

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: P392896

Luminaire Tested: **12EN-LD2-31-UNV-L93050-W2A-1-U (5700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392896
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 (5700K)
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: 2757.6 lumens
Efficiency: N/A
Efficacy: 104.5 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

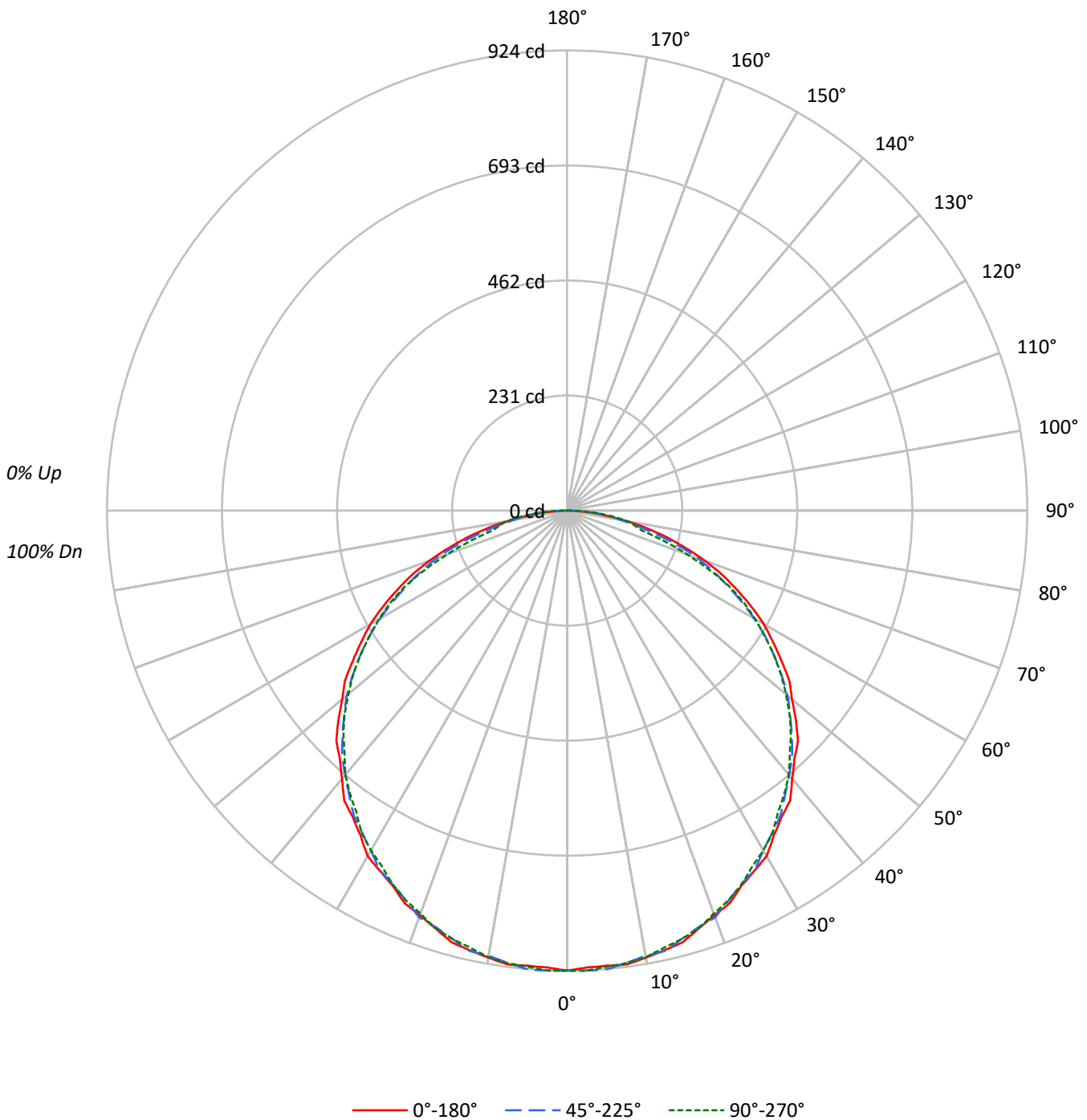
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P392896

CATALOG NUMBER: 12EN-LD2-31-UNV-L93050-W2A-1-U (5700K)

Luminous Intensity Polar Plot





TEST NUMBER: P392896

CATALOG NUMBER: 12EN-LD2-31-UNV-L93050-W2A-1-U (5700K)

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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4971	4971	4971
5°	4956	4995	4966
10°	4980	4961	4975
15°	4998	4959	4959
20°	4951	4977	4931
25°	4929	4914	4919
30°	4978	4896	4896
35°	4932	4909	4851
40°	4940	4872	4865
45°	4988	4854	4834
50°	4934	4838	4801
55°	4925	4759	4759
60°	4909	4672	4691
65°	4786	4504	4562
70°	4623	4373	4011
75°	4311	3889	3211
80°	3747	3363	3800
85°	2939	3649	3705



TEST NUMBER: P392896

CATALOG NUMBER: 12EN-LD2-31-UNV-L93050-W2A-1-U (5700K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.5	3.2
10°-20°	251.7	9.1
20°-30°	382.9	13.9
30°-40°	466.7	16.9
40°-50°	494.1	17.9
50°-60°	457.6	16.6
60°-70°	356.0	12.9
70°-80°	199.3	7.2
80°-90°	61.8	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°	722.1	26.2
0°-40°	1188.8	43.1
0°-60°	2140.5	77.6
0°-90°	2757.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2757.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	917	924	924	925	919	88
15°	897	892	890	888	890	252
25°	830	828	828	827	828	385
35°	751	751	747	743	738	472
45°	655	650	638	634	635	502
55°	525	520	507	505	507	470
65°	376	367	354	355	358	372
75°	207	200	187	168	154	218
85°	48	49	59	59	60	57
90°	0	0	0	0	0	



TEST NUMBER: P392896

CATALOG NUMBER: 12EN-LD2-31-UNV-L93050-W2A-1-U (5700K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	923.6	923.6	923.6	923.6	923.6
2.5°	918.3	921.8	924.5	924.5	924.5
5°	917.4	923.6	924.5	925.4	919.2
7.5°	919.2	914.8	915.7	913.9	916.6
10°	911.3	906.8	907.7	909.5	910.4
12.5°	904.2	905.1	906.0	905.1	898.9
15°	897.1	891.9	890.1	888.3	890.1
17.5°	879.5	876.0	876.9	877.7	879.5
20°	864.5	868.9	868.9	867.2	861.0
22.5°	853.0	852.2	846.9	844.2	846.9
25°	830.1	828.3	827.5	826.6	828.3
27.5°	815.1	815.1	814.2	810.7	805.4
30°	801.0	796.6	787.8	786.0	787.8
32.5°	772.8	769.2	766.6	763.1	767.5
35°	750.7	750.7	747.2	742.8	738.4
37.5°	734.8	729.5	719.0	715.4	716.3
40°	703.1	699.5	693.4	689.0	692.5
42.5°	675.7	674.8	668.7	663.4	661.6
45°	655.4	650.1	637.8	634.3	635.1
47.5°	622.8	617.5	606.9	603.4	606.0
50°	589.3	585.7	577.8	572.5	573.4
52.5°	562.8	555.8	542.5	540.8	541.6
55°	524.9	520.5	507.2	504.6	507.2
57.5°	489.6	484.3	471.9	466.7	471.1
60°	456.1	448.1	434.0	432.3	435.8
62.5°	416.4	410.2	393.4	394.3	399.6
65°	375.8	367.0	353.7	354.6	358.2
67.5°	337.0	327.3	316.7	311.4	307.0
70°	293.8	286.7	277.9	261.1	254.9
72.5°	248.8	242.6	234.7	209.1	204.7
75°	207.3	200.2	187.0	167.6	154.4
77.5°	163.2	159.7	143.8	135.0	139.4
80°	120.9	120.9	108.5	118.2	122.6
82.5°	81.2	80.3	89.1	93.5	92.6
85°	47.6	49.4	59.1	59.1	60.0
87.5°	20.3	22.9	27.3	28.2	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)