

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: P392831

Luminaire Tested: **12EN-LD2-23-UNV-L93050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392831
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 (5000K)
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: 2025.0 lumens
Efficiency: N/A
Efficacy: 107.1 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

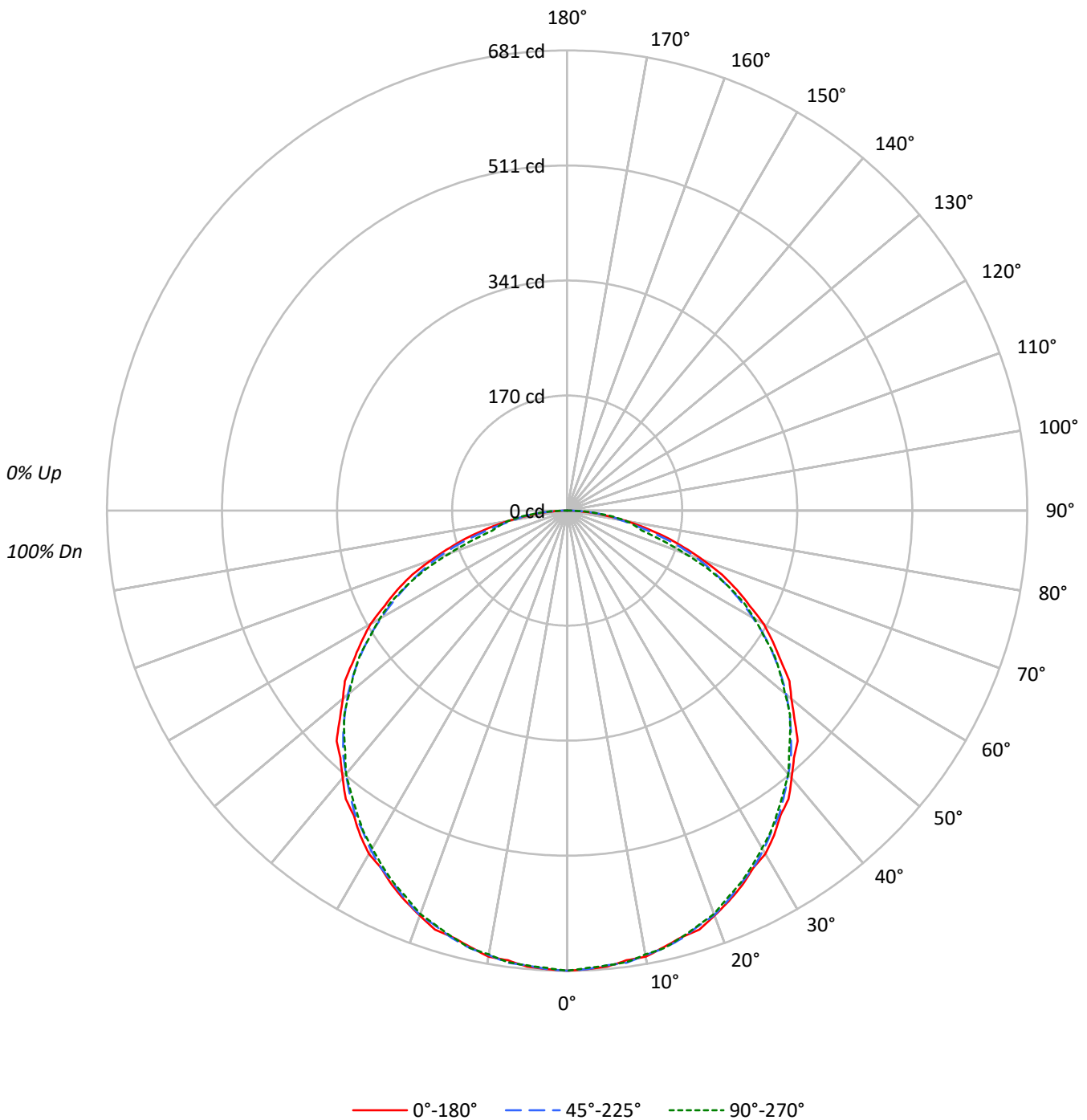
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3665	3665	3665
5°	3660	3650	3650
10°	3664	3650	3645
15°	3642	3652	3642
20°	3653	3648	3637
25°	3635	3615	3609
30°	3645	3608	3585
35°	3617	3599	3570
40°	3632	3576	3576
45°	3672	3565	3552
50°	3626	3545	3523
55°	3617	3501	3518
60°	3618	3419	3447
65°	3528	3314	3325
70°	3374	3207	2902
75°	3136	2843	2385
80°	2734	2461	2762
85°	2180	2612	2668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	3.2
10°-20°	184.9	9.1
20°-30°	281.3	13.9
30°-40°	342.7	16.9
40°-50°	363.1	17.9
50°-60°	336.2	16.6
60°-70°	261.5	12.9
70°-80°	145.8	7.2
80°-90°	45.1	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°	530.5	26.2
0°-40°	873.2	43.1
0°-60°	1572.6	77.7
0°-90°	2025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2025.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	681	681	681	681	681	
5°	678	675	676	678	676	64
15°	654	656	655	655	654	185
25°	612	612	609	607	608	282
35°	550	550	548	545	543	346
45°	482	475	468	465	467	369
55°	386	382	373	370	375	346
65°	277	271	260	263	261	273
75°	151	146	137	123	115	158
85°	35	36	42	43	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	681.0	681.0	681.0	681.0	681.0
2.5°	679.3	679.3	679.3	679.3	677.5
5°	677.5	674.8	675.7	677.5	675.7
7.5°	671.3	674.0	674.8	674.8	674.0
10°	670.4	667.8	667.8	667.8	666.9
12.5°	661.6	662.5	663.4	663.4	663.4
15°	653.7	656.3	655.4	655.4	653.7
17.5°	650.1	645.7	644.9	644.9	644.0
20°	637.8	636.0	636.9	635.1	635.1
22.5°	625.4	624.6	623.7	622.8	620.2
25°	612.2	612.2	608.7	606.9	607.8
27.5°	596.3	598.1	596.3	594.6	592.8
30°	586.6	582.2	580.5	578.7	576.9
32.5°	569.9	568.1	562.8	560.2	561.9
35°	550.5	550.5	547.8	545.2	543.4
37.5°	538.1	532.8	528.4	525.8	525.8
40°	516.9	516.9	509.0	505.5	509.0
42.5°	496.6	496.6	490.5	488.7	486.1
45°	482.5	474.6	468.4	464.9	466.7
47.5°	456.1	454.3	446.4	443.7	447.2
50°	433.1	432.3	423.4	421.7	420.8
52.5°	414.6	406.7	398.7	396.1	397.8
55°	385.5	382.0	373.1	370.5	374.9
57.5°	360.8	357.3	346.7	344.9	344.9
60°	336.1	328.2	317.6	315.8	320.2
62.5°	304.3	300.8	289.3	290.2	294.6
65°	277.0	270.8	260.2	262.9	261.1
67.5°	247.9	240.8	232.0	228.5	225.8
70°	214.4	210.0	203.8	191.4	184.4
72.5°	180.8	177.3	171.1	153.5	148.2
75°	150.8	146.4	136.7	122.6	114.7
77.5°	118.2	118.2	105.0	98.8	102.3
80°	88.2	89.1	79.4	86.5	89.1
82.5°	60.0	59.1	65.3	67.9	67.9
85°	35.3	36.2	42.3	43.2	43.2
87.5°	14.1	16.8	19.4	20.3	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)