

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: P229901

Luminaire Tested: **24RLN-LD5-55-RDP-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229901  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1707-178-7)  
Test Lab: INNOVATION CENTER-G3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-55-RDP-UNV-L830-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR AND RDP LENS  
Light Source: (252)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4367.0 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

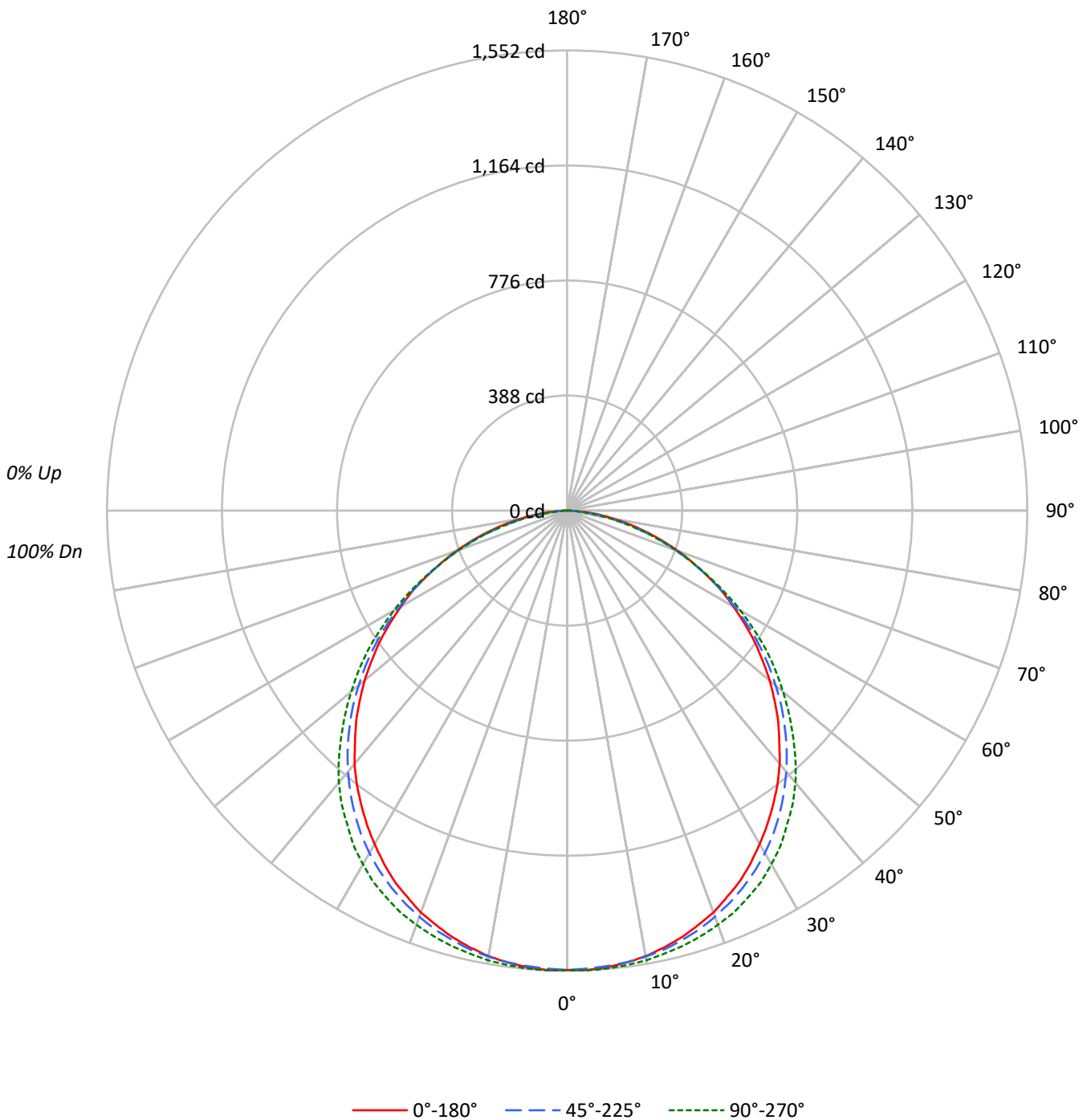
Input Watts (W): 42.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	78	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	27	37	31	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2373	2373	2373
5°	2377	2371	2384
10°	2373	2376	2394
15°	2363	2378	2408
20°	2351	2376	2423
25°	2331	2371	2435
30°	2298	2359	2436
35°	2264	2336	2417
40°	2230	2299	2396
45°	2181	2250	2335
50°	2126	2187	2265
55°	2062	2113	2188
60°	1983	2008	2069
65°	1891	1891	1910
70°	1777	1745	1741
75°	1622	1524	1519
80°	1413	1268	1213
85°	1119	880	687



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.0	3.4
10°-20°	424.1	9.7
20°-30°	648.0	14.8
30°-40°	781.7	17.9
40°-50°	801.2	18.3
50°-60°	705.9	16.2
60°-70°	516.7	11.8
70°-80°	277.7	6.4
80°-90°	64.6	1.5
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°	1219.1	27.9
0°-40°	2000.8	45.8
0°-60°	3508.0	80.3
0°-90°	4367.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4367.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1550	1550	1550	1550	1550	
5°	1546	1544	1542	1547	1550	147
15°	1490	1492	1499	1511	1518	420
25°	1379	1383	1403	1430	1441	635
35°	1211	1217	1249	1284	1293	758
45°	1007	1006	1039	1069	1078	776
55°	772	768	791	809	819	689
65°	522	512	522	528	527	517
75°	274	261	258	258	257	291
85°	64	56	50	41	39	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1549.5	1549.5	1549.5	1549.5	1549.5
2.5°	1551.3	1548.6	1545.8	1548.6	1552.2
5°	1545.8	1544.0	1542.2	1546.8	1550.4
7.5°	1537.6	1535.8	1536.7	1543.1	1545.8
10°	1525.8	1525.8	1527.6	1534.9	1539.5
12.5°	1509.4	1510.3	1515.8	1524.9	1529.5
15°	1490.3	1492.1	1499.4	1511.2	1518.5
17.5°	1466.6	1471.2	1481.2	1495.8	1504.0
20°	1442.1	1444.8	1457.5	1478.5	1486.7
22.5°	1410.2	1415.7	1432.0	1456.6	1467.5
25°	1379.2	1382.9	1402.9	1430.2	1441.1
27.5°	1340.1	1345.6	1370.1	1402.0	1413.8
30°	1299.1	1305.5	1333.7	1364.7	1377.4
32.5°	1256.3	1264.5	1293.7	1326.4	1340.1
35°	1210.8	1217.2	1249.1	1283.6	1292.8
37.5°	1165.3	1167.1	1200.8	1234.5	1249.1
40°	1115.2	1117.0	1149.8	1181.7	1198.1
42.5°	1058.8	1064.2	1096.1	1127.1	1139.8
45°	1006.9	1006.0	1038.8	1068.8	1077.9
47.5°	948.6	950.4	980.5	1009.6	1015.1
50°	892.2	891.3	917.7	943.2	950.4
52.5°	830.3	829.4	855.8	876.7	885.8
55°	772.0	767.5	791.1	809.3	819.4
57.5°	709.2	702.8	723.8	742.0	746.5
60°	647.3	640.0	655.5	669.1	675.5
62.5°	588.1	579.0	589.0	600.9	601.8
65°	521.7	512.5	521.7	528.0	527.1
67.5°	458.8	448.8	453.4	456.1	455.2
70°	396.9	383.3	389.6	387.8	388.7
72.5°	335.0	324.1	323.2	320.5	323.2
75°	274.0	261.3	257.6	257.6	256.7
77.5°	215.8	203.0	199.4	197.6	194.8
80°	160.2	150.2	143.8	142.9	137.5
82.5°	112.9	100.1	98.3	90.1	84.7
85°	63.7	56.4	50.1	41.0	39.1
87.5°	23.7	20.9	16.4	15.5	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)