

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: P238713

Luminaire Tested: **14EN-LD2-51-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238713  
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-LD2-51-UNV-L930-CD1-U  
Description: METALUX ENCOUNTER 1X4 LED TROFFER  
STANDARD OPTION  
Light Source: (224)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4287.6 lumens  
Efficiency: N/A  
Efficacy: 95.9 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

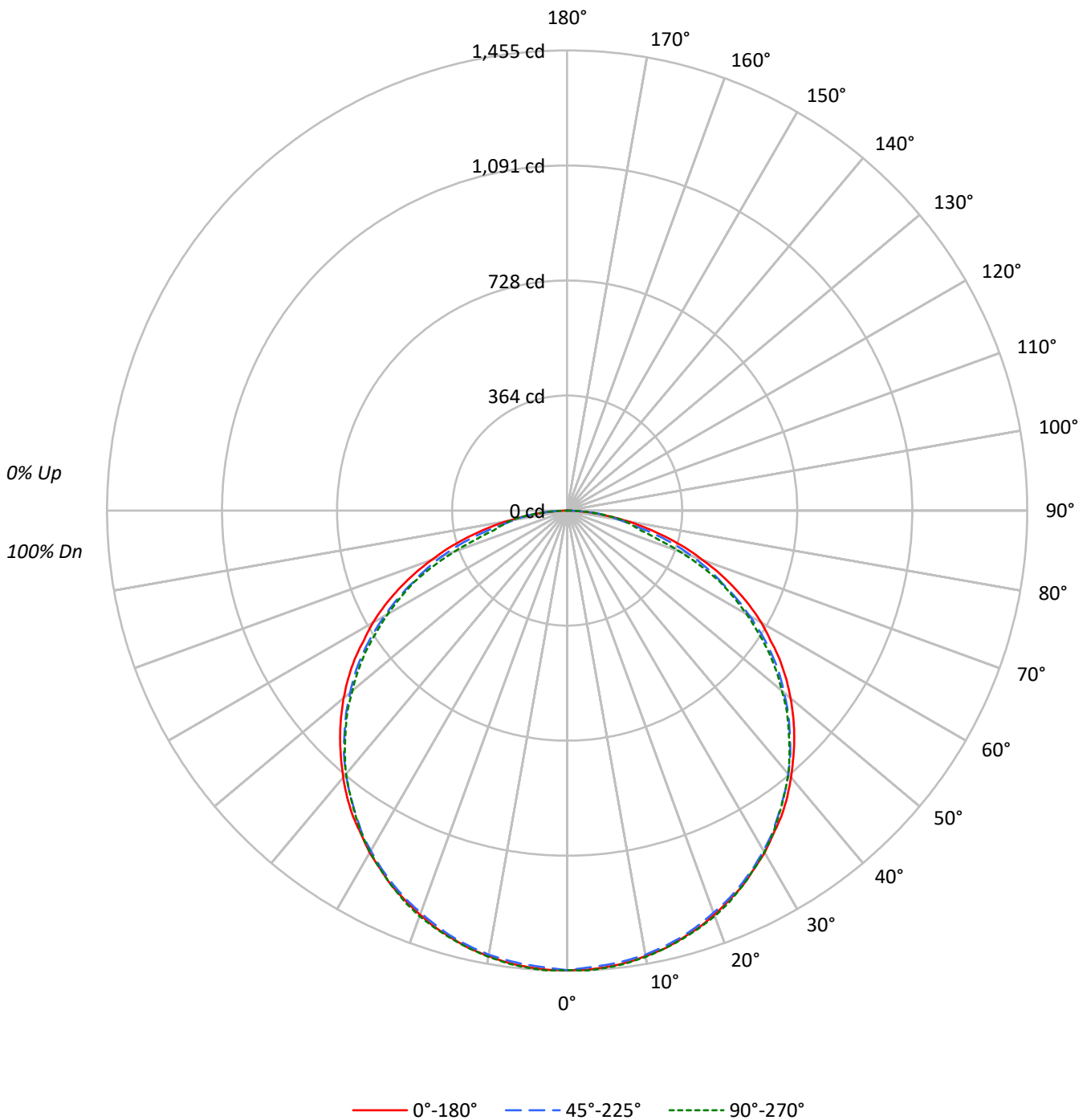
Input Watts (W): 44.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4080	4080	4080
5°	4083	4064	4089
10°	4078	4066	4085
15°	4072	4059	4079
20°	4064	4044	4078
25°	4060	4039	4060
30°	4050	4028	4043
35°	4048	4002	4010
40°	4038	3988	3988
45°	4033	3952	3934
50°	4030	3911	3872
55°	4017	3862	3806
60°	3985	3743	3679
65°	3901	3585	3539
70°	3740	3443	3108
75°	3517	3099	2607
80°	3116	2676	2933
85°	2410	2774	2629



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.6	3.2
10°-20°	395.2	9.2
20°-30°	602.4	14.0
30°-40°	733.5	17.1
40°-50°	771.3	18.0
50°-60°	708.0	16.5
60°-70°	543.9	12.7
70°-80°	303.6	7.1
80°-90°	92.2	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°	1135.2	26.5
0°-40°	1868.7	43.6
0°-60°	3347.9	78.1
0°-90°	4287.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4287.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1453	1453	1453	1453	1453	
5°	1448	1448	1442	1448	1451	138
15°	1401	1401	1396	1401	1403	396
25°	1310	1306	1304	1308	1310	604
35°	1181	1176	1167	1170	1170	738
45°	1016	1009	995	991	991	784
55°	821	814	789	775	778	732
65°	587	571	540	533	533	580
75°	324	308	286	247	240	343
85°	75	77	86	84	82	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1453.1	1453.1	1453.1	1453.1	1453.1
2.5°	1453.1	1453.1	1446.3	1453.1	1455.3
5°	1448.5	1448.5	1441.7	1448.5	1450.8
7.5°	1441.7	1441.7	1434.9	1439.5	1444.0
10°	1430.4	1430.4	1425.9	1430.4	1432.7
12.5°	1419.1	1416.8	1412.3	1416.8	1419.1
15°	1400.9	1400.9	1396.4	1400.9	1403.2
17.5°	1382.8	1380.5	1376.0	1382.8	1385.1
20°	1360.1	1357.9	1353.3	1360.1	1364.7
22.5°	1335.2	1332.9	1330.7	1337.5	1339.7
25°	1310.3	1305.7	1303.5	1308.0	1310.3
27.5°	1278.5	1276.3	1274.0	1276.3	1278.5
30°	1249.1	1244.5	1242.3	1242.3	1246.8
32.5°	1212.8	1210.5	1208.3	1210.5	1210.5
35°	1181.0	1176.5	1167.4	1169.7	1169.7
37.5°	1142.5	1135.7	1128.9	1128.9	1128.9
40°	1101.7	1097.2	1088.1	1085.8	1088.1
42.5°	1058.6	1054.1	1045.0	1038.2	1040.5
45°	1015.6	1008.8	995.2	990.6	990.6
47.5°	970.2	963.4	947.6	940.8	943.0
50°	922.6	913.6	895.4	886.4	886.4
52.5°	872.8	863.7	845.5	834.2	834.2
55°	820.6	813.8	788.9	775.3	777.5
57.5°	761.7	754.9	729.9	714.1	714.1
60°	709.5	695.9	666.5	655.1	655.1
62.5°	650.6	634.7	605.3	591.7	593.9
65°	587.1	571.3	539.5	532.7	532.7
67.5°	523.7	510.0	480.6	469.2	457.9
70°	455.6	442.0	419.4	392.2	378.6
72.5°	392.2	376.3	355.9	315.1	301.5
75°	324.2	308.3	285.6	247.1	240.3
77.5°	258.4	244.8	213.1	204.0	208.6
80°	192.7	188.2	165.5	174.6	181.4
82.5°	129.2	126.9	131.5	136.0	136.0
85°	74.8	77.1	86.1	83.9	81.6
87.5°	31.7	38.5	36.3	36.3	36.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)