

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: P238757

Luminaire Tested: **14EN-LD2-28-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238757
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: 14EN-LD2-28-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2728.1 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1' x L: 3.83' x H: 0')
CIE Type: Direct

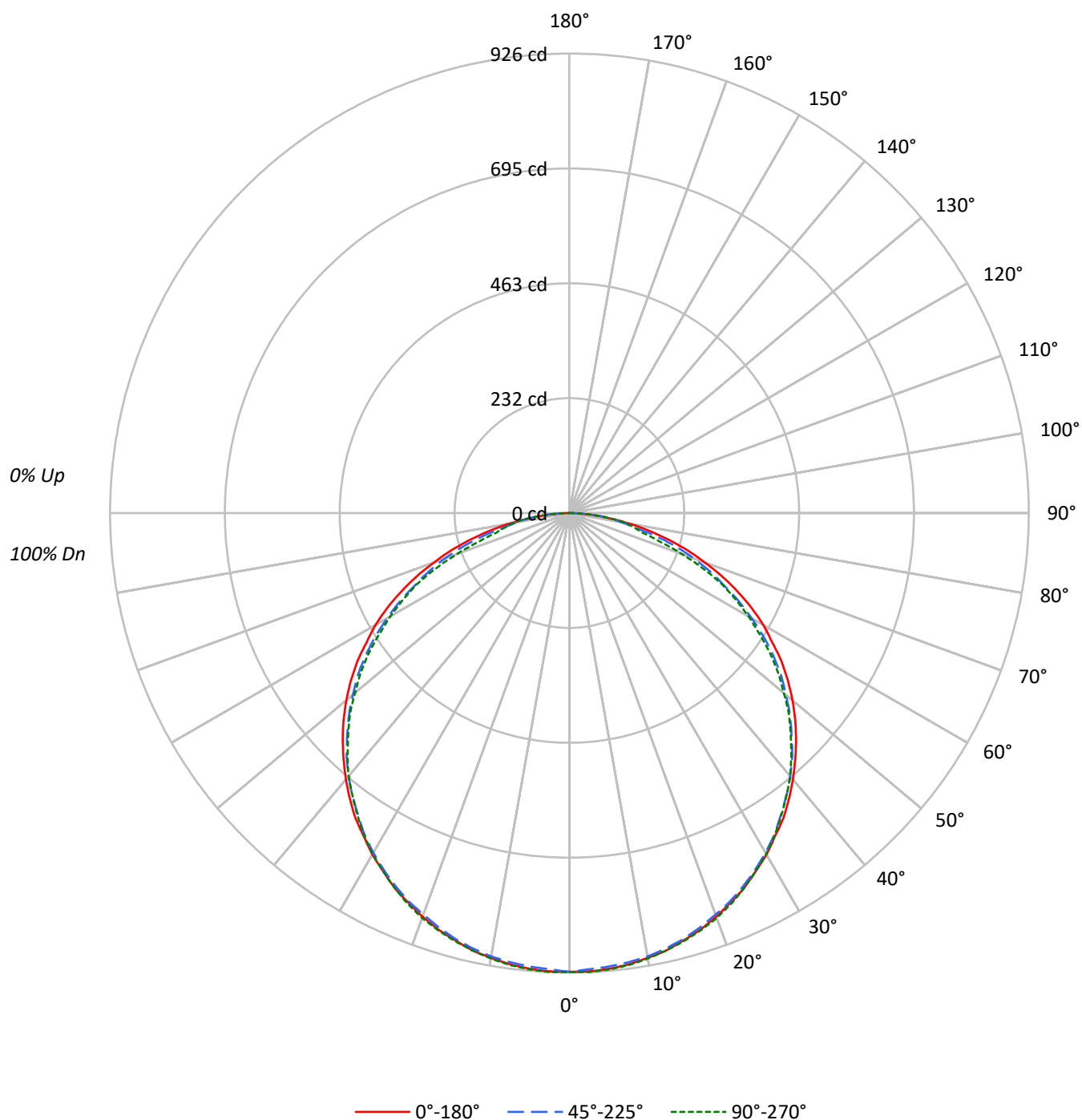
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2596	2596	2596
5°	2598	2586	2602
10°	2595	2587	2599
15°	2591	2583	2595
20°	2586	2573	2595
25°	2583	2570	2583
30°	2577	2563	2572
35°	2576	2546	2551
40°	2570	2538	2538
45°	2566	2514	2503
50°	2564	2489	2464
55°	2556	2457	2422
60°	2536	2382	2341
65°	2482	2281	2252
70°	2380	2190	1978
75°	2238	1971	1659
80°	1983	1703	1866
85°	1534	1766	1672



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.5	3.2
10°-20°	251.5	9.2
20°-30°	383.3	14.0
30°-40°	466.7	17.1
40°-50°	490.7	18.0
50°-60°	450.4	16.5
60°-70°	346.1	12.7
70°-80°	193.2	7.1
80°-90°	58.6	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°	722.3	26.5
0°-40°	1189.0	43.6
0°-60°	2130.2	78.1
0°-90°	2728.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2728.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	922	922	917	922	923	88
15°	891	891	888	891	893	252
25°	834	831	829	832	834	384
35°	752	749	743	744	744	470
45°	646	642	633	630	630	499
55°	522	518	502	493	495	466
65°	374	364	343	339	339	369
75°	206	196	182	157	153	218
85°	48	49	55	53	52	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.5	924.5	924.5	924.5	924.5
2.5°	924.5	924.5	920.2	924.5	926.0
5°	921.7	921.7	917.3	921.7	923.1
7.5°	917.3	917.3	913.0	915.9	918.8
10°	910.1	910.1	907.2	910.1	911.6
12.5°	902.9	901.5	898.6	901.5	902.9
15°	891.4	891.4	888.5	891.4	892.8
17.5°	879.8	878.4	875.5	879.8	881.3
20°	865.4	864.0	861.1	865.4	868.3
22.5°	849.5	848.1	846.7	851.0	852.4
25°	833.7	830.8	829.4	832.2	833.7
27.5°	813.5	812.0	810.6	812.0	813.5
30°	794.7	791.9	790.4	790.4	793.3
32.5°	771.7	770.2	768.8	770.2	770.2
35°	751.5	748.6	742.8	744.3	744.3
37.5°	726.9	722.6	718.3	718.3	718.3
40°	701.0	698.1	692.3	690.9	692.3
42.5°	673.6	670.7	664.9	660.6	662.0
45°	646.2	641.8	633.2	630.3	630.3
47.5°	617.3	613.0	602.9	598.6	600.0
50°	587.0	581.3	569.7	564.0	564.0
52.5°	555.3	549.5	538.0	530.8	530.8
55°	522.1	517.8	501.9	493.3	494.7
57.5°	484.6	480.3	464.4	454.3	454.3
60°	451.5	442.8	424.1	416.8	416.8
62.5°	414.0	403.9	385.1	376.5	377.9
65°	373.6	363.5	343.3	339.0	339.0
67.5°	333.2	324.5	305.8	298.6	291.4
70°	289.9	281.3	266.8	249.5	240.9
72.5°	249.5	239.4	226.4	200.5	191.8
75°	206.3	196.2	181.7	157.2	152.9
77.5°	164.4	155.8	135.6	129.8	132.7
80°	122.6	119.7	105.3	111.1	115.4
82.5°	82.2	80.8	83.7	86.5	86.5
85°	47.6	49.0	54.8	53.4	51.9
87.5°	20.2	24.5	23.1	23.1	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)