

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: P238684

Luminaire Tested: **14ENA-LD2-51-UNV-L850-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238684  
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-LD2-51-UNV-L850-CD1-U  
Description: METALUX ENCOUNTER 1X4 LED TROFFER  
AIR-VENTED OPTION  
Light Source: (224)5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4884.7 lumens  
Efficiency: N/A  
Efficacy: 109.3 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

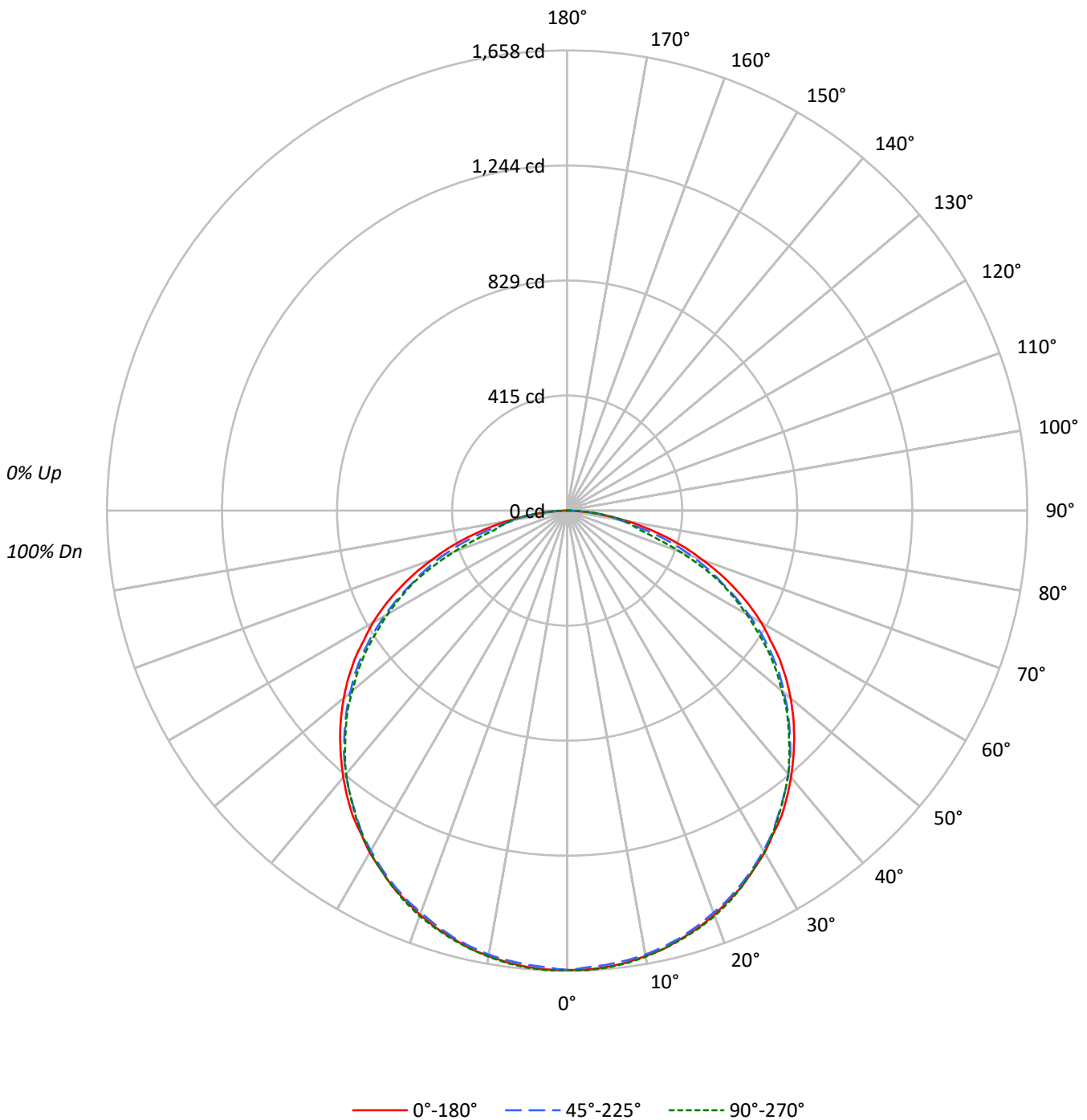
Input Watts (W): 44.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	6972	6972	6972
5°	6978	6945	6989
10°	6970	6947	6981
15°	6959	6937	6971
20°	6946	6911	6969
25°	6937	6901	6937
30°	6921	6883	6908
35°	6918	6839	6852
40°	6901	6816	6816
45°	6892	6754	6723
50°	6888	6684	6617
55°	6865	6599	6505
60°	6810	6396	6288
65°	6667	6126	6049
70°	6393	5884	5311
75°	6010	5295	4456
80°	5324	4572	5011
85°	4117	4741	4494



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.7	3.2
10°-20°	450.2	9.2
20°-30°	686.3	14.0
30°-40°	835.7	17.1
40°-50°	878.7	18.0
50°-60°	806.6	16.5
60°-70°	619.7	12.7
70°-80°	345.9	7.1
80°-90°	105.0	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°	1293.2	26.5
0°-40°	2128.9	43.6
0°-60°	3814.2	78.1
0°-90°	4884.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4884.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1655	1655	1655	1655	1655	
5°	1650	1650	1642	1650	1653	157
15°	1596	1596	1591	1596	1599	451
25°	1493	1488	1485	1490	1493	688
35°	1346	1340	1330	1333	1333	841
45°	1157	1149	1134	1129	1129	893
55°	935	927	899	883	886	834
65°	669	651	615	607	607	661
75°	369	351	325	282	274	390
85°	85	88	98	96	93	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1655.4	1655.4	1655.4	1655.4	1655.4
2.5°	1655.4	1655.4	1647.7	1655.4	1658.0
5°	1650.3	1650.3	1642.5	1650.3	1652.9
7.5°	1642.5	1642.5	1634.8	1639.9	1645.1
10°	1629.6	1629.6	1624.4	1629.6	1632.2
12.5°	1616.7	1614.1	1609.0	1614.1	1616.7
15°	1596.0	1596.0	1590.9	1596.0	1598.6
17.5°	1575.4	1572.8	1567.6	1575.4	1578.0
20°	1549.6	1547.0	1541.8	1549.6	1554.7
22.5°	1521.1	1518.6	1516.0	1523.7	1526.3
25°	1492.7	1487.6	1485.0	1490.2	1492.7
27.5°	1456.6	1454.0	1451.4	1454.0	1456.6
30°	1423.0	1417.8	1415.3	1415.3	1420.4
32.5°	1381.7	1379.1	1376.5	1379.1	1379.1
35°	1345.5	1340.4	1330.0	1332.6	1332.6
37.5°	1301.6	1293.9	1286.1	1286.1	1286.1
40°	1255.1	1250.0	1239.6	1237.1	1239.6
42.5°	1206.1	1200.9	1190.6	1182.8	1185.4
45°	1157.0	1149.3	1133.8	1128.6	1128.6
47.5°	1105.3	1097.6	1079.5	1071.8	1074.4
50°	1051.1	1040.8	1020.1	1009.8	1009.8
52.5°	994.3	984.0	963.3	950.4	950.4
55°	934.9	927.2	898.7	883.2	885.8
57.5°	867.8	860.0	831.6	813.5	813.5
60°	808.4	792.9	759.3	746.4	746.4
62.5°	741.2	723.1	689.6	674.1	676.6
65°	668.9	650.8	614.7	606.9	606.9
67.5°	596.6	581.1	547.5	534.6	521.7
70°	519.1	503.6	477.8	446.8	431.3
72.5°	446.8	428.7	405.5	359.0	343.5
75°	369.3	351.2	325.4	281.5	273.8
77.5°	294.4	278.9	242.8	232.4	237.6
80°	219.5	214.4	188.5	198.9	206.6
82.5°	147.2	144.6	149.8	155.0	155.0
85°	85.2	87.8	98.1	95.6	93.0
87.5°	36.2	43.9	41.3	41.3	41.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)