

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: P238894

Luminaire Tested: **24EN-LD2-49-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238894
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-LD2-49-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: 5098.5 lumens
Efficiency: N/A
Efficacy: 120.8 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

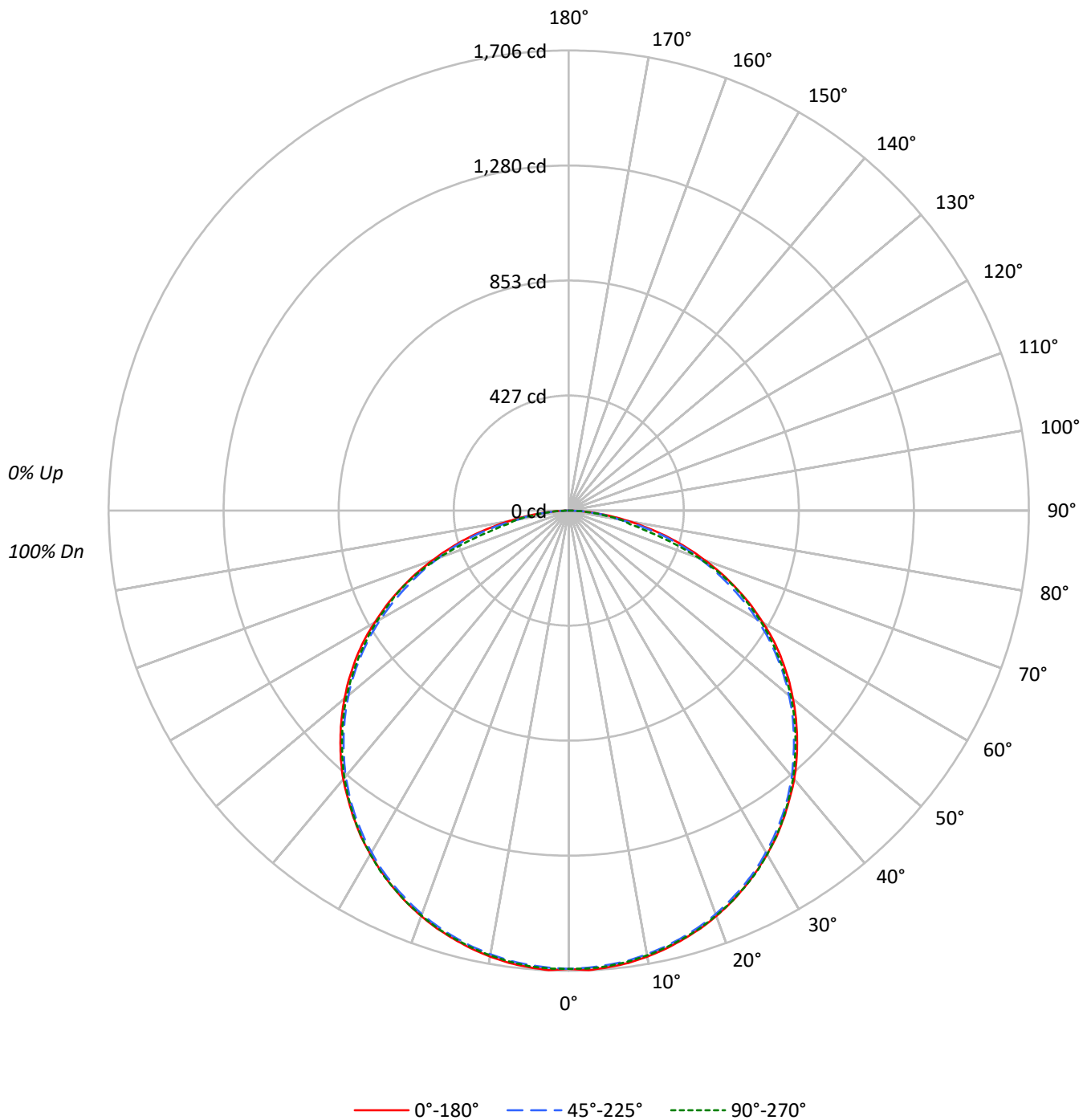
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2602	2602	2602
5°	2612	2599	2606
10°	2611	2598	2604
15°	2608	2596	2603
20°	2608	2596	2604
25°	2605	2592	2605
30°	2602	2587	2602
35°	2599	2581	2595
40°	2601	2573	2588
45°	2594	2557	2575
50°	2587	2541	2564
55°	2577	2515	2540
60°	2545	2467	2519
65°	2494	2390	2479
70°	2404	2304	2300
75°	2263	2162	1828
80°	1992	1692	1738
85°	1573	1480	1367



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.9	3.2
10°-20°	462.9	9.1
20°-30°	708.3	13.9
30°-40°	865.7	17.0
40°-50°	914.8	17.9
50°-60°	847.6	16.6
60°-70°	664.1	13.0
70°-80°	375.4	7.4
80°-90°	98.9	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°	1332.1	26.1
0°-40°	2197.8	43.1
0°-60°	3960.2	77.7
0°-90°	5098.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5098.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1699	1699	1699	1699	1699	
5°	1699	1694	1691	1690	1695	162
15°	1645	1638	1637	1636	1642	465
25°	1542	1535	1534	1534	1542	711
35°	1390	1384	1381	1381	1388	870
45°	1197	1189	1180	1180	1189	924
55°	965	954	942	944	951	862
65°	688	675	659	668	684	680
75°	382	372	365	326	309	402
85°	90	84	84	80	78	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1699.1	1699.1	1699.1	1699.1	1699.1
2.5°	1705.5	1698.1	1695.9	1693.8	1699.1
5°	1699.1	1693.8	1690.6	1689.5	1694.9
7.5°	1691.7	1685.3	1683.1	1681.0	1686.3
10°	1678.9	1672.5	1670.4	1669.3	1674.6
12.5°	1664.0	1656.5	1655.4	1654.4	1659.7
15°	1644.8	1638.4	1637.3	1636.3	1641.6
17.5°	1624.6	1618.2	1616.0	1615.0	1622.4
20°	1600.0	1593.7	1592.6	1591.5	1597.9
22.5°	1572.4	1566.0	1563.8	1564.9	1571.3
25°	1541.5	1535.1	1534.0	1534.0	1541.5
27.5°	1507.4	1501.0	1501.0	1501.0	1509.5
30°	1471.2	1465.8	1462.6	1463.7	1471.2
32.5°	1433.9	1425.3	1423.2	1424.3	1431.7
35°	1390.2	1383.8	1380.6	1380.6	1388.1
37.5°	1345.4	1339.1	1334.8	1334.8	1342.3
40°	1300.7	1291.1	1286.9	1284.7	1294.3
42.5°	1250.6	1243.2	1233.6	1233.6	1242.1
45°	1197.4	1188.9	1180.3	1180.3	1188.9
47.5°	1143.0	1134.5	1124.9	1124.9	1133.5
50°	1085.5	1077.0	1066.3	1066.3	1075.9
52.5°	1026.9	1017.3	1005.6	1004.6	1014.1
55°	965.1	954.5	941.7	943.8	951.3
57.5°	902.3	888.4	875.7	875.7	887.4
60°	830.9	819.2	805.4	807.5	822.4
62.5°	762.7	747.8	734.0	739.3	752.1
65°	688.2	675.4	659.4	667.9	683.9
67.5°	614.7	600.8	588.0	598.7	606.1
70°	536.9	524.1	514.5	514.5	513.5
72.5°	459.1	447.4	445.3	425.0	412.3
75°	382.4	371.8	365.4	326.0	308.9
77.5°	302.5	299.3	279.1	237.6	232.2
80°	225.8	228.0	191.8	192.8	197.1
82.5°	155.5	152.3	143.8	137.4	135.3
85°	89.5	84.2	84.2	79.9	77.8
87.5°	29.8	33.0	33.0	33.0	34.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)