



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] 15184934.07  
[TESTLAB] UL Verification Services Inc.  
[ISSUE DATE] 2024-03-14  
[TEST DATE] 2/27/2024  
[MANUFAC] H.E. WILLIAMS, INC.  
[LUMCAT] FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_  
[LUMINAIRE] Recessed 2 x 4 Lumen/Wattage selectable, CCT selectable,  
[MORE] LED Troffer w/center frosted acrylic lens.  
[LAMP] HLM 80 CRI 3500/5000K CCT LED  
[BALLAST] 0-10V DIMMING DRIVER

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7275
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	153
Total Luminaire Watts	47.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3000	3257	3538
55	2794	3204	3604
65	2528	3224	3837
75	2154	3511	4518
85	1689	4150	4327

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**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	2438.567	2438.567	2438.567	2438.567	2438.567	2438.567	2438.567	2438.567	2438.567
0.5	2424.410	2442.106	2431.488	2445.645	2443.876	2445.645	2435.027	2447.415	2422.640
1.0	2420.870	2440.336	2433.258	2442.106	2438.567	2440.336	2436.797	2442.106	2422.640
1.5	2417.331	2442.106	2433.258	2442.106	2443.876	2440.336	2429.718	2447.415	2420.870
2.0	2420.870	2440.336	2433.258	2436.797	2442.106	2438.567	2431.488	2442.106	2417.331
2.5	2424.410	2442.106	2429.718	2440.336	2442.106	2440.336	2431.488	2442.106	2420.870
3.0	2419.101	2440.336	2433.258	2440.336	2442.106	2438.567	2431.488	2438.567	2412.022
3.5	2417.331	2435.027	2429.718	2440.336	2440.336	2435.027	2429.718	2438.567	2406.713
4.0	2415.561	2438.567	2429.718	2436.797	2435.027	2438.567	2427.949	2436.797	2408.483
4.5	2419.101	2433.258	2429.718	2435.027	2435.027	2436.797	2426.179	2433.258	2412.022
5.0	2415.561	2429.718	2427.949	2433.258	2433.258	2431.488	2422.640	2429.718	2406.713
5.5	2408.483	2424.410	2422.640	2433.258	2433.258	2429.718	2417.331	2429.718	2399.635
6.0	2412.022	2426.179	2415.561	2427.949	2433.258	2424.410	2413.792	2426.179	2397.865
6.5	2412.022	2424.410	2417.331	2429.718	2427.949	2424.410	2417.331	2419.101	2392.556
7.0	2408.483	2417.331	2415.561	2419.101	2429.718	2422.640	2412.022	2422.640	2392.556
7.5	2401.404	2412.022	2408.483	2422.640	2422.640	2415.561	2404.943	2415.561	2390.786
8.0	2392.556	2410.252	2403.174	2419.101	2420.870	2415.561	2404.943	2412.022	2380.168
8.5	2385.477	2408.483	2406.713	2415.561	2415.561	2413.792	2404.943	2406.713	2380.168
9.0	2383.708	2403.174	2399.635	2412.022	2413.792	2413.792	2397.865	2404.943	2371.320
9.5	2383.708	2396.095	2394.326	2412.022	2410.252	2406.713	2394.326	2394.326	2369.551
10.0	2376.629	2390.786	2389.017	2406.713	2406.713	2401.404	2390.786	2387.247	2367.781
10.5	2366.011	2390.786	2381.938	2399.635	2403.174	2397.865	2387.247	2385.477	2360.702
11.0	2360.702	2381.938	2381.938	2396.095	2399.635	2397.865	2380.168	2376.629	2348.315
11.5	2360.702	2374.860	2378.399	2390.786	2397.865	2392.556	2376.629	2373.090	2341.236
12.0	2351.854	2371.320	2374.860	2389.017	2394.326	2381.938	2371.320	2369.551	2339.467
12.5	2348.315	2362.472	2369.551	2383.708	2389.017	2380.168	2366.011	2358.933	2335.927
13.0	2339.467	2355.393	2360.702	2381.938	2383.708	2378.399	2357.163	2357.163	2328.849
13.5	2328.849	2353.624	2353.624	2373.090	2376.629	2367.781	2350.085	2344.776	2318.231
14.0	2318.231	2344.776	2344.776	2367.781	2373.090	2364.242	2343.006	2343.006	2309.383
14.5	2314.692	2339.467	2346.545	2366.011	2371.320	2357.163	2339.467	2334.158	2300.535
15.0	2311.152	2332.388	2334.158	2364.242	2364.242	2353.624	2330.619	2327.079	2296.995
15.5	2304.074	2325.310	2334.158	2353.624	2357.163	2346.545	2323.540	2318.231	2288.147
16.0	2293.456	2316.461	2325.310	2346.545	2353.624	2337.697	2316.461	2307.613	2277.529
16.5	2288.147	2307.613	2312.922	2343.006	2346.545	2330.619	2309.383	2302.304	2266.911
17.0	2275.760	2293.456	2304.074	2335.927	2339.467	2325.310	2300.535	2291.686	2259.833
17.5	2272.220	2289.917	2298.765	2328.849	2334.158	2318.231	2293.456	2284.608	2249.215
18.0	2258.063	2284.608	2291.686	2321.770	2328.849	2309.383	2282.838	2277.529	2243.906
18.5	2247.445	2275.760	2282.838	2316.461	2318.231	2300.535	2277.529	2261.602	2226.210
19.0	2245.676	2261.602	2272.220	2307.613	2311.152	2298.765	2266.911	2254.524	2219.131
19.5	2231.519	2256.294	2263.372	2300.535	2300.535	2289.917	2256.294	2249.215	2213.822
20.0	2215.592	2240.367	2254.524	2288.147	2295.226	2281.069	2249.215	2236.827	2203.204
20.5	2206.744	2231.519	2250.985	2277.529	2286.377	2270.451	2240.367	2224.440	2192.586
21.0	2203.204	2222.670	2240.367	2273.990	2279.299	2261.602	2229.749	2213.822	2178.429
21.5	2192.586	2210.283	2224.440	2266.911	2270.451	2254.524	2222.670	2203.204	2166.042
22.0	2176.660	2201.435	2219.131	2252.754	2263.372	2247.445	2210.283	2194.356	2158.963
22.5	2162.503	2192.586	2208.513	2240.367	2254.524	2240.367	2199.665	2178.429	2143.036
23.0	2155.424	2180.199	2199.665	2235.058	2250.985	2227.979	2189.047	2166.042	2127.110
23.5	2146.576	2164.272	2190.817	2226.210	2243.906	2217.361	2183.738	2158.963	2120.031
24.0	2134.188	2155.424	2178.429	2217.361	2233.288	2212.052	2171.351	2148.345	2104.104
24.5	2118.261	2144.806	2167.811	2210.283	2224.440	2206.744	2160.733	2135.958	2089.947
25.0	2107.644	2132.419	2155.424	2199.665	2219.131	2196.126	2153.654	2123.570	2082.869
25.5	2095.256	2118.261	2144.806	2194.356	2208.513	2185.508	2143.036	2111.183	2066.942
26.0	2081.099	2109.413	2134.188	2185.508	2197.895	2174.890	2132.419	2098.795	2058.094
26.5	2070.481	2091.717	2123.570	2173.120	2187.278	2164.272	2121.801	2088.178	2043.937

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27.0	2054.554	2081.099	2111.183	2158.963	2181.969	2155.424	2109.413	2075.790	2028.010
27.5	2040.397	2068.711	2102.335	2151.885	2171.351	2146.576	2098.795	2063.403	2019.162
28.0	2028.010	2054.554	2089.947	2139.497	2160.733	2135.958	2089.947	2047.476	2001.465
28.5	2013.853	2043.937	2081.099	2130.649	2150.115	2121.801	2074.020	2035.088	1989.078
29.0	2005.004	2029.779	2065.172	2120.031	2143.036	2112.953	2061.633	2020.931	1971.381
29.5	1987.308	2015.622	2054.554	2111.183	2130.649	2102.335	2051.015	2008.544	1962.533
30.0	1969.612	2001.465	2038.628	2102.335	2121.801	2089.947	2040.397	1996.156	1950.145
30.5	1957.224	1987.308	2028.010	2088.178	2109.413	2077.560	2026.240	1976.690	1932.449
31.0	1944.837	1974.920	2019.162	2074.020	2097.026	2065.172	2010.313	1964.303	1912.983
31.5	1934.219	1958.994	2006.774	2059.863	2084.638	2056.324	1997.926	1953.685	1898.826
32.0	1914.753	1941.297	1992.617	2051.015	2075.790	2047.476	1989.078	1937.758	1882.899
32.5	1898.826	1927.140	1980.229	2038.628	2065.172	2031.549	1976.690	1923.601	1868.742
33.0	1882.899	1912.983	1966.072	2026.240	2052.785	2019.162	1960.763	1905.904	1858.124
33.5	1870.512	1902.365	1948.376	2017.392	2040.397	2008.544	1944.837	1893.517	1840.428
34.0	1852.815	1882.899	1935.988	2001.465	2026.240	1999.695	1934.219	1877.590	1822.731
34.5	1842.197	1868.742	1921.831	1990.847	2019.162	1987.308	1921.831	1863.433	1812.113
35.0	1826.271	1852.815	1907.674	1980.229	2006.774	1973.151	1905.904	1845.737	1796.187
35.5	1805.035	1842.197	1895.287	1967.842	1994.387	1958.994	1891.747	1831.579	1773.181
36.0	1790.878	1824.501	1879.360	1957.224	1983.769	1950.145	1874.051	1813.883	1758.847
36.5	1771.412	1805.035	1865.203	1944.837	1969.612	1934.219	1858.124	1794.417	1746.283
37.0	1756.547	1789.108	1852.815	1928.910	1958.994	1918.292	1845.737	1782.029	1731.064
37.5	1742.213	1776.721	1836.888	1916.522	1946.606	1905.904	1833.349	1765.395	1711.598
38.0	1723.277	1762.740	1822.731	1907.674	1934.219	1893.517	1817.422	1747.345	1694.255
38.5	1707.881	1743.451	1808.574	1889.978	1920.062	1882.899	1805.035	1732.480	1681.160
39.0	1687.354	1727.171	1796.187	1879.360	1904.135	1868.742	1790.878	1716.730	1662.048
39.5	1674.258	1710.359	1780.260	1859.894	1895.287	1851.046	1773.181	1702.750	1642.051
40.0	1653.907	1696.556	1762.917	1847.506	1879.360	1838.658	1759.909	1684.699	1626.655
40.5	1638.335	1677.798	1752.300	1836.888	1868.742	1828.040	1745.221	1666.295	1610.728
41.0	1622.231	1660.632	1736.550	1822.731	1854.585	1813.883	1728.940	1646.829	1593.740
41.5	1604.004	1643.290	1719.030	1806.804	1842.197	1797.956	1713.898	1630.371	1574.981
42.0	1583.653	1630.017	1705.758	1797.956	1826.271	1785.569	1695.317	1615.860	1557.108
42.5	1568.788	1613.383	1687.531	1782.029	1813.883	1773.181	1678.682	1598.518	1539.235
43.0	1549.322	1593.917	1672.312	1768.403	1797.956	1757.255	1663.817	1580.821	1520.830
43.5	1535.695	1576.043	1659.216	1752.653	1787.338	1743.274	1650.899	1563.302	1507.735
44.0	1516.229	1558.170	1641.166	1734.603	1773.181	1730.356	1635.149	1546.490	1488.977
44.5	1496.586	1541.535	1624.885	1719.738	1758.139	1711.952	1619.753	1527.378	1469.157
45.0	1481.013	1524.901	1608.074	1708.589	1746.814	1699.210	1601.526	1510.743	1453.761
45.5	1461.016	1507.204	1595.155	1692.840	1728.232	1683.107	1585.422	1493.755	1435.003
46.0	1445.444	1488.269	1579.405	1678.328	1717.084	1669.126	1570.026	1475.527	1416.244
46.5	1427.570	1469.688	1562.063	1665.410	1698.856	1654.438	1553.569	1460.309	1397.132
47.0	1407.396	1455.884	1545.782	1647.537	1684.876	1638.158	1538.173	1440.135	1381.206
47.5	1388.107	1436.772	1531.271	1631.610	1669.480	1621.700	1519.061	1419.430	1361.032
48.0	1373.242	1419.607	1516.229	1618.161	1655.500	1608.782	1506.673	1403.680	1343.158
48.5	1355.015	1399.079	1498.533	1602.588	1641.166	1595.863	1490.039	1385.099	1327.585
49.0	1333.602	1382.267	1483.314	1585.599	1622.231	1579.582	1472.696	1367.048	1309.004
49.5	1319.445	1366.518	1466.502	1571.796	1613.383	1562.240	1456.238	1349.706	1289.184
50.0	1299.979	1348.113	1449.337	1555.161	1596.925	1547.198	1441.550	1334.487	1273.611
50.5	1278.743	1329.709	1431.994	1541.712	1579.052	1532.156	1425.624	1313.605	1253.791
51.0	1261.755	1309.712	1415.714	1525.608	1566.487	1520.122	1409.874	1298.740	1236.095
51.5	1245.651	1293.608	1400.495	1511.451	1554.100	1501.541	1389.523	1277.505	1216.275
52.0	1225.831	1277.151	1382.798	1494.109	1540.119	1486.499	1373.242	1261.401	1200.879
52.5	1204.949	1258.215	1364.925	1479.067	1522.600	1472.519	1355.546	1243.350	1182.121
53.0	1188.669	1239.280	1347.051	1464.733	1503.488	1456.592	1341.566	1224.238	1167.256
53.5	1173.627	1219.814	1331.125	1448.806	1491.631	1439.604	1325.285	1207.073	1150.975
54.0	1156.992	1200.702	1314.313	1431.994	1475.351	1425.270	1307.235	1190.261	1130.270
54.5	1139.296	1187.076	1298.563	1416.244	1461.547	1409.874	1291.131	1174.334	1112.574

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55.0	1119.122	1173.980	1283.167	1398.548	1443.320	1394.478	1272.019	1158.762	1095.939
55.5	1100.717	1154.337	1265.471	1384.037	1428.632	1375.897	1256.269	1141.242	1074.704
56.0	1084.791	1134.341	1246.890	1369.172	1416.244	1358.908	1241.404	1121.953	1056.653
56.5	1062.670	1115.759	1231.671	1353.776	1399.256	1344.397	1222.469	1104.080	1038.072
57.0	1044.089	1099.302	1215.213	1337.849	1380.144	1329.355	1205.303	1088.153	1019.491
57.5	1023.915	1080.013	1201.410	1321.038	1364.571	1312.897	1189.022	1067.625	1002.148
58.0	1005.865	1061.431	1184.598	1303.341	1348.467	1295.732	1173.450	1049.044	981.620
58.5	989.053	1043.381	1167.433	1289.715	1334.664	1280.690	1158.054	1030.463	962.331
59.0	970.295	1026.569	1151.506	1272.373	1320.507	1266.710	1143.189	1012.235	942.688
59.5	949.413	1007.280	1138.234	1257.154	1303.872	1249.544	1126.023	993.831	927.646
60.0	929.770	989.584	1119.476	1239.280	1288.299	1234.325	1109.212	974.719	907.295
60.5	912.958	969.941	1104.257	1224.061	1272.373	1217.337	1091.692	957.376	887.652
61.0	895.262	950.829	1084.260	1207.427	1253.614	1202.118	1075.588	938.972	870.664
61.5	877.035	933.663	1070.279	1192.208	1239.457	1186.368	1058.423	921.276	852.967
62.0	857.038	914.905	1050.990	1177.343	1223.354	1172.034	1042.496	903.225	834.209
62.5	838.102	897.385	1035.241	1160.531	1210.081	1156.284	1026.215	884.644	814.389
63.0	817.929	878.450	1020.022	1147.259	1195.747	1140.711	1008.696	867.302	796.162
63.5	799.524	860.754	1001.971	1133.810	1179.643	1126.377	992.946	849.428	777.404
64.0	781.474	843.057	984.629	1118.945	1162.478	1110.096	975.427	830.493	761.831
64.5	762.893	826.423	967.463	1101.602	1147.967	1094.170	959.323	812.266	741.126
65.0	745.904	807.665	951.360	1085.498	1132.217	1078.420	942.688	795.808	724.668
65.5	726.969	790.499	935.610	1069.395	1118.060	1062.139	923.753	778.996	703.787
66.0	707.503	772.980	919.683	1054.353	1103.372	1046.920	907.295	760.769	686.444
66.5	691.576	755.637	902.340	1038.780	1087.799	1030.639	891.369	744.134	668.571
67.0	671.933	738.118	887.122	1022.145	1072.580	1016.128	877.389	727.677	651.582
67.5	653.706	719.890	870.133	1007.457	1056.653	999.140	858.984	709.449	634.771
68.0	634.948	703.256	854.737	991.000	1041.611	982.859	844.119	692.638	616.720
68.5	618.136	686.267	836.864	974.188	1026.569	968.702	827.662	674.588	597.608
69.0	600.440	669.102	822.530	959.500	1011.704	953.306	811.381	656.714	579.558
69.5	582.389	651.759	804.833	944.989	996.131	938.618	794.215	641.141	563.100
70.0	563.985	634.771	788.906	930.124	979.851	922.691	779.173	623.976	544.165
70.5	544.696	617.605	773.511	914.020	965.517	907.472	763.777	607.164	526.645
71.0	526.999	601.324	758.292	900.571	951.006	892.430	748.559	590.706	509.480
71.5	510.719	584.867	742.365	884.467	936.141	877.565	732.986	572.656	493.022
72.0	493.022	568.409	728.208	867.832	918.975	861.816	717.944	558.322	476.742
72.5	474.441	551.597	711.750	852.260	903.225	847.659	703.256	541.864	459.399
73.0	457.452	534.963	696.177	836.156	887.122	829.962	687.506	524.699	440.818
73.5	441.349	519.036	680.427	819.875	871.195	814.743	672.464	507.887	424.537
74.0	424.183	503.640	664.854	804.656	852.437	798.816	658.661	491.607	408.610
74.5	405.956	487.359	650.520	787.668	833.855	783.597	642.734	475.503	391.091
75.0	389.321	471.256	634.594	770.856	816.513	766.786	628.046	460.815	375.164
75.5	373.041	455.506	619.906	752.983	798.816	748.205	613.712	445.242	357.468
76.0	357.468	440.818	605.571	736.171	780.235	729.623	598.316	430.200	342.603
76.5	341.895	425.245	589.645	717.767	759.707	712.281	581.858	414.450	326.145
77.0	325.791	409.672	574.780	697.593	738.118	692.284	567.347	399.054	311.103
77.5	309.864	395.692	558.676	678.304	717.767	672.464	551.067	384.897	294.645
78.0	293.584	381.004	542.395	658.484	697.770	651.051	534.255	370.386	279.073
78.5	279.957	365.785	525.230	637.248	672.995	631.762	517.620	354.990	264.208
79.0	264.031	352.159	508.064	616.012	649.282	609.465	500.278	341.187	250.227
79.5	249.520	337.648	491.076	594.777	623.091	587.875	482.758	327.561	234.478
80.0	234.831	323.844	473.202	569.648	596.192	564.162	465.770	314.819	219.790
80.5	220.320	310.572	454.975	544.873	567.524	537.971	445.950	301.547	206.340
81.0	205.632	296.769	435.332	519.036	538.679	511.780	426.661	287.567	192.714
81.5	192.006	282.612	415.335	491.784	507.533	485.413	407.726	272.879	179.265
82.0	178.734	268.455	394.807	464.177	475.149	457.452	388.259	259.076	165.992
82.5	165.108	254.121	374.633	433.916	440.995	426.838	366.493	244.565	153.251

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_.IES**

**CANDELA TABULATION - (Cont.)**

83.0	152.366	239.963	352.690	401.886	406.664	395.692	344.018	230.230	141.217
83.5	139.271	225.452	329.861	369.147	372.687	362.069	321.013	215.896	128.830
84.0	127.060	210.410	305.971	336.586	336.940	329.153	296.769	200.677	116.265
84.5	114.850	194.661	279.250	302.078	299.600	294.291	270.224	185.282	105.294
85.0	102.816	178.203	252.528	266.685	263.323	258.899	242.795	169.532	94.322
85.5	90.783	163.161	223.860	230.938	226.337	222.798	215.012	152.720	82.819
86.0	79.457	146.349	194.661	194.484	188.998	186.520	186.166	135.909	71.847
86.5	68.485	129.184	162.984	157.498	152.189	150.243	155.021	117.858	60.876
87.0	57.690	110.249	130.954	121.751	115.558	114.142	122.813	98.746	50.435
87.5	46.896	90.783	99.454	86.712	80.165	78.749	90.252	79.103	40.525
88.0	36.278	70.609	68.308	53.443	46.896	46.188	59.106	58.929	30.261
88.5	26.014	49.196	39.109	23.890	18.935	19.112	30.615	37.870	19.997
89.0	15.927	28.314	14.865	6.725	4.778	5.309	9.910	17.342	9.910
89.5	7.256	10.441	3.539	2.654	2.301	2.301	2.477	3.893	2.831
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
93.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
103.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
103.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
104.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
104.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
106.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
106.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_.IES**

**CANDELA TABULATION - (Cont.)**

111.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
111.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
113.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
113.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
114.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
114.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
116.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
116.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
118.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
118.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
119.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
119.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
121.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
121.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
123.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
123.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
124.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
124.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
126.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
126.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
128.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
128.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
129.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
129.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
131.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
131.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
133.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
133.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
134.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
134.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
136.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
136.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
138.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
138.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_.IES

CANDELA TABULATION - (Cont.)

139.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
139.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
141.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
141.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
143.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
143.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
144.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
144.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
146.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
146.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
148.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
148.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
149.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
149.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
151.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
151.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
153.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
153.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
154.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
154.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
156.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
156.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
158.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
158.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
159.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
159.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
161.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
161.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
163.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
163.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
164.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
164.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
166.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
166.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_.IES

CANDELA TABULATION - (Cont.)

167.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
168.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
168.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
169.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
169.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
171.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
171.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
173.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
173.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
174.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
174.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
176.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
176.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
178.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
178.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
179.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
179.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	890.07	N.A.	12.20
0-30	1884.86	N.A.	25.90
0-40	3079.72	N.A.	42.30
0-60	5463.8	N.A.	75.10
0-80	7044.67	N.A.	96.80
0-90	7275.1	N.A.	100.00
10-90	7044.46	N.A.	96.80
20-40	2189.65	N.A.	30.10
20-50	3430.43	N.A.	47.20
40-70	3316.57	N.A.	45.60
60-80	1580.87	N.A.	21.70
70-80	648.38	N.A.	8.90
80-90	230.43	N.A.	3.20
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	7275.1	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	230.64
10-20	659.43
20-30	994.79
30-40	1194.86
40-50	1240.78
50-60	1143.3
60-70	932.49
70-80	648.38
80-90	230.43
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 : FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_.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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	98	89	82	75	95	87	80	75	83	78	73	80	75	71	77	73	69	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	41	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : FT-24-LS-8CS-AF-DIM-UNV\_48W\_4000K\_.IES

## 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	15.3	17.0	15.7	17.3	17.7	16.8	18.5	17.2	18.8	19.2
	3H	17.1	18.6	17.5	19.0	19.3	19.3	20.8	19.7	21.2	21.5
	4H	17.8	19.2	18.2	19.6	19.9	20.5	21.9	20.9	22.2	22.6
	6H	18.3	19.6	18.7	20.0	20.4	21.5	22.9	21.9	23.2	23.6
	8H	18.4	19.7	18.8	20.1	20.5	21.9	23.2	22.3	23.6	24.0
	12H	18.5	19.8	18.9	20.1	20.6	22.2	23.4	22.6	23.8	24.2

### UGR Viewed Endwise

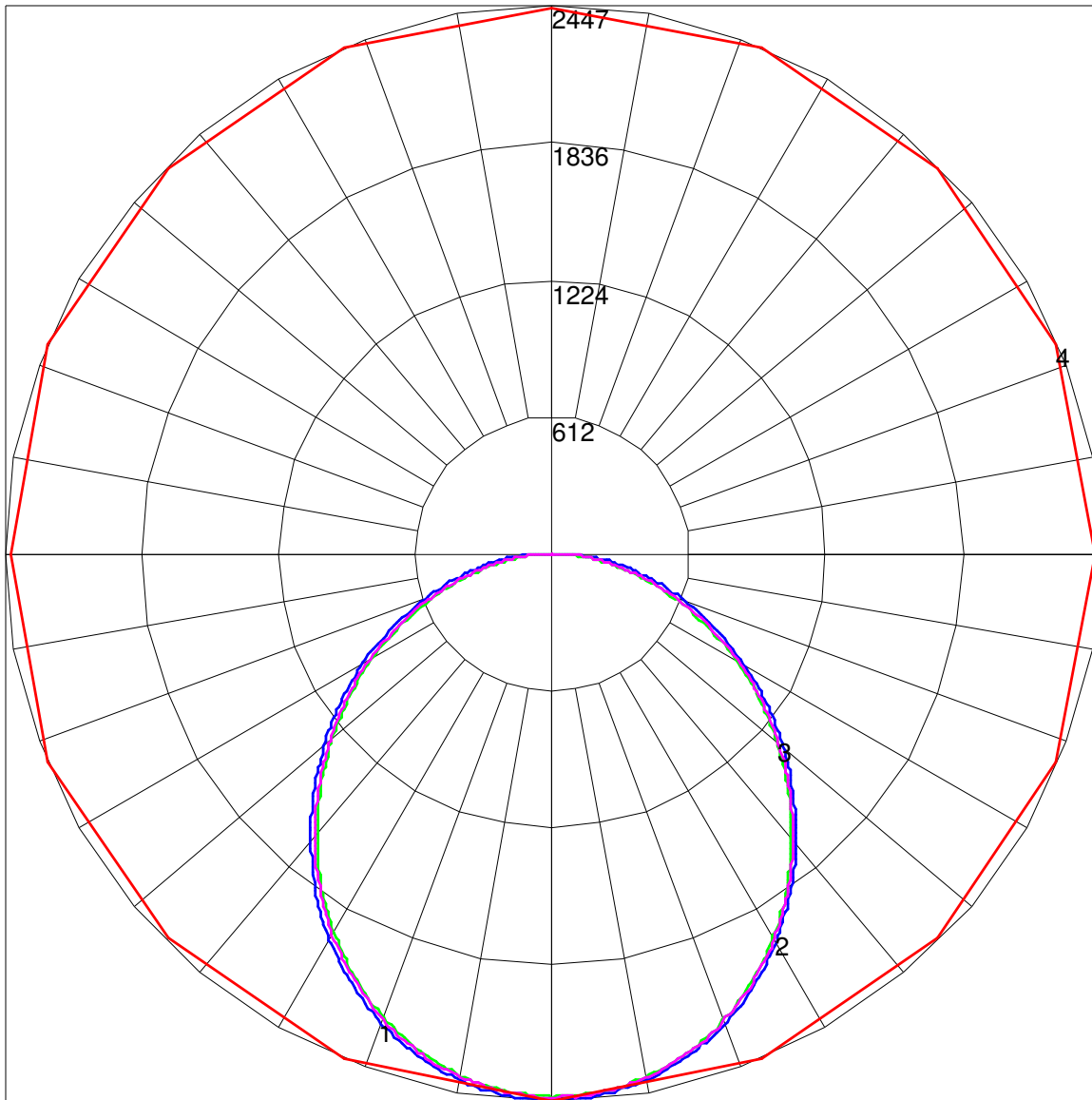
4H	2H	16.3	17.7	16.7	18.1	18.4	17.4	18.9	17.8	19.2	19.6
	3H	18.3	19.5	18.7	19.9	20.3	20.1	21.4	20.6	21.8	22.2
	4H	19.1	20.2	19.5	20.6	21.0	21.5	22.6	21.9	23.0	23.5
	6H	19.7	20.7	20.2	21.2	21.6	22.7	23.7	23.2	24.2	24.6
	8H	20.0	20.9	20.4	21.3	21.8	23.2	24.2	23.7	24.6	25.1
	12H	20.1	21.0	20.6	21.4	21.9	23.6	24.4	24.1	24.9	25.3

8H	4H	19.8	20.7	20.3	21.2	21.6	21.8	22.8	22.3	23.2	23.7
	6H	20.7	21.4	21.2	21.9	22.4	23.3	24.1	23.8	24.6	25.0
	8H	21.0	21.7	21.5	22.2	22.7	23.9	24.6	24.4	25.1	25.6
	12H	21.3	21.9	21.8	22.4	22.9	24.4	25.0	24.9	25.5	26.0

12H	4H	20.0	20.8	20.5	21.3	21.8	21.9	22.7	22.4	23.2	23.6
	6H	21.0	21.7	21.5	22.1	22.7	23.4	24.1	23.9	24.5	25.1
	8H	21.4	22.0	21.9	22.5	23.0	24.1	24.7	24.6	25.2	25.7

Maximum UGR = 26.0

POLAR GRAPH



Maximum Candela = 2447.415 Located At Horizontal Angle = 157.5, Vertical Angle = .5  
# 1 - Vertical Plane Through Horizontal Angles (157.5 - 337.5) (Through Max. Cd.)  
# 2 - Vertical Plane Through Horizontal Angles (5 - 185)  
# 3 - Vertical Plane Through Horizontal Angles (10 - 190)  
# 4 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)