



IES ROAD REPORT

PHOTOMETRIC FILENAME : VG1-L110-730-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-L110-730-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	10161
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	104
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	3064.251
Maximum Candela Angle	50H 67.5V
Maximum Candela (<90 Degrees Vertical)	3064.251
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	1061.392 (10.4% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VG1-L110-730-T5-XX-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	574.5	N.A.	5.7
FM - Front-Medium (30-60)	2317.4	N.A.	22.8
FH - Front-High (60-80)	2172.8	N.A.	21.4
FVH - Front-Very High (80-90)	59.9	N.A.	0.6
BL - Back-Low (0-30)	555.4	N.A.	5.5
BM - Back-Medium (30-60)	2172.4	N.A.	21.4
BH - Back-High (60-80)	2218.2	N.A.	21.8
BVH - Back-Very High (80-90)	90.0	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	10160.6	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	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087
2.5	1295.638	1296.759	1299.000	1300.121	1302.363	1301.242	1300.121	1300.121	1300.121	1302.363
5.0	1276.584	1277.705	1279.947	1282.188	1285.551	1284.430	1283.309	1283.309	1282.188	1284.430
7.5	1267.618	1269.860	1272.101	1274.343	1275.464	1275.464	1274.343	1274.343	1273.222	1274.343
10.0	1269.860	1270.980	1275.464	1276.584	1274.343	1274.343	1274.343	1272.101	1269.860	1268.739
12.5	1278.826	1279.947	1285.551	1287.792	1287.792	1287.792	1285.551	1281.068	1275.464	1272.101
15.0	1287.792	1290.034	1295.638	1296.759	1301.242	1306.846	1306.846	1303.483	1296.759	1291.155
17.5	1304.604	1305.725	1310.208	1309.087	1314.691	1323.658	1331.503	1331.503	1324.779	1322.537
20.0	1346.074	1342.711	1343.832	1339.349	1338.228	1344.953	1356.161	1361.765	1358.402	1361.765
22.5	1399.872	1389.785	1387.543	1378.577	1374.094	1377.456	1387.543	1393.147	1402.113	1411.080
25.0	1441.341	1437.979	1435.737	1425.650	1417.804	1415.563	1418.925	1426.771	1450.308	1457.032
27.5	1496.260	1495.139	1492.898	1480.569	1469.361	1462.636	1459.274	1465.999	1485.052	1490.656
30.0	1565.749	1564.629	1560.145	1544.454	1527.642	1513.072	1507.468	1513.072	1517.555	1523.159
32.5	1653.171	1650.930	1637.480	1619.547	1597.132	1574.716	1562.387	1554.541	1554.541	1554.541
35.0	1755.163	1752.922	1737.231	1711.453	1683.433	1650.930	1627.393	1616.185	1604.977	1596.011
37.5	1851.552	1849.310	1832.498	1808.962	1775.338	1734.989	1703.607	1684.553	1663.258	1650.930
40.0	1943.457	1940.095	1923.283	1898.625	1866.122	1822.411	1786.546	1761.888	1736.110	1722.660
42.5	2032.000	2025.275	2006.221	1979.322	1951.302	1908.712	1873.968	1847.069	1823.532	1807.841
45.0	2099.247	2094.764	2079.073	2056.657	2025.275	1982.685	1954.665	1932.249	1915.437	1901.988
47.5	2166.495	2158.649	2150.804	2130.630	2100.368	2053.295	2026.396	2011.825	2005.101	2001.738
50.0	2223.655	2220.293	2221.414	2210.206	2182.186	2136.233	2112.697	2102.610	2100.368	2101.489
52.5	2239.347	2243.830	2264.004	2278.574	2268.487	2232.622	2212.447	2207.964	2202.360	2202.360
55.0	2232.622	2242.709	2281.937	2330.131	2349.184	2332.372	2321.164	2323.406	2316.681	2312.198
57.5	2267.366	2271.850	2306.594	2368.238	2409.707	2422.036	2431.002	2453.418	2451.177	2439.969
60.0	2325.648	2329.010	2365.996	2442.210	2473.592	2499.371	2535.236	2589.034	2598.001	2584.551
62.5	2332.372	2343.580	2387.291	2498.250	2557.652	2614.813	2656.282	2741.462	2781.811	2784.052
65.0	2385.050	2394.016	2434.365	2539.719	2593.517	2639.470	2699.993	2862.508	2970.104	2985.795
67.5	2327.889	2358.151	2423.157	2552.048	2615.933	2665.248	2717.926	2910.702	3030.627	3060.889
70.0	2186.669	2210.206	2318.923	2473.592	2536.357	2561.014	2632.745	2852.421	2975.708	2971.225
72.5	1959.148	2018.550	2169.857	2405.224	2521.787	2472.472	2463.505	2455.660	2558.773	2503.854
75.0	1214.941	1325.899	1467.119	1765.251	1834.740	1918.799	2099.247	2091.402	1757.405	1609.460
77.5	381.070	404.607	446.076	561.518	699.375	1023.285	1265.376	1380.818	1356.161	1377.456
80.0	150.186	158.032	177.085	228.642	266.749	369.862	557.035	707.221	781.193	793.522
82.5	50.436	50.436	57.160	78.456	94.147	138.978	205.105	262.266	303.735	329.513
85.0	16.812	15.691	17.933	22.416	25.778	39.228	56.040	69.489	78.456	82.939
87.5	2.242	2.242	2.242	2.242	2.242	2.242	3.362	5.604	6.725	6.725
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	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087
2.5	1305.725	1312.450	1311.329	1305.725	1301.242	1301.242	1304.604	1304.604	1305.725	1303.483
5.0	1288.913	1292.276	1291.155	1286.672	1282.188	1282.188	1284.430	1284.430	1283.309	1282.188
7.5	1277.705	1277.705	1274.343	1273.222	1267.618	1268.739	1269.860	1268.739	1265.376	1265.376
10.0	1270.980	1268.739	1264.256	1263.135	1260.893	1264.256	1264.256	1265.376	1262.014	1260.893
12.5	1274.343	1270.980	1268.739	1269.860	1268.739	1270.980	1267.618	1265.376	1262.014	1259.773
15.0	1290.034	1290.034	1285.551	1283.309	1279.947	1274.343	1265.376	1262.014	1259.773	1257.531
17.5	1316.933	1314.691	1307.967	1300.121	1290.034	1282.188	1274.343	1272.101	1268.739	1268.739
20.0	1353.919	1344.953	1335.987	1322.537	1312.450	1306.846	1301.242	1300.121	1295.638	1295.638
22.5	1399.872	1377.456	1365.127	1353.919	1344.953	1342.711	1342.711	1340.470	1337.107	1334.866
25.0	1446.945	1412.201	1392.026	1388.664	1386.422	1386.422	1386.422	1384.181	1385.301	1379.697
27.5	1481.690	1449.187	1429.012	1431.254	1435.737	1434.616	1436.858	1435.737	1436.858	1431.254

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CANDELA TABULATION - (Cont.)

30.0	1514.193	1492.898	1480.569	1479.448	1488.415	1492.898	1495.139	1497.381	1494.018	1490.656
32.5	1546.696	1526.522	1527.642	1532.125	1545.575	1552.300	1560.145	1562.387	1562.387	1557.904
35.0	1589.286	1575.836	1585.924	1597.132	1617.306	1630.755	1643.084	1652.050	1649.809	1646.446
37.5	1648.688	1641.963	1654.292	1675.587	1700.245	1721.540	1733.868	1740.593	1746.197	1740.593
40.0	1719.298	1715.936	1734.989	1758.526	1789.908	1813.445	1826.894	1836.981	1843.706	1838.102
42.5	1804.478	1802.237	1825.774	1848.189	1880.692	1898.625	1914.316	1924.403	1928.887	1924.403
45.0	1896.384	1893.021	1913.195	1928.887	1958.027	1973.718	1989.409	1998.376	2000.617	1996.134
47.5	1991.651	1981.564	1997.255	2005.101	2027.516	2048.812	2061.140	2065.623	2064.503	2061.140
50.0	2095.885	2082.435	2091.402	2090.281	2111.576	2132.871	2132.871	2126.146	2123.905	2123.905
52.5	2204.602	2197.877	2191.152	2190.032	2207.964	2214.689	2194.515	2172.099	2168.737	2172.099
55.0	2316.681	2320.044	2308.836	2300.990	2306.594	2295.386	2250.554	2206.843	2198.998	2202.360
57.5	2442.210	2450.056	2425.398	2411.949	2397.378	2351.426	2274.091	2211.327	2204.602	2201.240
60.0	2578.947	2586.793	2545.323	2511.699	2469.109	2409.707	2318.923	2264.004	2261.762	2251.675
62.5	2769.482	2767.241	2687.664	2629.383	2561.014	2480.317	2364.875	2297.628	2293.145	2281.937
65.0	2981.312	2925.272	2753.791	2657.403	2595.759	2512.820	2387.291	2329.010	2313.319	2305.473
67.5	3064.251	2989.158	2794.140	2679.819	2651.799	2571.102	2465.747	2397.378	2386.171	2379.446
70.0	3018.298	2949.930	2745.945	2589.034	2567.739	2485.921	2344.701	2195.636	2175.461	2164.253
72.5	2584.551	2518.424	2482.559	2482.559	2562.135	2528.511	2357.030	2112.697	2103.730	2105.972
75.0	1708.090	2027.516	2211.327	2094.764	2057.778	1936.732	1796.633	1561.266	1548.937	1557.904
77.5	1367.369	1411.080	1388.664	1160.022	969.487	711.704	616.437	520.048	512.203	514.444
80.0	798.005	755.415	671.356	435.989	331.755	266.749	238.729	211.830	212.951	210.709
82.5	320.547	297.010	257.783	180.448	138.978	105.355	90.784	80.697	81.818	80.697
85.0	86.301	86.301	76.214	51.557	39.228	28.020	24.657	22.416	23.537	24.657
87.5	5.604	7.846	5.604	5.604	4.483	4.483	3.362	3.362	3.362	3.362
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	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087
2.5	1303.483	1302.363	1301.242	1301.242	1302.363	1302.363	1303.483	1305.725	1306.846	1306.846
5.0	1281.068	1281.068	1281.068	1281.068	1281.068	1282.188	1283.309	1286.672	1288.913	1287.792
7.5	1264.256	1265.376	1266.497	1266.497	1264.256	1264.256	1266.497	1268.739	1270.980	1270.980
10.0	1259.773	1259.773	1259.773	1256.410	1250.806	1249.685	1254.169	1256.410	1257.531	1256.410
12.5	1262.014	1264.256	1265.376	1262.014	1253.048	1248.565	1251.927	1253.048	1254.169	1254.169
15.0	1260.893	1264.256	1269.860	1268.739	1264.256	1259.773	1263.135	1262.014	1263.135	1264.256
17.5	1267.618	1268.739	1273.222	1275.464	1274.343	1277.705	1282.188	1282.188	1281.068	1283.309
20.0	1291.155	1291.155	1290.034	1290.034	1291.155	1299.000	1303.483	1311.329	1306.846	1304.604
22.5	1329.262	1324.779	1318.054	1315.812	1318.054	1325.899	1333.745	1347.194	1340.470	1330.383
25.0	1370.731	1364.006	1352.798	1350.557	1347.194	1352.798	1369.610	1387.543	1376.335	1358.402
27.5	1420.046	1409.959	1396.509	1393.147	1381.939	1385.301	1406.597	1418.925	1405.476	1386.422
30.0	1478.327	1464.878	1446.945	1439.100	1422.288	1429.012	1436.858	1448.066	1431.254	1422.288
32.5	1543.333	1524.280	1499.622	1483.931	1463.757	1461.515	1461.515	1463.757	1451.428	1441.341
35.0	1622.910	1599.373	1566.870	1541.092	1510.830	1498.502	1490.656	1488.415	1478.327	1472.723
37.5	1713.694	1684.553	1648.688	1613.943	1574.716	1554.541	1537.729	1529.884	1520.918	1526.522
40.0	1807.841	1775.338	1733.868	1695.761	1648.688	1621.789	1600.494	1589.286	1578.078	1585.924
42.5	1895.263	1862.760	1823.532	1782.063	1733.868	1700.245	1673.346	1661.017	1652.050	1658.775
45.0	1966.994	1936.732	1897.504	1861.639	1820.170	1783.183	1750.680	1737.231	1730.506	1738.352
47.5	2034.241	2009.584	1971.477	1937.853	1903.108	1867.243	1834.740	1823.532	1815.686	1824.653
50.0	2102.610	2090.281	2055.536	2023.033	1990.530	1958.027	1928.887	1921.041	1913.195	1914.316
52.5	2160.891	2163.133	2145.200	2118.301	2083.556	2057.778	2029.758	2024.154	2017.429	2014.067
55.0	2211.327	2237.105	2240.467	2225.897	2196.756	2169.857	2144.079	2127.267	2129.509	2121.663
57.5	2225.897	2288.661	2329.010	2335.735	2312.198	2295.386	2270.729	2244.950	2247.192	2242.709
60.0	2266.246	2336.856	2404.103	2437.727	2432.123	2431.002	2415.311	2379.446	2389.533	2378.325
62.5	2303.232	2392.895	2490.404	2549.806	2563.256	2591.276	2603.605	2572.222	2576.706	2552.048
65.0	2320.044	2404.103	2504.975	2576.706	2627.141	2767.241	2834.488	2810.951	2806.468	2750.429

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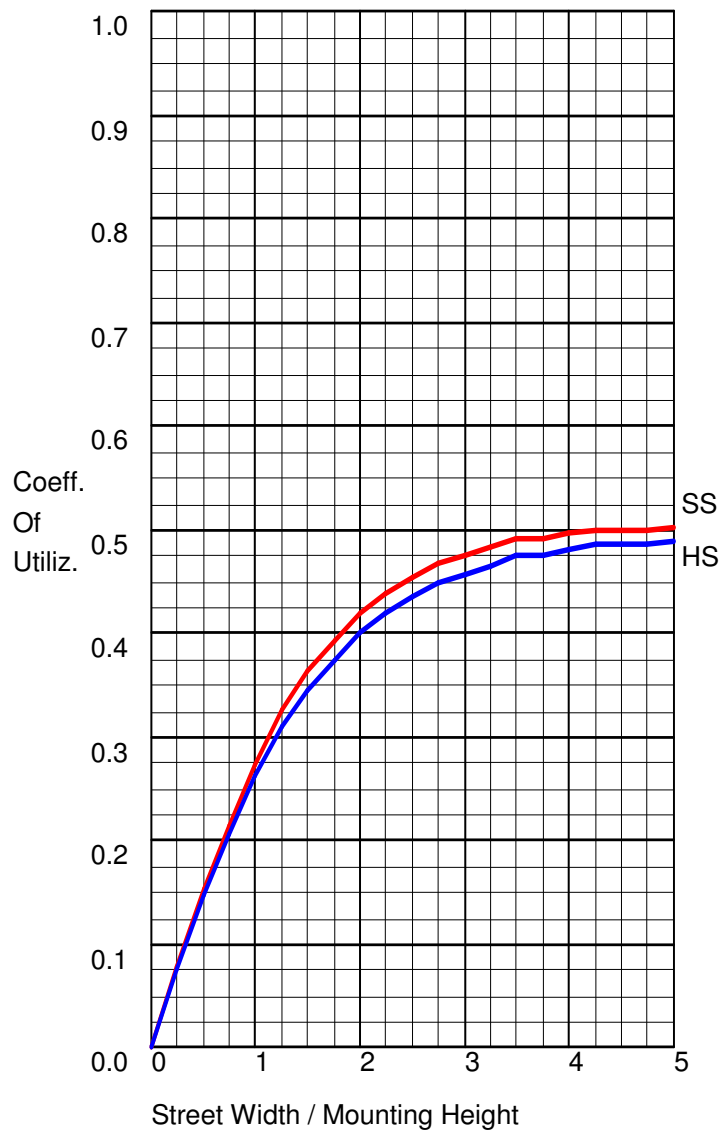
CANDELA TABULATION - (Cont.)

67.5	2404.103	2476.955	2558.773	2608.088	2648.436	2836.730	2955.534	2970.104	2955.534	2858.025
70.0	2231.501	2381.687	2487.042	2541.961	2645.074	2915.185	3037.352	3038.473	3045.197	2947.688
72.5	2250.554	2450.056	2474.713	2387.291	2448.935	2622.658	2789.656	2827.763	2871.474	2732.496
75.0	1787.667	2075.711	2185.548	2267.366	2359.271	2166.495	1966.994	2019.671	2029.758	2117.180
77.5	687.047	896.635	1184.679	1376.335	1559.025	1683.433	1513.072	1388.664	1488.415	1698.003
80.0	256.662	302.614	368.741	536.860	792.401	971.728	999.748	1061.392	1030.010	1049.063
82.5	99.751	121.046	161.394	211.830	290.286	393.399	471.854	488.666	462.888	446.076
85.0	28.020	34.745	49.315	67.248	90.784	126.650	165.878	175.965	174.844	160.274
87.5	4.483	4.483	7.846	10.087	17.933	17.933	22.416	21.295	21.295	21.295
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	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087	1309.087
2.5	1305.725	1304.604	1305.725	1302.363	1304.604	1309.087	1310.208
5.0	1286.672	1283.309	1284.430	1282.188	1283.309	1286.672	1285.551
7.5	1268.739	1266.497	1265.376	1263.135	1263.135	1265.376	1264.256
10.0	1255.289	1253.048	1253.048	1253.048	1251.927	1253.048	1255.289
12.5	1254.169	1254.169	1254.169	1253.048	1251.927	1251.927	1253.048
15.0	1265.376	1264.256	1260.893	1256.410	1251.927	1250.806	1250.806
17.5	1282.188	1274.343	1264.256	1255.289	1253.048	1253.048	1255.289
20.0	1301.242	1286.672	1272.101	1265.376	1269.860	1269.860	1273.222
22.5	1321.416	1307.967	1293.396	1291.155	1299.000	1302.363	1304.604
25.0	1340.470	1331.503	1322.537	1324.779	1333.745	1339.349	1344.953
27.5	1364.006	1362.886	1359.523	1362.886	1372.973	1376.335	1381.939
30.0	1403.234	1398.751	1400.993	1408.838	1421.167	1423.408	1430.133
32.5	1431.254	1433.496	1443.583	1455.911	1470.482	1476.086	1487.294
35.0	1469.361	1479.448	1498.502	1517.555	1536.609	1546.696	1560.145
37.5	1525.401	1543.333	1567.991	1591.528	1617.306	1631.876	1645.326
40.0	1593.769	1616.185	1640.843	1676.708	1708.090	1726.023	1739.472
42.5	1673.346	1698.003	1730.506	1765.251	1801.116	1820.170	1833.619
45.0	1760.767	1783.183	1811.203	1844.827	1873.968	1894.142	1901.988
47.5	1843.706	1861.639	1889.659	1917.679	1943.457	1954.665	1960.269
50.0	1927.766	1938.974	1969.235	1991.651	2012.946	2020.792	2028.637
52.5	2015.188	2030.879	2061.140	2076.831	2082.435	2082.435	2089.160
55.0	2122.784	2136.233	2153.045	2149.683	2137.354	2123.905	2121.663
57.5	2231.501	2234.863	2239.347	2224.776	2177.703	2140.717	2132.871
60.0	2351.426	2349.184	2331.252	2289.782	2212.447	2166.495	2162.012
62.5	2498.250	2479.196	2429.882	2367.117	2258.400	2210.206	2198.998
65.0	2622.658	2548.686	2473.592	2390.654	2274.091	2244.950	2234.863
67.5	2666.369	2576.706	2543.082	2498.250	2397.378	2371.600	2361.513
70.0	2723.530	2577.826	2509.458	2428.761	2314.440	2207.964	2196.756
72.5	2538.599	2415.311	2414.190	2407.466	2276.333	2162.012	2142.958
75.0	2394.016	2341.339	2318.923	2155.287	1974.839	1801.116	1767.492
77.5	1713.694	1529.884	1420.046	1296.759	1055.788	870.857	810.334
80.0	965.004	682.564	480.821	411.331	360.896	319.426	316.064
82.5	374.345	262.266	200.622	175.965	151.307	128.891	130.012
85.0	127.771	87.422	67.248	54.919	45.953	38.107	36.986
87.5	16.812	12.329	8.966	7.846	7.846	6.725	6.725
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

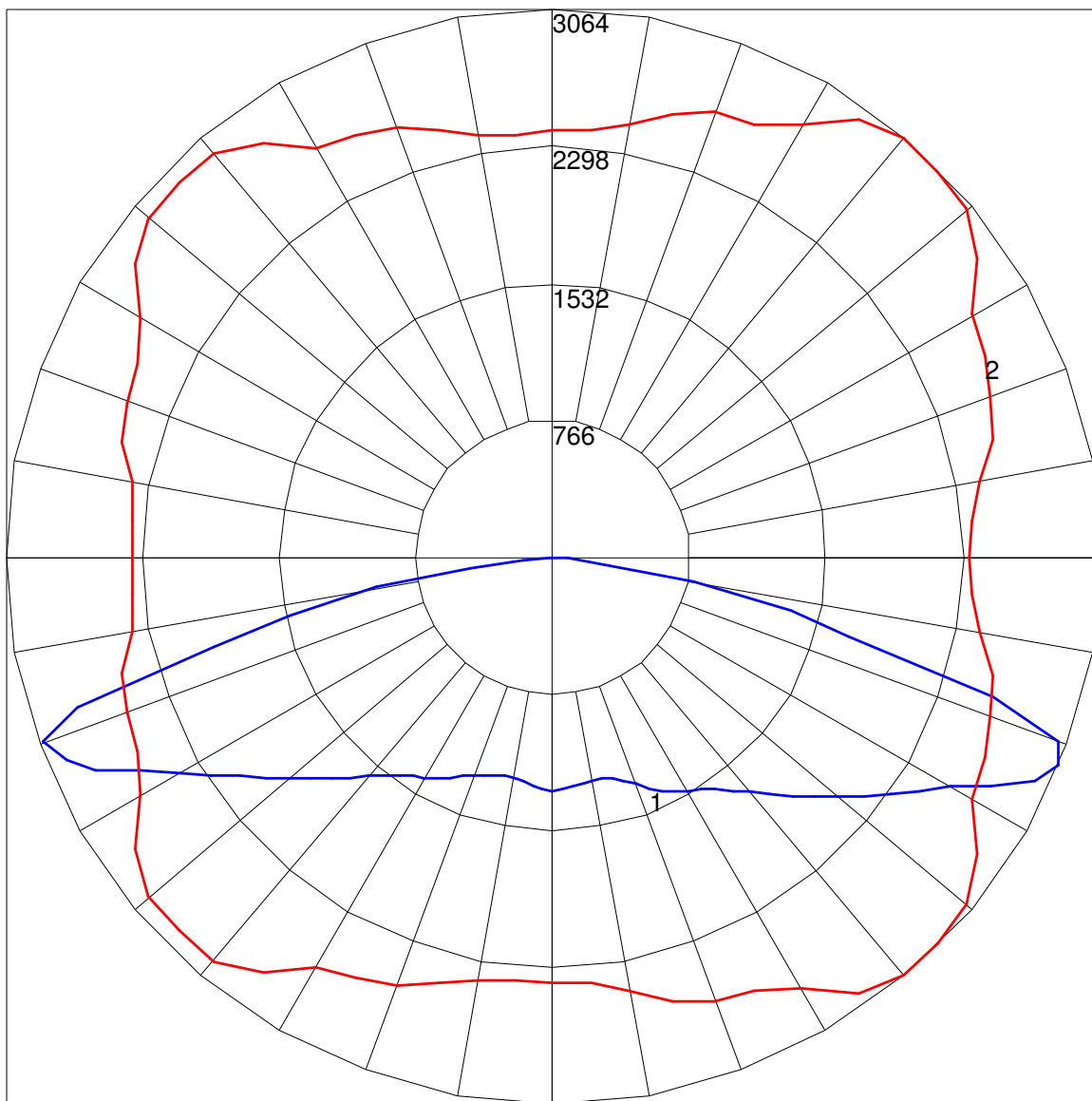
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

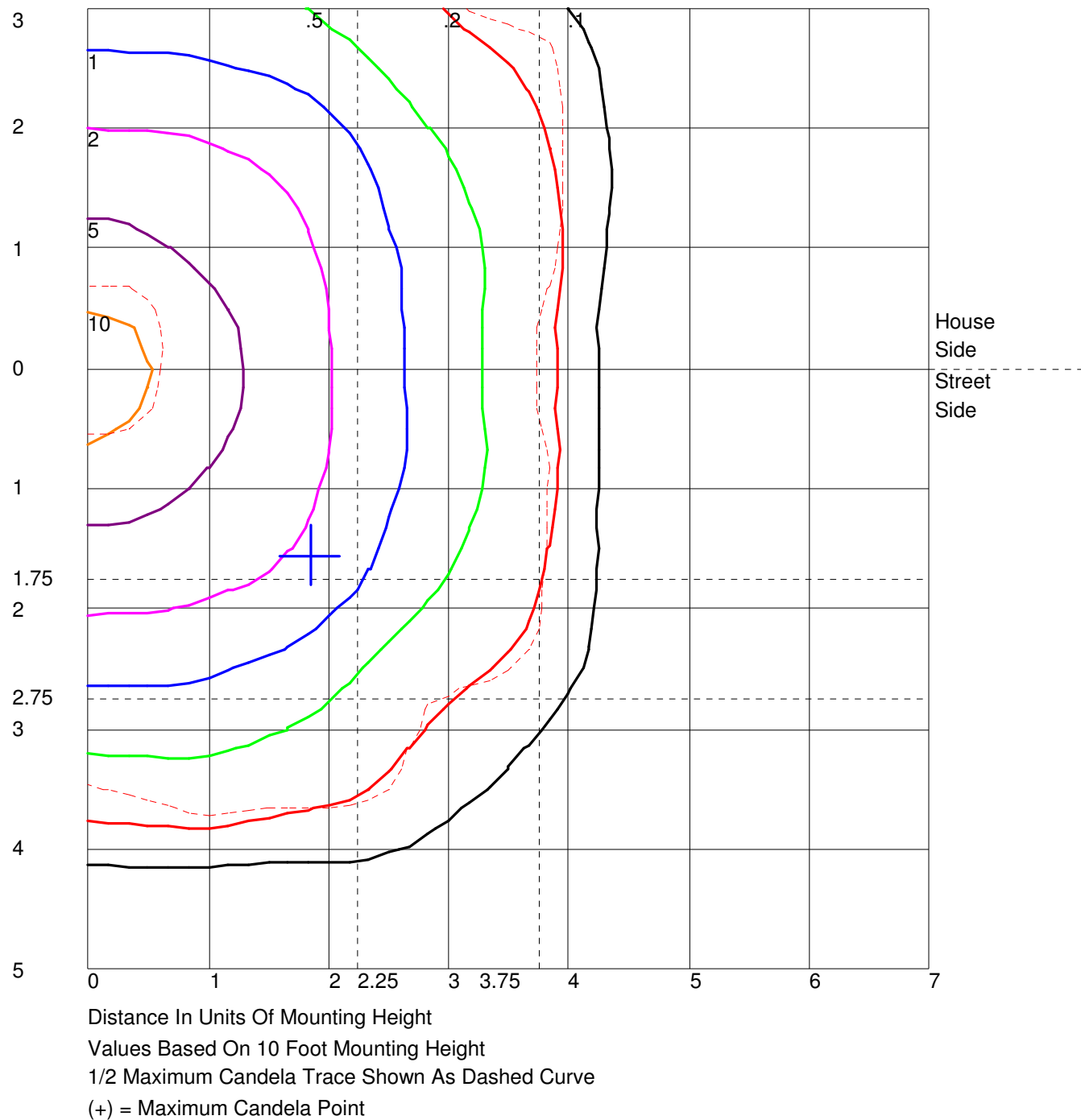
	Lumens	Percent Of Luminaire
Downward Street Side	5124.6	50.4
Downward House Side	5035.9	49.6
Downward Total	10160.5	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	10160.5	100.0

POLAR GRAPH

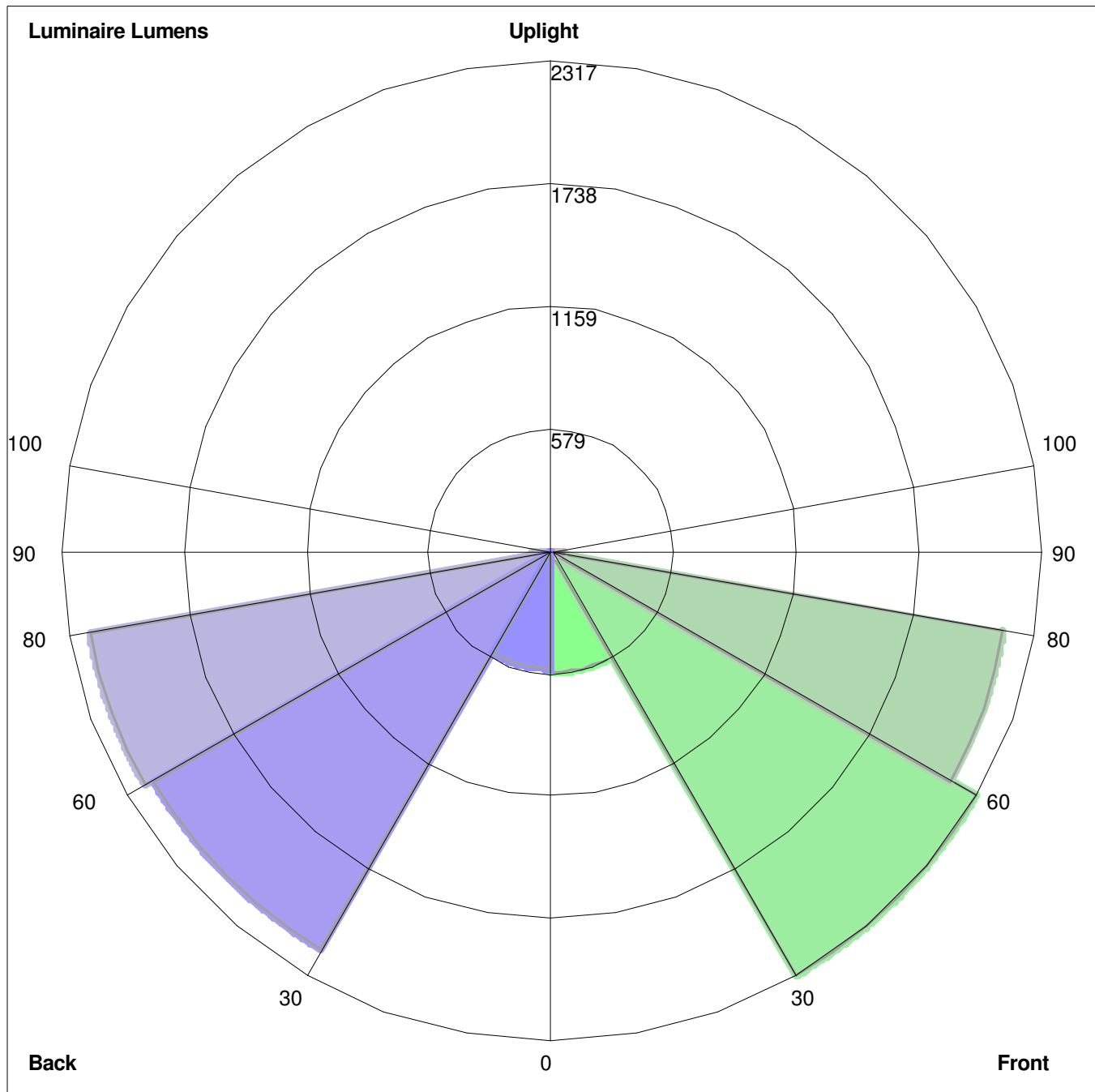


Maximum Candela = 3064.251 Located At Horizontal Angle = 50, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=574.5, Medium=2317.4, High=2172.8, Very High=59.9
Back: Low=555.4, Medium=2172.4, High=2218.2, Very High=90.0
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G2