



The Perfect Lighting Choice.™

visit us at www.JDG.com

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FAL-8635.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LM-79-08
[TESTLAB] Orb Optronix, Inc.
[ISSUE DATE] 07-22-2019
[MANUFAC] Justice Design
[LUMINAIRE] FAL-8635

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	656
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	19
Total Luminaire Watts	33.78
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.21 ft
Luminous Width (90-270)	2.38 ft
Luminous Height	0.38 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1151	1089	729
55	1298	1239	946
65	1445	1395	1271
75	1600	1574	1843
85	1785	1792	3237

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FAL-8635.IES

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>	<u>202.5</u>
0.0	6.804	6.804	6.804	6.804	6.804	6.804	6.804	6.804	6.804	6.804
2.5	6.014	6.905	6.829	6.653	7.274	7.224	10.660	8.518	8.627	9.316
5.0	10.912	12.163	11.424	9.988	9.836	10.676	12.592	12.970	13.070	12.449
7.5	18.161	18.388	16.321	13.734	11.970	12.365	11.878	12.516	12.860	12.188
10.0	23.898	25.368	21.806	16.447	12.323	11.626	12.029	12.138	11.819	11.794
12.5	36.196	37.061	30.668	21.479	14.129	11.869	12.373	11.768	11.054	11.281
15.0	44.663	44.940	38.270	26.670	16.103	12.541	12.886	11.483	10.777	10.937
17.5	51.710	51.467	43.621	30.769	17.833	13.171	12.995	11.407	11.147	10.836
20.0	58.514	58.145	48.989	34.222	19.328	13.793	13.037	11.617	11.600	11.029
22.5	65.276	63.806	53.600	37.212	20.521	14.633	12.970	11.827	12.298	11.617
25.0	71.014	69.250	57.851	40.009	21.706	15.095	12.970	12.323	13.364	12.214
27.5	76.322	74.122	62.227	42.840	22.722	15.254	12.768	12.869	14.557	12.676
30.0	81.152	78.893	66.318	45.746	23.579	15.372	12.524	13.516	15.574	13.247
32.5	85.596	82.530	69.594	48.266	24.335	15.649	12.121	14.162	16.388	13.516
35.0	90.359	86.713	72.559	50.274	24.906	15.994	11.701	14.599	17.186	13.742
37.5	94.928	90.964	76.196	52.508	25.612	16.103	11.500	14.927	18.077	14.087
40.0	98.776	94.651	79.699	54.701	26.359	16.388	11.273	15.196	18.883	14.356
42.5	102.430	98.112	82.807	57.036	27.098	16.724	11.147	15.624	19.673	14.582
45.0	106.277	101.632	85.646	59.170	27.787	16.960	11.046	15.943	20.294	14.927
47.5	110.376	105.470	88.654	61.085	28.585	17.119	10.970	16.170	20.983	15.145
50.0	114.920	109.561	91.854	63.185	29.484	17.354	10.886	16.397	21.664	15.280
52.5	119.725	113.929	95.273	65.243	30.274	17.531	10.685	16.624	22.235	15.498
55.0	124.060	117.936	98.675	67.385	30.954	17.791	10.685	16.842	22.579	15.775
57.5	128.092	121.556	101.682	69.367	31.525	17.976	10.508	16.884	23.092	15.800
60.0	131.687	124.841	104.227	71.114	32.214	18.203	10.433	16.943	23.545	15.952
62.5	135.139	128.016	106.781	72.769	32.836	18.362	10.231	17.119	23.990	16.069
65.0	138.499	131.048	109.208	74.172	33.508	18.707	10.290	17.388	24.444	16.414
67.5	141.179	133.375	111.098	75.382	33.911	18.707	10.307	17.556	25.015	16.565
70.0	143.598	135.820	113.047	76.684	34.423	18.950	10.382	17.682	25.410	16.649
72.5	146.546	138.592	115.450	78.120	34.927	19.396	10.534	17.884	25.981	16.918
75.0	149.226	140.860	117.331	79.489	35.389	19.765	10.584	18.102	26.485	17.186
77.5	151.385	142.069	119.078	80.581	35.960	20.093	10.811	18.262	26.771	17.338
80.0	153.409	144.161	120.523	81.539	36.364	20.462	10.928	18.404	27.342	17.455
82.5	155.341	145.925	121.934	82.396	36.758	20.647	10.996	18.472	27.619	17.581
85.0	156.761	147.294	122.758	83.034	37.036	20.866	11.071	18.472	27.846	17.506
87.5	157.567	148.218	123.253	83.286	37.212	20.966	11.096	18.413	28.014	17.506
90.0	158.021	148.478	123.354	83.210	37.279	20.908	11.071	18.262	28.014	17.430
92.5	157.727	148.210	122.968	83.252	37.262	20.840	11.004	18.102	28.014	17.119
95.0	156.996	147.622	122.480	82.942	37.279	20.622	11.071	17.926	27.787	16.960
97.5	156.030	146.815	121.783	82.496	37.162	20.488	11.004	17.842	27.720	16.724
100.0	154.888	145.723	120.784	81.866	36.985	20.210	11.029	17.791	27.720	16.758
102.5	153.174	144.136	119.347	80.976	36.590	20.000	10.710	17.296	27.082	16.094
105.0	151.242	142.271	117.978	80.153	36.364	19.379	10.382	16.842	26.821	15.842
107.5	149.209	140.440	116.491	79.128	36.263	19.026	10.282	16.640	26.401	15.624
110.0	146.975	138.424	114.584	78.095	36.036	18.505	10.038	16.363	25.838	15.431
112.5	144.186	135.887	112.316	76.650	35.574	18.035	9.786	16.120	25.334	15.028
115.0	141.011	132.980	109.956	75.180	35.179	18.010	9.534	15.826	24.881	14.801
117.5	138.071	130.150	107.621	73.769	34.667	17.926	9.584	15.506	24.368	14.473
120.0	134.820	127.226	104.941	72.122	34.045	17.816	9.836	15.204	23.688	14.238
122.5	131.376	124.001	102.228	70.392	33.533	17.531	10.139	15.196	23.125	14.188
125.0	128.184	120.868	99.347	68.578	33.012	17.296	10.332	15.128	22.546	14.112
127.5	124.110	117.138	96.054	66.646	32.222	17.094	10.408	15.145	21.613	13.818
130.0	120.095	113.358	94.391	67.612	31.718	16.867	10.584	15.078	20.782	13.339
132.5	117.088	110.821	93.845	65.108	31.080	16.666	10.500	14.725	19.874	13.415

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FAL-8635.IES

CANDELA TABULATION - (Cont.)

135.0	114.139	107.848	88.049	61.522	30.282	16.288	10.534	14.557	19.152	12.760
137.5	110.905	104.840	85.016	59.245	29.551	16.195	10.433	14.498	17.959	11.903
140.0	106.680	101.111	81.463	57.179	28.442	15.481	10.156	13.062	15.918	10.534
142.5	101.564	96.491	79.019	53.197	27.048	15.103	9.643	11.197	14.574	9.484
145.0	89.569	88.948	73.340	52.290	26.569	14.624	8.837	10.038	13.171	8.375
147.5	90.838	87.385	72.274	48.787	25.040	13.457	8.022	9.072	11.122	7.073
150.0	84.672	81.245	66.772	44.806	23.453	12.289	6.829	7.358	8.669	4.948
152.5	79.136	75.432	61.622	41.555	22.025	11.004	5.023	5.359	6.006	3.469
155.0	74.668	70.846	57.683	39.194	19.942	8.946	4.099	3.772	3.797	2.453
157.5	69.754	66.721	54.104	35.809	17.144	5.989	3.402	2.898	2.411	1.907
160.0	62.546	60.774	49.148	31.030	13.667	4.301	2.856	2.386	1.831	1.411
162.5	55.919	54.054	43.243	24.536	9.316	3.326	1.932	1.588	1.344	1.126
165.0	46.528	45.856	33.088	15.448	6.955	2.327	1.394	1.075	0.798	0.924
167.5	30.618	29.392	21.378	11.483	4.620	1.621	0.991	0.790	0.647	0.815
170.0	19.799	19.748	14.876	6.787	2.562	1.067	0.790	0.672	0.638	0.739
172.5	11.617	11.878	7.921	3.234	1.722	0.890	0.596	0.622	0.504	0.764
175.0	4.250	4.914	3.595	1.193	0.622	0.554	0.479	0.454	0.571	0.764
177.5	0.571	1.210	0.689	0.504	0.672	0.596	0.571	0.672	0.638	0.823
180.0	0.710	0.710	0.710	0.710	0.710	0.710	0.710	0.710	0.710	0.710

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	6.804	6.804	6.804	6.804	6.804	6.804	6.804
2.5	8.400	7.972	7.627	6.090	5.460	5.914	5.435
5.0	11.953	11.197	10.315	9.467	9.887	11.248	11.718
7.5	11.878	11.802	12.188	13.339	15.145	18.001	18.925
10.0	11.878	11.869	13.280	16.212	19.866	24.368	25.318
12.5	12.146	12.440	15.154	20.916	27.745	35.129	37.582
15.0	12.676	12.995	16.439	25.158	34.348	42.521	45.679
17.5	12.810	13.314	17.581	28.610	39.337	48.586	52.307
20.0	12.709	13.852	18.472	31.475	44.436	55.037	59.363
22.5	12.768	14.364	19.345	33.911	48.804	60.757	65.873
25.0	12.718	14.927	20.168	36.246	52.836	65.948	71.576
27.5	12.718	15.322	20.807	38.774	57.061	70.518	76.709
30.0	12.617	15.775	21.244	41.177	60.732	74.962	81.640
32.5	12.592	16.170	21.714	43.445	64.084	79.237	85.949
35.0	12.323	16.624	22.352	45.536	67.586	83.639	90.737
37.5	12.314	16.909	22.932	47.620	71.232	87.822	95.189
40.0	12.197	17.480	23.478	49.669	74.348	91.510	99.061
42.5	12.146	17.984	24.049	51.710	77.414	94.979	102.850
45.0	12.096	18.211	24.620	53.676	80.531	98.977	106.798
47.5	12.079	18.724	25.267	55.566	83.924	103.026	111.056
50.0	12.029	19.253	25.830	57.658	87.259	107.344	115.676
52.5	11.978	19.690	26.435	59.791	90.829	111.770	120.439
55.0	11.970	20.194	27.048	61.723	94.181	115.945	124.807
57.5	11.869	20.647	27.418	63.613	97.196	119.490	128.755
60.0	11.752	21.042	27.846	65.226	99.800	122.758	132.258
62.5	11.642	21.378	28.367	66.864	102.463	126.059	135.710
65.0	11.642	21.756	28.820	68.200	104.899	129.091	139.112
67.5	11.626	21.815	29.140	69.292	106.898	131.569	141.658
70.0	11.693	22.109	29.408	70.316	108.713	133.762	144.018
72.5	11.743	22.462	29.786	71.660	110.804	136.408	146.874
75.0	11.743	22.907	30.030	72.660	112.787	138.818	149.478
77.5	11.802	23.192	30.433	73.693	114.374	140.734	151.645
80.0	11.920	23.696	30.794	74.542	115.844	142.598	153.670

**IES INDOOR REPORT
PHOTOMETRIC FILENAME : FAL-8635.IES**

CANDELA TABULATION - (Cont.)

82.5	11.920	23.915	30.946	75.365	117.365	144.354	155.484
85.0	12.029	24.259	31.072	75.902	118.213	145.429	156.752
87.5	12.029	24.368	31.147	76.280	118.894	146.168	157.542
90.0	11.970	24.511	31.223	76.423	119.272	146.395	157.752
92.5	11.802	24.410	31.172	76.474	119.154	146.068	157.374
95.0	11.642	24.318	31.097	76.104	118.507	145.202	156.626
97.5	11.407	24.217	30.946	75.676	117.835	144.253	155.543
100.0	11.298	24.016	30.769	75.180	116.970	143.044	154.300
102.5	10.836	23.713	30.484	74.298	115.702	141.372	152.527
105.0	10.559	23.276	30.173	73.391	114.181	139.415	150.545
107.5	10.214	22.999	29.912	72.475	112.535	137.533	148.504
110.0	10.055	22.579	30.047	71.366	110.754	135.265	146.202
112.5	9.761	22.159	29.812	70.190	108.646	132.510	143.321
115.0	9.593	22.260	29.534	68.880	106.428	129.654	140.305
117.5	9.542	22.277	29.182	67.687	104.168	126.907	137.214
120.0	9.769	22.176	28.913	66.293	101.766	123.774	133.930
122.5	10.114	21.983	28.484	64.932	99.330	120.758	130.654
125.0	10.332	21.689	28.199	63.294	96.650	117.533	127.344
127.5	10.340	21.218	27.796	61.706	93.744	113.677	123.245
130.0	10.424	20.840	27.392	61.849	91.476	110.326	119.381
132.5	10.424	20.126	26.846	59.732	90.216	107.747	116.642
135.0	10.802	19.698	26.225	56.876	86.990	104.496	113.585
137.5	10.508	18.934	25.612	54.936	82.908	101.338	110.384
140.0	9.198	18.875	24.688	52.802	79.439	97.163	106.092
142.5	8.425	17.506	24.410	50.442	74.962	90.653	100.943
145.0	7.678	16.162	23.142	47.662	71.904	85.991	91.804
147.5	6.779	14.473	21.563	45.251	66.797	81.984	90.233
150.0	5.435	12.491	19.900	42.790	62.370	76.373	83.824
152.5	4.502	10.139	17.632	40.270	58.548	71.753	78.322
155.0	3.671	7.300	14.734	37.632	55.012	67.855	73.802
157.5	3.226	4.914	12.214	33.953	50.072	62.622	68.695
160.0	2.478	4.032	9.769	29.828	44.260	55.818	59.338
162.5	1.756	3.175	7.308	22.856	37.926	48.787	49.056
165.0	1.386	2.453	5.813	15.901	28.064	38.926	40.706
167.5	1.168	1.840	3.822	12.894	18.875	24.318	27.628
170.0	0.949	1.436	2.335	8.198	12.298	15.968	17.783
172.5	0.916	1.310	1.756	4.519	6.334	8.341	9.937
175.0	0.991	1.000	1.142	2.638	2.957	3.772	4.032
177.5	0.949	1.075	1.184	1.126	0.916	0.664	0.697
180.0	0.710	0.710	0.710	0.710	0.710	0.710	0.710

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FAL-8635.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	7.89	N.A.	1.20
0-30	23.26	N.A.	3.50
0-40	48.72	N.A.	7.40
0-60	132.86	N.A.	20.30
0-80	257.20	N.A.	39.20
0-90	328.61	N.A.	50.10
10-90	327.40	N.A.	49.90
20-40	40.83	N.A.	6.20
20-50	77.14	N.A.	11.80
40-70	142.23	N.A.	21.70
60-80	124.34	N.A.	19.00
70-80	66.25	N.A.	10.10
80-90	71.41	N.A.	10.90
90-110	138.07	N.A.	21.10
90-120	196.63	N.A.	30.00
90-130	245.20	N.A.	37.40
90-150	308.36	N.A.	47.00
90-180	326.95	N.A.	49.90
110-180	188.88	N.A.	28.80
0-180	655.56	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1.21
10-20	6.68
20-30	15.37
30-40	25.46
40-50	36.31
50-60	47.83
60-70	58.09
70-80	66.25
80-90	71.41
90-100	71.42
100-110	66.65
110-120	58.55
120-130	48.57
130-140	37.78
140-150	25.38
150-160	13.74
160-170	4.52
170-180	0.34

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FAL-8635.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	
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	92	86	80	74	84	78	73	68	65	61	57	52	49	46	41	39	36	31
2	82	72	63	56	74	65	58	52	54	48	43	43	39	35	33	30	27	22
3	73	61	52	44	67	56	48	41	46	39	34	36	31	27	28	24	20	16
4	66	53	44	36	60	48	40	33	40	33	27	31	26	22	24	20	16	12
5	60	47	37	30	55	43	34	27	35	28	23	28	22	18	21	17	13	10
6	55	41	32	25	50	38	29	23	31	24	19	24	19	15	18	14	11	8
7	51	37	28	22	46	34	26	20	28	21	16	22	17	13	17	13	9	7
8	47	33	25	19	43	30	23	17	25	19	14	20	15	11	15	11	8	5
9	44	30	22	16	40	28	20	15	23	17	12	18	13	10	14	10	7	5
10	41	27	19	14	37	25	18	13	21	15	11	17	12	8	13	9	6	4

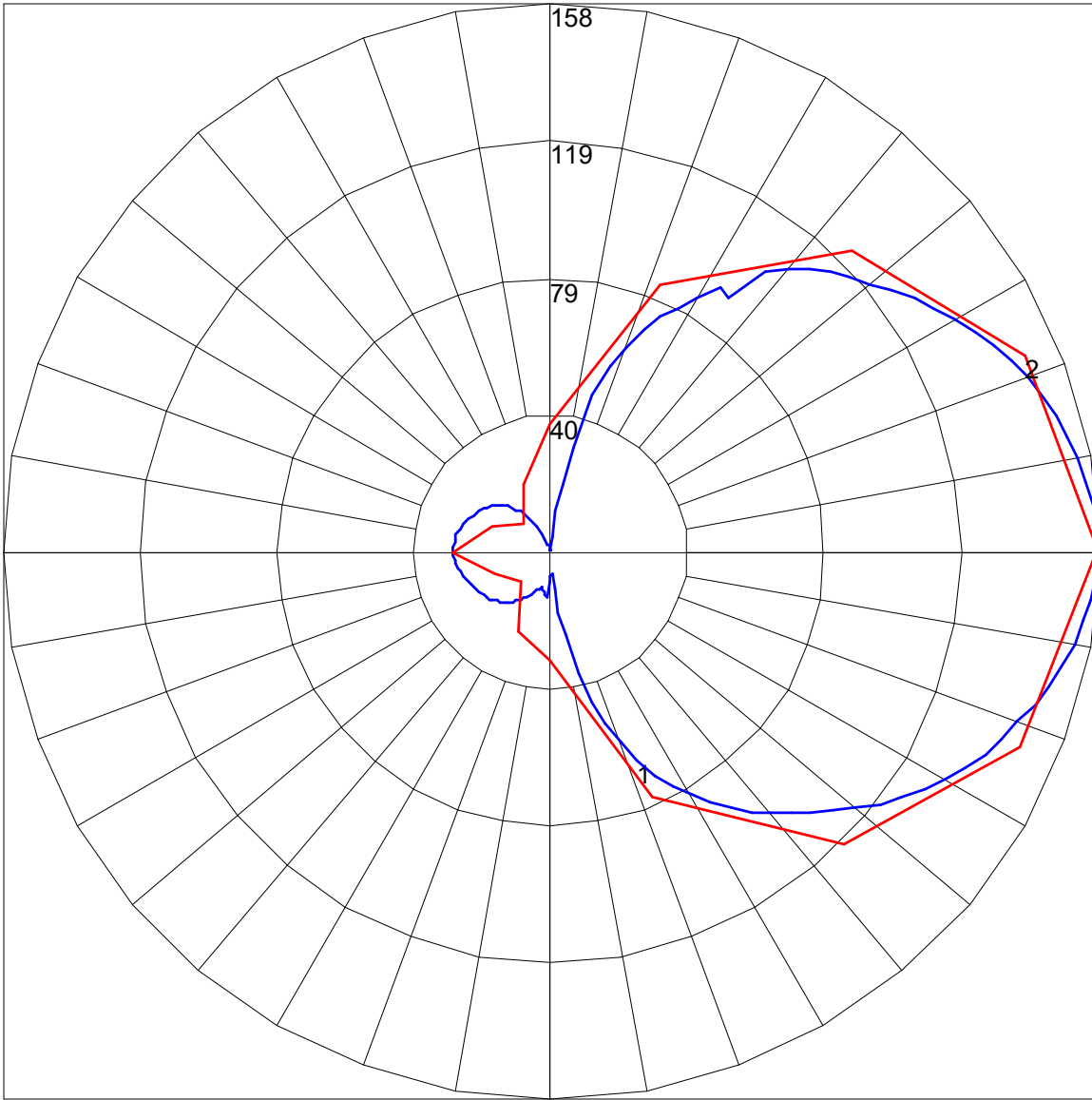
IES INDOOR REPORT
PHOTOMETRIC FILENAME : FAL-8635.IES

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					UGR Viewed Endwise				
X=2H	Y=2H	13.9	14.9	14.8	15.9	17.2	5.2	6.2	6.1	7.2	8.5
	3H	17.8	18.8	18.8	19.8	21.0	7.6	8.6	8.6	9.6	10.8
	4H	19.9	20.8	20.8	21.8	23.0	8.8	9.7	9.7	10.7	12.0
	6H	22.0	22.9	23.0	23.8	25.1	9.9	10.8	10.9	11.8	13.1
	8H	23.1	23.9	24.0	24.9	26.2	10.5	11.3	11.5	12.3	13.6
	12H	24.2	25.0	25.2	26.0	27.3	11.0	11.8	12.0	12.8	14.1
4H	2H	14.2	15.1	15.2	16.1	17.4	7.8	8.7	8.7	9.6	10.9
	3H	18.4	19.2	19.3	20.2	21.5	10.3	11.1	11.2	12.1	13.4
	4H	20.5	21.3	21.5	22.3	23.6	11.5	12.2	12.4	13.2	14.5
	6H	22.9	23.5	23.8	24.5	25.9	12.6	13.3	13.6	14.3	15.6
	8H	24.0	24.7	25.0	25.7	27.0	13.2	13.8	14.1	14.8	16.1
	12H	25.3	25.9	26.3	26.9	28.3	13.7	14.2	14.7	15.3	16.6
8H	4H	20.7	21.4	21.7	22.4	23.7	13.2	13.9	14.2	14.9	16.2
	6H	23.2	23.8	24.2	24.8	26.1	14.6	15.1	15.6	16.2	17.5
	8H	24.5	25.0	25.6	26.1	27.4	15.3	15.7	16.3	16.8	18.1
	12H	26.0	26.4	27.0	27.5	28.8	15.9	16.3	16.9	17.3	18.7
12H	4H	20.7	21.3	21.7	22.3	23.7	13.8	14.4	14.8	15.4	16.7
	6H	23.3	23.7	24.3	24.8	26.2	15.3	15.8	16.3	16.8	18.2
	8H	24.6	25.1	25.7	26.1	27.5	16.1	16.5	17.1	17.6	18.9

Maximum UGR = 28.8

POLAR GRAPH



Maximum Candela = 158.021 Located At Horizontal Angle = 0, Vertical Angle = 90
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (90) (Through Max. Cd.)