IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-20L-SIL-5W-50-70CRI.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-50-70CRI
[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] 5000

CHARACTERISTICS

IES Classification	Type VS
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20479
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	137
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	8987
Maximum Candela Angle	45H 72.5V
Maximum Candela (<90 Degrees Vertical)	8987
Maximum Candela Angle (<90 Degrees Vertical)	45H 72.5V
Maximum Candela At 90 Degrees Vertical	292 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	2461 (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)	829.1	N.A.	4.0
FM - Front-Medium (30-60)	4104.7	N.A.	20.0
FH - Front-High (60-80)	4663.8	N.A.	22.8
FVH - Front-Very High (80-90)	239.6	N.A.	1.2
BL - Back-Low (0-30)	829.1	N.A.	4.0
BM - Back-Medium (30-60)	4104.7	N.A.	20.0
BH - Back-High (60-80)	4663.8	N.A.	22.8
BVH - Back-Very High (80-90)	239.6	N.A.	1.2
UL - Uplight-Low (90-100)	239.6	N.A.	1.2
UH - Uplight-High (100-180)	565.2	N.A.	2.8
Total	20479.2	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	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292
2.5	1307	1305	1306	1302	1303	1307	1298	1294	1296	1290
5.0	1314	1319	1317	1336	1356	1355	1362	1354	1315	1297
7.5	1339	1321	1324	1334	1344	1346	1363	1359	1346	1326
10.0	1390	1399	1387	1408	1397	1394	1364	1378	1393	1367
12.5	1519	1516	1498	1484	1487	1452	1445	1453	1498	1469
15.0	1604	1644	1629	1613	1618	1558	1562	1559	1572	1543
17.5	1818	1801	1817	1756	1766	1764	1682	1680	1676	1668
20.0	1945	1957	1980	1950	1945	1882	1898	1842	1767	1800
22.5	2202	2212	2213	2157	2166	2084	2065	1995	1955	1958
25.0	2381	2388	2396	2382	2362	2299	2225	2194	2082	2093
27.5	2655	2654	2655	2592	2593	2532	2433	2338	2234	2299
30.0	2858	2897	2876	2829	2814	2755	2645	2504	2465	2397
32.5	3033	3048	3096	3122	3049	2959	2850	2673	2587	2510
35.0	3128	3130	3205	3316	3356	3195	3012	2820	2686	2558
37.5	3222	3207	3301	3450	3565	3458	3139	2916	2744	2617
40.0	3282	3280	3389	3577	3711	3686	3269	3040	2769	2672
42.5	3370	3355	3471	3693	3845	3843	3443	3092	2828	2733
45.0	3458	3435	3563	3802	3969	3988	3689	3153	2923	2799
47.5	3550	3542	3640	3912	4090	4095	3865	3259	3029	2860
50.0	3659	3662	3745	4026	4213	4215	3990	3344	3195	2940
52.5	3784	3788	3869	4145	4351	4369	4115	3608	3322	3103
55.0	3930	3933	4017	4283	4497	4546	4270	3835	3359	3247
57.5	4114	4126	4200	4451	4678	4739	4445	4091	3535	3363
60.0	4327	4342	4425	4645	4921	4997	4683	4362	3702	3567
62.5	4553	4571	4677	4898	5243	5364	4974	4563	4032	3736
65.0	4758	4787	4920	5208	5686	5788	5277	4868	4431	4051
67.5	4901	4941	5130	5547	6296	6432	5864	5298	4930	4553
70.0	4892	4949	5145	5825	7115	7616	6916	5907	5428	4959
72.5	4340	4405	4765	5605	7556	8987	7742	5763	4719	4020
75.0	1982	2127	2810	4069	6717	8438	6475	4168	3126	2552
77.5	554	595	776	1471	3987	5911	4314	2047	1234	937
80.0	388	435	504	608	1146	2461	1444	725	606	541
82.5	291	336	396	449	576	750	583	506	484	436
85.0	214	255	315	348	411	483	424	401	406	366
87.5	154	194	256	279	308	346	324	332	343	307
90.0	103	138	205	225	245	260	255	275	292	248
92.5	103	131	199	220	238	252	245	269	283	215
95.0	116	131	196	216	233	246	235	261	268	204
97.5	127	129	189	212	225	238	224	245	236	205
100.0	135	128	180	206	218	228	214	226	198	202
102.5	139	128	172	201	212	219	204	201	169	190
105.0	139	127	162	197	207	210	190	177	153	176
107.5	137	128	153	192	202	200	174	158	144	163
110.0	136	129	144	187	197	188	160	145	137	152
112.5	134	130	137	181	189	174	150	135	131	142
115.0	132	130	131	171	178	161	142	127	127	134
117.5	130	129	126	159	166	153	137	123	125	127
120.0	129	128	122	146	155	147	133	120	122	123
122.5	126	125	117	133	146	141	129	119	118	117
125.0	121	120	113	122	137	135	127	118	116	114
127.5	116	116	110	113	128	130	126	118	115	112
130.0	112	112	108	107	120	126	125	117	116	113

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CANDELA TABULATION - (Cont.)

132.5	109	109	106	104	114	121	119	116	116	114
135.0	109	108	106	103	106	108	107	113	117	116
137.5	108	108	105	96	91	90	93	103	112	116
140.0	97	96	92	82	72	69	77	87	98	105
142.5	81	80	75	65	52	49	58	69	80	88
145.0	62	62	56	47	36	35	41	50	61	68
147.5	43	42	38	31	26	21	25	34	41	46
150.0	31	30	27	22	12	8	12	20	26	28
152.5	20	19	15	9	5	3	5	9	13	15
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	1292
2.5	1287
5.0	1299
7.5	1314
10.0	1352
12.5	1435
15.0	1559
17.5	1642
20.0	1761
22.5	1921
25.0	2100
27.5	2223
30.0	2383
32.5	2436
35.0	2508
37.5	2582
40.0	2668
42.5	2709
45.0	2746
47.5	2859
50.0	2922
52.5	3100
55.0	3180
57.5	3379
60.0	3507
62.5	3712
65.0	4061
67.5	4537
70.0	4862
72.5	3982
75.0	2472
77.5	931

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CANDELA TABULATION - (Cont.)

80.0	559
82.5	443
85.0	326
87.5	207
90.0	151
92.5	194
95.0	235
97.5	238
100.0	222
102.5	204
105.0	185
107.5	169
110.0	155
112.5	145
115.0	136
117.5	129
120.0	124
122.5	118
125.0	113
127.5	111
130.0	112
132.5	113
135.0	115
137.5	116
140.0	106
142.5	89
145.0	69
147.5	45
150.0	29
152.5	15
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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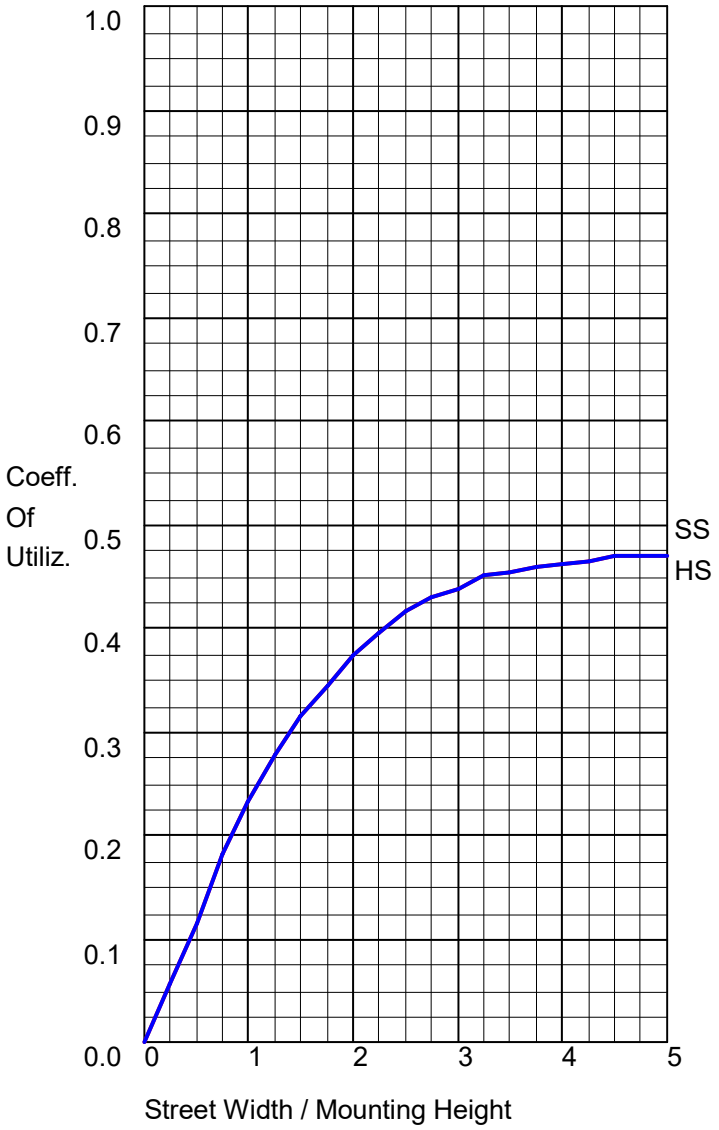
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	9837.1	48.0
Downward House Side	9837.1	48.0
Downward Total	19674.2	96.1
Upward Street Side	402.4	2.0
Upward House Side	402.4	2.0
Upward Total	804.8	3.9
Total Flux	20479.0	100.0

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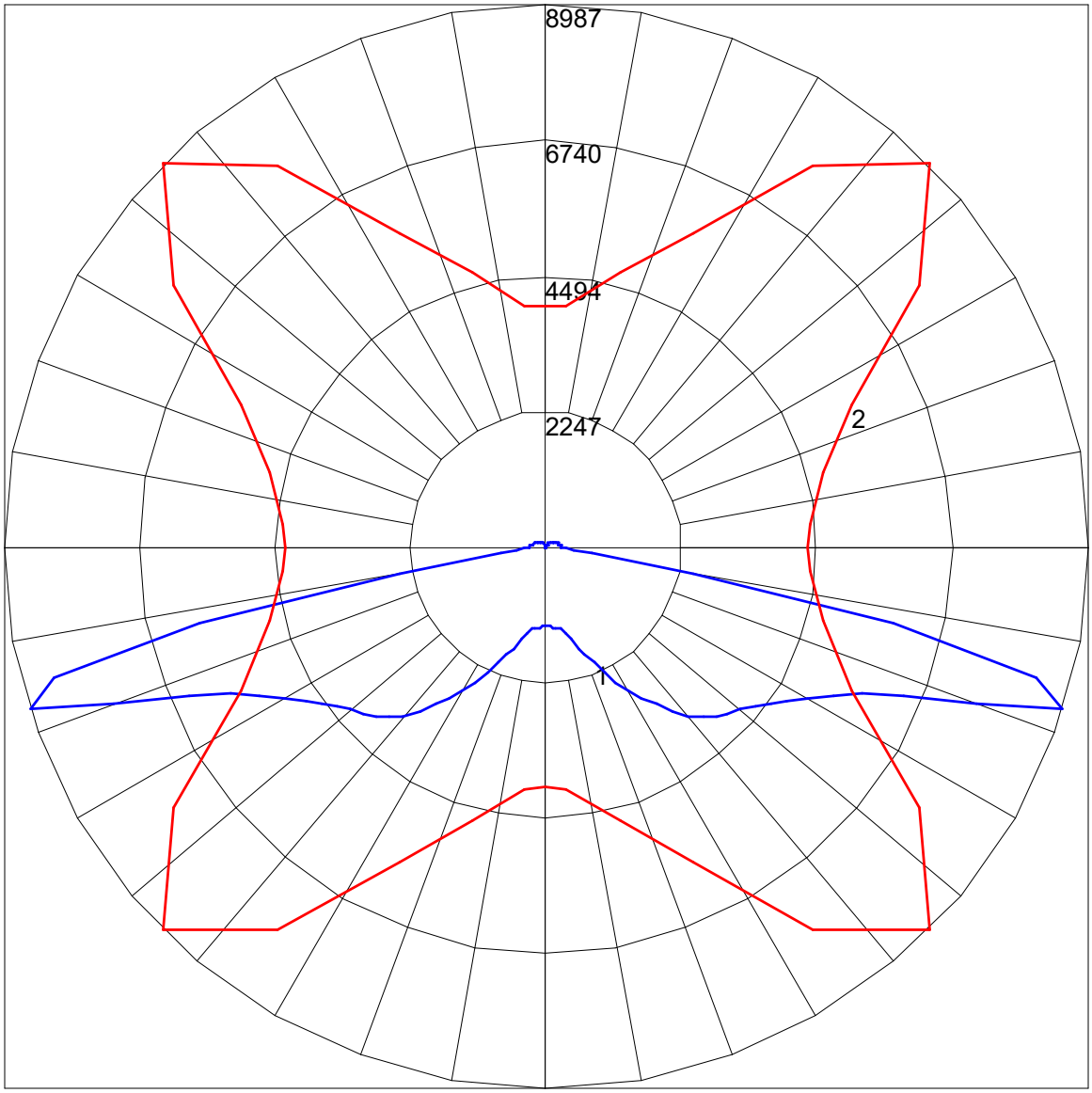
POLAR GRAPH



Maximum Candela = 8987 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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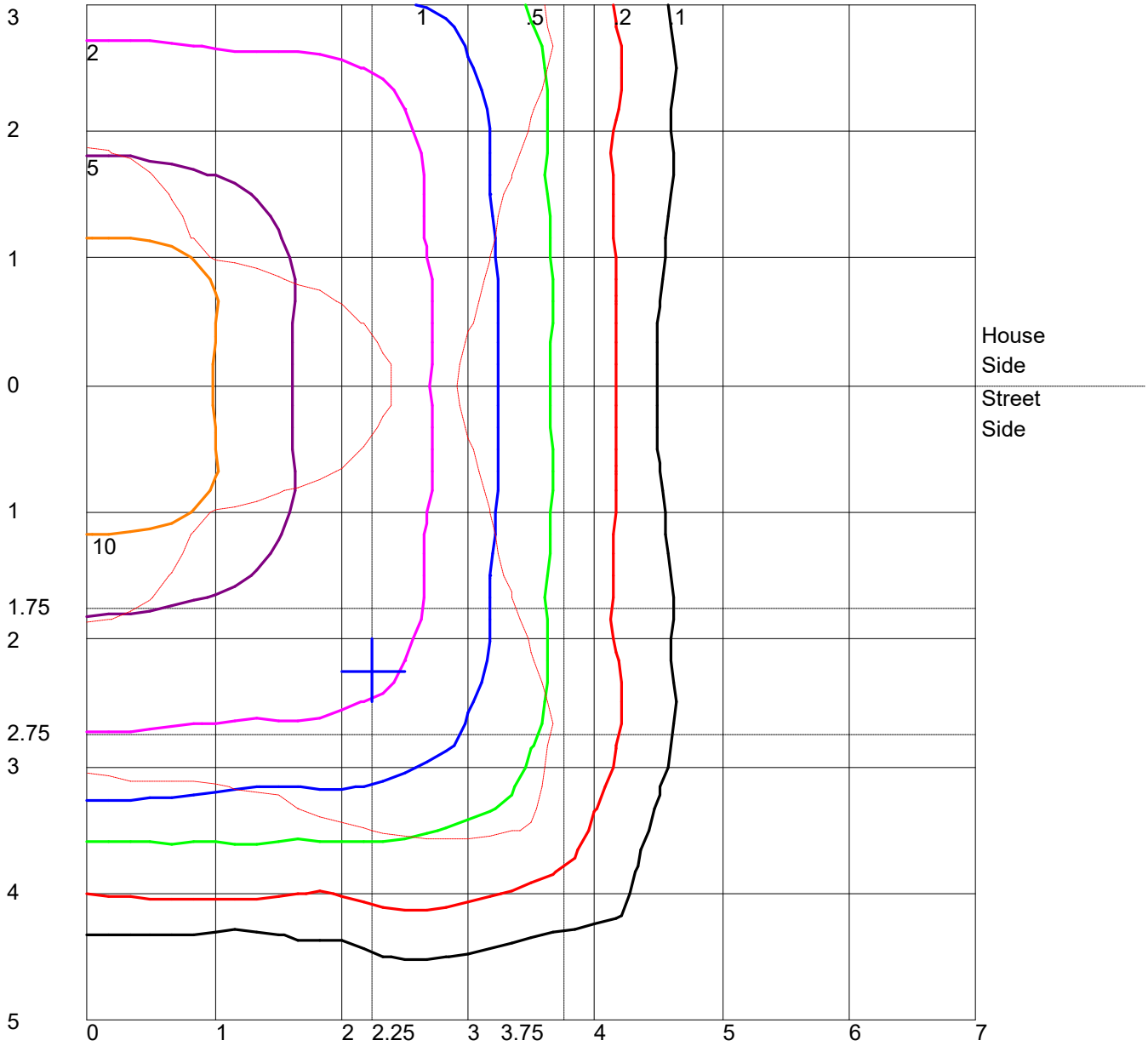
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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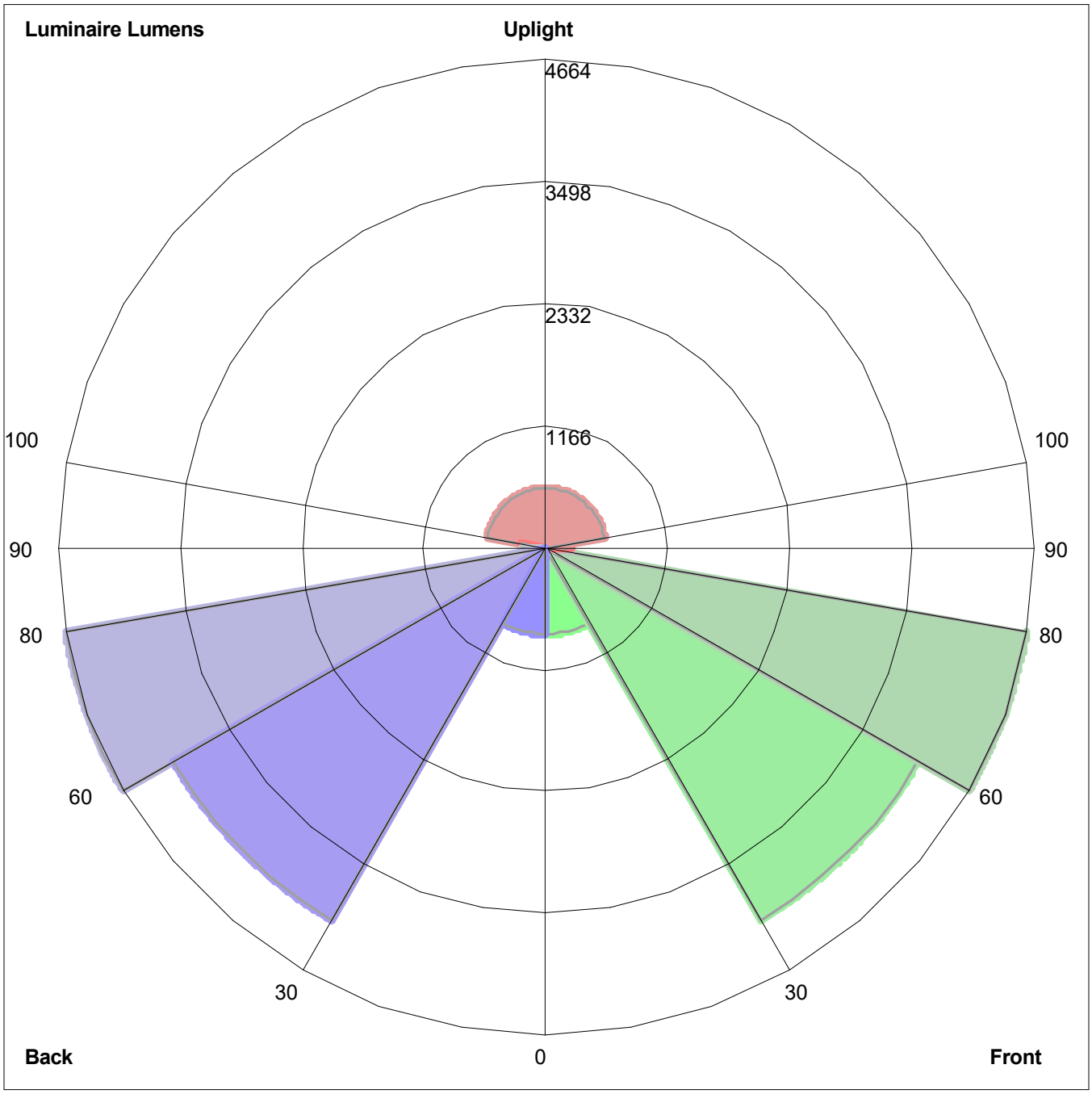
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=829.1, Medium=4104.7, High=4663.8, Very High=239.6
Back: Low=829.1, Medium=4104.7, High=4663.8, Very High=239.6
Uplight: Low=239.6, High=565.2

BUG Rating : B4-U4-G3

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