



## IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L110-740-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-L110-740-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	11091
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	88
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	10307.519
Maximum Candela Angle	42.5H 72.5V
Maximum Candela (<90 Degrees Vertical)	10307.519
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	758.805 (6.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : VA1-L110-740-T4-F-S-XXX-DIM-UNV\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	876.2	N.A.	7.9
FM - Front-Medium (30-60)	3392.8	N.A.	30.6
FH - Front-High (60-80)	3878.2	N.A.	35.0
FVH - Front-Very High (80-90)	69.7	N.A.	0.6
BL - Back-Low (0-30)	590.4	N.A.	5.3
BM - Back-Medium (30-60)	1400.7	N.A.	12.6
BH - Back-High (60-80)	832.5	N.A.	7.5
BVH - Back-Very High (80-90)	50.6	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	11091.1	N.A.	100.0
BUG Rating	B2-U0-G2		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : VA1-L110-740-T4-F-S-XXX-DIM-UNV\_.IES**

**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<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	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734
2.5	1941.598	1932.625	1921.408	1913.556	1904.583	1892.806	1881.028	1867.568	1845.696	1820.458
5.0	2100.874	2094.144	2080.684	2065.542	2038.622	2010.019	1992.634	1949.450	1896.731	1838.966
7.5	2203.506	2200.141	2190.607	2179.951	2150.788	2113.212	2094.144	2026.284	1946.085	1863.082
10.0	2234.913	2236.595	2227.622	2227.061	2209.675	2175.465	2158.079	2082.367	1995.438	1888.319
12.5	2236.034	2239.399	2230.987	2232.669	2227.622	2193.972	2178.830	2116.017	2034.696	1914.117
15.0	2229.865	2232.669	2222.574	2221.453	2221.453	2193.972	2182.755	2135.646	2069.468	1945.524
17.5	2210.797	2214.162	2210.797	2209.675	2205.189	2183.316	2177.708	2159.201	2101.996	1974.687
20.0	2163.687	2167.613	2179.951	2186.681	2187.242	2171.539	2170.417	2177.147	2106.482	1993.194
22.5	2103.678	2107.604	2152.471	2158.640	2156.957	2154.714	2156.957	2152.471	2111.530	2018.993
25.0	2056.568	2064.420	2140.132	2117.699	2120.503	2139.571	2147.984	2140.693	2126.111	2049.278
27.5	2032.453	2053.203	2105.361	2094.144	2103.117	2136.206	2150.788	2153.592	2146.862	2090.779
30.0	2047.595	2064.420	2072.833	2090.779	2119.942	2152.471	2167.613	2190.046	2188.925	2144.058
32.5	2089.657	2080.684	2081.245	2126.672	2167.052	2193.972	2209.675	2247.251	2246.129	2209.115
35.0	2137.328	2117.699	2124.429	2200.141	2238.278	2262.954	2275.853	2318.477	2313.990	2284.266
37.5	2224.257	2207.432	2227.622	2299.408	2335.862	2351.566	2355.491	2385.776	2386.898	2367.830
40.0	2360.539	2346.518	2356.613	2427.278	2471.584	2459.806	2462.049	2446.346	2460.367	2460.928
42.5	2516.450	2500.747	2516.450	2571.972	2623.008	2592.723	2581.507	2517.572	2542.248	2567.486
45.0	2691.990	2681.895	2697.038	2754.243	2810.887	2751.999	2725.079	2655.536	2655.536	2691.429
47.5	2892.207	2872.017	2898.376	2980.258	2983.062	2946.608	2917.444	2835.563	2805.839	2839.489
50.0	3114.857	3086.816	3108.688	3213.003	3177.109	3158.602	3137.290	3077.281	3012.786	3016.151
52.5	3410.976	3398.077	3347.602	3431.727	3406.489	3407.050	3402.564	3404.807	3260.673	3222.537
55.0	3846.181	3831.599	3700.926	3685.783	3663.350	3711.021	3745.792	3764.861	3540.528	3468.742
57.5	4516.935	4482.164	4249.980	4038.546	3939.840	4100.238	4196.701	4110.333	3832.721	3688.027
60.0	4791.743	4783.330	4805.203	4520.861	4295.968	4596.013	4766.505	4490.015	4080.048	3833.843
62.5	4984.108	5023.366	5200.589	5130.485	4761.458	5270.693	5553.352	4882.597	4211.843	3857.959
65.0	5333.506	5418.752	5856.761	5820.307	5532.601	6437.783	6772.599	5376.129	4023.965	3694.757
67.5	5204.515	5338.553	6325.055	6834.290	6558.361	8179.164	8459.579	5638.598	3534.920	3345.920
70.0	4239.885	4332.983	5817.503	7631.232	7620.015	9951.952	9936.248	5015.514	2744.708	2574.216
72.5	2732.931	2893.890	4437.858	6827.000	7646.935	10307.519	99890.821	3098.593	1746.429	1198.497
75.0	1080.722	1135.683	1971.883	4027.890	5759.177	7611.042	5927.426	1262.431	1003.327	550.736
77.5	670.193	651.686	596.725	1158.117	2154.153	2052.082	1119.980	512.600	547.932	355.567
80.0	442.496	503.627	349.398	555.223	758.805	559.710	416.137	289.389	315.187	232.184
82.5	235.549	276.490	218.724	287.146	315.748	233.867	221.528	163.763	163.202	132.356
85.0	102.071	130.113	95.341	109.923	124.505	90.294	95.341	75.151	70.665	58.326
87.5	31.407	40.941	21.312	21.872	25.798	19.068	17.947	19.068	15.142	15.142
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<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	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734	1790.734
2.5	1792.978	1782.322	1770.544	1745.868	1723.995	1698.197	1680.811	1666.230	1658.378	1650.527
5.0	1778.396	1753.159	1725.678	1670.156	1621.924	1578.179	1546.773	1526.022	1513.123	1504.710
7.5	1772.788	1731.847	1691.467	1607.903	1541.164	1492.933	1465.452	1454.236	1445.262	1442.458
10.0	1768.301	1711.657	1657.257	1550.699	1478.912	1437.971	1423.390	1425.633	1435.167	1448.066
12.5	1766.619	1693.711	1624.167	1497.420	1427.316	1402.078	1408.808	1431.802	1467.135	1502.467
15.0	1771.666	1679.690	1593.883	1448.066	1384.132	1378.523	1403.761	1448.066	1509.197	1562.476
17.5	1775.592	1669.034	1565.841	1404.322	1348.799	1358.333	1390.301	1448.627	1502.467	1546.773
20.0	1781.200	1660.622	1541.725	1366.185	1319.636	1336.461	1369.550	1403.200	1448.627	1496.859
22.5	1789.613	1652.209	1515.927	1330.853	1294.399	1317.393	1325.805	1344.873	1384.693	1430.120
25.0	1805.316	1649.966	1494.615	1301.129	1274.209	1291.034	1271.965	1287.108	1311.784	1354.968
27.5	1828.310	1653.892	1481.155	1279.256	1258.505	1252.336	1223.734	1230.464	1250.654	1292.716

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : VA1-L110-740-T4-F-S-XXX-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

30.0	1864.764	1669.034	1474.986	1261.870	1246.728	1212.517	1182.793	1182.793	1192.327	1234.390
32.5	1911.874	1691.467	1476.108	1251.215	1237.755	1180.550	1145.218	1134.001	1147.461	1205.226
35.0	1975.809	1723.995	1485.081	1247.289	1225.977	1153.630	1110.446	1090.817	1130.075	1189.523
37.5	2052.082	1768.862	1504.150	1252.336	1204.105	1127.832	1068.384	1070.066	1116.054	1182.793
40.0	2146.301	1837.283	1540.043	1268.600	1181.672	1104.838	1035.855	1057.167	1102.594	1182.232
42.5	2268.563	1930.942	1594.443	1287.108	1163.725	1086.330	1020.713	1040.903	1089.695	1177.185
45.0	2418.305	2056.008	1672.960	1293.838	1159.238	1066.701	1015.105	1023.517	1076.235	1167.651
47.5	2589.358	2209.115	1778.396	1298.885	1157.556	1049.315	1002.766	1004.449	1058.850	1104.838
50.0	2789.014	2384.655	1895.610	1317.393	1156.434	1033.051	982.576	983.698	989.306	1080.722
52.5	3008.299	2568.047	2021.236	1363.942	1158.117	1025.760	963.508	958.461	942.757	1062.214
55.0	3271.890	2879.869	2246.129	1403.200	1160.921	1037.538	964.069	921.446	924.811	1031.369
57.5	3700.365	3335.825	2457.002	1438.532	1196.814	1080.161	1005.571	934.906	942.757	1008.375
60.0	4117.063	3545.015	2626.934	1520.975	1237.755	1099.790	1039.781	971.921	1005.571	1022.395
62.5	4091.825	3557.353	2810.887	1568.645	1227.660	1079.039	1010.057	941.075	1049.876	1001.645
65.0	3798.510	3423.314	2668.435	1462.648	1208.031	1071.749	961.265	847.416	971.360	922.568
67.5	2822.103	2467.097	1755.402	1067.262	1075.114	1046.511	918.081	759.926	861.437	867.606
70.0	1399.274	1099.790	767.217	593.360	759.366	943.879	888.357	682.532	754.879	785.725
72.5	588.873	482.876	406.042	380.804	450.348	739.176	841.247	592.238	629.253	695.431
75.0	363.419	319.674	279.855	275.929	299.484	481.193	723.472	510.917	503.066	572.048
77.5	246.766	215.920	191.804	194.048	212.555	301.727	545.128	437.448	395.386	423.428
80.0	162.080	140.208	124.505	131.235	145.255	188.439	345.472	315.187	301.166	314.626
82.5	93.098	78.516	70.104	78.516	88.611	110.484	188.439	218.163	220.407	235.549
85.0	42.062	34.772	30.285	35.893	42.062	51.596	86.929	103.193	99.828	95.902
87.5	11.217	9.534	8.973	10.656	12.338	15.142	25.798	25.798	22.994	15.142
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**

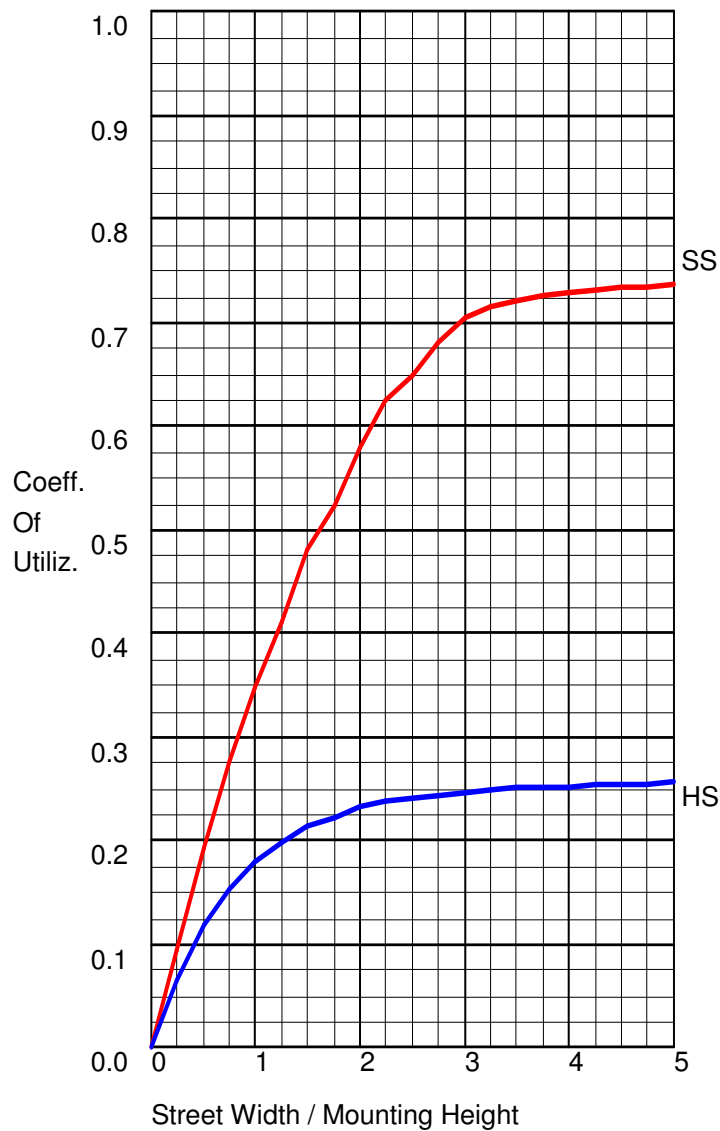
	<u>175.0</u>	<u>180.0</u>
0.0	1790.734	1790.734
2.5	1638.749	1646.601
5.0	1495.737	1497.980
7.5	1439.093	1437.971
10.0	1455.918	1452.553
12.5	1524.900	1522.096
15.0	1588.835	1591.078
17.5	1570.328	1572.010
20.0	1524.339	1523.218
22.5	1456.479	1461.526
25.0	1389.179	1396.470
27.5	1321.879	1329.731
30.0	1271.965	1280.939
32.5	1249.532	1258.505
35.0	1236.633	1244.485
37.5	1239.998	1246.167
40.0	1246.728	1252.336
42.5	1238.316	1243.924
45.0	1201.301	1205.787
47.5	1172.137	1178.307
50.0	1178.867	1183.354
52.5	1172.698	1177.746
55.0	1142.974	1152.508
57.5	1113.811	1122.784
60.0	1077.918	1085.209
62.5	1012.301	1022.956
65.0	932.102	954.535

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : VA1-L110-740-T4-F-S-XXX-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	846.855	877.140
<b>70.0</b>	756.561	795.820
<b>72.5</b>	671.315	705.526
<b>75.0</b>	560.270	586.069
<b>77.5</b>	457.638	492.971
<b>80.0</b>	412.211	438.570
<b>82.5</b>	238.353	241.718
<b>85.0</b>	69.543	62.813
<b>87.5</b>	6.169	3.365
<b>90.0</b>	0.000	0.000

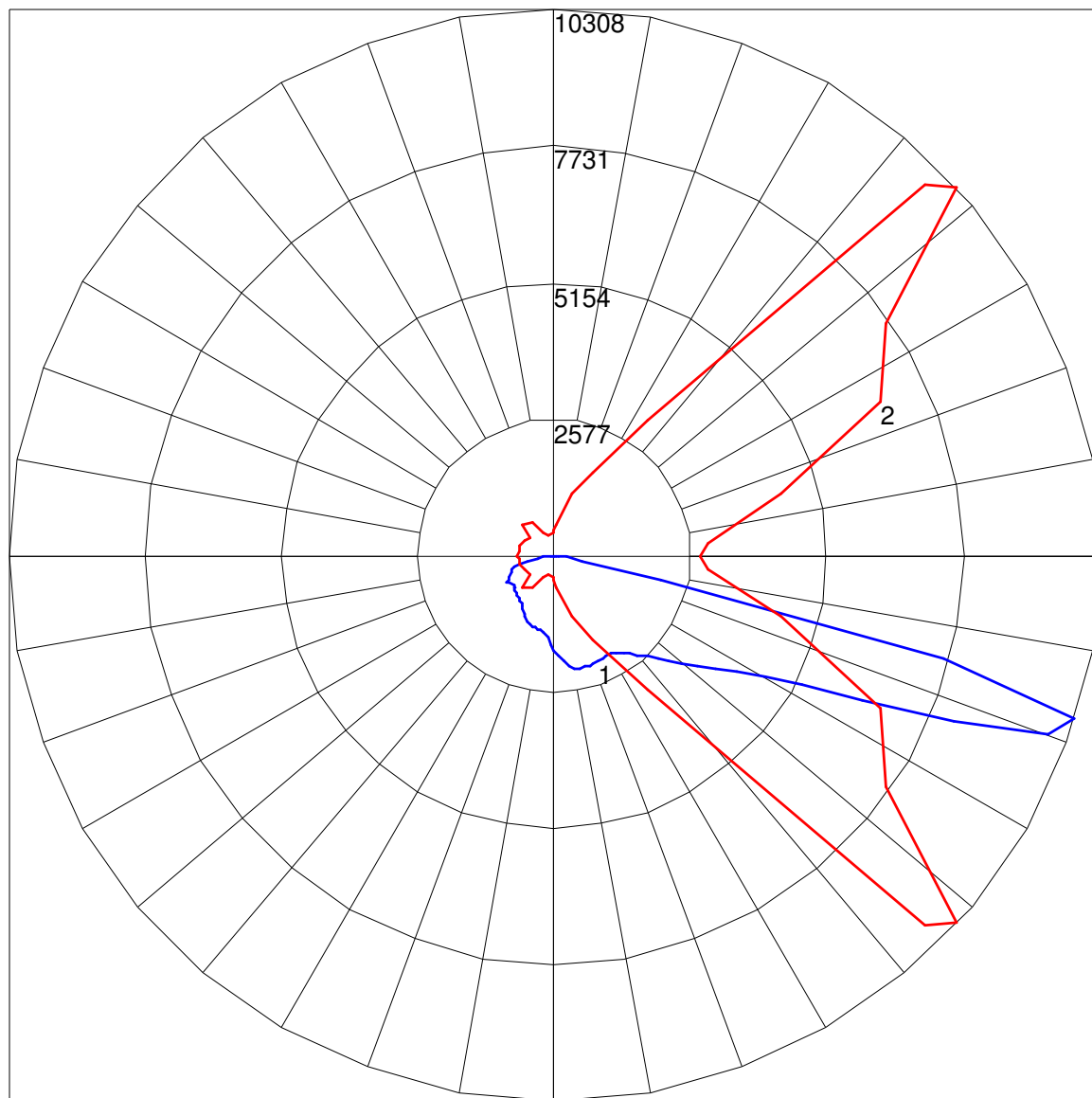
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

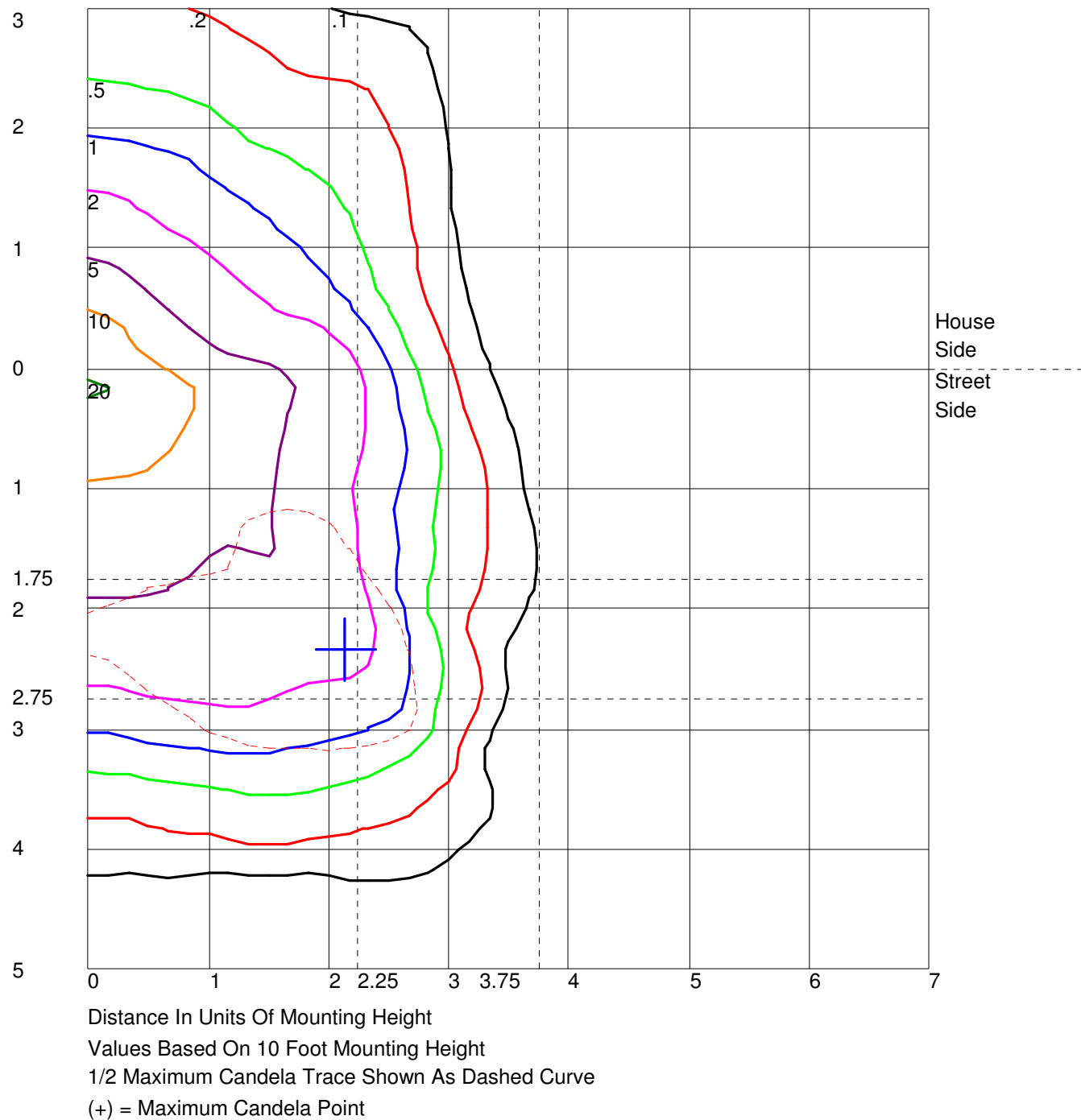
	Lumens	Percent Of Luminaire
Downward Street Side	8216.9	74.1
Downward House Side	2874.2	25.9
Downward Total	11091.1	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	11091.1	100.0

POLAR GRAPH



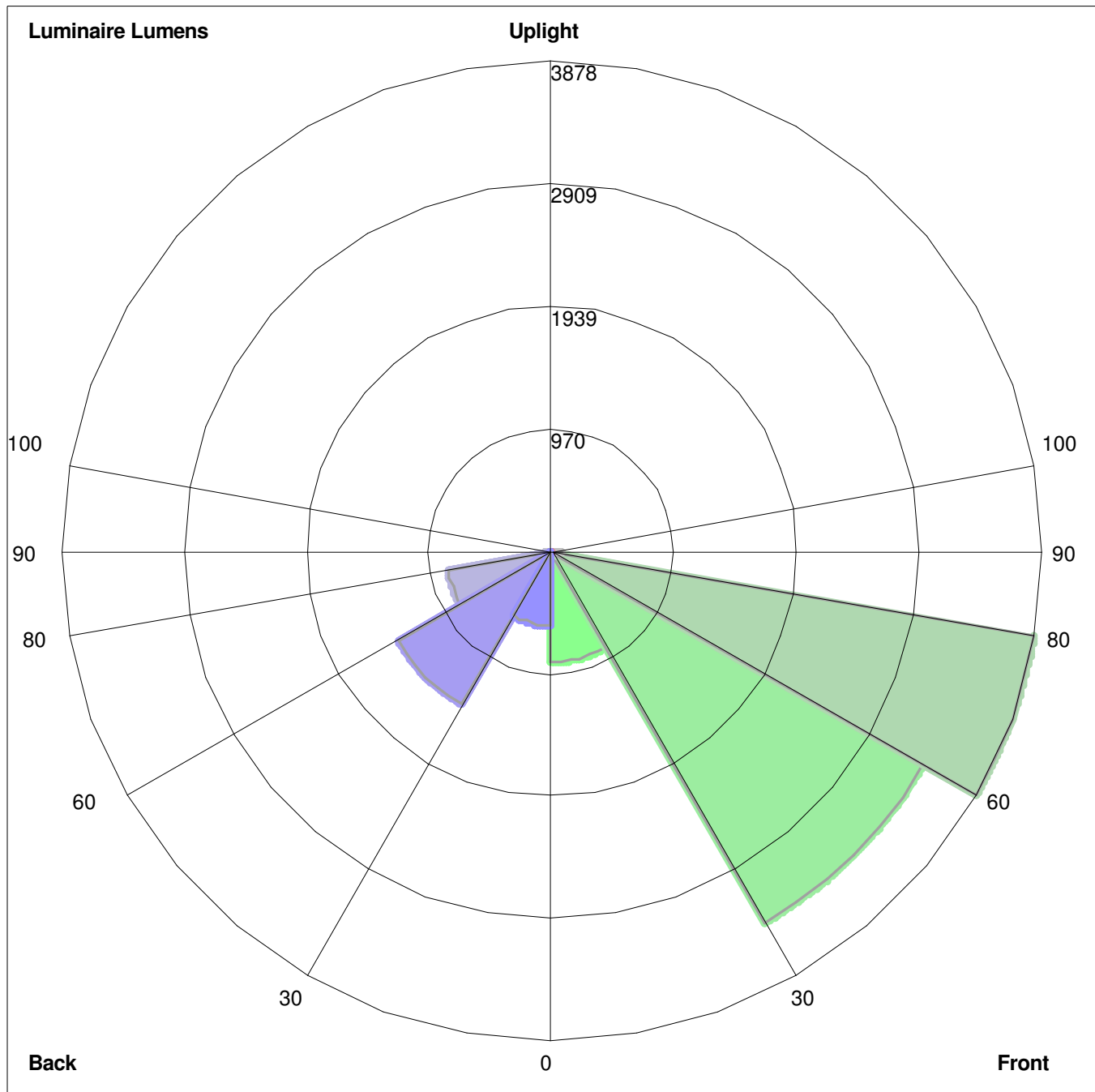
Maximum Candela = 10307.519 Located At Horizontal Angle = 42.5, Vertical Angle = 72.5  
# 1 - Vertical Plane Through Horizontal Angles (42.5 - 222.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=876.2, Medium=3392.8, High=3878.2, Very High=69.7  
Back: Low=590.4, Medium=1400.7, High=832.5, Very High=50.6  
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2