

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: P393450

Luminaire Tested: **24EN-LD2-34-UNV-L83050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393450  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-32)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-34-UNV-L83050-W2A-1-U (2700K)  
Description: 2X4 ENCOUNTER, 3400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3338.9 lumens  
Efficiency: N/A  
Efficacy: 142.7 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

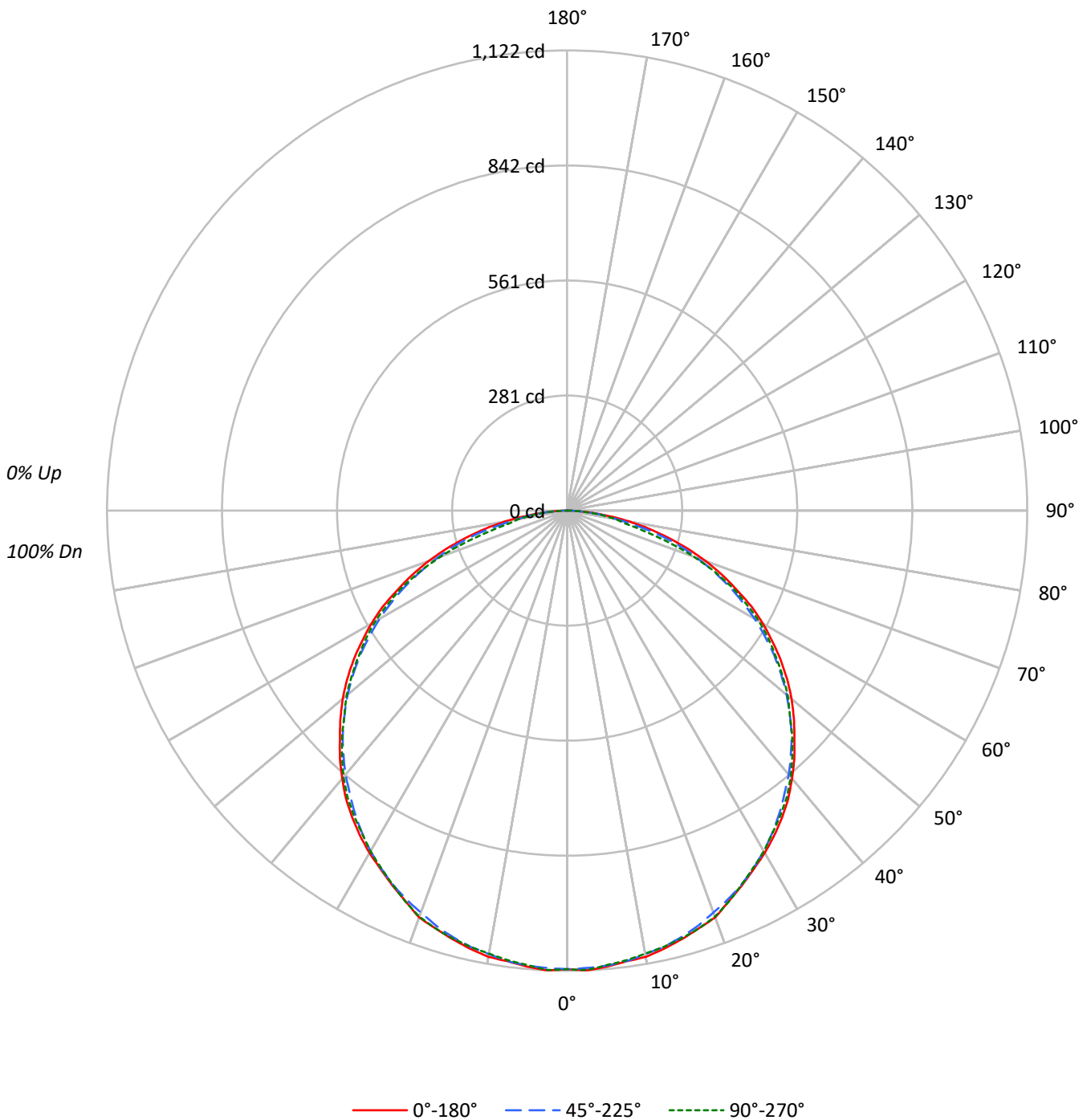
Input Watts (W): 23.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	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°	1505	1505	1505
5°	1508	1504	1502
10°	1509	1500	1499
15°	1507	1500	1504
20°	1511	1493	1509
25°	1497	1494	1494
30°	1498	1490	1490
35°	1501	1482	1490
40°	1498	1476	1490
45°	1491	1472	1476
50°	1495	1462	1470
55°	1491	1446	1457
60°	1482	1420	1454
65°	1450	1382	1416
70°	1412	1325	1294
75°	1324	1224	1018
80°	1189	957	942
85°	939	865	789



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	3.2
10°-20°	304.2	9.1
20°-30°	464.0	13.9
30°-40°	566.2	17.0
40°-50°	599.0	17.9
50°-60°	555.2	16.6
60°-70°	436.1	13.1
70°-80°	243.3	7.3
80°-90°	65.0	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°	874.1	26.2
0°-40°	1440.3	43.1
0°-60°	2594.5	77.7
0°-90°	3338.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3338.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1116	1115	1113	1112	1112	106
15°	1082	1079	1077	1074	1080	306
25°	1008	1006	1006	1004	1006	465
35°	914	907	902	900	907	571
45°	783	780	774	774	776	606
55°	636	625	616	616	621	568
65°	455	447	434	437	445	452
75°	255	245	235	206	196	270
85°	61	56	56	52	51	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1118.2	1118.2	1118.2	1118.2	1118.2
2.5°	1122.1	1118.2	1116.3	1118.2	1121.1
5°	1116.3	1115.3	1113.4	1112.4	1112.4
7.5°	1108.6	1110.5	1108.6	1105.7	1105.7
10°	1104.7	1102.8	1098.0	1097.0	1097.0
12.5°	1094.1	1091.2	1089.3	1085.4	1089.3
15°	1081.6	1078.7	1076.7	1073.8	1079.6
17.5°	1068.1	1061.3	1061.3	1061.3	1068.1
20°	1055.5	1045.9	1043.0	1044.9	1053.6
22.5°	1030.4	1026.6	1025.6	1027.5	1031.4
25°	1008.2	1006.3	1006.3	1004.4	1006.3
27.5°	985.1	985.1	983.2	981.2	982.2
30°	963.9	961.0	959.0	957.1	959.0
32.5°	939.7	934.9	931.1	930.1	932.0
35°	913.7	906.9	902.1	900.2	906.9
37.5°	885.7	876.1	870.3	870.3	879.9
40°	852.9	842.3	840.4	839.4	848.1
42.5°	820.1	812.4	807.6	808.5	812.4
45°	783.4	780.5	773.8	773.8	775.7
47.5°	749.7	745.8	736.2	738.1	736.2
50°	714.0	707.2	698.5	695.6	702.4
52.5°	676.3	668.6	658.0	656.1	661.9
55°	635.8	625.2	616.5	615.6	621.3
57.5°	593.4	582.8	572.1	572.1	581.8
60°	550.9	540.3	527.8	527.8	540.3
62.5°	506.5	495.0	481.4	484.3	492.1
65°	455.4	446.7	434.2	437.1	444.8
67.5°	408.1	398.5	385.0	388.8	388.8
70°	358.9	346.4	336.7	330.9	329.0
72.5°	306.8	296.2	289.4	268.2	262.4
75°	254.7	245.1	235.4	205.5	195.9
77.5°	204.5	197.8	178.5	146.7	142.8
80°	153.4	150.5	123.5	121.6	121.6
82.5°	104.2	102.3	92.6	87.8	86.8
85°	60.8	56.0	56.0	52.1	51.1
87.5°	21.2	22.2	24.1	23.2	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)