



IES ROAD REPORT

PHOTOMETRIC FILENAME : HLN-3-LED-32L-50-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-7762_Scaled
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]04/03/17
[TEST DATE]04/28/16
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT] HLN-3-LED-32L-50-IL
[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 III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	27102
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	314
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	34295.778
Maximum Candela Angle	55H 67.5V
Maximum Candela (<90 Degrees Vertical)	34295.778
Maximum Candela Angle (<90 Degrees Vertical)	55H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1867.215 (6.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1198.0	N.A.	4.4
FM - Front-Medium (30-60)	12260.0	N.A.	45.2
FH - Front-High (60-80)	11297.4	N.A.	41.7
FVH - Front-Very High (80-90)	220.0	N.A.	0.8
BL - Back-Low (0-30)	526.8	N.A.	1.9
BM - Back-Medium (30-60)	1185.7	N.A.	4.4
BH - Back-High (60-80)	406.7	N.A.	1.5
BVH - Back-Very High (80-90)	7.8	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	27102.4	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>45.0</u>	<u>55.0</u>	<u>57.5</u>	<u>65.0</u>	<u>75.0</u>
0.0	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049
2.5	2411.097	2400.704	2366.062	2350.473	2321.027	2303.706	2263.868	2244.815	2225.761	2175.530
5.0	2650.128	2646.664	2636.271	2625.879	2601.629	2584.308	2523.684	2485.578	2421.490	2300.242
7.5	2579.112	2579.112	2587.772	2617.218	2631.075	2650.128	2641.468	2625.879	2575.648	2423.222
10.0	2405.901	2405.901	2424.954	2475.185	2532.345	2608.558	2663.985	2662.253	2657.057	2528.881
12.5	2239.618	2241.350	2263.868	2326.224	2397.240	2504.631	2617.218	2632.807	2674.378	2592.969
15.0	2102.782	2104.514	2133.960	2196.316	2291.582	2405.901	2535.809	2561.791	2658.789	2638.004
17.5	2024.837	2026.569	2059.479	2128.763	2229.226	2348.741	2489.042	2521.952	2644.932	2684.771
20.0	2064.675	2069.871	2107.978	2194.583	2284.653	2404.169	2542.738	2582.576	2707.288	2774.840
22.5	2336.616	2340.081	2374.723	2457.864	2521.952	2617.218	2741.930	2785.233	2890.892	2975.765
25.0	2899.552	2899.552	2944.587	2958.444	2980.961	3019.068	3143.780	3150.708	3240.778	3310.062
27.5	3656.484	3703.251	3706.715	3679.002	3651.288	3613.182	3691.126	3692.859	3734.429	3744.822
30.0	4460.183	4510.415	4531.200	4526.003	4475.772	4382.238	4387.435	4368.381	4333.739	4205.563
32.5	5305.453	5282.936	5324.506	5364.345	5362.613	5321.042	5206.723	5156.492	4988.477	4707.875
35.0	5961.923	5953.262	6051.992	6154.187	6228.668	6268.506	6088.367	6001.761	5695.178	5234.436
37.5	6576.822	6606.268	6718.855	6892.066	7046.224	7238.488	6990.796	6874.745	6408.807	5754.069
40.0	7286.987	7319.897	7439.413	7617.820	7860.315	8146.113	7946.921	7740.800	7103.383	6235.596
42.5	8201.541	8232.719	8367.824	8433.644	8759.280	9064.132	8832.029	8625.908	7735.603	6633.981
45.0	9394.965	9426.143	9562.979	9542.194	9786.422	10061.827	9710.209	9462.517	8314.128	6976.939
47.5	10946.935	10986.774	11154.789	11054.326	11222.341	11187.699	10588.389	10247.163	8916.902	7299.112
50.0	13046.253	13131.126	13494.869	13416.924	13221.196	12547.405	11480.425	11042.201	9478.106	7692.301
52.5	16186.568	16328.601	16732.183	16574.561	16075.713	14302.032	12530.084	11929.042	10151.897	8284.682
55.0	19820.535	20163.493	20556.682	20608.645	19867.302	16673.291	13858.612	13115.537	11116.682	9157.666
57.5	21533.592	21769.159	23089.027	24374.252	24237.416	20205.063	15938.876	14984.484	12630.546	10591.853
60.0	19285.313	19711.412	22077.474	25217.790	28969.540	25311.324	19101.709	17951.588	15052.036	12990.825
62.5	11435.390	11736.778	16084.374	22074.010	28908.916	29821.738	24039.955	23177.364	18642.700	16124.212
65.0	3261.563	3401.864	5282.936	12145.555	24180.256	30492.065	29639.867	28933.166	22985.100	18890.392
67.5	1300.815	1361.438	1836.037	3478.077	13661.152	26638.120	34295.778	34288.850	26354.054	19756.447
70.0	879.912	914.554	1077.372	1797.930	4413.416	17856.322	31061.929	32717.826	27975.309	16358.047
72.5	710.165	741.343	833.145	1314.672	2554.862	7673.247	23426.788	25650.817	22084.403	9265.057
75.0	559.472	576.793	663.398	1117.211	2009.248	3708.448	11676.154	13763.346	11560.102	2849.321
77.5	427.831	453.813	526.561	976.910	1752.895	2281.189	4292.169	5428.433	3278.884	1025.409
80.0	297.923	315.244	394.921	822.752	1477.490	1584.881	1629.916	1867.215	1370.099	549.079
82.5	178.407	188.800	259.817	678.987	1125.872	1089.497	732.683	670.327	637.416	353.350
85.0	116.051	122.980	180.139	564.668	893.769	587.185	296.191	311.780	318.708	228.639
87.5	72.749	77.945	124.712	420.903	439.956	202.657	129.908	128.176	131.640	131.640
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	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049	2101.049
2.5	2139.156	2120.103	2095.853	2045.622	2007.516	1965.945	1927.838	1872.411	1836.037	1841.233
5.0	2182.459	2120.103	2054.282	1922.642	1796.198	1681.879	1576.220	1512.132	1468.829	1454.972
7.5	2224.029	2118.371	2007.516	1789.270	1598.738	1465.365	1394.349	1340.653	1293.886	1264.440
10.0	2260.404	2107.978	1953.820	1652.433	1446.312	1347.582	1267.905	1210.745	1167.442	1137.996
12.5	2295.046	2094.121	1901.857	1529.453	1351.046	1245.387	1172.638	1124.139	1084.301	1063.516
15.0	2326.224	2078.532	1846.429	1435.919	1280.029	1184.763	1105.086	1068.712	1044.462	1030.605
17.5	2359.134	2068.139	1792.734	1368.367	1231.530	1150.121	1075.640	1040.998	1025.409	1008.088
20.0	2424.954	2097.585	1778.877	1330.260	1231.530	1131.068	1073.908	1023.677	995.963	987.303
22.5	2610.290	2229.226	1862.018	1345.849	1281.761	1155.317	1080.837	1009.820	964.785	959.589
25.0	2887.427	2442.275	2042.158	1397.813	1349.314	1214.209	1082.569	995.963	935.339	876.448
27.5	3233.849	2740.198	2253.475	1472.294	1416.866	1280.029	1101.622	969.982	801.967	680.719

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CANDELA TABULATION - (Cont.)

30.0	3580.271	3000.015	2445.739	1553.703	1477.490	1340.653	1105.086	827.949	623.560	594.114
32.5	3957.871	3299.670	2655.325	1628.183	1531.185	1387.420	1028.873	689.380	601.042	613.167
35.0	4351.060	3588.932	2871.838	1673.218	1555.435	1403.009	897.233	673.791	604.506	630.488
37.5	4718.268	3866.070	3055.442	1688.807	1539.846	1318.136	866.055	642.613	549.079	550.811
40.0	5049.101	4105.101	3197.475	1671.486	1479.222	1153.585	850.466	599.310	471.134	439.956
42.5	5329.703	4292.169	3294.473	1619.523	1356.242	1018.481	779.450	559.472	426.099	370.672
45.0	5556.609	4442.862	3353.365	1534.649	1124.139	814.092	672.059	514.437	455.545	330.833
47.5	5793.908	4619.537	3427.846	1422.062	817.556	590.650	523.097	453.813	433.028	313.512
50.0	6109.152	4898.407	3564.682	1299.083	599.310	433.028	393.189	413.974	419.171	306.583
52.5	6590.679	5350.488	3859.141	1212.477	455.545	344.690	306.583	365.475	377.600	313.512
55.0	7342.414	6116.080	4351.060	1150.121	408.778	306.583	254.620	306.583	296.191	332.565
57.5	8608.587	7167.471	5069.886	1044.462	384.528	282.334	221.710	254.620	230.371	239.031
60.0	10629.959	8457.893	5466.539	898.965	363.743	249.424	192.264	181.872	138.569	185.336
62.5	13470.620	9419.214	5154.759	751.736	320.440	206.121	190.532	112.587	93.534	145.497
65.0	14903.075	9382.840	3824.499	607.971	249.424	181.872	136.837	88.338	67.552	140.301
67.5	14248.337	7610.891	2281.189	419.171	185.336	136.837	90.070	74.481	65.820	107.391
70.0	9299.699	4784.088	1134.532	270.209	136.837	83.141	55.428	60.624	50.231	79.677
72.5	4080.851	1907.053	420.903	173.211	100.462	48.499	41.571	39.839	32.910	53.695
75.0	1023.677	649.541	254.620	128.176	64.088	36.374	25.982	25.982	12.125	20.785
77.5	486.723	323.905	176.675	91.802	38.106	24.250	13.857	8.661	3.464	5.196
80.0	301.387	214.782	129.908	60.624	20.785	10.393	8.661	5.196	1.732	0.000
82.5	200.925	145.497	93.534	34.642	10.393	10.393	8.661	3.464	0.000	0.000
85.0	128.176	100.462	65.820	19.053	10.393	8.661	6.928	3.464	0.000	0.000
87.5	72.749	53.695	32.910	10.393	12.125	12.125	10.393	5.196	1.732	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

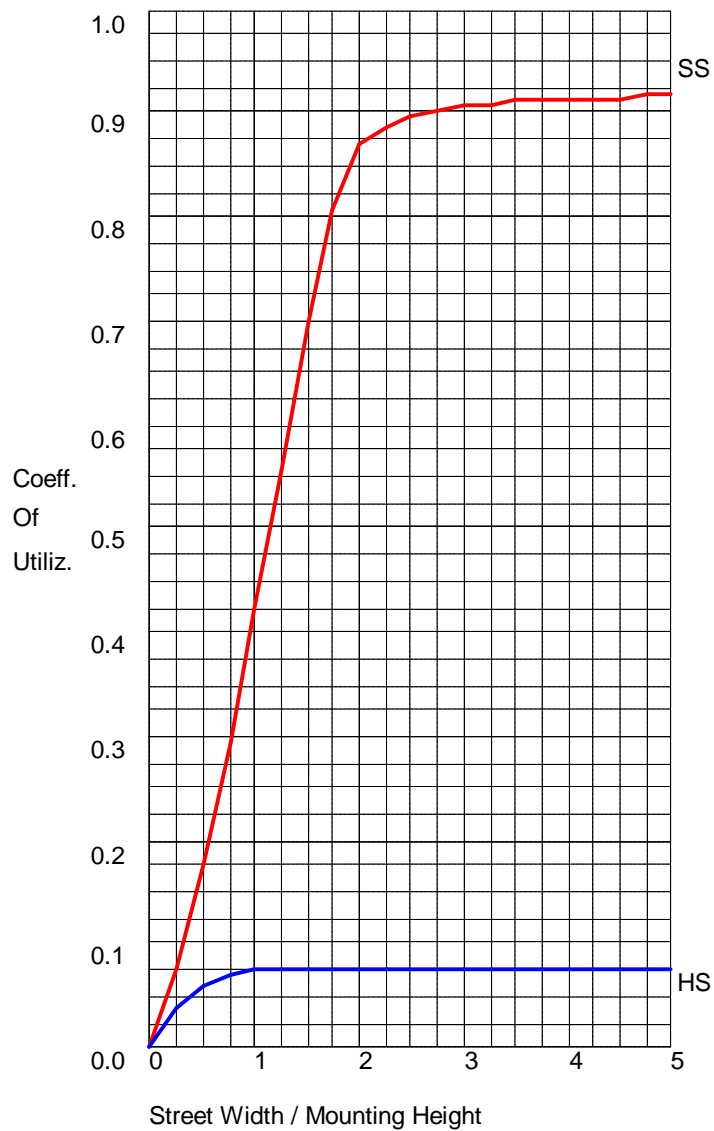
	175.0	180.0
0.0	2101.049	2101.049
2.5	1827.376	1830.840
5.0	1444.580	1441.116
7.5	1259.244	1255.780
10.0	1131.068	1124.139
12.5	1054.855	1049.659
15.0	1025.409	1016.749
17.5	1001.160	992.499
20.0	976.910	966.517
22.5	949.196	940.536
25.0	829.681	819.288
27.5	630.488	621.827
30.0	597.578	592.382
32.5	640.881	632.220
35.0	677.255	670.327
37.5	564.668	556.007
40.0	426.099	412.242
42.5	320.440	316.976
45.0	287.530	278.870
47.5	261.549	256.352
50.0	237.299	226.906
52.5	249.424	240.763
55.0	244.228	232.103
57.5	150.694	128.176
60.0	116.051	96.998
62.5	100.462	77.945
65.0	122.980	93.534

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CANDELA TABULATION - (Cont.)

67.5	112.587	81.409
70.0	93.534	64.088
72.5	62.356	43.303
75.0	19.053	12.125
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

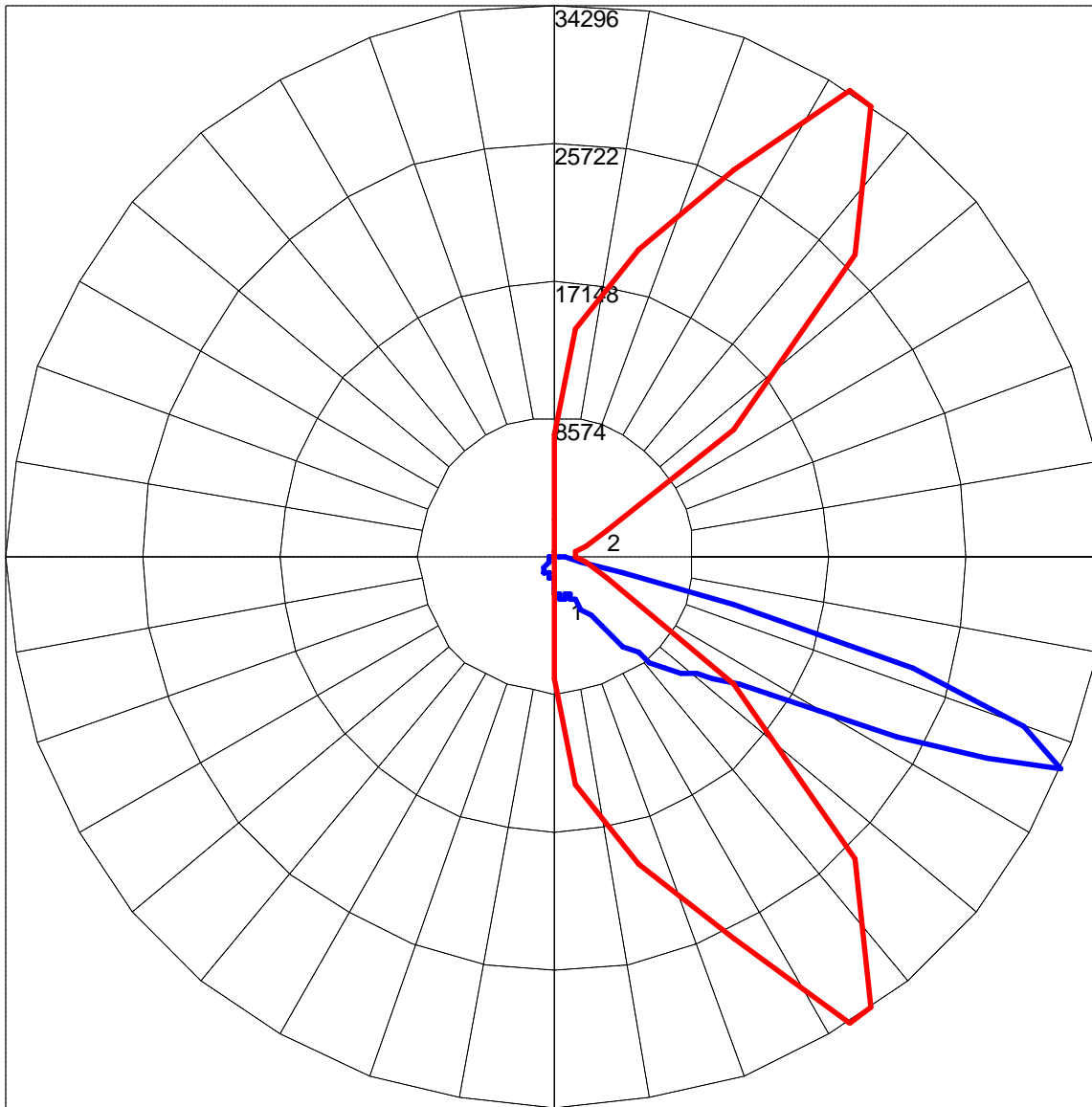
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

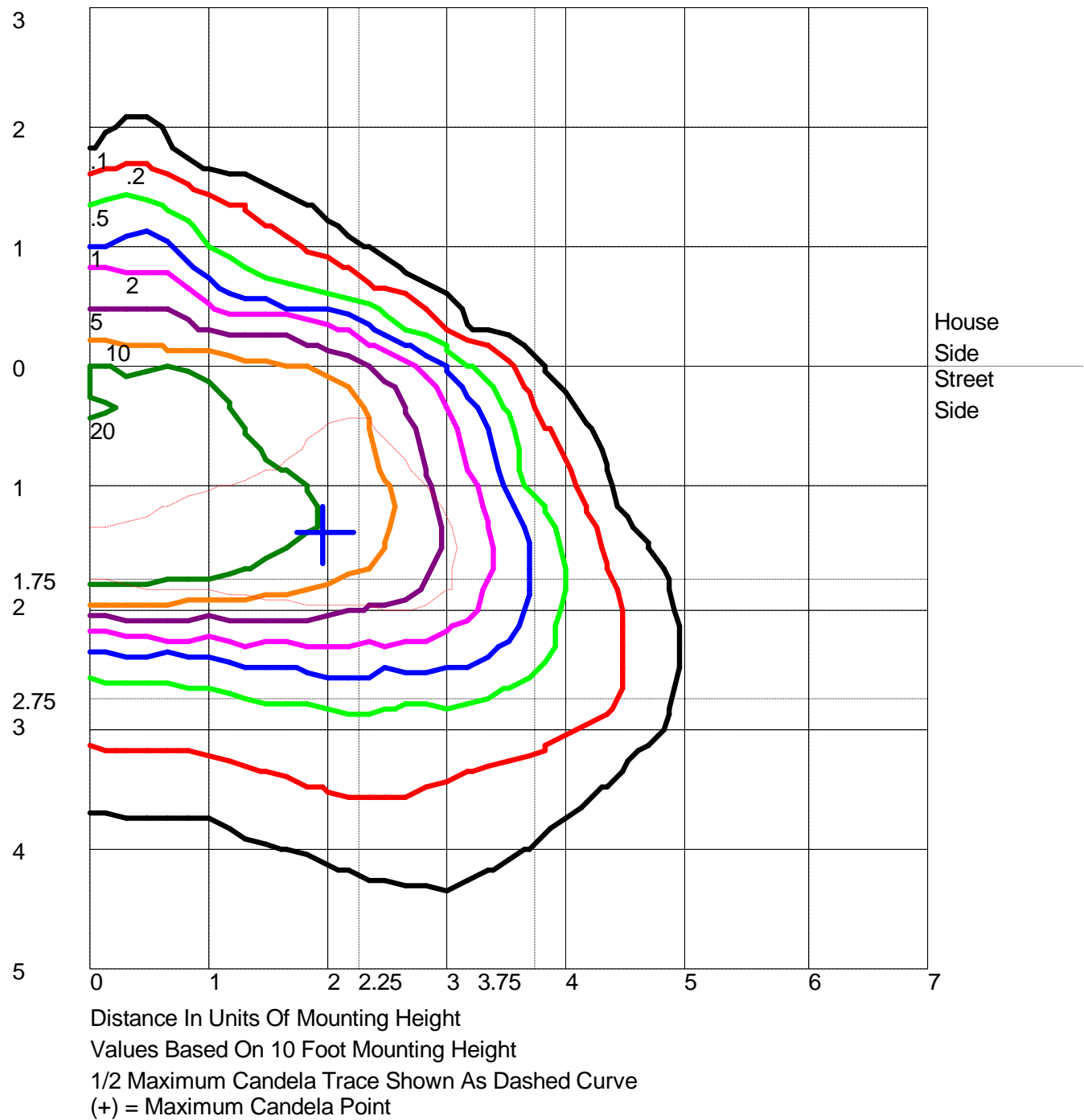
	Lumens	Percent Of Luminaire
Downward Street Side	24975.5	92.2
Downward House Side	2127.0	7.8
Downward Total	27102.5	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	27102.5	100.0

POLAR GRAPH

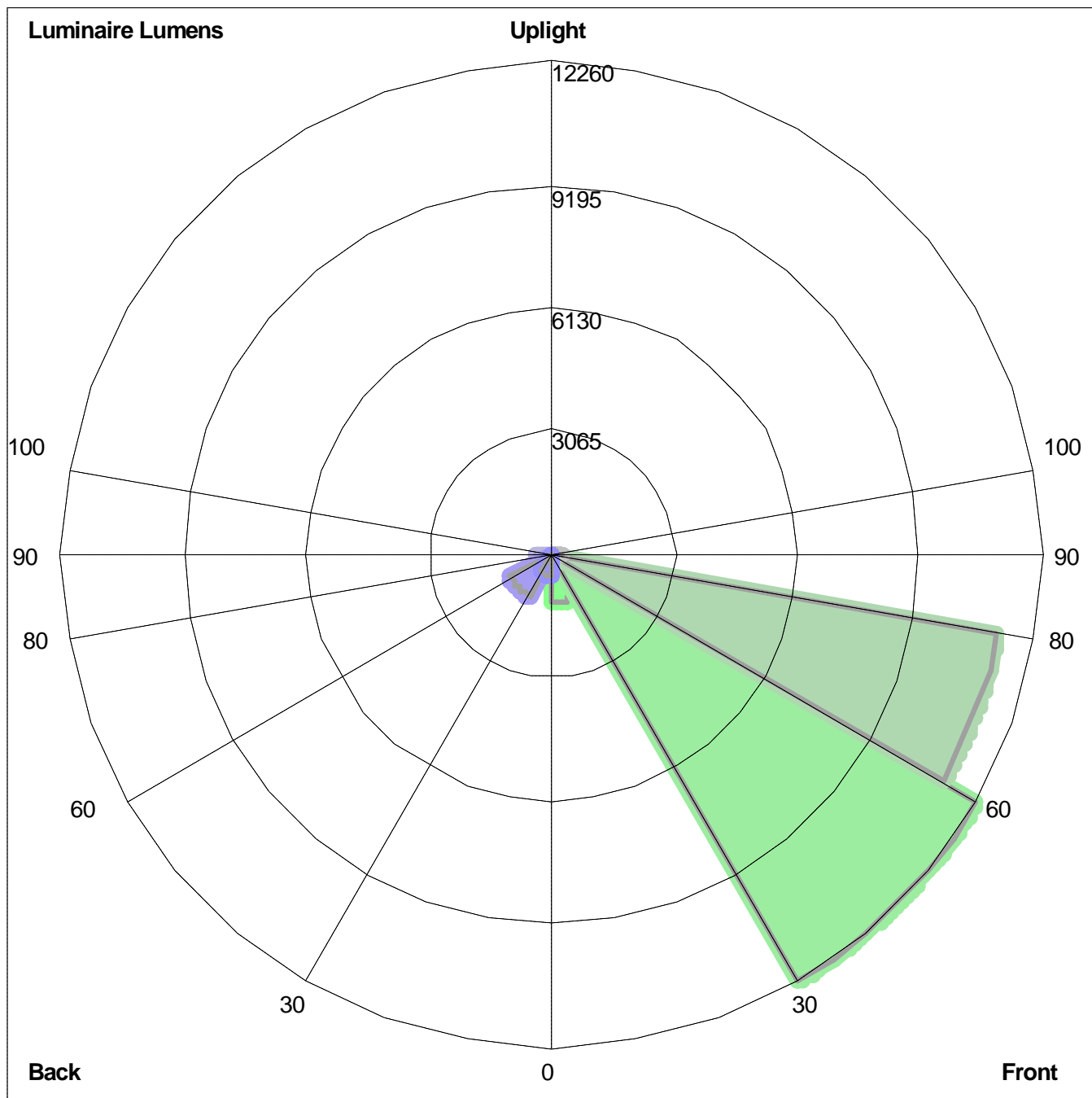


Maximum Candela = 34295.778 Located At Horizontal Angle = 55, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (55 - 235) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low= 1198.0, Medium= 12260.0, High=11297.4, Very High=220.0
Back: Low=526.8, Medium=1185.7, High=406.7, Very High=7.8
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G4