

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: P1336151

Luminaire Tested: P3A02R459830DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336151
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: P3A02R459830DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

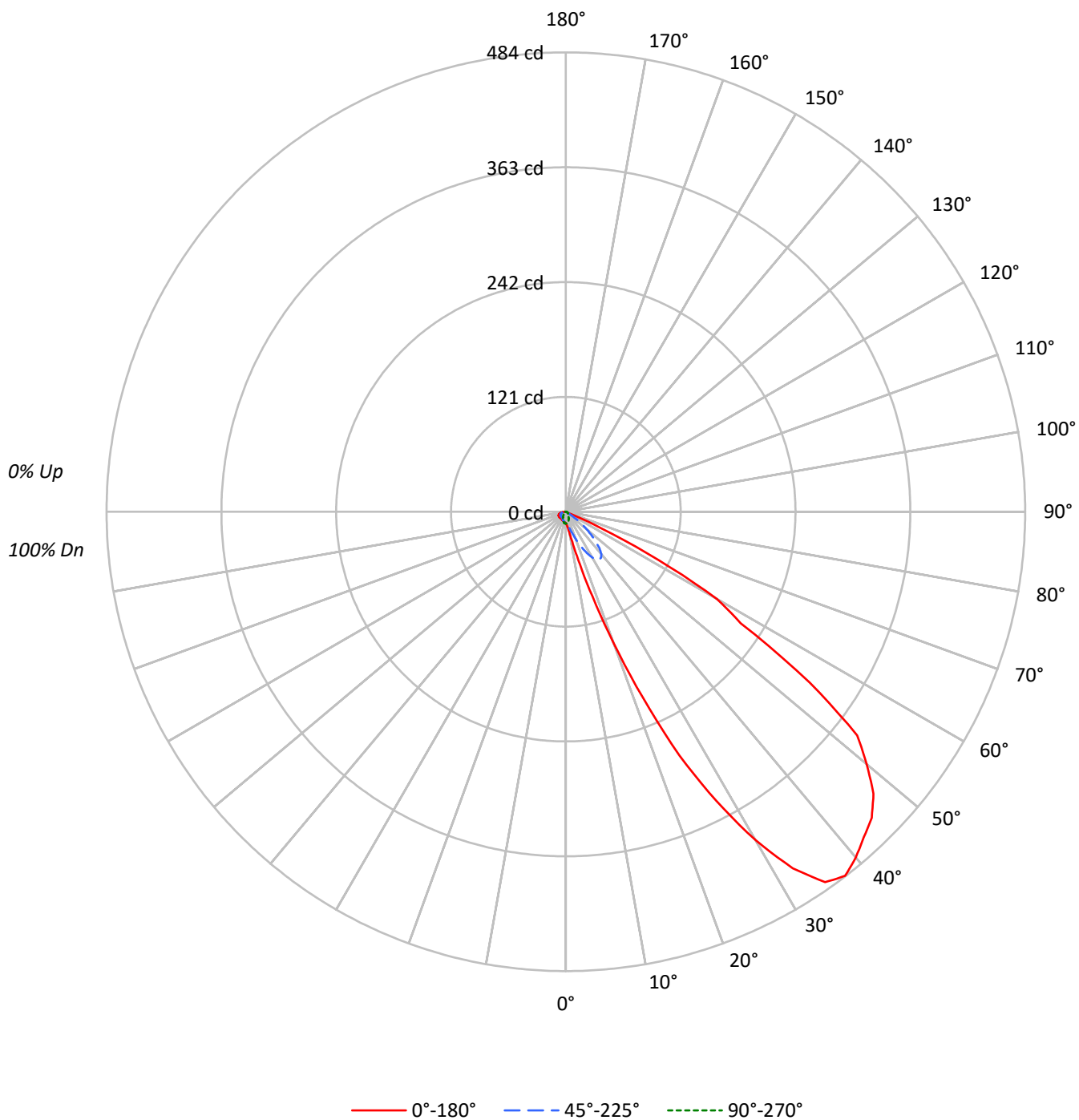
Lumens per Lamp: N/A
Luminaire Lumens: 216.0 lumens
Efficiency: N/A
Efficacy: 60.0 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.83 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2741	2741	2741	2741	2741
5°	3258	3016	2707	2509	2509
10°	5210	3540	2538	2382	2382
15°	12963	4745	2316	2225	2316
20°	34140	7071	2007	2124	2240
25°	68568	10501	1718	1984	2202
30°	101079	14053	1393	1950	2254
35°	127529	16490	1205	1901	2329
40°	136055	16660	1059	2004	2490
45°	141348	13893	992	2171	2698
50°	141130	9688	989	2320	3036
55°	119967	4282	1032	2600	3326
60°	80608	877	1009	2895	3815
65°	21377	363	1038	3165	4358
70°	577	449	1026	3462	4937
75°	424	424	1017	3643	5592
80°	505	631	1137	3788	6314
85°	503	1006	1761	4026	6290

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 144988 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.6
10°-20°	6.1	2.8
20°-30°	25.1	11.6
30°-40°	53.0	24.5
40°-50°	65.3	30.3
50°-60°	49.0	22.7
60°-70°	12.6	5.8
70°-80°	2.6	1.2
80°-90°	1.1	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°	32.5	15.0
0°-40°	85.4	39.5
0°-60°	199.7	92.5
0°-90°	216.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	216.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	15	14	12	11	11	2
15°	57	21	10	10	10	21
25°	283	43	7	8	9	132
35°	476	62	4	7	9	290
45°	456	45	3	7	9	349
55°	314	11	3	7	9	271
65°	41	1	2	6	8	59
75°	0	0	1	4	7	1
85°	0	0	1	2	2	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°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
2.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.0	12.9	12.5	12.1
5°	14.8	14.6	14.6	14.6	14.5	14.3	14.3	13.7	13.0	12.3	11.8
7.5°	17.5	17.5	17.3	17.0	16.8	16.4	16.1	14.6	13.0	12.0	11.2
10°	23.4	23.0	22.5	22.1	21.2	20.0	19.1	15.9	12.9	11.4	10.9
12.5°	35.0	35.7	33.9	32.1	29.6	27.3	24.5	18.0	12.9	10.9	10.4
15°	57.1	58.4	55.0	51.4	45.3	39.6	34.3	20.9	12.5	10.2	9.6
17.5°	93.3	94.9	89.2	80.8	71.4	60.0	50.2	24.8	12.1	9.5	9.1
20°	146.3	146.2	135.1	124.6	106.4	89.6	71.2	30.3	11.6	8.6	8.6
22.5°	211.5	212.2	198.6	179.7	153.8	126.9	97.6	36.8	10.9	7.9	8.0
25°	283.4	277.4	261.3	238.3	205.2	167.9	129.4	43.4	10.2	7.1	7.5
27.5°	343.4	337.5	319.1	291.8	256.3	212.0	161.7	50.0	9.3	6.4	7.0
30°	399.2	391.8	369.6	338.7	296.4	248.6	192.0	55.5	8.2	5.5	6.4
32.5°	445.3	438.5	413.3	377.5	331.4	280.0	217.7	59.8	7.1	5.0	6.1
35°	476.4	469.4	446.2	406.7	356.6	302.9	238.6	61.6	6.2	4.5	5.9
37.5°	483.5	479.7	463.1	426.2	373.9	317.5	252.0	61.0	5.2	4.1	5.5
40°	475.3	476.2	468.3	437.6	383.2	323.8	257.5	58.2	4.3	3.7	5.4
42.5°	464.8	467.1	466.5	442.3	387.1	324.1	255.2	52.5	3.4	3.4	5.2
45°	455.8	458.1	461.4	440.3	384.4	319.5	247.9	44.8	2.5	3.2	5.2
47.5°	439.6	442.1	446.7	424.6	370.9	307.5	234.7	36.4	1.8	3.0	5.0
50°	413.7	415.0	413.7	388.9	344.8	288.2	213.3	28.4	1.2	2.9	5.0
52.5°	387.1	384.6	374.3	342.9	303.4	257.7	186.3	20.2	0.9	2.7	4.8
55°	313.8	309.8	302.2	282.9	260.4	220.2	150.6	11.2	0.9	2.7	4.6
57.5°	218.6	220.8	223.5	219.5	209.2	173.5	114.4	5.0	0.9	2.5	4.6
60°	183.8	182.0	182.2	179.7	162.6	126.5	78.7	2.0	0.9	2.3	4.5
62.5°	109.8	111.0	113.3	113.9	96.9	70.7	41.2	0.9	0.9	2.1	4.3
65°	41.2	43.2	37.8	32.8	26.1	19.1	9.6	0.7	1.1	2.0	3.9
67.5°	1.2	1.4	1.8	1.6	1.6	1.4	1.1	0.7	1.1	1.8	3.7
70°	0.9	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.9	1.6	3.4
72.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	1.4	3.0
75°	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.2	2.5
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	1.1	2.1
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.7	0.9	1.8
82.5°	0.4	0.4	0.4	0.2	0.4	0.4	0.4	0.4	0.7	0.7	1.4
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.7	0.9
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.5	0.5	0.5
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°	12.5	12.5	12.5
2.5°	11.8	11.8	11.8
5°	11.4	11.4	11.4
7.5°	11.1	11.1	11.1
10°	10.7	10.7	10.7
12.5°	10.4	10.4	10.5
15°	9.8	10.2	10.2
17.5°	9.5	9.8	10.0
20°	9.1	9.5	9.6
22.5°	8.6	9.1	9.5
25°	8.2	8.9	9.1
27.5°	7.9	8.7	9.1
30°	7.7	8.6	8.9
32.5°	7.3	8.4	8.7
35°	7.1	8.4	8.7
37.5°	7.1	8.2	8.7
40°	7.0	8.2	8.7
42.5°	7.0	8.2	8.7
45°	7.0	8.2	8.7
47.5°	6.8	8.2	8.9
50°	6.8	8.4	8.9
52.5°	6.8	8.4	8.9
55°	6.8	8.4	8.7
57.5°	6.6	8.2	8.7
60°	6.6	8.2	8.7
62.5°	6.2	8.0	8.6
65°	6.1	7.9	8.4
67.5°	5.7	7.7	8.0
70°	5.4	7.1	7.7
72.5°	4.8	6.8	7.3
75°	4.3	6.2	6.6
77.5°	3.7	5.5	5.9
80°	3.0	4.6	5.0
82.5°	2.3	3.6	3.7
85°	1.6	2.3	2.5
87.5°	0.7	1.1	1.2
90°	0.0	0.0	0.0

(END OF REPORT)