



IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-2-LED-35-30-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-35-30-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	21958
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	70
Total Luminaire Watts	313.6
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	22112.607
Maximum Candela Angle	80H 67.5V
Maximum Candela (<90 Degrees Vertical)	22112.607
Maximum Candela Angle (<90 Degrees Vertical)	80H 67.5V
Maximum Candela At 90 Degrees Vertical	152.93 (0.7% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1329.711 (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)	2129.2	N.A.	9.7
FM - Front-Medium (30-60)	10236.3	N.A.	46.6
FH - Front-High (60-80)	5853.6	N.A.	26.7
FVH - Front-Very High (80-90)	79.7	N.A.	0.4
BL - Back-Low (0-30)	1146.3	N.A.	5.2
BM - Back-Medium (30-60)	1788.1	N.A.	8.1
BH - Back-High (60-80)	704.0	N.A.	3.2
BVH - Back-Very High (80-90)	5.1	N.A.	0.0
UL - Uplight-Low (90-100)	4.6	N.A.	0.0
UH - Uplight-High (100-180)	10.9	N.A.	0.0
Total	21957.8	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	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913
2.5	4263.889	4267.345	4266.481	4262.161	4262.161	4252.657	4257.841	4235.377	4225.009	4220.689
5.0	4334.738	4337.330	4343.378	4334.738	4334.738	4321.778	4320.914	4289.810	4271.665	4262.161
7.5	4410.771	4415.955	4422.003	4414.227	4412.499	4401.267	4402.131	4364.978	4337.330	4325.234
10.0	4498.036	4506.676	4514.452	4507.540	4508.404	4498.036	4499.764	4465.204	4430.643	4414.227
12.5	4590.485	4599.989	4612.085	4622.453	4627.637	4627.637	4634.550	4611.221	4561.973	4540.372
15.0	4648.374	4654.422	4681.206	4715.766	4768.471	4784.887	4809.944	4792.663	4734.775	4707.126
17.5	4683.798	4689.846	4725.271	4785.751	4882.520	4960.281	5025.946	5016.442	4945.593	4911.033
20.0	4719.222	4725.271	4777.975	4860.920	4980.154	5108.027	5268.733	5268.733	5188.380	5156.412
22.5	4735.639	4749.463	4821.176	4933.497	5082.107	5236.764	5472.639	5551.264	5484.735	5431.167
25.0	4747.735	4764.151	4848.824	4998.298	5180.604	5363.774	5641.985	5864.036	5807.011	5746.530
27.5	4767.607	4790.071	4886.840	5059.642	5277.373	5496.831	5800.099	6197.544	6188.903	6124.967
30.0	4883.384	4900.665	4993.978	5164.188	5402.654	5650.625	5983.269	6524.139	6622.636	6553.516
32.5	5103.707	5116.667	5195.292	5347.358	5566.816	5838.115	6202.728	6818.767	7112.530	7018.353
35.0	5420.799	5445.855	5487.327	5607.425	5795.779	6077.446	6472.299	7083.154	7598.968	7515.159
37.5	5834.659	5855.396	5888.228	5948.709	6099.910	6388.490	6785.934	7360.501	8081.085	8064.669
40.0	6353.065	6363.433	6393.674	6381.578	6482.667	6789.390	7152.275	7644.760	8535.555	8605.539
42.5	7054.641	7101.298	7057.233	6972.561	7007.985	7287.924	7575.639	7963.580	8948.551	9146.410
45.0	8015.421	8069.853	8005.916	7840.891	7723.385	7933.340	8113.918	8284.992	9338.220	9715.792
47.5	9187.882	9135.177	9086.793	8991.752	8856.102	8858.694	8897.575	8692.804	9767.633	10353.432
50.0	9658.768	9644.079	9695.920	9877.362	10197.046	10427.736	9983.635	9278.603	10322.327	11104.256
52.5	9393.516	9410.797	9576.687	10009.556	10926.270	12138.476	11684.007	10128.789	10915.902	11933.706
55.0	8621.092	8676.388	8958.055	9561.998	10840.733	13058.647	14181.860	11359.139	11603.654	13012.854
57.5	6821.359	6945.776	7480.598	8321.280	9980.179	12812.404	16423.966	13024.950	12655.154	14432.423
60.0	3926.925	3880.269	4326.962	5806.147	8039.613	11305.571	17500.522	16210.555	13733.439	16166.491
62.5	1355.632	1327.119	1526.706	2388.988	4733.047	8416.321	17690.604	19225.086	15408.754	18321.332
65.0	739.593	712.808	734.408	897.706	1833.429	4301.042	15883.959	20530.605	17075.429	20520.237
67.5	462.245	468.293	479.526	546.054	797.481	1589.778	10913.310	20078.728	19037.596	22112.607
70.0	268.707	275.619	293.763	365.476	524.454	826.858	5021.626	16273.628	19123.133	2228.725
72.5	141.698	144.290	146.018	209.090	361.156	555.558	1809.237	9985.363	15165.967	14157.667
75.0	71.713	74.305	75.169	108.001	201.314	391.397	856.234	4366.706	7476.278	5183.196
77.5	56.161	56.161	56.161	64.801	95.041	221.187	438.917	1748.756	2952.322	1613.107
80.0	57.889	56.161	50.977	54.433	66.529	101.089	209.954	622.087	1329.711	808.713
82.5	55.297	53.569	47.521	47.521	57.025	86.401	124.417	298.083	578.887	438.917
85.0	34.560	35.424	35.424	38.880	47.521	77.761	129.601	226.371	361.156	282.531
87.5	12.960	12.960	13.824	16.416	24.192	52.705	122.689	278.211	289.443	179.714
90.0	6.912	6.048	6.048	8.640	10.368	20.736	54.433	148.610	152.930	82.081
92.5	1.728	1.728	3.456	2.592	0.864	0.000	0.864	3.456	3.456	3.456
95.0	0.000	0.864	1.728	1.728	0.000	0.000	0.000	0.000	0.864	1.728
97.5	0.000	0.000	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.864	0.864	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.864	0.000	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.864	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	1.728	0.864	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	2.592	1.728	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.864	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.864	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.864
120.0	0.000	0.864	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.864
122.5	0.000	0.864	2.592	1.728	0.000	0.000	0.000	0.000	0.000	0.864
125.0	0.864	0.000	2.592	1.728	0.000	0.000	0.000	0.000	0.000	0.864
127.5	0.000	0.000	1.728	1.728	0.000	0.000	0.000	0.000	0.000	1.728
130.0	0.000	0.864	1.728	0.864	0.000	0.000	0.000	0.000	0.000	0.864

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CANDELA TABULATION - (Cont.)

132.5	0.000	0.000	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.864
135.0	0.864	0.864	1.728	1.728	0.000	0.000	0.000	0.000	0.864	1.728
137.5	0.000	0.000	0.864	0.864	0.000	0.000	0.000	0.000	0.000	0.864
140.0	0.000	0.864	1.728	0.864	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.864	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	0.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.864	0.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	1.728	0.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	1.728	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	1.728	0.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	1.728	1.728	0.864	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	1.728	0.864	0.864	0.864	0.000	0.000	0.000	0.000	0.000	0.000
172.5	1.728	0.864	0.864	0.864	0.000	0.000	0.000	0.000	0.000	0.000
175.0	2.592	1.728	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.000
177.5	2.592	1.728	1.728	1.728	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.864	0.864	0.864	0.864	0.864	0.864	0.864	0.864	0.864	0.864

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	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913	4212.913
2.5	4215.505	4199.952	4211.185	4214.641	4215.505	4202.545	4206.001	4183.536	4196.496	4197.360
5.0	4251.793	4231.921	4241.425	4233.649	4222.417	4191.312	4172.304	4124.784	4117.008	4099.727
7.5	4308.818	4283.761	4286.353	4263.025	4228.465	4156.752	4085.039	3983.950	3932.109	3877.677
10.0	4392.627	4364.978	4355.474	4308.818	4226.737	4085.903	3932.109	3742.027	3617.610	3536.393
12.5	4509.268	4480.756	4456.563	4372.754	4224.145	3980.494	3704.011	3423.208	3233.989	3061.187
15.0	4663.926	4625.909	4589.621	4454.835	4213.777	3830.156	3421.480	2955.778	2525.501	2204.089
17.5	4854.008	4804.759	4758.103	4546.420	4194.768	3637.482	2909.986	2166.073	1635.571	1303.791
20.0	5083.835	5010.394	4942.137	4650.102	4145.520	3268.550	2169.529	1396.240	914.123	692.072
22.5	5345.630	5255.773	5162.460	4771.927	4049.615	2629.182	1490.417	816.489	559.878	486.438
25.0	5649.761	5545.216	5425.119	4917.945	3795.596	2005.367	946.091	552.102	461.381	423.365
27.5	6045.478	5901.188	5746.530	5091.611	3363.591	1431.665	628.999	470.021	413.861	381.028
30.0	6471.435	6316.777	6132.743	5260.957	2829.633	956.459	513.222	425.957	374.980	338.692
32.5	6938.864	6772.974	6550.060	5368.958	2276.666	665.288	455.333	383.620	331.780	289.443
35.0	7438.262	7262.004	7016.625	5367.230	1714.196	540.006	408.677	338.692	279.075	223.779
37.5	7970.492	7779.546	7473.686	5198.748	1164.685	475.205	360.292	282.531	204.770	148.610
40.0	8522.594	8326.464	7950.620	4847.960	782.793	424.229	311.044	215.138	127.009	87.265
42.5	9091.113	8920.903	8452.610	4301.042	590.119	374.980	253.155	135.650	69.121	47.521
45.0	9708.880	9555.086	8926.951	3565.769	499.398	324.004	184.898	78.625	36.288	23.328
47.5	10466.617	10254.070	9429.805	2651.647	436.325	266.979	116.641	41.472	14.688	7.776
50.0	11270.146	11029.951	9905.010	1843.797	388.804	207.362	70.849	17.280	5.184	3.456
52.5	12198.093	11895.689	10337.015	1214.798	368.068	146.882	38.880	7.776	2.592	3.456
55.0	13443.131	12800.308	10679.163	892.522	355.108	97.633	18.144	4.320	3.456	4.320
57.5	14930.092	14277.765	10892.574	798.345	335.236	65.665	10.368	3.456	4.320	5.184
60.0	16741.921	15635.125	10817.405	755.145	295.491	61.345	8.640	4.320	5.184	6.912
62.5	18708.408	16915.587	10153.845	673.928	216.867	56.161	9.504	4.320	5.184	5.184
65.0	20382.859	17718.253	8653.924	561.606	181.442	38.016	8.640	5.184	3.456	6.912
67.5	21025.683	16885.347	6187.175	357.700	139.106	27.648	8.640	2.592	7.776	18.144
70.0	18423.285	13053.463	3219.301	181.442	74.305	19.008	6.048	7.776	10.368	6.048
72.5	10654.971	6708.173	1223.438	85.537	36.288	12.960	7.776	6.048	2.592	0.864
75.0	3568.361	2299.995	491.622	37.152	12.960	7.776	5.184	1.728	0.000	0.000
77.5	1099.021	781.929	256.611	12.960	6.912	5.184	0.864	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

80.0	554.694	409.541	154.658	10.368	6.048	3.456	0.000	0.000	0.000	0.000
82.5	297.219	216.867	84.673	9.504	5.184	0.864	0.000	0.000	0.000	0.000
85.0	183.170	120.961	29.376	5.184	0.864	0.864	0.000	0.000	0.000	0.000
87.5	99.361	44.929	5.184	0.864	0.864	0.000	0.000	0.864	0.000	0.000
90.0	25.056	6.048	3.456	2.592	1.728	1.728	1.728	2.592	1.728	0.000
92.5	3.456	2.592	2.592	1.728	1.728	0.864	0.864	0.864	0.000	0.000
95.0	1.728	2.592	3.456	3.456	2.592	2.592	1.728	0.864	0.000	0.000
97.5	0.864	1.728	3.456	4.320	4.320	2.592	1.728	0.864	0.000	0.000
100.0	0.864	2.592	3.456	5.184	5.184	3.456	2.592	0.864	0.000	0.864
102.5	0.864	1.728	3.456	6.048	6.048	4.320	3.456	1.728	0.864	0.864
105.0	0.864	2.592	4.320	6.048	6.048	4.320	3.456	2.592	0.864	0.864
107.5	0.864	1.728	3.456	6.048	5.184	5.184	4.320	3.456	1.728	0.864
110.0	0.864	2.592	4.320	6.048	6.048	5.184	4.320	4.320	2.592	1.728
112.5	0.864	2.592	4.320	5.184	6.048	5.184	5.184	3.456	2.592	1.728
115.0	1.728	2.592	4.320	5.184	6.048	5.184	5.184	4.320	3.456	2.592
117.5	1.728	2.592	4.320	5.184	6.048	6.048	5.184	4.320	3.456	2.592
120.0	1.728	2.592	4.320	5.184	6.048	6.048	6.048	4.320	3.456	3.456
122.5	1.728	3.456	4.320	6.048	6.912	6.048	6.048	5.184	4.320	3.456
125.0	2.592	3.456	4.320	6.048	6.912	6.912	6.048	5.184	4.320	4.320
127.5	2.592	3.456	4.320	6.048	6.912	6.912	6.912	6.048	4.320	4.320
130.0	2.592	3.456	4.320	6.048	6.912	6.912	6.912	6.048	4.320	4.320
132.5	2.592	2.592	4.320	6.048	6.912	6.912	6.912	6.048	5.184	4.320
135.0	1.728	3.456	4.320	6.048	6.912	6.912	6.912	6.912	5.184	4.320
137.5	1.728	2.592	3.456	5.184	6.912	6.912	6.048	6.048	5.184	4.320
140.0	0.864	1.728	2.592	4.320	6.048	6.048	6.048	6.048	5.184	3.456
142.5	0.000	0.864	1.728	3.456	5.184	5.184	6.048	5.184	4.320	2.592
145.0	0.000	0.864	0.864	2.592	4.320	5.184	5.184	5.184	4.320	2.592
147.5	0.000	0.000	0.864	2.592	4.320	5.184	5.184	5.184	4.320	2.592
150.0	0.000	0.000	0.864	1.728	3.456	4.320	5.184	4.320	3.456	1.728
152.5	0.000	0.000	0.000	1.728	3.456	4.320	4.320	4.320	2.592	1.728
155.0	0.000	0.000	0.000	1.728	3.456	3.456	4.320	4.320	2.592	0.864
157.5	0.000	0.000	0.000	1.728	2.592	3.456	3.456	3.456	2.592	0.864
160.0	0.000	0.000	0.000	0.864	2.592	3.456	3.456	3.456	1.728	0.864
162.5	0.000	0.000	0.000	0.864	1.728	2.592	2.592	2.592	0.864	0.000
165.0	0.000	0.000	0.000	0.000	0.864	2.592	2.592	1.728	0.864	0.000
167.5	0.000	0.000	0.000	0.000	0.864	0.864	1.728	1.728	0.864	0.000
170.0	0.000	0.000	0.000	0.000	0.864	1.728	1.728	1.728	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.864	0.864	0.864	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.864	0.864	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.864	0.864	0.864	0.000	0.000
180.0	0.864	0.864	0.864	0.864	0.864	0.864	0.864	0.864	0.864	0.864

Vert. Horizontal Angles

	<u>175</u>	<u>180</u>
0.0	4212.913	4212.913
2.5	4183.536	4174.032
5.0	4078.127	4065.167
7.5	3838.796	3824.972
10.0	3473.320	3458.632
12.5	2982.562	2961.826
15.0	2080.536	2056.344
17.5	1177.646	1156.909
20.0	610.855	616.039
22.5	461.381	455.333
25.0	406.949	402.629

IES ROAD REPORT
PHOTOMETRIC FILENAME : XMR-2-LED-35-30-IL.IES

CANDELA TABULATION - (Cont.)

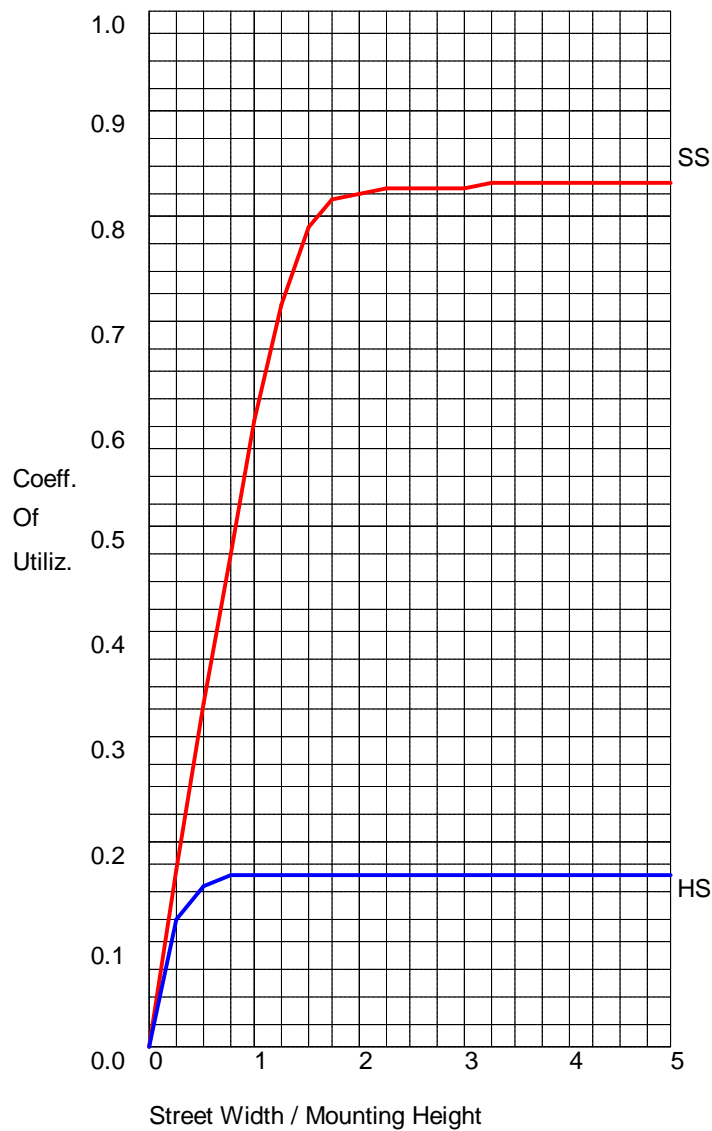
27.5	363.748	358.564
30.0	315.364	314.500
32.5	262.659	260.067
35.0	195.266	190.082
37.5	124.417	121.825
40.0	73.441	70.849
42.5	41.472	40.608
45.0	19.008	18.144
47.5	3.456	2.592
50.0	0.864	0.000
52.5	1.728	0.000
55.0	2.592	2.592
57.5	4.320	4.320
60.0	6.912	6.912
62.5	3.456	3.456
65.0	6.048	5.184
67.5	18.144	16.416
70.0	1.728	0.864
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	0.864	0.000
120.0	0.864	0.000
122.5	0.864	0.000
125.0	1.728	0.864
127.5	1.728	0.864
130.0	1.728	1.728
132.5	1.728	1.728
135.0	2.592	1.728
137.5	2.592	1.728
140.0	1.728	0.000
142.5	0.864	0.000
145.0	0.864	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-35-30-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	0.864	0.864

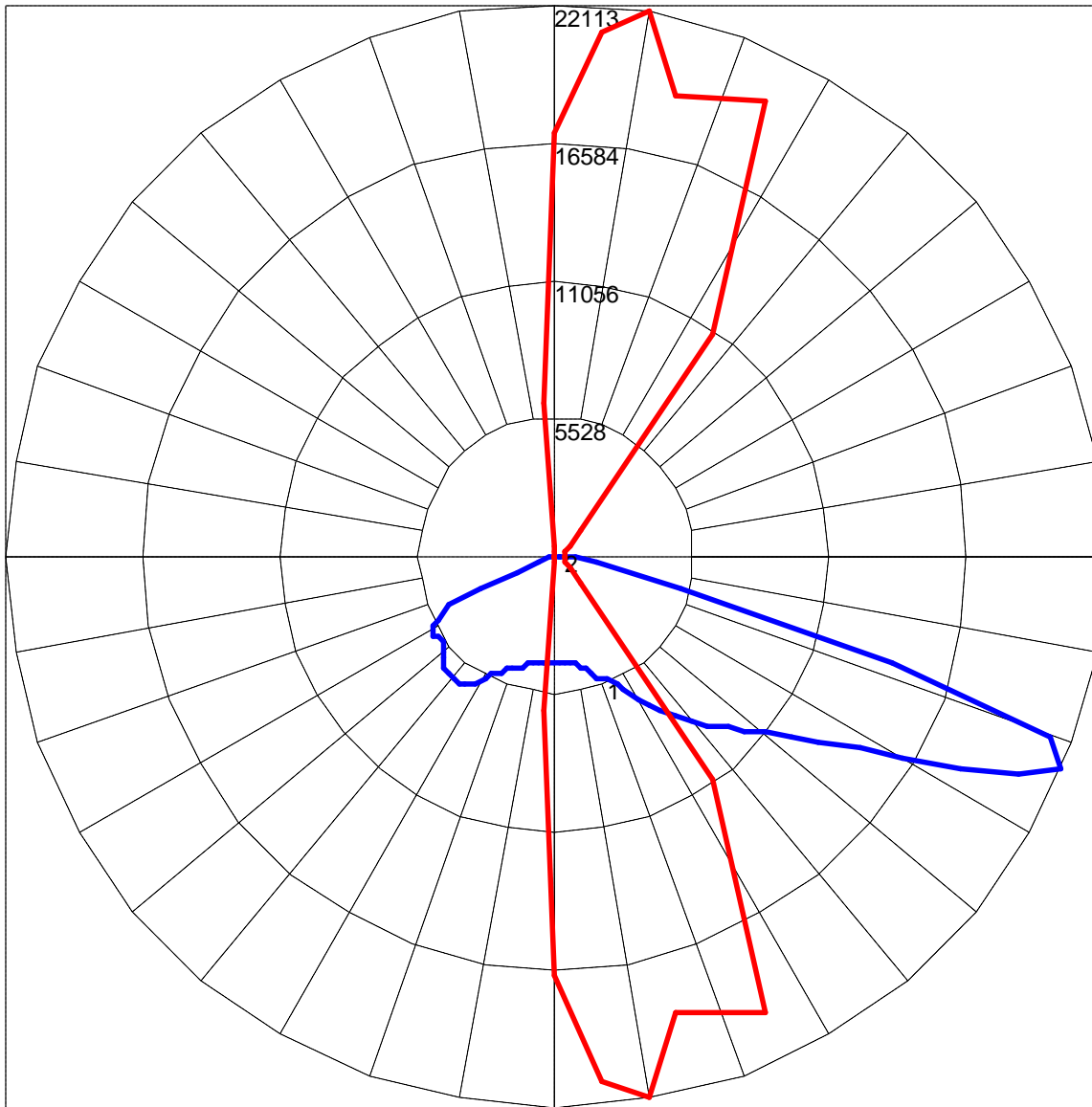
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

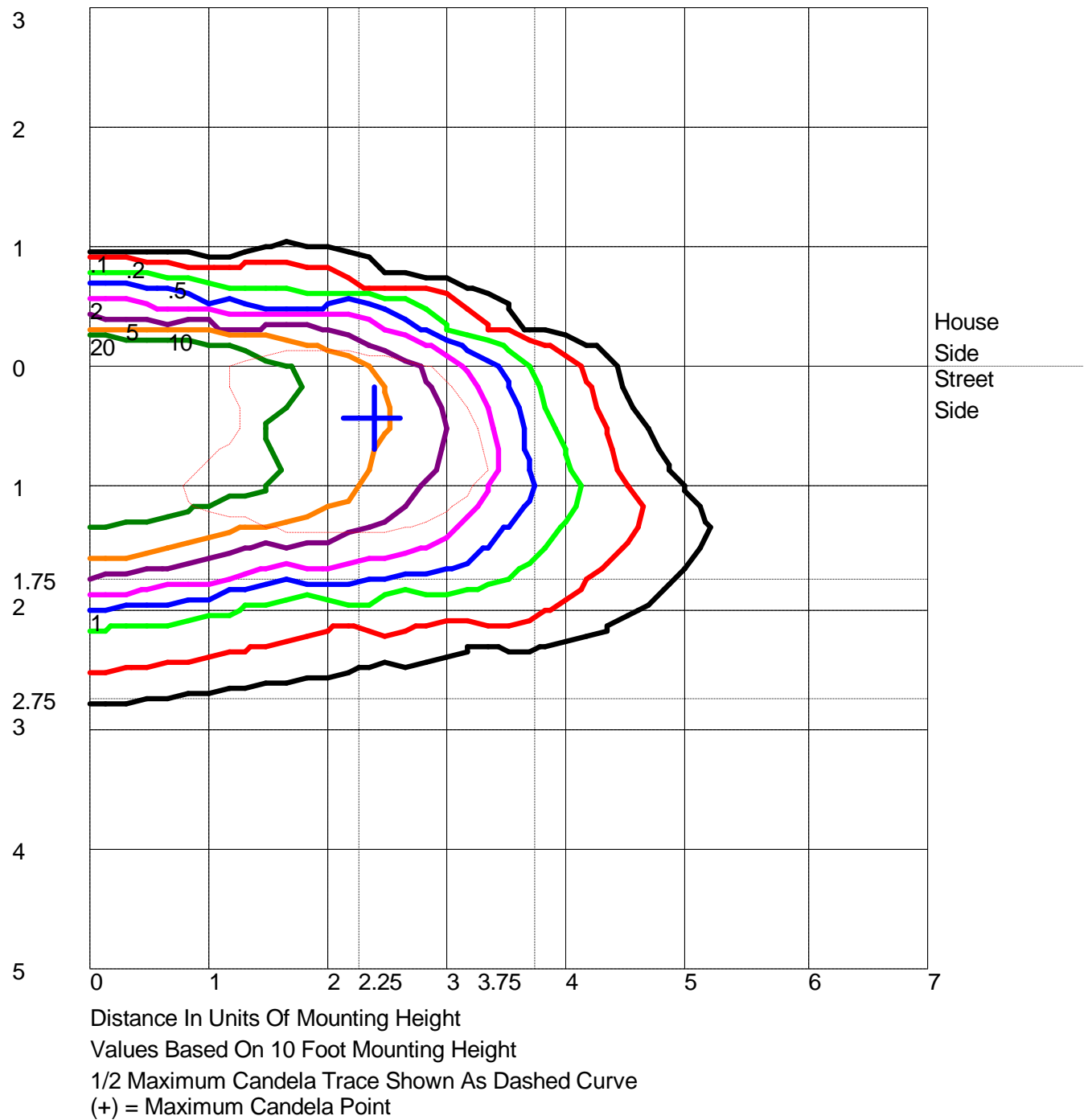
	Lumens	Percent Of Luminaire
Downward Street Side	18298.8	83.3
Downward House Side	3643.5	16.6
Downward Total	21942.3	99.9
Upward Street Side	5.0	0.0
Upward House Side	10.6	0.0
Upward Total	15.6	0.1
Total Flux	21957.9	100.0

POLAR GRAPH

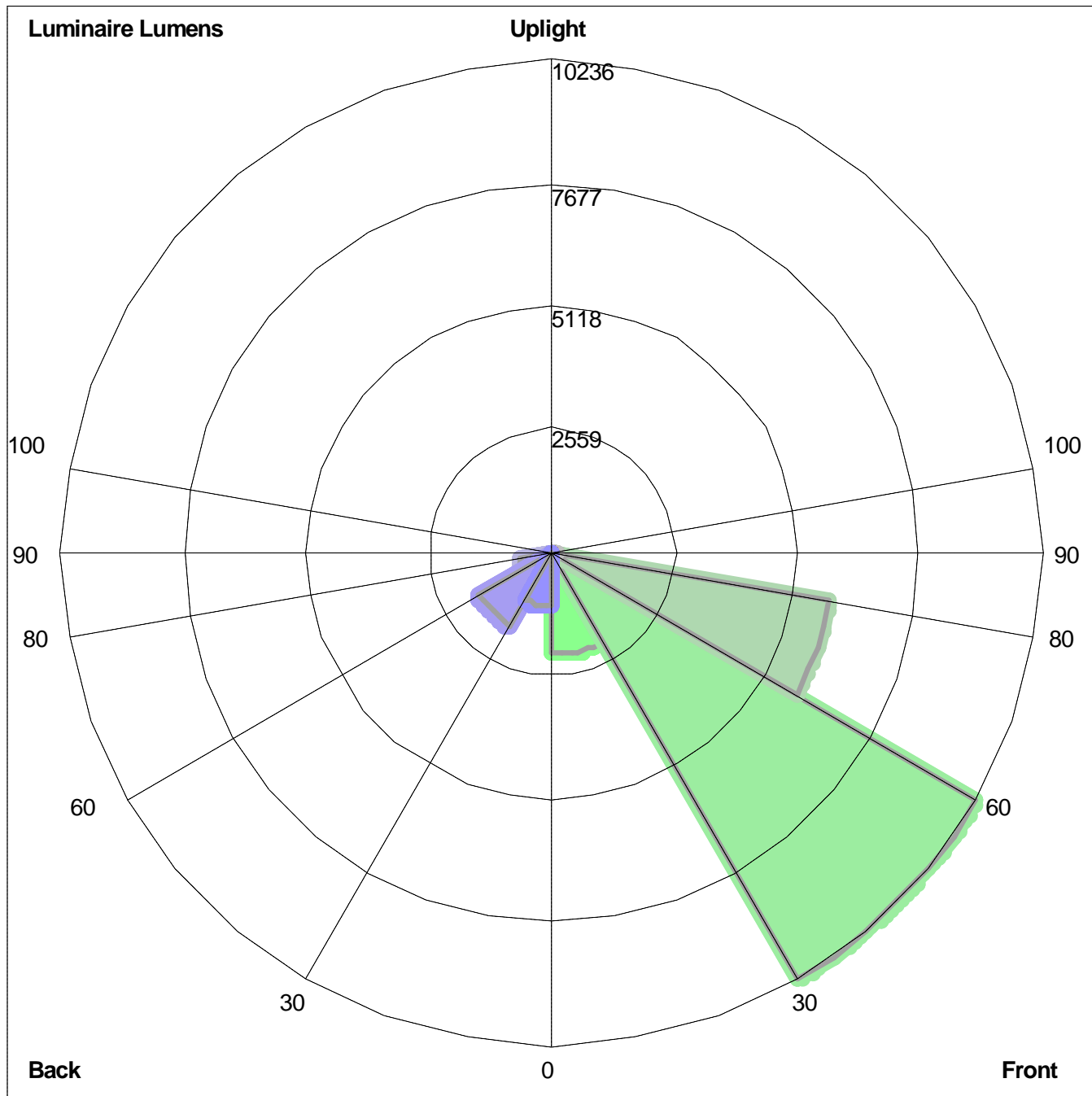


Maximum Candela = 22112.607 Located At Horizontal Angle = 80, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2129.2, Medium=10236.3, High=5853.6, Very High=79.7
Back: Low=1146.3, Medium=1788.1, High=704.0, Very High=5.1
Uplight: Low=4.6, High=10.9

BUG Rating : B3-U2-G3