



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-3-LED-10L-40.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11678

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/02/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-3-LED-10L-40

[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.

[OTHER] TEST PROCEDURE: IESNA LM-79-08

[SEARCH_SOURCETYPE] LED

[SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	10351
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	77.3
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	10165
Maximum Candela Angle	57.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	10165
Maximum Candela Angle (<90 Degrees Vertical)	57.5H 67.5V
Maximum Candela At 90 Degrees Vertical	46 (0.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	887 (8.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : ENM4-PT-3-LED-10L-40.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	301.4	N.A.	2.9
FM - Front-Medium (30-60)	4232.0	N.A.	40.9
FH - Front-High (60-80)	3589.5	N.A.	34.7
FVH - Front-Very High (80-90)	87.9	N.A.	0.8
BL - Back-Low (0-30)	300.9	N.A.	2.9
BM - Back-Medium (30-60)	1191.2	N.A.	11.5
BH - Back-High (60-80)	566.0	N.A.	5.5
BVH - Back-Very High (80-90)	54.3	N.A.	0.5
UL - Uplight-Low (90-100)	9.3	N.A.	0.1
UH - Uplight-High (100-180)	18.4	N.A.	0.2
Total	10350.9	N.A.	100.0
BUG Rating	B2-U2-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	57.5	65.0	75.0
0.0	513	513	513	513	513	513	513	513	513	513
2.5	498	500	493	492	495	497	506	506	508	505
5.0	445	449	455	465	478	465	464	463	464	467
7.5	424	432	444	436	433	432	446	456	479	477
10.0	426	424	425	421	430	456	466	469	474	481
12.5	443	444	443	428	448	463	476	478	489	508
15.0	467	465	467	475	488	481	503	511	521	532
17.5	504	501	493	506	518	537	533	542	554	571
20.0	587	581	567	564	575	588	606	604	605	616
22.5	659	668	670	685	677	685	710	703	683	687
25.0	810	788	808	832	842	848	868	854	834	802
27.5	1064	1081	1073	1046	1053	1099	1075	1067	1048	982
30.0	1393	1369	1329	1368	1335	1398	1366	1348	1299	1172
32.5	1797	1779	1680	1647	1703	1735	1710	1685	1602	1436
35.0	2092	2099	2052	2010	2043	2129	2059	2035	1904	1671
37.5	2495	2458	2390	2402	2427	2491	2407	2389	2173	1879
40.0	2828	2809	2813	2806	2817	2849	2721	2696	2420	2073
42.5	3189	3185	3183	3195	3221	3179	3048	2989	2646	2202
45.0	3674	3702	3682	3687	3662	3590	3315	3258	2854	2329
47.5	4422	4385	4379	4373	4188	3988	3627	3521	3047	2463
50.0	5251	5222	5253	5205	4906	4447	3949	3810	3288	2638
52.5	6081	6058	6129	6100	5765	5017	4321	4174	3606	2888
55.0	6751	6769	6892	6938	6664	5771	4827	4657	4013	3239
57.5	6871	6924	7240	7595	7662	6667	5574	5372	4610	3809
60.0	6173	6228	6856	7479	8313	7745	6640	6423	5547	4608
62.5	4128	4230	4936	6349	8007	8610	8026	7813	6723	5490
65.0	2113	2083	2578	3968	6857	8708	9435	9357	7837	6121
67.5	927	974	1190	1980	4396	7686	10055	10165	8532	6099
70.0	523	548	680	1049	2233	5612	8966	9421	8179	4835
72.5	294	314	419	683	1294	2975	6498	7082	5682	2869
75.0	208	218	281	478	874	1539	3392	3817	3176	1183
77.5	153	159	215	394	650	904	1667	1881	1358	493
80.0	111	117	166	319	520	566	766	887	692	245
82.5	76	79	128	232	377	366	324	363	326	141
85.0	56	59	96	178	225	207	154	156	149	88
87.5	47	50	70	129	135	80	52	54	55	46
90.0	25	29	38	44	46	20	14	14	12	11
92.5	8	8	10	10	5	6	7	7	7	6
95.0	4	4	3	3	3	4	6	6	6	5
97.5	3	3	3	3	3	4	4	5	5	4
100.0	3	3	2	3	3	3	4	4	4	4
102.5	2	3	2	3	3	3	3	3	3	4
105.0	2	2	2	3	3	3	3	3	3	4
107.5	2	2	2	3	3	3	3	3	3	4
110.0	2	2	2	3	3	3	3	3	3	4
112.5	3	3	3	3	3	3	3	3	3	4
115.0	3	3	3	3	3	3	3	3	3	4
117.5	3	3	3	3	3	4	3	3	3	4
120.0	3	3	3	3	4	4	3	3	4	4
122.5	4	4	4	4	4	4	3	3	4	4
125.0	4	4	4	4	4	4	3	3	4	4
127.5	3	4	4	4	4	4	4	4	4	4
130.0	4	4	4	4	4	4	4	4	4	4

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CANDELA TABULATION - (Cont.)

132.5	4	4	4	4	4	4	4	4	4	4
135.0	3	4	3	3	4	4	3	3	4	4
137.5	2	2	2	2	3	3	3	3	3	3
140.0	0	1	1	2	2	2	2	2	2	3
142.5	0	0	1	1	2	2	2	2	2	3
145.0	0	1	1	1	2	2	2	2	2	3
147.5	0	1	1	1	1	1	2	2	2	2
150.0	0	1	1	1	1	1	2	2	2	2
152.5	0	1	1	1	1	1	1	2	2	2
155.0	0	1	1	1	1	1	1	1	2	2
157.5	0	0	1	1	1	1	1	1	2	2
160.0	1	0	1	1	1	1	1	1	1	2
162.5	0	0	1	1	1	1	1	1	1	2
165.0	0	0	1	1	1	1	1	1	1	2
167.5	0	0	1	1	1	1	1	1	1	2
170.0	0	0	1	1	1	1	1	1	2	2
172.5	0	0	1	1	1	2	2	2	1	2
175.0	0	0	1	1	2	2	2	2	1	2
177.5	0	0	1	1	2	2	2	2	2	2
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles	Horizontal Angles									
	<u>85.0</u>	<u>90.0</u>	<u>95.0</u>	<u>105.0</u>	<u>115.0</u>	<u>125.0</u>	<u>135.0</u>	<u>145.0</u>	<u>155.0</u>	<u>165.0</u>
0.0	513	513	513	513	513	513	513	513	513	513
2.5	510	516	516	516	520	524	530	538	530	519
5.0	472	474	475	496	510	519	536	536	539	527
7.5	488	489	499	531	521	510	503	521	515	536
10.0	486	492	501	528	515	536	535	538	538	556
12.5	515	522	540	545	543	543	562	603	603	635
15.0	542	551	555	557	550	592	620	662	678	671
17.5	577	573	582	591	585	654	702	714	715	717
20.0	620	617	623	596	622	696	721	755	770	766
22.5	688	673	679	654	695	753	782	789	784	801
25.0	790	764	751	690	786	816	798	812	822	838
27.5	916	860	841	768	851	861	835	848	870	886
30.0	1065	991	943	831	891	932	888	888	901	922
32.5	1210	1116	1030	897	939	994	965	937	968	1035
35.0	1385	1242	1116	951	961	1036	1023	1000	1060	1143
37.5	1518	1354	1181	978	973	1058	1045	1079	1125	1265
40.0	1616	1406	1199	986	969	1065	1055	1091	1234	1310
42.5	1688	1442	1199	955	936	1050	1039	1102	1338	1286
45.0	1766	1479	1204	919	890	1006	1014	1072	1462	1182
47.5	1856	1533	1217	888	843	959	983	1046	1494	1120
50.0	1983	1620	1256	867	801	915	947	1025	1478	1100
52.5	2166	1743	1330	866	766	875	913	988	1413	1090
55.0	2395	1937	1471	875	734	836	870	938	1297	1077
57.5	2818	2226	1636	886	698	786	820	865	1117	1032
60.0	3388	2534	1683	863	654	719	762	773	921	1013
62.5	4010	2823	1549	779	604	645	689	680	733	992
65.0	4328	2772	1225	656	553	575	599	611	588	958
67.5	3856	2449	907	534	489	503	530	554	499	898
70.0	2597	1654	575	433	413	432	463	504	456	760
72.5	1209	741	334	332	341	358	389	446	402	566
75.0	448	318	212	259	284	304	327	353	280	360
77.5	211	162	153	214	240	258	237	223	182	248

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CANDELA TABULATION - (Cont.)

80.0	119	98	126	183	205	184	148	168	131	177
82.5	81	68	103	156	152	120	113	130	85	123
85.0	51	46	83	120	97	86	81	66	39	77
87.5	24	24	59	79	54	46	33	28	17	37
90.0	8	6	21	33	24	21	15	9	4	6
92.5	5	5	11	18	21	19	13	7	2	1
95.0	5	5	10	16	20	18	13	7	2	1
97.5	4	5	8	13	17	15	11	6	2	1
100.0	4	4	7	11	14	13	9	6	2	1
102.5	4	5	6	9	11	11	8	5	2	1
105.0	4	5	6	8	9	9	8	5	3	2
107.5	4	5	5	7	8	8	7	5	3	2
110.0	4	5	5	6	7	7	7	5	3	2
112.5	4	5	5	6	7	7	7	5	3	2
115.0	4	5	5	6	7	7	7	5	3	2
117.5	4	5	5	6	7	7	7	5	4	3
120.0	5	5	6	6	7	8	7	5	4	3
122.5	5	5	6	7	8	8	7	6	4	3
125.0	5	5	6	6	7	8	7	6	4	3
127.5	5	5	6	6	7	8	7	6	4	3
130.0	5	5	6	6	7	7	7	6	4	3
132.5	5	5	6	6	7	7	6	5	4	3
135.0	5	5	5	6	6	6	5	4	3	2
137.5	4	4	5	5	5	5	5	4	2	1
140.0	3	4	4	4	4	4	4	3	2	1
142.5	3	3	3	4	4	4	3	2	1	0
145.0	3	3	3	4	4	4	3	2	1	0
147.5	3	3	3	4	4	3	3	2	1	0
150.0	3	3	3	3	4	3	3	2	1	0
152.5	3	3	3	3	3	3	2	1	0	0
155.0	3	3	3	3	3	3	2	1	0	0
157.5	2	3	3	3	3	3	2	1	0	0
160.0	2	2	3	3	3	3	2	1	0	0
162.5	2	2	3	3	3	2	2	1	0	0
165.0	2	2	2	3	2	2	2	1	0	0
167.5	2	2	2	3	3	2	2	1	0	0
170.0	2	2	2	3	3	2	2	1	0	0
172.5	2	2	2	2	3	2	2	1	0	0
175.0	2	2	2	2	3	2	2	1	0	0
177.5	2	2	2	2	2	2	2	1	0	0
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Horizontal Angles
Angles

	<u>175.0</u>	<u>180.0</u>
0.0	513	513
2.5	521	523
5.0	524	533
7.5	538	548
10.0	571	579
12.5	636	646
15.0	695	714
17.5	744	749
20.0	786	792
22.5	797	825
25.0	852	867

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CANDELA TABULATION - (Cont.)

27.5	888	904
30.0	941	967
32.5	1056	1072
35.0	1197	1211
37.5	1287	1286
40.0	1213	1192
42.5	1043	1019
45.0	946	924
47.5	896	866
50.0	855	823
52.5	814	779
55.0	754	711
57.5	694	637
60.0	676	591
62.5	682	562
65.0	730	572
67.5	822	645
70.0	884	777
72.5	833	834
75.0	690	807
77.5	578	693
80.0	437	513
82.5	305	348
85.0	210	235
87.5	138	180
90.0	10	2
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	0	0
105.0	0	0
107.5	0	0
110.0	1	1
112.5	1	1
115.0	1	1
117.5	1	1
120.0	1	1
122.5	2	2
125.0	2	2
127.5	2	2
130.0	2	2
132.5	2	2
135.0	1	2
137.5	0	0
140.0	0	0
142.5	0	0
145.0	0	0
147.5	0	0
150.0	0	0
152.5	0	0
155.0	0	0
157.5	0	0
160.0	0	0
162.5	0	0
165.0	0	0

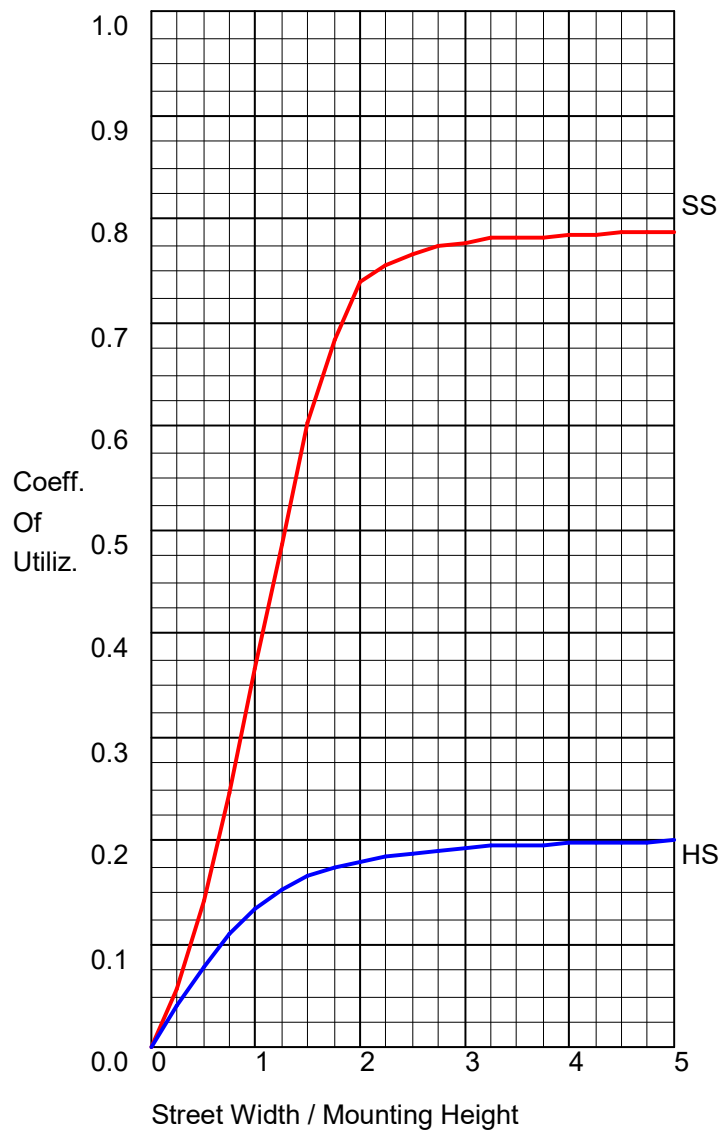
IES ROAD REPORT

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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

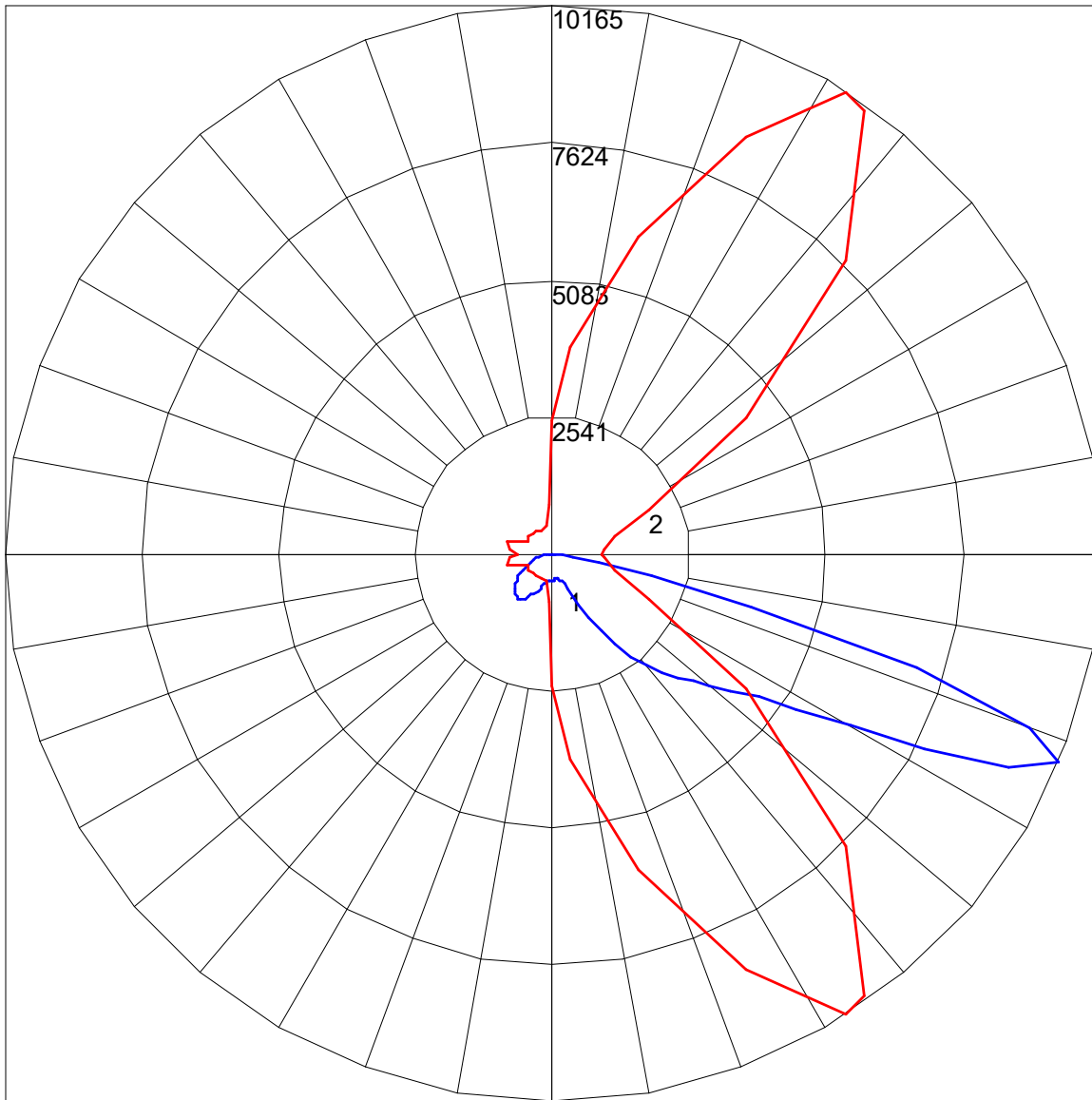
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

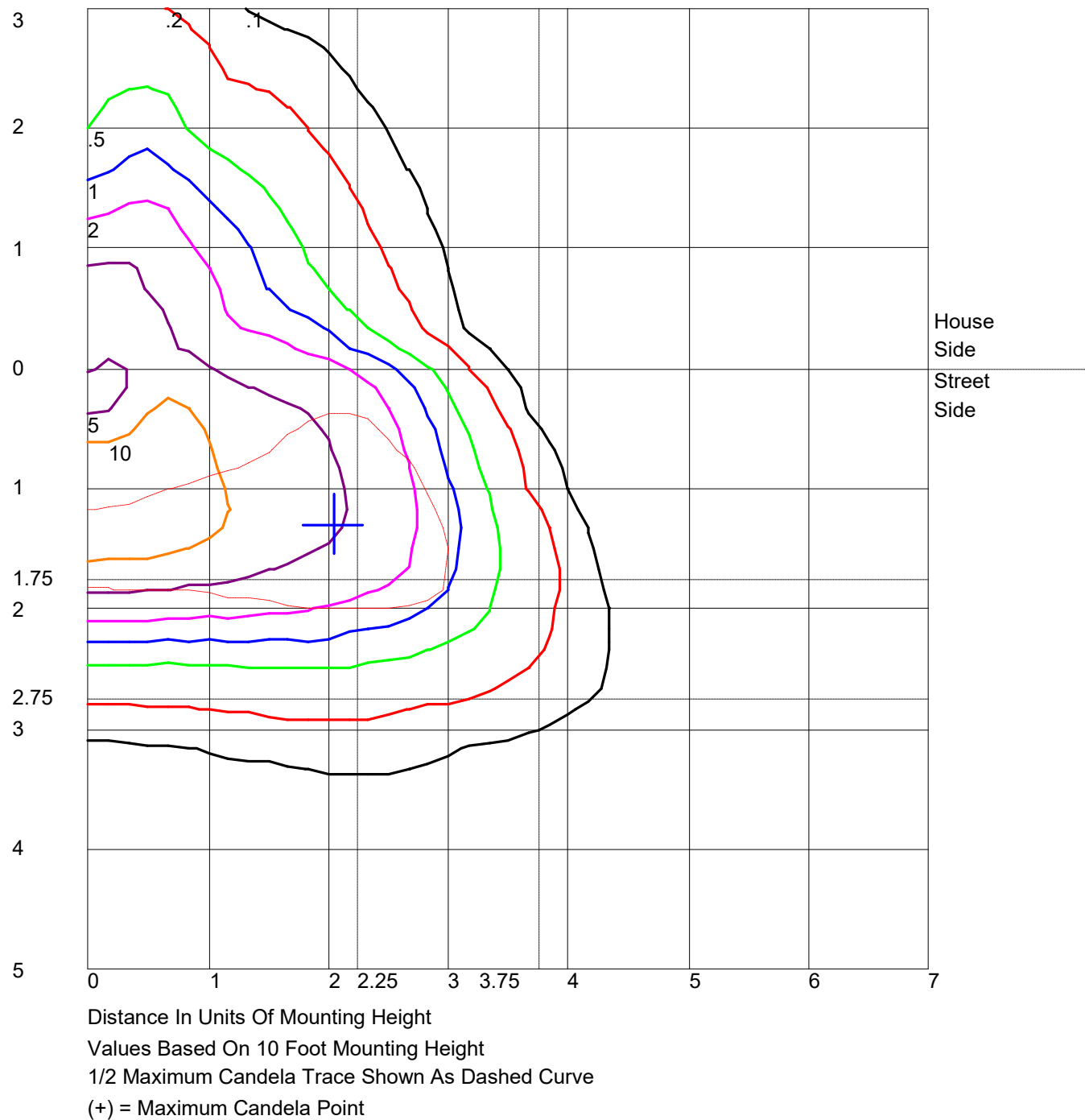
	Lumens	Percent Of Luminaire
Downward Street Side	8210.8	79.3
Downward House Side	2112.3	20.4
Downward Total	10323.1	99.7
Upward Street Side	11.5	0.1
Upward House Side	16.2	0.2
Upward Total	27.7	0.3
Total Flux	10350.8	100.0

POLAR GRAPH

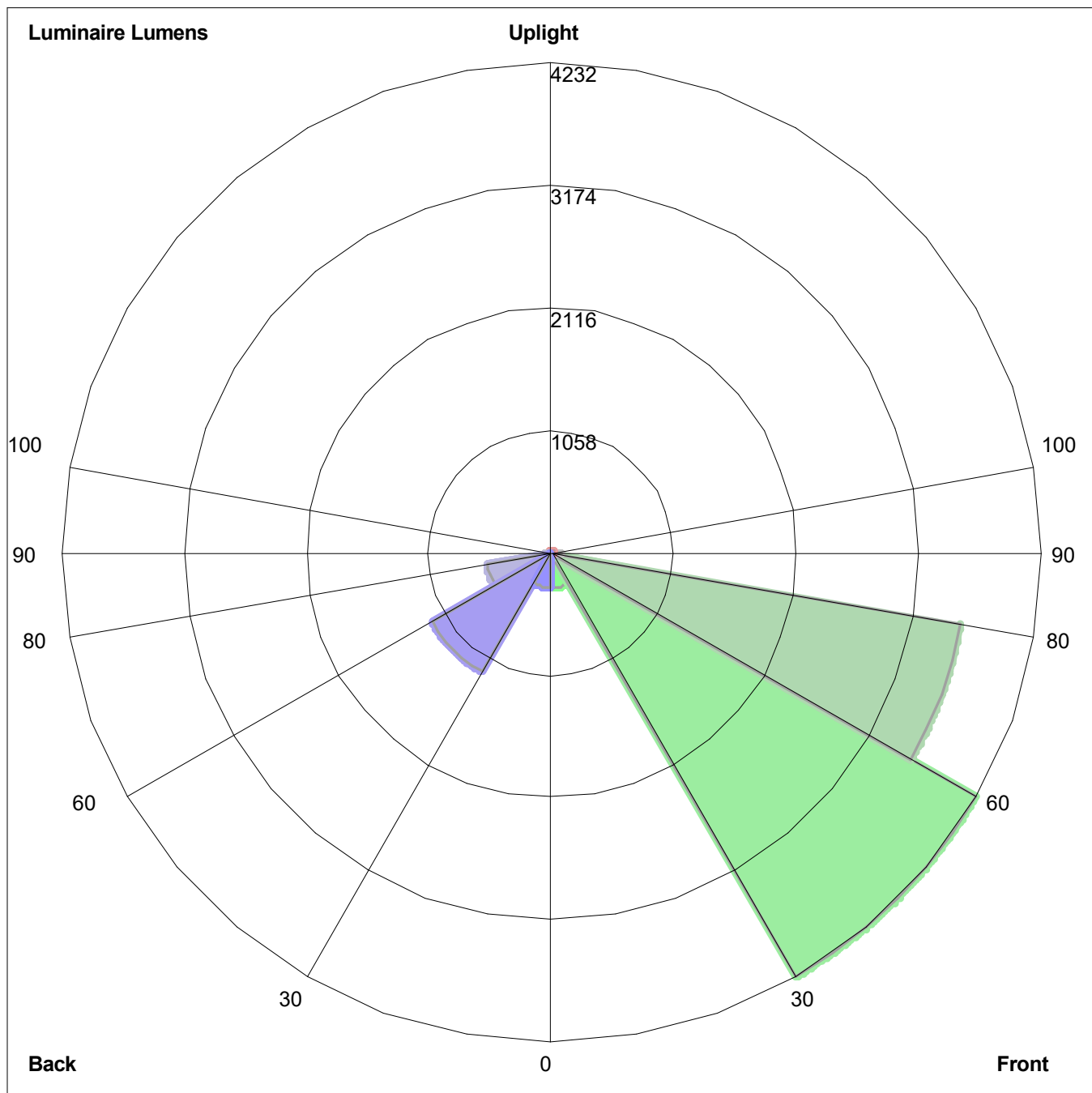


Maximum Candela = 10165 Located At Horizontal Angle = 57.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (57.5 - 237.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=301.4, Medium= 4232.0, High=3589.5, Very High=87.9
Back: Low=300.9, Medium=1191.2, High=566.0, Very High=54.3
Uplight: Low=9.3, High=18.4

BUG Rating : B2-U2-G2