

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: 144P117

Luminaire Tested: **SA-232AT**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 144P117
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SA-232AT
Description: Surface Mount Architectural Wrap with an
extruded tinted acrylic lens.
Light Source: Two - FO32T8/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 88.22

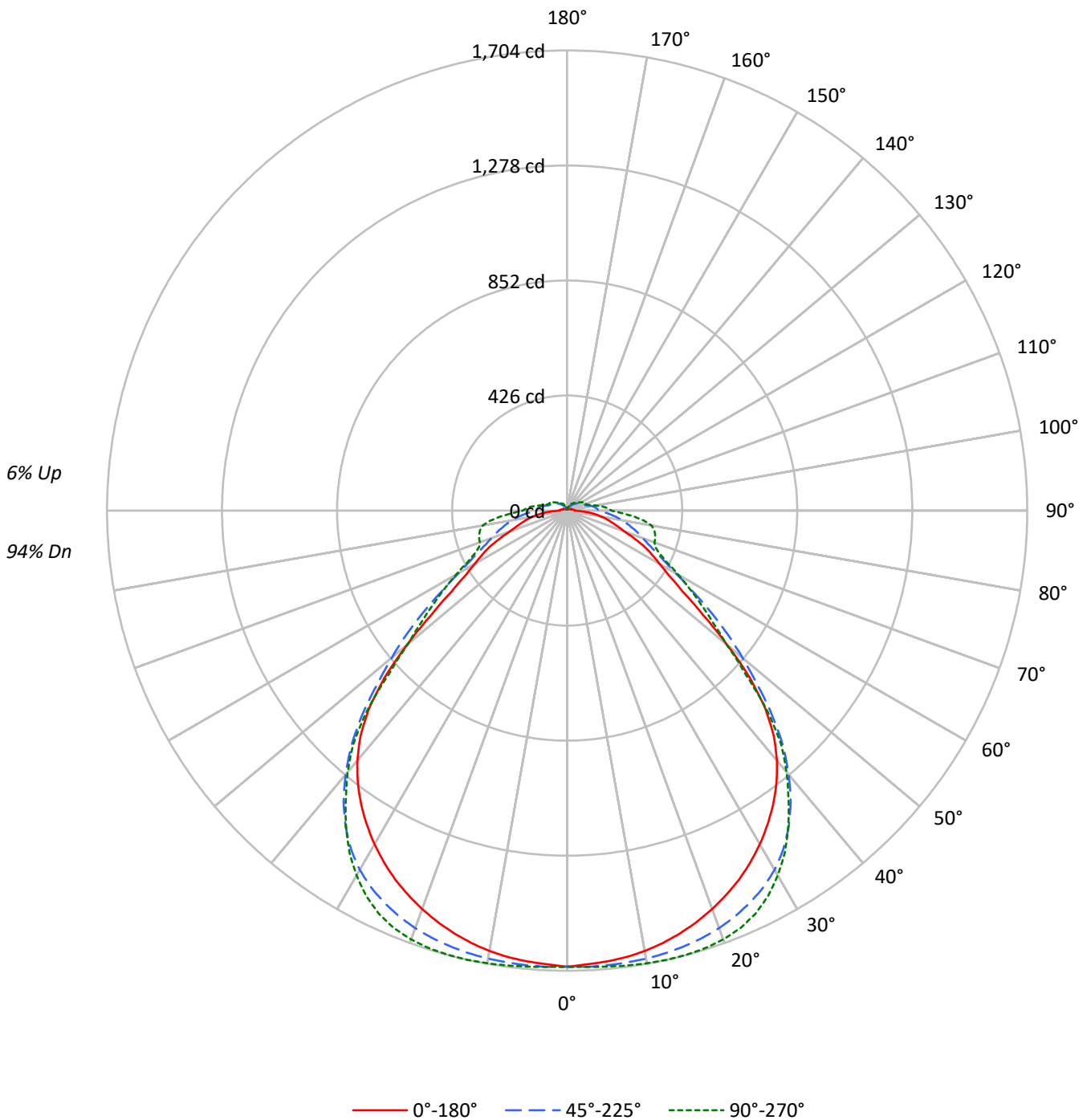
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 4724.3 lumens
Efficiency: 84.4%
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.33 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4.07' x H: 0.11')
CIE Type: Direct

Input Watts (W): 57.2
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	99	99	99	99	96	96	96	96	91	91	91	86	86	86	81	81	81	79
1	90	86	83	79	88	84	81	78	79	77	74	75	73	71	71	70	68	66
2	83	76	70	66	80	74	69	64	70	66	62	66	63	60	63	60	58	56
3	76	67	61	55	73	66	59	55	62	57	53	59	55	51	56	53	50	48
4	70	60	53	48	67	59	52	47	56	50	46	53	48	45	51	47	43	41
5	64	54	47	41	62	53	46	41	50	44	40	48	43	39	46	42	38	36
6	60	49	42	36	58	48	41	36	46	40	35	44	39	35	42	37	34	32
7	55	44	37	32	54	44	37	32	42	36	31	40	35	31	39	34	30	29
8	52	41	34	29	50	40	33	29	38	32	28	37	32	28	36	31	27	26
9	48	37	31	26	47	37	30	26	35	30	26	34	29	25	33	28	25	23
10	45	35	28	24	44	34	28	24	33	27	23	32	26	23	31	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4869	4869	4869
5°	4838	4845	4852
10°	4824	4840	4875
15°	4799	4847	4918
20°	4768	4855	4959
25°	4732	4851	4954
30°	4674	4812	4844
35°	4590	4678	4621
40°	4445	4406	4305
45°	4116	3955	3798
50°	3363	3369	3006
55°	2522	2790	2580
60°	2177	2253	2251
65°	2027	1998	2028
70°	1776	1936	2158
75°	1744	1991	2560
80°	1861	2129	3080
85°	2002	2380	3337



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	160.9	3.4	2.9	0°	1689	1689	1689	1689	1689	
10°-20°	471.1	10.0	8.4	5°	1676	1683	1690	1694	1695	159
20°-30°	732.1	15.5	13.1	15°	1620	1639	1671	1695	1703	457
30°-40°	875.6	18.5	15.6	25°	1507	1544	1602	1638	1648	694
40°-50°	807.7	17.1	14.4	35°	1330	1379	1430	1436	1428	830
50°-60°	554.7	11.7	9.9	45°	1038	1068	1075	1051	1048	786
60°-70°	365.0	7.7	6.5	55°	522	643	641	601	605	487
70°-80°	272.5	5.8	4.9	65°	315	335	361	404	377	309
80°-90°	179.0	3.8	3.2	75°	173	201	251	321	337	185
90°-100°	103.9	2.2	1.9	85°	80	115	161	225	245	75
100°-110°	68.9	1.5	1.2	90°	27	58	117	155	164	18
110°-120°	51.2	1.1	0.9	95°	26	59	108	134	141	20
120°-130°	35.4	0.7	0.6	105°	15	45	74	83	82	18
130°-140°	22.9	0.5	0.4	115°	14	37	61	68	68	14
140°-150°	13.5	0.3	0.2	125°	10	28	46	51	52	9
150°-160°	6.8	0.1	0.1	135°	8	21	34	39	40	6
160°-170°	2.5	0.1	0.0	145°	7	14	23	29	31	4
170°-180°	0.5	0.0	0.0	155°	6	9	15	20	22	3
0°-30°	1364.1	28.9	24.4	165°	5	6	8	10	12	1
0°-40°	2239.8	47.4	40.0	175°	5	5	5	5	5	0
0°-60°	3602.2	76.2	64.3	180°	4	4	4	4	4	
0°-90°	4418.7	93.5	78.9							
90°-120°	224.0	4.7	4.0							
90°-150°	295.8	6.3	5.3							
90°-180°	306.0	6.5	5.5							
0°-180°	4724.3	100.0	84.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1689	1689	1689	1689	1689
2.5°	1682	1686	1691	1691	1691
5°	1676	1683	1690	1694	1695
7.5°	1668	1676	1688	1696	1699
10°	1656	1667	1685	1697	1702
12.5°	1640	1654	1679	1697	1704
15°	1620	1639	1671	1695	1703
17.5°	1597	1620	1660	1689	1699
20°	1570	1599	1645	1678	1690
22.5°	1540	1573	1626	1662	1674
25°	1507	1544	1602	1638	1648
27.5°	1469	1510	1573	1605	1610
30°	1427	1472	1536	1559	1560
32.5°	1380	1428	1489	1504	1501
35°	1330	1379	1430	1436	1428
37.5°	1273	1320	1360	1358	1347
40°	1209	1251	1277	1272	1264
42.5°	1133	1167	1184	1174	1173
45°	1038	1068	1075	1051	1048
47.5°	919	960	956	908	895
50°	775	850	848	776	770
52.5°	634	744	745	674	680
55°	522	643	641	601	605
57.5°	446	549	543	543	537
60°	396	464	464	492	475
62.5°	356	391	406	446	418
65°	315	335	361	404	377
67.5°	268	292	325	373	353
70°	227	257	298	353	344
72.5°	197	227	275	337	342
75°	173	201	251	321	337
77.5°	152	182	229	302	330
80°	130	166	207	280	317
82.5°	106	144	184	255	287
85°	80	115	161	225	245
87.5°	50	83	136	189	199
90°	27	58	117	155	164
92.5°	27	58	113	144	153
95°	26	59	108	134	141
97.5°	24	59	102	123	125
100°	21	58	95	107	107
102.5°	16	50	84	93	92
105°	15	45	74	83	82
107.5°	17	43	68	77	76
110°	17	42	66	73	72



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	16	39	64	71	71
115°	14	37	61	68	68
117.5°	13	34	58	64	66
120°	12	32	53	60	62
122.5°	11	30	50	56	57
125°	10	28	46	51	52
127.5°	9	26	43	47	49
130°	9	24	40	44	45
132.5°	9	23	37	41	43
135°	8	21	34	39	40
137.5°	8	19	31	36	38
140°	7	17	28	34	35
142.5°	7	16	25	32	33
145°	7	14	23	29	31
147.5°	6	13	21	27	29
150°	6	11	19	25	27
152.5°	6	10	17	23	24
155°	6	9	15	20	22
157.5°	6	9	13	17	19
160°	5	8	11	15	17
162.5°	5	7	10	13	14
165°	5	6	8	10	12
167.5°	5	6	7	9	10
170°	5	5	7	7	8
172.5°	5	5	5	6	6
175°	5	5	5	5	5
177.5°	5	5	4	4	4
180°	4	4	4	4	4

(END OF REPORT)