

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: P238979

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238979
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-LD2-54-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: 4872.4 lumens
Efficiency: N/A
Efficacy: 113.3 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

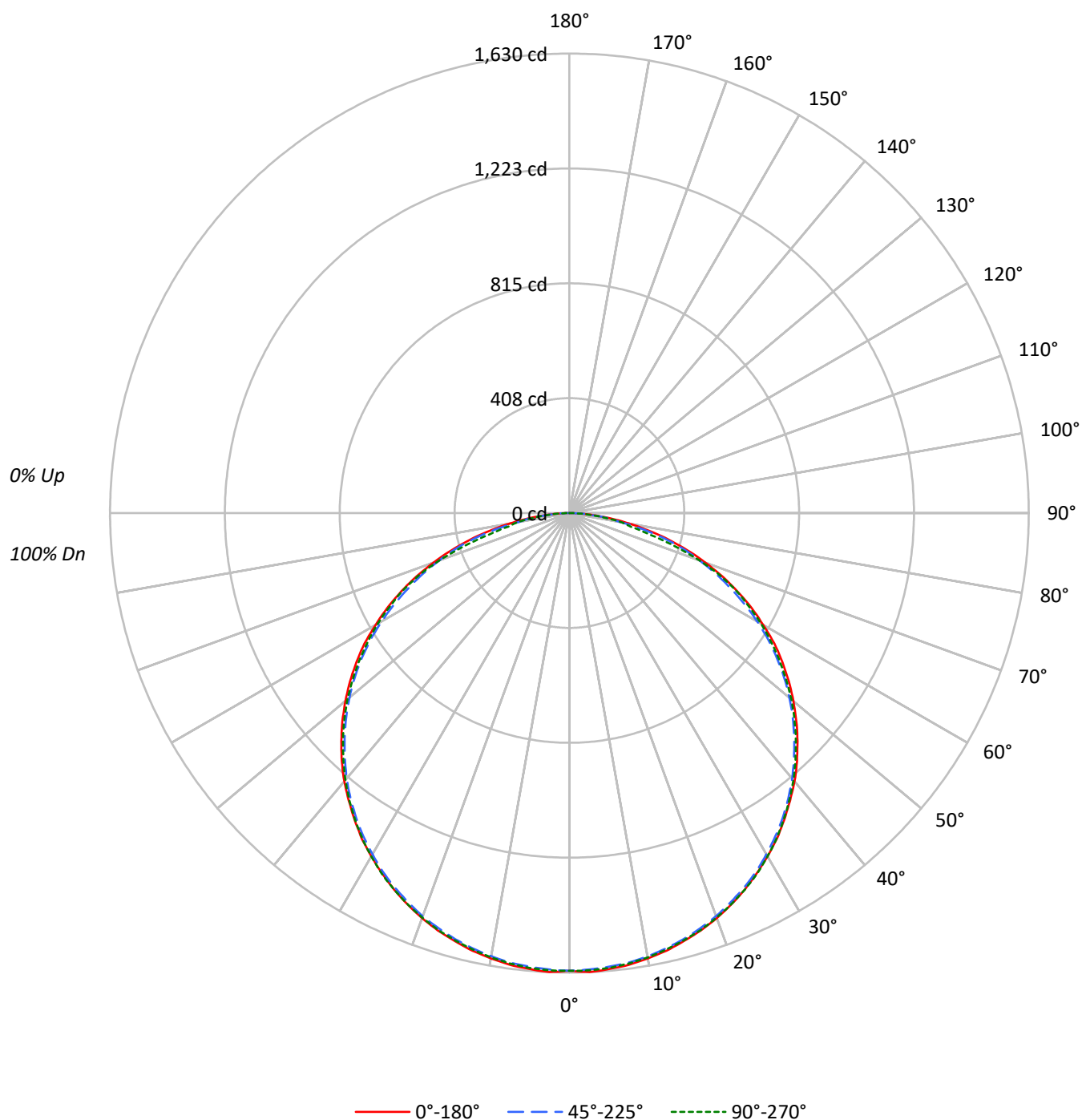
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	2487	2487	2487
5°	2497	2484	2490
10°	2495	2483	2489
15°	2492	2481	2488
20°	2492	2481	2489
25°	2489	2477	2489
30°	2486	2472	2486
35°	2484	2467	2480
40°	2485	2459	2473
45°	2479	2443	2461
50°	2472	2428	2450
55°	2463	2403	2428
60°	2433	2357	2407
65°	2384	2284	2369
70°	2298	2202	2197
75°	2163	2066	1747
80°	1903	1616	1661
85°	1503	1413	1306



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	3.2
10°-20°	442.3	9.1
20°-30°	676.8	13.9
30°-40°	827.3	17.0
40°-50°	874.2	17.9
50°-60°	810.0	16.6
60°-70°	634.6	13.0
70°-80°	358.8	7.4
80°-90°	94.5	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°	1273.0	26.1
0°-40°	2100.3	43.1
0°-60°	3784.5	77.7
0°-90°	4872.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4872.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1624	1624	1624	1624	1624	
5°	1624	1619	1616	1615	1620	154
15°	1572	1566	1565	1564	1569	444
25°	1473	1467	1466	1466	1473	679
35°	1328	1322	1319	1319	1326	832
45°	1144	1136	1128	1128	1136	883
55°	922	912	900	902	909	824
65°	658	645	630	638	654	650
75°	366	355	349	312	295	384
85°	86	80	80	76	74	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1623.8	1623.8	1623.8	1623.8	1623.8
2.5°	1629.9	1622.8	1620.7	1618.7	1623.8
5°	1623.8	1618.7	1615.6	1614.6	1619.7
7.5°	1616.6	1610.5	1608.5	1606.5	1611.6
10°	1604.4	1598.3	1596.3	1595.3	1600.4
12.5°	1590.2	1583.0	1582.0	1581.0	1586.1
15°	1571.8	1565.7	1564.7	1563.7	1568.8
17.5°	1552.5	1546.4	1544.4	1543.3	1550.5
20°	1529.1	1523.0	1522.0	1520.9	1527.1
22.5°	1502.6	1496.5	1494.5	1495.5	1501.6
25°	1473.1	1467.0	1466.0	1466.0	1473.1
27.5°	1440.5	1434.4	1434.4	1434.4	1442.6
30°	1405.9	1400.8	1397.8	1398.8	1405.9
32.5°	1370.3	1362.1	1360.1	1361.1	1368.2
35°	1328.5	1322.4	1319.4	1319.4	1326.5
37.5°	1285.8	1279.7	1275.6	1275.6	1282.7
40°	1243.0	1233.9	1229.8	1227.8	1236.9
42.5°	1195.2	1188.0	1178.9	1178.9	1187.0
45°	1144.3	1136.1	1128.0	1128.0	1136.1
47.5°	1092.4	1084.2	1075.0	1075.0	1083.2
50°	1037.4	1029.2	1019.1	1019.1	1028.2
52.5°	981.4	972.2	961.0	960.0	969.2
55°	922.3	912.2	899.9	902.0	909.1
57.5°	862.3	849.0	836.8	836.8	848.0
60°	794.1	782.9	769.6	771.7	785.9
62.5°	728.9	714.7	701.4	706.5	718.7
65°	657.7	645.4	630.2	638.3	653.6
67.5°	587.4	574.2	562.0	572.1	579.3
70°	513.1	500.9	491.7	491.7	490.7
72.5°	438.8	427.6	425.5	406.2	394.0
75°	365.5	355.3	349.2	311.5	295.2
77.5°	289.1	286.1	266.7	227.0	221.9
80°	215.8	217.9	183.2	184.3	188.3
82.5°	148.6	145.6	137.4	131.3	129.3
85°	85.5	80.4	80.4	76.4	74.3
87.5°	28.5	31.6	31.6	31.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)