



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L220-730-T3-F-S-XXX-DIM-UNV_.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM ATAL011760
[TESTLAB] ATA-LABS
[ISSUE DATE] 2023-01-18
[MANUFAC] WILLIAMS OUTDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] VA1-L220-730-T3-F-S-xxx-DIM-UNV_
[LUMINAIRE] VA1 LED AREA LIGHT FIXTURE WITH TYPE
[MORE] III OPTICS AND CLEAR LENS
[LAMP] LED
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor, Architectural, Area, Parking, Site
[SEARCH_MOUNTING] Pole

CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20488
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	182
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	14685.953
Maximum Candela Angle	62.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	14685.953
Maximum Candela Angle (<90 Degrees Vertical)	62.5H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	2995.175 (14.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L220-730-T3-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2067.4	N.A.	10.1
FM - Front-Medium (30-60)	7161.1	N.A.	35.0
FH - Front-High (60-80)	4785.3	N.A.	23.4
FVH - Front-Very High (80-90)	146.1	N.A.	0.7
BL - Back-Low (0-30)	1122.4	N.A.	5.5
BM - Back-Medium (30-60)	2661.4	N.A.	13.0
BH - Back-High (60-80)	2331.7	N.A.	11.4
BVH - Back-Very High (80-90)	212.9	N.A.	1.0
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	20488.3	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>62.5</u>	<u>65.0</u>	<u>75.0</u>
0.0	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002
2.5	4493.290	4461.662	4454.282	4453.228	4431.088	4420.546	4387.863	4372.049	4358.344	4330.933
5.0	4722.066	4693.601	4678.841	4664.082	4626.128	4591.337	4533.352	4483.802	4461.662	4389.972
7.5	4805.354	4781.105	4769.508	4769.508	4757.911	4731.555	4663.027	4596.608	4571.306	4460.608
10.0	4755.803	4742.097	4730.501	4745.260	4764.237	4788.485	4767.400	4704.144	4682.004	4544.949
12.5	4716.795	4708.361	4694.655	4710.469	4730.501	4774.780	4804.299	4784.268	4774.780	4635.616
15.0	4731.555	4725.229	4704.144	4705.198	4715.741	4760.020	4814.842	4834.873	4842.253	4744.206
17.5	4807.462	4801.136	4771.617	4754.749	4742.097	4775.834	4836.982	4880.207	4898.129	4852.796
20.0	4902.346	4905.509	4868.610	4850.687	4821.168	4835.927	4886.532	4942.408	4960.331	4960.331
22.5	5002.502	5002.502	4974.036	4961.385	4944.517	4942.408	4970.874	5029.913	5043.618	5068.921
25.0	5080.518	5081.572	5065.758	5064.703	5081.572	5085.789	5088.952	5127.960	5143.774	5174.347
27.5	5145.882	5150.099	5125.851	5145.882	5207.030	5248.146	5241.821	5239.712	5256.580	5277.666
30.0	5218.627	5214.410	5188.053	5193.324	5300.860	5428.426	5424.209	5375.713	5378.875	5382.038
32.5	5224.952	5226.006	5221.789	5239.712	5358.844	5610.814	5625.574	5546.504	5525.419	5485.356
35.0	5183.836	5190.161	5216.518	5295.588	5447.403	5777.389	5876.490	5754.195	5706.753	5580.241
37.5	5126.905	5136.394	5177.510	5366.224	5675.125	5952.397	6154.817	5987.188	5895.467	5645.605
40.0	5062.595	5078.409	5149.045	5543.341	6272.895	6643.997	6533.299	6252.864	6120.026	5713.078
42.5	4970.874	5000.393	5087.897	5447.403	6284.492	7335.597	7467.380	6801.083	6541.733	5823.776
45.0	5150.099	5164.859	5123.742	5367.278	6122.134	7241.767	8083.073	7827.940	7529.582	6219.127
47.5	5675.125	5660.365	5591.837	5636.117	6066.258	6976.091	8067.259	8302.361	8229.616	7230.170
50.0	5656.148	5635.062	5766.846	6066.258	6325.608	6875.936	7674.017	8091.507	8069.367	7361.953
52.5	5153.262	5135.339	5462.163	6098.940	6771.563	7179.565	7512.714	7772.064	7780.498	7134.232
55.0	3977.753	4008.327	4620.857	5854.350	7145.829	8065.150	7959.723	7917.553	7918.607	7302.914
57.5	2978.307	3058.431	3606.651	5021.478	7158.480	9423.047	9182.674	8515.323	8422.547	7606.544
60.0	2402.677	2450.119	2755.857	3523.364	6203.313	10256.973	11478.870	9693.994	9401.962	8226.453
62.5	1736.379	1781.713	1947.233	2310.955	4315.119	9675.017	13709.701	11752.980	11100.388	9275.450
65.0	1390.579	1417.990	1522.363	1606.704	2413.219	7988.189	13829.888	13919.500	13174.133	10561.657
67.5	1217.680	1225.059	1364.223	1385.308	1482.301	4502.779	12311.742	14685.953	14509.891	11340.761
70.0	965.709	947.787	1149.152	1210.300	1145.989	2200.257	9332.380	13170.970	13590.569	11493.630
72.5	680.003	662.080	741.150	1028.966	903.508	1250.362	5165.913	10026.089	10796.759	10370.834
75.0	525.025	519.754	527.134	792.810	749.585	810.732	2260.351	6086.289	6878.044	6924.432
77.5	362.668	358.451	366.885	528.188	638.886	558.762	970.981	2425.871	3226.060	4510.159
80.0	234.047	229.830	241.427	333.149	558.762	367.940	508.157	929.864	1369.494	2995.175
82.5	127.566	123.349	138.109	197.148	371.102	204.528	266.730	396.405	495.506	1371.603
85.0	53.768	50.605	60.093	89.613	131.784	85.396	108.590	141.272	160.249	301.521
87.5	10.543	10.543	11.597	20.031	24.248	17.923	21.085	27.411	29.520	35.845
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	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002	4274.002
2.5	4292.979	4278.220	4264.514	4221.289	4189.661	4142.219	4097.940	4087.397	4044.172	4027.304
5.0	4306.685	4262.406	4226.560	4131.676	4036.792	3927.148	3819.613	3748.977	3650.930	3597.162
7.5	4333.041	4262.406	4202.312	4046.281	3876.543	3673.070	3455.891	3260.851	3023.641	2918.214
10.0	4372.049	4278.220	4188.607	3967.210	3700.481	3339.921	2917.160	2566.088	2321.498	2216.071
12.5	4422.654	4306.685	4184.390	3886.032	3487.519	2892.911	2369.994	2174.955	2132.784	2118.024
15.0	4489.073	4349.910	4197.041	3808.016	3216.572	2452.227	2167.575	2125.404	2111.699	2110.645
17.5	4569.198	4406.840	4223.398	3724.729	2883.423	2209.746	2137.001	2118.024	2109.590	2105.373
20.0	4657.756	4476.422	4262.406	3628.790	2556.600	2148.598	2122.241	2108.536	2085.342	2063.202
22.5	4761.074	4561.818	4308.793	3513.875	2322.552	2129.621	2101.156	2069.528	2037.900	2007.326
25.0	4872.827	4646.159	4354.127	3378.929	2216.071	2113.807	2063.202	2013.652	1976.753	1941.962
27.5	4995.122	4733.663	4387.863	3221.843	2178.118	2091.668	2012.598	1953.559	1915.605	1877.651

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CANDELA TABULATION - (Cont.)

30.0	5121.634	4827.493	4432.143	3059.486	2151.761	2055.823	1958.830	1889.248	1849.186	1818.612
32.5	5243.929	4929.757	4482.748	2909.780	2124.350	2009.435	1900.845	1822.829	1790.147	1766.953
35.0	5335.650	4996.176	4518.593	2766.399	2086.396	1954.613	1849.186	1757.465	1726.891	1715.294
37.5	5369.387	5002.502	4511.213	2647.267	2040.009	1896.628	1795.418	1703.697	1669.961	1648.875
40.0	5403.124	5019.370	4509.104	2565.034	1999.946	1841.806	1749.031	1652.038	1608.813	1581.402
42.5	5448.457	5055.215	4531.244	2503.887	1964.101	1794.364	1707.914	1607.759	1539.231	1507.603
45.0	5691.993	5312.456	4734.718	2529.189	1945.124	1755.356	1676.286	1567.697	1472.812	1440.130
47.5	6360.399	5887.033	5282.937	2892.911	2094.831	1745.868	1657.309	1556.100	1438.022	1410.611
50.0	6493.237	6010.382	5389.418	3124.850	2493.344	1945.124	1663.635	1571.914	1482.301	1544.503
52.5	6329.825	5852.242	5240.766	2853.903	2360.506	2209.746	1801.744	1587.728	1611.976	1862.892
55.0	6517.485	6072.584	5533.853	2982.524	2131.730	1945.124	1919.822	1618.301	1733.217	2170.738
57.5	6789.486	6396.244	6015.653	3567.643	2103.265	1745.868	1671.015	1610.922	1790.147	2316.227
60.0	7200.650	6778.943	6610.260	4406.840	2153.870	1646.767	1477.029	1443.293	1768.007	2206.583
62.5	7826.886	7312.403	7217.519	5228.115	2282.490	1565.588	1351.572	1337.866	1683.666	1964.101
65.0	8420.439	7644.497	7439.969	5564.427	2547.111	1497.061	1240.873	1246.145	1566.642	1693.154
67.5	8637.618	7782.606	7579.133	5660.365	2853.903	1407.448	1130.175	1137.555	1391.634	1474.921
70.0	8457.338	7750.978	7686.668	5561.264	3123.796	1324.161	997.338	1006.826	1227.168	1293.587
72.5	7396.744	6863.285	6951.843	5172.239	3293.533	1237.711	860.283	861.337	1056.377	1094.330
75.0	4594.500	4310.902	4482.748	4226.560	3272.448	1174.455	708.468	711.631	879.260	827.600
77.5	3074.245	2744.260	2846.524	3334.650	3055.269	1109.090	562.979	557.708	680.003	444.901
80.0	2271.948	1987.295	2130.676	2558.708	2691.546	1041.617	384.808	400.622	456.498	223.505
82.5	908.779	839.197	968.872	1442.239	2030.520	856.066	192.931	242.482	230.885	126.512
85.0	124.404	102.264	138.109	400.622	1028.966	511.320	76.962	84.341	69.582	53.768
87.5	22.140	16.868	18.977	32.682	230.885	145.489	15.814	15.814	9.488	5.271
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

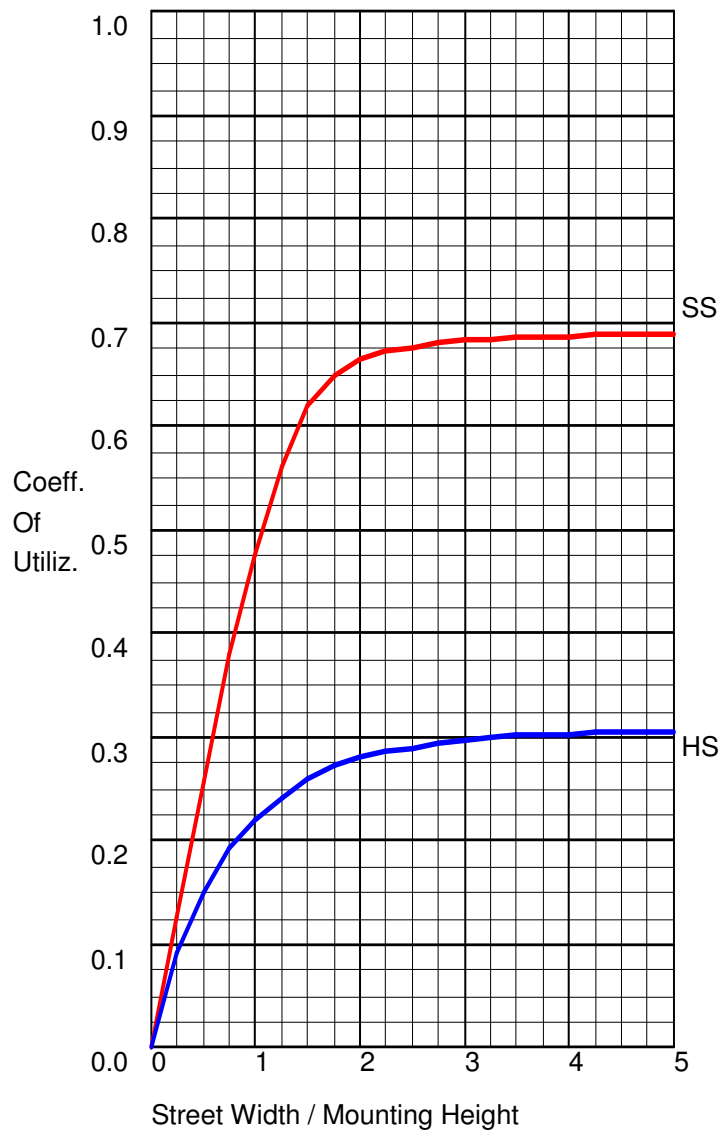
Vert. Angles **Horizontal Angles**

	<u>175.0</u>	<u>180.0</u>
0.0	4274.002	4274.002
2.5	4025.195	4015.707
5.0	3585.565	3572.914
7.5	2837.035	2826.493
10.0	2182.335	2178.118
12.5	2114.862	2112.753
15.0	2113.807	2114.862
17.5	2103.265	2101.156
20.0	2053.714	2050.551
22.5	1993.621	1988.349
25.0	1926.148	1919.822
27.5	1859.729	1858.674
30.0	1802.798	1799.635
32.5	1747.976	1744.814
35.0	1695.263	1691.046
37.5	1628.844	1625.681
40.0	1557.154	1557.154
42.5	1475.975	1474.921
45.0	1413.773	1409.556
47.5	1384.254	1386.362
50.0	1570.859	1590.890
52.5	1983.078	2010.489
55.0	2416.382	2460.662
57.5	2655.701	2714.740
60.0	2414.274	2422.708
62.5	2016.815	1991.512
65.0	1634.115	1596.162

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L220-730-T3-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

67.5	1353.680	1346.300
70.0	1148.098	1140.718
72.5	950.950	941.461
75.0	613.584	608.313
77.5	358.451	348.963
80.0	234.047	229.830
82.5	145.489	143.380
85.0	30.574	28.465
87.5	1.054	0.000
90.0	0.000	0.000

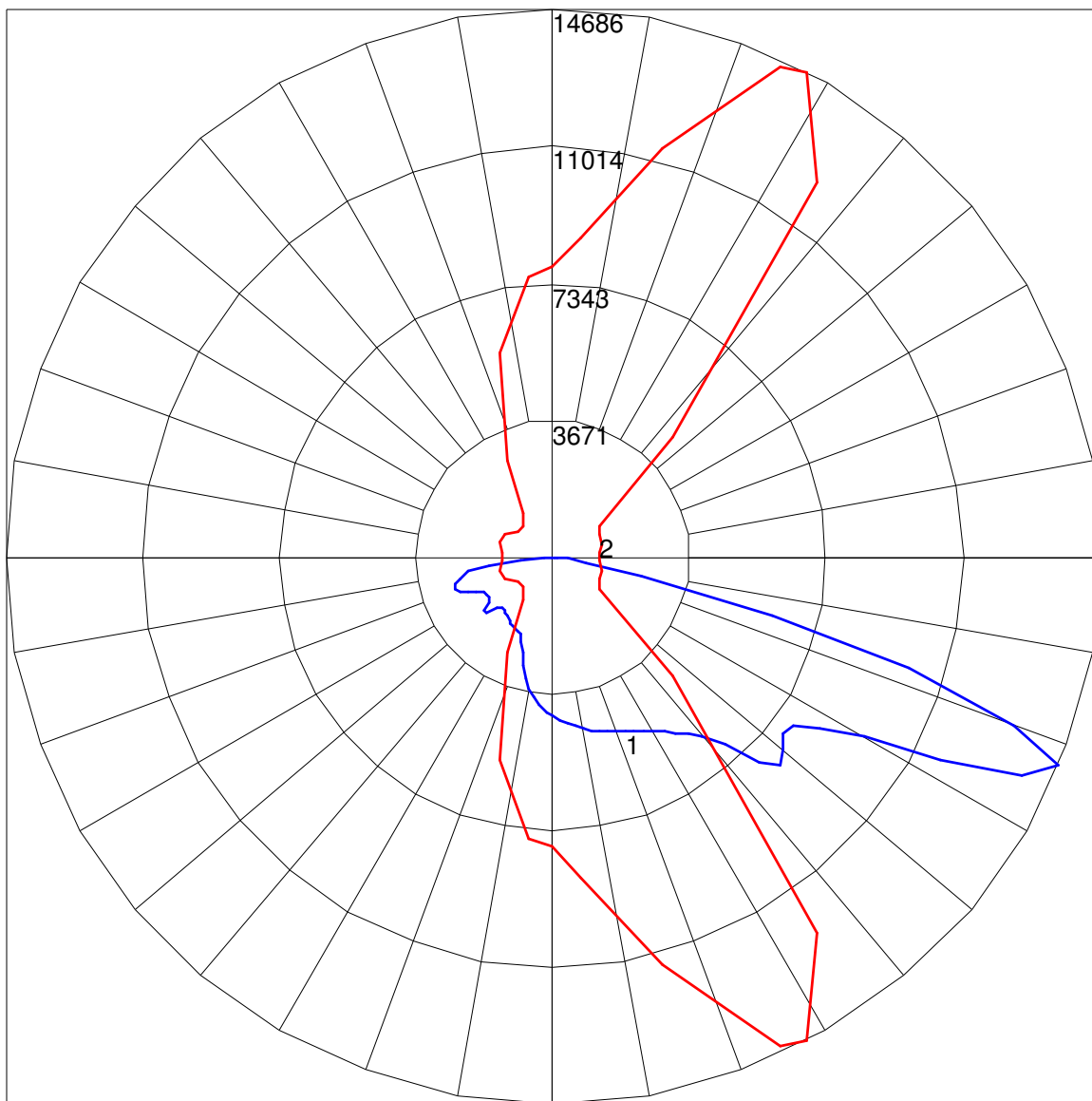
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

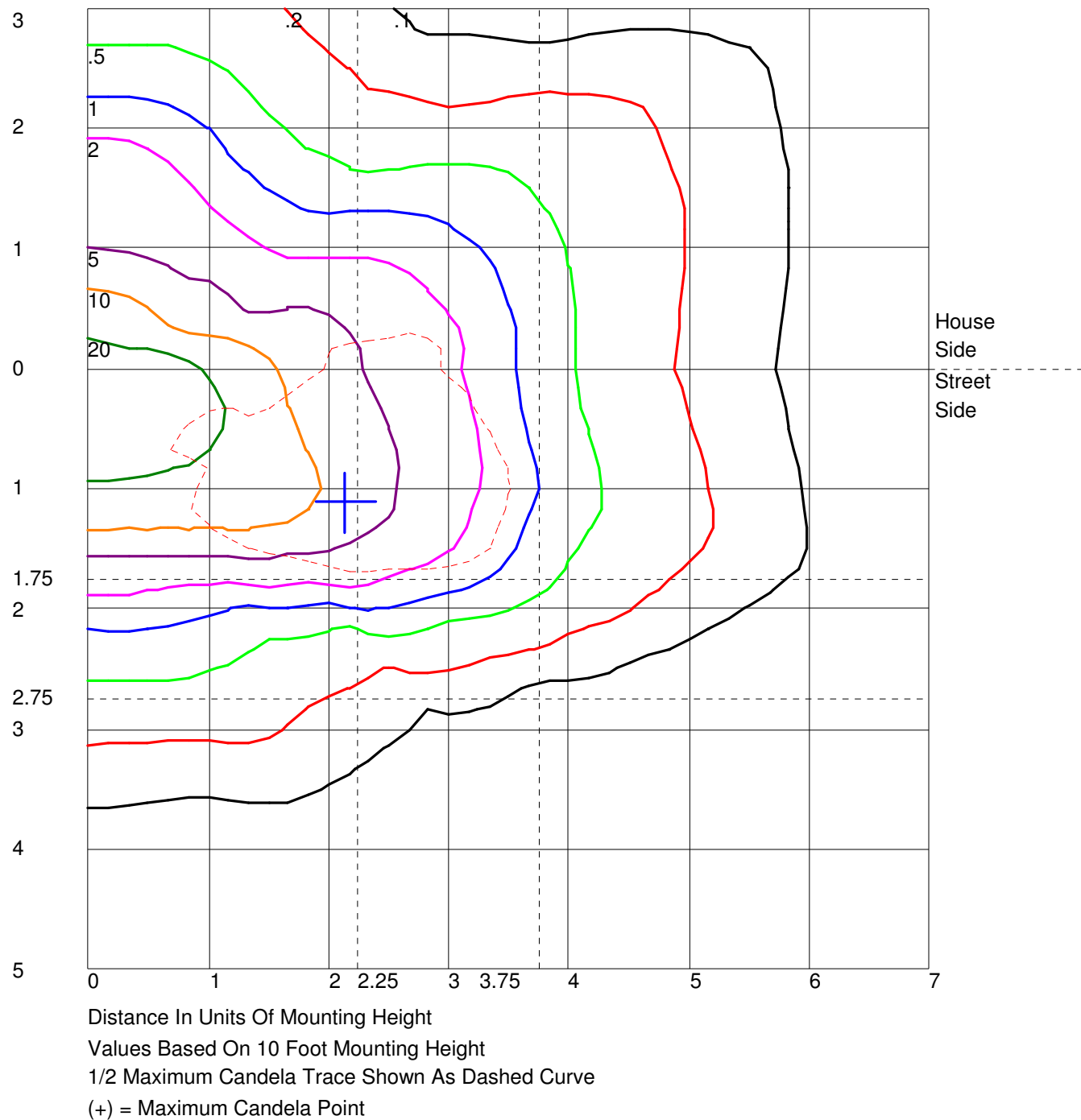
	Lumens	Percent Of Luminaire
Downward Street Side	14159.8	69.1
Downward House Side	6328.4	30.9
Downward Total	20488.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	20488.2	100.0

POLAR GRAPH

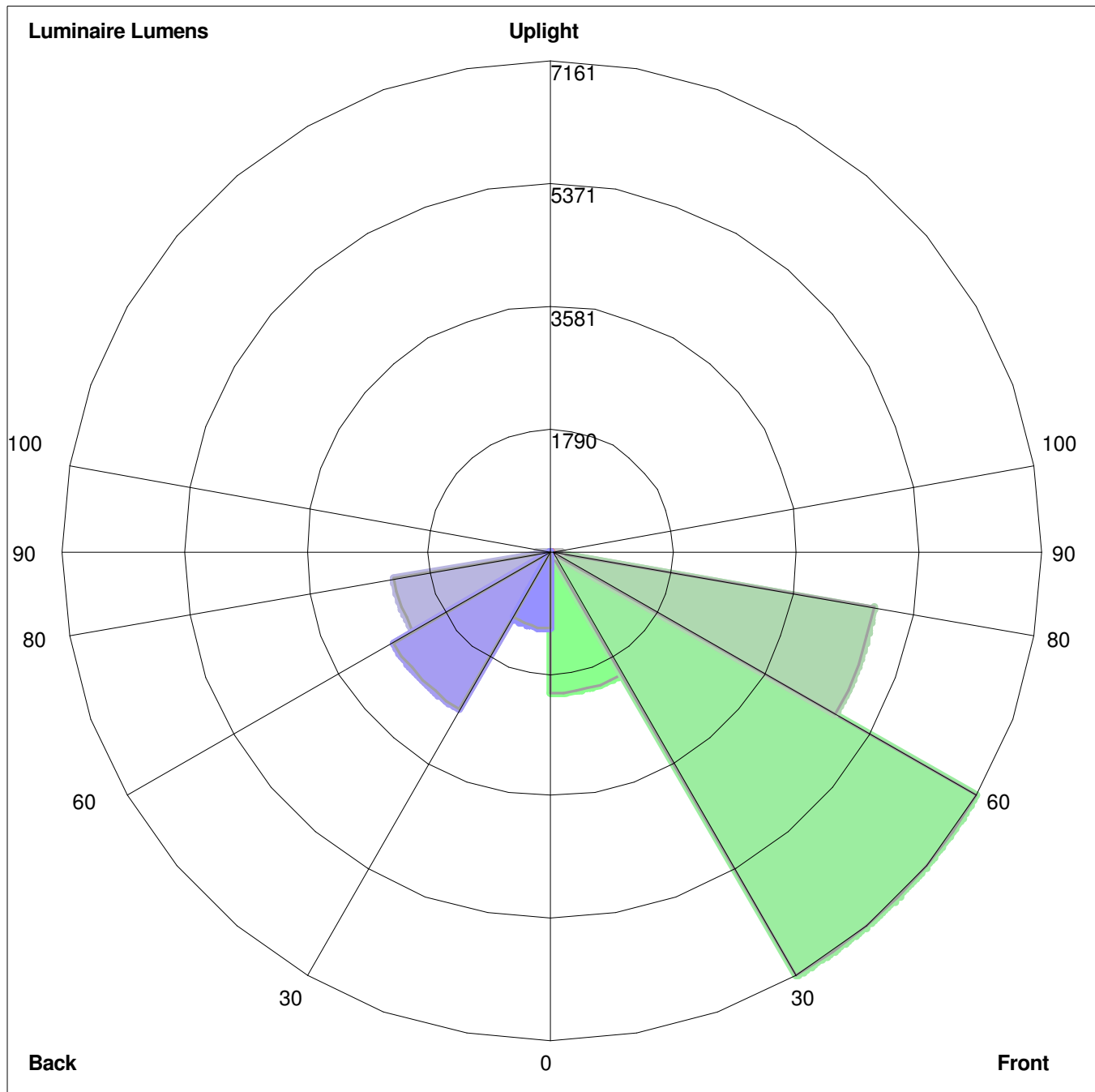


Maximum Candela = 14685.953 Located At Horizontal Angle = 62.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (62.5 - 242.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2067.4, Medium=7161.1, High=4785.3, Very High=146.1
Back: Low=1122.4, Medium=2661.4, High=2331.7, Very High=212.9
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3