

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: P392815

Luminaire Tested: **12EN-LD2-23-UNV-L83050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392815  
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 (5000K)  
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: 2338.8 lumens  
Efficiency: N/A  
Efficacy: 121.8 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

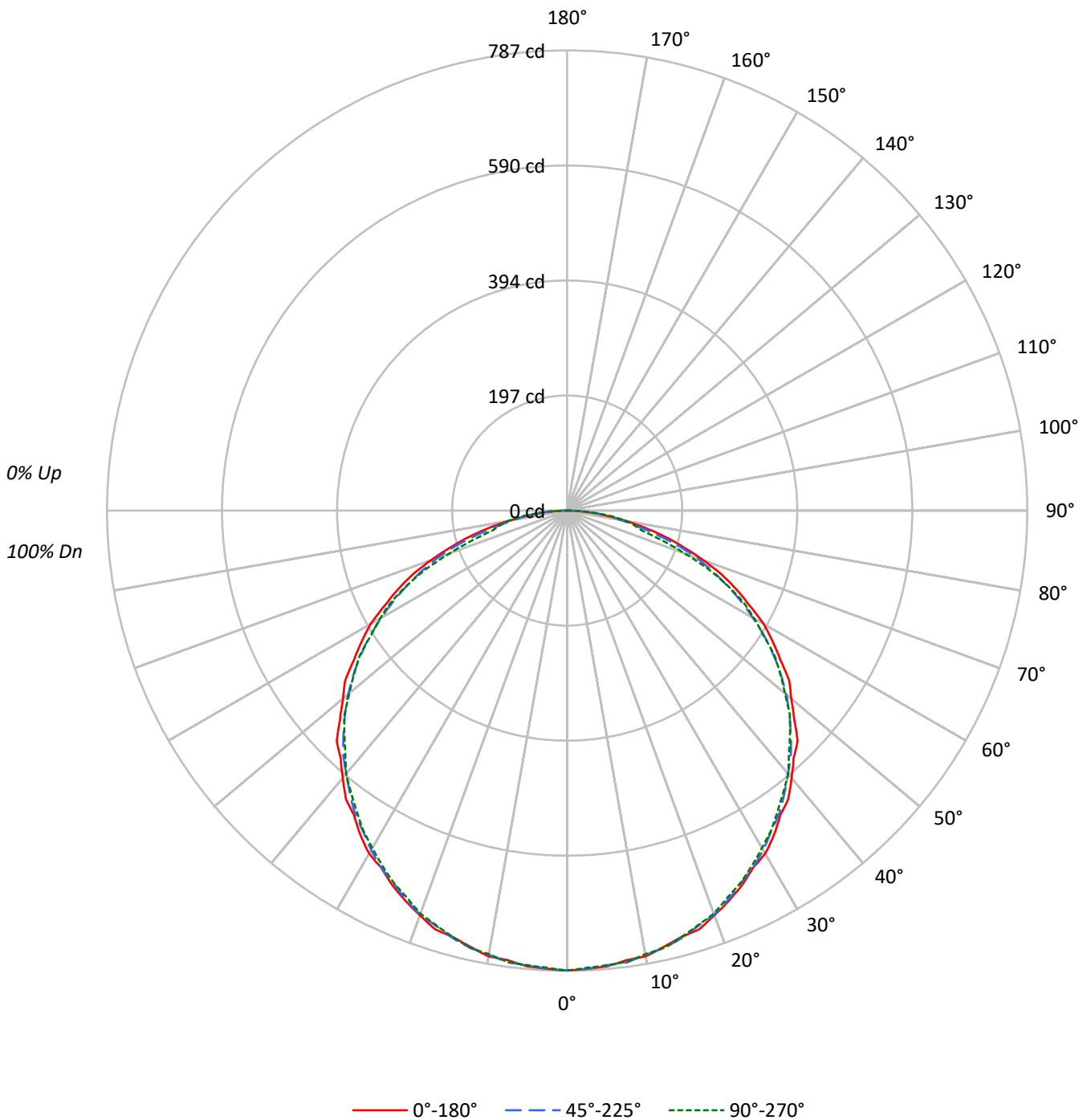
Input Watts (W): 19.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4233	4233	4233
5°	4227	4217	4217
10°	4232	4215	4210
15°	4207	4218	4207
20°	4219	4213	4202
25°	4199	4175	4169
30°	4210	4166	4141
35°	4177	4157	4123
40°	4195	4130	4130
45°	4242	4118	4102
50°	4189	4095	4069
55°	4177	4044	4063
60°	4179	3948	3980
65°	4074	3828	3841
70°	3896	3704	3350
75°	3622	3283	2755
80°	3158	2842	3189
85°	2519	3020	3081



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.3	3.2
10°-20°	213.6	9.1
20°-30°	324.9	13.9
30°-40°	395.8	16.9
40°-50°	419.4	17.9
50°-60°	388.3	16.6
60°-70°	302.1	12.9
70°-80°	168.3	7.2
80°-90°	52.1	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°	612.8	26.2
0°-40°	1008.6	43.1
0°-60°	1816.3	77.7
0°-90°	2338.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2338.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	787	787	787	787	787	
5°	782	779	780	782	780	74
15°	755	758	757	757	755	214
25°	707	707	703	701	702	326
35°	636	636	633	630	628	400
45°	557	548	541	537	539	426
55°	445	441	431	428	433	399
65°	320	313	301	304	302	316
75°	174	169	158	142	132	183
85°	41	42	49	50	50	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	786.6	786.6	786.6	786.6	786.6
2.5°	784.5	784.5	784.5	784.5	782.5
5°	782.5	779.4	780.5	782.5	780.5
7.5°	775.4	778.4	779.4	779.4	778.4
10°	774.3	771.3	771.3	771.3	770.3
12.5°	764.1	765.2	766.2	766.2	766.2
15°	755.0	758.0	757.0	757.0	755.0
17.5°	750.9	745.8	744.8	744.8	743.8
20°	736.6	734.6	735.6	733.6	733.6
22.5°	722.4	721.4	720.3	719.3	716.3
25°	707.1	707.1	703.0	701.0	702.0
27.5°	688.8	690.8	688.8	686.7	684.7
30°	677.5	672.5	670.4	668.4	666.3
32.5°	658.2	656.1	650.0	647.0	649.0
35°	635.8	635.8	632.7	629.7	627.6
37.5°	621.5	615.4	610.3	607.2	607.2
40°	597.1	597.1	587.9	583.8	587.9
42.5°	573.6	573.6	566.5	564.5	561.4
45°	557.3	548.1	541.0	536.9	539.0
47.5°	526.8	524.7	515.5	512.5	516.6
50°	500.3	499.2	489.1	487.0	486.0
52.5°	478.9	469.7	460.5	457.5	459.5
55°	445.2	441.2	431.0	427.9	433.0
57.5°	416.7	412.6	400.4	398.4	398.4
60°	388.2	379.0	366.8	364.8	369.8
62.5°	351.5	347.4	334.2	335.2	340.3
65°	319.9	312.8	300.6	303.6	301.6
67.5°	286.3	278.1	268.0	263.9	260.8
70°	247.6	242.5	235.4	221.1	212.9
72.5°	208.9	204.8	197.7	177.3	171.2
75°	174.2	169.1	157.9	141.6	132.5
77.5°	136.5	136.5	121.2	114.1	118.2
80°	101.9	102.9	91.7	99.8	102.9
82.5°	69.3	68.3	75.4	78.5	78.5
85°	40.8	41.8	48.9	49.9	49.9
87.5°	16.3	19.4	22.4	23.4	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)