

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: P393374

Luminaire Tested: **22EN-LD2-39-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393374  
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 (4500K)  
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: 3452.0 lumens  
Efficiency: N/A  
Efficacy: 117.4 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

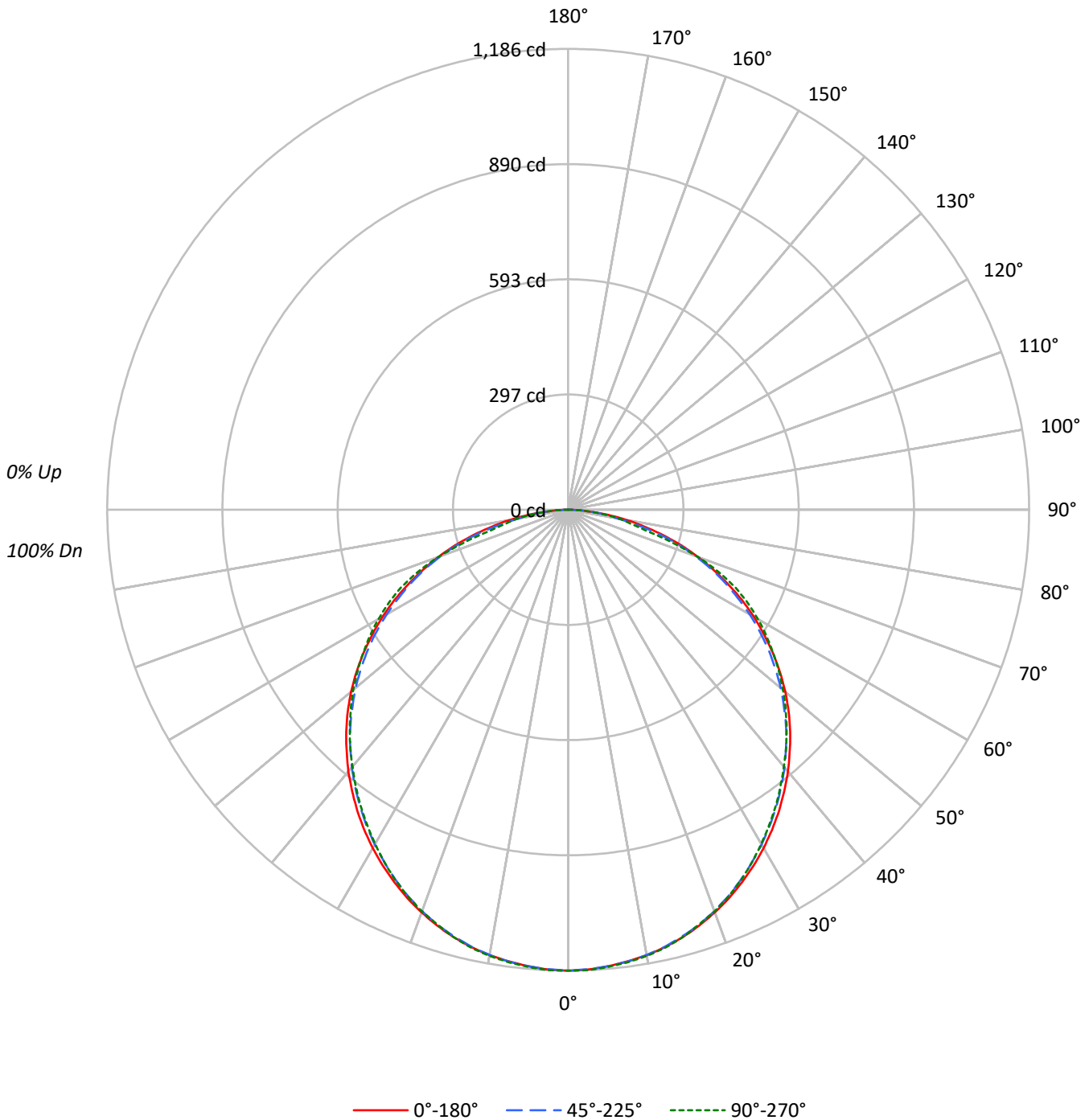
Input Watts (W): 29.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3192	3192	3192
5°	3186	3186	3190
10°	3181	3179	3186
15°	3173	3165	3173
20°	3158	3148	3151
25°	3142	3121	3123
30°	3124	3091	3086
35°	3107	3066	3058
40°	3091	3041	3032
45°	3074	3017	3024
50°	3051	2989	3022
55°	3016	2954	3019
60°	2968	2901	3034
65°	2891	2840	3025
70°	2784	2736	2791
75°	2620	2511	2137
80°	2354	1987	2109
85°	1680	1707	1707



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.1	3.2
10°-20°	320.9	9.3
20°-30°	485.0	14.0
30°-40°	585.2	17.0
40°-50°	614.2	17.8
50°-60°	568.3	16.5
60°-70°	448.6	13.0
70°-80°	251.2	7.3
80°-90°	66.5	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°	918.0	26.6
0°-40°	1503.2	43.5
0°-60°	2685.7	77.8
0°-90°	3452.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3452.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1179	1178	1179	1179	1181	112
15°	1139	1138	1136	1136	1139	321
25°	1058	1055	1051	1048	1052	488
35°	946	941	933	928	931	592
45°	808	803	793	788	795	623
55°	643	638	630	634	644	574
65°	454	450	446	460	475	449
75°	252	249	242	216	206	267
85°	54	54	55	55	55	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	<i>1186.3</i>	<i>1186.3</i>	<i>1186.3</i>	<i>1186.3</i>	<i>1186.3</i>
2.5°	<i>1184.5</i>	1182.8	1183.7	1184.5	1186.3
5°	<i>1179.3</i>	1177.5	1179.3	1179.3	1181.0
7.5°	<i>1172.2</i>	1171.4	1173.1	1173.1	1174.9
10°	<i>1164.3</i>	1162.6	1163.5	1163.5	1166.1
12.5°	<i>1152.9</i>	1152.0	1152.0	1152.0	1154.7
15°	<i>1138.9</i>	1138.0	1136.2	1136.2	1138.9
17.5°	<i>1122.2</i>	1120.4	1119.6	1117.8	1119.6
20°	<i>1102.9</i>	1101.1	1099.4	1097.6	1100.2
22.5°	<i>1081.8</i>	1080.0	1076.5	1073.9	1077.4
25°	<i>1058.1</i>	1054.6	1051.1	1048.4	1051.9
27.5°	<i>1032.6</i>	1028.2	1023.8	1021.2	1023.8
30°	<i>1005.4</i>	1001.0	994.9	990.5	993.1
32.5°	<i>976.4</i>	972.0	965.0	960.6	962.4
35°	<i>945.7</i>	941.3	933.4	928.1	930.8
37.5°	<i>913.2</i>	908.8	900.0	894.8	897.4
40°	<i>879.8</i>	874.6	865.8	860.5	863.2
42.5°	<i>843.8</i>	839.4	829.8	823.6	829.8
45°	<i>807.8</i>	802.6	792.9	788.5	794.7
47.5°	<i>769.2</i>	763.1	753.4	751.6	758.7
50°	<i>728.8</i>	723.5	713.9	713.0	721.8
52.5°	<i>686.7</i>	680.5	671.7	673.5	683.1
55°	<i>642.8</i>	637.5	629.6	634.0	643.6
57.5°	<i>597.1</i>	592.7	584.8	593.6	605.0
60°	<i>551.4</i>	546.2	539.1	550.6	563.7
62.5°	<i>504.0</i>	497.9	491.7	506.7	521.6
65°	<i>454.0</i>	450.5	446.1	460.1	475.0
67.5°	<i>403.9</i>	401.3	397.8	410.9	419.7
70°	<i>353.9</i>	350.4	347.7	352.1	354.7
72.5°	<i>305.6</i>	299.4	297.7	286.3	281.0
75°	<i>252.0</i>	249.4	241.5	216.0	205.5
77.5°	<i>201.1</i>	197.6	180.0	161.6	162.4
80°	<i>151.9</i>	146.6	128.2	134.3	136.1
82.5°	<i>103.6</i>	99.2	94.8	94.8	93.1
85°	<i>54.4</i>	54.4	55.3	55.3	55.3
87.5°	<i>22.0</i>	23.7	23.7	23.7	23.7
90°	<i>0.0</i>	0.0	0.0	0.0	0.0

(END OF REPORT)