

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: P238685

Luminaire Tested: **14EN-LD2-18-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238685  
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-LD2-18-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: 1555.1 lumens  
Efficiency: N/A  
Efficacy: 97.2 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

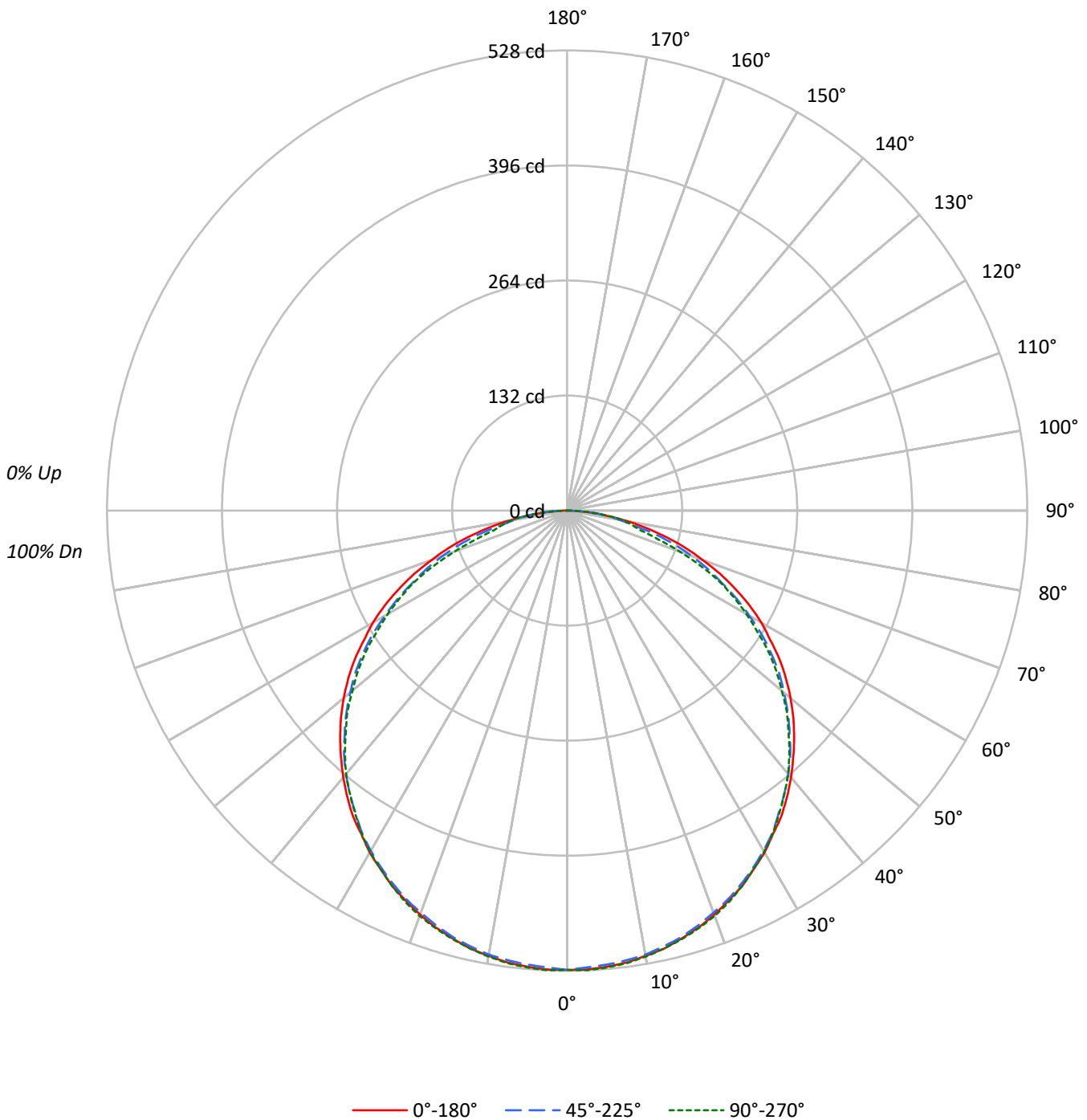
Input Watts (W): 16  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1480	1480	1480
5°	1481	1474	1483
10°	1479	1475	1482
15°	1477	1472	1480
20°	1474	1467	1479
25°	1472	1465	1472
30°	1469	1461	1466
35°	1469	1451	1454
40°	1465	1447	1447
45°	1463	1434	1427
50°	1462	1419	1404
55°	1457	1401	1381
60°	1446	1357	1334
65°	1415	1300	1284
70°	1357	1249	1127
75°	1276	1124	946
80°	1130	970	1064
85°	873	1005	954



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.9	3.2
10°-20°	143.3	9.2
20°-30°	218.5	14.0
30°-40°	266.1	17.1
40°-50°	279.7	18.0
50°-60°	256.8	16.5
60°-70°	197.3	12.7
70°-80°	110.1	7.1
80°-90°	33.4	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°	411.7	26.5
0°-40°	677.8	43.6
0°-60°	1214.3	78.1
0°-90°	1555.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1555.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	525	525	523	525	526	50
15°	508	508	506	508	509	144
25°	475	474	473	474	475	219
35°	428	427	423	424	424	268
45°	368	366	361	359	359	284
55°	298	295	286	281	282	265
65°	213	207	196	193	193	210
75°	118	112	104	90	87	124
85°	27	28	31	30	30	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	527.0	527.0	527.0	527.0	527.0
2.5°	527.0	527.0	524.6	527.0	527.9
5°	525.4	525.4	522.9	525.4	526.2
7.5°	522.9	522.9	520.5	522.1	523.8
10°	518.8	518.8	517.2	518.8	519.6
12.5°	514.7	513.9	512.2	513.9	514.7
15°	508.1	508.1	506.5	508.1	509.0
17.5°	501.6	500.7	499.1	501.6	502.4
20°	493.3	492.5	490.9	493.3	495.0
22.5°	484.3	483.5	482.6	485.1	485.9
25°	475.2	473.6	472.8	474.4	475.2
27.5°	463.7	462.9	462.1	462.9	463.7
30°	453.0	451.4	450.6	450.6	452.2
32.5°	439.9	439.1	438.2	439.1	439.1
35°	428.4	426.7	423.4	424.3	424.3
37.5°	414.4	411.9	409.5	409.5	409.5
40°	399.6	398.0	394.7	393.8	394.7
42.5°	384.0	382.3	379.0	376.6	377.4
45°	368.4	365.9	361.0	359.3	359.3
47.5°	351.9	349.4	343.7	341.2	342.0
50°	334.6	331.4	324.8	321.5	321.5
52.5°	316.6	313.3	306.7	302.6	302.6
55°	297.6	295.2	286.1	281.2	282.0
57.5°	276.3	273.8	264.8	259.0	259.0
60°	257.4	252.4	241.7	237.6	237.6
62.5°	236.0	230.2	219.5	214.6	215.4
65°	213.0	207.2	195.7	193.2	193.2
67.5°	189.9	185.0	174.3	170.2	166.1
70°	165.3	160.3	152.1	142.2	137.3
72.5°	142.2	136.5	129.1	114.3	109.4
75°	117.6	111.8	103.6	89.6	87.2
77.5°	93.7	88.8	77.3	74.0	75.6
80°	69.9	68.2	60.0	63.3	65.8
82.5°	46.9	46.0	47.7	49.3	49.3
85°	27.1	28.0	31.2	30.4	29.6
87.5°	11.5	14.0	13.2	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)