

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: P238929

Luminaire Tested: **24ENA-LD2-45-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238929
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-LD2-45-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4402.6 lumens
Efficiency: N/A
Efficacy: 115.9 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

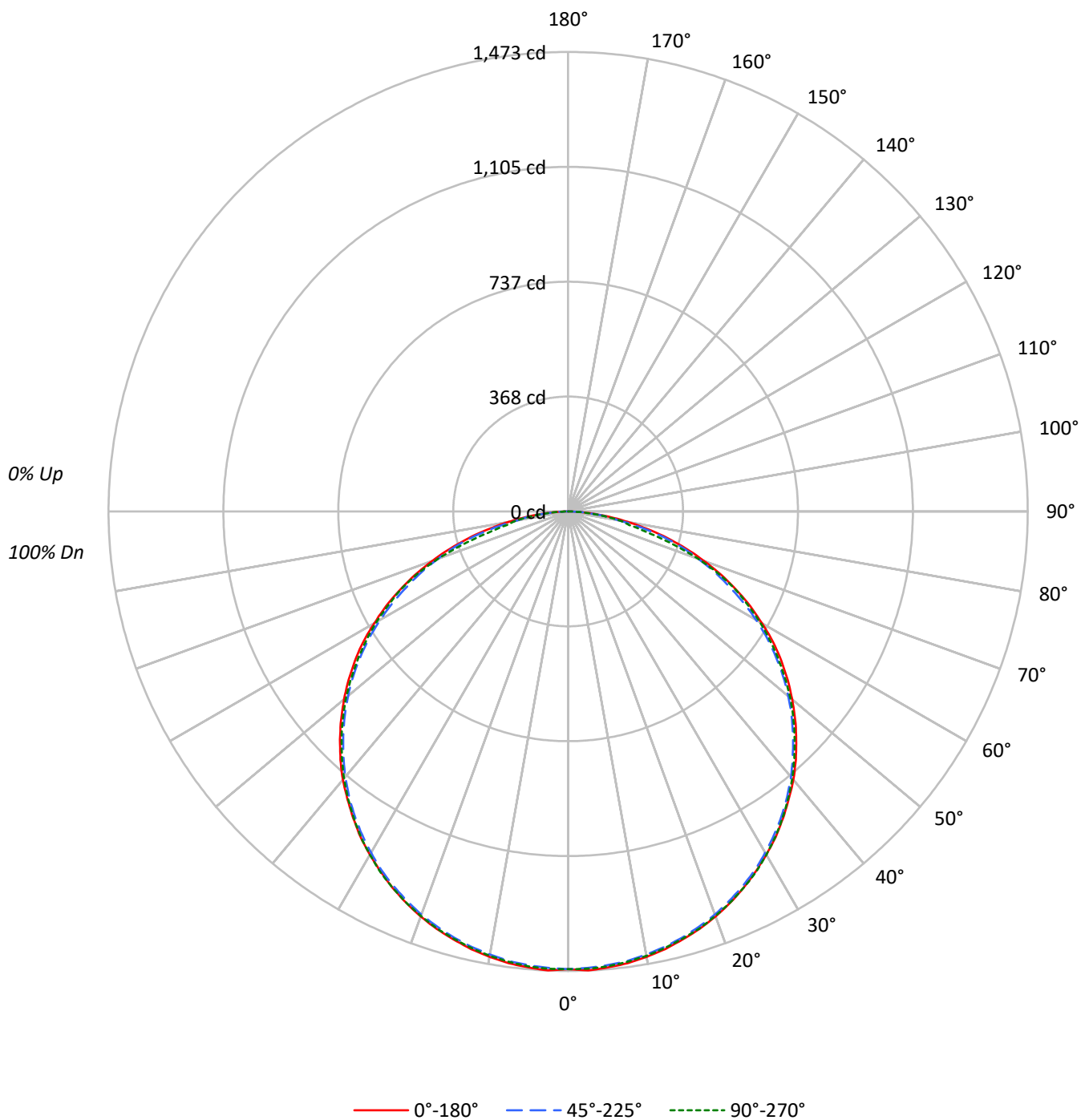
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238929

CATALOG NUMBER: 24ENA-LD2-45-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238929

CATALOG NUMBER: 24ENA-LD2-45-UNV-L830-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°	2472	2472	2472
5°	2481	2469	2475
10°	2480	2468	2474
15°	2477	2466	2472
20°	2477	2466	2474
25°	2474	2462	2474
30°	2471	2457	2471
35°	2469	2452	2465
40°	2470	2444	2458
45°	2464	2428	2446
50°	2457	2413	2435
55°	2448	2389	2413
60°	2418	2343	2393
65°	2369	2270	2354
70°	2284	2189	2184
75°	2149	2054	1737
80°	1892	1607	1651
85°	1494	1405	1299



TEST NUMBER: P238929

CATALOG NUMBER: 24ENA-LD2-45-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	3.2
10°-20°	399.7	9.1
20°-30°	611.6	13.9
30°-40°	747.6	17.0
40°-50°	789.9	17.9
50°-60°	731.9	16.6
60°-70°	573.4	13.0
70°-80°	324.2	7.4
80°-90°	85.4	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°	1150.2	26.1
0°-40°	1897.8	43.1
0°-60°	3419.7	77.7
0°-90°	4402.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4402.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1467	1467	1467	1467	1467	
5°	1467	1463	1460	1459	1464	140
15°	1420	1415	1414	1413	1418	401
25°	1331	1326	1325	1325	1331	614
35°	1200	1195	1192	1192	1199	752
45°	1034	1027	1019	1019	1027	798
55°	833	824	813	815	822	744
65°	594	583	569	577	591	588
75°	330	321	316	282	267	347
85°	77	73	73	69	67	91
90°	0	0	0	0	0	



TEST NUMBER: P238929

CATALOG NUMBER: 24ENA-LD2-45-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1467.2	1467.2	1467.2	1467.2	1467.2
2.5°	1472.7	1466.3	1464.5	1462.6	1467.2
5°	1467.2	1462.6	1459.9	1458.9	1463.5
7.5°	1460.8	1455.3	1453.4	1451.6	1456.2
10°	1449.7	1444.2	1442.4	1441.5	1446.1
12.5°	1436.9	1430.4	1429.5	1428.6	1433.2
15°	1420.3	1414.8	1413.9	1412.9	1417.5
17.5°	1402.8	1397.3	1395.5	1394.5	1401.0
20°	1381.7	1376.1	1375.2	1374.3	1379.8
22.5°	1357.8	1352.2	1350.4	1351.3	1356.8
25°	1331.1	1325.6	1324.6	1324.6	1331.1
27.5°	1301.6	1296.1	1296.1	1296.1	1303.5
30°	1270.4	1265.8	1263.0	1263.9	1270.4
32.5°	1238.2	1230.8	1229.0	1229.9	1236.3
35°	1200.4	1194.9	1192.2	1192.2	1198.6
37.5°	1161.8	1156.3	1152.6	1152.6	1159.1
40°	1123.2	1114.9	1111.2	1109.4	1117.7
42.5°	1079.9	1073.5	1065.2	1065.2	1072.6
45°	1034.0	1026.6	1019.2	1019.2	1026.6
47.5°	987.0	979.7	971.4	971.4	978.8
50°	937.4	930.0	920.8	920.8	929.1
52.5°	886.8	878.5	868.4	867.5	875.7
55°	833.4	824.2	813.2	815.0	821.5
57.5°	779.1	767.2	756.1	756.1	766.3
60°	717.5	707.4	695.4	697.3	710.2
62.5°	658.6	645.8	633.8	638.4	649.4
65°	594.2	583.2	569.4	576.8	590.6
67.5°	530.8	518.8	507.8	517.0	523.4
70°	463.6	452.6	444.3	444.3	443.4
72.5°	396.5	386.4	384.5	367.0	356.0
75°	330.2	321.0	315.5	281.5	266.8
77.5°	261.2	258.5	241.0	205.1	200.5
80°	195.0	196.9	165.6	166.5	170.2
82.5°	134.3	131.5	124.2	118.7	116.8
85°	77.3	72.7	72.7	69.0	67.2
87.5°	25.8	28.5	28.5	28.5	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)