

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: P1335079

Luminaire Tested: P3A02R309730DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335079
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R309730DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

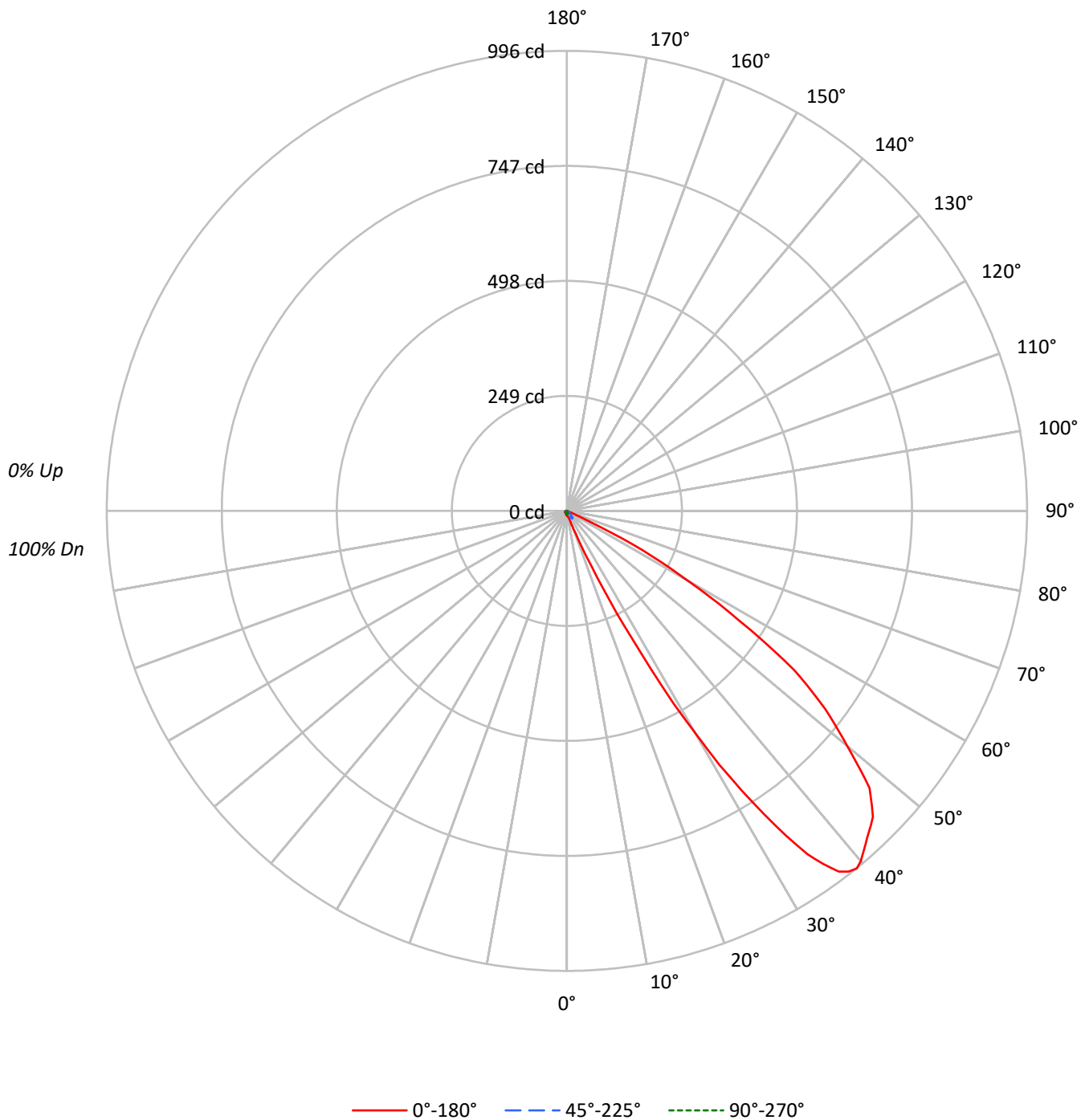
Lumens per Lamp: N/A
Luminaire Lumens: 259.0 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1335079

CATALOG NUMBER: P3A02R309730DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1335079

CATALOG NUMBER: P3A02R309730DE010 E3CA451MMS

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	108	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	60	52	45	58	51	45		56	50	44		54	49	44	42
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48	42	37	35
7	62	48	38	32	60	47	38	32	45	37	31		44	36	31		42	36	31	29
8	56	42	33	27	55	41	33	27	40	32	26		39	32	26		37	31	26	24
9	52	37	29	23	50	37	28	23	36	28	22		34	27	22		33	27	22	20
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2193	2193	2193	2193	2193
5°	2355	2311	2157	1959	1915
10°	2583	2293	1893	1692	1648
15°	3768	2270	1589	1430	1476
20°	9474	2497	1213	1213	1377
25°	43962	3121	944	1113	1258
30°	139971	4304	709	1038	1266
35°	242904	5247	589	990	1285
40°	283274	5238	429	1002	1317
45°	290511	3721	465	1085	1427
50°	270183	2081	375	1126	1637
55°	229612	1070	421	1262	1835
60°	132621	307	482	1360	2017
65°	27033	0	571	1608	2283
70°	449	128	705	1795	2629
75°	339	169	763	1864	3135
80°	253	253	1137	2147	3536
85°	0	503	2264	2264	4277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 290511 cd/sqm

TEST NUMBER: P1335079

CATALOG NUMBER: P3A02R309730DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.4
10°-20°	2.6	1.0
20°-30°	14.9	5.8
30°-40°	69.8	26.9
40°-50°	98.7	38.1
50°-60°	60.7	23.4
60°-70°	9.2	3.6
70°-80°	1.5	0.6
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°	18.5	7.1
0°-40°	88.2	34.1
0°-60°	247.6	95.6
0°-90°	259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	259.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	11	10	10	9	9	1
15°	17	10	7	6	6	6
25°	182	13	4	5	5	112
35°	907	20	2	4	5	545
45°	937	12	2	4	5	710
55°	601	3	1	3	5	511
65°	52	0	1	3	4	94
75°	0	0	1	2	4	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1335079

CATALOG NUMBER: P3A02R309730DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
2.5°	10.3	10.3	10.5	10.5	10.3	10.5	10.5	10.5	10.0	9.8	9.4
5°	10.7	10.7	10.7	10.9	10.7	10.7	10.5	10.3	9.8	9.2	8.9
7.5°	11.1	11.1	10.9	11.1	10.9	10.9	10.5	10.0	9.4	8.7	8.3
10°	11.6	11.6	11.3	11.3	11.1	11.1	10.3	9.6	8.5	7.9	7.6
12.5°	12.9	12.9	12.7	12.4	12.0	11.8	10.0	8.9	7.6	7.0	6.8
15°	16.6	16.4	15.9	15.3	14.2	14.0	10.0	8.3	7.0	6.3	6.3
17.5°	22.7	22.5	21.8	20.1	18.1	17.5	10.0	7.4	6.1	5.7	5.7
20°	40.6	38.8	35.6	31.2	26.6	24.2	10.7	6.5	5.2	5.0	5.2
21°	53.0	51.3	47.1	39.9	31.9	29.2	11.1	6.3	5.0	4.8	5.2
22°	72.2	70.3	61.7	51.9	40.4	35.8	11.3	5.9	4.6	4.6	5.0
23°	100.8	97.5	83.1	67.4	50.4	43.9	11.8	5.7	4.4	4.6	4.8
24°	132.0	129.2	112.8	89.2	64.4	55.0	12.2	5.5	4.1	4.1	4.6
25°	181.7	178.5	149.4	112.6	81.6	66.1	12.9	5.0	3.9	3.9	4.6
26°	246.1	231.0	192.4	145.1	100.6	82.9	13.5	4.8	3.7	3.9	4.4
27°	307.2	294.7	251.3	186.1	124.4	101.9	14.4	4.6	3.5	3.7	4.4
28°	387.5	370.0	315.3	235.4	156.6	123.3	15.3	4.4	3.3	3.7	4.1
29°	477.4	452.9	386.8	290.8	193.1	147.3	16.1	4.1	3.1	3.5	4.1
30°	552.8	529.9	463.8	356.5	235.0	178.9	17.0	3.9	2.8	3.5	4.1
31°	641.4	606.7	526.7	412.1	271.0	210.5	17.9	3.5	2.6	3.3	3.9
32°	713.2	689.0	603.9	475.0	318.3	245.4	18.5	3.3	2.6	3.3	3.9
33°	782.6	750.1	667.8	535.2	361.1	281.2	19.2	3.1	2.4	3.1	3.9
34°	848.9	819.0	728.3	583.8	401.4	315.3	19.6	2.6	2.4	3.1	3.7
35°	907.4	872.7	781.5	631.4	442.9	346.2	19.6	2.4	2.2	2.8	3.7
36°	945.3	920.5	827.7	678.3	480.4	375.7	19.6	2.2	2.0	2.8	3.5
37°	977.8	948.8	864.8	714.3	508.1	399.3	19.6	2.0	2.0	2.8	3.5
38°	991.1	966.3	890.4	746.1	534.1	423.3	19.4	1.7	1.7	2.6	3.5
39°	996.4	974.1	909.6	769.1	553.3	439.4	19.0	1.5	1.7	2.6	3.5
40°	989.6	972.8	919.4	783.9	568.6	451.2	18.3	1.3	1.5	2.6	3.5
42.5°	961.7	950.6	917.2	798.7	581.6	459.9	15.9	0.9	1.5	2.4	3.5
45°	936.8	924.6	895.2	783.2	564.6	442.7	12.0	0.4	1.5	2.4	3.5
47.5°	888.6	881.0	857.8	743.7	527.3	403.8	8.5	0.2	1.3	2.2	3.3
50°	792.0	784.8	754.2	645.8	453.6	341.4	6.1	0.2	1.1	2.2	3.3
52.5°	705.3	697.7	653.9	536.9	348.4	250.2	3.9	0.2	1.1	2.2	3.3
55°	600.6	587.3	529.7	407.5	247.0	167.8	2.8	0.2	1.1	2.0	3.3
57.5°	444.6	425.2	373.7	277.9	142.2	91.0	1.5	0.2	1.1	2.0	3.3
60°	302.4	290.8	233.9	146.6	60.7	38.4	0.7	0.2	1.1	2.0	3.1
62.5°	183.3	168.6	117.6	62.4	26.2	17.5	0.0	0.4	1.1	2.0	3.1
65°	52.1	46.3	30.8	14.2	7.4	5.7	0.0	0.4	1.1	2.0	3.1
67.5°	1.7	1.7	1.7	1.5	1.1	1.1	0.2	0.4	1.1	2.0	2.8
70°	0.7	0.7	0.7	0.4	0.4	0.2	0.2	0.4	1.1	1.7	2.8
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.9	1.5	2.6
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.7	0.9	1.5	2.2
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.7	0.9	1.3	2.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9	1.3	1.7



TEST NUMBER: P1335079

CATALOG NUMBER: P3A02R309730DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.7	0.9	0.9	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.9	0.7	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.7	0.7	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1335079

CATALOG NUMBER: P3A02R309730DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	10.0	10.0
2.5°	9.4	9.4
5°	8.7	8.7
7.5°	8.1	8.1
10°	7.4	7.4
12.5°	7.0	7.0
15°	6.3	6.5
17.5°	5.9	6.1
20°	5.7	5.9
21°	5.7	5.9
22°	5.5	5.7
23°	5.5	5.7
24°	5.2	5.5
25°	5.0	5.2
26°	5.0	5.2
27°	5.0	5.2
28°	4.8	5.2
29°	4.8	5.0
30°	4.8	5.0
31°	4.6	5.0
32°	4.6	5.0
33°	4.6	4.8
34°	4.4	4.8
35°	4.4	4.8
36°	4.4	4.8
37°	4.4	4.6
38°	4.4	4.8
39°	4.4	4.6
40°	4.4	4.6
42.5°	4.4	4.6
45°	4.4	4.6
47.5°	4.4	4.8
50°	4.4	4.8
52.5°	4.4	4.8
55°	4.4	4.8
57.5°	4.4	4.6
60°	4.4	4.6
62.5°	4.1	4.6
65°	4.1	4.4
67.5°	4.1	4.4
70°	3.9	4.1
72.5°	3.7	3.9
75°	3.3	3.7
77.5°	3.1	3.3
80°	2.6	2.8

TEST NUMBER: P1335079

CATALOG NUMBER: P3A02R309730DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.2	2.2
85°	1.5	1.7
87.5°	0.9	0.9
90°	0.0	0.0

(END OF REPORT)