

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: P273763

Luminaire Tested: **8RCG-4-78D-L840**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P273763
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-L840
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH FROST FLUSH LENS
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

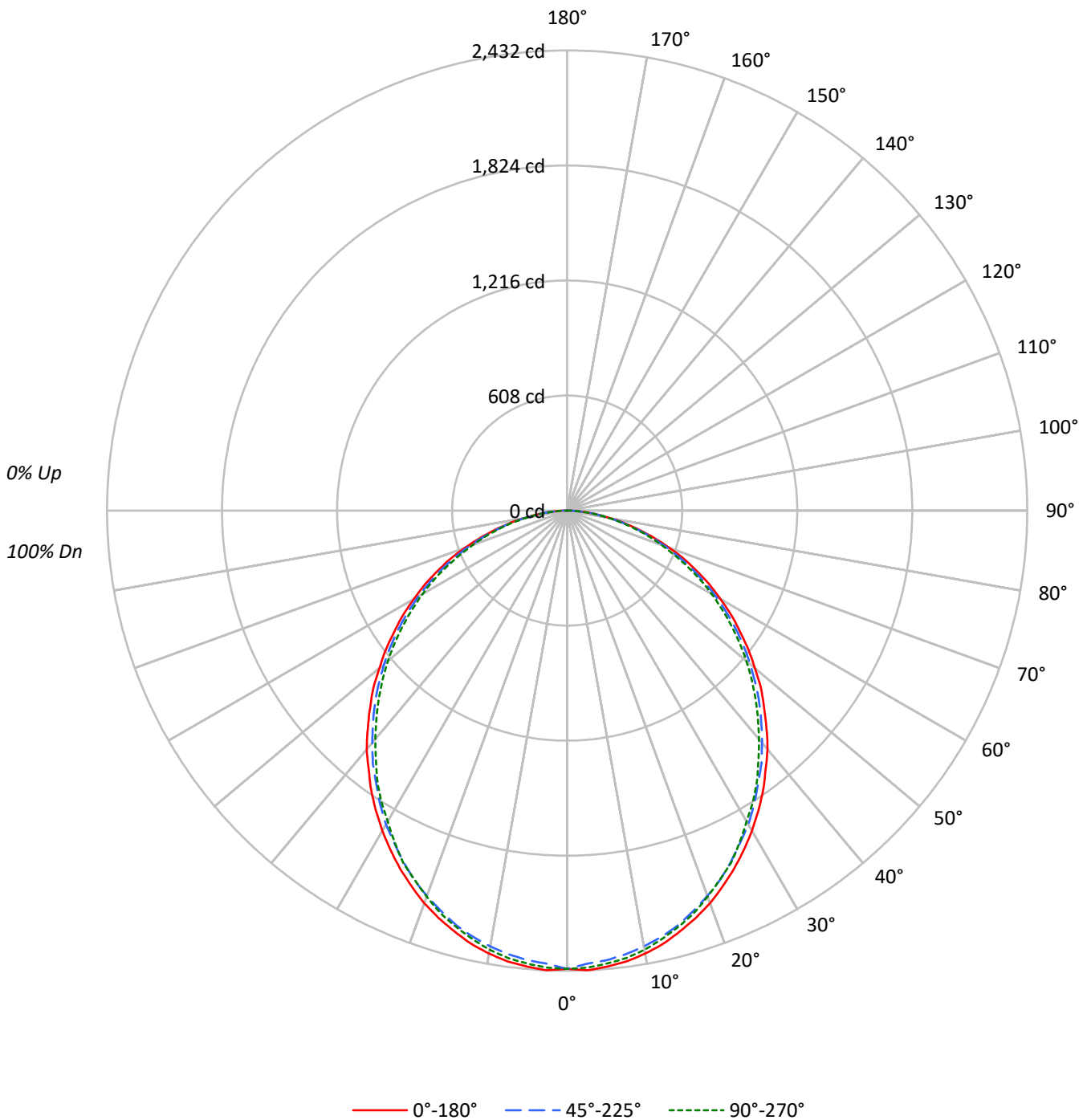
Lumens per Lamp: N/A
Luminaire Lumens: 6249.0 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.23' x L: 7.88' x H: 0')
CIE Type: Direct

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°	14443	14443	14443
5°	14487	14281	14390
10°	14397	14165	14275
15°	14217	14006	14055
20°	14012	13756	13781
25°	13744	13478	13504
30°	13451	13187	13062
35°	13147	12809	12735
40°	12831	12470	12282
45°	12420	12113	11875
50°	12013	11714	11469
55°	11592	11299	11006
60°	11156	10841	10528
65°	10661	10263	9919
70°	10003	9581	9229
75°	9167	8798	8517
80°	8044	7769	7495
85°	6775	6638	6077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.1	3.6
10°-20°	643.3	10.3
20°-30°	948.9	15.2
30°-40°	1107.2	17.7
40°-50°	1110.8	17.8
50°-60°	973.1	15.6
60°-70°	721.4	11.5
70°-80°	405.7	6.5
80°-90°	110.6	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°	1820.2	29.1
0°-40°	2927.4	46.8
0°-60°	5011.3	80.2
0°-90°	6249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6249.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2422	2422	2422	2422	2422	
5°	2420	2412	2385	2410	2403	230
15°	2302	2296	2268	2280	2276	649
25°	2088	2076	2048	2054	2052	962
35°	1806	1791	1759	1753	1749	1128
45°	1472	1466	1436	1420	1408	1137
55°	1115	1115	1087	1066	1058	999
65°	755	747	727	709	703	749
75°	398	390	382	376	370	421
85°	99	99	97	93	89	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2421.6	2421.6	2421.6	2421.6	2421.6
2.5°	2431.8	2423.6	2397.4	2419.6	2417.6
5°	2419.6	2411.6	2385.2	2409.6	2403.4
7.5°	2403.4	2393.4	2365.2	2387.4	2385.2
10°	2377.2	2367.2	2338.8	2359.0	2357.0
12.5°	2345.0	2334.8	2306.6	2322.6	2318.6
15°	2302.4	2296.4	2268.2	2280.2	2276.2
17.5°	2258.0	2248.0	2217.6	2229.8	2229.8
20°	2207.6	2197.4	2167.2	2179.2	2171.2
22.5°	2149.0	2136.8	2112.6	2118.6	2110.6
25°	2088.4	2076.2	2048.0	2054.0	2052.0
27.5°	2021.8	2009.6	1979.4	1979.4	1975.2
30°	1953.0	1943.0	1914.8	1906.6	1896.6
32.5°	1880.4	1866.2	1840.0	1834.0	1825.8
35°	1805.6	1791.4	1759.2	1753.2	1749.0
37.5°	1722.8	1712.8	1686.4	1670.4	1660.2
40°	1648.0	1632.0	1601.6	1587.6	1577.4
42.5°	1559.2	1551.2	1518.8	1504.6	1492.6
45°	1472.4	1466.4	1436.0	1419.8	1407.8
47.5°	1389.6	1379.4	1349.2	1329.0	1323.0
50°	1294.6	1288.6	1262.4	1244.2	1236.0
52.5°	1207.8	1201.8	1175.4	1155.2	1147.2
55°	1114.8	1114.8	1086.6	1066.4	1058.4
57.5°	1030.0	1022.0	995.8	979.6	969.4
60°	935.2	929.0	908.8	886.6	882.6
62.5°	848.2	840.2	816.0	799.8	795.8
65°	755.4	747.2	727.2	709.0	702.8
67.5°	668.6	654.4	638.2	622.0	614.0
70°	573.6	565.6	549.4	537.2	529.2
72.5°	482.8	474.6	464.6	454.4	450.4
75°	397.8	389.8	381.8	375.6	369.6
77.5°	313.0	309.0	303.0	294.8	294.8
80°	234.2	230.2	226.2	220.2	218.2
82.5°	163.6	161.6	157.6	155.6	155.6
85°	99.0	99.0	97.0	93.0	88.8
87.5°	44.4	40.4	40.4	36.4	36.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)