IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-10L-SIL-2-40-70CRI-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12638
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/26/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-10L-SIL-2-40-70CRI-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 I
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4153
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	62
Total Luminaire Watts	67
Ballast Factor	1.00
Upward Waste Light Ratio	0.06
Maximum Candela	5010
Maximum Candela Angle	80H 60V
Maximum Candela (<90 Degrees Vertical)	5010
Maximum Candela Angle (<90 Degrees Vertical)	80H 60V
Maximum Candela At 90 Degrees Vertical	91 (2.2% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	315 (7.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	487.6	N.A.	11.7
FM - Front-Medium (30-60)	1981.2	N.A.	47.7
FH - Front-High (60-80)	828.2	N.A.	19.9
FVH - Front-Very High (80-90)	90.4	N.A.	2.2
BL - Back-Low (0-30)	119.7	N.A.	2.9
BM - Back-Medium (30-60)	257.8	N.A.	6.2
BH - Back-High (60-80)	108.9	N.A.	2.6
BVH - Back-Very High (80-90)	37.0	N.A.	0.9
UL - Uplight-Low (90-100)	67.8	N.A.	1.6
UH - Uplight-High (100-180)	174.7	N.A.	4.2
Total	4153.3	N.A.	100.0
BUG Rating	B1-U3-G1		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	35	45	55	65	75	80
0.0	652	652	652	652	652	652	652	652	652	652
2.5	674	674	681	685	676	671	660	652	650	647
5.0	766	760	773	759	759	754	753	729	670	653
7.5	696	706	708	729	751	783	783	767	735	696
10.0	786	787	760	802	787	768	786	786	792	759
12.5	841	839	807	809	840	823	785	842	879	856
15.0	887	934	915	919	896	859	914	886	942	940
17.5	1044	995	1015	984	1010	1010	977	994	1043	1032
20.0	1104	1115	1141	1117	1098	1104	1136	1128	1131	1138
22.5	1230	1252	1242	1210	1282	1236	1277	1277	1253	1326
25.0	1250	1248	1284	1333	1348	1432	1447	1444	1437	1468
27.5	1272	1263	1292	1311	1459	1543	1658	1679	1631	1716
30.0	1174	1193	1224	1315	1447	1693	1864	1913	1895	1900
32.5	1064	1069	1147	1242	1459	1703	2052	2230	2231	2196
35.0	917	920	994	1163	1409	1740	2178	2524	2482	2403
37.5	770	769	841	1015	1336	1760	2228	2740	2766	2635
40.0	625	619	687	855	1181	1709	2256	2946	3062	2887
42.5	490	495	551	698	1009	1578	2244	3095	3328	3269
45.0	390	394	442	569	839	1391	2206	3234	3684	3578
47.5	329	332	366	474	681	1189	2109	3211	4029	4006
50.0	309	308	328	415	561	987	1916	3194	4312	4357
52.5	324	319	317	386	483	785	1689	3106	4482	4387
55.0	464	447	378	379	441	602	1449	2883	4555	4569
57.5	825	790	643	463	414	482	1119	2557	4546	4744
60.0	988	954	851	703	466	418	754	2074	4522	5010
62.5	709	689	672	697	619	351	479	1541	4376	4976
65.0	531	533	517	517	535	418	326	1012	3897	4390
67.5	490	491	471	455	422	411	288	584	2788	3458
70.0	457	459	432	416	384	349	340	342	1689	2325
72.5	357	360	352	364	357	323	342	262	758	1159
75.0	303	303	288	291	321	307	300	314	298	500
77.5	267	269	265	267	293	306	267	364	166	202
80.0	244	248	245	245	271	315	263	280	174	147
82.5	208	210	218	228	256	295	284	221	181	121
85.0	127	136	145	155	186	244	274	199	161	121
87.5	68	74	87	93	103	127	160	165	115	99
90.0	37	42	56	62	69	77	88	91	84	81
92.5	30	33	46	51	56	61	63	69	74	75
95.0	33	34	46	52	58	63	63	69	74	64
97.5	38	36	48	54	59	63	62	69	68	52
100.0	41	37	48	54	59	63	61	65	54	45
102.5	43	39	48	55	59	62	59	59	45	43
105.0	45	41	48	55	59	61	55	51	40	42
107.5	46	43	47	56	59	59	50	44	37	39
110.0	46	44	46	56	58	55	45	39	35	37
112.5	46	45	46	55	56	50	41	34	33	35
115.0	47	46	46	54	53	46	38	31	31	33
117.5	47	47	46	52	50	43	36	29	30	32
120.0	47	47	45	49	47	41	34	28	30	30
122.5	47	47	43	46	44	39	33	28	28	29
125.0	46	46	42	43	42	38	32	28	28	28
127.5	45	44	41	41	41	37	32	28	28	28
130.0	43	43	41	40	39	36	33	29	28	28

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CANDELA TABULATION - (Cont.)

132.5	42	42	40	39	39	37	33	29	29	29
135.0	42	41	40	39	38	35	30	29	30	30
137.5	42	41	40	38	35	30	27	27	29	30
140.0	40	39	37	33	28	24	22	23	25	26
142.5	35	34	32	27	22	18	17	17	20	21
145.0	28	28	25	20	15	13	12	12	15	15
147.5	20	20	17	14	10	7	7	8	9	10
150.0	14	13	12	9	5	1	2	4	5	5
152.5	10	10	7	4	1	0	0	0	1	1
155.0	3	3	2	1	0	0	0	0	0	0
157.5	1	1	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	1	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	**Horizontal Angles**									
	85	**90**	**95**	**105**	**115**	**125**	**135**	**145**	**155**	**165**
0.0	652	652	652	652	652	652	652	652	652	652
2.5	652	651	655	664	665	660	651	635	627	628
5.0	647	658	679	667	622	581	540	495	458	422
7.5	678	678	694	633	548	447	364	311	281	254
10.0	717	709	702	585	467	342	257	196	165	147
12.5	782	771	767	594	374	251	169	134	121	119
15.0	848	837	787	558	322	185	128	120	116	113
17.5	963	917	861	527	259	141	122	113	109	107
20.0	1076	993	895	493	209	129	116	109	106	100
22.5	1239	1128	1009	470	169	127	113	104	96	93
25.0	1391	1247	1047	417	150	125	111	96	87	80
27.5	1619	1395	1155	366	147	124	104	87	74	72
30.0	1846	1576	1220	305	146	120	96	76	67	65
32.5	2033	1688	1245	251	141	113	84	69	63	64
35.0	2241	1796	1259	206	135	104	75	65	63	62
37.5	2510	1948	1257	178	126	92	68	66	63	60
40.0	2761	2133	1220	165	116	80	68	67	60	49
42.5	3017	2256	1176	155	104	72	72	66	50	40
45.0	3364	2397	1124	148	95	75	76	57	44	38
47.5	3573	2509	1031	155	94	80	72	50	44	38
50.0	3763	2682	915	182	113	93	64	50	46	52
52.5	4009	2783	813	156	119	121	69	53	65	75
55.0	4280	2937	695	123	93	110	91	75	88	91
57.5	4433	2885	556	101	78	77	94	99	88	67
60.0	4613	2798	408	91	78	67	88	100	65	55
62.5	4531	2634	311	82	76	69	92	74	56	50
65.0	4015	2184	230	77	71	79	82	61	55	48
67.5	3230	1658	180	76	69	87	67	62	55	49
70.0	2354	1155	151	77	73	79	65	61	56	50
72.5	1380	727	120	75	76	71	64	61	56	52
75.0	752	468	98	74	77	69	65	62	58	53
77.5	260	194	82	76	74	69	67	63	60	54

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CANDELA TABULATION - (Cont.)

80.0	165	138	72	81	74	69	69	65	61	56
82.5	117	106	64	85	77	71	72	67	63	61
85.0	93	69	67	87	80	73	76	69	65	65
87.5	81	30	75	85	79	72	75	74	68	61
90.0	66	22	71	81	77	71	74	70	66	61
92.5	46	46	62	82	78	72	76	72	69	63
95.0	41	65	58	80	77	68	74	72	69	64
97.5	50	67	57	72	73	64	71	69	67	63
100.0	54	64	57	63	70	63	69	68	67	61
102.5	52	59	55	53	65	61	67	67	66	59
105.0	49	54	51	47	58	59	65	67	66	57
107.5	46	49	48	43	52	56	64	66	65	54
110.0	42	44	43	40	46	52	61	65	64	52
112.5	39	40	40	38	41	49	58	63	62	50
115.0	36	37	37	36	38	46	54	61	59	48
117.5	33	35	34	35	36	43	51	57	56	47
120.0	32	33	32	33	34	41	49	54	52	46
122.5	30	30	30	31	33	39	46	51	49	45
125.0	28	29	29	30	33	39	44	48	45	44
127.5	28	28	28	30	33	39	43	45	42	43
130.0	28	28	29	30	33	38	42	42	40	41
132.5	29	29	30	32	33	36	40	41	38	41
135.0	30	30	31	32	33	32	35	37	38	41
137.5	30	31	32	31	29	28	28	30	34	39
140.0	27	28	28	26	24	22	20	23	27	32
142.5	22	23	23	21	18	16	15	15	20	24
145.0	17	17	17	15	13	11	10	11	14	17
147.5	10	10	10	9	8	6	5	7	9	11
150.0	5	5	4	4	4	2	1	2	6	7
152.5	1	1	1	1	1	1	0	1	2	4
155.0	0	0	0	0	0	0	0	0	1	1
157.5	0	0	0	0	0	0	0	0	1	1
160.0	0	0	0	0	0	0	0	0	1	1
162.5	0	0	0	0	0	0	0	0	1	1
165.0	0	0	0	0	0	0	0	0	1	1
167.5	0	0	0	0	0	0	0	0	1	1
170.0	0	0	0	0	0	0	0	0	0	1
172.5	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	652	652
2.5	629	633
5.0	415	410
7.5	249	249
10.0	139	140
12.5	118	118
15.0	110	109
17.5	106	106
20.0	97	97
22.5	89	89
25.0	78	78

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CANDELA TABULATION - (Cont.)

27.5	70	69
30.0	65	65
32.5	65	65
35.0	64	63
37.5	59	59
40.0	47	46
42.5	40	40
45.0	39	39
47.5	39	40
50.0	61	64
52.5	78	80
55.0	80	80
57.5	50	52
60.0	43	43
62.5	39	39
65.0	35	35
67.5	34	32
70.0	33	29
72.5	33	27
75.0	35	26
77.5	36	24
80.0	37	23
82.5	40	26
85.0	45	29
87.5	40	29
90.0	41	34
92.5	43	41
95.0	44	46
97.5	45	50
100.0	46	52
102.5	47	54
105.0	48	54
107.5	50	54
110.0	52	54
112.5	52	53
115.0	52	52
117.5	51	52
120.0	50	51
122.5	50	50
125.0	48	49
127.5	46	47
130.0	44	45
132.5	43	43
135.0	42	42
137.5	41	41
140.0	35	35
142.5	27	27
145.0	19	20
147.5	12	12
150.0	8	8
152.5	4	4
155.0	2	2
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	0	0

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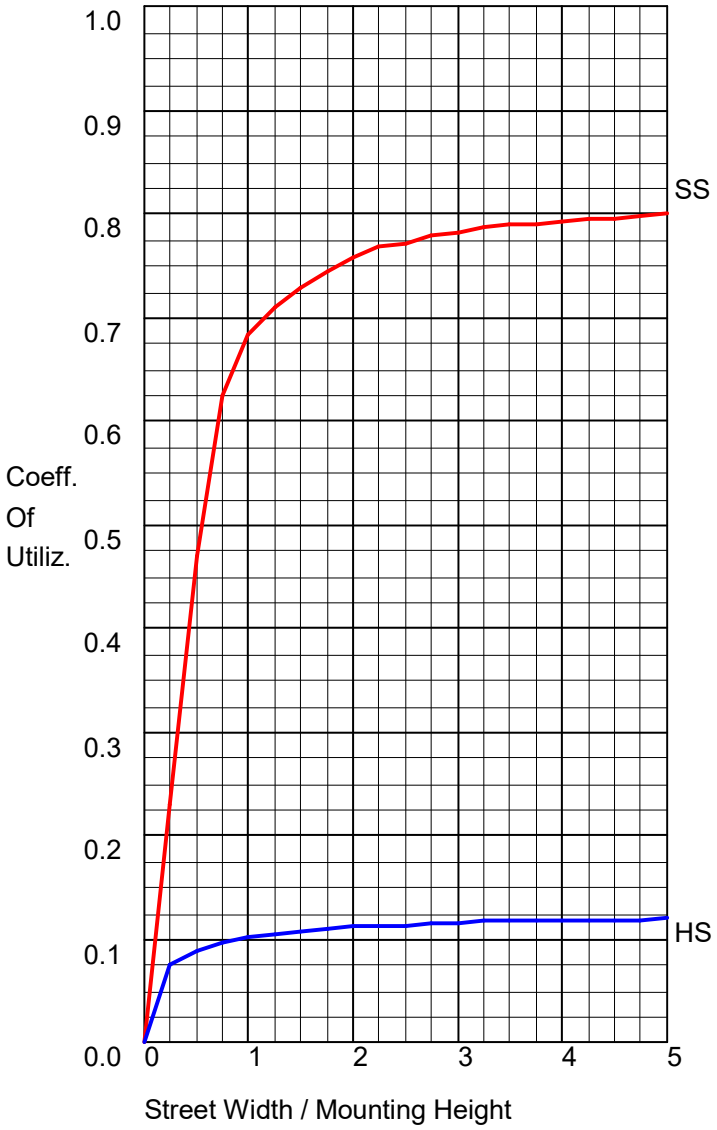
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	3387.4	81.6
Downward House Side	523.4	12.6
Downward Total	3910.8	94.2
Upward Street Side	115.3	2.8
Upward House Side	127.1	3.1
Upward Total	242.4	5.8
Total Flux	4153.2	100.0

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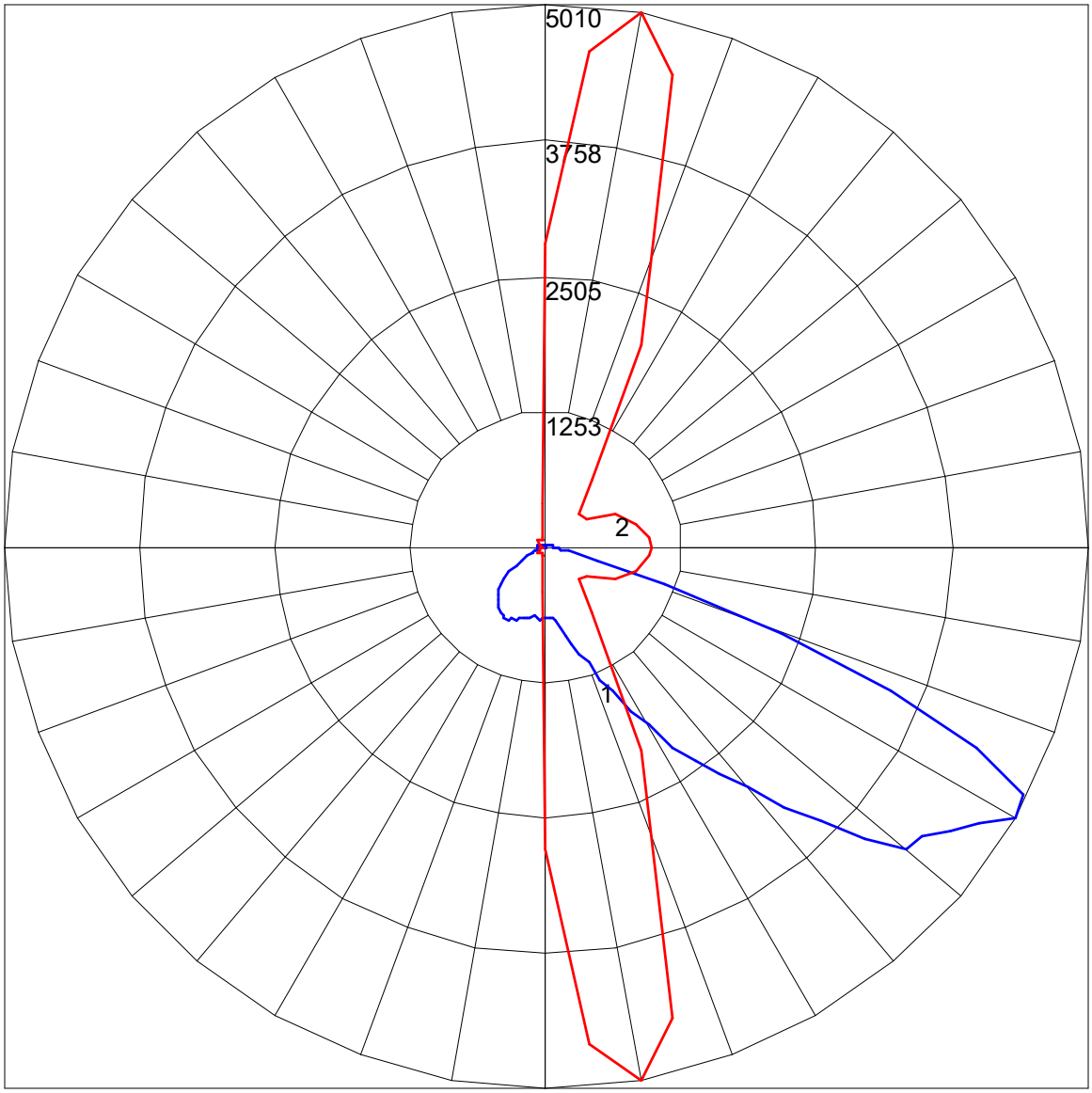
POLAR GRAPH



Maximum Candela = 5010 Located At Horizontal Angle = 80, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

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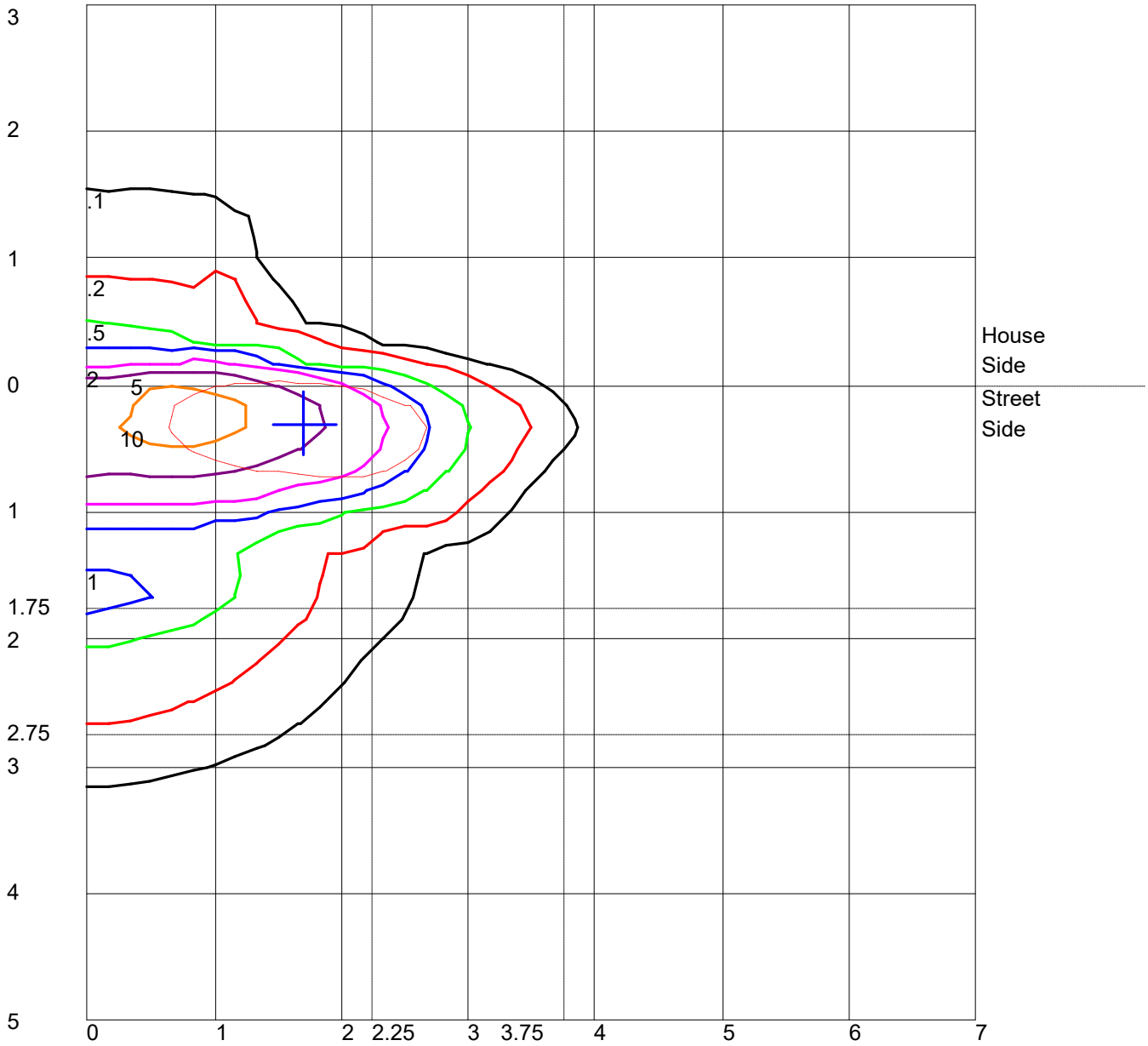
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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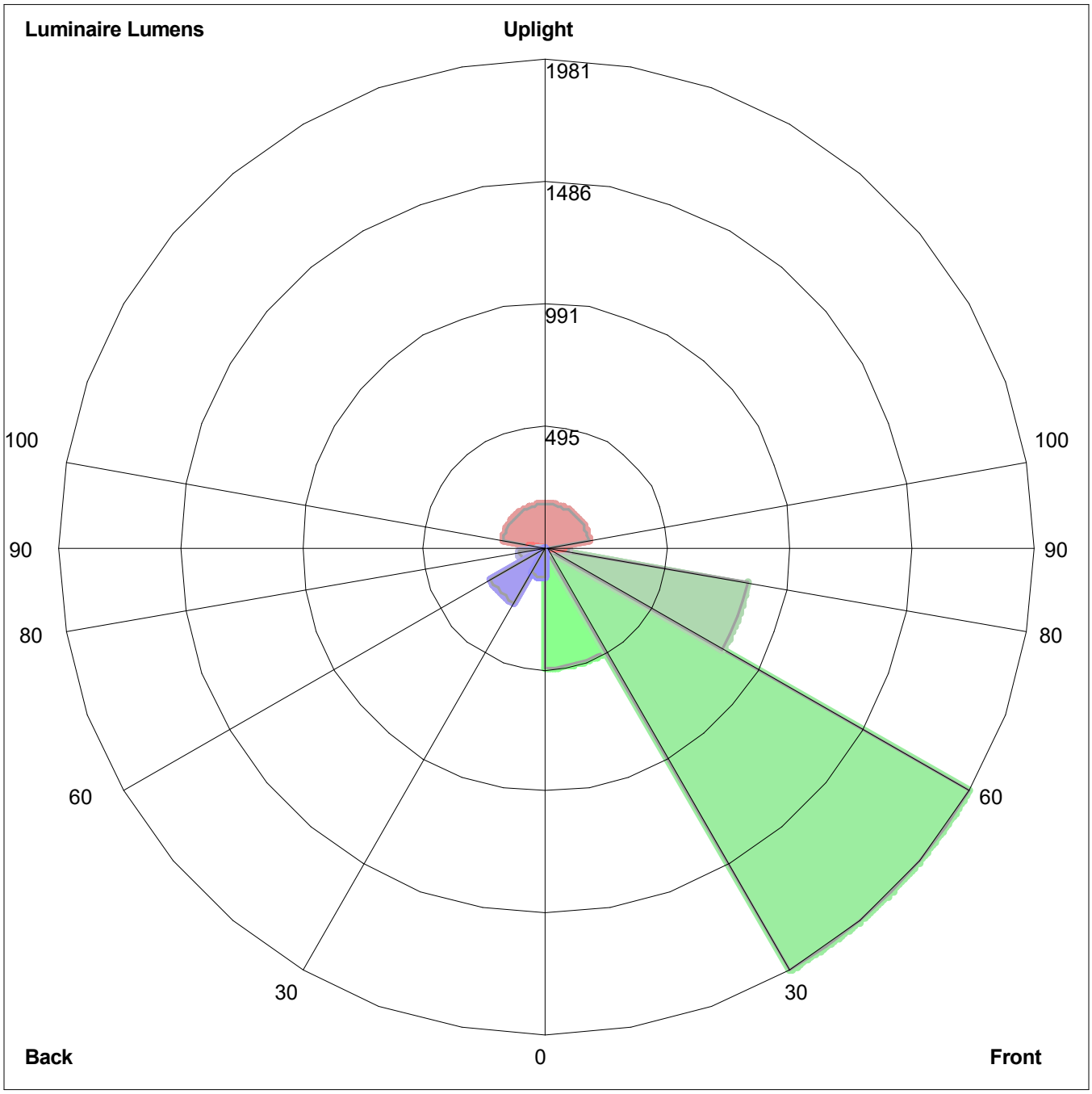
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=487.6, Medium=1981.2, High=828.2, Very High=90.4
Back: Low=119.7, Medium=257.8, High=108.9, Very High=37.0
Uplight: Low=67.8, High=174.7

BUG Rating : B1-U3-G1

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