

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: 223P121

Luminaire Tested: **2RDI-317RP**

Issue Date: 3/3/2020



**Test Information**

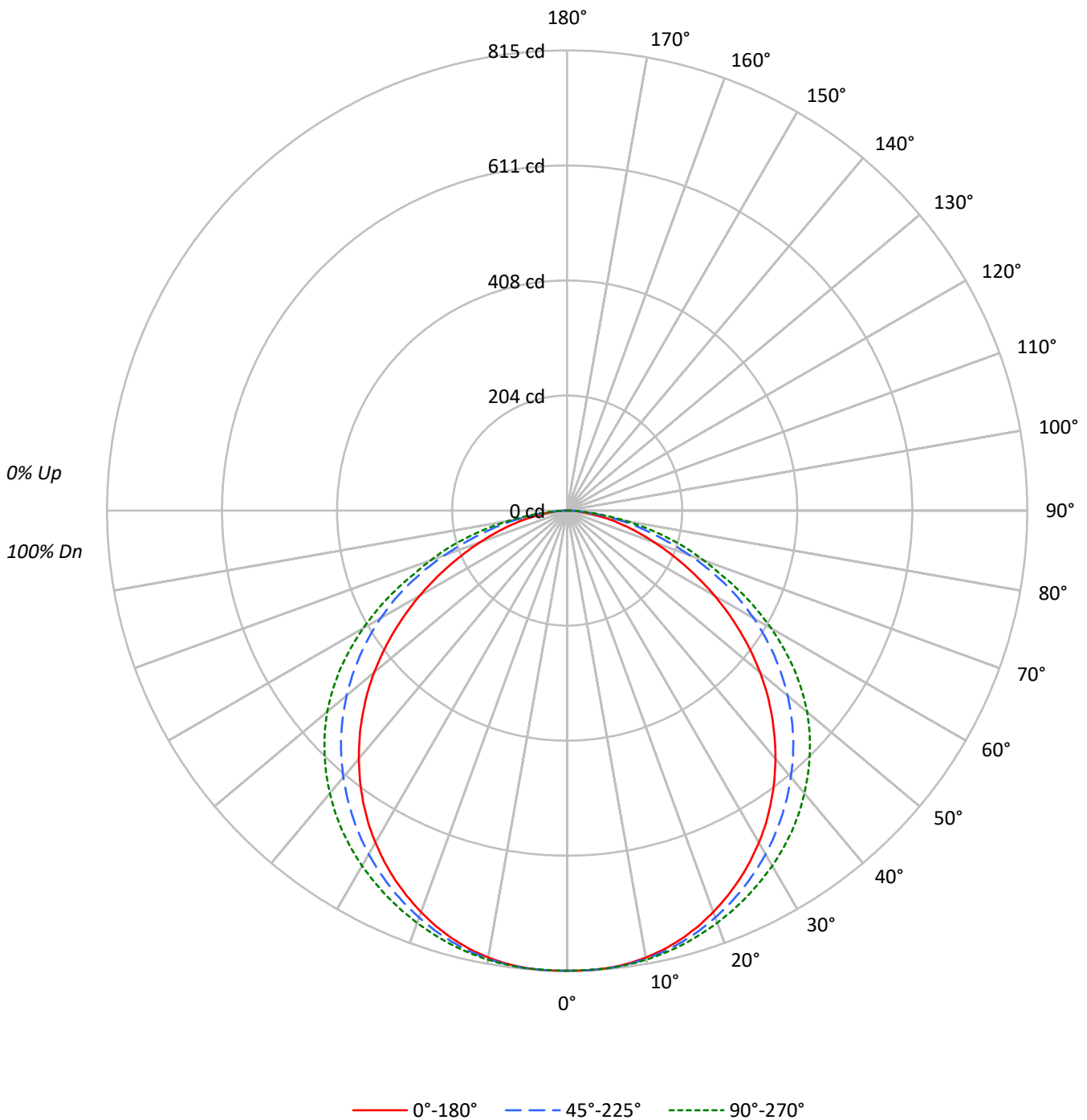
Test Method: LM-41-14  
Report Number: 223P121  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2RDI-317RP  
Description: 2 X 2 Recessed Direct-Indirect Luminaire with a  
center mounted curved acrylic diffuser and 51% curved perf.  
Light Source: Three - FO17/35K - 1300 Lumens ea. - 17 Watts ea.  
Ballast/Driver: Magnetek B332I120RH Electronic - L.O.B.F. = 89.7

**Summary**

Lumens per Lamp: 1300 (3 lamps)  
Luminaire Lumens: 2375.5 lumens  
Efficiency: 60.9%  
Efficacy: 50.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.33 / 1.41  
Luminous Opening: Rectangular (W 1.88' x L: 1.91' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 47  
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	50	30	10	50	30	10	0		
RCR																										
0	73	73	73	73	71	71	71	71	68	68	68	65	65	65	62	62	62	62	62	62	62	62	62	61		
1	66	63	61	58	65	62	60	57	59	57	56	57	55	54	55	54	52	55	54	52	55	54	52	51		
2	60	55	51	48	59	54	50	47	52	49	46	50	47	45	48	46	44	48	46	44	48	46	44	42		
3	55	48	43	39	53	47	43	39	46	42	38	44	41	38	42	39	37	42	39	37	42	39	37	36		
4	50	43	37	33	49	42	37	33	40	36	33	39	35	32	38	34	32	38	34	32	38	34	32	30		
5	46	38	33	29	45	38	32	28	36	32	28	35	31	28	34	30	28	34	30	28	34	30	28	26		
6	43	34	29	25	41	34	29	25	33	28	25	32	28	24	31	27	24	31	27	24	31	27	24	23		
7	39	31	26	22	38	31	26	22	30	25	22	29	25	22	28	24	21	28	24	21	28	24	21	20		
8	37	28	23	20	36	28	23	20	27	23	19	26	22	19	26	22	19	26	22	19	26	22	19	18		
9	34	26	21	18	33	26	21	18	25	21	17	24	20	17	24	20	17	24	20	17	24	20	17	16		
10	32	24	19	16	31	24	19	16	23	19	16	23	19	16	22	18	16	22	18	16	22	18	16	15		

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

	0°	45°	90°
0°	2454	2454	2454
5°	2460	2461	2460
10°	2458	2466	2470
15°	2447	2464	2480
20°	2425	2459	2490
25°	2397	2452	2506
30°	2361	2444	2526
35°	2316	2434	2550
40°	2257	2424	2571
45°	2183	2411	2589
50°	2090	2389	2600
55°	1966	2351	2579
60°	1814	2300	2513
65°	1636	2205	2399
70°	1444	2035	2267
75°	1255	1795	2123
80°	1034	1568	1826
85°	860	1158	1227



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	77.4	3.3	2.0	0°	815	815	815	815	815	
10°-20°	223.0	9.4	5.7	5°	814	813	814	814	814	77
20°-30°	340.1	14.3	8.7	15°	785	786	790	794	795	221
30°-40°	414.1	17.4	10.6	25°	721	726	738	750	754	332
40°-50°	434.3	18.3	11.1	35°	630	639	662	685	694	394
50°-60°	393.3	16.6	10.1	45°	513	529	566	598	608	395
60°-70°	293.2	12.3	7.5	55°	374	400	448	481	491	334
70°-80°	160.4	6.8	4.1	65°	230	264	309	330	337	228
80°-90°	39.6	1.7	1.0	75°	108	130	154	176	182	115
90°-100°	0.0	0.0	0.0	85°	25	28	34	36	36	27
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°	640.6	27.0	16.4	165°	0	0	0	0	0	0
0°-40°	1054.7	44.4	27.0	175°	0	0	0	0	0	0
0°-60°	1882.3	79.2	48.3	180°	0	0	0	0	0	0
0°-90°	2375.5	100.0	60.9							
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°	2375.5	100.0	60.9							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	815.0	815.0	815.0	815.0	815.0
2.5°	815.2	814.7	814.9	814.6	814.4
5°	813.7	813.3	814.0	813.8	813.8
7.5°	809.8	809.6	811.2	812.1	811.5
10°	803.8	804.0	806.3	808.0	807.8
12.5°	795.5	796.1	799.4	802.1	802.2
15°	784.9	785.7	790.3	794.5	795.3
17.5°	771.9	773.4	779.5	785.4	786.9
20°	756.7	759.2	767.2	774.9	777.0
22.5°	739.9	743.3	753.2	762.9	766.2
25°	721.4	725.7	737.8	749.7	754.2
27.5°	701.2	706.4	721.0	735.3	740.7
30°	679.1	685.6	702.8	719.7	726.5
32.5°	655.7	663.1	683.2	702.9	710.7
35°	629.9	639.1	662.1	685.1	693.6
37.5°	602.7	613.6	639.9	665.8	674.7
40°	574.1	586.6	616.6	644.7	653.9
42.5°	544.1	558.4	592.1	622.0	631.8
45°	512.6	529.0	566.2	597.6	607.9
47.5°	480.2	498.6	538.7	571.7	582.6
50°	446.2	467.1	509.9	544.0	554.9
52.5°	410.8	434.2	479.5	514.0	524.2
55°	374.5	400.5	447.8	481.2	491.2
57.5°	337.9	366.9	415.4	446.3	454.9
60°	301.2	333.1	381.8	409.1	417.3
62.5°	265.0	298.7	346.8	370.5	378.1
65°	229.6	264.4	309.4	330.1	336.7
67.5°	195.6	229.9	270.4	287.8	293.4
70°	164.0	195.9	231.1	247.1	257.5
72.5°	134.7	162.1	191.0	211.7	221.0
75°	107.9	129.5	154.3	175.5	182.5
77.5°	83.0	98.5	122.0	138.5	143.7
80°	59.6	70.3	90.4	101.6	105.3
82.5°	40.0	46.9	60.2	66.5	68.2
85°	24.9	28.1	33.5	35.5	35.5
87.5°	12.8	13.0	13.9	14.3	14.2
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)