

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: 223P130

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

Issue Date: 3/3/2020



**Test Information**

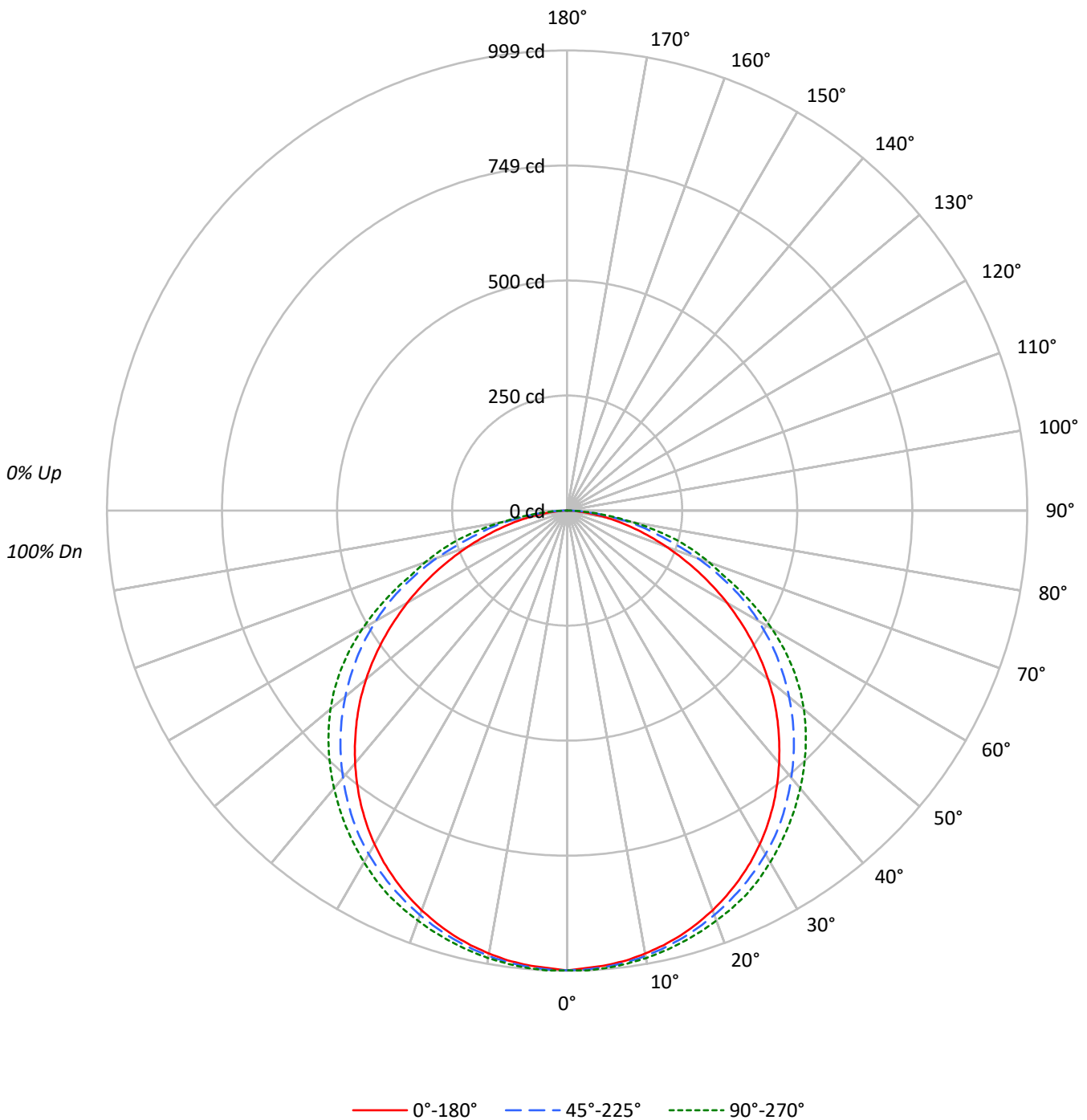
Test Method: LM-41-14  
Report Number: 223P130  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2RDI-154RP  
Description: 2 X 4 Recessed Direct-Indirect Luminaire with a  
perforated center mounted curve reflector and acrylic  
diffuser.  
Light Source: One - F54T5HO/830 - 4400 Lumens - 54 Watts  
Ballast/Driver: Triad B254PUNV-D Electronic

**Summary**

Lumens per Lamp: 4400 (1 lamp)  
Luminaire Lumens: 2964.7 lumens  
Efficiency: 67.4%  
Efficacy: 47.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 1.88' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 62  
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	80	80	80	80	78	78	78	78	75	75	75	72	72	72	69	69	69	67
1	73	70	67	64	71	68	66	63	65	63	61	63	61	59	60	59	58	56
2	66	61	56	52	65	59	55	51	57	53	50	55	52	49	53	50	48	47
3	60	53	48	43	59	52	47	43	50	46	42	48	44	41	46	43	40	39
4	55	47	41	36	54	46	40	36	44	39	36	43	39	35	41	38	35	33
5	51	42	36	31	49	41	35	31	40	35	31	38	34	30	37	33	30	29
6	47	38	32	27	45	37	31	27	36	31	27	35	30	27	34	29	26	25
7	43	34	28	24	42	34	28	24	33	27	24	32	27	23	31	26	23	22
8	40	31	25	21	39	31	25	21	30	25	21	29	24	21	28	24	21	20
9	38	29	23	19	37	28	23	19	27	22	19	27	22	19	26	22	19	18
10	35	26	21	17	34	26	21	17	25	20	17	25	20	17	24	20	17	16

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

	0°	45°	90°
0°	1465	1465	1465
5°	1460	1465	1469
10°	1456	1464	1470
15°	1450	1462	1474
20°	1443	1460	1480
25°	1432	1459	1490
30°	1418	1460	1495
35°	1398	1458	1501
40°	1372	1451	1509
45°	1341	1445	1520
50°	1301	1436	1533
55°	1247	1426	1533
60°	1177	1410	1509
65°	1090	1373	1449
70°	982	1288	1407
75°	863	1160	1386
80°	714	1089	1213
85°	504	839	886



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	94.5	3.2	2.1	0°	998	998	998	998	998	
10°-20°	271.6	9.2	6.2	5°	991	992	994	996	997	94
20°-30°	415.6	14.0	9.4	15°	954	956	962	968	970	269
30°-40°	507.2	17.1	11.5	25°	884	889	901	914	920	407
40°-50°	534.5	18.0	12.1	35°	780	790	814	830	837	488
50°-60°	492.0	16.6	11.2	45°	646	665	696	722	732	498
60°-70°	376.5	12.7	8.6	55°	487	517	557	588	599	435
70°-80°	217.2	7.3	4.9	65°	314	353	395	411	417	311
80°-90°	55.6	1.9	1.3	75°	152	186	204	234	244	162
90°-100°	0.0	0.0	0.0	85°	30	39	50	52	53	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°	781.7	26.4	17.8	165°	0	0	0	0	0	0
0°-40°	1288.9	43.5	29.3	175°	0	0	0	0	0	0
0°-60°	2315.4	78.1	52.6	180°	0	0	0	0	0	0
0°-90°	2964.7	100.0	67.4							
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°	2964.7	100.0	67.4							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	998.0	998.0	998.0	998.0	998.0
2.5°	993.9	995.0	997.2	999.0	999.2
5°	990.6	991.6	993.9	996.2	996.7
7.5°	984.9	986.2	989.0	991.5	992.2
10°	976.5	978.2	981.8	985.0	986.4
12.5°	966.5	968.3	972.6	977.1	978.9
15°	954.3	956.4	961.7	967.5	969.6
17.5°	939.9	942.6	948.9	956.0	959.3
20°	923.4	926.6	934.5	943.4	947.2
22.5°	904.9	908.7	918.4	929.7	934.5
25°	884.2	888.9	901.0	914.5	920.0
27.5°	861.5	867.0	881.9	897.2	902.1
30°	836.4	843.4	861.4	876.7	881.7
32.5°	809.4	817.8	838.9	854.2	860.0
35°	780.3	790.2	813.7	830.4	837.3
37.5°	748.9	760.9	786.1	805.6	812.8
40°	716.0	730.1	757.2	779.0	787.3
42.5°	681.7	697.9	727.2	751.3	760.5
45°	646.1	664.6	696.0	722.1	732.2
47.5°	609.1	629.9	663.1	691.7	702.5
50°	569.8	594.1	628.8	659.3	671.0
52.5°	529.2	556.6	593.7	624.6	636.7
55°	487.1	517.3	557.2	587.6	598.9
57.5°	443.9	477.1	519.4	547.9	558.0
60°	401.0	436.0	480.1	505.2	513.8
62.5°	357.4	394.6	439.0	458.9	466.3
65°	313.9	352.6	395.3	410.6	417.2
67.5°	270.7	310.9	348.6	360.8	366.4
70°	228.8	269.2	300.0	312.6	327.9
72.5°	189.2	227.7	250.1	275.7	287.9
75°	152.1	185.7	204.5	234.5	244.4
77.5°	117.1	143.2	167.5	190.5	195.7
80°	84.5	101.0	128.8	141.4	143.5
82.5°	54.5	65.4	88.3	94.5	95.4
85°	29.9	39.3	49.8	52.3	52.6
87.5°	12.5	16.3	18.3	18.6	18.4
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)