

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: 223P122

Luminaire Tested: **2RDI-217RP**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 223P122  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2RDI-217RP  
Description: 2 X 2 Recessed Direct-Indirect Luminaire with a  
center mounted curved acrylic diffuser and 51% curved perf.  
Light Source: Two - FO17/35K - 1300 Lumens ea. - 17 Watts ea.  
Ballast/Driver: Magnetek B232I120RH Electronic

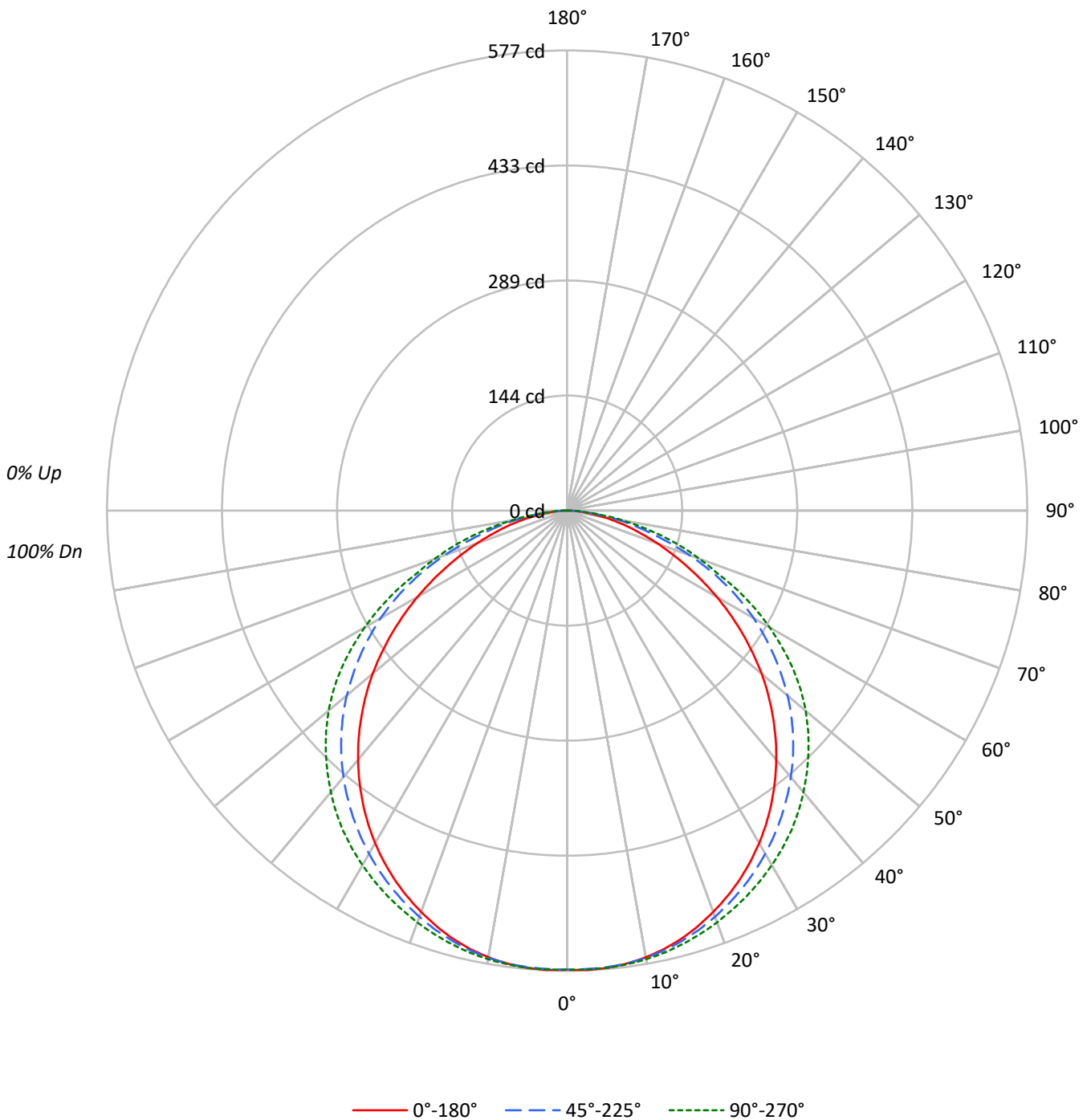
**Summary**

Lumens per Lamp: 1300 (2 lamps)  
Luminaire Lumens: 1679.6 lumens  
Efficiency: 64.6%  
Efficacy: 50.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.33 / 1.41  
Luminous Opening: Rectangular (W 1.86' x L: 1.9' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.2  
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	77	77	77	77	75	75	75	75	72	72	72	69	69	69	66	66	66	65
1	70	67	64	62	69	66	63	61	63	61	59	60	59	57	58	57	56	54
2	64	59	54	50	62	57	53	50	55	52	49	53	50	48	51	49	46	45
3	58	51	46	42	57	50	45	41	48	44	41	47	43	40	45	42	39	38
4	53	45	40	35	52	45	39	35	43	38	35	41	37	34	40	37	34	32
5	49	41	35	30	48	40	34	30	38	34	30	37	33	30	36	32	29	28
6	45	36	31	26	44	36	30	26	35	30	26	34	29	26	33	29	26	24
7	42	33	27	23	41	33	27	23	31	27	23	31	26	23	30	26	23	21
8	39	30	25	21	38	30	24	21	29	24	21	28	24	20	27	23	20	19
9	36	28	22	19	35	27	22	19	26	22	19	26	21	18	25	21	18	17
10	34	25	20	17	33	25	20	17	24	20	17	24	20	17	23	19	17	15

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

	0°	45°	90°
0°	1753	1753	1753
5°	1759	1757	1759
10°	1758	1761	1766
15°	1751	1760	1773
20°	1736	1756	1781
25°	1717	1752	1791
30°	1693	1747	1805
35°	1662	1742	1821
40°	1621	1735	1832
45°	1571	1726	1843
50°	1508	1709	1850
55°	1423	1680	1836
60°	1319	1645	1786
65°	1198	1577	1693
70°	1069	1452	1573
75°	939	1265	1454
80°	784	1096	1233
85°	657	828	852



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	54.7	3.3	2.1	0°	576	576	576	576	576	
10°-20°	157.7	9.4	6.1	5°	576	575	575	575	576	55
20°-30°	240.5	14.3	9.3	15°	555	556	558	562	562	157
30°-40°	293.1	17.4	11.3	25°	511	514	522	530	533	235
40°-50°	307.3	18.3	11.8	35°	447	453	468	484	490	279
50°-60°	278.6	16.6	10.7	45°	365	376	401	421	428	281
60°-70°	207.5	12.4	8.0	55°	268	286	316	339	346	239
70°-80°	112.3	6.7	4.3	65°	166	190	219	232	235	165
80°-90°	27.9	1.7	1.1	75°	80	94	108	120	124	85
90°-100°	0.0	0.0	0.0	85°	19	21	24	24	24	21
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	1
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°	453.0	27.0	17.4	165°	0	0	0	0	0	0
0°-40°	746.0	44.4	28.7	175°	0	0	0	0	0	0
0°-60°	1331.9	79.3	51.2	180°	0	0	0	0	0	0
0°-90°	1679.6	100.0	64.6							
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°	1679.6	100.0	64.6							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	575.7	575.7	575.7	575.7	575.7
2.5°	576.7	575.7	575.3	575.6	575.9
5°	575.5	574.7	574.7	575.2	575.5
7.5°	572.9	572.4	572.8	573.8	573.9
10°	568.7	568.5	569.5	571.0	571.3
12.5°	562.9	563.0	564.7	566.9	567.5
15°	555.4	555.8	558.3	561.6	562.4
17.5°	546.3	547.1	550.8	555.1	556.4
20°	535.6	537.1	542.0	547.6	549.5
22.5°	523.9	525.9	532.3	539.2	541.6
25°	511.0	513.6	521.5	529.9	533.1
27.5°	497.0	500.2	509.6	519.8	523.7
30°	481.6	485.6	496.8	508.7	513.4
32.5°	464.9	469.9	483.1	496.9	502.2
35°	447.0	453.0	468.5	484.2	489.9
37.5°	427.9	435.1	452.9	470.3	476.1
40°	407.9	416.2	436.5	455.2	461.0
42.5°	387.0	396.4	419.1	438.7	445.0
45°	364.9	375.8	400.7	421.2	427.9
47.5°	342.1	354.4	381.2	402.8	409.9
50°	318.4	332.4	360.7	383.4	390.5
52.5°	293.4	309.6	339.0	362.1	369.3
55°	268.0	285.9	316.5	339.2	345.8
57.5°	242.3	262.0	293.7	314.8	320.1
60°	216.6	238.2	270.1	288.4	293.3
62.5°	191.2	214.0	245.3	260.6	265.2
65°	166.3	189.7	218.9	231.6	235.0
67.5°	142.6	165.3	191.4	200.5	202.6
70°	120.1	141.0	163.1	170.7	176.7
72.5°	99.3	117.1	134.2	145.4	150.2
75°	79.8	93.7	107.5	119.5	123.6
77.5°	61.8	71.3	84.6	93.6	96.5
80°	44.7	51.0	62.5	68.5	70.3
82.5°	29.9	34.1	41.7	45.0	45.8
85°	18.8	20.8	23.7	24.4	24.4
87.5°	9.8	10.0	10.4	10.8	10.6
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)