

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: P1342547

Luminaire Tested: P3A09R409830DE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342547
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: P3A09R409830DE010 E3A451GPH
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 98CRI , E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

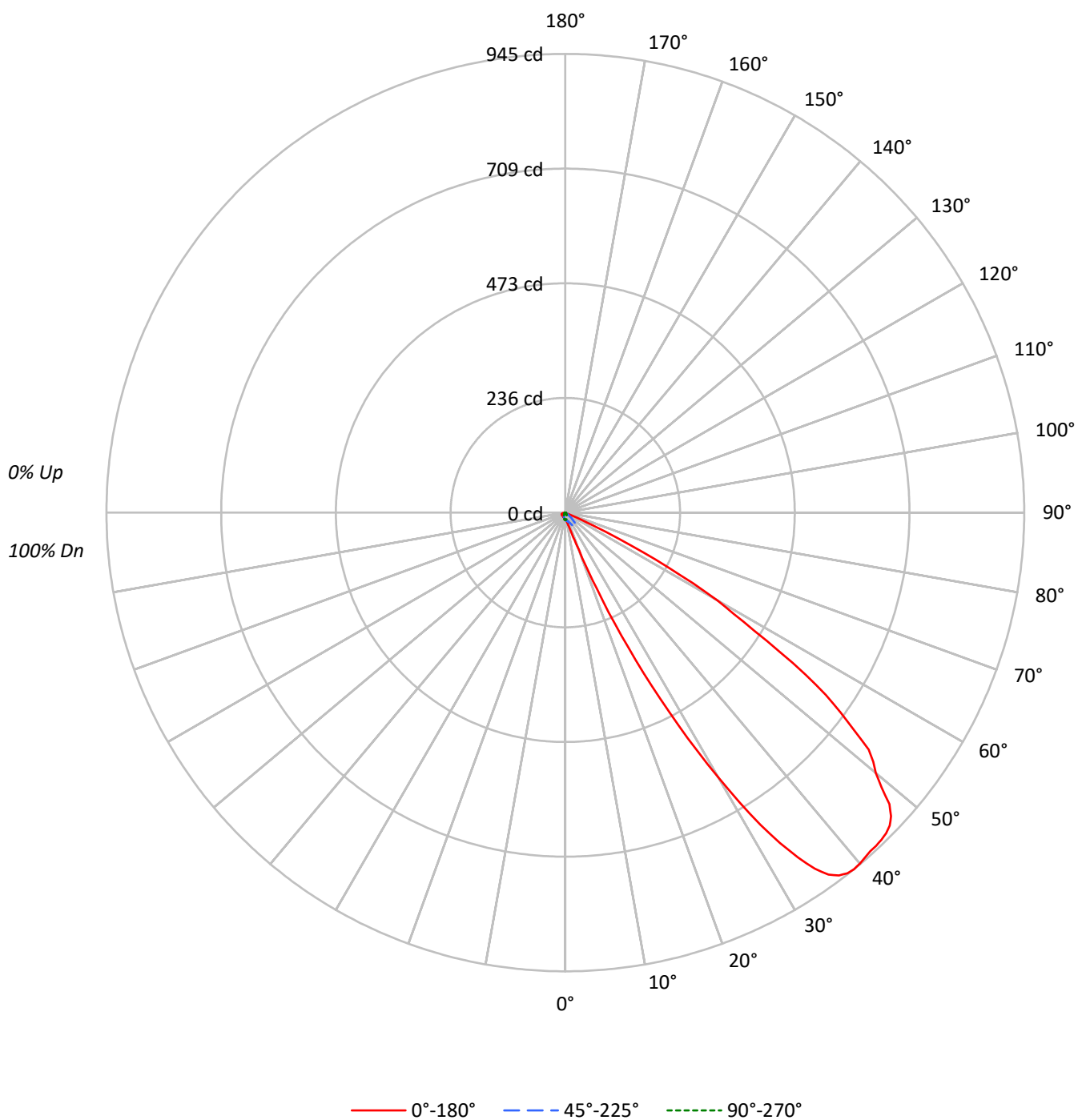
Lumens per Lamp: N/A
Luminaire Lumens: 292.0 lumens
Efficiency: N/A
Efficacy: 26.5 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3289	3289	3289	3289	3289
5°	3654	3544	3236	2950	2884
10°	4409	3763	2984	2694	2627
15°	7242	4086	2565	2384	2429
20°	19158	4807	2124	2124	2310
25°	73843	5976	1694	1936	2274
30°	159290	7951	1367	1899	2228
35°	239772	9396	1151	1874	2302
40°	270135	9446	1002	1918	2462
45°	289642	7319	899	1985	2667
50°	284681	4571	819	2115	2934
55°	250447	2256	803	2370	3288
60°	158540	482	921	2588	3640
65°	32429	156	986	2802	4047
70°	705	192	1026	3077	4616
75°	678	424	1101	3389	5253
80°	631	379	1389	3662	6061
85°	755	755	2768	4026	6793

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 294872 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.5
10°-20°	4.6	1.6
20°-30°	22.7	7.8
30°-40°	73.8	25.3
40°-50°	101.7	34.8
50°-60°	70.8	24.3
60°-70°	13.4	4.6
70°-80°	2.4	0.8
80°-90°	1.1	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°	28.7	9.8
0°-40°	102.5	35.1
0°-60°	275.0	94.2
0°-90°	292.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	292.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	15	15	15	15	15	
5°	17	16	15	13	13	2
15°	32	18	11	10	11	12
25°	305	25	7	8	9	157
35°	896	35	4	7	9	541
45°	934	24	3	6	9	710
55°	655	6	2	6	9	560
65°	62	0	2	5	8	110
75°	1	0	1	4	6	1
85°	0	0	1	2	3	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°	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
2.5°	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.3	15.0
5°	16.6	16.6	16.6	16.6	16.4	16.4	16.4	16.1	16.1	15.6	14.7
7.5°	17.7	17.7	17.7	17.7	17.4	17.2	16.9	16.9	16.6	15.3	14.2
10°	19.8	19.8	19.6	19.3	19.0	18.5	18.2	17.7	16.9	15.0	13.4
12.5°	24.1	23.6	23.3	22.8	22.0	20.9	19.8	19.0	17.2	14.5	12.6
15°	31.9	31.4	30.3	28.7	27.1	24.9	23.1	21.2	18.0	13.7	11.3
17.5°	45.6	44.0	42.4	39.7	35.7	31.9	27.9	24.4	19.0	12.9	10.2
20°	82.1	81.0	71.3	63.8	51.8	43.2	35.1	29.2	20.6	12.1	9.1
22.5°	169.2	157.9	142.1	116.4	90.6	66.8	48.5	36.7	22.3	11.0	8.0
25°	305.2	287.5	253.4	203.8	150.4	106.5	70.3	48.0	24.7	9.9	7.0
27.5°	462.0	444.1	391.2	322.9	235.7	160.6	100.3	63.6	27.9	8.8	6.2
30°	629.1	613.8	546.8	452.1	332.3	225.0	134.3	79.4	31.4	7.8	5.4
31°	696.4	676.8	604.4	503.6	377.6	251.5	148.0	86.1	32.7	7.5	5.1
32°	758.4	736.1	661.0	552.9	414.3	280.2	163.0	92.0	33.8	7.0	4.8
33°	811.7	785.7	713.3	599.6	454.8	307.0	178.6	97.6	34.6	6.4	4.6
34°	857.0	834.5	756.8	646.5	490.7	332.8	193.9	103.2	35.1	6.2	4.3
35°	895.7	875.3	798.3	682.2	525.9	357.7	207.8	108.6	35.1	5.6	4.3
36°	921.7	904.0	834.3	718.7	555.4	378.9	219.6	113.4	35.1	5.1	4.0
37°	935.9	918.7	857.8	748.7	584.3	399.8	230.4	117.2	34.9	4.8	3.8
38°	943.1	928.1	875.3	773.1	604.4	414.8	239.7	120.1	34.6	4.3	3.8
39°	945.0	932.4	886.3	790.8	624.0	429.9	246.4	121.7	33.8	4.0	3.5
40°	943.7	932.7	892.2	806.6	639.0	441.7	251.3	122.3	33.0	3.5	3.5
41°	941.0	932.4	896.5	817.6	651.1	449.2	253.1	121.2	31.9	2.9	3.2
42°	938.6	929.2	898.3	825.1	659.4	452.9	252.9	119.1	30.3	2.7	3.2
43°	938.6	927.8	898.6	830.0	663.4	453.2	249.7	115.0	28.2	2.4	2.9
44°	937.0	927.0	899.9	833.2	664.5	450.8	244.6	110.8	25.7	2.1	2.9
45°	934.0	923.5	899.7	833.4	662.6	444.9	236.3	105.1	23.6	1.6	2.9
46°	928.4	919.0	897.3	831.6	657.0	436.3	226.3	99.5	21.2	1.3	2.7
47°	917.1	909.9	890.8	825.1	648.4	423.7	214.5	93.1	19.3	1.1	2.7
48°	897.8	892.7	879.8	810.9	632.1	408.1	201.9	86.1	17.4	1.1	2.7
49°	862.4	858.4	850.9	788.1	611.1	389.1	188.2	78.3	15.6	0.8	2.7
50°	834.5	830.2	814.9	749.8	581.1	365.0	173.2	70.5	13.4	0.5	2.4
51°	816.0	809.0	784.9	705.3	537.4	332.8	156.9	62.7	11.3	0.5	2.4
52°	792.7	782.2	752.2	665.3	497.4	300.6	139.2	55.0	9.9	0.5	2.4
53°	743.9	740.1	710.4	622.4	457.5	269.8	120.9	48.5	8.6	0.5	2.4
54°	701.2	695.6	655.1	562.9	414.0	235.4	102.2	42.9	7.2	0.5	2.4
55°	655.1	644.1	608.2	512.7	363.1	203.8	84.2	37.0	5.9	0.5	2.1
56°	596.9	587.3	548.7	459.1	316.2	171.6	70.5	30.3	4.6	0.5	2.1
57°	526.1	517.3	487.5	393.1	267.4	140.2	57.4	24.4	3.5	0.5	2.1
58°	457.8	447.8	413.8	329.8	215.9	111.3	48.0	19.8	2.7	0.5	2.1
59°	405.2	391.8	347.8	277.0	168.9	84.5	38.1	15.8	1.9	0.5	2.1
60°	361.5	350.5	304.9	230.6	132.5	62.2	28.2	12.1	1.1	0.5	2.1
62.5°	209.4	206.5	165.5	118.8	62.5	29.0	13.9	5.6	0.5	0.8	2.1
65°	62.5	54.4	42.4	25.2	16.1	9.7	5.1	1.9	0.3	0.8	1.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.1	0.5	0.3	0.8	1.9
70°	1.1	0.8	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.8	1.6
72.5°	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.3	0.5	0.8	1.3
75°	0.8	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5	0.8	1.3
77.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.5	0.8	1.3
80°	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.8	0.8
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°	15.0	15.0	15.0	15.0
2.5°	14.5	14.2	13.9	13.9
5°	13.9	13.4	13.4	13.1
7.5°	13.1	12.6	12.6	12.6
10°	12.3	12.1	12.1	11.8
12.5°	11.3	11.3	11.3	11.3
15°	10.5	10.5	10.7	10.7
17.5°	9.4	9.7	10.2	10.5
20°	8.6	9.1	9.7	9.9
22.5°	8.0	8.6	9.4	9.7
25°	7.2	8.0	9.1	9.4
27.5°	6.7	7.8	8.6	9.1
30°	6.2	7.5	8.3	8.8
31°	6.2	7.2	8.3	8.8
32°	5.9	7.0	8.3	8.6
33°	5.9	7.0	8.3	8.6
34°	5.6	7.0	8.0	8.6
35°	5.6	7.0	8.0	8.6
36°	5.4	6.7	8.0	8.6
37°	5.4	6.7	8.0	8.6
38°	5.1	6.7	8.0	8.6
39°	5.1	6.7	8.0	8.6
40°	5.1	6.7	8.0	8.6
41°	4.8	6.7	8.0	8.6
42°	4.8	6.7	8.0	8.6
43°	4.8	6.4	8.0	8.6
44°	4.8	6.4	8.0	8.6
45°	4.6	6.4	8.0	8.6
46°	4.6	6.4	8.0	8.6
47°	4.6	6.4	8.0	8.6
48°	4.6	6.4	8.0	8.6
49°	4.6	6.4	8.0	8.6
50°	4.3	6.2	8.0	8.6
51°	4.3	6.2	8.0	8.6
52°	4.3	6.2	8.0	8.6
53°	4.3	6.2	8.0	8.6
54°	4.0	6.2	8.0	8.6
55°	4.0	6.2	8.0	8.6
56°	4.0	6.2	8.0	8.3
57°	4.0	6.2	7.8	8.3
58°	4.0	5.9	7.8	8.3
59°	4.0	5.9	7.8	8.3
60°	4.0	5.9	7.8	8.3
62.5°	3.8	5.9	7.5	8.0
65°	3.5	5.4	7.5	7.8



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	3.5	5.1	7.0	7.5
70°	3.2	4.8	6.7	7.2
72.5°	2.7	4.6	6.2	6.7
75°	2.4	4.0	5.6	6.2
77.5°	2.1	3.5	5.1	5.4
80°	1.9	2.9	4.3	4.8
82.5°	1.3	2.1	3.5	3.8
85°	1.1	1.6	2.4	2.7
87.5°	0.8	0.8	1.3	1.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)