



## IES ROAD REPORT

PHOTOMETRIC FILENAME : XCN4-PT-3-LED-18L-50.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] LED-13255  
[TESTLAB] LSI INDUSTRIES, INC.  
[ISSUEDATE] 06/07/22  
[TESTDATE] 02/14/22  
[MANUFAC] LSI INDUSTRIES, INC.  
[LUMCAT] XCN4-PT-3-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 III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20294
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	136
Total Luminaire Watts	149.1
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	18929
Maximum Candela Angle	52.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	18929
Maximum Candela Angle (<90 Degrees Vertical)	52.5H 67.5V
Maximum Candela At 90 Degrees Vertical	117 (0.6% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1328 (6.5% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)



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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	656.5	N.A.	3.2
FM - Front-Medium (30-60)	8160.9	N.A.	40.2
FH - Front-High (60-80)	6390.5	N.A.	31.5
FVH - Front-Very High (80-90)	168.7	N.A.	0.8
BL - Back-Low (0-30)	644.0	N.A.	3.2
BM - Back-Medium (30-60)	2836.8	N.A.	14.0
BH - Back-High (60-80)	1271.2	N.A.	6.3
BVH - Back-Very High (80-90)	121.9	N.A.	0.6
UL - Uplight-Low (90-100)	15.6	N.A.	0.1
UH - Uplight-High (100-180)	28.1	N.A.	0.1
Total	20294.2	N.A.	100.0
BUG Rating	B3-U2-G3		

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**CANDELA TABULATION**

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>52.5</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
<b>0.0</b>	960	960	960	960	960	960	960	960	960	960
<b>2.5</b>	975	976	971	971	966	959	956	956	949	947
<b>5.0</b>	940	936	934	941	956	974	985	980	963	942
<b>7.5</b>	904	914	909	904	903	907	909	925	981	951
<b>10.0</b>	936	936	954	933	931	936	932	946	967	1028
<b>12.5</b>	981	980	984	974	986	1010	994	1002	1016	1071
<b>15.0</b>	1073	1059	1067	1051	1054	1073	1090	1106	1077	1131
<b>17.5</b>	1211	1171	1189	1180	1185	1176	1184	1201	1183	1197
<b>20.0</b>	1408	1384	1339	1309	1334	1344	1347	1341	1329	1298
<b>22.5</b>	1623	1602	1594	1581	1524	1547	1555	1547	1515	1461
<b>25.0</b>	1921	1905	1873	1847	1887	1871	1868	1864	1822	1737
<b>27.5</b>	2295	2265	2292	2316	2347	2391	2310	2303	2297	2173
<b>30.0</b>	2796	2824	2803	2871	3002	3002	2914	2905	2906	2628
<b>32.5</b>	3357	3386	3461	3630	3712	3768	3682	3582	3433	3070
<b>35.0</b>	3896	3933	4084	4328	4488	4576	4431	4339	3934	3455
<b>37.5</b>	4418	4461	4680	4994	5250	5382	5164	4991	4448	3803
<b>40.0</b>	4877	4954	5218	5675	6002	6081	5821	5613	4847	4120
<b>42.5</b>	5395	5489	5802	6361	6784	6771	6474	6234	5271	4431
<b>45.0</b>	6190	6215	6570	7193	7540	7417	7081	6801	5642	4722
<b>47.5</b>	7239	7259	7639	8226	8401	8058	7604	7304	6015	5048
<b>50.0</b>	8655	8659	9022	9521	9439	8751	8120	7770	6370	5536
<b>52.5</b>	10450	10439	10733	11017	10749	9623	8763	8313	6909	6328
<b>55.0</b>	12123	12235	12542	12767	12182	10641	9515	9071	7775	7451
<b>57.5</b>	12812	12921	13433	14107	13863	12050	10948	10444	9314	8649
<b>60.0</b>	11827	11960	13161	14398	15239	14130	13409	13078	11007	9734
<b>62.5</b>	7410	7787	9655	12949	15643	16312	16419	15907	12525	10407
<b>65.0</b>	3402	3603	4829	8224	13415	16960	18764	18290	13272	10538
<b>67.5</b>	1868	1960	2372	3660	8539	15007	18929	18927	13532	9308
<b>70.0</b>	1126	1177	1443	2140	4007	10567	16152	17120	11939	6141
<b>72.5</b>	731	767	990	1456	2527	5593	11038	12308	7247	2633
<b>75.0</b>	526	553	740	1133	1818	2848	5675	6513	3010	944
<b>77.5</b>	380	393	559	940	1509	1785	2390	2832	1339	512
<b>80.0</b>	258	267	421	735	1269	1208	1172	1328	718	316
<b>82.5</b>	179	192	302	508	929	769	616	607	442	237
<b>85.0</b>	147	156	221	375	474	390	292	288	264	161
<b>87.5</b>	147	175	152	240	239	109	118	128	113	93
<b>90.0</b>	36	57	40	37	30	28	32	33	35	31
<b>92.5</b>	5	5	6	7	10	19	27	29	33	29
<b>95.0</b>	3	3	4	5	8	16	24	26	30	28
<b>97.5</b>	3	2	3	5	7	14	19	21	26	25
<b>100.0</b>	3	2	3	5	6	9	13	14	19	20
<b>102.5</b>	2	2	3	5	5	6	7	8	13	15
<b>105.0</b>	2	2	3	4	5	5	6	6	7	9
<b>107.5</b>	2	2	3	4	4	5	5	5	6	7
<b>110.0</b>	2	2	3	4	4	4	5	5	5	6
<b>112.5</b>	2	2	3	4	4	4	5	4	5	6
<b>115.0</b>	2	2	3	4	4	4	4	4	5	6
<b>117.5</b>	2	2	3	4	4	4	4	4	5	5
<b>120.0</b>	2	2	3	4	4	4	4	5	5	6
<b>122.5</b>	3	2	3	4	4	4	5	5	5	6
<b>125.0</b>	3	3	3	4	4	4	5	5	5	5
<b>127.5</b>	3	3	3	4	4	5	5	5	5	6
<b>130.0</b>	4	3	3	4	4	5	5	5	5	6

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**CANDELA TABULATION - (Cont.)**

132.5	4	4	4	4	5	5	5	5	5	6
135.0	5	4	4	5	5	5	5	5	6	6
137.5	5	4	4	5	5	5	5	5	6	6
140.0	5	5	4	5	5	5	5	5	6	6
142.5	5	4	4	4	4	4	5	4	5	5
145.0	3	2	3	3	3	3	3	3	4	4
147.5	1	1	2	2	2	2	2	2	3	4
150.0	1	1	2	2	2	2	2	2	3	3
152.5	1	1	2	2	2	2	2	2	3	3
155.0	1	1	2	2	2	2	2	2	2	3
157.5	1	1	1	2	2	2	2	2	2	3
160.0	1	1	1	2	2	2	2	2	2	3
162.5	1	1	1	2	2	1	2	2	2	2
165.0	1	1	1	2	2	2	2	2	2	3
167.5	1	1	1	2	2	2	2	2	2	3
170.0	1	1	2	2	2	2	2	2	2	3
172.5	1	1	2	2	2	2	2	2	3	3
175.0	0	1	1	2	2	2	2	2	3	3
177.5	0	1	1	2	2	2	2	2	3	3
180.0	2	2	2	2	2	2	2	2	2	2

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	960	960	960	960	960	960	960	960	960	960
2.5	953	957	954	948	962	976	985	996	998	996
5.0	929	939	939	952	984	1035	1042	1000	985	988
7.5	938	937	947	986	1041	987	972	991	1001	1019
10.0	973	956	980	1071	1041	1029	1050	1086	1110	1103
12.5	1037	1021	1046	1122	1084	1123	1153	1173	1168	1206
15.0	1091	1075	1118	1170	1159	1229	1239	1250	1290	1347
17.5	1168	1134	1168	1224	1256	1301	1329	1391	1448	1477
20.0	1263	1212	1226	1280	1353	1389	1449	1520	1597	1668
22.5	1388	1307	1316	1342	1439	1502	1564	1680	1819	1906
25.0	1602	1478	1435	1425	1518	1601	1686	1891	2041	2138
27.5	1935	1679	1589	1478	1615	1686	1849	2073	2356	2411
30.0	2228	1903	1740	1544	1649	1782	1985	2319	2633	2759
32.5	2482	2057	1841	1557	1691	1849	2100	2500	3054	3217
35.0	2713	2196	1921	1550	1682	1909	2172	2705	3460	3703
37.5	2924	2323	1993	1537	1657	1922	2180	2776	3876	4180
40.0	3124	2442	2061	1523	1640	1934	2165	2807	4362	4516
42.5	3318	2551	2119	1519	1606	1913	2119	2782	4825	4585
45.0	3540	2672	2179	1510	1567	1880	2086	2718	5190	4352
47.5	3850	2820	2245	1515	1527	1840	2046	2600	5147	4112
50.0	4313	3030	2326	1522	1479	1794	2004	2493	4826	3881
52.5	4907	3264	2395	1515	1428	1737	1943	2363	4325	3643
55.0	5495	3526	2477	1490	1366	1655	1885	2210	3763	3413
57.5	6078	3853	2547	1424	1294	1547	1784	2057	3200	3178
60.0	6717	4118	2431	1326	1212	1426	1661	1907	2666	2928
62.5	7276	4060	2040	1201	1150	1302	1529	1743	2198	2714
65.0	7060	3544	1555	1074	1077	1184	1378	1596	1858	2496
67.5	5364	2488	1148	944	1002	1085	1242	1487	1609	2226
70.0	2937	1317	768	786	883	961	1116	1366	1416	1922
72.5	949	564	488	622	752	826	977	1214	1242	1584
75.0	500	353	372	503	628	711	838	989	977	1213
77.5	273	229	288	406	518	610	704	545	543	772

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**CANDELA TABULATION - (Cont.)**

80.0	201	175	233	333	419	443	499	372	320	457
82.5	151	126	183	269	323	253	268	260	214	315
85.0	101	81	134	202	179	162	157	145	115	217
87.5	55	37	87	106	93	81	68	79	61	121
90.0	21	7	25	23	21	19	16	33	14	34
92.5	20	7	15	14	14	12	10	6	4	1
95.0	20	8	15	15	15	13	11	7	4	2
97.5	19	8	15	15	15	14	11	7	4	2
100.0	16	8	13	14	15	14	12	7	5	2
102.5	13	7	11	13	14	13	12	8	5	3
105.0	9	7	10	11	13	13	11	8	5	3
107.5	8	7	9	10	12	12	11	8	5	3
110.0	7	7	8	9	11	11	10	8	5	3
112.5	7	7	8	9	10	10	10	8	6	3
115.0	7	7	8	9	10	10	9	8	6	3
117.5	7	7	8	9	10	10	9	7	5	3
120.0	7	7	8	9	10	10	9	7	6	3
122.5	7	7	8	9	10	11	10	8	6	4
125.0	7	7	8	9	11	11	10	8	6	4
127.5	7	7	8	9	11	11	11	8	6	4
130.0	7	7	8	9	11	11	10	8	6	4
132.5	7	7	8	9	10	11	10	8	6	4
135.0	7	7	8	9	10	10	9	7	6	4
137.5	6	7	7	8	9	9	9	7	5	3
140.0	6	7	7	8	9	9	8	6	5	3
142.5	6	6	7	7	8	8	7	6	4	2
145.0	5	6	6	6	7	7	6	4	3	1
147.5	5	5	5	6	6	6	5	3	1	0
150.0	4	5	5	5	6	5	4	3	1	0
152.5	4	5	5	5	5	5	4	2	1	0
155.0	4	5	5	5	5	5	4	2	0	0
157.5	4	4	4	5	5	4	3	2	0	0
160.0	4	4	4	4	4	4	3	1	0	0
162.5	3	4	4	4	4	3	3	1	0	0
165.0	3	4	4	4	4	3	3	1	0	0
167.5	3	4	4	4	4	4	3	1	0	0
170.0	4	4	4	4	4	4	3	1	0	0
172.5	4	4	4	4	4	4	3	1	0	0
175.0	3	4	4	4	4	4	3	1	0	0
177.5	3	4	4	4	4	3	3	1	0	0
180.0	2	2	2	2	2	2	2	2	2	2

**Vert. Horizontal Angles**  
**Angles**

	<u>175.0</u>	<u>180.0</u>
0.0	960	960
2.5	992	987
5.0	985	991
7.5	1028	1026
10.0	1121	1104
12.5	1203	1211
15.0	1343	1342
17.5	1505	1521
20.0	1727	1744
22.5	1943	1920
25.0	2167	2185

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : XCN4-PT-3-LED-18L-50.IES**

**CANDELA TABULATION - (Cont.)**

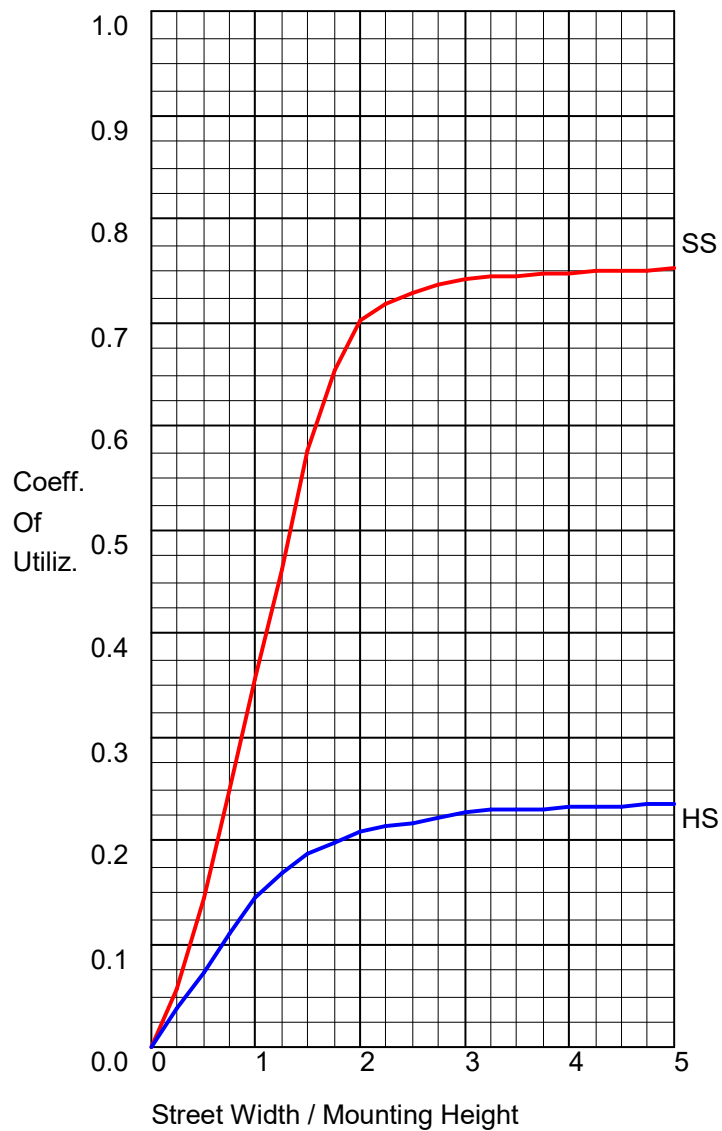
27.5	2387	2370
30.0	2699	2673
32.5	3028	2965
35.0	3332	3242
37.5	3454	3326
40.0	3340	3150
42.5	2967	2784
45.0	2708	2537
47.5	2526	2368
50.0	2401	2241
52.5	2314	2130
55.0	2256	2040
57.5	2215	1969
60.0	2207	1928
62.5	2262	1976
65.0	2323	2059
67.5	2348	2164
70.0	2281	2238
72.5	1977	2023
75.0	1395	1560
77.5	1108	1287
80.0	847	982
82.5	626	670
85.0	488	521
87.5	733	860
90.0	98	117
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	1	0
110.0	1	0
112.5	1	0
115.0	1	0
117.5	1	1
120.0	1	1
122.5	2	1
125.0	2	2
127.5	3	2
130.0	3	2
132.5	3	3
135.0	3	2
137.5	2	2
140.0	2	2
142.5	1	1
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.)**

<b>167.5</b>	0	0
<b>170.0</b>	0	0
<b>172.5</b>	0	0
<b>175.0</b>	0	0
<b>177.5</b>	0	0
<b>180.0</b>	2	2

### COEFFICIENTS OF UTILIZATION

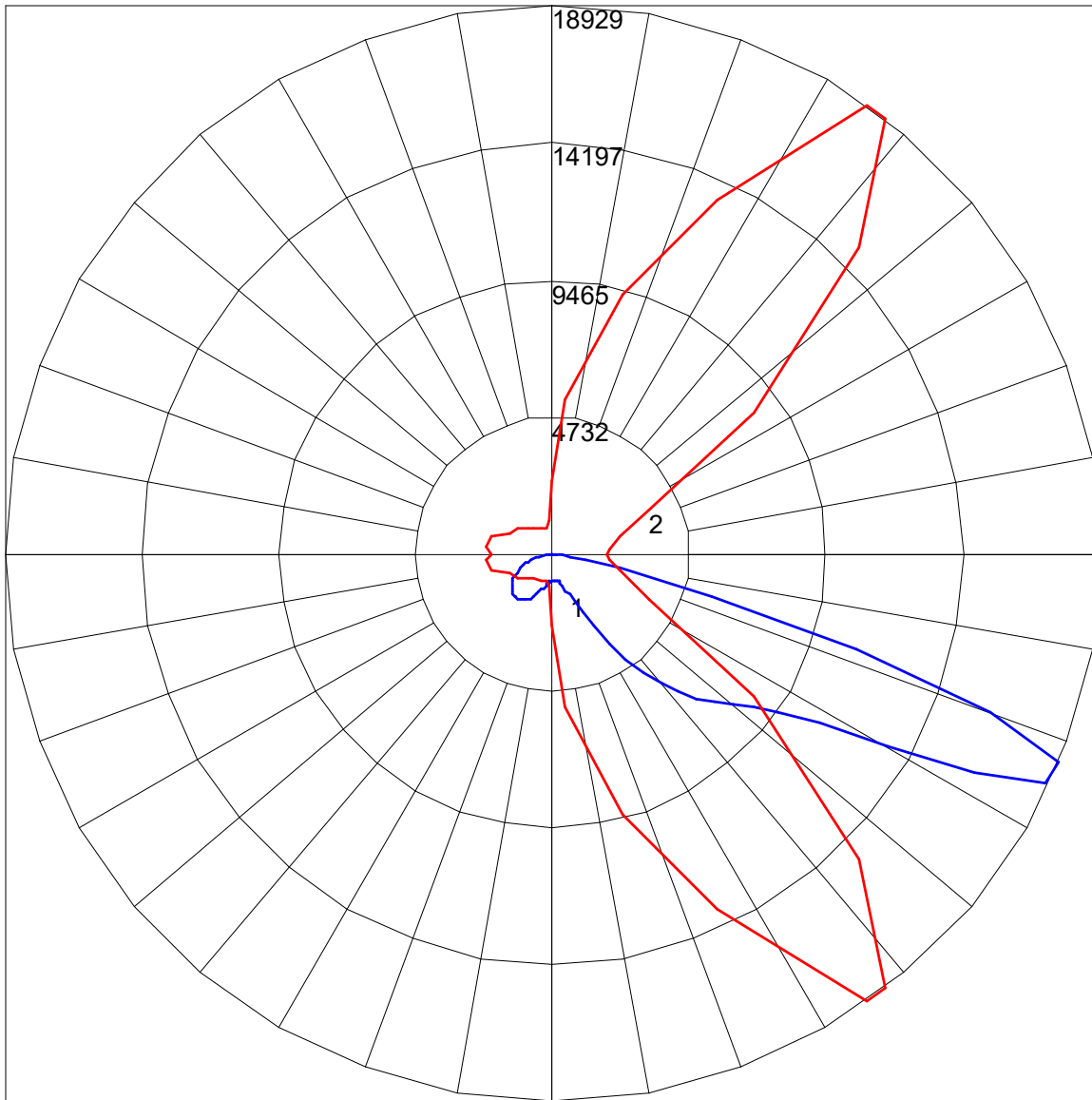


### FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	15376.6	75.8
Downward House Side	4873.9	24.0
Downward Total	20250.5	99.8
Upward Street Side	20.8	0.1
Upward House Side	22.9	0.1
Upward Total	43.7	0.2
Total Flux	20294.2	100.0

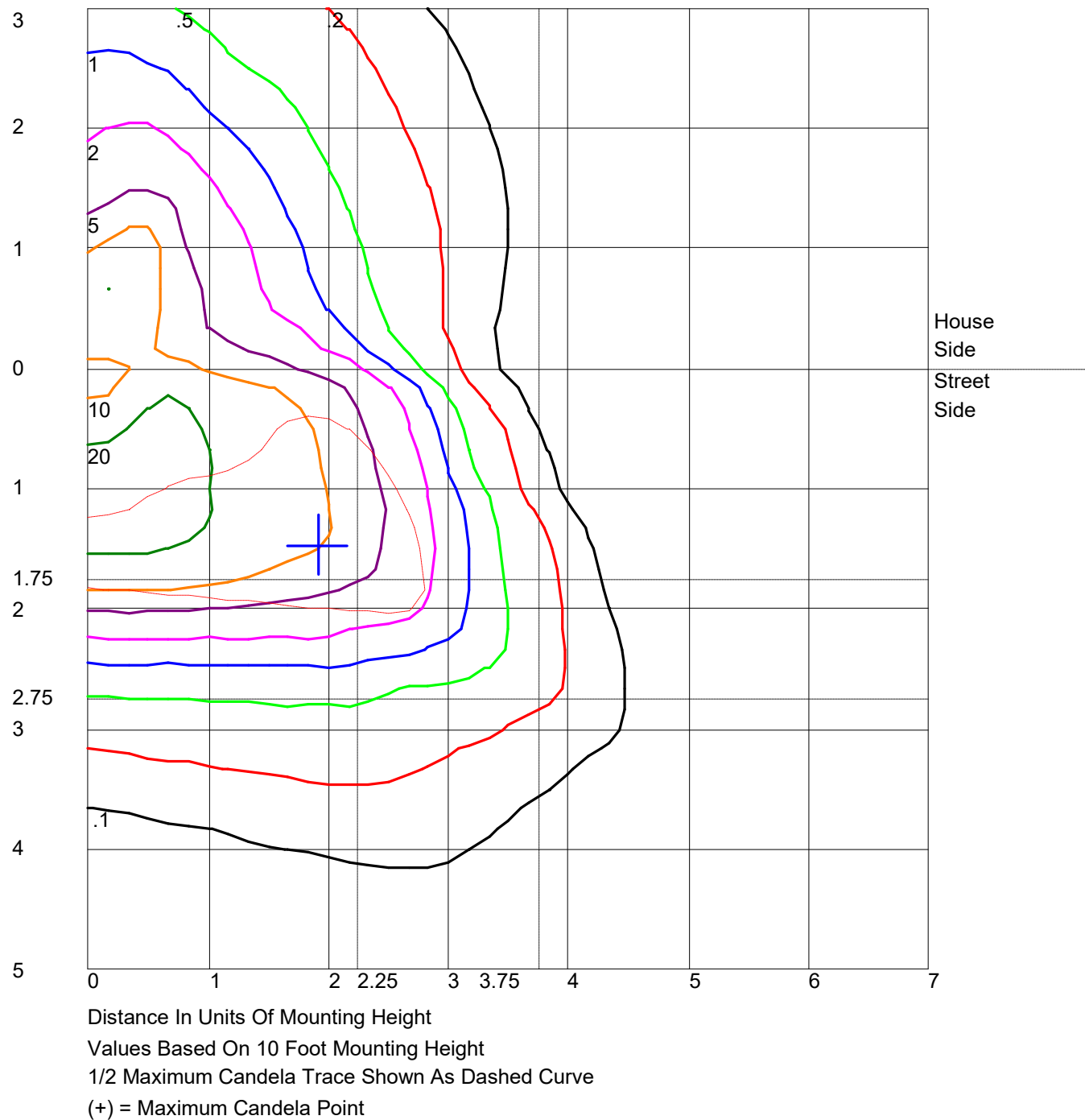


POLAR GRAPH

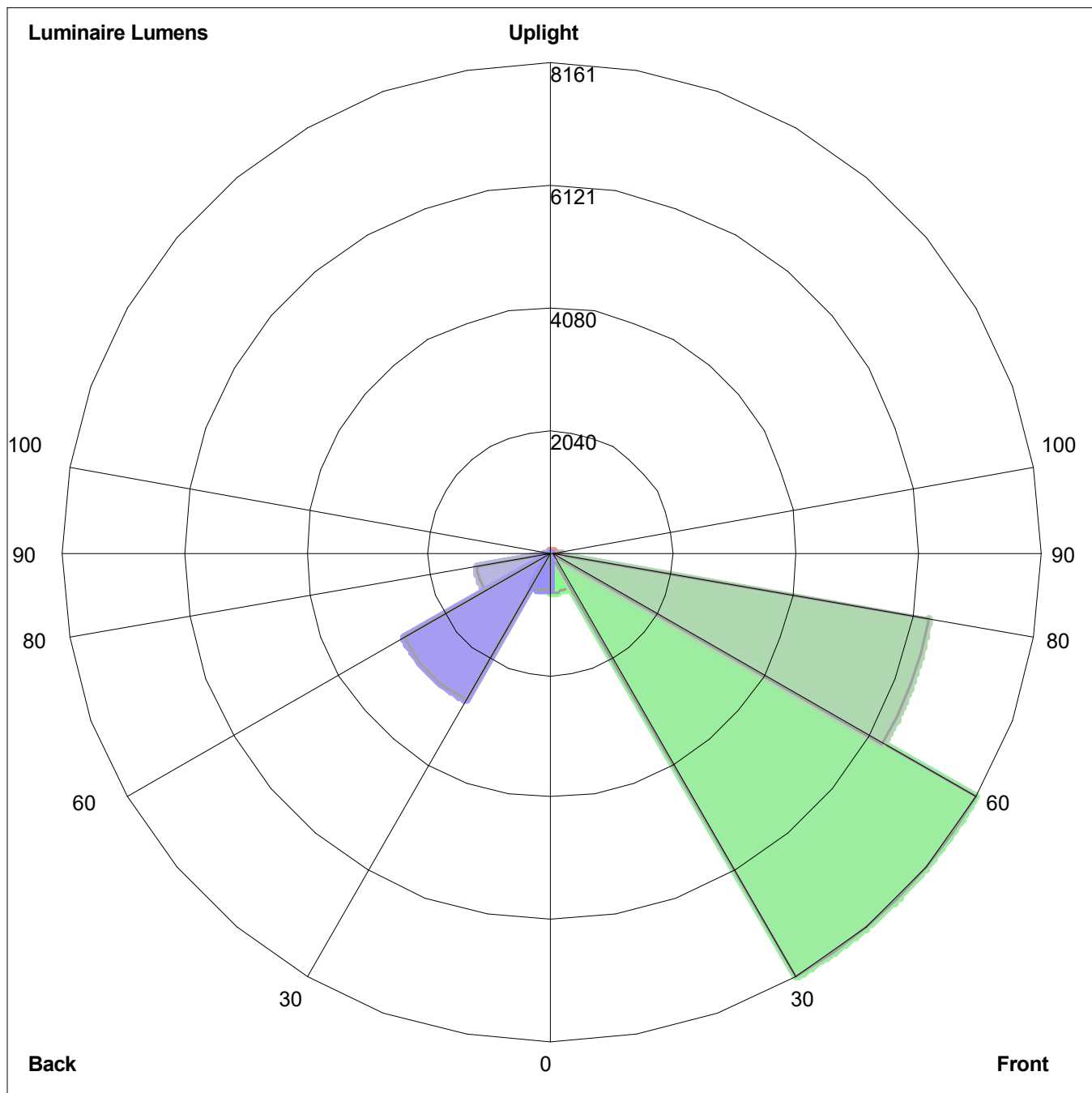


Maximum Candela = 18929 Located At Horizontal Angle = 52.5, Vertical Angle = 67.5  
# 1 - Vertical Plane Through Horizontal Angles (52.5 - 232.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=656.5, Medium=8160.9, High=6390.5, Very High=168.7  
Back: Low=644.0, Medium=2836.8, High=1271.2, Very High=121.9  
Uplight: Low=15.6, High=28.1

BUG Rating : B3-U2-G3