

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: P239013

Luminaire Tested: **24ENA-LD2-49-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239013
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-LD2-49-UNV-L930-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4166.5 lumens
Efficiency: N/A
Efficacy: 98.7 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

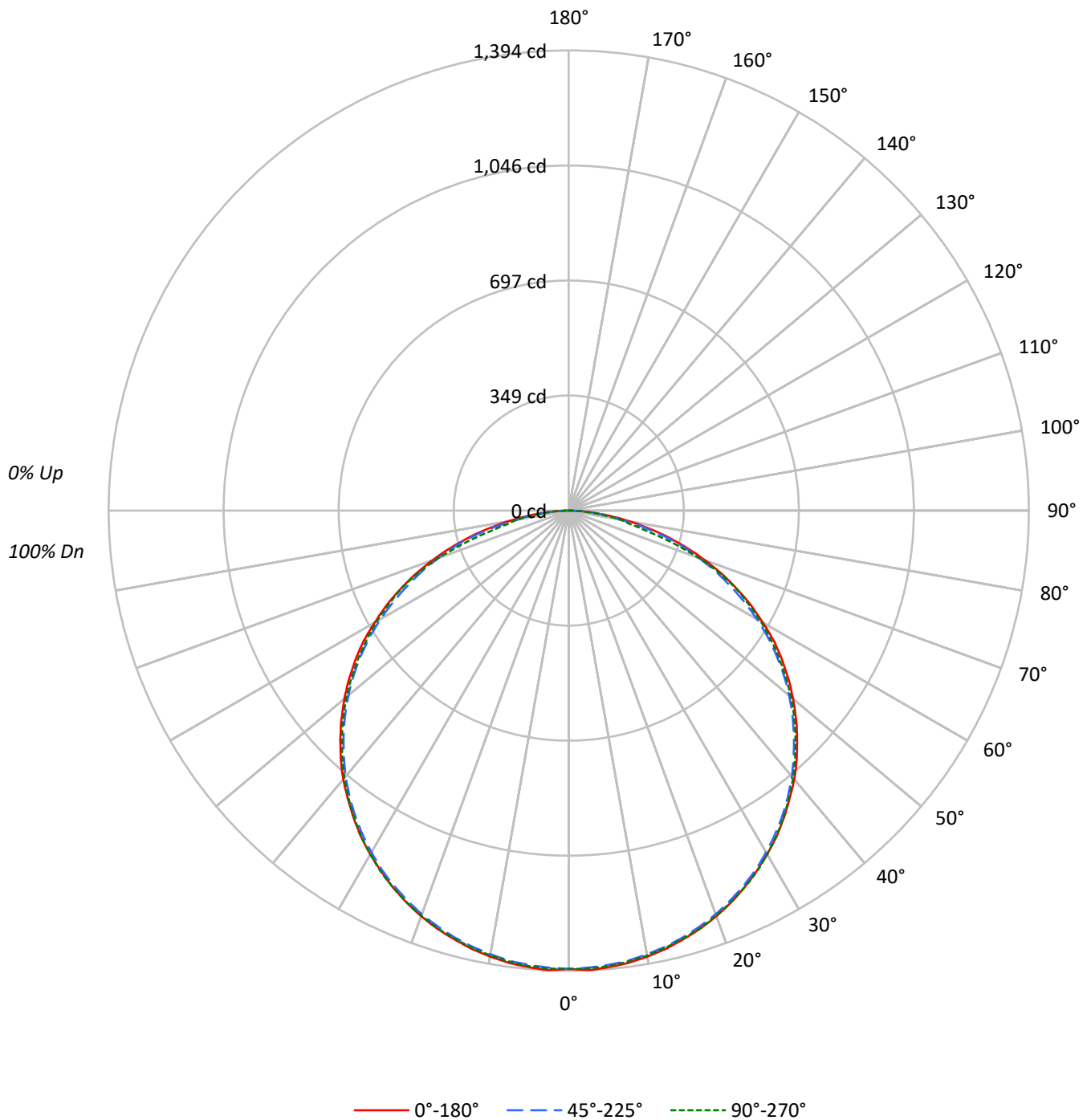
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P239013

CATALOG NUMBER: 24ENA-LD2-49-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P239013

CATALOG NUMBER: 24ENA-LD2-49-UNV-L930-CD1-U

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2339	2339	2339
5°	2348	2337	2343
10°	2347	2335	2341
15°	2344	2334	2340
20°	2344	2333	2341
25°	2342	2330	2342
30°	2339	2325	2339
35°	2337	2320	2333
40°	2338	2313	2326
45°	2331	2298	2315
50°	2325	2284	2305
55°	2317	2261	2283
60°	2288	2218	2265
65°	2242	2148	2228
70°	2162	2071	2067
75°	2034	1944	1644
80°	1791	1520	1563
85°	1413	1330	1229



TEST NUMBER: P239013

CATALOG NUMBER: 24ENA-LD2-49-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	3.2
10°-20°	378.3	9.1
20°-30°	578.8	13.9
30°-40°	707.5	17.0
40°-50°	747.6	17.9
50°-60°	692.7	16.6
60°-70°	542.7	13.0
70°-80°	306.8	7.4
80°-90°	80.8	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°	1088.6	26.1
0°-40°	1796.0	43.1
0°-60°	3236.3	77.7
0°-90°	4166.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4166.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1388	1384	1382	1381	1385	132
15°	1344	1339	1338	1337	1342	380
25°	1260	1254	1254	1254	1260	581
35°	1136	1131	1128	1128	1134	711
45°	978	972	965	965	972	755
55°	789	780	770	771	777	704
65°	562	552	539	546	559	556
75°	312	304	299	266	252	329
85°	73	69	69	65	64	86
90°	0	0	0	0	0	



TEST NUMBER: P239013

CATALOG NUMBER: 24ENA-LD2-49-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1388.5	1388.5	1388.5	1388.5	1388.5
2.5°	1393.8	1387.7	1385.9	1384.2	1388.5
5°	1388.5	1384.2	1381.6	1380.7	1385.1
7.5°	1382.4	1377.2	1375.5	1373.7	1378.1
10°	1372.0	1366.8	1365.0	1364.2	1368.5
12.5°	1359.8	1353.7	1352.9	1352.0	1356.3
15°	1344.1	1338.9	1338.1	1337.2	1341.5
17.5°	1327.6	1322.4	1320.6	1319.8	1325.9
20°	1307.6	1302.4	1301.5	1300.6	1305.8
22.5°	1284.9	1279.7	1278.0	1278.9	1284.1
25°	1259.7	1254.5	1253.6	1253.6	1259.7
27.5°	1231.8	1226.6	1226.6	1226.6	1233.6
30°	1202.2	1197.9	1195.3	1196.1	1202.2
32.5°	1171.8	1164.8	1163.1	1163.9	1170.0
35°	1136.1	1130.9	1128.2	1128.2	1134.3
37.5°	1099.5	1094.3	1090.8	1090.8	1096.9
40°	1063.0	1055.1	1051.6	1049.9	1057.7
42.5°	1022.0	1015.9	1008.1	1008.1	1015.1
45°	978.5	971.5	964.6	964.6	971.5
47.5°	934.1	927.1	919.3	919.3	926.3
50°	887.1	880.1	871.4	871.4	879.3
52.5°	839.2	831.4	821.8	820.9	828.8
55°	788.7	780.0	769.6	771.3	777.4
57.5°	737.4	726.0	715.6	715.6	725.2
60°	679.0	669.5	658.1	659.9	672.1
62.5°	623.3	611.1	599.8	604.2	614.6
65°	562.4	551.9	538.9	545.8	558.9
67.5°	502.3	491.0	480.5	489.3	495.3
70°	438.8	428.3	420.5	420.5	419.6
72.5°	375.2	365.6	363.9	347.4	336.9
75°	312.5	303.8	298.6	266.4	252.5
77.5°	247.2	244.6	228.1	194.1	189.8
80°	184.6	186.3	156.7	157.6	161.1
82.5°	127.1	124.5	117.5	112.3	110.6
85°	73.1	68.8	68.8	65.3	63.6
87.5°	24.4	27.0	27.0	27.0	27.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)