



## IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-5W-LED-18-30-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST]LED-7766  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]11/21/16  
[TEST DATE]04/29/16  
[MANUFACT]LSI INDUSTRIES, INC  
[LUMCAT]XMR-5W-LED-18-30-IL  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Outdoor  
[OTHER]SCALED FROM ORIGINAL TEST DATA

### CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	11003
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	72
Total Luminaire Watts	153.4
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	10178.96
Maximum Candela Angle	50H 70V
Maximum Candela (<90 Degrees Vertical)	10178.96
Maximum Candela Angle (<90 Degrees Vertical)	50H 70V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	287.373 (2.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	843.7	N.A.	7.7
FM - Front-Medium (30-60)	4470.5	N.A.	40.6
FH - Front-High (60-80)	3931.7	N.A.	35.7
FVH - Front-Very High (80-90)	34.1	N.A.	0.3
BL - Back-Low (0-30)	380.3	N.A.	3.5
BM - Back-Medium (30-60)	836.1	N.A.	7.6
BH - Back-High (60-80)	503.1	N.A.	4.6
BVH - Back-Very High (80-90)	3.1	N.A.	0.0
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	11002.6	N.A.	100.0
BUG Rating	B2-U0-G2		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>0</b></u>	<u><b>5</b></u>	<u><b>15</b></u>	<u><b>25</b></u>	<u><b>35</b></u>	<u><b>45</b></u>	<u><b>50</b></u>	<u><b>55</b></u>	<u><b>65</b></u>	<u><b>75</b></u>
<b>0.0</b>	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413
<b>2.5</b>	1259.234	1255.514	1249.003	1245.283	1238.773	1234.123	1228.543	1227.613	1219.243	1206.223
<b>5.0</b>	1355.955	1352.235	1343.864	1336.424	1324.334	1311.314	1301.084	1294.574	1274.114	1246.213
<b>7.5</b>	1463.836	1460.116	1450.816	1438.726	1421.985	1402.455	1388.505	1376.415	1343.864	1301.084
<b>10.0</b>	1572.647	1569.857	1561.487	1552.187	1534.517	1511.266	1493.596	1476.856	1430.355	1369.905
<b>12.5</b>	1684.248	1682.388	1684.248	1670.298	1656.348	1633.098	1614.497	1593.107	1533.587	1453.606
<b>15.0</b>	1800.499	1798.639	1805.149	1809.800	1791.199	1770.739	1754.929	1727.029	1653.558	1550.327
<b>17.5</b>	1924.191	1925.121	1941.861	1949.301	1949.301	1934.421	1908.381	1874.900	1787.479	1659.138
<b>20.0</b>	2048.812	2057.182	2074.852	2096.243	2109.263	2099.963	2076.712	2037.652	1935.351	1780.039
<b>22.5</b>	2189.244	2185.524	2213.424	2248.764	2279.455	2279.455	2258.994	2214.354	2093.453	1903.731
<b>25.0</b>	2329.675	2325.955	2362.225	2411.516	2457.086	2470.107	2455.226	2416.166	2259.924	2030.212
<b>27.5</b>	2485.917	2484.057	2524.047	2584.498	2644.018	2672.849	2660.759	2622.628	2435.696	2158.553
<b>30.0</b>	2645.879	2643.088	2691.449	2762.130	2837.461	2880.241	2871.871	2823.510	2605.888	2288.755
<b>32.5</b>	2814.210	2812.350	2866.291	2942.552	3030.903	3100.653	3082.053	3023.463	2784.450	2422.676
<b>35.0</b>	3002.072	3007.652	3055.083	3129.484	3226.205	3305.256	3290.375	3221.555	2958.362	2563.108
<b>37.5</b>	3196.444	3203.885	3249.455	3321.996	3423.367	3511.718	3506.138	3419.647	3134.134	2716.559
<b>40.0</b>	3401.047	3408.487	3459.637	3521.018	3631.689	3715.390	3714.460	3621.459	3309.906	2865.361
<b>42.5</b>	3616.809	3626.109	3676.330	3744.220	3831.641	3916.272	3920.922	3827.921	3488.468	3019.743
<b>45.0</b>	3816.761	3826.061	3880.002	3954.403	4040.894	4126.454	4133.895	4034.383	3671.680	3188.074
<b>47.5</b>	4012.993	4019.503	4088.324	4154.355	4258.516	4368.257	4380.347	4257.586	3859.542	3363.846
<b>50.0</b>	4225.036	4220.385	4283.626	4357.097	4468.698	4612.850	4635.170	4498.458	4055.774	3561.938
<b>52.5</b>	4429.638	4420.338	4483.578	4567.279	4699.341	4885.343	4912.313	4770.021	4287.346	3787.931
<b>55.0</b>	4624.940	4616.570	4702.131	4820.242	4955.093	5205.266	5236.886	5089.945	4544.959	4046.474
<b>57.5</b>	4802.572	4803.502	4897.433	5070.415	5284.317	5622.841	5645.161	5479.619	4876.043	4356.167
<b>60.0</b>	4920.683	4929.983	5100.175	5368.948	5691.661	6136.206	6204.097	5983.684	5281.527	4744.911
<b>62.5</b>	4901.153	4923.473	5223.866	5690.731	6214.327	6832.784	6936.945	6660.732	5790.242	5181.086
<b>65.0</b>	4667.720	4687.251	5086.225	5844.183	6915.555	7952.516	8103.177	7702.343	6644.922	5939.044
<b>67.5</b>	3404.767	3428.017	4030.663	5338.258	7115.507	9644.204	10007.8389277.780	7472.631	6430.089	
<b>70.0</b>	1127.172	1058.351	1724.239	3412.207	6053.435	9461.922	10178.9609384.731	6776.983	5147.605	
<b>72.5</b>	278.073	287.373	364.564	856.539	3277.355	7215.948	7883.695	7006.695	4238.986	2712.839
<b>75.0</b>	167.402	171.122	186.932	252.963	693.787	2967.662	3899.532	2993.702	1540.097	922.570
<b>77.5</b>	99.511	99.511	109.741	132.991	223.202	609.157	993.251	911.410	529.176	345.034
<b>80.0</b>	52.081	53.011	59.521	72.541	100.441	171.122	258.543	287.373	267.843	209.252
<b>82.5</b>	26.970	26.970	30.690	39.990	53.011	79.981	97.651	119.971	165.542	156.242
<b>85.0</b>	11.160	12.090	13.950	18.600	26.970	40.920	51.151	62.311	94.861	130.201
<b>87.5</b>	6.510	6.510	8.370	11.160	14.880	22.320	27.900	38.130	67.891	111.601
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>85</b></u>	<u><b>90</b></u>	<u><b>95</b></u>	<u><b>105</b></u>	<u><b>115</b></u>	<u><b>125</b></u>	<u><b>135</b></u>	<u><b>145</b></u>	<u><b>155</b></u>	<u><b>165</b></u>
<b>0.0</b>	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413	1190.413
<b>2.5</b>	1197.853	1194.133	1189.483	1172.743	1169.953	1163.443	1156.932	1152.282	1147.632	1144.842
<b>5.0</b>	1222.033	1209.943	1197.853	1166.233	1146.702	1125.312	1105.782	1090.902	1076.952	1067.652
<b>7.5</b>	1258.304	1238.773	1216.453	1167.163	1129.962	1092.762	1058.351	1029.521	1009.061	989.531
<b>10.0</b>	1308.524	1278.764	1247.143	1176.463	1120.662	1065.791	1016.501	976.511	948.610	925.360
<b>12.5</b>	1374.555	1331.774	1284.344	1190.413	1114.152	1043.471	982.091	933.730	897.460	875.139
<b>15.0</b>	1446.166	1389.435	1331.774	1209.013	1111.362	1026.731	955.120	904.900	863.979	838.869
<b>17.5</b>	1525.216	1452.676	1381.065	1229.473	1112.292	1017.431	943.030	887.230	810.969	704.948
<b>20.0</b>	1607.057	1518.706	1431.285	1254.584	1118.802	1016.501	940.240	798.879	575.676	461.285
<b>22.5</b>	1689.828	1582.877	1480.576	1285.274	1133.682	1028.591	887.230	558.936	419.435	379.444
<b>25.0</b>	1775.389	1650.768	1532.657	1318.754	1158.792	1048.121	675.187	426.875	377.584	359.914
<b>27.5</b>	1864.670	1723.309	1592.177	1358.745	1195.993	983.951	488.255	388.744	367.354	346.894

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**CANDELA TABULATION - (Cont.)**

30.0	1959.531	1804.219	1660.998	1409.895	1238.773	766.328	413.854	381.304	358.984	336.664
32.5	2059.972	1892.570	1738.189	1474.066	1284.344	563.586	397.114	376.654	350.614	323.643
35.0	2169.713	1990.221	1823.750	1548.467	1242.493	454.775	395.254	372.934	342.244	311.553
37.5	2288.755	2100.893	1926.051	1634.958	1070.442	425.945	394.324	369.214	333.874	299.463
40.0	2428.256	2227.374	2047.882	1741.909	851.889	426.875	396.184	368.284	322.713	263.193
42.5	2567.758	2374.316	2179.013	1860.020	649.147	432.455	400.834	362.704	269.703	204.602
45.0	2737.019	2536.137	2331.535	1987.431	534.756	441.755	406.414	313.413	199.022	159.962
47.5	2915.581	2712.839	2517.537	2080.432	511.506	454.775	399.904	230.642	152.522	132.061
50.0	3109.954	2908.141	2705.399	2001.382	525.456	466.865	335.734	165.542	125.551	111.601
52.5	3337.806	3137.854	2930.462	1775.389	546.846	477.095	234.363	128.341	106.951	96.721
55.0	3609.369	3408.487	3189.934	1484.296	572.886	434.315	159.032	107.881	92.071	82.771
57.5	3916.272	3714.460	3490.328	1221.103	606.367	305.043	119.971	93.001	79.051	67.891
60.0	4296.646	4091.114	3885.582	1086.252	658.447	183.212	101.371	79.981	63.241	52.081
62.5	4737.471	4552.399	4311.526	1145.772	673.327	118.111	85.561	64.171	49.291	49.291
65.0	5417.308	5231.306	4945.793	1274.114	582.186	89.281	70.681	58.591	60.451	88.351
67.5	5783.732	5587.500	5217.356	1268.534	513.366	95.791	88.351	154.382	108.811	122.761
70.0	4419.408	4313.386	3761.891	929.080	429.665	119.041	133.921	141.362	114.391	204.602
72.5	2202.264	2184.594	1565.207	326.434	222.272	119.971	121.831	185.072	203.672	218.552
75.0	717.038	700.298	431.525	115.321	89.281	51.151	126.481	201.812	127.411	76.261
77.5	253.893	227.852	135.781	54.871	35.340	21.390	79.051	82.771	18.600	4.650
80.0	161.822	134.851	79.981	30.690	13.020	5.580	15.810	7.440	0.930	0.000
82.5	113.461	85.561	51.151	12.090	3.720	1.860	3.720	0.930	0.000	0.000
85.0	73.471	49.291	23.250	0.930	0.930	0.930	0.930	0.000	0.000	0.000
87.5	42.780	17.670	2.790	0.930	0.000	0.000	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

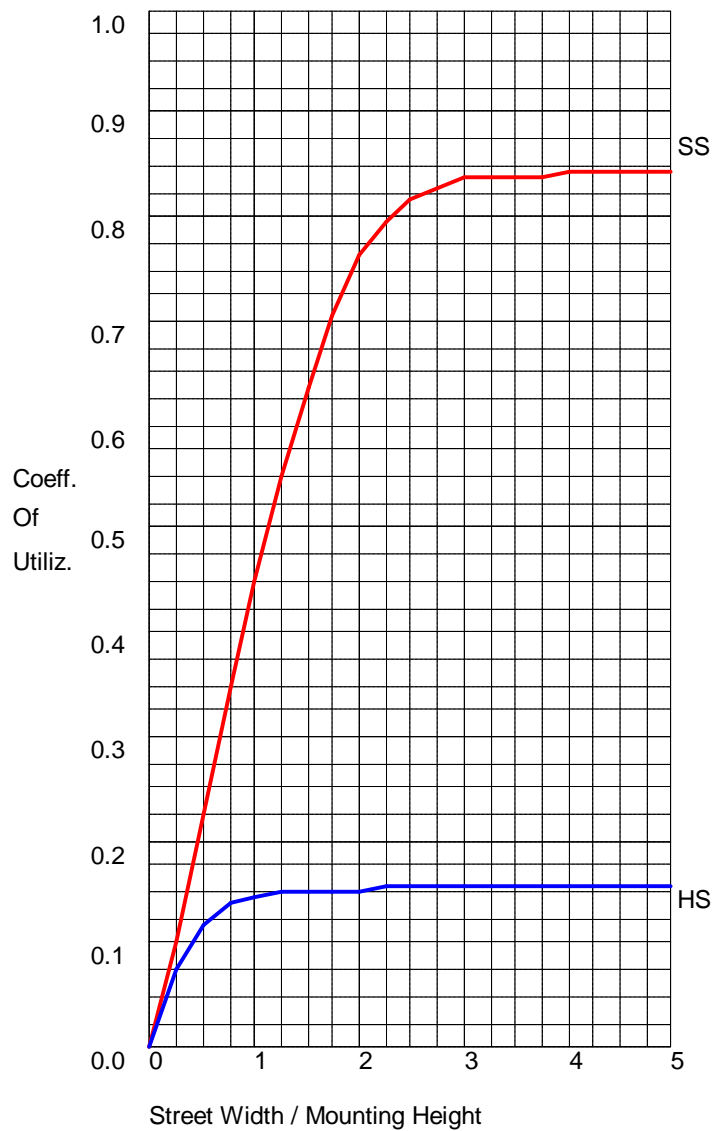
	<b>175</b>	<b>180</b>
0.0	1190.413	1190.413
2.5	1137.402	1135.542
5.0	1057.421	1055.561
7.5	982.091	978.371
10.0	914.200	910.480
12.5	863.979	859.329
15.0	824.919	821.199
17.5	655.657	648.217
20.0	432.455	427.805
22.5	366.424	363.634
25.0	350.614	347.824
27.5	336.664	333.874
30.0	322.713	319.923
32.5	307.833	305.043
35.0	294.813	291.093
37.5	277.143	273.423
40.0	232.503	229.712
42.5	182.282	181.352
45.0	147.872	146.942
47.5	124.621	124.621
50.0	106.951	107.881
52.5	92.071	91.141
55.0	78.121	77.191
57.5	61.381	60.451
60.0	46.501	45.570
62.5	51.151	48.361
65.0	77.191	64.171

**IES ROAD REPORT**  
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**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	93.931	79.051
<b>70.0</b>	159.962	145.082
<b>72.5</b>	136.711	120.901
<b>75.0</b>	41.850	29.760
<b>77.5</b>	0.000	0.000
<b>80.0</b>	0.000	0.000
<b>82.5</b>	0.000	0.000
<b>85.0</b>	0.000	0.000
<b>87.5</b>	0.000	0.000
<b>90.0</b>	0.000	0.000

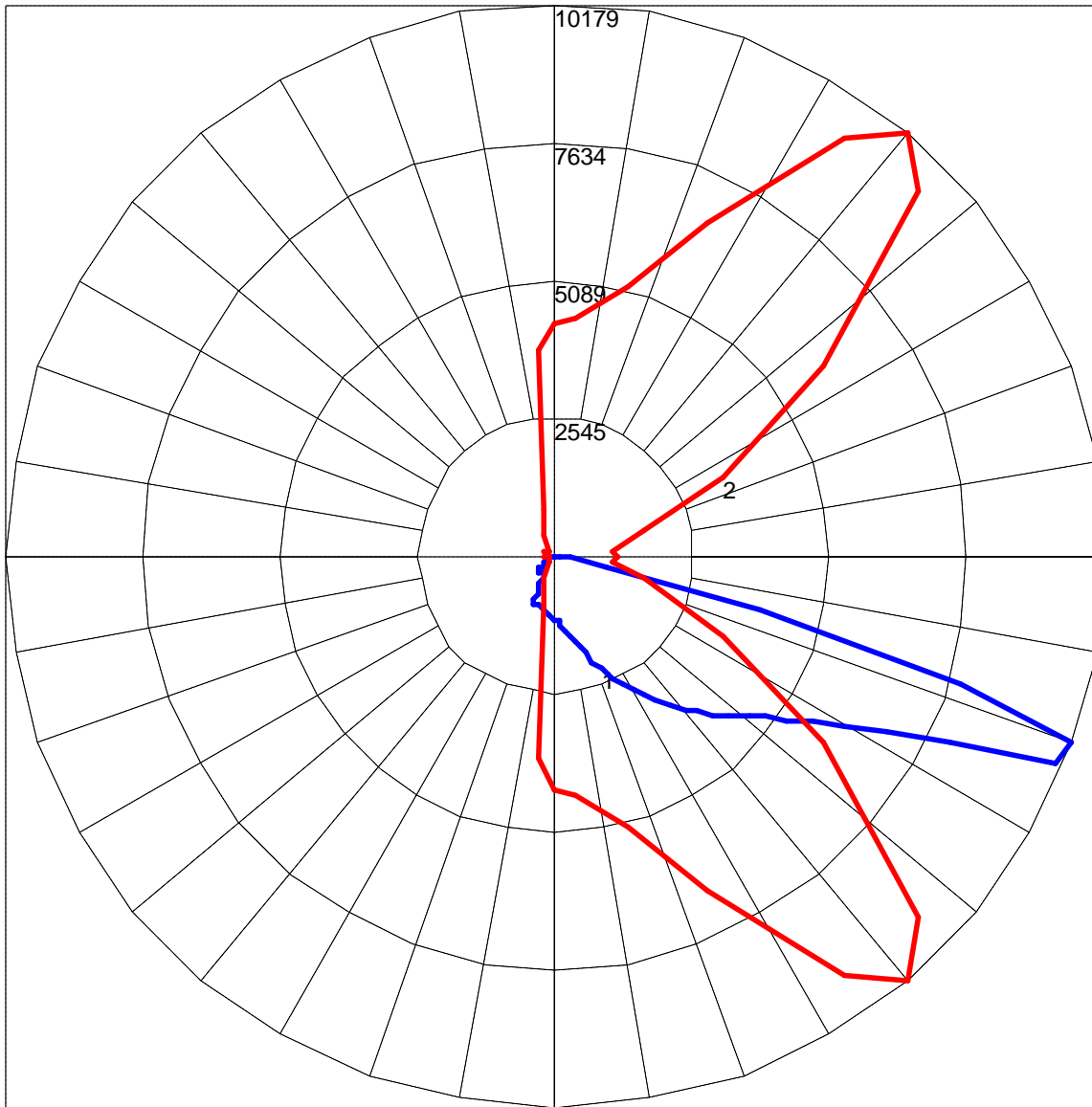
### COEFFICIENTS OF UTILIZATION



### FLUX DISTRIBUTION

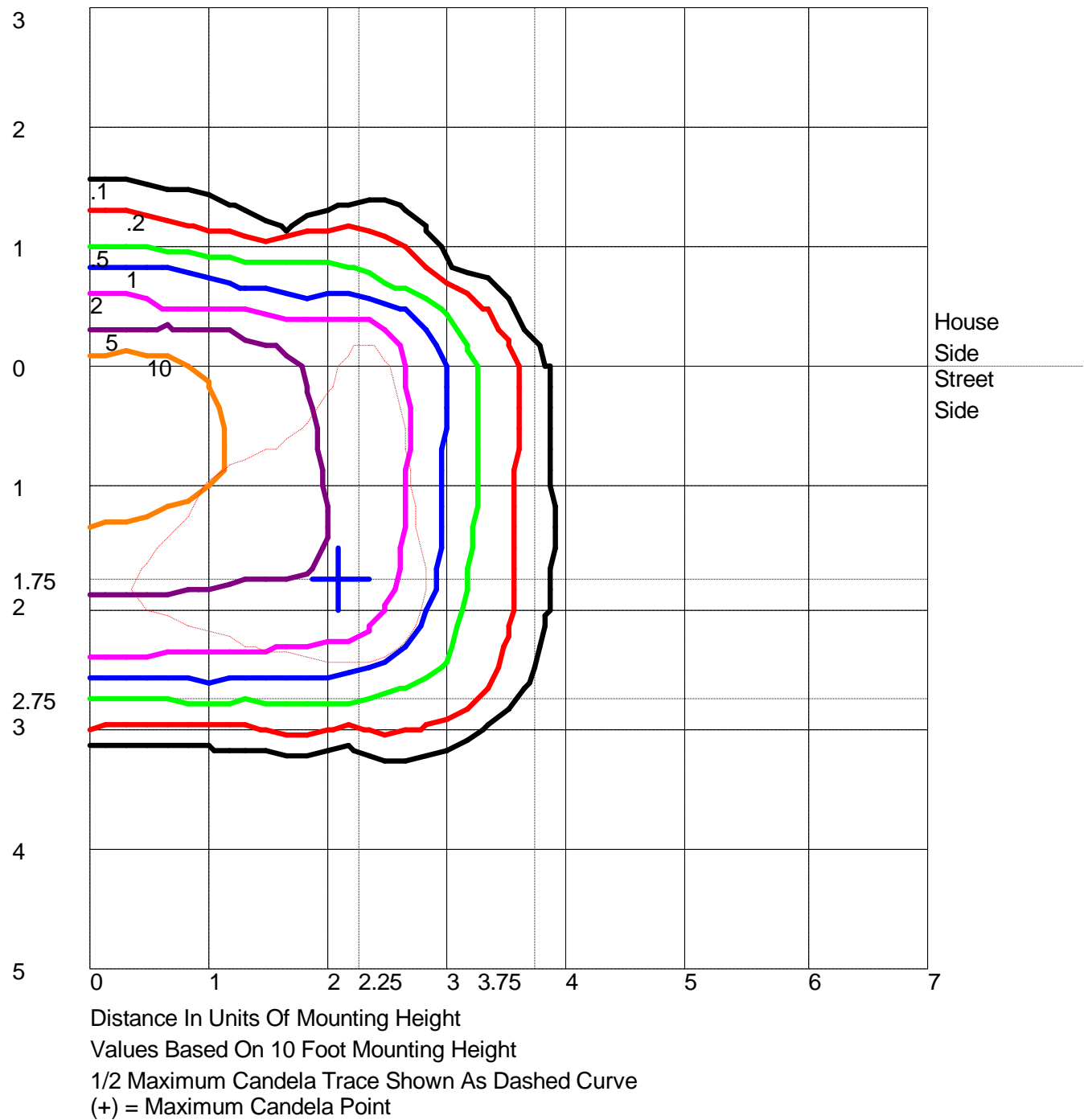
	Lumens	Percent Of Luminaire
Downward Street Side	9280.1	84.3
Downward House Side	1722.6	15.7
Downward Total	11002.7	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	11002.7	100.0

POLAR GRAPH



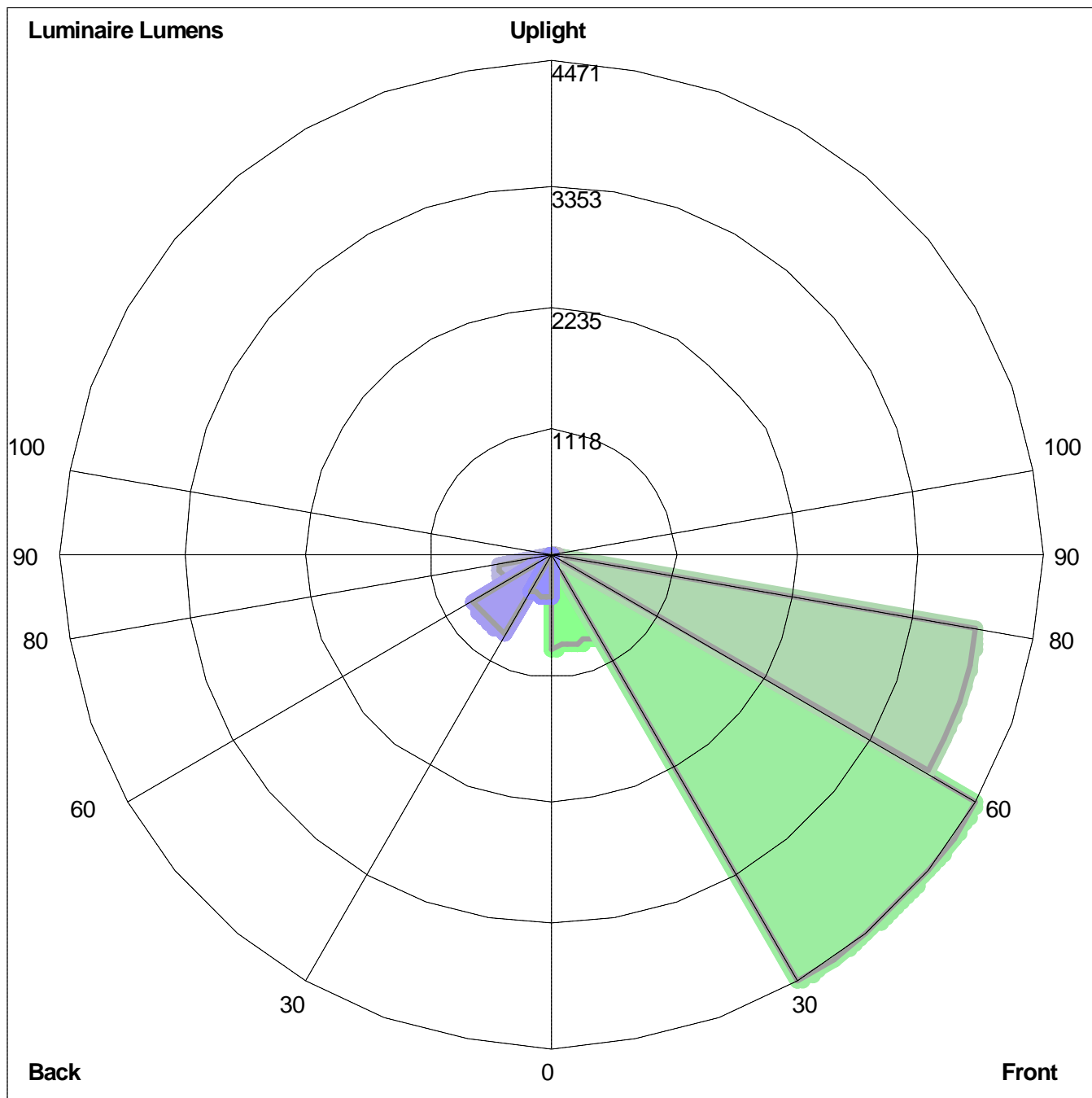
Maximum Candela = 10178.96 Located At Horizontal Angle = 50, Vertical Angle = 70  
# 1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (70) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=843.7, Medium=4470.5, High=3931.7, Very High=34.1  
Back: Low=380.3, Medium=836.1, High=503.1, Very High=3.1  
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2