

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: P392878

Luminaire Tested: **12EN-LD2-31-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392878
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 (4500K)
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: 3181.7 lumens
Efficiency: N/A
Efficacy: 118.7 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

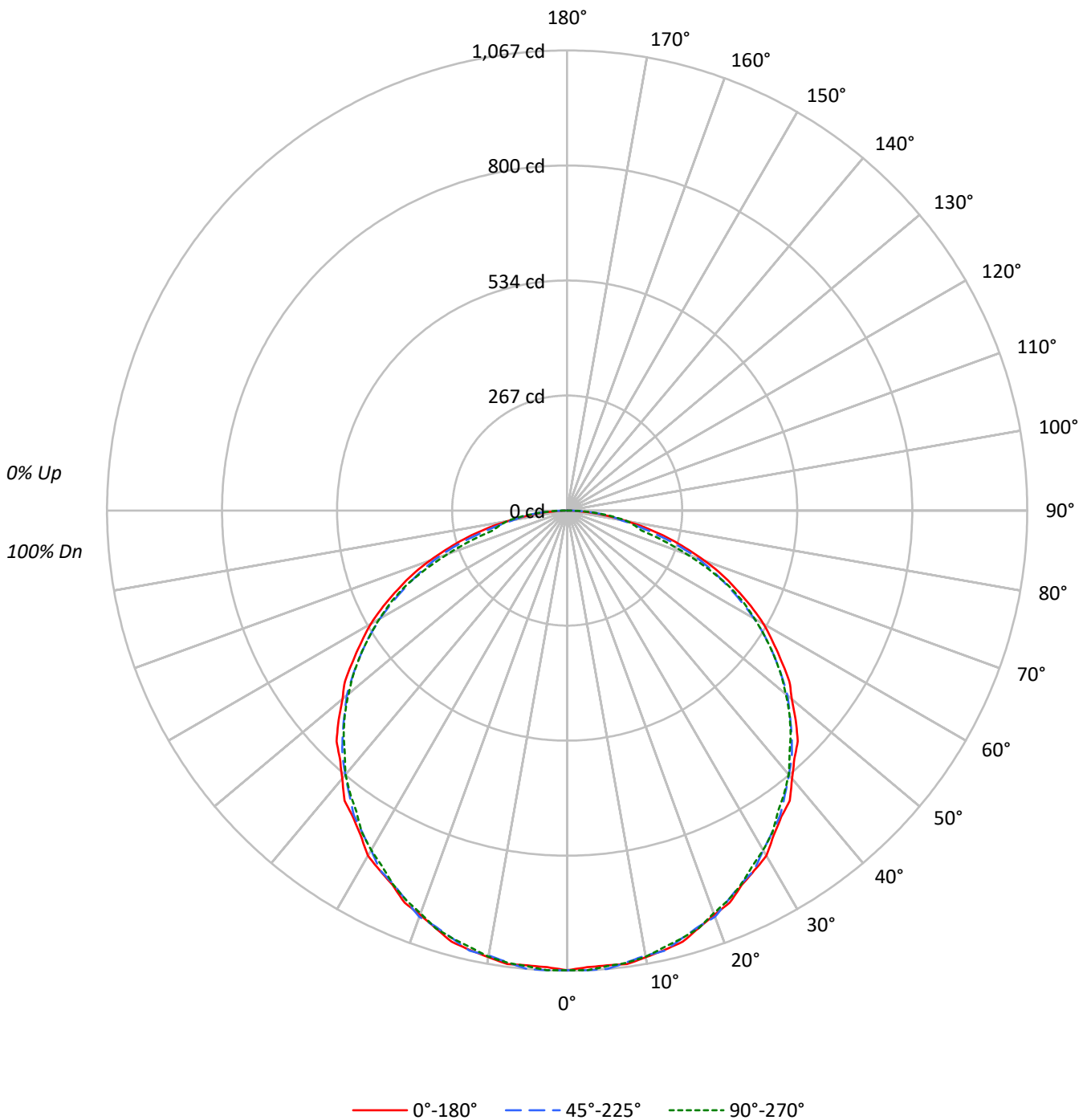
Input Watts (W): 26.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5736	5736	5736
5°	5719	5763	5730
10°	5746	5723	5740
15°	5767	5722	5722
20°	5713	5742	5690
25°	5688	5669	5675
30°	5743	5648	5648
35°	5691	5664	5597
40°	5699	5621	5613
45°	5756	5601	5578
50°	5693	5582	5539
55°	5682	5491	5491
60°	5664	5391	5412
65°	5522	5197	5262
70°	5333	5045	4629
75°	4974	4487	3703
80°	4320	3880	4386
85°	3396	4211	4273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	3.2
10°-20°	290.4	9.1
20°-30°	441.8	13.9
30°-40°	538.5	16.9
40°-50°	570.1	17.9
50°-60°	527.9	16.6
60°-70°	410.8	12.9
70°-80°	229.9	7.2
80°-90°	71.3	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°	833.2	26.2
0°-40°	1371.7	43.1
0°-60°	2469.7	77.6
0°-90°	3181.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3181.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1066	1066	1066	1066	1066	
5°	1058	1066	1067	1068	1061	101
15°	1035	1029	1027	1025	1027	291
25°	958	956	955	954	956	444
35°	866	866	862	857	852	544
45°	756	750	736	732	733	579
55°	606	600	585	582	585	542
65°	434	423	408	409	413	429
75°	239	231	216	193	178	251
85°	55	57	68	68	69	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1065.7	1065.7	1065.7	1065.7	1065.7
2.5°	1059.6	1063.6	1066.7	1066.7	1066.7
5°	1058.5	1065.7	1066.7	1067.7	1060.6
7.5°	1060.6	1055.5	1056.5	1054.5	1057.5
10°	1051.4	1046.3	1047.3	1049.4	1050.4
12.5°	1043.3	1044.3	1045.3	1044.3	1037.2
15°	1035.1	1029.0	1027.0	1025.0	1027.0
17.5°	1014.8	1010.7	1011.7	1012.7	1014.8
20°	997.5	1002.6	1002.6	1000.5	993.4
22.5°	984.2	983.2	977.1	974.1	977.1
25°	957.8	955.7	954.7	953.7	955.7
27.5°	940.5	940.5	939.5	935.4	929.3
30°	924.2	919.1	908.9	906.9	908.9
32.5°	891.6	887.5	884.5	880.4	885.5
35°	866.2	866.2	862.1	857.0	851.9
37.5°	847.8	841.7	829.5	825.5	826.5
40°	811.2	807.1	800.0	794.9	799.0
42.5°	779.7	778.6	771.5	765.4	763.4
45°	756.2	750.1	735.9	731.8	732.8
47.5°	718.6	712.5	700.3	696.2	699.2
50°	679.9	675.8	666.7	660.6	661.6
52.5°	649.4	641.2	626.0	623.9	624.9
55°	605.6	600.5	585.2	582.2	585.2
57.5°	564.9	558.8	544.5	538.4	543.5
60°	526.2	517.1	500.8	498.7	502.8
62.5°	480.4	473.3	454.0	455.0	461.1
65°	433.6	423.4	408.1	409.2	413.2
67.5°	388.8	377.6	365.4	359.3	354.2
70°	338.9	330.8	320.6	301.3	294.2
72.5°	287.0	279.9	270.7	241.2	236.1
75°	239.2	231.0	215.8	193.4	178.1
77.5°	188.3	184.2	165.9	155.7	160.8
80°	139.4	139.4	125.2	136.4	141.5
82.5°	93.6	92.6	102.8	107.9	106.9
85°	55.0	57.0	68.2	68.2	69.2
87.5°	23.4	26.5	31.6	32.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)