

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: 253P233

Luminaire Tested: **1250-XX-36-CFL/3/50-T5C/1/40**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-66-11  
Report Number: 253P233  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1250-XX-36-CFL/3/50-T5C/1/40  
Description: SHAPER 36 INCH 1250 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE  
WITH SHALLOW BOWL  
Light Source: THREE 50 WATT BIAx COMPACT FLUORESCENT LAMPS AND ONE 40 WATT T5 CIRCLINE  
LAMP  
(3)F50BX - 4000 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS  
Ballast/Driver: -

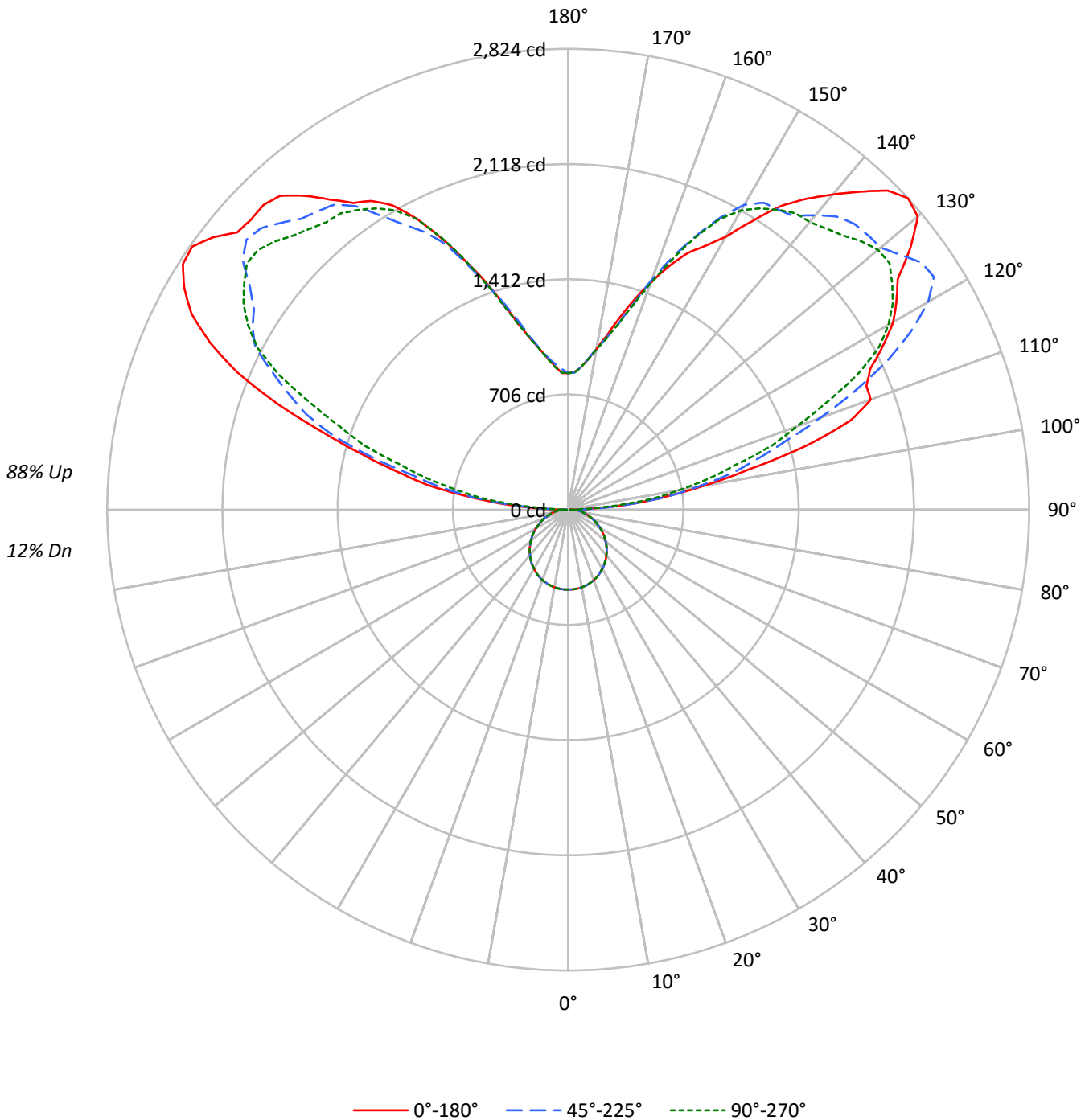
**Summary**

Lumens per Lamp: 15300 (1 lamp)  
Luminaire Lumens: 12127.2 lumens  
Efficiency: 79.3%  
Efficacy: 282.0 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: Semi-Indirect

Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	78	78	78	78	68	68	68	68	49	49	49	33	33	33	17	17	17	10
1	71	67	64	62	62	59	56	54	43	41	40	28	27	27	15	14	14	8
2	64	59	54	50	56	51	48	44	37	35	33	25	23	22	13	12	12	7
3	58	51	46	42	51	45	40	37	33	30	28	22	20	19	11	11	10	5
4	53	45	39	35	46	40	35	31	29	26	23	19	17	16	10	9	8	5
5	49	40	34	30	42	35	30	26	26	22	20	17	15	13	9	8	7	4
6	45	36	30	25	39	31	26	23	23	20	17	15	13	12	8	7	6	3
7	41	32	26	22	36	28	23	20	21	17	15	14	12	10	7	6	6	3
8	38	29	23	19	33	25	21	17	19	15	13	13	10	9	7	6	5	3
9	35	26	21	17	31	23	18	15	17	14	11	11	9	8	6	5	4	2
10	33	24	18	15	29	21	16	13	16	12	10	11	8	7	6	5	4	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	0.4	0.3
10°-20°	133.5	1.1	0.9
20°-30°	203.1	1.7	1.3
30°-40°	245.8	2.0	1.6
40°-50°	256.7	2.1	1.7
50°-60°	235.8	1.9	1.5
60°-70°	188.3	1.6	1.2
70°-80°	128.2	1.1	0.8
80°-90°	67.2	0.6	0.4
90°-100°	399.7	3.3	2.6
100°-110°	1297.8	10.7	8.5
110°-120°	2046.4	16.9	13.4
120°-130°	2247.0	18.5	14.7
130°-140°	1932.5	15.9	12.6
140°-150°	1417.3	11.7	9.3
150°-160°	844.4	7.0	5.5
160°-170°	349.5	2.9	2.3
170°-180°	87.8	0.7	0.6
0°-30°	382.9	3.2	2.5
0°-40°	628.7	5.2	4.1
0°-60°	1121.2	9.2	7.3
0°-90°	1504.7	12.4	9.8
90°-120°	3743.8	30.9	24.5
90°-150°	9340.8	77.0	61.1
90°-180°	10622.0	87.6	69.4
0°-180°	12127.2	100.0	79.3

**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°	8	13	7	8	16	26
95°	367	366	295	356	388	392
105°	1504	1196	1064	1247	1302	1543
115°	2042	2154	1952	2002	2419	2065
125°	2464	2641	2422	2380	2811	2248
135°	2766	2478	2377	2486	2641	2112
145°	2272	2244	2242	2271	2295	1420
155°	1737	1849	1840	1803	1834	802
165°	1217	1172	1173	1204	1177	354
175°	875	876	874	894	877	88
180°	837	837	837	837	837	



TEST NUMBER: 253P233

CATALOG NUMBER: 1250-XX-36-CFL/3/50-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°	8	8	13	14	7	7	8	11	16
92.5°	120	146	170	148	94	111	139	165	166
95°	367	344	366	372	295	343	356	349	388
97.5°	593	571	607	603	523	573	584	589	616
100°	842	749	801	835	689	808	788	753	875
102.5°	1127	909	1019	1042	881	1049	976	968	1066
105°	1504	1127	1196	1250	1064	1384	1247	1127	1302
107.5°	1812	1363	1394	1490	1308	1678	1507	1311	1570
110°	1973	1560	1641	1772	1487	1872	1705	1517	1891



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1977	1763	1901	2050	1707	1943	1852	1759	2190
115°	2042	1964	2154	2296	1952	2036	2002	2021	2419
117.5°	2174	2142	2367	2489	2142	2175	2161	2241	2601
120°	2299	2222	2546	2629	2265	2280	2233	2431	2716
122.5°	2385	2273	2656	2727	2358	2346	2282	2543	2799
125°	2464	2366	2641	2737	2422	2436	2380	2540	2811
127.5°	2645	2460	2565	2669	2481	2591	2512	2489	2742
130°	2795	2485	2499	2586	2478	2700	2574	2448	2645
132.5°	2824	2448	2490	2568	2434	2704	2553	2433	2633
135°	2766	2383	2478	2560	2377	2643	2486	2405	2641
137.5°	2643	2335	2436	2527	2337	2547	2419	2361	2610
140°	2521	2326	2355	2439	2301	2469	2387	2297	2512
142.5°	2402	2321	2268	2335	2289	2392	2356	2234	2395
145°	2272	2258	2244	2273	2242	2283	2271	2225	2295
147.5°	2096	2155	2230	2238	2189	2125	2135	2213	2244
150°	1931	2063	2158	2157	2117	1981	2017	2148	2154
152.5°	1823	1967	2017	2013	2007	1872	1921	2016	2011
155°	1737	1831	1849	1840	1840	1766	1803	1853	1834
157.5°	1616	1650	1678	1663	1657	1621	1636	1683	1653
160°	1480	1480	1500	1491	1477	1473	1475	1502	1490
162.5°	1351	1330	1316	1314	1309	1340	1336	1318	1320
165°	1217	1195	1172	1172	1173	1207	1204	1173	1177
167.5°	1091	1082	1076	1073	1072	1085	1084	1078	1074
170°	1001	1003	999	998	996	1000	1002	1000	998
172.5°	928	939	930	930	927	928	938	931	930
175°	875	896	876	877	874	875	894	877	877
177.5°	842	868	840	839	840	841	861	848	838
180°	837	837	837	837	837	837	837	837	837

(END OF REPORT)