

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P229479

Luminaire Tested: **14RLN-LD5-31-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229479  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36058)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-31-UNV-L940-CD1-U  
Description: METALUX 1X4 RLN LED TROFFER  
Light Source: (112)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

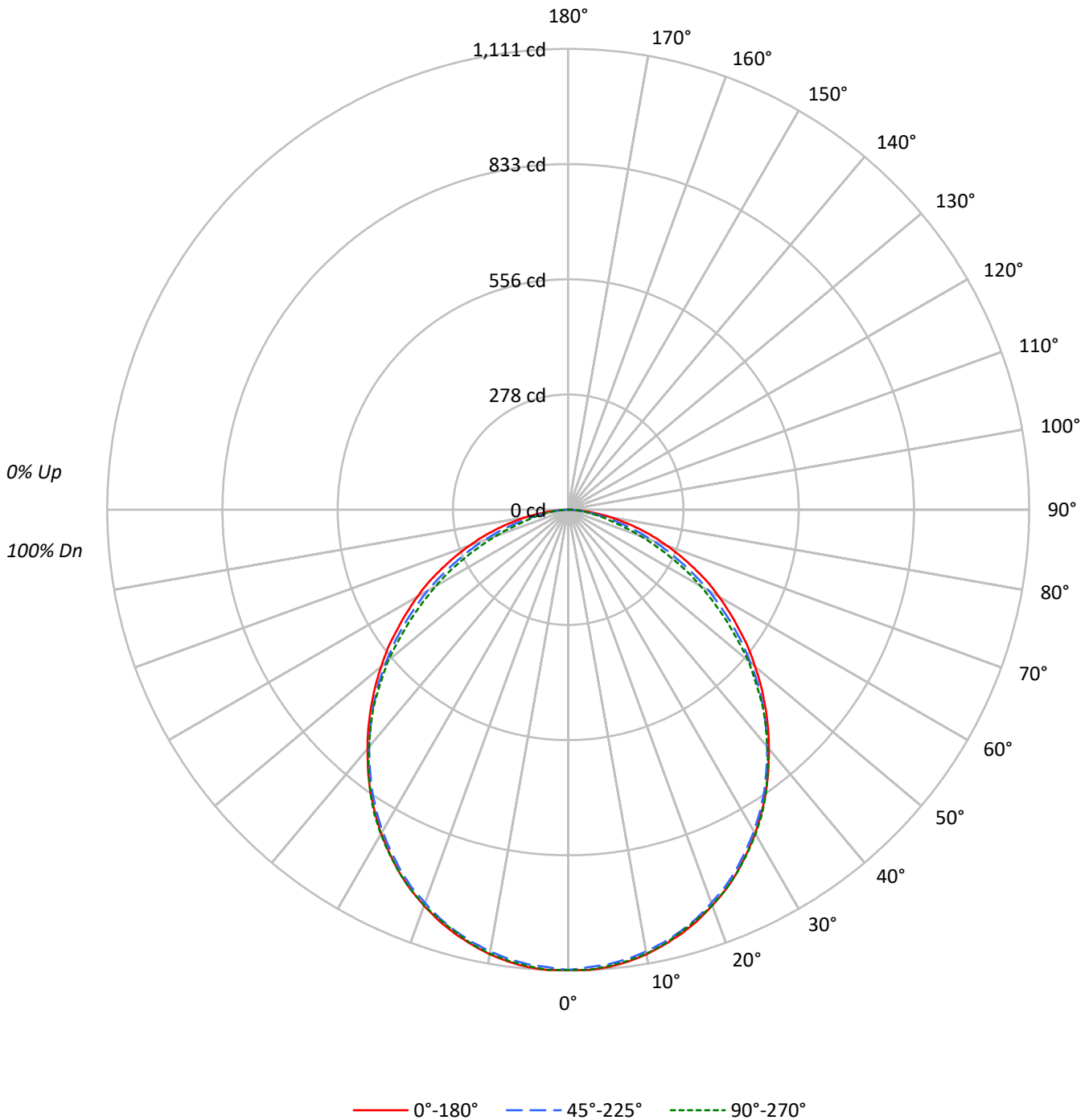
Lumens per Lamp: N/A  
Luminaire Lumens: 2791.0 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.31  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 30.6  
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	105	101	97	107	103	99	96	98	95	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77		84	79	76		81	77	74	72
3	91	81	74	67	89	80	73	67	77	71	66		74	69	64		72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56		66	60	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38		50	43	38		48	42	38	36
8	62	49	40	35	60	48	40	35	47	40	34		45	39	34		44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31		42	36	31		41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		38	32	28	26

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

	0°	45°	90°
0°	3739	3739	3739
5°	3744	3721	3737
10°	3724	3700	3717
15°	3689	3667	3675
20°	3642	3617	3637
25°	3585	3560	3585
30°	3509	3482	3514
35°	3419	3391	3419
40°	3309	3282	3285
45°	3199	3157	3147
50°	3081	3002	2970
55°	2953	2832	2728
60°	2828	2644	2482
65°	2674	2390	2187
70°	2494	2121	1837
75°	2286	1777	1419
80°	1970	1331	1224
85°	1589	1113	1141



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.8	3.8
10°-20°	297.4	10.7
20°-30°	442.7	15.9
30°-40°	517.5	18.5
40°-50°	511.4	18.3
50°-60°	431.8	15.5
60°-70°	299.1	10.7
70°-80°	149.3	5.3
80°-90°	37.1	1.3
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°	844.9	30.3
0°-40°	1362.4	48.8
0°-60°	2305.5	82.6
0°-90°	2791.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2791.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1110	1110	1110	1110	1110	
5°	1107	1105	1100	1106	1105	105
15°	1058	1056	1051	1056	1053	298
25°	964	962	957	964	964	444
35°	831	827	824	830	831	519
45°	671	664	662	661	660	518
55°	503	494	482	472	464	450
65°	335	320	300	284	274	333
75°	176	160	136	118	109	185
85°	41	32	29	29	30	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1109.6	1109.6	1109.6	1109.6	1109.6
2.5°	1111.0	1108.9	1104.1	1109.6	1110.3
5°	1106.9	1104.8	1100.0	1105.5	1104.8
7.5°	1099.3	1096.6	1092.5	1097.3	1097.3
10°	1088.4	1086.3	1081.5	1087.0	1086.3
12.5°	1074.0	1072.6	1067.8	1073.3	1072.6
15°	1057.5	1056.1	1051.3	1056.1	1053.4
17.5°	1038.3	1037.6	1032.1	1035.6	1034.9
20°	1015.7	1014.3	1008.8	1015.7	1014.3
22.5°	991.7	988.9	985.5	991.0	991.7
25°	964.2	961.5	957.4	963.6	964.2
27.5°	932.7	930.6	926.5	935.4	934.1
30°	901.8	899.8	895.0	902.5	903.2
32.5°	866.2	864.1	860.7	868.2	869.6
35°	831.2	827.1	824.3	830.5	831.2
37.5°	792.1	788.0	785.2	791.4	790.0
40°	752.3	747.5	746.2	751.0	746.8
42.5°	713.2	707.1	704.3	707.1	704.3
45°	671.4	663.9	662.5	661.1	660.4
47.5°	630.9	622.7	619.3	614.5	611.1
50°	587.7	578.8	572.6	567.8	566.5
52.5°	547.3	537.0	528.1	524.0	513.0
55°	502.7	493.8	482.1	471.8	464.3
57.5°	460.9	449.2	435.5	424.5	414.9
60°	419.7	404.6	392.3	375.1	368.3
62.5°	379.3	362.1	345.0	326.4	323.0
65°	335.4	319.6	299.7	283.9	274.3
67.5°	293.5	277.1	257.9	235.9	227.0
70°	253.1	235.2	215.3	194.1	186.5
72.5°	214.0	196.1	175.6	152.9	144.0
75°	175.6	159.8	136.5	118.0	109.0
77.5°	136.5	123.4	100.8	85.7	84.4
80°	101.5	89.8	68.6	65.2	63.1
82.5°	70.0	59.0	48.7	46.6	45.3
85°	41.1	31.5	28.8	28.8	29.5
87.5°	15.8	13.7	13.7	13.7	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)