

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: P392827

Luminaire Tested: **12EN-LD2-23-UNV-L93050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392827  
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-L93050-W2A-1-U (3000K)  
Description: 1X2 ENCOUNTER, 2300 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1886.3 lumens  
Efficiency: N/A  
Efficacy: 97.7 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

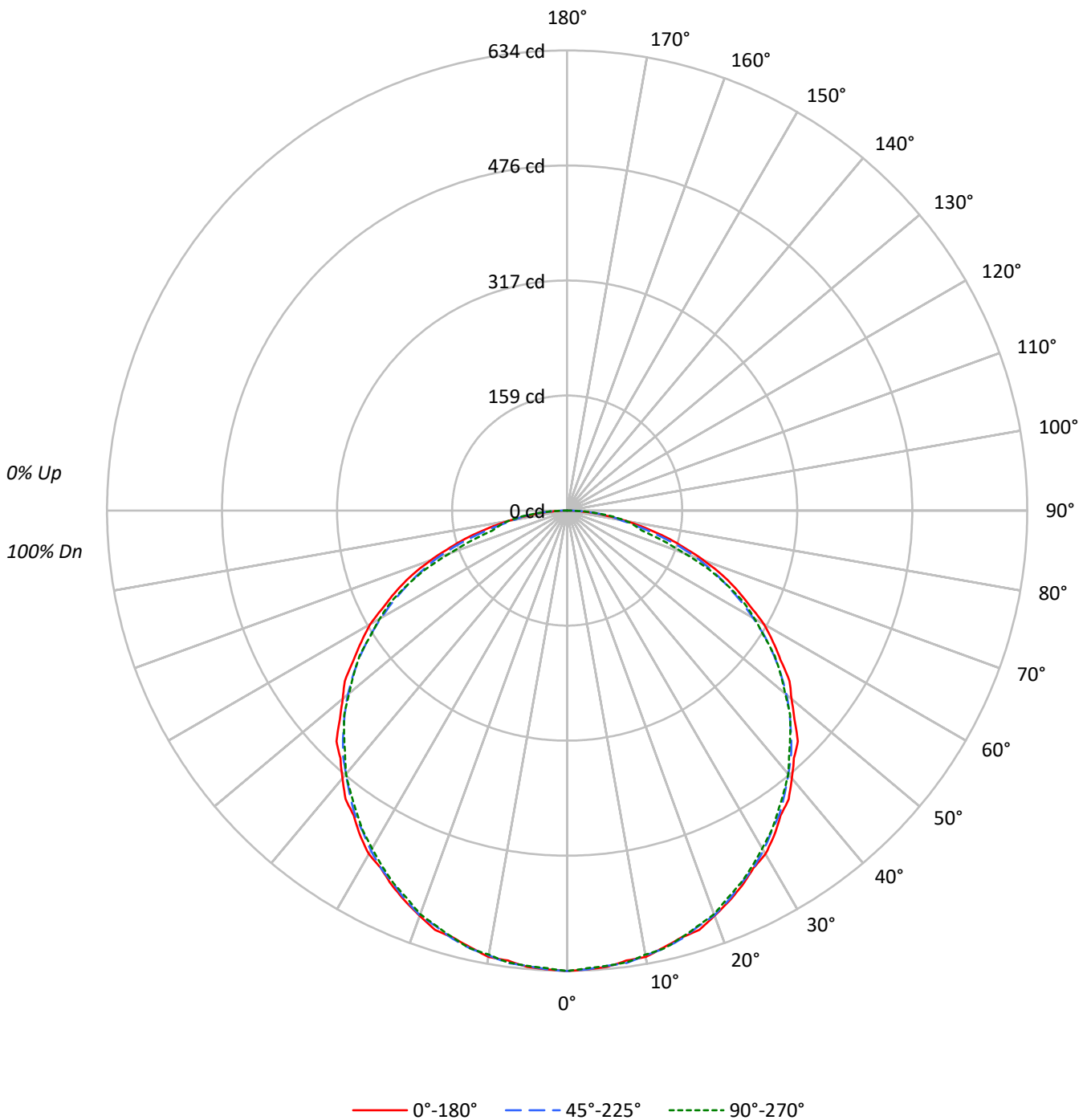
Input Watts (W): 19.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3414	3414	3414
5°	3410	3401	3401
10°	3413	3400	3395
15°	3393	3402	3393
20°	3403	3398	3389
25°	3387	3367	3362
30°	3396	3360	3340
35°	3369	3353	3326
40°	3383	3331	3331
45°	3421	3321	3309
50°	3378	3302	3282
55°	3369	3262	3277
60°	3370	3184	3211
65°	3286	3087	3097
70°	3142	2987	2702
75°	2922	2649	2221
80°	2548	2294	2572
85°	2032	2433	2489



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.9	3.2
10°-20°	172.2	9.1
20°-30°	262.0	13.9
30°-40°	319.2	16.9
40°-50°	338.2	17.9
50°-60°	313.2	16.6
60°-70°	243.6	12.9
70°-80°	135.8	7.2
80°-90°	42.0	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°	494.2	26.2
0°-40°	813.4	43.1
0°-60°	1464.9	77.7
0°-90°	1886.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1886.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	631	629	630	631	630	60
15°	609	611	611	611	609	173
25°	570	570	567	565	566	263
35°	513	513	510	508	506	323
45°	450	442	436	433	435	344
55°	359	356	348	345	349	322
65°	258	252	242	245	243	255
75°	140	136	127	114	107	148
85°	33	34	39	40	40	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	634.4	634.4	634.4	634.4	634.4
2.5°	632.7	632.7	632.7	632.7	631.1
5°	631.1	628.6	629.5	631.1	629.5
7.5°	625.3	627.8	628.6	628.6	627.8
10°	624.5	622.1	622.1	622.1	621.2
12.5°	616.3	617.1	618.0	618.0	618.0
15°	608.9	611.4	610.6	610.6	608.9
17.5°	605.6	601.5	600.7	600.7	599.9
20°	594.1	592.5	593.3	591.7	591.7
22.5°	582.6	581.8	581.0	580.2	577.7
25°	570.3	570.3	567.0	565.4	566.2
27.5°	555.5	557.1	555.5	553.9	552.2
30°	546.5	542.4	540.7	539.1	537.4
32.5°	530.8	529.2	524.3	521.8	523.5
35°	512.8	512.8	510.3	507.8	506.2
37.5°	501.3	496.3	492.2	489.8	489.8
40°	481.5	481.5	474.1	470.9	474.1
42.5°	462.6	462.6	456.9	455.2	452.8
45°	449.5	442.1	436.3	433.1	434.7
47.5°	424.8	423.2	415.8	413.3	416.6
50°	403.5	402.7	394.4	392.8	392.0
52.5°	386.2	378.8	371.4	369.0	370.6
55°	359.1	355.8	347.6	345.1	349.2
57.5°	336.1	332.8	322.9	321.3	321.3
60°	313.1	305.7	295.8	294.2	298.3
62.5°	283.5	280.2	269.5	270.4	274.5
65°	258.0	252.3	242.4	244.9	243.2
67.5°	230.9	224.3	216.1	212.8	210.4
70°	199.7	195.6	189.8	178.3	171.7
72.5°	168.5	165.2	159.4	143.0	138.1
75°	140.5	136.4	127.4	114.2	106.8
77.5°	110.1	110.1	97.8	92.0	95.3
80°	82.2	83.0	74.0	80.5	83.0
82.5°	55.9	55.1	60.8	63.3	63.3
85°	32.9	33.7	39.4	40.3	40.3
87.5°	13.1	15.6	18.1	18.9	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)