



IES ROAD REPORT

PHOTOMETRIC FILENAME : VG1-L110-750-T5-XX-XXX-DIM-UNV_.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] ATAL009389-R2

[TESTLAB] ATAL-LABS

[ISSUEDATE] 2023-11-06

[MANUFAC] WILLIAMS OUTDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMCAT] VG1-L110-750-T5-xx-xxx-DIM-UNV_

[LUMINAIRE] 13.5 x 16 INCH DIE CAST LED LUMINAIRE

[MORE] WITH TYPE V DISTRIBUTION AND CLEAR GLASS

[LAMPCAT] X12-LUXEON M LEDS

[LAMP] (12) LUXEON M LEDS

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Outdoor, Architectural, Area, Canopy, Garage, Industrial, Parking, Site, Direct, Wet Location

[_SEARCH_MOUNTING] Pendant, Surface

CHARACTERISTICS

IES Classification	Type VS
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	11189
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	104
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	3374.295
Maximum Candela Angle	50H 67.5V
Maximum Candela (<90 Degrees Vertical)	3374.295
Maximum Candela Angle (<90 Degrees Vertical)	50H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1168.785 (10.4% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VG1-L110-750-T5-XX-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	632.6	N.A.	5.7
FM - Front-Medium (30-60)	2551.9	N.A.	22.8
FH - Front-High (60-80)	2392.7	N.A.	21.4
FVH - Front-Very High (80-90)	66.0	N.A.	0.6
BL - Back-Low (0-30)	611.6	N.A.	5.5
BM - Back-Medium (30-60)	2392.2	N.A.	21.4
BH - Back-High (60-80)	2442.7	N.A.	21.8
BVH - Back-Very High (80-90)	99.1	N.A.	0.9
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	11188.8	N.A.	100.0
BUG Rating	B3-U0-G2		

IES ROAD REPORT

PHOTOMETRIC FILENAME : VG1-L110-750-T5-XX-XXX-DIM-UNV_.IES

CANDELA TABULATION

Vert. Angles Horizontal Angles

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0.0	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542
2.5	1426.732	1427.966	1430.434	1431.669	1434.137	1432.903	1431.669	1431.669	1431.669	1434.137
5.0	1405.750	1406.985	1409.453	1411.921	1415.624	1414.390	1413.156	1413.156	1411.921	1414.390
7.5	1395.877	1398.345	1400.814	1403.282	1404.516	1404.516	1403.282	1403.282	1402.048	1403.282
10.0	1398.345	1399.579	1404.516	1405.750	1403.282	1403.282	1403.282	1400.814	1398.345	1397.111
12.5	1408.219	1409.453	1415.624	1418.092	1418.092	1418.092	1415.624	1410.687	1404.516	1400.814
15.0	1418.092	1420.561	1426.732	1427.966	1432.903	1439.074	1439.074	1435.371	1427.966	1421.795
17.5	1436.605	1437.840	1442.776	1441.542	1447.713	1457.587	1466.226	1466.226	1458.821	1456.352
20.0	1482.271	1478.568	1479.802	1474.865	1473.631	1481.036	1493.378	1499.549	1495.847	1499.549
22.5	1541.512	1530.404	1527.936	1518.062	1513.126	1516.828	1527.936	1534.107	1543.980	1553.854
25.0	1587.177	1583.475	1581.006	1569.899	1561.259	1558.791	1562.493	1571.133	1597.051	1604.456
27.5	1647.653	1646.419	1643.950	1630.374	1618.032	1610.627	1606.925	1614.330	1635.311	1641.482
30.0	1724.173	1722.939	1718.002	1700.723	1682.211	1666.166	1659.995	1666.166	1671.103	1677.274
32.5	1820.441	1817.972	1803.162	1783.415	1758.731	1734.047	1720.471	1711.831	1711.831	1711.831
35.0	1932.753	1930.284	1913.005	1884.619	1853.764	1817.972	1792.054	1779.712	1767.370	1757.497
37.5	2038.893	2036.425	2017.912	1991.994	1954.968	1910.537	1875.979	1854.998	1831.548	1817.972
40.0	2140.098	2136.395	2117.882	2090.730	2054.938	2006.804	1967.310	1940.158	1911.771	1896.961
42.5	2237.599	2230.194	2209.213	2179.592	2148.737	2101.838	2063.577	2033.957	2008.039	1990.760
45.0	2311.651	2306.714	2289.435	2264.752	2230.194	2183.295	2152.440	2127.756	2109.243	2094.432
47.5	2385.703	2377.063	2368.424	2346.209	2312.885	2261.049	2231.428	2215.384	2207.978	2204.276
50.0	2448.647	2444.944	2446.178	2433.837	2402.982	2352.380	2326.461	2315.354	2312.885	2314.119
52.5	2465.926	2470.862	2493.078	2509.123	2498.015	2458.520	2436.305	2431.368	2425.197	2425.197
55.0	2458.520	2469.628	2512.825	2565.896	2586.877	2568.364	2556.022	2558.490	2551.085	2546.148
57.5	2496.781	2501.717	2539.977	2607.858	2653.524	2667.100	2676.973	2701.657	2699.189	2686.847
60.0	2560.959	2564.661	2605.390	2689.315	2723.873	2752.259	2791.754	2850.995	2860.869	2846.058
62.5	2568.364	2580.706	2628.840	2751.025	2816.438	2879.382	2925.047	3018.846	3063.277	3065.745
65.0	2626.371	2636.245	2680.676	2796.690	2855.932	2906.534	2973.181	3152.139	3270.622	3287.901
67.5	2563.427	2596.751	2668.334	2810.267	2880.616	2934.921	2992.928	3205.210	3337.269	3370.592
70.0	2407.918	2433.837	2553.554	2723.873	2792.988	2820.140	2899.129	3141.031	3276.793	3271.856
72.5	2157.376	2222.789	2389.405	2648.587	2776.943	2722.639	2712.765	2704.126	2817.672	2757.196
75.0	1337.870	1460.055	1615.564	1943.860	2020.381	2112.945	2311.651	2303.012	1935.221	1772.307
77.5	419.627	445.545	491.210	618.333	770.139	1126.822	1393.408	1520.531	1493.378	1516.828
80.0	165.382	174.022	195.003	251.776	293.739	407.285	613.396	778.778	860.235	873.811
82.5	55.539	55.539	62.944	86.394	103.673	153.040	225.858	288.802	334.467	362.854
85.0	18.513	17.279	19.747	24.684	28.387	43.197	61.710	76.520	86.394	91.331
87.5	2.468	2.468	2.468	2.468	2.468	2.468	3.703	6.171	7.405	7.405
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>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
0.0	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542
2.5	1437.840	1445.245	1444.011	1437.840	1432.903	1432.903	1436.605	1436.605	1437.840	1435.371
5.0	1419.327	1423.029	1421.795	1416.858	1411.921	1411.921	1414.390	1414.390	1413.156	1411.921
7.5	1406.985	1406.985	1403.282	1402.048	1395.877	1397.111	1398.345	1397.111	1393.408	1393.408
10.0	1399.579	1397.111	1392.174	1390.940	1388.472	1392.174	1392.174	1393.408	1389.706	1388.472
12.5	1403.282	1399.579	1397.111	1398.345	1397.111	1399.579	1395.877	1393.408	1389.706	1387.237
15.0	1420.561	1420.561	1415.624	1413.156	1409.453	1403.282	1393.408	1389.706	1387.237	1384.769
17.5	1450.181	1447.713	1440.308	1431.669	1420.561	1411.921	1403.282	1400.814	1397.111	1397.111
20.0	1490.910	1481.036	1471.163	1456.352	1445.245	1439.074	1432.903	1431.669	1426.732	1426.732
22.5	1541.512	1516.828	1503.252	1490.910	1481.036	1478.568	1478.568	1476.100	1472.397	1469.929
25.0	1593.348	1555.088	1532.873	1529.170	1526.702	1526.702	1526.702	1524.233	1525.468	1519.297
27.5	1631.608	1595.817	1573.601	1576.070	1581.006	1579.772	1582.241	1581.006	1582.241	1576.070

IES ROAD REPORT

PHOTOMETRIC FILENAME : VG1-L110-750-T5-XX-XXX-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

30.0	1667.400	1643.950	1630.374	1629.140	1639.014	1643.950	1646.419	1648.887	1645.185	1641.482
32.5	1703.192	1680.976	1682.211	1687.147	1701.958	1709.363	1718.002	1720.471	1720.471	1715.534
35.0	1750.091	1735.281	1746.389	1758.731	1780.946	1795.757	1809.333	1819.206	1816.738	1813.035
37.5	1815.504	1808.099	1821.675	1845.125	1872.277	1895.727	1909.303	1916.708	1922.879	1916.708
40.0	1893.258	1889.556	1910.537	1936.455	1971.013	1996.931	2011.741	2022.849	2030.254	2024.083
42.5	1987.057	1984.589	2010.507	2035.191	2070.983	2090.730	2108.009	2119.116	2124.053	2119.116
45.0	2088.261	2084.559	2106.774	2124.053	2156.142	2173.421	2190.700	2200.573	2203.042	2198.105
47.5	2193.168	2182.060	2199.339	2207.978	2232.662	2256.112	2269.688	2274.625	2273.391	2269.688
50.0	2307.948	2293.138	2303.012	2301.777	2325.227	2348.677	2348.677	2341.272	2338.803	2338.803
52.5	2427.666	2420.260	2412.855	2411.621	2431.368	2438.773	2416.558	2391.874	2388.171	2391.874
55.0	2551.085	2554.788	2542.446	2533.806	2539.977	2527.635	2478.268	2430.134	2421.495	2425.197
57.5	2689.315	2697.955	2670.802	2655.992	2639.947	2589.345	2504.186	2435.071	2427.666	2423.963
60.0	2839.887	2848.527	2802.861	2765.836	2718.936	2653.524	2553.554	2493.078	2490.610	2479.502
62.5	3049.701	3047.232	2959.604	2895.426	2820.140	2731.278	2604.156	2530.104	2525.167	2512.825
65.0	3282.964	3221.254	3032.422	2926.281	2858.400	2767.070	2628.840	2564.661	2547.383	2538.743
67.5	3374.295	3291.603	3076.853	2950.965	2920.110	2831.248	2715.233	2639.947	2627.605	2620.200
70.0	3323.693	3248.407	3023.783	2850.995	2827.545	2737.449	2581.940	2417.792	2395.576	2383.234
72.5	2846.058	2773.241	2733.746	2733.746	2821.374	2784.348	2595.516	2326.461	2316.588	2319.056
75.0	1880.916	2232.662	2435.071	2306.714	2265.986	2132.692	1978.418	1719.236	1705.660	1715.534
77.5	1505.720	1553.854	1529.170	1277.394	1067.580	783.715	678.808	572.667	564.028	566.496
80.0	878.748	831.849	739.284	480.103	365.322	293.739	262.884	233.263	234.497	232.029
82.5	352.980	327.062	283.865	198.706	153.040	116.015	99.970	88.862	90.096	88.862
85.0	95.033	95.033	83.925	56.773	43.197	30.855	27.152	24.684	25.918	27.152
87.5	6.171	8.639	6.171	6.171	4.937	4.937	3.703	3.703	3.703	3.703
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>100</u>	<u>105</u>	<u>110</u>	<u>115</u>	<u>120</u>	<u>125</u>	<u>130</u>	<u>135</u>	<u>140</u>	<u>145</u>
0.0	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542
2.5	1435.371	1434.137	1432.903	1432.903	1434.137	1434.137	1435.371	1437.840	1439.074	1439.074
5.0	1410.687	1410.687	1410.687	1410.687	1410.687	1411.921	1413.156	1416.858	1419.327	1418.092
7.5	1392.174	1393.408	1394.643	1394.643	1392.174	1392.174	1394.643	1397.111	1399.579	1399.579
10.0	1387.237	1387.237	1387.237	1383.535	1377.364	1376.130	1381.066	1383.535	1384.769	1383.535
12.5	1389.706	1392.174	1393.408	1389.706	1379.832	1374.895	1378.598	1379.832	1381.066	1381.066
15.0	1388.472	1392.174	1398.345	1397.111	1392.174	1387.237	1390.940	1389.706	1390.940	1392.174
17.5	1395.877	1397.111	1402.048	1404.516	1403.282	1406.985	1411.921	1411.921	1410.687	1413.156
20.0	1421.795	1421.795	1420.561	1420.561	1421.795	1430.434	1435.371	1444.011	1439.074	1436.605
22.5	1463.758	1458.821	1451.416	1448.947	1451.416	1460.055	1468.694	1483.505	1476.100	1464.992
25.0	1509.423	1502.018	1489.676	1487.207	1483.505	1489.676	1508.189	1527.936	1515.594	1495.847
27.5	1563.728	1552.620	1537.809	1534.107	1521.765	1525.468	1548.917	1562.493	1547.683	1526.702
30.0	1627.906	1613.096	1593.348	1584.709	1566.196	1573.601	1582.241	1594.583	1576.070	1566.196
32.5	1699.489	1678.508	1651.356	1634.077	1611.861	1609.393	1609.393	1611.861	1598.285	1587.177
35.0	1787.117	1761.199	1725.407	1697.021	1663.698	1650.121	1641.482	1639.014	1627.906	1621.735
37.5	1887.087	1854.998	1815.504	1777.244	1734.047	1711.831	1693.318	1684.679	1674.805	1680.976
40.0	1990.760	1954.968	1909.303	1867.340	1815.504	1785.883	1762.433	1750.091	1737.749	1746.389
42.5	2087.027	2051.235	2008.039	1962.373	1909.303	1872.277	1842.656	1829.080	1819.206	1826.612
45.0	2166.016	2132.692	2089.496	2050.001	2004.336	1963.607	1927.816	1913.005	1905.600	1914.240
47.5	2240.068	2212.915	2170.953	2133.927	2095.667	2056.172	2020.381	2008.039	1999.399	2009.273
50.0	2315.354	2301.777	2263.517	2227.726	2191.934	2156.142	2124.053	2115.414	2106.774	2108.009
52.5	2379.532	2382.000	2362.253	2332.632	2294.372	2265.986	2235.131	2228.960	2221.555	2217.852
55.0	2435.071	2463.457	2467.160	2451.115	2419.026	2389.405	2361.019	2342.506	2344.974	2336.335
57.5	2451.115	2520.230	2564.661	2572.067	2546.148	2527.635	2500.483	2472.097	2474.565	2469.628
60.0	2495.546	2573.301	2647.353	2684.379	2678.208	2676.973	2659.695	2620.200	2631.308	2618.966
62.5	2536.275	2635.011	2742.386	2807.798	2822.609	2853.464	2867.040	2832.482	2837.419	2810.267
65.0	2554.788	2647.353	2758.430	2837.419	2892.958	3047.232	3121.284	3095.366	3090.429	3028.719

IES ROAD REPORT

PHOTOMETRIC FILENAME : VG1-L110-750-T5-XX-XXX-DIM-UNV_.IES

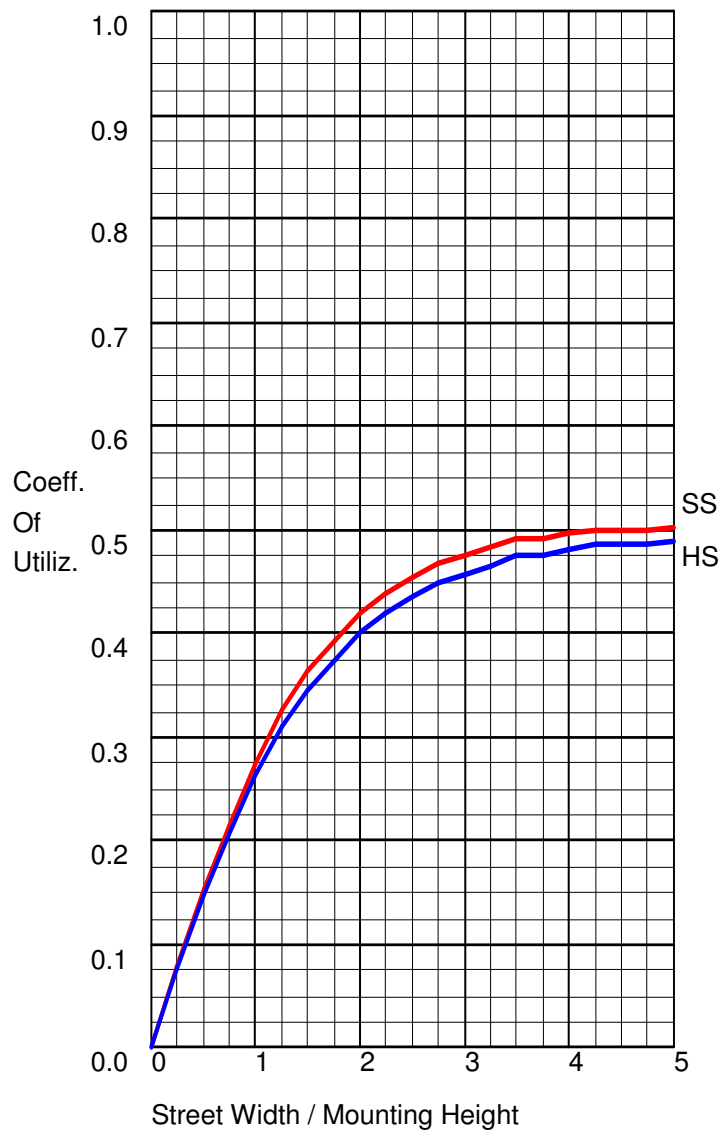
CANDELA TABULATION - (Cont.)

67.5	2647.353	2727.575	2817.672	2871.976	2916.408	3123.753	3254.578	3270.622	3254.578	3147.202
70.0	2457.286	2622.669	2738.683	2799.159	2912.705	3210.146	3344.674	3345.908	3353.313	3245.938
72.5	2478.268	2697.955	2725.107	2628.840	2696.720	2888.021	3071.916	3113.879	3162.013	3008.972
75.0	1968.544	2285.733	2406.684	2496.781	2597.985	2385.703	2166.016	2224.023	2235.131	2331.398
77.5	756.563	987.358	1304.546	1515.594	1716.768	1853.764	1666.166	1529.170	1639.014	1869.808
80.0	282.631	333.233	406.051	591.180	872.577	1070.049	1100.904	1168.785	1134.227	1155.208
82.5	109.844	133.293	177.724	233.263	319.657	433.203	519.597	538.110	509.723	491.210
85.0	30.855	38.260	54.305	74.052	99.970	139.464	182.661	193.769	192.535	176.490
87.5	4.937	4.937	8.639	11.108	19.747	19.747	24.684	23.450	23.450	23.450
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>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
0.0	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542	1441.542
2.5	1437.840	1436.605	1437.840	1434.137	1436.605	1441.542	1442.776
5.0	1416.858	1413.156	1414.390	1411.921	1413.156	1416.858	1415.624
7.5	1397.111	1394.643	1393.408	1390.940	1390.940	1393.408	1392.174
10.0	1382.301	1379.832	1379.832	1379.832	1378.598	1379.832	1382.301
12.5	1381.066	1381.066	1381.066	1379.832	1378.598	1378.598	1379.832
15.0	1393.408	1392.174	1388.472	1383.535	1378.598	1377.364	1377.364
17.5	1411.921	1403.282	1392.174	1382.301	1379.832	1379.832	1382.301
20.0	1432.903	1416.858	1400.814	1393.408	1398.345	1398.345	1402.048
22.5	1455.118	1440.308	1424.263	1421.795	1430.434	1434.137	1436.605
25.0	1476.100	1466.226	1456.352	1458.821	1468.694	1474.865	1481.036
27.5	1502.018	1500.784	1497.081	1500.784	1511.891	1515.594	1521.765
30.0	1545.215	1540.278	1542.746	1551.386	1564.962	1567.430	1574.835
32.5	1576.070	1578.538	1589.646	1603.222	1619.266	1625.437	1637.779
35.0	1618.032	1629.140	1650.121	1671.103	1692.084	1703.192	1718.002
37.5	1679.742	1699.489	1726.642	1752.560	1780.946	1796.991	1811.801
40.0	1755.028	1779.712	1806.864	1846.359	1880.916	1900.663	1915.474
42.5	1842.656	1869.808	1905.600	1943.860	1983.355	2004.336	2019.146
45.0	1938.924	1963.607	1994.462	2031.488	2063.577	2085.793	2094.432
47.5	2030.254	2050.001	2080.856	2111.711	2140.098	2152.440	2158.611
50.0	2122.819	2135.161	2168.484	2193.168	2216.618	2225.257	2233.897
52.5	2219.086	2236.365	2269.688	2286.967	2293.138	2293.138	2300.543
55.0	2337.569	2352.380	2370.892	2367.190	2353.614	2338.803	2336.335
57.5	2457.286	2460.989	2465.926	2449.881	2398.045	2357.316	2348.677
60.0	2589.345	2586.877	2567.130	2521.465	2436.305	2385.703	2380.766
62.5	2751.025	2730.044	2675.739	2606.624	2486.907	2433.837	2421.495
65.0	2888.021	2806.564	2723.873	2632.542	2504.186	2472.097	2460.989
67.5	2936.155	2837.419	2800.393	2751.025	2639.947	2611.561	2600.453
70.0	2999.099	2838.653	2763.367	2674.505	2548.617	2431.368	2419.026
72.5	2795.456	2659.695	2658.460	2651.055	2506.654	2380.766	2359.785
75.0	2636.245	2578.238	2553.554	2373.361	2174.655	1983.355	1946.329
77.5	1887.087	1684.679	1563.728	1427.966	1162.614	958.971	892.324
80.0	1062.644	751.626	529.471	452.950	397.411	351.746	348.044
82.5	412.222	288.802	220.921	193.769	166.617	141.933	143.167
85.0	140.698	96.267	74.052	60.476	50.602	41.963	40.729
87.5	18.513	13.576	9.874	8.639	8.639	7.405	7.405
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

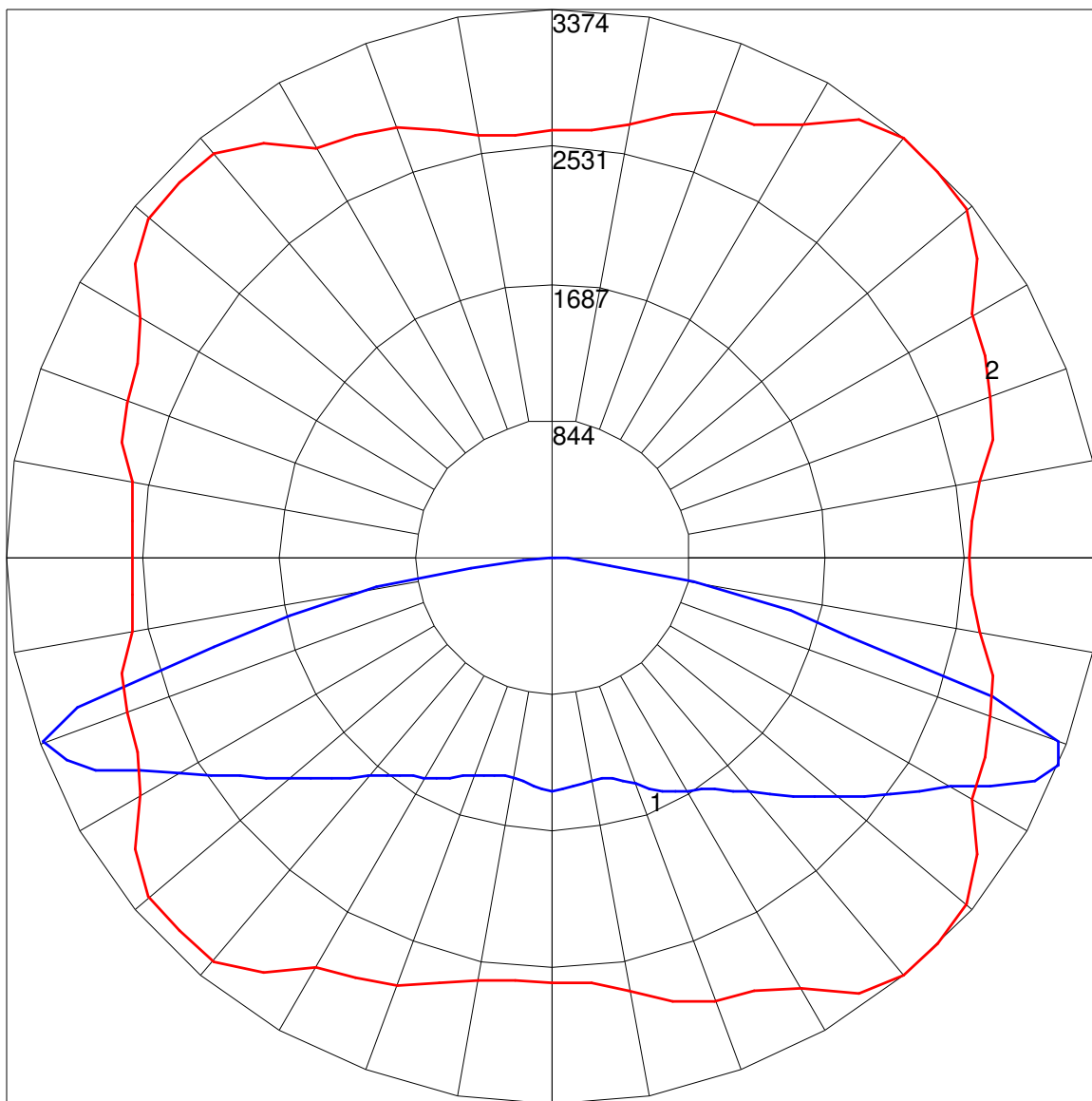
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

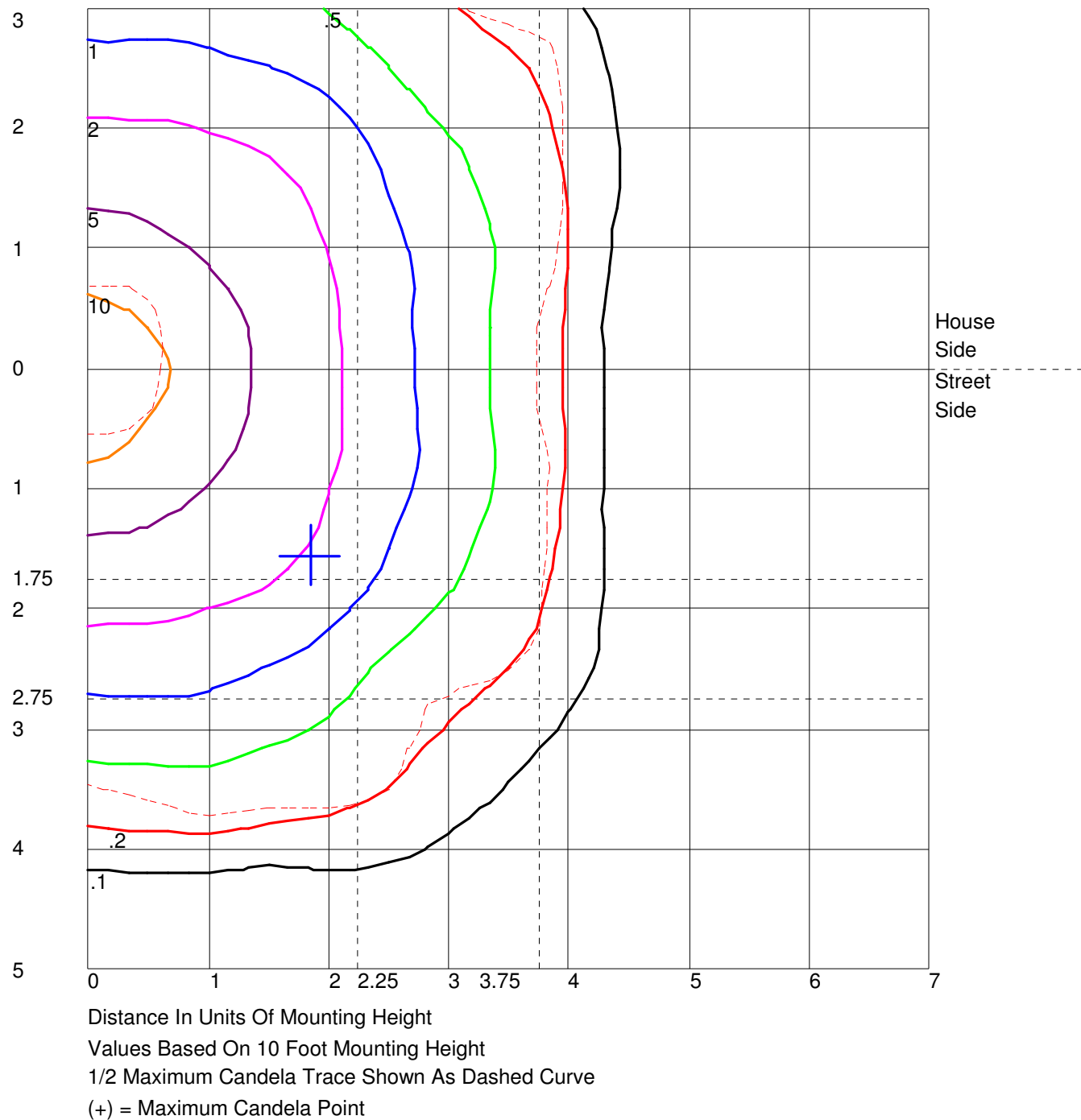
	Lumens	Percent Of Luminaire
Downward Street Side	5643.1	50.4
Downward House Side	5545.5	49.6
Downward Total	11188.6	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	11188.6	100.0

POLAR GRAPH

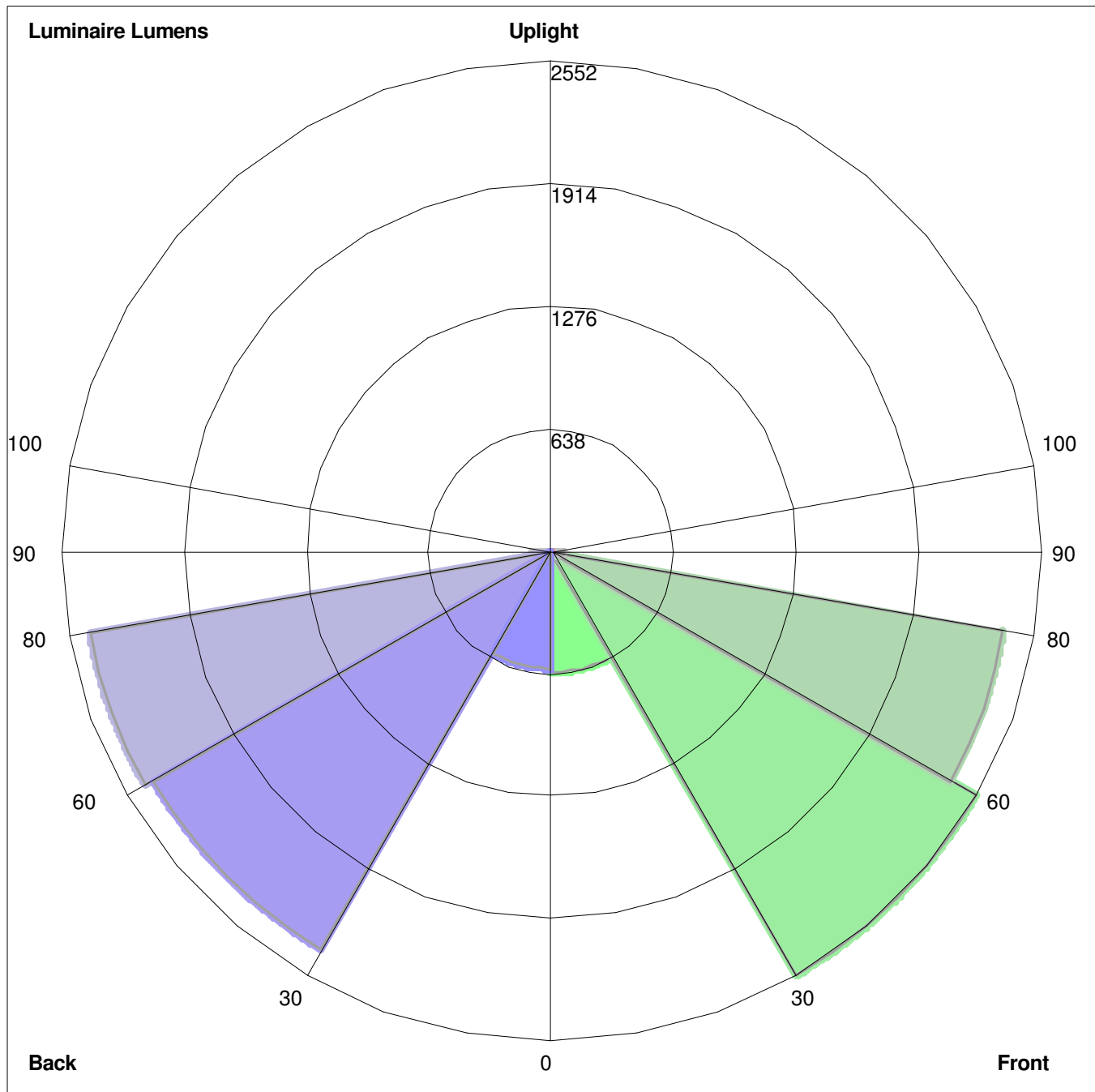


Maximum Candela = 3374.295 Located At Horizontal Angle = 50, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=632.6, Medium=2551.9, High=2392.7, Very High=66.0
Back: Low=611.6, Medium=2392.2, High=2442.7, Very High=99.1
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G2