

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: 253P258

Luminaire Tested: **1250-XX-44-CFL/4/55-T5C/1/40**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 253P258
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 1250-XX-44-CFL/4/55-T5C/1/40
Description: SHAPER 44 INCH 1250 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE
WITH SHALLOW BOWL
Light Source: FOUR 55 WATT BIAX COMPACT FLUORESCENT LAMPS AND ONE 40 WATT T5 CIRCLINE
(4)F55BX/SPX31 - 4800 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS
Ballast/Driver: -

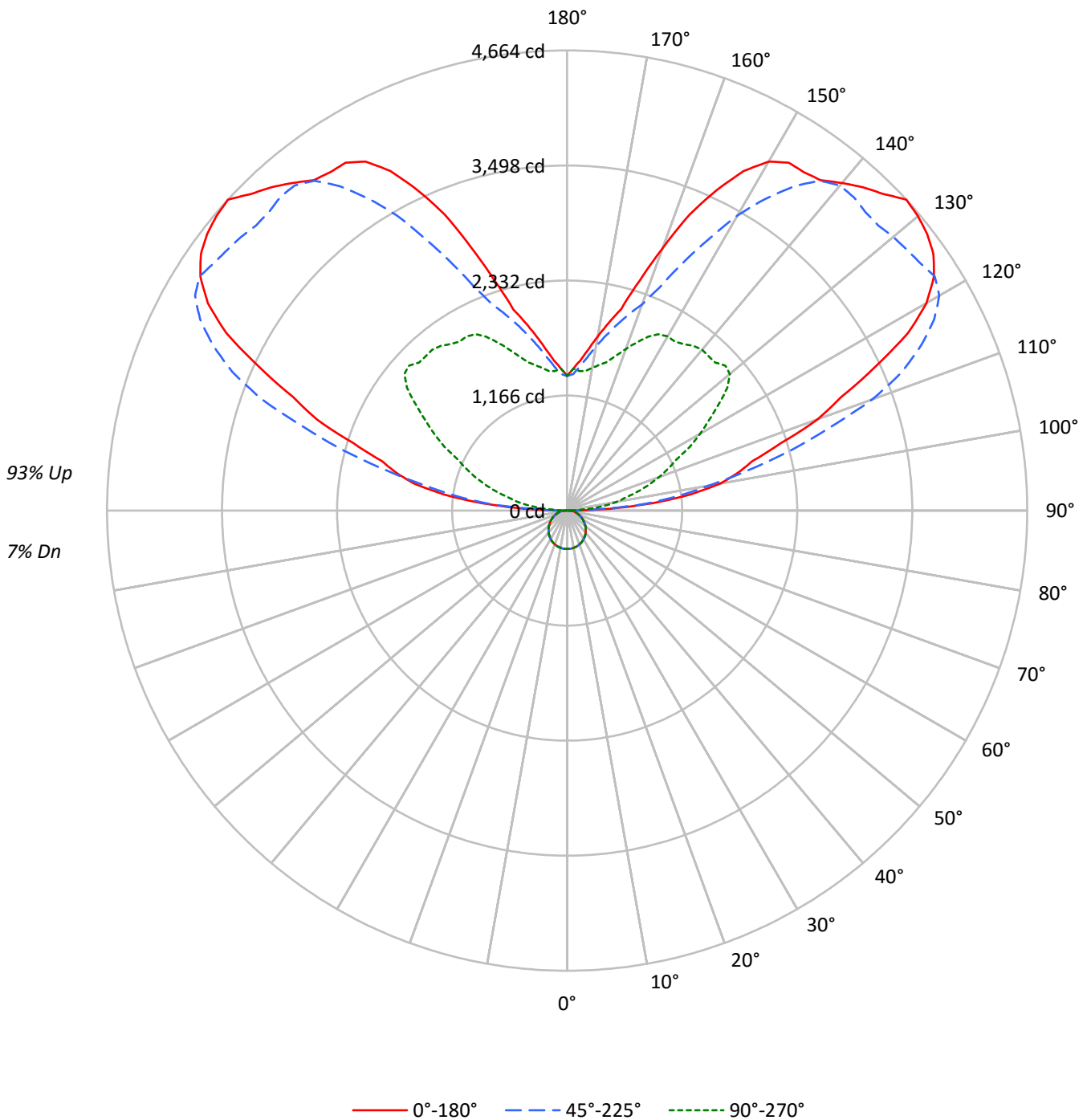
Summary

Lumens per Lamp: 22500 (1 lamp)
Luminaire Lumens: 17954.0 lumens
Efficiency: 79.8%
Efficacy: 417.5 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	77	77	77	77	67	67	67	67	47	47	47	30	30	30	13	13	13	5
1	70	67	64	61	61	58	56	53	41	40	38	26	25	24	11	11	11	4
2	64	58	54	50	55	51	47	44	36	34	32	22	21	20	10	9	9	4
3	58	51	46	41	50	44	40	36	32	29	26	20	18	17	9	8	8	3
4	53	45	39	35	46	39	34	31	28	25	22	17	16	14	8	7	6	3
5	48	40	34	29	42	35	30	26	25	21	19	16	14	12	7	6	6	2
6	44	36	30	25	38	31	26	22	22	19	16	14	12	10	6	5	5	2
7	41	32	26	22	35	28	23	19	20	17	14	13	11	9	6	5	4	2
8	38	29	23	19	33	25	20	17	18	15	12	11	9	8	5	4	4	1
9	35	26	20	17	30	23	18	15	16	13	11	10	8	7	5	4	3	1
10	33	24	18	15	28	21	16	13	15	12	10	9	8	6	4	4	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	0.2
10°-20°	106.1	0.6	0.5
20°-30°	161.6	0.9	0.7
30°-40°	196.3	1.1	0.9
40°-50°	205.9	1.1	0.9
50°-60°	190.3	1.1	0.8
60°-70°	154.6	0.9	0.7
70°-80°	109.4	0.6	0.5
80°-90°	60.7	0.3	0.3
90°-100°	746.0	4.2	3.3
100°-110°	2108.5	11.7	9.4
110°-120°	3176.6	17.7	14.1
120°-130°	3506.3	19.5	15.6
130°-140°	2983.9	16.6	13.3
140°-150°	2203.4	12.3	9.8
150°-160°	1305.1	7.3	5.8
160°-170°	556.4	3.1	2.5
170°-180°	146.1	0.8	0.6
0°-30°	304.5	1.7	1.4
0°-40°	500.8	2.8	2.2
0°-60°	896.9	5.0	4.0
0°-90°	1221.7	6.8	5.4
90°-120°	6031.2	33.6	26.8
90°-150°	14724.8	82.0	65.4
90°-180°	16732.0	93.2	74.4
0°-180°	17954.0	100.0	79.8

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°	3	12	15	6	6	67
95°	872	804	804	608	250	853
105°	1946	2226	2336	1950	736	2146
115°	3441	3899	3959	2680	1219	3413
125°	4533	4700	4370	3448	1872	4026
135°	4536	4530	4277	3225	2122	3514
145°	4186	4234	4013	2682	2059	2640
155°	3580	3394	2763	2278	1944	1656
165°	2114	2073	1949	1740	1560	639
175°	1527	1500	1463	1422	1420	154
180°	1364	1364	1364	1364	1364	



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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°	3	5	7	9	11	12	13	14	14	15	13
92.5°	434	413	392	371	350	338	337	335	334	332	317
95°	872	856	840	824	808	800	801	802	803	804	763
97.5°	1261	1263	1264	1266	1267	1253	1224	1195	1166	1137	1103
100°	1574	1598	1621	1645	1668	1655	1606	1557	1507	1458	1435
102.5°	1773	1807	1842	1876	1911	1921	1907	1893	1879	1865	1839
105°	1946	2011	2075	2140	2205	2248	2270	2292	2314	2336	2262
107.5°	2274	2369	2463	2558	2653	2709	2727	2745	2763	2781	2655
110°	2701	2791	2881	2972	3062	3127	3167	3207	3247	3287	3087



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	3007	3116	3225	3334	3443	3518	3557	3596	3635	3674	3413
115°	3441	3548	3656	3763	3870	3928	3936	3943	3951	3959	3677
117.5°	3894	3978	4061	4145	4228	4262	4245	4228	4211	4194	3900
120°	4205	4268	4331	4394	4457	4474	4444	4415	4385	4355	4072
122.5°	4408	4458	4509	4559	4610	4611	4563	4514	4466	4418	4173
125°	4533	4577	4621	4665	4709	4691	4611	4530	4450	4370	4174
127.5°	4601	4641	4682	4722	4763	4734	4636	4538	4440	4342	4165
130°	4641	4674	4708	4741	4774	4738	4632	4527	4421	4315	4127
132.5°	4664	4664	4665	4665	4666	4623	4536	4450	4363	4277	4071
135°	4536	4538	4540	4543	4545	4516	4456	4397	4337	4277	4044
137.5°	4443	4439	4435	4430	4426	4411	4384	4358	4331	4305	4039
140°	4333	4327	4321	4314	4308	4305	4304	4303	4302	4301	4001
142.5°	4220	4232	4244	4255	4267	4266	4253	4240	4226	4213	3896
145°	4186	4200	4214	4229	4243	4224	4171	4118	4066	4013	3707
147.5°	4180	4177	4174	4171	4168	4120	4027	3934	3842	3749	3491
150°	4084	4065	4045	4026	4007	3937	3816	3695	3575	3454	3247
152.5°	3880	3845	3811	3776	3741	3654	3515	3376	3236	3097	2945
155°	3580	3545	3509	3474	3439	3348	3202	3055	2909	2763	2653
157.5°	3251	3205	3160	3114	3069	2979	2846	2713	2579	2446	2375
160°	2830	2792	2755	2717	2680	2613	2516	2419	2322	2225	2171
162.5°	2443	2413	2383	2353	2323	2283	2234	2185	2136	2087	2033
165°	2114	2106	2098	2090	2082	2064	2035	2006	1978	1949	1902
167.5°	1946	1940	1934	1928	1922	1908	1885	1862	1839	1816	1780
170°	1794	1788	1782	1777	1771	1759	1742	1724	1707	1689	1662
172.5°	1646	1642	1638	1635	1631	1622	1608	1594	1580	1566	1548
175°	1527	1521	1515	1510	1504	1497	1488	1480	1471	1463	1453
177.5°	1441	1432	1422	1413	1404	1397	1394	1391	1387	1384	1381
180°	1364	1364	1364	1364	1364	1364	1364	1364	1364	1364	1364



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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°	11	9	7	6	6	6	6	6
92.5°	301	286	271	243	202	161	121	80
95°	721	680	639	577	495	414	332	250
97.5°	1069	1036	1002	919	786	654	521	389
100°	1412	1389	1366	1260	1073	886	699	512
102.5°	1814	1788	1763	1623	1368	1113	858	603
105°	2188	2113	2039	1861	1580	1299	1017	736
107.5°	2528	2402	2275	2063	1764	1465	1166	867
110°	2886	2686	2485	2230	1920	1611	1301	991



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	3153	2892	2631	2346	2036	1727	1417	1107
115°	3395	3114	2832	2527	2200	1873	1546	1219
117.5°	3605	3311	3016	2706	2380	2053	1727	1401
120°	3788	3505	3222	2911	2572	2233	1894	1555
122.5°	3929	3684	3439	3138	2779	2420	2062	1703
125°	3978	3783	3587	3309	2950	2591	2231	1872
127.5°	3989	3812	3635	3380	3047	2713	2380	2046
130°	3940	3752	3565	3325	3032	2739	2446	2153
132.5°	3865	3658	3452	3219	2958	2697	2436	2175
135°	3811	3578	3345	3105	2859	2614	2368	2122
137.5°	3772	3506	3239	2997	2778	2559	2341	2122
140°	3701	3401	3101	2860	2677	2494	2311	2128
142.5°	3579	3262	2945	2710	2559	2408	2256	2105
145°	3401	3096	2790	2573	2444	2316	2187	2059
147.5°	3233	2975	2717	2526	2402	2278	2154	2030
150°	3039	2832	2625	2467	2360	2253	2145	2038
152.5°	2794	2642	2491	2371	2282	2193	2104	2015
155°	2543	2434	2324	2233	2161	2088	2016	1944
157.5°	2305	2234	2163	2096	2033	1970	1907	1844
160°	2117	2063	2009	1956	1903	1850	1797	1744
162.5°	1980	1926	1873	1824	1779	1734	1689	1644
165°	1856	1809	1762	1719	1679	1640	1600	1560
167.5°	1743	1707	1670	1636	1605	1574	1543	1512
170°	1636	1609	1582	1558	1535	1513	1490	1468
172.5°	1531	1513	1496	1480	1467	1454	1440	1427
175°	1444	1434	1425	1420	1420	1420	1420	1420
177.5°	1378	1375	1372	1379	1395	1410	1426	1442
180°	1364	1364	1364	1364	1364	1364	1364	1364

(END OF REPORT)