IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-30-70CRI.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12569
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/05/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-15L-SIL-2-30-70CRI
[_ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[OTHER] SCALED FROM ORIGINAL TEST DATA
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Outdoor
[_SEARCH_COLORTEMP] 3000

CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	14783
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	145
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.05
Maximum Candela	8842
Maximum Candela Angle	72.5H 62.5V
Maximum Candela (<90 Degrees Vertical)	8842
Maximum Candela Angle (<90 Degrees Vertical)	72.5H 62.5V
Maximum Candela At 90 Degrees Vertical	236 (1.6% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	778 (5.3% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	906.5	N.A.	6.1
FM - Front-Medium (30-60)	5515.1	N.A.	37.3
FH - Front-High (60-80)	2264.6	N.A.	15.3
FVH - Front-Very High (80-90)	158.0	N.A.	1.1
BL - Back-Low (0-30)	776.4	N.A.	5.3
BM - Back-Medium (30-60)	3218.5	N.A.	21.8
BH - Back-High (60-80)	1058.7	N.A.	7.2
BVH - Back-Very High (80-90)	177.5	N.A.	1.2
UL - Uplight-Low (90-100)	198.4	N.A.	1.3
UH - Uplight-High (100-180)	509.1	N.A.	3.4
Total	14782.8	N.A.	100.0
BUG Rating	B3-U4-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	72.5	75.0
0.0	1264	1264	1264	1264	1264	1264	1264	1264	1264	1264
2.5	1288	1286	1298	1317	1317	1312	1303	1274	1267	1267
5.0	1326	1320	1340	1364	1369	1361	1345	1326	1316	1323
7.5	1367	1360	1325	1339	1323	1326	1374	1378	1353	1344
10.0	1402	1407	1412	1415	1429	1389	1360	1409	1392	1395
12.5	1531	1557	1532	1517	1501	1464	1489	1435	1534	1537
15.0	1602	1600	1613	1606	1651	1588	1584	1620	1594	1654
17.5	1807	1798	1819	1724	1752	1832	1728	1790	1739	1789
20.0	1943	1942	1962	1937	1995	1926	1998	1977	1929	1929
22.5	2261	2242	2284	2223	2214	2175	2188	2158	2169	2156
25.0	2673	2657	2592	2531	2549	2427	2417	2448	2370	2368
27.5	3309	3326	3250	3119	2901	2825	2744	2710	2650	2640
30.0	3964	3991	3931	3714	3557	3229	3146	3052	2998	3008
32.5	4145	4164	4224	4348	4180	3849	3727	3479	3420	3329
35.0	3995	3968	4045	4316	4645	4446	4316	3956	3786	3690
37.5	4121	4084	4080	4205	4512	4798	4854	4623	4175	4046
40.0	4379	4326	4304	4353	4560	4828	4980	5401	4629	4516
42.5	4573	4478	4458	4503	4724	5007	5137	5627	5350	5086
45.0	4526	4460	4451	4551	4841	5256	5477	5538	6066	5891
47.5	4322	4292	4287	4473	4847	5490	5740	5615	6415	6415
50.0	4076	4041	4030	4251	4736	5656	6084	5902	6605	6644
52.5	3636	3606	3617	3842	4464	5668	6414	6481	6822	6938
55.0	3045	3031	3097	3300	3966	5436	6610	7013	7131	7279
57.5	2439	2431	2475	2705	3316	4853	6568	7362	7624	7736
60.0	1708	1729	1793	1987	2493	3962	6275	7592	8055	8070
62.5	1055	1070	1114	1272	1651	2717	5561	7433	8842	8434
65.0	861	860	871	903	1034	1535	4391	6913	8569	8706
67.5	751	751	749	781	820	882	2851	5766	7311	7593
70.0	556	564	599	657	720	728	1450	4151	5346	5780
72.5	445	453	450	465	591	635	784	2381	3405	3652
75.0	377	395	396	400	460	533	601	1349	2084	2232
77.5	311	342	347	349	398	451	508	898	1314	1303
80.0	278	307	312	305	344	394	428	604	778	773
82.5	248	262	275	268	297	336	372	454	545	547
85.0	197	211	230	229	251	285	311	346	394	410
87.5	119	137	176	186	202	226	245	259	274	275
90.0	78	97	142	159	174	190	198	211	220	223
92.5	89	99	144	162	177	192	195	209	218	222
95.0	103	103	146	165	179	193	192	209	217	219
97.5	116	107	147	166	180	191	185	205	206	196
100.0	123	109	146	167	179	188	180	194	181	165
102.5	128	114	144	167	178	185	175	177	152	139
105.0	131	119	140	167	177	181	166	157	129	125
107.5	132	124	137	167	176	176	154	137	114	116
110.0	133	127	132	165	173	167	139	119	107	109
112.5	132	130	130	163	168	155	127	106	100	104
115.0	132	130	127	158	160	142	116	96	96	99
117.5	131	130	125	152	150	131	108	90	93	94
120.0	130	129	122	142	139	123	103	86	89	90
122.5	128	127	118	131	131	116	98	84	86	86
125.0	125	124	113	120	123	111	96	84	84	84
127.5	120	119	109	110	116	108	96	84	84	84
130.0	113	112	107	104	110	107	97	86	84	84

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CANDELA TABULATION - (Cont.)

132.5	109	108	104	100	108	104	93	86	86	86
135.0	107	107	104	100	102	95	86	86	88	88
137.5	107	107	103	93	87	81	77	81	86	87
140.0	94	94	89	80	69	61	63	68	75	77
142.5	78	78	72	63	50	46	49	55	61	63
145.0	61	60	55	44	35	33	35	40	47	48
147.5	42	41	36	31	24	17	20	27	31	33
150.0	30	29	26	20	11	5	8	14	18	18
152.5	17	18	12	7	2	1	2	4	6	8
155.0	6	6	4	2	0	0	0	1	1	2
157.5	2	2	1	0	0	0	0	0	0	0
160.0	1	1	0	0	0	0	0	0	0	0
162.5	1	1	0	0	0	0	0	0	0	0
165.0	1	1	0	0	0	0	0	0	0	0
167.5	1	1	1	0	0	0	0	0	0	0
170.0	1	1	1	0	0	0	0	0	0	0
172.5	1	1	1	1	0	0	0	0	0	0
175.0	1	1	1	1	0	0	0	0	0	0
177.5	1	1	1	1	1	0	0	0	0	0
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**									
	85.0	**90.0**	**95.0**	**105.0**	**115.0**	**125.0**	**135.0**	**145.0**	**155.0**	**165.0**
0.0	1264	1264	1264	1264	1264	1264	1264	1264	1264	1264
2.5	1258	1249	1250	1257	1249	1262	1271	1264	1267	1278
5.0	1263	1246	1249	1298	1308	1303	1321	1303	1293	1287
7.5	1308	1275	1284	1328	1336	1302	1262	1206	1213	1226
10.0	1361	1330	1328	1362	1346	1263	1284	1259	1250	1217
12.5	1494	1433	1465	1483	1355	1323	1274	1254	1242	1315
15.0	1630	1544	1576	1575	1468	1422	1323	1369	1352	1390
17.5	1784	1709	1771	1717	1576	1466	1489	1431	1451	1601
20.0	1942	1912	1933	1826	1718	1596	1514	1627	1678	1771
22.5	2244	2159	2163	2026	1830	1699	1706	1823	1912	2106
25.0	2443	2449	2364	2200	1987	1814	1889	2066	2185	2329
27.5	2805	2718	2694	2388	2082	2011	2135	2317	2455	2633
30.0	3064	3020	2981	2655	2275	2250	2370	2527	2676	2897
32.5	3313	3255	3237	2910	2442	2471	2529	2755	2988	3155
35.0	3630	3516	3478	3036	2569	2611	2724	2988	3097	3234
37.5	3944	3833	3766	3129	2685	2721	2900	3057	3152	3250
40.0	4320	4175	4039	3167	2797	2765	2978	3073	3149	3199
42.5	4672	4541	4245	3212	2838	2831	2972	3034	3042	3016
45.0	5070	4721	4564	3274	2729	2922	2903	2901	2791	2705
47.5	5548	5148	4763	3222	2737	2848	2768	2677	2487	2385
50.0	5984	5626	4914	3258	2689	2702	2577	2415	2200	2091
52.5	6565	6088	5135	3200	2587	2507	2346	2172	1953	1883
55.0	7112	6426	5278	2932	2427	2255	2106	1933	1772	1740
57.5	7520	6909	5125	2695	2244	2021	1856	1744	1627	1607
60.0	7893	6956	4823	2458	1984	1744	1632	1571	1476	1442
62.5	7960	6770	4263	2185	1701	1474	1422	1387	1301	1257
65.0	7555	5942	3405	1819	1336	1212	1222	1200	1113	1055
67.5	6288	4369	2377	1326	1041	954	1002	987	899	869
70.0	4339	2775	1510	894	782	754	788	753	710	698
72.5	2740	1772	1014	662	640	605	621	591	566	547
75.0	1775	1250	779	566	580	520	509	482	463	468
77.5	840	649	573	513	527	449	430	412	412	411

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CANDELA TABULATION - (Cont.)

80.0	509	469	446	466	469	385	371	366	385	397
82.5	379	359	353	414	394	330	327	341	398	432
85.0	305	230	286	357	322	290	297	324	401	455
87.5	253	123	252	287	267	248	255	291	330	335
90.0	187	86	212	236	229	214	217	205	190	174
92.5	148	151	181	236	228	212	216	205	193	176
95.0	144	197	166	234	226	206	213	205	194	177
97.5	157	205	173	218	217	196	208	200	192	175
100.0	168	196	176	188	206	188	204	197	190	170
102.5	165	182	170	165	192	182	199	195	189	166
105.0	156	166	159	146	174	176	193	192	187	160
107.5	142	150	147	133	156	166	187	189	185	154
110.0	130	135	133	124	139	155	180	185	180	146
112.5	118	123	121	115	123	143	169	180	176	139
115.0	108	112	111	108	112	133	158	174	170	133
117.5	101	104	104	103	104	126	149	165	161	128
120.0	94	97	97	98	99	120	140	155	151	123
122.5	89	91	91	94	97	114	132	145	139	119
125.0	84	86	87	91	96	111	127	136	127	115
127.5	84	84	86	90	96	110	122	128	116	111
130.0	84	84	86	90	97	110	119	120	108	108
132.5	85	86	87	93	96	107	116	114	103	106
135.0	89	89	90	94	95	98	107	109	101	105
137.5	91	92	93	92	89	86	90	93	97	105
140.0	84	86	85	82	77	73	70	75	84	94
142.5	70	73	72	67	61	57	52	57	66	77
145.0	55	56	57	52	46	40	37	38	50	59
147.5	36	37	38	36	32	25	24	28	34	41
150.0	21	21	22	22	18	12	10	16	24	29
152.5	10	11	11	11	8	5	4	6	12	18
155.0	3	3	4	4	3	3	3	4	5	8
157.5	0	1	1	1	2	2	2	3	3	4
160.0	0	0	0	1	1	2	2	3	3	3
162.5	0	0	0	1	1	2	2	3	3	2
165.0	0	0	0	1	1	2	2	3	3	2
167.5	0	0	0	1	1	2	2	2	3	2
170.0	0	0	0	1	1	2	2	2	3	2
172.5	0	0	0	1	1	2	2	2	2	2
175.0	0	0	0	1	1	1	2	2	2	2
177.5	0	0	0	1	1	1	2	2	2	2
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**	
	175.0	**180.0**
0.0	1264	1264
2.5	1271	1282
5.0	1261	1249
7.5	1203	1215
10.0	1215	1186
12.5	1307	1316
15.0	1390	1343
17.5	1604	1637
20.0	1839	1766
22.5	2133	2130
25.0	2422	2431

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CANDELA TABULATION - (Cont.)

27.5	2721	2758
30.0	3080	3069
32.5	3244	3245
35.0	3323	3347
37.5	3343	3406
40.0	3289	3364
42.5	3054	3110
45.0	2694	2739
47.5	2375	2401
50.0	2090	2110
52.5	1876	1891
55.0	1731	1741
57.5	1588	1595
60.0	1404	1418
62.5	1208	1199
65.0	988	984
67.5	824	815
70.0	671	659
72.5	517	499
75.0	439	416
77.5	370	342
80.0	359	325
82.5	418	380
85.0	454	422
87.5	232	231
90.0	113	81
92.5	114	90
95.0	118	105
97.5	121	120
100.0	123	131
102.5	126	139
105.0	128	143
107.5	131	144
110.0	133	144
112.5	135	143
115.0	135	140
117.5	135	137
120.0	132	134
122.5	130	131
125.0	126	127
127.5	121	122
130.0	116	117
132.5	110	112
135.0	108	108
137.5	107	108
140.0	98	99
142.5	82	83
145.0	64	64
147.5	47	47
150.0	32	32
152.5	22	22
155.0	9	9
157.5	5	4
160.0	3	3
162.5	2	2
165.0	2	2

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CANDELA TABULATION - (Cont.)

167.5	2	2
170.0	2	2
172.5	2	2
175.0	2	2
177.5	2	2
180.0	1	1

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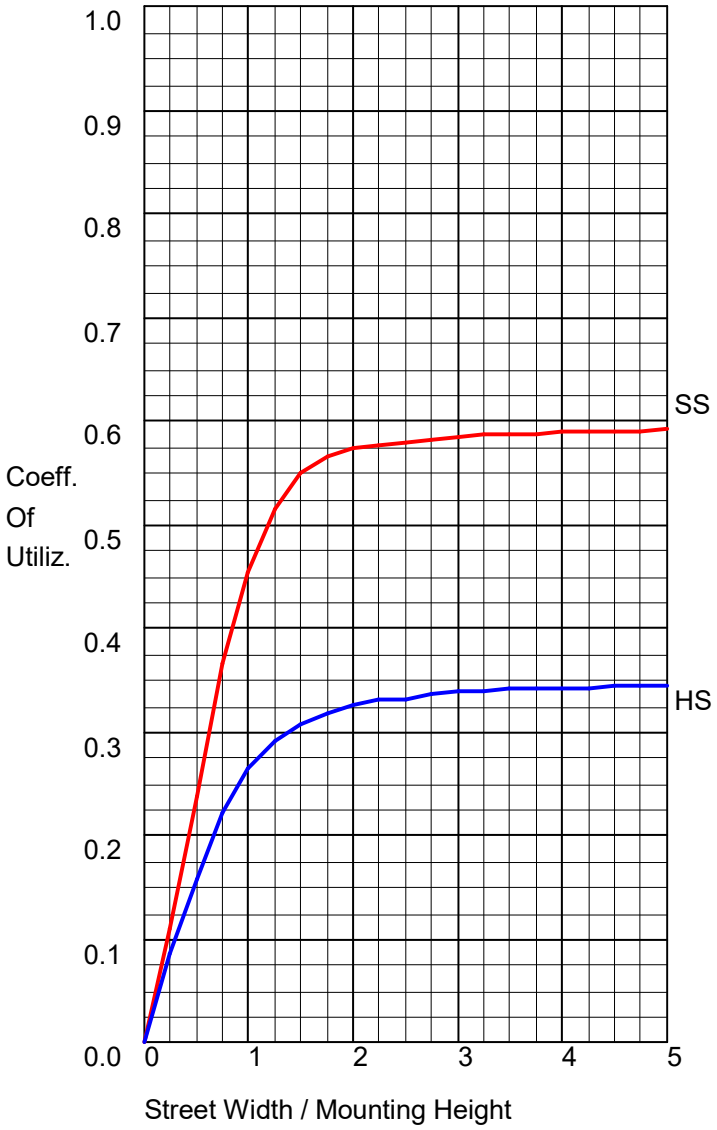
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	8844.2	59.8
Downward House Side	5231.1	35.4
Downward Total	14075.3	95.2
Upward Street Side	337.6	2.3
Upward House Side	369.8	2.5
Upward Total	707.4	4.8
Total Flux	14782.7	100.0

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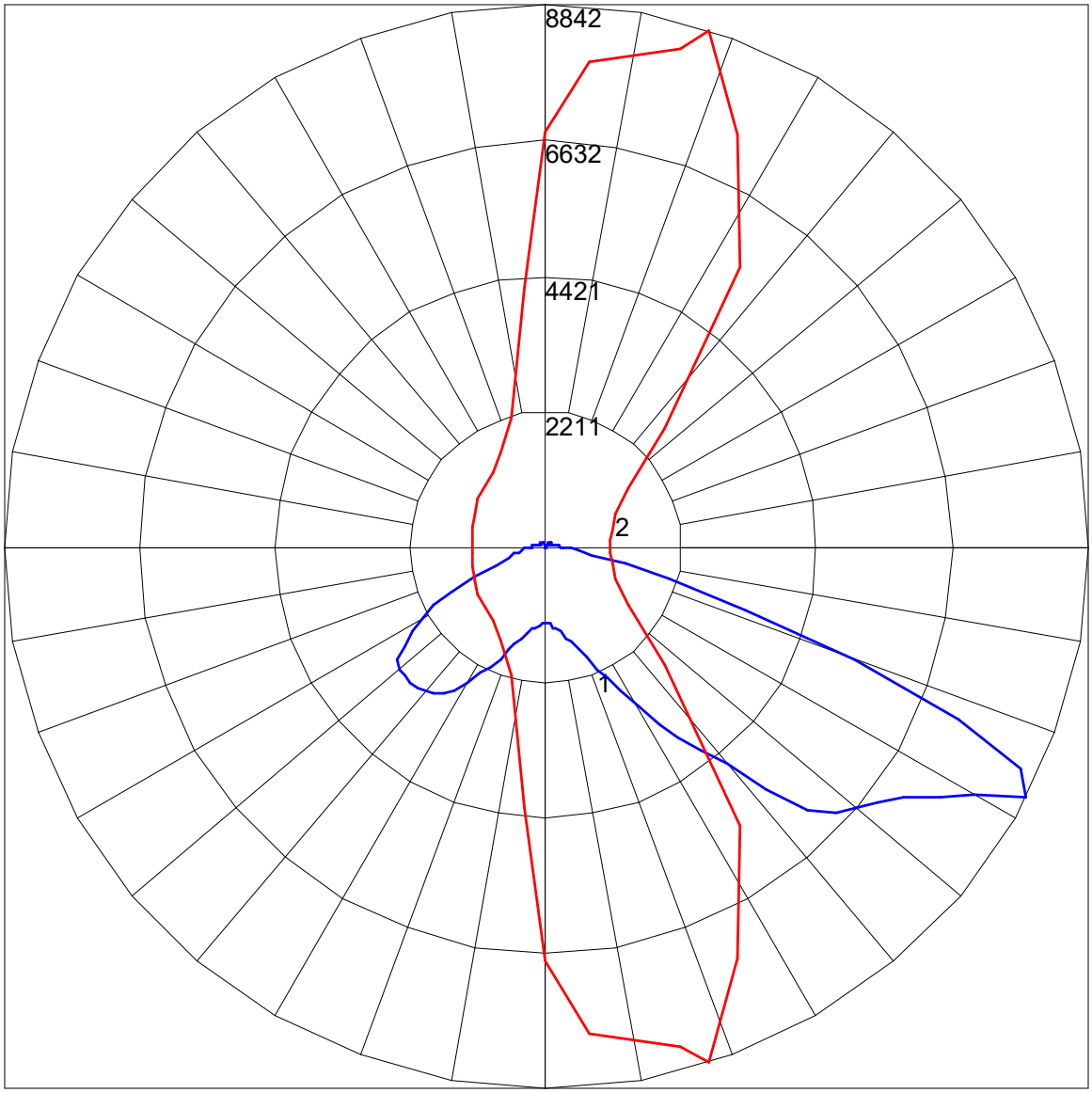
POLAR GRAPH



Maximum Candela = 8842 Located At Horizontal Angle = 72.5, Vertical Angle = 62.5
1 - Vertical Plane Through Horizontal Angles (72.5 - 252.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)

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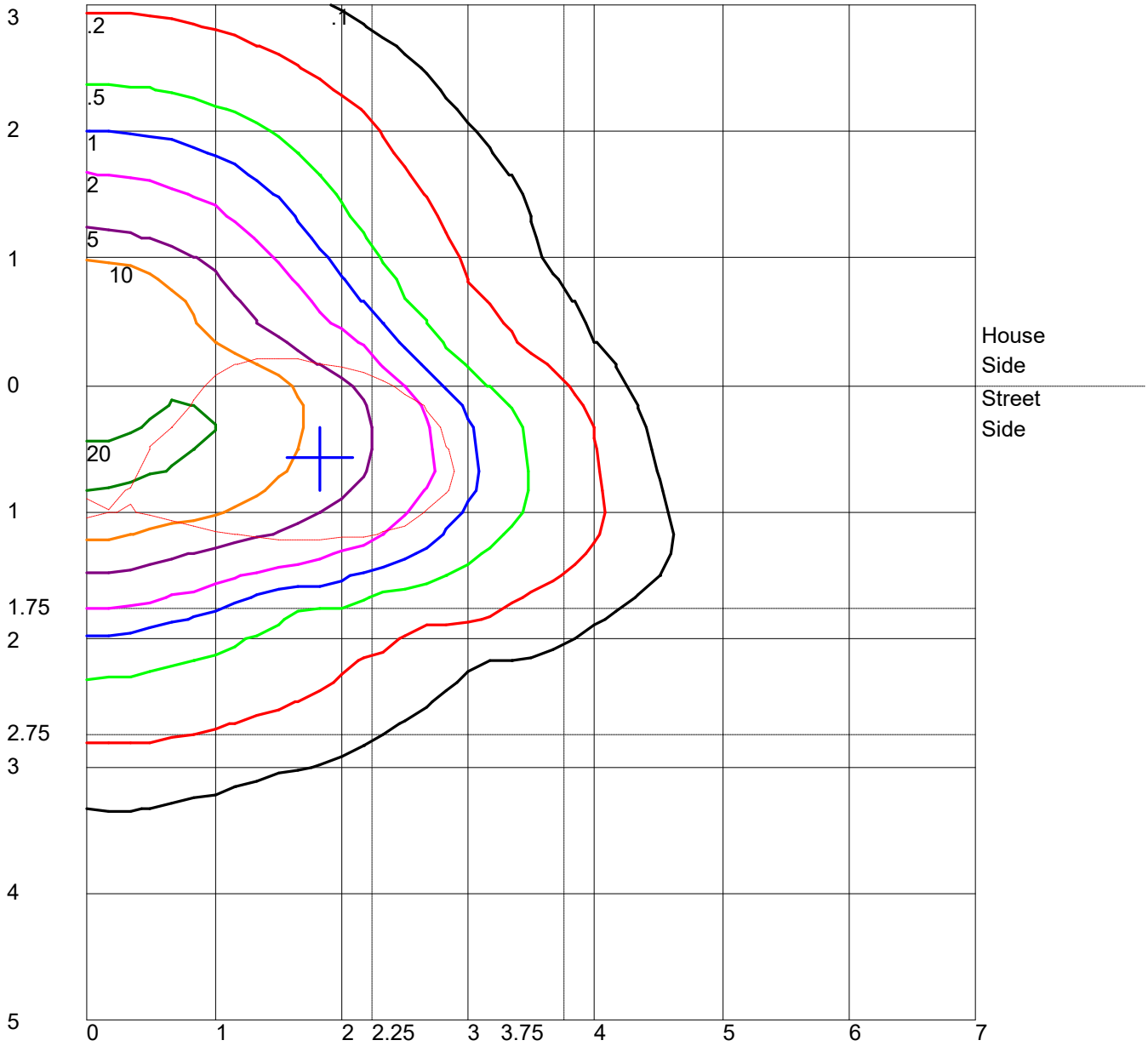
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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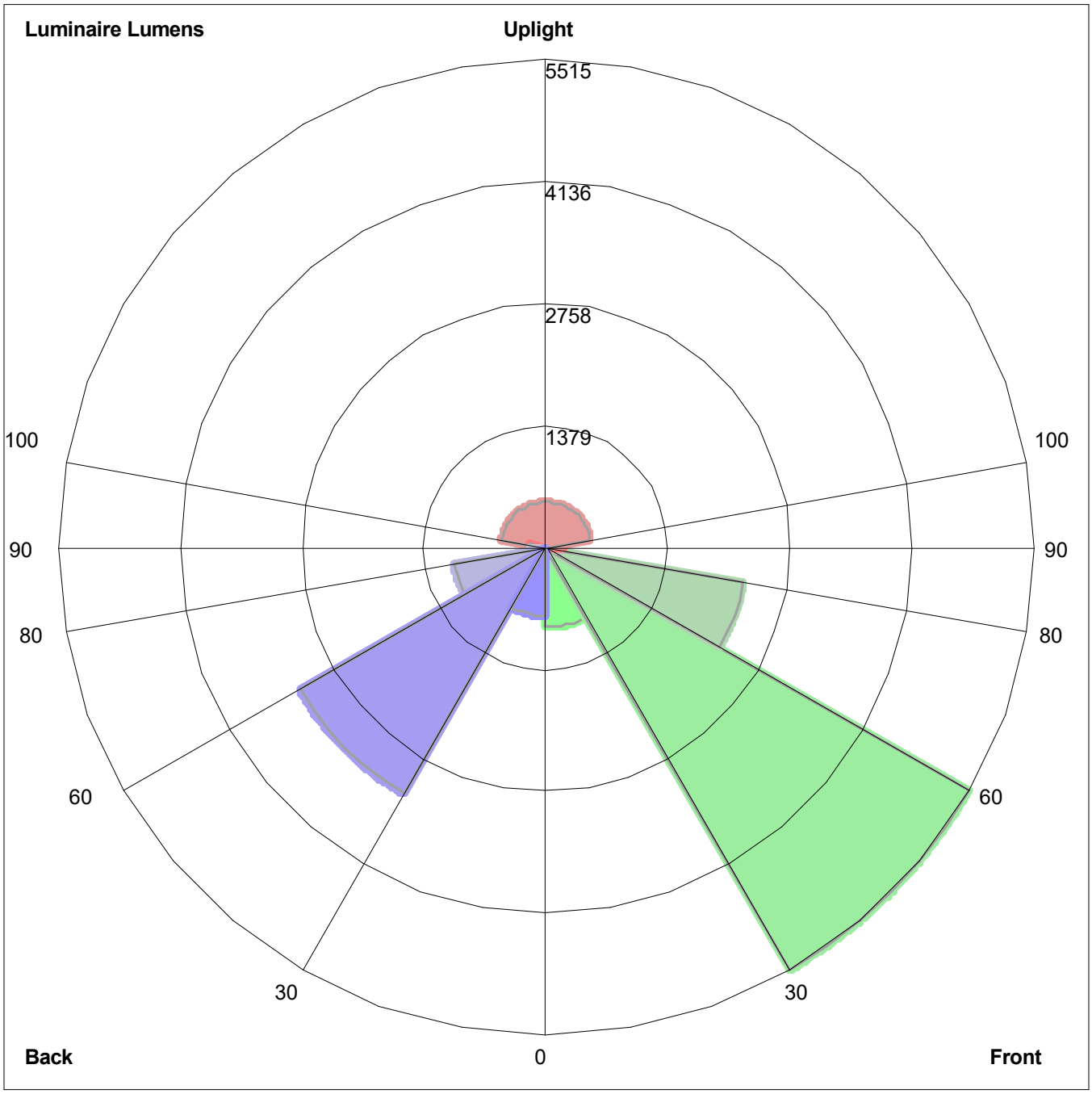
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=906.5, Medium=5515.1, High=2264.6, Very High=158.0
Back: Low=776.4, Medium=3218.5, High=1058.7, Very High=177.5
Uplight: Low=198.4, High=509.1

BUG Rating : B3-U4-G3

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