IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-10L-SIL-3-30-70CRI-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-3-30-70CRI-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] 3000

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5181
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	77
Total Luminaire Watts	67
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	4237
Maximum Candela Angle	35H 67.5V
Maximum Candela (<90 Degrees Vertical)	4237
Maximum Candela Angle (<90 Degrees Vertical)	35H 67.5V
Maximum Candela At 90 Degrees Vertical	131 (2.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	543 (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)	274.3	N.A.	5.3
FM - Front-Medium (30-60)	2304.2	N.A.	44.5
FH - Front-High (60-80)	1910.3	N.A.	36.9
FVH - Front-Very High (80-90)	110.2	N.A.	2.1
BL - Back-Low (0-30)	61.7	N.A.	1.2
BM - Back-Medium (30-60)	167.3	N.A.	3.2
BH - Back-High (60-80)	112.5	N.A.	2.2
BVH - Back-Very High (80-90)	35.5	N.A.	0.7
UL - Uplight-Low (90-100)	64.0	N.A.	1.2
UH - Uplight-High (100-180)	140.8	N.A.	2.7
Total	5180.8	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	221	221	221	221	221	221	221	221	221	221
2.5	253	250	248	246	248	243	241	235	229	227
5.0	348	344	342	331	332	325	314	292	264	240
7.5	405	406	395	401	406	409	396	353	317	272
10.0	442	446	457	444	449	453	426	420	379	316
12.5	458	457	458	469	467	464	475	457	445	362
15.0	506	493	500	509	498	495	497	498	477	429
17.5	519	531	524	525	542	558	535	540	537	491
20.0	587	594	599	614	596	597	617	603	591	570
22.5	688	683	684	694	697	703	689	695	689	654
25.0	768	774	811	846	829	821	832	825	815	805
27.5	926	943	961	969	994	1030	995	985	999	907
30.0	1056	1047	1123	1180	1189	1192	1267	1197	1146	1061
32.5	1211	1223	1294	1332	1379	1439	1472	1436	1355	1239
35.0	1300	1311	1388	1531	1594	1625	1733	1717	1548	1347
37.5	1336	1367	1458	1641	1732	1860	1972	1924	1678	1468
40.0	1358	1371	1506	1742	1852	2012	2187	2101	1831	1543
42.5	1358	1377	1557	1841	1972	2151	2392	2256	1986	1598
45.0	1379	1406	1634	1986	2115	2302	2539	2409	2090	1655
47.5	1436	1463	1750	2162	2303	2507	2691	2585	2133	1781
50.0	1461	1491	1833	2317	2497	2708	2853	2690	2245	1876
52.5	1467	1496	1857	2394	2627	2860	3018	2776	2371	2007
55.0	1689	1686	1951	2454	2691	2917	3125	2869	2512	2274
57.5	2538	2496	2540	2710	2841	2961	3166	2878	2608	2462
60.0	3408	3391	3403	3384	3336	3184	3096	2739	2590	2636
62.5	3731	3759	3822	3911	3886	3682	3026	2473	2513	2826
65.0	3041	3092	3506	4076	4183	4026	3280	2169	2259	2832
67.5	1232	1279	1841	3211	3934	4237	3623	1946	1811	2679
70.0	590	593	740	1349	2346	3406	3895	2213	1272	2102
72.5	464	469	539	763	1016	1486	3632	3094	879	1217
75.0	386	397	447	560	661	806	1881	2563	819	436
77.5	329	338	372	447	500	582	793	1375	487	202
80.0	288	296	317	354	379	439	543	533	288	138
82.5	246	251	264	285	302	333	418	392	236	127
85.0	159	164	172	185	198	221	304	348	216	124
87.5	87	92	100	111	122	135	196	239	173	100
90.0	43	45	55	65	74	82	108	131	104	78
92.5	23	25	35	42	46	50	62	73	68	69
95.0	24	23	34	40	42	46	54	58	62	65
97.5	27	25	34	40	43	46	53	56	61	56
100.0	29	25	34	40	43	46	52	54	57	48
102.5	30	26	34	41	43	46	52	52	50	37
105.0	31	27	34	41	44	46	50	47	42	32
107.5	31	29	34	41	44	46	48	41	35	29
110.0	32	30	33	41	43	45	44	36	29	27
112.5	32	31	33	40	42	43	38	31	26	25
115.0	32	32	32	39	40	39	34	28	23	25
117.5	32	32	32	37	37	36	30	25	22	24
120.0	32	32	31	34	34	32	28	24	21	23
122.5	32	31	29	31	31	30	27	23	21	23
125.0	31	30	27	28	29	28	26	23	21	23
127.5	29	28	26	26	27	27	25	23	22	23
130.0	27	27	25	25	26	25	25	24	22	23

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CANDELA TABULATION - (Cont.)

132.5	27	26	25	24	25	25	25	23	23	24
135.0	26	26	25	24	24	25	24	23	22	24
137.5	26	26	25	24	23	23	21	20	21	23
140.0	25	25	23	21	20	19	17	17	18	21
142.5	22	21	20	17	16	14	13	13	14	17
145.0	18	17	16	13	12	11	10	10	12	13
147.5	13	12	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	221	221	221	221	221	221	221	221	221	221
2.5	224	221	219	216	210	207	205	205	202	200
5.0	229	227	220	208	198	189	180	172	160	153
7.5	238	229	219	203	184	160	139	132	129	125
10.0	256	241	226	196	160	136	131	125	120	116
12.5	271	252	233	189	144	134	126	120	120	118
15.0	313	269	246	183	146	133	126	123	113	108
17.5	346	289	255	183	152	135	127	111	100	94
20.0	407	326	283	197	162	140	114	98	87	83
22.5	484	372	322	216	170	131	100	85	80	79
25.0	590	440	379	247	168	110	89	78	75	72
27.5	681	544	433	266	149	95	81	74	68	66
30.0	834	614	517	265	117	87	78	69	62	60
32.5	945	701	570	252	100	84	73	63	58	56
35.0	1029	774	590	222	92	80	67	60	55	52
37.5	1109	818	595	194	88	75	62	59	54	50
40.0	1157	858	609	164	85	70	61	60	52	41
42.5	1218	923	581	130	82	68	63	59	46	36
45.0	1262	937	571	108	80	70	65	54	44	36
47.5	1311	960	603	104	80	72	64	51	44	36
50.0	1416	1041	611	104	84	76	61	51	45	36
52.5	1511	1118	648	99	86	85	62	52	52	63
55.0	1702	1266	704	89	74	84	70	60	78	82
57.5	1972	1456	750	84	68	68	75	79	90	60
60.0	2274	1667	806	79	66	64	77	84	71	45
62.5	2520	1817	853	75	66	66	75	69	66	50
65.0	2602	1811	719	73	66	69	69	57	62	52
67.5	2420	1465	493	73	66	68	63	62	58	50
70.0	1895	927	253	69	67	71	66	60	59	51
72.5	932	421	104	69	67	69	64	61	57	53
75.0	261	148	86	69	68	66	65	62	58	54
77.5	171	113	78	71	69	66	67	64	60	56

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CANDELA TABULATION - (Cont.)

80.0	127	97	71	72	69	66	69	65	61	58
82.5	100	81	69	77	72	68	72	67	64	60
85.0	85	62	66	78	73	69	74	70	64	61
87.5	70	52	63	79	74	69	75	71	66	61
90.0	59	44	66	79	74	69	76	72	68	63
92.5	54	45	65	78	75	68	75	73	71	65
95.0	50	57	61	76	73	65	72	72	70	65
97.5	46	62	60	69	68	60	69	68	67	62
100.0	47	60	57	60	63	57	64	65	65	59
102.5	46	54	53	52	58	55	61	62	63	55
105.0	42	48	48	46	52	53	59	60	60	50
107.5	38	42	44	42	48	50	57	59	59	46
110.0	35	38	39	39	43	47	54	57	56	41
112.5	32	36	36	37	39	44	51	55	53	38
115.0	30	33	34	36	37	42	49	52	49	36
117.5	28	30	32	34	36	41	46	49	45	33
120.0	27	29	30	33	35	39	44	46	40	31
122.5	25	27	29	32	34	37	42	43	36	30
125.0	25	26	27	31	34	37	40	39	33	29
127.5	24	25	27	30	33	36	37	36	29	28
130.0	25	25	27	30	33	36	36	33	27	27
132.5	25	26	27	30	32	33	34	30	26	26
135.0	25	26	27	30	30	29	28	26	25	25
137.5	25	26	27	28	27	24	21	21	21	24
140.0	23	24	24	24	23	19	15	14	16	19
142.5	19	20	21	20	17	14	12	11	12	14
145.0	15	15	15	14	12	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	221	221
2.5	198	198
5.0	147	146
7.5	124	124
10.0	116	114
12.5	116	116
15.0	104	104
17.5	91	90
20.0	81	80
22.5	77	76
25.0	70	70

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CANDELA TABULATION - (Cont.)

27.5	63	62
30.0	58	57
32.5	55	54
35.0	52	52
37.5	48	47
40.0	40	39
42.5	36	36
45.0	36	36
47.5	36	36
50.0	37	37
52.5	70	72
55.0	82	84
57.5	34	35
60.0	32	34
62.5	32	32
65.0	32	31
67.5	32	28
70.0	31	25
72.5	32	23
75.0	34	21
77.5	34	19
80.0	35	18
82.5	36	19
85.0	37	20
87.5	37	23
90.0	38	25
92.5	40	32
95.0	41	37
97.5	41	41
100.0	40	44
102.5	39	45
105.0	38	44
107.5	37	42
110.0	37	40
112.5	36	38
115.0	36	36
117.5	35	36
120.0	34	34
122.5	32	33
125.0	31	32
127.5	29	30
130.0	28	28
132.5	27	27
135.0	26	26
137.5	25	25
140.0	20	20
142.5	15	15
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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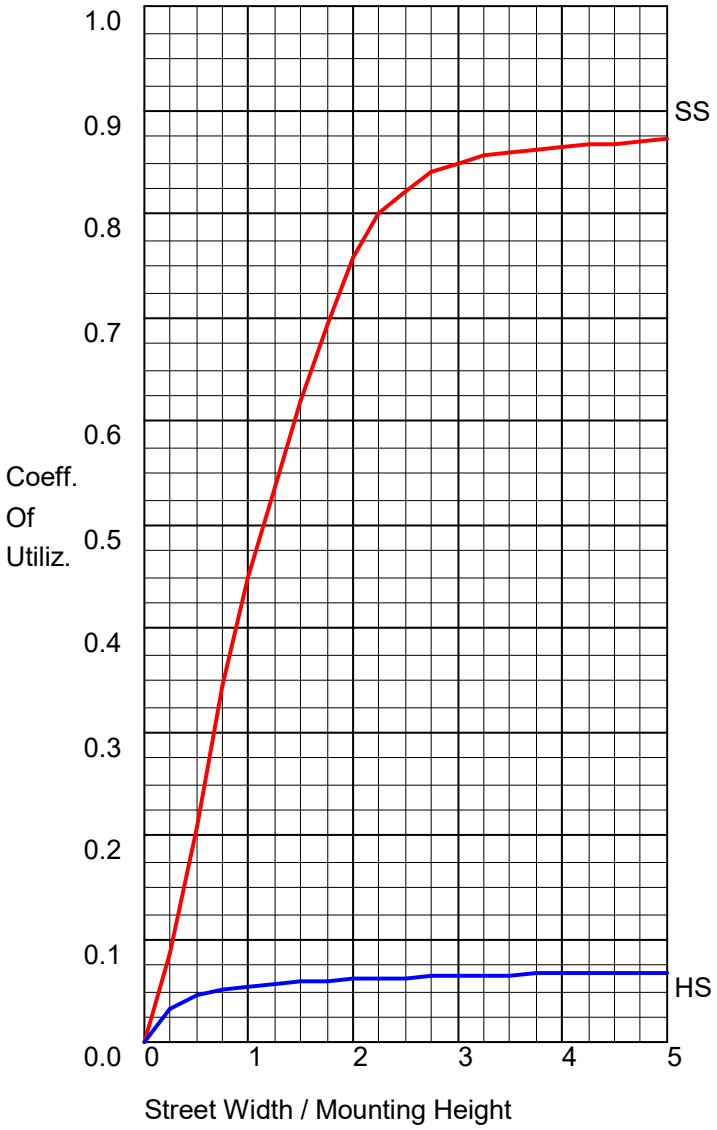
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	4599.0	88.8
Downward House Side	377.0	7.3
Downward Total	4976.0	96.0
Upward Street Side	91.6	1.8
Upward House Side	113.1	2.2
Upward Total	204.7	4.0
Total Flux	5180.7	100.0

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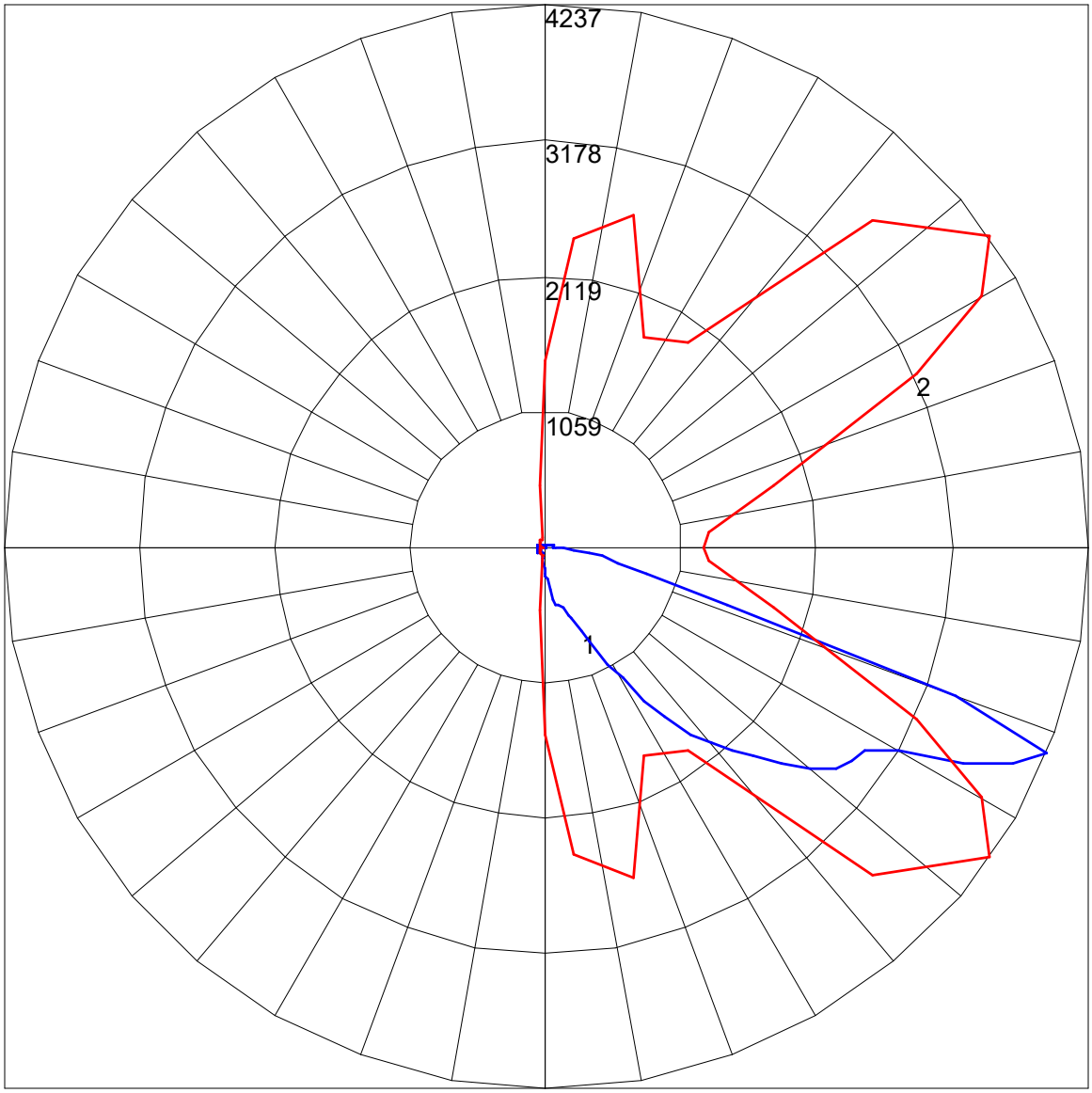
POLAR GRAPH



Maximum Candela = 4237 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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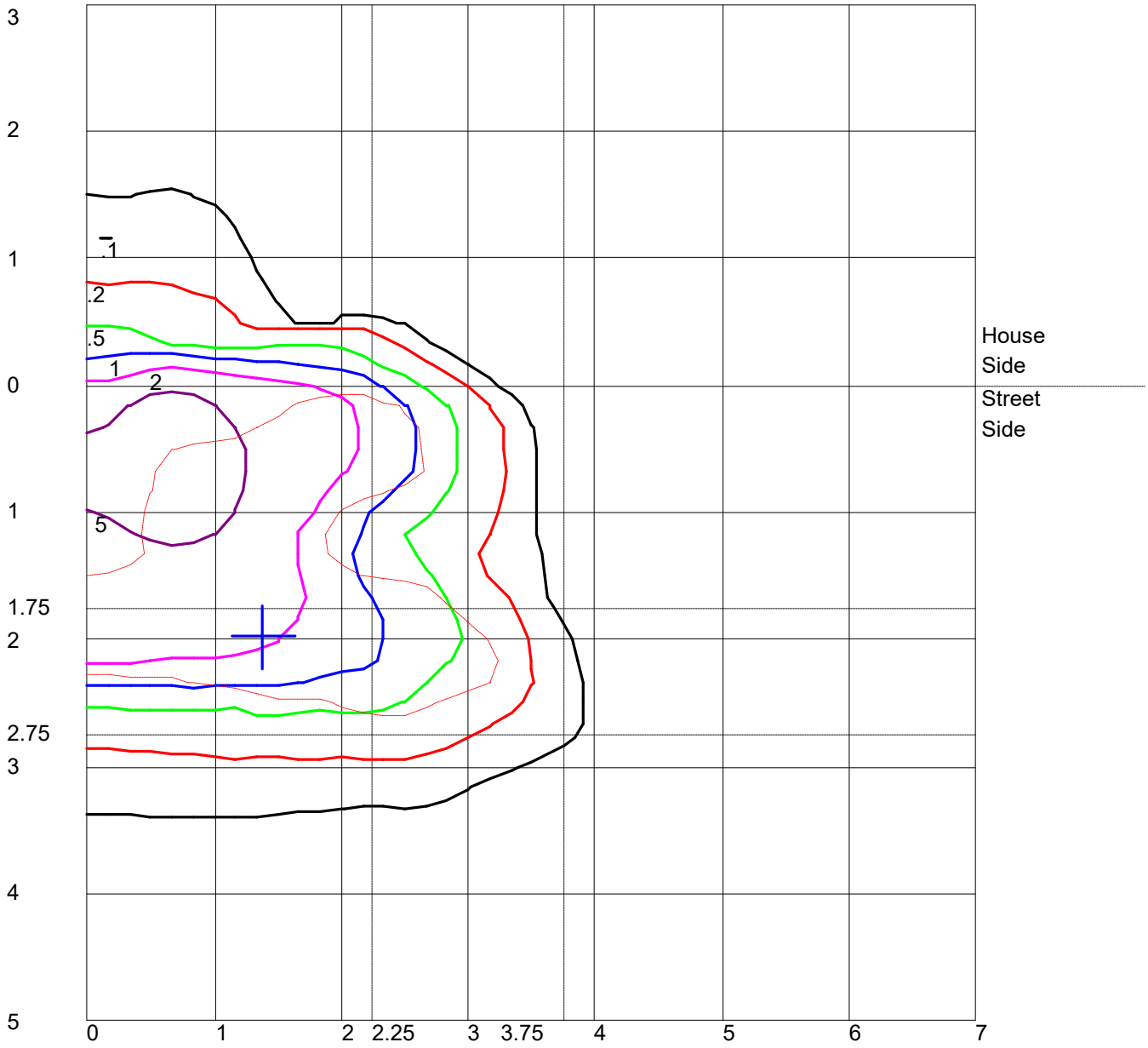
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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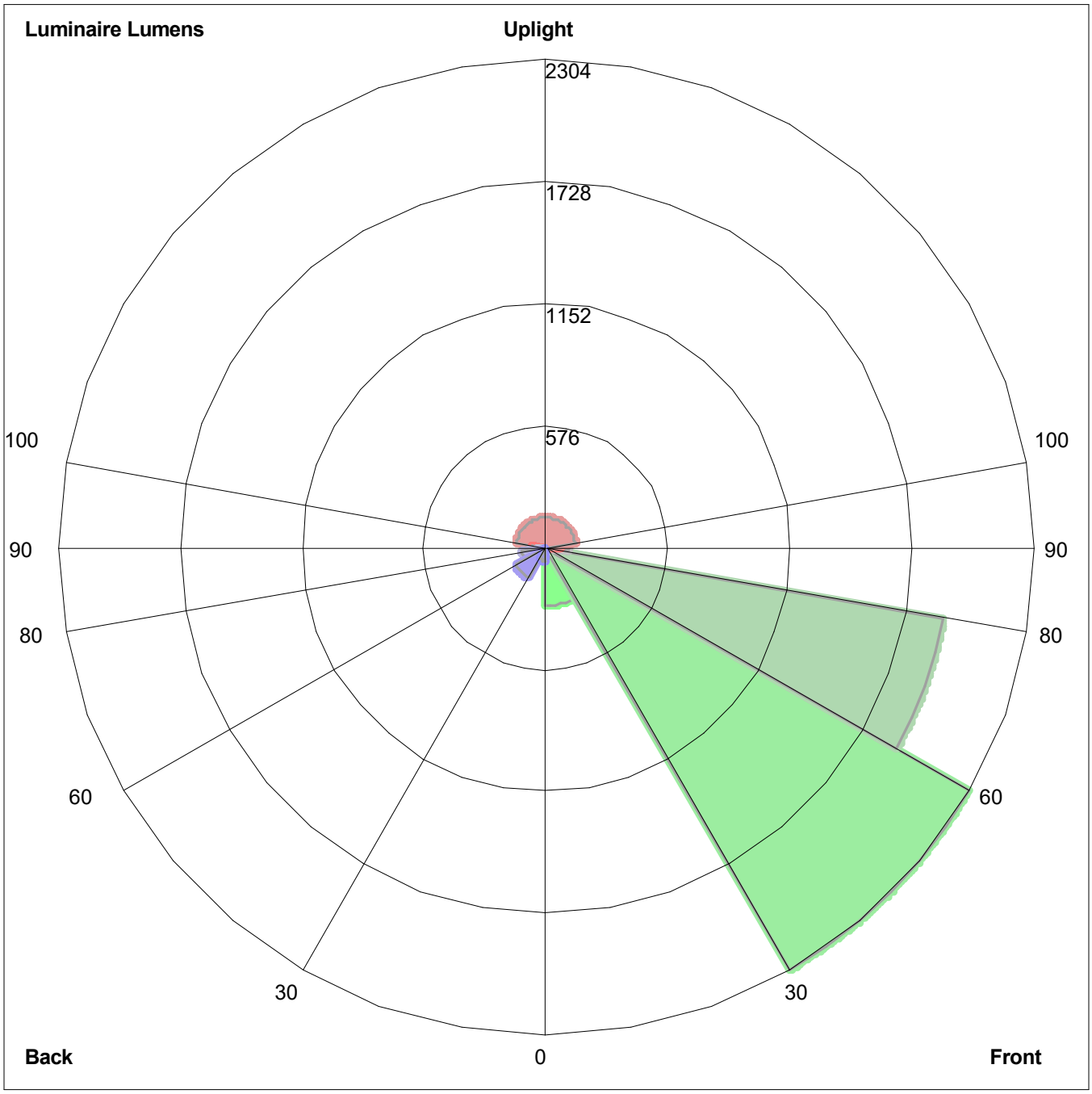
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=274.3, Medium=2304.2, High=1910.3, Very High=110.2
Back: Low=61.7, Medium=167.3, High=112.5, Very High=35.5
Uplight: Low=64.0, High=140.8

BUG Rating : B1-U3-G2

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