

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: P229444

Luminaire Tested: **24ALNG-LD5-45-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229444  
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-LD5-45-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: 4382.0 lumens  
Efficiency: N/A  
Efficacy: 135.2 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

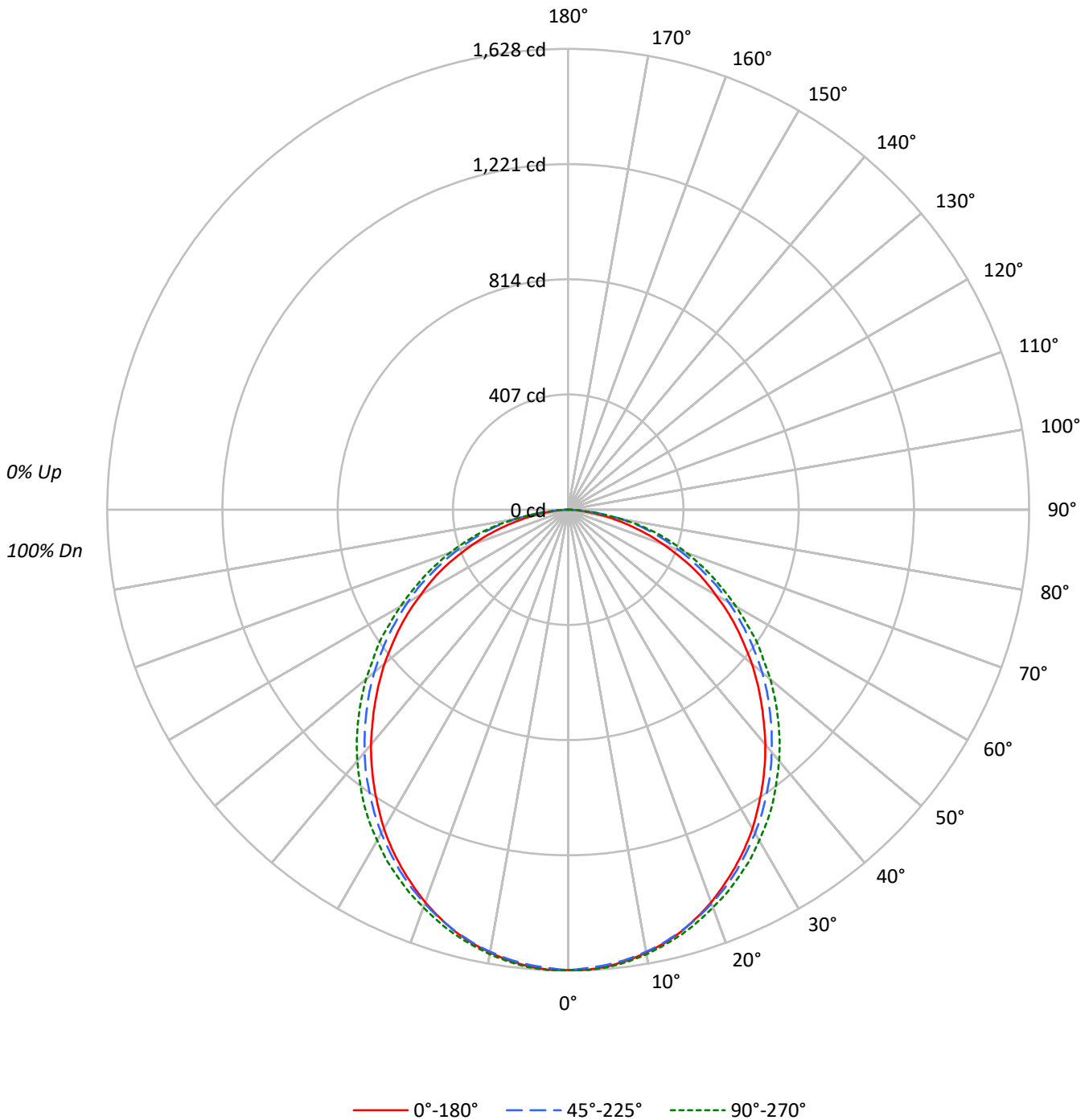
Input Watts (W): 32.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2491	2491	2491
5°	2490	2481	2494
10°	2471	2467	2480
15°	2446	2444	2462
20°	2406	2413	2437
25°	2356	2378	2414
30°	2302	2335	2386
35°	2234	2285	2358
40°	2166	2235	2316
45°	2090	2181	2272
50°	2017	2130	2220
55°	1936	2068	2172
60°	1841	2005	2097
65°	1754	1927	2042
70°	1604	1857	1986
75°	1402	1795	1932
80°	1172	1682	1669
85°	812	1193	1067



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.5	3.5
10°-20°	435.6	9.9
20°-30°	649.4	14.8
30°-40°	766.7	17.5
40°-50°	777.1	17.7
50°-60°	689.2	15.7
60°-70°	522.8	11.9
70°-80°	309.6	7.1
80°-90°	78.1	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°	1238.6	28.3
0°-40°	2005.2	45.8
0°-60°	3471.6	79.2
0°-90°	4382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4382.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1626	1626	1626	1626	1626	
5°	1619	1618	1614	1619	1622	154
15°	1543	1543	1541	1548	1553	435
25°	1394	1397	1407	1424	1429	642
35°	1195	1205	1222	1250	1261	747
45°	965	978	1007	1037	1049	745
55°	725	740	774	803	813	648
65°	484	498	532	555	563	477
75°	237	269	303	319	326	254
85°	46	69	68	62	61	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1626.5	1626.5	1626.5	1626.5	1626.5
2.5°	1626.5	1625.1	1620.7	1626.5	1627.9
5°	1619.3	1617.8	1613.5	1619.3	1622.2
7.5°	1606.3	1606.3	1601.9	1607.7	1610.6
10°	1588.9	1588.9	1586.1	1591.8	1594.7
12.5°	1568.7	1568.7	1565.8	1573.1	1574.5
15°	1542.7	1542.7	1541.3	1548.5	1552.8
17.5°	1510.9	1510.9	1513.8	1523.9	1525.4
20°	1476.3	1477.7	1480.6	1493.6	1495.1
22.5°	1435.8	1440.2	1445.9	1460.4	1464.7
25°	1393.9	1396.8	1406.9	1424.3	1428.6
27.5°	1349.2	1353.5	1363.6	1385.3	1392.5
30°	1301.5	1304.4	1320.3	1341.9	1349.2
32.5°	1248.0	1255.3	1272.6	1298.6	1307.3
35°	1194.6	1204.7	1222.0	1249.5	1261.0
37.5°	1139.7	1148.4	1172.9	1200.4	1209.0
40°	1083.4	1092.0	1118.0	1148.4	1158.5
42.5°	1022.7	1035.7	1063.2	1093.5	1105.0
45°	964.9	977.9	1006.8	1037.1	1048.7
47.5°	905.7	918.7	951.9	977.9	990.9
50°	846.5	862.4	894.1	921.6	931.7
52.5°	784.4	800.3	833.5	860.9	868.1
55°	725.1	739.6	774.3	803.1	813.3
57.5°	664.5	680.4	713.6	742.5	745.4
60°	600.9	618.2	654.4	677.5	684.7
62.5°	544.6	559.0	598.0	616.8	621.1
65°	483.9	498.4	531.6	554.7	563.4
67.5°	418.9	439.1	473.8	496.9	502.7
70°	358.2	382.8	414.6	439.1	443.5
72.5°	297.6	323.6	359.7	379.9	384.2
75°	236.9	268.7	303.3	319.2	326.5
77.5°	183.5	213.8	248.5	262.9	261.5
80°	132.9	163.2	190.7	190.7	189.2
82.5°	85.2	115.6	130.0	125.7	122.8
85°	46.2	69.3	67.9	62.1	60.7
87.5°	18.8	23.1	17.3	13.0	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)