

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: P1338498

Luminaire Tested: P3A05R359830DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338498
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: P3A05R359830DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

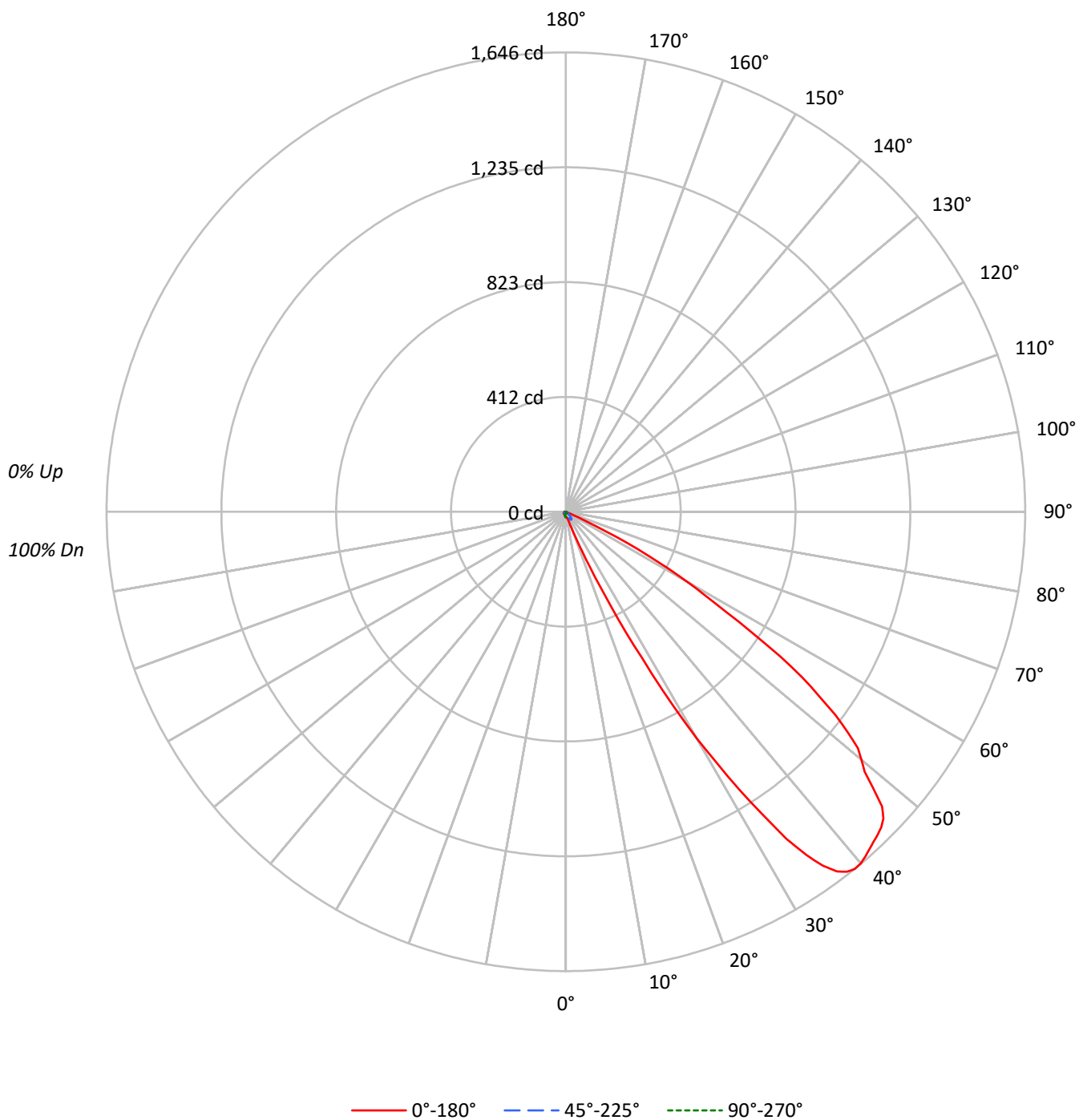
Lumens per Lamp: N/A
Luminaire Lumens: 410.0 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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°	4144	4144	4144	4144	4144
5°	4490	4402	4072	3676	3588
10°	4698	4275	3629	3140	3140
15°	6720	4200	2951	2679	2770
20°	16848	4480	2334	2334	2590
25°	78174	5734	1790	2153	2419
30°	237657	7773	1418	1975	2431
35°	401645	9021	1178	1874	2382
40°	470825	8902	945	1918	2548
45°	495834	6326	806	2078	2760
50°	471967	3787	751	2149	3036
55°	395494	1567	841	2409	3555
60°	221386	307	965	2763	3903
65°	38240	208	986	3061	4410
70°	705	256	1218	3334	5001
75°	593	339	1610	3728	5676
80°	505	505	1894	4167	6566
85°	0	1006	3774	4780	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 499354 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.4
10°-20°	4.8	1.2
20°-30°	25.2	6.1
30°-40°	108.6	26.5
40°-50°	155.0	37.8
50°-60°	96.0	23.4
60°-70°	14.6	3.6
70°-80°	2.7	0.7
80°-90°	1.4	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°	31.7	7.7
0°-40°	140.3	34.2
0°-60°	391.3	95.4
0°-90°	410.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	410.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	20	20	18	17	16	2
15°	30	18	13	12	12	11
25°	323	24	7	9	10	193
35°	1500	34	4	7	9	901
45°	1599	20	3	7	9	1208
55°	1034	4	2	6	9	881
65°	74	0	2	6	8	150
75°	1	0	2	4	7	1
85°	0	0	2	2	3	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°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9
2.5°	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	18.9	18.5
5°	20.4	20.4	20.0	20.0	20.0	20.0	20.0	20.0	19.2	18.5	17.4
7.5°	20.7	20.7	20.4	20.4	20.4	20.4	20.0	19.6	18.9	17.4	16.3
10°	21.1	21.1	21.1	21.1	20.7	20.4	20.0	19.2	18.1	16.3	15.2
12.5°	23.7	23.7	23.3	22.6	21.8	21.1	20.4	18.9	16.7	14.8	13.7
15°	29.6	29.2	28.5	27.4	25.9	24.1	22.6	18.5	15.2	13.0	12.2
17.5°	41.5	40.7	39.6	35.9	32.6	29.2	26.3	18.5	13.7	11.5	10.7
20°	72.2	72.5	64.8	55.9	48.5	40.3	32.9	19.2	12.2	10.0	9.6
22.5°	150.6	144.7	126.2	104.7	79.9	61.8	46.6	21.1	10.7	8.5	8.5
25°	323.1	300.5	255.7	193.2	136.2	96.6	67.7	23.7	9.6	7.4	7.8
27.5°	590.0	569.6	479.7	361.2	239.8	145.8	91.8	27.0	8.5	6.3	7.0
30°	938.6	882.3	765.0	592.2	400.8	223.2	123.2	30.7	7.0	5.6	6.7
31°	1047.4	1021.5	878.6	685.1	469.7	265.0	136.6	31.8	6.7	5.6	6.3
32°	1176.6	1130.7	1002.6	786.9	539.6	302.4	152.5	32.9	6.3	4.8	6.3
33°	1292.1	1247.7	1091.8	876.4	610.3	344.9	169.5	33.3	5.6	4.8	5.9
34°	1413.5	1352.8	1198.4	970.1	682.9	390.8	185.1	33.7	5.2	4.4	5.9
35°	1500.4	1439.7	1290.2	1044.1	745.4	431.6	202.8	33.7	4.8	4.4	5.6
36°	1567.8	1514.5	1369.4	1120.3	807.6	468.2	216.9	33.7	4.1	4.1	5.6
37°	1614.1	1563.4	1422.7	1185.8	855.0	500.8	229.5	33.7	3.7	4.1	5.6
38°	1636.6	1594.4	1474.2	1233.6	900.9	526.3	239.5	32.9	3.3	3.7	5.2
39°	1646.3	1611.8	1505.6	1273.9	935.3	548.5	246.9	32.2	3.0	3.7	5.2
40°	1644.8	1614.8	1523.4	1301.7	963.0	563.7	250.9	31.1	2.6	3.3	5.2
41°	1636.3	1610.4	1532.6	1325.4	979.7	574.0	252.0	30.0	2.2	3.3	4.8
42°	1626.6	1603.0	1535.6	1338.0	990.4	577.4	249.1	28.5	2.2	3.0	4.8
43°	1616.7	1594.8	1535.6	1342.0	993.0	575.2	244.3	25.9	1.9	3.0	4.8
44°	1608.5	1587.8	1530.8	1340.9	987.5	566.6	235.4	22.9	1.5	3.0	4.8
45°	1598.9	1578.5	1524.5	1333.9	976.7	552.2	224.3	20.4	1.1	2.6	4.8
46°	1581.9	1565.9	1513.4	1319.5	959.7	532.2	210.2	18.5	0.7	2.6	4.4
47°	1548.9	1535.2	1491.9	1298.0	937.1	508.5	195.8	16.7	0.7	2.6	4.4
48°	1482.7	1482.3	1449.0	1258.0	901.2	478.9	180.6	14.8	0.7	2.6	4.4
49°	1418.6	1412.0	1370.5	1187.7	849.8	443.4	164.7	13.3	0.4	2.6	4.4
50°	1383.5	1369.0	1300.9	1104.8	783.9	394.2	147.7	11.1	0.4	2.2	4.4
51°	1346.8	1326.1	1245.8	1030.0	705.4	346.8	129.2	8.9	0.4	2.2	4.1
52°	1280.6	1261.0	1171.0	958.6	629.2	298.3	111.4	7.4	0.4	2.2	4.4
53°	1209.2	1181.0	1083.3	880.1	562.2	255.4	93.3	6.3	0.4	2.2	4.1
54°	1119.2	1106.6	994.5	783.9	483.7	213.9	76.6	5.2	0.4	2.2	4.1
55°	1034.5	1016.0	899.4	685.4	412.7	175.4	64.0	4.1	0.4	2.2	4.1
56°	926.4	898.6	789.5	595.1	340.5	141.4	54.0	3.3	0.4	2.2	4.1
57°	797.6	768.0	681.7	494.8	267.2	107.7	45.2	2.6	0.4	2.2	4.1
58°	674.7	649.2	556.6	382.0	201.3	74.8	37.4	1.9	0.4	1.9	4.1
59°	582.9	554.8	463.0	293.9	139.9	55.1	28.1	1.5	0.4	2.2	4.1
60°	504.8	468.6	372.7	227.6	99.9	39.6	20.7	0.7	0.7	2.2	4.1
62.5°	290.9	256.9	178.0	92.5	41.1	20.4	10.0	0.4	0.7	2.2	4.1
65°	73.7	65.5	42.6	20.0	11.5	7.0	3.7	0.4	0.7	1.9	3.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	2.6	2.6	2.6	2.2	1.9	1.5	0.7	0.4	0.7	1.9	3.7
70°	1.1	1.1	1.1	0.7	0.7	0.4	0.4	0.4	0.7	1.9	3.3
72.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	1.1	1.9	3.0
75°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	1.1	1.9	3.0
77.5°	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5	2.6
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5	2.2
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.5	1.9
85°	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	1.1	1.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	1.5	1.1
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°	18.9	18.9	18.9
2.5°	17.8	17.8	17.8
5°	16.7	16.7	16.3
7.5°	15.5	15.2	15.2
10°	14.1	14.1	14.1
12.5°	13.0	13.0	13.0
15°	11.8	12.2	12.2
17.5°	10.7	11.5	11.5
20°	10.0	10.7	11.1
22.5°	9.3	10.0	10.4
25°	8.9	9.6	10.0
27.5°	8.1	9.3	10.0
30°	7.8	8.9	9.6
31°	7.8	8.9	9.3
32°	7.4	8.9	9.3
33°	7.4	8.9	9.3
34°	7.4	8.5	9.3
35°	7.0	8.5	8.9
36°	7.0	8.5	8.9
37°	7.0	8.5	9.3
38°	7.0	8.5	8.9
39°	6.7	8.5	8.9
40°	6.7	8.5	8.9
41°	6.7	8.5	8.9
42°	6.7	8.5	8.9
43°	6.7	8.5	8.9
44°	6.7	8.1	8.9
45°	6.7	8.1	8.9
46°	6.7	8.5	8.9
47°	6.7	8.5	9.3
48°	6.7	8.1	8.9
49°	6.3	8.1	8.9
50°	6.3	8.1	8.9
51°	6.3	8.5	9.3
52°	6.3	8.5	9.3
53°	6.3	8.5	9.3
54°	6.3	8.5	8.9
55°	6.3	8.5	9.3
56°	6.3	8.5	8.9
57°	6.3	8.5	8.9
58°	6.3	8.1	8.9
59°	6.3	8.1	8.9
60°	6.3	8.1	8.9
62.5°	5.9	8.1	8.9
65°	5.9	7.8	8.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	5.6	7.8	8.1
70°	5.2	7.4	7.8
72.5°	4.8	7.0	7.4
75°	4.4	6.3	6.7
77.5°	3.7	5.6	6.3
80°	3.3	4.8	5.2
82.5°	2.6	4.1	4.4
85°	1.9	3.0	3.0
87.5°	0.7	1.5	1.5
90°	0.0	0.0	0.0

(END OF REPORT)