

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: P229382

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229382  
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-L840-CD1-U  
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS  
Light Source: (252)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5098.0 lumens  
Efficiency: N/A  
Efficacy: 137.0 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

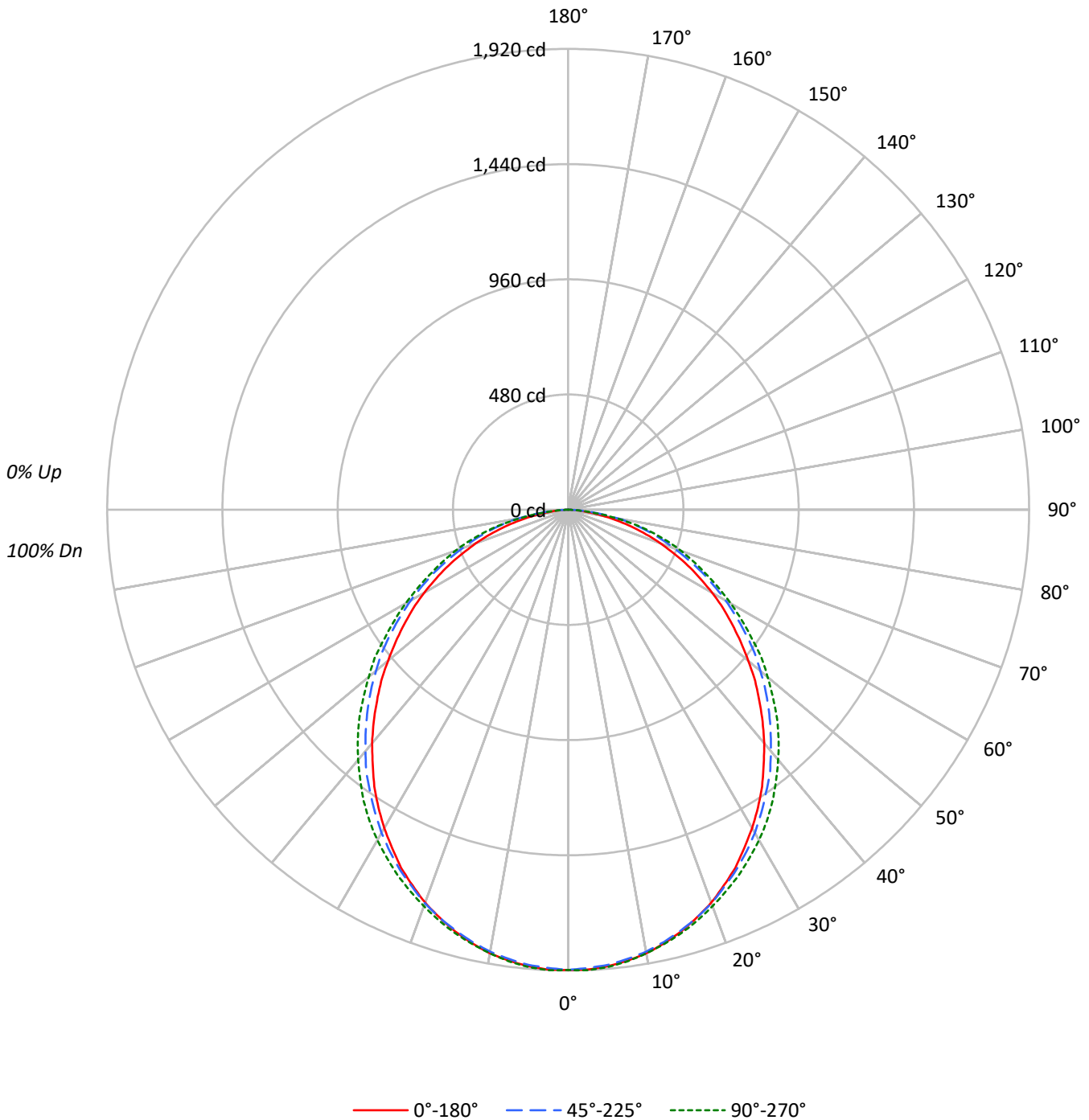
Input Watts (W): 37.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2937	2937	2937
5°	2935	2927	2940
10°	2919	2908	2919
15°	2884	2877	2895
20°	2840	2845	2865
25°	2782	2799	2840
30°	2709	2749	2812
35°	2632	2687	2775
40°	2540	2625	2721
45°	2440	2559	2666
50°	2334	2489	2583
55°	2227	2411	2491
60°	2121	2320	2394
65°	1992	2218	2294
70°	1829	2101	2234
75°	1605	2016	2124
80°	1297	1882	1783
85°	919	1242	993



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.0	3.6
10°-20°	513.1	10.1
20°-30°	764.6	15.0
30°-40°	902.0	17.7
40°-50°	910.6	17.9
50°-60°	799.8	15.7
60°-70°	596.5	11.7
70°-80°	347.4	6.8
80°-90°	83.0	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°	1458.7	28.6
0°-40°	2360.7	46.3
0°-60°	4071.1	79.9
0°-90°	5098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5098.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1918	1918	1918	1918	1918	
5°	1909	1908	1904	1909	1912	181
15°	1819	1817	1815	1823	1826	513
25°	1646	1648	1656	1675	1680	757
35°	1408	1416	1437	1471	1484	879
45°	1126	1143	1181	1217	1231	869
55°	834	859	903	931	933	747
65°	550	572	612	630	633	543
75°	271	304	341	358	359	289
85°	52	76	71	59	56	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1917.7	1917.7	1917.7	1917.7	1917.7
2.5°	1917.7	1916.3	1910.7	1916.3	1920.5
5°	1909.2	1907.8	1903.6	1909.2	1912.1
7.5°	1895.1	1893.7	1888.0	1896.5	1897.9
10°	1876.7	1873.9	1869.7	1875.3	1876.7
12.5°	1849.9	1848.5	1844.2	1851.3	1852.7
15°	1818.8	1817.4	1814.6	1823.0	1825.9
17.5°	1782.1	1783.5	1782.1	1791.9	1793.4
20°	1742.5	1743.9	1745.3	1756.6	1758.0
22.5°	1694.4	1695.8	1700.1	1715.6	1719.9
25°	1646.4	1647.8	1656.3	1674.7	1680.3
27.5°	1588.4	1594.1	1606.8	1629.4	1635.1
30°	1531.9	1537.6	1554.5	1581.4	1589.9
32.5°	1471.1	1476.8	1496.6	1526.3	1539.0
35°	1407.6	1416.0	1437.2	1471.1	1483.9
37.5°	1336.9	1352.4	1380.7	1413.2	1421.7
40°	1270.5	1281.8	1312.9	1352.4	1360.9
42.5°	1198.4	1213.9	1247.9	1287.4	1297.3
45°	1126.3	1143.3	1181.4	1216.8	1230.9
47.5°	1055.7	1074.0	1115.0	1151.8	1156.0
50°	979.4	1002.0	1044.4	1079.7	1083.9
52.5°	905.9	932.7	977.9	1006.2	1016.1
55°	833.8	859.2	903.0	931.3	932.7
57.5°	766.0	787.2	829.6	853.6	857.8
60°	692.5	713.7	757.5	777.3	781.5
62.5°	619.0	641.6	684.0	703.8	706.6
65°	549.7	572.3	611.9	630.3	633.1
67.5°	476.3	504.5	538.4	562.5	565.3
70°	408.4	436.7	469.2	493.2	498.9
72.5°	340.6	373.1	405.6	424.0	431.0
75°	271.3	303.8	340.6	357.5	359.0
77.5°	207.7	238.8	277.0	286.9	282.6
80°	147.0	180.9	213.4	212.0	202.1
82.5°	93.3	125.8	138.5	130.0	124.4
85°	52.3	76.3	70.7	59.4	56.5
87.5°	21.2	22.6	17.0	11.3	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)