

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: P238663

Luminaire Tested: **14ENA-LD2-28-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238663
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-L840-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2467.6 lumens
Efficiency: N/A
Efficacy: 104.6 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

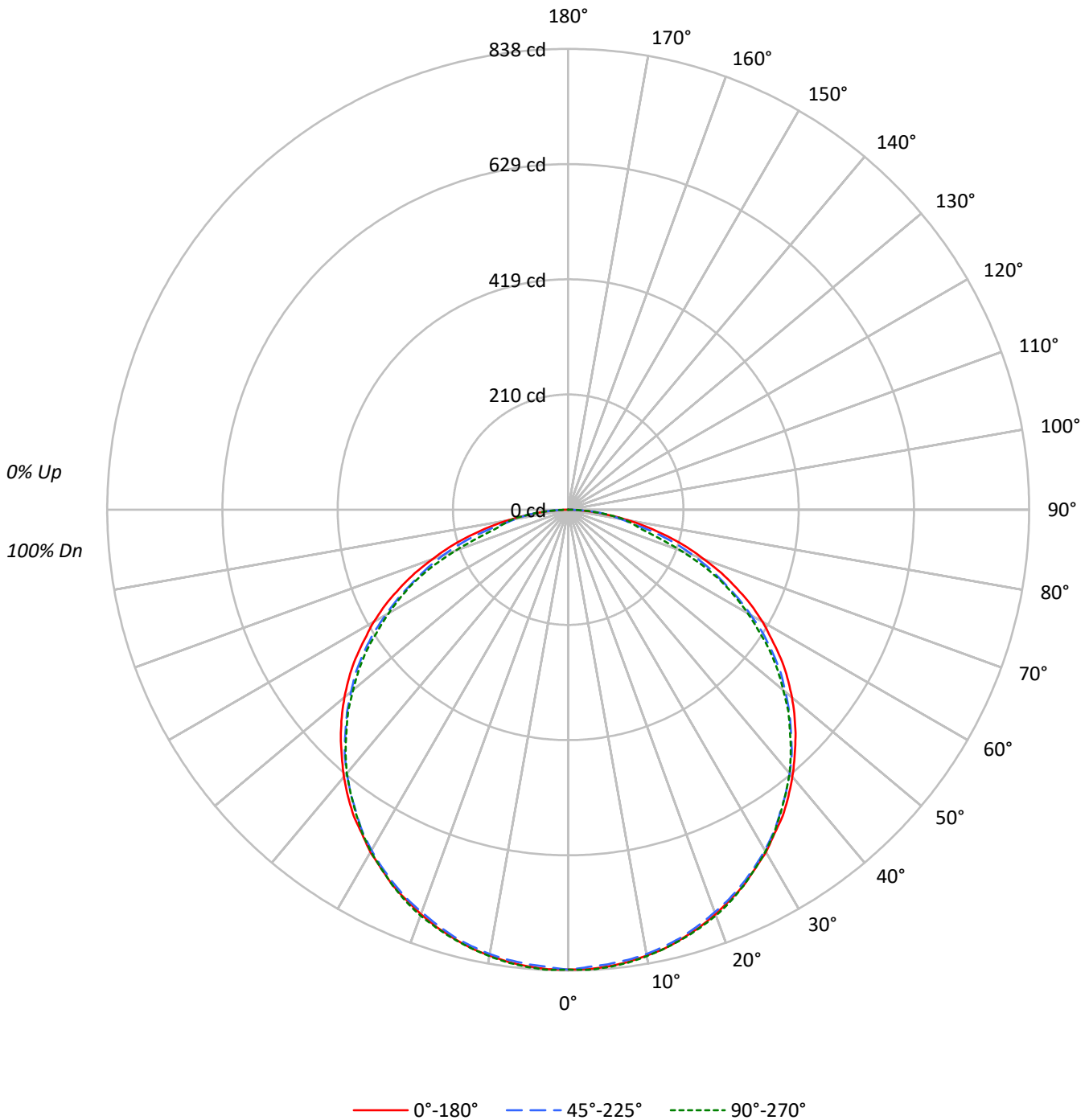
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238663

CATALOG NUMBER: 14ENA-LD2-28-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238663

CATALOG NUMBER: 14ENA-LD2-28-UNV-L840-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	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°	3522	3522	3522
5°	3525	3508	3530
10°	3521	3510	3526
15°	3516	3505	3522
20°	3509	3491	3520
25°	3505	3486	3505
30°	3496	3477	3490
35°	3495	3455	3462
40°	3486	3443	3443
45°	3482	3411	3396
50°	3479	3377	3343
55°	3468	3334	3286
60°	3439	3231	3176
65°	3368	3095	3056
70°	3229	2973	2683
75°	3037	2675	2251
80°	2690	2309	2532
85°	2083	2397	2271



TEST NUMBER: P238663

CATALOG NUMBER: 14ENA-LD2-28-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.2	3.2
10°-20°	227.4	9.2
20°-30°	346.7	14.0
30°-40°	422.2	17.1
40°-50°	443.9	18.0
50°-60°	407.5	16.5
60°-70°	313.0	12.7
70°-80°	174.7	7.1
80°-90°	53.1	2.2
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°	653.3	26.5
0°-40°	1075.5	43.6
0°-60°	1926.8	78.1
0°-90°	2467.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2467.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	834	834	830	834	835	79
15°	806	806	804	806	808	228
25°	754	752	750	753	754	347
35°	680	677	672	673	673	425
45°	584	581	573	570	570	451
55°	472	468	454	446	448	421
65°	338	329	310	307	307	334
75°	187	177	164	142	138	197
85°	43	44	50	48	47	52
90°	0	0	0	0	0	



TEST NUMBER: P238663

CATALOG NUMBER: 14ENA-LD2-28-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	836.3	836.3	836.3	836.3	836.3
2.5°	836.3	836.3	832.4	836.3	837.6
5°	833.7	833.7	829.7	833.7	835.0
7.5°	829.7	829.7	825.8	828.4	831.0
10°	823.2	823.2	820.6	823.2	824.5
12.5°	816.7	815.4	812.8	815.4	816.7
15°	806.3	806.3	803.7	806.3	807.6
17.5°	795.8	794.5	791.9	795.8	797.1
20°	782.8	781.5	778.9	782.8	785.4
22.5°	768.4	767.1	765.8	769.7	771.0
25°	754.1	751.5	750.2	752.8	754.1
27.5°	735.8	734.5	733.2	734.5	735.8
30°	718.9	716.2	714.9	714.9	717.5
32.5°	698.0	696.7	695.4	696.7	696.7
35°	679.7	677.1	671.9	673.2	673.2
37.5°	657.5	653.6	649.7	649.7	649.7
40°	634.0	631.4	626.2	624.9	626.2
42.5°	609.3	606.7	601.4	597.5	598.8
45°	584.5	580.6	572.7	570.1	570.1
47.5°	558.4	554.5	545.3	541.4	542.7
50°	531.0	525.8	515.3	510.1	510.1
52.5°	502.3	497.1	486.6	480.1	480.1
55°	472.3	468.4	454.0	446.2	447.5
57.5°	438.4	434.4	420.1	411.0	411.0
60°	408.3	400.5	383.6	377.0	377.0
62.5°	374.4	365.3	348.3	340.5	341.8
65°	337.9	328.8	310.5	306.6	306.6
67.5°	301.4	293.5	276.6	270.1	263.5
70°	262.2	254.4	241.4	225.7	217.9
72.5°	225.7	216.6	204.8	181.3	173.5
75°	186.6	177.4	164.4	142.2	138.3
77.5°	148.7	140.9	122.6	117.4	120.0
80°	110.9	108.3	95.2	100.5	104.4
82.5°	74.4	73.1	75.7	78.3	78.3
85°	43.1	44.4	49.6	48.3	47.0
87.5°	18.3	22.2	20.9	20.9	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)