

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: P1335119

Luminaire Tested: P3A02R309827DE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335119
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R309827DE010 E3A451GPH
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 98CRI , E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

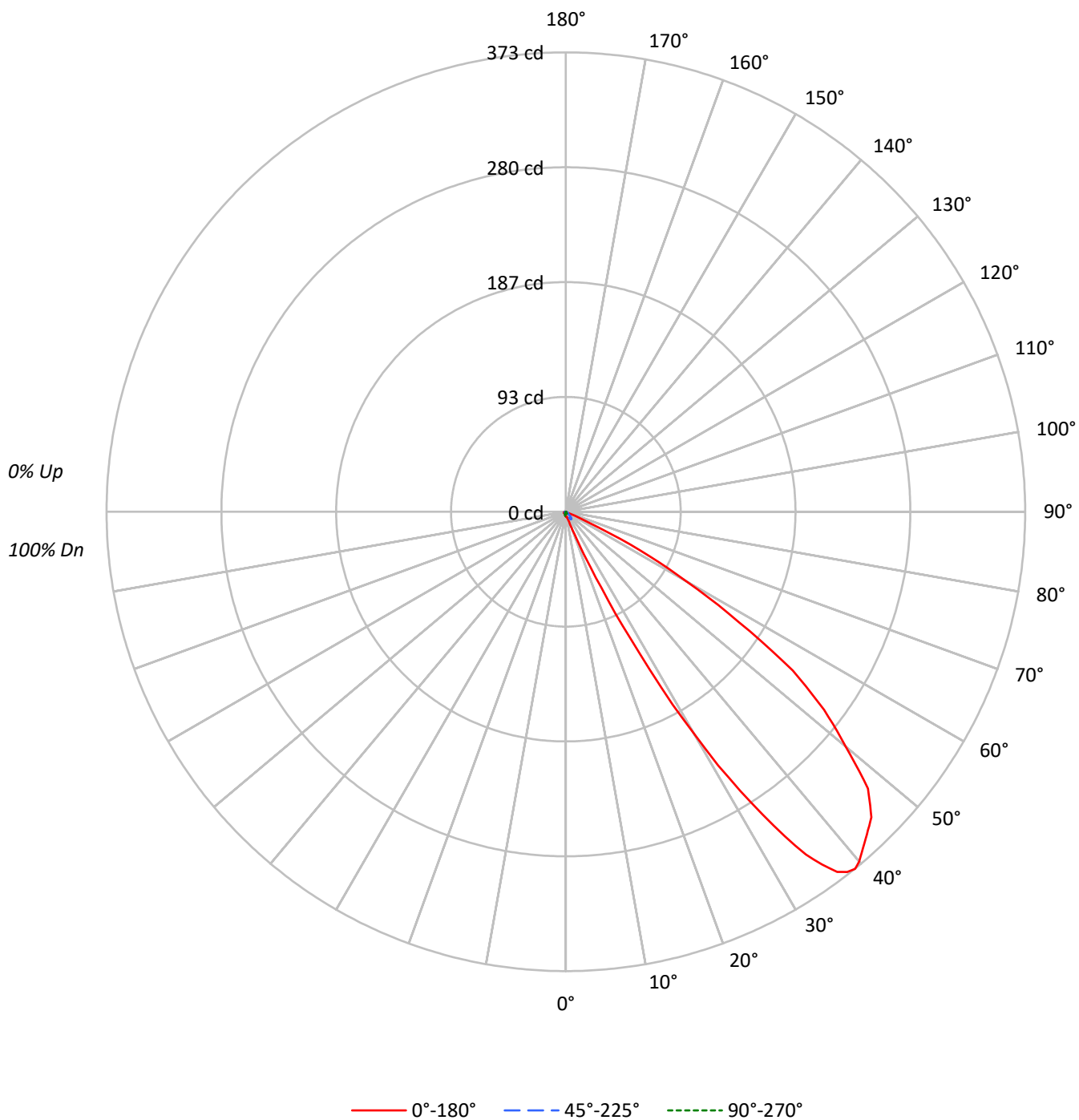
Lumens per Lamp: N/A
Luminaire Lumens: 97.0 lumens
Efficiency: N/A
Efficacy: 26.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.43
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	833	833	833	833	833
5°	880	858	814	748	726
10°	957	846	713	646	623
15°	1407	863	590	545	568
20°	3547	933	467	467	513
25°	16477	1161	363	411	484
30°	52413	1621	279	405	481
35°	90962	1981	214	375	482
40°	106084	1975	172	372	487
45°	108817	1395	186	403	527
50°	101182	785	136	409	614
55°	85980	421	153	459	688
60°	49645	88	175	482	746
65°	10118	0	208	571	830
70°	128	64	256	705	1026
75°	169	85	254	678	1186
80°	126	126	379	884	1389
85°	0	252	755	755	1761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 108817 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.3	0.4
10°-20°	1.0	1.0
20°-30°	5.6	5.8
30°-40°	26.1	26.9
40°-50°	36.9	38.1
50°-60°	22.7	23.4
60°-70°	3.5	3.6
70°-80°	0.6	0.6
80°-90°	0.3	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°	6.9	7.1
0°-40°	33.0	34.1
0°-60°	92.7	95.6
0°-90°	97.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	97.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4	4	4	4	4	
5°	4	4	4	3	3	0
15°	6	4	3	2	2	2
25°	68	5	2	2	2	42
35°	340	7	1	1	2	204
45°	351	4	1	1	2	266
55°	225	1	0	1	2	191
65°	20	0	0	1	2	35
75°	0	0	0	1	1	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°	22.5°	45°	67.5°	90°	112.5°	135°
0°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
2.5°	3.8	3.8	3.9	3.9	3.8	3.9	3.9	3.9	3.8	3.7	3.5
5°	4.0	4.0	4.0	4.1	4.0	4.0	3.9	3.8	3.7	3.4	3.4
7.5°	4.2	4.2	4.1	4.2	4.1	4.1	3.9	3.8	3.5	3.3	3.1
10°	4.3	4.3	4.2	4.2	4.2	4.2	3.8	3.6	3.2	2.9	2.9
12.5°	4.8	4.8	4.7	4.7	4.5	4.4	3.8	3.4	2.9	2.6	2.5
15°	6.2	6.1	6.0	5.7	5.3	5.2	3.8	3.1	2.6	2.4	2.4
17.5°	8.5	8.4	8.2	7.5	6.8	6.5	3.8	2.8	2.3	2.1	2.1
20°	15.2	14.5	13.3	11.7	10.0	9.1	4.0	2.5	2.0	1.9	2.0
21°	19.9	19.2	17.6	15.0	11.9	10.9	4.2	2.4	1.9	1.8	2.0
22°	27.0	26.3	23.1	19.4	15.1	13.4	4.2	2.2	1.7	1.7	1.9
23°	37.7	36.5	31.1	25.2	18.9	16.4	4.4	2.1	1.6	1.7	1.8
24°	49.4	48.4	42.2	33.4	24.1	20.6	4.6	2.0	1.6	1.6	1.7
25°	68.1	66.8	56.0	42.2	30.6	24.8	4.8	1.9	1.5	1.5	1.7
26°	92.2	86.5	72.1	54.3	37.7	31.0	5.1	1.8	1.4	1.5	1.6
27°	115.0	110.4	94.1	69.7	46.6	38.2	5.4	1.7	1.3	1.4	1.6
28°	145.1	138.6	118.1	88.2	58.7	46.2	5.7	1.6	1.2	1.4	1.6
29°	178.8	169.6	144.9	108.9	72.3	55.2	6.0	1.6	1.1	1.3	1.6
30°	207.0	198.5	173.7	133.5	88.0	67.0	6.4	1.5	1.1	1.3	1.6
31°	240.2	227.2	197.2	154.3	101.5	78.8	6.7	1.3	1.0	1.2	1.5
32°	267.1	258.0	226.2	177.9	119.2	91.9	6.9	1.2	1.0	1.2	1.5
33°	293.1	280.9	250.1	200.4	135.2	105.3	7.2	1.1	0.9	1.1	1.5
34°	317.9	306.7	272.7	218.7	150.3	118.1	7.4	1.0	0.9	1.1	1.4
35°	339.8	326.8	292.7	236.5	165.9	129.7	7.4	0.9	0.8	1.1	1.4
36°	354.0	344.7	310.0	254.0	179.9	140.7	7.4	0.8	0.7	1.1	1.3
37°	366.2	355.4	323.9	267.5	190.3	149.5	7.4	0.7	0.7	1.1	1.3
38°	371.2	361.9	333.5	279.4	200.0	158.5	7.3	0.7	0.7	1.0	1.3
39°	373.2	364.8	340.6	288.0	207.2	164.6	7.1	0.6	0.7	1.0	1.3
40°	370.6	364.3	344.3	293.6	212.9	169.0	6.9	0.5	0.6	1.0	1.3
42.5°	360.2	356.0	343.5	299.1	217.8	172.2	6.0	0.3	0.6	0.9	1.3
45°	350.9	346.3	335.3	293.3	211.5	165.8	4.5	0.2	0.6	0.9	1.3
47.5°	332.8	329.9	321.3	278.5	197.5	151.2	3.2	0.1	0.5	0.8	1.2
50°	296.6	293.9	282.5	241.9	169.9	127.9	2.3	0.1	0.4	0.8	1.2
52.5°	264.2	261.3	244.9	201.1	130.5	93.7	1.5	0.1	0.4	0.8	1.2
55°	224.9	220.0	198.4	152.6	92.5	62.8	1.1	0.1	0.4	0.7	1.2
57.5°	166.5	159.3	140.0	104.1	53.3	34.1	0.6	0.1	0.4	0.7	1.2
60°	113.2	108.9	87.6	54.9	22.7	14.4	0.2	0.1	0.4	0.7	1.1
62.5°	68.6	63.2	44.0	23.4	9.8	6.5	0.0	0.2	0.4	0.7	1.1
65°	19.5	17.3	11.5	5.3	2.8	2.1	0.0	0.2	0.4	0.7	1.1
67.5°	0.7	0.7	0.7	0.6	0.4	0.4	0.1	0.2	0.4	0.7	1.1
70°	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.4	0.7	1.1
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.6	1.0
75°	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.6	0.8
77.5°	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.8
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	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):

	157.5°	180°
0°	3.8	3.8
2.5°	3.5	3.5
5°	3.3	3.3
7.5°	3.0	3.0
10°	2.8	2.8
12.5°	2.6	2.6
15°	2.4	2.5
17.5°	2.2	2.3
20°	2.1	2.2
21°	2.1	2.2
22°	2.0	2.1
23°	2.0	2.1
24°	2.0	2.0
25°	1.9	2.0
26°	1.9	2.0
27°	1.9	2.0
28°	1.8	2.0
29°	1.8	1.9
30°	1.8	1.9
31°	1.7	1.9
32°	1.7	1.9
33°	1.7	1.8
34°	1.6	1.8
35°	1.6	1.8
36°	1.6	1.8
37°	1.6	1.7
38°	1.6	1.8
39°	1.6	1.7
40°	1.6	1.7
42.5°	1.6	1.7
45°	1.6	1.7
47.5°	1.6	1.8
50°	1.6	1.8
52.5°	1.6	1.8
55°	1.6	1.8
57.5°	1.6	1.7
60°	1.6	1.7
62.5°	1.6	1.7
65°	1.6	1.6
67.5°	1.6	1.6
70°	1.5	1.6
72.5°	1.4	1.5
75°	1.2	1.4
77.5°	1.1	1.2
80°	1.0	1.1

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	0.8	0.8
85°	0.6	0.7
87.5°	0.3	0.3
90°	0.0	0.0

(END OF REPORT)