

IES INDOOR REPORT

PHOTOMETRIC FILENAME : RWG-4-L90-935-S-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 14794038.01
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 11 DEC 2023
[TEST DATE] 5/11/2023
[MANUFAC] H.E. WILLIAMS, INC.
[LUMCAT] RWG-4-L90-935-S-DIM-UNV
[LUMINAIRE] 48 INCH RECESSED LINEAR WALL WASH
[MORE] WITH SPECULAR REFL AND LENS OVER LEDS
[LAMP] LED
[BALLAST] 0-10V DIMMABLE LED DRIVER
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] INDOOR
[SEARCH_MOUNTING] RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7509
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	94
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.40
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.60
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.81 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	18303	15258	5283
55	20089	15148	4826
65	25321	15659	4323
75	16905	16307	3940
85	28716	15846	3709

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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	1942.689	1942.689	1942.689	1942.689	1942.689	1942.689	1942.689	1942.689	1942.689
0.5	1919.625	1974.623	1988.817	1994.139	1978.172	1951.560	1912.528	1877.045	1813.176
1.0	1972.849	2024.299	2027.848	2015.429	1978.172	1930.270	1875.271	1829.144	1762.081
1.5	2027.848	2077.524	2070.427	2038.493	1978.172	1910.754	1838.014	1781.242	1712.405
2.0	2086.395	2130.748	2111.233	2059.782	1979.946	1891.239	1802.531	1734.227	1663.616
2.5	2143.167	2182.198	2152.038	2081.072	1981.720	1871.723	1766.161	1687.212	1615.714
3.0	2201.714	2238.971	2194.617	2104.136	1981.720	1852.207	1730.501	1641.794	1568.167
3.5	2262.035	2293.969	2235.423	2125.426	1981.720	1832.692	1694.486	1597.440	1523.281
4.0	2322.356	2350.742	2279.776	2148.490	1981.720	1811.402	1659.358	1552.554	1477.508
4.5	2384.451	2407.515	2322.356	2169.779	1979.946	1790.112	1625.649	1509.797	1433.154
5.0	2448.320	2466.062	2366.709	2191.069	1979.946	1770.064	1591.940	1468.105	1391.285
5.5	2510.415	2526.382	2411.063	2212.359	1976.398	1750.371	1558.232	1426.767	1348.173
6.0	2574.284	2586.703	2455.417	2233.649	1974.623	1729.791	1524.700	1386.317	1304.706
6.5	2638.154	2648.798	2497.996	2254.938	1972.849	1709.034	1491.169	1345.334	1262.659
7.0	2703.797	2710.894	2544.124	2274.454	1971.075	1688.809	1459.412	1304.884	1226.112
7.5	2771.215	2772.989	2588.478	2295.744	1969.301	1668.583	1426.235	1267.627	1195.241
8.0	2836.858	2833.310	2631.057	2317.033	1967.527	1648.181	1394.301	1233.208	1162.065
8.5	2898.953	2895.405	2677.185	2336.549	1962.204	1627.778	1362.543	1203.580	1132.082
9.0	2962.822	2957.500	2719.764	2357.839	1958.656	1606.488	1329.544	1173.420	1103.341
9.5	3033.788	3019.595	2765.892	2377.354	1953.334	1586.086	1299.206	1145.565	1078.680
10.0	3097.657	3079.916	2810.246	2396.870	1949.785	1564.973	1267.627	1120.550	1051.181
10.5	3165.075	3142.011	2854.599	2416.385	1944.463	1544.393	1240.482	1096.067	1023.682
11.0	3228.944	3200.558	2897.179	2434.127	1940.915	1524.523	1214.580	1070.519	997.069
11.5	3292.813	3259.104	2939.758	2451.868	1935.592	1503.056	1189.564	1044.971	970.990
12.0	3354.908	3317.651	2982.338	2469.610	1930.270	1483.540	1166.146	1019.956	945.619
12.5	3420.552	3376.198	3026.691	2489.125	1924.947	1461.718	1142.372	995.295	920.959
13.0	3482.647	3434.745	3069.271	2506.867	1919.625	1440.783	1120.195	971.877	896.475
13.5	3542.968	3489.743	3113.624	2524.608	1912.528	1420.203	1103.873	948.813	873.412
14.0	3601.514	3546.516	3152.656	2542.350	1905.432	1398.736	1083.116	925.217	849.283
14.5	3661.835	3603.289	3195.235	2556.543	1898.335	1378.865	1062.535	902.685	827.106
15.0	3722.156	3656.513	3234.266	2574.284	1891.239	1358.818	1041.778	880.508	804.930
15.5	3784.251	3711.511	3275.072	2590.252	1885.916	1338.238	1021.908	858.864	783.285
16.0	3837.476	3762.962	3312.329	2606.219	1878.820	1318.190	1002.037	837.929	763.415
16.5	3890.700	3814.412	3349.586	2622.186	1869.949	1296.190	982.522	817.526	741.593
17.0	3940.376	3864.088	3388.617	2638.154	1862.852	1275.433	963.538	797.478	721.545
17.5	3988.278	3911.990	3425.874	2652.347	1853.982	1255.030	944.732	777.963	702.207
18.0	4034.406	3956.343	3464.905	2670.088	1845.111	1234.805	926.813	757.915	681.981
18.5	4076.985	3998.923	3500.388	2684.281	1838.014	1214.402	908.362	739.286	664.062
19.0	4119.565	4039.728	3532.323	2698.475	1829.144	1195.596	889.734	720.480	644.192
19.5	4162.144	4076.985	3566.031	2710.894	1818.499	1178.565	872.347	701.674	625.918
20.0	4201.175	4112.468	3597.966	2723.313	1811.402	1161.178	853.896	683.578	608.354
20.5	4243.755	4149.725	3629.901	2739.280	1802.531	1144.324	837.219	665.304	589.726
21.0	4277.464	4183.434	3660.061	2749.925	1791.886	1128.179	820.010	648.450	573.049
21.5	4312.947	4215.369	3688.447	2764.118	1783.016	1114.340	802.801	631.418	555.485
22.0	4343.107	4247.303	3715.060	2774.763	1772.193	1099.260	786.656	614.386	538.985
22.5	4373.267	4277.464	3738.124	2783.634	1760.839	1084.535	769.802	597.532	522.663
23.0	4401.654	4307.624	3761.187	2796.053	1751.791	1068.568	753.834	581.387	505.276
23.5	4435.363	4334.236	3777.155	2804.923	1740.791	1053.665	737.867	565.420	491.438
24.0	4461.975	4359.074	3794.896	2813.794	1731.211	1037.165	721.722	549.808	475.116
24.5	4486.813	4380.364	3810.863	2822.665	1719.324	1021.375	706.642	534.372	460.213
25.0	4508.102	4399.880	3825.057	2831.535	1708.324	1005.585	690.497	519.647	446.375
25.5	4522.296	4422.944	3841.024	2838.632	1696.083	990.150	675.772	505.099	431.472
26.0	4536.489	4438.911	3856.991	2843.954	1683.309	975.602	661.224	490.906	418.521
26.5	4541.811	4451.330	3869.410	2849.277	1671.245	959.990	646.498	476.890	404.328

IES INDOOR REPORT
PHOTOMETRIC FILENAME : RWG-4-L90-935-S-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

27.0	4541.811	4460.201	3881.829	2854.599	1658.826	945.797	632.660	463.052	391.022
27.5	4538.263	4461.975	3888.926	2858.148	1644.810	930.894	617.757	450.101	378.957
28.0	4534.715	4460.201	3897.797	2859.922	1633.988	916.168	603.919	436.617	365.651
28.5	4529.392	4454.878	3904.893	2863.470	1619.440	902.330	590.613	424.375	354.297
29.0	4520.521	4446.007	3911.990	2867.018	1607.198	887.427	576.775	412.134	342.233
29.5	4511.651	4435.363	3917.312	2867.018	1593.360	873.766	564.178	400.247	330.523
30.0	4495.683	4422.944	3919.086	2865.244	1578.457	859.396	550.872	388.715	320.056
30.5	4481.490	4410.524	3920.860	2865.244	1564.973	845.380	538.630	376.828	308.169
31.0	4470.845	4398.105	3919.086	2863.470	1550.425	831.897	526.034	366.184	298.411
31.5	4456.652	4382.138	3917.312	2861.696	1538.006	818.236	513.615	355.361	287.944
32.0	4444.233	4364.397	3911.990	2859.922	1524.345	804.575	502.083	344.716	278.009
32.5	4426.492	4346.655	3904.893	2854.599	1509.443	790.559	489.487	334.604	268.606
33.0	4410.524	4323.591	3892.474	2852.825	1496.136	776.898	478.132	324.491	258.670
33.5	4396.331	4305.850	3883.603	2847.503	1480.701	763.592	466.955	314.911	250.154
34.0	4378.590	4286.334	3871.184	2843.954	1465.799	750.109	455.600	305.685	240.929
34.5	4360.848	4265.045	3851.669	2836.858	1452.670	736.980	445.665	296.282	232.058
35.0	4341.333	4243.755	3832.153	2829.761	1436.703	723.496	434.311	287.234	223.897
35.5	4321.817	4220.691	3809.089	2822.665	1422.864	709.835	423.666	278.541	215.381
36.0	4302.302	4197.627	3786.025	2813.794	1406.897	697.062	413.198	269.670	207.752
36.5	4288.108	4172.789	3762.962	2804.923	1392.349	684.110	402.731	261.509	200.124
37.0	4266.819	4146.177	3738.124	2797.827	1378.688	671.514	392.973	253.348	192.495
37.5	4245.529	4119.565	3713.285	2785.408	1361.124	658.917	383.038	245.542	185.576
38.0	4222.465	4091.178	3686.673	2772.989	1346.399	645.611	373.103	237.735	177.947
38.5	4195.853	4064.566	3658.287	2760.570	1330.077	633.192	363.700	230.107	171.028
39.0	4176.337	4037.954	3629.901	2748.151	1313.577	620.773	354.119	222.833	164.463
39.5	4155.048	4009.568	3601.514	2733.957	1299.206	608.887	345.071	215.559	157.899
40.0	4131.984	3981.181	3569.580	2719.764	1282.529	597.000	336.200	208.817	151.689
40.5	4108.920	3949.247	3539.419	2705.571	1267.627	584.758	327.330	201.898	145.302
41.0	4085.856	3920.860	3505.711	2691.378	1252.014	573.049	318.814	195.511	139.625
41.5	4062.792	3894.248	3477.324	2677.185	1235.160	561.339	310.475	189.479	134.125
42.0	4039.728	3865.862	3447.164	2662.992	1220.257	550.162	303.024	183.269	128.803
42.5	4018.438	3841.024	3417.003	2648.798	1204.290	539.163	295.573	177.592	124.013
43.0	3995.375	3816.186	3386.843	2632.831	1188.855	528.163	288.121	172.269	118.868
43.5	3975.859	3789.574	3354.908	2615.090	1174.129	517.518	280.847	166.770	114.255
44.0	3954.569	3764.736	3322.974	2599.122	1158.694	507.051	273.751	161.802	109.642
44.5	3936.828	3739.898	3292.813	2583.155	1144.501	496.583	267.186	156.834	105.384
45.0	3913.764	3715.060	3262.653	2567.188	1129.598	486.825	260.977	152.222	101.481
45.5	3894.248	3690.222	3230.718	2549.446	1115.937	476.535	254.235	147.609	97.401
46.0	3876.507	3667.158	3198.783	2529.931	1102.631	466.955	248.558	142.996	93.497
46.5	3855.217	3644.094	3166.849	2512.189	1088.970	457.375	242.171	138.738	89.949
47.0	3835.702	3621.030	3134.914	2492.674	1074.777	447.794	236.316	134.480	86.223
47.5	3817.960	3599.740	3104.754	2474.932	1059.697	438.746	230.816	130.400	82.853
48.0	3798.444	3573.128	3069.271	2453.643	1044.262	429.521	225.139	126.497	79.482
48.5	3775.381	3548.290	3037.336	2432.353	1030.069	420.472	219.639	122.416	76.288
49.0	3754.091	3521.678	3003.627	2411.063	1014.456	411.602	214.139	118.690	73.272
49.5	3731.027	3496.840	2969.919	2389.773	999.376	402.731	208.817	115.319	70.434
50.0	3709.737	3472.002	2941.532	2366.709	984.473	394.392	204.027	111.771	67.772
50.5	3686.673	3445.390	2909.598	2341.871	968.861	385.877	199.059	108.578	65.111
51.0	3661.835	3418.777	2875.889	2317.033	954.135	377.715	194.269	105.207	62.450
51.5	3638.771	3395.714	2842.180	2288.647	938.878	369.554	189.479	102.013	60.144
52.0	3617.482	3369.101	2812.020	2260.261	924.507	361.393	184.688	98.997	57.837
52.5	3596.192	3344.263	2781.859	2231.874	910.669	353.765	180.431	96.159	55.708
53.0	3574.902	3315.877	2749.925	2203.488	895.234	346.136	175.995	93.497	53.579
53.5	3553.612	3291.039	2717.990	2173.328	880.863	338.684	171.560	90.836	51.628
54.0	3528.774	3267.975	2687.830	2143.167	865.783	330.878	167.479	88.175	49.676
54.5	3507.485	3241.363	2657.669	2113.007	850.880	323.604	163.044	85.691	47.902

IES INDOOR REPORT
PHOTOMETRIC FILENAME : RWG-4-L90-935-S-DIM-UNV_.IES

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55.0	3484.421	3218.299	2627.509	2082.846	837.042	316.685	158.963	83.207	46.128
55.5	3459.583	3191.687	2595.574	2050.912	821.607	309.766	154.883	80.901	44.354
56.0	3438.293	3165.075	2565.414	2017.203	807.768	302.847	150.802	78.595	42.934
56.5	3413.455	3136.688	2533.479	1985.268	793.220	295.750	147.077	76.466	41.338
57.0	3388.617	3110.076	2499.770	1953.334	777.963	289.008	142.996	74.337	39.918
57.5	3367.327	3081.690	2471.384	1921.399	764.479	282.444	139.270	72.385	38.499
58.0	3340.715	3053.304	2439.449	1887.690	749.221	276.057	135.722	70.434	37.257
58.5	3319.425	3023.143	2409.289	1853.982	734.851	269.847	132.174	68.659	36.015
59.0	3298.136	2996.531	2379.128	1822.047	720.480	263.815	128.980	66.708	34.773
59.5	3276.846	2968.145	2345.420	1788.338	705.577	257.783	125.787	65.111	33.531
60.0	3266.201	2941.532	2315.259	1754.629	692.449	251.929	122.416	63.337	32.467
60.5	3259.104	2918.469	2285.099	1722.340	677.546	246.429	119.400	61.918	31.402
61.0	3257.330	2893.631	2253.164	1690.228	663.708	240.751	116.384	60.321	30.515
61.5	3262.653	2870.567	2223.004	1656.874	649.869	235.074	113.545	58.902	29.451
62.0	3264.427	2852.825	2192.843	1623.875	634.966	229.574	110.529	57.305	28.564
62.5	3271.523	2840.406	2162.683	1590.166	621.483	224.429	107.868	55.886	27.677
63.0	3278.620	2833.310	2130.748	1557.699	607.467	219.107	105.384	54.644	26.790
63.5	3285.717	2826.213	2098.814	1522.749	593.452	214.317	102.723	53.224	26.080
64.0	3283.942	2820.891	2066.879	1489.040	579.791	209.172	100.239	51.982	25.193
64.5	3267.975	2819.116	2033.170	1454.621	565.775	204.027	97.578	50.563	24.483
65.0	3236.040	2813.794	2001.236	1421.268	552.469	199.059	94.917	49.321	23.774
65.5	3189.913	2804.923	1967.527	1388.801	539.163	194.091	92.610	48.079	23.064
66.0	3142.011	2780.085	1937.366	1356.156	525.679	189.301	90.304	46.837	22.354
66.5	3092.335	2739.280	1907.206	1323.512	512.373	184.511	87.820	45.596	21.645
67.0	3037.336	2691.378	1877.045	1290.868	498.357	179.721	85.514	44.531	20.935
67.5	2989.434	2639.928	1846.885	1258.933	485.051	175.108	83.207	43.289	20.403
68.0	2923.791	2592.026	1822.047	1226.821	472.277	170.318	80.901	42.047	19.693
68.5	2842.180	2540.576	1798.983	1195.241	459.681	165.883	78.595	40.983	18.983
69.0	2753.473	2487.351	1777.693	1164.194	447.794	161.270	76.466	39.918	18.451
69.5	2631.057	2419.934	1761.016	1136.340	435.375	156.657	74.337	38.854	17.919
70.0	2494.448	2334.775	1742.743	1104.405	423.134	152.222	72.208	37.612	17.209
70.5	2350.742	2242.519	1725.356	1074.600	411.247	147.786	70.079	36.547	16.677
71.0	2191.069	2134.296	1697.857	1044.971	399.005	143.351	68.127	35.483	16.145
71.5	2050.912	2010.106	1655.632	1013.392	387.473	139.093	66.176	34.418	15.435
72.0	1898.335	1887.690	1607.730	981.812	375.941	134.835	64.224	33.354	14.903
72.5	1758.178	1757.468	1556.103	950.055	364.232	130.577	62.095	32.112	14.371
73.0	1646.052	1627.601	1505.539	918.475	353.055	126.319	59.966	31.048	13.838
73.5	1537.829	1508.555	1456.750	887.960	341.878	122.061	58.015	29.983	13.306
74.0	1455.863	1396.075	1402.107	857.444	330.878	117.981	56.063	28.919	12.774
74.5	1385.607	1307.013	1343.383	826.929	319.701	113.723	54.111	27.854	12.242
75.0	1323.157	1230.370	1276.320	796.059	308.346	109.820	52.160	26.967	11.709
75.5	1278.271	1165.791	1201.451	765.366	297.347	105.739	50.208	25.725	11.177
76.0	1234.628	1114.340	1123.921	733.786	286.524	101.836	48.257	24.838	10.467
76.5	1199.145	1072.471	1041.778	702.561	276.057	97.933	46.305	23.774	9.758
77.0	1166.678	1033.439	957.506	670.982	265.767	94.030	44.531	22.709	9.226
77.5	1130.308	997.069	876.605	639.047	255.477	90.127	42.579	21.645	8.871
78.0	1111.147	962.651	804.397	608.177	245.719	86.401	40.628	20.580	8.516
78.5	1107.599	933.378	743.544	578.726	235.784	82.675	38.854	19.516	7.984
79.0	1108.841	921.136	690.852	549.630	226.381	78.949	36.902	18.629	7.629
79.5	1116.115	923.265	647.208	518.760	216.623	75.224	34.951	17.741	7.274
80.0	1123.743	928.942	609.241	486.116	206.865	71.498	33.177	16.854	6.742
80.5	1130.663	931.604	575.000	452.230	196.753	67.772	31.225	15.790	6.387
81.0	1135.453	932.491	546.259	418.698	186.463	64.047	29.451	14.903	6.032
81.5	1130.308	932.668	527.631	387.473	175.995	60.321	27.499	14.016	5.677
82.0	1100.680	921.136	519.647	355.184	164.641	56.595	25.725	13.129	5.322
82.5	1044.617	886.718	515.921	322.007	153.286	52.692	23.951	12.242	4.968

IES INDOOR REPORT
PHOTOMETRIC FILENAME : RWG-4-L90-935-S-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

83.0	980.393	832.074	511.309	288.476	141.932	48.966	22.177	11.355	4.613
83.5	923.620	778.672	502.793	257.428	130.754	45.241	20.403	10.467	4.435
84.0	864.363	727.577	483.277	230.461	119.577	41.515	18.629	9.580	4.081
84.5	811.671	677.546	453.471	207.575	108.578	37.789	16.854	8.693	3.903
85.0	756.850	628.225	417.634	188.237	97.755	34.064	15.080	7.984	3.548
85.5	707.706	582.274	380.377	170.318	86.933	30.515	13.306	7.097	3.371
86.0	650.224	529.582	344.539	152.754	76.288	26.790	11.532	6.210	3.016
86.5	570.742	463.762	306.217	135.190	65.821	23.064	9.935	5.500	2.839
87.0	493.745	391.199	265.235	115.497	54.998	19.338	8.161	4.613	2.484
87.5	406.634	315.798	219.817	94.030	44.354	15.612	6.564	3.903	2.306
88.0	315.620	235.606	167.479	71.853	33.709	12.064	5.145	3.193	2.129
88.5	226.381	148.673	111.239	48.612	23.064	8.516	3.548	2.484	1.952
89.0	113.013	56.595	54.644	27.144	12.774	5.145	2.484	1.952	1.597
89.5	30.870	8.871	16.500	12.951	6.919	2.839	1.774	1.597	1.597
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 : RWG-4-L90-935-S-DIM-UNV_.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 : RWG-4-L90-935-S-DIM-UNV_.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 : RWG-4-L90-935-S-DIM-UNV_.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 : RWG-4-L90-935-S-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	789.91	N.A.	10.50
0-30	1793.98	N.A.	23.90
0-40	3048.19	N.A.	40.60
0-60	5599.61	N.A.	74.60
0-80	7284.26	N.A.	97.00
0-90	7508.83	N.A.	100.00
10-90	7318.85	N.A.	97.50
20-40	2258.27	N.A.	30.10
20-50	3570.2	N.A.	47.50
40-70	3621.35	N.A.	48.20
60-80	1684.64	N.A.	22.40
70-80	614.72	N.A.	8.20
80-90	224.57	N.A.	3.00
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	7508.83	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	189.98
10-20	599.93
20-30	1004.06
30-40	1254.21
40-50	1311.93
50-60	1239.5
60-70	1069.92
70-80	614.72
80-90	224.57
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
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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	92	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	68	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	56	50	62	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	37	50	42	37	48	42	37	35
7	63	49	40	33	61	48	39	33	46	39	33	45	38	33	44	37	32	30
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27
9	54	41	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24
10	51	37	29	24	50	37	29	24	36	29	24	35	28	23	34	28	23	22

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	25.6	27.3	26.0	27.6	27.9	19.1	20.8	19.5	21.2	21.5
	3H	28.6	30.1	29.0	30.4	30.8	20.4	22.0	20.8	22.3	22.7
	4H	29.1	30.6	29.5	30.9	31.3	20.9	22.3	21.3	22.7	23.1
	6H	29.6	31.0	30.1	31.4	31.8	21.2	22.6	21.6	23.0	23.3
	8H	30.1	31.4	30.5	31.8	32.1	21.3	22.6	21.8	23.0	23.4
	12H	30.4	31.7	30.9	32.1	32.5	21.4	22.7	21.9	23.1	23.5

UGR Viewed Endwise

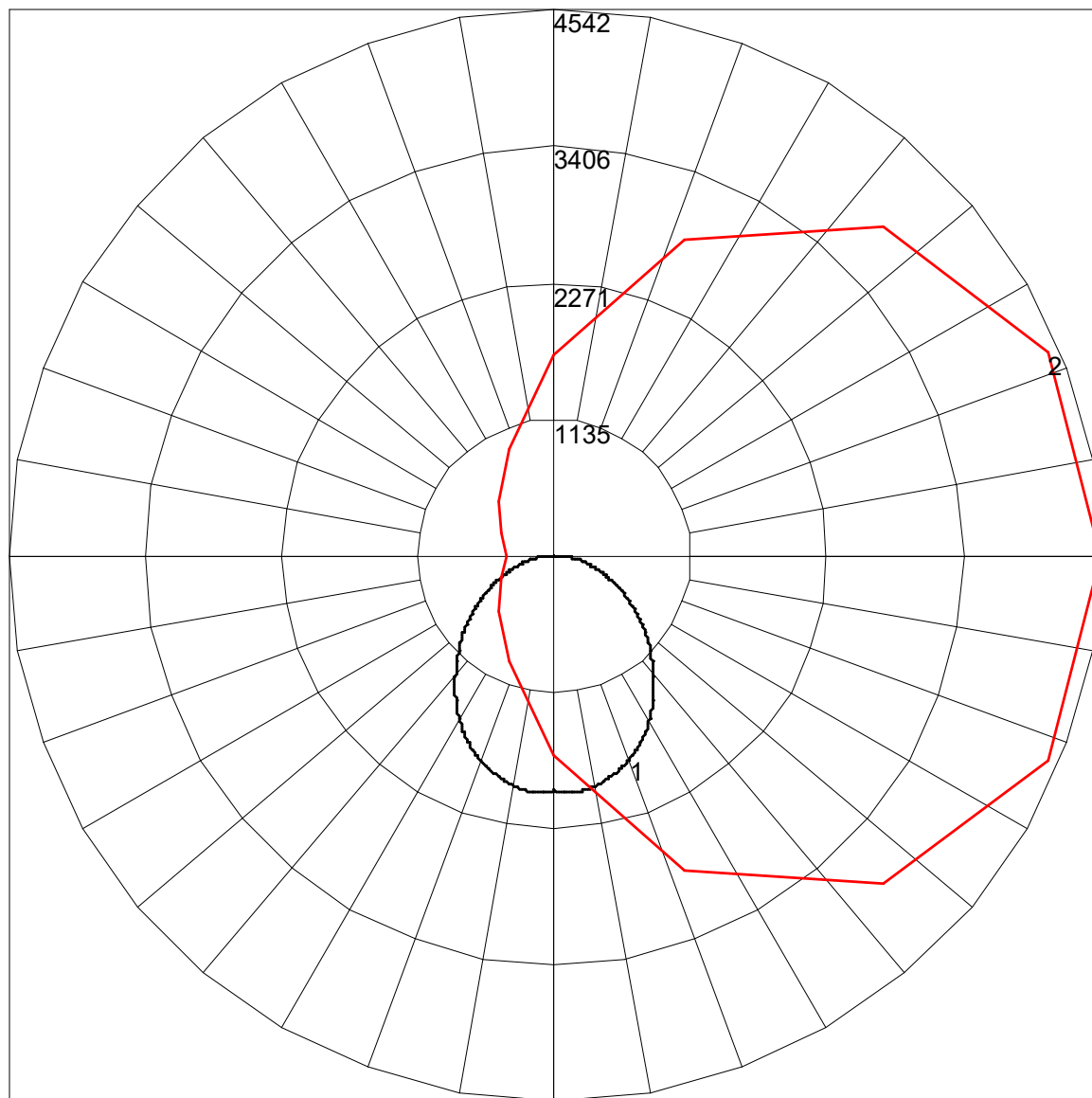
4H	2H	26.0	27.5	26.4	27.9	28.2	20.7	22.1	21.1	22.5	22.8
	3H	29.2	30.5	29.6	30.9	31.3	22.4	23.6	22.8	24.0	24.4
	4H	29.9	31.0	30.3	31.4	31.8	23.0	24.1	23.4	24.5	25.0
	6H	30.6	31.6	31.0	32.0	32.5	23.4	24.4	23.9	24.9	25.3
	8H	31.1	32.0	31.6	32.5	32.9	23.6	24.5	24.0	24.9	25.4
	12H	31.6	32.4	32.1	32.9	33.4	23.7	24.5	24.1	25.0	25.4

8H	4H	30.1	31.0	30.5	31.4	31.9	23.9	24.8	24.4	25.3	25.7
	6H	30.9	31.7	31.4	32.2	32.6	24.5	25.3	25.0	25.7	26.2
	8H	31.6	32.3	32.1	32.8	33.3	24.7	25.4	25.2	25.9	26.4
	12H	32.3	32.9	32.8	33.4	33.9	24.8	25.4	25.3	25.9	26.5

12H	4H	30.1	30.9	30.6	31.4	31.8	24.1	24.9	24.5	25.4	25.8
	6H	31.0	31.6	31.5	32.1	32.6	24.7	25.4	25.2	25.9	26.4
	8H	31.7	32.3	32.2	32.8	33.3	25.0	25.6	25.5	26.1	26.6

Maximum UGR = 33.9

POLAR GRAPH



Maximum Candela = 4541.811 Located At Horizontal Angle = 0, Vertical Angle = 26.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (26.5) (Through Max. Cd.)