

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: 223P129

Luminaire Tested: **2RDI-154X-M4I**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 223P129
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2RDI-154X-M4I
Description: 2 X 4 Recessed Direct-Indirect Luminaire with a
center mounted curve solid reflector with Mirro 4 insert.
Light Source: One - F54T5HO/830 - 4400 Lumens - 54 Watts
Ballast/Driver: Triad B254PUNV-D Electronic

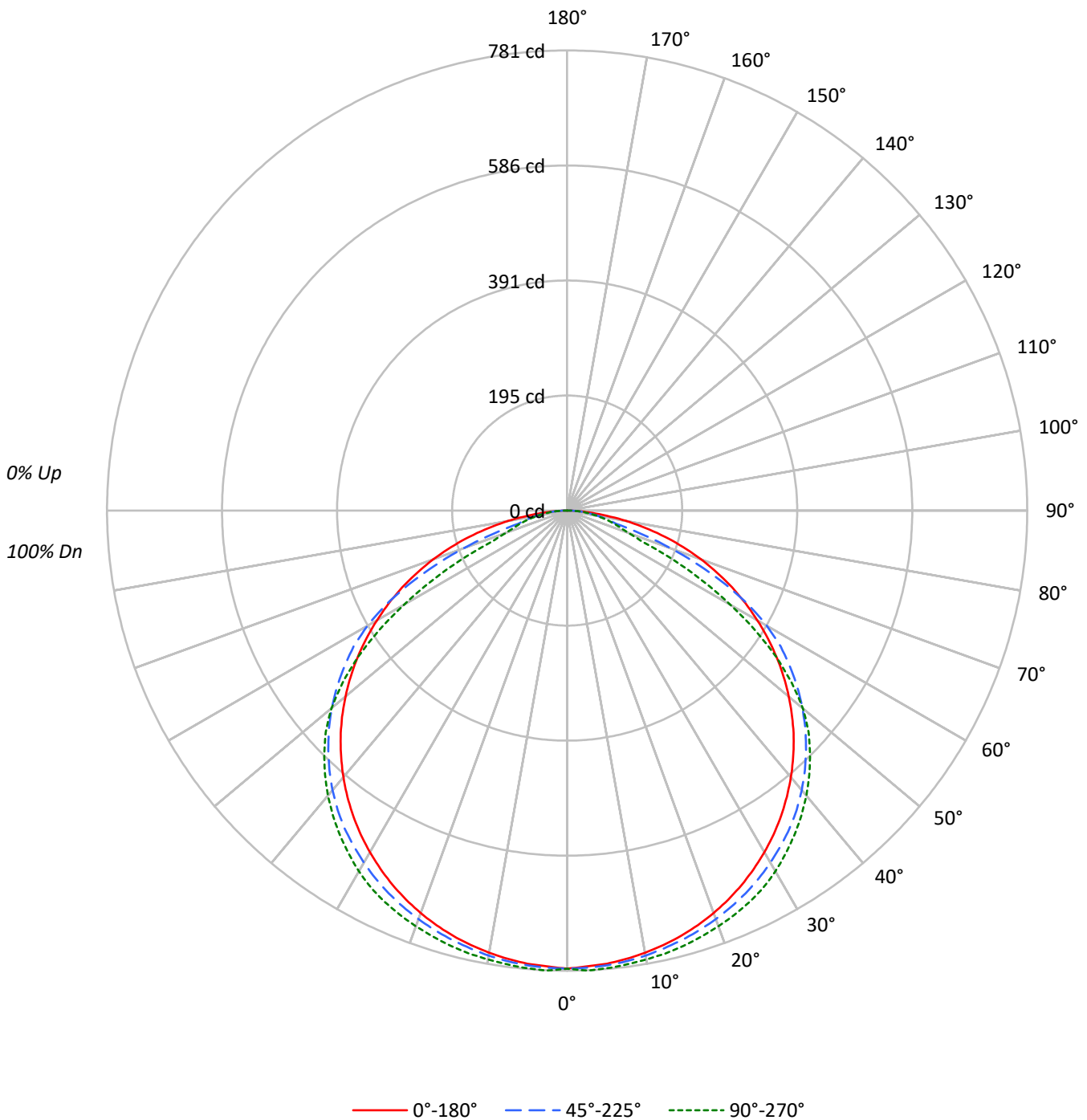
Summary

Lumens per Lamp: 4400 (1 lamp)
Luminaire Lumens: 2294.7 lumens
Efficiency: 52.2%
Efficacy: 37.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1.88' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 61
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	62	62	62	62	61	61	61	61	58	58	58	55	55	55	53	53	53	52
1	57	54	52	50	55	53	51	50	51	49	48	49	48	47	47	46	45	44
2	52	48	44	41	50	47	43	41	45	42	40	43	41	39	41	40	38	37
3	47	42	38	34	46	41	37	34	39	36	33	38	35	33	37	34	32	31
4	43	37	32	29	42	36	32	29	35	31	28	34	31	28	33	30	28	26
5	40	33	28	25	39	32	28	25	31	27	24	30	27	24	29	26	24	23
6	37	30	25	22	36	29	25	22	28	24	21	27	24	21	26	23	21	20
7	34	27	22	19	33	26	22	19	26	22	19	25	21	19	24	21	19	18
8	32	24	20	17	31	24	20	17	23	20	17	23	19	17	22	19	17	16
9	29	22	18	15	29	22	18	15	21	18	15	21	17	15	20	17	15	14
10	28	21	16	14	27	20	16	14	20	16	14	19	16	14	19	16	14	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1141	1141	1141
5°	1138	1142	1149
10°	1136	1143	1153
15°	1136	1147	1162
20°	1136	1153	1173
25°	1136	1161	1187
30°	1135	1170	1198
35°	1134	1180	1205
40°	1132	1187	1211
45°	1129	1191	1210
50°	1121	1191	1193
55°	1111	1182	1108
60°	1095	1150	940
65°	1073	1032	699
70°	1037	804	469
75°	974	486	446
80°	858	455	433
85°	625	446	453



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	73.7	3.2	1.7	0°	778	778	778	778	778	
10°-20°	213.3	9.3	4.8	5°	772	772	775	776	780	73
20°-30°	330.4	14.4	7.5	15°	747	749	754	760	765	211
30°-40°	409.7	17.9	9.3	25°	701	706	717	726	733	323
40°-50°	438.1	19.1	10.0	35°	633	642	658	666	672	396
50°-60°	398.9	17.4	9.1	45°	544	558	574	579	583	419
60°-70°	272.3	11.9	6.2	55°	434	454	462	446	433	388
70°-80°	126.0	5.5	2.9	65°	309	326	297	227	201	305
80°-90°	32.3	1.4	0.7	75°	172	173	86	80	79	181
90°-100°	0.0	0.0	0.0	85°	37	27	26	27	27	44
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	2
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	617.4	26.9	14.0	165°	0	0	0	0	0	0
0°-40°	1027.1	44.8	23.3	175°	0	0	0	0	0	0
0°-60°	1864.2	81.2	42.4	180°	0	0	0	0	0	0
0°-90°	2294.7	100.0	52.2							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	2294.7	100.0	52.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	777.5	777.5	777.5	777.5	777.5
2.5°	774.4	775.0	776.6	778.0	781.4
5°	772.0	772.5	774.6	776.2	779.7
7.5°	767.7	768.7	771.6	773.6	776.9
10°	762.0	763.3	766.9	770.1	773.6
12.5°	755.3	756.9	761.0	765.5	769.9
15°	747.2	749.1	754.4	759.7	764.8
17.5°	737.8	740.2	746.8	752.9	758.0
20°	726.9	730.0	737.9	745.2	750.9
22.5°	714.7	718.5	727.8	736.0	742.6
25°	701.0	705.8	716.7	725.6	732.7
27.5°	685.9	691.7	704.1	714.3	721.4
30°	669.6	676.3	689.9	700.8	707.0
32.5°	652.0	659.6	674.9	684.7	690.2
35°	633.0	641.7	658.4	666.2	672.4
37.5°	612.5	622.5	640.1	646.9	652.8
40°	590.8	602.0	619.5	626.3	631.7
42.5°	567.9	580.5	597.2	603.7	608.2
45°	543.8	557.6	573.5	578.6	583.0
47.5°	518.1	533.3	548.4	552.2	555.9
50°	491.0	508.2	521.3	523.5	522.3
52.5°	463.3	481.7	492.4	488.2	480.8
55°	434.1	453.6	461.9	445.6	432.9
57.5°	403.9	423.5	429.7	397.1	379.0
60°	373.0	392.2	391.7	342.8	320.2
62.5°	341.2	359.6	347.4	284.8	261.5
65°	309.0	326.2	297.0	227.4	201.2
67.5°	275.5	290.8	242.3	167.6	138.3
70°	241.6	254.7	187.3	112.2	109.3
72.5°	206.5	216.5	131.9	95.4	93.4
75°	171.7	173.0	85.6	79.8	78.6
77.5°	136.6	125.0	69.0	65.4	64.4
80°	101.5	78.5	53.8	51.8	51.2
82.5°	67.5	42.9	39.7	38.8	38.7
85°	37.1	26.9	26.5	26.7	26.9
87.5°	14.4	13.1	14.2	15.1	15.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)