



IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-2-LED-35-40-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-8713_Scaled
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]03/20/17
[TEST DATE]03/20/17
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT]XMR-2-LED-35-40-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	24283
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	77
Total Luminaire Watts	313.6
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	24454.112
Maximum Candela Angle	80H 67.5V
Maximum Candela (<90 Degrees Vertical)	24454.112
Maximum Candela Angle (<90 Degrees Vertical)	80H 67.5V
Maximum Candela At 90 Degrees Vertical	169.124 (0.7% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1470.515 (6.1% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2354.6	N.A.	9.7
FM - Front-Medium (30-60)	11320.3	N.A.	46.6
FH - Front-High (60-80)	6473.4	N.A.	26.7
FVH - Front-Very High (80-90)	88.1	N.A.	0.4
BL - Back-Low (0-30)	1267.7	N.A.	5.2
BM - Back-Medium (30-60)	1977.4	N.A.	8.1
BH - Back-High (60-80)	778.5	N.A.	3.2
BVH - Back-Very High (80-90)	5.6	N.A.	0.0
UL - Uplight-Low (90-100)	5.1	N.A.	0.0
UH - Uplight-High (100-180)	12.1	N.A.	0.0
Total	24282.8	N.A.	100.0
BUG Rating	B3-U2-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<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>
0.0	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018
2.5	4715.393	4719.215	4718.259	4713.482	4713.482	4702.971	4708.704	4683.861	4672.395	4667.618
5.0	4793.744	4796.610	4803.299	4793.744	4793.744	4779.411	4778.456	4744.058	4723.992	4713.482
7.5	4877.828	4883.561	4890.249	4881.650	4879.739	4867.317	4868.273	4827.186	4796.610	4783.233
10.0	4974.333	4983.888	4992.488	4984.844	4985.799	4974.333	4976.244	4938.024	4899.804	4881.650
12.5	5076.572	5087.082	5100.459	5111.925	5117.658	5117.658	5125.302	5099.504	5045.040	5021.153
15.0	5140.590	5147.279	5176.899	5215.119	5273.405	5291.559	5319.269	5300.159	5236.140	5205.564
17.5	5179.766	5186.454	5225.630	5292.515	5399.531	5485.526	5558.144	5547.633	5469.282	5431.062
20.0	5218.941	5225.630	5283.915	5375.643	5507.502	5648.916	5826.639	5826.639	5737.778	5702.424
22.5	5237.096	5252.384	5331.690	5455.905	5620.251	5791.286	6052.137	6139.088	6065.514	6006.273
25.0	5250.473	5268.627	5362.266	5527.568	5729.178	5931.744	6239.415	6484.979	6421.916	6355.031
27.5	5272.449	5297.292	5404.308	5595.408	5836.194	6078.891	6414.272	6853.802	6844.247	6773.540
30.0	5400.486	5419.596	5522.790	5711.024	5974.742	6248.970	6616.838	7214.981	7323.908	7247.468
32.5	5644.139	5658.471	5745.422	5913.590	6156.287	6456.314	6859.535	7540.806	7865.676	7761.527
35.0	5994.807	6022.517	6068.381	6201.195	6409.494	6720.987	7157.651	7833.189	8403.623	8310.939
37.5	6452.492	6475.424	6511.733	6578.618	6745.830	7064.967	7504.497	8139.905	8936.792	8918.637
40.0	7025.792	7037.258	7070.700	7057.323	7169.117	7508.319	7909.629	8454.264	9439.385	9516.780
42.5	7801.658	7853.255	7804.524	7710.885	7750.061	8059.643	8377.824	8806.844	9896.114	10114.923
45.0	8864.174	8924.370	8853.663	8671.163	8541.215	8773.401	8973.101	9162.290	10327.044	10744.598
47.5	10160.787	10102.502	10048.994	9943.889	9793.875	9796.742	9839.739	9613.286	10801.928	11449.757
50.0	10681.535	10665.291	10722.621	10923.276	11276.811	11531.930	11040.803	10261.115	11415.359	12280.086
52.5	10388.196	10407.306	10590.762	11069.468	12083.253	13423.820	12921.227	11201.327	12071.787	13197.366
55.0	9533.979	9595.131	9906.624	10574.519	11988.659	14441.427	15683.577	12561.959	12832.365	14390.786
57.5	7543.673	7681.265	8272.719	9202.421	11036.981	14169.110	18163.100	14404.163	13995.209	15960.672
60.0	4342.748	4291.151	4785.144	6420.960	8890.928	12502.718	19353.653	17927.091	15187.673	17878.361
62.5	1499.180	1467.648	1688.369	2641.958	5234.229	9307.526	19563.863	21260.831	17040.387	20261.378
65.0	817.908	788.288	812.175	992.765	2027.571	4756.479	17565.912	222704.591	18883.547	22693.125
67.5	511.193	517.881	530.303	603.876	881.927	1758.120	12068.921	222204.865	21053.487	24454.112
70.0	297.161	304.805	324.870	404.177	579.989	914.414	5553.366	17996.843	21148.082	23476.635
72.5	156.702	159.569	161.480	231.231	399.399	614.387	2000.817	11042.714	16771.892	15656.823
75.0	79.307	82.173	83.129	119.438	222.632	432.842	946.901	4829.097	8267.942	5732.045
77.5	62.108	62.108	62.108	71.663	105.105	244.608	485.394	1933.932	3264.944	1783.919
80.0	64.019	62.108	56.375	60.197	73.574	111.794	232.187	687.960	1470.515	894.348
82.5	61.152	59.241	52.553	52.553	63.063	95.550	137.592	329.648	640.185	485.394
85.0	38.220	39.176	39.176	42.998	52.553	85.995	143.325	250.341	399.399	312.449
87.5	14.333	14.333	15.288	18.155	26.754	58.286	135.681	307.671	320.093	198.744
90.0	7.644	6.689	6.689	9.555	11.466	22.932	60.197	164.346	169.124	90.773
92.5	1.911	1.911	3.822	2.867	0.956	0.000	0.956	3.822	3.822	3.822
95.0	0.000	0.956	1.911	1.911	0.000	0.000	0.000	0.000	0.956	1.911
97.5	0.000	0.000	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.956	0.956	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.956	0.000	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.956	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	1.911	0.956	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	2.867	1.911	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.956	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.956	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.956
120.0	0.000	0.956	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.956
122.5	0.000	0.956	2.867	1.911	0.000	0.000	0.000	0.000	0.000	0.956
125.0	0.956	0.000	2.867	1.911	0.000	0.000	0.000	0.000	0.000	0.956
127.5	0.000	0.000	1.911	1.911	0.000	0.000	0.000	0.000	0.000	1.911
130.0	0.000	0.956	1.911	0.956	0.000	0.000	0.000	0.000	0.000	0.956

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CANDELA TABULATION - (Cont.)

132.5	0.000	0.000	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.956
135.0	0.956	0.956	1.911	1.911	0.000	0.000	0.000	0.000	0.956	1.911
137.5	0.000	0.000	0.956	0.956	0.000	0.000	0.000	0.000	0.000	0.956
140.0	0.000	0.956	1.911	0.956	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.956	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	1.911	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	1.911	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	1.911	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	1.911	1.911	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	1.911	0.956	0.956	0.956	0.000	0.000	0.000	0.000	0.000	0.000
172.5	1.911	0.956	0.956	0.956	0.000	0.000	0.000	0.000	0.000	0.000
175.0	2.867	1.911	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.000
177.5	2.867	1.911	1.911	1.911	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956

Vert. Angles **Horizontal Angles**

	<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>
0.0	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018	4659.018
2.5	4661.885	4644.686	4657.107	4660.929	4661.885	4647.552	4651.374	4626.531	4640.864	4641.819
5.0	4702.016	4680.039	4690.550	4681.950	4669.529	4635.131	4614.110	4561.557	4552.958	4533.848
7.5	4765.079	4737.369	4740.236	4714.437	4676.217	4596.911	4517.604	4405.811	4348.481	4288.284
10.0	4857.762	4827.186	4816.676	4765.079	4674.306	4518.560	4348.481	4138.271	4000.679	3910.862
12.5	4986.755	4955.223	4928.469	4835.786	4671.440	4401.989	4096.229	3785.691	3576.437	3385.337
15.0	5157.789	5115.747	5075.616	4926.558	4659.974	4235.732	3783.780	3268.766	2792.927	2437.481
17.5	5367.999	5313.536	5261.939	5027.841	4638.953	4022.655	3218.124	2395.439	1808.762	1441.850
20.0	5622.162	5540.945	5465.460	5142.501	4584.489	3614.657	2399.261	1544.088	1010.919	765.356
22.5	5911.679	5812.307	5709.113	5277.227	4478.429	2907.587	1648.238	902.948	619.164	537.947
25.0	6248.015	6132.399	5999.585	5438.706	4197.512	2217.716	1046.273	610.565	510.237	468.195
27.5	6685.634	6526.065	6355.031	5630.762	3719.762	1583.264	695.604	519.792	457.685	421.376
30.0	7156.695	6985.661	6782.139	5818.040	3129.263	1057.739	567.567	471.062	414.687	374.556
32.5	7673.621	7490.165	7243.646	5937.477	2517.743	735.735	503.549	424.242	366.912	320.093
35.0	8225.900	8030.978	7759.616	5935.566	1895.712	597.188	451.952	374.556	308.627	247.475
37.5	8814.488	8603.322	8265.075	5749.244	1288.014	525.525	398.444	312.449	226.454	164.346
40.0	9425.052	9208.154	8792.511	5361.311	865.683	469.151	343.980	237.920	140.459	96.506
42.5	10053.771	9865.538	9347.657	4756.479	652.607	414.687	279.962	150.014	76.440	52.553
45.0	10736.954	10566.875	9872.226	3943.349	552.279	358.313	204.477	86.951	40.131	25.799
47.5	11574.927	11339.874	10428.327	2932.430	482.528	295.250	128.993	45.864	16.244	8.600
50.0	12463.542	12197.913	10953.852	2039.037	429.975	229.320	78.351	19.110	5.733	3.822
52.5	13489.749	13155.324	11431.602	1343.433	407.043	162.435	42.998	8.600	2.867	3.822
55.0	14866.625	14155.733	11809.980	987.032	392.711	107.972	20.066	4.778	3.822	4.778
57.5	16511.040	15789.638	12045.989	882.882	370.734	72.618	11.466	3.822	4.778	5.733
60.0	18514.724	17290.728	11962.860	835.107	326.781	67.841	9.555	4.778	5.733	7.644
62.5	20689.442	18706.779	11229.036	745.290	239.831	62.108	10.511	4.778	5.733	5.733
65.0	22541.201	19594.439	9570.288	621.075	200.655	42.042	9.555	5.733	3.822	7.644
67.5	23252.093	18673.337	6842.336	395.577	153.836	30.576	9.555	2.867	8.600	20.066
70.0	20374.127	14435.694	3560.193	200.655	82.173	21.021	6.689	8.600	11.466	6.689
72.5	11783.226	7418.502	1352.988	94.595	40.131	14.333	8.600	6.689	2.867	0.956
75.0	3946.215	2543.541	543.680	41.087	14.333	8.600	5.733	1.911	0.000	0.000
77.5	1215.396	864.728	283.784	14.333	7.644	5.733	0.956	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

80.0	613.431	452.907	171.035	11.466	6.689	3.822	0.000	0.000	0.000	0.000
82.5	328.692	239.831	93.639	10.511	5.733	0.956	0.000	0.000	0.000	0.000
85.0	202.566	133.770	32.487	5.733	0.956	0.956	0.000	0.000	0.000	0.000
87.5	109.883	49.686	5.733	0.956	0.956	0.000	0.000	0.956	0.000	0.000
90.0	27.710	6.689	3.822	2.867	1.911	1.911	1.911	2.867	1.911	0.000
92.5	3.822	2.867	2.867	1.911	1.911	0.956	0.956	0.956	0.000	0.000
95.0	1.911	2.867	3.822	3.822	2.867	2.867	1.911	0.956	0.000	0.000
97.5	0.956	1.911	3.822	4.778	4.778	2.867	1.911	0.956	0.000	0.000
100.0	0.956	2.867	3.822	5.733	5.733	3.822	2.867	0.956	0.000	0.956
102.5	0.956	1.911	3.822	6.689	6.689	4.778	3.822	1.911	0.956	0.956
105.0	0.956	2.867	4.778	6.689	6.689	4.778	3.822	2.867	0.956	0.956
107.5	0.956	1.911	3.822	6.689	5.733	5.733	4.778	3.822	1.911	0.956
110.0	0.956	2.867	4.778	6.689	6.689	5.733	4.778	4.778	2.867	1.911
112.5	0.956	2.867	4.778	5.733	6.689	5.733	5.733	3.822	2.867	1.911
115.0	1.911	2.867	4.778	5.733	6.689	5.733	5.733	4.778	3.822	2.867
117.5	1.911	2.867	4.778	5.733	6.689	6.689	5.733	4.778	3.822	2.867
120.0	1.911	2.867	4.778	5.733	6.689	6.689	6.689	4.778	3.822	3.822
122.5	1.911	3.822	4.778	6.689	7.644	6.689	6.689	5.733	4.778	3.822
125.0	2.867	3.822	4.778	6.689	7.644	7.644	6.689	5.733	4.778	4.778
127.5	2.867	3.822	4.778	6.689	7.644	7.644	7.644	6.689	4.778	4.778
130.0	2.867	3.822	4.778	6.689	7.644	7.644	7.644	6.689	4.778	4.778
132.5	2.867	2.867	4.778	6.689	7.644	7.644	7.644	6.689	5.733	4.778
135.0	1.911	3.822	4.778	6.689	7.644	7.644	7.644	7.644	5.733	4.778
137.5	1.911	2.867	3.822	5.733	7.644	7.644	6.689	6.689	5.733	4.778
140.0	0.956	1.911	2.867	4.778	6.689	6.689	6.689	6.689	5.733	3.822
142.5	0.000	0.956	1.911	3.822	5.733	5.733	6.689	5.733	4.778	2.867
145.0	0.000	0.956	0.956	2.867	4.778	5.733	5.733	5.733	4.778	2.867
147.5	0.000	0.000	0.956	2.867	4.778	5.733	5.733	5.733	4.778	2.867
150.0	0.000	0.000	0.956	1.911	3.822	4.778	5.733	4.778	3.822	1.911
152.5	0.000	0.000	0.000	1.911	3.822	4.778	4.778	4.778	2.867	1.911
155.0	0.000	0.000	0.000	1.911	3.822	3.822	4.778	4.778	2.867	0.956
157.5	0.000	0.000	0.000	1.911	2.867	3.822	3.822	3.822	2.867	0.956
160.0	0.000	0.000	0.000	0.956	2.867	3.822	3.822	3.822	1.911	0.956
162.5	0.000	0.000	0.000	0.956	1.911	2.867	2.867	2.867	0.956	0.000
165.0	0.000	0.000	0.000	0.000	0.956	2.867	2.867	1.911	0.956	0.000
167.5	0.000	0.000	0.000	0.000	0.956	0.956	1.911	1.911	0.956	0.000
170.0	0.000	0.000	0.000	0.000	0.956	1.911	1.911	1.911	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.956	0.956	0.956	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.956	0.956	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.956	0.956	0.956	0.000	0.000
180.0	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956

Vert. Horizontal Angles

	<u>175</u>	<u>180</u>
0.0	4659.018	4659.018
2.5	4626.531	4616.021
5.0	4509.960	4495.628
7.5	4245.287	4229.999
10.0	3841.110	3824.867
12.5	3298.386	3275.454
15.0	2300.844	2274.090
17.5	1302.347	1279.415
20.0	675.539	681.272
22.5	510.237	503.549
25.0	450.041	445.263

IES ROAD REPORT
PHOTOMETRIC FILENAME : XMR-2-LED-35-40-IL.IES

CANDELA TABULATION - (Cont.)

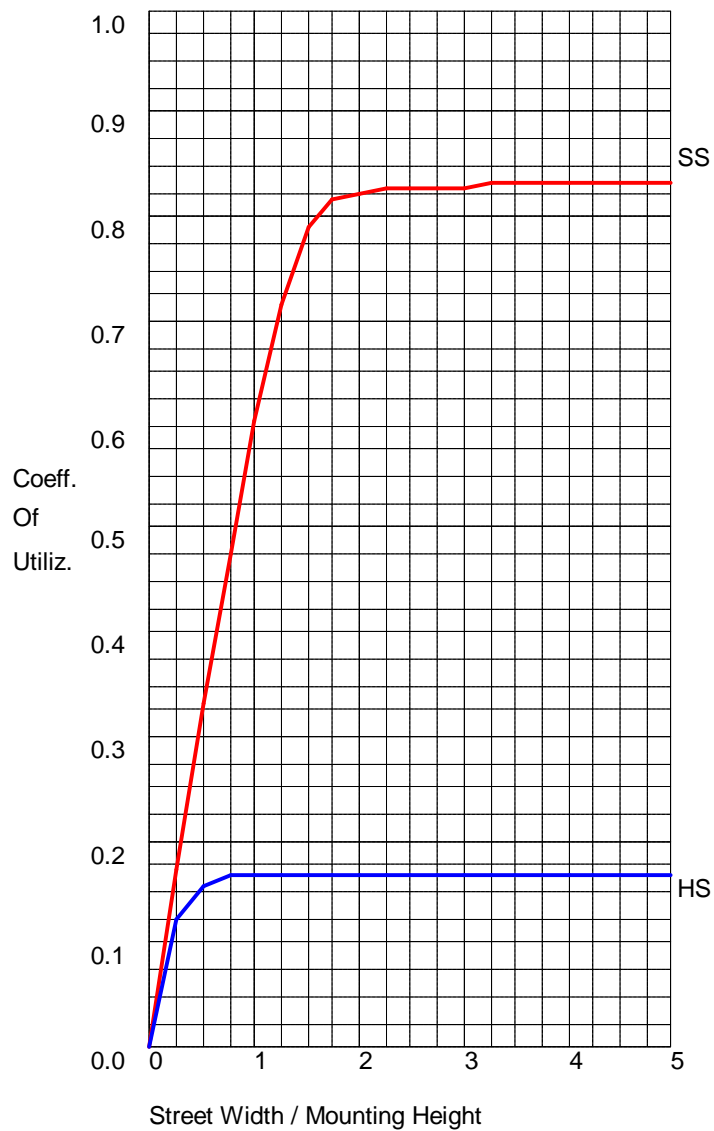
27.5	402.266	396.533
30.0	348.758	347.802
32.5	290.472	287.606
35.0	215.943	210.210
37.5	137.592	134.726
40.0	81.218	78.351
42.5	45.864	44.909
45.0	21.021	20.066
47.5	3.822	2.867
50.0	0.956	0.000
52.5	1.911	0.000
55.0	2.867	2.867
57.5	4.778	4.778
60.0	7.644	7.644
62.5	3.822	3.822
65.0	6.689	5.733
67.5	20.066	18.155
70.0	1.911	0.956
72.5	0.000	0.000
75.0	0.000	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
92.5	0.000	0.000
95.0	0.000	0.000
97.5	0.000	0.000
100.0	0.000	0.000
102.5	0.000	0.000
105.0	0.000	0.000
107.5	0.000	0.000
110.0	0.000	0.000
112.5	0.000	0.000
115.0	0.000	0.000
117.5	0.956	0.000
120.0	0.956	0.000
122.5	0.956	0.000
125.0	1.911	0.956
127.5	1.911	0.956
130.0	1.911	1.911
132.5	1.911	1.911
135.0	2.867	1.911
137.5	2.867	1.911
140.0	1.911	0.000
142.5	0.956	0.000
145.0	0.956	0.000
147.5	0.000	0.000
150.0	0.000	0.000
152.5	0.000	0.000
155.0	0.000	0.000
157.5	0.000	0.000
160.0	0.000	0.000
162.5	0.000	0.000
165.0	0.000	0.000

IES ROAD REPORT
PHOTOMETRIC FILENAME : XMR-2-LED-35-40-IL.IES

CANDELA TABULATION - (Cont.)

167.5	0.000	0.000
170.0	0.000	0.000
172.5	0.000	0.000
175.0	0.000	0.000
177.5	0.000	0.000
180.0	0.956	0.956

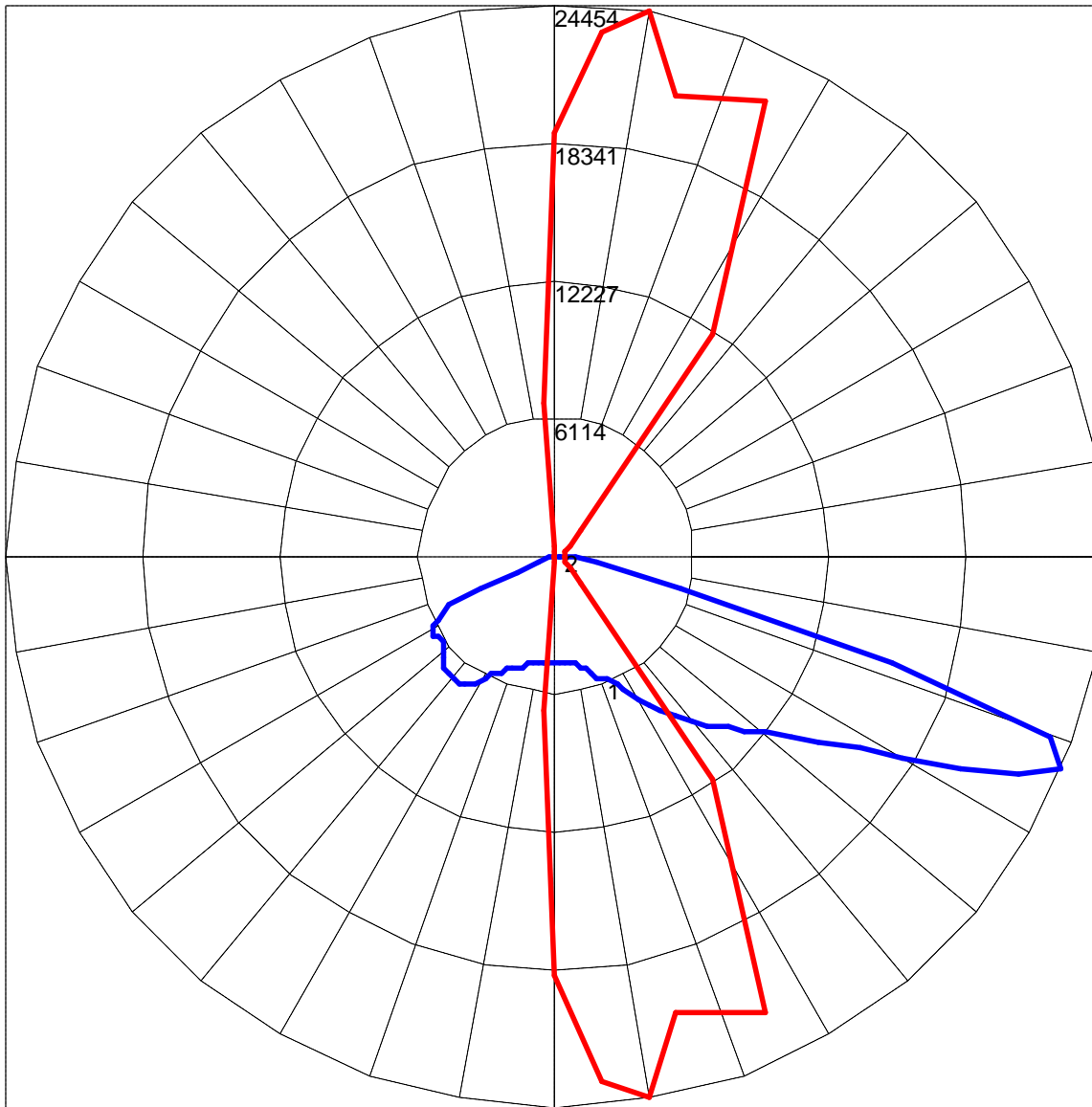
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

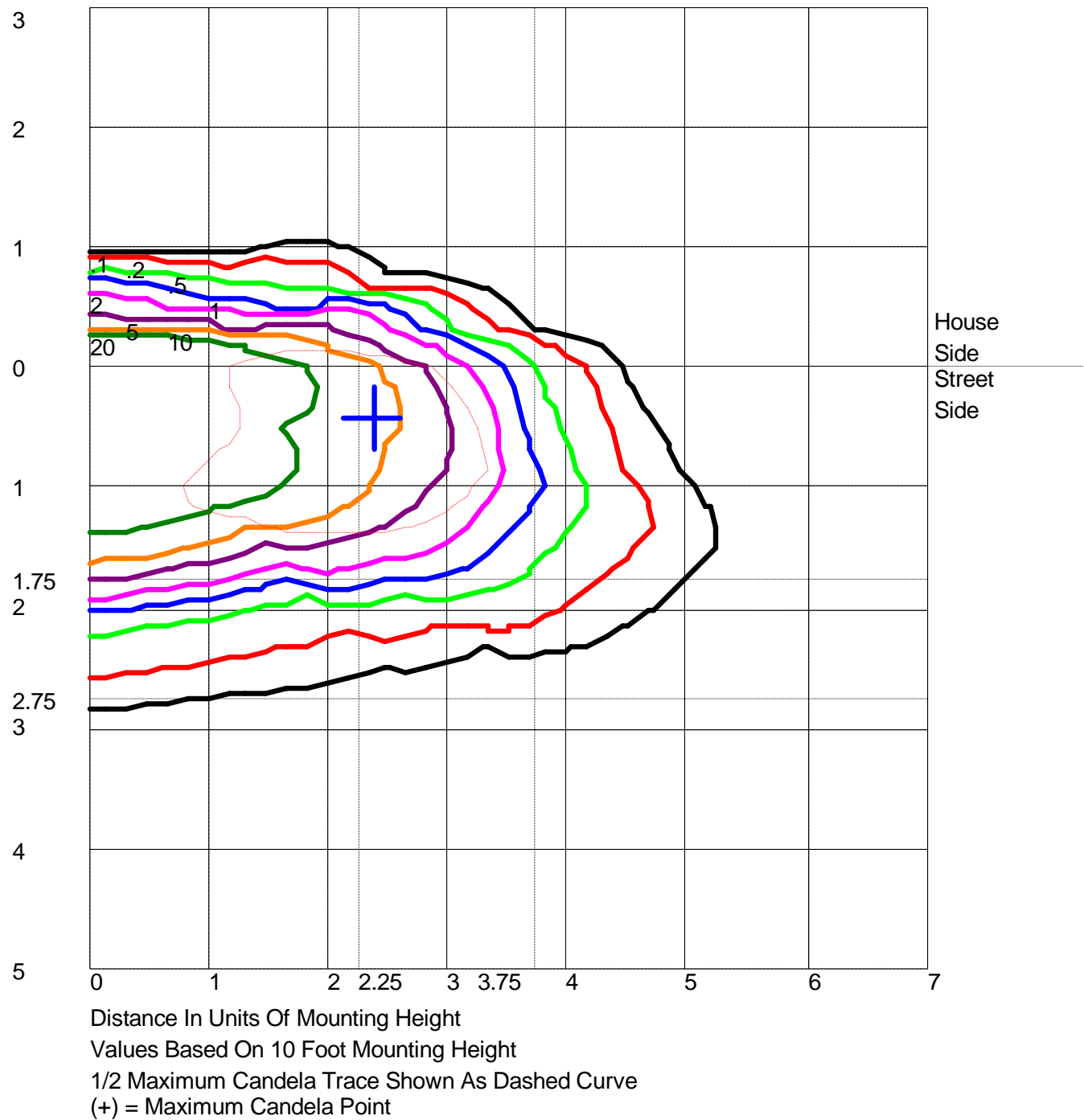
	Lumens	Percent Of Luminaire
Downward Street Side	20236.4	83.3
Downward House Side	4029.3	16.6
Downward Total	24265.7	99.9
Upward Street Side	5.5	0.0
Upward House Side	11.7	0.0
Upward Total	17.2	0.1
Total Flux	24282.9	100.0

POLAR GRAPH

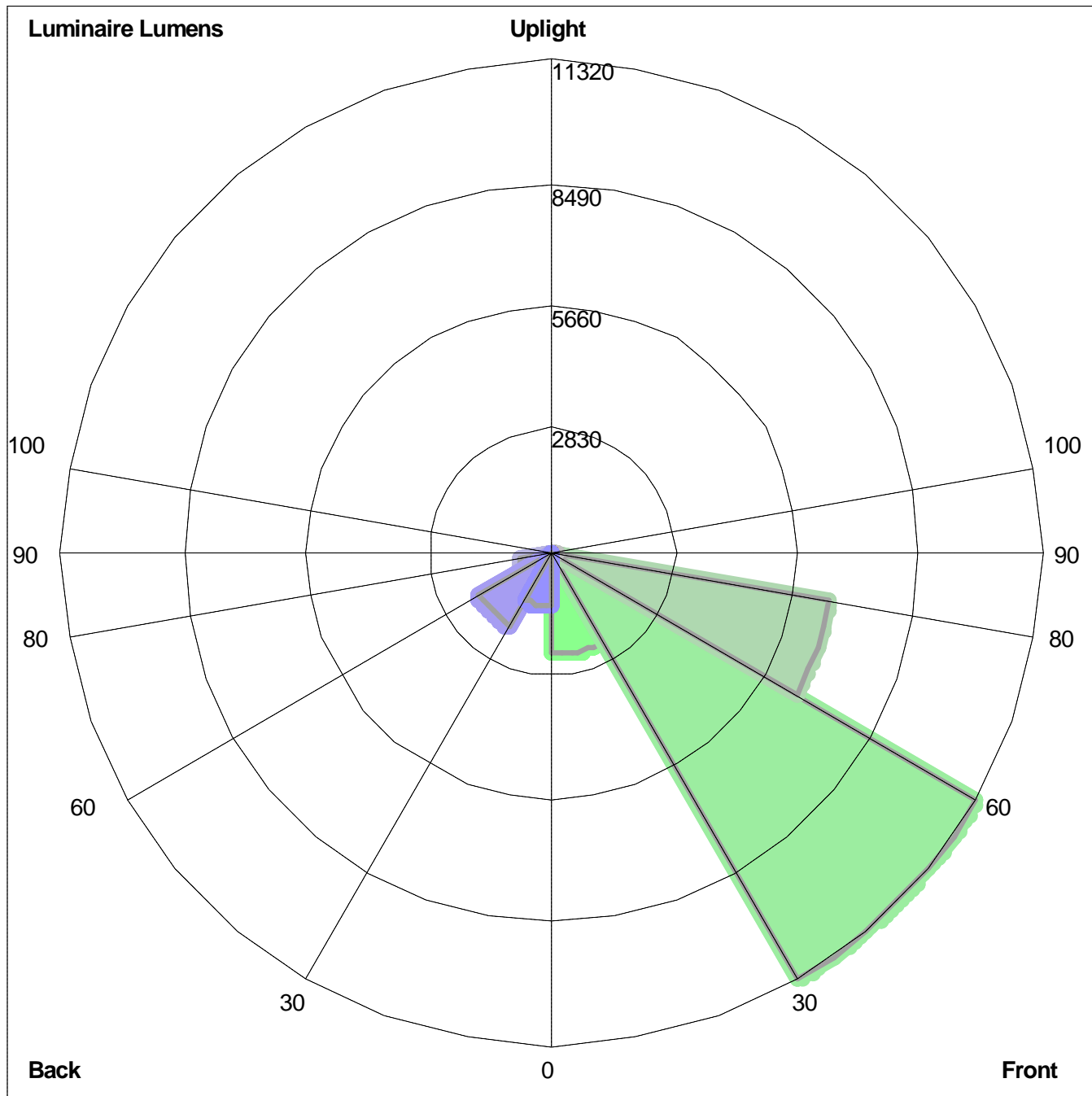


Maximum Candela = 24454.112 Located At Horizontal Angle = 80, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2354.6, Medium=11320.3, High=6473.4, Very High=88.1
Back: Low=1267.7, Medium=1977.4, High=778.5, Very High=5.6
Uplight: Low=5.1, High=12.1

BUG Rating : B3-U2-G3