

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: P229359

Luminaire Tested: **24ALNG-LD5-36-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229359  
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-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: 3463.0 lumens  
Efficiency: N/A  
Efficacy: 134.7 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

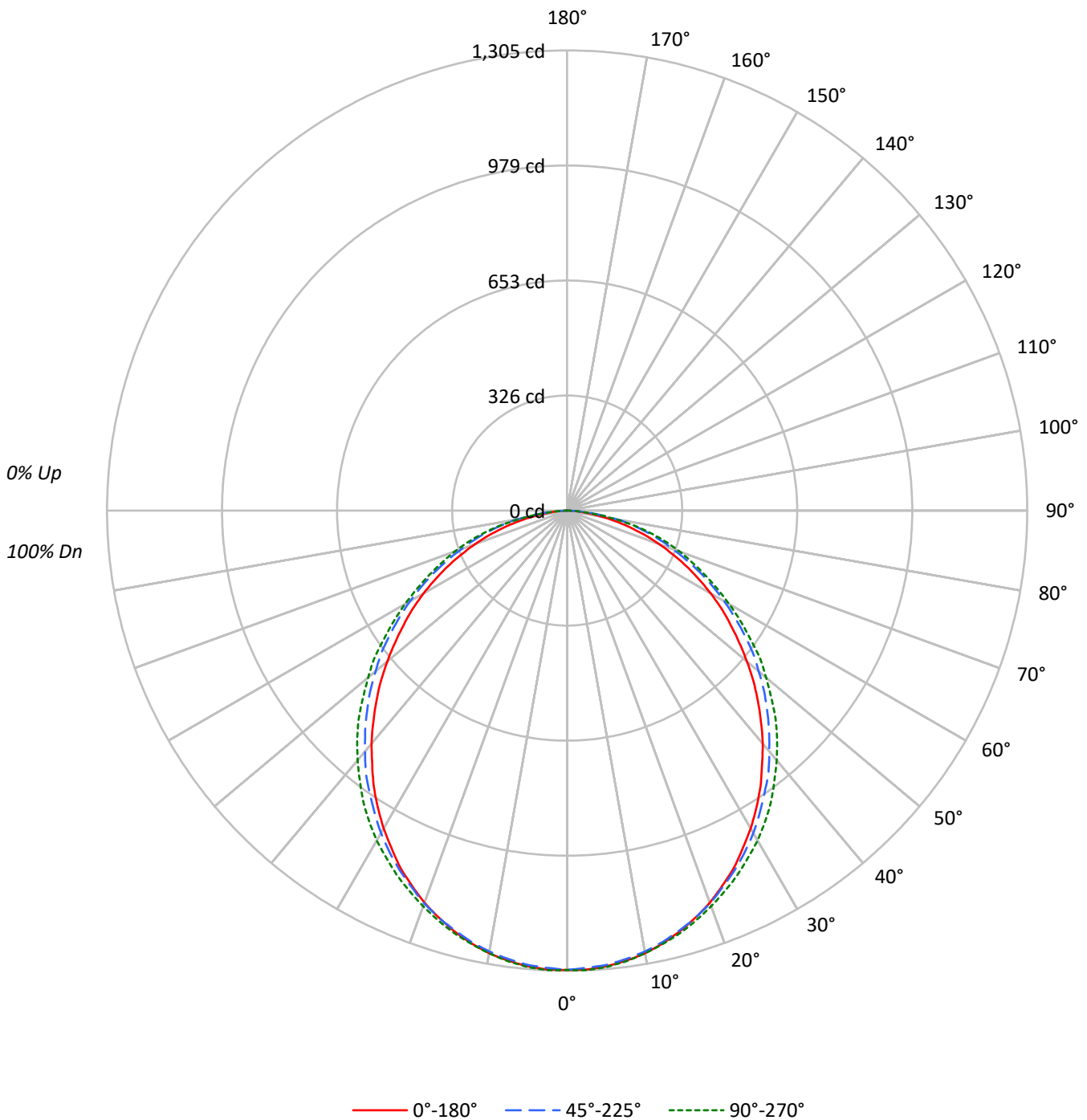
Input Watts (W): 25.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1995	1995	1995
5°	1994	1988	1997
10°	1983	1975	1983
15°	1959	1954	1967
20°	1929	1932	1946
25°	1890	1901	1929
30°	1840	1868	1910
35°	1788	1825	1885
40°	1725	1783	1848
45°	1657	1738	1811
50°	1585	1690	1754
55°	1512	1638	1692
60°	1441	1576	1626
65°	1353	1507	1559
70°	1242	1427	1518
75°	1091	1369	1443
80°	880	1279	1211
85°	624	844	675



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.0	3.6
10°-20°	348.5	10.1
20°-30°	519.4	15.0
30°-40°	612.7	17.7
40°-50°	618.6	17.9
50°-60°	543.3	15.7
60°-70°	405.2	11.7
70°-80°	236.0	6.8
80°-90°	56.4	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°	990.9	28.6
0°-40°	1603.6	46.3
0°-60°	2765.5	79.9
0°-90°	3463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3463.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1297	1296	1293	1297	1299	123
15°	1236	1234	1233	1238	1240	348
25°	1118	1119	1125	1138	1141	514
35°	956	962	976	999	1008	597
45°	765	777	802	826	836	590
55°	566	584	613	633	634	507
65°	373	389	416	428	430	369
75°	184	206	231	243	244	196
85°	36	52	48	40	38	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1302.7	1302.7	1302.7	1302.7	1302.7
2.5°	1302.7	1301.7	1297.9	1301.7	1304.6
5°	1296.9	1296.0	1293.1	1296.9	1298.8
7.5°	1287.3	1286.4	1282.5	1288.3	1289.2
10°	1274.8	1272.9	1270.0	1273.9	1274.8
12.5°	1256.6	1255.6	1252.8	1257.6	1258.5
15°	1235.5	1234.5	1232.6	1238.4	1240.3
17.5°	1210.5	1211.5	1210.5	1217.2	1218.2
20°	1183.6	1184.6	1185.6	1193.2	1194.2
22.5°	1151.0	1152.0	1154.8	1165.4	1168.3
25°	1118.4	1119.3	1125.1	1137.6	1141.4
27.5°	1079.0	1082.8	1091.5	1106.8	1110.7
30°	1040.6	1044.4	1056.0	1074.2	1080.0
32.5°	999.3	1003.2	1016.6	1036.8	1045.4
35°	956.1	961.9	976.3	999.3	1008.0
37.5°	908.1	918.7	937.9	960.0	965.7
40°	863.0	870.7	891.8	918.7	924.5
42.5°	814.1	824.6	847.7	874.5	881.3
45°	765.1	776.6	802.5	826.5	836.1
47.5°	717.1	729.6	757.4	782.4	785.3
50°	665.3	680.6	709.4	733.4	736.3
52.5°	615.3	633.6	664.3	683.5	690.2
55°	566.4	583.7	613.4	632.6	633.6
57.5°	520.3	534.7	563.5	579.8	582.7
60°	470.4	484.8	514.5	528.0	530.9
62.5°	420.5	435.8	464.6	478.1	480.0
65°	373.4	388.8	415.7	428.1	430.1
67.5°	323.5	342.7	365.7	382.1	384.0
70°	277.4	296.6	318.7	335.0	338.9
72.5°	231.4	253.4	275.5	288.0	292.8
75°	184.3	206.4	231.4	242.9	243.8
77.5°	141.1	162.2	188.2	194.9	192.0
80°	99.8	122.9	145.0	144.0	137.3
82.5°	63.4	85.4	94.1	88.3	84.5
85°	35.5	51.8	48.0	40.3	38.4
87.5°	14.4	15.4	11.5	7.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)