

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: P273775

Luminaire Tested: **4RCG-4-78D-L940**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273775  
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: 4RCG-4-78D-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**

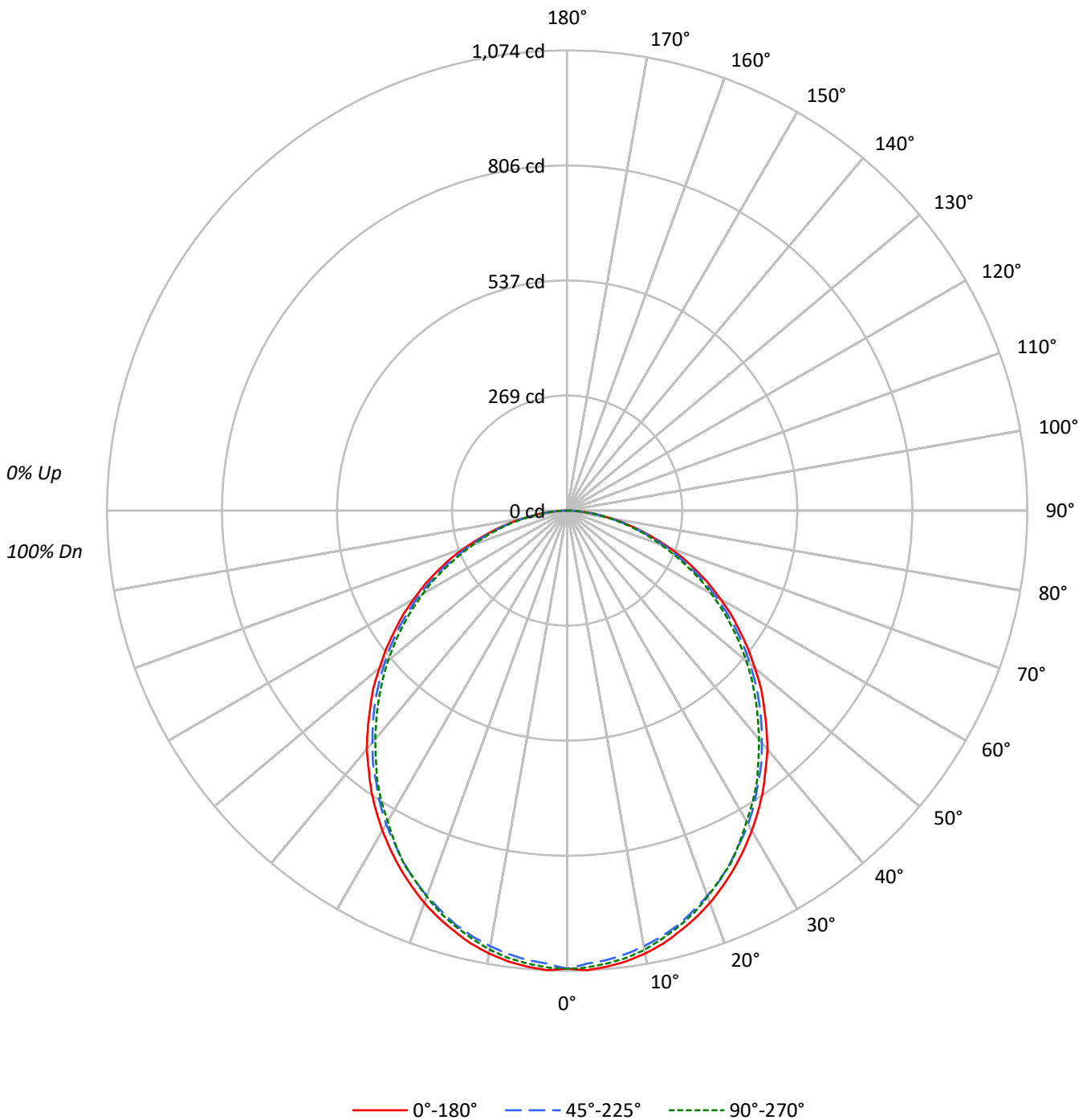
Lumens per Lamp: N/A  
Luminaire Lumens: 2758.9 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')  
CIE Type: Direct

Input Watts (W): 26  
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°	12960	12960	12960
5°	12999	12814	12911
10°	12917	12709	12808
15°	12756	12566	12612
20°	12571	12342	12365
25°	12331	12093	12117
30°	12069	11831	11719
35°	11796	11493	11426
40°	11513	11189	11019
45°	11144	10868	10654
50°	10779	10509	10290
55°	10402	10137	9875
60°	10010	9728	9447
65°	9565	9207	8900
70°	8973	8594	8279
75°	8229	7891	7643
80°	7218	6973	6722
85°	6078	5952	5452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.7	3.6
10°-20°	284.0	10.3
20°-30°	419.0	15.2
30°-40°	488.8	17.7
40°-50°	490.4	17.8
50°-60°	429.6	15.6
60°-70°	318.5	11.5
70°-80°	179.1	6.5
80°-90°	48.8	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°	803.6	29.1
0°-40°	1292.4	46.8
0°-60°	2212.5	80.2
0°-90°	2758.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2758.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1069	1069	1069	1069	1069	
5°	1068	1065	1053	1064	1061	101
15°	1016	1014	1001	1007	1005	287
25°	922	917	904	907	906	425
35°	797	791	777	774	772	498
45°	650	647	634	627	622	502
55°	492	492	480	471	467	441
65°	334	330	321	313	310	331
75°	176	172	168	166	163	186
85°	44	44	43	41	39	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1069.2	1069.2	1069.2	1069.2	1069.2
2.5°	1073.6	1070.1	1058.5	1068.3	1067.4
5°	1068.3	1064.7	1053.1	1063.8	1061.1
7.5°	1061.1	1056.7	1044.2	1054.0	1053.1
10°	1049.5	1045.1	1032.6	1041.5	1040.6
12.5°	1035.3	1030.8	1018.3	1025.5	1023.7
15°	1016.5	1013.9	1001.4	1006.7	1005.0
17.5°	996.9	992.5	979.1	984.4	984.4
20°	974.6	970.2	956.8	962.2	958.6
22.5°	948.8	943.4	932.7	935.4	931.8
25°	922.0	916.7	904.2	906.9	906.0
27.5°	892.6	887.3	873.9	873.9	872.1
30°	862.3	857.8	845.3	841.8	837.3
32.5°	830.2	823.9	812.3	809.7	806.1
35°	797.2	790.9	776.7	774.0	772.2
37.5°	760.6	756.2	744.6	737.4	733.0
40°	727.6	720.5	707.1	700.9	696.4
42.5°	688.4	684.8	670.6	664.3	659.0
45°	650.1	647.4	634.0	626.9	621.5
47.5°	613.5	609.0	595.7	586.7	584.1
50°	571.6	568.9	557.3	549.3	545.7
52.5°	533.2	530.6	519.0	510.1	506.5
55°	492.2	492.2	479.7	470.8	467.3
57.5°	454.8	451.2	439.6	432.5	428.0
60°	412.9	410.2	401.3	391.5	389.7
62.5°	374.5	371.0	360.3	353.1	351.3
65°	333.5	329.9	321.0	313.0	310.3
67.5°	295.2	288.9	281.8	274.6	271.1
70°	253.2	249.7	242.5	237.2	233.6
72.5°	213.1	209.6	205.1	200.6	198.9
75°	175.7	172.1	168.5	165.9	163.2
77.5°	138.2	136.4	133.8	130.2	130.2
80°	103.4	101.7	99.9	97.2	96.3
82.5°	72.2	71.3	69.6	68.7	68.7
85°	43.7	43.7	42.8	41.0	39.2
87.5°	19.6	17.8	17.8	16.1	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)