

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: P229890

Luminaire Tested: **24RLN-LD5-50-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229890
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-LD5-50-UNV-L940-CD1-SVPD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR
Light Source: (252)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4363.0 lumens
Efficiency: N/A
Efficacy: 115.4 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

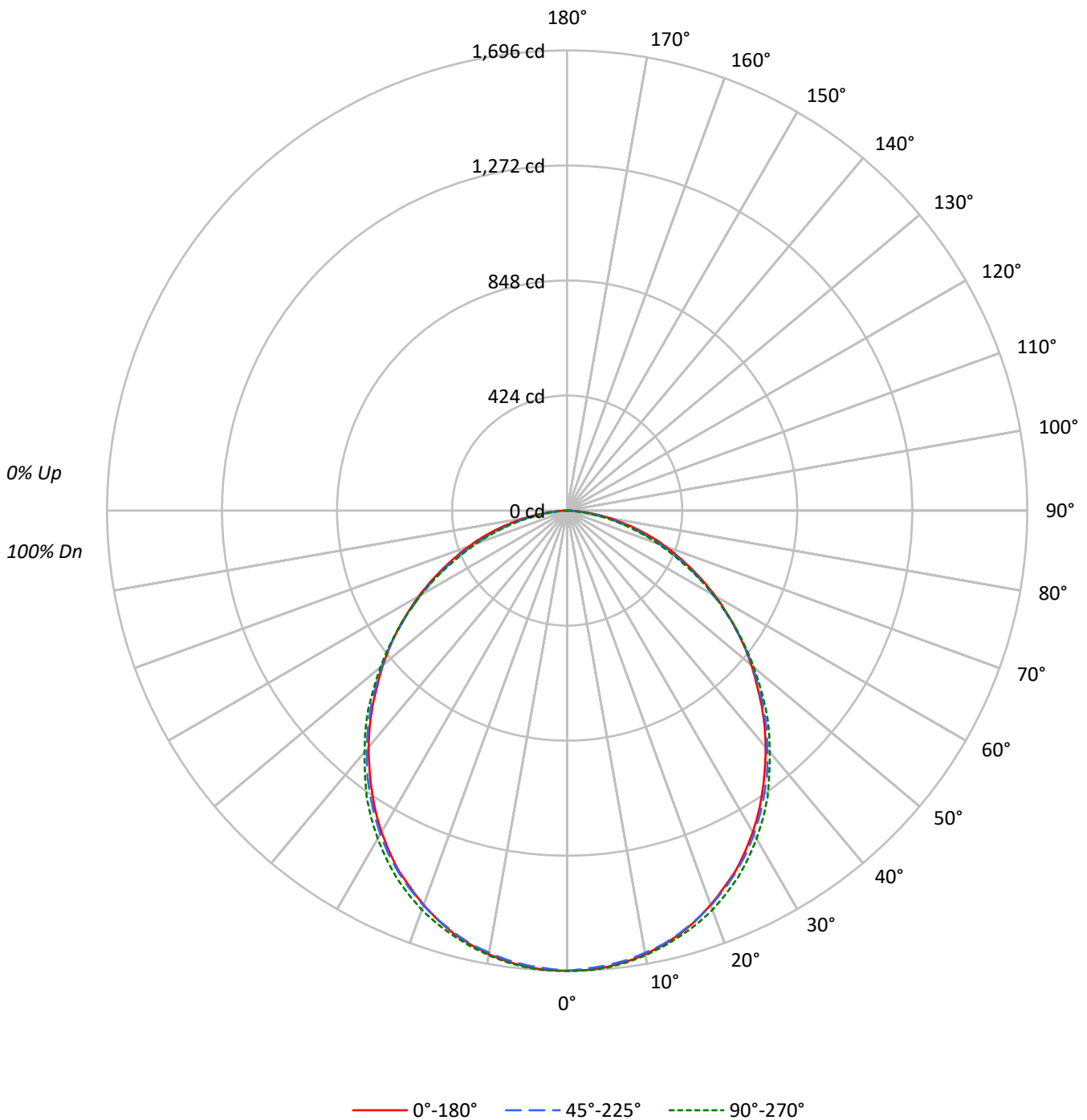
Input Watts (W): 37.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2598	2598	2598
5°	2595	2587	2600
10°	2582	2574	2589
15°	2560	2553	2571
20°	2521	2525	2552
25°	2480	2487	2519
30°	2420	2435	2470
35°	2348	2372	2408
40°	2275	2295	2322
45°	2194	2215	2245
50°	2112	2122	2139
55°	2029	2018	2026
60°	1932	1902	1911
65°	1823	1782	1752
70°	1724	1630	1593
75°	1587	1447	1398
80°	1397	1225	1152
85°	1098	854	634



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.1	3.7
10°-20°	455.2	10.4
20°-30°	678.6	15.6
30°-40°	793.3	18.2
40°-50°	787.8	18.1
50°-60°	676.5	15.5
60°-70°	487.3	11.2
70°-80°	262.4	6.0
80°-90°	61.9	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°	1293.9	29.7
0°-40°	2087.2	47.8
0°-60°	3551.4	81.4
0°-90°	4363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4363.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1696	1696	1696	1696	1696	
5°	1688	1687	1682	1688	1691	160
15°	1614	1610	1610	1620	1621	455
25°	1467	1462	1471	1487	1491	674
35°	1256	1255	1268	1282	1288	786
45°	1013	1010	1023	1031	1036	781
55°	760	753	756	760	759	679
65°	503	495	492	488	484	500
75°	268	252	244	238	236	284
85°	62	57	49	39	36	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1696.4	1696.4	1696.4	1696.4	1696.4
2.5°	1695.0	1693.6	1689.5	1695.0	1696.4
5°	1688.1	1686.7	1682.5	1688.1	1690.9
7.5°	1677.0	1674.2	1671.4	1677.0	1679.7
10°	1660.3	1657.5	1654.7	1661.7	1664.5
12.5°	1639.5	1636.7	1636.7	1642.2	1645.0
15°	1614.4	1610.3	1610.3	1620.0	1621.4
17.5°	1582.5	1579.7	1581.1	1592.2	1596.4
20°	1546.4	1545.0	1549.1	1561.7	1565.8
22.5°	1506.1	1504.7	1511.6	1526.9	1529.7
25°	1467.2	1461.6	1471.3	1486.6	1490.8
27.5°	1418.5	1414.4	1426.9	1440.8	1444.9
30°	1368.5	1364.4	1376.9	1392.1	1396.3
32.5°	1314.3	1311.6	1324.1	1339.4	1343.5
35°	1256.0	1254.6	1268.5	1282.4	1287.9
37.5°	1197.6	1196.2	1211.5	1222.6	1224.0
40°	1137.9	1135.1	1147.6	1160.1	1161.5
42.5°	1076.8	1072.6	1086.5	1096.2	1100.4
45°	1012.8	1010.1	1022.6	1030.9	1036.5
47.5°	947.5	947.5	954.5	964.2	965.6
50°	886.4	882.2	890.6	896.1	897.5
52.5°	822.5	818.3	825.3	826.7	829.5
55°	760.0	753.0	755.8	760.0	758.6
57.5°	694.7	683.6	689.1	689.1	691.9
60°	630.8	621.0	621.0	621.0	623.8
62.5°	566.9	557.1	557.1	555.7	554.4
65°	503.0	494.6	491.8	487.7	483.5
67.5°	441.8	432.1	426.5	421.0	416.8
70°	384.9	368.2	364.0	355.7	355.7
72.5°	327.9	311.2	302.9	297.3	295.9
75°	268.1	251.5	244.5	237.6	236.2
77.5°	209.8	198.7	187.6	182.0	179.2
80°	158.4	148.7	138.9	129.2	130.6
82.5°	108.4	98.6	91.7	83.4	80.6
85°	62.5	57.0	48.6	38.9	36.1
87.5°	26.4	19.5	13.9	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)