

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: **8RCG-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: 8RCG-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**

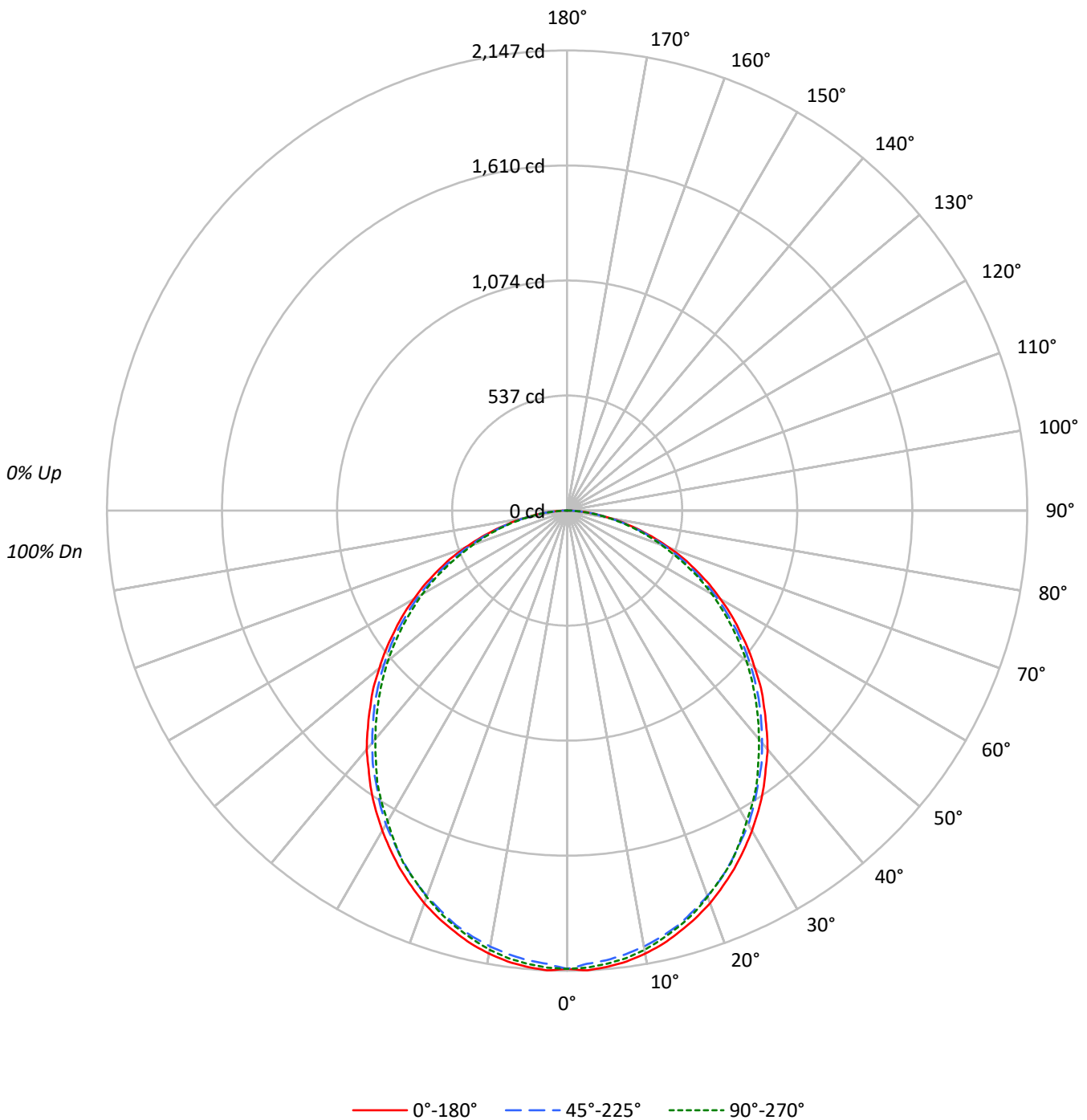
Lumens per Lamp: N/A  
Luminaire Lumens: 5517.9 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.23' x L: 7.88' x H: 0')  
CIE Type: Direct

Input Watts (W): 52  
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°	12754	12754	12754
5°	12792	12610	12706
10°	12712	12508	12605
15°	12553	12367	12411
20°	12372	12146	12169
25°	12135	11901	11925
30°	11878	11643	11533
35°	11609	11311	11245
40°	11330	11011	10844
45°	10967	10696	10485
50°	10608	10342	10127
55°	10236	9976	9719
60°	9851	9574	9297
65°	9413	9061	8759
70°	8831	8458	8147
75°	8098	7766	7522
80°	7103	6863	6615
85°	5981	5858	5365



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.4	3.6
10°-20°	568.0	10.3
20°-30°	837.9	15.2
30°-40°	977.6	17.7
40°-50°	980.8	17.8
50°-60°	859.2	15.6
60°-70°	637.0	11.5
70°-80°	358.3	6.5
80°-90°	97.6	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°	1607.3	29.1
0°-40°	2584.9	46.8
0°-60°	4425.0	80.2
0°-90°	5517.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5517.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2138	2138	2138	2138	2138	
5°	2137	2129	2106	2128	2122	203
15°	2033	2028	2003	2013	2010	573
25°	1844	1833	1808	1814	1812	849
35°	1594	1582	1553	1548	1544	996
45°	1300	1295	1268	1254	1243	1004
55°	984	984	959	942	935	882
65°	667	660	642	626	621	661
75°	351	344	337	332	326	372
85°	87	87	86	82	78	102
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2138.4	2138.4	2138.4	2138.4	2138.4
2.5°	2147.2	2140.2	2117.0	2136.6	2134.8
5°	2136.6	2129.4	2106.2	2127.6	2122.2
7.5°	2122.2	2113.4	2088.4	2108.0	2106.2
10°	2099.0	2090.2	2065.2	2083.0	2081.2
12.5°	2070.6	2061.6	2036.6	2051.0	2047.4
15°	2033.0	2027.8	2002.8	2013.4	2010.0
17.5°	1993.8	1985.0	1958.2	1968.8	1968.8
20°	1949.2	1940.4	1913.6	1924.4	1917.2
22.5°	1897.6	1886.8	1865.4	1870.8	1863.6
25°	1844.0	1833.4	1808.4	1813.8	1812.0
27.5°	1785.2	1774.6	1747.8	1747.8	1744.2
30°	1724.6	1715.6	1690.6	1683.6	1674.6
32.5°	1660.4	1647.8	1624.6	1619.4	1612.2
35°	1594.4	1581.8	1553.4	1548.0	1544.4
37.5°	1521.2	1512.4	1489.2	1474.8	1466.0
40°	1455.2	1441.0	1414.2	1401.8	1392.8
42.5°	1376.8	1369.6	1341.2	1328.6	1318.0
45°	1300.2	1294.8	1268.0	1253.8	1243.0
47.5°	1227.0	1218.0	1191.4	1173.4	1168.2
50°	1143.2	1137.8	1114.6	1098.6	1091.4
52.5°	1066.4	1061.2	1038.0	1020.2	1013.0
55°	984.4	984.4	959.4	941.6	934.6
57.5°	909.6	902.4	879.2	865.0	856.0
60°	825.8	820.4	802.6	783.0	779.4
62.5°	749.0	742.0	720.6	706.2	702.6
65°	667.0	659.8	642.0	626.0	620.6
67.5°	590.4	577.8	563.6	549.2	542.2
70°	506.4	499.4	485.0	474.4	467.2
72.5°	426.2	419.2	410.2	401.2	397.8
75°	351.4	344.2	337.0	331.8	326.4
77.5°	276.4	272.8	267.6	260.4	260.4
80°	206.8	203.4	199.8	194.4	192.6
82.5°	144.4	142.6	139.2	137.4	137.4
85°	87.4	87.4	85.6	82.0	78.4
87.5°	39.2	35.6	35.6	32.2	32.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)