

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: P238895

Luminaire Tested: **24EN-LD2-49-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238895
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-LD2-49-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5200.5 lumens
Efficiency: N/A
Efficacy: 123.2 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

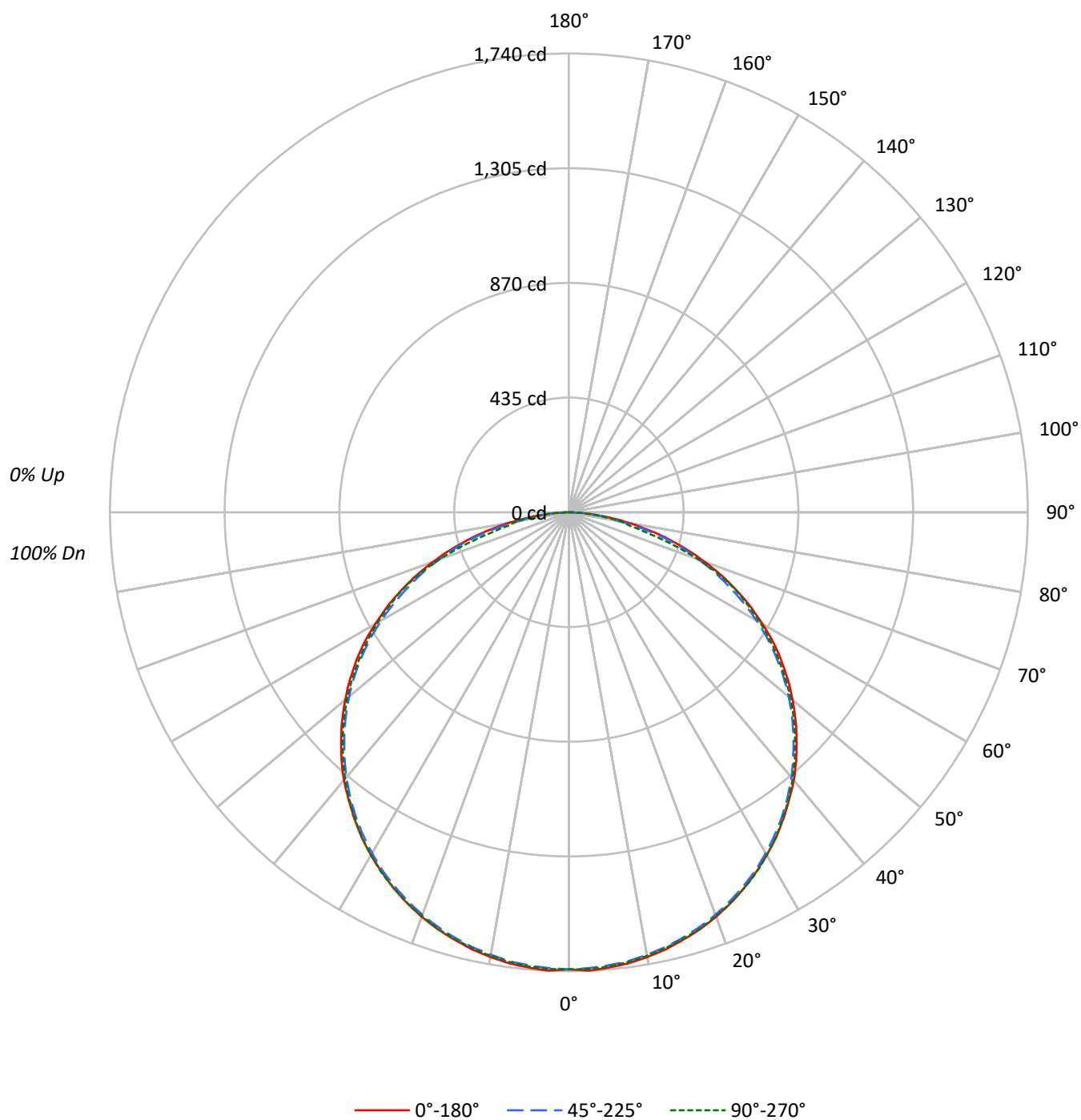
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2654	2654	2654
5°	2665	2651	2658
10°	2663	2650	2657
15°	2660	2648	2655
20°	2660	2648	2657
25°	2657	2644	2657
30°	2654	2639	2654
35°	2651	2633	2647
40°	2653	2624	2640
45°	2645	2608	2627
50°	2638	2592	2615
55°	2629	2565	2591
60°	2596	2516	2569
65°	2544	2438	2528
70°	2452	2350	2345
75°	2309	2206	1865
80°	2032	1725	1773
85°	1604	1508	1394



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	3.2
10°-20°	472.1	9.1
20°-30°	722.4	13.9
30°-40°	883.0	17.0
40°-50°	933.1	17.9
50°-60°	864.5	16.6
60°-70°	677.3	13.0
70°-80°	382.9	7.4
80°-90°	100.8	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°	1358.7	26.1
0°-40°	2241.7	43.1
0°-60°	4039.4	77.7
0°-90°	5200.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5200.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1733	1733	1733	1733	1733	
5°	1733	1728	1724	1723	1729	165
15°	1678	1671	1670	1669	1674	474
25°	1572	1566	1565	1565	1572	725
35°	1418	1412	1408	1408	1416	888
45°	1221	1213	1204	1204	1213	942
55°	984	974	960	963	970	879
65°	702	689	673	681	698	694
75°	390	379	373	332	315	410
85°	91	86	86	82	79	108
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1733.1	1733.1	1733.1	1733.1	1733.1
2.5°	1739.6	1732.0	1729.8	1727.7	1733.1
5°	1733.1	1727.7	1724.4	1723.3	1728.8
7.5°	1725.5	1719.0	1716.8	1714.6	1720.1
10°	1712.5	1705.9	1703.8	1702.7	1708.1
12.5°	1697.2	1689.6	1688.6	1687.5	1692.9
15°	1677.7	1671.2	1670.1	1669.0	1674.4
17.5°	1657.0	1650.5	1648.3	1647.3	1654.9
20°	1632.1	1625.5	1624.4	1623.4	1629.9
22.5°	1603.8	1597.3	1595.1	1596.2	1602.7
25°	1572.3	1565.8	1564.7	1564.7	1572.3
27.5°	1537.5	1531.0	1531.0	1531.0	1539.7
30°	1500.6	1495.1	1491.9	1493.0	1500.6
32.5°	1462.5	1453.9	1451.7	1452.8	1460.4
35°	1418.0	1411.5	1408.2	1408.2	1415.8
37.5°	1372.4	1365.8	1361.5	1361.5	1369.1
40°	1326.7	1316.9	1312.6	1310.4	1320.2
42.5°	1275.7	1268.0	1258.3	1258.3	1267.0
45°	1221.3	1212.6	1203.9	1203.9	1212.6
47.5°	1165.9	1157.2	1147.4	1147.4	1156.1
50°	1107.2	1098.5	1087.7	1087.7	1097.5
52.5°	1047.5	1037.7	1025.7	1024.6	1034.4
55°	984.4	973.6	960.5	962.7	970.3
57.5°	920.3	906.2	893.2	893.2	905.1
60°	847.5	835.6	821.5	823.6	838.8
62.5°	778.0	762.8	748.7	754.1	767.1
65°	701.9	688.9	672.6	681.3	697.6
67.5°	627.0	612.8	599.8	610.7	618.3
70°	547.6	534.6	524.8	524.8	523.7
72.5°	468.3	456.4	454.2	433.5	420.5
75°	390.1	379.2	372.7	332.5	315.1
77.5°	308.6	305.3	284.7	242.3	236.9
80°	230.4	232.5	195.6	196.7	201.0
82.5°	158.6	155.4	146.7	140.2	138.0
85°	91.3	85.8	85.8	81.5	79.3
87.5°	30.4	33.7	33.7	33.7	34.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)