

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: P238793

Luminaire Tested: **22EN-LD2-34-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238793
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-LD2-34-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: 3367.1 lumens
Efficiency: N/A
Efficacy: 118.1 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

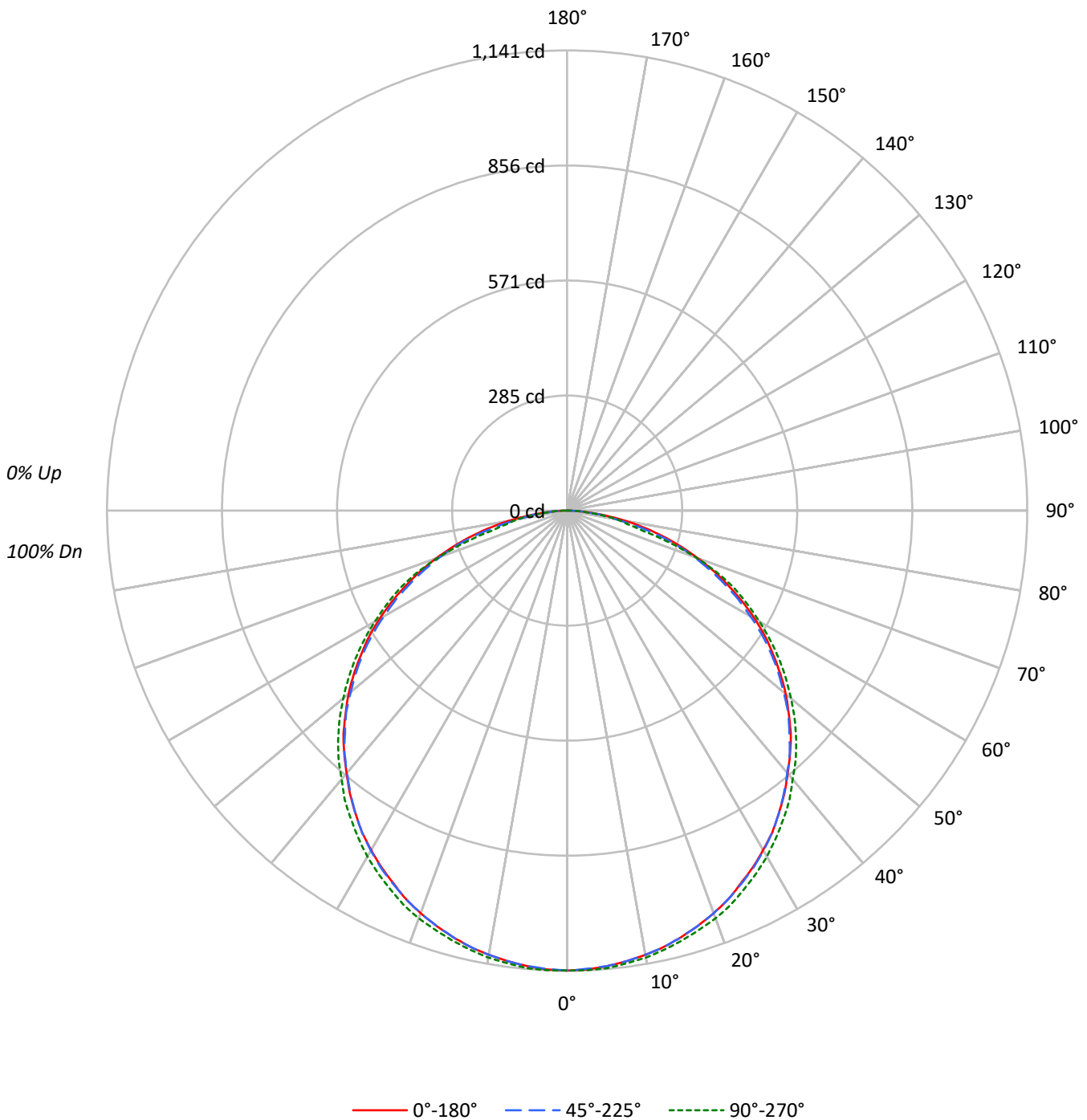
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	98	94	97	94	91	93	91	88	90	88	86	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37					37			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33					33			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3653	3653	3653
5°	3645	3645	3661
10°	3637	3637	3659
15°	3629	3629	3657
20°	3620	3620	3666
25°	3603	3609	3663
30°	3594	3600	3663
35°	3580	3580	3653
40°	3557	3550	3635
45°	3552	3529	3637
50°	3525	3491	3610
55°	3484	3446	3579
60°	3440	3363	3527
65°	3346	3256	3475
70°	3225	3129	3177
75°	3038	2848	2426
80°	2672	2233	2327
85°	1944	1878	1815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.9	3.2
10°-20°	309.6	9.2
20°-30°	472.7	14.0
30°-40°	575.7	17.1
40°-50°	606.0	18.0
50°-60°	557.9	16.6
60°-70°	434.3	12.9
70°-80°	241.1	7.2
80°-90°	61.9	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°	890.2	26.4
0°-40°	1465.9	43.5
0°-60°	2629.8	78.1
0°-90°	3367.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3367.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1141	1141	1141	1141	1141	
5°	1134	1134	1134	1137	1139	108
15°	1095	1095	1095	1100	1103	309
25°	1020	1021	1021	1030	1037	471
35°	916	916	916	926	934	573
45°	784	779	779	791	803	604
55°	624	622	617	627	641	558
65°	442	436	430	443	459	438
75°	246	240	230	205	196	259
85°	53	49	51	49	49	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1140.6	1140.6	1140.6	1140.6	1140.6
2.5°	1138.9	1137.2	1137.2	1140.6	1140.6
5°	1133.8	1133.8	1133.8	1137.2	1138.9
7.5°	1127.0	1127.0	1127.0	1132.1	1132.1
10°	1118.5	1116.8	1118.5	1121.9	1125.3
12.5°	1108.2	1106.5	1108.2	1111.7	1115.1
15°	1094.6	1094.6	1094.6	1099.7	1103.1
17.5°	1079.3	1077.6	1079.3	1084.4	1089.5
20°	1062.2	1062.2	1062.2	1069.0	1075.8
22.5°	1043.5	1041.7	1043.5	1052.0	1058.8
25°	1019.6	1021.3	1021.3	1029.8	1036.6
27.5°	997.4	995.7	999.1	1005.9	1014.5
30°	971.8	971.8	973.5	982.1	990.6
32.5°	946.3	944.6	946.3	954.8	963.3
35°	915.6	915.6	915.6	925.8	934.3
37.5°	884.9	883.2	883.2	893.4	905.3
40°	850.8	849.1	849.1	861.0	869.5
42.5°	818.4	816.7	816.7	826.9	838.9
45°	784.3	779.2	779.2	791.1	803.0
47.5°	745.1	741.7	743.4	753.6	765.5
50°	707.6	702.5	700.7	712.7	724.6
52.5°	666.6	664.9	659.8	670.1	683.7
55°	624.0	622.3	617.2	627.4	641.1
57.5°	583.1	578.0	572.9	581.4	596.7
60°	537.1	532.0	525.1	537.1	550.7
62.5°	491.0	484.2	479.1	489.3	504.7
65°	441.6	436.5	429.7	443.3	458.6
67.5°	395.6	390.4	381.9	393.9	404.1
70°	344.4	337.6	334.2	335.9	339.3
72.5°	295.0	291.6	286.4	272.8	269.4
75°	245.5	240.4	230.2	204.6	196.1
77.5°	196.1	192.7	173.9	151.7	151.7
80°	144.9	143.2	121.1	124.5	126.2
82.5°	98.9	95.5	88.7	87.0	87.0
85°	52.9	49.4	51.1	49.4	49.4
87.5°	20.5	20.5	22.2	20.5	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)