



IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-FT-LED-29-30-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-7771
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]11/21/16
[TEST DATE]05/02/16
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT]XMR-FT-LED-29-30-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 IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18937
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	79
Total Luminaire Watts	241
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	18079.156
Maximum Candela Angle	45H 67.5V
Maximum Candela (<90 Degrees Vertical)	18079.156
Maximum Candela Angle (<90 Degrees Vertical)	45H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	2196.547 (11.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1649.5	N.A.	8.7
FM - Front-Medium (30-60)	6873.0	N.A.	36.3
FH - Front-High (60-80)	8170.6	N.A.	43.1
FVH - Front-Very High (80-90)	191.2	N.A.	1.0
BL - Back-Low (0-30)	648.6	N.A.	3.4
BM - Back-Medium (30-60)	1091.4	N.A.	5.8
BH - Back-High (60-80)	309.1	N.A.	1.6
BVH - Back-Very High (80-90)	3.6	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	18937.0	N.A.	100.0
BUG Rating	B2-U0-G4		

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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>42.5</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351
2.5	3220.788	3231.474	3233.000	3231.474	3220.788	3213.156	3196.365	3178.048	3141.414	3118.517
5.0	3271.161	3281.846	3283.372	3297.110	3306.269	3324.586	3321.533	3323.060	3286.425	3243.685
7.5	3248.264	3265.055	3272.687	3297.110	3326.113	3361.221	3367.327	3408.541	3408.541	3393.276
10.0	3295.584	3313.901	3318.481	3344.430	3382.591	3425.331	3436.016	3497.074	3530.656	3547.447
12.5	3407.014	3426.858	3429.911	3449.754	3483.336	3527.603	3538.288	3606.978	3672.615	3704.670
15.0	3547.447	3576.449	3576.449	3594.766	3622.242	3668.035	3666.509	3735.199	3808.468	3864.946
17.5	3697.038	3724.514	3718.408	3741.304	3764.201	3809.994	3803.889	3866.473	3938.215	4022.169
20.0	3846.629	3872.578	3871.052	3874.105	3895.475	3932.110	3933.636	3988.588	4054.225	4141.232
22.5	3984.008	4006.905	4005.379	4003.852	4013.011	4032.855	4034.381	4089.333	4150.390	4237.398
25.0	4109.177	4130.547	4121.388	4121.388	4113.756	4119.862	4116.809	4161.076	4228.239	4315.246
27.5	4226.712	4246.556	4229.765	4214.501	4194.657	4188.551	4185.499	4217.554	4286.244	4377.830
30.0	4333.563	4348.828	4324.405	4293.876	4257.241	4245.030	4241.977	4257.241	4327.457	4422.097
32.5	4415.991	4428.203	4394.621	4353.407	4309.140	4287.770	4289.296	4292.349	4357.986	4451.099
35.0	4484.681	4490.787	4451.099	4394.621	4351.881	4333.563	4335.090	4328.984	4379.356	4475.522
37.5	4551.844	4561.003	4504.525	4438.888	4396.147	4386.989	4397.674	4382.409	4406.832	4495.366
40.0	4644.957	4651.063	4588.479	4513.683	4469.416	4463.311	4486.207	4478.575	4454.152	4525.895
42.5	4811.339	4800.654	4733.491	4651.063	4606.796	4619.008	4631.219	4637.325	4556.423	4580.847
45.0	5073.887	5069.307	4989.932	4901.399	4855.606	4875.449	4893.767	4904.452	4725.858	4684.644
47.5	5518.081	5513.501	5432.600	5334.908	5301.326	5293.694	5318.117	5333.381	5025.041	4930.401
50.0	6218.717	6217.190	6194.294	6038.597	5982.118	5943.957	5977.539	5998.909	5522.660	5263.165
52.5	7223.114	7238.379	7267.381	7149.845	6983.463	6881.192	6925.458	6959.040	6215.664	5742.467
55.0	8464.110	8506.850	8656.441	8706.814	8352.680	8157.295	8225.985	8215.300	7174.268	6446.156
57.5	9546.356	9607.414	10005.814	10369.107	10210.357	9818.062	9883.699	9787.533	8386.261	7207.850
60.0	10413.374	10497.328	11098.745	11904.706	12196.256	11889.441	12087.879	11724.586	9712.738	8074.868
62.5	10936.943	11086.534	11981.028	13367.035	14298.164	14325.640	14447.755	13687.588	10965.945	8572.487
65.0	10243.939	10527.857	11874.177	14339.378	16282.536	16661.093	16613.773	15261.347	11803.961	8589.278
67.5	7966.490	8222.932	10352.316	14002.034	17132.763	18045.574	18079.156	16079.519	11492.567	7503.979
70.0	5092.204	5341.014	7082.682	11718.480	15870.397	17743.339	17938.723	15157.549	9373.868	5333.381
72.5	1810.358	1953.843	3062.039	6615.591	12750.354	15087.333	15258.294	11878.756	6461.421	2978.084
75.0	793.749	860.912	1357.005	2465.201	6672.069	10497.328	10656.078	8047.392	3332.219	1157.042
77.5	580.047	638.052	1002.871	1578.339	2437.725	4989.932	5205.160	4231.292	1405.851	648.737
80.0	431.983	496.093	839.542	1294.421	1605.815	2124.805	2196.547	1750.827	703.689	422.824
82.5	317.500	378.557	697.583	1036.453	963.184	863.965	783.064	396.874	354.134	265.601
85.0	222.860	257.968	406.033	450.300	338.870	290.024	238.125	125.168	148.065	155.697
87.5	56.478	59.531	93.113	152.644	74.796	56.478	58.005	59.531	64.110	71.743
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351	3022.351
2.5	3089.515	3084.935	3043.721	2981.137	2949.082	2884.972	2848.337	2811.703	2775.068	2750.645
5.0	3170.416	3135.308	3049.827	2886.498	2753.698	2590.369	2460.621	2335.453	2220.970	2141.595
7.5	3298.637	3228.421	3092.567	2810.176	2541.523	2243.867	1966.055	1737.089	1576.813	1482.173
10.0	3449.754	3344.430	3149.046	2732.328	2294.239	1857.678	1524.914	1340.214	1244.049	1189.097
12.5	3617.663	3475.704	3211.630	2643.794	2039.324	1550.863	1295.948	1175.359	1089.878	1021.188
15.0	3794.730	3620.716	3278.793	2550.681	1811.884	1375.322	1187.570	1048.664	967.763	926.549
17.5	3956.533	3747.410	3329.166	2439.251	1642.449	1279.157	1092.931	978.448	918.917	879.229
20.0	4093.912	3852.735	3356.642	2340.033	1529.493	1228.784	1030.347	946.393	882.282	839.542
22.5	4212.974	3935.162	3365.800	2265.237	1454.697	1170.779	1004.398	911.285	844.121	799.855
25.0	4301.508	4005.379	3367.327	2214.864	1425.695	1131.092	978.448	873.124	807.487	766.273
27.5	4373.251	4051.172	3359.694	2184.336	1421.116	1112.775	944.866	838.016	732.691	634.999

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CANDELA TABULATION - (Cont.)

30.0	4426.676	4075.595	3349.009	2170.598	1422.642	1095.984	914.338	758.641	563.256	445.720
32.5	4457.205	4074.068	3341.377	2167.545	1410.431	1077.667	865.491	589.206	404.507	357.187
35.0	4472.469	4063.383	3344.430	2164.492	1387.534	1054.770	737.271	445.720	357.187	317.500
37.5	4483.154	4051.172	3361.221	2156.860	1346.320	996.765	576.994	401.454	322.079	273.233
40.0	4496.892	4048.119	3393.276	2144.648	1286.789	859.386	499.146	361.766	276.286	239.651
42.5	4532.000	4069.489	3440.596	2118.699	1175.359	654.843	431.983	309.867	242.704	261.021
45.0	4606.796	4144.285	3524.550	2082.064	987.607	496.093	346.502	256.442	218.281	279.339
47.5	4785.389	4310.667	3668.035	2027.112	728.112	375.504	267.127	209.122	262.548	169.435
50.0	5034.199	4541.159	3866.473	1917.209	479.302	294.603	218.281	175.541	212.175	135.853
52.5	5449.391	4936.507	4139.705	1734.036	348.028	245.757	181.646	154.170	155.697	120.589
55.0	5977.539	5386.807	4454.152	1497.438	299.182	219.807	155.697	132.800	125.168	138.906
57.5	6498.055	5821.842	4728.911	1266.945	273.233	193.858	131.274	112.957	132.800	129.747
60.0	6920.879	6116.445	4727.385	1051.717	247.283	155.697	112.957	116.009	99.219	74.796
62.5	6984.990	6067.599	4258.768	836.489	210.649	123.642	108.377	82.428	61.058	53.425
65.0	6553.007	5486.025	3284.899	699.110	169.435	108.377	90.060	53.425	44.267	54.952
67.5	5263.165	4212.974	2050.009	496.093	117.536	105.324	62.584	44.267	64.110	56.478
70.0	3356.642	2665.164	987.607	283.918	82.428	74.796	47.320	58.005	45.793	38.161
72.5	1346.320	981.501	425.877	141.959	62.584	44.267	47.320	42.740	35.108	25.949
75.0	610.576	468.617	195.384	85.481	44.267	30.529	29.002	30.529	12.212	4.579
77.5	392.295	296.129	126.695	53.425	24.423	19.844	16.791	7.632	3.053	3.053
80.0	230.492	177.067	87.007	29.002	13.738	13.738	6.106	3.053	1.526	1.526
82.5	154.170	114.483	51.899	13.738	9.159	6.106	4.579	1.526	0.000	0.000
85.0	91.586	56.478	18.317	4.579	3.053	1.526	1.526	0.000	0.000	0.000
87.5	38.161	15.264	4.579	1.526	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

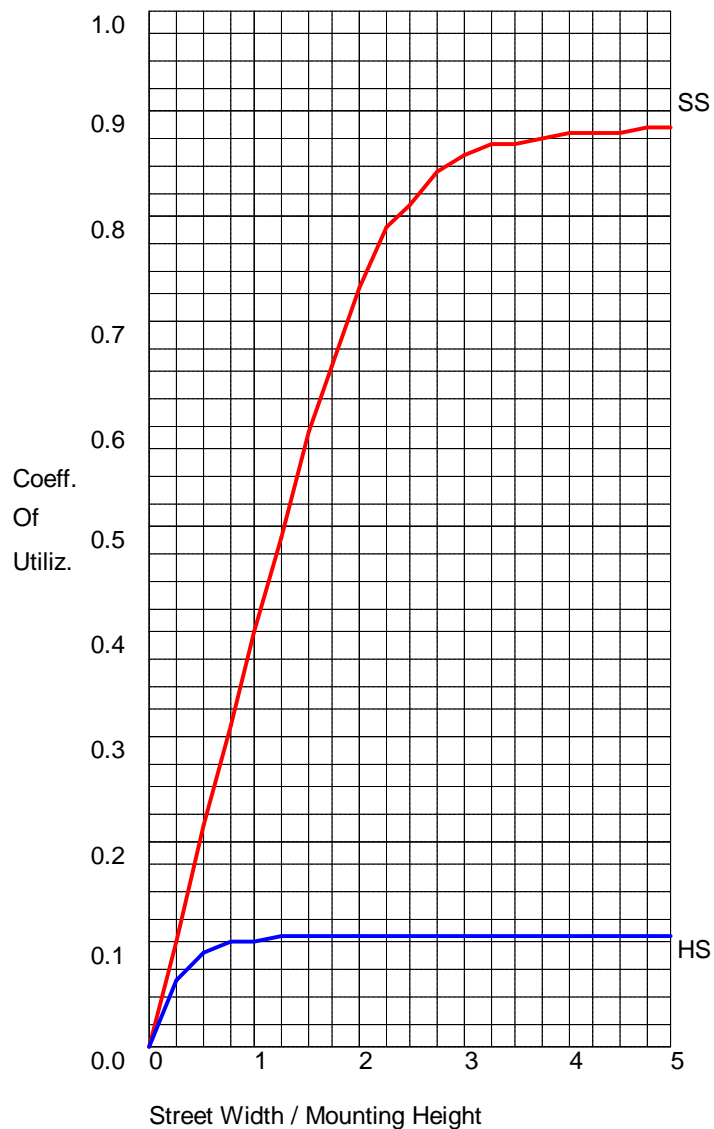
	175.0	180.0
0.0	3022.351	3022.351
2.5	2761.330	2744.539
5.0	2101.908	2120.225
7.5	1442.486	1451.644
10.0	1167.727	1167.727
12.5	987.607	979.974
15.0	906.705	900.600
17.5	863.965	857.859
20.0	822.751	816.645
22.5	786.117	780.011
25.0	741.850	734.218
27.5	578.521	569.362
30.0	392.295	384.663
32.5	338.870	335.817
35.0	303.762	300.709
37.5	253.389	250.336
40.0	227.440	227.440
42.5	259.495	238.125
45.0	170.961	164.856
47.5	143.485	141.959
50.0	128.221	126.695
52.5	123.642	122.115
55.0	151.118	151.118
57.5	122.115	112.957
60.0	67.163	61.058
62.5	44.267	41.214
65.0	67.163	67.163

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CANDELA TABULATION - (Cont.)

67.5	50.373	48.846
70.0	33.582	33.582
72.5	21.370	19.844
75.0	1.526	0.000
77.5	0.000	0.000
80.0	0.000	0.000
82.5	0.000	0.000
85.0	0.000	0.000
87.5	0.000	0.000
90.0	0.000	0.000

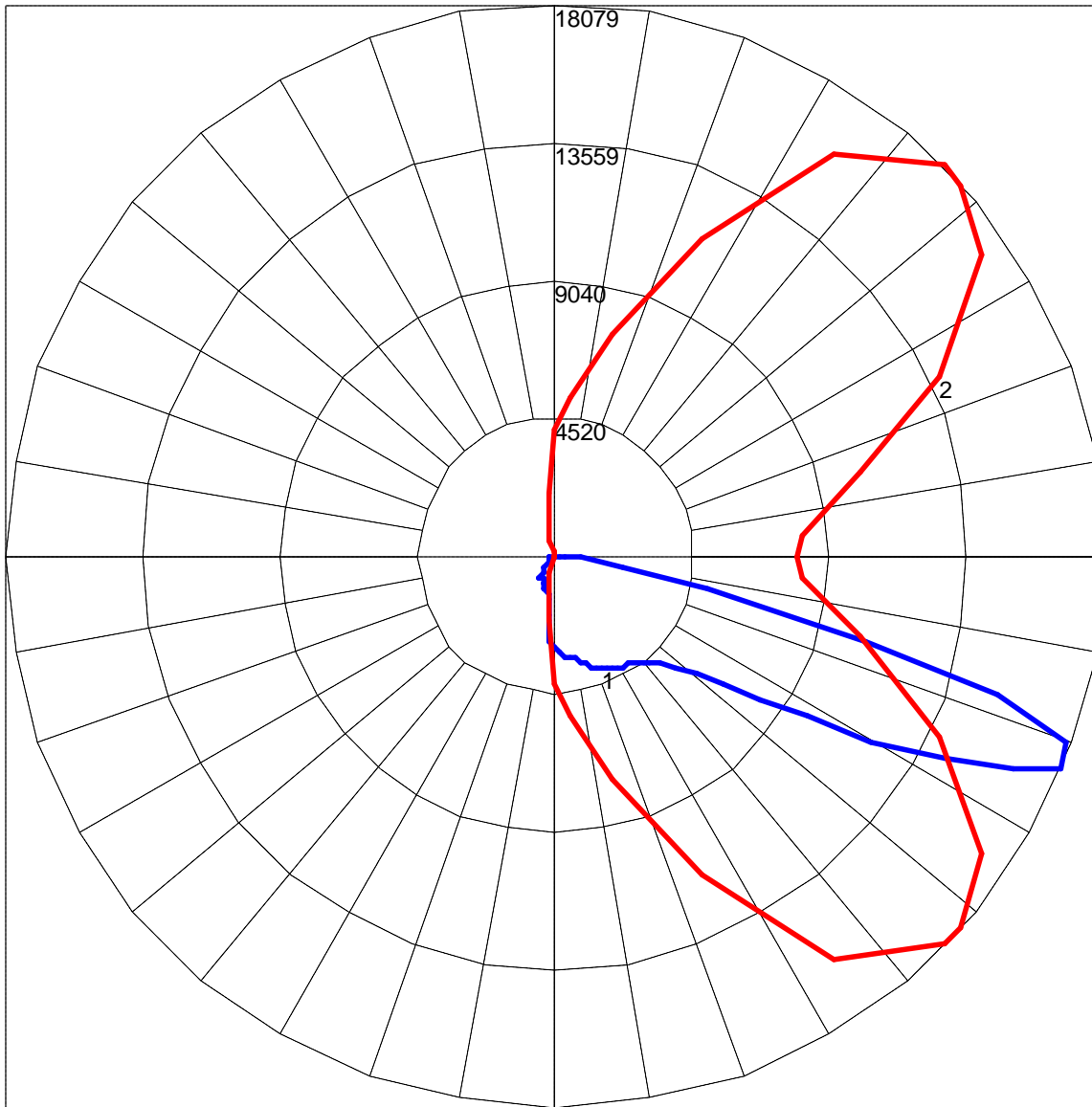
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

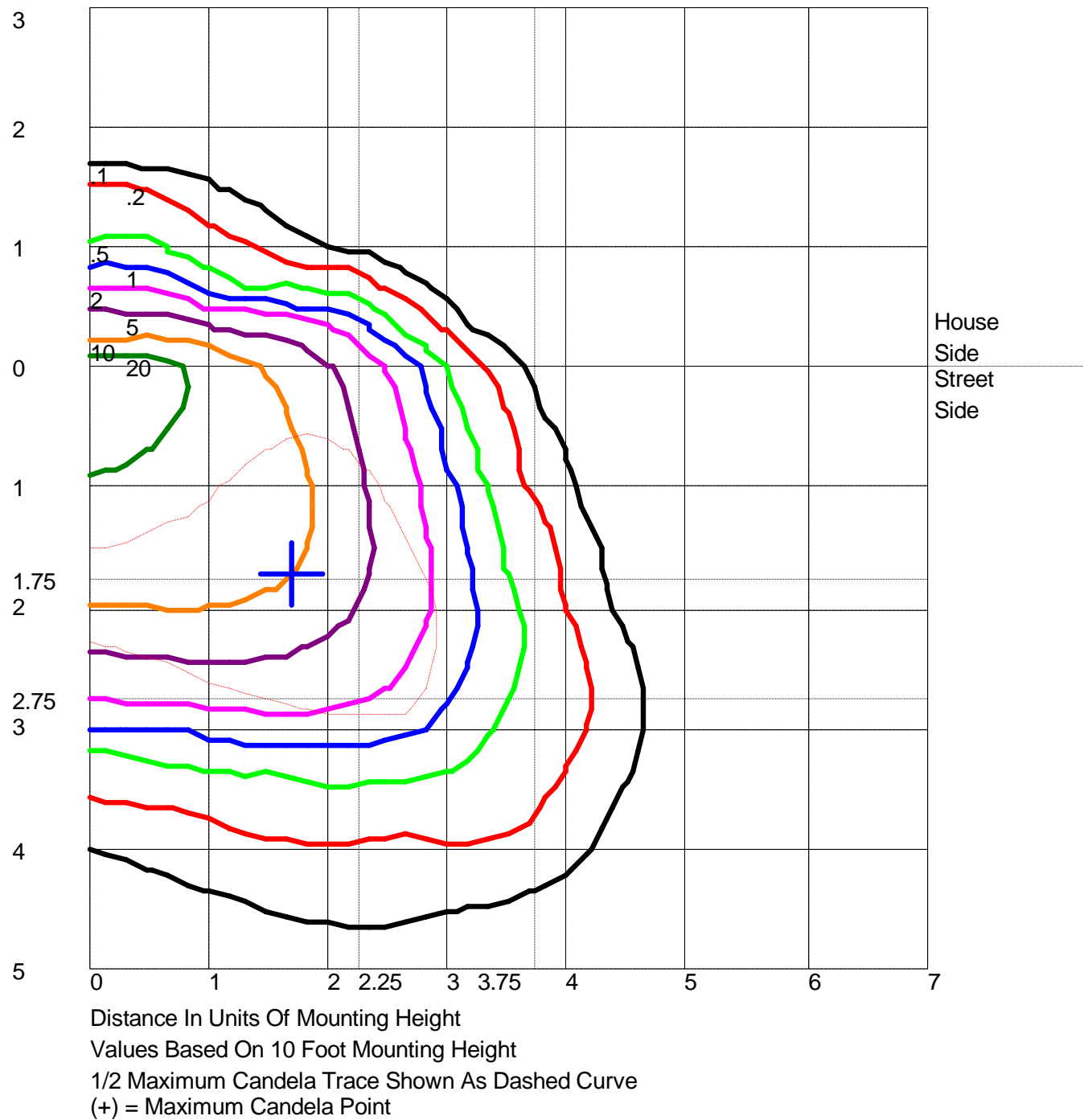
	Lumens	Percent Of Luminaire
Downward Street Side	16884.4	89.2
Downward House Side	2052.6	10.8
Downward Total	18937.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	18937.0	100.0

POLAR GRAPH

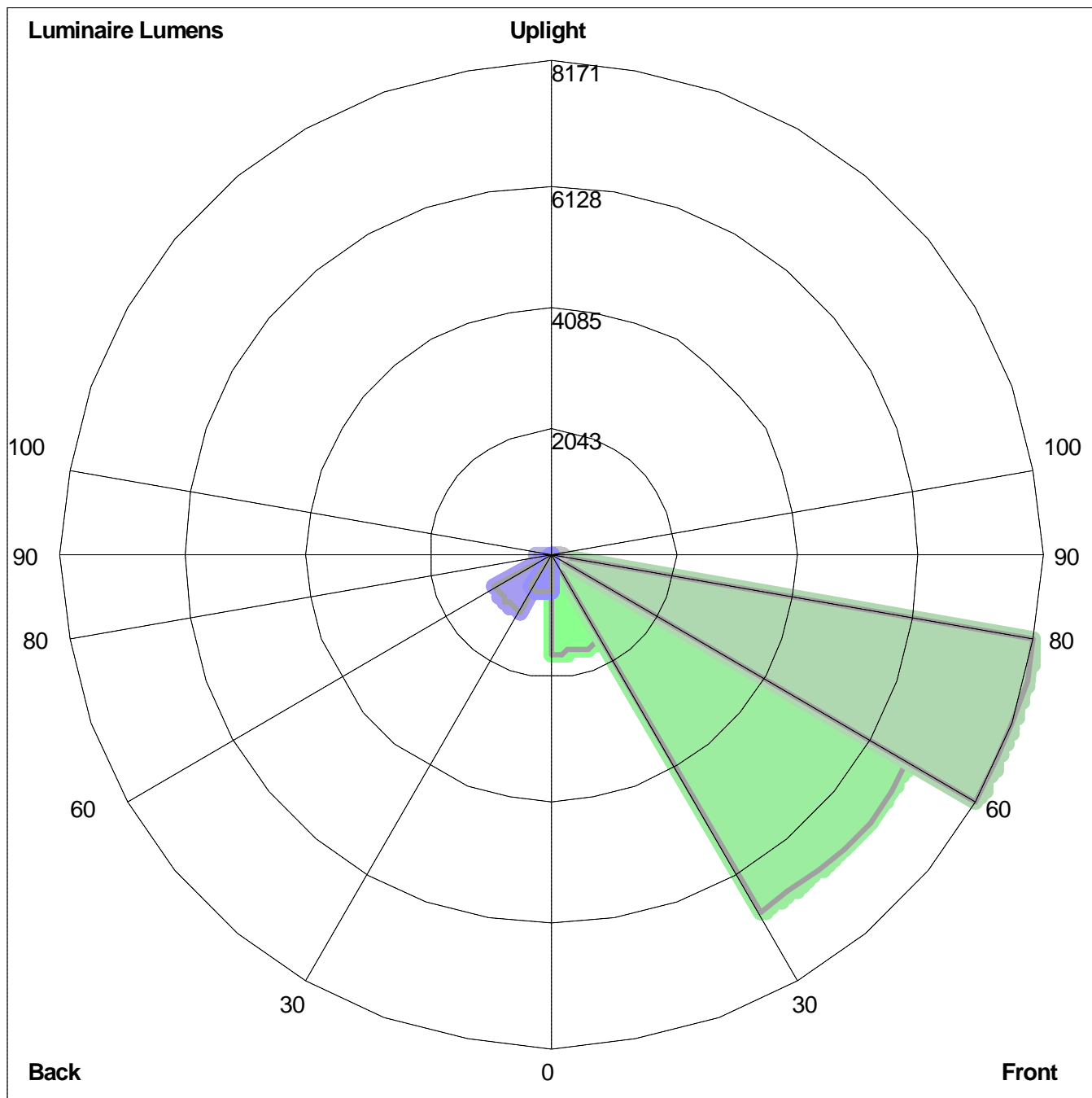


Maximum Candela = 18079.156 Located At Horizontal Angle = 45, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1649.5, Medium= 6873.0, High=8170.6, Very High=191.2
Back: Low=648.6, Medium=1091.4, High=309.1, Very High=3.6
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G4