

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: 253P257

Luminaire Tested: **1250-XX-44-CFL/8/50-T5C/1/40**

Issue Date: 3/3/2020

**Test Information**

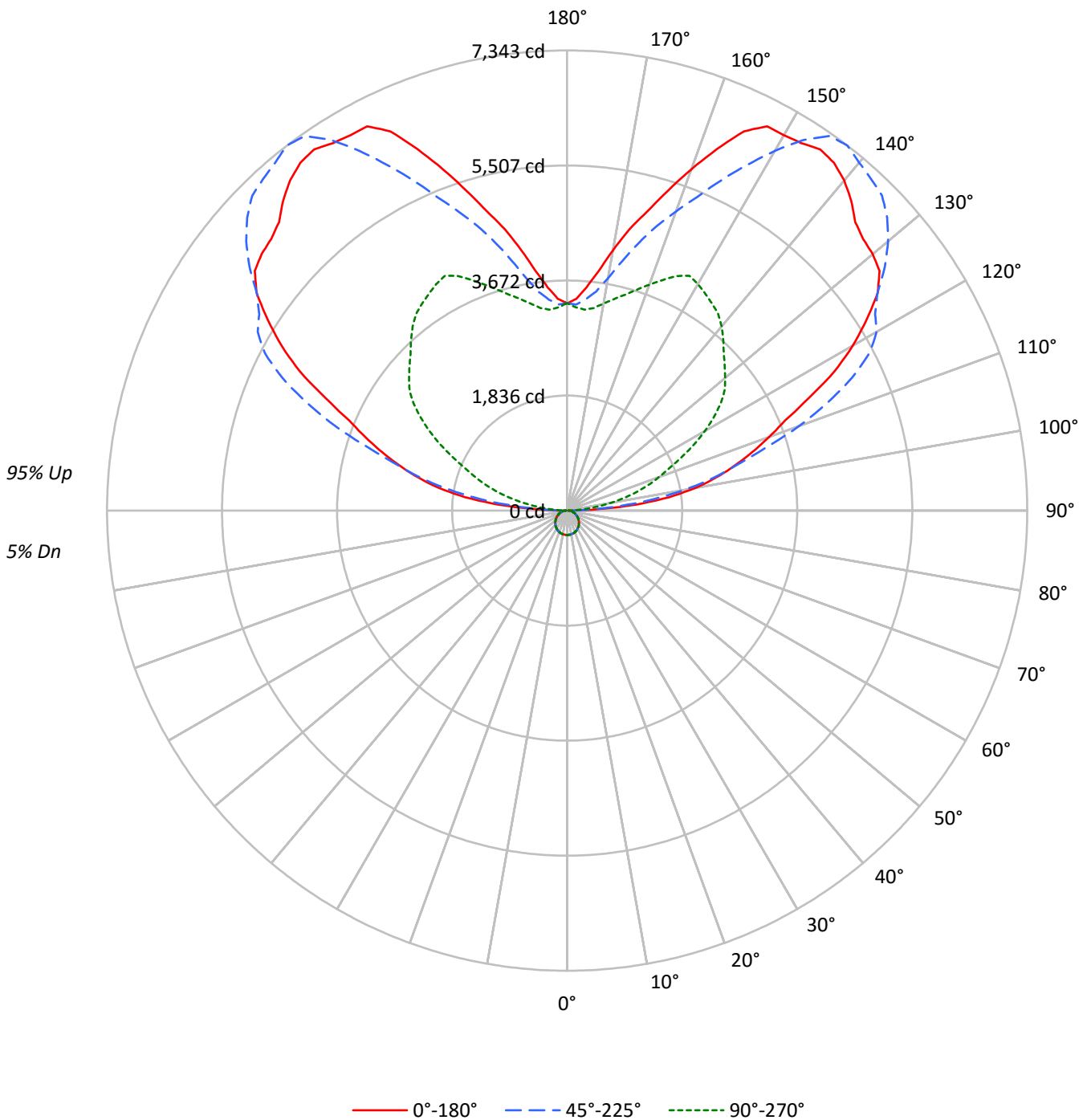
Test Method: LM-66-11  
Report Number: 253P257  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1250-XX-44-CFL/8/50-T5C/1/40  
Description: SHAPER 44 INCH 1250 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE  
WITH SHALLOW BOWL  
Light Source: EIGHT 50 WATT BIAx COMPACT FLUORESCENT LAMPS AND ONE 40 WATT T5 CIRCLINE  
(8)F50BX/SPX41 - 4000 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 35300 (1 lamp)  
Luminaire Lumens: 26964.6 lumens  
Efficiency: 76.4%  
Efficacy: 627.1 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

TEST NUMBER: 253P257  
CATALOG NUMBER: 1250-XX-44-CFL/8/50-T5C/1/40

### Luminous Intensity Polar Plot





TEST NUMBER: 253P257

CATALOG NUMBER: 1250-XX-44-CFL/8/50-T5C/1/40

**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	74	74	74	74	63	63	63	63	44	44	44	27	27	27	11	11	11	3
1	67	64	61	58	57	55	53	51	39	37	36	23	23	22	10	9	9	3
2	61	56	51	48	52	48	44	41	34	31	30	21	19	18	8	8	8	2
3	55	49	44	39	47	42	38	34	30	27	25	18	17	15	7	7	6	2
4	50	43	37	33	43	37	33	29	26	23	21	16	14	13	7	6	5	2
5	46	38	32	28	40	33	28	25	23	20	18	14	12	11	6	5	5	1
6	42	34	28	24	36	29	25	21	21	18	15	13	11	10	5	5	4	1
7	39	30	25	21	33	26	22	18	19	16	13	11	10	8	5	4	4	1
8	36	27	22	18	31	24	19	16	17	14	12	10	9	7	4	4	3	1
9	33	25	19	16	29	21	17	14	15	12	10	9	8	6	4	3	3	1
10	31	22	17	14	27	19	15	12	14	11	9	9	7	6	4	3	2	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



TEST NUMBER: 253P257

CATALOG NUMBER: 1250-XX-44-CFL/8/50-T5C/1/40

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	36.9	0.1	0.1
10°-20°	106.1	0.4	0.3
20°-30°	161.6	0.6	0.5
30°-40°	196.3	0.7	0.6
40°-50°	205.9	0.8	0.6
50°-60°	190.3	0.7	0.5
60°-70°	154.6	0.6	0.4
70°-80°	109.4	0.4	0.3
80°-90°	61.8	0.2	0.2
90°-100°	903.1	3.3	2.6
100°-110°	2738.6	10.2	7.8
110°-120°	4199.3	15.6	11.9
120°-130°	4985.7	18.5	14.1
130°-140°	4763.0	17.7	13.5
140°-150°	3962.8	14.7	11.2
150°-160°	2608.1	9.7	7.4
160°-170°	1245.6	4.6	3.5
170°-180°	335.6	1.2	1.0
0°-30°	304.5	1.1	0.9
0°-40°	500.8	1.9	1.4
0°-60°	896.9	3.3	2.5
0°-90°	1222.8	4.5	3.5
90°-120°	7841.1	29.1	22.2
90°-150°	21552.5	79.9	61.1
90°-180°	25742.0	95.5	72.9
0°-180°	26964.6	100.0	76.4

**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°	15	20	16	18	17	76
95°	1100	950	857	704	292	1092
105°	2765	2988	2791	2584	1145	2916
115°	4257	4810	5020	4001	2010	4250
125°	6047	6491	6042	5228	2996	5331
135°	6504	6838	7107	5668	3533	5075
145°	7037	7040	7297	5540	4032	4379
155°	6677	6381	5815	4926	4129	3047
165°	4940	4718	4423	3902	3565	1432
175°	3576	3477	3380	3279	3218	362
180°	3308	3308	3308	3308	3308	



TEST NUMBER: 253P257

CATALOG NUMBER: 1250-XX-44-CFL/8/50-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°	15	16	18	19	20	20	19	18	17	16	16
92.5°	472	448	425	401	378	360	349	337	326	314	307
95°	1100	1066	1032	997	963	936	916	897	877	857	827
97.5°	1642	1627	1612	1597	1582	1553	1512	1471	1429	1388	1347
100°	2074	2087	2100	2113	2126	2107	2055	2004	1952	1900	1848
102.5°	2434	2468	2502	2536	2570	2564	2517	2471	2424	2378	2342
105°	2765	2820	2876	2931	2986	2989	2940	2890	2841	2791	2762
107.5°	3094	3166	3237	3309	3380	3404	3379	3354	3330	3305	3244
110°	3429	3509	3590	3670	3751	3807	3840	3873	3905	3938	3790



TEST NUMBER: 253P257

CATALOG NUMBER: 1250-XX-44-CFL/8/50-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	3764	3877	3991	4104	4217	4299	4349	4398	4448	4498	4305
115°	4257	4385	4513	4640	4768	4853	4895	4936	4978	5020	4807
117.5°	4809	4937	5065	5193	5321	5391	5403	5416	5428	5440	5221
120°	5264	5394	5524	5654	5784	5833	5801	5768	5736	5704	5502
122.5°	5666	5801	5936	6071	6206	6224	6125	6025	5926	5826	5660
125°	6047	6158	6269	6380	6491	6491	6379	6266	6154	6042	5881
127.5°	6284	6358	6433	6507	6582	6594	6543	6492	6441	6390	6200
130°	6365	6423	6481	6539	6597	6633	6646	6659	6673	6686	6454
132.5°	6409	6468	6527	6586	6645	6703	6758	6813	6869	6924	6646
135°	6504	6579	6654	6729	6804	6871	6930	6989	7048	7107	6797
137.5°	6708	6769	6829	6890	6951	7003	7047	7091	7135	7179	6855
140°	6877	6922	6968	7013	7058	7100	7137	7174	7212	7249	6901
142.5°	6995	7023	7052	7080	7109	7147	7196	7245	7294	7343	6957
145°	7037	7034	7032	7029	7026	7055	7116	7176	7237	7297	6903
147.5°	6953	6953	6952	6952	6951	6958	6971	6984	6997	7010	6670
150°	6918	6926	6934	6942	6950	6918	6845	6772	6700	6627	6355
152.5°	6913	6888	6863	6838	6813	6736	6606	6476	6346	6216	5989
155°	6677	6615	6553	6491	6429	6333	6204	6074	5945	5815	5616
157.5°	6242	6176	6111	6045	5980	5888	5769	5650	5532	5413	5241
160°	5796	5731	5665	5600	5535	5455	5361	5267	5173	5079	4921
162.5°	5351	5287	5222	5158	5093	5028	4961	4894	4828	4761	4616
165°	4940	4892	4844	4795	4747	4690	4623	4556	4490	4423	4305
167.5°	4597	4549	4501	4452	4404	4347	4281	4214	4148	4082	3996
170°	4219	4179	4140	4100	4061	4010	3949	3888	3827	3766	3711
172.5°	3853	3824	3795	3766	3737	3701	3657	3613	3569	3525	3489
175°	3576	3554	3532	3510	3488	3466	3445	3423	3402	3380	3357
177.5°	3381	3369	3357	3346	3334	3324	3316	3308	3300	3292	3287
180°	3308	3308	3308	3308	3308	3308	3308	3308	3308	3308	3308



TEST NUMBER: 253P257

CATALOG NUMBER: 1250-XX-44-CFL/8/50-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°	17	17	18	18	18	17	17	17
92.5°	301	294	287	265	226	188	149	111
95°	797	766	736	673	578	483	387	292
97.5°	1306	1265	1224	1124	967	810	652	495
100°	1796	1744	1692	1559	1346	1133	919	706
102.5°	2305	2269	2232	2071	1785	1500	1214	928
105°	2734	2705	2676	2493	2156	1819	1482	1145
107.5°	3183	3122	3061	2844	2473	2102	1730	1359
110°	3642	3495	3347	3082	2700	2318	1936	1554





TEST NUMBER: 253P257

CATALOG NUMBER: 1250-XX-44-CFL/8/50-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	4112	3919	3726	3422	3006	2590	2174	1758
115°	4594	4381	4168	3834	3378	2922	2466	2010
117.5°	5001	4782	4563	4212	3729	3246	2764	2281
120°	5300	5098	4896	4544	4042	3541	3039	2537
122.5°	5493	5327	5160	4821	4309	3797	3285	2773
125°	5719	5558	5397	5058	4543	4027	3512	2996
127.5°	6010	5819	5629	5272	4747	4222	3697	3172
130°	6222	5989	5757	5380	4858	4336	3814	3292
132.5°	6368	6091	5813	5423	4920	4417	3914	3411
135°	6487	6176	5866	5469	4985	4501	4017	3533
137.5°	6531	6207	5883	5495	5043	4590	4138	3686
140°	6554	6206	5859	5479	5068	4657	4246	3835
142.5°	6571	6186	5800	5424	5057	4690	4324	3957
145°	6509	6116	5722	5359	5027	4696	4364	4032
147.5°	6330	5991	5651	5328	5021	4715	4408	4102
150°	6084	5812	5541	5268	4995	4722	4448	4175
152.5°	5761	5534	5307	5085	4870	4655	4439	4224
155°	5418	5219	5020	4833	4657	4481	4305	4129
157.5°	5069	4898	4726	4567	4420	4274	4127	3981
160°	4763	4604	4446	4308	4190	4073	3955	3837
162.5°	4471	4326	4181	4063	3971	3878	3786	3694
165°	4187	4068	3950	3855	3782	3710	3637	3565
167.5°	3909	3823	3736	3667	3614	3562	3509	3457
170°	3656	3601	3546	3500	3463	3427	3390	3354
172.5°	3453	3416	3380	3351	3328	3305	3283	3260
175°	3334	3311	3288	3270	3257	3244	3231	3218
177.5°	3282	3277	3272	3266	3261	3255	3250	3244
180°	3308	3308	3308	3308	3308	3308	3308	3308

(END OF REPORT)