

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: 253P232

Luminaire Tested: **1215-XX-36-CFL/6/40-T5C/1/40**

Issue Date: 3/3/2020

**Test Information**

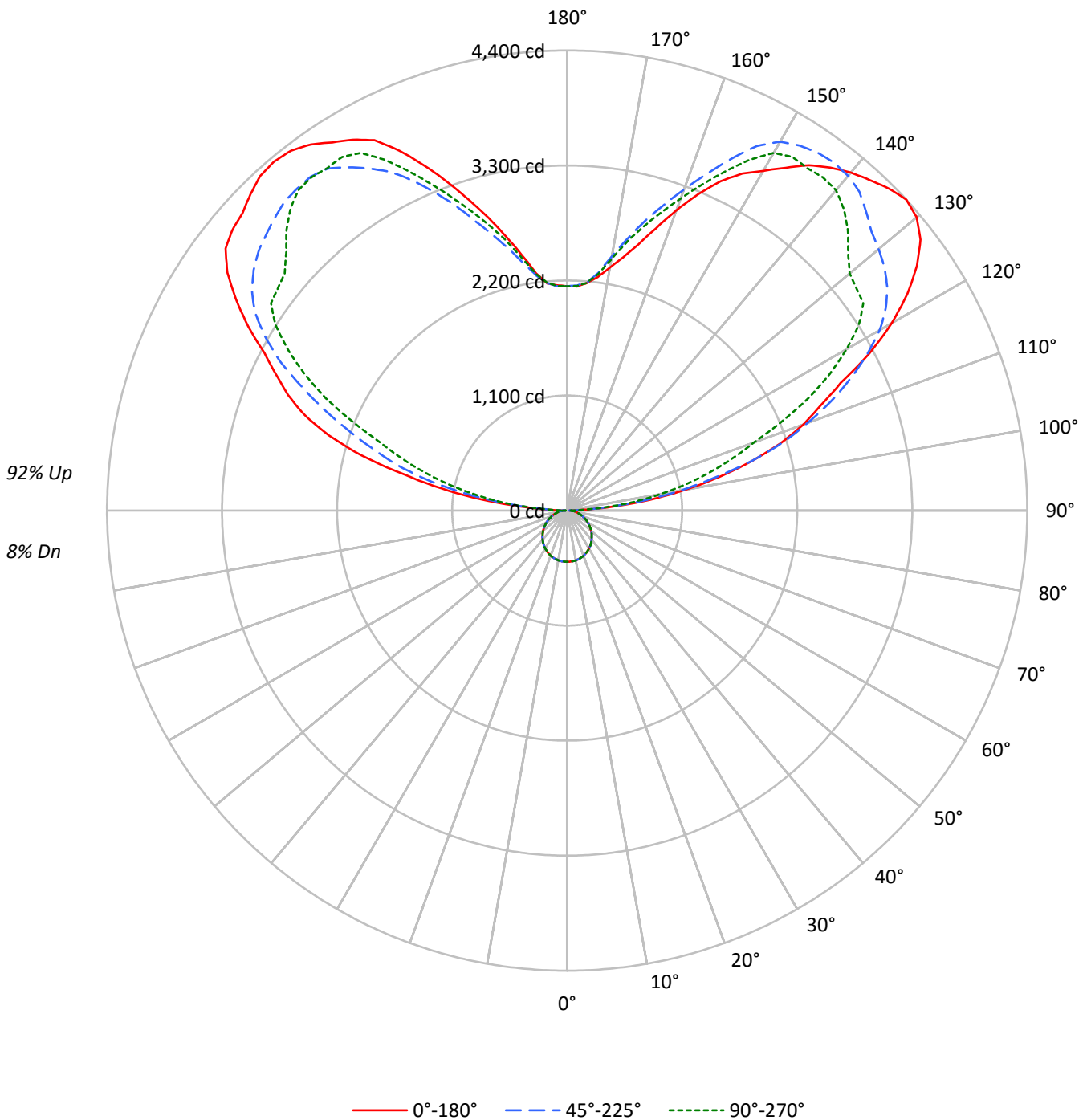
Test Method: LM-66-11  
Report Number: 253P232  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1215-XX-36-CFL/6/40-T5C/1/40  
Description: SHAPER 36 INCH 1215 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE  
WITH SHALLOW BOWL  
Light Source: SIX 40 WATT BIAx COMPACT FLUORESCENT LAMPS AND ONE 40 WATTS T5 CIRCLINE  
(3)F40BX - 3150 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 22200 (1 lamp)  
Luminaire Lumens: 18250.3 lumens  
Efficiency: 82.2%  
Efficacy: 424.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
Luminous Opening: Vertical Cylinder (Dia: 3' x H: 0.52')  
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	80	80	80	80	69	69	69	69	49	49	49	31	31	31	15	15	15	7
1	73	69	66	63	63	60	58	55	43	41	40	27	26	26	13	12	12	5
2	66	60	56	52	57	52	49	45	37	35	33	24	22	21	11	11	10	5
3	60	53	47	43	52	46	41	38	33	30	28	21	19	18	10	9	8	4
4	55	47	41	36	47	41	36	32	29	26	23	19	17	15	9	8	7	3
5	50	41	35	30	43	36	31	27	26	22	20	16	14	13	8	7	6	3
6	46	37	31	26	40	32	27	23	23	20	17	15	13	11	7	6	5	2
7	42	33	27	23	37	29	24	20	21	17	15	13	11	10	6	5	5	2
8	39	30	24	20	34	26	21	17	19	15	13	12	10	9	6	5	4	2
9	36	27	21	17	31	23	19	15	17	14	11	11	9	8	5	4	4	2
10	34	24	19	15	29	21	17	13	16	12	10	10	8	7	5	4	3	2

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	745	745	745
5°	732	732	732
10°	719	719	719
15°	704	704	704
20°	688	688	688
25°	672	672	672
30°	652	652	652
35°	633	633	633
40°	610	610	610
45°	587	587	587
50°	561	561	561
55°	533	533	533
60°	500	500	500
65°	464	464	464
70°	427	427	427
75°	390	390	390
80°	354	354	354
85°	322	322	322



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	46.4	0.3	0.2
10°-20°	133.5	0.7	0.6
20°-30°	203.1	1.1	0.9
30°-40°	245.8	1.3	1.1
40°-50°	256.7	1.4	1.2
50°-60°	235.8	1.3	1.1
60°-70°	188.3	1.0	0.8
70°-80°	128.2	0.7	0.6
80°-90°	68.3	0.4	0.3
90°-100°	490.0	2.7	2.2
100°-110°	1792.7	9.8	8.1
110°-120°	2813.0	15.4	12.7
120°-130°	3301.8	18.1	14.9
130°-140°	3105.8	17.0	14.0
140°-150°	2552.0	14.0	11.5
150°-160°	1669.4	9.1	7.5
160°-170°	803.2	4.4	3.6
170°-180°	216.6	1.2	1.0
0°-30°	382.9	2.1	1.7
0°-40°	628.7	3.4	2.8
0°-60°	1121.2	6.1	5.1
0°-90°	1505.9	8.3	6.8
90°-120°	5095.7	27.9	23.0
90°-150°	14055.3	77.0	63.3
90°-180°	16744.0	91.7	75.4
0°-180°	18250.3	100.0	82.2

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	489	489	489	489	489	
5°	488	488	488	488	488	46
15°	473	473	473	473	473	133
25°	441	441	441	441	441	203
35°	393	393	393	393	393	246
45°	333	333	333	333	333	257
55°	264	264	264	264	264	236
65°	190	190	190	190	190	188
75°	121	121	121	121	121	128
85°	65	65	65	65	65	58
90°	20	21	13	19	20	32
95°	444	392	368	381	451	514
105°	1830	1822	1412	1681	2036	1909
115°	2886	2989	2548	2799	3066	2910
125°	4083	3736	3457	3680	3965	3621
135°	4353	4043	3796	3955	4281	3357
145°	4031	4177	3999	3993	4274	2524
155°	3475	3712	3579	3478	3798	1605
165°	2635	2863	2807	2721	2894	765
175°	2185	2187	2186	2184	2180	214
180°	2145	2145	2145	2145	2145	



TEST NUMBER: 253P232

CATALOG NUMBER: 1215-XX-36-CFL/6/40-T5C/1/40

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	489	489	489	489	489	489	489	489	489
2.5°	489	489	489	489	489	489	489	489	489
5°	488	488	488	488	488	488	488	488	488
7.5°	486	486	486	486	486	486	486	486	486
10°	483	483	483	483	483	483	483	483	483
12.5°	478	478	478	478	478	478	478	478	478
15°	473	473	473	473	473	473	473	473	473
17.5°	466	466	466	466	466	466	466	466	466
20°	459	459	459	459	459	459	459	459	459
22.5°	450	450	450	450	450	450	450	450	450
25°	441	441	441	441	441	441	441	441	441
27.5°	430	430	430	430	430	430	430	430	430
30°	418	418	418	418	418	418	418	418	418
32.5°	406	406	406	406	406	406	406	406	406
35°	393	393	393	393	393	393	393	393	393
37.5°	379	379	379	379	379	379	379	379	379
40°	364	364	364	364	364	364	364	364	364
42.5°	349	349	349	349	349	349	349	349	349
45°	333	333	333	333	333	333	333	333	333
47.5°	316	316	316	316	316	316	316	316	316
50°	299	299	299	299	299	299	299	299	299
52.5°	282	282	282	282	282	282	282	282	282
55°	264	264	264	264	264	264	264	264	264
57.5°	245	245	245	245	245	245	245	245	245
60°	227	227	227	227	227	227	227	227	227
62.5°	208	208	208	208	208	208	208	208	208
65°	190	190	190	190	190	190	190	190	190
67.5°	172	172	172	172	172	172	172	172	172
70°	154	154	154	154	154	154	154	154	154
72.5°	137	137	137	137	137	137	137	137	137
75°	121	121	121	121	121	121	121	121	121
77.5°	105	105	105	105	105	105	105	105	105
80°	91	91	91	91	91	91	91	91	91
82.5°	77	77	77	77	77	77	77	77	77
85°	65	65	65	65	65	65	65	65	65
87.5°	54	54	54	54	54	54	54	54	54
90°	20	17	21	18	13	18	19	19	20
92.5°	142	106	128	158	129	146	120	109	162
95°	444	350	392	435	368	436	381	359	451
97.5°	799	665	752	794	648	780	711	696	843
100°	1154	993	1098	1147	905	1112	1050	1024	1224
102.5°	1492	1314	1430	1490	1162	1434	1383	1334	1596
105°	1830	1591	1822	1877	1412	1751	1681	1681	2036
107.5°	2136	1840	2161	2211	1655	2045	1933	2006	2386
110°	2401	2122	2447	2502	1898	2316	2212	2290	2671



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	2620	2437	2733	2757	2217	2553	2505	2599	2889
115°	2886	2743	2989	2975	2548	2830	2799	2888	3066
117.5°	3260	3014	3233	3200	2831	3182	3097	3148	3265
120°	3585	3233	3452	3451	3085	3474	3337	3364	3521
122.5°	3858	3422	3614	3662	3308	3706	3543	3519	3752
125°	4083	3533	3736	3839	3457	3893	3680	3619	3965
127.5°	4259	3596	3825	3962	3487	4041	3778	3678	4117
130°	4363	3647	3888	4021	3527	4131	3854	3728	4178
132.5°	4400	3714	3948	4075	3643	4175	3904	3806	4210
135°	4353	3813	4043	4162	3796	4173	3955	3920	4281
137.5°	4286	3906	4136	4241	3915	4154	4003	4026	4342
140°	4219	3959	4178	4270	4000	4128	4017	4086	4357
142.5°	4133	3994	4192	4261	4016	4092	4025	4109	4338
145°	4031	3983	4177	4217	3999	4021	3993	4106	4274
147.5°	3887	3922	4138	4152	4009	3887	3892	4096	4175
150°	3750	3830	4073	4082	3949	3756	3776	4041	4095
152.5°	3633	3691	3930	3958	3782	3635	3650	3881	3993
155°	3475	3507	3712	3752	3579	3471	3478	3660	3798
157.5°	3274	3316	3483	3524	3373	3276	3288	3436	3572
160°	3055	3126	3264	3300	3175	3069	3095	3224	3340
162.5°	2832	2936	3061	3084	2987	2859	2896	3031	3111
165°	2635	2766	2863	2879	2807	2671	2721	2844	2894
167.5°	2480	2596	2661	2670	2628	2513	2558	2650	2677
170°	2359	2423	2469	2473	2440	2375	2400	2462	2476
172.5°	2253	2276	2293	2292	2282	2258	2267	2292	2290
175°	2185	2185	2187	2185	2186	2183	2184	2189	2180
177.5°	2145	2147	2155	2156	2149	2144	2146	2153	2156
180°	2145	2145	2145	2145	2145	2145	2145	2145	2145

(END OF REPORT)