

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: P238672

Luminaire Tested: **14ENA-LD2-38-UNV-L850-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238672  
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-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: 3663.8 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

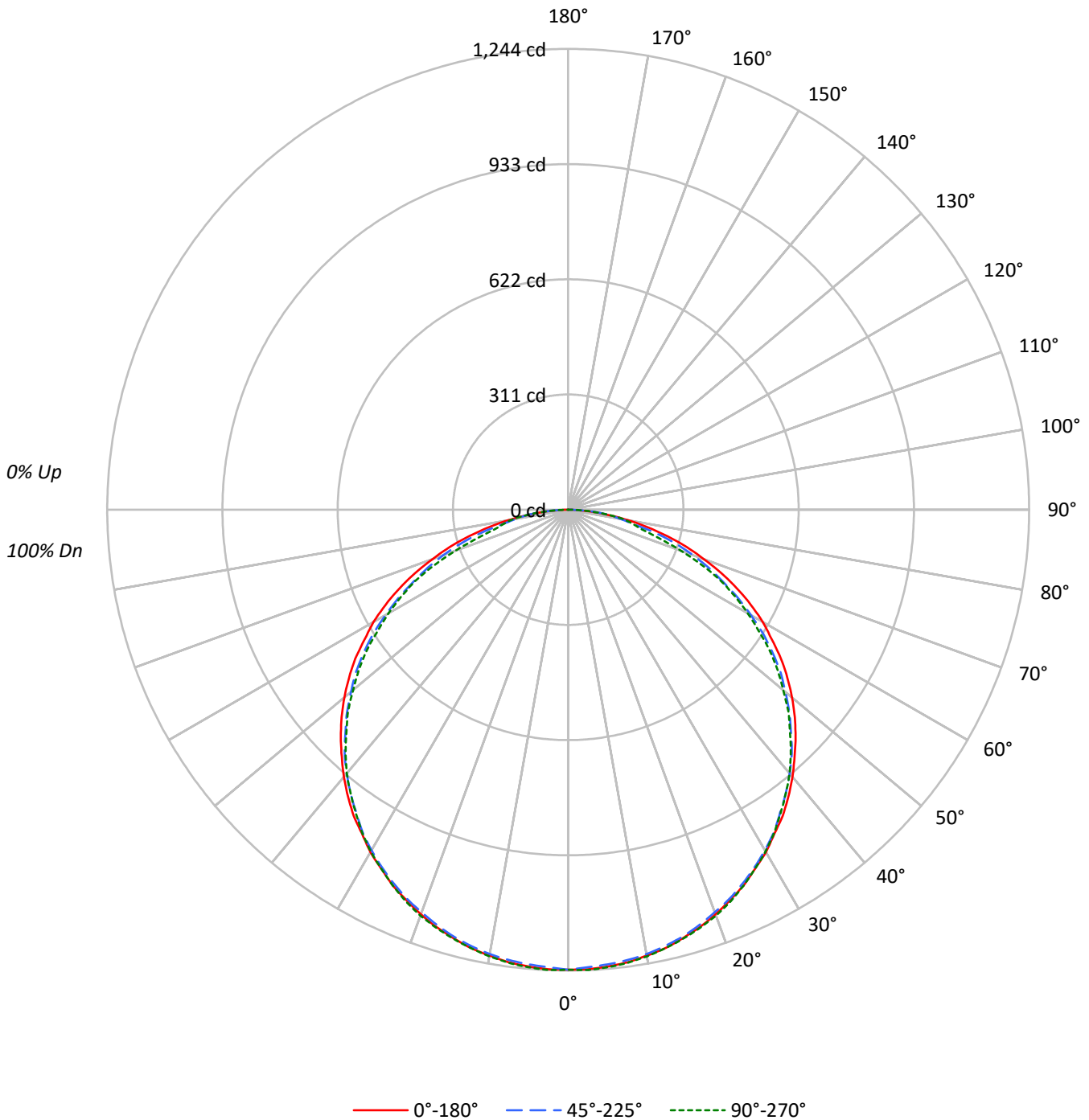
Input Watts (W): 32.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5230	5230	5230
5°	5233	5209	5242
10°	5228	5211	5236
15°	5220	5203	5228
20°	5209	5183	5227
25°	5203	5176	5203
30°	5191	5163	5182
35°	5189	5130	5139
40°	5176	5112	5112
45°	5169	5066	5042
50°	5166	5013	4963
55°	5149	4950	4879
60°	5107	4797	4716
65°	5000	4594	4537
70°	4795	4414	3984
75°	4508	3972	3341
80°	3995	3430	3760
85°	3088	3557	3368



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.6	3.2
10°-20°	337.7	9.2
20°-30°	514.7	14.0
30°-40°	626.8	17.1
40°-50°	659.1	18.0
50°-60°	605.0	16.5
60°-70°	464.8	12.7
70°-80°	259.4	7.1
80°-90°	78.8	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°	970.0	26.5
0°-40°	1596.8	43.6
0°-60°	2860.8	78.1
0°-90°	3663.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3663.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1238	1238	1232	1238	1240	118
15°	1197	1197	1193	1197	1199	338
25°	1120	1116	1114	1118	1120	516
35°	1009	1005	998	1000	1000	631
45°	868	862	850	846	846	670
55°	701	695	674	662	664	625
65°	502	488	461	455	455	496
75°	277	263	244	211	205	293
85°	64	66	74	72	70	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1241.7	1241.7	1241.7	1241.7	1241.7
2.5°	1241.7	1241.7	1235.9	1241.7	1243.6
5°	1237.8	1237.8	1232.0	1237.8	1239.7
7.5°	1232.0	1232.0	1226.2	1230.0	1233.9
10°	1222.3	1222.3	1218.4	1222.3	1224.2
12.5°	1212.6	1210.7	1206.8	1210.7	1212.6
15°	1197.1	1197.1	1193.2	1197.1	1199.0
17.5°	1181.6	1179.7	1175.8	1181.6	1183.5
20°	1162.2	1160.3	1156.4	1162.2	1166.1
22.5°	1140.9	1139.0	1137.1	1142.9	1144.8
25°	1119.6	1115.8	1113.8	1117.7	1119.6
27.5°	1092.5	1090.6	1088.6	1090.6	1092.5
30°	1067.3	1063.5	1061.5	1061.5	1065.4
32.5°	1036.3	1034.4	1032.5	1034.4	1034.4
35°	1009.2	1005.3	997.6	999.5	999.5
37.5°	976.3	970.5	964.7	964.7	964.7
40°	941.4	937.5	929.8	927.9	929.8
42.5°	904.6	900.7	893.0	887.2	889.1
45°	867.8	862.0	850.4	846.5	846.5
47.5°	829.1	823.3	809.7	803.9	805.8
50°	788.4	780.6	765.1	757.4	757.4
52.5°	745.8	738.0	722.5	712.8	712.8
55°	701.2	695.4	674.1	662.5	664.4
57.5°	650.9	645.0	623.7	610.2	610.2
60°	606.3	594.7	569.5	559.8	559.8
62.5°	555.9	542.4	517.2	505.6	507.5
65°	501.7	488.1	461.0	455.2	455.2
67.5°	447.5	435.8	410.7	401.0	391.3
70°	389.4	377.7	358.4	335.1	323.5
72.5°	335.1	321.6	304.1	269.3	257.6
75°	277.0	263.4	244.1	211.1	205.3
77.5°	220.8	209.2	182.1	174.3	178.2
80°	164.7	160.8	141.4	149.2	155.0
82.5°	110.4	108.5	112.4	116.2	116.2
85°	63.9	65.9	73.6	71.7	69.7
87.5°	27.1	32.9	31.0	31.0	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)