

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF SEALED SOURCE

NO: NR-155-S-102-S

DATE: MAR 8 1983

PAGE 1 OF 1

SOURCE TYPE: Radioluminous Lamp

MODEL: 10556135

MANUFACTURER/DISTRIBUTOR:

Department of the Army
U.S. Army Armament Material
Readiness Command (DRSAR-SF)
Rock Island, IL 61299

MANUFACTURER/DISTRIBUTOR:

ISOTOPE: Hydrogen-3

MAXIMUM ACTIVITY: 10 curies

LEAK TEST FREQUENCY: See License No. 12-00722-06

PRINCIPAL USE: (P) Gas Sources, for use in the Model M1A1 infinity aiming reference collimator

DIAGRAM: See Attachments 1 and 2.

CUSTOM DEVICE: X YES NO

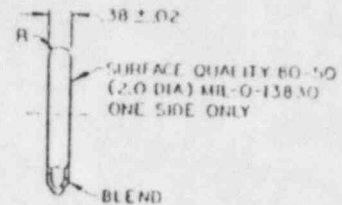
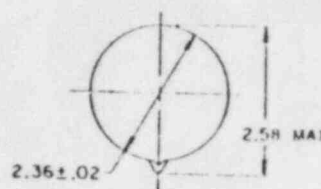
CUSTOM USER:

U.S. Department of Defense

REFERENCES: This registration document was formulated from information contained within U.S. Dept. of Army License No. 12-00722-06.

8403020034 840209
PDR FOIA
HAMMITT84-74 PDR

ISSUING AGENCY: U.S. Nuclear Regulatory Commission



NOTES:

- 1- MARKING, LABELING AND SHIPPING OF PACKAGES AND CONTAINERS SHALL BE IN ACCORDANCE WITH DSAM 415.8 "RADIOACTIVE COMMODITIES IN DOD SUPPLY SYSTEM".
- 2- THERE SHALL BE NO EVIDENCE OF PHYSICAL FAILURE SUCH AS FRACTURING OR LIGHT LOSS DUE TO EXPOSING THE LAMP TO -80°F AND +160°F FOR A PERIOD OF 8 HOURS AT EACH TEMPERATURE.
- 3- AFTER SUBMERGING THE LAMP IN ROOM TEMPERATURE WATER FOR 4 HOURS, RADIOACTIVE CONTENT OF THE WATER SHALL NOT EXCEED .005 MICROCURIES.
- 4- VIAL FILLED WITH 99% PURE (LESS THAN 1% TRITIUM OXIDE) TRITIUM (H_3), 10.0 CURIES MAX.
- 5- COLOR OF LIGHT EMITTED: GREEN, SPECTRAL PEAK 5250 Å ± 50 Å, 1/2 PEAK WIDTH 700 Å ± 50 Å.
- 6- INITIAL BRIGHTNESS: BRIGHTNESS 25 DAYS AFTER MANUFACTURE SHALL BE 420 MICROLAMBERTS MINIMUM. THIS SHALL BE CONSIDERED INITIAL BRIGHTNESS.
- 7- DECAY RATE: INITIAL BRIGHTNESS SHALL NOT DECAY MORE THAN SIX (6) % MEASURED 90 DAYS AFTER THE INITIAL BRIGHTNESS READING.
- 8- MATERIAL: GLASS, TYPE I, CLASS A, SPEC DD-G-541, .08 ± .04 THICK WALL.
- 9- IDENTIFICATION OF THE SUGGESTED SOURCES OF SUPPLY HEREON IS NOT TO BE CONSIDERED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM.
- 10- SUGGESTED SOURCES OF SUPPLY: SEE TABLE

SUGGESTED SOURCES OF SUPPLY	
VENDOR	VENDOR PART NO.
SELF POWERED LIGHTING LTD 8 WEST CHESTER PLAZA ELMSFORD, N.Y. 10523 FSLM 27270	NOT AVAILABLE
AMERICAN ATOMIES CORP 425 S. FLUMER AVE TUCSON, AZ 85710 FSCAT 27743	NOT AVAILABLE
U.S. RADIUM CORP 4150 OLD BERWICK RD BLOOMSBURG, PA 17015 FSCAT 02006	NOT AVAILABLE
SAUNDERS ROE DEVELOPMENTS LTD (WESTLAND GROUP) NORTH HYDE RD HAYES, MIDDLESEX UB3 4NB UNITED KINGDOM	NOT AVAILABLE

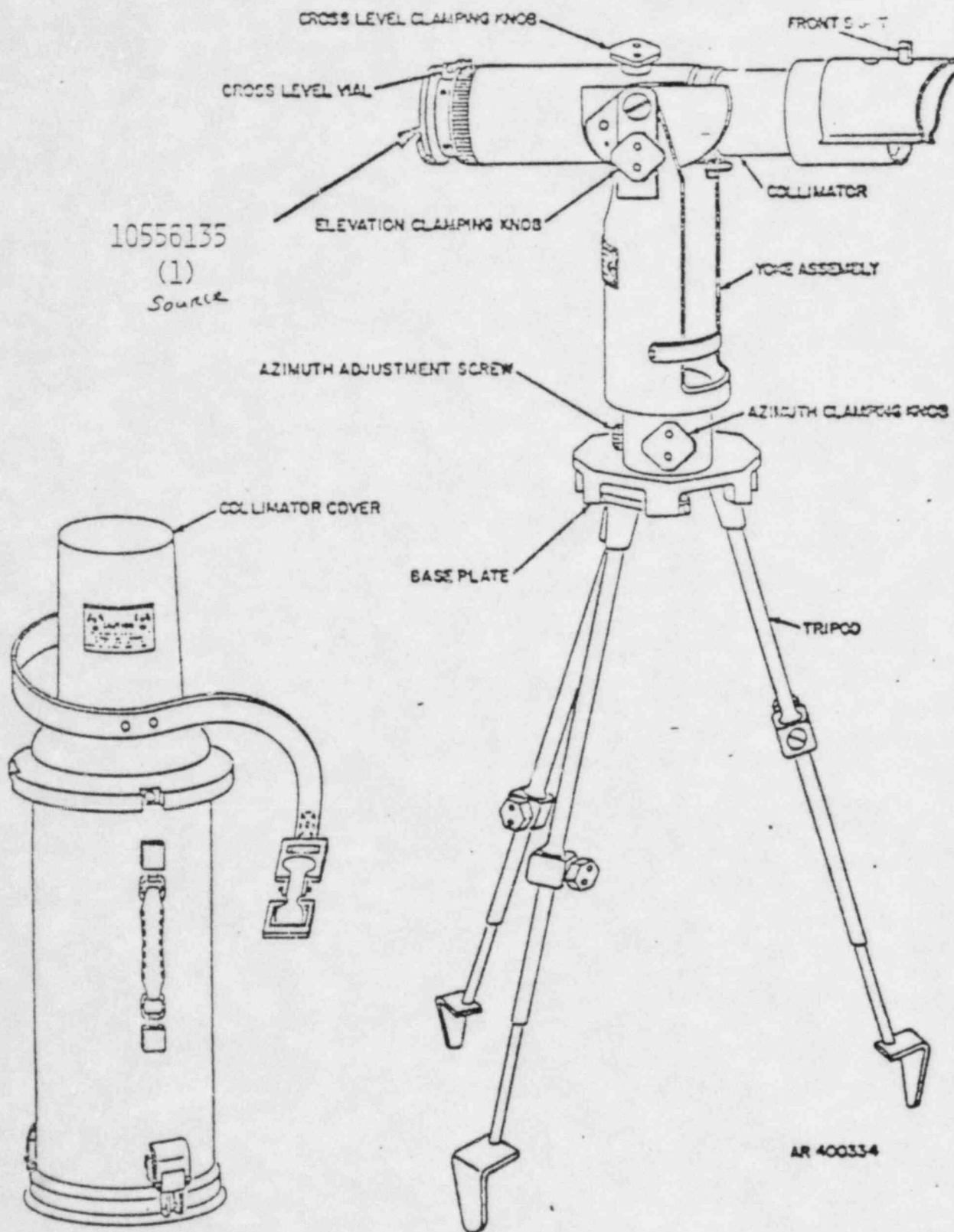
SOURCE USED ON:
MAL Infinity Collimator

SPECIFICATION CONTROL DRAWING PART NO 10556135

DESIGNED BY: [] DRAWN BY: [] CHECKED BY: [] APPROVED BY: [] DATE: 74 JUN 14		PART NO: 10556135 LAMP RADIO LUMINOUS	
APPLICATION: COLLIMATOR		D 19200 10556135	

NO: NR-156-S-102-5
DATE: MAR 9 1983

10556135
(1)
Source



AR 400334

COLLIMATOR, INFINITY AIMING REFERENCE: M1A1 :-