

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: P229840

Luminaire Tested: **24RLN-LD5-50-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229840  
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-LD5-50-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: 4741.0 lumens  
Efficiency: N/A  
Efficacy: 125.4 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

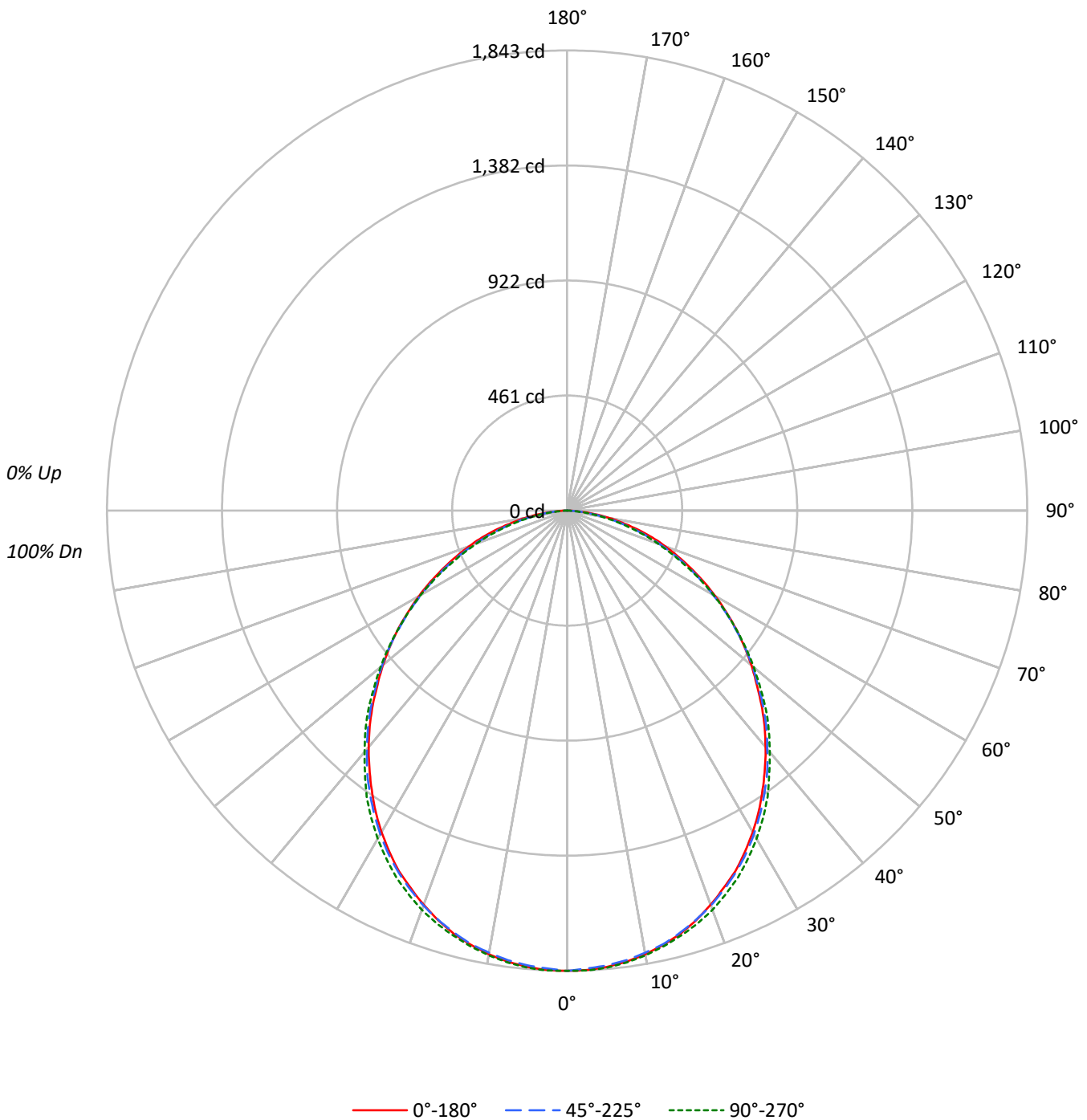
Input Watts (W): 37.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2823	2823	2823
5°	2820	2811	2825
10°	2806	2797	2813
15°	2782	2775	2794
20°	2739	2744	2773
25°	2694	2702	2738
30°	2630	2646	2684
35°	2552	2577	2617
40°	2472	2493	2524
45°	2384	2407	2440
50°	2295	2306	2324
55°	2205	2193	2201
60°	2100	2067	2077
65°	1981	1937	1904
70°	1873	1772	1731
75°	1724	1572	1519
80°	1518	1332	1252
85°	1193	928	691



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.0	3.7
10°-20°	494.7	10.4
20°-30°	737.3	15.6
30°-40°	862.0	18.2
40°-50°	856.0	18.1
50°-60°	735.1	15.5
60°-70°	529.5	11.2
70°-80°	285.1	6.0
80°-90°	67.2	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°	1406.0	29.7
0°-40°	2268.1	47.8
0°-60°	3859.1	81.4
0°-90°	4741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4741.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1843	1843	1843	1843	1843	
5°	1834	1833	1828	1834	1837	174
15°	1754	1750	1750	1760	1762	494
25°	1594	1588	1599	1615	1620	733
35°	1365	1363	1378	1394	1400	854
45°	1101	1098	1111	1120	1126	849
55°	826	818	821	826	824	738
65°	546	538	534	530	525	543
75°	291	273	266	258	257	309
85°	68	62	53	42	39	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1843.4	1843.4	1843.4	1843.4	1843.4
2.5°	1841.9	1840.4	1835.8	1841.9	1843.4
5°	1834.3	1832.8	1828.3	1834.3	1837.4
7.5°	1822.3	1819.2	1816.2	1822.3	1825.3
10°	1804.1	1801.1	1798.1	1805.6	1808.7
12.5°	1781.5	1778.5	1778.5	1784.5	1787.5
15°	1754.3	1749.8	1749.8	1760.4	1761.9
17.5°	1719.6	1716.6	1718.1	1730.2	1734.7
20°	1680.3	1678.8	1683.4	1696.9	1701.5
22.5°	1636.6	1635.0	1642.6	1659.2	1662.2
25°	1594.3	1588.2	1598.8	1615.4	1620.0
27.5°	1541.4	1536.9	1550.5	1565.6	1570.1
30°	1487.1	1482.6	1496.2	1512.8	1517.3
32.5°	1428.2	1425.2	1438.8	1455.4	1459.9
35°	1364.8	1363.3	1378.4	1393.5	1399.5
37.5°	1301.4	1299.9	1316.5	1328.6	1330.1
40°	1236.5	1233.5	1247.0	1260.6	1262.1
42.5°	1170.0	1165.5	1180.6	1191.2	1195.7
45°	1100.6	1097.6	1111.2	1120.2	1126.3
47.5°	1029.6	1029.6	1037.2	1047.8	1049.3
50°	963.2	958.7	967.7	973.8	975.3
52.5°	893.8	889.2	896.8	898.3	901.3
55°	825.8	818.3	821.3	825.8	824.3
57.5°	754.9	742.8	748.8	748.8	751.9
60°	685.4	674.9	674.9	674.9	677.9
62.5°	616.0	605.4	605.4	603.9	602.4
65°	546.5	537.5	534.4	529.9	525.4
67.5°	480.1	469.5	463.5	457.5	452.9
70°	418.2	400.1	395.6	386.5	386.5
72.5°	356.3	338.2	329.1	323.1	321.6
75°	291.4	273.3	265.7	258.2	256.7
77.5°	228.0	215.9	203.8	197.8	194.8
80°	172.1	161.5	151.0	140.4	141.9
82.5°	117.8	107.2	99.6	90.6	87.6
85°	67.9	61.9	52.8	42.3	39.3
87.5°	28.7	21.1	15.1	15.1	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)