



IES INDOOR REPORT

PHOTOMETRIC FILENAME : COPY_BL736LEDHTLOWBDWT40120-277V.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] 8,569
 [TESTLAB] CSA Group
 [ISSUEDATE] 2/11/2016 8:26:17 AM
 [MANUFAC] BEGHELLI
 [LUMINAIRE] BL736LEDHTLOWBDWT40120-277V
 [_AMBIENT] 24.8 deg C
 [_POWERFACTOR] 0.9943
 [_ATHD] 6.85%
 [_CURRENT] 1.2578
 [_VOLTAGE] 120.08
 [_STABILIZATION] 37:13.4 Stable
 [_POWER VARIATION] 0.20 %
 [_LIGHT VARIATION] 0.49 %
 [_Lumens] 15,028.50

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	15170
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	150
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Point
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

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	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572
2.5	8765.514	8783.027	8766.281	8745.449	8732.012	8732.022	8726.584	8729.449	8740.687	8725.949
5.0	8911.790	8940.309	8897.717	8860.371	8844.251	8839.055	8839.792	8839.893	8864.396	8848.619
7.5	9133.494	9124.152	9093.757	9085.213	9085.021	9072.986	9067.922	9065.178	9084.143	9070.837
10.0	9303.356	9284.471	9284.521	9311.880	9365.599	9403.600	9384.413	9353.301	9352.696	9326.023
12.5	9449.500	9422.465	9462.464	9559.944	9665.737	9729.533	9739.672	9674.715	9628.694	9575.106
15.0	9573.593	9546.083	9638.479	9810.449	9971.635	10050.080	10064.566	9957.502	9833.954	9749.366
17.5	9598.601	9587.222	9764.347	10035.845	10241.893	10317.795	10287.319	10149.073	99951.742	9829.324
20.0	9437.940	9458.580	9758.788	10161.814	10422.952	10497.825	10415.215	10198.787	9912.560	9725.518
22.5	9095.573	9143.390	9576.054	10109.256	10461.075	10576.169	10350.127	9983.378	9604.180	9359.697
25.0	8644.286	8731.295	9258.363	9846.201	10331.565	10451.673	10079.879	99569.144	9112.259	8826.667
27.5	8000.036	8144.951	8768.560	9448.643	10031.154	10100.328	9663.084	9005.084	8475.161	8143.437
30.0	7178.581	7375.619	8067.909	8871.337	9522.245	9615.499	9135.976	8289.855	7679.662	7290.900
32.5	6330.775	6572.120	7248.440	8153.152	8794.830	8950.296	8403.889	7474.109	6744.413	6327.678
35.0	5464.690	5711.846	6387.581	7249.923	7926.041	8073.548	7514.824	6523.637	5764.334	5381.303
37.5	4677.251	4895.898	5518.368	6322.977	6950.844	7041.354	6501.807	5544.375	4777.304	4432.213
40.0	3929.367	4114.895	4667.556	5330.741	5886.661	5927.638	5424.762	4579.549	3854.806	3491.588
42.5	3175.935	3347.854	3830.484	4423.729	4885.659	4880.746	4420.854	3602.163	2950.185	2634.118
45.0	2530.938	2659.076	3055.897	3554.255	3913.297	3876.435	3399.273	2711.301	2169.051	1913.522
47.5	1948.548	2052.000	2369.389	2764.738	3047.302	2974.235	2512.669	1958.716	1619.255	1362.122
50.0	1450.180	1533.083	1793.021	2096.266	2302.677	2239.637	1805.318	1430.105	1196.971	983.661
52.5	1071.689	1135.576	1333.190	1562.369	1737.436	1644.344	1326.189	1040.063	812.568	708.833
55.0	799.575	848.935	983.782	1156.791	1278.412	1189.042	980.160	753.342	584.428	506.710
57.5	601.527	632.679	727.274	847.029	931.889	861.213	710.195	542.169	413.628	361.584
60.0	445.960	471.816	537.327	628.735	672.163	624.266	512.591	385.745	291.463	259.867
62.5	330.412	349.569	400.716	458.590	490.771	452.255	370.018	269.915	208.922	185.569
65.0	244.896	260.321	294.842	338.140	360.545	328.939	261.895	187.183	150.997	133.797
67.5	183.450	192.449	218.224	249.042	263.408	235.807	184.056	131.023	111.472	99.821
70.0	135.492	142.775	160.611	181.322	192.620	171.506	129.661	94.575	83.549	76.951
72.5	99.710	105.016	117.535	131.598	138.004	122.620	89.097	70.313	64.140	59.933
75.0	73.360	76.306	84.164	93.778	98.529	86.343	62.213	52.548	48.402	45.850
77.5	51.933	54.233	58.803	64.815	67.933	59.015	43.903	37.780	35.096	33.300
80.0	35.490	36.276	38.778	42.249	44.892	38.960	29.053	25.745	23.576	22.486
82.5	22.052	22.305	24.130	25.321	26.683	22.557	16.918	15.182	13.932	13.014
85.0	11.470	11.278	11.712	12.358	12.358	10.391	7.838	6.900	6.305	5.962
87.5	4.287	4.267	3.672	3.682	3.672	2.451	2.038	1.614	1.211	0.767
90.0	0.000	0.404	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572
2.5	8707.952	8686.495	8662.657	8629.064	8599.496	8580.702	8565.166	8557.762	8611.137	8626.905
5.0	8797.977	8740.516	8672.503	8589.216	8512.184	8445.543	8398.008	8387.194	8458.354	8490.676
7.5	8985.452	8890.363	8761.559	8608.292	8469.461	8365.020	8284.780	8252.872	8331.104	8354.236
10.0	9211.686	9072.028	8889.122	8699.175	8514.605	8326.151	8187.018	8121.254	8196.641	8225.866
12.5	9428.306	9241.254	9049.158	8828.645	8571.320	8304.785	8085.129	7948.739	8041.599	8067.091
15.0	9577.356	9367.848	9188.776	8940.016	8615.626	8245.205	7914.763	7731.907	7821.257	7853.508
17.5	9631.367	9421.547	9238.127	8964.116	8596.106	8140.219	7727.438	7486.870	7569.249	7616.309
20.0	9518.603	9381.417	9196.201	8881.586	8495.660	7991.795	7501.346	7213.152	7286.573	7341.885
22.5	9154.659	9090.448	8983.374	8703.210	8293.920	7780.965	7235.911	6911.198	6985.638	7035.381
25.0	8624.453	8586.099	8572.853	8398.260	8023.380	7526.425	6965.401	6607.166	6666.110	6701.761
27.5	7943.291	7978.095	8023.471	7950.928	7701.038	7252.112	6723.390	6318.437	6367.092	6419.156
30.0	7114.340	7222.413	7419.825	7433.797	7314.416	6954.002	6360.050	5818.244	5932.703	6036.780

CANDELA TABULATION - (Cont.)

32.5	6194.738	6344.343	6641.344	6847.503	6830.938	6475.639	5821.946	5296.432	5408.419	5513.042
35.0	5248.423	5456.377	5783.027	6150.200	6242.656	5878.217	5224.969	4692.585	4802.766	4967.876
37.5	4332.483	4550.596	4939.892	5333.778	5496.114	5173.540	4601.429	4093.287	4184.644	4347.605
40.0	3425.421	3672.022	4103.385	4560.502	4713.780	4480.515	3968.892	3487.230	3556.343	3747.440
42.5	2598.719	2865.870	3292.612	3743.758	3935.944	3771.550	3320.395	2918.055	2995.369	3166.603
45.0	1900.408	2137.526	2536.819	2975.113	3171.143	3085.728	2693.486	2314.924	2418.679	2581.065
47.5	1371.131	1555.560	1911.071	2315.115	2514.676	2448.095	2076.817	1762.696	1845.186	1983.603
50.0	986.384	1134.365	1418.978	1733.905	1948.507	1870.840	1568.886	1318.128	1371.060	1501.155
52.5	709.005	825.330	1040.537	1288.096	1497.614	1400.164	1174.052	981.673	1024.689	1118.013
55.0	511.179	599.843	764.600	962.365	1111.254	1034.030	881.237	748.570	778.108	845.960
57.5	366.901	436.467	561.024	709.237	811.892	773.235	664.547	555.859	587.495	634.424
60.0	261.995	310.014	418.359	520.198	596.574	574.945	493.989	415.616	439.464	472.088
62.5	187.385	223.621	301.066	385.241	438.203	430.717	368.555	310.771	328.849	353.978
65.0	135.613	161.761	216.650	282.373	320.556	318.740	275.080	229.724	244.695	264.911
67.5	99.912	117.919	157.464	205.029	235.908	236.664	201.699	166.321	180.404	195.596
70.0	76.275	87.009	113.611	149.726	173.847	174.280	146.548	121.631	131.326	141.837
72.5	58.914	65.824	81.955	107.457	125.888	124.970	104.885	86.575	93.818	104.411
75.0	45.043	48.796	58.742	75.620	89.208	88.452	74.974	60.256	66.591	73.007
77.5	33.008	35.348	40.897	51.661	60.215	59.338	49.340	41.946	47.141	50.359
80.0	22.184	23.555	25.997	32.463	37.810	37.820	31.142	27.268	32.050	34.047
82.5	12.489	12.933	14.789	17.735	20.973	20.862	17.573	15.768	19.904	21.114
85.0	5.558	5.609	6.487	7.475	8.908	8.545	7.566	7.324	10.229	10.774
87.5	0.968	0.827	1.211	1.251	1.422	1.443	1.382	1.564	3.178	3.642
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.101	0.000

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	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572
2.5	8640.715	8645.527	8664.553	8686.727	8701.808	8727.381	8774.825	8798.734	8807.641	8823.500
5.0	8503.428	8524.411	8566.589	8617.846	8665.592	8712.602	8790.572	8841.295	8862.117	8884.361
7.5	8371.255	8402.447	8467.797	8555.451	8652.579	8745.721	8849.567	8930.473	8965.952	8992.988
10.0	8256.362	8319.120	8421.503	8535.629	8672.523	8825.437	8968.404	9090.005	9136.914	9185.679
12.5	8131.342	8253.518	8398.563	8572.984	8741.989	8926.185	9115.759	9277.197	9356.197	9446.575
15.0	7967.018	8153.757	8385.701	8615.879	8823.358	9014.213	9237.774	9437.889	9543.248	9708.399
17.5	7772.239	8026.285	8330.429	8628.963	8884.764	9074.893	9327.093	9562.083	9705.504	9953.093
20.0	7542.757	7864.252	8221.751	8568.566	8882.585	9107.447	9363.359	9634.525	9832.824	10139.732
22.5	7277.564	7653.816	8053.220	8437.926	8799.823	9051.589	9261.692	9547.445	9814.726	10226.609
25.0	7001.224	7409.878	7830.094	8235.147	8564.833	8755.850	8922.443	9224.124	9521.700	10047.315
27.5	6729.443	7139.500	7592.300	7944.320	8158.933	8306.217	8418.870	8736.299	9079.523	9672.213
30.0	6451.811	6882.468	7305.518	7541.022	7657.347	7750.530	7842.321	8108.795	8487.418	9157.191
32.5	5979.682	6583.490	6958.400	7100.399	7087.103	7090.755	7106.472	7331.101	7717.512	8516.784
35.0	5466.909	6098.025	6507.910	6627.171	6453.485	6281.394	6182.794	6333.115	6783.151	7659.375
37.5	4841.352	5497.446	5960.071	6046.203	5709.990	5359.250	5248.232	5382.987	5801.377	6703.053
40.0	4218.237	4777.899	5254.991	5327.766	4885.054	4424.123	4301.665	4411.462	4796.874	5674.591
42.5	3581.482	4060.864	4513.331	4513.553	4095.496	3611.575	3428.881	3497.278	3834.187	4646.119
45.0	2969.413	3361.856	3734.931	3717.539	3315.512	2805.886	2632.726	2680.483	2967.738	3686.145
47.5	2356.930	2694.747	2983.879	2984.474	2557.278	2053.453	1906.844	1918.748	2170.776	2778.518
50.0	1783.447	2085.805	2309.385	2296.120	1873.967	1452.168	1316.393	1335.752	1526.768	1970.247
52.5	1323.203	1592.653	1763.070	1711.399	1335.157	1064.314	925.302	928.449	1074.301	1384.780
55.0	986.596	1227.932	1318.421	1242.398	955.989	749.912	655.478	660.623	759.304	991.328
57.5	737.372	863.220	954.416	888.178	593.479	534.775	462.898	467.851	536.914	708.722
60.0	548.989	631.711	689.303	638.782	504.602	374.184	325.368	328.264	379.420	497.530
62.5	409.099	466.681	503.664	466.388	365.740	263.549	227.464	230.753	262.550	347.643
65.0	300.461	341.852	364.722	338.805	258.253	185.428	161.257	161.569	181.443	238.985
67.5	222.693	250.293	267.998	242.405	182.613	131.265	116.305	117.586	128.158	165.756

IES INDOOR REPORT
PHOTOMETRIC FILENAME : COPY_BL736LEDHTLOWBDWT40120-277V.IES

CANDELA TABULATION - (Cont.)

70.0	162.951	183.682	194.920	174.613	127.734	95.584	88.149	89.178	95.685	117.152
72.5	115.871	131.850	140.718	125.858	89.672	72.311	70.112	72.502	75.287	84.820
75.0	82.308	93.082	101.304	89.349	64.967	57.179	56.906	58.278	60.377	64.815
77.5	57.401	66.157	70.777	62.868	47.555	43.964	43.984	44.992	46.738	49.431
80.0	37.830	43.409	47.989	41.966	33.502	32.130	31.747	33.129	34.430	36.690
82.5	22.799	26.622	29.336	26.491	22.184	21.487	21.760	22.426	23.838	24.544
85.0	12.035	13.659	15.394	14.275	12.479	12.731	12.560	13.205	14.113	14.930
87.5	4.711	4.741	5.770	5.669	5.306	5.316	5.458	5.700	5.881	6.729
90.0	0.222	0.000	0.222	0.081	0.747	0.928	1.009	0.706	1.523	1.624

Vert. Horizontal Angles
Angles

	<u>300</u>	<u>310</u>	<u>320</u>	<u>330</u>	<u>340</u>	<u>350</u>	<u>360</u>
0.0	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572	8720.572
2.5	8830.642	8827.979	8828.493	8821.714	8811.344	8797.099	8765.514
5.0	8898.726	8905.445	8924.814	8943.295	8952.112	8934.801	8911.790
7.5	9038.293	9072.028	9111.764	9147.819	9165.332	9165.685	9133.494
10.0	9256.013	9313.696	9348.651	9353.987	9355.773	9339.955	9303.356
12.5	9560.529	9591.469	9583.580	9563.566	9534.361	9509.292	9449.500
15.0	9858.135	9893.806	9842.055	9763.822	9701.186	9646.902	9573.593
17.5	10103.738	10162.934	10109.780	9961.467	9831.130	9736.827	9598.601
20.0	10317.099	10390.660	10334.894	10107.672	9829.526	9662.519	9437.940
22.5	10469.075	10561.703	10443.814	10088.020	9636.461	9392.846	9095.573
25.0	10484.701	10650.648	10389.036	9882.871	9319.648	9001.785	8644.286
27.5	10276.606	10562.520	10168.089	9475.437	8881.092	8462.955	8000.036
30.0	9906.679	10241.166	9857.752	9045.456	8267.923	7709.573	7178.581
32.5	9395.600	9714.845	9380.942	8424.086	7467.733	6881.782	6330.775
35.0	8697.491	9054.404	8656.523	7638.472	6669.681	6010.733	5464.690
37.5	7755.685	8216.071	7769.445	6827.619	5800.469	5175.870	4677.251
40.0	6658.040	7186.338	6808.876	5915.805	4981.263	4365.209	3929.367
42.5	5580.258	6013.013	5812.000	5039.834	4173.285	3594.344	3175.935
45.0	4521.553	4877.034	4769.748	4173.698	3399.364	2898.353	2530.938
47.5	3507.900	3867.689	3778.228	3368.303	2720.381	2266.451	1948.548
50.0	2580.722	2991.465	2962.664	2659.358	2090.314	1732.069	1450.180
52.5	1839.032	2224.656	2277.749	2027.244	1598.827	1281.892	1071.689
55.0	1299.758	1600.149	1714.022	1521.553	1178.410	957.846	799.575
57.5	928.832	1139.359	1266.730	1111.022	888.773	714.261	601.527
60.0	666.433	816.603	915.264	824.866	659.110	533.786	445.960
62.5	473.541	587.112	652.048	603.827	491.508	397.548	330.412
65.0	332.934	420.922	472.734	445.012	365.488	295.810	244.896
67.5	233.467	299.654	342.699	327.799	270.762	220.403	183.450
70.0	161.105	215.903	248.619	242.838	200.549	162.356	135.492
72.5	113.450	155.537	177.942	176.651	146.437	120.158	99.710
75.0	80.048	111.200	128.602	126.282	107.185	87.735	73.360
77.5	57.411	77.113	92.003	89.551	75.418	62.273	51.933
80.0	40.453	52.538	63.262	60.437	50.763	42.723	35.490
82.5	26.844	34.047	40.281	39.313	32.372	27.540	22.052
85.0	15.939	19.288	22.991	22.123	18.330	15.868	11.470
87.5	7.778	8.585	9.997	9.947	8.010	6.840	4.287
90.0	1.493	2.421	2.038	1.715	1.362	1.190	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : COPY_BL736LEDHTLOWBDWT40120-277V.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3442.16	N.A.	22.70
0-30	7453.23	N.A.	49.10
0-40	11425.55	N.A.	75.30
0-60	14776.58	N.A.	97.40
0-80	15154.58	N.A.	99.90
0-90	15170.18	N.A.	100.00
10-90	14328.64	N.A.	94.50
20-40	7983.39	N.A.	52.60
20-50	10409.41	N.A.	68.60
40-70	3642.44	N.A.	24.00
60-80	378.01	N.A.	2.50
70-80	86.59	N.A.	0.60
80-90	15.60	N.A.	0.10
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	15170.18	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

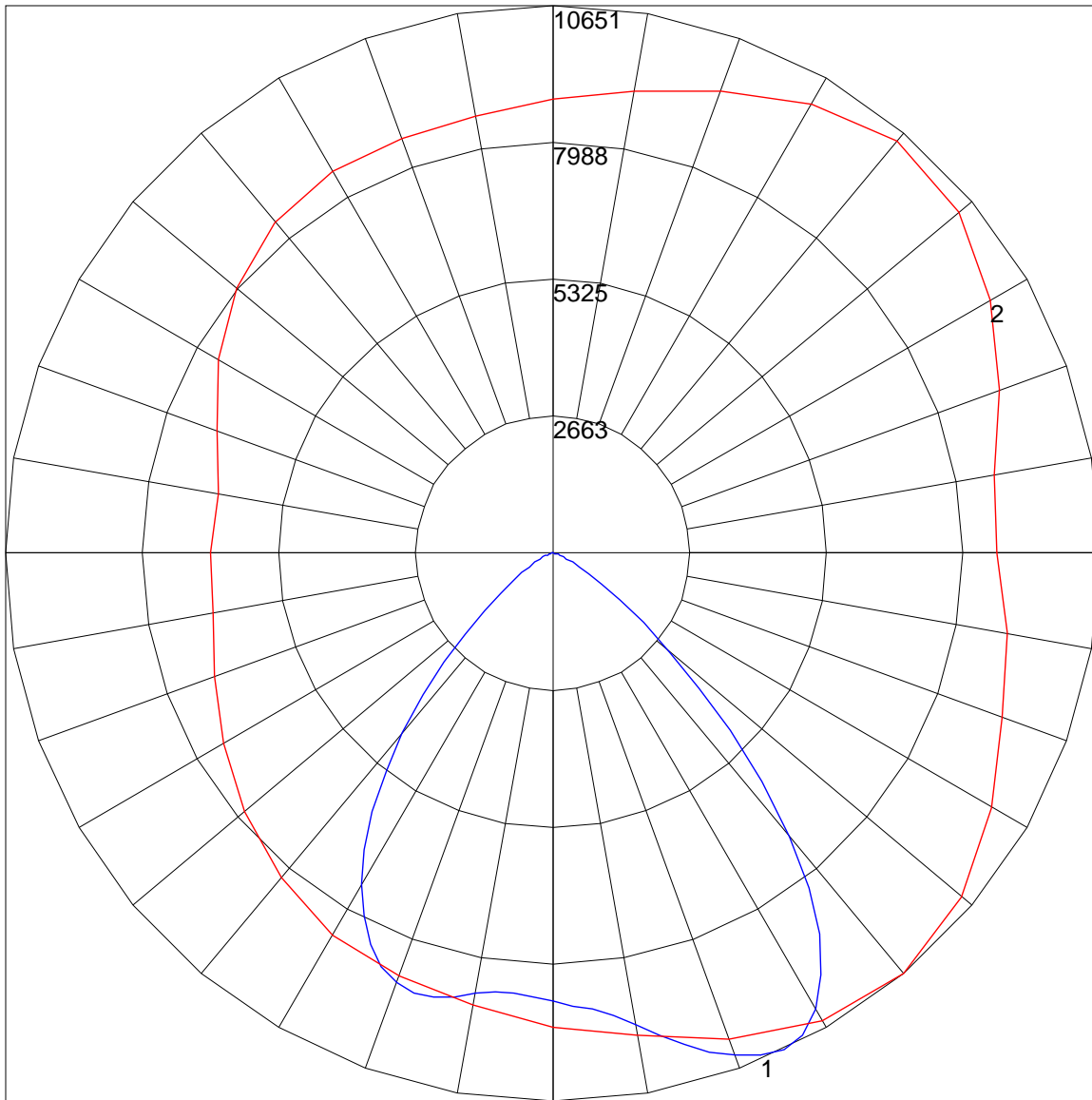
Zone	Lumens
0-10	841.55
10-20	2600.62
20-30	4011.06
30-40	3972.33
40-50	2426.02
50-60	925.01
60-70	291.42
70-80	86.59
80-90	15.60
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63	72	67	63	70	66	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	42
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40	39

POLAR GRAPH



Maximum Candela = 10650.648 Located At Horizontal Angle = 310, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (310 - 130) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)