



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L220-750-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-L220-750-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	22703
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	125
Total Luminaire Watts	182
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	21099.478
Maximum Candela Angle	42.5H 72.5V
Maximum Candela (<90 Degrees Vertical)	21099.478
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	1553.272 (6.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L220-750-T4-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1793.6	N.A.	7.9
FM - Front-Medium (30-60)	6945.0	N.A.	30.6
FH - Front-High (60-80)	7938.6	N.A.	35.0
FVH - Front-Very High (80-90)	142.7	N.A.	0.6
BL - Back-Low (0-30)	1208.6	N.A.	5.3
BM - Back-Medium (30-60)	2867.2	N.A.	12.6
BH - Back-High (60-80)	1704.1	N.A.	7.5
BVH - Back-Very High (80-90)	103.6	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	22703.4	N.A.	100.0
BUG Rating	B3-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>42.5</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631
2.5	3974.449	3956.080	3933.120	3917.048	3898.679	3874.571	3850.462	3822.910	3778.137	3726.476
5.0	4300.487	4286.710	4259.158	4228.161	4173.056	4114.507	4078.919	3990.521	3882.607	3764.361
7.5	4510.574	4503.686	4484.170	4462.358	4402.660	4325.743	4286.710	4147.800	3983.633	3813.726
10.0	4574.864	4578.308	4559.939	4558.791	4523.203	4453.173	4417.585	4262.602	4084.659	3865.387
12.5	4577.160	4584.048	4566.827	4570.272	4559.939	4491.058	4460.062	4331.483	4165.020	3918.196
15.0	4564.531	4570.272	4549.607	4547.311	4547.311	4491.058	4468.098	4371.664	4236.197	3982.485
17.5	4525.499	4532.387	4525.499	4523.203	4514.019	4469.246	4457.765	4419.881	4302.783	4042.182
20.0	4429.065	4437.101	4462.358	4476.134	4477.282	4445.137	4442.841	4456.617	4311.967	4080.067
22.5	4306.227	4314.263	4406.105	4418.733	4415.289	4410.697	4415.289	4406.105	4322.299	4132.876
25.0	4209.793	4225.865	4380.848	4334.927	4340.667	4379.700	4396.920	4381.996	4352.148	4194.869
27.5	4160.428	4202.905	4309.671	4286.710	4305.079	4372.812	4402.660	4408.401	4394.624	4279.822
30.0	4191.425	4225.865	4243.086	4279.822	4339.519	4406.105	4437.101	4483.022	4480.726	4388.884
32.5	4277.526	4259.158	4260.306	4353.296	4435.953	4491.058	4523.203	4600.120	4597.824	4522.055
35.0	4375.108	4334.927	4348.703	4503.686	4581.752	4632.265	4658.669	4745.919	4736.735	4675.889
37.5	4553.051	4518.611	4559.939	4706.886	4781.507	4813.652	4821.688	4883.681	4885.977	4846.945
40.0	4832.020	4803.320	4823.984	4968.635	5059.328	5035.220	5039.812	5007.668	5036.368	5037.516
42.5	5151.170	5119.026	5151.170	5264.824	5369.294	5307.301	5284.341	5153.466	5203.979	5255.640
45.0	5510.501	5489.836	5520.833	5637.931	5753.881	5633.339	5578.234	5435.879	5435.879	5509.353
47.5	5920.344	5879.015	5932.972	6100.584	6106.324	6031.702	5972.005	5804.394	5743.549	5812.430
50.0	6376.109	6318.707	6363.480	6577.012	6503.539	6465.654	6422.029	6299.191	6167.169	6174.057
52.5	6982.264	6955.859	6852.537	7024.740	6973.079	6974.227	6965.043	6969.635	6674.594	6596.529
55.0	7873.128	7843.279	7575.790	7544.794	7498.873	7596.455	7667.632	7706.665	7247.456	7100.510
57.5	9246.161	9174.984	8699.703	8266.899	8064.847	8393.181	8590.641	8413.846	7845.575	7549.386
60.0	9808.691	9791.471	9836.244	9254.197	8793.841	9408.032	9757.030	9191.056	8351.853	7847.871
62.5	10202.462	10282.824	10645.599	10502.096	9746.698	10789.101	11367.704	9994.671	8621.638	7897.236
65.0	10917.680	11092.179	11988.783	11914.162	11325.227	13178.133	13863.501	11004.929	8237.051	7563.162
67.5	10653.635	10928.012	12947.381	13989.784	13424.957	16742.738	17316.749	11542.203	7235.976	6849.093
70.0	8679.039	8869.610	11908.422	15621.122	15598.161	20371.632	20339.488	10266.752	5618.415	5269.416
72.5	5594.306	5923.788	9084.290	13974.859	15653.266	21099.478	20246.498	6342.816	3574.937	2453.321
75.0	2212.236	2324.742	4036.442	8245.087	11789.027	15579.793	2133.434	2584.195	2053.810	1127.357
77.5	1371.885	1334.000	1221.494	2370.663	4409.549	4200.609	2292.598	1049.291	1121.617	727.845
80.0	905.789	1030.923	715.217	1136.541	1553.272	1145.725	851.832	592.379	645.188	475.281
82.5	482.169	565.974	447.728	587.787	646.336	478.725	453.468	335.222	334.074	270.933
85.0	208.940	266.341	195.164	225.012	254.861	184.831	195.164	153.835	144.651	119.394
87.5	64.289	83.806	43.625	44.773	52.809	39.033	36.737	39.033	30.997	30.997
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	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631	3665.631
2.5	3670.223	3648.411	3624.302	3573.789	3529.017	3476.208	3440.619	3410.770	3394.698	3378.626
5.0	3640.375	3588.714	3532.461	3418.806	3320.077	3230.531	3166.242	3123.765	3097.361	3080.140
7.5	3628.894	3545.089	3462.431	3291.376	3154.762	3056.032	2999.779	2976.818	2958.450	2952.710
10.0	3619.710	3503.760	3392.402	3174.278	3027.331	2943.526	2913.677	2918.269	2937.786	2964.190
12.5	3616.266	3467.023	3324.669	3065.216	2921.713	2870.052	2883.829	2930.898	3003.223	3075.548
15.0	3626.598	3438.323	3262.676	2964.190	2833.316	2821.836	2873.497	2964.190	3089.324	3198.386
17.5	3634.634	3416.510	3205.275	2874.645	2760.990	2780.507	2845.944	2965.338	3075.548	3166.242
20.0	3646.115	3399.290	3155.910	2796.579	2701.293	2735.734	2803.467	2872.348	2965.338	3064.068
22.5	3663.335	3382.070	3103.101	2724.254	2649.632	2696.701	2713.922	2752.954	2834.464	2927.454
25.0	3695.480	3377.478	3059.476	2663.409	2608.304	2642.744	2603.712	2634.708	2685.221	2773.619
27.5	3742.548	3385.514	3031.923	2618.636	2576.159	2563.531	2504.982	2518.758	2560.087	2646.188

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CANDELA TABULATION - (Cont.)

30.0	3817.170	3416.510	3019.295	2583.047	2552.051	2482.021	2421.176	2421.176	2440.693	2526.794
32.5	3913.604	3462.431	3021.591	2561.235	2533.682	2416.584	2344.259	2321.298	2348.851	2467.097
35.0	4044.478	3529.017	3039.960	2553.199	2509.574	2361.479	2273.082	2232.901	2313.262	2434.953
37.5	4200.609	3620.858	3078.992	2563.531	2464.801	2308.670	2186.980	2190.424	2284.562	2421.176
40.0	4393.476	3760.917	3152.466	2596.823	2418.880	2261.601	2120.395	2164.020	2257.009	2420.028
42.5	4643.745	3952.636	3263.824	2634.708	2382.144	2223.717	2089.398	2130.727	2230.605	2409.696
45.0	4950.266	4208.645	3424.547	2648.484	2372.959	2183.536	2077.918	2095.138	2203.052	2390.180
47.5	5300.413	4522.055	3640.375	2658.817	2369.515	2147.947	2052.662	2056.106	2167.464	2261.601
50.0	5709.108	4881.385	3880.311	2696.701	2367.219	2114.655	2011.333	2013.629	2025.109	2212.236
52.5	6157.985	5256.788	4137.468	2791.987	2370.663	2099.730	1972.300	1961.968	1929.823	2174.352
55.0	6697.554	5895.088	4597.824	2872.348	2376.403	2123.839	1973.448	1886.198	1893.087	2111.211
57.5	7574.642	6828.429	5029.480	2944.674	2449.877	2211.088	2058.402	1913.751	1929.823	2064.142
60.0	8427.622	7256.641	5377.330	3113.433	2533.682	2251.269	2128.431	1989.520	2058.402	2092.842
62.5	8375.961	7281.897	5753.881	3211.015	2513.018	2208.792	2067.586	1926.379	2149.095	2050.365
65.0	7775.546	7007.520	5462.284	2994.039	2472.837	2193.868	1967.708	1734.660	1988.372	1888.495
67.5	5776.842	5050.144	3593.306	2184.684	2200.756	2142.207	1879.310	1555.568	1763.360	1775.988
70.0	2864.312	2251.269	1570.493	1214.606	1554.420	1932.119	1818.465	1397.142	1545.236	1608.377
72.5	1205.422	988.446	831.167	779.506	921.861	1513.092	1722.031	1212.310	1288.080	1423.546
75.0	743.918	654.372	572.862	564.826	613.043	985.002	1480.947	1045.847	1029.775	1170.981
77.5	505.129	441.988	392.623	397.215	435.100	617.635	1115.876	895.456	809.355	866.756
80.0	331.778	287.005	254.861	268.637	297.337	385.735	707.181	645.188	616.487	644.040
82.5	190.571	160.723	143.503	160.723	181.387	226.160	385.735	446.580	451.172	482.169
85.0	86.102	71.177	61.993	73.473	86.102	105.618	177.943	211.236	204.348	196.312
87.5	22.960	19.516	18.368	21.812	25.256	30.997	52.809	52.809	47.069	30.997
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

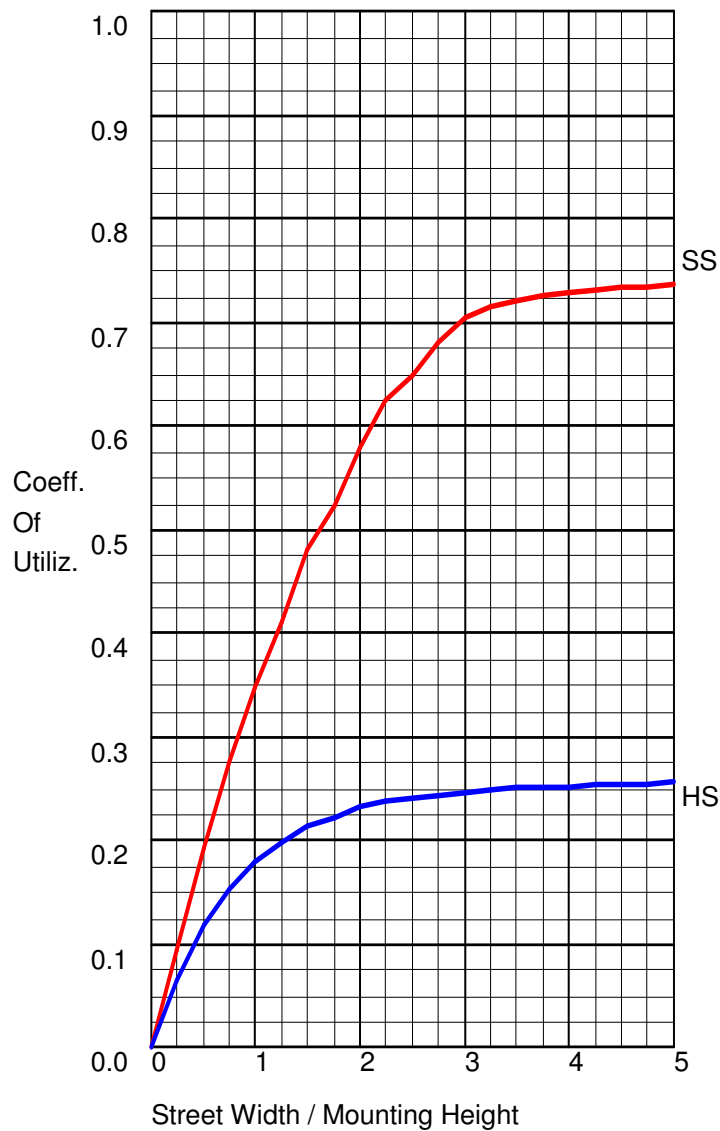
Vert. Horizontal Angles
Angles

	175.0	180.0
0.0	3665.631	3665.631
2.5	3354.517	3370.590
5.0	3061.772	3066.364
7.5	2945.822	2943.526
10.0	2980.262	2973.374
12.5	3121.469	3115.729
15.0	3252.343	3256.936
17.5	3214.459	3217.903
20.0	3120.321	3118.025
22.5	2981.410	2991.743
25.0	2843.648	2858.572
27.5	2705.885	2721.958
30.0	2603.712	2622.080
32.5	2557.791	2576.159
35.0	2531.386	2547.459
37.5	2538.274	2550.903
40.0	2552.051	2563.531
42.5	2534.830	2546.311
45.0	2459.061	2468.245
47.5	2399.364	2411.992
50.0	2413.140	2422.324
52.5	2400.512	2410.844
55.0	2339.667	2359.183
57.5	2279.970	2298.338
60.0	2206.496	2221.421
62.5	2072.178	2093.990
65.0	1908.011	1953.932

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L220-750-T4-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

67.5	1733.512	1795.505
70.0	1548.680	1629.042
72.5	1374.181	1444.210
75.0	1146.873	1199.682
77.5	936.785	1009.110
80.0	843.795	897.752
82.5	487.909	494.797
85.0	142.355	128.578
87.5	12.628	6.888
90.0	0.000	0.000

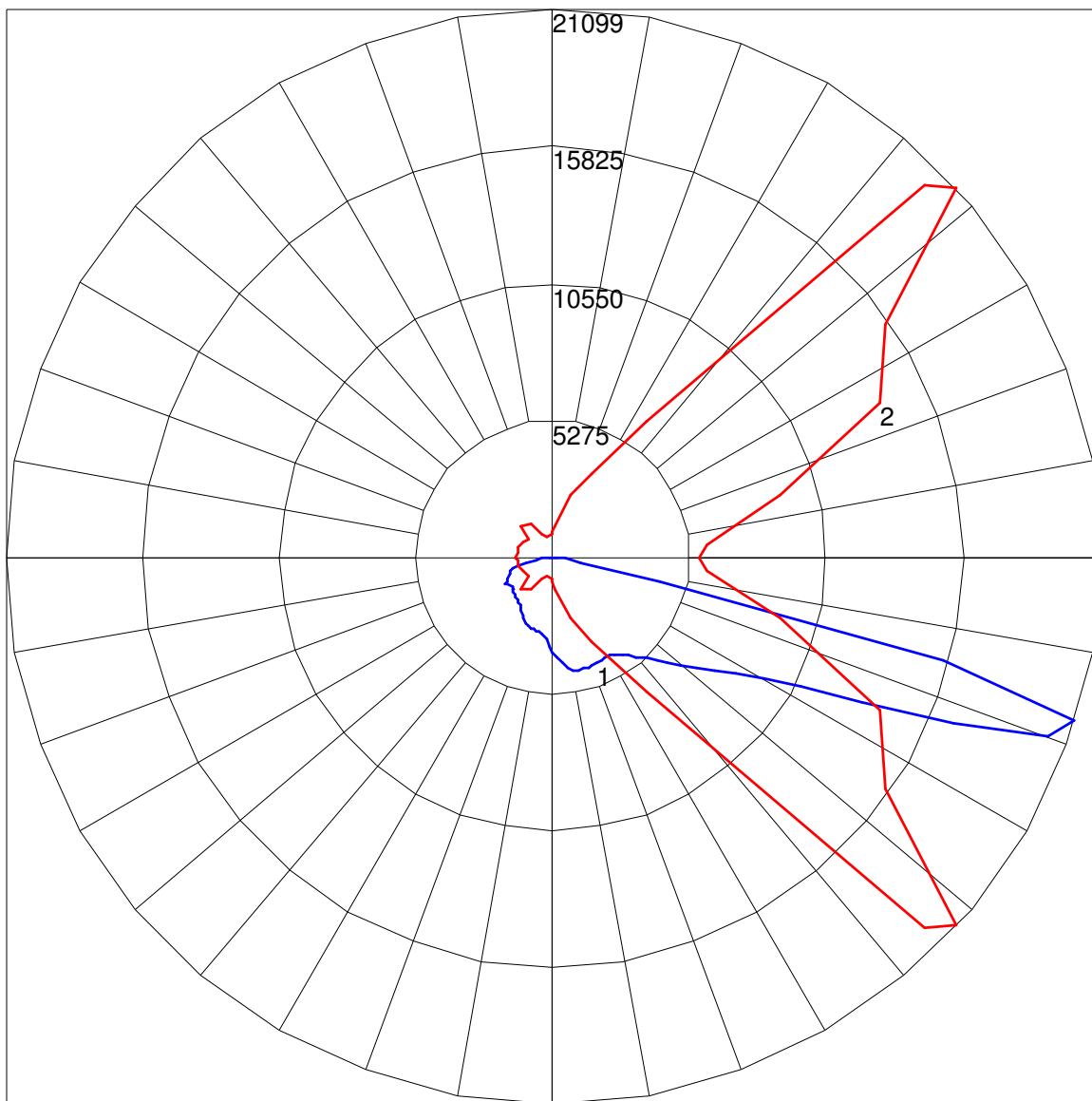
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

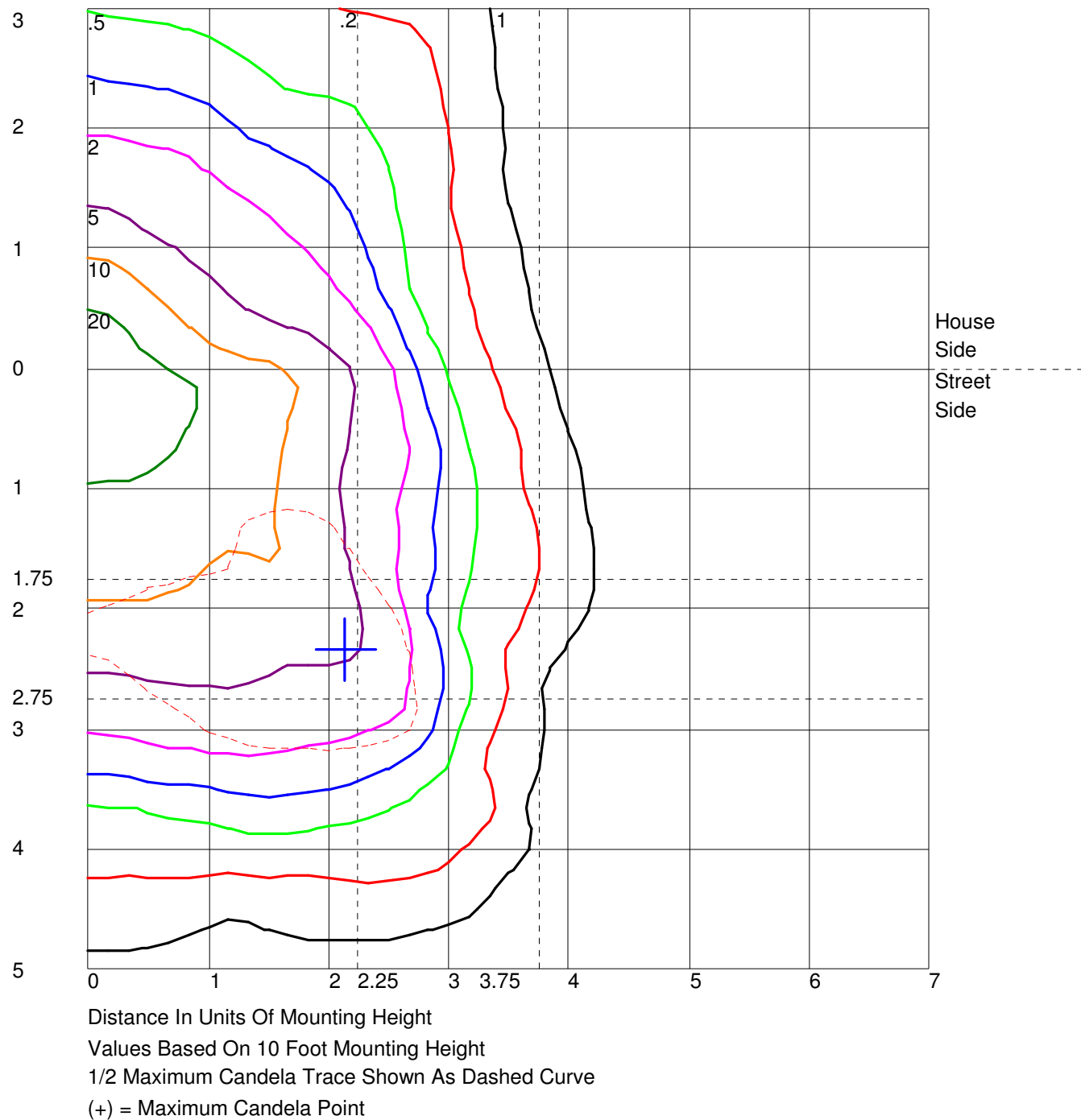
	Lumens	Percent Of Luminaire
Downward Street Side	16819.9	74.1
Downward House Side	5883.5	25.9
Downward Total	22703.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	22703.4	100.0

POLAR GRAPH

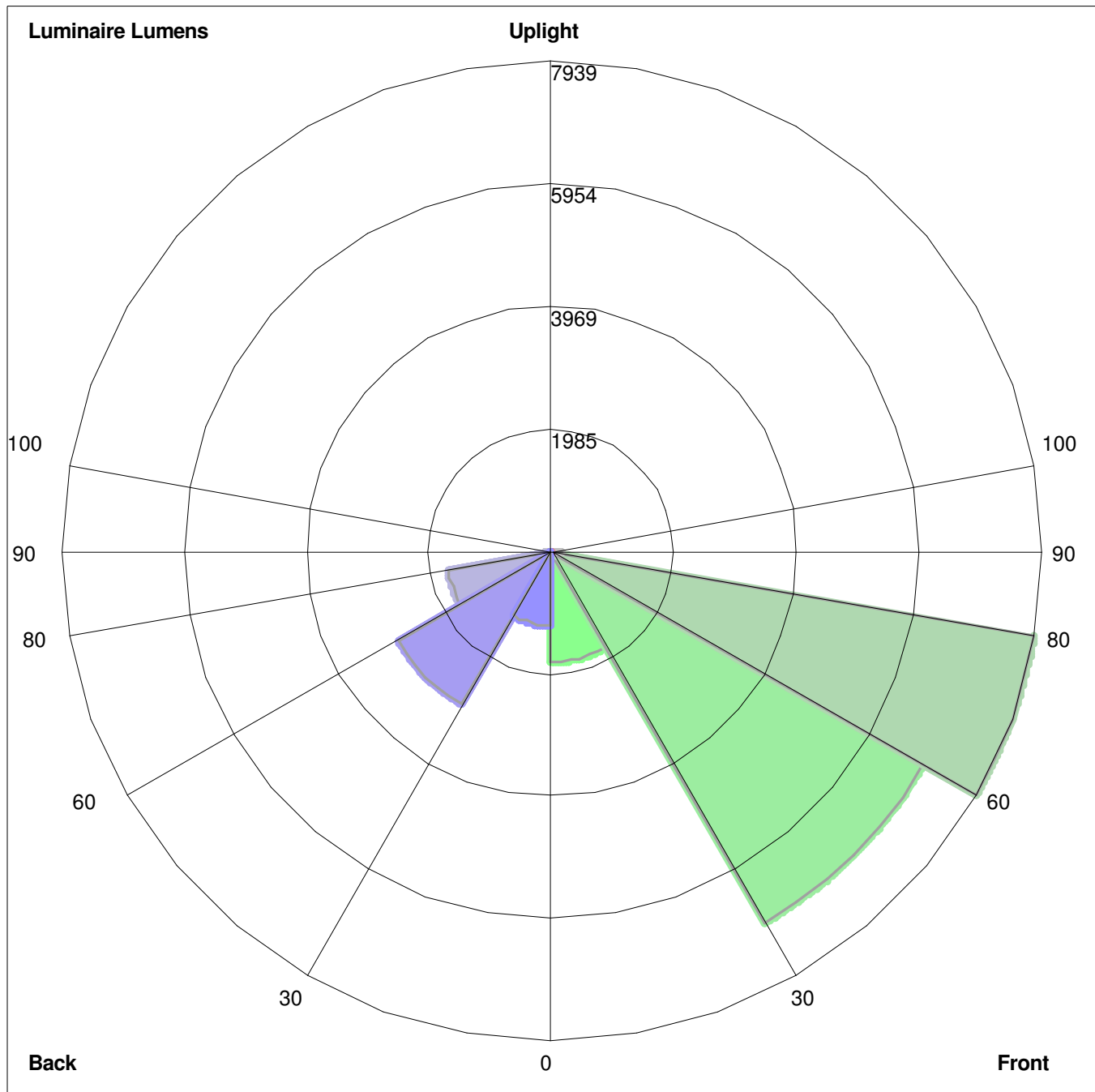


Maximum Candela = 21099.478 Located At Horizontal Angle = 42.5, Vertical Angle = 72.5
1 - Vertical Plane Through Horizontal Angles (42.5 - 222.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1793.6, Medium= 6945.0, High=7938.6, Very High=142.7
Back: Low=1208.6, Medium=2867.2, High=1704.1, Very High=103.6
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G4