

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: P229423

Luminaire Tested: **24ALNG-LD5-42-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229423
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-LD5-42-UNV-L830-CD1-SVPD1-U
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3982.0 lumens
Efficiency: N/A
Efficacy: 130.1 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

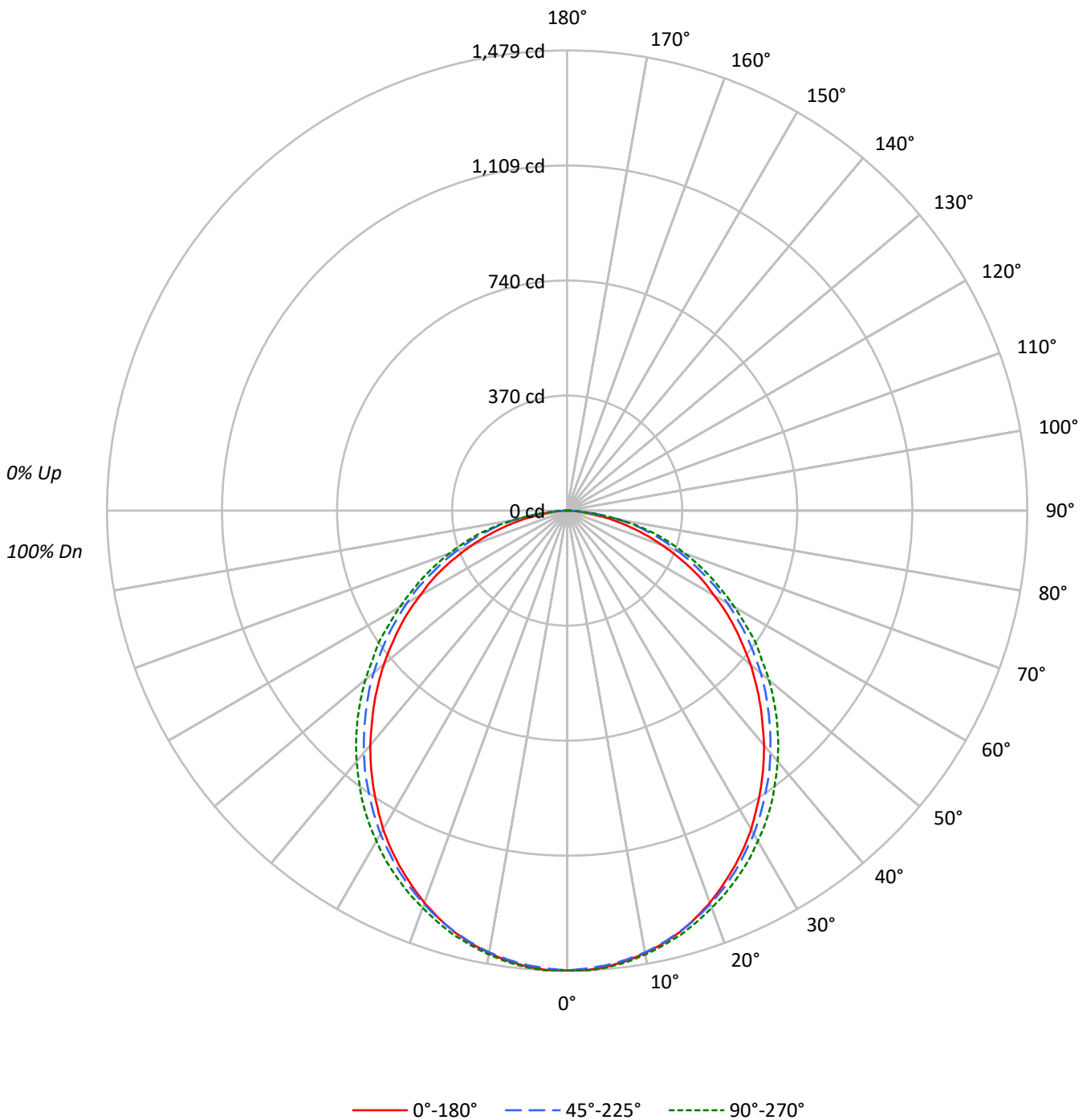
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2264	2264	2264
5°	2262	2254	2266
10°	2246	2242	2254
15°	2223	2221	2238
20°	2187	2193	2214
25°	2141	2161	2194
30°	2092	2122	2168
35°	2030	2076	2143
40°	1968	2031	2105
45°	1899	1982	2064
50°	1833	1936	2018
55°	1759	1879	1973
60°	1673	1821	1906
65°	1594	1751	1855
70°	1458	1687	1805
75°	1274	1632	1756
80°	1065	1529	1517
85°	738	1084	968



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.5	3.5
10°-20°	395.9	9.9
20°-30°	590.1	14.8
30°-40°	696.7	17.5
40°-50°	706.2	17.7
50°-60°	626.3	15.7
60°-70°	475.0	11.9
70°-80°	281.4	7.1
80°-90°	71.0	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°	1125.5	28.3
0°-40°	1822.2	45.8
0°-60°	3154.7	79.2
0°-90°	3982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3982.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1472	1470	1466	1472	1474	140
15°	1402	1402	1401	1407	1411	395
25°	1267	1269	1278	1294	1298	583
35°	1086	1095	1110	1135	1146	679
45°	877	889	915	942	953	677
55°	659	672	704	730	739	589
65°	440	453	483	504	512	433
75°	215	244	276	290	297	231
85°	42	63	62	56	55	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1478.0	1478.0	1478.0	1478.0	1478.0
2.5°	1478.0	1476.7	1472.8	1478.0	1479.3
5°	1471.5	1470.2	1466.2	1471.5	1474.1
7.5°	1459.7	1459.7	1455.7	1461.0	1463.6
10°	1443.9	1443.9	1441.3	1446.5	1449.2
12.5°	1425.5	1425.5	1422.9	1429.5	1430.8
15°	1401.9	1401.9	1400.6	1407.2	1411.1
17.5°	1373.0	1373.0	1375.6	1384.8	1386.1
20°	1341.5	1342.8	1345.5	1357.3	1358.6
22.5°	1304.8	1308.7	1314.0	1327.1	1331.0
25°	1266.7	1269.3	1278.5	1294.3	1298.2
27.5°	1226.0	1229.9	1239.1	1258.8	1265.4
30°	1182.7	1185.3	1199.8	1219.4	1226.0
32.5°	1134.1	1140.7	1156.4	1180.1	1187.9
35°	1085.6	1094.7	1110.5	1135.4	1145.9
37.5°	1035.7	1043.5	1065.9	1090.8	1098.7
40°	984.5	992.4	1016.0	1043.5	1052.7
42.5°	929.3	941.2	966.1	993.7	1004.2
45°	876.8	888.7	914.9	942.5	953.0
47.5°	823.0	834.8	865.0	888.7	900.5
50°	769.2	783.6	812.5	837.5	846.7
52.5°	712.8	727.2	757.4	782.3	788.9
55°	658.9	672.1	703.6	729.8	739.0
57.5°	603.8	618.3	648.4	674.7	677.3
60°	546.1	561.8	594.6	615.6	622.2
62.5°	494.9	508.0	543.4	560.5	564.4
65°	439.7	452.9	483.1	504.1	511.9
67.5°	380.7	399.0	430.5	451.5	456.8
70°	325.5	347.8	376.7	399.0	403.0
72.5°	270.4	294.0	326.8	345.2	349.2
75°	215.3	244.2	275.7	290.1	296.7
77.5°	166.7	194.3	225.8	238.9	237.6
80°	120.8	148.3	173.3	173.3	172.0
82.5°	77.4	105.0	118.1	114.2	111.6
85°	42.0	63.0	61.7	56.4	55.1
87.5°	17.1	21.0	15.8	11.8	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)