

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: 139P102

Luminaire Tested: **SNRA-232**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 139P102  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SNRA-232  
Description: Right Angle Striplite  
Light Source: Two - FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B2321120RH Electronic - L.O.B.F. = 88.22

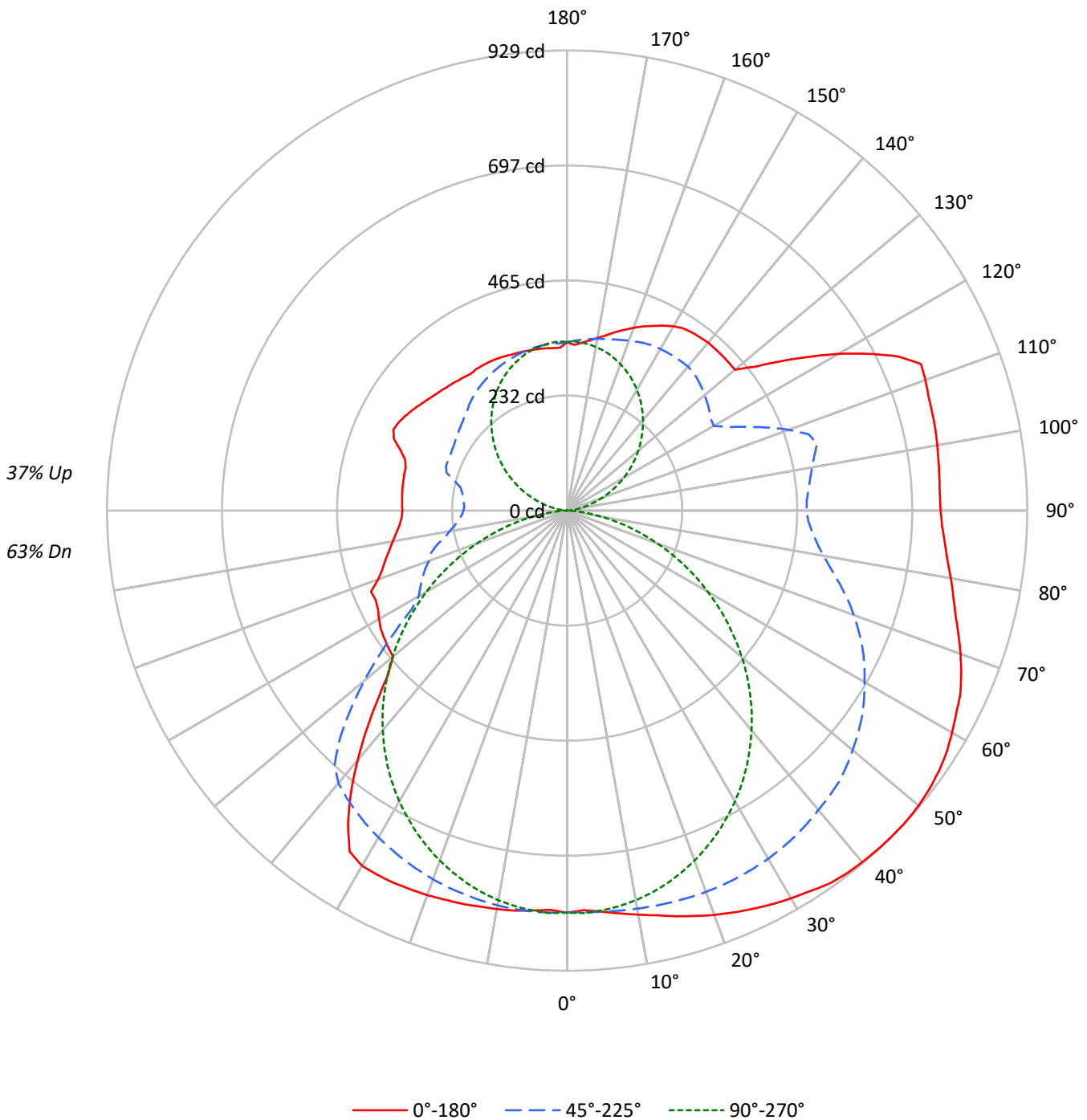
**Summary**

Lumens per Lamp: 2850 (2 lamps)  
Luminaire Lumens: 5484.5 lumens  
Efficiency: 96.2%  
Efficacy: 92.3 lumens/watt  
Spacing Criteria (0/90/45): 1.55 / 1.24 / 1.56  
Luminous Opening: Rectangular w/ Sides (W: 4' x L: 0.38' x H: 0.29')  
CIE Type: Semi-Direct

Input Watts (W): 59.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	106	106	106	106	99	99	99	99	87	87	87	75	75	75	65	65	65	60
1	94	88	84	79	88	83	78	74	72	69	66	62	60	57	53	51	49	45
2	84	76	69	63	78	71	64	59	62	57	52	53	49	46	45	42	39	35
3	76	66	57	51	71	61	54	48	53	48	43	46	41	38	39	36	32	29
4	70	58	49	42	65	54	46	40	47	41	36	41	36	31	35	31	27	24
5	64	51	42	36	59	48	40	34	42	35	30	36	31	27	31	27	23	20
6	59	46	37	31	54	43	35	29	37	31	26	32	27	23	28	24	20	18
7	54	41	33	27	50	39	31	26	34	28	23	29	24	20	25	21	18	15
8	50	37	29	24	47	35	28	22	31	25	20	27	22	18	23	19	16	14
9	47	34	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14	12
10	44	31	24	19	41	29	22	18	26	20	16	23	18	14	20	16	13	11

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

	0°	90°	180°
0°	5824	5824	5824
5°	5483	5799	5465
10°	5307	5747	5233
15°	5210	5677	5051
20°	5169	5594	4916
25°	5154	5498	4817
30°	5166	5389	4733
35°	5216	5262	4374
40°	5250	5112	3729
45°	5298	4938	3091
50°	5364	4727	2657
55°	5428	4479	2668
60°	5482	4182	2679
65°	5572	3829	2713
70°	5649	3382	2713
75°	5760	2809	2691
80°	6000	2037	2727
85°	6367	1028	2826



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	77.5	1.4	1.4	0°	812	812	812	812	812	
10°-20°	229.0	4.2	4.0	5°	813	813	810	812	810	78
20°-30°	366.6	6.7	6.4	15°	848	818	779	802	822	241
30°-40°	473.3	8.6	8.3	25°	887	817	718	779	829	411
40°-50°	515.7	9.4	9.0	35°	920	802	631	742	772	577
50°-60°	508.4	9.3	8.9	45°	929	775	522	648	542	719
60°-70°	478.3	8.7	8.4	55°	916	726	395	422	450	820
70°-80°	418.4	7.6	7.3	65°	876	658	261	322	427	867
80°-90°	361.0	6.6	6.3	75°	812	569	129	274	379	860
90°-100°	348.0	6.3	6.1	85°	766	496	23	219	340	630
100°-110°	353.7	6.4	6.2	90°	754	483	0	209	333	414
110°-120°	330.9	6.0	5.8	95°	754	489	6	210	334	617
120°-130°	278.0	5.1	4.9	105°	763	522	48	237	338	808
130°-140°	246.5	4.5	4.3	115°	736	400	103	261	387	720
140°-150°	210.3	3.8	3.7	125°	525	350	160	270	368	476
150°-160°	158.7	2.9	2.8	135°	442	373	213	285	349	343
160°-170°	97.4	1.8	1.7	145°	439	379	261	306	338	275
170°-180°	32.6	0.6	0.6	155°	411	372	300	322	338	191
0°-30°	673.1	12.3	11.8	165°	372	358	327	333	333	106
0°-40°	1146.5	20.9	20.1	175°	340	346	341	338	329	33
0°-60°	2170.5	39.6	38.1	180°	340	340	340	340	340	
0°-90°	3428.3	62.5	60.1							
90°-120°	1032.6	18.8	18.1							
90°-150°	1767.5	32.2	31.0							
90°-180°	2056.0	37.5	36.1							
0°-180°	5484.5	100.0	96.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	811.6	811.6	811.6	811.6	811.6	811.6	811.6	811.6	811.6
2.5°	807.5	811.6	811.6	812.3	813.4	812.9	812.4	811.7	806.7
5°	813.0	815.4	812.8	810.2	810.2	810.1	812.5	813.5	810.3
7.5°	820.2	821.5	814.5	806.9	805.6	806.2	811.5	815.1	814.8
10°	828.3	828.3	816.1	802.8	798.8	801.1	809.2	815.9	816.7
12.5°	837.0	835.7	817.5	797.4	790.0	794.4	806.0	816.1	818.8
15°	847.7	844.0	818.4	790.6	779.1	786.1	802.0	817.0	821.7
17.5°	858.2	852.3	819.0	782.7	766.2	776.6	797.7	817.6	823.3
20°	868.7	859.5	819.2	773.3	752.0	765.4	792.1	816.5	826.2
22.5°	878.1	865.5	818.6	762.6	735.7	752.5	785.5	816.3	827.5
25°	887.3	871.4	817.0	750.8	718.0	738.3	778.6	815.1	829.2
27.5°	895.9	877.4	814.5	737.7	698.4	722.7	770.3	812.6	829.3
30°	903.8	882.1	811.6	723.9	677.8	706.4	762.0	810.1	828.0
32.5°	911.2	886.8	807.4	708.5	655.3	689.0	752.8	806.1	816.8
35°	920.1	891.3	802.4	691.8	631.4	670.1	742.3	790.8	771.6
37.5°	924.8	895.4	796.2	674.3	605.8	650.0	731.1	745.5	717.3
40°	926.6	895.2	789.1	655.9	579.1	629.1	718.4	689.7	658.2
42.5°	928.1	893.7	782.6	636.7	551.4	607.7	694.8	631.7	599.1
45°	928.6	891.5	775.4	616.1	522.1	585.3	647.7	573.4	541.8
47.5°	928.4	888.1	764.7	595.1	492.0	562.4	592.3	517.6	489.9
50°	926.4	882.9	752.5	573.0	460.3	537.8	534.6	465.6	458.8
52.5°	922.2	875.9	740.0	550.2	428.0	513.1	476.9	433.4	455.0
55°	916.3	867.9	726.4	526.9	395.3	488.3	422.2	427.2	450.4
57.5°	908.2	857.5	710.6	503.7	361.9	461.8	373.0	421.1	446.0
60°	897.2	844.6	693.3	482.1	328.2	424.7	345.8	413.3	438.4
62.5°	885.5	832.3	676.7	460.4	294.8	371.9	334.1	403.4	430.7
65°	876.1	818.7	658.1	436.6	260.8	317.8	322.4	394.7	426.6
67.5°	861.0	803.5	637.1	411.7	227.1	265.1	310.8	392.6	428.6
70°	845.2	785.7	615.8	386.2	193.5	217.1	296.6	384.6	405.9
72.5°	827.9	766.6	593.3	359.7	160.7	183.6	288.9	361.7	390.7
75°	811.5	748.0	569.3	332.3	128.9	165.8	273.8	347.9	379.1
77.5°	798.4	731.5	546.0	304.0	98.2	146.5	253.9	336.1	367.6
80°	786.4	718.0	525.0	277.0	69.7	130.8	241.0	324.8	357.4
82.5°	774.6	705.8	509.1	251.3	44.2	114.5	229.0	314.3	348.0
85°	765.6	695.5	496.5	229.1	22.9	102.0	219.4	306.2	339.8
87.5°	757.9	688.3	487.4	214.5	7.8	94.3	213.3	300.6	334.5
90°	753.8	685.3	483.0	205.1	0.0	87.9	209.1	297.2	332.8
92.5°	753.0	686.7	484.4	207.2	0.8	86.3	208.1	296.5	333.6
95°	754.3	689.0	488.7	216.4	6.1	89.8	209.7	297.4	334.5
97.5°	756.3	692.2	494.8	229.8	14.5	97.3	212.3	298.3	335.4
100°	758.8	696.0	502.1	229.8	24.7	111.3	215.4	299.5	336.1
102.5°	761.4	699.5	511.0	207.9	36.1	116.5	221.0	300.8	336.9
105°	763.0	703.4	522.2	185.6	48.4	120.6	236.7	303.0	337.5
107.5°	765.1	708.7	511.5	175.1	61.4	126.8	255.4	312.7	343.0
110°	769.6	714.3	476.5	182.0	74.9	134.6	260.3	331.2	358.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	773.2	689.7	437.8	192.8	88.8	143.8	261.0	349.6	378.4
115°	736.3	644.6	399.8	204.1	103.0	154.0	261.4	351.9	387.3
117.5°	685.7	595.5	364.6	215.7	117.4	164.3	262.2	349.7	384.1
120°	632.5	544.9	341.7	227.6	131.5	176.4	264.1	346.5	379.2
122.5°	577.2	496.3	343.9	238.2	145.8	187.5	266.7	343.2	373.5
125°	525.2	452.1	350.4	247.2	159.8	197.9	269.6	340.2	367.7
127.5°	476.6	425.4	356.9	255.7	173.7	208.0	273.0	337.3	362.0
130°	442.2	426.7	362.7	264.0	187.2	217.9	276.7	335.4	356.9
132.5°	442.3	428.8	368.1	272.5	200.5	228.0	280.7	333.9	352.9
135°	442.5	430.7	373.2	280.4	213.4	237.9	285.0	332.9	349.1
137.5°	442.6	431.7	377.5	287.9	226.0	247.6	291.9	332.2	345.9
140°	442.6	432.3	379.5	294.6	238.1	257.2	297.0	331.9	342.8
142.5°	440.7	432.9	379.1	301.0	249.9	266.4	301.9	331.6	340.2
145°	439.0	432.1	378.7	307.0	261.2	275.4	306.5	334.3	337.8
147.5°	436.1	428.0	377.8	312.7	271.8	283.7	310.6	335.7	339.6
150°	429.5	421.3	376.8	317.6	281.9	291.8	314.5	336.5	339.1
152.5°	420.9	414.4	375.2	322.5	291.0	299.3	318.1	337.2	338.8
155°	411.3	407.2	372.5	327.4	299.7	306.2	321.6	337.1	337.8
157.5°	402.3	399.8	369.0	331.6	307.5	312.6	324.8	337.0	336.4
160°	392.7	391.4	365.3	335.3	314.5	318.4	327.5	337.1	334.6
162.5°	382.5	382.8	361.2	338.4	321.1	323.4	330.3	337.3	333.7
165°	372.5	373.9	357.7	340.4	326.8	327.7	332.7	337.8	332.9
167.5°	362.4	365.5	354.8	342.4	331.5	331.2	334.9	337.9	332.1
170°	353.9	358.9	352.2	343.7	335.4	334.6	336.6	338.1	331.3
172.5°	346.5	352.8	349.2	344.2	338.4	336.8	337.6	338.2	330.5
175°	340.2	347.5	346.2	344.2	340.6	338.6	338.0	338.0	329.2
177.5°	334.8	343.3	343.2	343.4	341.9	340.2	338.1	337.3	329.0
180°	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0	340.0

(END OF REPORT)