

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: P392826

Luminaire Tested: **12EN-LD2-23-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392826
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 (2700K)
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: 1982.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

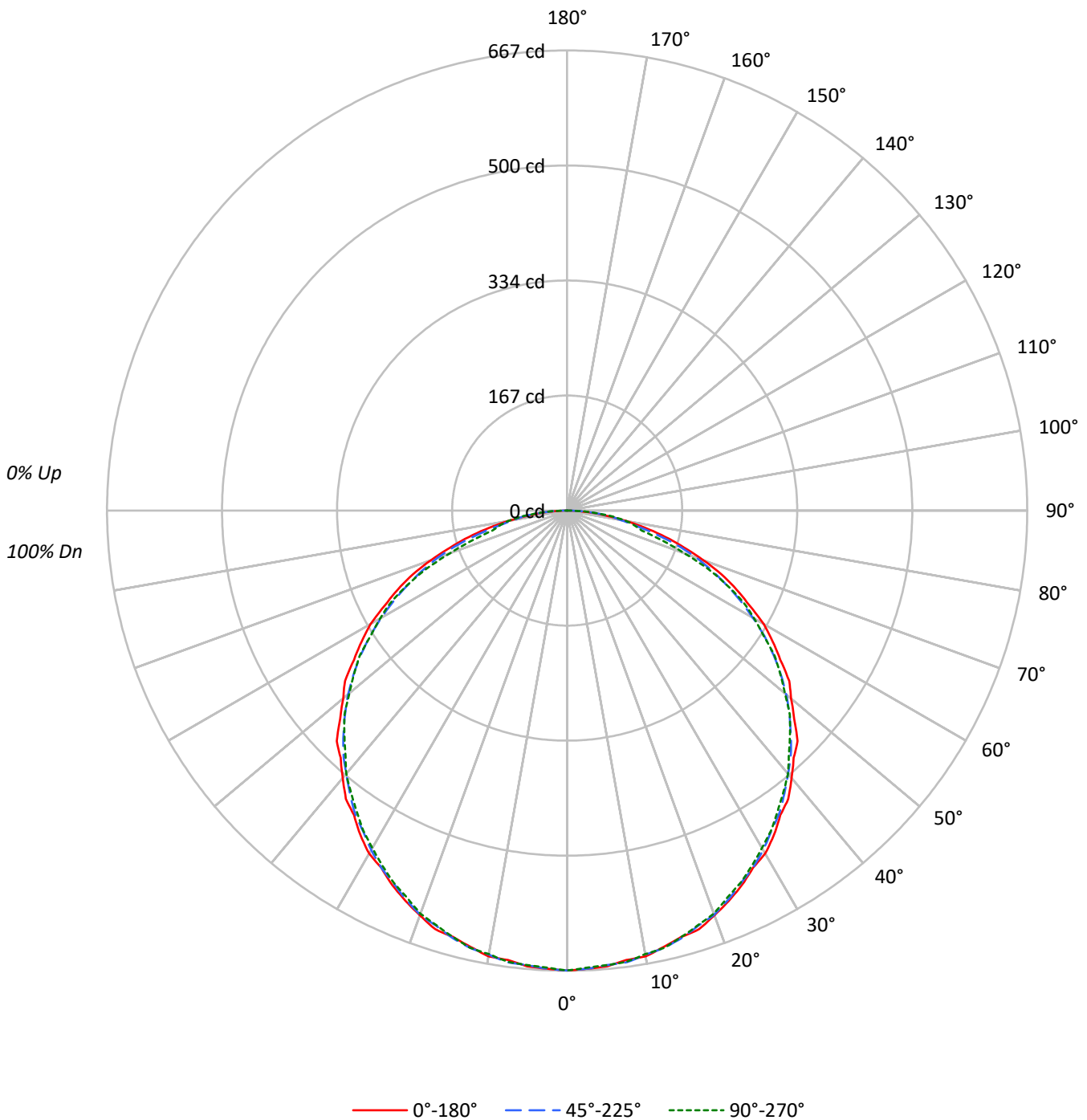
Input Watts (W): 19.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3588	3588	3588
5°	3582	3573	3573
10°	3586	3572	3568
15°	3565	3574	3565
20°	3576	3570	3561
25°	3558	3538	3533
30°	3568	3530	3509
35°	3540	3523	3495
40°	3555	3500	3500
45°	3595	3490	3477
50°	3549	3470	3449
55°	3540	3427	3444
60°	3541	3345	3373
65°	3452	3244	3255
70°	3301	3139	2840
75°	3069	2782	2333
80°	2675	2408	2703
85°	2130	2556	2612



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	3.2
10°-20°	181.0	9.1
20°-30°	275.3	13.9
30°-40°	335.4	16.9
40°-50°	355.4	17.9
50°-60°	329.1	16.6
60°-70°	256.0	12.9
70°-80°	142.7	7.2
80°-90°	44.1	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°	519.3	26.2
0°-40°	854.7	43.1
0°-60°	1539.2	77.7
0°-90°	1982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1982.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	663	660	661	663	661	63
15°	640	642	642	642	640	181
25°	599	599	596	594	595	276
35°	539	539	536	534	532	339
45°	472	464	458	455	457	361
55°	377	374	365	363	367	338
65°	271	265	255	257	256	268
75°	148	143	134	120	112	155
85°	34	35	41	42	42	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	666.6	666.6	666.6	666.6	666.6
2.5°	664.8	664.8	664.8	664.8	663.1
5°	663.1	660.5	661.4	663.1	661.4
7.5°	657.1	659.7	660.5	660.5	659.7
10°	656.2	653.6	653.6	653.6	652.8
12.5°	647.6	648.4	649.3	649.3	649.3
15°	639.8	642.4	641.5	641.5	639.8
17.5°	636.3	632.0	631.2	631.2	630.3
20°	624.3	622.5	623.4	621.7	621.7
22.5°	612.2	611.3	610.4	609.6	607.0
25°	599.2	599.2	595.8	594.0	594.9
27.5°	583.7	585.4	583.7	582.0	580.2
30°	574.2	569.9	568.1	566.4	564.7
32.5°	557.8	556.0	550.9	548.3	550.0
35°	538.8	538.8	536.2	533.6	531.9
37.5°	526.7	521.5	517.2	514.6	514.6
40°	506.0	506.0	498.2	494.7	498.2
42.5°	486.1	486.1	480.1	478.3	475.8
45°	472.3	464.5	458.5	455.0	456.8
47.5°	446.4	444.7	436.9	434.3	437.8
50°	423.9	423.1	414.4	412.7	411.9
52.5°	405.8	398.0	390.3	387.7	389.4
55°	377.3	373.9	365.2	362.6	367.0
57.5°	353.1	349.7	339.3	337.6	337.6
60°	329.0	321.2	310.8	309.1	313.4
62.5°	297.9	294.4	283.2	284.1	288.4
65°	271.1	265.1	254.7	257.3	255.6
67.5°	242.6	235.7	227.1	223.6	221.0
70°	209.8	205.5	199.5	187.4	180.5
72.5°	177.0	173.5	167.5	150.2	145.1
75°	147.6	143.3	133.8	120.0	112.2
77.5°	115.7	115.7	102.7	96.7	100.2
80°	86.3	87.2	77.7	84.6	87.2
82.5°	58.7	57.8	63.9	66.5	66.5
85°	34.5	35.4	41.4	42.3	42.3
87.5°	13.8	16.4	19.0	19.9	20.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)