

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: P229770

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229770
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-LD5-50-UNV-L940-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4417.0 lumens
Efficiency: N/A
Efficacy: 116.9 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

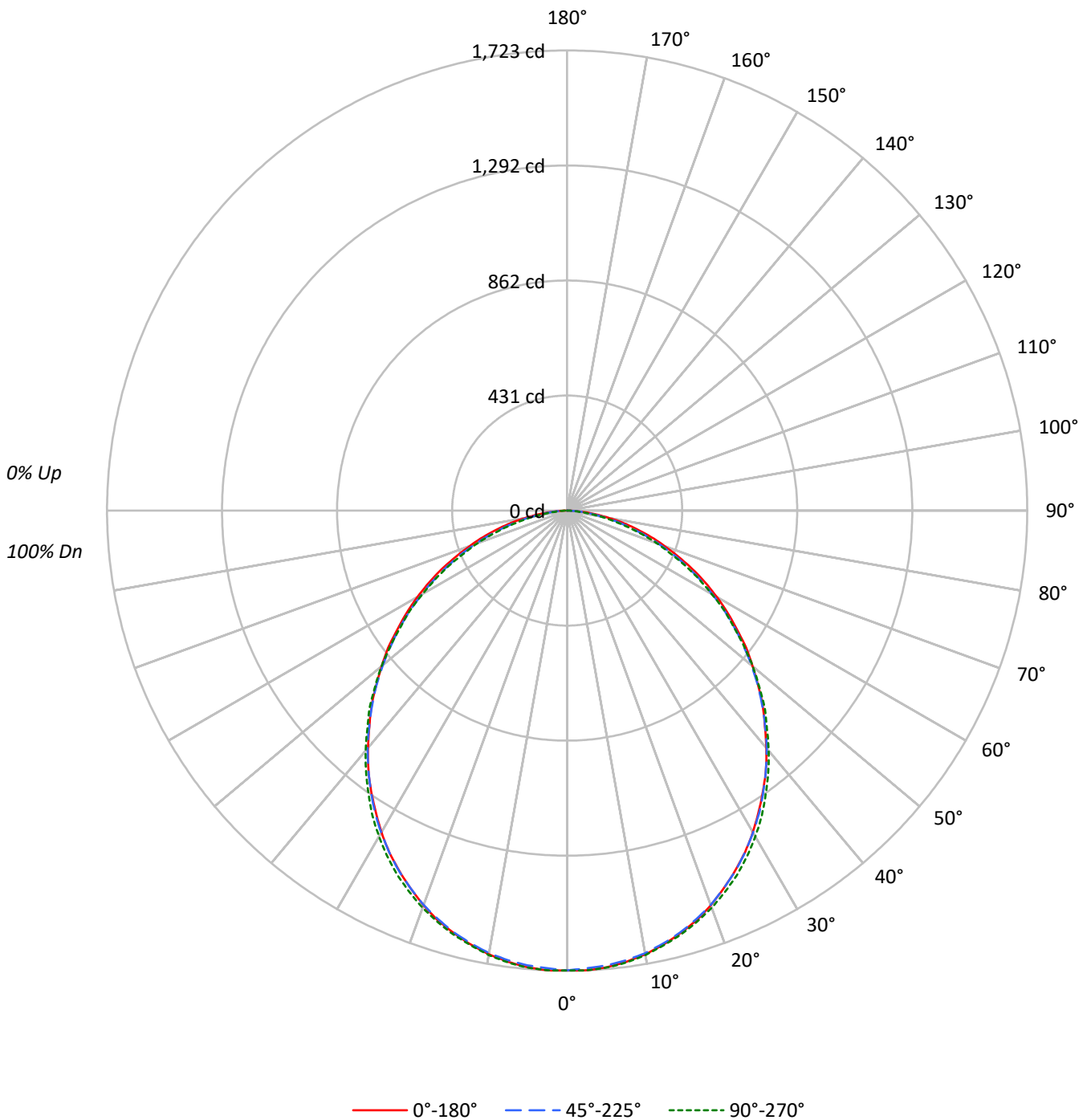
Input Watts (W): 37.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2637	2637	2637
5°	2638	2628	2641
10°	2624	2617	2628
15°	2598	2593	2607
20°	2564	2561	2580
25°	2515	2517	2543
30°	2460	2462	2492
35°	2393	2395	2424
40°	2320	2325	2348
45°	2245	2239	2266
50°	2159	2146	2162
55°	2070	2044	2037
60°	1984	1924	1916
65°	1873	1793	1768
70°	1736	1631	1599
75°	1595	1439	1365
80°	1397	1201	1091
85°	1148	829	659



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.7	3.7
10°-20°	462.1	10.5
20°-30°	687.5	15.6
30°-40°	803.3	18.2
40°-50°	798.6	18.1
50°-60°	686.1	15.5
60°-70°	492.8	11.2
70°-80°	262.4	5.9
80°-90°	61.5	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°	1312.3	29.7
0°-40°	2115.6	47.9
0°-60°	3600.3	81.5
0°-90°	4417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4417.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1716	1713	1709	1715	1717	163
15°	1638	1638	1636	1641	1644	462
25°	1488	1488	1490	1501	1505	685
35°	1280	1277	1281	1295	1296	800
45°	1037	1028	1034	1039	1046	798
55°	775	766	766	766	763	696
65°	517	502	495	489	488	511
75°	270	254	243	236	231	287
85°	65	56	47	39	38	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1721.6	1721.6	1721.6	1721.6	1721.6
2.5°	1723.0	1720.2	1714.7	1721.6	1723.0
5°	1716.0	1713.3	1709.1	1714.7	1717.4
7.5°	1703.5	1700.8	1698.0	1703.5	1706.3
10°	1686.9	1685.5	1682.7	1689.6	1689.6
12.5°	1664.6	1663.2	1660.5	1667.4	1667.4
15°	1638.2	1638.2	1635.5	1641.0	1643.8
17.5°	1609.1	1607.7	1604.9	1611.8	1614.6
20°	1572.9	1572.9	1571.5	1579.9	1582.7
22.5°	1531.2	1531.2	1531.2	1542.4	1545.1
25°	1488.2	1488.2	1489.6	1500.7	1504.8
27.5°	1442.3	1440.9	1442.3	1454.8	1459.0
30°	1390.9	1388.1	1392.3	1404.8	1409.0
32.5°	1335.3	1332.5	1339.5	1350.6	1356.2
35°	1279.7	1277.0	1281.1	1295.0	1296.4
37.5°	1222.8	1215.8	1222.8	1235.3	1236.7
40°	1160.2	1154.7	1163.0	1168.6	1174.1
42.5°	1096.3	1093.5	1097.7	1107.4	1107.4
45°	1036.6	1028.2	1033.8	1039.4	1046.3
47.5°	969.9	965.7	968.5	972.7	975.4
50°	906.0	899.0	900.4	904.6	907.4
52.5°	846.2	832.3	832.3	835.1	835.1
55°	775.3	765.6	765.6	765.6	762.8
57.5°	712.8	700.3	698.9	698.9	698.9
60°	647.5	632.2	628.1	628.1	625.3
62.5°	582.2	568.3	562.8	557.2	557.2
65°	516.9	501.6	494.7	489.1	487.7
67.5°	450.2	439.1	430.7	423.8	416.9
70°	387.7	375.2	364.1	357.1	357.1
72.5°	329.3	315.4	304.3	296.0	291.8
75°	269.6	254.3	243.2	236.2	230.7
77.5°	216.8	200.1	189.0	179.2	173.7
80°	158.4	145.9	136.2	126.4	123.7
82.5°	109.8	100.0	88.9	82.0	79.2
85°	65.3	55.6	47.2	38.9	37.5
87.5°	26.4	19.5	15.3	15.3	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)