

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: P239017

Luminaire Tested: **24ENA-LD2-54-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239017
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-L930-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4420.9 lumens
Efficiency: N/A
Efficacy: 102.8 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

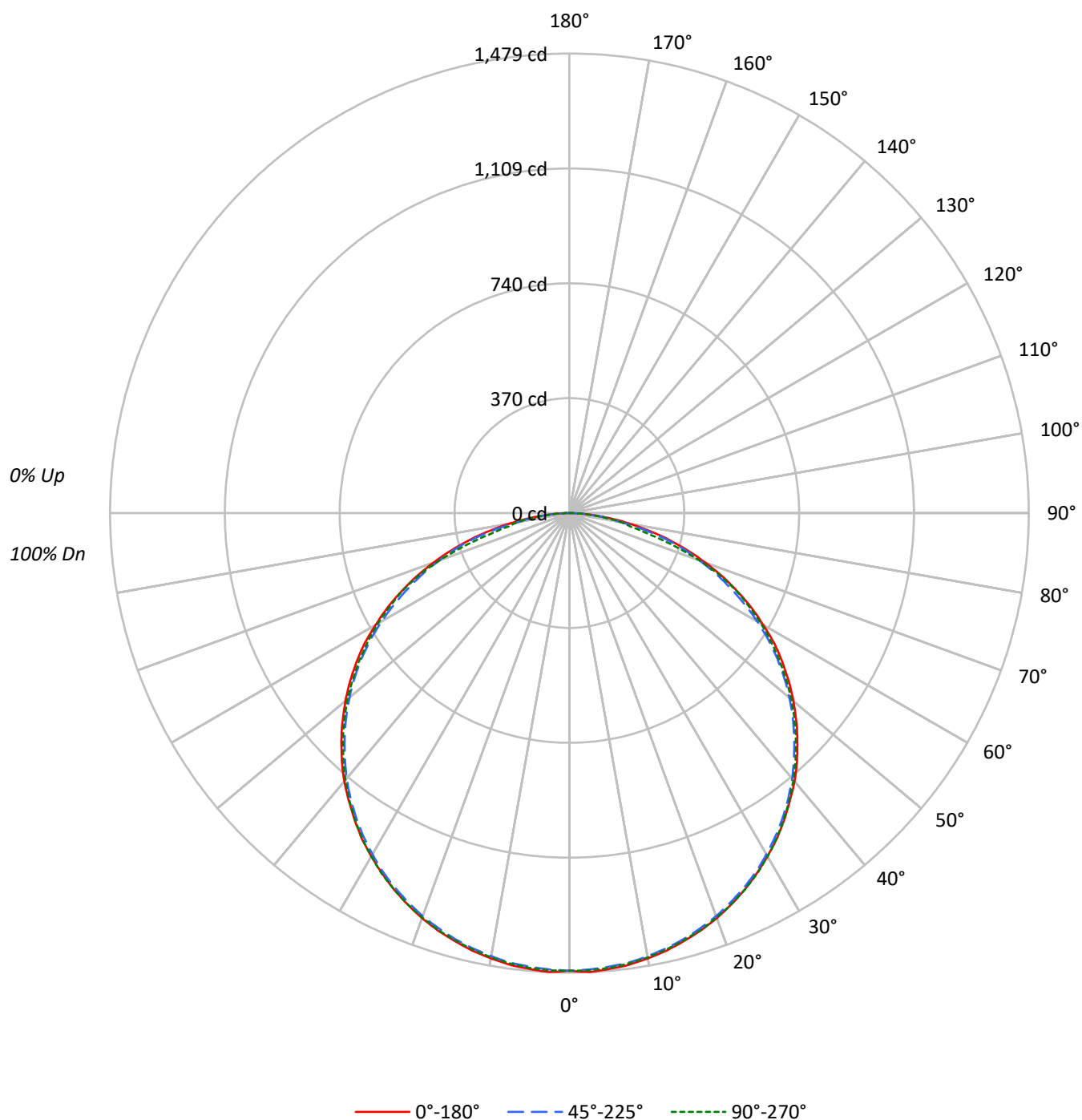
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	2482	2482	2482
5°	2492	2479	2485
10°	2491	2478	2484
15°	2488	2476	2483
20°	2487	2476	2484
25°	2485	2473	2485
30°	2482	2467	2482
35°	2479	2462	2475
40°	2480	2454	2468
45°	2474	2439	2456
50°	2467	2423	2445
55°	2458	2399	2423
60°	2428	2353	2403
65°	2379	2280	2364
70°	2293	2197	2193
75°	2159	2062	1744
80°	1900	1613	1658
85°	1500	1411	1303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	3.2
10°-20°	401.3	9.1
20°-30°	614.1	13.9
30°-40°	750.6	17.0
40°-50°	793.2	17.9
50°-60°	735.0	16.6
60°-70°	575.8	13.0
70°-80°	325.5	7.4
80°-90°	85.7	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°	1155.0	26.1
0°-40°	1905.7	43.1
0°-60°	3433.9	77.7
0°-90°	4420.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4420.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1473	1469	1466	1465	1470	140
15°	1426	1421	1420	1419	1423	403
25°	1337	1331	1330	1330	1337	616
35°	1205	1200	1197	1197	1204	755
45°	1038	1031	1024	1024	1031	801
55°	837	828	817	818	825	747
65°	597	586	572	579	593	590
75°	332	322	317	283	268	349
85°	78	73	73	69	67	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1473.3	1473.3	1473.3	1473.3	1473.3
2.5°	1478.9	1472.4	1470.5	1468.7	1473.3
5°	1473.3	1468.7	1465.9	1465.0	1469.6
7.5°	1466.8	1461.3	1459.5	1457.6	1462.2
10°	1455.8	1450.2	1448.4	1447.4	1452.1
12.5°	1442.8	1436.4	1435.4	1434.5	1439.1
15°	1426.2	1420.7	1419.7	1418.8	1423.4
17.5°	1408.7	1403.1	1401.3	1400.3	1406.8
20°	1387.4	1381.9	1380.9	1380.0	1385.6
22.5°	1363.4	1357.8	1356.0	1356.9	1362.5
25°	1336.6	1331.1	1330.1	1330.1	1336.6
27.5°	1307.0	1301.5	1301.5	1301.5	1308.9
30°	1275.6	1271.0	1268.2	1269.2	1275.6
32.5°	1243.3	1235.9	1234.1	1235.0	1241.5
35°	1205.4	1199.9	1197.1	1197.1	1203.6
37.5°	1166.6	1161.1	1157.4	1157.4	1163.9
40°	1127.8	1119.5	1115.8	1114.0	1122.3
42.5°	1084.4	1078.0	1069.7	1069.7	1077.0
45°	1038.2	1030.9	1023.5	1023.5	1030.9
47.5°	991.1	983.7	975.4	975.4	982.8
50°	941.3	933.9	924.6	924.6	932.9
52.5°	890.5	882.1	872.0	871.1	879.4
55°	836.9	827.6	816.6	818.4	824.9
57.5°	782.4	770.4	759.3	759.3	769.4
60°	720.5	710.3	698.3	700.2	713.1
62.5°	661.4	648.4	636.4	641.1	652.1
65°	596.7	585.6	571.8	579.2	593.0
67.5°	533.0	521.0	509.9	519.1	525.6
70°	465.5	454.5	446.1	446.1	445.2
72.5°	398.1	388.0	386.1	368.6	357.5
75°	331.6	322.4	316.8	282.7	267.9
77.5°	262.3	259.6	242.0	206.0	201.4
80°	195.8	197.7	166.3	167.2	170.9
82.5°	134.9	132.1	124.7	119.2	117.3
85°	77.6	73.0	73.0	69.3	67.4
87.5°	25.9	28.6	28.6	28.6	29.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)