



IES ROAD REPORT

PHOTOMETRIC FILENAME : HLN-FT-LED-32L-40-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-7771_Scaled
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]04/03/2017
[TEST DATE]05/02/16
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT] HLN-FT-LED-32L-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 IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	25864
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	82
Total Luminaire Watts	315
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	24692.371
Maximum Candela Angle	45H 67.5V
Maximum Candela (<90 Degrees Vertical)	24692.371
Maximum Candela Angle (<90 Degrees Vertical)	45H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	3000.027 (11.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2252.9	N.A.	8.7
FM - Front-Medium (30-60)	9387.0	N.A.	36.3
FH - Front-High (60-80)	11159.4	N.A.	43.1
FVH - Front-Very High (80-90)	261.2	N.A.	1.0
BL - Back-Low (0-30)	885.8	N.A.	3.4
BM - Back-Medium (30-60)	1490.6	N.A.	5.8
BH - Back-High (60-80)	422.1	N.A.	1.6
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	25863.9	N.A.	100.0
BUG Rating	B2-U0-G4		

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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>42.5</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904
2.5	4398.928	4413.522	4415.606	4413.522	4398.928	4388.504	4365.571	4340.554	4290.518	4259.246
5.0	4467.726	4482.320	4484.405	4503.168	4515.677	4540.694	4536.525	4538.610	4488.574	4430.200
7.5	4436.454	4459.387	4469.811	4503.168	4542.779	4590.730	4599.069	4655.358	4655.358	4634.510
10.0	4501.083	4526.101	4532.355	4567.797	4619.917	4678.291	4692.885	4776.277	4822.142	4845.075
12.5	4653.274	4680.376	4684.546	4711.648	4757.514	4817.973	4832.566	4926.382	5016.029	5059.810
15.0	4845.075	4884.686	4884.686	4909.704	4947.230	5009.774	5007.690	5101.506	5201.576	5278.714
17.5	5049.386	5086.912	5078.573	5109.845	5141.117	5203.661	5195.322	5280.798	5378.784	5493.448
20.0	5253.696	5289.138	5287.053	5291.222	5320.410	5370.445	5372.530	5447.582	5537.229	5656.062
22.5	5441.328	5472.600	5470.515	5468.430	5480.939	5508.042	5510.126	5585.179	5668.571	5787.405
25.0	5612.282	5641.469	5628.960	5628.960	5618.536	5626.875	5622.706	5683.165	5774.896	5893.730
27.5	5772.811	5799.914	5776.981	5756.133	5729.030	5720.691	5716.522	5760.302	5854.118	5979.206
30.0	5918.747	5939.595	5906.238	5864.542	5814.507	5797.829	5793.659	5814.507	5910.408	6039.666
32.5	6031.326	6048.005	6002.139	5945.850	5885.390	5856.203	5858.288	5862.458	5952.104	6079.277
35.0	6125.142	6133.482	6079.277	6002.139	5943.765	5918.747	5920.832	5912.493	5981.291	6112.634
37.5	6216.874	6229.382	6152.245	6062.598	6004.224	5991.715	6006.309	5985.461	6018.818	6139.736
40.0	6344.046	6352.386	6266.909	6164.754	6104.294	6095.955	6127.227	6116.803	6083.446	6181.432
42.5	6571.290	6556.696	6464.965	6352.386	6291.926	6308.605	6325.283	6333.622	6223.128	6256.485
45.0	6929.875	6923.621	6815.211	6694.293	6631.749	6658.851	6683.869	6698.462	6454.541	6398.251
47.5	7536.552	7530.298	7419.803	7286.376	7240.510	7230.086	7263.443	7284.291	6863.162	6733.904
50.0	8493.475	8491.390	8460.118	8247.469	8170.331	8118.211	8164.077	8193.264	7542.806	7188.390
52.5	9865.274	9886.122	9925.733	9765.203	9537.960	9398.278	9458.738	9504.603	8489.306	7843.018
55.0	11560.216	11618.590	11822.901	11891.699	11408.026	11141.171	11234.987	11220.394	9798.560	8804.110
57.5	13038.339	13121.731	13665.864	14162.046	13945.227	13409.434	13499.080	13367.738	11453.891	9844.426
60.0	14222.506	14337.170	15158.581	16259.355	16657.552	16238.507	16509.531	16013.349	13265.582	11028.592
62.5	14937.592	15141.902	16363.595	18256.594	19528.322	19565.848	19732.632	18694.402	14977.203	11708.237
65.0	13991.093	14378.866	16217.659	19584.611	22238.562	22755.592	22690.963	20843.830	16121.758	11731.170
67.5	10880.571	11230.818	14139.114	19123.870	23399.795	24646.506	24692.371	21961.283	15696.459	10248.877
70.0	6954.893	7294.715	9673.472	16005.010	21675.666	24233.715	24500.570	20702.064	12802.757	7284.291
72.5	2472.573	2668.544	4182.109	9035.523	17414.334	20606.163	20839.661	16223.914	8824.958	4067.445
75.0	1084.096	1175.827	1853.387	3366.952	9112.661	14337.170	14553.989	10991.066	4551.118	1580.278
77.5	792.224	871.446	1369.714	2155.683	3329.426	6815.211	7109.168	5779.066	1920.101	886.040
80.0	589.998	677.560	1146.640	1767.910	2193.210	2902.042	3000.027	2391.266	961.093	577.490
82.5	433.638	517.030	952.754	1415.579	1315.509	1179.997	1069.502	542.048	483.674	362.755
85.0	304.381	352.331	554.557	615.016	462.826	396.112	325.229	170.954	202.226	212.650
87.5	77.138	81.307	127.173	208.480	102.155	77.138	79.222	81.307	87.562	97.986
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	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904	4127.904
2.5	4219.635	4213.381	4157.091	4071.614	4027.834	3940.272	3890.237	3840.202	3790.166	3756.810
5.0	4330.130	4282.179	4165.430	3942.357	3760.979	3537.906	3360.698	3189.744	3033.384	2924.974
7.5	4505.253	4409.352	4223.805	3838.117	3471.192	3064.656	2685.222	2372.502	2153.598	2024.341
10.0	4711.648	4567.797	4300.942	3731.792	3133.454	2537.202	2082.715	1830.454	1699.112	1624.059
12.5	4940.976	4747.090	4386.419	3610.874	2785.293	2118.157	1769.995	1605.296	1488.547	1394.731
15.0	5182.813	4945.146	4478.150	3483.701	2474.658	1878.405	1621.974	1432.258	1321.763	1265.474
17.5	5403.802	5118.184	4546.949	3331.510	2243.245	1747.062	1492.717	1336.357	1255.050	1200.845
20.0	5591.434	5262.035	4584.475	3195.998	2088.970	1678.264	1407.240	1292.576	1205.014	1146.640
22.5	5754.048	5374.614	4596.984	3093.843	1986.814	1599.042	1371.798	1244.626	1152.894	1092.435
25.0	5874.966	5470.515	4599.069	3025.045	1947.203	1544.837	1336.357	1192.506	1102.859	1046.570
27.5	5972.952	5533.059	4588.645	2983.349	1940.949	1519.819	1290.491	1144.555	1000.704	867.277

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CANDELA TABULATION - (Cont.)

30.0	6045.920	5566.416	4574.051	2964.586	1943.034	1496.886	1248.795	1036.146	769.291	608.762
32.5	6087.616	5564.331	4563.627	2960.416	1926.355	1471.869	1182.082	804.733	552.472	487.843
35.0	6108.464	5549.738	4567.797	2956.246	1895.083	1440.597	1006.958	608.762	487.843	433.638
37.5	6123.058	5533.059	4590.730	2945.822	1838.794	1361.374	788.054	548.302	439.893	373.179
40.0	6141.821	5528.890	4634.510	2929.144	1757.486	1173.742	681.730	494.098	377.349	327.314
42.5	6189.771	5558.077	4699.139	2893.702	1605.296	894.379	589.998	423.214	331.483	356.501
45.0	6291.926	5660.232	4813.803	2843.667	1348.866	677.560	473.250	350.246	298.126	381.518
47.5	6535.848	5887.475	5009.774	2768.614	994.450	512.861	364.840	285.618	358.586	231.413
50.0	6875.670	6202.280	5280.798	2618.509	654.627	402.366	298.126	239.752	289.787	185.547
52.5	7442.736	6742.243	5653.978	2368.333	475.334	335.653	248.091	210.565	212.650	164.699
55.0	8164.077	7357.259	6083.446	2045.189	408.621	300.211	212.650	181.378	170.954	189.717
57.5	8874.994	7951.427	6458.710	1730.384	373.179	264.770	179.293	154.275	181.378	177.208
60.0	9452.483	8353.794	6456.626	1436.427	337.738	212.650	154.275	158.445	135.512	102.155
62.5	9540.045	8287.080	5816.592	1142.470	287.702	168.869	148.021	112.579	83.392	72.968
65.0	8950.046	7492.771	4486.490	954.838	231.413	148.021	123.003	72.968	60.459	75.053
67.5	7188.390	5754.048	2799.886	677.560	160.530	143.851	85.477	60.459	87.562	77.138
70.0	4584.475	3640.061	1348.866	387.773	112.579	102.155	64.629	79.222	62.544	52.120
72.5	1838.794	1340.526	581.659	193.886	85.477	60.459	64.629	58.374	47.950	35.442
75.0	833.920	640.034	266.854	116.749	60.459	41.696	39.611	41.696	16.678	6.254
77.5	535.794	404.451	173.038	72.968	33.357	27.102	22.933	10.424	4.170	4.170
80.0	314.805	241.837	118.834	39.611	18.763	18.763	8.339	4.170	2.085	2.085
82.5	210.565	156.360	70.883	18.763	12.509	8.339	6.254	2.085	0.000	0.000
85.0	125.088	77.138	25.018	6.254	4.170	2.085	2.085	0.000	0.000	0.000
87.5	52.120	20.848	6.254	2.085	0.000	0.000	0.000	0.000	0.000	0.000
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

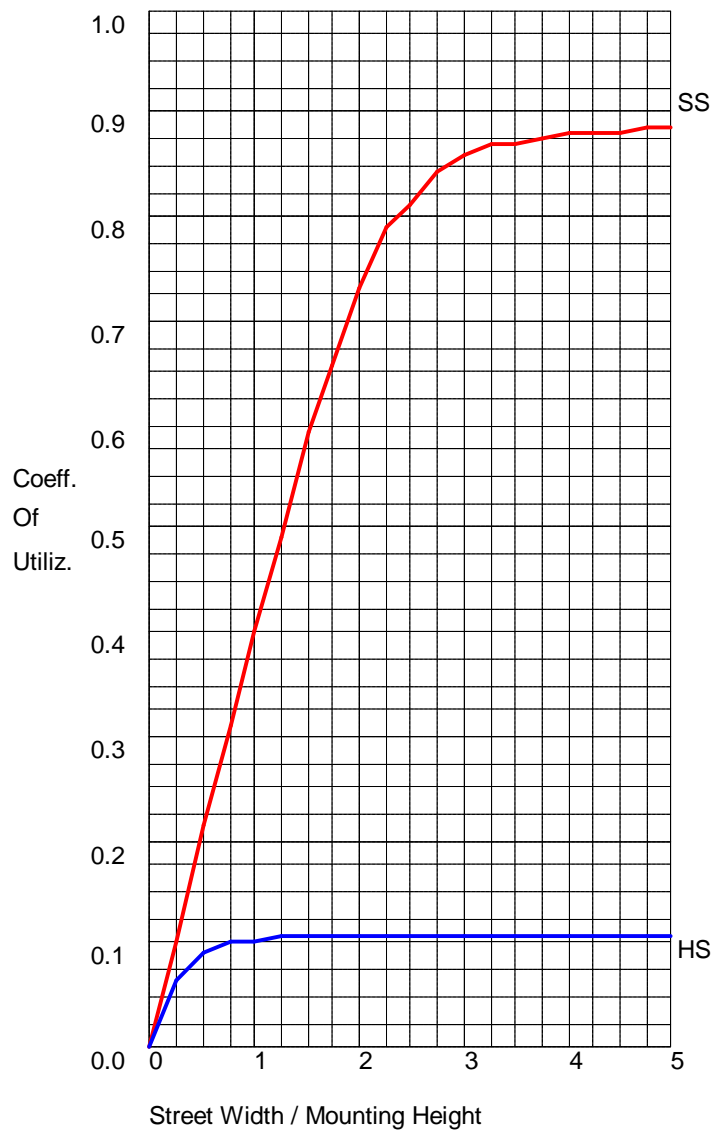
	175.0	180.0
0.0	4127.904	4127.904
2.5	3771.403	3748.470
5.0	2870.770	2895.787
7.5	1970.136	1982.645
10.0	1594.872	1594.872
12.5	1348.866	1338.442
15.0	1238.371	1230.032
17.5	1179.997	1171.658
20.0	1123.707	1115.368
22.5	1073.672	1065.333
25.0	1013.213	1002.789
27.5	790.139	777.630
30.0	535.794	525.370
32.5	462.826	458.656
35.0	414.875	410.706
37.5	346.077	341.907
40.0	310.635	310.635
42.5	354.416	325.229
45.0	233.498	225.158
47.5	195.971	193.886
50.0	175.123	173.038
52.5	168.869	166.784
55.0	206.395	206.395
57.5	166.784	154.275
60.0	91.731	83.392
62.5	60.459	56.290
65.0	91.731	91.731

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CANDELA TABULATION - (Cont.)

67.5	68.798	66.714
70.0	45.866	45.866
72.5	29.187	27.102
75.0	2.085	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

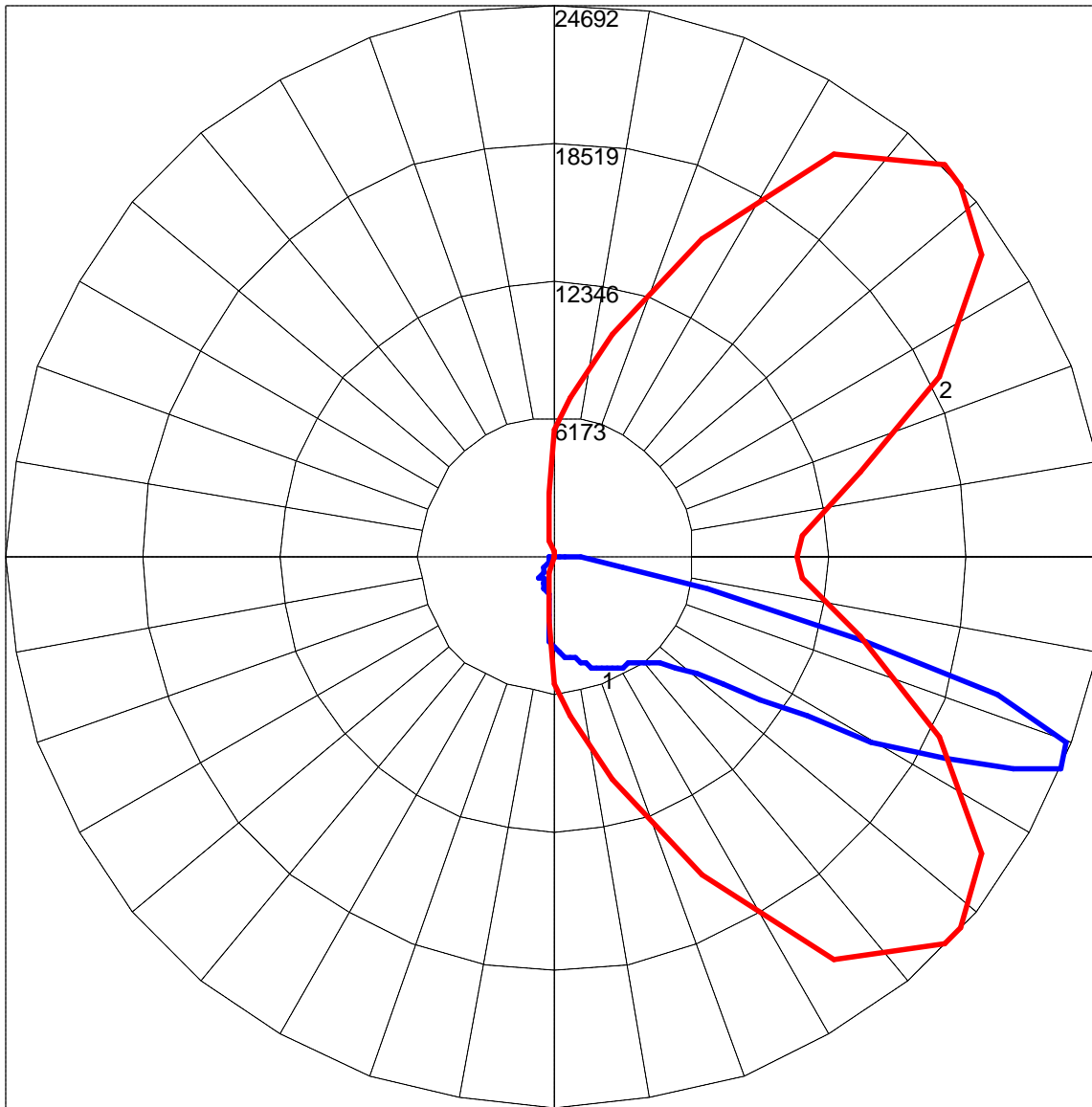
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

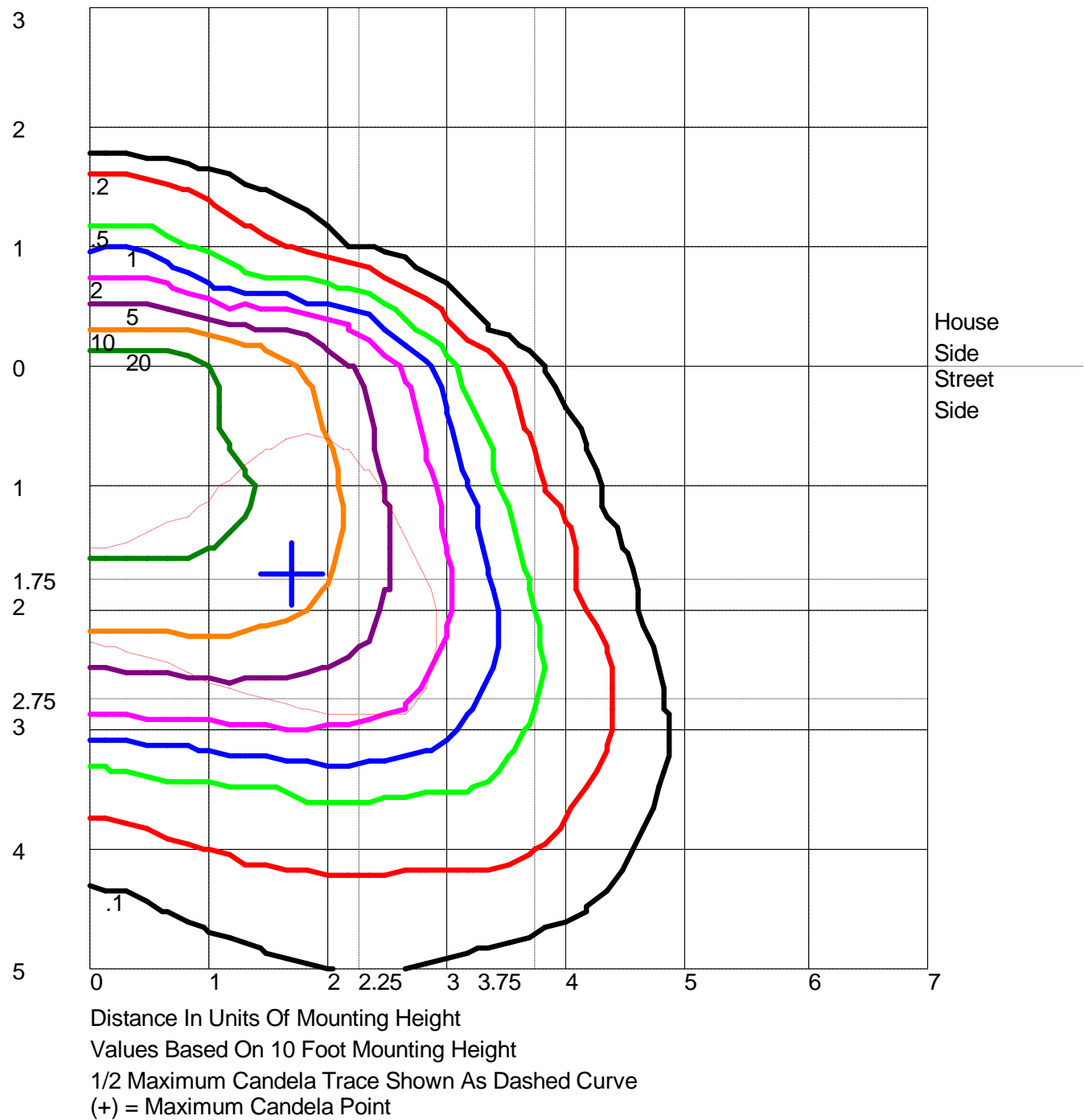
	Lumens	Percent Of Luminaire
Downward Street Side	23060.5	89.2
Downward House Side	2803.5	10.8
Downward Total	25864.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	25864.0	100.0

POLAR GRAPH

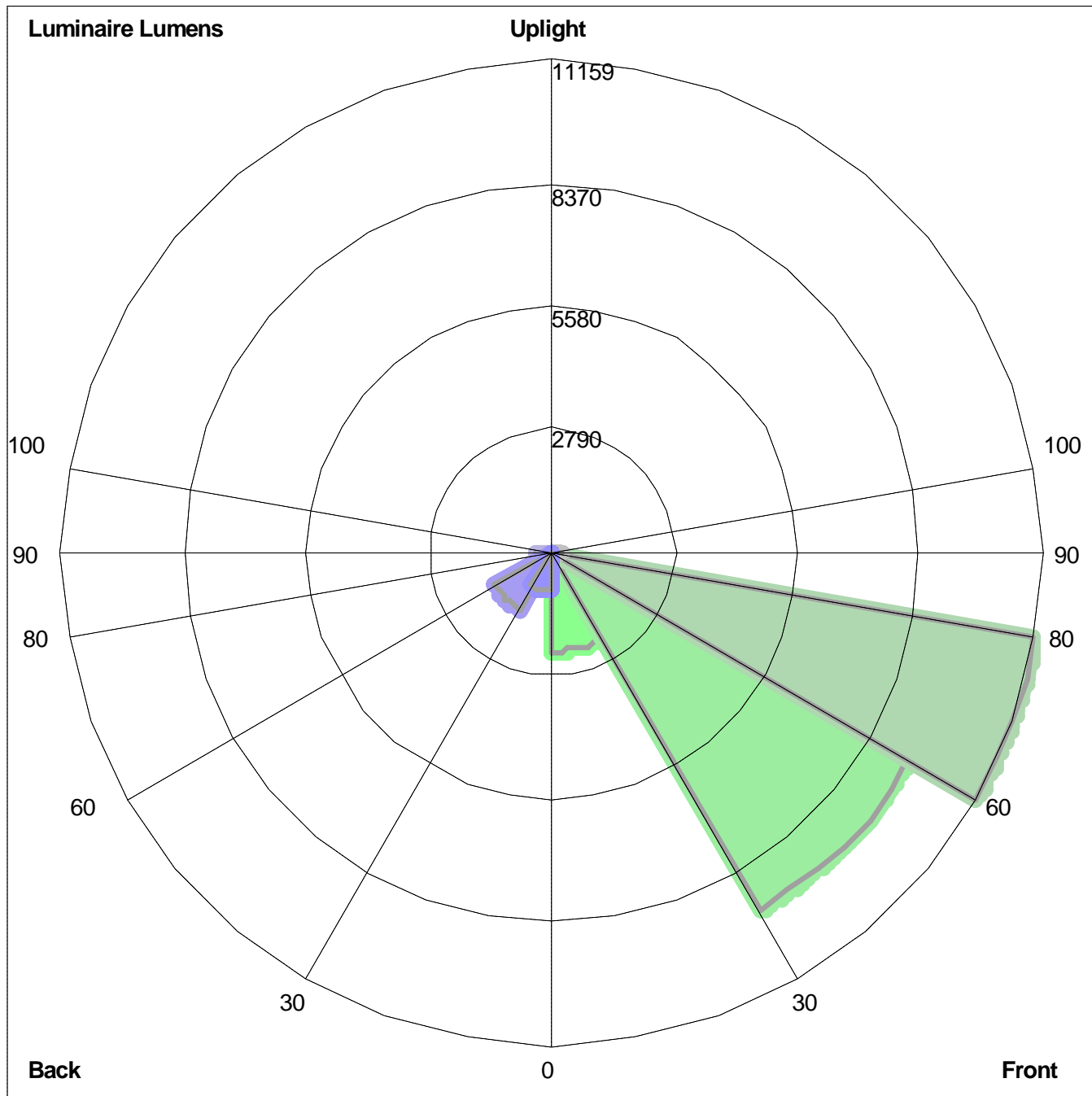


Maximum Candela = 24692.371 Located At Horizontal Angle = 45, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2252.9, Medium= 9387.0, High=11159.4, Very High=261.2
Back: Low=885.8, Medium=1490.6, High=422.1, Very High=4.9
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G4