

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: P238931

Luminaire Tested: **24ENA-LD2-45-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238931
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-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4629.6 lumens
Efficiency: N/A
Efficacy: 121.8 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

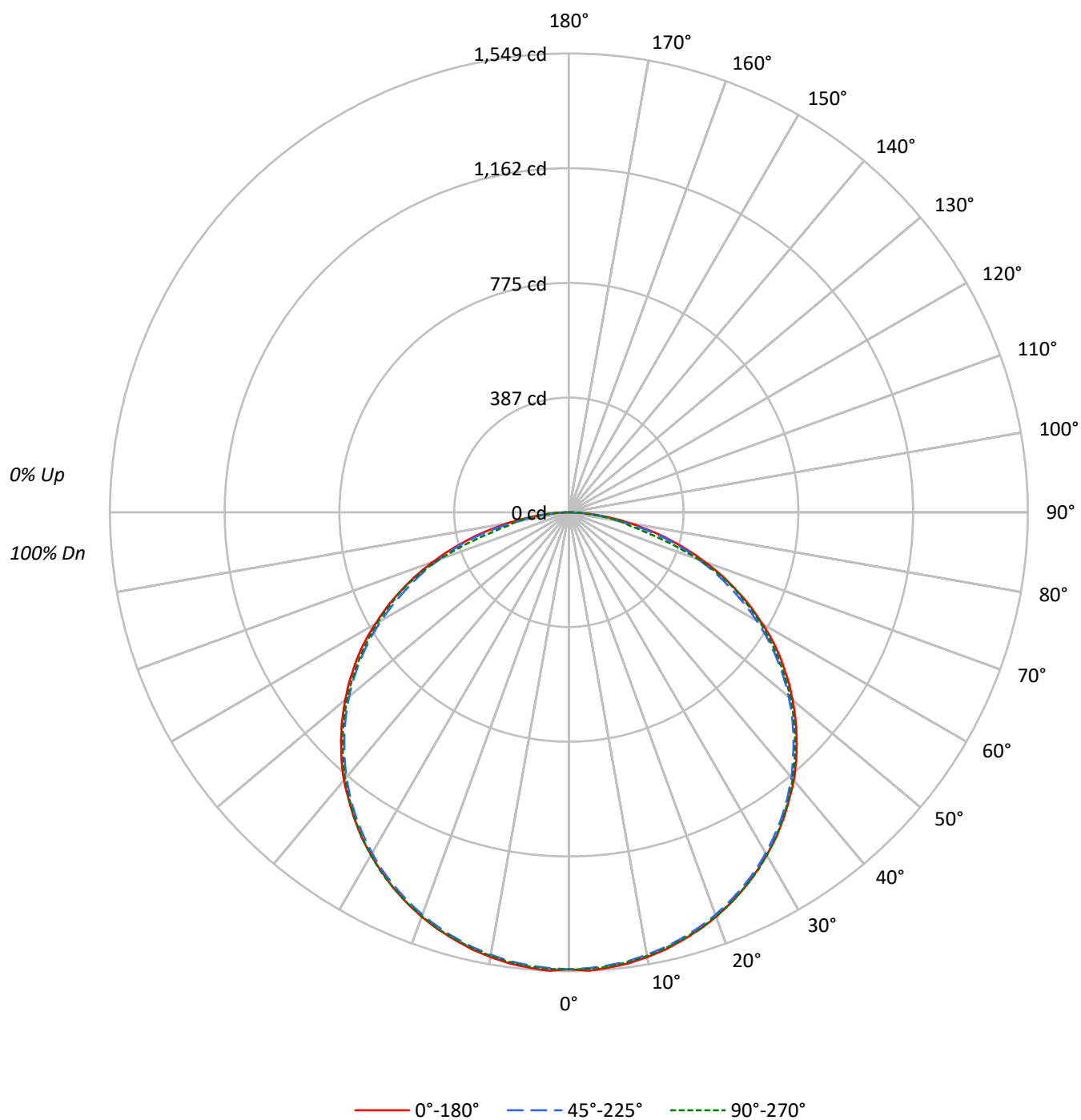
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	2599	2599	2599
5°	2609	2596	2603
10°	2608	2595	2601
15°	2605	2593	2600
20°	2605	2593	2602
25°	2602	2589	2602
30°	2599	2584	2599
35°	2596	2578	2592
40°	2598	2570	2585
45°	2591	2554	2572
50°	2584	2538	2561
55°	2574	2512	2537
60°	2542	2464	2516
65°	2491	2387	2476
70°	2401	2301	2296
75°	2261	2160	1826
80°	1990	1689	1737
85°	1572	1477	1365



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.1	3.2
10°-20°	420.3	9.1
20°-30°	643.1	13.9
30°-40°	786.1	17.0
40°-50°	830.7	17.9
50°-60°	769.6	16.6
60°-70°	603.0	13.0
70°-80°	340.9	7.4
80°-90°	89.8	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°	1209.5	26.1
0°-40°	1995.6	43.1
0°-60°	3595.9	77.7
0°-90°	4629.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4629.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1543	1543	1543	1543	1543	
5°	1543	1538	1535	1534	1539	147
15°	1494	1488	1487	1486	1491	422
25°	1400	1394	1393	1393	1400	645
35°	1262	1256	1254	1254	1260	790
45°	1087	1080	1072	1072	1080	839
55°	876	867	855	857	864	783
65°	625	613	599	606	621	618
75°	347	338	332	296	280	365
85°	81	76	76	72	71	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1542.9	1542.9	1542.9	1542.9	1542.9
2.5°	1548.7	1541.9	1540.0	1538.0	1542.9
5°	1542.9	1538.0	1535.1	1534.1	1539.0
7.5°	1536.1	1530.3	1528.3	1526.4	1531.2
10°	1524.5	1518.7	1516.7	1515.8	1520.6
12.5°	1510.9	1504.2	1503.2	1502.2	1507.1
15°	1493.5	1487.7	1486.7	1485.8	1490.6
17.5°	1475.1	1469.3	1467.4	1466.4	1473.2
20°	1452.9	1447.1	1446.1	1445.2	1451.0
22.5°	1427.7	1421.9	1420.0	1421.0	1426.8
25°	1399.7	1393.9	1392.9	1392.9	1399.7
27.5°	1368.7	1362.9	1362.9	1362.9	1370.7
30°	1335.8	1331.0	1328.1	1329.1	1335.8
32.5°	1302.0	1294.3	1292.3	1293.3	1300.1
35°	1262.3	1256.5	1253.6	1253.6	1260.4
37.5°	1221.7	1215.9	1212.0	1212.0	1218.8
40°	1181.1	1172.4	1168.5	1166.6	1175.3
42.5°	1135.6	1128.8	1120.1	1120.1	1127.9
45°	1087.3	1079.5	1071.8	1071.8	1079.5
47.5°	1037.9	1030.2	1021.5	1021.5	1029.2
50°	985.7	977.9	968.3	968.3	977.0
52.5°	932.5	923.8	913.1	912.2	920.9
55°	876.4	866.7	855.1	857.0	863.8
57.5°	819.3	806.7	795.1	795.1	805.8
60°	754.5	743.9	731.3	733.2	746.8
62.5°	692.6	679.0	666.5	671.3	682.9
65°	624.9	613.3	598.8	606.5	621.0
67.5°	558.1	545.6	534.0	543.6	550.4
70°	487.5	475.9	467.2	467.2	466.2
72.5°	416.9	406.3	404.3	386.0	374.3
75°	347.3	337.6	331.8	296.0	280.5
77.5°	274.7	271.8	253.4	215.7	210.9
80°	205.1	207.0	174.1	175.1	179.0
82.5°	141.2	138.3	130.6	124.8	122.8
85°	81.3	76.4	76.4	72.5	70.6
87.5°	27.1	30.0	30.0	30.0	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)