

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: P1335672

Luminaire Tested: P3A02R409030DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335672
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: P3A02R409030DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 90CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

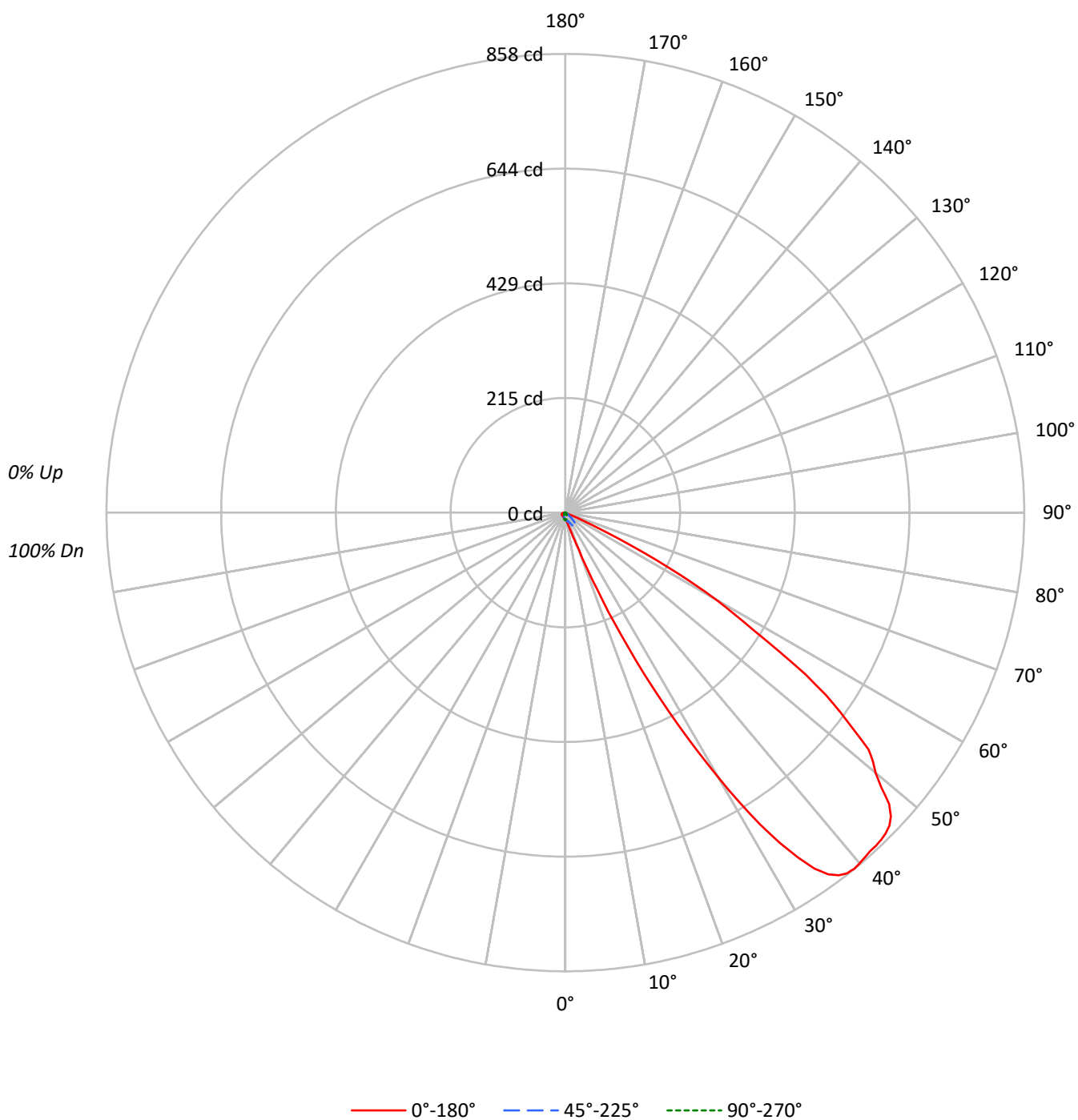
Lumens per Lamp: N/A
Luminaire Lumens: 265.0 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.74 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	91	81	73	66	89	79	72	66	76	70	65		73	68	64		71
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48
7	62	48	39	32	60	47	38	32	45	37	32		44	37	31		42
8	57	42	33	27	55	42	33	27	40	32	27		39	32	27		38
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34
10	48	34	25	20	47	33	25	20	32	25	20		31	24	20		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2982	2982	2982	2982	2982
5°	3324	3214	2950	2685	2619
10°	4008	3407	2716	2449	2382
15°	6583	3700	2316	2157	2202
20°	17385	4364	1937	1937	2100
25°	67020	5420	1524	1766	2057
30°	144554	7216	1241	1722	2026
35°	217580	8539	1044	1686	2088
40°	245145	8559	916	1746	2233
45°	262849	6636	837	1799	2419
50°	258380	4162	751	1910	2661
55°	227280	2064	726	2141	2982
60°	143892	439	833	2368	3289
65°	29419	104	882	2542	3684
70°	641	128	962	2821	4231
75°	593	424	1017	3135	4745
80°	631	253	1263	3410	5556
85°	503	503	2516	3774	6038

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 267607 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	0.5
10°-20°	4.2	1.6
20°-30°	20.6	7.8
30°-40°	66.9	25.3
40°-50°	92.3	34.8
50°-60°	64.3	24.3
60°-70°	12.2	4.6
70°-80°	2.2	0.8
80°-90°	1.0	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°	26.1	9.8
0°-40°	93.0	35.1
0°-60°	249.6	94.2
0°-90°	265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	265.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	15	15	13	12	12	2
15°	29	16	10	10	10	11
25°	277	22	6	7	8	143
35°	813	32	4	6	8	491
45°	848	21	3	6	8	645
55°	594	5	2	6	8	508
65°	57	0	2	5	7	100
75°	1	0	1	4	6	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°	35°	45°	67.5°	90°
0°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
2.5°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	13.9	13.6
5°	15.1	15.1	15.1	15.1	14.8	14.8	14.8	14.6	14.6	14.1	13.4
7.5°	16.1	16.1	16.1	16.1	15.8	15.6	15.3	15.3	15.1	13.9	12.9
10°	18.0	18.0	17.8	17.5	17.3	16.8	16.5	16.1	15.3	13.6	12.2
12.5°	21.9	21.4	21.2	20.7	20.0	19.0	18.0	17.3	15.6	13.1	11.4
15°	29.0	28.5	27.5	26.0	24.6	22.6	20.9	19.2	16.3	12.4	10.2
17.5°	41.4	39.9	38.5	36.0	32.4	29.0	25.3	22.1	17.3	11.7	9.2
20°	74.5	73.5	64.7	57.9	47.0	39.2	31.9	26.5	18.7	11.0	8.3
22.5°	153.6	143.3	129.0	105.6	82.3	60.6	44.0	33.3	20.2	10.0	7.3
25°	277.0	260.9	230.0	185.0	136.5	96.6	63.8	43.6	22.4	9.0	6.3
27.5°	419.3	403.0	355.1	293.0	213.9	145.8	91.0	57.7	25.3	8.0	5.6
30°	570.9	557.1	496.2	410.3	301.5	204.2	121.9	72.0	28.5	7.1	4.9
31°	632.0	614.3	548.5	457.0	342.7	228.3	134.3	78.1	29.7	6.8	4.6
32°	688.2	668.0	599.9	501.8	376.0	254.3	148.0	83.5	30.7	6.3	4.4
33°	736.7	713.1	647.4	544.2	412.7	278.7	162.1	88.6	31.4	5.8	4.1
34°	777.8	757.4	686.8	586.8	445.4	302.0	176.0	93.7	31.9	5.6	3.9
35°	812.8	794.3	724.5	619.1	477.2	324.6	188.6	98.6	31.9	5.1	3.9
36°	836.4	820.4	757.1	652.2	504.0	343.9	199.3	102.9	31.9	4.6	3.7
37°	849.3	833.8	778.5	679.5	530.3	362.9	209.1	106.4	31.6	4.4	3.4
38°	855.9	842.3	794.3	701.6	548.5	376.5	217.6	109.0	31.4	3.9	3.4
39°	857.6	846.2	804.3	717.7	566.3	390.1	223.7	110.5	30.7	3.7	3.2
40°	856.4	846.4	809.7	732.0	579.9	400.8	228.0	111.0	29.9	3.2	3.2
41°	854.0	846.2	813.6	742.0	590.9	407.6	229.7	110.0	29.0	2.7	2.9
42°	851.8	843.3	815.3	748.8	598.4	411.0	229.5	108.1	27.5	2.4	2.9
43°	851.8	842.0	815.5	753.2	602.1	411.3	226.6	104.4	25.6	2.2	2.7
44°	850.3	841.3	816.7	756.1	603.1	409.1	221.9	100.5	23.4	1.9	2.7
45°	847.6	838.2	816.5	756.4	601.4	403.7	214.4	95.4	21.4	1.5	2.7
46°	842.5	834.0	814.3	754.7	596.2	396.0	205.4	90.3	19.2	1.2	2.4
47°	832.3	825.7	808.5	748.8	588.5	384.5	194.7	84.4	17.5	1.0	2.4
48°	814.8	810.2	798.5	735.9	573.6	370.4	183.3	78.1	15.8	1.0	2.4
49°	782.7	779.0	772.2	715.3	554.6	353.1	170.8	71.1	14.1	0.7	2.4
50°	757.4	753.5	739.6	680.5	527.4	331.2	157.2	64.0	12.2	0.5	2.2
51°	740.6	734.2	712.3	640.1	487.7	302.0	142.4	56.9	10.2	0.5	2.2
52°	719.4	709.9	682.6	603.8	451.4	272.8	126.3	49.9	9.0	0.5	2.2
53°	675.1	671.7	644.7	564.9	415.2	244.8	109.8	44.0	7.8	0.5	2.2
54°	636.4	631.3	594.5	510.8	375.8	213.7	92.7	38.9	6.6	0.5	2.2
55°	594.5	584.6	552.0	465.3	329.5	185.0	76.4	33.6	5.4	0.5	1.9
56°	541.7	533.0	497.9	416.6	286.9	155.8	64.0	27.5	4.1	0.5	1.9
57°	477.5	469.5	442.4	356.8	242.6	127.3	52.1	22.1	3.2	0.5	1.9
58°	415.4	406.4	375.5	299.3	195.9	101.0	43.6	18.0	2.4	0.5	1.9
59°	367.7	355.6	315.6	251.4	153.3	76.7	34.6	14.4	1.7	0.5	1.9
60°	328.1	318.1	276.7	209.3	120.2	56.5	25.6	11.0	1.0	0.5	1.9
62.5°	190.1	187.4	150.2	107.8	56.7	26.3	12.7	5.1	0.5	0.7	1.9
65°	56.7	49.4	38.5	22.9	14.6	8.8	4.6	1.7	0.2	0.7	1.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.0	0.5	0.2	0.7	1.7
70°	1.0	0.7	0.7	0.7	0.7	0.5	0.5	0.2	0.2	0.7	1.5
72.5°	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.2	0.5	0.7	1.2
75°	0.7	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.7	1.2
77.5°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.5	0.7	1.2
80°	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.0
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.0
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.7	0.7
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°	13.6	13.6	13.6	13.6
2.5°	13.1	12.9	12.7	12.7
5°	12.7	12.2	12.2	11.9
7.5°	11.9	11.4	11.4	11.4
10°	11.2	11.0	11.0	10.7
12.5°	10.2	10.2	10.2	10.2
15°	9.5	9.5	9.7	9.7
17.5°	8.5	8.8	9.2	9.5
20°	7.8	8.3	8.8	9.0
22.5°	7.3	7.8	8.5	8.8
25°	6.6	7.3	8.3	8.5
27.5°	6.1	7.1	7.8	8.3
30°	5.6	6.8	7.5	8.0
31°	5.6	6.6	7.5	8.0
32°	5.4	6.3	7.5	7.8
33°	5.4	6.3	7.5	7.8
34°	5.1	6.3	7.3	7.8
35°	5.1	6.3	7.3	7.8
36°	4.9	6.1	7.3	7.8
37°	4.9	6.1	7.3	7.8
38°	4.6	6.1	7.3	7.8
39°	4.6	6.1	7.3	7.8
40°	4.6	6.1	7.3	7.8
41°	4.4	6.1	7.3	7.8
42°	4.4	6.1	7.3	7.8
43°	4.4	5.8	7.3	7.8
44°	4.4	5.8	7.3	7.8
45°	4.1	5.8	7.3	7.8
46°	4.1	5.8	7.3	7.8
47°	4.1	5.8	7.3	7.8
48°	4.1	5.8	7.3	7.8
49°	4.1	5.8	7.3	7.8
50°	3.9	5.6	7.3	7.8
51°	3.9	5.6	7.3	7.8
52°	3.9	5.6	7.3	7.8
53°	3.9	5.6	7.3	7.8
54°	3.7	5.6	7.3	7.8
55°	3.7	5.6	7.3	7.8
56°	3.7	5.6	7.3	7.5
57°	3.7	5.6	7.1	7.5
58°	3.7	5.4	7.1	7.5
59°	3.7	5.4	7.1	7.5
60°	3.7	5.4	7.1	7.5
62.5°	3.4	5.4	6.8	7.3
65°	3.2	4.9	6.8	7.1



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	3.2	4.6	6.3	6.8
70°	2.9	4.4	6.1	6.6
72.5°	2.4	4.1	5.6	6.1
75°	2.2	3.7	5.1	5.6
77.5°	1.9	3.2	4.6	4.9
80°	1.7	2.7	3.9	4.4
82.5°	1.2	1.9	3.2	3.4
85°	1.0	1.5	2.2	2.4
87.5°	0.7	0.7	1.2	1.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)