

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: P1336006

Luminaire Tested: P3A02R459030DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336006
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R459030DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

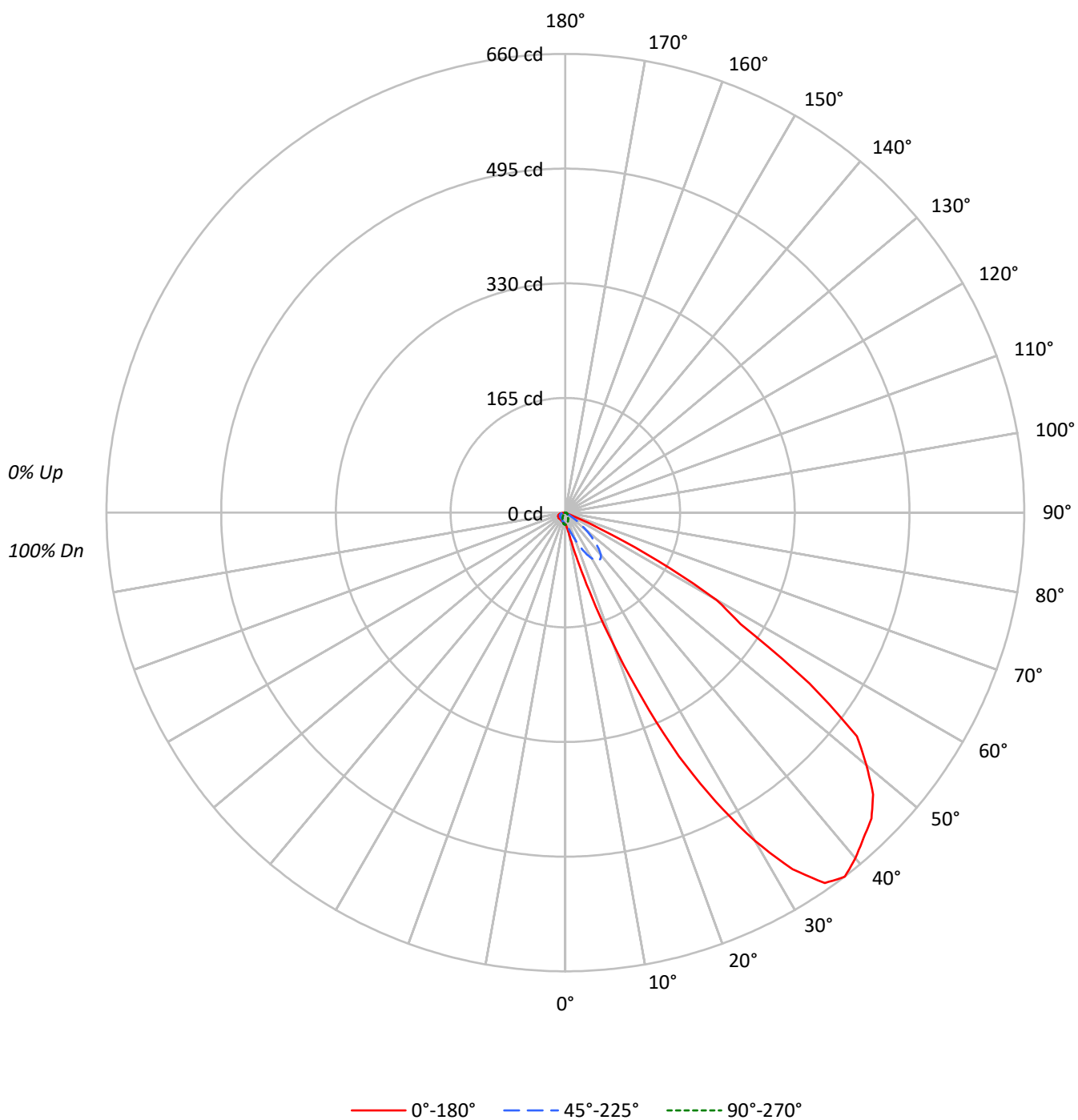
Lumens per Lamp: N/A
Luminaire Lumens: 295.0 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	99	97	94		96	93	91		92	90	88	86
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	80	72	66	77	70	65		74	69	64		71	67	63	61
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39	33	28	26
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35	29	24	22
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3750	3750	3750	3750	3750
5°	4446	4138	3698	3434	3434
10°	7103	4832	3474	3251	3251
15°	17707	6470	3156	3042	3156
20°	46647	9661	2730	2894	3080
25°	93659	14323	2371	2710	3000
30°	138072	19193	1924	2659	3089
35°	174161	22513	1633	2623	3186
40°	185805	22757	1460	2719	3406
45°	193043	18979	1364	2946	3690
50°	192744	13236	1330	3173	4162
55°	163817	5887	1415	3555	4549
60°	110123	1184	1403	3947	5219
65°	29212	519	1401	4307	5967
70°	769	641	1410	4680	6732
75°	593	593	1440	4999	7625
80°	631	884	1515	5177	8587
85°	503	1258	2516	5535	8554

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 198024 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.6
10°-20°	8.3	2.8
20°-30°	34.3	11.6
30°-40°	72.3	24.5
40°-50°	89.2	30.2
50°-60°	66.9	22.7
60°-70°	17.2	5.8
70°-80°	3.6	1.2
80°-90°	1.4	0.5
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°	44.3	15.0
0°-40°	116.7	39.5
0°-60°	272.8	92.5
0°-90°	295.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	295.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	17	17	17	17	17	
5°	20	19	17	16	16	2
15°	78	28	14	13	14	29
25°	387	59	10	11	12	180
35°	651	84	6	10	12	396
45°	622	61	4	10	12	476
55°	428	15	4	9	12	370
65°	56	1	3	8	12	81
75°	1	1	2	6	9	1
85°	0	0	1	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°	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1
2.5°	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.8	17.6	17.1	16.6
5°	20.2	20.0	20.0	20.0	19.7	19.5	19.5	18.8	17.8	16.8	16.1
7.5°	23.9	23.9	23.6	23.2	22.9	22.4	21.9	20.0	17.8	16.3	15.4
10°	31.9	31.4	30.7	30.2	29.0	27.3	26.1	21.7	17.6	15.6	14.9
12.5°	47.8	48.8	46.3	43.9	40.5	37.3	33.4	24.6	17.6	14.9	14.1
15°	78.0	79.7	75.1	70.2	61.9	54.1	46.8	28.5	17.1	13.9	13.2
17.5°	127.5	129.7	121.9	110.4	97.5	81.9	68.5	33.9	16.6	12.9	12.4
20°	199.9	199.6	184.5	170.1	145.3	122.4	97.3	41.4	15.8	11.7	11.7
22.5°	288.8	289.8	271.3	245.5	210.1	173.3	133.3	50.2	14.9	10.7	11.0
25°	387.1	378.8	356.9	325.4	280.3	229.4	176.7	59.2	13.9	9.8	10.2
27.5°	469.0	460.9	435.8	398.5	350.0	289.6	220.8	68.3	12.7	8.8	9.5
30°	545.3	535.0	504.8	462.6	404.9	339.5	262.3	75.8	11.2	7.6	8.8
32.5°	608.2	598.9	564.5	515.5	452.6	382.4	297.4	81.7	9.8	6.8	8.3
35°	650.6	641.1	609.4	555.5	487.0	413.6	325.9	84.1	8.5	6.1	8.0
37.5°	660.3	655.2	632.5	582.1	510.7	433.6	344.2	83.4	7.1	5.6	7.6
40°	649.1	650.3	639.6	597.7	523.3	442.2	351.7	79.5	5.9	5.1	7.3
42.5°	634.7	637.9	637.2	604.0	528.7	442.7	348.6	71.7	4.6	4.6	7.1
45°	622.5	625.7	630.1	601.3	525.0	436.3	338.6	61.2	3.4	4.4	7.1
47.5°	600.4	603.8	610.1	579.9	506.5	420.0	320.5	49.7	2.4	4.1	6.8
50°	565.0	566.7	565.0	531.1	470.9	393.7	291.3	38.8	1.7	3.9	6.8
52.5°	528.7	525.3	511.1	468.2	414.4	352.0	254.5	27.5	1.2	3.7	6.6
55°	428.5	423.2	412.7	386.3	355.6	300.8	205.7	15.4	1.2	3.7	6.3
57.5°	298.6	301.5	305.2	299.8	285.7	236.9	156.2	6.8	1.2	3.4	6.3
60°	251.1	248.6	248.9	245.5	222.1	172.8	107.5	2.7	1.2	3.2	6.1
62.5°	149.9	151.6	154.8	155.5	132.4	96.5	56.3	1.2	1.2	2.9	5.9
65°	56.3	59.0	51.7	44.9	35.6	26.1	13.2	1.0	1.5	2.7	5.4
67.5°	1.7	2.0	2.4	2.2	2.2	2.0	1.5	1.0	1.5	2.4	5.1
70°	1.2	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.2	2.2	4.6
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	2.0	4.1
75°	0.7	1.0	0.7	0.7	0.7	0.7	0.7	0.7	1.2	1.7	3.4
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.5	2.9
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	1.0	1.2	2.4
82.5°	0.5	0.5	0.5	0.2	0.5	0.5	0.5	0.5	1.0	1.0	2.0
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.0	1.2
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.5	0.7	0.7	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°	17.1	17.1	17.1
2.5°	16.1	16.1	16.1
5°	15.6	15.6	15.6
7.5°	15.1	15.1	15.1
10°	14.6	14.6	14.6
12.5°	14.1	14.1	14.4
15°	13.4	13.9	13.9
17.5°	12.9	13.4	13.7
20°	12.4	12.9	13.2
22.5°	11.7	12.4	12.9
25°	11.2	12.2	12.4
27.5°	10.7	11.9	12.4
30°	10.5	11.7	12.2
32.5°	10.0	11.5	11.9
35°	9.8	11.5	11.9
37.5°	9.8	11.2	11.9
40°	9.5	11.2	11.9
42.5°	9.5	11.2	11.9
45°	9.5	11.2	11.9
47.5°	9.3	11.2	12.2
50°	9.3	11.5	12.2
52.5°	9.3	11.5	12.2
55°	9.3	11.5	11.9
57.5°	9.0	11.2	11.9
60°	9.0	11.2	11.9
62.5°	8.5	11.0	11.7
65°	8.3	10.7	11.5
67.5°	7.8	10.5	11.0
70°	7.3	9.8	10.5
72.5°	6.6	9.3	10.0
75°	5.9	8.5	9.0
77.5°	5.1	7.6	8.0
80°	4.1	6.3	6.8
82.5°	3.2	4.9	5.1
85°	2.2	3.2	3.4
87.5°	1.0	1.5	1.7
90°	0.0	0.0	0.0

(END OF REPORT)