

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: P238727

Luminaire Tested: **14ENA-LD2-28-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238727  
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-LD2-28-UNV-L940-CD1-U  
Description: METALUX ENCOUNTER 1X4 LED TROFFER  
AIR-VENTED OPTION  
Light Source: (224)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2178.9 lumens  
Efficiency: N/A  
Efficacy: 92.3 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

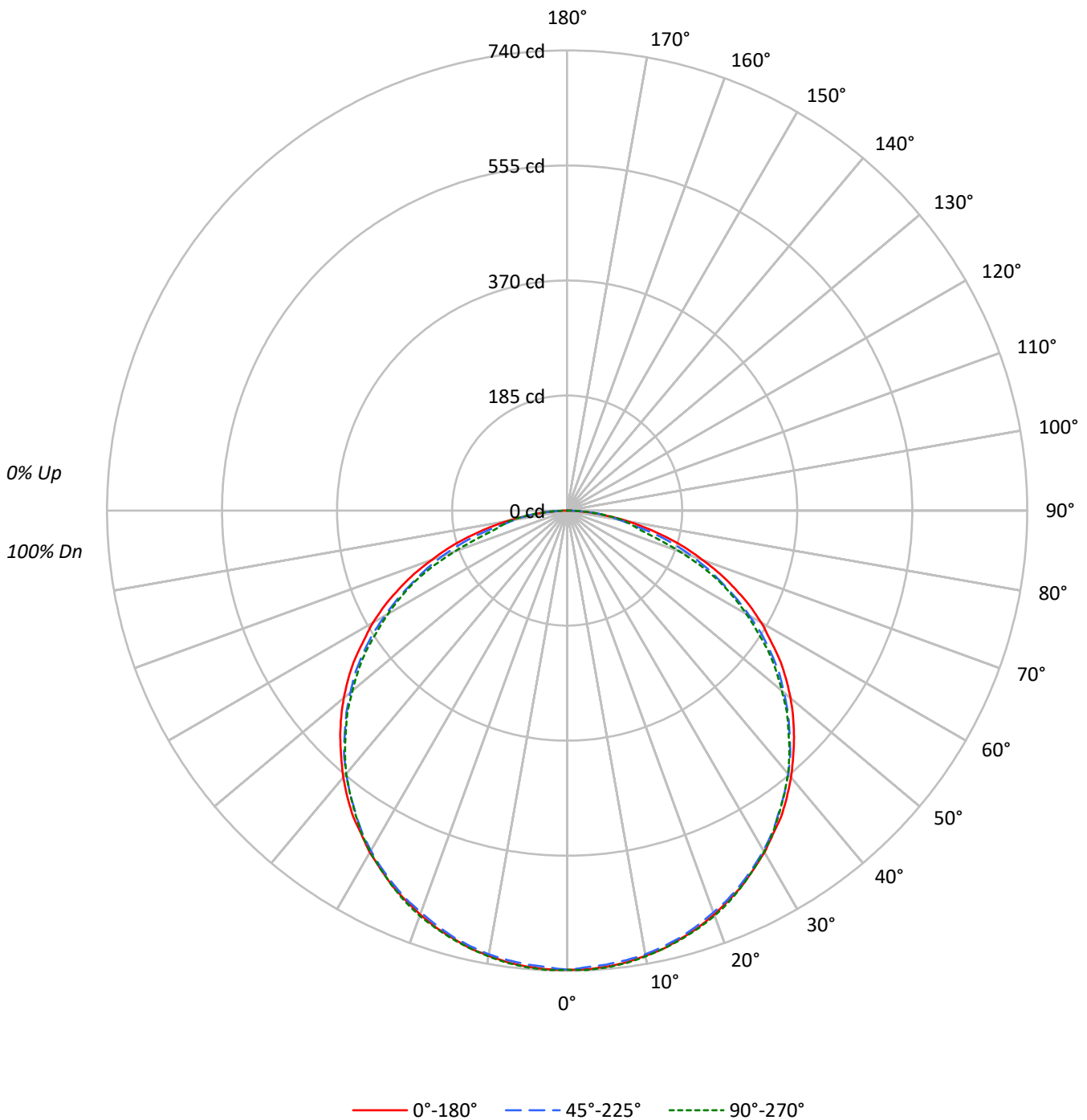
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	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
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°	3110	3110	3110
5°	3112	3098	3117
10°	3109	3099	3114
15°	3104	3094	3110
20°	3098	3082	3108
25°	3094	3078	3094
30°	3087	3070	3082
35°	3086	3051	3056
40°	3079	3041	3041
45°	3074	3012	2999
50°	3073	2981	2951
55°	3062	2944	2901
60°	3038	2853	2804
65°	2974	2733	2698
70°	2851	2624	2369
75°	2680	2363	1987
80°	2375	2040	2236
85°	1836	2117	2006



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.9	3.2
10°-20°	200.8	9.2
20°-30°	306.1	14.0
30°-40°	372.8	17.1
40°-50°	391.9	18.0
50°-60°	359.8	16.5
60°-70°	276.4	12.7
70°-80°	154.3	7.1
80°-90°	46.8	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°	576.9	26.5
0°-40°	949.6	43.6
0°-60°	1701.3	78.1
0°-90°	2178.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2178.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	736	736	733	736	737	70
15°	712	712	710	712	713	201
25°	666	664	662	665	666	307
35°	600	598	593	594	594	375
45°	516	513	506	503	503	398
55°	417	414	401	394	395	372
65°	298	290	274	271	271	295
75°	165	157	145	126	122	174
85°	38	39	44	43	42	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	738.4	738.4	738.4	738.4	738.4
2.5°	738.4	738.4	735.0	738.4	739.6
5°	736.1	736.1	732.7	736.1	737.3
7.5°	732.7	732.7	729.2	731.5	733.8
10°	726.9	726.9	724.6	726.9	728.1
12.5°	721.1	720.0	717.7	720.0	721.1
15°	711.9	711.9	709.6	711.9	713.1
17.5°	702.7	701.6	699.3	702.7	703.9
20°	691.2	690.0	687.7	691.2	693.5
22.5°	678.5	677.4	676.2	679.7	680.8
25°	665.8	663.5	662.4	664.7	665.8
27.5°	649.7	648.6	647.4	648.6	649.7
30°	634.7	632.4	631.3	631.3	633.6
32.5°	616.3	615.2	614.0	615.2	615.2
35°	600.2	597.9	593.3	594.4	594.4
37.5°	580.6	577.1	573.7	573.7	573.7
40°	559.9	557.6	553.0	551.8	553.0
42.5°	538.0	535.7	531.1	527.6	528.8
45°	516.1	512.6	505.7	503.4	503.4
47.5°	493.1	489.6	481.5	478.1	479.2
50°	468.9	464.3	455.0	450.4	450.4
52.5°	443.5	438.9	429.7	423.9	423.9
55°	417.0	413.6	400.9	394.0	395.1
57.5°	387.1	383.6	370.9	362.9	362.9
60°	360.6	353.7	338.7	332.9	332.9
62.5°	330.6	322.6	307.6	300.7	301.8
65°	298.4	290.3	274.2	270.7	270.7
67.5°	266.1	259.2	244.2	238.5	232.7
70°	231.5	224.6	213.1	199.3	192.4
72.5°	199.3	191.2	180.9	160.1	153.2
75°	164.7	156.7	145.2	125.6	122.1
77.5°	131.3	124.4	108.3	103.7	106.0
80°	97.9	95.6	84.1	88.7	92.2
82.5°	65.7	64.5	66.8	69.1	69.1
85°	38.0	39.2	43.8	42.6	41.5
87.5°	16.1	19.6	18.4	18.4	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)