IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-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-15L-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	5985
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	59
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.06
Maximum Candela	7220
Maximum Candela Angle	80H 60V
Maximum Candela (<90 Degrees Vertical)	7220
Maximum Candela Angle (<90 Degrees Vertical)	80H 60V
Maximum Candela At 90 Degrees Vertical	132 (2.2% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	454 (7.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-40-70CRI-IL.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	702.7	N.A.	11.7
FM - Front-Medium (30-60)	2855.2	N.A.	47.7
FH - Front-High (60-80)	1193.5	N.A.	19.9
FVH - Front-Very High (80-90)	130.3	N.A.	2.2
BL - Back-Low (0-30)	172.6	N.A.	2.9
BM - Back-Medium (30-60)	371.5	N.A.	6.2
BH - Back-High (60-80)	157.0	N.A.	2.6
BVH - Back-Very High (80-90)	53.3	N.A.	0.9
UL - Uplight-Low (90-100)	97.7	N.A.	1.6
UH - Uplight-High (100-180)	251.7	N.A.	4.2
Total	5985.5	N.A.	100.0
BUG Rating	B1-U3-G2		

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-40-70CRI-IL.IES

CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	35	45	55	65	75	80
0.0	940	940	940	940	940	940	940	940	940	940
2.5	972	971	982	987	974	967	951	940	936	933
5.0	1104	1095	1114	1094	1094	1087	1086	1050	965	941
7.5	1004	1018	1021	1051	1082	1129	1128	1105	1060	1004
10.0	1133	1134	1095	1156	1135	1107	1132	1133	1142	1094
12.5	1213	1210	1163	1166	1211	1186	1132	1213	1267	1234
15.0	1278	1347	1319	1324	1292	1238	1317	1277	1357	1355
17.5	1504	1434	1463	1419	1456	1456	1408	1433	1502	1487
20.0	1591	1607	1644	1610	1583	1591	1637	1625	1629	1639
22.5	1773	1804	1789	1744	1848	1781	1841	1840	1806	1910
25.0	1801	1799	1850	1920	1943	2063	2085	2081	2071	2115
27.5	1833	1820	1862	1889	2102	2224	2389	2420	2351	2473
30.0	1692	1720	1764	1895	2086	2440	2686	2757	2731	2738
32.5	1533	1541	1653	1789	2103	2454	2957	3214	3216	3164
35.0	1321	1326	1433	1676	2031	2508	3138	3637	3576	3463
37.5	1110	1109	1212	1463	1925	2536	3210	3948	3986	3798
40.0	901	892	989	1232	1702	2463	3251	4245	4413	4160
42.5	706	713	793	1006	1454	2275	3234	4461	4796	4710
45.0	562	569	637	820	1210	2004	3179	4661	5309	5156
47.5	475	478	527	683	981	1714	3040	4628	5806	5773
50.0	446	444	473	598	809	1423	2762	4603	6215	6279
52.5	467	459	457	556	697	1131	2434	4476	6459	6322
55.0	669	643	545	546	636	868	2088	4155	6564	6584
57.5	1189	1139	926	667	597	695	1613	3685	6552	6837
60.0	1425	1375	1227	1013	672	602	1087	2990	6517	7220
62.5	1022	992	968	1005	892	506	690	2221	6307	7171
65.0	766	769	745	745	772	602	470	1458	5616	6327
67.5	706	708	679	656	608	593	415	841	4018	4984
70.0	659	661	623	599	553	502	490	494	2433	3351
72.5	514	518	508	524	514	465	492	377	1092	1670
75.0	437	437	416	420	462	442	432	452	429	721
77.5	384	388	382	385	422	441	385	525	239	291
80.0	351	357	353	353	391	454	379	403	251	212
82.5	300	303	314	328	368	425	410	319	261	174
85.0	183	196	210	224	268	351	395	287	232	175
87.5	98	106	125	134	148	183	231	238	165	143
90.0	53	61	80	90	100	111	126	132	121	117
92.5	43	47	66	74	81	88	91	99	107	108
95.0	48	49	66	76	83	91	91	100	107	92
97.5	55	52	69	78	84	91	90	100	98	74
100.0	59	54	69	78	85	91	88	94	78	64
102.5	62	56	69	80	85	90	85	84	65	63
105.0	64	59	69	80	84	87	80	73	57	60
107.5	66	61	68	80	84	84	72	64	53	57
110.0	66	63	67	80	83	79	65	56	50	53
112.5	67	65	66	80	81	73	59	49	47	51
115.0	67	66	66	77	77	67	55	45	45	48
117.5	68	67	66	74	72	62	52	42	44	46
120.0	68	67	64	70	67	59	49	40	43	44
122.5	68	67	63	66	64	56	47	40	41	42
125.0	67	66	61	62	61	54	46	40	40	40
127.5	64	64	60	59	59	53	46	41	40	40
130.0	63	62	59	57	57	52	47	42	40	41

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-40-70CRI-IL.IES

CANDELA TABULATION - (Cont.)

132.5	61	60	58	56	56	53	47	42	42	42
135.0	60	60	57	56	55	50	43	42	43	43
137.5	60	60	58	54	50	44	39	39	42	43
140.0	57	57	54	48	41	35	32	33	36	38
142.5	50	49	46	39	31	26	24	25	29	30
145.0	40	40	36	29	22	19	17	18	21	22
147.5	29	29	25	20	15	11	10	12	13	14
150.0	20	19	18	13	8	2	2	5	7	7
152.5	14	14	11	5	1	0	0	1	1	2
155.0	5	5	2	1	0	0	0	0	0	0
157.5	1	1	1	0	0	0	0	0	0	0
160.0	0	1	0	0	0	0	0	0	0	0
162.5	0	1	0	0	0	0	0	0	0	0
165.0	0	1	1	1	0	0	0	0	0	0
167.5	0	1	1	1	0	0	0	0	0	0
170.0	1	1	1	1	0	0	0	0	0	0
172.5	1	1	1	1	0	0	0	0	0	0
175.0	1	1	1	1	0	0	0	0	0	0
177.5	1	1	1	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	940	940	940	940	940	940	940	940	940	940
2.5	939	938	944	957	959	951	939	915	903	905
5.0	933	948	978	961	896	837	778	714	660	608
7.5	977	977	999	913	789	645	525	448	405	365
10.0	1033	1022	1011	843	673	494	371	283	237	212
12.5	1127	1111	1105	855	539	362	244	193	175	172
15.0	1221	1206	1135	804	464	266	184	173	167	162
17.5	1388	1321	1241	760	374	203	176	163	157	155
20.0	1550	1430	1290	710	301	186	167	157	153	143
22.5	1785	1626	1454	677	243	183	163	150	138	133
25.0	2005	1797	1509	601	216	180	160	138	126	116
27.5	2333	2010	1664	527	212	179	149	126	107	104
30.0	2661	2271	1759	440	211	173	138	110	97	93
32.5	2929	2432	1795	362	203	163	121	99	91	92
35.0	3230	2589	1815	297	195	150	108	94	91	90
37.5	3617	2807	1811	256	182	133	98	95	91	86
40.0	3979	3073	1759	238	167	116	98	97	86	70
42.5	4347	3251	1694	224	150	104	104	95	71	57
45.0	4849	3454	1620	214	136	108	109	82	64	54
47.5	5149	3615	1486	223	136	115	103	73	63	55
50.0	5422	3865	1319	262	163	133	92	72	67	74
52.5	5777	4011	1172	225	172	174	100	77	94	108
55.0	6168	4233	1002	177	134	159	131	108	126	131
57.5	6388	4158	801	146	113	111	136	143	127	97
60.0	6647	4033	588	131	112	97	127	145	94	79
62.5	6530	3796	448	119	109	100	132	107	81	71
65.0	5787	3148	331	111	102	114	119	88	80	70
67.5	4655	2390	260	110	100	125	97	89	79	70
70.0	3393	1665	218	111	105	114	93	87	81	72
72.5	1989	1047	173	108	110	102	93	87	81	75
75.0	1083	675	141	106	111	99	94	89	84	77
77.5	374	280	118	109	106	99	96	91	87	78

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

CANDELA TABULATION - (Cont.)

80.0	238	198	104	117	107	100	99	93	88	81
82.5	169	153	92	122	111	102	103	96	91	88
85.0	135	99	96	126	116	105	109	100	94	94
87.5	117	43	108	123	114	104	108	107	98	87
90.0	95	31	102	117	111	102	107	101	95	88
92.5	66	66	89	118	113	104	109	104	99	91
95.0	60	94	83	115	111	98	106	103	100	92
97.5	73	97	82	104	105	93	102	100	97	90
100.0	77	92	83	90	101	90	99	98	97	88
102.5	75	84	79	77	93	88	97	97	95	85
105.0	70	77	74	68	84	85	94	96	95	82
107.5	66	70	69	62	74	81	92	95	93	78
110.0	60	64	63	58	66	75	88	93	92	74
112.5	56	58	57	54	60	70	83	91	89	71
115.0	52	54	53	52	55	66	78	87	85	70
117.5	48	50	49	50	52	63	74	82	81	68
120.0	46	47	46	47	49	60	70	77	76	67
122.5	43	44	44	45	48	57	67	73	70	65
125.0	41	42	42	44	47	56	64	69	65	63
127.5	40	40	41	43	47	56	61	65	60	61
130.0	41	41	42	44	47	55	60	61	57	60
132.5	42	42	43	46	47	52	57	59	55	59
135.0	43	43	44	46	47	46	50	54	55	59
137.5	44	45	46	45	42	40	40	44	49	56
140.0	39	40	40	38	35	32	29	33	39	46
142.5	32	33	33	30	26	23	21	22	29	35
145.0	24	24	24	21	18	16	14	15	20	25
147.5	15	15	14	12	11	8	7	10	13	16
150.0	7	7	6	6	5	2	2	4	8	11
152.5	2	2	2	1	1	1	1	1	3	5
155.0	0	0	0	0	1	0	1	1	1	2
157.5	0	0	0	0	0	0	1	1	1	1
160.0	0	0	0	0	0	0	0	1	1	1
162.5	0	0	0	0	0	0	0	1	1	1
165.0	0	0	0	0	0	0	0	1	1	1
167.5	0	0	0	0	0	0	0	1	1	1
170.0	0	0	0	0	0	0	0	1	1	1
172.5	0	0	0	0	0	0	0	0	1	1
175.0	0	0	0	0	0	0	0	0	1	1
177.5	0	0	0	0	0	0	0	0	0	1
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	940	940
2.5	906	912
5.0	598	591
7.5	358	358
10.0	200	202
12.5	170	170
15.0	159	157
17.5	153	153
20.0	140	139
22.5	129	128
25.0	112	112

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

CANDELA TABULATION - (Cont.)

27.5	101	100
30.0	94	93
32.5	93	93
35.0	92	91
37.5	85	84
40.0	68	67
42.5	58	57
45.0	56	56
47.5	57	57
50.0	87	92
52.5	112	116
55.0	115	116
57.5	73	74
60.0	61	62
62.5	56	56
65.0	51	50
67.5	49	46
70.0	48	42
72.5	48	39
75.0	50	37
77.5	52	35
80.0	53	33
82.5	58	37
85.0	64	42
87.5	58	42
90.0	60	49
92.5	63	59
95.0	64	67
97.5	64	71
100.0	66	76
102.5	67	77
105.0	70	78
107.5	73	78
110.0	74	78
112.5	75	77
115.0	74	76
117.5	74	74
120.0	73	74
122.5	71	73
125.0	69	70
127.5	67	67
130.0	64	64
132.5	61	62
135.0	60	61
137.5	60	60
140.0	50	50
142.5	39	39
145.0	28	28
147.5	18	18
150.0	12	12
152.5	6	6
155.0	2	2
157.5	1	0
160.0	1	0
162.5	1	0
165.0	1	0

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

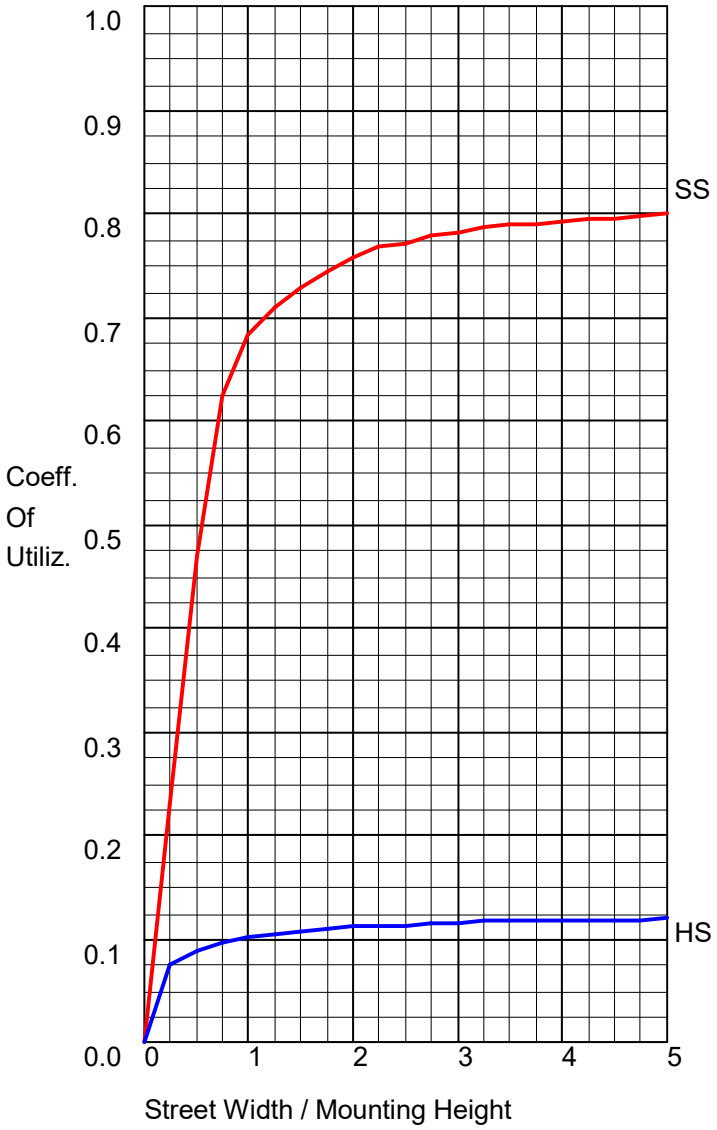
CANDELA TABULATION - (Cont.)

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

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-40-70CRI-IL.IES

COEFFICIENTS OF UTILIZATION



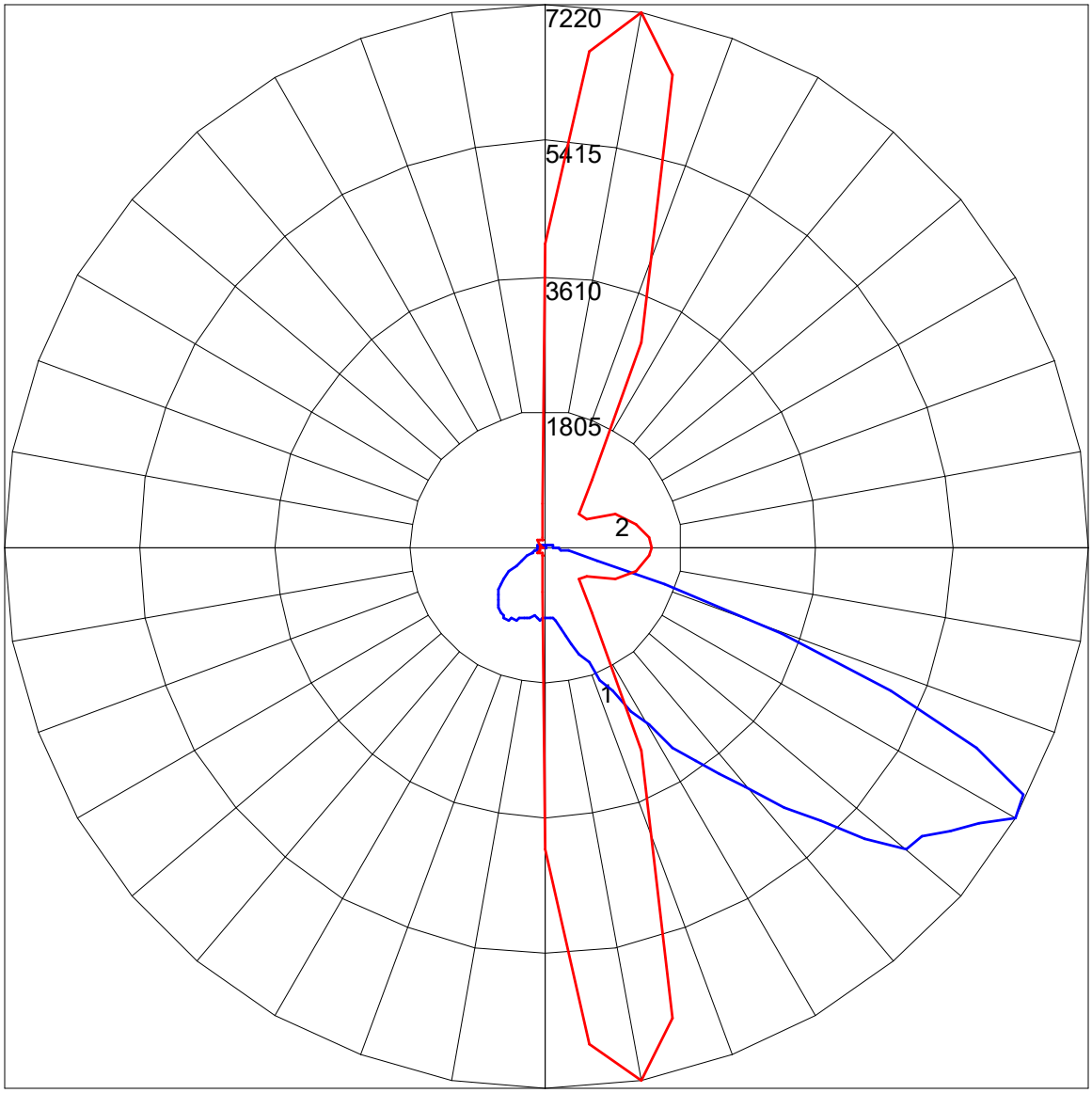
FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	4881.7	81.6
Downward House Side	754.4	12.6
Downward Total	5636.1	94.2
Upward Street Side	166.3	2.8
Upward House Side	183.1	3.1
Upward Total	349.4	5.8
Total Flux	5985.5	100.0

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-40-70CRI-IL.IES

POLAR GRAPH

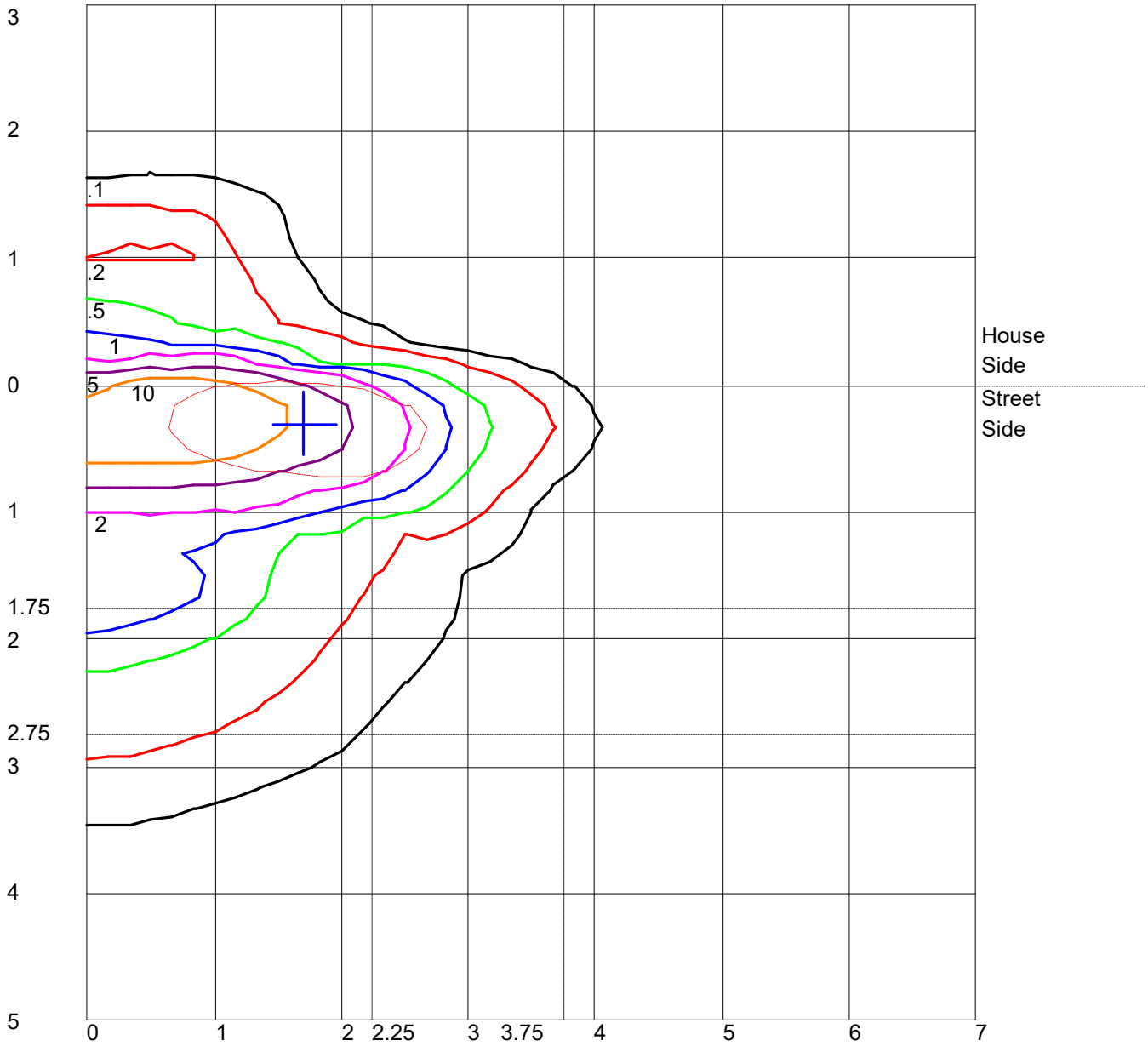


Maximum Candela = 7220 Located At Horizontal Angle = 80, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-40-70CRI-IL.IES

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE

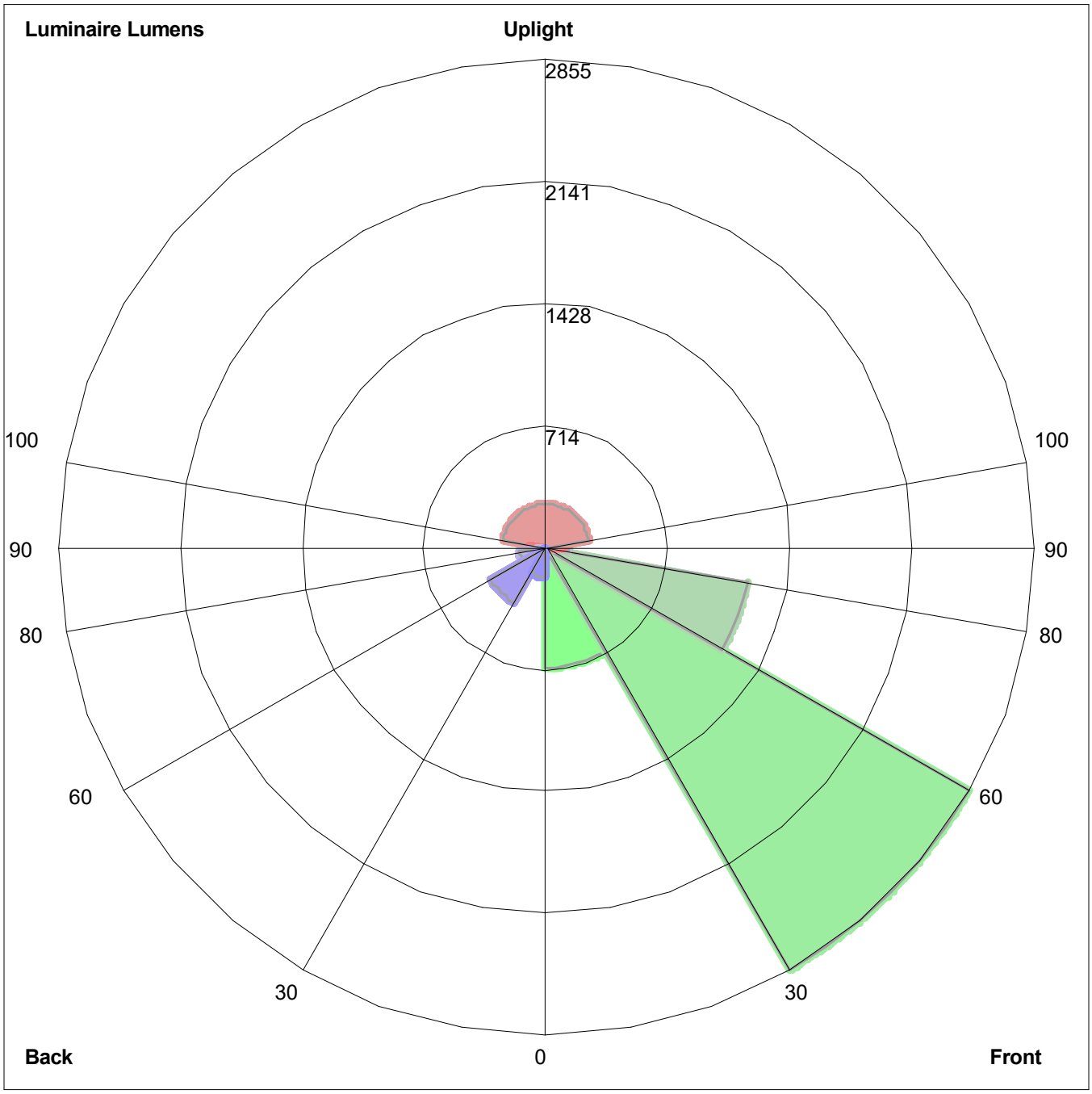


Distance In Units Of Mounting Height
Values Based On 10 Foot Mounting Height
1/2 Maximum Candela Trace Shown As Dashed Curve
(+) = Maximum Candela Point

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-2-40-70CRI-IL.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=702.7, Medium=2855.2, High=1193.5, Very High=130.3
Back: Low=172.6, Medium=371.5, High=157.0, Very High=53.3
Uplight: Low=97.7, High=251.7

BUG Rating : B1-U3-G2

Photometric Toolbox® Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.