



IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-2-LED-18-40.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
[MANUFACT]LSI INDUSTRIES, INC
[LUMCAT]XMR-2-LED-18-40
[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	19666
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	128
Total Luminaire Watts	154
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	15119.854
Maximum Candela Angle	82.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	15119.854
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	985.832 (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)	1381.7	N.A.	7.0
FM - Front-Medium (30-60)	6846.5	N.A.	34.8
FH - Front-High (60-80)	4402.9	N.A.	22.4
FVH - Front-Very High (80-90)	89.7	N.A.	0.5
BL - Back-Low (0-30)	1127.1	N.A.	5.7
BM - Back-Medium (30-60)	4091.4	N.A.	20.8
BH - Back-High (60-80)	1650.1	N.A.	8.4
BVH - Back-Very High (80-90)	76.4	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	19665.8	N.A.	100.0
BUG Rating	B3-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	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199
2.5	2805.135	2804.571	2796.671	2803.442	2799.492	2792.156	2784.821	2788.771	2778.613	2769.020
5.0	2840.122	2838.993	2833.350	2838.993	2835.608	2826.579	2819.807	2821.500	2807.957	2794.978
7.5	2876.801	2876.237	2872.287	2880.752	2876.801	2867.208	2865.515	2864.951	2851.972	2834.479
10.0	2927.588	2926.460	2926.460	2934.360	2932.667	2925.331	2925.896	2925.896	2913.481	2893.166
12.5	2974.990	2976.683	2980.068	2995.869	3003.205	3002.640	3009.412	3017.876	2994.740	2971.040
15.0	3003.769	3006.026	3014.491	3050.042	3077.692	3096.314	3114.936	3131.865	3104.779	3081.078
17.5	3015.055	3020.134	3037.063	3090.671	3142.587	3194.502	3241.904	3268.990	3238.518	3212.560
20.0	3031.984	3036.498	3064.149	3130.736	3205.788	3287.048	3375.643	3425.301	3393.700	3358.714
22.5	3055.120	3061.328	3096.314	3178.702	3269.554	3371.128	3509.946	3600.798	3574.841	3533.647
25.0	3088.414	3094.621	3135.251	3227.796	3332.756	3452.387	3626.756	3788.146	3782.503	3740.180
27.5	3142.022	3148.794	3192.245	3293.255	3408.372	3538.725	3738.488	3986.780	4040.388	3986.215
30.0	3233.439	3236.825	3280.840	3382.414	3504.303	3649.328	3856.426	4185.413	4312.945	4266.108
32.5	3388.057	3395.957	3420.222	3509.382	3636.349	3786.453	3989.601	4381.790	4601.302	4571.394
35.0	3614.342	3619.985	3624.499	3700.679	3799.996	3951.229	4160.584	4574.216	4896.431	4898.124
37.5	3929.785	3933.171	3933.171	3957.436	4019.509	4162.277	4365.989	4761.563	5212.439	5247.990
40.0	4389.690	4389.125	4382.354	4323.102	4323.102	4444.991	4616.538	4958.504	5516.597	5621.557
42.5	5001.955	5030.170	4973.740	4888.531	4762.692	4824.201	4929.725	5192.124	5810.033	6008.102
45.0	5666.701	5693.787	5638.486	5559.484	5398.658	5364.800	5330.942	5427.437	6096.697	6434.149
47.5	6190.935	6210.122	6176.264	6166.670	6167.235	6130.555	5898.628	5727.645	6401.984	6909.289
50.0	6502.429	6497.350	6497.350	6584.252	6779.500	7083.658	6764.264	6148.049	6757.493	7417.159
52.5	6410.448	6432.456	6492.836	6708.398	7169.996	7834.741	7869.164	6744.514	7175.639	7983.152
55.0	5977.066	6016.567	6135.070	6455.592	7184.103	8407.506	9248.313	7600.557	7631.593	8836.374
57.5	5247.426	5263.226	5446.059	5754.731	6689.777	8358.976	10473.408	9003.407	8357.283	9850.985
60.0	4213.064	4217.014	4266.108	4582.680	5611.399	7585.321	11246.499	10731.293	9166.489	11027.551
62.5	2901.066	2889.216	2762.249	3042.706	3959.693	6038.574	11434.411	12529.717	10438.986	12417.986
65.0	1791.653	1744.251	1665.814	1687.257	2289.929	3735.666	10556.360	13583.830	11823.778	14099.036
67.5	1109.978	1090.228	1071.606	1042.262	1271.932	1879.683	7884.964	13515.549	13254.843	15119.854
70.0	704.246	699.168	712.711	716.097	844.193	1079.506	4102.461	11568.150	13493.542	14230.517
72.5	437.333	457.083	470.626	521.413	610.573	734.719	1845.825	7561.620	10737.500	9118.524
75.0	313.187	326.730	321.651	374.131	444.668	556.400	1003.325	3711.401	5746.267	3248.111
77.5	238.699	249.421	246.035	277.636	319.958	413.068	646.124	1786.010	2280.336	986.396
80.0	201.455	211.048	194.684	209.355	235.313	305.286	395.010	911.345	985.832	527.621
82.5	180.012	175.497	146.154	151.232	164.776	224.591	249.421	450.876	481.912	274.814
85.0	126.403	122.453	99.317	98.188	103.831	145.025	150.104	180.576	243.778	136.561
87.5	59.816	60.380	52.480	50.787	49.094	63.766	63.202	60.380	62.073	51.351
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	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199	2766.199
2.5	2766.763	2758.298	2767.327	2758.298	2762.813	2763.377	2759.427	2756.041	2749.270	2742.498
5.0	2791.592	2778.049	2784.821	2766.763	2755.477	2740.241	2719.926	2702.433	2682.682	2659.546
7.5	2829.965	2811.343	2814.728	2783.692	2749.834	2707.511	2656.160	2604.245	2559.101	2521.857
10.0	2888.652	2869.466	2862.694	2812.471	2746.448	2661.239	2567.001	2475.020	2413.511	2364.981
12.5	2965.397	2941.132	2927.024	2853.101	2741.369	2601.987	2462.041	2351.438	2287.672	2254.379
15.0	3068.099	3037.627	3020.698	2906.709	2736.855	2534.836	2363.853	2266.793	2234.628	2226.728
17.5	3189.988	3151.616	3124.529	2969.347	2730.083	2465.991	2292.187	2242.528	2255.507	2278.643
20.0	3331.627	3289.869	3244.161	3036.498	2713.154	2398.275	2263.407	2275.258	2328.302	2373.446
22.5	3500.917	3452.387	3390.879	3121.143	2690.582	2346.924	2284.286	2346.359	2432.133	2498.156
25.0	3709.144	3645.942	3566.940	3217.074	2664.060	2335.073	2345.231	2449.626	2568.694	2662.367
27.5	3949.536	3879.563	3777.989	3330.499	2648.260	2375.139	2441.162	2589.573	2756.041	2890.909

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CANDELA TABULATION - (Cont.)

30.0	4242.972	4153.812	4028.538	3449.566	2653.903	2455.269	2583.365	2782.563	3008.848	3180.395
32.5	4549.951	4452.891	4302.223	3577.098	2693.404	2582.801	2768.456	3028.034	3293.819	3495.839
35.0	4881.759	4775.671	4588.888	3689.958	2780.306	2758.863	2994.176	3280.840	3561.297	3767.831
37.5	5236.704	5119.894	4903.767	3797.739	2919.688	2964.832	3211.996	3513.332	3809.025	4004.837
40.0	5614.785	5509.261	5225.982	3904.956	3096.314	3167.416	3391.443	3697.858	3992.423	4182.027
42.5	6008.666	5901.449	5564.562	4011.044	3282.533	3333.884	3523.489	3806.204	4066.346	4192.185
45.0	6429.070	6313.388	5925.150	4106.975	3435.458	3444.487	3586.691	3772.346	3886.334	3896.492
47.5	6898.003	6795.301	6290.252	4184.849	3532.518	3478.910	3512.768	3508.253	3482.295	3437.151
50.0	7423.367	7304.299	6676.233	4240.150	3558.476	3399.908	3260.525	3111.550	2999.819	2920.253
52.5	8031.118	7842.641	7075.758	4272.315	3521.796	3169.673	2922.510	2686.068	2520.164	2438.905
55.0	8884.339	8532.780	7482.618	4306.173	3439.409	2895.988	2534.836	2283.158	2126.847	2043.330
57.5	9916.444	9441.868	7883.835	4353.575	3336.142	2614.402	2208.106	1990.850	1819.868	1786.010
60.0	11077.209	10369.013	8273.202	4424.112	3251.497	2361.596	1967.150	1818.739	1607.691	1571.011
62.5	12421.372	11265.685	8709.406	4448.377	3170.802	2159.012	1790.524	1691.207	1363.913	1300.712
65.0	13794.314	11978.396	8640.562	4289.809	2991.354	1945.706	1609.384	1471.130	1089.663	989.782
67.5	14464.702	11665.210	7459.482	3675.286	2557.972	1587.940	1302.969	1161.894	791.149	690.139
70.0	13024.044	9191.883	4849.030	2436.647	1843.004	1153.429	961.003	828.392	573.893	518.592
72.5	7826.841	4960.197	2351.438	1358.270	1116.185	754.469	687.317	584.615	414.761	363.974
75.0	2502.671	1734.094	1119.571	727.947	660.795	544.550	485.298	400.089	295.693	264.657
77.5	822.749	641.609	575.022	468.369	447.490	424.354	332.373	280.457	231.363	204.277
80.0	431.125	350.995	321.087	349.302	349.302	291.179	228.542	202.019	255.628	208.791
82.5	226.849	183.962	172.112	257.321	244.906	176.062	159.133	159.133	362.281	347.045
85.0	128.660	98.753	91.981	165.340	103.831	105.524	108.910	182.833	381.467	238.699
87.5	52.480	36.115	32.165	34.987	34.987	33.294	25.394	20.315	77.873	11.286
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

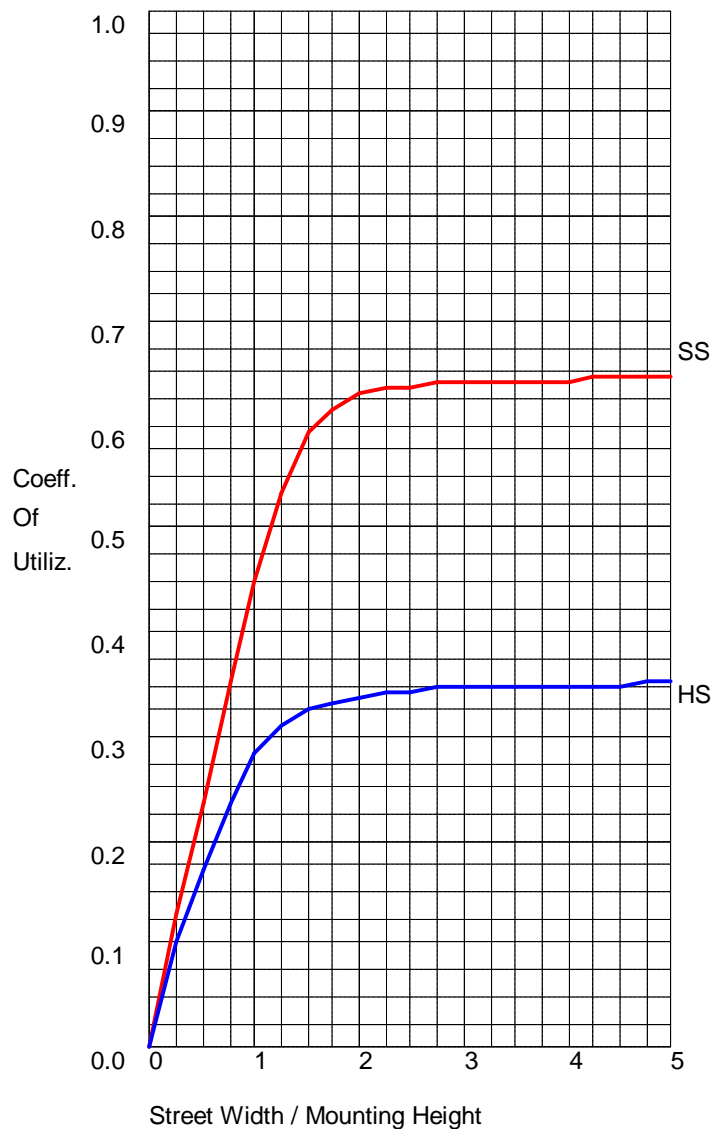
	175.0	180.0
0.0	2766.199	2766.199
2.5	2739.112	2734.598
5.0	2653.903	2648.824
7.5	2506.621	2500.978
10.0	2344.102	2337.895
12.5	2240.271	2234.064
15.0	2226.728	2221.085
17.5	2289.365	2284.851
20.0	2400.532	2390.939
22.5	2536.529	2526.935
25.0	2717.105	2704.690
27.5	2967.089	2978.375
30.0	3269.554	3280.840
32.5	3585.562	3577.098
35.0	3850.219	3838.369
37.5	4074.246	4060.139
40.0	4228.864	4214.192
42.5	4185.413	4163.405
45.0	3862.634	3836.111
47.5	3381.286	3379.028
50.0	2862.694	2864.951
52.5	2377.396	2330.559
55.0	1970.536	1951.349
57.5	1746.509	1729.015
60.0	1511.760	1492.574
62.5	1230.174	1208.166
65.0	898.930	872.972

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CANDELA TABULATION - (Cont.)

67.5	651.202	637.659
70.0	492.070	467.240
72.5	366.231	364.538
75.0	265.785	284.407
77.5	195.812	199.762
80.0	183.398	185.090
82.5	224.591	221.206
85.0	102.703	97.624
87.5	0.564	0.000
90.0	0.000	0.000

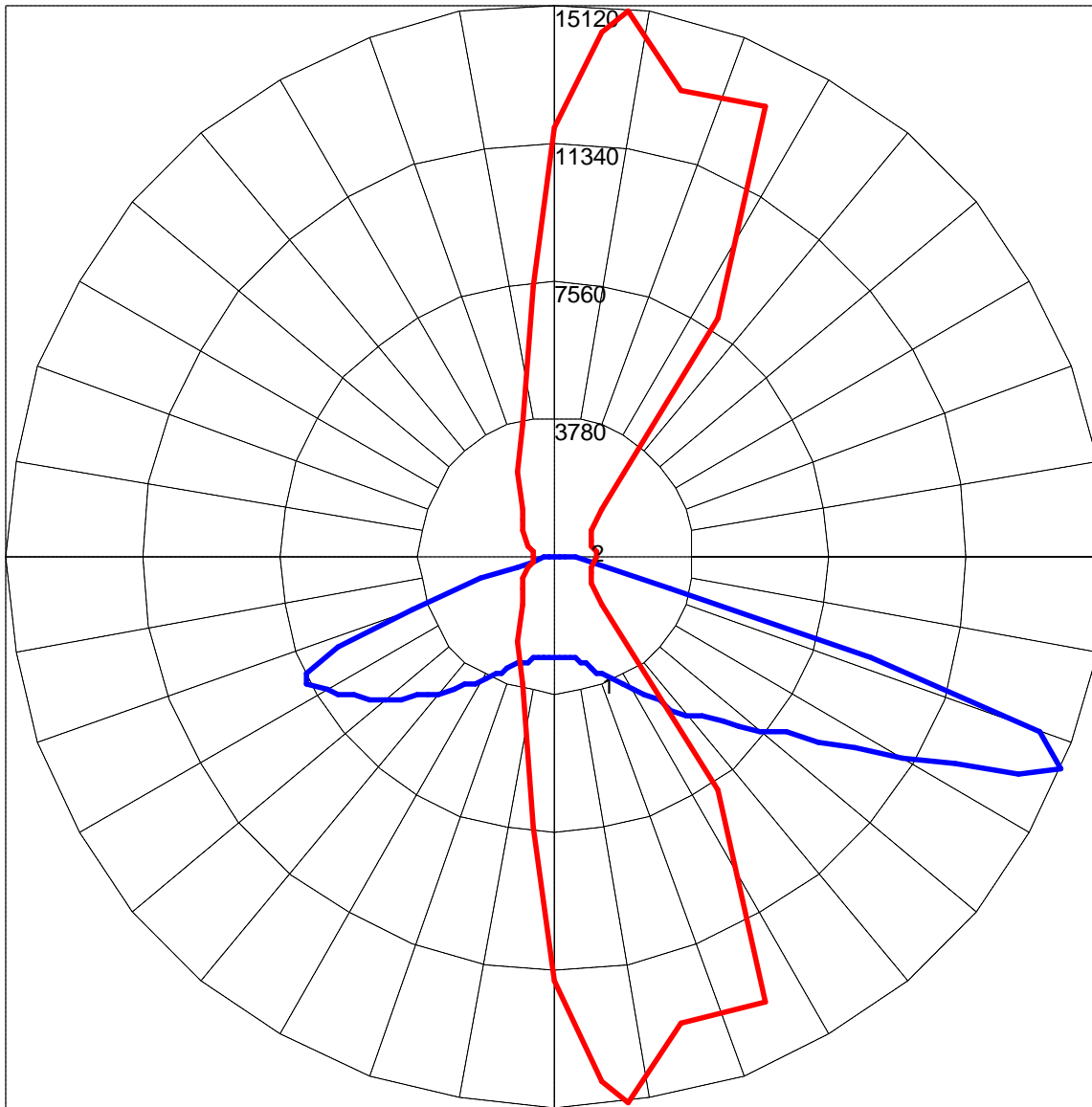
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

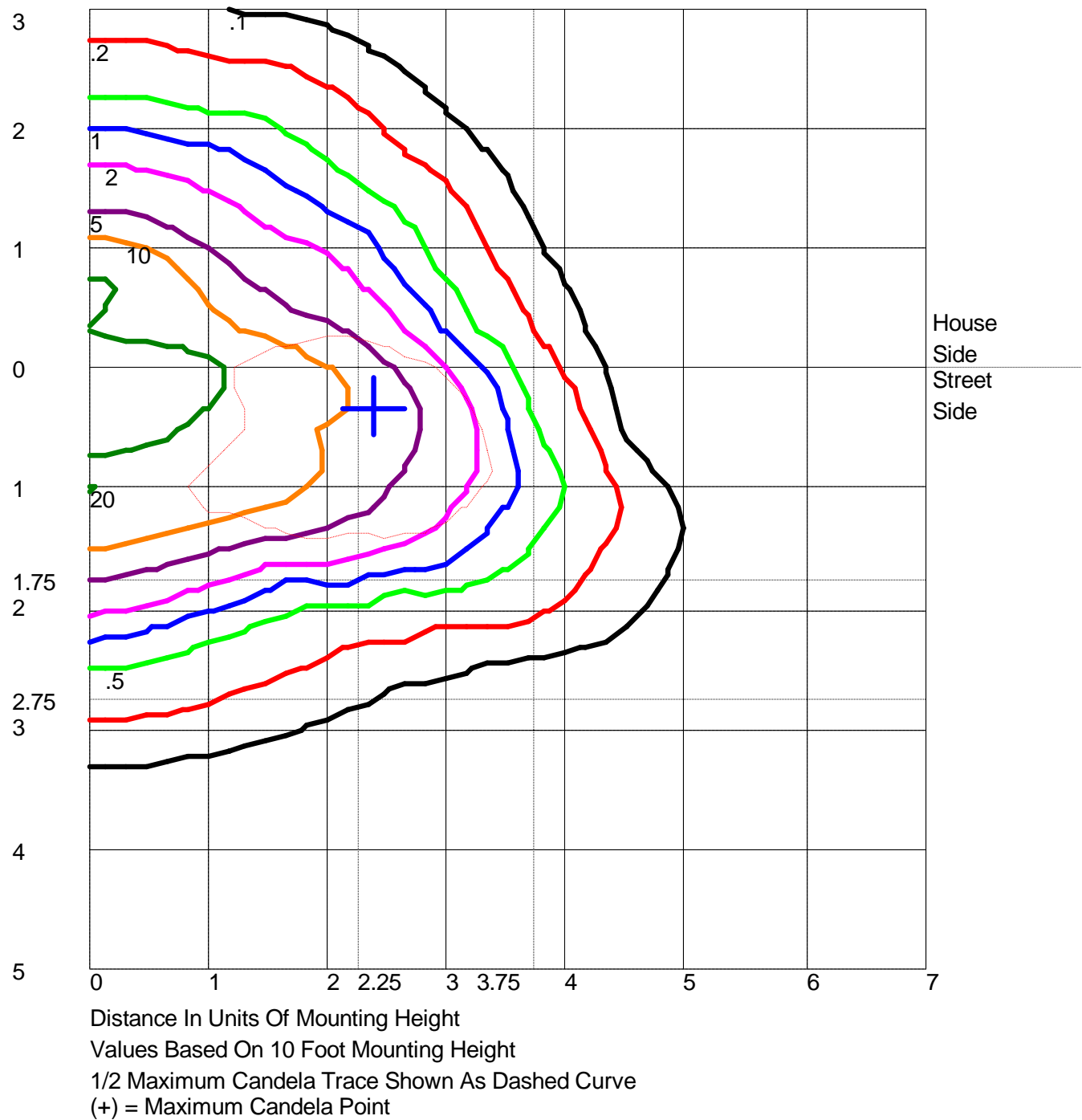
	Lumens	Percent Of Luminaire
Downward Street Side	12720.8	64.7
Downward House Side	6945.1	35.3
Downward Total	19665.9	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	19665.9	100.0

POLAR GRAPH

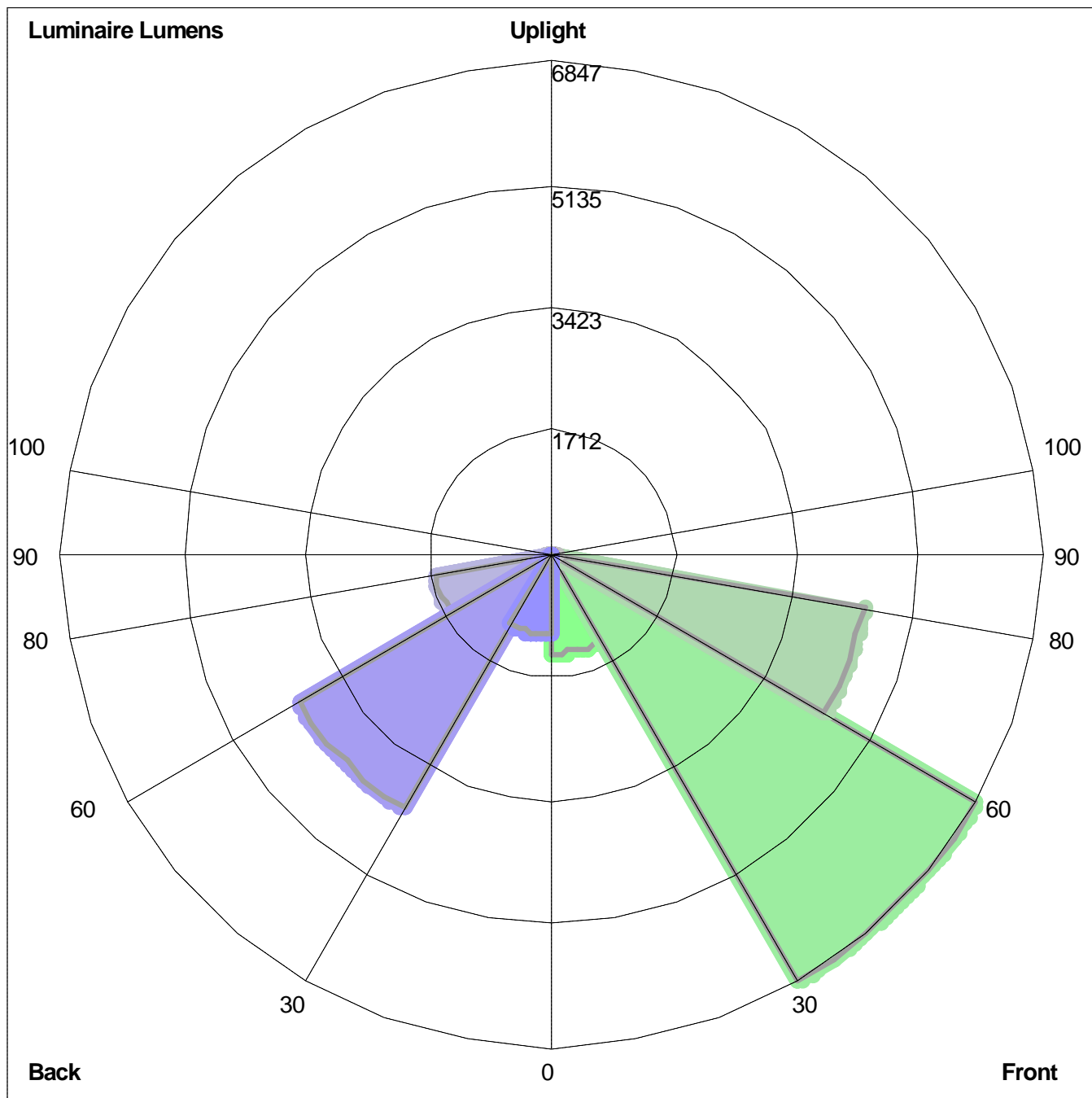


Maximum Candela = 15119.854 Located At Horizontal Angle = 82.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (82.5 - 262.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1381.7, Medium=6846.5, High=4402.9, Very High=89.7
Back: Low=1127.1, Medium=4091.4, High=1650.1, Very High=76.4
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3