

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: P392811

Luminaire Tested: **12EN-LD2-23-UNV-L83050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392811
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-L83050-W2A-1-U (3000K)
Description: 1X2 ENCOUNTER, 2300 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2258.6 lumens
Efficiency: N/A
Efficacy: 115.8 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

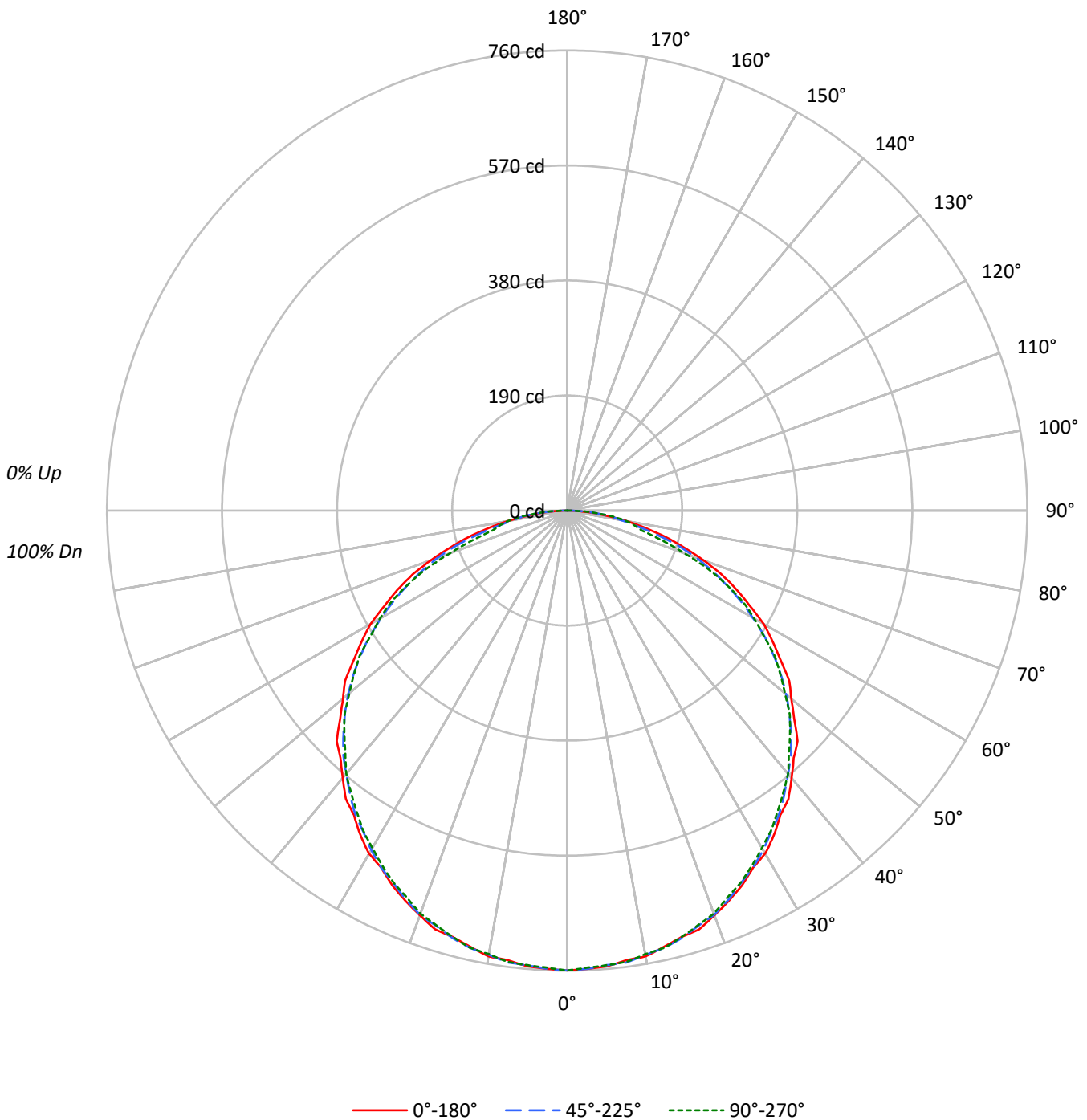
Input Watts (W): 19.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4088	4088	4088
5°	4083	4072	4072
10°	4087	4070	4065
15°	4062	4074	4062
20°	4074	4069	4057
25°	4055	4032	4026
30°	4066	4023	3999
35°	4034	4014	3982
40°	4051	3988	3988
45°	4096	3977	3962
50°	4045	3954	3929
55°	4035	3905	3924
60°	4035	3813	3845
65°	3935	3697	3708
70°	3762	3577	3235
75°	3500	3171	2660
80°	3050	2746	3081
85°	2433	2915	2976



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	3.2
10°-20°	206.2	9.1
20°-30°	313.7	13.9
30°-40°	382.2	16.9
40°-50°	405.0	17.9
50°-60°	375.0	16.6
60°-70°	291.7	12.9
70°-80°	162.6	7.2
80°-90°	50.3	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°	591.7	26.2
0°-40°	974.0	43.1
0°-60°	1754.0	77.7
0°-90°	2258.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2258.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	756	753	754	756	754	72
15°	729	732	731	731	729	207
25°	683	683	679	677	678	315
35°	614	614	611	608	606	386
45°	538	529	522	518	520	412
55°	430	426	416	413	418	386
65°	309	302	290	293	291	305
75°	168	163	152	137	128	177
85°	39	40	47	48	48	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	759.6	759.6	759.6	759.6	759.6
2.5°	757.6	757.6	757.6	757.6	755.7
5°	755.7	752.7	753.7	755.7	753.7
7.5°	748.8	751.7	752.7	752.7	751.7
10°	747.8	744.8	744.8	744.8	743.9
12.5°	738.0	738.9	739.9	739.9	739.9
15°	729.1	732.1	731.1	731.1	729.1
17.5°	725.2	720.2	719.3	719.3	718.3
20°	711.4	709.4	710.4	708.4	708.4
22.5°	697.6	696.6	695.7	694.7	691.7
25°	682.9	682.9	678.9	677.0	677.9
27.5°	665.1	667.1	665.1	663.2	661.2
30°	654.3	649.4	647.4	645.5	643.5
32.5°	635.6	633.7	627.8	624.8	626.8
35°	614.0	614.0	611.0	608.1	606.1
37.5°	600.2	594.3	589.4	586.4	586.4
40°	576.6	576.6	567.7	563.8	567.7
42.5°	554.0	554.0	547.1	545.1	542.2
45°	538.2	529.4	522.5	518.5	520.5
47.5°	508.7	506.7	497.9	494.9	498.9
50°	483.1	482.1	472.3	470.3	469.3
52.5°	462.5	453.6	444.7	441.8	443.8
55°	430.0	426.0	416.2	413.3	418.2
57.5°	402.4	398.5	386.7	384.7	384.7
60°	374.9	366.0	354.2	352.3	357.2
62.5°	339.5	335.5	322.7	323.7	328.6
65°	309.0	302.1	290.3	293.2	291.2
67.5°	276.5	268.6	258.8	254.8	251.9
70°	239.1	234.2	227.3	213.5	205.6
72.5°	201.7	197.8	190.9	171.2	165.3
75°	168.3	163.3	152.5	136.8	127.9
77.5°	131.8	131.8	117.1	110.2	114.1
80°	98.4	99.4	88.6	96.4	99.4
82.5°	66.9	65.9	72.8	75.8	75.8
85°	39.4	40.3	47.2	48.2	48.2
87.5°	15.7	18.7	21.6	22.6	23.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)