

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: P229379

Luminaire Tested: **24ALNG-LD5-36-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229379  
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-LD5-36-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: 3607.1 lumens  
Efficiency: N/A  
Efficacy: 140.4 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

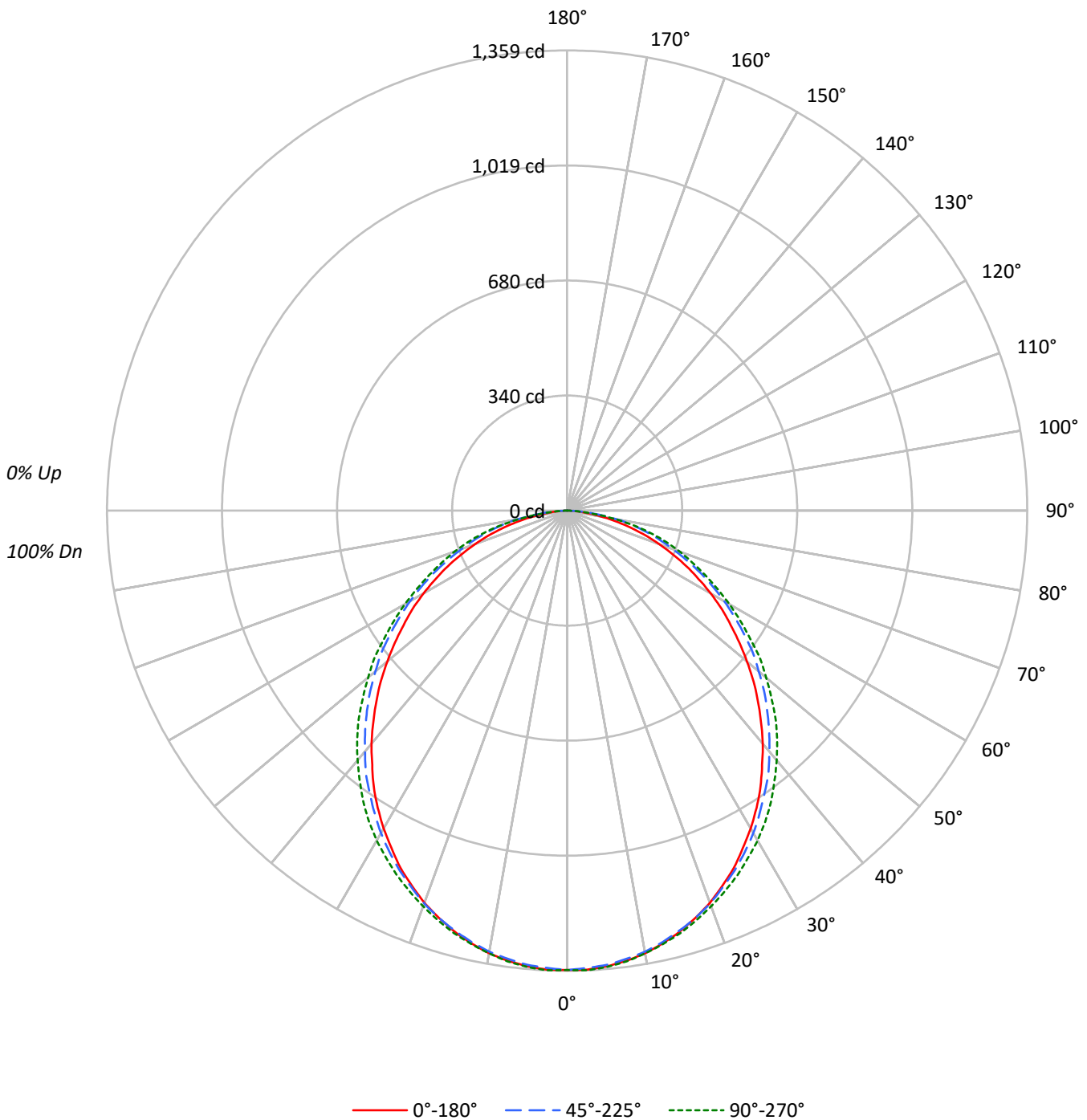
Input Watts (W): 25.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2078	2078	2078
5°	2077	2071	2080
10°	2065	2057	2065
15°	2041	2036	2049
20°	2010	2013	2027
25°	1969	1980	2009
30°	1917	1945	1989
35°	1862	1901	1963
40°	1797	1857	1925
45°	1726	1811	1886
50°	1651	1761	1827
55°	1575	1706	1762
60°	1501	1642	1694
65°	1410	1569	1624
70°	1294	1487	1581
75°	1136	1426	1503
80°	917	1332	1261
85°	650	879	703



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.1	3.6
10°-20°	363.1	10.1
20°-30°	541.0	15.0
30°-40°	638.2	17.7
40°-50°	644.3	17.9
50°-60°	565.8	15.7
60°-70°	422.0	11.7
70°-80°	245.8	6.8
80°-90°	58.7	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°	1032.1	28.6
0°-40°	1670.3	46.3
0°-60°	2880.5	79.9
0°-90°	3607.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3607.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1351	1350	1347	1351	1353	128
15°	1287	1286	1284	1290	1292	363
25°	1165	1166	1172	1185	1189	536
35°	996	1002	1017	1041	1050	622
45°	797	809	836	861	871	615
55°	590	608	639	659	660	529
65°	389	405	433	446	448	384
75°	192	215	241	253	254	205
85°	37	54	50	42	40	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1356.9	1356.9	1356.9	1356.9	1356.9
2.5°	1356.9	1355.9	1351.9	1355.9	1358.9
5°	1350.9	1349.9	1346.9	1350.9	1352.9
7.5°	1340.9	1339.9	1335.9	1341.9	1342.9
10°	1327.9	1325.9	1322.9	1326.9	1327.9
12.5°	1308.9	1307.9	1304.9	1309.9	1310.9
15°	1286.9	1285.9	1283.9	1289.9	1291.9
17.5°	1260.9	1261.9	1260.9	1267.9	1268.9
20°	1232.9	1233.9	1234.9	1242.9	1243.9
22.5°	1198.9	1199.9	1202.9	1213.9	1216.9
25°	1164.9	1165.9	1171.9	1184.9	1188.9
27.5°	1123.9	1127.9	1136.9	1152.9	1156.9
30°	1083.9	1087.9	1099.9	1118.9	1124.9
32.5°	1040.9	1044.9	1058.9	1079.9	1088.9
35°	995.9	1001.9	1016.9	1040.9	1049.9
37.5°	945.9	956.9	976.9	999.9	1005.9
40°	898.9	906.9	928.9	956.9	962.9
42.5°	847.9	858.9	882.9	910.9	917.9
45°	796.9	808.9	835.9	860.9	870.9
47.5°	746.9	759.9	788.9	814.9	817.9
50°	692.9	708.9	738.9	763.9	766.9
52.5°	640.9	659.9	691.9	711.9	718.9
55°	589.9	607.9	638.9	658.9	659.9
57.5°	541.9	556.9	586.9	603.9	606.9
60°	489.9	504.9	535.9	549.9	552.9
62.5°	438.0	454.0	483.9	497.9	499.9
65°	389.0	405.0	433.0	446.0	448.0
67.5°	337.0	357.0	381.0	398.0	400.0
70°	289.0	309.0	332.0	349.0	353.0
72.5°	241.0	264.0	287.0	300.0	305.0
75°	192.0	215.0	241.0	253.0	254.0
77.5°	147.0	169.0	196.0	203.0	200.0
80°	104.0	128.0	151.0	150.0	143.0
82.5°	66.0	89.0	98.0	92.0	88.0
85°	37.0	54.0	50.0	42.0	40.0
87.5°	15.0	16.0	12.0	8.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)