

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: P238930

Luminaire Tested: **24ENA-LD2-45-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238930
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-L835-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4539.2 lumens
Efficiency: N/A
Efficacy: 119.5 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

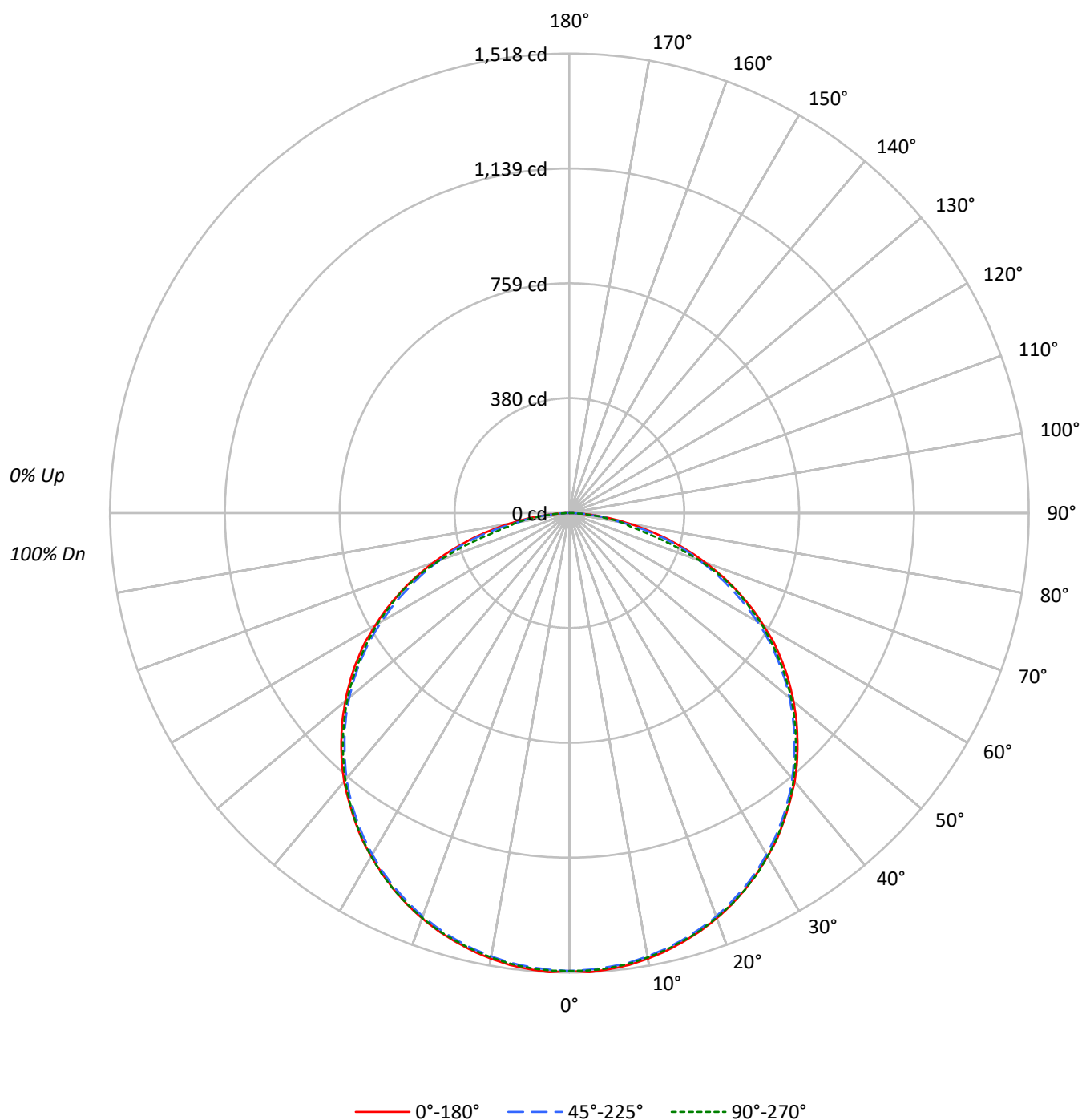
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	2549	2549	2549
5°	2558	2545	2552
10°	2557	2544	2551
15°	2554	2543	2549
20°	2554	2542	2551
25°	2551	2539	2551
30°	2548	2533	2548
35°	2546	2528	2542
40°	2547	2520	2534
45°	2540	2504	2522
50°	2533	2488	2511
55°	2524	2463	2488
60°	2493	2416	2467
65°	2443	2341	2427
70°	2355	2257	2252
75°	2216	2118	1790
80°	1951	1656	1703
85°	1541	1448	1338



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.3	3.2
10°-20°	412.1	9.1
20°-30°	630.6	13.9
30°-40°	770.7	17.0
40°-50°	814.5	17.9
50°-60°	754.6	16.6
60°-70°	591.2	13.0
70°-80°	334.2	7.4
80°-90°	88.0	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°	1185.9	26.1
0°-40°	1956.7	43.1
0°-60°	3525.8	77.7
0°-90°	4539.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4539.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1513	1508	1505	1504	1509	144
15°	1464	1459	1458	1457	1462	414
25°	1372	1367	1366	1366	1372	633
35°	1238	1232	1229	1229	1236	775
45°	1066	1058	1051	1051	1058	823
55°	859	850	838	840	847	767
65°	613	601	587	595	609	606
75°	340	331	325	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°	1512.7	1512.7	1512.7	1512.7	1512.7
2.5°	1518.4	1511.8	1509.9	1508.0	1512.7
5°	1512.7	1508.0	1505.1	1504.2	1508.9
7.5°	1506.1	1500.4	1498.5	1496.6	1501.4
10°	1494.7	1489.0	1487.1	1486.2	1490.9
12.5°	1481.4	1474.8	1473.8	1472.9	1477.6
15°	1464.4	1458.7	1457.7	1456.8	1461.5
17.5°	1446.3	1440.7	1438.8	1437.8	1444.4
20°	1424.5	1418.8	1417.9	1416.9	1422.6
22.5°	1399.9	1394.2	1392.3	1393.2	1398.9
25°	1372.4	1366.7	1365.7	1365.7	1372.4
27.5°	1342.0	1336.3	1336.3	1336.3	1343.9
30°	1309.8	1305.0	1302.2	1303.1	1309.8
32.5°	1276.6	1269.0	1267.1	1268.0	1274.7
35°	1237.7	1232.0	1229.2	1229.2	1235.8
37.5°	1197.9	1192.2	1188.4	1188.4	1195.0
40°	1158.0	1149.5	1145.7	1143.8	1152.3
42.5°	1113.4	1106.8	1098.3	1098.3	1105.9
45°	1066.0	1058.4	1050.9	1050.9	1058.4
47.5°	1017.7	1010.1	1001.5	1001.5	1009.1
50°	966.4	958.9	949.4	949.4	957.9
52.5°	914.3	905.7	895.3	894.4	902.9
55°	859.3	849.8	838.4	840.3	846.9
57.5°	803.3	791.0	779.6	779.6	790.0
60°	739.8	729.3	717.0	718.9	732.2
62.5°	679.1	665.8	653.5	658.2	669.6
65°	612.7	601.3	587.1	594.7	608.9
67.5°	547.2	534.9	523.5	533.0	539.7
70°	478.0	466.6	458.1	458.1	457.1
72.5°	408.8	398.3	396.4	378.4	367.0
75°	340.5	331.0	325.3	290.2	275.0
77.5°	269.4	266.5	248.5	211.5	206.8
80°	201.1	203.0	170.7	171.7	175.5
82.5°	138.5	135.6	128.0	122.3	120.4
85°	79.7	74.9	74.9	71.1	69.2
87.5°	26.6	29.4	29.4	29.4	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)