

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: P238801

Luminaire Tested: **22EN-LD2-43-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238801
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22EN-LD2-43-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 2X2 LED TROFFER
STANDARD OPTION
Light Source: (168)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4344.6 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

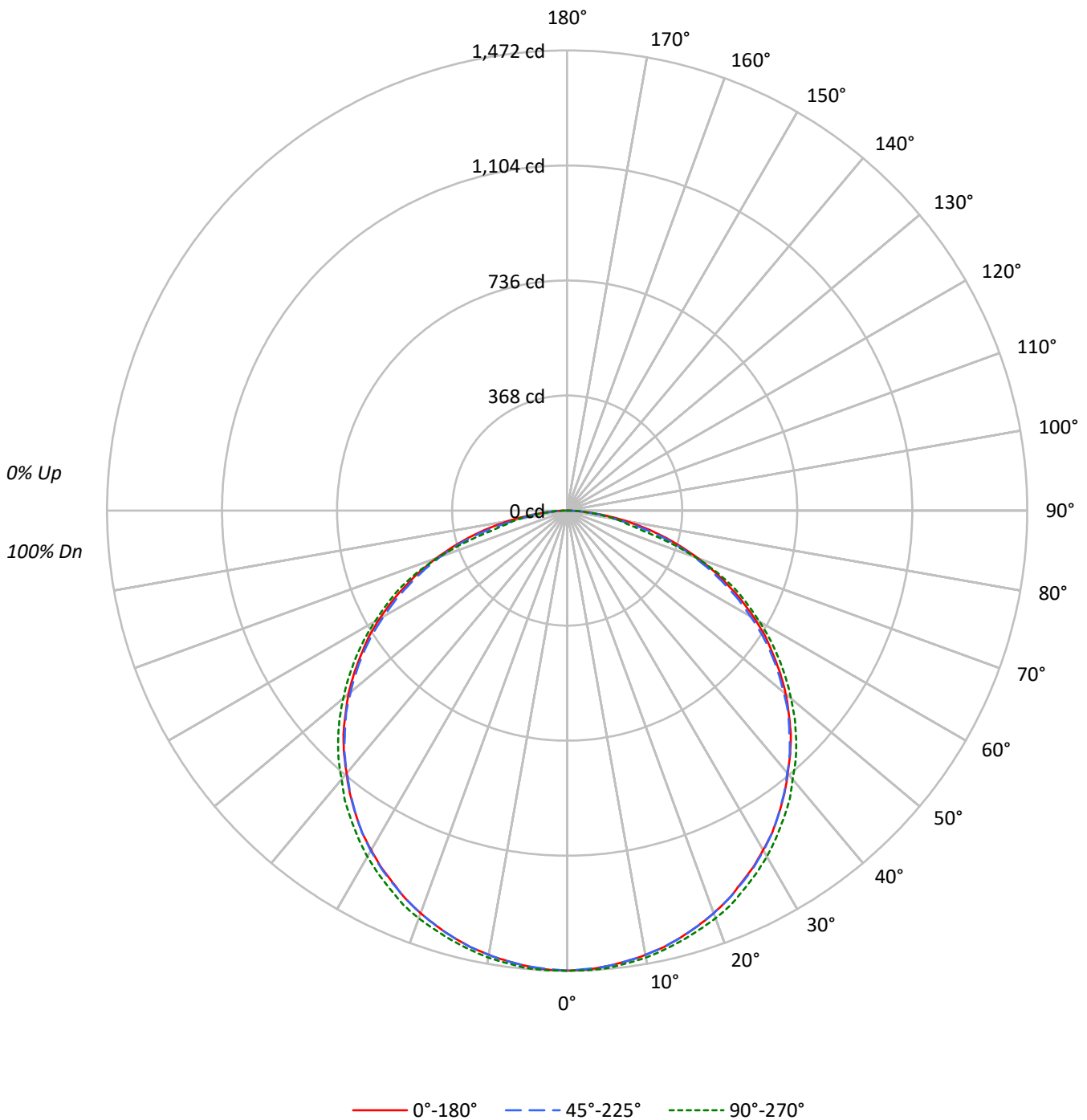
Input Watts (W): 38.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238801

CATALOG NUMBER: 22EN-LD2-43-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238801

CATALOG NUMBER: 22EN-LD2-43-UNV-L830-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	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	102	102	102	100					100			
1	109	104	99	95	106	101	98	94	97	94	91	93	91	88	90	88	86	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37					37			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33					33			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4713	4713	4713
5°	4703	4703	4724
10°	4693	4693	4722
15°	4683	4683	4719
20°	4671	4671	4731
25°	4649	4657	4726
30°	4637	4645	4727
35°	4619	4619	4713
40°	4589	4580	4691
45°	4583	4553	4693
50°	4549	4505	4658
55°	4496	4447	4619
60°	4439	4340	4551
65°	4318	4201	4485
70°	4161	4038	4099
75°	3920	3675	3130
80°	3449	2881	3002
85°	2506	2425	2344



TEST NUMBER: P238801

CATALOG NUMBER: 22EN-LD2-43-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.2	3.2
10°-20°	399.5	9.2
20°-30°	609.9	14.0
30°-40°	742.9	17.1
40°-50°	781.9	18.0
50°-60°	719.9	16.6
60°-70°	560.4	12.9
70°-80°	311.0	7.2
80°-90°	79.9	1.8
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°	1148.6	26.4
0°-40°	1891.5	43.5
0°-60°	3393.3	78.1
0°-90°	4344.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4344.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1463	1463	1463	1467	1470	139
15°	1412	1412	1412	1419	1423	399
25°	1316	1318	1318	1329	1338	607
35°	1181	1181	1181	1195	1206	739
45°	1012	1005	1005	1021	1036	779
55°	805	803	796	810	827	721
65°	570	563	554	572	592	565
75°	317	310	297	264	253	334
85°	68	64	66	64	64	86
90°	0	0	0	0	0	



TEST NUMBER: P238801

CATALOG NUMBER: 22EN-LD2-43-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1471.8	1471.8	1471.8	1471.8	1471.8
2.5°	1469.6	1467.4	1467.4	1471.8	1471.8
5°	1463.0	1463.0	1463.0	1467.4	1469.6
7.5°	1454.2	1454.2	1454.2	1460.8	1460.8
10°	1443.2	1441.0	1443.2	1447.6	1452.0
12.5°	1430.0	1427.8	1430.0	1434.4	1438.8
15°	1412.4	1412.4	1412.4	1419.0	1423.4
17.5°	1392.6	1390.4	1392.6	1399.2	1405.8
20°	1370.6	1370.6	1370.6	1379.4	1388.2
22.5°	1346.4	1344.2	1346.4	1357.4	1366.2
25°	1315.6	1317.8	1317.8	1328.8	1337.6
27.5°	1287.0	1284.8	1289.2	1298.0	1309.0
30°	1254.0	1254.0	1256.2	1267.2	1278.2
32.5°	1221.0	1218.8	1221.0	1232.0	1243.0
35°	1181.4	1181.4	1181.4	1194.6	1205.6
37.5°	1141.8	1139.6	1139.6	1152.8	1168.2
40°	1097.8	1095.6	1095.6	1111.0	1122.0
42.5°	1056.0	1053.8	1053.8	1067.0	1082.4
45°	1012.0	1005.4	1005.4	1020.8	1036.2
47.5°	961.4	957.0	959.2	972.4	987.8
50°	913.0	906.4	904.2	919.6	935.0
52.5°	860.2	858.0	851.4	864.6	882.2
55°	805.2	803.0	796.4	809.6	827.2
57.5°	752.4	745.8	739.2	750.2	770.0
60°	693.0	686.4	677.6	693.0	710.6
62.5°	633.6	624.8	618.2	631.4	651.2
65°	569.8	563.2	554.4	572.0	591.8
67.5°	510.4	503.8	492.8	508.2	521.4
70°	444.4	435.6	431.2	433.4	437.8
72.5°	380.6	376.2	369.6	352.0	347.6
75°	316.8	310.2	297.0	264.0	253.0
77.5°	253.0	248.6	224.4	195.8	195.8
80°	187.0	184.8	156.2	160.6	162.8
82.5°	127.6	123.2	114.4	112.2	112.2
85°	68.2	63.8	66.0	63.8	63.8
87.5°	26.4	26.4	28.6	26.4	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)