

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: P1336023

Luminaire Tested: P3A02R459035DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336023
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R459035DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

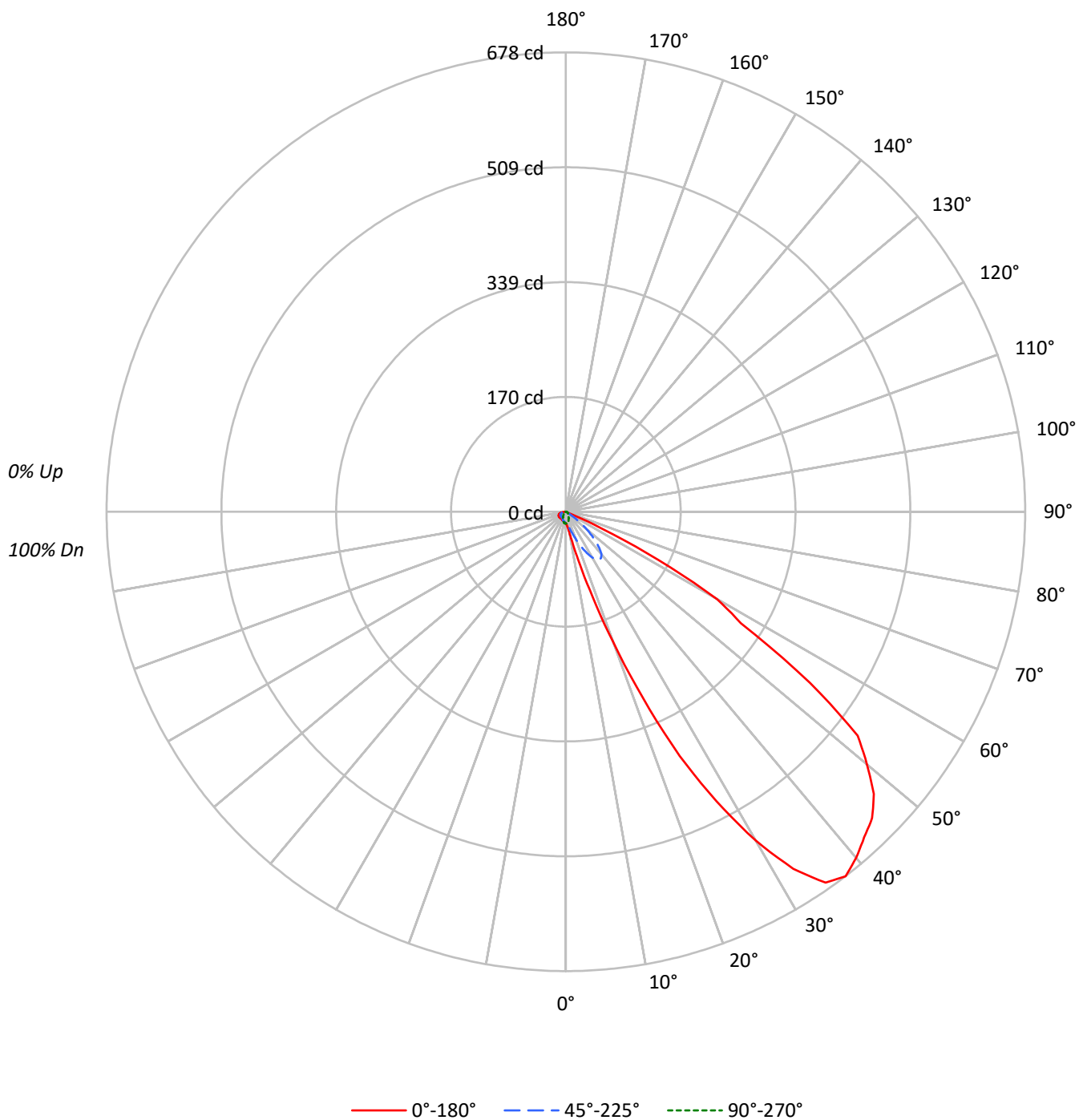
Lumens per Lamp: N/A
Luminaire Lumens: 303.1 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			0
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	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
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	80	72	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43		
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36		
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31		
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28	26		
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24	22		
10	49	35	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21	19		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3837	3837	3837	3837	3837
5°	4578	4248	3808	3522	3522
10°	7303	4965	3563	3340	3340
15°	18184	6652	3246	3133	3246
20°	47907	9941	2800	2987	3150
25°	96199	14711	2419	2782	3097
30°	141819	19725	1975	2735	3165
35°	178872	23129	1686	2677	3293
40°	190843	23358	1517	2805	3521
45°	198284	19475	1395	3039	3814
50°	197964	13577	1365	3241	4264
55°	168252	6040	1453	3632	4702
60°	113105	1228	1447	4079	5394
65°	29990	519	1453	4410	6123
70°	833	641	1475	4809	6924
75°	678	678	1525	5083	7879
80°	631	1010	1642	5430	8840
85°	755	1258	2516	5787	8806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 203412 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.6
10°-20°	8.5	2.8
20°-30°	35.3	11.6
30°-40°	74.3	24.5
40°-50°	91.7	30.2
50°-60°	68.7	22.7
60°-70°	17.7	5.8
70°-80°	3.7	1.2
80°-90°	1.5	0.5
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°	45.5	15.0
0°-40°	119.8	39.5
0°-60°	280.2	92.4
0°-90°	303.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	303.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18	18	18	18	18	
5°	21	19	17	16	16	2
15°	80	29	14	14	14	29
25°	398	61	10	12	13	185
35°	668	86	6	10	12	407
45°	639	63	4	10	12	489
55°	440	16	4	10	12	380
65°	58	1	3	8	12	83
75°	1	1	2	6	9	1
85°	0	0	1	2	4	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°	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
2.5°	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.0	17.5	17.0
5°	20.8	20.5	20.5	20.5	20.3	20.0	20.0	19.3	18.3	17.3	16.5
7.5°	24.5	24.5	24.3	23.8	23.5	23.0	22.5	20.5	18.3	16.8	15.8
10°	32.8	32.3	31.5	31.0	29.8	28.0	26.8	22.3	18.0	16.0	15.3
12.5°	49.1	50.1	47.6	45.1	41.6	38.3	34.3	25.3	18.0	15.3	14.5
15°	80.1	81.9	77.1	72.1	63.6	55.6	48.1	29.3	17.5	14.3	13.5
17.5°	130.9	133.2	125.2	113.4	100.1	84.1	70.4	34.8	17.0	13.3	12.8
20°	205.3	205.0	189.5	174.8	149.2	125.7	99.9	42.6	16.3	12.0	12.0
22.5°	296.7	297.7	278.7	252.1	215.8	178.0	136.9	51.6	15.3	11.0	11.3
25°	397.6	389.1	366.5	334.2	287.9	235.6	181.5	60.8	14.3	10.0	10.5
27.5°	481.7	473.4	447.6	409.3	359.5	297.4	226.8	70.1	13.0	9.0	9.8
30°	560.1	549.5	518.5	475.2	415.9	348.8	269.4	77.9	11.5	7.8	9.0
32.5°	624.7	615.1	579.8	529.5	464.9	392.8	305.4	83.9	10.0	7.0	8.5
35°	668.2	658.5	625.9	570.6	500.2	424.9	334.7	86.4	8.8	6.3	8.3
37.5°	678.2	673.0	649.7	597.9	524.5	445.4	353.5	85.6	7.3	5.8	7.8
40°	666.7	668.0	656.9	613.9	537.5	454.2	361.3	81.6	6.0	5.3	7.5
42.5°	651.9	655.2	654.4	620.4	543.0	454.7	358.0	73.6	4.8	4.8	7.3
45°	639.4	642.7	647.2	617.6	539.3	448.1	347.8	62.8	3.5	4.5	7.3
47.5°	616.6	620.1	626.7	595.6	520.3	431.4	329.2	51.1	2.5	4.3	7.0
50°	580.3	582.1	580.3	545.5	483.7	404.3	299.2	39.8	1.8	4.0	7.0
52.5°	543.0	539.5	525.0	480.9	425.6	361.5	261.4	28.3	1.3	3.8	6.8
55°	440.1	434.6	423.9	396.8	365.3	308.9	211.3	15.8	1.3	3.8	6.5
57.5°	306.7	309.7	313.5	307.9	293.4	243.4	160.5	7.0	1.3	3.5	6.5
60°	257.9	255.4	255.6	252.1	228.1	177.5	110.4	2.8	1.3	3.3	6.3
62.5°	154.0	155.7	159.0	159.7	135.9	99.1	57.8	1.3	1.3	3.0	6.0
65°	57.8	60.6	53.1	46.1	36.6	26.8	13.5	1.0	1.5	2.8	5.5
67.5°	1.8	2.0	2.5	2.3	2.3	2.0	1.5	1.0	1.5	2.5	5.3
70°	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.0	1.3	2.3	4.8
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	2.0	4.3
75°	0.8	1.0	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.8	3.5
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.0	1.5	3.0
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	1.0	1.3	2.5
82.5°	0.5	0.5	0.5	0.3	0.5	0.5	0.5	0.5	1.0	1.0	2.0
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.8	1.0	1.3
87.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.5	0.8	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):

	135°	157.5°	180°
0°	17.5	17.5	17.5
2.5°	16.5	16.5	16.5
5°	16.0	16.0	16.0
7.5°	15.5	15.5	15.5
10°	15.0	15.0	15.0
12.5°	14.5	14.5	14.8
15°	13.8	14.3	14.3
17.5°	13.3	13.8	14.0
20°	12.8	13.3	13.5
22.5°	12.0	12.8	13.3
25°	11.5	12.5	12.8
27.5°	11.0	12.3	12.8
30°	10.8	12.0	12.5
32.5°	10.3	11.8	12.3
35°	10.0	11.8	12.3
37.5°	10.0	11.5	12.3
40°	9.8	11.5	12.3
42.5°	9.8	11.5	12.3
45°	9.8	11.5	12.3
47.5°	9.5	11.5	12.5
50°	9.5	11.8	12.5
52.5°	9.5	11.8	12.5
55°	9.5	11.8	12.3
57.5°	9.3	11.5	12.3
60°	9.3	11.5	12.3
62.5°	8.8	11.3	12.0
65°	8.5	11.0	11.8
67.5°	8.0	10.8	11.3
70°	7.5	10.0	10.8
72.5°	6.8	9.5	10.3
75°	6.0	8.8	9.3
77.5°	5.3	7.8	8.3
80°	4.3	6.5	7.0
82.5°	3.3	5.0	5.3
85°	2.3	3.3	3.5
87.5°	1.0	1.5	1.8
90°	0.0	0.0	0.0

(END OF REPORT)