

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: **4RCG-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: 4RCG-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: 3747.4 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: 3.88' x H: 0')  
CIE Type: Direct

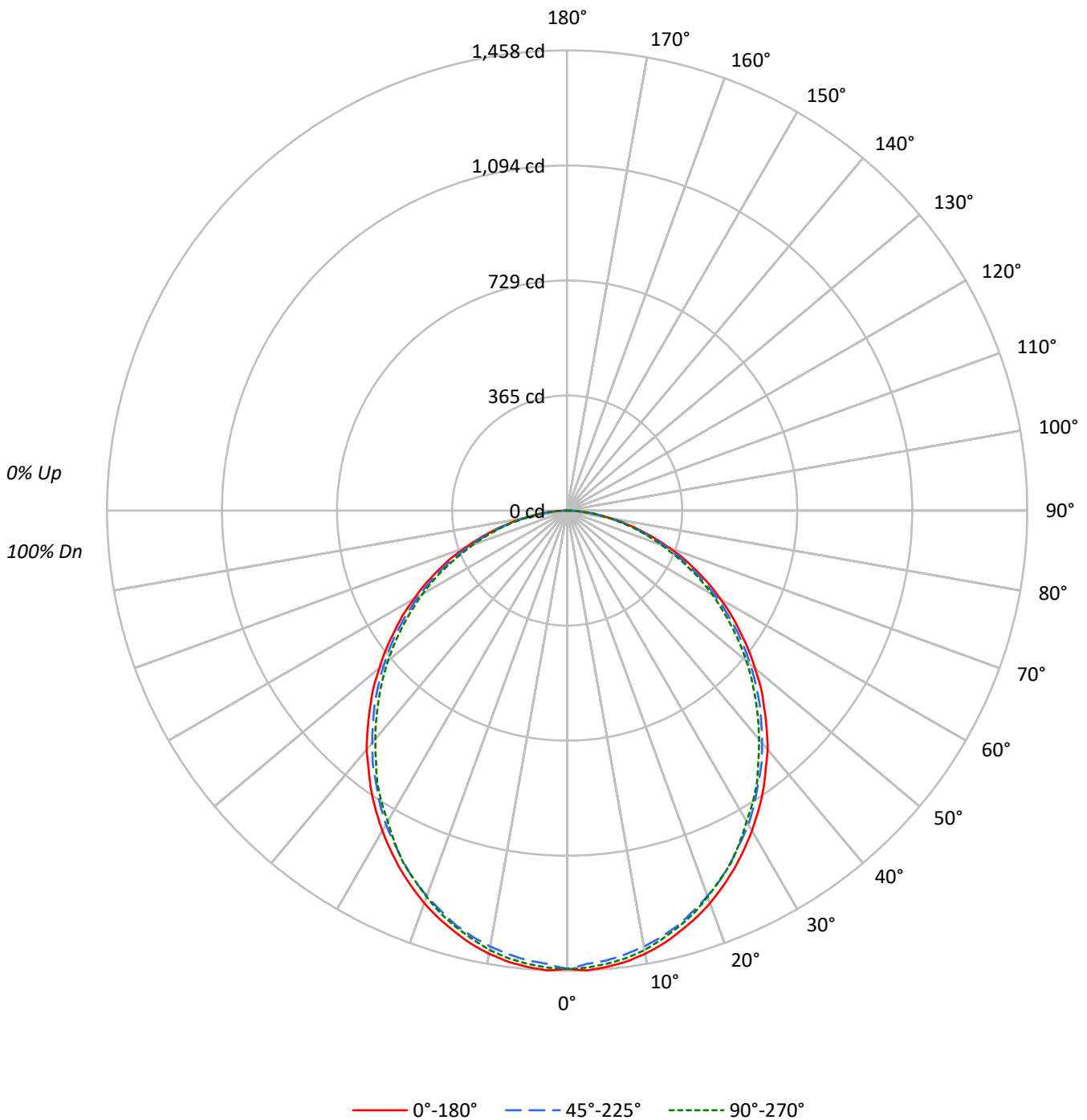
Input Watts (W): 34.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	17604	17604	17604
5°	17655	17406	17538
10°	17547	17264	17398
15°	17327	17069	17129
20°	17077	16764	16796
25°	16750	16426	16458
30°	16393	16071	15918
35°	16022	15611	15521
40°	15640	15198	14969
45°	15136	14763	14471
50°	14641	14275	13979
55°	14129	13770	13413
60°	13595	13212	12832
65°	12993	12505	12089
70°	12191	11678	11245
75°	11174	10720	10383
80°	9807	9472	9130
85°	8247	8080	7413



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.8	3.6
10°-20°	385.8	10.3
20°-30°	569.1	15.2
30°-40°	664.0	17.7
40°-50°	666.1	17.8
50°-60°	583.5	15.6
60°-70°	432.6	11.5
70°-80°	243.3	6.5
80°-90°	66.3	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°	1091.6	29.1
0°-40°	1755.5	46.8
0°-60°	3005.2	80.2
0°-90°	3747.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3747.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1451	1446	1430	1445	1441	138
15°	1381	1377	1360	1368	1365	389
25°	1252	1245	1228	1232	1231	577
35°	1083	1074	1055	1051	1049	677
45°	883	879	861	852	844	682
55°	669	669	652	640	635	599
65°	453	448	436	425	422	449
75°	239	234	229	225	222	253
85°	59	59	58	56	53	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1452.3	1452.3	1452.3	1452.3	1452.3
2.5°	1458.3	1453.5	1437.7	1451.0	1449.8
5°	1451.0	1446.2	1430.5	1445.0	1441.4
7.5°	1441.4	1435.3	1418.3	1431.7	1430.5
10°	1425.6	1419.5	1402.6	1414.7	1413.5
12.5°	1406.2	1400.2	1383.2	1392.9	1390.5
15°	1380.8	1377.2	1360.2	1367.5	1365.0
17.5°	1354.1	1348.1	1329.9	1337.2	1337.2
20°	1323.9	1317.8	1299.6	1306.9	1302.1
22.5°	1288.7	1281.5	1266.9	1270.6	1265.7
25°	1252.4	1245.1	1228.2	1231.8	1230.6
27.5°	1212.4	1205.2	1187.0	1187.0	1184.6
30°	1171.2	1165.2	1148.2	1143.4	1137.3
32.5°	1127.6	1119.2	1103.4	1099.8	1094.9
35°	1082.8	1074.4	1055.0	1051.3	1048.9
37.5°	1033.2	1027.1	1011.4	1001.7	995.6
40°	988.4	978.7	960.5	952.0	946.0
42.5°	935.1	930.2	910.8	902.4	895.1
45°	883.0	879.3	861.2	851.5	844.2
47.5°	833.3	827.3	809.1	797.0	793.3
50°	776.4	772.8	757.0	746.1	741.3
52.5°	724.3	720.7	704.9	692.8	688.0
55°	668.6	668.6	651.6	639.5	634.7
57.5°	617.7	612.9	597.1	587.4	581.4
60°	560.8	557.2	545.0	531.7	529.3
62.5°	508.7	503.9	489.3	479.6	477.2
65°	453.0	448.2	436.0	425.1	421.5
67.5°	400.9	392.4	382.7	373.1	368.2
70°	344.0	339.1	329.5	322.2	317.3
72.5°	289.5	284.6	278.6	272.5	270.1
75°	238.6	233.8	228.9	225.3	221.7
77.5°	187.7	185.3	181.7	176.8	176.8
80°	140.5	138.1	135.7	132.0	130.8
82.5°	98.1	96.9	94.5	93.3	93.3
85°	59.3	59.3	58.1	55.7	53.3
87.5°	26.6	24.2	24.2	21.8	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)