

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: P229870

Luminaire Tested: **24RLN-LD5-50-UNV-L930-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229870  
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-L930-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR  
Light Source: (252)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4099.0 lumens  
Efficiency: N/A  
Efficacy: 108.4 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

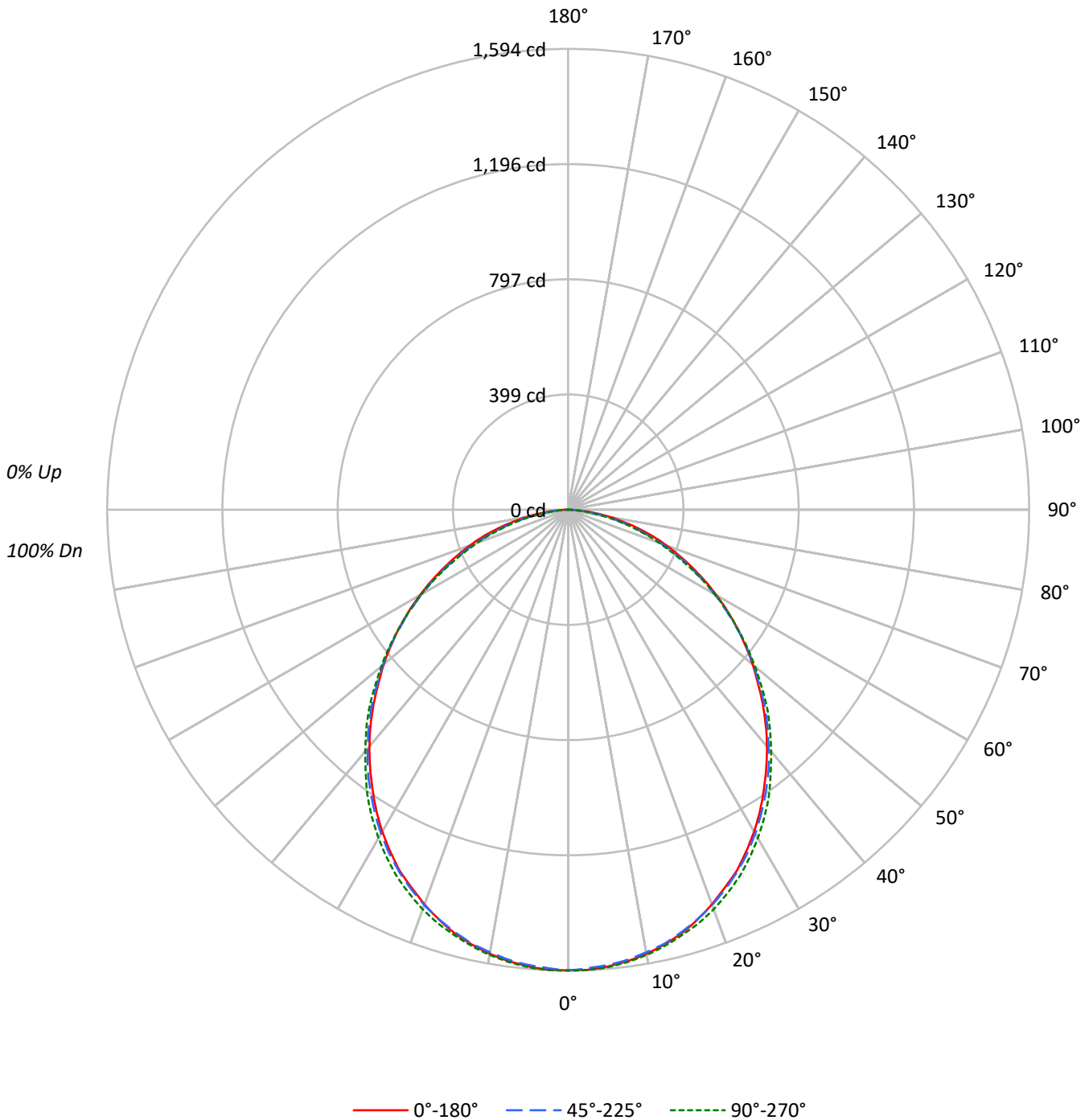
Input Watts (W): 37.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2441	2441	2441
5°	2438	2430	2442
10°	2426	2418	2432
15°	2405	2399	2415
20°	2368	2372	2398
25°	2330	2336	2367
30°	2274	2288	2320
35°	2206	2228	2262
40°	2137	2156	2182
45°	2061	2081	2109
50°	1984	1994	2009
55°	1907	1896	1903
60°	1815	1787	1795
65°	1712	1675	1646
70°	1619	1532	1497
75°	1491	1359	1313
80°	1312	1151	1082
85°	1032	803	596



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.4	3.7
10°-20°	427.7	10.4
20°-30°	637.5	15.6
30°-40°	745.3	18.2
40°-50°	740.1	18.1
50°-60°	635.5	15.5
60°-70°	457.8	11.2
70°-80°	246.5	6.0
80°-90°	58.1	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°	1215.6	29.7
0°-40°	1960.9	47.8
0°-60°	3336.6	81.4
0°-90°	4099.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4099.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1586	1585	1581	1586	1588	151
15°	1517	1513	1513	1522	1523	427
25°	1378	1373	1382	1397	1401	634
35°	1180	1179	1192	1205	1210	738
45°	952	949	961	968	974	734
55°	714	708	710	714	713	638
65°	472	465	462	458	454	469
75°	252	236	230	223	222	267
85°	59	54	46	36	34	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1593.8	1593.8	1593.8	1593.8	1593.8
2.5°	1592.5	1591.2	1587.2	1592.5	1593.8
5°	1585.9	1584.6	1580.7	1585.9	1588.5
7.5°	1575.5	1572.9	1570.3	1575.5	1578.1
10°	1559.8	1557.2	1554.6	1561.1	1563.7
12.5°	1540.3	1537.6	1537.6	1542.9	1545.5
15°	1516.8	1512.8	1512.8	1522.0	1523.3
17.5°	1486.7	1484.1	1485.4	1495.9	1499.8
20°	1452.8	1451.5	1455.4	1467.2	1471.1
22.5°	1414.9	1413.6	1420.2	1434.5	1437.1
25°	1378.4	1373.2	1382.3	1396.7	1400.6
27.5°	1332.7	1328.8	1340.5	1353.6	1357.5
30°	1285.7	1281.8	1293.6	1307.9	1311.8
32.5°	1234.8	1232.2	1244.0	1258.3	1262.2
35°	1180.0	1178.7	1191.7	1204.8	1210.0
37.5°	1125.2	1123.9	1138.2	1148.7	1150.0
40°	1069.0	1066.4	1078.2	1089.9	1091.2
42.5°	1011.6	1007.7	1020.7	1029.9	1033.8
45°	951.6	949.0	960.7	968.5	973.8
47.5°	890.2	890.2	896.7	905.9	907.2
50°	832.8	828.9	836.7	841.9	843.2
52.5°	772.7	768.8	775.3	776.7	779.3
55°	714.0	707.5	710.1	714.0	712.7
57.5°	652.6	642.2	647.4	647.4	650.0
60°	592.6	583.5	583.5	583.5	586.1
62.5°	532.6	523.4	523.4	522.1	520.8
65°	472.5	464.7	462.1	458.2	454.2
67.5°	415.1	405.9	400.7	395.5	391.6
70°	361.6	345.9	342.0	334.2	334.2
72.5°	308.1	292.4	284.6	279.3	278.0
75°	251.9	236.3	229.7	223.2	221.9
77.5°	197.1	186.7	176.2	171.0	168.4
80°	148.8	139.7	130.5	121.4	122.7
82.5°	101.8	92.7	86.1	78.3	75.7
85°	58.7	53.5	45.7	36.5	33.9
87.5°	24.8	18.3	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)