

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: P238669

Luminaire Tested: **14ENA-LD2-38-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238669
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-395-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14ENA-LD2-38-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 1X4 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: 3201.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 0.67' x L: 3.83' x H: 0')
CIE Type: Direct

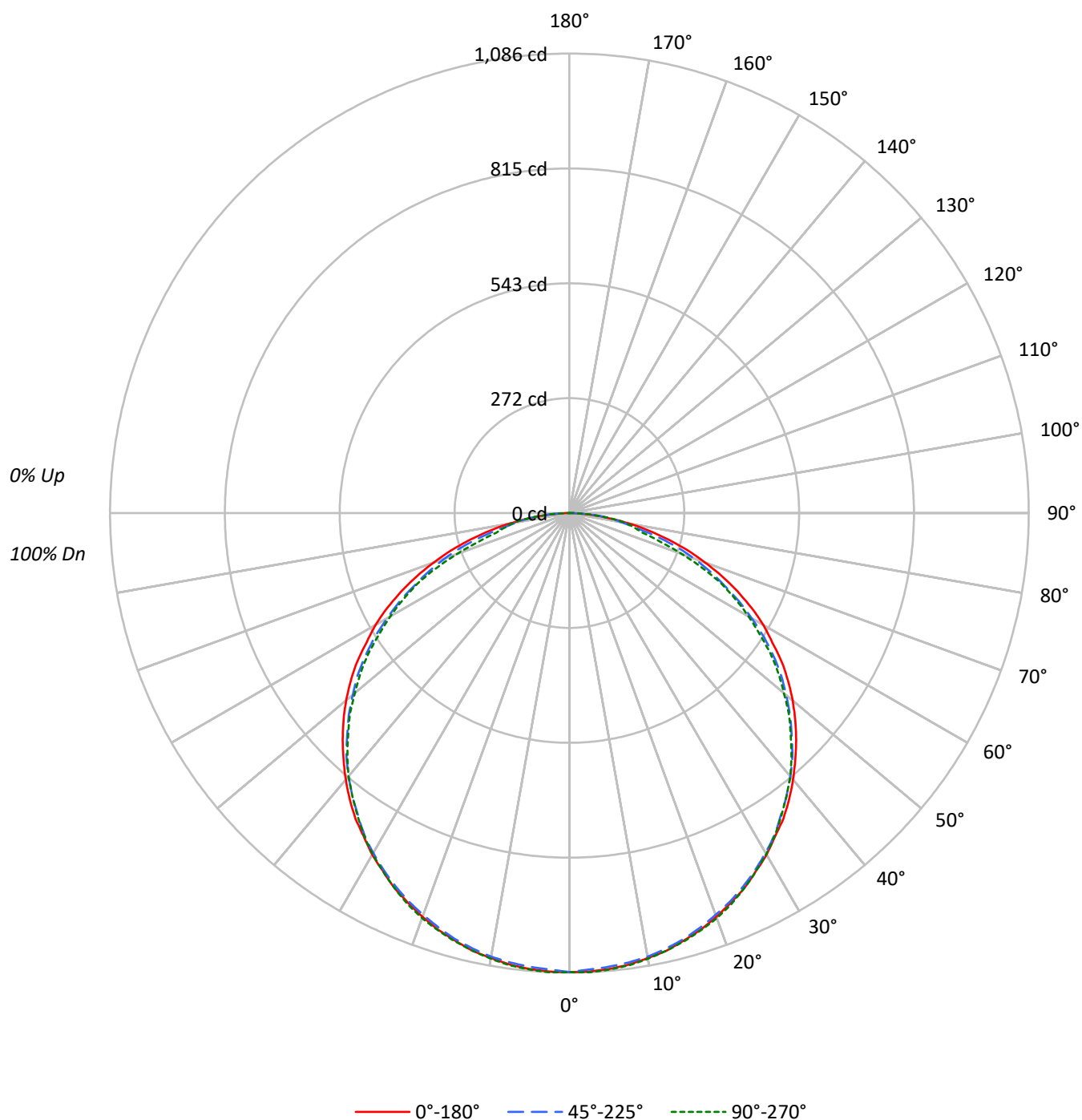
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83		
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58		
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37		
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33		
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29		
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26		
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4569	4569	4569
5°	4572	4551	4579
10°	4567	4553	4575
15°	4561	4546	4568
20°	4551	4529	4567
25°	4546	4522	4546
30°	4535	4510	4527
35°	4534	4482	4490
40°	4522	4467	4467
45°	4516	4426	4406
50°	4513	4380	4336
55°	4499	4325	4263
60°	4462	4192	4120
65°	4368	4014	3964
70°	4190	3856	3480
75°	3938	3470	2920
80°	3490	2996	3284
85°	2697	3107	2943



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.7	3.2
10°-20°	295.1	9.2
20°-30°	449.7	14.0
30°-40°	547.6	17.1
40°-50°	575.8	18.0
50°-60°	528.6	16.5
60°-70°	406.1	12.7
70°-80°	226.6	7.1
80°-90°	68.8	2.1
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°	847.5	26.5
0°-40°	1395.1	43.6
0°-60°	2499.5	78.1
0°-90°	3201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1081	1081	1076	1081	1083	103
15°	1046	1046	1042	1046	1048	295
25°	978	975	973	976	978	451
35°	882	878	872	873	873	551
45°	758	753	743	740	740	585
55°	613	608	589	579	580	546
65°	438	426	403	398	398	433
75°	242	230	213	184	179	256
85°	56	58	64	63	61	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1084.8	1084.8	1084.8	1084.8	1084.8
2.5°	1084.8	1084.8	1079.8	1084.8	1086.5
5°	1081.4	1081.4	1076.4	1081.4	1083.1
7.5°	1076.4	1076.4	1071.3	1074.7	1078.1
10°	1067.9	1067.9	1064.5	1067.9	1069.6
12.5°	1059.4	1057.8	1054.4	1057.8	1059.4
15°	1045.9	1045.9	1042.5	1045.9	1047.6
17.5°	1032.4	1030.7	1027.3	1032.4	1034.1
20°	1015.4	1013.8	1010.4	1015.4	1018.8
22.5°	996.8	995.1	993.4	998.5	1000.2
25°	978.2	974.8	973.1	976.5	978.2
27.5°	954.5	952.8	951.1	952.8	954.5
30°	932.5	929.1	927.4	927.4	930.8
32.5°	905.4	903.7	902.1	903.7	903.7
35°	881.7	878.4	871.6	873.3	873.3
37.5°	853.0	847.9	842.8	842.8	842.8
40°	822.5	819.1	812.4	810.7	812.4
42.5°	790.4	787.0	780.2	775.1	776.8
45°	758.2	753.1	743.0	739.6	739.6
47.5°	724.3	719.3	707.4	702.3	704.0
50°	688.8	682.0	668.5	661.7	661.7
52.5°	651.6	644.8	631.3	622.8	622.8
55°	612.7	607.6	589.0	578.8	580.5
57.5°	568.6	563.6	545.0	533.1	533.1
60°	529.7	519.6	497.6	489.1	489.1
62.5°	485.7	473.9	451.9	441.7	443.4
65°	438.3	426.5	402.8	397.7	397.7
67.5°	390.9	380.8	358.8	350.3	341.9
70°	340.2	330.0	313.1	292.8	282.6
72.5°	292.8	280.9	265.7	235.2	225.1
75°	242.0	230.2	213.2	184.5	179.4
77.5°	192.9	182.8	159.1	152.3	155.7
80°	143.9	140.5	123.5	130.3	135.4
82.5°	96.5	94.8	98.2	101.5	101.5
85°	55.8	57.5	64.3	62.6	60.9
87.5°	23.7	28.8	27.1	27.1	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)