

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: P392828

Luminaire Tested: **12EN-LD2-23-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392828
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 (3500K)
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: 1930.4 lumens
Efficiency: N/A
Efficacy: 100.5 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

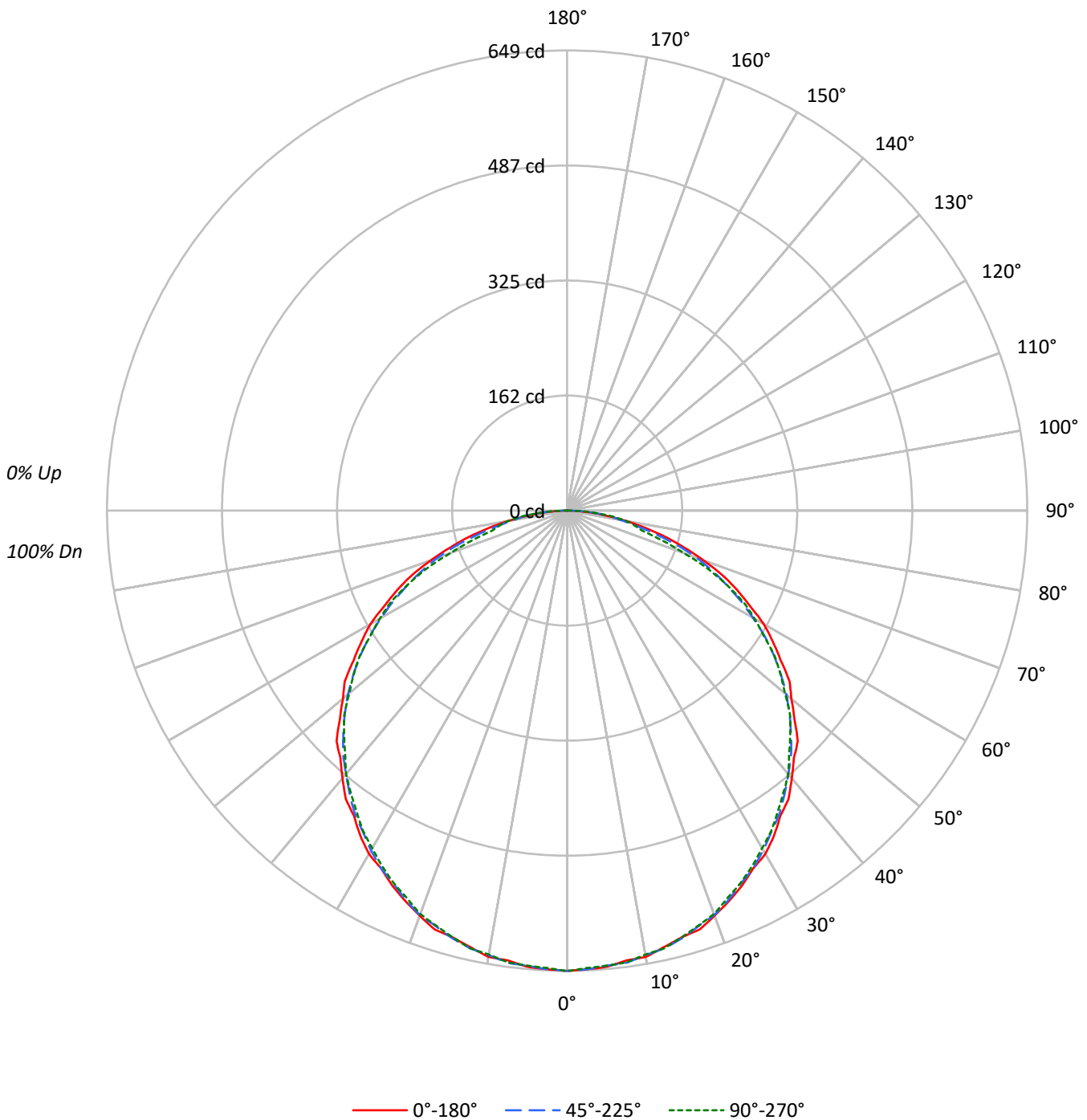
Input Watts (W): 19.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3494	3494	3494
5°	3489	3480	3480
10°	3493	3479	3474
15°	3472	3481	3472
20°	3482	3477	3468
25°	3466	3445	3441
30°	3475	3439	3418
35°	3447	3431	3403
40°	3462	3409	3409
45°	3501	3398	3386
50°	3457	3379	3358
55°	3448	3338	3354
60°	3449	3258	3286
65°	3363	3160	3170
70°	3215	3057	2766
75°	2990	2709	2273
80°	2607	2346	2631
85°	2075	2495	2544



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	3.2
10°-20°	176.3	9.1
20°-30°	268.1	13.9
30°-40°	326.7	16.9
40°-50°	346.1	17.9
50°-60°	320.5	16.6
60°-70°	249.3	12.9
70°-80°	138.9	7.2
80°-90°	43.0	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°	505.7	26.2
0°-40°	832.4	43.1
0°-60°	1499.1	77.7
0°-90°	1930.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1930.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	649	649	649	649	649	
5°	646	643	644	646	644	61
15°	623	626	625	625	623	177
25°	584	584	580	579	579	269
35°	525	525	522	520	518	330
45°	460	452	446	443	445	352
55°	368	364	356	353	357	330
65°	264	258	248	251	249	261
75°	144	140	130	117	109	151
85°	34	34	40	41	41	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	649.2	649.2	649.2	649.2	649.2
2.5°	647.5	647.5	647.5	647.5	645.8
5°	645.8	643.3	644.2	645.8	644.2
7.5°	639.9	642.5	643.3	643.3	642.5
10°	639.1	636.6	636.6	636.6	635.7
12.5°	630.7	631.5	632.4	632.4	632.4
15°	623.1	625.7	624.8	624.8	623.1
17.5°	619.8	615.6	614.7	614.7	613.9
20°	608.0	606.3	607.1	605.5	605.5
22.5°	596.2	595.4	594.5	593.7	591.2
25°	583.6	583.6	580.2	578.6	579.4
27.5°	568.5	570.1	568.5	566.8	565.1
30°	559.2	555.0	553.3	551.6	550.0
32.5°	543.2	541.6	536.5	534.0	535.7
35°	524.7	524.7	522.2	519.7	518.0
37.5°	513.0	507.9	503.7	501.2	501.2
40°	492.8	492.8	485.2	481.9	485.2
42.5°	473.4	473.4	467.6	465.9	463.4
45°	460.0	452.4	446.5	443.2	444.9
47.5°	434.8	433.1	425.5	423.0	426.4
50°	412.9	412.1	403.6	402.0	401.1
52.5°	395.2	387.7	380.1	377.6	379.3
55°	367.5	364.1	355.7	353.2	357.4
57.5°	343.9	340.6	330.5	328.8	328.8
60°	320.4	312.8	302.7	301.1	305.3
62.5°	290.1	286.8	275.8	276.7	280.9
65°	264.1	258.2	248.1	250.6	248.9
67.5°	236.3	229.6	221.2	217.8	215.3
70°	204.3	200.1	194.3	182.5	175.8
72.5°	172.4	169.0	163.1	146.3	141.3
75°	143.8	139.6	130.3	116.9	109.3
77.5°	112.7	112.7	100.1	94.2	97.5
80°	84.1	84.9	75.7	82.4	84.9
82.5°	57.2	56.3	62.2	64.8	64.8
85°	33.6	34.5	40.4	41.2	41.2
87.5°	13.5	16.0	18.5	19.3	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)