IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-10L-SIL-3-50-70CRI-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12641
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/29/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-10L-SIL-3-50-70CRI-IL
[_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] 5000

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5310
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	79
Total Luminaire Watts	67
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	4342
Maximum Candela Angle	35H 67.5V
Maximum Candela (<90 Degrees Vertical)	4342
Maximum Candela Angle (<90 Degrees Vertical)	35H 67.5V
Maximum Candela At 90 Degrees Vertical	134 (2.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	557 (10.5% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	281.1	N.A.	5.3
FM - Front-Medium (30-60)	2361.4	N.A.	44.5
FH - Front-High (60-80)	1957.7	N.A.	36.9
FVH - Front-Very High (80-90)	112.9	N.A.	2.1
BL - Back-Low (0-30)	63.3	N.A.	1.2
BM - Back-Medium (30-60)	171.5	N.A.	3.2
BH - Back-High (60-80)	115.4	N.A.	2.2
BVH - Back-Very High (80-90)	36.5	N.A.	0.7
UL - Uplight-Low (90-100)	65.6	N.A.	1.2
UH - Uplight-High (100-180)	144.2	N.A.	2.7
Total	5309.6	N.A.	100.0
BUG Rating	B1-U3-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	30	35	45	55	65	75
0.0	226	226	226	226	226	226	226	226	226	226
2.5	259	256	254	252	254	249	247	241	235	232
5.0	356	352	350	339	340	333	322	299	271	246
7.5	415	416	404	411	416	419	405	362	325	278
10.0	453	458	468	455	460	464	437	430	389	324
12.5	469	468	469	480	478	475	487	468	457	371
15.0	519	506	513	521	511	508	510	511	489	440
17.5	532	544	537	538	556	572	548	553	550	503
20.0	601	609	614	629	611	612	633	618	606	584
22.5	705	700	701	711	714	720	706	712	706	670
25.0	787	793	831	867	849	841	853	845	835	825
27.5	949	966	985	993	1018	1056	1019	1009	1024	930
30.0	1082	1072	1151	1209	1218	1222	1299	1227	1175	1087
32.5	1241	1253	1326	1365	1413	1475	1508	1472	1388	1269
35.0	1332	1344	1423	1569	1633	1666	1776	1759	1586	1380
37.5	1370	1401	1495	1681	1775	1906	2021	1972	1720	1504
40.0	1391	1405	1544	1785	1898	2062	2241	2153	1876	1581
42.5	1391	1411	1596	1887	2021	2204	2451	2312	2036	1637
45.0	1413	1440	1675	2036	2168	2359	2602	2469	2142	1696
47.5	1472	1499	1794	2216	2360	2569	2758	2649	2186	1825
50.0	1497	1528	1878	2374	2559	2776	2924	2757	2300	1923
52.5	1503	1533	1903	2454	2692	2931	3092	2844	2430	2056
55.0	1731	1728	1999	2515	2758	2989	3203	2940	2574	2331
57.5	2600	2558	2603	2778	2911	3034	3245	2950	2672	2523
60.0	3493	3475	3487	3468	3419	3263	3173	2807	2655	2702
62.5	3823	3852	3917	4008	3982	3773	3101	2535	2575	2896
65.0	3116	3169	3593	4177	4287	4125	3361	2223	2315	2903
67.5	1262	1311	1886	3290	4031	4342	3713	1994	1856	2745
70.0	604	608	759	1382	2404	3491	3992	2268	1304	2154
72.5	475	480	552	782	1041	1523	3722	3171	901	1248
75.0	396	407	458	574	677	825	1927	2627	839	447
77.5	337	346	381	458	513	596	813	1409	499	207
80.0	295	303	325	363	389	450	557	546	295	142
82.5	252	257	271	292	310	341	428	401	242	130
85.0	163	168	176	190	203	226	312	356	221	127
87.5	90	94	102	114	125	139	201	245	177	102
90.0	44	46	56	67	76	84	111	134	106	80
92.5	24	26	35	43	47	51	64	75	70	71
95.0	25	24	34	41	43	47	55	59	64	67
97.5	28	26	34	41	44	47	54	57	63	57
100.0	30	26	34	41	44	47	53	55	58	49
102.5	31	27	34	42	44	47	53	53	51	38
105.0	31	28	34	42	45	47	51	48	43	32
107.5	31	30	34	42	45	47	49	42	35	30
110.0	32	31	33	42	44	46	45	36	30	28
112.5	32	31	33	41	43	44	39	31	27	26
115.0	32	32	32	40	41	40	34	29	24	26
117.5	32	32	32	38	38	36	31	26	23	25
120.0	32	32	31	34	34	32	29	25	22	24
122.5	32	31	30	31	31	31	28	24	22	24
125.0	31	31	28	29	30	29	27	24	22	24
127.5	30	29	27	27	28	28	26	24	23	24
130.0	28	28	26	26	27	26	26	25	23	24

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CANDELA TABULATION - (Cont.)

132.5	28	27	26	25	26	26	26	24	24	25
135.0	27	27	26	25	25	26	25	24	23	25
137.5	27	27	26	25	24	24	22	21	22	24
140.0	26	26	24	22	21	20	18	18	19	22
142.5	23	22	21	18	17	15	14	14	15	18
145.0	19	18	17	14	13	11	10	10	12	14
147.5	14	13	12	9	9	7	6	7	8	10
150.0	9	9	8	7	6	4	3	4	5	6
152.5	7	7	5	3	2	2	2	2	3	4
155.0	2	2	1	1	1	1	1	1	2	2
157.5	0	0	1	1	1	1	1	1	1	2
160.0	0	0	0	0	1	1	1	1	1	1
162.5	0	0	0	1	1	1	1	1	1	1
165.0	0	0	0	1	1	1	1	1	1	1
167.5	0	0	0	1	1	1	1	1	1	1
170.0	0	0	0	1	1	1	1	1	1	1
172.5	0	0	0	1	1	1	1	1	1	1
175.0	0	0	1	1	1	1	1	1	1	1
177.5	0	0	1	1	1	1	1	1	1	1
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**									
	85	**90**	**95**	**105**	**115**	**125**	**135**	**145**	**155**	**165**
0.0	226	226	226	226	226	226	226	226	226	226
2.5	229	226	224	221	215	213	211	210	207	205
5.0	235	232	225	214	203	194	184	176	164	156
7.5	244	234	224	208	189	164	143	135	132	128
10.0	263	247	231	201	164	140	134	128	123	119
12.5	277	258	239	194	148	138	129	123	123	121
15.0	321	275	252	188	150	137	129	126	116	110
17.5	354	296	262	188	155	139	130	114	102	96
20.0	417	335	290	202	166	144	117	100	90	85
22.5	496	381	330	221	174	134	102	88	82	81
25.0	604	451	389	253	172	113	92	80	77	74
27.5	698	558	444	273	153	97	83	76	70	68
30.0	855	629	529	272	120	90	80	71	64	61
32.5	968	718	584	258	102	86	75	65	59	57
35.0	1055	793	605	227	94	82	69	61	56	53
37.5	1136	838	610	199	91	77	64	60	55	51
40.0	1186	880	624	168	88	72	63	61	53	42
42.5	1249	946	595	133	84	70	65	60	47	37
45.0	1293	960	585	111	82	72	67	55	45	36
47.5	1344	984	618	106	82	74	66	52	45	36
50.0	1451	1067	626	106	86	78	63	52	46	37
52.5	1549	1145	664	101	89	88	64	53	53	65
55.0	1744	1298	721	92	76	86	72	62	80	84
57.5	2021	1493	768	87	70	70	77	81	92	62
60.0	2331	1708	825	81	68	66	79	87	73	46
62.5	2583	1863	874	77	68	68	77	71	68	51
65.0	2666	1856	737	75	68	71	71	58	64	53
67.5	2480	1501	505	75	68	70	65	64	59	51
70.0	1942	950	260	71	69	73	68	62	60	52
72.5	955	431	106	71	69	71	66	63	58	54
75.0	268	152	89	71	70	68	67	64	59	55
77.5	175	116	80	73	71	68	69	66	62	57

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CANDELA TABULATION - (Cont.)

80.0	130	99	73	74	71	68	71	67	63	59
82.5	102	83	71	79	74	70	74	69	66	62
85.0	88	64	68	80	75	71	76	72	66	63
87.5	72	53	65	81	76	71	77	73	68	63
90.0	60	45	68	81	76	71	78	74	70	65
92.5	55	46	67	80	77	70	77	75	73	67
95.0	51	58	63	78	75	67	74	74	72	67
97.5	47	64	61	71	70	62	71	70	69	64
100.0	48	61	58	62	65	58	66	67	67	60
102.5	47	55	54	53	59	56	63	64	65	56
105.0	43	49	49	47	53	54	60	62	62	51
107.5	39	43	45	43	49	51	58	60	60	47
110.0	35	39	40	40	44	48	55	58	57	42
112.5	32	36	37	38	40	45	52	56	54	39
115.0	31	33	34	36	38	43	50	53	50	36
117.5	29	31	32	34	36	42	47	50	46	33
120.0	28	30	31	33	35	40	45	47	41	31
122.5	26	28	30	32	34	38	43	44	37	31
125.0	26	27	28	31	34	38	41	40	33	30
127.5	25	26	28	31	33	37	38	36	30	29
130.0	26	26	28	31	33	36	36	33	28	28
132.5	26	27	28	31	32	33	34	31	27	27
135.0	26	27	28	31	31	30	29	27	26	26
137.5	26	27	28	29	28	25	22	22	22	25
140.0	24	25	25	25	24	20	16	15	17	20
142.5	20	21	22	21	18	15	12	11	13	15
145.0	16	16	16	15	13	10	8	7	8	10
147.5	11	11	11	11	9	7	4	4	6	7
150.0	7	7	7	7	6	4	3	2	3	4
152.5	4	4	4	4	4	3	2	2	2	2
155.0	3	3	3	3	3	2	2	1	1	1
157.5	2	2	2	2	2	2	2	1	1	1
160.0	1	2	2	2	2	2	1	1	1	0
162.5	1	1	2	2	2	2	1	1	1	0
165.0	1	1	2	2	2	2	1	1	1	0
167.5	1	1	1	2	2	2	1	1	1	0
170.0	1	1	1	2	2	2	1	1	1	0
172.5	1	1	1	2	2	2	1	1	0	0
175.0	1	1	1	2	2	2	1	1	0	0
177.5	1	1	1	2	2	2	1	1	0	0
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	226	226
2.5	203	203
5.0	151	150
7.5	127	127
10.0	119	117
12.5	119	119
15.0	106	106
17.5	93	92
20.0	83	82
22.5	79	78
25.0	72	72

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CANDELA TABULATION - (Cont.)

27.5	65	64
30.0	59	58
32.5	56	55
35.0	53	53
37.5	49	48
40.0	41	40
42.5	37	36
45.0	36	36
47.5	36	36
50.0	38	38
52.5	72	74
55.0	84	86
57.5	34	35
60.0	32	34
62.5	32	32
65.0	32	31
67.5	32	29
70.0	31	26
72.5	32	24
75.0	34	22
77.5	34	20
80.0	35	19
82.5	37	20
85.0	38	21
87.5	38	24
90.0	39	26
92.5	41	32
95.0	42	38
97.5	42	42
100.0	41	45
102.5	40	46
105.0	39	45
107.5	38	43
110.0	38	41
112.5	37	39
115.0	36	37
117.5	35	36
120.0	34	34
122.5	32	33
125.0	31	32
127.5	30	31
130.0	29	29
132.5	28	28
135.0	27	27
137.5	26	26
140.0	21	21
142.5	16	16
145.0	11	11
147.5	7	7
150.0	4	4
152.5	2	2
155.0	1	0
157.5	0	0
160.0	0	0
162.5	0	0
165.0	0	0

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CANDELA TABULATION - (Cont.)

167.5	0	0
170.0	0	0
172.5	0	0
175.0	0	0
177.5	0	0
180.0	1	1

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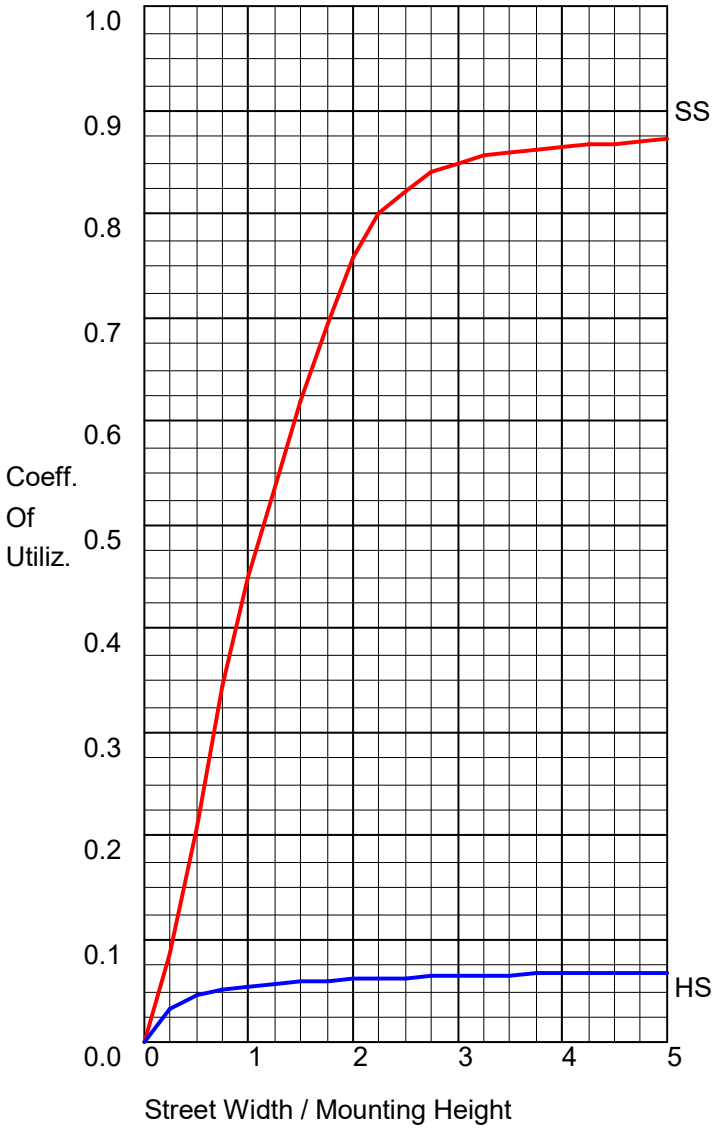
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	4713.1	88.8
Downward House Side	386.6	7.3
Downward Total	5099.7	96.0
Upward Street Side	94.0	1.8
Upward House Side	115.8	2.2
Upward Total	209.8	4.0
Total Flux	5309.5	100.0

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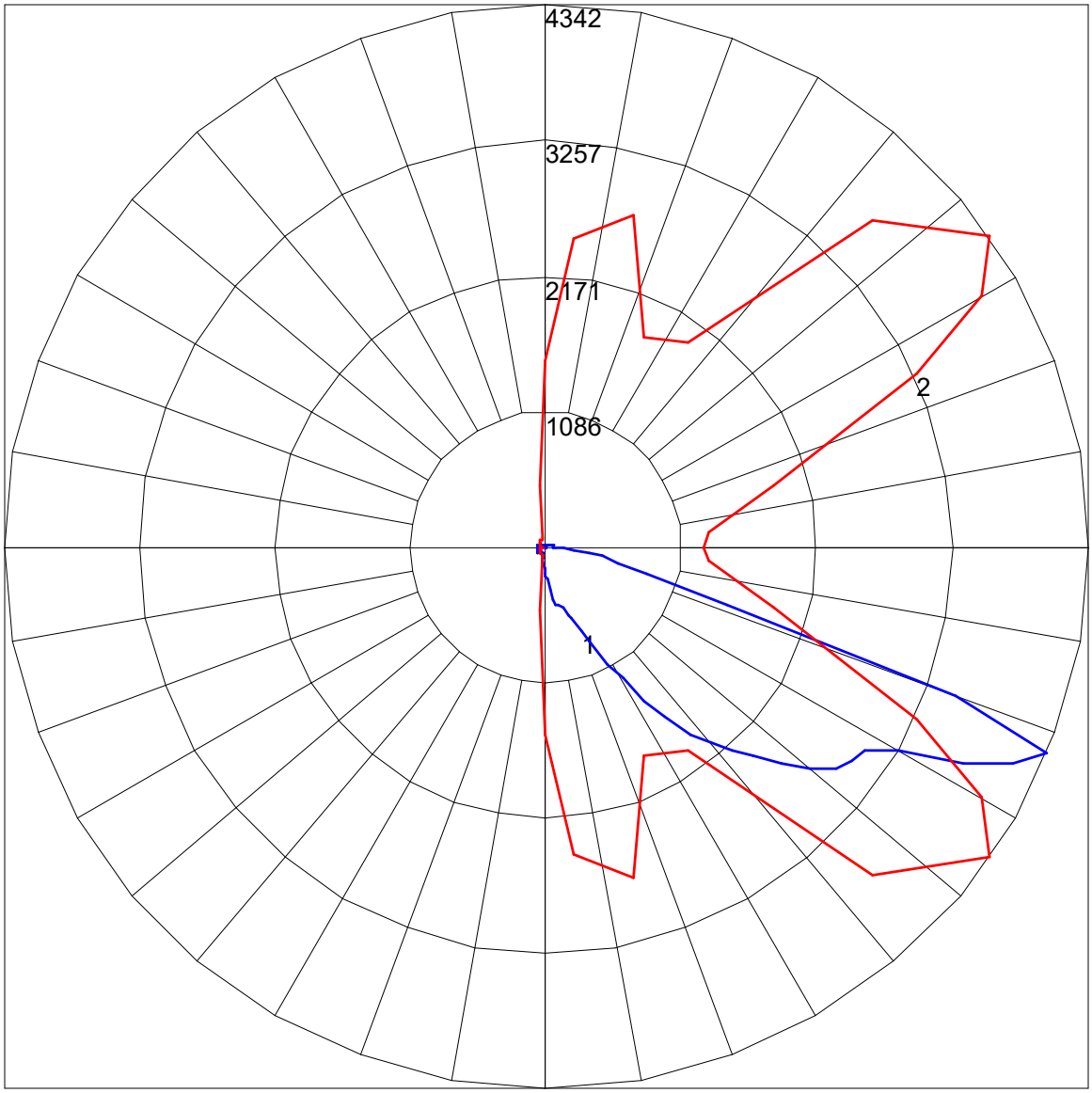
POLAR GRAPH



Maximum Candela = 4342 Located At Horizontal Angle = 35, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (35 - 215) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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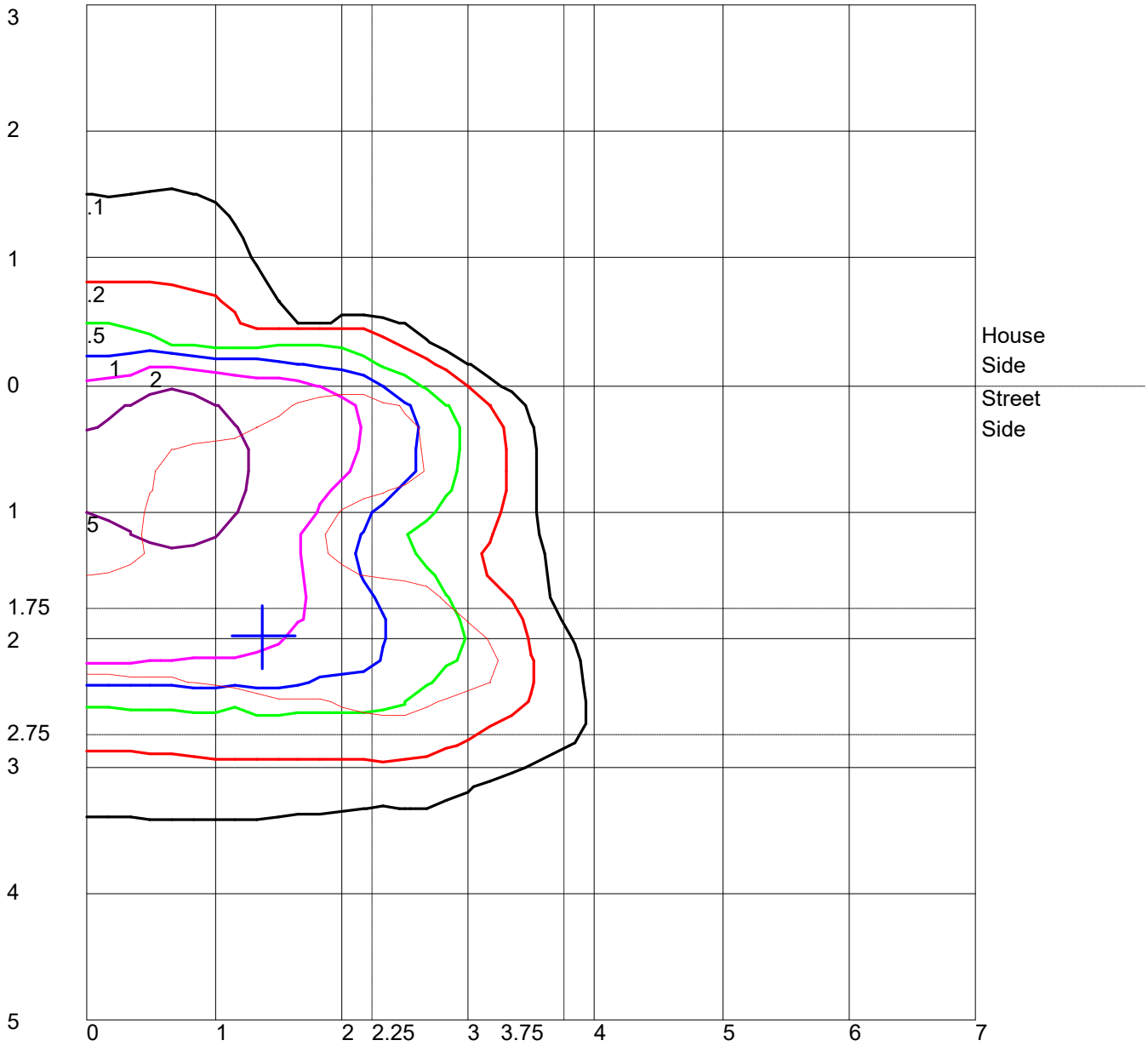
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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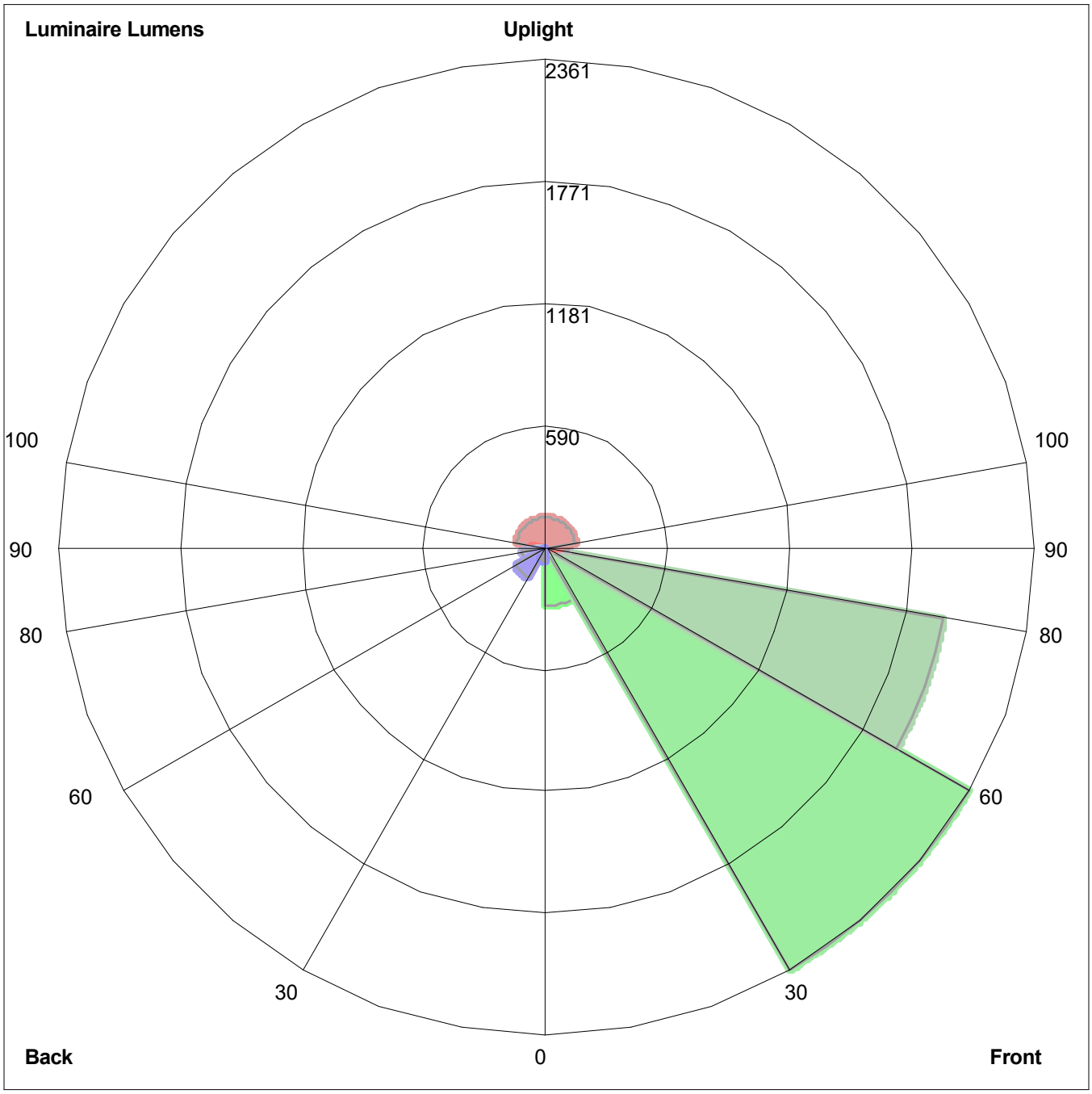
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=281.1, Medium=2361.4, High=1957.7, Very High=112.9
Back: Low=63.3, Medium=171.5, High=115.4, Very High=36.5
Uplight: Low=65.6, High=144.2

BUG Rating : B1-U3-G2

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