

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: P239019

Luminaire Tested: **24ENA-LD2-54-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239019
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-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: 4750.6 lumens
Efficiency: N/A
Efficacy: 110.5 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

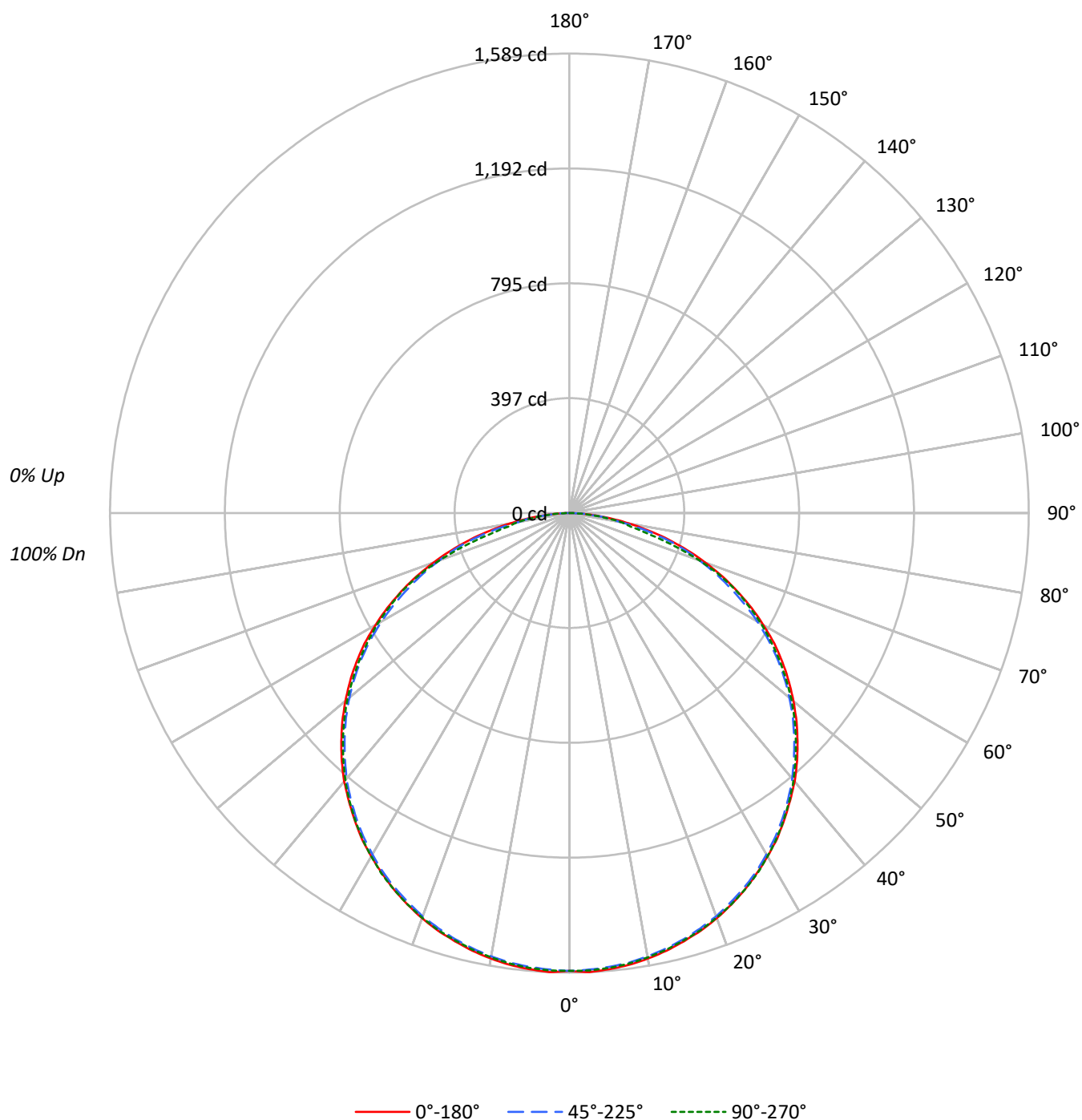
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83		
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58		
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32		
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2667	2667	2667
5°	2678	2664	2671
10°	2676	2663	2669
15°	2673	2661	2668
20°	2673	2661	2669
25°	2670	2657	2670
30°	2667	2651	2667
35°	2664	2646	2660
40°	2665	2637	2652
45°	2658	2620	2639
50°	2651	2604	2628
55°	2642	2577	2604
60°	2609	2529	2582
65°	2556	2449	2540
70°	2464	2362	2357
75°	2319	2216	1873
80°	2041	1734	1781
85°	1612	1516	1401



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	3.2
10°-20°	431.3	9.1
20°-30°	659.9	13.9
30°-40°	806.6	17.0
40°-50°	852.4	17.9
50°-60°	789.8	16.6
60°-70°	618.7	13.0
70°-80°	349.8	7.4
80°-90°	92.1	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°	1241.2	26.1
0°-40°	2047.8	43.1
0°-60°	3689.9	77.7
0°-90°	4750.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4750.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1583	1578	1575	1574	1579	151
15°	1533	1527	1526	1525	1530	433
25°	1436	1430	1429	1429	1436	662
35°	1295	1289	1286	1286	1293	811
45°	1116	1108	1100	1100	1108	861
55°	899	889	877	879	886	803
65°	641	629	614	622	637	634
75°	356	346	340	304	288	375
85°	83	78	78	74	72	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.2	1583.2	1583.2	1583.2	1583.2
2.5°	1589.1	1582.2	1580.2	1578.2	1583.2
5°	1583.2	1578.2	1575.2	1574.2	1579.2
7.5°	1576.2	1570.3	1568.3	1566.3	1571.3
10°	1564.3	1558.4	1556.4	1555.4	1560.3
12.5°	1550.4	1543.5	1542.5	1541.5	1546.4
15°	1532.6	1526.6	1525.6	1524.6	1529.6
17.5°	1513.7	1507.7	1505.8	1504.8	1511.7
20°	1490.9	1484.9	1483.9	1482.9	1488.9
22.5°	1465.1	1459.1	1457.1	1458.1	1464.1
25°	1436.3	1430.3	1429.3	1429.3	1436.3
27.5°	1404.5	1398.6	1398.6	1398.6	1406.5
30°	1370.8	1365.8	1362.8	1363.8	1370.8
32.5°	1336.0	1328.1	1326.1	1327.1	1334.0
35°	1295.3	1289.4	1286.4	1286.4	1293.3
37.5°	1253.6	1247.7	1243.7	1243.7	1250.7
40°	1211.9	1203.0	1199.0	1197.1	1206.0
42.5°	1165.3	1158.3	1149.4	1149.4	1157.4
45°	1115.7	1107.7	1099.8	1099.8	1107.7
47.5°	1065.0	1057.1	1048.2	1048.2	1056.1
50°	1011.4	1003.5	993.6	993.6	1002.5
52.5°	956.9	947.9	937.0	936.0	944.9
55°	899.3	889.4	877.4	879.4	886.4
57.5°	840.7	827.8	815.9	815.9	826.8
60°	774.2	763.3	750.4	752.4	766.3
62.5°	710.7	696.8	683.9	688.9	700.8
65°	641.2	629.3	614.4	622.4	637.2
67.5°	572.7	559.8	547.9	557.8	564.8
70°	500.3	488.4	479.4	479.4	478.4
72.5°	427.8	416.9	414.9	396.0	384.1
75°	356.3	346.4	340.5	303.7	287.8
77.5°	281.9	278.9	260.1	221.3	216.4
80°	210.4	212.4	178.7	179.7	183.6
82.5°	144.9	141.9	134.0	128.0	126.1
85°	83.4	78.4	78.4	74.4	72.5
87.5°	27.8	30.8	30.8	30.8	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)