

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: P392874

Luminaire Tested: **12EN-LD2-31-UNV-L83050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392874
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-38)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-31-UNV-L83050-W2A-1-U (2700K)
Description: 1X2 ENCOUNTER, 3100 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3016.1 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

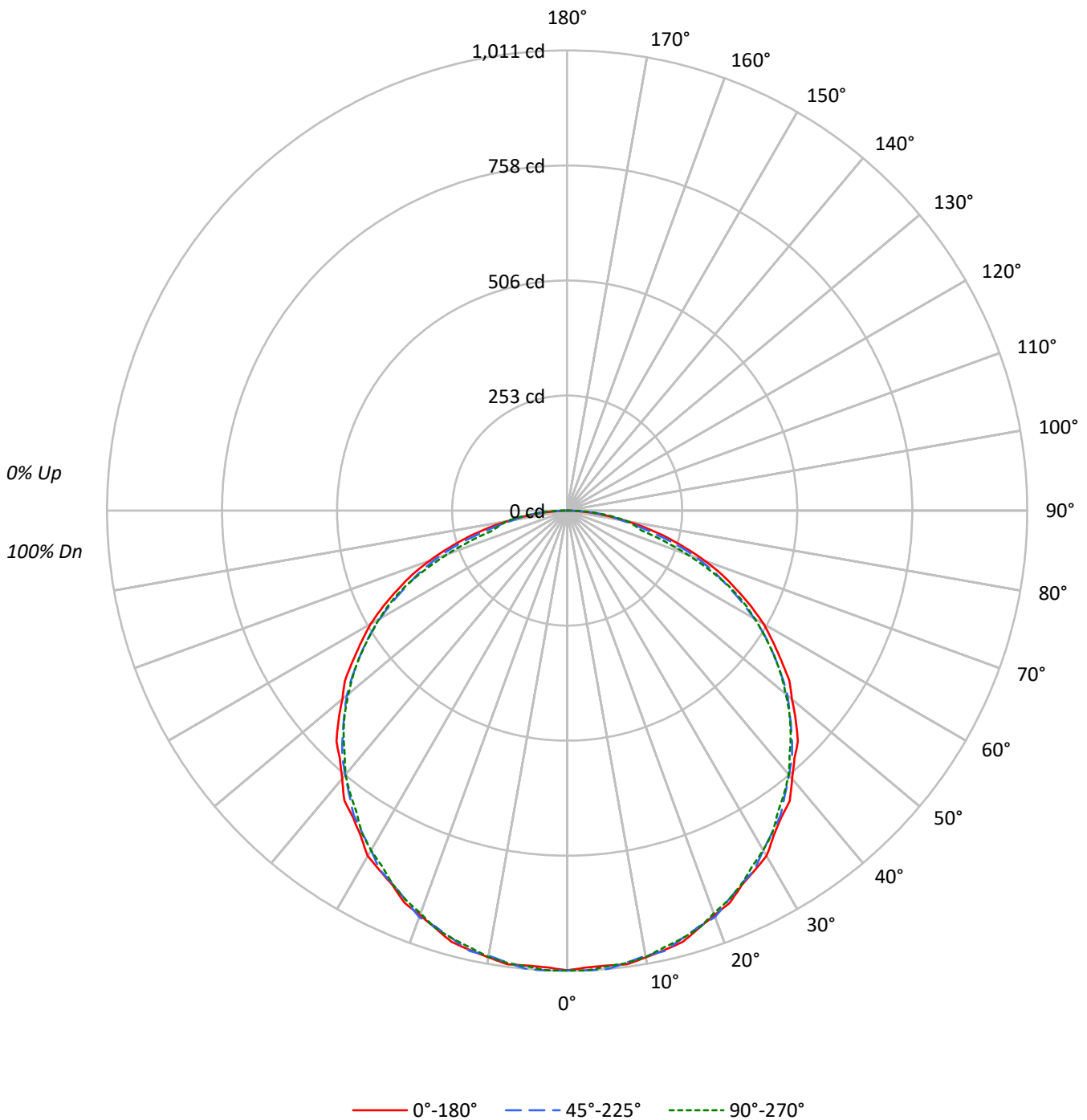
Input Watts (W): 26.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5437	5437	5437
5°	5421	5462	5431
10°	5447	5426	5441
15°	5467	5424	5424
20°	5415	5443	5393
25°	5391	5374	5380
30°	5445	5354	5354
35°	5395	5369	5306
40°	5403	5328	5321
45°	5456	5310	5288
50°	5396	5292	5251
55°	5387	5206	5206
60°	5369	5110	5130
65°	5234	4927	4988
70°	5056	4782	4387
75°	4714	4252	3510
80°	4097	3679	4156
85°	3217	3989	4051



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.7	3.2
10°-20°	275.2	9.1
20°-30°	418.8	13.9
30°-40°	510.4	16.9
40°-50°	540.4	17.9
50°-60°	500.4	16.6
60°-70°	389.4	12.9
70°-80°	217.9	7.2
80°-90°	67.6	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°	789.8	26.2
0°-40°	1300.2	43.1
0°-60°	2341.1	77.6
0°-90°	3016.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3016.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	1003	1010	1011	1012	1005	96
15°	981	975	974	972	974	276
25°	908	906	905	904	906	421
35°	821	821	817	812	808	516
45°	717	711	698	694	695	549
55°	574	569	555	552	555	514
65°	411	401	387	388	392	407
75°	227	219	204	183	169	238
85°	52	54	65	65	66	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1010.2	1010.2	1010.2	1010.2	1010.2
2.5°	1004.4	1008.2	1011.1	1011.1	1011.1
5°	1003.4	1010.2	1011.1	1012.1	1005.3
7.5°	1005.3	1000.5	1001.5	999.6	1002.4
10°	996.7	991.8	992.8	994.7	995.7
12.5°	988.9	989.9	990.9	989.9	983.2
15°	981.2	975.4	973.5	971.6	973.5
17.5°	961.9	958.1	959.0	960.0	961.9
20°	945.5	950.3	950.3	948.4	941.7
22.5°	933.0	932.0	926.2	923.3	926.2
25°	907.9	906.0	905.0	904.0	906.0
27.5°	891.5	891.5	890.5	886.7	880.9
30°	876.1	871.2	861.6	859.7	861.6
32.5°	845.2	841.3	838.4	834.6	839.4
35°	821.1	821.1	817.2	812.4	807.6
37.5°	803.7	797.9	786.3	782.5	783.4
40°	769.0	765.1	758.3	753.5	757.4
42.5°	739.1	738.1	731.3	725.5	723.6
45°	716.9	711.1	697.6	693.7	694.7
47.5°	681.2	675.4	663.8	659.9	662.8
50°	644.5	640.6	632.0	626.2	627.1
52.5°	615.6	607.8	593.4	591.4	592.4
55°	574.1	569.2	554.8	551.9	554.8
57.5°	535.5	529.7	516.2	510.4	515.2
60°	498.8	490.1	474.7	472.8	476.6
62.5°	455.4	448.6	430.3	431.3	437.1
65°	411.0	401.4	386.9	387.9	391.7
67.5°	368.6	357.9	346.4	340.6	335.8
70°	321.3	313.6	303.9	285.6	278.8
72.5°	272.1	265.3	256.6	228.7	223.8
75°	226.7	219.0	204.5	183.3	168.8
77.5°	178.5	174.6	157.3	147.6	152.4
80°	132.2	132.2	118.7	129.3	134.1
82.5°	88.8	87.8	97.4	102.3	101.3
85°	52.1	54.0	64.6	64.6	65.6
87.5°	22.2	25.1	29.9	30.9	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)