

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: P238890

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238890
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-LD2-45-UNV-L835-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4655.6 lumens
Efficiency: N/A
Efficacy: 122.5 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

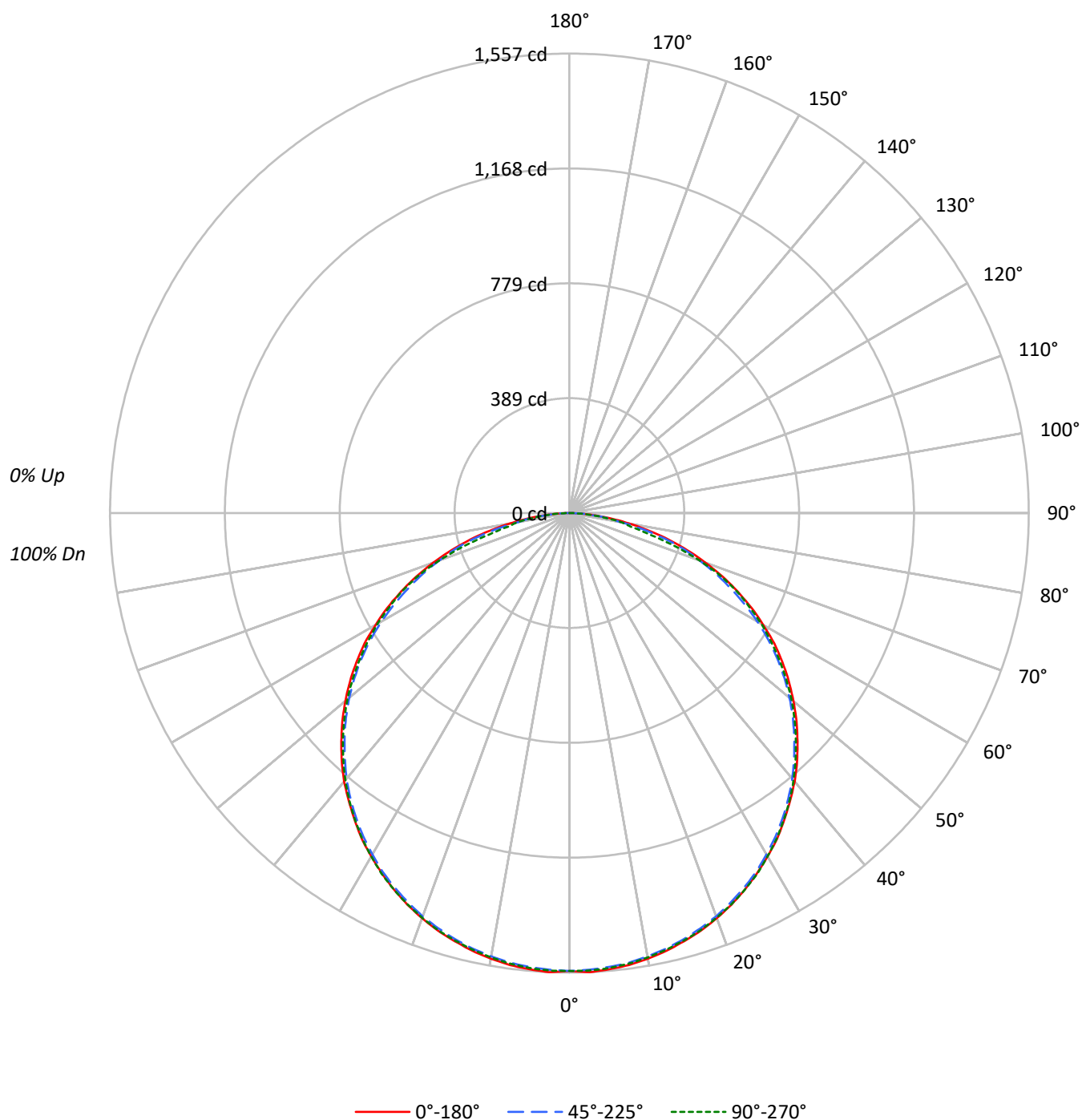
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2376	2376	2376
5°	2385	2373	2379
10°	2384	2372	2378
15°	2381	2371	2377
20°	2381	2370	2378
25°	2379	2367	2379
30°	2376	2362	2376
35°	2373	2357	2370
40°	2375	2349	2363
45°	2368	2335	2351
50°	2362	2320	2341
55°	2353	2296	2320
60°	2324	2253	2301
65°	2277	2182	2263
70°	2196	2104	2100
75°	2066	1974	1669
80°	1819	1544	1588
85°	1436	1350	1248



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	3.2
10°-20°	422.6	9.1
20°-30°	646.7	13.9
30°-40°	790.5	17.0
40°-50°	835.3	17.9
50°-60°	774.0	16.6
60°-70°	606.4	13.0
70°-80°	342.8	7.4
80°-90°	90.3	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°	1216.3	26.1
0°-40°	2006.8	43.1
0°-60°	3616.2	77.7
0°-90°	4655.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4655.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1552	1552	1552	1552	1552	
5°	1552	1547	1544	1543	1548	148
15°	1502	1496	1495	1494	1499	424
25°	1408	1402	1401	1401	1408	649
35°	1269	1264	1261	1261	1268	795
45°	1093	1086	1078	1078	1086	844
55°	881	872	860	862	869	787
65°	628	617	602	610	624	621
75°	349	340	334	298	282	367
85°	82	77	77	73	71	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1551.5	1551.5	1551.5	1551.5	1551.5
2.5°	1557.4	1550.5	1548.6	1546.7	1551.5
5°	1551.5	1546.7	1543.7	1542.8	1547.6
7.5°	1544.7	1538.9	1536.9	1535.0	1539.8
10°	1533.0	1527.2	1525.3	1524.3	1529.1
12.5°	1519.4	1512.6	1511.6	1510.7	1515.5
15°	1501.9	1496.1	1495.1	1494.1	1499.0
17.5°	1483.4	1477.6	1475.6	1474.7	1481.5
20°	1461.1	1455.2	1454.2	1453.3	1459.1
22.5°	1435.8	1429.9	1428.0	1429.0	1434.8
25°	1407.6	1401.7	1400.7	1400.7	1407.6
27.5°	1376.4	1370.6	1370.6	1370.6	1378.4
30°	1343.4	1338.5	1335.6	1336.5	1343.4
32.5°	1309.3	1301.5	1299.6	1300.6	1307.4
35°	1269.4	1263.6	1260.7	1260.7	1267.5
37.5°	1228.6	1222.7	1218.8	1218.8	1225.7
40°	1187.7	1179.0	1175.1	1173.1	1181.9
42.5°	1142.0	1135.2	1126.4	1126.4	1134.2
45°	1093.4	1085.6	1077.8	1077.8	1085.6
47.5°	1043.8	1036.0	1027.2	1027.2	1035.0
50°	991.2	983.4	973.7	973.7	982.5
52.5°	937.7	929.0	918.3	917.3	926.0
55°	881.3	871.6	859.9	861.8	868.7
57.5°	823.9	811.3	799.6	799.6	810.3
60°	758.7	748.0	735.4	737.3	751.0
62.5°	696.5	682.9	670.2	675.1	686.8
65°	628.4	616.7	602.1	609.9	624.5
67.5°	561.3	548.6	537.0	546.7	553.5
70°	490.3	478.6	469.8	469.8	468.9
72.5°	419.3	408.6	406.6	388.1	376.5
75°	349.2	339.5	333.6	297.7	282.1
77.5°	276.3	273.3	254.9	216.9	212.1
80°	206.2	208.2	175.1	176.1	180.0
82.5°	142.0	139.1	131.3	125.5	123.5
85°	81.7	76.8	76.8	73.0	71.0
87.5°	27.2	30.2	30.2	30.2	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)