

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: P392891

Luminaire Tested: **12EN-LD2-31-UNV-L93050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392891
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 (3000K)
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: 2568.8 lumens
Efficiency: N/A
Efficacy: 95.5 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

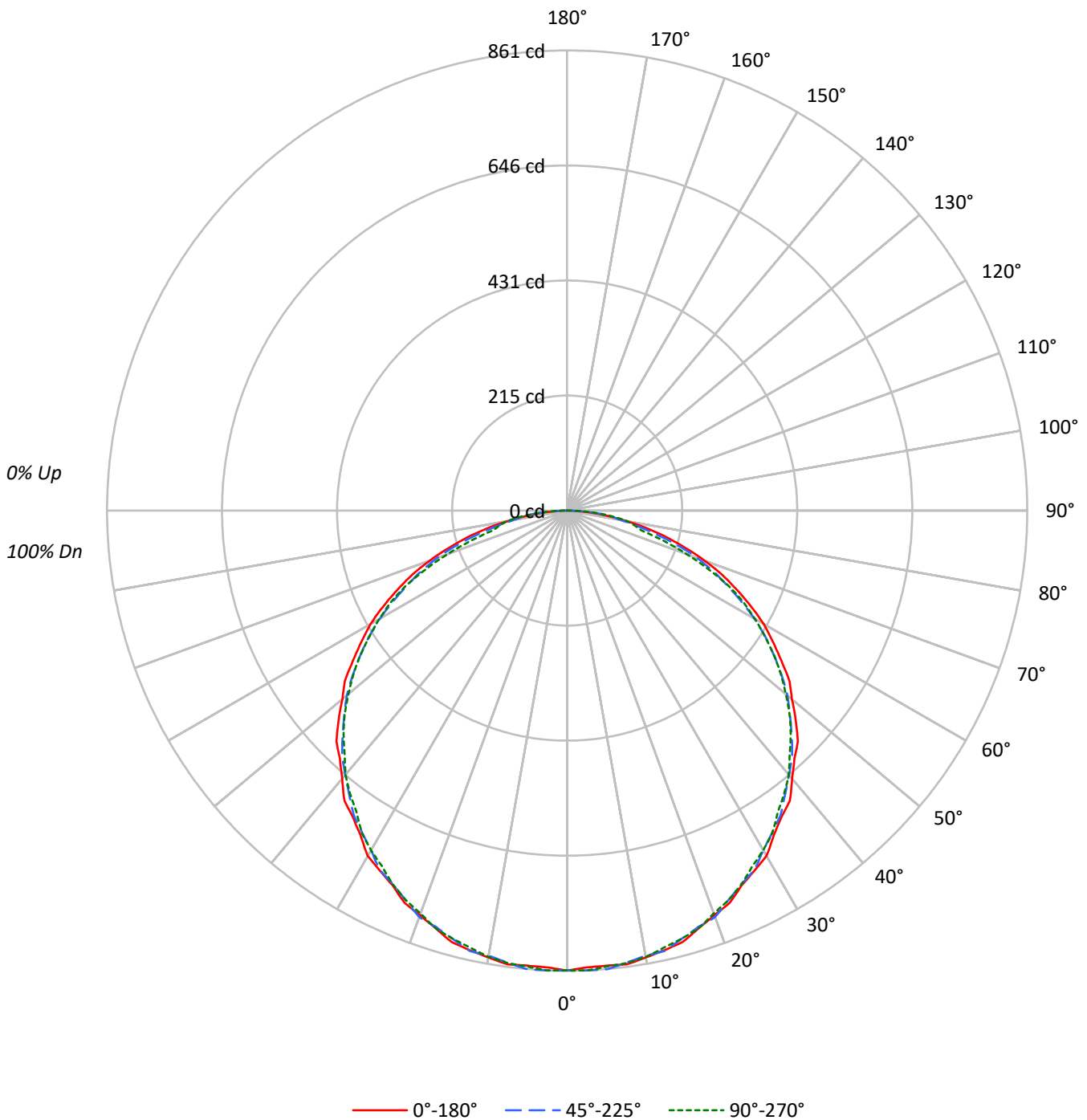
Input Watts (W): 26.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4631	4631	4631
5°	4617	4653	4626
10°	4639	4621	4634
15°	4656	4620	4620
20°	4612	4636	4593
25°	4592	4577	4582
30°	4637	4560	4560
35°	4595	4573	4519
40°	4601	4538	4532
45°	4647	4522	4504
50°	4596	4506	4472
55°	4587	4434	4434
60°	4573	4352	4369
65°	4458	4196	4248
70°	4305	4072	3737
75°	4015	3622	2990
80°	3490	3133	3539
85°	2742	3402	3452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.5	3.2
10°-20°	234.4	9.1
20°-30°	356.7	13.9
30°-40°	434.7	16.9
40°-50°	460.3	17.9
50°-60°	426.2	16.6
60°-70°	331.7	12.9
70°-80°	185.6	7.2
80°-90°	57.6	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°	672.7	26.2
0°-40°	1107.4	43.1
0°-60°	1993.9	77.6
0°-90°	2568.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2568.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	855	860	861	862	856	82
15°	836	831	829	828	829	235
25°	773	772	771	770	772	358
35°	699	699	696	692	688	439
45°	611	606	594	591	592	468
55°	489	485	472	470	472	438
65°	350	342	330	330	334	347
75°	193	186	174	156	144	203
85°	44	46	55	55	56	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	860.4	860.4	860.4	860.4	860.4
2.5°	855.4	858.7	861.2	861.2	861.2
5°	854.6	860.4	861.2	862.0	856.3
7.5°	856.3	852.1	853.0	851.3	853.8
10°	848.9	844.8	845.6	847.2	848.0
12.5°	842.3	843.1	843.9	843.1	837.4
15°	835.7	830.8	829.1	827.5	829.1
17.5°	819.3	816.0	816.8	817.6	819.3
20°	805.3	809.4	809.4	807.8	802.0
22.5°	794.6	793.8	788.9	786.4	788.9
25°	773.3	771.6	770.8	770.0	771.6
27.5°	759.3	759.3	758.5	755.2	750.3
30°	746.1	742.0	733.8	732.2	733.8
32.5°	719.8	716.6	714.1	710.8	714.9
35°	699.3	699.3	696.0	691.9	687.8
37.5°	684.5	679.6	669.7	666.4	667.3
40°	654.9	651.6	645.9	641.8	645.1
42.5°	629.5	628.6	622.9	618.0	616.3
45°	610.6	605.6	594.1	590.8	591.7
47.5°	580.2	575.2	565.4	562.1	564.5
50°	548.9	545.6	538.2	533.3	534.1
52.5°	524.3	517.7	505.4	503.7	504.6
55°	488.9	484.8	472.5	470.0	472.5
57.5°	456.1	451.1	439.6	434.7	438.8
60°	424.8	417.4	404.3	402.7	405.9
62.5°	387.9	382.1	366.5	367.3	372.2
65°	350.1	341.8	329.5	330.3	333.6
67.5°	313.9	304.9	295.0	290.1	286.0
70°	273.6	267.1	258.8	243.2	237.5
72.5°	231.7	226.0	218.6	194.8	190.6
75°	193.1	186.5	174.2	156.1	143.8
77.5°	152.0	148.7	133.9	125.7	129.8
80°	112.6	112.6	101.1	110.1	114.2
82.5°	75.6	74.8	83.0	87.1	86.3
85°	44.4	46.0	55.1	55.1	55.9
87.5°	18.9	21.4	25.5	26.3	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)