

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: P273778

Luminaire Tested: **8RCG-4-100D-L830**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273778  
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-L830  
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH FROST FLUSH LENS  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7494.9 lumens  
Efficiency: N/A  
Efficacy: 108.9 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

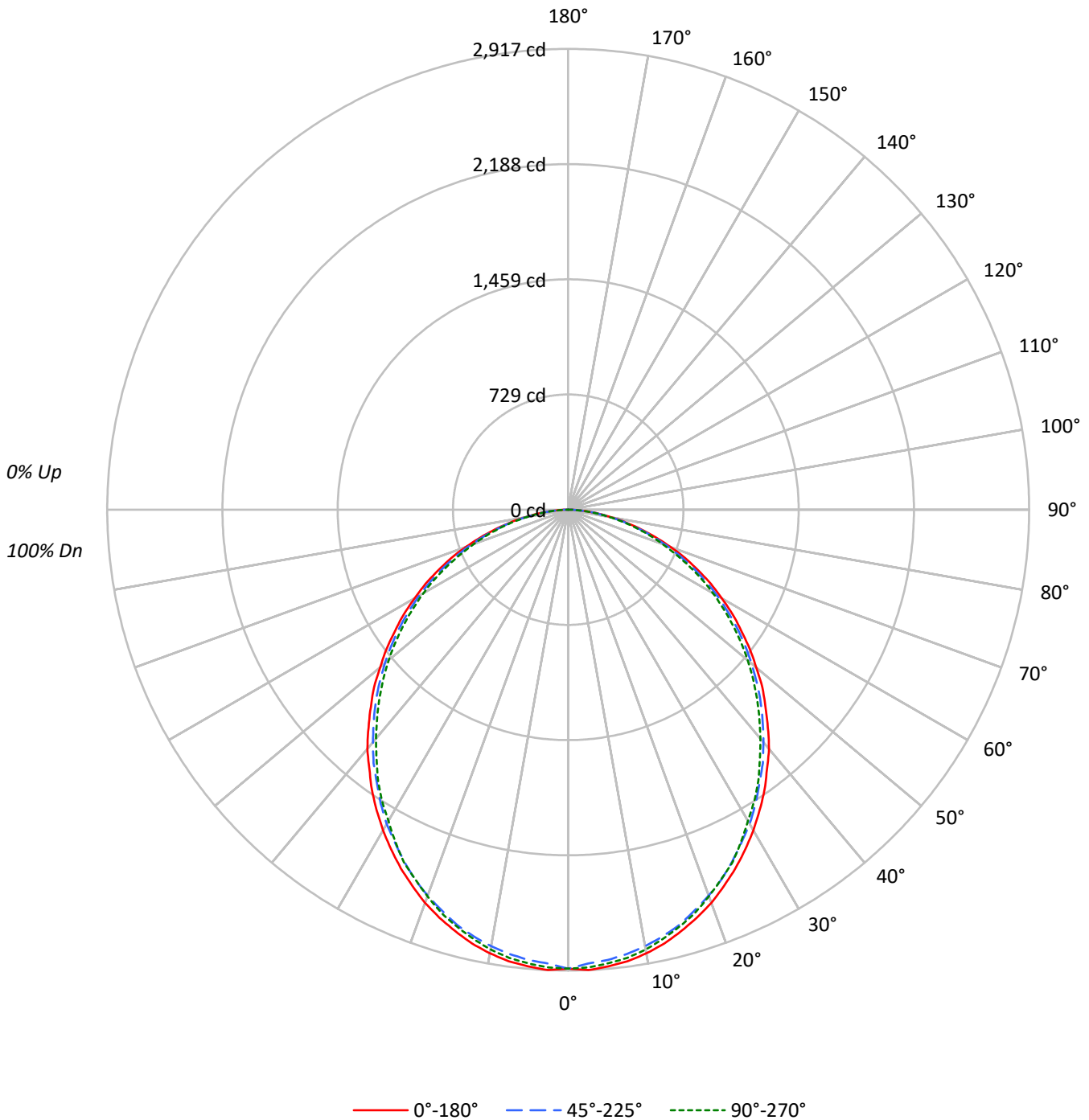
Input Watts (W): 68.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	17324	17324	17324
5°	17375	17129	17260
10°	17268	16989	17122
15°	17052	16798	16857
20°	16806	16498	16529
25°	16484	16166	16197
30°	16132	15816	15665
35°	15768	15363	15275
40°	15391	14957	14731
45°	14896	14528	14242
50°	14408	14048	13757
55°	13905	13552	13200
60°	13379	13002	12628
65°	12786	12307	11897
70°	11998	11492	11067
75°	10997	10550	10218
80°	9652	9322	8985
85°	8116	7952	7295



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.5	3.6
10°-20°	771.5	10.3
20°-30°	1138.1	15.2
30°-40°	1327.9	17.7
40°-50°	1332.3	17.8
50°-60°	1167.1	15.6
60°-70°	865.2	11.5
70°-80°	486.6	6.5
80°-90°	132.6	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°	2183.2	29.1
0°-40°	3511.1	46.8
0°-60°	6010.5	80.2
0°-90°	7494.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7494.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2905	2905	2905	2905	2905	
5°	2902	2892	2861	2890	2883	275
15°	2762	2754	2720	2735	2730	779
25°	2505	2490	2456	2464	2461	1153
35°	2166	2149	2110	2103	2098	1353
45°	1766	1759	1722	1703	1688	1364
55°	1337	1337	1303	1279	1269	1198
65°	906	896	872	850	843	898
75°	477	468	458	451	443	505
85°	119	119	116	111	107	138
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2904.6	2904.6	2904.6	2904.6	2904.6
2.5°	2916.6	2907.0	2875.4	2902.0	2899.6
5°	2902.0	2892.4	2861.0	2890.0	2882.8
7.5°	2882.8	2870.6	2836.6	2863.4	2861.0
10°	2851.2	2839.0	2805.2	2829.4	2827.0
12.5°	2812.4	2800.4	2766.4	2785.8	2781.0
15°	2761.6	2754.4	2720.4	2735.0	2730.0
17.5°	2708.2	2696.2	2659.8	2674.4	2674.4
20°	2647.8	2635.6	2599.2	2613.8	2604.2
22.5°	2577.4	2563.0	2533.8	2541.2	2531.4
25°	2504.8	2490.2	2456.4	2463.6	2461.2
27.5°	2424.8	2410.4	2374.0	2374.0	2369.2
30°	2342.4	2330.4	2296.4	2286.8	2274.6
32.5°	2255.2	2238.4	2206.8	2199.6	2189.8
35°	2165.6	2148.8	2110.0	2102.6	2097.8
37.5°	2066.4	2054.2	2022.8	2003.4	1991.2
40°	1976.8	1957.4	1921.0	1904.0	1892.0
42.5°	1870.2	1860.4	1821.6	1804.8	1790.2
45°	1766.0	1758.6	1722.4	1703.0	1688.4
47.5°	1666.6	1654.6	1618.2	1594.0	1586.6
50°	1552.8	1545.6	1514.0	1492.2	1482.6
52.5°	1448.6	1441.4	1409.8	1385.6	1376.0
55°	1337.2	1337.2	1303.2	1279.0	1269.4
57.5°	1235.4	1225.8	1194.2	1174.8	1162.8
60°	1121.6	1114.4	1090.0	1063.4	1058.6
62.5°	1017.4	1007.8	978.6	959.2	954.4
65°	906.0	896.4	872.0	850.2	843.0
67.5°	801.8	784.8	765.4	746.2	736.4
70°	688.0	678.2	659.0	644.4	634.6
72.5°	579.0	569.2	557.2	545.0	540.2
75°	477.2	467.6	457.8	450.6	443.4
77.5°	375.4	370.6	363.4	353.6	353.6
80°	281.0	276.2	271.4	264.0	261.6
82.5°	196.2	193.8	189.0	186.6	186.6
85°	118.6	118.6	116.2	111.4	106.6
87.5°	53.2	48.4	48.4	43.6	43.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)