

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: P239023

Luminaire Tested: **24ENA-LD2-58-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239023
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-LD2-58-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: 5126.8 lumens
Efficiency: N/A
Efficacy: 109.1 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

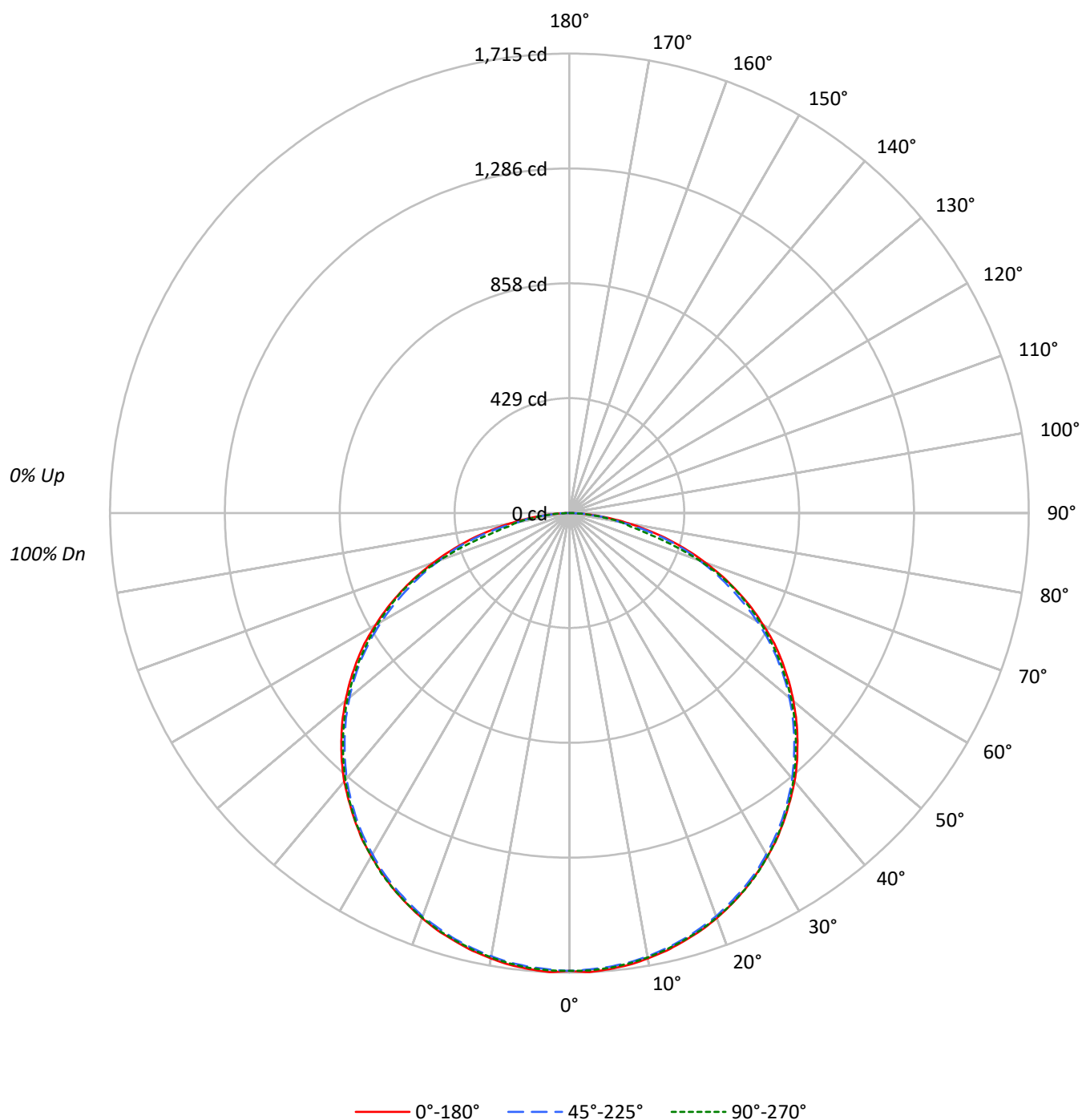
Input Watts (W): 47
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2879	2879	2879
5°	2890	2875	2882
10°	2888	2873	2881
15°	2885	2872	2879
20°	2885	2871	2881
25°	2881	2867	2881
30°	2878	2861	2878
35°	2875	2855	2871
40°	2877	2846	2862
45°	2869	2828	2848
50°	2861	2811	2836
55°	2851	2781	2810
60°	2815	2729	2787
65°	2759	2643	2742
70°	2660	2549	2543
75°	2504	2392	2022
80°	2203	1871	1923
85°	1740	1635	1512



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.8	3.2
10°-20°	465.4	9.1
20°-30°	712.2	13.9
30°-40°	870.5	17.0
40°-50°	919.9	17.9
50°-60°	852.3	16.6
60°-70°	667.7	13.0
70°-80°	377.5	7.4
80°-90°	99.4	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°	1339.4	26.1
0°-40°	2210.0	43.1
0°-60°	3982.2	77.7
0°-90°	5126.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5126.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1709	1709	1709	1709	1709	
5°	1709	1703	1700	1699	1704	162
15°	1654	1648	1646	1645	1651	467
25°	1550	1544	1542	1542	1550	715
35°	1398	1392	1388	1388	1396	875
45°	1204	1196	1187	1187	1196	929
55°	970	960	947	949	957	867
65°	692	679	663	672	688	684
75°	385	374	367	328	311	404
85°	90	85	85	80	78	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1708.6	1708.6	1708.6	1708.6	1708.6
2.5°	1715.0	1707.5	1705.3	1703.2	1708.6
5°	1708.6	1703.2	1700.0	1698.9	1704.3
7.5°	1701.1	1694.6	1692.5	1690.3	1695.7
10°	1688.2	1681.8	1679.6	1678.6	1683.9
12.5°	1673.2	1665.7	1664.6	1663.6	1668.9
15°	1653.9	1647.5	1646.4	1645.4	1650.7
17.5°	1633.6	1627.1	1625.0	1623.9	1631.4
20°	1608.9	1602.5	1601.4	1600.4	1606.8
22.5°	1581.1	1574.7	1572.5	1573.6	1580.0
25°	1550.0	1543.6	1542.5	1542.5	1550.0
27.5°	1515.7	1509.3	1509.3	1509.3	1517.9
30°	1479.3	1474.0	1470.7	1471.8	1479.3
32.5°	1441.8	1433.3	1431.1	1432.2	1439.7
35°	1397.9	1391.5	1388.3	1388.3	1395.8
37.5°	1352.9	1346.5	1342.2	1342.2	1349.7
40°	1307.9	1298.3	1294.0	1291.9	1301.5
42.5°	1257.6	1250.1	1240.4	1240.4	1249.0
45°	1204.0	1195.5	1186.9	1186.9	1195.5
47.5°	1149.4	1140.8	1131.2	1131.2	1139.8
50°	1091.5	1083.0	1072.3	1072.3	1081.9
52.5°	1032.6	1023.0	1011.2	1010.1	1019.8
55°	970.5	959.8	946.9	949.1	956.6
57.5°	907.3	893.4	880.5	880.5	892.3
60°	835.5	823.7	809.8	812.0	827.0
62.5°	767.0	752.0	738.1	743.4	756.3
65°	692.0	679.1	663.1	671.6	687.7
67.5°	618.1	604.2	591.3	602.0	609.5
70°	539.9	527.0	517.4	517.4	516.3
72.5°	461.7	449.9	447.8	427.4	414.6
75°	384.6	373.8	367.4	327.8	310.6
77.5°	304.2	301.0	280.7	238.9	233.5
80°	227.1	229.2	192.8	193.9	198.2
82.5°	156.4	153.2	144.6	138.2	136.0
85°	90.0	84.6	84.6	80.3	78.2
87.5°	30.0	33.2	33.2	33.2	34.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)