

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: P392875

Luminaire Tested: **12EN-LD2-31-UNV-L83050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392875  
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 (3000K)  
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: 3075.8 lumens  
Efficiency: N/A  
Efficacy: 112.7 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

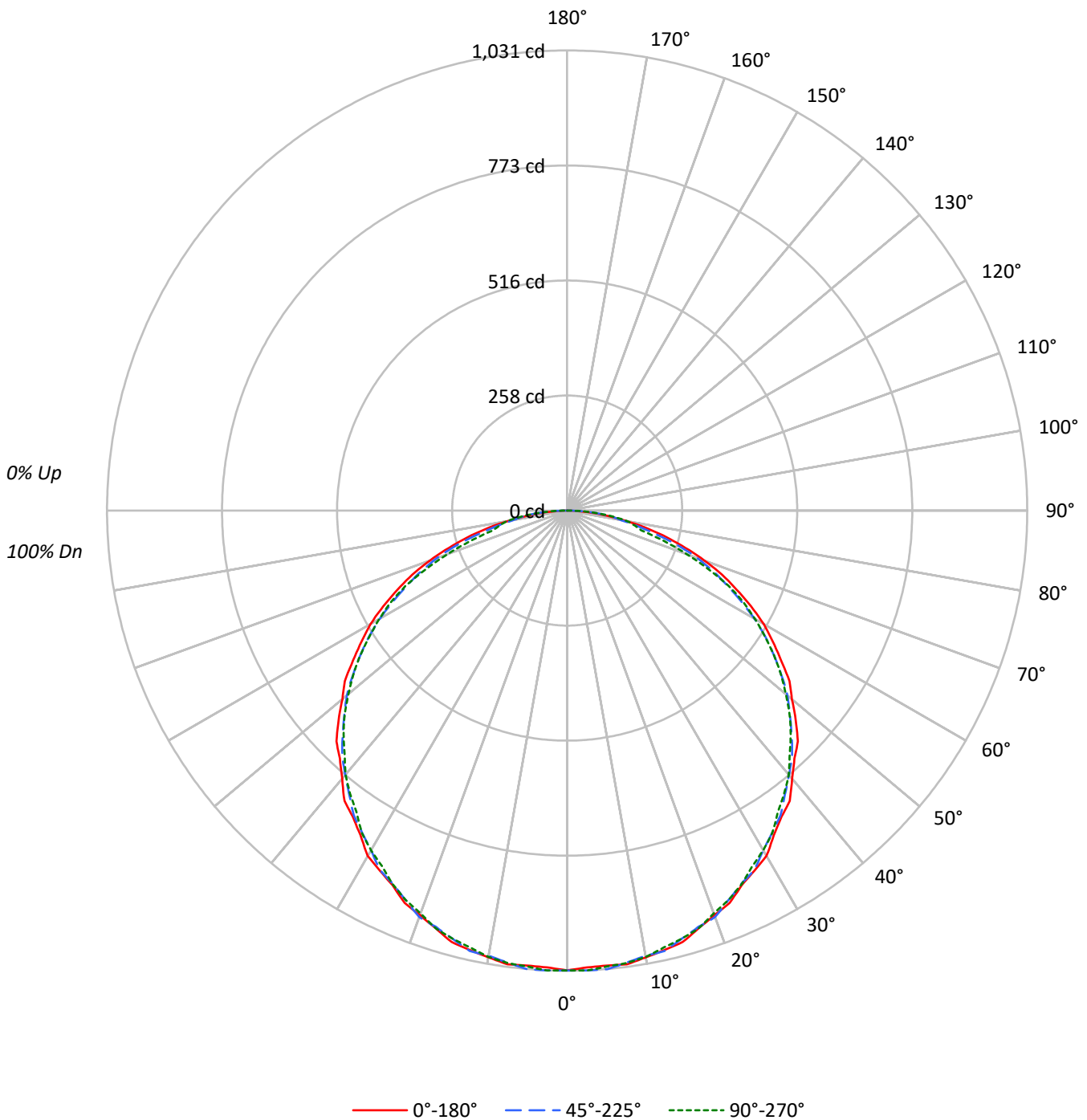
Input Watts (W): 27.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5544	5544	5544
5°	5528	5571	5539
10°	5555	5533	5549
15°	5576	5532	5532
20°	5523	5551	5500
25°	5498	5480	5486
30°	5552	5461	5461
35°	5501	5476	5411
40°	5510	5434	5427
45°	5565	5415	5392
50°	5503	5396	5355
55°	5493	5309	5309
60°	5476	5211	5232
65°	5338	5025	5088
70°	5157	4877	4475
75°	4808	4338	3581
80°	4178	3750	4240
85°	3279	4069	4131



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.6	3.2
10°-20°	280.7	9.1
20°-30°	427.1	13.9
30°-40°	520.6	16.9
40°-50°	551.1	17.9
50°-60°	510.4	16.6
60°-70°	397.1	12.9
70°-80°	222.3	7.2
80°-90°	68.9	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°	805.5	26.2
0°-40°	1326.0	43.1
0°-60°	2387.5	77.6
0°-90°	3075.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3075.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1023	1030	1031	1032	1025	98
15°	1001	995	993	991	993	281
25°	926	924	923	922	924	429
35°	837	837	833	828	824	526
45°	731	725	711	708	708	560
55°	585	580	566	563	566	524
65°	419	409	395	396	400	415
75°	231	223	209	187	172	243
85°	53	55	66	66	67	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1030.2	1030.2	1030.2	1030.2	1030.2
2.5°	1024.3	1028.2	1031.2	1031.2	1031.2
5°	1023.3	1030.2	1031.2	1032.2	1025.3
7.5°	1025.3	1020.4	1021.3	1019.4	1022.3
10°	1016.4	1011.5	1012.5	1014.4	1015.4
12.5°	1008.5	1009.5	1010.5	1009.5	1002.6
15°	1000.7	994.8	992.8	990.8	992.8
17.5°	981.0	977.1	978.0	979.0	981.0
20°	964.3	969.2	969.2	967.2	960.3
22.5°	951.5	950.5	944.6	941.6	944.6
25°	925.9	923.9	922.9	922.0	923.9
27.5°	909.2	909.2	908.2	904.2	898.3
30°	893.4	888.5	878.7	876.7	878.7
32.5°	861.9	858.0	855.1	851.1	856.0
35°	837.3	837.3	833.4	828.5	823.6
37.5°	819.6	813.7	801.9	798.0	799.0
40°	784.2	780.3	773.4	768.5	772.4
42.5°	753.7	752.7	745.8	739.9	738.0
45°	731.1	725.2	711.4	707.5	708.4
47.5°	694.7	688.8	677.0	673.0	676.0
50°	657.3	653.3	644.5	638.6	639.6
52.5°	627.8	619.9	605.1	603.2	604.1
55°	585.4	580.5	565.8	562.8	565.8
57.5°	546.1	540.2	526.4	520.5	525.4
60°	508.7	499.8	484.1	482.1	486.1
62.5°	464.4	457.5	438.8	439.8	445.7
65°	419.2	409.3	394.6	395.5	399.5
67.5°	375.9	365.0	353.2	347.3	342.4
70°	327.7	319.8	309.9	291.2	284.4
72.5°	277.5	270.6	261.7	233.2	228.3
75°	231.2	223.4	208.6	186.9	172.2
77.5°	182.0	178.1	160.4	150.5	155.5
80°	134.8	134.8	121.0	131.8	136.8
82.5°	90.5	89.5	99.4	104.3	103.3
85°	53.1	55.1	65.9	65.9	66.9
87.5°	22.6	25.6	30.5	31.5	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)