

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: P392892

Luminaire Tested: **12EN-LD2-31-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P392892
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-L93050-W2A-1-U (3500K)
Description: 1X2 ENCOUNTER, 3100 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2628.8 lumens
Efficiency: N/A
Efficacy: 98.1 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

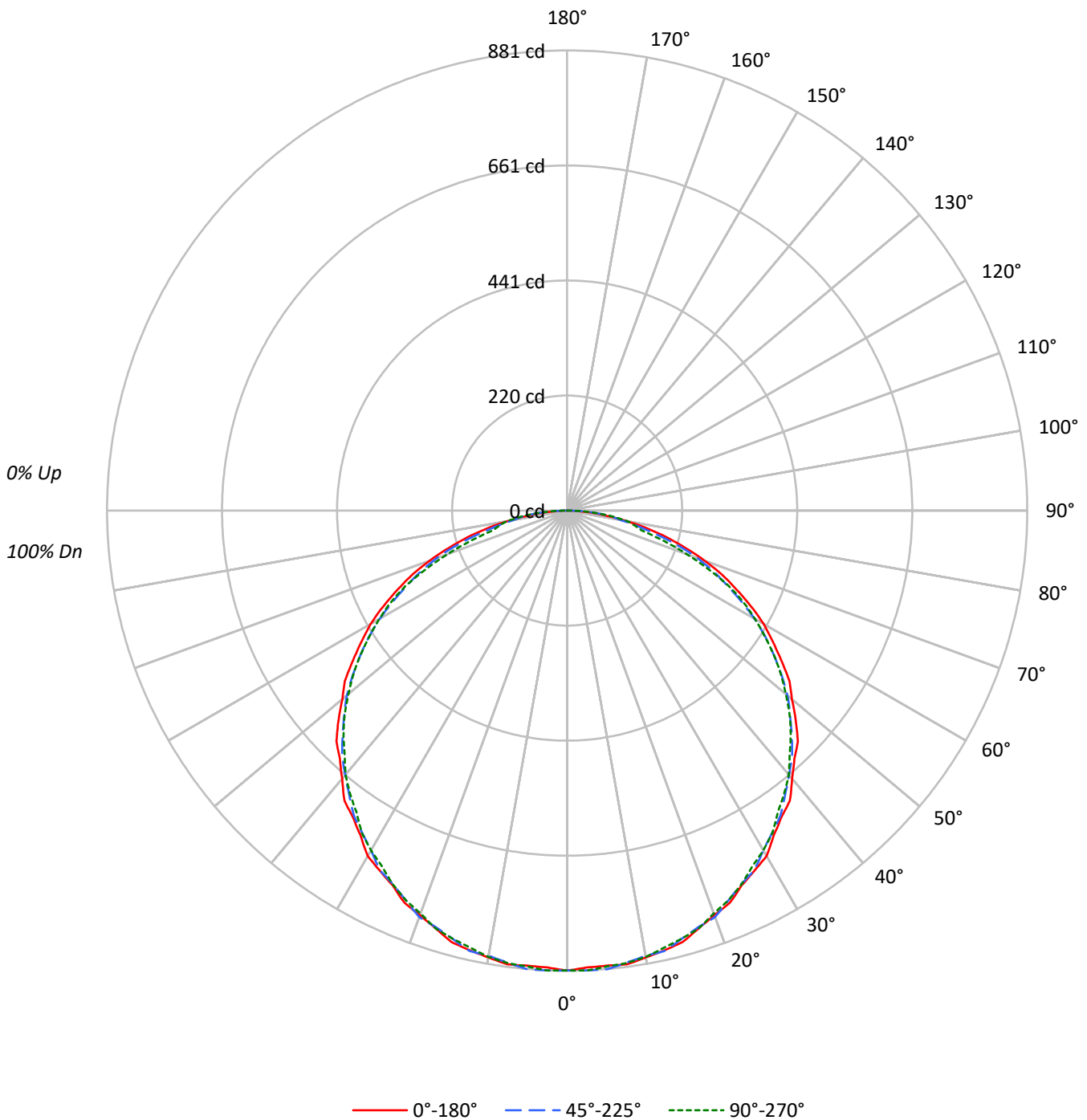
Input Watts (W): 26.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4739	4739	4739
5°	4725	4761	4734
10°	4747	4729	4743
15°	4765	4728	4728
20°	4720	4744	4700
25°	4699	4684	4689
30°	4745	4667	4667
35°	4702	4680	4625
40°	4709	4644	4638
45°	4756	4628	4609
50°	4703	4612	4577
55°	4695	4537	4537
60°	4680	4453	4471
65°	4562	4294	4348
70°	4406	4168	3824
75°	4109	3708	3061
80°	3570	3205	3623
85°	2803	3477	3532



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	3.2
10°-20°	239.9	9.1
20°-30°	365.0	13.9
30°-40°	444.9	16.9
40°-50°	471.0	17.9
50°-60°	436.2	16.6
60°-70°	339.4	12.9
70°-80°	190.0	7.2
80°-90°	58.9	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°	688.4	26.2
0°-40°	1133.3	43.1
0°-60°	2040.5	77.6
0°-90°	2628.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2628.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	875	880	881	882	876	83
15°	855	850	848	847	848	240
25°	791	790	789	788	790	367
35°	716	716	712	708	704	450
45°	625	620	608	605	606	479
55°	500	496	484	481	484	448
65°	358	350	337	338	341	355
75°	198	191	178	160	147	208
85°	45	47	56	56	57	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	880.5	880.5	880.5	880.5	880.5
2.5°	875.4	878.8	881.3	881.3	881.3
5°	874.6	880.5	881.3	882.1	876.2
7.5°	876.2	872.0	872.9	871.2	873.7
10°	868.7	864.5	865.3	867.0	867.8
12.5°	862.0	862.8	863.6	862.8	856.9
15°	855.2	850.2	848.5	846.8	848.5
17.5°	838.4	835.0	835.9	836.7	838.4
20°	824.1	828.3	828.3	826.6	820.7
22.5°	813.2	812.3	807.3	804.8	807.3
25°	791.3	789.6	788.8	787.9	789.6
27.5°	777.0	777.0	776.2	772.8	767.8
30°	763.6	759.4	750.9	749.3	750.9
32.5°	736.7	733.3	730.8	727.4	731.6
35°	715.6	715.6	712.3	708.1	703.9
37.5°	700.5	695.4	685.4	682.0	682.8
40°	670.2	666.9	661.0	656.8	660.1
42.5°	644.2	643.3	637.4	632.4	630.7
45°	624.8	619.8	608.0	604.6	605.5
47.5°	593.7	588.6	578.6	575.2	577.7
50°	561.7	558.4	550.8	545.8	546.6
52.5°	536.5	529.8	517.2	515.5	516.3
55°	500.4	496.1	483.5	481.0	483.5
57.5°	466.7	461.7	449.9	444.9	449.1
60°	434.8	427.2	413.7	412.1	415.4
62.5°	396.9	391.0	375.1	375.9	380.9
65°	358.2	349.8	337.2	338.1	341.4
67.5°	321.2	312.0	301.9	296.8	292.6
70°	280.0	273.3	264.9	248.9	243.0
72.5°	237.1	231.3	223.7	199.3	195.1
75°	197.6	190.9	178.3	159.8	147.2
77.5°	155.6	152.2	137.1	128.7	132.9
80°	115.2	115.2	103.4	112.7	116.9
82.5°	77.4	76.5	84.9	89.1	88.3
85°	45.4	47.1	56.3	56.3	57.2
87.5°	19.3	21.9	26.1	26.9	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)