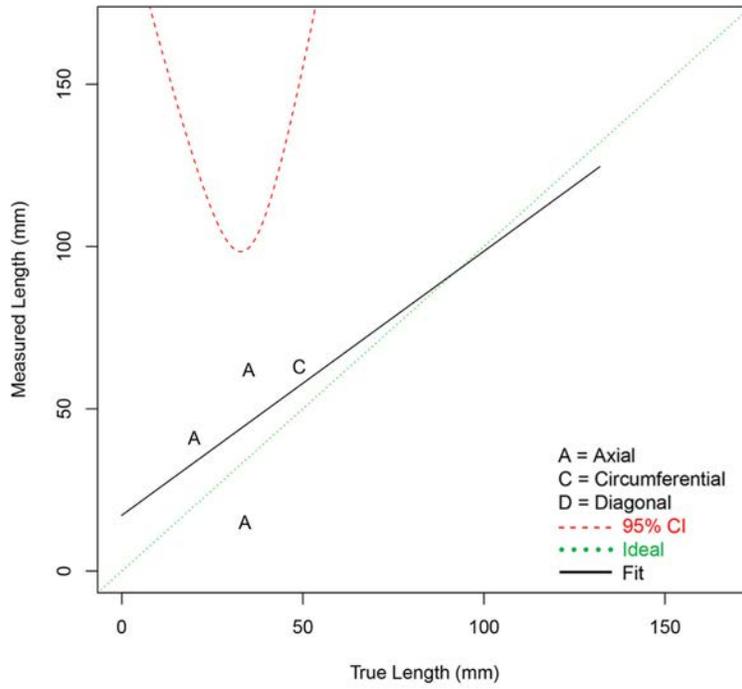


Figure G.20 Length Sizing Regression (in mm) for PAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (O.D. access)

G.7 Length Sizing Results for Procedures Applied to LBDMW Test Blocks with I.D. Access

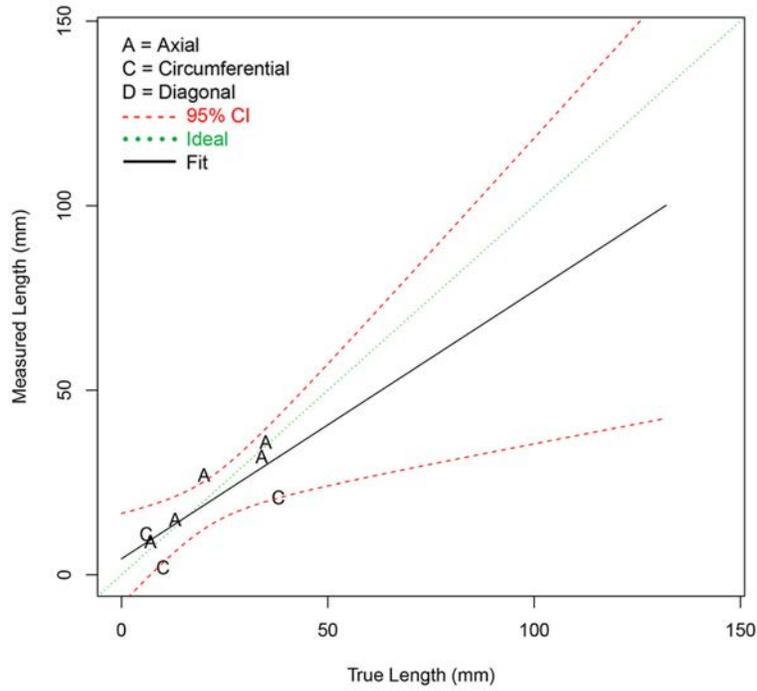


Figure G.21 Length Sizing Regression (in mm) for Procedure AECT.33 on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

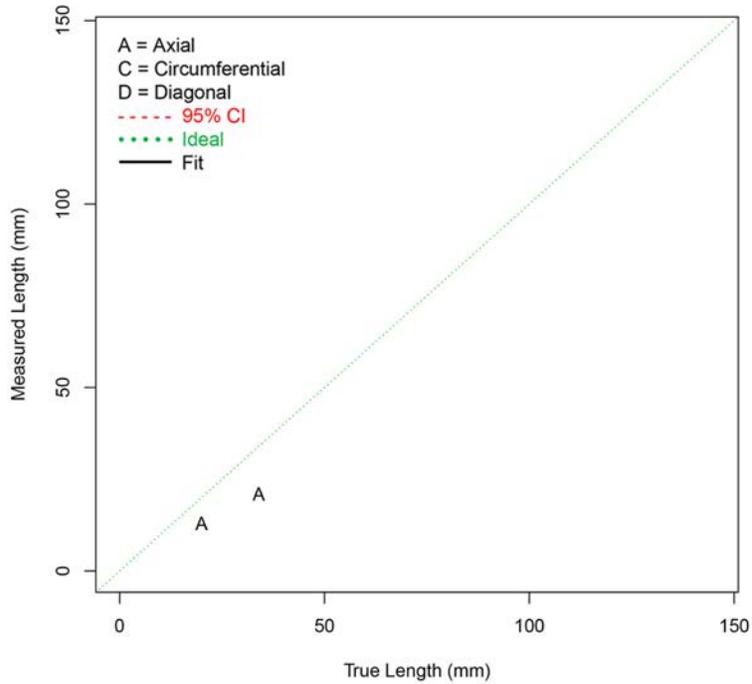


Figure G.22 Length Sizing Regression (in mm) for Procedure CEECT.5.2 on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

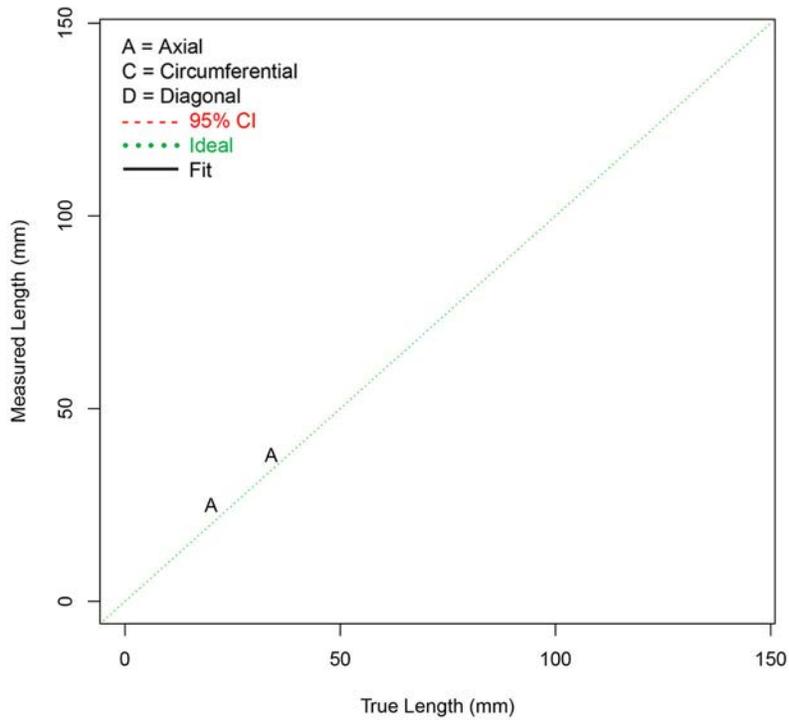


Figure G.23 Length Sizing Regression (in mm) for Procedure ECT.16 on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

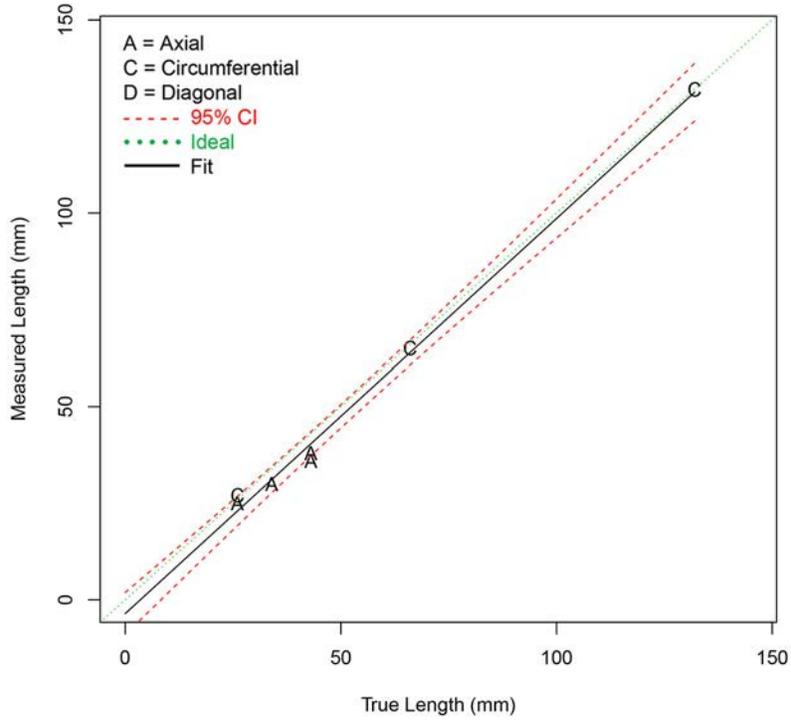


Figure G.24 Length Sizing Regression (in mm) for Procedure MM.28.1 on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

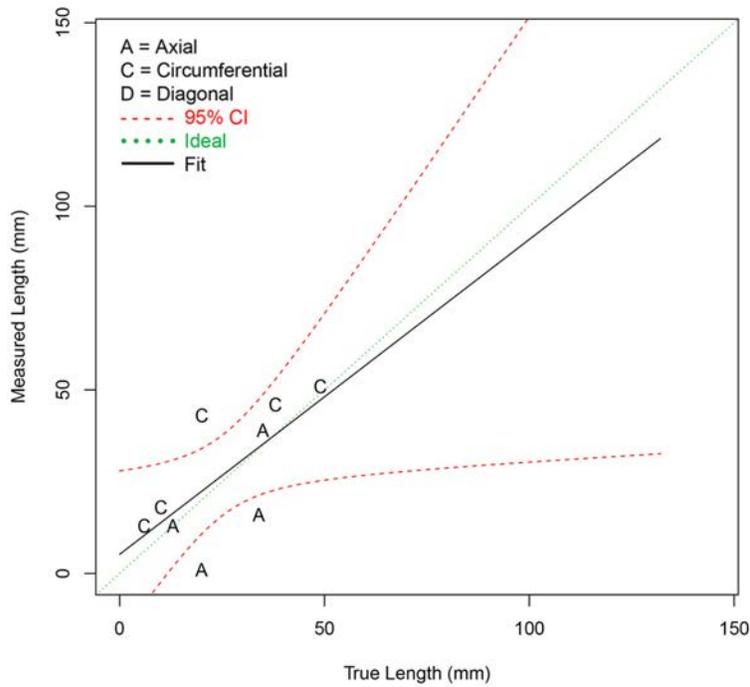


Figure G.25 Length Sizing Regression (in mm) for Procedure PAUT.7 on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

G.8 Length Sizing Results for Procedure Types Applied to LBDMW Test Blocks with I.D. Access

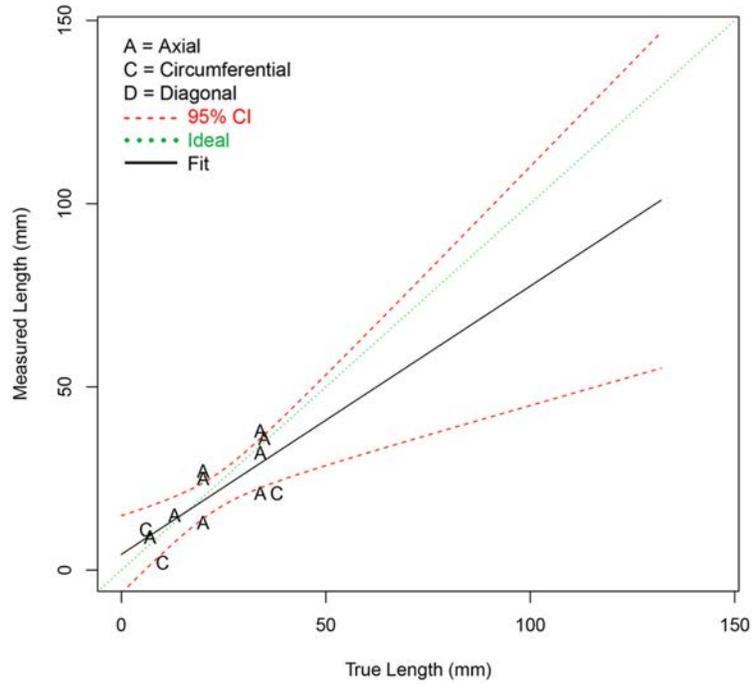


Figure G.26 Length Sizing Regression (in mm) for ECT Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

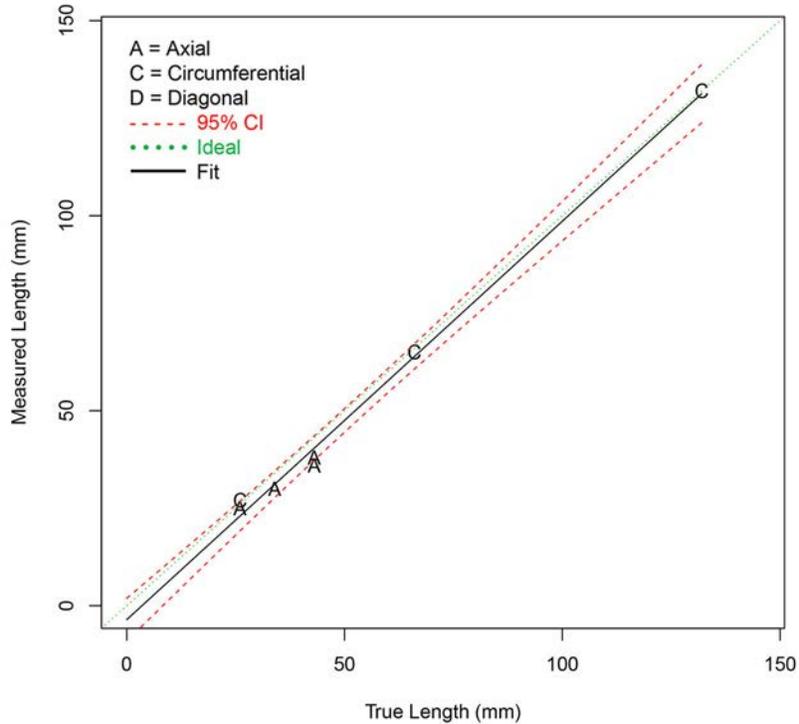


Figure G.27 Length Sizing Regression (in mm) for MM Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

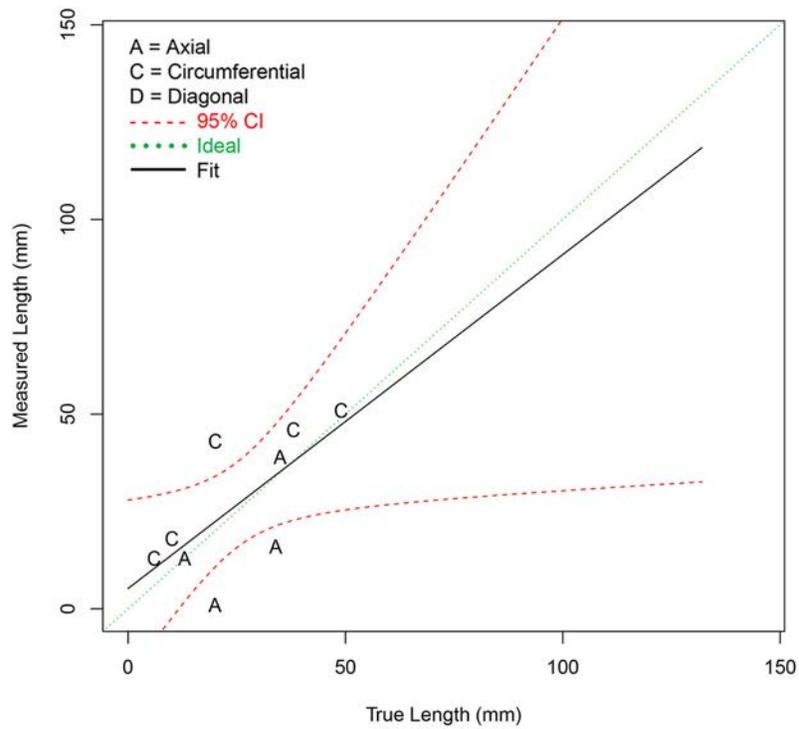


Figure G.28 Length Sizing Regression (in mm) for PAUT Procedures on LBDMW Test Blocks in PARENT Open Testing (I.D. access)

G.9 Length Sizing Results for Procedures Applied to BMI Test Blocks with J-Groove Weld Access

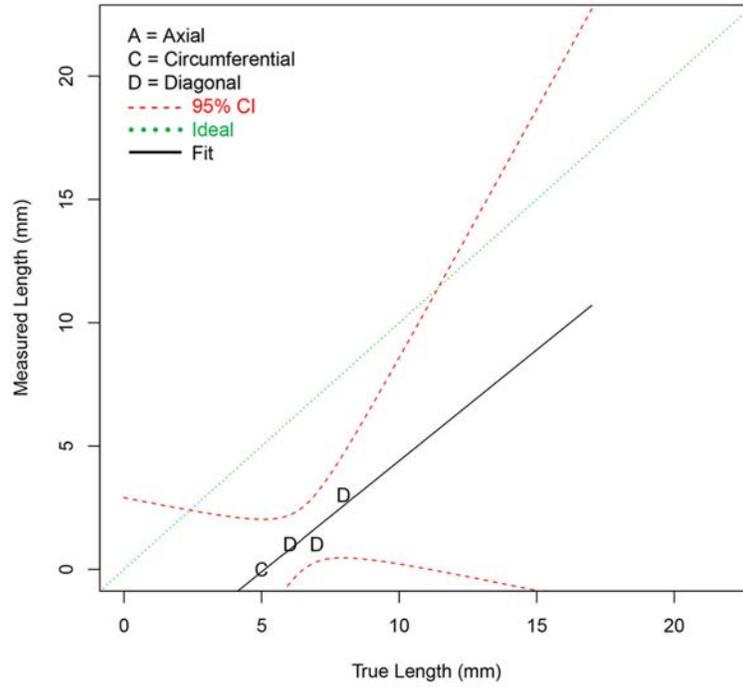


Figure G.29 Length Sizing Regression (in mm) for Procedure AECT.33 on BMI Test Blocks in PARENT Open Testing (J-groove weld access)

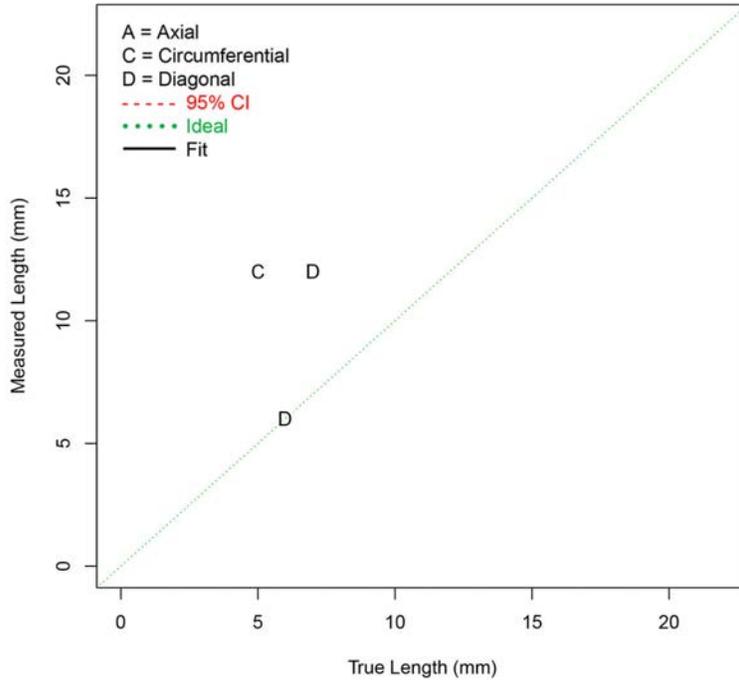


Figure G.30 Length Sizing Regression (in mm) for Procedure ECT.16 on BMI Test Blocks in PARENT Open Testing (J-groove weld access)

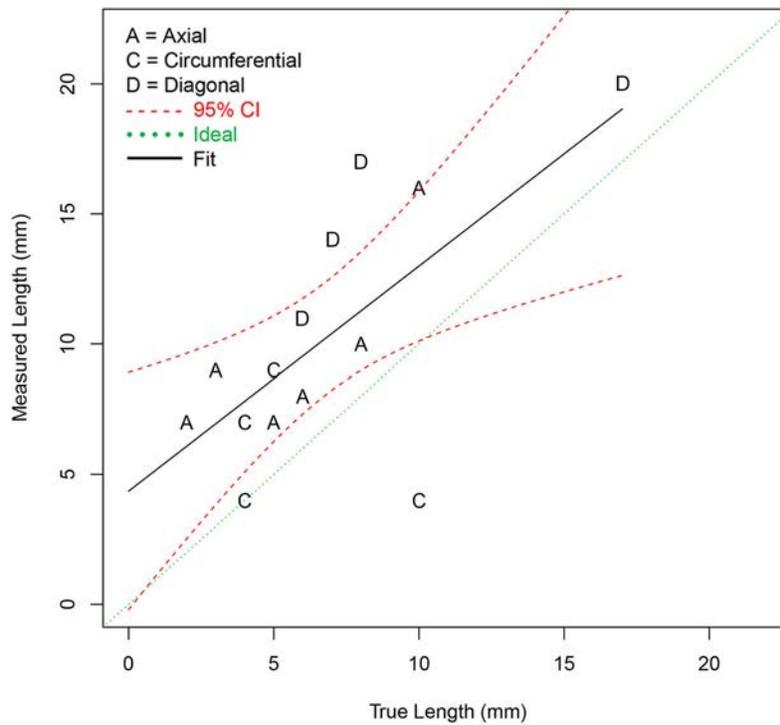


Figure G.31 Length Sizing Regression (in mm) for Procedure ECT.7 on BMI Test Blocks in PARENT Open Testing (J-groove weld access)

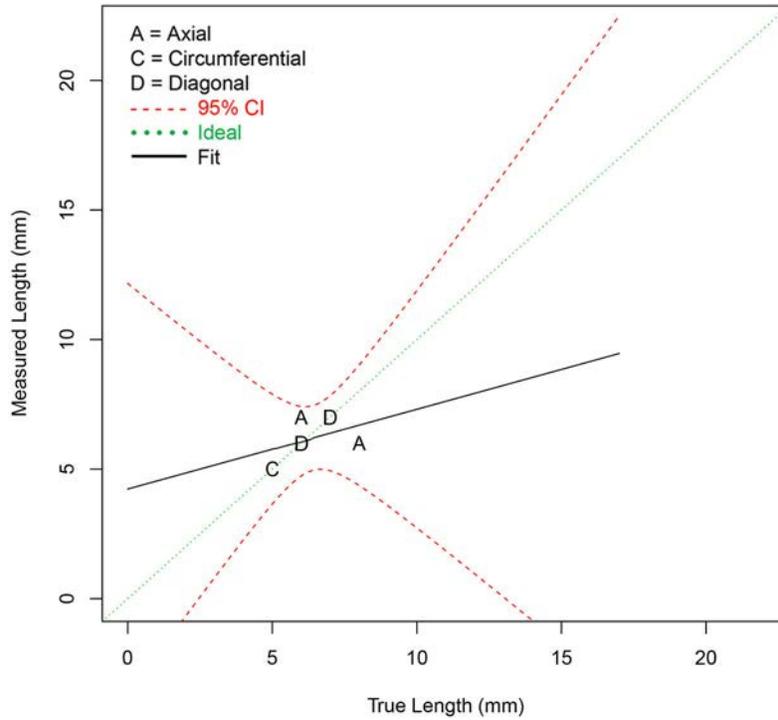


Figure G.32 Length Sizing Regression (in mm) for Procedure LUV.170 on BMI Test Blocks in PARENT Open Testing (J-groove weld access)

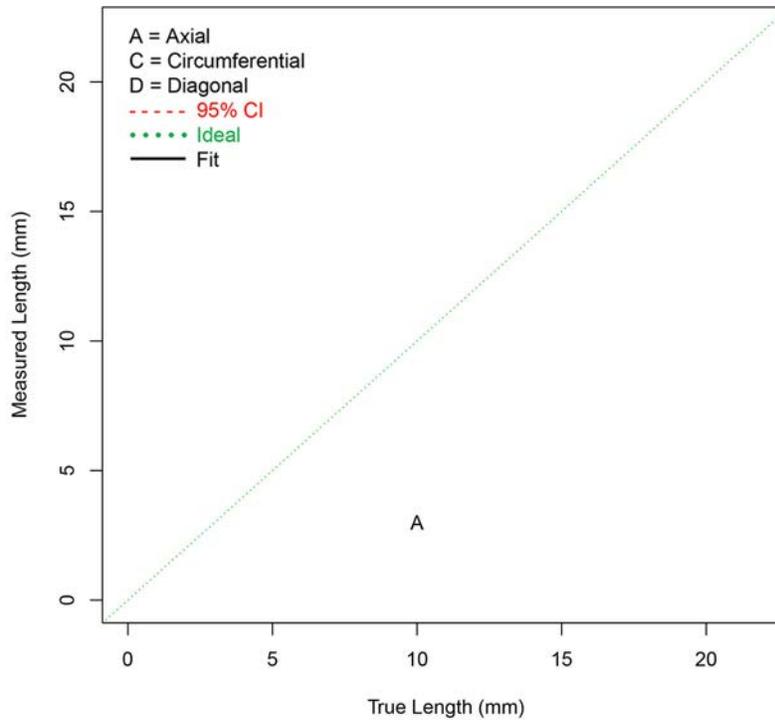


Figure G.33 Length Sizing Regression (in mm) for Procedure MM.28.1 on BMI Test Blocks in PARENT Open Testing (J-groove weld access)

APPENDIX H

INDICATION PLOTS

APPENDIX H

INDICATION PLOTS

H.1 Indication Plots for BMIsH-1
H.2 Indication Plots for DMWs.....H-18

H.1 Indication Plots for BMIs

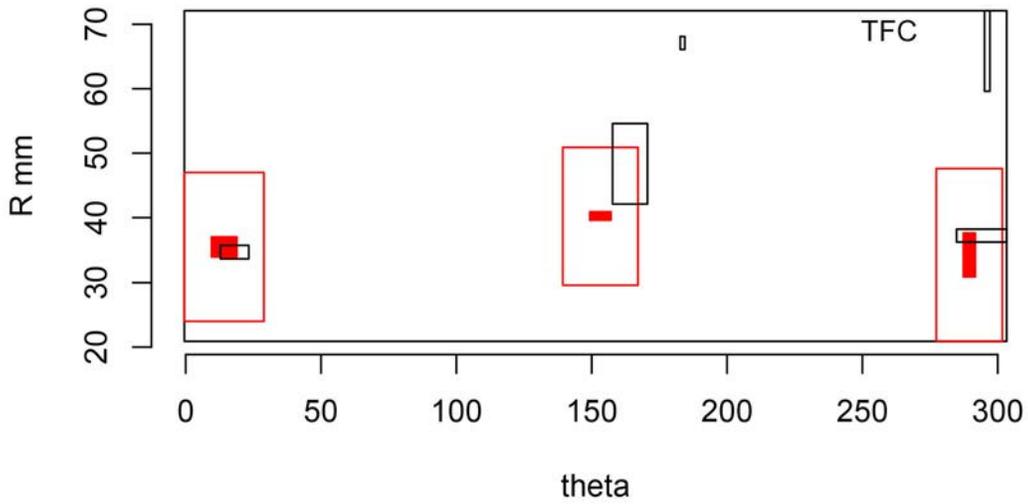


Figure H.1 Indication Plot for Procedure ECT.16 Applied to Test Block P5 in PARENT Open Testing (theta – R view)

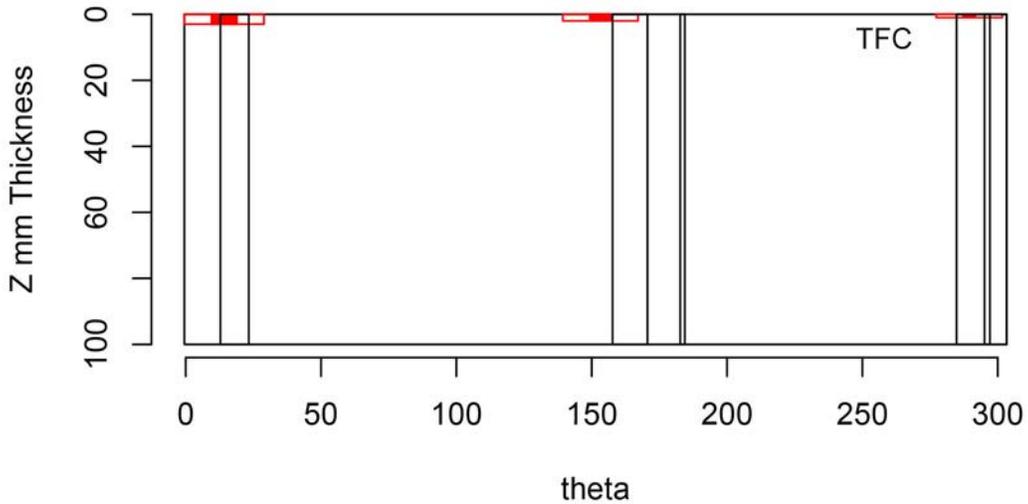


Figure H.2 Indication Plot for Procedure ECT.16 Applied to Test Block P5 in PARENT Open Testing (theta – Z view)

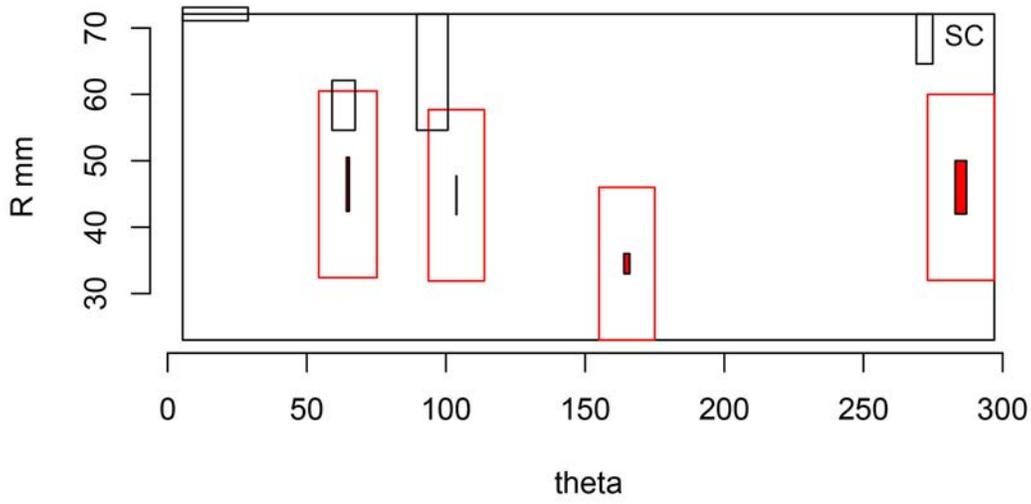


Figure H.3 Indication Plot for Procedure ECT.16 Applied to Test Block P7 in PARENT Open Testing (theta – R view)

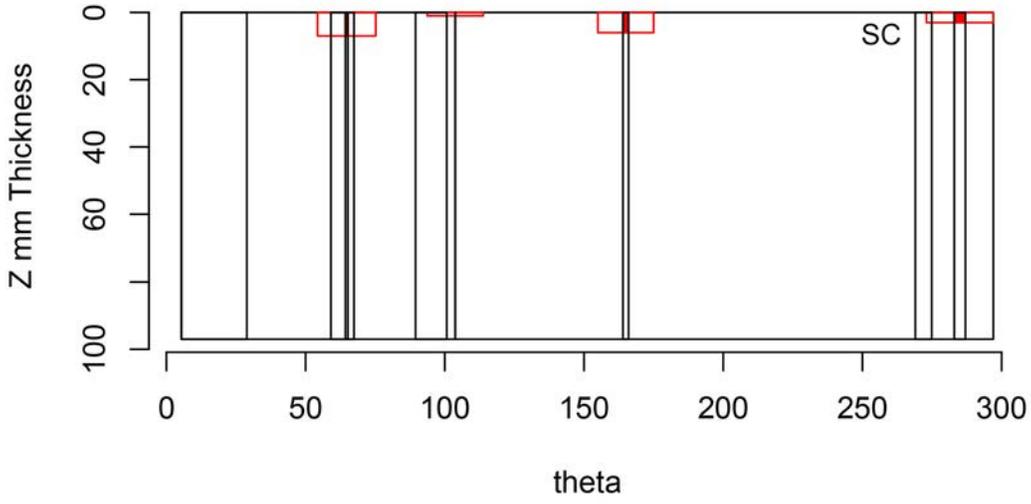


Figure H.4 Indication Plot for Procedure ECT.16 Applied to Test Block P7 in PARENT Open Testing (theta – Z view)

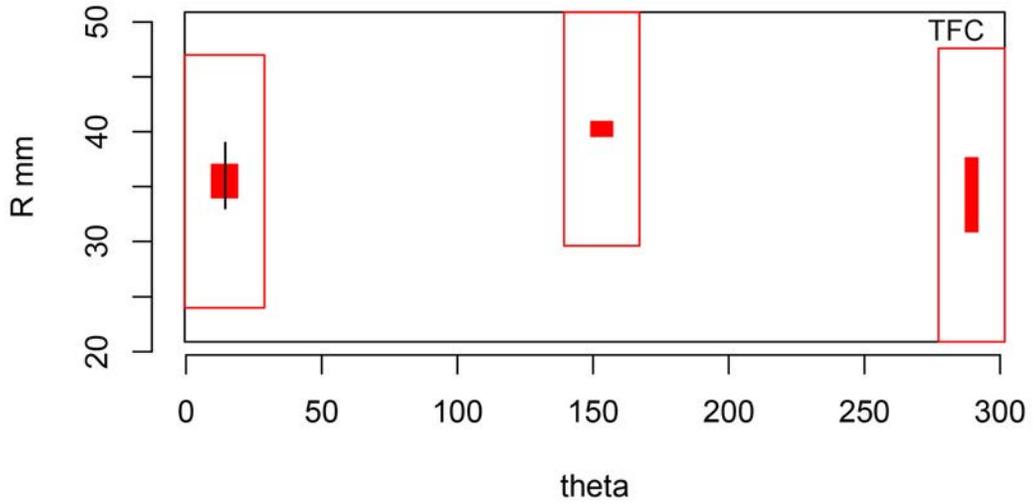


Figure H.5 Indication Plot for Procedure LUV.170 Applied to Test Block P5 in PARENT Open Testing (theta - R view)

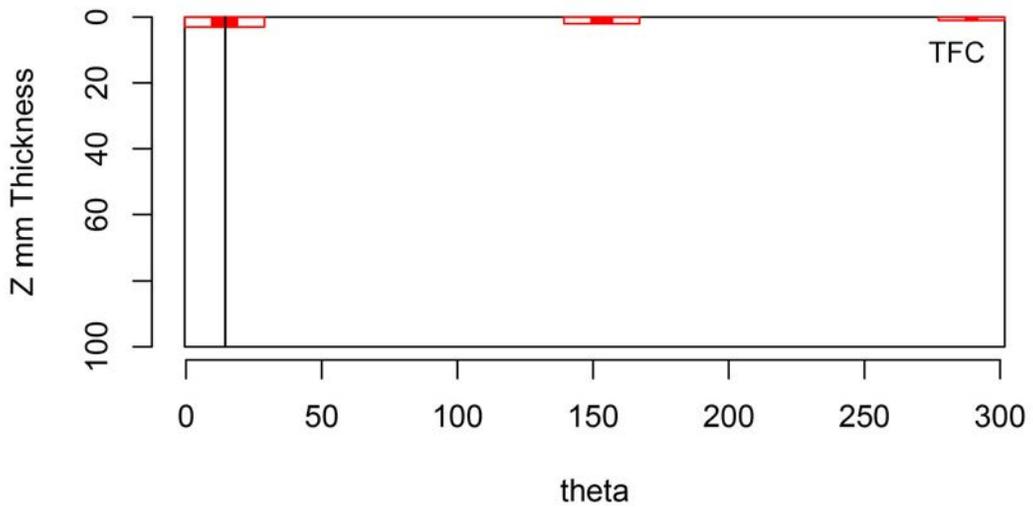


Figure H.6 Indication Plot for Procedure LUV.170 Applied to Test Block P5 in PARENT Open Testing (theta - Z view)

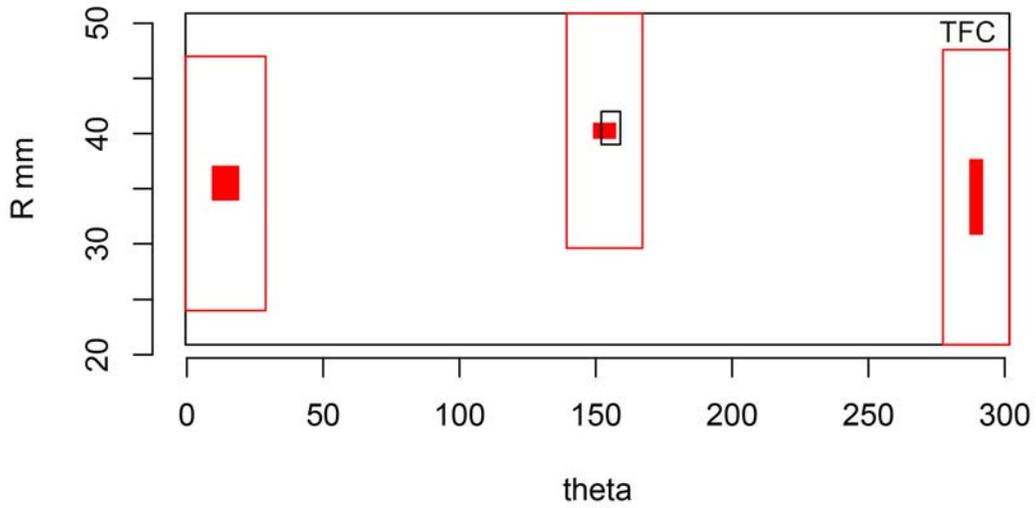


Figure H.7 Indication Plot for Procedure LUV.170 Applied to Test Block P5 in PARENT Open Testing (theta – R view)

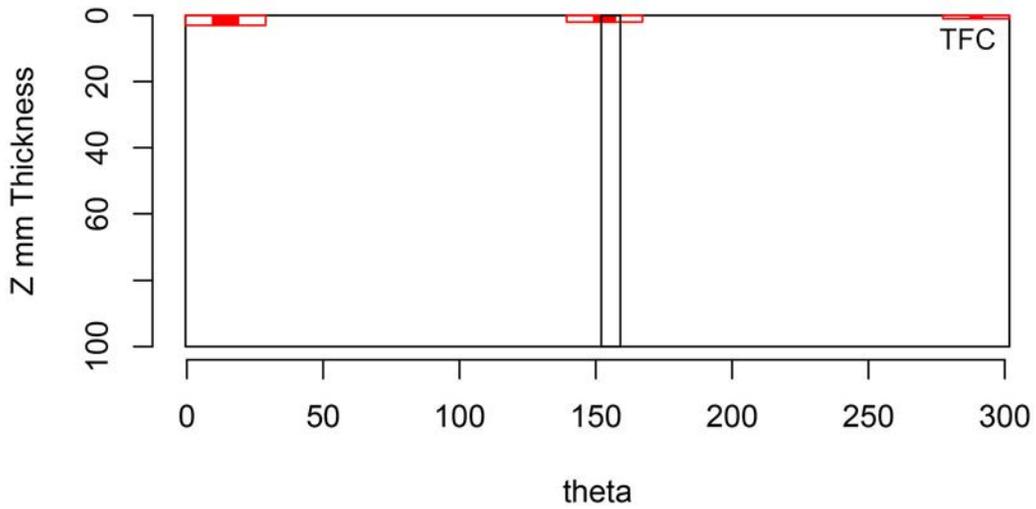


Figure H.8 Indication Plot for Procedure LUV.170 Applied to Test Block P5 in PARENT Open Testing (theta – Z view)

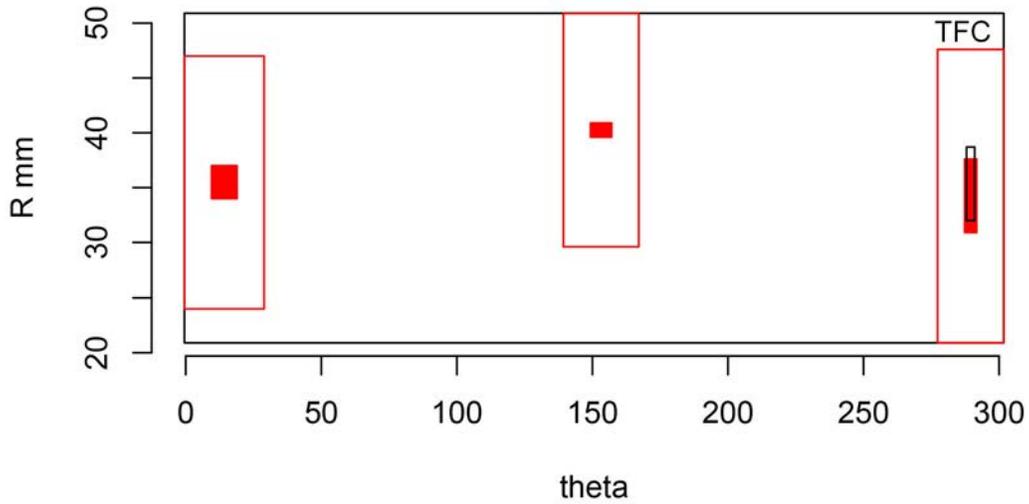


Figure H.9 Indication Plot for Procedure LUV.170 Applied to Test Block P5 in PARENT Open Testing (theta – R view)

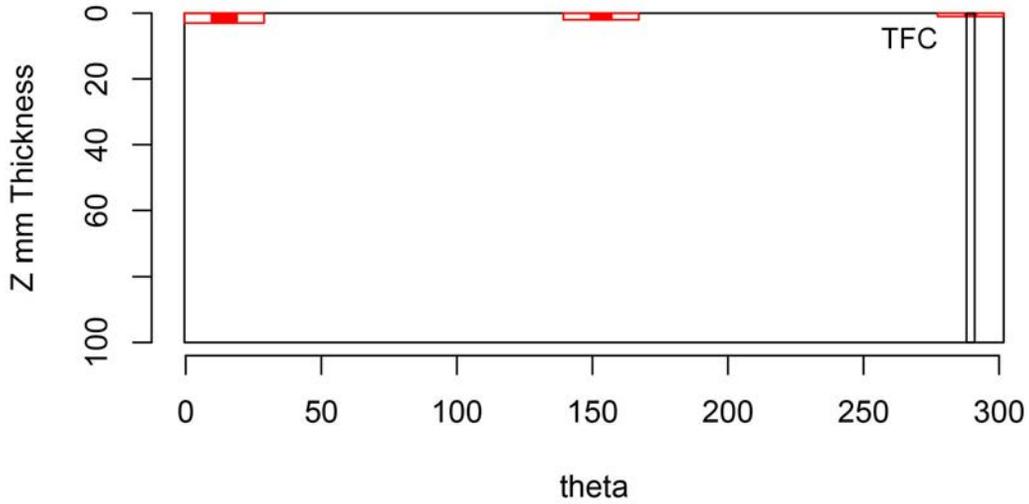


Figure H.10 Indication Plot for Procedure LUV.170 Applied to Test Block P5 in PARENT Open Testing (theta – Z view)

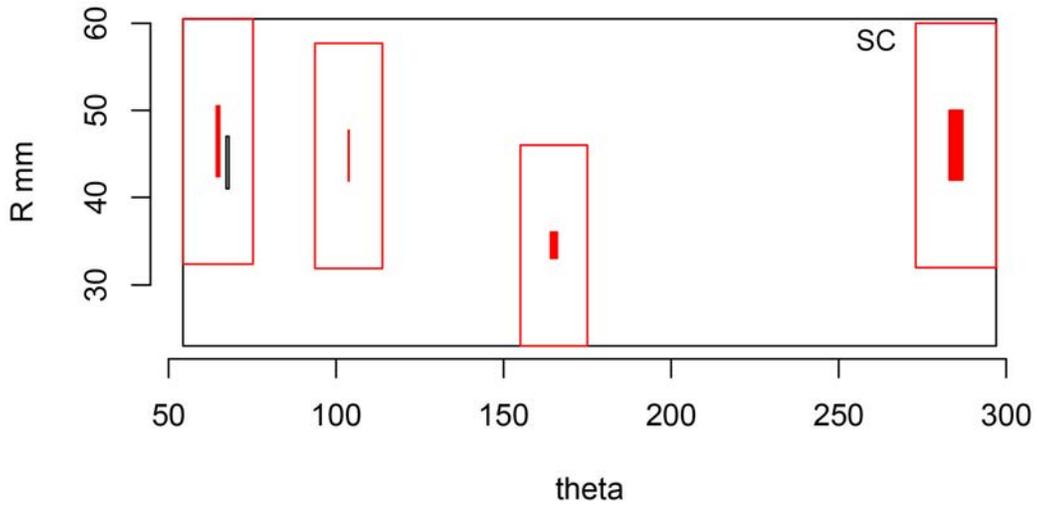


Figure H.11 Indication Plot for Procedure LUV.170 Applied to Test Block P7 in PARENT Open Testing (theta – R view)

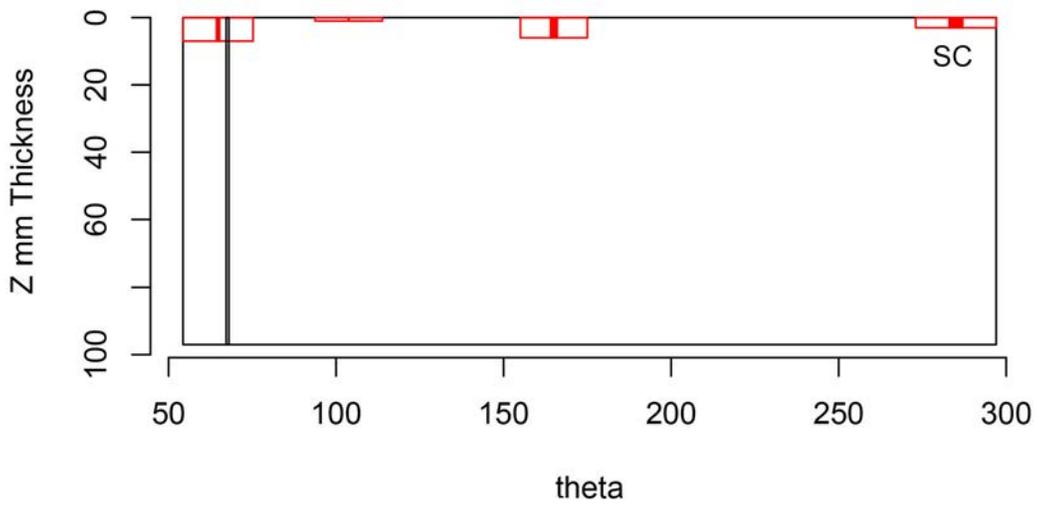


Figure H.12 Indication Plot for Procedure LUV.170 Applied to Test Block P7 in PARENT Open Testing (theta – Z view)

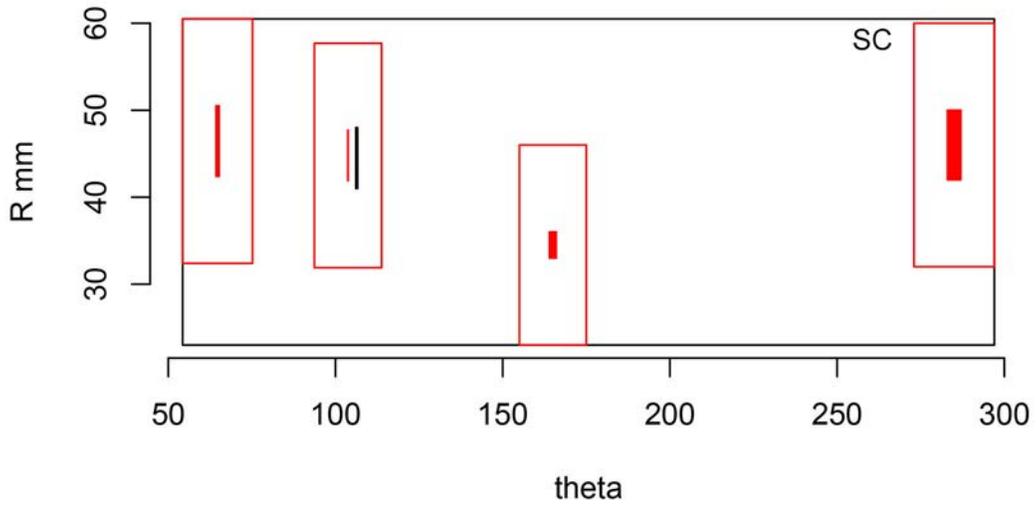


Figure H.13 Indication Plot for Procedure LUV.170 Applied to Test Block P7 in PARENT Open Testing (theta – R view)

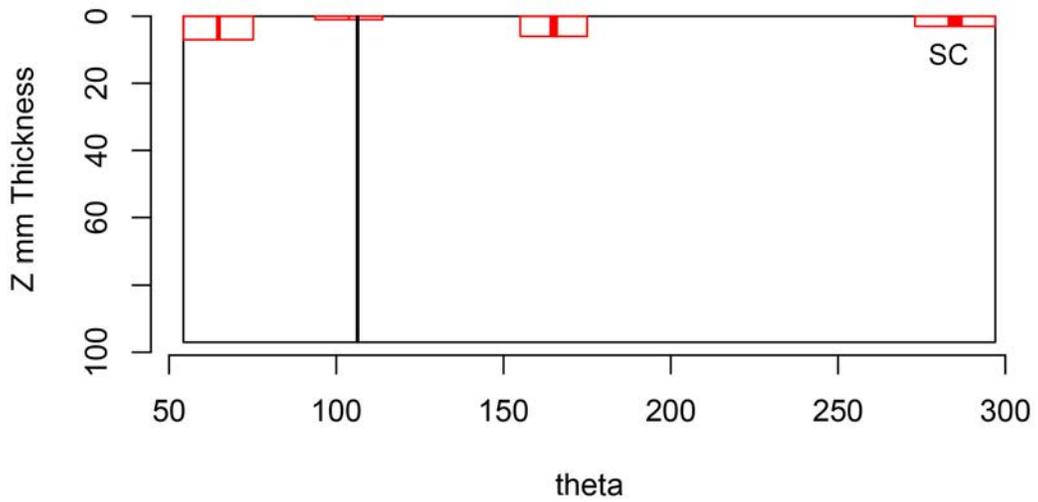


Figure H.14 Indication Plot for Procedure LUV.170 Applied to Test Block P7 in PARENT Open Testing (theta – Z view)

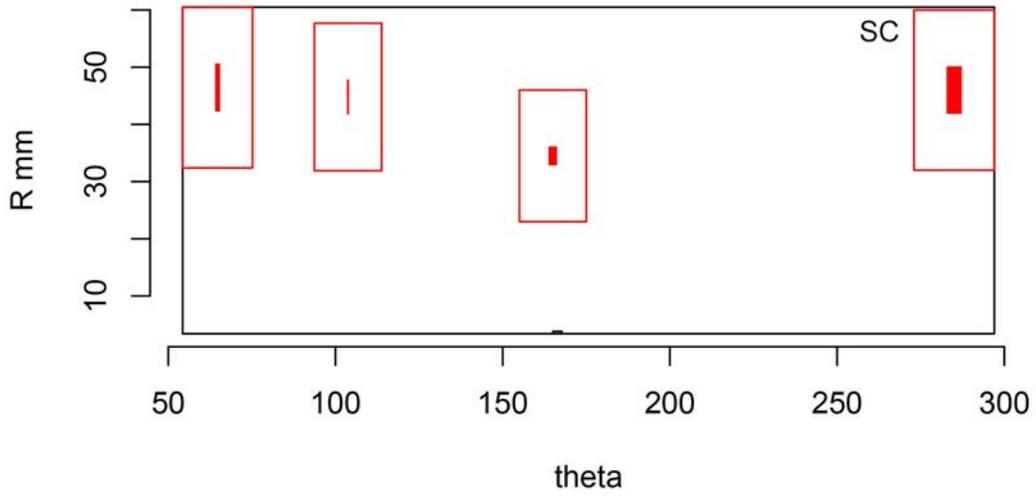


Figure H.15 Indication Plot for Procedure LUV.170 Applied to Test Block P7 in PARENT Open Testing (theta – R view)

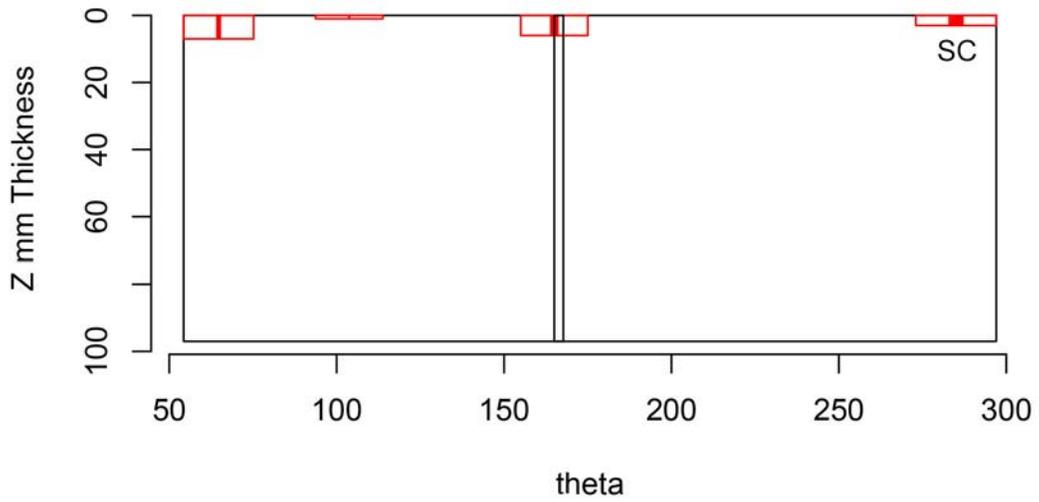


Figure H.16 Indication Plot for Procedure LUV.170 Applied to Test Block P7 in PARENT Open Testing (theta – Z view)

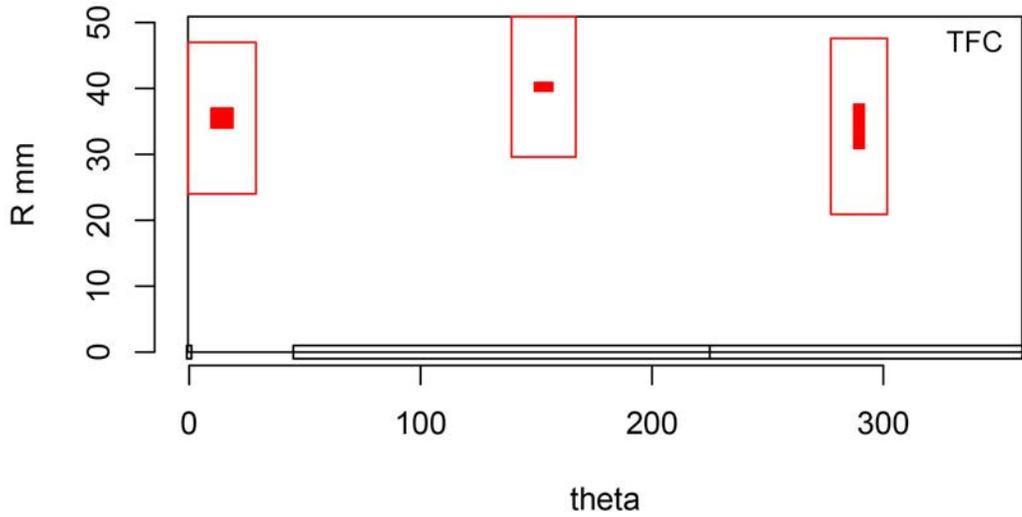


Figure H.17 Indication Plot for Procedure GW.21 Applied to Test Block P5 in PARENT Open Testing (theta – R view)

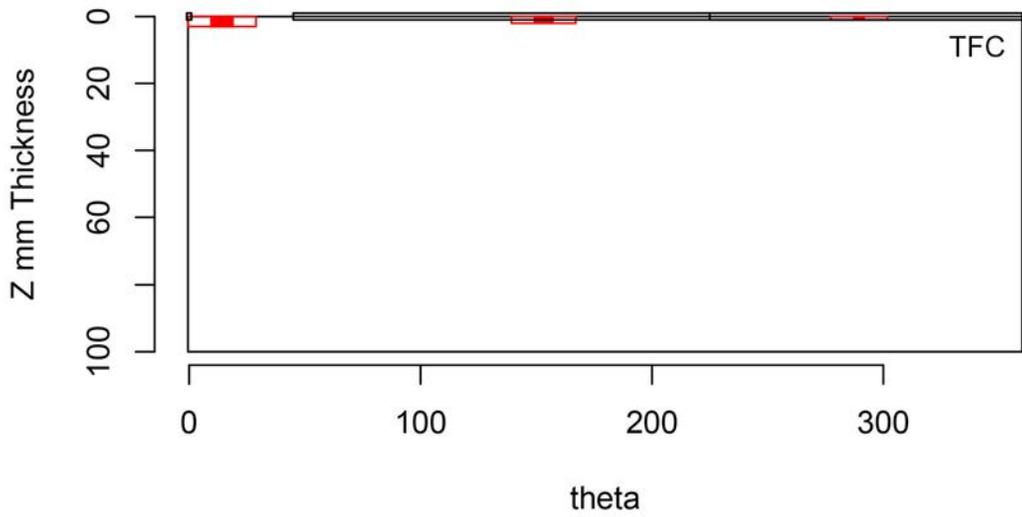


Figure H.18 Indication Plot for Procedure GW.21 Applied to Test Block P5 in PARENT Open Testing (theta – Z view)

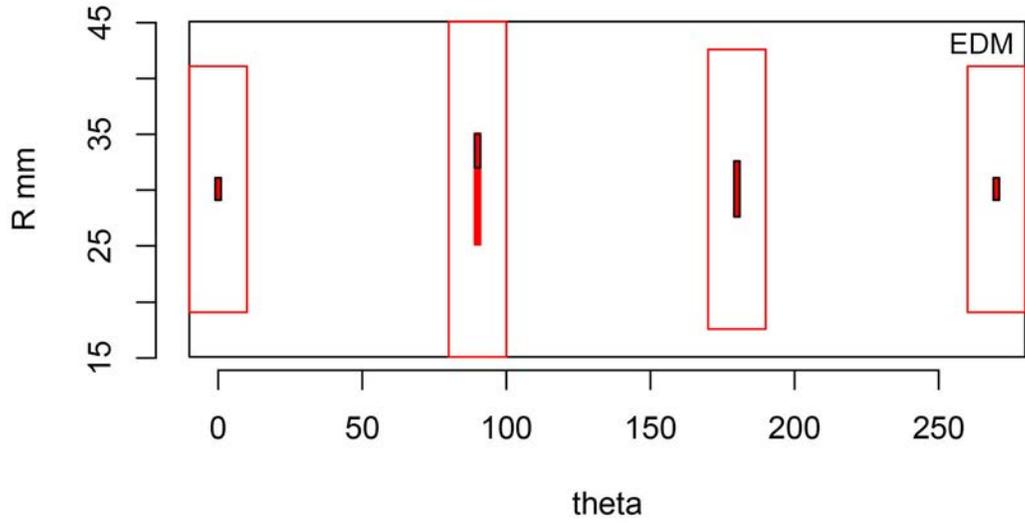


Figure H.19 Indication Plot for Procedure MM.28.1 Applied to Test Block P21 in PARENT Open Testing (theta – R view)

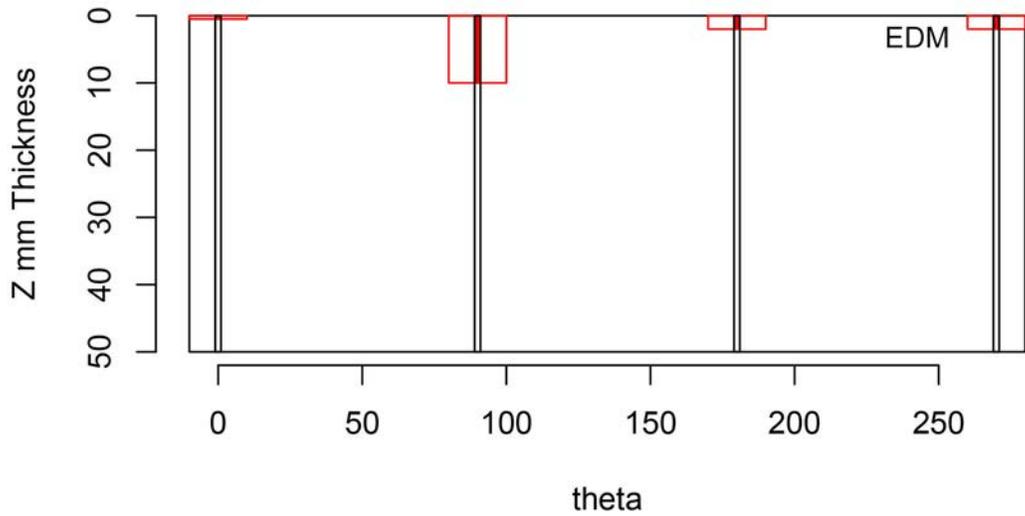


Figure H.20 Indication Plot for Procedure MM.28.1 Applied to Test Block P21 in PARENT Open Testing (theta – Z view)

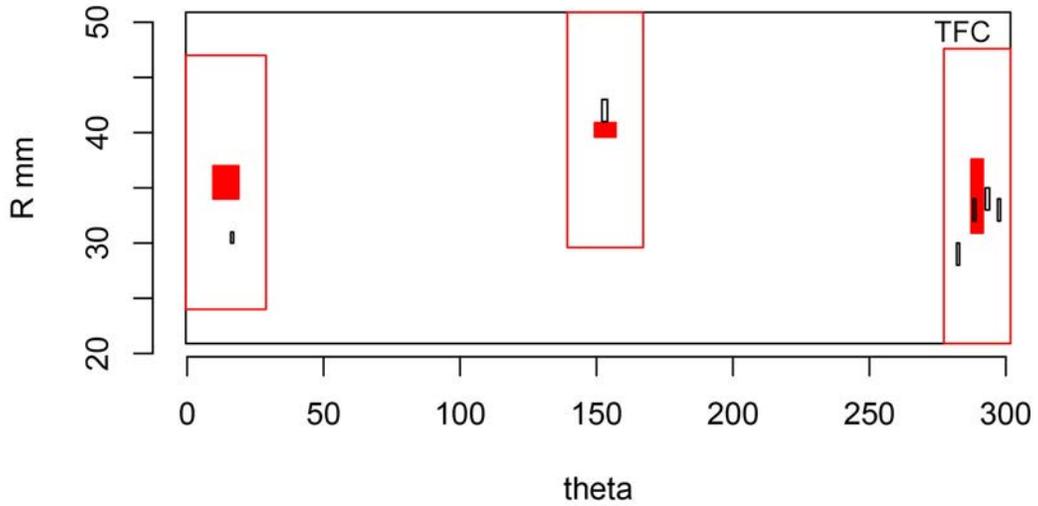


Figure H.21 Indication Plot for Procedure AECT.33 Applied to Test Block P5 in PARENT Open Testing (theta – R view)

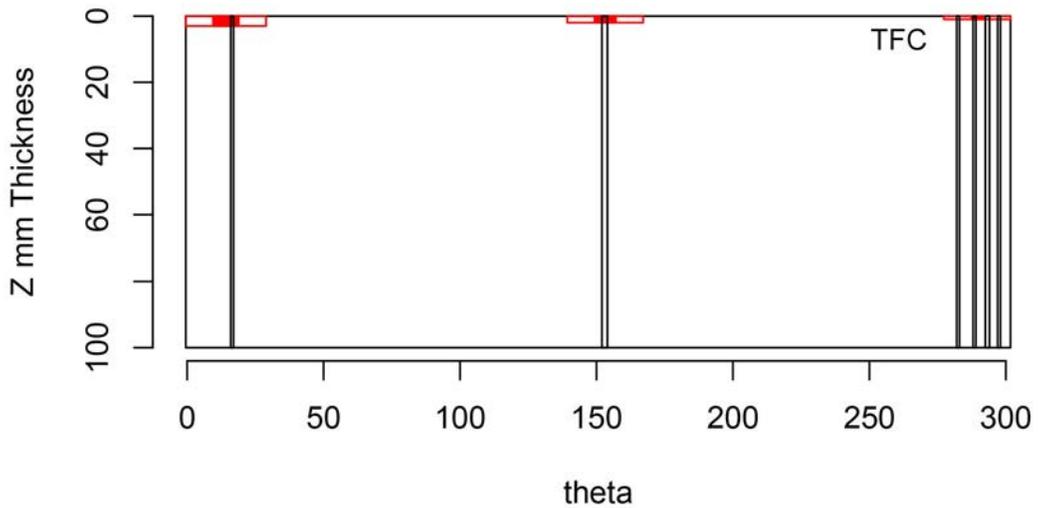


Figure H.22 Indication Plot for Procedure AECT.33 Applied to Test Block P5 in PARENT Open Testing (theta – Z view)

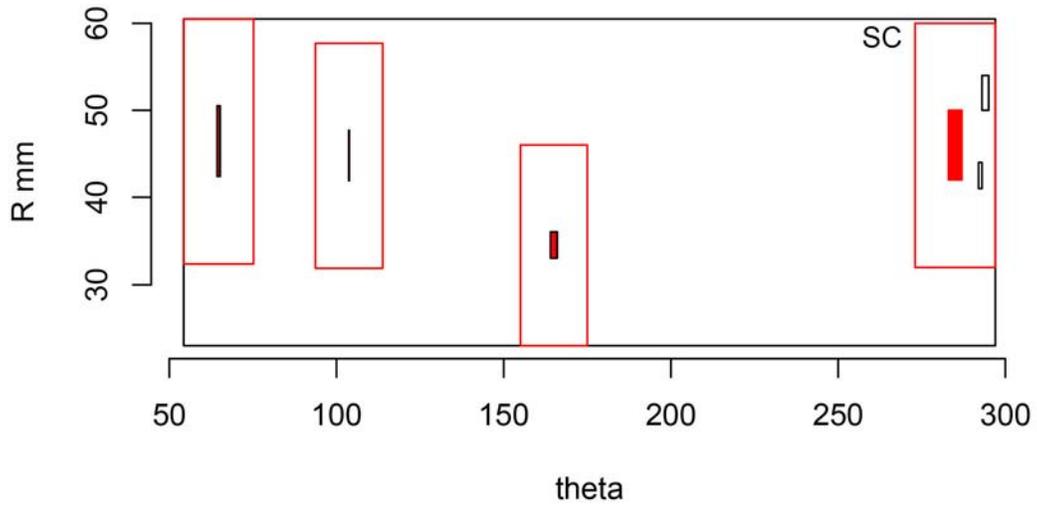


Figure H.23 Indication Plot for Procedure AECT.33 Applied to Test Block P7 in PARENT Open Testing (theta – R view)

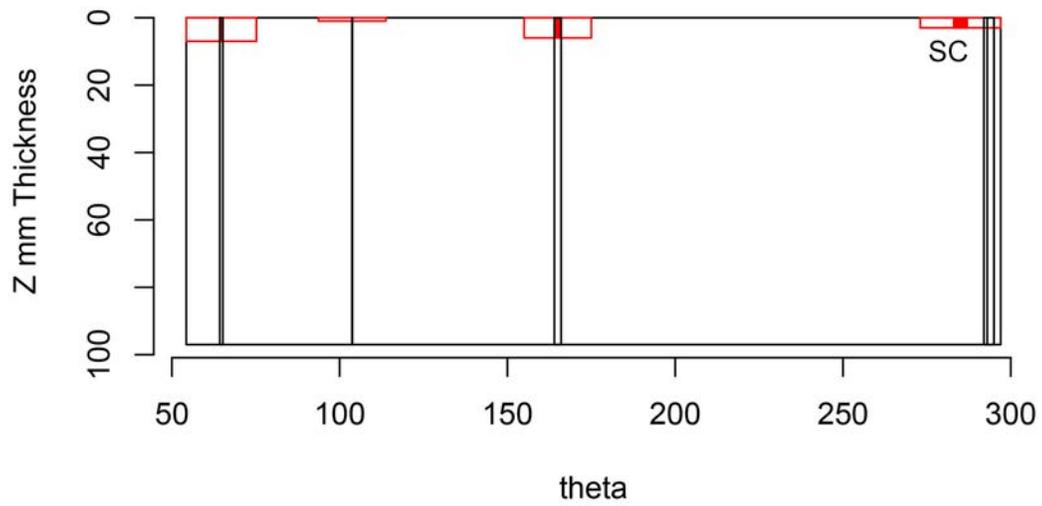


Figure H.24 Indication Plot for Procedure AECT.33 Applied to Test Block P7 in PARENT Open Testing (theta – Z view)

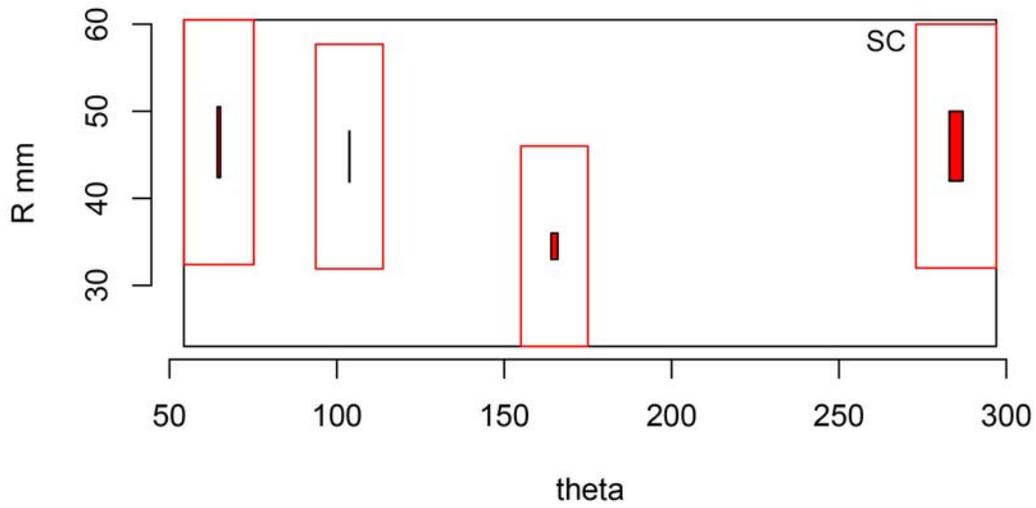


Figure H.25 Indication Plot for Procedure CEECT.5.1 Applied to Test Block P7 in PARENT Open Testing (theta - R view)

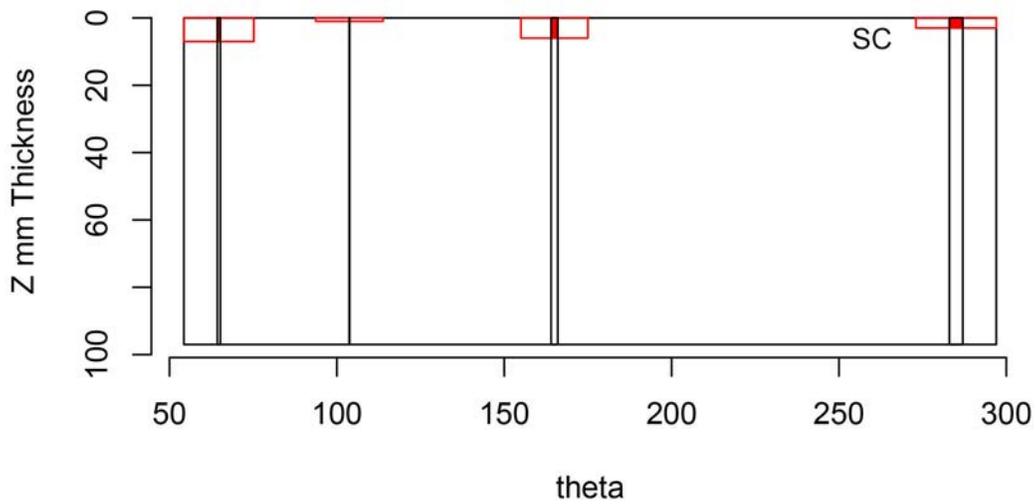


Figure H.26 Indication Plot for Procedure CEECT.5.1 Applied to Test Block P7 in PARENT Open Testing (theta - Z view)

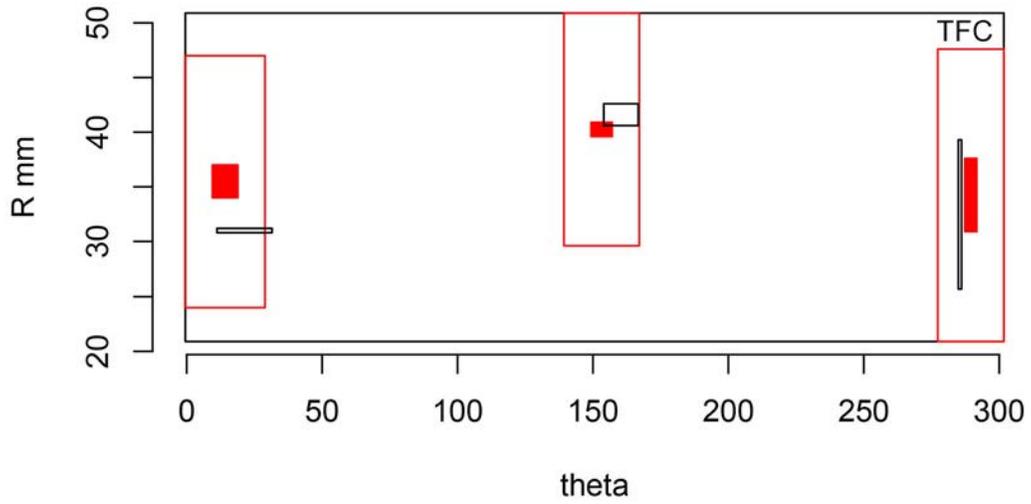


Figure H.27 Indication Plot for Procedure ECT.7 Applied to Test Block P5 in PARENT Open Testing (theta – R view)

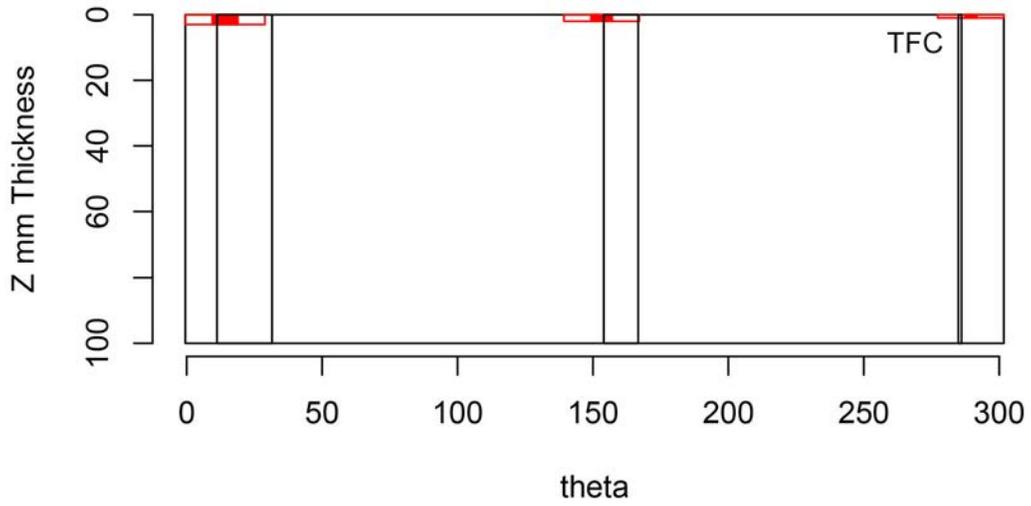


Figure H.28 Indication Plot for Procedure ECT.7 Applied to Test Block P5 in PARENT Open Testing (theta – Z view)

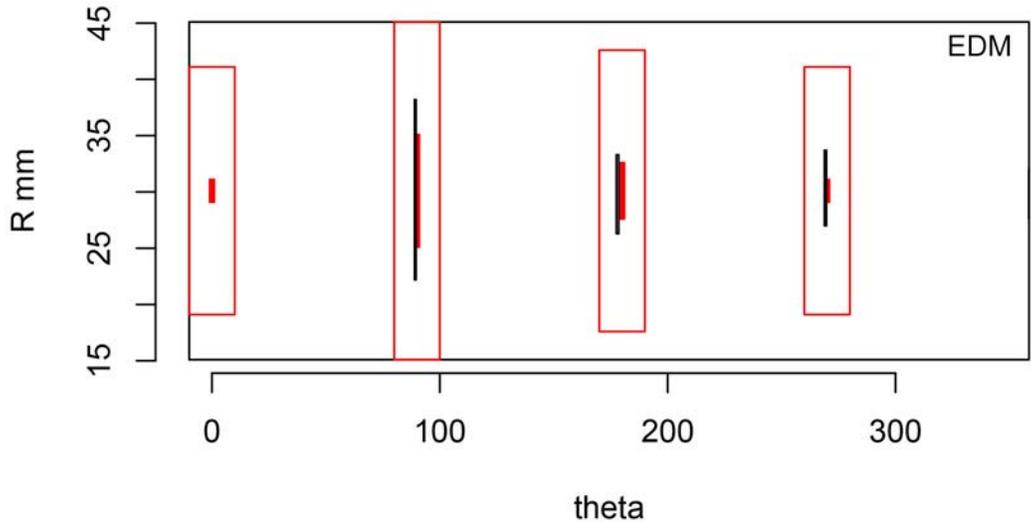


Figure H.29 Indication Plot for Procedure ECT.7 Applied to Test Block P21 in PARENT Open Testing (theta – R view)

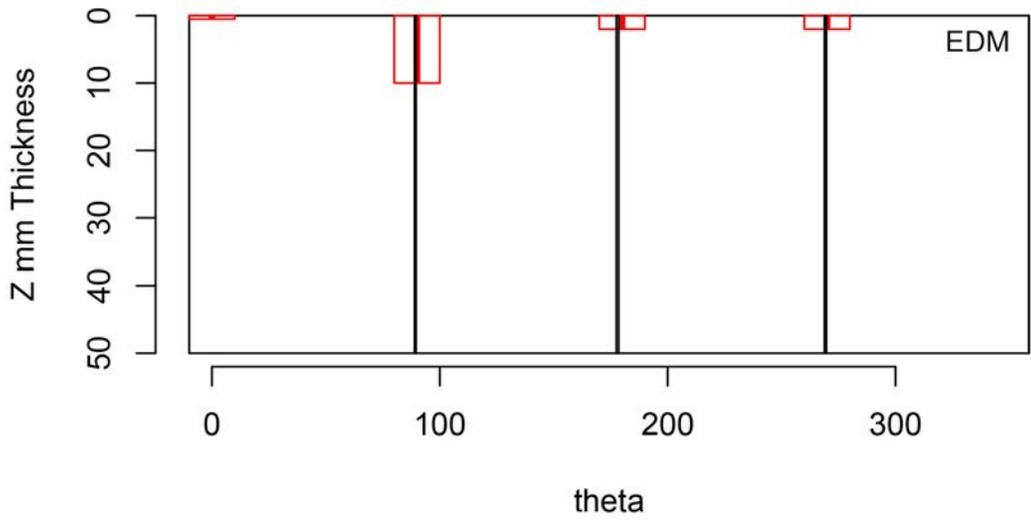


Figure H.30 Indication Plot for Procedure ECT.7 Applied to Test Block P21 in PARENT Open Testing (theta – Z view)

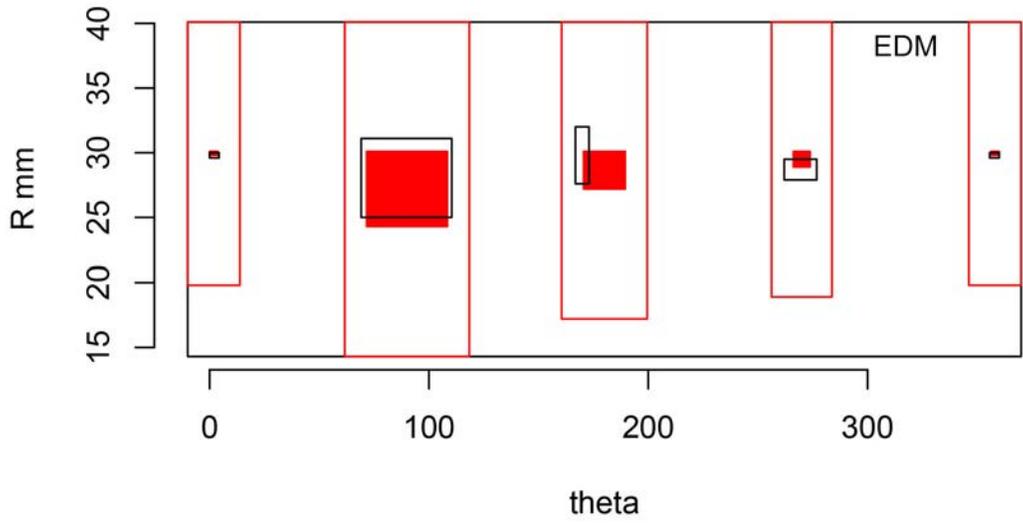


Figure H.31 Indication Plot for Procedure ECT.7 Applied to Test Block P22 in PARENT Open Testing (theta – R view)

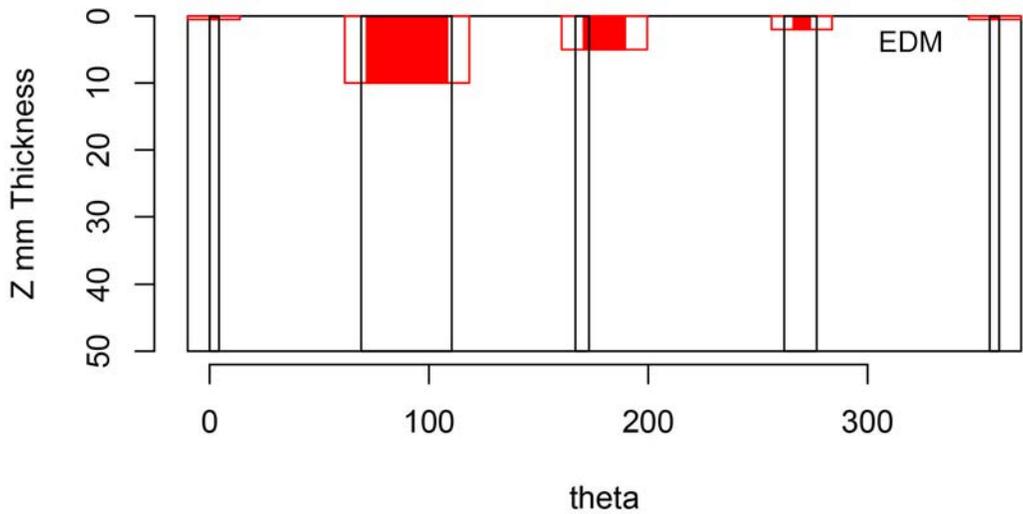


Figure H.32 Indication Plot for Procedure ECT.7 Applied to Test Block P22 in PARENT Open Testing (theta – Z view)

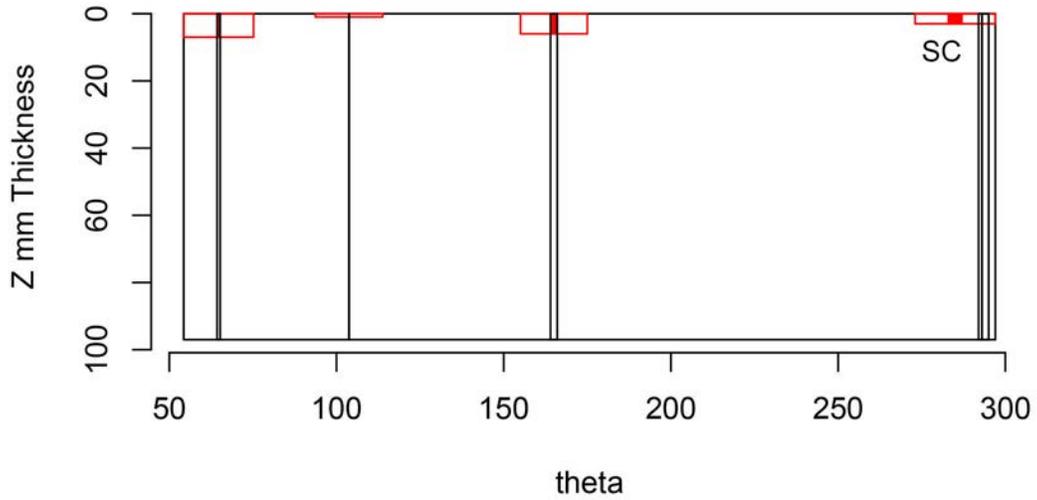


Figure H.33 Indication Plot for Procedure ECT.7 Applied to Test Block P7 in PARENT Open Testing (theta – R view)

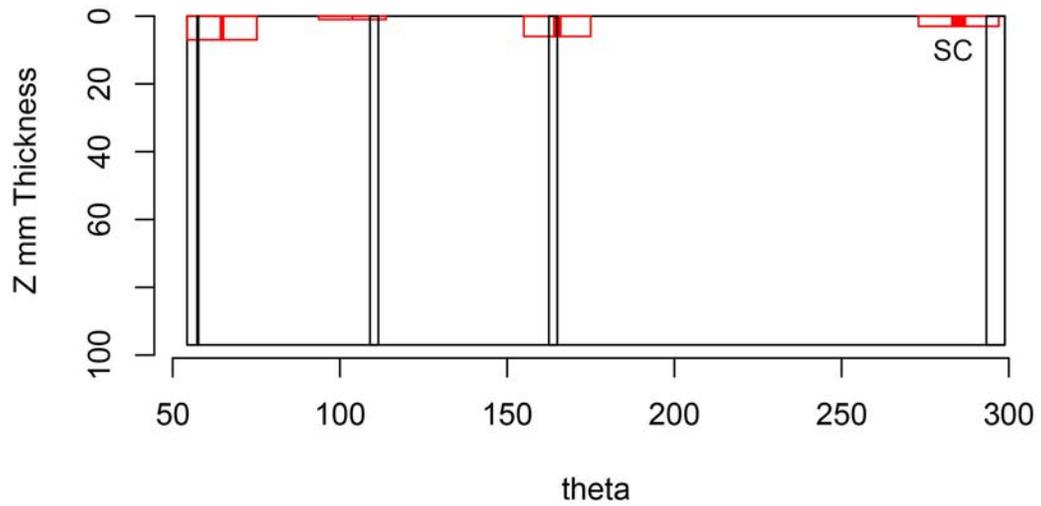


Figure H.34 Indication Plot for Procedure ECT.7 Applied to Test Block P7 in PARENT Open Testing (theta – Z view)

H.2 Indication Plots for DMWs

H.2.1 Plots for Team 104

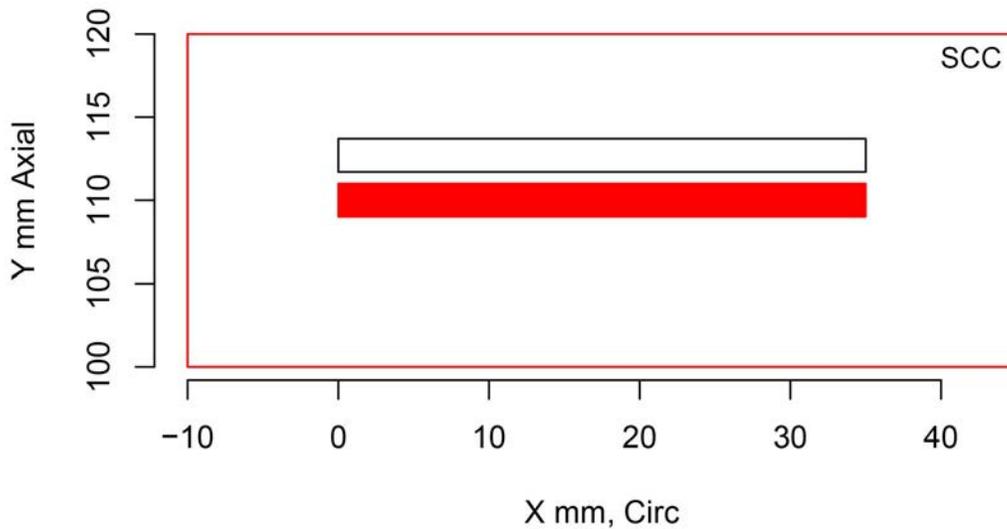


Figure H.35 Indication Plot for Procedure UT.104 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

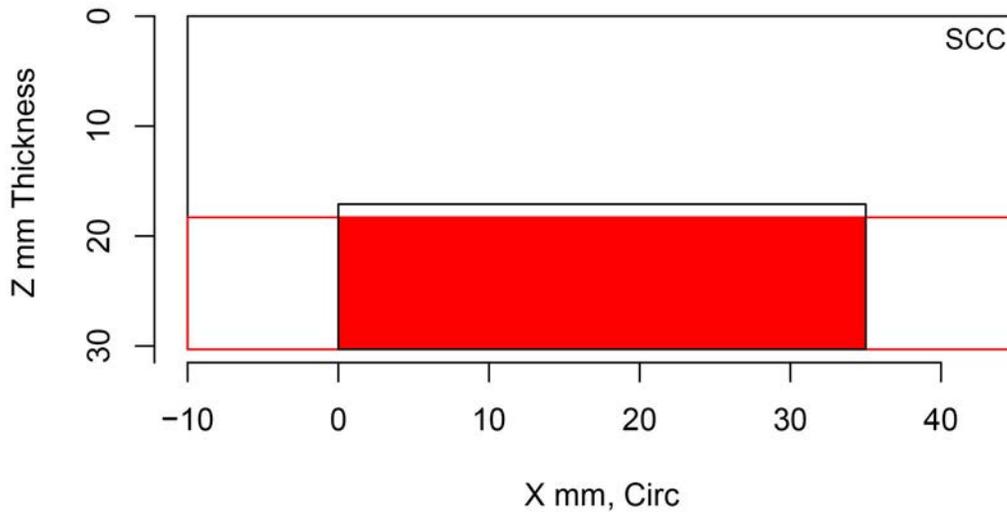


Figure H.36 Indication Plot for Procedure UT.104 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

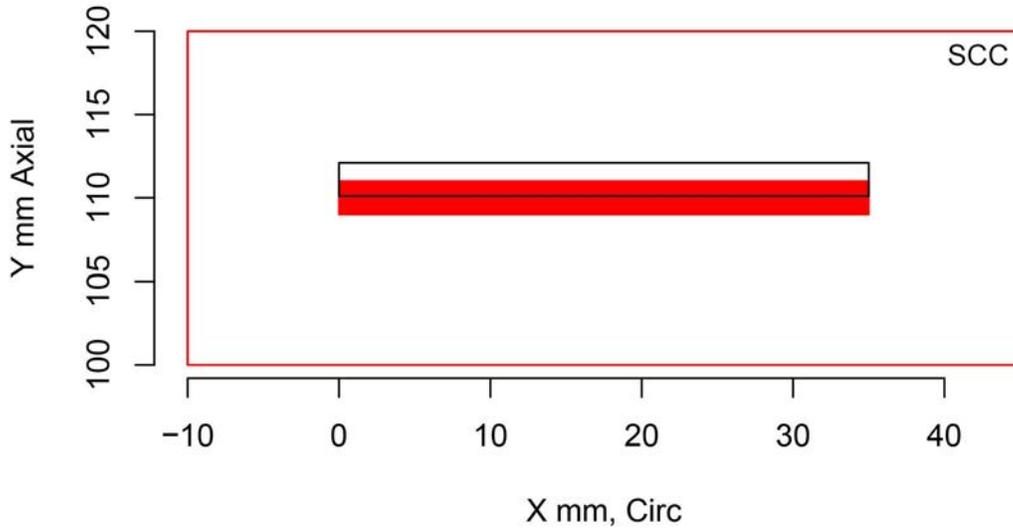


Figure H.37 Indication Plot for Procedure UT.104 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

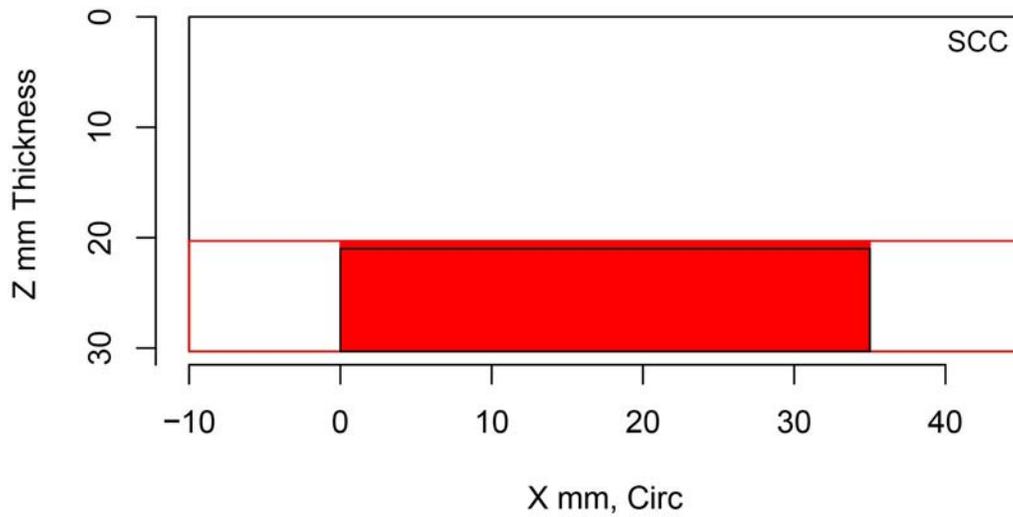


Figure H.38 Indication Plot for Procedure UT.104 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

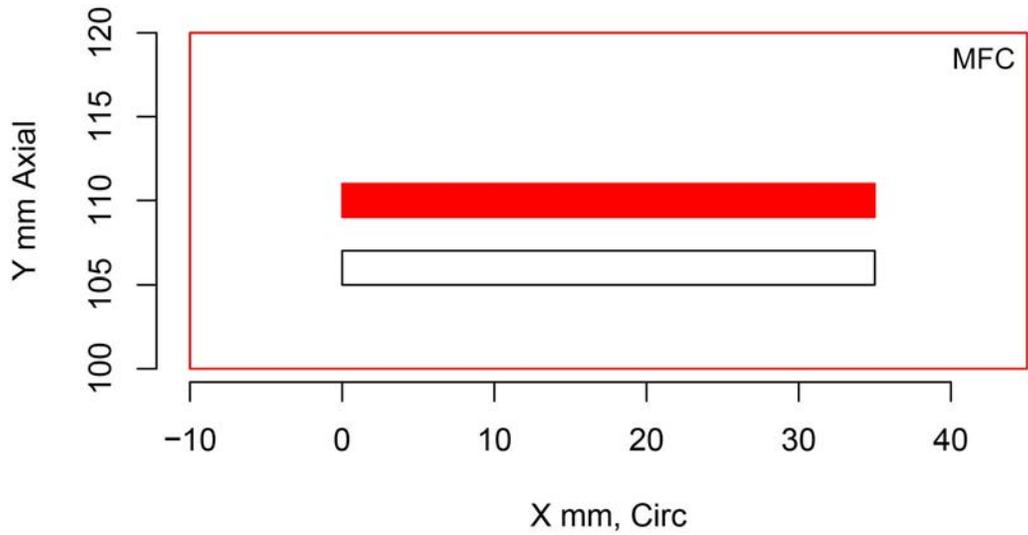


Figure H.39 Indication Plot for Procedure UT.104 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

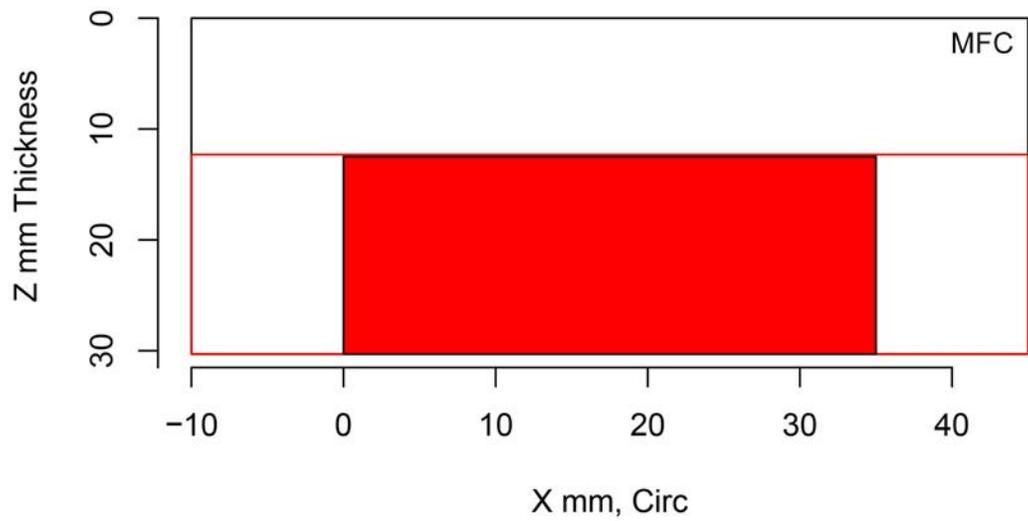


Figure H.40 Indication Plot for Procedure UT.104 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

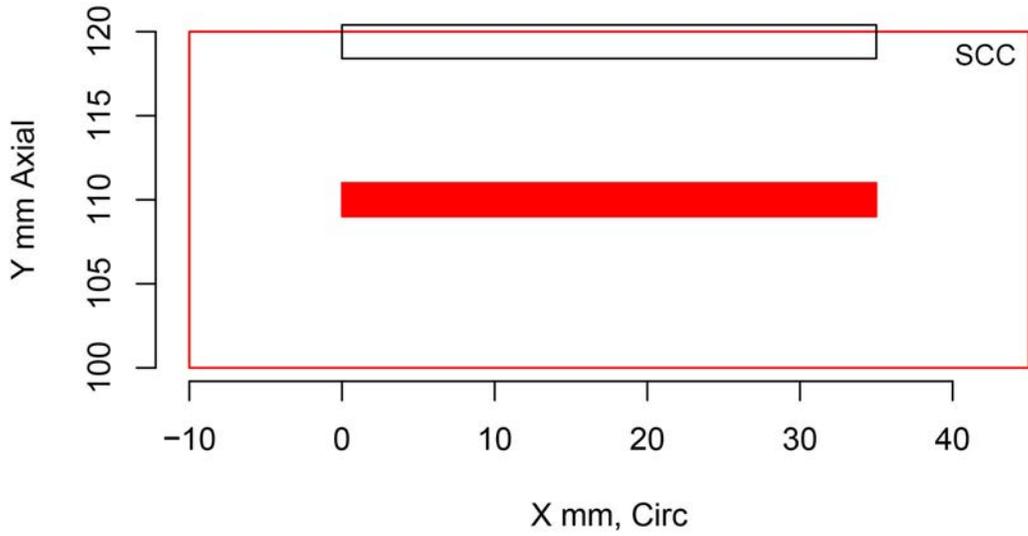


Figure H.41 Indication Plot for Procedure UT.104 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

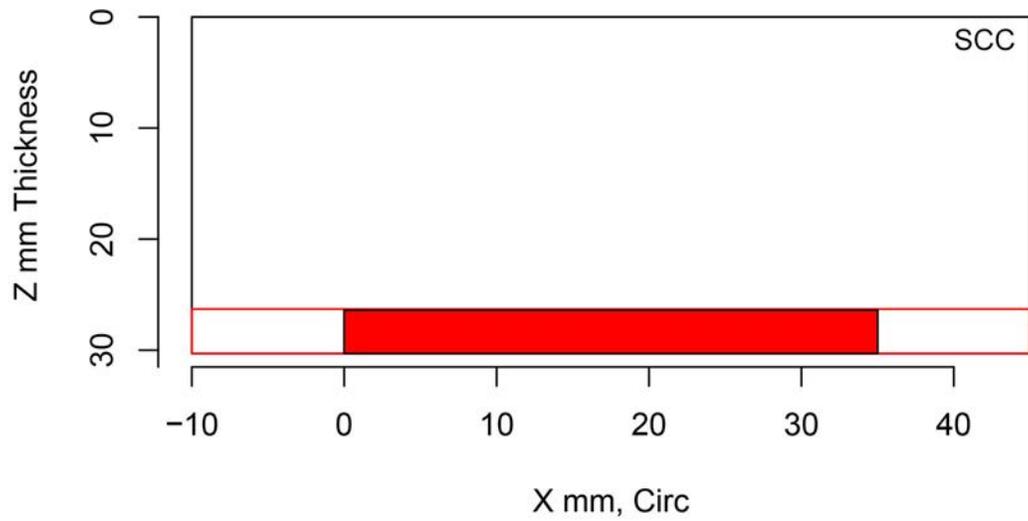


Figure H.42 Indication Plot for Procedure UT.104 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

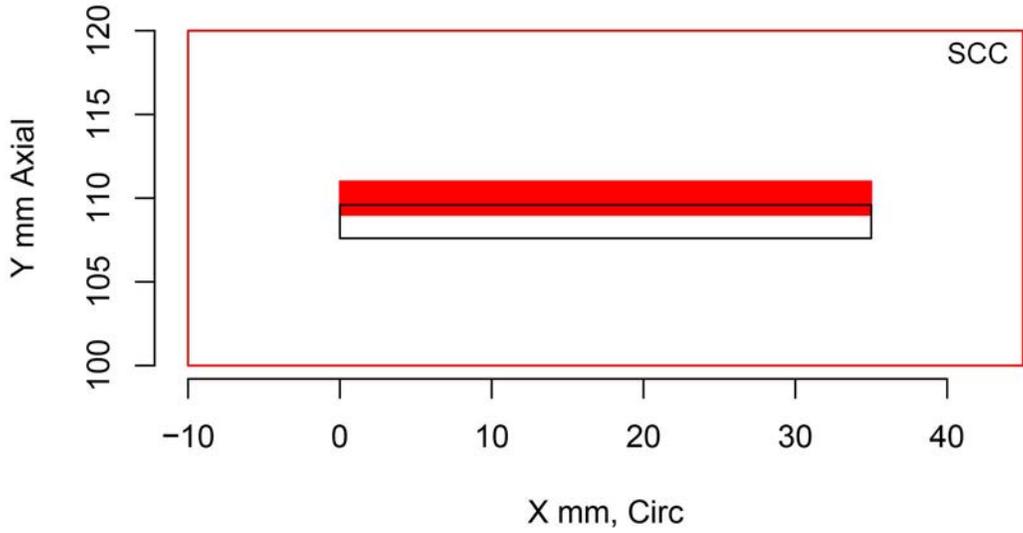


Figure H.43 Indication Plot for Procedure UT.104 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

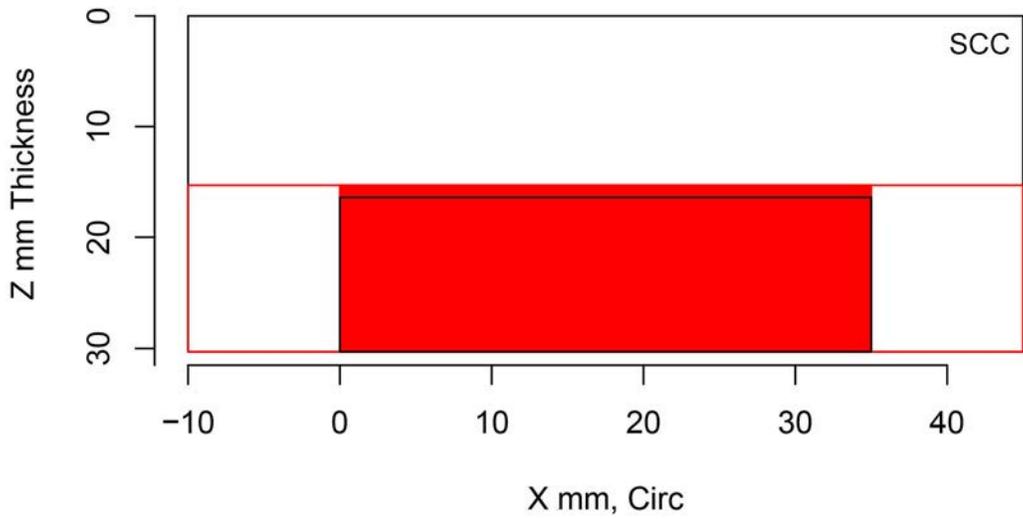


Figure H.44 Indication Plot for Procedure UT.104 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

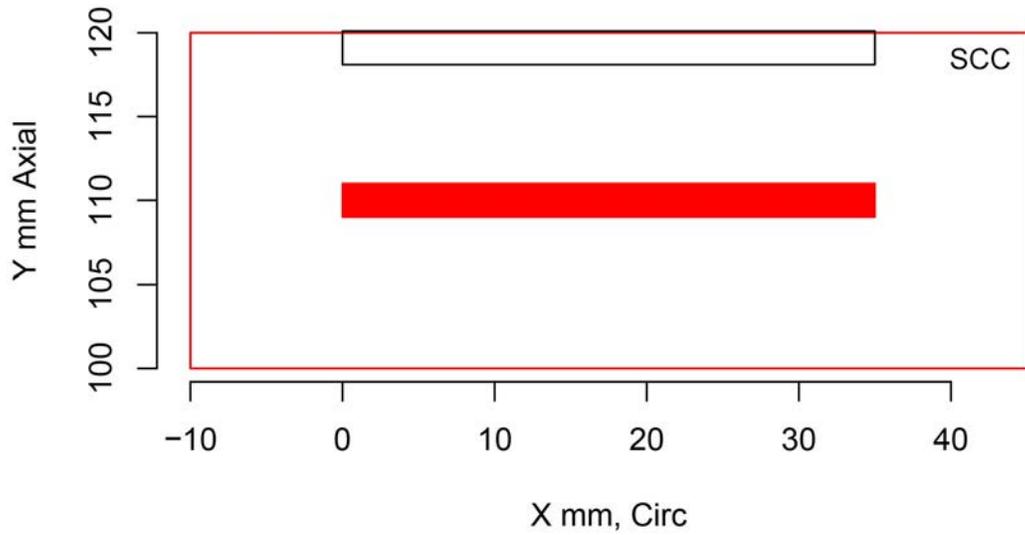


Figure H.45 Indication Plot for Procedure UT.104 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

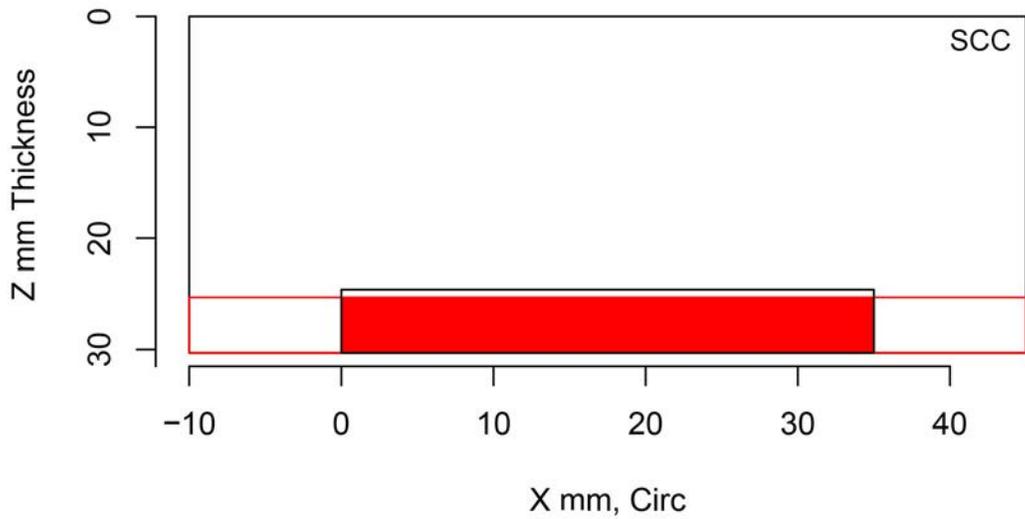


Figure H.46 Indication Plot for Procedure UT.104 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

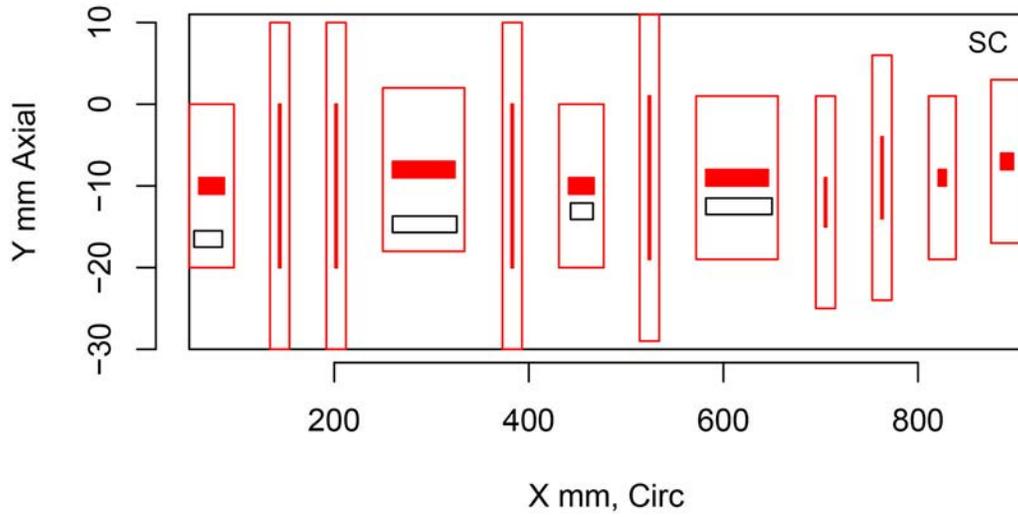


Figure H.47 Indication Plot for Procedure UT.104 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

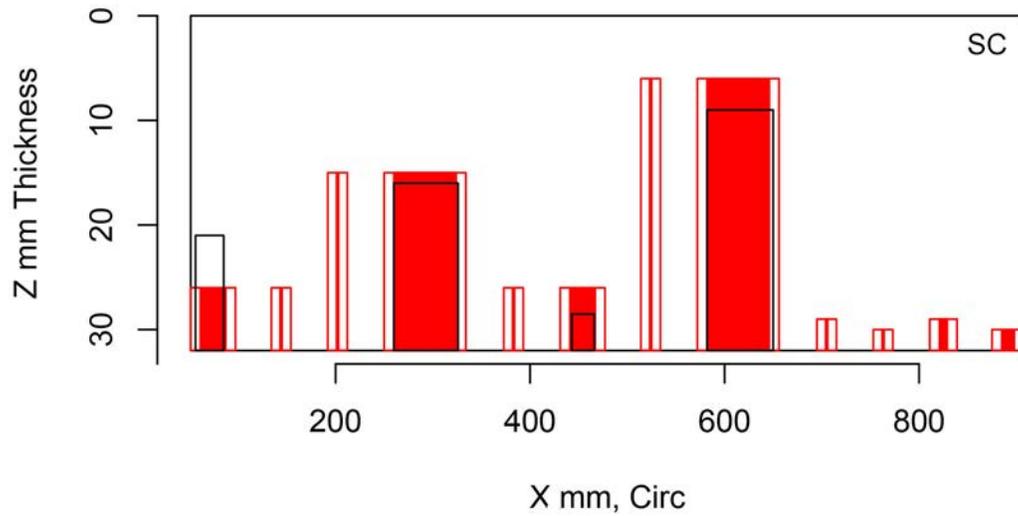


Figure H.48 Indication Plot for Procedure UT.104 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

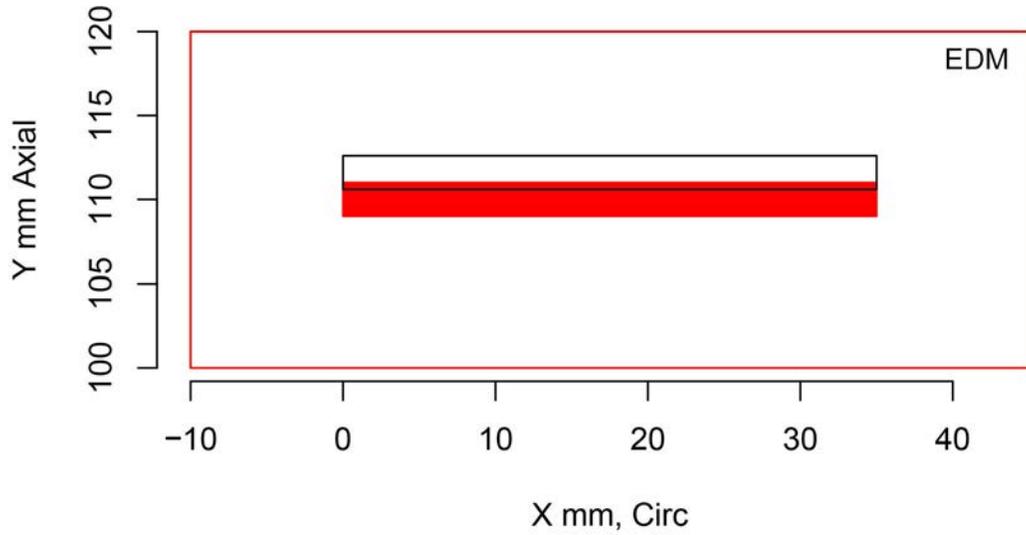


Figure H.49 Indication Plot for Procedure UT.104 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

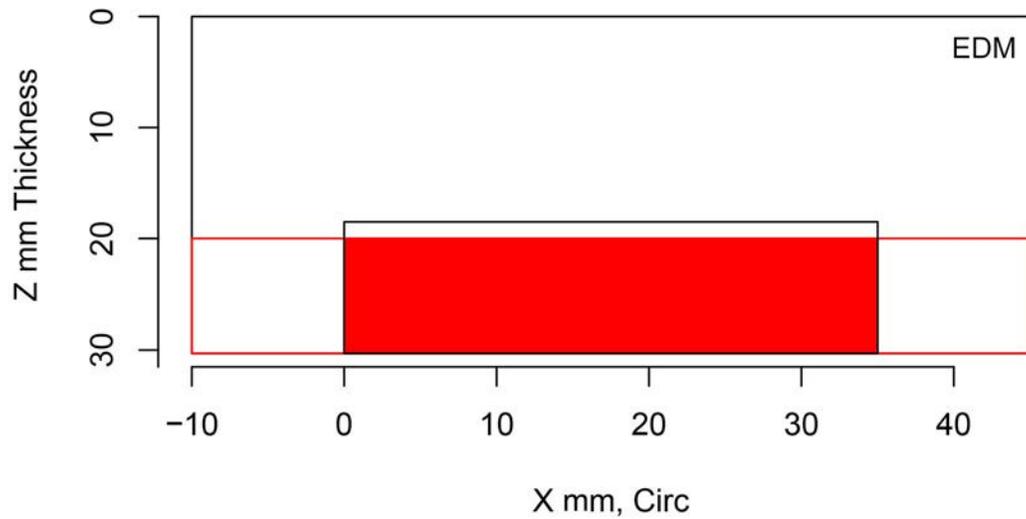


Figure H.50 Indication Plot for Procedure UT.104 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

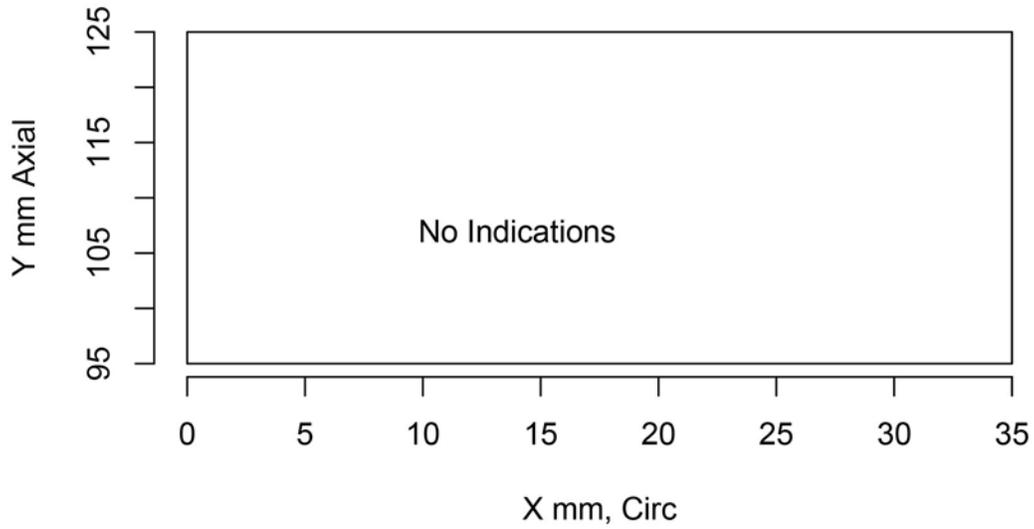


Figure H.51 Indication Plot for Procedure UT.104 Applied to Test Block P46 in PARENT Open Testing (X – Y view)

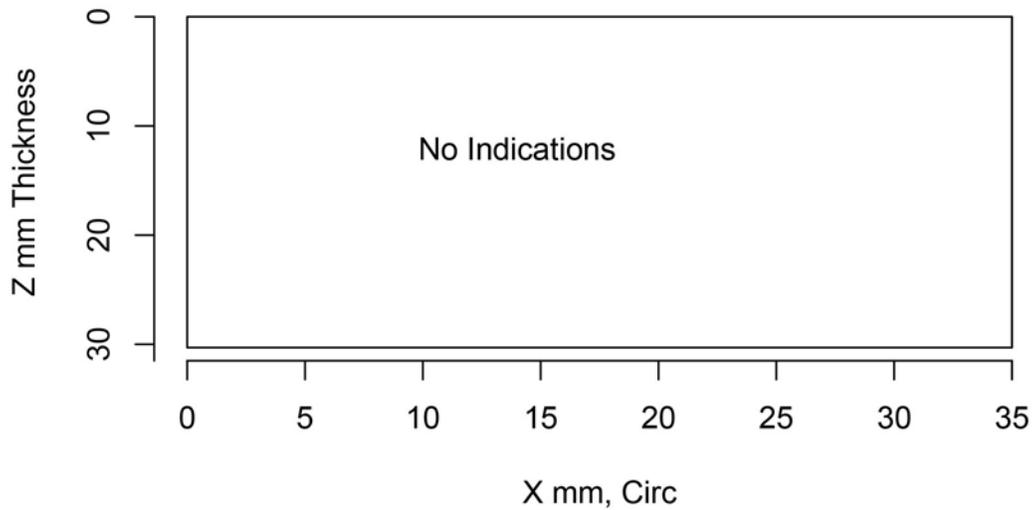


Figure H.52 Indication Plot for Procedure UT.104 Applied to Test Block P46 in PARENT Open Testing (X – Z view)

H.2.2 Plots for Team 109

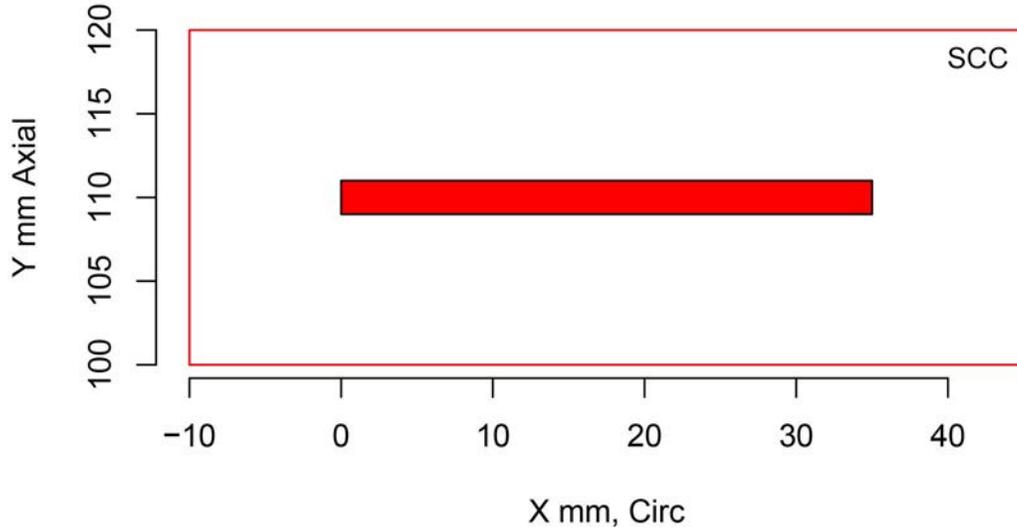


Figure H.53 Indication Plot for Procedure RT.109 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

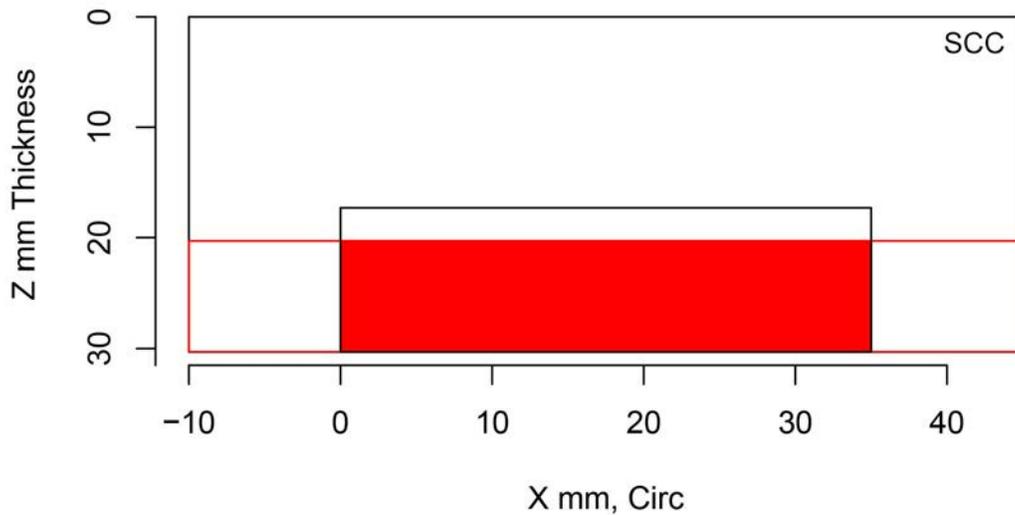


Figure H.54 Indication Plot for Procedure RT.109 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

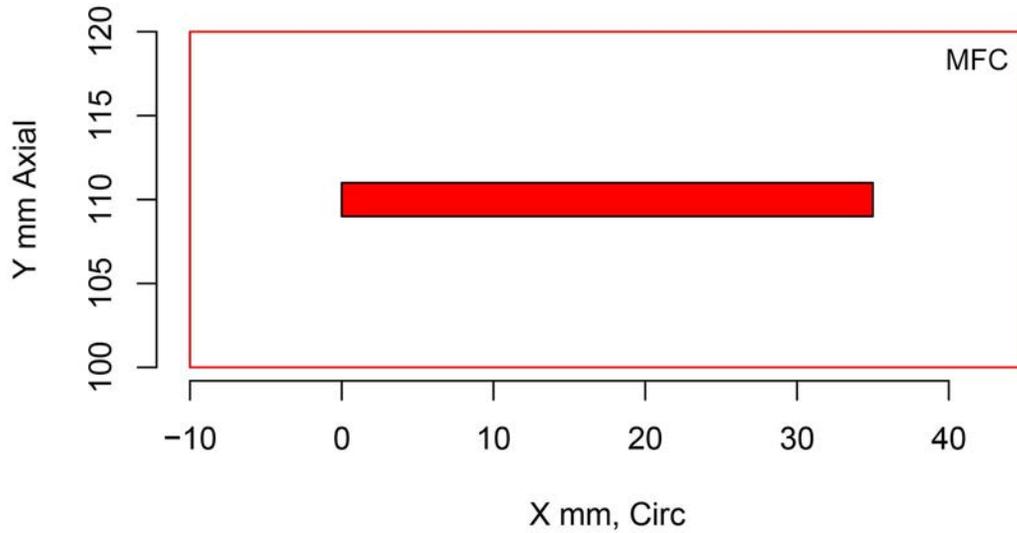


Figure H.55 Indication Plot for Procedure RT.109 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

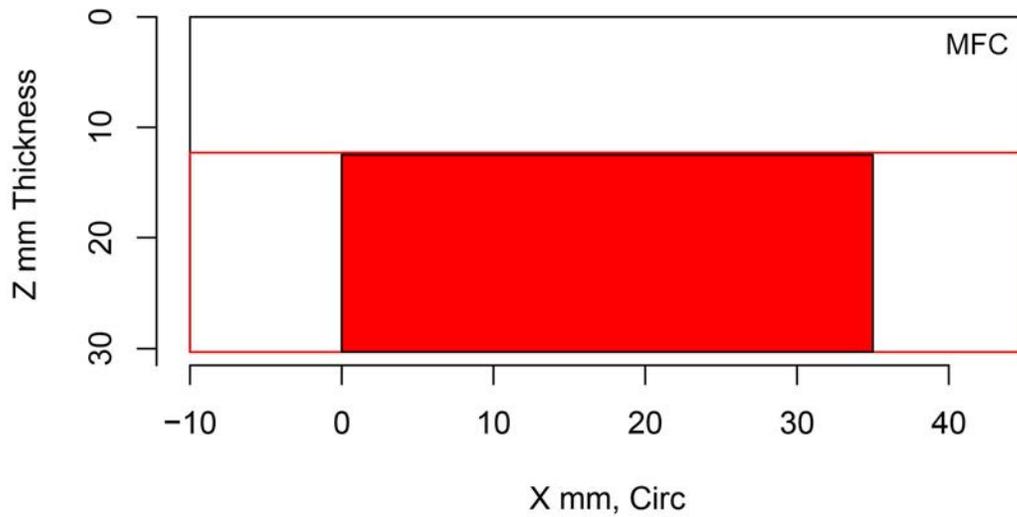


Figure H.56 Indication Plot for Procedure RT.109 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

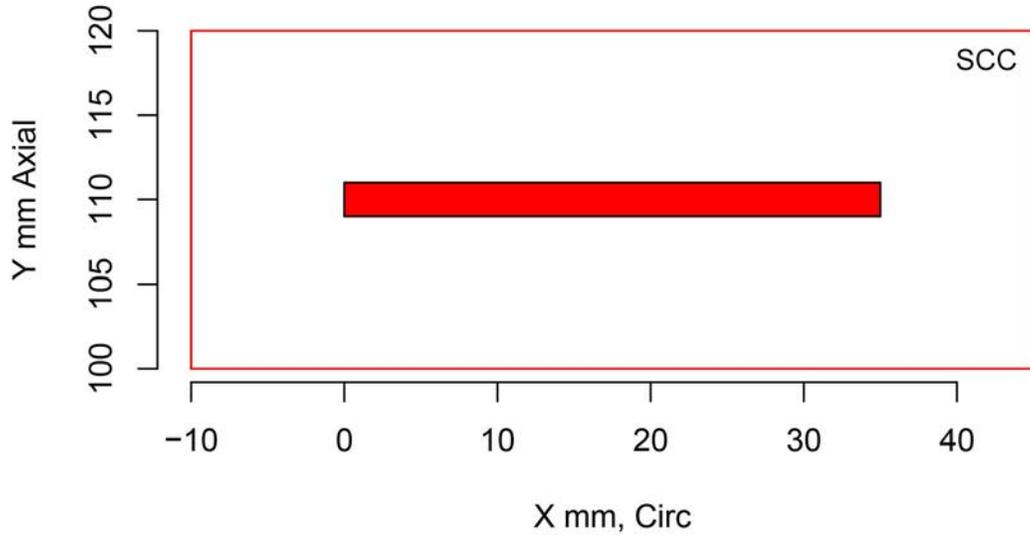


Figure H.57 Indication Plot for Procedure RT.109 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

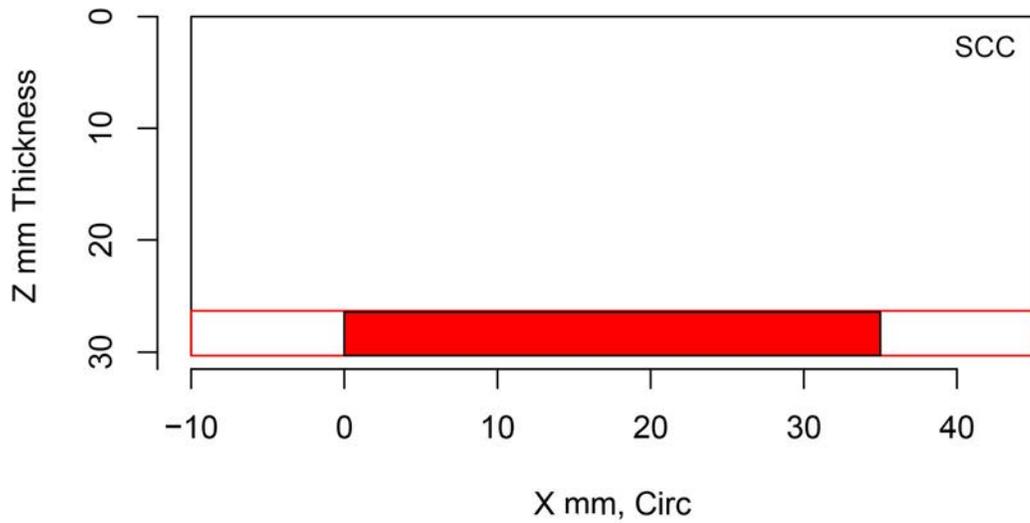


Figure H.58 Indication Plot for Procedure RT.109 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

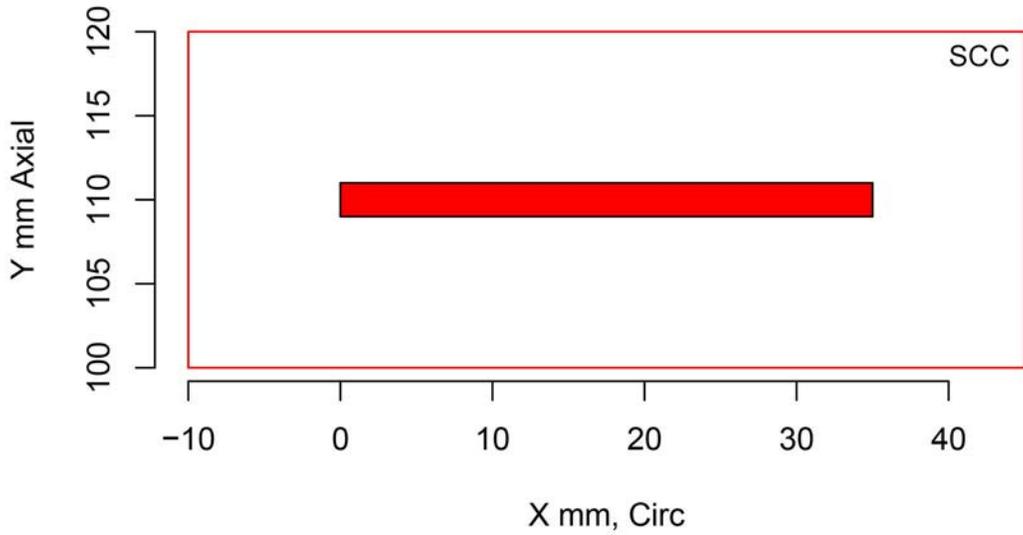


Figure H.59 Indication Plot for Procedure RT.109 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

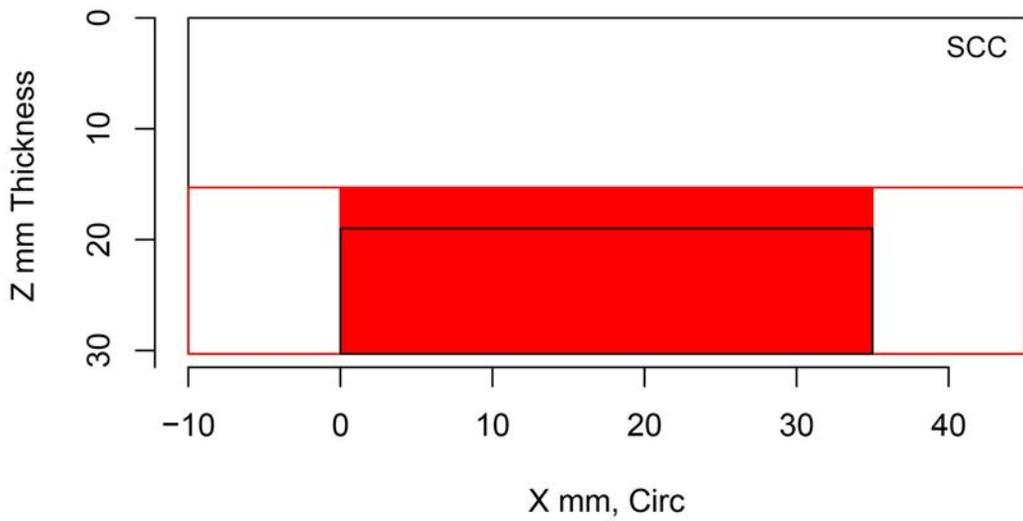


Figure H.60 Indication Plot for Procedure RT.109 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

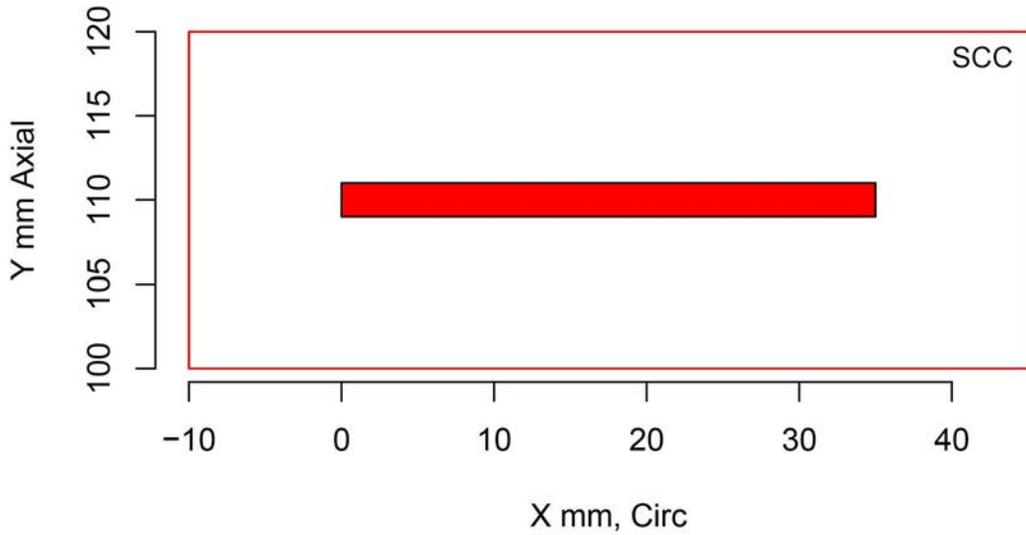


Figure H.61 Indication Plot for Procedure RT.109 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

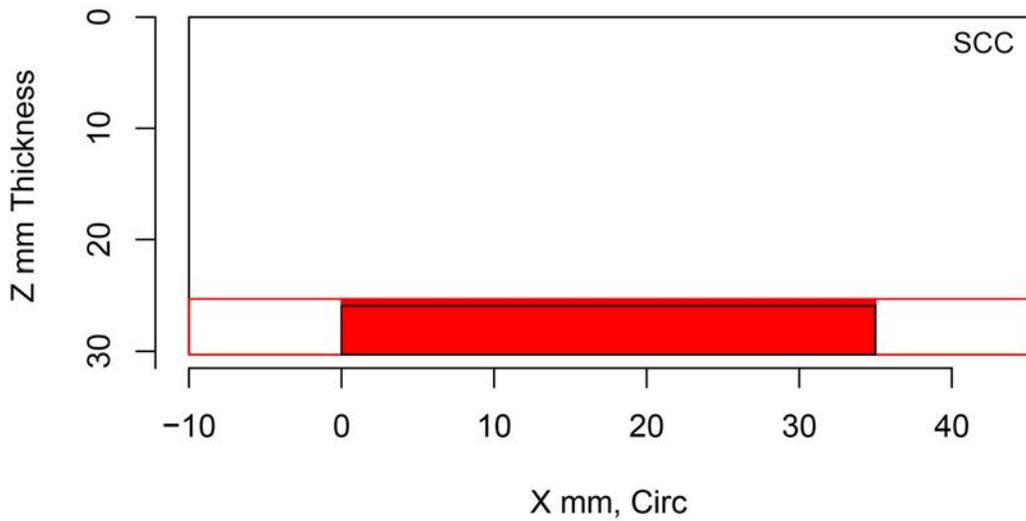


Figure H.62 Indication Plot for Procedure RT.109 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

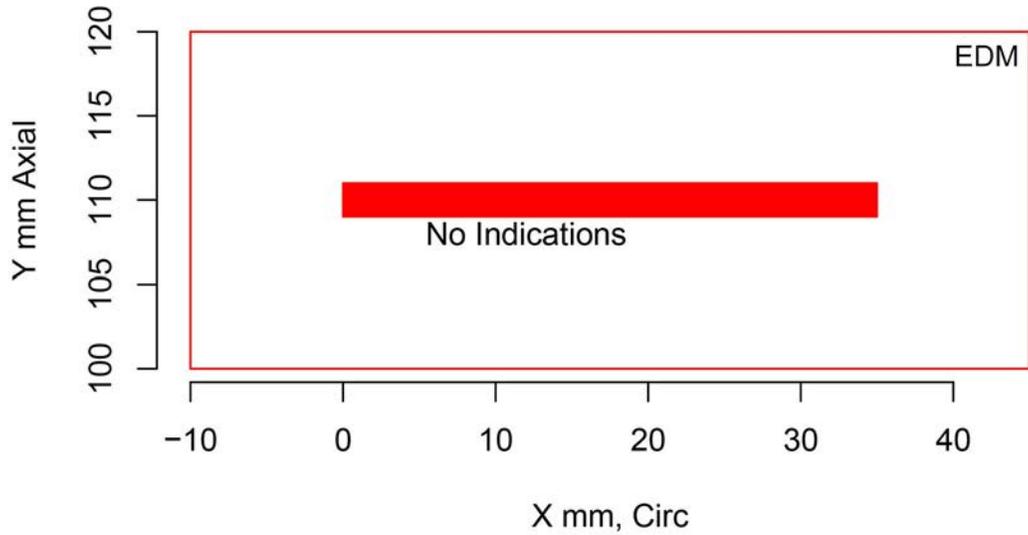


Figure H.63 Indication Plot for Procedure RT.109 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

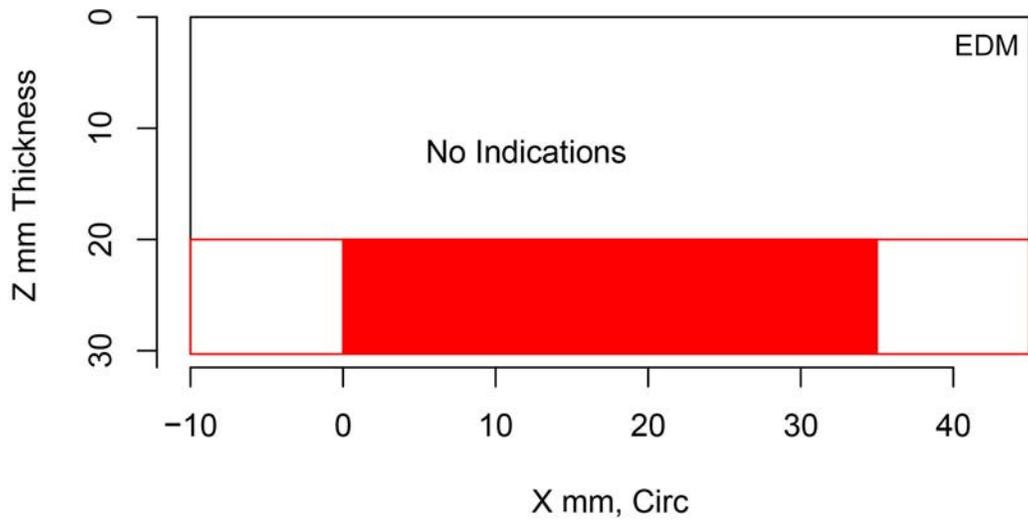


Figure H.64 Indication Plot for Procedure RT.109 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

H.2.3 Plots for Team 11

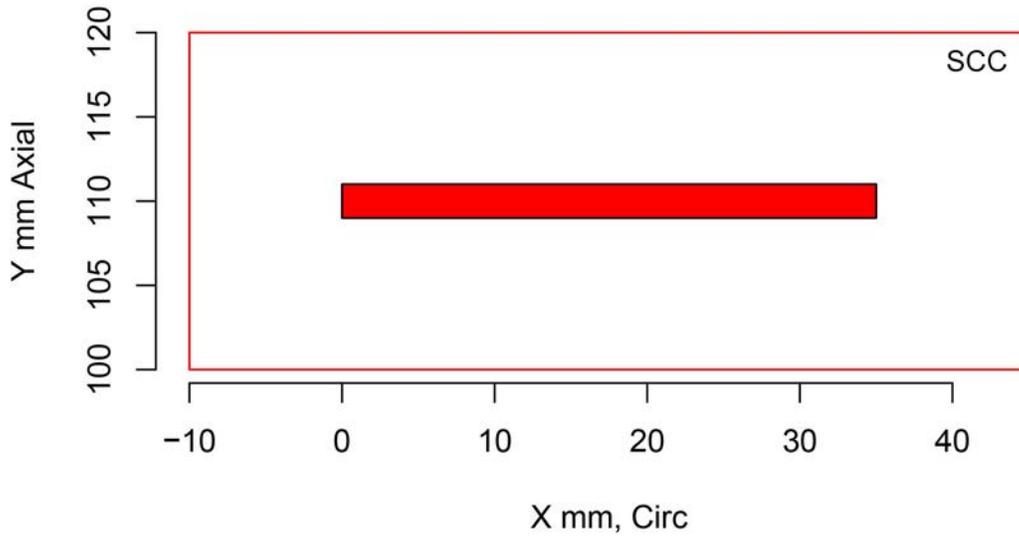


Figure H.65 Indication Plot for Procedure NRUS.11 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

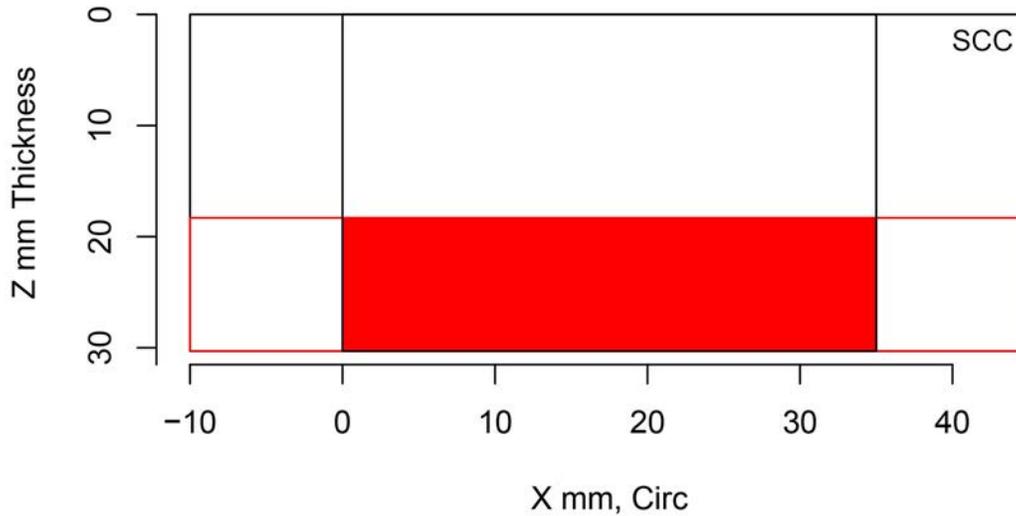


Figure H.66 Indication Plot for Procedure NRUS.11 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

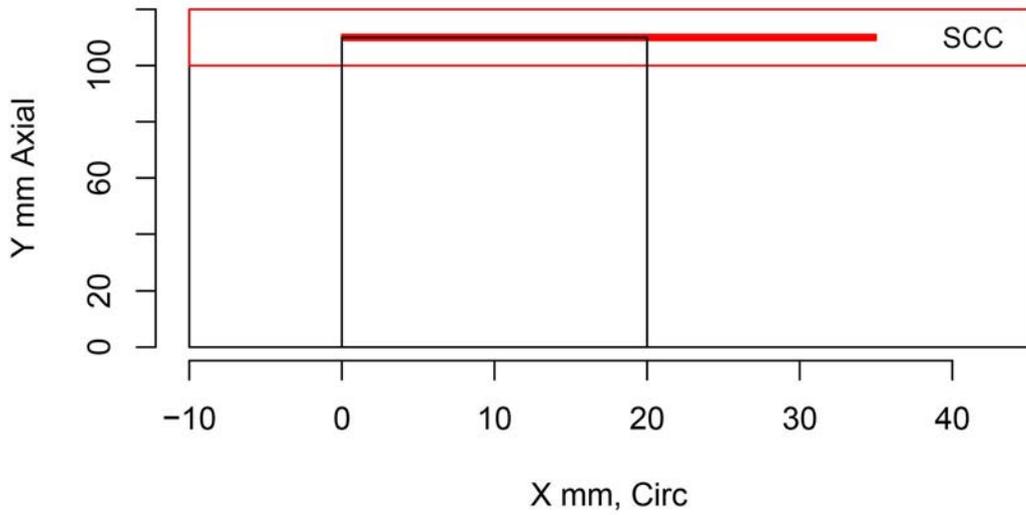


Figure H.67 Indication Plot for Procedure PECT.11 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

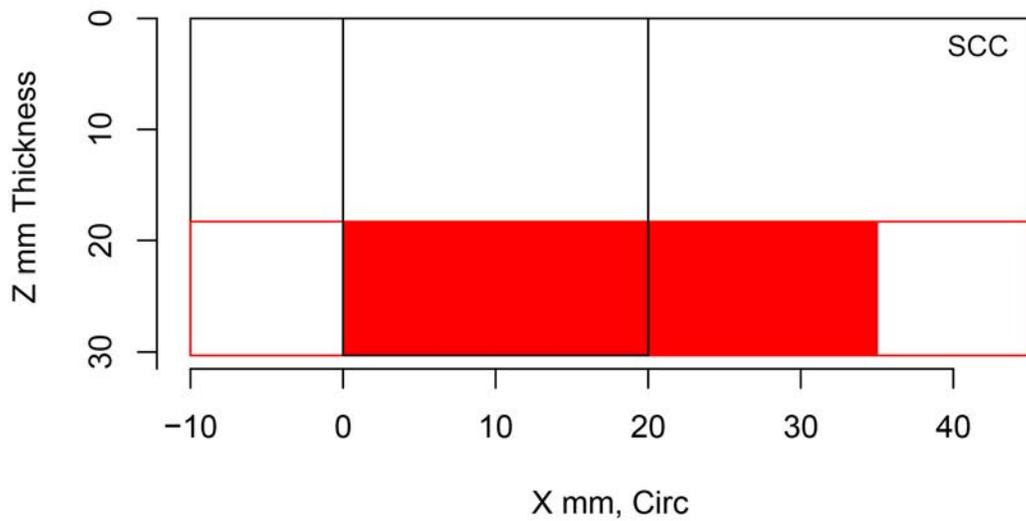


Figure H.68 Indication Plot for Procedure PECT.11 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

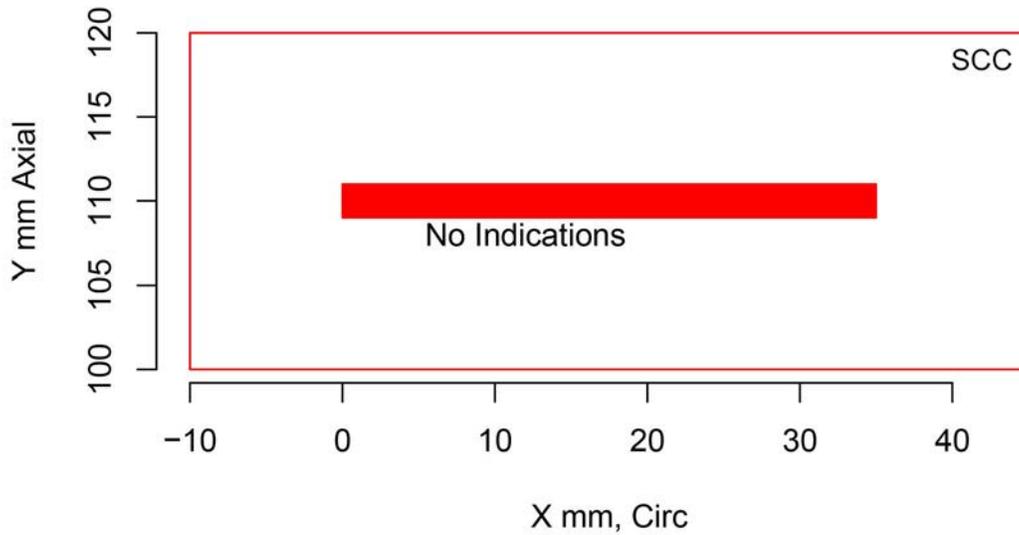


Figure H.69 Indication Plot for Procedure NRUS.11 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

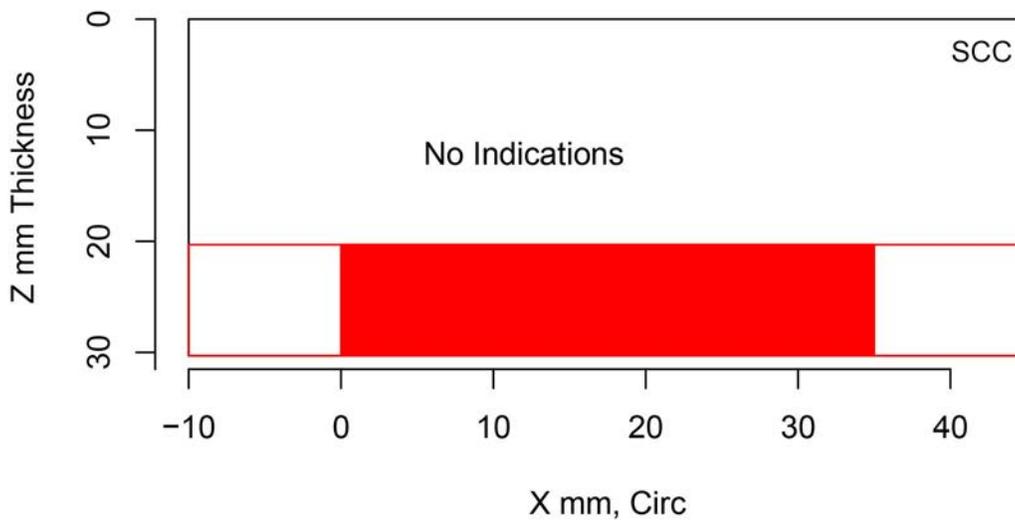


Figure H.70 Indication Plot for Procedure NRUS.11 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

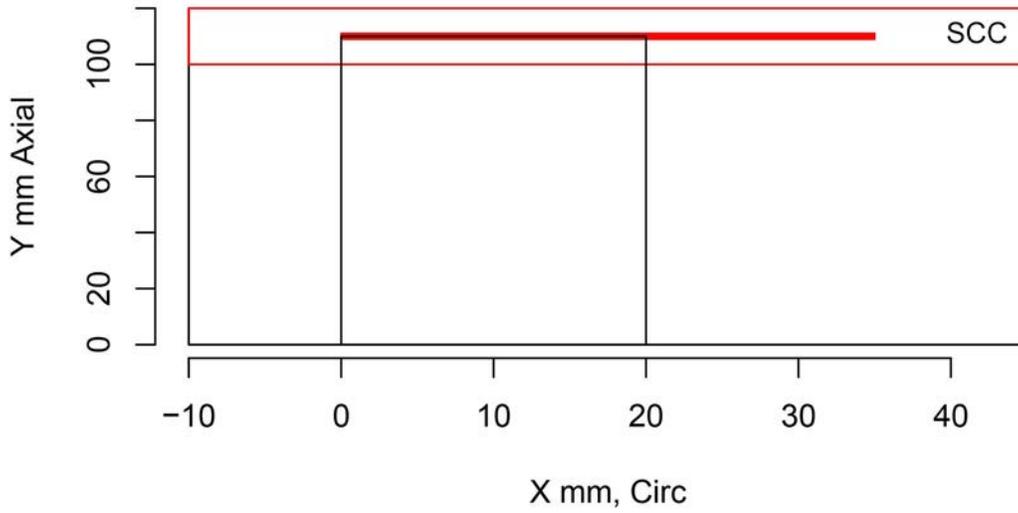


Figure H.71 Indication Plot for Procedure PECT.11 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

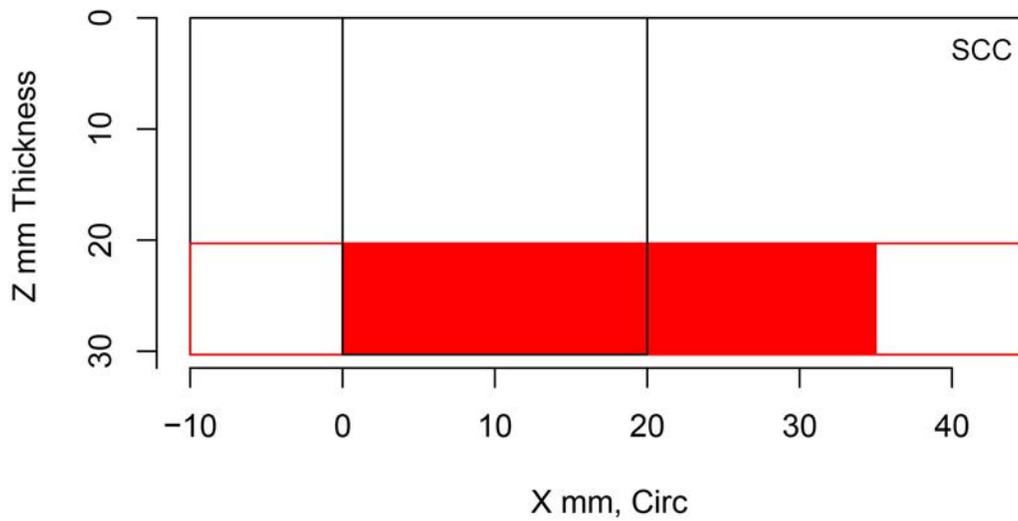


Figure H.72 Indication Plot for Procedure PECT.11 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

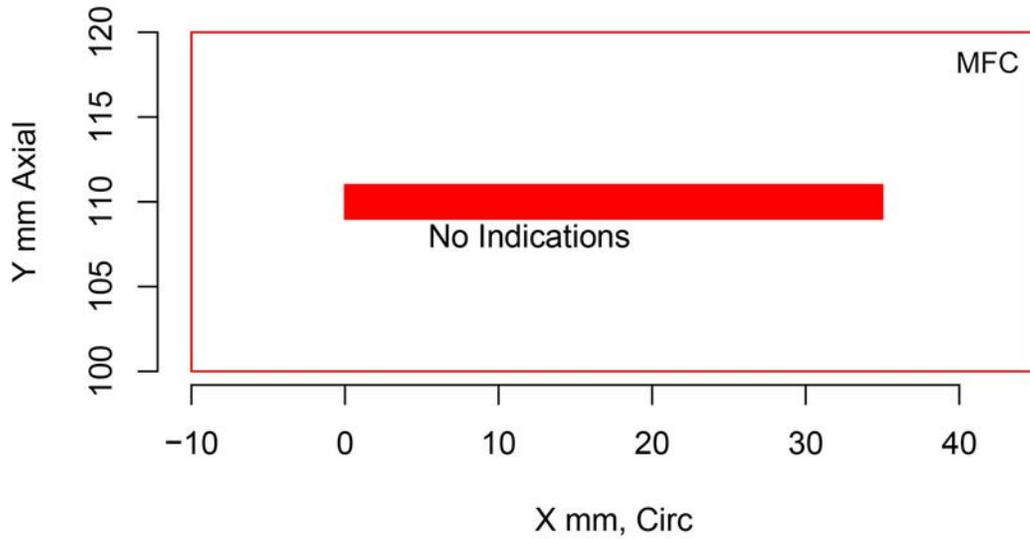


Figure H.73 Indication Plot for Procedure NRUS.11 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

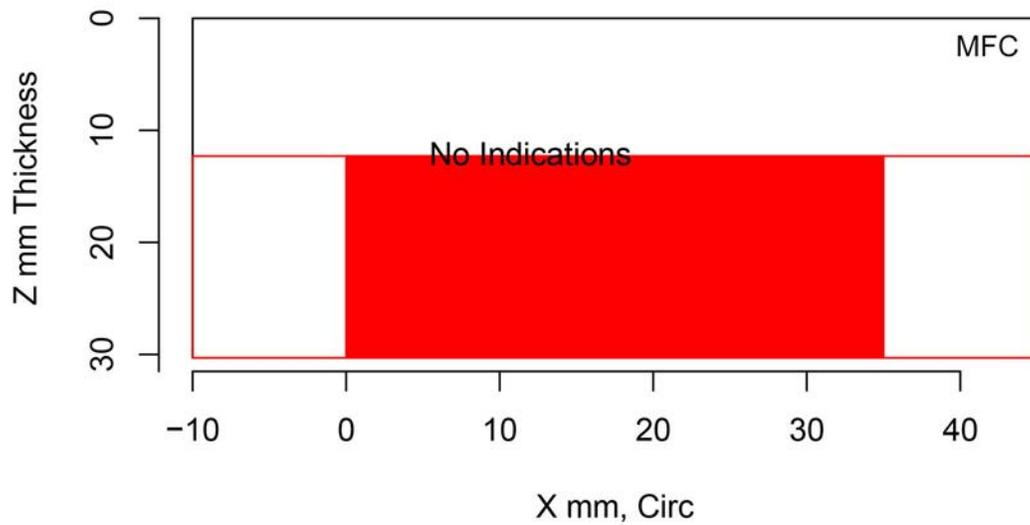


Figure H.74 Indication Plot for Procedure NRUS.11 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

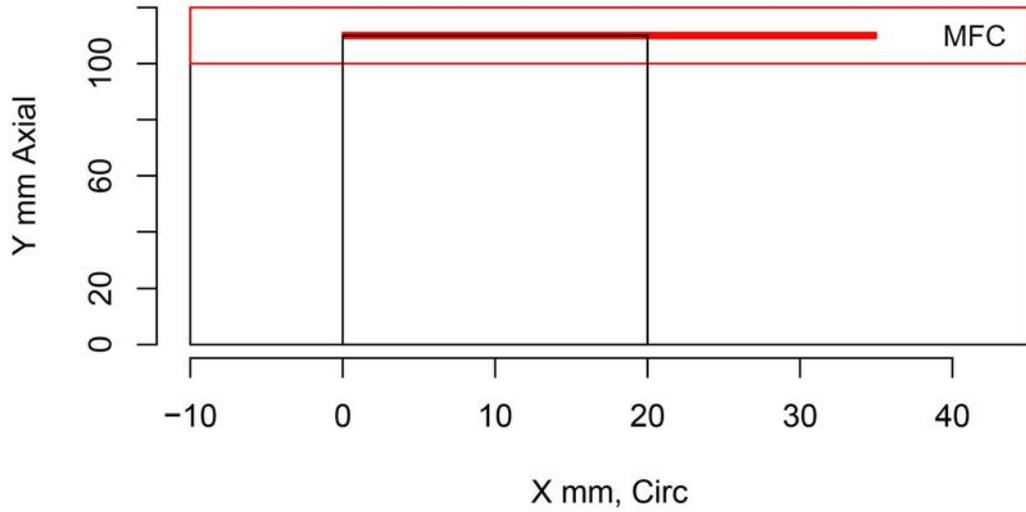


Figure H.75 Indication Plot for Procedure PECT.11 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

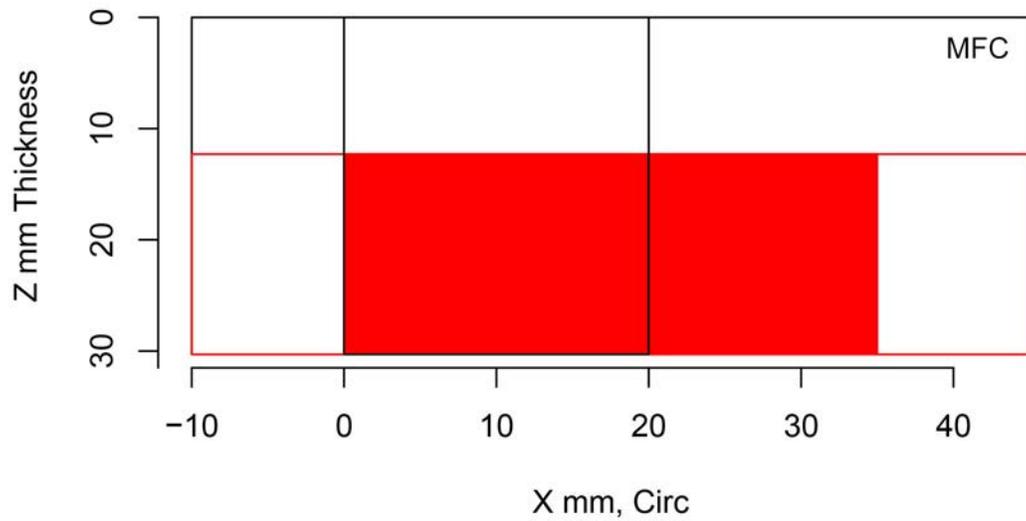


Figure H.76 Indication Plot for Procedure PECT.11 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

H.2.4 Plots for Team 112

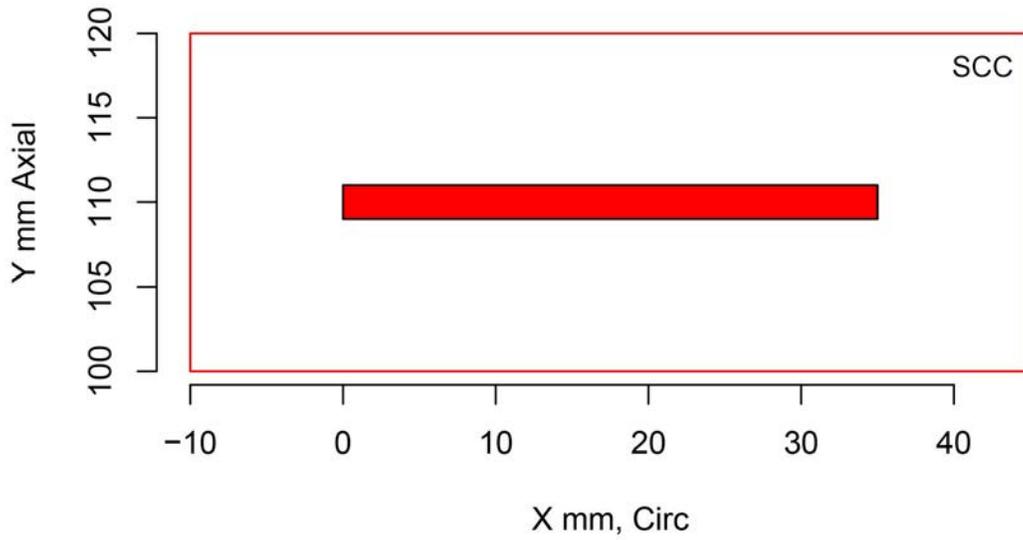


Figure H.77 Indication Plot for Procedure RT.112 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

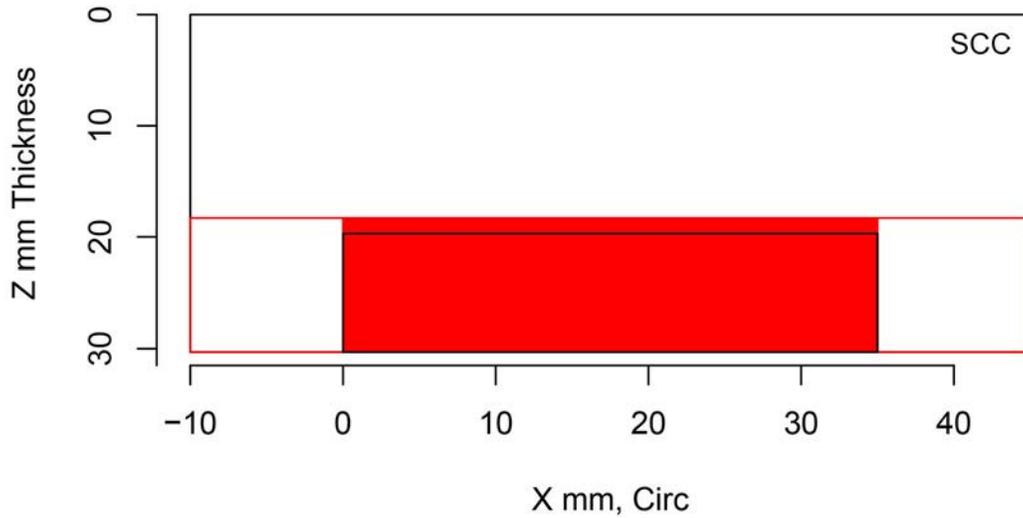


Figure H.78 Indication Plot for Procedure RT.112 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

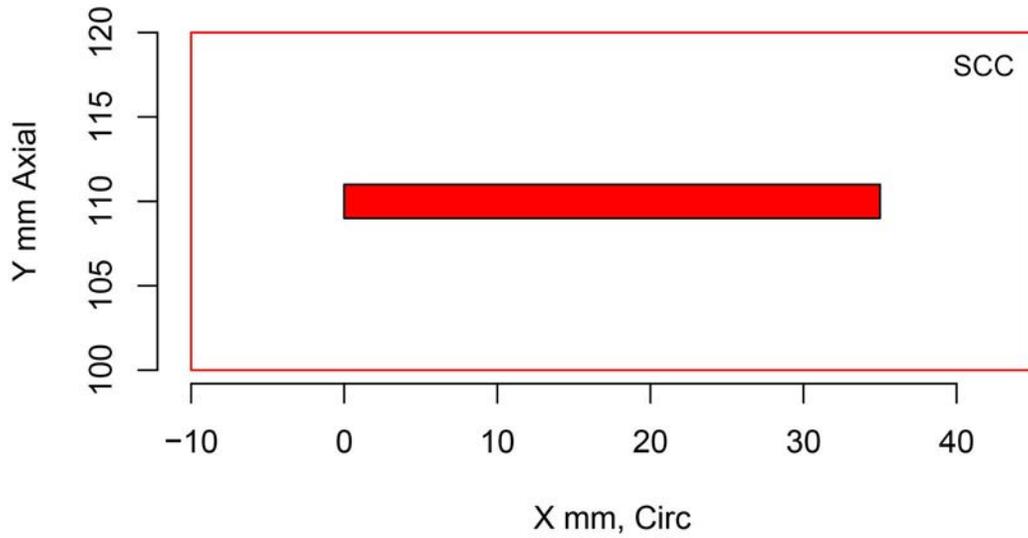


Figure H.79 Indication Plot for Procedure RT.112 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

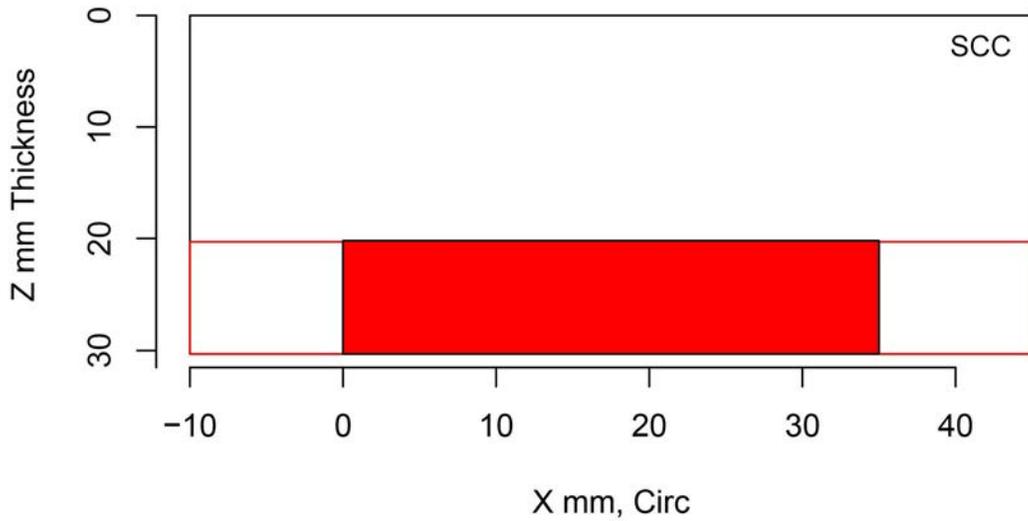


Figure H.80 Indication Plot for Procedure RT.112 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

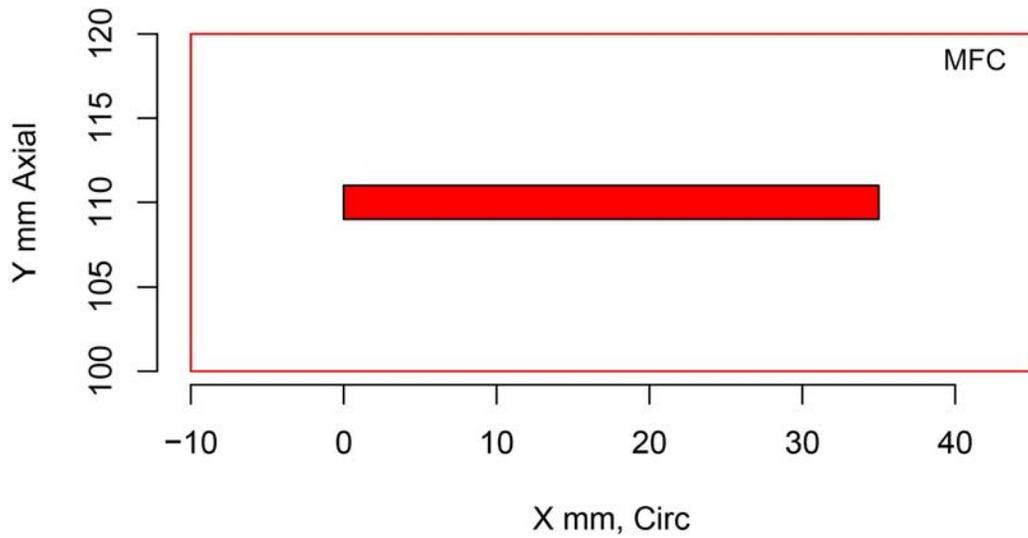


Figure H.81 Indication Plot for Procedure RT.112 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

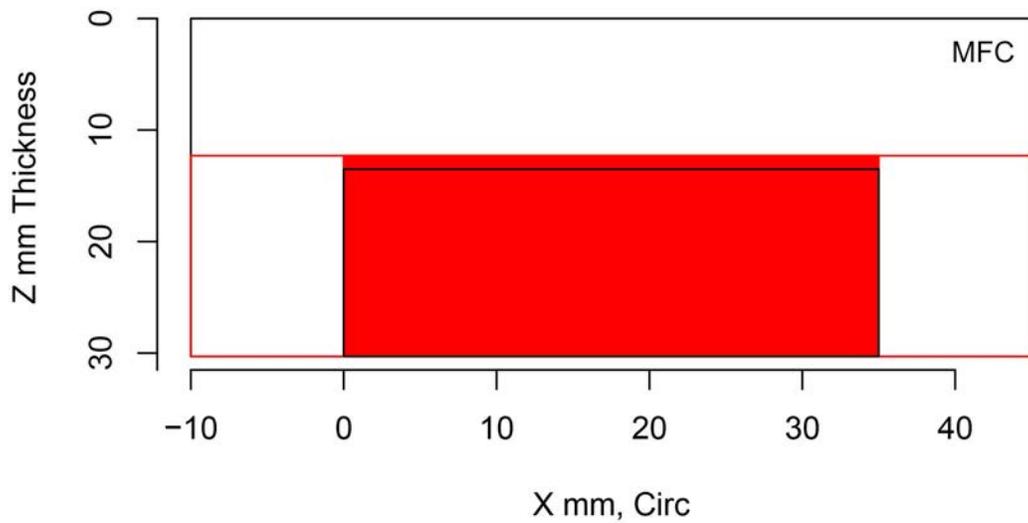


Figure H.82 Indication Plot for Procedure RT.112 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

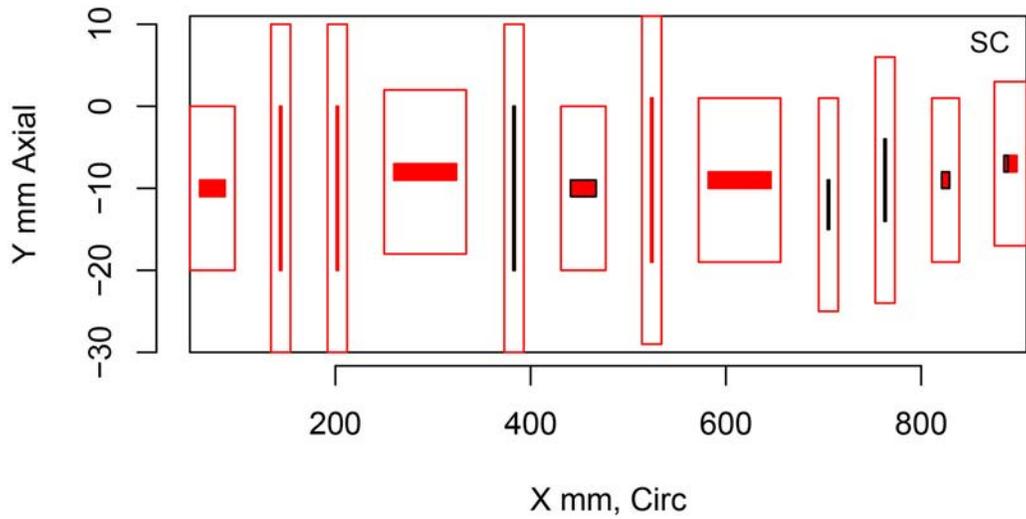


Figure H.83 Indication Plot for Procedure RT.112 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

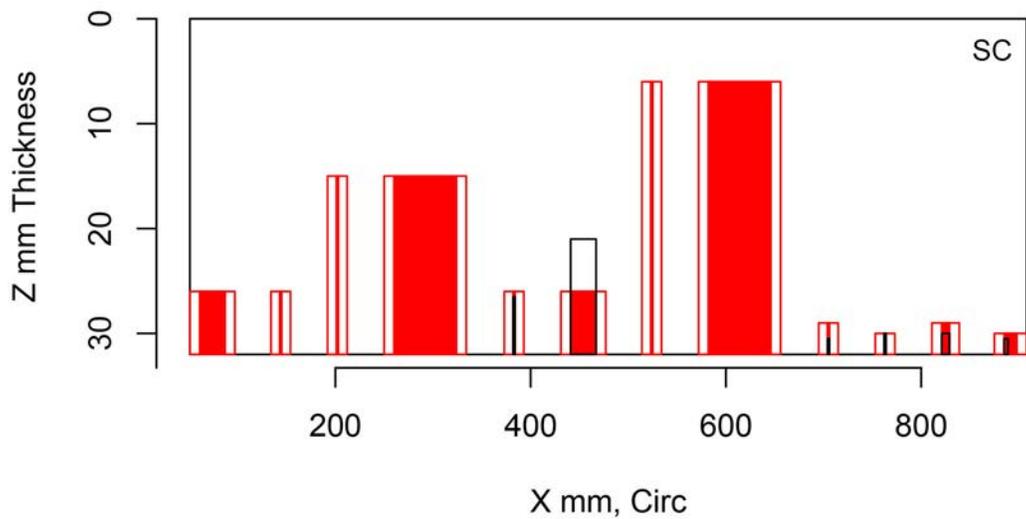


Figure H.84 Indication Plot for Procedure RT.112 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

H.2.5 Plots for Team 114

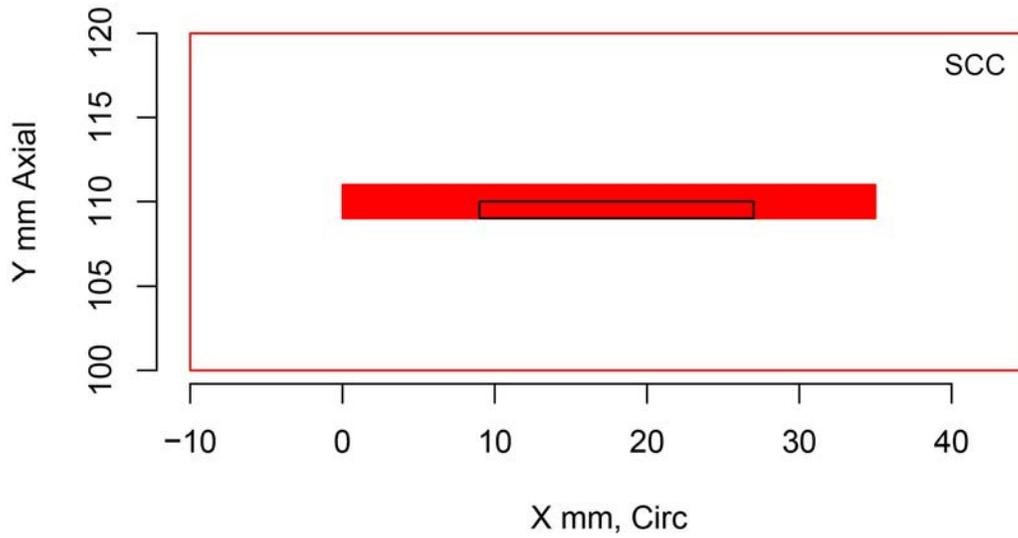


Figure H.85 Indication Plot for Procedure PAUT.114 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

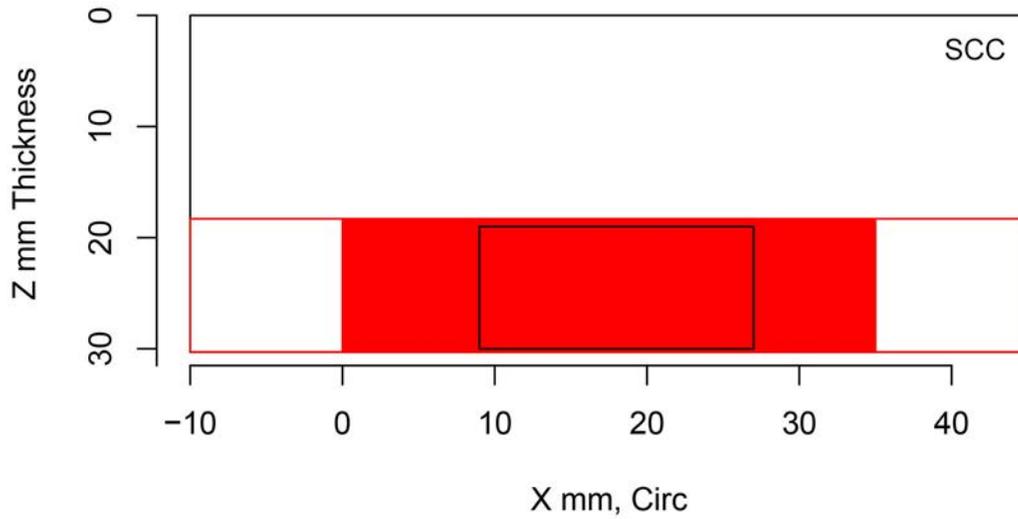


Figure H.86 Indication Plot for Procedure PAUT.114 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

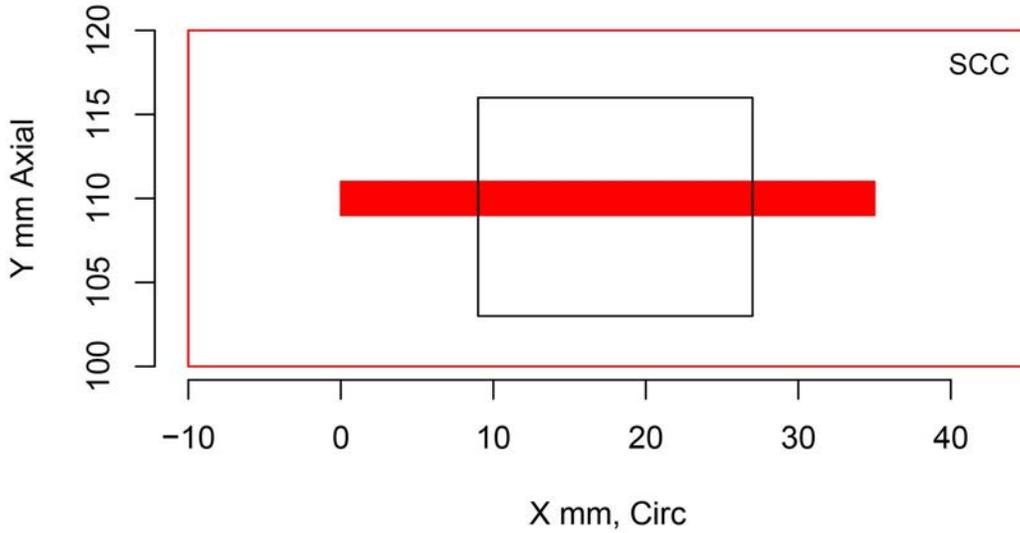


Figure H.87 Indication Plot for Procedure PAUT.114 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

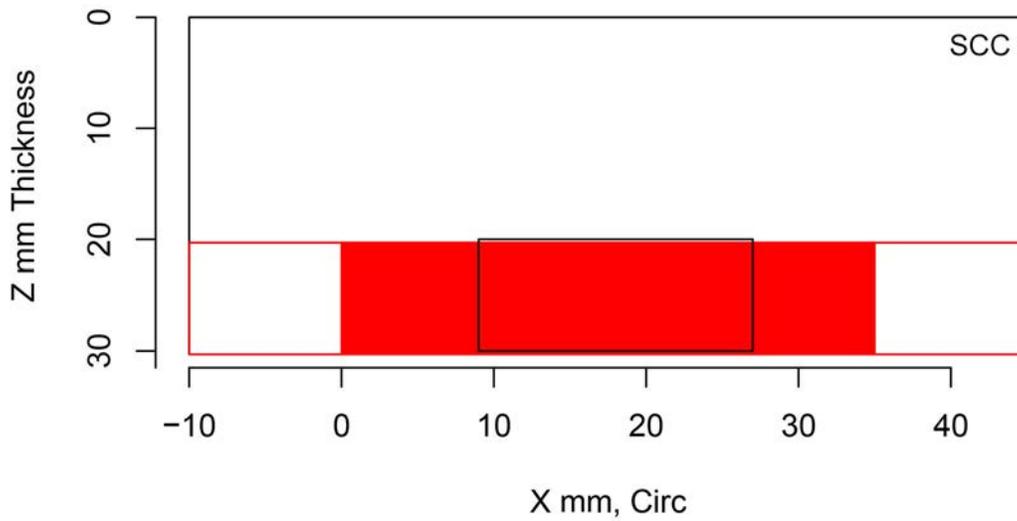


Figure H.88 Indication Plot for Procedure PAUT.114 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

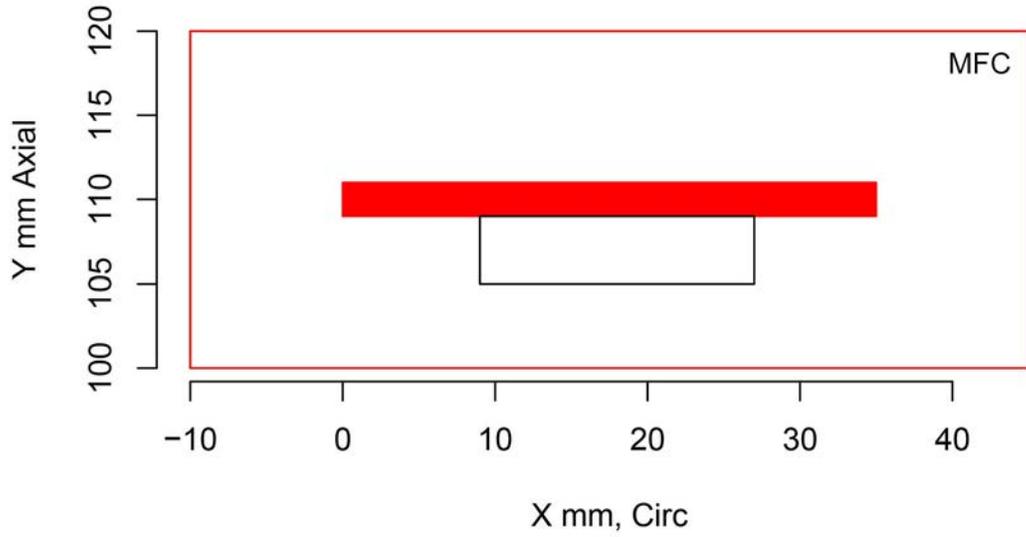


Figure H.89 Indication Plot for Procedure PAUT.114 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

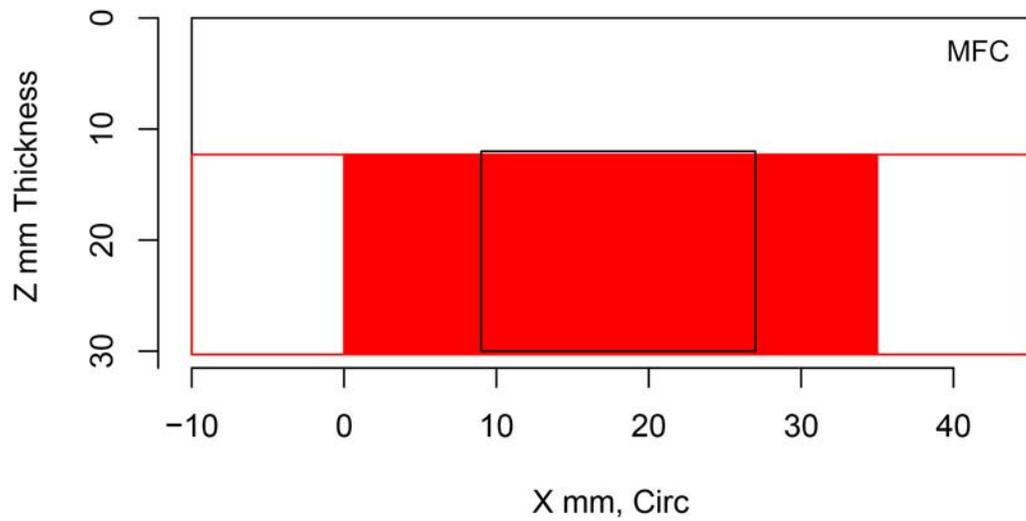


Figure H.90 Indication Plot for Procedure PAUT.114 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

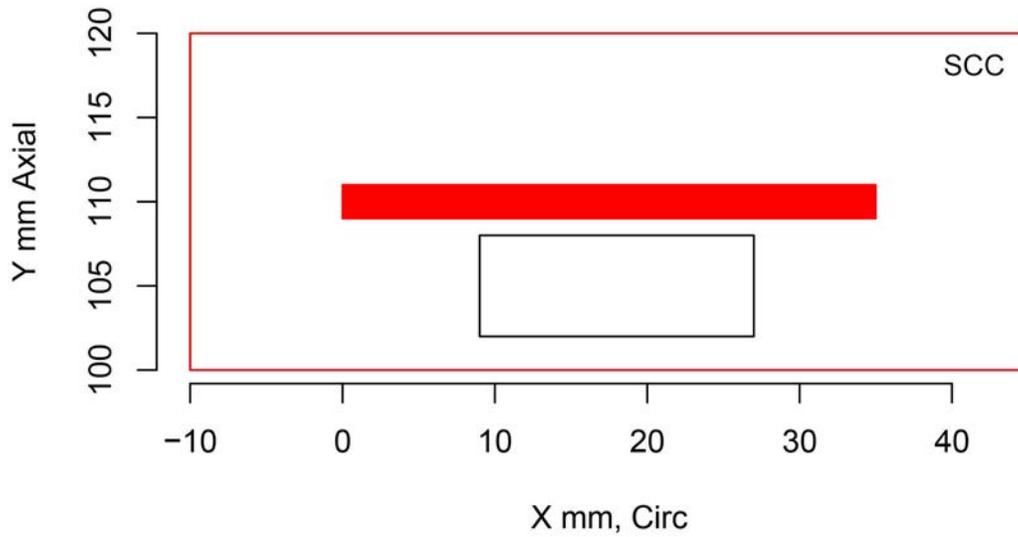


Figure H.91 Indication Plot for Procedure PAUT.114 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

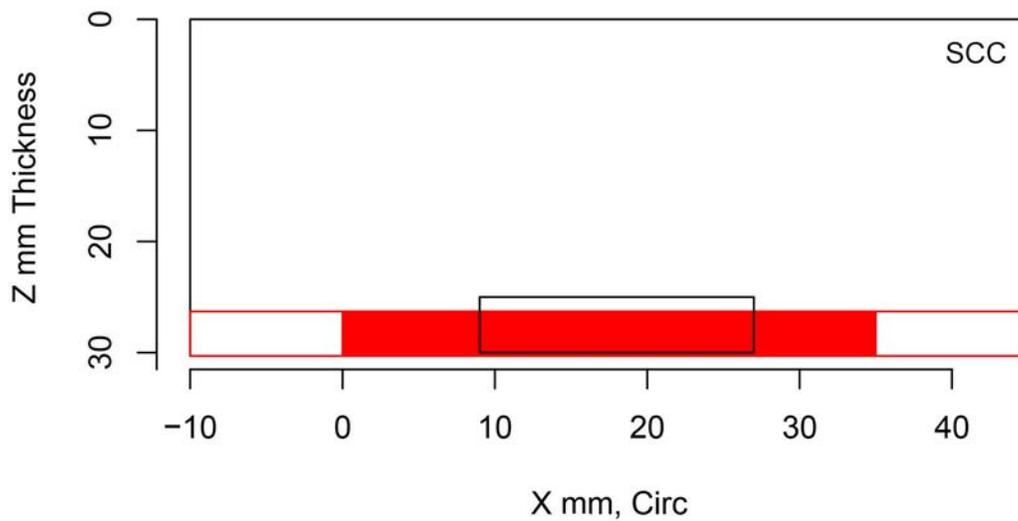


Figure H.92 Indication Plot for Procedure PAUT.114 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

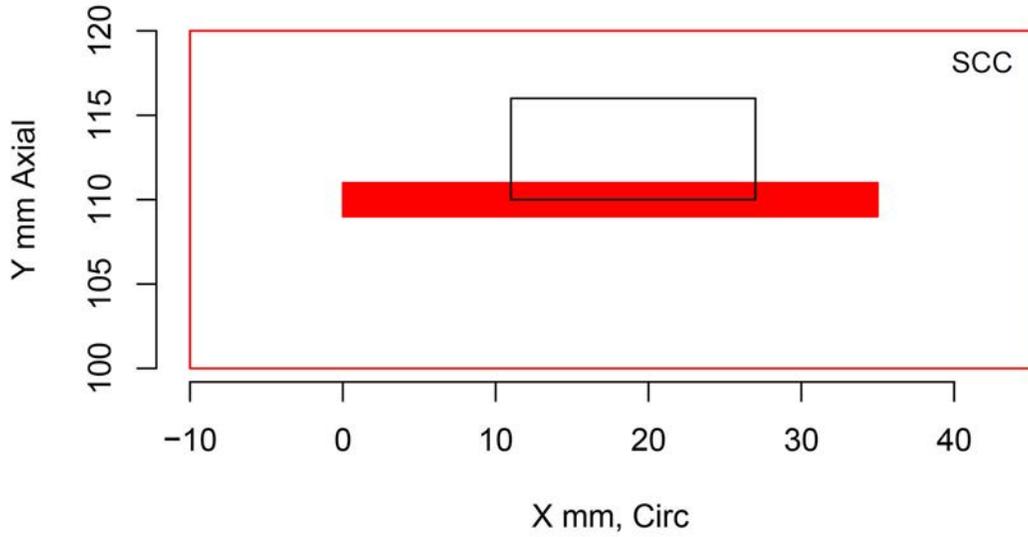


Figure H.93 Indication Plot for Procedure PAUT.114 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

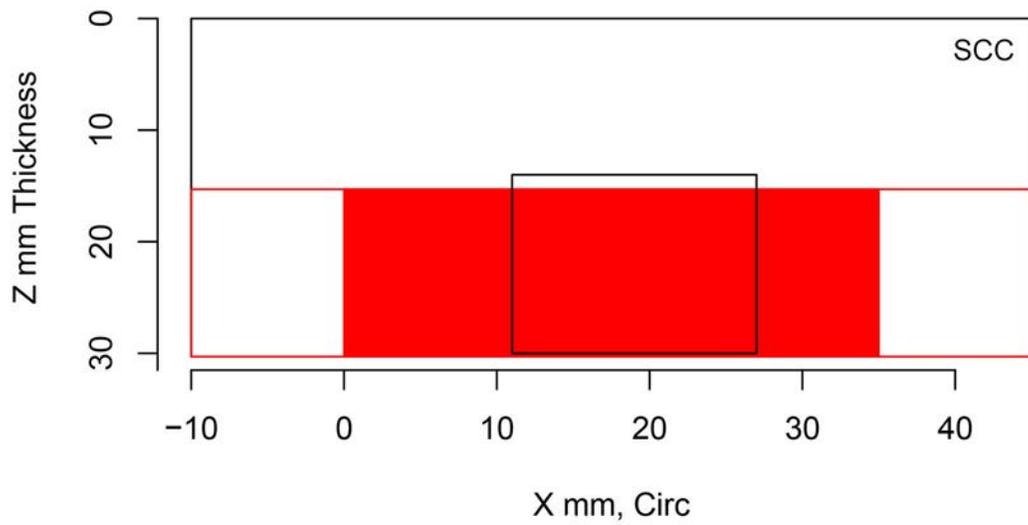


Figure H.94 Indication Plot for Procedure PAUT.114 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

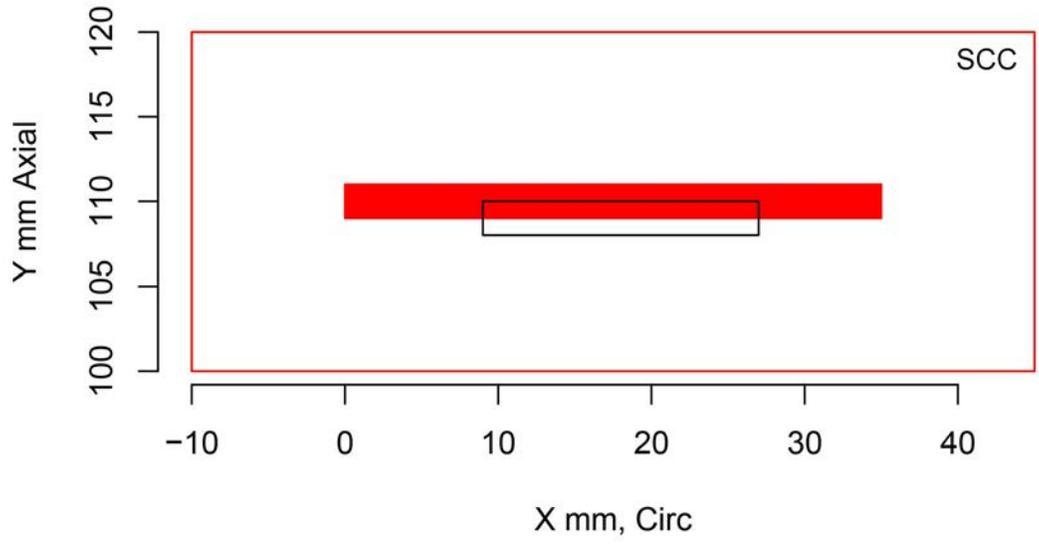


Figure H.95 Indication Plot for Procedure PAUT.114 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

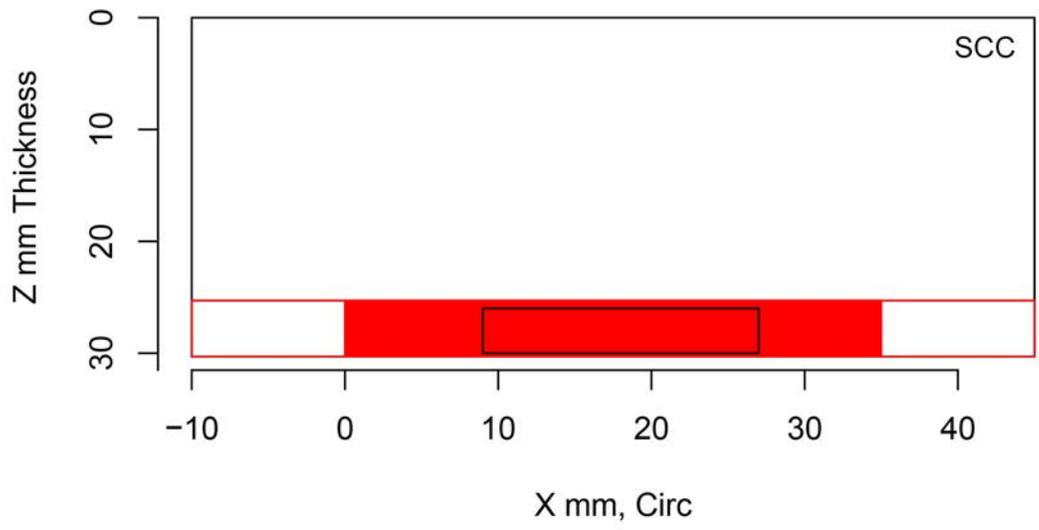


Figure H.96 Indication Plot for Procedure PAUT.114 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

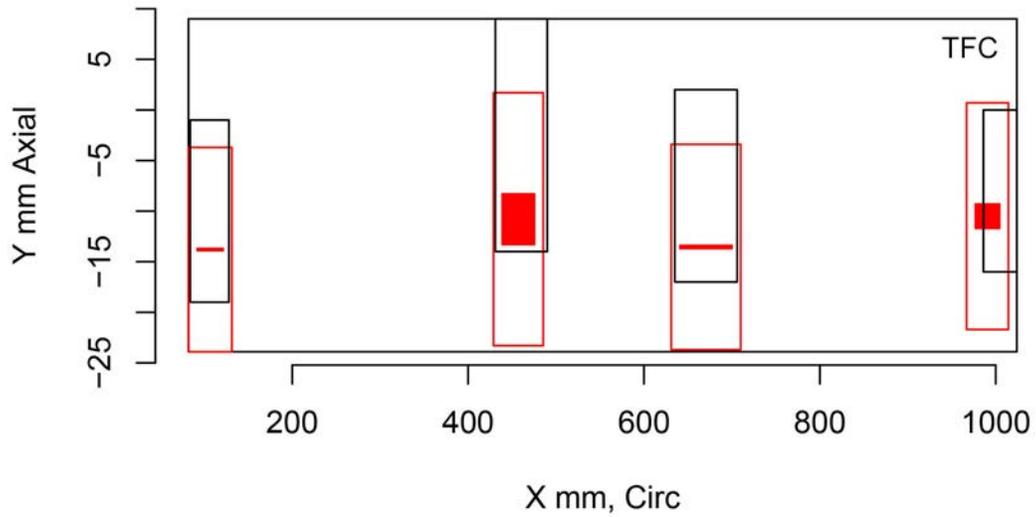


Figure H.97 Indication Plot for Procedure PAUT.114 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

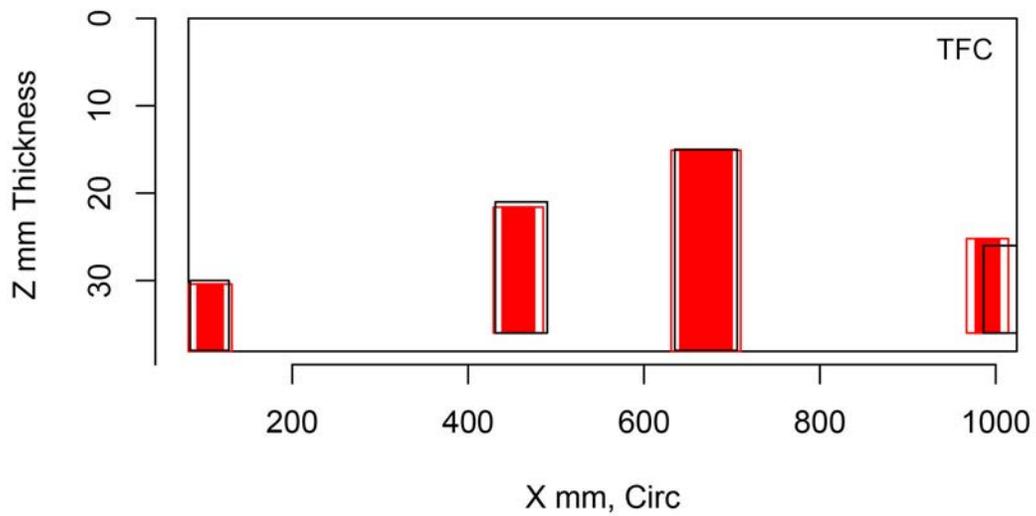


Figure H.98 Indication Plot for Procedure PAUT.114 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

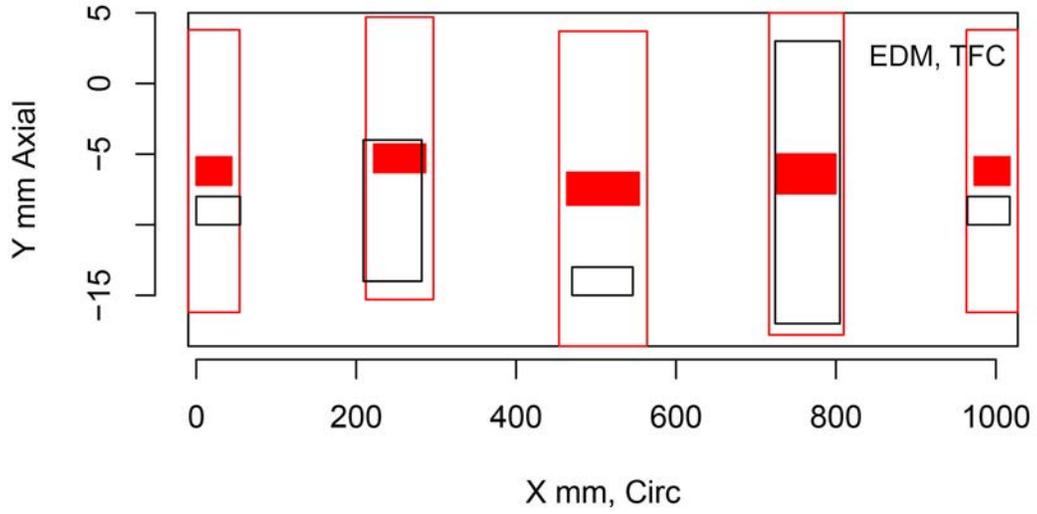


Figure H.99 Indication Plot for Procedure PAUT.114 Applied to Test Block P4 in PARENT Open Testing (X – Y view)

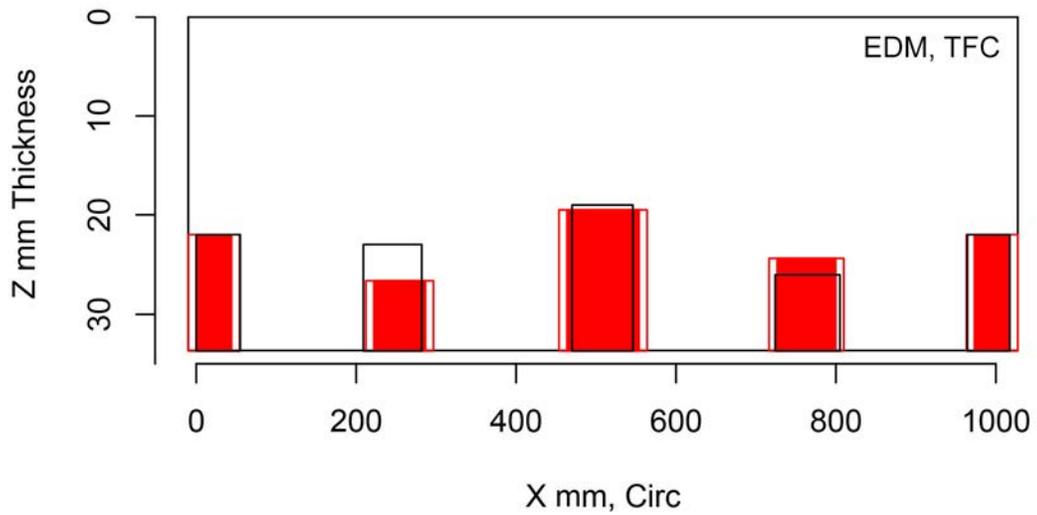


Figure H.100 Indication Plot for Procedure PAUT.114 Applied to Test Block P4 in PARENT Open Testing (X – Z view)

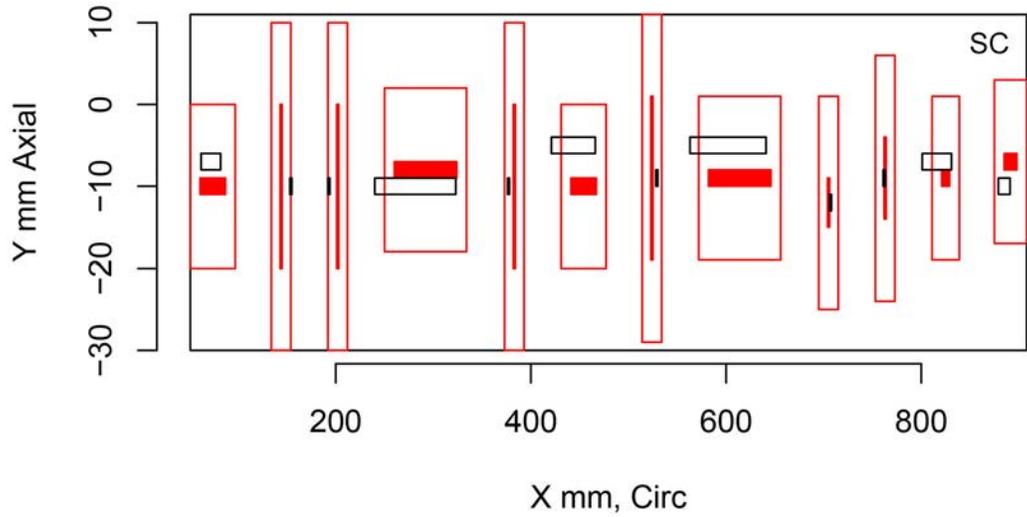


Figure H.101 Indication Plot for Procedure PAUT.114 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

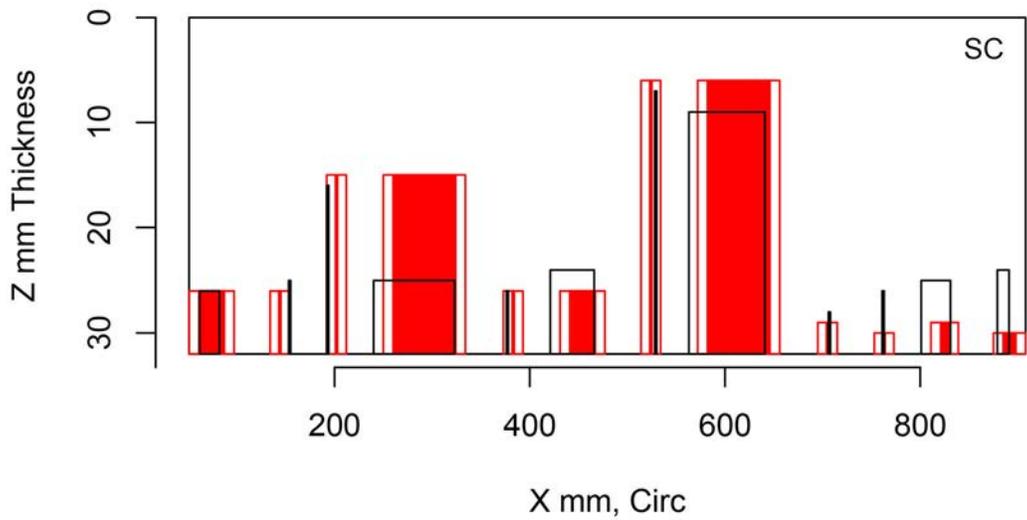


Figure H.102 Indication Plot for Procedure PAUT.114 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

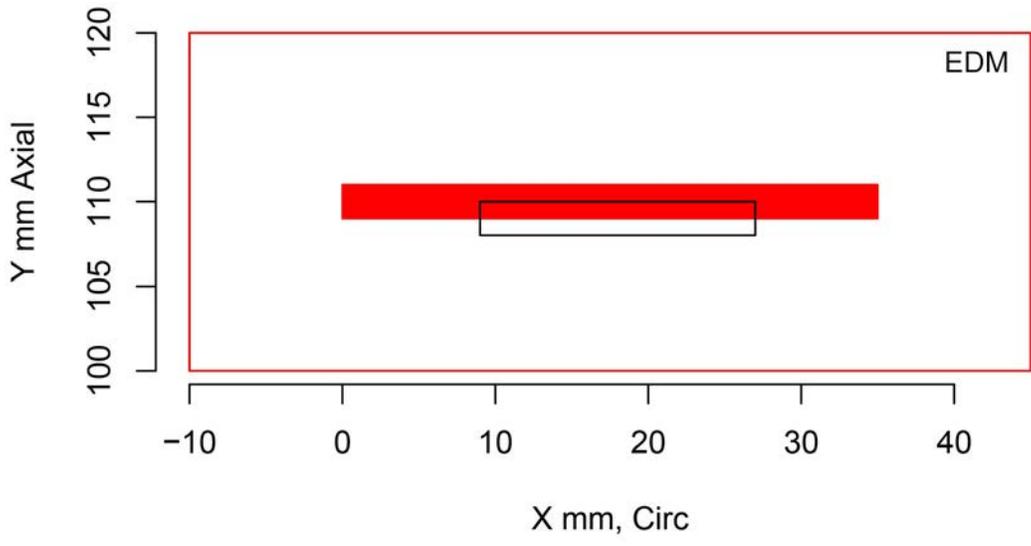


Figure H.103 Indication Plot for Procedure PAUT.114 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

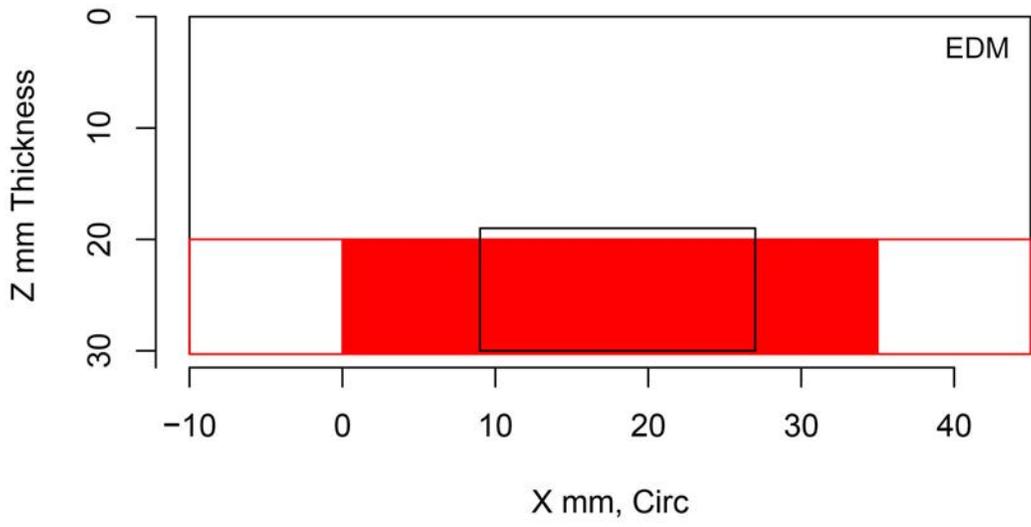


Figure H.104 Indication Plot for Procedure PAUT.114 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

H.2.6 Plots for Team 122

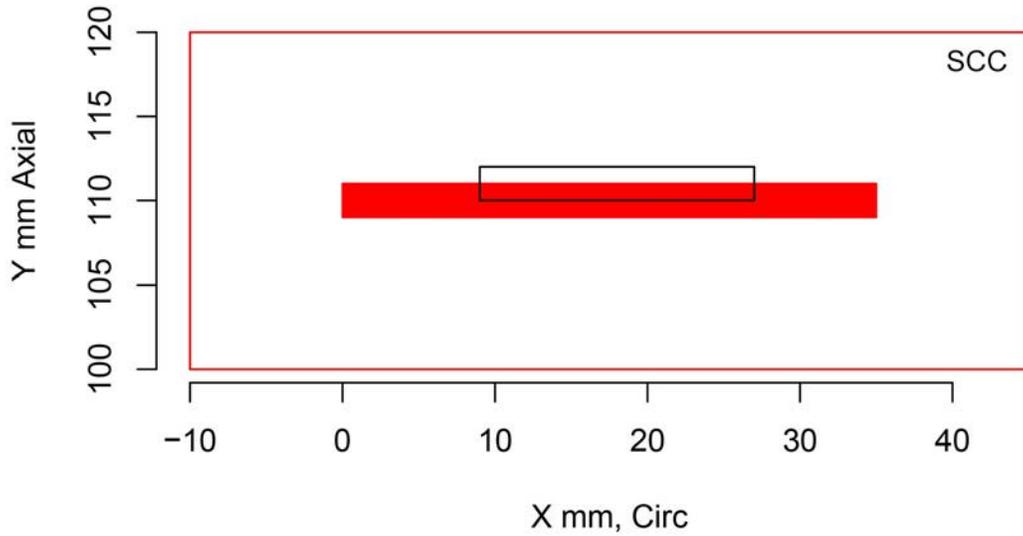


Figure H.105 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

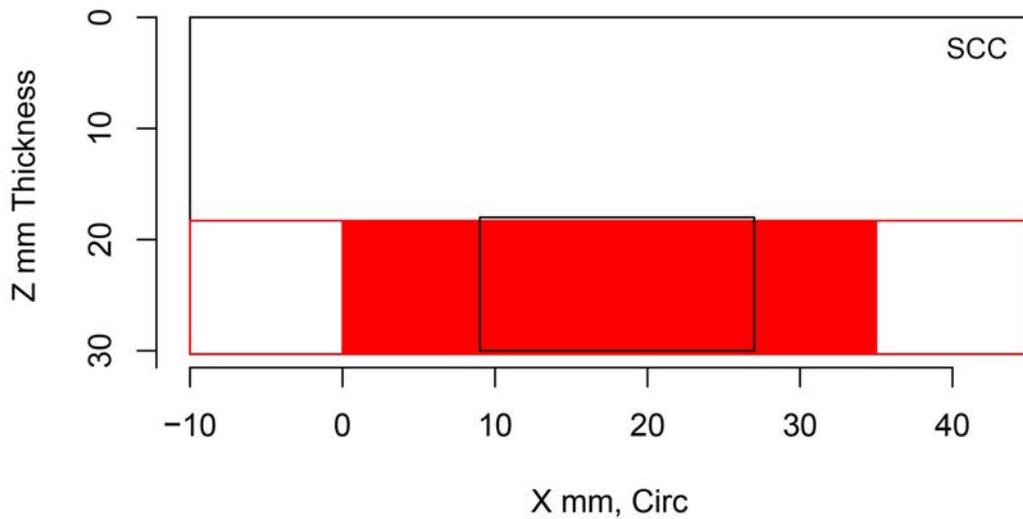


Figure H.106 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

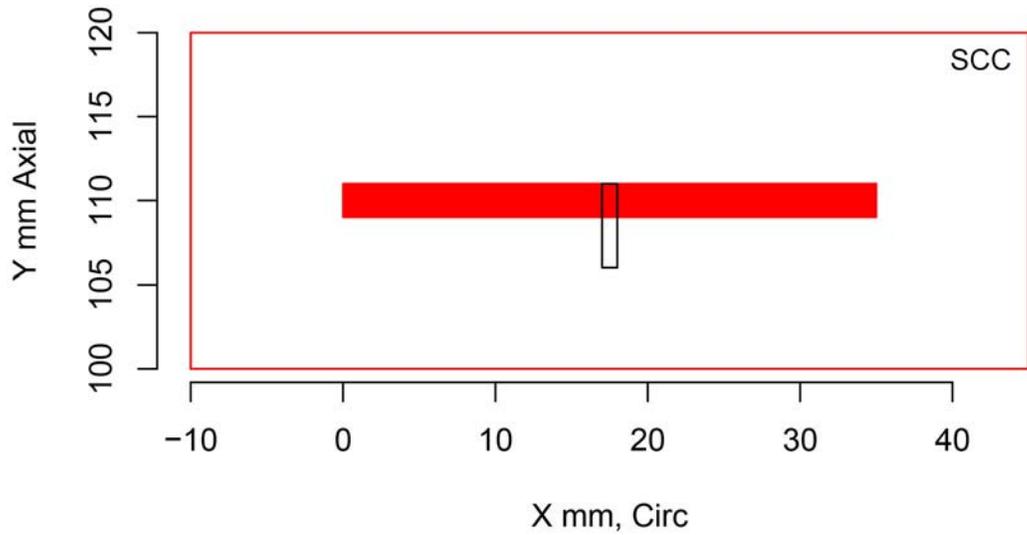


Figure H.107 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

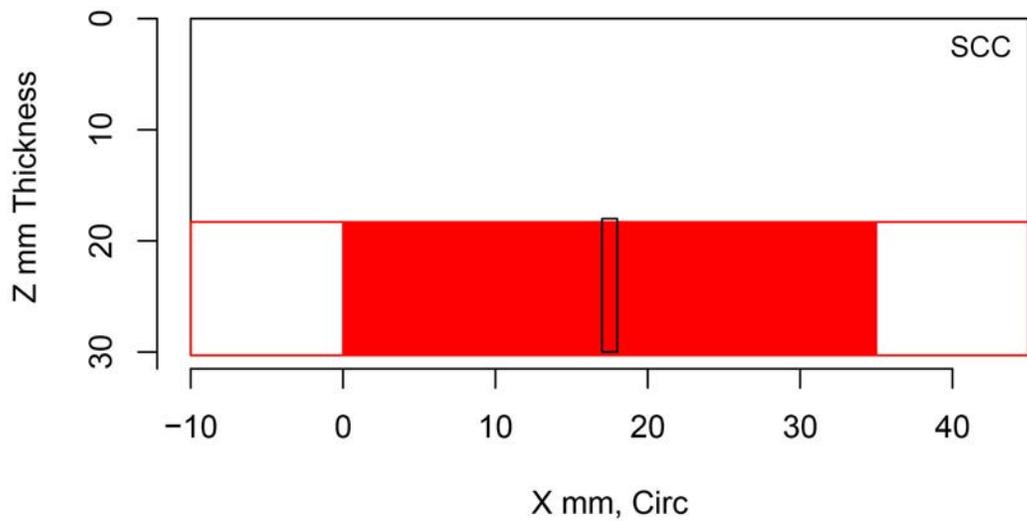


Figure H.108 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

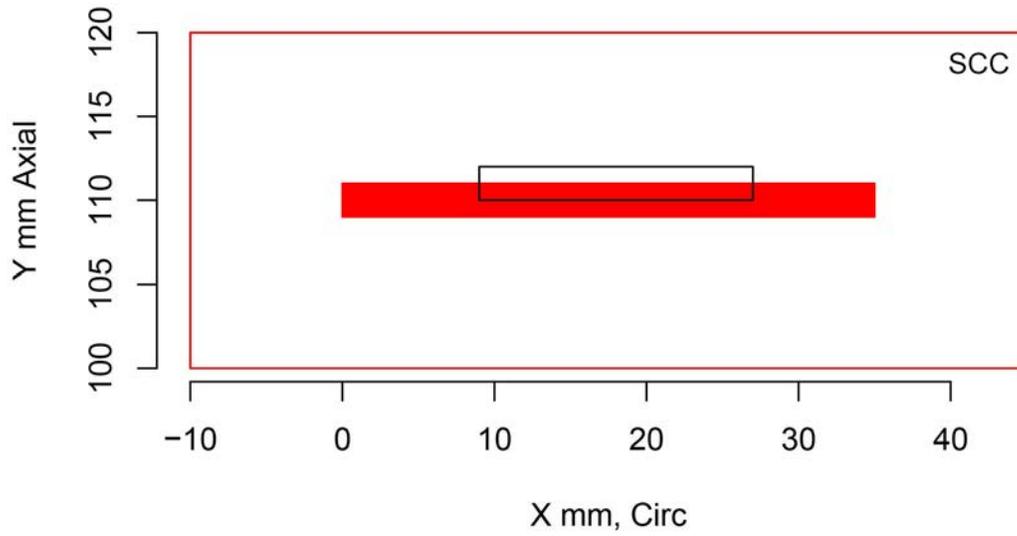


Figure H.109 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

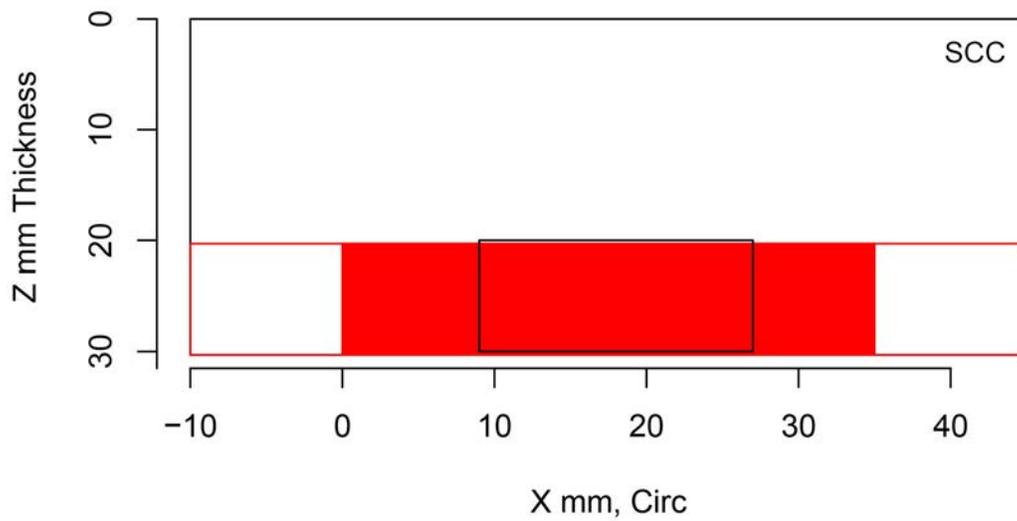


Figure H.110 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

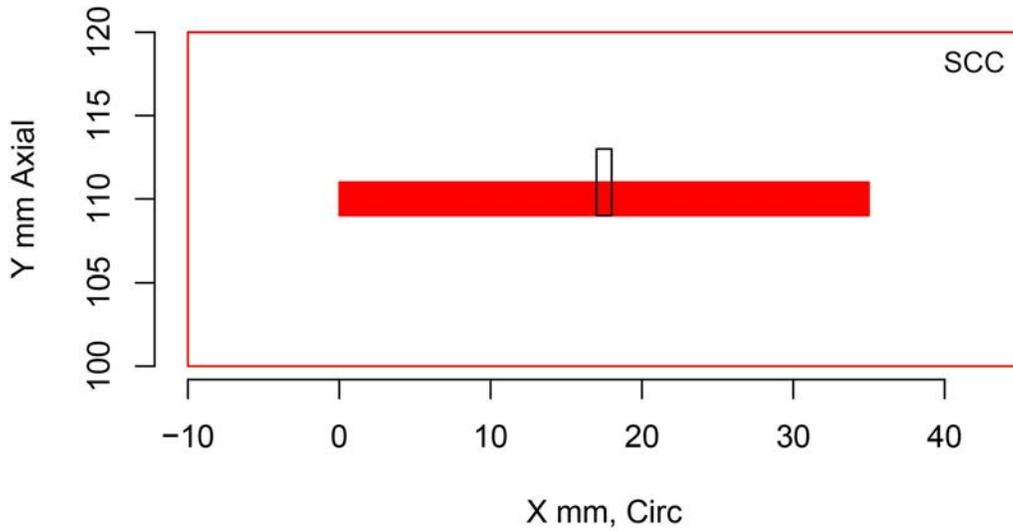


Figure H.111 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

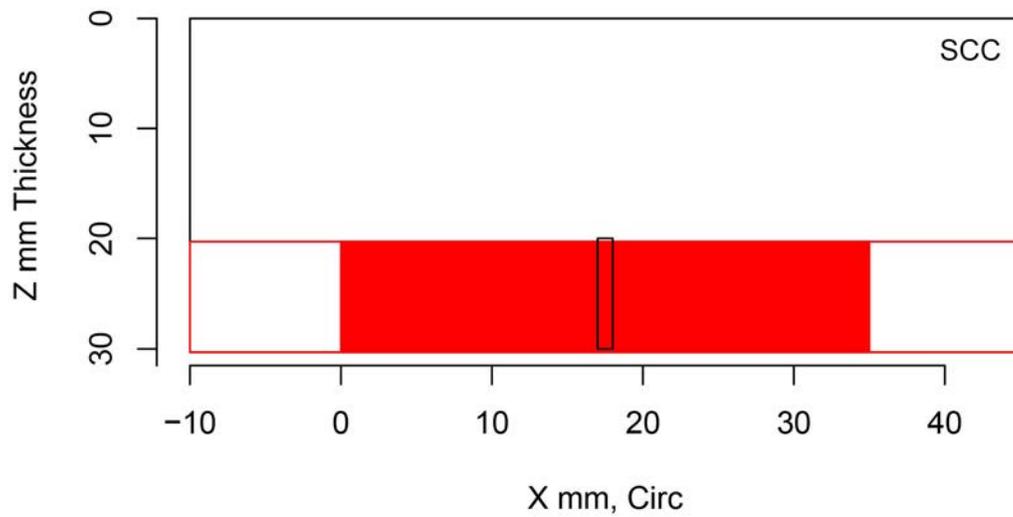


Figure H.112 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

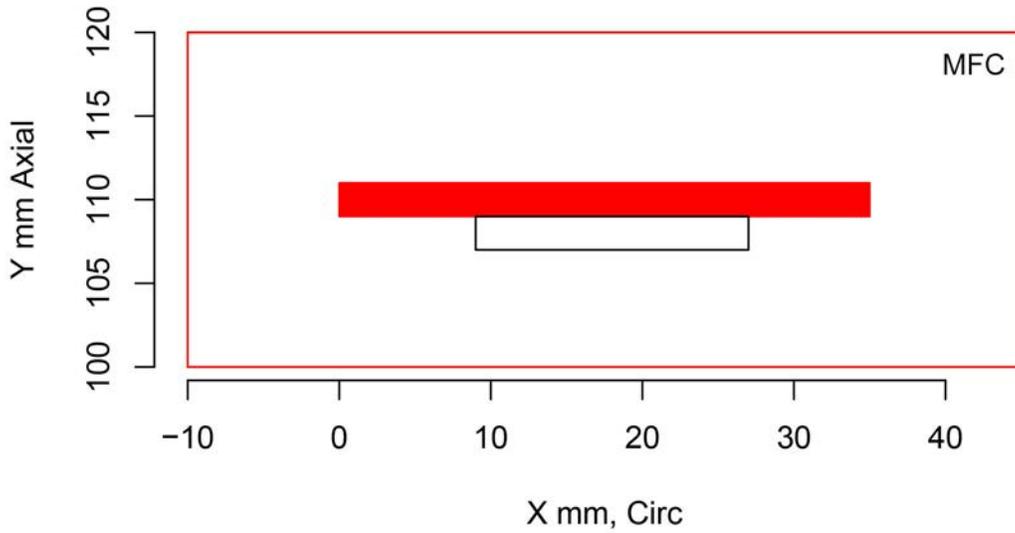


Figure H.113 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

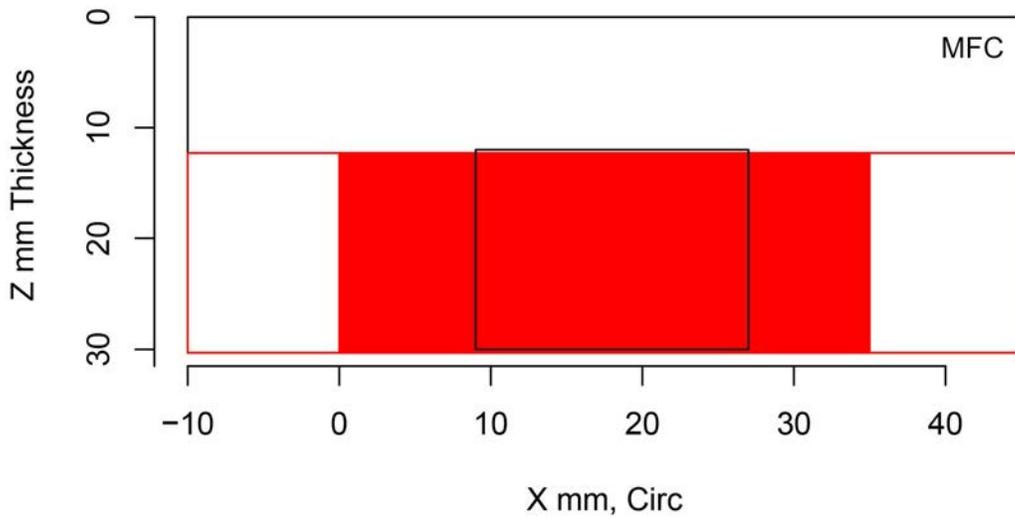


Figure H.114 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

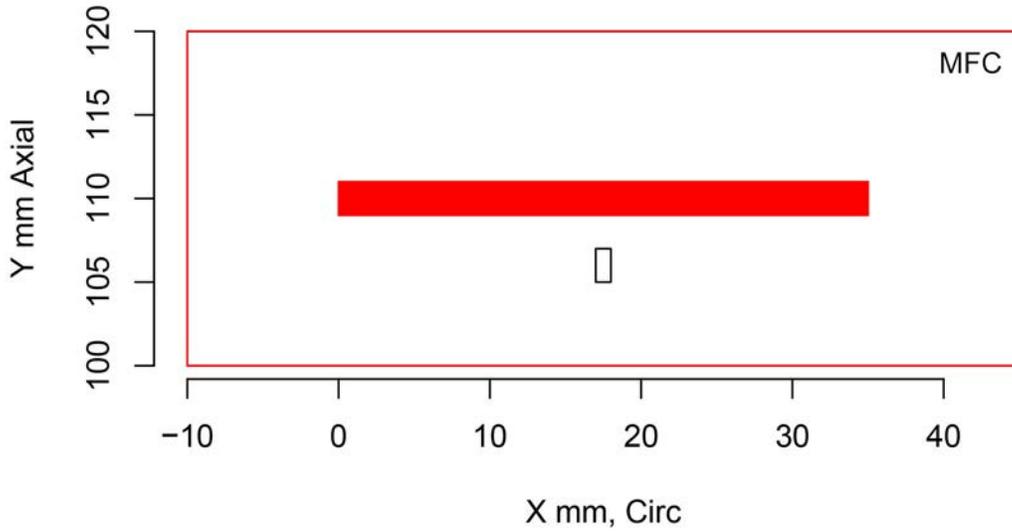


Figure H.115 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

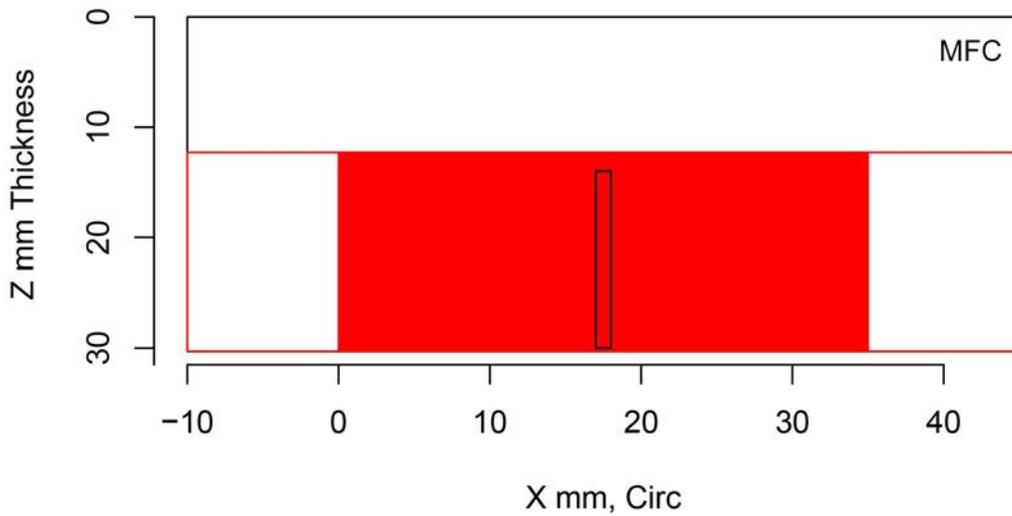


Figure H.116 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

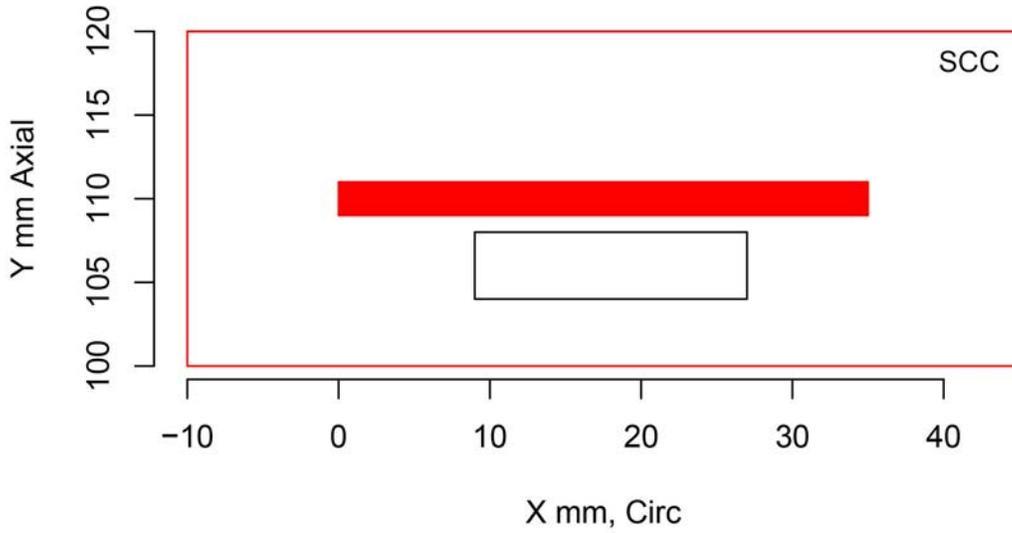


Figure H.117 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

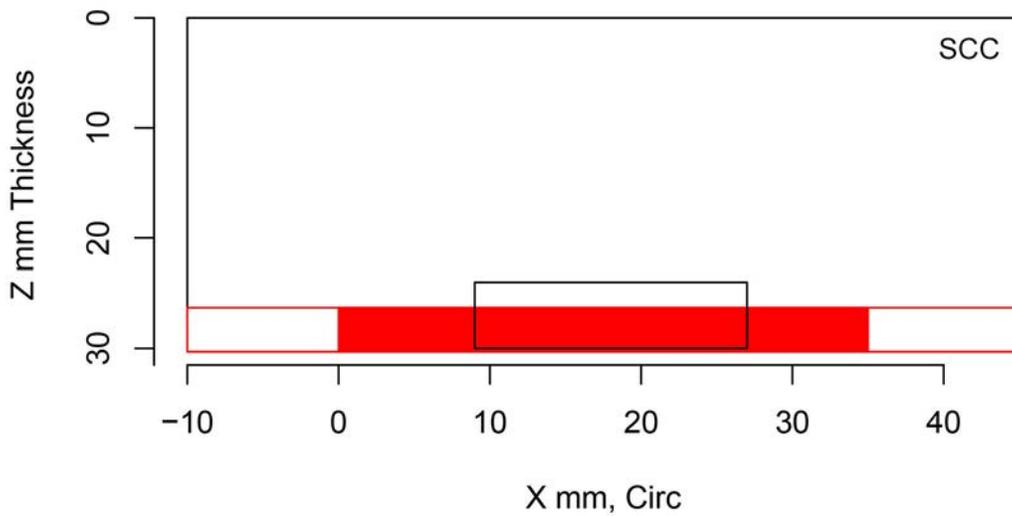


Figure H.118 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

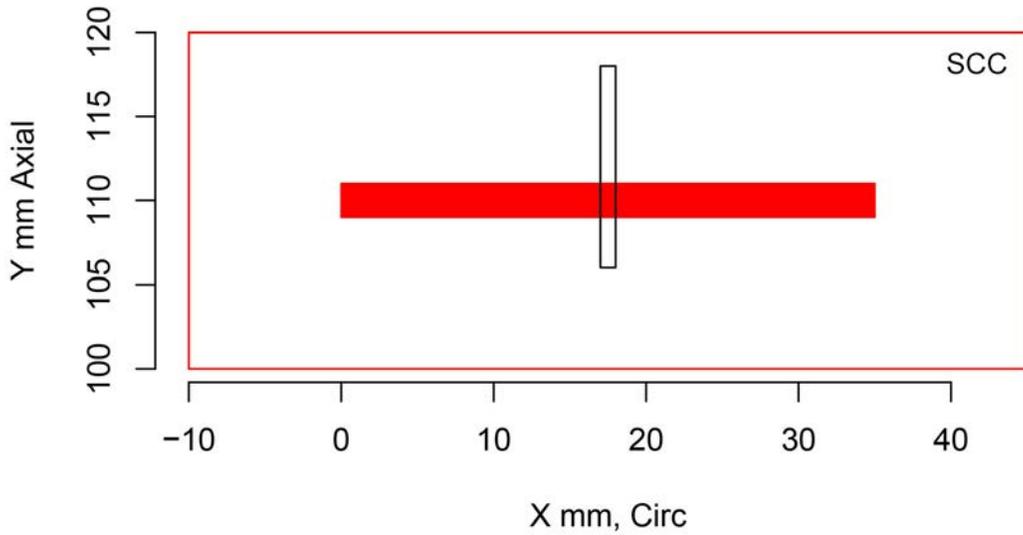


Figure H.119 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

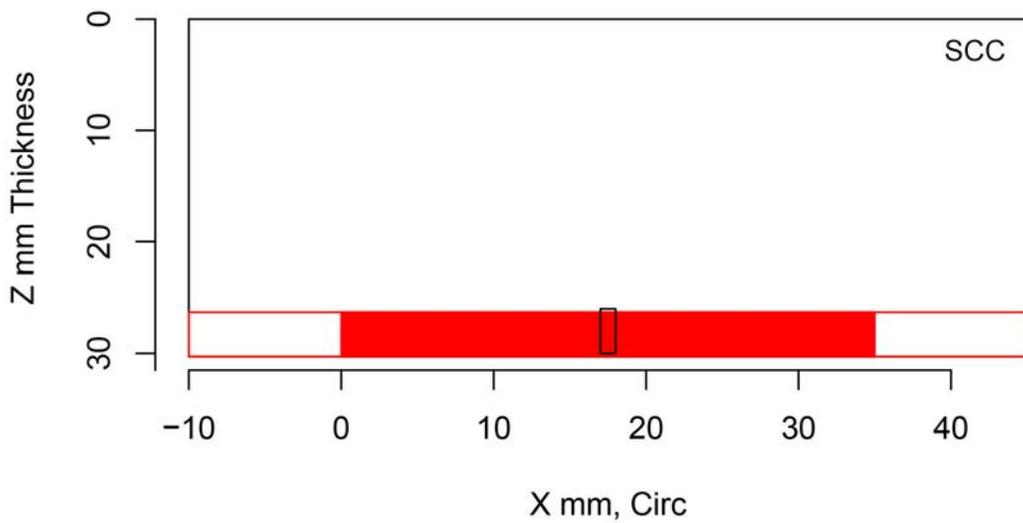


Figure H.120 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

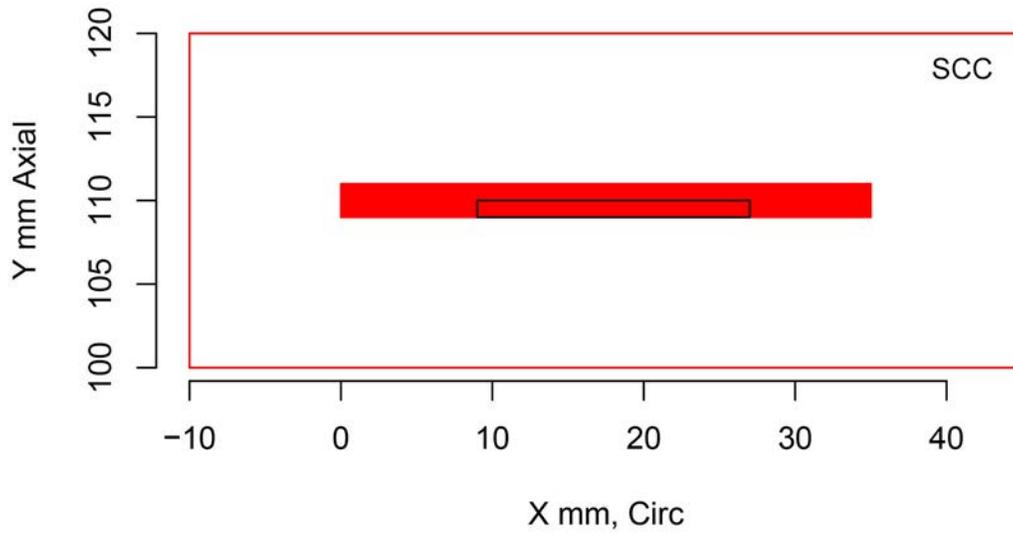


Figure H.121 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

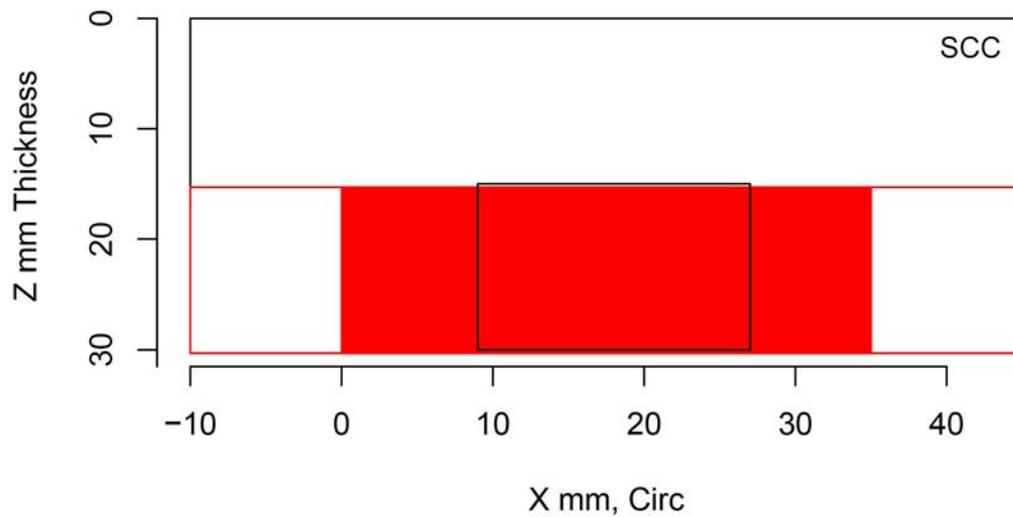


Figure H.122 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

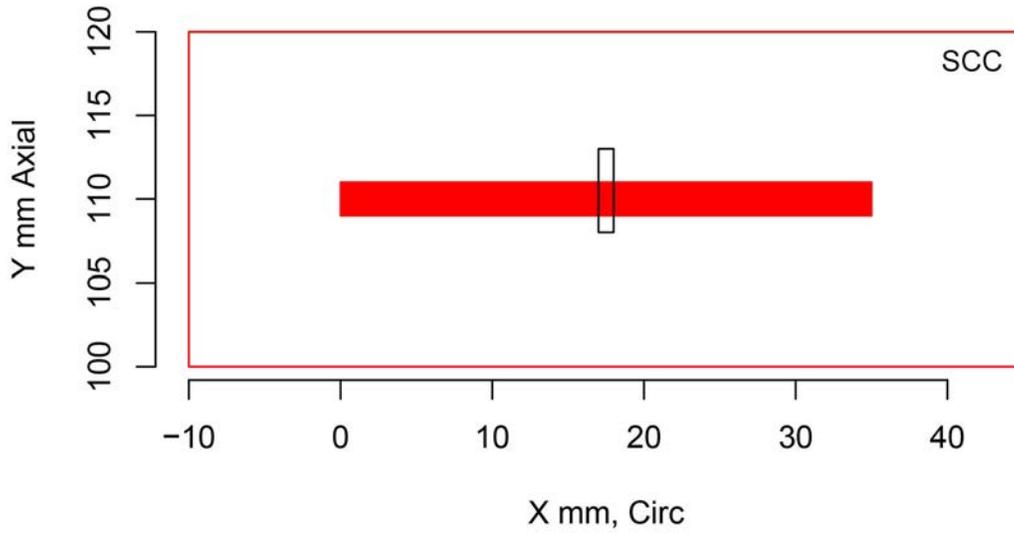


Figure H.123 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

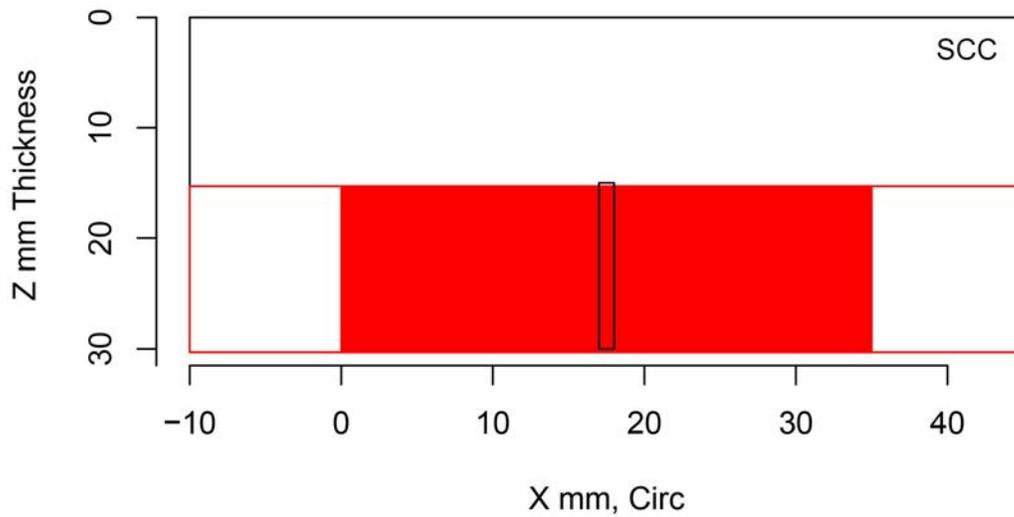


Figure H.124 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

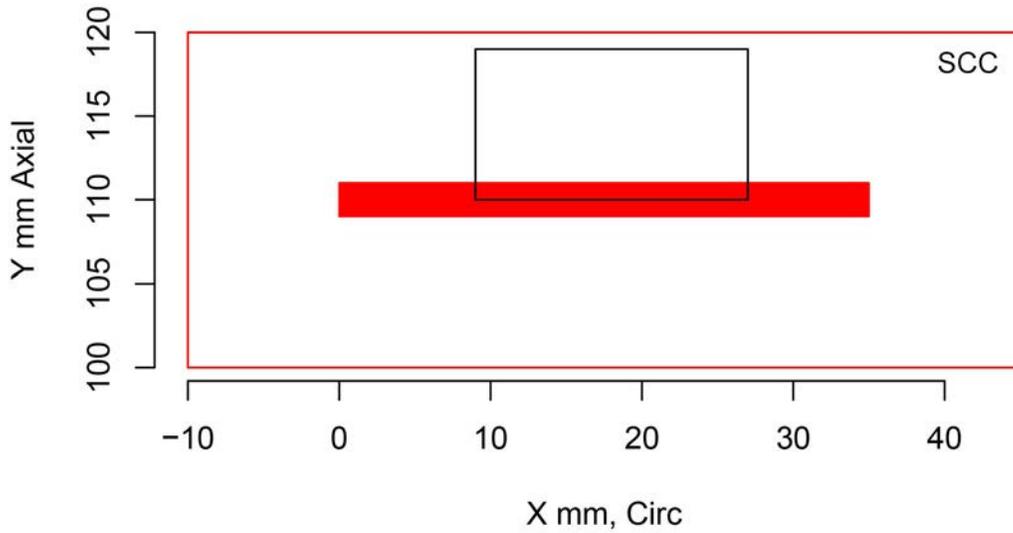


Figure H.125 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

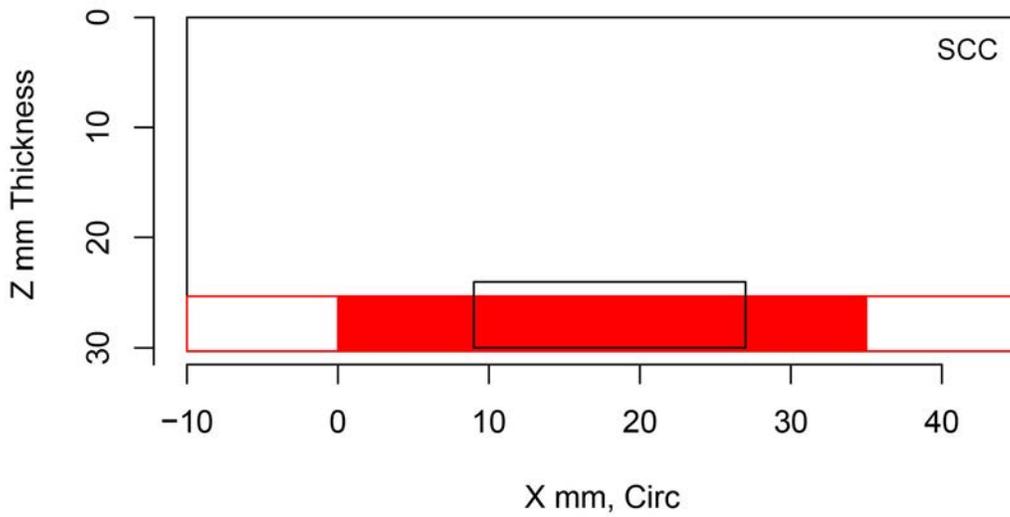


Figure H.126 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

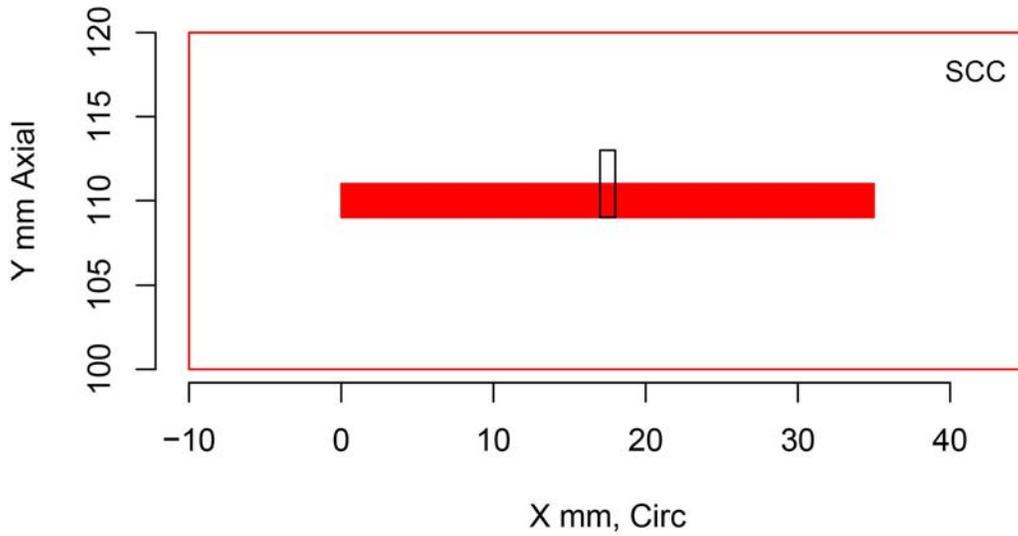


Figure H.127 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

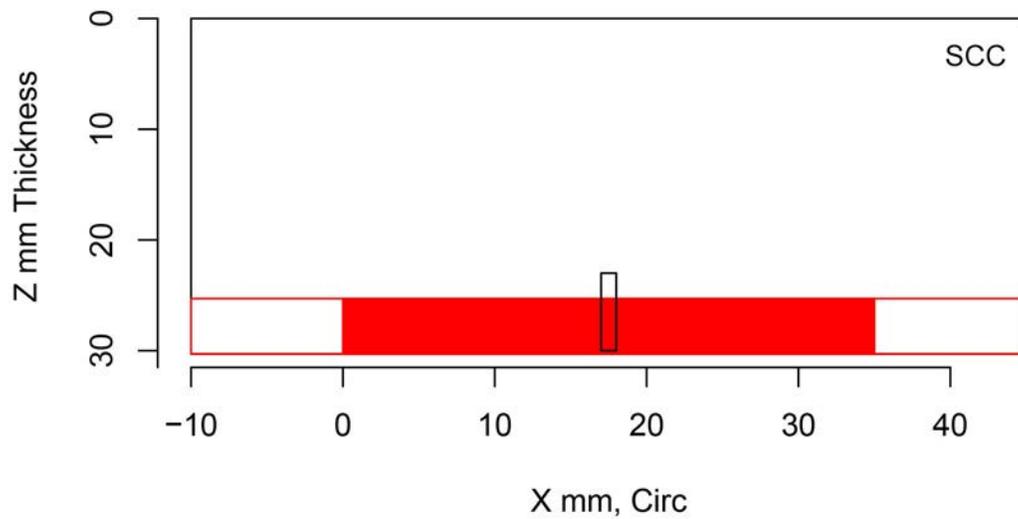


Figure H.128 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

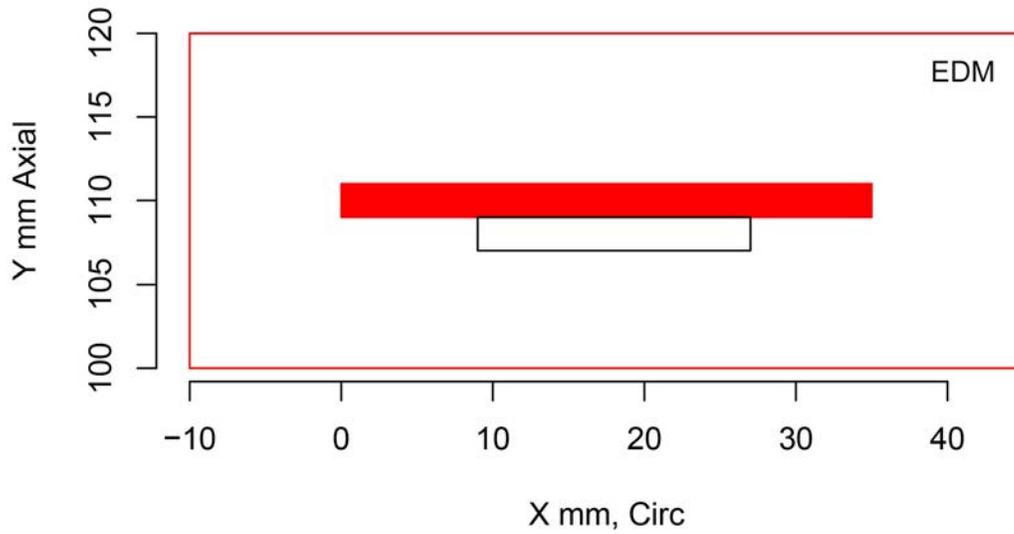


Figure H.129 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

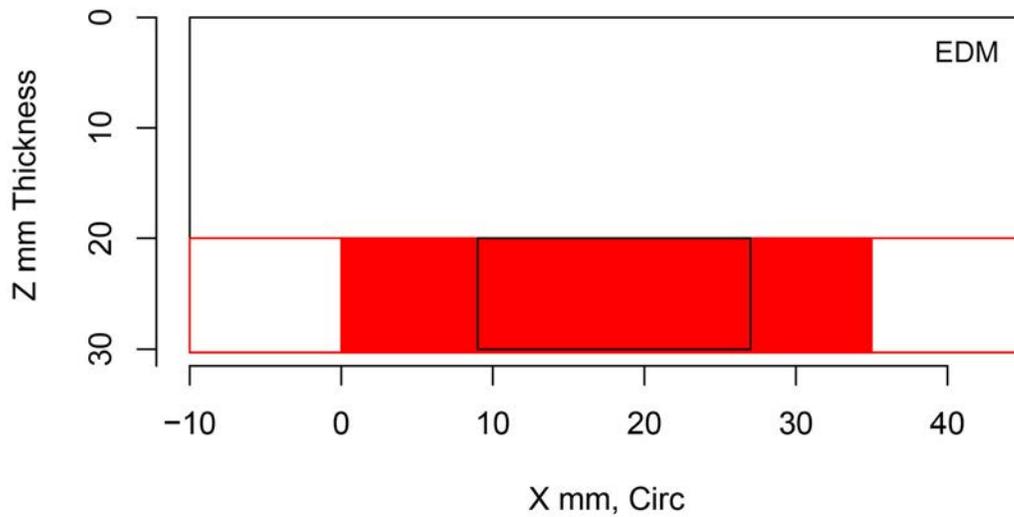


Figure H.130 Indication Plot for Procedure PAUT.122.1 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

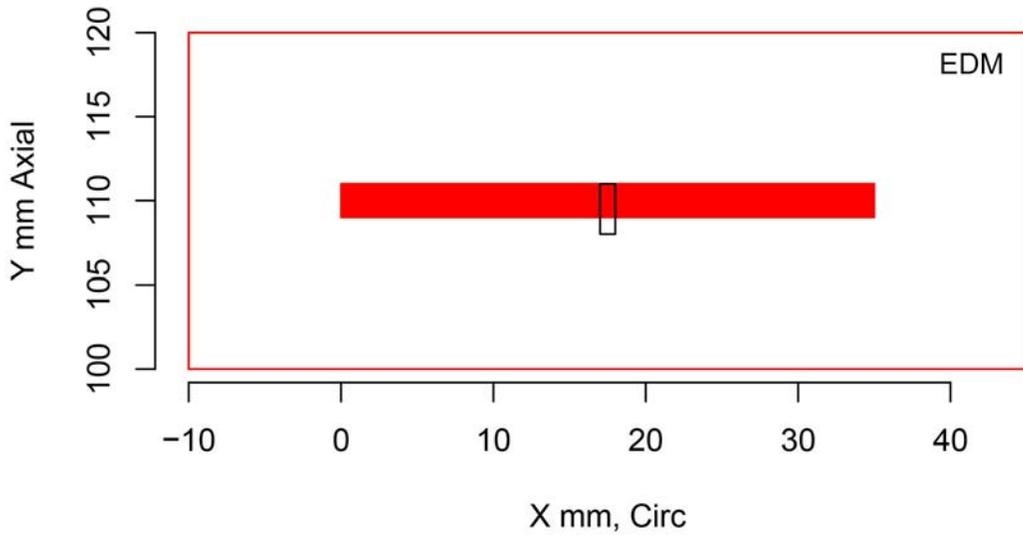


Figure H.131 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

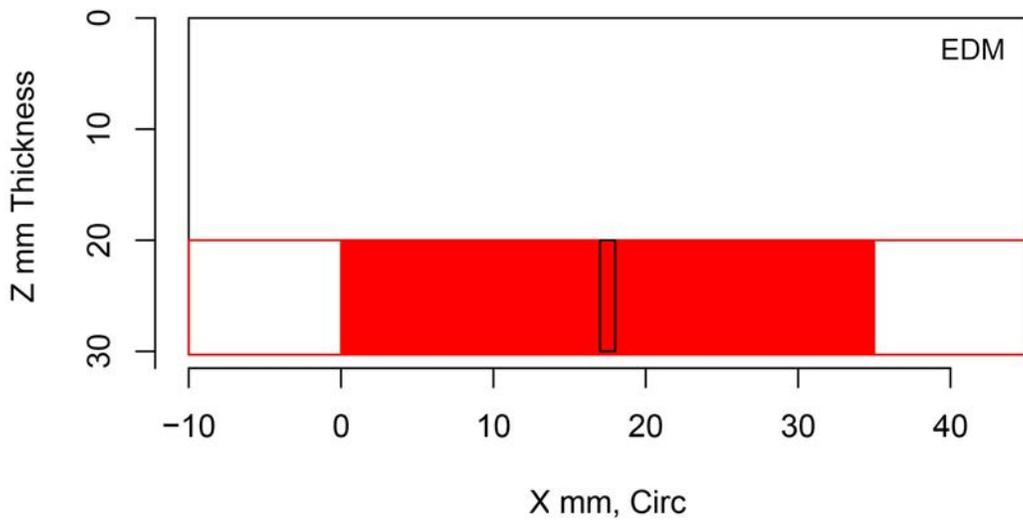


Figure H.132 Indication Plot for Procedure PAUT.122.2 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

H.2.7 Plots for Team 131

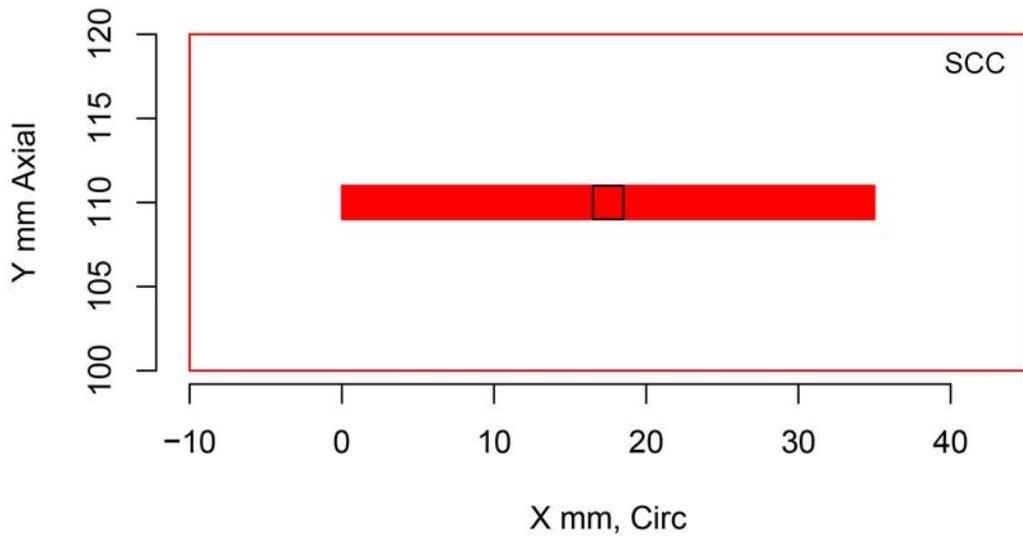


Figure H.133 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

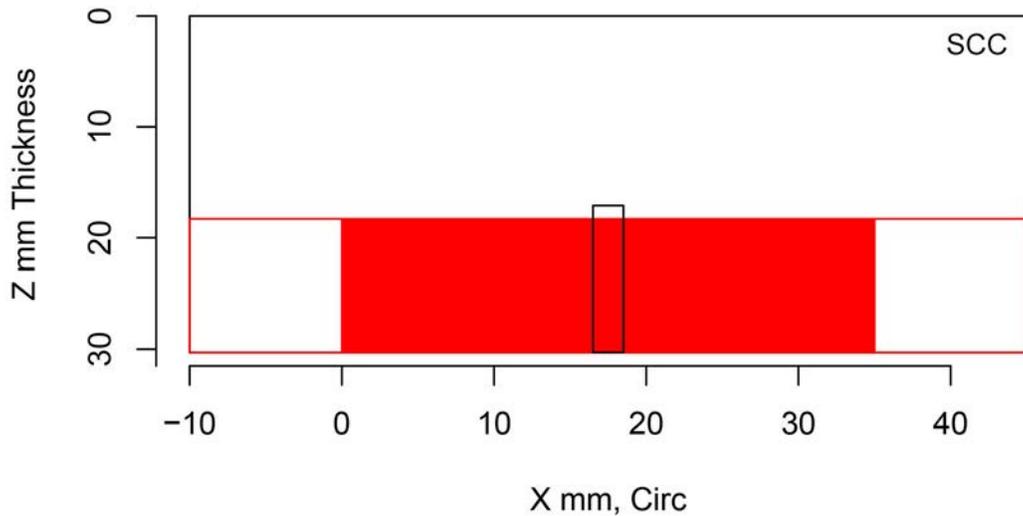


Figure H.134 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

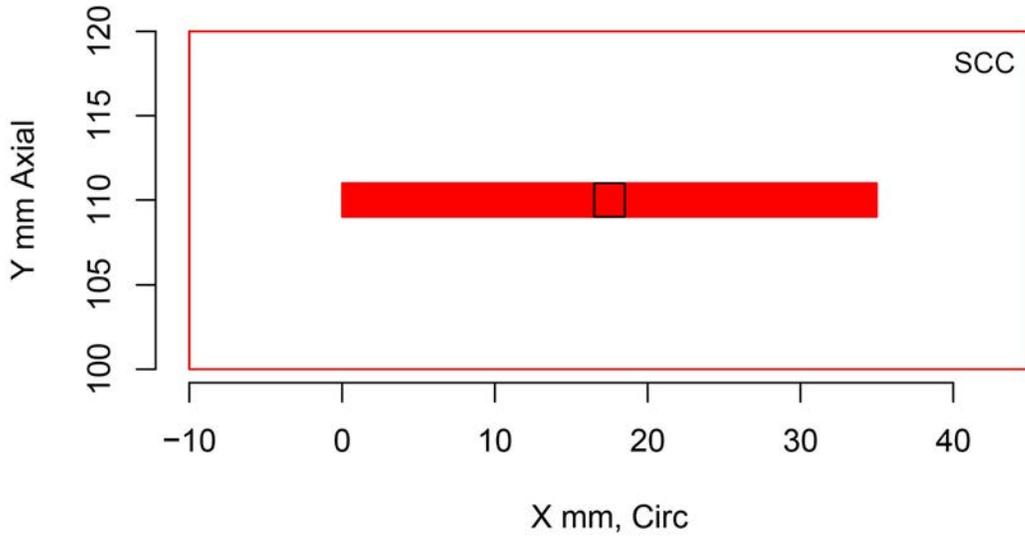


Figure H.135 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

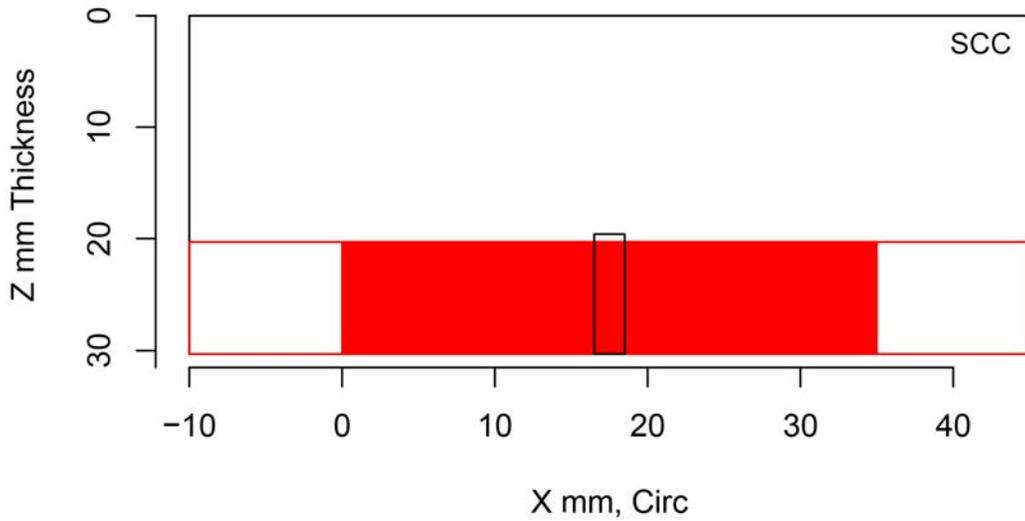


Figure H.136 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

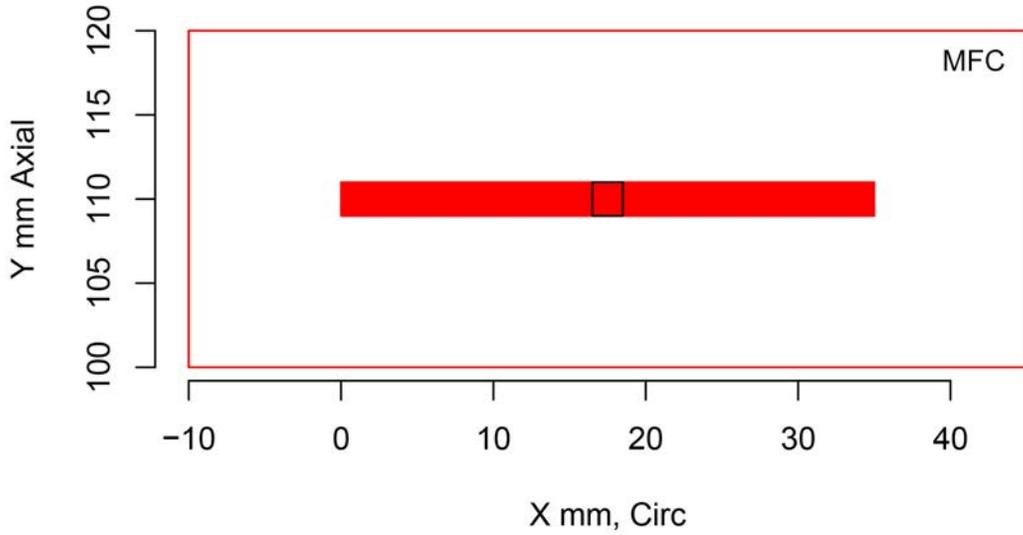


Figure H.137 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

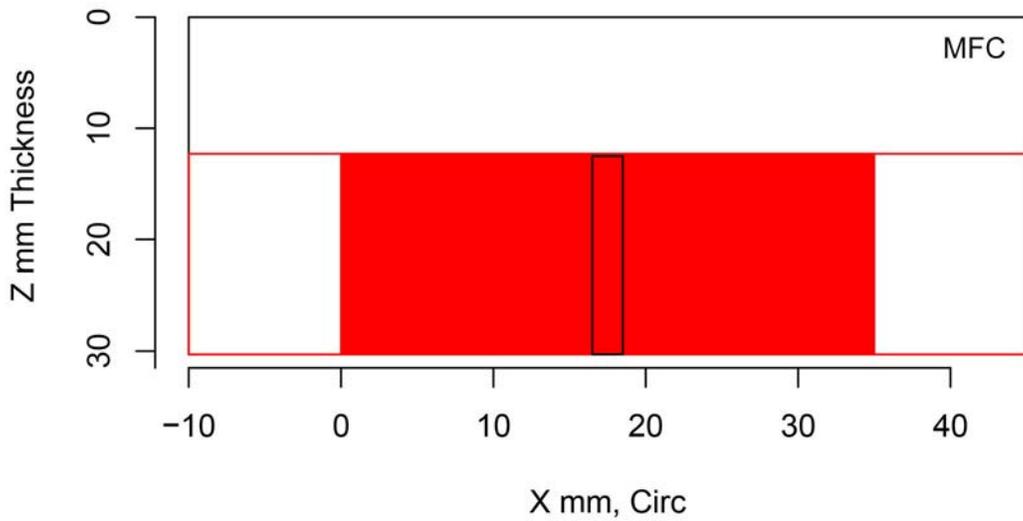


Figure H.138 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

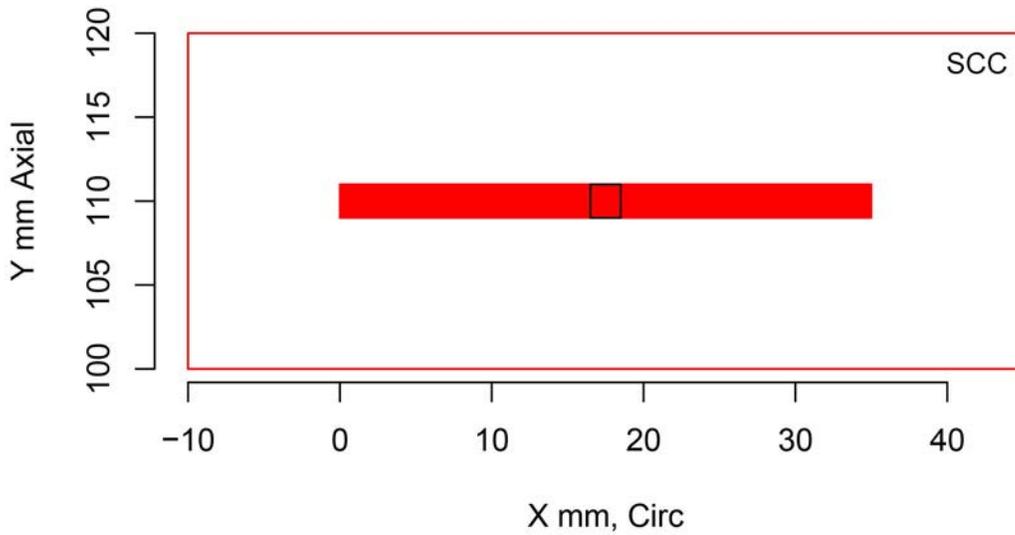


Figure H.139 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

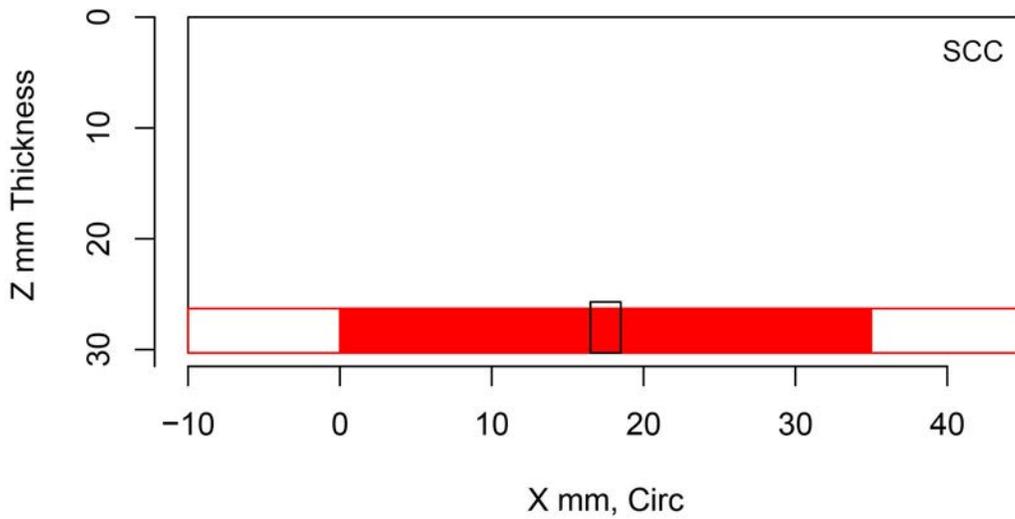


Figure H.140 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

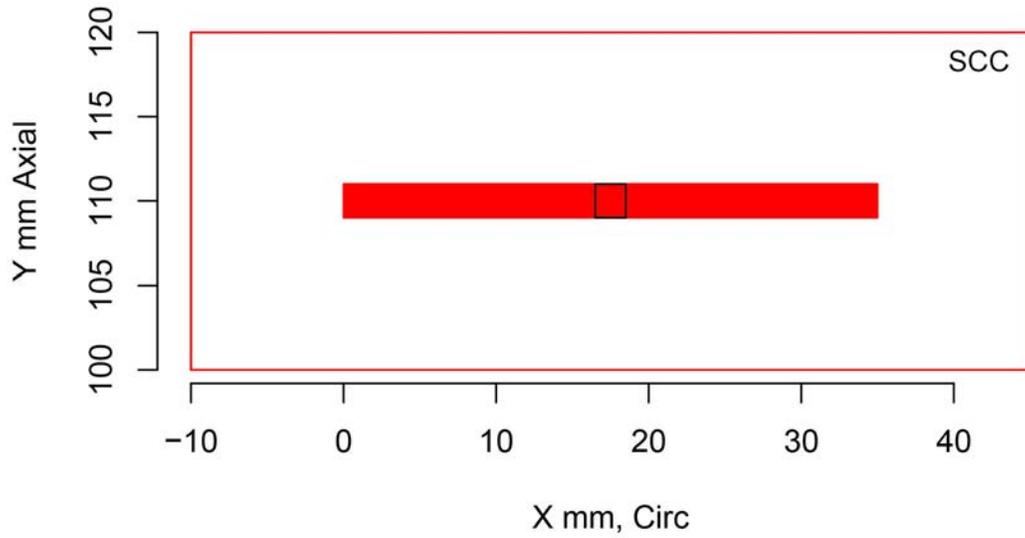


Figure H.141 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

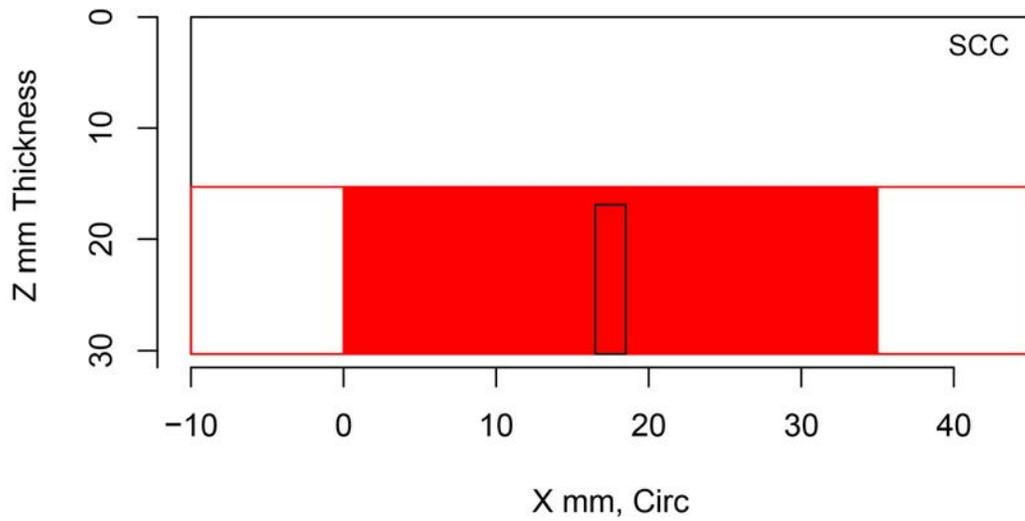


Figure H.142 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

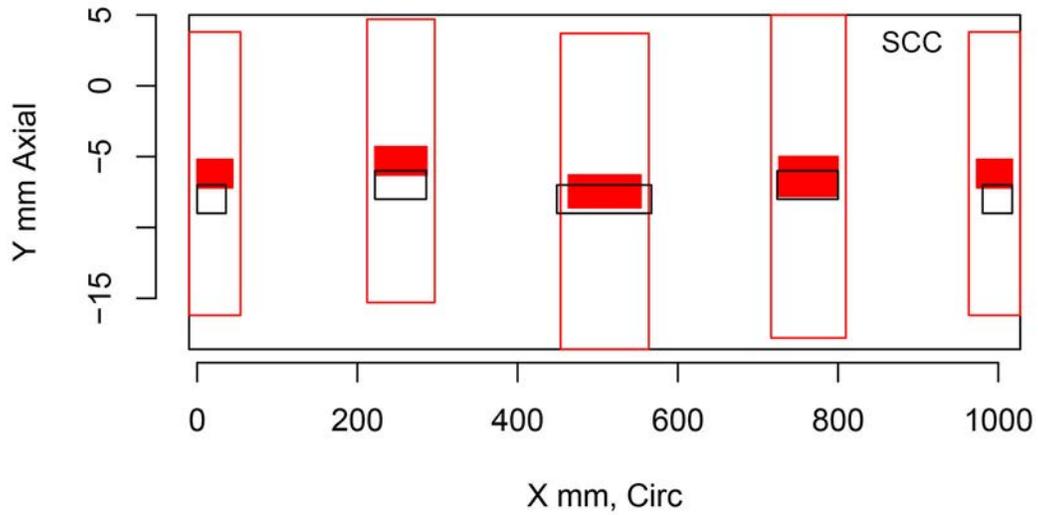


Figure H.143 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

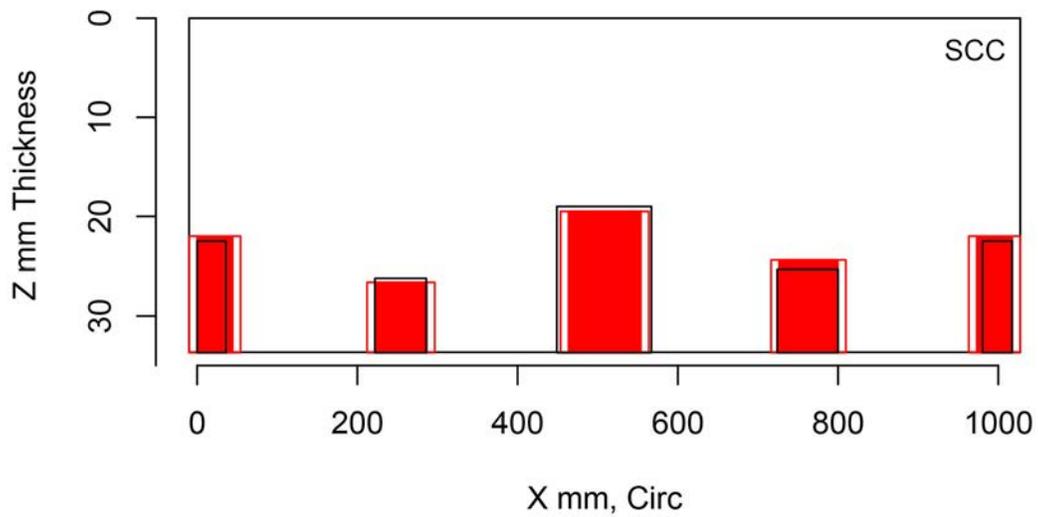


Figure H.144 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

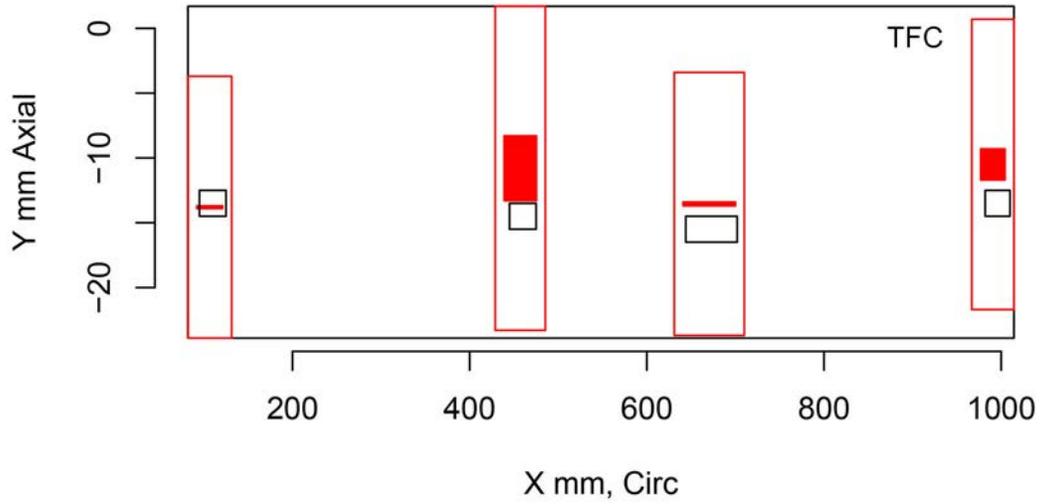


Figure H.145 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

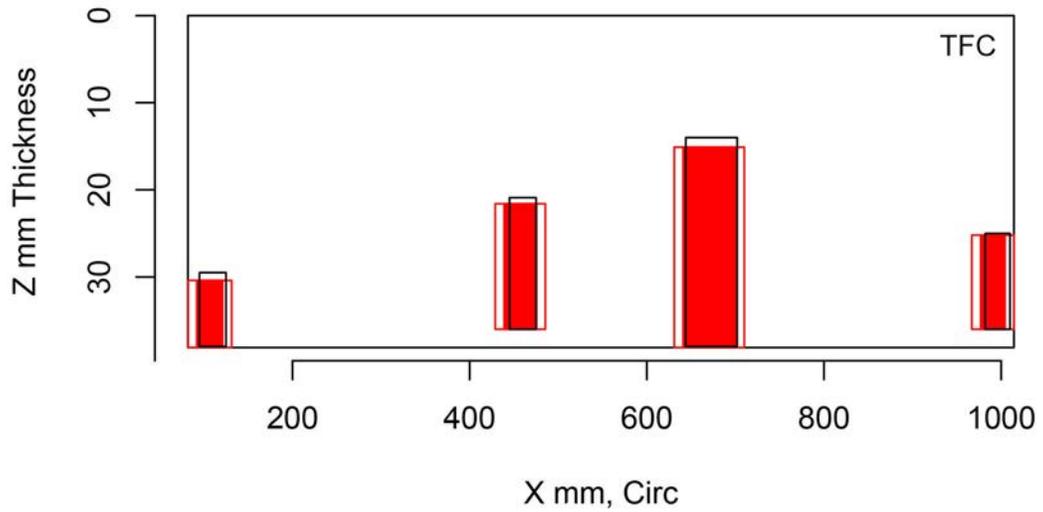


Figure H.146 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

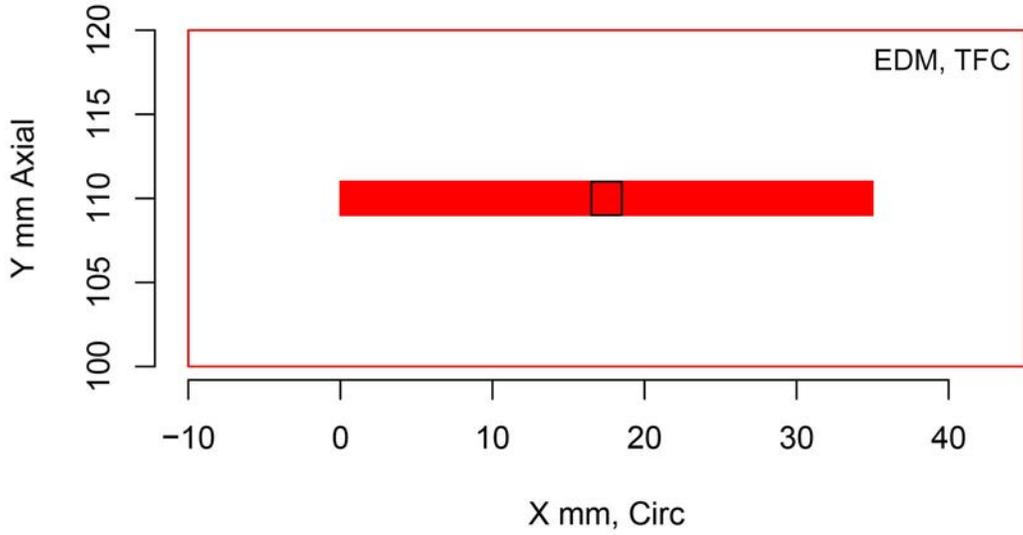


Figure H.147 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P4 in PARENT Open Testing (X – Y view)

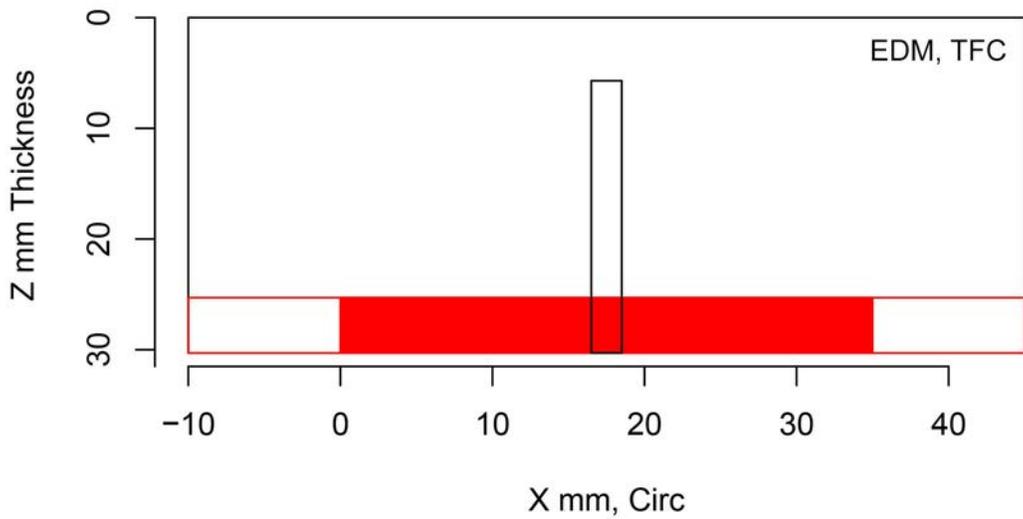


Figure H.148 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P4 in PARENT Open Testing (X – Z view)

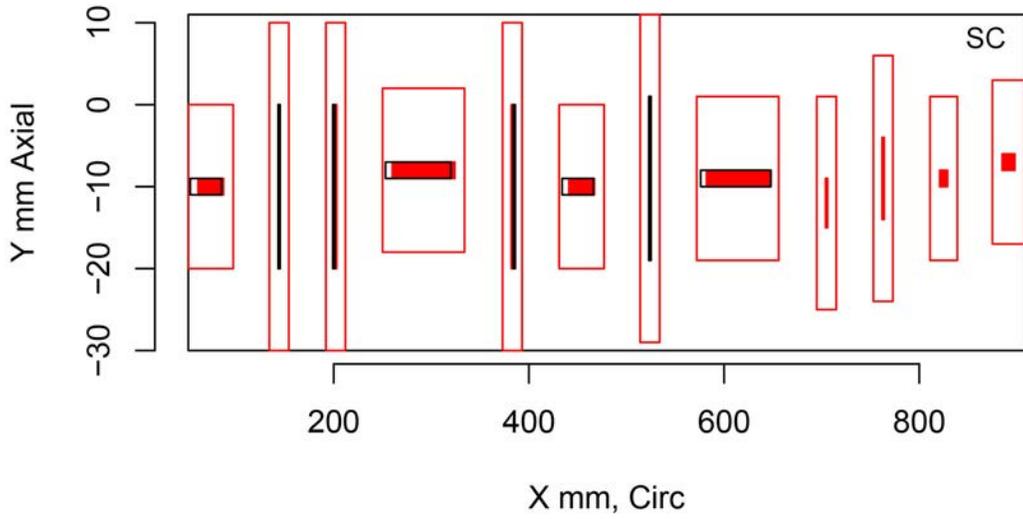


Figure H.149 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

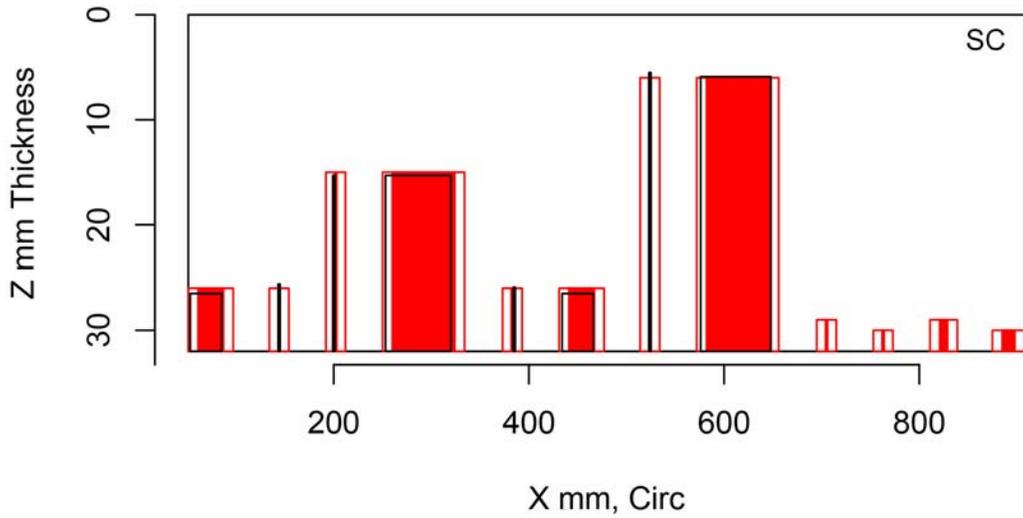


Figure H.150 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

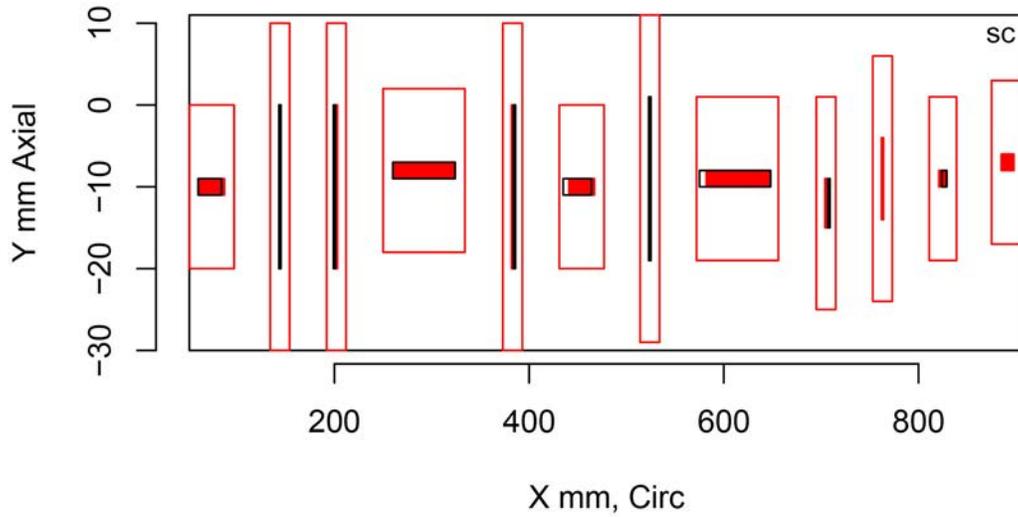


Figure H.151 Indication Plot for Procedure PAUT.131.2 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

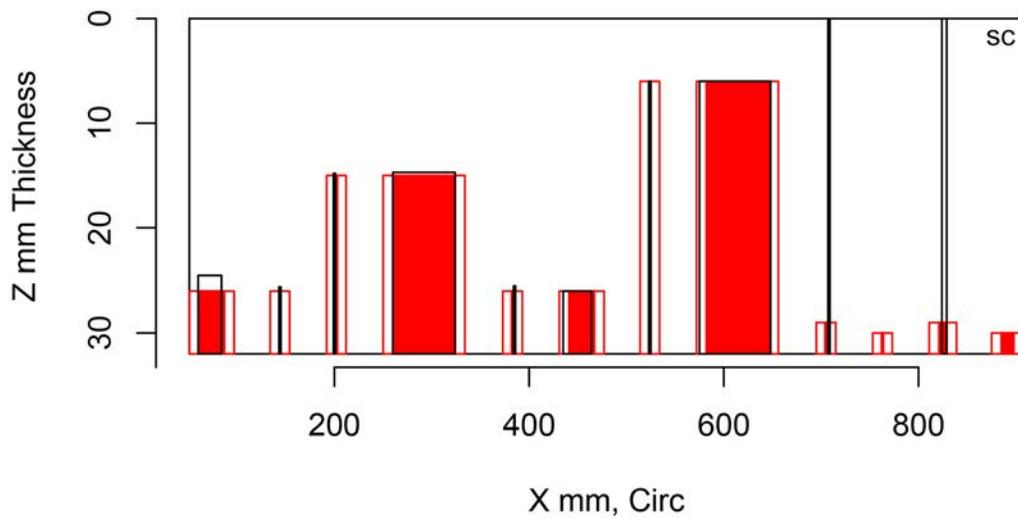


Figure H.152 Indication Plot for Procedure PAUT.131.2 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

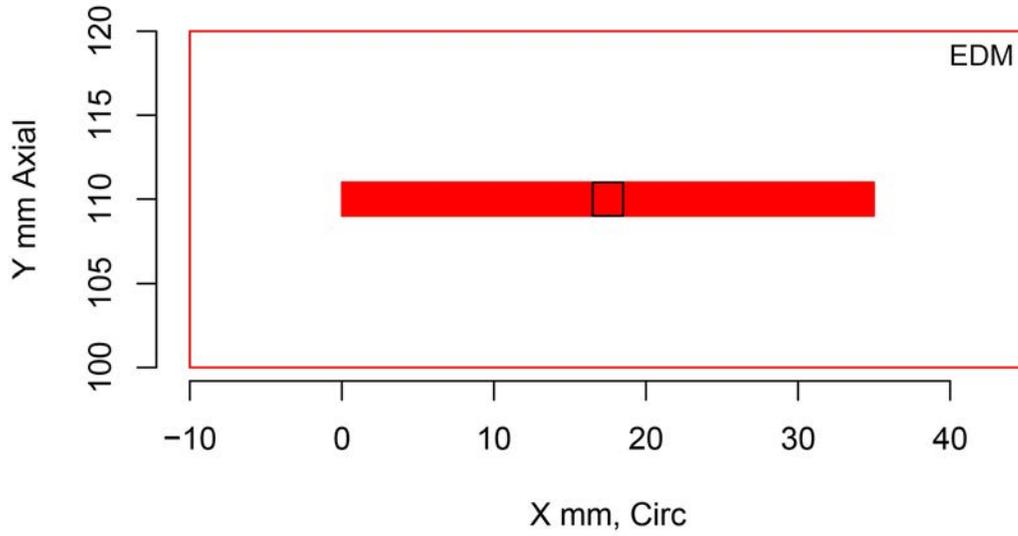


Figure H.153 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

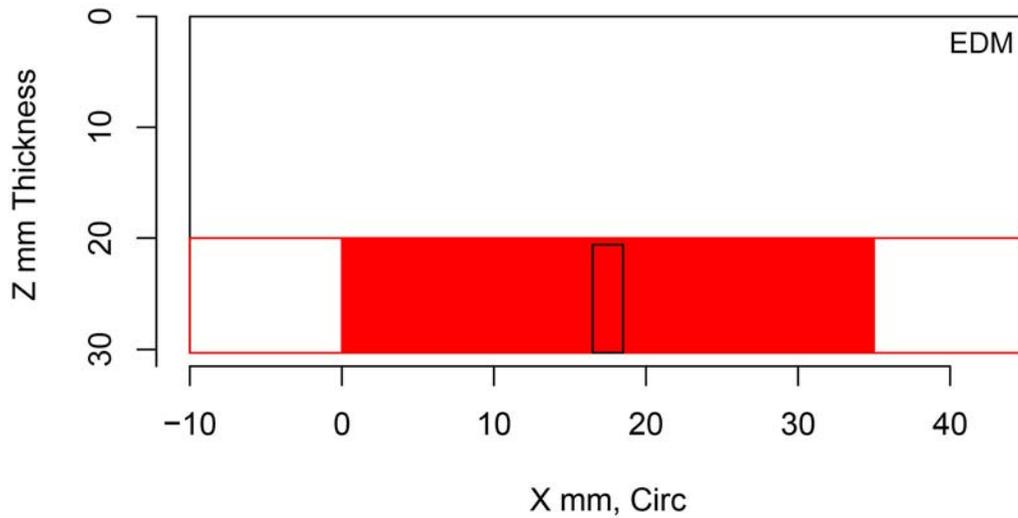


Figure H.154 Indication Plot for Procedure PAUT.131.1 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

H.2.8 Plots for Team 150

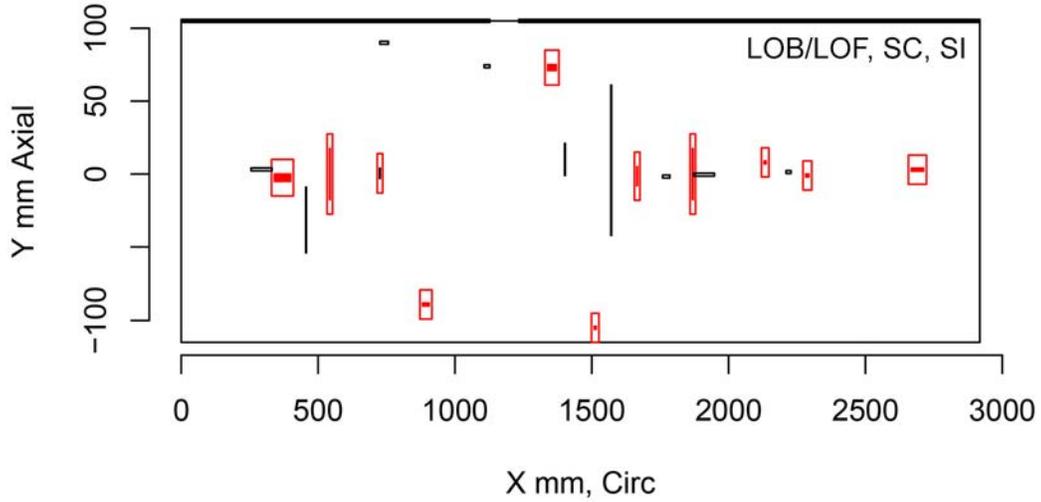


Figure H.155 Indication Plot for Procedure PAUT.150 Applied to Test Block P37 in PARENT Open Testing (X – Y view)

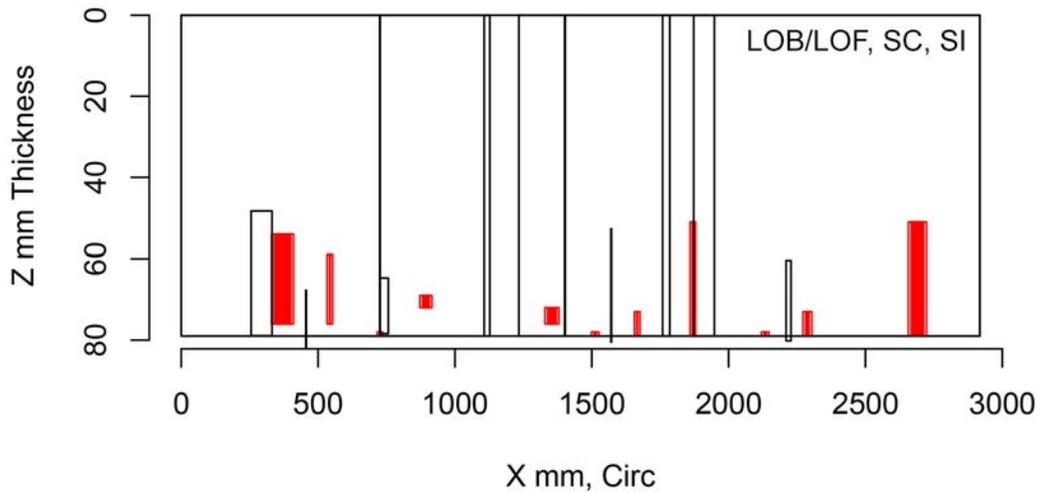


Figure H.156 Indication Plot for Procedure PAUT.150 Applied to Test Block P37 in PARENT Open Testing (X – Z view)

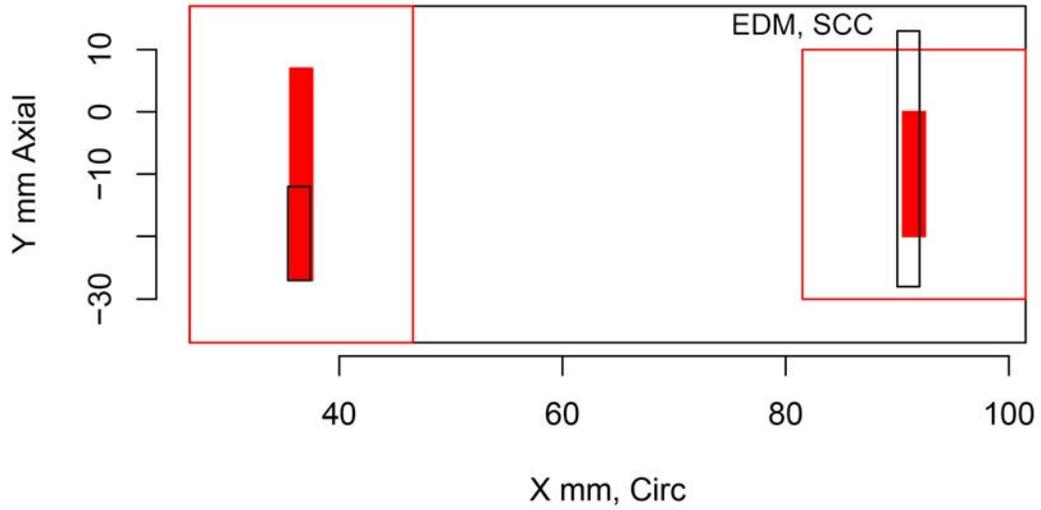


Figure H.157 Indication Plot for Procedure PAUT.150 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

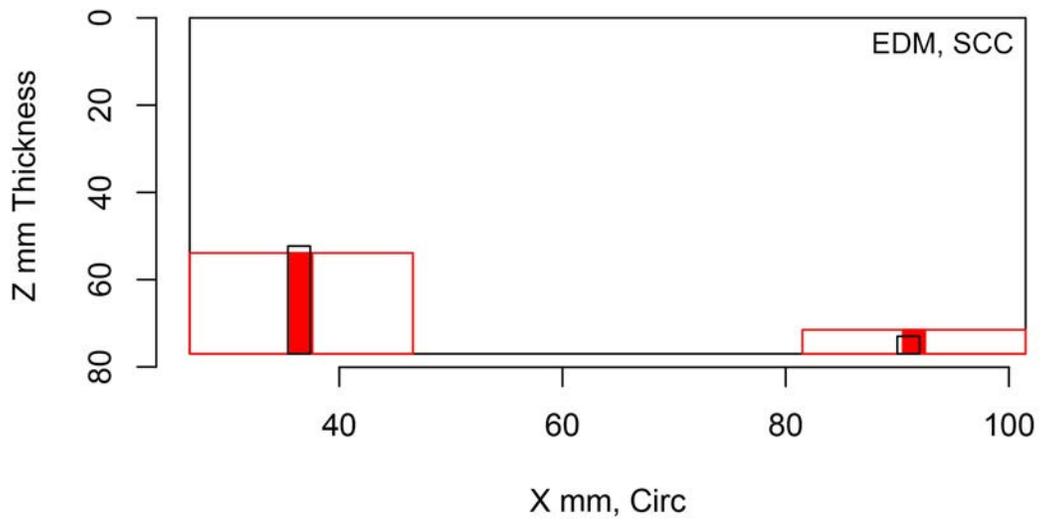


Figure H.158 Indication Plot for Procedure PAUT.150 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

H.2.9 Plots for Team 16

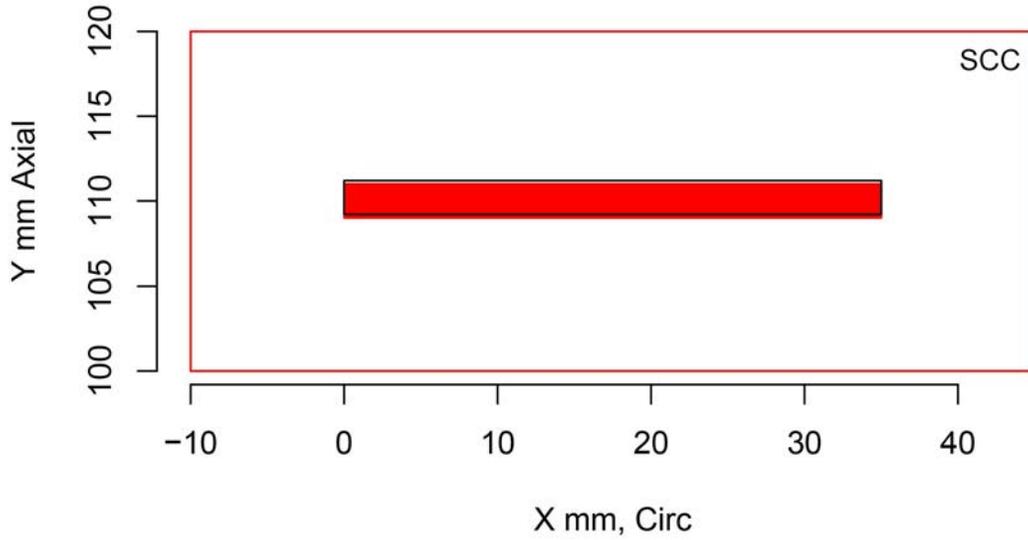


Figure H.159 Indication Plot for Procedure ECT.16 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

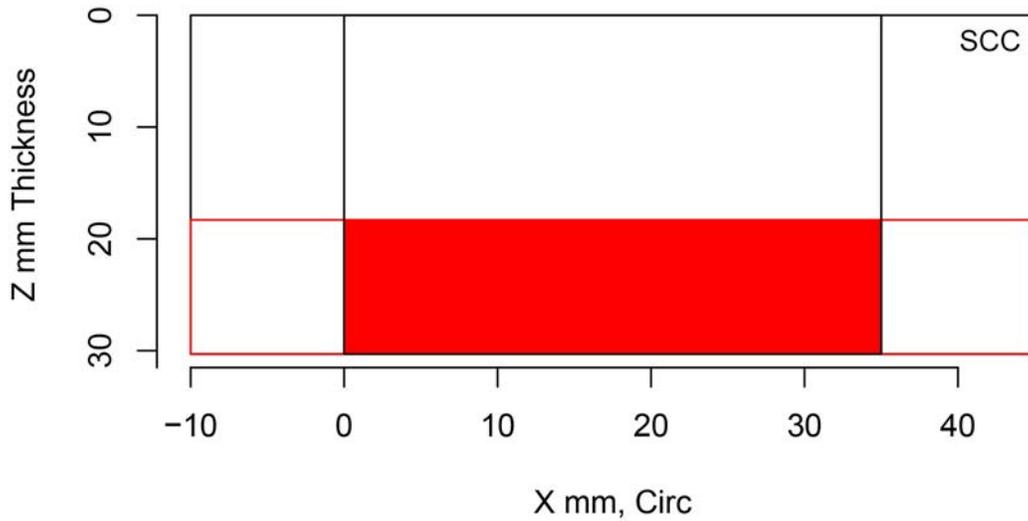


Figure H.160 Indication Plot for Procedure ECT.16 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

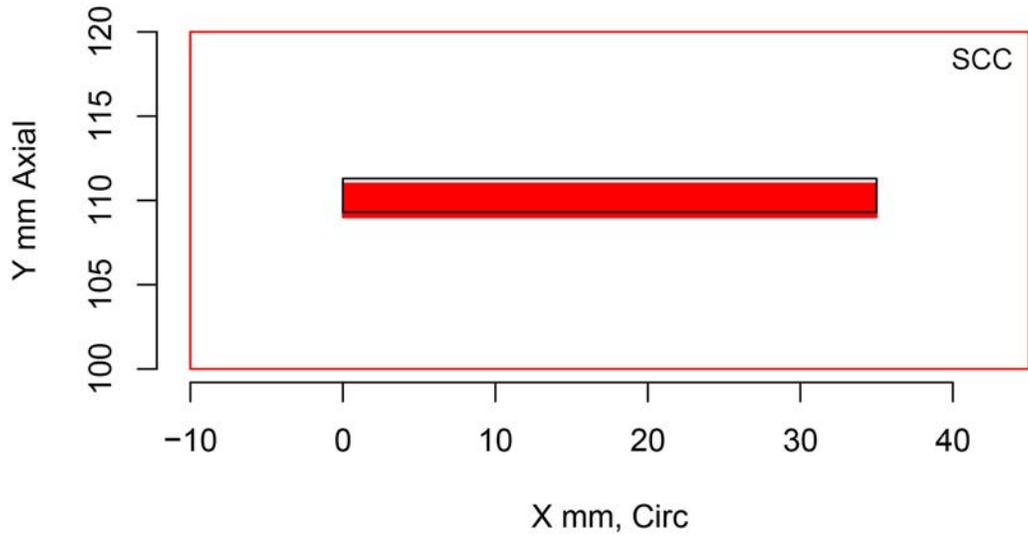


Figure H.161 Indication Plot for Procedure ECT.16 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

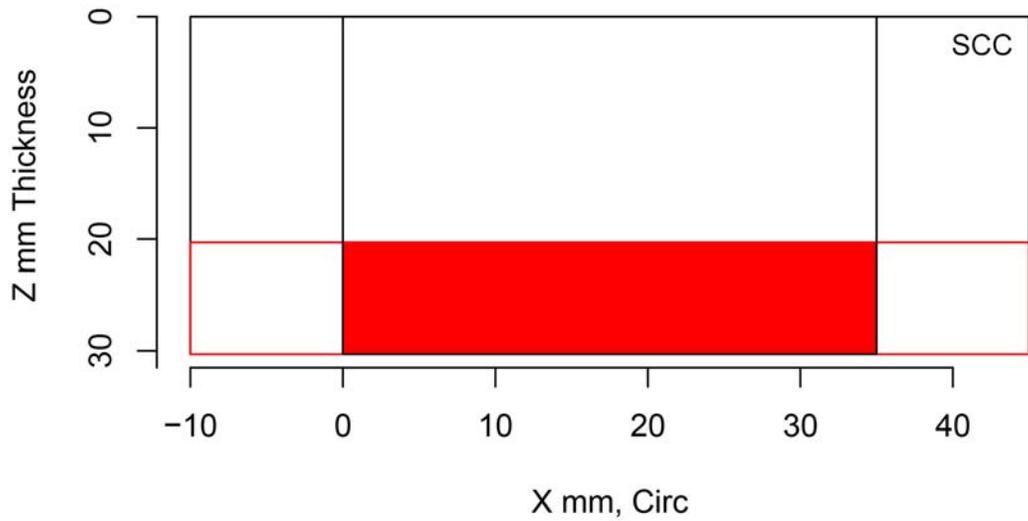


Figure H.162 Indication Plot for Procedure ECT.16 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

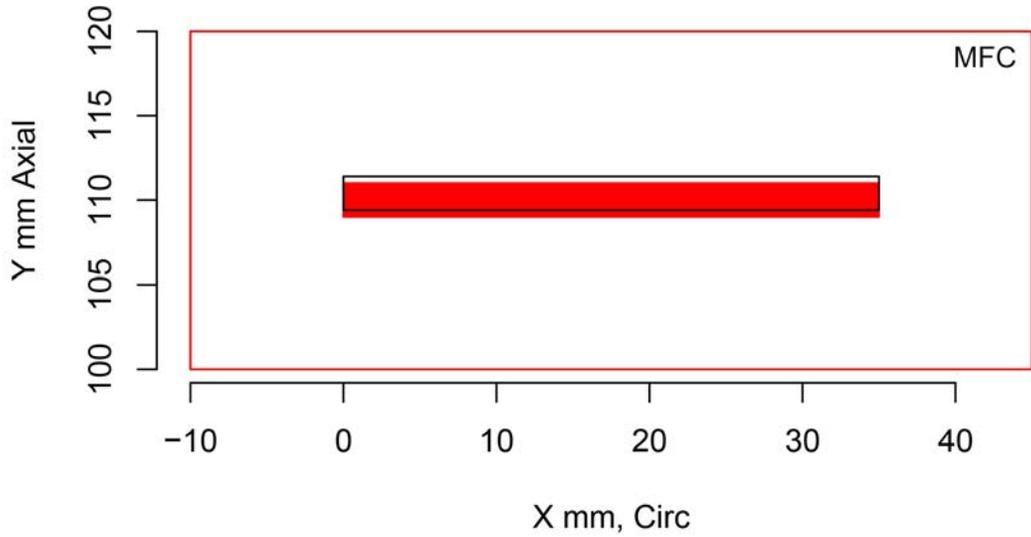


Figure H.163 Indication Plot for Procedure ECT.16 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

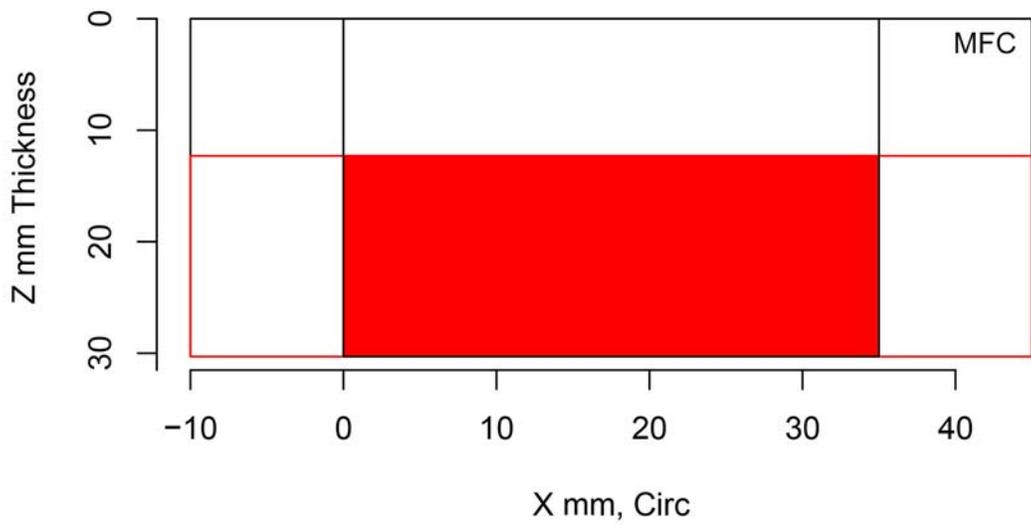


Figure H.164 Indication Plot for Procedure ECT.16 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

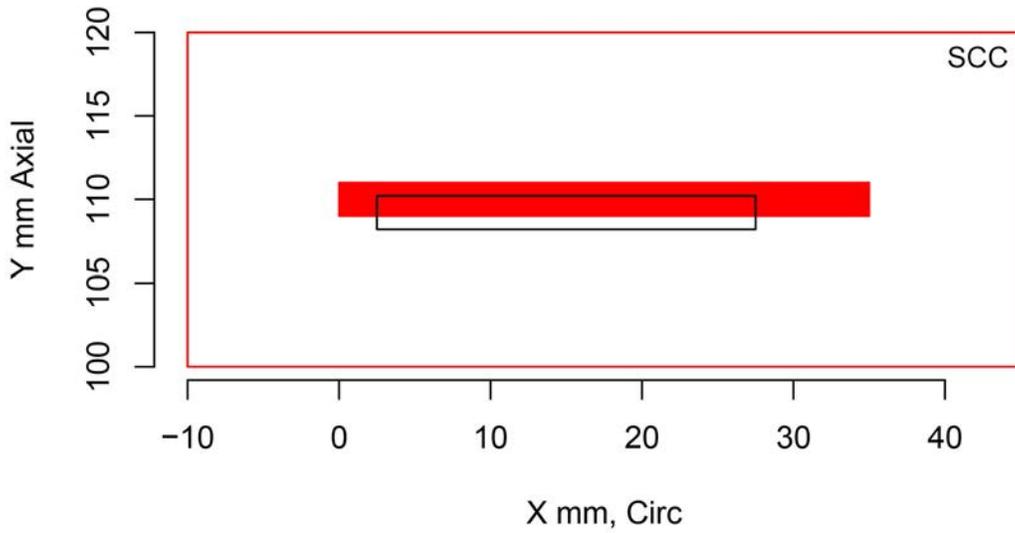


Figure H.165 Indication Plot for Procedure ECT.16 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

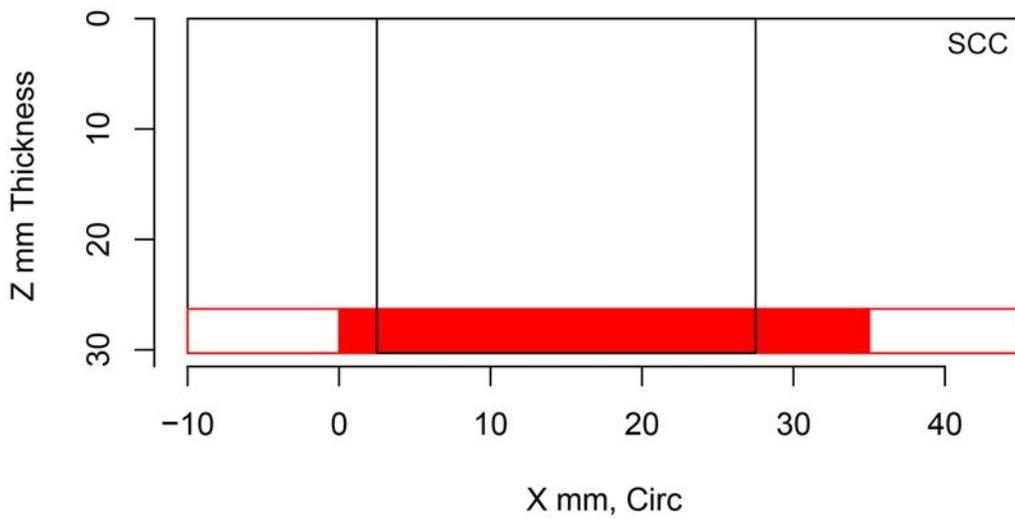


Figure H.166 Indication Plot for Procedure ECT.16 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

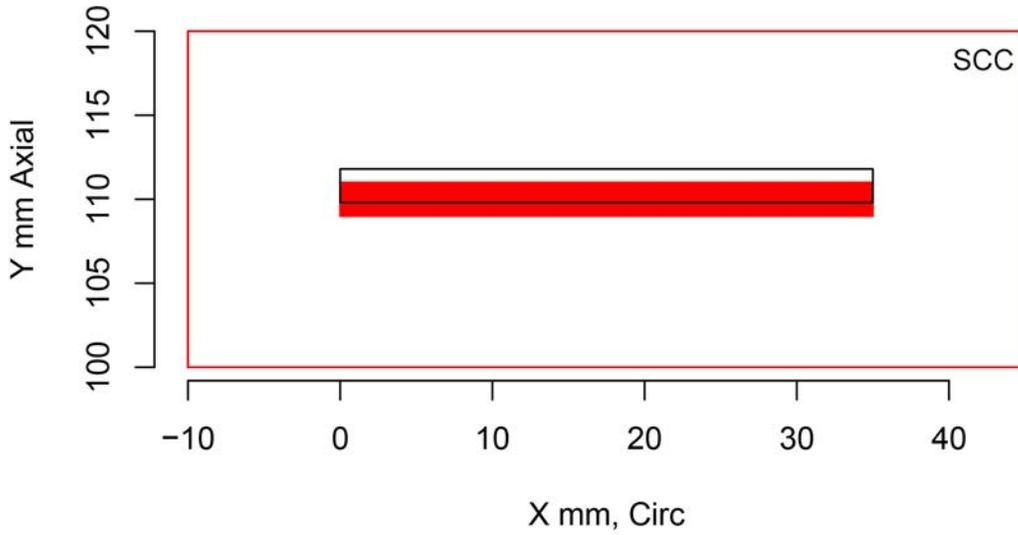


Figure H.167 Indication Plot for Procedure ECT.16 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

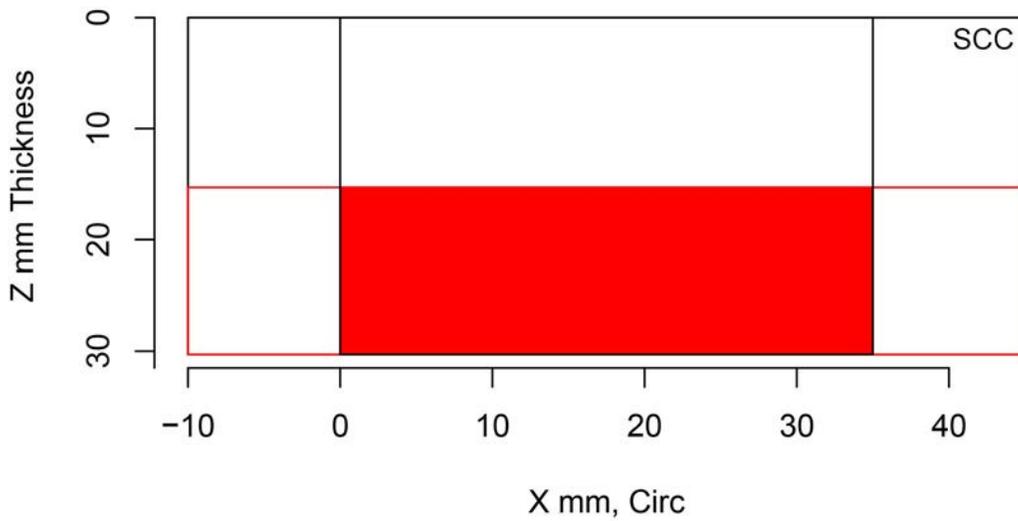


Figure H.168 Indication Plot for Procedure ECT.16 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

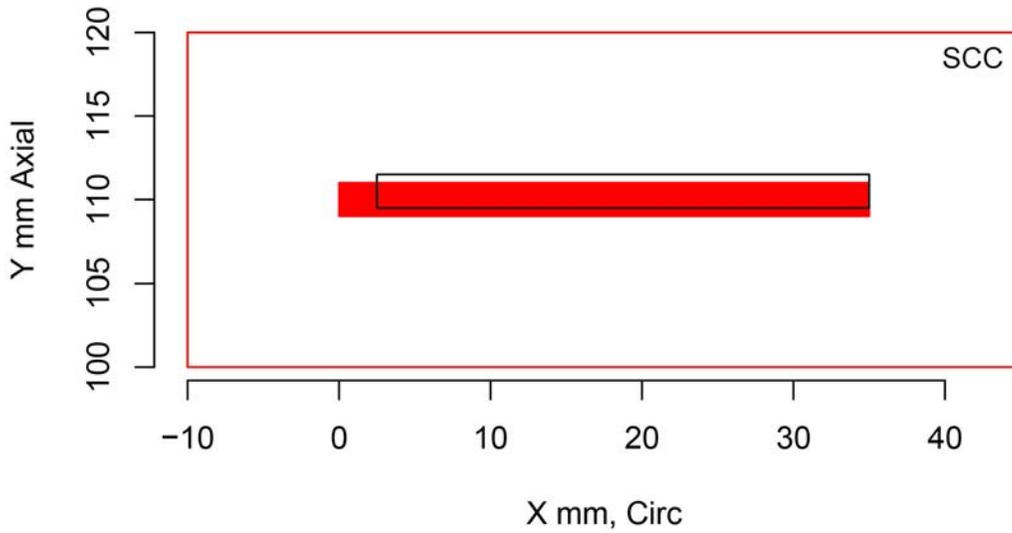


Figure H.169 Indication Plot for Procedure ECT.16 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

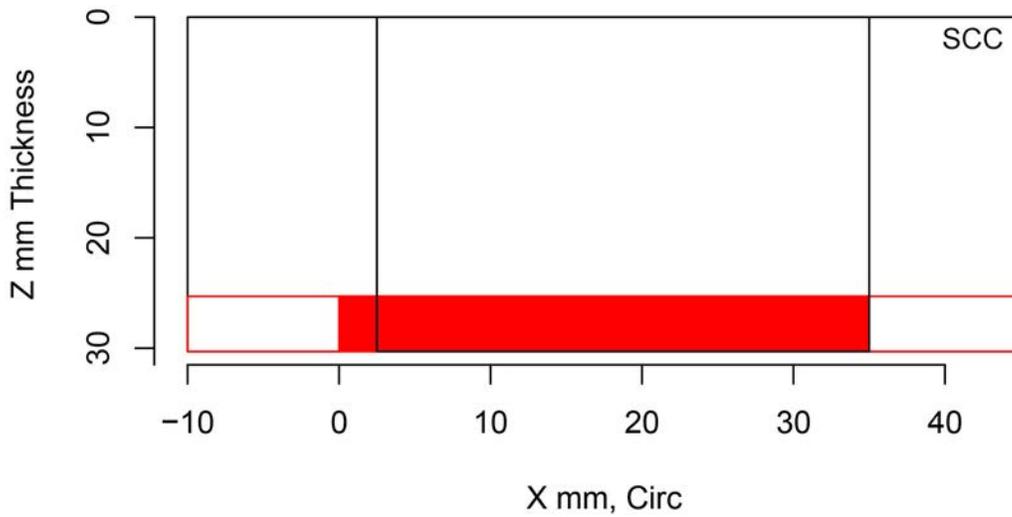


Figure H.170 Indication Plot for Procedure ECT.16 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

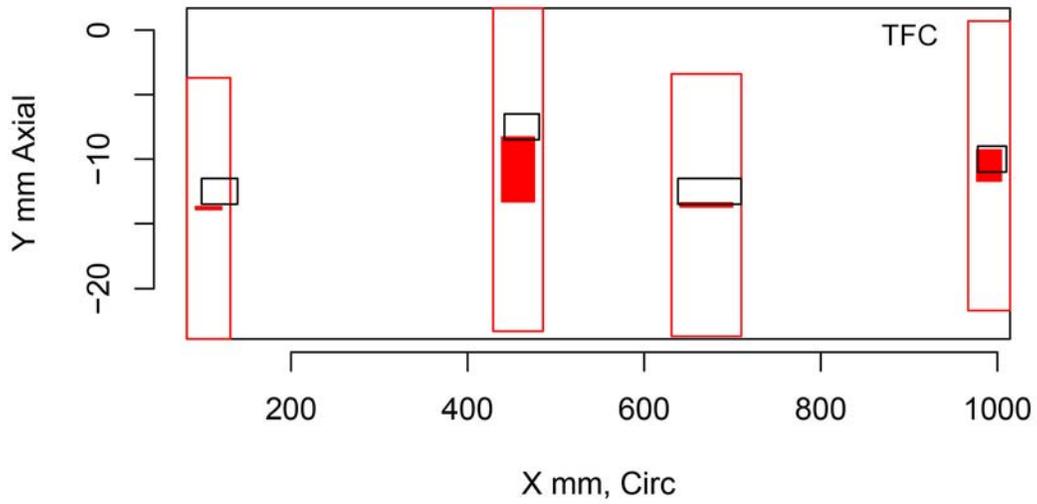


Figure H.171 Indication Plot for Procedure ECT.16 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

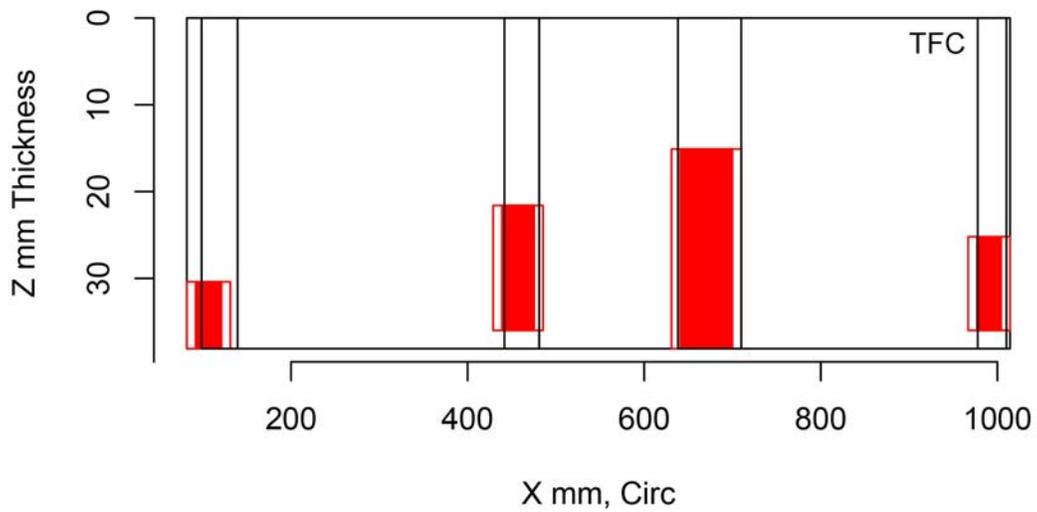


Figure H.172 Indication Plot for Procedure ECT.16 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

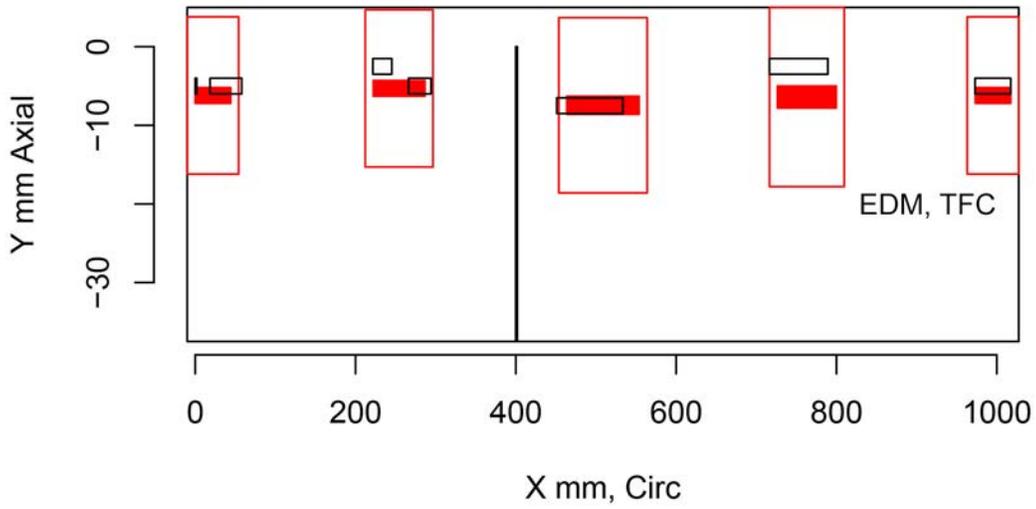


Figure H.173 Indication Plot for Procedure ECT.16 Applied to Test Block P4 in PARENT Open Testing (X – Y view)

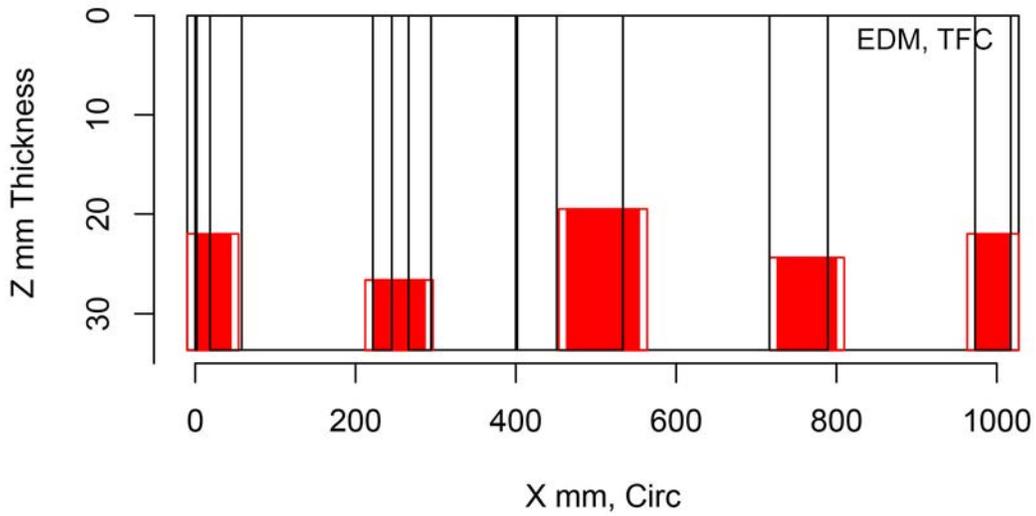


Figure H.174 Indication Plot for Procedure ECT.16 Applied to Test Block P4 in PARENT Open Testing (X – Z view)

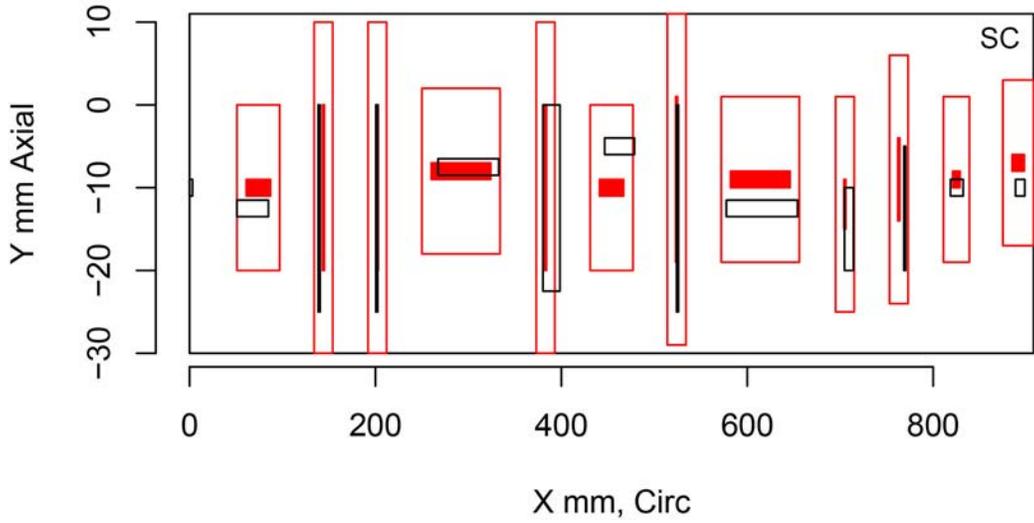


Figure H.175 Indication Plot for Procedure ECT.16 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

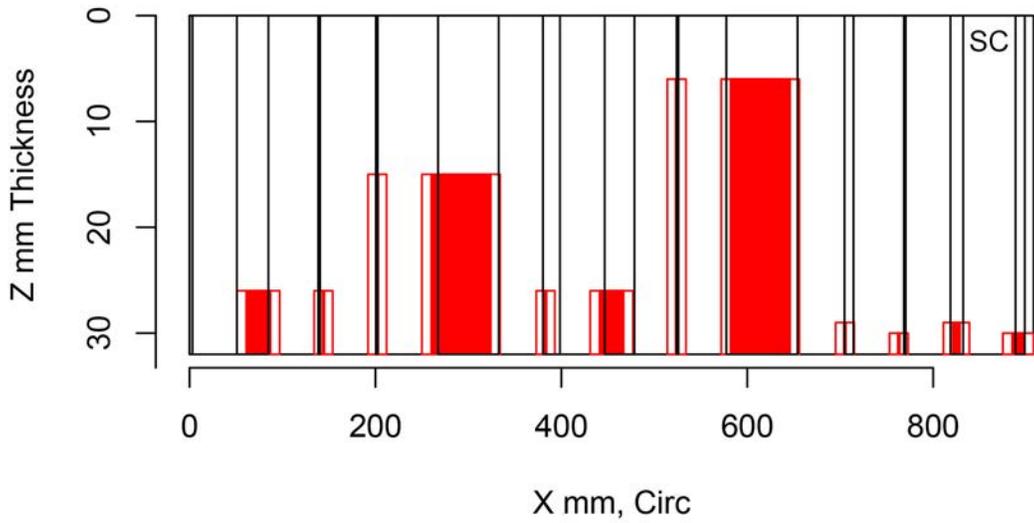


Figure H.176 Indication Plot for Procedure ECT.16 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

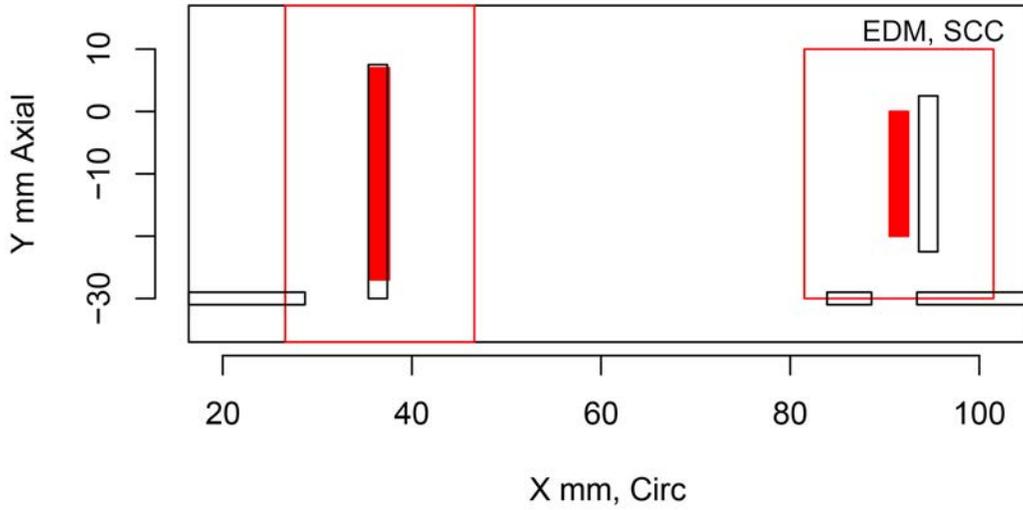


Figure H.177 Indication Plot for Procedure ECT.16 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

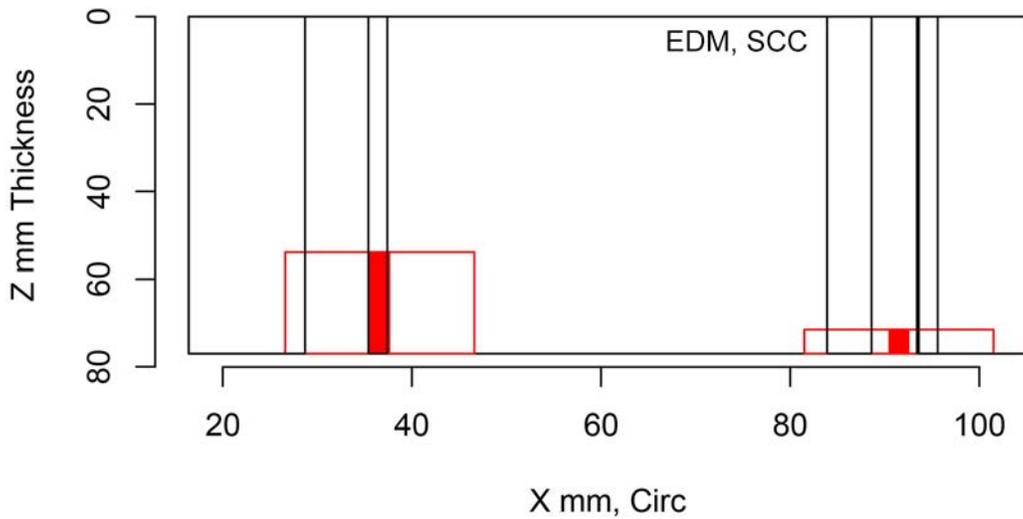


Figure H.178 Indication Plot for Procedure ECT.16 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

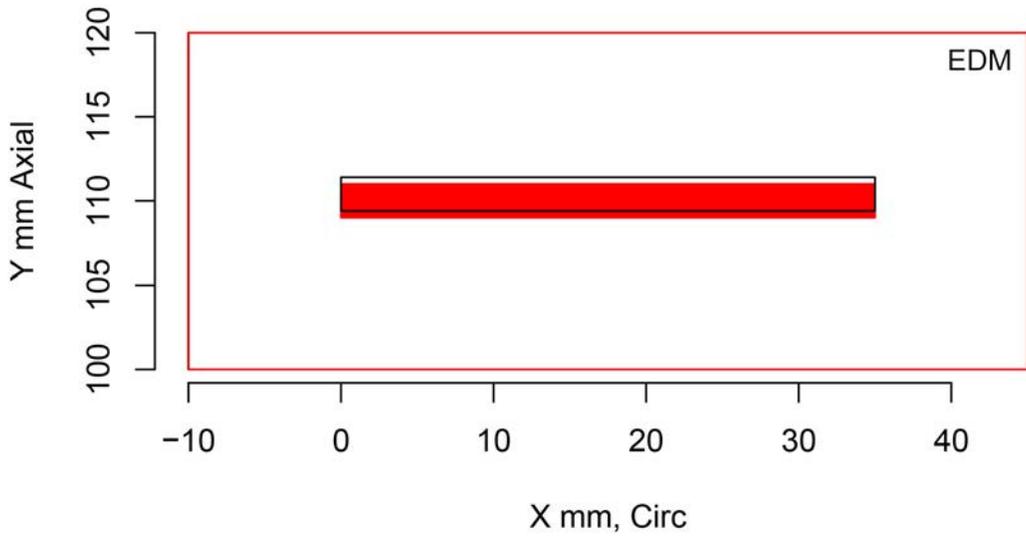


Figure H.179 Indication Plot for Procedure ECT.16 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

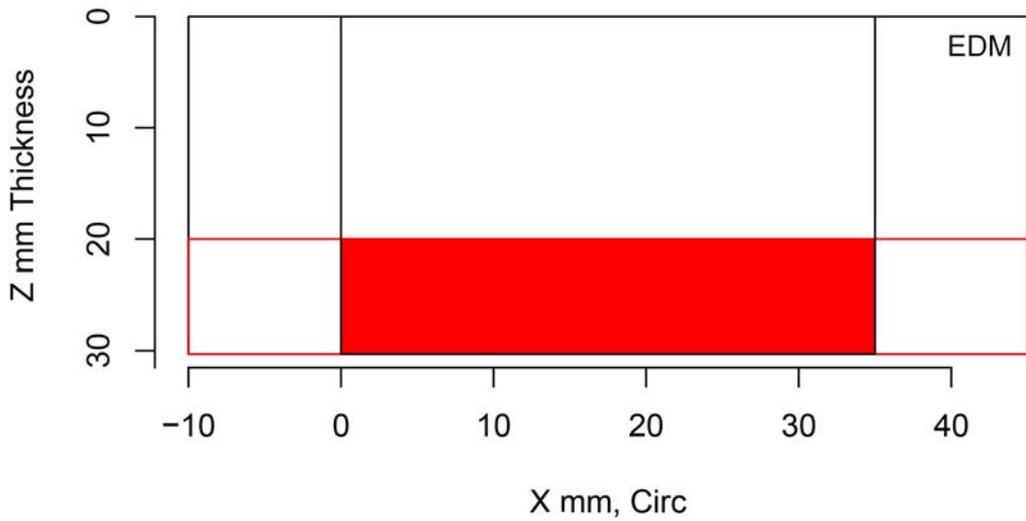


Figure H.180 Indication Plot for Procedure ECT.16 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

H.2.10 Plots for Team 17

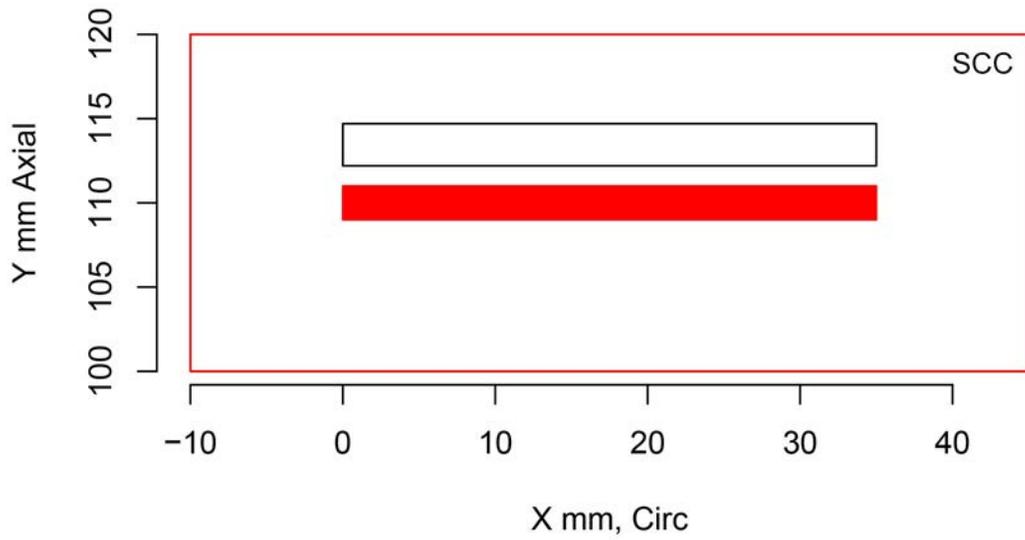


Figure H.181 Indication Plot for Procedure SAFT.17 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

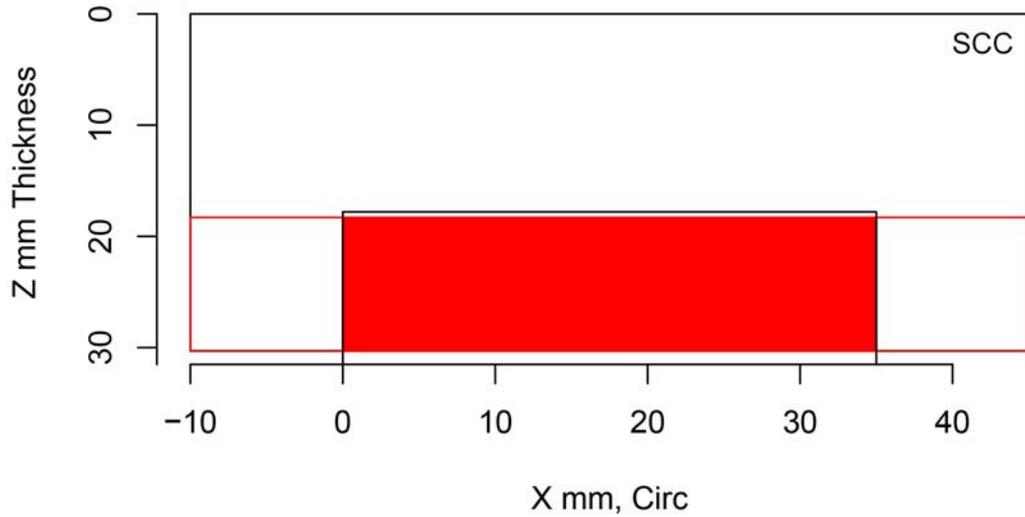


Figure H.182 Indication Plot for Procedure SAFT.17 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

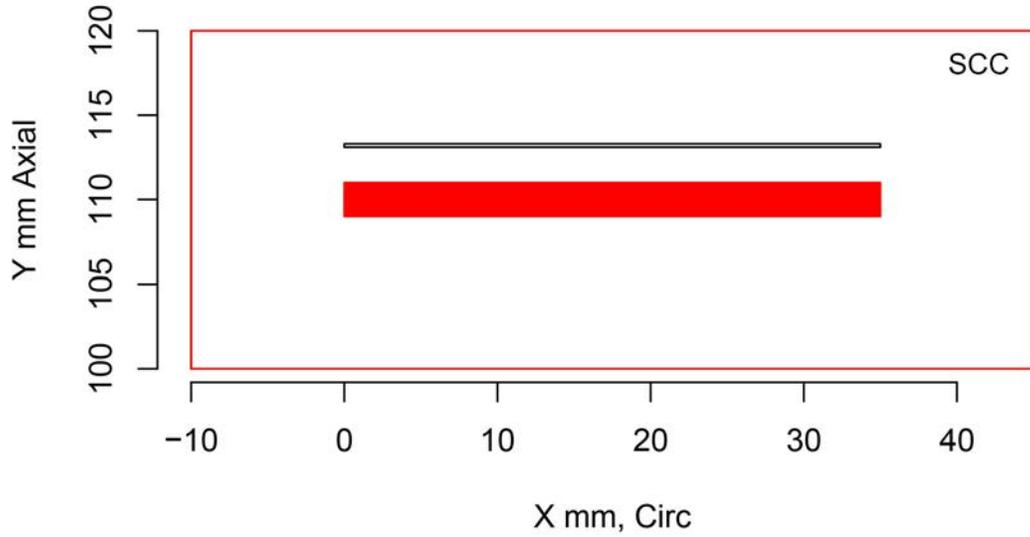


Figure H.183 Indication Plot for Procedure SAFT.17 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

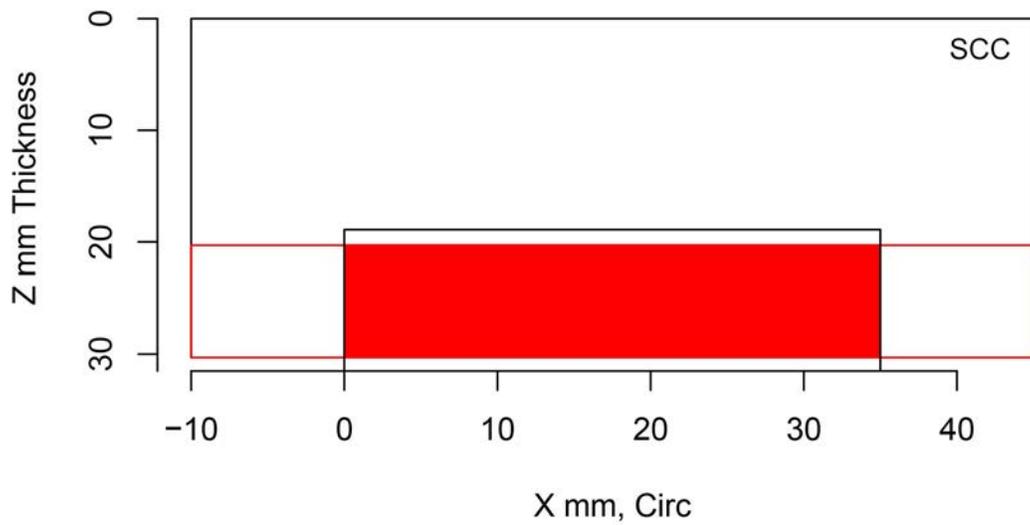


Figure H.184 Indication Plot for Procedure SAFT.17 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

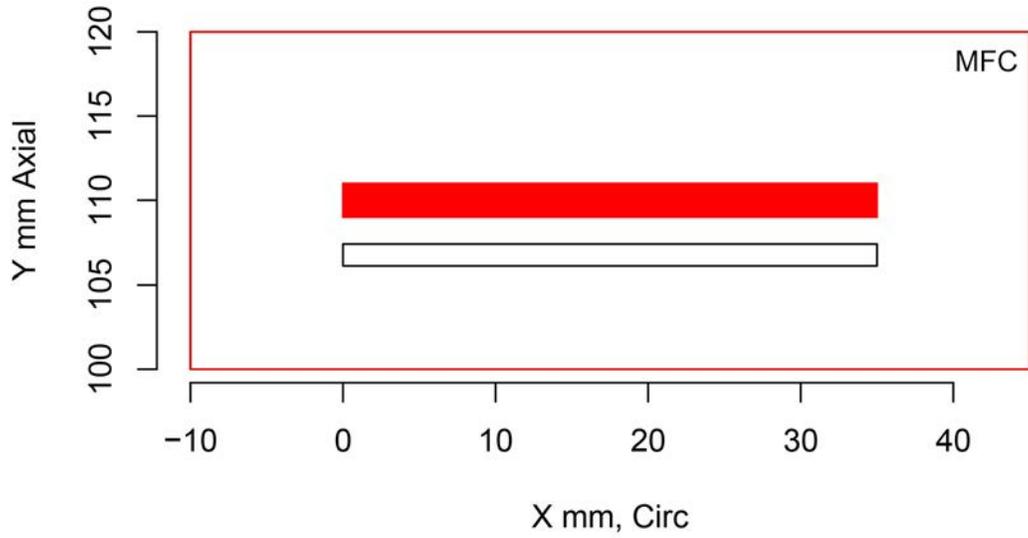


Figure H.185 Indication Plot for Procedure SAFT.17 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

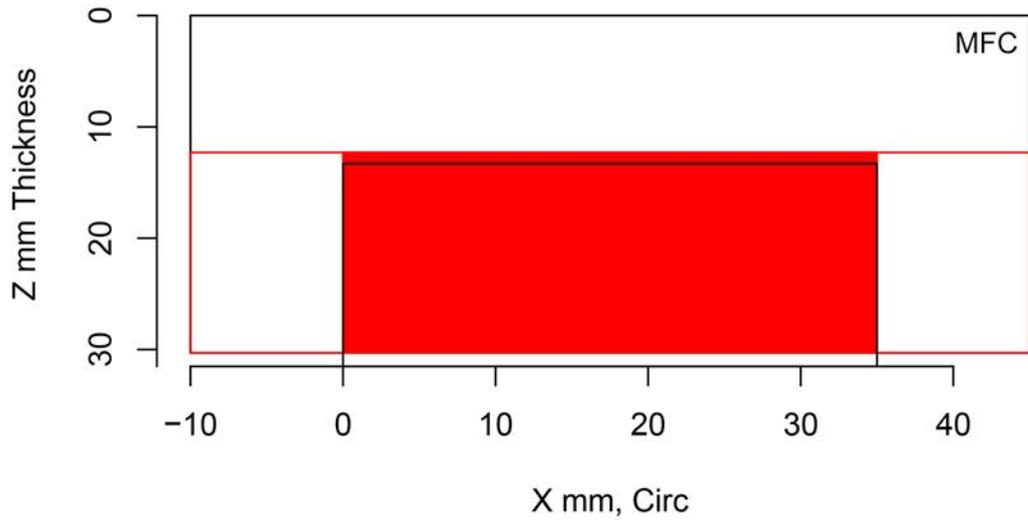


Figure H.186 Indication Plot for Procedure SAFT.17 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

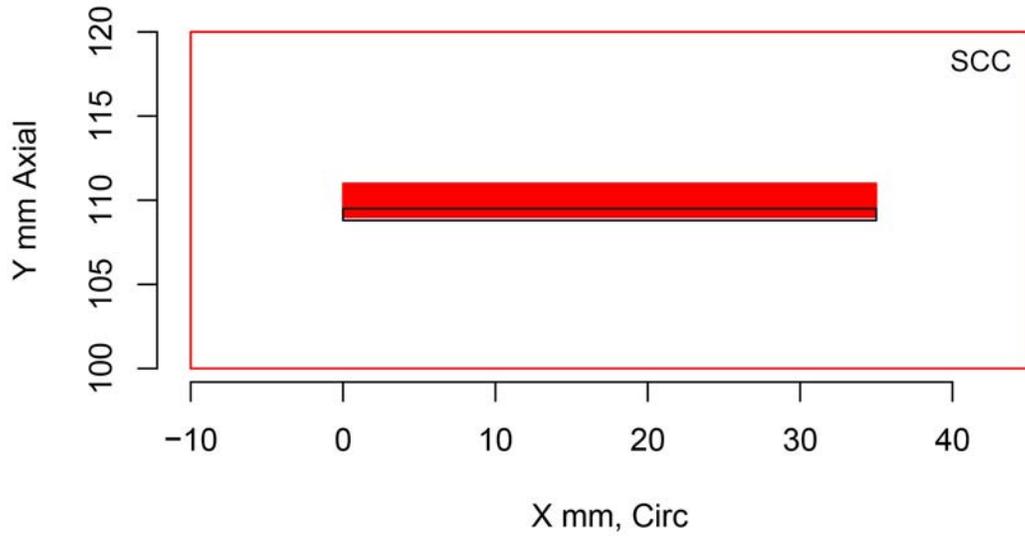


Figure H.187 Indication Plot for Procedure SAFT.17 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

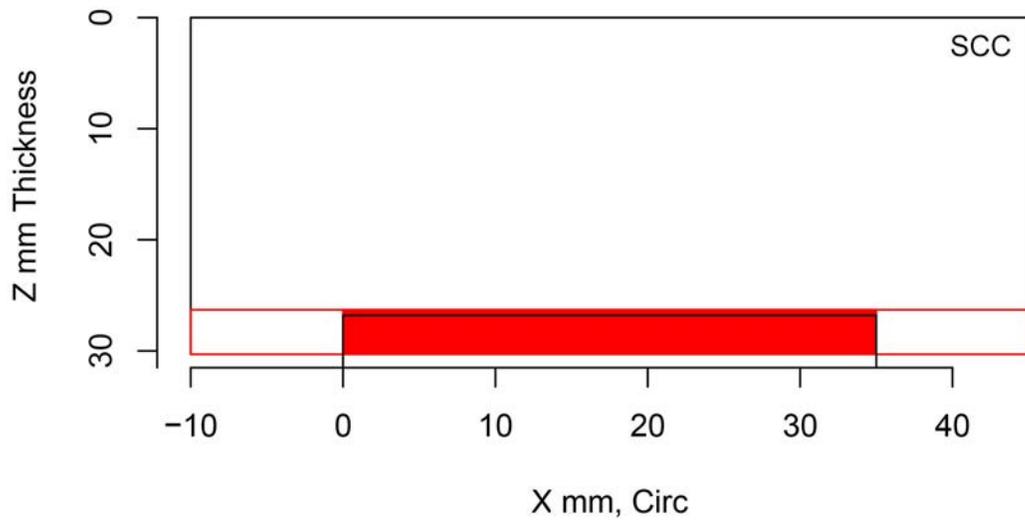


Figure H.188 Indication Plot for Procedure SAFT.17 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

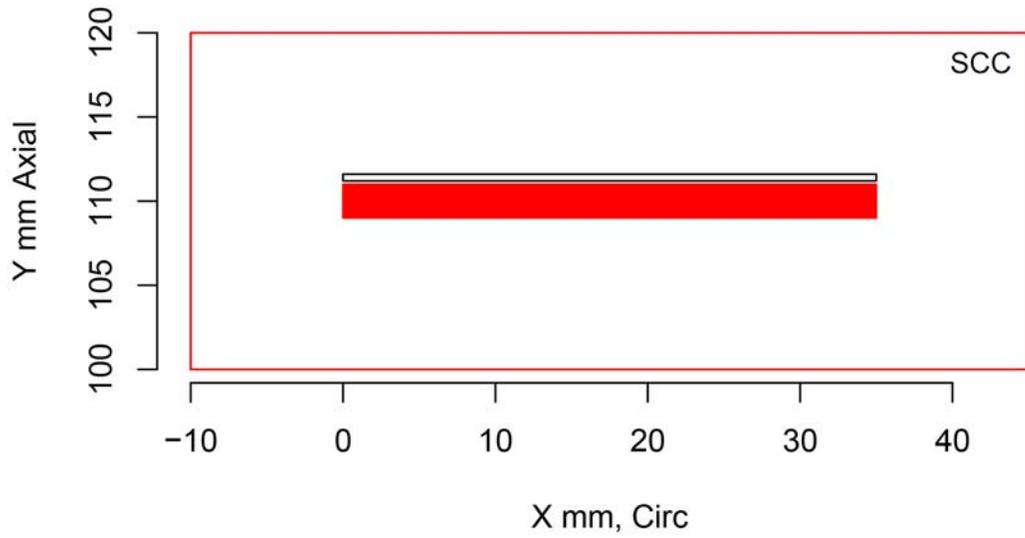


Figure H.189 Indication Plot for Procedure SAFT.17 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

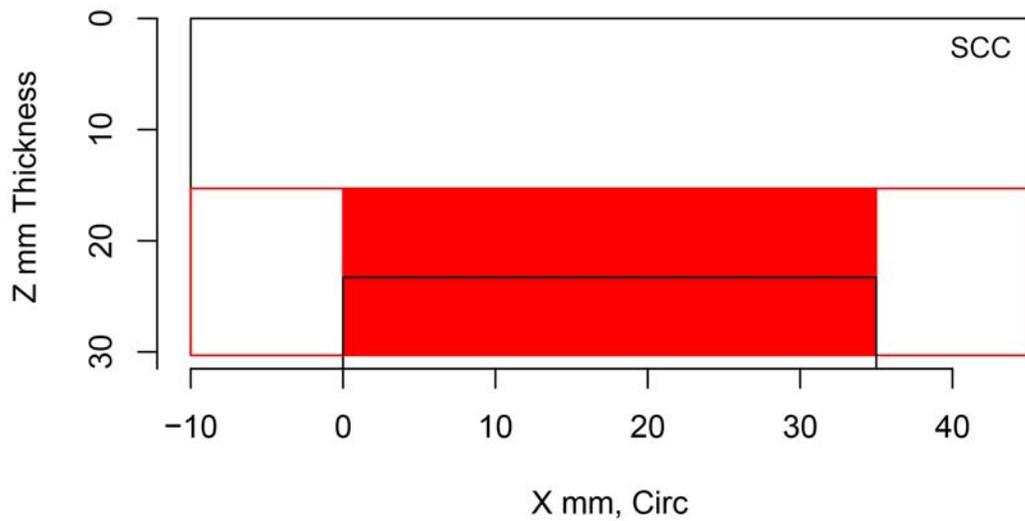


Figure H.190 Indication Plot for Procedure SAFT.17 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

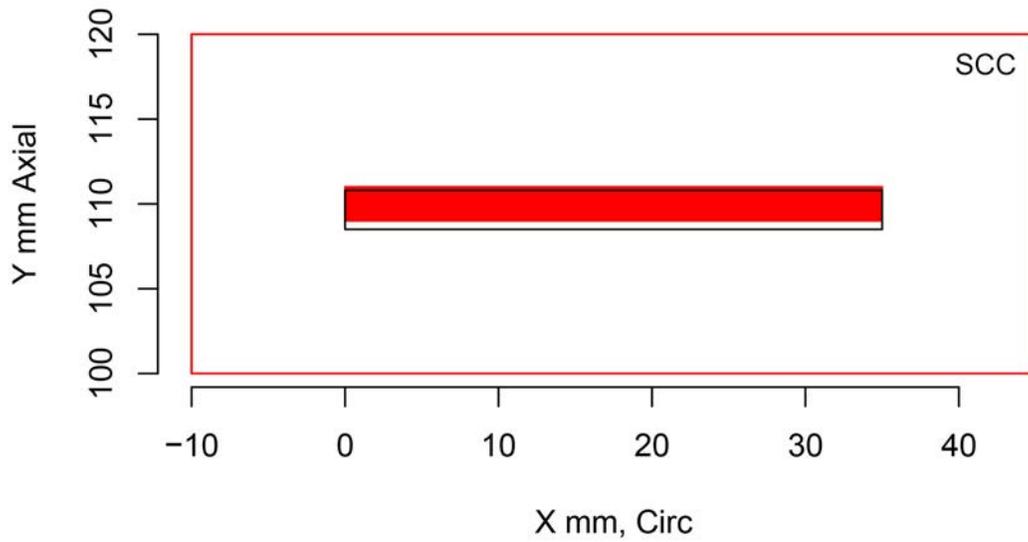


Figure H.191 Indication Plot for Procedure SAFT.17 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

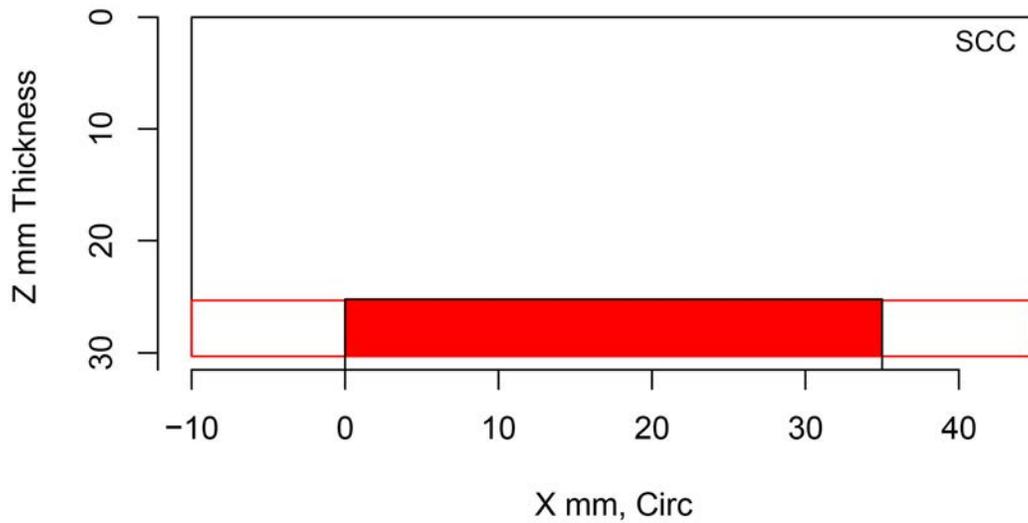


Figure H.192 Indication Plot for Procedure SAFT.17 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

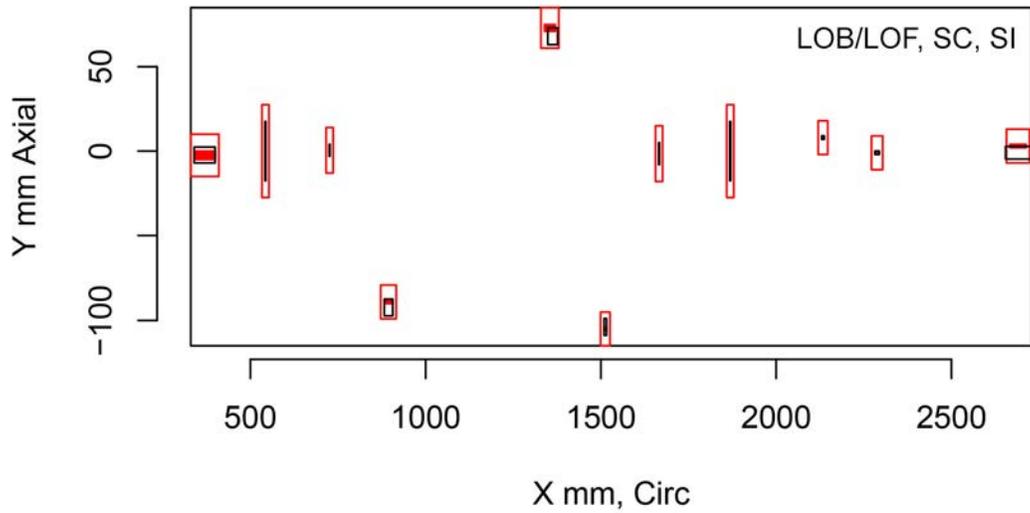


Figure H.193 Indication Plot for Procedure SAFT.17 Applied to Test Block P37 in PARENT Open Testing (X – Y view)

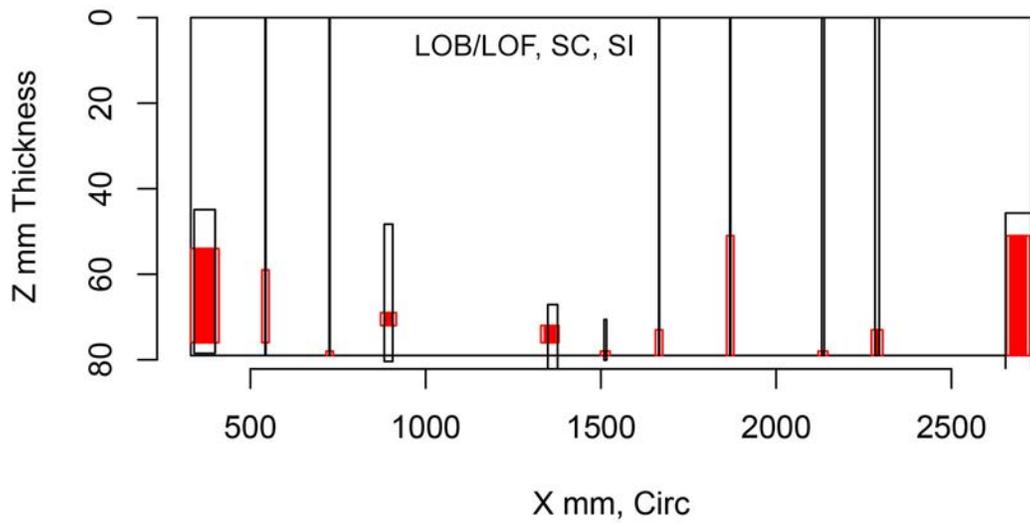


Figure H.194 Indication Plot for Procedure SAFT.17 Applied to Test Block P37 in PARENT Open Testing (X – Z view)

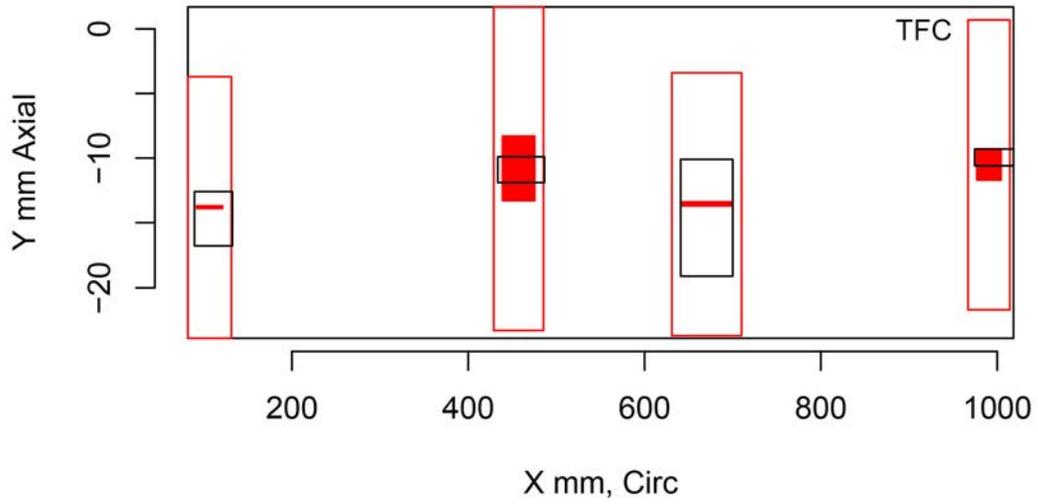


Figure H.195 Indication Plot for Procedure SAFT.17 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

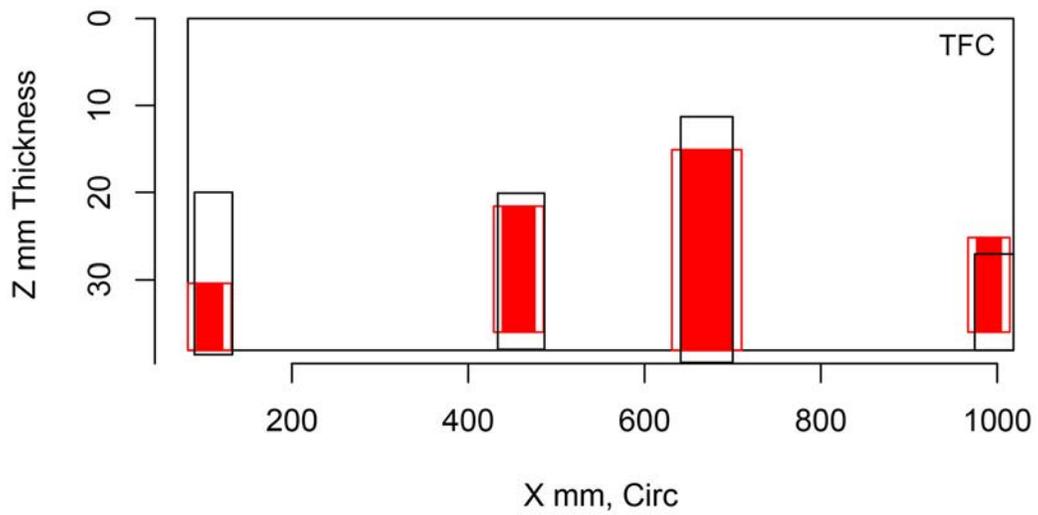


Figure H.196 Indication Plot for Procedure SAFT.17 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

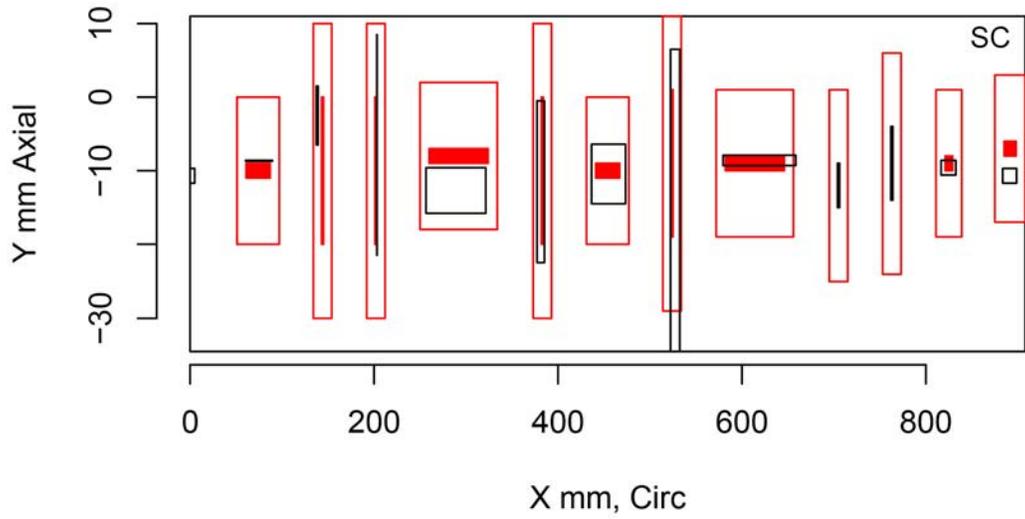


Figure H.197 Indication Plot for Procedure SAFT.17 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

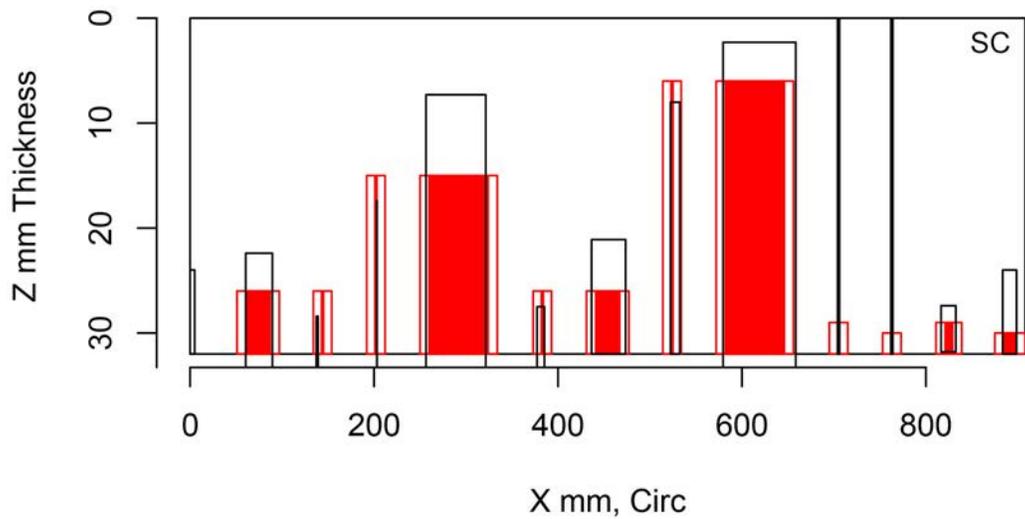


Figure H.198 Indication Plot for Procedure SAFT.17 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

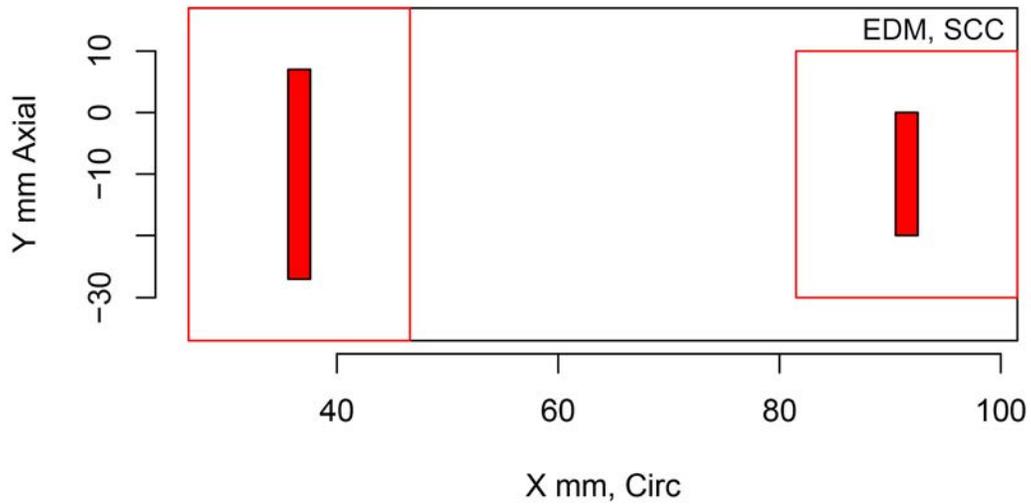


Figure H.199 Indication Plot for Procedure SAFT.17 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

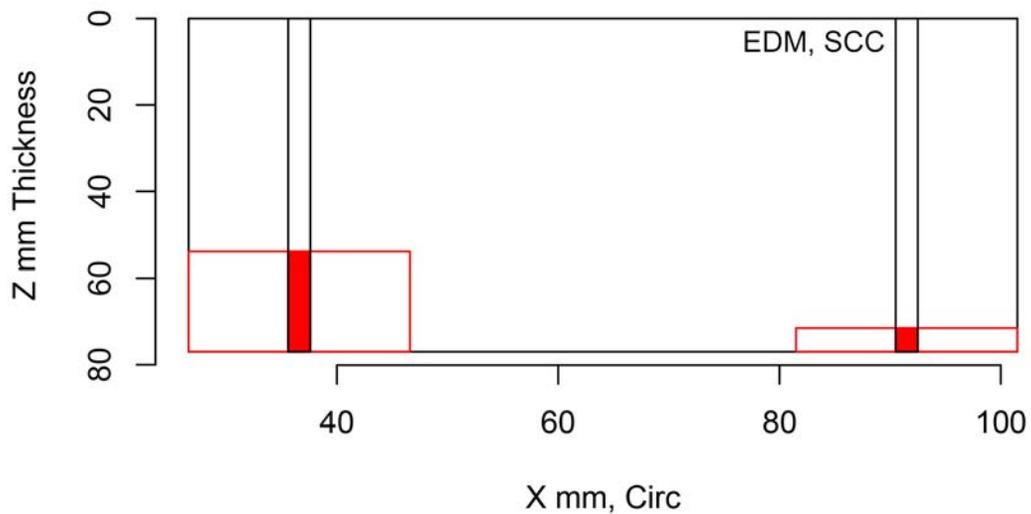


Figure H.200 Indication Plot for Procedure SAFT.17 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

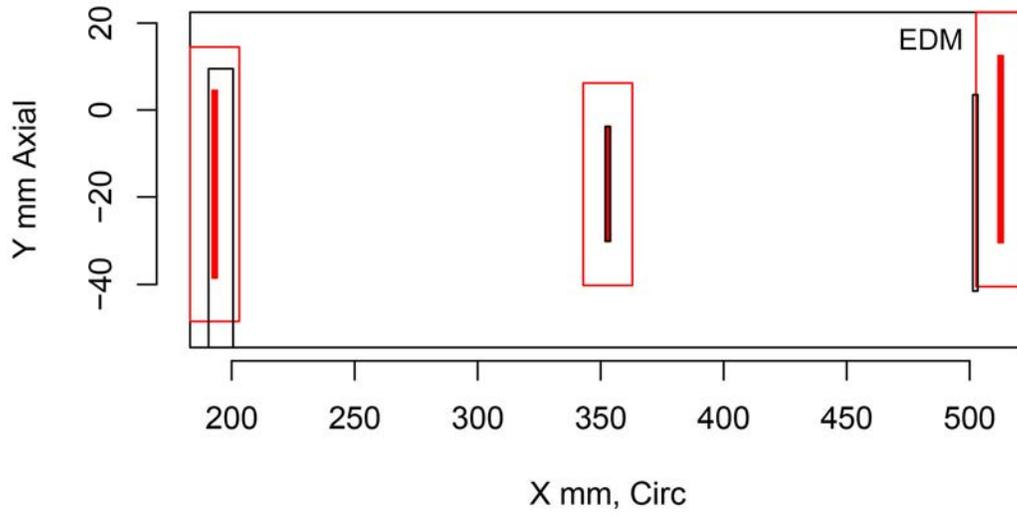


Figure H.201 Indication Plot for Procedure SAFT.17 Applied to Test Block P23 in PARENT Open Testing (X – Y view)

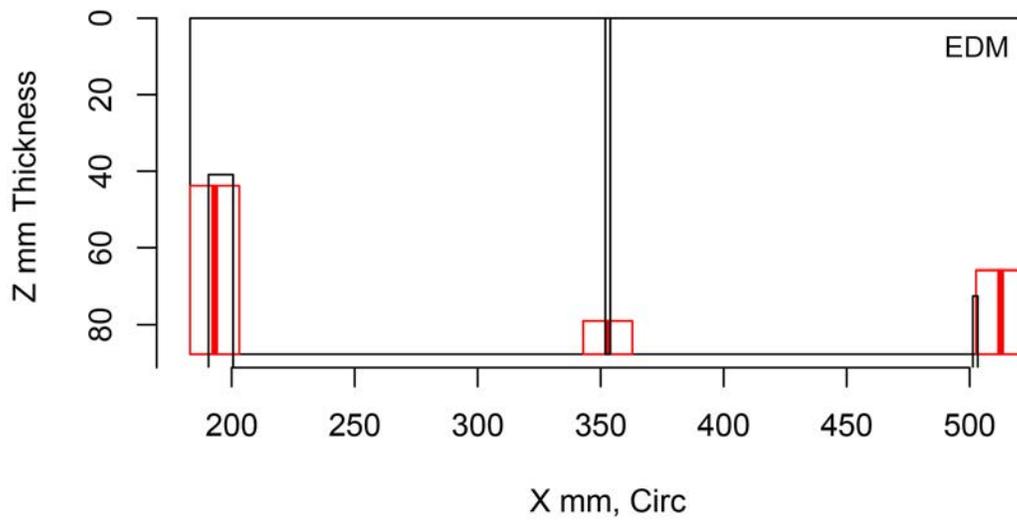


Figure H.202 Indication Plot for Procedure SAFT.17 Applied to Test Block P23 in PARENT Open Testing (X – Z view)

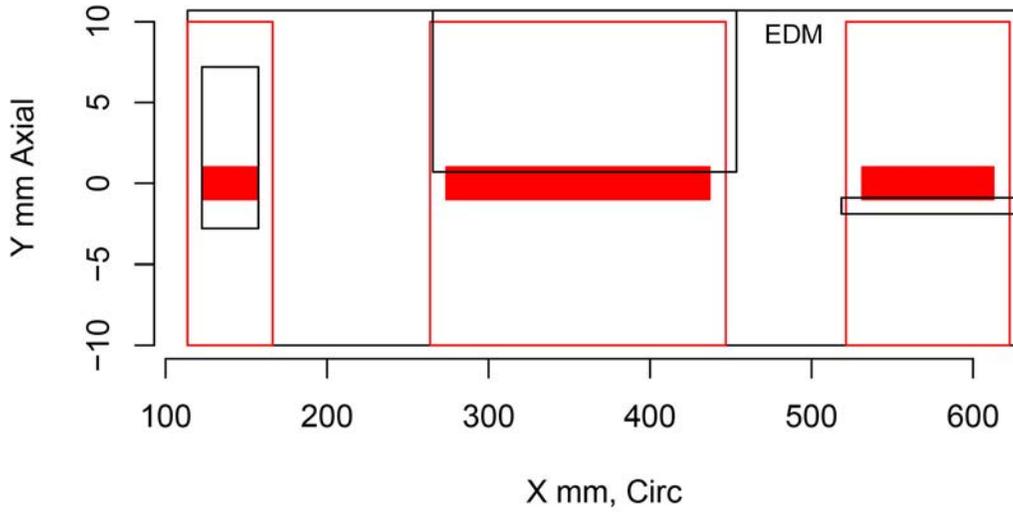


Figure H.203 Indication Plot for Procedure SAFT.17 Applied to Test Block P24 in PARENT Open Testing (X – Y view)

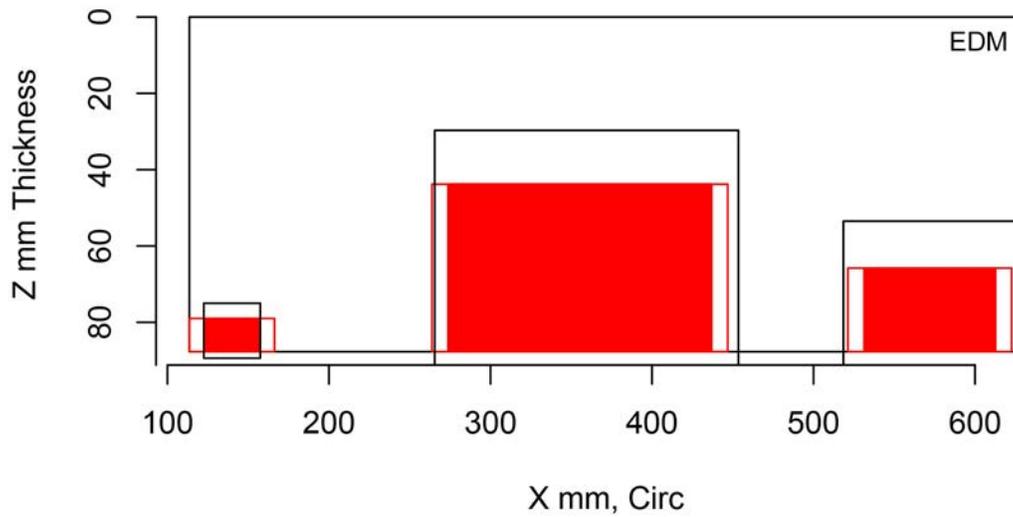


Figure H.204 Indication Plot for Procedure SAFT.17 Applied to Test Block P24 in PARENT Open Testing (X – Z view)

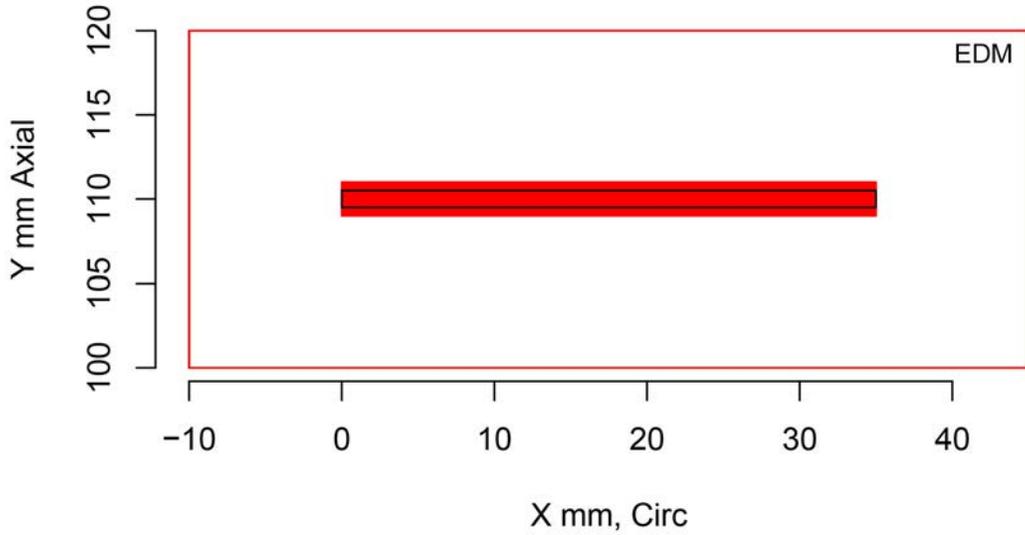


Figure H.205 Indication Plot for Procedure SAFT.17 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

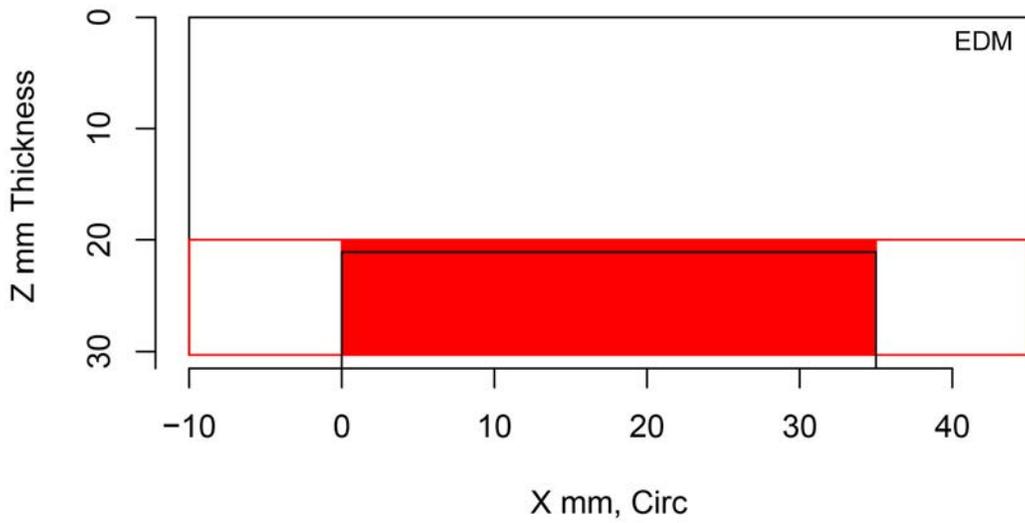


Figure H.206 Indication Plot for Procedure SAFT.17 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

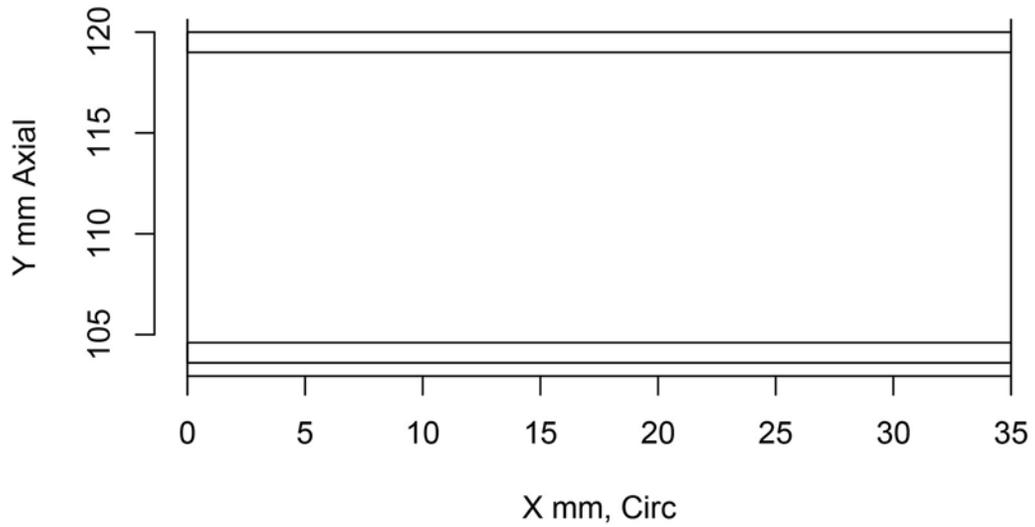


Figure H.207 Indication Plot for Procedure SAFT.17 Applied to Test Block P46 in PARENT Open Testing (X – Y view)

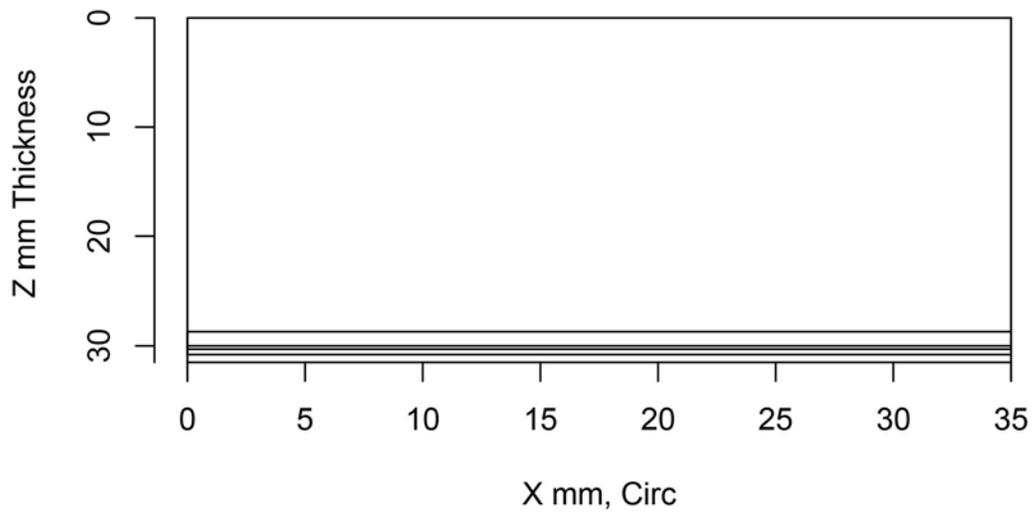


Figure H.208 Indication Plot for Procedure SAFT.17 Applied to Test Block P46 in PARENT Open Testing (X – Z view)

H.2.11 Plots for Team 170

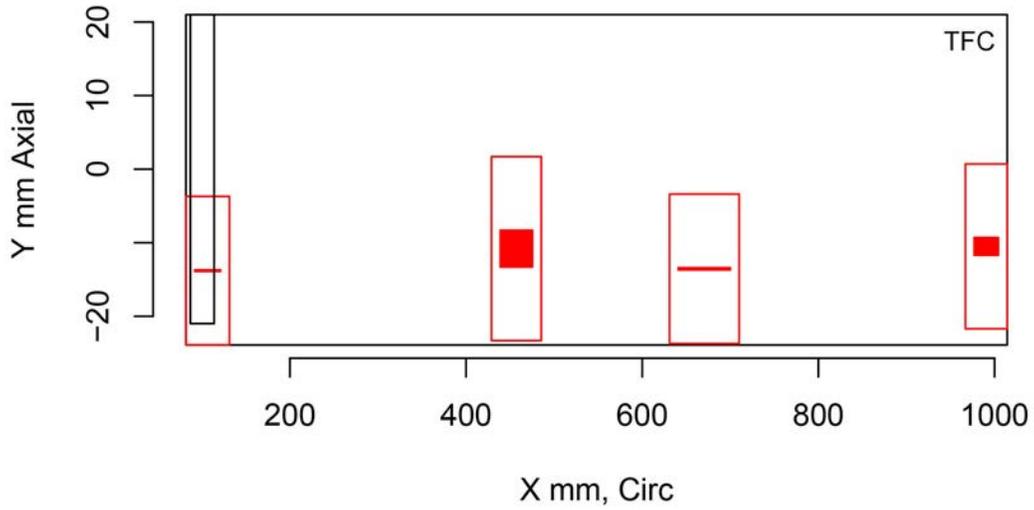


Figure H.209 Indication Plot for Procedure LUV.170 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

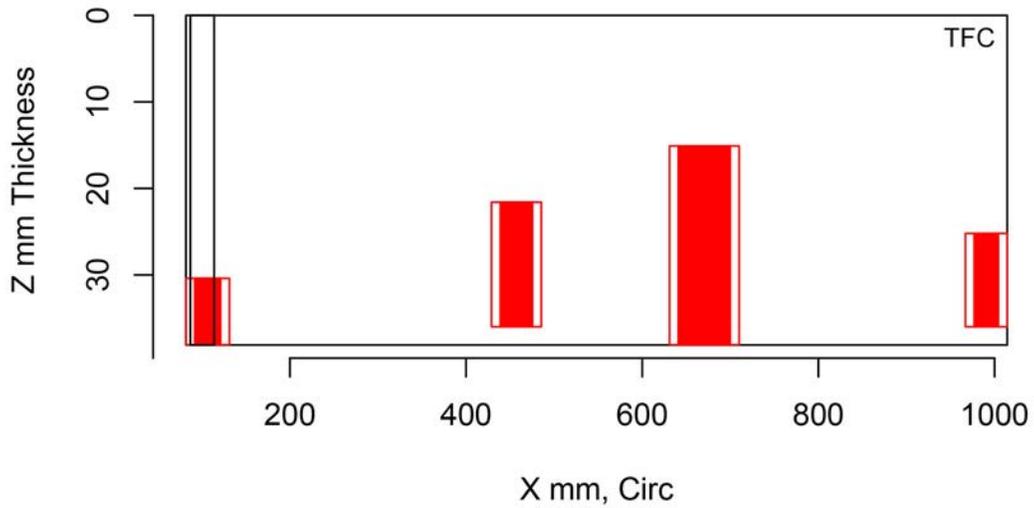


Figure H.210 Indication Plot for Procedure LUV.170 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

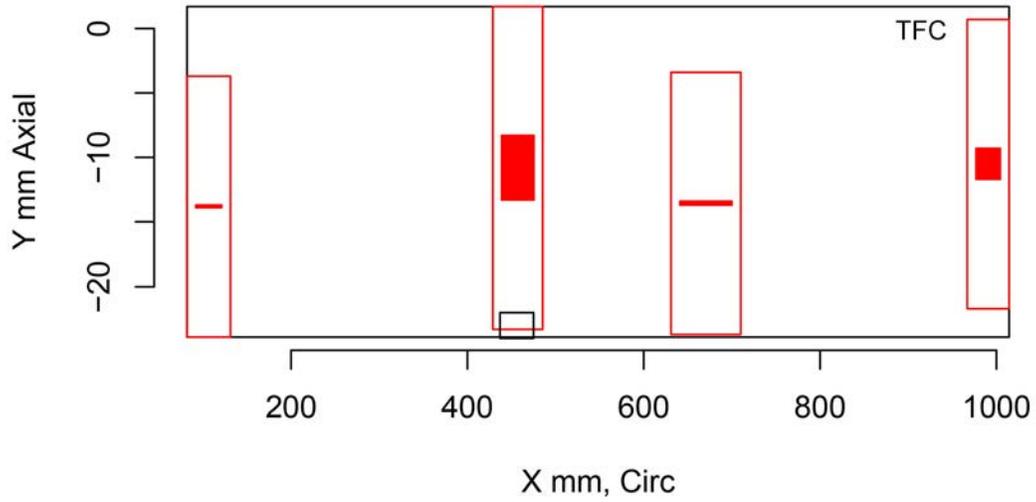


Figure H.211 Indication Plot for Procedure LUV.170 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

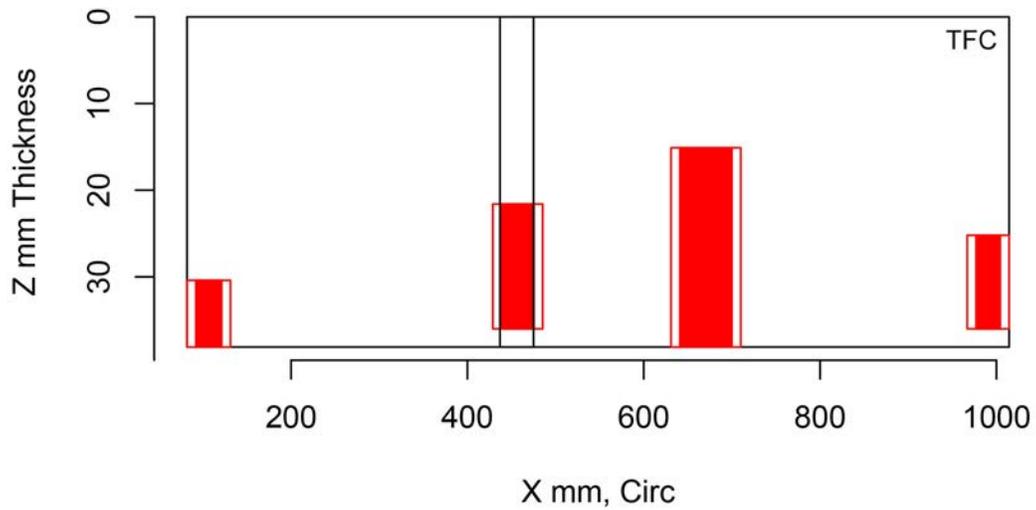


Figure H.212 Indication Plot for Procedure LUV.170 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

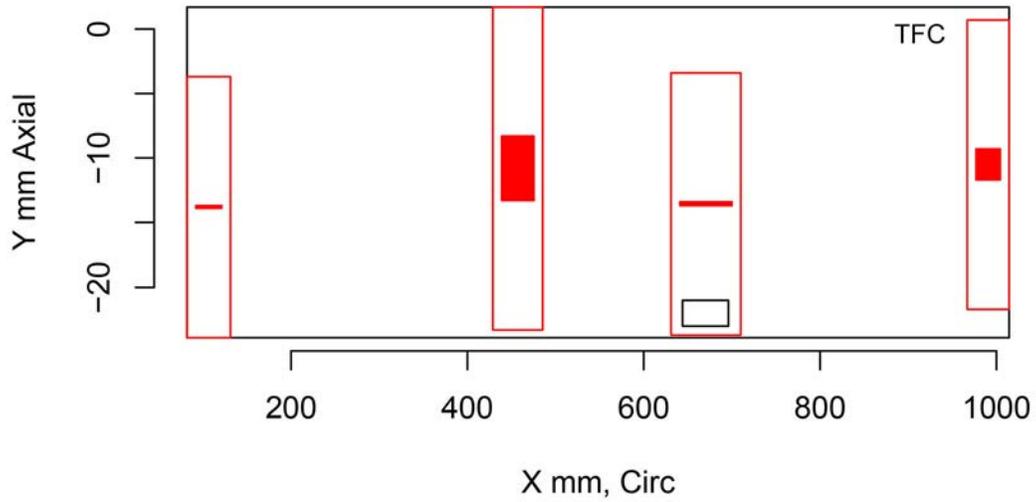


Figure H.213 Indication Plot for Procedure LUV.170 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

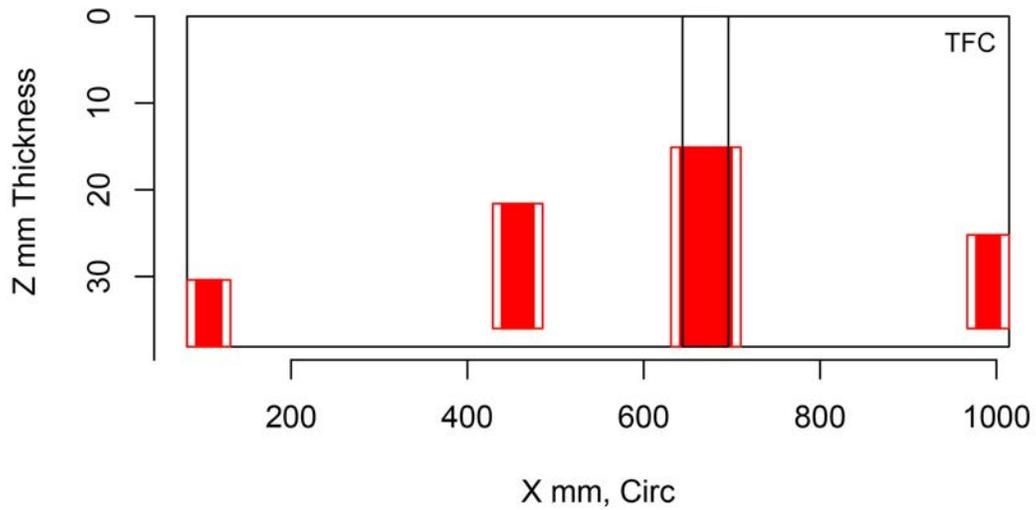


Figure H.214 Indication Plot for Procedure LUV.170 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

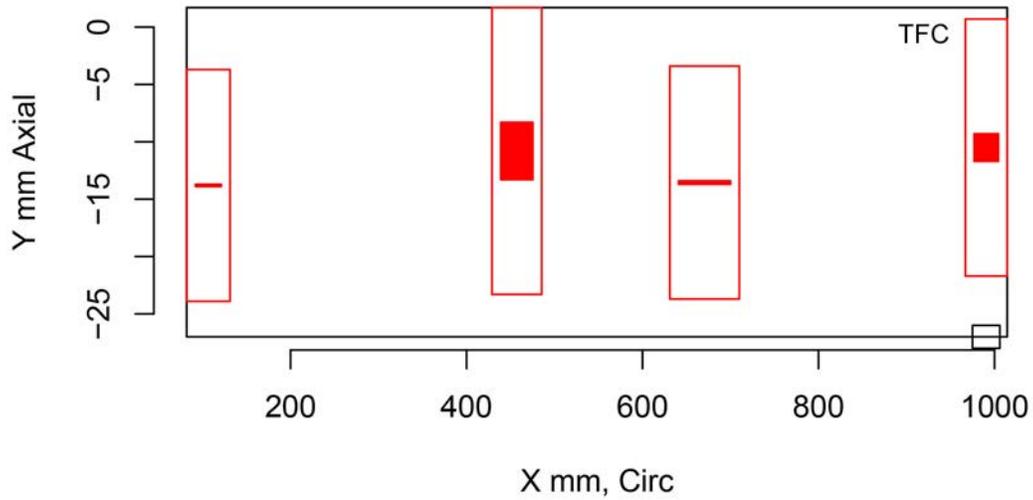


Figure H.215 Indication Plot for Procedure LUV.170 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

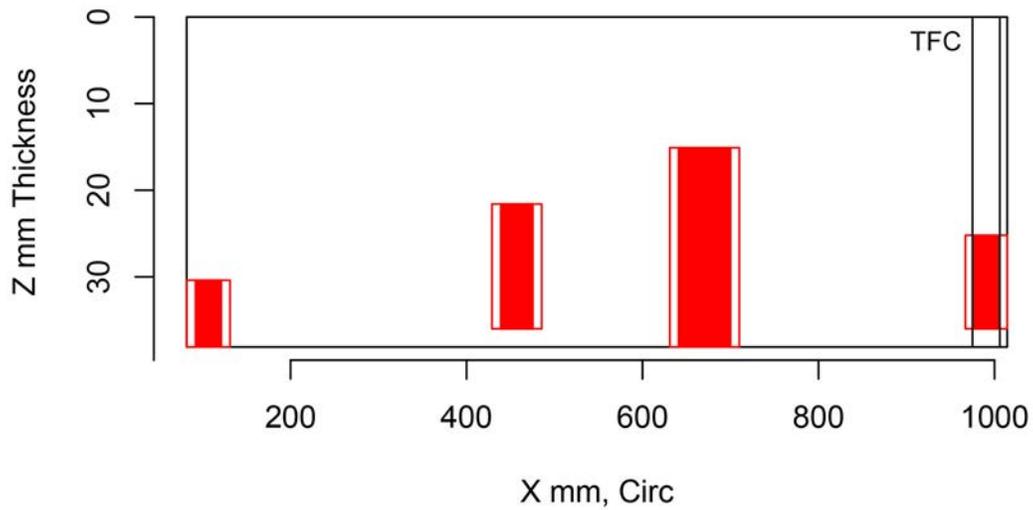


Figure H.216 Indication Plot for Procedure LUV.170 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

H.2.12 Plots for Team 18

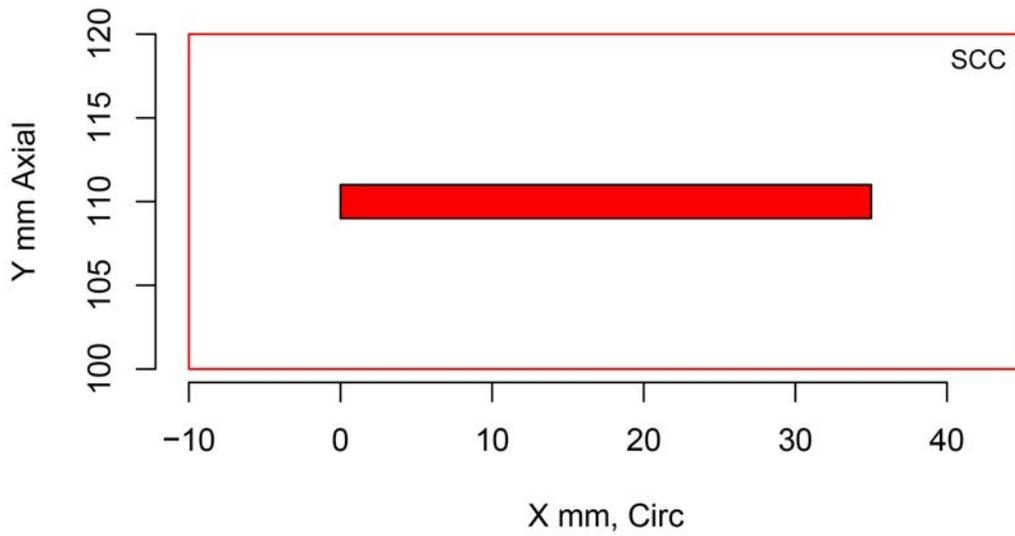


Figure H.217 Indication Plot for Procedure LASH.18 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

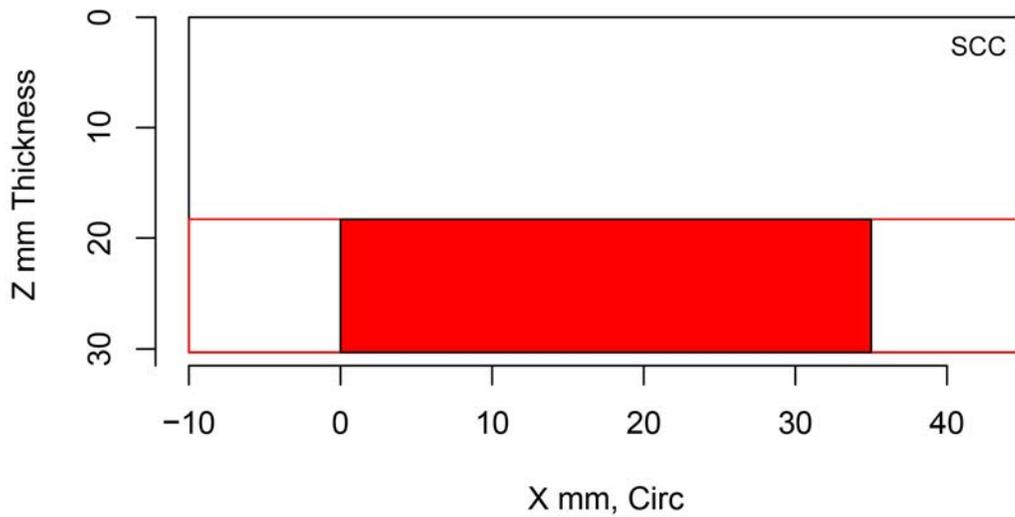


Figure H.218 Indication Plot for Procedure LASH.18 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

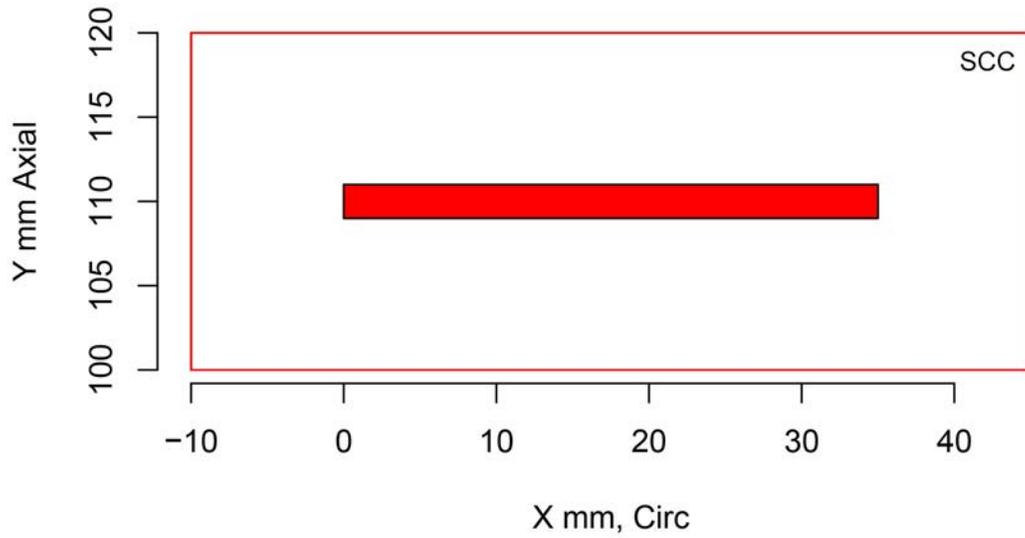


Figure H.219 Indication Plot for Procedure LASH.18 Applied to Test Block P29 in PARENT Open Testing (X - Y view)

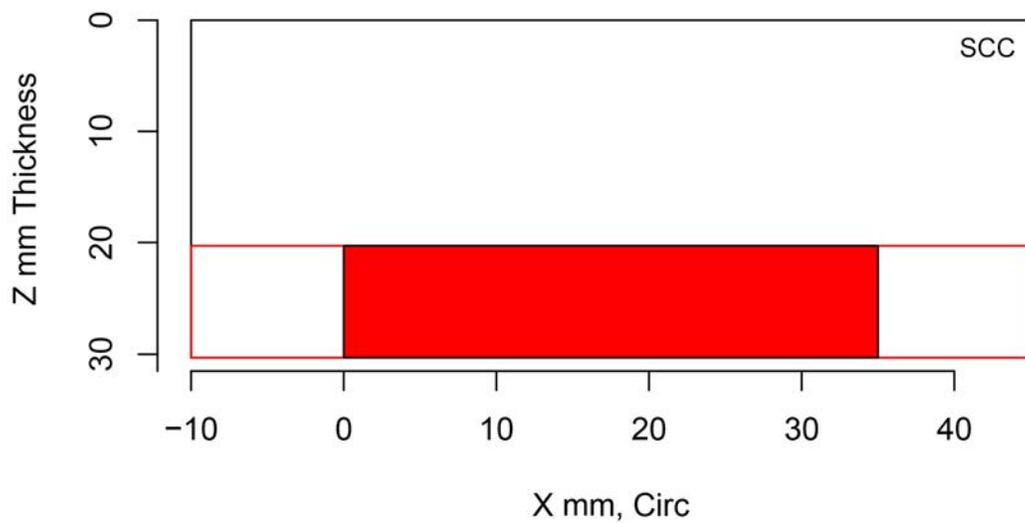


Figure H.220 Indication Plot for Procedure LASH.18 Applied to Test Block P29 in PARENT Open Testing (X - Z view)

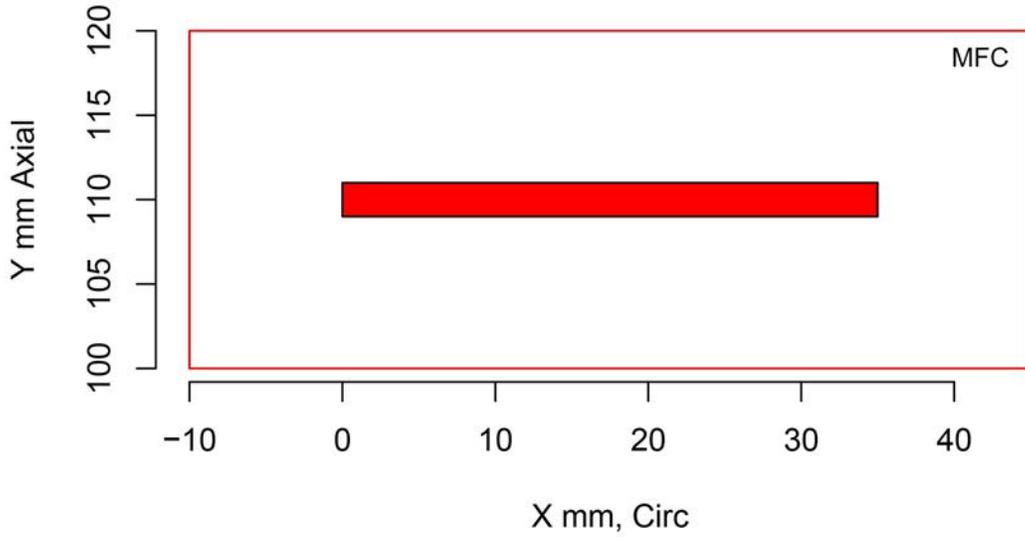


Figure H.221 Indication Plot for Procedure LASH.18 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

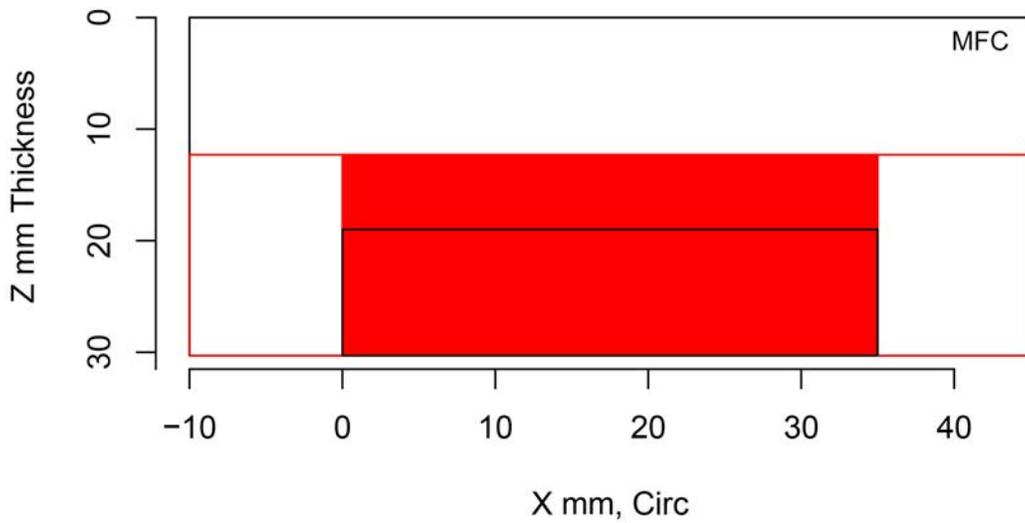


Figure H.222 Indication Plot for Procedure LASH.18 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

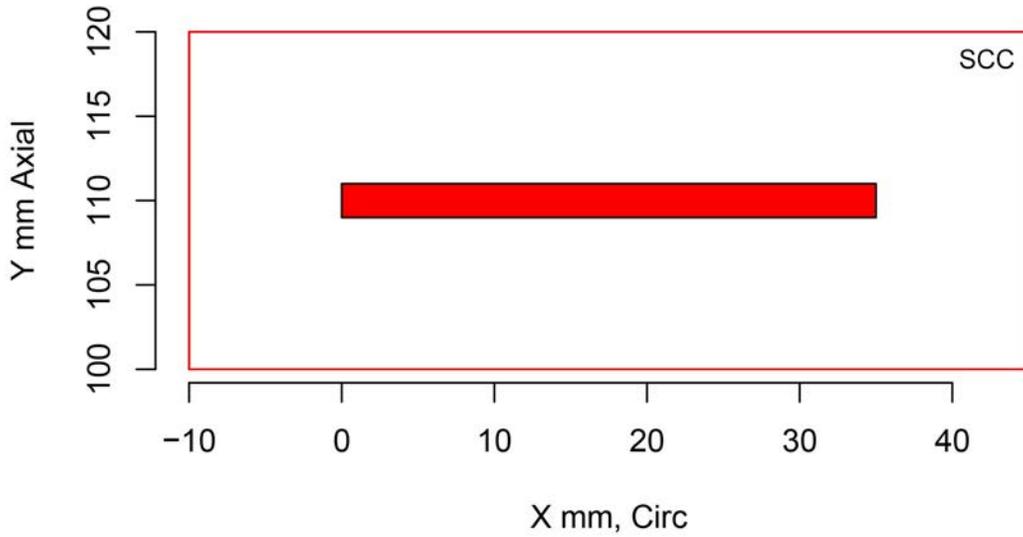


Figure H.223 Indication Plot for Procedure LASH.18 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

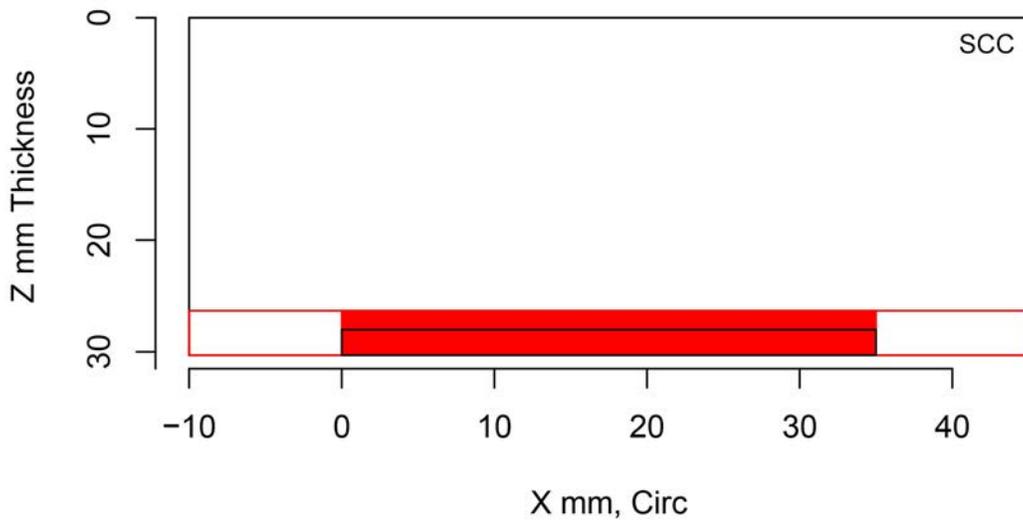


Figure H.224 Indication Plot for Procedure LASH.18 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

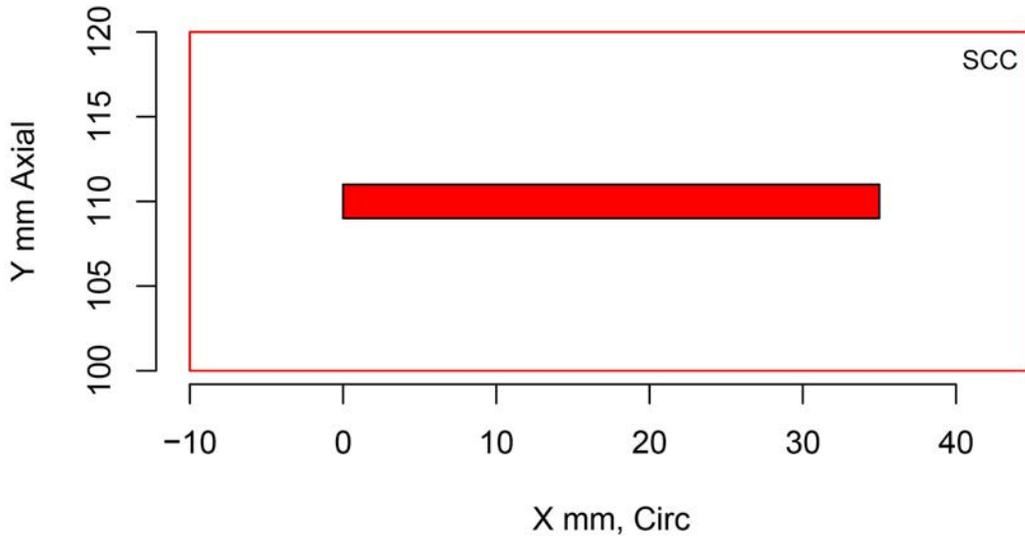


Figure H.225 Indication Plot for Procedure LASH.18 Applied to Test Block P32 in PARENT Open Testing (X - Y view)

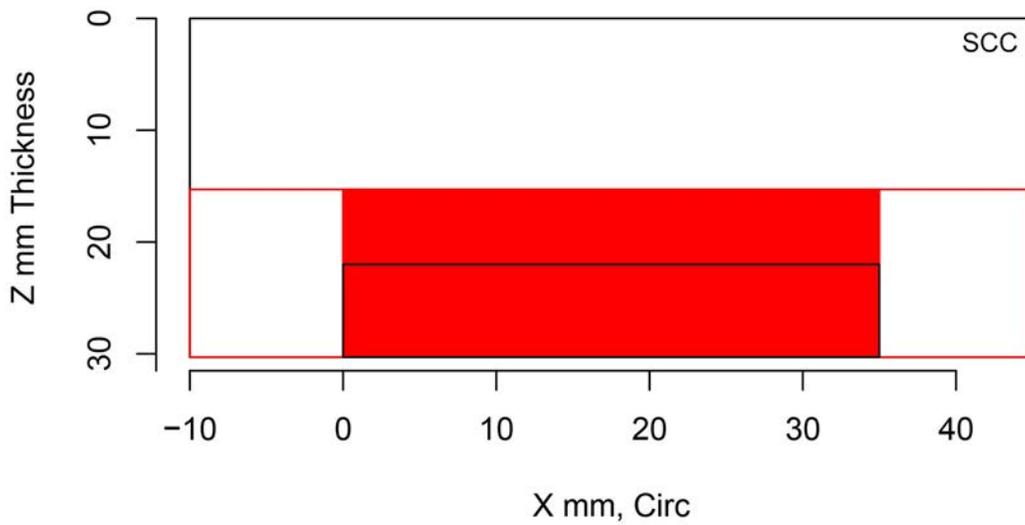


Figure H.226 Indication Plot for Procedure LASH.18 Applied to Test Block P32 in PARENT Open Testing (X - Z view)

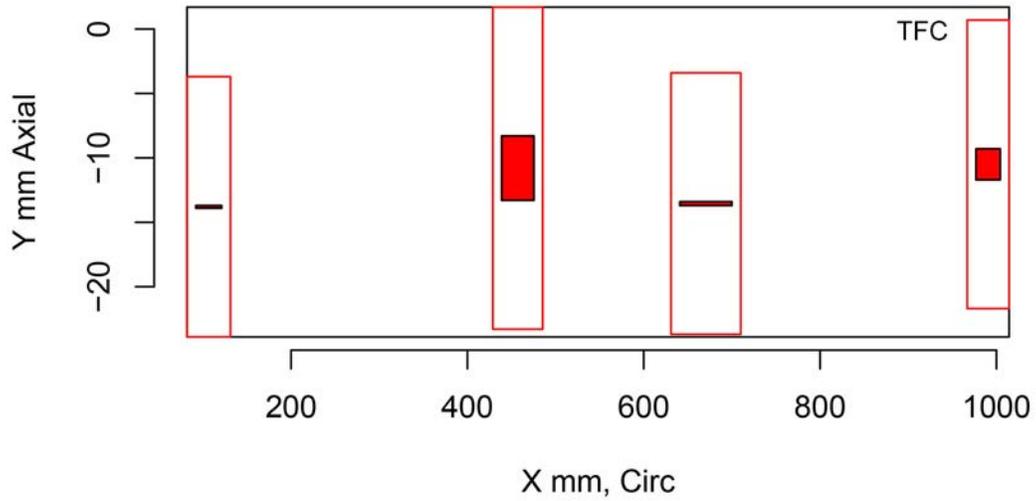


Figure H.227 Indication Plot for Procedure LASH.18 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

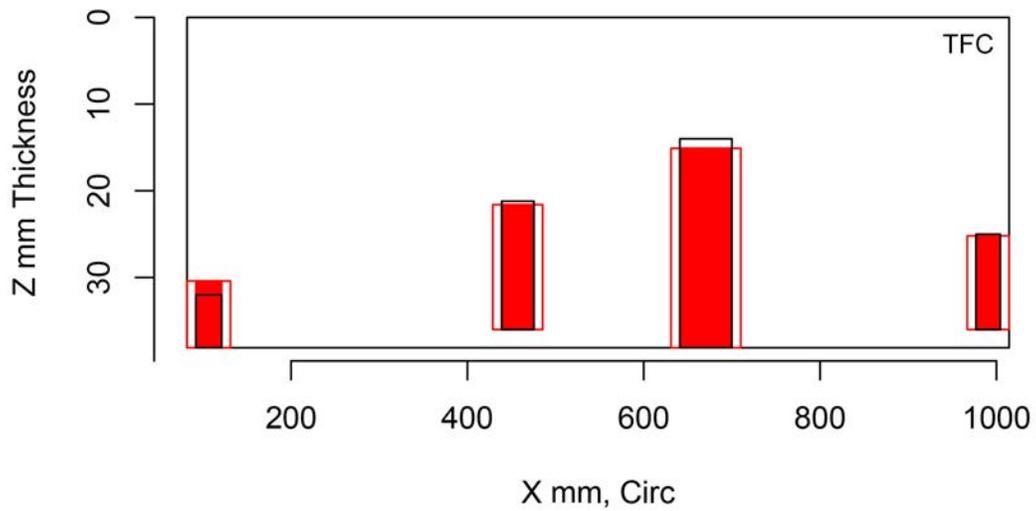


Figure H.228 Indication Plot for Procedure LASH.18 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

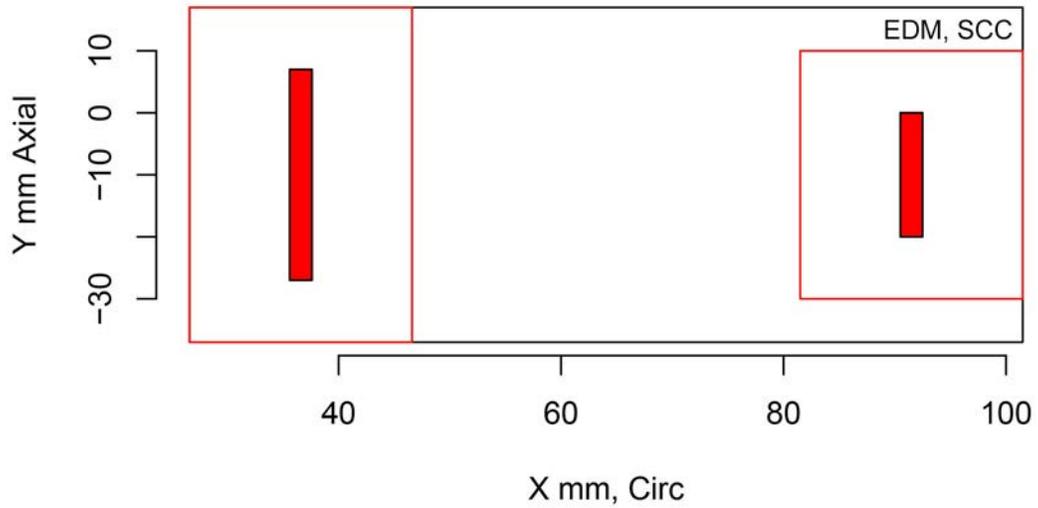


Figure H.229 Indication Plot for Procedure LASH.18 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

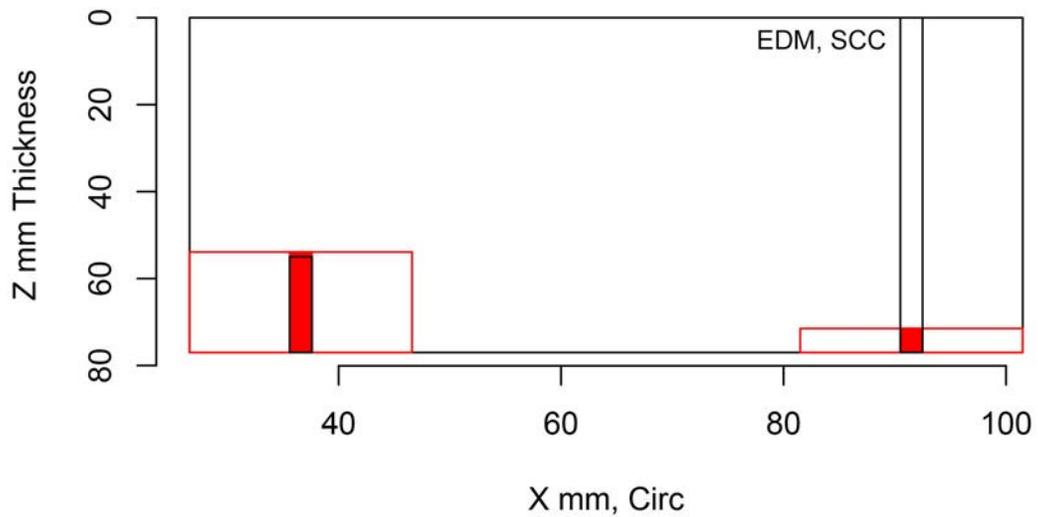


Figure H.230 Indication Plot for Procedure LASH.18 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

H.2.13 Plots for Team 20

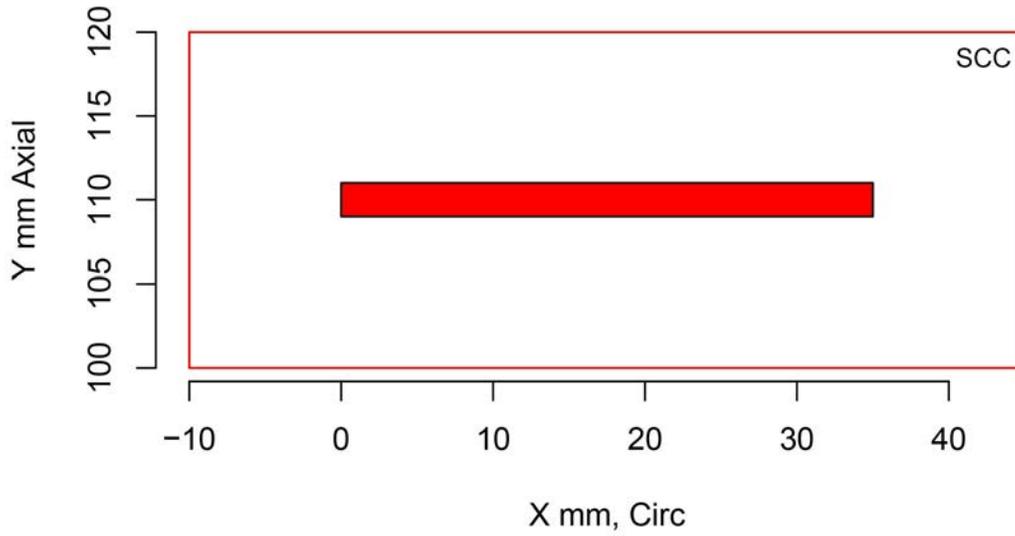


Figure H.231 Indication Plot for Procedure PAUT.20 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

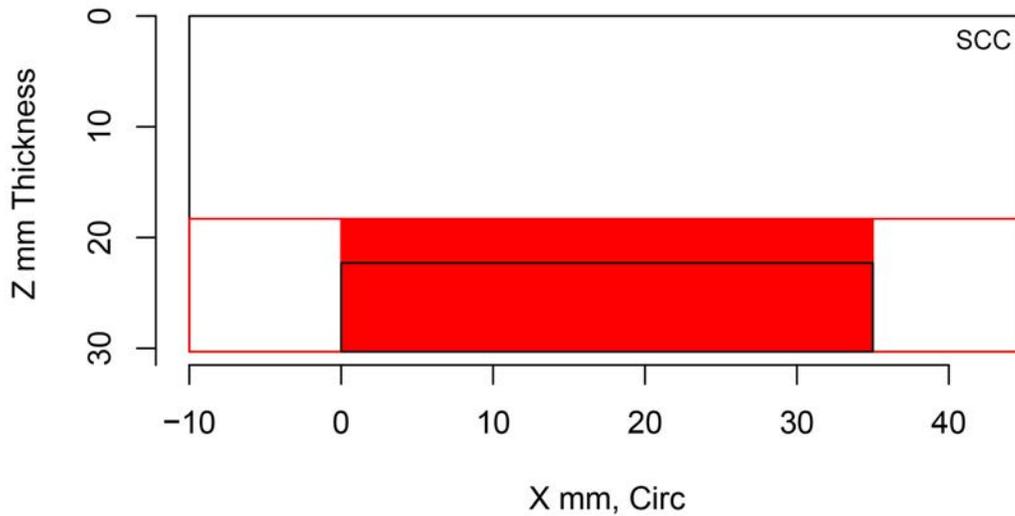


Figure H.232 Indication Plot for Procedure PAUT.20 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

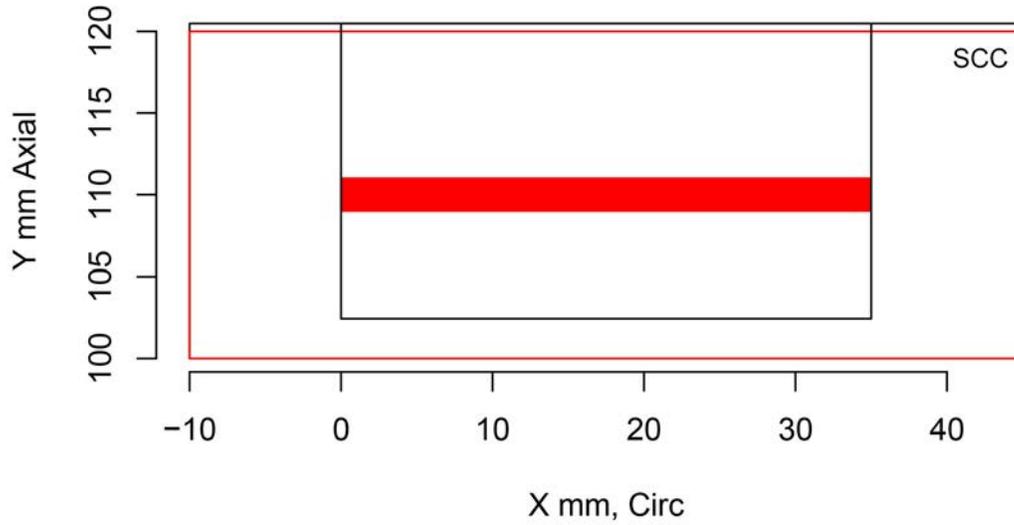


Figure H.233 Indication Plot for Procedure UIR.20 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

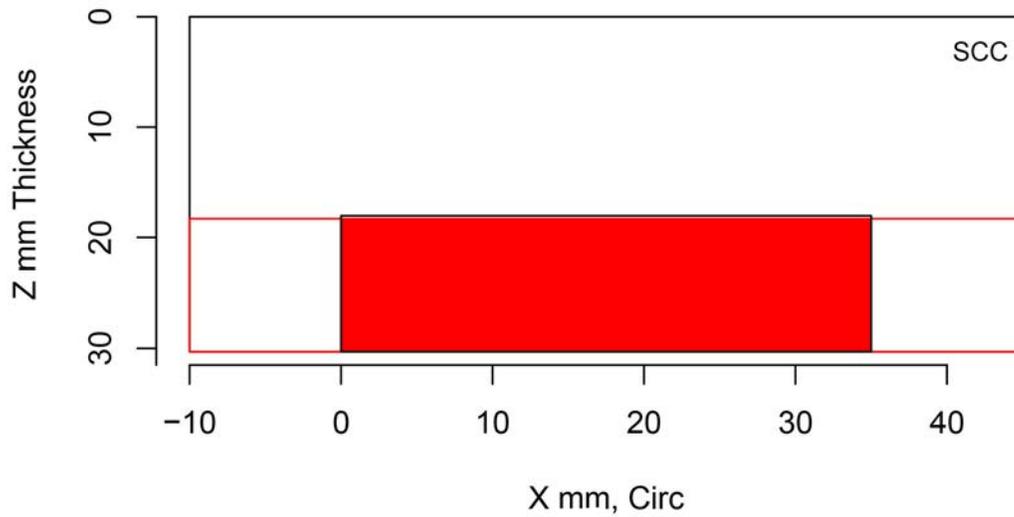


Figure H.234 Indication Plot for Procedure UIR.20 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

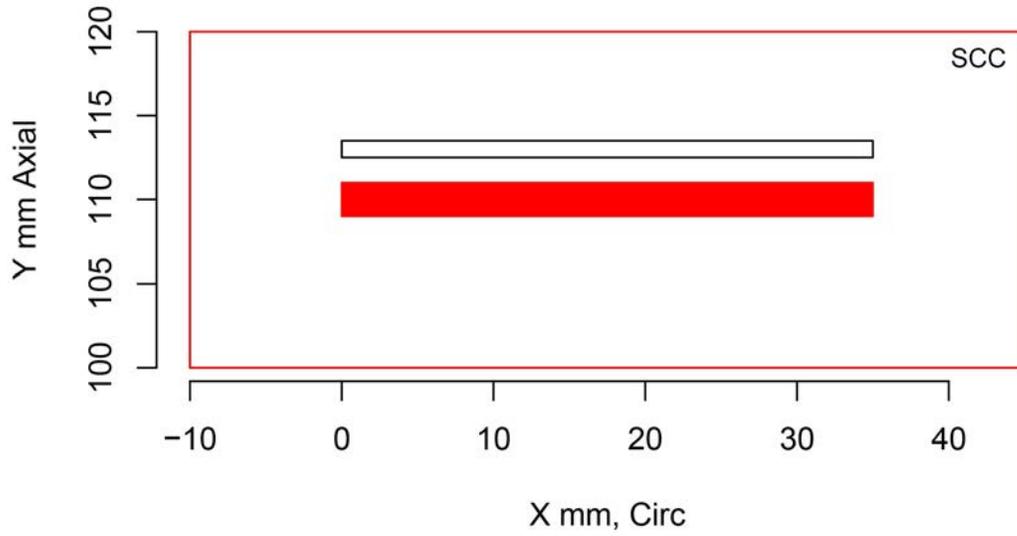


Figure H.235 Indication Plot for Procedure PAUT.20 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

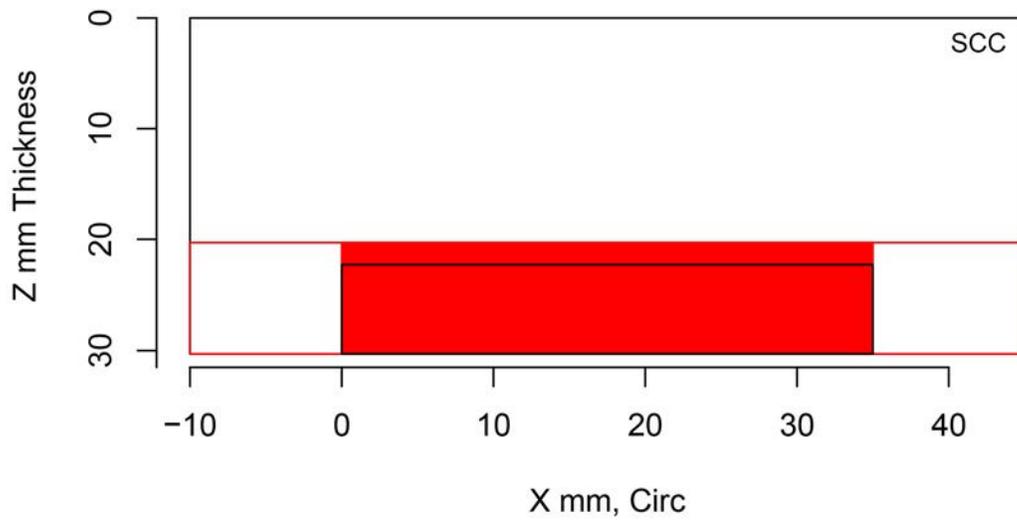


Figure H.236 Indication Plot for Procedure PAUT.20 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

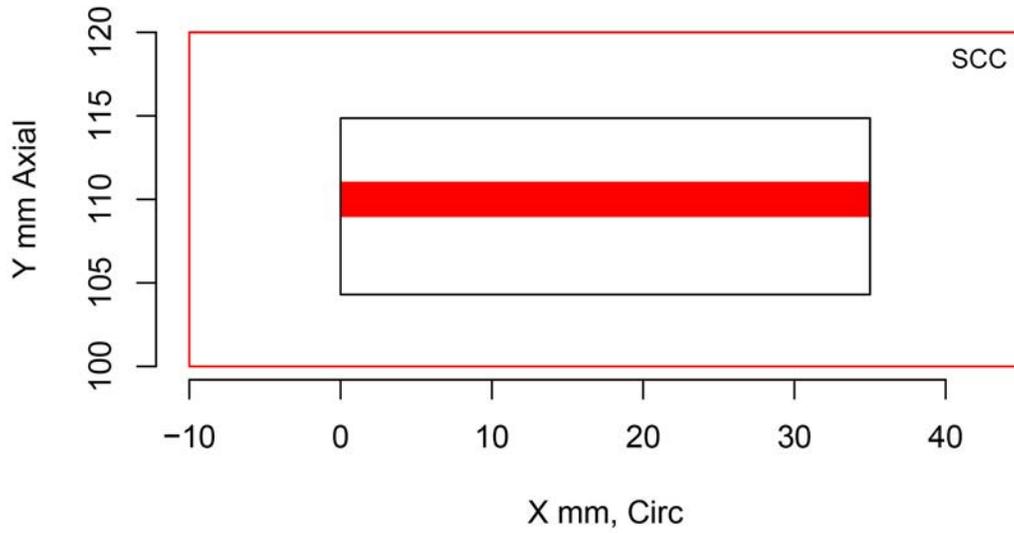


Figure H.237 Indication Plot for Procedure UIR.20 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

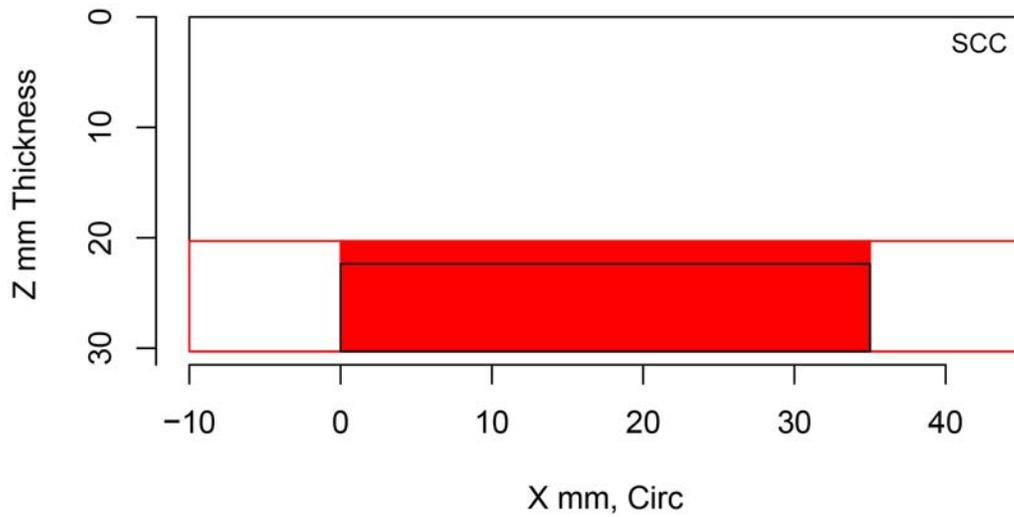


Figure H.238 Indication Plot for Procedure UIR.20 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

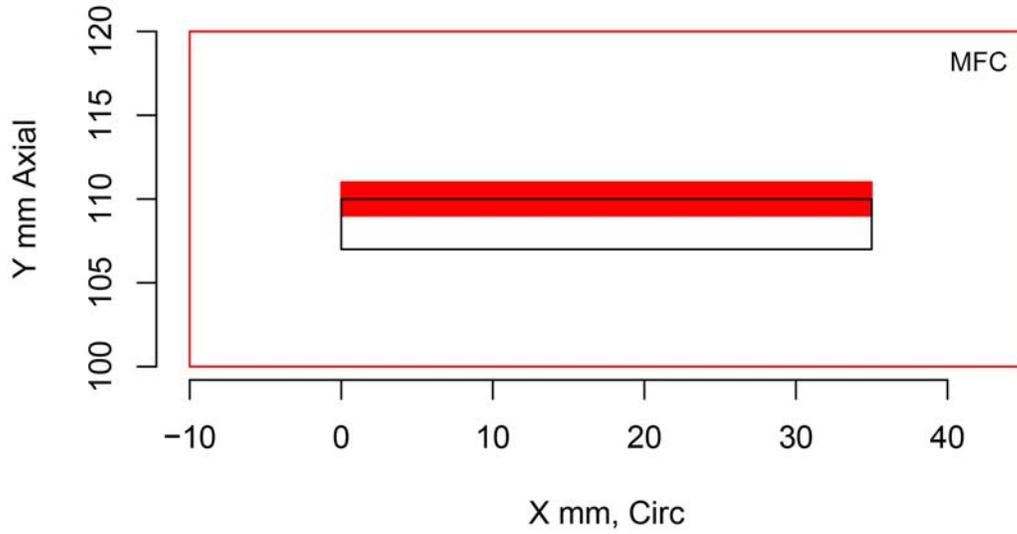


Figure H.239 Indication Plot for Procedure PAUT.20 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

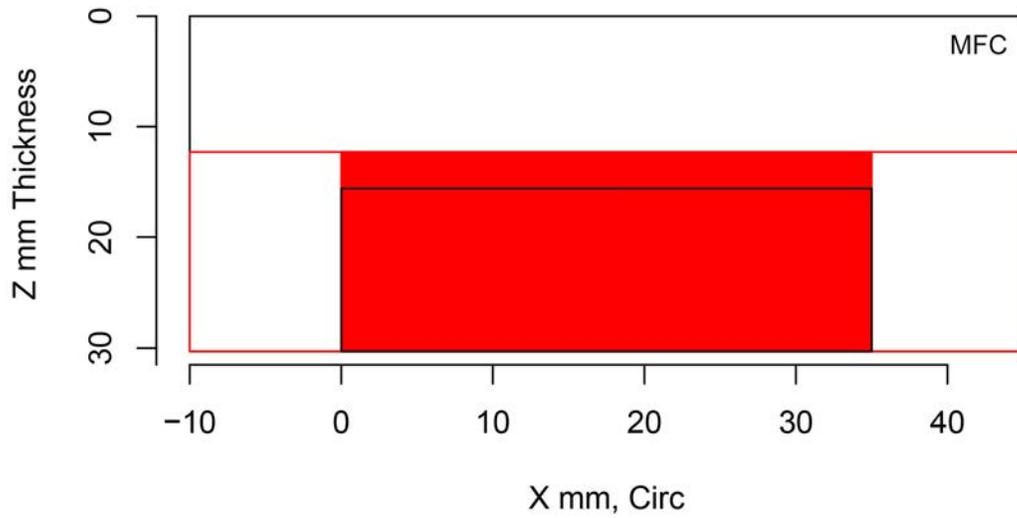


Figure H.240 Indication Plot for Procedure PAUT.20 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

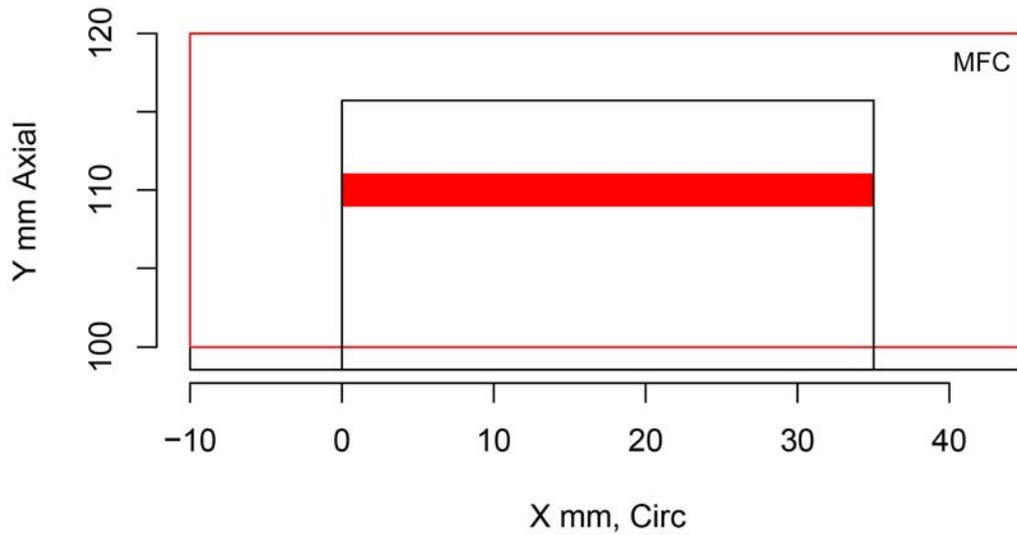


Figure H.241 Indication Plot for Procedure UIR.20 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

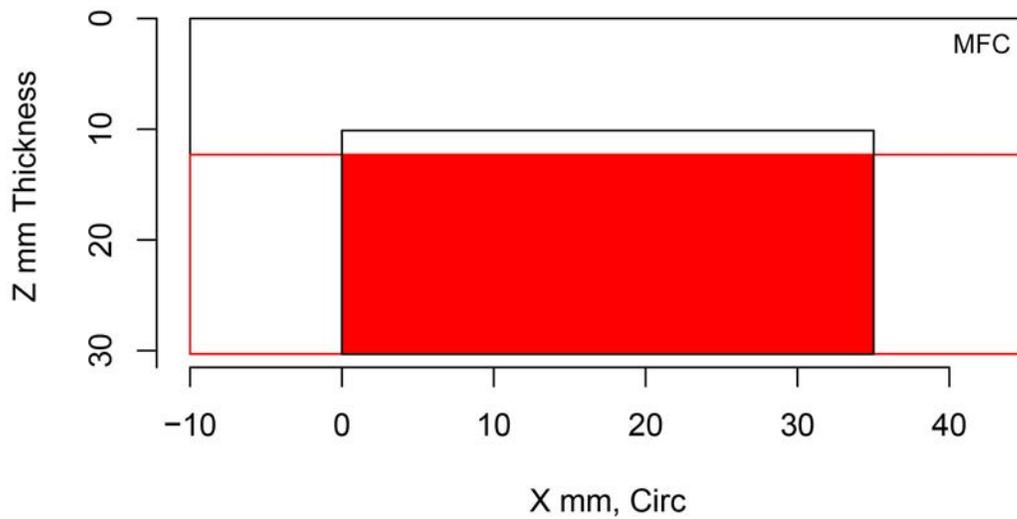


Figure H.242 Indication Plot for Procedure UIR.20 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

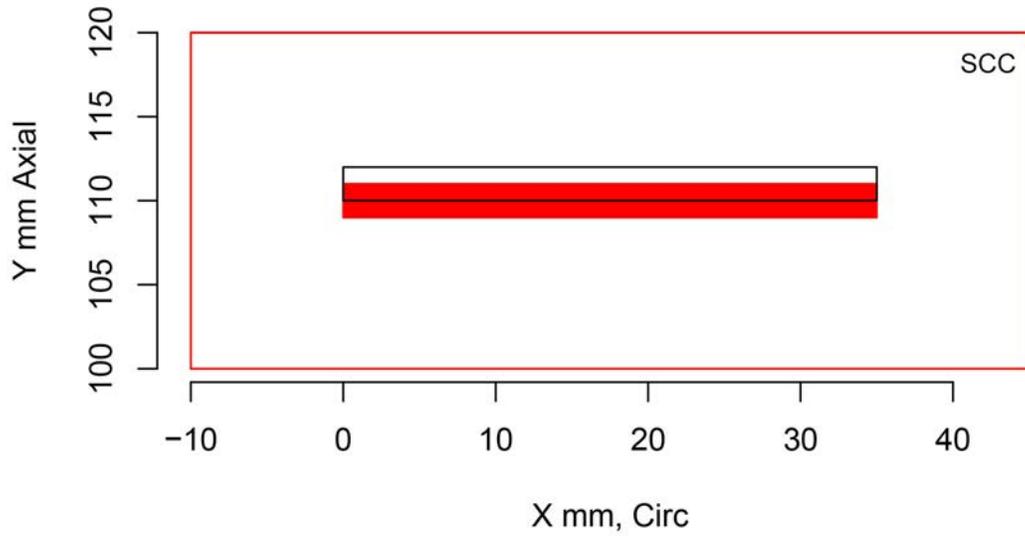


Figure H.243 Indication Plot for Procedure PAUT.20 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

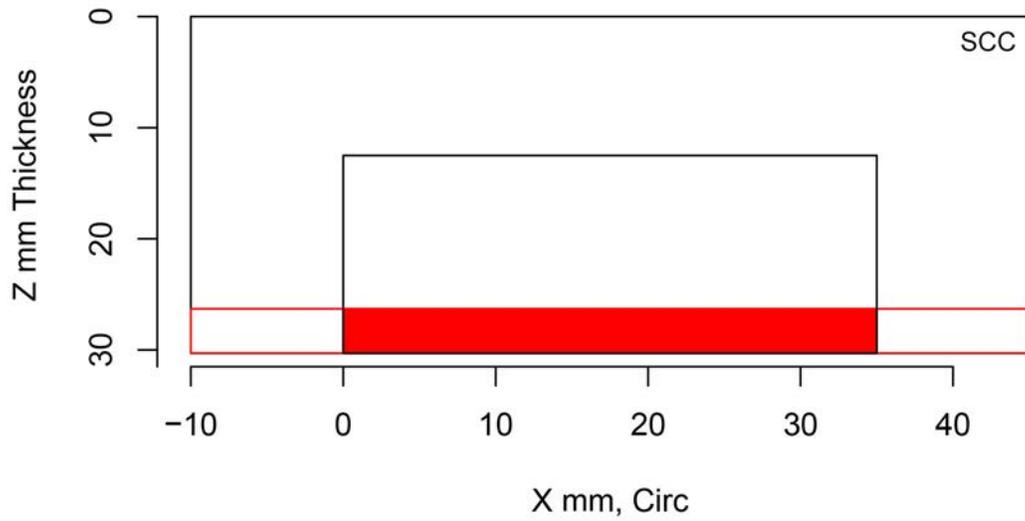


Figure H.244 Indication Plot for Procedure PAUT.20 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

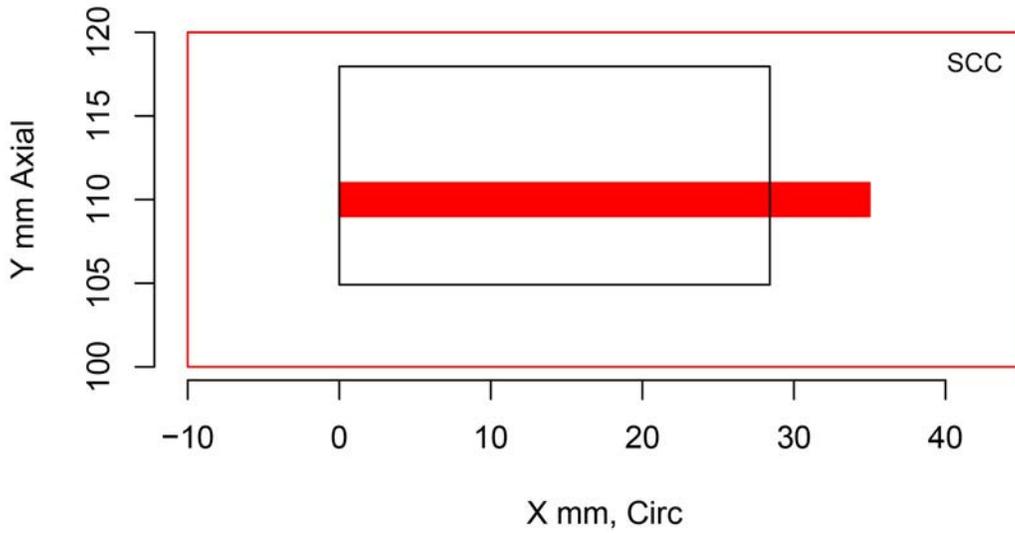


Figure H.245 Indication Plot for Procedure UIR.20 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

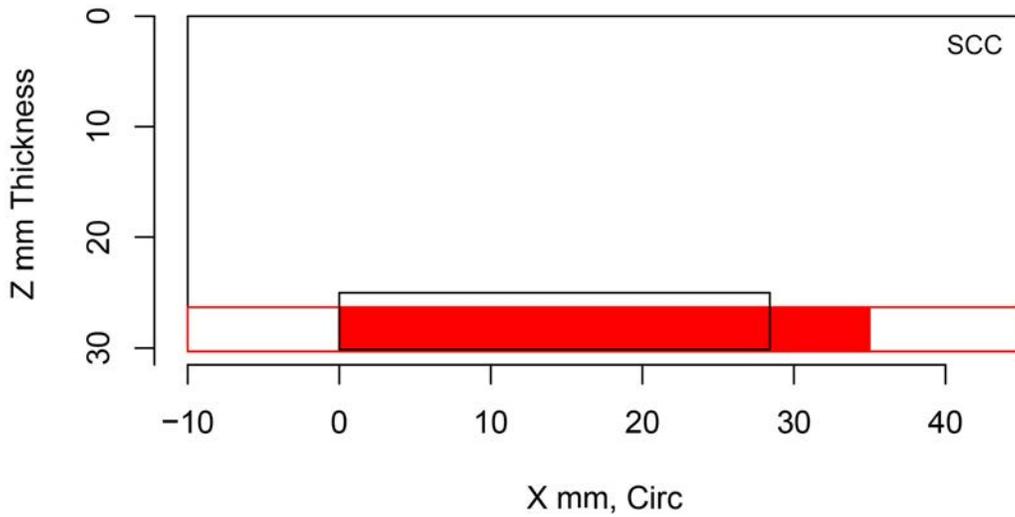


Figure H.246 Indication Plot for Procedure UIR.20 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

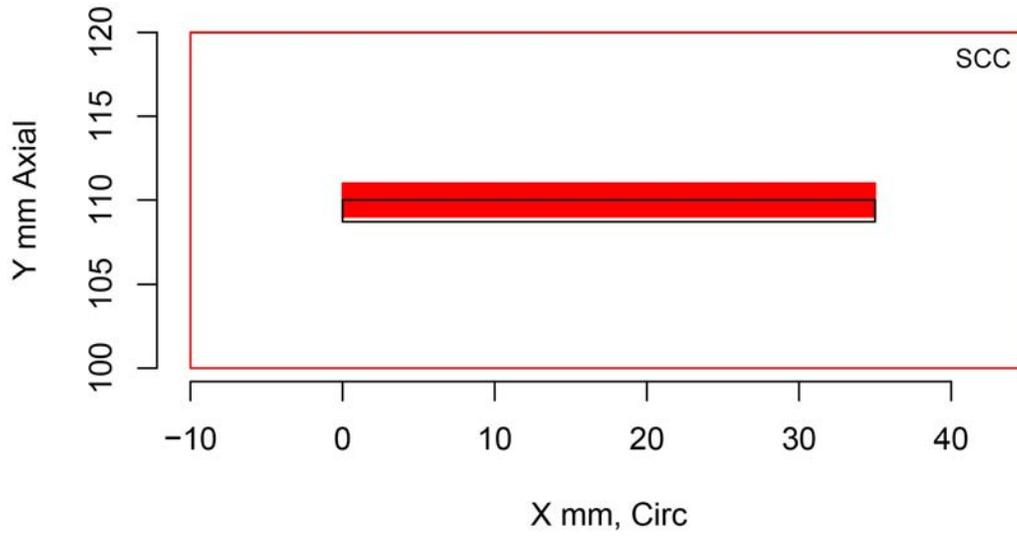


Figure H.247 Indication Plot for Procedure PAUT.20 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

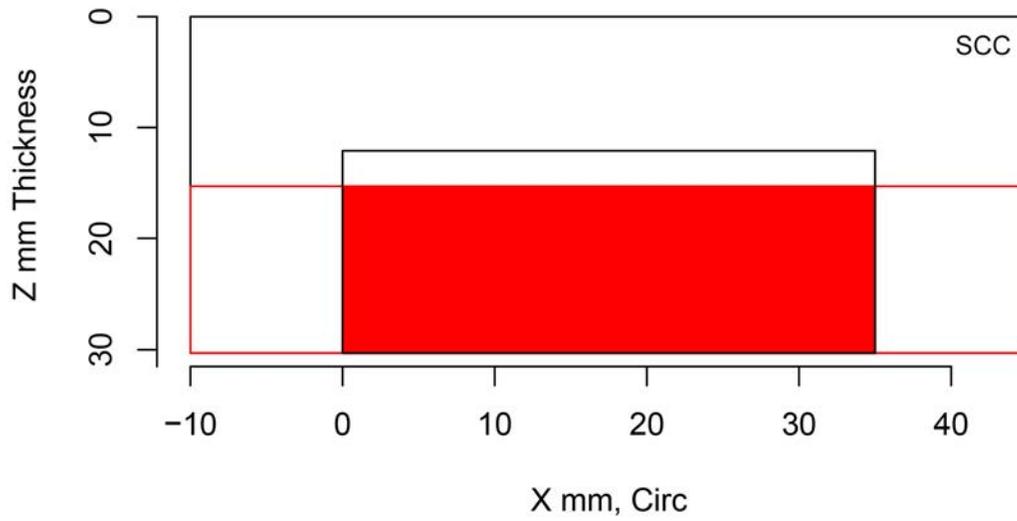


Figure H.248 Indication Plot for Procedure PAUT.20 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

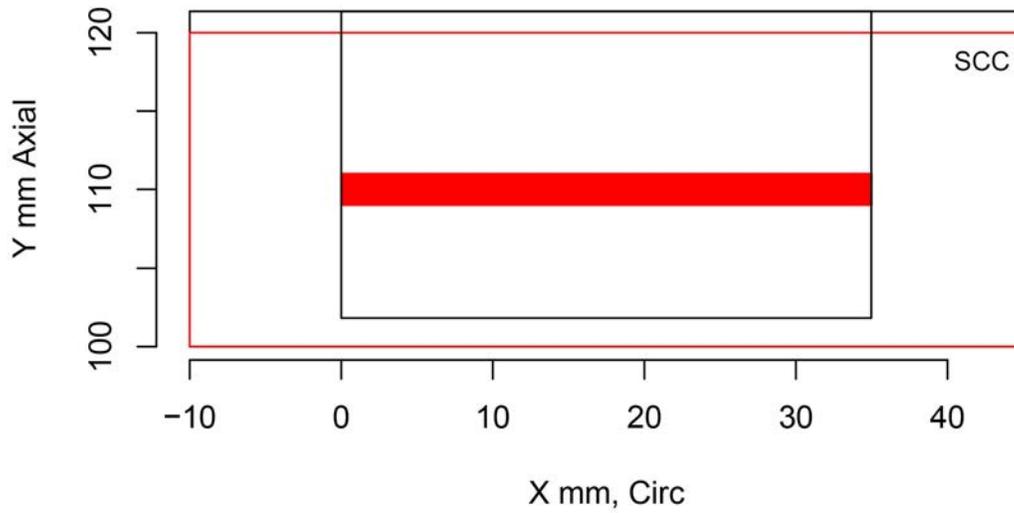


Figure H.249 Indication Plot for Procedure UIR.20 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

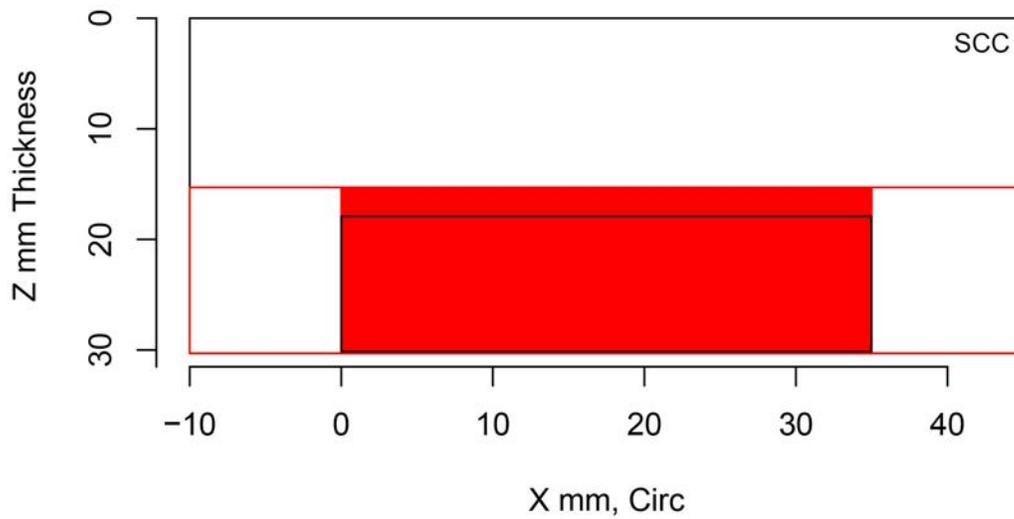


Figure H.250 Indication Plot for Procedure UIR.20 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

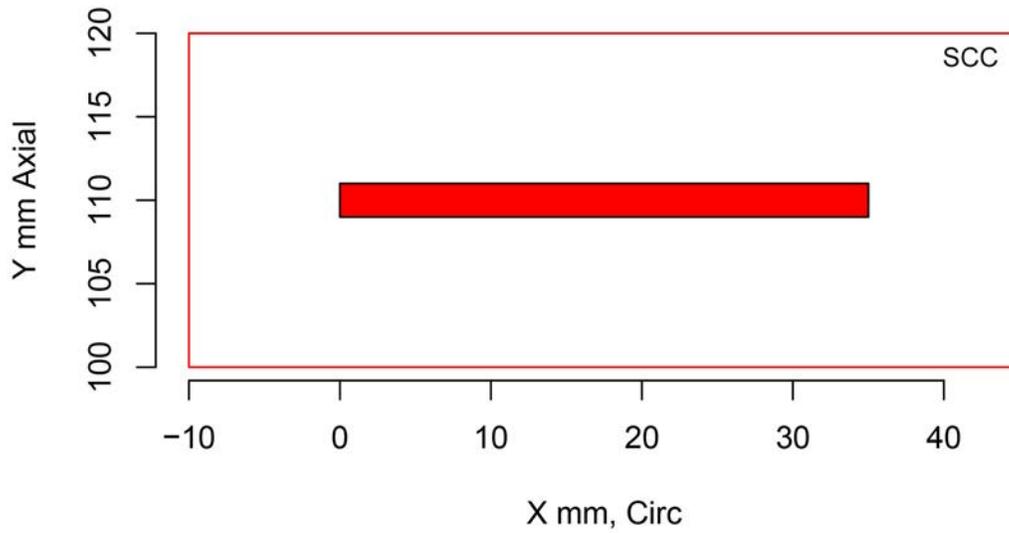


Figure H.251 Indication Plot for Procedure PAUT.20 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

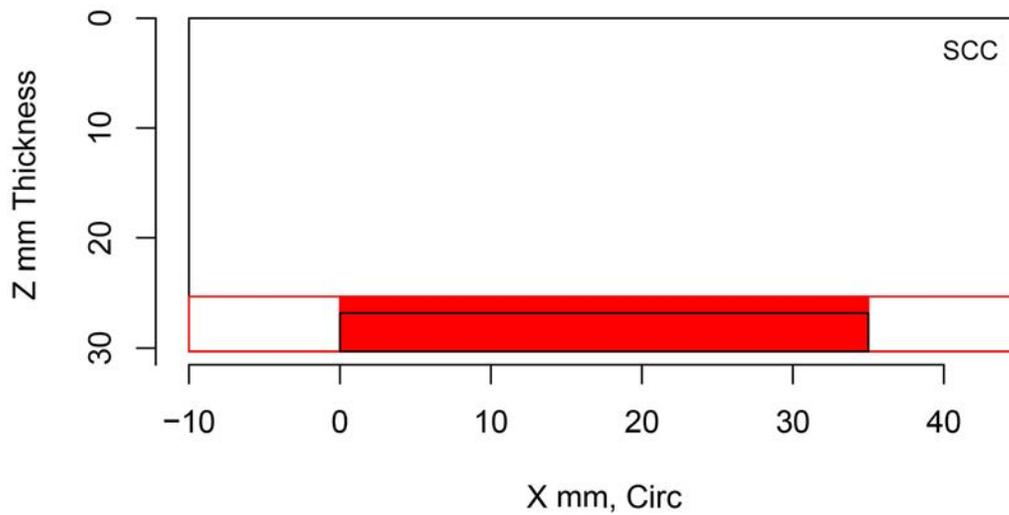


Figure H.252 Indication Plot for Procedure PAUT.20 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

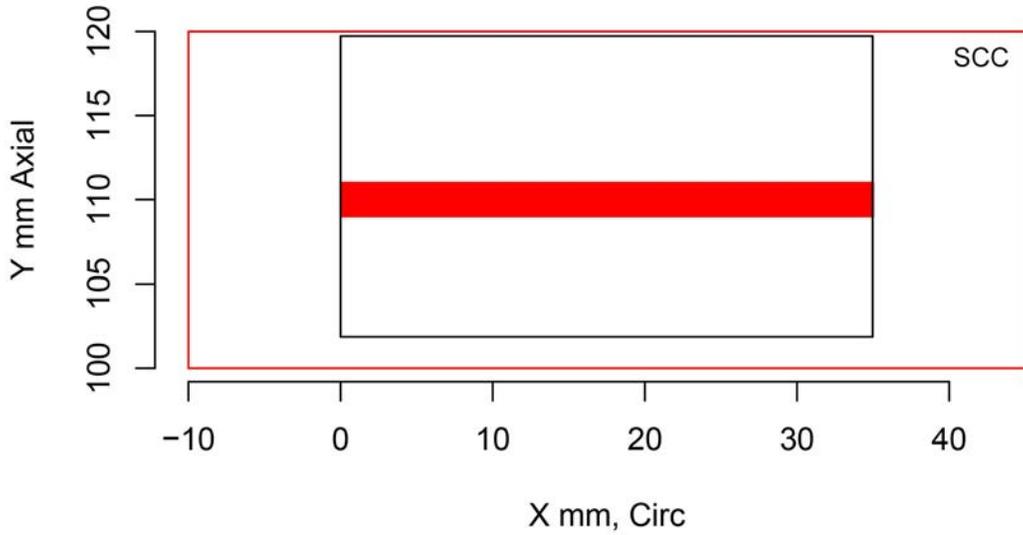


Figure H.253 Indication Plot for Procedure UIR.20 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

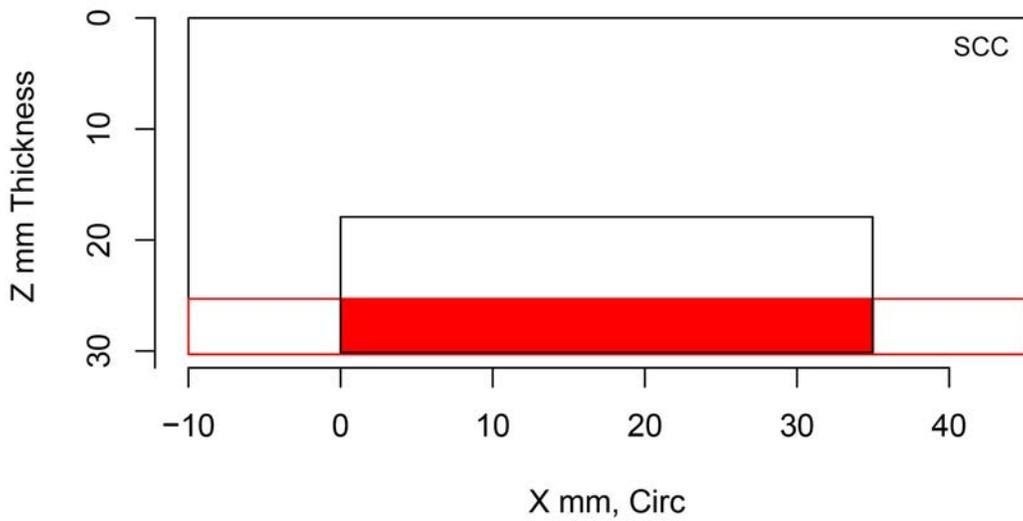


Figure H.254 Indication Plot for Procedure UIR.20 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

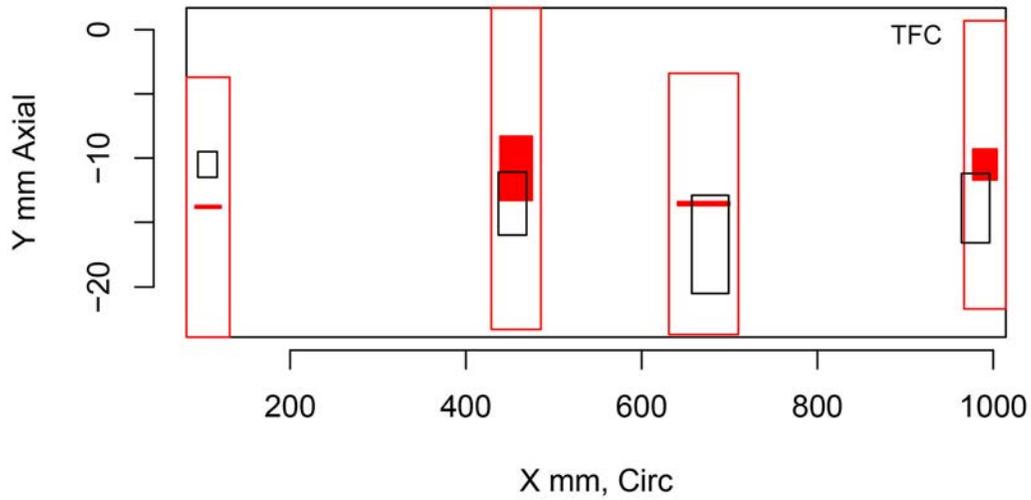


Figure H.255 Indication Plot for Procedure PAUT.20 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

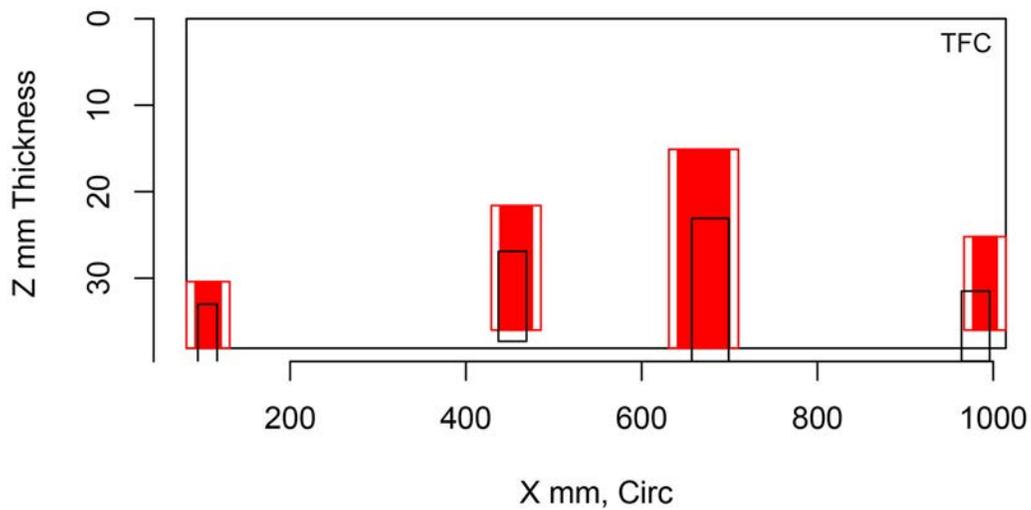


Figure H.256 Indication Plot for Procedure PAUT.20 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

H.2.14 Plots for Team 21

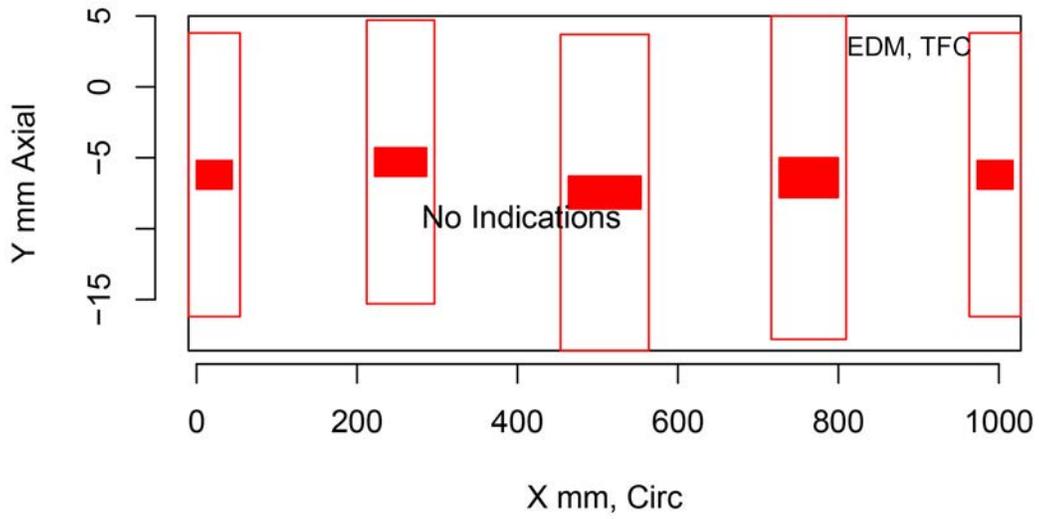


Figure H.257 Indication Plot for Procedure PAUT.20 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

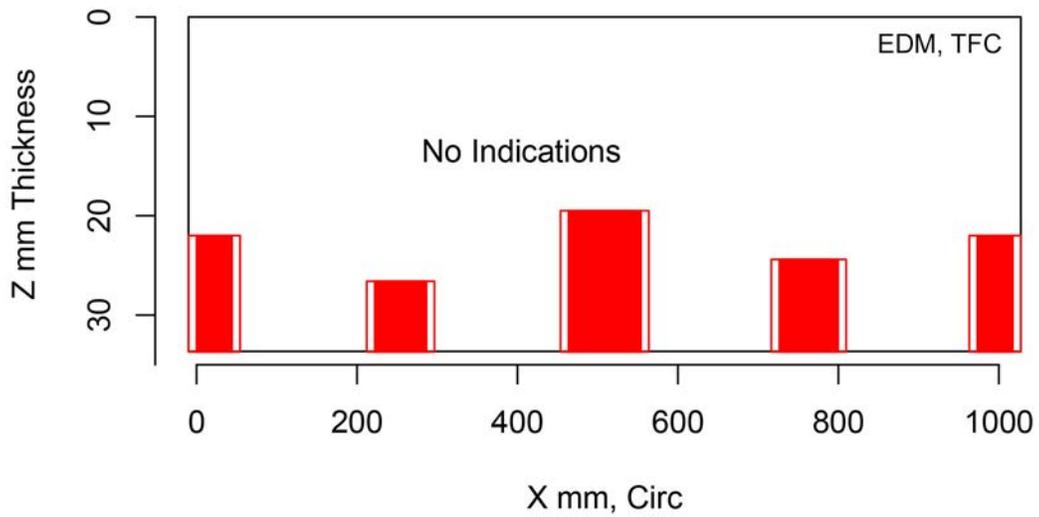


Figure H.258 Indication Plot for Procedure PAUT.20 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

H.2.15 Plots for Team 22

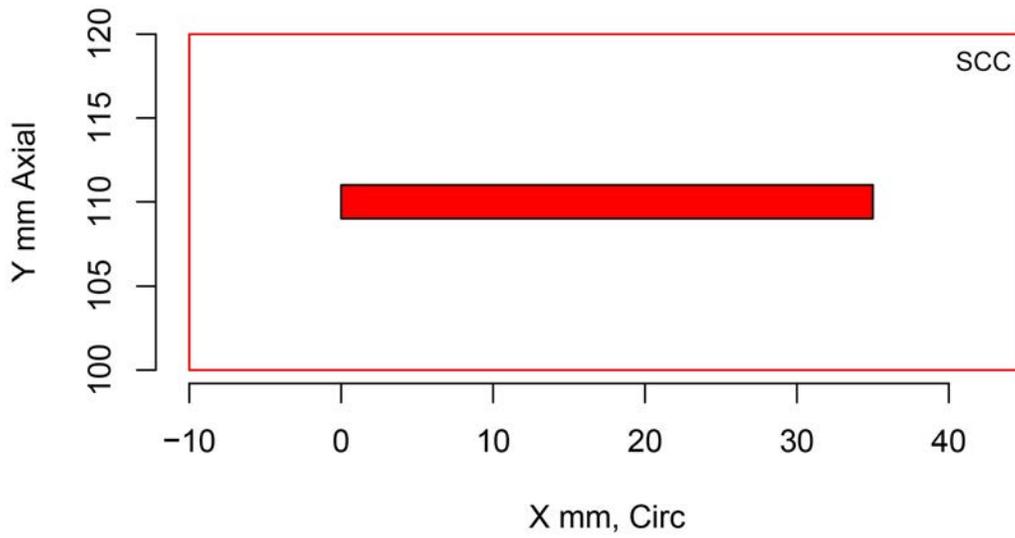


Figure H.259 Indication Plot for Procedure PATRT.22 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

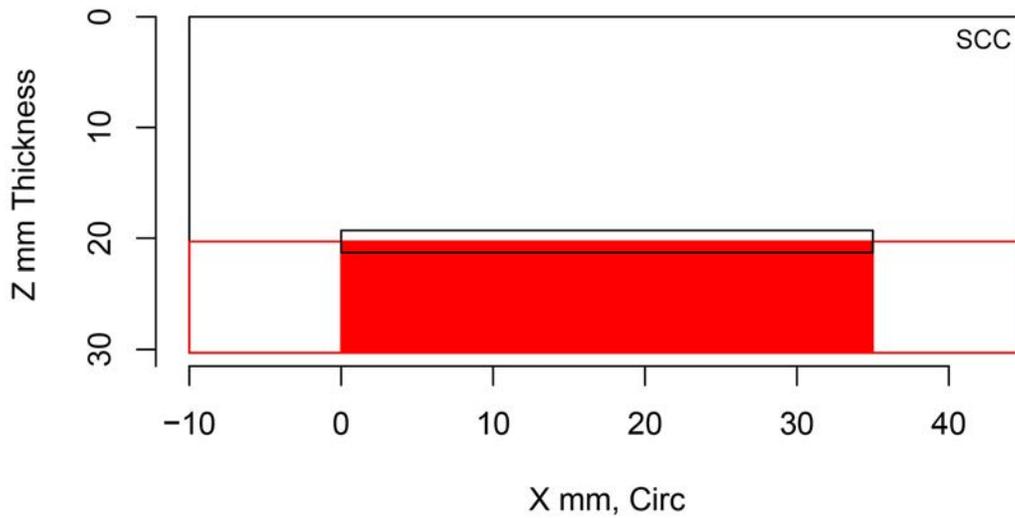


Figure H.260 Indication Plot for Procedure PATRT.22 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

H.2.16 Plots for Team 27

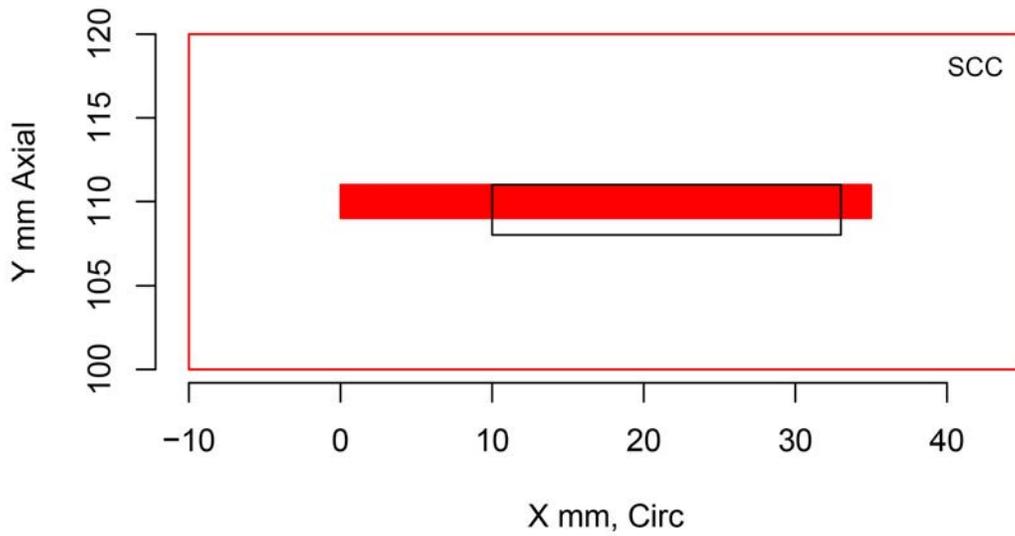


Figure H.261 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

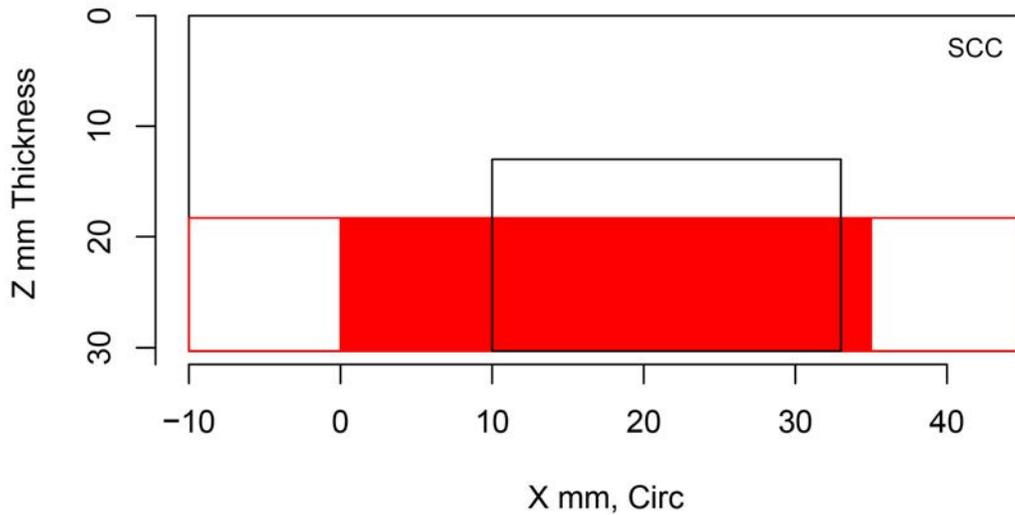


Figure H.262 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

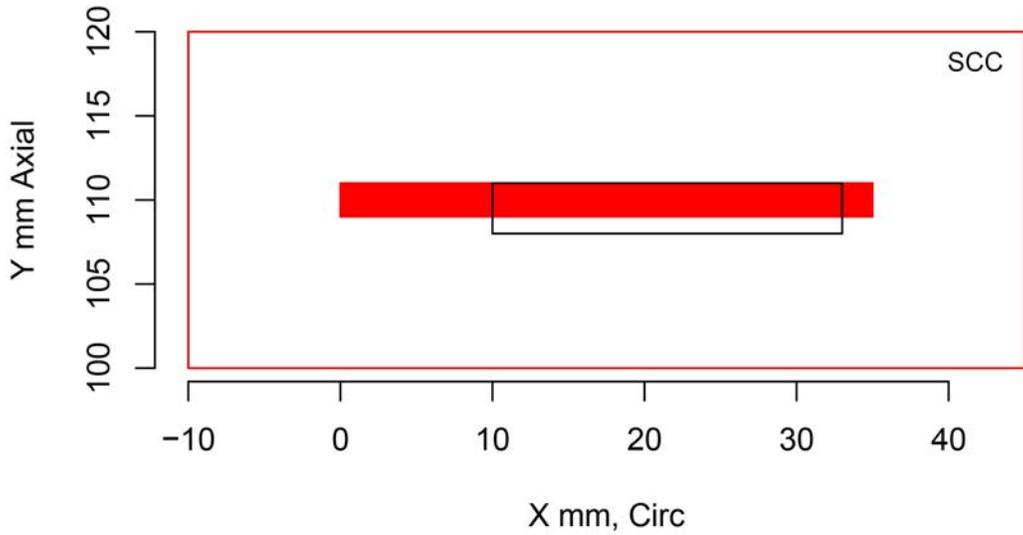


Figure H.263 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

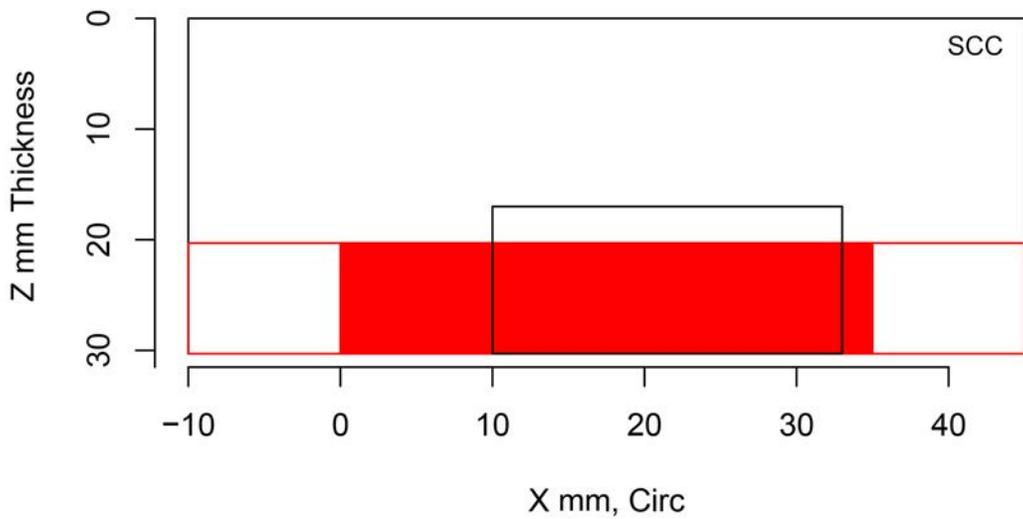


Figure H.264 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

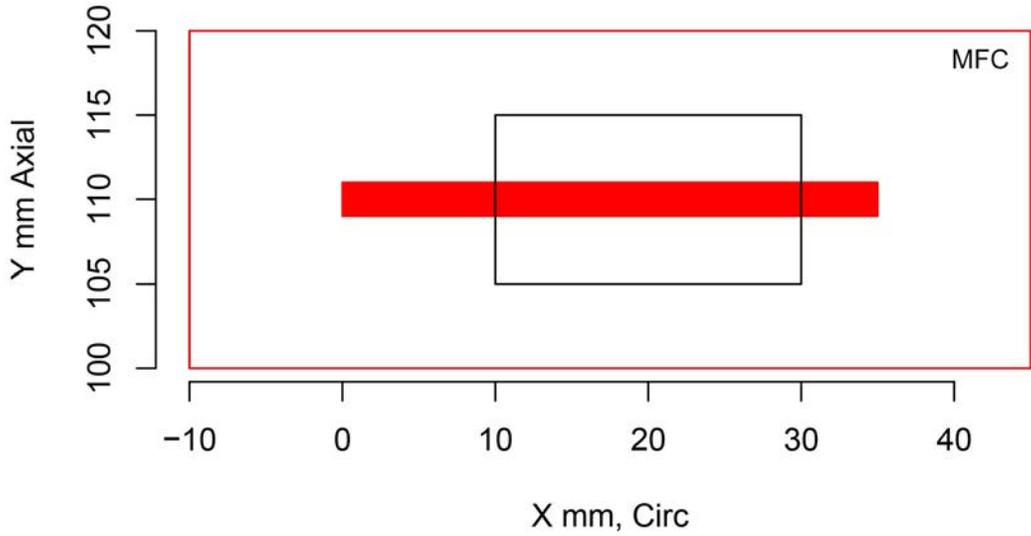


Figure H.265 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

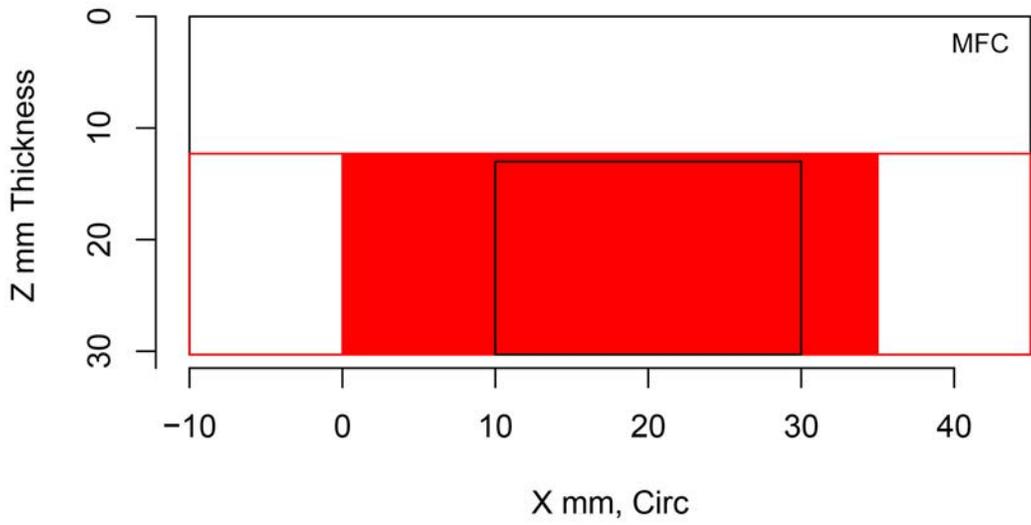


Figure H.266 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

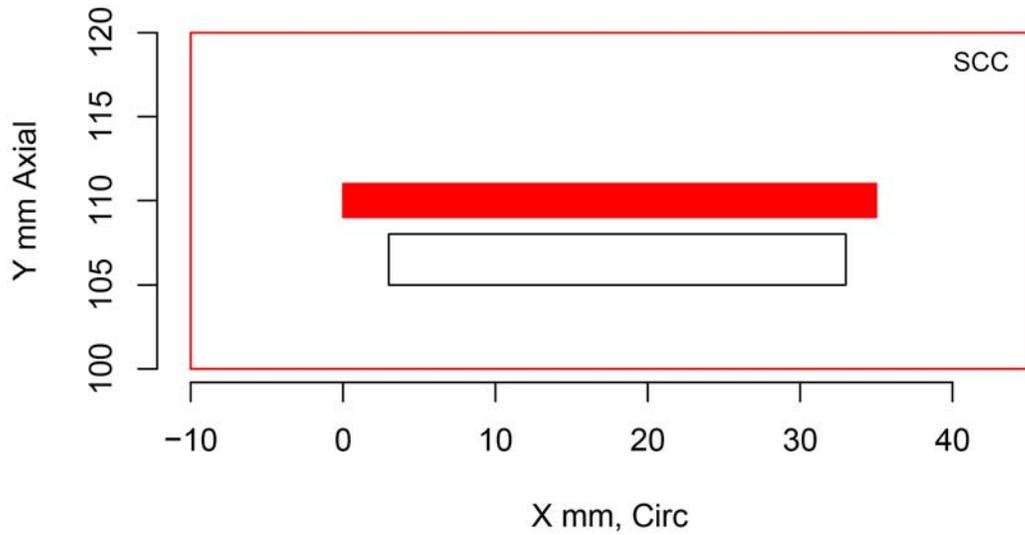


Figure H.267 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

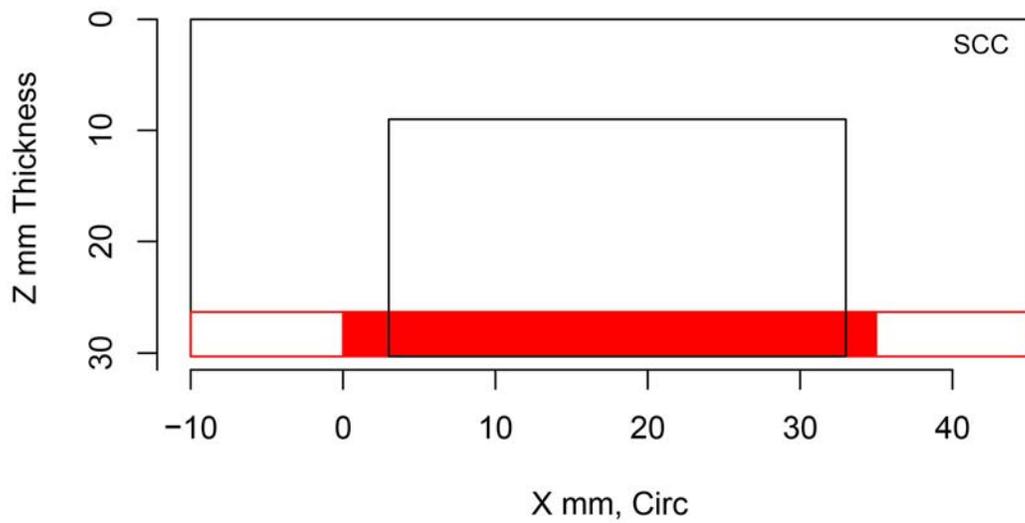


Figure H.268 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

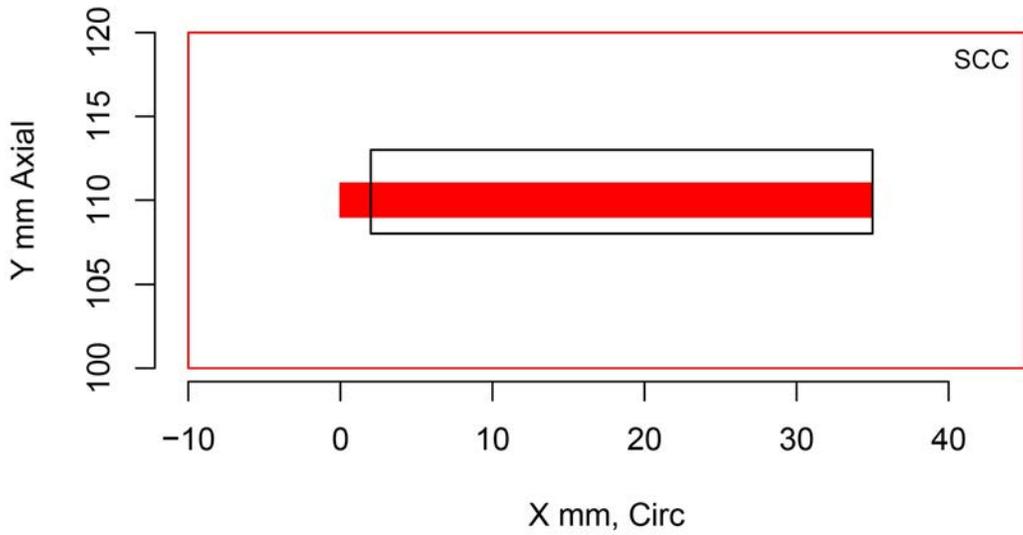


Figure H.269 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

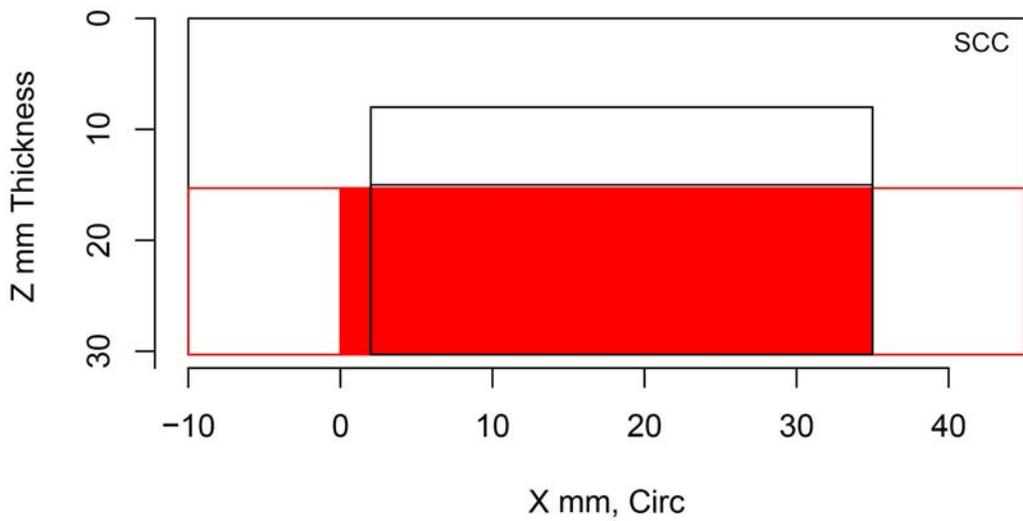


Figure H.270 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

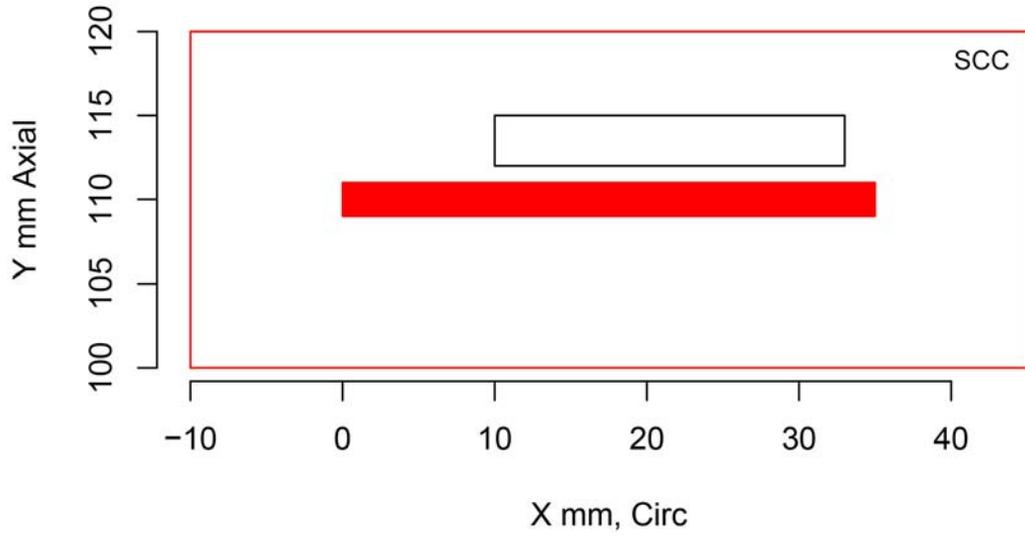


Figure H.271 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

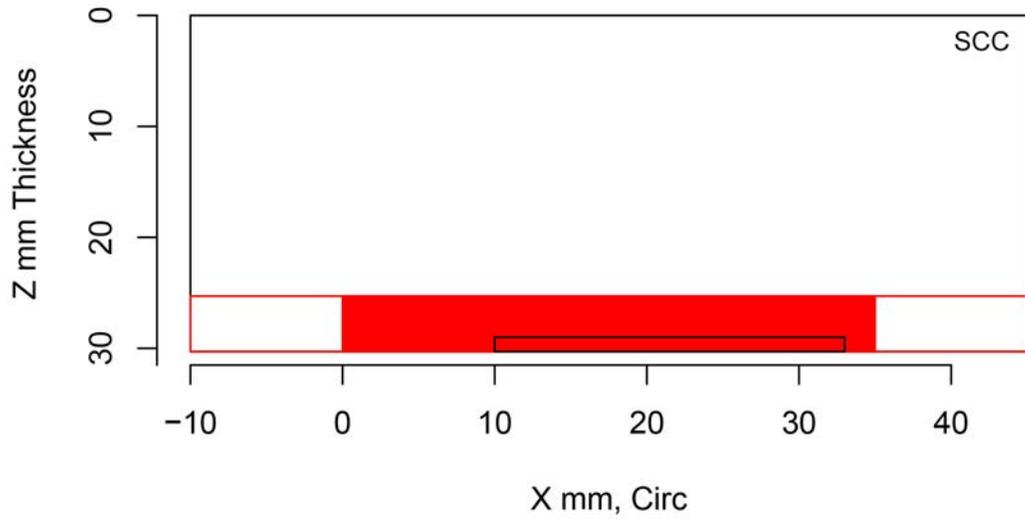


Figure H.272 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

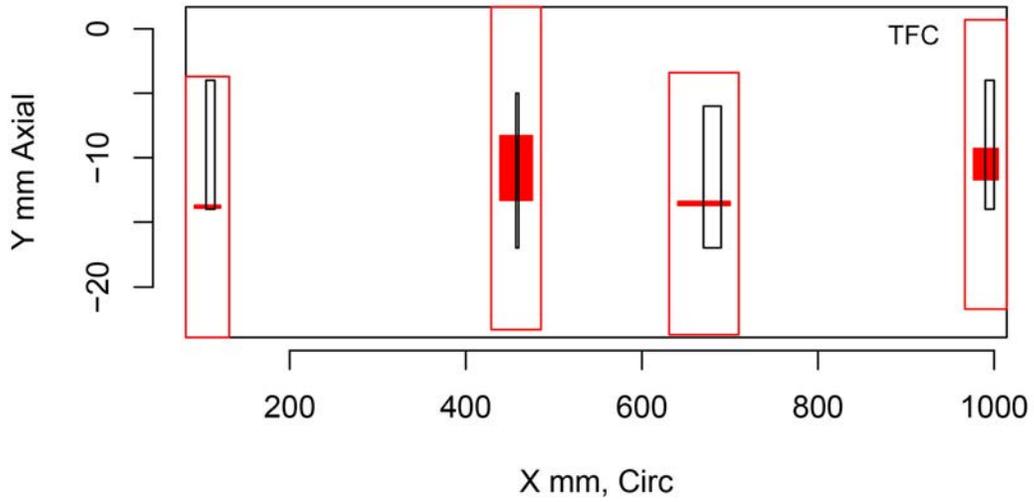


Figure H.273 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

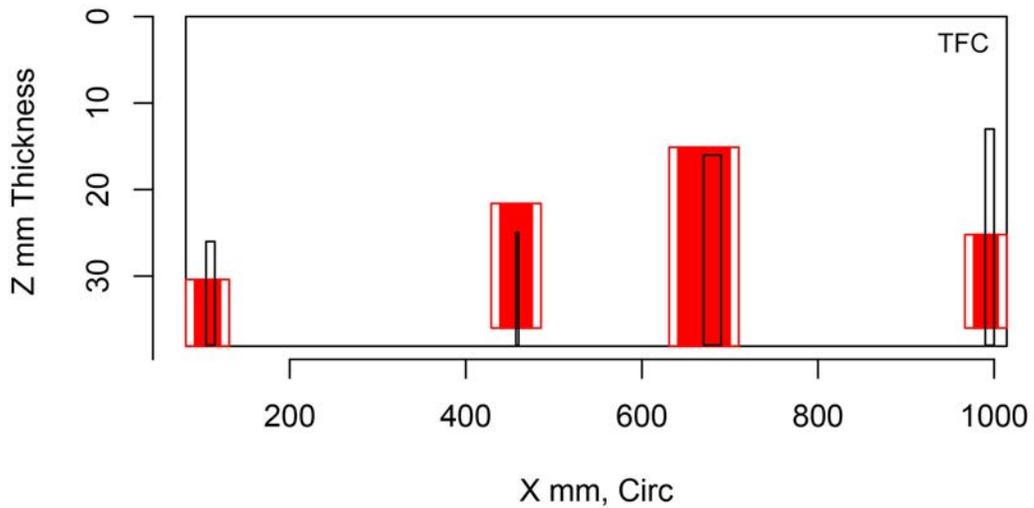


Figure H.274 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

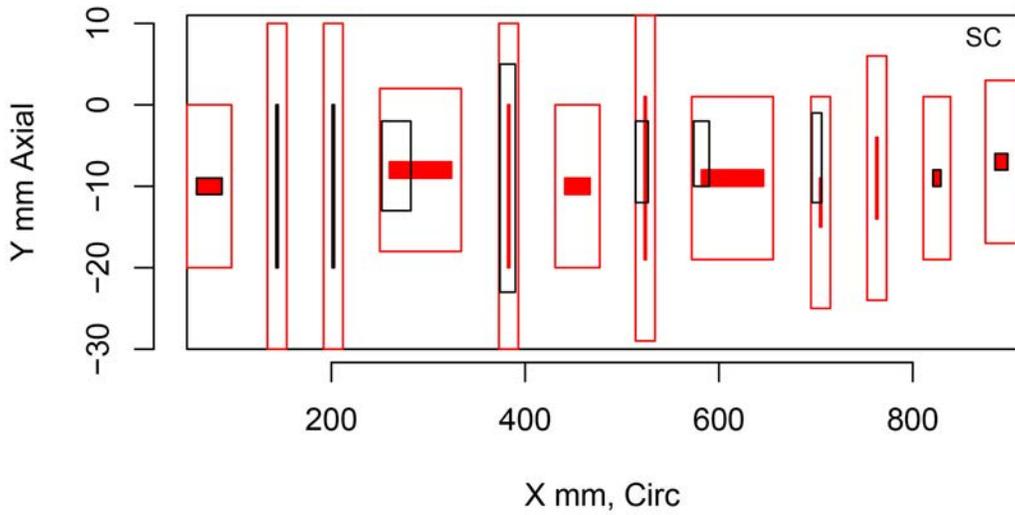


Figure H.275 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

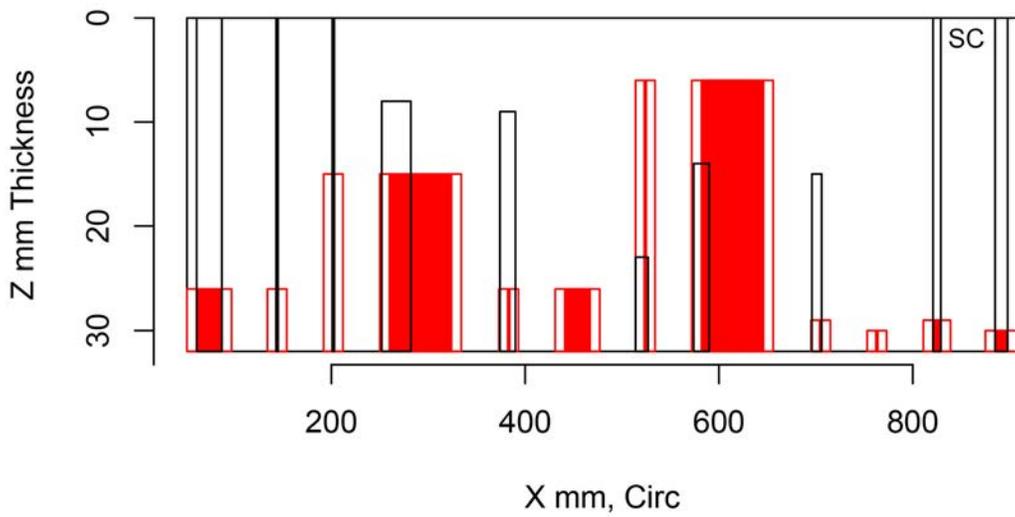


Figure H.276 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

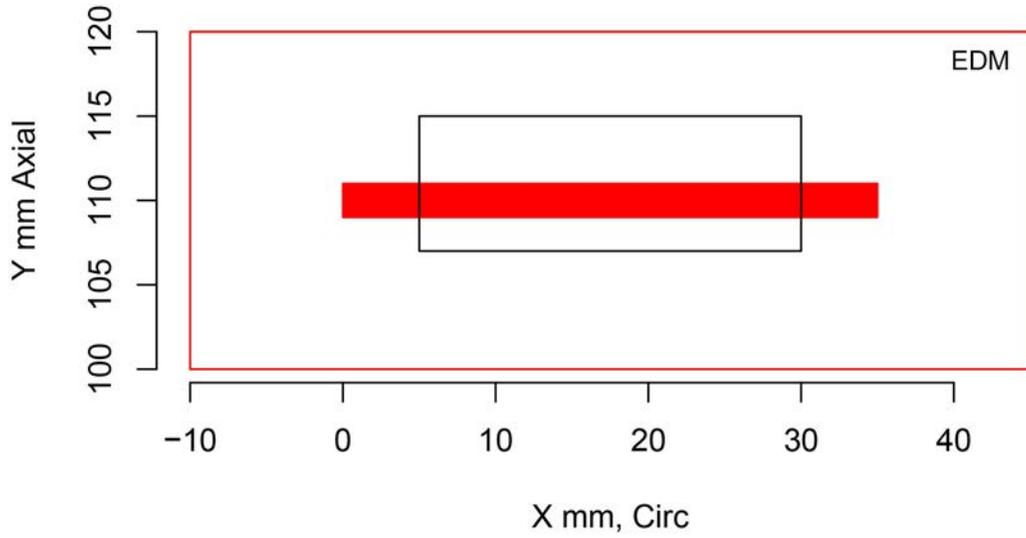


Figure H.277 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

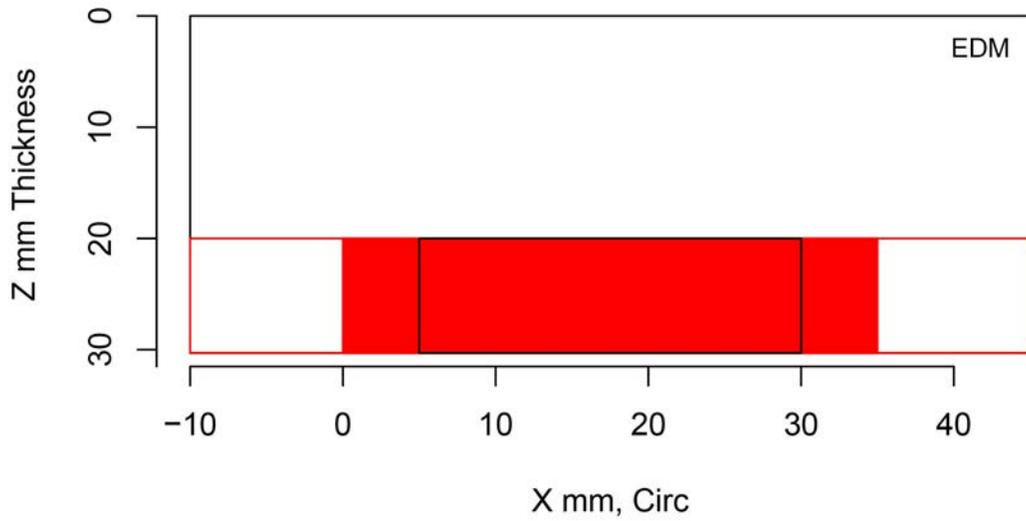


Figure H.278 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

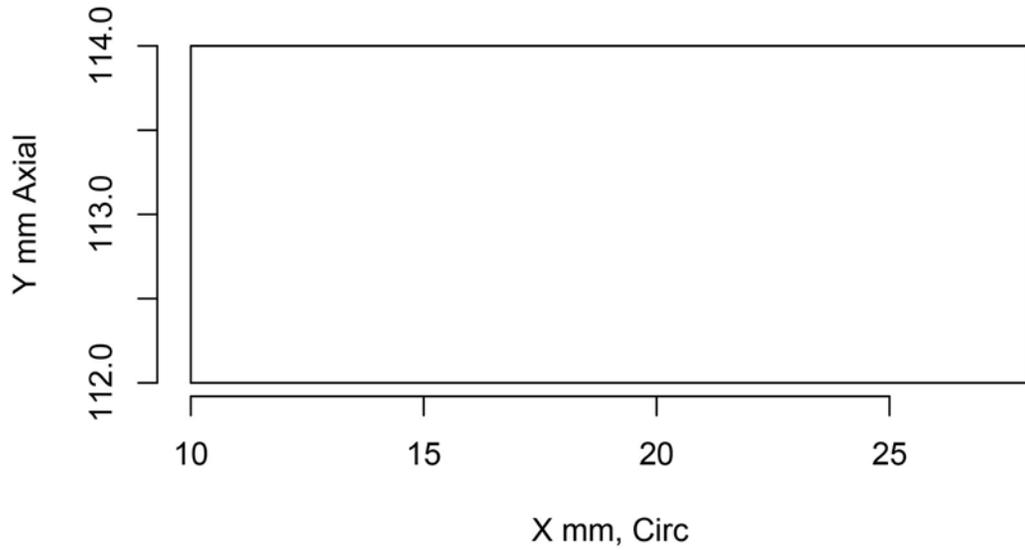


Figure H.279 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P46 in PARENT Open Testing (X – Y view)

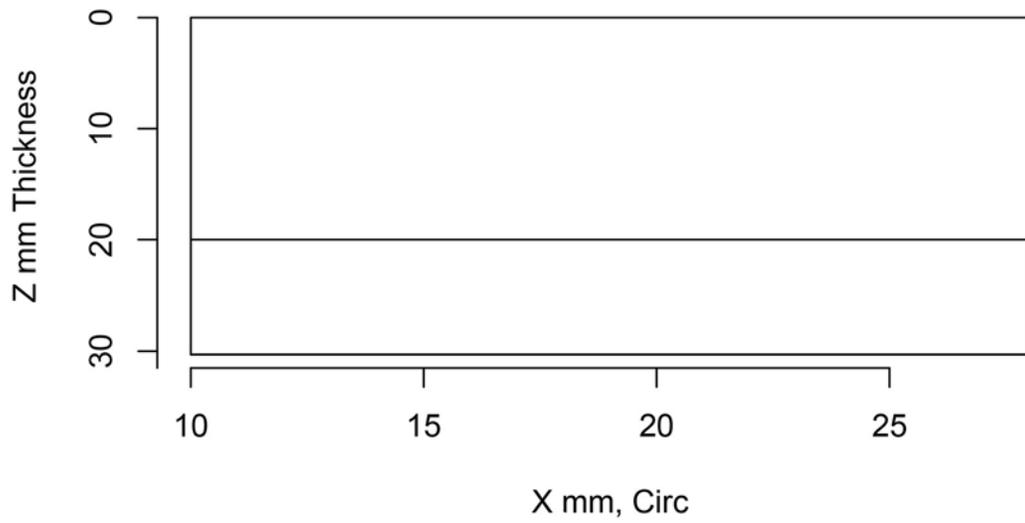


Figure H.280 Indication Plot for Procedure HHUT.27.1 Applied to Test Block P46 in PARENT Open Testing (X – Z view)

H.2.17 Plots for Team 28

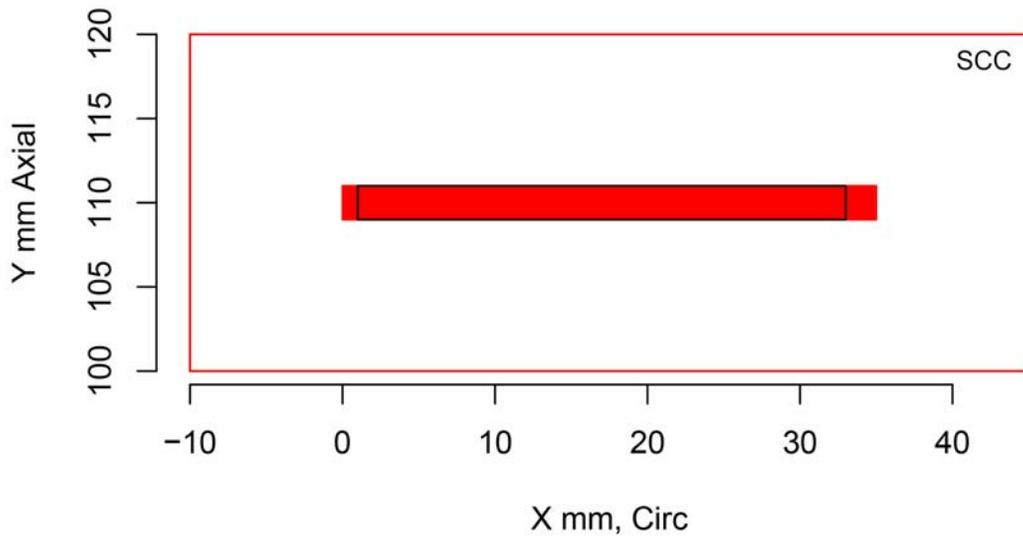


Figure H.281 Indication Plot for Procedure MM.28.1 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

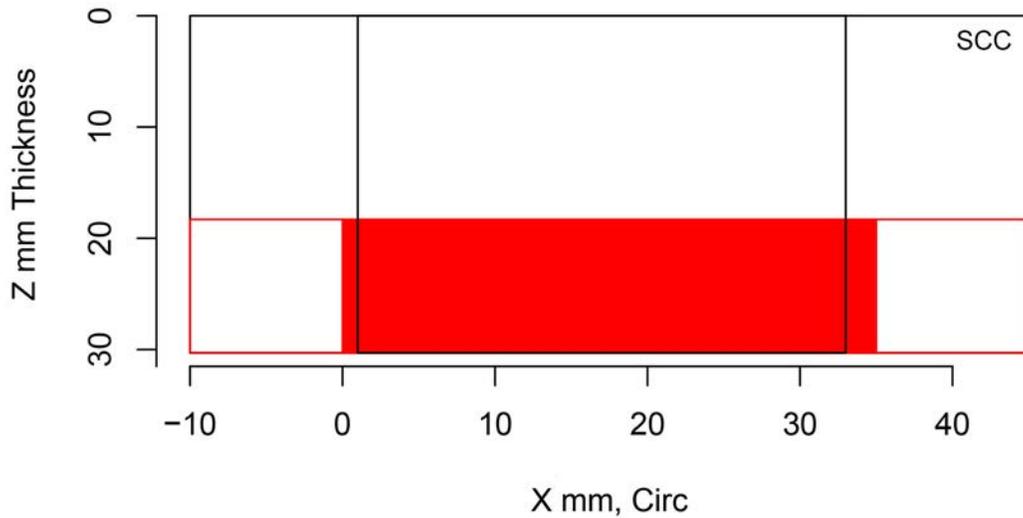


Figure H.282 Indication Plot for Procedure MM.28.1 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

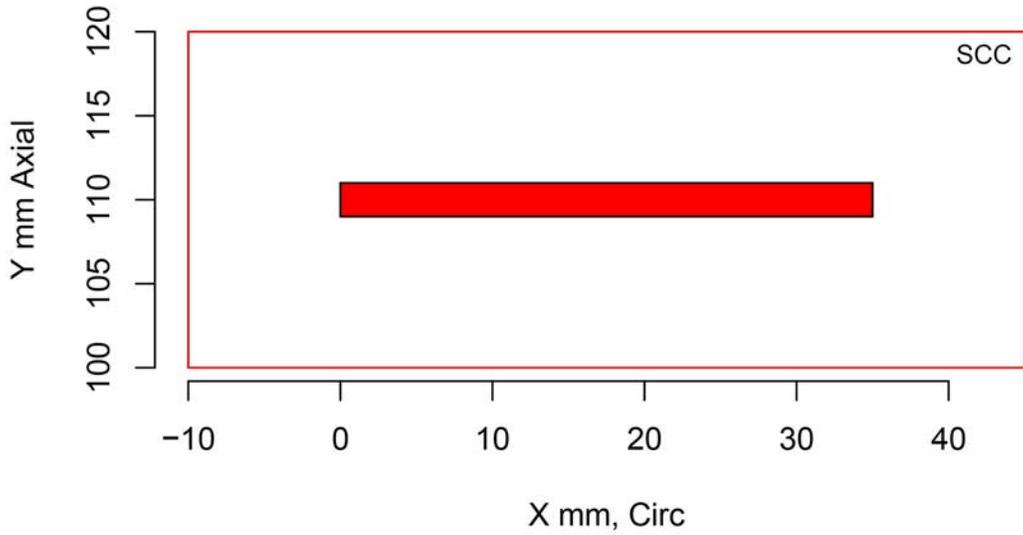


Figure H.283 Indication Plot for Procedure MM.28.1 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

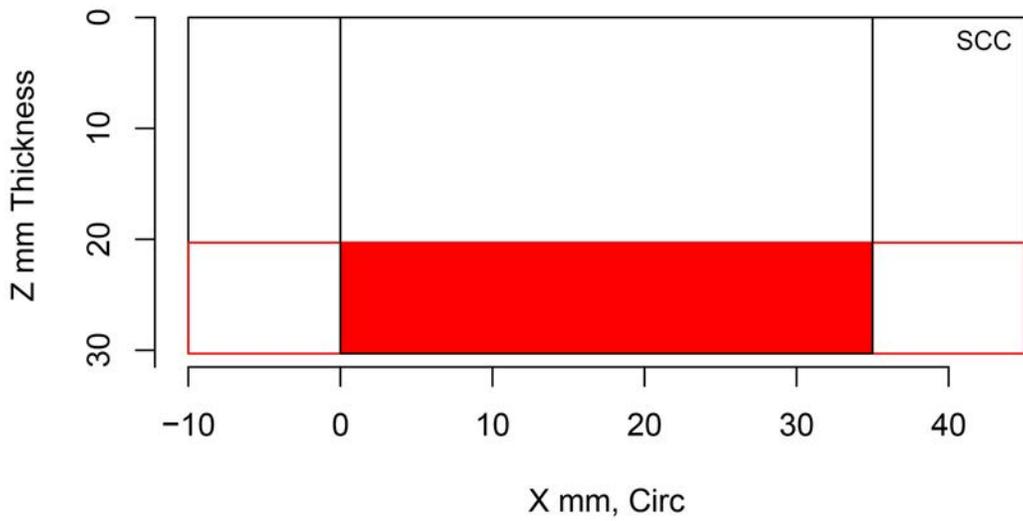


Figure H.284 Indication Plot for Procedure MM.28.1 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

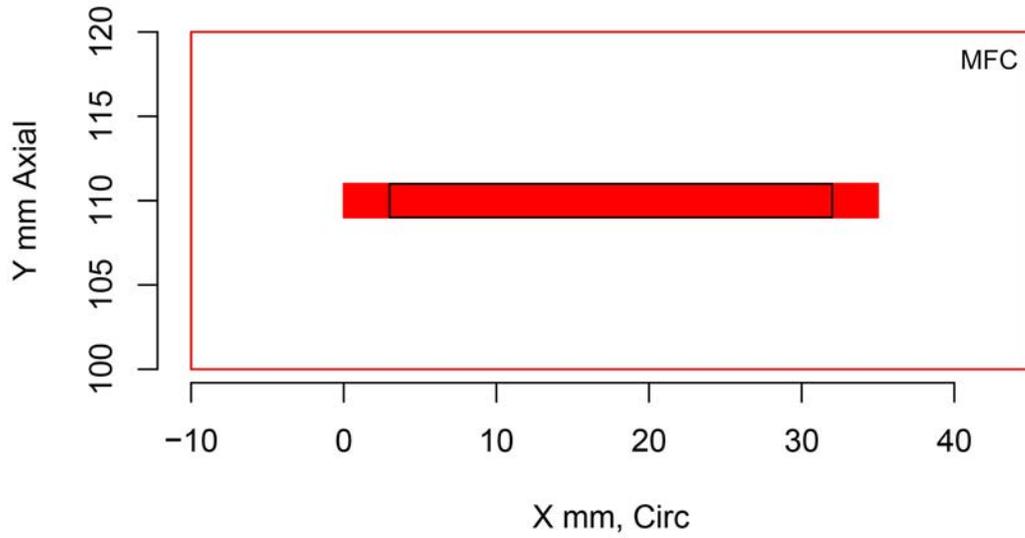


Figure H.285 Indication Plot for Procedure MM.28.1 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

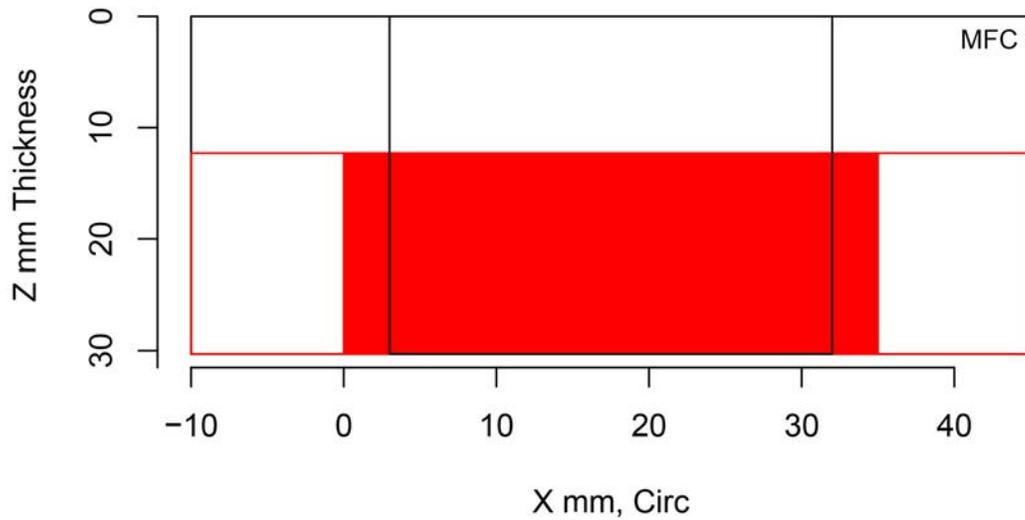


Figure H.286 Indication Plot for Procedure MM.28.1 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

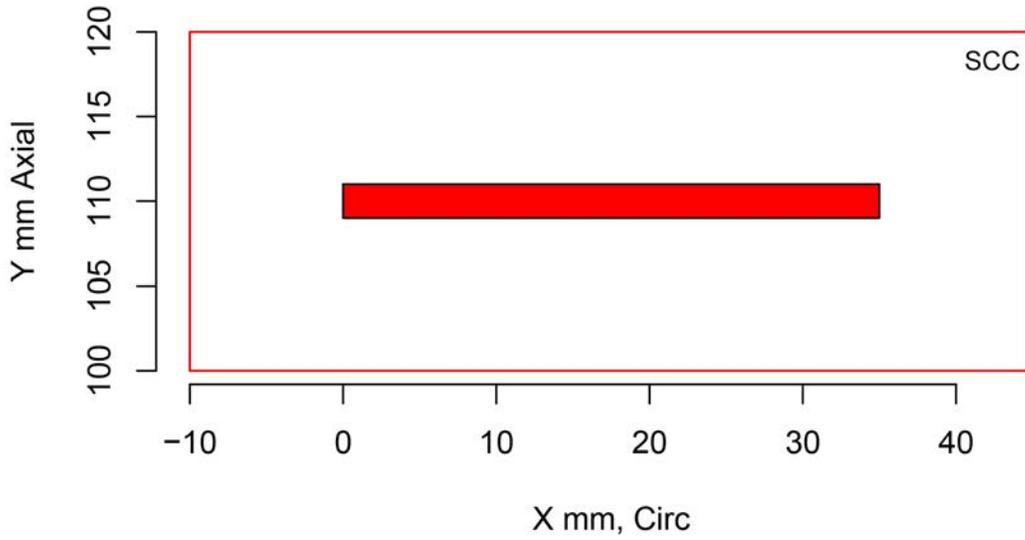


Figure H.287 Indication Plot for Procedure MM.28.1 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

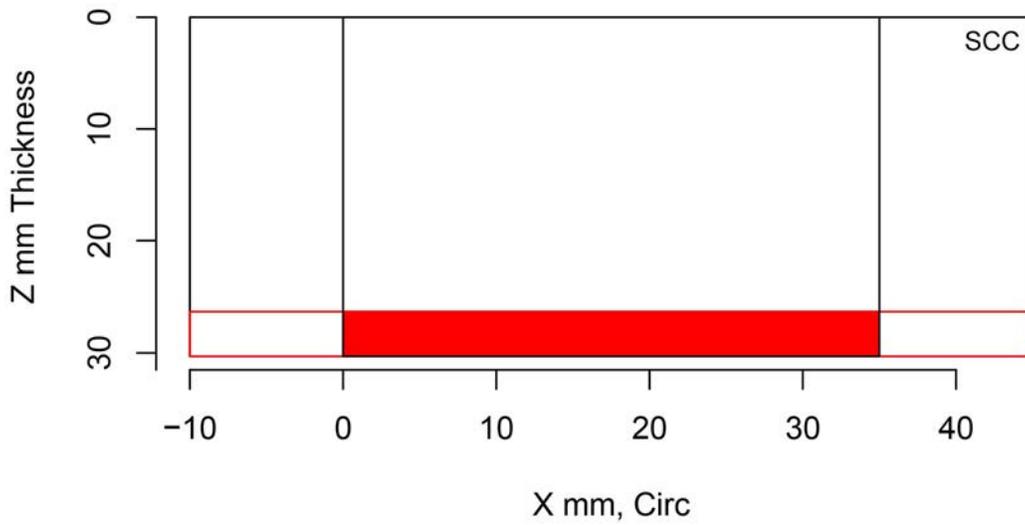


Figure H.288 Indication Plot for Procedure MM.28.1 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

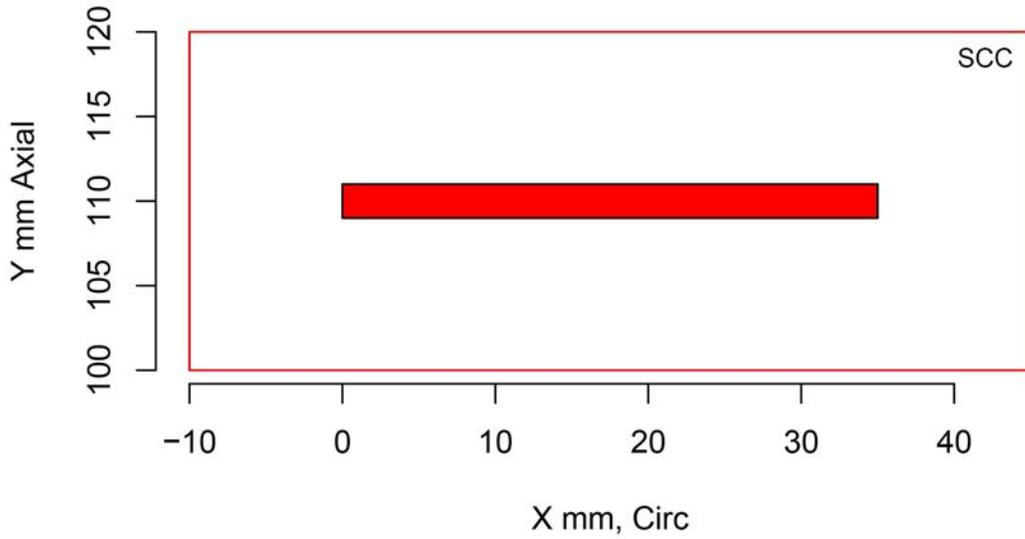


Figure H.289 Indication Plot for Procedure MM.28.1 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

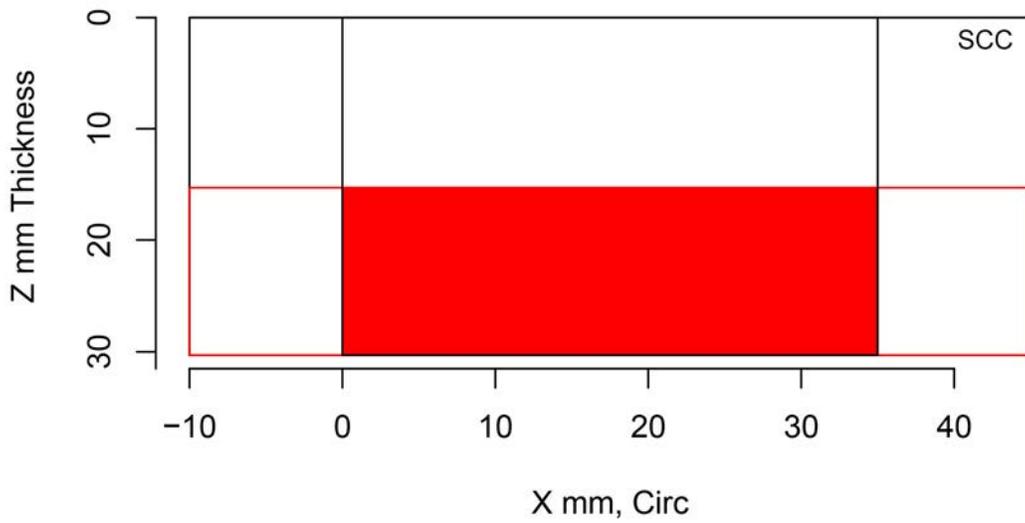


Figure H.290 Indication Plot for Procedure MM.28.1 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

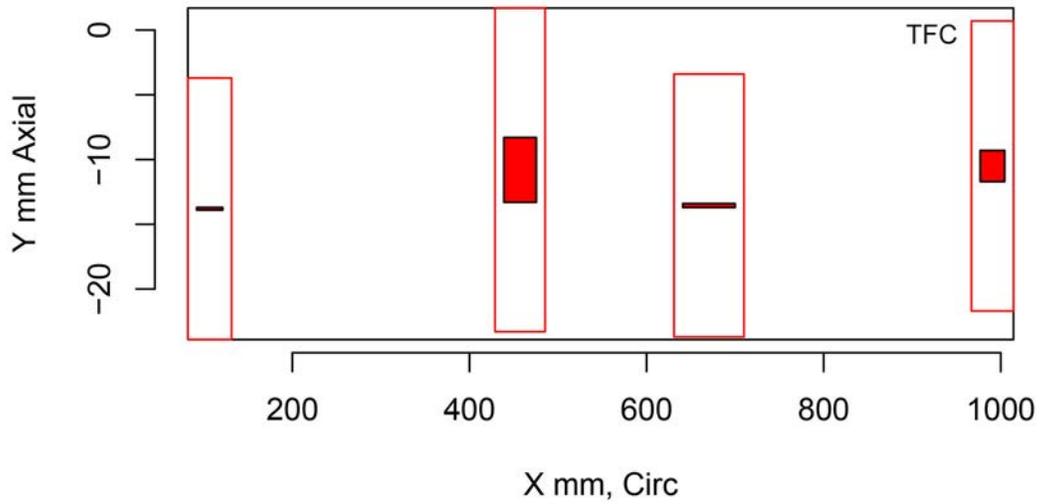


Figure H.291 Indication Plot for Procedure MM.28.1 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

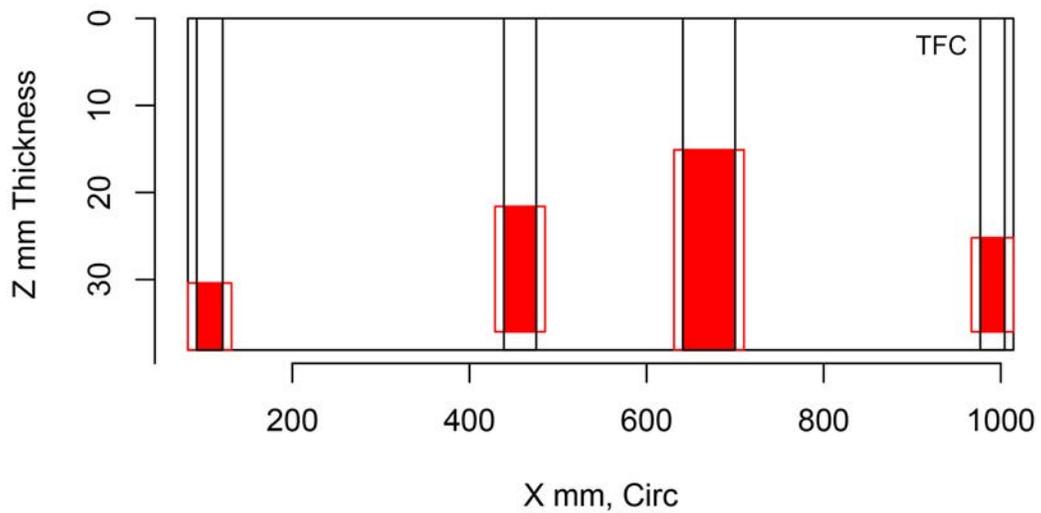


Figure H.292 Indication Plot for Procedure MM.28.1 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

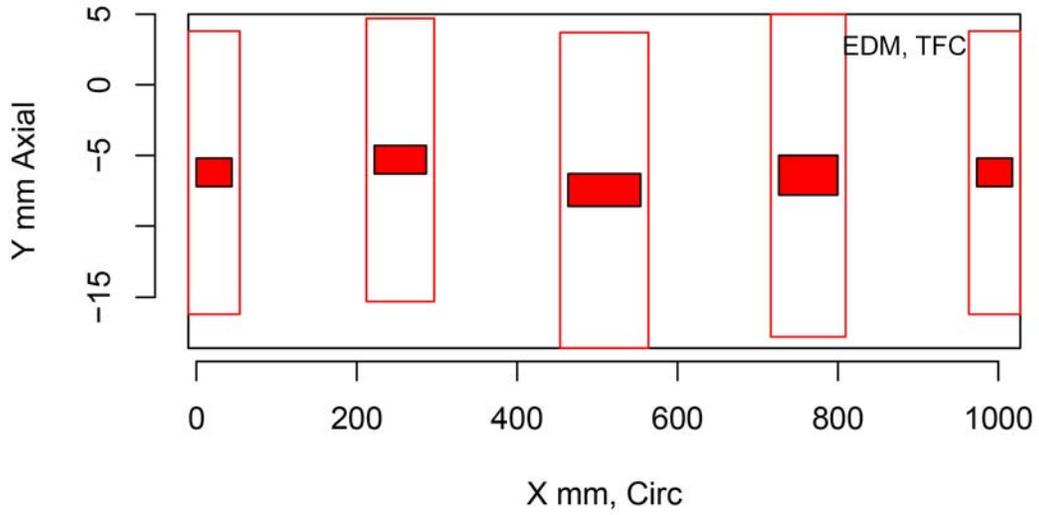


Figure H.293 Indication Plot for Procedure MM.28.1 Applied to Test Block P4 in PARENT Open Testing (X – Y view)

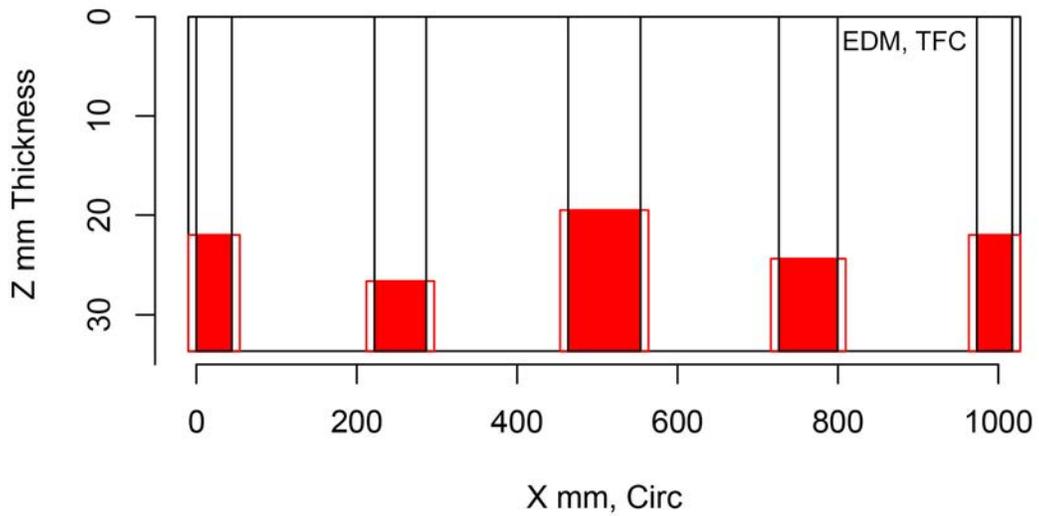


Figure H.294 Indication Plot for Procedure MM.28.1 Applied to Test Block P4 in PARENT Open Testing (X – Z view)

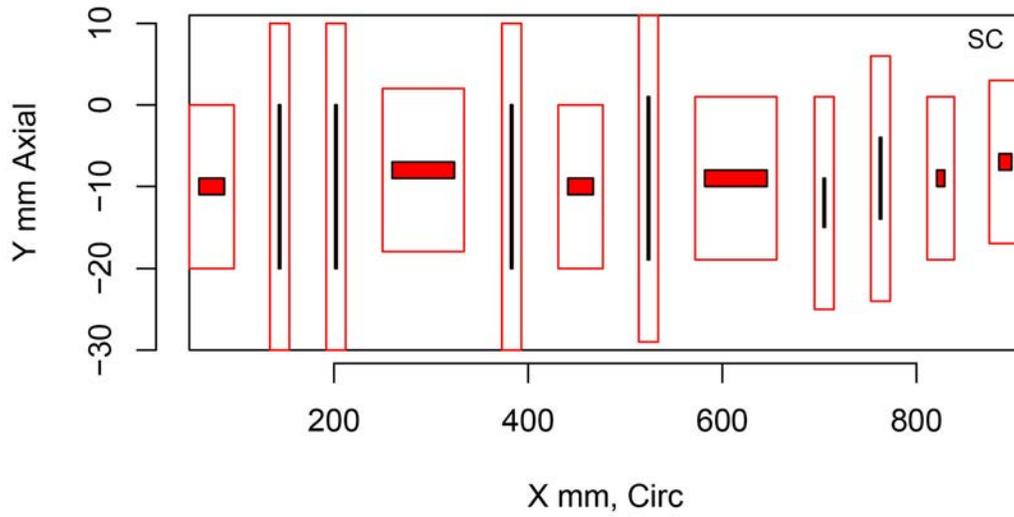


Figure H.295 Indication Plot for Procedure MM.28.1 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

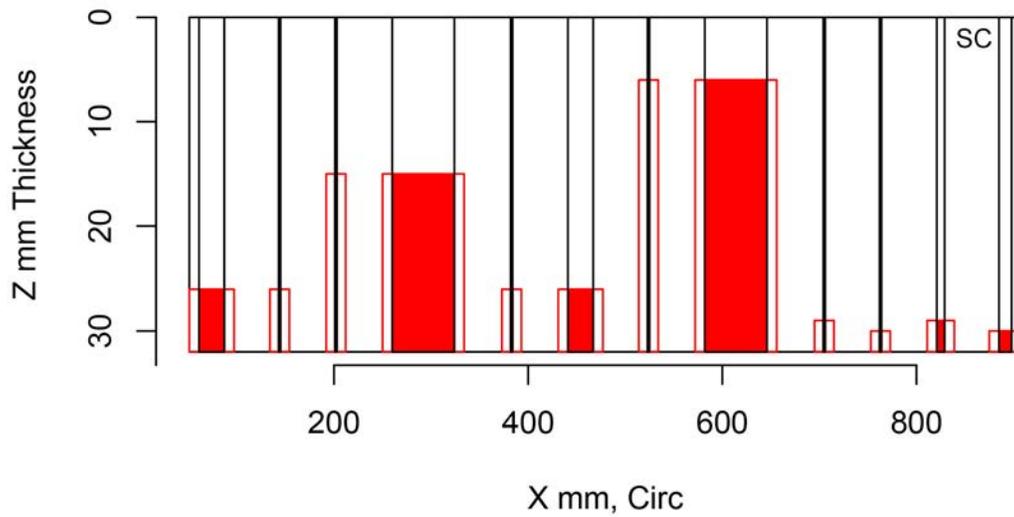


Figure H.296 Indication Plot for Procedure MM.28.1 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

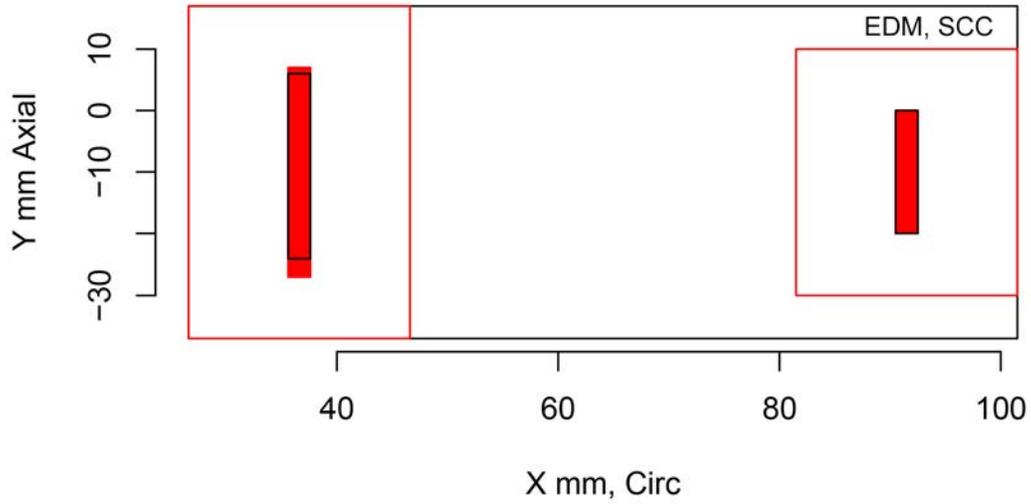


Figure H.297 Indication Plot for Procedure MM.28.1 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

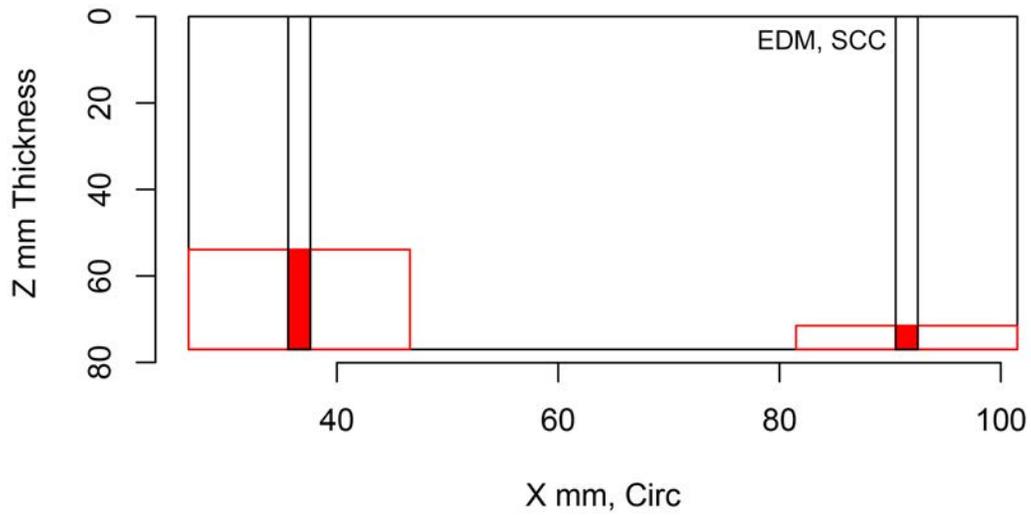


Figure H.298 Indication Plot for Procedure MM.28.1 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

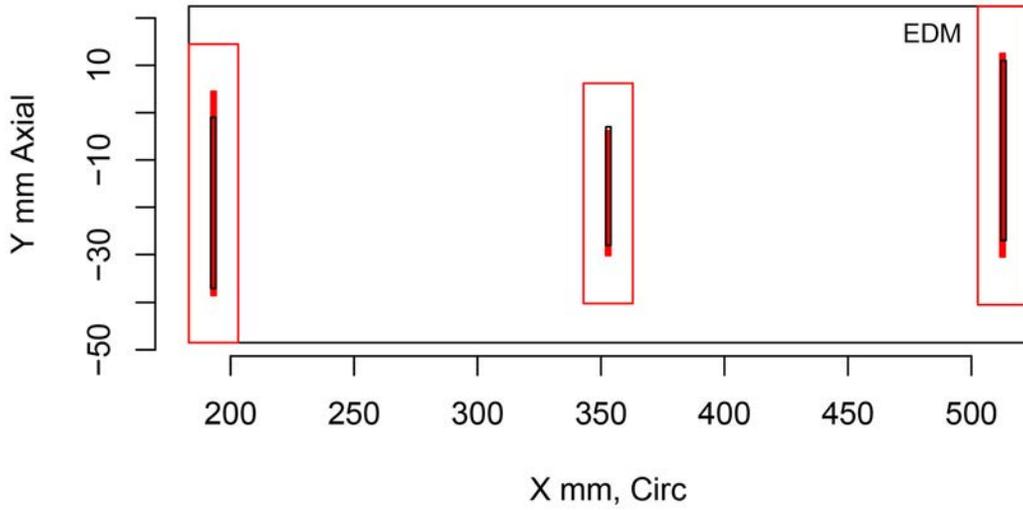


Figure H.299 Indication Plot for Procedure MM.28.1 Applied to Test Block P23 in PARENT Open Testing (X – Y view)

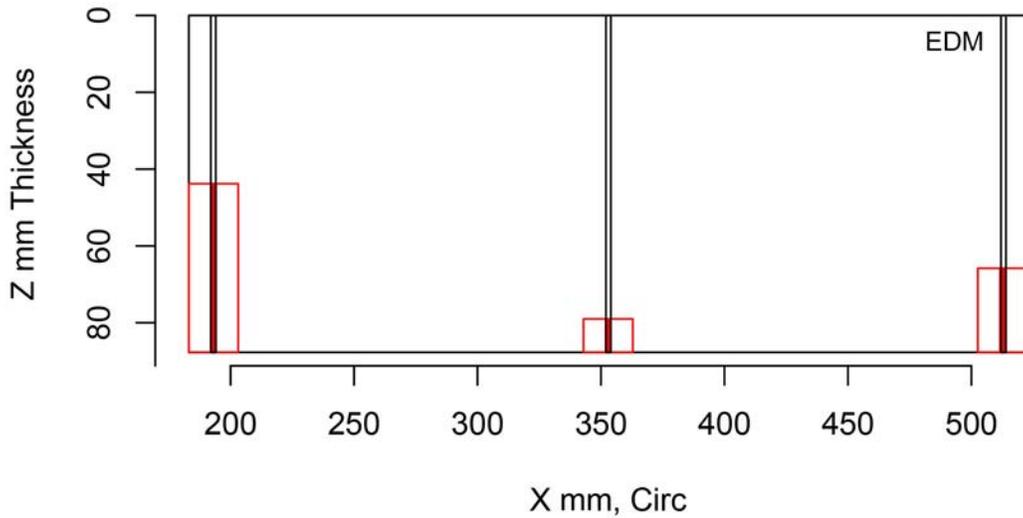


Figure H.300 Indication Plot for Procedure MM.28.1 Applied to Test Block P23 in PARENT Open Testing (X – Z view)

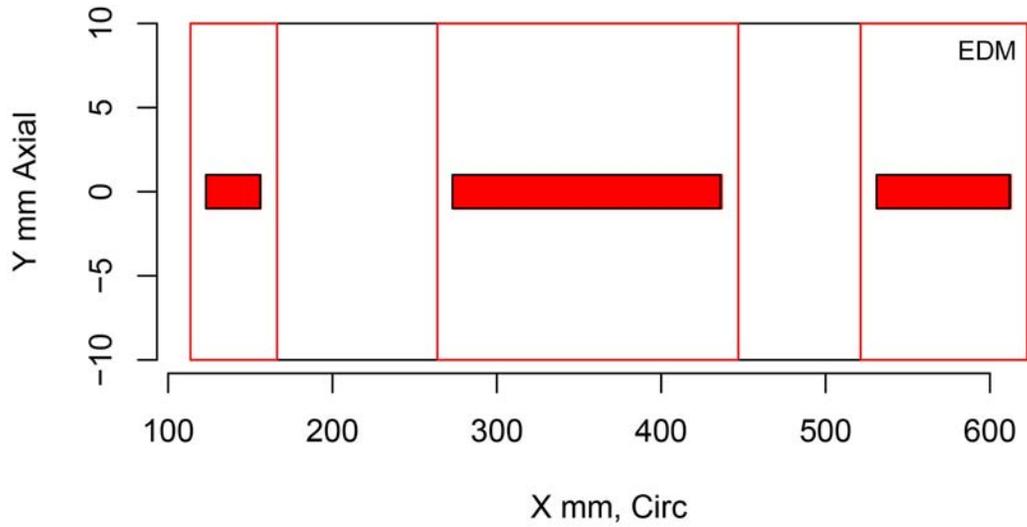


Figure H.301 Indication Plot for Procedure MM.28.1 Applied to Test Block P24 in PARENT Open Testing (X – Y view)

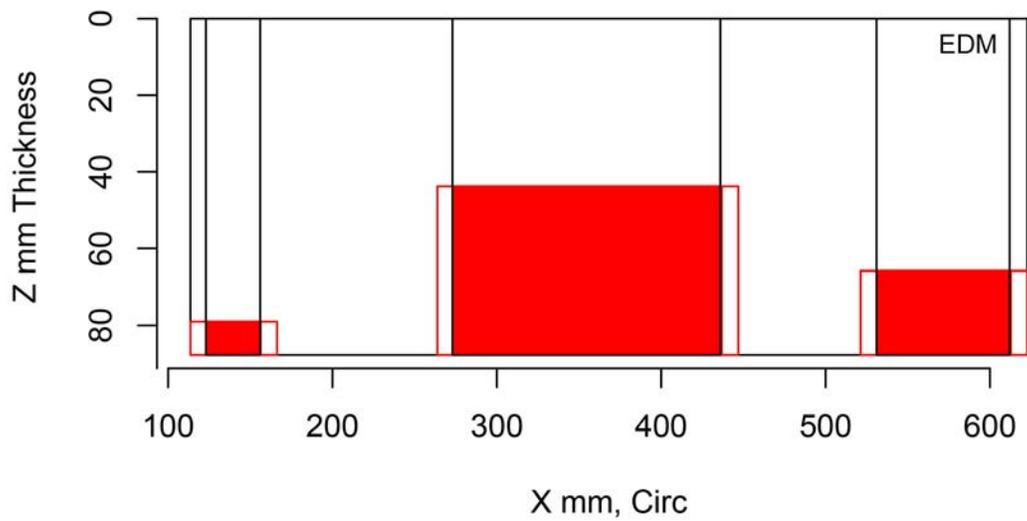


Figure H.302 Indication Plot for Procedure MM.28.1 Applied to Test Block P24 in PARENT Open Testing (X – Z view)

H.2.18 Plots for Team 29

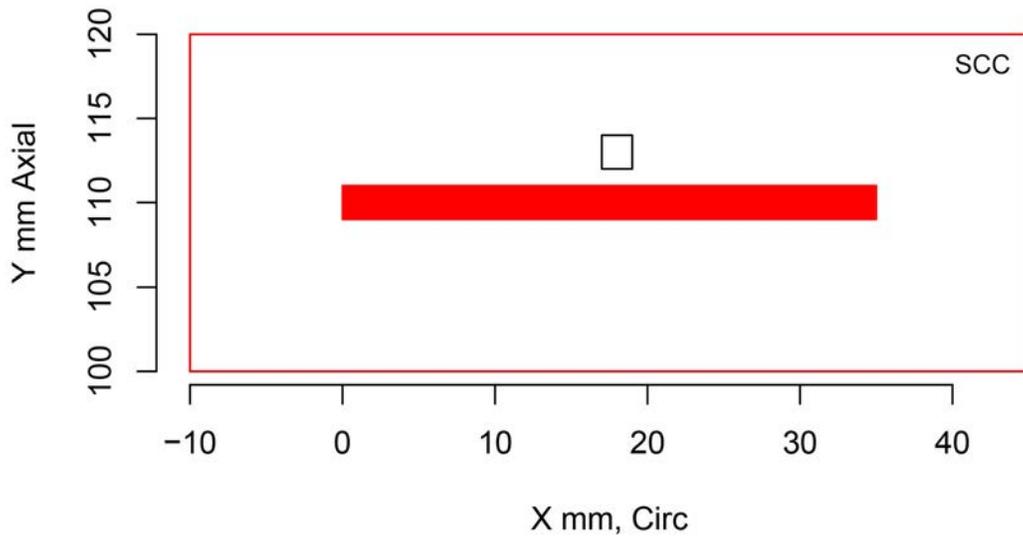


Figure H.303 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

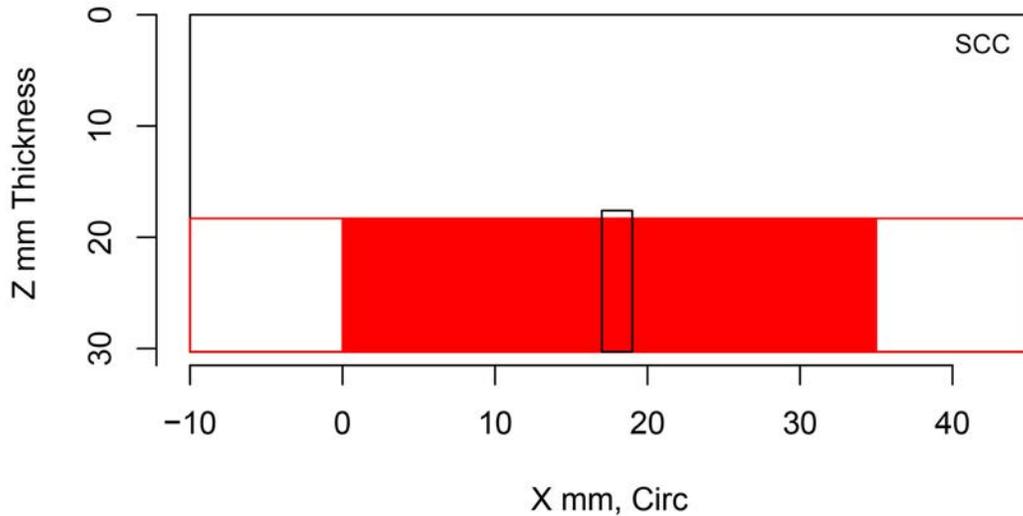


Figure H.304 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

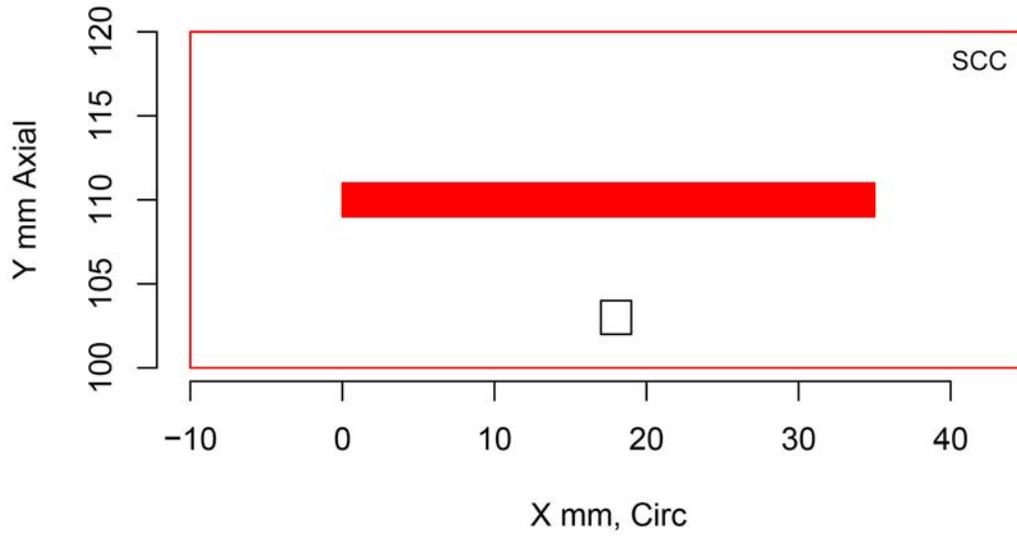


Figure H.305 Indication Plot for Procedure PATP.29 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

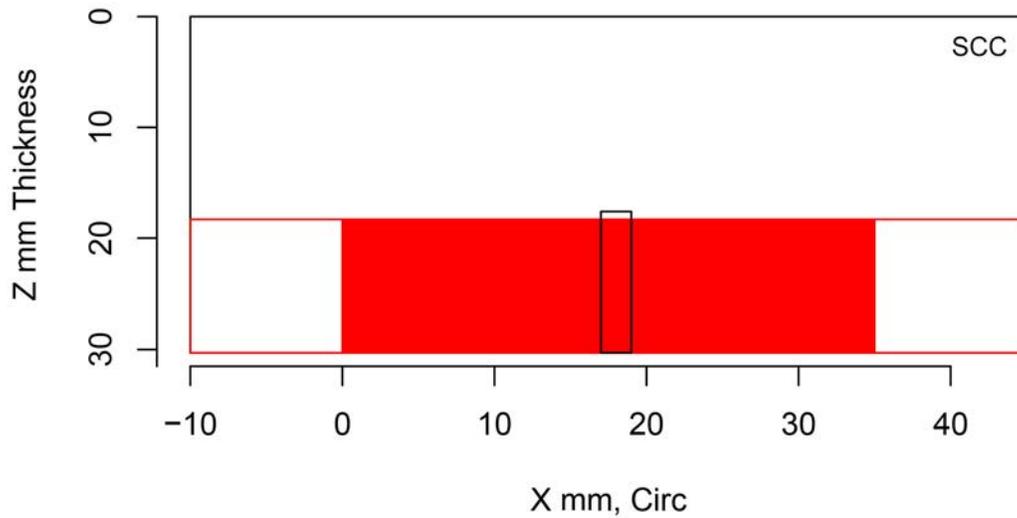


Figure H.306 Indication Plot for Procedure PATP.29 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

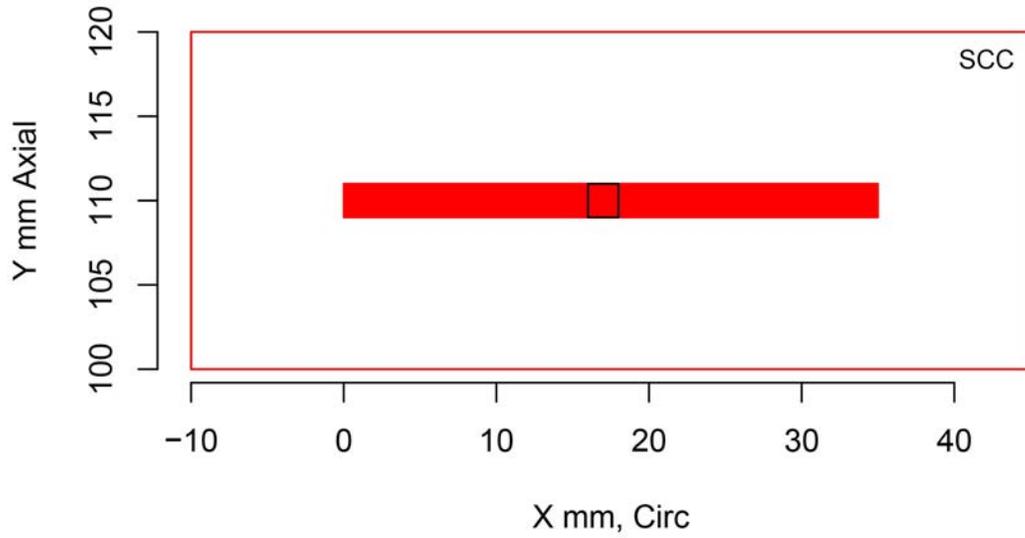


Figure H.307 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

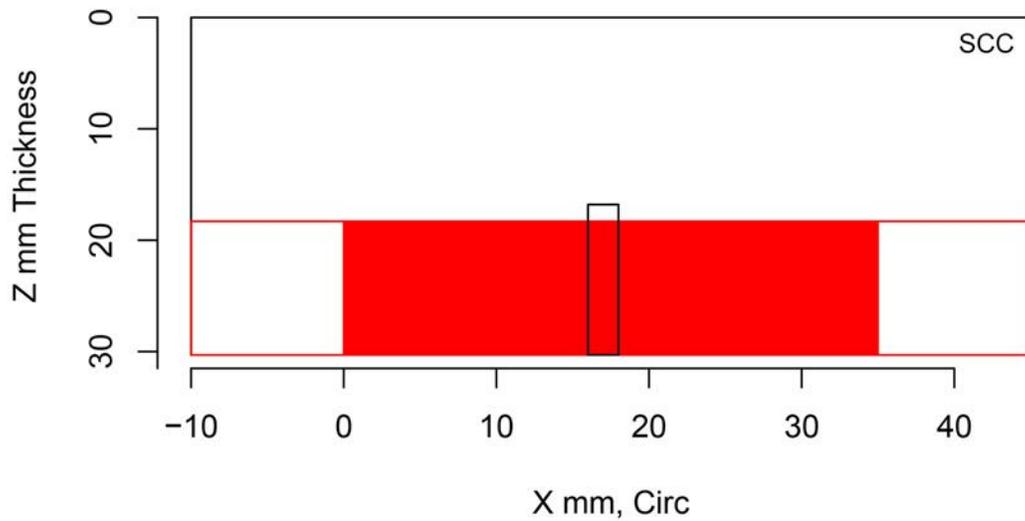


Figure H.308 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

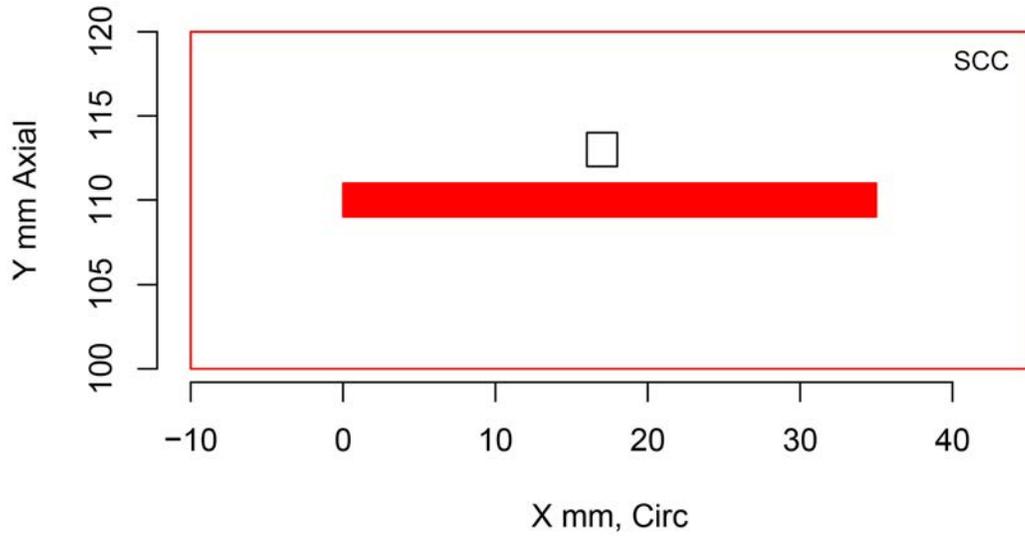


Figure H.309 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

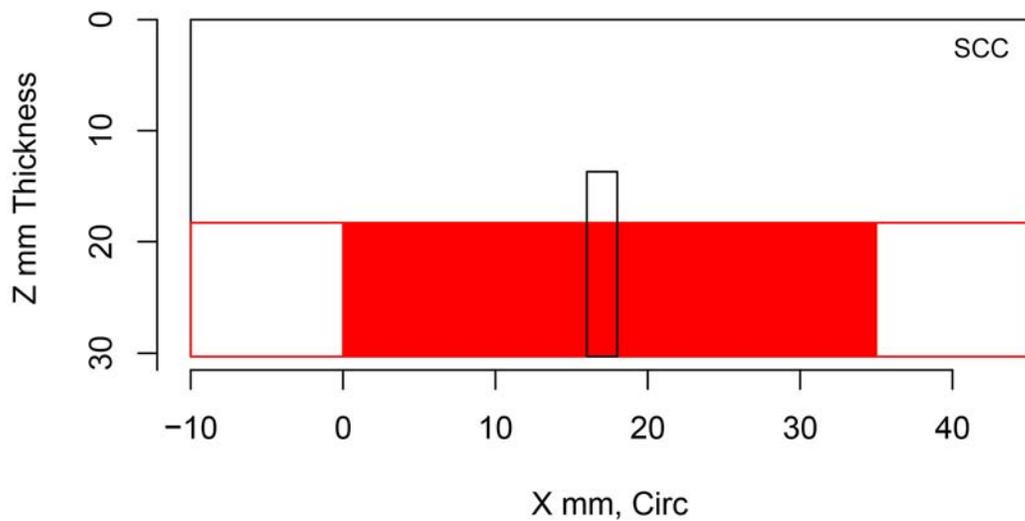


Figure H.310 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

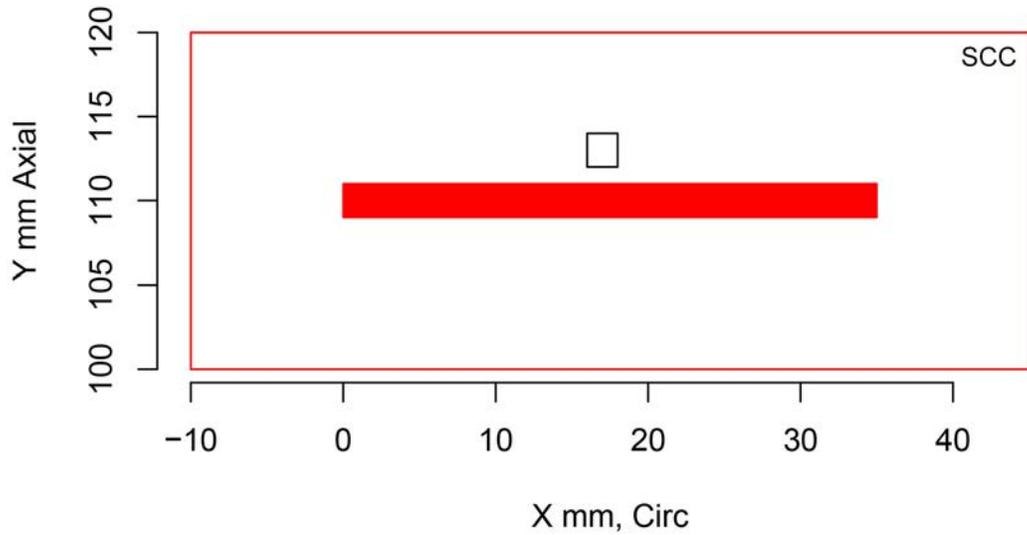


Figure H.311 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

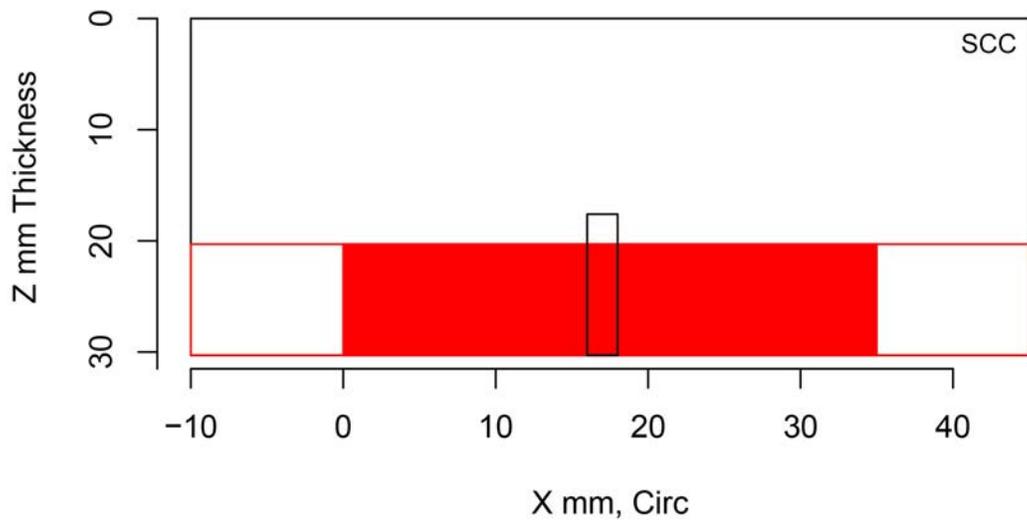


Figure H.312 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

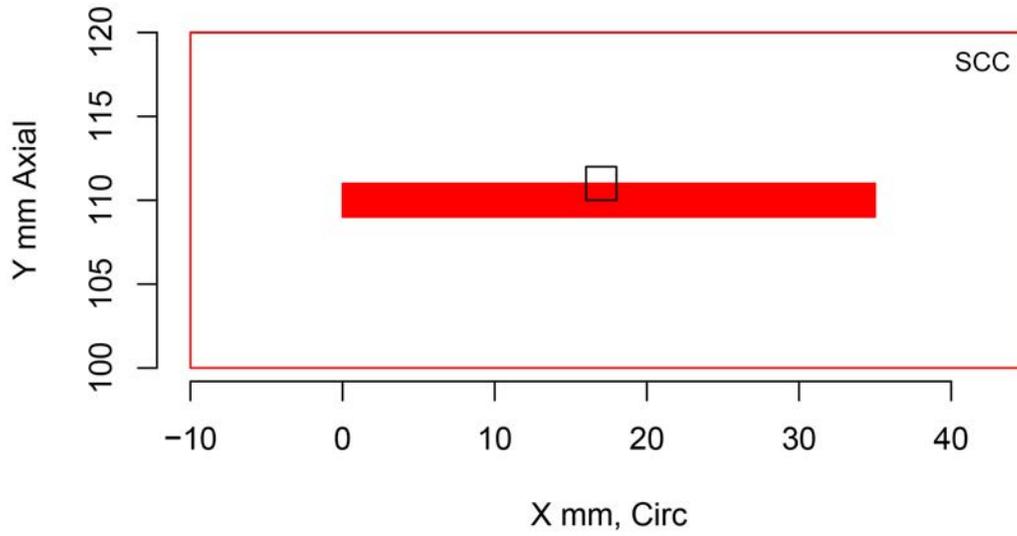


Figure H.313 Indication Plot for Procedure PATP.29 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

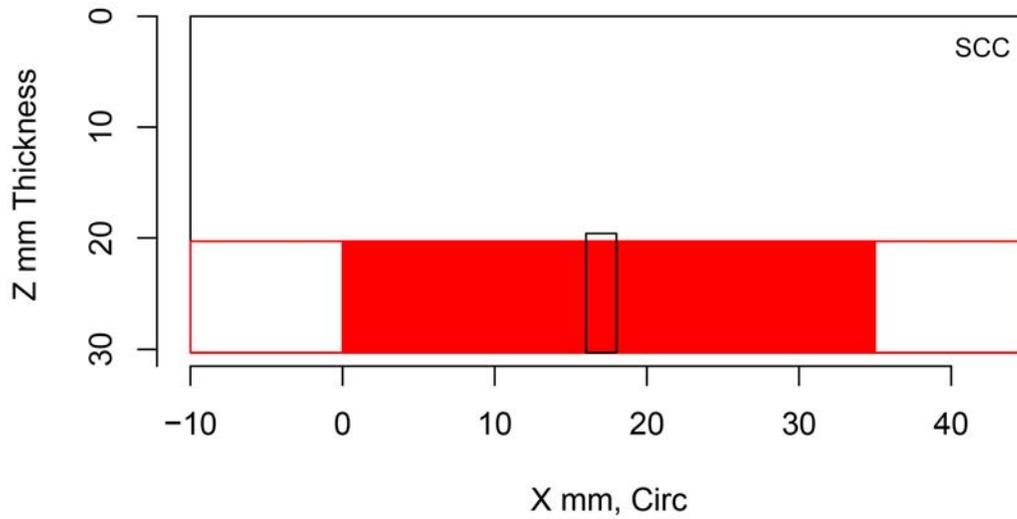


Figure H.314 Indication Plot for Procedure PATP.29 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

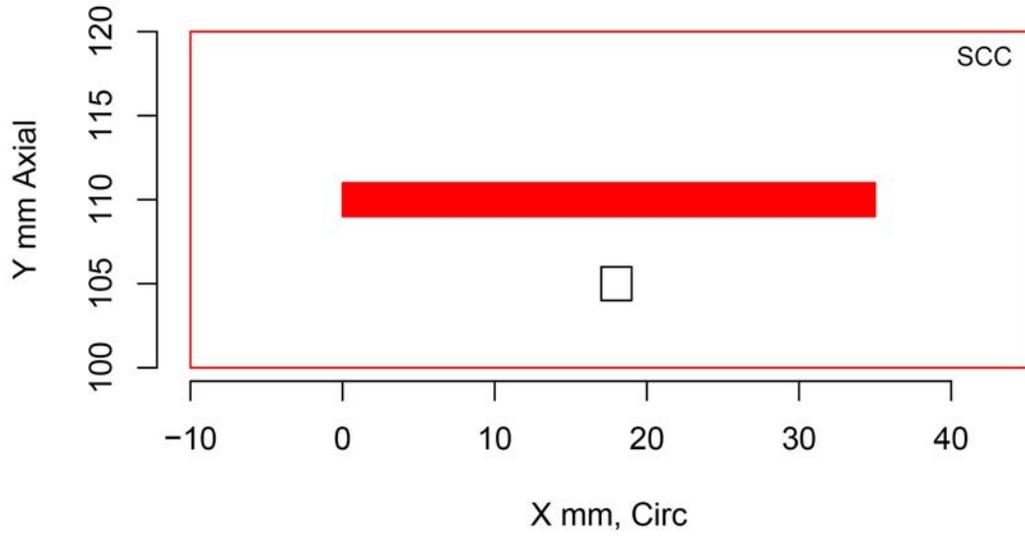


Figure H.315 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

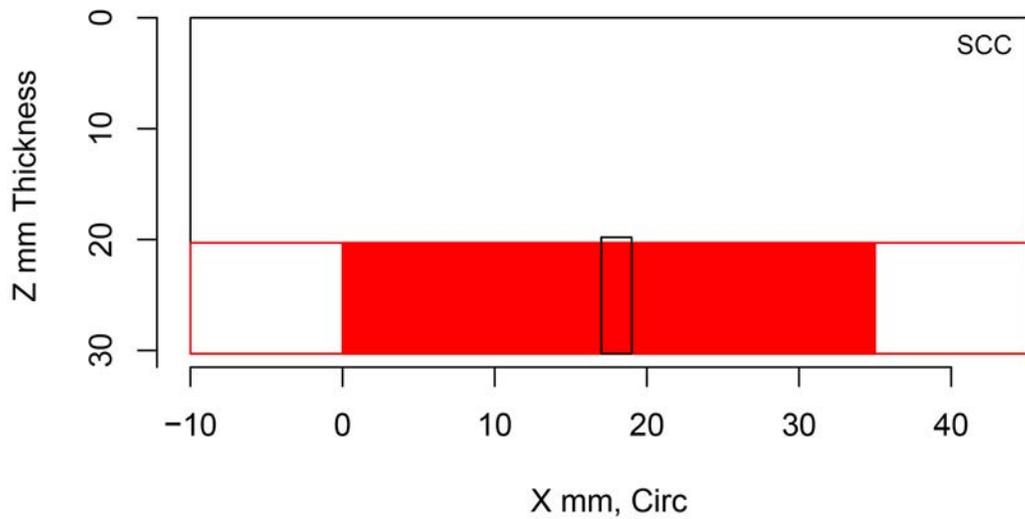


Figure H.316 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

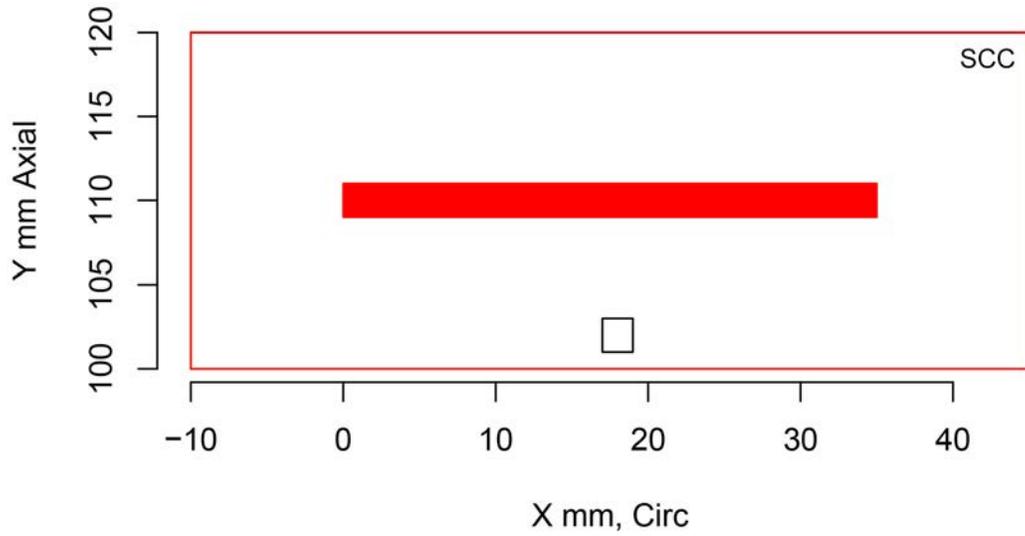


Figure H.317 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

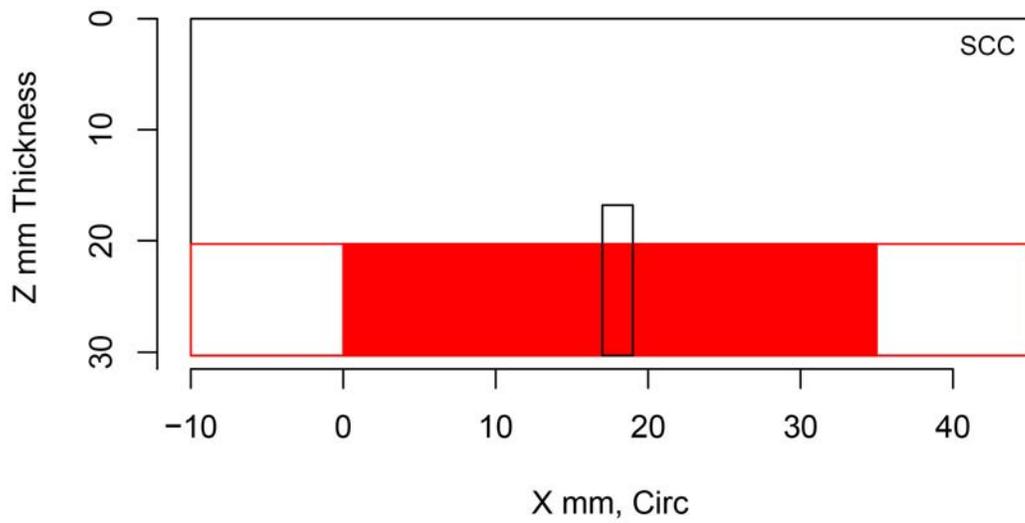


Figure H.318 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

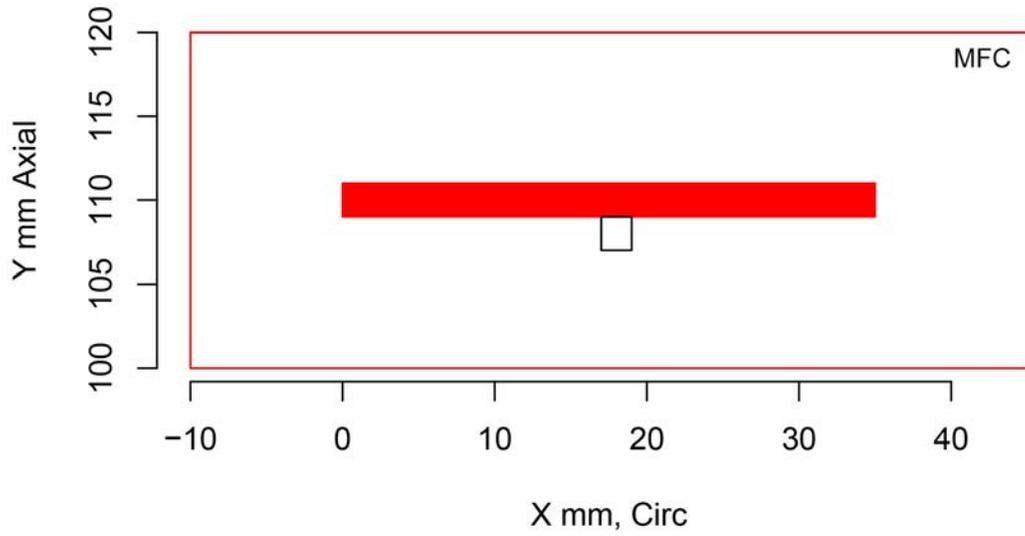


Figure H.319 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

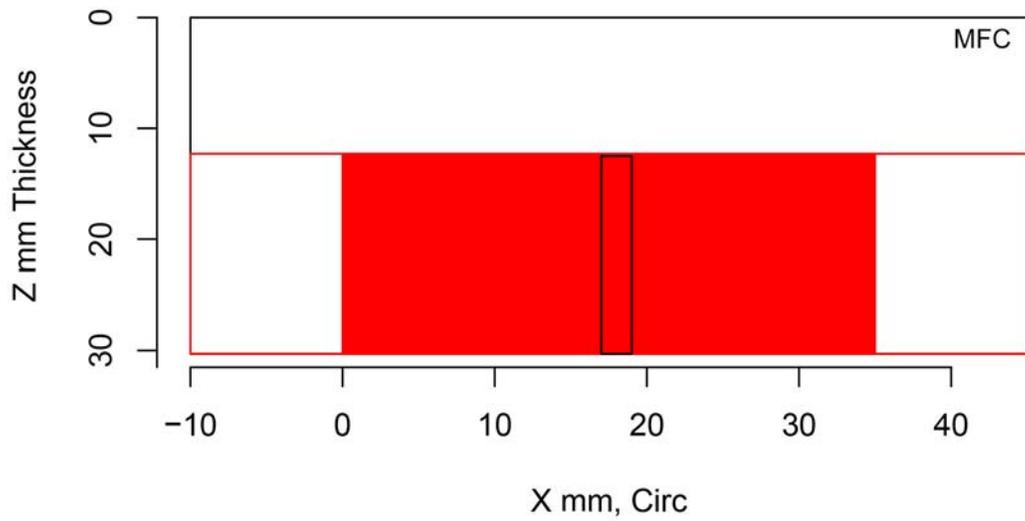


Figure H.320 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

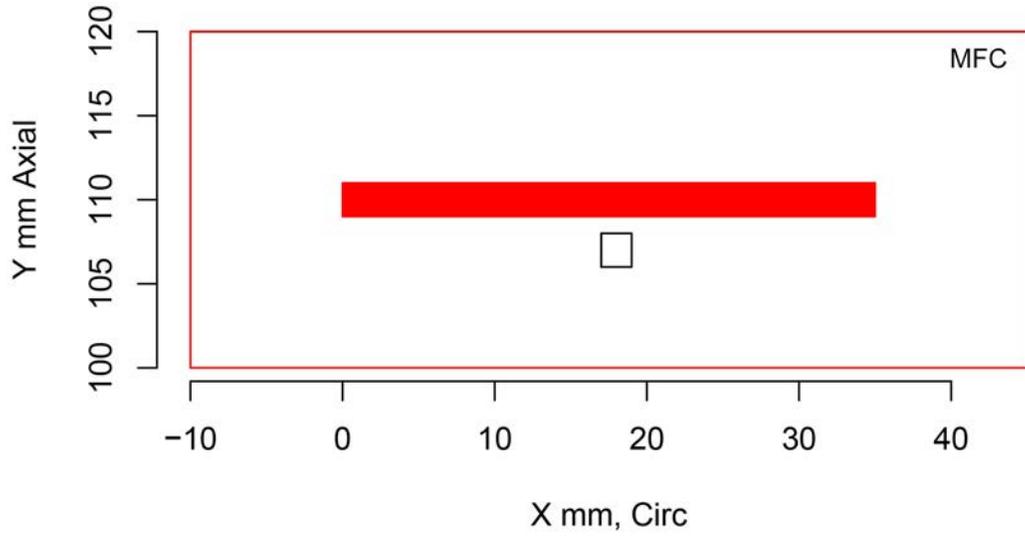


Figure H.321 Indication Plot for Procedure PATP.29 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

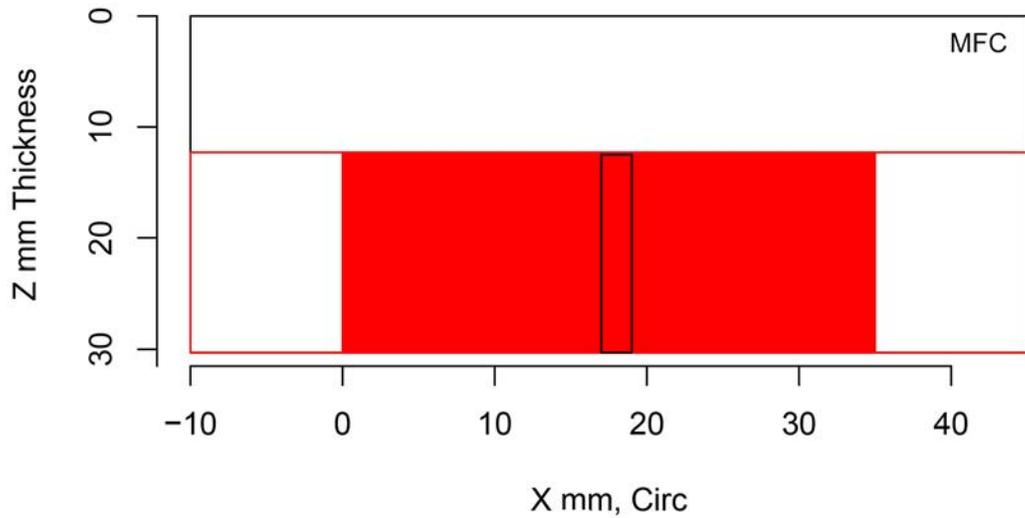


Figure H.322 Indication Plot for Procedure PATP.29 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

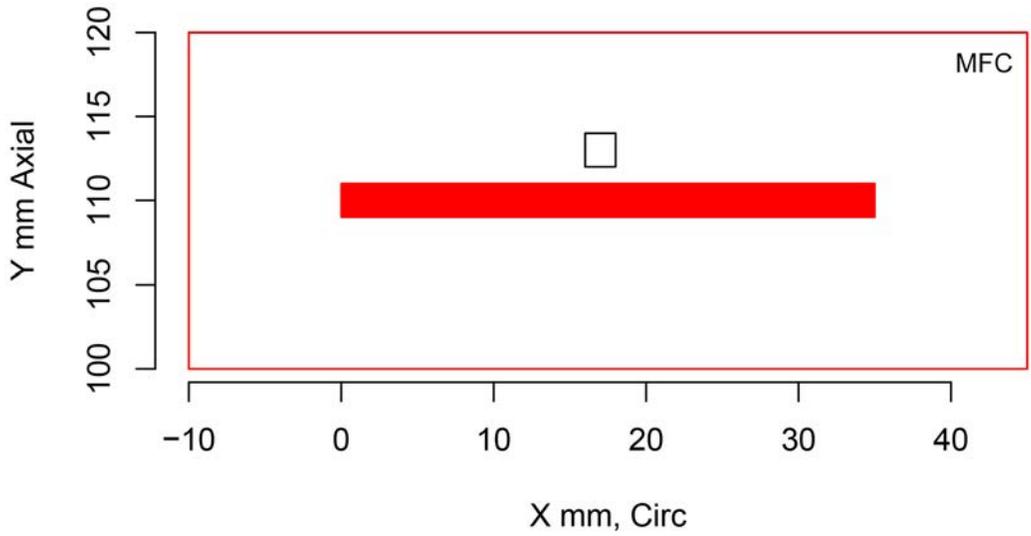


Figure H.323 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

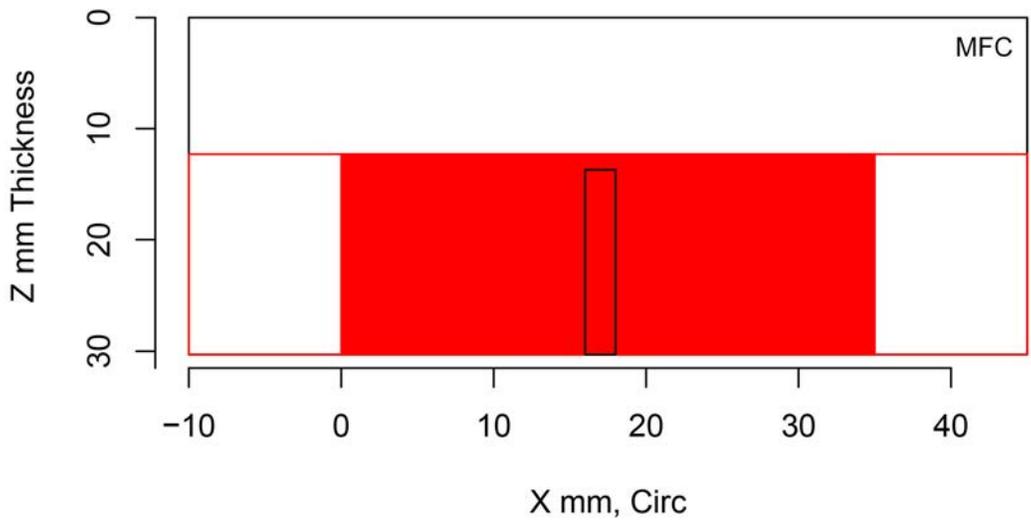


Figure H.324 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

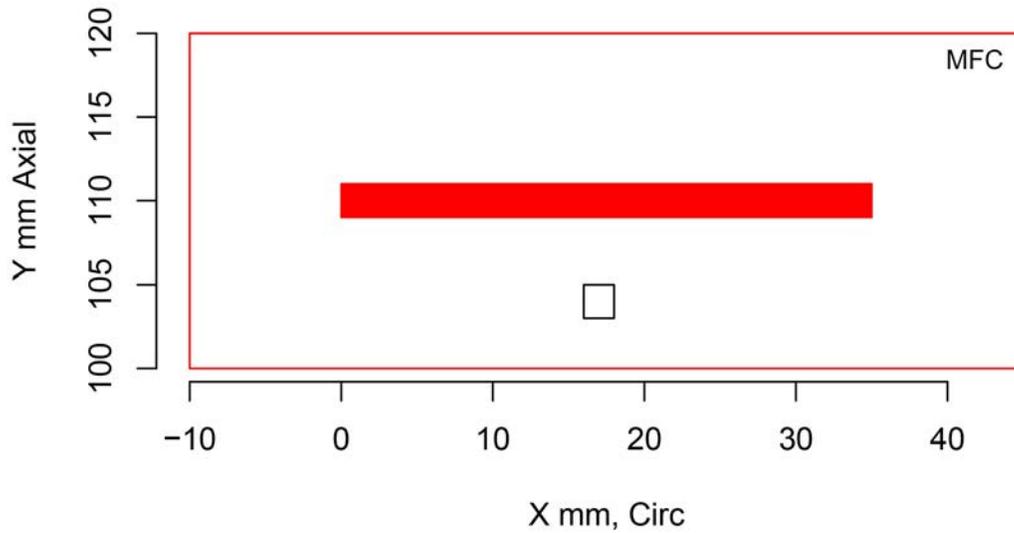


Figure H.325 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

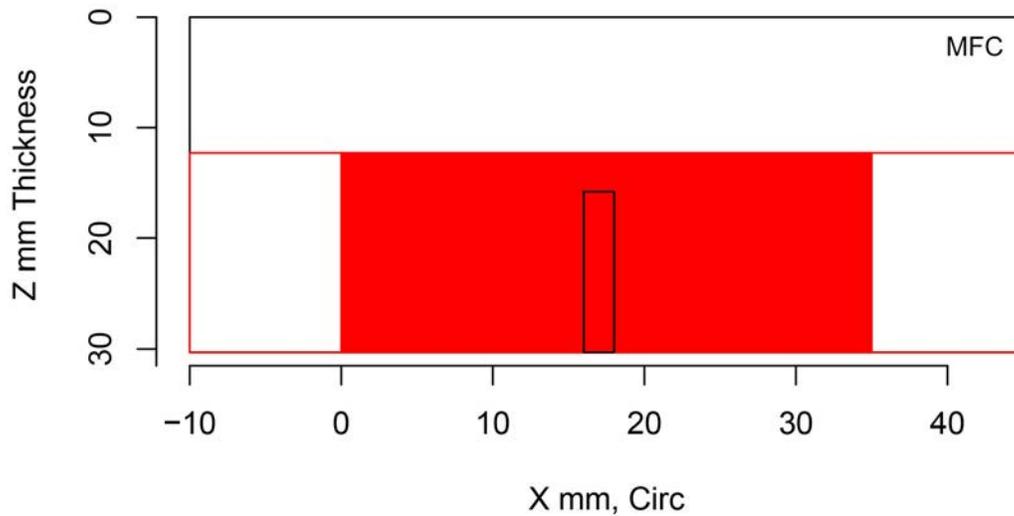


Figure H.326 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

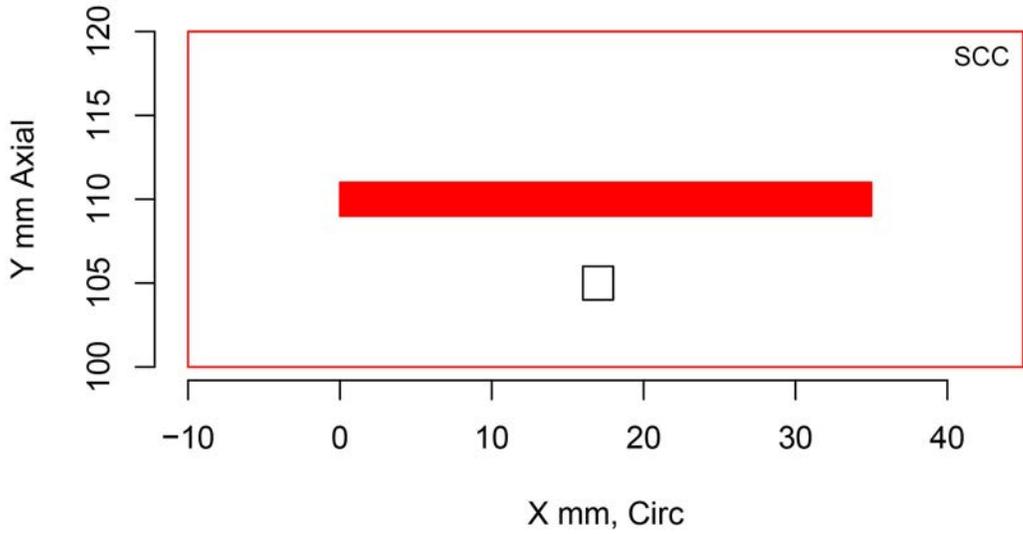


Figure H.327 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

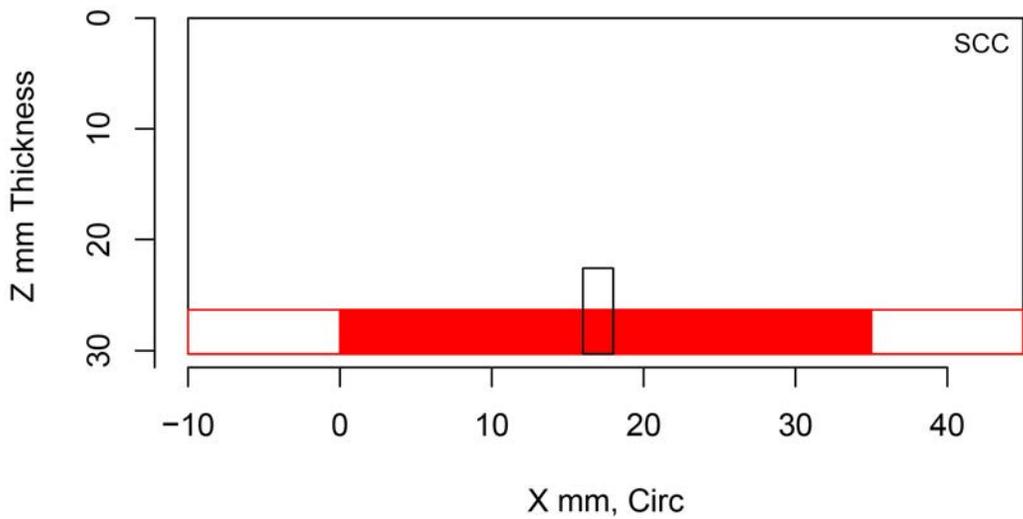


Figure H.328 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

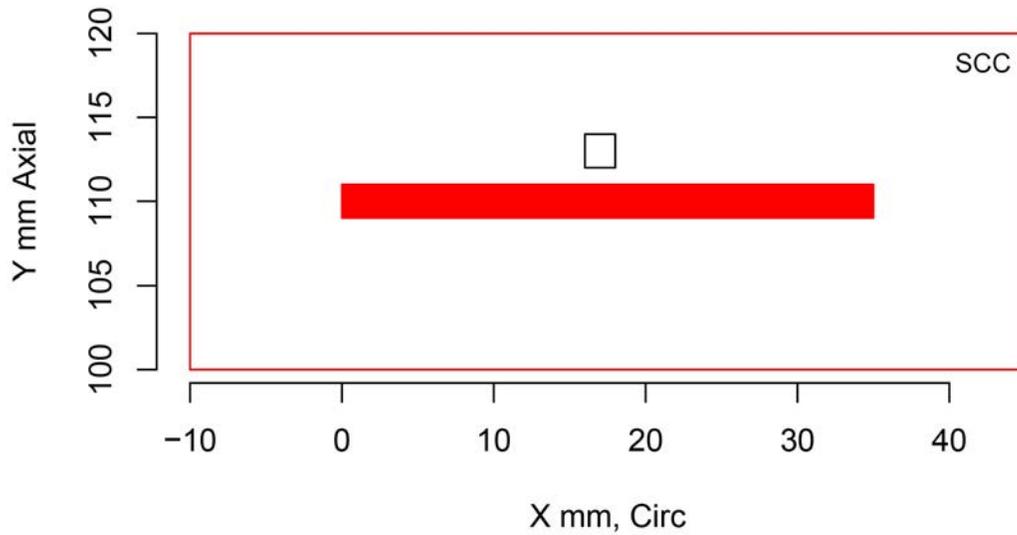


Figure H.329 Indication Plot for Procedure PATP.29 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

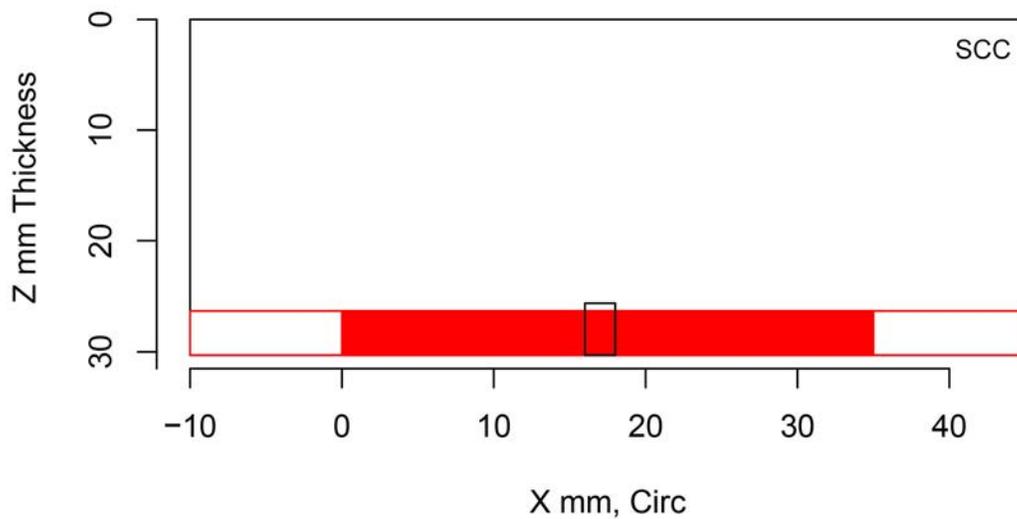


Figure H.330 Indication Plot for Procedure PATP.29 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

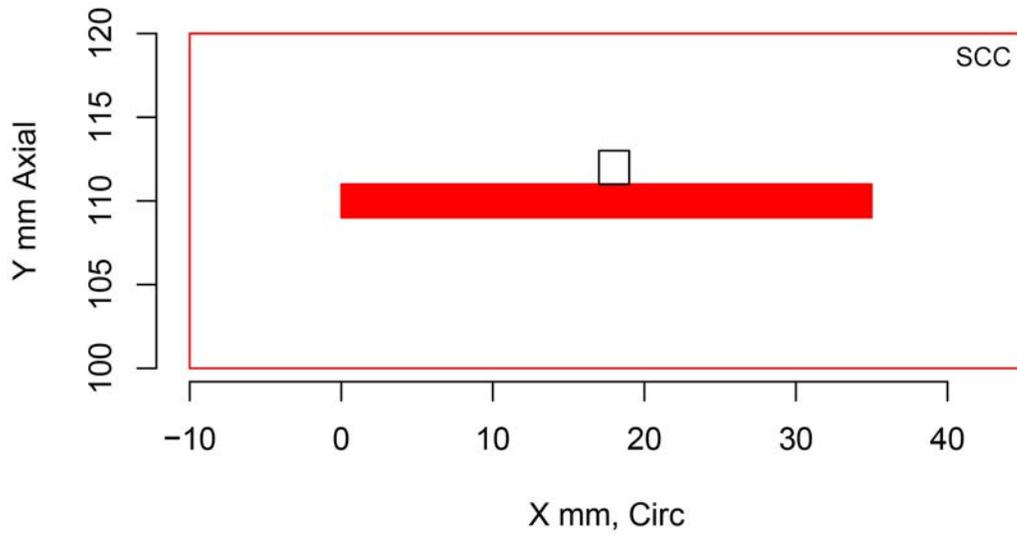


Figure H.331 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

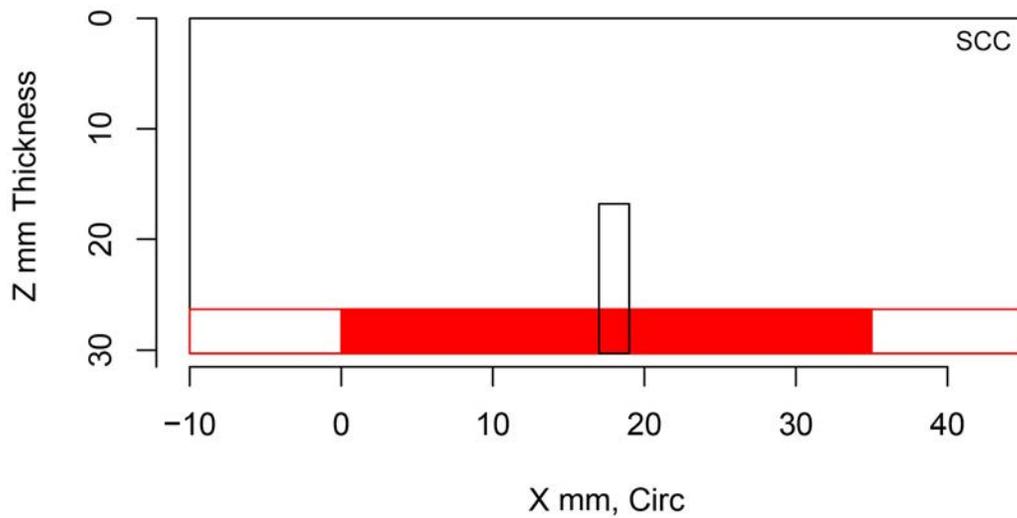


Figure H.332 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

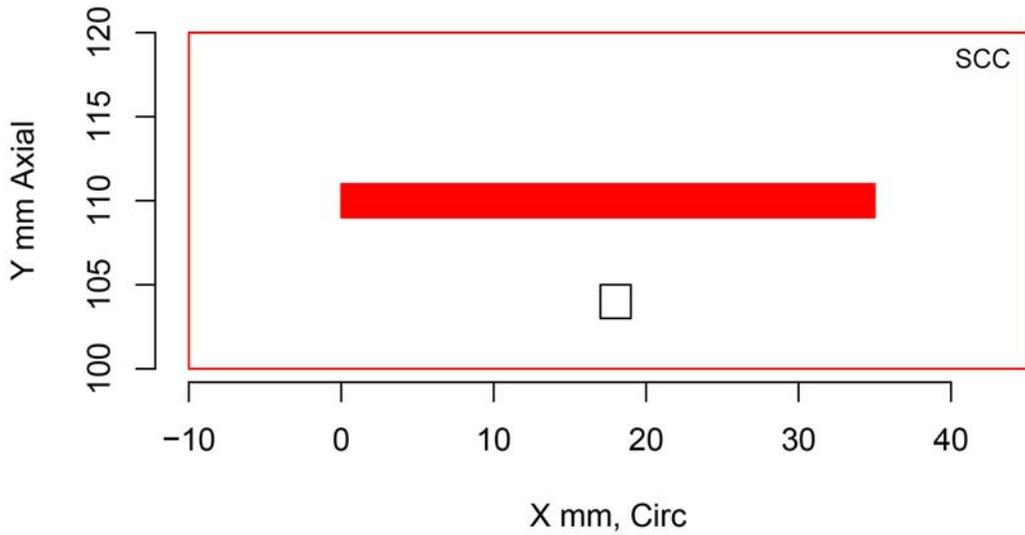


Figure H.333 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

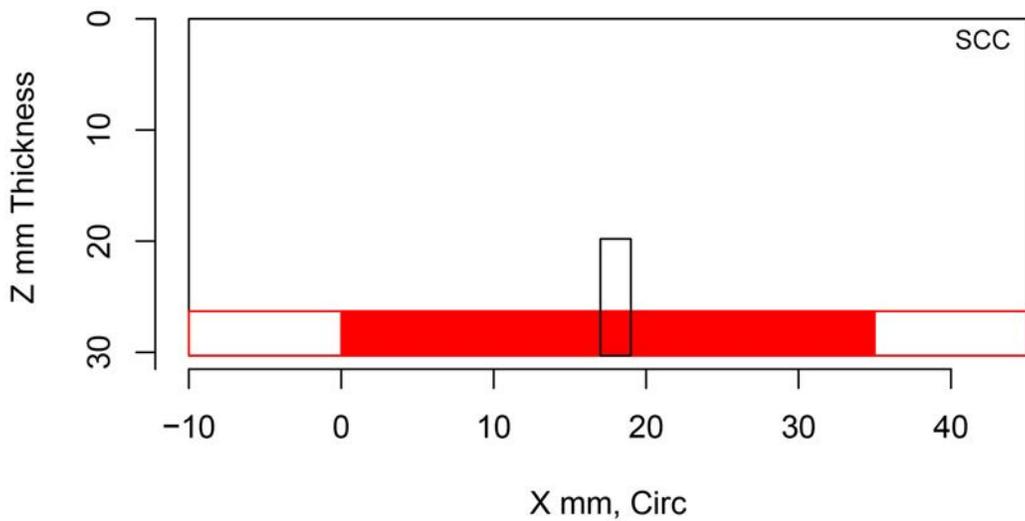


Figure H.334 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

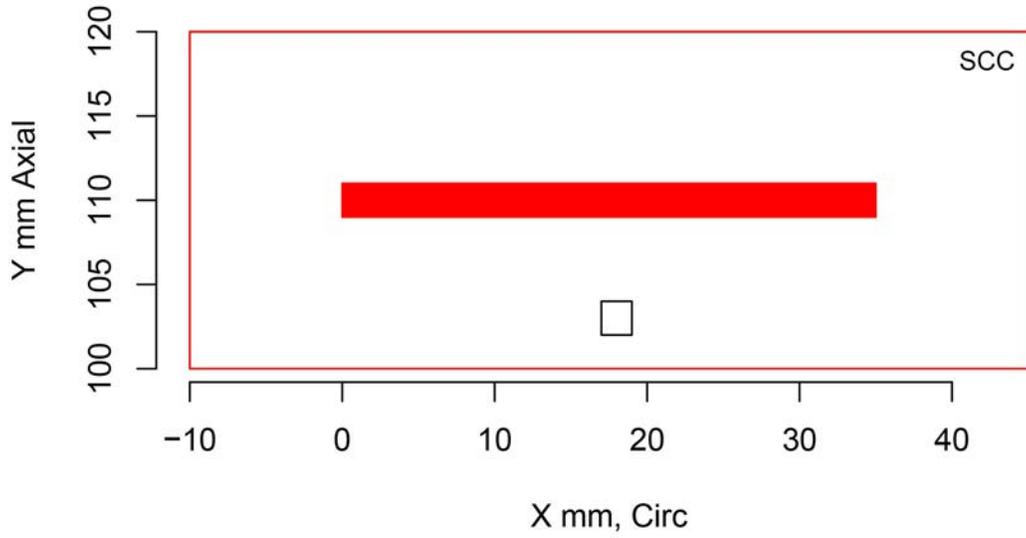


Figure H.335 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

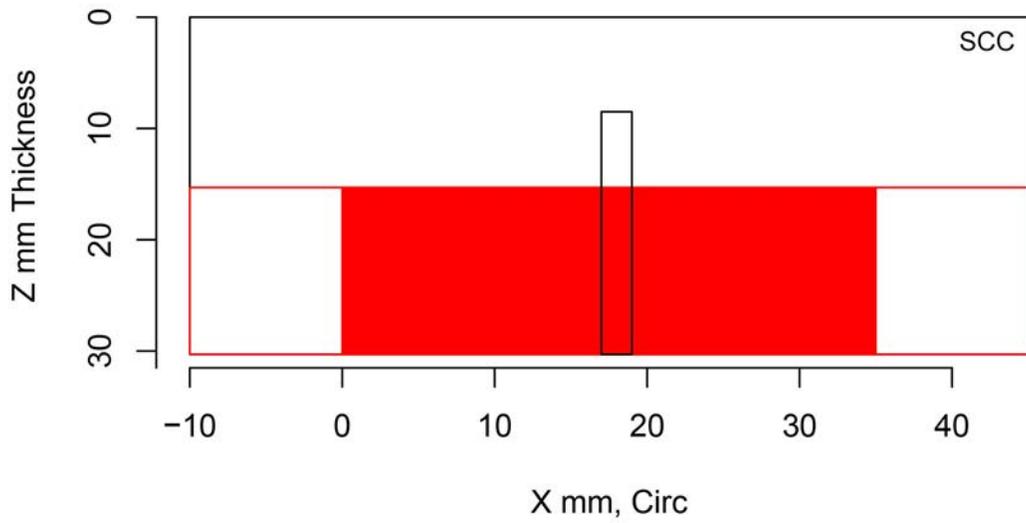


Figure H.336 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

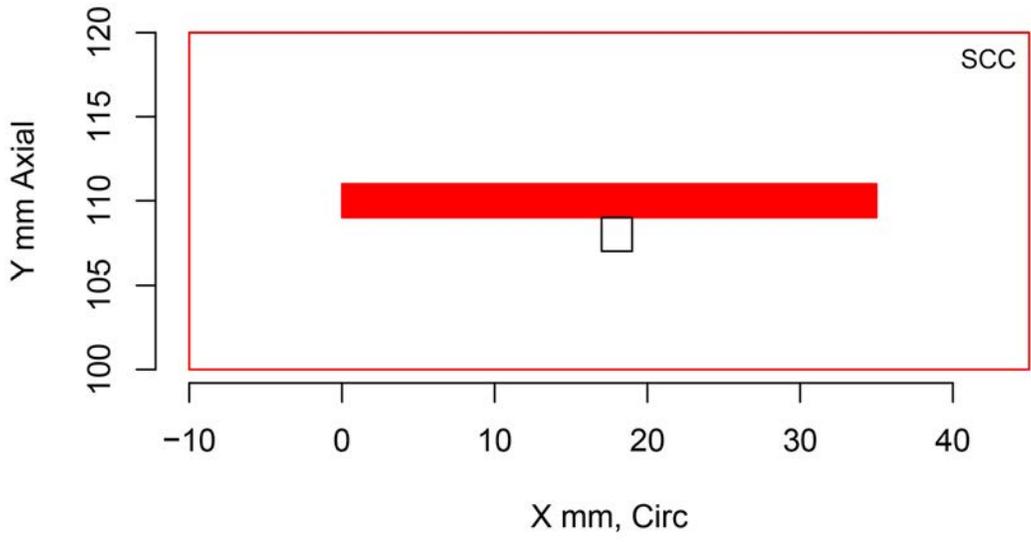


Figure H.337 Indication Plot for Procedure PATP.29 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

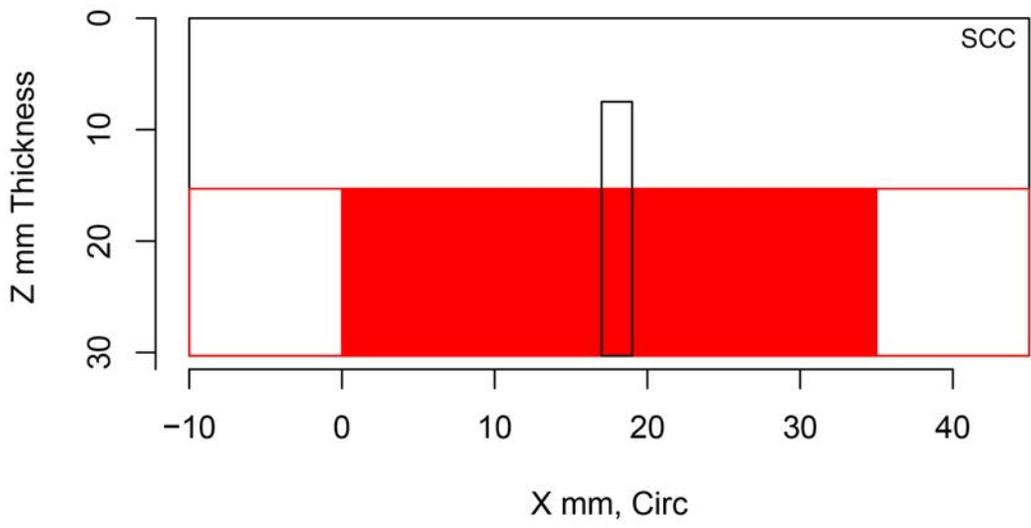


Figure H.338 Indication Plot for Procedure PATP.29 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

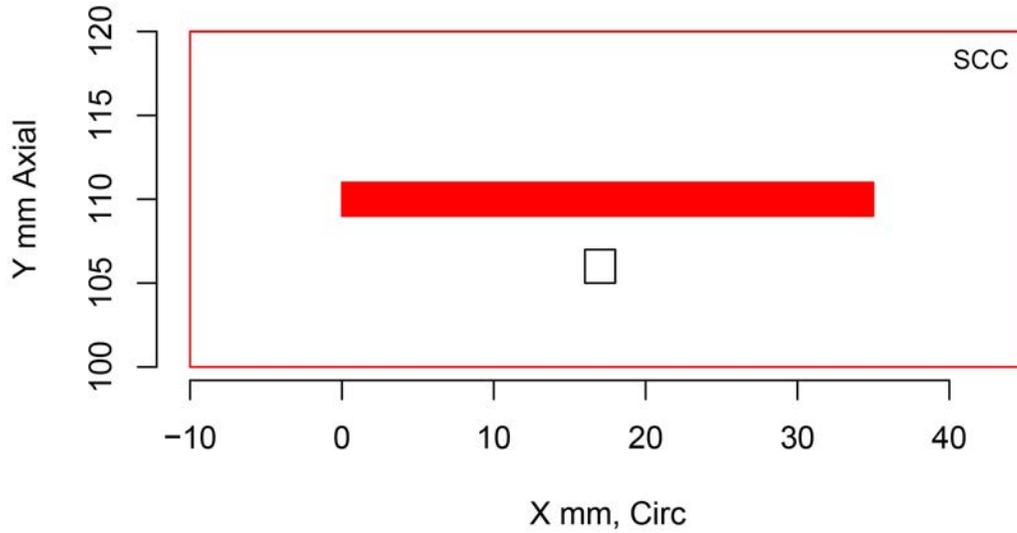


Figure H.339 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

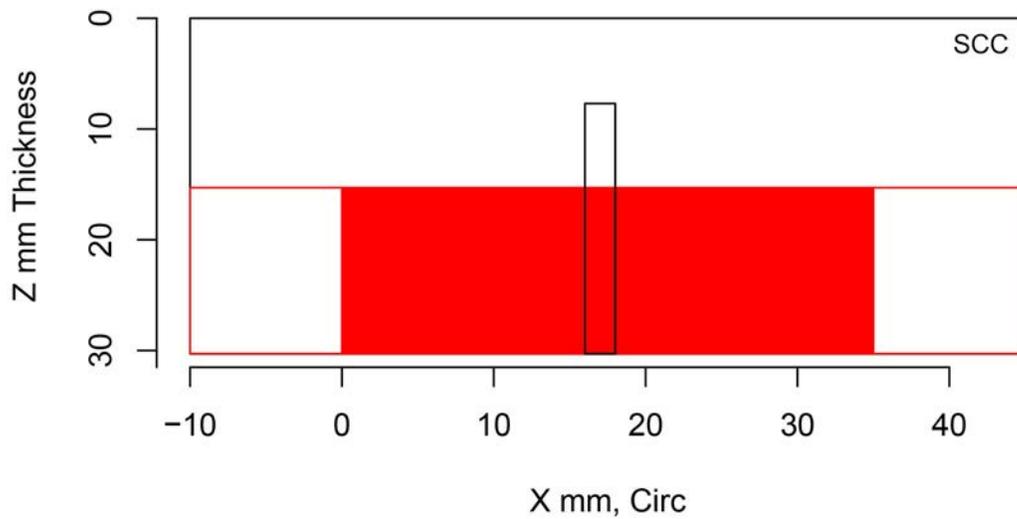


Figure H.340 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

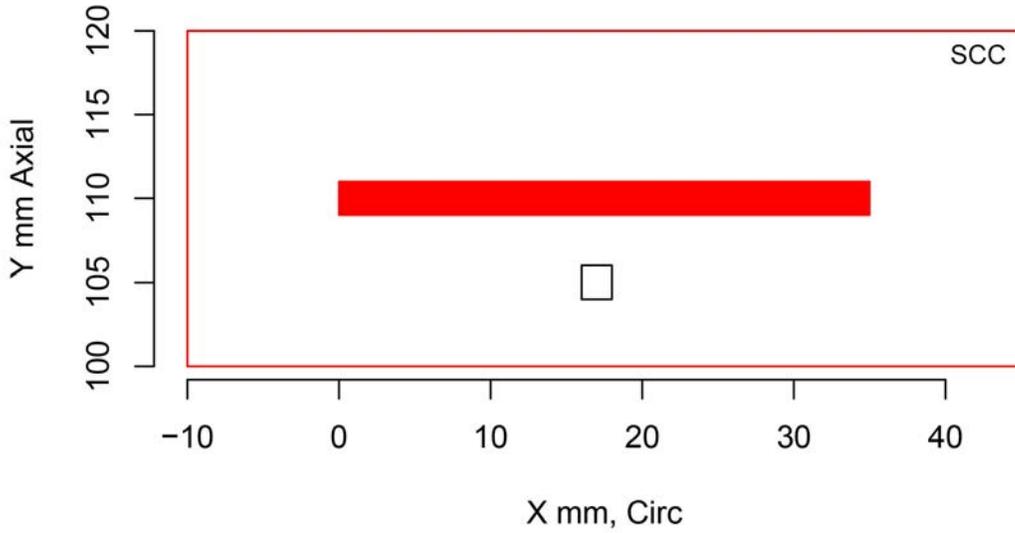


Figure H.341 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

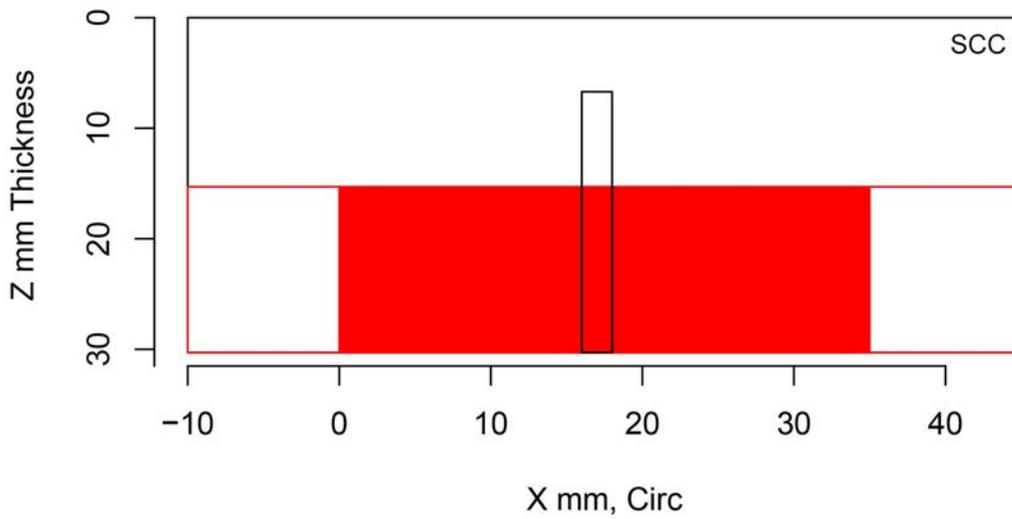


Figure H.342 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

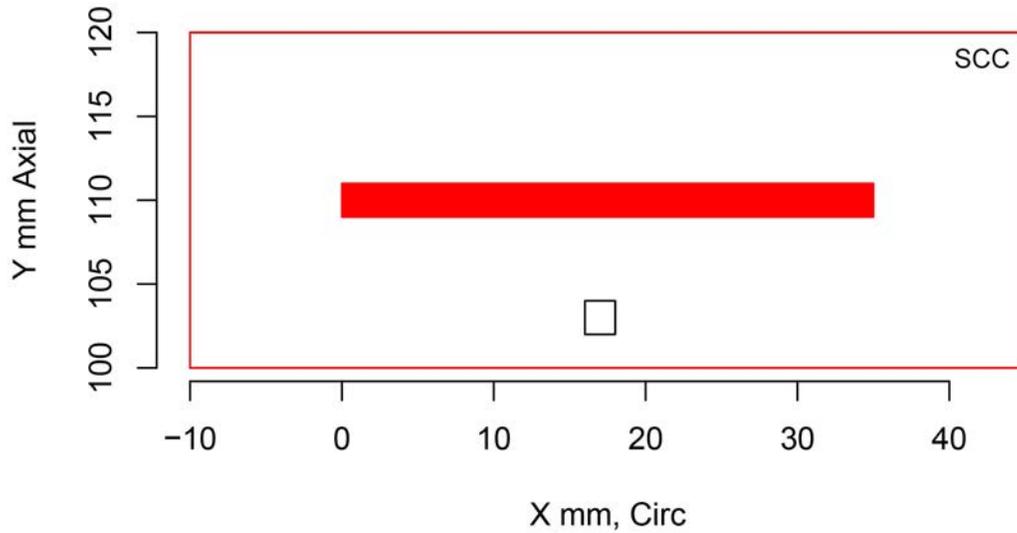


Figure H.343 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

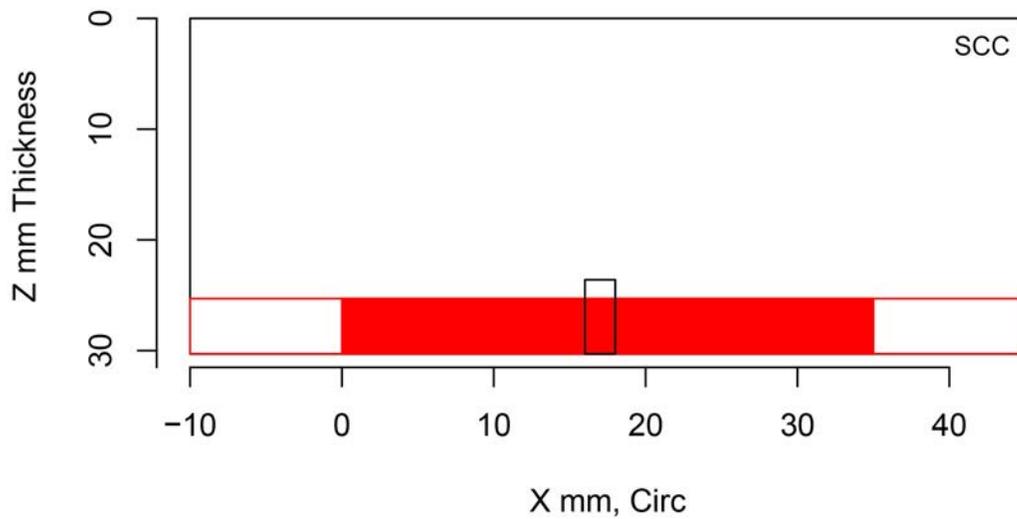


Figure H.344 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

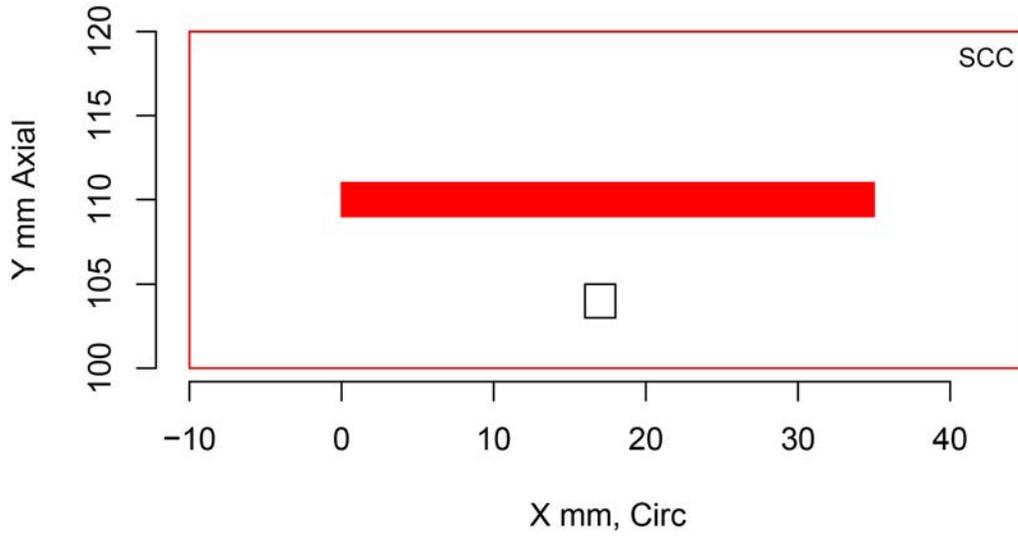


Figure H.345 Indication Plot for Procedure PATP.29 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

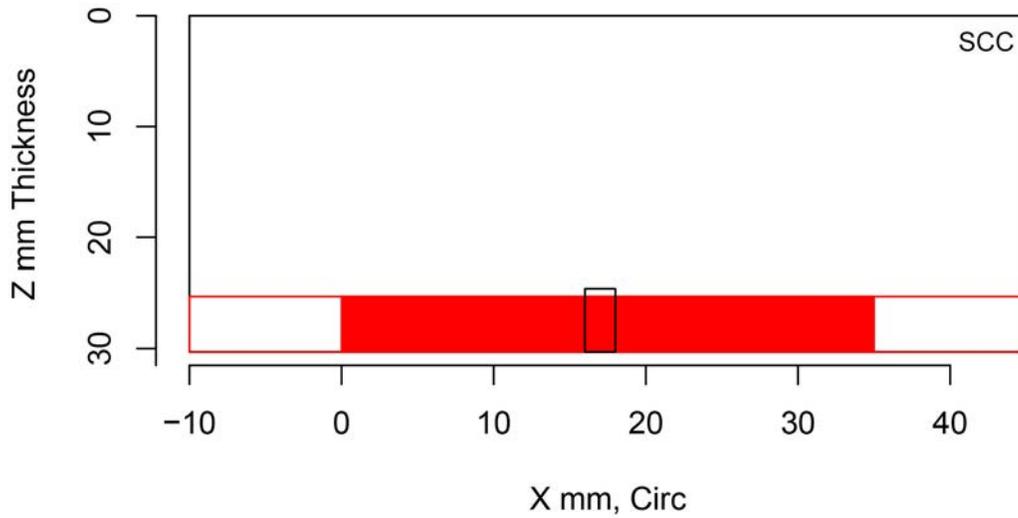


Figure H.346 Indication Plot for Procedure PATP.29 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

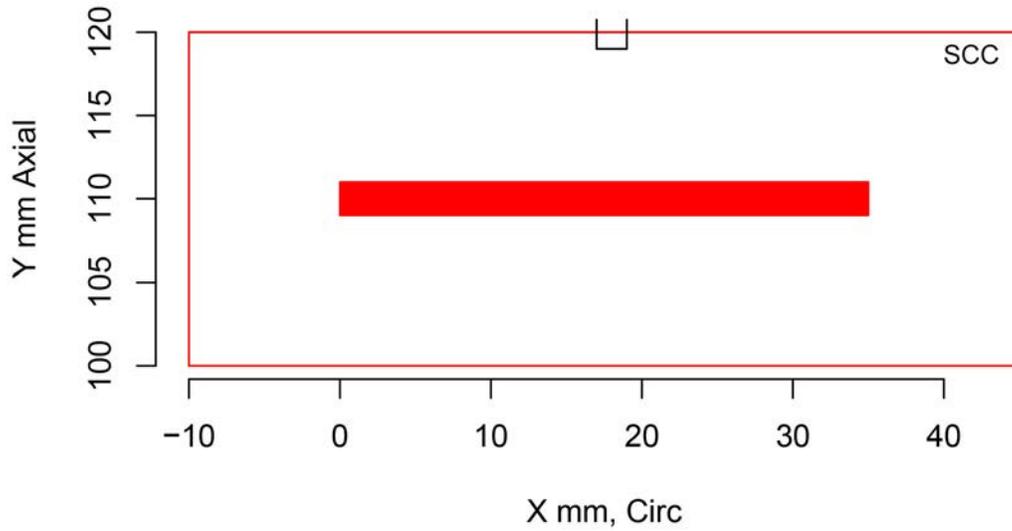


Figure H.347 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

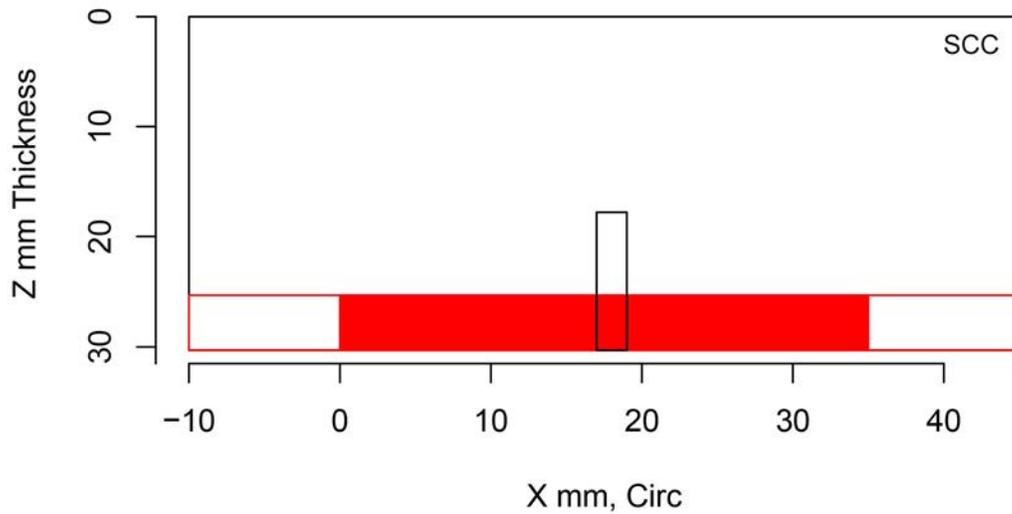


Figure H.348 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

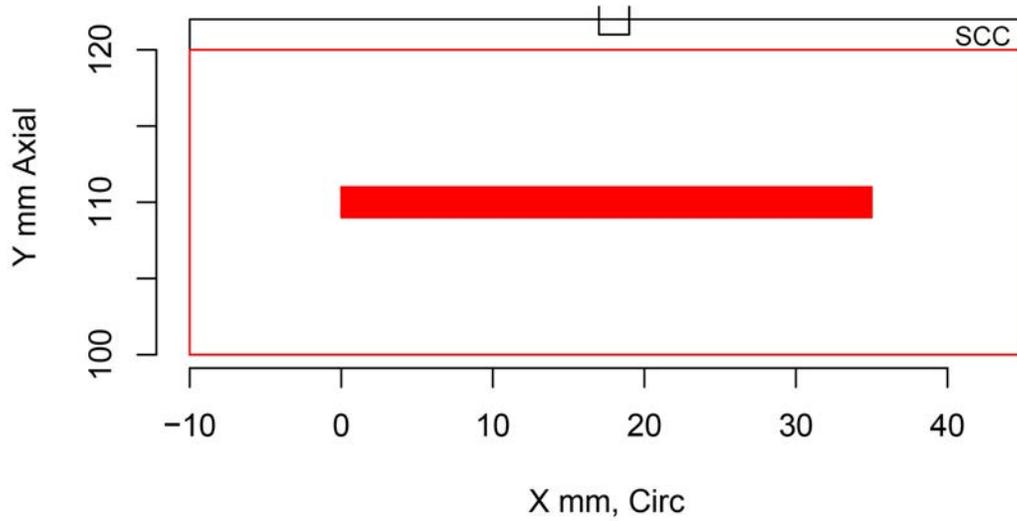


Figure H.349 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

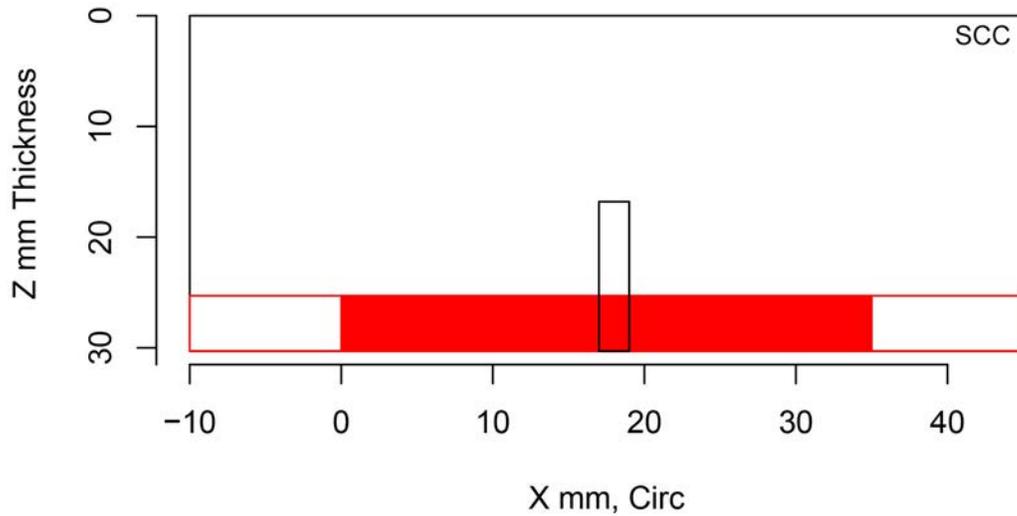


Figure H.350 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

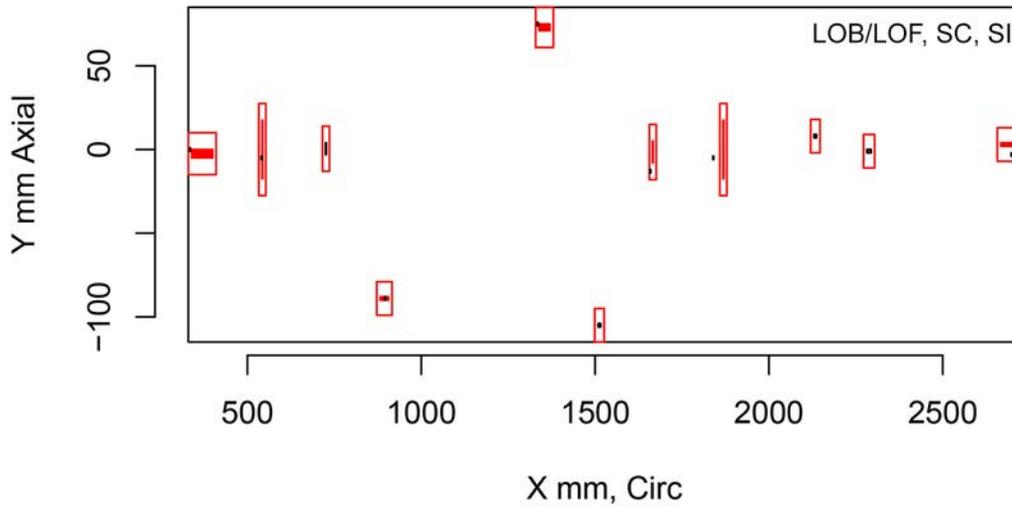


Figure H.351 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P37 in PARENT Open Testing (X – Y view)

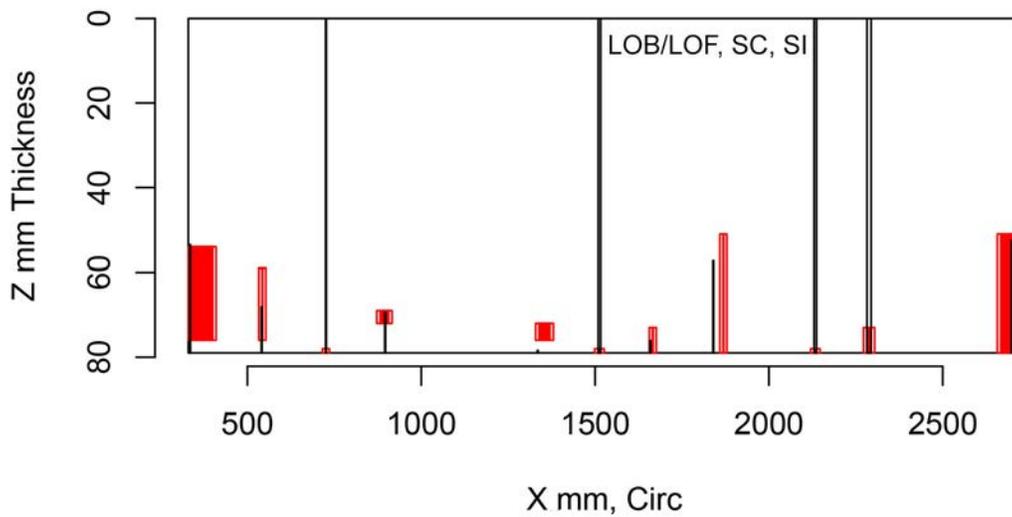


Figure H.352 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P37 in PARENT Open Testing (X – Z view)

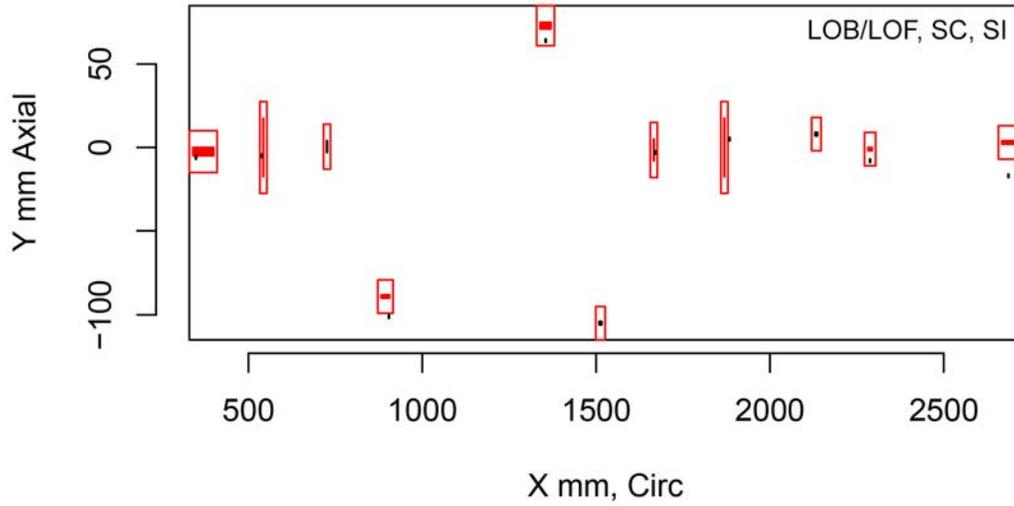


Figure H.353 Indication Plot for Procedure PATP.29 Applied to Test Block P37 in PARENT Open Testing (X – Y view)

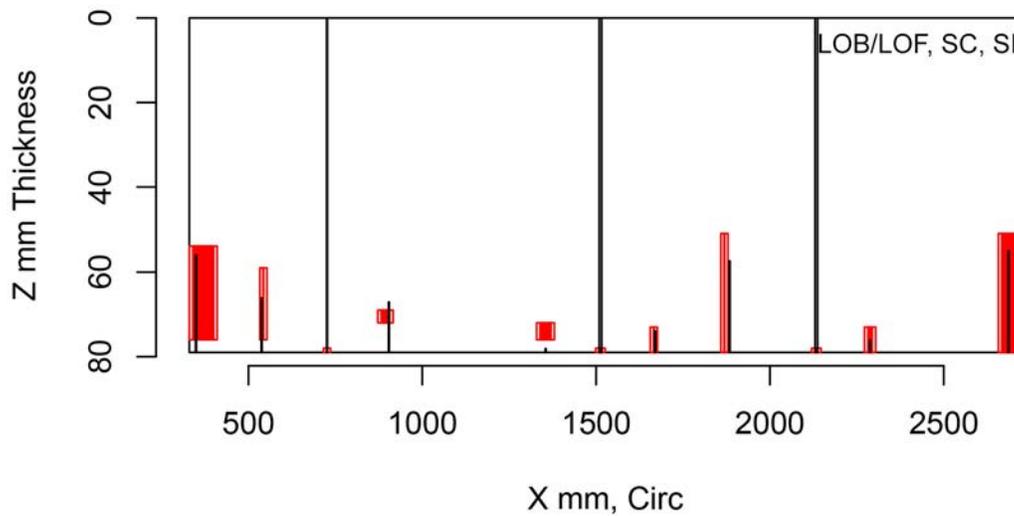


Figure H.354 Indication Plot for Procedure PATP.29 Applied to Test Block P37 in PARENT Open Testing (X – Z view)

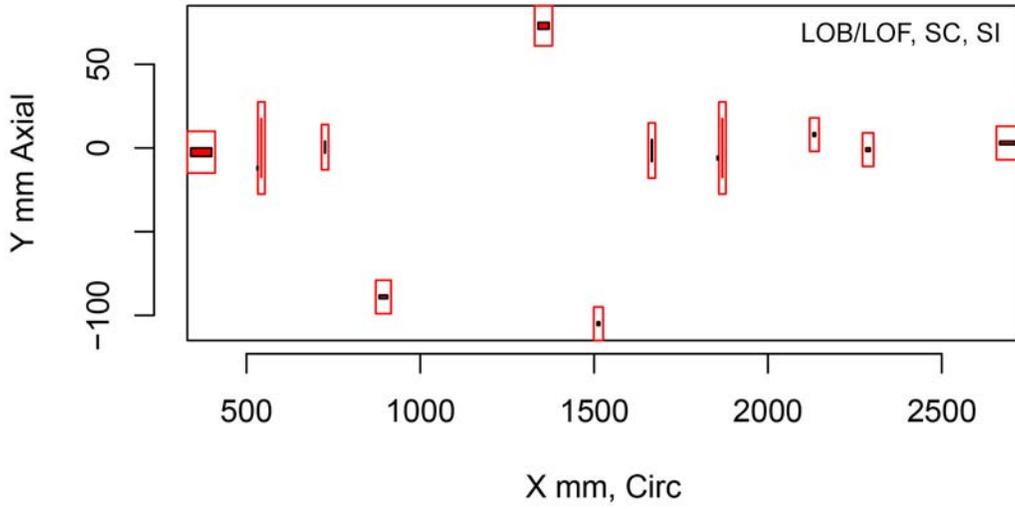


Figure H.355 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P37 in PARENT Open Testing (X – Y view)

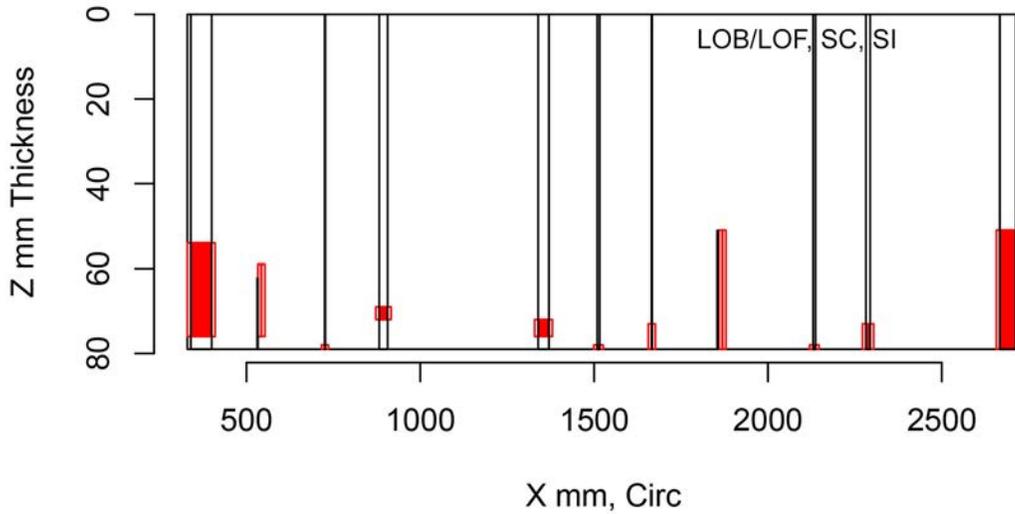


Figure H.356 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P37 in PARENT Open Testing (X – Z view)

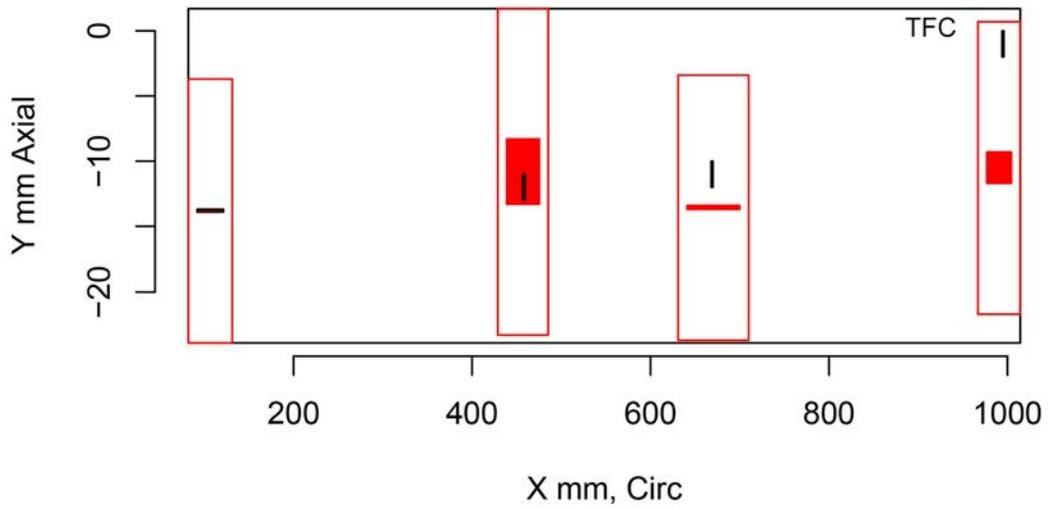


Figure H.357 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

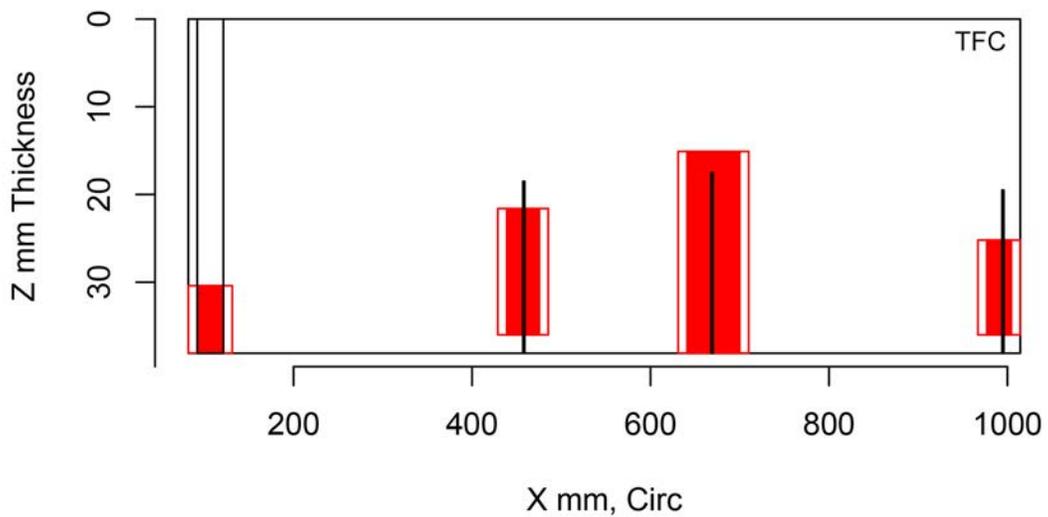


Figure H.358 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

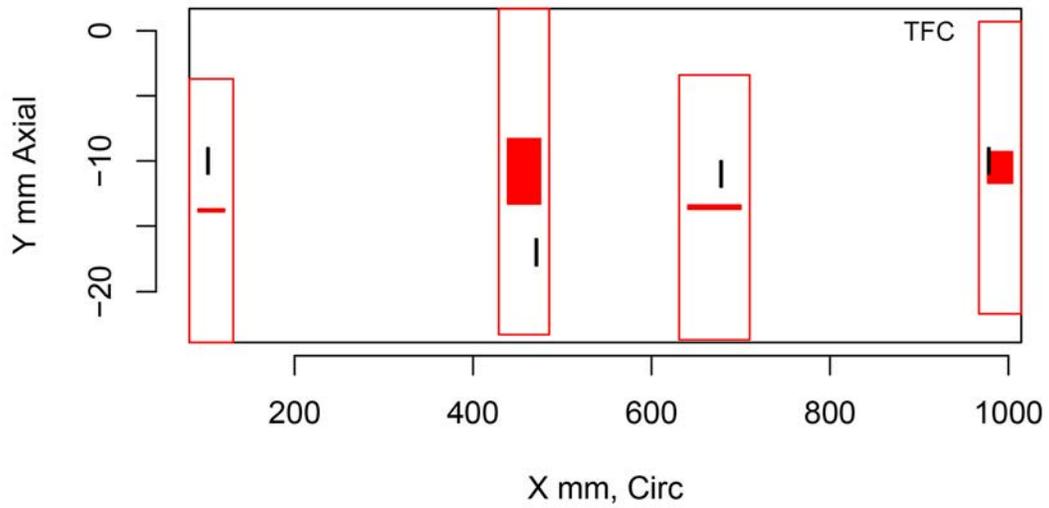


Figure H.359 Indication Plot for Procedure PATP.29 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

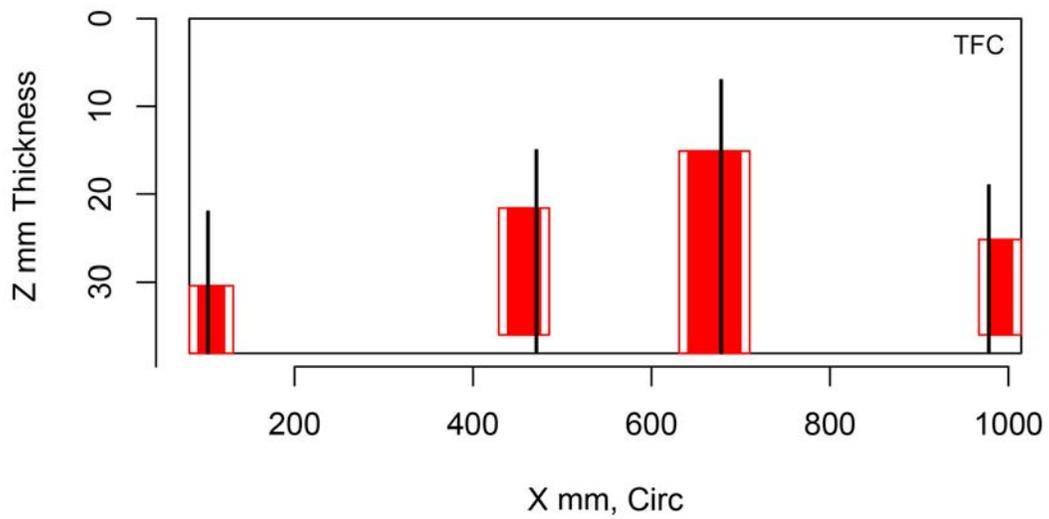


Figure H.360 Indication Plot for Procedure PATP.29 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

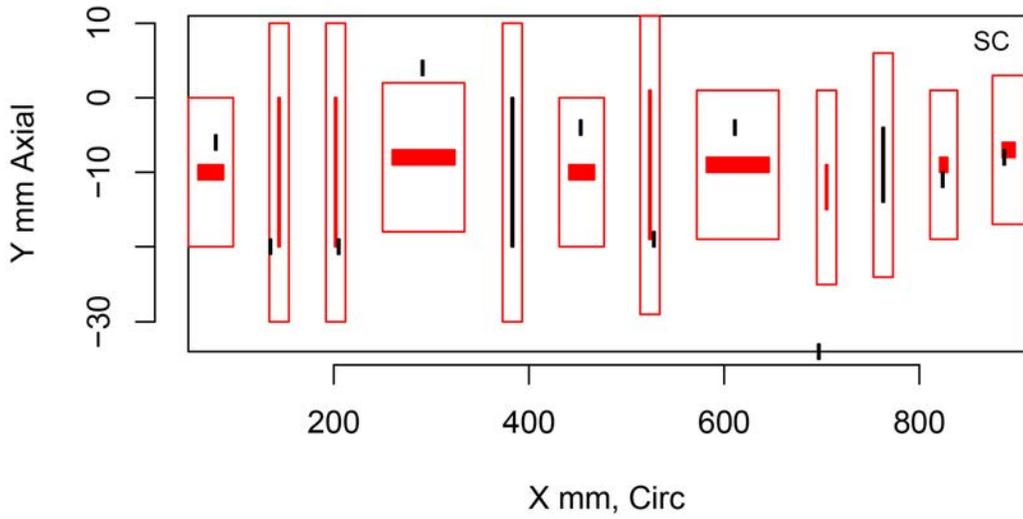


Figure H.361 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

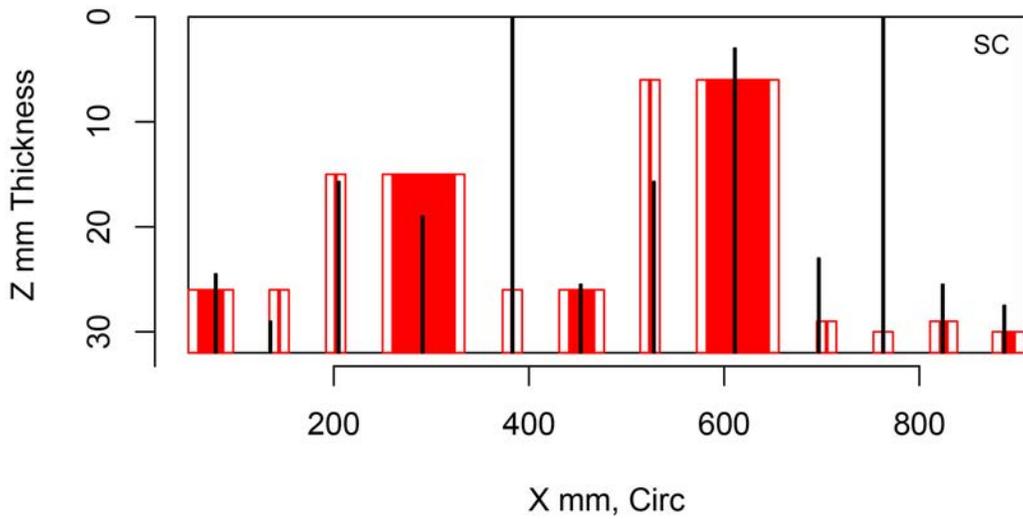


Figure H.362 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

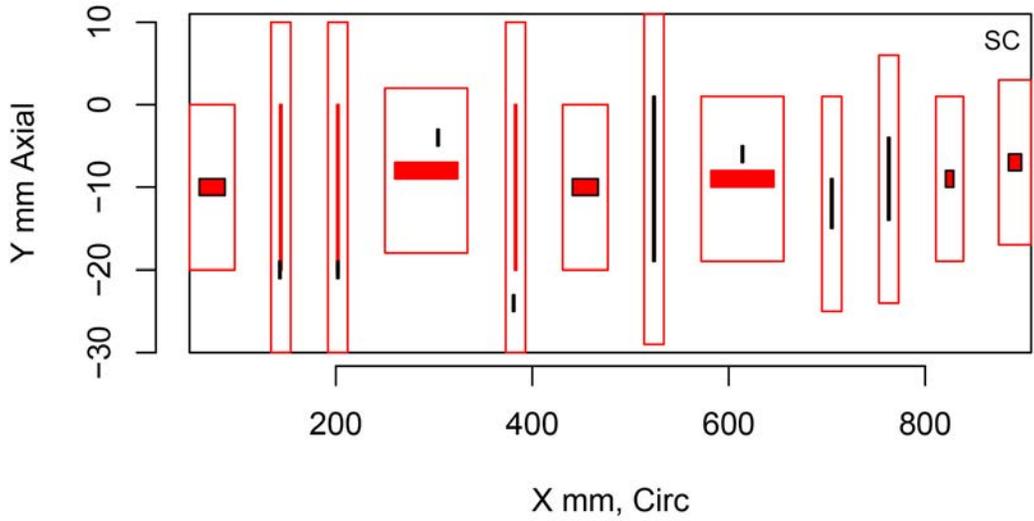


Figure H.363 Indication Plot for Procedure PATP.29 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

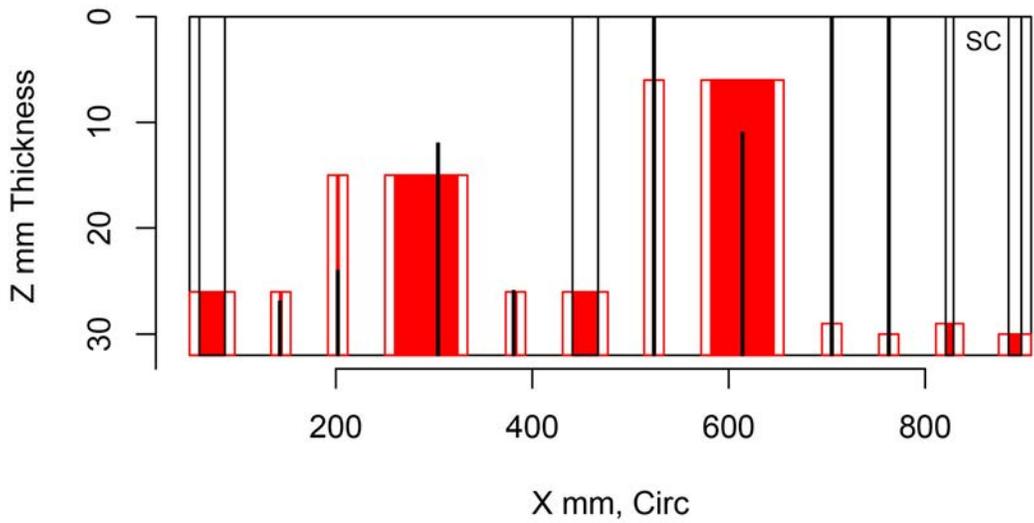


Figure H.364 Indication Plot for Procedure PATP.29 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

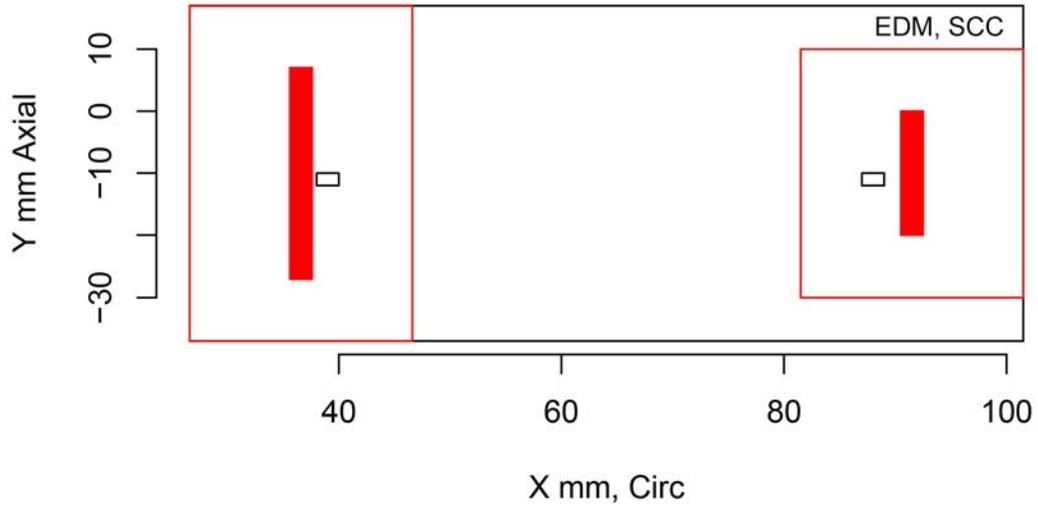


Figure H.365 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

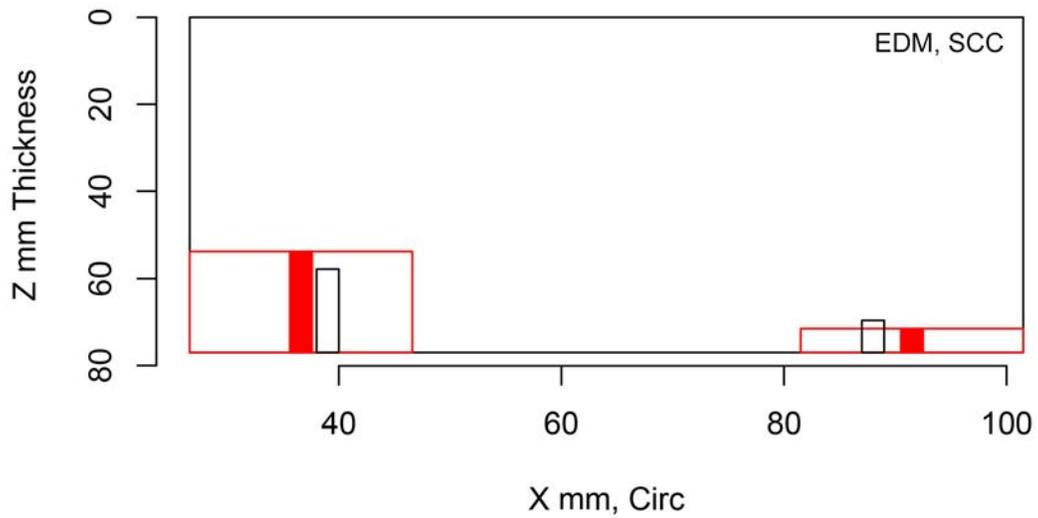


Figure H.366 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

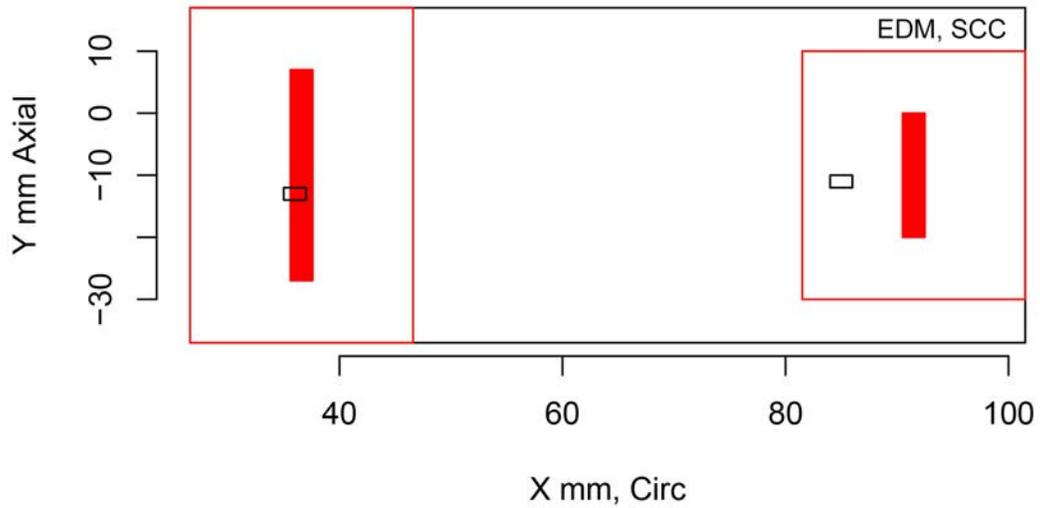


Figure H.367 Indication Plot for Procedure PATP.29 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

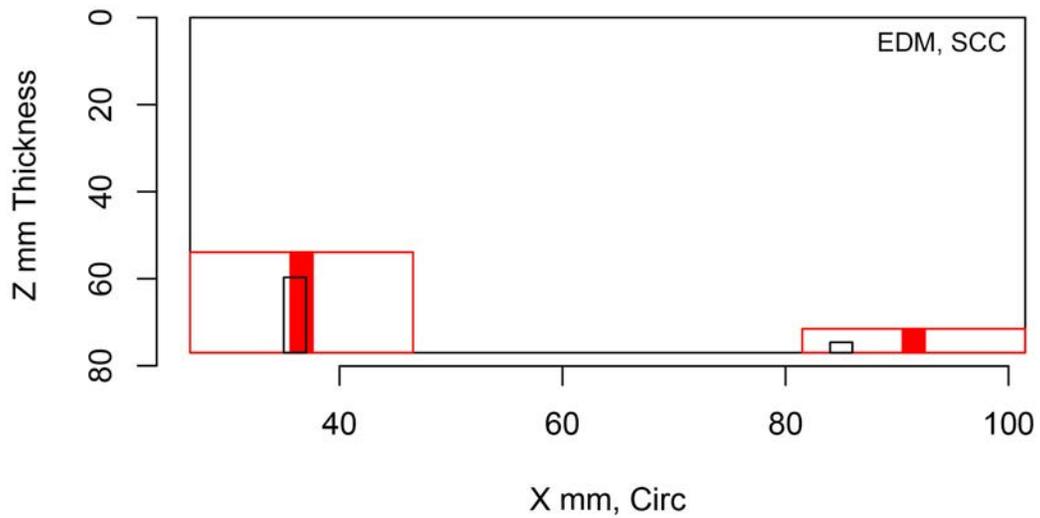


Figure H.368 Indication Plot for Procedure PATP.29 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

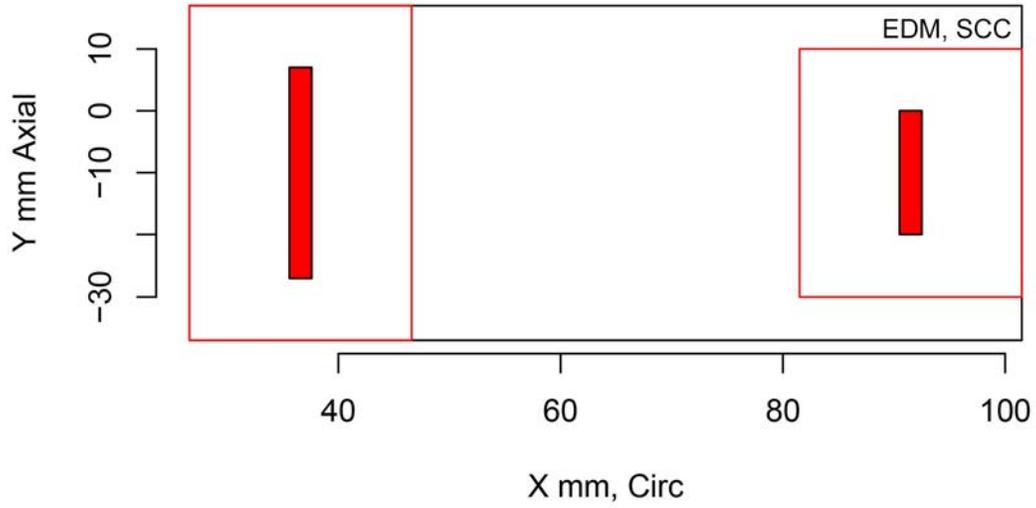


Figure H.369 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

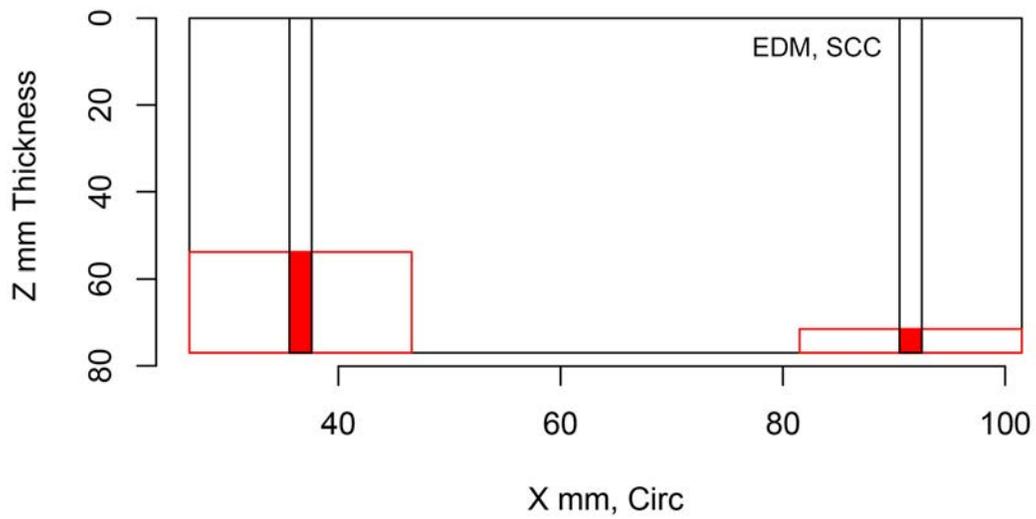


Figure H.370 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

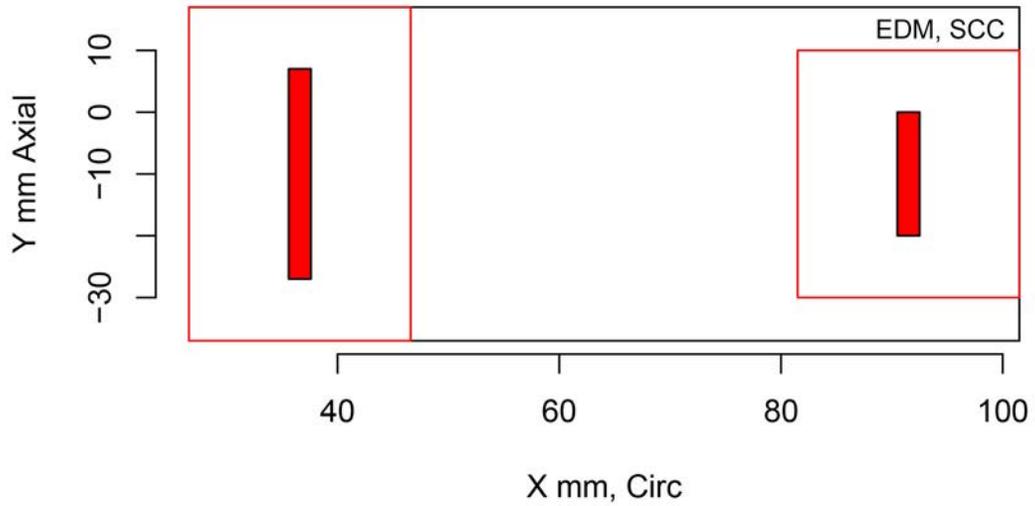


Figure H.371 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

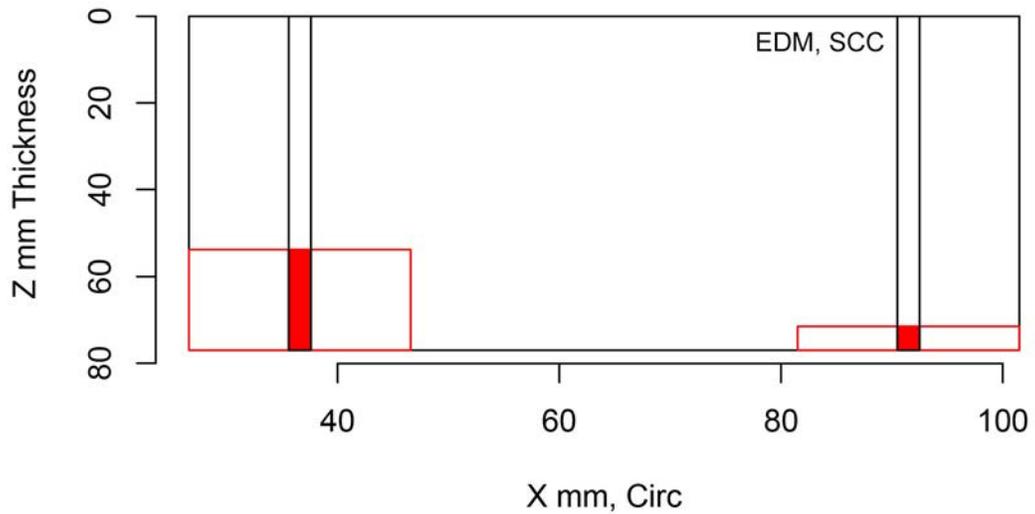


Figure H.372 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

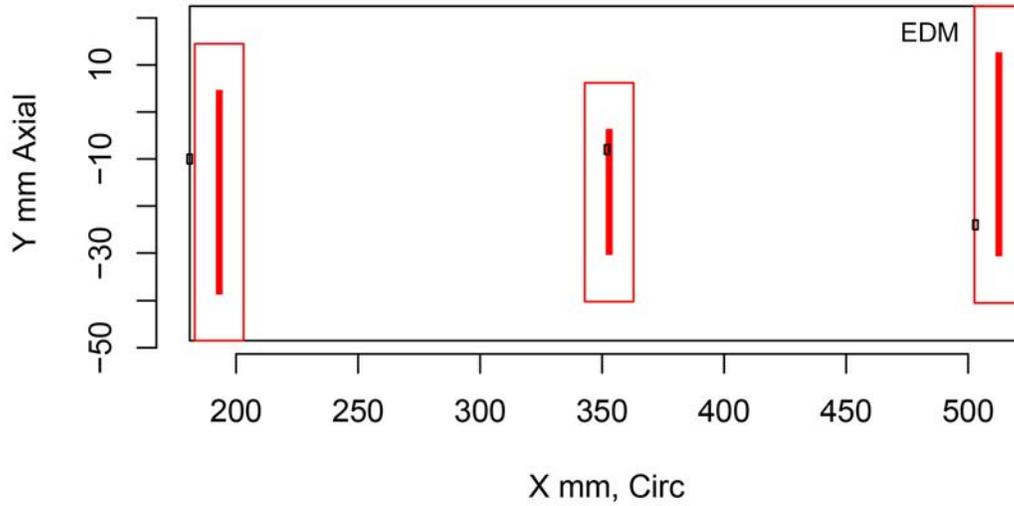


Figure H.373 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P23 in PARENT Open Testing (X – Y view)

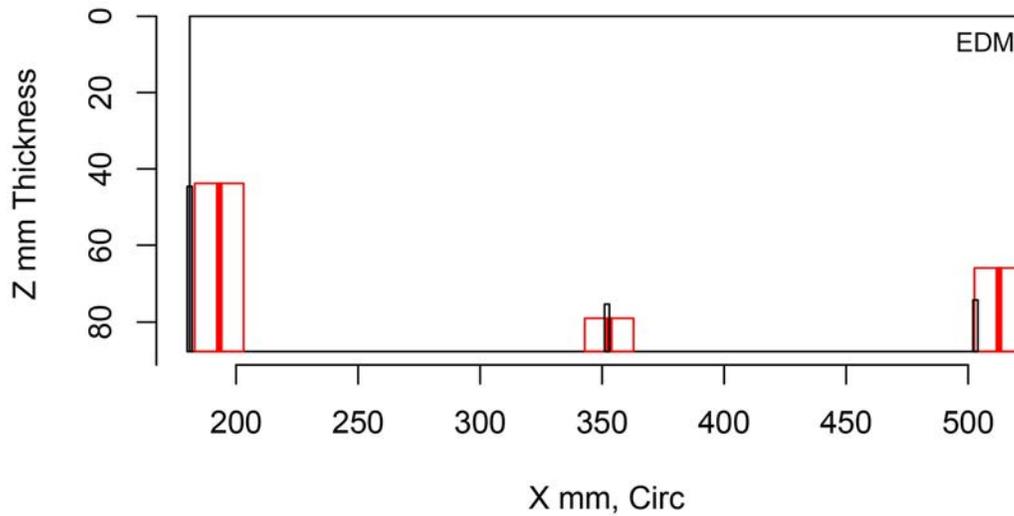


Figure H.374 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P23 in PARENT Open Testing (X – Z view)

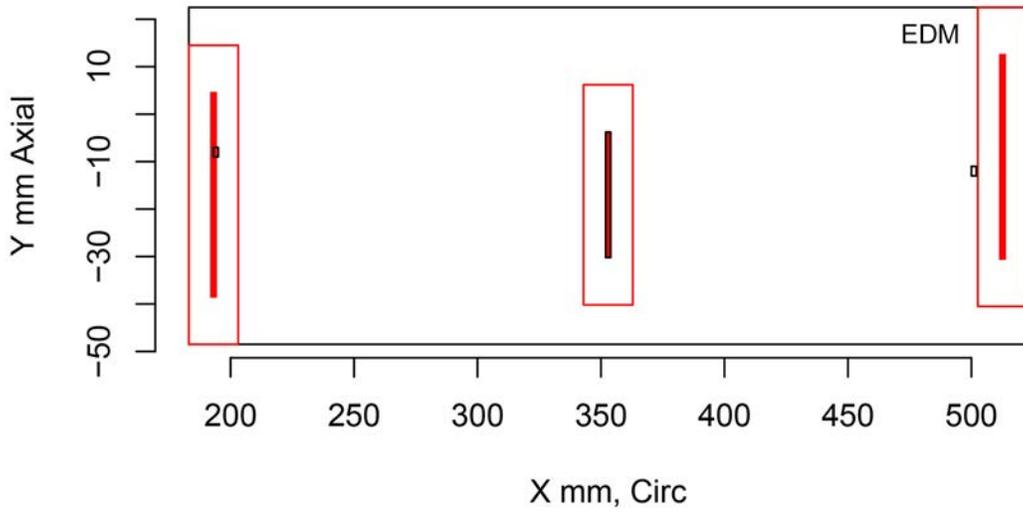


Figure H.375 Indication Plot for Procedure PATP.29 Applied to Test Block P23 in PARENT Open Testing (X – Y view)

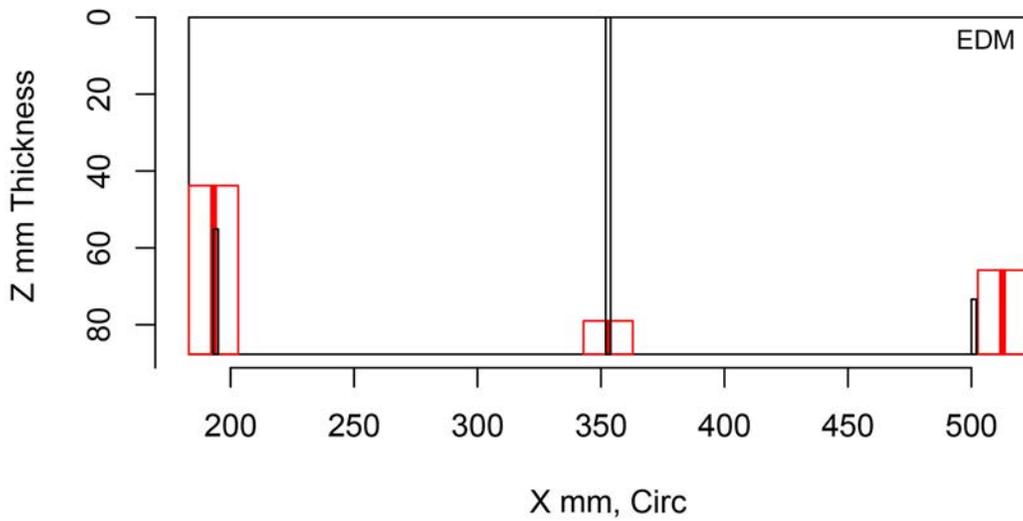


Figure H.376 Indication Plot for Procedure PATP.29 Applied to Test Block P23 in PARENT Open Testing (X – Z view)

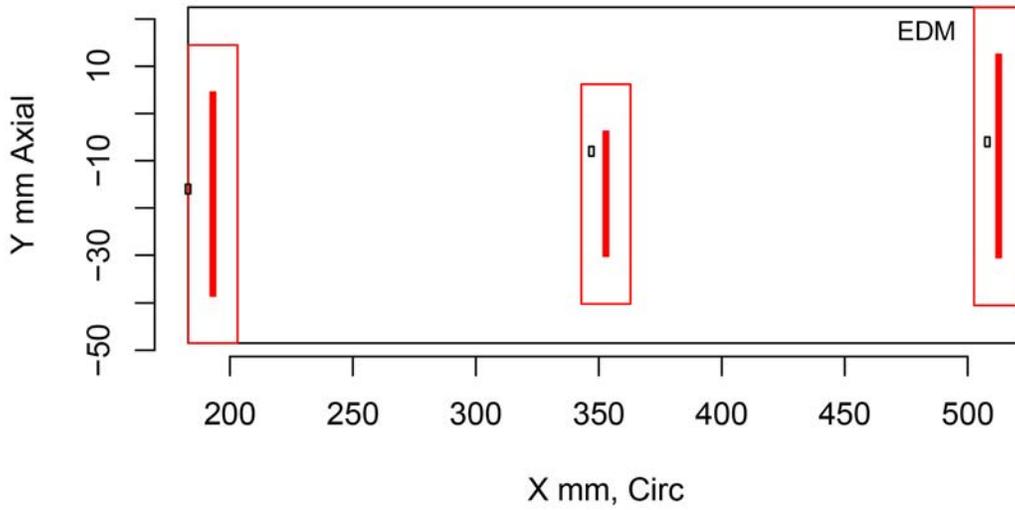


Figure H.377 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P23 in PARENT Open Testing (X – Y view)

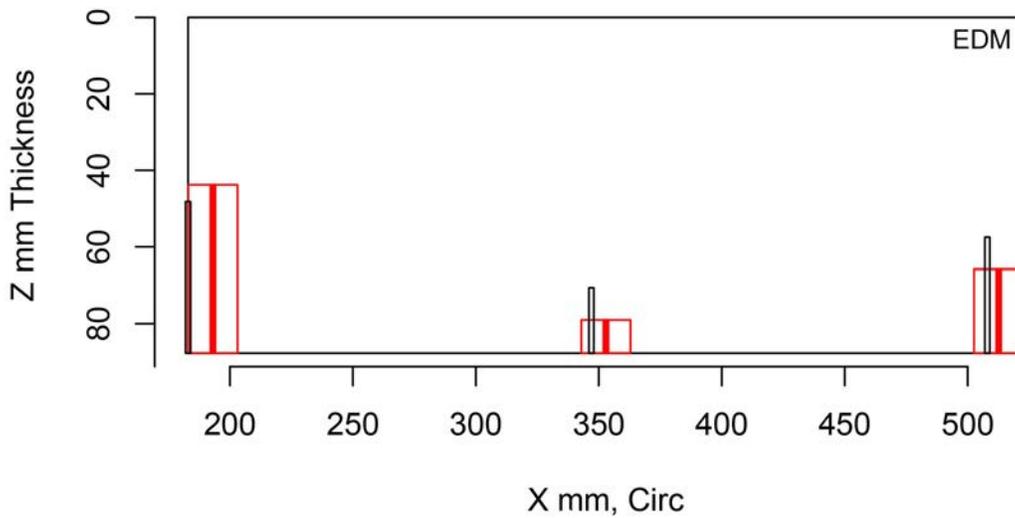


Figure H.378 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P23 in PARENT Open Testing (X – Z view)

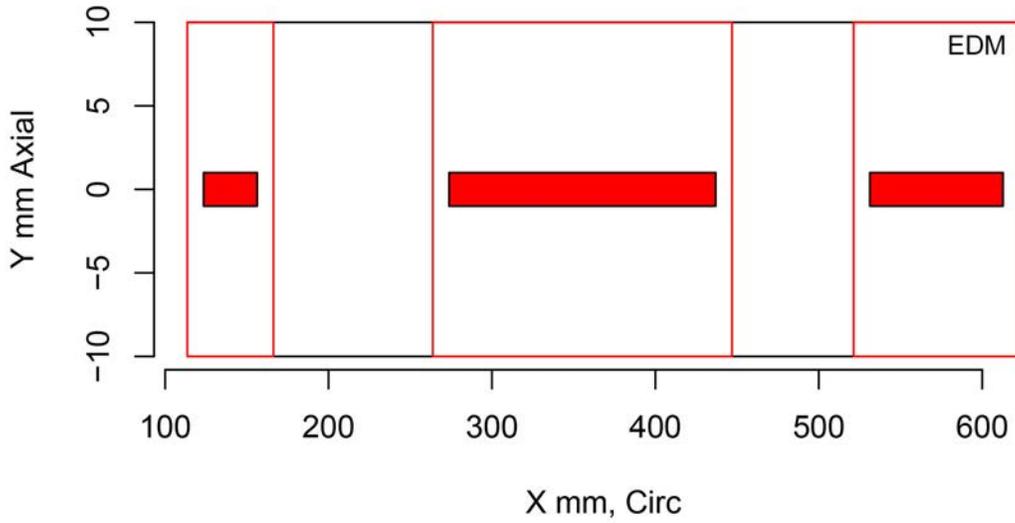


Figure H.379 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P24 in PARENT Open Testing (X – Y view)

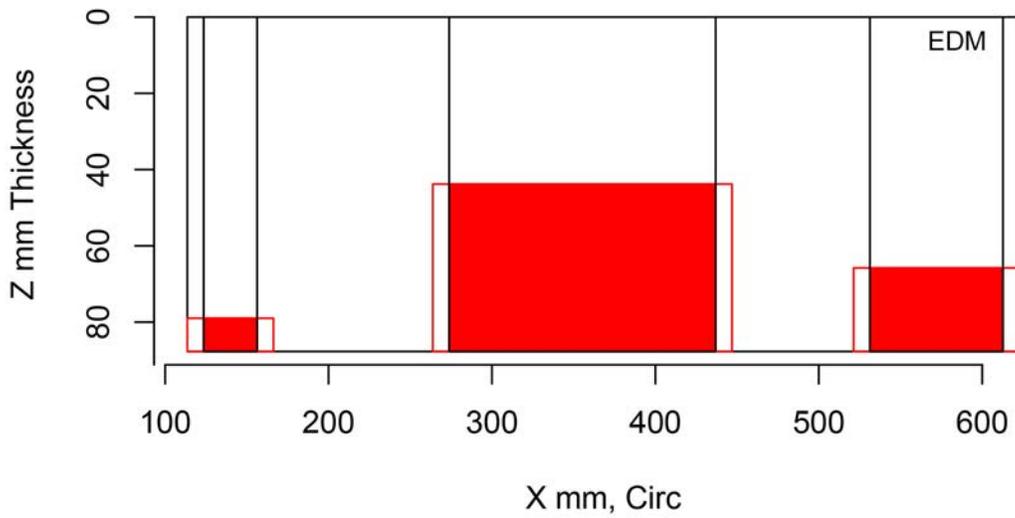


Figure H.380 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P24 in PARENT Open Testing (X – Z view)

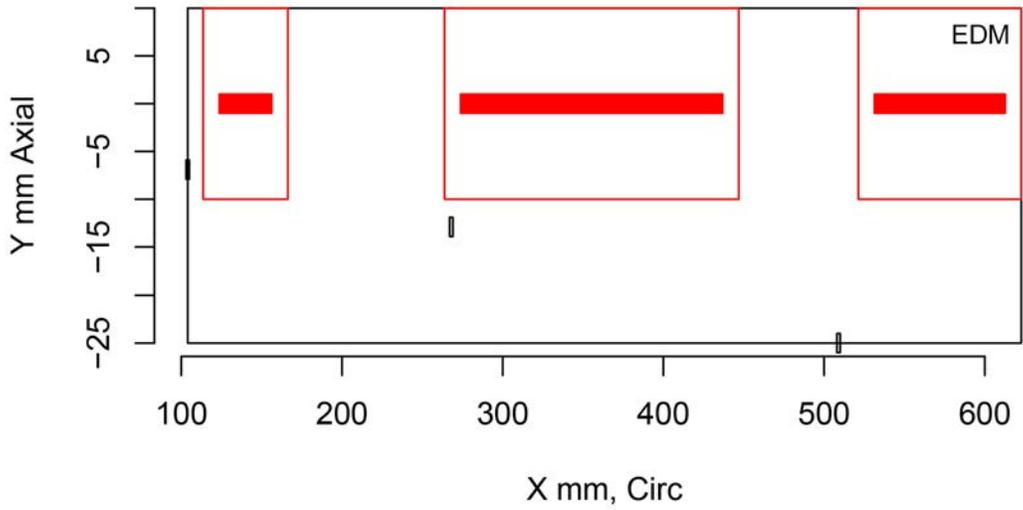


Figure H.381 Indication Plot for Procedure PATP.29 Applied to Test Block P24 in PARENT Open Testing (X – Y view)

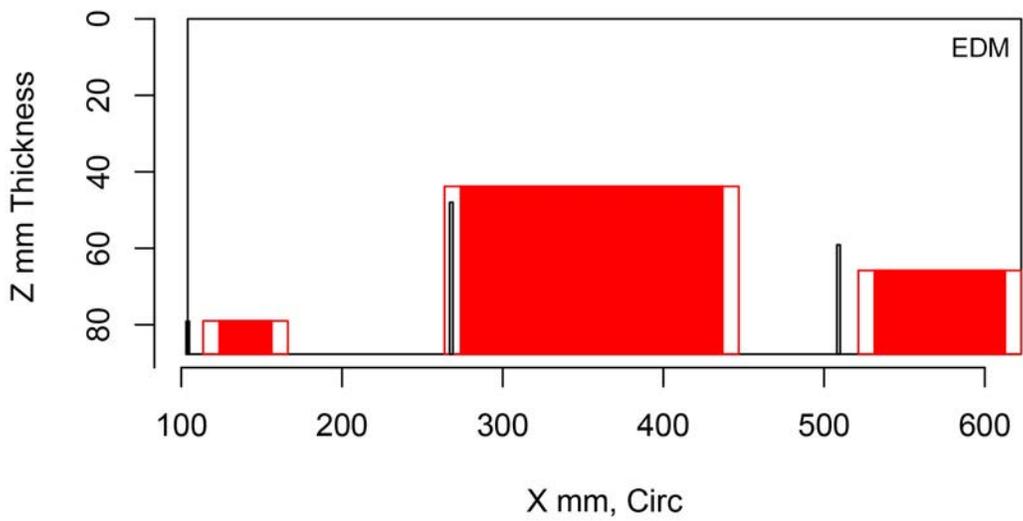


Figure H.382 Indication Plot for Procedure PATP.29 Applied to Test Block P24 in PARENT Open Testing (X – Z view)

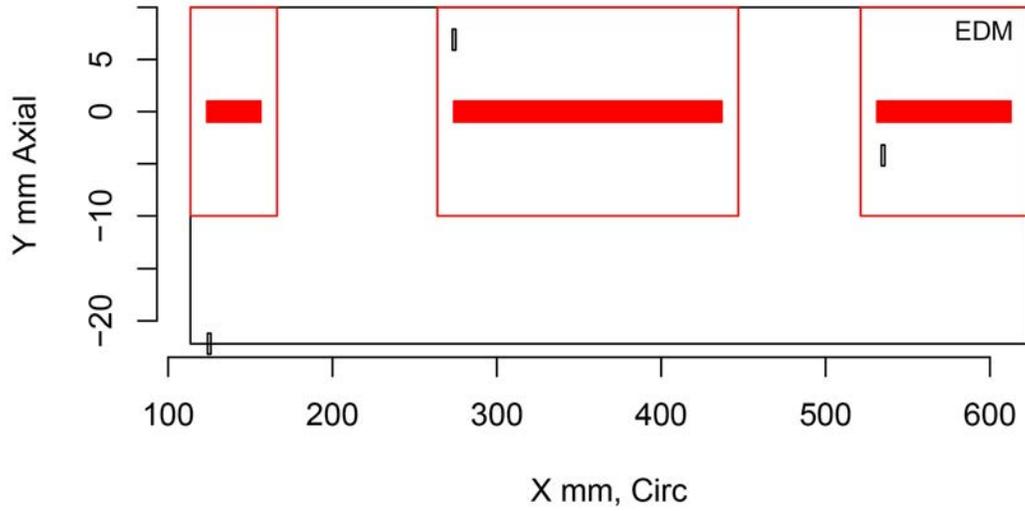


Figure H.383 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P24 in PARENT Open Testing (X – Y view)

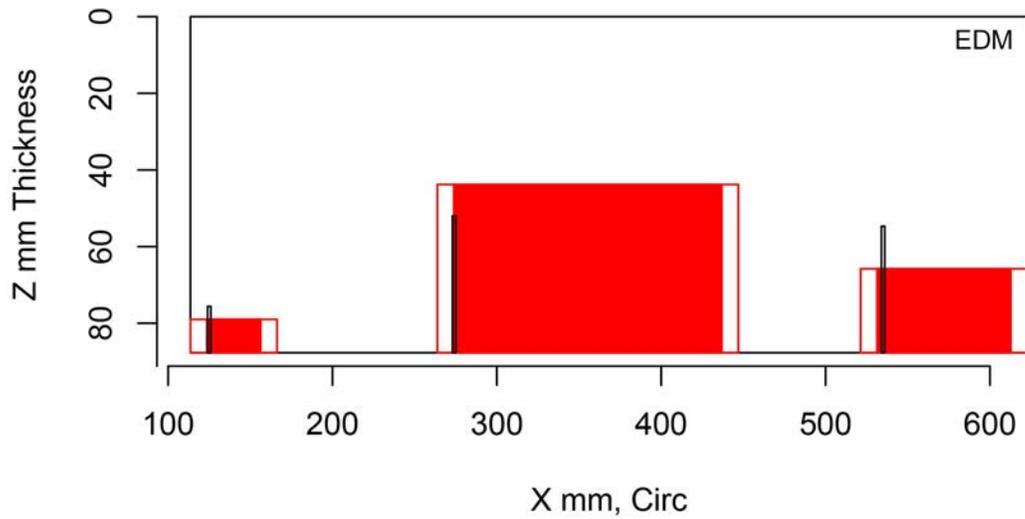


Figure H.384 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P24 in PARENT Open Testing (X – Z view)

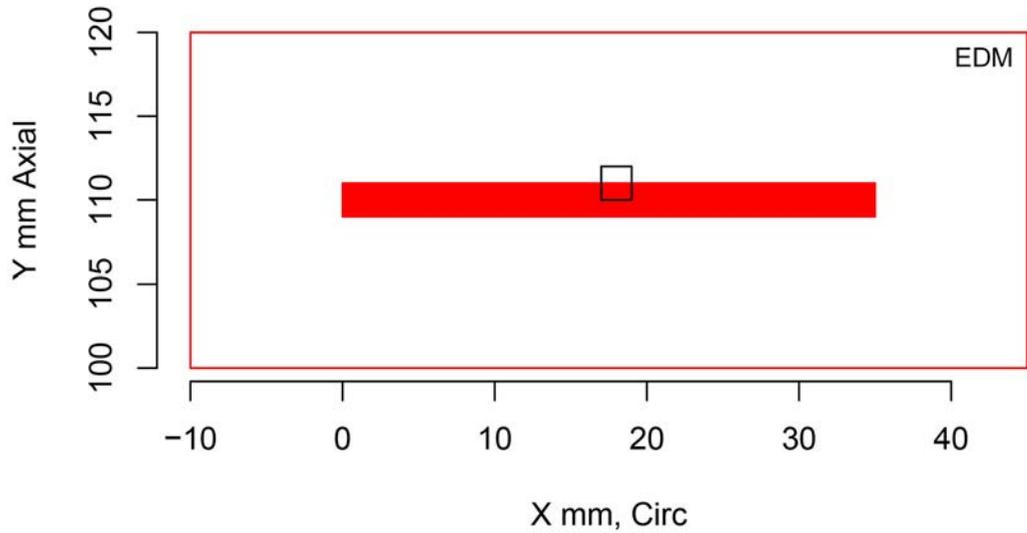


Figure H.385 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

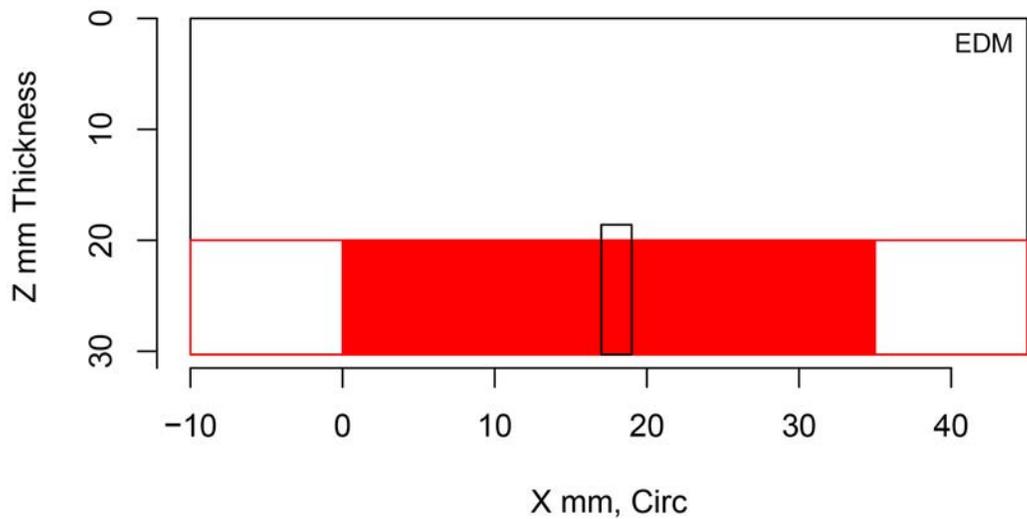


Figure H.386 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

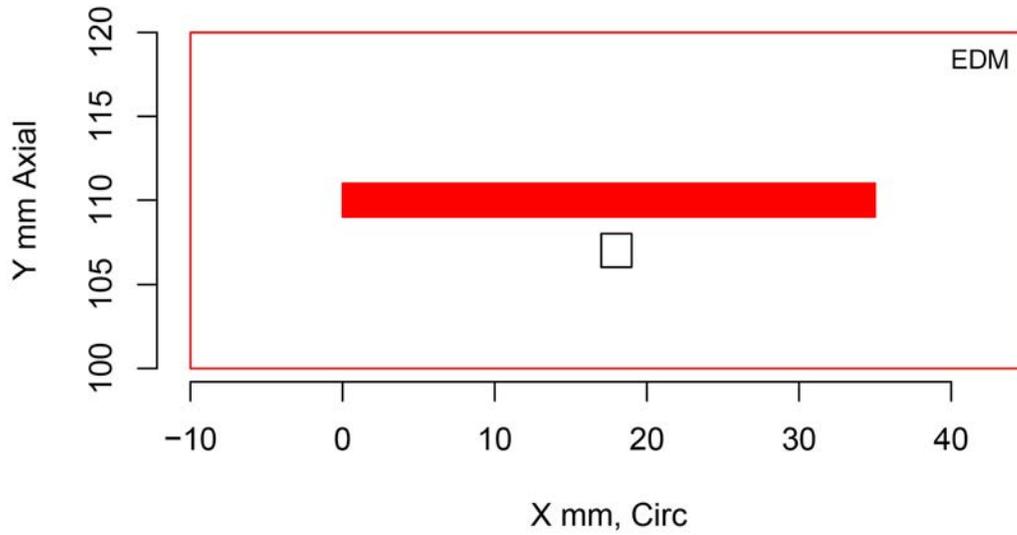


Figure H.387 Indication Plot for Procedure PATP.29 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

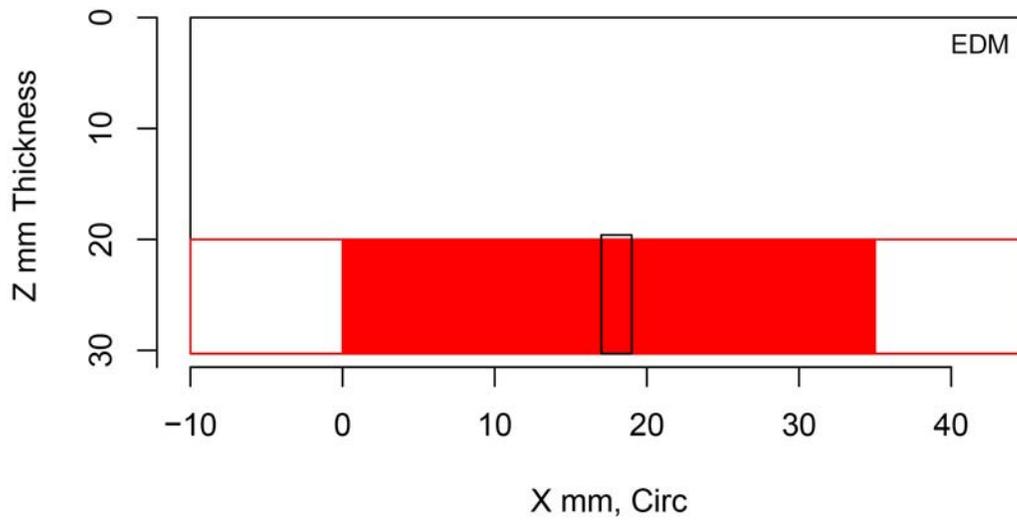


Figure H.388 Indication Plot for Procedure PATP.29 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

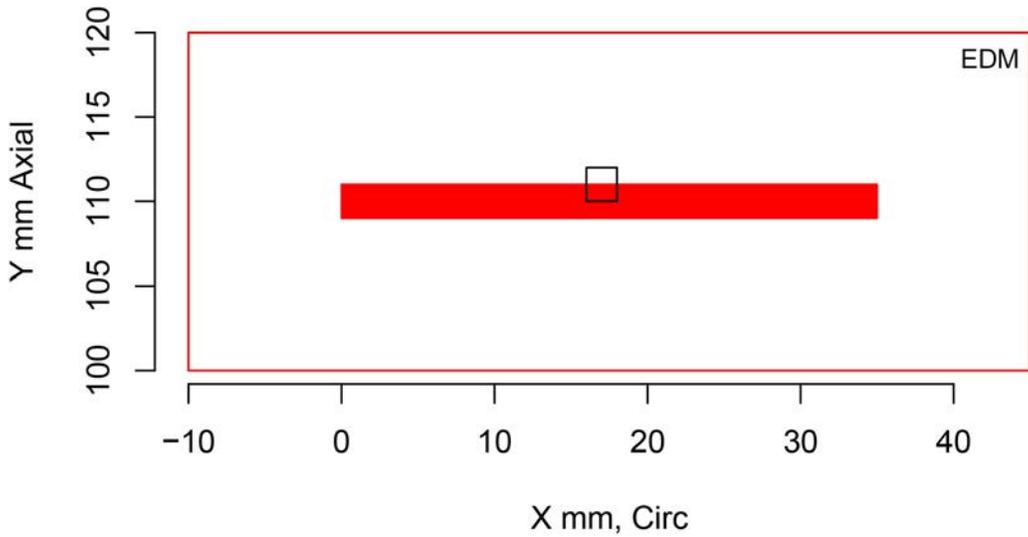


Figure H.389 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

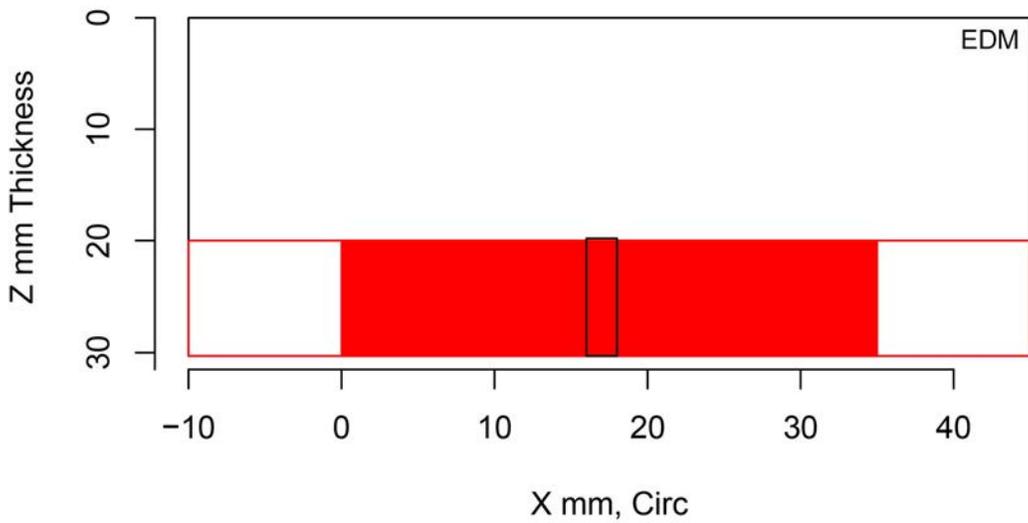


Figure H.390 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

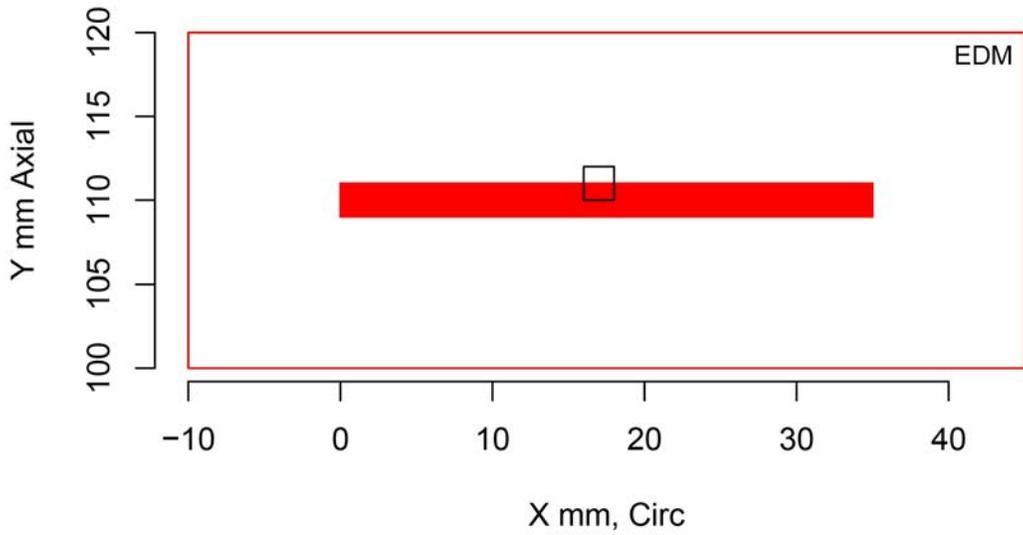


Figure H.391 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

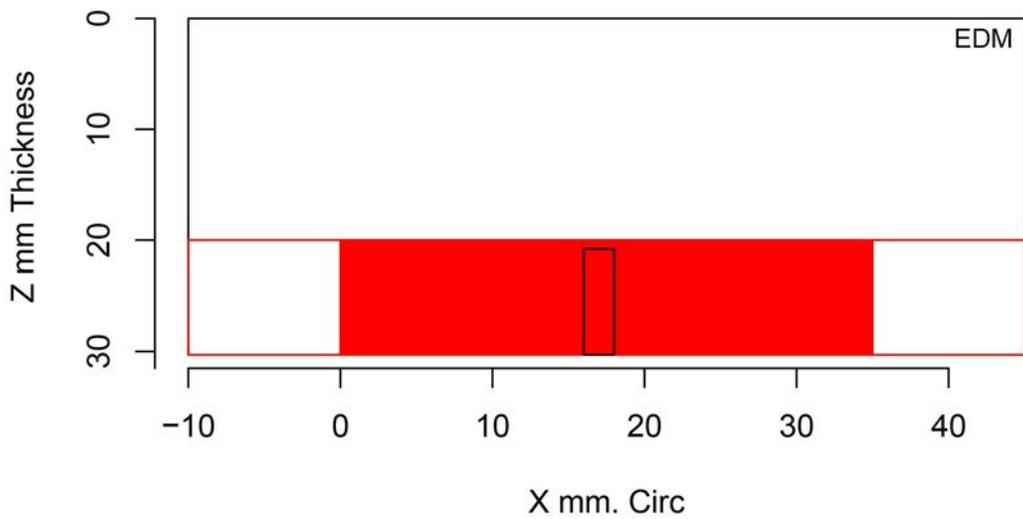


Figure H.392 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

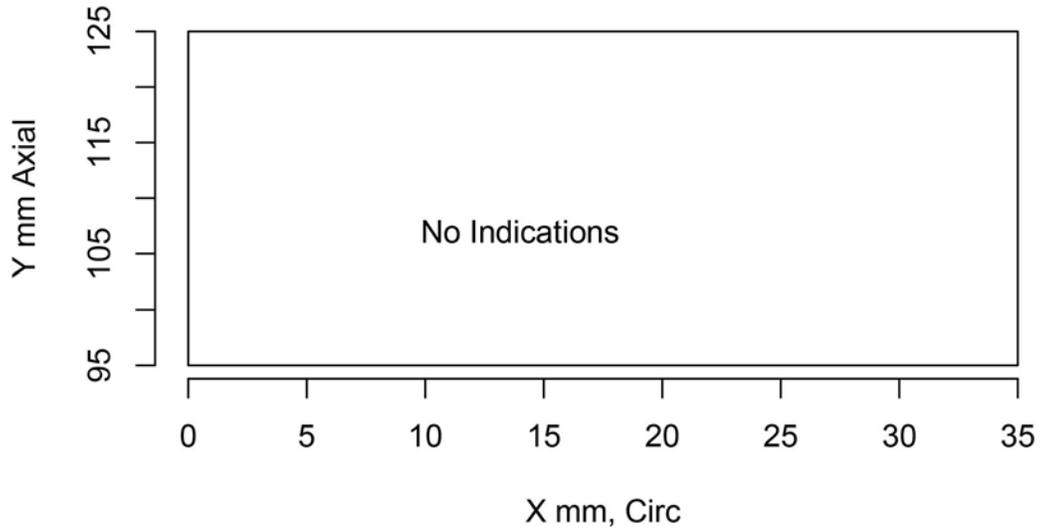


Figure H.393 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P46 in PARENT Open Testing (X – Y view)

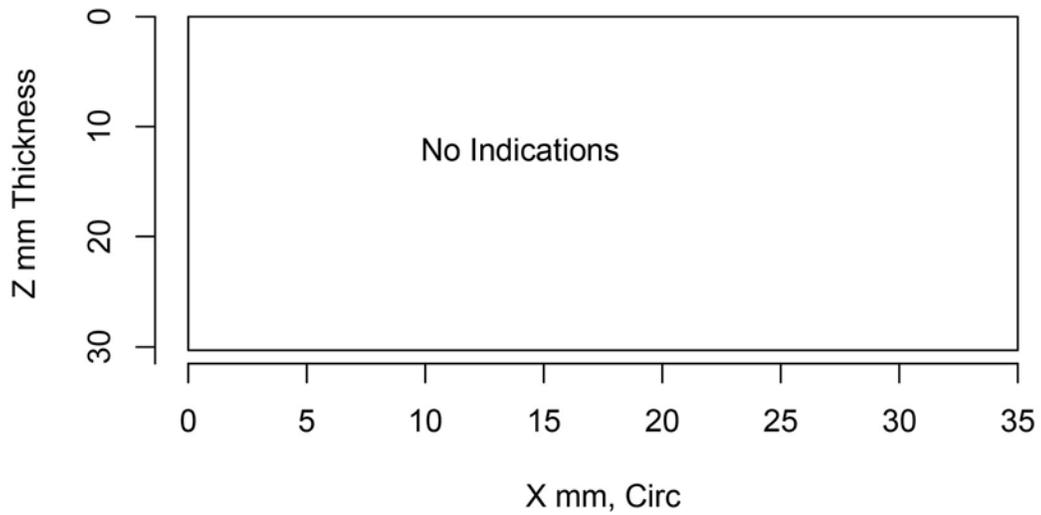


Figure H.394 Indication Plot for Procedure PAATOFD.29.0 Applied to Test Block P46 in PARENT Open Testing (X – Z view)

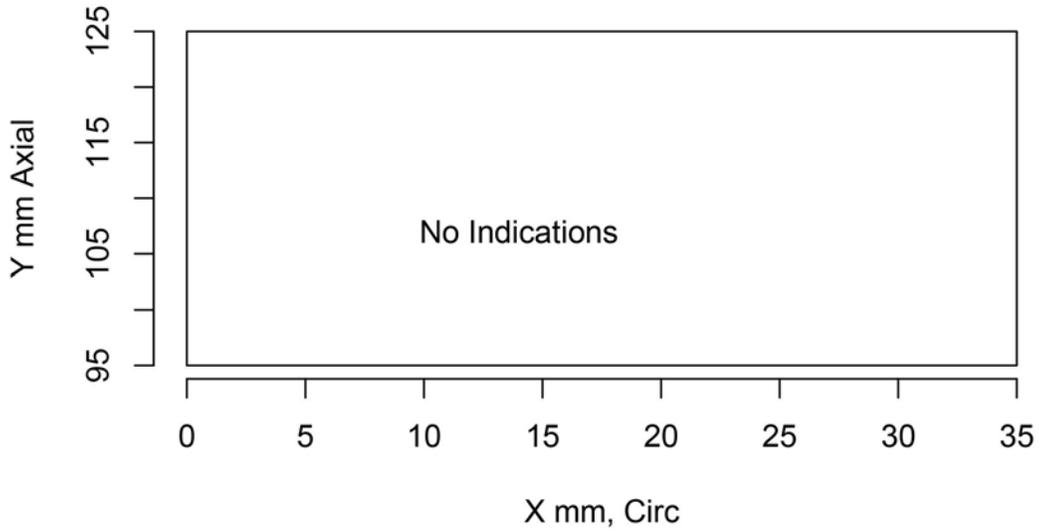


Figure H.395 Indication Plot for Procedure PATP.29 Applied to Test Block P46 in PARENT Open Testing (X – Y view)

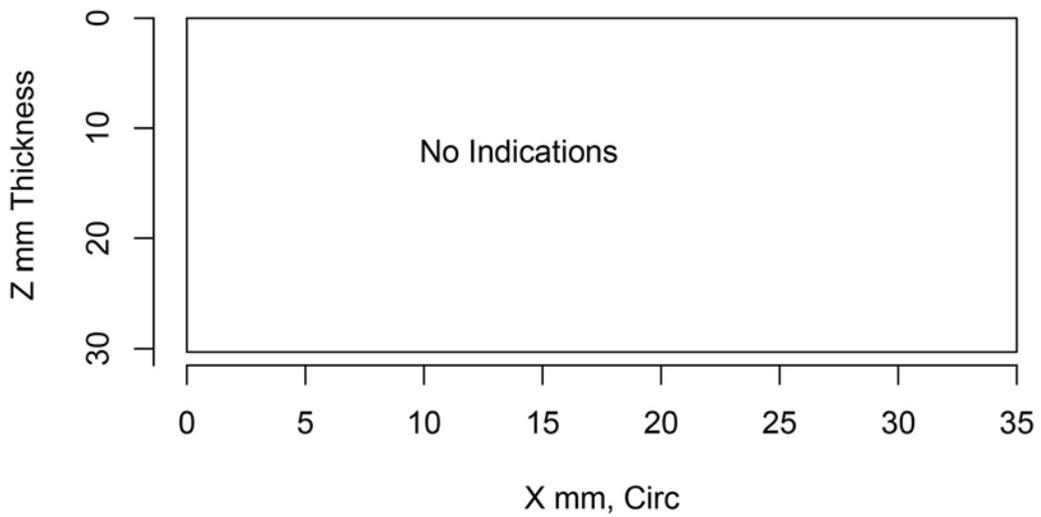


Figure H.396 Indication Plot for Procedure PATP.29 Applied to Test Block P46 in PARENT Open Testing (X – Z view)

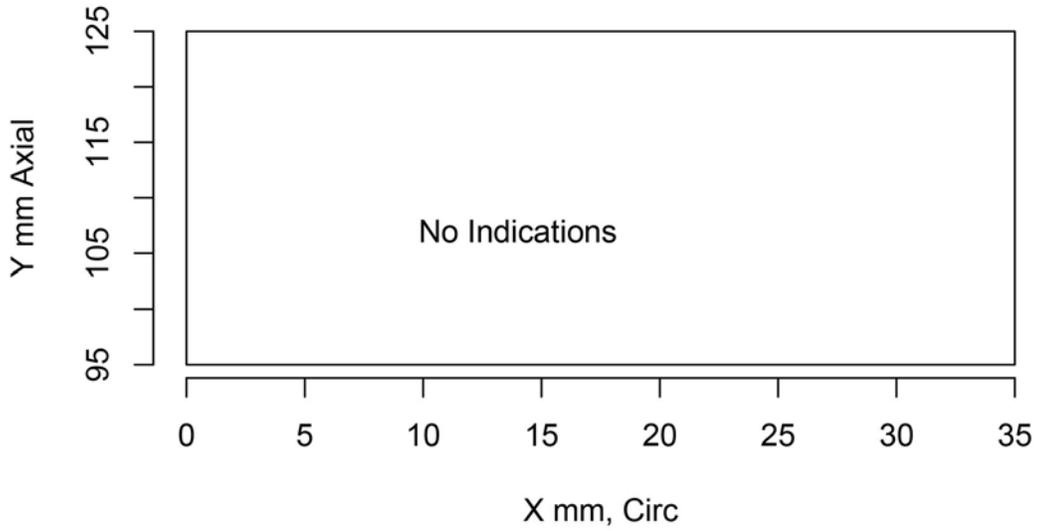


Figure H.397 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P46 in PARENT Open Testing (X – Y view)

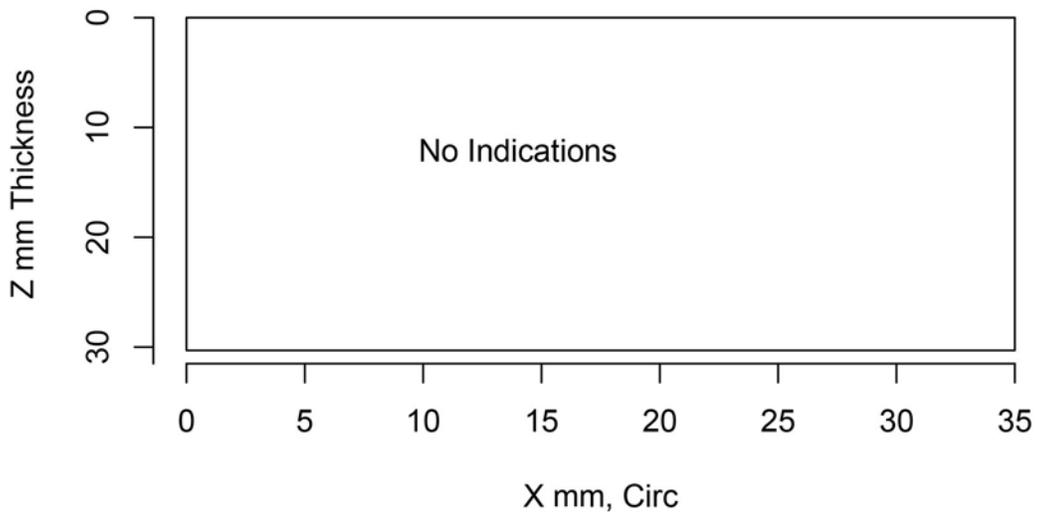


Figure H.398 Indication Plot for Procedure PAATOFD.29.1 Applied to Test Block P46 in PARENT Open Testing (X – Z view)

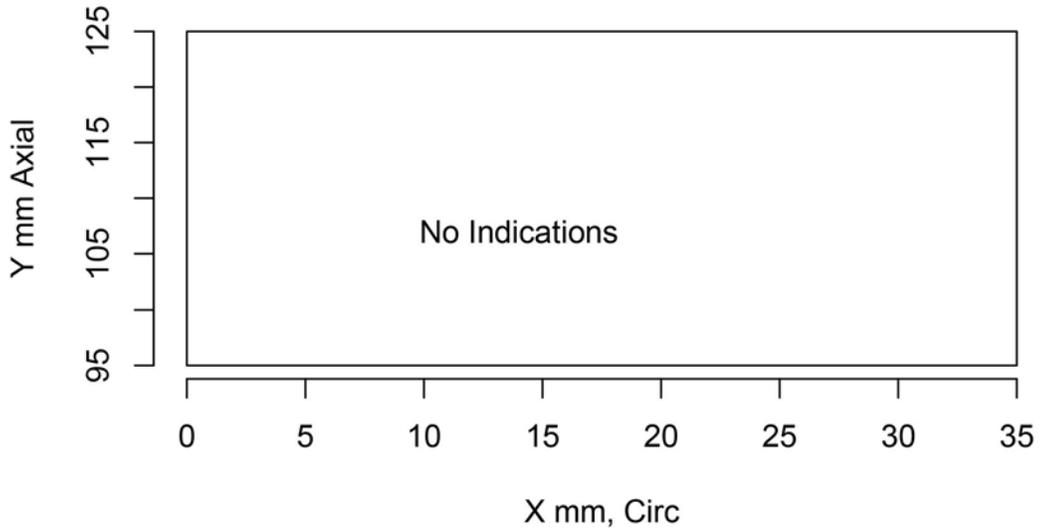


Figure H.399 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P46 in PARENT Open Testing (X – Y view)

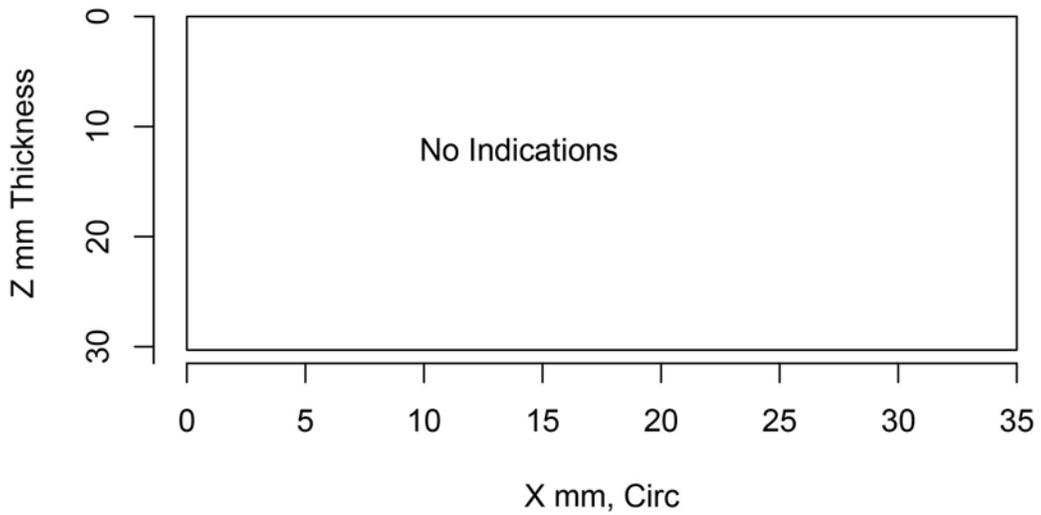


Figure H.400 Indication Plot for Procedure PAATOFD.29.2 Applied to Test Block P46 in PARENT Open Testing (X – Z view)

H.2.19 Plots for Team 30

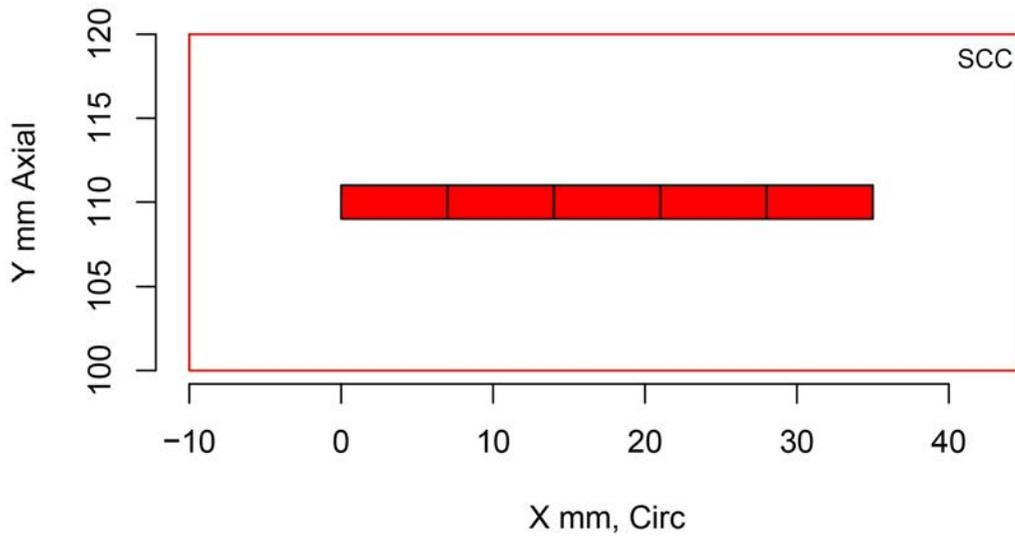


Figure H.401 Indication Plot for Procedure HHUT.30 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

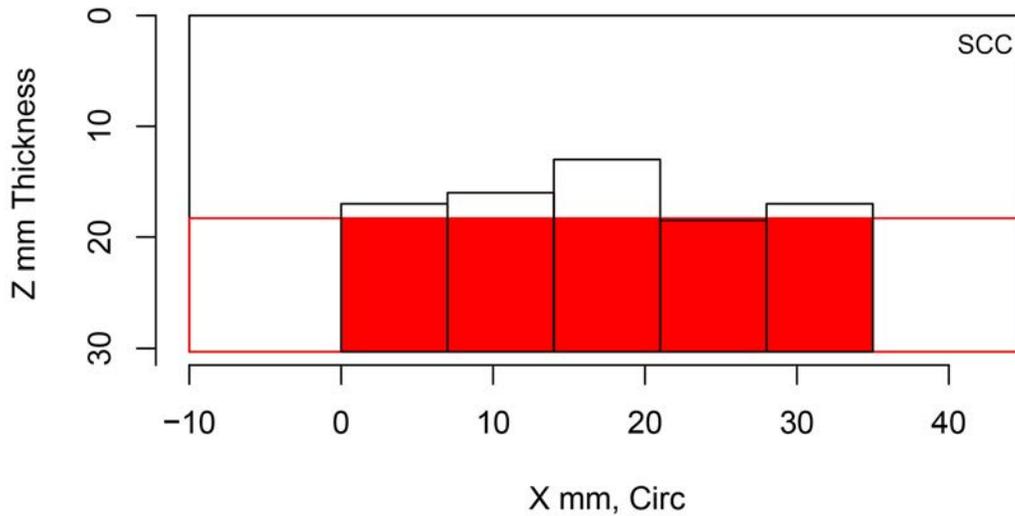


Figure H.402 Indication Plot for Procedure HHUT.30 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

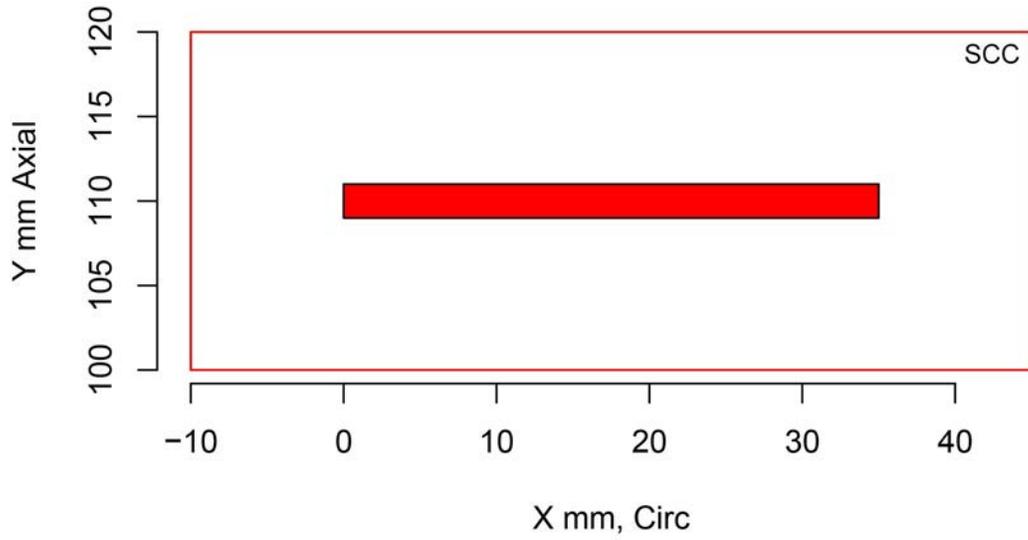


Figure H.403 Indication Plot for Procedure HHUT.30 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

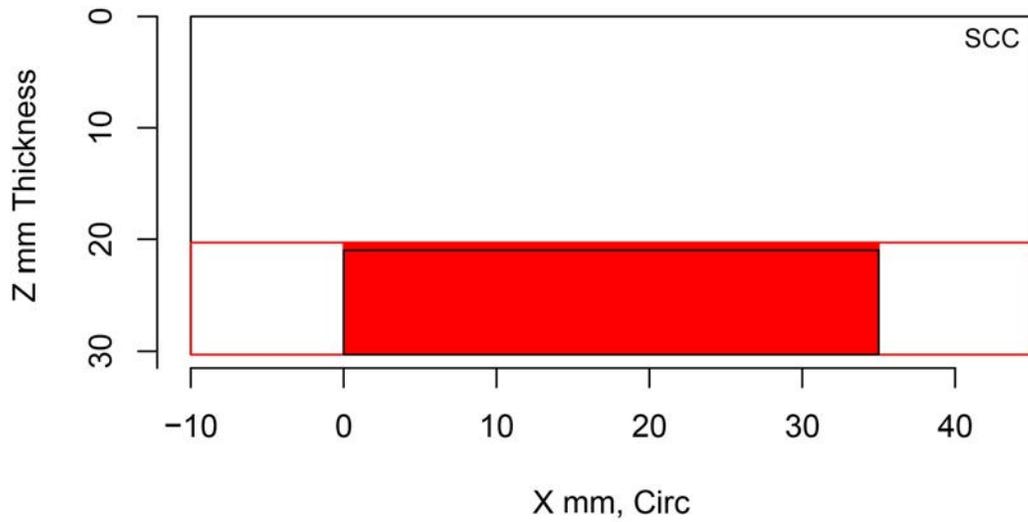


Figure H.404 Indication Plot for Procedure HHUT.30 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

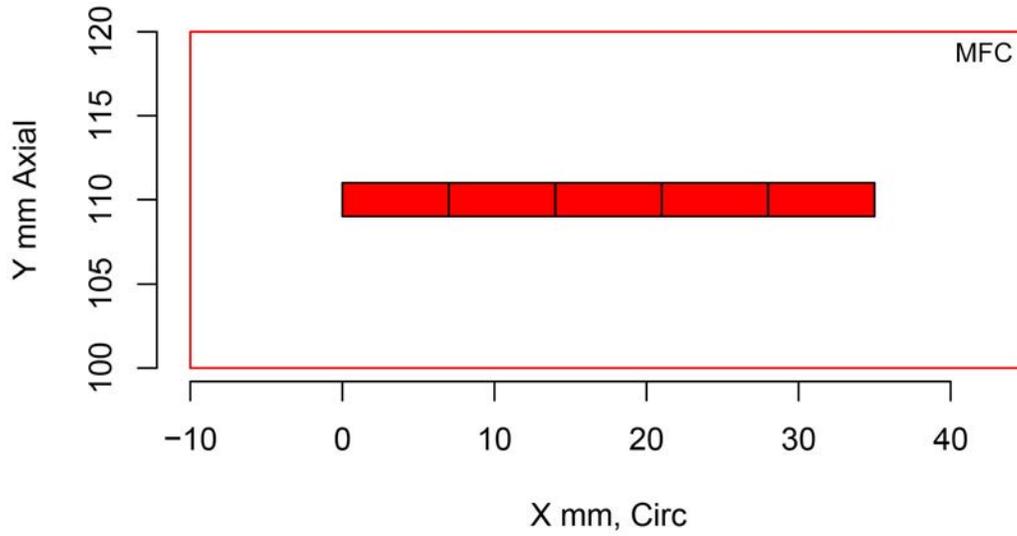


Figure H.405 Indication Plot for Procedure HHUT.30 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

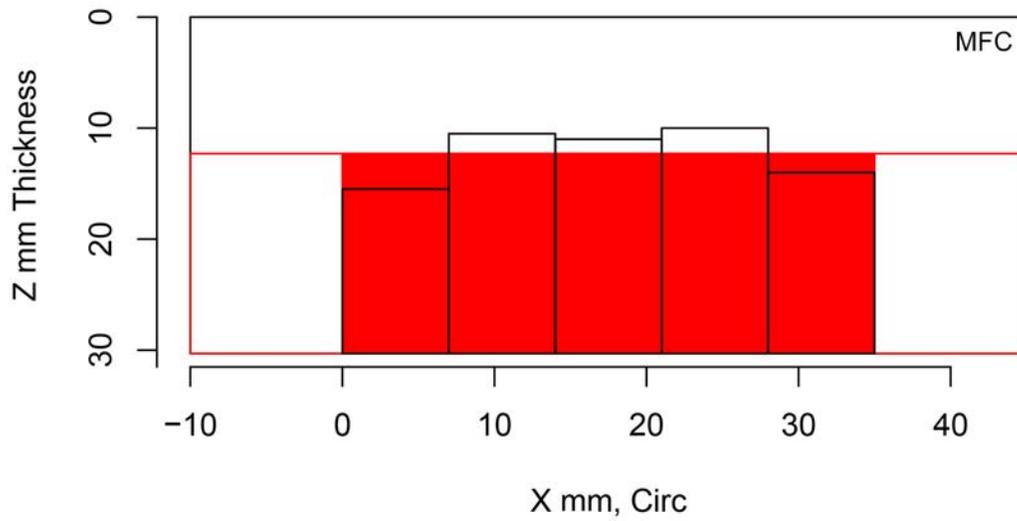


Figure H.406 Indication Plot for Procedure HHUT.30 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

H.2.20 Plots for Team 33

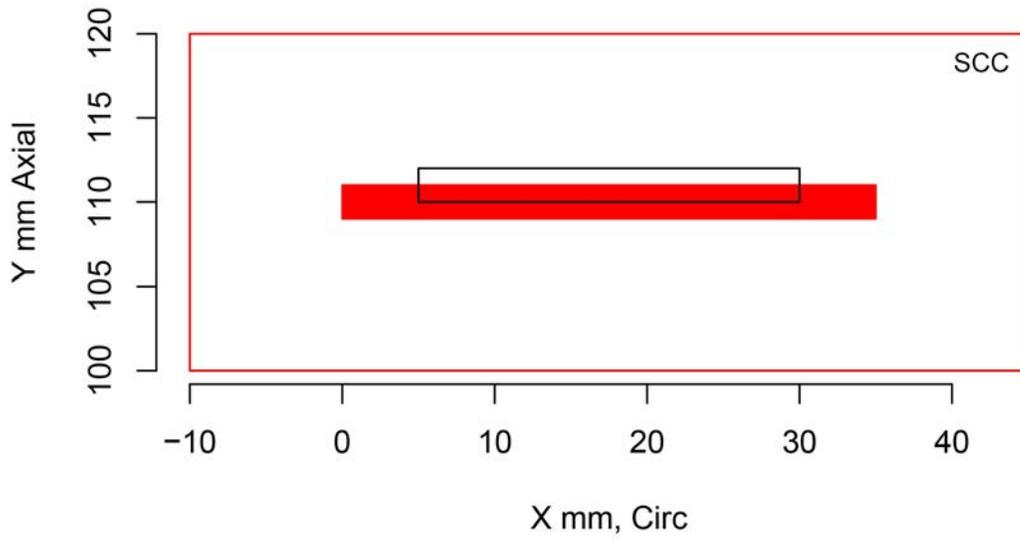


Figure H.407 Indication Plot for Procedure AECT.33 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

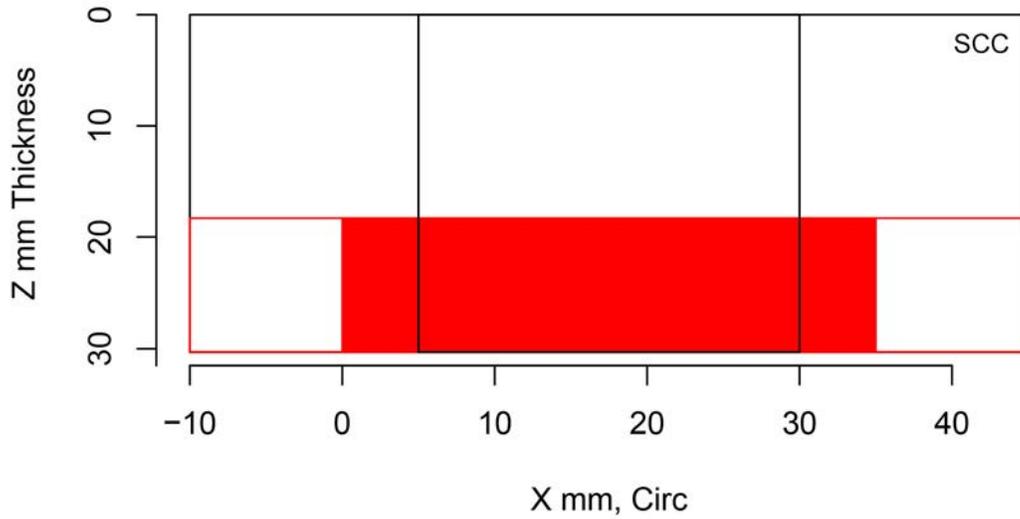


Figure H.408 Indication Plot for Procedure AECT.33 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

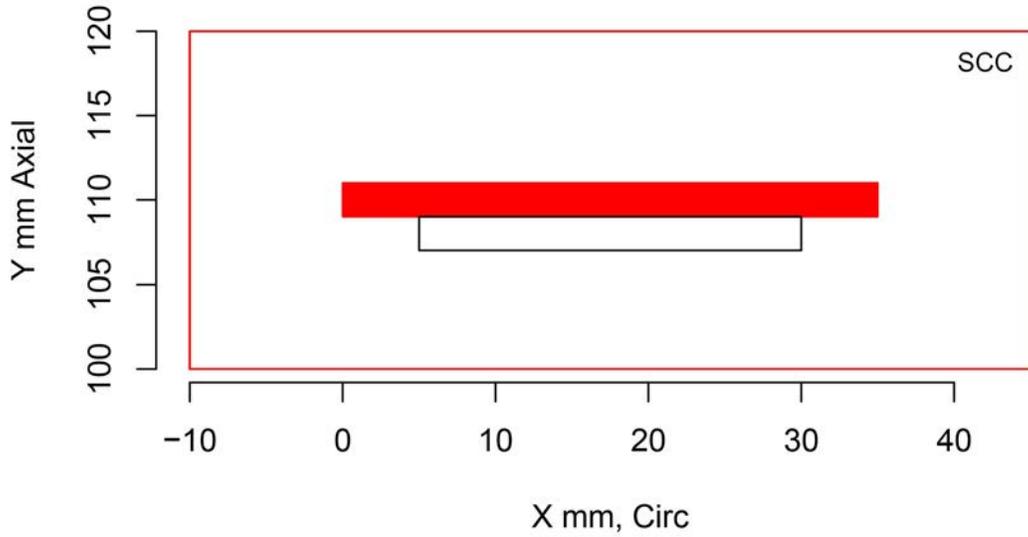


Figure H.409 Indication Plot for Procedure AECT.33 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

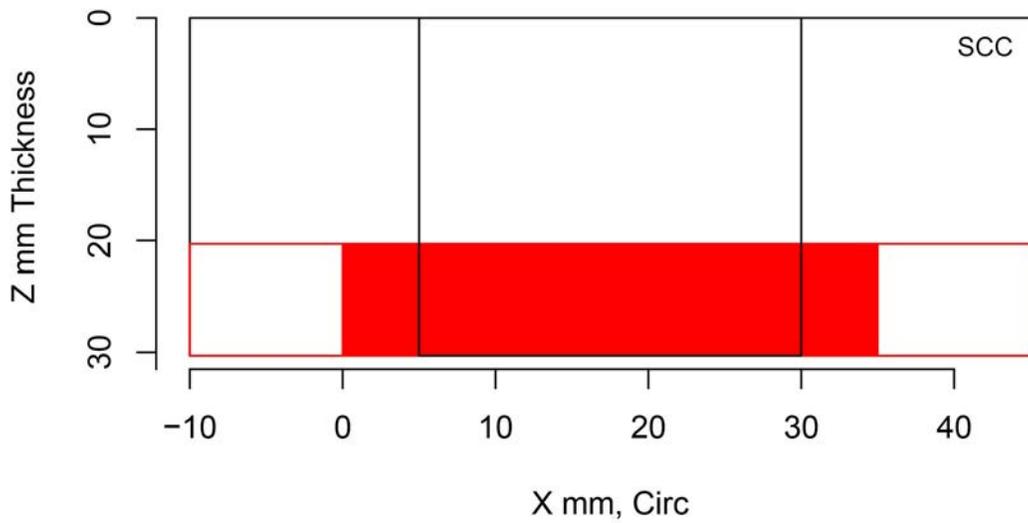


Figure H.410 Indication Plot for Procedure AECT.33 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

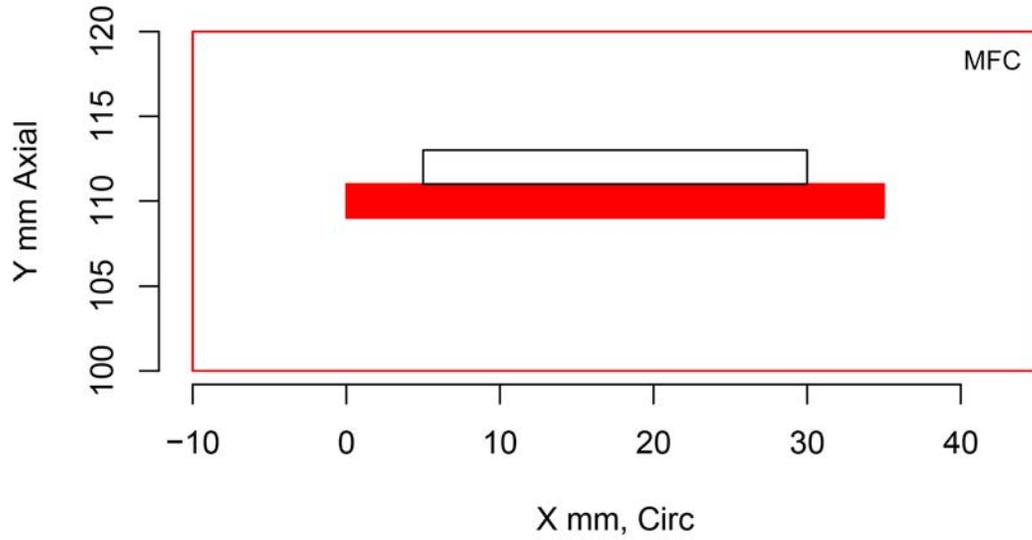


Figure H.411 Indication Plot for Procedure AECT.33 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

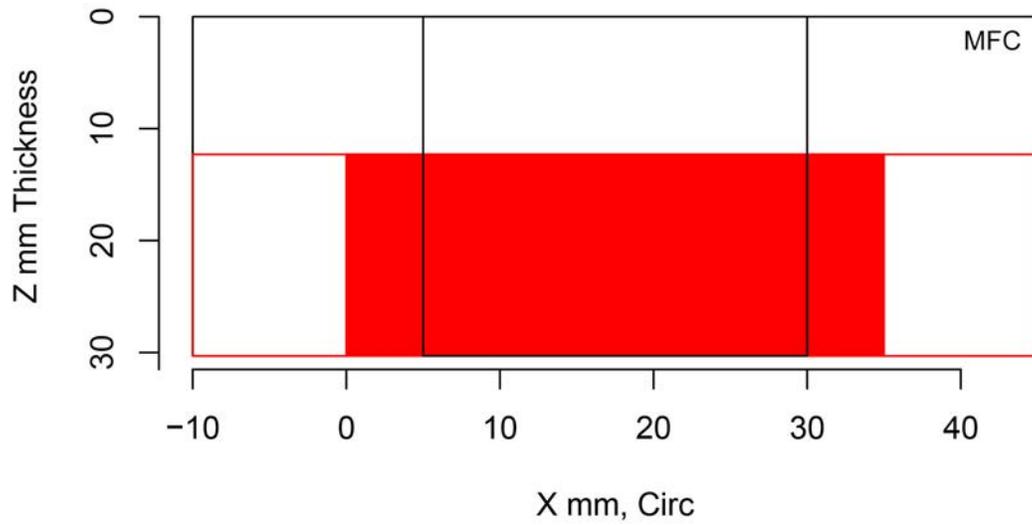


Figure H.412 Indication Plot for Procedure AECT.33 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

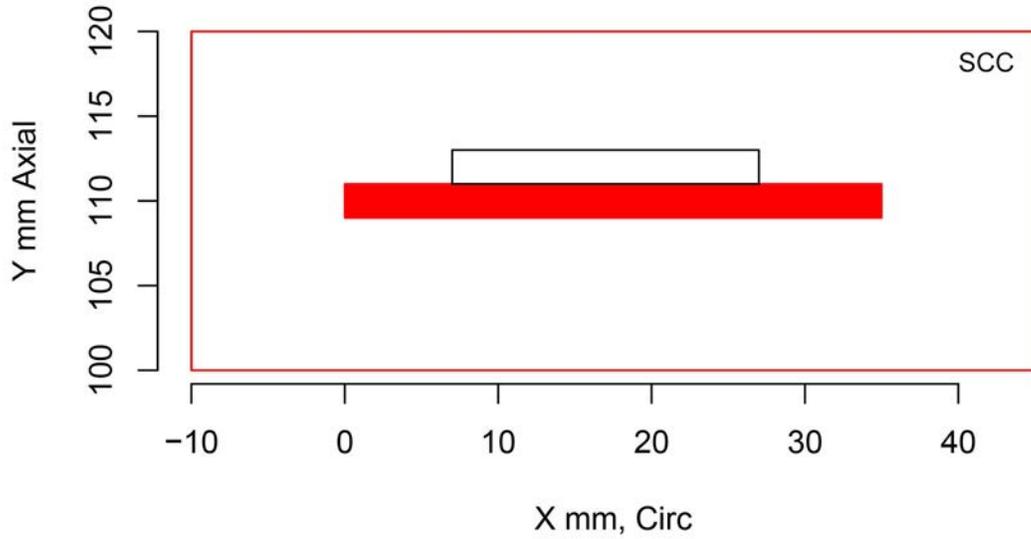


Figure H.413 Indication Plot for Procedure AECT.33 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

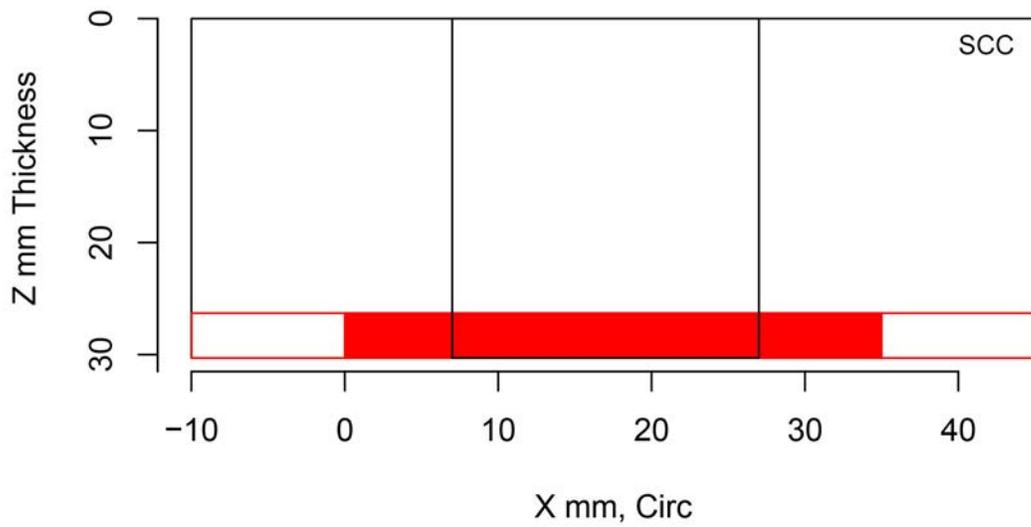


Figure H.414 Indication Plot for Procedure AECT.33 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

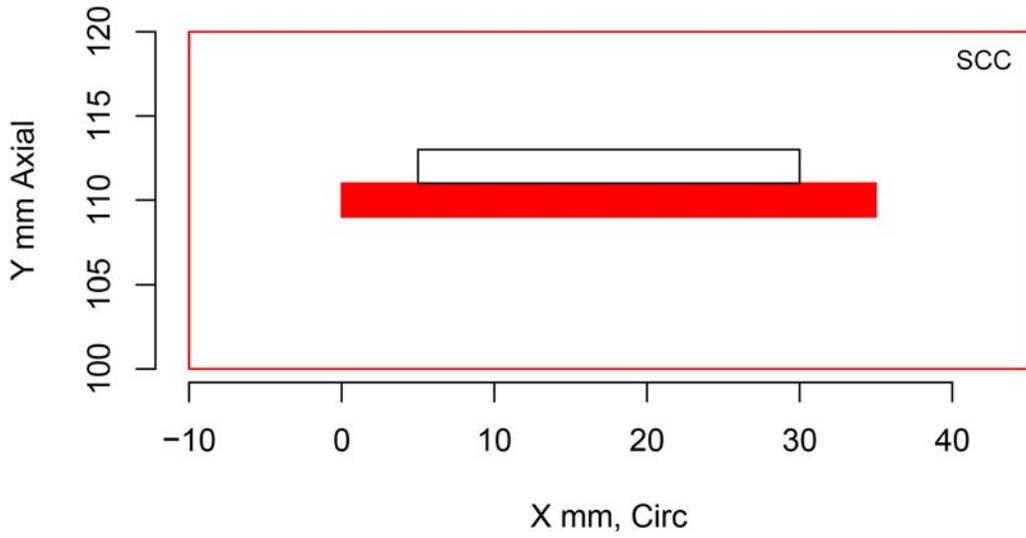


Figure H.415 Indication Plot for Procedure AECT.33 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

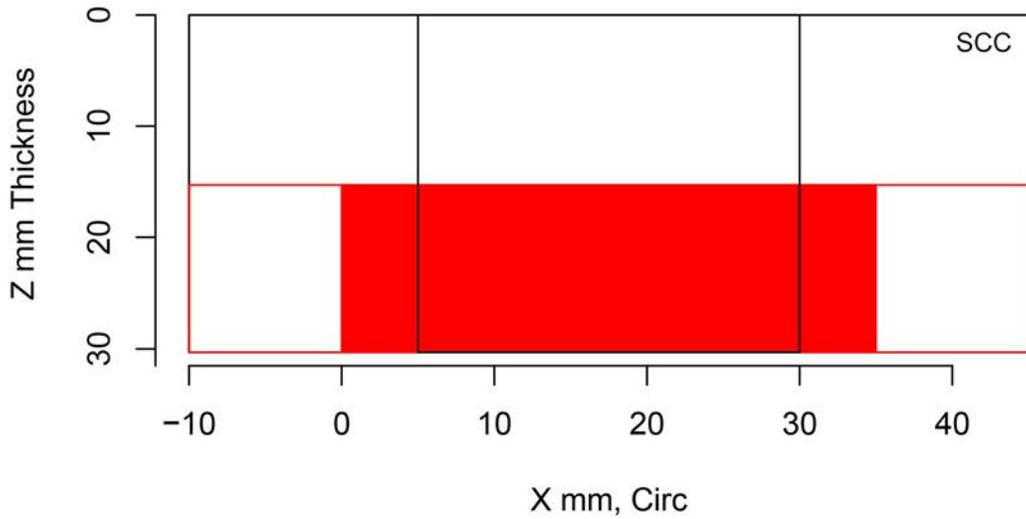


Figure H.416 Indication Plot for Procedure AECT.33 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

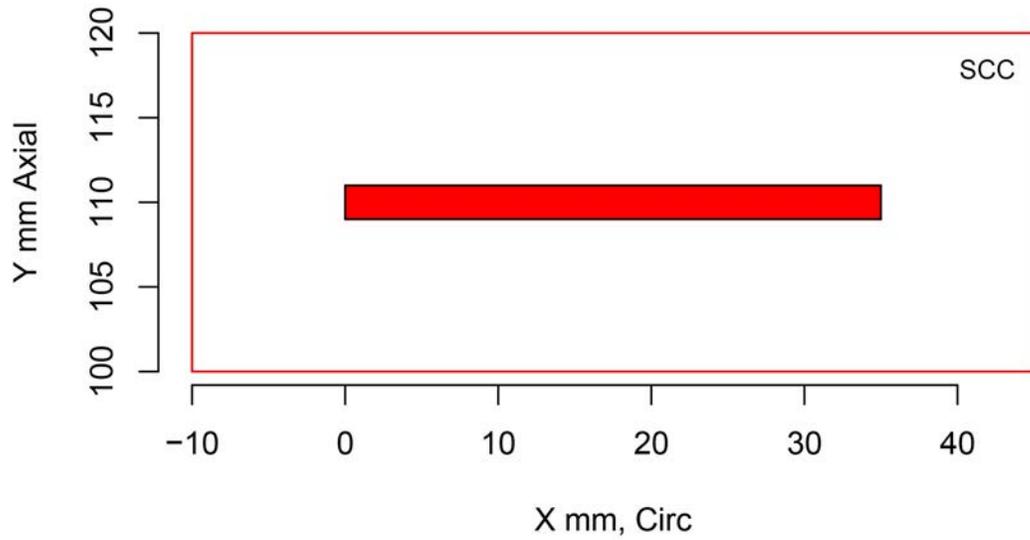


Figure H.417 Indication Plot for Procedure AECT.33 Applied to Test Block P38 in PARENT Open Testing (X – Y view)

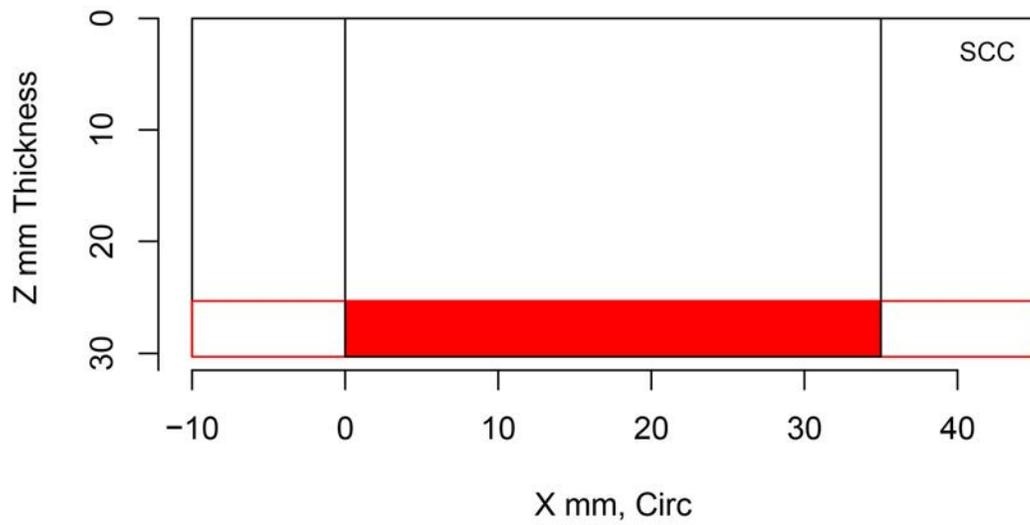


Figure H.418 Indication Plot for Procedure AECT.33 Applied to Test Block P38 in PARENT Open Testing (X – Z view)

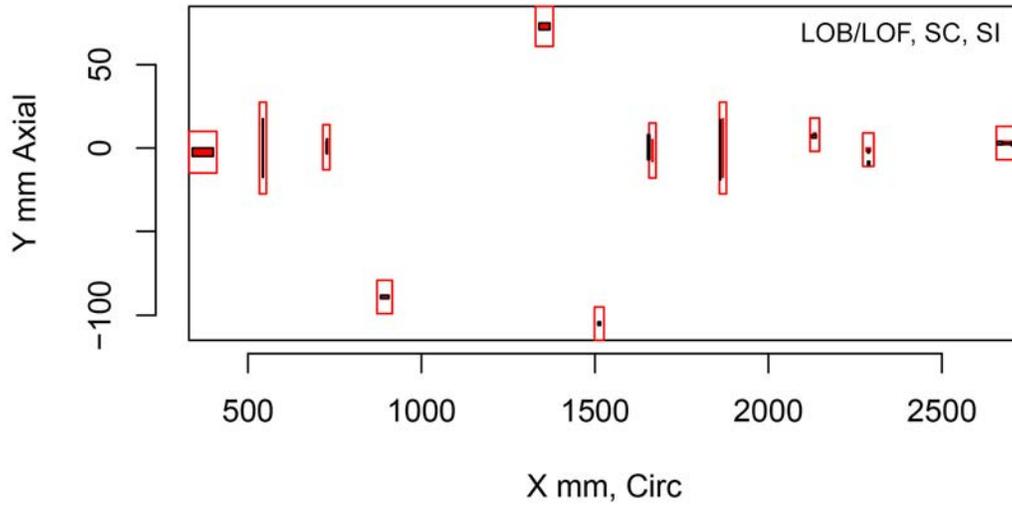


Figure H.419 Indication Plot for Procedure AECT.33 Applied to Test Block P37 in PARENT Open Testing (X – Y view)

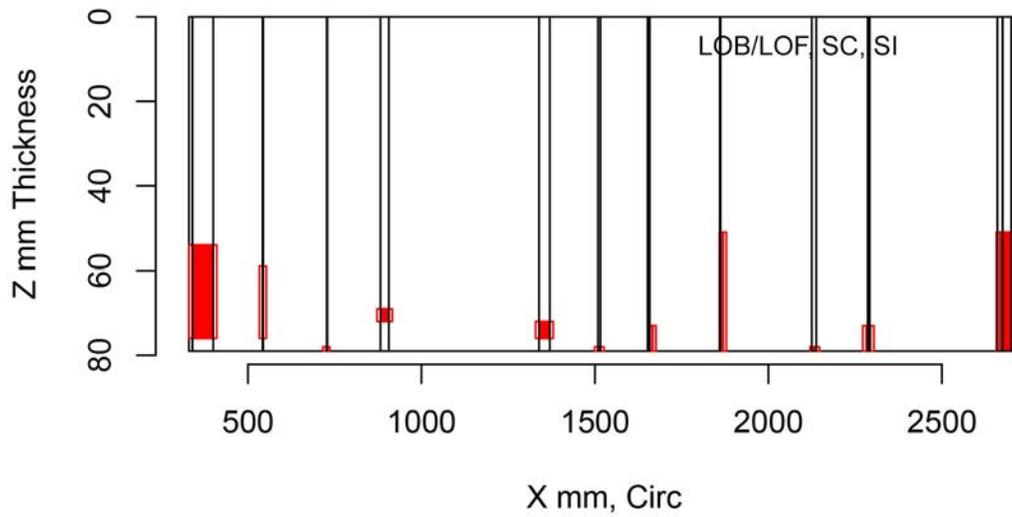


Figure H.420 Indication Plot for Procedure AECT.33 Applied to Test Block P37 in PARENT Open Testing (X – Z view)

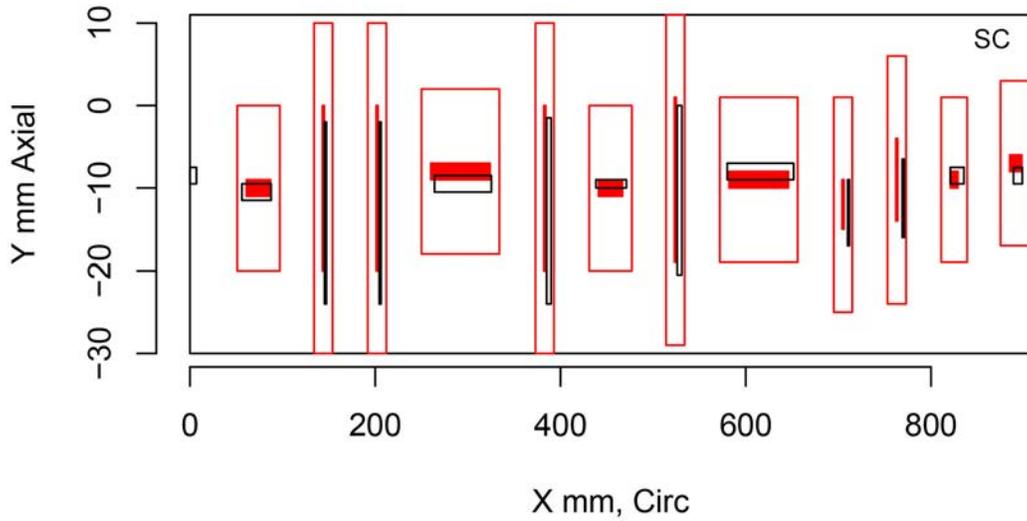


Figure H.421 Indication Plot for Procedure AECT.33 Applied to Test Block P41 in PARENT Open Testing (X – Y view)

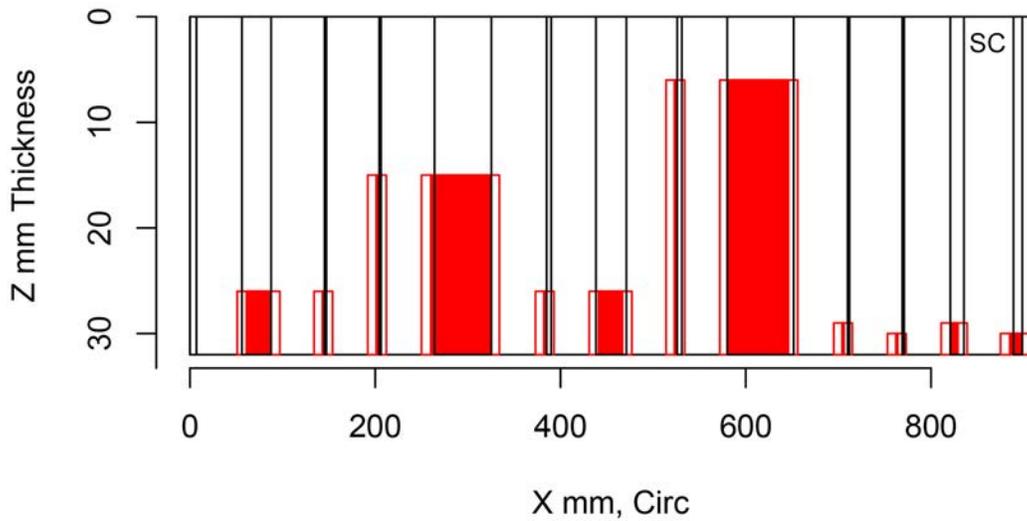


Figure H.422 Indication Plot for Procedure AECT.33 Applied to Test Block P41 in PARENT Open Testing (X – Z view)

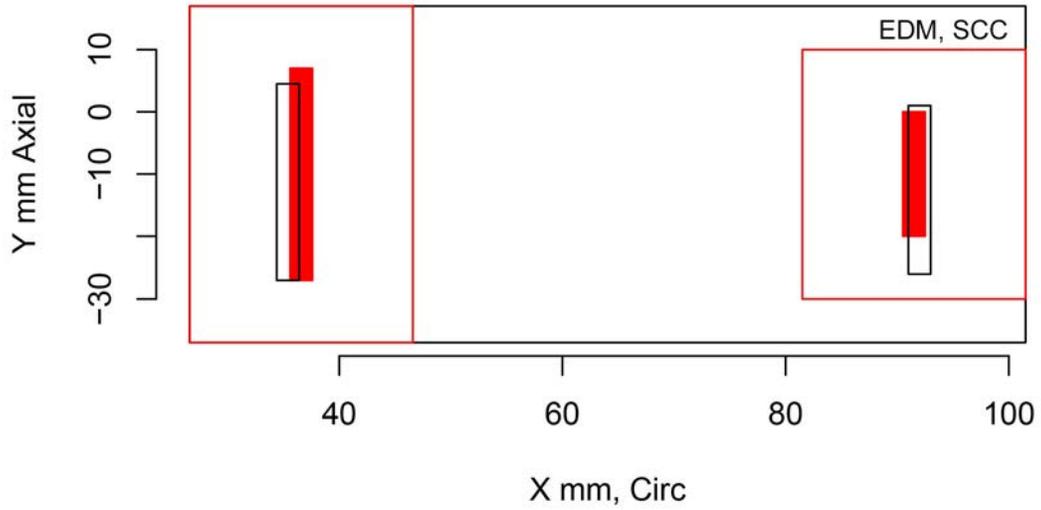


Figure H.423 Indication Plot for Procedure AECT.33 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

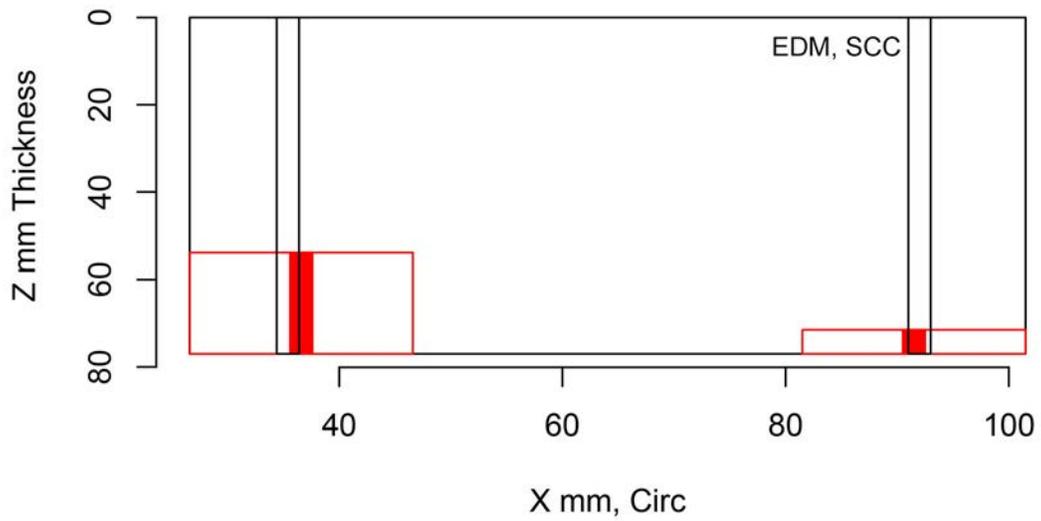


Figure H.424 Indication Plot for Procedure AECT.33 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

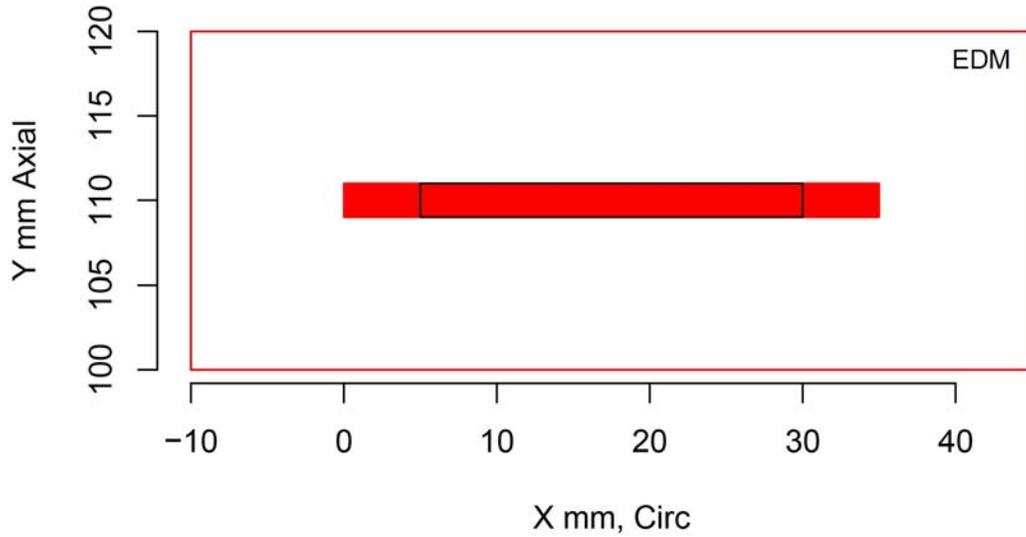


Figure H.425 Indication Plot for Procedure AECT.33 Applied to Test Block P42 in PARENT Open Testing (X – Y view)

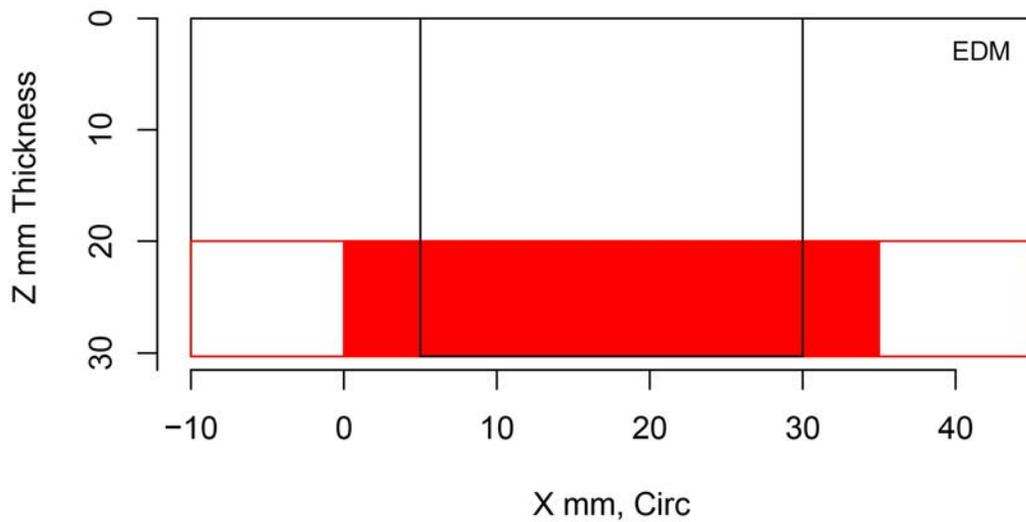


Figure H.426 Indication Plot for Procedure AECT.33 Applied to Test Block P42 in PARENT Open Testing (X – Z view)

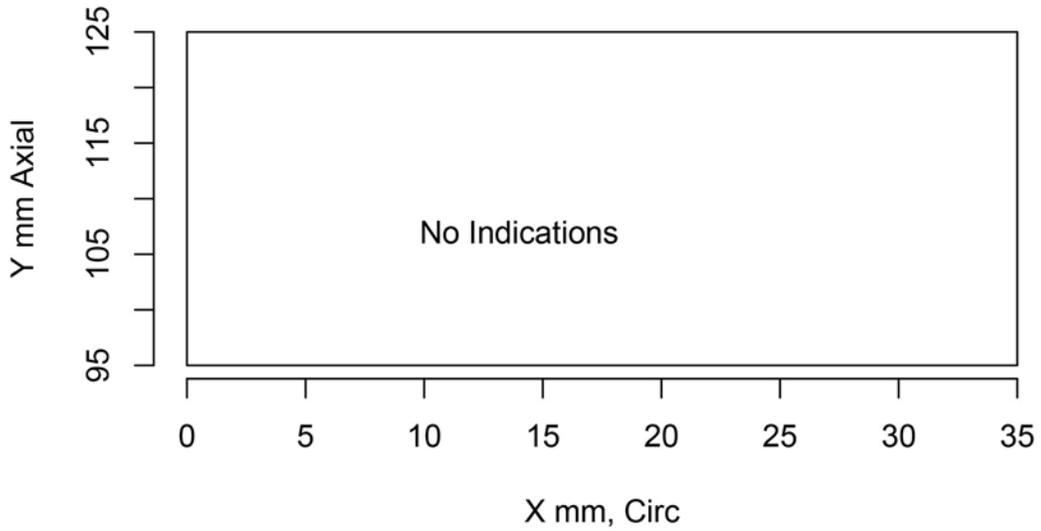


Figure H.427 Indication Plot for Procedure AECT.33 Applied to Test Block P46 in PARENT Open Testing (X – Y view)

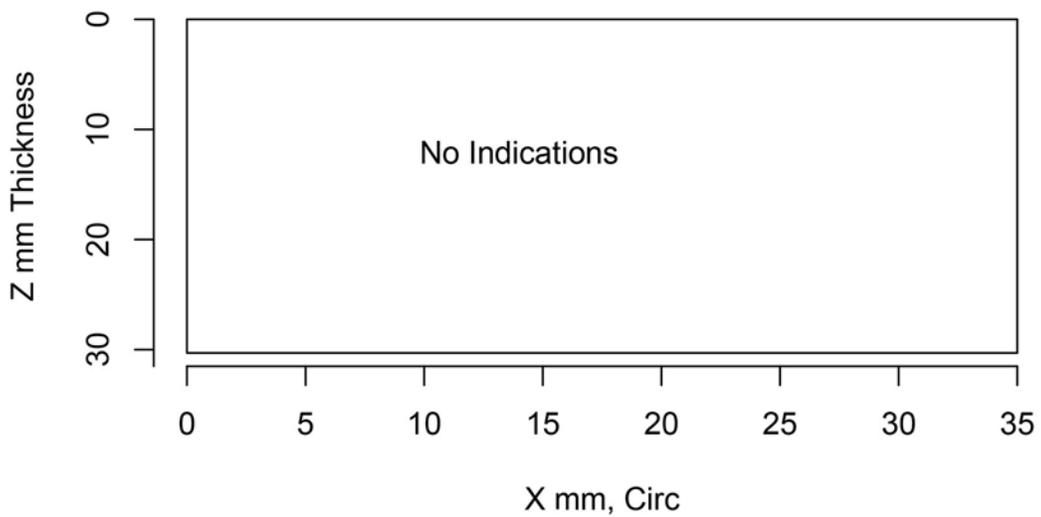


Figure H.428 Indication Plot for Procedure AECT.33 Applied to Test Block P46 in PARENT Open Testing (X – Z view)

H.2.21 Plots for Team 5

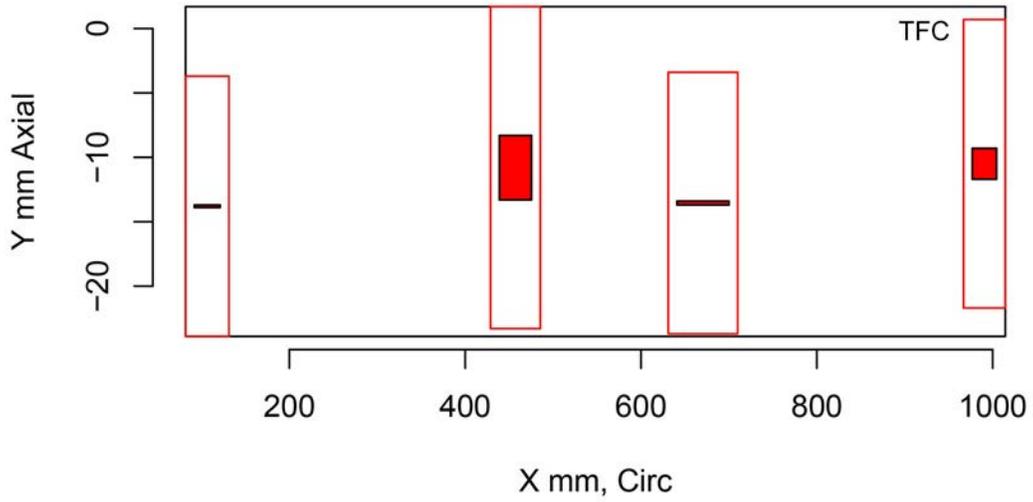


Figure H.429 Indication Plot for Procedure CEECT.5.1 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

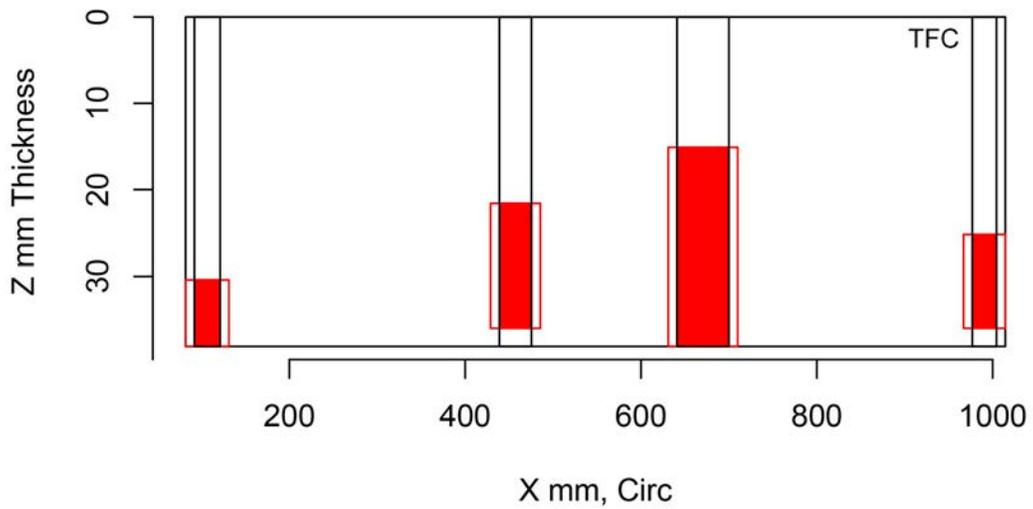


Figure H.430 Indication Plot for Procedure CEECT.5.1 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

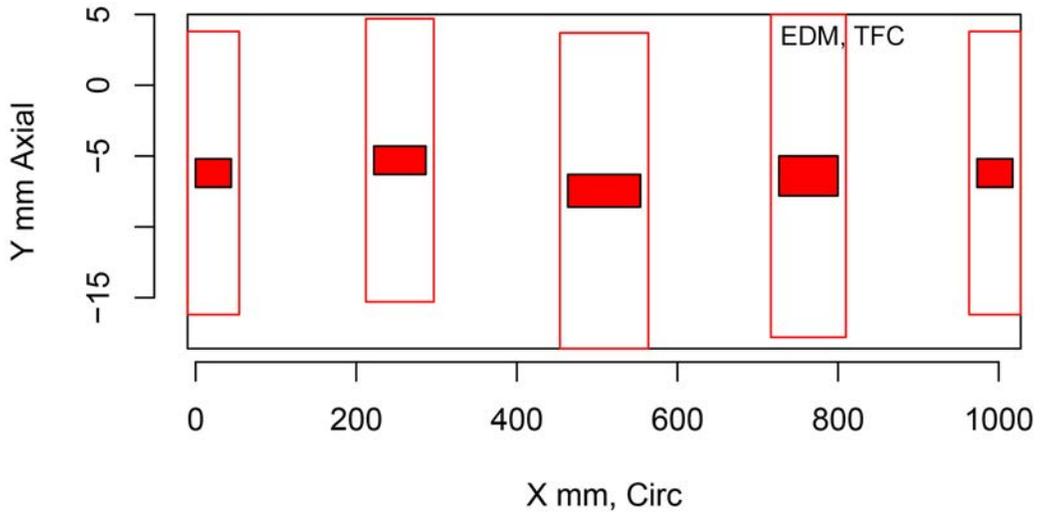


Figure H.431 Indication Plot for Procedure CEECT.5.1 Applied to Test Block P4 in PARENT Open Testing (X – Y view)

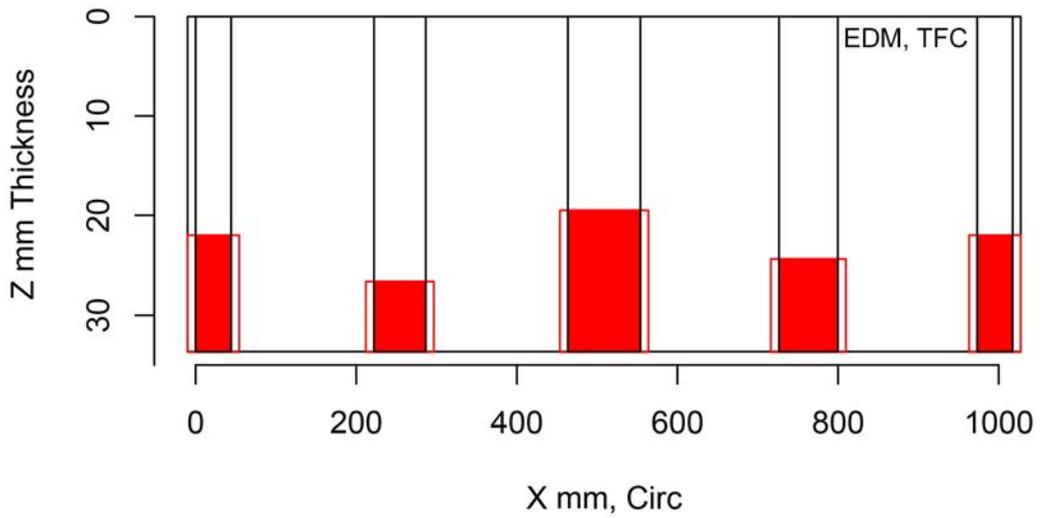


Figure H.432 Indication Plot for Procedure CEECT.5.1 Applied to Test Block P4 in PARENT Open Testing (X – Z view)

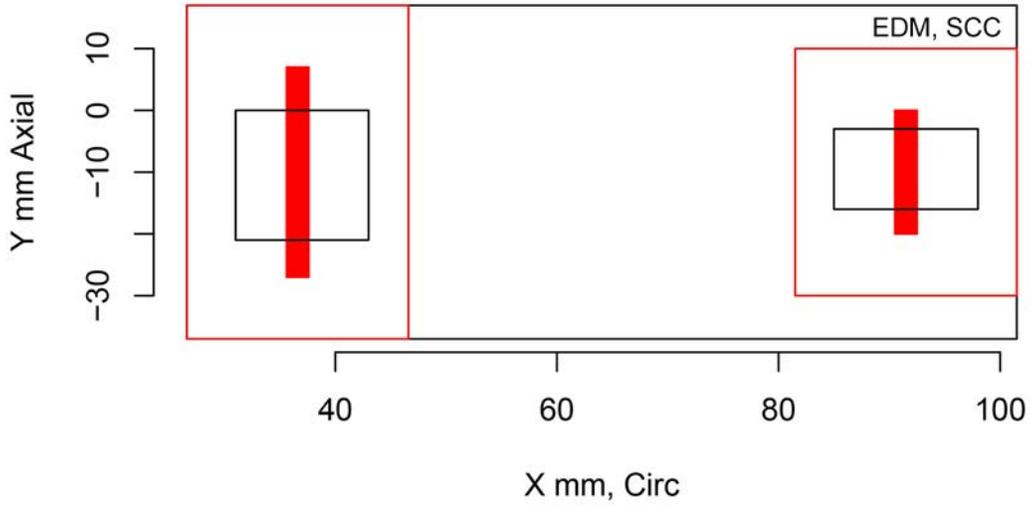


Figure H.433 Indication Plot for Procedure CEECT.5.1 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

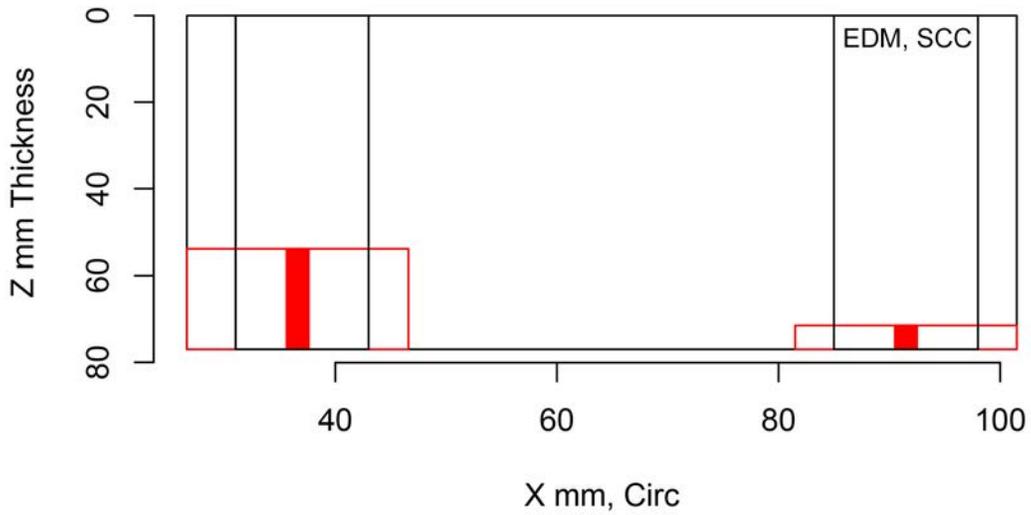


Figure H.434 Indication Plot for Procedure CEECT.5.1 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

H.2.22 Plots for Team 6

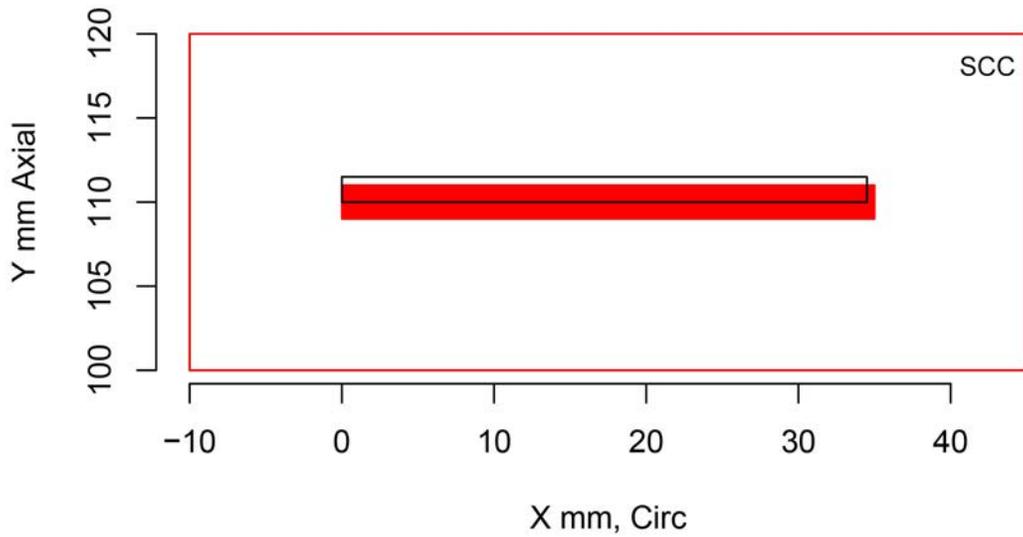


Figure H.435 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P28 in PARENT Open Testing (X – Y view)

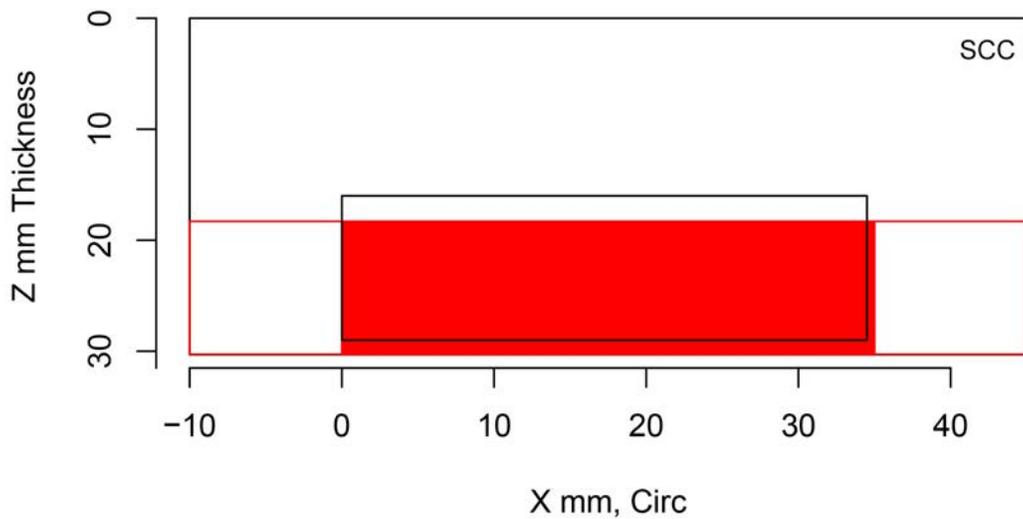


Figure H.436 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P28 in PARENT Open Testing (X – Z view)

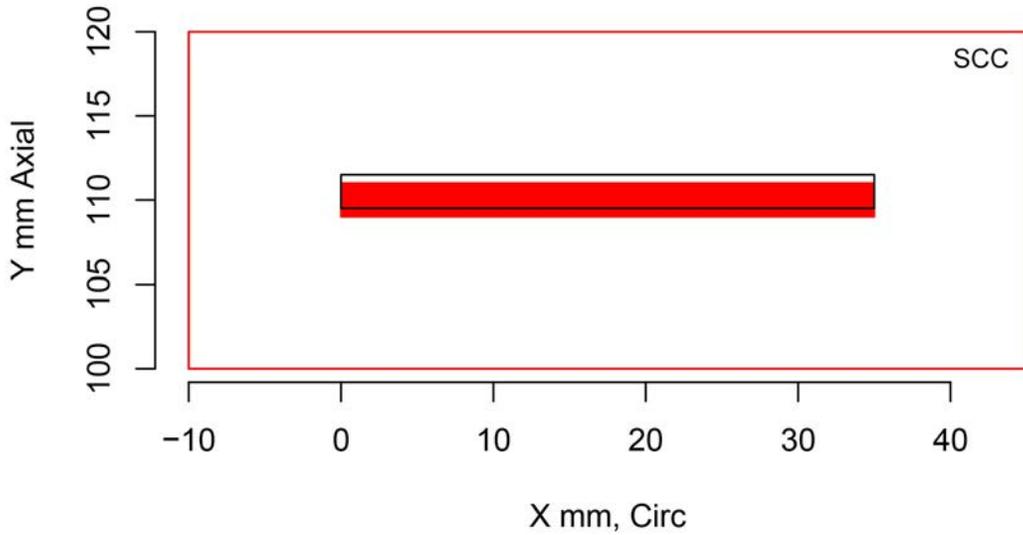


Figure H.437 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P29 in PARENT Open Testing (X – Y view)

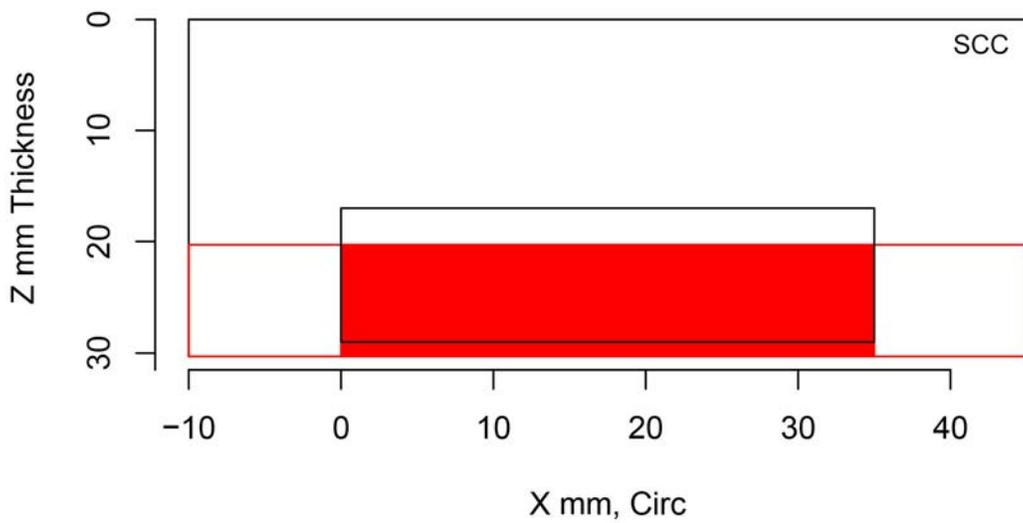


Figure H.438 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P29 in PARENT Open Testing (X – Z view)

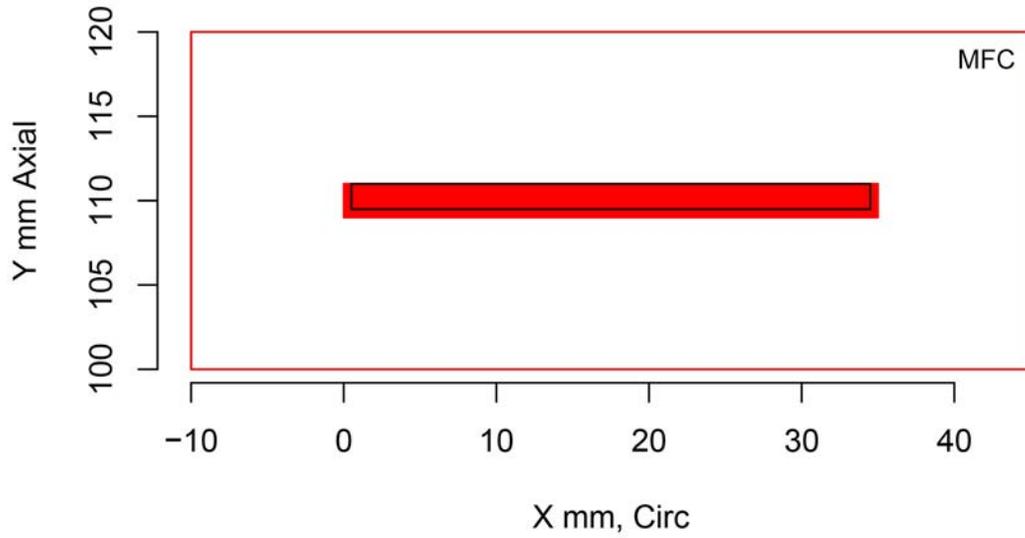


Figure H.439 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P30 in PARENT Open Testing (X – Y view)

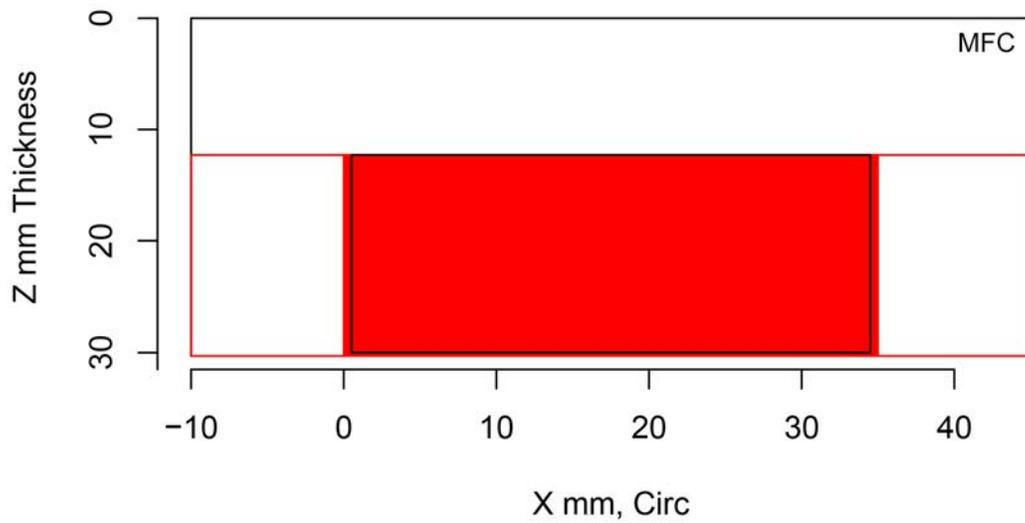


Figure H.440 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P30 in PARENT Open Testing (X – Z view)

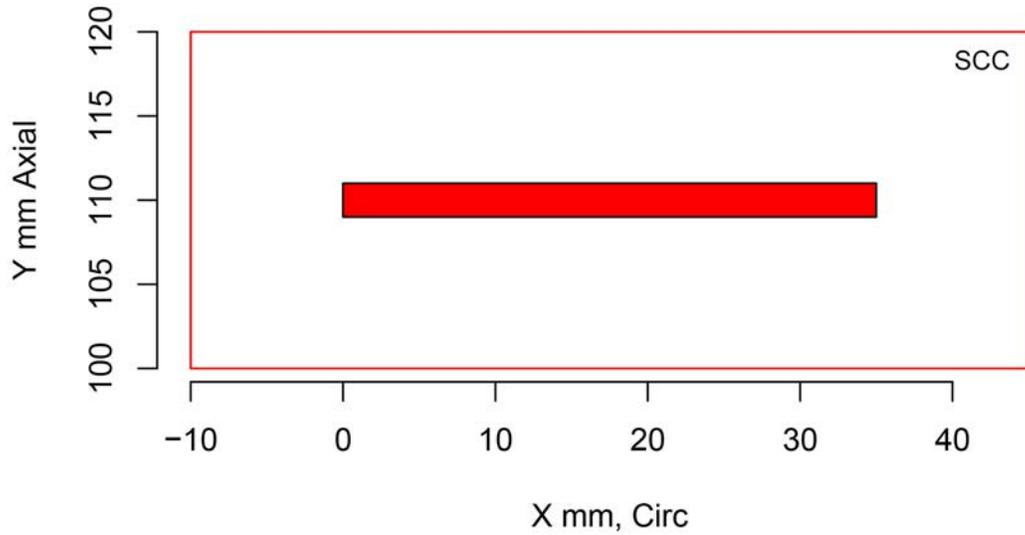


Figure H.441 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P31 in PARENT Open Testing (X – Y view)

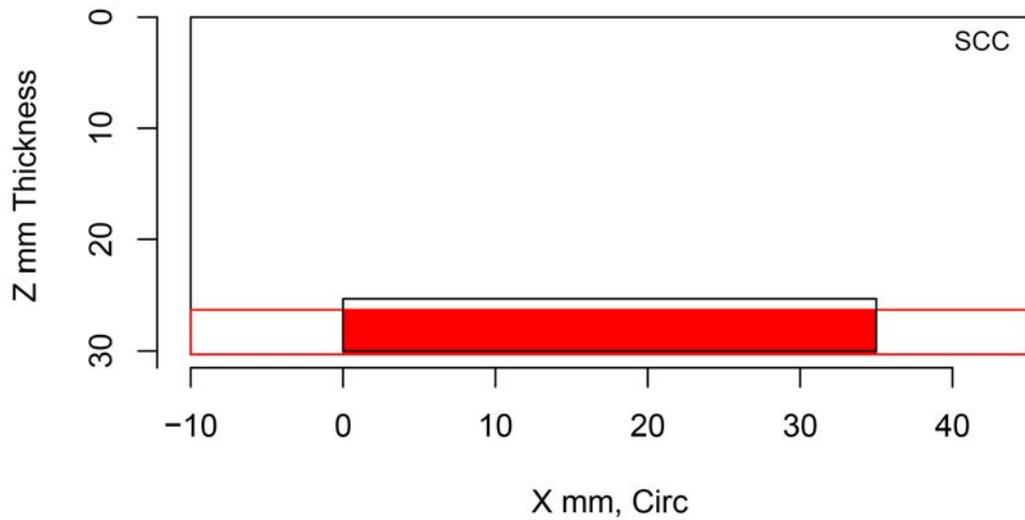


Figure H.442 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P31 in PARENT Open Testing (X – Z view)

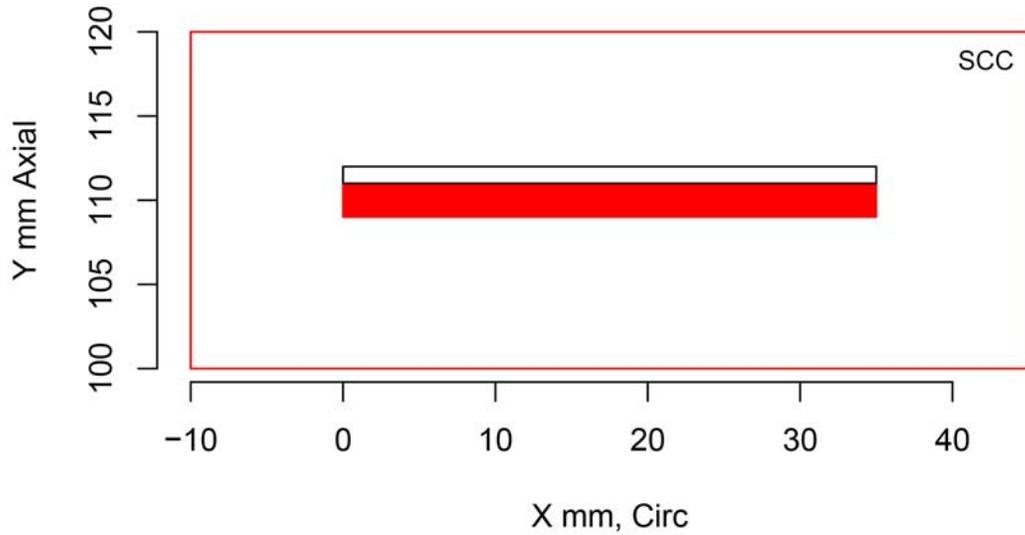


Figure H.443 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P32 in PARENT Open Testing (X – Y view)

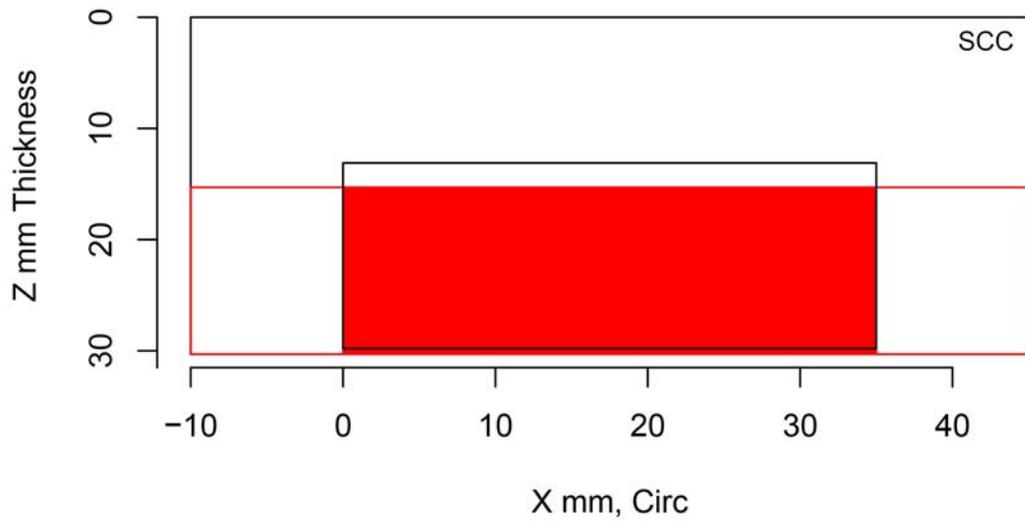


Figure H.444 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P32 in PARENT Open Testing (X – Z view)

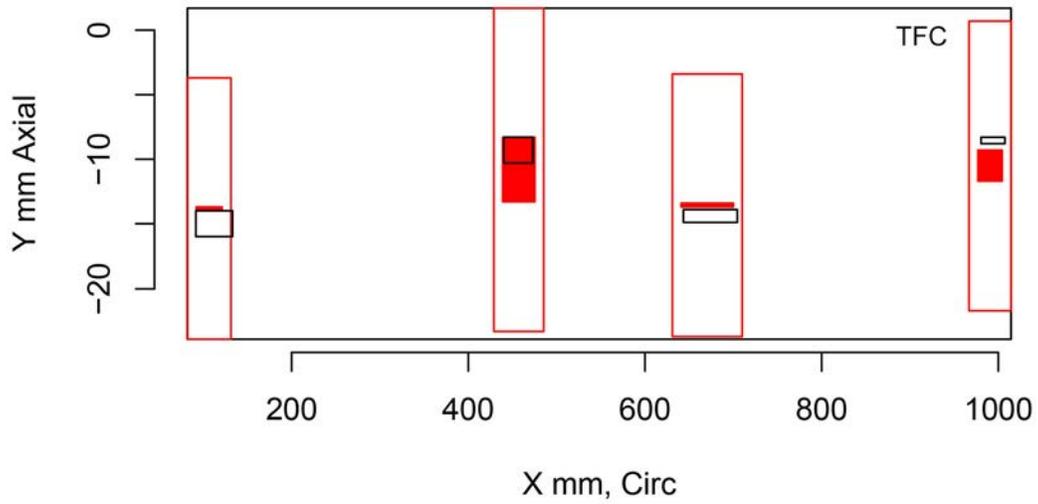


Figure H.445 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P1 in PARENT Open Testing (X – Y view)

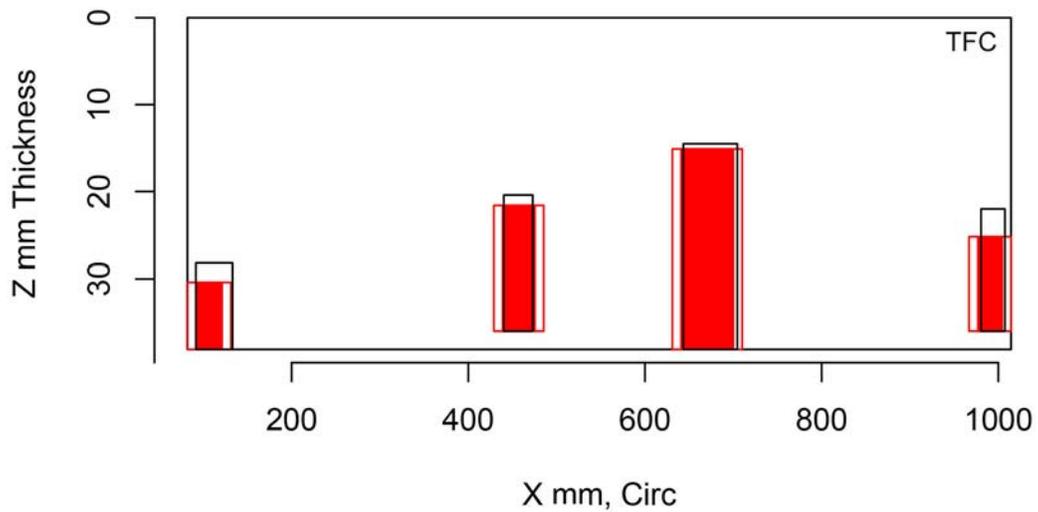


Figure H.446 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P1 in PARENT Open Testing (X – Z view)

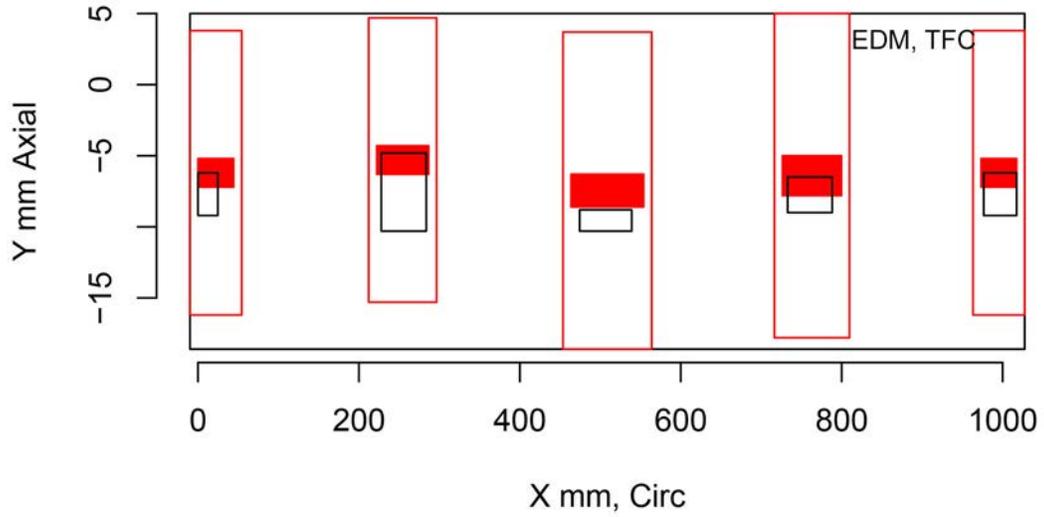


Figure H.447 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P4 in PARENT Open Testing (X – Y view)

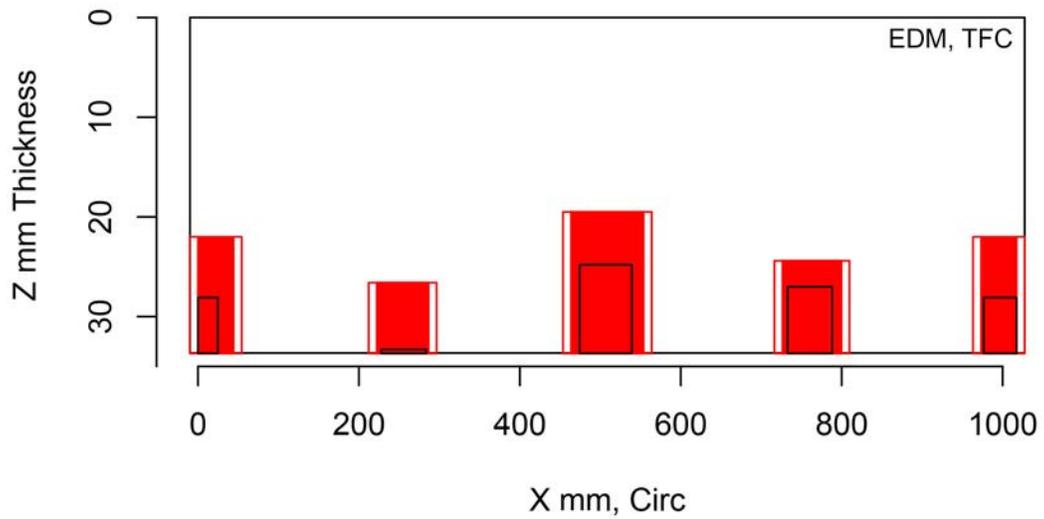


Figure H.448 Indication Plot for Procedure SHPA.6.1 Applied to Test Block P4 in PARENT Open Testing (X – Z view)

H.2.23 Plots for Team 7

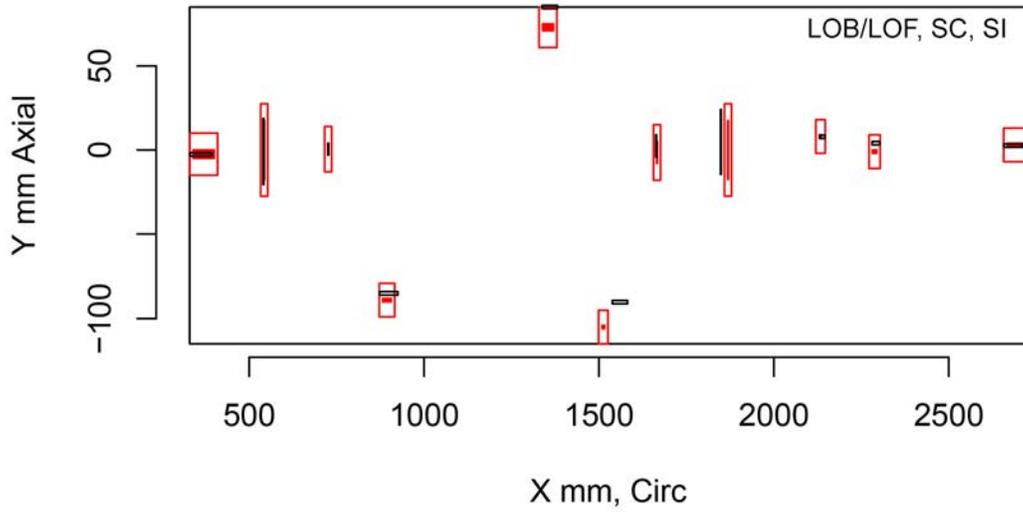


Figure H.449 Indication Plot for Procedure ECT.7 Applied to Test Block P37 in PARENT Open Testing (X – Y view)

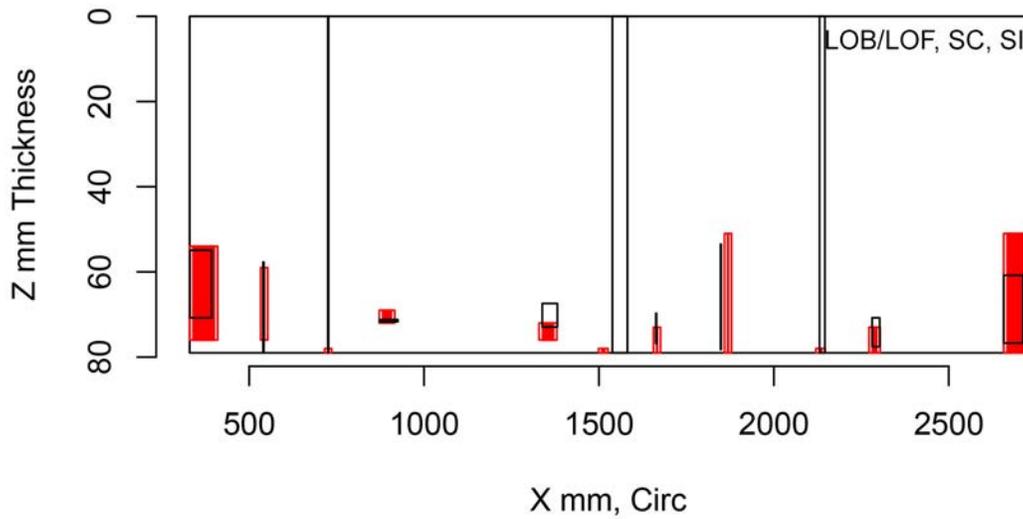


Figure H.450 Indication Plot for Procedure ECT.7 Applied to Test Block P37 in PARENT Open Testing (X – Z view)

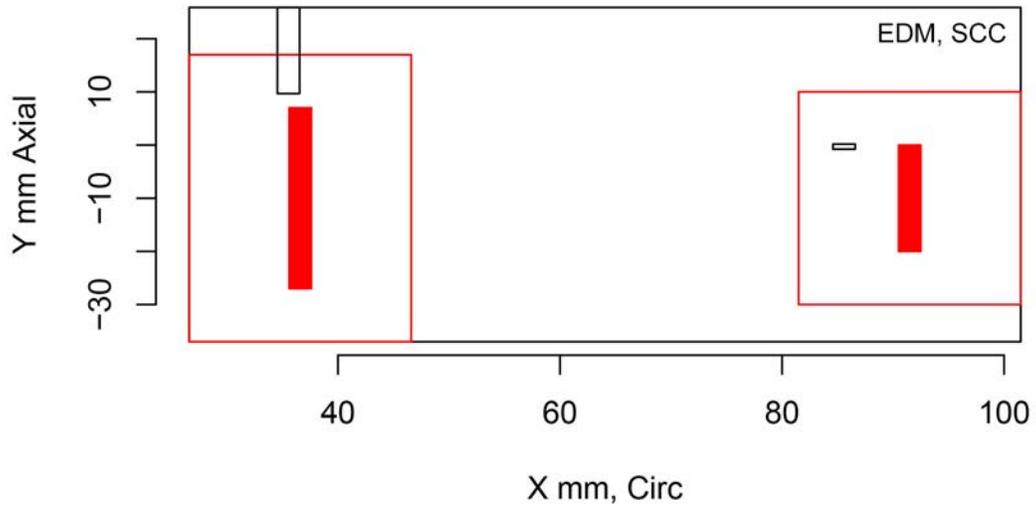


Figure H.451 Indication Plot for Procedure ECT.7 Applied to Test Block P12 in PARENT Open Testing (X – Y view)

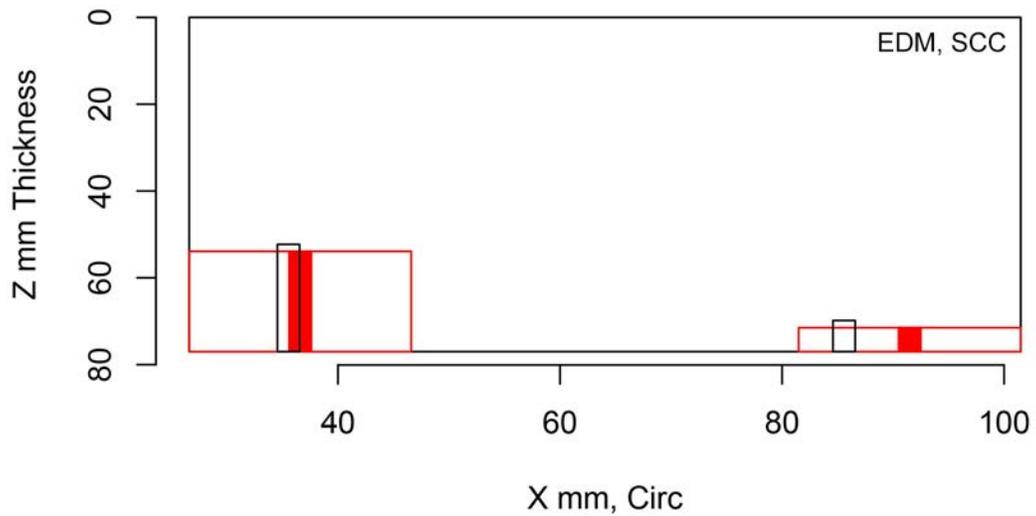


Figure H.452 Indication Plot for Procedure ECT.7 Applied to Test Block P12 in PARENT Open Testing (X – Z view)

BIBLIOGRAPHIC DATA SHEET

(See instructions on the reverse)

NUREG/CR-7236, Vol. 2

2. TITLE AND SUBTITLE

**Results of Open Testing for the Program to Assess the Reliability of
Emerging Nondestructive Techniques**

3. DATE REPORT PUBLISHED

MONTH

August

YEAR

2017

4. FIN OR GRANT NUMBER

V6286

5. AUTHOR(S)

R. M. Meyer, A. E. Holmes, and P. G. Heasler

6. TYPE OF REPORT

Technical

7. PERIOD COVERED (Inclusive Dates)

8. PERFORMING ORGANIZATION - NAME AND ADDRESS (If NRC, provide Division, Office or Region, U. S. Nuclear Regulatory Commission, and mailing address; if contractor, provide name and mailing address.)

Pacific Northwest National Laboratory
P.O. Box 999
Richland, WA 99352

9. SPONSORING ORGANIZATION - NAME AND ADDRESS (If NRC, type "Same as above", if contractor, provide NRC Division, Office or Region, U. S. Nuclear Regulatory Commission, and mailing address.)

Division of Engineering
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

10. SUPPLEMENTARY NOTES

11. ABSTRACT (200 words or less)

The U.S. Nuclear Regulatory Commission (NRC) conducted agreements with organizations in Finland, Japan, South Korea, Sweden and Switzerland to establish the Program to Assess the Reliability of Emerging Nondestructive Techniques (PARENT) whose goal was to investigate the performance of current and emerging nondestructive examination (NDE) procedures and techniques to find flaws in nickel-alloy welds and base materials. This was performed by conducting a series of open and blind international round-robin tests on a set of nickel alloy piping components that included large-bore dissimilar metal welds (LBDMW), small-bore dissimilar metal welds (SBDMW), and bottom-mounted instrumentation (BMI) penetration welds. The project was divided into open and blind testing to separate the evaluation of novel techniques implemented by nonqualified teams (open testing) from the evaluation of more established techniques implemented by commercial inspection service providers (blind testing). This report is focused on documenting the open testing activity and results. The open testing portion of PARENT was performed with knowledge of true-state information in the open test blocks provided to teams conducting tests. As a result, no detection performance analyses were performed on open test data. Thus, the evaluation of open test data is based on statistical analyses of sizing data and qualitative review of data response images.

12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.)

Nondestructive Examination, Stress Corrosion Cracking, Dissimilar Metal Welds,
Ultrasonic Testing, Probability of Detection

13. AVAILABILITY STATEMENT

unlimited

14. SECURITY CLASSIFICATION

(This Page)

unclassified

(This Report)

unclassified

15. NUMBER OF PAGES

16. PRICE



Federal Recycling Program



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

OFFICIAL BUSINESS



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NUREG/CR-7236, Vol. 2

**Results of Open Testing for the Program to Assess the Reliability of Emerging
Nondestructive Techniques**

August 2017