

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: P238898

Luminaire Tested: **24EN-LD2-54-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238898
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-L835-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5410.0 lumens
Efficiency: N/A
Efficacy: 125.8 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

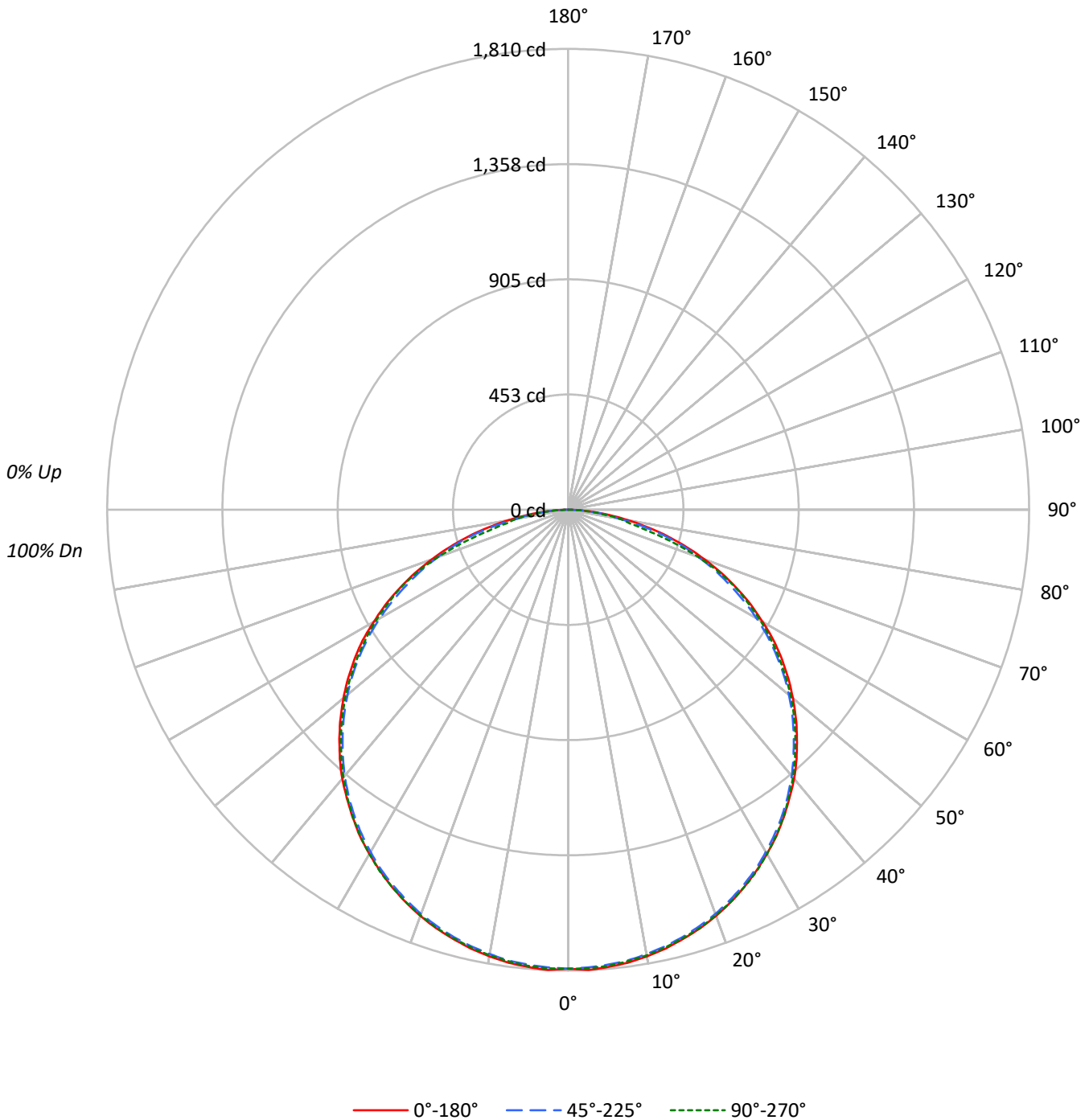
Input Watts (W): 43
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2761	2761	2761
5°	2772	2758	2765
10°	2771	2757	2764
15°	2767	2755	2762
20°	2767	2754	2764
25°	2764	2751	2764
30°	2761	2745	2761
35°	2758	2739	2754
40°	2760	2730	2746
45°	2752	2713	2732
50°	2744	2696	2720
55°	2735	2668	2695
60°	2701	2618	2673
65°	2646	2536	2630
70°	2551	2445	2440
75°	2401	2294	1940
80°	2113	1795	1844
85°	1669	1569	1450



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.8	3.2
10°-20°	491.1	9.1
20°-30°	751.5	13.9
30°-40°	918.6	17.0
40°-50°	970.7	17.9
50°-60°	899.4	16.6
60°-70°	704.6	13.0
70°-80°	398.4	7.4
80°-90°	104.9	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°	1413.4	26.1
0°-40°	2332.0	43.1
0°-60°	4202.1	77.7
0°-90°	5410.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5410.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1803	1803	1803	1803	1803	
5°	1803	1797	1794	1793	1798	171
15°	1745	1738	1737	1736	1742	493
25°	1636	1629	1628	1628	1636	754
35°	1475	1468	1465	1465	1473	924
45°	1270	1262	1252	1252	1262	980
55°	1024	1013	999	1002	1009	915
65°	730	717	700	709	726	722
75°	406	394	388	346	328	427
85°	95	89	89	85	82	112
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1802.9	1802.9	1802.9	1802.9	1802.9
2.5°	1809.7	1801.8	1799.5	1797.3	1802.9
5°	1802.9	1797.3	1793.9	1792.8	1798.4
7.5°	1795.0	1788.2	1786.0	1783.7	1789.4
10°	1781.5	1774.7	1772.4	1771.3	1776.9
12.5°	1765.6	1757.7	1756.6	1755.5	1761.1
15°	1745.3	1738.5	1737.4	1736.2	1741.9
17.5°	1723.8	1717.0	1714.8	1713.6	1721.5
20°	1697.8	1691.0	1689.9	1688.8	1695.5
22.5°	1668.4	1661.6	1659.4	1660.5	1667.3
25°	1635.6	1628.9	1627.7	1627.7	1635.6
27.5°	1599.5	1592.7	1592.7	1592.7	1601.7
30°	1561.0	1555.4	1552.0	1553.1	1561.0
32.5°	1521.5	1512.4	1510.2	1511.3	1519.2
35°	1475.1	1468.3	1465.0	1465.0	1472.9
37.5°	1427.6	1420.9	1416.3	1416.3	1424.3
40°	1380.2	1370.0	1365.5	1363.2	1373.4
42.5°	1327.0	1319.1	1309.0	1309.0	1318.0
45°	1270.5	1261.5	1252.4	1252.4	1261.5
47.5°	1212.9	1203.8	1193.7	1193.7	1202.7
50°	1151.8	1142.8	1131.5	1131.5	1141.7
52.5°	1089.7	1079.5	1067.1	1065.9	1076.1
55°	1024.1	1012.8	999.2	1001.5	1009.4
57.5°	957.4	942.7	929.2	929.2	941.6
60°	881.7	869.3	854.6	856.8	872.6
62.5°	809.3	793.5	778.8	784.5	798.0
65°	730.2	716.7	699.7	708.7	725.7
67.5°	652.2	637.5	624.0	635.3	643.2
70°	569.7	556.1	546.0	546.0	544.8
72.5°	487.2	474.8	472.5	451.0	437.5
75°	405.8	394.5	387.7	345.9	327.8
77.5°	321.0	317.6	296.2	252.1	246.4
80°	239.6	241.9	203.5	204.6	209.1
82.5°	165.0	161.6	152.6	145.8	143.6
85°	95.0	89.3	89.3	84.8	82.5
87.5°	31.7	35.0	35.0	35.0	36.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)