

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: P393453

Luminaire Tested: **24EN-LD2-34-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393453
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 (4000K)
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: 3475.3 lumens
Efficiency: N/A
Efficacy: 145.4 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

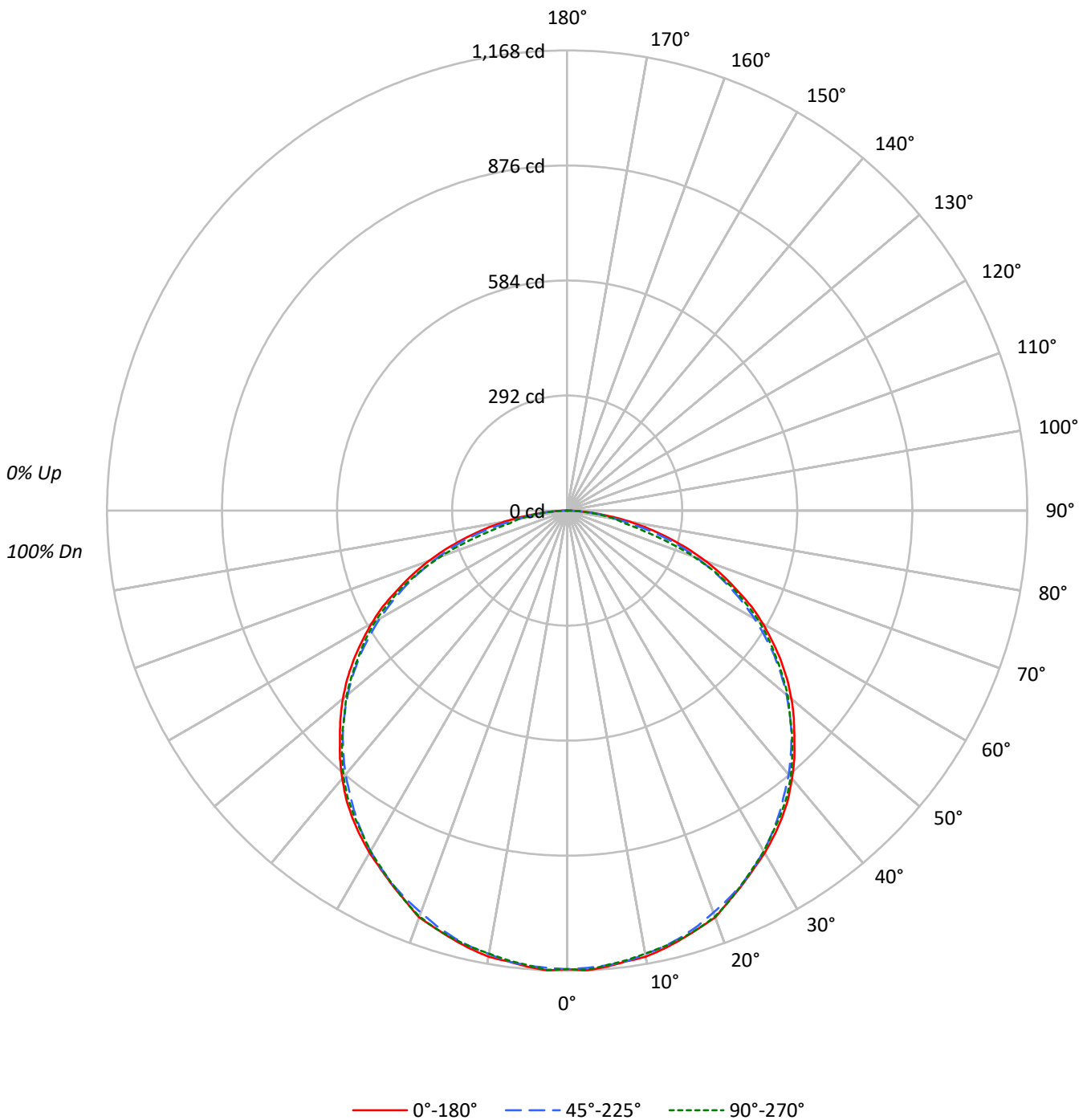
Input Watts (W): 23.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1566	1566	1566
5°	1569	1565	1564
10°	1571	1561	1560
15°	1568	1561	1565
20°	1573	1554	1570
25°	1558	1555	1555
30°	1559	1551	1551
35°	1562	1542	1551
40°	1559	1536	1550
45°	1552	1533	1536
50°	1555	1522	1530
55°	1552	1505	1517
60°	1543	1478	1513
65°	1509	1439	1474
70°	1470	1379	1347
75°	1378	1274	1060
80°	1237	996	980
85°	977	898	821



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.2	3.2
10°-20°	316.6	9.1
20°-30°	483.0	13.9
30°-40°	589.3	17.0
40°-50°	623.5	17.9
50°-60°	577.9	16.6
60°-70°	453.9	13.1
70°-80°	253.2	7.3
80°-90°	67.7	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°	909.8	26.2
0°-40°	1499.1	43.1
0°-60°	2700.6	77.7
0°-90°	3475.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3475.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1164	1164	1164	1164	1164	
5°	1162	1161	1159	1158	1158	110
15°	1126	1123	1121	1118	1124	318
25°	1049	1047	1047	1045	1047	485
35°	951	944	939	937	944	595
45°	816	812	805	805	807	631
55°	662	651	642	641	647	591
65°	474	465	452	455	463	470
75°	265	255	245	214	204	281
85°	63	58	58	54	53	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1163.9	1163.9	1163.9	1163.9	1163.9
2.5°	1167.9	1163.9	1161.9	1163.9	1166.9
5°	1161.9	1160.9	1158.9	1157.9	1157.9
7.5°	1153.9	1155.9	1153.9	1150.9	1150.9
10°	1149.9	1147.9	1142.8	1141.8	1141.8
12.5°	1138.8	1135.8	1133.8	1129.8	1133.8
15°	1125.8	1122.8	1120.7	1117.7	1123.8
17.5°	1111.7	1104.7	1104.7	1104.7	1111.7
20°	1098.7	1088.6	1085.6	1087.6	1096.6
22.5°	1072.5	1068.5	1067.5	1069.5	1073.5
25°	1049.4	1047.4	1047.4	1045.4	1047.4
27.5°	1025.3	1025.3	1023.3	1021.3	1022.3
30°	1003.2	1000.2	998.2	996.2	998.2
32.5°	978.1	973.1	969.1	968.1	970.1
35°	951.0	944.0	939.0	937.0	944.0
37.5°	921.9	911.9	905.8	905.8	915.9
40°	887.8	876.7	874.7	873.7	882.7
42.5°	853.6	845.6	840.6	841.6	845.6
45°	815.5	812.4	805.4	805.4	807.4
47.5°	780.3	776.3	766.2	768.3	766.2
50°	743.1	736.1	727.1	724.1	731.1
52.5°	704.0	695.9	684.9	682.9	688.9
55°	661.8	650.8	641.7	640.7	646.7
57.5°	617.6	606.6	595.5	595.5	605.6
60°	573.4	562.4	549.3	549.3	562.4
62.5°	527.2	515.2	501.1	504.1	512.2
65°	474.0	465.0	451.9	454.9	463.0
67.5°	424.8	414.8	400.7	404.7	404.7
70°	373.6	360.5	350.5	344.5	342.5
72.5°	319.4	308.3	301.3	279.2	273.2
75°	265.1	255.1	245.0	213.9	203.9
77.5°	212.9	205.9	185.8	152.6	148.6
80°	159.7	156.7	128.5	126.5	126.5
82.5°	108.5	106.5	96.4	91.4	90.4
85°	63.3	58.2	58.2	54.2	53.2
87.5°	22.1	23.1	25.1	24.1	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)