

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: P238761

Luminaire Tested: **14EN-LD2-33-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238761
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-LD2-33-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: 3228.4 lumens
Efficiency: N/A
Efficacy: 114.9 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

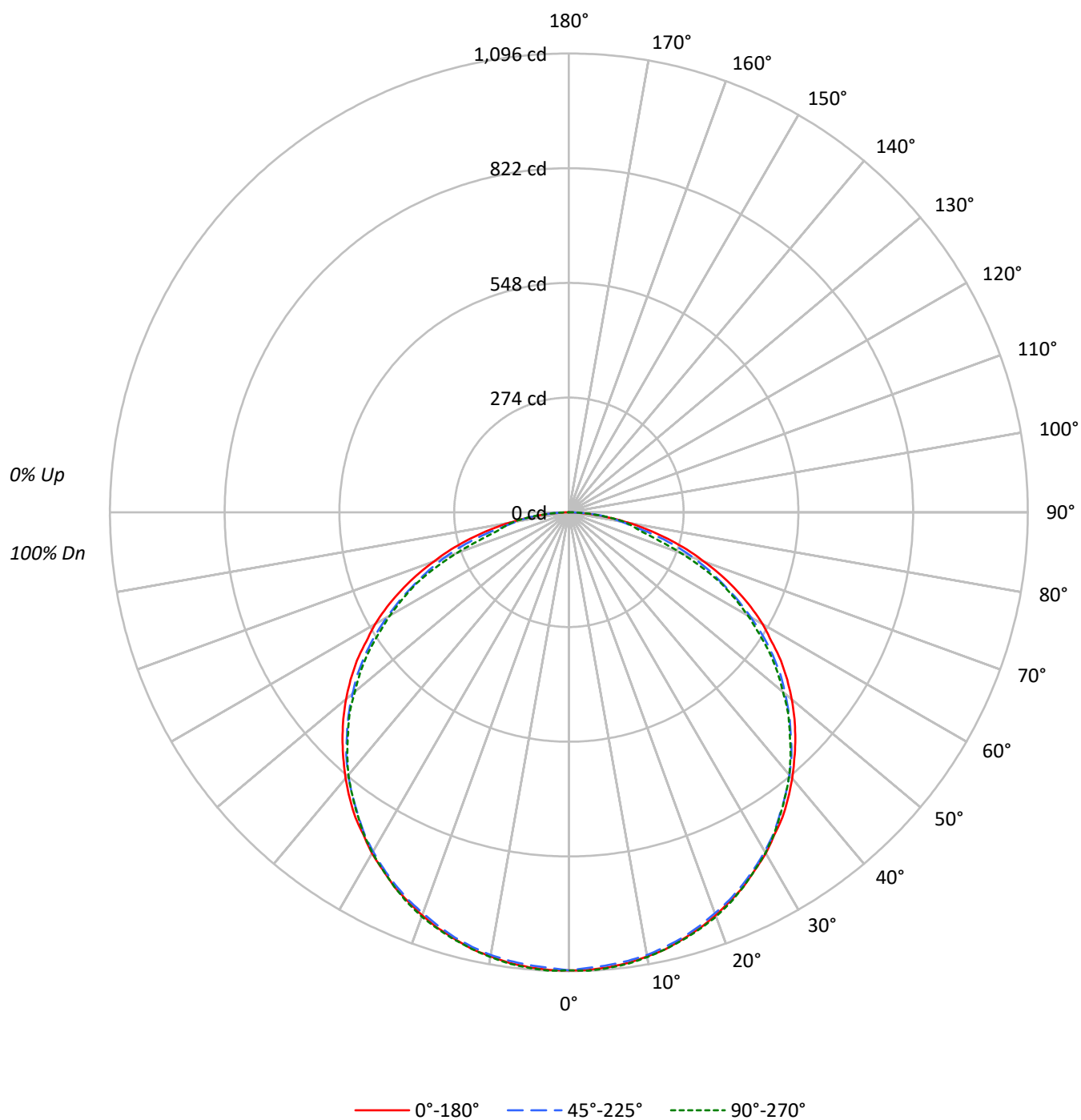
Input Watts (W): 28.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3072	3072	3072
5°	3074	3060	3079
10°	3071	3061	3076
15°	3067	3057	3072
20°	3061	3045	3071
25°	3057	3041	3057
30°	3049	3033	3044
35°	3048	3013	3019
40°	3041	3003	3003
45°	3037	2976	2962
50°	3035	2945	2915
55°	3025	2908	2866
60°	3001	2818	2770
65°	2937	2699	2665
70°	2817	2593	2341
75°	2648	2334	1963
80°	2346	2015	2209
85°	1814	2091	1978



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	3.2
10°-20°	297.6	9.2
20°-30°	453.6	14.0
30°-40°	552.3	17.1
40°-50°	580.7	18.0
50°-60°	533.1	16.5
60°-70°	409.5	12.7
70°-80°	228.6	7.1
80°-90°	69.4	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°	854.8	26.5
0°-40°	1407.1	43.6
0°-60°	2520.9	78.1
0°-90°	3228.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3228.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1091	1091	1086	1091	1092	104
15°	1055	1055	1052	1055	1057	298
25°	987	983	982	985	987	454
35°	889	886	879	881	881	556
45°	765	760	749	746	746	590
55°	618	613	594	584	586	551
65°	442	430	406	401	401	437
75°	244	232	215	186	181	258
85°	56	58	65	63	61	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1094.1	1094.1	1094.1	1094.1	1094.1
2.5°	1094.1	1094.1	1089.0	1094.1	1095.8
5°	1090.7	1090.7	1085.6	1090.7	1092.4
7.5°	1085.6	1085.6	1080.5	1083.9	1087.3
10°	1077.1	1077.1	1073.7	1077.1	1078.8
12.5°	1068.5	1066.8	1063.4	1066.8	1068.5
15°	1054.9	1054.9	1051.5	1054.9	1056.6
17.5°	1041.2	1039.5	1036.1	1041.2	1042.9
20°	1024.2	1022.4	1019.0	1024.2	1027.6
22.5°	1005.4	1003.7	1002.0	1007.1	1008.8
25°	986.6	983.2	981.5	984.9	986.6
27.5°	962.7	961.0	959.3	961.0	962.7
30°	940.5	937.1	935.4	935.4	938.8
32.5°	913.2	911.5	909.8	911.5	911.5
35°	889.3	885.9	879.1	880.8	880.8
37.5°	860.3	855.2	850.0	850.0	850.0
40°	829.6	826.2	819.3	817.6	819.3
42.5°	797.1	793.7	786.9	781.8	783.5
45°	764.7	759.6	749.3	745.9	745.9
47.5°	730.6	725.4	713.5	708.4	710.1
50°	694.7	687.9	674.2	667.4	667.4
52.5°	657.2	650.3	636.7	628.1	628.1
55°	617.9	612.8	594.0	583.8	585.5
57.5°	573.5	568.4	549.6	537.7	537.7
60°	534.3	524.0	501.8	493.3	493.3
62.5°	489.9	477.9	455.7	445.5	447.2
65°	442.1	430.1	406.2	401.1	401.1
67.5°	394.3	384.1	361.9	353.3	344.8
70°	343.1	332.9	315.8	295.3	285.1
72.5°	295.3	283.3	268.0	237.3	227.0
75°	244.1	232.1	215.1	186.1	180.9
77.5°	194.6	184.3	160.5	153.6	157.0
80°	145.1	141.7	124.6	131.4	136.6
82.5°	97.3	95.6	99.0	102.4	102.4
85°	56.3	58.0	64.9	63.2	61.4
87.5°	23.9	29.0	27.3	27.3	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)