

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: P393454

Luminaire Tested: **24EN-LD2-34-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393454  
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 (4500K)  
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: 3522.3 lumens  
Efficiency: N/A  
Efficacy: 149.3 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

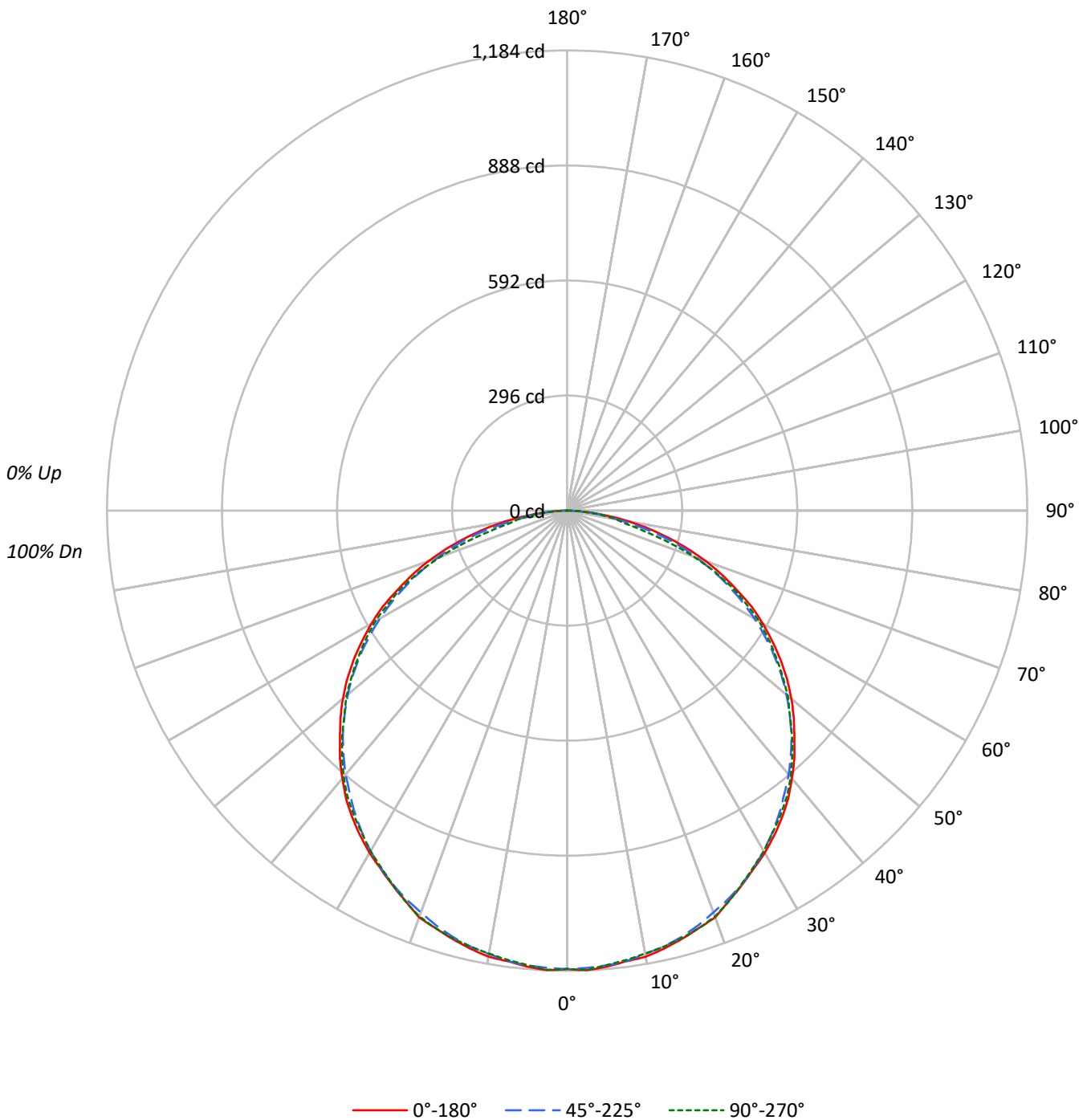
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1587	1587	1587
5°	1591	1586	1585
10°	1592	1583	1581
15°	1589	1582	1586
20°	1594	1575	1591
25°	1579	1576	1576
30°	1580	1572	1572
35°	1583	1563	1572
40°	1580	1557	1571
45°	1573	1553	1557
50°	1577	1542	1551
55°	1573	1526	1538
60°	1564	1498	1534
65°	1529	1458	1494
70°	1489	1397	1365
75°	1397	1291	1074
80°	1254	1010	993
85°	990	911	832



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.7	3.2
10°-20°	320.9	9.1
20°-30°	489.5	13.9
30°-40°	597.3	17.0
40°-50°	631.9	17.9
50°-60°	585.8	16.6
60°-70°	460.0	13.1
70°-80°	256.6	7.3
80°-90°	68.6	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°	922.1	26.2
0°-40°	1519.4	43.1
0°-60°	2737.1	77.7
0°-90°	3522.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3522.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1178	1177	1175	1174	1174	112
15°	1141	1138	1136	1133	1139	322
25°	1064	1062	1062	1060	1062	491
35°	964	957	952	950	957	603
45°	826	823	816	816	818	639
55°	671	660	650	649	656	599
65°	480	471	458	461	469	476
75°	269	258	248	217	207	284
85°	64	59	59	55	54	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1179.7	1179.7	1179.7	1179.7	1179.7
2.5°	1183.7	1179.7	1177.6	1179.7	1182.7
5°	1177.6	1176.6	1174.6	1173.6	1173.6
7.5°	1169.5	1171.5	1169.5	1166.4	1166.4
10°	1165.4	1163.4	1158.3	1157.3	1157.3
12.5°	1154.2	1151.2	1149.1	1145.1	1149.1
15°	1141.0	1137.9	1135.9	1132.8	1138.9
17.5°	1126.7	1119.6	1119.6	1119.6	1126.7
20°	1113.5	1103.3	1100.3	1102.3	1111.5
22.5°	1087.0	1083.0	1081.9	1084.0	1088.1
25°	1063.6	1061.6	1061.6	1059.6	1061.6
27.5°	1039.2	1039.2	1037.2	1035.1	1036.1
30°	1016.8	1013.8	1011.7	1009.7	1011.7
32.5°	991.4	986.3	982.2	981.2	983.2
35°	963.9	956.8	951.7	949.6	956.8
37.5°	934.4	924.2	918.1	918.1	928.3
40°	899.8	888.6	886.5	885.5	894.7
42.5°	865.2	857.0	851.9	852.9	857.0
45°	826.5	823.4	816.3	816.3	818.3
47.5°	790.9	786.8	776.6	778.6	776.6
50°	753.2	746.1	736.9	733.9	741.0
52.5°	713.5	705.4	694.2	692.1	698.2
55°	670.7	659.6	650.4	649.4	655.5
57.5°	626.0	614.8	603.6	603.6	613.7
60°	581.2	570.0	556.8	556.8	570.0
62.5°	534.4	522.1	507.9	510.9	519.1
65°	480.4	471.3	458.0	461.1	469.2
67.5°	430.5	420.4	406.1	410.2	410.2
70°	378.6	365.4	355.2	349.1	347.1
72.5°	323.7	312.5	305.3	283.0	276.8
75°	268.7	258.5	248.3	216.8	206.6
77.5°	215.8	208.7	188.3	154.7	150.6
80°	161.8	158.8	130.3	128.2	128.2
82.5°	109.9	107.9	97.7	92.6	91.6
85°	64.1	59.0	59.0	55.0	53.9
87.5°	22.4	23.4	25.4	24.4	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)