

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: P392802

Luminaire Tested: **12EN-LD2-23-UNV-L82765-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392802  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12EN-LD2-23-UNV-L82765-W2A-1-U (2700K)  
Description: 1X2 ENCOUNTER, 2300 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2085.3 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.26 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

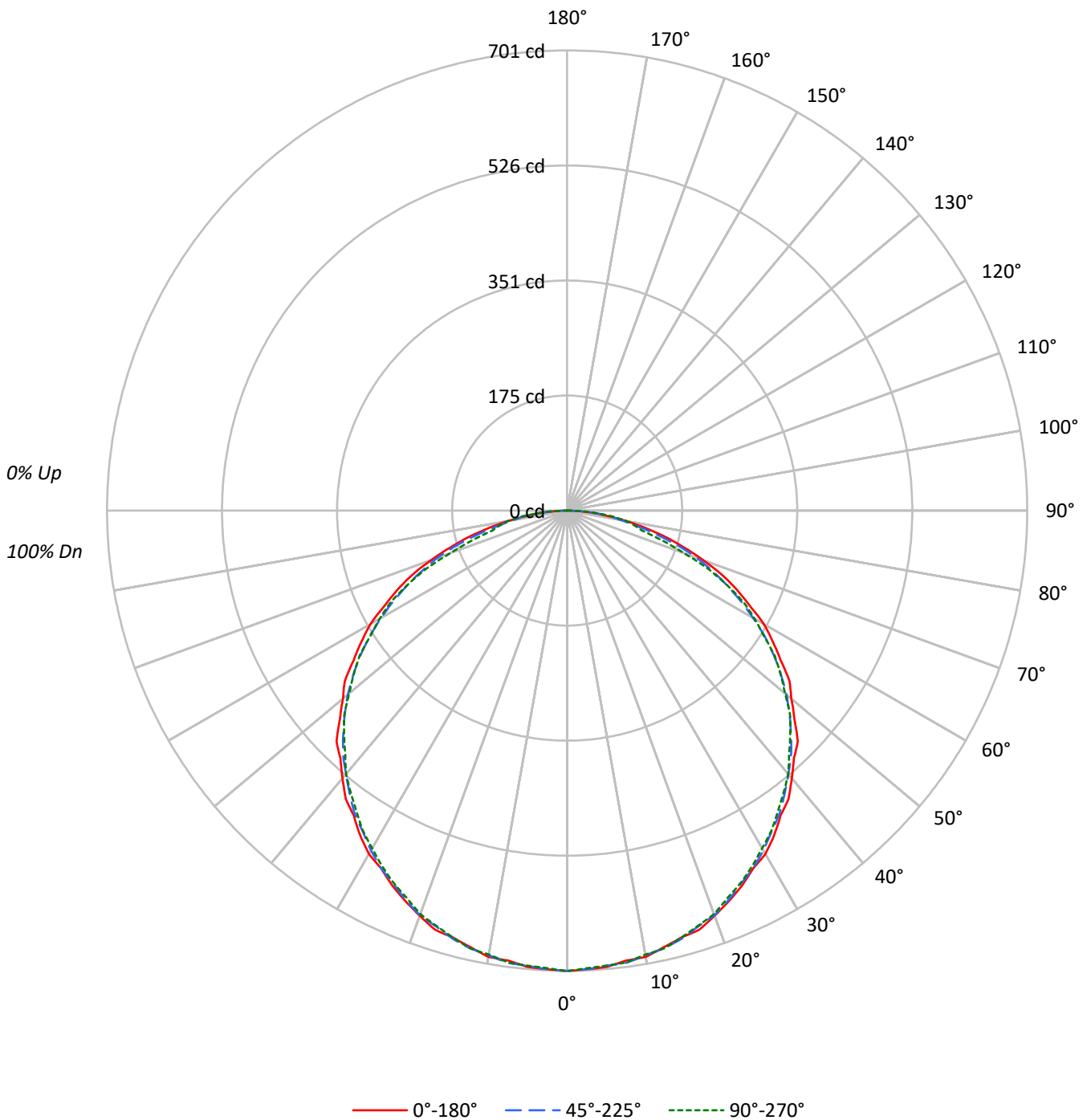
Input Watts (W): 19.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3774	3774	3774
5°	3769	3760	3760
10°	3773	3758	3753
15°	3750	3761	3750
20°	3762	3757	3746
25°	3744	3722	3717
30°	3754	3714	3692
35°	3725	3706	3677
40°	3740	3683	3683
45°	3782	3672	3658
50°	3734	3651	3628
55°	3725	3606	3623
60°	3725	3520	3550
65°	3632	3413	3424
70°	3473	3301	2988
75°	3229	2928	2456
80°	2814	2535	2845
85°	2242	2692	2748



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.3	3.2
10°-20°	190.4	9.1
20°-30°	289.7	13.9
30°-40°	352.9	16.9
40°-50°	373.9	17.9
50°-60°	346.3	16.6
60°-70°	269.3	12.9
70°-80°	150.1	7.2
80°-90°	46.4	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°	546.3	26.2
0°-40°	899.2	43.1
0°-60°	1619.4	77.7
0°-90°	2085.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2085.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	698	695	696	698	696	66
15°	673	676	675	675	673	191
25°	630	630	627	625	626	291
35°	567	567	564	561	560	357
45°	497	489	482	479	481	380
55°	397	393	384	382	386	356
65°	285	279	268	271	269	281
75°	155	151	141	126	118	163
85°	36	37	44	44	44	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	701.3	701.3	701.3	701.3	701.3
2.5°	699.5	699.5	699.5	699.5	697.7
5°	697.7	694.9	695.9	697.7	695.9
7.5°	691.3	694.0	694.9	694.9	694.0
10°	690.4	687.7	687.7	687.7	686.8
12.5°	681.3	682.2	683.1	683.1	683.1
15°	673.1	675.9	675.0	675.0	673.1
17.5°	669.5	665.0	664.1	664.1	663.2
20°	656.8	655.0	655.9	654.1	654.1
22.5°	644.1	643.2	642.3	641.4	638.6
25°	630.5	630.5	626.8	625.0	625.9
27.5°	614.1	615.9	614.1	612.3	610.5
30°	604.1	599.6	597.7	595.9	594.1
32.5°	586.8	585.0	579.6	576.9	578.7
35°	566.9	566.9	564.1	561.4	559.6
37.5°	554.1	548.7	544.1	541.4	541.4
40°	532.3	532.3	524.2	520.5	524.2
42.5°	511.4	511.4	505.1	503.3	500.5
45°	496.9	488.7	482.4	478.7	480.6
47.5°	469.7	467.8	459.7	456.9	460.6
50°	446.0	445.1	436.0	434.2	433.3
52.5°	427.0	418.8	410.6	407.9	409.7
55°	397.0	393.4	384.3	381.5	386.1
57.5°	371.5	367.9	357.0	355.2	355.2
60°	346.1	337.9	327.0	325.2	329.8
62.5°	313.4	309.8	298.0	298.9	303.4
65°	285.2	278.9	268.0	270.7	268.9
67.5°	255.3	248.0	238.9	235.3	232.6
70°	220.7	216.2	209.8	197.1	189.9
72.5°	186.2	182.6	176.2	158.1	152.6
75°	155.3	150.8	140.8	126.3	118.1
77.5°	121.7	121.7	108.1	101.7	105.4
80°	90.8	91.8	81.8	89.0	91.8
82.5°	61.8	60.9	67.2	69.9	69.9
85°	36.3	37.2	43.6	44.5	44.5
87.5°	14.5	17.3	20.0	20.9	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)