



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L110-730-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-L110-730-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	10093
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	88
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	9379.842
Maximum Candela Angle	42.5H 72.5V
Maximum Candela (<90 Degrees Vertical)	9379.842
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	690.512 (6.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L110-730-T4-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	797.3	N.A.	7.9
FM - Front-Medium (30-60)	3087.4	N.A.	30.6
FH - Front-High (60-80)	3529.1	N.A.	35.0
FVH - Front-Very High (80-90)	63.5	N.A.	0.6
BL - Back-Low (0-30)	537.3	N.A.	5.3
BM - Back-Medium (30-60)	1274.6	N.A.	12.6
BH - Back-High (60-80)	757.6	N.A.	7.5
BVH - Back-Very High (80-90)	46.1	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	10092.9	N.A.	100.0
BUG Rating	B2-U0-G2		

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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	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	
2.5	1766.854	1758.688	1748.481	1741.336	1733.171	1722.453	1711.736	1699.487	1679.583	1656.617	
5.0	1911.795	1905.671	1893.423	1879.643	1855.146	1829.118	1813.297	1773.999	1726.026	1673.459	
7.5	2005.191	2002.128	1993.452	1983.756	1957.217	1923.023	1905.671	1843.918	1770.937	1695.404	
10.0	2033.771	2035.302	2027.136	2026.626	2010.805	1979.673	1963.852	1894.954	1815.848	1718.370	
12.5	2034.791	2037.853	2030.198	2031.729	2027.136	1996.515	1982.735	1925.575	1851.573	1741.847	
15.0	2029.177	2031.729	2022.543	2021.522	2021.522	1996.515	1986.307	1943.437	1883.215	1770.427	
17.5	2011.825	2014.887	2011.825	2010.805	2006.722	1986.818	1981.714	1964.872	1912.816	1796.965	
20.0	1968.955	1972.528	1983.756	1989.880	1990.390	1976.100	1975.080	1981.204	1916.899	1813.807	
22.5	1914.347	1917.920	1958.748	1964.362	1962.831	1960.790	1962.831	1958.748	1921.492	1837.283	
25.0	1871.477	1878.622	1947.520	1927.106	1929.658	1947.010	1954.665	1948.031	1934.761	1864.843	
27.5	1849.532	1868.415	1915.878	1905.671	1913.837	1943.948	1957.217	1959.769	1953.645	1902.609	
30.0	1863.312	1878.622	1886.278	1902.609	1929.148	1958.748	1972.528	1992.942	1991.921	1951.093	
32.5	1901.588	1893.423	1893.933	1935.272	1972.017	1996.515	2010.805	2044.998	2043.978	2010.294	
35.0	1944.969	1927.106	1933.230	2002.128	2036.833	2059.288	2071.027	2109.814	2105.731	2078.682	
37.5	2024.074	2008.763	2027.136	2092.462	2125.635	2139.925	2143.497	2171.056	2172.077	2154.725	
40.0	2148.090	2135.332	2144.518	2208.823	2249.141	2238.424	2240.465	2226.175	2238.934	2239.444	
42.5	2289.970	2275.680	2289.970	2340.495	2386.937	2359.378	2349.171	2290.990	2313.446	2336.412	
45.0	2449.711	2440.525	2454.304	2506.361	2557.907	2504.319	2479.822	2416.538	2416.538	2449.201	
47.5	2631.908	2613.536	2637.522	2712.034	2714.586	2681.413	2654.874	2580.362	2553.313	2583.935	
50.0	2834.520	2809.002	2828.906	2923.832	2891.169	2874.328	2854.934	2800.326	2741.635	2744.697	
52.5	3103.988	3092.250	3046.318	3122.871	3099.905	3100.416	3096.333	3098.374	2967.213	2932.508	
55.0	3500.025	3486.756	3367.842	3354.063	3333.649	3377.029	3408.671	3426.023	3221.880	3156.555	
57.5	4110.411	4078.769	3867.481	3675.077	3585.254	3731.216	3818.998	3740.403	3487.776	3356.104	
60.0	4360.486	4352.830	4372.734	4113.984	3909.331	4182.371	4337.520	4085.914	3712.843	3488.797	
62.5	4535.538	4571.263	4732.536	4668.741	4332.927	4796.330	5053.550	4443.164	3832.777	3510.742	
65.0	4853.490	4931.064	5329.653	5296.480	5034.667	5858.382	6163.065	4892.277	3661.808	3362.229	
67.5	4736.108	4858.083	5755.800	6219.204	5968.109	7443.039	7698.217	5131.124	3216.777	3044.787	
70.0	3858.295	3943.014	5293.928	6944.421	6934.214	9056.276	9041.986	4564.118	2497.685	2342.536	
72.5	2486.967	2633.439	4038.451	6212.570	6958.711	9379.842	9000.647	2819.720	1589.250	1090.632	
75.0	983.457	1033.472	1794.413	3665.380	5240.851	6926.048	5393.958	1148.812	913.028	501.170	
77.5	609.876	593.034	543.019	1053.886	1960.279	1867.394	1019.182	466.466	498.618	323.566	
80.0	402.671	458.300	317.952	505.253	690.512	509.336	378.685	263.344	286.820	211.288	
82.5	214.350	251.606	199.039	261.303	287.331	212.819	201.591	149.024	148.514	120.444	
85.0	92.885	118.403	86.761	100.030	113.299	82.167	86.761	68.388	64.305	53.077	
87.5	28.580	37.256	19.394	19.904	23.476	17.352	16.331	17.352	13.780	13.780	
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	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	1629.568	
2.5	1631.610	1621.913	1611.195	1588.740	1568.836	1545.359	1529.538	1516.269	1509.124	1501.979	
5.0	1618.340	1595.374	1570.367	1519.842	1475.951	1436.143	1407.563	1388.680	1376.942	1369.286	
7.5	1613.237	1575.981	1539.235	1463.192	1402.460	1358.569	1333.561	1323.354	1315.189	1312.637	
10.0	1609.154	1557.608	1508.103	1411.136	1345.810	1308.554	1295.285	1297.326	1306.002	1317.740	
12.5	1607.623	1541.277	1477.992	1362.652	1298.857	1275.891	1282.015	1302.940	1335.093	1367.245	
15.0	1612.216	1528.518	1450.433	1317.740	1259.560	1254.456	1277.422	1317.740	1373.369	1421.853	
17.5	1615.789	1518.821	1424.915	1277.933	1227.407	1236.083	1265.174	1318.251	1367.245	1407.563	
20.0	1620.892	1511.166	1402.970	1243.228	1200.869	1216.180	1246.291	1276.912	1318.251	1362.141	
22.5	1628.548	1503.510	1379.494	1211.076	1177.903	1198.827	1206.483	1223.835	1260.070	1301.409	
25.0	1642.838	1501.469	1360.100	1184.027	1159.530	1174.841	1157.489	1171.268	1193.724	1233.021	
27.5	1663.762	1505.041	1347.851	1164.123	1145.240	1139.626	1113.598	1119.722	1138.095	1176.372	

IES ROAD REPORT

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CANDELA TABULATION - (Cont.)

30.0	1696.935	1518.821	1342.238	1148.302	1134.522	1103.391	1076.342	1076.342	1085.018	1123.295
32.5	1739.805	1539.235	1343.258	1138.605	1126.357	1074.300	1042.148	1031.941	1044.189	1096.756
35.0	1797.986	1568.836	1351.424	1135.033	1115.639	1049.803	1010.506	992.643	1028.368	1082.466
37.5	1867.394	1609.664	1368.776	1139.626	1095.735	1026.327	972.229	973.760	1015.609	1076.342
40.0	1953.134	1671.928	1401.439	1154.426	1075.321	1005.402	942.628	962.022	1003.361	1075.831
42.5	2064.392	1757.157	1450.943	1171.268	1058.990	988.561	928.849	947.222	991.623	1071.238
45.0	2200.657	1870.967	1522.393	1177.392	1054.907	970.698	923.745	931.401	979.374	1062.562
47.5	2356.316	2010.294	1618.340	1181.986	1053.376	954.877	912.517	914.048	963.553	1005.402
50.0	2538.003	2170.036	1725.005	1198.827	1052.355	940.077	894.145	895.165	900.269	983.457
52.5	2737.552	2336.922	1839.325	1241.187	1053.886	933.442	876.792	872.199	857.909	966.615
55.0	2977.420	2620.681	2043.978	1276.912	1056.438	944.159	877.303	838.516	841.578	938.546
57.5	3367.332	3035.600	2235.872	1309.064	1089.101	982.947	915.069	850.764	857.909	917.621
60.0	3746.527	3225.963	2390.510	1384.087	1126.357	1000.809	946.201	884.448	915.069	930.380
62.5	3723.561	3237.191	2557.907	1427.467	1117.170	981.926	919.152	856.378	955.387	911.497
65.0	3456.644	3115.216	2428.276	1331.010	1099.308	975.291	874.751	771.149	883.937	839.536
67.5	2568.114	2245.058	1597.416	971.208	978.353	952.325	835.454	691.533	783.908	789.521
70.0	1273.339	1000.809	698.168	539.957	691.023	858.930	808.405	621.104	686.940	715.009
72.5	535.874	439.417	369.498	346.532	409.816	672.650	765.535	538.936	572.620	632.842
75.0	330.711	290.903	254.668	251.095	272.530	437.886	658.360	464.935	457.790	520.564
77.5	224.557	196.487	174.542	176.583	193.425	274.572	496.067	398.078	359.801	385.319
80.0	147.493	127.589	113.299	119.423	132.182	171.480	314.380	286.820	274.061	286.310
82.5	84.719	71.450	63.795	71.450	80.636	100.540	171.480	198.529	200.570	214.350
85.0	38.277	31.642	27.559	32.663	38.277	46.953	79.105	93.906	90.843	87.271
87.5	10.207	8.676	8.166	9.697	11.228	13.780	23.476	23.476	20.925	13.780
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

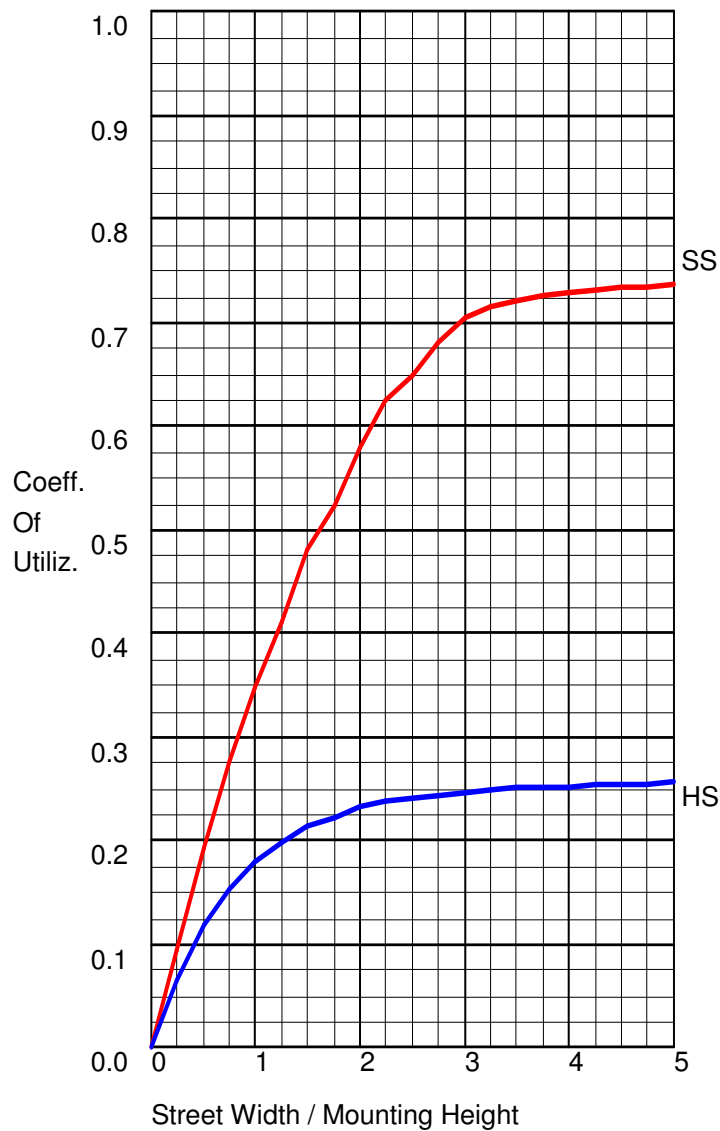
Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	1629.568	1629.568
2.5	1491.262	1498.407
5.0	1361.121	1363.162
7.5	1309.575	1308.554
10.0	1324.885	1321.823
12.5	1387.659	1385.108
15.0	1445.840	1447.881
17.5	1428.998	1430.529
20.0	1387.149	1386.128
22.5	1325.396	1329.989
25.0	1264.153	1270.788
27.5	1202.910	1210.055
30.0	1157.489	1165.654
32.5	1137.074	1145.240
35.0	1125.336	1132.481
37.5	1128.398	1134.012
40.0	1134.522	1139.626
42.5	1126.867	1131.971
45.0	1093.184	1097.266
47.5	1066.645	1072.259
50.0	1072.769	1076.852
52.5	1067.155	1071.749
55.0	1040.107	1048.783
57.5	1013.568	1021.734
60.0	980.905	987.540
62.5	921.193	930.890
65.0	848.212	868.627

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L110-730-T4-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

67.5	770.638	798.198
70.0	688.471	724.196
72.5	610.897	642.028
75.0	509.846	533.323
77.5	416.451	448.603
80.0	375.112	399.099
82.5	216.902	219.964
85.0	63.284	57.160
87.5	5.614	3.062
90.0	0.000	0.000

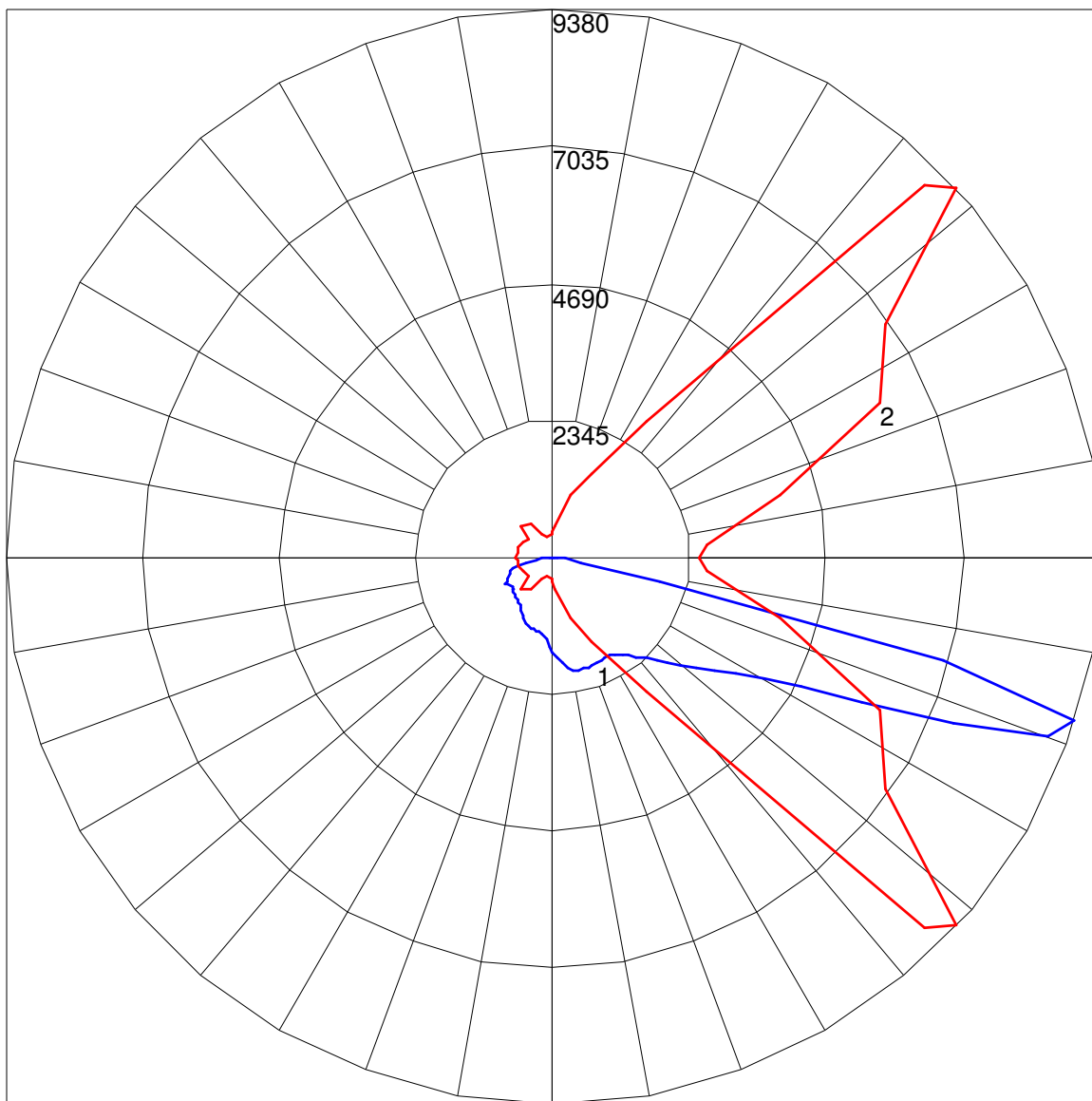
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

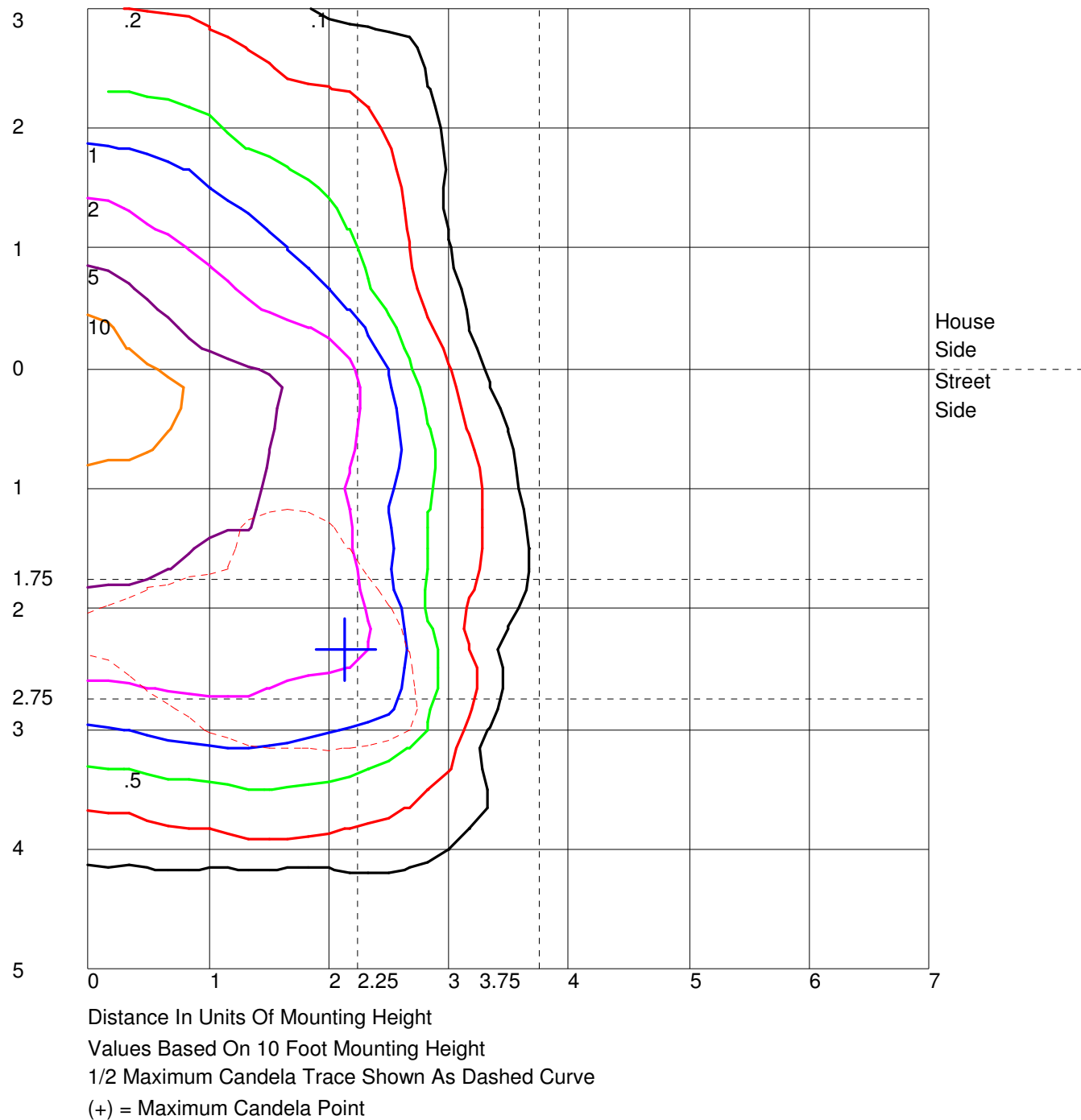
	Lumens	Percent Of Luminaire
Downward Street Side	7477.4	74.1
Downward House Side	2615.5	25.9
Downward Total	10092.9	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	10092.9	100.0

POLAR GRAPH

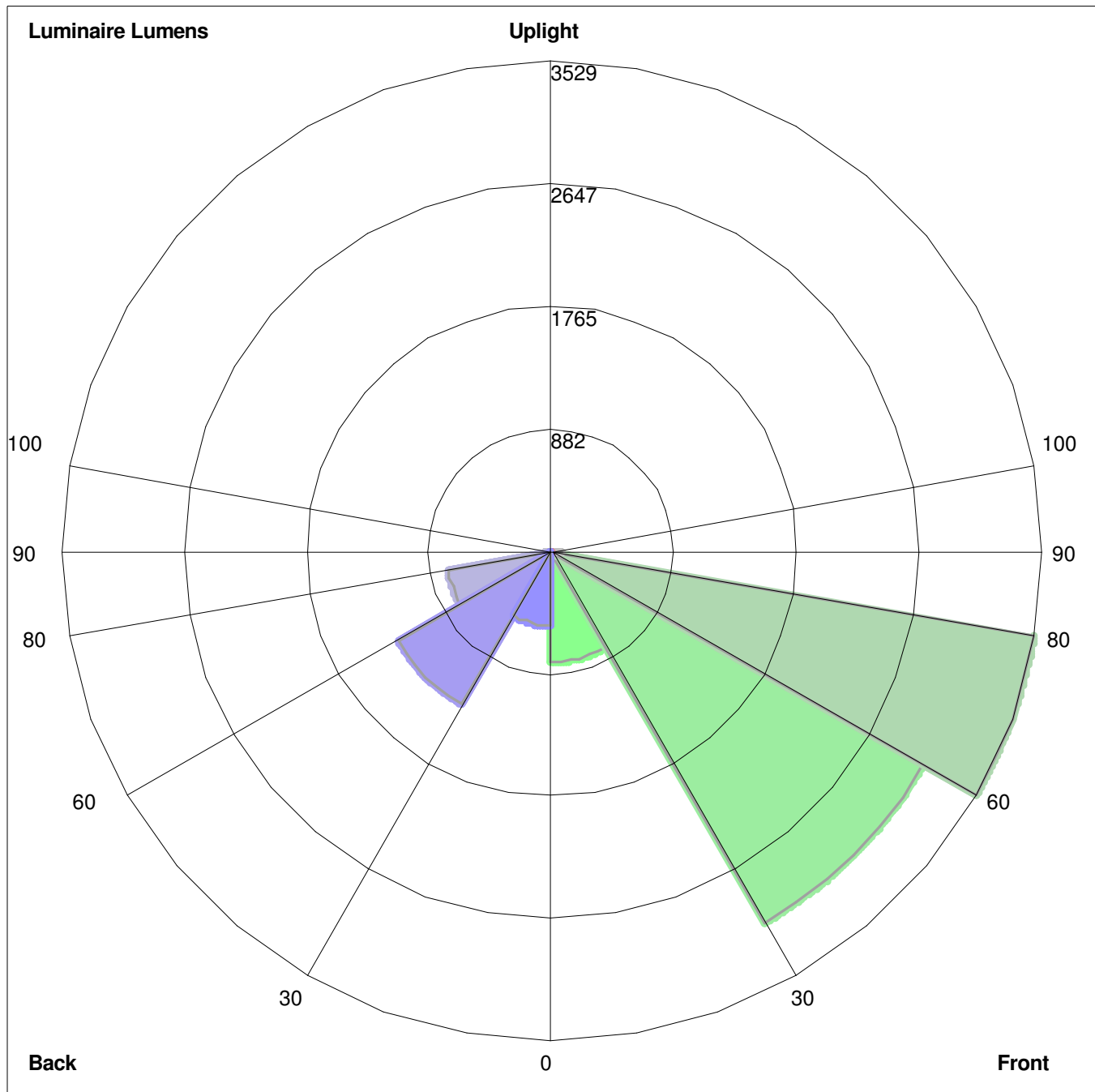


Maximum Candela = 9379.842 Located At Horizontal Angle = 42.5, Vertical Angle = 72.5
1 - Vertical Plane Through Horizontal Angles (42.5 - 222.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=797.3, Medium=3087.4, High=3529.1, Very High=63.5
Back: Low=537.3, Medium=1274.6, High=757.6, Very High=46.1
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2