

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: P392810

Luminaire Tested: **12EN-LD2-23-UNV-L83050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392810
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 (2700K)
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: 2214.7 lumens
Efficiency: N/A
Efficacy: 116.6 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

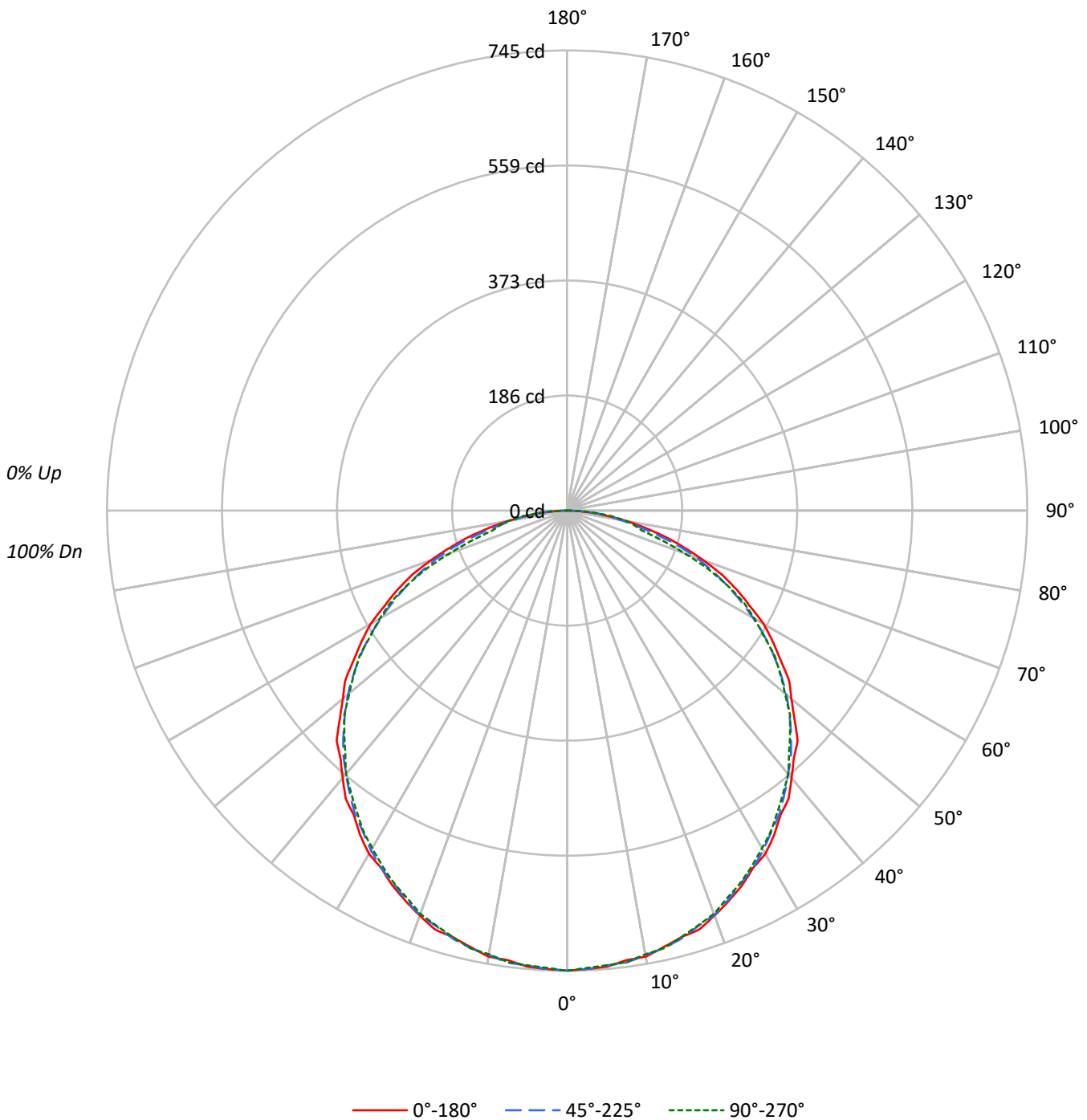
Input Watts (W): 19
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4008	4008	4008
5°	4003	3993	3993
10°	4007	3992	3986
15°	3983	3994	3983
20°	3995	3990	3979
25°	3976	3953	3948
30°	3987	3946	3921
35°	3955	3937	3905
40°	3972	3911	3911
45°	4017	3899	3885
50°	3966	3877	3853
55°	3956	3829	3847
60°	3957	3738	3770
65°	3859	3624	3637
70°	3690	3508	3172
75°	3431	3109	2608
80°	2991	2690	3019
85°	2384	2859	2921



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.4	3.2
10°-20°	202.2	9.1
20°-30°	307.6	13.9
30°-40°	374.8	16.9
40°-50°	397.1	17.9
50°-60°	367.7	16.6
60°-70°	286.1	12.9
70°-80°	159.4	7.2
80°-90°	49.3	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°	580.3	26.2
0°-40°	955.1	43.1
0°-60°	1719.9	77.7
0°-90°	2214.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2214.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	745	745	745	745	745	
5°	741	738	739	741	739	70
15°	715	718	717	717	715	203
25°	670	670	666	664	665	309
35°	602	602	599	596	594	379
45°	528	519	512	508	510	404
55°	422	418	408	405	410	378
65°	303	296	285	288	286	299
75°	165	160	150	134	125	173
85°	39	40	46	47	47	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	744.8	744.8	744.8	744.8	744.8
2.5°	742.9	742.9	742.9	742.9	741.0
5°	741.0	738.1	739.1	741.0	739.1
7.5°	734.2	737.1	738.1	738.1	737.1
10°	733.3	730.4	730.4	730.4	729.4
12.5°	723.6	724.6	725.5	725.5	725.5
15°	714.9	717.8	716.9	716.9	714.9
17.5°	711.1	706.2	705.3	705.3	704.3
20°	697.6	695.6	696.6	694.7	694.7
22.5°	684.1	683.1	682.1	681.2	678.3
25°	669.6	669.6	665.7	663.8	664.8
27.5°	652.2	654.1	652.2	650.3	648.4
30°	641.6	636.8	634.9	632.9	631.0
32.5°	623.3	621.3	615.6	612.7	614.6
35°	602.0	602.0	599.2	596.3	594.3
37.5°	588.5	582.8	577.9	575.0	575.0
40°	565.4	565.4	556.7	552.8	556.7
42.5°	543.2	543.2	536.4	534.5	531.6
45°	527.8	519.1	512.3	508.5	510.4
47.5°	498.8	496.9	488.2	485.3	489.2
50°	473.7	472.8	463.1	461.2	460.2
52.5°	453.5	444.8	436.1	433.2	435.1
55°	421.6	417.8	408.1	405.2	410.0
57.5°	394.6	390.8	379.2	377.2	377.2
60°	367.6	358.9	347.3	345.4	350.2
62.5°	332.9	329.0	316.5	317.4	322.3
65°	303.0	296.2	284.6	287.5	285.6
67.5°	271.1	263.4	253.7	249.9	247.0
70°	234.5	229.6	222.9	209.4	201.6
72.5°	197.8	193.9	187.2	167.9	162.1
75°	165.0	160.2	149.5	134.1	125.4
77.5°	129.3	129.3	114.8	108.1	111.9
80°	96.5	97.4	86.8	94.6	97.4
82.5°	65.6	64.6	71.4	74.3	74.3
85°	38.6	39.6	46.3	47.3	47.3
87.5°	15.4	18.3	21.2	22.2	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)