

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: P229756

Luminaire Tested: **24RLN-LD5-31-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36038)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-UNV-L935-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2737.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

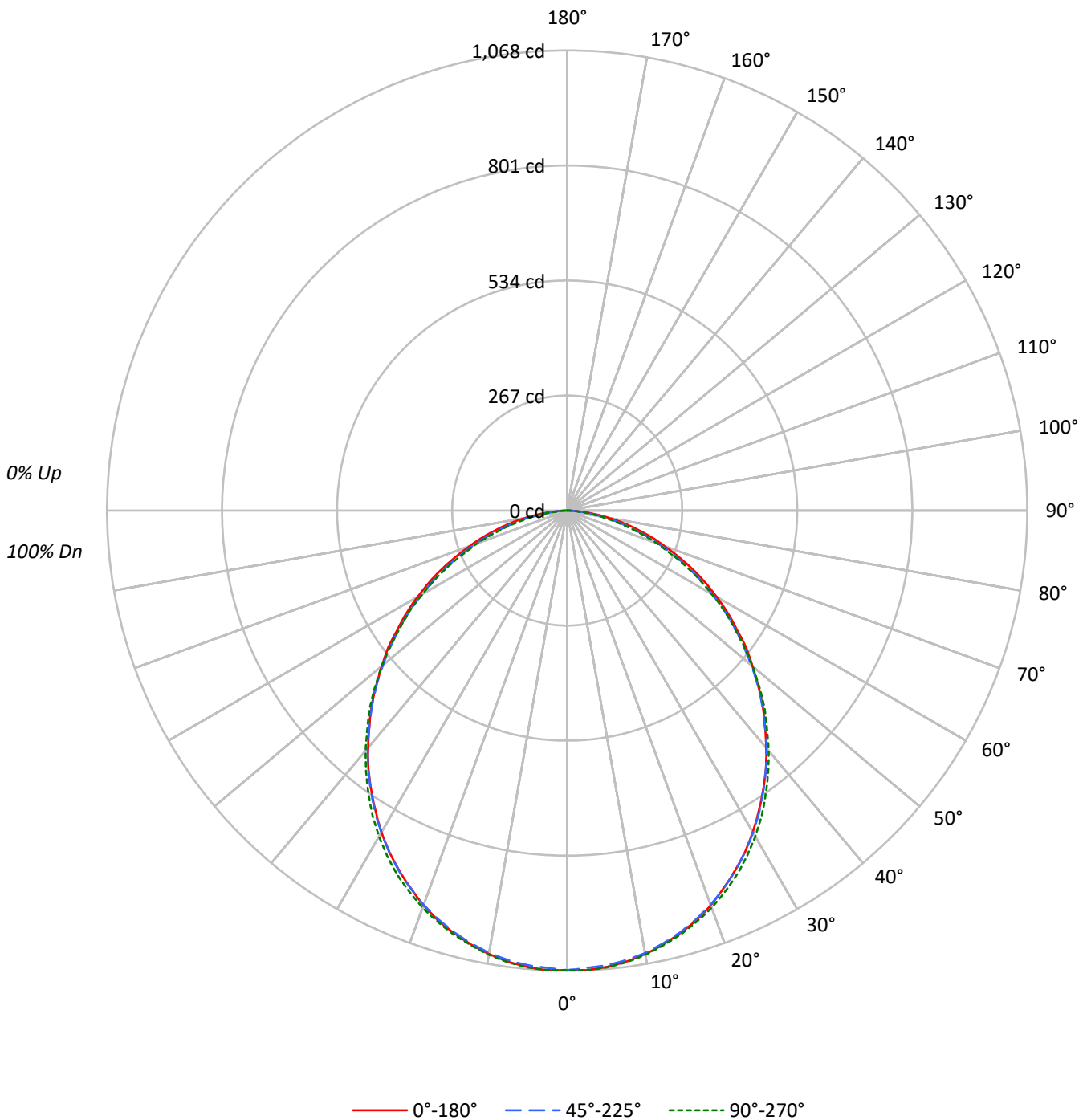
Input Watts (W): 22.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	60					60			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40					40			
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35					35			
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32					32			
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	28					28			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1634	1634	1634
5°	1635	1628	1636
10°	1626	1622	1628
15°	1610	1607	1615
20°	1589	1587	1599
25°	1558	1560	1576
30°	1524	1526	1544
35°	1483	1484	1502
40°	1437	1441	1455
45°	1391	1388	1404
50°	1338	1329	1340
55°	1283	1267	1262
60°	1229	1192	1187
65°	1161	1111	1095
70°	1076	1010	991
75°	988	892	846
80°	866	744	676
85°	712	515	408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.8	3.7
10°-20°	286.3	10.5
20°-30°	426.0	15.6
30°-40°	497.8	18.2
40°-50°	494.8	18.1
50°-60°	425.2	15.5
60°-70°	305.3	11.2
70°-80°	162.6	5.9
80°-90°	38.1	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°	813.2	29.7
0°-40°	1311.0	47.9
0°-60°	2230.9	81.5
0°-90°	2737.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2737.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1063	1062	1059	1062	1064	101
15°	1015	1015	1013	1017	1019	286
25°	922	922	923	930	932	425
35°	793	791	794	802	803	496
45°	642	637	641	644	648	495
55°	480	474	474	474	473	431
65°	320	311	306	303	302	317
75°	167	158	151	146	143	178
85°	40	34	29	24	23	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1066.8	1066.8	1066.8	1066.8	1066.8
2.5°	1067.7	1065.9	1062.5	1066.8	1067.7
5°	1063.3	1061.6	1059.0	1062.5	1064.2
7.5°	1055.6	1053.9	1052.2	1055.6	1057.3
10°	1045.3	1044.4	1042.7	1047.0	1047.0
12.5°	1031.5	1030.6	1028.9	1033.2	1033.2
15°	1015.1	1015.1	1013.4	1016.9	1018.6
17.5°	997.1	996.2	994.5	998.8	1000.5
20°	974.7	974.7	973.8	979.0	980.7
22.5°	948.8	948.8	948.8	955.7	957.4
25°	922.1	922.1	923.0	929.9	932.5
27.5°	893.7	892.9	893.7	901.5	904.1
30°	861.9	860.2	862.7	870.5	873.1
32.5°	827.4	825.7	830.0	836.9	840.3
35°	793.0	791.3	793.9	802.5	803.3
37.5°	757.7	753.4	757.7	765.4	766.3
40°	718.9	715.5	720.7	724.1	727.6
42.5°	679.3	677.6	680.2	686.2	686.2
45°	642.3	637.1	640.6	644.0	648.3
47.5°	601.0	598.4	600.1	602.7	604.4
50°	561.4	557.1	557.9	560.5	562.2
52.5°	524.4	515.7	515.7	517.5	517.5
55°	480.4	474.4	474.4	474.4	472.7
57.5°	441.7	433.9	433.1	433.1	433.1
60°	401.2	391.8	389.2	389.2	387.5
62.5°	360.8	352.2	348.7	345.3	345.3
65°	320.3	310.8	306.5	303.1	302.2
67.5°	279.0	272.1	266.9	262.6	258.3
70°	240.2	232.5	225.6	221.3	221.3
72.5°	204.1	195.4	188.6	183.4	180.8
75°	167.0	157.6	150.7	146.4	142.9
77.5°	134.3	124.0	117.1	111.1	107.6
80°	98.2	90.4	84.4	78.4	76.6
82.5°	68.0	62.0	55.1	50.8	49.1
85°	40.5	34.4	29.3	24.1	23.2
87.5°	16.4	12.1	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)