

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: P229445

Luminaire Tested: **24ALNG-LD5-50-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229445  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36086)  
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-L840-CD1-SVPD1-U  
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR  
Light Source: (252)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4959.0 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

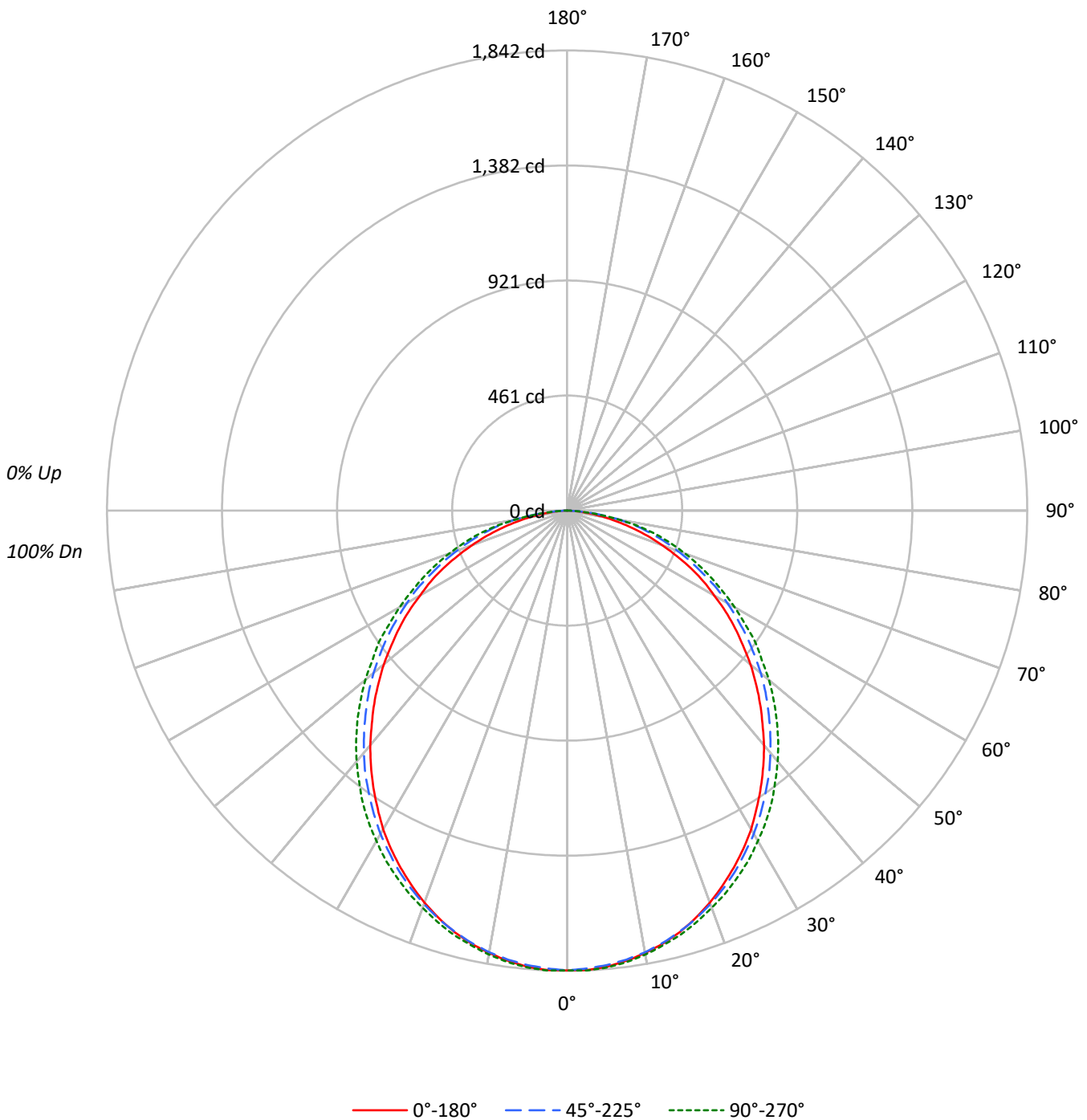
Input Watts (W): 37.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P229445

CATALOG NUMBER: 24ALNG-LD5-50-UNV-L840-CD1-SVPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P229445

CATALOG NUMBER: 24ALNG-LD5-50-UNV-L840-CD1-SVPD1-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	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	64	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2819	2819	2819
5°	2817	2807	2822
10°	2797	2792	2807
15°	2768	2766	2786
20°	2723	2731	2758
25°	2666	2691	2732
30°	2605	2642	2700
35°	2528	2586	2668
40°	2451	2530	2621
45°	2365	2468	2571
50°	2282	2411	2512
55°	2191	2340	2457
60°	2083	2268	2373
65°	1985	2180	2310
70°	1815	2101	2248
75°	1587	2032	2186
80°	1327	1903	1888
85°	919	1350	1207



TEST NUMBER: P229445

CATALOG NUMBER: 24ALNG-LD5-50-UNV-L840-CD1-SVPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.8	3.5
10°-20°	493.0	9.9
20°-30°	734.9	14.8
30°-40°	867.6	17.5
40°-50°	879.4	17.7
50°-60°	780.0	15.7
60°-70°	591.6	11.9
70°-80°	350.4	7.1
80°-90°	88.4	1.8
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°	1401.7	28.3
0°-40°	2269.3	45.8
0°-60°	3928.7	79.2
0°-90°	4959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4959.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1841	1841	1841	1841	1841	
5°	1832	1831	1826	1832	1836	174
15°	1746	1746	1744	1752	1757	492
25°	1578	1581	1592	1612	1617	726
35°	1352	1363	1383	1414	1427	846
45°	1092	1107	1139	1174	1187	843
55°	821	837	876	909	920	733
65°	548	564	602	628	638	539
75°	268	304	343	361	369	287
85°	52	78	77	70	69	67
90°	0	0	0	0	0	



TEST NUMBER: P229445

CATALOG NUMBER: 24ALNG-LD5-50-UNV-L840-CD1-SVPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1840.7	1840.7	1840.7	1840.7	1840.7
2.5°	1840.7	1839.0	1834.1	1840.7	1842.3
5°	1832.5	1830.9	1826.0	1832.5	1835.8
7.5°	1817.8	1817.8	1812.9	1819.4	1822.7
10°	1798.2	1798.2	1794.9	1801.4	1804.7
12.5°	1775.3	1775.3	1772.0	1780.2	1781.8
15°	1745.9	1745.9	1744.2	1752.4	1757.3
17.5°	1709.9	1709.9	1713.2	1724.6	1726.2
20°	1670.7	1672.3	1675.6	1690.3	1691.9
22.5°	1624.9	1629.8	1636.3	1652.7	1657.6
25°	1577.5	1580.8	1592.2	1611.8	1616.7
27.5°	1526.8	1531.7	1543.2	1567.7	1575.9
30°	1472.9	1476.1	1494.1	1518.6	1526.8
32.5°	1412.4	1420.6	1440.2	1469.6	1479.4
35°	1351.9	1363.3	1383.0	1414.0	1427.1
37.5°	1289.8	1299.6	1327.4	1358.4	1368.2
40°	1226.0	1235.8	1265.3	1299.6	1311.0
42.5°	1157.4	1172.1	1203.1	1237.5	1250.5
45°	1092.0	1106.7	1139.4	1173.7	1186.8
47.5°	1025.0	1039.7	1077.3	1106.7	1121.4
50°	957.9	975.9	1011.9	1042.9	1054.4
52.5°	887.6	905.6	943.2	974.3	982.5
55°	820.6	837.0	876.2	908.9	920.3
57.5°	752.0	769.9	807.5	840.2	843.5
60°	680.0	699.7	740.5	766.7	774.8
62.5°	616.3	632.6	676.8	698.0	702.9
65°	547.6	564.0	601.6	627.7	637.5
67.5°	474.1	496.9	536.2	562.3	568.9
70°	405.4	433.2	469.2	496.9	501.9
72.5°	336.7	366.2	407.0	429.9	434.8
75°	268.1	304.1	343.3	361.3	369.4
77.5°	207.6	241.9	281.2	297.5	295.9
80°	150.4	184.7	215.8	215.8	214.1
82.5°	96.4	130.8	147.1	142.2	138.9
85°	52.3	78.5	76.8	70.3	68.7
87.5°	21.3	26.2	19.6	14.7	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)