

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: 144P114

Luminaire Tested: **SA-332A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 144P114
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SA-332A
Description: Surface Mount Architectural Wrap with an
extruded acrylic lens.
Light Source: Three-F32T8/35K - 2850 Lumens ea. - 32 Watts ea.
Ballast/Driver: Two-Triad-Utrad B232I120RH Electronic

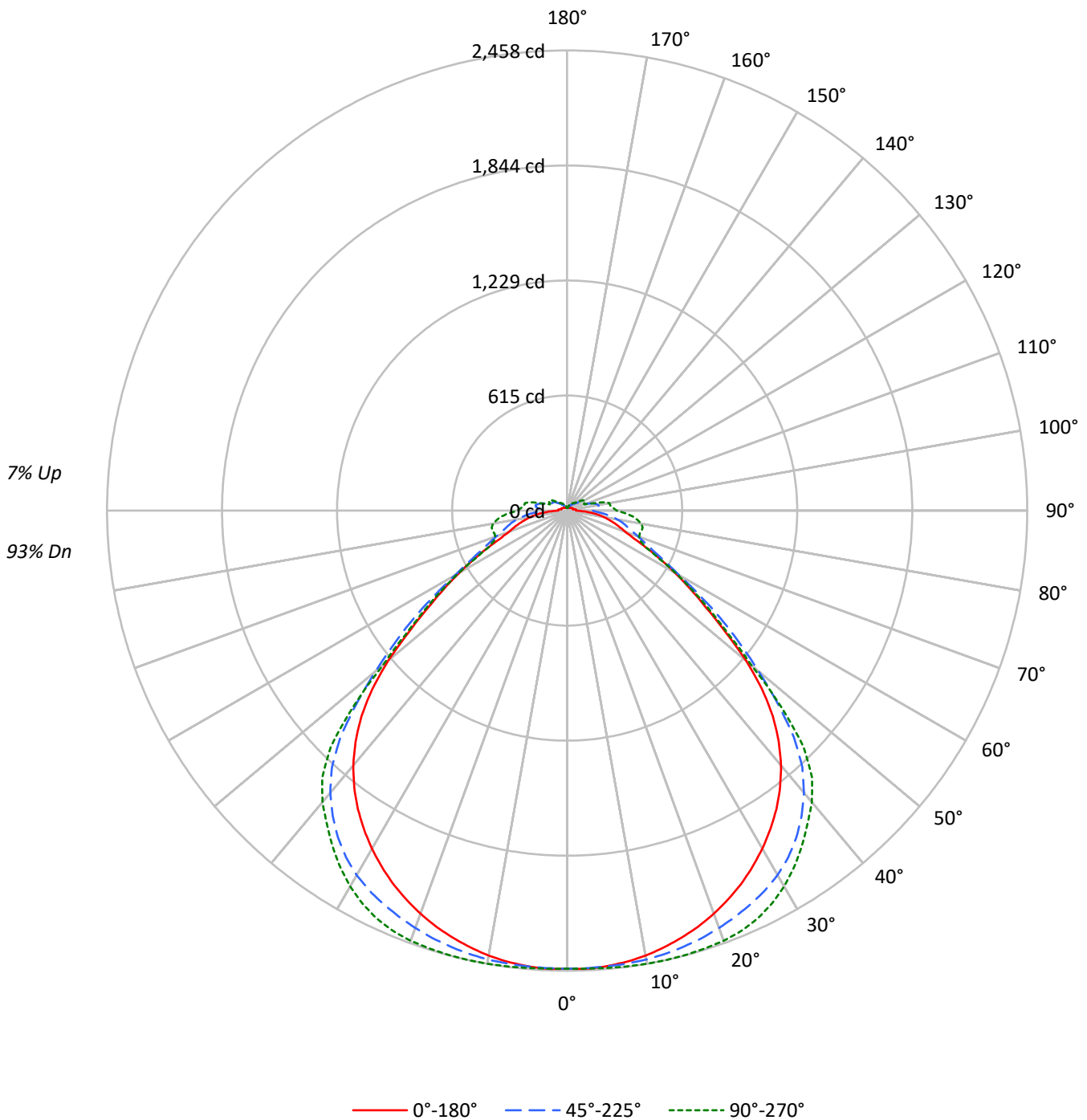
Summary

Lumens per Lamp: 2850 (3 lamps)
Luminaire Lumens: 7095.8 lumens
Efficiency: 83.0%
Efficacy: 72.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.38 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 1.32' x L: 4.07' x H: 0.11')
CIE Type: Direct

Input Watts (W): 97.5
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	97	97	97	97	94	94	94	94	89	89	89	84	84	84	79	79	79	77						77													
1	89	85	81	78	86	83	79	76	78	75	73	74	72	70	70	68	67	64						64													
2	81	75	69	65	79	73	68	64	69	65	61	65	62	59	62	59	57	55						55													
3	75	66	60	55	72	64	59	54	61	56	52	58	54	50	55	52	49	47						47													
4	69	59	52	47	66	58	51	46	55	49	45	52	47	44	50	46	42	41						41													
5	63	53	46	41	61	52	45	40	49	44	39	47	42	38	45	41	37	35						35													
6	59	48	41	36	57	47	40	35	45	39	35	43	38	34	41	37	33	31						31													
7	54	44	37	32	53	43	36	31	41	35	31	39	34	30	38	33	29	28						28													
8	51	40	33	28	49	39	33	28	37	32	28	36	31	27	35	30	27	25						25													
9	47	37	30	25	46	36	30	25	34	29	25	33	28	24	32	27	24	22						22													
10	44	34	27	23	43	33	27	23	32	26	23	31	26	22	30	25	22	20						20													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4888	4888	4888
5°	4887	4867	4880
10°	4873	4870	4911
15°	4849	4880	4964
20°	4821	4898	5039
25°	4787	4927	5095
30°	4733	4954	5092
35°	4659	4925	5026
40°	4527	4805	4943
45°	4268	4474	4646
50°	3750	3778	3623
55°	3040	3102	2889
60°	2541	2424	2331
65°	2064	2041	1842
70°	1784	1920	1930
75°	1830	1961	2409
80°	1974	2151	3094
85°	2185	2343	4031



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	233.0	3.3	2.7	0°	2447	2447	2447	2447	2447	
10°-20°	681.2	9.6	8.0	5°	2443	2440	2444	2446	2452	232
20°-30°	1065.0	15.0	12.5	15°	2362	2375	2411	2439	2456	667
30°-40°	1310.5	18.5	15.3	25°	2200	2238	2320	2383	2405	1013
40°-50°	1283.0	18.1	15.0	35°	1948	2018	2134	2177	2186	1216
50°-60°	871.3	12.3	10.2	45°	1553	1649	1712	1752	1787	1185
60°-70°	524.6	7.4	6.1	55°	908	1012	994	921	932	827
70°-80°	369.2	5.2	4.3	65°	463	533	507	552	462	470
80°-90°	245.9	3.5	2.9	75°	262	314	331	407	413	277
90°-100°	166.7	2.3	1.9	85°	126	169	197	305	350	118
100°-110°	126.8	1.8	1.5	90°	47	82	135	243	264	31
110°-120°	80.0	1.1	0.9	95°	47	86	159	224	236	36
120°-130°	61.0	0.9	0.7	105°	31	76	148	166	154	35
130°-140°	36.2	0.5	0.4	115°	30	60	89	104	107	30
140°-150°	22.3	0.3	0.3	125°	24	48	78	90	94	22
150°-160°	12.2	0.2	0.1	135°	21	35	52	57	59	16
160°-170°	5.5	0.1	0.1	145°	19	27	37	45	47	12
170°-180°	1.4	0.0	0.0	155°	17	21	26	32	34	8
0°-30°	1979.1	27.9	23.1	165°	15	17	18	21	22	4
0°-40°	3289.6	46.4	38.5	175°	14	15	14	14	14	1
0°-60°	5444.0	76.7	63.7	180°	14	14	14	14	14	
0°-90°	6583.7	92.8	77.0							
90°-120°	373.5	5.3	4.4							
90°-150°	493.0	6.9	5.8							
90°-180°	512.0	7.2	6.0							
0°-180°	7095.8	100.0	83.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2447	2447	2447	2447	2447
2.5°	2450	2445	2446	2444	2449
5°	2443	2440	2444	2446	2452
7.5°	2431	2431	2441	2447	2456
10°	2414	2417	2435	2447	2458
12.5°	2390	2399	2425	2446	2458
15°	2362	2375	2411	2439	2456
17.5°	2330	2349	2394	2432	2452
20°	2291	2317	2372	2421	2445
22.5°	2248	2280	2348	2406	2431
25°	2200	2238	2320	2383	2405
27.5°	2145	2190	2288	2347	2367
30°	2085	2139	2248	2301	2318
32.5°	2020	2082	2197	2245	2257
35°	1948	2018	2134	2177	2186
37.5°	1868	1945	2057	2099	2109
40°	1777	1859	1968	2016	2033
42.5°	1673	1762	1859	1911	1936
45°	1553	1649	1712	1752	1787
47.5°	1412	1511	1526	1522	1550
50°	1247	1351	1333	1274	1286
52.5°	1065	1179	1160	1067	1087
55°	908	1012	994	921	932
57.5°	780	858	831	812	797
60°	667	728	692	712	671
62.5°	559	621	587	621	552
65°	463	533	507	552	462
67.5°	383	461	449	508	422
70°	329	400	402	479	409
72.5°	295	351	361	444	407
75°	262	314	331	407	413
77.5°	230	283	305	373	413
80°	199	253	273	347	401
82.5°	167	215	235	326	379
85°	126	169	197	305	350
87.5°	84	124	158	278	310
90°	47	82	135	243	264
92.5°	47	83	145	238	251
95°	47	86	159	224	236
97.5°	44	87	170	216	231
100°	39	86	170	212	229
102.5°	33	79	160	201	207
105°	31	76	148	166	154
107.5°	33	77	125	124	114
110°	33	75	100	100	98



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	32	67	90	97	98
115°	30	60	89	104	107
117.5°	28	56	90	107	109
120°	27	54	89	104	106
122.5°	25	51	85	99	102
125°	24	48	78	90	94
127.5°	23	44	69	79	82
130°	22	40	62	70	72
132.5°	22	37	57	62	65
135°	21	35	52	57	59
137.5°	21	32	48	54	55
140°	20	30	44	51	53
142.5°	19	28	40	48	50
145°	19	27	37	45	47
147.5°	18	25	34	41	43
150°	18	24	31	38	40
152.5°	18	22	29	34	37
155°	17	21	26	32	34
157.5°	17	20	24	29	31
160°	16	19	22	26	28
162.5°	16	18	20	24	25
165°	15	17	18	21	22
167.5°	15	16	17	19	20
170°	15	16	16	17	18
172.5°	14	15	15	15	15
175°	14	15	14	14	14
177.5°	14	14	14	13	13
180°	14	14	14	14	14

(END OF REPORT)