

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: P238827

Luminaire Tested: **22ENA-LD2-43-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238827  
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-LD2-43-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: 4453.8 lumens  
Efficiency: N/A  
Efficacy: 116.3 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

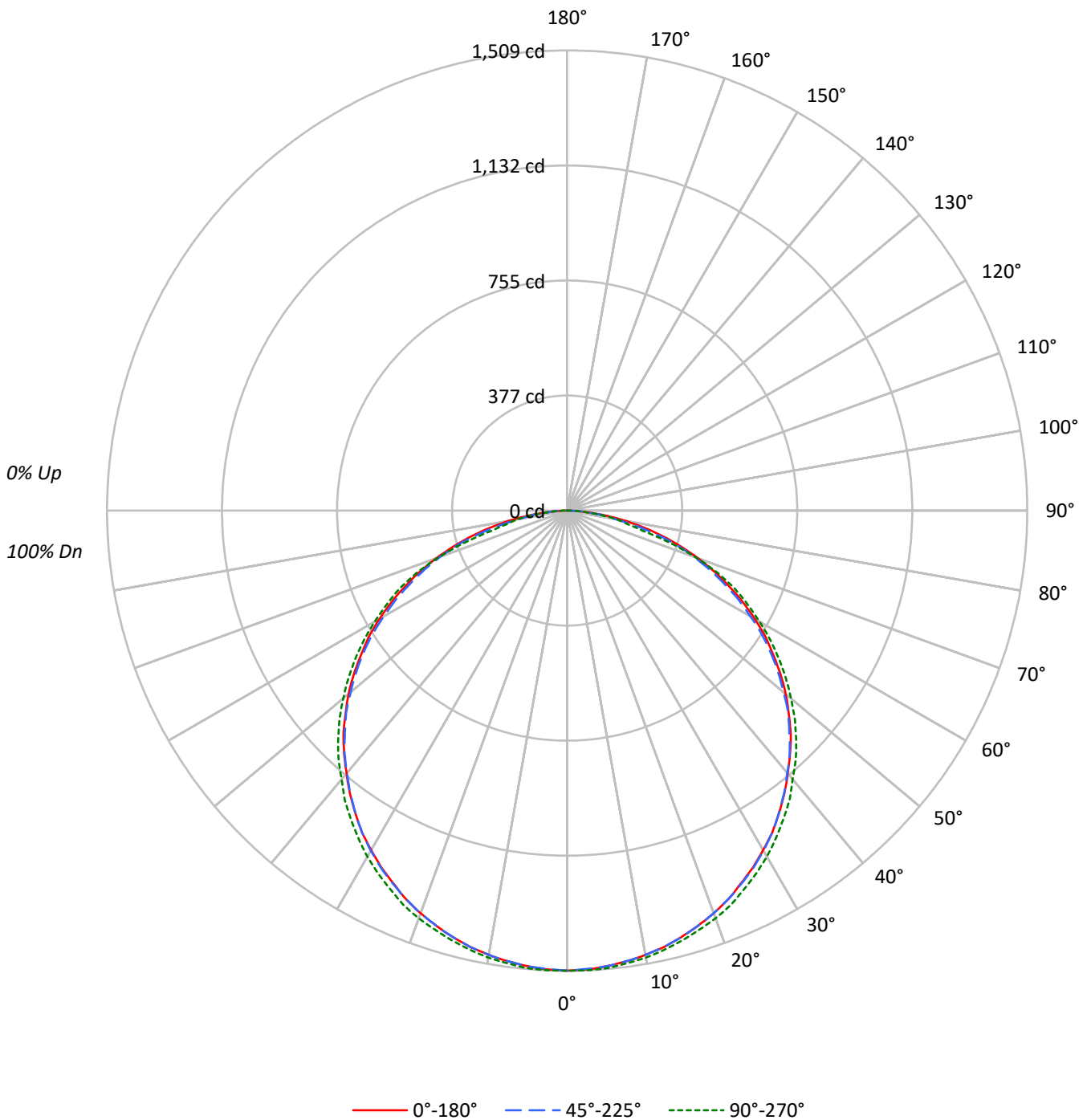
Input Watts (W): 38.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5315	5315	5315
5°	5304	5304	5327
10°	5292	5292	5324
15°	5280	5280	5322
20°	5267	5267	5335
25°	5242	5251	5330
30°	5229	5238	5330
35°	5208	5208	5315
40°	5175	5165	5289
45°	5168	5135	5292
50°	5129	5080	5253
55°	5069	5014	5208
60°	5005	4894	5133
65°	4869	4737	5057
70°	4693	4553	4623
75°	4421	4144	3531
80°	3889	3248	3386
85°	2825	2736	2643



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.7	3.2
10°-20°	409.6	9.2
20°-30°	625.2	14.0
30°-40°	761.5	17.1
40°-50°	801.6	18.0
50°-60°	738.0	16.6
60°-70°	574.4	12.9
70°-80°	318.8	7.2
80°-90°	81.9	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°	1177.5	26.4
0°-40°	1939.0	43.5
0°-60°	3478.6	78.1
0°-90°	4453.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4453.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1509	1509	1509	1509	1509	
5°	1500	1500	1500	1504	1506	143
15°	1448	1448	1448	1455	1459	409
25°	1349	1351	1351	1362	1371	622
35°	1211	1211	1211	1225	1236	758
45°	1037	1031	1031	1046	1062	799
55°	825	823	816	830	848	739
65°	584	577	568	586	607	579
75°	325	318	304	271	259	342
85°	70	65	68	65	65	88
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1508.8	1508.8	1508.8	1508.8	1508.8
2.5°	1506.5	1504.3	1504.3	1508.8	1508.8
5°	1499.8	1499.8	1499.8	1504.3	1506.5
7.5°	1490.8	1490.8	1490.8	1497.5	1497.5
10°	1479.5	1477.2	1479.5	1484.0	1488.5
12.5°	1465.9	1463.7	1465.9	1470.5	1475.0
15°	1447.9	1447.9	1447.9	1454.7	1459.2
17.5°	1427.6	1425.3	1427.6	1434.4	1441.1
20°	1405.1	1405.1	1405.1	1414.1	1423.1
22.5°	1380.2	1378.0	1380.2	1391.5	1400.5
25°	1348.7	1350.9	1350.9	1362.2	1371.2
27.5°	1319.3	1317.1	1321.6	1330.6	1341.9
30°	1285.5	1285.5	1287.8	1299.1	1310.3
32.5°	1251.7	1249.4	1251.7	1263.0	1274.2
35°	1211.1	1211.1	1211.1	1224.6	1235.9
37.5°	1170.5	1168.2	1168.2	1181.8	1197.6
40°	1125.4	1123.1	1123.1	1138.9	1150.2
42.5°	1082.5	1080.3	1080.3	1093.8	1109.6
45°	1037.4	1030.7	1030.7	1046.5	1062.2
47.5°	985.6	981.1	983.3	996.8	1012.6
50°	935.9	929.2	926.9	942.7	958.5
52.5°	881.8	879.6	872.8	886.3	904.4
55°	825.4	823.2	816.4	829.9	848.0
57.5°	771.3	764.5	757.8	769.1	789.4
60°	710.4	703.7	694.6	710.4	728.5
62.5°	649.5	640.5	633.7	647.3	667.6
65°	584.1	577.4	568.3	586.4	606.7
67.5°	523.2	516.5	505.2	521.0	534.5
70°	455.6	446.5	442.0	444.3	448.8
72.5°	390.2	385.7	378.9	360.8	356.3
75°	324.8	318.0	304.5	270.6	259.4
77.5°	259.4	254.8	230.0	200.7	200.7
80°	191.7	189.4	160.1	164.6	166.9
82.5°	130.8	126.3	117.3	115.0	115.0
85°	69.9	65.4	67.7	65.4	65.4
87.5°	27.1	27.1	29.3	27.1	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)