

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: P229760

Luminaire Tested: **24RLN-LD5-50-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229760  
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-LD5-50-UNV-L935-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER  
Light Source: (252)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

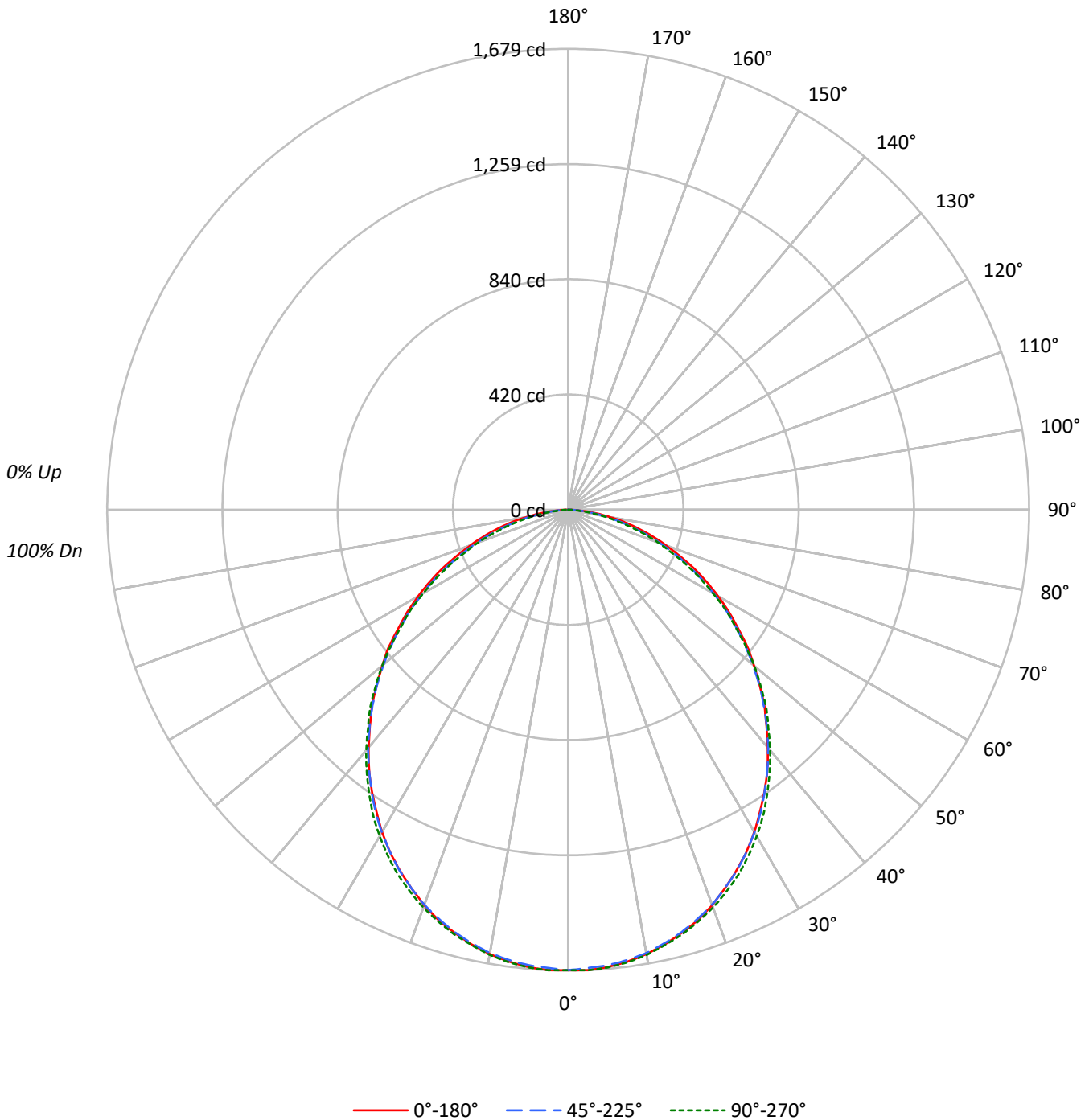
Lumens per Lamp: N/A  
Luminaire Lumens: 4305.0 lumens  
Efficiency: N/A  
Efficacy: 113.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 37.8  
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	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	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	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	32
9	58	44	36	31	56	44	36	31	43	36	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°	2570	2570	2570
5°	2571	2561	2574
10°	2557	2551	2561
15°	2532	2528	2540
20°	2499	2497	2514
25°	2451	2454	2479
30°	2398	2400	2429
35°	2332	2335	2363
40°	2261	2266	2288
45°	2188	2183	2209
50°	2104	2091	2107
55°	2018	1993	1985
60°	1933	1875	1867
65°	1826	1747	1723
70°	1692	1589	1558
75°	1555	1403	1330
80°	1362	1170	1063
85°	1119	808	643



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.6	3.7
10°-20°	450.4	10.5
20°-30°	670.1	15.6
30°-40°	782.9	18.2
40°-50°	778.3	18.1
50°-60°	668.7	15.5
60°-70°	480.3	11.2
70°-80°	255.8	5.9
80°-90°	59.9	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°	1279.1	29.7
0°-40°	2062.0	47.9
0°-60°	3509.0	81.5
0°-90°	4305.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4305.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1678	1678	1678	1678	1678	
5°	1672	1670	1666	1671	1674	159
15°	1597	1597	1594	1599	1602	450
25°	1450	1450	1452	1463	1467	668
35°	1247	1245	1249	1262	1264	780
45°	1010	1002	1008	1013	1020	778
55°	756	746	746	746	744	678
65°	504	489	482	477	475	498
75°	263	248	237	230	225	280
85°	64	54	46	38	37	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1677.9	1677.9	1677.9	1677.9	1677.9
2.5°	1679.3	1676.6	1671.2	1677.9	1679.3
5°	1672.5	1669.8	1665.8	1671.2	1673.9
7.5°	1660.3	1657.6	1654.9	1660.3	1663.1
10°	1644.1	1642.7	1640.0	1646.8	1646.8
12.5°	1622.4	1621.1	1618.4	1625.1	1625.1
15°	1596.7	1596.7	1594.0	1599.4	1602.1
17.5°	1568.3	1566.9	1564.2	1571.0	1573.7
20°	1533.0	1533.0	1531.7	1539.8	1542.5
22.5°	1492.4	1492.4	1492.4	1503.2	1506.0
25°	1450.4	1450.4	1451.8	1462.6	1466.7
27.5°	1405.7	1404.4	1405.7	1417.9	1422.0
30°	1355.6	1352.9	1357.0	1369.2	1373.2
32.5°	1301.5	1298.8	1305.5	1316.4	1321.8
35°	1247.3	1244.6	1248.6	1262.2	1263.5
37.5°	1191.8	1185.0	1191.8	1204.0	1205.3
40°	1130.8	1125.4	1133.5	1138.9	1144.4
42.5°	1068.5	1065.8	1069.9	1079.4	1079.4
45°	1010.3	1002.2	1007.6	1013.0	1019.8
47.5°	945.3	941.2	943.9	948.0	950.7
50°	883.0	876.2	877.6	881.6	884.3
52.5°	824.8	811.2	811.2	813.9	813.9
55°	755.7	746.2	746.2	746.2	743.5
57.5°	694.7	682.6	681.2	681.2	681.2
60°	631.1	616.2	612.1	612.1	609.4
62.5°	567.4	553.9	548.5	543.1	543.1
65°	503.8	488.9	482.1	476.7	475.4
67.5°	438.8	428.0	419.8	413.1	406.3
70°	377.8	365.7	354.8	348.0	348.0
72.5°	321.0	307.4	296.6	288.5	284.4
75°	262.7	247.8	237.0	230.2	224.8
77.5°	211.3	195.0	184.2	174.7	169.3
80°	154.4	142.2	132.7	123.2	120.5
82.5°	107.0	97.5	86.7	79.9	77.2
85°	63.7	54.2	46.0	37.9	36.6
87.5°	25.7	19.0	14.9	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)