IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-10L-SIL-FT-30-70CRI-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-12643
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUEDATE] 03/30/21
[TESTDATE] 03/29/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] MPP-LED-10L-SIL-FT-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 IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4942
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	74
Total Luminaire Watts	67
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	3948
Maximum Candela Angle	30H 67.5V
Maximum Candela (<90 Degrees Vertical)	3948
Maximum Candela Angle (<90 Degrees Vertical)	30H 67.5V
Maximum Candela At 90 Degrees Vertical	70 (1.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	689 (13.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	401.8	N.A.	8.1
FM - Front-Medium (30-60)	1984.5	N.A.	40.2
FH - Front-High (60-80)	1856.5	N.A.	37.6
FVH - Front-Very High (80-90)	79.3	N.A.	1.6
BL - Back-Low (0-30)	84.8	N.A.	1.7
BM - Back-Medium (30-60)	184.7	N.A.	3.7
BH - Back-High (60-80)	102.5	N.A.	2.1
BVH - Back-Very High (80-90)	33.3	N.A.	0.7
UL - Uplight-Low (90-100)	58.3	N.A.	1.2
UH - Uplight-High (100-180)	156.1	N.A.	3.2
Total	4941.8	N.A.	100.0
BUG Rating	B0-U3-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	30	35	45	55	65	75
0.0	376	376	376	376	376	376	376	376	376	376
2.5	443	441	428	426	425	426	421	411	400	391
5.0	488	486	472	488	485	493	503	485	459	429
7.5	669	653	645	638	624	604	561	514	498	468
10.0	715	707	705	722	710	716	685	637	545	521
12.5	791	763	791	799	789	777	750	727	658	564
15.0	806	797	795	806	818	840	854	806	788	643
17.5	903	878	903	908	907	889	903	921	885	767
20.0	1013	1008	1013	988	996	1009	975	1000	987	858
22.5	1095	1095	1123	1133	1112	1084	1107	1070	1077	977
25.0	1204	1215	1241	1198	1212	1239	1184	1151	1166	1055
27.5	1259	1262	1265	1314	1331	1308	1323	1255	1209	1156
30.0	1253	1275	1317	1346	1353	1412	1408	1355	1255	1256
32.5	1199	1205	1265	1384	1437	1472	1528	1447	1341	1312
35.0	1157	1154	1206	1334	1406	1512	1633	1531	1407	1334
37.5	1118	1119	1167	1287	1365	1480	1734	1666	1506	1342
40.0	1117	1118	1165	1280	1354	1460	1755	1780	1624	1374
42.5	1191	1182	1226	1320	1378	1475	1769	1944	1689	1459
45.0	1339	1335	1366	1434	1458	1537	1790	2041	1785	1542
47.5	1565	1561	1596	1638	1623	1669	1845	2118	1956	1660
50.0	1829	1815	1860	1926	1875	1869	1937	2178	2115	1845
52.5	1955	1959	2047	2190	2154	2119	2039	2241	2211	1905
55.0	2011	2013	2118	2337	2360	2333	2156	2223	2165	1980
57.5	2327	2314	2307	2416	2442	2443	2282	2098	2100	2065
60.0	2943	2970	2875	2737	2628	2489	2234	1905	1962	2190
62.5	3340	3384	3419	3431	3233	2857	2012	1719	1745	2231
65.0	3413	3473	3580	3829	3797	3571	2091	1505	1435	2070
67.5	3231	3273	3452	3856	3948	3911	2982	1239	1093	1654
70.0	2487	2508	2900	3408	3617	3775	3392	1467	777	1150
72.5	972	1088	1600	2439	3010	3477	3133	2024	504	613
75.0	346	376	643	1048	1410	2087	2975	1791	349	291
77.5	254	263	343	562	682	938	1488	1119	328	155
80.0	179	183	215	310	365	477	664	689	350	119
82.5	99	104	116	143	167	213	328	344	234	143
85.0	53	58	66	82	98	125	185	233	164	119
87.5	30	33	41	57	65	70	96	114	96	79
90.0	21	23	32	38	41	45	57	66	63	64
92.5	23	23	32	37	41	44	50	52	57	62
95.0	26	24	33	39	41	45	52	53	58	59
97.5	28	25	34	39	42	46	52	53	57	49
100.0	29	27	34	40	42	46	51	52	52	40
102.5	31	28	34	40	43	46	50	49	44	34
105.0	32	30	35	41	43	46	49	44	37	32
107.5	33	32	35	42	44	46	46	37	33	31
110.0	34	33	35	42	44	45	41	34	30	30
112.5	34	34	36	42	43	42	37	31	28	29
115.0	35	35	36	41	41	39	34	29	27	29
117.5	36	36	36	38	37	36	32	29	26	29
120.0	36	36	35	36	36	34	31	28	26	28
122.5	36	36	34	34	34	33	31	28	26	28
125.0	35	34	32	33	33	32	30	28	26	27
127.5	34	34	32	32	32	32	30	29	27	28
130.0	33	33	32	31	32	32	31	29	28	29

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CANDELA TABULATION - (Cont.)

132.5	33	33	32	31	32	32	30	28	28	29
135.0	33	33	32	31	31	30	28	27	28	30
137.5	33	32	31	28	27	26	23	23	26	29
140.0	29	29	27	24	22	21	19	19	22	26
142.5	24	23	21	18	16	14	14	15	18	22
145.0	18	17	15	12	12	11	11	11	13	16
147.5	12	12	11	9	9	7	5	7	10	12
150.0	9	9	8	5	4	2	2	3	6	8
152.5	4	3	2	2	2	1	1	2	3	4
155.0	1	1	1	1	1	1	1	2	2	3
157.5	0	0	1	1	1	1	1	1	2	2
160.0	0	0	1	1	1	1	1	1	2	2
162.5	0	0	1	1	1	1	1	1	2	2
165.0	0	0	1	1	1	1	1	1	1	2
167.5	0	0	1	1	1	1	1	1	2	2
170.0	0	0	1	1	1	1	1	1	2	2
172.5	0	0	1	1	1	1	1	1	1	2
175.0	0	0	1	1	1	1	1	1	1	2
177.5	0	0	1	1	1	1	1	1	1	2
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	376	376	376	376	376	376	376	376	376	376
2.5	383	383	379	373	361	348	336	333	331	327
5.0	401	391	380	350	329	333	329	316	308	300
7.5	422	403	386	342	335	314	291	266	240	212
10.0	455	427	393	360	323	285	222	169	146	125
12.5	520	477	420	386	321	221	158	118	100	95
15.0	571	518	460	406	291	177	111	93	89	87
17.5	642	574	503	416	252	132	91	85	84	83
20.0	713	620	553	415	209	99	87	82	80	81
22.5	774	709	600	412	157	90	84	77	77	75
25.0	856	738	636	393	114	88	81	74	71	72
27.5	932	791	687	361	98	85	78	70	67	66
30.0	957	839	703	301	95	82	74	66	62	62
32.5	1030	864	724	254	92	80	71	62	62	65
35.0	1066	901	739	214	91	77	66	62	67	73
37.5	1101	960	742	165	87	74	62	66	74	75
40.0	1144	990	746	129	84	70	63	74	76	65
42.5	1235	1007	759	110	82	66	71	78	62	47
45.0	1275	1068	754	103	78	69	80	69	50	39
47.5	1325	1082	758	104	76	76	82	57	45	37
50.0	1417	1098	727	114	93	83	71	52	44	38
52.5	1439	1148	710	97	97	107	64	50	51	67
55.0	1522	1201	668	86	73	106	75	60	92	115
57.5	1642	1255	670	82	70	70	93	100	124	107
60.0	1791	1399	689	77	69	62	91	123	90	44
62.5	1883	1433	667	73	67	60	94	95	56	44
65.0	1907	1386	573	71	64	74	83	60	58	48
67.5	1711	1169	435	69	60	75	59	60	59	48
70.0	1284	761	238	66	62	66	61	64	56	49
72.5	645	351	116	64	61	65	62	59	57	50
75.0	283	183	86	63	66	64	60	59	57	54
77.5	188	129	75	62	66	60	62	60	58	56

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CANDELA TABULATION - (Cont.)

80.0	137	107	67	66	63	60	64	60	59	56
82.5	104	84	60	71	66	62	66	62	60	58
85.0	84	60	60	75	69	64	69	64	61	59
87.5	64	43	58	73	69	65	71	67	62	60
90.0	49	35	60	70	68	62	70	68	65	60
92.5	41	41	60	71	70	63	71	70	68	63
95.0	42	54	57	70	69	61	70	71	70	66
97.5	44	57	54	64	64	58	66	67	68	65
100.0	47	54	52	57	60	54	62	64	65	62
102.5	45	50	49	50	56	53	60	61	62	59
105.0	42	46	46	46	52	52	58	60	60	54
107.5	39	43	44	43	49	52	57	59	60	50
110.0	37	40	41	41	46	50	56	59	58	46
112.5	36	38	39	39	43	48	55	58	56	43
115.0	34	36	37	39	41	47	53	57	54	40
117.5	33	35	36	38	40	46	52	55	51	37
120.0	32	34	35	37	39	45	50	53	47	36
122.5	31	32	34	36	39	44	49	50	44	36
125.0	30	32	33	36	38	43	47	47	39	36
127.5	30	31	33	36	38	43	45	44	36	35
130.0	30	32	33	36	38	42	43	40	35	34
132.5	31	32	34	36	37	40	41	37	33	34
135.0	32	33	34	36	36	36	37	36	32	33
137.5	32	34	34	35	34	31	31	30	32	33
140.0	30	31	32	31	29	25	23	24	27	31
142.5	25	26	26	25	23	19	16	18	21	25
145.0	19	20	20	19	16	14	12	12	15	19
147.5	13	13	13	13	12	9	8	9	11	13
150.0	9	9	9	9	7	4	4	6	7	9
152.5	5	5	5	5	4	3	2	2	4	6
155.0	3	3	3	3	2	2	1	2	2	2
157.5	2	2	2	2	2	2	1	1	1	1
160.0	2	2	2	2	2	2	1	1	1	1
162.5	2	2	2	2	2	1	1	1	1	1
165.0	2	2	2	2	2	1	1	1	1	0
167.5	2	2	2	2	2	1	1	1	1	0
170.0	2	2	2	2	2	1	1	1	1	0
172.5	2	2	2	2	2	1	1	1	0	0
175.0	2	2	2	2	2	1	1	1	0	0
177.5	2	2	2	2	2	1	1	0	0	0
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	376	376
2.5	326	327
5.0	296	300
7.5	202	204
10.0	116	118
12.5	91	89
15.0	86	86
17.5	82	81
20.0	79	80
22.5	74	74
25.0	70	70

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CANDELA TABULATION - (Cont.)

27.5	64	64
30.0	62	62
32.5	68	68
35.0	75	75
37.5	75	75
40.0	60	58
42.5	44	43
45.0	38	37
47.5	36	36
50.0	39	39
52.5	83	89
55.0	120	123
57.5	73	73
60.0	36	38
62.5	35	36
65.0	36	36
67.5	34	34
70.0	34	31
72.5	34	28
75.0	34	25
77.5	35	23
80.0	36	21
82.5	37	20
85.0	36	20
87.5	37	21
90.0	38	23
92.5	40	28
95.0	42	35
97.5	43	39
100.0	41	42
102.5	40	44
105.0	39	43
107.5	38	42
110.0	38	41
112.5	38	41
115.0	39	40
117.5	38	39
120.0	38	39
122.5	38	38
125.0	37	37
127.5	37	37
130.0	36	36
132.5	35	35
135.0	34	34
137.5	34	34
140.0	32	33
142.5	27	27
145.0	20	21
147.5	14	14
150.0	10	10
152.5	7	7
155.0	3	3
157.5	1	1
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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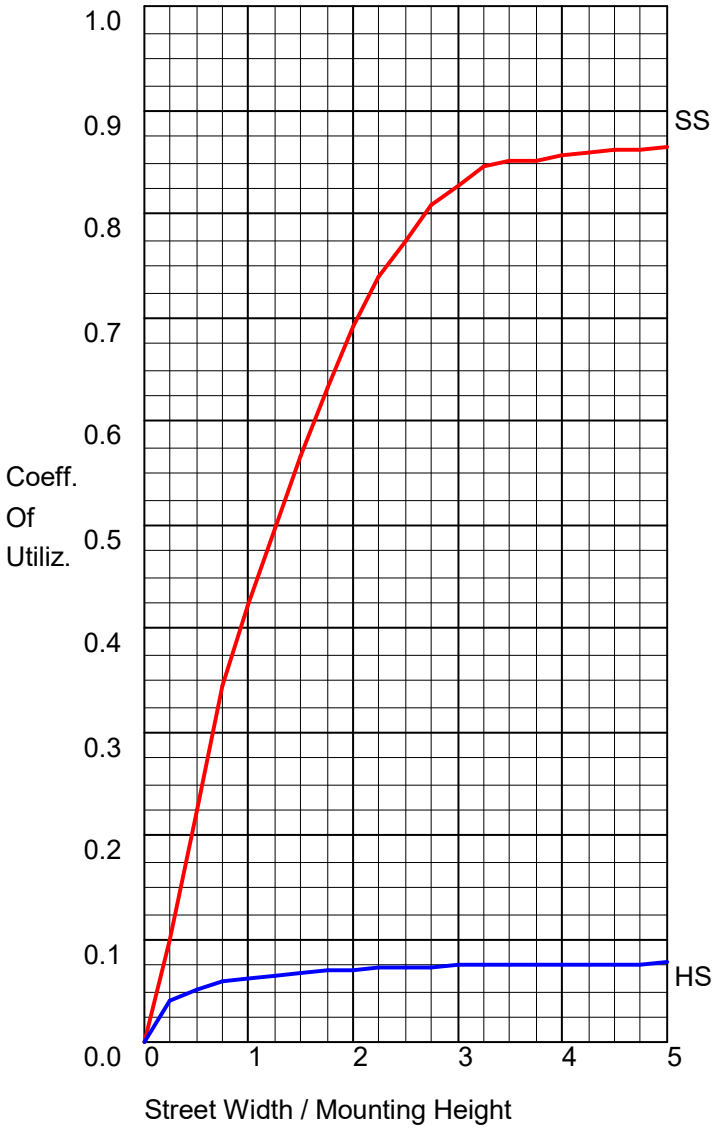
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	4322.0	87.5
Downward House Side	405.3	8.2
Downward Total	4727.3	95.7
Upward Street Side	93.0	1.9
Upward House Side	121.4	2.5
Upward Total	214.4	4.3
Total Flux	4941.7	100.0

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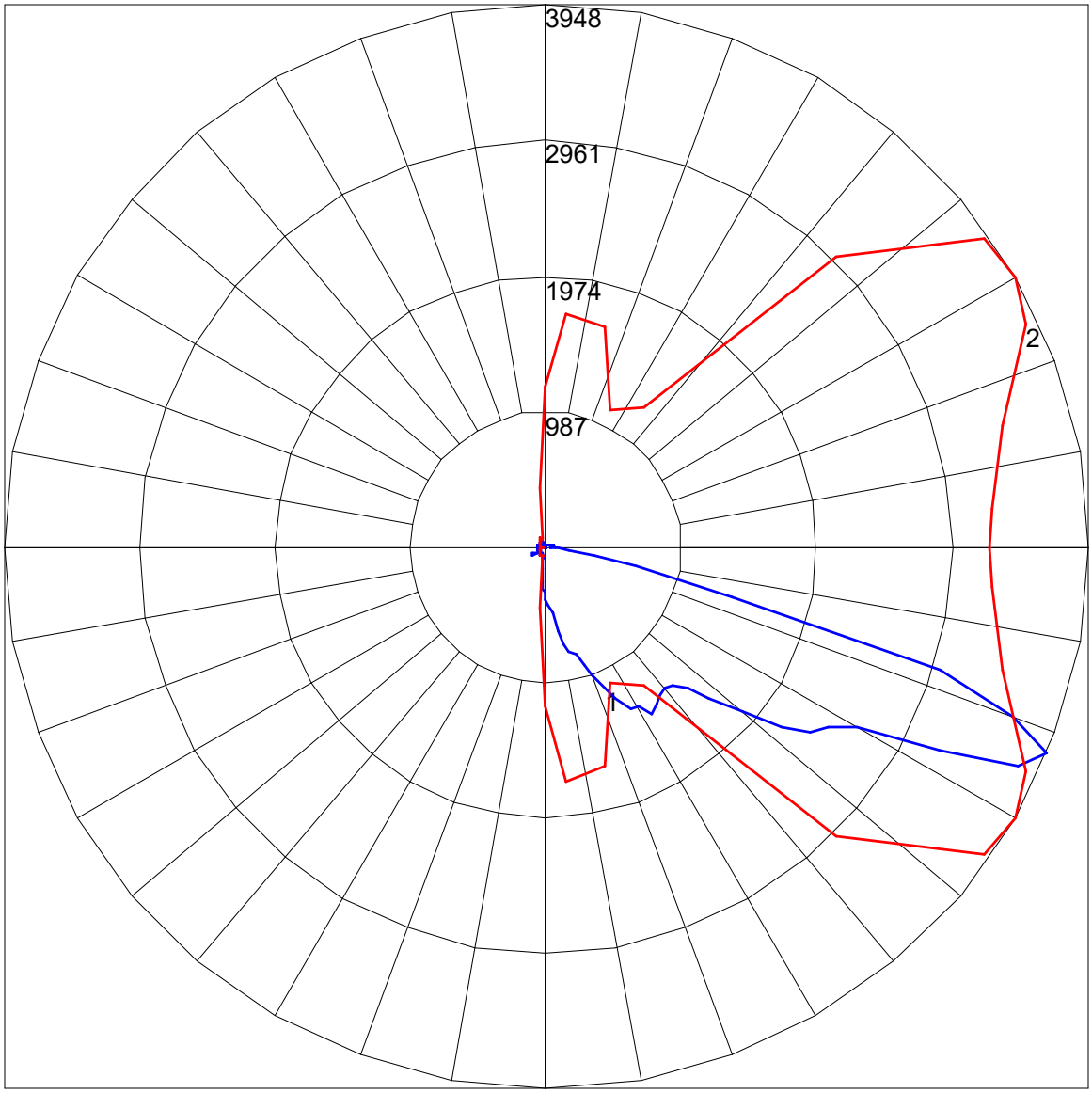
POLAR GRAPH



Maximum Candela = 3948 Located At Horizontal Angle = 30, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (30 - 210) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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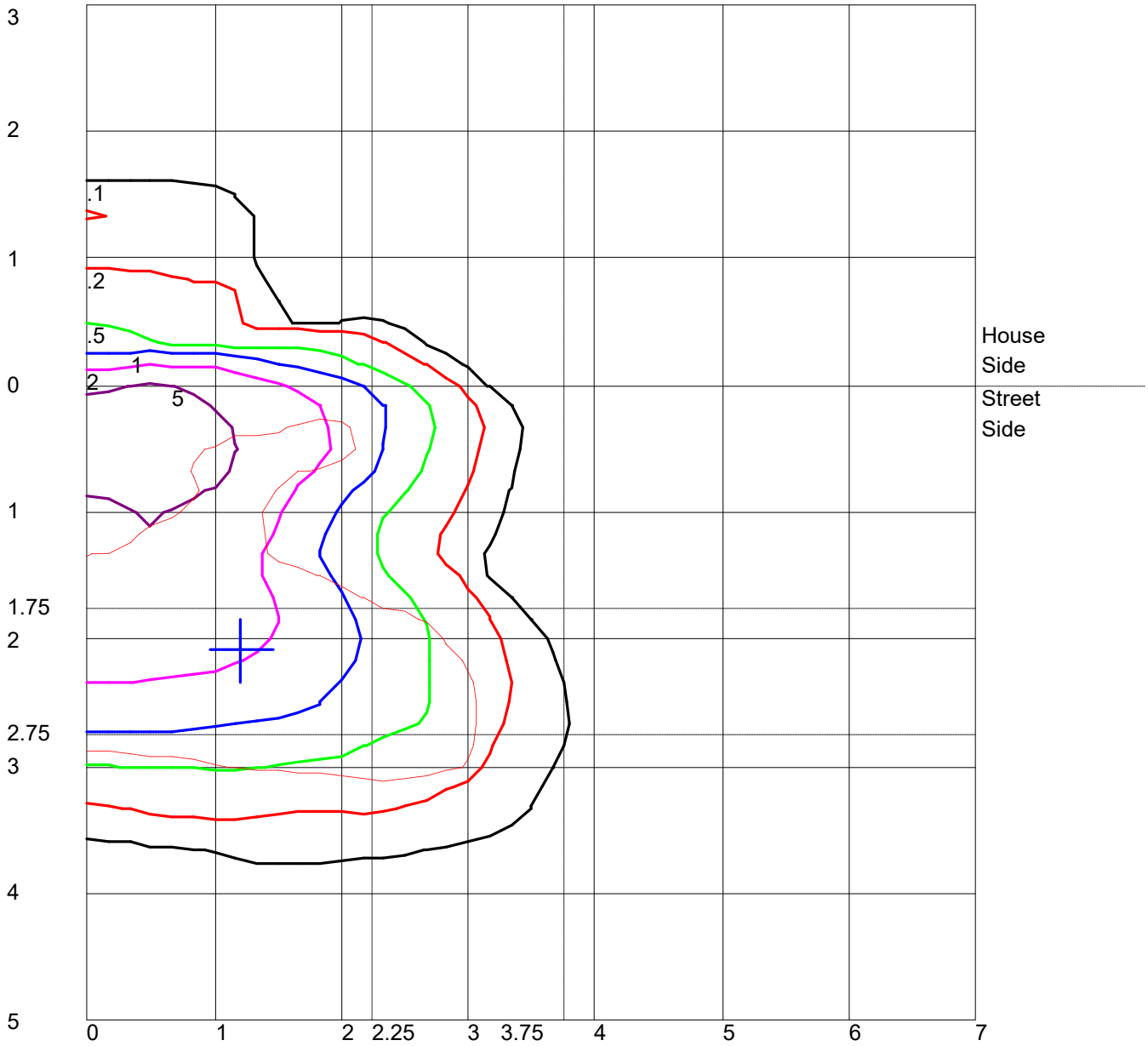
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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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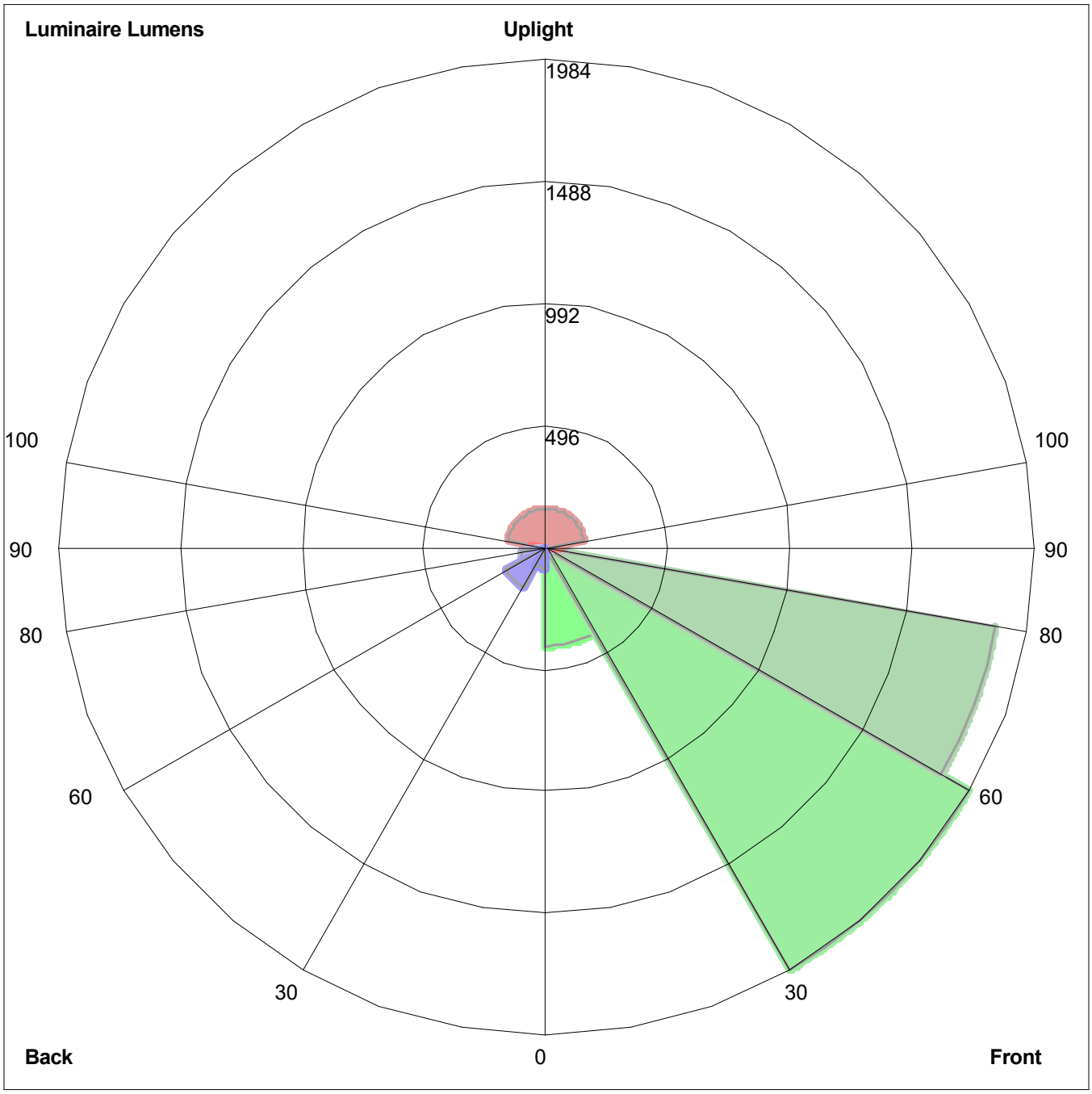
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=401.8, Medium=1984.5, High=1856.5, Very High=79.3
Back: Low=84.8, Medium=184.7, High=102.5, Very High=33.3
Uplight: Low=58.3, High=156.1

BUG Rating : B0-U3-G2

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