



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : FT-22-LS-8CS-AF-DIM-UNV\_33W\_4000K\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] 15184934.04  
[TESTLAB] UL Verification Services Inc.  
[ISSUEDATE] 2024-03-14  
[TESTDATE] 2/28/2024  
[MANUFAC] H.E. WILLIAMS, INC.  
[LUMCAT] FT-22-LS-8CS-AF-DIM-UNV\_33W\_4000K\_  
[LUMINAIRE] Recessed 2 x 2 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	4659
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	142
Total Luminaire Watts	32.7
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)	1.92 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	3927	4326	4681
55	3628	4211	4778
65	3274	4169	5051
75	2786	4408	5922
85	2159	4582	5255

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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	1589.991	1589.991	1589.991	1589.991	1589.991	1589.991	1589.991	1589.991	1589.991
0.5	1574.359	1596.795	1593.669	1588.152	1586.864	1588.152	1592.198	1596.427	1573.808
1.0	1573.440	1596.611	1592.565	1587.968	1585.577	1587.968	1592.381	1595.324	1573.992
1.5	1574.543	1595.875	1590.910	1587.416	1584.842	1588.152	1592.014	1595.324	1572.888
2.0	1573.256	1594.037	1591.094	1586.497	1584.842	1586.129	1590.910	1593.669	1571.233
2.5	1572.520	1594.588	1590.910	1586.681	1582.819	1586.129	1590.726	1593.669	1569.578
3.0	1573.072	1593.301	1589.623	1586.129	1583.554	1584.474	1589.623	1592.198	1568.658
3.5	1573.256	1591.462	1589.991	1585.025	1582.635	1583.554	1586.864	1590.726	1567.003
4.0	1571.417	1592.014	1587.968	1583.922	1580.980	1581.531	1587.416	1589.991	1566.268
4.5	1570.681	1589.071	1586.313	1581.899	1579.876	1580.428	1585.025	1588.336	1564.245
5.0	1569.210	1587.968	1585.761	1580.796	1579.325	1578.957	1582.635	1585.577	1561.670
5.5	1567.187	1585.393	1583.003	1578.589	1577.853	1577.486	1581.531	1584.474	1558.912
6.0	1565.900	1585.025	1582.451	1578.037	1577.302	1575.831	1579.692	1581.899	1554.682
6.5	1562.774	1582.267	1579.141	1576.014	1574.543	1574.359	1577.486	1580.428	1552.475
7.0	1561.486	1579.141	1578.037	1574.911	1572.336	1573.072	1574.911	1577.669	1550.636
7.5	1559.280	1576.566	1574.911	1572.888	1571.049	1571.969	1573.808	1575.095	1548.797
8.0	1555.602	1574.175	1573.072	1570.681	1570.314	1569.762	1570.865	1571.969	1544.568
8.5	1554.130	1571.969	1571.969	1569.026	1567.555	1567.555	1568.107	1568.842	1541.257
9.0	1551.188	1568.842	1567.923	1566.268	1566.636	1565.900	1565.716	1565.716	1538.499
9.5	1549.165	1566.084	1566.084	1565.348	1564.613	1563.509	1563.141	1562.958	1535.373
10.0	1546.223	1563.141	1562.222	1562.038	1562.222	1560.751	1559.831	1559.831	1530.040
10.5	1541.441	1559.463	1560.199	1560.383	1559.831	1557.257	1557.625	1556.521	1528.936
11.0	1539.051	1555.969	1556.705	1557.625	1557.441	1555.234	1553.579	1551.924	1525.626
11.5	1533.902	1551.556	1555.234	1555.418	1554.866	1552.291	1550.636	1549.349	1520.293
12.0	1530.040	1548.981	1551.188	1551.924	1551.556	1548.797	1546.958	1544.935	1515.879
12.5	1525.258	1544.384	1547.326	1549.901	1548.246	1546.407	1542.545	1540.154	1511.650
13.0	1519.374	1539.602	1543.096	1546.407	1546.958	1542.361	1538.867	1536.108	1506.133
13.5	1516.247	1534.637	1540.338	1541.993	1542.177	1539.602	1534.821	1531.143	1501.535
14.0	1510.914	1530.591	1535.557	1539.602	1538.867	1534.269	1529.856	1526.178	1498.225
14.5	1504.662	1525.626	1531.879	1535.005	1536.476	1532.430	1525.810	1519.925	1492.708
15.0	1498.593	1520.661	1527.097	1530.775	1531.327	1528.017	1521.213	1515.328	1485.904
15.5	1493.444	1515.328	1521.396	1527.281	1528.752	1524.523	1516.247	1508.891	1480.755
16.0	1487.743	1509.627	1517.718	1522.684	1524.890	1519.741	1511.098	1502.823	1475.606
16.5	1480.571	1504.110	1511.834	1518.638	1520.109	1514.224	1504.845	1496.938	1468.985
17.0	1474.870	1497.490	1506.133	1513.489	1516.247	1508.707	1499.696	1490.501	1462.181
17.5	1468.066	1491.605	1501.719	1507.788	1511.282	1503.926	1493.260	1484.249	1455.561
18.0	1461.997	1484.249	1494.915	1503.558	1507.236	1498.961	1487.007	1477.261	1449.492
18.5	1454.273	1479.284	1489.766	1498.593	1501.719	1493.260	1480.571	1469.537	1442.320
19.0	1448.021	1472.847	1482.778	1493.076	1495.834	1486.456	1473.767	1462.917	1435.148
19.5	1443.055	1464.939	1477.077	1487.743	1490.685	1481.490	1468.250	1456.664	1427.056
20.0	1433.677	1458.135	1470.089	1481.490	1484.433	1476.341	1461.629	1449.860	1420.252
20.5	1427.240	1452.066	1463.468	1476.157	1479.284	1470.089	1455.561	1442.320	1413.264
21.0	1420.620	1443.607	1458.135	1470.456	1474.502	1464.572	1448.940	1436.251	1405.724
21.5	1412.528	1437.171	1451.515	1464.939	1469.169	1459.239	1443.055	1427.976	1397.265
22.0	1406.827	1428.160	1444.343	1458.871	1464.020	1453.905	1436.067	1420.804	1388.989
22.5	1398.552	1422.275	1438.274	1453.722	1458.687	1448.940	1431.286	1412.896	1381.449
23.0	1391.012	1413.999	1432.021	1447.837	1453.905	1443.239	1424.298	1406.643	1372.622
23.5	1382.553	1405.724	1424.849	1442.872	1449.124	1438.458	1417.310	1398.736	1364.347
24.0	1375.197	1398.368	1419.149	1437.722	1444.343	1432.941	1411.425	1390.276	1356.623
24.5	1366.921	1391.196	1411.241	1431.102	1439.010	1427.240	1404.069	1382.737	1347.244
25.0	1360.669	1383.656	1404.988	1425.769	1433.125	1420.988	1397.632	1375.013	1338.233
25.5	1352.393	1375.932	1398.184	1419.700	1427.240	1415.287	1390.093	1367.473	1330.325
26.0	1345.405	1367.841	1391.012	1413.448	1421.355	1409.034	1383.104	1359.197	1320.211
26.5	1335.842	1358.094	1384.759	1407.563	1415.471	1402.414	1376.300	1351.106	1312.119

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**CANDELA TABULATION - (Cont.)**

27.0	1329.038	1350.370	1377.036	1401.678	1409.770	1394.874	1368.760	1342.830	1303.292
27.5	1319.659	1342.647	1369.496	1394.690	1403.333	1388.070	1360.485	1333.268	1292.626
28.0	1311.200	1333.268	1361.220	1387.702	1396.897	1380.530	1352.945	1324.808	1284.534
28.5	1302.924	1324.257	1353.864	1380.898	1390.276	1374.829	1344.118	1315.613	1275.156
29.0	1292.810	1314.694	1345.957	1373.358	1382.185	1367.473	1336.578	1307.522	1267.984
29.5	1283.063	1306.602	1336.394	1365.266	1374.829	1359.933	1328.119	1297.407	1259.340
30.0	1273.868	1296.488	1327.935	1358.830	1367.841	1352.945	1318.372	1288.396	1251.249
30.5	1268.719	1286.925	1320.027	1350.922	1362.140	1344.669	1309.913	1278.650	1244.077
31.0	1260.812	1277.546	1311.016	1342.830	1354.416	1337.865	1301.821	1272.029	1233.227
31.5	1249.226	1270.558	1301.637	1335.107	1346.325	1329.774	1292.994	1262.834	1222.561
32.0	1239.111	1261.179	1292.626	1327.015	1340.440	1321.866	1284.167	1255.478	1214.469
32.5	1229.365	1251.984	1285.454	1319.659	1332.716	1313.407	1277.546	1246.100	1203.251
33.0	1219.434	1244.445	1278.650	1311.935	1325.176	1306.602	1269.639	1235.066	1193.137
33.5	1208.216	1234.146	1269.823	1305.131	1317.820	1299.430	1260.995	1225.319	1181.367
34.0	1196.815	1223.664	1260.260	1295.752	1311.016	1291.707	1254.007	1215.388	1171.804
34.5	1187.252	1213.917	1253.088	1287.845	1303.844	1282.696	1245.732	1203.619	1161.874
35.0	1174.563	1202.332	1245.548	1280.673	1295.936	1276.259	1235.617	1193.137	1151.024
35.5	1164.081	1192.585	1235.985	1274.972	1288.580	1269.455	1226.606	1182.287	1140.542
36.0	1154.334	1181.183	1226.606	1267.984	1279.937	1263.202	1217.044	1171.804	1129.324
36.5	1142.381	1170.885	1217.227	1261.915	1272.397	1256.398	1207.481	1161.874	1118.106
37.0	1130.611	1159.667	1207.113	1253.456	1266.328	1247.387	1197.550	1150.656	1108.543
37.5	1121.048	1149.185	1197.918	1245.180	1259.892	1237.640	1188.355	1140.174	1096.958
38.0	1107.991	1138.886	1188.171	1235.433	1253.639	1229.365	1177.505	1129.875	1085.372
38.5	1098.245	1127.301	1178.609	1226.606	1245.548	1221.273	1168.678	1118.290	1074.706
39.0	1086.475	1116.451	1168.126	1217.779	1236.905	1211.710	1157.644	1107.072	1063.304
39.5	1075.257	1105.785	1158.196	1208.768	1228.813	1202.332	1148.081	1096.222	1052.086
40.0	1064.040	1094.567	1148.081	1199.941	1220.538	1194.056	1137.231	1085.372	1040.868
40.5	1053.006	1082.981	1138.151	1191.298	1211.710	1184.493	1127.853	1073.786	1029.834
41.0	1041.788	1072.131	1127.301	1181.735	1203.251	1175.850	1118.106	1063.304	1018.617
41.5	1030.570	1060.546	1118.290	1172.540	1194.424	1166.839	1107.256	1051.351	1006.663
42.0	1019.352	1049.512	1108.175	1163.713	1186.149	1157.644	1096.958	1039.765	995.629
42.5	1007.950	1038.478	1096.958	1154.150	1176.586	1148.081	1086.659	1027.995	983.860
43.0	995.445	1026.524	1086.843	1145.323	1168.494	1138.519	1075.441	1017.145	972.642
43.5	984.227	1014.755	1075.809	1135.392	1158.564	1128.956	1066.614	1005.560	961.608
44.0	972.458	1002.985	1065.879	1126.381	1150.104	1120.129	1055.580	994.158	950.022
44.5	961.056	991.767	1054.661	1116.267	1140.358	1110.198	1045.282	982.756	938.804
45.0	948.919	980.733	1045.282	1106.704	1131.163	1100.635	1033.328	971.171	926.851
45.5	937.885	968.964	1033.880	1097.325	1121.784	1090.521	1023.398	959.585	915.265
46.0	925.012	957.378	1023.582	1087.211	1112.589	1080.774	1011.996	947.999	903.312
46.5	913.059	945.976	1012.364	1076.913	1103.578	1071.212	1002.250	936.046	892.094
47.0	900.921	934.023	1001.698	1067.166	1094.015	1061.649	991.216	924.828	880.141
47.5	889.152	923.173	991.399	1057.971	1084.636	1051.718	980.549	913.426	868.187
48.0	878.302	911.403	979.998	1047.673	1074.890	1041.420	969.148	901.289	856.785
48.5	866.164	899.818	969.148	1037.374	1064.775	1031.857	958.114	889.519	844.648
49.0	853.475	887.864	958.482	1027.444	1055.396	1021.927	947.448	877.750	832.879
49.5	841.338	875.911	947.632	1017.881	1045.466	1012.180	936.230	866.716	821.293
50.0	829.568	863.774	936.781	1007.215	1036.823	1001.514	925.564	854.946	809.339
50.5	817.431	852.004	926.115	997.652	1026.524	991.583	914.530	842.625	797.754
51.0	806.765	840.051	914.898	987.354	1016.594	980.733	903.864	831.040	784.881
51.5	794.260	829.017	903.312	977.607	1006.663	970.987	893.381	819.454	773.295
52.0	782.306	816.512	891.726	966.757	997.284	960.137	881.244	807.684	761.710
52.5	770.537	804.558	881.612	956.459	987.170	950.206	870.578	796.283	749.940
53.0	758.216	792.972	869.842	945.793	977.055	940.643	859.912	784.513	737.803
53.5	746.814	781.203	858.992	935.862	967.309	929.609	849.429	772.560	725.665
54.0	735.228	769.433	847.590	925.564	956.826	919.311	837.660	760.238	713.528
54.5	722.355	757.480	836.557	915.265	946.528	908.645	826.258	748.653	701.023

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55.0	711.137	745.710	825.339	904.047	936.598	898.347	815.224	735.780	688.518
55.5	698.816	733.757	814.305	893.565	926.667	887.497	804.190	724.746	677.300
56.0	687.231	721.620	802.719	883.083	916.369	877.382	793.524	712.793	665.714
56.5	674.725	709.850	791.685	873.152	906.070	867.084	782.122	700.655	654.129
57.0	662.772	698.816	780.467	862.118	895.588	855.866	770.353	688.702	641.991
57.5	650.451	685.943	769.250	851.636	885.658	845.751	759.135	676.932	630.590
58.0	638.313	674.358	758.399	841.154	875.175	834.534	748.469	664.979	618.268
58.5	626.360	662.588	746.998	830.488	864.877	824.419	737.251	652.658	606.131
59.0	614.590	650.819	735.964	819.454	854.579	813.937	726.033	640.888	594.362
59.5	602.637	639.049	724.378	809.339	844.280	802.719	714.815	629.302	582.776
60.0	590.500	627.279	713.528	798.122	834.166	792.237	703.965	617.533	571.006
60.5	579.282	614.774	702.310	787.456	823.132	781.571	692.196	605.947	559.053
61.0	566.225	603.189	691.092	776.605	813.017	770.537	680.794	594.178	546.916
61.5	554.823	591.235	679.323	765.204	802.167	759.687	669.576	582.408	534.410
62.0	542.686	579.650	668.473	755.089	791.317	749.021	658.542	570.822	523.560
62.5	531.468	567.880	657.255	744.607	781.571	738.354	647.692	558.869	511.239
63.0	520.250	556.111	645.853	733.941	771.272	728.608	636.658	547.100	499.470
63.5	508.113	544.341	635.187	722.907	760.974	717.206	625.257	536.066	487.700
64.0	496.343	532.939	623.418	712.793	750.676	706.724	613.855	524.480	475.747
64.5	484.206	521.354	612.935	702.126	740.193	696.242	602.821	512.894	464.713
65.0	472.804	509.584	602.085	691.644	729.527	685.392	592.339	501.493	452.575
65.5	461.219	498.366	591.051	680.978	719.781	675.461	581.673	489.723	441.174
66.0	449.817	486.597	580.017	670.680	709.482	664.427	570.455	478.505	429.404
66.5	437.864	475.011	569.351	660.749	699.552	654.497	559.972	467.103	417.819
67.0	426.278	463.793	558.317	650.267	689.437	643.830	549.122	455.886	406.785
67.5	414.141	452.392	547.651	639.785	678.955	633.532	538.456	444.668	395.015
68.0	402.371	440.990	536.249	628.935	669.025	623.785	527.790	433.266	383.981
68.5	390.418	429.772	525.951	618.452	659.094	613.671	517.308	422.232	372.763
69.0	379.016	418.738	514.917	608.706	649.347	603.557	506.826	411.198	361.913
69.5	367.798	407.520	504.435	598.959	639.785	593.626	496.343	400.164	350.328
70.0	356.948	396.854	493.769	588.661	629.854	583.328	485.493	388.762	339.661
70.5	345.178	385.820	483.103	578.730	619.556	573.029	475.011	378.096	328.995
71.0	333.777	374.602	472.437	568.248	609.625	562.915	464.529	367.246	318.697
71.5	322.375	363.752	462.322	558.685	599.511	553.352	454.047	356.212	307.479
72.0	310.973	352.902	451.840	548.203	589.212	542.870	443.932	345.546	296.997
72.5	299.939	342.236	441.909	538.088	579.098	532.571	433.634	335.064	286.147
73.0	288.905	331.570	431.243	527.790	568.616	522.457	423.703	324.950	275.481
73.5	278.239	320.904	420.945	517.308	557.766	511.423	413.037	314.099	265.182
74.0	267.757	310.605	410.646	506.090	546.732	500.757	402.371	303.985	254.700
74.5	256.907	299.571	400.164	495.424	534.962	489.723	392.624	293.135	244.402
75.0	246.425	289.457	389.866	484.574	523.744	478.505	381.774	282.837	233.736
75.5	236.126	278.791	379.568	472.620	511.975	467.655	371.844	272.722	223.621
76.0	225.644	268.676	369.085	461.219	499.654	455.886	361.362	262.792	213.691
76.5	215.714	258.562	358.419	449.449	486.229	443.932	351.063	253.045	203.760
77.0	205.967	248.264	348.121	436.944	472.437	431.059	340.581	243.114	193.830
77.5	196.220	238.333	337.639	423.703	458.460	417.635	330.099	233.368	184.083
78.0	186.474	228.403	326.789	409.911	444.300	404.210	319.249	223.621	174.373
78.5	176.561	218.656	315.387	396.118	429.036	390.785	308.215	214.058	165.215
79.0	167.164	209.093	303.801	381.590	413.405	376.073	296.997	204.680	156.075
79.5	157.546	199.530	292.032	367.062	396.118	361.545	285.411	194.933	147.082
80.0	148.186	189.968	280.078	351.247	378.280	345.546	273.458	185.370	137.943
80.5	139.064	180.313	267.573	335.064	359.155	328.995	260.953	176.102	129.557
81.0	130.219	170.621	255.068	317.042	339.661	311.525	248.080	166.668	121.134
81.5	121.539	160.746	241.643	299.020	318.513	293.687	235.207	157.105	113.061
82.0	112.675	151.330	228.770	280.446	297.181	275.297	221.782	147.561	104.730
82.5	103.958	141.970	214.610	260.769	274.929	255.804	208.725	138.053	96.694

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : FT-22-LS-8CS-AF-DIM-UNV\_33W\_4000K\_.IES

## CANDELA TABULATION - (Cont.)

83.0	95.131	132.370	200.450	240.540	251.942	235.207	194.565	128.380	88.897
83.5	87.205	122.477	185.370	219.024	228.770	213.875	180.056	118.652	81.081
84.0	79.316	112.289	169.592	197.324	205.231	192.174	165.086	108.831	73.652
84.5	71.849	102.064	153.335	175.017	180.846	170.051	149.179	98.680	66.112
85.0	64.291	91.398	136.471	151.919	156.498	147.910	132.297	88.419	58.958
85.5	56.733	80.585	119.075	128.821	131.800	125.419	114.955	77.936	51.768
86.0	49.285	69.551	100.979	105.668	107.084	102.193	97.834	67.160	44.559
86.5	42.003	58.664	82.865	82.203	82.571	79.591	79.665	56.163	37.295
87.0	35.180	47.317	64.052	59.197	58.443	57.689	61.882	45.386	29.645
87.5	28.688	36.228	46.214	37.571	36.118	37.240	44.467	34.775	22.859
88.0	22.049	25.654	29.166	19.199	17.047	19.125	27.530	24.495	16.091
88.5	15.521	15.870	14.215	7.264	5.204	7.577	13.572	14.730	9.857
89.0	9.213	7.963	4.781	2.869	2.317	2.979	4.671	6.988	4.469
89.5	4.138	3.108	1.821	1.655	1.692	1.618	1.582	2.372	1.379
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-22-LS-8CS-AF-DIM-UNV\_33W\_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-22-LS-8CS-AF-DIM-UNV\_33W\_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-22-LS-8CS-AF-DIM-UNV\_33W\_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-22-LS-8CS-AF-DIM-UNV\_33W\_4000K\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	578.91	N.A.	12.40
0-30	1223.35	N.A.	26.30
0-40	1996.91	N.A.	42.90
0-60	3531.8	N.A.	75.80
0-80	4527.02	N.A.	97.20
0-90	4659.19	N.A.	100.00
10-90	4509.00	N.A.	96.80
20-40	1418.00	N.A.	30.40
20-50	2219.21	N.A.	47.60
40-70	2126.54	N.A.	45.60
60-80	995.22	N.A.	21.40
70-80	403.58	N.A.	8.70
80-90	132.18	N.A.	2.80
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	4659.19	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	150.19
10-20	428.72
20-30	644.44
30-40	773.56
40-50	801.21
50-60	733.69
60-70	591.64
70-80	403.58
80-90	132.18
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-22-LS-8CS-AF-DIM-UNV\_33W\_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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	70	63	86	76	69	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	60	55	50	48
5	75	62	52	45	73	60	52	45	58	51	45	56	49	44	54	48	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : FT-22-LS-8CS-AF-DIM-UNV\_33W\_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	16.3	18.0	16.7	18.3	18.6	17.9	19.6	18.3	19.9	20.2
	3H	18.0	19.5	18.4	19.9	20.2	20.3	21.8	20.7	22.2	22.5
	4H	18.6	20.1	19.0	20.4	20.8	21.4	22.9	21.8	23.2	23.6
	6H	19.1	20.5	19.6	20.8	21.2	22.5	23.8	22.9	24.2	24.6
	8H	19.3	20.6	19.7	20.9	21.3	22.9	24.1	23.3	24.5	24.9
	12H	19.4	20.6	19.8	21.0	21.4	23.1	24.3	23.5	24.7	25.1

### UGR Viewed Endwise

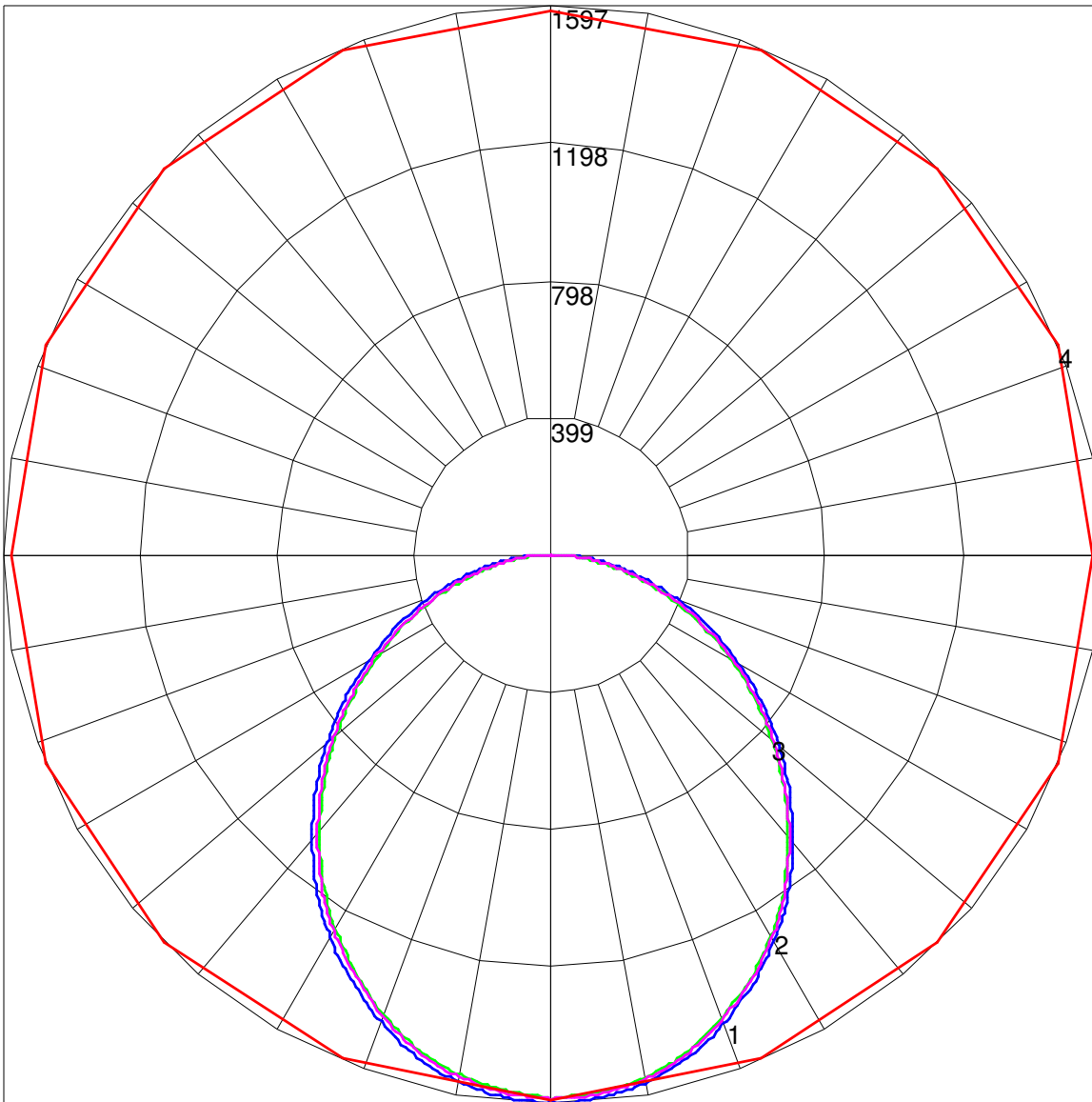
4H	2H	17.2	18.6	17.6	19.0	19.4	18.4	19.9	18.8	20.2	20.6
	3H	19.2	20.4	19.6	20.8	21.2	21.1	22.3	21.5	22.7	23.1
	4H	20.0	21.1	20.4	21.5	21.9	22.5	23.6	22.9	24.0	24.4
	6H	20.6	21.5	21.0	22.0	22.4	23.7	24.7	24.1	25.1	25.5
	8H	20.8	21.7	21.2	22.1	22.6	24.1	25.0	24.6	25.5	26.0
	12H	20.9	21.7	21.4	22.2	22.7	24.4	25.3	24.9	25.7	26.2

8H	4H	20.6	21.6	21.1	22.0	22.5	22.7	23.7	23.2	24.1	24.6
	6H	21.4	22.2	21.9	22.7	23.2	24.2	24.9	24.7	25.4	25.9
	8H	21.7	22.4	22.2	22.9	23.4	24.8	25.4	25.3	25.9	26.4
	12H	22.0	22.6	22.5	23.1	23.6	25.2	25.8	25.7	26.3	26.8

12H	4H	20.8	21.6	21.3	22.1	22.6	22.8	23.6	23.3	24.1	24.5
	6H	21.7	22.4	22.2	22.9	23.4	24.3	24.9	24.8	25.4	25.9
	8H	22.1	22.7	22.6	23.2	23.7	24.9	25.5	25.4	26.0	26.5

Maximum UGR = 26.8

POLAR GRAPH



Maximum Candela = 1596.795 Located At Horizontal Angle = 22.5, Vertical Angle = .5  
# 1 - Vertical Plane Through Horizontal Angles (22.5 - 202.5) (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.)