

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: 223P128

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 223P128
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2RDI-154X
Description: 2 X 4 Recessed Direct-Indirect Luminaire with a
center mounted curve solid reflector.
Light Source: One - F54T5HO/830 - 4400 Lumens - 54 Watts
Ballast/Driver: Triad B254PUNV-D Electronic

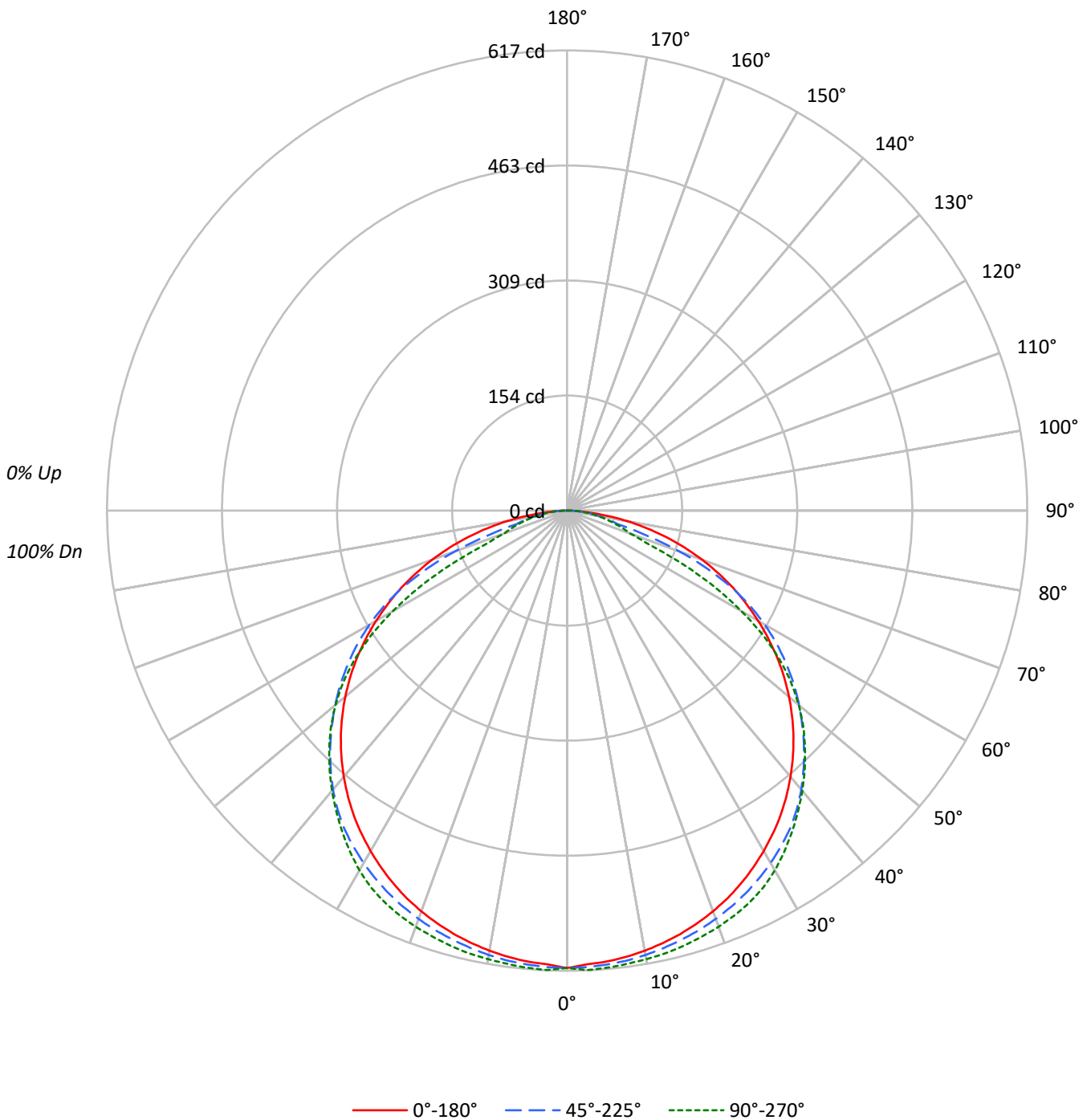
Summary

Lumens per Lamp: 4400 (1 lamp)
Luminaire Lumens: 1819.3 lumens
Efficiency: 41.3%
Efficacy: 29.8 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

TEST NUMBER: 223P128
CATALOG NUMBER: 2RDI-154X

Luminous Intensity Polar Plot





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 CATALOG NUMBER: 2RDI-154X

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	49	49	49	49	48	48	48	48	46	46	46	44	44	44	42	42	42	41
1	45	43	41	40	44	42	41	39	40	39	38	39	38	37	37	37	36	35
2	41	38	35	33	40	37	34	32	35	33	31	34	32	31	33	31	30	29
3	37	33	30	27	36	32	29	27	31	28	26	30	28	26	29	27	25	24
4	34	29	26	23	33	29	25	23	28	25	22	27	24	22	26	24	22	21
5	31	26	22	20	31	26	22	19	25	22	19	24	21	19	23	21	19	18
6	29	23	20	17	28	23	20	17	22	19	17	22	19	17	21	18	17	16
7	27	21	18	15	26	21	17	15	20	17	15	20	17	15	19	17	15	14
8	25	19	16	13	24	19	16	13	18	15	13	18	15	13	17	15	13	12
9	23	18	14	12	23	17	14	12	17	14	12	17	14	12	16	14	12	11
10	22	16	13	11	21	16	13	11	16	13	11	15	13	11	15	12	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	900	900	900
5°	895	900	907
10°	893	902	911
15°	893	905	918
20°	893	910	928
25°	894	917	939
30°	894	925	944
35°	894	933	942
40°	893	936	940
45°	891	933	937
50°	887	928	925
55°	880	919	890
60°	869	899	794
65°	853	842	605
70°	826	691	387
75°	780	399	366
80°	694	372	355
85°	510	364	369



TEST NUMBER: 223P128
 CATALOG NUMBER: 2RDI-154X

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	58.1	3.2	1.3	0°	613	613	613	613	613	
10°-20°	168.3	9.3	3.8	5°	607	609	611	613	615	58
20°-30°	260.9	14.3	5.9	15°	588	591	595	600	604	166
30°-40°	322.7	17.7	7.3	25°	552	557	566	574	579	254
40°-50°	343.1	18.9	7.8	35°	499	508	521	523	526	312
50°-60°	315.2	17.3	7.2	45°	429	442	449	449	451	331
60°-70°	221.7	12.2	5.0	55°	344	360	359	352	348	307
70°-80°	102.8	5.7	2.3	65°	246	257	242	196	174	243
80°-90°	26.5	1.5	0.6	75°	138	139	70	66	65	145
90°-100°	0.0	0.0	0.0	85°	30	22	22	22	22	36
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°	487.3	26.8	11.1	165°	0	0	0	0	0	0
0°-40°	810.0	44.5	18.4	175°	0	0	0	0	0	0
0°-60°	1468.3	80.7	33.4	180°	0	0	0	0	0	0
0°-90°	1819.3	100.0	41.3							
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°	1819.3	100.0	41.3							



TEST NUMBER: 223P128
 CATALOG NUMBER: 2RDI-154X

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	613.2	613.2	613.2	613.2	613.2
2.5°	609.1	611.2	612.7	614.0	616.6
5°	607.0	609.2	611.0	612.6	615.3
7.5°	603.7	606.3	608.7	610.5	613.1
10°	599.3	602.0	605.1	607.7	610.8
12.5°	593.9	597.0	600.5	604.2	608.1
15°	587.6	590.9	595.3	599.8	604.1
17.5°	580.2	584.0	589.5	594.7	599.1
20°	571.8	576.1	582.7	588.9	593.8
22.5°	562.5	567.1	574.9	581.8	587.2
25°	551.7	557.3	566.3	573.8	579.4
27.5°	539.9	546.3	556.5	564.6	569.7
30°	527.1	534.4	545.7	553.3	557.1
32.5°	513.4	521.4	533.9	539.0	542.0
35°	498.9	507.5	520.8	522.7	525.8
37.5°	482.8	492.6	505.6	505.6	508.5
40°	466.0	476.7	488.4	487.7	490.5
42.5°	448.0	459.9	469.3	468.7	471.4
45°	429.2	442.1	449.2	448.6	451.1
47.5°	409.2	423.3	428.0	427.3	429.6
50°	388.4	403.5	406.2	403.9	405.2
52.5°	366.6	382.6	383.2	379.5	378.5
55°	343.8	360.0	359.0	351.7	347.8
57.5°	320.2	335.9	333.5	320.2	311.9
60°	295.9	310.2	306.1	283.5	270.5
62.5°	270.8	283.8	276.4	241.6	225.2
65°	245.6	256.6	242.5	195.9	174.2
67.5°	219.3	228.9	203.5	144.9	117.5
70°	192.5	200.2	160.9	92.6	90.2
72.5°	165.1	170.7	113.4	78.4	77.1
75°	137.5	139.0	70.4	65.5	64.6
77.5°	109.7	104.1	56.5	53.6	53.1
80°	82.1	66.8	44.0	42.3	42.0
82.5°	54.9	35.2	32.5	31.7	31.6
85°	30.3	22.2	21.6	21.8	21.9
87.5°	11.8	10.8	11.6	12.4	12.7
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



TEST NUMBER: 223P128
CATALOG NUMBER: 2RDI-154X

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)