

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: P229782

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-60-RDP-UNV-L830-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4775.0 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

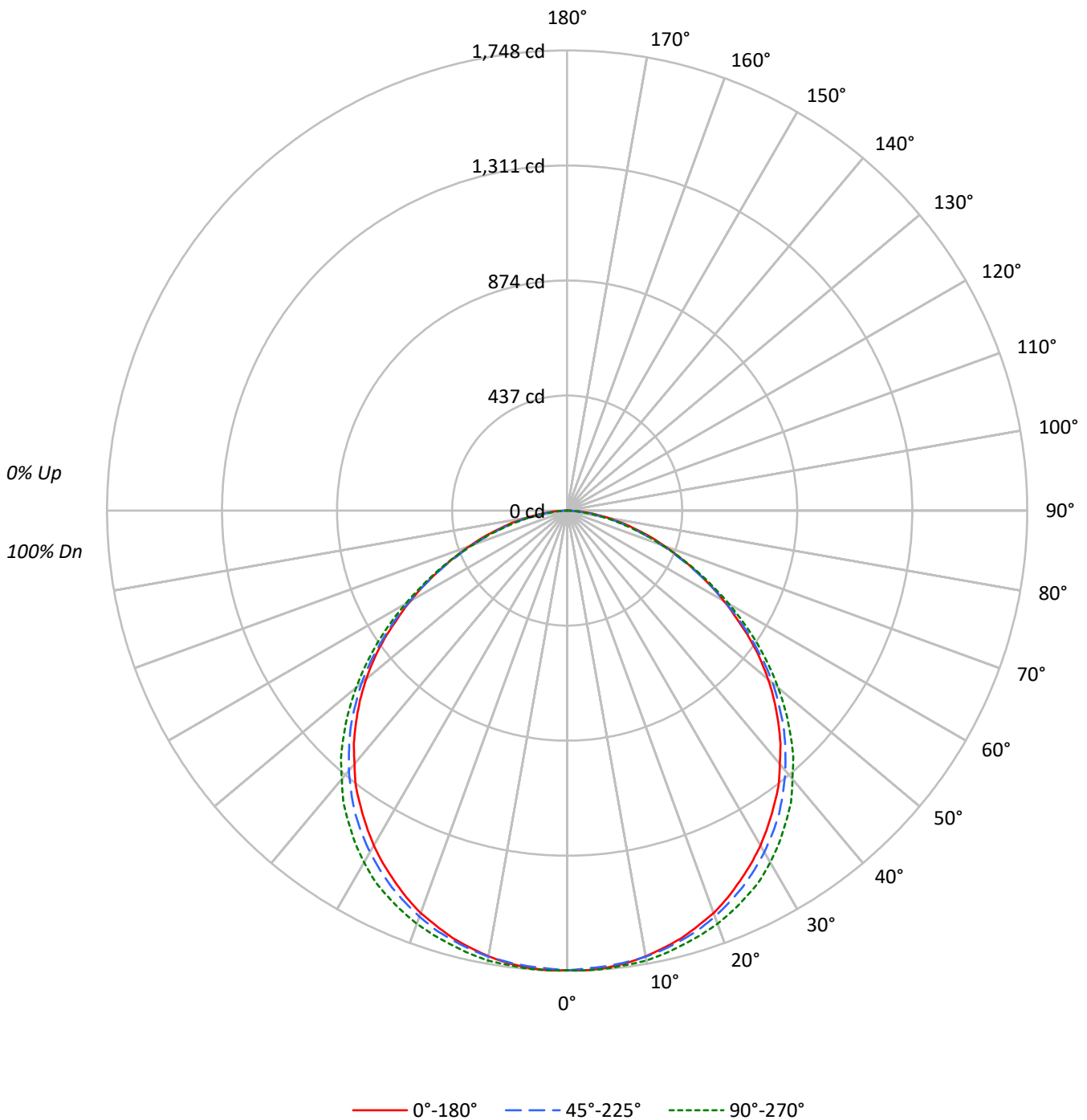
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	107	102	99	95	98	95	92	94	92	90	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	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	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	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2675	2675	2675
5°	2679	2671	2685
10°	2674	2677	2699
15°	2666	2677	2706
20°	2651	2675	2722
25°	2624	2666	2731
30°	2598	2650	2730
35°	2561	2625	2706
40°	2514	2579	2662
45°	2456	2519	2598
50°	2374	2430	2495
55°	2259	2288	2356
60°	2109	2120	2175
65°	1937	1924	1969
70°	1760	1712	1720
75°	1565	1479	1469
80°	1358	1215	1182
85°	1114	859	668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.6	3.5
10°-20°	477.4	10.0
20°-30°	728.8	15.3
30°-40°	878.6	18.4
40°-50°	895.9	18.8
50°-60°	766.8	16.1
60°-70°	528.2	11.1
70°-80°	270.8	5.7
80°-90°	63.0	1.3
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°	1371.8	28.7
0°-40°	2250.4	47.1
0°-60°	3913.0	81.9
0°-90°	4775.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4775.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1746	1746	1746	1746	1746	
5°	1743	1739	1737	1743	1746	166
15°	1681	1679	1688	1701	1706	474
25°	1552	1558	1578	1605	1616	716
35°	1370	1375	1404	1435	1447	857
45°	1134	1136	1163	1192	1199	874
55°	846	840	857	875	882	755
65°	534	522	531	534	543	531
75°	264	254	250	250	248	285
85°	63	56	49	44	38	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1746.2	1746.2	1746.2	1746.2	1746.2
2.5°	1748.0	1744.4	1740.8	1744.4	1748.0
5°	1742.6	1739.0	1737.2	1742.6	1746.2
7.5°	1733.6	1729.9	1729.9	1737.2	1740.8
10°	1719.1	1717.3	1720.9	1728.1	1735.4
12.5°	1700.9	1700.9	1706.4	1715.4	1722.7
15°	1681.0	1679.2	1688.3	1700.9	1706.4
17.5°	1653.9	1655.7	1668.3	1682.8	1690.1
20°	1626.7	1628.5	1641.2	1661.1	1670.2
22.5°	1592.3	1595.9	1610.4	1635.7	1644.8
25°	1552.4	1557.8	1577.8	1604.9	1615.8
27.5°	1512.6	1518.0	1539.7	1570.5	1585.0
30°	1469.1	1476.3	1498.1	1530.7	1543.4
32.5°	1420.2	1425.6	1452.8	1485.4	1498.1
35°	1369.5	1374.9	1403.9	1434.7	1447.3
37.5°	1318.7	1318.7	1347.7	1383.9	1396.6
40°	1257.1	1259.0	1289.8	1324.2	1331.4
42.5°	1199.2	1199.2	1226.4	1259.0	1271.6
45°	1134.0	1135.8	1162.9	1191.9	1199.2
47.5°	1066.9	1066.9	1090.5	1117.7	1124.9
50°	996.3	992.7	1019.8	1041.6	1047.0
52.5°	923.8	918.4	940.1	958.3	965.5
55°	845.9	840.5	856.8	874.9	882.2
57.5°	764.4	757.2	775.3	791.6	795.2
60°	688.4	677.5	692.0	701.0	710.1
62.5°	612.3	599.6	610.5	615.9	623.1
65°	534.4	521.7	530.8	534.4	543.4
67.5°	460.1	451.1	452.9	458.3	461.9
70°	393.1	382.2	382.2	382.2	384.0
72.5°	331.5	315.2	313.4	315.2	315.2
75°	264.5	253.6	250.0	250.0	248.2
77.5°	211.9	197.4	195.6	192.0	188.4
80°	154.0	141.3	137.7	135.9	134.0
82.5°	106.9	96.0	92.4	88.8	83.3
85°	63.4	56.2	48.9	43.5	38.0
87.5°	23.5	21.7	18.1	16.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)