

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: P238893

Luminaire Tested: **24EN-LD2-49-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238893
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-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4946.1 lumens
Efficiency: N/A
Efficacy: 117.2 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

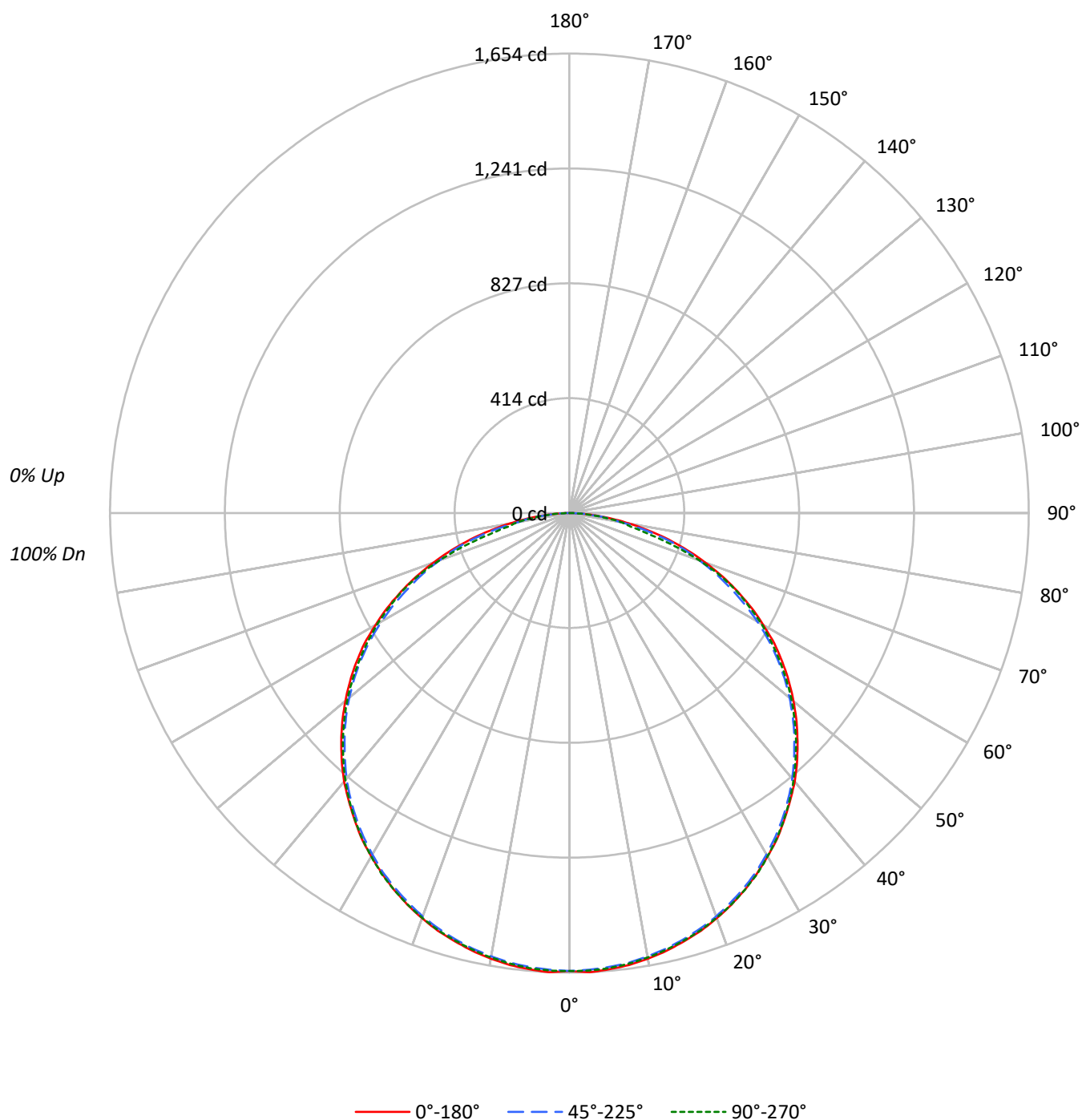
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2525	2525	2525
5°	2534	2522	2528
10°	2533	2520	2527
15°	2530	2519	2525
20°	2530	2518	2527
25°	2527	2515	2527
30°	2524	2509	2524
35°	2522	2504	2518
40°	2523	2496	2510
45°	2516	2480	2498
50°	2509	2465	2487
55°	2500	2440	2464
60°	2469	2393	2444
65°	2419	2318	2405
70°	2332	2235	2231
75°	2195	2098	1774
80°	1933	1641	1686
85°	1525	1434	1325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	3.2
10°-20°	449.0	9.1
20°-30°	687.1	13.9
30°-40°	839.8	17.0
40°-50°	887.5	17.9
50°-60°	822.3	16.6
60°-70°	644.2	13.0
70°-80°	364.2	7.4
80°-90°	95.9	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°	1292.2	26.1
0°-40°	2132.0	43.1
0°-60°	3841.8	77.7
0°-90°	4946.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4946.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1648	1648	1648	1648	1648	
5°	1648	1643	1640	1639	1644	157
15°	1596	1589	1588	1587	1592	451
25°	1495	1489	1488	1488	1495	689
35°	1349	1342	1339	1339	1347	844
45°	1162	1153	1145	1145	1153	896
55°	936	926	914	916	923	836
65°	668	655	640	648	664	660
75°	371	361	354	316	300	390
85°	87	82	82	78	75	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1648.3	1648.3	1648.3	1648.3	1648.3
2.5°	1654.5	1647.3	1645.2	1643.2	1648.3
5°	1648.3	1643.2	1640.1	1639.0	1644.2
7.5°	1641.1	1634.9	1632.8	1630.8	1635.9
10°	1628.7	1622.5	1620.4	1619.4	1624.5
12.5°	1614.2	1607.0	1605.9	1604.9	1610.1
15°	1595.6	1589.4	1588.4	1587.3	1592.5
17.5°	1576.0	1569.8	1567.7	1566.7	1573.9
20°	1552.2	1546.0	1545.0	1543.9	1550.1
22.5°	1525.3	1519.1	1517.1	1518.1	1524.3
25°	1495.4	1489.2	1488.1	1488.1	1495.4
27.5°	1462.3	1456.1	1456.1	1456.1	1464.4
30°	1427.2	1422.0	1418.9	1419.9	1427.2
32.5°	1391.0	1382.7	1380.7	1381.7	1388.9
35°	1348.6	1342.4	1339.3	1339.3	1346.6
37.5°	1305.2	1299.0	1294.9	1294.9	1302.1
40°	1261.8	1252.5	1248.4	1246.3	1255.6
42.5°	1213.2	1206.0	1196.7	1196.7	1205.0
45°	1161.6	1153.3	1145.0	1145.0	1153.3
47.5°	1108.9	1100.6	1091.3	1091.3	1099.6
50°	1053.1	1044.8	1034.5	1034.5	1043.8
52.5°	996.2	986.9	975.6	974.5	983.8
55°	936.3	926.0	913.6	915.6	922.9
57.5°	875.3	861.9	849.5	849.5	860.8
60°	806.1	794.7	781.3	783.3	797.8
62.5°	739.9	725.5	712.0	717.2	729.6
65°	667.6	655.2	639.7	648.0	663.5
67.5°	596.3	582.9	570.5	580.8	588.0
70°	520.8	508.4	499.1	499.1	498.1
72.5°	445.4	434.0	432.0	412.3	399.9
75°	371.0	360.7	354.5	316.2	299.7
77.5°	293.5	290.4	270.8	230.5	225.3
80°	219.1	221.2	186.0	187.1	191.2
82.5°	150.9	147.8	139.5	133.3	131.2
85°	86.8	81.6	81.6	77.5	75.4
87.5°	28.9	32.0	32.0	32.0	33.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)