

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: P392872

Luminaire Tested: **12EN-LD2-31-UNV-L82765-W2A-1-U (5700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392872  
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-L82765-W2A-1-U (5700K)  
Description: 1X2 ENCOUNTER, 3100 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3012.9 lumens  
Efficiency: N/A  
Efficacy: 113.3 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

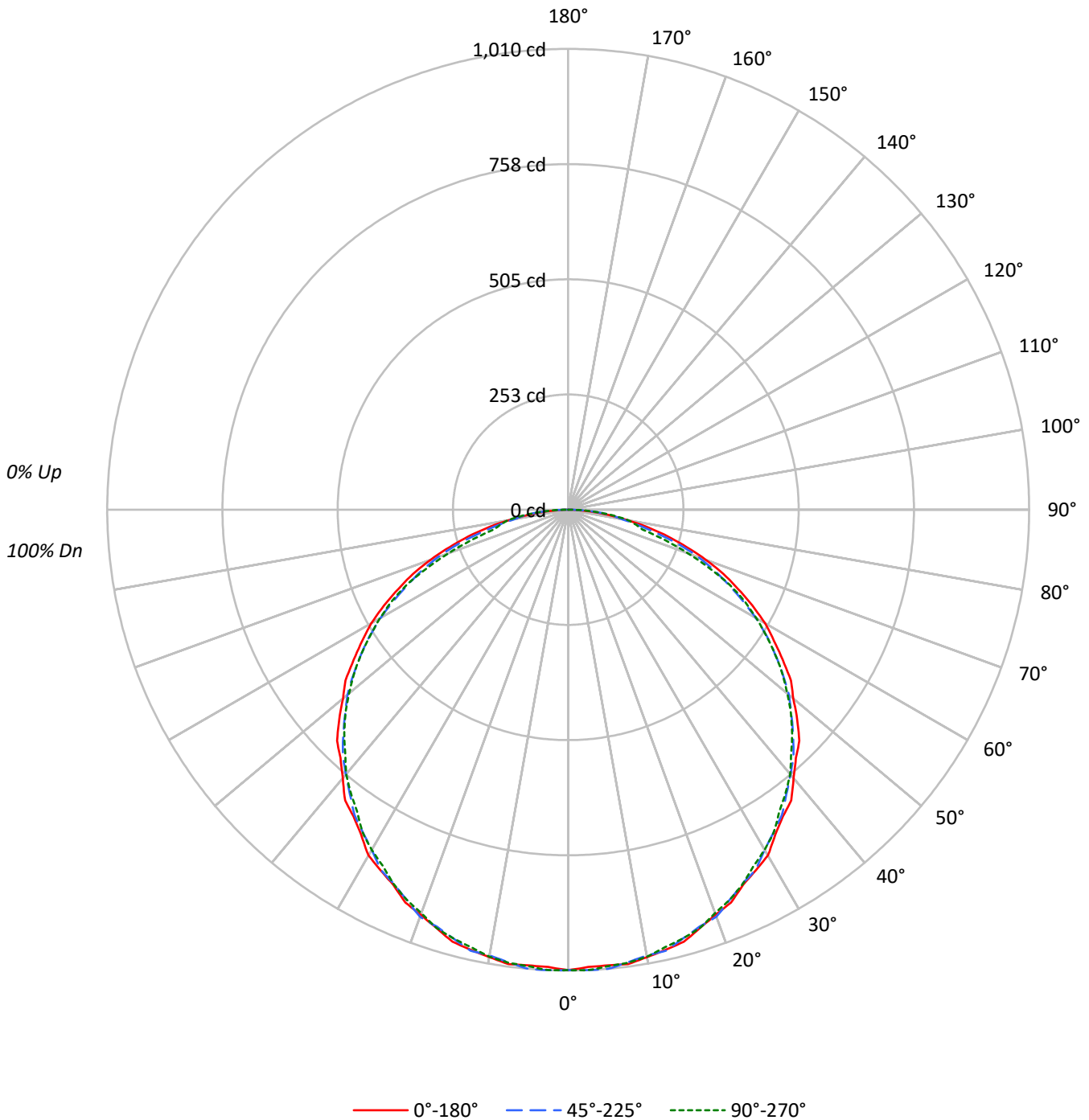
Input Watts (W): 26.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5431	5431	5431
5°	5415	5457	5426
10°	5441	5420	5436
15°	5461	5419	5419
20°	5409	5438	5388
25°	5386	5369	5374
30°	5438	5349	5349
35°	5389	5364	5300
40°	5397	5323	5316
45°	5450	5304	5281
50°	5390	5286	5246
55°	5381	5200	5200
60°	5364	5104	5125
65°	5229	4922	4983
70°	5051	4777	4382
75°	4710	4248	3508
80°	4091	3673	4153
85°	3211	3989	4045



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.6	3.2
10°-20°	275.0	9.1
20°-30°	418.4	13.9
30°-40°	509.9	16.9
40°-50°	539.9	17.9
50°-60°	499.9	16.6
60°-70°	389.0	12.9
70°-80°	217.7	7.2
80°-90°	67.5	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°	789.0	26.2
0°-40°	1298.9	43.1
0°-60°	2338.7	77.6
0°-90°	3012.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3012.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1009	1009	1009	1009	1009	
5°	1002	1009	1010	1011	1004	96
15°	980	974	972	971	972	276
25°	907	905	904	903	905	420
35°	820	820	816	812	807	515
45°	716	710	697	693	694	549
55°	574	569	554	551	554	513
65°	411	401	386	388	391	407
75°	226	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°	1009.1	1009.1	1009.1	1009.1	1009.1
2.5°	1003.3	1007.2	1010.1	1010.1	1010.1
5°	1002.4	1009.1	1010.1	1011.0	1004.3
7.5°	1004.3	999.5	1000.4	998.5	1001.4
10°	995.6	990.8	991.8	993.7	994.7
12.5°	987.9	988.9	989.8	988.9	982.1
15°	980.2	974.4	972.5	970.6	972.5
17.5°	960.9	957.1	958.0	959.0	960.9
20°	944.5	949.4	949.4	947.4	940.7
22.5°	932.0	931.0	925.3	922.4	925.3
25°	907.0	905.0	904.1	903.1	905.0
27.5°	890.6	890.6	889.6	885.7	880.0
30°	875.1	870.3	860.7	858.8	860.7
32.5°	844.3	840.4	837.6	833.7	838.5
35°	820.2	820.2	816.4	811.5	806.7
37.5°	802.9	797.1	785.5	781.7	782.6
40°	768.2	764.3	757.6	752.7	756.6
42.5°	738.3	737.3	730.6	724.8	722.9
45°	716.1	710.3	696.8	693.0	693.9
47.5°	680.5	674.7	663.1	659.3	662.1
50°	643.8	640.0	631.3	625.5	626.5
52.5°	614.9	607.2	592.7	590.8	591.8
55°	573.5	568.7	554.2	551.3	554.2
57.5°	534.9	529.1	515.6	509.9	514.7
60°	498.3	489.6	474.2	472.3	476.1
62.5°	454.9	448.2	429.9	430.8	436.6
65°	410.6	400.9	386.5	387.5	391.3
67.5°	368.2	357.6	346.0	340.2	335.4
70°	321.0	313.2	303.6	285.3	278.5
72.5°	271.8	265.0	256.4	228.4	223.6
75°	226.5	218.8	204.3	183.1	168.7
77.5°	178.3	174.5	157.1	147.5	152.3
80°	132.0	132.0	118.5	129.2	134.0
82.5°	88.7	87.7	97.3	102.2	101.2
85°	52.0	54.0	64.6	64.6	65.5
87.5°	22.2	25.1	29.9	30.8	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)