

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: P1335791

Luminaire Tested: P3A02R409827DE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335791
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R409827DE010 E3A451GPH
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 98CRI , E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

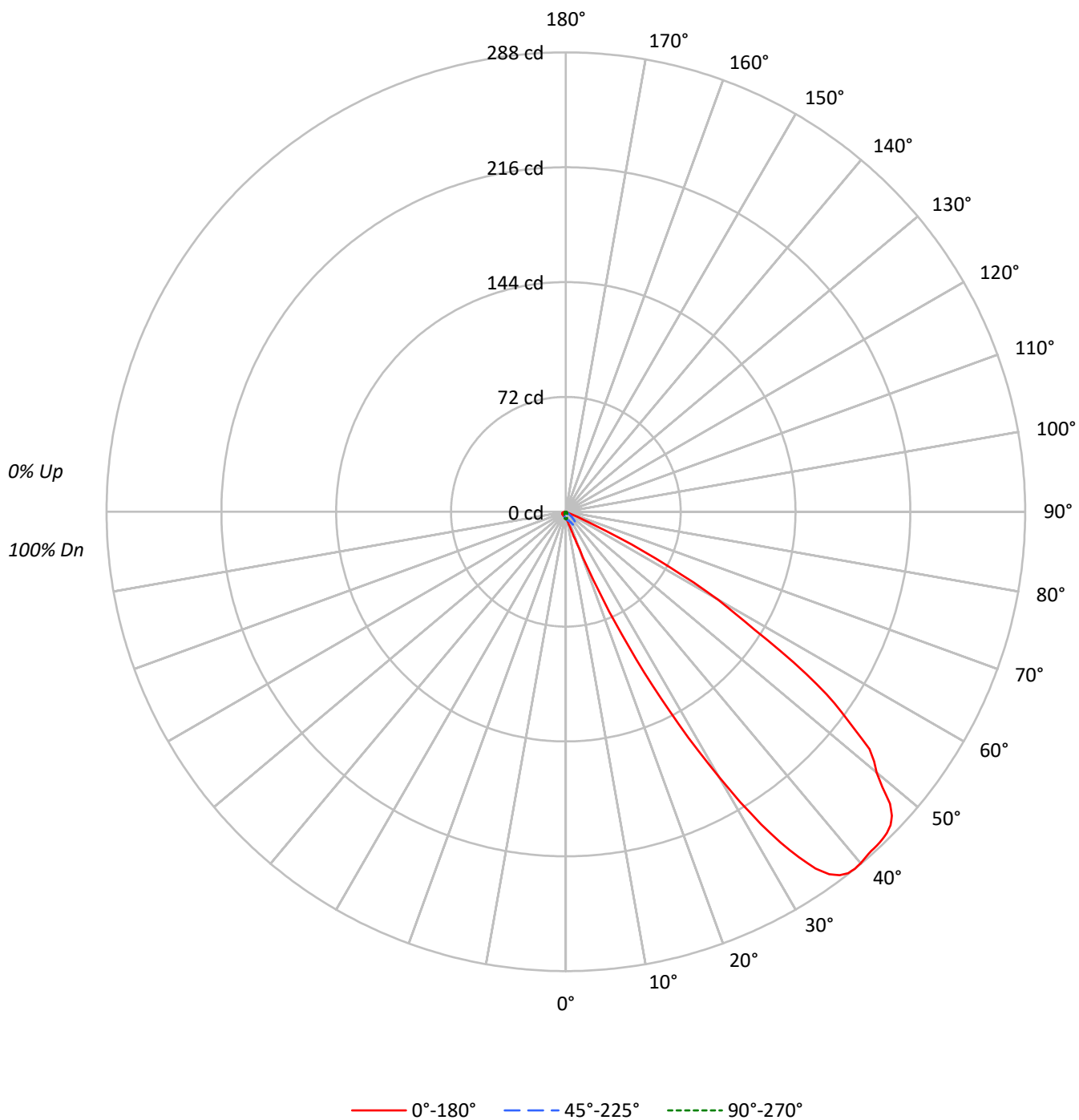
Lumens per Lamp: N/A
Luminaire Lumens: 89.0 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	91	81	73	66	89	79	72	66	76	70	65		73	68	64		71
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48
7	62	48	39	32	60	47	38	32	45	37	32		44	37	31		42
8	57	42	33	27	55	42	33	27	40	32	27		39	32	27		38
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34
10	48	34	25	20	47	33	25	20	32	25	20		31	24	20		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1009	1009	1009	1009	1009
5°	1123	1079	991	902	880
10°	1336	1136	913	824	802
15°	2202	1249	772	726	749
20°	5834	1470	653	653	700
25°	22501	1815	508	605	702
30°	48539	2431	405	582	684
35°	73080	2864	348	562	696
40°	82326	2891	315	573	744
45°	88288	2233	279	620	806
50°	86786	1399	239	648	887
55°	76346	688	268	726	994
60°	48329	132	307	789	1096
65°	9858	52	311	830	1245
70°	192	64	321	962	1410
75°	169	169	339	1017	1610
80°	253	126	379	1137	1894
85°	252	252	755	1258	2013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 89867 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.4	0.5
10°-20°	1.4	1.6
20°-30°	6.9	7.8
30°-40°	22.5	25.3
40°-50°	31.0	34.8
50°-60°	21.6	24.3
60°-70°	4.1	4.6
70°-80°	0.7	0.8
80°-90°	0.3	0.4
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°	8.8	9.8
0°-40°	31.2	35.1
0°-60°	83.8	94.2
0°-90°	89.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	89.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	5	5	4	4	4	1
15°	10	6	3	3	3	4
25°	93	8	2	2	3	48
35°	273	11	1	2	3	165
45°	285	7	1	2	3	216
55°	200	2	1	2	3	171
65°	19	0	1	2	2	34
75°	0	0	0	1	2	0
85°	0	0	0	0	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
2.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.6
5°	5.1	5.1	5.1	5.1	5.0	5.0	5.0	4.9	4.9	4.7	4.5
7.5°	5.4	5.4	5.4	5.4	5.3	5.2	5.1	5.1	5.1	4.7	4.3
10°	6.0	6.0	6.0	5.9	5.8	5.6	5.6	5.4	5.1	4.6	4.1
12.5°	7.4	7.2	7.1	6.9	6.7	6.4	6.0	5.8	5.2	4.4	3.8
15°	9.7	9.6	9.2	8.7	8.3	7.6	7.0	6.5	5.5	4.2	3.4
17.5°	13.9	13.4	12.9	12.1	10.9	9.7	8.5	7.4	5.8	3.9	3.1
20°	25.0	24.7	21.7	19.5	15.8	13.2	10.7	8.9	6.3	3.7	2.8
22.5°	51.6	48.1	43.3	35.5	27.6	20.4	14.8	11.2	6.8	3.4	2.5
25°	93.0	87.6	77.2	62.1	45.9	32.4	21.4	14.6	7.5	3.0	2.1
27.5°	140.8	135.4	119.3	98.4	71.8	49.0	30.6	19.4	8.5	2.7	1.9
30°	191.7	187.1	166.7	137.8	101.3	68.6	40.9	24.2	9.6	2.4	1.6
31°	212.3	206.3	184.2	153.5	115.1	76.7	45.1	26.2	10.0	2.3	1.6
32°	231.1	224.4	201.5	168.5	126.3	85.4	49.7	28.0	10.3	2.1	1.5
33°	247.4	239.5	217.4	182.8	138.6	93.6	54.4	29.8	10.5	2.0	1.4
34°	261.2	254.4	230.7	197.1	149.6	101.4	59.1	31.5	10.7	1.9	1.3
35°	273.0	266.8	243.3	207.9	160.3	109.0	63.3	33.1	10.7	1.7	1.3
36°	280.9	275.5	254.3	219.0	169.3	115.5	66.9	34.6	10.7	1.6	1.2
37°	285.3	280.0	261.5	228.2	178.1	121.9	70.2	35.7	10.6	1.5	1.1
38°	287.5	282.9	266.8	235.6	184.2	126.4	73.1	36.6	10.5	1.3	1.1
39°	288.0	284.2	270.1	241.0	190.2	131.0	75.1	37.1	10.3	1.2	1.1
40°	287.6	284.3	271.9	245.9	194.8	134.6	76.6	37.3	10.1	1.1	1.1
41°	286.8	284.2	273.2	249.2	198.5	136.9	77.2	36.9	9.7	0.9	1.0
42°	286.1	283.2	273.8	251.5	201.0	138.0	77.1	36.3	9.2	0.8	1.0
43°	286.1	282.8	273.9	253.0	202.2	138.1	76.1	35.1	8.6	0.7	0.9
44°	285.6	282.6	274.3	253.9	202.5	137.4	74.5	33.8	7.8	0.7	0.9
45°	284.7	281.5	274.2	254.0	202.0	135.6	72.0	32.0	7.2	0.5	0.9
46°	283.0	280.1	273.5	253.5	200.2	133.0	69.0	30.3	6.5	0.4	0.8
47°	279.5	277.3	271.5	251.5	197.6	129.1	65.4	28.4	5.9	0.3	0.8
48°	273.6	272.1	268.2	247.2	192.6	124.4	61.5	26.2	5.3	0.3	0.8
49°	262.9	261.6	259.3	240.2	186.3	118.6	57.4	23.9	4.7	0.2	0.8
50°	254.4	253.0	248.4	228.5	177.1	111.2	52.8	21.5	4.1	0.2	0.7
51°	248.7	246.6	239.2	215.0	163.8	101.4	47.8	19.1	3.4	0.2	0.7
52°	241.6	238.4	229.3	202.8	151.6	91.6	42.4	16.8	3.0	0.2	0.7
53°	226.7	225.6	216.5	189.7	139.4	82.2	36.9	14.8	2.6	0.2	0.7
54°	213.7	212.0	199.7	171.6	126.2	71.8	31.1	13.1	2.2	0.2	0.7
55°	199.7	196.3	185.4	156.3	110.7	62.1	25.7	11.3	1.8	0.2	0.7
56°	181.9	179.0	167.2	139.9	96.4	52.3	21.5	9.2	1.4	0.2	0.7
57°	160.4	157.7	148.6	119.8	81.5	42.7	17.5	7.4	1.1	0.2	0.7
58°	139.5	136.5	126.1	100.5	65.8	33.9	14.6	6.0	0.8	0.2	0.7
59°	123.5	119.4	106.0	84.4	51.5	25.7	11.6	4.8	0.6	0.2	0.7
60°	110.2	106.8	92.9	70.3	40.4	19.0	8.6	3.7	0.3	0.2	0.7
62.5°	63.8	62.9	50.4	36.2	19.0	8.8	4.3	1.7	0.2	0.2	0.7
65°	19.0	16.6	12.9	7.7	4.9	2.9	1.6	0.6	0.1	0.2	0.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.3	0.2	0.1	0.2	0.6
70°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.5
72.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.4
75°	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.4
77.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.4
80°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
85°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
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):

	112.5°	135°	157.5°	180°
0°	4.6	4.6	4.6	4.6
2.5°	4.4	4.3	4.3	4.3
5°	4.3	4.1	4.1	4.0
7.5°	4.0	3.8	3.8	3.8
10°	3.8	3.7	3.7	3.6
12.5°	3.4	3.4	3.4	3.4
15°	3.2	3.2	3.3	3.3
17.5°	2.9	2.9	3.1	3.2
20°	2.6	2.8	2.9	3.0
22.5°	2.5	2.6	2.9	2.9
25°	2.2	2.5	2.8	2.9
27.5°	2.0	2.4	2.6	2.8
30°	1.9	2.3	2.5	2.7
31°	1.9	2.2	2.5	2.7
32°	1.8	2.1	2.5	2.6
33°	1.8	2.1	2.5	2.6
34°	1.7	2.1	2.5	2.6
35°	1.7	2.1	2.5	2.6
36°	1.6	2.0	2.5	2.6
37°	1.6	2.0	2.5	2.6
38°	1.6	2.0	2.5	2.6
39°	1.6	2.0	2.5	2.6
40°	1.6	2.0	2.5	2.6
41°	1.5	2.0	2.5	2.6
42°	1.5	2.0	2.5	2.6
43°	1.5	2.0	2.5	2.6
44°	1.5	2.0	2.5	2.6
45°	1.4	2.0	2.5	2.6
46°	1.4	2.0	2.5	2.6
47°	1.4	2.0	2.5	2.6
48°	1.4	2.0	2.5	2.6
49°	1.4	2.0	2.5	2.6
50°	1.3	1.9	2.5	2.6
51°	1.3	1.9	2.5	2.6
52°	1.3	1.9	2.5	2.6
53°	1.3	1.9	2.5	2.6
54°	1.2	1.9	2.5	2.6
55°	1.2	1.9	2.5	2.6
56°	1.2	1.9	2.5	2.5
57°	1.2	1.9	2.4	2.5
58°	1.2	1.8	2.4	2.5
59°	1.2	1.8	2.4	2.5
60°	1.2	1.8	2.4	2.5
62.5°	1.1	1.8	2.3	2.5
65°	1.1	1.6	2.3	2.4



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	1.1	1.6	2.1	2.3
70°	1.0	1.5	2.0	2.2
72.5°	0.8	1.4	1.9	2.0
75°	0.7	1.2	1.7	1.9
77.5°	0.7	1.1	1.6	1.6
80°	0.6	0.9	1.3	1.5
82.5°	0.4	0.7	1.1	1.1
85°	0.3	0.5	0.7	0.8
87.5°	0.2	0.2	0.4	0.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)