

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: 223P135

Luminaire Tested: **2RDI-2BX40FLS**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 223P135  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2RDI-2BX40FLS  
Description: 2 X 2 RDI CENTER MOUNT SERIES LUMINAIRE WITH AN OPAQUE RIBBED LENS.  
Light Source: TWO - F40BX/SPX35/RS - 3150 LUMENS EA. - 40 WATTS EA.  
Ballast/Driver: ADVANCE R-2BS40-TP

**Summary**

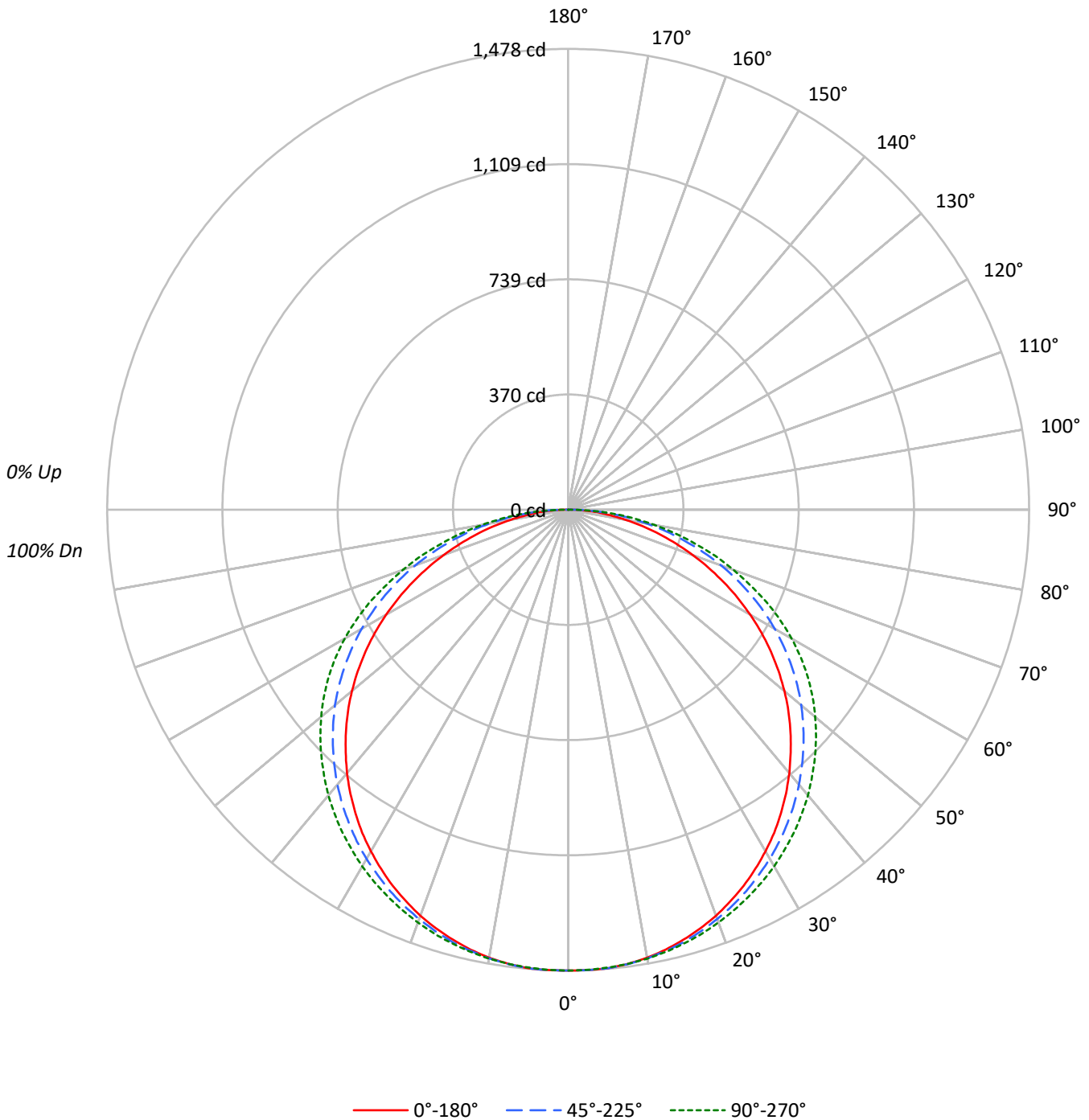
Lumens per Lamp: 3150 (2 lamps)  
Luminaire Lumens: 4700.9 lumens  
Efficiency: 74.6%  
Efficacy: 65.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.33 / 1.43  
Luminous Opening: Rectangular (W 1.85' x L: 1.9' x H: 0')  
CIE Type: Direct

Input Watts (W): 72  
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: 223P135

CATALOG NUMBER: 2RDI-2BX40FLS

### Luminous Intensity Polar Plot





TEST NUMBER: 223P135

CATALOG NUMBER: 2RDI-2BX40FLS

**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	89	89	89	89	87	87	87	87	83	83	83		79	79	79		76	76	76	75
1	80	77	73	70	78	75	72	69	72	69	67		69	67	65		66	64	63	61
2	73	66	61	56	71	65	60	56	62	58	54		60	56	53		57	54	52	50
3	66	58	51	46	64	57	51	46	54	49	45		52	48	44		50	47	43	42
4	60	51	44	39	59	50	44	39	48	42	38		46	41	38		45	40	37	35
5	55	45	38	33	54	45	38	33	43	37	33		41	36	32		40	36	32	30
6	51	41	34	29	50	40	33	29	39	33	28		37	32	28		36	32	28	26
7	47	37	30	25	46	36	30	25	35	29	25		34	29	25		33	28	25	23
8	44	34	27	23	43	33	27	22	32	26	22		31	26	22		30	26	22	21
9	41	31	24	20	40	30	24	20	29	24	20		29	24	20		28	23	20	18
10	38	28	22	18	37	28	22	18	27	22	18		26	22	18		26	21	18	17

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

	0°	45°	90°
0°	4526	4526	4526
5°	4537	4537	4531
10°	4537	4543	4546
15°	4527	4549	4565
20°	4516	4552	4591
25°	4497	4561	4625
30°	4473	4572	4671
35°	4445	4583	4721
40°	4409	4601	4781
45°	4365	4621	4846
50°	4311	4649	4926
55°	4234	4666	5008
60°	4128	4685	5071
65°	3985	4688	5086
70°	3805	4665	5041
75°	3585	4579	4981
80°	3315	4532	4938
85°	3162	4603	4989



TEST NUMBER: 223P135

CATALOG NUMBER: 2RDI-2BX40FLS

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	140.4	3.0	2.2	0°	1478	1478	1478	1478	1478	
10°-20°	405.2	8.6	6.4	5°	1476	1476	1476	1475	1474	140
20°-30°	622.8	13.2	9.9	15°	1428	1431	1435	1440	1440	403
30°-40°	767.7	16.3	12.2	25°	1331	1337	1350	1364	1369	613
40°-50°	822.2	17.5	13.1	35°	1189	1201	1226	1253	1263	744
50°-60°	777.3	16.5	12.3	45°	1008	1027	1067	1104	1119	777
60°-70°	628.7	13.4	10.0	55°	793	821	874	920	938	708
70°-80°	397.3	8.5	6.3	65°	550	587	647	687	702	544
80°-90°	137.3	2.9	2.2	75°	303	342	387	413	421	321
90°-100°	2.1	0.0	0.0	85°	90	109	131	139	142	94
100°-110°	0.0	0.0	0.0	90°	15	14	16	15	15	11
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°	1168.4	24.9	18.5	165°	0	0	0	0	0	0
0°-40°	1936.1	41.2	30.7	175°	0	0	0	0	0	0
0°-60°	3535.5	75.2	56.1	180°	0	0	0	0	0	0
<b>0°-90°</b>	<b>4698.8</b>	<b>100.0</b>	<b>74.6</b>							
90°-120°	2.1	0.0	0.0							
90°-150°	2.1	0.0	0.0							
<b>90°-180°</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>							
0°-180°	4700.9	100.0	74.6							



TEST NUMBER: 223P135

CATALOG NUMBER: 2RDI-2BX40FLS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1478	1478	1478	1478	1478
2.5°	1478	1478	1478	1477	1477
5°	1476	1476	1476	1475	1474
7.5°	1469	1470	1470	1470	1469
10°	1459	1460	1461	1463	1462
12.5°	1445	1447	1449	1452	1452
15°	1428	1431	1435	1440	1440
17.5°	1408	1411	1417	1425	1426
20°	1386	1390	1397	1407	1409
22.5°	1359	1364	1375	1387	1390
25°	1331	1337	1350	1364	1369
27.5°	1299	1307	1322	1340	1346
30°	1265	1275	1293	1313	1321
32.5°	1229	1239	1261	1284	1292
35°	1189	1201	1226	1253	1263
37.5°	1147	1161	1190	1220	1230
40°	1103	1118	1151	1183	1196
42.5°	1056	1074	1110	1145	1158
45°	1008	1027	1067	1104	1119
47.5°	958	979	1022	1062	1078
50°	905	928	976	1018	1034
52.5°	850	876	926	970	988
55°	793	821	874	920	938
57.5°	735	765	820	866	885
60°	674	707	765	810	828
62.5°	613	647	707	750	766
65°	550	587	647	687	702
67.5°	487	525	585	620	631
70°	425	464	521	549	563
72.5°	363	402	455	484	495
75°	303	342	387	413	421
77.5°	245	280	323	342	351
80°	188	221	257	274	280
82.5°	135	163	193	206	211
85°	90	109	131	139	142
87.5°	50	58	70	74	75
90°	15	14	16	15	15
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



TEST NUMBER: 223P135

CATALOG NUMBER: 2RDI-2BX40FLS

**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)