

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: P238821

Luminaire Tested: **22ENA-LD2-39-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238821  
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-L830-CD1-U  
Description: METALUX ENCOUNTER 2X2 LED TROFFER  
AIR-VENTED OPTION  
Light Source: (168)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3763.0 lumens  
Efficiency: N/A  
Efficacy: 113.0 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

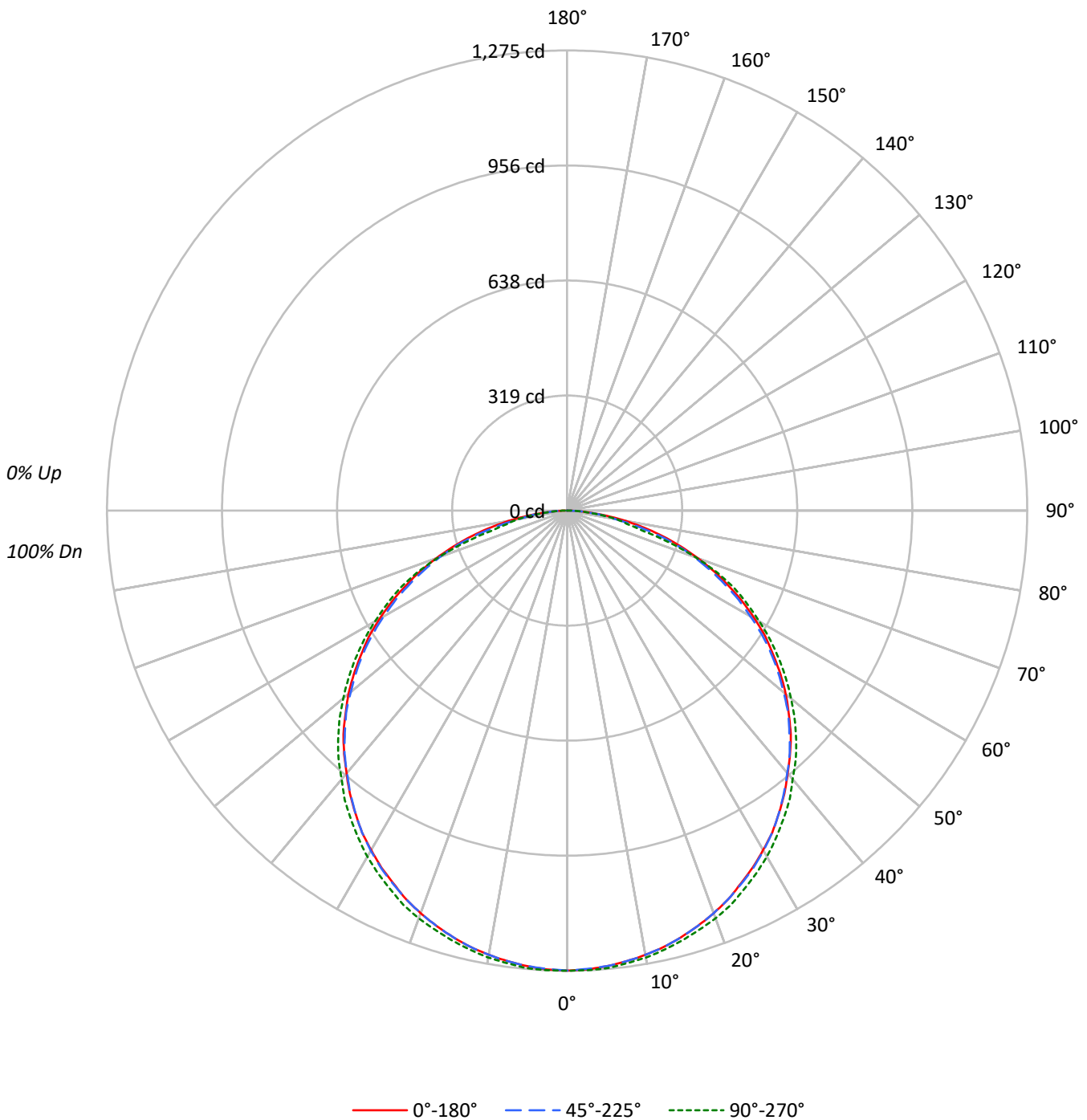
Input Watts (W): 33.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P238821

CATALOG NUMBER: 22ENA-LD2-39-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P238821

CATALOG NUMBER: 22ENA-LD2-39-UNV-L830-CD1-U

**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°	4490	4490	4490
5°	4481	4481	4501
10°	4471	4471	4499
15°	4461	4461	4496
20°	4450	4450	4507
25°	4429	4437	4503
30°	4418	4426	4503
35°	4400	4400	4491
40°	4372	4364	4469
45°	4367	4338	4471
50°	4334	4292	4438
55°	4283	4237	4400
60°	4229	4135	4336
65°	4114	4003	4273
70°	3964	3847	3906
75°	3735	3501	2982
80°	3286	2745	2860
85°	2389	2312	2235



TEST NUMBER: P238821

CATALOG NUMBER: 22ENA-LD2-39-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.6	3.2
10°-20°	346.0	9.2
20°-30°	528.3	14.0
30°-40°	643.4	17.1
40°-50°	677.2	18.0
50°-60°	623.5	16.6
60°-70°	485.3	12.9
70°-80°	269.4	7.2
80°-90°	69.2	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°	994.9	26.4
0°-40°	1638.2	43.5
0°-60°	2939.0	78.1
0°-90°	3763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3763.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1275	1275	1275	1275	1275	
5°	1267	1267	1267	1271	1273	120
15°	1223	1223	1223	1229	1233	345
25°	1139	1141	1141	1151	1158	526
35°	1023	1023	1023	1035	1044	640
45°	876	871	871	884	898	675
55°	697	696	690	701	716	624
65°	494	488	480	495	513	489
75°	274	269	257	229	219	289
85°	59	55	57	55	55	74
90°	0	0	0	0	0	



TEST NUMBER: P238821

CATALOG NUMBER: 22ENA-LD2-39-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1274.7	1274.7	1274.7	1274.7	1274.7
2.5°	1272.8	1270.9	1270.9	1274.7	1274.7
5°	1267.1	1267.1	1267.1	1270.9	1272.8
7.5°	1259.5	1259.5	1259.5	1265.2	1265.2
10°	1250.0	1248.1	1250.0	1253.8	1257.6
12.5°	1238.5	1236.6	1238.5	1242.3	1246.2
15°	1223.3	1223.3	1223.3	1229.0	1232.8
17.5°	1206.1	1204.2	1206.1	1211.9	1217.6
20°	1187.1	1187.1	1187.1	1194.7	1202.3
22.5°	1166.1	1164.2	1166.1	1175.7	1183.3
25°	1139.4	1141.4	1141.4	1150.9	1158.5
27.5°	1114.7	1112.8	1116.6	1124.2	1133.7
30°	1086.1	1086.1	1088.0	1097.5	1107.1
32.5°	1057.5	1055.6	1057.5	1067.0	1076.6
35°	1023.2	1023.2	1023.2	1034.7	1044.2
37.5°	988.9	987.0	987.0	998.4	1011.8
40°	950.8	948.9	948.9	962.2	971.8
42.5°	914.6	912.7	912.7	924.1	937.5
45°	876.5	870.8	870.8	884.1	897.5
47.5°	832.7	828.9	830.8	842.2	855.5
50°	790.8	785.0	783.1	796.5	809.8
52.5°	745.0	743.1	737.4	748.8	764.1
55°	697.4	695.5	689.8	701.2	716.4
57.5°	651.7	645.9	640.2	649.8	666.9
60°	600.2	594.5	586.9	600.2	615.5
62.5°	548.8	541.1	535.4	546.9	564.0
65°	493.5	487.8	480.2	495.4	512.6
67.5°	442.1	436.3	426.8	440.2	451.6
70°	384.9	377.3	373.5	375.4	379.2
72.5°	329.6	325.8	320.1	304.9	301.1
75°	274.4	268.7	257.2	228.7	219.1
77.5°	219.1	215.3	194.4	169.6	169.6
80°	162.0	160.1	135.3	139.1	141.0
82.5°	110.5	106.7	99.1	97.2	97.2
85°	59.1	55.3	57.2	55.3	55.3
87.5°	22.9	22.9	24.8	22.9	22.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)