

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: P393445

Luminaire Tested: **24EN-LD2-34-UNV-L82765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393445
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-L82765-W2A-1-U (4000K)
Description: 2X4 ENCOUNTER, 3400 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3232.7 lumens
Efficiency: N/A
Efficacy: 135.8 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

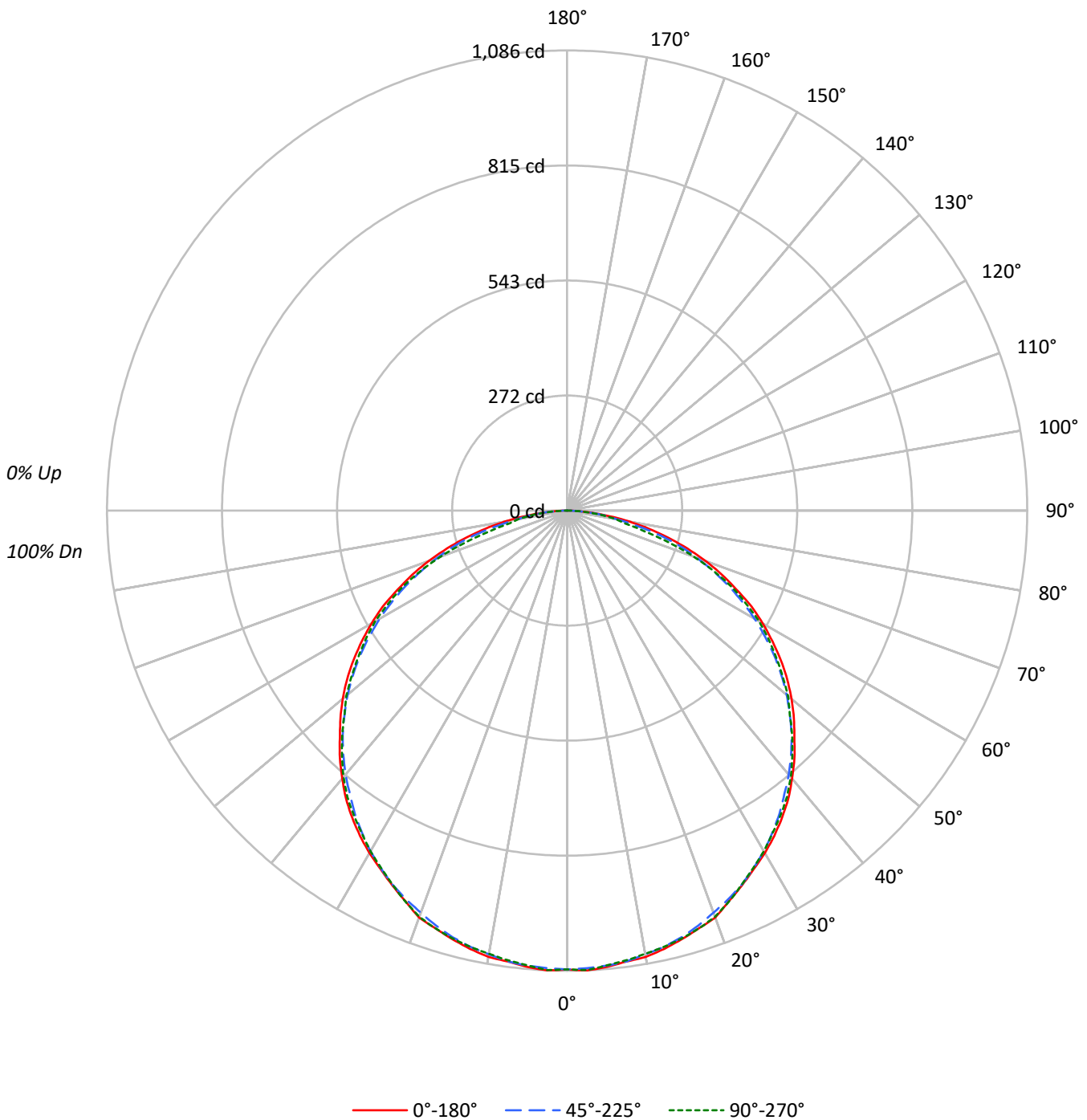
Input Watts (W): 23.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1457	1457	1457
5°	1460	1456	1455
10°	1461	1452	1451
15°	1459	1452	1456
20°	1463	1446	1461
25°	1449	1446	1446
30°	1450	1443	1443
35°	1453	1435	1442
40°	1450	1429	1442
45°	1443	1426	1429
50°	1447	1416	1424
55°	1444	1400	1411
60°	1435	1375	1408
65°	1404	1338	1371
70°	1367	1282	1253
75°	1282	1185	986
80°	1151	927	912
85°	909	837	764



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.5	3.2
10°-20°	294.5	9.1
20°-30°	449.3	13.9
30°-40°	548.2	17.0
40°-50°	580.0	17.9
50°-60°	537.6	16.6
60°-70°	422.2	13.1
70°-80°	235.5	7.3
80°-90°	62.9	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°	846.3	26.2
0°-40°	1394.5	43.1
0°-60°	2512.0	77.7
0°-90°	3232.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3232.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1081	1080	1078	1077	1077	103
15°	1047	1044	1042	1040	1045	296
25°	976	974	974	972	974	451
35°	885	878	873	872	878	553
45°	758	756	749	749	751	587
55°	616	605	597	596	602	550
65°	441	432	420	423	431	437
75°	247	237	228	199	190	261
85°	59	54	54	50	50	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1086.4	1082.7	1080.8	1082.7	1085.5
5°	1080.8	1079.9	1078.0	1077.1	1077.1
7.5°	1073.3	1075.2	1073.3	1070.5	1070.5
10°	1069.6	1067.7	1063.1	1062.1	1062.1
12.5°	1059.3	1056.5	1054.7	1050.9	1054.7
15°	1047.2	1044.4	1042.5	1039.7	1045.3
17.5°	1034.1	1027.6	1027.6	1027.6	1034.1
20°	1022.0	1012.6	1009.8	1011.7	1020.1
22.5°	997.7	993.9	993.0	994.9	998.6
25°	976.2	974.3	974.3	972.4	974.3
27.5°	953.8	953.8	951.9	950.0	951.0
30°	933.2	930.4	928.5	926.7	928.5
32.5°	909.9	905.2	901.5	900.5	902.4
35°	884.6	878.1	873.4	871.6	878.1
37.5°	857.5	848.2	842.6	842.6	851.9
40°	825.8	815.5	813.6	812.7	821.1
42.5°	794.0	786.6	781.9	782.8	786.6
45°	758.5	755.7	749.2	749.2	751.1
47.5°	725.8	722.1	712.8	714.6	712.8
50°	691.3	684.7	676.3	673.5	680.1
52.5°	654.8	647.4	637.1	635.2	640.8
55°	615.6	605.3	596.9	596.0	601.6
57.5°	574.5	564.2	553.9	553.9	563.3
60°	533.4	523.1	511.0	511.0	523.1
62.5°	490.4	479.2	466.1	468.9	476.4
65°	440.9	432.5	420.4	423.2	430.6
67.5°	395.1	385.8	372.7	376.5	376.5
70°	347.5	335.4	326.0	320.4	318.5
72.5°	297.1	286.8	280.2	259.7	254.1
75°	246.6	237.3	227.9	199.0	189.6
77.5°	198.0	191.5	172.8	142.0	138.3
80°	148.5	145.7	119.6	117.7	117.7
82.5°	100.9	99.0	89.7	85.0	84.1
85°	58.9	54.2	54.2	50.4	49.5
87.5°	20.6	21.5	23.4	22.4	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)