

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: P238983

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238983
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-LD2-58-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5258.3 lumens
Efficiency: N/A
Efficacy: 111.9 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

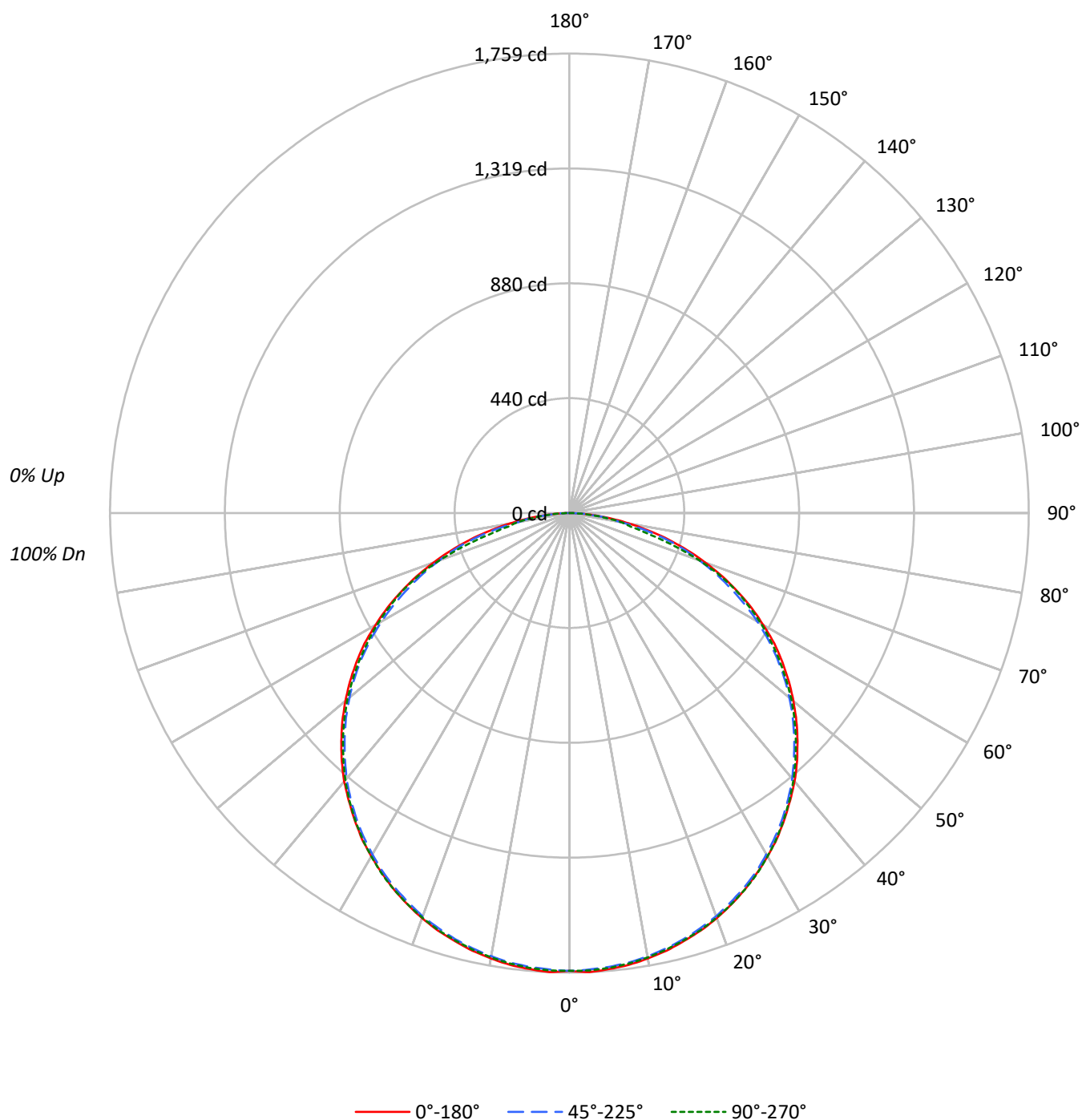
Input Watts (W): 47
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2684	2684	2684
5°	2694	2681	2688
10°	2693	2679	2686
15°	2690	2678	2685
20°	2690	2677	2686
25°	2687	2674	2687
30°	2683	2668	2683
35°	2681	2662	2677
40°	2682	2654	2669
45°	2675	2637	2656
50°	2668	2621	2644
55°	2658	2593	2620
60°	2625	2544	2598
65°	2572	2465	2556
70°	2480	2377	2372
75°	2334	2230	1885
80°	2054	1745	1793
85°	1622	1525	1409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.0	3.2
10°-20°	477.4	9.1
20°-30°	730.5	13.9
30°-40°	892.8	17.0
40°-50°	943.5	17.9
50°-60°	874.2	16.6
60°-70°	684.9	13.0
70°-80°	387.2	7.4
80°-90°	102.0	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°	1373.8	26.1
0°-40°	2266.6	43.1
0°-60°	4084.3	77.7
0°-90°	5258.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5258.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1752	1752	1752	1752	1752	
5°	1752	1747	1744	1742	1748	167
15°	1696	1690	1689	1688	1693	479
25°	1590	1583	1582	1582	1590	733
35°	1434	1427	1424	1424	1432	898
45°	1235	1226	1217	1217	1226	953
55°	995	984	971	973	981	889
65°	710	697	680	689	705	702
75°	394	383	377	336	319	415
85°	92	87	87	82	80	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1752.4	1752.4	1752.4	1752.4	1752.4
2.5°	1759.0	1751.3	1749.1	1746.9	1752.4
5°	1752.4	1746.9	1743.6	1742.5	1748.0
7.5°	1744.7	1738.1	1735.9	1733.7	1739.2
10°	1731.5	1724.9	1722.7	1721.6	1727.1
12.5°	1716.1	1708.4	1707.3	1706.2	1711.7
15°	1696.3	1689.7	1688.6	1687.5	1693.0
17.5°	1675.5	1668.9	1666.7	1665.6	1673.3
20°	1650.2	1643.6	1642.5	1641.4	1648.0
22.5°	1621.6	1615.0	1612.8	1613.9	1620.5
25°	1589.8	1583.2	1582.1	1582.1	1589.8
27.5°	1554.6	1548.0	1548.0	1548.0	1556.8
30°	1517.3	1511.8	1508.5	1509.6	1517.3
32.5°	1478.8	1470.0	1467.8	1468.9	1476.6
35°	1433.8	1427.2	1423.9	1423.9	1431.6
37.5°	1387.6	1381.0	1376.6	1376.6	1384.3
40°	1341.5	1331.6	1327.2	1325.0	1334.9
42.5°	1289.8	1282.1	1272.2	1272.2	1281.0
45°	1234.9	1226.1	1217.3	1217.3	1226.1
47.5°	1178.9	1170.1	1160.2	1160.2	1169.0
50°	1119.5	1110.7	1099.8	1099.8	1109.6
52.5°	1059.1	1049.2	1037.1	1036.0	1045.9
55°	995.4	984.4	971.2	973.4	981.1
57.5°	930.6	916.3	903.1	903.1	915.2
60°	857.0	844.9	830.6	832.8	848.2
62.5°	786.6	771.3	757.0	762.5	775.7
65°	709.7	696.6	680.1	688.9	705.3
67.5°	633.9	619.6	606.5	617.4	625.1
70°	553.7	540.5	530.7	530.7	529.6
72.5°	473.5	461.4	459.2	438.4	425.2
75°	394.4	383.4	376.8	336.2	318.6
77.5°	312.0	308.7	287.8	245.0	239.5
80°	232.9	235.1	197.8	198.9	203.3
82.5°	160.4	157.1	148.3	141.7	139.5
85°	92.3	86.8	86.8	82.4	80.2
87.5°	30.8	34.1	34.1	34.1	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)