

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: P273796

Luminaire Tested: **8RCG-4-100D-L940**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273796  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1804-709-7-R2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8RCG-4-100D-L940  
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH FROST FLUSH LENS  
Light Source: (168) 4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

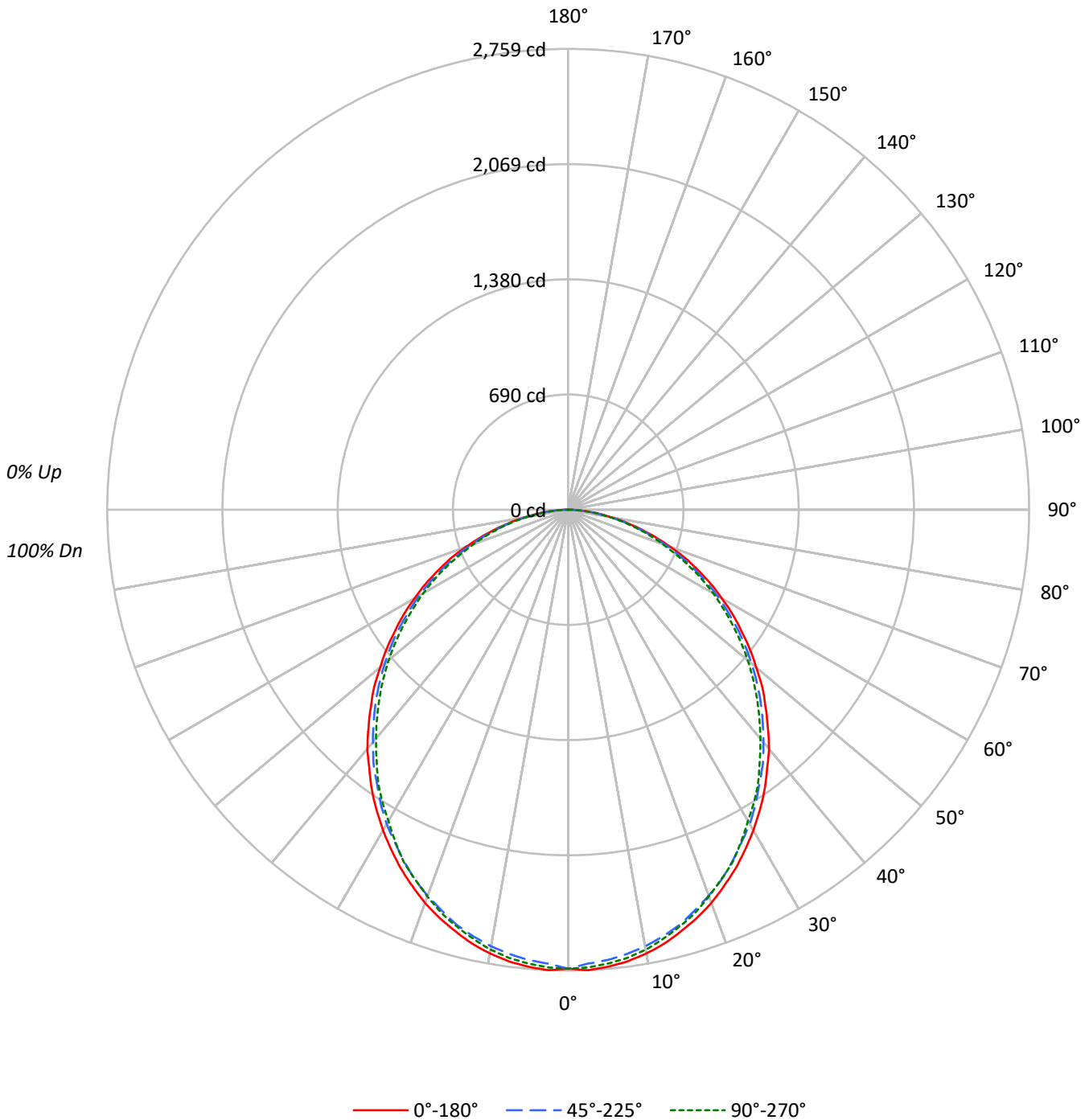
Lumens per Lamp: N/A  
Luminaire Lumens: 7090.7 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.23' x L: 7.88' x H: 0')  
CIE Type: Direct

Input Watts (W): 68.8  
Input Voltage (V): 120  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	16389	16389	16389
5°	16438	16205	16328
10°	16337	16074	16199
15°	16132	15891	15948
20°	15900	15608	15637
25°	15596	15293	15323
30°	15263	14963	14821
35°	14918	14535	14450
40°	14561	14150	13935
45°	14093	13744	13474
50°	13631	13291	13015
55°	13154	12822	12489
60°	12659	12303	11948
65°	12098	11643	11257
70°	11349	10871	10470
75°	10402	9983	9665
80°	9130	8814	8504
85°	7678	7528	6898



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	258.8	3.6
10°-20°	729.9	10.3
20°-30°	1076.7	15.2
30°-40°	1256.3	17.7
40°-50°	1260.4	17.8
50°-60°	1104.2	15.6
60°-70°	818.6	11.5
70°-80°	460.4	6.5
80°-90°	125.4	1.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2065.4	29.1
0°-40°	3321.7	46.8
0°-60°	5686.3	80.2
0°-90°	7090.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7090.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2748	2748	2748	2748	2748	
5°	2746	2736	2707	2734	2727	261
15°	2613	2606	2574	2587	2583	737
25°	2370	2356	2324	2331	2328	1091
35°	2049	2033	1996	1989	1985	1280
45°	1671	1664	1629	1611	1597	1290
55°	1265	1265	1233	1210	1201	1134
65°	857	848	825	804	798	850
75°	451	442	433	426	419	478
85°	112	112	110	105	101	131
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2747.8	2747.8	2747.8	2747.8	2747.8
2.5°	2759.4	2750.2	2720.4	2745.6	2743.2
5°	2745.6	2736.4	2706.6	2734.2	2727.2
7.5°	2727.2	2715.8	2683.6	2709.0	2706.6
10°	2697.4	2686.0	2654.0	2676.8	2674.6
12.5°	2660.8	2649.4	2617.2	2635.6	2631.0
15°	2612.6	2605.8	2573.6	2587.4	2582.8
17.5°	2562.2	2550.8	2516.4	2530.2	2530.2
20°	2505.0	2493.4	2459.0	2472.8	2463.6
22.5°	2438.4	2424.8	2397.2	2404.0	2395.0
25°	2369.8	2356.0	2323.8	2330.8	2328.4
27.5°	2294.0	2280.4	2246.0	2246.0	2241.4
30°	2216.2	2204.8	2172.6	2163.4	2152.0
32.5°	2133.6	2117.6	2087.8	2081.0	2071.8
35°	2048.8	2032.8	1996.2	1989.2	1984.6
37.5°	1955.0	1943.4	1913.6	1895.4	1883.8
40°	1870.2	1851.8	1817.4	1801.4	1789.8
42.5°	1769.2	1760.0	1723.4	1707.4	1693.6
45°	1670.8	1663.8	1629.4	1611.2	1597.4
47.5°	1576.8	1565.2	1531.0	1508.0	1501.2
50°	1469.0	1462.2	1432.4	1411.8	1402.6
52.5°	1370.4	1363.6	1333.8	1311.0	1301.8
55°	1265.0	1265.0	1233.0	1210.0	1201.0
57.5°	1168.8	1159.6	1129.8	1111.6	1100.0
60°	1061.2	1054.2	1031.4	1006.0	1001.6
62.5°	962.6	953.4	925.8	907.6	903.0
65°	857.2	848.0	825.0	804.4	797.6
67.5°	758.6	742.6	724.2	705.8	696.8
70°	650.8	641.8	623.4	609.6	600.4
72.5°	547.8	538.6	527.2	515.6	511.0
75°	451.4	442.4	433.2	426.2	419.4
77.5°	355.2	350.6	343.8	334.6	334.6
80°	265.8	261.2	256.6	249.8	247.6
82.5°	185.6	183.4	178.8	176.4	176.4
85°	112.2	112.2	110.0	105.4	100.8
87.5°	50.4	45.8	45.8	41.2	41.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)