

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: P238938

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238938
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-LD2-54-UNV-L835-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5274.8 lumens
Efficiency: N/A
Efficacy: 122.7 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

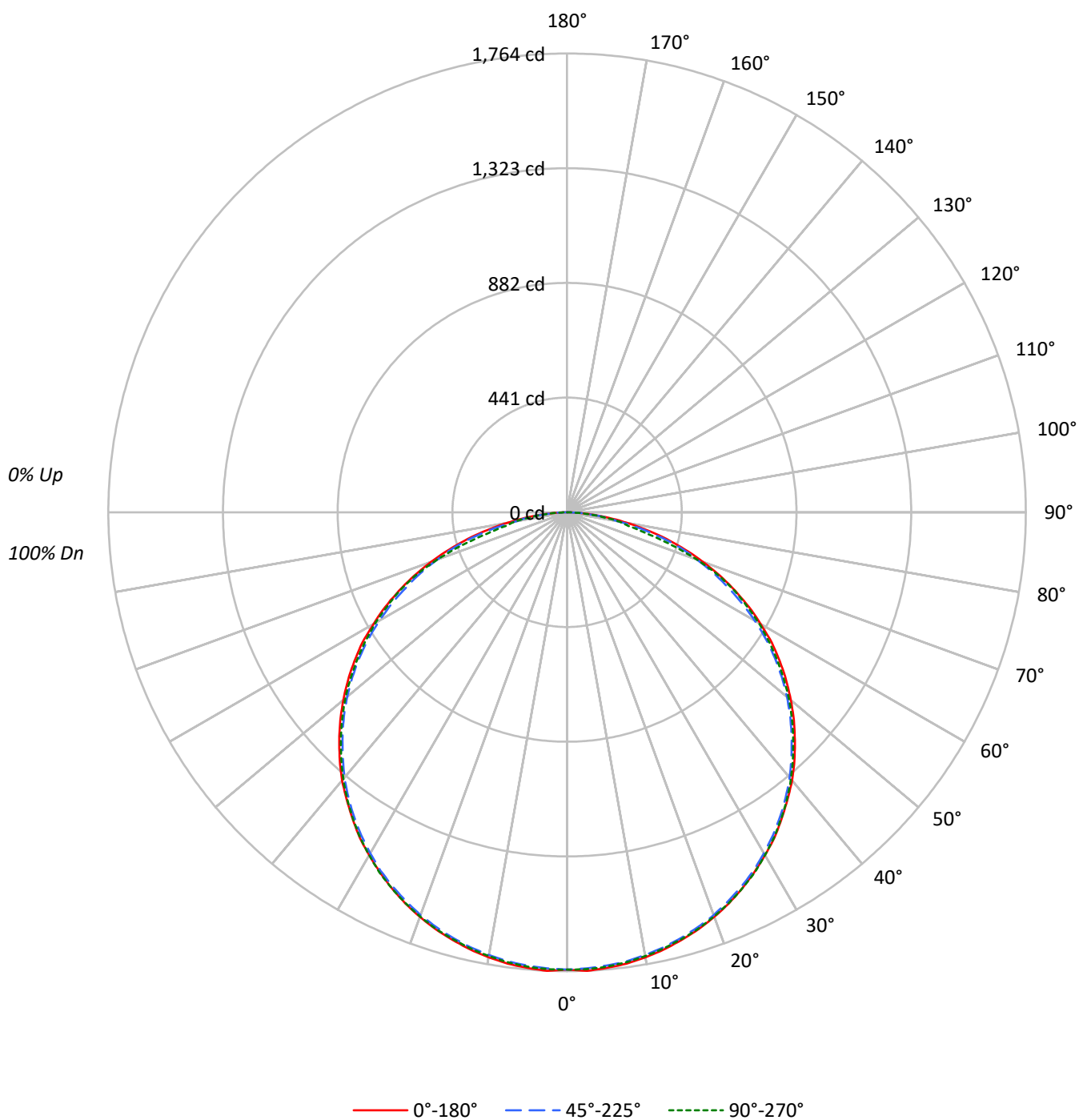
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2962	2962	2962
5°	2973	2958	2965
10°	2971	2956	2964
15°	2968	2955	2962
20°	2968	2954	2964
25°	2964	2950	2964
30°	2961	2944	2961
35°	2958	2938	2953
40°	2960	2928	2945
45°	2952	2909	2930
50°	2943	2892	2918
55°	2933	2862	2891
60°	2896	2808	2867
65°	2838	2720	2821
70°	2736	2622	2617
75°	2576	2461	2080
80°	2266	1925	1978
85°	1790	1684	1556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.5	3.2
10°-20°	478.9	9.1
20°-30°	732.7	13.9
30°-40°	895.6	17.0
40°-50°	946.4	17.9
50°-60°	876.9	16.6
60°-70°	687.0	13.0
70°-80°	388.4	7.4
80°-90°	102.3	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°	1378.1	26.1
0°-40°	2273.7	43.1
0°-60°	4097.0	77.7
0°-90°	5274.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5274.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1758	1752	1749	1748	1753	167
15°	1702	1695	1694	1693	1698	481
25°	1595	1588	1587	1587	1595	735
35°	1438	1432	1428	1428	1436	900
45°	1239	1230	1221	1221	1230	956
55°	998	988	974	976	984	892
65°	712	699	682	691	708	704
75°	396	385	378	337	320	416
85°	93	87	87	83	80	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1757.9	1757.9	1757.9	1757.9	1757.9
2.5°	1764.5	1756.8	1754.6	1752.3	1757.9
5°	1757.9	1752.3	1749.0	1747.9	1753.4
7.5°	1750.1	1743.5	1741.3	1739.1	1744.6
10°	1736.9	1730.3	1728.1	1727.0	1732.5
12.5°	1721.5	1713.8	1712.7	1711.6	1717.1
15°	1701.7	1695.0	1693.9	1692.8	1698.3
17.5°	1680.7	1674.1	1671.9	1670.8	1678.5
20°	1655.4	1648.7	1647.6	1646.5	1653.2
22.5°	1626.7	1620.1	1617.9	1619.0	1625.6
25°	1594.7	1588.1	1587.0	1587.0	1594.7
27.5°	1559.5	1552.9	1552.9	1552.9	1561.7
30°	1522.0	1516.5	1513.2	1514.3	1522.0
32.5°	1483.4	1474.6	1472.4	1473.5	1481.2
35°	1438.2	1431.6	1428.3	1428.3	1436.0
37.5°	1392.0	1385.3	1380.9	1380.9	1388.7
40°	1345.7	1335.8	1331.3	1329.1	1339.1
42.5°	1293.9	1286.2	1276.2	1276.2	1285.1
45°	1238.8	1229.9	1221.1	1221.1	1229.9
47.5°	1182.6	1173.7	1163.8	1163.8	1172.6
50°	1123.0	1114.2	1103.2	1103.2	1113.1
52.5°	1062.4	1052.5	1040.4	1039.3	1049.2
55°	998.5	987.5	974.3	976.5	984.2
57.5°	933.5	919.2	905.9	905.9	918.1
60°	859.6	847.5	833.2	835.4	850.8
62.5°	789.1	773.7	759.4	764.9	778.1
65°	712.0	698.7	682.2	691.0	707.6
67.5°	635.9	621.6	608.4	619.4	627.1
70°	555.5	542.2	532.3	532.3	531.2
72.5°	475.0	462.9	460.7	439.7	426.5
75°	395.7	384.6	378.0	337.2	319.6
77.5°	313.0	309.7	288.8	245.8	240.3
80°	233.6	235.9	198.4	199.5	203.9
82.5°	160.9	157.6	148.8	142.2	140.0
85°	92.6	87.1	87.1	82.7	80.5
87.5°	30.9	34.2	34.2	34.2	35.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)