



IES ROAD REPORT

PHOTOMETRIC FILENAME : HLN-2-LED-32L-50-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-8625_Scaled
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]4/03/17
[TEST DATE]03/01/17
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT] HLN-2-LED-32L-50-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	23517
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	75
Total Luminaire Watts	314
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	24294.978
Maximum Candela Angle	80H 67.5V
Maximum Candela (<90 Degrees Vertical)	24294.978
Maximum Candela Angle (<90 Degrees Vertical)	80H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1923.115 (8.2% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2232.3	N.A.	9.5
FM - Front-Medium (30-60)	10626.1	N.A.	45.2
FH - Front-High (60-80)	6992.4	N.A.	29.7
FVH - Front-Very High (80-90)	101.5	N.A.	0.4
BL - Back-Low (0-30)	1124.3	N.A.	4.8
BM - Back-Medium (30-60)	1732.6	N.A.	7.4
BH - Back-High (60-80)	702.5	N.A.	3.0
BVH - Back-Very High (80-90)	5.8	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	23517.5	N.A.	100.0
BUG Rating	B3-U0-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	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858
2.5	4433.227	4427.637	4428.755	4432.109	4436.581	4430.991	4432.109	4420.928	4411.983	4404.157
5.0	4508.139	4503.667	4507.021	4511.493	4519.320	4513.729	4510.375	4489.131	4473.478	4460.061
7.5	4588.641	4584.169	4590.878	4604.295	4609.885	4600.940	4594.232	4567.398	4546.154	4524.910
10.0	4682.561	4680.325	4689.270	4707.159	4716.104	4701.569	4690.388	4662.435	4636.719	4613.239
12.5	4797.724	4794.370	4810.023	4830.149	4839.094	4825.677	4832.385	4804.433	4782.071	4750.765
15.0	4884.935	4883.817	4915.124	4959.847	4988.918	4997.862	5022.460	4995.626	4967.674	4928.541
17.5	4924.069	4928.541	4968.792	5040.350	5123.089	5203.591	5252.787	5238.252	5192.410	5148.805
20.0	4965.438	4971.028	5014.634	5110.790	5234.898	5388.076	5511.066	5504.357	5447.335	5393.666
22.5	5014.634	5017.988	5067.184	5209.181	5354.533	5526.719	5764.872	5816.304	5723.503	5664.244
25.0	5023.579	5023.579	5104.081	5279.621	5471.933	5655.299	5967.247	6151.731	6052.221	5987.372
27.5	5033.641	5042.586	5138.742	5339.998	5572.561	5777.171	6124.897	6513.993	6421.191	6355.224
30.0	5124.207	5135.388	5232.661	5435.036	5688.842	5918.051	6291.493	6869.545	6869.545	6783.452
32.5	5312.046	5319.872	5411.556	5592.686	5842.020	6101.417	6489.395	7180.374	7335.789	7239.633
35.0	5606.103	5604.985	5682.134	5834.194	6048.867	6342.925	6730.902	7454.306	7827.748	7732.711
37.5	6001.907	5994.081	6042.159	6171.857	6348.515	6648.163	7026.078	7714.821	8353.251	8271.630
40.0	6467.033	6452.498	6484.922	6574.369	6723.075	7032.786	7371.568	8011.115	8850.801	8864.218
42.5	7037.259	7009.306	7011.543	7070.801	7180.374	7525.864	7793.088	8325.298	9311.454	9413.200
45.0	7799.796	7807.623	7729.356	7729.356	7726.002	8122.924	8285.047	8624.947	9709.494	9985.662
47.5	8889.934	8898.879	8908.941	8770.298	8589.168	8892.170	8955.901	9010.688	10150.021	10681.114
50.0	9851.491	9881.680	9896.215	9948.765	9986.780	10135.486	9878.325	9573.087	10687.823	11457.069
52.5	9972.245	9990.134	10109.770	10487.685	11187.609	12054.129	11307.245	10336.742	11355.322	12378.375
55.0	9493.702	9542.898	9776.579	10313.262	11531.981	13508.764	13873.261	11487.257	12118.978	13493.111
57.5	8594.758	8668.552	9017.396	9616.692	11145.121	13783.814	16319.642	13200.171	13095.070	14699.530
60.0	7013.779	7113.289	7509.093	8164.293	9866.026	12957.545	18097.405	15930.547	14398.763	16386.728
62.5	3973.692	4089.973	4552.863	5587.096	7279.884	10590.549	19082.443	19721.990	15737.117	18793.975
65.0	1361.834	1409.912	1534.020	2194.811	3887.599	6696.241	18798.448	21982.768	17652.405	21605.972
67.5	727.877	724.522	732.349	874.346	1497.123	3057.976	15094.215	22266.763	20127.857	24294.978
70.0	466.244	456.181	469.598	544.510	758.065	1236.608	7301.128	19591.174	21030.155	23658.785
72.5	234.799	241.507	254.925	328.718	495.314	742.412	2598.441	13333.224	19288.171	17233.122
75.0	121.872	124.108	124.108	173.304	308.593	531.093	1212.010	6009.734	10351.278	8882.962
77.5	67.085	69.322	71.558	93.920	158.769	335.427	660.791	2809.760	4087.737	2265.250
80.0	59.259	60.377	58.141	65.967	84.975	158.769	339.899	992.864	1923.115	991.746
82.5	59.259	58.141	54.786	58.141	72.676	102.864	164.359	446.118	856.457	537.801
85.0	52.550	51.432	49.196	50.314	60.377	93.920	153.178	280.641	479.661	345.490
87.5	26.834	24.598	25.716	31.307	42.487	78.266	157.651	332.073	357.789	225.854
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</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	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858	4391.858
2.5	4397.448	4382.913	4399.684	4401.920	4405.275	4396.330	4382.913	4384.031	4379.559	4377.322
5.0	4451.116	4430.991	4443.290	4434.345	4424.282	4394.094	4357.197	4329.245	4296.820	4271.104
7.5	4504.785	4480.187	4486.895	4462.297	4423.164	4351.606	4266.632	4185.011	4100.036	4021.770
10.0	4587.523	4552.863	4551.745	4502.549	4411.983	4266.632	4093.328	3942.385	3779.144	3609.195
12.5	4722.812	4680.325	4675.853	4584.169	4420.928	4153.704	3818.277	3454.898	3071.393	2728.140
15.0	4888.290	4833.503	4816.732	4675.853	4417.574	3979.282	3284.949	2610.740	2039.396	1635.766
17.5	5094.018	5019.106	4988.918	4776.481	4386.267	3579.006	2475.451	1632.411	1092.374	863.166
20.0	5322.109	5242.724	5184.583	4884.935	4287.875	2933.868	1660.364	950.377	621.658	533.329
22.5	5579.269	5496.531	5404.847	5001.217	4029.596	2193.693	1043.178	583.643	488.605	453.945
25.0	5893.453	5799.533	5681.015	5140.978	3596.896	1550.791	655.201	495.314	442.764	409.221
27.5	6255.714	6147.259	6004.143	5276.267	3052.386	1027.525	533.329	453.945	401.394	365.615

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CANDELA TABULATION - (Cont.)

30.0	6706.304	6568.779	6395.475	5350.061	2450.853	680.917	488.605	412.575	361.143	320.892
32.5	7170.311	7029.432	6822.585	5347.825	1758.756	563.517	443.882	371.206	315.301	264.987
35.0	7660.035	7504.620	7250.814	5217.008	1170.640	512.085	398.040	325.364	253.806	193.430
37.5	8198.954	8032.359	7718.176	4921.832	777.073	460.653	351.080	263.869	174.422	120.754
40.0	8777.007	8603.703	8221.316	4423.164	604.887	408.103	298.530	188.957	103.982	70.440
42.5	9397.547	9182.873	8699.859	3679.634	536.683	358.907	233.681	116.281	58.141	38.015
45.0	10016.969	9785.524	9186.228	2803.052	481.897	307.475	158.769	63.731	26.834	15.653
47.5	10733.664	10504.456	9639.054	1909.698	429.347	251.570	99.510	31.307	10.063	4.472
50.0	11611.365	11379.920	10078.464	1210.892	375.678	187.839	58.141	14.535	3.354	1.118
52.5	12596.402	12302.345	10384.820	835.213	324.246	128.580	27.952	6.709	2.236	1.118
55.0	13829.656	13408.136	10568.187	728.995	280.641	82.739	16.771	4.472	3.354	2.236
57.5	15246.276	14681.640	10610.674	754.711	259.397	50.314	10.063	4.472	4.472	4.472
60.0	16909.994	15993.160	10296.491	787.135	253.806	26.834	7.827	4.472	5.590	5.590
62.5	19599.000	17580.848	9551.843	761.419	245.980	17.889	6.709	4.472	5.590	4.472
65.0	21655.168	18792.857	7995.462	647.374	209.083	25.716	5.590	4.472	3.354	2.236
67.5	23180.243	18420.533	5594.923	434.937	144.234	17.889	5.590	2.236	3.354	6.709
70.0	20758.460	14659.278	2763.919	203.492	74.912	14.535	3.354	3.354	4.472	2.236
72.5	13058.174	7848.992	1024.170	89.447	38.015	12.299	2.236	2.236	1.118	0.000
75.0	4950.903	3056.858	459.535	38.015	15.653	6.709	2.236	0.000	0.000	0.000
77.5	1378.605	924.660	262.751	16.771	8.945	3.354	1.118	0.000	0.000	0.000
80.0	644.020	465.125	163.241	11.181	5.590	2.236	0.000	0.000	0.000	0.000
82.5	327.600	244.862	83.857	10.063	5.590	0.000	0.000	0.000	0.000	0.000
85.0	201.256	139.761	33.543	7.827	2.236	1.118	1.118	1.118	1.118	0.000
87.5	116.281	58.141	11.181	3.354	3.354	2.236	2.236	2.236	1.118	1.118
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

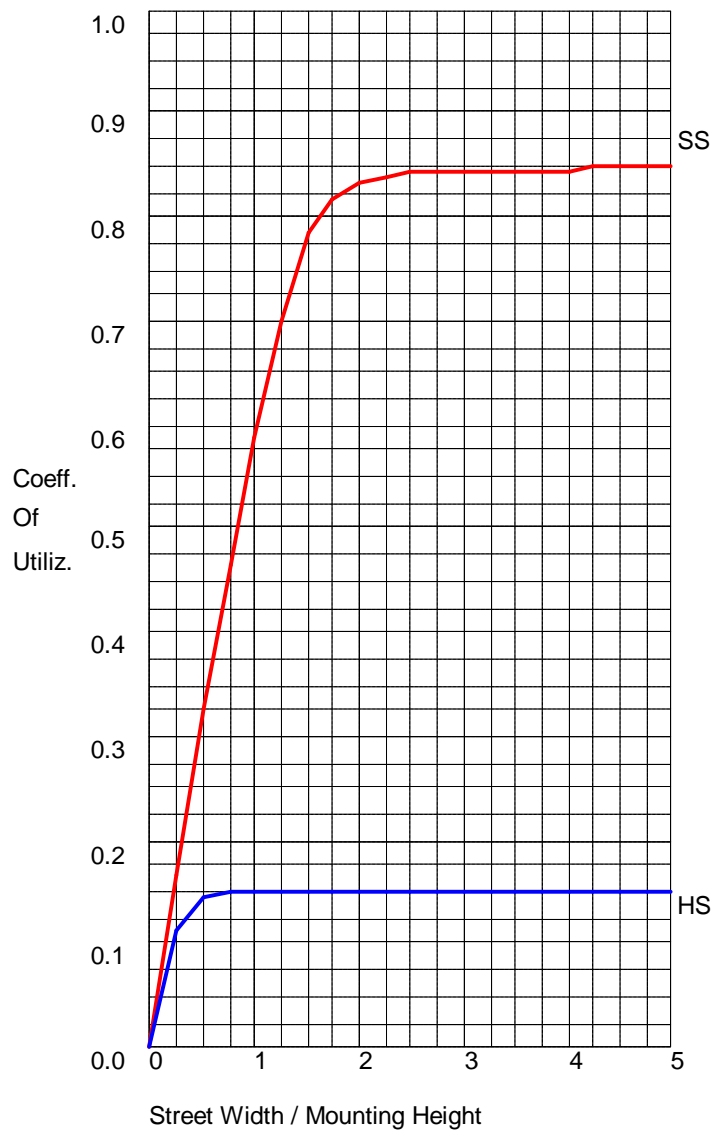
	<u>175</u>	<u>180</u>
0.0	4391.858	4391.858
2.5	4370.614	4359.433
5.0	4245.388	4233.089
7.5	3981.519	3966.983
10.0	3514.157	3491.795
12.5	2552.600	2523.529
15.0	1462.462	1437.864
17.5	751.357	739.058
20.0	504.259	498.668
22.5	439.409	438.291
25.0	393.568	391.332
27.5	348.844	345.490
30.0	298.530	297.412
32.5	238.153	235.917
35.0	165.477	158.769
37.5	100.628	95.038
40.0	57.023	55.905
42.5	30.188	30.188
45.0	11.181	10.063
47.5	0.000	0.000
50.0	0.000	0.000
52.5	0.000	0.000
55.0	0.000	0.000
57.5	2.236	1.118
60.0	3.354	2.236
62.5	1.118	0.000
65.0	0.000	0.000

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CANDELA TABULATION - (Cont.)

67.5	3.354	3.354
70.0	0.000	0.000
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

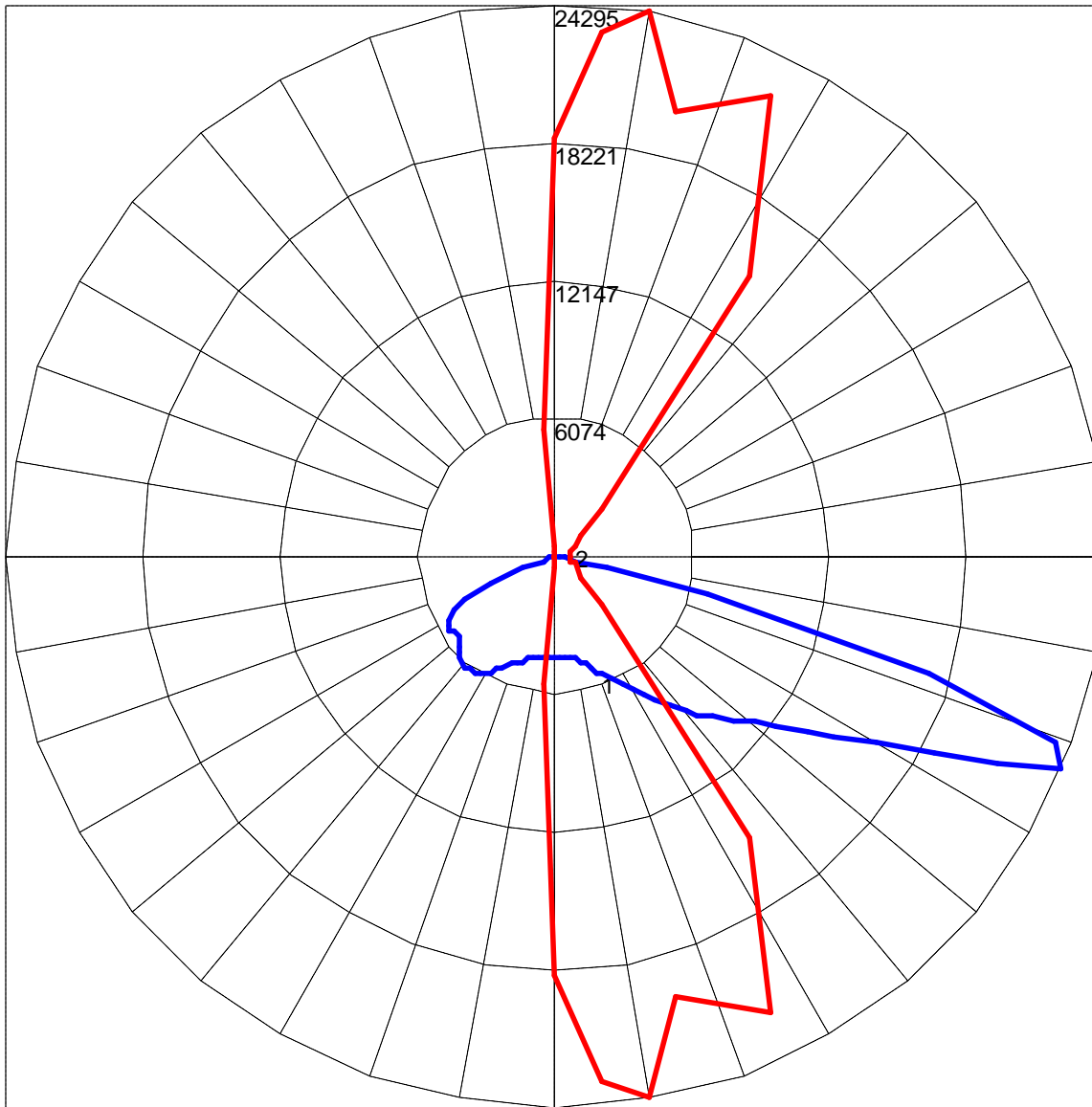
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

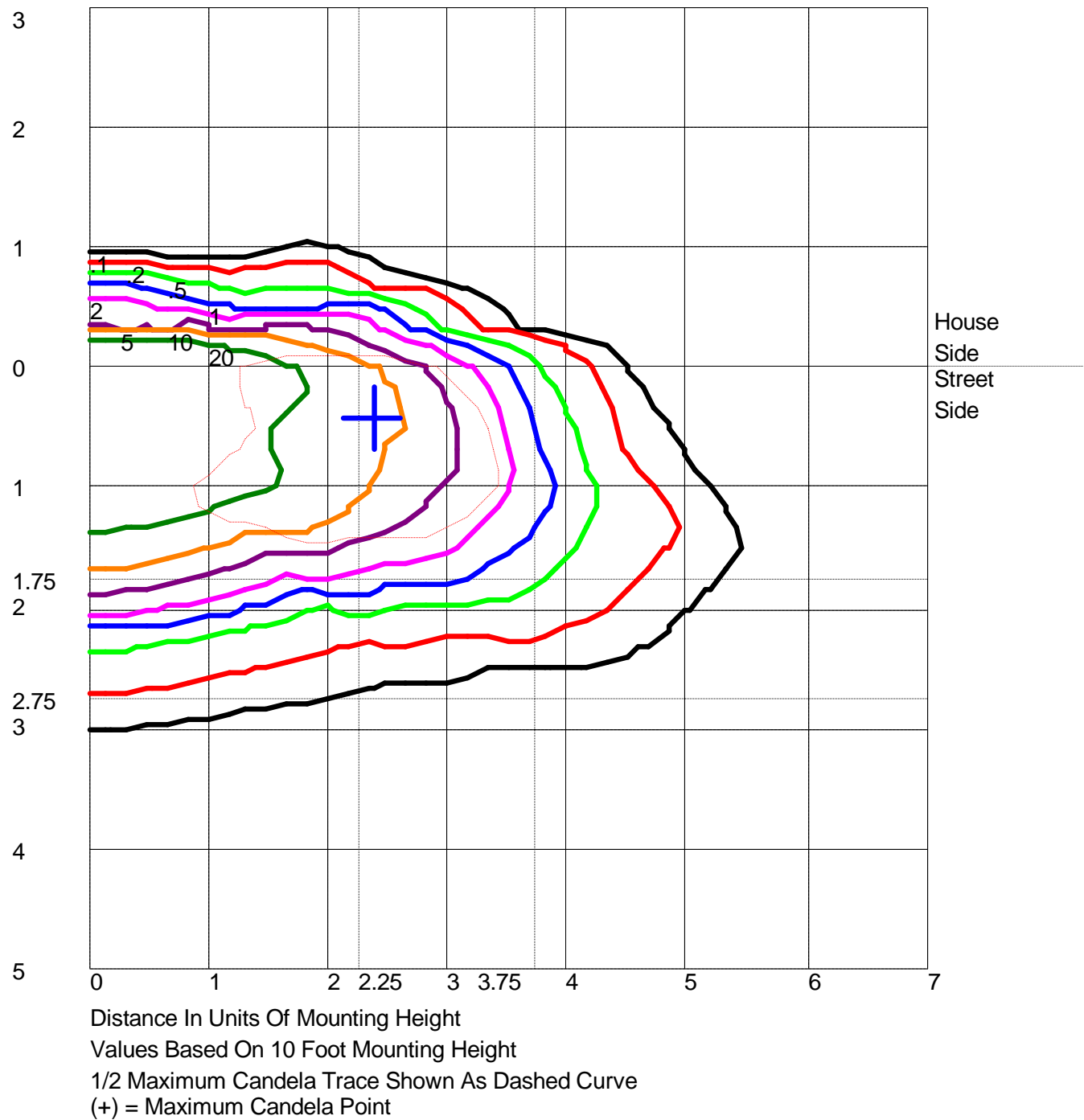
	Lumens	Percent Of Luminaire
Downward Street Side	19952.3	84.8
Downward House Side	3565.2	15.2
Downward Total	23517.5	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	23517.5	100.0

POLAR GRAPH

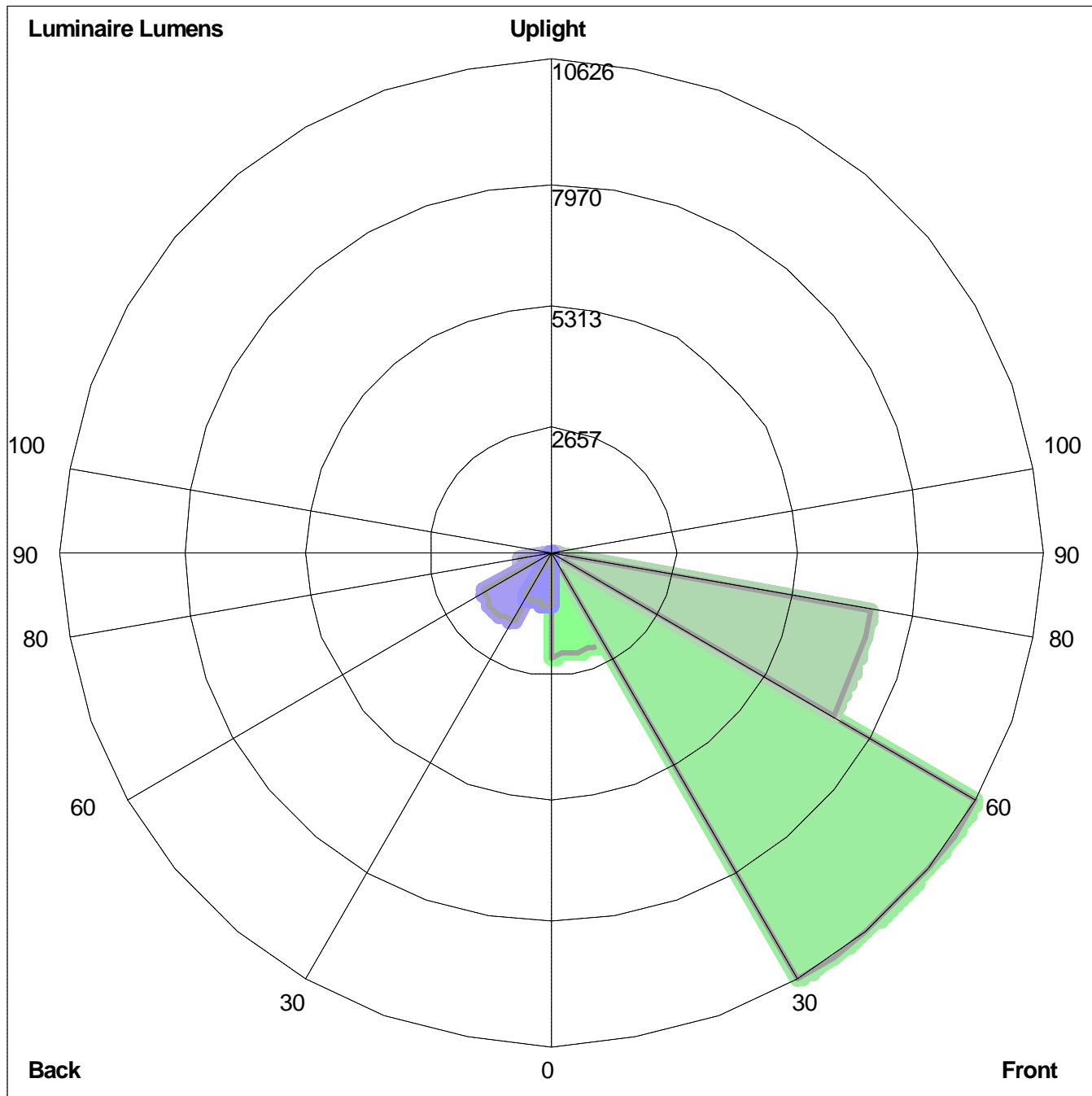


Maximum Candela = 24294.978 Located At Horizontal Angle = 80, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2232.3, Medium=10626.1, High=6992.4, Very High=101.5
Back: Low=1124.3, Medium=1732.6, High=702.5, Very High=5.8
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3