

Scaled data based on original data using
LM-66-11 Electrical and Photometric Measurements of Single-Ended Compact
Fluorescent Lamps

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: SHAPER

Report Number: 253P255

Luminaire Tested: **1215-XX-44-CFL/8/40-T5C/1/40**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 253P255
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 1215-XX-44-CFL/8/40-T5C/1/40
Description: SHAPER 44 INCH 1215 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE
WITH SHALLOW BOWL
Light Source: EIGHT 40 WATT BIAX COMPACT FLUORESCENT LAMPS AND ONE 40 WATT T5 CIRCLINE
(8)F40BX - 3150 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS
Ballast/Driver: -

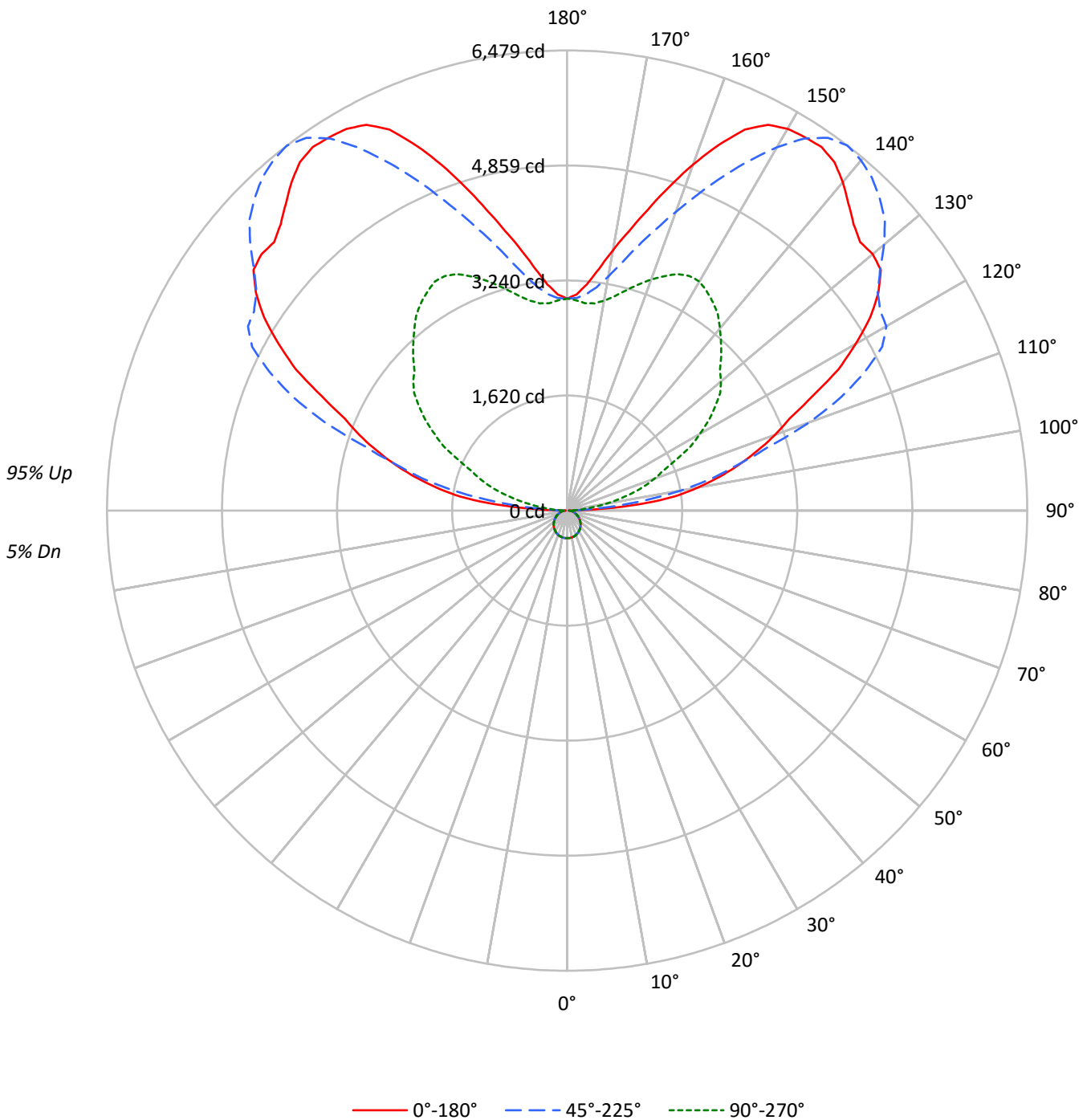
Summary

Lumens per Lamp: 28500 (1 lamp)
Luminaire Lumens: 23970.2 lumens
Efficiency: 84.1%
Efficacy: 557.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Vertical Cylinder (Dia: 3.67' x H: 0.69')
CIE Type: Indirect

Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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
RCR																		
0	81	81	81	81	70	70	70	70	49	49	49	30	30	30	13	13	13	4
1	74	70	67	64	63	61	58	56	43	41	40	26	25	25	11	11	10	3
2	67	61	56	52	58	53	49	46	37	35	33	23	22	20	9	9	9	3
3	61	54	48	43	52	46	42	38	33	30	27	20	18	17	8	8	7	2
4	56	47	41	36	48	41	36	32	29	26	23	18	16	15	7	7	6	2
5	51	42	36	31	44	36	31	27	26	22	20	16	14	12	7	6	5	2
6	47	37	31	26	40	32	27	23	23	19	17	14	12	11	6	5	5	1
7	43	33	27	23	37	29	24	20	21	17	15	13	11	9	5	5	4	1
8	40	30	24	20	34	26	21	18	19	15	13	12	10	8	5	4	4	1
9	37	27	21	17	32	24	19	15	17	14	11	10	9	7	4	4	3	1
10	34	25	19	15	29	22	17	14	15	12	10	10	8	6	4	3	3	1

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	396	396	396
5°	389	389	389
10°	380	380	380
15°	373	373	373
20°	364	364	364
25°	355	355	355
30°	344	344	344
35°	335	335	335
40°	323	323	323
45°	311	311	311
50°	298	298	298
55°	282	282	282
60°	265	265	265
65°	249	249	249
70°	232	232	232
75°	215	215	215
80°	200	200	200
85°	185	185	185



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	36.9	0.2	0.1
10°-20°	106.1	0.4	0.4
20°-30°	161.6	0.7	0.6
30°-40°	196.3	0.8	0.7
40°-50°	205.9	0.9	0.7
50°-60°	190.3	0.8	0.7
60°-70°	154.6	0.6	0.5
70°-80°	109.4	0.5	0.4
80°-90°	62.1	0.3	0.2
90°-100°	741.5	3.1	2.6
100°-110°	2447.9	10.2	8.6
110°-120°	3755.5	15.7	13.2
120°-130°	4408.5	18.4	15.5
130°-140°	4176.1	17.4	14.7
140°-150°	3501.9	14.6	12.3
150°-160°	2310.9	9.6	8.1
160°-170°	1103.1	4.6	3.9
170°-180°	301.7	1.3	1.1
0°-30°	304.5	1.3	1.1
0°-40°	500.8	2.1	1.8
0°-60°	896.9	3.7	3.1
0°-90°	1223.1	5.1	4.3
90°-120°	6945.0	29.0	24.4
90°-150°	19031.5	79.4	66.8
90°-180°	22747.0	94.9	79.8
0°-180°	23970.2	100.0	84.1

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	388	388	388	388	388	
5°	388	388	388	388	388	37
15°	376	376	376	376	376	106
25°	351	351	351	351	351	162
35°	314	314	314	314	314	196
45°	267	267	267	267	267	206
55°	213	213	213	213	213	190
65°	156	156	156	156	156	155
75°	103	103	103	103	103	109
85°	59	59	59	59	59	53
90°	19	17	17	22	24	67
95°	1026	736	623	594	219	1003
105°	2508	2822	2476	2208	948	2643
115°	3809	4278	4627	3504	1687	3811
125°	5349	5734	5338	4688	2537	4731
135°	5703	5990	6222	4958	3066	4445
145°	6247	6266	6406	4873	3580	3891
155°	5918	5652	5189	4336	3675	2711
165°	4383	4164	3859	3455	3210	1272
175°	3196	3138	3057	2992	2931	322
180°	2984	2984	2984	2984	2984	



TEST NUMBER: 253P255

CATALOG NUMBER: 1215-XX-44-CFL/8/40-T5C/1/40

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	388	388	388	388	388	388	388	388	388	388	388
2.5°	388	388	388	388	388	388	388	388	388	388	388
5°	388	388	388	388	388	388	388	388	388	388	388
7.5°	386	386	386	386	386	386	386	386	386	386	386
10°	383	383	383	383	383	383	383	383	383	383	383
12.5°	380	380	380	380	380	380	380	380	380	380	380
15°	376	376	376	376	376	376	376	376	376	376	376
17.5°	371	371	371	371	371	371	371	371	371	371	371
20°	365	365	365	365	365	365	365	365	365	365	365
22.5°	358	358	358	358	358	358	358	358	358	358	358
25°	351	351	351	351	351	351	351	351	351	351	351
27.5°	342	342	342	342	342	342	342	342	342	342	342
30°	333	333	333	333	333	333	333	333	333	333	333
32.5°	324	324	324	324	324	324	324	324	324	324	324
35°	314	314	314	314	314	314	314	314	314	314	314
37.5°	303	303	303	303	303	303	303	303	303	303	303
40°	291	291	291	291	291	291	291	291	291	291	291
42.5°	279	279	279	279	279	279	279	279	279	279	279
45°	267	267	267	267	267	267	267	267	267	267	267
47.5°	254	254	254	254	254	254	254	254	254	254	254
50°	241	241	241	241	241	241	241	241	241	241	241
52.5°	227	227	227	227	227	227	227	227	227	227	227
55°	213	213	213	213	213	213	213	213	213	213	213
57.5°	198	198	198	198	198	198	198	198	198	198	198
60°	184	184	184	184	184	184	184	184	184	184	184
62.5°	170	170	170	170	170	170	170	170	170	170	170
65°	156	156	156	156	156	156	156	156	156	156	156
67.5°	142	142	142	142	142	142	142	142	142	142	142
70°	129	129	129	129	129	129	129	129	129	129	129
72.5°	116	116	116	116	116	116	116	116	116	116	116
75°	103	103	103	103	103	103	103	103	103	103	103
77.5°	91	91	91	91	91	91	91	91	91	91	91
80°	80	80	80	80	80	80	80	80	80	80	80
82.5°	69	69	69	69	69	69	69	69	69	69	69
85°	59	59	59	59	59	59	59	59	59	59	59
87.5°	50	50	50	50	50	50	50	50	50	50	50
90°	19	19	18	18	17	17	17	17	17	17	18
92.5°	403	363	323	282	242	217	208	199	189	180	192
95°	1026	959	892	825	758	713	690	668	645	623	621
97.5°	1524	1468	1412	1355	1299	1253	1216	1179	1143	1106	1086
100°	1873	1875	1877	1878	1880	1853	1797	1741	1685	1629	1577
102.5°	2196	2254	2312	2369	2427	2415	2333	2251	2169	2087	2035
105°	2508	2587	2666	2745	2824	2820	2734	2648	2562	2476	2430
107.5°	2814	2905	2996	3087	3178	3195	3138	3080	3023	2965	2885
110°	3113	3212	3312	3411	3510	3568	3583	3598	3613	3628	3448



TEST NUMBER: 253P255

CATALOG NUMBER: 1215-XX-44-CFL/8/40-T5C/1/40

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	3388	3492	3595	3699	3802	3890	3961	4033	4104	4176	3934
115°	3809	3915	4021	4127	4233	4324	4400	4475	4551	4627	4387
117.5°	4303	4397	4491	4584	4678	4756	4817	4878	4940	5001	4775
120°	4689	4791	4893	4996	5098	5154	5163	5172	5181	5190	4988
122.5°	5060	5163	5267	5370	5473	5492	5426	5359	5293	5227	5082
125°	5349	5445	5541	5638	5734	5733	5634	5535	5437	5338	5214
127.5°	5567	5636	5706	5775	5844	5843	5770	5697	5624	5551	5405
130°	5617	5663	5710	5756	5803	5826	5825	5825	5824	5824	5630
132.5°	5594	5655	5717	5778	5839	5892	5935	5978	6022	6065	5829
135°	5703	5767	5832	5896	5961	6018	6069	6120	6171	6222	5950
137.5°	5862	5922	5982	6041	6101	6156	6205	6255	6304	6354	6051
140°	6038	6084	6130	6176	6222	6266	6309	6352	6394	6437	6111
142.5°	6182	6204	6226	6249	6271	6304	6348	6391	6435	6479	6131
145°	6247	6249	6252	6254	6257	6274	6307	6340	6373	6406	6062
147.5°	6233	6229	6225	6220	6216	6214	6213	6213	6212	6212	5897
150°	6206	6194	6182	6171	6159	6126	6071	6016	5961	5906	5635
152.5°	6123	6092	6061	6030	5999	5936	5840	5744	5648	5552	5324
155°	5918	5862	5806	5749	5693	5612	5506	5401	5295	5189	4997
157.5°	5568	5506	5444	5383	5321	5238	5134	5029	4925	4821	4661
160°	5185	5121	5057	4993	4929	4850	4756	4662	4568	4474	4342
162.5°	4778	4720	4662	4603	4545	4475	4394	4313	4231	4150	4039
165°	4383	4336	4288	4241	4194	4135	4066	3997	3928	3859	3767
167.5°	4033	3995	3958	3920	3883	3832	3769	3706	3643	3580	3510
170°	3722	3692	3662	3632	3602	3560	3507	3453	3400	3346	3296
172.5°	3429	3409	3389	3369	3349	3320	3283	3246	3208	3171	3139
175°	3196	3183	3171	3158	3145	3130	3112	3093	3075	3057	3043
177.5°	3046	3040	3034	3027	3021	3015	3010	3005	3000	2995	2993
180°	2984	2984	2984	2984	2984	2984	2984	2984	2984	2984	2984



TEST NUMBER: 253P255

CATALOG NUMBER: 1215-XX-44-CFL/8/40-T5C/1/40

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	388	388	388	388	388	388	388	388
2.5°	388	388	388	388	388	388	388	388
5°	388	388	388	388	388	388	388	388
7.5°	386	386	386	386	386	386	386	386
10°	383	383	383	383	383	383	383	383
12.5°	380	380	380	380	380	380	380	380
15°	376	376	376	376	376	376	376	376
17.5°	371	371	371	371	371	371	371	371
20°	365	365	365	365	365	365	365	365
22.5°	358	358	358	358	358	358	358	358
25°	351	351	351	351	351	351	351	351
27.5°	342	342	342	342	342	342	342	342
30°	333	333	333	333	333	333	333	333
32.5°	324	324	324	324	324	324	324	324
35°	314	314	314	314	314	314	314	314
37.5°	303	303	303	303	303	303	303	303
40°	291	291	291	291	291	291	291	291
42.5°	279	279	279	279	279	279	279	279
45°	267	267	267	267	267	267	267	267
47.5°	254	254	254	254	254	254	254	254
50°	241	241	241	241	241	241	241	241
52.5°	227	227	227	227	227	227	227	227
55°	213	213	213	213	213	213	213	213
57.5°	198	198	198	198	198	198	198	198
60°	184	184	184	184	184	184	184	184
62.5°	170	170	170	170	170	170	170	170
65°	156	156	156	156	156	156	156	156
67.5°	142	142	142	142	142	142	142	142
70°	129	129	129	129	129	129	129	129
72.5°	116	116	116	116	116	116	116	116
75°	103	103	103	103	103	103	103	103
77.5°	91	91	91	91	91	91	91	91
80°	80	80	80	80	80	80	80	80
82.5°	69	69	69	69	69	69	69	69
85°	59	59	59	59	59	59	59	59
87.5°	50	50	50	50	50	50	50	50
90°	20	21	22	23	23	24	24	24
92.5°	204	217	229	219	186	154	121	89
95°	620	618	617	572	484	395	307	219
97.5°	1066	1046	1026	945	803	661	519	377
100°	1525	1474	1422	1303	1117	930	744	558
102.5°	1983	1932	1880	1731	1486	1241	995	750
105°	2384	2339	2293	2123	1829	1536	1242	948
107.5°	2806	2726	2647	2444	2117	1791	1464	1138
110°	3268	3088	2908	2650	2315	1979	1644	1308



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CATALOG NUMBER: 1215-XX-44-CFL/8/40-T5C/1/40

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	3691	3449	3206	2904	2542	2179	1817	1455
115°	4147	3908	3668	3341	2928	2514	2101	1687
117.5°	4548	4322	4095	3758	3309	2860	2412	1963
120°	4787	4585	4384	4046	3573	3100	2627	2154
122.5°	4937	4792	4647	4330	3839	3348	2858	2367
125°	5091	4967	4844	4533	4034	3535	3036	2537
127.5°	5259	5112	4966	4651	4167	3683	3199	2715
130°	5435	5241	5046	4713	4242	3770	3299	2827
132.5°	5594	5358	5123	4773	4309	3844	3380	2916
135°	5678	5405	5133	4782	4353	3924	3495	3066
137.5°	5748	5445	5142	4792	4396	3999	3603	3207
140°	5785	5459	5133	4790	4429	4068	3708	3347
142.5°	5783	5434	5086	4753	4436	4118	3801	3483
145°	5718	5374	5030	4716	4432	4148	3864	3580
147.5°	5582	5267	4952	4669	4416	4163	3911	3658
150°	5364	5093	4822	4579	4366	4152	3939	3725
152.5°	5096	4869	4641	4438	4259	4081	3902	3724
155°	4805	4612	4420	4252	4108	3963	3819	3675
157.5°	4500	4340	4179	4040	3923	3806	3688	3571
160°	4210	4079	3947	3834	3741	3648	3554	3461
162.5°	3928	3817	3706	3616	3547	3477	3408	3338
165°	3675	3583	3491	3419	3367	3314	3262	3210
167.5°	3441	3371	3302	3247	3208	3169	3130	3091
170°	3246	3196	3146	3108	3081	3054	3027	3000
172.5°	3108	3076	3045	3019	3000	2981	2961	2942
175°	3028	3014	2999	2985	2972	2958	2945	2931
177.5°	2992	2990	2989	2985	2979	2974	2968	2962
180°	2984	2984	2984	2984	2984	2984	2984	2984

(END OF REPORT)