

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: P392804

Luminaire Tested: **12EN-LD2-23-UNV-L82765-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392804
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-L82765-W2A-1-U (3500K)
Description: 1X2 ENCOUNTER, 2300 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2174.1 lumens
Efficiency: N/A
Efficacy: 112.6 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

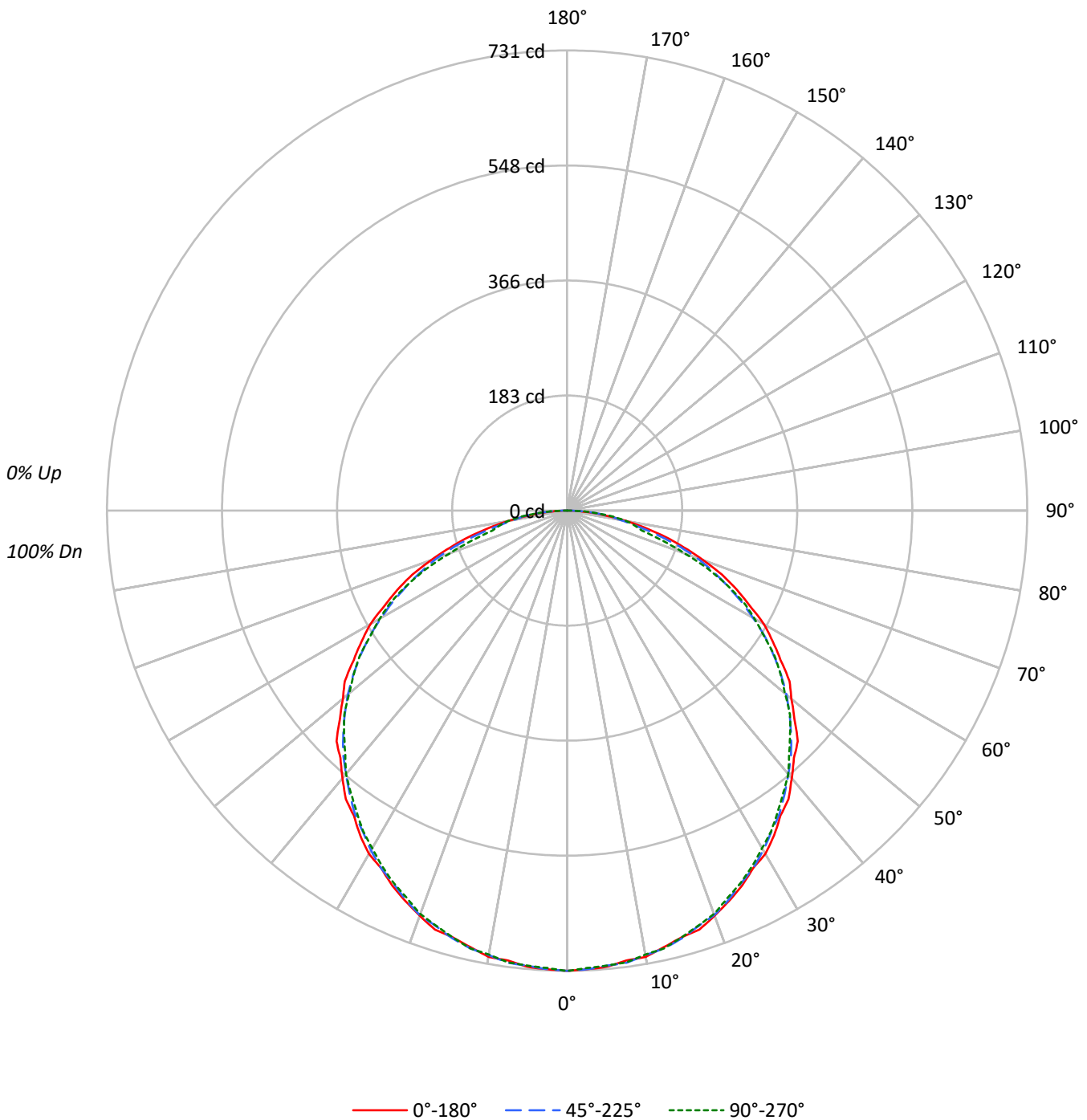
Input Watts (W): 19.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3935	3935	3935
5°	3930	3920	3920
10°	3934	3918	3913
15°	3910	3921	3910
20°	3922	3916	3905
25°	3903	3881	3875
30°	3914	3873	3849
35°	3883	3865	3833
40°	3899	3840	3840
45°	3943	3828	3813
50°	3893	3806	3783
55°	3884	3759	3777
60°	3885	3670	3701
65°	3787	3558	3570
70°	3621	3443	3114
75°	3369	3053	2560
80°	2935	2641	2966
85°	2340	2810	2865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	3.2
10°-20°	198.5	9.1
20°-30°	302.0	13.9
30°-40°	367.9	16.9
40°-50°	389.8	17.9
50°-60°	361.0	16.6
60°-70°	280.8	12.9
70°-80°	156.5	7.2
80°-90°	48.4	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°	569.6	26.2
0°-40°	937.5	43.1
0°-60°	1688.4	77.7
0°-90°	2174.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2174.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	727	724	726	727	726	69
15°	702	705	704	704	702	199
25°	657	657	654	652	653	303
35°	591	591	588	585	583	372
45°	518	510	503	499	501	396
55°	414	410	401	398	402	371
65°	297	291	279	282	280	293
75°	162	157	147	132	123	170
85°	38	39	46	46	46	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	731.2	731.2	731.2	731.2	731.2
2.5°	729.3	729.3	729.3	729.3	727.4
5°	727.4	724.5	725.5	727.4	725.5
7.5°	720.8	723.6	724.5	724.5	723.6
10°	719.8	717.0	717.0	717.0	716.0
12.5°	710.3	711.3	712.2	712.2	712.2
15°	701.8	704.7	703.7	703.7	701.8
17.5°	698.0	693.3	692.3	692.3	691.4
20°	684.8	682.9	683.8	681.9	681.9
22.5°	671.5	670.6	669.6	668.7	665.8
25°	657.3	657.3	653.5	651.6	652.6
27.5°	640.2	642.1	640.2	638.4	636.5
30°	629.8	625.1	623.2	621.3	619.4
32.5°	611.8	609.9	604.3	601.4	603.3
35°	591.0	591.0	588.2	585.3	583.4
37.5°	577.7	572.1	567.3	564.5	564.5
40°	555.0	555.0	546.5	542.7	546.5
42.5°	533.2	533.2	526.6	524.7	521.9
45°	518.1	509.5	502.9	499.1	501.0
47.5°	489.7	487.8	479.2	476.4	480.2
50°	465.0	464.1	454.6	452.7	451.8
52.5°	445.1	436.6	428.1	425.3	427.1
55°	413.9	410.1	400.6	397.8	402.5
57.5°	387.4	383.6	372.2	370.3	370.3
60°	360.9	352.3	341.0	339.1	343.8
62.5°	326.8	323.0	310.7	311.6	316.3
65°	297.4	290.8	279.4	282.2	280.3
67.5°	266.1	258.6	249.1	245.3	242.5
70°	230.1	225.4	218.8	205.5	197.9
72.5°	194.2	190.4	183.7	164.8	159.1
75°	162.0	157.2	146.8	131.6	123.1
77.5°	126.9	126.9	112.7	106.1	109.9
80°	94.7	95.7	85.2	92.8	95.7
82.5°	64.4	63.5	70.1	72.9	72.9
85°	37.9	38.8	45.5	46.4	46.4
87.5°	15.2	18.0	20.8	21.8	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)