

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: P229902

Luminaire Tested: **24RLN-LD5-60-RDP-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229902  
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-LD5-60-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: 4717.0 lumens  
Efficiency: N/A  
Efficacy: 98.9 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

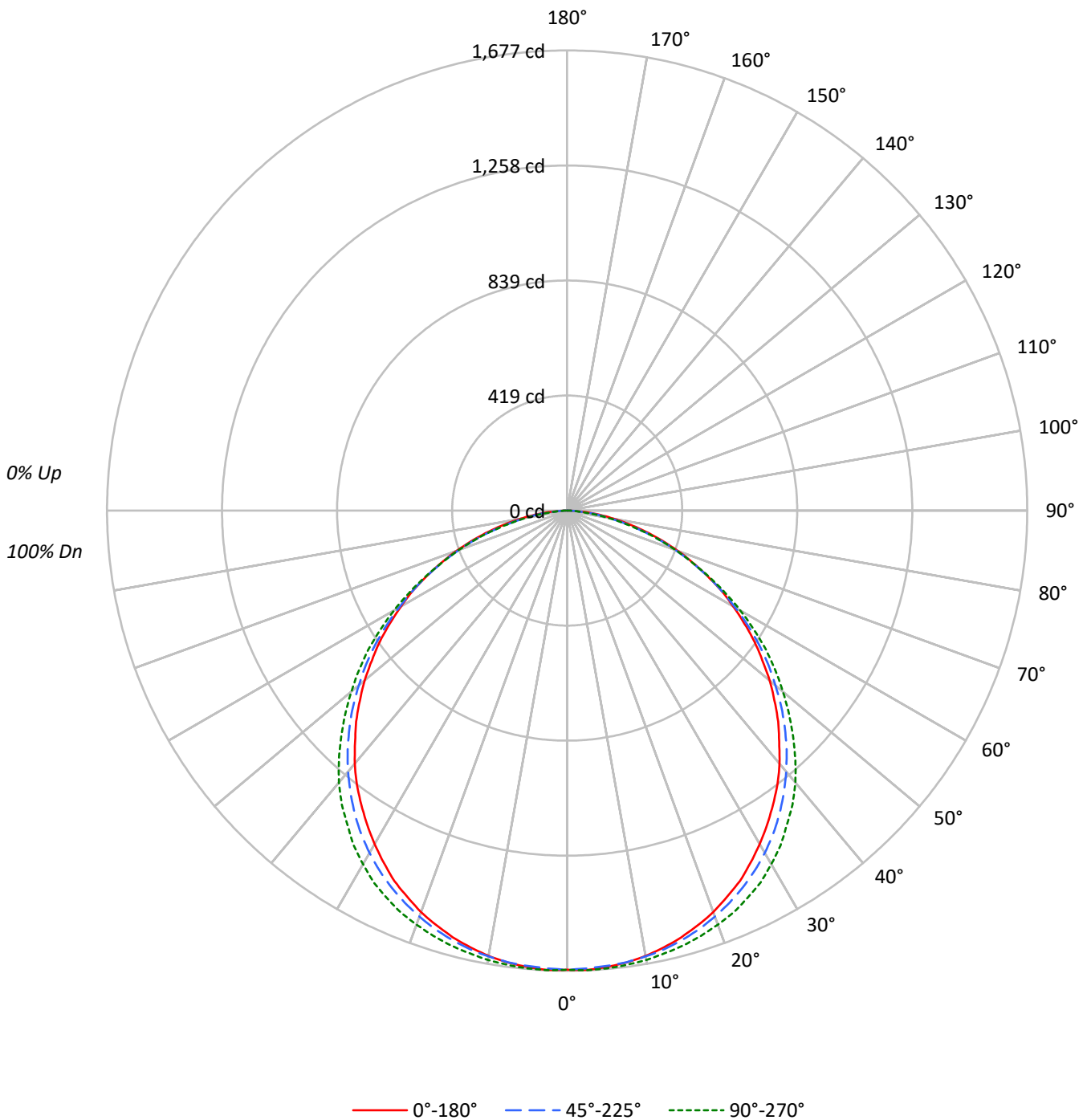
Input Watts (W): 47.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2564	2564	2564
5°	2567	2561	2575
10°	2563	2566	2586
15°	2553	2568	2601
20°	2539	2566	2617
25°	2518	2561	2631
30°	2482	2548	2631
35°	2446	2523	2611
40°	2409	2483	2587
45°	2356	2430	2522
50°	2296	2362	2446
55°	2227	2282	2363
60°	2142	2169	2235
65°	2042	2042	2064
70°	1920	1885	1880
75°	1752	1647	1641
80°	1527	1371	1310
85°	1209	951	743



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.8	3.4
10°-20°	458.1	9.7
20°-30°	699.9	14.8
30°-40°	844.4	17.9
40°-50°	865.5	18.3
50°-60°	762.5	16.2
60°-70°	558.1	11.8
70°-80°	299.9	6.4
80°-90°	69.9	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°	1316.8	27.9
0°-40°	2161.2	45.8
0°-60°	3789.2	80.3
0°-90°	4717.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4717.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1674	1674	1674	1674	1674	
5°	1670	1668	1666	1671	1675	159
15°	1610	1612	1620	1632	1640	454
25°	1490	1494	1515	1545	1557	685
35°	1308	1315	1349	1386	1396	819
45°	1088	1087	1122	1154	1164	838
55°	834	829	854	874	885	744
65°	564	554	564	570	569	559
75°	296	282	278	278	277	314
85°	69	61	54	44	42	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1673.7	1673.7	1673.7	1673.7	1673.7
2.5°	1675.6	1672.7	1669.7	1672.7	1676.6
5°	1669.7	1667.8	1665.8	1670.7	1674.7
7.5°	1660.9	1658.9	1659.9	1666.8	1669.7
10°	1648.1	1648.1	1650.1	1657.9	1662.9
12.5°	1630.4	1631.4	1637.3	1647.1	1652.0
15°	1609.8	1611.7	1619.6	1632.4	1640.2
17.5°	1584.2	1589.1	1599.9	1615.7	1624.5
20°	1557.6	1560.6	1574.4	1597.0	1605.8
22.5°	1523.2	1529.1	1546.8	1573.4	1585.2
25°	1489.8	1493.7	1515.3	1544.9	1556.7
27.5°	1447.5	1453.4	1479.9	1514.4	1527.1
30°	1403.2	1410.1	1440.6	1474.0	1487.8
32.5°	1357.0	1365.9	1397.3	1432.7	1447.5
35°	1307.9	1314.7	1349.2	1386.5	1396.4
37.5°	1258.7	1260.7	1297.0	1333.4	1349.2
40°	1204.6	1206.6	1242.0	1276.4	1294.1
42.5°	1143.6	1149.5	1184.0	1217.4	1231.2
45°	1087.6	1086.6	1122.0	1154.5	1164.3
47.5°	1024.7	1026.6	1059.1	1090.5	1096.4
50°	963.7	962.7	991.2	1018.8	1026.6
52.5°	896.8	895.8	924.4	947.0	956.8
55°	833.9	829.0	854.5	874.2	885.0
57.5°	766.0	759.1	781.8	801.4	806.4
60°	699.2	691.3	708.0	722.8	729.6
62.5°	635.2	625.4	636.2	649.0	650.0
65°	563.5	553.6	563.5	570.3	569.4
67.5°	495.6	484.8	489.7	492.7	491.7
70°	428.7	414.0	420.9	418.9	419.9
72.5°	361.9	350.1	349.1	346.1	349.1
75°	296.0	282.2	278.3	278.3	277.3
77.5°	233.1	219.3	215.4	213.4	210.4
80°	173.1	162.3	155.4	154.4	148.5
82.5°	121.9	108.2	106.2	97.4	91.5
85°	68.8	61.0	54.1	44.3	42.3
87.5°	25.6	22.6	17.7	16.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)