



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L160-750-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-L160-750-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	16827
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	128
Total Luminaire Watts	131
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	15638.423
Maximum Candela Angle	42.5H 72.5V
Maximum Candela (<90 Degrees Vertical)	15638.423
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	1151.248 (6.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L160-750-T4-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1329.3	N.A.	7.9
FM - Front-Medium (30-60)	5147.5	N.A.	30.6
FH - Front-High (60-80)	5883.9	N.A.	35.0
FVH - Front-Very High (80-90)	105.8	N.A.	0.6
BL - Back-Low (0-30)	895.8	N.A.	5.3
BM - Back-Medium (30-60)	2125.1	N.A.	12.6
BH - Back-High (60-80)	1263.0	N.A.	7.5
BVH - Back-Very High (80-90)	76.8	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	16827.2	N.A.	100.0
BUG Rating	B3-U0-G3		

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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	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877
2.5	2945.765	2932.151	2915.133	2903.221	2889.607	2871.738	2853.870	2833.448	2800.264	2761.974
5.0	3187.417	3177.206	3156.785	3133.811	3092.968	3049.573	3023.196	2957.678	2877.694	2790.053
7.5	3343.129	3338.023	3323.558	3307.392	3263.145	3206.136	3177.206	3074.249	2952.572	2826.641
10.0	3390.778	3393.331	3379.717	3378.866	3352.488	3300.584	3274.207	3159.337	3027.450	2864.931
12.5	3392.480	3397.585	3384.822	3387.375	3379.717	3328.664	3305.690	3210.391	3087.012	2904.072
15.0	3383.120	3387.375	3372.059	3370.357	3370.357	3328.664	3311.646	3240.172	3139.767	2951.721
17.5	3354.190	3359.296	3354.190	3352.488	3345.681	3312.497	3303.988	3275.909	3189.118	2995.967
20.0	3282.716	3288.672	3307.392	3317.602	3318.453	3294.628	3292.926	3303.137	3195.926	3024.047
22.5	3191.671	3197.627	3265.698	3275.058	3272.505	3269.102	3272.505	3265.698	3203.583	3063.187
25.0	3120.197	3132.109	3246.979	3212.943	3217.198	3246.128	3258.891	3247.830	3225.707	3109.135
27.5	3083.609	3115.091	3194.224	3177.206	3190.820	3241.022	3263.145	3267.400	3257.189	3172.101
30.0	3106.583	3132.109	3144.872	3172.101	3216.347	3265.698	3288.672	3322.707	3321.006	3252.935
32.5	3170.399	3156.785	3157.636	3226.557	3287.821	3328.664	3352.488	3409.498	3407.796	3351.638
35.0	3242.724	3212.943	3223.154	3338.023	3395.884	3433.323	3452.893	3517.560	3510.753	3465.656
37.5	3374.611	3349.085	3379.717	3488.630	3543.938	3567.762	3573.719	3619.666	3621.368	3592.438
40.0	3581.377	3560.104	3575.420	3682.632	3749.852	3731.983	3735.387	3711.562	3732.834	3733.685
42.5	3817.923	3794.098	3817.923	3902.160	3979.591	3933.643	3916.625	3819.625	3857.063	3895.353
45.0	4084.250	4068.934	4091.908	4178.698	4264.638	4175.295	4134.452	4028.942	4028.942	4083.399
47.5	4388.016	4357.384	4397.376	4521.605	4525.859	4470.552	4426.306	4302.077	4256.980	4308.033
50.0	4725.817	4683.273	4716.458	4874.722	4820.266	4792.187	4759.853	4668.808	4570.956	4576.062
52.5	5175.085	5155.515	5078.935	5206.568	5168.278	5169.129	5162.322	5165.725	4947.048	4889.187
55.0	5835.372	5813.249	5614.993	5592.019	5557.983	5630.309	5683.064	5711.994	5371.639	5262.726
57.5	6853.031	6800.276	6448.009	6127.226	5977.470	6220.823	6367.175	6236.139	5814.951	5595.422
60.0	7269.965	7257.202	7290.386	6858.987	6517.782	6973.006	7231.675	6812.188	6190.191	5816.653
62.5	7561.818	7621.380	7890.260	7783.900	7224.017	7996.621	8425.467	7407.808	6390.149	5853.241
65.0	8091.920	8221.255	8885.796	8830.489	8393.984	9767.313	10275.292	8156.587	6105.103	5605.633
67.5	7896.216	8099.578	9596.285	10368.889	9950.254	12409.313	12834.755	8554.802	5363.131	5076.382
70.0	6432.694	6573.941	8826.234	11577.998	11560.980	15098.961	15075.136	7609.468	4164.233	3905.564
72.5	4146.365	4390.569	6733.056	10357.828	11601.822	15638.423	15006.215	4701.142	2649.657	1818.342
75.0	1639.656	1723.043	2991.713	6111.059	8737.742	11547.366	8993.008	1915.343	1522.234	835.569
77.5	1016.808	988.729	905.342	1757.078	3268.251	3113.390	1699.218	777.709	831.315	539.461
80.0	671.349	764.095	530.102	842.377	1151.248	849.184	631.357	439.057	478.198	352.267
82.5	357.372	419.486	331.845	435.653	479.048	354.819	336.100	248.459	247.608	200.809
85.0	154.861	197.405	144.651	166.774	188.897	136.993	144.651	114.019	107.212	88.492
87.5	47.650	62.115	32.334	33.185	39.141	28.930	27.228	28.930	22.974	22.974
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	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877	2716.877
2.5	2720.281	2704.114	2686.245	2648.806	2615.622	2576.481	2550.104	2527.980	2516.068	2504.156
5.0	2698.158	2659.868	2618.174	2533.937	2460.761	2394.391	2346.742	2315.259	2295.689	2282.926
7.5	2689.649	2627.534	2566.270	2439.488	2338.233	2265.057	2223.364	2206.346	2192.732	2188.477
10.0	2682.842	2596.902	2514.366	2352.698	2243.785	2181.670	2159.547	2162.951	2177.416	2196.986
12.5	2680.289	2569.674	2464.164	2271.864	2165.503	2127.213	2137.424	2172.310	2225.916	2279.522
15.0	2687.947	2548.402	2418.216	2196.986	2099.985	2091.476	2129.766	2196.986	2289.733	2370.567
17.5	2693.903	2532.235	2375.672	2130.617	2046.379	2060.844	2109.345	2197.837	2279.522	2346.742
20.0	2702.412	2519.472	2339.084	2072.757	2002.133	2027.660	2077.862	2128.915	2197.837	2271.013
22.5	2715.175	2506.708	2299.943	2019.151	1963.843	1998.730	2011.493	2040.423	2100.836	2169.758
25.0	2739.000	2503.305	2267.610	1974.054	1933.212	1958.738	1929.808	1952.782	1990.221	2055.739
27.5	2773.886	2509.261	2247.188	1940.870	1909.387	1900.027	1856.632	1866.843	1897.474	1961.291

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CANDELA TABULATION - (Cont.)

30.0	2829.194	2532.235	2237.829	1914.492	1891.518	1839.614	1794.517	1794.517	1808.982	1872.799
32.5	2900.668	2566.270	2239.530	1898.325	1877.904	1791.114	1737.508	1720.490	1740.912	1828.553
35.0	2997.669	2615.622	2253.145	1892.369	1860.035	1750.271	1684.753	1654.972	1714.534	1804.728
37.5	3113.390	2683.693	2282.075	1900.027	1826.851	1711.131	1620.937	1623.489	1693.262	1794.517
40.0	3256.338	2787.501	2336.531	1924.703	1792.816	1676.244	1571.585	1603.919	1672.841	1793.666
42.5	3441.831	2929.598	2419.067	1952.782	1765.587	1648.165	1548.611	1579.243	1653.270	1786.008
45.0	3669.018	3119.346	2538.191	1962.993	1758.780	1618.384	1540.103	1552.866	1632.849	1771.543
47.5	3928.538	3351.638	2698.158	1970.651	1756.227	1592.007	1521.383	1523.936	1606.472	1676.244
50.0	4231.453	3617.965	2875.993	1998.730	1754.526	1567.331	1490.751	1492.453	1500.962	1639.656
52.5	4564.149	3896.204	3066.591	2069.353	1757.078	1556.269	1461.821	1454.163	1430.338	1611.577
55.0	4964.065	4369.296	3407.796	2128.915	1761.333	1574.138	1462.672	1398.005	1403.110	1564.778
57.5	5614.142	5061.066	3727.729	2182.521	1815.789	1638.805	1525.638	1418.426	1430.338	1529.892
60.0	6246.350	5378.447	3985.547	2307.601	1877.904	1668.586	1577.542	1474.584	1525.638	1551.164
62.5	6208.060	5397.166	4264.638	2379.926	1862.588	1637.103	1532.445	1427.786	1592.857	1519.681
65.0	5763.047	5193.804	4048.513	2219.109	1832.807	1626.042	1458.418	1285.688	1473.733	1399.706
67.5	4281.655	3743.045	2663.271	1619.235	1631.147	1587.752	1392.899	1152.950	1306.960	1316.320
70.0	2122.959	1668.586	1164.011	900.237	1152.099	1432.040	1347.802	1035.528	1145.292	1192.090
72.5	893.430	732.612	616.041	577.751	683.261	1121.467	1276.328	898.535	954.693	1055.098
75.0	551.374	485.005	424.592	418.636	454.373	730.060	1097.642	775.157	763.244	867.903
77.5	374.390	327.591	291.003	294.406	322.486	457.776	827.061	663.691	599.874	642.418
80.0	245.906	212.721	188.897	199.107	220.379	285.897	524.145	478.198	456.925	477.347
82.5	141.247	119.124	106.361	119.124	134.440	167.624	285.897	330.994	334.398	357.372
85.0	63.816	52.755	45.948	54.457	63.816	78.281	131.887	156.563	151.458	145.501
87.5	17.018	14.465	13.614	16.167	18.719	22.974	39.141	39.141	34.886	22.974
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

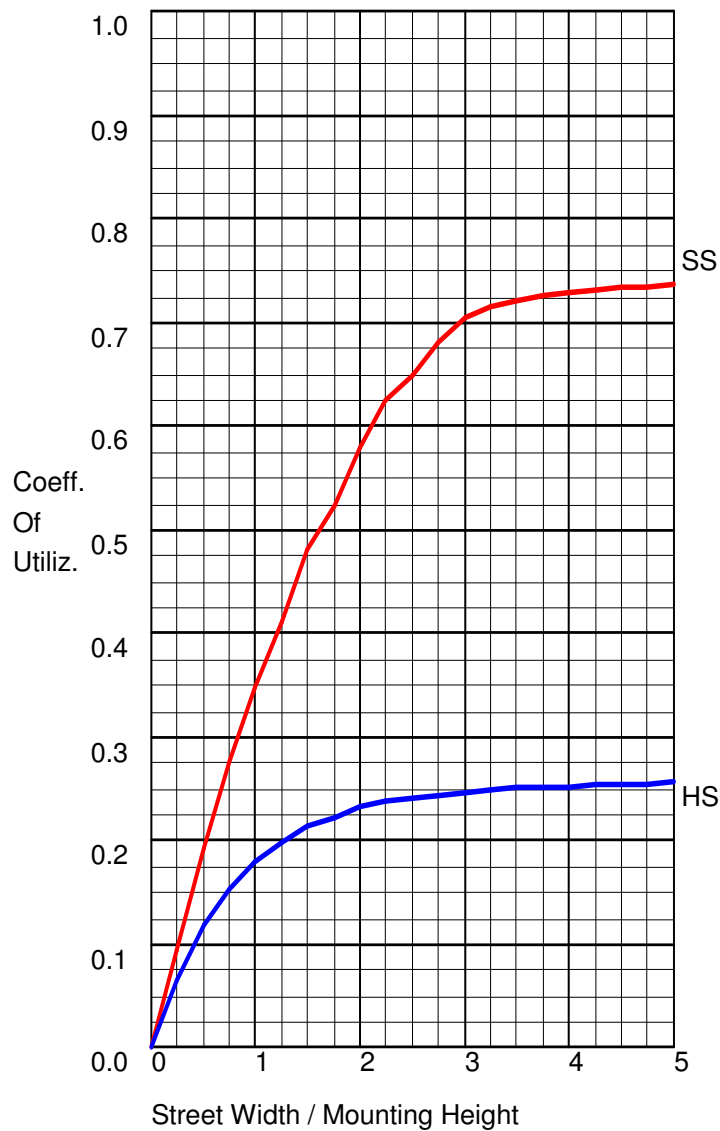
Vert. Angles Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	2716.877	2716.877
2.5	2486.287	2498.200
5.0	2269.311	2272.715
7.5	2183.372	2181.670
10.0	2208.898	2203.793
12.5	2313.557	2309.303
15.0	2410.558	2413.962
17.5	2382.479	2385.032
20.0	2312.706	2311.005
22.5	2209.749	2217.407
25.0	2107.643	2118.705
27.5	2005.537	2017.449
30.0	1929.808	1943.422
32.5	1895.773	1909.387
35.0	1876.202	1888.115
37.5	1881.308	1890.667
40.0	1891.518	1900.027
42.5	1878.755	1887.264
45.0	1822.597	1829.404
47.5	1778.350	1787.710
50.0	1788.561	1795.368
52.5	1779.201	1786.859
55.0	1734.104	1748.569
57.5	1689.858	1703.473
60.0	1635.402	1646.463
62.5	1535.848	1552.015
65.0	1414.172	1448.207

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L160-750-T4-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

67.5	1284.837	1330.785
70.0	1147.844	1207.406
72.5	1018.510	1070.414
75.0	850.035	889.175
77.5	694.322	747.928
80.0	625.401	665.392
82.5	361.626	366.732
85.0	105.510	95.299
87.5	9.360	5.105
90.0	0.000	0.000

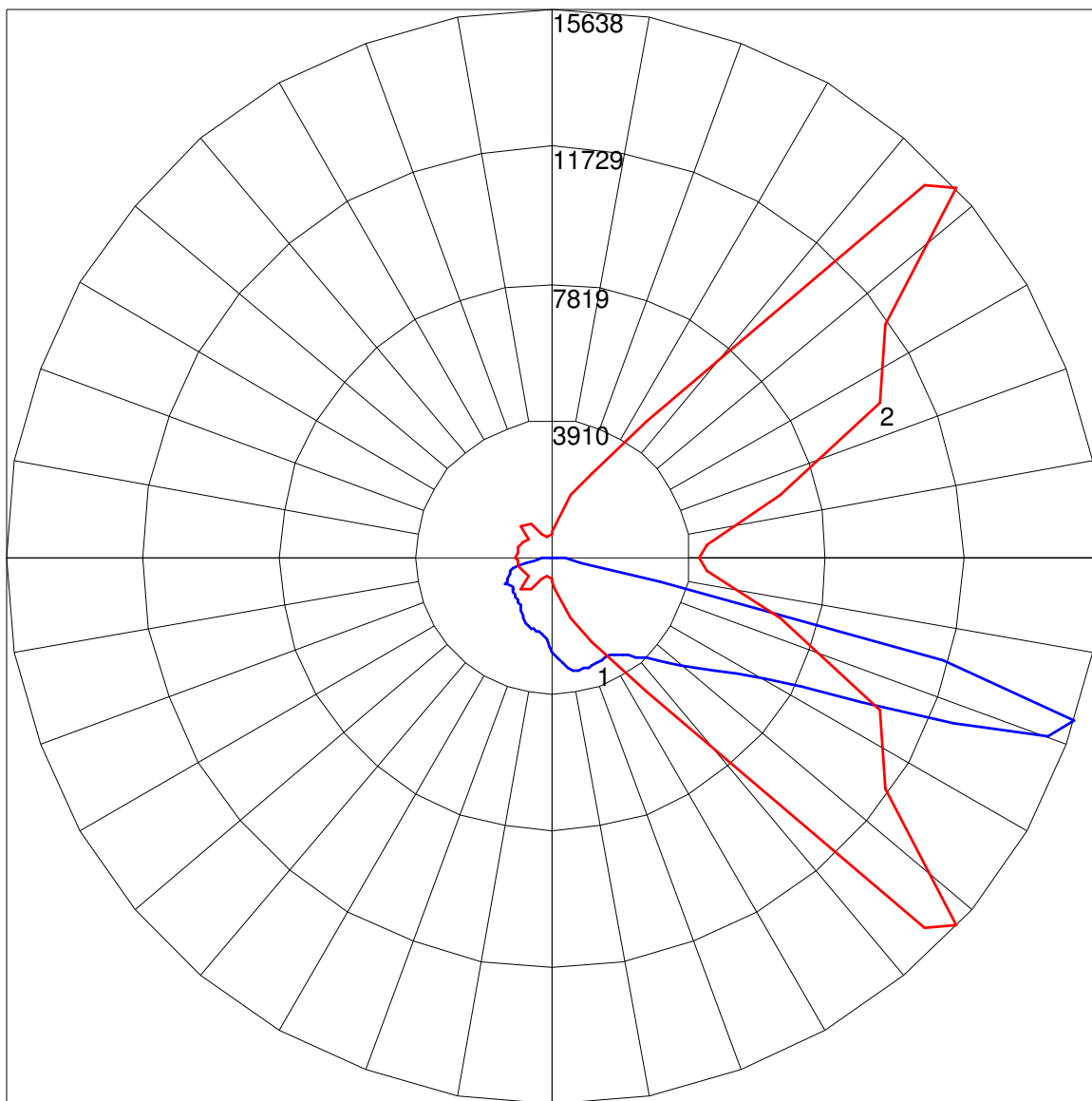
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

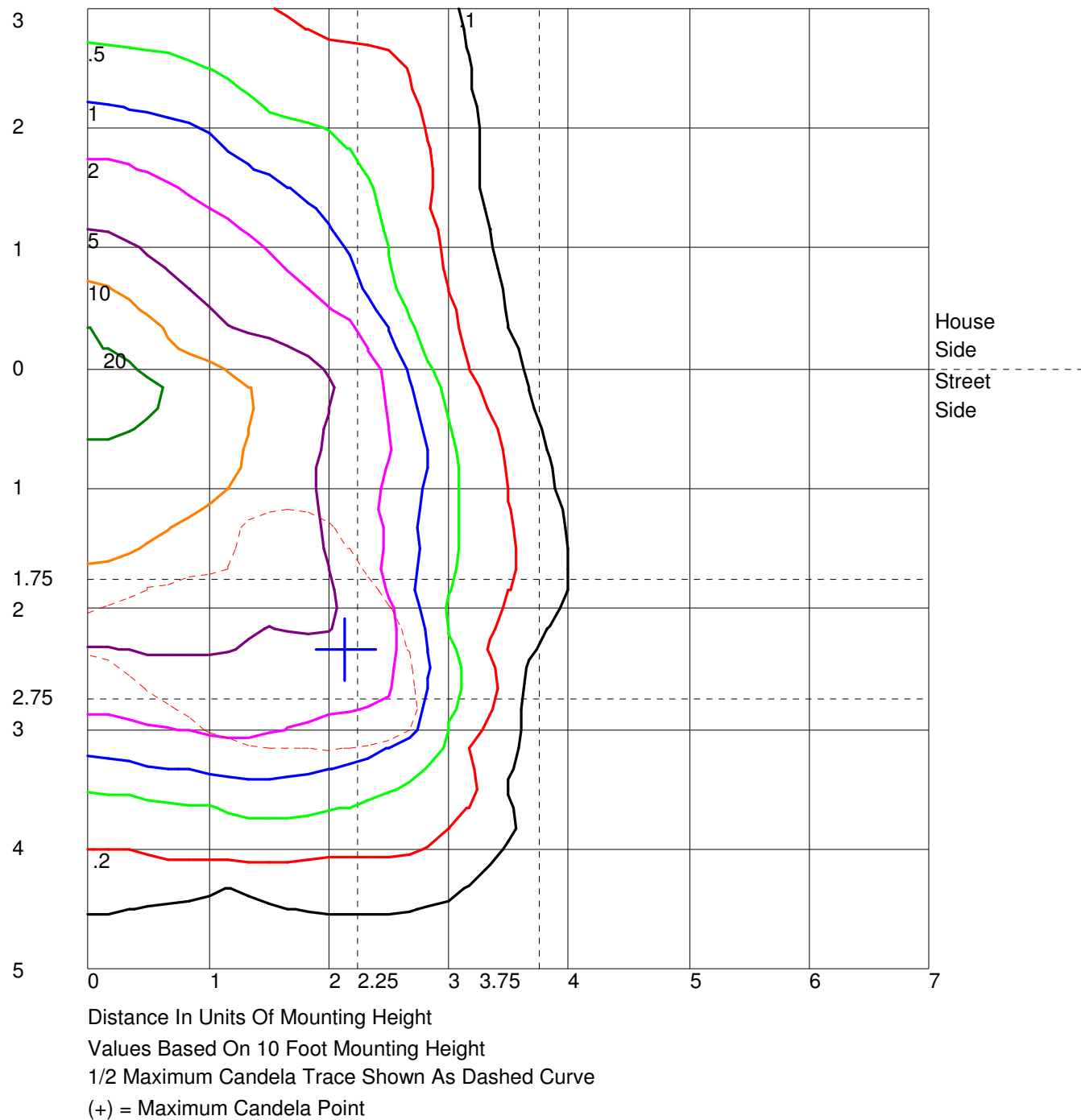
	Lumens	Percent Of Luminaire
Downward Street Side	12466.5	74.1
Downward House Side	4360.7	25.9
Downward Total	16827.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	16827.2	100.0

POLAR GRAPH

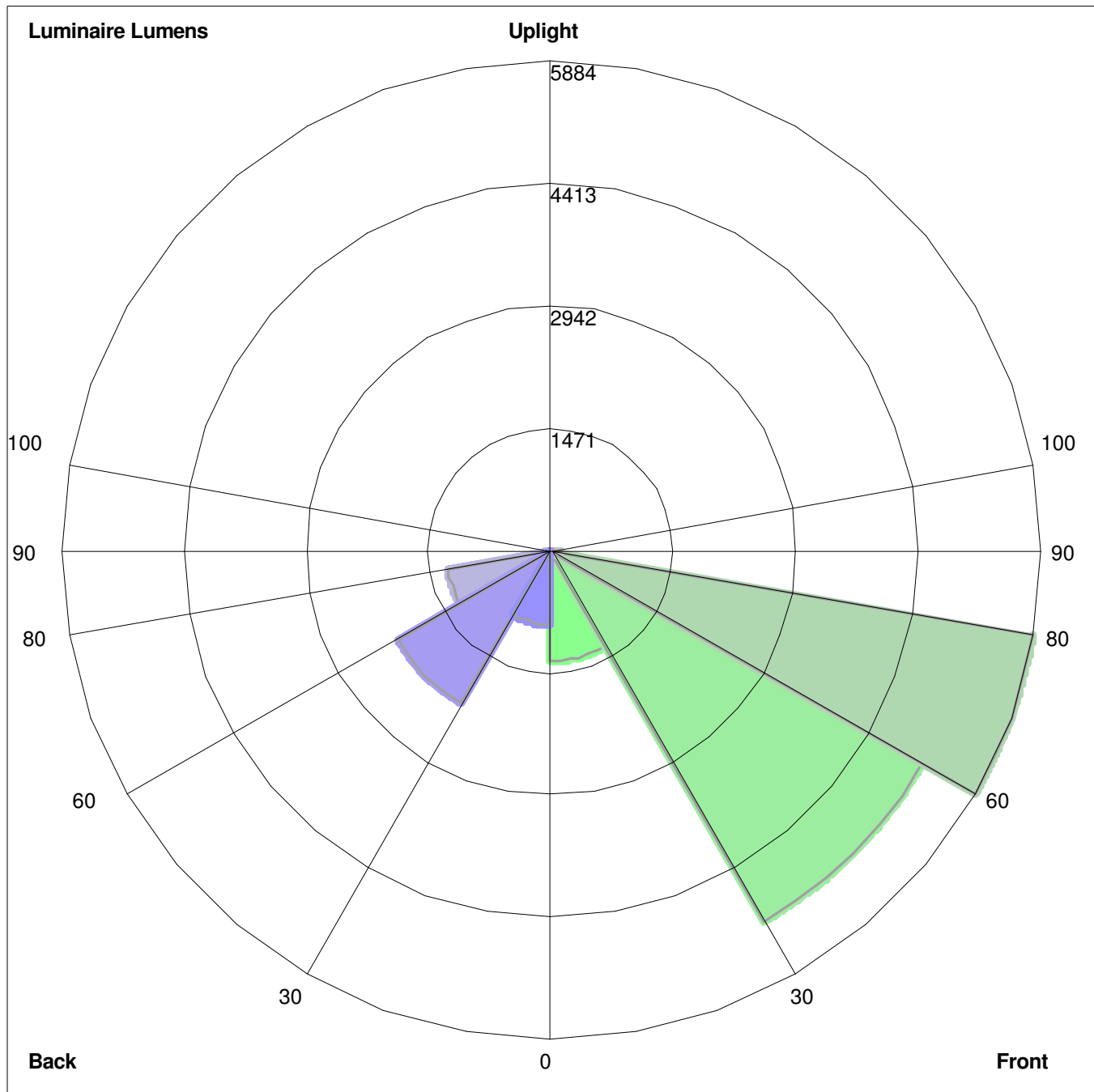


Maximum Candela = 15638.423 Located At Horizontal Angle = 42.5, Vertical Angle = 72.5
1 - Vertical Plane Through Horizontal Angles (42.5 - 222.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
 Front: Low=1329.3, Medium=5147.5, High=5883.9, Very High=105.8
 Back: Low=895.8, Medium=2125.1, High= 1263.0, Very High=76.8
 Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3