



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L220-740-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-L220-740-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	23173
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	127
Total Luminaire Watts	182
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	23498.114
Maximum Candela Angle	77.5H 68V
Maximum Candela (<90 Degrees Vertical)	23498.114
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	897.404 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L220-740-T2-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	4188.4	N.A.	18.1
FM - Front-Medium (30-60)	10148.1	N.A.	43.8
FH - Front-High (60-80)	4103.3	N.A.	17.7
FVH - Front-Very High (80-90)	59.9	N.A.	0.3
BL - Back-Low (0-30)	937.2	N.A.	4.0
BM - Back-Medium (30-60)	2231.5	N.A.	9.6
BH - Back-High (60-80)	1423.2	N.A.	6.1
BVH - Back-Very High (80-90)	81.1	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	23172.7	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>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>77.5</u>
0.0	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409
2.5	6341.495	6220.949	6227.037	6101.619	6033.431	5915.320	5781.379	5603.603	5442.873	5383.209
5.0	7758.834	7678.470	7639.505	7425.200	7240.117	6953.971	6628.860	6237.996	5837.390	5711.973
7.5	9223.661	9150.603	9060.497	8753.650	8423.668	7969.487	7458.076	6863.865	6216.078	6051.696
10.0	10563.071	10468.094	10351.201	10012.695	9598.696	9010.573	8333.563	7476.341	6610.595	6384.113
12.5	11391.069	11349.670	11251.040	11003.858	10612.994	9984.689	9189.567	8107.081	7020.941	6740.883
15.0	11425.163	11425.163	11417.858	11438.558	11299.746	10827.300	10016.348	88834.015	7465.382	7129.312
17.5	11243.734	11237.646	11231.558	11326.534	11462.910	11405.681	10787.117	9545.120	7967.052	7570.099
20.0	11281.481	11280.264	11285.134	11294.875	11367.934	11561.540	11436.122	10319.542	8545.433	8072.987
22.5	11141.452	11154.846	11243.734	11361.846	11399.593	11501.875	11834.292	11102.488	9204.179	8651.368
25.0	10571.594	10598.383	10812.688	11209.640	11434.905	11522.575	11979.192	11870.822	9916.501	9291.849
27.5	9621.831	9653.490	10037.048	10628.824	11264.434	11591.981	12025.463	12523.479	10650.741	9957.901
30.0	8816.968	8855.932	9128.685	9737.507	10704.318	11563.975	12126.527	13030.020	11353.322	10622.735
32.5	8348.174	8387.139	8634.321	9056.844	9867.795	11300.964	12272.644	13351.478	12075.386	11263.217
35.0	7998.710	8026.716	8265.375	8658.674	9211.485	10774.941	12417.544	13524.384	12710.997	11833.075
37.5	7479.994	7504.346	7800.234	8253.198	8776.786	10211.171	12519.826	13626.666	13269.896	12351.791
40.0	6577.719	6609.377	6985.630	7583.493	8261.722	9663.231	12784.055	13724.077	13793.483	12914.343
42.5	5287.015	5313.803	5793.555	6480.307	7498.258	8928.991	13114.037	14066.236	14274.453	13416.013
45.0	4086.417	4097.376	4399.352	4935.115	6253.825	8055.940	12670.814	15214.475	14665.317	13924.989
47.5	3294.948	3292.512	3433.759	3660.241	4469.975	6793.242	11425.163	16545.361	15215.693	14515.547
50.0	2921.130	2907.736	2927.219	2979.577	3291.295	4484.587	9912.848	17244.289	16824.202	16020.556
52.5	2765.272	2753.095	2708.043	2627.678	2779.884	3083.077	7514.088	18001.664	19381.256	18502.117
55.0	2483.996	2493.737	2559.490	2509.566	2514.437	2655.684	4528.422	18324.340	21631.464	20826.601
57.5	2140.620	2150.361	2258.732	2452.337	2448.684	2465.731	3593.271	17014.154	22310.910	21674.082
60.0	1859.344	1872.738	1981.108	2212.461	2367.102	2325.702	3375.312	14503.370	22158.705	21895.693
62.5	1535.450	1558.586	1710.791	1961.626	2112.614	2104.091	3092.818	11717.398	21945.617	22097.822
65.0	1215.210	1240.780	1413.686	1680.350	1830.121	1793.591	2660.554	8659.892	21867.687	22376.663
67.5	859.657	881.575	1076.398	1362.545	1515.968	1473.351	2118.702	6010.296	22729.780	23445.755
68.0	771.987	787.816	996.034	1294.357	1452.651	1408.815	2001.808	5586.555	22777.268	23498.114
70.0	625.870	633.175	695.275	1027.692	1204.251	1167.722	1556.150	4105.899	20730.407	21313.659
72.5	491.929	498.017	547.940	726.934	946.110	943.675	1095.881	2497.390	13940.818	14281.759
75.0	367.729	375.035	420.088	510.193	751.287	818.257	729.369	1288.268	4881.539	4860.839
77.5	258.141	267.882	310.499	373.817	586.905	757.375	445.658	680.664	1033.781	1066.657
80.0	171.688	180.211	211.870	241.094	440.788	562.552	265.447	373.817	476.099	487.058
82.5	103.500	103.500	121.765	137.594	273.970	249.617	141.247	189.953	245.964	237.441
85.0	43.835	43.835	51.141	58.447	135.159	86.453	59.665	68.188	92.541	90.106
87.5	8.524	8.524	9.741	9.741	25.571	10.959	7.306	9.741	10.959	10.959
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	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409	5093.409
2.5	5224.915	5121.415	5021.568	4792.651	4584.434	4360.387	4249.581	4093.723	3928.123	3924.470
5.0	5352.768	5111.674	4868.145	4351.863	3867.241	3415.494	3101.342	2824.937	2610.631	2542.443
7.5	5491.579	5116.544	4736.639	3928.123	3243.806	2645.943	2318.396	2102.873	1978.673	1937.273
10.0	5641.350	5139.680	4622.181	3545.782	2705.607	2175.932	1956.756	1859.344	1806.985	1781.415
12.5	5811.820	5179.862	4527.204	3203.624	2329.355	1944.579	1826.468	1765.585	1727.838	1709.574
15.0	6013.949	5256.574	4460.234	2901.648	2073.650	1836.209	1753.409	1707.138	1677.915	1662.085
17.5	6255.043	5361.291	4417.616	2658.119	1937.273	1774.109	1703.485	1670.609	1646.256	1627.991
20.0	6544.842	5507.409	4406.657	2466.949	1869.085	1733.927	1670.609	1646.256	1629.209	1603.639
22.5	6879.695	5698.579	4418.834	2320.831	1827.685	1702.268	1648.691	1629.209	1619.468	1590.244
25.0	7260.817	5910.449	4461.451	2208.808	1789.938	1673.044	1626.774	1613.380	1608.509	1557.368

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CANDELA TABULATION - (Cont.)

27.5	7656.552	6149.107	4524.769	2124.791	1750.974	1638.950	1601.203	1593.897	1574.415	1518.403
30.0	8066.898	6412.119	4605.134	2063.908	1715.662	1604.856	1568.327	1562.239	1534.233	1483.092
32.5	8455.327	6661.736	4696.457	2020.073	1681.568	1567.109	1529.362	1515.968	1468.480	1349.151
35.0	8778.003	6868.736	4776.822	1979.891	1647.474	1525.709	1486.745	1428.298	1327.233	1238.345
37.5	9044.667	7073.300	4859.621	1939.709	1599.986	1484.309	1396.639	1304.098	1221.298	1190.857
40.0	9385.608	7333.876	4985.039	1910.485	1551.280	1418.556	1285.833	1175.027	1172.592	1147.022
42.5	9688.802	7572.535	5143.333	1892.220	1500.139	1324.798	1206.686	1109.275	1126.322	1137.280
45.0	10027.307	7864.769	5339.374	1881.262	1445.345	1243.216	1081.269	1059.351	1094.663	1112.928
47.5	10470.530	8264.157	5637.697	1894.656	1386.898	1190.857	1036.216	1021.604	1059.351	1086.139
50.0	11729.575	9416.049	6494.919	2020.073	1340.627	1149.457	1030.128	988.728	1032.563	1075.181
52.5	13766.695	11209.640	8020.628	2386.584	1277.310	1042.304	1044.739	944.893	1021.604	1084.922
55.0	15282.663	12592.885	9285.761	2552.184	1155.545	935.151	919.322	914.451	1026.475	1101.969
57.5	14959.987	12412.674	9192.002	2298.914	1027.692	859.657	849.916	896.187	1031.345	1094.663
60.0	14442.488	11956.057	8719.556	1882.479	907.146	793.905	801.210	884.010	1009.428	1048.392
62.5	13967.606	11489.699	8376.180	1569.544	799.993	741.546	758.593	858.440	952.198	977.769
65.0	13732.601	11202.334	8211.798	1336.974	703.799	680.664	714.758	810.952	874.269	961.940
67.5	13793.483	10876.006	7969.487	1098.316	619.781	613.693	667.269	746.416	810.952	1278.527
68.0	13711.901	10703.100	7874.511	1041.087	605.170	600.299	656.311	731.805	818.257	1357.674
70.0	12256.815	98819.403	6671.477	847.481	549.158	549.158	610.040	670.922	965.593	1648.691
72.5	8809.662	5616.997	4276.369	588.123	478.535	493.146	545.505	589.340	1280.963	1880.044
75.0	2848.072	2057.820	1861.779	412.782	399.388	433.482	478.535	518.717	1466.045	1718.097
77.5	708.669	545.505	438.352	273.970	306.847	355.552	395.735	462.705	1349.151	1254.174
80.0	351.899	284.929	236.223	182.647	213.088	266.664	300.758	356.770	897.404	804.863
82.5	194.823	163.164	130.288	105.935	135.159	180.211	194.823	226.482	516.282	478.535
85.0	70.623	63.318	52.359	43.835	64.535	77.929	88.888	97.412	233.788	207.000
87.5	6.088	6.088	3.653	2.435	9.741	14.612	15.829	19.482	53.576	25.571
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

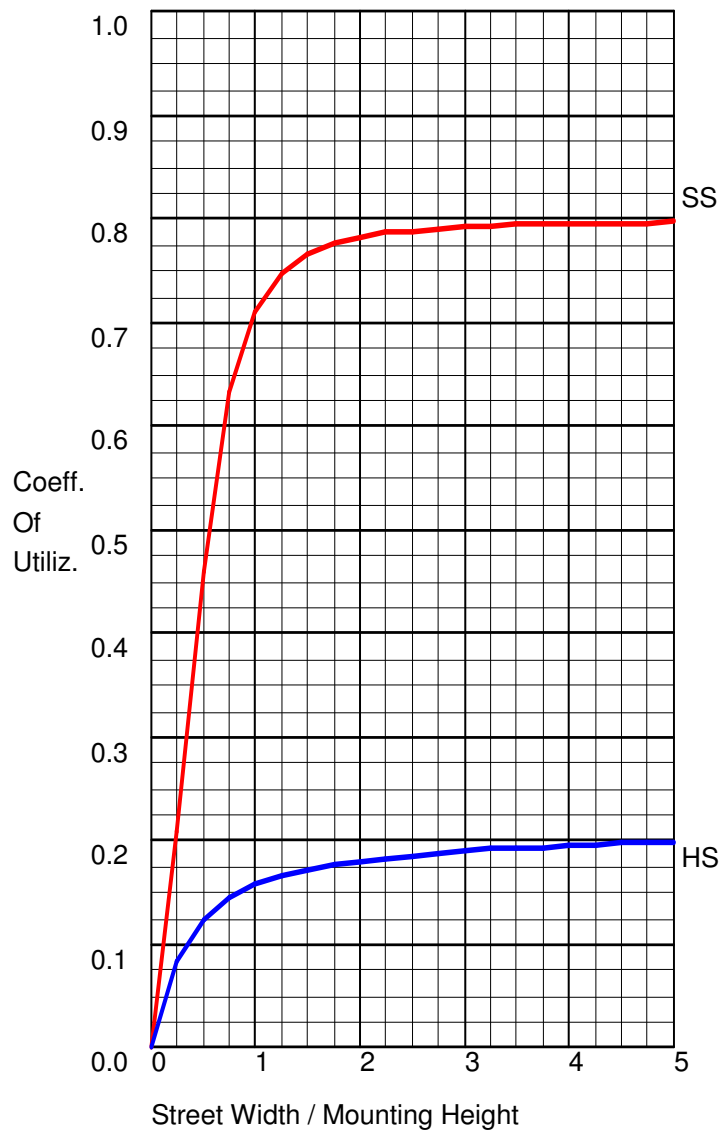
Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	5093.409	5093.409
2.5	3763.741	3835.582
5.0	2413.372	2452.337
7.5	1895.873	1903.179
10.0	1761.932	1763.150
12.5	1696.180	1696.180
15.0	1653.562	1654.780
17.5	1619.468	1620.686
20.0	1590.244	1590.244
22.5	1569.544	1569.544
25.0	1524.492	1525.709
27.5	1490.398	1491.615
30.0	1418.556	1419.774
32.5	1290.704	1287.051
35.0	1211.557	1213.992
37.5	1175.027	1181.116
40.0	1127.539	1137.280
42.5	1098.316	1097.098
45.0	1089.792	1061.786
47.5	1053.263	1053.263
50.0	1050.828	1067.875
52.5	1080.051	1099.533
55.0	1110.492	1127.539
57.5	1106.839	1121.451
60.0	1065.439	1081.269

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L220-740-T2-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

62.5	1008.210	1028.910
65.0	1098.316	1149.457
67.5	1385.680	1435.604
68.0	1433.168	1480.656
70.0	1593.897	1645.038
72.5	1626.774	1652.344
75.0	1341.845	1395.421
77.5	921.757	926.628
80.0	592.993	585.687
82.5	357.988	366.511
85.0	84.018	93.759
87.5	4.871	0.000
90.0	0.000	0.000

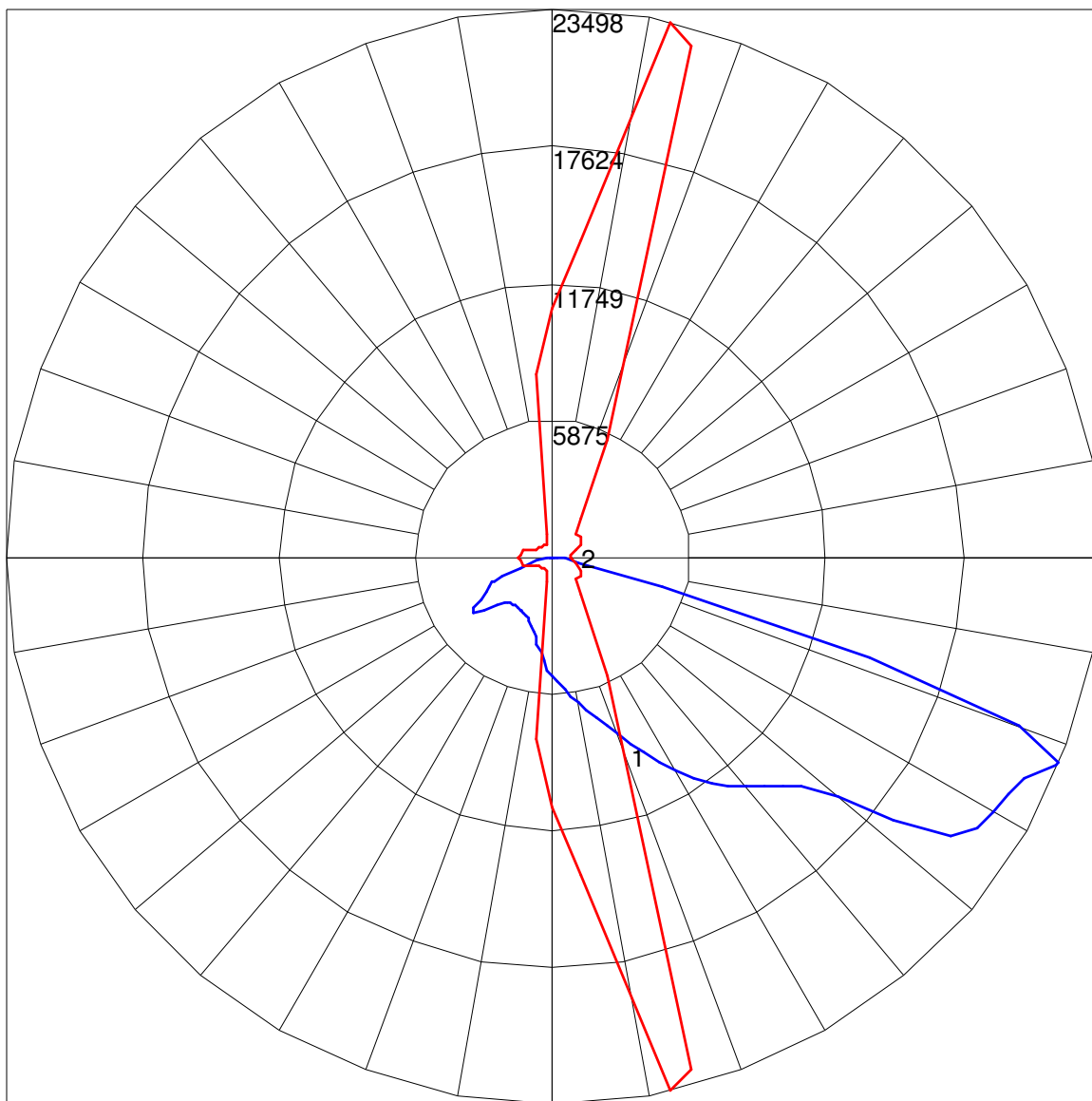
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

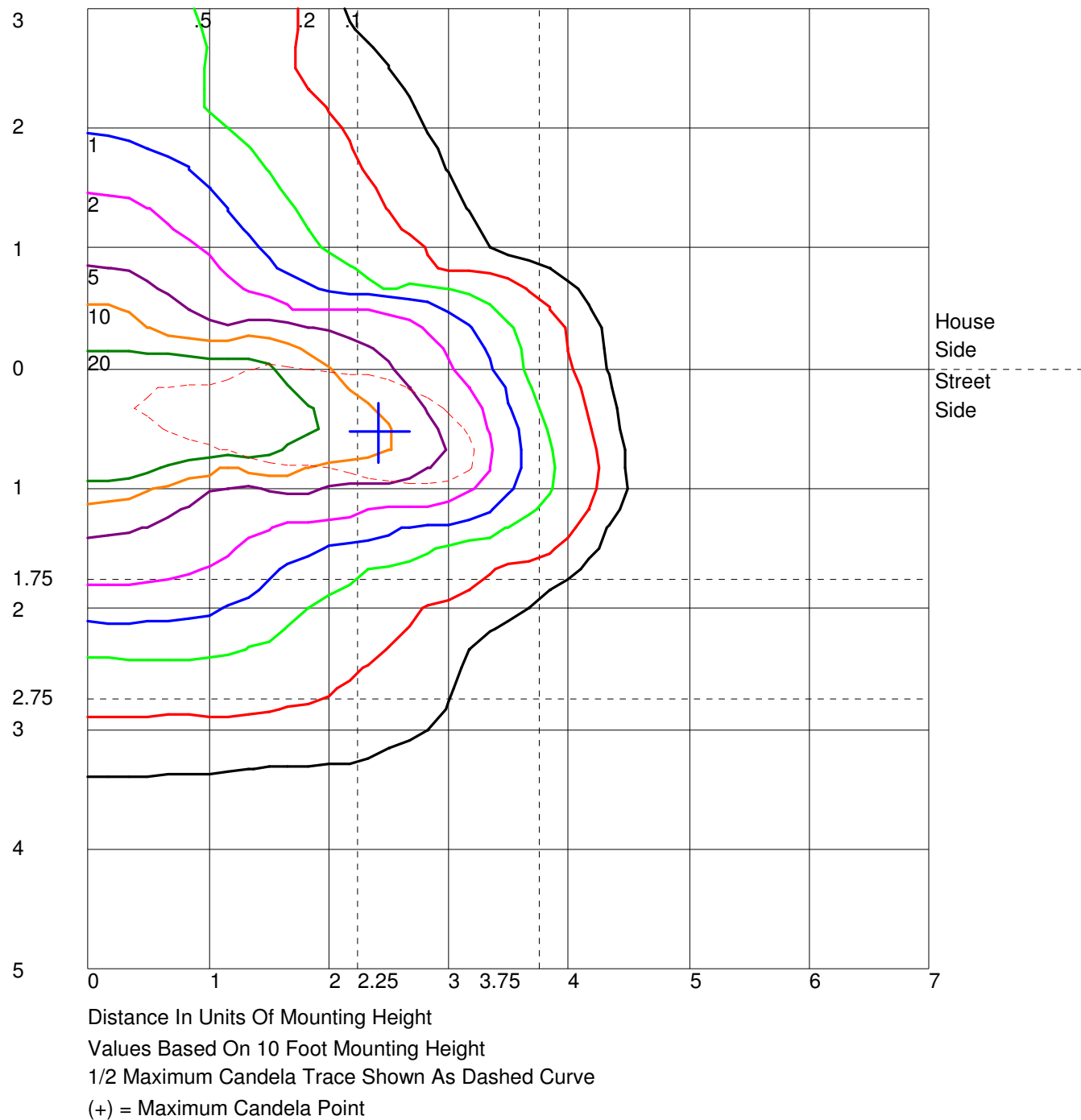
	Lumens	Percent Of Luminaire
Downward Street Side	18499.7	79.8
Downward House Side	4672.9	20.2
Downward Total	23172.6	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	23172.6	100.0

POLAR GRAPH

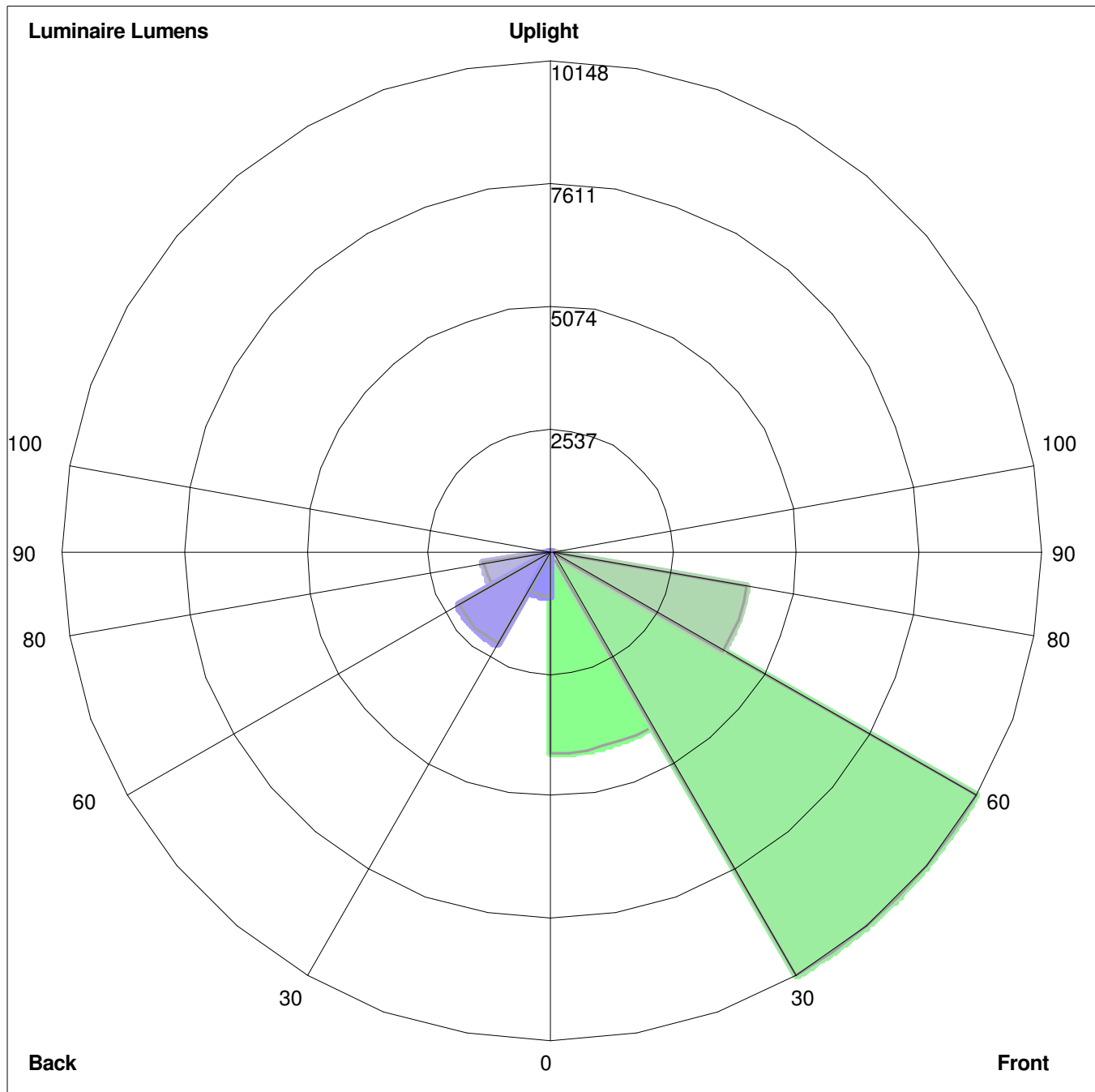


Maximum Candela = 23498.114 Located At Horizontal Angle = 77.5, Vertical Angle = 68
1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (68) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=4188.4, Medium=10148.1, High=4103.3, Very High=59.9
Back: Low=937.2, Medium=2231.5, High=1423.2, Very High=81.1
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3