

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: 144P110

Luminaire Tested: **SA-432A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 144P110
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SA-432A
Description: Surface Mount Architectural Wrap with an
extruded acrylic lens.
Light Source: Four-F32T8/35K - 2850 Lumens ea. - 32 Watts ea.
Ballast/Driver: Two-Triad-Utrad B232I120RH Electronic

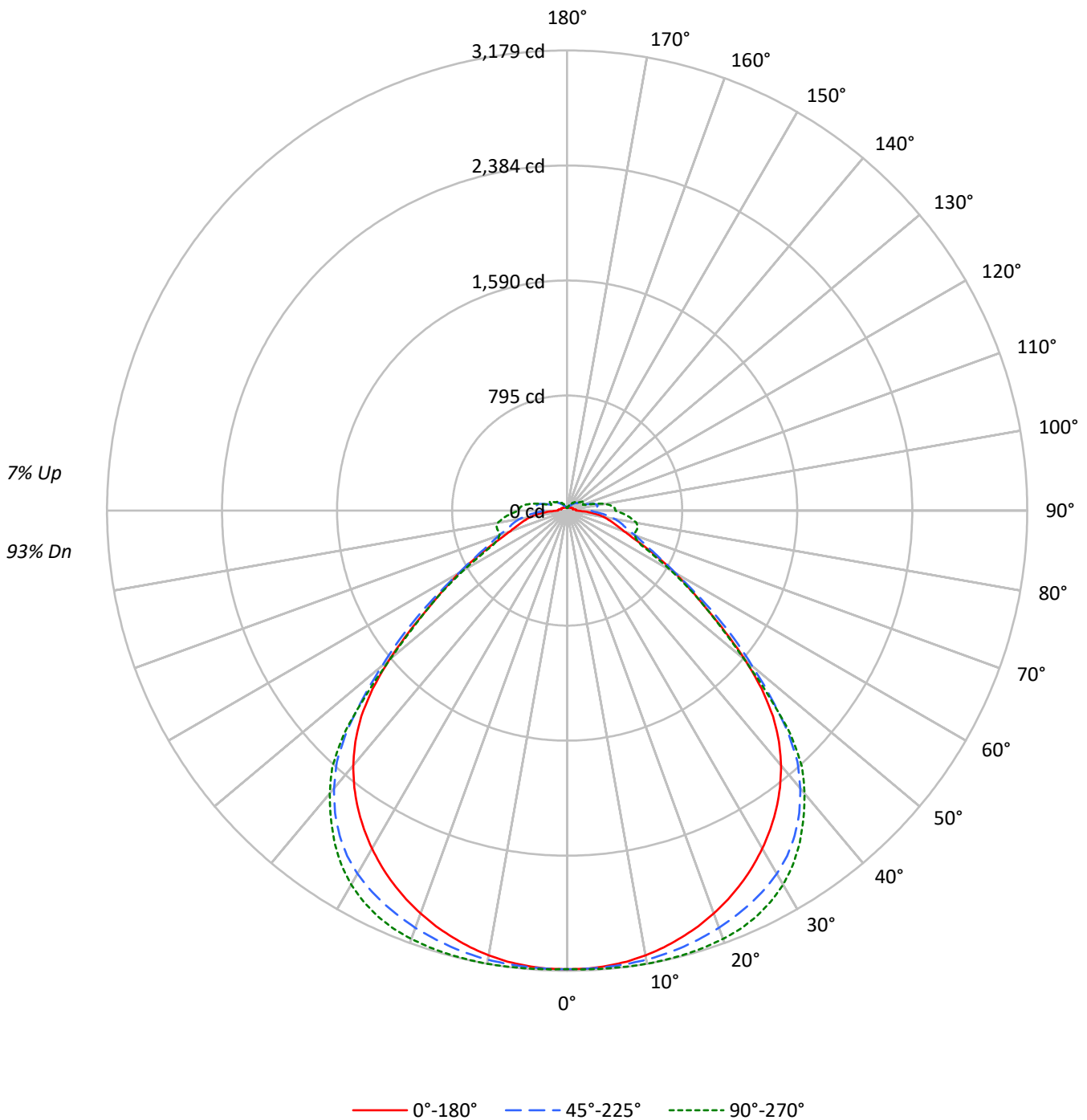
Summary

Lumens per Lamp: 2850 (4 lamps)
Luminaire Lumens: 8995.5 lumens
Efficiency: 78.9%
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.37 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.32' x L: 4.07' x H: 0.11')
CIE Type: Direct

Input Watts (W): 118.1
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

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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	93	93	93	93	90	90	90	90	85	85	85	80	80	80	75	75	75	73
1	85	81	78	75	82	79	76	73	74	72	70	70	68	67	67	65	64	62
2	78	71	66	62	75	69	65	61	66	62	58	62	59	56	59	57	54	52
3	71	63	57	52	69	62	56	51	58	54	50	56	52	48	53	50	47	45
4	65	56	50	45	63	55	49	44	52	47	43	50	45	42	48	44	41	39
5	60	51	44	39	58	50	43	38	47	42	38	45	40	37	43	39	36	34
6	56	46	39	34	54	45	38	34	43	37	33	41	36	32	39	35	32	30
7	52	42	35	30	50	41	35	30	39	34	30	37	33	29	36	32	28	27
8	48	38	32	27	47	37	31	27	36	30	26	34	30	26	33	29	26	24
9	45	35	29	25	44	34	28	24	33	28	24	32	27	23	31	26	23	22
10	42	32	26	22	41	32	26	22	31	25	22	29	25	21	28	24	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6329	6329	6329
5°	6317	6302	6319
10°	6298	6302	6352
15°	6267	6311	6412
20°	6233	6333	6490
25°	6186	6363	6555
30°	6120	6384	6556
35°	6022	6325	6440
40°	5857	6119	6204
45°	5526	5618	5671
50°	4823	4727	4485
55°	3901	3867	3608
60°	3273	3030	2866
65°	2630	2549	2256
70°	2272	2374	2345
75°	2305	2393	2916
80°	2560	2639	3742
85°	2810	2830	4814



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	301.6	3.4	2.6	0°	3168	3168	3168	3168	3168	
10°-20°	880.6	9.8	7.7	5°	3158	3160	3165	3168	3175	300
20°-30°	1374.5	15.3	12.1	15°	3053	3074	3118	3152	3172	862
30°-40°	1683.5	18.7	14.8	25°	2843	2895	2996	3069	3094	1310
40°-50°	1615.3	18.0	14.2	35°	2518	2606	2741	2793	2801	1572
50°-60°	1094.6	12.2	9.6	45°	2011	2110	2150	2158	2181	1532
60°-70°	655.4	7.3	5.7	55°	1165	1286	1239	1145	1164	1065
70°-80°	455.1	5.1	4.0	65°	590	673	633	684	566	601
80°-90°	300.3	3.3	2.6	75°	330	397	404	493	500	352
90°-100°	210.1	2.3	1.8	85°	162	211	238	366	418	152
100°-110°	150.7	1.7	1.3	90°	63	101	162	295	332	40
110°-120°	97.3	1.1	0.9	95°	61	105	193	297	319	48
120°-130°	72.3	0.8	0.6	105°	40	94	179	185	173	46
130°-140°	50.0	0.6	0.4	115°	40	74	108	128	132	40
140°-150°	29.4	0.3	0.3	125°	33	60	91	98	99	29
150°-160°	15.8	0.2	0.1	135°	29	47	73	82	85	22
160°-170°	7.2	0.1	0.1	145°	26	35	48	58	61	16
170°-180°	1.9	0.0	0.0	155°	23	27	34	41	43	11
0°-30°	2556.8	28.4	22.4	165°	21	22	24	28	29	6
0°-40°	4240.2	47.1	37.2	175°	19	20	19	19	19	2
0°-60°	6950.2	77.3	61.0	180°	18	18	18	18	18	
0°-90°	8360.9	92.9	73.3							
90°-120°	458.0	5.1	4.0							
90°-150°	609.7	6.8	5.3							
90°-180°	635.0	7.1	5.6							
0°-180°	8995.5	100.0	78.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3168	3168	3168	3168	3168
2.5°	3167	3167	3168	3166	3172
5°	3158	3160	3165	3168	3175
7.5°	3143	3148	3159	3168	3177
10°	3120	3130	3151	3167	3179
12.5°	3090	3105	3137	3163	3177
15°	3053	3074	3118	3152	3172
17.5°	3011	3039	3094	3141	3163
20°	2962	2998	3067	3123	3149
22.5°	2906	2949	3033	3100	3128
25°	2843	2895	2996	3069	3094
27.5°	2774	2834	2952	3024	3046
30°	2696	2768	2897	2965	2984
32.5°	2612	2693	2829	2889	2903
35°	2518	2606	2741	2793	2801
37.5°	2415	2508	2634	2675	2682
40°	2299	2394	2506	2543	2552
42.5°	2167	2262	2355	2383	2402
45°	2011	2110	2150	2158	2181
47.5°	1823	1929	1906	1864	1878
50°	1604	1719	1668	1564	1592
52.5°	1376	1501	1453	1321	1357
55°	1165	1286	1239	1145	1164
57.5°	1003	1091	1036	1008	990
60°	859	921	865	882	825
62.5°	717	782	734	770	678
65°	590	673	633	684	566
67.5°	488	583	558	628	515
70°	419	507	497	586	497
72.5°	371	447	442	540	494
75°	330	397	404	493	500
77.5°	292	354	374	452	499
80°	258	317	335	421	485
82.5°	215	270	288	395	454
85°	162	211	238	366	418
87.5°	106	153	190	331	374
90°	63	101	162	295	332
92.5°	62	102	175	300	332
95°	61	105	193	297	319
97.5°	57	106	209	285	295
100°	51	103	214	262	263
102.5°	43	97	205	227	224
105°	40	94	179	185	173
107.5°	43	98	147	141	132
110°	44	94	118	118	116



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	43	83	107	117	120
115°	40	74	108	128	132
117.5°	38	69	108	130	134
120°	36	66	103	121	124
122.5°	34	63	96	107	110
125°	33	60	91	98	99
127.5°	31	58	88	94	94
130°	30	55	84	92	93
132.5°	30	51	78	87	90
135°	29	47	73	82	85
137.5°	28	43	66	76	79
140°	27	40	59	70	73
142.5°	26	37	53	64	68
145°	26	35	48	58	61
147.5°	25	32	44	53	56
150°	24	31	40	48	51
152.5°	23	29	37	44	47
155°	23	27	34	41	43
157.5°	23	26	31	37	39
160°	22	24	29	34	36
162.5°	21	23	26	31	32
165°	21	22	24	28	29
167.5°	21	22	22	25	26
170°	20	21	21	22	23
172.5°	20	20	20	20	21
175°	19	20	19	19	19
177.5°	19	19	19	18	18
180°	18	18	18	18	18

(END OF REPORT)