

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: P392814

Luminaire Tested: **12EN-LD2-23-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392814
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 (4500K)
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: 2336.4 lumens
Efficiency: N/A
Efficacy: 121.7 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

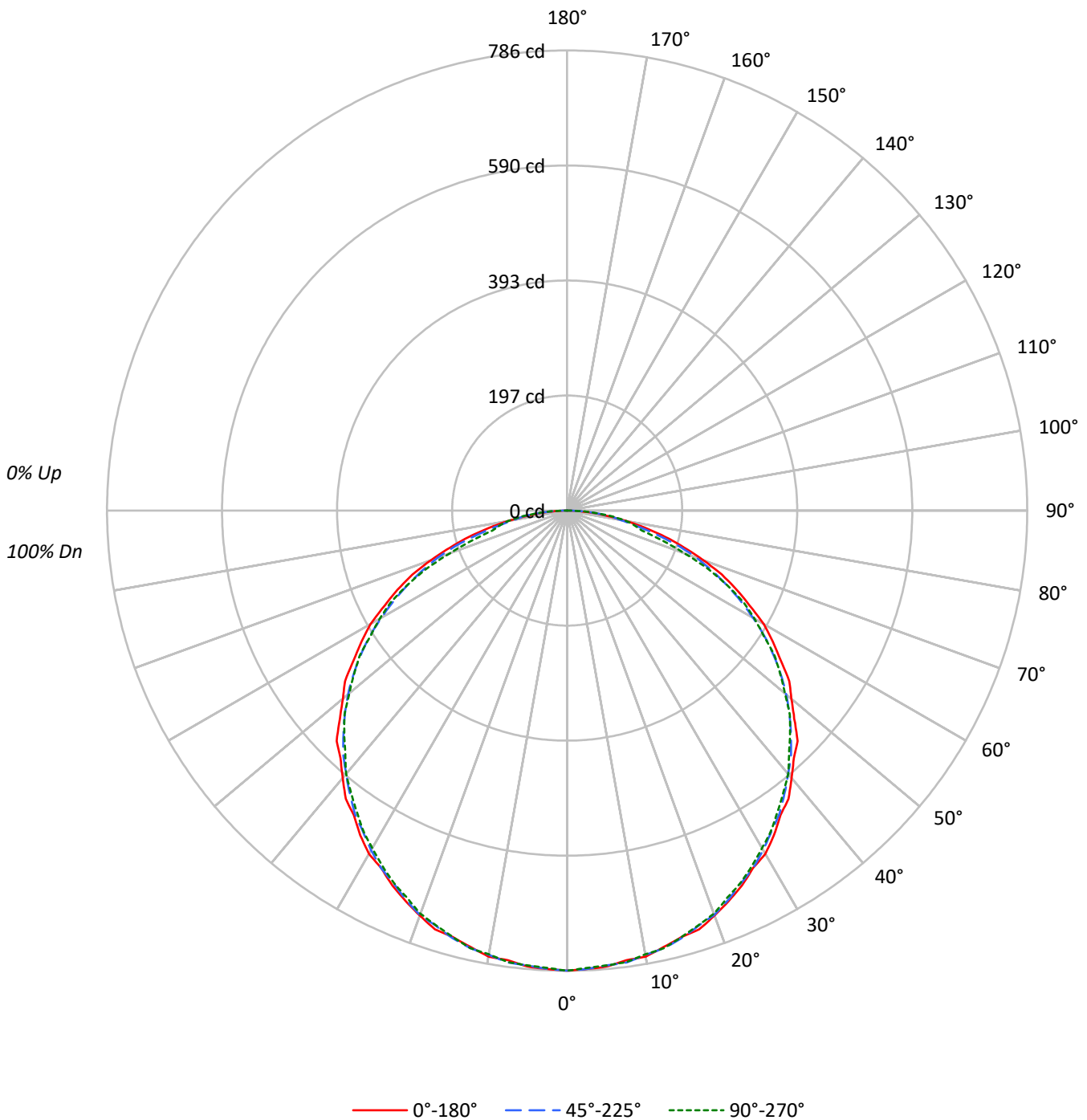
Input Watts (W): 19.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P392814

CATALOG NUMBER: 12EN-LD2-23-UNV-L83050-W2A-1-U (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P392814

CATALOG NUMBER: 12EN-LD2-23-UNV-L83050-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°	4229	4229	4229
5°	4223	4212	4212
10°	4227	4211	4205
15°	4202	4213	4202
20°	4215	4209	4197
25°	4195	4170	4165
30°	4207	4162	4137
35°	4173	4153	4119
40°	4190	4126	4126
45°	4238	4114	4098
50°	4185	4091	4065
55°	4174	4039	4059
60°	4174	3944	3977
65°	4070	3824	3837
70°	3891	3699	3347
75°	3618	3281	2751
80°	3155	2839	3186
85°	2513	3020	3081



TEST NUMBER: P392814

CATALOG NUMBER: 12EN-LD2-23-UNV-L83050-W2A-1-U (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.2	3.2
10°-20°	213.3	9.1
20°-30°	324.6	13.9
30°-40°	395.4	16.9
40°-50°	418.9	17.9
50°-60°	388.0	16.6
60°-70°	301.8	12.9
70°-80°	168.2	7.2
80°-90°	52.0	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°	612.1	26.2
0°-40°	1007.5	43.1
0°-60°	1814.4	77.7
0°-90°	2336.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2336.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	782	779	780	782	780	74
15°	754	757	756	756	754	214
25°	706	706	702	700	701	326
35°	635	635	632	629	627	400
45°	557	548	540	536	538	426
55°	445	441	430	428	433	399
65°	320	312	300	303	301	315
75°	174	169	158	142	132	183
85°	41	42	49	50	50	48
90°	0	0	0	0	0	



TEST NUMBER: P392814

CATALOG NUMBER: 12EN-LD2-23-UNV-L83050-W2A-1-U (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	785.8	785.8	785.8	785.8	785.8
2.5°	783.7	783.7	783.7	783.7	781.7
5°	781.7	778.6	779.7	781.7	779.7
7.5°	774.6	777.6	778.6	778.6	777.6
10°	773.5	770.5	770.5	770.5	769.5
12.5°	763.4	764.4	765.4	765.4	765.4
15°	754.2	757.3	756.2	756.2	754.2
17.5°	750.1	745.0	744.0	744.0	743.0
20°	735.9	733.9	734.9	732.8	732.8
22.5°	721.6	720.6	719.6	718.6	715.5
25°	706.4	706.4	702.3	700.3	701.3
27.5°	688.1	690.1	688.1	686.0	684.0
30°	676.9	671.8	669.7	667.7	665.7
32.5°	657.5	655.5	649.4	646.3	648.4
35°	635.1	635.1	632.1	629.0	627.0
37.5°	620.9	614.8	609.7	606.6	606.6
40°	596.4	596.4	587.3	583.2	587.3
42.5°	573.0	573.0	565.9	563.9	560.8
45°	556.8	547.6	540.5	536.4	538.4
47.5°	526.2	524.2	515.0	512.0	516.0
50°	499.8	498.7	488.6	486.5	485.5
52.5°	478.4	469.2	460.1	457.0	459.0
55°	444.8	440.7	430.5	427.5	432.6
57.5°	416.3	412.2	400.0	398.0	398.0
60°	387.8	378.6	366.4	364.4	369.5
62.5°	351.1	347.1	333.8	334.9	340.0
65°	319.6	312.5	300.3	303.3	301.3
67.5°	286.0	277.9	267.7	263.6	260.6
70°	247.3	242.2	235.1	220.9	212.7
72.5°	208.7	204.6	197.5	177.1	171.0
75°	174.0	169.0	157.8	141.5	132.3
77.5°	136.4	136.4	121.1	114.0	118.1
80°	101.8	102.8	91.6	99.7	102.8
82.5°	69.2	68.2	75.3	78.4	78.4
85°	40.7	41.7	48.9	49.9	49.9
87.5°	16.3	19.3	22.4	23.4	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)