

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: P393499

Luminaire Tested: **24EN-LD2-40-UNV-L93050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393499
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 (3000K)
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: 3328.6 lumens
Efficiency: N/A
Efficacy: 118.5 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

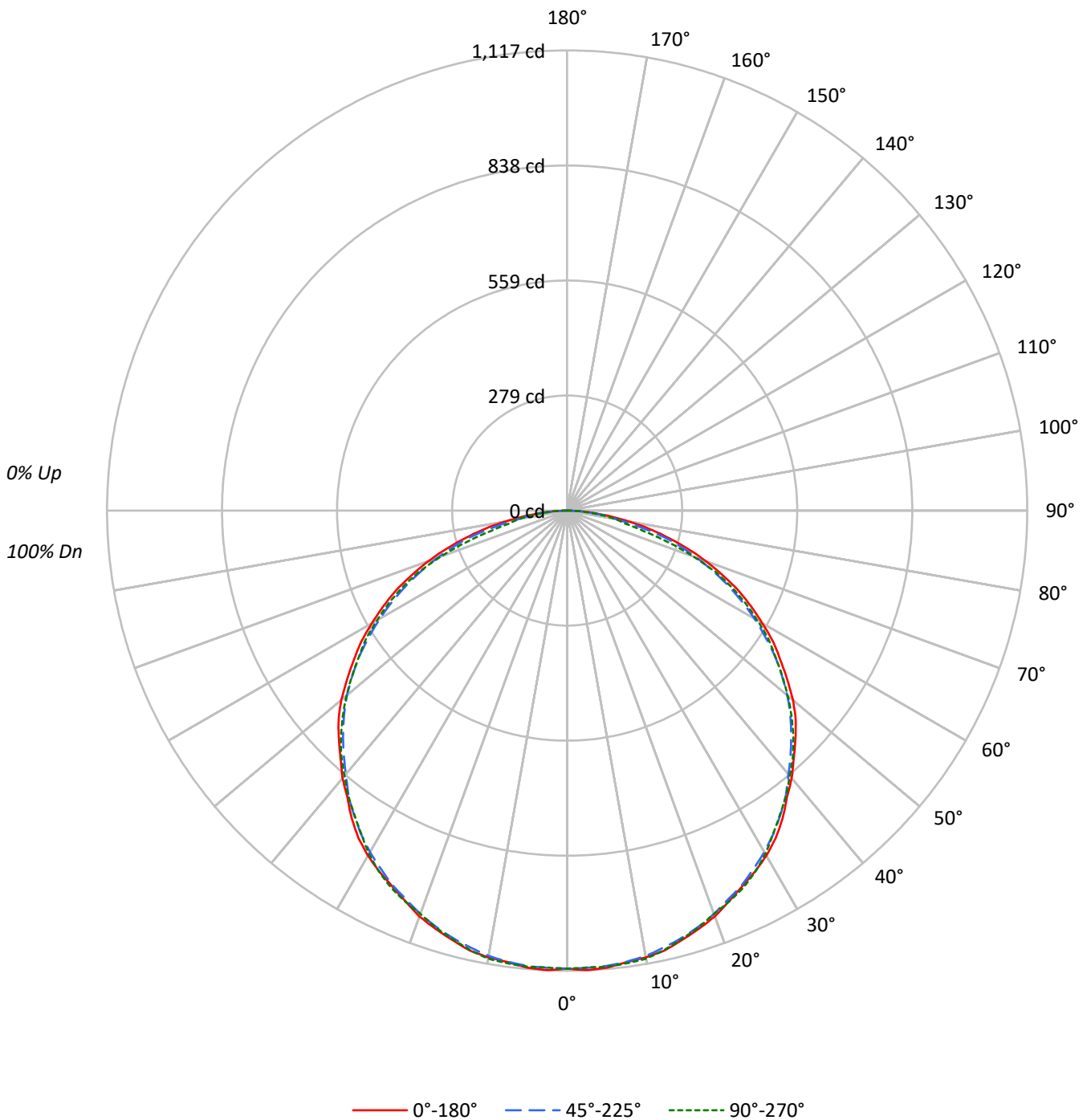
Input Watts (W): 28.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1496	1496	1496
5°	1504	1498	1501
10°	1504	1500	1509
15°	1503	1496	1500
20°	1501	1492	1492
25°	1493	1489	1500
30°	1503	1487	1495
35°	1498	1482	1479
40°	1489	1468	1476
45°	1492	1464	1478
50°	1498	1460	1464
55°	1482	1444	1446
60°	1473	1413	1435
65°	1460	1373	1405
70°	1406	1316	1280
75°	1316	1226	1000
80°	1172	948	936
85°	926	875	786



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	3.2
10°-20°	303.4	9.1
20°-30°	463.3	13.9
30°-40°	565.2	17.0
40°-50°	596.8	17.9
50°-60°	553.4	16.6
60°-70°	433.5	13.0
70°-80°	242.6	7.3
80°-90°	64.7	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°	872.3	26.2
0°-40°	1437.5	43.2
0°-60°	2587.7	77.7
0°-90°	3328.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3328.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1114	1114	1109	1110	1111	106
15°	1079	1074	1074	1072	1076	305
25°	1006	1006	1003	1002	1011	465
35°	912	904	902	902	901	570
45°	784	776	769	768	776	605
55°	632	624	616	616	616	566
65°	458	445	431	434	441	451
75°	253	246	236	205	192	268
85°	60	58	57	53	51	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1111.8	1111.8	1111.8	1111.8	1111.8
2.5°	1116.7	1114.3	1111.0	1111.8	1110.2
5°	1113.5	1113.5	1109.4	1110.2	1111.0
7.5°	1105.2	1106.1	1104.4	1101.1	1108.5
10°	1101.1	1095.4	1097.8	1091.3	1104.4
12.5°	1093.7	1084.7	1086.3	1081.4	1092.1
15°	1078.9	1074.0	1074.0	1071.6	1076.5
17.5°	1064.2	1060.9	1059.2	1060.9	1060.9
20°	1048.5	1046.1	1042.0	1045.3	1042.0
22.5°	1026.4	1028.0	1021.4	1028.8	1027.2
25°	1005.8	1005.8	1003.3	1001.7	1010.7
27.5°	987.7	982.0	980.3	977.1	988.6
30°	967.2	956.5	957.3	952.4	962.3
32.5°	942.5	930.2	931.0	926.1	930.2
35°	912.1	903.9	902.3	901.5	900.6
37.5°	876.8	876.0	871.9	874.3	872.7
40°	848.0	846.4	835.7	838.2	840.6
42.5°	814.3	811.9	802.8	804.5	811.1
45°	783.9	776.5	769.2	767.5	776.5
47.5°	752.7	741.2	734.6	729.7	738.7
50°	715.7	705.9	697.7	692.7	699.3
52.5°	673.0	664.8	656.6	654.9	657.4
55°	631.9	623.7	615.5	615.5	616.3
57.5°	592.5	581.8	569.5	571.9	578.5
60°	547.3	537.4	525.1	525.1	533.3
62.5°	502.9	490.6	478.3	479.9	488.1
65°	458.5	444.6	431.4	433.9	441.3
67.5°	407.6	395.3	382.9	386.2	390.3
70°	357.5	345.1	334.4	331.2	325.4
72.5°	306.5	296.6	287.6	269.5	260.5
75°	253.1	245.7	235.8	204.6	192.3
77.5°	203.8	198.0	175.9	147.1	143.0
80°	151.2	151.2	122.4	120.0	120.8
82.5°	102.7	101.1	92.9	87.1	84.6
85°	60.0	57.5	56.7	53.4	50.9
87.5°	19.7	23.0	23.0	22.2	23.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)