IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-20L-SIL-5W-40-70CRI.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-40-70CRI
[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] 4000

CHARACTERISTICS

IES Classification	Type VS
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20814
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	140
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	9134
Maximum Candela Angle	45H 72.5V
Maximum Candela (<90 Degrees Vertical)	9134
Maximum Candela Angle (<90 Degrees Vertical)	45H 72.5V
Maximum Candela At 90 Degrees Vertical	297 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	2501 (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)	842.6	N.A.	4.0
FM - Front-Medium (30-60)	4171.9	N.A.	20.0
FH - Front-High (60-80)	4740.1	N.A.	22.8
FVH - Front-Very High (80-90)	243.5	N.A.	1.2
BL - Back-Low (0-30)	842.6	N.A.	4.0
BM - Back-Medium (30-60)	4171.9	N.A.	20.0
BH - Back-High (60-80)	4740.1	N.A.	22.8
BVH - Back-Very High (80-90)	243.5	N.A.	1.2
UL - Uplight-Low (90-100)	243.5	N.A.	1.2
UH - Uplight-High (100-180)	574.3	N.A.	2.8
Total	20814.0	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	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313
2.5	1328	1326	1327	1323	1324	1328	1319	1315	1317	1311
5.0	1335	1341	1339	1358	1378	1377	1384	1376	1337	1318
7.5	1361	1343	1346	1356	1366	1368	1385	1381	1368	1348
10.0	1413	1422	1410	1431	1420	1417	1386	1401	1416	1389
12.5	1544	1541	1523	1508	1511	1476	1469	1477	1523	1493
15.0	1630	1671	1656	1639	1644	1584	1588	1585	1598	1568
17.5	1848	1830	1847	1785	1795	1793	1710	1707	1703	1695
20.0	1977	1989	2012	1982	1977	1913	1929	1872	1796	1829
22.5	2238	2248	2249	2192	2201	2118	2099	2028	1987	1990
25.0	2420	2427	2435	2421	2401	2337	2261	2230	2116	2127
27.5	2698	2697	2698	2634	2635	2573	2473	2376	2271	2337
30.0	2905	2944	2923	2875	2860	2800	2688	2545	2505	2436
32.5	3083	3098	3147	3173	3099	3007	2897	2717	2629	2551
35.0	3179	3181	3257	3370	3411	3247	3061	2866	2730	2600
37.5	3275	3259	3355	3506	3623	3515	3190	2964	2789	2660
40.0	3336	3334	3444	3636	3772	3746	3322	3090	2814	2716
42.5	3425	3410	3528	3753	3908	3906	3499	3143	2874	2778
45.0	3515	3491	3621	3864	4034	4053	3749	3205	2971	2845
47.5	3608	3600	3700	3976	4157	4162	3928	3312	3079	2907
50.0	3719	3722	3806	4092	4282	4284	4055	3399	3247	2988
52.5	3846	3850	3932	4213	4422	4440	4182	3667	3376	3154
55.0	3994	3997	4083	4353	4571	4620	4340	3898	3414	3300
57.5	4181	4194	4269	4524	4755	4817	4518	4158	3593	3418
60.0	4398	4413	4497	4721	5002	5079	4760	4433	3763	3625
62.5	4628	4646	4754	4978	5329	5452	5055	4638	4098	3797
65.0	4836	4865	5000	5293	5779	5883	5363	4948	4504	4117
67.5	4981	5022	5214	5638	6399	6537	5960	5385	5011	4627
70.0	4972	5030	5229	5920	7231	7741	7029	6004	5517	5040
72.5	4411	4477	4843	5697	7680	9134	7869	5857	4796	4086
75.0	2014	2162	2856	4136	6827	8576	6581	4236	3177	2594
77.5	563	605	789	1495	4052	6008	4385	2081	1254	952
80.0	394	442	512	618	1165	2501	1468	737	616	550
82.5	296	342	402	456	585	762	593	514	492	443
85.0	218	259	320	354	418	491	431	408	413	372
87.5	157	197	260	284	313	352	329	337	349	312
90.0	105	140	208	229	249	264	259	280	297	252
92.5	105	133	202	224	242	256	249	273	288	219
95.0	118	133	199	220	237	250	239	265	272	207
97.5	129	131	192	215	229	242	228	249	240	208
100.0	137	130	183	209	222	232	218	230	201	205
102.5	141	130	175	204	215	223	207	204	172	193
105.0	141	129	165	200	210	213	193	180	156	179
107.5	139	130	155	195	205	203	177	161	146	166
110.0	138	131	146	190	200	191	163	147	139	154
112.5	136	132	139	184	192	177	152	137	133	144
115.0	134	132	133	174	181	164	144	129	129	136
117.5	132	131	128	162	169	156	139	125	127	129
120.0	131	130	124	148	158	149	135	122	124	125
122.5	128	127	119	135	148	143	131	121	120	119
125.0	123	122	115	124	139	137	129	120	118	116
127.5	118	118	112	115	130	132	128	120	117	114
130.0	114	114	110	109	122	128	127	119	118	115

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CANDELA TABULATION - (Cont.)

132.5	111	111	108	106	116	123	121	118	118	116
135.0	111	110	108	105	108	110	109	115	119	118
137.5	110	110	107	98	92	91	95	105	114	118
140.0	99	98	93	83	73	70	78	88	100	107
142.5	82	81	76	66	53	50	59	70	81	89
145.0	63	63	57	48	37	36	42	51	62	69
147.5	44	43	39	32	26	21	25	35	42	47
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	1313
2.5	1308
5.0	1320
7.5	1335
10.0	1374
12.5	1458
15.0	1585
17.5	1669
20.0	1790
22.5	1952
25.0	2134
27.5	2259
30.0	2422
32.5	2476
35.0	2549
37.5	2624
40.0	2712
42.5	2753
45.0	2791
47.5	2906
50.0	2970
52.5	3151
55.0	3232
57.5	3434
60.0	3564
62.5	3773
65.0	4127
67.5	4611
70.0	4942
72.5	4047
75.0	2512
77.5	946

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CANDELA TABULATION - (Cont.)

80.0	568
82.5	450
85.0	331
87.5	210
90.0	153
92.5	197
95.0	239
97.5	242
100.0	226
102.5	207
105.0	188
107.5	172
110.0	158
112.5	147
115.0	138
117.5	131
120.0	126
122.5	120
125.0	115
127.5	113
130.0	114
132.5	115
135.0	117
137.5	118
140.0	108
142.5	90
145.0	70
147.5	46
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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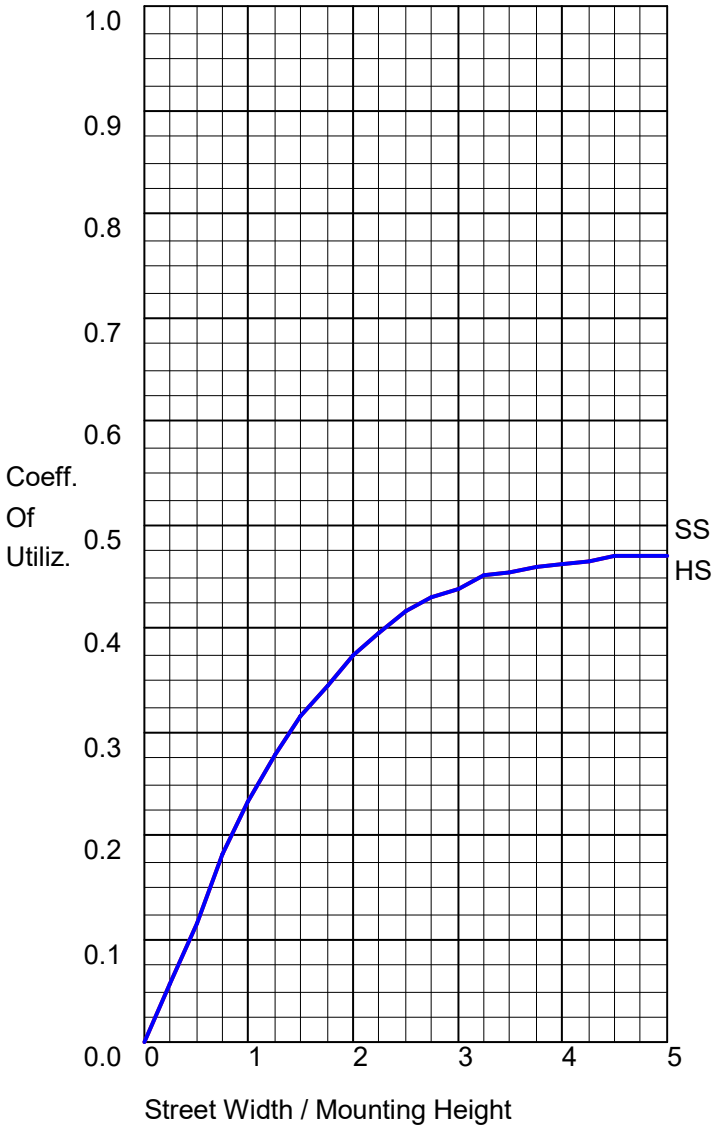
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	9998.1	48.0
Downward House Side	9998.1	48.0
Downward Total	19996.2	96.1
Upward Street Side	408.9	2.0
Upward House Side	408.9	2.0
Upward Total	817.8	3.9
Total Flux	20814.0	100.0

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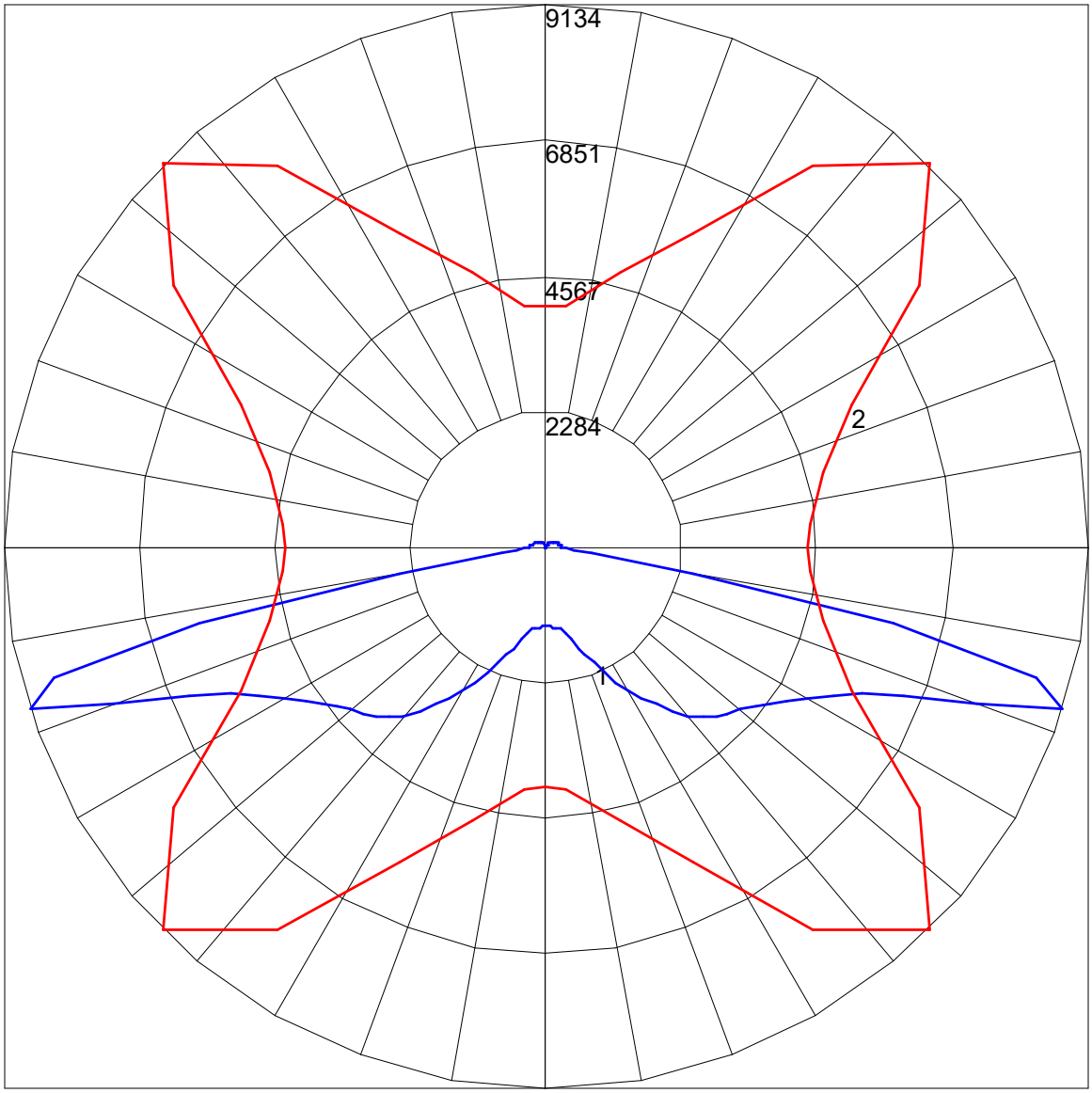
POLAR GRAPH



Maximum Candela = 9134 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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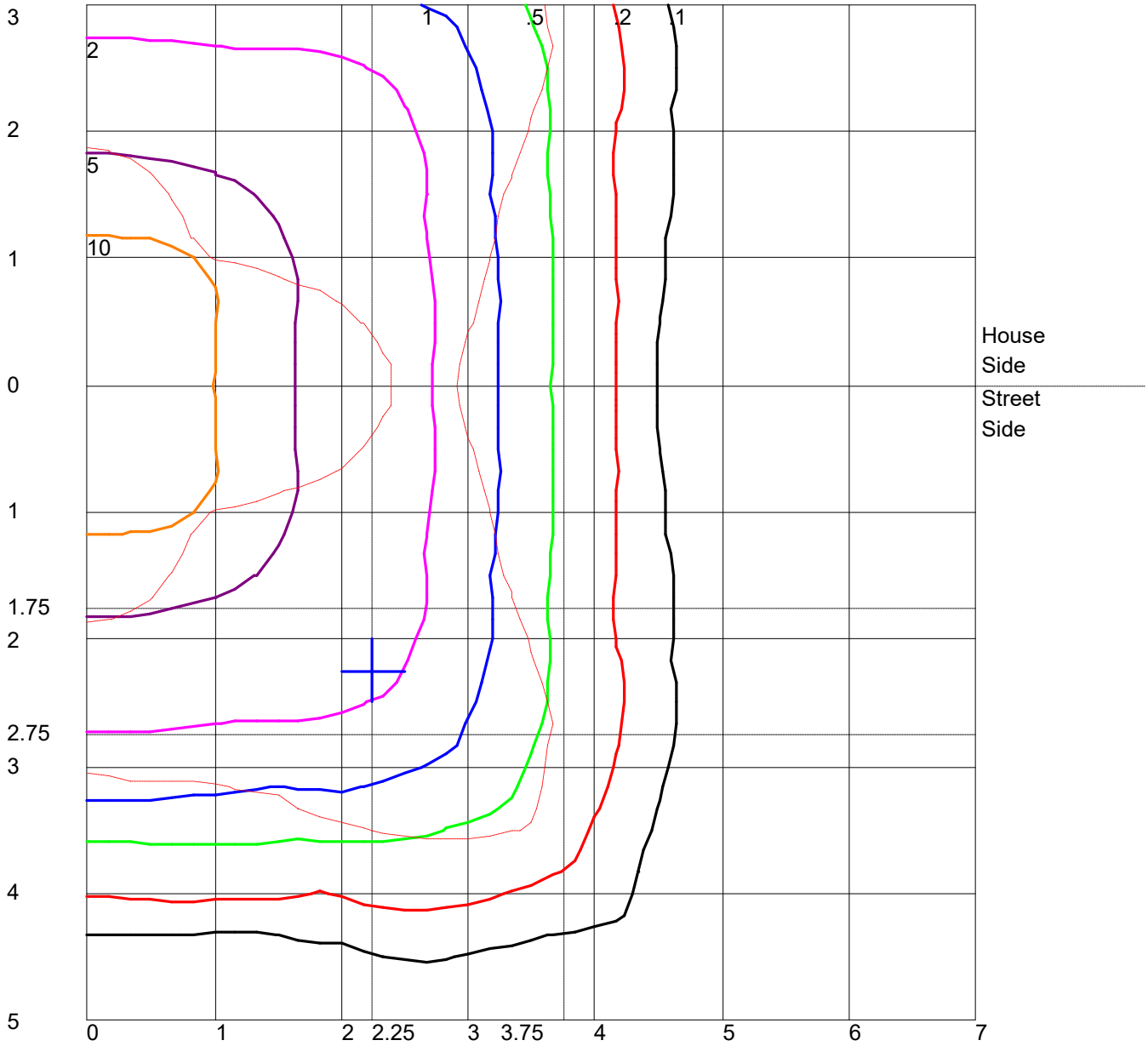
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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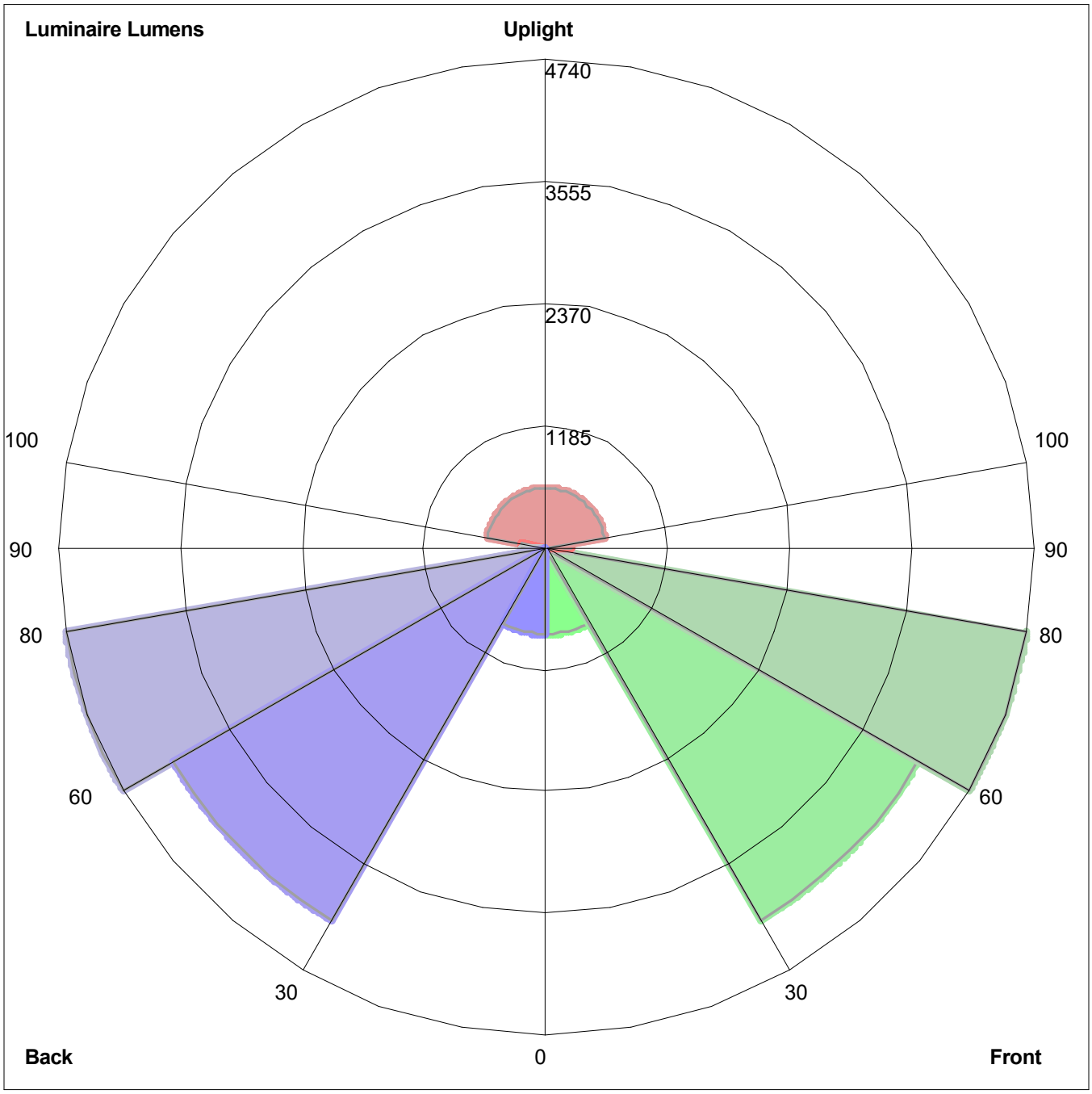
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=842.6, Medium=4171.9, High=4740.1, Very High=243.5
Back: Low=842.6, Medium=4171.9, High=4740.1, Very High=243.5
Uplight: Low=243.5, High=574.3

BUG Rating : B4-U4-G3

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