

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: P238823

Luminaire Tested: **22ENA-LD2-39-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238823  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22ENA-LD2-39-UNV-L840-CD1-U  
Description: METALUX ENCOUNTER 2X2 LED TROFFER  
AIR-VENTED OPTION  
Light Source: (168)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3956.7 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1.67' x L: 1.83' x H: 0')  
CIE Type: Direct

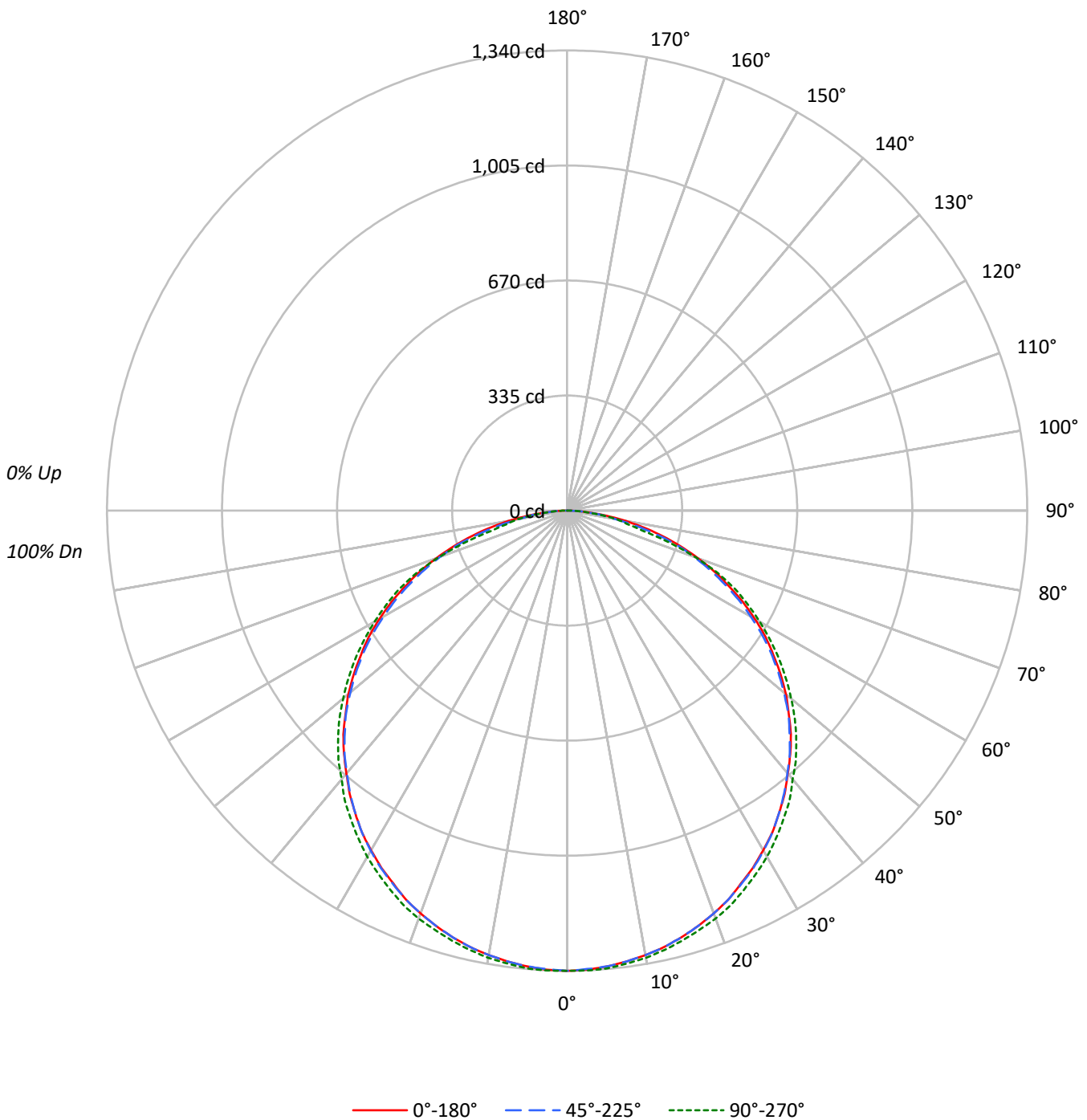
Input Watts (W): 33.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	97	94	91	93	91	88	90	88	86	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	39	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°	4722	4722	4722
5°	4712	4712	4733
10°	4701	4701	4730
15°	4691	4691	4728
20°	4679	4679	4740
25°	4657	4665	4735
30°	4645	4653	4735
35°	4627	4627	4722
40°	4598	4588	4699
45°	4591	4561	4701
50°	4557	4513	4667
55°	4504	4455	4627
60°	4446	4348	4560
65°	4325	4209	4493
70°	4168	4045	4107
75°	3927	3682	3136
80°	3455	2887	3009
85°	2510	2429	2348



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.8	3.2
10°-20°	363.9	9.2
20°-30°	555.5	14.0
30°-40°	676.5	17.1
40°-50°	712.1	18.0
50°-60°	655.6	16.6
60°-70°	510.3	12.9
70°-80°	283.3	7.2
80°-90°	72.8	1.8
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°	1046.1	26.4
0°-40°	1722.6	43.5
0°-60°	3090.4	78.1
0°-90°	3956.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3956.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1332	1332	1332	1336	1338	127
15°	1286	1286	1286	1292	1296	363
25°	1198	1200	1200	1210	1218	553
35°	1076	1076	1076	1088	1098	673
45°	922	916	916	930	944	710
55°	733	731	725	737	753	656
65°	519	513	505	521	539	514
75°	288	282	270	240	230	304
85°	62	58	60	58	58	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1340.4	1340.4	1340.4	1340.4	1340.4
2.5°	1338.4	1336.4	1336.4	1340.4	1340.4
5°	1332.4	1332.4	1332.4	1336.4	1338.4
7.5°	1324.4	1324.4	1324.4	1330.4	1330.4
10°	1314.3	1312.3	1314.3	1318.4	1322.4
12.5°	1302.3	1300.3	1302.3	1306.3	1310.3
15°	1286.3	1286.3	1286.3	1292.3	1296.3
17.5°	1268.3	1266.3	1268.3	1274.3	1280.3
20°	1248.2	1248.2	1248.2	1256.2	1264.3
22.5°	1226.2	1224.2	1226.2	1236.2	1244.2
25°	1198.1	1200.1	1200.1	1210.2	1218.2
27.5°	1172.1	1170.1	1174.1	1182.1	1192.1
30°	1142.0	1142.0	1144.0	1154.1	1164.1
32.5°	1112.0	1110.0	1112.0	1122.0	1132.0
35°	1075.9	1075.9	1075.9	1087.9	1098.0
37.5°	1039.9	1037.9	1037.9	1049.9	1063.9
40°	999.8	997.8	997.8	1011.8	1021.8
42.5°	961.7	959.7	959.7	971.7	985.8
45°	921.6	915.6	915.6	929.7	943.7
47.5°	875.6	871.6	873.6	885.6	899.6
50°	831.5	825.5	823.5	837.5	851.5
52.5°	783.4	781.4	775.4	787.4	803.4
55°	733.3	731.3	725.3	737.3	753.3
57.5°	685.2	679.2	673.2	683.2	701.3
60°	631.1	625.1	617.1	631.1	647.2
62.5°	577.0	569.0	563.0	575.0	593.1
65°	518.9	512.9	504.9	520.9	539.0
67.5°	464.8	458.8	448.8	462.8	474.8
70°	404.7	396.7	392.7	394.7	398.7
72.5°	346.6	342.6	336.6	320.6	316.6
75°	288.5	282.5	270.5	240.4	230.4
77.5°	230.4	226.4	204.4	178.3	178.3
80°	170.3	168.3	142.3	146.3	148.3
82.5°	116.2	112.2	104.2	102.2	102.2
85°	62.1	58.1	60.1	58.1	58.1
87.5°	24.0	24.0	26.0	24.0	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)