

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: P273769

Luminaire Tested: **4RCG-4-78D-L930**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273769  
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-L930  
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH FROST FLUSH LENS  
Light Source: (168) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

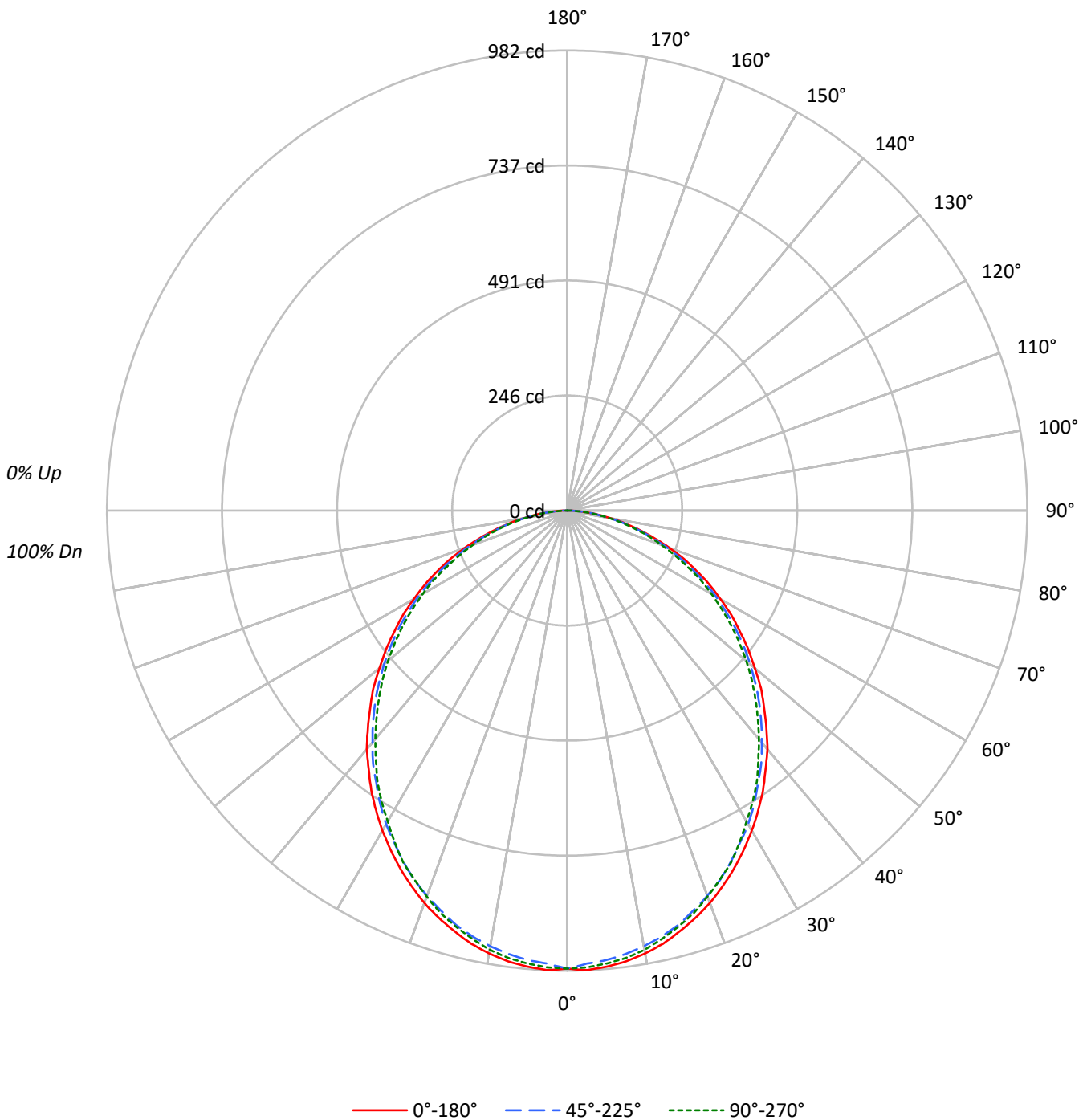
Lumens per Lamp: N/A  
Luminaire Lumens: 2522.5 lumens  
Efficiency: N/A  
Efficacy: 97.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')  
CIE Type: Direct

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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44					44			
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39					39			
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11848	11848	11848
5°	11884	11716	11805
10°	11811	11620	11711
15°	11663	11490	11530
20°	11494	11284	11305
25°	11275	11057	11078
30°	11035	10818	10716
35°	10786	10508	10447
40°	10527	10230	10075
45°	10189	9937	9742
50°	9855	9610	9410
55°	9510	9269	9028
60°	9152	8895	8638
65°	8745	8418	8137
70°	8204	7861	7570
75°	7521	7217	6987
80°	6603	6373	6150
85°	5549	5438	4993



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.1	3.6
10°-20°	259.7	10.3
20°-30°	383.0	15.2
30°-40°	446.9	17.7
40°-50°	448.4	17.8
50°-60°	392.8	15.6
60°-70°	291.2	11.5
70°-80°	163.8	6.5
80°-90°	44.6	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°	734.8	29.1
0°-40°	1181.7	46.8
0°-60°	2022.9	80.2
0°-90°	2522.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2522.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	977	974	963	973	970	93
15°	929	927	916	920	919	262
25°	843	838	827	829	828	388
35°	729	723	710	708	706	456
45°	594	592	580	573	568	459
55°	450	450	439	430	427	403
65°	305	302	294	286	284	302
75°	161	157	154	152	149	170
85°	40	40	39	38	36	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	977.5	977.5	977.5	977.5	977.5
2.5°	981.6	978.4	967.8	976.7	975.9
5°	976.7	973.5	962.9	972.7	970.2
7.5°	970.2	966.1	954.7	963.7	962.9
10°	959.6	955.5	944.1	952.3	951.5
12.5°	946.6	942.5	931.1	937.6	936.0
15°	929.4	927.0	915.6	920.5	918.8
17.5°	911.5	907.4	895.2	900.1	900.1
20°	891.1	887.0	874.8	879.7	876.4
22.5°	867.5	862.6	852.8	855.2	852.0
25°	843.0	838.1	826.7	829.2	828.3
27.5°	816.1	811.2	799.0	799.0	797.4
30°	788.4	784.3	772.9	769.6	765.6
32.5°	759.0	753.3	742.7	740.3	737.0
35°	728.9	723.2	710.1	707.7	706.0
37.5°	695.4	691.4	680.8	674.3	670.2
40°	665.3	658.8	646.5	640.8	636.7
42.5°	629.4	626.1	613.1	607.4	602.5
45°	594.4	591.9	579.7	573.2	568.3
47.5°	560.9	556.8	544.6	536.5	534.0
50°	522.6	520.2	509.6	502.2	499.0
52.5°	487.5	485.1	474.5	466.4	463.1
55°	450.0	450.0	438.6	430.5	427.2
57.5°	415.8	412.5	401.9	395.4	391.3
60°	377.5	375.0	366.9	357.9	356.3
62.5°	342.4	339.2	329.4	322.9	321.2
65°	304.9	301.7	293.5	286.2	283.7
67.5°	269.9	264.2	257.6	251.1	247.9
70°	231.5	228.3	221.8	216.9	213.6
72.5°	194.9	191.6	187.5	183.4	181.8
75°	160.6	157.4	154.1	151.6	149.2
77.5°	126.4	124.7	122.3	119.0	119.0
80°	94.6	92.9	91.3	88.9	88.1
82.5°	66.0	65.2	63.6	62.8	62.8
85°	39.9	39.9	39.1	37.5	35.9
87.5°	17.9	16.3	16.3	14.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)