IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-10L-SIL-3-40-70CRI-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-3-40-70CRI-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] 4000

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5396
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	81
Total Luminaire Watts	67
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	4413
Maximum Candela Angle	35H 67.5V
Maximum Candela (<90 Degrees Vertical)	4413
Maximum Candela Angle (<90 Degrees Vertical)	35H 67.5V
Maximum Candela At 90 Degrees Vertical	136 (2.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	566 (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)	285.7	N.A.	5.3
FM - Front-Medium (30-60)	2400.0	N.A.	44.5
FH - Front-High (60-80)	1989.7	N.A.	36.9
FVH - Front-Very High (80-90)	114.8	N.A.	2.1
BL - Back-Low (0-30)	64.3	N.A.	1.2
BM - Back-Medium (30-60)	174.3	N.A.	3.2
BH - Back-High (60-80)	117.2	N.A.	2.2
BVH - Back-Very High (80-90)	37.0	N.A.	0.7
UL - Uplight-Low (90-100)	66.7	N.A.	1.2
UH - Uplight-High (100-180)	146.4	N.A.	2.7
Total	5396.1	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	230	230	230	230	230	230	230	230	230	230
2.5	263	260	258	256	258	253	251	245	239	236
5.0	362	358	356	345	346	338	327	304	275	250
7.5	422	423	411	418	423	426	412	368	330	283
10.0	460	465	476	462	468	472	444	437	395	329
12.5	477	476	477	488	486	483	495	476	464	377
15.0	527	514	521	530	519	516	518	519	497	447
17.5	541	553	546	547	565	581	557	562	559	511
20.0	611	619	624	639	621	622	643	628	616	594
22.5	717	711	712	723	726	732	718	724	718	681
25.0	800	806	845	881	863	855	867	859	849	838
27.5	965	982	1001	1009	1035	1073	1036	1026	1041	945
30.0	1100	1090	1170	1229	1238	1242	1320	1247	1194	1105
32.5	1261	1274	1348	1387	1436	1499	1533	1496	1411	1290
35.0	1354	1366	1446	1595	1660	1693	1805	1788	1612	1403
37.5	1392	1424	1519	1709	1804	1937	2054	2004	1748	1529
40.0	1414	1428	1569	1814	1929	2096	2278	2188	1907	1607
42.5	1414	1434	1622	1918	2054	2240	2491	2350	2069	1664
45.0	1436	1464	1702	2069	2203	2398	2645	2509	2177	1724
47.5	1496	1524	1823	2252	2399	2611	2803	2692	2222	1855
50.0	1522	1553	1909	2413	2601	2821	2972	2802	2338	1954
52.5	1528	1558	1934	2494	2736	2979	3143	2891	2470	2090
55.0	1759	1756	2032	2556	2803	3038	3255	2988	2616	2369
57.5	2643	2600	2646	2823	2959	3084	3298	2998	2716	2564
60.0	3550	3532	3544	3525	3475	3316	3225	2853	2698	2746
62.5	3886	3915	3981	4074	4047	3835	3152	2576	2617	2943
65.0	3167	3221	3652	4245	4357	4193	3416	2259	2353	2950
67.5	1283	1332	1917	3344	4097	4413	3774	2027	1886	2790
70.0	614	618	771	1405	2443	3548	4057	2305	1325	2189
72.5	483	488	561	795	1058	1548	3783	3223	916	1268
75.0	402	414	466	583	688	839	1959	2670	853	454
77.5	343	352	387	466	521	606	826	1432	507	210
80.0	300	308	330	369	395	457	566	555	300	144
82.5	256	261	275	297	315	347	435	408	246	132
85.0	166	171	179	193	206	230	317	362	225	129
87.5	91	96	104	116	127	141	204	249	180	104
90.0	45	47	57	68	77	85	113	136	108	81
92.5	24	26	36	44	48	52	65	76	71	72
95.0	25	24	35	42	44	48	56	60	65	68
97.5	28	26	35	42	45	48	55	58	64	58
100.0	30	26	35	42	45	48	54	56	59	50
102.5	31	27	35	43	45	48	54	54	52	39
105.0	32	28	35	43	46	48	52	49	44	33
107.5	32	30	35	43	46	48	50	43	36	30
110.0	33	31	34	43	45	47	46	37	30	28
112.5	33	32	34	42	44	45	40	32	27	26
115.0	33	33	33	41	42	41	35	29	24	26
117.5	33	33	33	39	39	37	31	26	23	25
120.0	33	33	32	35	35	33	29	25	22	24
122.5	33	32	30	32	32	31	28	24	22	24
125.0	32	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	230	230	230	230	230	230	230	230	230	230
2.5	233	230	228	225	219	216	214	213	210	208
5.0	239	236	229	217	206	197	187	179	167	159
7.5	248	238	228	211	192	167	145	137	134	130
10.0	267	251	235	204	167	142	136	130	125	121
12.5	282	262	243	197	150	140	131	125	125	123
15.0	326	280	256	191	152	139	131	128	118	112
17.5	360	301	266	191	158	141	132	116	104	98
20.0	424	340	295	205	169	146	119	102	91	86
22.5	504	387	335	225	177	136	104	89	83	82
25.0	614	458	395	257	175	115	93	81	78	75
27.5	709	567	451	277	155	99	84	77	71	69
30.0	869	639	538	276	122	91	81	72	65	62
32.5	984	730	594	262	104	87	76	66	60	58
35.0	1072	806	615	231	96	83	70	62	57	54
37.5	1155	852	620	202	92	78	65	61	56	52
40.0	1205	894	634	171	89	73	64	62	54	43
42.5	1269	961	605	135	85	71	66	61	48	38
45.0	1314	976	595	113	83	73	68	56	46	37
47.5	1366	1000	628	108	83	75	67	53	46	37
50.0	1475	1084	636	108	87	79	64	53	47	38
52.5	1574	1164	675	103	90	89	65	54	54	66
55.0	1773	1319	733	93	77	87	73	63	81	85
57.5	2054	1517	781	88	71	71	78	82	94	63
60.0	2369	1736	839	82	69	67	80	88	74	47
62.5	2625	1893	888	78	69	69	78	72	69	52
65.0	2710	1886	749	76	69	72	72	59	65	54
67.5	2521	1526	513	76	69	71	66	65	60	52
70.0	1974	966	264	72	70	74	69	63	61	53
72.5	971	438	108	72	70	72	67	64	59	55
75.0	272	154	90	72	71	69	68	65	60	56
77.5	178	118	81	74	72	69	70	67	63	58

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CANDELA TABULATION - (Cont.)

80.0	132	101	74	75	72	69	72	68	64	60
82.5	104	84	72	80	75	71	75	70	67	63
85.0	89	65	69	81	76	72	77	73	67	64
87.5	73	54	66	82	77	72	78	74	69	64
90.0	61	46	69	82	77	72	79	75	71	66
92.5	56	47	68	81	78	71	78	76	74	68
95.0	52	59	64	79	76	68	75	75	73	68
97.5	48	65	62	72	71	63	72	71	70	65
100.0	49	62	59	63	66	59	67	68	68	61
102.5	48	56	55	54	60	57	64	65	66	57
105.0	44	50	50	48	54	55	61	63	63	52
107.5	40	44	46	44	50	52	59	61	61	48
110.0	36	40	41	41	45	49	56	59	58	43
112.5	33	37	38	39	41	46	53	57	55	40
115.0	31	34	35	37	39	44	51	54	51	37
117.5	29	31	33	35	37	43	48	51	47	34
120.0	28	30	31	34	36	41	46	48	42	32
122.5	26	28	30	33	35	39	44	45	38	31
125.0	26	27	28	32	35	39	42	41	34	30
127.5	25	26	28	31	34	38	39	37	30	29
130.0	26	26	28	31	34	37	37	34	28	28
132.5	26	27	28	31	33	34	35	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	230	230
2.5	206	206
5.0	153	152
7.5	129	129
10.0	121	119
12.5	121	121
15.0	108	108
17.5	95	94
20.0	84	83
22.5	80	79
25.0	73	73

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CANDELA TABULATION - (Cont.)

27.5	66	65
30.0	60	59
32.5	57	56
35.0	54	54
37.5	50	49
40.0	42	41
42.5	38	37
45.0	37	37
47.5	37	37
50.0	39	39
52.5	73	75
55.0	85	87
57.5	35	36
60.0	33	35
62.5	33	33
65.0	33	32
67.5	33	29
70.0	32	26
72.5	33	24
75.0	35	22
77.5	35	20
80.0	36	19
82.5	38	20
85.0	39	21
87.5	39	24
90.0	40	26
92.5	42	33
95.0	43	39
97.5	43	43
100.0	42	46
102.5	41	47
105.0	40	46
107.5	39	44
110.0	39	42
112.5	38	40
115.0	37	38
117.5	36	37
120.0	35	35
122.5	33	34
125.0	32	33
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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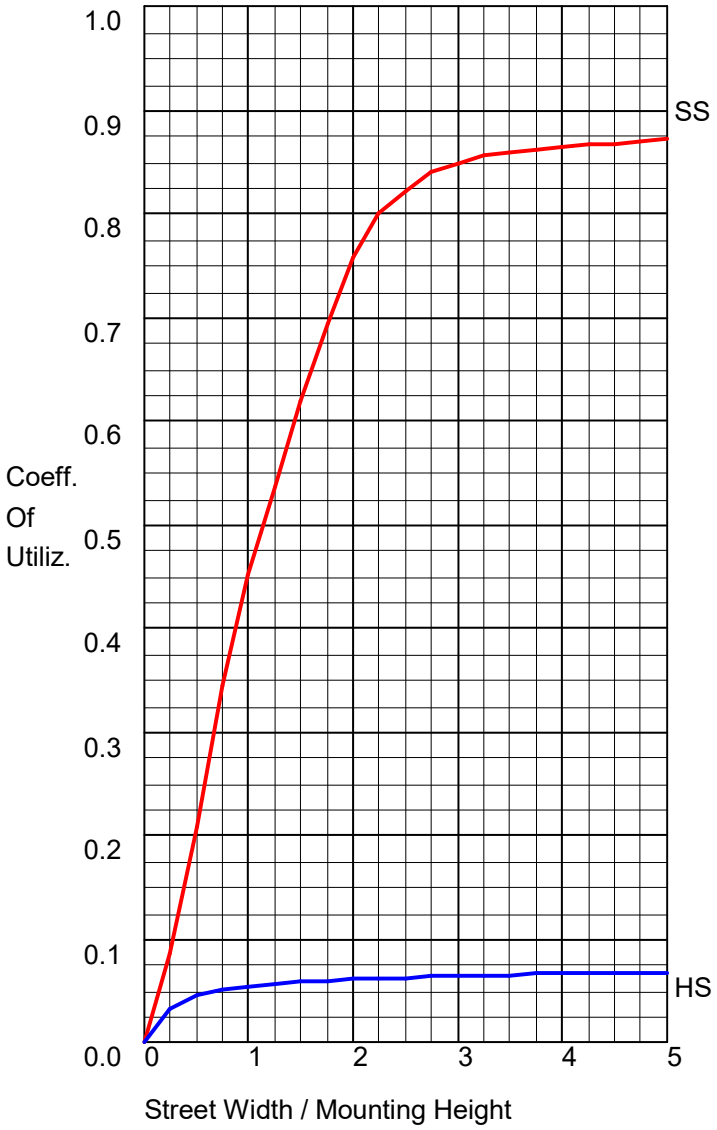
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	4790.2	88.8
Downward House Side	392.8	7.3
Downward Total	5183.0	96.1
Upward Street Side	95.3	1.8
Upward House Side	117.8	2.2
Upward Total	213.1	3.9
Total Flux	5396.1	100.0

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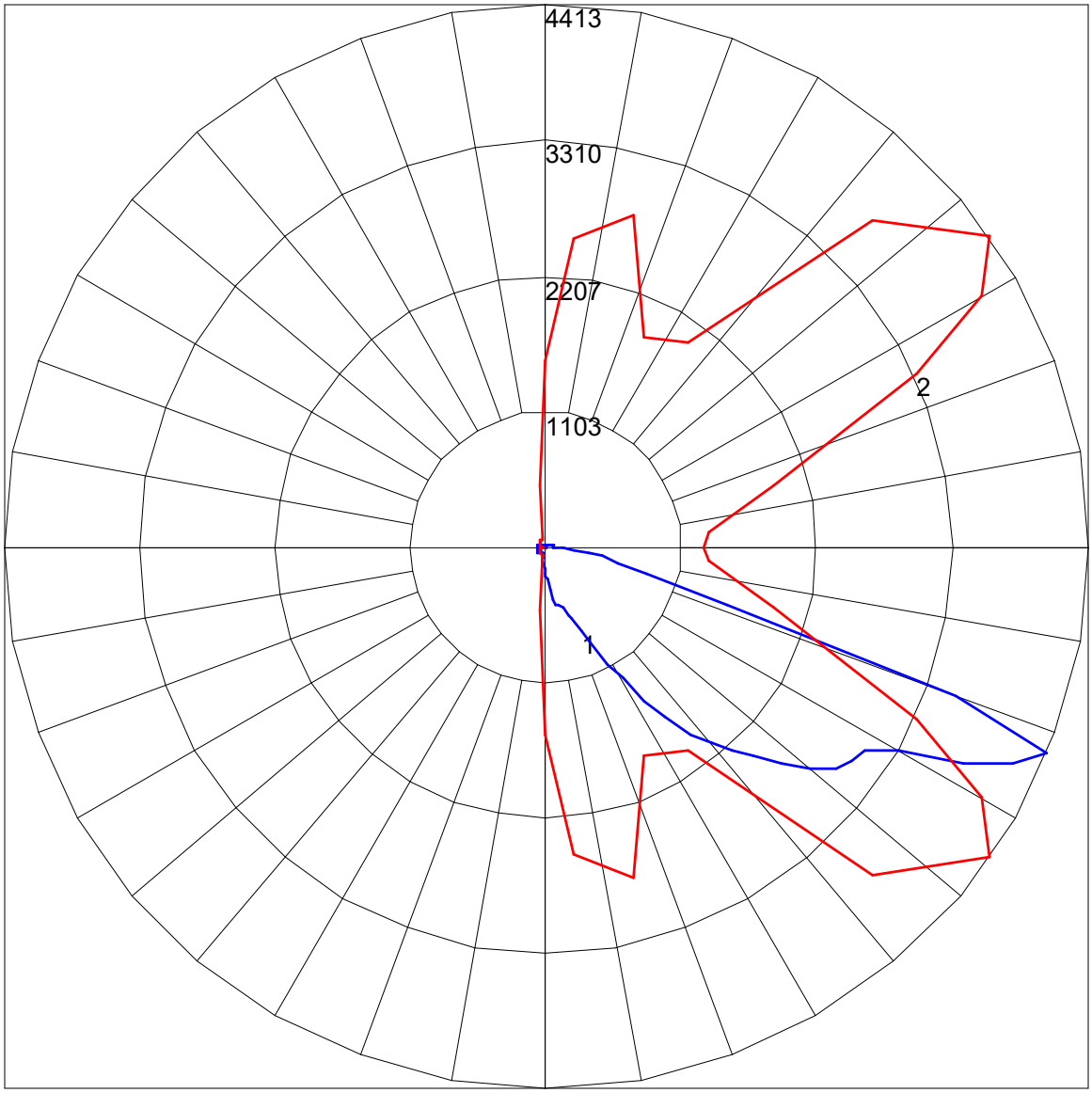
POLAR GRAPH



Maximum Candela = 4413 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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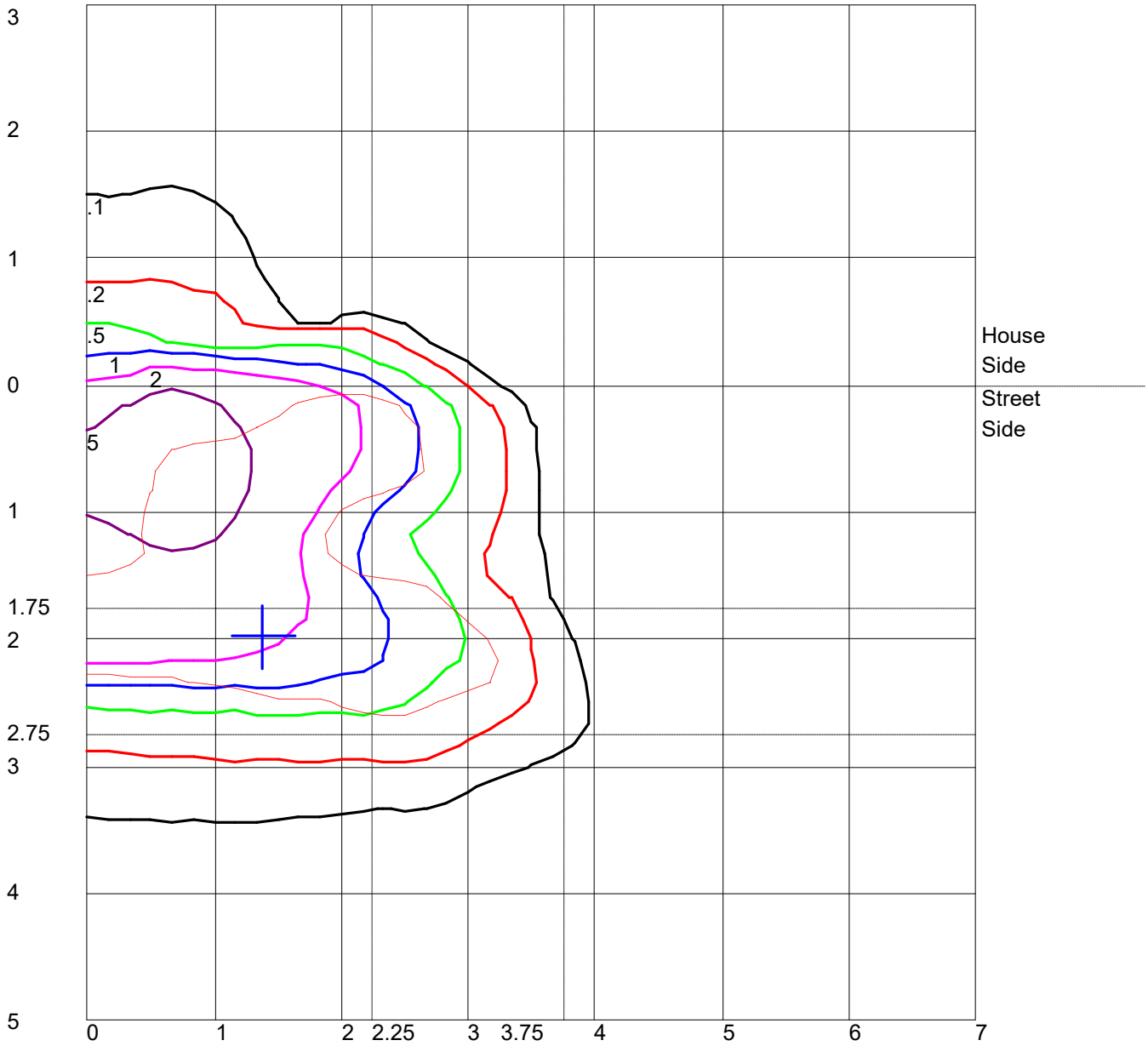
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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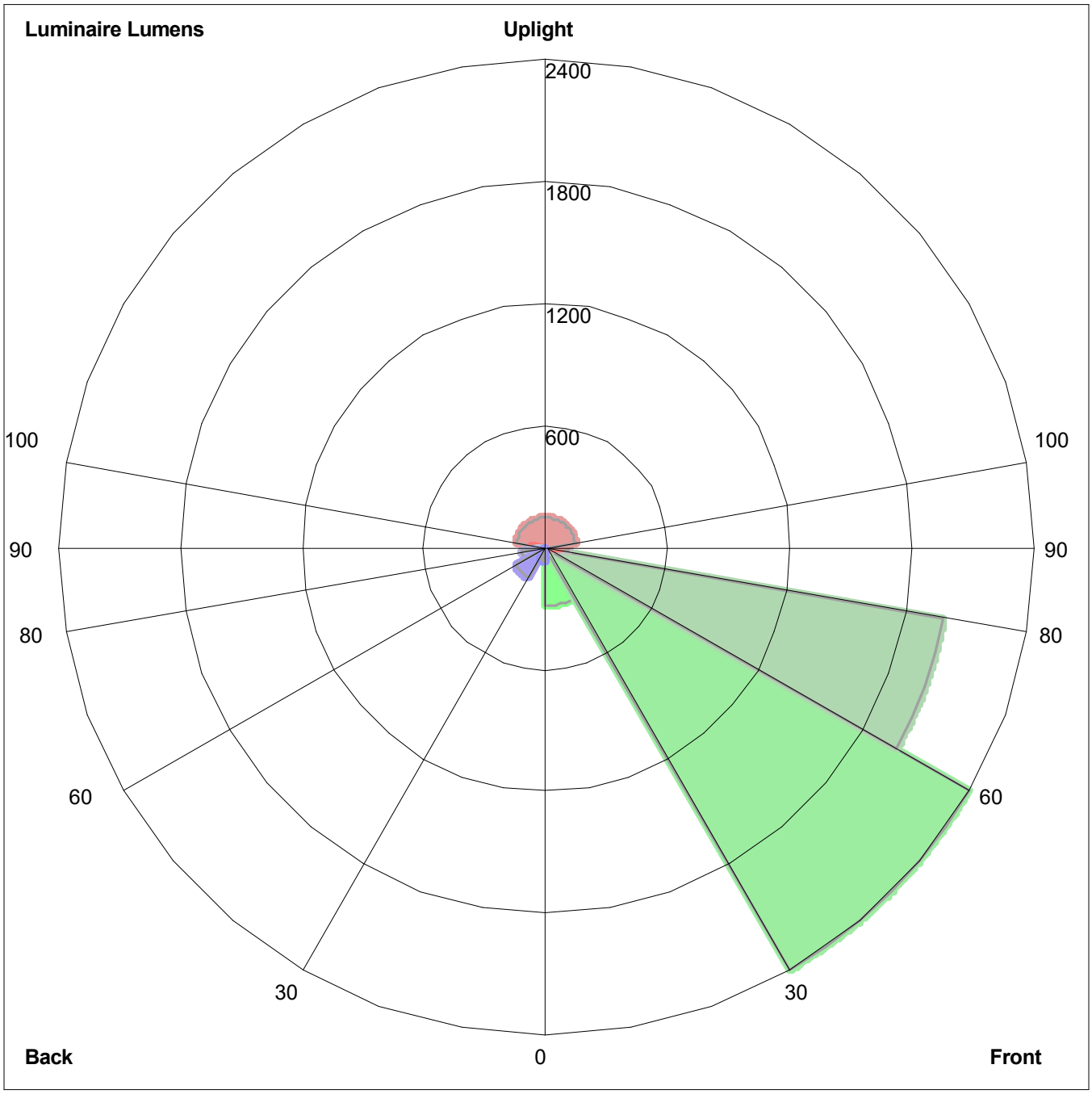
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=285.7, Medium= 2400.0, High=1989.7, Very High=114.8
Back: Low=64.3, Medium=174.3, High=117.2, Very High=37.0
Uplight: Low=66.7, High=146.4

BUG Rating : B1-U3-G2

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