

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: P273757

Luminaire Tested: **4RCG-4-78D-L830**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273757  
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-4-78D-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**

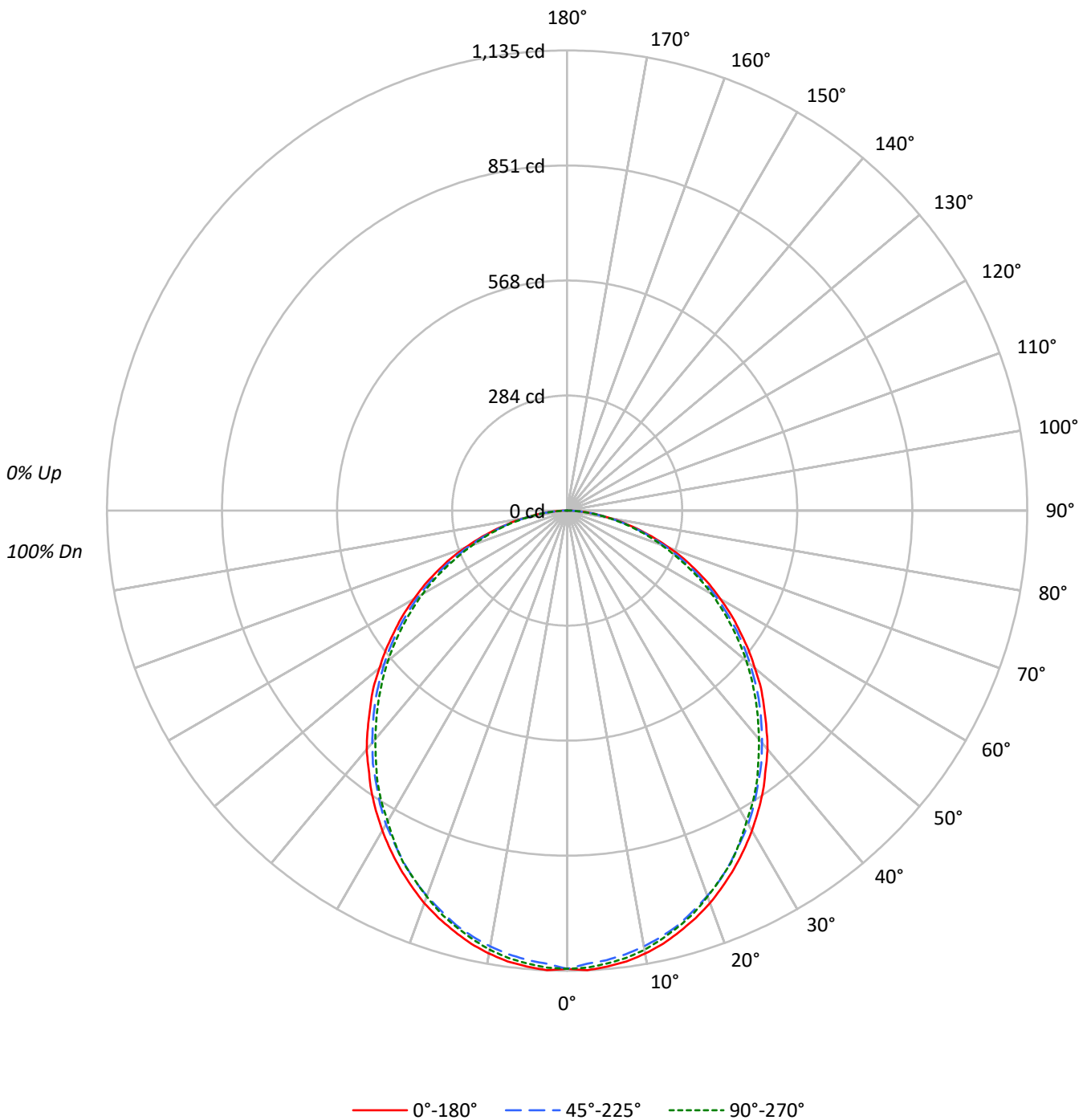
Lumens per Lamp: N/A  
Luminaire Lumens: 2916.2 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')  
CIE Type: Direct

Input Watts (W): 26  
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°	13698	13698	13698
5°	13740	13544	13647
10°	13655	13434	13538
15°	13484	13283	13329
20°	13289	13045	13069
25°	13035	12782	12807
30°	12756	12506	12387
35°	12468	12149	12078
40°	12170	11826	11647
45°	11778	11487	11262
50°	11394	11109	10877
55°	10995	10716	10437
60°	10579	10281	9985
65°	10110	9732	9407
70°	9487	9087	8750
75°	8697	8341	8079
80°	7630	7371	7106
85°	6425	6286	5772



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.4	3.6
10°-20°	300.2	10.3
20°-30°	442.8	15.2
30°-40°	516.7	17.7
40°-50°	518.4	17.8
50°-60°	454.1	15.6
60°-70°	336.7	11.5
70°-80°	189.3	6.5
80°-90°	51.6	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°	849.4	29.1
0°-40°	1366.1	46.8
0°-60°	2338.6	80.2
0°-90°	2916.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2916.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1129	1125	1113	1124	1122	107
15°	1074	1072	1058	1064	1062	303
25°	975	969	956	959	958	449
35°	843	836	821	818	816	527
45°	687	684	670	663	657	531
55°	520	520	507	498	494	466
65°	352	349	339	331	328	349
75°	186	182	178	175	172	197
85°	46	46	45	43	42	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1130.1	1130.1	1130.1	1130.1	1130.1
2.5°	1134.8	1131.1	1118.8	1129.2	1128.2
5°	1129.2	1125.4	1113.1	1124.5	1121.6
7.5°	1121.6	1116.9	1103.7	1114.1	1113.1
10°	1109.4	1104.7	1091.5	1100.9	1099.9
12.5°	1094.3	1089.6	1076.4	1083.9	1082.0
15°	1074.5	1071.7	1058.5	1064.1	1062.2
17.5°	1053.8	1049.0	1034.9	1040.6	1040.6
20°	1030.2	1025.5	1011.3	1017.0	1013.2
22.5°	1002.9	997.2	985.9	988.7	985.0
25°	974.6	968.9	955.7	958.6	957.6
27.5°	943.5	937.8	923.7	923.7	921.8
30°	911.4	906.7	893.5	889.8	885.0
32.5°	877.5	870.9	858.7	855.8	852.1
35°	842.6	836.0	821.0	818.1	816.2
37.5°	804.0	799.3	787.0	779.5	774.8
40°	769.1	761.6	747.4	740.8	736.1
42.5°	727.6	723.9	708.8	702.2	696.5
45°	687.1	684.3	670.1	662.6	657.0
47.5°	648.5	643.8	629.6	620.2	617.4
50°	604.2	601.3	589.1	580.6	576.8
52.5°	563.6	560.8	548.6	539.1	535.4
55°	520.3	520.3	507.1	497.7	493.9
57.5°	480.7	476.9	464.7	457.1	452.4
60°	436.4	433.6	424.1	413.8	411.9
62.5°	395.9	392.1	380.8	373.2	371.4
65°	352.5	348.7	339.3	330.8	328.0
67.5°	312.0	305.4	297.8	290.3	286.5
70°	267.7	263.9	256.4	250.7	246.9
72.5°	225.3	221.5	216.8	212.1	210.2
75°	185.7	181.9	178.1	175.3	172.5
77.5°	146.1	144.2	141.4	137.6	137.6
80°	109.3	107.4	105.6	102.7	101.8
82.5°	76.3	75.4	73.5	72.6	72.6
85°	46.2	46.2	45.2	43.4	41.5
87.5°	20.7	18.9	18.9	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)