

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: P392894

Luminaire Tested: **12EN-LD2-31-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392894
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 (4500K)
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: 2744.9 lumens
Efficiency: N/A
Efficacy: 103.6 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

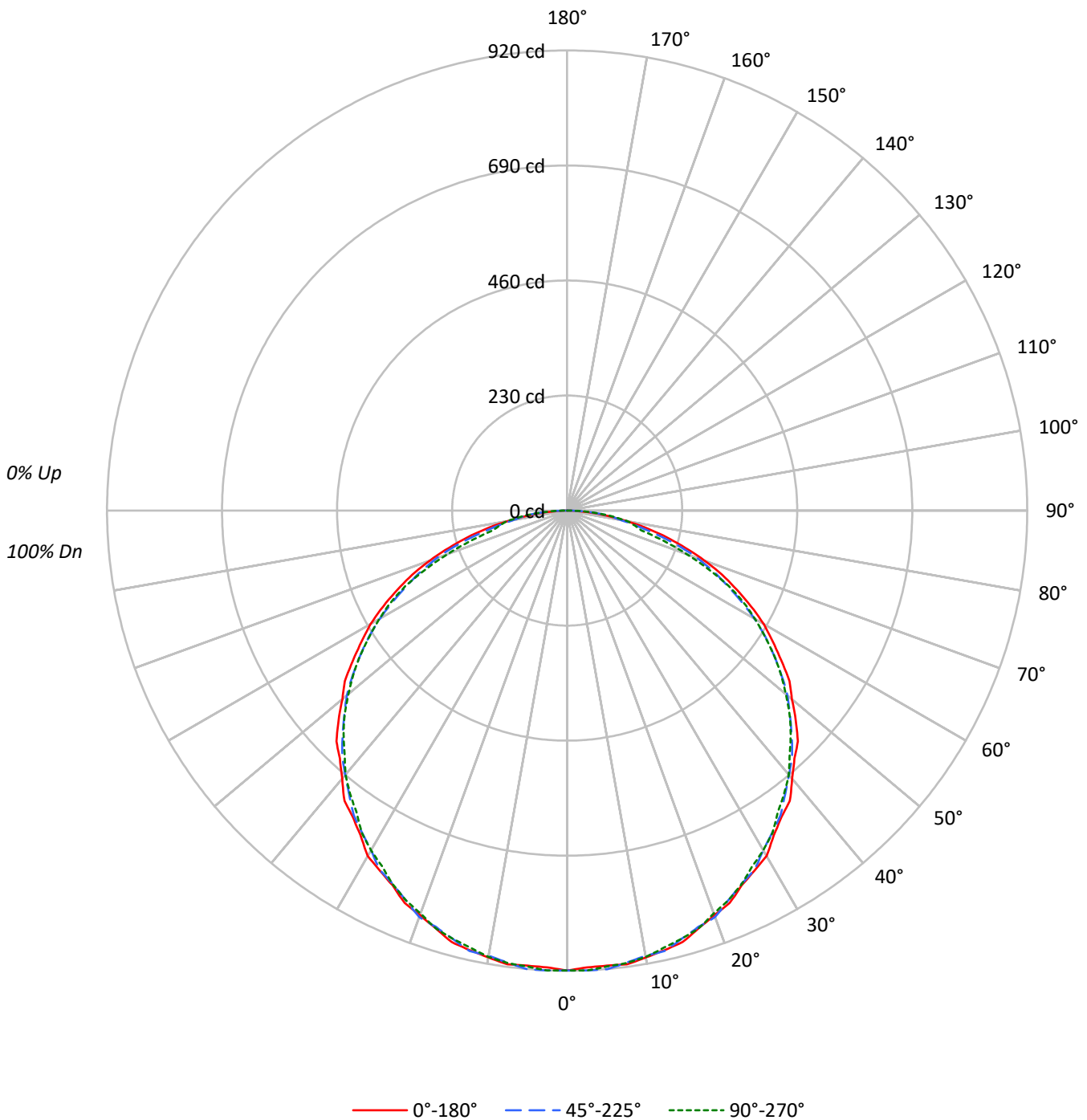
Input Watts (W): 26.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P392894

CATALOG NUMBER: 12EN-LD2-31-UNV-L93050-W2A-1-U (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P392894

CATALOG NUMBER: 12EN-LD2-31-UNV-L93050-W2A-1-U (4500K)

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°	4948	4948	4948
5°	4934	4971	4943
10°	4957	4938	4952
15°	4976	4937	4937
20°	4928	4954	4908
25°	4907	4891	4896
30°	4955	4873	4873
35°	4909	4886	4829
40°	4917	4849	4843
45°	4966	4832	4812
50°	4912	4815	4779
55°	4903	4738	4738
60°	4887	4650	4669
65°	4764	4484	4540
70°	4601	4353	3994
75°	4290	3872	3196
80°	3729	3347	3784
85°	2927	3631	3687



TEST NUMBER: P392894

CATALOG NUMBER: 12EN-LD2-31-UNV-L93050-W2A-1-U (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	3.2
10°-20°	250.5	9.1
20°-30°	381.2	13.9
30°-40°	464.5	16.9
40°-50°	491.8	17.9
50°-60°	455.5	16.6
60°-70°	354.4	12.9
70°-80°	198.3	7.2
80°-90°	61.5	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°	718.8	26.2
0°-40°	1183.3	43.1
0°-60°	2130.6	77.6
0°-90°	2744.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2744.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	919	919	919	919	919	
5°	913	919	920	921	915	87
15°	893	888	886	884	886	251
25°	826	824	824	823	824	383
35°	747	747	744	739	735	469
45°	652	647	635	631	632	500
55°	522	518	505	502	505	468
65°	374	365	352	353	356	371
75°	206	199	186	167	154	217
85°	47	49	59	59	60	57
90°	0	0	0	0	0	



TEST NUMBER: P392894

CATALOG NUMBER: 12EN-LD2-31-UNV-L93050-W2A-1-U (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	919.4	919.4	919.4	919.4	919.4
2.5°	914.1	917.6	920.2	920.2	920.2
5°	913.2	919.4	920.2	921.1	915.0
7.5°	915.0	910.6	911.4	909.7	912.3
10°	907.1	902.7	903.5	905.3	906.2
12.5°	900.0	900.9	901.8	900.9	894.8
15°	893.0	887.7	886.0	884.2	886.0
17.5°	875.4	871.9	872.8	873.7	875.4
20°	860.5	864.9	864.9	863.2	857.0
22.5°	849.1	848.2	843.0	840.3	843.0
25°	826.3	824.5	823.6	822.8	824.5
27.5°	811.3	811.3	810.5	807.0	801.7
30°	797.3	792.9	784.1	782.4	784.1
32.5°	769.2	765.7	763.1	759.5	763.9
35°	747.2	747.2	743.7	739.3	735.0
37.5°	731.4	726.2	715.6	712.1	713.0
40°	699.8	696.3	690.2	685.8	689.3
42.5°	672.6	671.7	665.6	660.3	658.6
45°	652.4	647.1	634.9	631.3	632.2
47.5°	619.9	614.7	604.1	600.6	603.2
50°	586.6	583.0	575.1	569.9	570.8
52.5°	560.2	553.2	540.0	538.3	539.1
55°	522.5	518.1	504.9	502.3	504.9
57.5°	487.3	482.1	469.8	464.5	468.9
60°	454.0	446.1	432.0	430.3	433.8
62.5°	414.5	408.3	391.6	392.5	397.8
65°	374.1	365.3	352.1	353.0	356.5
67.5°	335.4	325.8	315.2	310.0	305.6
70°	292.4	285.4	276.6	259.9	253.8
72.5°	247.6	241.5	233.6	208.1	203.7
75°	206.3	199.3	186.2	166.8	153.7
77.5°	162.4	158.9	143.1	134.3	138.7
80°	120.3	120.3	108.0	117.7	122.1
82.5°	80.8	79.9	88.7	93.1	92.2
85°	47.4	49.2	58.8	58.8	59.7
87.5°	20.2	22.8	27.2	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)