

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: P229362

Luminaire Tested: **24ALNG-LD5-50-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229362
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36066)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ALNG-LD5-50-UNV-L830-CD1-U
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4894.0 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

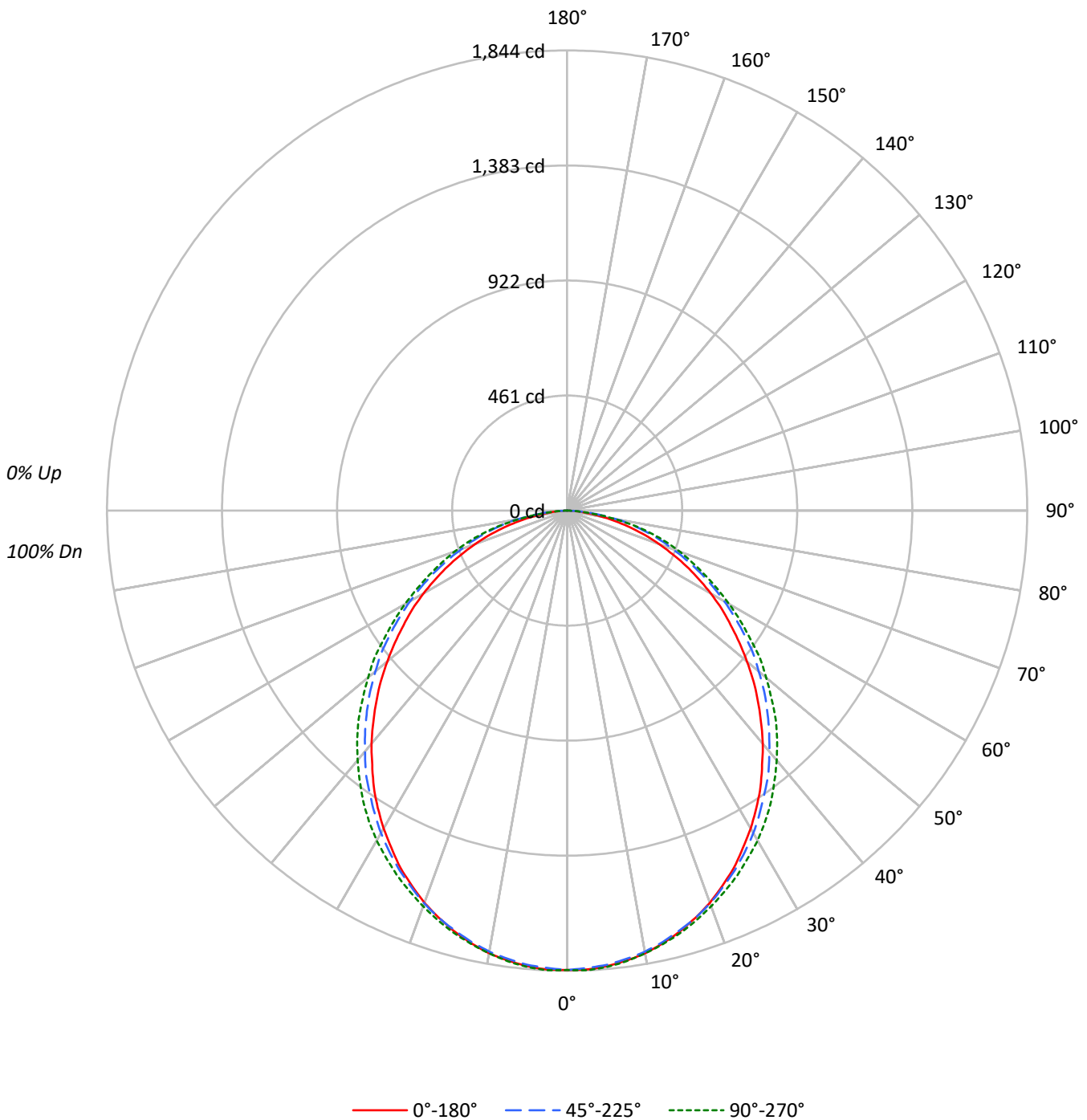
Input Watts (W): 37.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229362

CATALOG NUMBER: 24ALNG-LD5-50-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229362

CATALOG NUMBER: 24ALNG-LD5-50-UNV-L830-CD1-U

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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2820	2820	2820
5°	2818	2810	2822
10°	2802	2792	2802
15°	2769	2762	2779
20°	2727	2731	2751
25°	2671	2687	2726
30°	2601	2639	2699
35°	2526	2580	2663
40°	2438	2520	2612
45°	2342	2457	2559
50°	2240	2389	2480
55°	2137	2315	2391
60°	2036	2228	2298
65°	1912	2129	2203
70°	1756	2017	2145
75°	1542	1935	2039
80°	1245	1807	1711
85°	882	1191	954



TEST NUMBER: P229362

CATALOG NUMBER: 24ALNG-LD5-50-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.8	3.6
10°-20°	492.6	10.1
20°-30°	734.0	15.0
30°-40°	865.9	17.7
40°-50°	874.2	17.9
50°-60°	767.8	15.7
60°-70°	572.6	11.7
70°-80°	333.5	6.8
80°-90°	79.7	1.6
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°	1400.3	28.6
0°-40°	2266.2	46.3
0°-60°	3908.2	79.9
0°-90°	4894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1841	1841	1841	1841	1841	
5°	1833	1832	1827	1833	1836	174
15°	1746	1745	1742	1750	1753	492
25°	1580	1582	1590	1608	1613	727
35°	1351	1359	1380	1412	1424	844
45°	1081	1098	1134	1168	1182	834
55°	800	825	867	894	895	717
65°	528	549	587	605	608	521
75°	260	292	327	343	345	278
85°	50	73	68	57	54	63
90°	0	0	0	0	0	



TEST NUMBER: P229362

CATALOG NUMBER: 24ALNG-LD5-50-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1841.0	1841.0	1841.0	1841.0	1841.0
2.5°	1841.0	1839.6	1834.2	1839.6	1843.7
5°	1832.8	1831.5	1827.4	1832.8	1835.6
7.5°	1819.3	1817.9	1812.5	1820.6	1822.0
10°	1801.6	1798.9	1794.9	1800.3	1801.6
12.5°	1775.9	1774.5	1770.4	1777.2	1778.6
15°	1746.0	1744.7	1741.9	1750.1	1752.8
17.5°	1710.7	1712.1	1710.7	1720.2	1721.6
20°	1672.8	1674.1	1675.5	1686.3	1687.7
22.5°	1626.6	1628.0	1632.1	1647.0	1651.1
25°	1580.5	1581.9	1590.0	1607.6	1613.1
27.5°	1524.9	1530.3	1542.5	1564.2	1569.7
30°	1470.6	1476.0	1492.3	1518.1	1526.2
32.5°	1412.3	1417.7	1436.7	1465.2	1477.4
35°	1351.2	1359.4	1379.7	1412.3	1424.5
37.5°	1283.4	1298.3	1325.5	1356.7	1364.8
40°	1219.6	1230.5	1260.3	1298.3	1306.5
42.5°	1150.4	1165.4	1197.9	1235.9	1245.4
45°	1081.3	1097.5	1134.2	1168.1	1181.6
47.5°	1013.4	1031.1	1070.4	1105.7	1109.7
50°	940.2	961.9	1002.6	1036.5	1040.6
52.5°	869.6	895.4	938.8	965.9	975.4
55°	800.4	824.8	866.9	894.0	895.4
57.5°	735.3	755.7	796.4	819.4	823.5
60°	664.8	685.1	727.2	746.2	750.2
62.5°	594.2	615.9	656.6	675.6	678.3
65°	527.7	549.4	587.4	605.1	607.8
67.5°	457.2	484.3	516.9	539.9	542.7
70°	392.1	419.2	450.4	473.5	478.9
72.5°	327.0	358.2	389.4	407.0	413.8
75°	260.5	291.7	327.0	343.2	344.6
77.5°	199.4	229.3	265.9	275.4	271.3
80°	141.1	173.7	204.9	203.5	194.0
82.5°	89.5	120.7	133.0	124.8	119.4
85°	50.2	73.3	67.8	57.0	54.3
87.5°	20.3	21.7	16.3	10.9	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)