

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: P393500

Luminaire Tested: **24EN-LD2-40-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393500  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-33)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-40-UNV-L93050-W2A-1-U (3500K)  
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3406.3 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

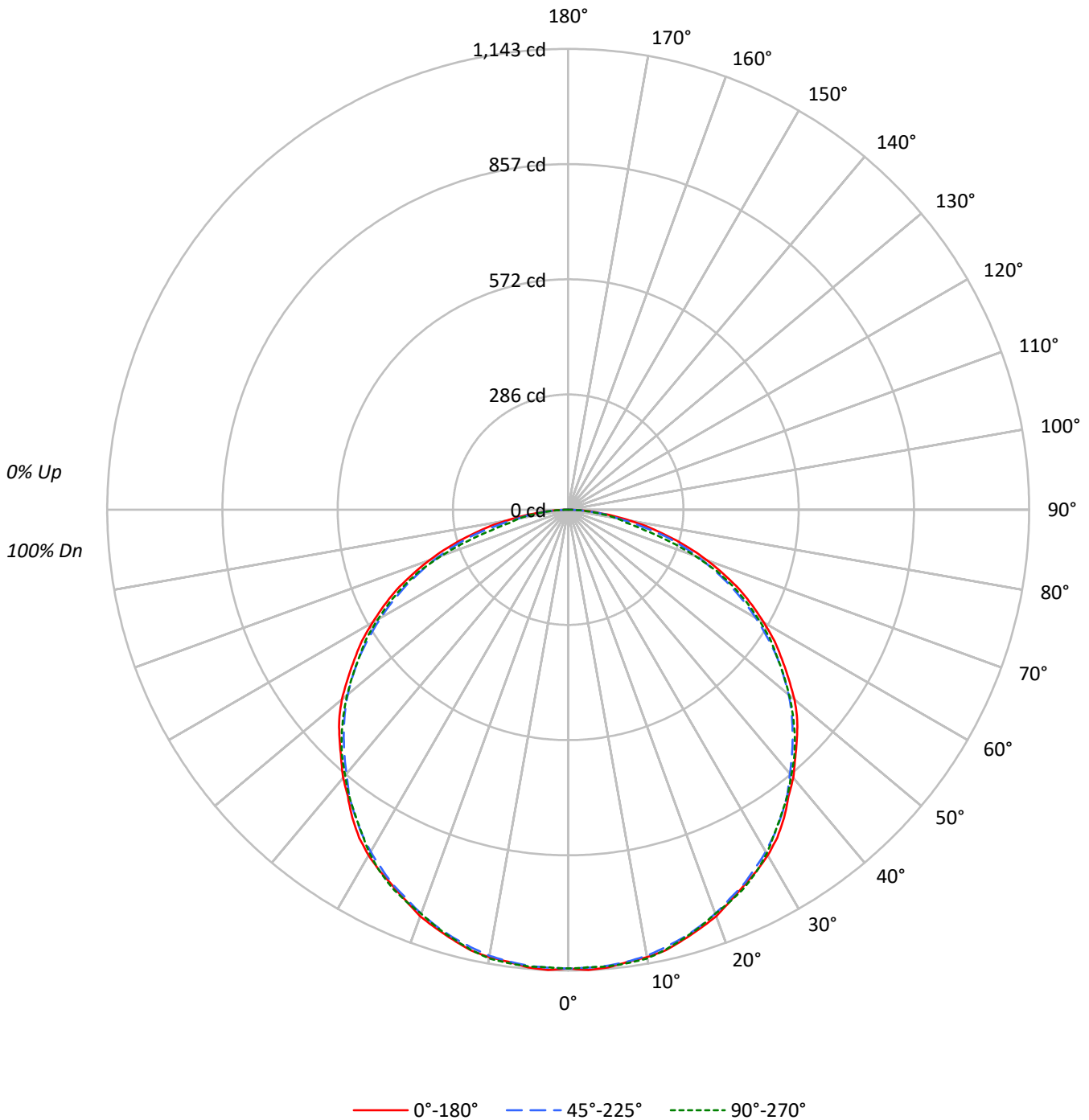
Input Watts (W): 28  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	80	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	42	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	36	29	25	23

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

	0°	45°	90°
0°	1531	1531	1531
5°	1539	1533	1536
10°	1539	1535	1544
15°	1538	1531	1534
20°	1536	1527	1527
25°	1528	1524	1536
30°	1538	1522	1530
35°	1533	1517	1514
40°	1524	1502	1511
45°	1526	1498	1512
50°	1533	1494	1498
55°	1517	1478	1479
60°	1507	1446	1469
65°	1494	1406	1438
70°	1439	1347	1310
75°	1346	1254	1023
80°	1199	971	958
85°	948	895	804



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.0	3.2
10°-20°	310.5	9.1
20°-30°	474.1	13.9
30°-40°	578.4	17.0
40°-50°	610.7	17.9
50°-60°	566.3	16.6
60°-70°	443.6	13.0
70°-80°	248.3	7.3
80°-90°	66.2	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°	892.7	26.2
0°-40°	1471.1	43.2
0°-60°	2648.2	77.7
0°-90°	3406.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3406.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1138	1138	1138	1138	1138	
5°	1140	1140	1135	1136	1137	108
15°	1104	1099	1099	1097	1102	312
25°	1029	1029	1027	1025	1034	476
35°	933	925	923	922	922	583
45°	802	795	787	785	795	619
55°	647	638	630	630	631	579
65°	469	455	442	444	452	461
75°	259	251	241	209	197	275
85°	61	59	58	55	52	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1137.8	1137.8	1137.8	1137.8	1137.8
2.5°	1142.8	1140.3	1136.9	1137.8	1136.1
5°	1139.5	1139.5	1135.3	1136.1	1136.9
7.5°	1131.0	1131.9	1130.2	1126.8	1134.4
10°	1126.8	1121.0	1123.5	1116.8	1130.2
12.5°	1119.3	1110.0	1111.7	1106.7	1117.6
15°	1104.1	1099.1	1099.1	1096.6	1101.6
17.5°	1089.0	1085.6	1084.0	1085.6	1085.6
20°	1073.0	1070.5	1066.3	1069.7	1066.3
22.5°	1050.3	1052.0	1045.3	1052.8	1051.2
25°	1029.3	1029.3	1026.8	1025.1	1034.3
27.5°	1010.8	1004.9	1003.2	999.9	1011.6
30°	989.8	978.8	979.7	974.6	984.7
32.5°	964.5	951.9	952.8	947.7	951.9
35°	933.4	925.0	923.3	922.5	921.7
37.5°	897.3	896.4	892.2	894.7	893.1
40°	867.8	866.2	855.2	857.7	860.3
42.5°	833.4	830.8	821.6	823.3	830.0
45°	802.2	794.7	787.1	785.4	794.7
47.5°	770.3	758.5	751.8	746.7	756.0
50°	732.4	722.4	713.9	708.9	715.6
52.5°	688.7	680.3	671.9	670.2	672.7
55°	646.7	638.3	629.9	629.9	630.7
57.5°	606.3	595.4	582.8	585.3	592.0
60°	560.1	550.0	537.4	537.4	545.8
62.5°	514.6	502.0	489.4	491.1	499.5
65°	469.2	454.9	441.5	444.0	451.6
67.5°	417.1	404.5	391.9	395.2	399.4
70°	365.8	353.2	342.3	338.9	333.0
72.5°	313.7	303.6	294.3	275.8	266.6
75°	259.0	251.4	241.3	209.4	196.8
77.5°	208.6	202.7	180.0	150.5	146.3
80°	154.7	154.7	125.3	122.8	123.6
82.5°	105.1	103.4	95.0	89.1	86.6
85°	61.4	58.9	58.0	54.7	52.1
87.5°	20.2	23.5	23.5	22.7	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)