

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: P1343064

Luminaire Tested: P3A09R459830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343064
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: P3A09R459830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

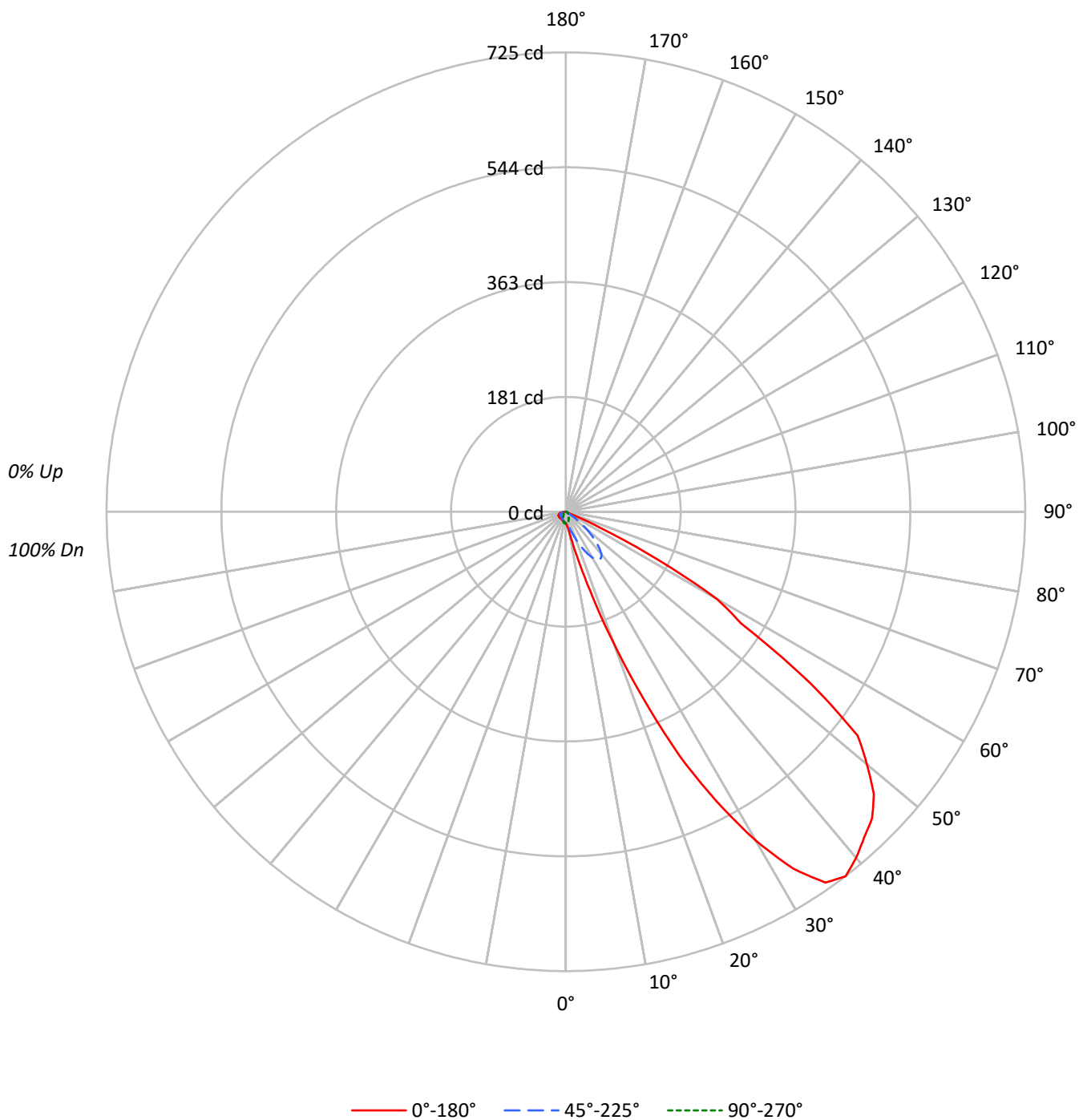
Lumens per Lamp: N/A
Luminaire Lumens: 324.0 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.83 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	4101	4101	4101	4101	4101
5°	4887	4534	4072	3764	3764
10°	7815	5299	3808	3585	3585
15°	19455	7106	3473	3337	3473
20°	51221	10618	3010	3197	3384
25°	102853	15751	2589	2976	3315
30°	151644	21092	2102	2912	3393
35°	191266	24735	1794	2864	3507
40°	204068	24990	1603	2977	3750
45°	212022	20839	1489	3225	4062
50°	211712	14533	1467	3480	4571
55°	179912	6461	1529	3900	5008
60°	120911	1272	1535	4342	5745
65°	32066	571	1505	4722	6538
70°	833	705	1539	5129	7373
75°	678	678	1610	5422	8388
80°	631	1010	1642	5809	9471
85°	755	1258	2768	6038	9309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 217499 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.6
10°-20°	9.1	2.8
20°-30°	37.7	11.6
30°-40°	79.4	24.5
40°-50°	98.0	30.2
50°-60°	73.5	22.7
60°-70°	18.9	5.8
70°-80°	3.9	1.2
80°-90°	1.6	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°	48.7	15.0
0°-40°	128.1	39.5
0°-60°	299.6	92.5
0°-90°	324.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	324.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	22	21	18	17	17	2
15°	86	31	15	15	15	31
25°	425	65	11	12	14	198
35°	714	92	7	11	13	435
45°	684	67	5	10	13	523
55°	471	17	4	10	13	406
65°	62	1	3	9	13	89
75°	1	1	2	6	10	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°	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7
2.5°	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.5	19.3	18.7	18.2
5°	22.2	22.0	22.0	22.0	21.7	21.4	21.4	20.6	19.5	18.5	17.7
7.5°	26.2	26.2	26.0	25.4	25.2	24.6	24.1	22.0	19.5	17.9	16.9
10°	35.1	34.5	33.7	33.2	31.9	30.0	28.6	23.8	19.3	17.1	16.3
12.5°	52.5	53.5	50.9	48.2	44.4	41.0	36.7	27.0	19.3	16.3	15.5
15°	85.7	87.5	82.5	77.1	68.0	59.4	51.4	31.3	18.7	15.3	14.5
17.5°	140.0	142.4	133.9	121.3	107.1	90.0	75.2	37.2	18.2	14.2	13.7
20°	219.5	219.3	202.7	186.9	159.6	134.4	106.8	45.5	17.4	12.9	12.9
22.5°	317.2	318.3	298.0	269.6	230.8	190.3	146.4	55.1	16.3	11.8	12.0
25°	425.1	416.0	391.9	357.4	307.9	251.9	194.1	65.1	15.3	10.7	11.2
27.5°	515.1	506.2	478.7	437.7	384.4	318.0	242.5	75.0	13.9	9.6	10.4
30°	598.9	587.6	554.4	508.1	444.7	372.9	288.1	83.3	12.3	8.3	9.6
32.5°	667.9	657.8	620.0	566.2	497.1	420.0	326.6	89.7	10.7	7.5	9.1
35°	714.5	704.1	669.3	610.1	534.9	454.3	357.9	92.4	9.4	6.7	8.8
37.5°	725.2	719.6	694.7	639.3	560.9	476.3	378.0	91.6	7.8	6.2	8.3
40°	712.9	714.3	702.5	656.4	574.8	485.6	386.3	87.3	6.4	5.6	8.0
42.5°	697.1	700.6	699.8	663.4	580.7	486.2	382.8	78.7	5.1	5.1	7.8
45°	683.7	687.2	692.0	660.4	576.7	479.2	371.9	67.2	3.7	4.8	7.8
47.5°	659.4	663.1	670.1	636.9	556.3	461.3	352.0	54.6	2.7	4.6	7.5
50°	620.6	622.4	620.6	583.3	517.2	432.4	319.9	42.6	1.9	4.3	7.5
52.5°	580.7	576.9	561.4	514.3	455.1	386.6	279.5	30.3	1.3	4.0	7.2
55°	470.6	464.8	453.2	424.3	390.6	330.4	226.0	16.9	1.3	4.0	7.0
57.5°	327.9	331.2	335.2	329.3	313.8	260.2	171.6	7.5	1.3	3.7	7.0
60°	275.7	273.1	273.3	269.6	243.9	189.8	118.1	2.9	1.3	3.5	6.7
62.5°	164.6	166.5	170.0	170.8	145.4	106.0	61.8	1.3	1.3	3.2	6.4
65°	61.8	64.8	56.8	49.3	39.1	28.6	14.5	1.1	1.6	2.9	5.9
67.5°	1.9	2.1	2.7	2.4	2.4	2.1	1.6	1.1	1.6	2.7	5.6
70°	1.3	1.3	1.3	1.3	1.3	1.1	1.1	1.1	1.3	2.4	5.1
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3	2.1	4.6
75°	0.8	1.1	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.9	3.7
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.6	3.2
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	1.1	1.3	2.7
82.5°	0.5	0.5	0.5	0.3	0.5	0.5	0.5	0.5	1.1	1.1	2.1
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.8	1.1	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°	18.7	18.7	18.7
2.5°	17.7	17.7	17.7
5°	17.1	17.1	17.1
7.5°	16.6	16.6	16.6
10°	16.1	16.1	16.1
12.5°	15.5	15.5	15.8
15°	14.7	15.3	15.3
17.5°	14.2	14.7	15.0
20°	13.7	14.2	14.5
22.5°	12.9	13.7	14.2
25°	12.3	13.4	13.7
27.5°	11.8	13.1	13.7
30°	11.5	12.9	13.4
32.5°	11.0	12.6	13.1
35°	10.7	12.6	13.1
37.5°	10.7	12.3	13.1
40°	10.4	12.3	13.1
42.5°	10.4	12.3	13.1
45°	10.4	12.3	13.1
47.5°	10.2	12.3	13.4
50°	10.2	12.6	13.4
52.5°	10.2	12.6	13.4
55°	10.2	12.6	13.1
57.5°	9.9	12.3	13.1
60°	9.9	12.3	13.1
62.5°	9.4	12.0	12.9
65°	9.1	11.8	12.6
67.5°	8.6	11.5	12.0
70°	8.0	10.7	11.5
72.5°	7.2	10.2	11.0
75°	6.4	9.4	9.9
77.5°	5.6	8.3	8.8
80°	4.6	7.0	7.5
82.5°	3.5	5.4	5.6
85°	2.4	3.5	3.7
87.5°	1.1	1.6	1.9
90°	0.0	0.0	0.0

(END OF REPORT)