

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: P273784

Luminaire Tested: **8RCG-4-100D-L840**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P273784
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-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

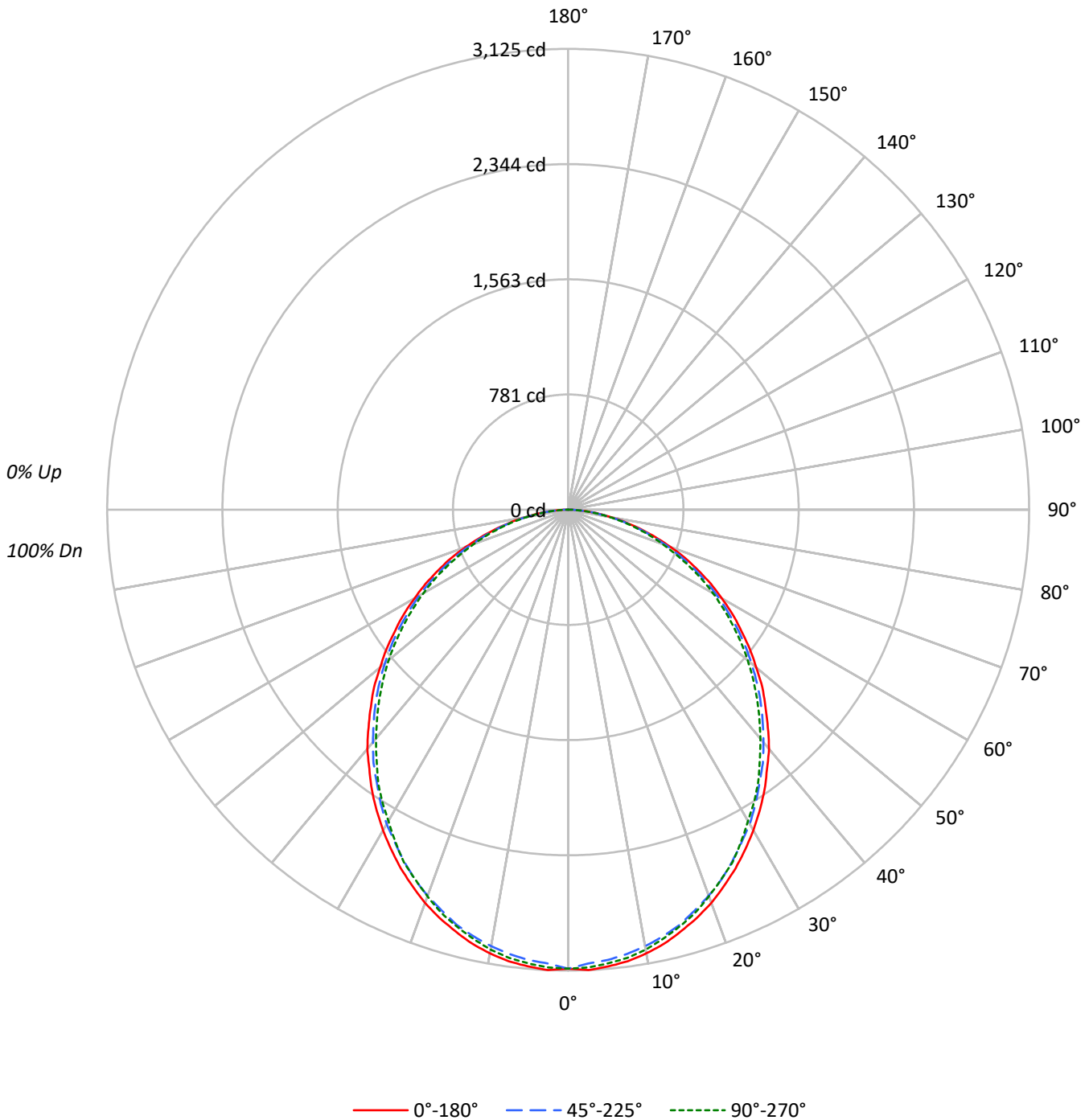
Lumens per Lamp: N/A
Luminaire Lumens: 8030.4 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.23' x L: 7.88' x H: 0')
CIE Type: Direct

Input Watts (W): 68.8
Input Voltage (V): 120
Input Current (A_{in}): 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°	18561	18561	18561
5°	18617	18352	18492
10°	18501	18203	18345
15°	18270	17998	18061
20°	18006	17677	17710
25°	17662	17320	17354
30°	17285	16946	16785
35°	16895	16460	16365
40°	16491	16025	15782
45°	15959	15566	15259
50°	15437	15052	14739
55°	14897	14521	14142
60°	14336	13933	13530
65°	13701	13187	12747
70°	12856	12312	11858
75°	11785	11306	10946
80°	10339	9981	9631
85°	8705	8527	7815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.1	3.6
10°-20°	826.6	10.3
20°-30°	1219.4	15.2
30°-40°	1422.8	17.7
40°-50°	1427.4	17.8
50°-60°	1250.5	15.6
60°-70°	927.1	11.5
70°-80°	521.4	6.5
80°-90°	142.1	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°	2339.1	29.1
0°-40°	3761.9	46.8
0°-60°	6439.8	80.2
0°-90°	8030.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8030.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3112	3112	3112	3112	3112	
5°	3109	3099	3065	3096	3089	295
15°	2959	2951	2915	2930	2925	834
25°	2684	2668	2632	2640	2637	1236
35°	2320	2302	2261	2253	2248	1450
45°	1892	1884	1845	1825	1809	1461
55°	1433	1433	1396	1370	1360	1284
65°	971	960	934	911	903	962
75°	511	501	491	483	475	541
85°	127	127	125	119	114	148
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3112.0	3112.0	3112.0	3112.0	3112.0
2.5°	3125.0	3114.6	3080.8	3109.4	3106.8
5°	3109.4	3099.0	3065.2	3096.4	3088.6
7.5°	3088.6	3075.6	3039.2	3067.8	3065.2
10°	3054.8	3041.8	3005.6	3031.6	3029.0
12.5°	3013.4	3000.4	2964.0	2984.8	2979.6
15°	2958.8	2951.0	2914.8	2930.2	2925.0
17.5°	2901.8	2888.8	2849.8	2865.4	2865.4
20°	2836.8	2823.8	2785.0	2800.6	2790.2
22.5°	2761.6	2746.0	2714.8	2722.6	2712.2
25°	2683.8	2668.2	2631.8	2639.6	2637.0
27.5°	2598.0	2582.4	2543.6	2543.6	2538.4
30°	2509.8	2496.8	2460.6	2450.2	2437.2
32.5°	2416.4	2398.2	2364.4	2356.6	2346.4
35°	2320.4	2302.2	2260.6	2252.8	2247.6
37.5°	2214.0	2201.0	2167.2	2146.4	2133.4
40°	2118.0	2097.2	2058.2	2040.0	2027.0
42.5°	2003.6	1993.4	1951.8	1933.6	1918.0
45°	1892.0	1884.4	1845.4	1824.6	1809.0
47.5°	1785.6	1772.8	1733.8	1707.8	1700.0
50°	1663.6	1656.0	1622.2	1598.8	1588.4
52.5°	1552.0	1544.4	1510.6	1484.6	1474.2
55°	1432.6	1432.6	1396.4	1370.4	1360.0
57.5°	1323.6	1313.4	1279.6	1258.8	1245.8
60°	1201.8	1194.0	1168.0	1139.4	1134.2
62.5°	1090.0	1079.8	1048.6	1027.8	1022.6
65°	970.8	960.4	934.4	911.0	903.2
67.5°	859.0	841.0	820.2	799.4	789.0
70°	737.2	726.8	706.0	690.4	680.0
72.5°	620.4	610.0	597.0	584.0	578.8
75°	511.4	501.0	490.6	482.8	475.0
77.5°	402.2	397.2	389.4	379.0	379.0
80°	301.0	295.8	290.6	283.0	280.4
82.5°	210.2	207.6	202.4	199.8	199.8
85°	127.2	127.2	124.6	119.4	114.2
87.5°	57.2	52.0	52.0	46.8	46.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)