

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: P229859

Luminaire Tested: **24RLN-LD5-45-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229859
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)
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-SVPD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4491.0 lumens
Efficiency: N/A
Efficacy: 132.1 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

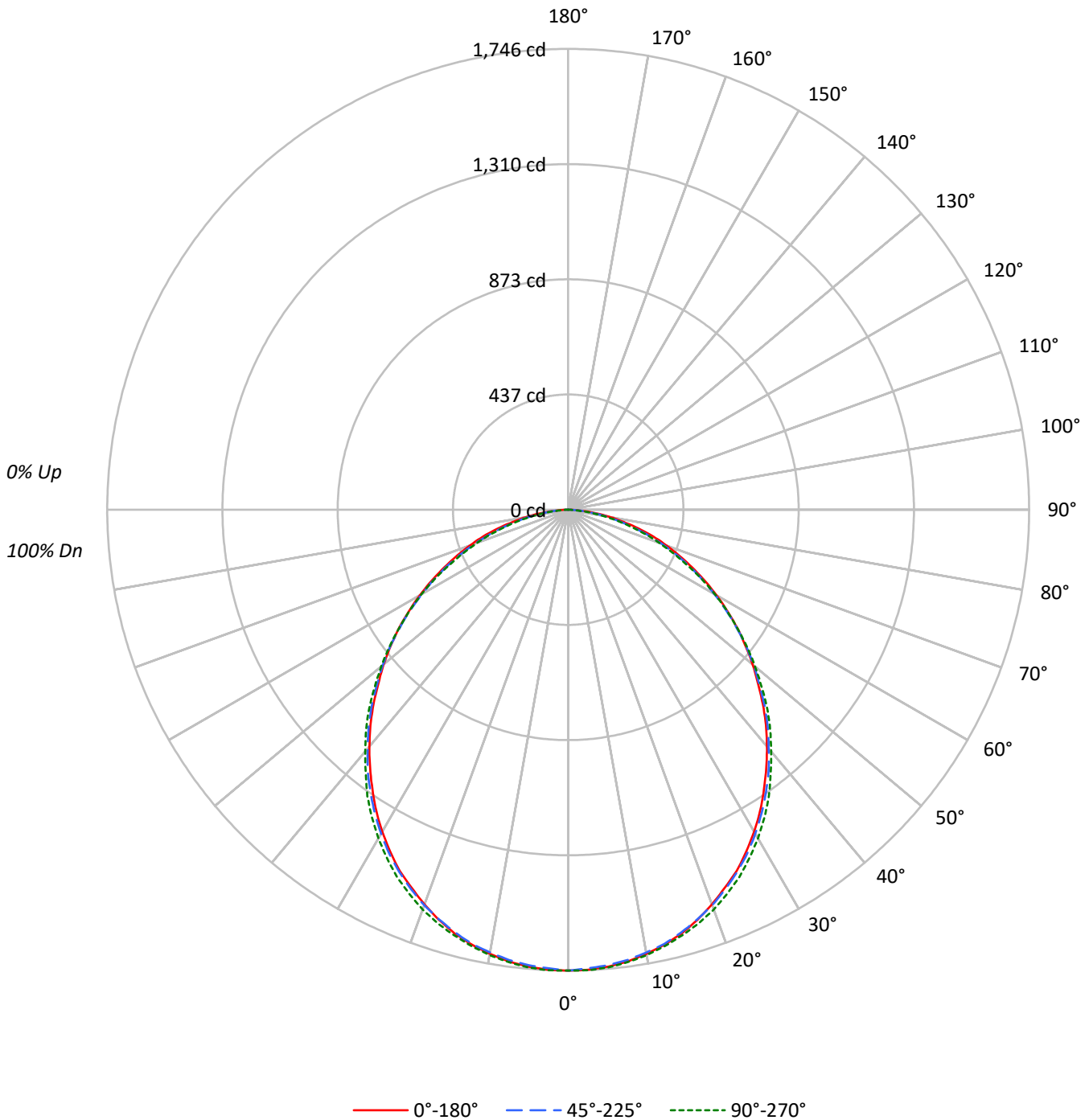
Input Watts (W): 34
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	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	31
9	58	44	36	31	56	44	36	31	43	35	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°	2675	2675	2675
5°	2672	2663	2676
10°	2658	2649	2665
15°	2635	2628	2647
20°	2594	2599	2627
25°	2552	2560	2593
30°	2491	2507	2542
35°	2417	2441	2479
40°	2342	2362	2391
45°	2258	2280	2311
50°	2174	2184	2202
55°	2089	2078	2085
60°	1989	1958	1967
65°	1876	1835	1804
70°	1774	1678	1640
75°	1633	1490	1439
80°	1438	1261	1185
85°	1132	880	654



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.8	3.7
10°-20°	468.6	10.4
20°-30°	698.5	15.6
30°-40°	816.6	18.2
40°-50°	810.9	18.1
50°-60°	696.3	15.5
60°-70°	501.6	11.2
70°-80°	270.1	6.0
80°-90°	63.7	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°	1331.9	29.7
0°-40°	2148.4	47.8
0°-60°	3655.6	81.4
0°-90°	4491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4491.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1746	1746	1746	1746	1746	
5°	1738	1736	1732	1738	1740	165
15°	1662	1658	1658	1668	1669	468
25°	1510	1504	1514	1530	1534	694
35°	1293	1291	1306	1320	1326	809
45°	1043	1040	1053	1061	1067	804
55°	782	775	778	782	781	699
65°	518	509	506	502	498	514
75°	276	259	252	245	243	292
85°	64	59	50	40	37	77
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°	1744.8	1743.3	1739.0	1744.8	1746.2
5°	1737.6	1736.2	1731.9	1737.6	1740.5
7.5°	1726.2	1723.3	1720.4	1726.2	1729.0
10°	1709.0	1706.1	1703.3	1710.4	1713.3
12.5°	1687.6	1684.7	1684.7	1690.4	1693.3
15°	1661.8	1657.5	1657.5	1667.5	1669.0
17.5°	1628.9	1626.1	1627.5	1638.9	1643.2
20°	1591.7	1590.3	1594.6	1607.5	1611.8
22.5°	1550.3	1548.8	1556.0	1571.7	1574.6
25°	1510.2	1504.5	1514.5	1530.2	1534.5
27.5°	1460.2	1455.9	1468.7	1483.0	1487.3
30°	1408.7	1404.4	1417.3	1433.0	1437.3
32.5°	1352.9	1350.0	1362.9	1378.6	1382.9
35°	1292.8	1291.4	1305.7	1320.0	1325.7
37.5°	1232.8	1231.3	1247.1	1258.5	1259.9
40°	1171.3	1168.4	1181.3	1194.2	1195.6
42.5°	1108.4	1104.1	1118.4	1128.4	1132.7
45°	1042.6	1039.7	1052.6	1061.2	1066.9
47.5°	975.3	975.3	982.5	992.5	993.9
50°	912.4	908.1	916.7	922.4	923.9
52.5°	846.6	842.3	849.5	850.9	853.8
55°	782.3	775.1	778.0	782.3	780.9
57.5°	715.1	703.6	709.3	709.3	712.2
60°	649.3	639.3	639.3	639.3	642.1
62.5°	583.5	573.5	573.5	572.1	570.6
65°	517.7	509.1	506.3	502.0	497.7
67.5°	454.8	444.8	439.0	433.3	429.0
70°	396.1	379.0	374.7	366.1	366.1
72.5°	337.5	320.3	311.8	306.0	304.6
75°	276.0	258.9	251.7	244.6	243.1
77.5°	215.9	204.5	193.1	187.3	184.5
80°	163.0	153.0	143.0	133.0	134.4
82.5°	111.6	101.5	94.4	85.8	82.9
85°	64.4	58.6	50.1	40.0	37.2
87.5°	27.2	20.0	14.3	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)