

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: P238935

Luminaire Tested: **24ENA-LD2-49-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238935
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: 24ENA-LD2-49-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5070.4 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.67' x L: 3.83' x H: 0')
CIE Type: Direct

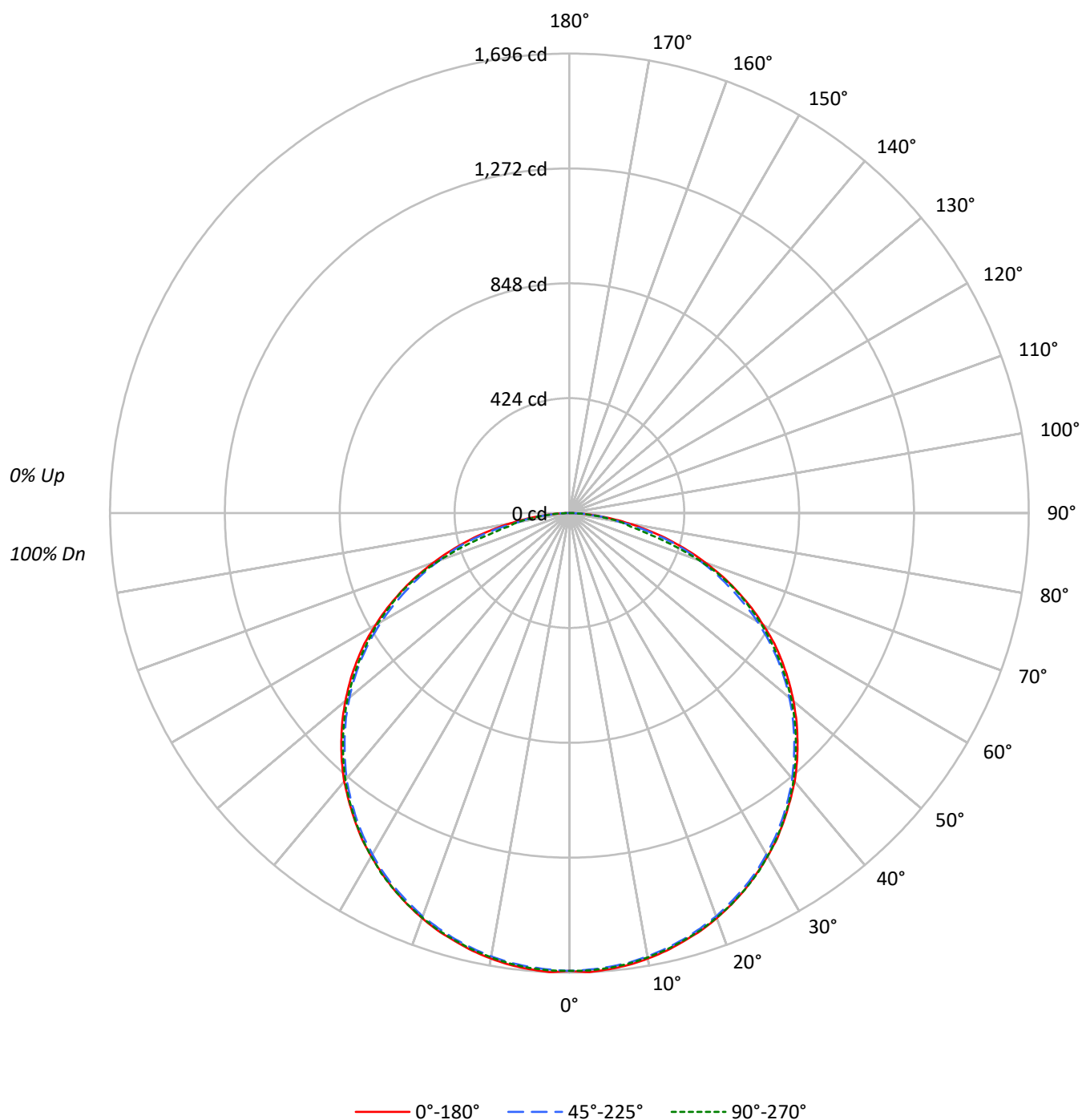
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	90	88		90	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	70	61	54	79	68	60	53		66	58	53		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	36	31		43	36	31		41	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	25		37	30	25		36	30	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2847	2847	2847
5°	2858	2843	2851
10°	2856	2842	2849
15°	2853	2840	2848
20°	2853	2840	2849
25°	2850	2836	2850
30°	2846	2830	2846
35°	2843	2824	2839
40°	2845	2815	2831
45°	2837	2797	2817
50°	2829	2780	2805
55°	2819	2751	2779
60°	2784	2699	2756
65°	2728	2614	2711
70°	2630	2521	2515
75°	2476	2366	2000
80°	2179	1850	1902
85°	1720	1618	1494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.1	3.2
10°-20°	460.3	9.1
20°-30°	704.4	13.9
30°-40°	860.9	17.0
40°-50°	909.8	17.9
50°-60°	842.9	16.6
60°-70°	660.4	13.0
70°-80°	373.4	7.4
80°-90°	98.3	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°	1324.7	26.1
0°-40°	2185.7	43.1
0°-60°	3938.4	77.7
0°-90°	5070.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5070.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1690	1690	1690	1690	1690	
5°	1690	1684	1681	1680	1686	161
15°	1636	1629	1628	1627	1633	462
25°	1533	1527	1526	1526	1533	707
35°	1382	1376	1373	1373	1380	866
45°	1191	1182	1174	1174	1182	919
55°	960	949	936	939	946	857
65°	684	672	656	664	680	677
75°	380	370	363	324	307	400
85°	89	84	84	80	77	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1689.8	1689.8	1689.8	1689.8	1689.8
2.5°	1696.1	1688.7	1686.6	1684.5	1689.8
5°	1689.8	1684.5	1681.3	1680.2	1685.5
7.5°	1682.4	1676.0	1673.9	1671.8	1677.1
10°	1669.6	1663.3	1661.2	1660.1	1665.4
12.5°	1654.8	1647.4	1646.3	1645.3	1650.6
15°	1635.7	1629.4	1628.3	1627.3	1632.6
17.5°	1615.6	1609.3	1607.1	1606.1	1613.5
20°	1591.2	1584.9	1583.8	1582.8	1589.1
22.5°	1563.7	1557.3	1555.2	1556.3	1562.6
25°	1533.0	1526.6	1525.6	1525.6	1533.0
27.5°	1499.1	1492.7	1492.7	1492.7	1501.2
30°	1463.1	1457.8	1454.6	1455.6	1463.1
32.5°	1426.0	1417.5	1415.4	1416.4	1423.9
35°	1382.5	1376.2	1373.0	1373.0	1380.4
37.5°	1338.0	1331.7	1327.5	1327.5	1334.9
40°	1293.6	1284.0	1279.8	1277.7	1287.2
42.5°	1243.8	1236.3	1226.8	1226.8	1235.3
45°	1190.8	1182.3	1173.8	1173.8	1182.3
47.5°	1136.8	1128.3	1118.7	1118.7	1127.2
50°	1079.5	1071.1	1060.5	1060.5	1070.0
52.5°	1021.3	1011.7	1000.1	999.0	1008.6
55°	959.8	949.2	936.5	938.6	946.1
57.5°	897.3	883.6	870.8	870.8	882.5
60°	826.3	814.7	800.9	803.0	817.9
62.5°	758.5	743.7	729.9	735.2	748.0
65°	684.4	671.7	655.8	664.3	680.1
67.5°	611.3	597.5	584.8	595.4	602.8
70°	533.9	521.2	511.7	511.7	510.6
72.5°	456.6	445.0	442.8	422.7	410.0
75°	380.3	369.7	363.4	324.2	307.2
77.5°	300.9	297.7	277.6	236.3	231.0
80°	224.6	226.7	190.7	191.8	196.0
82.5°	154.7	151.5	143.0	136.7	134.5
85°	89.0	83.7	83.7	79.5	77.3
87.5°	29.7	32.8	32.8	32.8	33.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)