

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 144P106

Luminaire Tested: **SA-340A**

Issue Date: 3/3/2020



**Test Information**

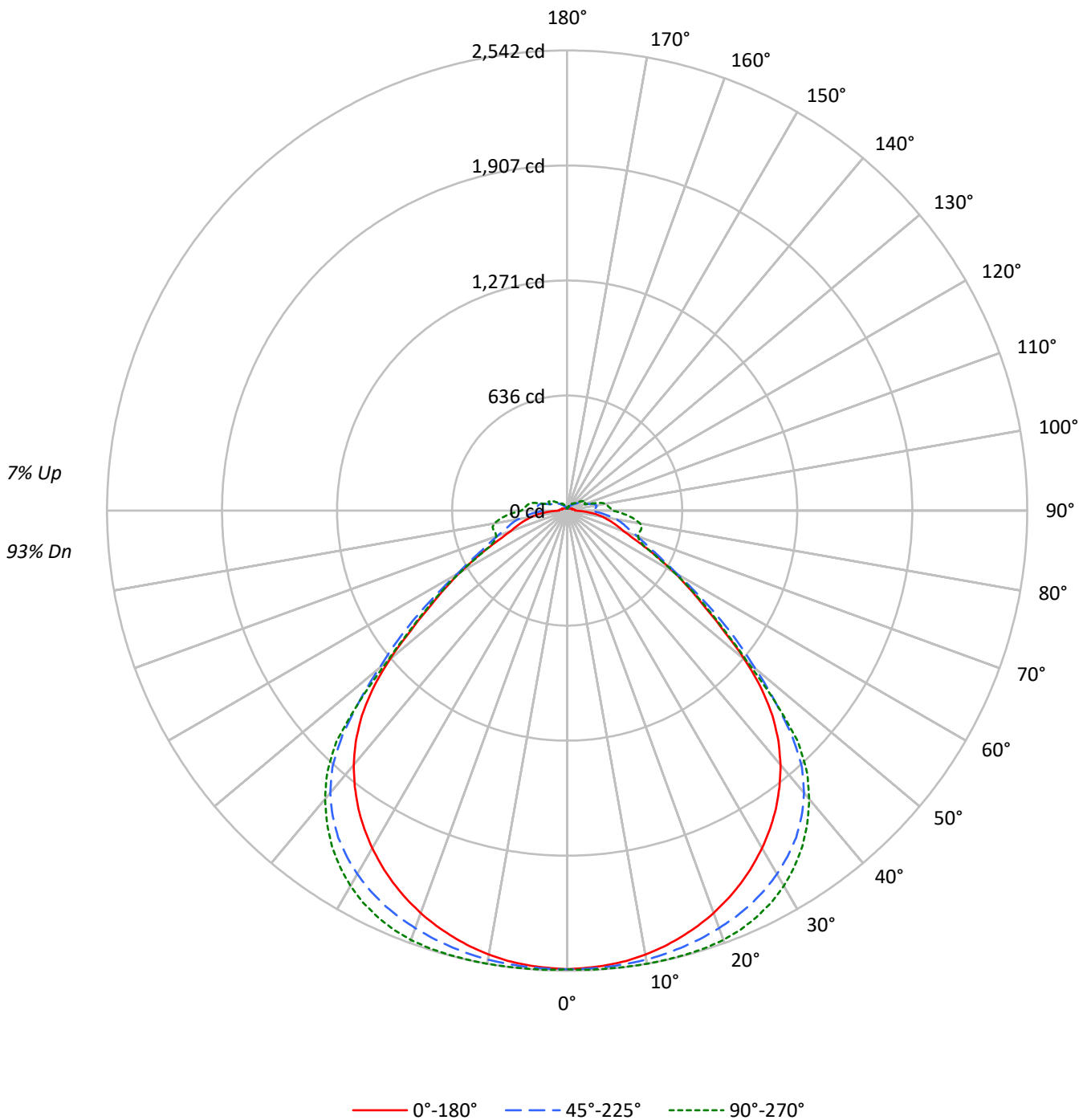
Test Method: LM-41-14  
Report Number: 144P106  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SA-340A  
Description: Surface Mounted Architectural Wrap with an  
extruded acrylic lens.  
Light Source: Three-F40CW - 3150 Lumens ea. - 40 Watts ea.  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 3150 (3 lamps)  
Luminaire Lumens: 7250.0 lumens  
Efficiency: 76.7%  
Efficacy: 55.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.38 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.32' x L: 4.07' x H: 0.11')  
CIE Type: Direct  
  
Input Watts (W): 131.1  
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: 144P106  
CATALOG NUMBER: SA-340A

### 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	90	90	90	90	87	87	87	87	82	82	82	78	78	78	73	73	73	71
1	82	79	75	73	80	76	74	71	72	70	68	68	66	65	65	63	62	60
2	75	69	64	60	73	67	63	59	64	60	57	61	57	55	58	55	53	51
3	69	61	55	51	67	60	54	50	57	52	48	54	50	47	51	48	45	44
4	64	55	48	43	61	53	47	43	51	46	42	49	44	41	46	43	40	38
5	59	49	43	38	57	48	42	37	46	41	36	44	39	36	42	38	35	33
6	54	44	38	33	52	43	37	33	42	36	32	40	35	31	38	34	31	29
7	50	40	34	29	49	40	33	29	38	33	29	36	32	28	35	31	27	26
8	47	37	31	26	45	36	30	26	35	29	26	33	29	25	32	28	25	23
9	44	34	28	24	43	33	27	24	32	27	23	31	26	23	30	25	22	21
10	41	31	25	22	40	31	25	21	30	25	21	29	24	21	28	23	20	19

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

	0°	45°	90°
0°	5062	5062	5062
5°	5043	5040	5055
10°	5028	5038	5079
15°	5005	5046	5132
20°	4979	5067	5202
25°	4941	5097	5248
30°	4887	5110	5259
35°	4810	5088	5208
40°	4673	4971	5057
45°	4408	4586	4683
50°	3849	3840	3657
55°	3107	3152	2935
60°	2598	2466	2366
65°	2091	2090	1886
70°	1800	1958	1963
75°	1837	1979	2456
80°	1974	2167	3155
85°	2151	2343	3950



TEST NUMBER: 144P106  
 CATALOG NUMBER: SA-340A

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	241.1	3.3	2.6	0°	2534	2534	2534	2534	2534	
10°-20°	704.4	9.7	7.5	5°	2521	2526	2531	2533	2540	240
20°-30°	1100.2	15.2	11.6	15°	2438	2459	2493	2523	2539	688
30°-40°	1354.5	18.7	14.3	25°	2271	2316	2400	2457	2477	1046
40°-50°	1312.8	18.1	13.9	35°	2011	2088	2205	2254	2265	1255
50°-60°	887.9	12.2	9.4	45°	1604	1708	1755	1769	1801	1223
60°-70°	535.2	7.4	5.7	55°	928	1036	1010	937	947	847
70°-80°	374.2	5.2	4.0	65°	469	542	519	566	473	477
80°-90°	245.2	3.4	2.6	75°	263	319	334	410	421	278
90°-100°	161.1	2.2	1.7	85°	124	169	197	307	343	117
100°-110°	123.4	1.7	1.3	90°	43	78	136	234	252	29
110°-120°	80.8	1.1	0.9	95°	43	82	157	217	231	34
120°-130°	57.7	0.8	0.6	105°	27	74	144	162	155	31
130°-140°	34.2	0.5	0.4	115°	27	58	91	109	113	27
140°-150°	20.6	0.3	0.2	125°	21	44	73	84	87	19
150°-160°	10.9	0.1	0.1	135°	18	31	50	55	57	14
160°-170°	4.7	0.1	0.0	145°	16	23	34	42	45	10
170°-180°	1.2	0.0	0.0	155°	13	17	24	30	31	6
0°-30°	2045.7	28.2	21.6	165°	12	14	16	19	20	3
0°-40°	3400.2	46.9	36.0	175°	12	12	13	13	13	1
0°-60°	5600.8	77.3	59.3	180°	12	12	12	12	12	
0°-90°	6755.4	93.2	71.5							
90°-120°	365.3	5.0	3.9							
90°-150°	477.7	6.6	5.1							
90°-180°	495.0	6.8	5.2							
0°-180°	7250.0	100.0	76.7							



TEST NUMBER: 144P106  
 CATALOG NUMBER: SA-340A

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2534	2534	2534	2534	2534
2.5°	2528	2532	2533	2533	2539
5°	2521	2526	2531	2533	2540
7.5°	2509	2516	2525	2533	2541
10°	2491	2502	2519	2532	2542
12.5°	2467	2483	2508	2529	2541
15°	2438	2459	2493	2523	2539
17.5°	2405	2430	2476	2515	2534
20°	2366	2397	2454	2502	2524
22.5°	2321	2359	2430	2484	2505
25°	2271	2316	2400	2457	2477
27.5°	2215	2268	2363	2421	2441
30°	2153	2214	2319	2377	2394
32.5°	2085	2155	2266	2321	2335
35°	2011	2088	2205	2254	2265
37.5°	1926	2012	2128	2173	2179
40°	1834	1925	2036	2075	2080
42.5°	1727	1826	1919	1948	1962
45°	1604	1708	1755	1769	1801
47.5°	1457	1559	1555	1527	1550
50°	1280	1390	1355	1281	1298
52.5°	1089	1210	1181	1080	1104
55°	928	1036	1010	937	947
57.5°	799	878	844	829	811
60°	682	741	704	726	681
62.5°	570	633	599	636	563
65°	469	542	519	566	473
67.5°	387	468	460	521	432
70°	332	407	410	487	416
72.5°	297	359	366	449	415
75°	263	319	334	410	421
77.5°	229	286	308	378	422
80°	199	256	275	354	409
82.5°	166	217	237	333	379
85°	124	169	197	307	343
87.5°	80	121	159	272	297
90°	43	78	136	234	252
92.5°	43	80	145	227	242
95°	43	82	157	217	231
97.5°	41	83	164	211	224
100°	36	82	164	203	214
102.5°	29	78	157	190	196
105°	27	74	144	162	155
107.5°	30	76	122	124	116
110°	30	72	101	104	102



TEST NUMBER: 144P106  
CATALOG NUMBER: SA-340A

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	29	65	92	103	106
115°	27	58	91	109	113
117.5°	25	54	91	108	111
120°	23	52	88	104	106
122.5°	22	49	82	95	98
125°	21	44	73	84	87
127.5°	20	40	65	74	76
130°	19	37	59	66	68
132.5°	18	34	54	60	62
135°	18	31	50	55	57
137.5°	17	29	46	52	54
140°	17	27	42	49	51
142.5°	16	25	38	46	48
145°	16	23	34	42	45
147.5°	15	21	31	39	41
150°	14	20	29	35	38
152.5°	14	18	26	32	35
155°	13	17	24	30	31
157.5°	13	16	21	27	28
160°	13	15	19	24	26
162.5°	12	14	17	22	23
165°	12	14	16	19	20
167.5°	12	13	14	17	18
170°	12	13	14	15	16
172.5°	11	13	13	14	14
175°	12	12	13	13	13
177.5°	12	12	12	13	13
180°	12	12	12	12	12

(END OF REPORT)