

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: P229443

Luminaire Tested: **24ALNG-LD5-42-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229443
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-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: 4148.0 lumens
Efficiency: N/A
Efficacy: 135.6 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

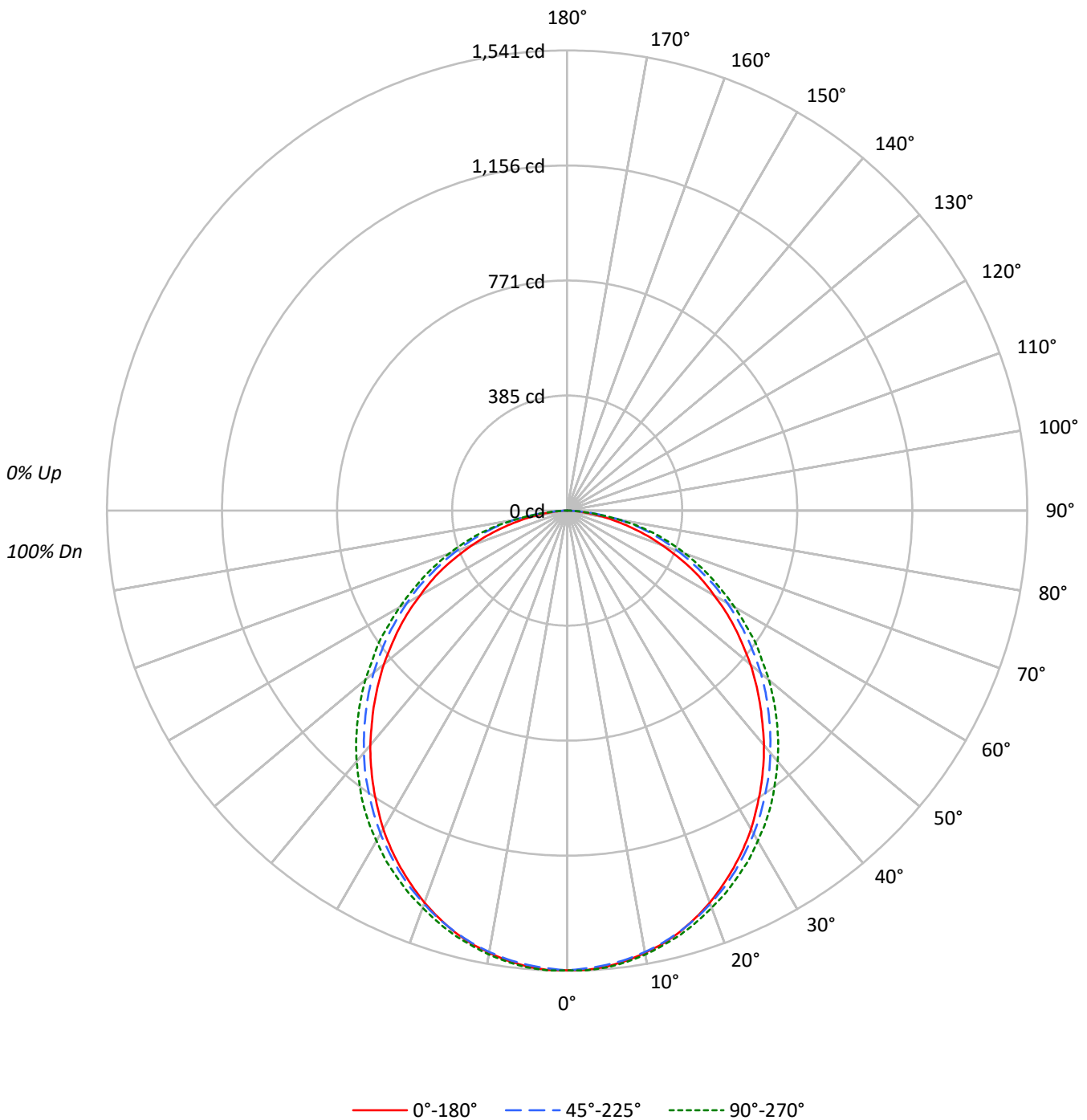
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2358	2358	2358
5°	2357	2348	2361
10°	2339	2335	2348
15°	2316	2313	2331
20°	2278	2284	2307
25°	2230	2251	2285
30°	2179	2210	2259
35°	2114	2163	2232
40°	2050	2116	2193
45°	1978	2064	2150
50°	1909	2017	2101
55°	1833	1957	2056
60°	1742	1897	1985
65°	1660	1824	1933
70°	1519	1757	1880
75°	1327	1699	1829
80°	1110	1592	1580
85°	770	1130	1009



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.3	3.5
10°-20°	412.4	9.9
20°-30°	614.7	14.8
30°-40°	725.7	17.5
40°-50°	735.6	17.7
50°-60°	652.4	15.7
60°-70°	494.8	11.9
70°-80°	293.1	7.1
80°-90°	73.9	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°	1172.4	28.3
0°-40°	1898.2	45.8
0°-60°	3286.2	79.2
0°-90°	4148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1540	1540	1540	1540	1540	
5°	1533	1531	1527	1533	1536	145
15°	1460	1460	1459	1466	1470	411
25°	1320	1322	1332	1348	1352	608
35°	1131	1140	1157	1183	1194	707
45°	913	926	953	982	993	705
55°	686	700	733	760	770	613
65°	458	472	503	525	533	451
75°	224	254	287	302	309	240
85°	44	66	64	59	57	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1539.6	1539.6	1539.6	1539.6	1539.6
2.5°	1539.6	1538.3	1534.2	1539.6	1541.0
5°	1532.8	1531.4	1527.3	1532.8	1535.5
7.5°	1520.5	1520.5	1516.4	1521.9	1524.6
10°	1504.1	1504.1	1501.4	1506.8	1509.6
12.5°	1485.0	1485.0	1482.2	1489.1	1490.4
15°	1460.3	1460.3	1459.0	1465.8	1469.9
17.5°	1430.3	1430.3	1433.0	1442.6	1443.9
20°	1397.4	1398.8	1401.5	1413.9	1415.2
22.5°	1359.2	1363.3	1368.7	1382.4	1386.5
25°	1319.5	1322.2	1331.8	1348.2	1352.3
27.5°	1277.1	1281.2	1290.8	1311.3	1318.1
30°	1232.0	1234.7	1249.8	1270.3	1277.1
32.5°	1181.4	1188.2	1204.6	1229.3	1237.5
35°	1130.8	1140.4	1156.8	1182.8	1193.7
37.5°	1078.8	1087.1	1110.3	1136.3	1144.5
40°	1025.5	1033.7	1058.3	1087.1	1096.6
42.5°	968.1	980.4	1006.4	1035.1	1046.0
45°	913.4	925.7	953.1	981.8	992.7
47.5°	857.3	869.6	901.1	925.7	938.0
50°	801.3	816.3	846.4	872.4	881.9
52.5°	742.5	757.5	789.0	814.9	821.8
55°	686.4	700.1	732.9	760.3	769.8
57.5°	629.0	644.0	675.5	702.8	705.6
60°	568.8	585.2	619.4	641.3	648.1
62.5°	515.5	529.2	566.1	583.9	588.0
65°	458.1	471.7	503.2	525.1	533.3
67.5°	396.5	415.7	448.5	470.4	475.8
70°	339.1	362.4	392.4	415.7	419.8
72.5°	281.7	306.3	340.5	359.6	363.7
75°	224.2	254.3	287.1	302.2	309.0
77.5°	173.7	202.4	235.2	248.9	247.5
80°	125.8	154.5	180.5	180.5	179.1
82.5°	80.7	109.4	123.1	119.0	116.2
85°	43.8	65.6	64.3	58.8	57.4
87.5°	17.8	21.9	16.4	12.3	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)