



IES ROAD REPORT
PHOTOMETRIC FILENAME : XMR-2-LED-29-30.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-8225_SCALED
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]11/21/2016
[TEST DATE]10/17/16
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT]XMR-2-LED-29-30
[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 II
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	24576
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	102
Total Luminaire Watts	241
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	18895.129
Maximum Candela Angle	82.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	18895.129
Maximum Candela Angle (<90 Degrees Vertical)	82.5H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1231.984 (5.0% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1726.7	N.A.	7.0
FM - Front-Medium (30-60)	8556.0	N.A.	34.8
FH - Front-High (60-80)	5502.2	N.A.	22.4
FVH - Front-Very High (80-90)	112.1	N.A.	0.5
BL - Back-Low (0-30)	1408.5	N.A.	5.7
BM - Back-Medium (30-60)	5113.0	N.A.	20.8
BH - Back-High (60-80)	2062.1	N.A.	8.4
BVH - Back-Very High (80-90)	95.5	N.A.	0.4
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	24576.1	N.A.	100.0
BUG Rating	B4-U0-G3		

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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>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>82.5</u>
0.0	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890
2.5	3505.549	3504.844	3494.971	3503.434	3498.497	3489.330	3480.162	3485.098	3472.405	3460.416
5.0	3549.272	3547.861	3540.809	3547.861	3543.630	3532.347	3523.884	3526.000	3509.075	3492.856
7.5	3595.110	3594.404	3589.468	3600.046	3595.110	3583.121	3581.006	3580.300	3564.081	3542.220
10.0	3658.578	3657.167	3657.167	3667.040	3664.924	3655.757	3656.462	3656.462	3640.948	3615.560
12.5	3717.814	3719.930	3724.161	3743.907	3753.074	3752.369	3760.832	3771.410	3742.496	3712.878
15.0	3753.780	3756.600	3767.178	3811.606	3846.161	3869.432	3892.704	3913.860	3880.010	3850.392
17.5	3767.884	3774.230	3795.386	3862.380	3927.259	3992.137	4051.374	4085.224	4047.143	4014.704
20.0	3789.040	3794.681	3829.236	3912.450	4006.241	4107.790	4218.506	4280.564	4241.073	4197.350
22.5	3817.953	3825.710	3869.432	3972.392	4085.929	4212.865	4386.344	4499.881	4467.442	4415.963
25.0	3859.560	3867.317	3918.091	4033.744	4164.911	4314.414	4532.321	4734.008	4726.956	4674.066
27.5	3926.554	3935.016	3989.316	4115.547	4259.408	4422.309	4671.950	4982.238	5049.232	4981.533
30.0	4040.796	4045.027	4100.033	4226.969	4379.292	4560.529	4819.337	5230.469	5389.844	5331.312
32.5	4234.021	4243.894	4274.217	4385.639	4544.309	4731.892	4985.764	5475.878	5750.201	5712.825
35.0	4516.806	4523.858	4529.500	4624.702	4748.817	4937.811	5199.440	5716.351	6119.021	6121.136
37.5	4911.013	4915.244	4915.244	4945.568	5023.140	5201.555	5456.133	5950.478	6513.933	6558.360
40.0	5485.751	5485.046	5476.583	5402.537	5402.537	5554.861	5769.241	6196.593	6894.035	7025.203
42.5	6250.893	6286.153	6215.633	6109.148	5951.888	6028.755	6160.627	6488.545	7260.739	7508.265
45.0	7081.619	7115.468	7046.359	6947.631	6746.649	6704.337	6662.025	6782.614	7618.981	8040.691
47.5	7736.749	7760.726	7718.414	7706.426	7707.131	7661.293	7371.456	7157.780	8000.494	8634.469
50.0	8126.020	8119.673	8119.673	8228.274	8472.273	8852.376	8453.233	7683.154	8444.770	9269.149
52.5	8011.072	8038.575	8114.031	8383.418	8960.271	9790.997	9834.014	8428.551	8967.323	9976.465
55.0	7469.479	7518.843	7666.935	8067.488	8977.901	10506.775	11557.523	9498.339	9537.125	11042.727
57.5	6557.655	6577.401	6805.885	7191.630	8360.146	10446.128	13088.512	11251.466	10444.012	12310.677
60.0	5265.023	5269.960	5331.312	5726.929	7012.509	9479.299	14054.636	13410.789	11455.269	13781.019
62.5	3625.433	3610.624	3451.954	3802.438	4948.389	7546.345	14289.468	15658.261	13045.495	15518.632
65.0	2239.010	2179.773	2081.750	2108.548	2861.702	4668.424	13192.177	16975.575	14776.056	17619.422
67.5	1387.128	1362.446	1339.175	1302.504	1589.521	2349.021	9853.760	16890.246	16564.443	18895.129
70.0	880.090	873.743	890.668	894.899	1054.979	1349.048	5126.804	14456.600	16862.743	17783.734
72.5	546.530	571.212	588.137	651.605	763.026	918.170	2306.709	9449.680	13418.546	11395.327
75.0	391.386	408.311	401.964	467.548	555.698	695.327	1253.846	4638.101	7181.052	4059.131
77.5	298.300	311.698	307.467	346.958	399.848	516.206	807.454	2231.958	2849.713	1232.690
80.0	251.756	263.745	243.294	261.629	294.068	381.513	493.640	1138.898	1231.984	659.362
82.5	224.959	219.317	182.647	188.994	205.918	280.670	311.698	563.455	602.241	343.432
85.0	157.965	153.028	124.115	122.705	129.757	181.236	187.583	225.664	304.646	170.658
87.5	74.751	75.456	65.584	63.468	61.352	79.688	78.982	75.456	77.572	64.173
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	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890	3456.890
2.5	3457.596	3447.018	3458.301	3447.018	3452.659	3453.364	3448.428	3444.197	3435.734	3427.272
5.0	3488.624	3471.700	3480.162	3457.596	3443.492	3424.451	3399.064	3377.203	3352.521	3323.608
7.5	3536.578	3513.306	3517.538	3478.752	3436.440	3383.550	3319.376	3254.498	3198.082	3151.539
10.0	3609.919	3585.942	3577.480	3514.717	3432.208	3325.723	3207.955	3093.007	3016.140	2955.493
12.5	3705.826	3675.502	3657.872	3565.491	3425.862	3251.677	3076.788	2938.568	2858.881	2817.274
15.0	3834.172	3796.092	3774.936	3632.485	3420.220	3167.758	2954.083	2832.788	2792.592	2782.719
17.5	3986.496	3938.542	3904.692	3710.762	3411.758	3081.724	2864.522	2802.465	2818.684	2847.598
20.0	4163.501	4111.316	4054.195	3794.681	3390.602	2997.100	2828.557	2843.366	2909.655	2966.071
22.5	4375.061	4314.414	4237.547	3900.461	3362.394	2932.927	2854.650	2932.222	3039.412	3121.920
25.0	4635.280	4556.297	4457.569	4020.345	3329.249	2918.118	2930.811	3061.273	3210.070	3327.134
27.5	4935.695	4848.250	4721.314	4162.090	3309.504	2968.187	3050.695	3236.163	3444.197	3612.740

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CANDELA TABULATION - (Cont.)

30.0	5302.399	5190.977	5034.423	4310.888	3316.556	3068.325	3228.406	3477.341	3760.126	3974.507
32.5	5686.028	5564.733	5376.445	4470.263	3365.920	3227.700	3459.711	3784.103	4116.252	4368.714
35.0	6100.685	5968.108	5734.687	4611.303	3474.520	3447.723	3741.791	4100.033	4450.517	4708.621
37.5	6544.256	6398.280	6128.188	4745.996	3648.705	3705.121	4013.998	4390.575	4760.100	5004.805
40.0	7016.740	6884.868	6530.857	4879.984	3869.432	3958.288	4238.252	4621.176	4989.290	5226.237
42.5	7508.970	7374.982	6953.977	5012.562	4102.148	4166.322	4403.269	4756.574	5081.671	5238.931
45.0	8034.344	7889.778	7404.600	5132.446	4293.258	4304.541	4482.251	4714.262	4856.713	4869.406
47.5	8620.365	8492.019	7860.865	5229.763	4414.552	4347.558	4389.870	4384.229	4351.789	4295.373
50.0	9276.906	9128.109	8343.221	5298.873	4446.991	4248.830	4074.646	3888.473	3748.843	3649.410
52.5	10036.407	9800.870	8842.503	5339.069	4401.153	3961.108	3652.231	3356.752	3149.423	3047.874
55.0	11102.669	10663.329	9350.952	5381.381	4298.194	3619.086	3167.758	2853.239	2657.899	2553.529
57.5	12392.480	11799.407	9852.349	5440.618	4169.142	3267.192	2759.448	2487.946	2274.270	2231.958
60.0	13843.076	12958.050	10338.937	5528.768	4063.362	2951.262	2458.327	2272.860	2009.115	1963.277
62.5	15522.863	14078.613	10884.057	5559.092	3962.519	2698.095	2237.600	2113.484	1704.468	1625.486
65.0	17238.614	14969.281	10798.023	5360.931	3738.265	2431.530	2011.230	1838.456	1361.741	1236.921
67.5	18076.392	14577.895	9322.039	4592.968	3196.672	1984.433	1628.307	1452.007	988.690	862.460
70.0	16276.016	11487.003	6059.784	3045.054	2303.183	1441.429	1200.956	1035.234	717.188	648.079
72.5	9781.124	6198.708	2938.568	1697.416	1394.886	942.852	858.934	730.587	518.322	454.854
75.0	3127.562	2167.080	1399.117	909.708	825.789	680.518	606.472	499.987	369.525	330.739
77.5	1028.182	801.812	718.599	585.316	559.224	530.310	415.363	350.484	289.132	255.282
80.0	538.773	438.634	401.259	436.519	436.519	363.883	285.606	252.462	319.456	260.924
82.5	283.490	229.895	215.086	321.571	306.057	220.022	198.866	198.866	452.738	433.698
85.0	160.786	123.410	114.948	206.624	129.757	131.872	136.104	228.485	476.715	298.300
87.5	65.584	45.133	40.196	43.722	43.722	41.607	31.734	25.387	97.318	14.104
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

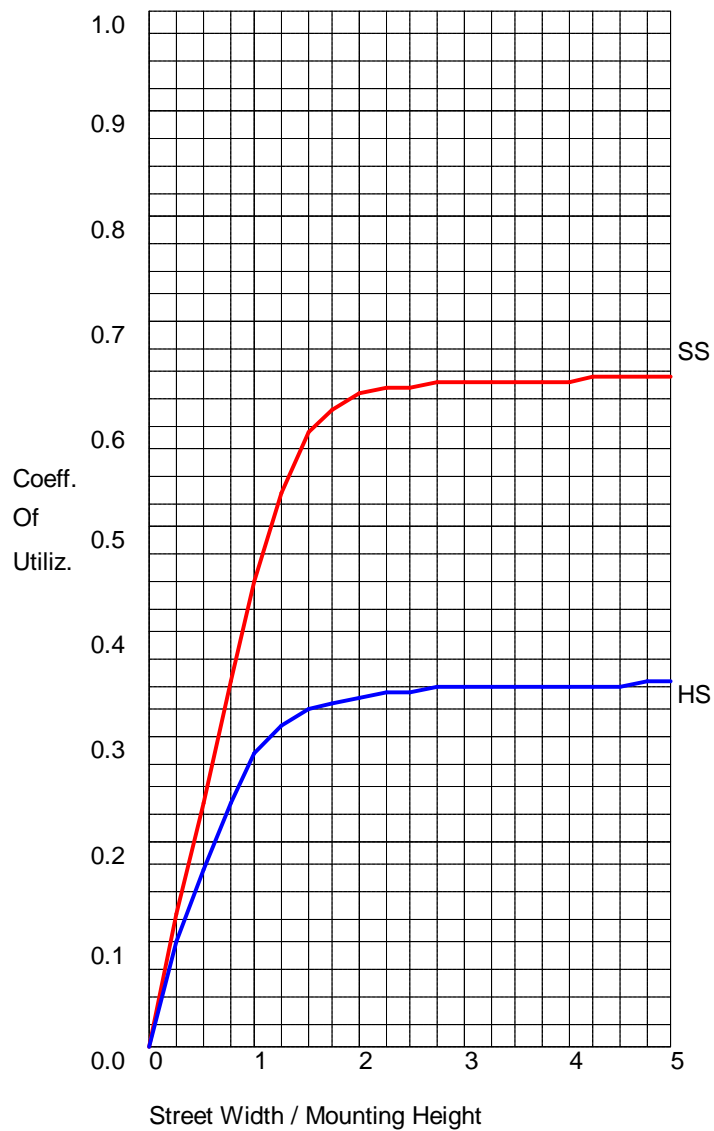
	175.0	180.0
0.0	3456.890	3456.890
2.5	3423.041	3417.399
5.0	3316.556	3310.209
7.5	3132.498	3125.446
10.0	2929.401	2921.644
12.5	2799.644	2791.887
15.0	2782.719	2775.667
17.5	2860.996	2855.355
20.0	2999.921	2987.932
22.5	3169.874	3157.886
25.0	3395.538	3380.024
27.5	3707.942	3722.046
30.0	4085.929	4100.033
32.5	4480.841	4470.263
35.0	4811.580	4796.771
37.5	5091.544	5073.914
40.0	5284.769	5266.434
42.5	5230.469	5202.966
45.0	4827.094	4793.950
47.5	4225.558	4222.738
50.0	3577.480	3580.300
52.5	2971.008	2912.476
55.0	2462.558	2438.582
57.5	2182.594	2160.733
60.0	1889.231	1865.254
62.5	1537.336	1509.833
65.0	1123.384	1090.944

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CANDELA TABULATION - (Cont.)

67.5	813.801	796.876
70.0	614.934	583.906
72.5	457.675	455.559
75.0	332.149	355.421
77.5	244.704	249.641
80.0	229.190	231.306
82.5	280.670	276.438
85.0	128.346	122.000
87.5	0.705	0.000
90.0	0.000	0.000

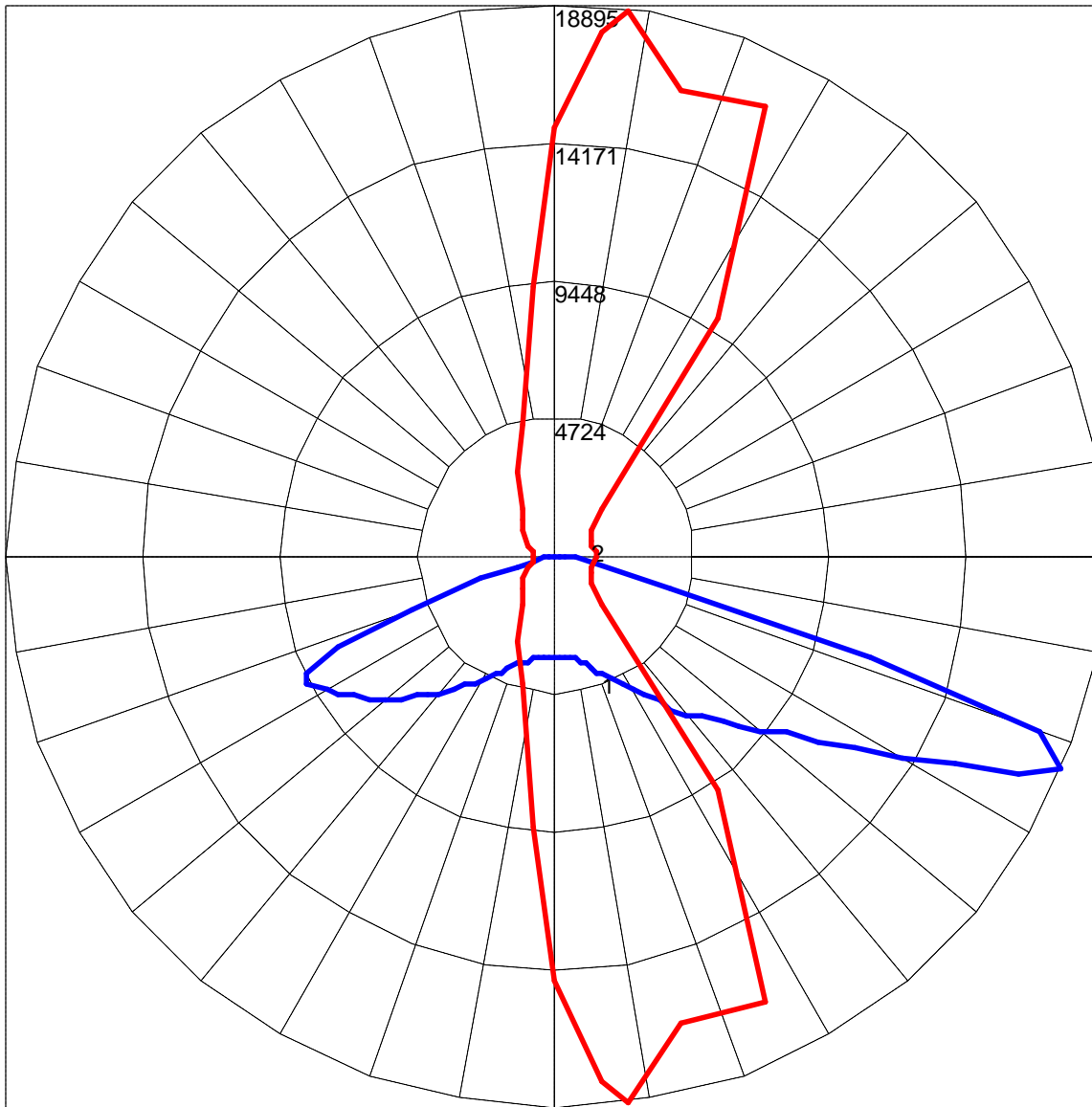
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

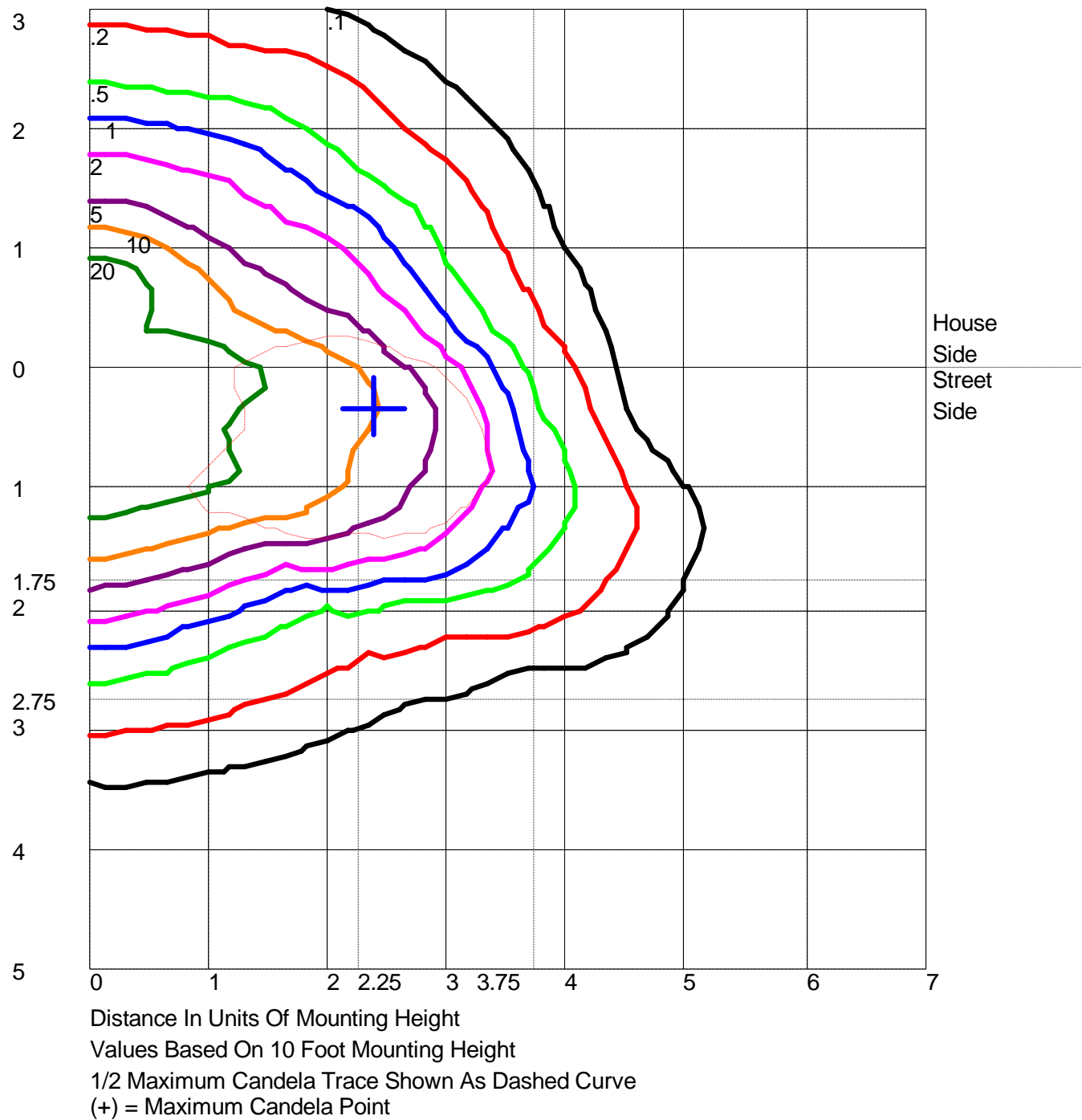
	Lumens	Percent Of Luminaire
Downward Street Side	15897.0	64.7
Downward House Side	8679.2	35.3
Downward Total	24576.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	24576.2	100.0

POLAR GRAPH

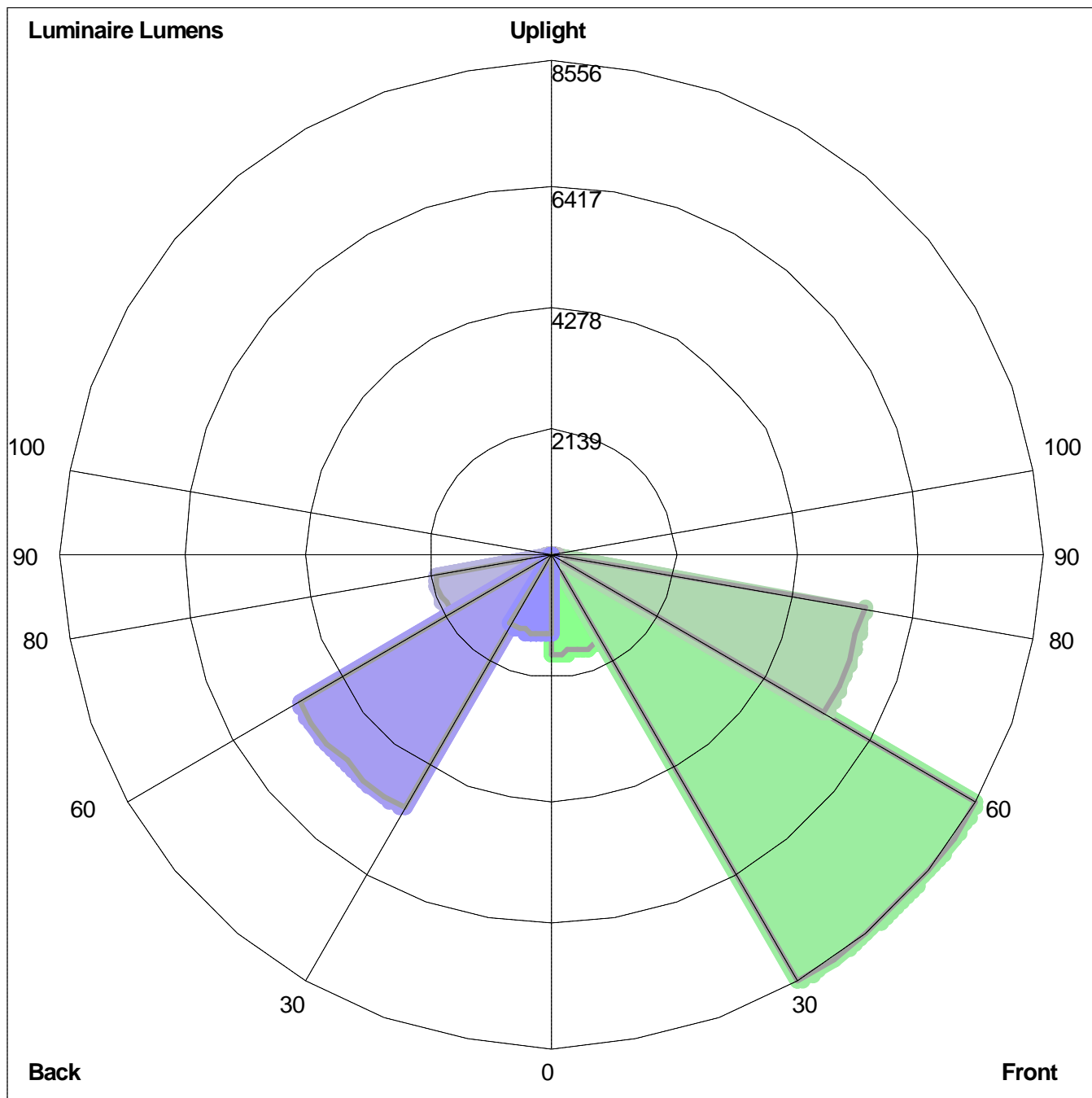


Maximum Candela = 18895.129 Located At Horizontal Angle = 82.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (82.5 - 262.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1726.7, Medium= 8556.0, High=5502.2, Very High=112.1
Back: Low=1408.5, Medium= 5113.0, High=2062.1, Very High=95.5
Uplight: Low=0.0, High=0.0

BUG Rating : B4-U0-G3