

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: P229534

Luminaire Tested: **14RLN-LD5-31-UNV-L935-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229534  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36064)  
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-L935-CD1-SVPD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR  
Light Source: (112)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2651.0 lumens  
Efficiency: N/A  
Efficacy: 86.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.14 / 1.26  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

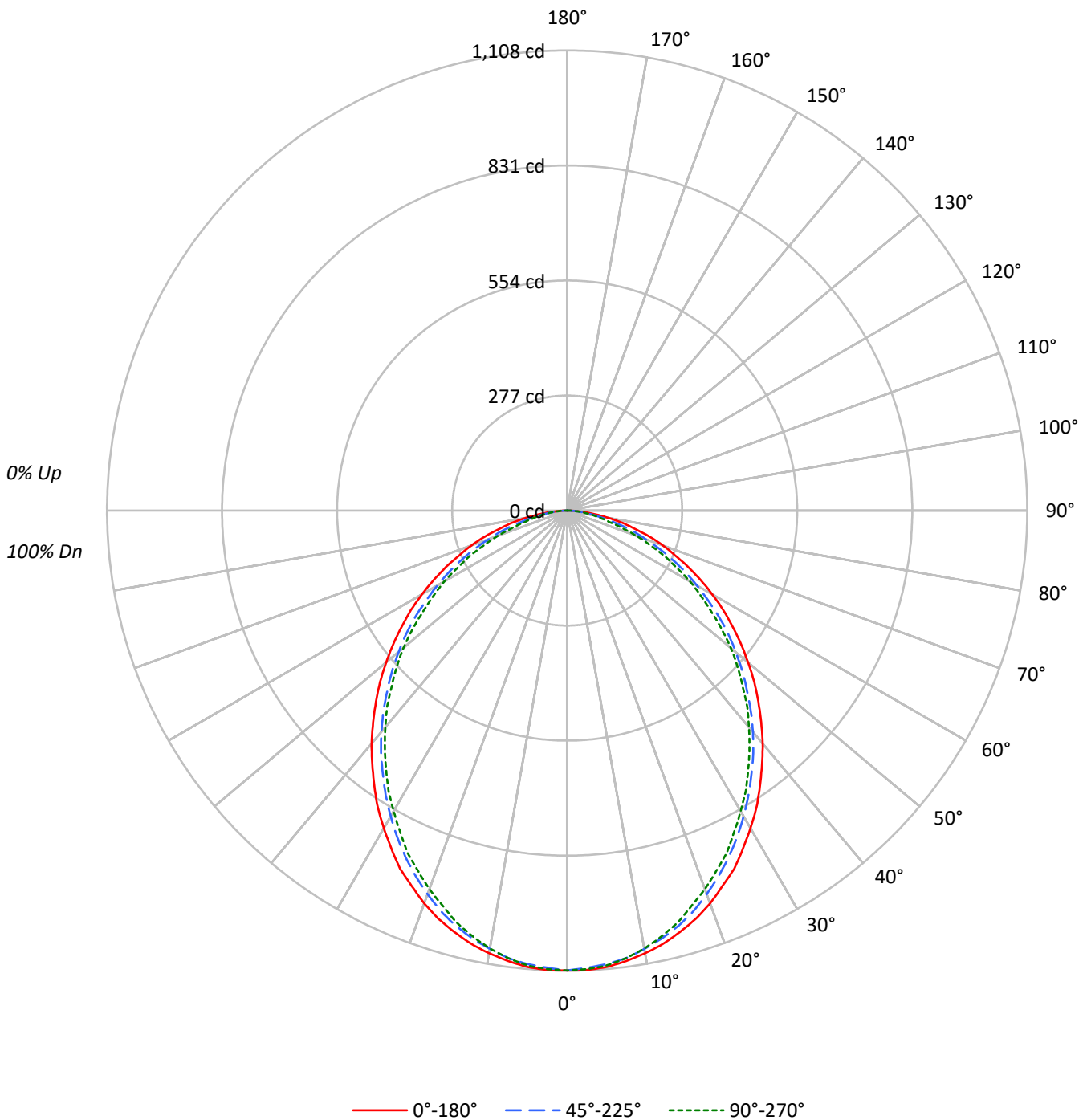
Input Watts (W): 30.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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

	0°	45°	90°
0°	3732	3732	3732
5°	3731	3708	3719
10°	3703	3668	3664
15°	3664	3612	3584
20°	3610	3523	3478
25°	3538	3423	3380
30°	3435	3306	3252
35°	3329	3183	3127
40°	3222	3061	2996
45°	3103	2917	2846
50°	2981	2777	2699
55°	2856	2620	2486
60°	2720	2434	2303
65°	2569	2231	2066
70°	2418	1976	1751
75°	2179	1687	1358
80°	1935	1335	1201
85°	1597	1063	1110



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	3.9
10°-20°	292.1	11.0
20°-30°	425.8	16.1
30°-40°	488.1	18.4
40°-50°	477.2	18.0
50°-60°	402.6	15.2
60°-70°	281.4	10.6
70°-80°	143.5	5.4
80°-90°	36.2	1.4
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°	822.0	31.0
0°-40°	1310.1	49.4
0°-60°	2189.9	82.6
0°-90°	2651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2651.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1103	1101	1096	1100	1100	105
15°	1050	1047	1035	1032	1027	296
25°	952	940	921	912	909	437
35°	809	798	774	766	760	506
45°	651	634	612	604	597	503
55°	486	468	446	433	423	435
65°	322	303	280	264	259	319
75°	167	154	130	114	104	180
85°	41	31	28	29	29	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1107.5	1107.5	1107.5	1107.5	1107.5
2.5°	1107.5	1105.2	1101.8	1106.4	1105.2
5°	1103.0	1100.7	1096.1	1099.5	1099.5
7.5°	1093.8	1091.5	1086.9	1089.2	1086.9
10°	1082.3	1080.0	1072.0	1073.1	1070.8
12.5°	1068.6	1064.0	1054.8	1053.6	1050.2
15°	1050.2	1046.8	1035.3	1031.9	1027.3
17.5°	1030.7	1023.8	1011.2	1004.3	997.5
20°	1006.6	997.5	982.6	974.5	970.0
22.5°	978.0	971.1	952.8	943.6	939.0
25°	951.6	940.1	920.7	911.5	909.2
27.5°	917.2	908.0	886.3	878.2	871.4
30°	882.8	872.5	849.6	841.5	835.8
32.5°	848.4	837.0	812.9	803.7	800.3
35°	809.4	798.0	773.9	765.9	760.1
37.5°	770.5	756.7	736.1	726.9	721.2
40°	732.6	716.6	695.9	685.6	681.0
42.5°	691.4	674.2	654.7	644.3	642.0
45°	651.2	634.0	612.2	604.2	597.3
47.5°	611.1	591.6	572.1	560.6	556.1
50°	568.7	550.3	529.7	518.2	514.8
52.5°	527.4	509.1	489.6	477.0	468.9
55°	486.1	467.8	446.0	433.4	423.1
57.5°	446.0	424.2	402.4	387.5	381.8
60°	403.6	384.1	361.2	346.2	341.7
62.5°	362.3	345.1	321.0	303.8	295.8
65°	322.2	302.7	279.8	263.7	259.1
67.5°	280.9	263.7	240.8	222.4	214.4
70°	245.4	223.6	200.6	184.6	177.7
72.5°	207.5	188.0	166.2	147.9	137.6
75°	167.4	153.6	129.6	113.5	104.3
77.5°	135.3	119.2	97.5	84.8	82.5
80°	99.7	87.1	68.8	63.1	61.9
82.5°	69.9	57.3	47.0	44.7	43.6
85°	41.3	31.0	27.5	28.7	28.7
87.5°	17.2	12.6	12.6	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)