

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: P1336054

Luminaire Tested: P3A02R459050DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336054
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: P3A02R459050DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R45 optic, 5000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

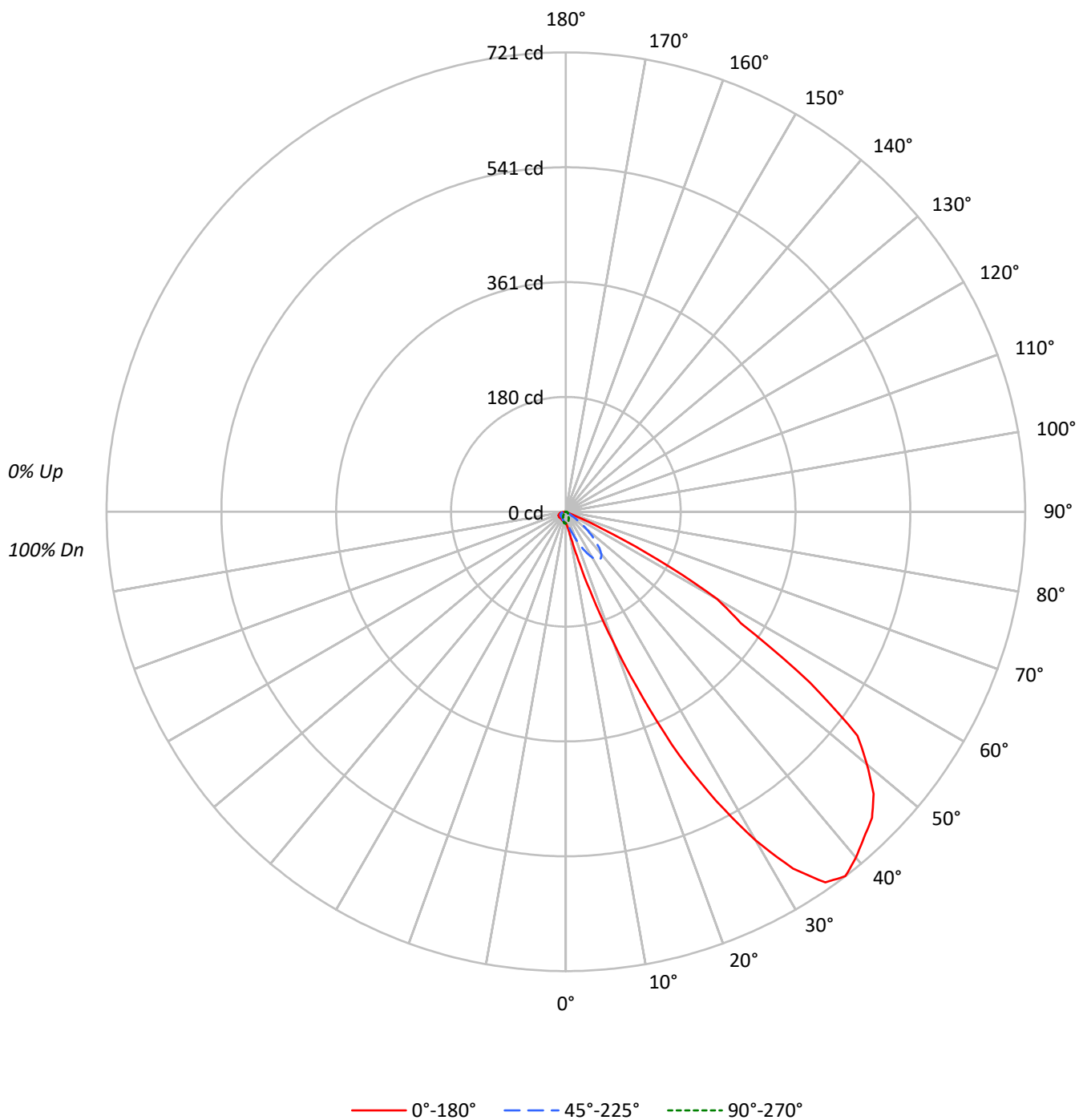
Lumens per Lamp: N/A
Luminaire Lumens: 322.0 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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	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°	4079	4079	4079	4079	4079
5°	4865	4512	4050	3742	3742
10°	7771	5277	3785	3563	3563
15°	19319	7060	3451	3314	3451
20°	50918	10548	2987	3174	3360
25°	102224	15654	2565	2952	3291
30°	150707	20940	2076	2887	3368
35°	190088	24574	1794	2838	3480
40°	202809	24818	1603	2977	3721
45°	210720	20715	1489	3225	4031
50°	210381	14430	1467	3446	4537
55°	178804	6423	1529	3861	4970
60°	120166	1272	1535	4298	5701
65°	31910	571	1505	4670	6486
70°	833	705	1539	5129	7309
75°	678	678	1610	5422	8303
80°	631	1010	1642	5683	9345
85°	755	1258	2768	6038	9309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 216168 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.6
10°-20°	9.1	2.8
20°-30°	37.5	11.6
30°-40°	78.9	24.5
40°-50°	97.4	30.2
50°-60°	73.0	22.7
60°-70°	18.8	5.8
70°-80°	3.9	1.2
80°-90°	1.6	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°	48.4	15.0
0°-40°	127.3	39.5
0°-60°	297.7	92.5
0°-90°	322.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	322.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	22	20	18	17	17	2
15°	85	31	15	15	15	31
25°	422	65	11	12	14	197
35°	710	92	7	11	13	433
45°	680	67	5	10	13	520
55°	468	17	4	10	13	404
65°	62	1	3	9	12	89
75°	1	1	2	6	10	1
85°	0	0	1	2	4	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°	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6
2.5°	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.4	19.2	18.6	18.1
5°	22.1	21.8	21.8	21.8	21.6	21.3	21.3	20.5	19.4	18.4	17.6
7.5°	26.1	26.1	25.8	25.3	25.0	24.5	23.9	21.8	19.4	17.8	16.8
10°	34.9	34.3	33.5	33.0	31.7	29.8	28.5	23.7	19.2	17.0	16.2
12.5°	52.1	53.2	50.6	47.9	44.2	40.7	36.5	26.9	19.2	16.2	15.4
15°	85.1	87.0	81.9	76.6	67.6	59.1	51.1	31.1	18.6	15.2	14.4
17.5°	139.1	141.5	133.0	120.5	106.4	89.4	74.8	37.0	18.1	14.1	13.6
20°	218.2	217.9	201.4	185.7	158.6	133.6	106.2	45.2	17.3	12.8	12.8
22.5°	315.3	316.3	296.1	267.9	229.3	189.2	145.5	54.8	16.2	11.7	12.0
25°	422.5	413.5	389.5	355.2	306.0	250.4	192.9	64.7	15.2	10.6	11.2
27.5°	511.9	503.1	475.7	435.0	382.1	316.1	241.1	74.5	13.8	9.6	10.4
30°	595.2	584.0	551.0	505.0	441.9	370.6	286.3	82.7	12.2	8.2	9.6
32.5°	663.8	653.7	616.2	562.7	494.1	417.4	324.6	89.1	10.6	7.4	9.0
35°	710.1	699.7	665.2	606.4	531.6	451.5	355.7	91.8	9.3	6.7	8.8
37.5°	720.8	715.2	690.4	635.4	557.4	473.3	375.7	91.0	7.7	6.1	8.2
40°	708.5	709.9	698.1	652.4	571.2	482.6	383.9	86.7	6.4	5.6	8.0
42.5°	692.8	696.3	695.5	659.3	577.1	483.2	380.5	78.2	5.1	5.1	7.7
45°	679.5	683.0	687.8	656.4	573.1	476.2	369.6	66.8	3.7	4.8	7.7
47.5°	655.3	659.0	666.0	633.0	552.9	458.4	349.9	54.3	2.7	4.5	7.4
50°	616.7	618.6	616.7	579.7	514.0	429.7	317.9	42.3	1.9	4.3	7.4
52.5°	577.1	573.4	557.9	511.1	452.3	384.2	277.8	30.1	1.3	4.0	7.2
55°	467.7	461.9	450.4	421.7	388.2	328.3	224.6	16.8	1.3	4.0	6.9
57.5°	325.9	329.1	333.1	327.3	311.8	258.6	170.5	7.4	1.3	3.7	6.9
60°	274.0	271.4	271.6	267.9	242.4	188.6	117.3	2.9	1.3	3.5	6.7
62.5°	163.6	165.5	168.9	169.7	144.5	105.4	61.5	1.3	1.3	3.2	6.4
65°	61.5	64.4	56.4	49.0	38.8	28.5	14.4	1.1	1.6	2.9	5.9
67.5°	1.9	2.1	2.7	2.4	2.4	2.1	1.6	1.1	1.6	2.7	5.6
70°	1.3	1.3	1.3	1.3	1.3	1.1	1.1	1.1	1.3	2.4	5.1
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3	2.1	4.5
75°	0.8	1.1	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.9	3.7
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.6	3.2
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	1.1	1.3	2.7
82.5°	0.5	0.5	0.5	0.3	0.5	0.5	0.5	0.5	1.1	1.1	2.1
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.8	1.1	1.3
87.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.5	0.8	0.8	0.8
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°	18.6	18.6	18.6
2.5°	17.6	17.6	17.6
5°	17.0	17.0	17.0
7.5°	16.5	16.5	16.5
10°	16.0	16.0	16.0
12.5°	15.4	15.4	15.7
15°	14.6	15.2	15.2
17.5°	14.1	14.6	14.9
20°	13.6	14.1	14.4
22.5°	12.8	13.6	14.1
25°	12.2	13.3	13.6
27.5°	11.7	13.0	13.6
30°	11.4	12.8	13.3
32.5°	10.9	12.5	13.0
35°	10.6	12.5	13.0
37.5°	10.6	12.2	13.0
40°	10.4	12.2	13.0
42.5°	10.4	12.2	13.0
45°	10.4	12.2	13.0
47.5°	10.1	12.2	13.3
50°	10.1	12.5	13.3
52.5°	10.1	12.5	13.3
55°	10.1	12.5	13.0
57.5°	9.8	12.2	13.0
60°	9.8	12.2	13.0
62.5°	9.3	12.0	12.8
65°	9.0	11.7	12.5
67.5°	8.5	11.4	12.0
70°	8.0	10.6	11.4
72.5°	7.2	10.1	10.9
75°	6.4	9.3	9.8
77.5°	5.6	8.2	8.8
80°	4.5	6.9	7.4
82.5°	3.5	5.3	5.6
85°	2.4	3.5	3.7
87.5°	1.1	1.6	1.9
90°	0.0	0.0	0.0

(END OF REPORT)