

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: P1345605

Luminaire Tested: P3A13R359835DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345605
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: P3A13R359835DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

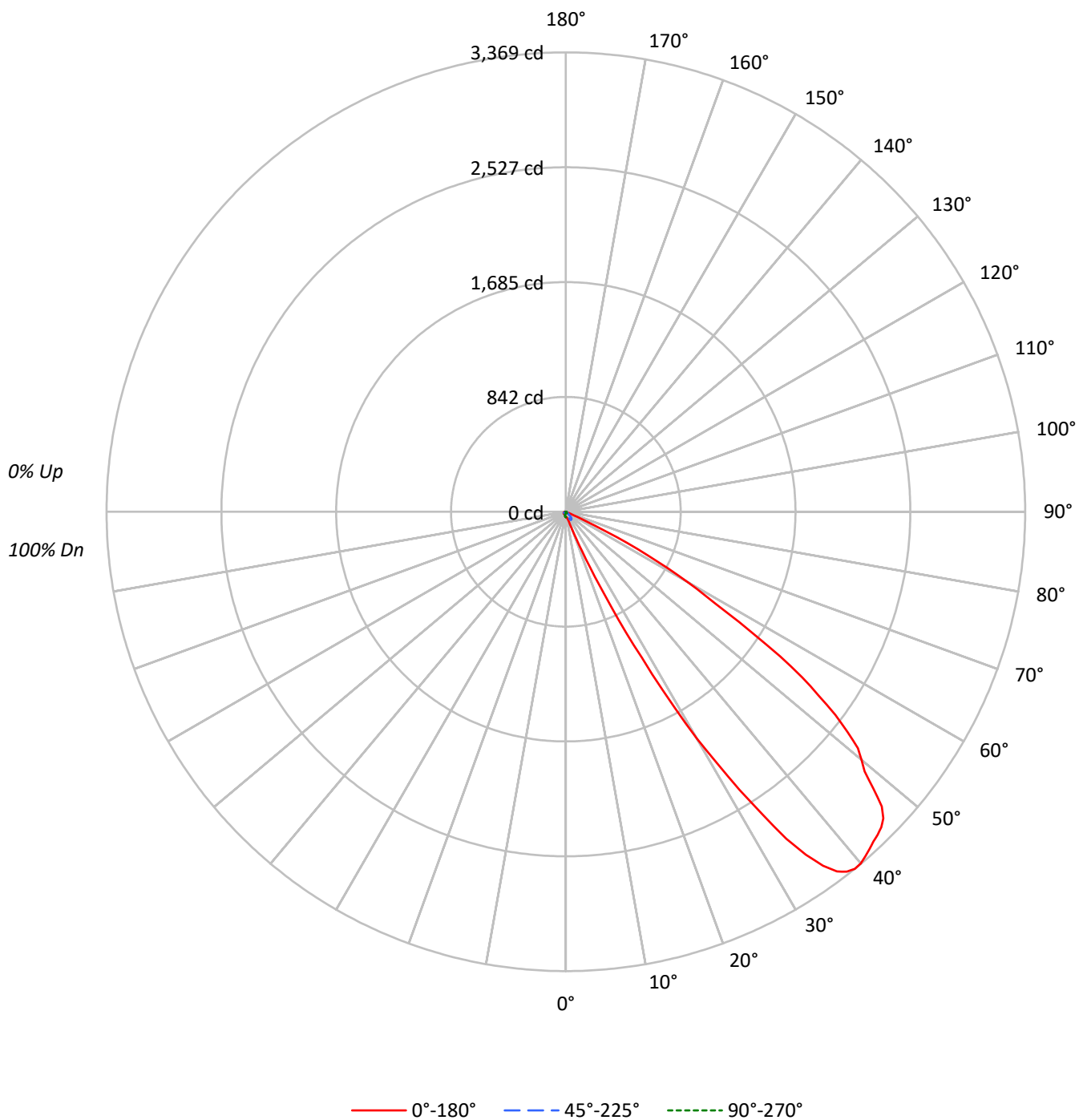
Lumens per Lamp: N/A
Luminaire Lumens: 839.0 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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		100	97	94		96	93	91		92	90	89
2	100	93	86	81		98	91	85	80		87	83	78		84	80	77		81	78	75
3	91	81	73	67		89	79	72	66		76	70	65		74	68	64		71	67	63
4	83	71	62	55		80	69	61	55		67	60	54		64	58	53		62	57	52
5	75	62	52	46		73	61	52	45		58	51	45		56	50	44		55	49	44
6	68	54	45	38		66	53	44	38		51	43	38		50	43	37		48	42	37
7	62	48	38	32		60	47	38	32		45	37	32		44	37	31		42	36	31
8	57	42	33	27		55	41	33	27		40	32	27		39	32	26		38	31	26
9	52	38	29	23		50	37	29	23		36	28	23		35	28	22		34	27	22
10	48	34	25	19		46	33	25	19		32	25	19		31	24	19		30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8464	8464	8464	8464	8464
5°	9179	9003	8342	7506	7330
10°	9619	8773	7415	6413	6413
15°	13757	8604	6016	5494	5675
20°	34466	9194	4760	4760	5297
25°	159977	11735	3653	4403	4936
30°	486328	15927	2887	4026	4988
35°	821922	18444	2436	3855	4872
40°	963462	18206	1947	3893	5210
45°	1014648	12932	1644	4217	5644
50°	965802	7744	1535	4401	6209
55°	809300	3173	1720	4932	7226
60°	453078	658	1974	5657	7982
65°	78193	415	1972	6278	9028
70°	1475	513	2436	6796	10194
75°	1271	678	3219	7710	11522
80°	1010	1010	3788	8587	13386
85°	0	2013	7548	9561	15347

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1021814 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.5	0.4
10°-20°	9.9	1.2
20°-30°	51.5	6.1
30°-40°	222.3	26.5
40°-50°	317.1	37.8
50°-60°	196.4	23.4
60°-70°	29.9	3.6
70°-80°	5.6	0.7
80°-90°	2.8	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°	64.9	7.7
0°-40°	287.2	34.2
0°-60°	800.7	95.4
0°-90°	839.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	839.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	39	39	39	39	39	
5°	42	41	38	34	33	4
15°	61	38	26	24	25	22
25°	661	48	15	18	20	396
35°	3070	69	9	14	18	1844
45°	3272	42	5	14	18	2472
55°	2117	8	4	13	19	1803
65°	151	1	4	12	17	308
75°	2	1	4	9	14	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°	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6
2.5°	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	38.6	37.9
5°	41.7	41.7	40.9	40.9	40.9	40.9	40.9	40.9	39.4	37.9	35.6
7.5°	42.4	42.4	41.7	41.7	41.7	41.7	40.9	40.1	38.6	35.6	33.3
10°	43.2	43.2	43.2	43.2	42.4	41.7	40.9	39.4	37.1	33.3	31.1
12.5°	48.5	48.5	47.7	46.2	44.7	43.2	41.7	38.6	34.1	30.3	28.0
15°	60.6	59.8	58.3	56.0	53.0	49.2	46.2	37.9	31.1	26.5	25.0
17.5°	84.8	83.3	81.0	73.5	66.6	59.8	53.8	37.9	28.0	23.5	22.0
20°	147.7	148.4	132.5	114.4	99.2	82.6	67.4	39.4	25.0	20.4	19.7
22.5°	308.3	296.1	258.3	214.3	163.6	126.5	95.4	43.2	22.0	17.4	17.4
25°	661.2	615.0	523.3	395.4	278.7	197.7	138.6	48.5	19.7	15.1	15.9
27.5°	1207.3	1165.6	981.6	739.2	490.8	298.4	187.8	55.3	17.4	12.9	14.4
30°	1920.7	1805.6	1565.5	1211.8	820.2	456.7	252.2	62.9	14.4	11.4	13.6
31°	2143.4	2090.4	1798.0	1401.9	961.1	542.3	279.5	65.1	13.6	11.4	12.9
32°	2407.7	2313.8	2051.7	1610.2	1104.3	618.8	312.0	67.4	12.9	9.8	12.9
33°	2644.0	2553.1	2234.3	1793.5	1248.9	705.9	346.9	68.2	11.4	9.8	12.1
34°	2892.4	2768.2	2452.4	1985.1	1397.4	799.8	378.7	68.9	10.6	9.1	12.1
35°	3070.4	2946.2	2640.2	2136.6	1525.4	883.1	415.0	68.9	9.8	9.1	11.4
36°	3208.2	3099.2	2802.3	2292.6	1652.6	958.1	443.8	68.9	8.3	8.3	11.4
37°	3302.9	3199.2	2911.4	2426.6	1749.5	1024.7	469.6	68.9	7.6	8.3	11.4
38°	3349.1	3262.8	3016.6	2524.3	1843.5	1077.0	490.0	67.4	6.8	7.6	10.6
39°	3368.8	3298.4	3081.0	2606.9	1913.9	1122.4	505.2	65.9	6.1	7.6	10.6
40°	3365.8	3304.4	3117.4	2663.7	1970.7	1153.5	513.5	63.6	5.3	6.8	10.6
41°	3348.4	3295.3	3136.3	2712.2	2004.8	1174.7	515.8	61.3	4.5	6.8	9.8
42°	3328.7	3280.2	3142.4	2737.9	2026.7	1181.5	509.7	58.3	4.5	6.1	9.8
43°	3308.2	3263.5	3142.4	2746.2	2032.0	1177.0	499.9	53.0	3.8	6.1	9.8
44°	3291.6	3249.1	3132.5	2744.0	2020.7	1159.5	481.7	47.0	3.0	6.1	9.8
45°	3271.9	3230.2	3119.6	2729.6	1998.7	1130.0	459.0	41.7	2.3	5.3	9.8
46°	3237.0	3204.5	3096.9	2700.0	1963.9	1089.1	430.2	37.9	1.5	5.3	9.1
47°	3169.6	3141.6	3053.0	2656.1	1917.7	1040.6	400.7	34.1	1.5	5.3	9.1
48°	3034.1	3033.3	2965.1	2574.3	1844.2	980.0	369.6	30.3	1.5	5.3	9.1
49°	2903.0	2889.4	2804.6	2430.4	1738.9	907.3	337.0	27.3	0.8	5.3	9.1
50°	2831.1	2801.5	2662.2	2260.8	1604.1	806.6	302.2	22.7	0.8	4.5	9.1
51°	2756.1	2713.7	2549.3	2107.8	1443.6	709.7	264.3	18.2	0.8	4.5	8.3
52°	2620.5	2580.4	2396.3	1961.6	1287.5	610.4	228.0	15.1	0.8	4.5	9.1
53°	2474.4	2416.8	2216.8	1801.0	1150.5	522.6	190.9	12.9	0.8	4.5	8.3
54°	2290.3	2264.6	2035.1	1604.1	989.9	437.8	156.8	10.6	0.8	4.5	8.3
55°	2116.9	2079.0	1840.4	1402.7	844.5	359.0	131.0	8.3	0.8	4.5	8.3
56°	1895.7	1838.9	1615.5	1217.9	696.8	289.3	110.6	6.8	0.8	4.5	8.3
57°	1632.1	1571.6	1395.1	1012.6	546.8	220.4	92.4	5.3	0.8	4.5	8.3
58°	1380.7	1328.4	1139.1	781.6	412.0	153.0	76.5	3.8	0.8	3.8	8.3
59°	1192.9	1135.3	947.5	601.4	286.3	112.8	57.6	3.0	0.8	4.5	8.3
60°	1033.1	958.8	762.7	465.8	204.5	81.0	42.4	1.5	1.5	4.5	8.3
62.5°	595.3	525.6	364.3	189.3	84.1	41.7	20.4	0.8	1.5	4.5	8.3
65°	150.7	134.1	87.1	40.9	23.5	14.4	7.6	0.8	1.5	3.8	7.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	5.3	5.3	5.3	4.5	3.8	3.0	1.5	0.8	1.5	3.8	7.6
70°	2.3	2.3	2.3	1.5	1.5	0.8	0.8	0.8	1.5	3.8	6.8
72.5°	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	2.3	3.8	6.1
75°	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	2.3	3.8	6.1
77.5°	1.5	1.5	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.0	5.3
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.0	4.5
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.0	3.8
85°	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8	2.3	3.0	3.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.3	3.0	2.3
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°	38.6	38.6	38.6
2.5°	36.4	36.4	36.4
5°	34.1	34.1	33.3
7.5°	31.8	31.1	31.1
10°	28.8	28.8	28.8
12.5°	26.5	26.5	26.5
15°	24.2	25.0	25.0
17.5°	22.0	23.5	23.5
20°	20.4	22.0	22.7
22.5°	18.9	20.4	21.2
25°	18.2	19.7	20.4
27.5°	16.7	18.9	20.4
30°	15.9	18.2	19.7
31°	15.9	18.2	18.9
32°	15.1	18.2	18.9
33°	15.1	18.2	18.9
34°	15.1	17.4	18.9
35°	14.4	17.4	18.2
36°	14.4	17.4	18.2
37°	14.4	17.4	18.9
38°	14.4	17.4	18.2
39°	13.6	17.4	18.2
40°	13.6	17.4	18.2
41°	13.6	17.4	18.2
42°	13.6	17.4	18.2
43°	13.6	17.4	18.2
44°	13.6	16.7	18.2
45°	13.6	16.7	18.2
46°	13.6	17.4	18.2
47°	13.6	17.4	18.9
48°	13.6	16.7	18.2
49°	12.9	16.7	18.2
50°	12.9	16.7	18.2
51°	12.9	17.4	18.9
52°	12.9	17.4	18.9
53°	12.9	17.4	18.9
54°	12.9	17.4	18.2
55°	12.9	17.4	18.9
56°	12.9	17.4	18.2
57°	12.9	17.4	18.2
58°	12.9	16.7	18.2
59°	12.9	16.7	18.2
60°	12.9	16.7	18.2
62.5°	12.1	16.7	18.2
65°	12.1	15.9	17.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	11.4	15.9	16.7
70°	10.6	15.1	15.9
72.5°	9.8	14.4	15.1
75°	9.1	12.9	13.6
77.5°	7.6	11.4	12.9
80°	6.8	9.8	10.6
82.5°	5.3	8.3	9.1
85°	3.8	6.1	6.1
87.5°	1.5	3.0	3.0
90°	0.0	0.0	0.0

(END OF REPORT)