

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: P229759

Luminaire Tested: **24RLN-LD5-45-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229759
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-LD5-45-UNV-L935-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3915.0 lumens
Efficiency: N/A
Efficacy: 115.1 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

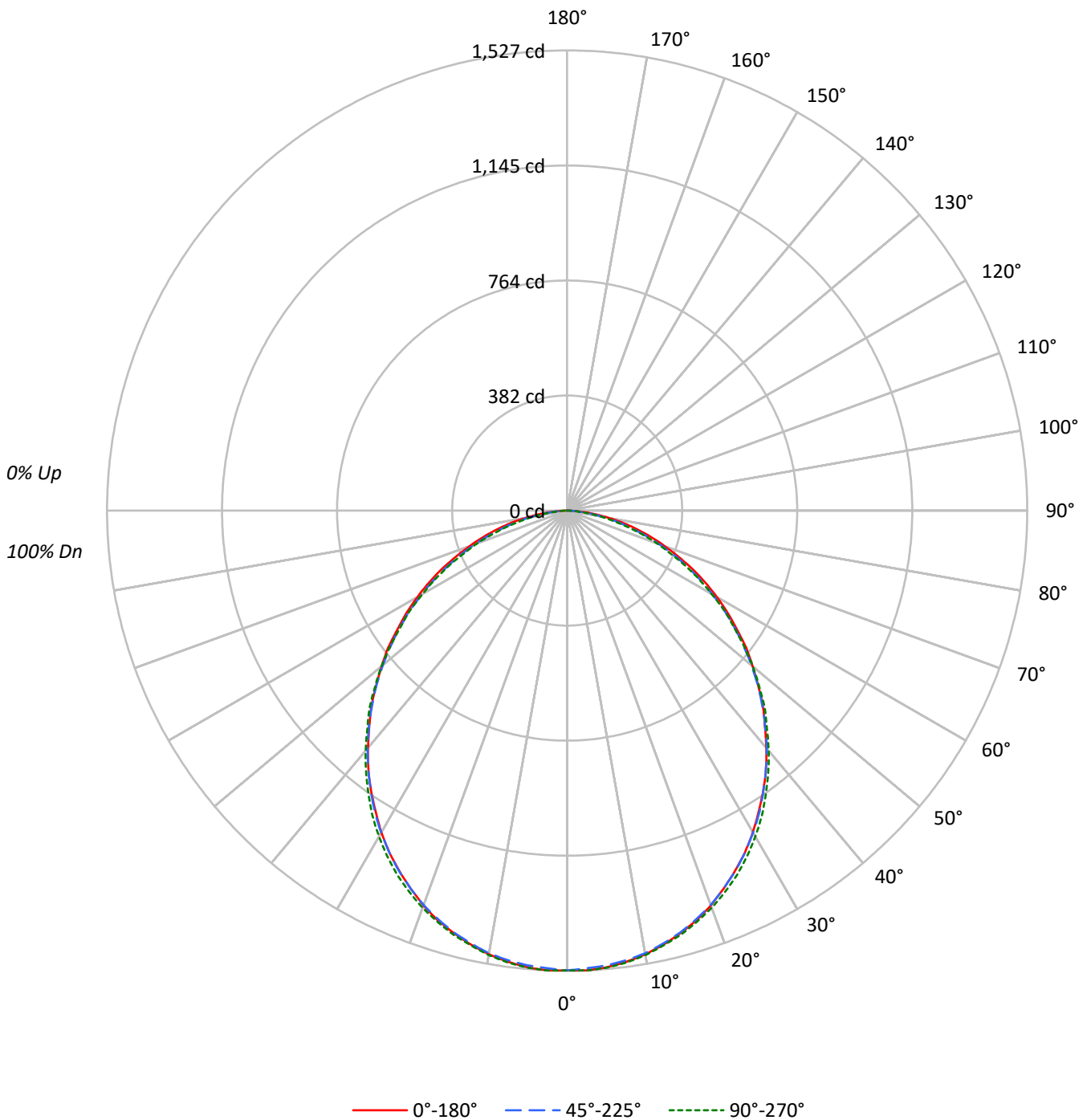
Input Watts (W): 34
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2337	2337	2337
5°	2339	2329	2340
10°	2325	2320	2329
15°	2302	2299	2310
20°	2272	2270	2287
25°	2229	2231	2254
30°	2180	2183	2209
35°	2121	2123	2149
40°	2056	2061	2081
45°	1990	1985	2009
50°	1913	1902	1916
55°	1835	1812	1805
60°	1758	1705	1698
65°	1661	1589	1567
70°	1539	1445	1417
75°	1414	1275	1210
80°	1238	1065	967
85°	1018	736	585



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	3.7
10°-20°	409.6	10.5
20°-30°	609.4	15.6
30°-40°	712.0	18.2
40°-50°	707.8	18.1
50°-60°	608.2	15.5
60°-70°	436.7	11.2
70°-80°	232.6	5.9
80°-90°	54.5	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°	1163.2	29.7
0°-40°	1875.2	47.9
0°-60°	3191.2	81.5
0°-90°	3915.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3915.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1521	1519	1515	1520	1522	144
15°	1452	1452	1450	1454	1457	409
25°	1319	1319	1320	1330	1334	607
35°	1134	1132	1136	1148	1149	709
45°	919	911	916	921	927	707
55°	687	679	679	679	676	616
65°	458	445	438	434	432	453
75°	239	225	216	209	204	254
85°	58	49	42	34	33	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1525.9	1525.9	1525.9	1525.9	1525.9
2.5°	1527.2	1524.7	1519.8	1525.9	1527.2
5°	1521.0	1518.6	1514.9	1519.8	1522.2
7.5°	1509.9	1507.5	1505.0	1509.9	1512.4
10°	1495.2	1493.9	1491.5	1497.6	1497.6
12.5°	1475.4	1474.2	1471.7	1477.9	1477.9
15°	1452.0	1452.0	1449.6	1454.5	1457.0
17.5°	1426.2	1424.9	1422.5	1428.6	1431.1
20°	1394.2	1394.2	1392.9	1400.3	1402.8
22.5°	1357.2	1357.2	1357.2	1367.1	1369.5
25°	1319.0	1319.0	1320.3	1330.1	1333.8
27.5°	1278.4	1277.2	1278.4	1289.5	1293.2
30°	1232.8	1230.4	1234.1	1245.1	1248.8
32.5°	1183.6	1181.1	1187.3	1197.1	1202.0
35°	1134.3	1131.8	1135.5	1147.8	1149.1
37.5°	1083.8	1077.6	1083.8	1094.9	1096.1
40°	1028.4	1023.5	1030.8	1035.8	1040.7
42.5°	971.7	969.3	973.0	981.6	981.6
45°	918.8	911.4	916.3	921.2	927.4
47.5°	859.6	856.0	858.4	862.1	864.6
50°	803.0	796.8	798.1	801.8	804.2
52.5°	750.0	737.7	737.7	740.2	740.2
55°	687.2	678.6	678.6	678.6	676.1
57.5°	631.8	620.7	619.5	619.5	619.5
60°	573.9	560.4	556.7	556.7	554.2
62.5°	516.0	503.7	498.8	493.9	493.9
65°	458.2	444.6	438.4	433.5	432.3
67.5°	399.0	389.2	381.8	375.6	369.5
70°	343.6	332.5	322.7	316.5	316.5
72.5°	291.9	279.6	269.7	262.3	258.6
75°	238.9	225.4	215.5	209.4	204.4
77.5°	192.1	177.3	167.5	158.9	153.9
80°	140.4	129.3	120.7	112.1	109.6
82.5°	97.3	88.7	78.8	72.7	70.2
85°	57.9	49.3	41.9	34.5	33.3
87.5°	23.4	17.2	13.5	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)