

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: P1334999

Luminaire Tested: P3A02R309030DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334999
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: P3A02R309030DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

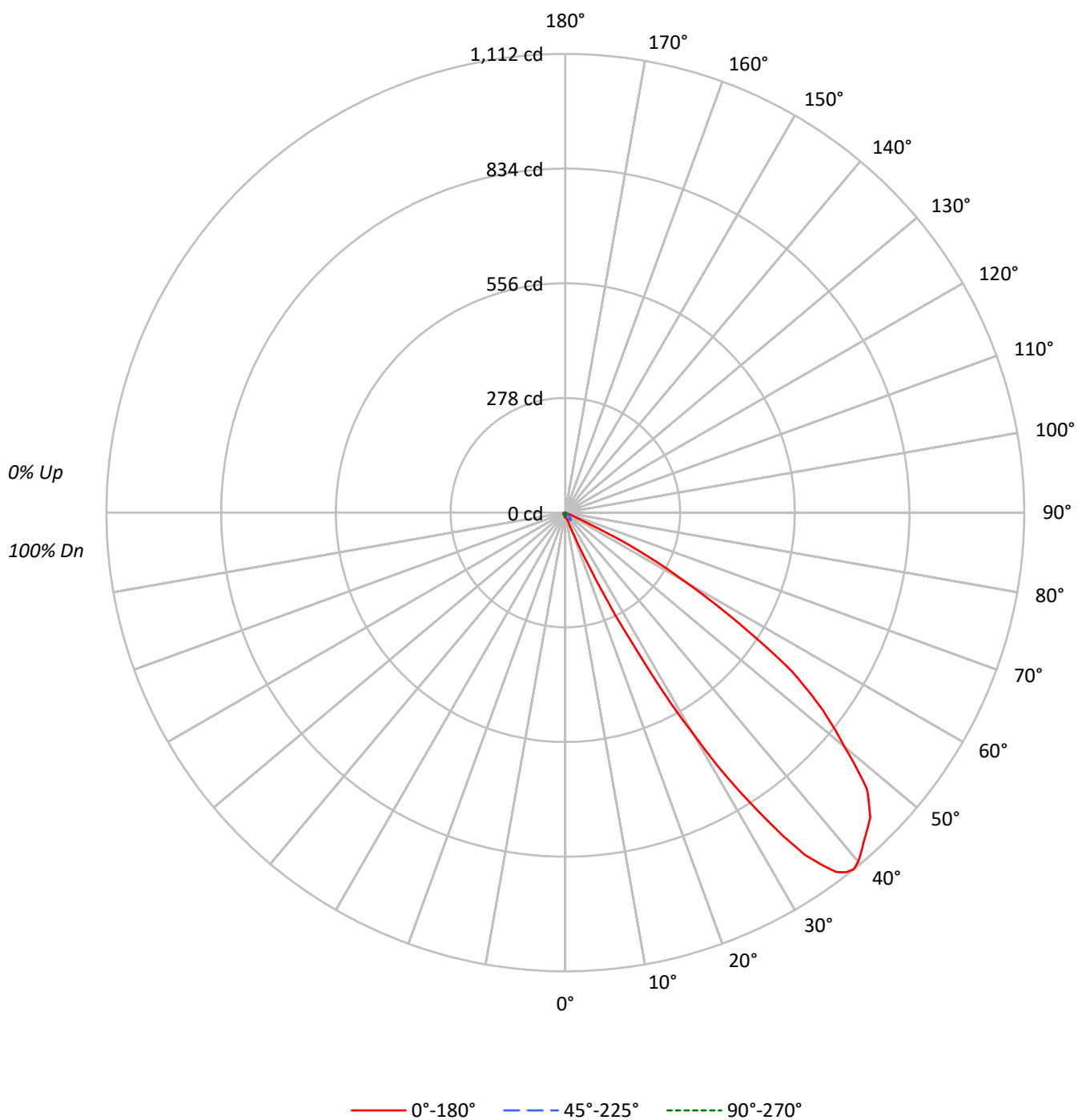
Lumens per Lamp: N/A
Luminaire Lumens: 289.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	26	26	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2456	2456	2456	2456	2456
5°	2619	2575	2421	2201	2135
10°	2872	2538	2115	1893	1848
15°	4200	2543	1771	1612	1657
20°	10571	2777	1353	1353	1540
25°	49067	3484	1065	1234	1403
30°	156201	4811	810	1165	1418
35°	271038	5862	642	1098	1446
40°	316107	5840	487	1116	1460
45°	324158	4155	527	1209	1582
50°	301466	2320	409	1262	1842
55°	256220	1223	459	1415	2064
60°	147971	307	526	1491	2237
65°	30198	0	623	1764	2542
70°	449	128	769	2052	2949
75°	424	169	847	2033	3474
80°	253	253	1263	2399	4041
85°	0	503	2516	2516	4780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 324158 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.4
10°-20°	2.9	1.0
20°-30°	16.7	5.8
30°-40°	77.8	26.9
40°-50°	110.1	38.1
50°-60°	67.7	23.4
60°-70°	10.3	3.6
70°-80°	1.6	0.6
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°	20.6	7.1
0°-40°	98.4	34.1
0°-60°	276.2	95.6
0°-90°	289.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	289.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11	11	11	11	11	
5°	12	12	11	10	10	1
15°	18	11	8	7	7	7
25°	203	14	4	5	6	125
35°	1012	22	2	4	5	608
45°	1045	13	2	4	5	792
55°	670	3	1	4	5	570
65°	58	0	1	3	5	105
75°	0	0	1	2	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°	22.5°	45°	67.5°	90°	112.5°	135°
0°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
2.5°	11.4	11.4	11.7	11.7	11.4	11.7	11.7	11.7	11.2	11.0	10.5
5°	11.9	11.9	11.9	12.2	11.9	11.9	11.7	11.4	11.0	10.2	10.0
7.5°	12.4	12.4	12.2	12.4	12.2	12.2	11.7	11.2	10.5	9.7	9.3
10°	12.9	12.9	12.7	12.7	12.4	12.4	11.4	10.7	9.5	8.8	8.5
12.5°	14.4	14.4	14.1	13.9	13.4	13.1	11.2	10.0	8.5	7.8	7.5
15°	18.5	18.3	17.8	17.0	15.8	15.6	11.2	9.3	7.8	7.1	7.1
17.5°	25.3	25.1	24.3	22.4	20.2	19.5	11.2	8.3	6.8	6.3	6.3
20°	45.3	43.3	39.7	34.8	29.7	27.0	11.9	7.3	5.8	5.6	5.8
21°	59.2	57.2	52.6	44.5	35.5	32.6	12.4	7.1	5.6	5.4	5.8
22°	80.6	78.4	68.9	57.9	45.0	39.9	12.7	6.6	5.1	5.1	5.6
23°	112.5	108.8	92.8	75.2	56.2	48.9	13.1	6.3	4.9	5.1	5.4
24°	147.3	144.1	125.9	99.6	71.8	61.3	13.6	6.1	4.6	4.6	5.1
25°	202.8	199.1	166.8	125.6	91.0	73.8	14.4	5.6	4.4	4.4	5.1
26°	274.6	257.8	214.7	161.9	112.2	92.5	15.1	5.4	4.1	4.4	4.9
27°	342.8	328.9	280.4	207.7	138.8	113.7	16.1	5.1	3.9	4.1	4.9
28°	432.4	412.9	351.8	262.7	174.8	137.5	17.0	4.9	3.7	4.1	4.6
29°	532.6	505.4	431.6	324.5	215.4	164.3	18.0	4.6	3.4	3.9	4.6
30°	616.9	591.3	517.6	397.8	262.2	199.6	19.0	4.4	3.2	3.9	4.6
31°	715.7	677.0	587.7	459.9	302.4	234.9	20.0	3.9	2.9	3.7	4.4
32°	795.8	768.8	673.8	530.0	355.2	273.9	20.7	3.7	2.9	3.7	4.4
33°	873.2	837.0	745.2	597.2	402.9	313.8	21.4	3.4	2.7	3.4	4.4
34°	947.2	913.9	812.6	651.4	447.9	351.8	21.9	2.9	2.7	3.4	4.1
35°	1012.5	973.8	872.0	704.5	494.2	386.3	21.9	2.7	2.4	3.2	4.1
36°	1054.8	1027.1	923.6	756.9	536.1	419.2	21.9	2.4	2.2	3.2	3.9
37°	1091.1	1058.7	965.0	797.0	567.0	445.5	21.9	2.2	2.2	3.2	3.9
38°	1106.0	1078.2	993.5	832.6	595.9	472.3	21.7	1.9	1.9	2.9	3.9
39°	1111.8	1087.0	1014.9	858.1	617.4	490.3	21.2	1.7	1.9	2.9	3.9
40°	1104.3	1085.5	1025.9	874.7	634.4	503.4	20.4	1.5	1.7	2.9	3.9
42.5°	1073.1	1060.7	1023.4	891.2	649.0	513.2	17.8	1.0	1.7	2.7	3.9
45°	1045.3	1031.7	998.8	874.0	630.0	493.9	13.4	0.5	1.7	2.7	3.9
47.5°	991.5	983.0	957.2	829.9	588.4	450.6	9.5	0.2	1.5	2.4	3.7
50°	883.7	875.7	841.6	720.6	506.1	381.0	6.8	0.2	1.2	2.4	3.7
52.5°	787.0	778.5	729.6	599.1	388.8	279.2	4.4	0.2	1.2	2.4	3.7
55°	670.2	655.3	591.1	454.7	275.6	187.2	3.2	0.2	1.2	2.2	3.7
57.5°	496.1	474.5	417.0	310.1	158.7	101.5	1.7	0.2	1.2	2.2	3.7
60°	337.4	324.5	261.0	163.6	67.7	42.8	0.7	0.2	1.2	2.2	3.4
62.5°	204.5	188.2	131.2	69.6	29.2	19.5	0.0	0.5	1.2	2.2	3.4
65°	58.2	51.6	34.3	15.8	8.3	6.3	0.0	0.5	1.2	2.2	3.4
67.5°	1.9	1.9	1.9	1.7	1.2	1.2	0.2	0.5	1.2	2.2	3.2
70°	0.7	0.7	0.7	0.5	0.5	0.2	0.2	0.5	1.2	1.9	3.2
72.5°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	1.0	1.7	2.9
75°	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.7	1.0	1.7	2.4
77.5°	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.7	1.0	1.5	2.4
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.0	1.5	1.9



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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	1.0	1.0	1.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	1.0	0.7	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.7	0.7	0.5
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):

	157.5°	180°
0°	11.2	11.2
2.5°	10.5	10.5
5°	9.7	9.7
7.5°	9.0	9.0
10°	8.3	8.3
12.5°	7.8	7.8
15°	7.1	7.3
17.5°	6.6	6.8
20°	6.3	6.6
21°	6.3	6.6
22°	6.1	6.3
23°	6.1	6.3
24°	5.8	6.1
25°	5.6	5.8
26°	5.6	5.8
27°	5.6	5.8
28°	5.4	5.8
29°	5.4	5.6
30°	5.4	5.6
31°	5.1	5.6
32°	5.1	5.6
33°	5.1	5.4
34°	4.9	5.4
35°	4.9	5.4
36°	4.9	5.4
37°	4.9	5.1
38°	4.9	5.4
39°	4.9	5.1
40°	4.9	5.1
42.5°	4.9	5.1
45°	4.9	5.1
47.5°	4.9	5.4
50°	4.9	5.4
52.5°	4.9	5.4
55°	4.9	5.4
57.5°	4.9	5.1
60°	4.9	5.1
62.5°	4.6	5.1
65°	4.6	4.9
67.5°	4.6	4.9
70°	4.4	4.6
72.5°	4.1	4.4
75°	3.7	4.1
77.5°	3.4	3.7
80°	2.9	3.2

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.4	2.4
85°	1.7	1.9
87.5°	1.0	1.0
90°	0.0	0.0

(END OF REPORT)