



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L110-730-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-L110-730-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	10610
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	88
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	10759.464
Maximum Candela Angle	77.5H 68V
Maximum Candela (<90 Degrees Vertical)	10759.464
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	410.909 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L110-730-T2-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1917.8	N.A.	18.1
FM - Front-Medium (30-60)	4646.7	N.A.	43.8
FH - Front-High (60-80)	1878.8	N.A.	17.7
FVH - Front-Very High (80-90)	27.4	N.A.	0.3
BL - Back-Low (0-30)	429.1	N.A.	4.0
BM - Back-Medium (30-60)	1021.8	N.A.	9.6
BH - Back-High (60-80)	651.6	N.A.	6.1
BVH - Back-Very High (80-90)	37.1	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	10610.3	N.A.	100.0
BUG Rating	B2-U0-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	77.5
0.0	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202
2.5	2903.684	2848.487	2851.275	2793.848	2762.625	2708.544	2647.214	2565.813	2492.217	2464.898
5.0	3552.664	3515.866	3498.025	3399.897	3315.151	3184.128	3035.264	2856.293	2672.861	2615.434
7.5	4223.388	4189.935	4148.677	4008.176	3857.082	3649.119	3414.951	3142.870	2846.257	2770.989
10.0	4836.685	4793.197	4739.673	4584.676	4395.111	4125.818	3815.824	3423.314	3026.901	2923.198
12.5	5215.815	5196.858	5151.697	5038.516	4859.545	4571.852	4207.777	3712.121	3214.793	3086.558
15.0	5231.426	5231.426	5228.081	5237.559	5173.999	4957.672	4586.349	4044.974	3418.296	3264.414
17.5	5148.352	5145.564	5142.776	5186.265	5248.710	5222.505	4939.273	4370.579	3648.004	3466.245
20.0	5165.636	5165.078	5167.308	5171.769	5205.221	5293.871	5236.444	4725.177	3912.837	3696.510
22.5	5101.518	5107.651	5148.352	5202.434	5219.717	5266.551	5418.760	5083.677	4214.467	3961.343
25.0	4840.588	4852.854	4950.982	5132.741	5235.886	5276.029	5485.108	5435.487	4540.630	4254.610
27.5	4405.705	4420.201	4595.827	4866.793	5157.830	5307.809	5506.294	5734.330	4876.828	4559.586
30.0	4037.169	4055.010	4179.900	4458.671	4901.360	5294.986	5552.571	5966.267	5198.531	4864.005
32.5	3822.515	3840.356	3953.537	4147.005	4518.328	5174.556	5619.476	6113.459	5529.154	5157.273
35.0	3662.500	3675.323	3784.602	3964.688	4217.813	4933.698	5685.823	6192.630	5820.191	5418.203
37.5	3424.987	3436.137	3571.620	3779.026	4018.770	4675.555	5732.657	6239.463	6076.103	5655.716
40.0	3011.847	3026.343	3198.624	3472.378	3782.929	4424.661	5853.644	6284.067	6315.847	5913.301
42.5	2420.852	2433.118	2652.789	2967.244	3433.350	4088.463	6004.738	6440.737	6536.076	6143.009
45.0	1871.114	1876.132	2014.403	2259.722	2863.541	3688.704	5801.792	6966.500	6715.048	6376.062
47.5	1508.711	1507.596	1572.271	1675.974	2046.740	3110.532	5231.426	7575.894	6967.057	6646.470
50.0	1337.546	1331.413	1340.333	1364.308	1507.039	2053.431	4538.957	7895.924	7703.571	7335.593
52.5	1266.180	1260.605	1239.976	1203.178	1272.871	1411.699	3440.598	8242.715	8874.412	8471.866
55.0	1137.388	1141.848	1171.955	1149.096	1151.326	1216.001	2073.502	8390.464	9904.751	9536.215
57.5	980.161	984.621	1034.242	1122.892	1121.219	1129.025	1645.309	7790.548	10215.860	9924.265
60.0	851.368	857.501	907.122	1013.056	1083.864	1064.907	1545.509	6640.894	10146.167	10025.738
62.5	703.062	713.655	783.348	898.202	967.337	963.434	1416.159	5365.236	10048.597	10118.290
65.0	556.428	568.136	647.307	769.409	837.987	821.261	1218.231	3965.246	10012.914	10245.967
67.5	393.625	403.661	492.868	623.891	694.141	674.627	970.125	2752.032	10407.655	10735.490
68.0	353.482	360.730	456.070	592.668	665.149	645.077	916.601	2558.007	10429.399	10759.464
70.0	286.577	289.922	318.357	470.566	551.410	534.684	712.540	1880.035	9492.169	9759.232
72.5	225.247	228.035	250.894	332.853	433.211	432.096	501.789	1143.521	6383.310	6539.422
75.0	168.378	171.723	192.352	233.611	344.004	374.669	333.968	589.880	2235.190	2225.712
77.5	118.199	122.659	142.173	171.166	268.736	346.792	204.061	311.667	473.354	488.408
80.0	78.614	82.516	97.012	110.394	201.831	257.585	121.544	171.166	217.999	223.017
82.5	47.391	47.391	55.754	63.002	125.447	114.296	64.675	86.977	112.624	108.721
85.0	20.072	20.072	23.417	26.762	61.887	39.586	27.320	31.222	42.373	41.258
87.5	3.903	3.903	4.460	4.460	11.708	5.018	3.345	4.460	5.018	5.018
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	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202	2332.202
2.5	2392.417	2345.026	2299.307	2194.489	2099.149	1996.561	1945.825	1874.459	1798.634	1796.961
5.0	2450.959	2340.565	2229.057	1992.659	1770.757	1563.908	1420.062	1293.500	1195.372	1164.150
7.5	2514.519	2342.796	2168.842	1798.634	1485.294	1211.541	1061.562	962.877	906.007	887.051
10.0	2583.097	2353.389	2116.433	1623.565	1238.861	996.329	895.972	851.368	827.394	815.685
12.5	2661.153	2371.788	2072.945	1466.896	1066.580	890.396	836.314	808.437	791.153	782.790
15.0	2753.705	2406.913	2042.280	1328.625	949.496	840.775	802.862	781.675	768.294	761.046
17.5	2864.098	2454.862	2022.766	1217.116	887.051	812.340	780.003	764.949	753.798	745.435
20.0	2996.794	2521.767	2017.748	1129.582	855.828	793.941	764.949	753.798	745.993	734.284
22.5	3150.118	2609.301	2023.323	1062.677	836.872	779.445	754.913	745.993	741.532	728.151
25.0	3324.629	2706.314	2042.837	1011.383	819.588	766.064	744.877	738.744	736.514	713.097

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CANDELA TABULATION - (Cont.)

27.5	3505.830	2815.592	2071.830	972.912	801.747	750.453	733.169	729.824	720.903	695.256
30.0	3693.722	2936.021	2108.628	945.035	785.578	734.842	718.115	715.328	702.504	679.087
32.5	3871.578	3050.318	2150.443	924.964	769.967	717.558	700.274	694.141	672.397	617.758
35.0	4019.327	3145.100	2187.241	906.565	754.356	698.601	680.760	653.998	607.722	567.021
37.5	4141.429	3238.767	2225.154	888.166	732.611	679.645	639.502	597.129	559.216	545.277
40.0	4297.541	3358.081	2282.581	874.785	710.310	649.538	588.765	538.029	536.914	525.205
42.5	4436.369	3467.360	2355.062	866.422	686.893	606.607	552.525	507.922	515.727	520.745
45.0	4591.366	3601.170	2444.826	861.404	661.804	569.251	495.098	485.062	501.231	509.594
47.5	4794.312	3784.044	2581.424	867.537	635.041	545.277	474.469	467.779	485.062	497.328
50.0	5370.812	4311.480	2973.934	924.964	613.855	526.321	471.681	452.725	472.796	492.310
52.5	6303.581	5132.741	3672.536	1092.784	584.863	477.257	478.372	432.653	467.779	496.771
55.0	6997.722	5766.109	4251.823	1168.610	529.108	428.193	420.945	418.715	470.009	504.576
57.5	6849.973	5683.593	4208.892	1052.641	470.566	393.625	389.165	410.352	472.239	501.231
60.0	6613.017	5474.515	3992.565	861.961	415.370	363.518	366.863	404.776	462.203	480.045
62.5	6395.576	5260.976	3835.338	718.673	366.306	339.544	347.349	393.068	435.999	447.707
65.0	6287.970	5129.395	3760.070	612.182	322.260	311.667	327.278	371.324	400.316	440.459
67.5	6315.847	4979.974	3649.119	502.904	283.789	281.002	305.534	341.774	371.324	585.420
68.0	6278.491	4900.803	3605.630	476.699	277.099	274.869	300.516	335.083	374.669	621.660
70.0	5612.228	4038.284	3054.778	388.050	251.452	251.452	279.329	307.206	442.132	754.913
72.5	4033.823	2571.946	1958.091	269.293	219.114	225.805	249.779	269.851	586.535	860.846
75.0	1304.093	942.248	852.483	189.007	182.874	198.485	219.114	237.513	671.282	786.693
77.5	324.490	249.779	200.715	125.447	140.501	162.803	181.201	211.866	617.758	574.269
80.0	161.130	130.465	108.163	83.631	97.570	122.102	137.713	163.360	410.909	368.536
82.5	89.207	74.711	59.657	48.506	61.887	82.516	89.207	103.703	236.398	219.114
85.0	32.337	28.992	23.974	20.072	29.550	35.683	40.701	44.603	107.048	94.782
87.5	2.788	2.788	1.673	1.115	4.460	6.691	7.248	8.921	24.532	11.708
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

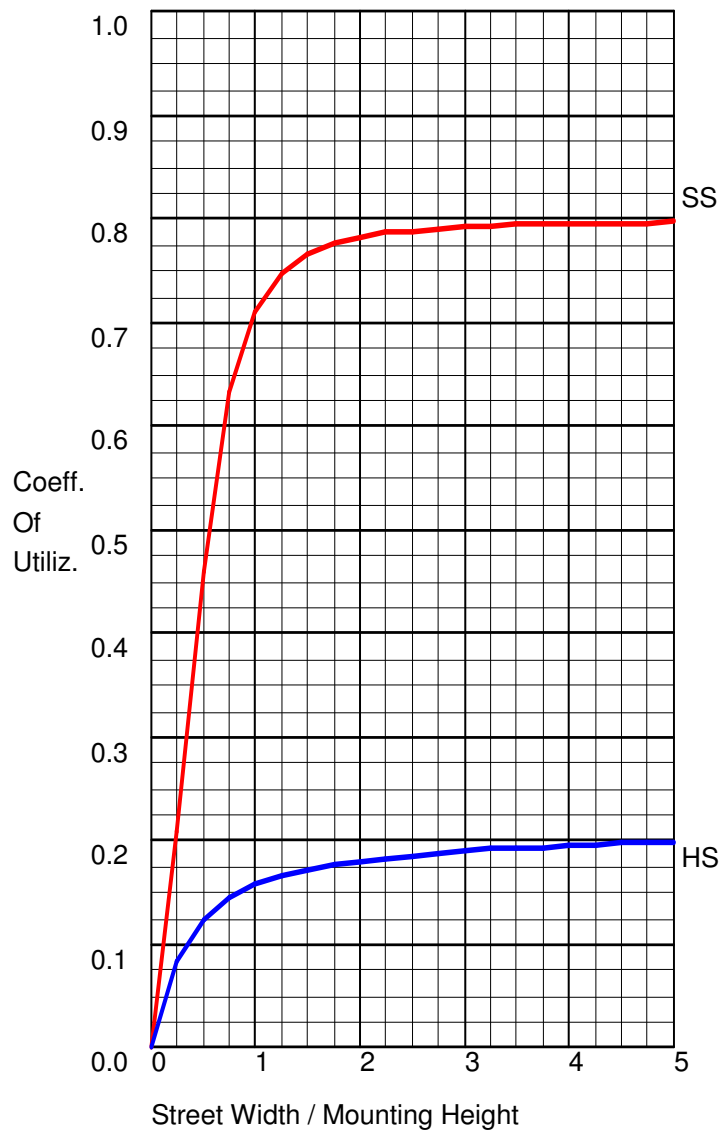
Vert. Angles **Horizontal Angles**

	<u>175.0</u>	<u>180.0</u>
0.0	2332.202	2332.202
2.5	1723.365	1756.260
5.0	1105.050	1122.892
7.5	868.094	871.440
10.0	806.765	807.322
12.5	776.657	776.657
15.0	757.143	757.701
17.5	741.532	742.090
20.0	728.151	728.151
22.5	718.673	718.673
25.0	698.044	698.601
27.5	682.433	682.990
30.0	649.538	650.095
32.5	590.996	589.323
35.0	554.755	555.870
37.5	538.029	540.817
40.0	516.285	520.745
42.5	502.904	502.346
45.0	499.001	486.177
47.5	482.275	482.275
50.0	481.160	488.965
52.5	494.541	503.461
55.0	508.479	516.285
57.5	506.807	513.497
60.0	487.850	495.098

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L110-730-T2-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

62.5	461.646	471.124
65.0	502.904	526.321
67.5	634.484	657.343
68.0	656.228	677.972
70.0	729.824	753.241
72.5	744.877	756.586
75.0	614.412	638.944
77.5	422.060	424.290
80.0	271.523	268.178
82.5	163.918	167.820
85.0	38.470	42.931
87.5	2.230	0.000
90.0	0.000	0.000

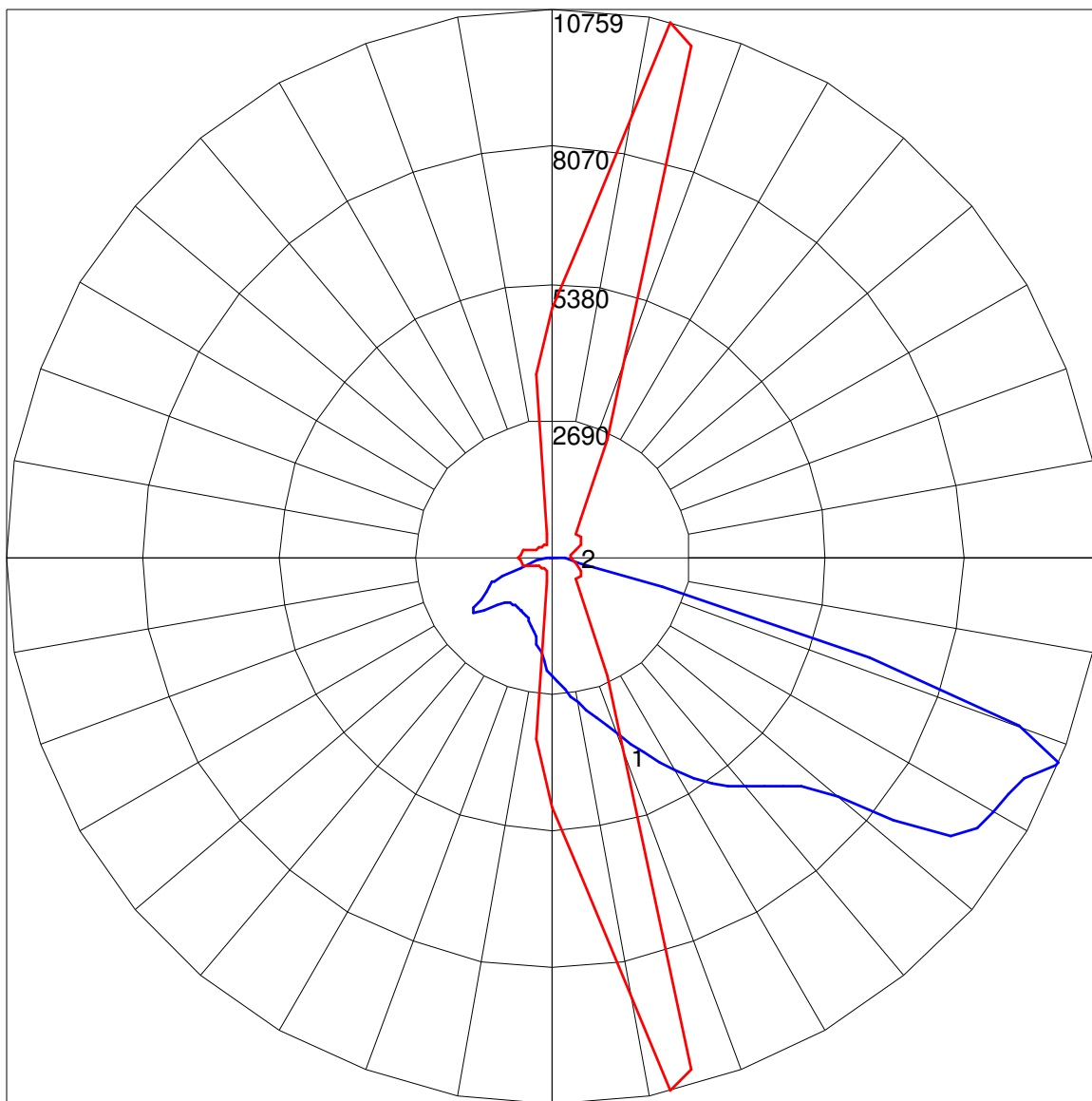
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

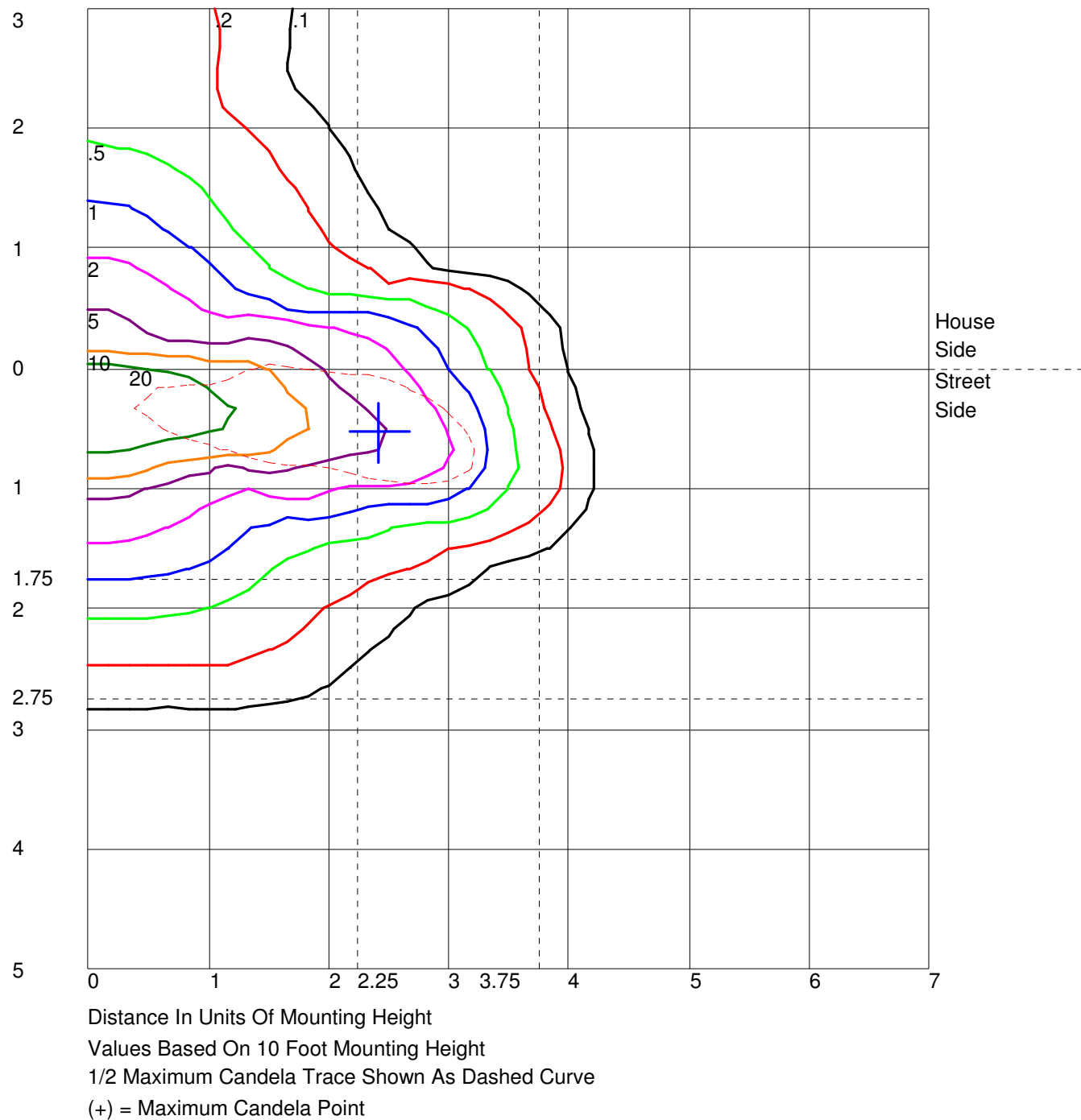
	Lumens	Percent Of Luminaire
Downward Street Side	8470.8	79.8
Downward House Side	2139.7	20.2
Downward Total	10610.5	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	10610.5	100.0

POLAR GRAPH

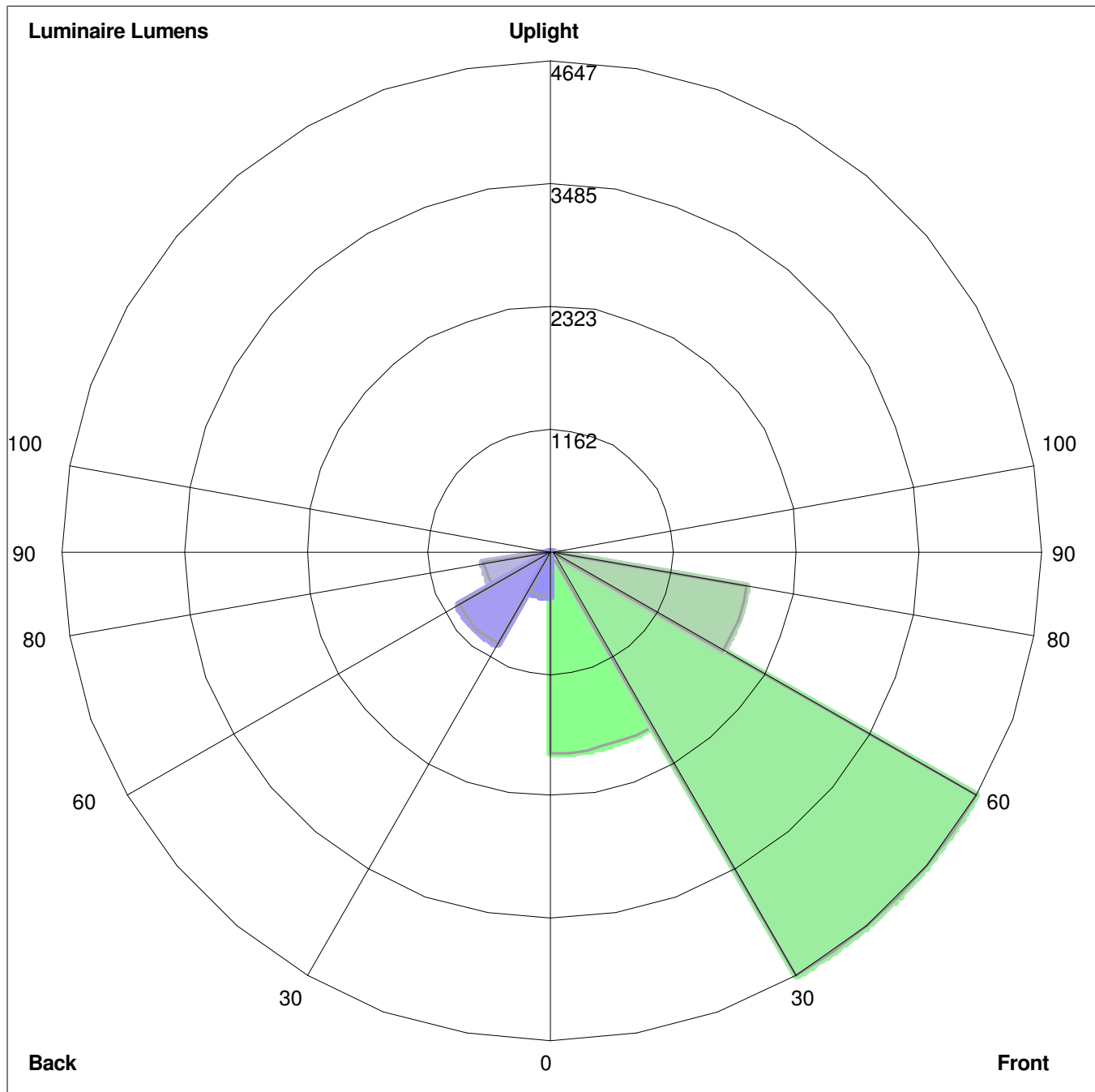


Maximum Candela = 10759.464 Located At Horizontal Angle = 77.5, Vertical Angle = 68
1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (68) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1917.8, Medium=4646.7, High=1878.8, Very High=27.4
Back: Low=429.1, Medium=1021.8, High=651.6, Very High=37.1
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2