

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: P238671

Luminaire Tested: **14ENA-LD2-38-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238671  
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-LD2-38-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: 3366.7 lumens  
Efficiency: N/A  
Efficacy: 102.6 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

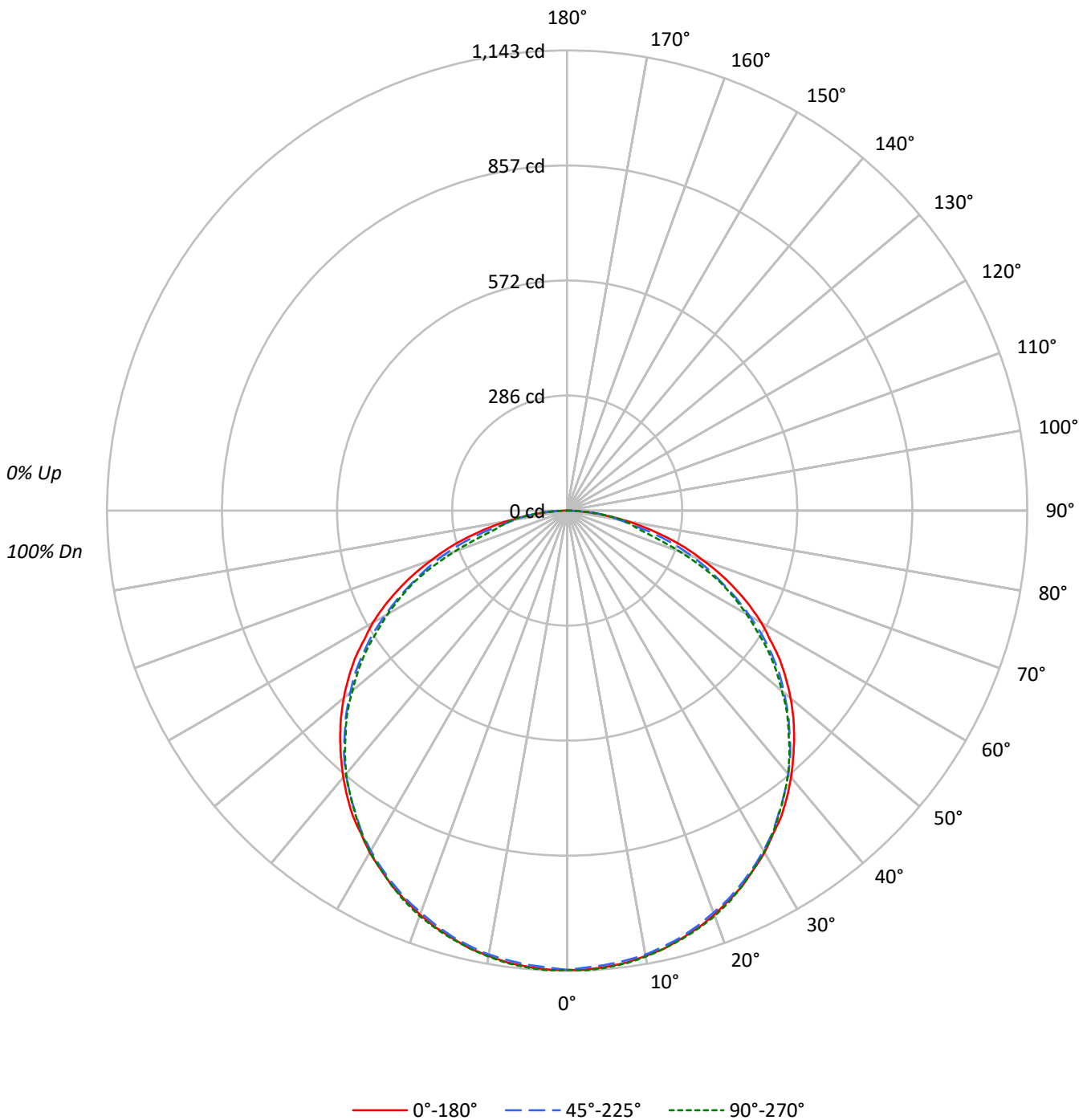
Input Watts (W): 32.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4806	4806	4806
5°	4809	4787	4817
10°	4804	4788	4812
15°	4797	4781	4804
20°	4787	4763	4803
25°	4781	4757	4781
30°	4770	4744	4761
35°	4769	4714	4723
40°	4757	4698	4698
45°	4750	4655	4634
50°	4747	4607	4561
55°	4732	4548	4483
60°	4693	4408	4333
65°	4594	4222	4169
70°	4406	4055	3661
75°	4142	3650	3071
80°	3670	3151	3454
85°	2837	3267	3098



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.0	3.2
10°-20°	310.3	9.2
20°-30°	473.0	14.0
30°-40°	576.0	17.1
40°-50°	605.6	18.0
50°-60°	555.9	16.5
60°-70°	427.1	12.7
70°-80°	238.4	7.1
80°-90°	72.4	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°	891.3	26.5
0°-40°	1467.3	43.6
0°-60°	2628.8	78.1
0°-90°	3366.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3366.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1141	1141	1141	1141	1141	
5°	1137	1137	1132	1137	1139	108
15°	1100	1100	1096	1100	1102	311
25°	1029	1025	1024	1027	1029	474
35°	927	924	917	918	918	580
45°	797	792	781	778	778	615
55°	644	639	619	609	610	575
65°	461	449	424	418	418	455
75°	254	242	224	194	189	269
85°	59	60	68	66	64	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1141.0	1141.0	1141.0	1141.0	1141.0
2.5°	1141.0	1141.0	1135.6	1141.0	1142.8
5°	1137.4	1137.4	1132.1	1137.4	1139.2
7.5°	1132.1	1132.1	1126.7	1130.3	1133.9
10°	1123.2	1123.2	1119.6	1123.2	1125.0
12.5°	1114.3	1112.5	1108.9	1112.5	1114.3
15°	1100.0	1100.0	1096.5	1100.0	1101.8
17.5°	1085.8	1084.0	1080.5	1085.8	1087.6
20°	1068.0	1066.2	1062.7	1068.0	1071.6
22.5°	1048.4	1046.6	1044.9	1050.2	1052.0
25°	1028.8	1025.3	1023.5	1027.1	1028.8
27.5°	1003.9	1002.1	1000.4	1002.1	1003.9
30°	980.8	977.2	975.4	975.4	979.0
32.5°	952.3	950.5	948.7	950.5	950.5
35°	927.4	923.8	916.7	918.5	918.5
37.5°	897.1	891.8	886.4	886.4	886.4
40°	865.1	861.5	854.4	852.6	854.4
42.5°	831.3	827.7	820.6	815.2	817.0
45°	797.4	792.1	781.4	777.9	777.9
47.5°	761.8	756.5	744.0	738.7	740.5
50°	724.5	717.3	703.1	696.0	696.0
52.5°	685.3	678.2	663.9	655.0	655.0
55°	644.4	639.0	619.4	608.8	610.5
57.5°	598.1	592.7	573.2	560.7	560.7
60°	557.1	546.5	523.3	514.4	514.4
62.5°	510.9	498.4	475.3	464.6	466.4
65°	461.0	448.6	423.6	418.3	418.3
67.5°	411.2	400.5	377.4	368.5	359.6
70°	357.8	347.1	329.3	307.9	297.3
72.5°	307.9	295.5	279.5	247.4	236.7
75°	254.5	242.1	224.3	194.0	188.7
77.5°	202.9	192.2	167.3	160.2	163.8
80°	151.3	147.7	129.9	137.1	142.4
82.5°	101.5	99.7	103.2	106.8	106.8
85°	58.7	60.5	67.6	65.9	64.1
87.5°	24.9	30.3	28.5	28.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)