

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: P1335110

Luminaire Tested: P3A02R309740DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335110
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: P3A02R309740DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 97CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

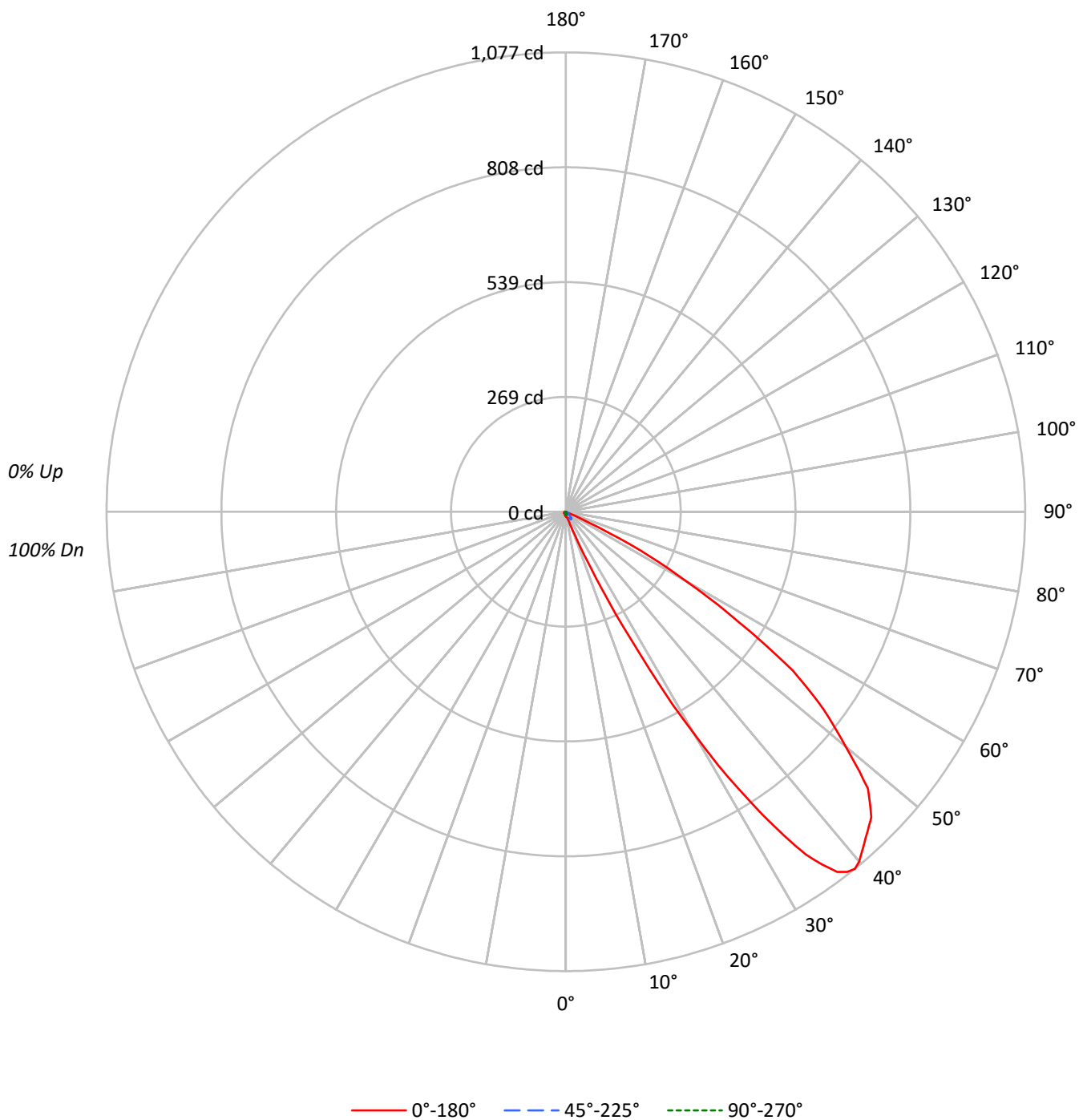
Lumens per Lamp: N/A
Luminaire Lumens: 280.0 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2368	2368	2368	2368	2368
5°	2553	2487	2333	2135	2069
10°	2783	2472	2049	1848	1781
15°	4064	2452	1703	1544	1612
20°	10244	2707	1330	1330	1493
25°	47543	3363	1016	1210	1379
30°	151340	4659	785	1139	1367
35°	262579	5675	642	1071	1392
40°	306260	5668	487	1088	1431
45°	314079	4031	527	1178	1551
50°	292084	2252	409	1194	1774
55°	248230	1185	459	1338	1988
60°	143366	307	526	1447	2193
65°	29264	0	623	1712	2439
70°	449	128	769	1988	2885
75°	424	169	763	2033	3389
80°	253	253	1137	2399	3915
85°	0	503	2264	2264	4780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 314079 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.3
10°-20°	2.8	1.0
20°-30°	16.1	5.8
30°-40°	75.4	26.9
40°-50°	106.7	38.1
50°-60°	65.6	23.4
60°-70°	10.0	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°	19.9	7.1
0°-40°	95.4	34.1
0°-60°	267.6	95.6
0°-90°	280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	280.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11	11	11	11	11	
5°	12	11	11	10	9	1
15°	18	11	8	7	7	6
25°	196	14	4	5	6	121
35°	981	21	2	4	5	589
45°	1013	13	2	4	5	768
55°	649	3	1	4	5	553
65°	56	0	1	3	5	102
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°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
2.5°	11.1	11.1	11.3	11.3	11.1	11.3	11.3	11.3	10.8	10.6	10.1
5°	11.6	11.6	11.6	11.8	11.6	11.6	11.3	11.1	10.6	9.9	9.7
7.5°	12.0	12.0	11.8	12.0	11.8	11.8	11.3	10.8	10.1	9.4	9.0
10°	12.5	12.5	12.3	12.3	12.0	12.0	11.1	10.4	9.2	8.5	8.3
12.5°	13.9	13.9	13.7	13.4	13.0	12.7	10.8	9.7	8.3	7.5	7.3
15°	17.9	17.7	17.2	16.5	15.3	15.1	10.8	9.0	7.5	6.8	6.8
17.5°	24.5	24.3	23.6	21.7	19.6	18.9	10.8	8.0	6.6	6.1	6.1
20°	43.9	42.0	38.4	33.7	28.8	26.2	11.6	7.1	5.7	5.4	5.7
21°	57.3	55.4	50.9	43.2	34.4	31.6	12.0	6.8	5.4	5.2	5.7
22°	78.1	75.9	66.7	56.1	43.6	38.7	12.3	6.4	5.0	5.0	5.4
23°	109.0	105.4	89.9	72.9	54.5	47.4	12.7	6.1	4.7	5.0	5.2
24°	142.7	139.6	121.9	96.5	69.6	59.4	13.2	5.9	4.5	4.5	5.0
25°	196.5	192.9	161.6	121.7	88.2	71.5	13.9	5.4	4.2	4.2	5.0
26°	266.1	249.8	208.0	156.8	108.7	89.6	14.6	5.2	4.0	4.2	4.7
27°	332.1	318.6	271.7	201.2	134.4	110.1	15.6	5.0	3.8	4.0	4.7
28°	418.9	400.0	340.8	254.5	169.3	133.3	16.5	4.7	3.5	4.0	4.5
29°	516.1	489.6	418.2	314.4	208.7	159.2	17.5	4.5	3.3	3.8	4.5
30°	597.7	572.9	501.4	385.4	254.0	193.4	18.4	4.2	3.1	3.8	4.5
31°	693.4	655.9	569.4	445.5	292.9	227.6	19.3	3.8	2.8	3.5	4.2
32°	771.0	744.8	652.9	513.5	344.1	265.3	20.0	3.5	2.8	3.5	4.2
33°	846.0	810.9	722.0	578.6	390.3	304.0	20.8	3.3	2.6	3.3	4.2
34°	917.7	885.4	787.3	631.2	434.0	340.8	21.2	2.8	2.6	3.3	4.0
35°	980.9	943.4	844.9	682.6	478.8	374.3	21.2	2.6	2.4	3.1	4.0
36°	1022.0	995.1	894.9	733.3	519.4	406.2	21.2	2.4	2.1	3.1	3.8
37°	1057.1	1025.8	934.9	772.2	549.3	431.6	21.2	2.1	2.1	3.1	3.8
38°	1071.5	1044.6	962.5	806.6	577.4	457.6	21.0	1.9	1.9	2.8	3.8
39°	1077.2	1053.1	983.3	831.4	598.1	475.0	20.5	1.7	1.9	2.8	3.8
40°	1069.9	1051.7	993.9	847.4	614.7	487.8	19.8	1.4	1.7	2.8	3.8
42.5°	1039.7	1027.6	991.6	863.5	628.8	497.2	17.2	0.9	1.7	2.6	3.8
45°	1012.8	999.6	967.7	846.7	610.4	478.6	13.0	0.5	1.7	2.6	3.8
47.5°	960.7	952.4	927.4	804.0	570.1	436.6	9.2	0.2	1.4	2.4	3.5
50°	856.2	848.4	815.4	698.1	490.4	369.1	6.6	0.2	1.2	2.4	3.5
52.5°	762.5	754.3	706.9	580.5	376.7	270.5	4.2	0.2	1.2	2.4	3.5
55°	649.3	634.9	572.7	440.6	267.0	181.4	3.1	0.2	1.2	2.1	3.5
57.5°	480.7	459.7	404.0	300.5	153.8	98.4	1.7	0.2	1.2	2.1	3.5
60°	326.9	314.4	252.8	158.5	65.6	41.5	0.7	0.2	1.2	2.1	3.3
62.5°	198.1	182.3	127.1	67.5	28.3	18.9	0.0	0.5	1.2	2.1	3.3
65°	56.4	50.0	33.3	15.3	8.0	6.1	0.0	0.5	1.2	2.1	3.3
67.5°	1.9	1.9	1.9	1.7	1.2	1.2	0.2	0.5	1.2	2.1	3.1
70°	0.7	0.7	0.7	0.5	0.5	0.2	0.2	0.5	1.2	1.9	3.1
72.5°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.9	1.7	2.8
75°	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.7	0.9	1.7	2.4
77.5°	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.7	0.9	1.4	2.4
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9	1.4	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	0.9	0.9	1.4
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	0.5
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°	10.8	10.8
2.5°	10.1	10.1
5°	9.4	9.4
7.5°	8.7	8.7
10°	8.0	8.0
12.5°	7.5	7.5
15°	6.8	7.1
17.5°	6.4	6.6
20°	6.1	6.4
21°	6.1	6.4
22°	5.9	6.1
23°	5.9	6.1
24°	5.7	5.9
25°	5.4	5.7
26°	5.4	5.7
27°	5.4	5.7
28°	5.2	5.7
29°	5.2	5.4
30°	5.2	5.4
31°	5.0	5.4
32°	5.0	5.4
33°	5.0	5.2
34°	4.7	5.2
35°	4.7	5.2
36°	4.7	5.2
37°	4.7	5.0
38°	4.7	5.2
39°	4.7	5.0
40°	4.7	5.0
42.5°	4.7	5.0
45°	4.7	5.0
47.5°	4.7	5.2
50°	4.7	5.2
52.5°	4.7	5.2
55°	4.7	5.2
57.5°	4.7	5.0
60°	4.7	5.0
62.5°	4.5	5.0
65°	4.5	4.7
67.5°	4.5	4.7
70°	4.2	4.5
72.5°	4.0	4.2
75°	3.5	4.0
77.5°	3.3	3.5
80°	2.8	3.1

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.4	2.4
85°	1.7	1.9
87.5°	0.9	0.9
90°	0.0	0.0

(END OF REPORT)