

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: P392782

Luminaire Tested: **12EN-LD2-17-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392782  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-35)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12EN-LD2-17-UNV-L83050-W2A-1-U (4500K)  
Description: 1X2 ENCOUNTER, 1700 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1897.6 lumens  
Efficiency: N/A  
Efficacy: 122.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.26 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

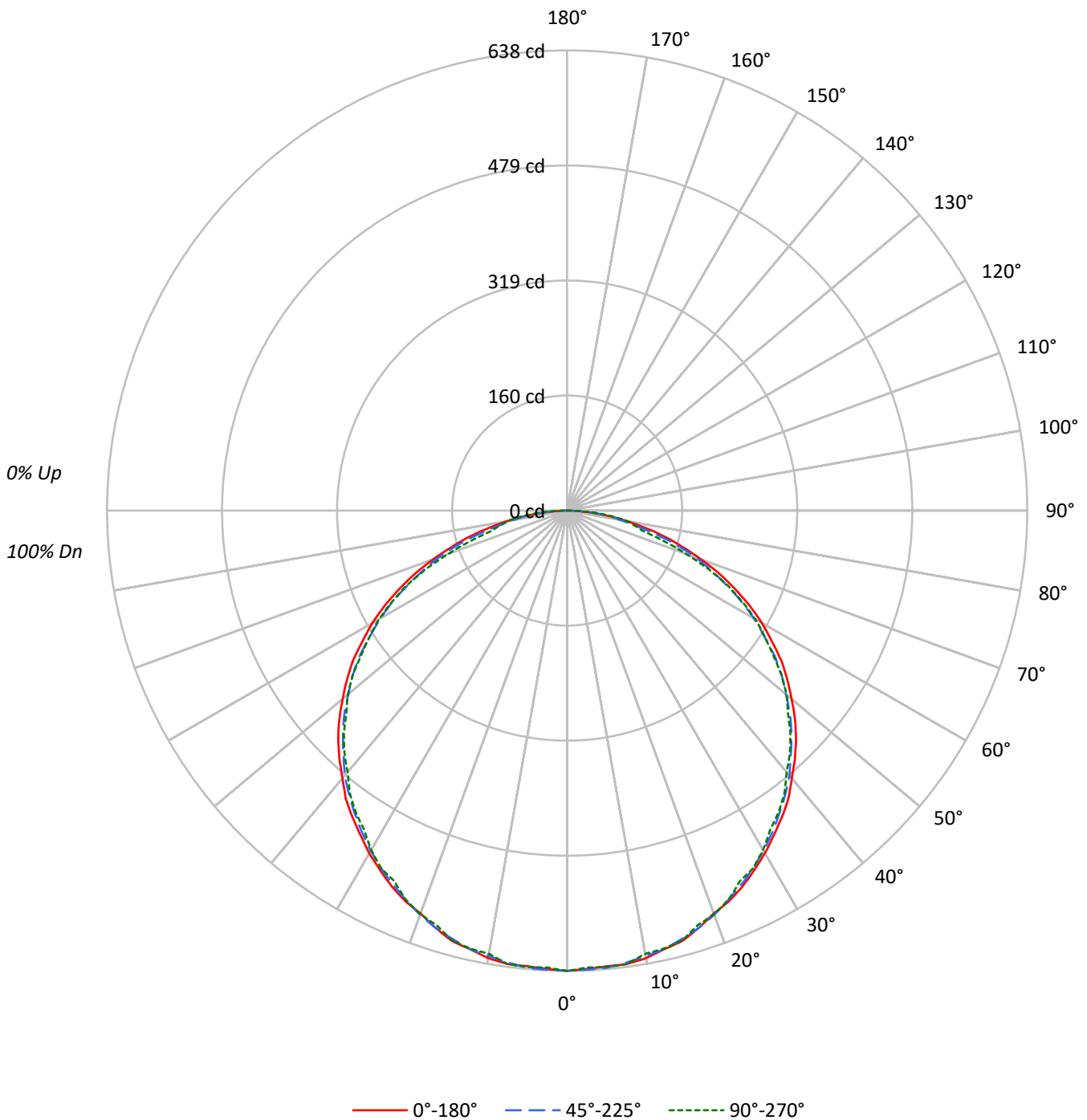
Input Watts (W): 15.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	36	29	25	23					23			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3435	3435	3435
5°	3426	3437	3431
10°	3443	3427	3410
15°	3442	3426	3437
20°	3404	3416	3410
25°	3415	3397	3366
30°	3409	3384	3378
35°	3411	3370	3357
40°	3404	3368	3325
45°	3417	3347	3331
50°	3400	3315	3324
55°	3400	3294	3266
60°	3353	3221	3243
65°	3266	3098	3124
70°	3108	2979	2755
75°	2922	2666	2244
80°	2619	2303	2619
85°	2013	2390	2575



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.4	3.2
10°-20°	173.5	9.1
20°-30°	263.8	13.9
30°-40°	321.6	16.9
40°-50°	340.3	17.9
50°-60°	315.0	16.6
60°-70°	244.3	12.9
70°-80°	136.5	7.2
80°-90°	42.3	2.2
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°	497.6	26.2
0°-40°	819.2	43.2
0°-60°	1474.5	77.7
0°-90°	1897.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1897.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	638	638	638	638	638	
5°	634	635	636	632	635	60
15°	618	616	615	615	617	174
25°	575	572	572	572	567	265
35°	519	518	513	509	511	325
45°	449	446	440	437	438	346
55°	362	358	351	348	348	323
65°	256	253	243	245	245	253
75°	140	137	128	115	108	148
85°	33	34	39	41	42	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	638.2	638.2	638.2	638.2	638.2
2.5°	636.1	636.1	637.2	640.2	634.1
5°	634.1	635.1	636.1	632.1	635.1
7.5°	634.1	632.1	632.1	632.1	634.1
10°	630.0	624.9	627.0	629.0	623.9
12.5°	622.9	622.9	622.9	618.8	621.9
15°	617.8	615.8	614.8	614.8	616.8
17.5°	606.6	604.6	606.6	606.6	602.6
20°	594.4	597.5	596.4	593.4	595.4
22.5°	586.3	586.3	584.2	583.2	584.2
25°	575.1	572.0	572.0	572.0	566.9
27.5°	561.8	560.8	558.8	554.7	558.8
30°	548.6	546.6	544.5	542.5	543.5
32.5°	533.3	531.3	529.3	529.3	524.2
35°	519.1	518.1	513.0	508.9	510.9
37.5°	503.8	499.8	496.7	493.6	494.7
40°	484.5	482.4	479.4	476.3	473.3
42.5°	467.2	466.2	459.0	456.0	457.0
45°	448.9	445.8	439.7	436.6	437.7
47.5°	428.5	425.5	419.3	417.3	415.3
50°	406.1	405.1	395.9	392.9	397.0
52.5°	384.7	381.7	374.6	371.5	374.6
55°	362.3	358.3	351.1	348.1	348.1
57.5°	335.9	333.8	323.7	321.6	324.7
60°	311.5	307.4	299.2	297.2	301.3
62.5°	285.0	280.9	271.8	272.8	273.8
65°	256.5	253.4	243.3	245.3	245.3
67.5°	228.0	223.9	215.8	212.7	211.7
70°	197.5	194.4	189.3	179.1	175.1
72.5°	167.9	165.9	159.8	143.5	140.5
75°	140.5	137.4	128.2	115.0	107.9
77.5°	110.9	110.9	97.7	93.6	95.7
80°	84.5	83.5	74.3	81.4	84.5
82.5°	58.0	56.0	60.1	63.1	64.1
85°	32.6	33.6	38.7	40.7	41.7
87.5°	13.2	16.3	17.3	19.3	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)