

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: P229739

Luminaire Tested: **24RLN-LD5-45-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229739
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-L840-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4547.0 lumens
Efficiency: N/A
Efficacy: 133.7 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

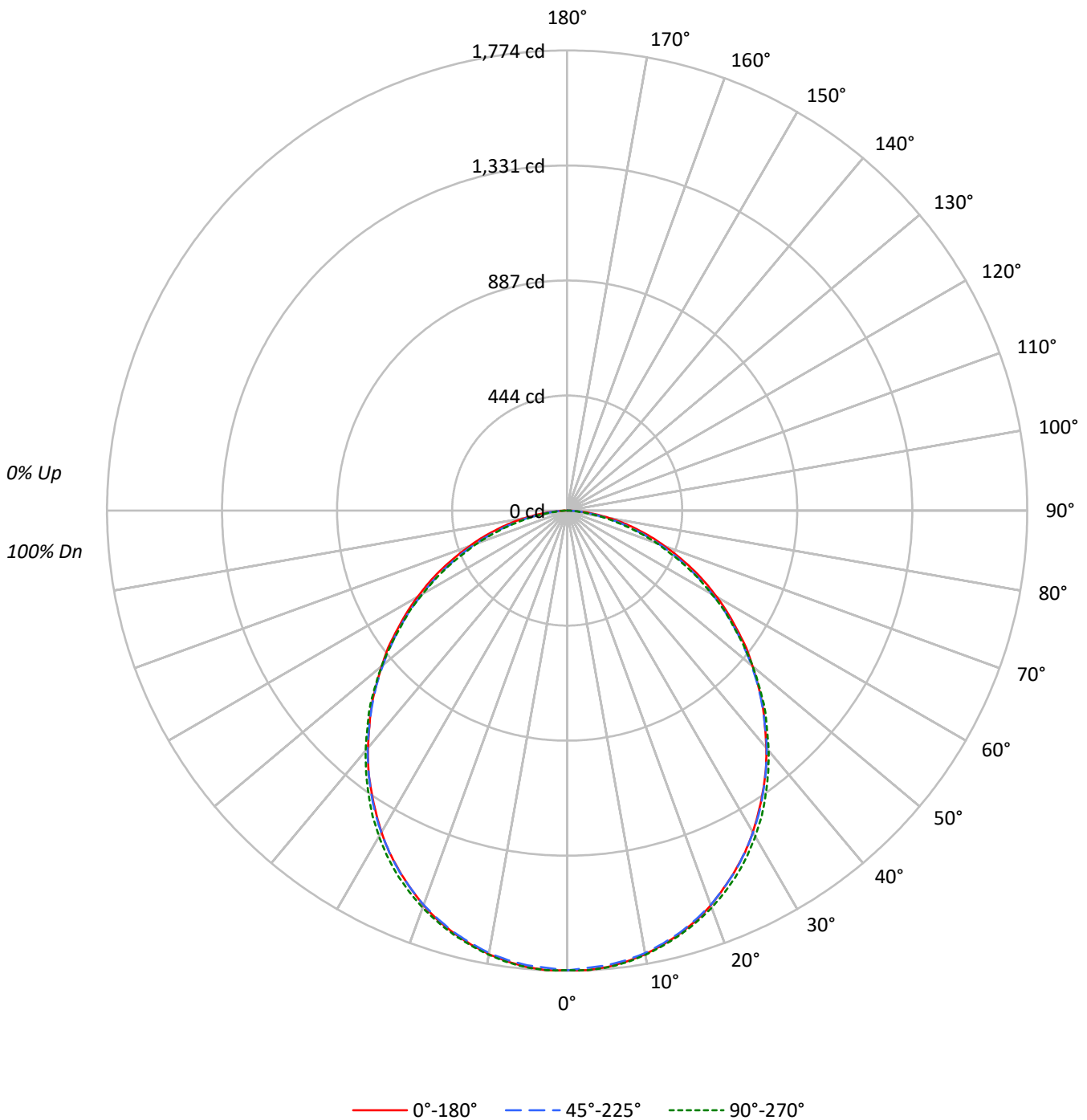
Input Watts (W): 34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2715	2715	2715
5°	2716	2705	2718
10°	2701	2694	2705
15°	2674	2670	2683
20°	2639	2637	2656
25°	2589	2591	2618
30°	2532	2535	2565
35°	2463	2466	2495
40°	2388	2394	2417
45°	2311	2305	2333
50°	2222	2209	2226
55°	2131	2105	2097
60°	2042	1980	1972
65°	1928	1845	1820
70°	1787	1678	1646
75°	1642	1481	1405
80°	1439	1237	1123
85°	1181	854	678



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.5	3.7
10°-20°	475.7	10.5
20°-30°	707.8	15.6
30°-40°	826.9	18.2
40°-50°	822.0	18.1
50°-60°	706.3	15.5
60°-70°	507.2	11.2
70°-80°	270.2	5.9
80°-90°	63.3	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°	1351.0	29.7
0°-40°	2177.9	47.9
0°-60°	3706.3	81.5
0°-90°	4547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4547.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1772	1772	1772	1772	1772	
5°	1767	1764	1759	1765	1768	168
15°	1686	1686	1684	1689	1692	476
25°	1532	1532	1533	1545	1549	706
35°	1317	1314	1319	1333	1335	824
45°	1067	1058	1064	1070	1077	822
55°	798	788	788	788	785	716
65°	532	516	509	504	502	526
75°	278	262	250	243	237	295
85°	67	57	49	40	39	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1772.3	1772.3	1772.3	1772.3	1772.3
2.5°	1773.7	1770.8	1765.1	1772.3	1773.7
5°	1766.6	1763.7	1759.4	1765.1	1768.0
7.5°	1753.7	1750.8	1748.0	1753.7	1756.5
10°	1736.5	1735.1	1732.2	1739.4	1739.4
12.5°	1713.6	1712.2	1709.3	1716.5	1716.5
15°	1686.4	1686.4	1683.6	1689.3	1692.2
17.5°	1656.4	1655.0	1652.1	1659.3	1662.1
20°	1619.2	1619.2	1617.8	1626.4	1629.2
22.5°	1576.3	1576.3	1576.3	1587.8	1590.6
25°	1532.0	1532.0	1533.4	1544.8	1549.1
27.5°	1484.8	1483.3	1484.8	1497.6	1501.9
30°	1431.8	1429.0	1433.3	1446.1	1450.4
32.5°	1374.6	1371.8	1378.9	1390.4	1396.1
35°	1317.4	1314.5	1318.8	1333.1	1334.6
37.5°	1258.8	1251.6	1258.8	1271.6	1273.1
40°	1194.4	1188.7	1197.2	1203.0	1208.7
42.5°	1128.6	1125.7	1130.0	1140.0	1140.0
45°	1067.1	1058.5	1064.2	1069.9	1077.1
47.5°	998.4	994.1	997.0	1001.3	1004.1
50°	932.6	925.5	926.9	931.2	934.1
52.5°	871.1	856.8	856.8	859.7	859.7
55°	798.2	788.2	788.2	788.2	785.3
57.5°	733.8	720.9	719.5	719.5	719.5
60°	666.6	650.8	646.5	646.5	643.7
62.5°	599.3	585.0	579.3	573.6	573.6
65°	532.1	516.4	509.2	503.5	502.1
67.5°	463.5	452.0	443.4	436.3	429.1
70°	399.1	386.2	374.8	367.6	367.6
72.5°	339.0	324.7	313.3	304.7	300.4
75°	277.5	261.8	250.3	243.2	237.4
77.5°	223.1	206.0	194.5	184.5	178.8
80°	163.1	150.2	140.2	130.2	127.3
82.5°	113.0	103.0	91.5	84.4	81.5
85°	67.2	57.2	48.6	40.1	38.6
87.5°	27.2	20.0	15.7	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)