

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: P238892

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238892
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-LD2-45-UNV-L850-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5167.5 lumens
Efficiency: N/A
Efficacy: 136.0 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

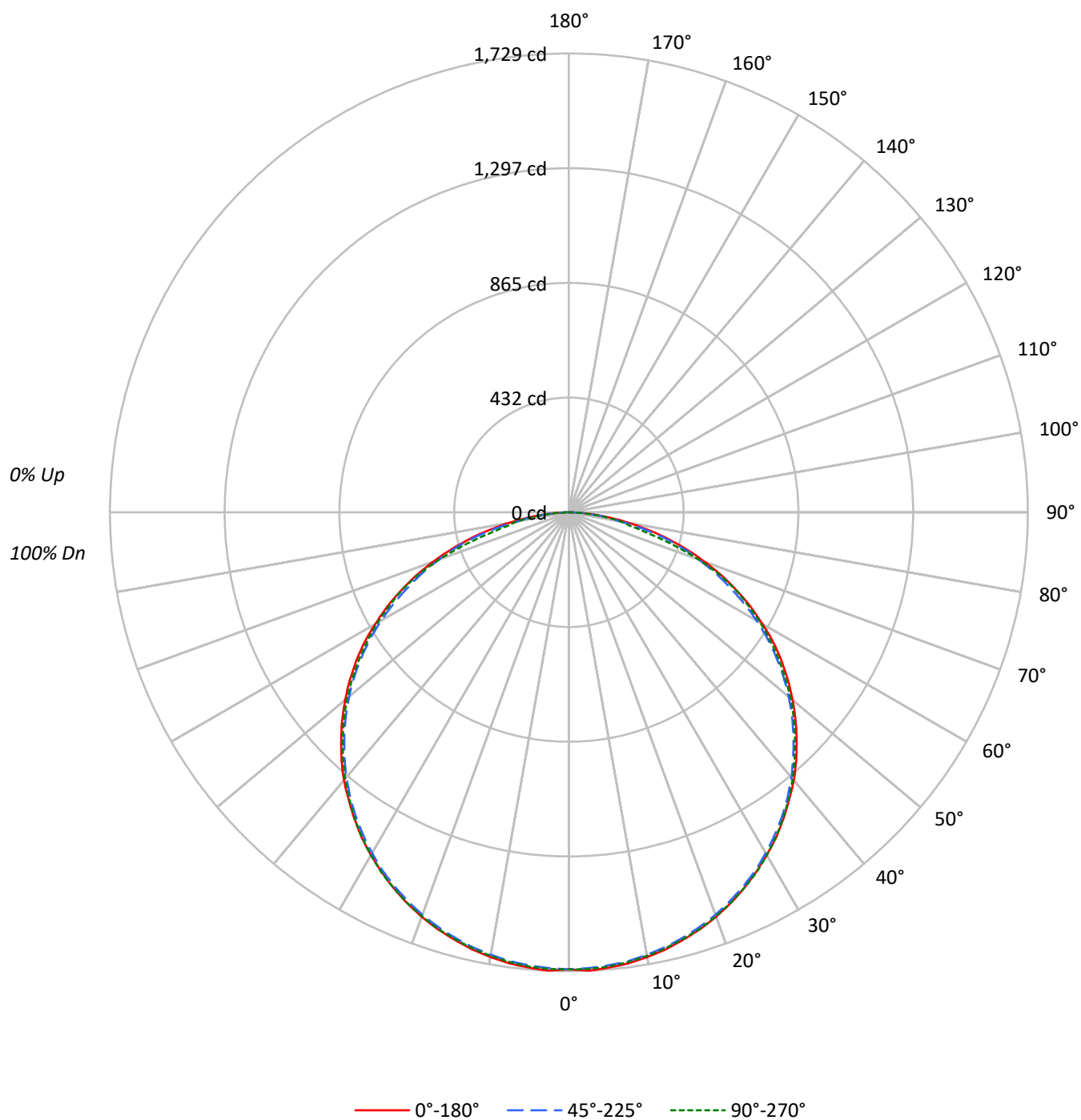
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2638	2638	2638
5°	2648	2634	2641
10°	2646	2633	2640
15°	2643	2631	2638
20°	2643	2631	2640
25°	2640	2628	2640
30°	2637	2622	2637
35°	2635	2616	2630
40°	2636	2608	2623
45°	2629	2591	2610
50°	2622	2575	2598
55°	2612	2549	2575
60°	2580	2501	2553
65°	2528	2422	2512
70°	2437	2335	2330
75°	2294	2191	1853
80°	2019	1714	1761
85°	1594	1499	1385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.1	3.2
10°-20°	469.1	9.1
20°-30°	717.8	13.9
30°-40°	877.4	17.0
40°-50°	927.2	17.9
50°-60°	859.1	16.6
60°-70°	673.0	13.0
70°-80°	380.5	7.4
80°-90°	100.2	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°	1350.1	26.1
0°-40°	2227.5	43.1
0°-60°	4013.8	77.7
0°-90°	5167.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5167.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1722	1717	1714	1712	1718	164
15°	1667	1661	1660	1658	1664	471
25°	1562	1556	1555	1555	1562	720
35°	1409	1402	1399	1399	1407	882
45°	1214	1205	1196	1196	1205	937
55°	978	967	954	957	964	874
65°	698	684	668	677	693	690
75°	388	377	370	330	313	408
85°	91	85	85	81	79	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.1	1722.1	1722.1	1722.1	1722.1
2.5°	1728.6	1721.0	1718.9	1716.7	1722.1
5°	1722.1	1716.7	1713.5	1712.4	1717.8
7.5°	1714.6	1708.1	1705.9	1703.8	1709.2
10°	1701.6	1695.1	1693.0	1691.9	1697.3
12.5°	1686.5	1678.9	1677.9	1676.8	1682.2
15°	1667.1	1660.6	1659.5	1658.4	1663.8
17.5°	1646.5	1640.1	1637.9	1636.8	1644.4
20°	1621.7	1615.2	1614.1	1613.1	1619.5
22.5°	1593.6	1587.2	1585.0	1586.1	1592.6
25°	1562.3	1555.8	1554.8	1554.8	1562.3
27.5°	1527.8	1521.3	1521.3	1521.3	1529.9
30°	1491.1	1485.7	1482.4	1483.5	1491.1
32.5°	1453.3	1444.6	1442.5	1443.6	1451.1
35°	1409.0	1402.5	1399.3	1399.3	1406.8
37.5°	1363.7	1357.2	1352.9	1352.9	1360.4
40°	1318.3	1308.6	1304.3	1302.1	1311.8
42.5°	1267.6	1260.0	1250.3	1250.3	1258.9
45°	1213.6	1204.9	1196.3	1196.3	1204.9
47.5°	1158.5	1149.9	1140.2	1140.2	1148.8
50°	1100.2	1091.6	1080.8	1080.8	1090.5
52.5°	1040.8	1031.1	1019.2	1018.2	1027.9
55°	978.2	967.4	954.5	956.6	964.2
57.5°	914.5	900.5	887.5	887.5	899.4
60°	842.2	830.3	816.3	818.4	833.5
62.5°	773.1	757.9	743.9	749.3	762.3
65°	697.5	684.5	668.3	677.0	693.2
67.5°	623.0	608.9	596.0	606.8	614.3
70°	544.2	531.2	521.5	521.5	520.4
72.5°	465.3	453.5	451.3	430.8	417.8
75°	387.6	376.8	370.3	330.4	313.1
77.5°	306.6	303.4	282.9	240.8	235.4
80°	228.9	231.1	194.3	195.4	199.7
82.5°	157.6	154.4	145.8	139.3	137.1
85°	90.7	85.3	85.3	81.0	78.8
87.5°	30.2	33.5	33.5	33.5	34.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)