

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1345478

Luminaire Tested: P3A13R359040DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345478
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R359040DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 90CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

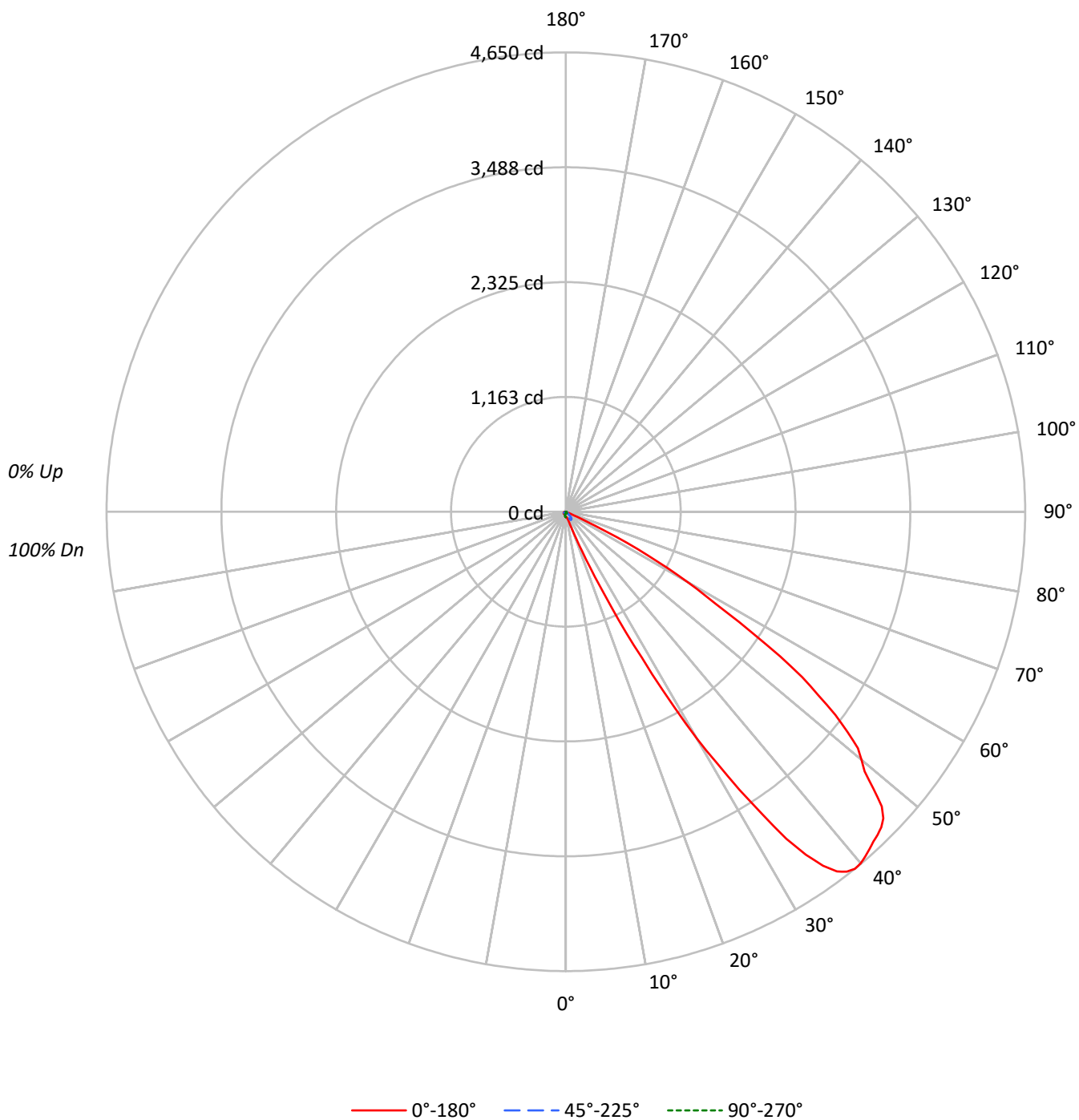
Lumens per Lamp: N/A
Luminaire Lumens: 1158.0 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
Input Voltage (V): NR
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	11688	11688	11688	11688	11688
5°	12657	12415	11512	10346	10125
10°	13271	12113	10243	8840	8840
15°	18979	11873	8309	7605	7832
20°	47557	12694	6581	6581	7327
25°	220803	16186	5057	6073	6823
30°	671243	21978	3975	5570	6887
35°	1134426	25458	3346	5327	6719
40°	1329777	25133	2691	5382	7185
45°	1400424	17831	2264	5830	7784
50°	1333005	10712	2149	6072	8563
55°	1116978	4396	2409	6805	9978
60°	625301	921	2763	7806	11008
65°	107923	519	2698	8665	12453
70°	1988	641	3334	9361	14105
75°	1779	847	4406	10590	15928
80°	1263	1263	5304	11870	18437
85°	0	2516	10567	13083	21134

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1410337 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.8	0.4
10°-20°	13.6	1.2
20°-30°	71.1	6.1
30°-40°	306.9	26.5
40°-50°	437.7	37.8
50°-60°	271.1	23.4
60°-70°	41.3	3.6
70°-80°	7.7	0.7
80°-90°	3.9	0.3
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°	89.5	7.7
0°-40°	396.4	34.2
0°-60°	1105.2	95.4
0°-90°	1158.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1158.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	53	53	53	53	53	
5°	58	56	52	47	46	6
15°	84	52	37	34	34	30
25°	913	67	21	25	28	546
35°	4238	95	12	20	25	2544
45°	4516	58	7	19	25	3412
55°	2922	12	6	18	26	2488
65°	208	1	5	17	24	425
75°	2	1	5	12	19	2
85°	0	1	4	5	8	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
2.5°	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	53.3	52.3
5°	57.5	57.5	56.4	56.4	56.4	56.4	56.4	56.4	54.4	52.3	49.1
7.5°	58.5	58.5	57.5	57.5	57.5	57.5	56.4	55.4	53.3	49.1	46.0
10°	59.6	59.6	59.6	59.6	58.5	57.5	56.4	54.4	51.2	46.0	42.9
12.5°	66.9	66.9	65.9	63.8	61.7	59.6	57.5	53.3	47.0	41.8	38.7
15°	83.6	82.6	80.5	77.4	73.2	67.9	63.8	52.3	42.9	36.6	34.5
17.5°	117.1	115.0	111.9	101.4	92.0	82.6	74.2	52.3	38.7	32.4	30.3
20°	203.8	204.9	182.9	157.8	136.9	113.9	93.0	54.4	34.5	28.2	27.2
22.5°	425.5	408.7	356.5	295.8	225.8	174.6	131.7	59.6	30.3	24.0	24.0
25°	912.6	848.8	722.3	545.7	384.7	272.8	191.3	66.9	27.2	20.9	22.0
27.5°	1666.3	1608.8	1354.8	1020.3	677.4	411.9	259.2	76.3	24.0	17.8	19.9
30°	2651.0	2492.1	2160.7	1672.5	1132.1	630.3	348.1	86.8	19.9	15.7	18.8
31°	2958.3	2885.1	2481.6	1934.9	1326.5	748.5	385.7	89.9	18.8	15.7	17.8
32°	3323.1	3193.5	2831.8	2222.4	1524.1	854.0	430.7	93.0	17.8	13.6	17.8
33°	3649.3	3523.9	3083.8	2475.4	1723.8	974.3	478.8	94.1	15.7	13.6	16.7
34°	3992.2	3820.7	3384.8	2739.8	1928.7	1103.9	522.7	95.1	14.6	12.5	16.7
35°	4237.8	4066.4	3644.1	2948.9	2105.3	1218.9	572.8	95.1	13.6	12.5	15.7
36°	4428.1	4277.5	3867.8	3164.3	2280.9	1322.4	612.6	95.1	11.5	11.5	15.7
37°	4558.7	4415.5	4018.3	3349.3	2414.7	1414.3	648.1	95.1	10.5	11.5	15.7
38°	4622.5	4503.3	4163.6	3484.1	2544.4	1486.5	676.3	93.0	9.4	10.5	14.6
39°	4649.7	4552.5	4252.5	3598.1	2641.6	1549.2	697.2	90.9	8.4	10.5	14.6
40°	4645.5	4560.8	4302.6	3676.5	2720.0	1592.1	708.7	87.8	7.3	9.4	14.6
41°	4621.5	4548.3	4328.8	3743.4	2767.0	1621.3	711.9	84.7	6.3	9.4	13.6
42°	4594.3	4527.4	4337.1	3778.9	2797.3	1630.7	703.5	80.5	6.3	8.4	13.6
43°	4566.1	4504.4	4337.1	3790.4	2804.7	1624.5	689.9	73.2	5.2	8.4	13.6
44°	4543.1	4484.5	4323.5	3787.3	2789.0	1600.4	664.8	64.8	4.2	8.4	13.6
45°	4515.9	4458.4	4305.8	3767.4	2758.7	1559.7	633.5	57.5	3.1	7.3	13.6
46°	4467.8	4422.8	4274.4	3726.6	2710.6	1503.2	593.8	52.3	2.1	7.3	12.5
47°	4374.8	4336.1	4213.8	3666.0	2646.8	1436.3	553.0	47.0	2.1	7.3	12.5
48°	4187.6	4186.6	4092.5	3553.1	2545.4	1352.7	510.1	41.8	2.1	7.3	12.5
49°	4006.8	3988.0	3870.9	3354.5	2400.1	1252.3	465.2	37.6	1.0	7.3	12.5
50°	3907.5	3866.7	3674.4	3120.3	2214.0	1113.3	417.1	31.4	1.0	6.3	12.5
51°	3804.0	3745.5	3518.6	2909.2	1992.4	979.5	364.8	25.1	1.0	6.3	11.5
52°	3616.9	3561.5	3307.5	2707.4	1777.1	842.5	314.6	20.9	1.0	6.3	12.5
53°	3415.1	3335.7	3059.7	2485.8	1587.9	721.3	263.4	17.8	1.0	6.3	11.5
54°	3161.1	3125.6	2808.8	2214.0	1366.3	604.2	216.4	14.6	1.0	6.3	11.5
55°	2921.7	2869.5	2540.2	1936.0	1165.6	495.5	180.8	11.5	1.0	6.3	11.5
56°	2616.5	2538.1	2229.7	1680.9	961.7	399.3	152.6	9.4	1.0	6.3	11.5
57°	2252.7	2169.1	1925.5	1397.6	754.7	304.2	127.5	7.3	1.0	6.3	11.5
58°	1905.7	1833.5	1572.2	1078.8	568.7	211.2	105.6	5.2	1.0	5.2	11.5
59°	1646.4	1567.0	1307.7	830.0	395.1	155.8	79.4	4.2	1.0	6.3	11.5
60°	1425.8	1323.4	1052.7	642.9	282.2	111.9	58.5	2.1	2.1	6.3	11.5
62.5°	821.6	725.5	502.8	261.3	116.0	57.5	28.2	1.0	2.1	6.3	11.5
65°	208.0	185.0	120.2	56.4	32.4	19.9	10.5	1.0	2.1	5.2	10.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	7.3	7.3	7.3	6.3	5.2	4.2	2.1	1.0	2.1	5.2	10.5
70°	3.1	3.1	3.1	2.1	2.1	1.0	1.0	1.0	2.1	5.2	9.4
72.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	3.1	5.2	8.4
75°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	3.1	5.2	8.4
77.5°	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	3.1	4.2	7.3
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.1	4.2	6.3
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.1	4.2	5.2
85°	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	3.1	4.2	4.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.1	4.2	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	53.3	53.3	53.3
2.5°	50.2	50.2	50.2
5°	47.0	47.0	46.0
7.5°	43.9	42.9	42.9
10°	39.7	39.7	39.7
12.5°	36.6	36.6	36.6
15°	33.5	34.5	34.5
17.5°	30.3	32.4	32.4
20°	28.2	30.3	31.4
22.5°	26.1	28.2	29.3
25°	25.1	27.2	28.2
27.5°	23.0	26.1	28.2
30°	22.0	25.1	27.2
31°	22.0	25.1	26.1
32°	20.9	25.1	26.1
33°	20.9	25.1	26.1
34°	20.9	24.0	26.1
35°	19.9	24.0	25.1
36°	19.9	24.0	25.1
37°	19.9	24.0	26.1
38°	19.9	24.0	25.1
39°	18.8	24.0	25.1
40°	18.8	24.0	25.1
41°	18.8	24.0	25.1
42°	18.8	24.0	25.1
43°	18.8	24.0	25.1
44°	18.8	23.0	25.1
45°	18.8	23.0	25.1
46°	18.8	24.0	25.1
47°	18.8	24.0	26.1
48°	18.8	23.0	25.1
49°	17.8	23.0	25.1
50°	17.8	23.0	25.1
51°	17.8	24.0	26.1
52°	17.8	24.0	26.1
53°	17.8	24.0	26.1
54°	17.8	24.0	25.1
55°	17.8	24.0	26.1
56°	17.8	24.0	25.1
57°	17.8	24.0	25.1
58°	17.8	23.0	25.1
59°	17.8	23.0	25.1
60°	17.8	23.0	25.1
62.5°	16.7	23.0	25.1
65°	16.7	22.0	24.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	15.7	22.0	23.0
70°	14.6	20.9	22.0
72.5°	13.6	19.9	20.9
75°	12.5	17.8	18.8
77.5°	10.5	15.7	17.8
80°	9.4	13.6	14.6
82.5°	7.3	11.5	12.5
85°	5.2	8.4	8.4
87.5°	2.1	4.2	4.2
90°	0.0	0.0	0.0

(END OF REPORT)