

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: P238797

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238797  
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: 22EN-LD2-39-UNV-L830-CD1-U  
Description: METALUX ENCOUNTER 2X2 LED TROFFER  
STANDARD OPTION  
Light Source: (168)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3859.4 lumens  
Efficiency: N/A  
Efficacy: 115.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

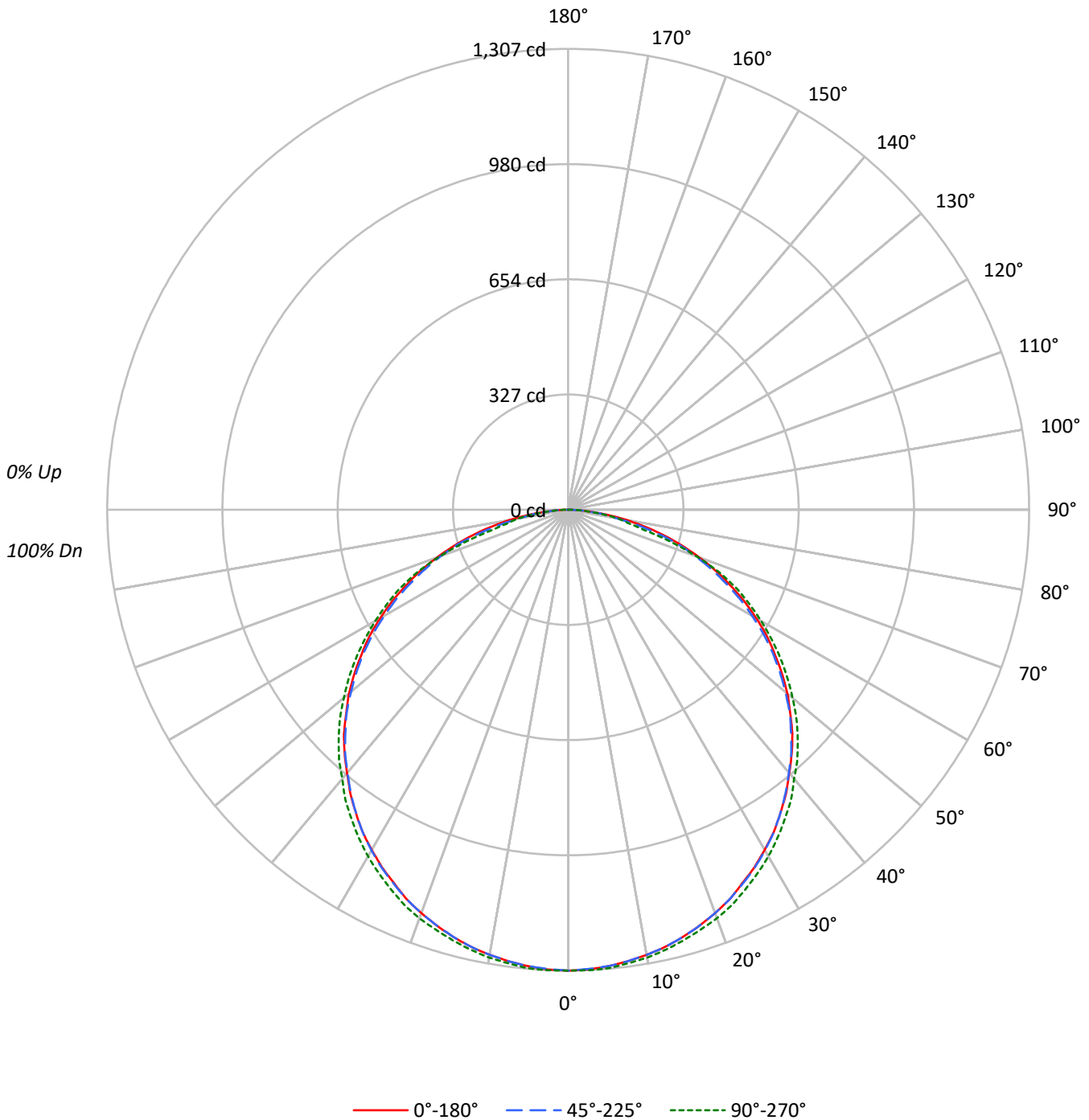
Input Watts (W): 33.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4187	4187	4187
5°	4178	4178	4197
10°	4169	4169	4194
15°	4160	4160	4192
20°	4149	4149	4203
25°	4130	4136	4199
30°	4119	4127	4199
35°	4103	4103	4187
40°	4077	4069	4167
45°	4072	4045	4169
50°	4041	4002	4138
55°	3994	3950	4103
60°	3943	3855	4043
65°	3836	3732	3984
70°	3697	3586	3641
75°	3482	3264	2780
80°	3063	2560	2667
85°	2227	2153	2083



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.6	3.2
10°-20°	354.9	9.2
20°-30°	541.8	14.0
30°-40°	659.9	17.1
40°-50°	694.6	18.0
50°-60°	639.5	16.6
60°-70°	497.8	12.9
70°-80°	276.3	7.2
80°-90°	71.0	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°	1020.4	26.4
0°-40°	1680.2	43.5
0°-60°	3014.3	78.1
0°-90°	3859.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3859.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1307	1307	1307	1307	1307	
5°	1300	1300	1300	1304	1306	124
15°	1255	1255	1255	1260	1264	354
25°	1169	1171	1171	1180	1188	539
35°	1050	1050	1050	1061	1071	657
45°	899	893	893	907	920	692
55°	715	713	708	719	735	640
65°	506	500	492	508	526	502
75°	281	276	264	234	225	297
85°	61	57	59	57	57	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1307.4	1307.4	1307.4	1307.4	1307.4
2.5°	1305.5	1303.5	1303.5	1307.4	1307.4
5°	1299.6	1299.6	1299.6	1303.5	1305.5
7.5°	1291.8	1291.8	1291.8	1297.6	1297.6
10°	1282.0	1280.1	1282.0	1285.9	1289.8
12.5°	1270.3	1268.3	1270.3	1274.2	1278.1
15°	1254.7	1254.7	1254.7	1260.5	1264.4
17.5°	1237.1	1235.1	1237.1	1242.9	1248.8
20°	1217.5	1217.5	1217.5	1225.3	1233.2
22.5°	1196.0	1194.1	1196.0	1205.8	1213.6
25°	1168.7	1170.6	1170.6	1180.4	1188.2
27.5°	1143.3	1141.3	1145.2	1153.0	1162.8
30°	1113.9	1113.9	1115.9	1125.7	1135.4
32.5°	1084.6	1082.7	1084.6	1094.4	1104.2
35°	1049.5	1049.5	1049.5	1061.2	1071.0
37.5°	1014.3	1012.3	1012.3	1024.0	1037.7
40°	975.2	973.2	973.2	986.9	996.7
42.5°	938.1	936.1	936.1	947.8	961.5
45°	899.0	893.1	893.1	906.8	920.5
47.5°	854.0	850.1	852.1	863.8	877.5
50°	811.0	805.2	803.2	816.9	830.6
52.5°	764.1	762.2	756.3	768.0	783.7
55°	715.3	713.3	707.5	719.2	734.8
57.5°	668.4	662.5	656.6	666.4	684.0
60°	615.6	609.7	601.9	615.6	631.2
62.5°	562.8	555.0	549.2	560.9	578.5
65°	506.2	500.3	492.5	508.1	525.7
67.5°	453.4	447.5	437.8	451.4	463.2
70°	394.8	386.9	383.0	385.0	388.9
72.5°	338.1	334.2	328.3	312.7	308.8
75°	281.4	275.6	263.8	234.5	224.7
77.5°	224.7	220.8	199.3	173.9	173.9
80°	166.1	164.2	138.8	142.7	144.6
82.5°	113.3	109.4	101.6	99.7	99.7
85°	60.6	56.7	58.6	56.7	56.7
87.5°	23.5	23.5	25.4	23.5	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)