



## IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L110-740-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-L110-740-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	11660
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	132
Total Luminaire Watts	88
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	11823.585
Maximum Candela Angle	77.5H 68V
Maximum Candela (<90 Degrees Vertical)	11823.585
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	451.548 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : VA1-L110-740-T2-F-S-XXX-DIM-UNV\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2107.5	N.A.	18.1
FM - Front-Medium (30-60)	5106.2	N.A.	43.8
FH - Front-High (60-80)	2064.7	N.A.	17.7
FVH - Front-Very High (80-90)	30.2	N.A.	0.3
BL - Back-Low (0-30)	471.6	N.A.	4.0
BM - Back-Medium (30-60)	1122.8	N.A.	9.6
BH - Back-High (60-80)	716.1	N.A.	6.1
BVH - Back-Very High (80-90)	40.8	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	11659.9	N.A.	100.0
BUG Rating	B2-U0-G2		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>0.0</b></u>	<u><b>5.0</b></u>	<u><b>15.0</b></u>	<u><b>25.0</b></u>	<u><b>35.0</b></u>	<u><b>45.0</b></u>	<u><b>55.0</b></u>	<u><b>65.0</b></u>	<u><b>75.0</b></u>	<u><b>77.5</b></u>
<b>0.0</b>	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859
<b>2.5</b>	3190.861	3130.205	3133.268	3070.162	3035.852	2976.421	2909.026	2819.574	2738.700	2708.678
<b>5.0</b>	3904.026	3863.588	3843.982	3736.150	3643.022	3499.041	3335.454	3138.783	2937.209	2874.103
<b>7.5</b>	4641.085	4604.324	4558.985	4404.589	4238.551	4010.020	3752.692	3453.702	3127.754	3045.042
<b>10.0</b>	5315.038	5267.249	5208.431	5038.105	4829.792	4533.865	4193.213	3761.883	3326.264	3212.305
<b>12.5</b>	5731.663	5710.832	5661.205	5536.830	5340.158	5024.013	4623.930	4079.253	3532.739	3391.821
<b>15.0</b>	5748.819	5748.819	5745.142	5755.558	5685.712	5447.990	5039.943	4445.026	3756.369	3587.268
<b>17.5</b>	5657.529	5654.465	5651.402	5699.191	5767.812	5739.016	5427.772	4802.834	4008.795	3809.059
<b>20.0</b>	5676.522	5675.909	5678.360	5683.261	5720.022	5817.439	5754.333	5192.501	4299.820	4062.098
<b>22.5</b>	5606.063	5612.803	5657.529	5716.959	5735.952	5787.418	5954.681	5586.457	4631.282	4353.123
<b>25.0</b>	5319.327	5332.806	5440.638	5640.373	5753.720	5797.833	6027.590	5973.061	4989.702	4675.395
<b>27.5</b>	4841.433	4857.363	5050.358	5348.123	5667.944	5832.756	6050.872	6301.460	5359.151	5010.534
<b>30.0</b>	4436.448	4456.054	4593.296	4899.638	5386.109	5818.665	6101.725	6556.337	5712.670	5345.059
<b>32.5</b>	4200.565	4220.171	4344.546	4557.147	4965.195	5686.325	6175.247	6718.085	6075.992	5667.332
<b>35.0</b>	4024.724	4038.816	4158.902	4356.799	4634.958	5421.645	6248.156	6805.087	6395.813	5954.068
<b>37.5</b>	3763.721	3775.975	3924.857	4152.775	4416.230	5137.972	6299.622	6856.552	6677.036	6215.071
<b>40.0</b>	3309.722	3325.651	3514.971	3815.799	4157.064	4862.264	6432.574	6905.567	6940.490	6498.132
<b>42.5</b>	2660.276	2673.755	2915.153	3260.707	3772.911	4492.815	6598.612	7077.731	7182.500	6750.558
<b>45.0</b>	2056.169	2061.683	2213.629	2483.210	3146.748	4053.521	6375.595	7655.493	7379.172	7006.660
<b>47.5</b>	1657.924	1656.699	1727.770	1841.730	2249.165	3418.167	5748.819	8325.157	7656.105	7303.812
<b>50.0</b>	1469.830	1463.091	1472.894	1499.239	1656.086	2256.517	4987.864	8676.838	8465.462	8061.090
<b>52.5</b>	1391.406	1385.280	1362.610	1322.173	1398.759	1551.317	3780.876	9057.927	9752.099	9309.741
<b>55.0</b>	1249.876	1254.778	1287.863	1262.743	1265.193	1336.265	2278.574	9220.289	10884.340	10479.355
<b>57.5</b>	1077.099	1082.001	1136.530	1233.947	1232.109	1240.686	1808.032	8561.040	11226.218	10905.784
<b>60.0</b>	935.569	942.309	996.838	1113.248	1191.059	1170.227	1698.361	7297.685	11149.632	11017.292
<b>62.5</b>	772.595	784.236	860.822	987.035	1063.008	1058.719	1556.219	5895.863	11042.413	11118.998
<b>65.0</b>	611.459	624.325	711.327	845.505	920.865	902.484	1338.716	4357.412	11003.201	11259.303
<b>67.5</b>	432.555	443.584	541.613	685.594	762.792	741.348	1066.071	3024.211	11436.981	11797.240
<b>68.0</b>	388.442	396.407	501.176	651.284	730.933	708.876	1007.253	2810.996	11460.876	11823.585
<b>70.0</b>	314.920	318.596	349.843	517.106	605.945	587.564	783.011	2065.972	10430.953	10724.429
<b>72.5</b>	247.525	250.588	275.708	365.773	476.056	474.830	551.416	1256.616	7014.625	7186.176
<b>75.0</b>	185.031	188.707	211.376	256.715	378.026	411.724	366.998	648.220	2456.252	2445.836
<b>77.5</b>	129.889	134.791	156.235	188.094	295.314	381.090	224.243	342.491	520.169	536.712
<b>80.0</b>	86.389	90.677	106.607	121.312	221.792	283.060	133.565	188.094	239.560	245.074
<b>82.5</b>	52.078	52.078	61.268	69.233	137.854	125.600	71.071	95.579	123.762	119.473
<b>85.0</b>	22.057	22.057	25.733	29.409	68.008	43.501	30.022	34.310	46.564	45.339
<b>87.5</b>	4.289	4.289	4.901	4.901	12.866	5.514	3.676	4.901	5.514	5.514
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>85.0</b></u>	<u><b>90.0</b></u>	<u><b>95.0</b></u>	<u><b>105.0</b></u>	<u><b>115.0</b></u>	<u><b>125.0</b></u>	<u><b>135.0</b></u>	<u><b>145.0</b></u>	<u><b>155.0</b></u>	<u><b>165.0</b></u>
<b>0.0</b>	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859	2562.859
<b>2.5</b>	2629.029	2576.951	2526.711	2411.526	2306.757	2194.023	2138.269	2059.845	1976.520	1974.682
<b>5.0</b>	2693.361	2572.049	2449.513	2189.734	1945.886	1718.580	1560.507	1421.428	1313.596	1279.285
<b>7.5</b>	2763.207	2574.500	2383.343	1976.520	1632.191	1331.363	1166.551	1058.106	995.612	974.781
<b>10.0</b>	2838.567	2586.141	2325.750	1784.137	1361.385	1094.867	984.584	935.569	909.224	896.357
<b>12.5</b>	2924.343	2606.360	2277.961	1611.973	1172.065	978.457	919.027	888.393	869.399	860.209
<b>15.0</b>	3026.049	2644.959	2244.263	1460.027	1043.402	923.928	882.266	858.984	844.279	836.314
<b>17.5</b>	3147.360	2697.650	2222.819	1337.490	974.781	892.681	857.146	840.603	828.349	819.159
<b>20.0</b>	3293.179	2771.172	2217.305	1241.299	940.471	872.463	840.603	828.349	819.772	806.905
<b>22.5</b>	3461.667	2867.363	2223.432	1167.777	919.639	856.533	829.575	819.772	814.870	800.166
<b>25.0</b>	3653.438	2973.971	2244.876	1111.410	900.646	841.828	818.546	811.807	809.356	783.623

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**CANDELA TABULATION - (Cont.)**

27.5	3852.560	3094.057	2276.736	1069.134	881.040	824.673	805.680	802.004	792.201	764.018
30.0	4059.035	3226.397	2317.173	1038.500	863.272	807.518	789.138	786.074	771.982	746.250
32.5	4254.481	3351.997	2363.124	1016.444	846.117	788.525	769.532	762.792	738.897	678.854
35.0	4416.842	3456.153	2403.561	996.225	828.962	767.694	748.088	718.679	667.826	623.100
37.5	4551.020	3559.084	2445.224	976.006	805.067	746.862	702.749	656.185	614.523	599.205
40.0	4722.572	3690.199	2508.330	961.302	780.560	713.777	646.995	591.241	590.015	577.149
42.5	4875.130	3810.285	2587.979	952.112	754.827	666.601	607.170	558.156	566.733	572.247
45.0	5045.457	3957.329	2686.621	946.598	727.256	625.551	544.064	533.036	550.803	559.994
47.5	5268.474	4158.290	2836.729	953.337	697.848	599.205	521.394	514.042	533.036	546.515
50.0	5901.990	4737.889	3268.059	1016.444	674.566	578.374	518.331	497.500	519.556	541.000
52.5	6927.011	5640.373	4035.753	1200.862	642.706	524.458	525.683	475.443	514.042	545.902
55.0	7689.803	6336.383	4672.332	1284.187	581.438	470.542	462.577	460.126	516.493	554.479
57.5	7527.442	6245.706	4625.155	1156.748	517.106	432.555	427.654	450.936	518.944	550.803
60.0	7267.051	6015.949	4387.434	947.210	456.450	399.470	403.146	444.809	507.915	527.521
62.5	7028.104	5781.291	4214.657	789.750	402.534	373.125	381.702	431.943	479.119	491.986
65.0	6909.856	5636.697	4131.944	672.728	354.132	342.491	359.646	408.048	439.907	484.021
67.5	6940.490	5472.498	4010.020	552.641	311.856	308.793	335.751	375.576	408.048	643.319
68.0	6899.440	5385.497	3962.231	523.845	304.504	302.053	330.237	368.223	411.724	683.143
70.0	6167.282	4437.674	3356.898	426.428	276.321	276.321	306.955	337.589	485.859	829.575
72.5	4432.772	2826.314	2151.748	295.927	240.785	248.137	274.483	296.539	644.544	945.985
75.0	1433.069	1035.437	936.795	207.700	200.961	218.116	240.785	261.004	737.672	864.498
77.5	356.582	274.483	220.566	137.854	154.396	178.904	199.122	232.820	678.854	631.065
80.0	177.066	143.368	118.861	91.903	107.220	134.178	151.333	179.517	451.548	404.984
82.5	98.030	82.100	65.557	53.304	68.008	90.677	98.030	113.959	259.778	240.785
85.0	35.536	31.860	26.345	22.057	32.472	39.212	44.726	49.015	117.635	104.156
87.5	3.063	3.063	1.838	1.225	4.901	7.352	7.965	9.803	26.958	12.866
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**

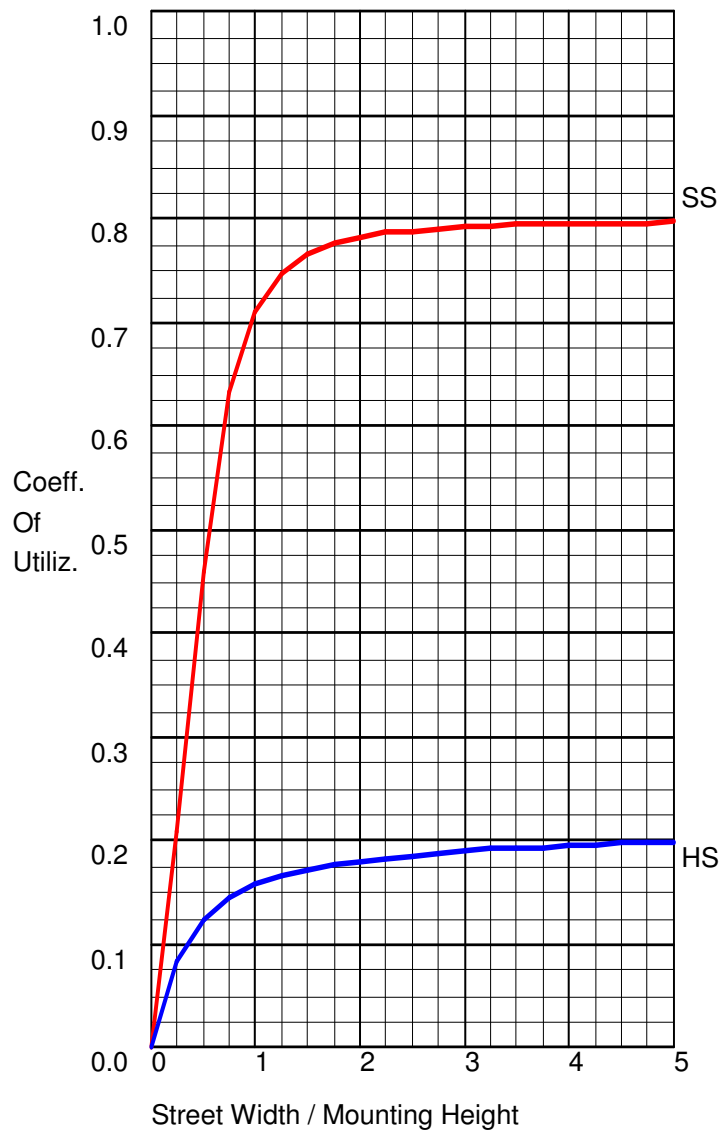
	<u>175.0</u>	<u>180.0</u>
0.0	2562.859	2562.859
2.5	1893.808	1929.956
5.0	1214.341	1233.947
7.5	953.950	957.626
10.0	886.554	887.167
12.5	853.469	853.469
15.0	832.026	832.638
17.5	814.870	815.483
20.0	800.166	800.166
22.5	789.750	789.750
25.0	767.081	767.694
27.5	749.926	750.538
30.0	713.777	714.390
32.5	649.446	647.608
35.0	609.621	610.846
37.5	591.241	594.304
40.0	567.346	572.247
42.5	552.641	552.029
45.0	548.353	534.261
47.5	529.972	529.972
50.0	528.747	537.324
52.5	543.451	553.254
55.0	558.768	567.346
57.5	556.930	564.282
60.0	536.099	544.064

**IES ROAD REPORT**  
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**CANDELA TABULATION - (Cont.)**

<b>62.5</b>	507.303	517.718
<b>65.0</b>	552.641	578.374
<b>67.5</b>	697.235	722.355
<b>68.0</b>	721.130	745.024
<b>70.0</b>	802.004	827.737
<b>72.5</b>	818.546	831.413
<b>75.0</b>	675.178	702.136
<b>77.5</b>	463.802	466.253
<b>80.0</b>	298.377	294.701
<b>82.5</b>	180.129	184.418
<b>85.0</b>	42.275	47.177
<b>87.5</b>	2.451	0.000
<b>90.0</b>	0.000	0.000

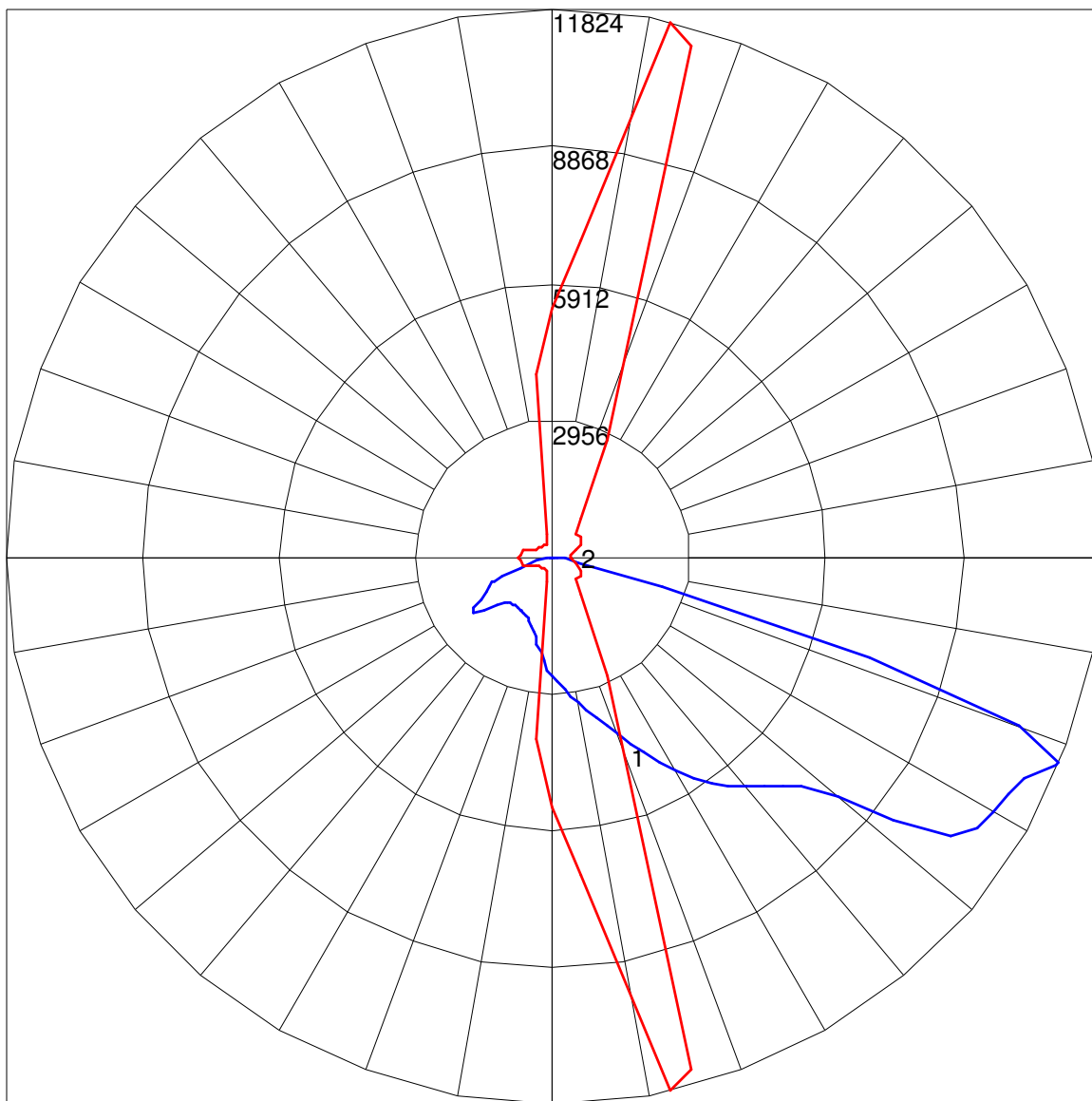
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

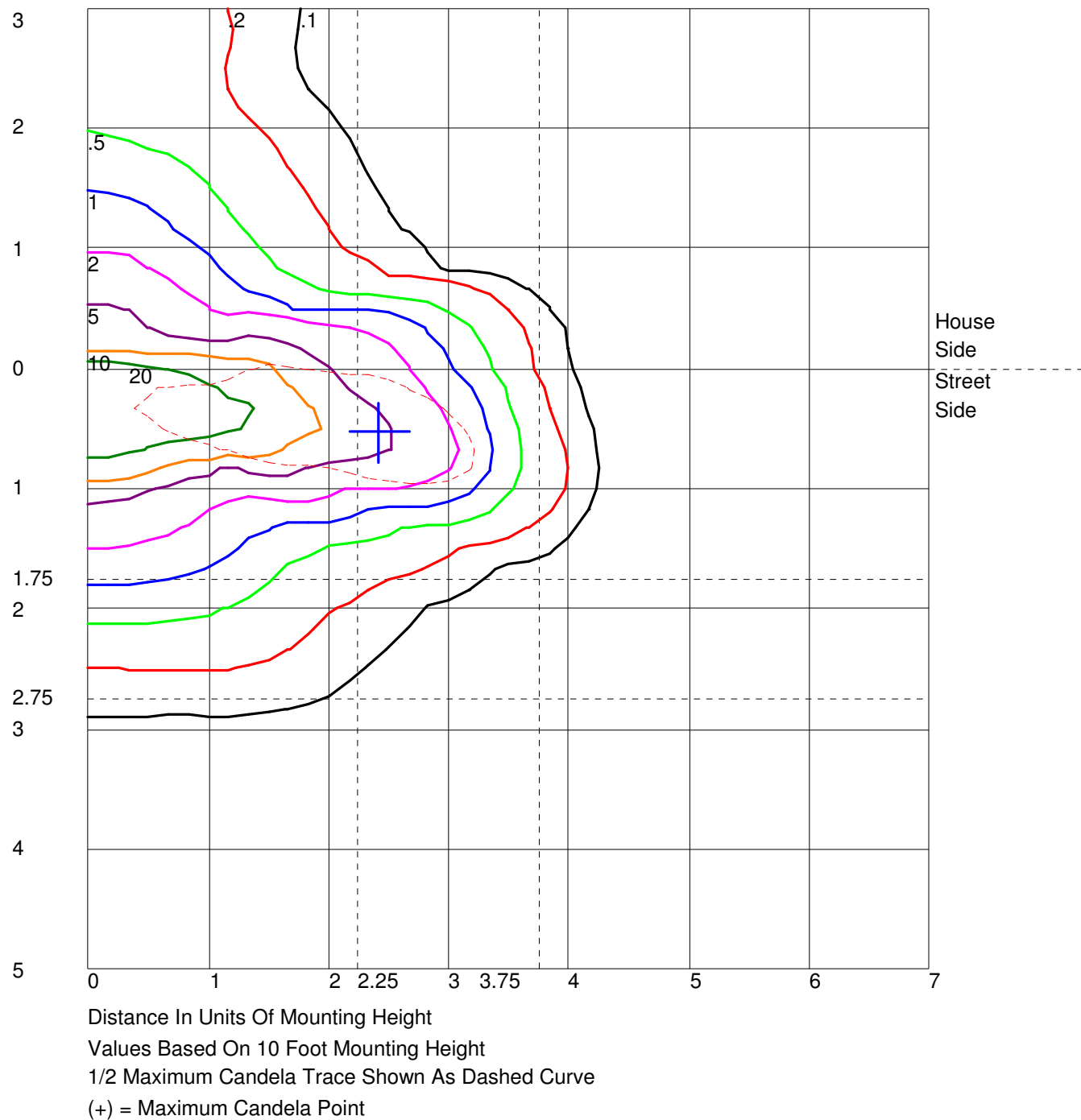
	Lumens	Percent Of Luminaire
Downward Street Side	9308.5	79.8
Downward House Side	2351.3	20.2
Downward Total	11659.8	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	11659.8	100.0

POLAR GRAPH



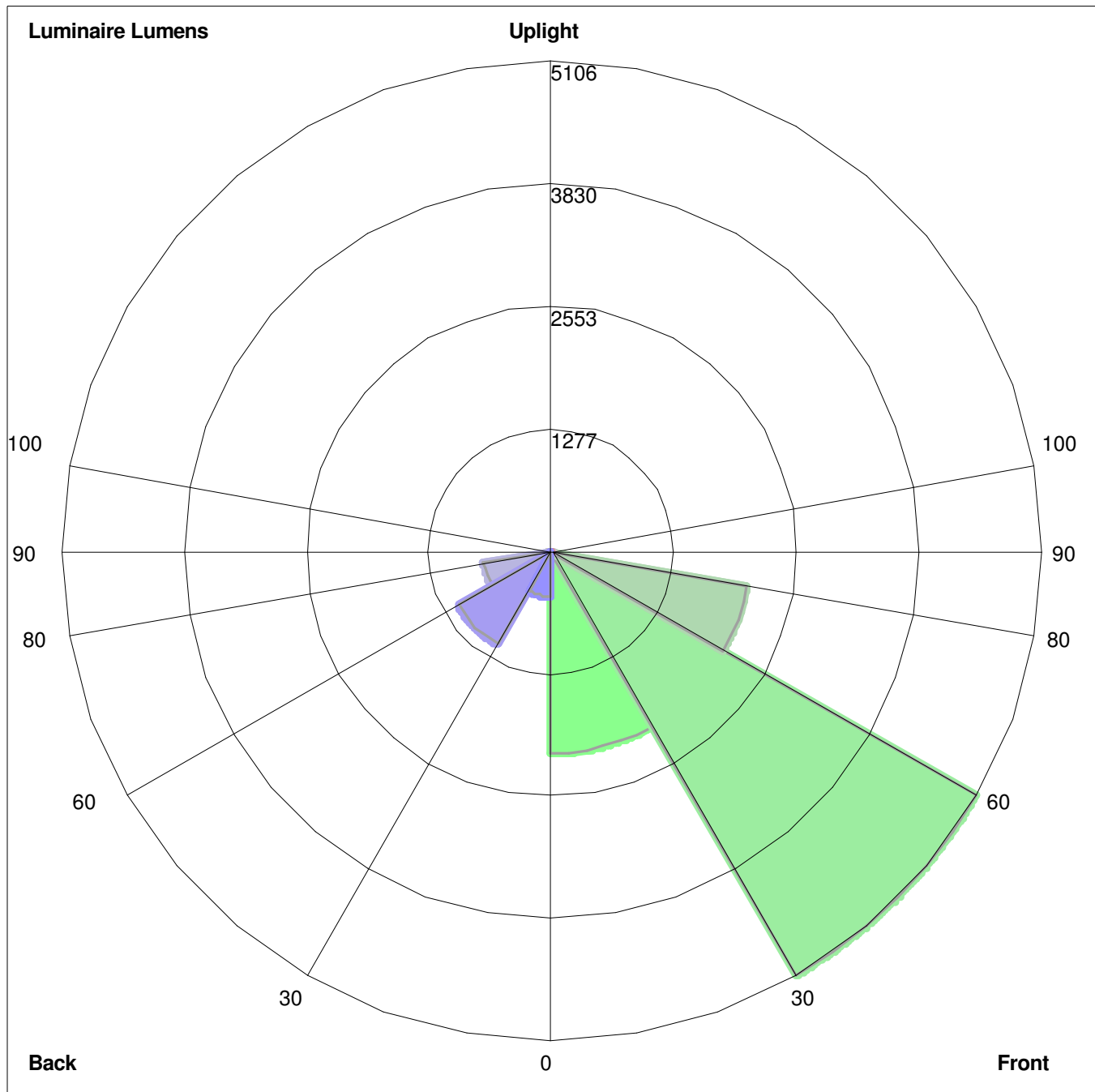
Maximum Candela = 11823.585 Located At Horizontal Angle = 77.5, Vertical Angle = 68  
# 1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (68) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=2107.5, Medium=5106.2, High=2064.7, Very High=30.2  
Back: Low=471.6, Medium=1122.8, High=716.1, Very High=40.8  
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2