

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: P238897

Luminaire Tested: **24EN-LD2-54-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238897
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-234-34)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-54-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5248.0 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

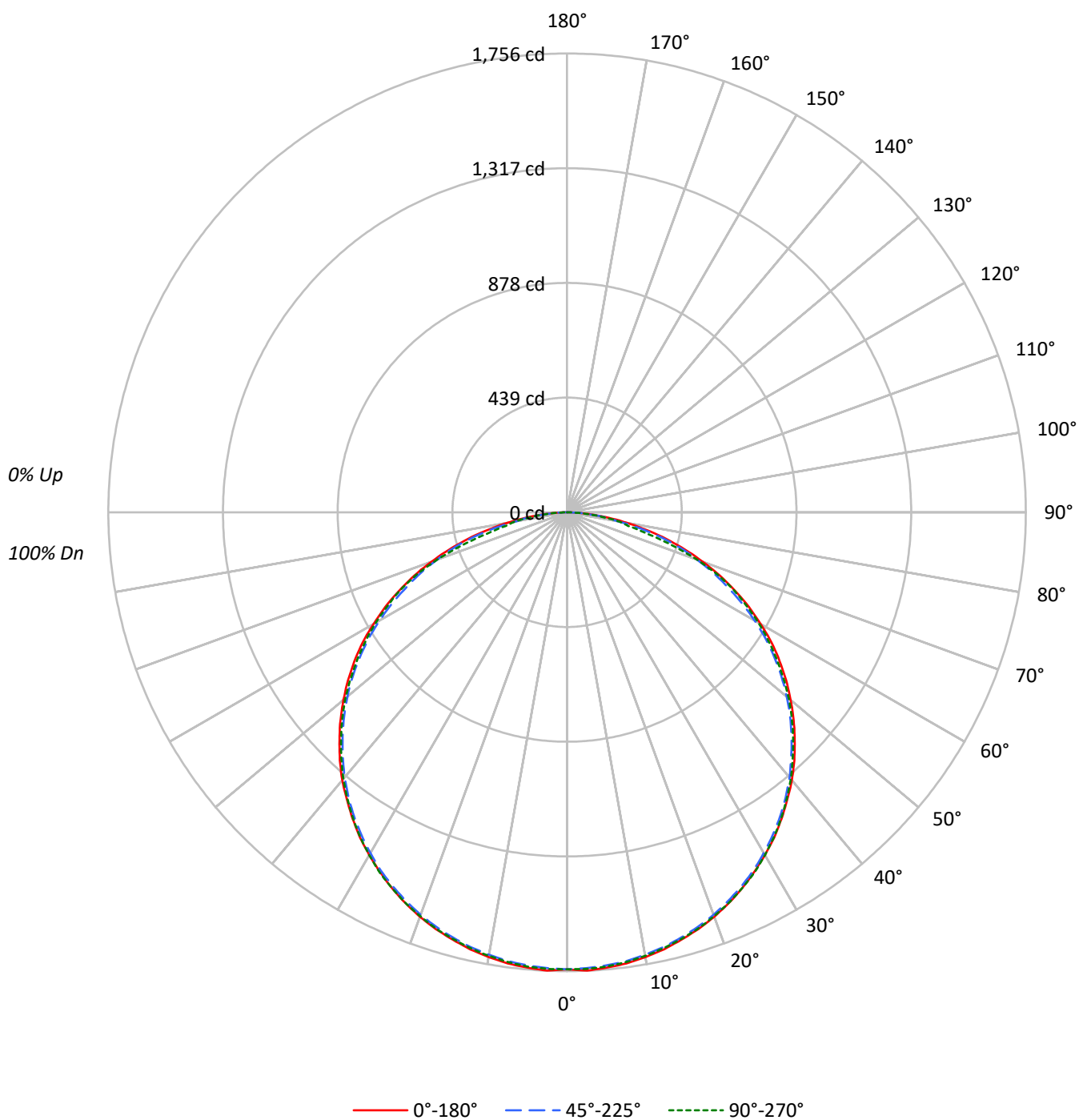
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	104	99	95	106	101	97	94		97	94	91			93	90	88			90
2	98	90	83	77	96	88	82	76		84	79	74			81	77	73			78
3	90	79	70	64	87	77	69	63		74	67	62			71	66	61			69
4	82	70	61	54	79	68	60	53		66	58	53			63	57	52			61
5	75	62	53	46	73	61	52	46		59	51	45			57	50	45			55
6	69	56	47	40	67	55	46	40		53	45	40			51	44	39			50
7	64	50	42	35	62	50	41	35		48	40	35			47	40	35			45
8	60	46	37	31	58	45	37	31		44	36	31			43	36	31			41
9	56	42	34	28	54	42	34	28		40	33	28			39	33	28			38
10	52	39	31	26	51	38	31	25		37	30	25			36	30	25			35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2679	2679	2679
5°	2689	2676	2682
10°	2688	2674	2681
15°	2685	2672	2679
20°	2684	2672	2681
25°	2681	2668	2681
30°	2678	2663	2678
35°	2676	2657	2672
40°	2677	2648	2664
45°	2670	2632	2651
50°	2662	2615	2639
55°	2653	2588	2615
60°	2620	2539	2593
65°	2567	2460	2551
70°	2475	2372	2367
75°	2329	2226	1882
80°	2051	1741	1790
85°	1619	1522	1406



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	3.2
10°-20°	476.4	9.1
20°-30°	729.0	13.9
30°-40°	891.1	17.0
40°-50°	941.6	17.9
50°-60°	872.4	16.6
60°-70°	683.5	13.0
70°-80°	386.4	7.4
80°-90°	101.8	1.9
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°	1371.1	26.1
0°-40°	2262.2	43.1
0°-60°	4076.3	77.7
0°-90°	5248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5248.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1749	1749	1749	1749	1749	
5°	1749	1744	1740	1739	1745	166
15°	1693	1686	1685	1684	1690	478
25°	1587	1580	1579	1579	1587	732
35°	1431	1424	1421	1421	1429	896
45°	1232	1224	1215	1215	1224	951
55°	993	982	969	972	979	887
65°	708	695	679	688	704	700
75°	394	383	376	336	318	414
85°	92	87	87	82	80	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1748.9	1748.9	1748.9	1748.9	1748.9
2.5°	1755.5	1747.8	1745.7	1743.5	1748.9
5°	1748.9	1743.5	1740.2	1739.1	1744.6
7.5°	1741.3	1734.7	1732.5	1730.3	1735.8
10°	1728.1	1721.5	1719.3	1718.2	1723.7
12.5°	1712.8	1705.1	1704.0	1702.9	1708.4
15°	1693.0	1686.4	1685.3	1684.2	1689.7
17.5°	1672.2	1665.6	1663.4	1662.3	1670.0
20°	1647.0	1640.4	1639.3	1638.2	1644.8
22.5°	1618.5	1611.9	1609.7	1610.8	1617.4
25°	1586.7	1580.1	1579.0	1579.0	1586.7
27.5°	1551.6	1545.0	1545.0	1545.0	1553.8
30°	1514.3	1508.8	1505.5	1506.6	1514.3
32.5°	1475.9	1467.1	1464.9	1466.0	1473.7
35°	1431.0	1424.4	1421.1	1421.1	1428.8
37.5°	1384.9	1378.3	1373.9	1373.9	1381.6
40°	1338.8	1329.0	1324.6	1322.4	1332.3
42.5°	1287.3	1279.6	1269.8	1269.8	1278.5
45°	1232.5	1223.7	1214.9	1214.9	1223.7
47.5°	1176.6	1167.8	1157.9	1157.9	1166.7
50°	1117.3	1108.6	1097.6	1097.6	1107.5
52.5°	1057.0	1047.2	1035.1	1034.0	1043.9
55°	993.4	982.5	969.3	971.5	979.2
57.5°	928.7	914.5	901.3	901.3	913.4
60°	855.3	843.2	829.0	831.2	846.5
62.5°	785.1	769.8	755.5	761.0	774.1
65°	708.3	695.2	678.7	687.5	704.0
67.5°	632.7	618.4	605.3	616.2	623.9
70°	552.6	539.5	529.6	529.6	528.5
72.5°	472.6	460.5	458.3	437.5	424.4
75°	393.6	382.7	376.1	335.5	318.0
77.5°	311.4	308.1	287.3	244.5	239.0
80°	232.5	234.7	197.4	198.5	202.9
82.5°	160.1	156.8	148.0	141.5	139.3
85°	92.1	86.6	86.6	82.2	80.0
87.5°	30.7	34.0	34.0	34.0	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)