

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: P238977

Luminaire Tested: **24EN-LD2-54-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238977
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-L930-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4534.3 lumens
Efficiency: N/A
Efficacy: 105.4 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

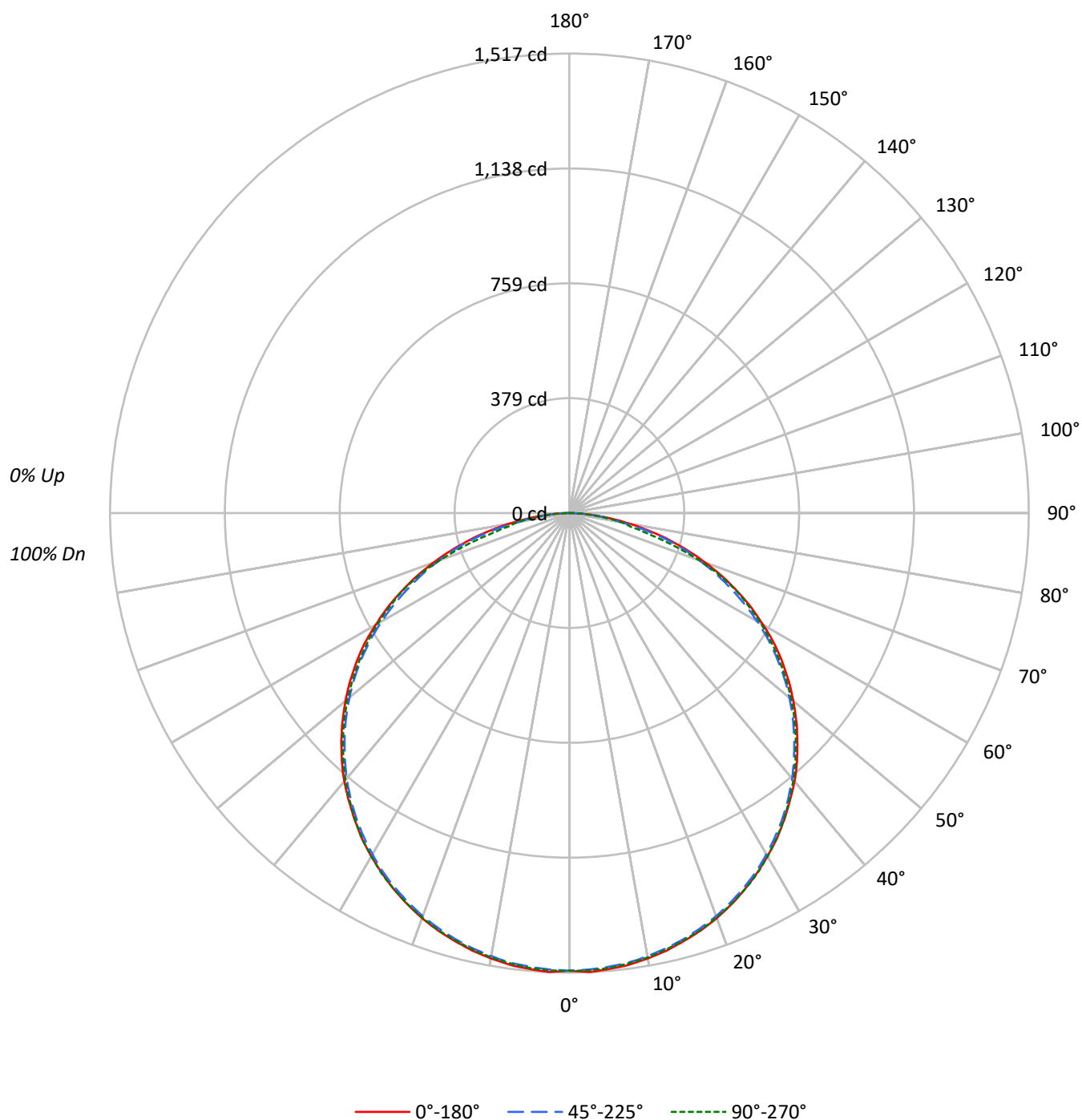
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2314	2314	2314
5°	2323	2312	2317
10°	2322	2310	2316
15°	2319	2309	2315
20°	2319	2308	2316
25°	2317	2305	2317
30°	2314	2301	2314
35°	2312	2296	2308
40°	2313	2288	2302
45°	2307	2274	2290
50°	2300	2260	2280
55°	2292	2236	2259
60°	2264	2194	2240
65°	2218	2125	2204
70°	2138	2049	2045
75°	2013	1923	1626
80°	1771	1504	1546
85°	1399	1314	1216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.1	3.2
10°-20°	411.6	9.1
20°-30°	629.9	13.9
30°-40°	769.9	17.0
40°-50°	813.6	17.9
50°-60°	753.8	16.6
60°-70°	590.6	13.0
70°-80°	333.9	7.4
80°-90°	87.9	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°	1184.6	26.1
0°-40°	1954.5	43.1
0°-60°	3521.9	77.7
0°-90°	4534.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4534.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1511	1511	1511	1511	1511	
5°	1511	1506	1504	1503	1507	144
15°	1463	1457	1456	1455	1460	413
25°	1371	1365	1364	1364	1371	632
35°	1236	1231	1228	1228	1234	774
45°	1065	1057	1050	1050	1057	822
55°	858	849	838	839	846	767
65°	612	601	586	594	608	605
75°	340	331	325	290	275	358
85°	80	75	75	71	69	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1511.1	1511.1	1511.1	1511.1	1511.1
2.5°	1516.8	1510.1	1508.2	1506.3	1511.1
5°	1511.1	1506.3	1503.5	1502.6	1507.3
7.5°	1504.5	1498.8	1496.9	1495.0	1499.7
10°	1493.1	1487.4	1485.5	1484.6	1489.3
12.5°	1479.8	1473.2	1472.2	1471.3	1476.0
15°	1462.8	1457.1	1456.1	1455.2	1459.9
17.5°	1444.8	1439.1	1437.2	1436.2	1442.9
20°	1423.0	1417.3	1416.3	1415.4	1421.1
22.5°	1398.3	1392.7	1390.8	1391.7	1397.4
25°	1370.9	1365.2	1364.2	1364.2	1370.9
27.5°	1340.6	1334.9	1334.9	1334.9	1342.5
30°	1308.3	1303.6	1300.8	1301.7	1308.3
32.5°	1275.2	1267.6	1265.7	1266.7	1273.3
35°	1236.3	1230.7	1227.8	1227.8	1234.4
37.5°	1196.6	1190.9	1187.1	1187.1	1193.7
40°	1156.8	1148.2	1144.4	1142.6	1151.1
42.5°	1112.2	1105.6	1097.1	1097.1	1104.7
45°	1064.9	1057.3	1049.7	1049.7	1057.3
47.5°	1016.5	1009.0	1000.4	1000.4	1008.0
50°	965.4	957.8	948.3	948.3	956.9
52.5°	913.3	904.8	894.3	893.4	901.9
55°	858.3	848.9	837.5	839.4	846.0
57.5°	802.4	790.1	778.8	778.8	789.2
60°	739.0	728.5	716.2	718.1	731.4
62.5°	678.3	665.1	652.8	657.5	668.9
65°	612.0	600.6	586.4	594.0	608.2
67.5°	546.6	534.3	523.0	532.4	539.1
70°	477.5	466.1	457.6	457.6	456.6
72.5°	408.3	397.9	396.0	378.0	366.6
75°	340.1	330.6	325.0	289.9	274.7
77.5°	269.1	266.2	248.2	211.3	206.5
80°	200.8	202.7	170.5	171.5	175.3
82.5°	138.3	135.5	127.9	122.2	120.3
85°	79.6	74.8	74.8	71.1	69.2
87.5°	26.5	29.4	29.4	29.4	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)