

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: P1345509

Luminaire Tested: P3A13R359727DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345509
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: P3A13R359727DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

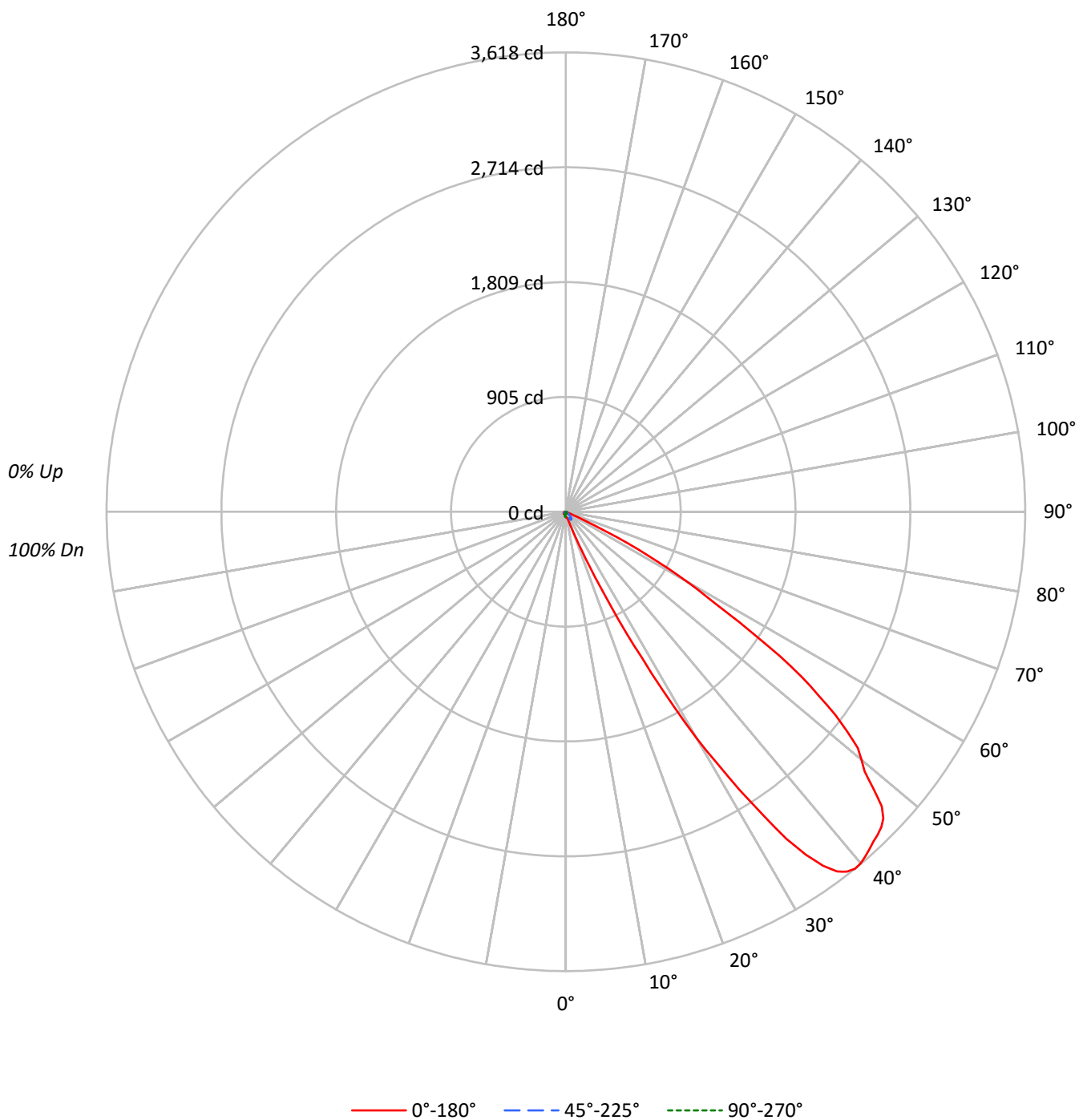
Lumens per Lamp: N/A
Luminaire Lumens: 901.0 lumens
Efficiency: N/A
Efficacy: 61.7 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	0
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	100	97	94		96	93	91		92	90	89	87
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	79	72	66	76	70	65		74	68	64		71	67	63	61
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	52	50
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55	49	44	42
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	42	33	27	55	41	33	27	40	32	27		39	32	26		38	31	26	24
9	52	38	29	23	50	37	29	23	36	28	23		35	28	22		34	27	22	20
10	48	34	25	19	46	33	25	19	32	25	19		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	9100	9100	9100	9100	9100
5°	9839	9663	8959	8056	7880
10°	10332	9419	7971	6880	6880
15°	14779	9240	6470	5902	6084
20°	37010	9871	5134	5134	5694
25°	171808	12606	3944	4718	5323
30°	522258	17091	3089	4330	5343
35°	882662	19809	2623	4149	5220
40°	1034653	19551	2090	4179	5582
45°	1089632	13862	1768	4528	6047
50°	1037168	8324	1672	4708	6652
55°	869092	3403	1873	5276	7761
60°	486540	702	2149	6052	8552
65°	84004	415	2127	6745	9703
70°	1539	513	2629	7309	10963
75°	1356	678	3474	8303	12370
80°	1010	1010	4167	9218	14396
85°	0	2013	8303	10315	16354

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1097321 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.7	0.4
10°-20°	10.6	1.2
20°-30°	55.3	6.1
30°-40°	238.8	26.5
40°-50°	340.6	37.8
50°-60°	210.9	23.4
60°-70°	32.1	3.6
70°-80°	6.0	0.7
80°-90°	3.0	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°	69.6	7.7
0°-40°	308.4	34.2
0°-60°	859.9	95.4
0°-90°	901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	901.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	42	42	42	42	42	
5°	45	44	41	37	36	4
15°	65	41	28	26	27	23
25°	710	52	16	20	22	425
35°	3297	74	10	16	20	1980
45°	3514	45	6	15	20	2655
55°	2273	9	5	14	20	1936
65°	162	1	4	13	19	331
75°	2	1	4	10	15	2
85°	0	1	3	4	6	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°	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
2.5°	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	41.5	40.7
5°	44.7	44.7	43.9	43.9	43.9	43.9	43.9	43.9	42.3	40.7	38.2
7.5°	45.5	45.5	44.7	44.7	44.7	44.7	43.9	43.1	41.5	38.2	35.8
10°	46.4	46.4	46.4	46.4	45.5	44.7	43.9	42.3	39.9	35.8	33.3
12.5°	52.1	52.1	51.2	49.6	48.0	46.4	44.7	41.5	36.6	32.5	30.1
15°	65.1	64.3	62.6	60.2	56.9	52.9	49.6	40.7	33.3	28.5	26.8
17.5°	91.1	89.5	87.0	78.9	71.6	64.3	57.7	40.7	30.1	25.2	23.6
20°	158.6	159.4	142.3	122.8	106.5	88.7	72.4	42.3	26.8	22.0	21.1
22.5°	331.0	318.0	277.4	230.2	175.7	135.8	102.5	46.4	23.6	18.7	18.7
25°	710.1	660.4	562.0	424.6	299.3	212.3	148.8	52.1	21.1	16.3	17.1
27.5°	1296.5	1251.7	1054.1	793.8	527.0	320.5	201.7	59.4	18.7	13.8	15.5
30°	2062.6	1939.0	1681.2	1301.4	880.9	490.4	270.8	67.5	15.5	12.2	14.6
31°	2301.8	2244.8	1930.9	1505.5	1032.1	582.4	300.1	69.9	14.6	12.2	13.8
32°	2585.6	2484.8	2203.4	1729.2	1185.9	664.5	335.1	72.4	13.8	10.6	13.8
33°	2839.4	2741.8	2399.4	1926.0	1341.2	758.0	372.5	73.2	12.2	10.6	13.0
34°	3106.2	2972.8	2633.6	2131.8	1500.6	858.9	406.7	74.0	11.4	9.8	13.0
35°	3297.3	3163.9	2835.3	2294.4	1638.1	948.4	445.7	74.0	10.6	9.8	12.2
36°	3445.3	3328.2	3009.4	2462.0	1774.7	1028.9	476.6	74.0	8.9	8.9	12.2
37°	3547.0	3435.6	3126.5	2606.0	1878.8	1100.5	504.3	74.0	8.1	8.9	12.2
38°	3596.6	3503.9	3239.6	2710.9	1979.7	1156.6	526.2	72.4	7.3	8.1	11.4
39°	3617.8	3542.1	3308.7	2799.5	2055.3	1205.4	542.5	70.8	6.5	8.1	11.4
40°	3614.5	3548.6	3347.7	2860.5	2116.3	1238.7	551.4	68.3	5.7	7.3	11.4
41°	3595.8	3538.9	3368.1	2912.6	2152.9	1261.5	553.9	65.9	4.9	7.3	10.6
42°	3574.7	3522.6	3374.6	2940.2	2176.5	1268.8	547.4	62.6	4.9	6.5	10.6
43°	3552.7	3504.7	3374.6	2949.2	2182.2	1263.9	536.8	56.9	4.1	6.5	10.6
44°	3534.8	3489.3	3364.0	2946.8	2170.0	1245.2	517.3	50.4	3.3	6.5	10.6
45°	3513.7	3468.9	3350.2	2931.3	2146.4	1213.5	492.9	44.7	2.4	5.7	10.6
46°	3476.2	3441.3	3325.8	2899.6	2109.0	1169.6	462.0	40.7	1.6	5.7	9.8
47°	3403.9	3373.8	3278.6	2852.4	2059.4	1117.5	430.3	36.6	1.6	5.7	9.8
48°	3258.3	3257.4	3184.2	2764.6	1980.5	1052.5	396.9	32.5	1.6	5.7	9.8
49°	3117.6	3102.9	3011.8	2610.0	1867.4	974.4	361.9	29.3	0.8	5.7	9.8
50°	3040.3	3008.6	2858.9	2427.8	1722.7	866.2	324.5	24.4	0.8	4.9	9.8
51°	2959.8	2914.2	2737.7	2263.5	1550.2	762.1	283.9	19.5	0.8	4.9	8.9
52°	2814.2	2771.1	2573.4	2106.6	1382.7	655.6	244.8	16.3	0.8	4.9	9.8
53°	2657.2	2595.4	2380.7	1934.1	1235.5	561.2	205.0	13.8	0.8	4.9	8.9
54°	2459.6	2431.9	2185.5	1722.7	1063.0	470.1	168.4	11.4	0.8	4.9	8.9
55°	2273.3	2232.6	1976.4	1506.3	906.9	385.5	140.7	8.9	0.8	4.9	8.9
56°	2035.8	1974.8	1734.9	1307.9	748.3	310.7	118.7	7.3	0.8	4.9	8.9
57°	1752.8	1687.7	1498.2	1087.4	587.2	236.7	99.2	5.7	0.8	4.9	8.9
58°	1482.7	1426.6	1223.3	839.4	442.5	164.3	82.1	4.1	0.8	4.1	8.9
59°	1281.0	1219.2	1017.5	645.8	307.4	121.2	61.8	3.3	0.8	4.9	8.9
60°	1109.4	1029.7	819.0	500.2	219.6	87.0	45.5	1.6	1.6	4.9	8.9
62.5°	639.3	564.5	391.2	203.3	90.3	44.7	22.0	0.8	1.6	4.9	8.9
65°	161.9	144.0	93.5	43.9	25.2	15.5	8.1	0.8	1.6	4.1	8.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	5.7	5.7	5.7	4.9	4.1	3.3	1.6	0.8	1.6	4.1	8.1
70°	2.4	2.4	2.4	1.6	1.6	0.8	0.8	0.8	1.6	4.1	7.3
72.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	2.4	4.1	6.5
75°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	2.4	4.1	6.5
77.5°	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	2.4	3.3	5.7
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.4	3.3	4.9
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.4	3.3	4.1
85°	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8	2.4	3.3	3.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.4	3.3	2.4
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°	41.5	41.5	41.5
2.5°	39.0	39.0	39.0
5°	36.6	36.6	35.8
7.5°	34.2	33.3	33.3
10°	30.9	30.9	30.9
12.5°	28.5	28.5	28.5
15°	26.0	26.8	26.8
17.5°	23.6	25.2	25.2
20°	22.0	23.6	24.4
22.5°	20.3	22.0	22.8
25°	19.5	21.1	22.0
27.5°	17.9	20.3	22.0
30°	17.1	19.5	21.1
31°	17.1	19.5	20.3
32°	16.3	19.5	20.3
33°	16.3	19.5	20.3
34°	16.3	18.7	20.3
35°	15.5	18.7	19.5
36°	15.5	18.7	19.5
37°	15.5	18.7	20.3
38°	15.5	18.7	19.5
39°	14.6	18.7	19.5
40°	14.6	18.7	19.5
41°	14.6	18.7	19.5
42°	14.6	18.7	19.5
43°	14.6	18.7	19.5
44°	14.6	17.9	19.5
45°	14.6	17.9	19.5
46°	14.6	18.7	19.5
47°	14.6	18.7	20.3
48°	14.6	17.9	19.5
49°	13.8	17.9	19.5
50°	13.8	17.9	19.5
51°	13.8	18.7	20.3
52°	13.8	18.7	20.3
53°	13.8	18.7	20.3
54°	13.8	18.7	19.5
55°	13.8	18.7	20.3
56°	13.8	18.7	19.5
57°	13.8	18.7	19.5
58°	13.8	17.9	19.5
59°	13.8	17.9	19.5
60°	13.8	17.9	19.5
62.5°	13.0	17.9	19.5
65°	13.0	17.1	18.7

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	12.2	17.1	17.9
70°	11.4	16.3	17.1
72.5°	10.6	15.5	16.3
75°	9.8	13.8	14.6
77.5°	8.1	12.2	13.8
80°	7.3	10.6	11.4
82.5°	5.7	8.9	9.8
85°	4.1	6.5	6.5
87.5°	1.6	3.3	3.3
90°	0.0	0.0	0.0

(END OF REPORT)