Building 722 Phoswich Data

Date	Building	Room	Surface	Grid	Alpha cpm	Beta cpm
1/18/2000	722		metal	10	1	211
1/18/2000	722		metal	11	3	358
1/18/2000	722		metal	12	3	278
1/18/2000	722		metal	13	1	275
1/18/2000	722		metal	14	4	234
1/18/2000	722		metal	15	4	209
1/18/2000	722		metal	16	4	429
1/18/2000	722		metal	17	1	327
1/18/2000	722		metal	18	4	237
1/18/2000	722		metal	19	4	258
1/18/2000	722		counter top	20	9	370
1/18/2000	722		counter top	21	7	497
1/18/2000	722		counter top	22	2	448
1/18/2000	722		counter top	23	2	401
1/18/2000	722		counter top	24	4	423
1/18/2000	722		counter top	25	3	368
1/18/2000	722		counter top	26	1	432
1/18/2000	722		counter top	27	6	485
1/18/2000	722		counter top	28	3	418
1/18/2000	722		counter top	29	3	337
1/18/2000	722		cinder wall	30	2	498
1/18/2000	722		cinder wall	31	1	496
1/18/2000	722		cinder wall	32	2	617
1/18/2000	722		cinder wall	33	4	511
1/18/2000	722		cinder wall	34	4	463
1/18/2000	722		cinder wall	35	7	480
1/18/2000	722		cinder wall	36	3	411
1/18/2000	722		cinder wall	37	3	457
1/18/2000	722		cinder wall	38	7	437
1/18/2000	722		cinder wall	39	5	484
1/18/2000	722		cinder wall	135	2	541
1/18/2000	722		cinder wall	137	2	498
1/18/2000	722		cinder wall	136	4	529
1/18/2000	722		cinder wall	138	3	511
1/18/2000	722		cinder wall	139	6	405
1/18/2000	722		cinder wall	130	0	537
1/18/2000	722		cinder wall	131	6	420
1/18/2000	722		cinder wall	132	2	297
1/18/2000	722		cinder wall	133	3	533
1/18/2000	722		cinder wall	134	4	501
1/18/2000	722		pipes/machinery	60	5	239
1/18/2000	722		pipes/machinery	61	7	327
1/18/2000	722		pipes/machinery	62	4	342
1/18/2000	722		pipes/machinery	63	9	271
1/18/2000	722		pipes/machinery	64	5	274
1/18/2000	722		pipes/machinery	65	0	371
1/18/2000	722		pipes/machinery	66	3	376
1/18/2000	722		pipes/machinery	67	7	238

1/18/2000	722	pipes/machinery	68	6	243
1/18/2000	722	pipes/machinery	69	3	281
1/18/2000	722	sinks/toilets	70	3	295
1/18/2000	722	sinks/toilets	71	3	316
1/18/2000	722	sinks/toilets	72	4	271
1/18/2000	722	sinks/toilets	73	5	306
1/18/2000	722	sinks/toilets	74	6	597
1/18/2000	722	sinks/toilets	75	14	717
1/18/2000	722	sinks/toilets	76	2	225
1/18/2000	722	sinks/toilets	77	6	276
1/18/2000	722	sinks/toilets	78	6	301
1/18/2000	722	sinks/toilets	79	7	500
1/18/2000	722	wood paneling	80	4	232
1/18/2000	722	wood paneling	81	0	201
1/18/2000	722	wood paneling	82	4	183
1/18/2000	722	wood paneling	83	2	250
1/18/2000	722	wood paneling	84	3	223
1/18/2000	722	wood paneling	85	3	201
1/18/2000	722	wood paneling	86	3	205
1/18/2000	722	wood paneling	87	3	280
1/18/2000	722	wood paneling	88	2	270
1/18/2000	722	wood paneling	89	2	319
1/18/2000	722	glass mirrors/windo	90	4	328
1/18/2000	722	glass mirrors/windo	91	6	923
1/18/2000	722	glass mirrors/windo	92	10	281
1/18/2000	722	glass mirrors/windo	93	5	265
1/18/2000	722	glass mirrors/windo	94	8	1187
1/18/2000	722	glass mirrors/windo	95	3	779
1/18/2000	722	glass mirrors/windo	96	2	1026
1/18/2000	722	glass mirrors/windo	97	0	935
1/18/2000	722	glass mirrors/windo	98	3	353
1/18/2000	722	glass mirrors/windo	99	4	412
1/18/2000	722	rollup doors	100	2	160
1/18/2000	722	rollup doors	101	5	170
1/18/2000	722	rollup doors	102	5	173
1/18/2000	722	rollup doors	103	3	236
1/18/2000	722	rollup doors	104	6	221
1/18/2000	722	rollup doors	105	7	219
1/18/2000	722	rollup doors	106	1	194
1/18/2000	722	rollup doors	107	1	162
1/18/2000	722	rollup doors	108	5	245
1/18/2000	722	rollup doors	109	6	172
1/18/2000	722	wall board	110	2	226
1/18/2000	722	wall board	111	4	223
1/18/2000	722	wall board	112	2	266
1/18/2000	722	wall board	113	1	299
1/18/2000	722	wall board	114	6	227
1/18/2000	722	wall board	115	4	206
1/18/2000	722	wall board	116	2	226
1/18/2000	722	wall board	117	2	269

1/18/2000	722	wall board	118	3	221
1/18/2000	722	wall board	119	3	193

Instrument Type	Instrument S/N
phoswich	133669
phoswich	133669
phoswich	133669

phoswich	138254
phoswich	138254
phoswich	138254
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phoswich	138254
phoswich	138254
phoswich	138254
phoswich	133669

phoswich 138254
phoswich 138254

Building 722 Floor Monitor Data

Date	Building	Surface	Grid	Alpha	Beta	Instrument Type
11/16/1999	722	tile floor	0	4	687	floor monitor
11/16/1999	722	tile floor	1	1	715	floor monitor
11/16/1999	722	ceramic tile	2	0	768	floor monitor
11/16/1999	722	ceramic tile	3	6	640	floor monitor
11/16/1999	722	tile floor	4	6	1435	floor monitor
11/16/1999	722	tile floor	5	4	1420	floor monitor
11/16/1999	722	tile floor	6	2	772	floor monitor
11/16/1999	722	tile floor	7	3	821	floor monitor
11/16/1999	722	tile floor	8	2	789	floor monitor
11/16/1999	722	tile floor	9	4	785	floor monitor
11/16/1999	722	concrete floors	120	6	505	floor monitor
11/16/1999	722	concrete floors	121	1	621	floor monitor
11/16/1999	722	concrete floors	122	3	588	floor monitor
11/16/1999	722	concrete floors	123	7	581	floor monitor
11/16/1999	722	concrete floors	129	8	498	floor monitor

Instrument S/N
138256
138256
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138256

Kruskal-Wallis Test, per NUREG-1505 Section 13

Ordered Data	Rank	Adj Rank	cinder wall	counter top	glass mirrors/windows	metal	pipes/machinery	rollup doors	sinks/toilets	wall board	wood paneling
0	1	2.5	2.5								
0	2	2.5			2.5						
0	3	2.5					2.5				
0	4	2.5									2.5
1	5	8.5	8.5								
1	6	8.5		8.5							
1	7	8.5				8.5					
1	8	8.5				8.5					
1	9	8.5				8.5					
1	10	8.5						8.5			
1	11	8.5						8.5			
1	12	8.5								8.5	
2	13	21	21								
2	14	21	21								
2	15	21	21								
2	16	21	21								
2	17	21	21								
2	18	21		21							
2	19	21		21							
2	20	21			21						
2	21	21						21			
2	22	21							21		
2	23	21								21	
2	24	21								21	
2	25	21								21	
2	26	21								21	
2	27	21									21
2	28	21									21
2	29	21									21
3	30	40.5	40.5								
3	31	40.5	40.5								
3	32	40.5	40.5								
3	33	40.5	40.5								
3	34	40.5		40.5							
3	35	40.5		40.5							
3	36	40.5		40.5							
3	37	40.5			40.5						
3	38	40.5			40.5						
3	39	40.5				40.5					
3	40	40.5				40.5					
3	41	40.5					40.5				
3	42	40.5					40.5				
3	43	40.5						40.5			
3	44	40.5							40.5		
3	45	40.5							40.5		
3	46	40.5								40.5	
3	47	40.5								40.5	
3	48	40.5									40.5
3	49	40.5									40.5
3	50	40.5									40.5
3	51	40.5									40.5
4	52	60.5	60.5								
4	53	60.5	60.5								
4	54	60.5	60.5								
4	55	60.5	60.5								
4	56	60.5		60.5							
4	57	60.5			60.5						
4	58	60.5			60.5						
4	59	60.5				60.5					
4	60	60.5				60.5					
4	61	60.5				60.5					
4	62	60.5				60.5					
4	63	60.5				60.5					
4	64	60.5					60.5				
4	65	60.5							60.5		
4	66	60.5								60.5	
4	67	60.5								60.5	
4	68	60.5									60.5
4	69	60.5									60.5
5	70	73.5	73.5								
5	71	73.5			73.5						
5	72	73.5					73.5				
5	73	73.5					73.5				
5	74	73.5						73.5			
5	75	73.5						73.5			
5	76	73.5						73.5			
5	77	73.5							73.5		
6	78	83	83								
6	79	83	83								
6	80	83		83							
6	81	83			83						
6	82	83					83				
6	83	83						83			
6	84	83						83			
6	85	83							83		
6	86	83							83		
6	87	83							83		
6	88	83								83	
7	89	92	92								
7	90	92	92								
7	91	92		92							
7	92	92					92				
7	93	92					92				
7	94	92						92			
7	95	92							92		
8	96	96			96						
9	97	97.5		97.5							
9	98	97.5					97.5				
10	99	99			99						
14	100	100							100		

	cinder wall	counter top	glass mirrors/windows	metal	pipes/machinery	rollup doors	sinks/toilets	wall board	wood paneling	Total
Sum of Ranks	943.5	505	577	409	655.5	557	677	377.5	348.5	5050
Count	20	10	10	10	10	10	10	10	10	100
Avg. Rank	47.175	50.5	57.7	40.9	65.55	55.7	67.7	37.75	34.85	

												K
	K	0.001188119	44509.6125	25502.5	33292.9	16728.1	42968.025	31024.9	45832.9	14250.63	12145.23	316.3423	13.34232
k = number of datasets	k-1	8											
	Kc	11	at an alpha of 0.2										

K>Kc therefore significant variability

The null hypothesis (i.e., no significant variability exists between the 9 background areas) is rejected.

Lower Boundary of Gray Region Calculation, per NUREG-1505 Section 13

Data Groups	Measurements (cpm)									Measurements Squared								
	cinder wall	counter top	mirrors/win	metal	pes/machine	ollup door	sinks/toilets	wall board	ood paneli	cinder wall	counter top	glass mirr	metal	pipes/mac	rollup doo	sinks/toilet	wall board	wood paneling
	2	9	4	1	5	2	3	2	4	4	81	16	1	25	4	9	4	16
	1	7	6	3	7	5	3	4	0	1	49	36	9	49	25	9	16	0
	2	2	10	3	4	5	4	2	4	4	4	100	9	16	25	16	4	16
	4	2	5	1	9	3	5	1	2	16	4	25	1	81	9	25	1	4
	4	4	8	4	5	6	6	6	3	16	16	64	16	25	36	36	36	9
	7	3	3	4	0	7	14	4	3	49	9	9	16	0	49	196	16	9
	3	1	2	4	3	1	2	2	3	9	1	4	16	9	1	4	4	9
	3	6	0	1	7	1	6	2	3	9	36	0	1	49	1	36	4	9
	7	3	3	4	6	5	6	3	2	49	9	9	16	36	25	36	9	4
	5	3	4	4	3	6	7	3	2	25	9	16	16	9	36	49	9	4
	2									4								
	2									4								
	4									16								
	3									9								
	6									36								
	0									0								
	6									36								
	2									4								
	3									9								
	4									16								

sum	70	40	45	29	49	41	56	29	26	316	218	279	101	299	211	416	103	80	
Average	3.5	4	4.5	2.9	4.9	4.1	5.6	2.9	2.6										
Std Dev	1.9330913	2.538591	2.9154759	1.3703203	2.5582112	2.18327	3.373096	1.449138	1.173788										
Avg Sqd	12.25	16	20.25	8.41	24.01	16.81	31.36	8.41	6.76										
count	20	10	10	10	10	10	10	10	10										
count Sqd	400	100	100	100	100	100	100	100	100	4	1	1	1	1	1	1	1	1	12

2023	sum of squares of all measurements (A)
148225	square of sum of all measurements (B)
1565.1	sum of squares of averages weighted by number of measurements (C)
100	N
9	k
11.0	n_o
5.031868132	Sw^2
10.35625	Sb^2
0.484034715	w^2
0.7	w
2.1	LBGR = 3w, per NUREG-1505
	Other LBGR possibilities
3.9	Mean all bkgd data
2	Std Dev all bkgd data
9	Mean + 2*SD
7	95% Percentile All Data
14	Maximum Background Measurement

Kruskal-Wallis Test, per NUREG-1505 Section 13

Ordered Data	Rank	Adj Rank	cinder wall	counter top	glass mirrors/windows	metal	pipes/machinery	rollup doors	sinks/toilets	wall board	wood paneling
160	1	1						1			
162	2	2						2			
170	3	3						3			
172	4	4						4			
173	5	5						5			
183	6	6									6
193	7	7								7	
194	8	8						8			
201	9	9.5									9.5
201	10	9.5									9.5
205	11	11									11
206	12	12								12	
209	13	13				13					
211	14	14				14					
219	15	15						15			
221	16	16.5						16.5			
221	17	16.5								16.5	
223	18	18.5								18.5	
223	19	18.5									18.5
225	20	20							20		
226	21	21.5								21.5	
226	22	21.5								21.5	
227	23	23								23	
232	24	24									24
234	25	25				25					
236	26	26						26			
237	27	27				27					
238	28	28					28				
239	29	29					29				
243	30	30					30				
245	31	31						31			
250	32	32									32
258	33	33				33					
265	34	34			34						
266	35	35								35	
269	36	36								36	
270	37	37									37
271	38	38.5					38.5				
271	39	38.5							38.5		
274	40	40					40				
275	41	41				41					
276	42	42							42		
278	43	43				43					
280	44	44									44
281	45	45.5			45.5						
281	46	45.5					45.5				
295	47	47							47		
297	48	48	48								
299	49	49								49	
301	50	50							50		
306	51	51							51		
316	52	52							52		
319	53	53									53
327	54	54.5				54.5					
327	55	54.5					54.5				
328	56	56			56						
337	57	57		57							
342	58	58					58				
353	59	59			59						
358	60	60				60					
368	61	61		61							
370	62	62		62							
371	63	63					63				
376	64	64					64				
401	65	65		65							
405	66	66	66								
411	67	67	67								
412	68	68			68						
418	69	69		69							
420	70	70	70								
423	71	71		71							
429	72	72				72					
432	73	73		73							
437	74	74	74								
448	75	75		75							
457	76	76	76								
463	77	77	77								
480	78	78	78								
484	79	79	79								
485	80	80		80							
496	81	81	81								
497	82	82		82							
498	83	83.5	83.5								
498	84	83.5	83.5								
500	85	85							85		
501	86	86	86								
511	87	87.5	87.5								
511	88	87.5	87.5								
529	89	89	89								
533	90	90	90								
537	91	91	91								
541	92	92	92								
597	93	93							93		
617	94	94	94								
717	95	95							95		
779	96	96			96						
923	97	97			97						
935	98	98			98						
1026	99	99			99						
1187	100	100			100						

	cinder wall	counter top	glass mirrors/windows	metal	pipes/machinery	rollup doors	sinks/toilets	wall board	wood paneling	Total
Sum of Ranks	1600	695	752.5	382.5	450.5	111.5	573.5	240	244.5	5050
Count	20	10	10	10	10	10	10	10	10	100
Avg. Rank	80	69.5	75.25	38.25	45.05	11.15	57.35	24	24.45	

												K
	K	0.001188119	128000	48302.5	56625.63	14630.625	20295.025	1243.225	32890.23	5760	5978.025	372.7429	69.74287
k = number of datasets	k-1	8											
	Kc	16.9	at an alpha of 0.05										
	K>Kc		therefore significant variability										
			The null hypothesis (i.e., no significant variability exists between the 9 background areas) is rejected.										

Lower Boundary of Gray Region Calculation, per NUREG-1505 Section 13

Measurements (cpm)

Data Groups	cinder wall	counter top	mirrors/win	metal	pes/machine	rollup door	sinks/toilets	wall board	ood paneli
	498	370	328	211	239	160	295	226	232
	496	497	923	358	327	170	316	223	201
	617	448	281	278	342	173	271	266	183
	511	401	265	275	271	236	306	299	250
	463	423	1187	234	274	221	597	227	223
	480	368	779	209	371	219	717	206	201
	411	432	1026	429	376	194	225	226	205
	457	485	935	327	238	162	276	269	280
	437	418	353	237	243	245	301	221	270
	484	337	412	258	281	172	500	193	319
	541								
	498								
	529								
	511								
	405								
	537								
	420								
	297								
	533								
	501								

Measurements Squared

	cinder wall	counter top	glass mirr	metal	pipes/mac	rollup doo	sinks/toilet	wall board	wood paneling
	248004	136900	107584	44521	57121	25600	87025	51076	53824
	246016	247009	851929	128164	106929	28900	99856	49729	40401
	380689	200704	78961	77284	116964	29929	73441	70756	33489
	261121	160801	70225	75625	73441	55696	93636	89401	62500
	214369	178929	1408969	54756	75076	48841	356409	51529	49729
	230400	135424	606841	43681	137641	47961	514089	42436	40401
	168921	186624	1052676	184041	141376	37636	50625	51076	42025
	208849	235225	874225	106929	56644	26244	76176	72361	78400
	190969	174724	124609	56169	59049	60025	90601	48841	72900
	234256	113569	169744	66564	78961	29584	250000	37249	101761
	292681								
	248004								
	279841								
	261121								
	164025								
	288369								
	176400								
	88209								
	284089								
	251001								

sum	9626	4179	6489	2816	2962	1952	3804	2356	2364	4717334	1769909	5345763	837734	903202	390416	1691858	564454	575430	
Average	481.3	417.9	648.9	281.6	296.2	195.2	380.4	235.6	236.4										
Std Dev	66.625505	51.104359	355.12923	70.512725	53.600995	32.2931	164.9297	32.28416	42.92163										
Avg Sqd	231649.69	174640.41	421071.21	79298.56	87734.44	38103.04	144704.2	55507.36	55884.96										
count	20	10	10	10	10	10	10	10	10										
count Sqd	400	100	100	100	100	100	100	100	100	4	1	1	1	1	1	1	1	1	12

16796100	sum of squares of all measurements (A)
1335756304	square of sum of all measurements (B)
15202435.2	sum of squares of averages weighted by number of measurements (C)
100	N
9	k
11.0	n_o
17512.8	Sw^2
230609.02	Sb^2
19372.38364	w^2
139.2	w
417.6	LBGR = 3w, per NUREG-1505
	Other LBGR possibilities
365.5	Mean all bkgd data
191	Std Dev all bkgd data
747	Mean + 2*SD
720	95% Percentile All Data
1187	Maximum Background Measurement

Kruskal-Wallis Test, per NUREG-1505 Section 13

Ordered Data	Rank	Adj Rank	ceramic tile	concrete floors	tile floor
0	1	1	1		
1	2	2.5		2.5	
1	3	2.5			2.5
2	4	4.5			4.5
2	5	4.5			4.5
3	6	6.5		6.5	
3	7	6.5			6.5
4	8	9			9
4	9	9			9
4	10	9			9
6	11	12	12		
6	12	12		12	
6	13	12			12
7	14	14		14	
8	15	15		15	

						Total
	Sum of Ranks	13	50	57		120
	Count	2	5	8		15
	Avg. Rank	6.5	10	7.125		
	K	0.05	84.5	500	406.125	49.53125
k = number of datasets	k-1	2				
	Kc	3.2	at an alpha of 0.2			
		K<Kc	re not significant variability			

K
1.53125

The null hypothesis (i.e., no significant variability exists between the 3 background areas) is accepted.

Lower Boundary of Gray Region Calculation, per NUREG-1505 Section 13

	Measurements (cpm)			Measurements Squared		
Data Groups	ceramic tile	concrete floors	tile floor	ceramic tile	concrete floors	tile floor
	0	6	4	0	36	16
	6	1	1	36	1	1
		3	6		9	36
		7	4		49	16
		8	2		64	4
			3			9
			2			4
			4			16

sum	6	25	26	36	159	102	
Average	3	5	3.25				
Std Dev	4.242640687	2.915475947	1.5811388				
Avg Sqd	9	25	10.5625				
count	2	5	8				
count Sqd	4	25	64	0.266666667	1.666666667	4.266667	6.2

297	sum of squares of all measurements (A)
3249	square of sum of all measurements (B)
227.5	sum of squares of averages weighted by number of measurements (C)
15	N
3	k
4.4	n_o
5.791666667	Sw^2
5.45	Sb^2
-0.077651515	w^2
#NUM!	w
#NUM!	LBGR = 3w, per NUREG-1505
	Other LBGR possibilities
3.8	Mean all bkgd data
2	Std Dev all bkgd data
9	Mean + 2*SD
7	95% Percentile All Data
8	Maximum Background Measurement

For Building 722 alpha floor monitor, LBGR is set to zero.

Kruskal-Wallis Test, per NUREG-1505 Section 13

Ordered Data	Rank	Adj Rank	ceramic tile	concrete floors	tile floor
498	1	1		1	
505	2	2		2	
581	3	3		3	
588	4	4		4	
621	5	5		5	
640	6	6	6		
687	7	7			7
715	8	8			8
768	9	9	9		
772	10	10			10
785	11	11			11
789	12	12			12
821	13	13			13
1420	14	14			14
1435	15	15			15

					Total
Sum of Ranks	15	15	90		120
Count	2	5	8		15
Avg. Rank	7.5	3	11.25		

						K
	K	0.05	112.5	45	1012.5	58.5	10.5
k = number of datasets	k-1	2					
	Kc	6	at an alpha of 0.05				
		K>Kc	therefore significant variability				

The null hypothesis (i.e., no significant variability exists between the 3 background areas) is rejected.

Lower Boundary of Gray Region Calculation, per NUREG-1505 Section 13

	Measurements (cpm)			Measurements Squared			
Data Groups	ceramic tile	concrete floors	tile floor	ceramic tile	concrete floors	tile floor	
	768	505	687	589824	255025	471969	
	640	621	715	409600	385641	511225	
		588	1435		345744	2059225	
		581	1420		337561	2016400	
		498	772		248004	595984	
			821			674041	
			789			622521	
			785			616225	
sum	1408	2793	7424	999424	1571975	7567590	
Average	704	558.6	928				
Std Dev	90.50966799	54.32586861	311.24588				
Avg Sqd	495616	312033.96	861184				
count	2	5	8				
count Sqd	4	25	64	0.266666667	1.666666667	4.266667	6.2

10138989	sum of squares of all measurements (A)
135140625	square of sum of all measurements (B)
9440873.8	sum of squares of averages weighted by number of measurements (C)
15	N
3	k
4.4	n_o
58176.26667	Sw^2
215749.4	Sb^2
35812.07576	w^2
189.2	w
567.7	LBGR = 3w, per NUREG-1505
	Other LBGR possibilities
775.0	Mean all bkgd data
284	Std Dev all bkgd data
1343	Mean + 2*SD
1425	95% Percentile All Data
1435	Maximum Background Measurement

Summary of Kruskal-Wallis Test (per NUREG-1505)
Building 722 Alpha and Beta Background Measurements
Seneca Army Depot Activity

Background Dataset	Reference Area	Average Measurement (cpm)	St Dev (cpm)	Sum of Ranks	Number of Measurements	K	k-1	Kc	K > Kc?	*w*	LBGR (=3*w*)
Building 722 Alpha Phoswich	cinder wall	3.5	1.9	943.5	20	13.3	8	11	yes	0.7	2.1
	counter top	4	2.5	505	10			@ α = 0.2			
	glass mirrors/windows	4.5	2.9	577	10						
	metal	2.9	1.4	409	10						
	pipes/machinery	4.9	2.6	655.5	10						
	rollup doors	4.1	2.2	557	10						
	sinks/toilets	5.6	3.4	677	10						
	wall board	2.9	1.4	377.5	10						
	wood paneling	2.6	1.2	348.5	10						
Building 722 Beta Phoswich	cinder wall	481	67	1600	20	69.7	8	16.9	yes	139.2	417.6
	counter top	418	51	695	10			@ α = 0.05			
	glass mirrors/windows	649	355	752.5	10						
	metal	282	71	382.5	10						
	pipes/machinery	296	54	450.5	10						
	rollup doors	195	32	111.5	10						
	sinks/toilets	380	165	573.5	10						
	wall board	236	32	240	10						
	wood paneling	236	43	244.5	10						
Building 722 Alpha Floor Monitor	ceramic tile	3	4.2	13	2	1.5	2	3.2	no	--	0
	concrete floors	5	2.9	50	5			@ α = 0.2			
	tile floor	3.25	1.6	57	8						
Building 722 Beta Floor Monitor	ceramic tile	704	91	15	2	10.5	2	6	yes	189.2	567.7
	concrete floors	559	54	15	5			@ α = 0.05			
	tile floor	928	311	90	8						

Notes:
K calculated using equation 13-3 from NUREG-1505
Kc is from Table 13.1, NUREG-1505 for k-1 and specified α.
If K > Kc, the null hypothesis that there is no difference between the populations is rejected (i.e., variability exists between the datasets).
w is the estimate of the standard deviation of the background mean for each background type around the overall mean
NUREG-1505 recommends a LBGR of 3*w* as a default.