

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: P238937

Luminaire Tested: **24ENA-LD2-54-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238937
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-LD2-54-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5116.8 lumens
Efficiency: N/A
Efficacy: 119.0 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

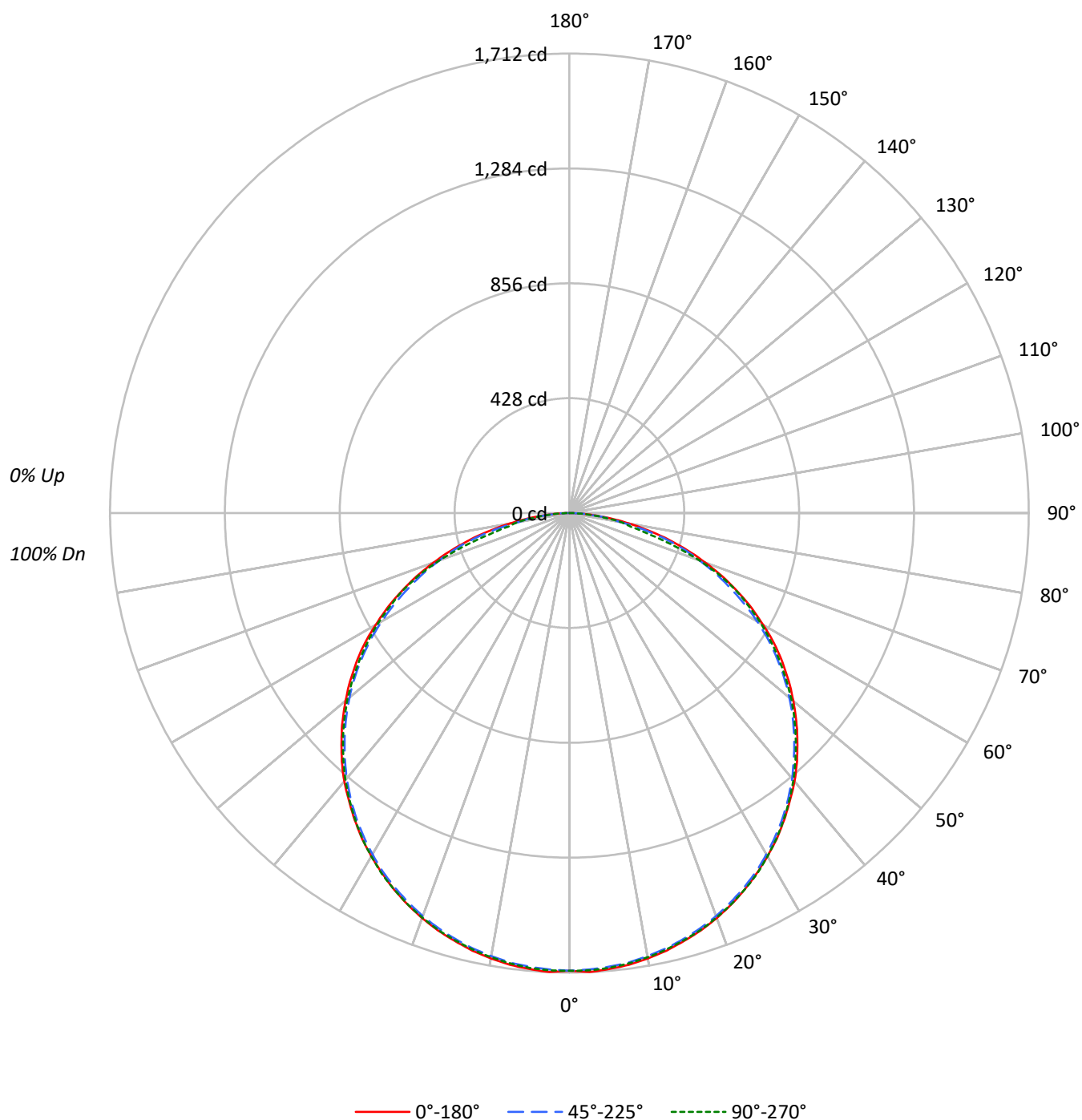
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2873	2873	2873
5°	2884	2869	2877
10°	2882	2868	2875
15°	2879	2866	2874
20°	2879	2866	2875
25°	2876	2862	2876
30°	2872	2856	2872
35°	2870	2850	2865
40°	2871	2840	2857
45°	2863	2822	2843
50°	2855	2805	2830
55°	2845	2776	2804
60°	2810	2723	2781
65°	2753	2638	2736
70°	2654	2544	2538
75°	2498	2387	2018
80°	2199	1867	1919
85°	1736	1633	1508



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.5	3.2
10°-20°	464.5	9.1
20°-30°	710.8	13.9
30°-40°	868.8	17.0
40°-50°	918.1	17.9
50°-60°	850.6	16.6
60°-70°	666.4	13.0
70°-80°	376.8	7.4
80°-90°	99.2	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°	1336.8	26.1
0°-40°	2205.7	43.1
0°-60°	3974.4	77.7
0°-90°	5116.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5116.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1705	1700	1697	1696	1701	162
15°	1651	1644	1643	1642	1648	466
25°	1547	1541	1540	1540	1547	713
35°	1395	1389	1386	1386	1393	873
45°	1202	1193	1185	1185	1193	927
55°	969	958	945	947	955	865
65°	691	678	662	670	686	683
75°	384	373	367	327	310	404
85°	90	84	84	80	78	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.2	1705.2	1705.2	1705.2	1705.2
2.5°	1711.6	1704.2	1702.0	1699.9	1705.2
5°	1705.2	1699.9	1696.7	1695.6	1700.9
7.5°	1697.7	1691.3	1689.2	1687.0	1692.4
10°	1684.9	1678.5	1676.4	1675.3	1680.6
12.5°	1669.9	1662.5	1661.4	1660.3	1665.7
15°	1650.7	1644.3	1643.2	1642.1	1647.5
17.5°	1630.4	1624.0	1621.8	1620.8	1628.2
20°	1605.8	1599.4	1598.3	1597.2	1603.7
22.5°	1578.0	1571.6	1569.4	1570.5	1576.9
25°	1547.0	1540.6	1539.5	1539.5	1547.0
27.5°	1512.8	1506.4	1506.4	1506.4	1514.9
30°	1476.4	1471.1	1467.9	1468.9	1476.4
32.5°	1439.0	1430.5	1428.3	1429.4	1436.9
35°	1395.2	1388.8	1385.6	1385.6	1393.0
37.5°	1350.3	1343.9	1339.6	1339.6	1347.1
40°	1305.4	1295.8	1291.5	1289.3	1299.0
42.5°	1255.1	1247.6	1238.0	1238.0	1246.6
45°	1201.7	1193.1	1184.6	1184.6	1193.1
47.5°	1147.1	1138.6	1129.0	1129.0	1137.5
50°	1089.4	1080.9	1070.2	1070.2	1079.8
52.5°	1030.6	1021.0	1009.2	1008.2	1017.8
55°	968.6	957.9	945.1	947.2	954.7
57.5°	905.5	891.6	878.8	878.8	890.6
60°	833.9	822.1	808.2	810.4	825.3
62.5°	765.5	750.5	736.6	742.0	754.8
65°	690.6	677.8	661.8	670.3	686.4
67.5°	616.9	603.0	590.1	600.8	608.3
70°	538.8	526.0	516.4	516.4	515.3
72.5°	460.8	449.0	446.9	426.6	413.7
75°	383.8	373.1	366.7	327.1	310.0
77.5°	303.6	300.4	280.1	238.4	233.1
80°	226.6	228.8	192.4	193.5	197.8
82.5°	156.1	152.9	144.3	137.9	135.8
85°	89.8	84.5	84.5	80.2	78.0
87.5°	29.9	33.1	33.1	33.1	34.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)