



IES ROAD REPORT

PHOTOMETRIC FILENAME : VG1-L110-740-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-L110-740-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	10698
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	103
Total Luminaire Watts	104
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	3226.21
Maximum Candela Angle	50H 67.5V
Maximum Candela (<90 Degrees Vertical)	3226.21
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	1117.491 (10.4% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VG1-L110-740-T5-XX-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	604.8	N.A.	5.7
FM - Front-Medium (30-60)	2439.9	N.A.	22.8
FH - Front-High (60-80)	2287.7	N.A.	21.4
FVH - Front-Very High (80-90)	63.1	N.A.	0.6
BL - Back-Low (0-30)	584.7	N.A.	5.5
BM - Back-Medium (30-60)	2287.2	N.A.	21.4
BH - Back-High (60-80)	2335.5	N.A.	21.8
BVH - Back-Very High (80-90)	94.7	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	10697.6	N.A.	100.0
BUG Rating	B3-U0-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	5	10	15	20	25	30	35	40	45
0.0	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279
2.5	1364.118	1365.298	1367.658	1368.838	1371.198	1370.018	1368.838	1368.838	1368.838	1371.198
5.0	1344.058	1345.238	1347.598	1349.958	1353.498	1352.318	1351.138	1351.138	1349.958	1352.318
7.5	1334.617	1336.977	1339.337	1341.697	1342.878	1342.878	1341.697	1341.697	1340.517	1341.697
10.0	1336.977	1338.157	1342.878	1344.058	1341.697	1341.697	1341.697	1339.337	1336.977	1335.797
12.5	1346.418	1347.598	1353.498	1355.858	1355.858	1355.858	1353.498	1348.778	1342.878	1339.337
15.0	1355.858	1358.218	1364.118	1365.298	1370.018	1375.918	1375.918	1372.378	1365.298	1359.398
17.5	1373.558	1374.738	1379.459	1378.279	1384.179	1393.619	1401.879	1401.879	1394.799	1392.439
20.0	1417.220	1413.679	1414.860	1410.139	1408.959	1416.040	1427.840	1433.740	1430.200	1433.740
22.5	1473.861	1463.241	1460.881	1451.441	1446.720	1450.261	1460.881	1466.781	1476.221	1485.662
25.0	1517.522	1513.982	1511.622	1501.002	1492.742	1490.382	1493.922	1502.182	1526.963	1534.043
27.5	1575.344	1574.164	1571.804	1558.824	1547.023	1539.943	1536.403	1543.483	1563.544	1569.444
30.0	1648.506	1647.326	1642.606	1626.085	1608.385	1593.045	1587.144	1593.045	1597.765	1603.665
32.5	1740.549	1738.189	1724.028	1705.148	1681.547	1657.946	1644.966	1636.706	1636.706	1636.706
35.0	1847.932	1845.572	1829.051	1801.910	1772.410	1738.189	1713.408	1701.608	1689.807	1680.367
37.5	1949.414	1947.054	1929.354	1904.573	1869.172	1826.691	1793.650	1773.590	1751.169	1738.189
40.0	2046.177	2042.637	2024.937	1998.976	1964.755	1918.734	1880.973	1855.012	1827.871	1813.711
42.5	2139.400	2132.320	2112.259	2083.938	2054.437	2009.596	1973.015	1944.694	1919.914	1903.393
45.0	2210.202	2205.482	2188.961	2165.360	2132.320	2087.478	2057.977	2034.377	2016.676	2002.516
47.5	2281.004	2272.743	2264.483	2243.243	2211.382	2161.820	2133.500	2118.159	2111.079	2107.539
50.0	2341.185	2337.645	2338.825	2327.025	2297.524	2249.143	2224.362	2213.742	2211.382	2212.562
52.5	2357.706	2362.426	2383.667	2399.007	2388.387	2350.626	2329.385	2324.665	2318.765	2318.765
55.0	2350.626	2361.246	2402.547	2453.289	2473.349	2455.649	2443.848	2446.208	2439.128	2434.408
57.5	2387.207	2391.927	2428.508	2493.410	2537.071	2550.051	2559.492	2583.092	2580.732	2568.932
60.0	2448.568	2452.109	2491.050	2571.292	2604.333	2631.474	2669.235	2725.876	2735.316	2721.156
62.5	2455.649	2467.449	2513.470	2630.293	2692.835	2753.017	2796.678	2886.361	2928.842	2931.202
65.0	2511.110	2520.550	2563.032	2673.955	2730.596	2778.978	2842.699	3013.804	3127.087	3143.608
67.5	2450.928	2482.789	2551.231	2686.935	2754.197	2806.118	2861.580	3064.546	3190.809	3222.670
70.0	2302.244	2327.025	2441.488	2604.333	2670.415	2696.375	2771.897	3003.184	3132.988	3128.267
72.5	2062.698	2125.239	2284.544	2532.351	2655.074	2603.153	2593.712	2585.452	2694.015	2636.194
75.0	1279.156	1395.979	1544.663	1858.552	1931.714	2020.216	2210.202	2201.942	1850.292	1694.527
77.5	401.211	425.992	469.653	591.197	736.341	1077.370	1332.257	1453.801	1427.840	1450.261
80.0	158.124	166.385	186.445	240.727	280.848	389.411	586.476	744.601	822.483	835.463
82.5	53.101	53.101	60.182	82.602	99.123	146.324	215.946	276.128	319.789	346.930
85.0	17.700	16.520	18.881	23.601	27.141	41.301	59.002	73.162	82.602	87.322
87.5	2.360	2.360	2.360	2.360	2.360	2.360	3.540	5.900	7.080	7.080
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									
	50	55	60	65	70	75	80	85	90	95
0.0	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279
2.5	1374.738	1381.819	1380.639	1374.738	1370.018	1370.018	1373.558	1373.558	1374.738	1372.378
5.0	1357.038	1360.578	1359.398	1354.678	1349.958	1349.958	1352.318	1352.318	1351.138	1349.958
7.5	1345.238	1345.238	1341.697	1340.517	1334.617	1335.797	1336.977	1335.797	1332.257	1332.257
10.0	1338.157	1335.797	1331.077	1329.897	1327.537	1331.077	1331.077	1332.257	1328.717	1327.537
12.5	1341.697	1338.157	1335.797	1336.977	1335.797	1338.157	1334.617	1332.257	1328.717	1326.357
15.0	1358.218	1358.218	1353.498	1351.138	1347.598	1341.697	1332.257	1328.717	1326.357	1323.997
17.5	1386.539	1384.179	1377.098	1368.838	1358.218	1349.958	1341.697	1339.337	1335.797	1335.797
20.0	1425.480	1416.040	1406.599	1392.439	1381.819	1375.918	1370.018	1368.838	1364.118	1364.118
22.5	1473.861	1450.261	1437.280	1425.480	1416.040	1413.679	1413.679	1411.319	1407.779	1405.419
25.0	1523.423	1486.842	1465.601	1462.061	1459.701	1459.701	1459.701	1457.341	1458.521	1452.621
27.5	1560.004	1525.783	1504.542	1506.902	1511.622	1510.442	1512.802	1511.622	1512.802	1506.902

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CANDELA TABULATION - (Cont.)

30.0	1594.225	1571.804	1558.824	1557.644	1567.084	1571.804	1574.164	1576.524	1572.984	1569.444
32.5	1628.445	1607.205	1608.385	1613.105	1627.265	1634.346	1642.606	1644.966	1644.966	1640.246
35.0	1673.287	1659.126	1669.747	1681.547	1702.788	1716.948	1729.928	1739.369	1737.009	1733.468
37.5	1735.828	1728.748	1741.729	1764.149	1790.110	1812.531	1825.511	1832.591	1838.491	1832.591
40.0	1810.171	1806.630	1826.691	1851.472	1884.513	1909.293	1923.454	1934.074	1941.154	1935.254
42.5	1899.853	1897.493	1922.274	1945.874	1980.095	1998.976	2015.496	2026.117	2030.837	2026.117
45.0	1996.616	1993.076	2014.316	2030.837	2061.518	2078.038	2094.559	2103.999	2106.359	2101.639
47.5	2096.919	2086.298	2102.819	2111.079	2134.680	2157.100	2170.081	2174.801	2173.621	2170.081
50.0	2206.662	2192.501	2201.942	2200.761	2223.182	2245.603	2245.603	2238.523	2236.162	2236.162
52.5	2321.125	2314.045	2306.964	2305.784	2324.665	2331.745	2310.505	2286.904	2283.364	2286.904
55.0	2439.128	2442.668	2430.868	2422.608	2428.508	2416.708	2369.506	2323.485	2315.225	2318.765
57.5	2571.292	2579.552	2553.591	2539.431	2524.091	2475.709	2394.287	2328.205	2321.125	2317.585
60.0	2715.256	2723.516	2679.855	2644.454	2599.613	2537.071	2441.488	2383.667	2381.307	2370.686
62.5	2915.861	2913.501	2829.719	2768.357	2696.375	2611.413	2489.870	2419.068	2414.347	2402.547
65.0	3138.888	3079.886	2899.341	2797.858	2732.956	2645.634	2513.470	2452.109	2435.588	2427.328
67.5	3226.210	3147.148	2941.822	2821.459	2791.958	2706.996	2596.073	2524.091	2512.290	2505.210
70.0	3177.829	3105.847	2891.081	2725.876	2703.456	2617.313	2468.629	2311.685	2290.444	2278.644
72.5	2721.156	2651.534	2613.773	2613.773	2697.555	2662.154	2481.609	2224.362	2214.922	2217.282
75.0	1798.370	2134.680	2328.205	2205.482	2166.541	2039.097	1891.593	1643.786	1630.806	1640.246
77.5	1439.640	1485.662	1462.061	1221.334	1020.729	749.321	649.018	547.535	539.275	541.635
80.0	840.183	795.342	706.840	459.033	349.290	280.848	251.347	223.026	224.206	221.846
82.5	337.489	312.709	271.408	189.985	146.324	110.923	95.583	84.962	86.142	84.962
85.0	90.863	90.863	80.242	54.282	41.301	29.501	25.961	23.601	24.781	25.961
87.5	5.900	8.260	5.900	5.900	4.720	4.720	3.540	3.540	3.540	3.540
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	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279
2.5	1372.378	1371.198	1370.018	1370.018	1371.198	1371.198	1372.378	1374.738	1375.918	1375.918
5.0	1348.778	1348.778	1348.778	1348.778	1348.778	1349.958	1351.138	1354.678	1357.038	1355.858
7.5	1331.077	1332.257	1333.437	1333.437	1331.077	1331.077	1333.437	1335.797	1338.157	1338.157
10.0	1326.357	1326.357	1326.357	1322.817	1316.917	1315.737	1320.457	1322.817	1323.997	1322.817
12.5	1328.717	1331.077	1332.257	1328.717	1319.277	1314.557	1318.097	1319.277	1320.457	1320.457
15.0	1327.537	1331.077	1336.977	1335.797	1331.077	1326.357	1329.897	1328.717	1329.897	1331.077
17.5	1334.617	1335.797	1340.517	1342.878	1341.697	1345.238	1349.958	1349.958	1348.778	1351.138
20.0	1359.398	1359.398	1358.218	1358.218	1359.398	1367.658	1372.378	1380.639	1375.918	1373.558
22.5	1399.519	1394.799	1387.719	1385.359	1387.719	1395.979	1404.239	1418.400	1411.319	1400.699
25.0	1443.180	1436.100	1424.300	1421.940	1418.400	1424.300	1442.000	1460.881	1449.080	1430.200
27.5	1495.102	1484.481	1470.321	1466.781	1454.981	1458.521	1480.941	1493.922	1479.761	1459.701
30.0	1556.463	1542.303	1523.423	1515.162	1497.462	1504.542	1512.802	1524.603	1506.902	1497.462
32.5	1624.905	1604.845	1578.884	1562.364	1541.123	1538.763	1538.763	1541.123	1528.143	1517.522
35.0	1708.688	1683.907	1649.686	1622.545	1590.684	1577.704	1569.444	1567.084	1556.463	1550.563
37.5	1804.270	1773.590	1735.828	1699.247	1657.946	1636.706	1619.005	1610.745	1601.305	1607.205
40.0	1903.393	1869.172	1825.511	1785.390	1735.828	1707.508	1685.087	1673.287	1661.486	1669.747
42.5	1995.436	1961.215	1919.914	1876.252	1825.511	1790.110	1761.789	1748.809	1739.369	1746.449
45.0	2070.958	2039.097	1997.796	1960.035	1916.374	1877.432	1843.211	1829.051	1821.971	1830.231
47.5	2141.760	2115.799	2075.678	2040.277	2003.696	1965.935	1931.714	1919.914	1911.653	1921.094
50.0	2213.742	2200.761	2164.180	2129.960	2095.739	2061.518	2030.837	2022.577	2014.316	2015.496
52.5	2275.104	2277.464	2258.583	2230.262	2193.681	2166.541	2137.040	2131.140	2124.059	2120.519
55.0	2328.205	2355.346	2358.886	2343.545	2312.865	2284.544	2257.403	2239.703	2242.063	2233.802
57.5	2343.545	2409.627	2452.109	2459.189	2434.408	2416.708	2390.747	2363.606	2365.966	2361.246
60.0	2386.027	2460.369	2531.171	2566.572	2560.672	2559.492	2542.971	2505.210	2515.830	2504.030
62.5	2424.968	2519.370	2622.033	2684.575	2698.735	2728.236	2741.217	2708.176	2712.896	2686.935
65.0	2442.668	2531.171	2637.374	2712.896	2765.997	2913.501	2984.303	2959.523	2954.803	2895.801

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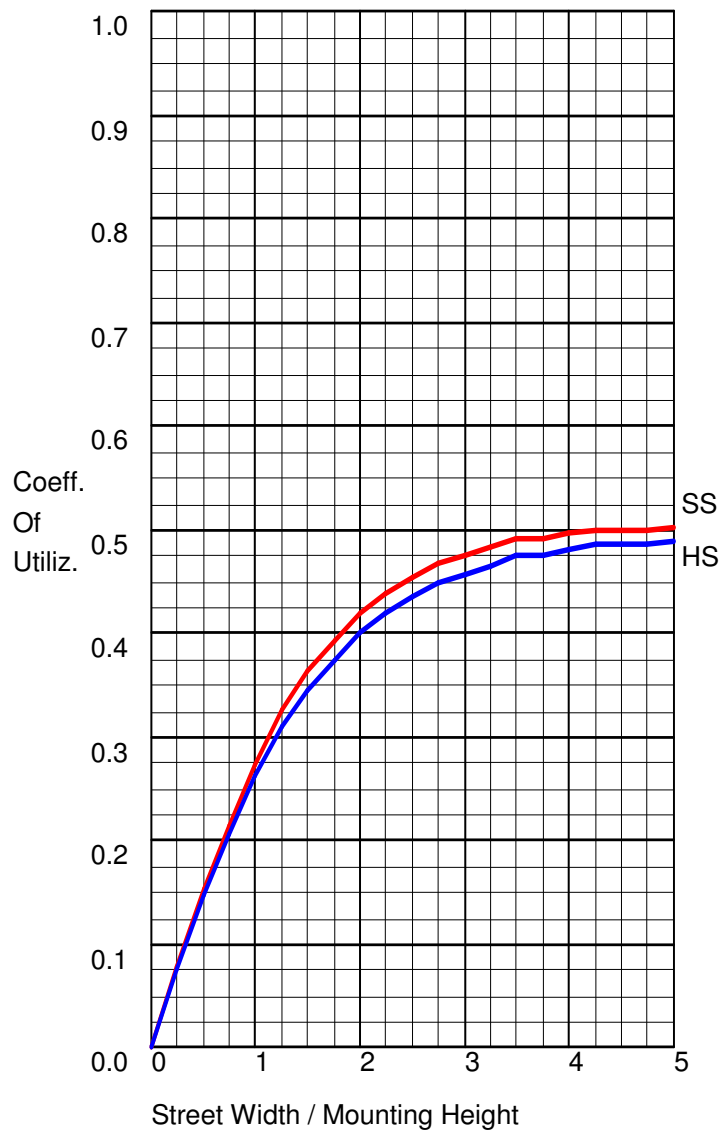
CANDELA TABULATION - (Cont.)

67.5	2531.171	2607.873	2694.015	2745.937	2788.418	2986.663	3111.747	3127.087	3111.747	3009.084
70.0	2349.446	2507.570	2618.493	2676.315	2784.878	3069.266	3197.889	3199.069	3206.150	3103.487
72.5	2369.506	2579.552	2605.513	2513.470	2578.372	2761.277	2937.102	2977.223	3023.244	2876.920
75.0	1882.153	2185.421	2301.064	2387.207	2483.969	2281.004	2070.958	2126.419	2137.040	2229.082
77.5	723.360	944.026	1247.295	1449.080	1641.426	1772.410	1593.045	1462.061	1567.084	1787.750
80.0	270.228	318.609	388.231	565.236	834.283	1023.089	1052.589	1117.491	1084.450	1104.511
82.5	105.023	127.444	169.925	223.026	305.629	414.192	496.794	514.494	487.354	469.653
85.0	29.501	36.581	51.921	70.802	95.583	133.344	174.645	185.265	184.085	168.745
87.5	4.720	4.720	8.260	10.620	18.881	18.881	23.601	22.421	22.421	22.421
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	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279	1378.279
2.5	1374.738	1373.558	1374.738	1371.198	1373.558	1378.279	1379.459
5.0	1354.678	1351.138	1352.318	1349.958	1351.138	1354.678	1353.498
7.5	1335.797	1333.437	1332.257	1329.897	1329.897	1332.257	1331.077
10.0	1321.637	1319.277	1319.277	1319.277	1318.097	1319.277	1321.637
12.5	1320.457	1320.457	1320.457	1319.277	1318.097	1318.097	1319.277
15.0	1332.257	1331.077	1327.537	1322.817	1318.097	1316.917	1316.917
17.5	1349.958	1341.697	1331.077	1321.637	1319.277	1319.277	1321.637
20.0	1370.018	1354.678	1339.337	1332.257	1336.977	1336.977	1340.517
22.5	1391.259	1377.098	1361.758	1359.398	1367.658	1371.198	1373.558
25.0	1411.319	1401.879	1392.439	1394.799	1404.239	1410.139	1416.040
27.5	1436.100	1434.920	1431.380	1434.920	1445.540	1449.080	1454.981
30.0	1477.401	1472.681	1475.041	1483.301	1496.282	1498.642	1505.722
32.5	1506.902	1509.262	1519.882	1532.863	1548.203	1554.103	1565.904
35.0	1547.023	1557.644	1577.704	1597.765	1617.825	1628.445	1642.606
37.5	1606.025	1624.905	1650.866	1675.647	1702.788	1718.128	1732.288
40.0	1678.007	1701.608	1727.568	1765.329	1798.370	1817.251	1831.411
42.5	1761.789	1787.750	1821.971	1858.552	1896.313	1916.374	1930.534
45.0	1853.832	1877.432	1906.933	1942.334	1973.015	1994.256	2002.516
47.5	1941.154	1960.035	1989.536	2019.036	2046.177	2057.977	2063.878
50.0	2029.657	2041.457	2073.318	2096.919	2119.339	2127.599	2135.860
52.5	2121.699	2138.220	2170.081	2186.601	2192.501	2192.501	2199.581
55.0	2234.982	2249.143	2266.843	2263.303	2250.323	2236.162	2233.802
57.5	2349.446	2352.986	2357.706	2342.365	2292.804	2253.863	2245.603
60.0	2475.709	2473.349	2454.469	2410.807	2329.385	2281.004	2276.284
62.5	2630.293	2610.233	2558.311	2492.230	2377.766	2327.025	2315.225
65.0	2761.277	2683.395	2604.333	2517.010	2394.287	2363.606	2352.986
67.5	2807.298	2712.896	2677.495	2630.293	2524.091	2496.950	2486.329
70.0	2867.480	2714.076	2642.094	2557.131	2436.768	2324.665	2312.865
72.5	2672.775	2542.971	2541.791	2534.711	2396.647	2276.284	2256.223
75.0	2520.550	2465.089	2441.488	2269.203	2079.218	1896.313	1860.912
77.5	1804.270	1610.745	1495.102	1365.298	1111.591	916.886	853.164
80.0	1016.008	718.640	506.234	433.072	379.971	336.309	332.769
82.5	394.131	276.128	211.226	185.265	159.304	135.704	136.884
85.0	134.524	92.043	70.802	57.822	48.381	40.121	38.941
87.5	17.700	12.980	9.440	8.260	8.260	7.080	7.080
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

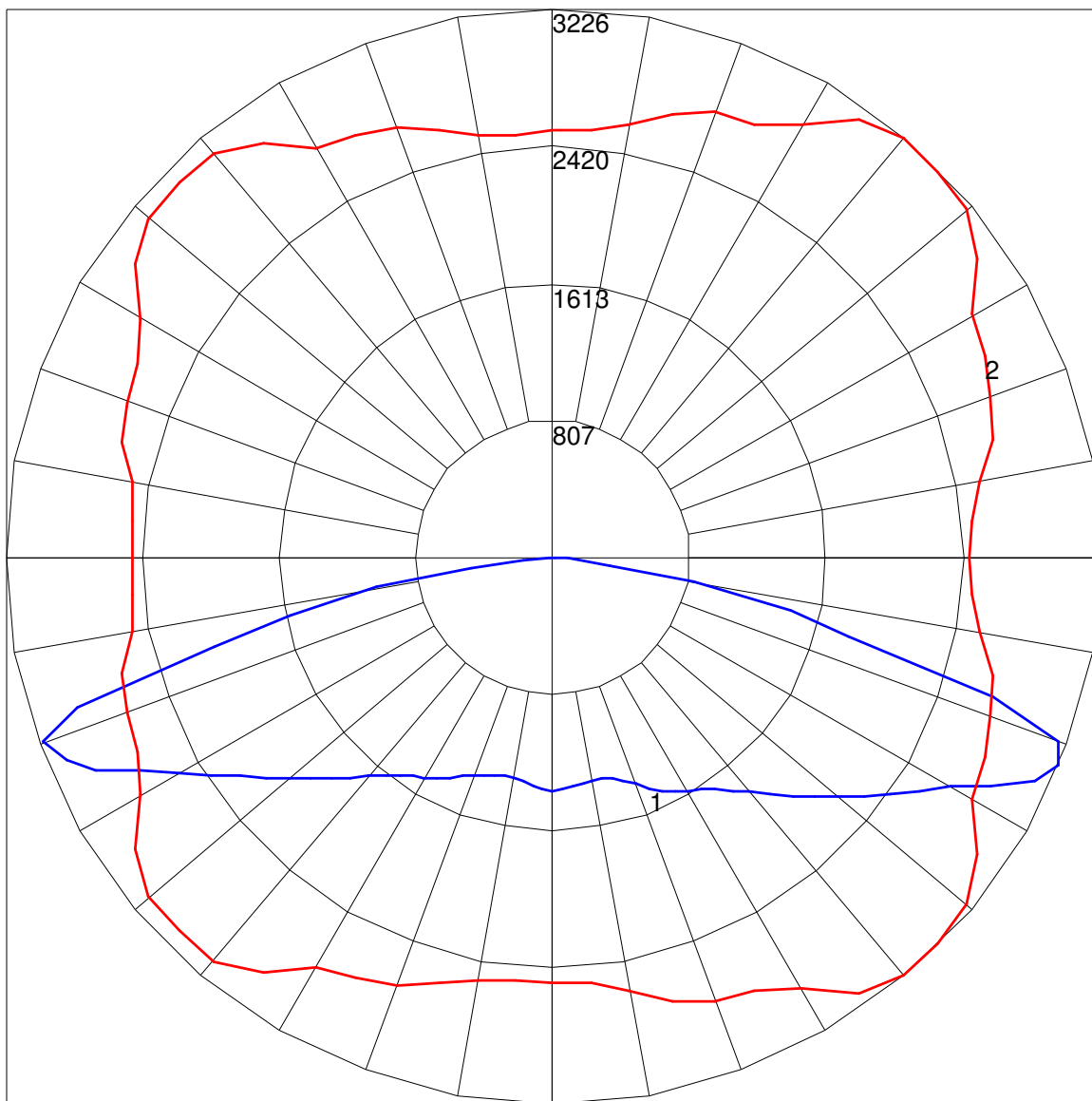
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

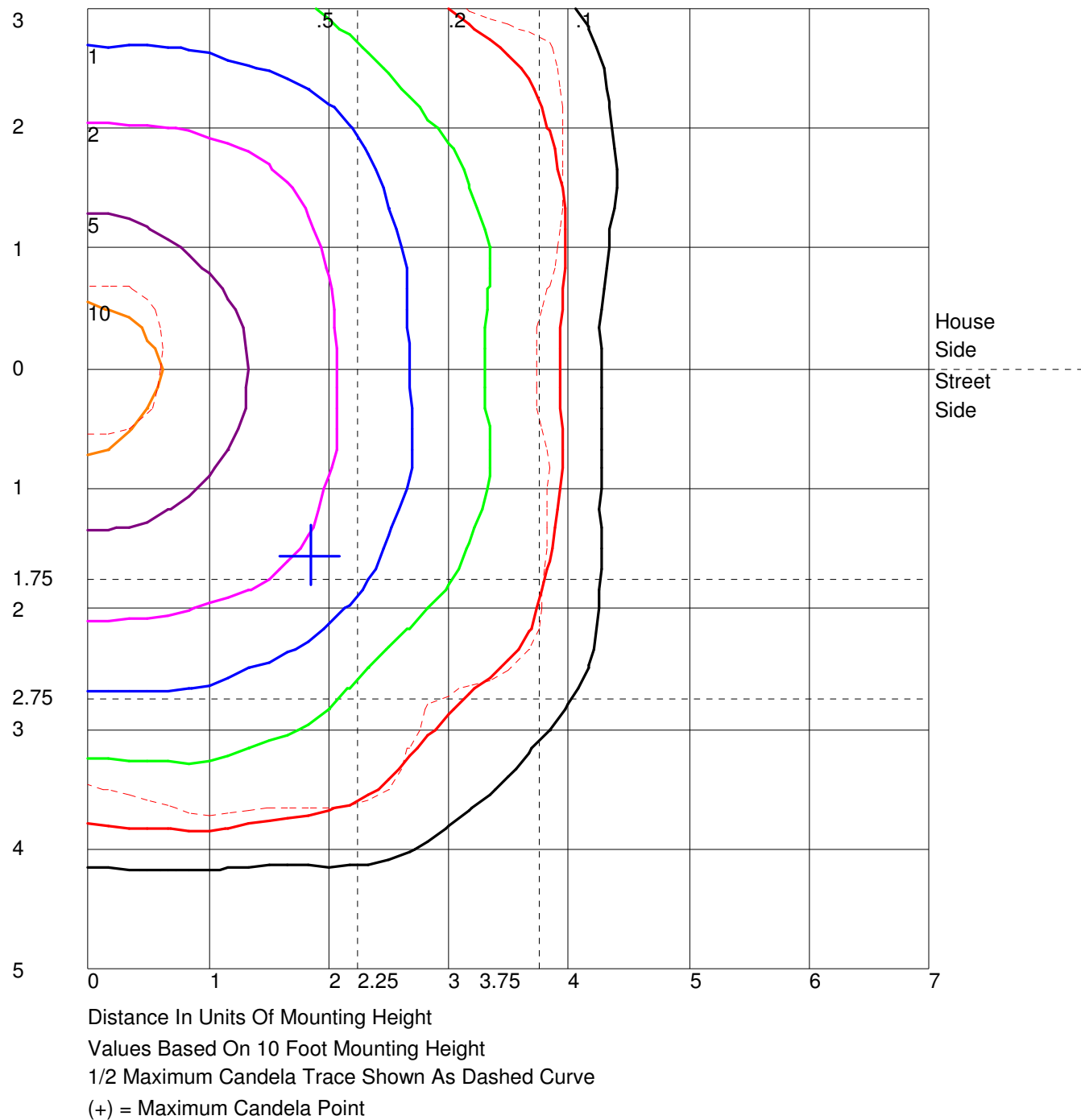
	Lumens	Percent Of Luminaire
Downward Street Side	5395.5	50.4
Downward House Side	5302.1	49.6
Downward Total	10697.6	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	10697.6	100.0

POLAR GRAPH

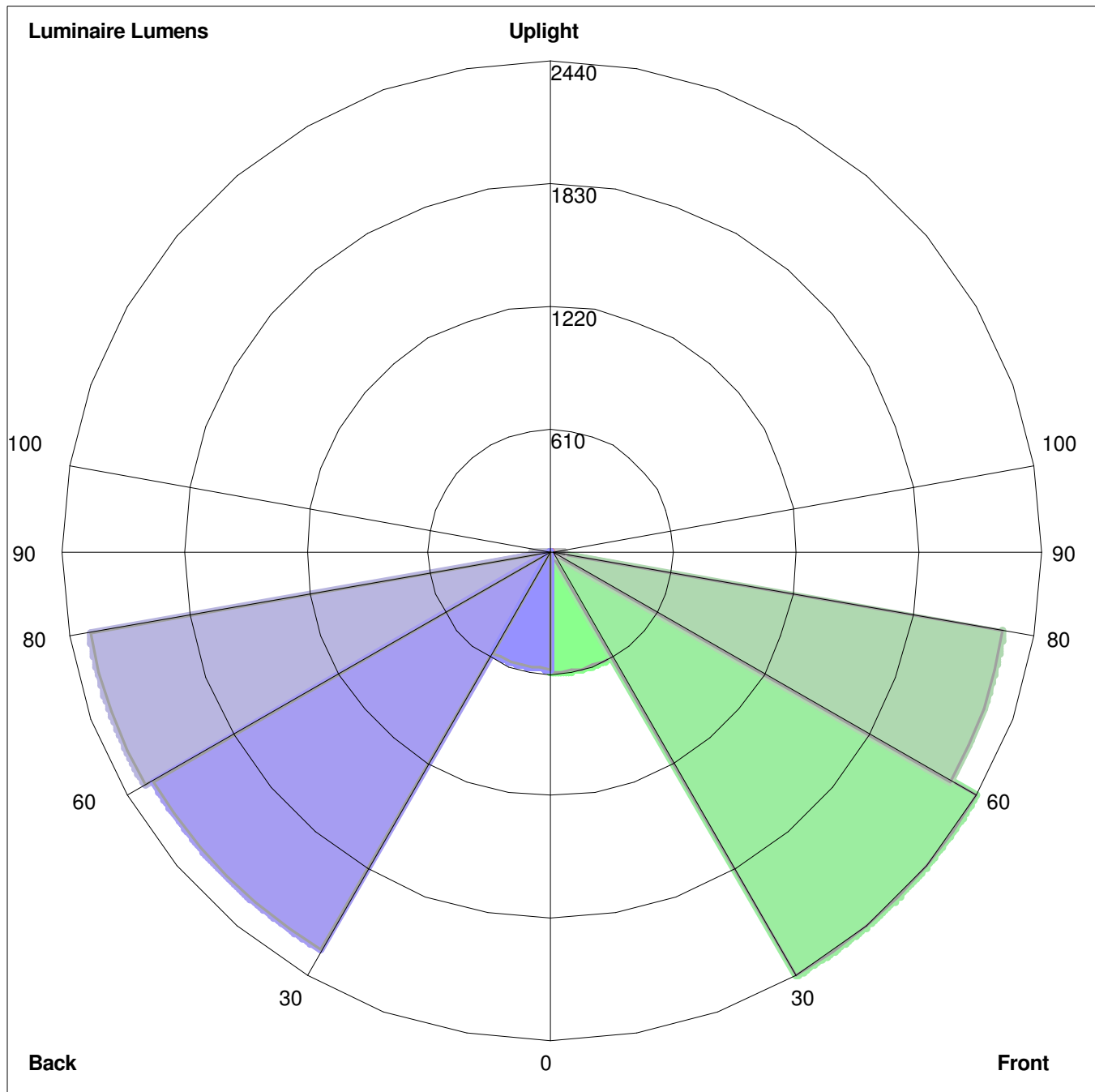


Maximum Candela = 3226.21 Located At Horizontal Angle = 50, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=604.8, Medium=2439.9, High=2287.7, Very High=63.1
Back: Low=584.7, Medium=2287.2, High=2335.5, Very High=94.7
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G2