



IES INDOOR REPORT

PHOTOMETRIC FILENAME : VF2-L88-750-HF_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]ATAL009606-R2
[TESTLAB]ATAL-LABS
[ISSUE DATE]28 NOV 2022
[MANUFACTURER]WILLIAMS OUTDOOR
[OTHER]H.E. WILLIAMS. INC. - CARTHAGE, MO.
[LUMEN CATEGORY]VF2-L88-750-HF-MTG-CLR-OPT-DIM-UNV
[LUMINAIRE] MEDIUM ARCHITECTURAL FLOOD LIGHT WITH
[MORE] HORIZONTAL FLOOD MOLDED REFRACTIVE CLEAR ACRYLIC LENS AND A
[MORE] CLEAR GLASS LENS.
[LAMP CATEGORY]LUXEON TX 5000K LEDS
[BALLAST](1) PHILIPS ELECTRONIC DRIVER
[OTHER]INPUT WATTS: 75, AMPS: 0.4433, VAC: 120.02, TEMP: 24.9 C
[SEARCH_SOURCE TYPE] LED
[SEARCH_APPLICATION] Outdoor, Architectural, Facade, Landscape, Parking, Site, Flood, Wet Location
[SEARCH_MOUNTING] Arm, Ground, Pole, Post Top, Wall
[SEARCH_CERTIFICATION] DLC
[SEARCH_CLASSIFICATION] IP66

Note: Candela values converted from Type-B to Type-C

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8102
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	75
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.72
Spacing Criterion (90-270)	3.16
Spacing Criterion (Diagonal)	2.10
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.69 ft (Diameter)
Luminous Height	0.00 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	50033	102880	140517
55	19690	73995	239948
65	17899	21206	198999
75	14410	13431	14207
85	0	4939	4822

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CANDELA TABULATION

	<u>0.0</u>	<u>2.5</u>	<u>5.0</u>	<u>7.5</u>	<u>10.0</u>	<u>12.5</u>	<u>15.0</u>	<u>17.5</u>	<u>20.0</u>	<u>22.5</u>
0.0	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297
2.5	1350.031	1349.803	1349.516	1349.168	1348.762	1348.299	1347.778	1347.201	1346.569	1345.883
5.0	1387.204	1386.342	1385.342	1384.210	1382.954	1381.867	1381.384	1380.692	1379.866	1378.908
7.5	1433.445	1432.712	1431.700	1430.409	1429.655	1428.685	1427.437	1425.914	1423.071	1422.107
10.0	1485.125	1484.135	1482.741	1481.757	1480.731	1479.300	1477.468	1475.237	1472.611	1469.594
12.5	1531.365	1530.196	1528.799	1528.421	1527.594	1526.391	1524.917	1523.175	1520.978	1518.316
15.0	1555.845	1555.726	1555.616	1555.582	1555.299	1554.958	1554.748	1554.283	1553.421	1554.732
17.5	1575.429	1573.851	1573.209	1572.810	1571.978	1572.703	1573.430	1574.902	1577.105	1579.032
20.0	1609.641	1608.605	1608.409	1607.926	1607.967	1607.508	1608.454	1611.644	1613.413	1618.039
22.5	1642.885	1646.064	1646.978	1647.170	1649.548	1651.583	1655.672	1659.705	1667.097	1676.082
25.0	1685.197	1688.469	1691.046	1693.285	1698.358	1703.535	1711.346	1720.786	1735.871	1751.829
27.5	1739.252	1743.006	1746.225	1750.830	1757.918	1768.072	1778.798	1799.380	1816.446	1848.812
30.0	1782.513	1786.227	1791.558	1801.125	1813.325	1834.042	1859.633	1891.524	1928.206	1963.917
32.5	1805.179	1807.255	1813.758	1826.241	1843.446	1868.828	1905.819	1949.114	2002.953	2061.052
35.0	1737.984	1739.221	1750.944	1769.837	1798.644	1838.484	1896.972	1968.923	2051.312	2138.961
37.5	1648.325	1647.640	1661.216	1679.012	1709.458	1754.027	1810.879	1892.771	1982.232	2078.930
40.0	1517.765	1518.834	1532.438	1552.636	1587.077	1638.486	1708.018	1794.607	1894.169	2004.530
42.5	1387.204	1389.302	1401.469	1421.942	1456.394	1509.309	1583.436	1671.283	1769.530	1882.180
45.0	1221.284	1226.275	1237.630	1260.103	1291.873	1347.497	1427.953	1519.820	1627.501	1747.256
47.5	1055.363	1062.584	1071.788	1092.181	1122.553	1172.699	1248.665	1338.013	1445.587	1553.681
50.0	833.531	839.886	849.852	870.410	902.248	953.623	1027.841	1118.568	1227.825	1335.060
52.5	611.700	616.482	624.779	641.820	669.025	712.929	774.082	848.151	932.487	1019.961
55.0	389.868	393.022	399.137	412.180	432.961	466.578	511.805	563.983	624.440	696.784
57.5	357.681	358.856	359.127	361.755	366.935	377.809	390.534	397.397	401.842	414.208
60.0	325.495	326.705	327.012	329.596	334.516	344.057	355.144	361.357	367.295	378.649
62.5	293.308	294.600	294.841	297.404	301.935	309.382	318.703	325.503	332.597	341.080
65.0	261.121	262.536	262.622	265.181	269.155	274.580	282.295	289.990	296.909	303.112
67.5	228.028	229.470	229.753	232.100	236.204	239.831	246.368	253.479	259.260	264.226
70.0	194.934	196.389	196.897	198.848	202.855	205.131	210.024	215.988	219.772	222.832
72.5	161.841	163.303	164.073	165.767	169.215	170.342	173.080	178.335	179.818	180.829
75.0	128.747	130.210	131.275	132.633	135.337	135.468	135.640	140.529	139.475	138.314
77.5	96.560	98.015	98.969	100.161	102.133	102.835	102.456	106.268	104.158	102.033
80.0	64.374	65.819	66.668	67.630	69.186	70.403	70.622	72.851	71.797	71.121
82.5	32.187	33.618	34.364	35.026	36.383	37.835	39.002	39.709	39.680	40.473
85.0	0.000	1.412	2.058	2.369	3.674	5.170	7.522	6.668	7.718	10.002
87.5	0.000	0.679	0.910	0.914	1.377	1.857	2.809	1.901	2.084	2.936
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>25.0</u>	<u>27.5</u>	<u>30.0</u>	<u>32.5</u>	<u>35.0</u>	<u>37.5</u>	<u>40.0</u>	<u>42.5</u>	<u>45.0</u>	<u>47.5</u>
0.0	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297
2.5	1345.247	1344.721	1344.102	1343.425	1342.690	1341.898	1341.051	1340.150	1339.197	1338.194
5.0	1377.819	1376.602	1375.258	1373.790	1372.201	1370.457	1368.752	1366.855	1364.826	1362.667
7.5	1419.905	1417.493	1414.875	1412.060	1409.054	1405.866	1402.504	1398.883	1395.372	1389.965
10.0	1464.461	1462.606	1458.822	1455.574	1451.941	1447.873	1443.374	1438.448	1432.957	1429.013
12.5	1515.854	1513.561	1510.227	1505.876	1501.670	1498.302	1494.135	1489.163	1483.547	1478.522
15.0	1555.220	1555.264	1556.166	1556.407	1554.906	1552.240	1553.790	1553.040	1549.533	1543.661
17.5	1582.574	1587.930	1592.474	1597.779	1603.870	1609.322	1615.193	1621.812	1624.902	1623.922
20.0	1623.639	1626.946	1638.734	1645.200	1657.916	1671.627	1683.313	1694.197	1704.856	1712.871
22.5	1686.238	1700.178	1710.618	1729.034	1744.709	1759.186	1771.886	1781.613	1793.741	1802.984
25.0	1772.350	1792.068	1816.901	1838.068	1857.278	1872.660	1884.026	1894.781	1901.496	1903.898
27.5	1877.447	1910.477	1940.079	1966.489	1987.422	2002.544	2015.470	2021.403	2022.912	2019.328
30.0	2006.648	2045.515	2082.764	2112.737	2137.187	2153.062	2160.980	2161.202	2154.122	2147.704

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CANDELA TABULATION - (Cont.)

32.5	2120.226	2184.782	2242.618	2277.956	2300.543	2315.671	2317.931	2312.451	2303.205	2293.798
35.0	2205.536	2271.011	2333.171	2387.642	2438.313	2474.838	2476.466	2470.648	2462.892	2455.564
37.5	2179.759	2279.410	2376.784	2467.929	2509.665	2544.994	2573.514	2599.413	2610.657	2608.882
40.0	2112.904	2213.486	2307.768	2396.955	2481.116	2560.116	2612.173	2632.387	2660.022	2703.167
42.5	1995.310	2102.160	2207.775	2302.055	2385.356	2448.534	2514.883	2577.708	2647.483	2686.179
45.0	1862.817	1965.330	2058.204	2152.134	2229.654	2311.302	2381.189	2442.216	2511.228	2595.611
47.5	1657.374	1764.007	1870.167	1975.804	2054.765	2121.230	2190.529	2262.422	2342.641	2425.553
50.0	1425.466	1515.373	1614.597	1694.353	1785.832	1881.220	1982.710	2041.845	2117.528	2217.069
52.5	1110.879	1208.976	1304.017	1389.691	1464.818	1551.818	1635.241	1738.239	1863.608	1963.590
55.0	777.628	865.919	949.907	1035.287	1119.395	1197.226	1272.182	1352.965	1465.097	1608.622
57.5	434.789	511.946	596.325	683.051	772.927	852.269	929.726	996.020	1057.725	1132.460
60.0	384.436	390.793	398.200	403.803	428.436	519.852	605.578	682.687	748.659	752.988
62.5	346.640	352.914	358.747	363.519	366.076	369.162	367.320	384.759	456.541	493.258
65.0	308.932	314.718	318.805	322.284	322.029	321.773	317.327	314.263	309.374	305.282
67.5	270.122	276.223	278.415	279.109	277.115	272.778	266.804	261.685	256.688	252.892
70.0	226.606	230.681	232.717	233.006	231.393	223.911	215.832	210.051	204.987	203.013
72.5	182.502	184.372	185.488	186.066	185.769	179.206	172.139	164.847	157.364	155.201
75.0	137.902	137.898	138.033	140.119	140.521	136.197	130.976	124.814	119.995	119.501
77.5	99.812	97.410	95.199	96.602	96.552	94.635	90.950	86.048	84.183	85.361
80.0	69.961	68.598	67.696	69.057	68.334	65.773	61.250	55.620	53.726	53.825
82.5	40.355	40.088	40.223	41.535	41.431	40.455	37.771	34.439	34.195	34.694
85.0	10.919	11.789	12.766	14.023	14.926	15.592	15.015	14.095	14.861	15.786
87.5	3.001	3.066	3.140	3.224	3.319	3.427	2.969	2.471	2.563	2.682
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>50.0</u>	<u>52.5</u>	<u>55.0</u>	<u>57.5</u>	<u>60.0</u>	<u>62.5</u>	<u>65.0</u>	<u>67.5</u>	<u>70.0</u>	<u>72.5</u>
0.0	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297
2.5	1337.141	1336.042	1334.899	1333.715	1332.490	1331.229	1329.177	1328.685	1327.520	1326.343
5.0	1360.384	1357.253	1355.766	1353.622	1351.444	1349.232	1346.988	1344.713	1342.406	1340.069
7.5	1387.901	1384.468	1380.926	1377.281	1373.536	1369.696	1365.765	1362.166	1359.041	1356.478
10.0	1424.497	1419.563	1414.223	1408.488	1401.615	1397.755	1392.815	1389.093	1384.604	1379.341
12.5	1473.547	1467.751	1461.150	1454.283	1447.395	1439.276	1433.360	1426.709	1421.803	1416.375
15.0	1538.783	1532.394	1525.392	1518.006	1509.445	1500.358	1494.663	1486.711	1477.743	1470.417
17.5	1622.957	1620.798	1614.680	1606.696	1594.583	1587.491	1575.974	1563.271	1552.388	1540.260
20.0	1718.704	1718.408	1714.132	1705.416	1697.285	1685.624	1671.814	1657.010	1637.365	1626.779
22.5	1807.901	1814.323	1817.589	1815.364	1808.384	1798.101	1780.728	1761.269	1743.882	1721.412
25.0	1906.317	1907.944	1911.785	1912.999	1912.709	1903.958	1891.723	1878.835	1859.532	1844.950
27.5	2016.554	2011.343	2007.207	2010.286	2015.343	2020.362	2020.005	2015.258	2004.403	1992.915
30.0	2136.512	2130.103	2128.305	2123.839	2130.674	2149.614	2166.343	2177.282	2183.030	2175.323
32.5	2283.466	2274.617	2275.731	2285.599	2296.973	2310.098	2329.111	2366.328	2396.183	2416.485
35.0	2452.336	2457.627	2465.162	2470.663	2486.037	2517.559	2557.132	2602.570	2641.133	2669.246
37.5	2618.609	2633.596	2639.715	2654.135	2677.843	2712.121	2757.493	2806.456	2862.777	2920.860
40.0	2731.817	2746.318	2773.641	2796.468	2828.055	2864.265	2903.843	2968.184	3044.712	3121.207
42.5	2739.657	2807.805	2853.897	2913.410	2962.527	2997.034	3049.294	3118.526	3192.234	3252.952
45.0	2688.168	2773.744	2887.226	2989.994	3071.971	3172.307	3246.513	3313.407	3367.454	3409.770
47.5	2539.285	2679.514	2816.565	2988.245	3174.129	3310.276	3438.186	3542.523	3650.740	3747.762
50.0	2341.015	2480.411	2689.740	2921.419	3139.579	3387.470	3598.802	3797.290	3967.254	4094.698
52.5	2082.795	2267.407	2491.201	2741.755	3072.227	3368.859	3693.829	3954.608	4169.155	4342.300
55.0	1806.717	1975.949	2205.507	2542.069	2893.333	3279.000	3623.235	3935.325	4209.967	4475.756
57.5	1278.251	1522.752	1868.891	2215.052	2643.374	3015.237	3393.776	3762.874	4133.542	4494.725
60.0	723.253	892.065	1281.476	1749.448	2145.750	2558.170	2999.334	3487.639	3936.924	4125.479
62.5	503.519	558.734	620.978	996.960	1463.171	1942.485	2440.175	2999.371	3172.181	3189.166
65.0	337.833	391.205	449.438	497.448	641.635	1159.514	1705.601	1999.712	2188.347	2287.355
67.5	251.038	248.666	281.993	337.425	382.160	415.508	788.309	1139.706	1325.832	1395.980

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70.0	202.306	203.041	208.927	216.689	247.636	287.074	321.331	461.069	653.139	677.529
72.5	155.891	158.474	163.213	169.760	176.411	178.682	204.514	236.207	266.916	279.456
75.0	118.442	117.507	116.850	121.947	127.236	130.874	132.622	132.098	160.436	184.528
77.5	85.529	84.861	84.277	84.075	84.917	86.898	90.515	91.631	92.993	102.977
80.0	53.268	52.939	52.656	53.684	55.664	56.976	57.430	57.122	60.049	61.675
82.5	33.654	31.835	29.526	28.758	28.555	30.555	32.570	34.110	35.114	34.960
85.0	15.954	15.777	15.251	15.784	16.343	16.684	16.734	16.600	16.212	16.876
87.5	2.819	2.976	3.158	3.777	4.516	5.775	6.900	7.514	7.952	8.162
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>75.0</u>	<u>77.5</u>	<u>80.0</u>	<u>82.5</u>	<u>85.0</u>	<u>87.5</u>	<u>90.0</u>	<u>92.5</u>	<u>95.0</u>	<u>97.5</u>
0.0	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297
2.5	1325.154	1323.955	1322.747	1321.531	1320.308	1319.078	1317.844	1316.506	1315.168	1313.834
5.0	1337.702	1334.295	1333.001	1330.739	1328.439	1326.103	1323.737	1321.344	1318.924	1316.477
7.5	1353.546	1350.497	1347.336	1344.077	1340.854	1337.551	1334.164	1331.136	1328.022	1324.688
10.0	1376.247	1372.546	1368.627	1364.499	1360.489	1357.161	1353.658	1349.962	1346.059	1343.089
12.5	1410.452	1405.388	1401.525	1397.392	1392.966	1388.633	1384.031	1381.343	1378.365	1375.438
15.0	1463.705	1456.065	1449.690	1444.578	1438.762	1433.499	1428.911	1424.999	1421.781	1419.152
17.5	1529.349	1518.831	1511.798	1508.276	1505.248	1501.221	1496.005	1488.638	1482.474	1476.216
20.0	1612.176	1599.444	1589.409	1581.173	1578.811	1574.876	1569.143	1561.870	1555.542	1547.144
22.5	1708.443	1691.149	1679.241	1665.154	1658.905	1649.469	1644.698	1640.360	1638.030	1634.346
25.0	1826.335	1810.424	1794.460	1781.118	1770.894	1762.498	1755.010	1751.881	1749.311	1747.012
27.5	1978.913	1963.458	1946.918	1934.181	1922.045	1913.276	1905.560	1901.175	1896.930	1894.715
30.0	2161.667	2148.272	2135.807	2122.534	2109.983	2101.713	2093.500	2087.831	2080.455	2076.820
32.5	2417.217	2405.298	2385.214	2361.534	2344.058	2333.239	2322.434	2317.734	2310.888	2307.827
35.0	2689.333	2696.685	2689.187	2668.816	2643.842	2618.501	2593.075	2578.362	2566.360	2562.616
37.5	2975.972	3013.363	3025.757	3010.640	2971.264	2921.791	2874.142	2845.848	2829.946	2833.878
40.0	3174.533	3204.265	3203.924	3176.500	3131.090	3085.457	3051.850	3039.064	3034.474	3043.606
42.5	3295.348	3318.565	3321.995	3305.216	3272.492	3242.967	3229.557	3233.318	3234.518	3233.595
45.0	3482.207	3537.193	3568.453	3571.423	3539.814	3485.771	3429.931	3393.182	3370.670	3366.136
47.5	3823.098	3870.781	3889.853	3878.090	3826.469	3737.853	3630.305	3545.237	3497.051	3488.997
50.0	4175.442	4232.554	4264.494	4263.261	4212.723	4122.343	4003.853	3890.576	3818.392	3784.541
52.5	4487.497	4601.089	4664.802	4669.658	4613.338	4510.899	4377.400	4241.969	4157.664	4134.888
55.0	4717.939	4927.378	5050.481	5079.761	5015.145	4901.055	4750.948	4589.304	4494.846	4487.468
57.5	4845.594	4964.809	4828.122	4616.893	4384.070	4168.448	4288.999	3890.852	3917.400	4139.143
60.0	4099.811	4044.502	3953.842	3791.498	3590.561	3395.330	3827.052	3160.680	3203.411	3743.463
62.5	3164.972	3125.986	3046.977	2938.102	2781.457	2616.858	3365.104	2432.864	2486.457	3313.030
65.0	2258.008	2194.078	2126.706	2056.460	1954.719	1831.051	2903.156	1709.011	1760.254	2797.638
67.5	1381.607	1296.062	1314.894	1421.548	1454.731	1402.172	2209.101	1302.432	1672.570	2223.570
70.0	626.831	795.517	922.545	1005.578	1036.348	990.102	1515.045	914.256	1507.652	1633.114
72.5	357.465	477.523	577.640	624.597	624.832	575.354	820.990	530.899	899.904	1055.185
75.0	198.229	243.697	300.654	298.605	239.112	160.857	126.934	153.657	309.653	496.665
77.5	118.014	119.919	120.362	96.029	101.074	101.566	98.827	97.354	98.292	98.487
80.0	61.084	61.310	58.273	67.360	72.074	73.715	70.721	70.830	72.163	71.230
82.5	34.642	33.840	36.348	39.669	44.893	44.248	42.614	44.237	47.392	44.067
85.0	17.150	18.031	19.962	21.295	21.438	18.336	14.507	19.998	24.196	24.434
87.5	8.030	8.400	8.846	10.044	10.093	7.692	7.254	8.974	10.688	11.281
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>100.0</u>	<u>102.5</u>	<u>105.0</u>	<u>107.5</u>	<u>110.0</u>	<u>112.5</u>	<u>115.0</u>	<u>117.5</u>	<u>120.0</u>	<u>122.5</u>
0.0	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297
2.5	1312.507	1311.192	1309.892	1308.611	1307.353	1305.604	1304.912	1303.723	1302.555	1301.412

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CANDELA TABULATION - (Cont.)

5.0	1314.000	1311.499	1308.981	1306.446	1303.895	1301.332	1298.758	1296.177	1293.593	1291.008
7.5	1322.006	1319.080	1316.016	1312.803	1309.046	1306.025	1302.735	1299.429	1295.998	1292.440
10.0	1340.306	1337.261	1333.939	1330.389	1327.228	1323.741	1319.161	1316.052	1312.076	1309.455
12.5	1372.156	1368.523	1365.339	1362.391	1358.922	1354.912	1352.310	1348.562	1347.218	1344.223
15.0	1415.875	1412.828	1410.070	1406.634	1403.890	1402.777	1401.030	1398.722	1396.245	1393.059
17.5	1470.137	1465.824	1465.229	1464.196	1463.794	1462.151	1461.362	1459.623	1454.298	1452.256
20.0	1543.458	1540.904	1540.366	1540.492	1539.606	1540.306	1539.251	1536.660	1531.945	1525.821
22.5	1634.170	1632.887	1634.339	1634.298	1636.832	1636.665	1634.909	1630.721	1623.597	1615.124
25.0	1745.930	1747.374	1748.319	1752.380	1753.883	1752.310	1745.580	1744.514	1737.493	1722.351
27.5	1892.517	1894.992	1897.139	1898.003	1897.022	1896.091	1897.412	1890.666	1875.232	1853.997
30.0	2074.818	2073.960	2077.949	2086.721	2092.230	2095.725	2089.887	2075.457	2050.675	2030.232
32.5	2310.264	2316.335	2323.553	2329.986	2336.710	2334.044	2319.531	2311.998	2296.057	2269.045
35.0	2569.403	2581.431	2592.577	2605.276	2622.023	2630.242	2623.740	2600.438	2571.521	2531.597
37.5	2853.830	2878.064	2895.769	2910.518	2917.420	2915.841	2904.445	2881.164	2818.324	2767.033
40.0	3067.116	3098.004	3136.098	3175.357	3174.489	3135.134	3093.354	3046.295	2999.078	2935.088
42.5	3234.224	3234.527	3249.808	3275.529	3289.282	3275.270	3239.705	3190.498	3146.666	3088.580
45.0	3369.446	3372.256	3374.895	3377.541	3410.661	3425.556	3413.729	3386.805	3339.280	3285.338
47.5	3510.924	3560.964	3612.792	3647.995	3662.287	3655.629	3656.372	3643.304	3602.777	3526.969
50.0	3796.468	3844.838	3902.562	3963.996	3998.483	4007.624	3991.005	3946.621	3880.065	3796.188
52.5	4160.135	4213.940	4265.305	4311.143	4352.439	4381.686	4368.421	4295.829	4192.633	4014.702
55.0	4526.705	4572.792	4612.254	4645.900	4677.239	4709.290	4711.402	4638.157	4442.980	4244.435
57.5	4487.892	4767.528	4941.317	4962.247	4978.785	4961.999	4906.939	4782.345	4610.498	4207.486
60.0	4005.345	4271.959	4597.116	4987.063	5215.416	5110.816	4852.487	4605.596	4349.428	4063.566
62.5	3495.112	3740.484	4031.567	4373.854	4745.916	4913.891	4503.678	4134.630	3802.329	3488.709
65.0	2946.546	3143.953	3372.509	3629.261	3741.740	3780.719	3815.218	3439.336	3068.730	2528.852
67.5	2351.708	2429.440	2528.325	2597.078	2571.647	2554.619	2641.284	2563.696	1923.573	1304.912
70.0	1757.476	1728.126	1516.547	1381.844	1354.327	1579.600	1536.100	1228.888	714.709	363.036
72.5	1163.095	1092.130	768.528	342.422	624.300	732.261	559.734	294.073	292.958	265.804
75.0	610.646	506.009	240.157	225.733	193.983	177.831	192.699	194.834	186.433	166.547
77.5	193.311	141.388	141.253	121.798	109.433	112.549	118.229	110.579	104.907	103.469
80.0	64.359	69.974	70.666	72.782	71.960	69.282	70.093	69.481	67.297	63.883
82.5	40.872	39.085	41.584	42.756	43.059	41.905	39.838	36.491	32.899	32.623
85.0	23.439	22.169	21.747	21.512	20.668	20.987	20.947	20.498	19.957	19.351
87.5	10.684	10.704	10.689	10.725	10.390	9.809	9.056	8.168	7.239	6.739
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>125.0</u>	<u>127.5</u>	<u>130.0</u>	<u>132.5</u>	<u>135.0</u>	<u>137.5</u>	<u>140.0</u>	<u>142.5</u>	<u>145.0</u>	<u>147.5</u>
0.0	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297
2.5	1300.294	1299.204	1298.144	1297.115	1296.119	1295.158	1294.234	1293.348	1292.503	1291.701
5.0	1288.427	1285.941	1283.686	1281.435	1279.193	1276.963	1274.750	1272.352	1270.812	1269.227
7.5	1288.757	1284.952	1281.028	1277.384	1274.329	1270.498	1268.312	1265.613	1262.774	1259.807
10.0	1306.297	1302.590	1298.330	1293.516	1287.568	1284.548	1280.386	1275.732	1270.606	1265.032
12.5	1340.975	1337.288	1332.827	1327.592	1321.987	1314.592	1306.496	1297.749	1288.381	1279.766
15.0	1388.896	1383.132	1375.669	1367.060	1358.606	1348.460	1336.393	1321.920	1310.319	1296.693
17.5	1446.519	1438.915	1428.119	1415.791	1402.531	1387.149	1368.295	1350.298	1332.333	1313.843
20.0	1516.566	1504.836	1489.706	1471.073	1451.297	1429.750	1407.654	1385.241	1361.908	1339.850
22.5	1601.512	1582.191	1557.658	1537.261	1512.991	1486.332	1462.111	1436.235	1409.947	1383.803
25.0	1702.491	1673.099	1653.090	1627.224	1598.045	1567.200	1535.353	1500.414	1468.631	1434.470
27.5	1829.596	1808.182	1781.841	1747.962	1710.796	1672.261	1628.749	1585.658	1537.546	1493.634
30.0	2009.101	1978.473	1933.092	1894.870	1848.440	1793.106	1738.098	1680.605	1621.105	1563.669
32.5	2227.806	2180.771	2133.270	2069.437	1998.499	1935.203	1862.712	1788.843	1718.418	1645.146
35.0	2484.040	2419.299	2345.238	2271.995	2182.483	2088.103	2002.677	1915.276	1820.601	1735.665
37.5	2696.722	2628.178	2536.892	2444.094	2356.586	2247.793	2133.133	2026.454	1922.390	1822.089
40.0	2857.334	2773.766	2681.430	2583.020	2477.528	2363.128	2245.473	2113.261	1977.308	1847.978

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CANDELA TABULATION - (Cont.)

42.5	3012.577	2920.306	2828.077	2719.761	2599.615	2453.794	2298.294	2147.793	1996.681	1856.051
45.0	3207.696	3110.801	2998.314	2855.021	2695.045	2528.840	2358.859	2142.829	1953.693	1777.319
47.5	3431.922	3308.682	3144.680	2972.544	2790.770	2541.273	2301.927	2077.463	1869.494	1691.508
50.0	3643.783	3463.088	3287.984	3014.682	2743.323	2484.342	2229.742	1983.471	1757.868	1568.247
52.5	3838.630	3573.853	3258.825	2971.409	2683.996	2378.318	2100.093	1842.837	1623.510	1413.666
55.0	3889.774	3554.710	3225.115	2851.850	2521.172	2213.545	1933.364	1633.795	1361.519	1114.915
57.5	3845.655	3429.326	3013.588	2647.796	2282.003	1917.296	1626.934	1329.160	1048.711	806.013
60.0	3552.039	3115.922	2684.375	2211.461	1781.180	1466.557	1244.490	1004.936	728.411	545.393
62.5	3075.227	2464.078	2077.807	1651.182	1236.048	914.372	849.037	791.628	618.301	477.817
65.0	1939.336	1452.894	1204.375	1091.355	867.586	684.320	631.289	594.828	486.730	383.375
67.5	703.703	438.505	639.309	768.260	641.991	497.105	417.016	377.002	320.273	262.135
70.0	327.764	295.648	363.351	417.795	369.902	269.672	205.743	183.513	184.764	183.686
72.5	231.851	200.938	182.248	147.575	143.792	145.537	147.446	148.536	149.482	149.064
75.0	133.314	126.046	119.977	115.569	111.967	112.216	113.705	114.308	114.313	114.395
77.5	97.063	91.187	86.720	83.185	80.223	79.486	80.505	80.712	79.713	80.796
80.0	59.321	55.441	52.768	52.147	52.274	53.154	55.517	57.221	57.495	58.112
82.5	32.719	33.613	34.157	34.321	33.996	33.978	35.353	36.388	36.109	35.827
85.0	18.747	18.303	17.610	16.737	15.930	15.203	15.541	15.729	14.879	13.814
87.5	6.298	5.441	4.685	4.023	3.844	3.700	4.151	4.569	4.426	4.155
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>150.0</u>	<u>152.5</u>	<u>155.0</u>	<u>157.5</u>	<u>160.0</u>	<u>162.5</u>	<u>165.0</u>	<u>167.5</u>	<u>170.0</u>	<u>172.5</u>
0.0	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297	1318.297
2.5	1290.943	1290.231	1289.534	1288.977	1288.475	1288.031	1287.644	1287.315	1287.045	1286.835
5.0	1267.675	1266.162	1264.693	1263.276	1261.915	1260.619	1259.393	1258.034	1256.403	1256.013
7.5	1256.726	1253.544	1250.277	1247.081	1245.776	1244.234	1242.703	1241.190	1239.704	1238.335
10.0	1259.151	1255.143	1250.965	1246.618	1242.220	1237.817	1235.255	1232.714	1230.208	1227.752
12.5	1271.401	1262.531	1253.293	1245.528	1239.237	1232.910	1226.571	1221.847	1218.303	1214.882
15.0	1282.426	1268.395	1257.085	1245.752	1233.135	1225.692	1217.331	1208.982	1203.673	1200.063
17.5	1296.375	1279.681	1262.800	1248.248	1235.553	1222.827	1212.730	1204.685	1196.585	1192.460
20.0	1320.075	1297.185	1281.514	1263.307	1246.404	1232.451	1216.844	1208.652	1199.793	1193.119
22.5	1355.271	1333.157	1309.139	1287.568	1267.476	1249.178	1233.196	1218.609	1208.686	1199.137
25.0	1403.404	1372.351	1342.769	1314.298	1290.036	1267.201	1248.269	1231.177	1218.816	1207.785
27.5	1451.024	1411.978	1374.440	1343.101	1311.579	1290.153	1268.033	1252.572	1238.866	1228.270
30.0	1509.229	1459.792	1417.064	1376.119	1345.381	1316.280	1295.732	1280.499	1267.586	1259.260
32.5	1577.554	1516.907	1463.648	1422.053	1384.677	1354.258	1334.140	1318.893	1308.455	1302.816
35.0	1653.629	1581.697	1521.299	1468.189	1421.850	1386.427	1360.830	1346.096	1338.505	1335.068
37.5	1717.813	1623.252	1542.149	1479.390	1431.397	1396.292	1372.202	1363.425	1360.282	1361.914
40.0	1732.848	1631.655	1549.797	1476.615	1415.159	1375.363	1350.762	1336.638	1330.757	1330.552
42.5	1708.510	1590.015	1490.272	1413.134	1356.153	1322.260	1302.409	1292.035	1290.026	1292.929
45.0	1632.357	1505.025	1411.524	1338.854	1281.083	1242.777	1222.015	1208.542	1203.531	1201.688
47.5	1532.205	1396.988	1299.236	1225.411	1174.317	1138.443	1120.991	1110.752	1107.044	1105.056
50.0	1400.292	1274.437	1170.687	1089.946	1035.173	982.704	948.075	935.280	934.980	931.322
52.5	1226.026	1075.905	941.601	863.878	823.232	774.007	728.019	724.293	742.700	749.099
55.0	944.465	830.725	708.275	625.783	593.859	572.298	507.079	506.339	546.084	566.774
57.5	616.562	557.216	461.214	408.731	407.836	445.256	390.236	398.224	445.200	472.414
60.0	408.831	416.922	399.243	352.994	344.686	381.807	335.172	334.031	366.903	387.136
62.5	370.888	340.393	336.989	300.879	288.903	302.755	282.995	275.268	291.878	301.975
65.0	309.037	270.131	266.883	244.628	233.029	232.221	226.082	220.063	219.836	216.918
67.5	225.482	204.757	198.754	194.233	190.659	188.716	188.312	186.399	185.932	184.223
70.0	180.793	175.601	170.486	166.609	163.745	161.532	160.197	158.462	157.822	155.918
72.5	148.253	145.253	141.783	138.752	136.626	134.789	132.050	130.565	129.704	127.720
75.0	114.874	114.199	112.704	110.693	109.332	108.404	103.878	102.695	101.581	99.527
77.5	83.048	84.912	85.330	84.277	83.465	83.154	79.005	78.363	77.390	75.987

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80.0	59.072	60.042	60.257	59.253	58.442	57.967	54.986	54.499	53.616	52.639
82.5	35.449	35.406	35.188	34.240	33.438	32.850	31.010	30.562	29.875	29.253
85.0	12.065	10.932	10.118	9.230	8.441	7.752	7.063	6.573	5.440	5.440
87.5	3.394	3.066	3.001	2.944	2.894	2.852	2.816	2.786	2.762	2.743
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>175.0</u>	<u>177.5</u>	<u>180.0</u>
0.0	1318.297	1318.297	1318.297
2.5	1286.684	1286.594	1286.564
5.0	1255.620	1255.226	1254.831
7.5	1238.036	1237.788	1237.604
10.0	1225.779	1224.842	1224.004
12.5	1211.150	1210.098	1209.044
15.0	1196.316	1194.350	1193.177
17.5	1188.336	1185.122	1183.747
20.0	1188.406	1184.138	1182.599
22.5	1192.534	1185.845	1184.110
25.0	1201.772	1196.413	1194.688
27.5	1221.711	1217.680	1215.455
30.0	1253.521	1251.417	1249.391
32.5	1300.012	1300.741	1299.258
35.0	1334.798	1336.331	1335.827
37.5	1365.941	1368.598	1369.071
40.0	1332.851	1332.916	1335.524
42.5	1296.728	1296.537	1301.977
45.0	1202.695	1202.032	1204.964
47.5	1106.025	1105.372	1107.950
50.0	925.757	924.281	927.221
52.5	742.138	740.942	746.491
55.0	558.942	555.486	565.762
57.5	470.308	470.663	477.815
60.0	385.521	385.163	389.868
62.5	300.556	299.844	301.921
65.0	212.587	213.974	213.974
67.5	183.784	184.146	184.507
70.0	154.060	154.028	155.041
72.5	124.398	123.879	125.574
75.0	94.139	93.541	96.107
77.5	71.965	71.005	72.534
80.0	49.265	48.382	48.960
82.5	26.541	25.786	25.387
85.0	3.627	3.165	1.813
87.5	1.820	1.587	0.907
90.0	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	535.23	N.A.	6.60
0-30	1321.9	N.A.	16.30
0-40	2699.84	N.A.	33.30
0-60	6683.00	N.A.	82.50
0-80	8078.91	N.A.	99.70
0-90	8102.35	N.A.	100.00
10-90	7975.02	N.A.	98.40
20-40	2164.61	N.A.	26.70
20-50	4068.09	N.A.	50.20
40-70	5158.55	N.A.	63.70
60-80	1395.91	N.A.	17.20
70-80	220.52	N.A.	2.70
80-90	23.43	N.A.	0.30
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	8102.35	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	127.32
10-20	407.91
20-30	786.67
30-40	1377.94
40-50	1903.47
50-60	2079.68
60-70	1175.39
70-80	220.52
80-90	23.43
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : VF2-L88-750-HF_.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	120	120	120	120	117	117	117	117	112	112	112	107	107	107	103	103	103	101
1	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	99	91	84	78	97	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	79	70	63	87	77	69	63	74	67	62	71	65	60	69	64	59	57
4	81	68	59	52	79	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	60	50	43	71	59	50	43	56	49	42	54	47	42	53	46	41	39
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	47	40	35	33
7	62	47	38	31	60	46	37	31	45	36	31	43	36	30	42	35	30	28
8	57	42	33	27	55	41	33	27	40	32	26	39	32	26	38	31	26	24
9	52	38	29	23	51	37	29	23	36	29	23	35	28	23	34	28	23	21
10	49	35	26	21	47	34	26	20	33	26	20	32	25	20	31	25	20	18

IES INDOOR REPORT
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UGR TABLE - CORRECTED

Reflectances

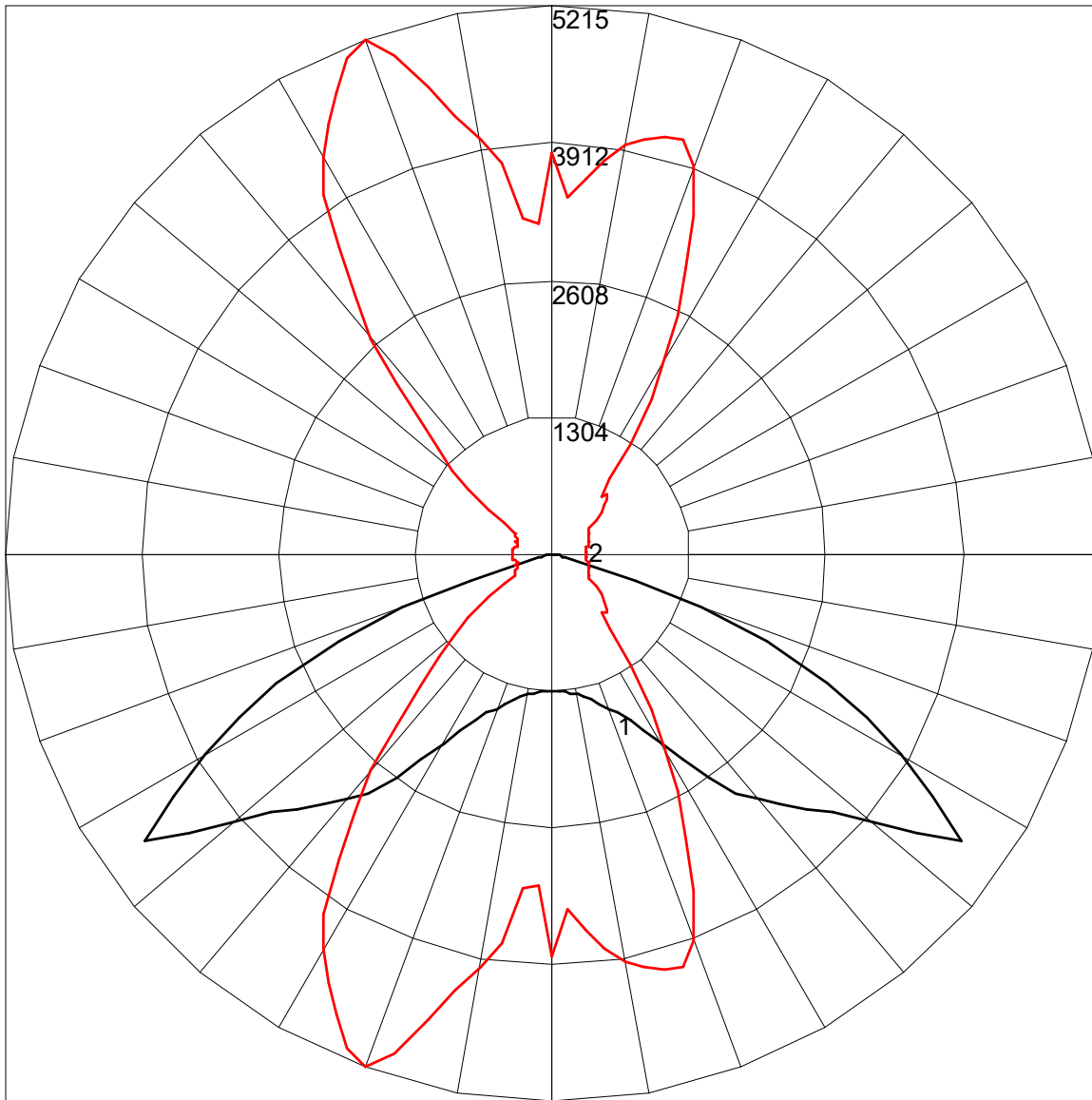
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	17.7	19.2	18.1	19.5	19.8	UGR Viewed Endwise				
	3H	19.3	20.6	19.7	20.9	21.2	7.3	7.3	7.3	7.3	7.3
	4H	19.8	21.0	20.2	21.4	21.7	7.3	7.3	7.3	7.3	7.3
	6H	20.1	21.2	20.6	21.6	22.0	7.3	7.3	7.3	7.3	7.3
	8H	20.2	21.2	20.6	21.6	22.0	7.3	7.3	7.3	7.3	7.3
	12H	20.2	21.2	20.6	21.5	22.0	7.3	7.3	7.3	7.3	7.3
4H	2H	17.8	19.0	18.2	19.3	19.7	9.6	10.8	10.0	11.2	11.5
	3H	19.7	20.6	20.1	21.0	21.4	10.2	11.2	10.7	11.6	12.0
	4H	20.3	21.2	20.8	21.6	22.1	10.3	11.2	10.8	11.6	12.0
	6H	20.8	21.5	21.2	22.0	22.4	10.3	11.1	10.8	11.5	12.0
	8H	20.8	21.5	21.3	22.0	22.5	10.3	11.0	10.8	11.5	11.9
	12H	20.8	21.4	21.3	21.9	22.4	10.3	11.0	10.8	11.4	11.9
8H	4H	20.3	21.0	20.8	21.4	21.9	11.9	12.6	12.4	13.1	13.6
	6H	20.8	21.4	21.3	21.9	22.4	12.0	12.6	12.5	13.1	13.6
	8H	20.9	21.4	21.4	21.9	22.4	12.0	12.6	12.5	13.1	13.6
	12H	20.9	21.3	21.4	21.8	22.4	12.0	12.5	12.5	13.0	13.6
12H	4H	20.3	20.9	20.7	21.4	21.8	12.2	12.8	12.7	13.3	13.8
	6H	20.7	21.3	21.3	21.7	22.3	12.3	12.9	12.8	13.3	13.9
	8H	20.8	21.3	21.4	21.8	22.4	12.3	12.8	12.9	13.3	13.9

Maximum UGR = 22.5

POLAR GRAPH



Maximum Candela = 5215.416 Located At Horizontal Angle = 110, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)