

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: P1335399

Luminaire Tested: P3A02R359727DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359727DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

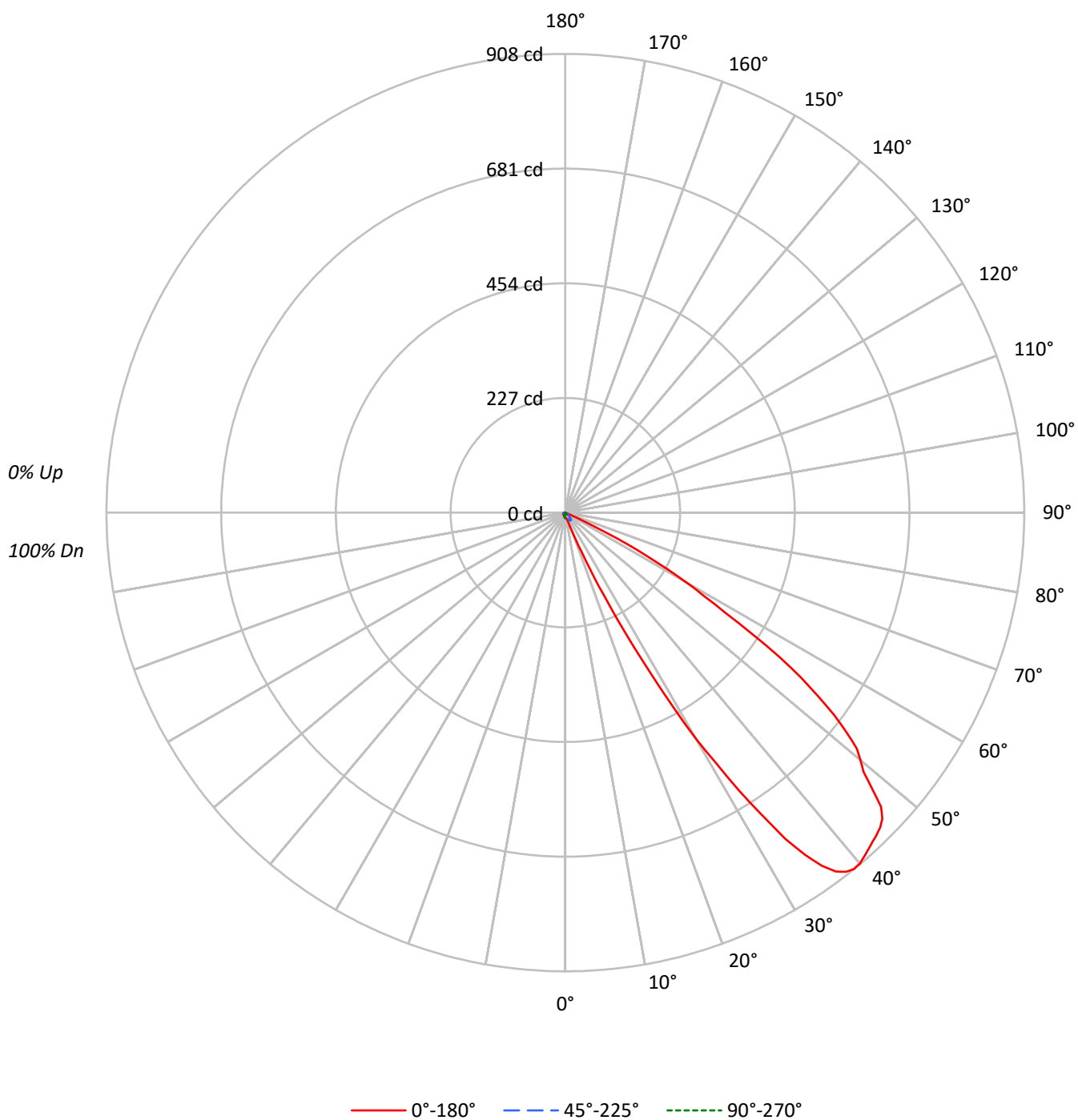
Lumens per Lamp: N/A
Luminaire Lumens: 226.0 lumens
Efficiency: N/A
Efficacy: 62.8 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2281	2281	2281	2281	2281
5°	2465	2421	2245	2025	1981
10°	2583	2360	2004	1737	1737
15°	3700	2316	1612	1476	1521
20°	9287	2474	1283	1283	1423
25°	43091	3170	992	1186	1331
30°	131007	4279	785	1089	1342
35°	221408	4979	642	1044	1312
40°	259515	4895	515	1059	1403
45°	273300	3473	434	1147	1520
50°	260153	2081	409	1194	1672
55°	217990	841	459	1338	1950
60°	122052	175	526	1535	2149
65°	21066	104	519	1712	2439
70°	385	128	641	1859	2757
75°	339	169	847	2033	3135
80°	253	253	1010	2273	3662
85°	0	503	2013	2516	4026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 275262 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.4
10°-20°	2.7	1.2
20°-30°	13.9	6.1
30°-40°	59.9	26.5
40°-50°	85.4	37.8
50°-60°	52.9	23.4
60°-70°	8.0	3.6
70°-80°	1.5	0.7
80°-90°	0.7	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°	17.5	7.7
0°-40°	77.4	34.2
0°-60°	215.7	95.4
0°-90°	226.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	226.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	11	11	10	9	9	1
15°	16	10	7	6	7	6
25°	178	13	4	5	6	107
35°	827	19	2	4	5	497
45°	881	11	1	4	5	666
55°	570	2	1	4	5	486
65°	41	0	1	3	5	83
75°	0	0	1	2	4	0
85°	0	0	1	1	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°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
2.5°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.4	10.2
5°	11.2	11.2	11.0	11.0	11.0	11.0	11.0	11.0	10.6	10.2	9.6
7.5°	11.4	11.4	11.2	11.2	11.2	11.2	11.0	10.8	10.4	9.6	9.0
10°	11.6	11.6	11.6	11.6	11.4	11.2	11.0	10.6	10.0	9.0	8.4
12.5°	13.1	13.1	12.9	12.4	12.0	11.6	11.2	10.4	9.2	8.2	7.5
15°	16.3	16.1	15.7	15.1	14.3	13.3	12.4	10.2	8.4	7.1	6.7
17.5°	22.8	22.4	21.8	19.8	18.0	16.1	14.5	10.2	7.5	6.3	5.9
20°	39.8	40.0	35.7	30.8	26.7	22.2	18.2	10.6	6.7	5.5	5.3
22.5°	83.0	79.8	69.6	57.7	44.1	34.1	25.7	11.6	5.9	4.7	4.7
25°	178.1	165.7	141.0	106.5	75.1	53.2	37.3	13.1	5.3	4.1	4.3
27.5°	325.2	314.0	264.4	199.1	132.2	80.4	50.6	14.9	4.7	3.5	3.9
30°	517.4	486.4	421.7	326.4	220.9	123.0	67.9	16.9	3.9	3.1	3.7
31°	577.4	563.1	484.3	377.6	258.9	146.1	75.3	17.5	3.7	3.1	3.5
32°	648.6	623.3	552.7	433.7	297.5	166.7	84.1	18.2	3.5	2.7	3.5
33°	712.2	687.7	601.8	483.1	336.4	190.1	93.4	18.4	3.1	2.7	3.3
34°	779.1	745.7	660.6	534.7	376.4	215.4	102.0	18.6	2.9	2.4	3.3
35°	827.1	793.6	711.2	575.5	410.9	237.9	111.8	18.6	2.7	2.4	3.1
36°	864.2	834.8	754.8	617.5	445.2	258.1	119.6	18.6	2.2	2.2	3.1
37°	889.7	861.8	784.2	653.7	471.3	276.0	126.5	18.6	2.0	2.2	3.1
38°	902.1	878.9	812.6	680.0	496.6	290.1	132.0	18.2	1.8	2.0	2.9
39°	907.5	888.5	829.9	702.2	515.5	302.3	136.1	17.7	1.6	2.0	2.9
40°	906.6	890.1	839.7	717.5	530.8	310.7	138.3	17.1	1.4	1.8	2.9
41°	901.9	887.7	844.8	730.6	540.0	316.4	138.9	16.5	1.2	1.8	2.7
42°	896.6	883.6	846.5	737.5	545.9	318.3	137.3	15.7	1.2	1.6	2.7
43°	891.1	879.1	846.5	739.8	547.4	317.0	134.6	14.3	1.0	1.6	2.7
44°	886.6	875.2	843.8	739.1	544.3	312.3	129.8	12.6	0.8	1.6	2.7
45°	881.3	870.1	840.3	735.3	538.4	304.4	123.6	11.2	0.6	1.4	2.7
46°	872.0	863.2	834.2	727.3	529.0	293.4	115.9	10.2	0.4	1.4	2.4
47°	853.8	846.2	822.4	715.5	516.6	280.3	107.9	9.2	0.4	1.4	2.4
48°	817.3	817.1	798.7	693.4	496.8	264.0	99.6	8.2	0.4	1.4	2.4
49°	782.0	778.3	755.5	654.7	468.4	244.4	90.8	7.3	0.2	1.4	2.4
50°	762.6	754.6	717.1	609.0	432.1	217.3	81.4	6.1	0.2	1.2	2.4
51°	742.4	731.0	686.7	567.8	388.8	191.2	71.2	4.9	0.2	1.2	2.2
52°	705.9	695.1	645.5	528.4	346.8	164.4	61.4	4.1	0.2	1.2	2.4
53°	666.5	651.0	597.1	485.1	309.9	140.8	51.4	3.5	0.2	1.2	2.2
54°	616.9	610.0	548.2	432.1	266.6	117.9	42.2	2.9	0.2	1.2	2.2
55°	570.2	560.0	495.8	377.8	227.5	96.7	35.3	2.2	0.2	1.2	2.2
56°	510.6	495.3	435.2	328.1	187.7	77.9	29.8	1.8	0.2	1.2	2.2
57°	439.6	423.3	375.8	272.8	147.3	59.4	24.9	1.4	0.2	1.2	2.2
58°	371.9	357.8	306.8	210.5	111.0	41.2	20.6	1.0	0.2	1.0	2.2
59°	321.3	305.8	255.2	162.0	77.1	30.4	15.5	0.8	0.2	1.2	2.2
60°	278.3	258.3	205.4	125.5	55.1	21.8	11.4	0.4	0.4	1.2	2.2
62.5°	160.4	141.6	98.1	51.0	22.6	11.2	5.5	0.2	0.4	1.2	2.2
65°	40.6	36.1	23.5	11.0	6.3	3.9	2.0	0.2	0.4	1.0	2.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.4	1.4	1.4	1.2	1.0	0.8	0.4	0.2	0.4	1.0	2.0
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.2	0.4	1.0	1.8
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	1.0	1.6
75°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	1.0	1.6
77.5°	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.4
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.6	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	0.6
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°	10.4	10.4	10.4
2.5°	9.8	9.8	9.8
5°	9.2	9.2	9.0
7.5°	8.6	8.4	8.4
10°	7.8	7.8	7.8
12.5°	7.1	7.1	7.1
15°	6.5	6.7	6.7
17.5°	5.9	6.3	6.3
20°	5.5	5.9	6.1
22.5°	5.1	5.5	5.7
25°	4.9	5.3	5.5
27.5°	4.5	5.1	5.5
30°	4.3	4.9	5.3
31°	4.3	4.9	5.1
32°	4.1	4.9	5.1
33°	4.1	4.9	5.1
34°	4.1	4.7	5.1
35°	3.9	4.7	4.9
36°	3.9	4.7	4.9
37°	3.9	4.7	5.1
38°	3.9	4.7	4.9
39°	3.7	4.7	4.9
40°	3.7	4.7	4.9
41°	3.7	4.7	4.9
42°	3.7	4.7	4.9
43°	3.7	4.7	4.9
44°	3.7	4.5	4.9
45°	3.7	4.5	4.9
46°	3.7	4.7	4.9
47°	3.7	4.7	5.1
48°	3.7	4.5	4.9
49°	3.5	4.5	4.9
50°	3.5	4.5	4.9
51°	3.5	4.7	5.1
52°	3.5	4.7	5.1
53°	3.5	4.7	5.1
54°	3.5	4.7	4.9
55°	3.5	4.7	5.1
56°	3.5	4.7	4.9
57°	3.5	4.7	4.9
58°	3.5	4.5	4.9
59°	3.5	4.5	4.9
60°	3.5	4.5	4.9
62.5°	3.3	4.5	4.9
65°	3.3	4.3	4.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	3.1	4.3	4.5
70°	2.9	4.1	4.3
72.5°	2.7	3.9	4.1
75°	2.4	3.5	3.7
77.5°	2.0	3.1	3.5
80°	1.8	2.7	2.9
82.5°	1.4	2.2	2.4
85°	1.0	1.6	1.6
87.5°	0.4	0.8	0.8
90°	0.0	0.0	0.0

(END OF REPORT)