

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: 223P116

Luminaire Tested: **2RDI-2BX40RP**

Issue Date: 3/3/2020



**Test Information**

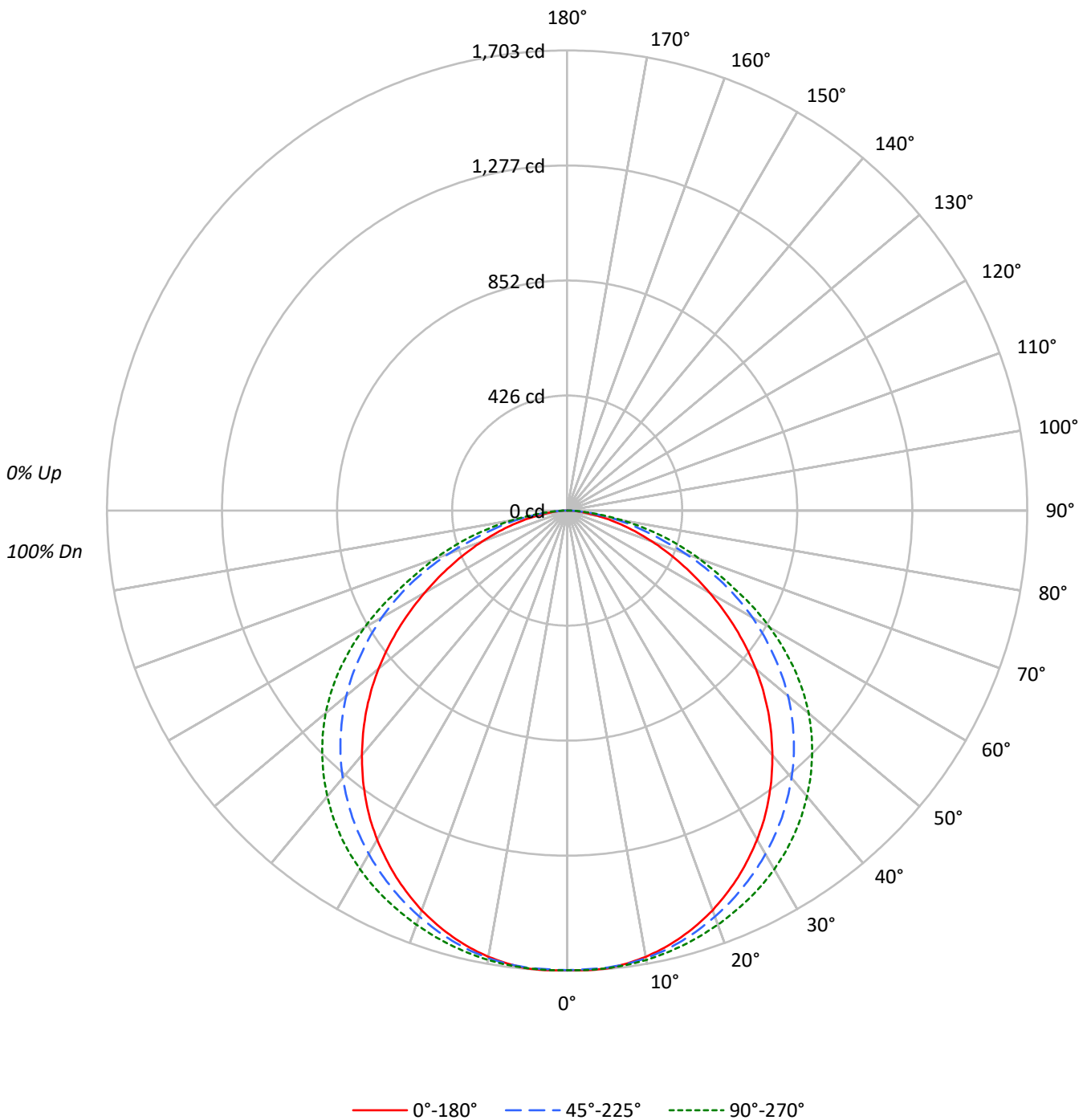
Test Method: LM-41-14  
Report Number: 223P116  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2RDI-2BX40RP  
Description: 2 X 2 Recessed Direct-Indirect Luminaire with  
a curved acrylic diffuser and 51% curved perf.  
Light Source: Two - F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.  
Ballast/Driver: Magnetek B240I120HP Electronic - L.O.B.F. = 89.4

**Summary**

Lumens per Lamp: 3150 (2 lamps)  
Luminaire Lumens: 4924.7 lumens  
Efficiency: 78.2%  
Efficacy: 72.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.41  
Luminous Opening: Rectangular (W 1.85' x L: 1.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 68.2  
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	93	93	93	93	91	91	91	91	87	87	87	83	83	83	80	80	80	78
1	85	81	78	75	83	80	77	74	76	74	72	73	71	69	70	69	67	66
2	77	71	66	61	75	69	65	60	67	63	59	64	61	58	62	59	56	55
3	71	62	56	51	69	61	55	50	59	54	49	57	52	49	55	51	48	46
4	65	55	48	43	63	54	48	43	52	47	42	50	45	42	49	44	41	39
5	59	49	42	37	58	48	42	37	47	41	36	45	40	36	44	39	36	34
6	55	44	37	32	53	44	37	32	42	36	32	41	36	31	40	35	31	30
7	51	40	33	28	49	39	33	28	38	32	28	37	32	28	36	31	28	26
8	47	37	30	25	46	36	30	25	35	29	25	34	29	25	33	28	25	23
9	44	34	27	23	43	33	27	23	32	27	23	31	26	22	31	26	22	21
10	41	31	25	21	40	31	25	21	30	24	20	29	24	20	28	24	20	19

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

	0°	45°	90°
0°	5209	5209	5209
5°	5229	5219	5225
10°	5214	5230	5252
15°	5180	5224	5278
20°	5129	5211	5315
25°	5058	5200	5362
30°	4971	5191	5420
35°	4863	5181	5476
40°	4725	5165	5520
45°	4556	5136	5552
50°	4345	5083	5559
55°	4068	4981	5493
60°	3736	4850	5310
65°	3369	4615	4949
70°	2990	4172	4656
75°	2567	3608	4283
80°	2098	3104	3615
85°	1686	2319	2530



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	161.6	3.3	2.6	0°	1701	1701	1701	1701	1701	
10°-20°	465.5	9.5	7.4	5°	1701	1699	1698	1698	1700	162
20°-30°	710.3	14.4	11.3	15°	1634	1637	1648	1661	1665	461
30°-40°	865.7	17.6	13.7	25°	1497	1507	1539	1574	1587	689
40°-50°	906.6	18.4	14.4	35°	1301	1325	1386	1443	1465	813
50°-60°	817.3	16.6	13.0	45°	1052	1095	1186	1257	1282	810
60°-70°	600.2	12.2	9.5	55°	762	828	933	1006	1029	680
70°-80°	319.4	6.5	5.1	65°	465	544	637	673	683	463
80°-90°	77.9	1.6	1.2	75°	217	261	305	344	362	233
90°-100°	0.0	0.0	0.0	85°	48	56	66	70	72	54
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	3
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°	1337.4	27.2	21.2	165°	0	0	0	0	0	0
0°-40°	2203.1	44.7	35.0	175°	0	0	0	0	0	0
0°-60°	3927.1	79.7	62.3	180°	0	0	0	0	0	0
<b>0°-90°</b>	<b>4924.7</b>	<b>100.0</b>	<b>78.2</b>							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
<b>90°-180°</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>							
0°-180°	4924.7	100.0	78.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1701	1701	1701	1701	1701
2.5°	1703	1701	1699	1700	1702
5°	1701	1699	1698	1698	1700
7.5°	1691	1690	1692	1695	1696
10°	1677	1678	1682	1688	1689
12.5°	1658	1660	1667	1676	1678
15°	1634	1637	1648	1661	1665
17.5°	1606	1610	1625	1643	1649
20°	1574	1580	1599	1622	1631
22.5°	1537	1545	1571	1599	1610
25°	1497	1507	1539	1574	1587
27.5°	1453	1467	1505	1546	1562
30°	1406	1423	1468	1515	1533
32.5°	1356	1375	1428	1480	1501
35°	1301	1325	1386	1443	1465
37.5°	1243	1271	1340	1402	1425
40°	1182	1215	1292	1357	1381
42.5°	1118	1156	1241	1309	1334
45°	1052	1095	1186	1257	1282
47.5°	983	1032	1128	1200	1227
50°	912	967	1067	1141	1167
52.5°	837	899	1002	1076	1101
55°	762	828	933	1006	1029
57.5°	685	758	864	931	950
60°	610	687	792	850	867
62.5°	536	616	717	764	779
65°	465	544	637	673	683
67.5°	398	471	552	578	595
70°	334	399	466	497	520
72.5°	273	329	378	422	442
75°	217	261	305	344	362
77.5°	166	197	238	270	283
80°	119	140	176	197	205
82.5°	79	93	117	129	134
85°	48	56	66	70	72
87.5°	23	25	28	31	31
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	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
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)