

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: P392890

Luminaire Tested: **12EN-LD2-31-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392890  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12EN-LD2-31-UNV-L93050-W2A-1-U (2700K)  
Description: 1X2 ENCOUNTER, 3100 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2699.1 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

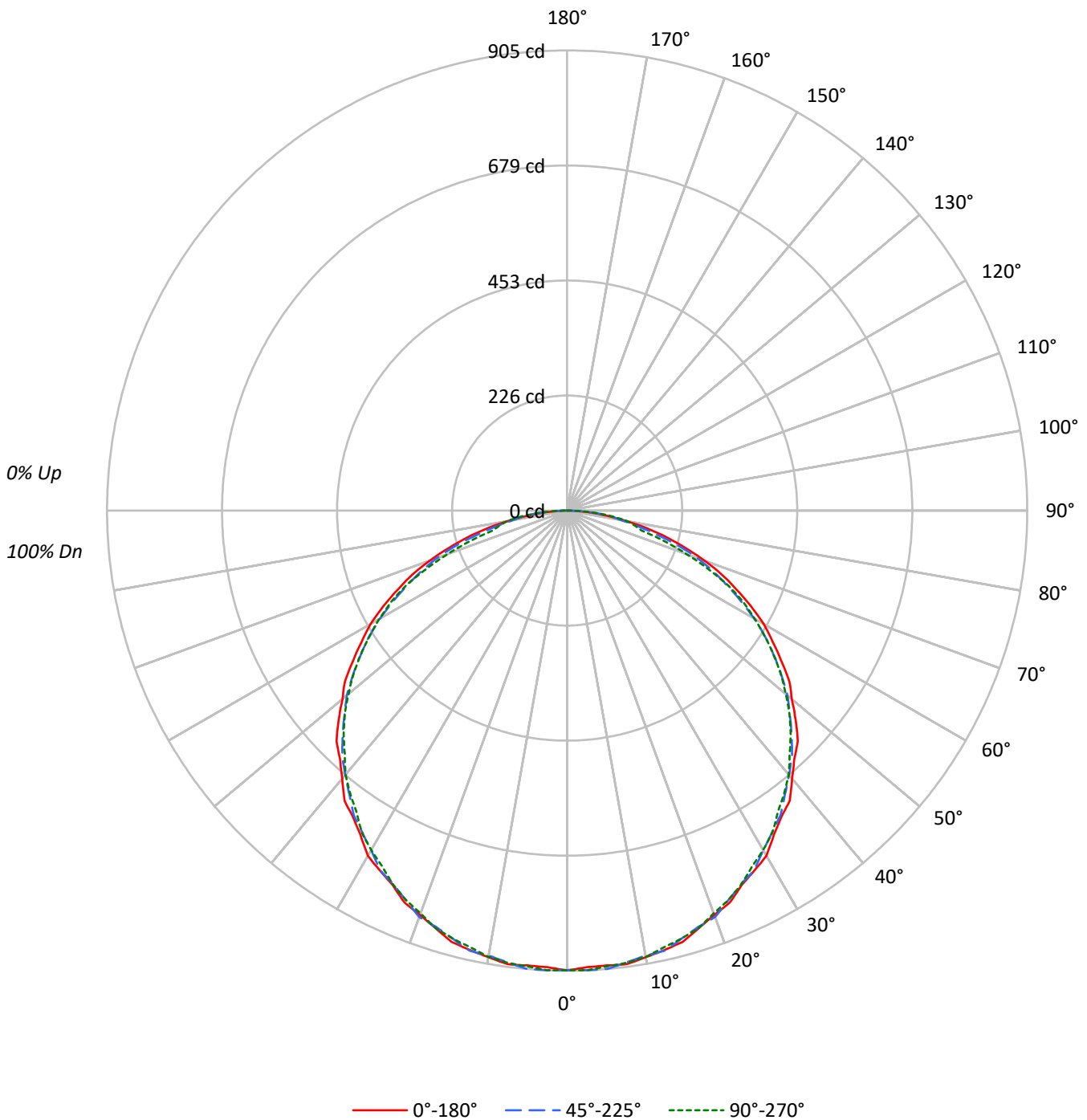
Input Watts (W): 26.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4865	4865	4865
5°	4851	4889	4861
10°	4874	4856	4870
15°	4893	4854	4854
20°	4846	4871	4826
25°	4825	4809	4815
30°	4872	4791	4791
35°	4828	4805	4748
40°	4835	4768	4762
45°	4883	4752	4732
50°	4829	4735	4699
55°	4820	4659	4659
60°	4805	4573	4591
65°	4684	4409	4465
70°	4524	4280	3926
75°	4219	3805	3142
80°	3667	3292	3719
85°	2878	3569	3625



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.7	3.2
10°-20°	246.3	9.1
20°-30°	374.8	13.9
30°-40°	456.8	16.9
40°-50°	483.6	17.9
50°-60°	447.9	16.6
60°-70°	348.5	12.9
70°-80°	195.0	7.2
80°-90°	60.5	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°	706.8	26.2
0°-40°	1163.6	43.1
0°-60°	2095.1	77.6
0°-90°	2699.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2699.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	898	904	905	906	900	86
15°	878	873	871	870	871	247
25°	812	811	810	809	811	376
35°	735	735	731	727	723	462
45°	642	636	624	621	622	492
55°	514	509	496	494	496	460
65°	368	359	346	347	351	364
75°	203	196	183	164	151	213
85°	47	48	58	58	59	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.0	904.0	904.0	904.0	904.0
2.5°	898.8	902.3	904.9	904.9	904.9
5°	898.0	904.0	904.9	905.7	899.7
7.5°	899.7	895.4	896.2	894.5	897.1
10°	891.9	887.6	888.5	890.2	891.1
12.5°	885.0	885.9	886.7	885.9	879.8
15°	878.1	872.9	871.2	869.5	871.2
17.5°	860.8	857.4	858.3	859.1	860.8
20°	846.2	850.5	850.5	848.8	842.7
22.5°	834.9	834.1	828.9	826.3	828.9
25°	812.5	810.8	809.9	809.0	810.8
27.5°	797.8	797.8	796.9	793.5	788.3
30°	784.0	779.7	771.0	769.3	771.0
32.5°	756.4	752.9	750.3	746.9	751.2
35°	734.8	734.8	731.3	727.0	722.7
37.5°	719.2	714.1	703.7	700.2	701.1
40°	688.2	684.7	678.7	674.3	677.8
42.5°	661.4	660.5	654.5	649.3	647.6
45°	641.5	636.3	624.3	620.8	621.7
47.5°	609.6	604.4	594.0	590.6	593.2
50°	576.8	573.3	565.5	560.4	561.2
52.5°	550.9	544.0	531.0	529.3	530.1
55°	513.7	509.4	496.5	493.9	496.5
57.5°	479.2	474.0	461.9	456.8	461.1
60°	446.4	438.6	424.8	423.1	426.5
62.5°	407.5	401.5	385.1	386.0	391.1
65°	367.8	359.2	346.2	347.1	350.6
67.5°	329.8	320.3	310.0	304.8	300.5
70°	287.5	280.6	272.0	255.6	249.5
72.5°	243.5	237.4	229.7	204.6	200.3
75°	202.9	196.0	183.0	164.1	151.1
77.5°	159.7	156.3	140.7	132.1	136.4
80°	118.3	118.3	106.2	115.7	120.0
82.5°	79.4	78.6	87.2	91.5	90.7
85°	46.6	48.4	57.8	57.8	58.7
87.5°	19.9	22.4	26.8	27.6	27.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)