

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: P238980

Luminaire Tested: **24EN-LD2-54-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238980
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-LD2-54-UNV-L950-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)5000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5164.3 lumens
Efficiency: N/A
Efficacy: 120.1 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

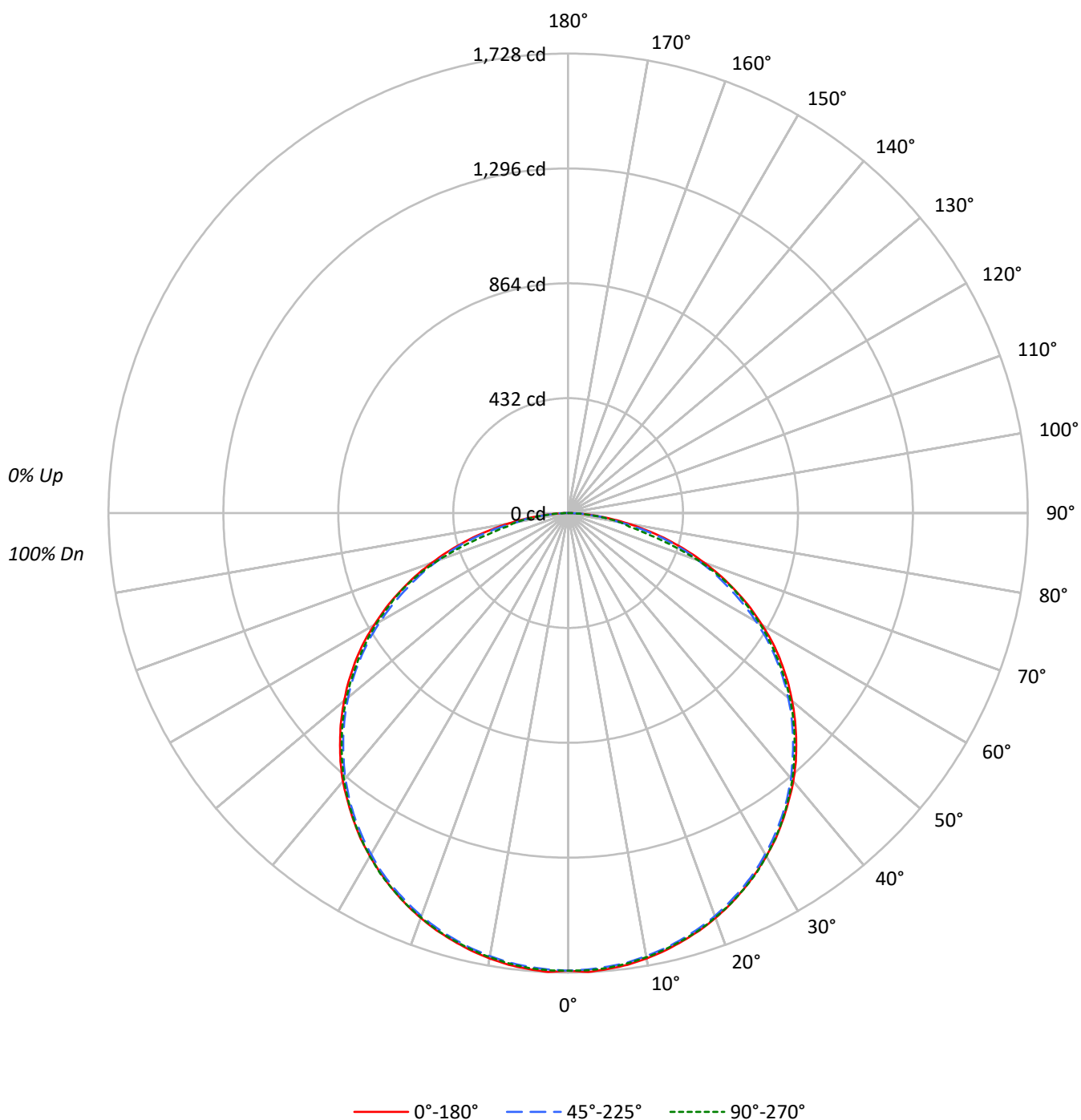
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	2636	2636	2636
5°	2646	2633	2639
10°	2645	2631	2638
15°	2642	2630	2637
20°	2642	2629	2638
25°	2639	2626	2639
30°	2635	2620	2635
35°	2633	2615	2629
40°	2634	2606	2621
45°	2627	2590	2608
50°	2620	2574	2597
55°	2610	2547	2573
60°	2578	2499	2552
65°	2526	2421	2510
70°	2435	2334	2329
75°	2293	2190	1852
80°	2018	1713	1761
85°	1592	1497	1385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.0	3.2
10°-20°	468.8	9.1
20°-30°	717.4	13.9
30°-40°	876.9	17.0
40°-50°	926.6	17.9
50°-60°	858.5	16.6
60°-70°	672.6	13.0
70°-80°	380.3	7.4
80°-90°	100.1	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°	1349.2	26.1
0°-40°	2226.1	43.1
0°-60°	4011.3	77.7
0°-90°	5164.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5164.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1721	1721	1721	1721	1721	
5°	1721	1716	1712	1711	1717	164
15°	1666	1660	1658	1657	1663	471
25°	1561	1555	1554	1554	1561	720
35°	1408	1402	1398	1398	1406	882
45°	1213	1204	1196	1196	1204	936
55°	978	967	954	956	964	873
65°	697	684	668	677	693	689
75°	387	377	370	330	313	407
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°	1721.0	1721.0	1721.0	1721.0	1721.0
2.5°	1727.5	1720.0	1717.8	1715.7	1721.0
5°	1721.0	1715.7	1712.4	1711.3	1716.7
7.5°	1713.5	1707.0	1704.9	1702.7	1708.1
10°	1700.5	1694.1	1691.9	1690.8	1696.2
12.5°	1685.4	1677.9	1676.8	1675.7	1681.1
15°	1666.0	1659.5	1658.5	1657.4	1662.8
17.5°	1645.5	1639.0	1636.9	1635.8	1643.4
20°	1620.7	1614.2	1613.1	1612.1	1618.5
22.5°	1592.6	1586.2	1584.0	1585.1	1591.6
25°	1561.4	1554.9	1553.8	1553.8	1561.4
27.5°	1526.8	1520.3	1520.3	1520.3	1529.0
30°	1490.1	1484.7	1481.5	1482.6	1490.1
32.5°	1452.4	1443.7	1441.6	1442.7	1450.2
35°	1408.1	1401.7	1398.4	1398.4	1406.0
37.5°	1362.8	1356.3	1352.0	1352.0	1359.6
40°	1317.5	1307.8	1303.5	1301.3	1311.0
42.5°	1266.8	1259.2	1249.5	1249.5	1258.1
45°	1212.8	1204.2	1195.6	1195.6	1204.2
47.5°	1157.8	1149.2	1139.5	1139.5	1148.1
50°	1099.5	1090.9	1080.1	1080.1	1089.8
52.5°	1040.2	1030.5	1018.6	1017.5	1027.2
55°	977.6	966.8	953.9	956.0	963.6
57.5°	913.9	899.9	887.0	887.0	898.8
60°	841.6	829.8	815.7	817.9	833.0
62.5°	772.6	757.5	743.5	748.8	761.8
65°	697.1	684.1	667.9	676.6	692.7
67.5°	622.6	608.6	595.6	606.4	614.0
70°	543.8	530.9	521.2	521.2	520.1
72.5°	465.1	453.2	451.0	430.5	417.6
75°	387.4	376.6	370.1	330.2	312.9
77.5°	306.4	303.2	282.7	240.6	235.2
80°	228.8	230.9	194.2	195.3	199.6
82.5°	157.5	154.3	145.7	139.2	137.0
85°	90.6	85.2	85.2	80.9	78.8
87.5°	30.2	33.4	33.4	33.4	34.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)