IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-20L-SIL-5W-30-70CRI.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12508
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 02/22/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-20L-SIL-5W-30-70CRI
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[_ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER] SCALED FROM ORIGINAL TEST DATA
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Outdoor
[_SEARCH_COLORTEMP] 3000

CHARACTERISTICS

IES Classification	Type VS
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	19983
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	8770
Maximum Candela Angle	45H 72.5V
Maximum Candela (<90 Degrees Vertical)	8770
Maximum Candela Angle (<90 Degrees Vertical)	45H 72.5V
Maximum Candela At 90 Degrees Vertical	285 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	2401 (12.0% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	809.0	N.A.	4.0
FM - Front-Medium (30-60)	4005.4	N.A.	20.0
FH - Front-High (60-80)	4551.0	N.A.	22.8
FVH - Front-Very High (80-90)	233.8	N.A.	1.2
BL - Back-Low (0-30)	809.0	N.A.	4.0
BM - Back-Medium (30-60)	4005.4	N.A.	20.0
BH - Back-High (60-80)	4551.0	N.A.	22.8
BVH - Back-Very High (80-90)	233.8	N.A.	1.2
UL - Uplight-Low (90-100)	233.7	N.A.	1.2
UH - Uplight-High (100-180)	551.4	N.A.	2.8
Total	19983.5	N.A.	100.0
BUG Rating	B4-U4-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	35	45	55	65	75	85
0.0	1261	1261	1261	1261	1261	1261	1261	1261	1261	1261
2.5	1275	1273	1274	1270	1271	1275	1266	1263	1264	1259
5.0	1282	1287	1286	1304	1323	1322	1329	1321	1284	1265
7.5	1307	1289	1292	1302	1311	1313	1330	1326	1313	1294
10.0	1357	1365	1354	1374	1363	1360	1331	1345	1360	1334
12.5	1482	1480	1462	1448	1451	1417	1410	1418	1462	1433
15.0	1565	1604	1590	1574	1578	1521	1525	1522	1534	1505
17.5	1774	1757	1773	1714	1723	1721	1642	1639	1635	1627
20.0	1898	1910	1932	1903	1898	1837	1852	1797	1724	1756
22.5	2149	2158	2159	2105	2113	2033	2015	1947	1908	1911
25.0	2323	2330	2338	2324	2305	2244	2171	2141	2032	2042
27.5	2590	2589	2590	2529	2530	2470	2374	2281	2180	2244
30.0	2789	2827	2806	2760	2746	2688	2581	2443	2405	2339
32.5	2960	2974	3021	3046	2975	2887	2781	2609	2524	2449
35.0	3052	3054	3127	3236	3275	3117	2939	2752	2621	2496
37.5	3144	3129	3221	3366	3478	3375	3063	2846	2678	2554
40.0	3203	3201	3307	3491	3621	3597	3189	2967	2702	2608
42.5	3288	3274	3387	3603	3752	3750	3359	3018	2759	2667
45.0	3375	3352	3477	3710	3873	3891	3599	3077	2852	2731
47.5	3464	3456	3552	3817	3991	3996	3771	3180	2956	2791
50.0	3571	3573	3654	3929	4111	4113	3893	3263	3117	2869
52.5	3693	3696	3775	4045	4246	4263	4015	3521	3241	3028
55.0	3835	3838	3920	4179	4389	4436	4167	3742	3278	3168
57.5	4014	4027	4099	4343	4565	4625	4338	3992	3450	3282
60.0	4223	4237	4318	4533	4802	4876	4570	4256	3613	3480
62.5	4443	4461	4564	4779	5116	5234	4853	4453	3934	3645
65.0	4643	4671	4800	5082	5548	5648	5149	4751	4324	3953
67.5	4782	4822	5006	5413	6144	6276	5722	5170	4811	4442
70.0	4774	4829	5020	5684	6942	7432	6749	5764	5297	4839
72.5	4235	4298	4650	5470	7374	8770	7555	5623	4605	3923
75.0	1934	2076	2742	3971	6555	8234	6318	4067	3050	2490
77.5	541	581	758	1435	3890	5768	4210	1998	1204	914
80.0	378	424	492	593	1119	2401	1409	708	591	528
82.5	284	328	386	438	562	732	569	493	472	425
85.0	209	249	307	340	401	471	414	392	397	357
87.5	151	189	250	273	301	338	316	324	335	300
90.0	101	134	200	220	239	253	249	269	285	242
92.5	101	128	194	215	232	246	239	262	277	210
95.0	113	128	191	211	228	240	229	254	261	199
97.5	124	126	184	206	220	232	219	239	230	200
100.0	132	125	176	201	213	223	209	221	193	197
102.5	135	125	168	196	206	214	199	196	165	185
105.0	135	124	158	192	202	205	185	173	150	172
107.5	133	125	149	187	197	195	170	155	140	159
110.0	132	126	140	182	192	183	156	141	133	148
112.5	131	127	133	177	184	170	146	132	128	138
115.0	129	127	128	167	174	157	138	124	124	131
117.5	127	126	123	156	162	150	133	120	122	124
120.0	126	125	119	142	152	143	130	117	119	120
122.5	123	122	114	130	142	137	126	116	115	114
125.0	118	117	110	119	133	132	124	115	113	111
127.5	113	113	108	110	125	127	123	115	112	109
130.0	109	109	106	105	117	123	122	114	113	110

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CANDELA TABULATION - (Cont.)

132.5	107	107	104	102	111	118	116	113	113	111
135.0	107	106	104	101	104	106	105	110	114	113
137.5	106	106	103	94	88	87	91	101	109	113
140.0	95	94	89	80	70	67	75	84	96	103
142.5	79	78	73	63	51	48	57	67	78	85
145.0	60	60	55	46	36	35	40	49	60	66
147.5	42	41	37	31	25	20	24	34	40	45
150.0	30	29	26	21	12	8	12	19	25	27
152.5	19	18	14	9	5	3	5	9	12	14
155.0	7	7	6	4	2	2	2	4	6	7
157.5	3	3	2	2	2	2	2	3	3	4
160.0	2	2	2	2	2	1	2	2	3	3
162.5	2	2	2	2	2	2	2	3	3	3
165.0	1	2	2	2	2	1	2	2	3	3
167.5	2	2	2	2	2	2	2	3	3	3
170.0	2	2	2	2	2	2	2	2	3	3
172.5	2	2	2	2	2	2	2	2	3	3
175.0	2	1	2	2	1	2	2	2	3	3
177.5	1	1	1	1	1	1	2	2	3	2
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	**Horizontal Angles**
	90
0.0	1261
2.5	1256
5.0	1267
7.5	1282
10.0	1319
12.5	1400
15.0	1522
17.5	1602
20.0	1719
22.5	1874
25.0	2049
27.5	2169
30.0	2325
32.5	2377
35.0	2447
37.5	2519
40.0	2604
42.5	2643
45.0	2680
47.5	2790
50.0	2851
52.5	3025
55.0	3103
57.5	3297
60.0	3422
62.5	3622
65.0	3962
67.5	4427
70.0	4745
72.5	3886
75.0	2412
77.5	908

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CANDELA TABULATION - (Cont.)

80.0	545
82.5	432
85.0	318
87.5	202
90.0	147
92.5	189
95.0	229
97.5	232
100.0	217
102.5	199
105.0	180
107.5	165
110.0	152
112.5	141
115.0	132
117.5	126
120.0	121
122.5	115
125.0	110
127.5	108
130.0	109
132.5	110
135.0	112
137.5	113
140.0	104
142.5	86
145.0	67
147.5	44
150.0	28
152.5	14
155.0	7
157.5	4
160.0	3
162.5	3
165.0	3
167.5	3
170.0	3
172.5	3
175.0	3
177.5	2
180.0	2

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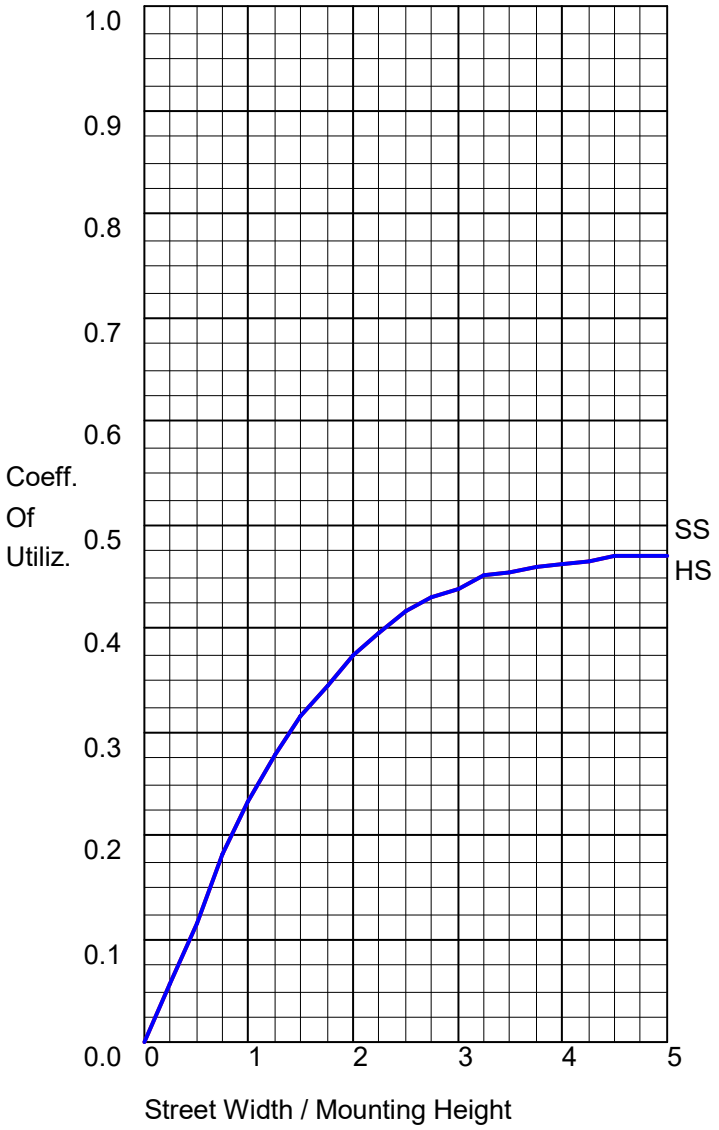
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	9599.1	48.0
Downward House Side	9599.1	48.0
Downward Total	19198.2	96.1
Upward Street Side	392.6	2.0
Upward House Side	392.6	2.0
Upward Total	785.2	3.9
Total Flux	19983.4	100.0

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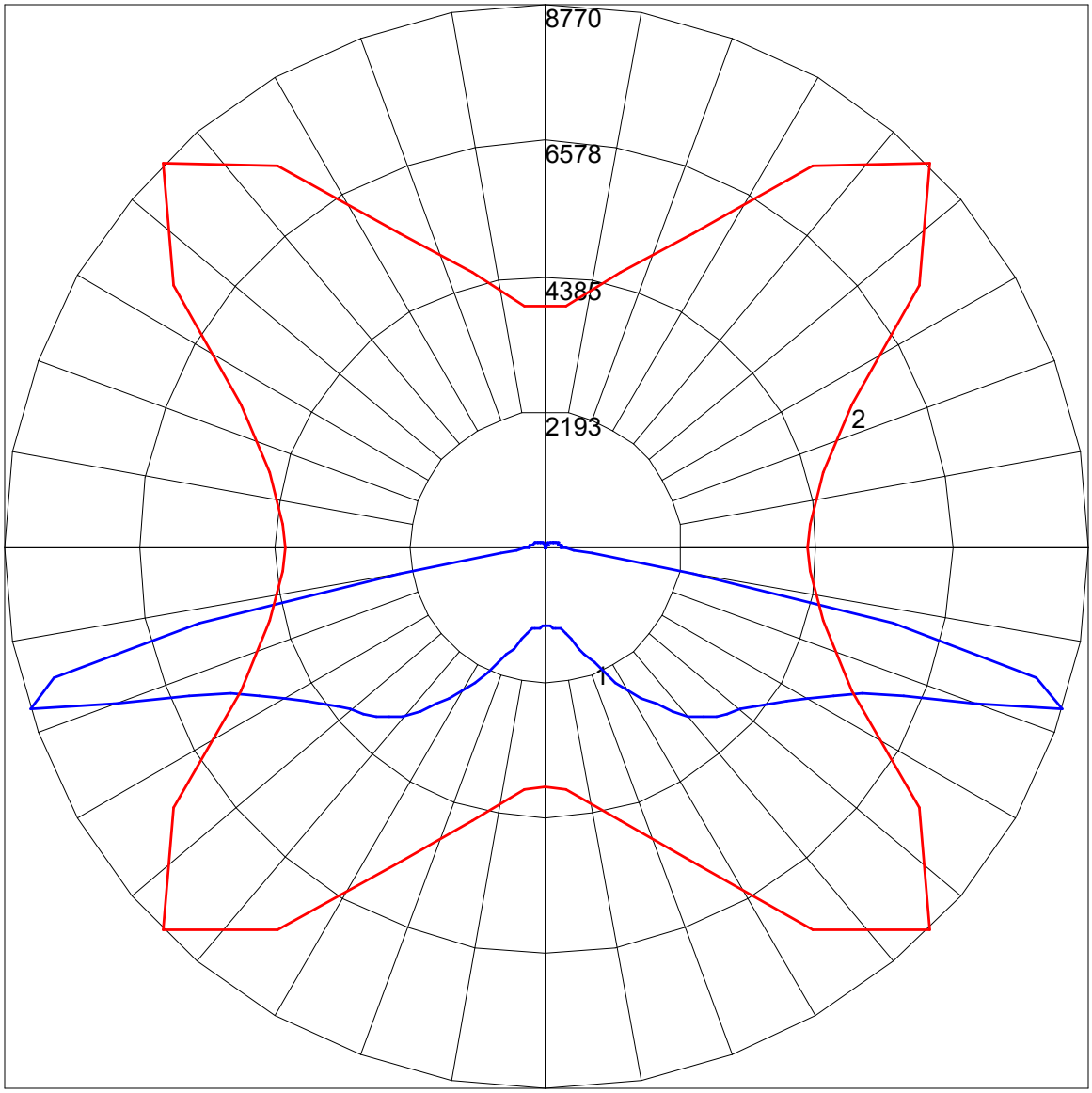
POLAR GRAPH



Maximum Candela = 8770 Located At Horizontal Angle = 45, Vertical Angle = 72.5
1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

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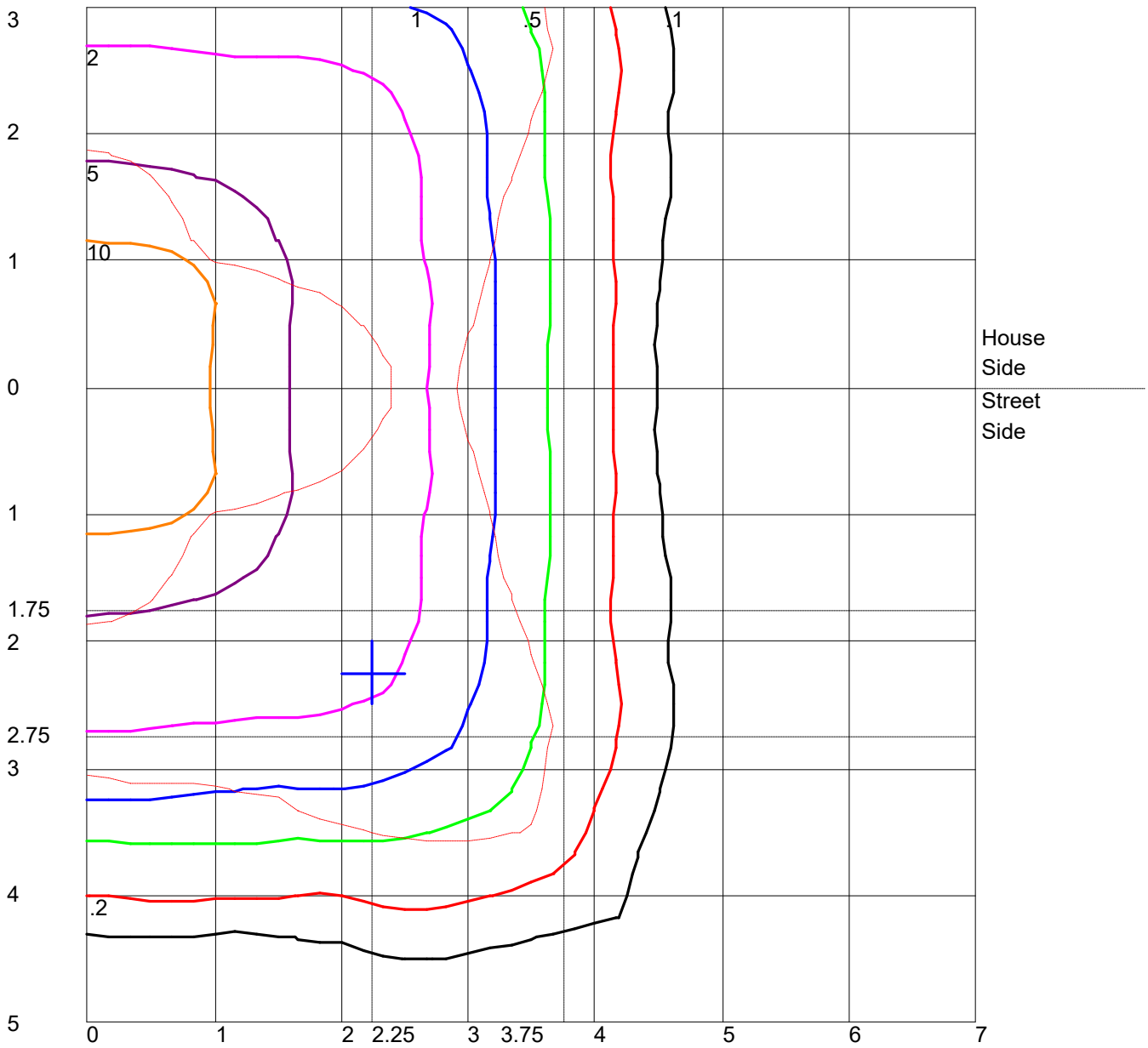
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



Distance In Units Of Mounting Height
Values Based On 10 Foot Mounting Height
1/2 Maximum Candela Trace Shown As Dashed Curve
(+) = Maximum Candela Point

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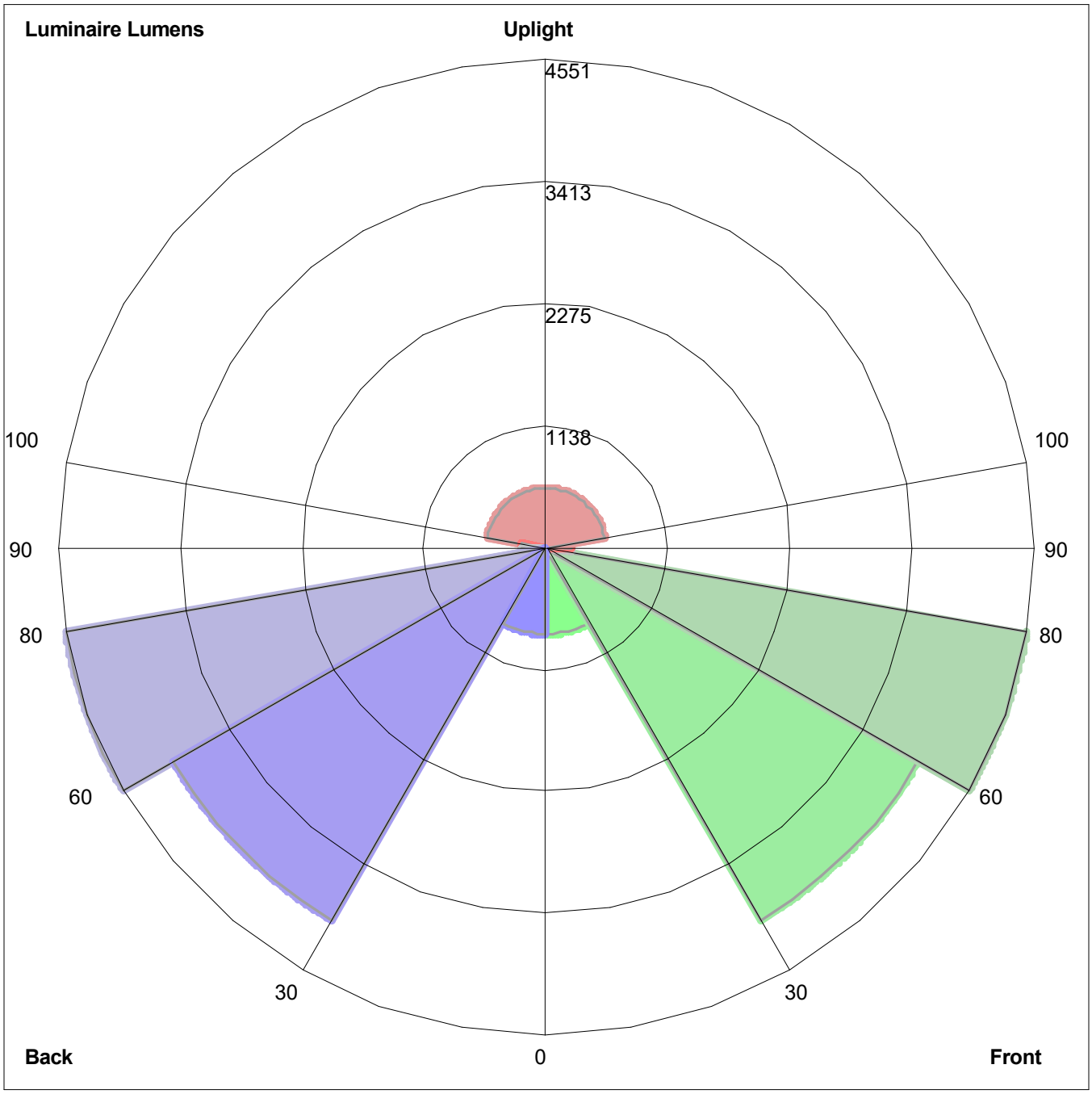
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=809.0, Medium=4005.4, High= 4551.0, Very High=233.8
Back: Low=809.0, Medium=4005.4, High= 4551.0, Very High=233.8
Uplight: Low=233.7, High=551.4

BUG Rating : B4-U4-G3

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