IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-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-15L-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	7465
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	73
Total Luminaire Watts	102
Ballast Factor	1.00
Upward Waste Light Ratio	0.04
Maximum Candela	6105
Maximum Candela Angle	35H 67.5V
Maximum Candela (<90 Degrees Vertical)	6105
Maximum Candela Angle (<90 Degrees Vertical)	35H 67.5V
Maximum Candela At 90 Degrees Vertical	188 (2.5% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	783 (10.5% 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-3-30-70CRI-IL.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	395.2	N.A.	5.3
FM - Front-Medium (30-60)	3320.2	N.A.	44.5
FH - Front-High (60-80)	2752.5	N.A.	36.9
FVH - Front-Very High (80-90)	158.8	N.A.	2.1
BL - Back-Low (0-30)	88.9	N.A.	1.2
BM - Back-Medium (30-60)	241.0	N.A.	3.2
BH - Back-High (60-80)	162.1	N.A.	2.2
BVH - Back-Very High (80-90)	51.2	N.A.	0.7
UL - Uplight-Low (90-100)	92.2	N.A.	1.2
UH - Uplight-High (100-180)	202.4	N.A.	2.7
Total	7464.5	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-3-30-70CRI-IL.IES

CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	15	25	30	35	45	55	65	75
0.0	319	319	319	319	319	319	319	319	319	319
2.5	364	360	357	353	357	349	347	338	331	326
5.0	501	495	492	478	478	467	453	420	381	346
7.5	584	586	568	578	585	590	569	509	456	392
10.0	636	643	659	639	648	653	614	604	547	455
12.5	661	659	661	675	672	668	685	659	642	521
15.0	730	710	721	733	718	713	717	718	688	618
17.5	749	764	756	757	782	805	771	778	773	707
20.0	845	856	863	884	859	860	890	868	852	822
22.5	992	984	985	1000	1004	1013	993	1001	994	942
25.0	1107	1116	1168	1219	1193	1183	1199	1189	1174	1160
27.5	1335	1360	1384	1396	1432	1485	1433	1420	1439	1307
30.0	1522	1508	1619	1700	1712	1719	1827	1725	1652	1528
32.5	1745	1763	1865	1919	1986	2074	2121	2069	1953	1784
35.0	1873	1889	2001	2206	2296	2343	2496	2473	2229	1940
37.5	1926	1969	2101	2364	2496	2680	2841	2772	2418	2116
40.0	1957	1975	2170	2509	2669	2900	3151	3027	2638	2224
42.5	1956	1985	2245	2653	2842	3098	3446	3251	2863	2301
45.0	1986	2026	2354	2862	3048	3317	3659	3472	3012	2384
47.5	2070	2108	2522	3115	3319	3612	3878	3723	3073	2565
50.0	2106	2149	2640	3338	3597	3903	4112	3876	3235	2704
52.5	2113	2155	2675	3450	3785	4122	4347	4000	3417	2891
55.0	2434	2429	2811	3536	3878	4203	4503	4134	3620	3278
57.5	3657	3597	3661	3905	4093	4266	4562	4148	3758	3547
60.0	4911	4886	4903	4876	4807	4587	4462	3947	3732	3799
62.5	5377	5416	5507	5635	5598	5306	4361	3564	3620	4072
65.0	4381	4456	5052	5873	6027	5801	4726	3125	3255	4080
67.5	1775	1842	2652	4627	5667	6105	5220	2803	2609	3860
70.0	850	854	1067	1943	3380	4908	5612	3189	1832	3028
72.5	667	676	776	1100	1464	2141	5234	4459	1267	1754
75.0	556	573	644	806	952	1161	2709	3694	1180	628
77.5	474	488	535	645	721	838	1143	1982	702	291
80.0	416	426	457	510	547	632	783	767	416	199
82.5	353	361	380	412	436	479	602	564	340	183
85.0	229	236	248	266	285	318	439	501	311	179
87.5	126	133	143	160	176	196	282	344	250	144
90.0	61	65	80	94	107	117	156	188	150	111
92.5	33	36	50	61	66	72	89	105	98	100
95.0	35	34	48	58	61	67	78	83	90	94
97.5	38	36	48	58	61	67	77	81	88	81
100.0	41	36	49	59	62	67	75	78	82	68
102.5	42	37	49	59	62	66	74	74	72	54
105.0	44	39	48	59	63	66	73	68	60	45
107.5	44	41	48	60	63	65	68	60	50	41
110.0	45	43	47	60	62	64	63	51	42	38
112.5	45	44	47	59	61	61	56	44	37	36
115.0	45	45	46	57	58	57	48	40	34	36
117.5	45	45	45	54	54	51	43	36	32	35
120.0	45	45	44	49	48	46	40	35	31	34
122.5	45	44	41	44	44	42	38	34	31	33
125.0	44	43	39	40	41	40	37	34	31	33
127.5	41	40	37	37	38	38	36	34	32	33
130.0	39	38	36	36	37	36	36	35	32	34

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.)

132.5	38	37	36	35	36	36	36	34	33	35
135.0	37	37	36	35	35	36	35	33	32	35
137.5	37	37	36	35	34	33	31	29	31	34
140.0	36	36	34	31	29	28	25	25	27	30
142.5	32	31	29	25	24	21	19	19	21	25
145.0	26	25	23	19	17	14	13	14	16	19
147.5	19	18	16	12	12	11	9	9	12	13
150.0	12	12	11	9	8	6	5	6	8	8
152.5	9	9	8	4	4	3	2	3	5	6
155.0	3	3	2	2	2	2	1	2	3	4
157.5	1	1	1	1	1	1	1	2	2	2
160.0	0	1	1	1	1	1	1	1	2	2
162.5	0	1	1	1	1	1	1	1	2	2
165.0	0	1	1	1	1	1	1	1	2	2
167.5	0	1	1	1	1	1	1	1	2	2
170.0	0	1	1	1	1	1	1	1	1	2
172.5	0	1	1	1	1	1	1	1	2	2
175.0	0	1	1	1	1	1	1	1	1	2
177.5	0	1	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	319	319	319	319	319	319	319	319	319	319
2.5	322	318	316	312	303	299	297	295	291	288
5.0	331	326	317	300	285	273	258	248	231	220
7.5	344	329	315	292	266	231	202	189	185	180
10.0	369	348	325	282	231	197	188	180	173	168
12.5	391	362	335	274	208	193	181	173	173	170
15.0	451	387	353	265	210	193	181	177	163	155
17.5	498	417	368	264	219	196	182	160	143	135
20.0	587	471	409	283	233	202	165	140	127	119
22.5	698	536	464	311	245	188	143	123	114	114
25.0	849	634	547	355	242	159	128	112	108	104
27.5	980	784	624	383	214	137	116	107	98	96
30.0	1202	884	744	382	169	126	111	99	90	85
32.5	1360	1009	822	363	144	120	105	91	83	81
35.0	1482	1115	851	320	133	114	97	85	80	75
37.5	1598	1178	857	278	128	108	90	84	78	71
40.0	1668	1238	878	236	123	101	88	85	75	60
42.5	1755	1330	837	187	118	98	91	84	66	52
45.0	1817	1350	823	156	114	101	94	78	63	51
47.5	1890	1384	868	150	115	104	92	74	63	51
50.0	2041	1499	880	149	121	109	88	73	65	53
52.5	2178	1611	934	142	125	123	89	75	74	91
55.0	2452	1824	1014	129	107	121	101	87	111	117
57.5	2842	2098	1081	121	98	98	108	114	130	87
60.0	3277	2401	1161	114	96	93	111	121	102	64
62.5	3631	2619	1228	108	96	95	108	100	96	71
65.0	3748	2610	1036	106	96	100	99	82	90	74
67.5	3488	2111	710	105	95	98	91	90	83	73
70.0	2731	1336	365	100	97	103	95	87	84	74
72.5	1343	606	150	100	97	99	92	88	81	77
75.0	376	213	125	99	98	95	94	89	84	78
77.5	247	163	111	102	100	95	97	92	86	81

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	183	140	103	104	100	96	100	94	88	83
82.5	144	116	100	111	104	98	104	97	92	87
85.0	123	89	95	112	105	100	107	101	93	88
87.5	101	75	91	113	107	100	108	102	96	88
90.0	84	63	96	113	107	100	109	104	98	91
92.5	78	64	94	112	108	98	108	106	102	94
95.0	71	82	88	109	105	94	104	104	101	94
97.5	65	89	85	100	98	87	99	98	97	90
100.0	67	85	82	86	91	82	93	94	94	84
102.5	66	78	76	75	84	79	88	90	91	80
105.0	61	69	70	67	75	76	84	87	87	73
107.5	55	61	63	61	68	71	81	84	84	65
110.0	50	56	58	57	61	67	78	82	81	60
112.5	46	51	52	54	57	64	74	79	76	55
115.0	43	47	48	51	54	61	70	75	71	51
117.5	40	43	45	49	51	59	67	71	65	47
120.0	38	41	42	47	50	57	63	67	59	44
122.5	36	38	41	45	48	55	60	61	52	43
125.0	36	37	39	44	48	54	58	57	47	41
127.5	35	36	38	43	47	53	55	52	42	40
130.0	36	36	38	42	47	51	52	47	38	38
132.5	36	37	38	43	45	47	48	42	37	37
135.0	36	37	39	42	42	41	40	37	36	36
137.5	36	37	38	40	38	35	31	30	31	35
140.0	34	35	35	35	33	28	22	21	24	28
142.5	28	29	30	29	25	21	16	14	17	20
145.0	22	22	22	21	18	14	11	10	12	14
147.5	15	15	15	14	12	9	6	6	8	9
150.0	9	9	9	9	8	6	4	4	5	6
152.5	6	6	6	6	5	4	3	2	2	3
155.0	4	4	4	4	4	4	2	2	2	2
157.5	2	3	3	3	3	3	2	2	1	1
160.0	2	2	2	2	3	3	2	2	1	1
162.5	2	2	2	2	3	2	2	2	1	1
165.0	2	2	2	2	3	2	2	2	1	1
167.5	2	2	2	2	3	2	2	2	1	1
170.0	2	2	2	2	2	2	2	1	1	1
172.5	2	2	2	2	2	2	2	1	1	1
175.0	2	2	2	2	2	2	2	1	1	0
177.5	2	2	2	2	2	2	2	1	1	0
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	**Horizontal Angles**	
	175	**180**
0.0	319	319
2.5	284	285
5.0	211	211
7.5	179	179
10.0	167	165
12.5	167	167
15.0	150	149
17.5	131	130
20.0	116	114
22.5	110	109
25.0	101	101

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	91	90
30.0	84	82
32.5	79	78
35.0	75	74
37.5	69	67
40.0	58	57
42.5	52	52
45.0	51	51
47.5	51	51
50.0	54	54
52.5	101	104
55.0	117	120
57.5	49	50
60.0	45	48
62.5	45	46
65.0	45	44
67.5	45	40
70.0	44	36
72.5	45	34
75.0	48	30
77.5	48	28
80.0	50	26
82.5	52	28
85.0	54	29
87.5	55	33
90.0	56	36
92.5	59	46
95.0	60	54
97.5	60	60
100.0	59	63
102.5	58	64
105.0	56	63
107.5	55	60
110.0	54	59
112.5	52	56
115.0	51	53
117.5	50	51
120.0	48	49
122.5	46	47
125.0	44	45
127.5	42	42
130.0	40	40
132.5	38	38
135.0	37	37
137.5	36	36
140.0	29	29
142.5	22	22
145.0	15	15
147.5	10	11
150.0	6	6
152.5	4	4
155.0	1	1
157.5	0	0
160.0	0	0
162.5	0	0
165.0	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.

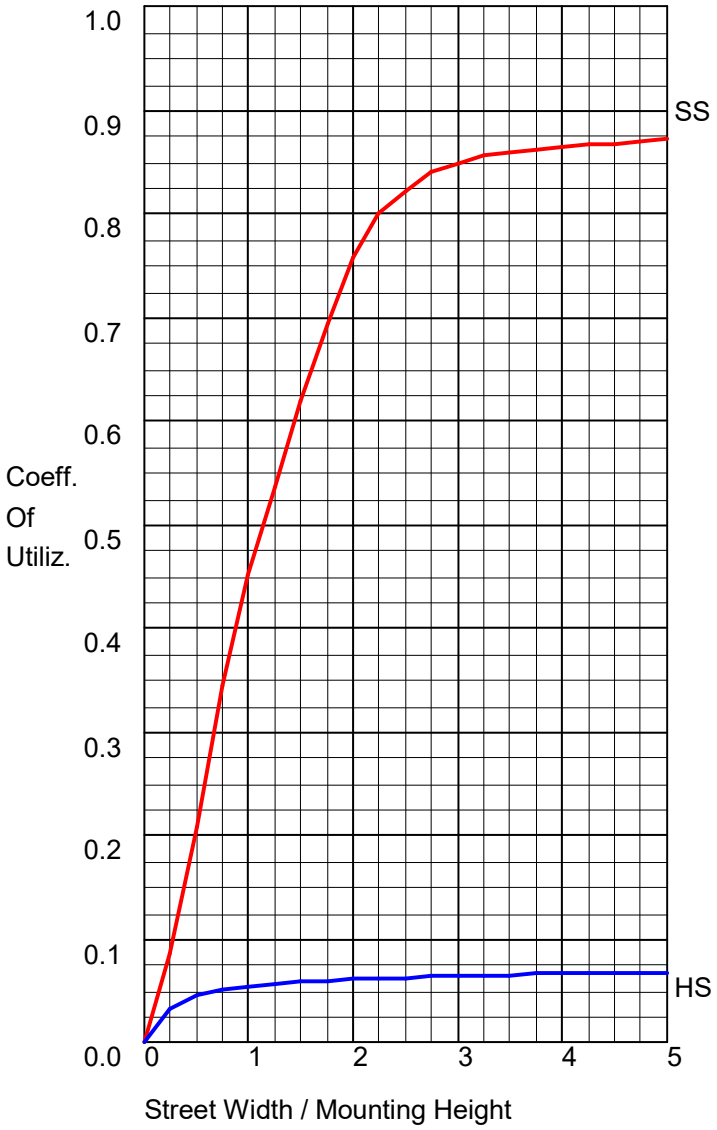
CANDELA TABULATION - (Cont.)

167.5	0	0
170.0	0	0
172.5	0	0
175.0	0	0
177.5	0	0
180.0	1	1

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-3-30-70CRI-IL.IES

COEFFICIENTS OF UTILIZATION



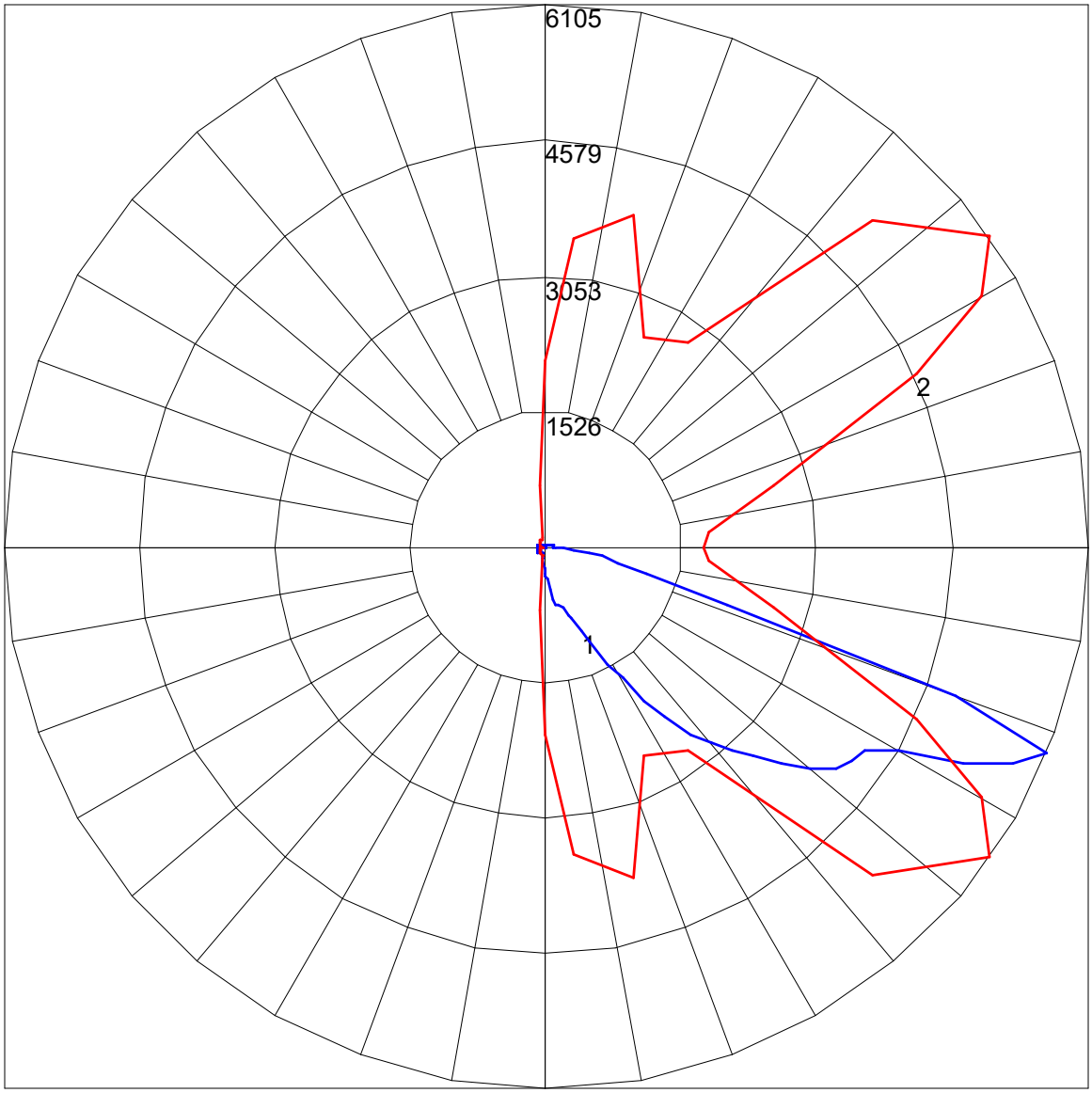
FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	6626.7	88.8
Downward House Side	543.3	7.3
Downward Total	7170.0	96.1
Upward Street Side	131.8	1.8
Upward House Side	162.8	2.2
Upward Total	294.6	3.9
Total Flux	7464.6	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-3-30-70CRI-IL.IES

POLAR GRAPH

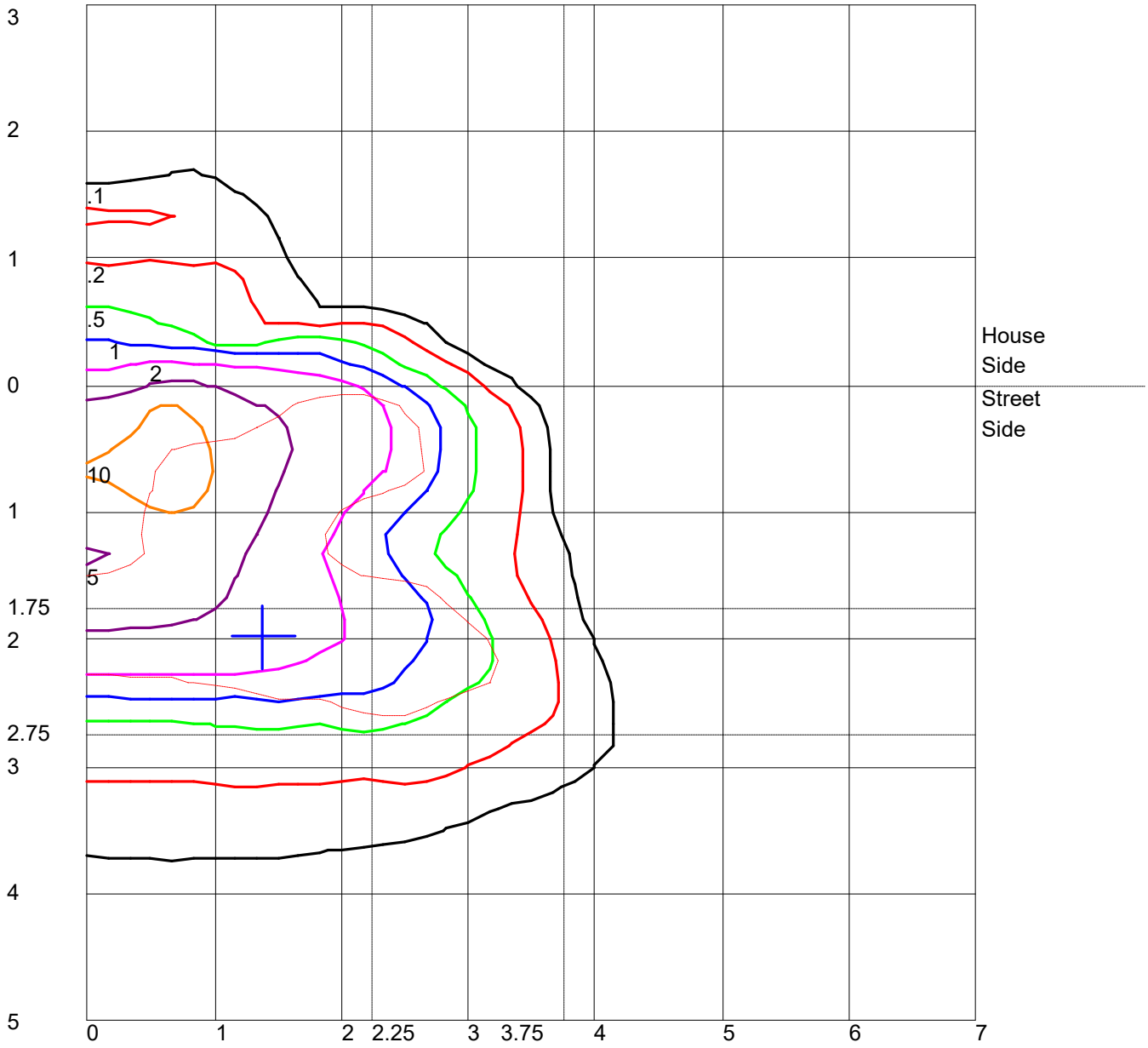


Maximum Candela = 6105 Located At Horizontal Angle = 35, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (35 - 215) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

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-3-30-70CRI-IL.IES

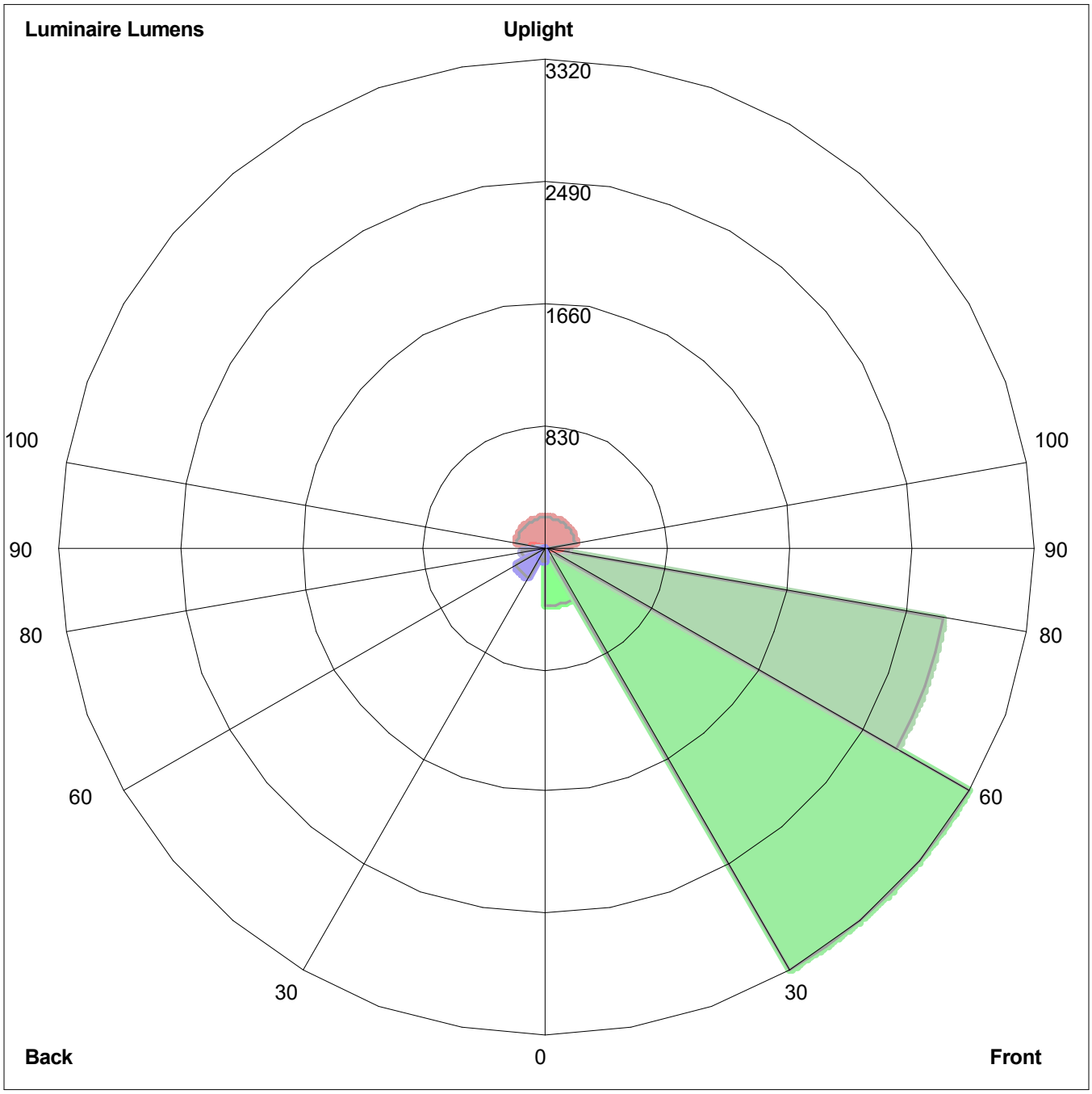
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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

IES ROAD REPORT
PHOTOMETRIC FILENAME : MPP-LED-15L-SIL-3-30-70CRI-IL.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=395.2, Medium=3320.2, High=2752.5, Very High=158.8
Back: Low=88.9, Medium=241.0, High=162.1, Very High=51.2
Uplight: Low=92.2, High=202.4

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.