

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: P392879

Luminaire Tested: **12EN-LD2-31-UNV-L83050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392879  
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 (5000K)  
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: 3185.0 lumens  
Efficiency: N/A  
Efficacy: 119.3 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

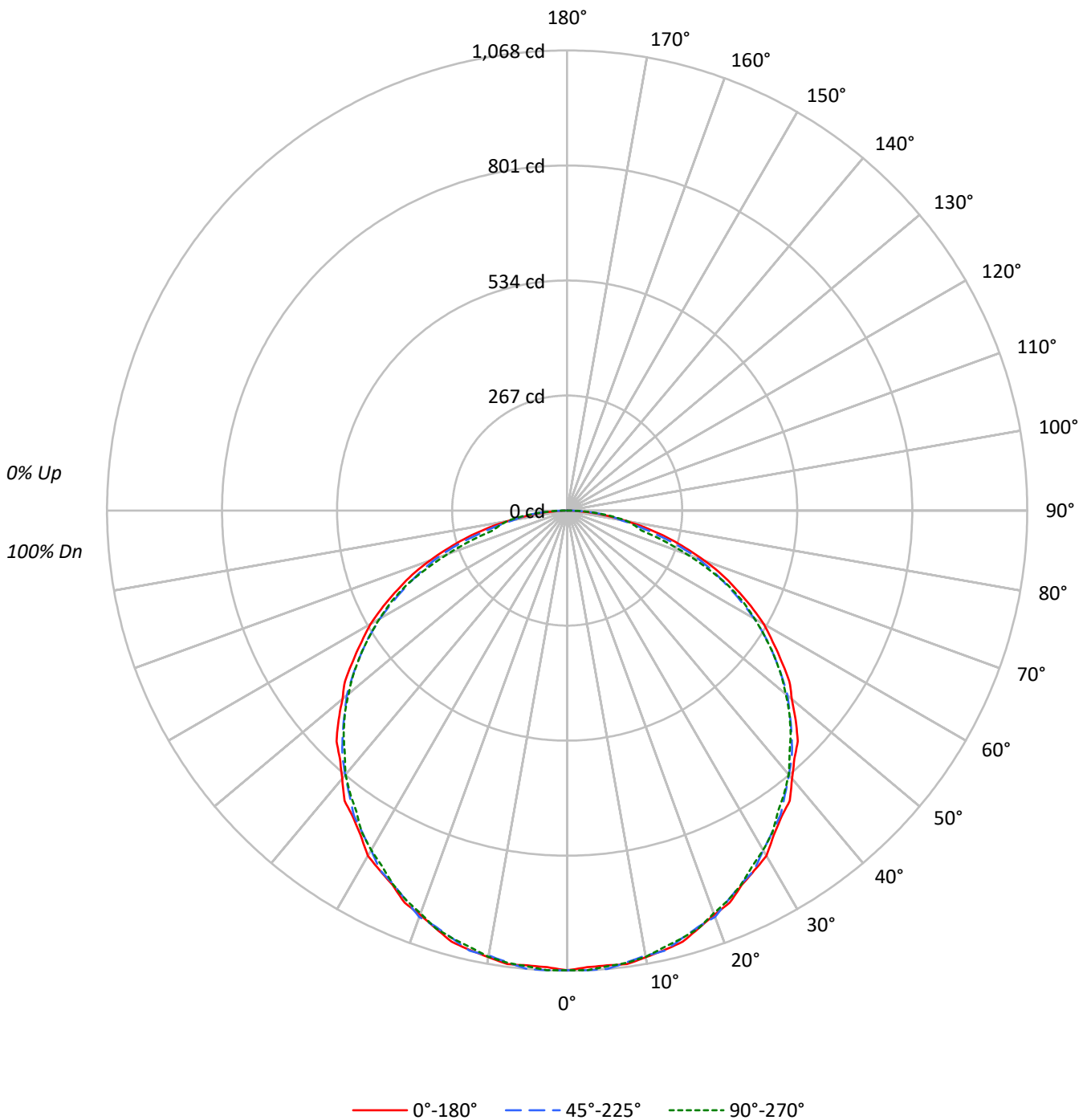
Input Watts (W): 26.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5741	5741	5741
5°	5725	5769	5736
10°	5752	5729	5746
15°	5774	5728	5728
20°	5719	5748	5695
25°	5694	5675	5681
30°	5749	5654	5654
35°	5697	5670	5603
40°	5705	5626	5619
45°	5762	5606	5584
50°	5699	5588	5545
55°	5688	5497	5497
60°	5670	5396	5417
65°	5527	5203	5268
70°	5339	5050	4634
75°	4978	4492	3708
80°	4327	3883	4389
85°	3396	4218	4279



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.1	3.2
10°-20°	290.7	9.1
20°-30°	442.3	13.9
30°-40°	539.0	16.9
40°-50°	570.7	17.9
50°-60°	528.5	16.6
60°-70°	411.2	12.9
70°-80°	230.2	7.2
80°-90°	71.4	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°	834.0	26.2
0°-40°	1373.1	43.1
0°-60°	2472.2	77.6
0°-90°	3185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3185.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1060	1067	1068	1069	1062	101
15°	1036	1030	1028	1026	1028	291
25°	959	957	956	955	957	444
35°	867	867	863	858	853	545
45°	757	751	737	733	734	580
55°	606	601	586	583	586	543
65°	434	424	409	410	414	430
75°	239	231	216	194	178	252
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°	1066.8	1066.8	1066.8	1066.8	1066.8
2.5°	1060.6	1064.7	1067.8	1067.8	1067.8
5°	1059.6	1066.8	1067.8	1068.8	1061.7
7.5°	1061.7	1056.6	1057.6	1055.5	1058.6
10°	1052.5	1047.4	1048.4	1050.4	1051.5
12.5°	1044.3	1045.4	1046.4	1045.4	1038.2
15°	1036.2	1030.1	1028.0	1026.0	1028.0
17.5°	1015.8	1011.7	1012.8	1013.8	1015.8
20°	998.5	1003.6	1003.6	1001.5	994.4
22.5°	985.2	984.2	978.1	975.1	978.1
25°	958.8	956.7	955.7	954.7	956.7
27.5°	941.4	941.4	940.4	936.3	930.2
30°	925.1	920.0	909.8	907.8	909.8
32.5°	892.5	888.4	885.4	881.3	886.4
35°	867.1	867.1	863.0	857.9	852.8
37.5°	848.7	842.6	830.4	826.3	827.3
40°	812.0	808.0	800.8	795.7	799.8
42.5°	780.5	779.4	772.3	766.2	764.1
45°	757.0	750.9	736.6	732.6	733.6
47.5°	719.3	713.2	701.0	696.9	700.0
50°	680.6	676.5	667.4	661.2	662.3
52.5°	650.0	641.9	626.6	624.6	625.6
55°	606.2	601.1	585.8	582.8	585.8
57.5°	565.5	559.4	545.1	539.0	544.1
60°	526.8	517.6	501.3	499.2	503.3
62.5°	480.9	473.8	454.4	455.4	461.5
65°	434.0	423.8	408.6	409.6	413.7
67.5°	389.2	378.0	365.8	359.7	354.6
70°	339.3	331.1	320.9	301.6	294.5
72.5°	287.3	280.2	271.0	241.5	236.4
75°	239.4	231.3	216.0	193.6	178.3
77.5°	188.5	184.4	166.1	155.9	161.0
80°	139.6	139.6	125.3	136.5	141.6
82.5°	93.7	92.7	102.9	108.0	107.0
85°	55.0	57.1	68.3	68.3	69.3
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)