

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: P229751

Luminaire Tested: **24RLN-LD5-55-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229751  
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-LD5-55-UNV-L930-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER  
Light Source: (252)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4610.0 lumens  
Efficiency: N/A  
Efficacy: 108.0 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

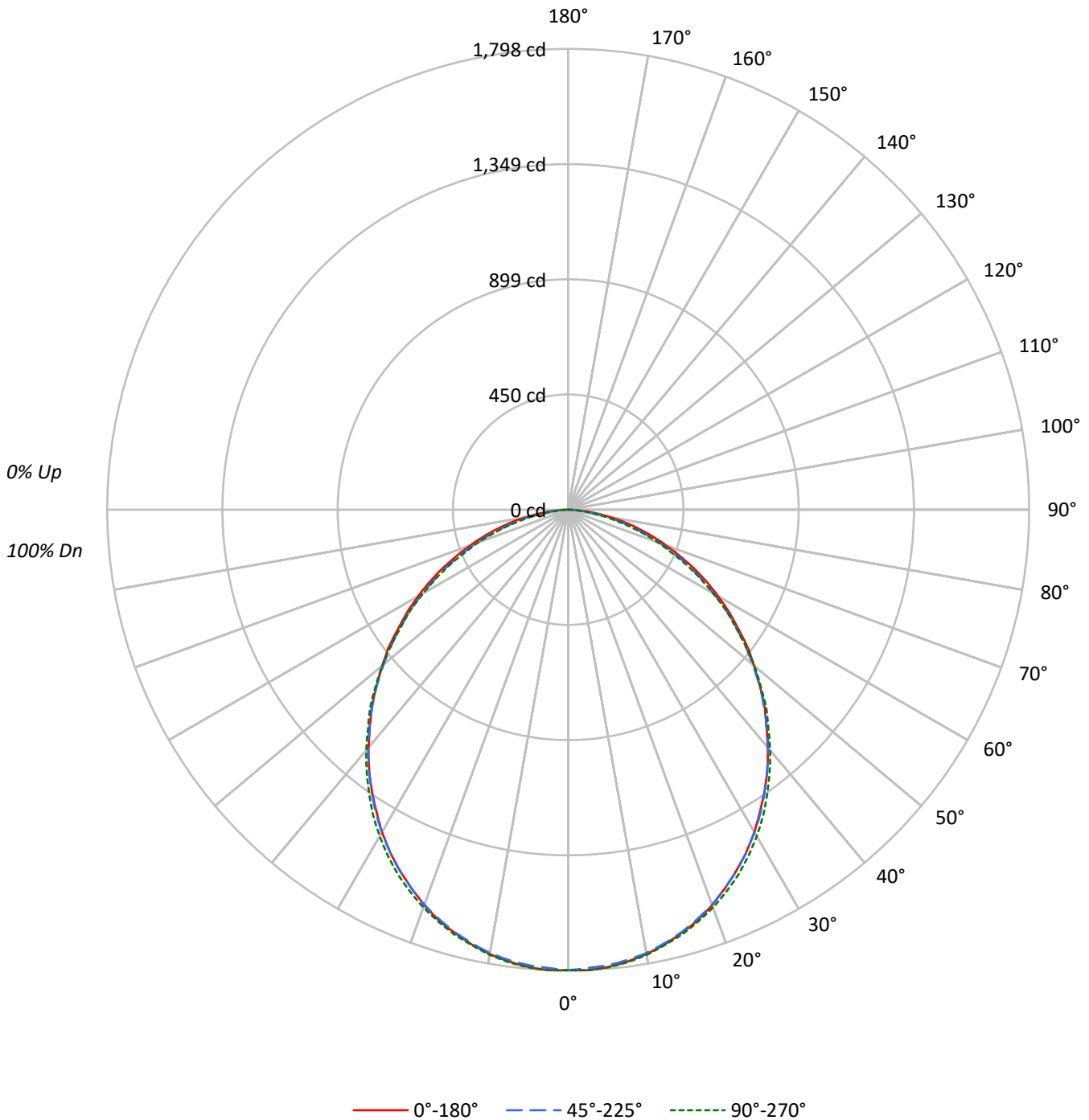
Input Watts (W): 42.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2752	2752	2752
5°	2754	2743	2756
10°	2738	2731	2743
15°	2711	2707	2720
20°	2676	2673	2692
25°	2625	2627	2654
30°	2567	2570	2601
35°	2498	2500	2530
40°	2421	2427	2450
45°	2344	2337	2365
50°	2253	2239	2257
55°	2161	2134	2126
60°	2070	2008	1999
65°	1955	1871	1845
70°	1812	1702	1669
75°	1665	1502	1424
80°	1458	1253	1139
85°	1199	866	689



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.8	3.7
10°-20°	482.3	10.5
20°-30°	717.6	15.6
30°-40°	838.4	18.2
40°-50°	833.4	18.1
50°-60°	716.1	15.5
60°-70°	514.3	11.2
70°-80°	273.9	5.9
80°-90°	64.2	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°	1369.7	29.7
0°-40°	2208.1	47.9
0°-60°	3757.7	81.5
0°-90°	4610.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4610.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1797	1797	1797	1797	1797	
5°	1791	1788	1784	1790	1792	170
15°	1710	1710	1707	1713	1716	482
25°	1553	1553	1555	1566	1571	715
35°	1336	1333	1337	1352	1353	835
45°	1082	1073	1079	1085	1092	833
55°	809	799	799	799	796	726
65°	540	524	516	510	509	534
75°	281	265	254	246	241	300
85°	68	58	49	41	39	80
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1796.8	1796.8	1796.8	1796.8	1796.8
2.5°	1798.3	1795.4	1789.6	1796.8	1798.3
5°	1791.0	1788.1	1783.8	1789.6	1792.5
7.5°	1778.0	1775.1	1772.2	1778.0	1780.9
10°	1760.6	1759.1	1756.2	1763.5	1763.5
12.5°	1737.4	1735.9	1733.0	1740.3	1740.3
15°	1709.8	1709.8	1706.9	1712.7	1715.6
17.5°	1679.4	1677.9	1675.0	1682.3	1685.2
20°	1641.7	1641.7	1640.2	1648.9	1651.8
22.5°	1598.1	1598.1	1598.1	1609.7	1612.6
25°	1553.2	1553.2	1554.6	1566.2	1570.6
27.5°	1505.3	1503.9	1505.3	1518.4	1522.7
30°	1451.7	1448.8	1453.1	1466.2	1470.5
32.5°	1393.7	1390.8	1398.0	1409.6	1415.4
35°	1335.7	1332.8	1337.1	1351.6	1353.1
37.5°	1276.2	1268.9	1276.2	1289.2	1290.7
40°	1210.9	1205.1	1213.8	1219.6	1225.4
42.5°	1144.2	1141.3	1145.7	1155.8	1155.8
45°	1081.9	1073.2	1079.0	1084.8	1092.0
47.5°	1012.3	1007.9	1010.8	1015.2	1018.1
50°	945.5	938.3	939.7	944.1	947.0
52.5°	883.2	868.7	868.7	871.6	871.6
55°	809.2	799.1	799.1	799.1	796.2
57.5°	744.0	730.9	729.5	729.5	729.5
60°	675.8	659.9	655.5	655.5	652.6
62.5°	607.6	593.1	587.3	581.5	581.5
65°	539.5	523.5	516.3	510.5	509.0
67.5°	469.9	458.3	449.6	442.3	435.1
70°	404.6	391.6	380.0	372.7	372.7
72.5°	343.7	329.2	317.6	308.9	304.5
75°	281.3	265.4	253.8	246.5	240.7
77.5°	226.2	208.8	197.2	187.1	181.3
80°	165.3	152.3	142.1	132.0	129.1
82.5°	114.6	104.4	92.8	85.6	82.7
85°	68.2	58.0	49.3	40.6	39.2
87.5°	27.6	20.3	16.0	16.0	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)