

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: P238969

Luminaire Tested: **24EN-LD2-45-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238969
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-L930-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3901.4 lumens
Efficiency: N/A
Efficacy: 102.7 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

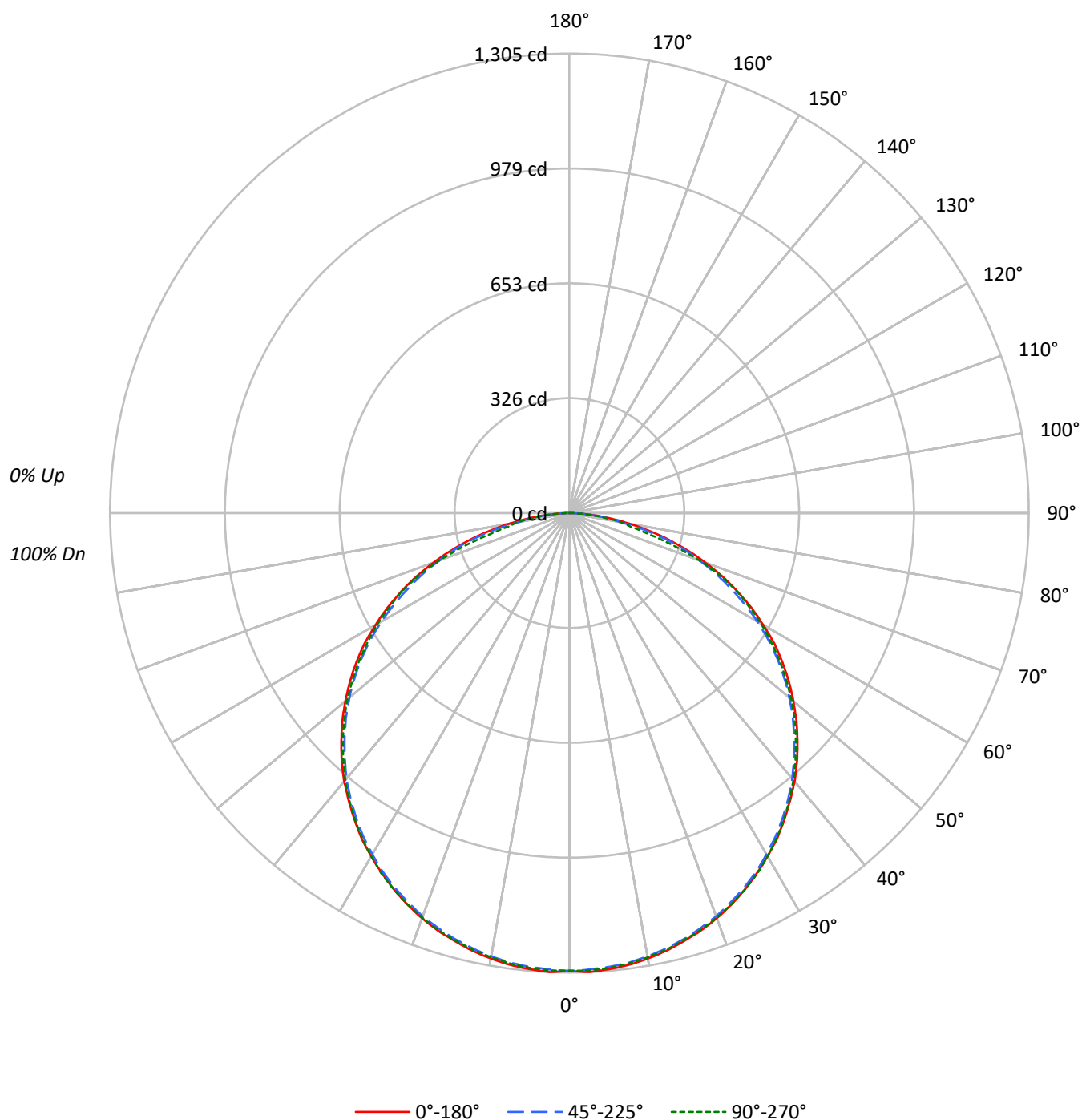
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1991	1991	1991
5°	1999	1989	1994
10°	1998	1988	1993
15°	1996	1987	1992
20°	1996	1986	1993
25°	1993	1984	1993
30°	1991	1979	1991
35°	1989	1975	1986
40°	1990	1969	1980
45°	1985	1956	1970
50°	1979	1944	1962
55°	1972	1924	1944
60°	1948	1888	1928
65°	1908	1829	1897
70°	1840	1763	1759
75°	1732	1655	1399
80°	1524	1294	1330
85°	1204	1132	1046



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	3.2
10°-20°	354.2	9.1
20°-30°	542.0	13.9
30°-40°	662.4	17.0
40°-50°	700.0	17.9
50°-60°	648.6	16.6
60°-70°	508.1	13.0
70°-80°	287.3	7.4
80°-90°	75.6	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°	1019.3	26.1
0°-40°	1681.7	43.1
0°-60°	3030.4	77.7
0°-90°	3901.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3901.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1300	1300	1300	1300	1300	
5°	1300	1296	1294	1293	1297	124
15°	1259	1254	1253	1252	1256	356
25°	1180	1175	1174	1174	1180	544
35°	1064	1059	1056	1056	1062	666
45°	916	910	903	903	910	707
55°	738	730	721	722	728	660
65°	527	517	505	511	523	521
75°	293	284	280	249	236	308
85°	68	64	64	61	60	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1300.2	1300.2	1300.2	1300.2	1300.2
2.5°	1305.1	1299.4	1297.7	1296.1	1300.2
5°	1300.2	1296.1	1293.7	1292.8	1296.9
7.5°	1294.5	1289.6	1288.0	1286.3	1290.4
10°	1284.7	1279.8	1278.2	1277.4	1281.4
12.5°	1273.3	1267.6	1266.8	1265.9	1270.0
15°	1258.6	1253.7	1252.9	1252.1	1256.2
17.5°	1243.1	1238.2	1236.6	1235.8	1241.5
20°	1224.4	1219.5	1218.7	1217.8	1222.7
22.5°	1203.2	1198.3	1196.7	1197.5	1202.4
25°	1179.5	1174.6	1173.8	1173.8	1179.5
27.5°	1153.5	1148.6	1148.6	1148.6	1155.1
30°	1125.7	1121.7	1119.2	1120.0	1125.7
32.5°	1097.2	1090.7	1089.1	1089.9	1095.6
35°	1063.8	1058.9	1056.4	1056.4	1062.2
37.5°	1029.5	1024.7	1021.4	1021.4	1027.1
40°	995.3	988.0	984.7	983.1	990.4
42.5°	957.0	951.3	944.0	944.0	950.5
45°	916.2	909.7	903.2	903.2	909.7
47.5°	874.7	868.1	860.8	860.8	867.3
50°	830.6	824.1	816.0	816.0	823.3
52.5°	785.8	778.5	769.5	768.7	776.0
55°	738.5	730.4	720.6	722.2	727.9
57.5°	690.4	679.8	670.1	670.1	679.0
60°	635.8	626.9	616.3	617.9	629.3
62.5°	583.7	572.2	561.6	565.7	575.5
65°	526.6	516.8	504.6	511.1	523.3
67.5°	470.3	459.7	450.0	458.1	463.8
70°	410.8	401.1	393.7	393.7	392.9
72.5°	351.3	342.4	340.7	325.2	315.5
75°	292.6	284.5	279.6	249.4	236.4
77.5°	231.5	229.1	213.6	181.8	177.7
80°	172.8	174.4	146.7	147.5	150.8
82.5°	119.0	116.6	110.0	105.2	103.5
85°	68.5	64.4	64.4	61.1	59.5
87.5°	22.8	25.3	25.3	25.3	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)