



## IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-2-LED-29-40-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST]LED-8625\_Scaled  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]03/01/17  
[TEST DATE]03/01/17  
[MANUFACTURER]LSI INDUSTRIES, INC  
[LUMCAT]XMR-2-LED-29-40-IL  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[OTHER]SCALED FROM ORIGINAL TEST DATA  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Outdoor

### CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20087
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	84
Total Luminaire Watts	239.2
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	20750.761
Maximum Candela Angle	80H 67.5V
Maximum Candela (<90 Degrees Vertical)	20750.761
Maximum Candela Angle (<90 Degrees Vertical)	80H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1642.566 (8.2% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1906.6	N.A.	9.5
FM - Front-Medium (30-60)	9075.9	N.A.	45.2
FH - Front-High (60-80)	5972.3	N.A.	29.7
FVH - Front-Very High (80-90)	86.7	N.A.	0.4
BL - Back-Low (0-30)	960.3	N.A.	4.8
BM - Back-Medium (30-60)	1479.9	N.A.	7.4
BH - Back-High (60-80)	600.0	N.A.	3.0
BVH - Back-Very High (80-90)	4.9	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	20086.6	N.A.	100.0
BUG Rating	B2-U0-G3		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u>0</u>	<u>5</u>	<u>15</u>	<u>25</u>	<u>35</u>	<u>45</u>	<u>55</u>	<u>65</u>	<u>75</u>	<u>80</u>
<b>0.0</b>	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162
<b>2.5</b>	3786.496	3781.721	3782.676	3785.541	3789.361	3784.586	3785.541	3775.991	3768.351	3761.666
<b>5.0</b>	3850.479	3846.660	3849.524	3853.344	3860.029	3855.254	3852.389	3834.245	3820.875	3809.415
<b>7.5</b>	3919.238	3915.418	3921.148	3932.608	3937.383	3929.743	3924.013	3901.093	3882.949	3864.804
<b>10.0</b>	3999.456	3997.546	4005.186	4020.466	4028.106	4015.691	4006.141	3982.267	3960.302	3940.248
<b>12.5</b>	4097.819	4094.954	4108.324	4125.514	4133.154	4121.694	4127.424	4103.549	4084.450	4057.710
<b>15.0</b>	4172.308	4171.353	4198.092	4236.291	4261.121	4268.761	4289.770	4266.851	4242.976	4209.552
<b>17.5</b>	4205.732	4209.552	4243.931	4305.050	4375.718	4444.477	4486.496	4474.081	4434.927	4397.683
<b>20.0</b>	4241.066	4245.841	4283.085	4365.214	4471.216	4602.049	4707.096	4701.367	4652.663	4606.824
<b>22.5</b>	4283.085	4285.950	4327.969	4449.252	4573.399	4720.466	4923.877	4967.806	4888.543	4837.929
<b>25.0</b>	4290.725	4290.725	4359.484	4509.416	4673.672	4830.289	5096.728	5254.300	5169.307	5113.918
<b>27.5</b>	4299.320	4306.960	4389.088	4560.985	4759.620	4934.382	5231.381	5563.714	5484.450	5428.106
<b>30.0</b>	4376.673	4386.223	4469.306	4642.158	4858.938	5054.709	5373.673	5867.397	5867.397	5793.864
<b>32.5</b>	4537.110	4543.795	4622.103	4776.810	4989.771	5211.326	5542.704	6132.882	6265.624	6183.496
<b>35.0</b>	4788.270	4787.315	4853.208	4983.086	5166.442	5417.602	5748.980	6366.852	6685.815	6604.642
<b>37.5</b>	5126.333	5119.648	5160.712	5271.490	5422.377	5678.311	6001.094	6589.362	7134.656	7064.942
<b>40.0</b>	5523.604	5511.190	5538.884	5615.282	5742.295	6006.824	6296.183	6842.432	7559.622	7571.082
<b>42.5</b>	6010.644	5986.770	5988.680	6039.294	6132.882	6427.970	6656.211	7110.781	7953.074	8039.977
<b>45.0</b>	6661.941	6668.625	6601.777	6601.777	6598.912	6937.930	7076.402	7366.716	8293.046	8528.927
<b>47.5</b>	7593.046	7600.686	7609.281	7490.863	7336.156	7594.956	7649.390	7696.184	8669.309	9122.924
<b>50.0</b>	8414.329	8440.113	8452.528	8497.412	8529.882	8656.894	8437.248	8176.539	9128.654	9785.680
<b>52.5</b>	8517.467	8532.746	8634.929	8957.713	9555.530	10295.640	9657.713	8828.790	9698.777	10572.584
<b>55.0</b>	8108.735	8150.754	8350.345	8808.736	9849.664	11538.069	11849.392	9811.465	10351.028	11524.699
<b>57.5</b>	7340.931	7403.960	7701.914	8213.783	9519.241	11772.994	13938.888	11274.494	11184.726	12555.122
<b>60.0</b>	5990.590	6075.583	6413.646	6973.264	8426.744	11067.263	15457.307	13606.555	12298.233	13996.187
<b>62.5</b>	3393.999	3493.317	3888.679	4772.035	6217.875	9045.571	16298.644	16844.892	13441.344	16052.259
<b>65.0</b>	1163.166	1204.230	1310.233	1874.626	3320.466	5719.375	16056.079	18775.862	15077.224	18454.034
<b>67.5</b>	621.692	618.827	625.512	746.794	1278.718	2611.870	12892.230	19018.427	17191.550	20750.761
<b>70.0</b>	398.227	389.632	401.092	465.075	647.476	1056.208	6236.020	16733.160	17962.219	20207.377
<b>72.5</b>	200.546	206.276	217.735	280.764	423.056	634.107	2219.374	11388.137	16474.360	14719.107
<b>75.0</b>	104.093	106.003	106.003	148.022	263.574	453.616	1035.198	5133.018	8841.205	5878.857
<b>77.5</b>	57.299	59.209	61.119	80.218	135.607	286.494	564.393	2399.865	3491.407	1934.790
<b>80.0</b>	50.614	51.569	49.659	56.344	72.578	135.607	290.314	848.022	1642.566	847.067
<b>82.5</b>	50.614	49.659	46.794	49.659	62.074	87.858	140.382	381.037	731.515	459.345
<b>85.0</b>	44.884	43.929	42.019	42.974	51.569	80.218	130.832	239.700	409.686	295.089
<b>87.5</b>	22.920	21.010	21.965	26.739	36.289	66.849	134.652	283.629	305.594	192.906
<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>85</u>	<u>90</u>	<u>95</u>	<u>105</u>	<u>115</u>	<u>125</u>	<u>135</u>	<u>145</u>	<u>155</u>	<u>165</u>
<b>0.0</b>	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162	3751.162
<b>2.5</b>	3755.936	3743.522	3757.846	3759.756	3762.621	3754.981	3743.522	3744.477	3740.657	3738.747
<b>5.0</b>	3801.775	3784.586	3795.091	3787.451	3778.856	3753.071	3721.557	3697.683	3669.988	3648.024
<b>7.5</b>	3847.614	3826.605	3832.335	3811.325	3777.901	3716.782	3644.204	3574.490	3501.912	3435.063
<b>10.0</b>	3918.283	3888.679	3887.724	3845.705	3768.351	3644.204	3496.182	3367.260	3227.832	3082.675
<b>12.5</b>	4033.836	3997.546	3993.726	3915.418	3775.991	3547.751	3261.257	2950.888	2623.330	2330.151
<b>15.0</b>	4175.173	4128.379	4114.054	3993.726	3773.126	3398.774	2805.731	2229.878	1741.884	1397.136
<b>17.5</b>	4350.889	4286.905	4261.121	4079.675	3746.387	3056.891	2114.326	1394.271	933.015	737.245
<b>20.0</b>	4545.705	4477.901	4428.242	4172.308	3662.348	2505.868	1418.145	811.733	530.969	455.525
<b>22.5</b>	4765.350	4694.682	4616.373	4271.626	3441.748	1873.671	890.996	498.500	417.326	387.722
<b>25.0</b>	5033.700	4953.481	4852.253	4390.998	3072.171	1324.557	559.618	423.056	378.172	349.523
<b>27.5</b>	5343.113	5250.480	5128.243	4506.551	2607.095	877.627	455.525	387.722	342.838	312.278

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

30.0	5727.970	5610.508	5462.486	4569.579	2093.316	581.583	417.326	352.388	308.459	274.079
32.5	6124.287	6003.959	5827.288	4567.669	1502.184	481.310	379.127	317.053	269.304	226.330
35.0	6542.568	6409.826	6193.045	4455.937	999.864	437.381	339.973	277.899	216.780	165.212
37.5	7002.868	6860.576	6592.227	4203.822	663.711	393.452	299.864	225.375	148.977	103.138
40.0	7496.593	7348.571	7021.968	3777.901	516.644	348.568	254.980	161.392	88.813	60.164
42.5	8026.607	7843.251	7430.700	3142.839	458.390	306.549	199.591	99.318	49.659	32.469
45.0	8555.666	8357.985	7846.116	2394.135	411.596	262.620	135.607	54.434	22.920	13.370
47.5	9167.808	8972.037	8232.883	1631.106	366.712	214.871	84.993	26.739	8.595	3.820
50.0	9917.467	9719.787	8608.190	1034.243	320.873	160.437	49.659	12.415	2.865	0.955
52.5	10758.805	10507.645	8869.854	713.370	276.944	109.823	23.875	5.730	1.910	0.955
55.0	11812.148	11452.120	9026.471	622.647	239.700	70.669	14.325	3.820	2.865	1.910
57.5	13022.107	12539.843	9062.760	644.612	221.555	42.974	8.595	3.820	3.820	3.820
60.0	14443.118	13660.034	8794.411	672.306	216.780	22.920	6.685	3.820	4.775	4.775
62.5	16739.845	15016.106	8158.394	650.341	210.096	15.280	5.730	3.820	4.775	3.820
65.0	18496.053	16051.304	6829.062	552.933	178.581	21.965	4.775	3.820	2.865	1.910
67.5	19798.646	15733.296	4778.720	371.487	123.192	15.280	4.775	1.910	2.865	5.730
70.0	17730.159	12520.743	2360.711	173.806	63.984	12.415	2.865	2.865	3.820	1.910
72.5	11153.212	6703.960	874.762	76.398	32.469	10.505	1.910	1.910	0.955	0.000
75.0	4228.652	2610.915	392.497	32.469	13.370	5.730	1.910	0.000	0.000	0.000
77.5	1177.490	789.768	224.420	14.325	7.640	2.865	0.955	0.000	0.000	0.000
80.0	550.068	397.272	139.427	9.550	4.775	1.910	0.000	0.000	0.000	0.000
82.5	279.809	209.141	71.624	8.595	4.775	0.000	0.000	0.000	0.000	0.000
85.0	171.896	119.373	28.649	6.685	1.910	0.955	0.955	0.955	0.955	0.000
87.5	99.318	49.659	9.550	2.865	2.865	1.910	1.910	1.910	0.955	0.955
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**

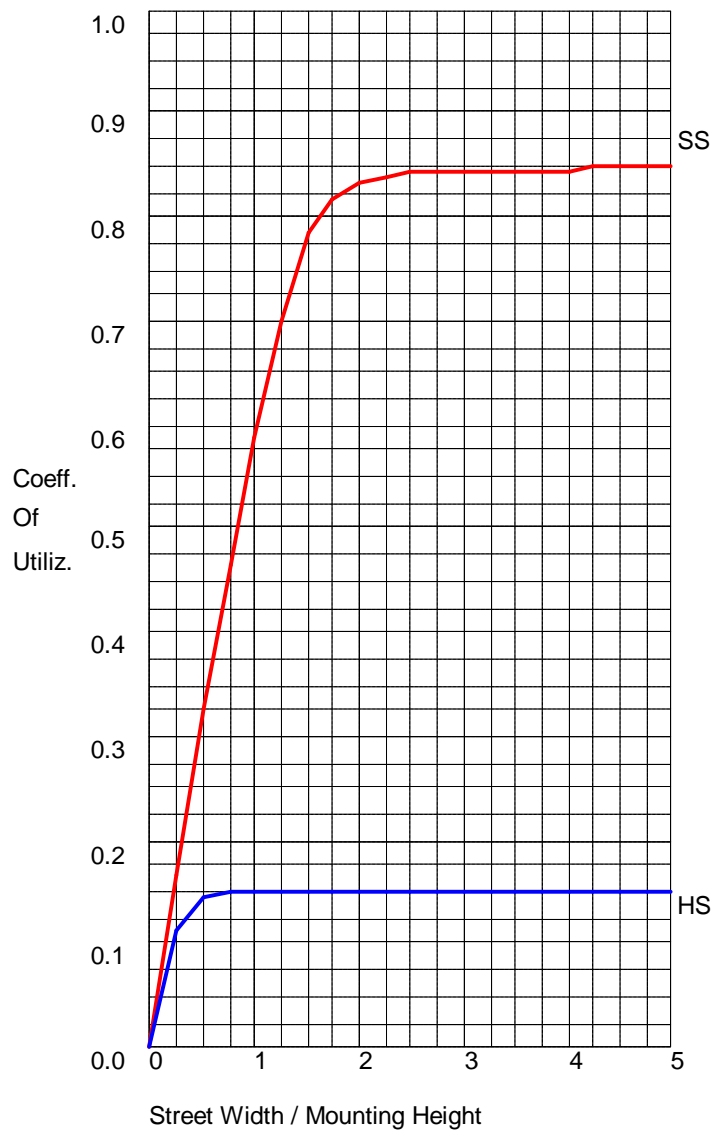
	<b>175</b>	<b>180</b>
0.0	3751.162	3751.162
2.5	3733.017	3723.467
5.0	3626.059	3615.554
7.5	3400.684	3388.269
10.0	3001.502	2982.403
12.5	2180.219	2155.390
15.0	1249.114	1228.104
17.5	641.747	631.242
20.0	430.696	425.921
22.5	375.307	374.352
25.0	336.153	334.243
27.5	297.954	295.089
30.0	254.980	254.025
32.5	203.411	201.501
35.0	141.337	135.607
37.5	85.948	81.173
40.0	48.704	47.749
42.5	25.784	25.784
45.0	9.550	8.595
47.5	0.000	0.000
50.0	0.000	0.000
52.5	0.000	0.000
55.0	0.000	0.000
57.5	1.910	0.955
60.0	2.865	1.910
62.5	0.955	0.000
65.0	0.000	0.000

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**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	2.865	2.865
<b>70.0</b>	0.000	0.000
<b>72.5</b>	0.000	0.000
<b>75.0</b>	0.000	0.000
<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

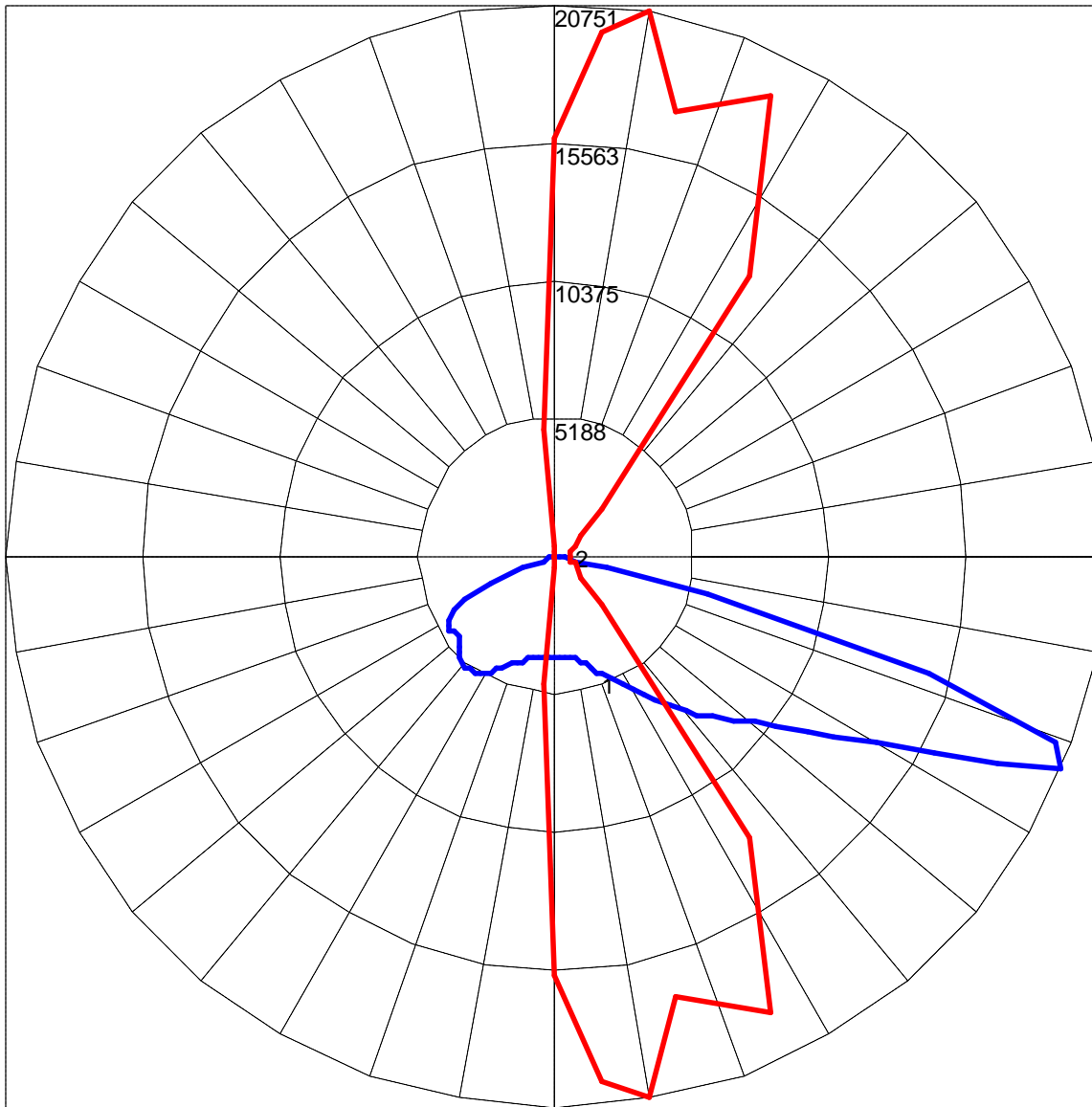
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

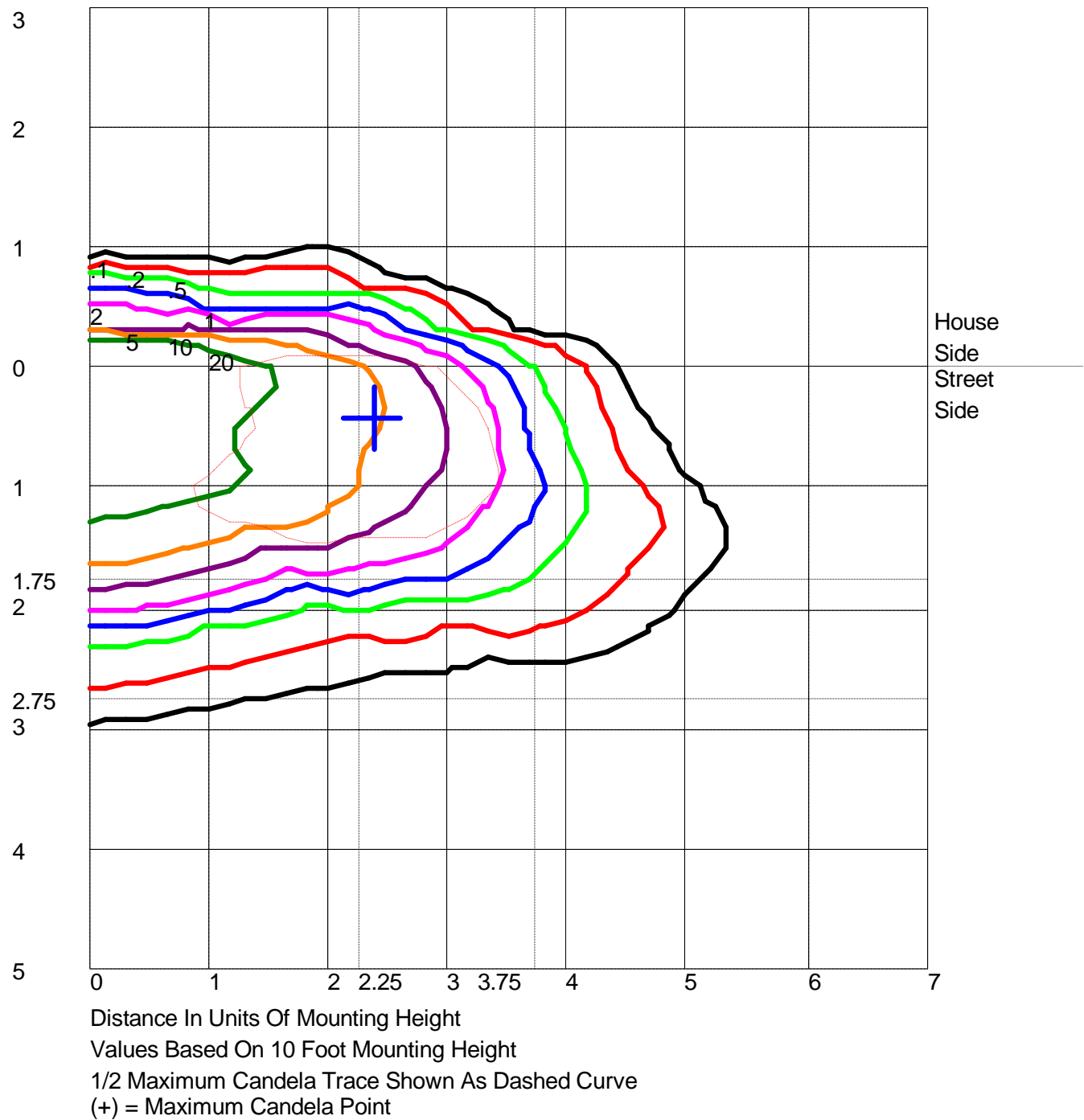
	Lumens	Percent Of Luminaire
Downward Street Side	17041.6	84.8
Downward House Side	3045.1	15.2
Downward Total	20086.7	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	20086.7	100.0

POLAR GRAPH



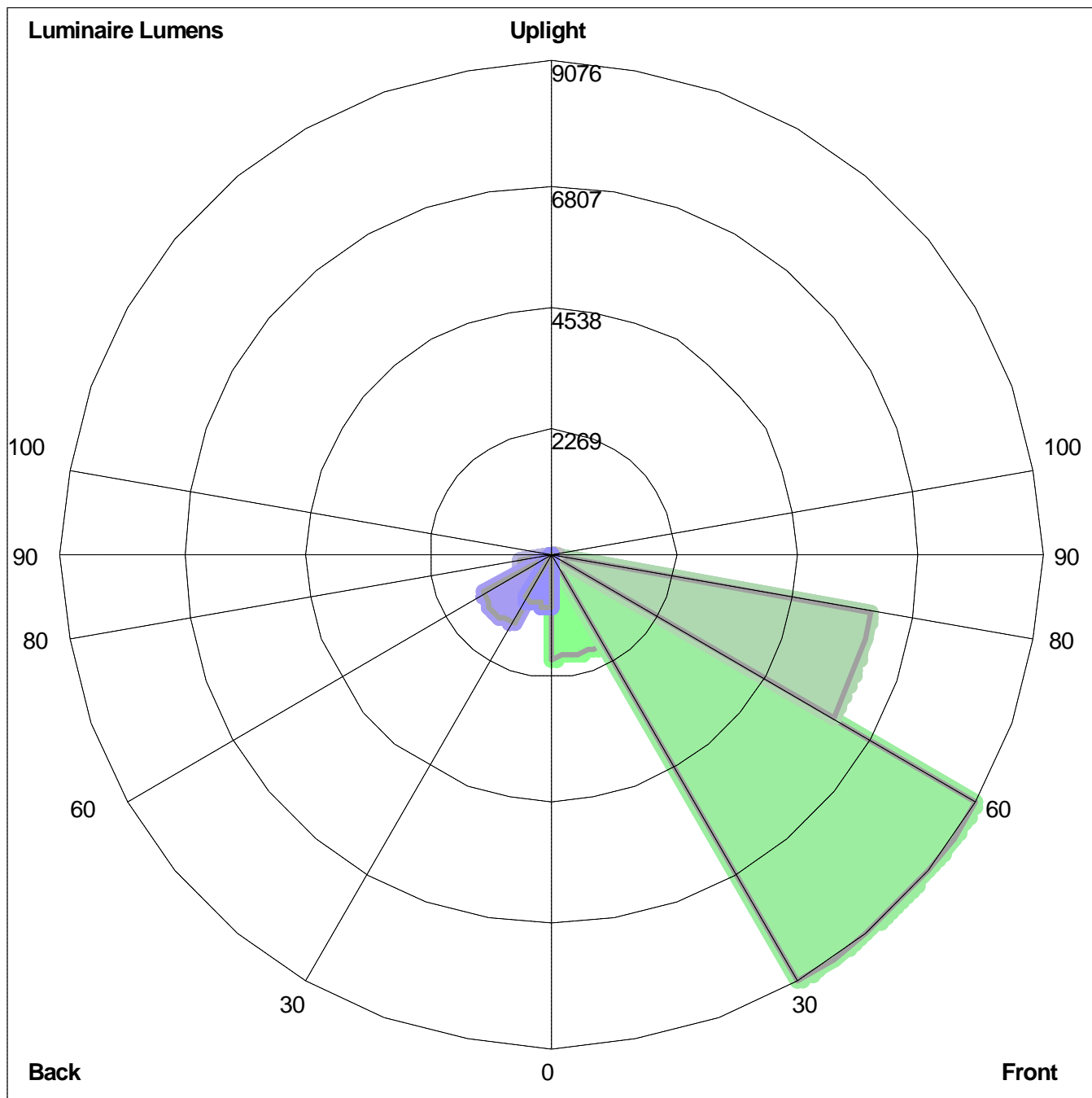
Maximum Candela = 20750.761 Located At Horizontal Angle = 80, Vertical Angle = 67.5  
# 1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=1906.6, Medium=9075.9, High=5972.3, Very High=86.7  
Back: Low=960.3, Medium=1479.9, High=600.0, Very High=4.9  
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G3