

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: P1335303

Luminaire Tested: P3A02R359027DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335303
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: P3A02R359027DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

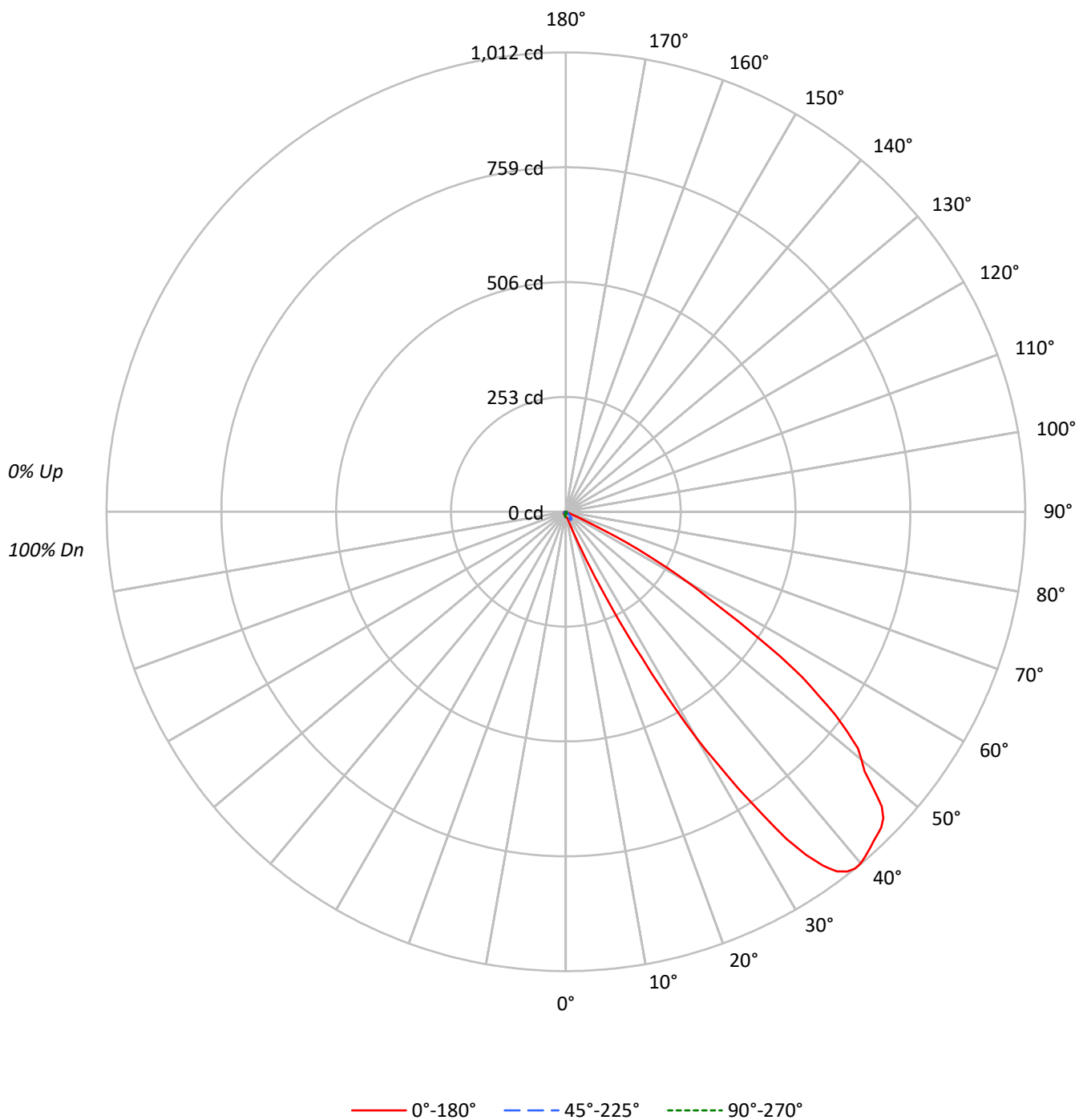
Lumens per Lamp: N/A
Luminaire Lumens: 252.0 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			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°	2544	2544	2544	2544	2544
5°	2751	2707	2509	2245	2201
10°	2895	2627	2227	1915	1915
15°	4132	2588	1816	1657	1703
20°	10361	2754	1423	1423	1587
25°	48051	3532	1089	1331	1476
30°	146073	4786	861	1215	1494
35°	246866	5541	723	1151	1472
40°	289371	5467	573	1174	1574
45°	304745	3876	496	1271	1706
50°	290071	2320	478	1330	1876
55°	243069	956	535	1491	2179
60°	136086	219	614	1710	2412
65°	23504	104	571	1868	2698
70°	449	128	705	2052	3077
75°	424	169	932	2288	3474
80°	253	253	1137	2526	4041
85°	0	503	2264	2768	4529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 306923 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.4
10°-20°	3.0	1.2
20°-30°	15.5	6.1
30°-40°	66.8	26.5
40°-50°	95.3	37.8
50°-60°	59.0	23.4
60°-70°	9.0	3.6
70°-80°	1.7	0.7
80°-90°	0.8	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°	19.5	7.7
0°-40°	86.3	34.2
0°-60°	240.5	95.4
0°-90°	252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	252.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	12	12	11	10	10	1
15°	18	11	8	7	8	7
25°	199	15	4	6	6	119
35°	922	21	3	4	6	554
45°	983	12	2	4	6	742
55°	636	2	1	4	6	542
65°	45	0	1	4	5	93
75°	0	0	1	3	4	1
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°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
2.5°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	11.6	11.4
5°	12.5	12.5	12.3	12.3	12.3	12.3	12.3	12.3	11.8	11.4	10.7
7.5°	12.7	12.7	12.5	12.5	12.5	12.5	12.3	12.1	11.6	10.7	10.0
10°	13.0	13.0	13.0	13.0	12.7	12.5	12.3	11.8	11.1	10.0	9.3
12.5°	14.6	14.6	14.3	13.9	13.4	13.0	12.5	11.6	10.2	9.1	8.4
15°	18.2	18.0	17.5	16.8	15.9	14.8	13.9	11.4	9.3	8.0	7.5
17.5°	25.5	25.0	24.3	22.1	20.0	18.0	16.2	11.4	8.4	7.1	6.6
20°	44.4	44.6	39.8	34.4	29.8	24.8	20.2	11.8	7.5	6.1	5.9
22.5°	92.6	88.9	77.6	64.4	49.1	38.0	28.7	13.0	6.6	5.2	5.2
25°	198.6	184.7	157.2	118.7	83.7	59.4	41.6	14.6	5.9	4.5	4.8
27.5°	362.6	350.1	294.8	222.0	147.4	89.6	56.4	16.6	5.2	3.9	4.3
30°	576.9	542.3	470.2	364.0	246.4	137.2	75.8	18.9	4.3	3.4	4.1
31°	643.8	627.9	540.0	421.1	288.7	162.9	83.9	19.6	4.1	3.4	3.9
32°	723.2	695.0	616.3	483.6	331.7	185.9	93.7	20.2	3.9	3.0	3.9
33°	794.1	766.8	671.1	538.7	375.1	212.0	104.2	20.5	3.4	3.0	3.6
34°	868.8	831.5	736.6	596.2	419.7	240.2	113.7	20.7	3.2	2.7	3.6
35°	922.2	884.9	793.0	641.7	458.2	265.2	124.7	20.7	3.0	2.7	3.4
36°	963.6	930.9	841.7	688.6	496.4	287.8	133.3	20.7	2.5	2.5	3.4
37°	992.1	960.9	874.4	728.9	525.5	307.8	141.0	20.7	2.3	2.5	3.4
38°	1005.9	980.0	906.1	758.2	553.7	323.5	147.2	20.2	2.0	2.3	3.2
39°	1011.8	990.7	925.4	783.0	574.9	337.1	151.7	19.8	1.8	2.3	3.2
40°	1010.9	992.5	936.3	800.1	591.9	346.5	154.2	19.1	1.6	2.0	3.2
41°	1005.7	989.8	942.0	814.6	602.2	352.8	154.9	18.4	1.4	2.0	3.0
42°	999.8	985.2	943.8	822.4	608.7	354.9	153.1	17.5	1.4	1.8	3.0
43°	993.6	980.2	943.8	824.9	610.3	353.5	150.1	15.9	1.1	1.8	3.0
44°	988.6	975.9	940.9	824.2	606.9	348.3	144.7	14.1	0.9	1.8	3.0
45°	982.7	970.2	937.0	819.9	600.3	339.4	137.9	12.5	0.7	1.6	3.0
46°	972.3	962.5	930.2	811.0	589.9	327.1	129.2	11.4	0.5	1.6	2.7
47°	952.0	943.6	917.0	797.8	576.0	312.6	120.3	10.2	0.5	1.6	2.7
48°	911.3	911.1	890.6	773.2	553.9	294.4	111.0	9.1	0.5	1.6	2.7
49°	871.9	867.9	842.4	730.0	522.3	272.5	101.2	8.2	0.2	1.6	2.7
50°	850.3	841.5	799.6	679.0	481.8	242.3	90.8	6.8	0.2	1.4	2.7
51°	827.8	815.1	765.7	633.1	433.6	213.2	79.4	5.5	0.2	1.4	2.5
52°	787.1	775.0	719.8	589.2	386.7	183.4	68.5	4.5	0.2	1.4	2.7
53°	743.2	725.9	665.8	541.0	345.5	157.0	57.3	3.9	0.2	1.4	2.5
54°	687.9	680.2	611.2	481.8	297.3	131.5	47.1	3.2	0.2	1.4	2.5
55°	635.8	624.4	552.8	421.3	253.6	107.8	39.4	2.5	0.2	1.4	2.5
56°	569.4	552.3	485.2	365.8	209.3	86.9	33.2	2.0	0.2	1.4	2.5
57°	490.2	472.0	419.0	304.1	164.2	66.2	27.8	1.6	0.2	1.4	2.5
58°	414.7	399.0	342.1	234.8	123.8	46.0	23.0	1.1	0.2	1.1	2.5
59°	358.3	341.0	284.6	180.6	86.0	33.9	17.3	0.9	0.2	1.4	2.5
60°	310.3	288.0	229.1	139.9	61.4	24.3	12.7	0.5	0.5	1.4	2.5
62.5°	178.8	157.9	109.4	56.9	25.3	12.5	6.1	0.2	0.5	1.4	2.5
65°	45.3	40.3	26.2	12.3	7.1	4.3	2.3	0.2	0.5	1.1	2.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.6	1.6	1.6	1.4	1.1	0.9	0.5	0.2	0.5	1.1	2.3
70°	0.7	0.7	0.7	0.5	0.5	0.2	0.2	0.2	0.5	1.1	2.0
72.5°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.7	1.1	1.8
75°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.7	1.1	1.8
77.5°	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9	1.6
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9	1.4
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9	1.1
85°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.7	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.9	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):

	135°	157.5°	180°
0°	11.6	11.6	11.6
2.5°	10.9	10.9	10.9
5°	10.2	10.2	10.0
7.5°	9.6	9.3	9.3
10°	8.6	8.6	8.6
12.5°	8.0	8.0	8.0
15°	7.3	7.5	7.5
17.5°	6.6	7.1	7.1
20°	6.1	6.6	6.8
22.5°	5.7	6.1	6.4
25°	5.5	5.9	6.1
27.5°	5.0	5.7	6.1
30°	4.8	5.5	5.9
31°	4.8	5.5	5.7
32°	4.5	5.5	5.7
33°	4.5	5.5	5.7
34°	4.5	5.2	5.7
35°	4.3	5.2	5.5
36°	4.3	5.2	5.5
37°	4.3	5.2	5.7
38°	4.3	5.2	5.5
39°	4.1	5.2	5.5
40°	4.1	5.2	5.5
41°	4.1	5.2	5.5
42°	4.1	5.2	5.5
43°	4.1	5.2	5.5
44°	4.1	5.0	5.5
45°	4.1	5.0	5.5
46°	4.1	5.2	5.5
47°	4.1	5.2	5.7
48°	4.1	5.0	5.5
49°	3.9	5.0	5.5
50°	3.9	5.0	5.5
51°	3.9	5.2	5.7
52°	3.9	5.2	5.7
53°	3.9	5.2	5.7
54°	3.9	5.2	5.5
55°	3.9	5.2	5.7
56°	3.9	5.2	5.5
57°	3.9	5.2	5.5
58°	3.9	5.0	5.5
59°	3.9	5.0	5.5
60°	3.9	5.0	5.5
62.5°	3.6	5.0	5.5
65°	3.6	4.8	5.2



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	3.4	4.8	5.0
70°	3.2	4.5	4.8
72.5°	3.0	4.3	4.5
75°	2.7	3.9	4.1
77.5°	2.3	3.4	3.9
80°	2.0	3.0	3.2
82.5°	1.6	2.5	2.7
85°	1.1	1.8	1.8
87.5°	0.5	0.9	0.9
90°	0.0	0.0	0.0

(END OF REPORT)