



## IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L220-740-T4-F-S-XXX-DIM-UNV\_.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM ATAL011762  
 [TESTLAB] ATA-LABS  
 [ISSUE DATE] 2023-01-18  
 [MANUFAC] WILLIAMS OUTDOOR  
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
 [LUMCAT] VA1-L220-740-T4-F-S-xxx-DIM-UNV\_  
 [LUMINAIRE] VA1 LED AREA LIGHT FIXTURE WITH TYPE IV  
 [MORE] OPTICS AND CLEAR LENS  
 [LAMP] LED  
 [BALLASTCAT] X1-EUD-200S105DT  
 [BALLAST] (1) INVENTRONICS ELECTRONIC DRIVER  
 [ \_SEARCH\_ SOURCETYPE] LED  
 [ \_SEARCH\_ APPLICATION] Outdoor, Architectural, Area, Parking, Site  
 [ \_SEARCH\_ MOUNTING] Pole

### CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	22042
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	182
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	20484.921
Maximum Candela Angle	42.5H 72.5V
Maximum Candela (<90 Degrees Vertical)	20484.921
Maximum Candela Angle (<90 Degrees Vertical)	42.5H 72.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1508.031 (6.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : VA1-L220-740-T4-F-S-XXX-DIM-UNV\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1741.3	N.A.	7.9
FM - Front-Medium (30-60)	6742.7	N.A.	30.6
FH - Front-High (60-80)	7707.4	N.A.	35.0
FVH - Front-Very High (80-90)	138.6	N.A.	0.6
BL - Back-Low (0-30)	1173.4	N.A.	5.3
BM - Back-Medium (30-60)	2783.7	N.A.	12.6
BH - Back-High (60-80)	1654.5	N.A.	7.5
BVH - Back-Very High (80-90)	100.6	N.A.	0.5
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	22042.2	N.A.	100.0
BUG Rating	B3-U0-G4		

**IES ROAD REPORT**  
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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>42.5</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864
2.5	3858.686	3840.853	3818.561	3802.957	3785.124	3761.718	3738.311	3711.561	3668.093	3617.936
5.0	4175.228	4161.853	4135.103	4105.009	4051.509	3994.666	3960.113	3874.291	3769.520	3654.718
7.5	4379.197	4372.509	4353.561	4332.384	4274.426	4199.749	4161.853	4026.988	3867.603	3702.645
10.0	4441.613	4444.957	4427.124	4426.009	4391.457	4323.468	4288.915	4138.447	3965.686	3752.801
12.5	4443.842	4450.530	4433.811	4437.155	4427.124	4360.249	4330.155	4205.322	4043.707	3804.072
15.0	4431.582	4437.155	4417.092	4414.863	4414.863	4360.249	4337.957	4244.332	4112.811	3866.488
17.5	4393.686	4400.374	4393.686	4391.457	4382.540	4339.072	4327.926	4291.145	4177.457	3924.447
20.0	4300.061	4307.863	4332.384	4345.759	4346.874	4315.665	4313.436	4326.811	4186.374	3961.228
22.5	4180.801	4188.603	4277.770	4290.030	4286.686	4282.228	4286.686	4277.770	4196.405	4012.499
25.0	4087.176	4102.780	4253.249	4208.665	4214.238	4252.134	4268.853	4254.363	4225.384	4072.686
27.5	4039.249	4080.488	4184.145	4161.853	4179.686	4245.447	4274.426	4279.999	4266.624	4155.165
30.0	4069.343	4102.780	4119.499	4155.165	4213.124	4277.770	4307.863	4352.447	4350.218	4261.051
32.5	4152.936	4135.103	4136.218	4226.499	4306.749	4360.249	4391.457	4466.134	4463.905	4390.342
35.0	4247.676	4208.665	4222.040	4372.509	4448.301	4497.342	4522.978	4607.686	4598.770	4539.697
37.5	4420.436	4386.999	4427.124	4569.790	4642.238	4673.447	4681.249	4741.436	4743.665	4705.769
40.0	4691.280	4663.415	4683.478	4823.915	4911.967	4888.561	4893.019	4861.811	4889.676	4890.790
42.5	5001.134	4969.926	5001.134	5111.478	5212.905	5152.717	5130.426	5003.363	5052.405	5102.561
45.0	5349.998	5329.936	5360.030	5473.717	5586.290	5469.259	5415.759	5277.551	5277.551	5348.884
47.5	5747.905	5707.780	5760.165	5922.894	5928.467	5856.019	5798.061	5635.332	5576.259	5643.134
50.0	6190.394	6134.665	6178.134	6385.446	6314.113	6277.332	6234.977	6115.717	5987.540	5994.227
52.5	6778.894	6753.258	6652.946	6820.133	6769.977	6771.092	6762.175	6766.633	6480.186	6404.394
55.0	7643.810	7614.831	7355.133	7325.040	7280.456	7375.196	7444.300	7482.196	7036.363	6893.696
57.5	8976.852	8907.747	8446.310	8026.112	7829.946	8148.716	8340.425	8168.779	7617.060	7329.498
60.0	9522.997	9506.279	9549.747	8984.654	8537.706	9134.008	9472.841	8923.352	8108.591	7619.289
62.5	9905.299	9983.320	10335.528	10196.205	9462.810	10474.851	11036.601	9703.560	8370.518	7667.217
65.0	10599.684	10769.101	11639.590	11567.143	10995.361	112794.298	13459.704	10684.393	7997.133	7342.873
67.5	10343.330	10609.716	12570.267	13582.309	13033.934	16255.079	16812.370	11206.018	7025.217	6649.602
70.0	8426.248	8611.268	11561.570	15166.131	15143.839	19778.276	19747.067	9967.716	5454.769	5115.936
72.5	5431.363	5751.248	8819.695	13567.819	15197.339	20484.921	19656.786	6158.071	3470.812	2381.864
75.0	2147.801	2257.031	3918.874	8004.935	11445.653	15126.006	11780.028	2508.926	1993.989	1094.521
77.5	1331.927	1295.145	1185.916	2301.614	4281.113	4078.259	2225.822	1018.729	1088.948	706.646
80.0	879.406	1000.896	694.385	1103.437	1508.031	1112.354	827.021	575.125	626.396	461.437
82.5	468.125	549.489	434.687	570.667	627.510	464.781	440.260	325.458	324.344	263.042
85.0	202.854	258.583	189.479	218.458	247.437	179.448	189.479	149.354	140.437	115.917
87.5	62.417	81.365	42.354	43.469	51.271	37.896	35.667	37.896	30.094	30.094
90.0	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>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	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864	3558.864
2.5	3563.322	3542.145	3518.739	3469.697	3426.228	3374.957	3340.405	3311.426	3295.822	3280.218
5.0	3534.343	3484.187	3429.572	3319.228	3223.374	3136.437	3074.020	3032.780	3007.145	2990.426
7.5	3523.197	3441.832	3361.582	3195.510	3062.874	2967.020	2912.405	2890.114	2872.280	2866.708
10.0	3514.280	3401.707	3293.593	3081.822	2939.155	2857.791	2828.812	2833.270	2852.218	2877.853
12.5	3510.936	3366.041	3227.832	2975.937	2836.614	2786.458	2799.833	2845.530	2915.749	2985.968
15.0	3520.968	3338.176	3167.645	2877.853	2750.791	2739.645	2789.801	2877.853	2999.343	3105.228
17.5	3528.770	3316.999	3111.916	2790.916	2680.572	2699.520	2763.051	2878.968	2985.968	3074.020
20.0	3539.916	3300.280	3063.989	2715.124	2622.614	2656.051	2721.812	2788.687	2878.968	2974.822
22.5	3556.634	3283.562	3012.718	2644.905	2572.458	2618.156	2634.874	2672.770	2751.905	2842.187
25.0	3587.843	3279.103	2970.364	2585.833	2532.333	2565.770	2527.874	2557.968	2607.010	2692.833
27.5	3633.541	3286.905	2943.614	2542.364	2501.124	2488.864	2432.020	2445.395	2485.520	2569.114

# IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L220-740-T4-F-S-XXX-DIM-UNV\_.IES

## CANDELA TABULATION - (Cont.)

30.0	3705.989	3316.999	2931.353	2507.812	2477.718	2409.728	2350.656	2350.656	2369.603	2453.197
32.5	3799.613	3361.582	2933.582	2486.635	2459.885	2346.197	2275.979	2253.687	2280.437	2395.239
35.0	3926.676	3426.228	2951.416	2478.833	2436.478	2292.697	2206.874	2167.864	2245.885	2364.031
37.5	4078.259	3515.395	2989.312	2488.864	2393.010	2241.426	2123.281	2126.624	2218.020	2350.656
40.0	4265.509	3651.374	3060.645	2521.187	2348.426	2195.729	2058.635	2100.989	2191.270	2349.541
42.5	4508.488	3837.509	3168.760	2557.968	2312.760	2158.947	2028.541	2068.666	2165.635	2339.510
45.0	4806.082	4086.061	3324.801	2571.343	2303.843	2119.937	2017.395	2034.114	2138.885	2320.562
47.5	5146.030	4390.342	3534.343	2581.374	2300.499	2085.385	1992.874	1996.218	2104.333	2195.729
50.0	5542.821	4739.207	3767.291	2618.156	2298.270	2053.062	1952.749	1954.979	1966.124	2147.801
52.5	5978.623	5103.676	4016.957	2710.666	2301.614	2038.572	1914.854	1904.822	1873.614	2111.020
55.0	6502.477	5723.384	4463.905	2788.687	2307.187	2061.979	1915.968	1831.260	1837.947	2049.718
57.5	7354.019	6629.540	4882.988	2858.905	2378.520	2146.687	1998.447	1858.010	1873.614	2004.020
60.0	8182.154	7045.279	5220.707	3022.749	2459.885	2185.697	2066.437	1931.572	1998.447	2031.885
62.5	8131.998	7069.800	5586.290	3117.489	2439.822	2144.458	2007.364	1870.270	2086.499	1990.645
65.0	7549.071	6803.415	5303.186	2906.833	2400.812	2129.968	1910.395	1684.135	1930.458	1833.489
67.5	5608.582	4903.051	3488.645	2121.051	2136.656	2079.812	1824.572	1510.260	1712.000	1724.260
70.0	2780.885	2185.697	1524.750	1179.229	1509.145	1875.843	1765.499	1356.448	1500.229	1561.531
72.5	1170.312	959.656	806.958	756.802	895.010	1469.020	1671.875	1177.000	1250.562	1382.083
75.0	722.250	635.312	556.177	548.375	595.187	956.312	1437.812	1015.385	999.781	1136.875
77.5	490.417	429.114	381.187	385.646	422.427	599.646	1083.375	869.375	785.781	841.510
80.0	322.114	278.646	247.437	260.812	288.677	374.500	686.583	626.396	598.531	625.281
82.5	185.021	156.042	139.323	156.042	176.104	219.573	374.500	433.573	438.031	468.125
85.0	83.594	69.104	60.187	71.333	83.594	102.542	172.760	205.083	198.396	190.594
87.5	22.292	18.948	17.833	21.177	24.521	30.094	51.271	51.271	45.698	30.094
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

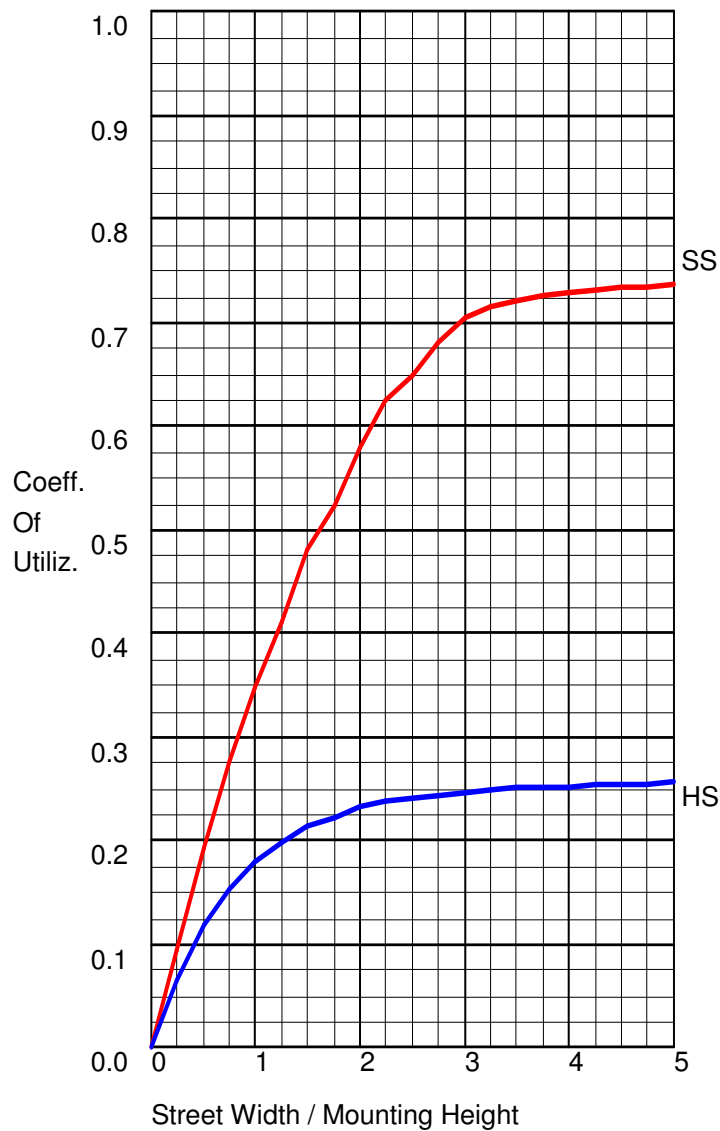
## Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	3558.864	3558.864
2.5	3256.812	3272.416
5.0	2972.593	2977.051
7.5	2860.020	2857.791
10.0	2893.458	2886.770
12.5	3030.551	3024.978
15.0	3157.614	3162.072
17.5	3120.832	3124.176
20.0	3029.437	3027.207
22.5	2894.572	2904.603
25.0	2760.822	2775.312
27.5	2627.072	2642.676
30.0	2527.874	2545.708
32.5	2483.291	2501.124
35.0	2457.656	2473.260
37.5	2464.343	2476.603
40.0	2477.718	2488.864
42.5	2460.999	2472.145
45.0	2387.437	2396.353
47.5	2329.479	2341.739
50.0	2342.853	2351.770
52.5	2330.593	2340.624
55.0	2271.520	2290.468
57.5	2213.562	2231.395
60.0	2142.229	2156.718
62.5	2011.822	2032.999
65.0	1852.437	1897.020

**IES ROAD REPORT****PHOTOMETRIC FILENAME : VA1-L220-740-T4-F-S-XXX-DIM-UNV\_.IES****CANDELA TABULATION - (Cont.)**

<b>67.5</b>	1683.020	1743.208
<b>70.0</b>	1503.572	1581.593
<b>72.5</b>	1334.156	1402.145
<b>75.0</b>	1113.468	1164.739
<b>77.5</b>	909.500	979.718
<b>80.0</b>	819.219	871.604
<b>82.5</b>	473.698	480.385
<b>85.0</b>	138.208	124.833
<b>87.5</b>	12.260	6.687
<b>90.0</b>	0.000	0.000

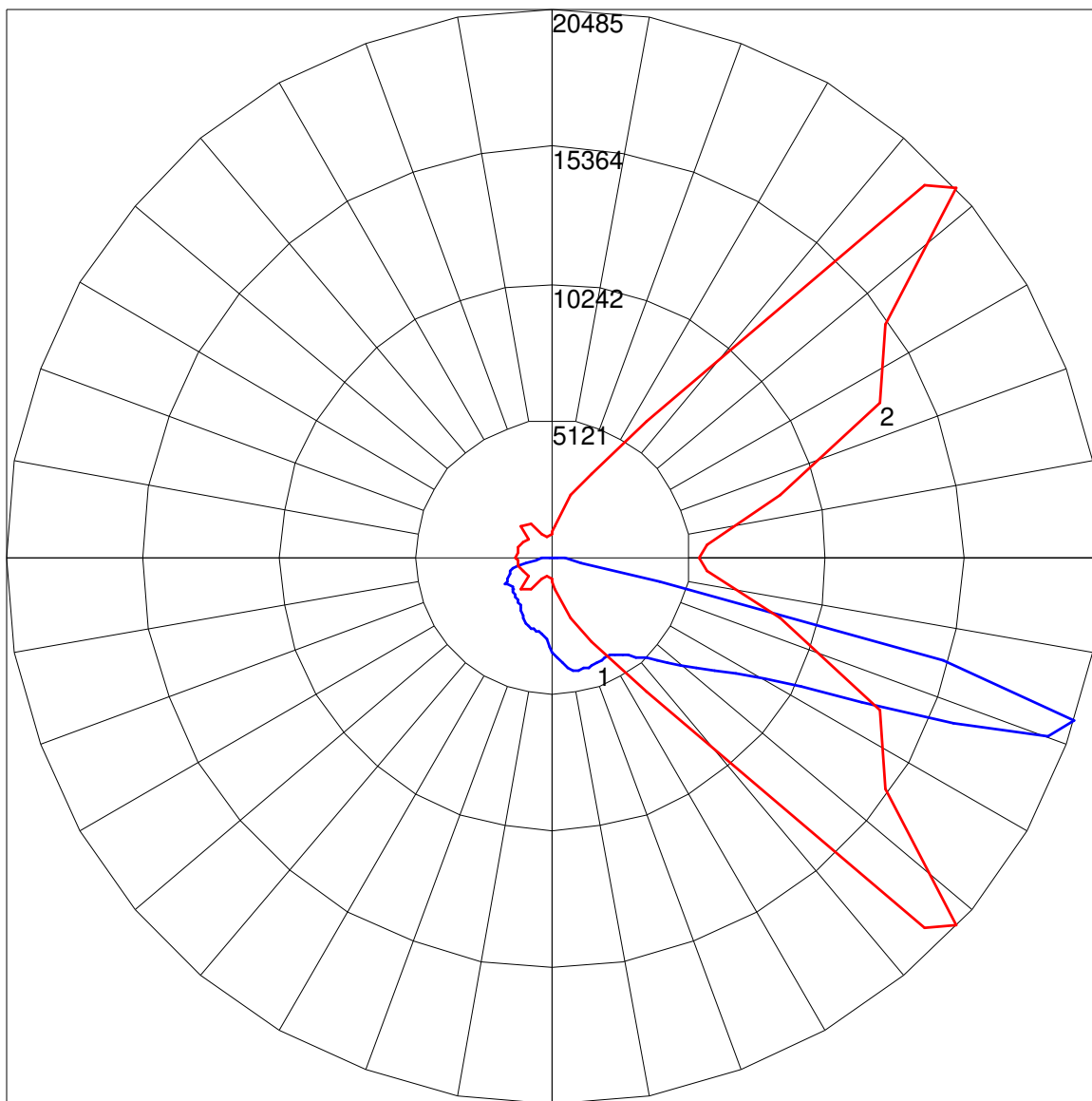
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

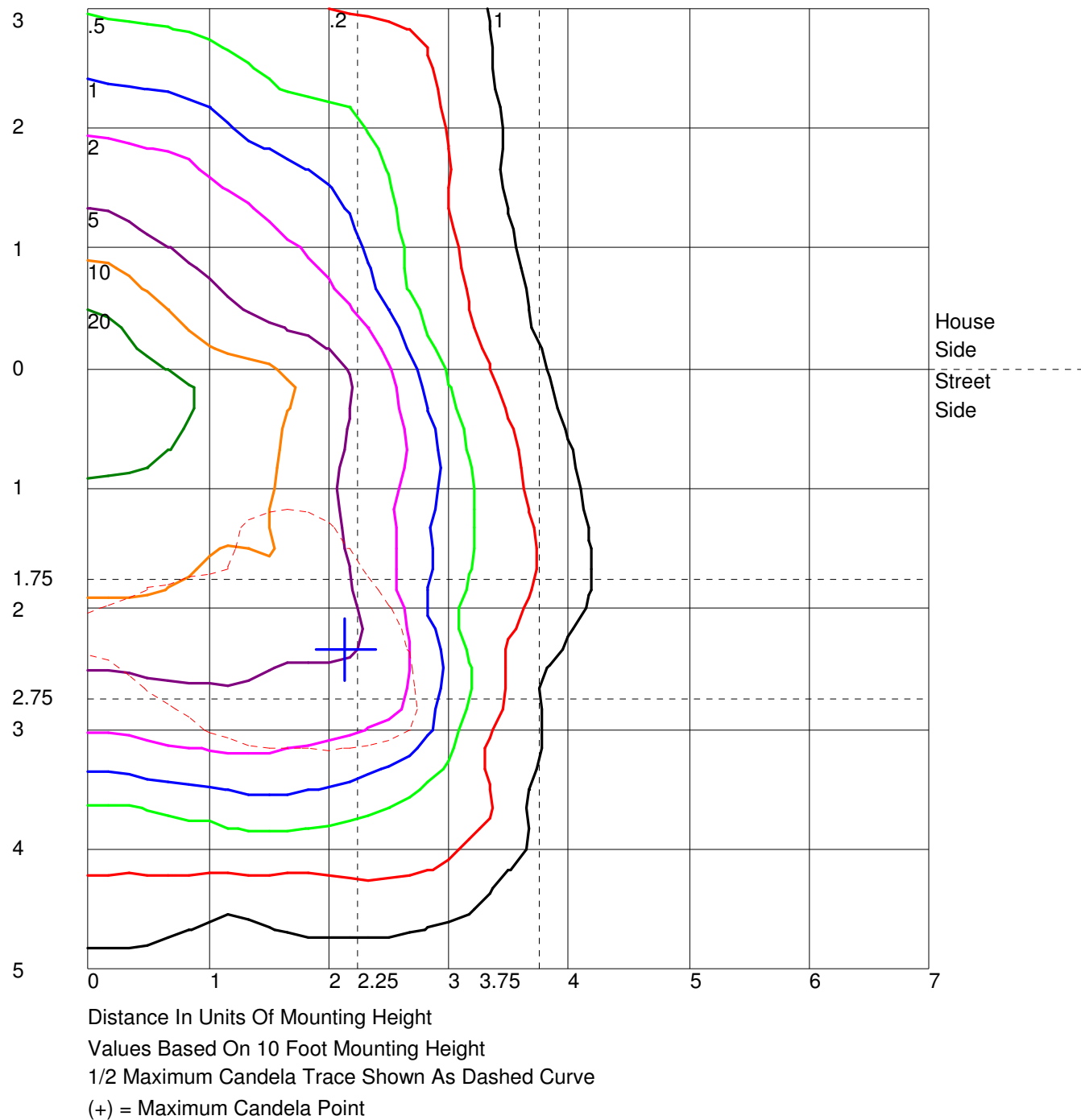
	Lumens	Percent Of Luminaire
Downward Street Side	16330.0	74.1
Downward House Side	5712.2	25.9
Downward Total	22042.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	22042.2	100.0

POLAR GRAPH



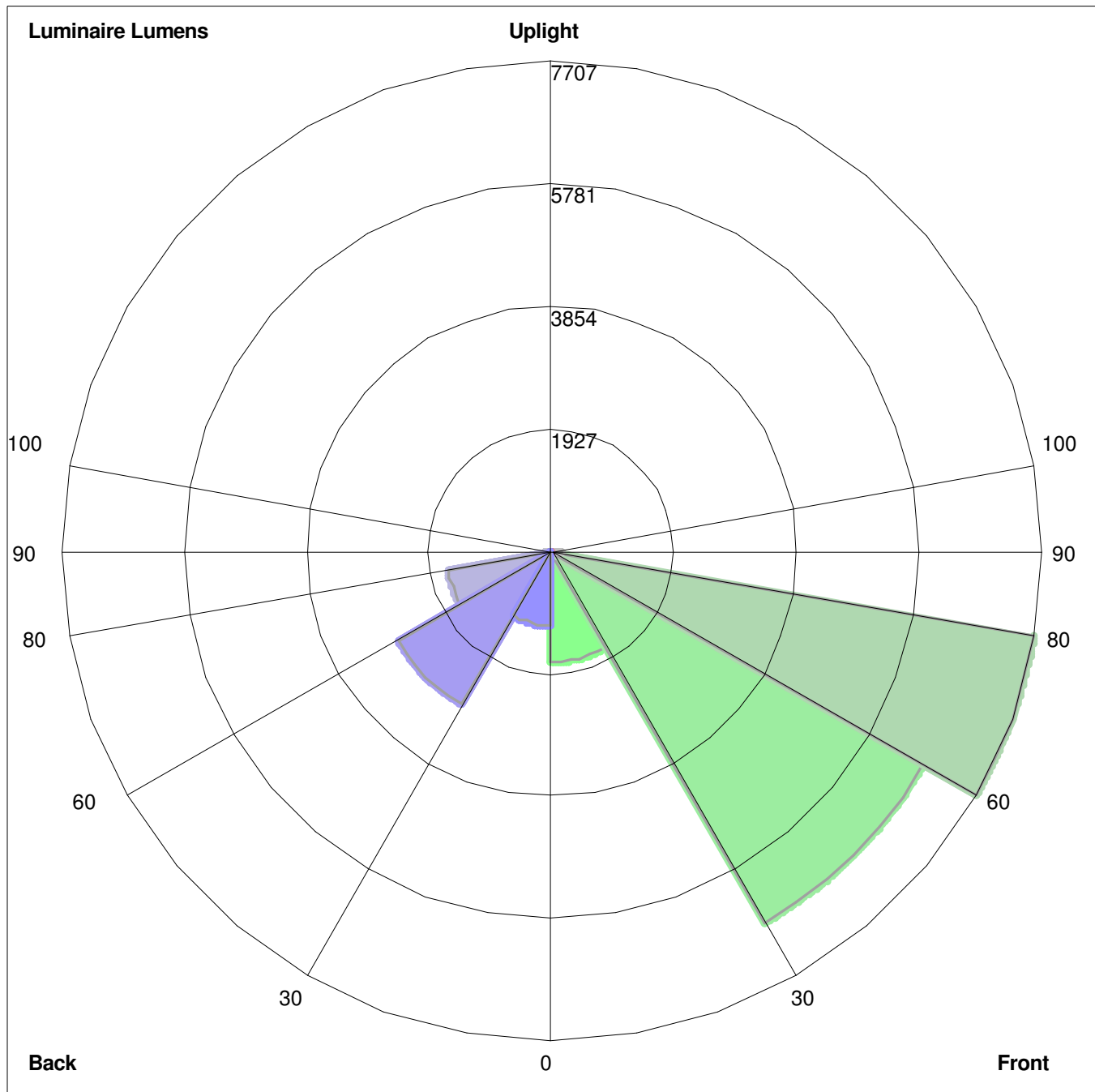
Maximum Candela = 20484.921 Located At Horizontal Angle = 42.5, Vertical Angle = 72.5  
# 1 - Vertical Plane Through Horizontal Angles (42.5 - 222.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=1741.3, Medium=6742.7, High=7707.4, Very High=138.6  
Back: Low=1173.4, Medium=2783.7, High=1654.5, Very High=100.6  
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G4