



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L110-750-T2-F-S-XXX-DIM-UNV_.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM ATAL011757
[TESTLAB] ATAL-LABS
[ISSUE DATE] 2023-01-18
[MANUFAC] WILLIAMS OUTDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] VA1-L110-750-T2-F-S-xxx-DIM-UNV_
[LUMINAIRE] VA1 LED AREA LIGHT FIXTURE WITH TYPE II
[MORE] OPTICS, CLEAR LENS
[LAMP] LED
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor, Architectural, Area, Parking, Site
[SEARCH_MOUNTING] Pole

CHARACTERISTICS

IES Classification	Type I
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	12010
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	136
Total Luminaire Watts	88
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	12178.294
Maximum Candela Angle	77.5H 68V
Maximum Candela (<90 Degrees Vertical)	12178.294
Maximum Candela Angle (<90 Degrees Vertical)	77.5H 68V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	465.095 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L110-750-T2-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2170.7	N.A.	18.1
FM - Front-Medium (30-60)	5259.4	N.A.	43.8
FH - Front-High (60-80)	2126.6	N.A.	17.7
FVH - Front-Very High (80-90)	31.1	N.A.	0.3
BL - Back-Low (0-30)	485.7	N.A.	4.0
BM - Back-Medium (30-60)	1156.5	N.A.	9.6
BH - Back-High (60-80)	737.6	N.A.	6.1
BVH - Back-Very High (80-90)	42.0	N.A.	0.3
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	12009.6	N.A.	100.0
BUG Rating	B2-U0-G2		

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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>77.5</u>
0.0	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745
2.5	3286.587	3224.111	3227.267	3162.267	3126.927	3065.714	2996.297	2904.161	2820.861	2789.939
5.0	4021.147	3979.496	3959.302	3848.235	3752.313	3604.013	3435.518	3232.946	3025.326	2960.326
7.5	4780.318	4742.454	4695.755	4536.727	4365.708	4130.321	3865.274	3557.314	3221.587	3136.393
10.0	5474.489	5425.266	5364.684	5189.248	4974.686	4669.882	4319.009	3874.740	3426.052	3308.674
12.5	5903.614	5882.158	5831.041	5702.935	5500.363	5174.734	4762.648	4201.631	3638.721	3493.576
15.0	5921.284	5921.284	5917.497	5928.225	5856.284	5611.431	5191.141	4578.377	3869.060	3694.886
17.5	5827.255	5824.100	5820.944	5870.167	5940.847	5911.187	5590.605	4946.919	4129.059	3923.332
20.0	5846.818	5846.187	5848.711	5853.760	5891.623	5991.963	5926.963	5348.276	4428.815	4183.961
22.5	5774.245	5781.187	5827.255	5888.468	5908.031	5961.041	6133.321	5754.051	4770.221	4483.717
25.0	5478.907	5492.790	5603.858	5809.585	5926.332	5971.769	6208.418	6152.253	5139.394	4815.658
27.5	4986.676	5003.084	5201.869	5508.567	5837.983	6007.739	6232.399	6490.504	5519.926	5160.850
30.0	4569.542	4589.736	4731.095	5046.627	5547.693	5993.225	6284.777	6753.027	5884.051	5505.412
32.5	4326.582	4346.776	4474.882	4693.862	5114.151	5856.915	6360.505	6919.628	6258.272	5837.352
35.0	4145.466	4159.981	4283.670	4487.504	4774.007	5584.295	6435.602	7009.240	6587.688	6132.690
37.5	3876.633	3889.254	4042.603	4277.359	4548.717	5292.112	6488.611	7062.249	6877.347	6401.524
40.0	3409.014	3425.421	3620.420	3930.273	4281.777	5008.132	6625.552	7112.734	7148.705	6693.076
42.5	2740.085	2753.968	3002.608	3358.528	3886.099	4627.600	6796.571	7290.064	7397.976	6953.075
45.0	2117.854	2123.534	2280.038	2557.707	3241.150	4175.127	6566.863	7885.158	7600.548	7216.860
47.5	1707.662	1706.400	1779.603	1896.982	2316.640	3520.712	5921.284	8574.912	7885.789	7522.927
50.0	1513.925	1506.983	1517.080	1544.216	1705.769	2324.213	5137.501	8937.144	8719.426	8302.923
52.5	1433.149	1426.838	1403.489	1361.838	1440.722	1597.857	3894.303	9329.666	10044.663	9589.034
55.0	1287.373	1292.421	1326.499	1300.625	1303.149	1376.353	2346.931	9496.898	11210.871	10793.737
57.5	1109.412	1114.461	1170.626	1270.965	1269.072	1277.907	1862.273	8817.872	11563.005	11232.958
60.0	963.636	970.578	1026.743	1146.645	1226.790	1205.334	1749.312	7516.616	11484.122	11347.812
62.5	795.773	807.763	886.646	1016.646	1094.898	1090.480	1602.905	6072.739	11373.686	11452.569
65.0	629.803	643.055	732.667	870.870	948.491	929.559	1378.877	4488.135	11333.298	11597.083
67.5	445.532	456.891	557.862	706.162	785.676	763.589	1098.053	3114.937	11780.092	12151.158
68.0	400.095	408.299	516.211	670.822	752.861	730.142	1037.471	2895.327	11804.703	12178.294
70.0	324.367	328.154	360.338	532.619	624.123	605.191	806.501	2127.951	10743.883	11046.163
72.5	254.950	258.106	283.979	376.746	490.338	489.075	567.959	1294.314	7225.064	7401.762
75.0	190.582	194.368	217.717	264.416	389.367	424.076	378.008	667.667	2529.940	2519.212
77.5	133.786	138.834	160.922	193.737	304.173	392.522	230.970	352.765	535.774	552.813
80.0	88.980	93.398	109.805	124.951	228.446	291.552	137.572	193.737	246.746	252.426
82.5	53.641	53.641	63.107	71.310	141.990	129.368	73.204	98.446	127.475	123.058
85.0	22.718	22.718	26.505	30.291	70.048	44.806	30.922	35.340	47.961	46.699
87.5	4.417	4.417	5.049	5.049	13.252	5.680	3.786	5.049	5.680	5.680
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	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745	2639.745
2.5	2707.900	2654.260	2602.512	2483.872	2375.960	2259.844	2202.417	2121.641	2035.816	2033.923
5.0	2774.162	2649.211	2522.998	2255.427	2004.263	1770.138	1607.323	1464.071	1353.004	1317.664
7.5	2846.103	2651.735	2454.843	2035.816	1681.157	1371.304	1201.548	1089.849	1025.481	1004.025
10.0	2923.724	2663.726	2395.523	1837.661	1402.227	1127.713	1014.122	963.636	936.501	923.248
12.5	3012.074	2684.551	2346.300	1660.332	1207.227	1007.811	946.598	915.044	895.481	886.015
15.0	3116.830	2724.308	2311.591	1503.828	1074.704	951.646	908.734	884.753	869.608	861.404
17.5	3241.781	2778.580	2289.504	1377.615	1004.025	919.462	882.860	865.821	853.200	843.734
20.0	3391.975	2854.307	2283.824	1278.538	968.685	898.637	865.821	853.200	844.365	831.113
22.5	3565.518	2953.385	2290.135	1202.810	947.229	882.229	854.462	844.365	839.317	824.171
25.0	3763.041	3063.190	2312.222	1144.752	927.666	867.083	843.103	836.161	833.637	807.132

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CANDELA TABULATION - (Cont.)

27.5	3968.137	3186.879	2345.038	1101.209	907.472	849.414	829.851	826.064	815.967	786.938
30.0	4180.806	3323.189	2386.688	1069.655	889.171	831.744	812.812	809.656	795.142	768.637
32.5	4382.116	3452.557	2434.018	1046.937	871.501	812.181	792.618	785.676	761.064	699.220
35.0	4549.348	3559.838	2475.668	1026.112	853.831	790.725	770.530	740.239	687.861	641.793
37.5	4687.551	3665.857	2518.581	1005.287	829.220	769.268	723.832	675.871	632.958	617.182
40.0	4864.250	3800.905	2583.580	990.141	803.977	735.191	666.405	608.978	607.716	594.463
42.5	5021.385	3924.594	2665.619	980.675	777.472	686.599	625.385	574.900	583.735	589.415
45.0	5196.821	4076.049	2767.220	974.996	749.074	644.317	560.386	549.027	567.327	576.793
47.5	5426.529	4283.039	2921.831	981.937	718.783	617.182	537.036	529.464	549.027	562.910
50.0	6079.050	4880.026	3366.101	1046.937	694.803	595.725	533.881	512.425	535.143	557.230
52.5	7134.822	5809.585	4156.826	1236.888	661.987	540.192	541.454	489.706	529.464	562.279
55.0	7920.498	6526.475	4812.502	1322.712	598.881	484.658	476.454	473.930	531.988	571.114
57.5	7753.265	6433.077	4763.910	1191.451	532.619	445.532	440.483	464.464	534.512	567.327
60.0	7485.063	6196.428	4519.057	975.627	470.143	411.454	415.241	458.153	523.153	543.347
62.5	7238.947	5954.730	4341.097	813.443	414.610	384.319	393.154	444.901	493.493	506.745
65.0	7117.152	5805.799	4255.903	692.909	364.756	352.765	370.435	420.289	453.105	498.541
67.5	7148.705	5636.673	4130.321	569.221	321.212	318.057	345.824	386.843	420.289	662.618
68.0	7106.424	5547.062	4081.098	539.561	313.639	311.115	340.144	379.270	424.076	703.638
70.0	6352.301	4570.804	3457.606	439.221	284.610	284.610	316.164	347.717	500.435	854.462
72.5	4565.756	2911.103	2216.301	304.804	248.009	255.581	282.717	305.435	663.880	974.364
75.0	1476.061	1066.500	964.898	213.931	206.989	224.659	248.009	268.834	759.802	890.433
77.5	367.280	282.717	227.183	141.990	159.028	184.271	205.096	239.805	699.220	649.997
80.0	182.378	147.669	122.427	94.660	110.436	138.203	155.873	184.902	465.095	417.134
82.5	100.970	84.563	67.524	54.903	70.048	93.398	100.970	117.378	267.572	248.009
85.0	36.602	32.815	27.136	22.718	33.446	40.388	46.068	50.485	121.164	107.281
87.5	3.155	3.155	1.893	1.262	5.049	7.573	8.204	10.097	27.767	13.252
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

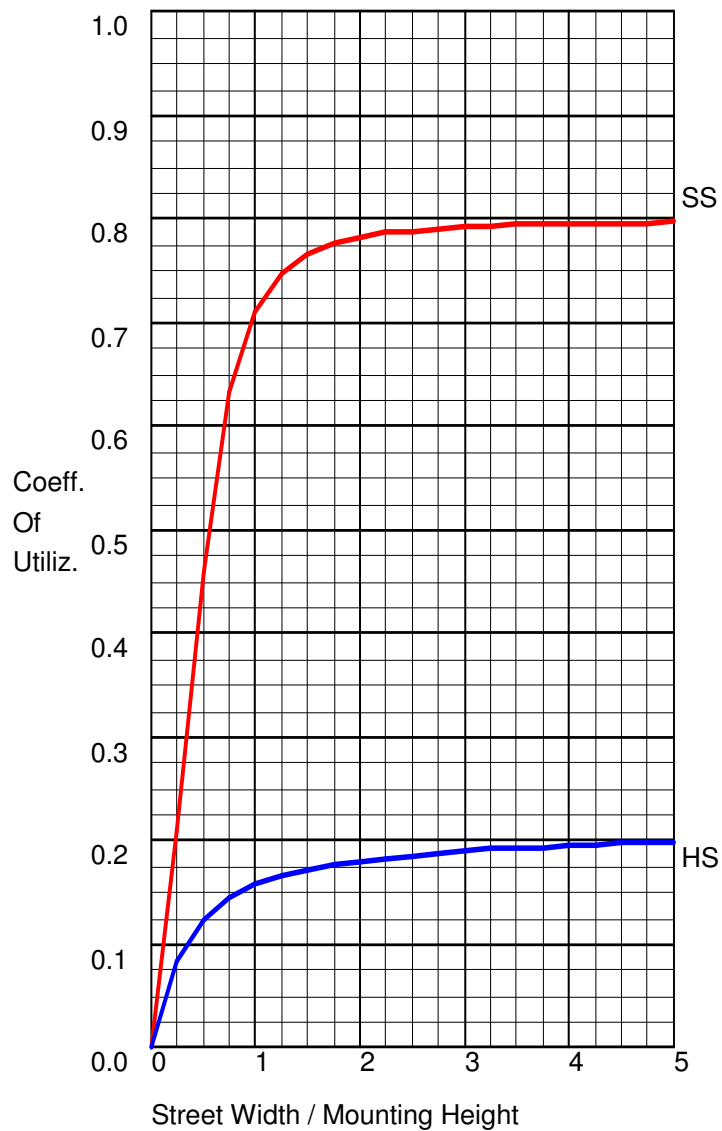
Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	2639.745	2639.745
2.5	1950.622	1987.855
5.0	1250.771	1270.965
7.5	982.568	986.355
10.0	913.151	913.782
12.5	879.074	879.074
15.0	856.986	857.617
17.5	839.317	839.948
20.0	824.171	824.171
22.5	813.443	813.443
25.0	790.093	790.725
27.5	772.424	773.055
30.0	735.191	735.822
32.5	668.929	667.036
35.0	627.910	629.172
37.5	608.978	612.133
40.0	584.366	589.415
42.5	569.221	568.590
45.0	564.803	550.289
47.5	545.871	545.871
50.0	544.609	553.444
52.5	559.755	569.852
55.0	575.531	584.366
57.5	573.638	581.211
60.0	552.182	560.386

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L110-750-T2-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

62.5	522.522	533.250
65.0	569.221	595.725
67.5	718.152	744.026
68.0	742.764	767.375
70.0	826.064	852.569
72.5	843.103	856.355
75.0	695.434	723.201
77.5	477.716	480.241
80.0	307.329	303.542
82.5	185.533	189.951
85.0	43.543	48.592
87.5	2.524	0.000
90.0	0.000	0.000

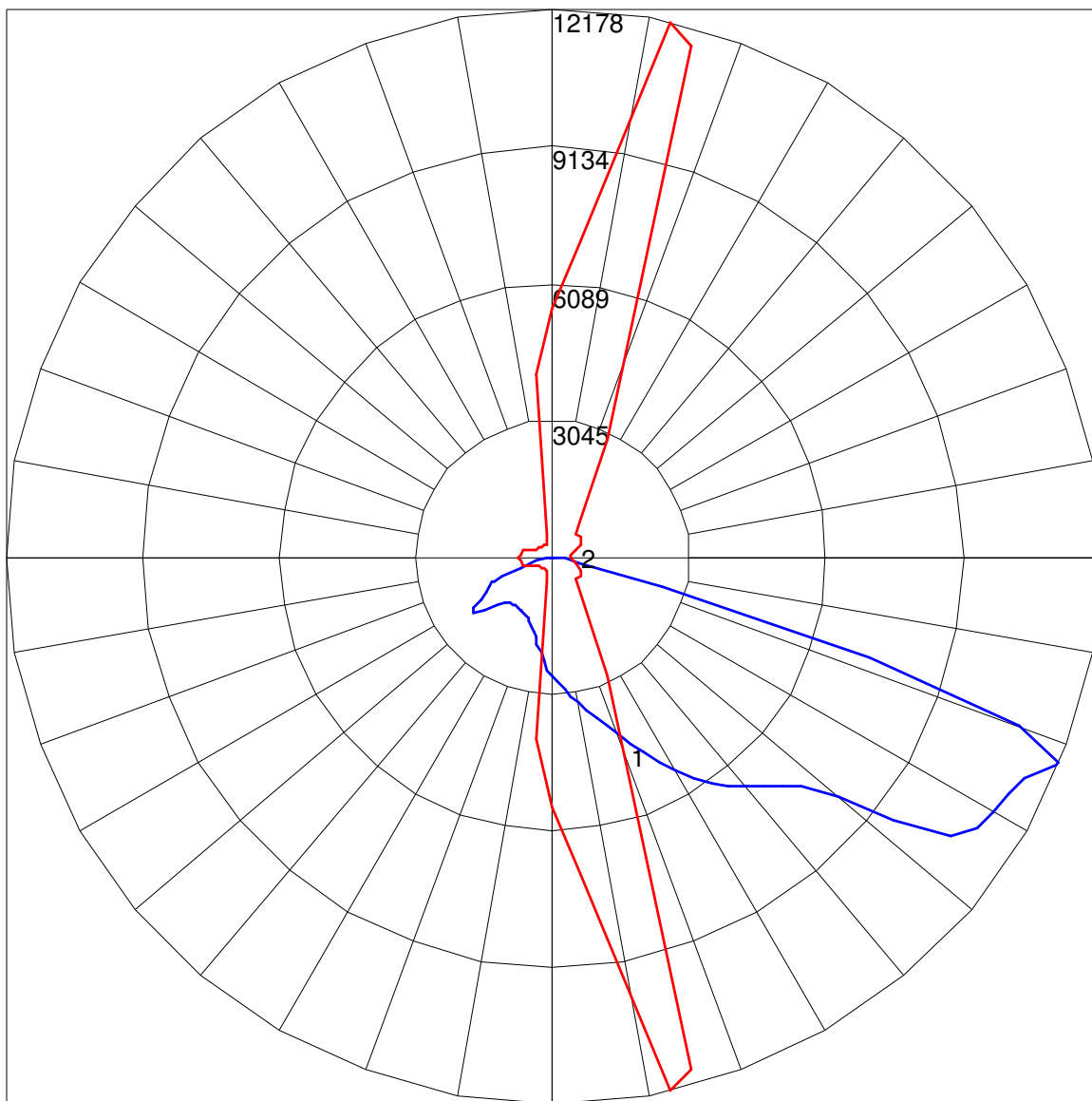
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

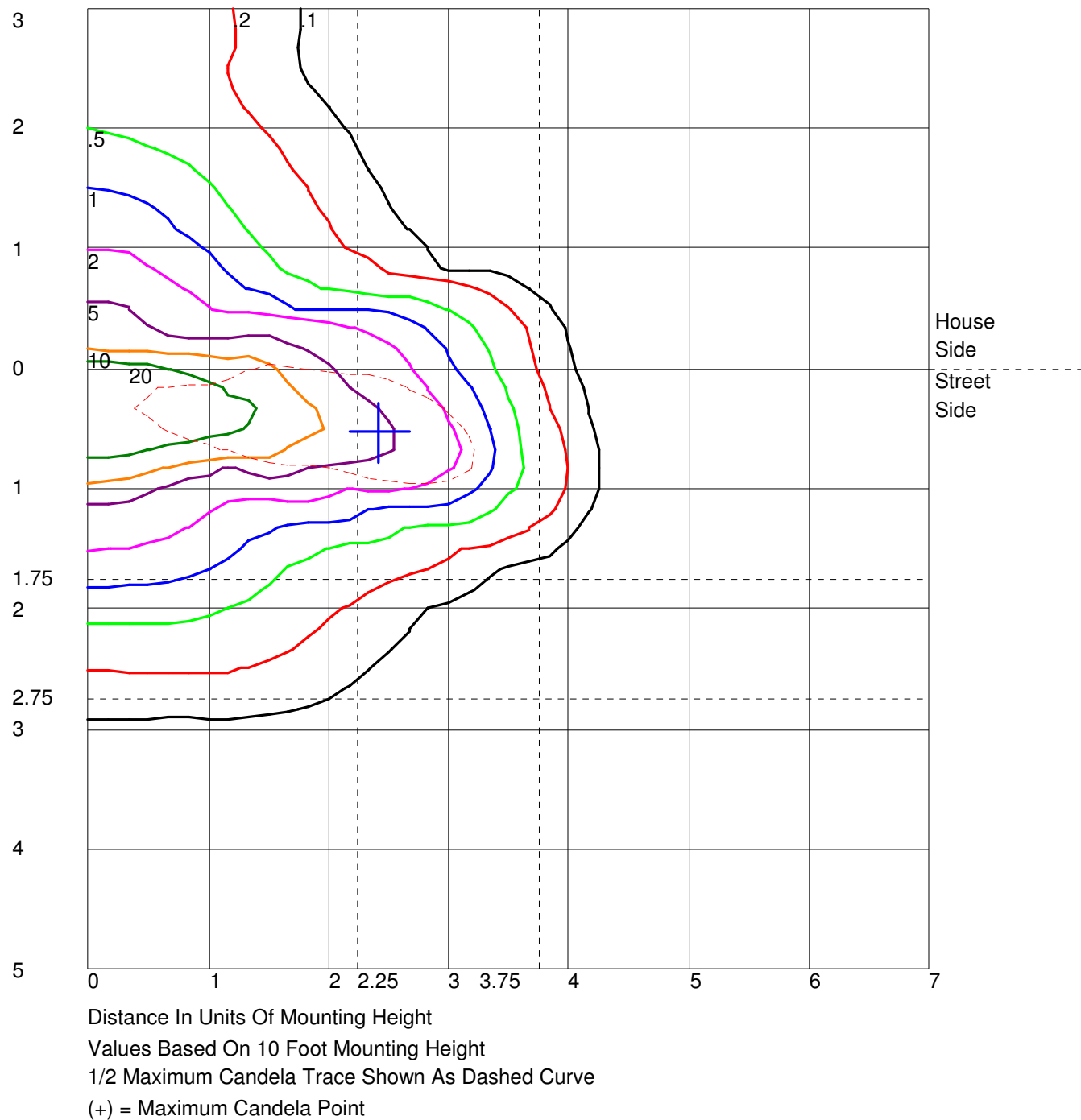
	Lumens	Percent Of Luminaire
Downward Street Side	9587.8	79.8
Downward House Side	2421.8	20.2
Downward Total	12009.6	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	12009.6	100.0

POLAR GRAPH

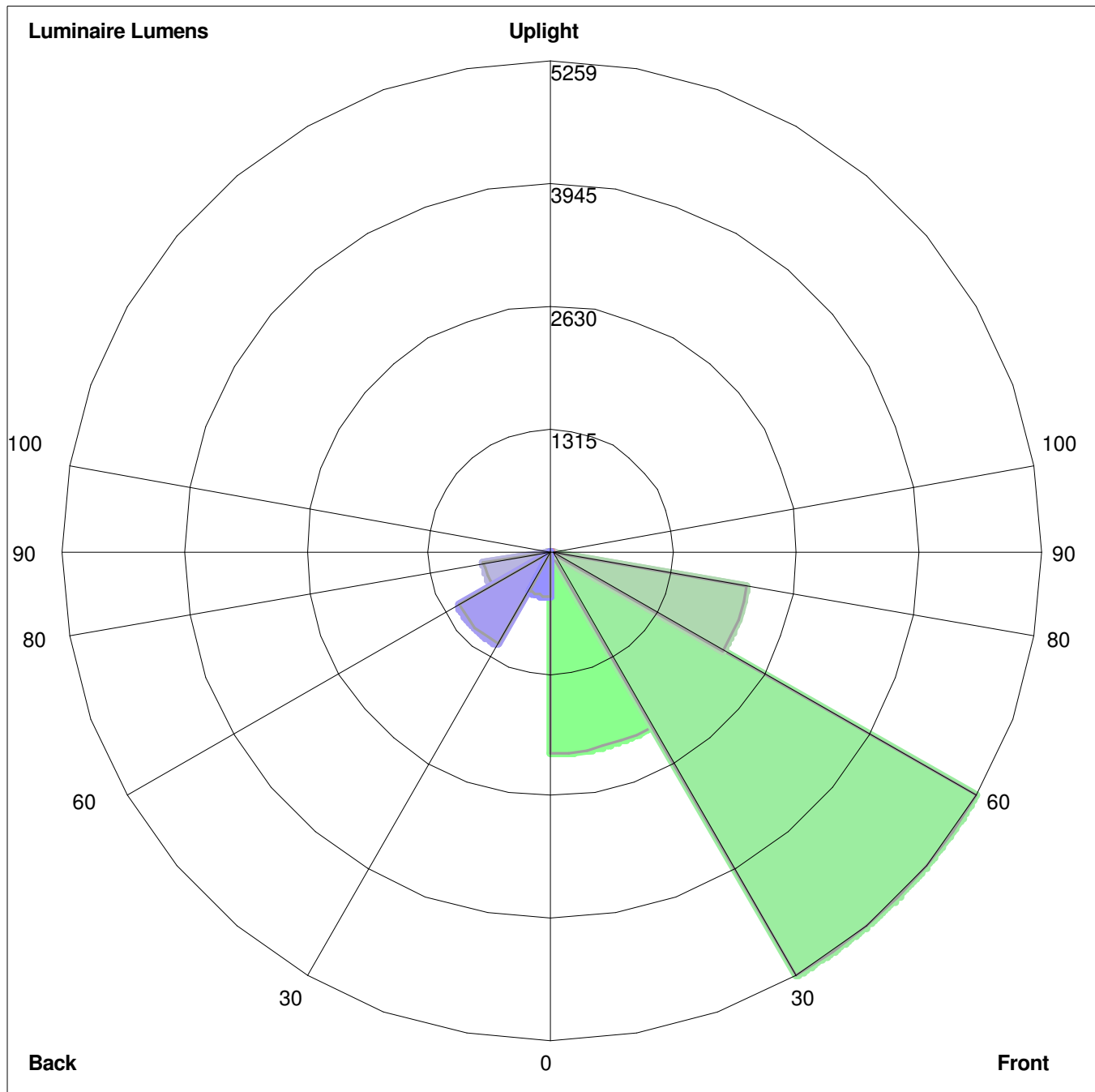


Maximum Candela = 12178.294 Located At Horizontal Angle = 77.5, Vertical Angle = 68
1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (68) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2170.7, Medium=5259.4, High=2126.6, Very High=31.1
Back: Low=485.7, Medium=1156.5, High=737.6, Very High=42.0
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2