

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: P238932

Luminaire Tested: **24ENA-LD2-45-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238932
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-LD2-45-UNV-L850-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5038.3 lumens
Efficiency: N/A
Efficacy: 132.6 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

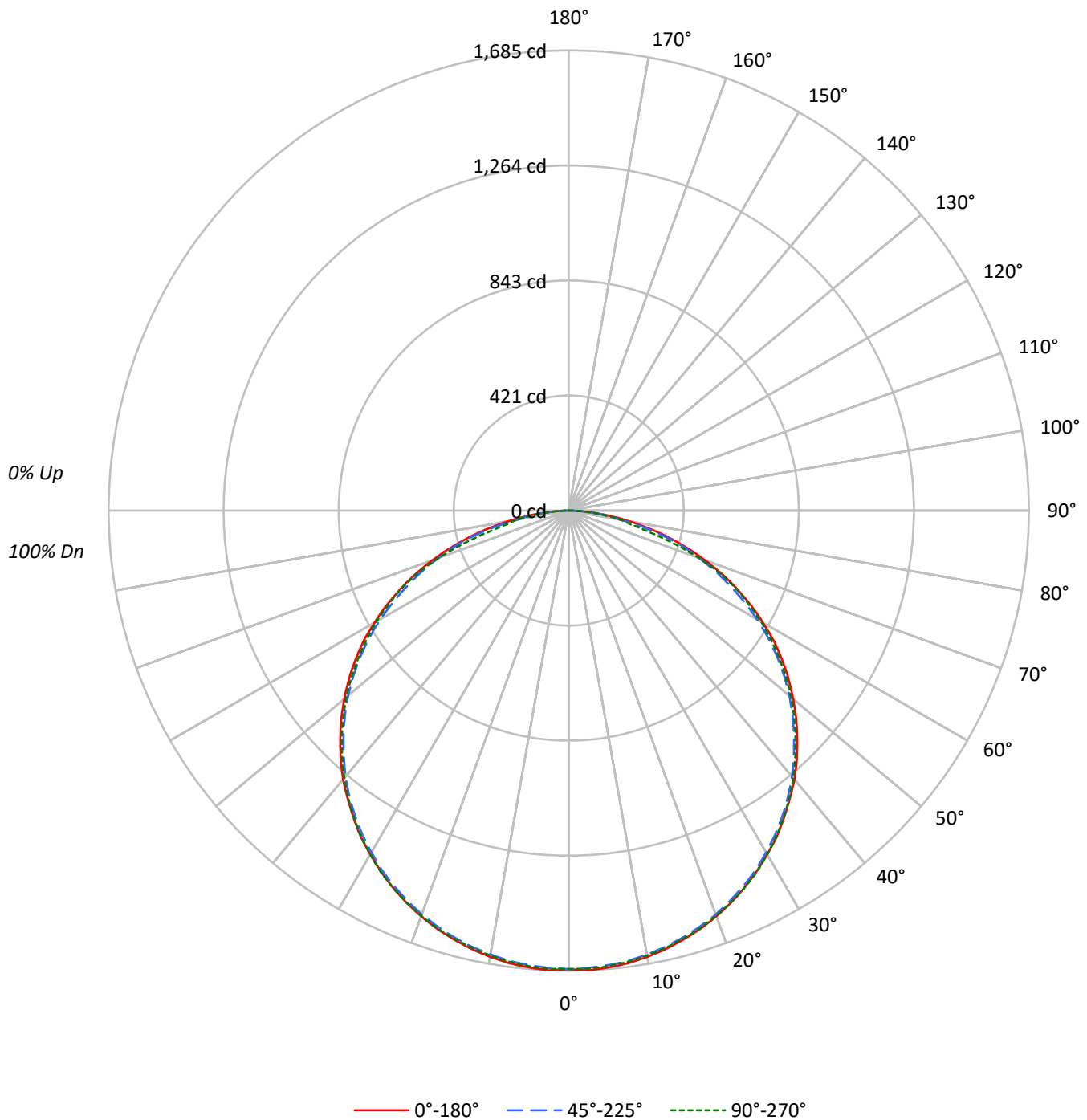
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2829	2829	2829
5°	2840	2825	2833
10°	2838	2824	2831
15°	2835	2822	2829
20°	2835	2822	2831
25°	2832	2818	2832
30°	2828	2812	2828
35°	2826	2806	2821
40°	2827	2797	2813
45°	2819	2779	2799
50°	2812	2762	2787
55°	2802	2733	2761
60°	2767	2682	2738
65°	2711	2598	2694
70°	2614	2505	2499
75°	2460	2351	1987
80°	2166	1839	1890
85°	1709	1608	1485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.0	3.2
10°-20°	457.4	9.1
20°-30°	699.9	13.9
30°-40°	855.5	17.0
40°-50°	904.0	17.9
50°-60°	837.6	16.6
60°-70°	656.2	13.0
70°-80°	371.0	7.4
80°-90°	97.7	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°	1316.3	26.1
0°-40°	2171.8	43.1
0°-60°	3913.4	77.7
0°-90°	5038.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5038.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1679	1679	1679	1679	1679	
5°	1679	1674	1671	1670	1675	160
15°	1625	1619	1618	1617	1622	459
25°	1523	1517	1516	1516	1523	702
35°	1374	1368	1364	1364	1372	860
45°	1183	1175	1166	1166	1175	913
55°	954	943	931	933	940	852
65°	680	667	652	660	676	672
75°	378	367	361	322	305	398
85°	88	83	83	79	77	104
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1679.1	1679.1	1679.1	1679.1	1679.1
2.5°	1685.4	1678.0	1675.9	1673.8	1679.1
5°	1679.1	1673.8	1670.6	1669.6	1674.9
7.5°	1671.7	1665.4	1663.3	1661.2	1666.4
10°	1659.1	1652.7	1650.6	1649.6	1654.9
12.5°	1644.3	1637.0	1635.9	1634.9	1640.1
15°	1625.4	1619.1	1618.0	1617.0	1622.2
17.5°	1605.4	1599.1	1597.0	1595.9	1603.3
20°	1581.2	1574.8	1573.8	1572.7	1579.1
22.5°	1553.8	1547.5	1545.4	1546.4	1552.7
25°	1523.3	1516.9	1515.9	1515.9	1523.3
27.5°	1489.6	1483.3	1483.3	1483.3	1491.7
30°	1453.8	1448.5	1445.4	1446.4	1453.8
32.5°	1416.9	1408.5	1406.4	1407.5	1414.8
35°	1373.8	1367.5	1364.3	1364.3	1371.7
37.5°	1329.6	1323.3	1319.0	1319.0	1326.4
40°	1285.4	1275.9	1271.7	1269.6	1279.0
42.5°	1235.9	1228.5	1219.0	1219.0	1227.5
45°	1183.2	1174.8	1166.4	1166.4	1174.8
47.5°	1129.6	1121.1	1111.7	1111.7	1120.1
50°	1072.7	1064.3	1053.8	1053.8	1063.2
52.5°	1014.8	1005.3	993.8	992.7	1002.2
55°	953.8	943.2	930.6	932.7	940.1
57.5°	891.6	878.0	865.3	865.3	876.9
60°	821.1	809.5	795.8	798.0	812.7
62.5°	753.7	739.0	725.3	730.6	743.2
65°	680.0	667.4	651.6	660.0	675.8
67.5°	607.4	593.7	581.1	591.6	599.0
70°	530.6	517.9	508.5	508.5	507.4
72.5°	453.7	442.1	440.0	420.0	407.4
75°	377.9	367.4	361.1	322.1	305.3
77.5°	299.0	295.8	275.8	234.8	229.5
80°	223.2	225.3	189.5	190.5	194.8
82.5°	153.7	150.5	142.1	135.8	133.7
85°	88.4	83.2	83.2	79.0	76.8
87.5°	29.5	32.6	32.6	32.6	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)