



IES INDOOR REPORT

PHOTOMETRIC FILENAME : PLURALUCE - CEILING MOUNT ASYMMETRICAL.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA: LM-63-2019

[TESTDATE] 11 December 2024

[TESTLAB] Spectra Lux

[TEST] S2412113-R1

[MANUFAC] BeLuce Canada Inc.

[LUMCAT] PLURALUCE - CEILING MOUNT ASYMMETRICAL

[LUMINAIRE] PLURALUCE REMOTE/UNIT

[LAMP] Clusters of Seoul Semiconductors 3535 Dome LEDs c/w BeLuce Driver RT-1 @ 12.00V DC

[BURNING] Axial (1,409 Luminaire Lumens)

[OPTICS] Ceiling Mount Asymmetrical Lenses

[LENS] None

[HOUSING] White Painted Fabricated

[NOMINAL COLOR] 4000 K

[DRIVE CURRENT] 778 mA / LED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1414
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	12.52
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.72
Spacing Criterion (90-270)	1.68
Spacing Criterion (Diagonal)	2.00
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.13 ft
Luminous Width (90-270)	0.13 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	589836	444810	185905
55	735550	353976	55196
65	734466	65141	65141
75	82434	63820	63820
85	102657	55277	39484

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CANDELA TABULATION

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0.0	270	270	270	270	270	270	270	270	270	270
2.5	268	268	269	269	269	270	270	270	270	271
5.0	268	269	269	270	270	271	271	271	271	271
7.5	270	270	271	271	271	271	271	271	270	270
10.0	272	272	273	273	273	273	272	271	271	271
12.5	277	277	277	277	277	276	275	275	276	277
15.0	284	284	285	284	284	284	283	282	283	283
17.5	292	292	293	292	293	293	292	292	291	290
20.0	298	298	299	299	299	300	300	299	298	296
22.5	304	304	305	306	306	307	307	306	303	298
25.0	314	313	314	314	314	315	315	311	307	304
27.5	325	325	326	326	325	326	323	318	317	318
30.0	336	336	338	338	340	339	334	331	332	329
32.5	354	353	353	352	354	355	350	349	345	338
35.0	386	384	380	377	377	374	370	366	358	353
37.5	431	428	419	414	409	399	395	383	379	377
40.0	484	479	467	462	448	435	422	410	406	407
42.5	544	540	532	526	498	481	458	444	449	446
45.0	606	605	602	600	573	540	506	498	494	457
47.5	666	660	659	669	653	611	574	559	512	440
50.0	680	682	710	753	720	693	662	593	503	412
52.5	664	673	736	805	793	794	722	602	479	369
55.0	613	635	734	824	873	866	749	587	437	295
57.5	497	537	685	830	941	901	736	543	357	180
60.0	369	417	605	834	974	886	681	456	219	82
62.5	443	476	651	852	930	791	569	299	91	48
65.0	451	528	689	761	738	623	368	105	49	40
67.5	312	358	435	442	413	333	128	51	39	35
70.0	156	160	166	175	175	112	54	38	33	31
72.5	68	79	85	76	61	45	37	31	29	27
75.0	31	37	45	43	37	31	30	27	25	24
77.5	23	21	27	32	26	25	24	22	21	20
80.0	20	17	15	21	20	20	19	18	15	15
82.5	17	14	16	14	15	15	14	13	11	11
85.0	13	12	13	12	11	11	10	9	7	7
87.5	9	8	8	7	6	6	5	4	4	3
90.0	6	6	5	4	3	3	2	1	1	1
92.5	0	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0	0
110.0	0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0

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CANDELA TABULATION - (Cont.)

135.0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
0.0	270	270	270	270	270	270	270	270	270	270
2.5	271	271	272	272	272	272	272	272	272	272
5.0	270	270	270	270	270	270	270	269	270	270
7.5	269	269	269	269	270	270	270	270	270	270
10.0	272	272	274	274	274	275	275	275	276	276
12.5	278	279	280	280	280	281	281	281	281	281
15.0	284	284	285	285	284	285	284	285	285	286
17.5	288	287	287	287	287	287	288	288	288	289
20.0	292	289	287	288	288	289	291	293	294	294
22.5	295	293	294	296	299	300	300	302	304	305
25.0	304	305	305	304	305	306	306	307	309	310
27.5	316	312	311	310	310	312	313	314	317	318
30.0	324	321	319	318	321	325	327	327	329	330
32.5	335	334	334	333	334	338	340	341	343	344
35.0	353	351	352	350	355	358	358	357	358	360
37.5	375	376	377	367	357	346	341	337	335	339
40.0	410	397	372	347	325	312	305	299	298	302
42.5	421	383	341	312	289	271	261	254	253	257
45.0	403	351	305	273	242	216	202	193	191	196
47.5	373	314	256	214	175	145	130	120	118	124
50.0	332	255	184	138	96	72	65	61	61	63
52.5	265	174	95	66	54	50	49	49	49	49
55.0	168	81	53	47	45	45	46	46	46	46
57.5	77	50	44	43	42	43	43	44	44	44
60.0	48	42	40	40	40	41	42	43	43	42
62.5	41	39	38	38	38	39	41	41	42	41
65.0	37	36	35	35	36	37	39	40	40	39
67.5	34	33	32	33	34	35	36	38	38	37
70.0	31	30	30	30	32	32	33	34	34	33
72.5	27	27	27	28	28	28	29	29	29	28
75.0	24	24	24	24	24	23	24	24	24	23
77.5	20	20	20	20	19	18	18	18	18	17
80.0	15	16	14	14	13	12	12	11	11	11

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CANDELA TABULATION - (Cont.)

82.5	10	9	9	8	8	7	7	7	7	7
85.0	6	6	5	5	5	5	5	5	5	5
87.5	3	3	2	2	3	3	3	2	2	2
90.0	1	1	1	1	1	1	1	1	1	1
92.5	0	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0	0
110.0	0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert.
Angles

Horizontal Angles

	<u>100</u>	<u>105</u>	<u>110</u>	<u>115</u>	<u>120</u>	<u>125</u>	<u>130</u>	<u>135</u>	<u>140</u>	<u>145</u>
0.0	270	270	270	270	270	270	270	270	270	270
2.5	272	273	273	272	272	272	272	272	272	272
5.0	270	271	271	271	272	272	272	273	273	273
7.5	271	271	272	272	272	273	273	273	274	274
10.0	277	278	279	278	278	277	276	277	277	278
12.5	282	282	283	283	282	281	281	281	282	283
15.0	287	287	288	287	286	285	285	287	287	289
17.5	290	292	292	293	292	292	292	293	295	298
20.0	295	295	295	294	295	298	300	303	304	306
22.5	306	307	307	305	303	302	306	310	313	316
25.0	311	313	314	315	317	320	319	319	324	328
27.5	318	319	321	323	327	330	335	338	337	342

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CANDELA TABULATION - (Cont.)

30.0	330	330	332	335	337	340	345	353	358	359
32.5	344	343	346	348	352	356	360	365	375	382
35.0	361	362	366	368	370	374	380	387	395	409
37.5	346	356	367	384	395	401	404	413	424	438
40.0	311	324	342	371	400	425	436	444	454	473
42.5	268	285	307	341	378	422	462	486	493	512
45.0	209	231	258	301	346	398	456	514	550	566
47.5	138	163	192	240	297	363	434	512	588	643
50.0	70	87	111	161	226	305	396	493	600	704
52.5	50	52	58	81	136	224	331	456	589	737
55.0	46	45	45	49	66	119	236	383	546	720
57.5	43	42	41	42	45	58	116	265	458	651
60.0	41	40	39	39	40	44	57	121	315	542
62.5	39	38	37	37	38	39	44	58	130	365
65.0	37	35	34	34	35	36	39	44	60	137
67.5	35	33	32	31	31	33	35	37	44	62
70.0	31	30	29	28	28	29	31	33	36	43
72.5	27	27	26	25	25	26	27	28	31	34
75.0	23	22	21	22	22	22	23	23	26	28
77.5	17	17	16	17	18	18	19	19	21	22
80.0	11	11	11	12	13	14	14	14	15	17
82.5	7	7	7	7	8	8	10	10	10	11
85.0	5	5	5	4	5	5	6	7	7	7
87.5	2	2	2	2	2	2	2	2	2	2
90.0	1	1	1	1	1	1	1	1	1	1
92.5	0	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0	0
110.0	0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0

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170.0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles

Horizontal Angles

	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
0.0	270	270	270	270	270	270	270
2.5	272	272	272	272	272	272	271
5.0	274	274	274	274	274	274	274
7.5	275	276	276	277	277	277	278
10.0	278	279	280	281	281	282	283
12.5	283	284	285	286	287	288	289
15.0	290	292	293	295	296	297	299
17.5	299	300	300	301	303	305	306
20.0	307	307	308	308	310	313	315
22.5	316	317	317	318	319	322	324
25.0	329	329	328	328	330	334	337
27.5	345	344	343	342	344	349	353
30.0	364	367	365	362	364	370	375
32.5	386	395	396	394	395	405	412
35.0	415	427	437	440	445	456	463
37.5	449	463	485	492	499	510	520
40.0	490	513	545	577	603	629	636
42.5	540	587	654	710	725	734	734
45.0	602	691	773	790	769	761	758
47.5	694	782	843	828	773	748	740
50.0	802	852	876	835	737	684	679
52.5	876	908	878	793	656	562	551
55.0	899	952	851	706	520	390	375
57.5	863	941	812	583	315	239	236
60.0	776	852	725	487	297	258	262
62.5	640	700	648	592	421	316	314
65.0	399	466	472	506	433	297	290
67.5	148	245	287	293	275	217	213
70.0	62	110	147	163	176	165	149
72.5	39	48	81	103	112	112	99
75.0	31	34	46	61	60	53	48
77.5	24	27	27	31	27	25	24
80.0	20	22	22	20	19	19	19
82.5	14	17	17	16	17	15	15
85.0	8	11	12	13	14	13	13
87.5	3	5	7	7	9	9	9
90.0	1	2	2	3	5	7	7
92.5	0	0	0	0	0	0	0
95.0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0
100.0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0
105.0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0
110.0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0

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CANDELA TABULATION - (Cont.)

117.5	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0

IES INDOOR REPORT**PHOTOMETRIC FILENAME : PLURALUCE - CEILING MOUNT ASYMMETRICAL.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	107.64	N.A.	7.60
0-30	254.74	N.A.	18.00
0-40	494.51	N.A.	35.00
0-60	1172.36	N.A.	82.90
0-80	1404.6	N.A.	99.40
0-90	1413.26	N.A.	100.00
10-90	1387.25	N.A.	98.10
20-40	386.88	N.A.	27.40
20-50	731.16	N.A.	51.70
40-70	873.32	N.A.	61.80
60-80	232.24	N.A.	16.40
70-80	36.77	N.A.	2.60
80-90	8.66	N.A.	0.60
90-110	0.28	N.A.	0.00
90-120	0.28	N.A.	0.00
90-130	0.28	N.A.	0.00
90-150	0.28	N.A.	0.00
90-180	0.28	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1413.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	26.01
10-20	81.63
20-30	147.10
30-40	239.78
40-50	344.28
50-60	333.56
60-70	195.47
70-80	36.77
80-90	8.66
90-100	0.28
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT

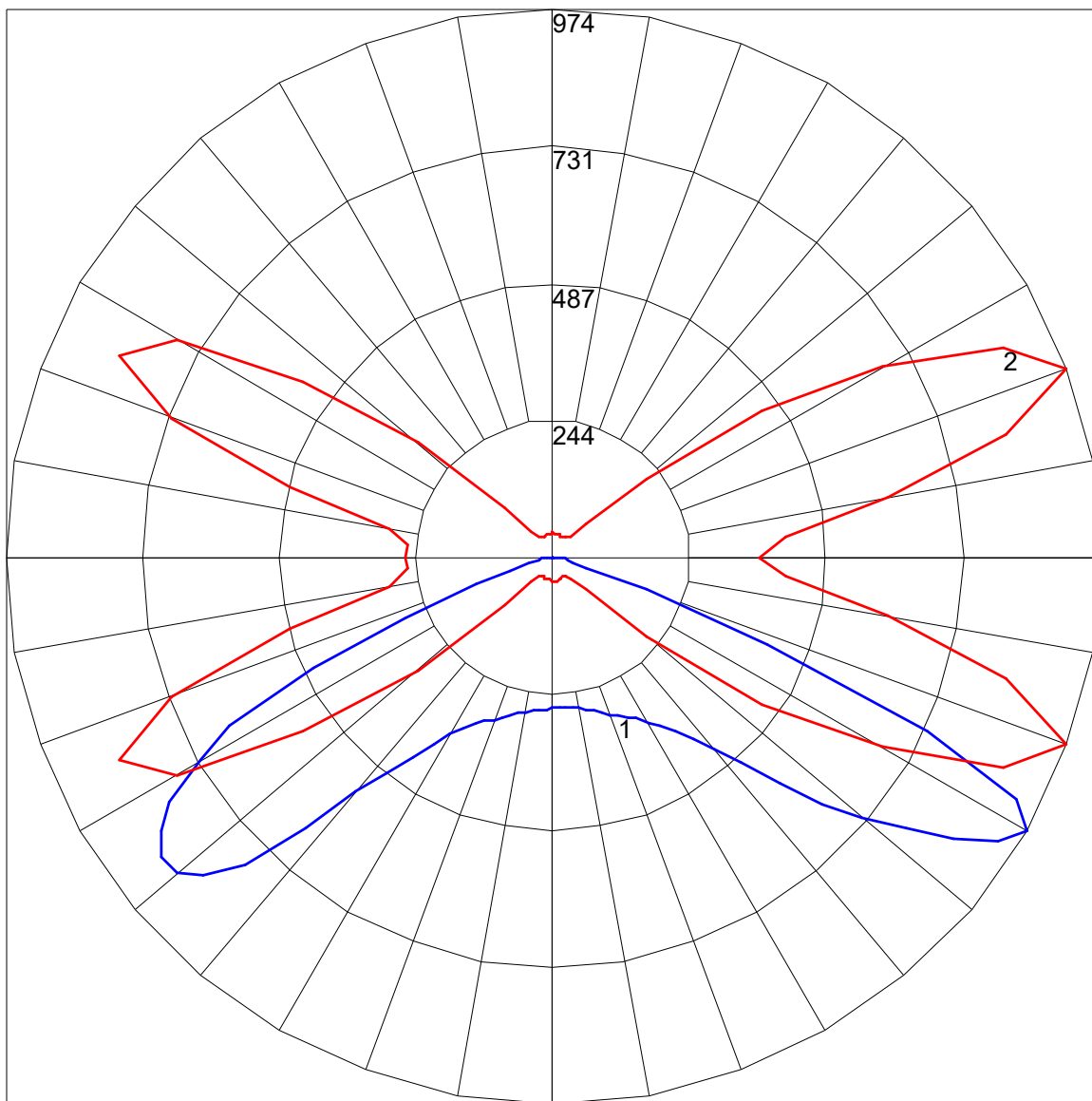
PHOTOMETRIC FILENAME : PLURALUCE - CEILING MOUNT ASYMMETRICAL.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	55	50	48
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	67	53	44	37	65	52	44	37	51	43	37	49	42	36	47	41	36	34
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	27	40	32	27	38	32	27	25
9	53	39	30	24	52	38	30	24	37	29	24	36	29	24	35	28	24	22
10	49	35	27	22	48	35	27	21	34	26	21	33	26	21	32	26	21	19

POLAR GRAPH



Maximum Candela = 974 Located At Horizontal Angle = 20, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (20 - 200) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)