

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: P229836

Luminaire Tested: **24RLN-LD5-31-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229836
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)
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-L830-CD1-SVPD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3014.0 lumens
Efficiency: N/A
Efficacy: 131.6 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

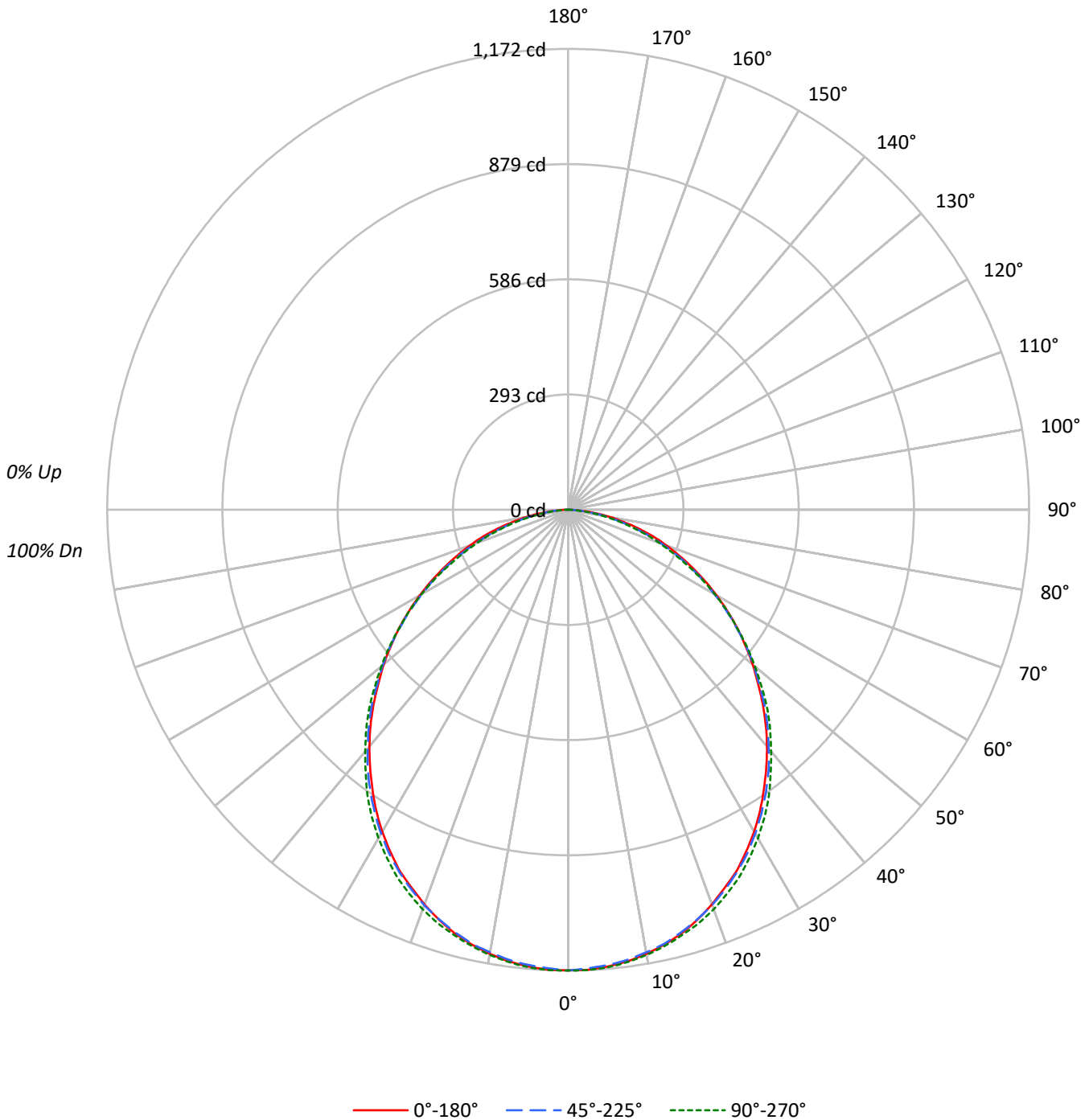
Input Watts (W): 22.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1795	1795	1795
5°	1793	1787	1796
10°	1784	1778	1788
15°	1769	1764	1776
20°	1741	1744	1763
25°	1713	1718	1741
30°	1672	1682	1706
35°	1622	1639	1664
40°	1572	1585	1604
45°	1516	1530	1551
50°	1459	1466	1477
55°	1402	1394	1399
60°	1335	1314	1320
65°	1259	1232	1210
70°	1191	1126	1100
75°	1096	1000	966
80°	965	847	796
85°	759	590	439



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.6	3.7
10°-20°	314.5	10.4
20°-30°	468.8	15.6
30°-40°	548.0	18.2
40°-50°	544.2	18.1
50°-60°	467.3	15.5
60°-70°	336.6	11.2
70°-80°	181.2	6.0
80°-90°	42.7	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°	893.9	29.7
0°-40°	1441.9	47.8
0°-60°	2453.4	81.4
0°-90°	3014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3014.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1166	1165	1162	1166	1168	111
15°	1115	1112	1112	1119	1120	314
25°	1014	1010	1016	1027	1030	466
35°	868	867	876	886	890	543
45°	700	698	706	712	716	540
55°	525	520	522	525	524	469
65°	347	342	340	337	334	345
75°	185	174	169	164	163	196
85°	43	39	34	27	25	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1171.9	1171.9	1171.9	1171.9	1171.9
2.5°	1170.9	1170.0	1167.1	1170.9	1171.9
5°	1166.1	1165.2	1162.3	1166.1	1168.1
7.5°	1158.5	1156.5	1154.6	1158.5	1160.4
10°	1146.9	1145.0	1143.1	1147.9	1149.8
12.5°	1132.6	1130.6	1130.6	1134.5	1136.4
15°	1115.3	1112.4	1112.4	1119.1	1120.1
17.5°	1093.2	1091.3	1092.2	1099.9	1102.8
20°	1068.2	1067.3	1070.2	1078.8	1081.7
22.5°	1040.4	1039.5	1044.2	1054.8	1056.7
25°	1013.5	1009.7	1016.4	1027.0	1029.9
27.5°	979.9	977.1	985.7	995.3	998.2
30°	945.4	942.5	951.2	961.7	964.6
32.5°	908.0	906.0	914.7	925.2	928.1
35°	867.6	866.7	876.3	885.9	889.7
37.5°	827.3	826.4	836.9	844.6	845.6
40°	786.1	784.1	792.8	801.4	802.4
42.5°	743.8	741.0	750.6	757.3	760.2
45°	699.7	697.8	706.4	712.2	716.0
47.5°	654.6	654.6	659.4	666.1	667.1
50°	612.3	609.5	615.2	619.1	620.0
52.5°	568.2	565.3	570.1	571.1	573.0
55°	525.0	520.2	522.1	525.0	524.0
57.5°	479.9	472.2	476.1	476.1	478.0
60°	435.7	429.0	429.0	429.0	430.9
62.5°	391.6	384.9	384.9	383.9	383.0
65°	347.4	341.7	339.8	336.9	334.0
67.5°	305.2	298.5	294.7	290.8	287.9
70°	265.9	254.3	251.5	245.7	245.7
72.5°	226.5	215.0	209.2	205.4	204.4
75°	185.2	173.7	168.9	164.1	163.2
77.5°	144.9	137.2	129.6	125.7	123.8
80°	109.4	102.7	96.0	89.3	90.2
82.5°	74.9	68.1	63.3	57.6	55.7
85°	43.2	39.4	33.6	26.9	25.0
87.5°	18.2	13.4	9.6	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)