

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: P239018

Luminaire Tested: **24ENA-LD2-54-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239018
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-L935-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4541.6 lumens
Efficiency: N/A
Efficacy: 105.6 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

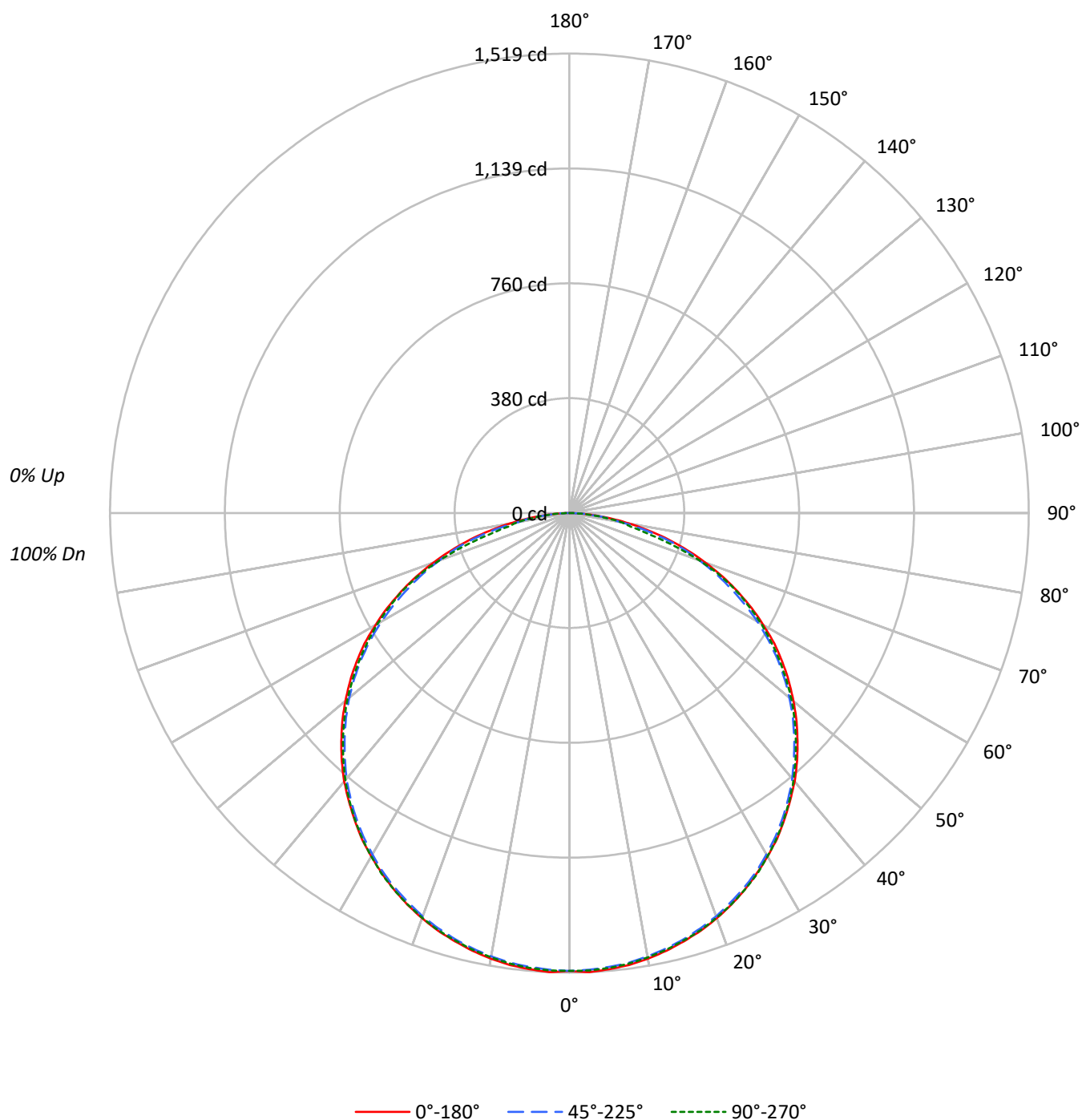
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2550	2550	2550
5°	2560	2547	2553
10°	2558	2545	2552
15°	2555	2544	2551
20°	2555	2543	2552
25°	2553	2540	2553
30°	2549	2535	2549
35°	2547	2529	2543
40°	2548	2521	2536
45°	2541	2505	2523
50°	2534	2490	2512
55°	2525	2464	2489
60°	2494	2417	2469
65°	2444	2342	2429
70°	2356	2258	2253
75°	2218	2119	1791
80°	1952	1657	1703
85°	1541	1450	1340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.4	3.2
10°-20°	412.3	9.1
20°-30°	630.9	13.9
30°-40°	771.1	17.0
40°-50°	814.9	17.9
50°-60°	755.0	16.6
60°-70°	591.5	13.0
70°-80°	334.4	7.4
80°-90°	88.1	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°	1186.5	26.1
0°-40°	1957.7	43.1
0°-60°	3527.6	77.7
0°-90°	4541.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4541.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1514	1514	1514	1514	1514	
5°	1514	1509	1506	1505	1510	144
15°	1465	1459	1458	1458	1462	414
25°	1373	1367	1366	1366	1373	633
35°	1238	1233	1230	1230	1236	775
45°	1067	1059	1051	1051	1059	823
55°	860	850	839	841	847	768
65°	613	602	587	595	609	606
75°	341	331	326	290	275	358
85°	80	75	75	71	69	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1513.5	1513.5	1513.5	1513.5	1513.5
2.5°	1519.2	1512.6	1510.7	1508.8	1513.5
5°	1513.5	1508.8	1505.9	1505.0	1509.7
7.5°	1506.9	1501.2	1499.3	1497.4	1502.1
10°	1495.5	1489.8	1487.9	1486.9	1491.7
12.5°	1482.2	1475.6	1474.6	1473.7	1478.4
15°	1465.1	1459.4	1458.5	1457.5	1462.3
17.5°	1447.1	1441.4	1439.5	1438.6	1445.2
20°	1425.3	1419.6	1418.6	1417.7	1423.4
22.5°	1400.6	1394.9	1393.0	1394.0	1399.6
25°	1373.1	1367.4	1366.4	1366.4	1373.1
27.5°	1342.7	1337.0	1337.0	1337.0	1344.6
30°	1310.4	1305.7	1302.9	1303.8	1310.4
32.5°	1277.2	1269.6	1267.7	1268.7	1275.3
35°	1238.3	1232.6	1229.8	1229.8	1236.4
37.5°	1198.5	1192.8	1189.0	1189.0	1195.6
40°	1158.6	1150.1	1146.3	1144.4	1152.9
42.5°	1114.0	1107.4	1098.8	1098.8	1106.4
45°	1066.6	1059.0	1051.4	1051.4	1059.0
47.5°	1018.2	1010.6	1002.1	1002.1	1009.6
50°	966.9	959.4	949.9	949.9	958.4
52.5°	914.8	906.2	895.8	894.8	903.4
55°	859.7	850.2	838.8	840.7	847.4
57.5°	803.7	791.4	780.0	780.0	790.4
60°	740.2	729.7	717.4	719.3	732.6
62.5°	679.4	666.1	653.8	658.5	669.9
65°	613.0	601.6	587.4	595.0	609.2
67.5°	547.5	535.2	523.8	533.3	539.9
70°	478.3	466.9	458.3	458.3	457.4
72.5°	409.0	398.5	396.6	378.6	367.2
75°	340.7	331.2	325.5	290.4	275.2
77.5°	269.5	266.6	248.6	211.6	206.9
80°	201.2	203.1	170.8	171.8	175.5
82.5°	138.5	135.7	128.1	122.4	120.5
85°	79.7	75.0	75.0	71.2	69.3
87.5°	26.6	29.4	29.4	29.4	30.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)