

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: P238970

Luminaire Tested: **24EN-LD2-45-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238970
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-LD2-45-UNV-L935-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4008.5 lumens
Efficiency: N/A
Efficacy: 105.5 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

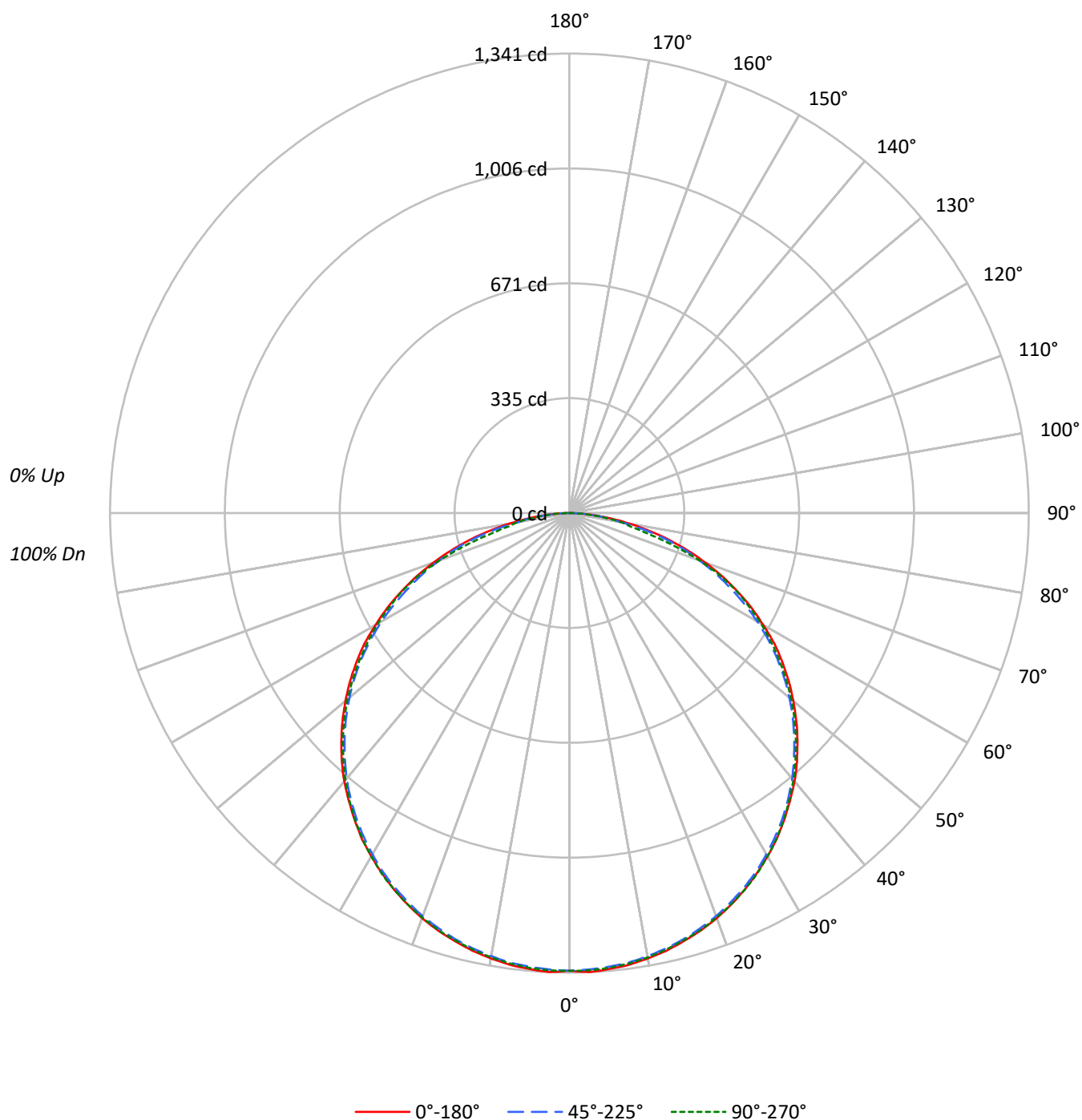
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	90	88		90	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	70	61	54	79	68	60	53		66	58	53		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	36	31		43	36	31		41	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	25		37	30	25		36	30	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2046	2046	2046
5°	2054	2044	2049
10°	2053	2042	2048
15°	2050	2041	2046
20°	2050	2041	2048
25°	2048	2038	2048
30°	2046	2034	2046
35°	2044	2029	2040
40°	2045	2023	2035
45°	2039	2010	2025
50°	2033	1998	2016
55°	2026	1977	1997
60°	2001	1940	1981
65°	1961	1879	1949
70°	1890	1811	1808
75°	1779	1700	1437
80°	1566	1330	1366
85°	1237	1163	1074



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.5	3.2
10°-20°	363.9	9.1
20°-30°	556.8	13.9
30°-40°	680.6	17.0
40°-50°	719.2	17.9
50°-60°	666.4	16.6
60°-70°	522.1	13.0
70°-80°	295.2	7.4
80°-90°	77.7	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°	1047.3	26.1
0°-40°	1727.9	43.1
0°-60°	3113.5	77.7
0°-90°	4008.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4008.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1336	1336	1336	1336	1336	
5°	1336	1332	1329	1328	1332	127
15°	1293	1288	1287	1286	1291	365
25°	1212	1207	1206	1206	1212	559
35°	1093	1088	1085	1085	1091	684
45°	941	935	928	928	935	726
55°	759	750	740	742	748	678
65°	541	531	518	525	538	535
75°	301	292	287	256	243	316
85°	70	66	66	63	61	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1335.9	1335.9	1335.9	1335.9	1335.9
2.5°	1340.9	1335.0	1333.3	1331.7	1335.9
5°	1335.9	1331.7	1329.2	1328.3	1332.5
7.5°	1330.0	1325.0	1323.3	1321.6	1325.8
10°	1319.9	1314.9	1313.2	1312.4	1316.6
12.5°	1308.2	1302.4	1301.5	1300.7	1304.9
15°	1293.1	1288.1	1287.3	1286.4	1290.6
17.5°	1277.2	1272.2	1270.5	1269.7	1275.6
20°	1258.0	1252.9	1252.1	1251.3	1256.3
22.5°	1236.2	1231.2	1229.5	1230.3	1235.4
25°	1211.9	1206.9	1206.0	1206.0	1211.9
27.5°	1185.1	1180.1	1180.1	1180.1	1186.8
30°	1156.6	1152.4	1149.9	1150.8	1156.6
32.5°	1127.3	1120.6	1118.9	1119.8	1125.6
35°	1093.0	1088.0	1085.4	1085.4	1091.3
37.5°	1057.8	1052.8	1049.4	1049.4	1055.3
40°	1022.6	1015.1	1011.7	1010.1	1017.6
42.5°	983.3	977.4	969.9	969.9	976.6
45°	941.4	934.7	928.0	928.0	934.7
47.5°	898.7	892.0	884.4	884.4	891.1
50°	853.4	846.7	838.4	838.4	845.9
52.5°	807.4	799.8	790.6	789.8	797.3
55°	758.8	750.4	740.4	742.1	747.9
57.5°	709.4	698.5	688.4	688.4	697.7
60°	653.3	644.1	633.2	634.8	646.6
62.5°	599.7	587.9	577.1	581.2	591.3
65°	541.0	531.0	518.4	525.1	537.7
67.5°	483.3	472.4	462.3	470.7	476.6
70°	422.1	412.1	404.5	404.5	403.7
72.5°	361.0	351.8	350.1	334.2	324.1
75°	300.7	292.3	287.3	256.3	242.9
77.5°	237.9	235.3	219.4	186.8	182.6
80°	177.6	179.2	150.8	151.6	154.9
82.5°	122.3	119.8	113.1	108.0	106.4
85°	70.4	66.2	66.2	62.8	61.1
87.5°	23.5	26.0	26.0	26.0	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)