

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: P238845

Luminaire Tested: **22EN-LD2-39-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238845  
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-L930-CD1-U  
Description: METALUX ENCOUNTER 2X2 LED TROFFER  
STANDARD OPTION  
Light Source: (168)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3334.5 lumens  
Efficiency: N/A  
Efficacy: 100.1 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

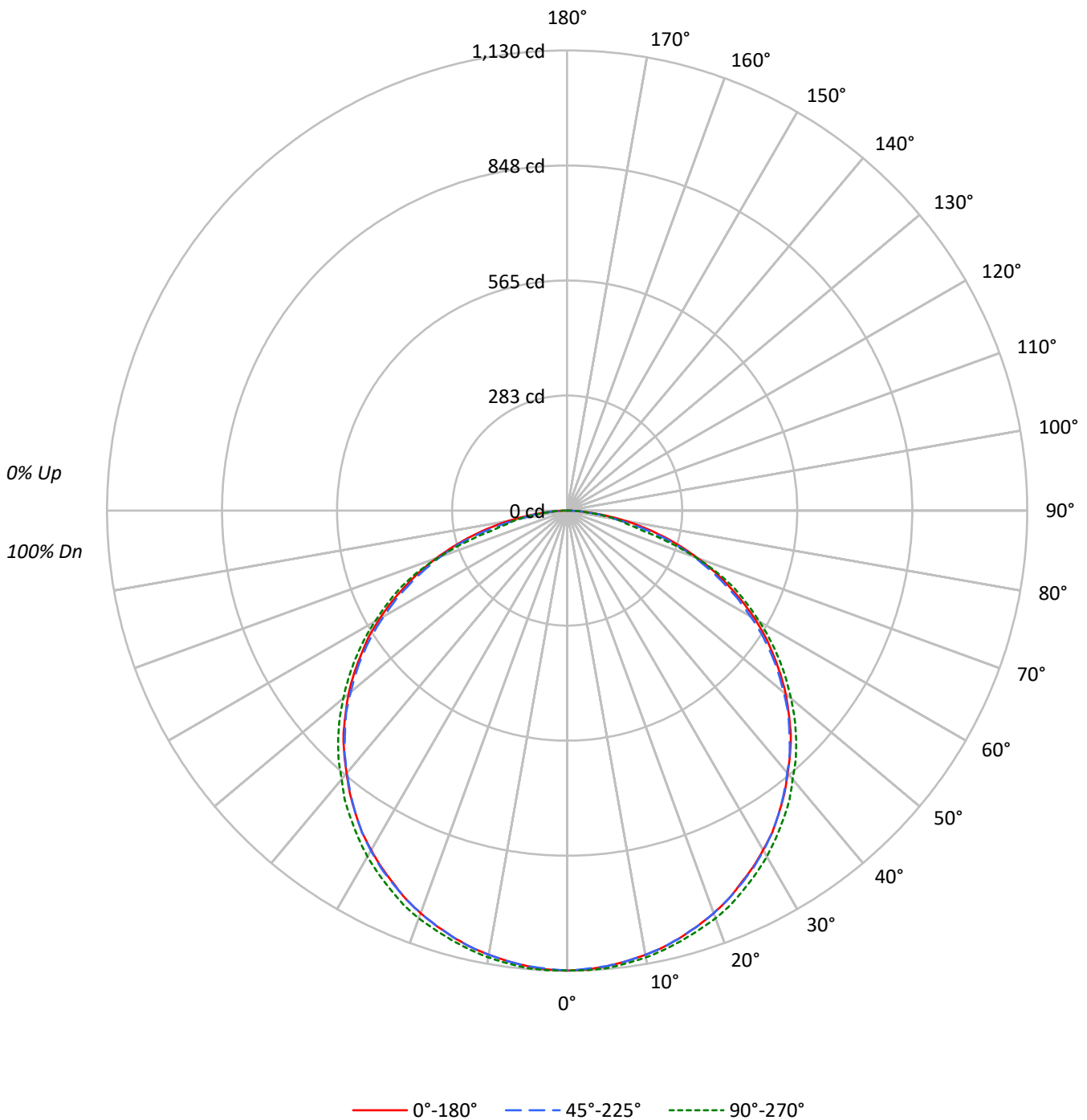
Input Watts (W): 33.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3618	3618	3618
5°	3610	3610	3626
10°	3602	3602	3624
15°	3594	3594	3622
20°	3585	3585	3631
25°	3568	3574	3628
30°	3559	3565	3628
35°	3545	3545	3617
40°	3523	3515	3600
45°	3518	3495	3602
50°	3491	3458	3575
55°	3451	3413	3545
60°	3407	3331	3493
65°	3314	3224	3442
70°	3194	3098	3146
75°	3008	2820	2403
80°	2646	2211	2303
85°	1922	1863	1800



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.8	3.2
10°-20°	306.6	9.2
20°-30°	468.1	14.0
30°-40°	570.1	17.1
40°-50°	600.1	18.0
50°-60°	552.5	16.6
60°-70°	430.1	12.9
70°-80°	238.7	7.2
80°-90°	61.4	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°	881.6	26.4
0°-40°	1451.7	43.5
0°-60°	2604.4	78.1
0°-90°	3334.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3334.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1123	1123	1123	1126	1128	107
15°	1084	1084	1084	1089	1092	306
25°	1010	1011	1011	1020	1027	466
35°	907	907	907	917	925	567
45°	777	772	772	784	795	598
55°	618	616	611	621	635	553
65°	437	432	426	439	454	434
75°	243	238	228	203	194	256
85°	52	49	51	49	49	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1129.6	1129.6	1129.6	1129.6	1129.6
2.5°	1127.9	1126.2	1126.2	1129.6	1129.6
5°	1122.9	1122.9	1122.9	1126.2	1127.9
7.5°	1116.1	1116.1	1116.1	1121.2	1121.2
10°	1107.7	1106.0	1107.7	1111.0	1114.4
12.5°	1097.5	1095.8	1097.5	1100.9	1104.3
15°	1084.0	1084.0	1084.0	1089.1	1092.5
17.5°	1068.8	1067.1	1068.8	1073.9	1079.0
20°	1051.9	1051.9	1051.9	1058.7	1065.4
22.5°	1033.4	1031.7	1033.4	1041.8	1048.6
25°	1009.7	1011.4	1011.4	1019.9	1026.6
27.5°	987.8	986.1	989.5	996.2	1004.7
30°	962.4	962.4	964.1	972.6	981.0
32.5°	937.1	935.4	937.1	945.6	954.0
35°	906.7	906.7	906.7	916.9	925.3
37.5°	876.3	874.6	874.6	884.8	896.6
40°	842.6	840.9	840.9	852.7	861.1
42.5°	810.5	808.8	808.8	818.9	830.7
45°	776.7	771.6	771.6	783.5	795.3
47.5°	737.9	734.5	736.2	746.3	758.1
50°	700.7	695.7	694.0	705.8	717.6
52.5°	660.2	658.5	653.5	663.6	677.1
55°	618.0	616.3	611.2	621.4	634.9
57.5°	577.5	572.4	567.3	575.8	591.0
60°	531.9	526.8	520.1	531.9	545.4
62.5°	486.3	479.5	474.5	484.6	499.8
65°	437.3	432.3	425.5	439.0	454.2
67.5°	391.7	386.7	378.2	390.0	400.2
70°	341.1	334.3	330.9	332.6	336.0
72.5°	292.1	288.7	283.7	270.2	266.8
75°	243.1	238.1	227.9	202.6	194.2
77.5°	194.2	190.8	172.2	150.3	150.3
80°	143.5	141.8	119.9	123.3	124.9
82.5°	97.9	94.6	87.8	86.1	86.1
85°	52.3	49.0	50.7	49.0	49.0
87.5°	20.3	20.3	22.0	20.3	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)