



IES INDOOR REPORT

PHOTOMETRIC FILENAME : TRSD48L40.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 8,389P29
[TESTLAB] CSA Group
[ISSUEDATE] 09/16/2019 02:43:24 PM
[MANUFAC] LAMAR LIGHTING CO., INC.
[LUMINAIRE] TRSD48L-40/TRWD48L-40
[AMBIENT] 24.6 deg C
[POWERFACTOR] 0.9973
[ATHD] 5.35%
[CURRENT] 0.2038
[VOLTAGE] 120.00
[STABILIZATION] 23:22.1 Stable
[POWER VARIATION] 0.36 %
[LIGHT VARIATION] 0.40 %
[Lumens] 2,775

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2775
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	24.45
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.33 ft
Luminous Width (90-270)	3.75 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8056	7653	7231
55	7329	6958	6585
65	6479	6214	5926
75	5289	5250	5136
85	2835	4018	4588

IES INDOOR REPORT
PHOTOMETRIC FILENAME : TRSD48L40.IES

CANDELA TABULATION

	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>	<u>80</u>	<u>90</u>
0.0	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790
2.5	1151.967	1152.607	1152.374	1154.426	1156.370	1159.119	1156.395	1154.509	1153.521	1151.054
5.0	1147.266	1147.042	1146.768	1148.163	1149.941	1151.594	1149.210	1146.494	1144.608	1142.316
7.5	1138.827	1137.723	1137.631	1138.013	1139.118	1139.807	1136.352	1132.548	1130.521	1128.287
10.0	1127.058	1125.031	1124.342	1124.167	1124.242	1123.561	1119.018	1114.840	1112.331	1110.346
12.5	1111.443	1109.432	1107.331	1106.559	1105.936	1104.142	1098.568	1092.945	1090.212	1087.579
15.0	1091.824	1089.589	1087.131	1085.860	1083.019	1080.096	1074.232	1067.471	1063.675	1061.241
17.5	1069.206	1066.823	1063.351	1061.224	1057.487	1052.653	1045.277	1037.885	1033.864	1030.692
20.0	1044.048	1041.423	1036.340	1032.668	1028.806	1022.734	1013.183	1006.322	1000.649	997.293
22.5	1014.262	1012.659	1007.426	1001.953	997.227	989.336	979.452	971.146	965.091	961.810
25.0	981.985	980.781	975.349	969.078	961.926	953.728	943.196	934.051	928.328	923.544
27.5	948.470	947.058	940.455	933.553	926.609	915.620	904.972	895.138	888.509	884.680
30.0	912.323	911.152	903.718	896.558	887.770	876.441	864.223	854.181	848.533	843.665
32.5	873.426	872.379	865.070	857.536	848.051	835.916	823.091	812.493	807.235	802.684
35.0	833.374	833.507	823.781	817.485	806.770	794.402	781.046	771.212	765.315	761.494
37.5	791.969	791.936	783.787	776.312	764.003	751.394	739.940	729.865	724.300	720.512
40.0	751.751	750.763	741.983	734.068	722.190	709.822	697.355	687.504	682.105	678.492
42.5	708.377	707.704	698.767	690.943	679.132	667.346	654.953	646.223	640.351	636.456
45.0	663.500	664.081	655.784	647.910	636.331	624.196	612.327	604.992	599.236	595.515
47.5	621.098	619.628	612.576	604.619	594.336	583.090	572.317	564.708	558.977	554.218
50.0	577.466	576.453	570.589	561.619	551.884	541.244	532.190	524.457	518.220	515.329
52.5	534.126	533.453	528.993	519.856	510.703	500.794	492.014	484.647	479.306	476.839
55.0	489.589	489.655	485.926	478.550	469.920	459.704	451.979	445.841	441.356	439.936
57.5	446.423	446.830	443.241	436.688	429.013	420.500	412.268	407.501	403.414	401.354
60.0	403.406	403.879	399.851	396.196	387.334	380.207	374.343	369.675	366.212	364.359
62.5	361.544	362.125	358.653	354.575	346.842	341.069	336.293	333.071	330.188	328.162
65.0	318.934	321.085	317.729	314.050	308.261	303.493	299.199	296.341	295.195	291.698
67.5	277.545	279.904	277.944	273.625	269.912	265.684	262.387	259.920	260.617	256.506
70.0	237.759	238.872	237.269	234.811	232.053	229.005	226.912	224.436	226.039	220.881
72.5	198.057	199.278	198.256	195.656	193.663	192.492	191.686	190.041	191.462	187.624
75.0	159.442	160.779	160.098	158.919	158.105	158.429	157.623	156.809	156.884	154.816
77.5	121.567	123.485	124.241	124.432	125.387	125.545	125.313	125.487	125.238	124.607
80.0	87.670	89.240	89.954	91.615	92.844	94.796	95.660	95.984	96.200	95.826
82.5	56.124	56.855	58.973	62.445	64.347	66.656	68.076	69.588	69.961	69.912
85.0	28.780	29.735	33.149	36.314	39.096	42.477	44.321	45.932	46.314	46.572
87.5	8.165	9.718	13.215	16.363	19.760	22.393	25.342	26.803	27.551	27.916
90.0	0.050	1.503	4.153	7.343	10.233	12.908	15.424	16.853	18.248	18.556

Vert. Angles **Horizontal Angles**

	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>	<u>190</u>
0.0	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790
2.5	1150.223	1146.054	1144.268	1138.994	1138.537	1143.711	1147.665	1152.582	1151.378	1151.411
5.0	1140.497	1137.689	1135.912	1131.020	1130.887	1135.630	1140.796	1145.971	1146.062	1146.378
7.5	1126.526	1124.167	1121.900	1118.303	1118.295	1123.835	1129.757	1135.023	1137.881	1137.141
10.0	1107.373	1106.376	1104.316	1101.118	1102.530	1107.281	1115.189	1121.077	1125.305	1124.616
12.5	1084.747	1084.332	1082.671	1080.112	1082.820	1088.227	1097.206	1103.843	1108.087	1107.888
15.0	1058.824	1058.035	1057.902	1056.324	1059.513	1067.329	1075.162	1082.255	1087.920	1087.322
17.5	1028.831	1028.299	1029.022	1028.399	1032.793	1041.257	1051.274	1058.160	1065.120	1064.730
20.0	996.438	996.620	997.725	997.899	1003.165	1012.510	1023.183	1030.999	1040.194	1038.964
22.5	960.348	960.099	963.413	963.969	972.201	981.171	992.916	1001.479	1012.036	1010.201
25.0	923.287	923.395	927.456	929.765	937.490	949.160	959.900	968.903	980.299	979.643
27.5	884.763	884.547	889.315	892.621	900.719	912.024	926.227	932.830	945.763	945.065
30.0	843.890	844.695	849.338	853.699	862.395	874.622	888.385	895.869	909.515	909.648

IES INDOOR REPORT
PHOTOMETRIC FILENAME : TRSD48L40.IES

CANDELA TABULATION - (Cont.)

32.5	801.222	804.004	808.149	813.307	822.601	835.609	849.504	857.146	871.590	872.221
35.0	759.559	763.064	767.167	772.940	782.575	795.540	809.727	816.887	832.992	833.665
37.5	719.084	720.969	726.318	733.104	741.834	754.525	766.818	775.888	791.886	790.980
40.0	677.587	678.966	685.145	691.641	700.420	712.273	725.330	733.802	749.533	748.819
42.5	636.231	637.220	643.300	649.978	657.594	670.145	681.964	691.292	707.248	705.545
45.0	594.676	596.313	601.338	607.584	615.433	627.975	638.889	648.441	664.530	662.993
47.5	554.949	556.502	561.270	567.840	573.729	587.118	595.956	604.502	622.410	620.525
50.0	514.673	516.857	522.198	527.232	532.855	544.267	554.110	560.730	578.978	576.694
52.5	477.346	477.985	482.271	487.737	493.219	502.505	511.650	519.241	534.707	532.996
55.0	437.053	440.401	443.349	447.735	453.341	461.722	469.439	476.357	491.283	489.788
57.5	400.175	402.559	404.560	409.918	414.752	421.737	428.324	433.648	450.318	448.391
60.0	363.188	364.733	367.167	371.735	375.431	381.968	386.835	391.728	408.157	406.213
62.5	327.273	327.281	329.649	332.896	336.526	341.626	346.269	350.389	366.162	365.182
65.0	291.491	291.474	293.459	296.366	298.734	302.928	306.591	308.958	323.909	322.788
67.5	255.841	255.393	255.958	259.446	261.215	263.823	266.573	269.372	282.554	281.773
70.0	220.848	220.474	220.940	222.526	223.024	226.604	227.468	228.648	242.809	242.220
72.5	187.126	186.270	186.636	186.819	186.819	187.832	189.443	188.953	202.633	203.730
75.0	155.040	153.470	153.046	152.855	151.684	151.585	152.124	152.149	165.497	165.397
77.5	123.319	123.161	121.442	119.847	119.291	117.713	117.189	116.924	127.647	127.962
80.0	94.439	93.982	92.072	89.863	87.703	86.216	84.738	83.525	93.318	93.692
82.5	69.139	67.453	65.576	63.541	60.443	57.826	55.343	53.026	61.473	62.627
85.0	46.024	43.955	42.685	39.503	36.505	33.282	30.034	27.418	33.938	35.575
87.5	27.235	25.657	23.805	21.130	17.833	14.835	11.221	8.597	12.451	14.079
90.0	18.016	16.828	16.853	12.725	10.191	7.068	4.361	1.678	0.781	2.558

**Vert.
Angles**

Horizontal Angles

	<u>200</u>	<u>210</u>	<u>220</u>	<u>230</u>	<u>240</u>	<u>250</u>	<u>260</u>	<u>270</u>	<u>280</u>	<u>290</u>
0.0	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790
2.5	1151.345	1154.310	1156.453	1159.219	1156.370	1154.958	1154.750	1152.964	1151.785	1148.462
5.0	1145.680	1148.305	1150.730	1153.147	1150.522	1148.305	1148.504	1146.826	1146.037	1142.955
7.5	1136.925	1139.359	1141.784	1143.296	1140.090	1137.557	1138.113	1136.552	1135.929	1132.781
10.0	1124.259	1125.397	1127.855	1127.764	1124.890	1121.576	1121.053	1121.368	1119.624	1109.308
12.5	1106.708	1107.481	1108.079	1108.112	1104.515	1099.773	1099.415	1098.527	1097.721	1085.395
15.0	1086.408	1085.569	1085.295	1083.044	1078.875	1074.124	1072.031	1072.197	1070.461	1061.474
17.5	1062.911	1061.399	1059.979	1056.041	1050.859	1044.729	1043.607	1042.212	1041.755	1037.561
20.0	1036.772	1034.546	1031.190	1026.281	1020.010	1013.415	1010.865	1009.744	1009.461	1012.510
22.5	1007.144	1004.129	999.071	993.040	985.997	978.023	975.515	973.978	974.751	977.400
25.0	974.020	970.116	964.019	956.644	947.424	940.405	936.784	934.749	936.078	938.927
27.5	938.545	933.495	926.227	917.074	907.165	898.759	895.644	892.646	895.295	897.621
30.0	901.292	896.624	888.186	877.446	865.095	857.545	854.372	851.564	854.687	856.722
32.5	863.234	857.636	848.798	836.531	823.880	816.164	812.327	810.126	813.606	816.787
35.0	822.228	816.804	806.837	796.138	782.791	774.194	770.290	767.607	771.810	775.847
37.5	781.337	774.651	764.509	751.344	738.636	730.347	726.393	724.865	727.747	733.827
40.0	738.104	733.237	721.351	707.912	693.817	685.993	683.767	681.001	684.539	689.639
42.5	695.943	690.494	677.994	664.355	652.877	643.042	640.285	639.628	641.555	647.943
45.0	653.740	648.341	635.542	621.837	612.011	603.414	599.311	598.929	600.673	607.185
47.5	611.396	604.768	593.655	580.664	572.250	563.687	559.027	560.755	560.356	567.433
50.0	569.617	561.012	550.729	538.196	531.219	523.702	519.250	519.623	520.778	526.791
52.5	526.393	518.444	508.136	496.358	489.830	483.642	479.622	479.181	481.000	486.100
55.0	484.115	476.507	466.714	455.036	449.355	444.587	440.758	441.256	442.643	446.564
57.5	442.137	435.160	426.264	417.950	412.542	407.700	405.208	404.585	407.218	410.200
60.0	401.969	394.826	387.151	379.709	374.775	372.341	370.223	369.368	371.129	374.659
62.5	360.098	354.500	347.689	342.357	337.855	335.895	334.998	333.503	336.584	338.063
65.0	318.917	314.282	308.834	305.013	300.818	299.730	298.808	297.380	300.137	301.823
67.5	278.018	275.103	270.668	267.329	264.430	263.574	263.250	262.694	264.687	266.390

IES INDOOR REPORT
PHOTOMETRIC FILENAME : TRSD48L40.IES

CANDELA TABULATION - (Cont.)

70.0	239.587	236.887	233.581	231.497	230.076	228.955	229.320	229.752	230.541	232.676
72.5	201.337	200.033	197.625	197.193	196.346	195.673	196.520	197.301	197.957	199.419
75.0	163.371	163.288	162.972	163.612	163.470	163.836	164.725	164.866	165.946	166.701
77.5	128.045	128.203	129.233	130.462	131.866	132.622	133.419	134.997	135.396	135.795
80.0	93.742	96.250	98.110	100.486	102.754	103.460	104.813	105.893	106.516	106.225
82.5	64.023	67.694	70.493	72.644	75.568	77.246	78.525	79.821	79.954	79.272
85.0	38.623	42.278	45.608	48.233	51.937	54.213	55.434	56.149	56.547	55.584
87.5	17.575	21.463	25.225	29.013	31.912	34.628	36.181	36.729	36.804	35.558
90.0	6.180	9.726	14.004	17.384	20.300	22.219	24.021	24.694	24.445	23.664

**Vert.
Angles**

Horizontal Angles

	<u>300</u>	<u>310</u>	<u>320</u>	<u>330</u>	<u>340</u>	<u>350</u>	<u>360</u>
0.0	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790	1152.790
2.5	1146.552	1141.718	1141.336	1146.187	1150.082	1154.235	1151.967
5.0	1141.112	1136.975	1137.349	1141.959	1146.095	1150.140	1147.266
7.5	1131.335	1128.270	1129.998	1134.774	1139.484	1143.429	1138.827
10.0	1117.157	1116.409	1117.572	1122.788	1128.611	1132.340	1127.058
12.5	1097.173	1097.272	1099.548	1105.861	1112.813	1117.705	1111.443
15.0	1073.119	1074.207	1077.878	1085.295	1093.020	1098.900	1091.824
17.5	1046.249	1048.134	1053.226	1061.532	1070.677	1077.155	1069.206
20.0	1017.103	1019.287	1026.248	1035.110	1045.709	1052.852	1044.048
22.5	983.663	987.608	995.084	1006.073	1016.854	1024.811	1014.262
25.0	946.236	951.461	961.320	973.222	985.640	993.148	981.985
27.5	906.650	912.888	924.084	937.000	950.555	958.737	948.470
30.0	866.507	873.559	886.956	900.753	914.790	922.190	912.323
32.5	826.032	834.869	847.254	862.769	876.491	884.307	873.426
35.0	783.007	795.133	807.493	823.465	837.751	846.066	833.374
37.5	741.227	752.133	765.381	782.450	796.105	805.499	791.969
40.0	697.447	708.842	722.306	738.744	753.122	763.213	751.751
42.5	655.235	666.939	679.954	695.794	710.504	720.247	708.377
45.0	614.337	627.070	638.590	654.430	667.894	676.698	663.500
47.5	573.687	586.586	597.284	612.800	626.314	634.711	621.098
50.0	533.303	544.134	554.093	569.094	581.827	589.876	577.466
52.5	492.280	502.106	512.148	525.911	538.628	545.978	534.126
55.0	453.641	461.847	470.817	483.426	494.498	502.380	489.589
57.5	416.081	423.216	431.306	442.336	453.491	460.335	446.423
60.0	380.357	385.182	392.716	402.775	411.047	418.971	403.406
62.5	343.387	347.207	353.653	362.059	370.356	375.822	361.544
65.0	306.433	308.393	314.557	320.894	328.560	332.880	318.934
67.5	269.413	271.249	275.518	281.316	287.379	290.278	277.545
70.0	233.955	236.679	240.168	243.366	248.466	250.251	237.759
72.5	199.552	201.811	203.688	206.138	209.253	210.682	198.057
75.0	167.017	167.922	168.919	170.514	171.901	172.109	159.442
77.5	135.313	135.662	135.205	135.272	134.964	135.047	121.567
80.0	105.179	104.946	103.310	101.773	100.959	99.489	87.670
82.5	77.561	76.723	74.364	72.121	69.471	67.860	56.124
85.0	54.255	52.004	48.665	45.318	42.219	40.060	28.780
87.5	34.561	31.073	28.423	24.079	20.225	17.509	8.165
90.0	21.488	18.888	15.906	11.745	7.899	3.995	0.050

IES INDOOR REPORT
PHOTOMETRIC FILENAME : TRSD48L40.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	411.45	N.A.	14.80
0-30	850.24	N.A.	30.60
0-40	1348.54	N.A.	48.60
0-60	2248.63	N.A.	81.00
0-80	2724.09	N.A.	98.20
0-90	2775.42	N.A.	100.00
10-90	2666.98	N.A.	96.10
20-40	937.08	N.A.	33.80
20-50	1422.24	N.A.	51.20
40-70	1204.51	N.A.	43.40
60-80	475.46	N.A.	17.10
70-80	171.04	N.A.	6.20
80-90	51.33	N.A.	1.80
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	2775.42	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	108.43
10-20	303.02
20-30	438.78
30-40	498.30
40-50	485.16
50-60	414.94
60-70	304.41
70-80	171.04
80-90	51.33
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

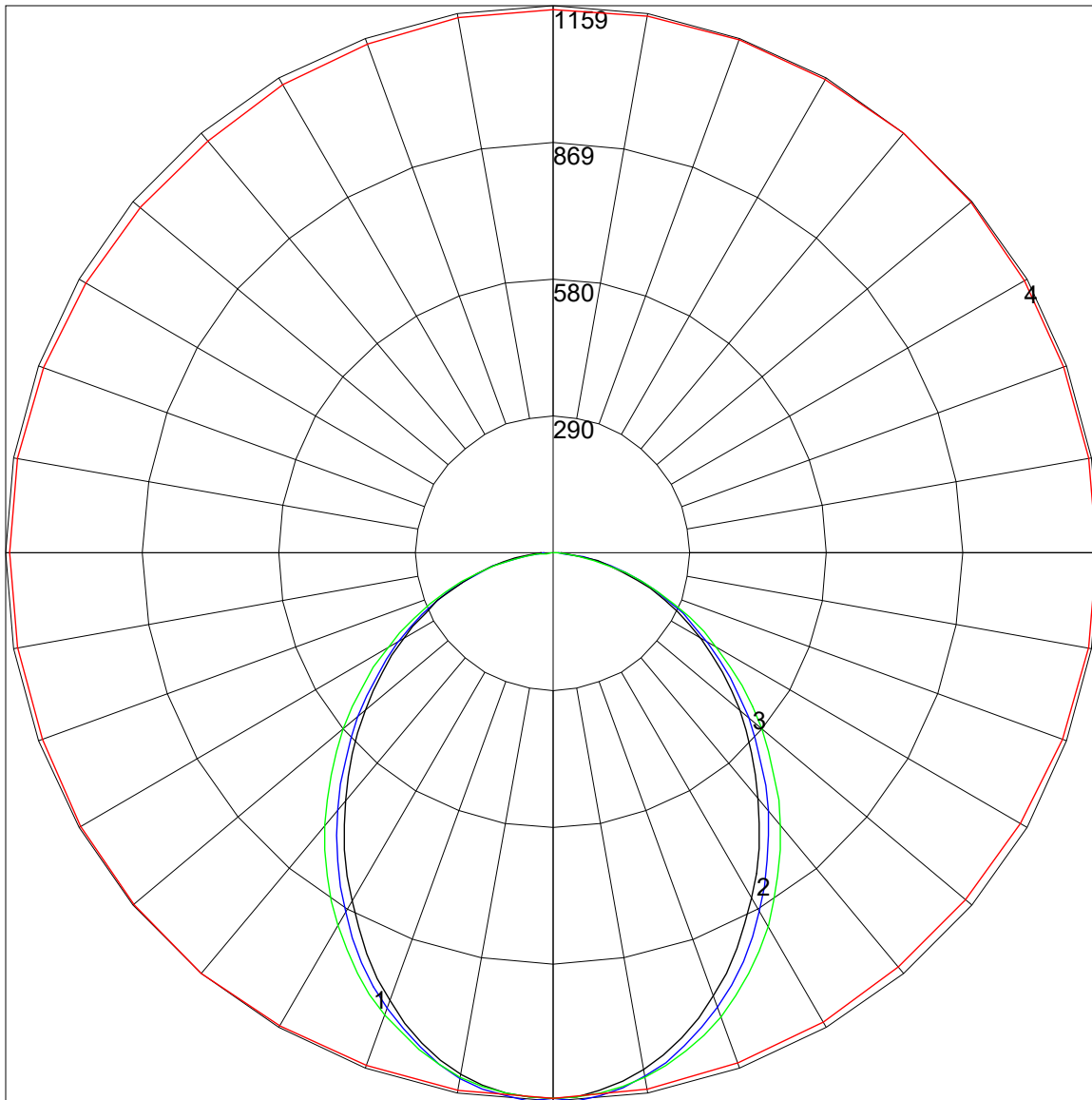
IES INDOOR REPORT
PHOTOMETRIC FILENAME : TRSD48L40.IES

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	109	104	100	97	106	102	98	95	98	95	92	94	92	89	90	88	87	84
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	60
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	49	59	53	48	58	52	48	45
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

POLAR GRAPH



Maximum Candela = 1159.219 Located At Horizontal Angle = 230, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (230 - 50) (Through Max. Cd.)
2 - Vertical Plane Through Horizontal Angles (90 - 270)
3 - Vertical Plane Through Horizontal Angles (0 - 180)
4 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)