

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: P393372

Luminaire Tested: **22EN-LD2-39-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393372  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22EN-LD2-39-UNV-L93050-W2A-1-U (3500K)  
Description: 2X2 ENCOUNTER, 3900 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3305.9 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

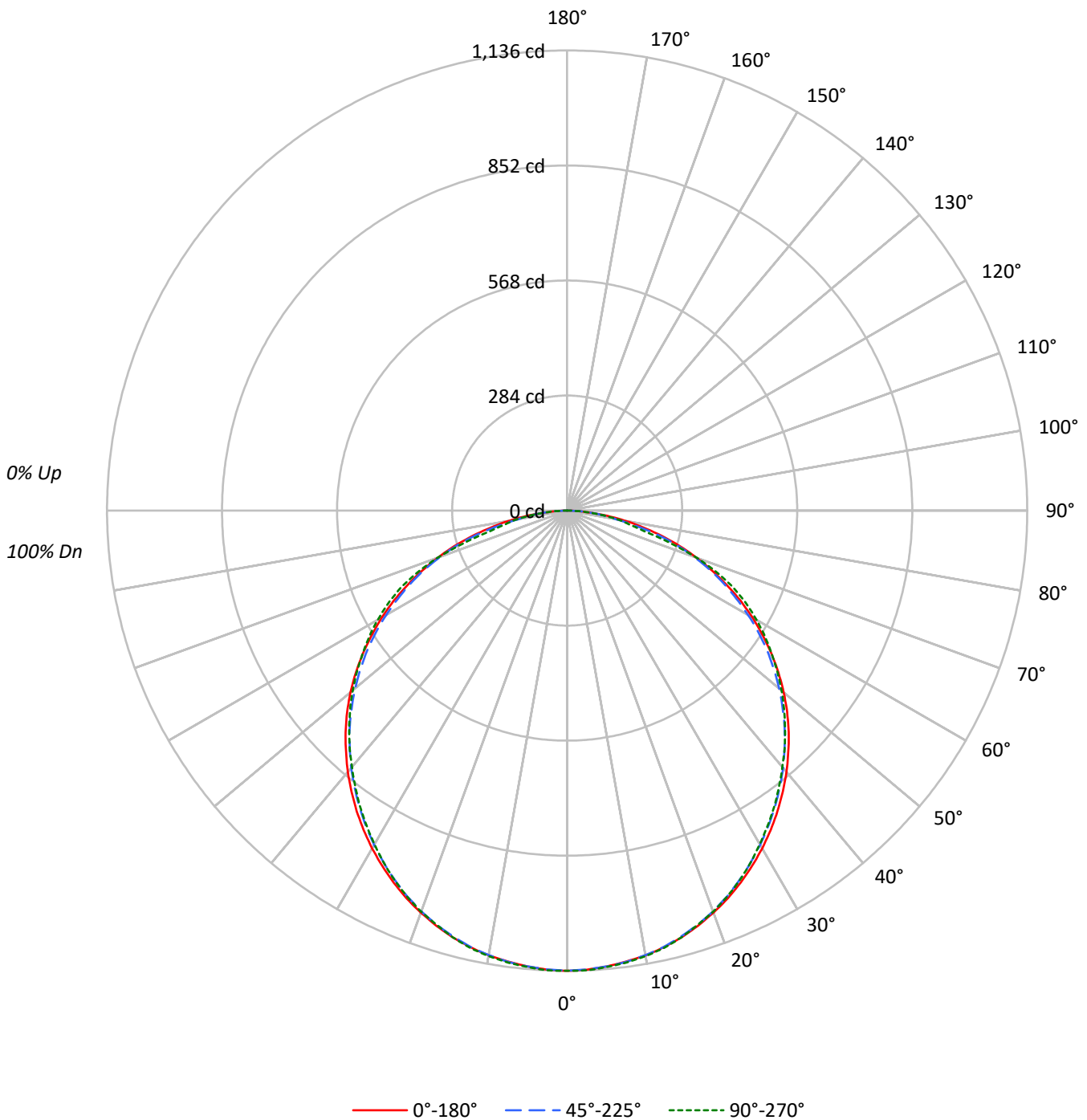
Input Watts (W): 29.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3057	3057	3057
5°	3051	3051	3055
10°	3047	3045	3052
15°	3039	3032	3039
20°	3025	3015	3017
25°	3009	2989	2991
30°	2992	2961	2955
35°	2975	2937	2928
40°	2960	2913	2904
45°	2944	2890	2896
50°	2922	2862	2894
55°	2888	2829	2892
60°	2842	2779	2906
65°	2769	2720	2897
70°	2666	2620	2673
75°	2509	2405	2046
80°	2255	1903	2019
85°	1609	1636	1636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.3	3.2
10°-20°	307.3	9.3
20°-30°	464.5	14.0
30°-40°	560.5	17.0
40°-50°	588.2	17.8
50°-60°	544.3	16.5
60°-70°	429.6	13.0
70°-80°	240.6	7.3
80°-90°	63.7	1.9
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°	879.1	26.6
0°-40°	1439.6	43.5
0°-60°	2572.1	77.8
0°-90°	3305.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3305.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1129	1128	1129	1129	1131	107
15°	1091	1090	1088	1088	1091	308
25°	1013	1010	1007	1004	1007	467
35°	906	902	894	889	891	567
45°	774	769	759	755	761	597
55°	616	610	603	607	616	550
65°	435	431	427	441	455	430
75°	241	239	231	207	197	255
85°	52	52	53	53	53	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1136.1	1136.1	1136.1	1136.1	1136.1
2.5°	1134.4	1132.7	1133.6	1134.4	1136.1
5°	1129.4	1127.7	1129.4	1129.4	1131.0
7.5°	1122.6	1121.8	1123.5	1123.5	1125.2
10°	1115.1	1113.4	1114.2	1114.2	1116.8
12.5°	1104.1	1103.3	1103.3	1103.3	1105.8
15°	1090.7	1089.8	1088.2	1088.2	1090.7
17.5°	1074.7	1073.0	1072.2	1070.5	1072.2
20°	1056.2	1054.5	1052.8	1051.2	1053.7
22.5°	1036.0	1034.3	1031.0	1028.5	1031.8
25°	1013.3	1010.0	1006.6	1004.1	1007.4
27.5°	988.9	984.7	980.5	978.0	980.5
30°	962.9	958.7	952.8	948.6	951.1
32.5°	935.1	930.9	924.2	920.0	921.7
35°	905.7	901.5	893.9	888.9	891.4
37.5°	874.6	870.4	862.0	856.9	859.4
40°	842.6	837.6	829.2	824.1	826.6
42.5°	808.1	803.9	794.7	788.8	794.7
45°	773.7	768.6	759.4	755.2	761.0
47.5°	736.7	730.8	721.5	719.8	726.6
50°	698.0	692.9	683.7	682.8	691.2
52.5°	657.6	651.7	643.3	645.0	654.2
55°	615.6	610.5	602.9	607.1	616.4
57.5°	571.8	567.6	560.1	568.5	579.4
60°	528.1	523.1	516.3	527.3	539.9
62.5°	482.7	476.8	470.9	485.2	499.5
65°	434.8	431.4	427.2	440.6	454.9
67.5°	386.8	384.3	380.9	393.6	402.0
70°	338.9	335.5	333.0	337.2	339.7
72.5°	292.6	286.8	285.1	274.1	269.1
75°	241.3	238.8	231.3	206.9	196.8
77.5°	192.6	189.2	172.4	154.7	155.6
80°	145.5	140.4	122.8	128.7	130.3
82.5°	99.2	95.0	90.8	90.8	89.1
85°	52.1	52.1	53.0	53.0	53.0
87.5°	21.0	22.7	22.7	22.7	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)