



IES ROAD REPORT

PHOTOMETRIC FILENAME : XCN4-PT-2-LED-18L-50.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-13253
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUE DATE] 06/07/22
[TEST DATE] 02/10/22
[MANUFACT] LSI INDUSTRIES, INC.
[LUMCAT] XCN4-PT-2-LED-18L-50
[OTHER] TEST PROCEDURE: IESNA LM-79-19
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED
[OTHER] SCALED FROM ORIGINAL TEST DATA
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor
[SEARCH_COLORTEMP] 5000

CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	19383
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	130
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	15665
Maximum Candela Angle	77.5H 65V
Maximum Candela (<90 Degrees Vertical)	15665
Maximum Candela Angle (<90 Degrees Vertical)	77.5H 65V
Maximum Candela At 90 Degrees Vertical	31 (0.2% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1024 (5.3% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)



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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1112.3	N.A.	5.7
FM - Front-Medium (30-60)	7515.3	N.A.	38.8
FH - Front-High (60-80)	3844.7	N.A.	19.8
FVH - Front-Very High (80-90)	99.8	N.A.	0.5
BL - Back-Low (0-30)	976.8	N.A.	5.0
BM - Back-Medium (30-60)	4198.7	N.A.	21.7
BH - Back-High (60-80)	1470.8	N.A.	7.6
BVH - Back-Very High (80-90)	146.6	N.A.	0.8
UL - Uplight-Low (90-100)	8.5	N.A.	0.0
UH - Uplight-High (100-180)	9.5	N.A.	0.0
Total	19383.0	N.A.	100.0
BUG Rating	B3-U1-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	77.5
0.0	1696	1696	1696	1696	1696	1696	1696	1696	1696	1696
2.5	1816	1796	1779	1747	1718	1692	1676	1655	1658	1657
5.0	1728	1734	1711	1703	1752	1789	1776	1765	1677	1668
7.5	1752	1745	1724	1751	1691	1698	1696	1820	1746	1713
10.0	1847	1827	1870	1821	1797	1785	1761	1813	1926	1883
12.5	1931	1951	1950	1923	1916	1953	1881	1921	1994	2027
15.0	2111	2107	2144	2094	2040	2074	2114	2070	2189	2230
17.5	2297	2247	2286	2262	2305	2259	2303	2338	2375	2431
20.0	2555	2533	2462	2399	2473	2529	2538	2611	2654	2672
22.5	2698	2683	2679	2679	2612	2724	2789	2900	2899	2952
25.0	2996	3013	2965	2865	2897	2918	3106	3249	3299	3341
27.5	3251	3274	3252	3231	3111	3227	3352	3586	3735	3789
30.0	3645	3678	3603	3501	3505	3494	3599	3967	4190	4239
32.5	3935	3978	4003	3997	3828	3849	3923	4314	4617	4623
35.0	4392	4398	4415	4383	4268	4217	4269	4579	4978	4997
37.5	4945	4985	4956	4877	4718	4613	4572	4862	5405	5432
40.0	5601	5650	5646	5513	5322	5117	4985	5061	5825	5872
42.5	6277	6338	6357	6314	6070	5748	5458	5306	6225	6314
45.0	6802	6871	6955	7102	6904	6545	6051	5567	6626	6787
47.5	6989	7057	7243	7555	7617	7497	6927	5969	7093	7359
50.0	6777	6831	7056	7541	8004	8452	8124	6655	7743	8101
52.5	6158	6156	6430	7022	7845	9051	9477	7638	8665	9215
55.0	5145	5108	5372	6028	7093	9016	10849	8907	9781	10501
57.5	3612	3707	3940	4566	5750	8186	11698	10612	11122	11951
60.0	2309	2375	2517	2959	3975	6451	11852	12385	12532	13403
62.5	1563	1568	1617	1853	2421	4059	11020	13343	14048	14865
65.0	1148	1152	1184	1326	1552	2263	8782	13115	14857	15665
67.5	865	877	906	1000	1175	1468	5753	11427	14322	14975
70.0	665	685	693	783	929	1083	3196	8385	11658	11564
72.5	481	507	498	593	737	856	1729	5215	6772	6023
75.0	286	303	281	372	528	685	1070	2987	3029	2435
77.5	205	233	193	227	306	494	703	1748	1498	1167
80.0	201	227	176	173	210	322	437	1024	844	669
82.5	241	244	170	131	155	229	241	587	525	432
85.0	234	236	141	94	104	147	153	205	268	237
87.5	118	113	69	39	34	54	63	70	79	82
90.0	5	6	4	3	3	5	13	25	30	31
92.5	3	3	3	3	2	4	11	24	30	30
95.0	3	3	3	3	2	3	10	22	28	28
97.5	3	2	2	3	2	3	8	19	25	25
100.0	3	2	2	3	2	2	5	14	19	20
102.5	3	2	2	2	2	2	2	8	13	13
105.0	2	2	2	2	1	1	1	3	6	7
107.5	2	2	2	2	1	0	0	0	2	2
110.0	2	2	2	2	1	0	0	0	0	0
112.5	2	2	2	2	1	0	0	0	0	0
115.0	3	2	2	2	1	0	0	0	0	0
117.5	3	2	2	2	1	0	0	0	0	0
120.0	3	3	2	2	1	0	0	0	0	0
122.5	3	3	3	3	1	1	0	0	0	0
125.0	4	4	3	3	2	1	0	0	0	0
127.5	4	4	3	3	2	1	0	0	0	0
130.0	5	5	4	3	2	1	1	0	0	0

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CANDELA TABULATION - (Cont.)

132.5	6	6	5	4	2	2	1	0	0	0
135.0	7	6	5	4	3	2	1	0	0	0
137.5	7	7	6	5	3	2	1	1	0	0
140.0	8	8	6	5	3	2	1	1	0	0
142.5	7	7	6	4	3	2	1	1	0	0
145.0	4	4	2	2	1	0	0	0	0	0
147.5	2	1	1	0	0	0	0	0	0	0
150.0	2	1	1	0	0	0	0	0	0	0
152.5	1	1	1	0	0	0	0	0	0	0
155.0	1	1	0	0	0	0	0	0	0	0
157.5	1	1	0	0	0	0	0	0	0	0
160.0	1	1	0	0	0	0	0	0	0	0
162.5	1	1	0	0	0	0	0	0	0	0
165.0	1	1	0	0	0	0	0	0	0	0
167.5	1	1	0	0	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									
	<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	1696	1696	1696	1696	1696	1696	1696	1696	1696	1696
2.5	1666	1664	1661	1647	1641	1626	1642	1665	1671	1680
5.0	1657	1600	1594	1612	1625	1614	1668	1597	1535	1508
7.5	1649	1647	1617	1616	1650	1526	1435	1409	1435	1400
10.0	1741	1678	1662	1743	1596	1479	1423	1409	1407	1446
12.5	1932	1822	1825	1809	1606	1493	1504	1468	1483	1523
15.0	2095	1979	1963	1916	1645	1603	1553	1578	1636	1722
17.5	2307	2206	2145	1995	1766	1677	1698	1812	1892	2008
20.0	2587	2462	2406	2122	1878	1804	1894	2060	2143	2314
22.5	2884	2781	2643	2234	1979	1975	2137	2316	2630	2822
25.0	3298	3095	2997	2415	2129	2186	2376	2742	3016	3324
27.5	3706	3478	3416	2619	2316	2413	2772	3112	3586	3864
30.0	4153	3881	3769	2800	2525	2679	3087	3584	3937	4255
32.5	4503	4186	4019	2976	2740	2934	3431	3864	4354	4622
35.0	4894	4516	4295	3123	2942	3244	3662	4125	4529	4714
37.5	5322	4875	4591	3288	3101	3383	3786	4216	4520	4647
40.0	5771	5256	4899	3468	3225	3491	3825	4193	4355	4404
42.5	6280	5667	5244	3631	3364	3555	3759	4010	4056	4004
45.0	6816	6138	5589	3814	3435	3526	3634	3727	3677	3547
47.5	7468	6661	5953	3988	3480	3455	3449	3413	3239	3115
50.0	8311	7325	6350	4146	3518	3340	3222	3092	2888	2769
52.5	9401	8035	6767	4297	3534	3173	2962	2851	2617	2514
55.0	10645	8817	7116	4406	3465	2950	2754	2647	2356	2251
57.5	11968	9559	7323	4422	3331	2685	2542	2430	2048	1945
60.0	13196	10084	7248	4250	3104	2368	2263	2138	1739	1658
62.5	13948	10063	6682	3799	2720	2000	1926	1812	1442	1355
65.0	13815	9174	5408	3069	2216	1592	1547	1474	1175	1086
67.5	11936	7160	3708	2187	1682	1241	1239	1177	962	941
70.0	8219	4477	2270	1473	1253	997	1022	954	854	865
72.5	3522	2177	1423	1033	962	825	865	829	782	794
75.0	1324	1031	943	771	770	709	747	741	688	640
77.5	708	627	659	626	620	619	652	569	442	362

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CANDELA TABULATION - (Cont.)

80.0	477	399	412	520	519	524	441	302	382	346
82.5	311	214	226	416	424	328	230	244	466	471
85.0	177	107	123	290	242	169	176	252	503	496
87.5	67	35	52	91	69	80	101	182	356	387
90.0	26	4	18	14	8	4	2	2	1	1
92.5	26	4	19	14	9	4	2	2	1	1
95.0	26	3	20	15	9	4	3	2	1	1
97.5	24	3	19	14	9	4	3	2	1	1
100.0	19	3	15	12	8	4	2	1	1	1
102.5	13	2	12	9	6	4	2	1	1	1
105.0	7	1	7	6	5	3	2	1	1	1
107.5	3	1	4	4	4	3	2	1	1	1
110.0	1	0	2	3	3	3	2	1	1	1
112.5	0	0	2	3	3	2	2	1	1	1
115.0	0	0	1	2	3	3	2	2	1	1
117.5	0	0	1	2	3	3	2	2	1	1
120.0	0	0	1	2	3	3	3	2	2	2
122.5	0	0	1	2	3	3	3	2	2	2
125.0	0	1	1	2	3	3	3	3	2	2
127.5	0	1	2	3	3	3	3	3	2	2
130.0	0	1	2	3	3	3	3	3	3	3
132.5	0	1	2	3	4	4	4	3	3	3
135.0	0	1	2	3	4	4	4	4	3	3
137.5	0	1	1	3	4	4	4	4	4	3
140.0	0	1	1	2	4	4	4	4	4	3
142.5	0	0	1	2	3	4	4	4	4	3
145.0	0	0	0	1	2	3	3	3	2	2
147.5	0	0	0	0	1	1	1	2	1	0
150.0	0	0	0	0	1	1	1	1	1	0
152.5	0	0	0	0	0	1	1	1	1	0
155.0	0	0	0	0	0	1	1	1	0	0
157.5	0	0	0	0	0	1	1	1	0	0
160.0	0	0	0	0	0	0	1	1	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	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles
Angles

	<u>175.0</u>	<u>180.0</u>
0.0	1696	1696
2.5	1680	1683
5.0	1534	1508
7.5	1393	1391
10.0	1400	1425
12.5	1537	1523
15.0	1736	1762
17.5	2012	2086
20.0	2486	2530
22.5	2936	2992
25.0	3545	3552

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CANDELA TABULATION - (Cont.)

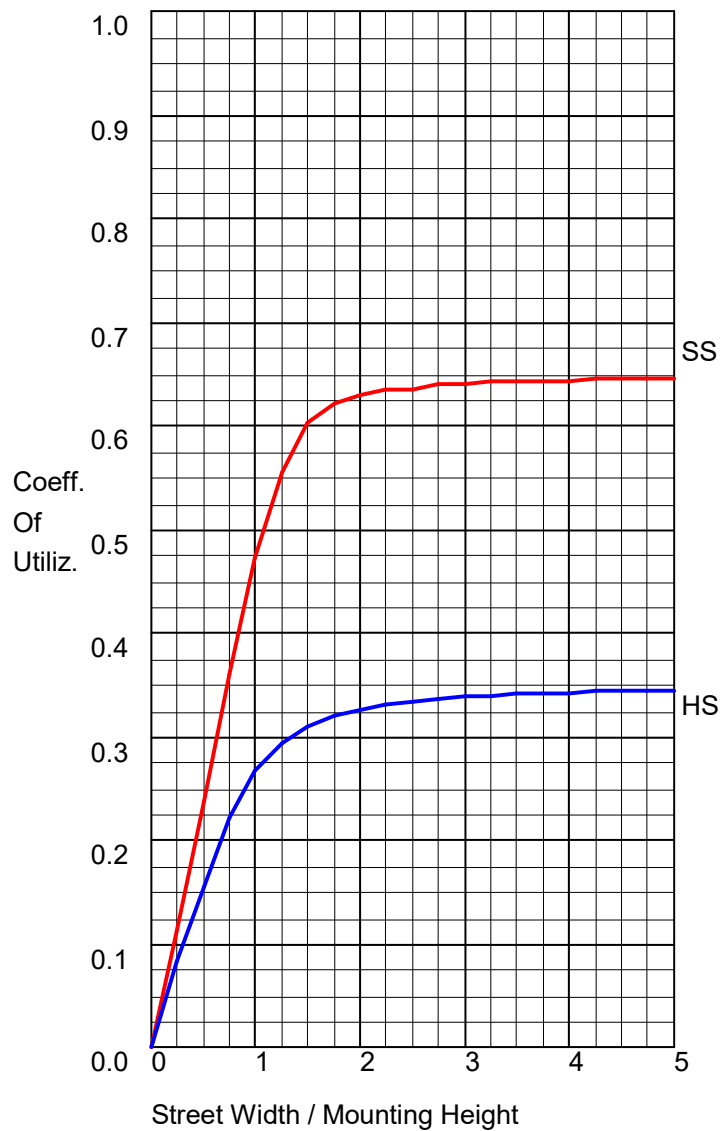
27.5	3996	4041
30.0	4482	4468
32.5	4690	4681
35.0	4742	4730
37.5	4623	4604
40.0	4334	4309
42.5	3920	3895
45.0	3449	3423
47.5	3024	3003
50.0	2705	2685
52.5	2452	2433
55.0	2162	2155
57.5	1873	1867
60.0	1588	1556
62.5	1288	1280
65.0	1082	1093
67.5	996	1025
70.0	952	1002
72.5	888	964
75.0	677	744
77.5	384	449
80.0	386	434
82.5	515	530
85.0	522	530
87.5	321	398
90.0	0	0
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	0	0
112.5	0	0
115.0	0	0
117.5	0	0
120.0	0	0
122.5	1	0
125.0	1	0
127.5	1	1
130.0	1	1
132.5	2	2
135.0	2	2
137.5	3	3
140.0	3	3
142.5	2	2
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

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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

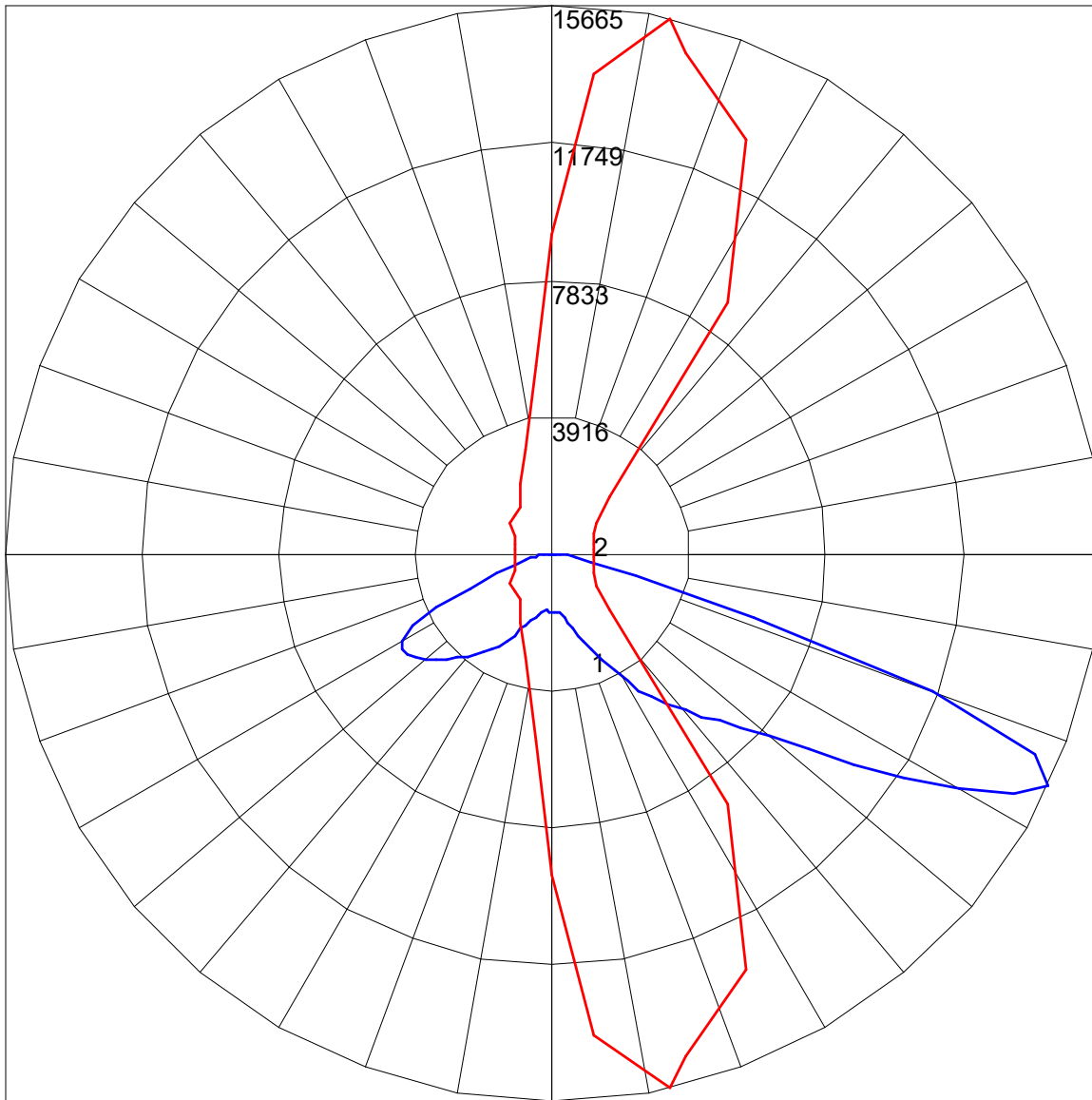
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

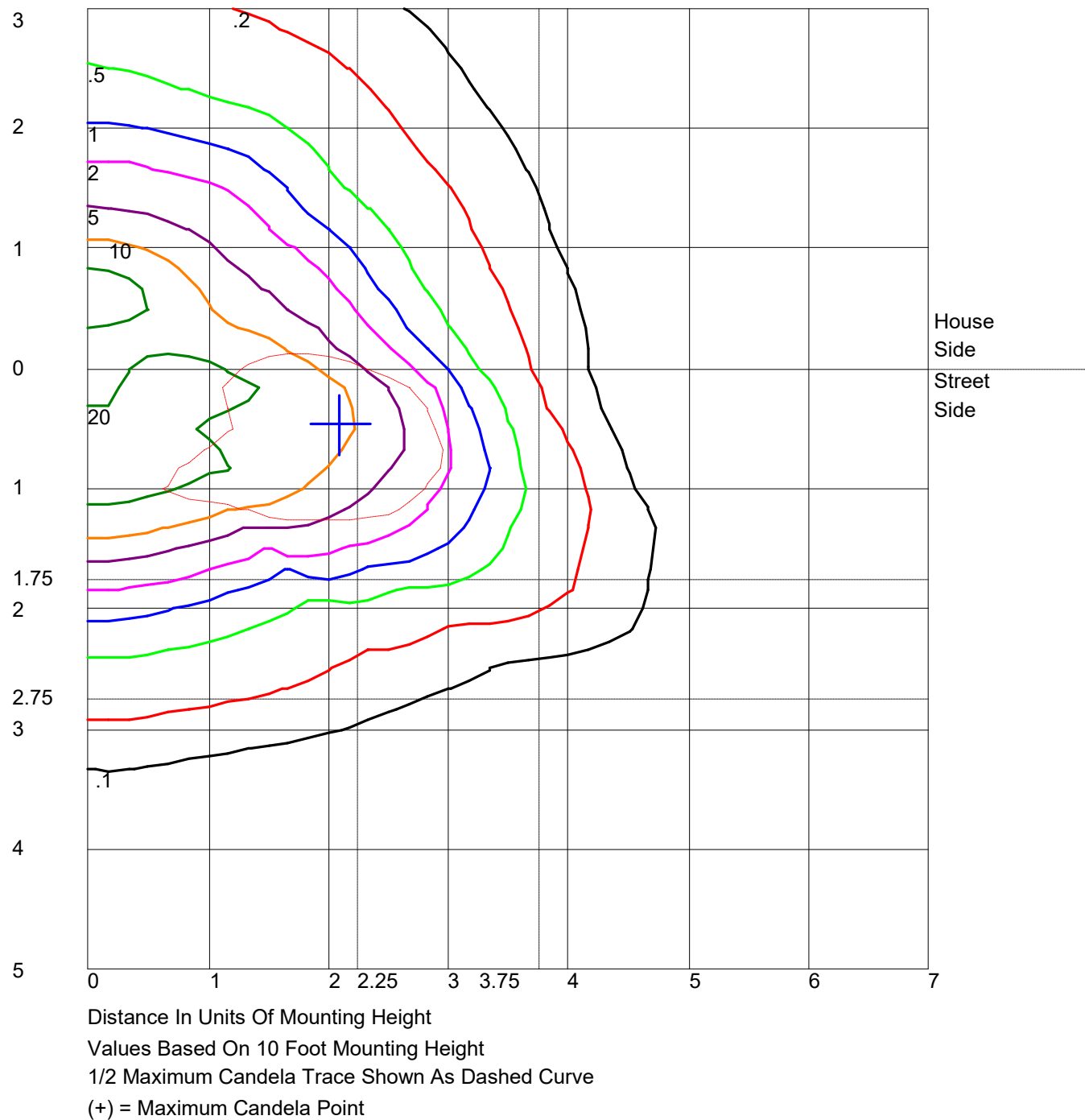
	Lumens	Percent Of Luminaire
Downward Street Side	12572.1	64.9
Downward House Side	6792.9	35.0
Downward Total	19365.0	99.9
Upward Street Side	9.7	0.1
Upward House Side	8.2	0.0
Upward Total	17.9	0.1
Total Flux	19382.9	100.0

POLAR GRAPH

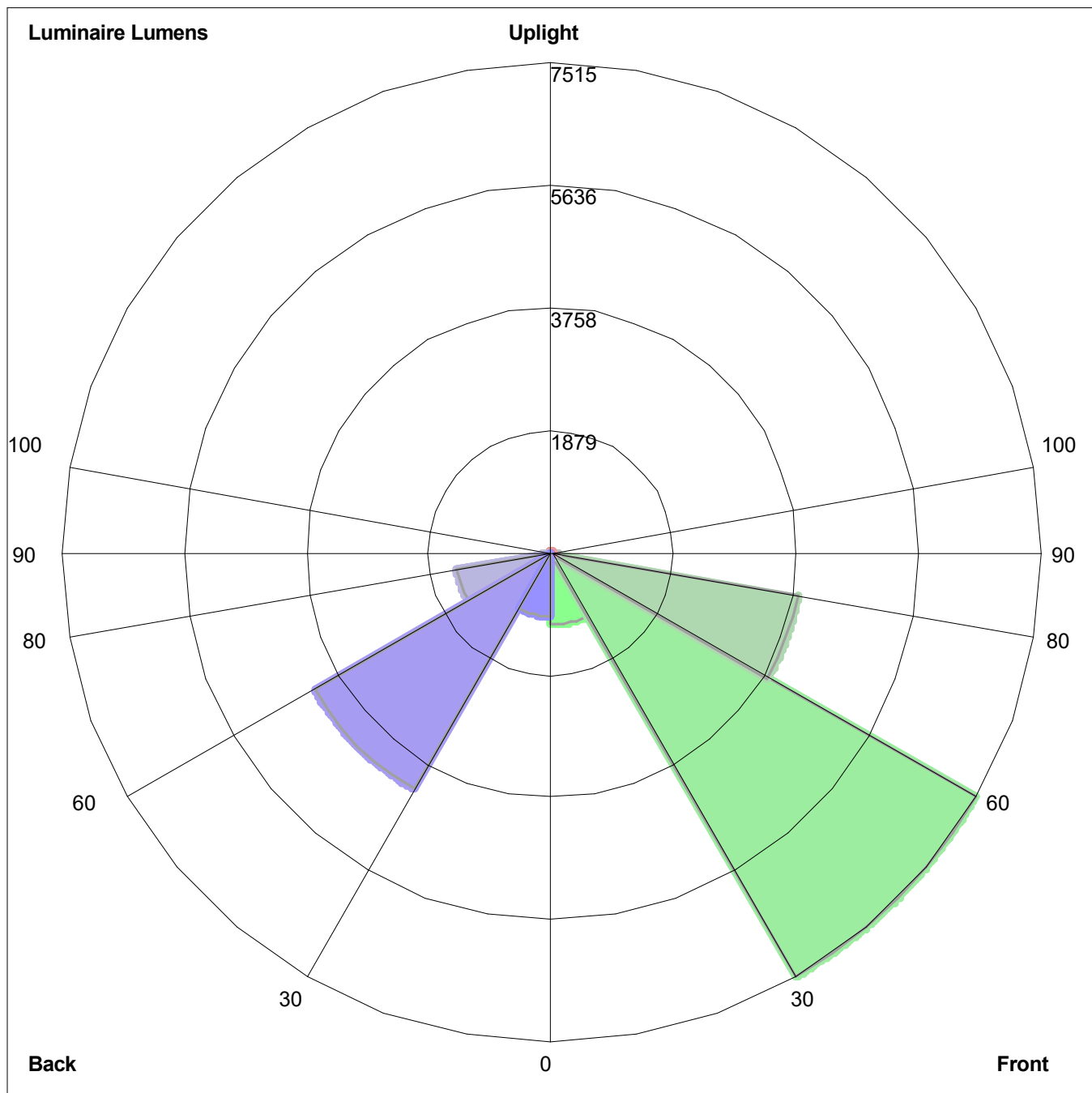


Maximum Candela = 15665 Located At Horizontal Angle = 77.5, Vertical Angle = 65
1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1112.3, Medium=7515.3, High=3844.7, Very High=99.8
Back: Low=976.8, Medium=4198.7, High=1470.8, Very High=146.6
Uplight: Low=8.5, High=9.5

BUG Rating : B3-U1-G3