

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: P239015

Luminaire Tested: **24ENA-LD2-49-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239015
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-LD2-49-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4477.3 lumens
Efficiency: N/A
Efficacy: 106.1 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

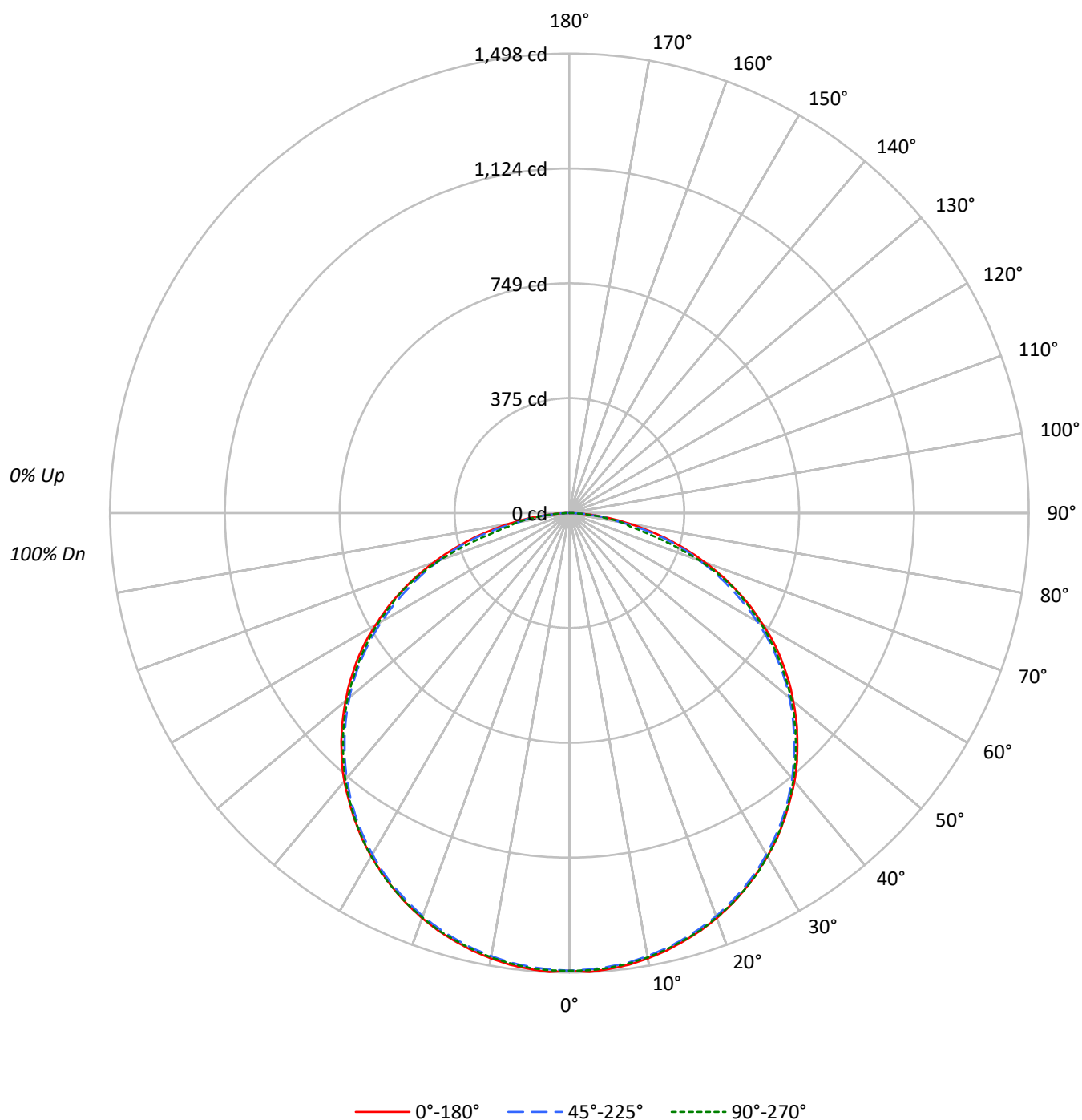
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2514	2514	2514
5°	2523	2511	2517
10°	2522	2509	2516
15°	2519	2508	2514
20°	2519	2507	2516
25°	2516	2504	2516
30°	2513	2499	2513
35°	2511	2494	2507
40°	2512	2485	2500
45°	2505	2470	2487
50°	2498	2454	2476
55°	2489	2429	2454
60°	2459	2383	2434
65°	2409	2309	2394
70°	2323	2226	2221
75°	2186	2089	1766
80°	1924	1634	1679
85°	1519	1429	1320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.3	3.2
10°-20°	406.5	9.1
20°-30°	622.0	13.9
30°-40°	760.2	17.0
40°-50°	803.3	17.9
50°-60°	744.3	16.6
60°-70°	583.1	13.0
70°-80°	329.7	7.4
80°-90°	86.8	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°	1169.7	26.1
0°-40°	1930.0	43.1
0°-60°	3477.6	77.7
0°-90°	4477.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4477.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1492	1492	1492	1492	1492	
5°	1492	1487	1485	1484	1488	142
15°	1444	1439	1438	1437	1442	408
25°	1354	1348	1347	1347	1354	624
35°	1221	1215	1212	1212	1219	764
45°	1052	1044	1036	1036	1044	811
55°	848	838	827	829	835	757
65°	604	593	579	586	601	598
75°	336	326	321	286	271	353
85°	79	74	74	70	68	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1492.1	1492.1	1492.1	1492.1	1492.1
2.5°	1497.7	1491.1	1489.3	1487.4	1492.1
5°	1492.1	1487.4	1484.6	1483.7	1488.3
7.5°	1485.5	1479.9	1478.0	1476.2	1480.8
10°	1474.3	1468.7	1466.8	1465.9	1470.6
12.5°	1461.2	1454.7	1453.7	1452.8	1457.5
15°	1444.4	1438.8	1437.8	1436.9	1441.6
17.5°	1426.6	1421.0	1419.1	1418.2	1424.7
20°	1405.1	1399.5	1398.5	1397.6	1403.2
22.5°	1380.8	1375.1	1373.3	1374.2	1379.8
25°	1353.6	1348.0	1347.1	1347.1	1353.6
27.5°	1323.7	1318.1	1318.1	1318.1	1325.6
30°	1291.9	1287.2	1284.4	1285.3	1291.9
32.5°	1259.1	1251.7	1249.8	1250.7	1257.3
35°	1220.8	1215.2	1212.4	1212.4	1218.9
37.5°	1181.5	1175.9	1172.1	1172.1	1178.7
40°	1142.2	1133.8	1130.0	1128.2	1136.6
42.5°	1098.2	1091.7	1083.3	1083.3	1090.8
45°	1051.5	1044.0	1036.5	1036.5	1044.0
47.5°	1003.8	996.3	987.9	987.9	995.3
50°	953.2	945.8	936.4	936.4	944.8
52.5°	901.8	893.4	883.1	882.1	890.6
55°	847.5	838.2	827.0	828.8	835.4
57.5°	792.3	780.2	769.0	769.0	779.2
60°	729.7	719.4	707.2	709.1	722.2
62.5°	669.8	656.7	644.5	649.2	660.4
65°	604.3	593.1	579.1	586.5	600.6
67.5°	539.8	527.6	516.4	525.7	532.3
70°	471.5	460.3	451.8	451.8	450.9
72.5°	403.2	392.9	391.0	373.3	362.0
75°	335.8	326.5	320.9	286.3	271.3
77.5°	265.7	262.9	245.1	208.6	203.9
80°	198.3	200.2	168.4	169.3	173.1
82.5°	136.6	133.8	126.3	120.7	118.8
85°	78.6	73.9	73.9	70.2	68.3
87.5°	26.2	29.0	29.0	29.0	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)