



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L160-730-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-L160-730-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	14867
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	131
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	13816.472
Maximum Candela Angle	42.5H 72.5V
Maximum Candela (<90 Degrees Vertical)	13816.472
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	1017.122 (6.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L160-730-T4-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1174.5	N.A.	7.9
FM - Front-Medium (30-60)	4547.8	N.A.	30.6
FH - Front-High (60-80)	5198.4	N.A.	35.0
FVH - Front-Very High (80-90)	93.5	N.A.	0.6
BL - Back-Low (0-30)	791.4	N.A.	5.3
BM - Back-Medium (30-60)	1877.5	N.A.	12.6
BH - Back-High (60-80)	1115.9	N.A.	7.5
BVH - Back-Very High (80-90)	67.9	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	14866.9	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	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348
2.5	2602.570	2590.542	2575.507	2564.982	2552.954	2537.167	2521.380	2503.338	2474.020	2440.191
5.0	2816.068	2807.046	2789.004	2768.707	2732.623	2694.284	2670.979	2613.094	2542.429	2464.999
7.5	2953.638	2949.128	2936.348	2922.065	2882.974	2832.606	2807.046	2716.084	2608.584	2497.324
10.0	2995.737	2997.992	2985.964	2985.212	2961.908	2916.051	2892.746	2791.260	2674.738	2531.153
12.5	2997.240	3001.751	2990.474	2992.730	2985.964	2940.859	2920.561	2836.365	2727.361	2565.734
15.0	2988.971	2992.730	2979.198	2977.694	2977.694	2940.859	2925.823	2862.676	2773.969	2607.832
17.5	2963.411	2967.922	2963.411	2961.908	2955.894	2926.575	2919.058	2894.250	2817.571	2646.923
20.0	2900.264	2905.526	2922.065	2931.086	2931.838	2910.788	2909.285	2918.306	2823.585	2671.731
22.5	2819.826	2825.089	2885.229	2893.498	2891.243	2888.236	2891.243	2885.229	2830.351	2706.312
25.0	2756.679	2767.204	2868.690	2838.620	2842.379	2867.939	2879.215	2869.442	2849.896	2746.906
27.5	2724.354	2752.169	2822.082	2807.046	2819.075	2863.428	2882.974	2886.732	2877.711	2802.536
30.0	2744.651	2767.204	2778.480	2802.536	2841.627	2885.229	2905.526	2935.596	2934.093	2873.953
32.5	2801.032	2789.004	2789.756	2850.648	2904.774	2940.859	2961.908	3012.275	3010.772	2961.156
35.0	2864.931	2838.620	2847.641	2949.128	3000.247	3033.324	3050.615	3107.748	3101.734	3061.891
37.5	2981.453	2958.901	2985.964	3082.188	3131.052	3152.101	3157.363	3197.958	3199.462	3173.902
40.0	3164.129	3145.335	3158.867	3253.588	3312.976	3297.190	3300.197	3279.148	3297.941	3298.693
42.5	3373.117	3352.068	3373.117	3447.540	3515.950	3475.355	3460.320	3374.620	3407.697	3441.526
45.0	3608.415	3594.884	3615.181	3691.860	3767.787	3688.853	3652.769	3559.551	3559.551	3607.664
47.5	3876.791	3849.728	3885.061	3994.817	3998.575	3949.711	3910.620	3800.864	3761.021	3806.127
50.0	4175.237	4137.650	4166.968	4306.794	4258.682	4233.874	4205.307	4124.870	4038.418	4042.929
52.5	4572.163	4554.873	4487.215	4599.978	4566.149	4566.901	4560.887	4563.894	4370.693	4319.574
55.0	5155.524	5135.978	4960.819	4940.522	4910.452	4974.351	5020.960	5046.519	4745.818	4649.594
57.5	6054.620	6008.012	5696.786	5413.375	5281.066	5496.068	5625.369	5509.599	5137.481	4943.529
60.0	6422.979	6411.703	6441.022	6059.883	5758.430	6160.618	6389.151	6018.536	5469.005	5138.985
62.5	6680.831	6733.454	6971.008	6877.038	6382.385	7064.977	7443.860	6544.763	5645.667	5171.310
65.0	7149.173	7263.440	7850.559	7801.695	7416.045	8629.375	9078.172	7206.306	5393.829	4952.550
67.5	6976.270	7155.939	8478.273	9160.865	8791.002	10963.569	11339.445	7558.127	4738.300	4484.960
70.0	5683.254	5808.045	7797.936	10229.106	10214.071	113339.861	113318.812	6722.929	3679.080	3450.547
72.5	3663.293	3879.047	5948.623	9151.092	10250.155	13816.472	13257.920	4153.436	2340.959	1606.497
75.0	1448.628	1522.300	2643.164	5399.092	7719.754	10202.043	7945.280	1692.196	1344.886	738.222
77.5	898.345	873.537	799.865	1552.370	2887.484	2750.665	1501.251	687.102	734.463	476.612
80.0	593.133	675.074	468.342	744.236	1017.122	750.250	557.801	387.905	422.485	311.226
82.5	315.736	370.614	293.184	384.898	423.237	313.481	296.943	219.512	218.760	177.414
85.0	136.819	174.407	127.798	147.344	166.889	121.032	127.798	100.735	94.721	78.182
87.5	42.098	54.878	28.567	29.318	34.581	25.560	24.056	25.560	20.297	20.297
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	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348	2400.348
2.5	2403.355	2389.072	2373.285	2340.208	2310.889	2276.309	2253.004	2233.459	2222.934	2212.410
5.0	2383.809	2349.981	2313.145	2238.721	2174.070	2115.434	2073.335	2045.520	2028.230	2016.954
7.5	2376.292	2321.414	2267.288	2155.276	2065.818	2001.167	1964.331	1949.296	1937.268	1933.509
10.0	2370.278	2294.351	2221.431	2078.598	1982.373	1927.495	1907.950	1910.957	1923.736	1941.027
12.5	2368.023	2270.295	2177.077	2007.181	1913.212	1879.383	1888.404	1919.226	1966.586	2013.947
15.0	2374.788	2251.501	2136.483	1941.027	1855.327	1847.809	1881.638	1941.027	2022.968	2094.384
17.5	2380.051	2237.218	2098.895	1882.390	1807.966	1820.746	1863.596	1941.779	2013.947	2073.335
20.0	2387.568	2225.941	2066.570	1831.271	1768.875	1791.428	1835.781	1880.887	1941.779	2006.429
22.5	2398.844	2214.665	2031.989	1783.910	1735.046	1765.868	1777.145	1802.704	1856.079	1916.971
25.0	2419.894	2211.658	2003.422	1744.067	1707.983	1730.536	1704.976	1725.274	1758.351	1816.236
27.5	2450.715	2216.920	1985.380	1714.749	1686.934	1678.665	1640.326	1649.347	1676.410	1732.791

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CANDELA TABULATION - (Cont.)

30.0	2499.579	2237.218	1977.111	1691.445	1671.147	1625.290	1585.448	1585.448	1598.227	1654.609
32.5	2562.727	2267.288	1978.614	1677.161	1659.119	1582.441	1535.080	1520.045	1538.087	1615.518
35.0	2648.427	2310.889	1990.643	1671.899	1643.333	1546.356	1488.471	1462.160	1514.783	1594.469
37.5	2750.665	2371.030	2016.202	1678.665	1614.014	1511.776	1432.090	1434.345	1495.989	1585.448
40.0	2876.960	2462.744	2064.314	1700.466	1583.944	1480.954	1388.488	1417.055	1477.947	1584.696
42.5	3040.842	2588.286	2137.234	1725.274	1559.888	1456.146	1368.191	1395.254	1460.656	1577.930
45.0	3241.560	2755.927	2242.480	1734.295	1553.874	1429.835	1360.673	1371.950	1442.614	1565.150
47.5	3470.845	2961.156	2383.809	1741.060	1551.619	1406.530	1344.135	1346.390	1419.310	1480.954
50.0	3738.469	3196.455	2540.926	1765.868	1550.115	1384.729	1317.072	1318.575	1326.093	1448.628
52.5	4032.404	3442.278	2709.319	1828.264	1552.370	1374.957	1291.512	1284.746	1263.697	1423.821
55.0	4385.728	3860.253	3010.772	1880.887	1556.129	1390.743	1292.264	1235.131	1239.641	1382.474
57.5	4960.068	4471.428	3293.431	1928.247	1604.241	1447.877	1347.894	1253.173	1263.697	1351.652
60.0	5518.620	4751.832	3521.212	2038.755	1659.119	1474.188	1393.750	1302.788	1347.894	1370.446
62.5	5484.791	4768.371	3767.787	2102.654	1645.588	1446.373	1353.908	1261.442	1407.282	1342.631
65.0	5091.624	4588.702	3576.842	1960.572	1619.276	1436.600	1288.505	1135.899	1302.037	1236.634
67.5	3782.822	3306.962	2352.988	1430.586	1441.111	1402.771	1230.620	1018.626	1154.693	1162.962
70.0	1875.624	1474.188	1028.398	795.355	1017.874	1265.201	1190.777	914.884	1011.860	1053.206
72.5	789.341	647.260	544.269	510.440	603.658	990.811	1127.630	793.851	843.467	932.174
75.0	487.136	428.499	375.125	369.863	401.436	645.004	969.762	684.847	674.323	766.788
77.5	330.771	289.425	257.100	260.107	284.914	404.443	730.704	586.368	529.986	567.574
80.0	217.257	187.938	166.889	175.910	194.704	252.589	463.080	422.485	403.691	421.734
82.5	124.791	105.245	93.969	105.245	118.777	148.095	252.589	292.432	295.439	315.736
85.0	56.381	46.609	40.595	48.112	56.381	69.161	116.522	138.323	133.812	128.550
87.5	15.035	12.780	12.028	14.283	16.539	20.297	34.581	34.581	30.822	20.297
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

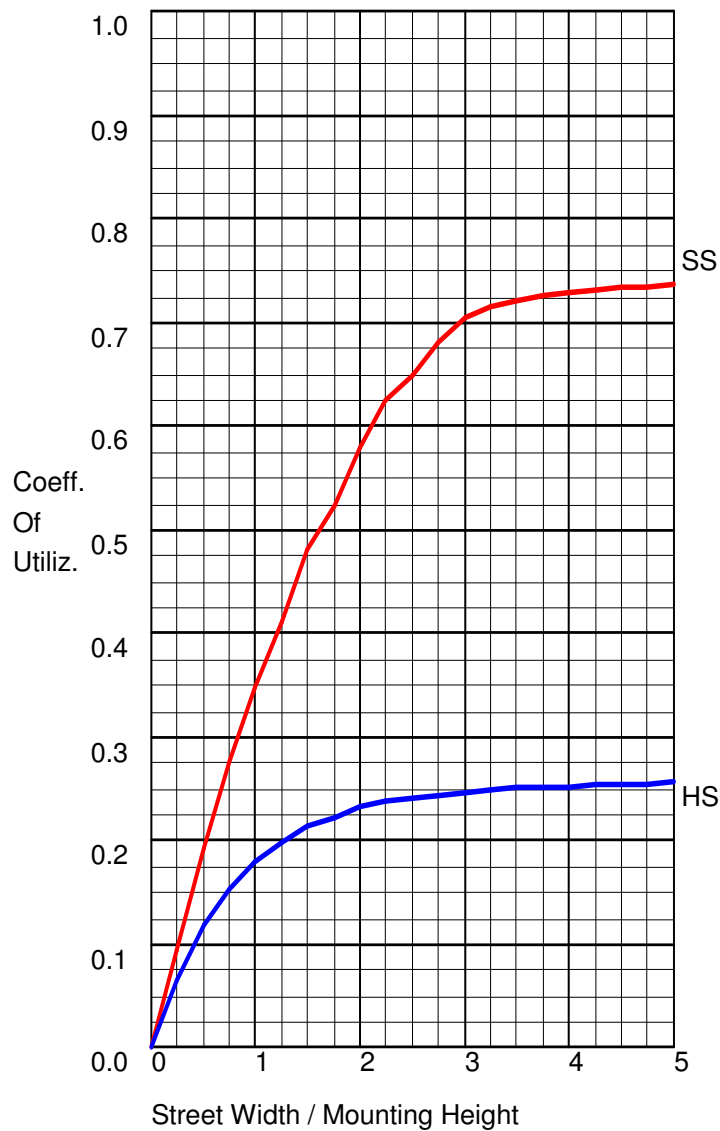
Vert. Horizontal Angles
Angles

	<u>175.0</u>	<u>180.0</u>
0.0	2400.348	2400.348
2.5	2196.623	2207.147
5.0	2004.926	2007.933
7.5	1928.999	1927.495
10.0	1951.551	1947.041
12.5	2044.017	2040.258
15.0	2129.717	2132.724
17.5	2104.909	2107.164
20.0	2043.265	2041.762
22.5	1952.303	1959.069
25.0	1862.093	1871.865
27.5	1771.882	1782.407
30.0	1704.976	1717.004
32.5	1674.906	1686.934
35.0	1657.616	1668.140
37.5	1662.126	1670.396
40.0	1671.147	1678.665
42.5	1659.871	1667.389
45.0	1610.255	1616.269
47.5	1571.164	1579.433
50.0	1580.185	1586.199
52.5	1571.916	1578.682
55.0	1532.073	1544.853
57.5	1492.982	1505.010
60.0	1444.870	1454.642
62.5	1356.915	1371.198
65.0	1249.414	1279.484

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L160-730-T4-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

67.5	1135.147	1175.742
70.0	1014.115	1066.738
72.5	899.849	945.706
75.0	751.001	785.582
77.5	613.431	660.791
80.0	552.539	587.871
82.5	319.495	324.006
85.0	93.217	84.196
87.5	8.269	4.511
90.0	0.000	0.000

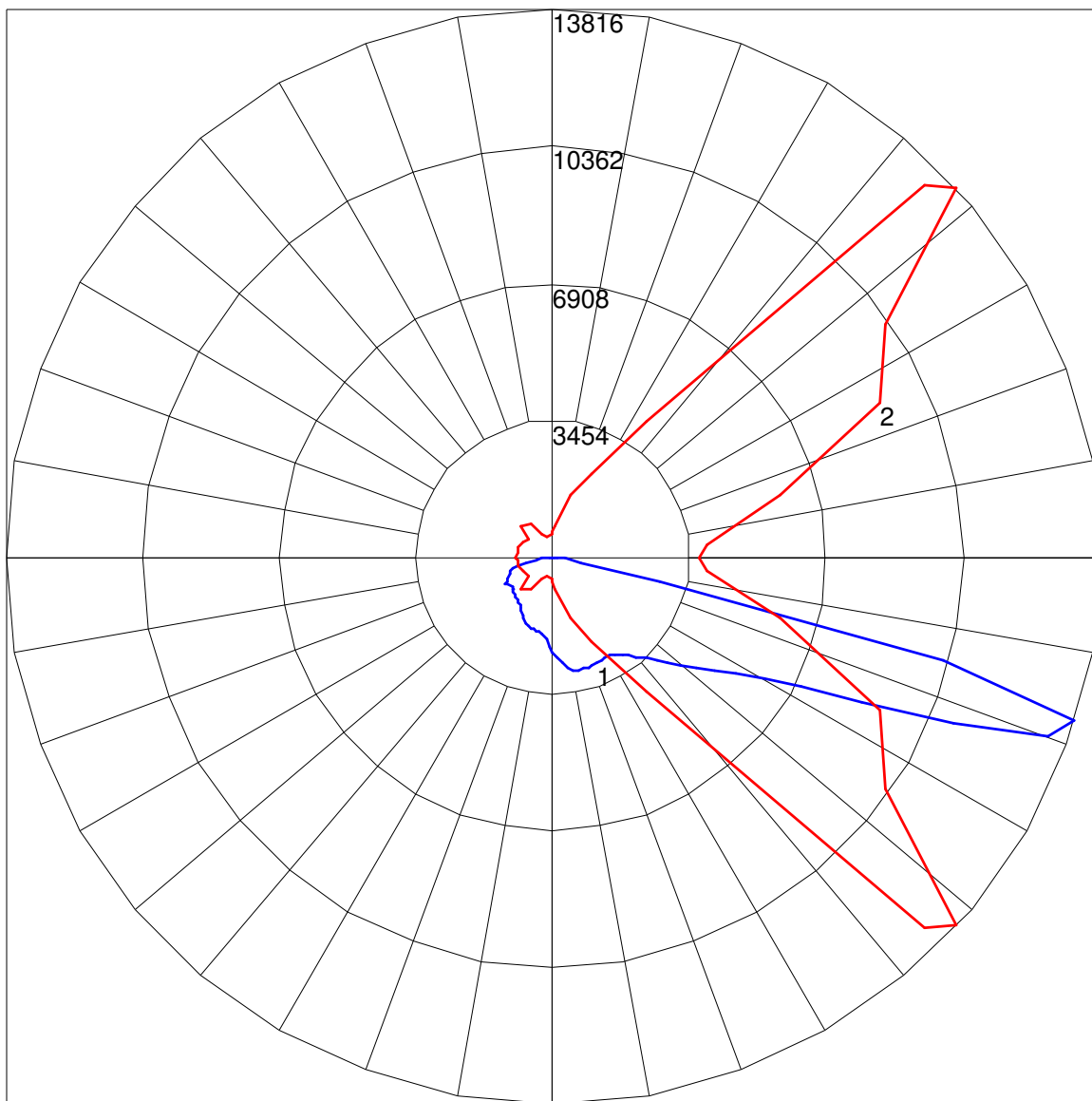
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

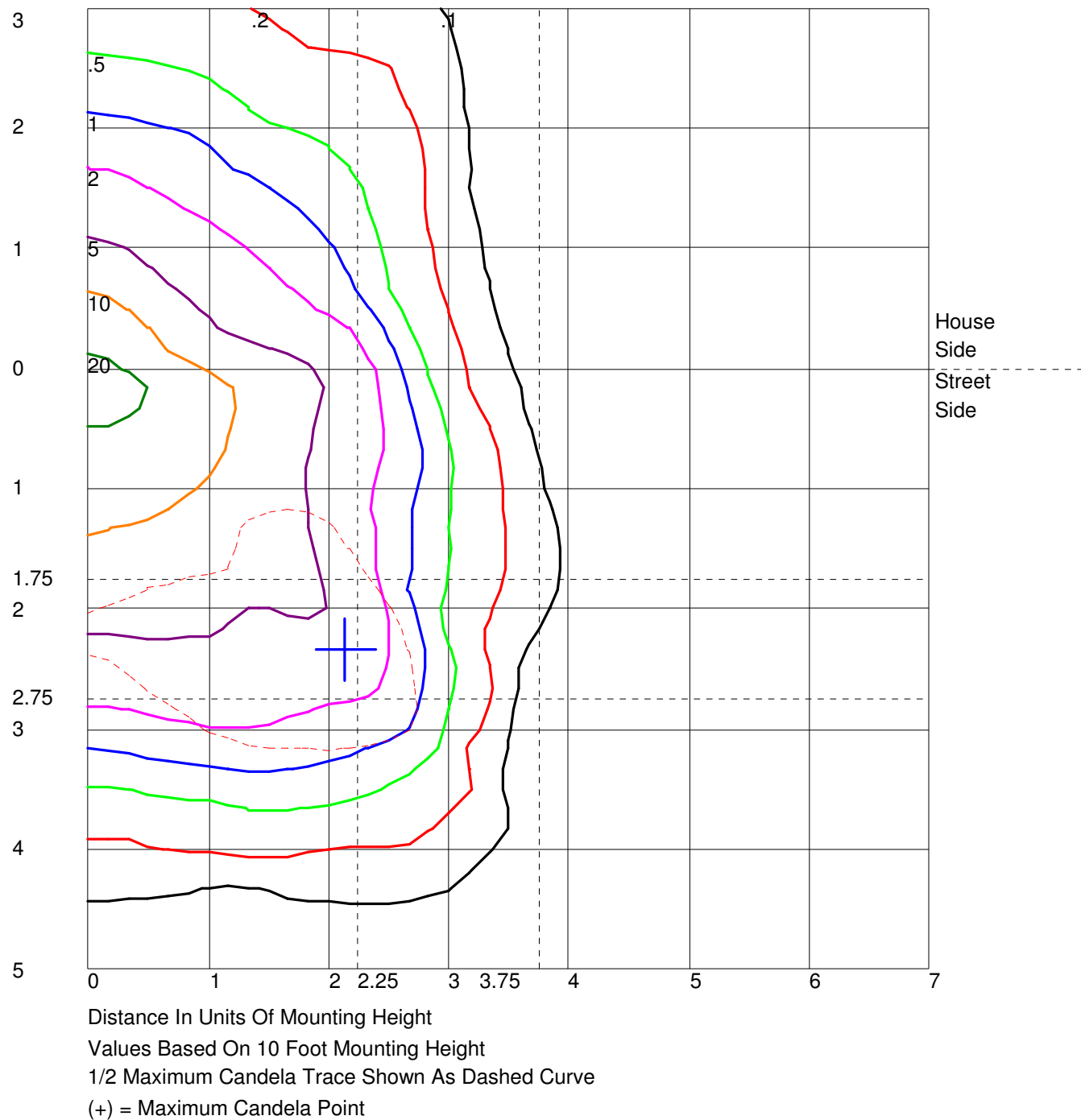
	Lumens	Percent Of Luminaire
Downward Street Side	11014.1	74.1
Downward House Side	3852.7	25.9
Downward Total	14866.8	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	14866.8	100.0

POLAR GRAPH

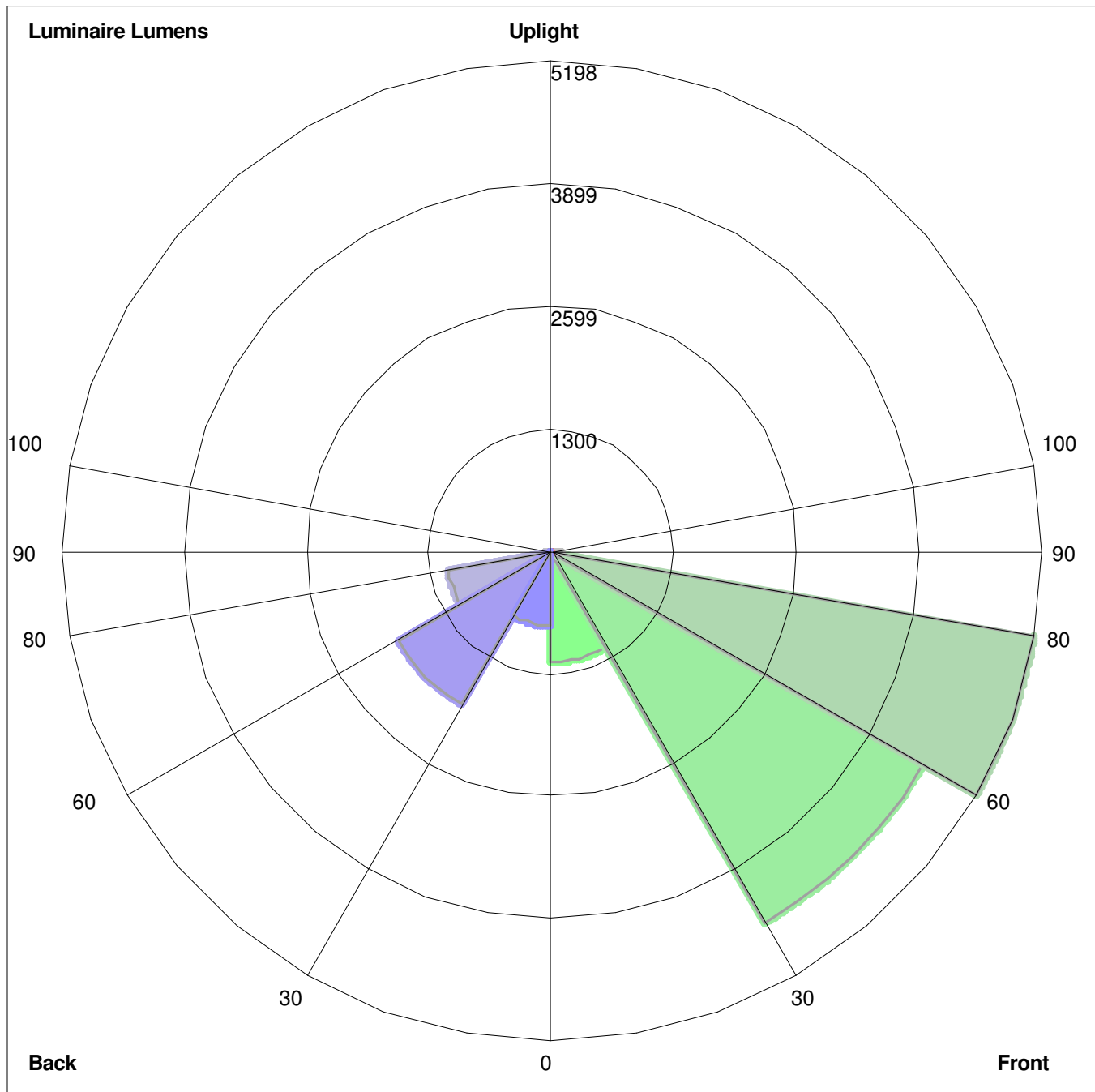


Maximum Candela = 13816.472 Located At Horizontal Angle = 42.5, Vertical Angle = 72.5
1 - Vertical Plane Through Horizontal Angles (42.5 - 222.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1174.5, Medium=4547.8, High=5198.4, Very High=93.5
Back: Low=791.4, Medium=1877.5, High=1115.9, Very High=67.9
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3