

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: P1335974

Luminaire Tested: P3A02R459027DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335974
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: P3A02R459027DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

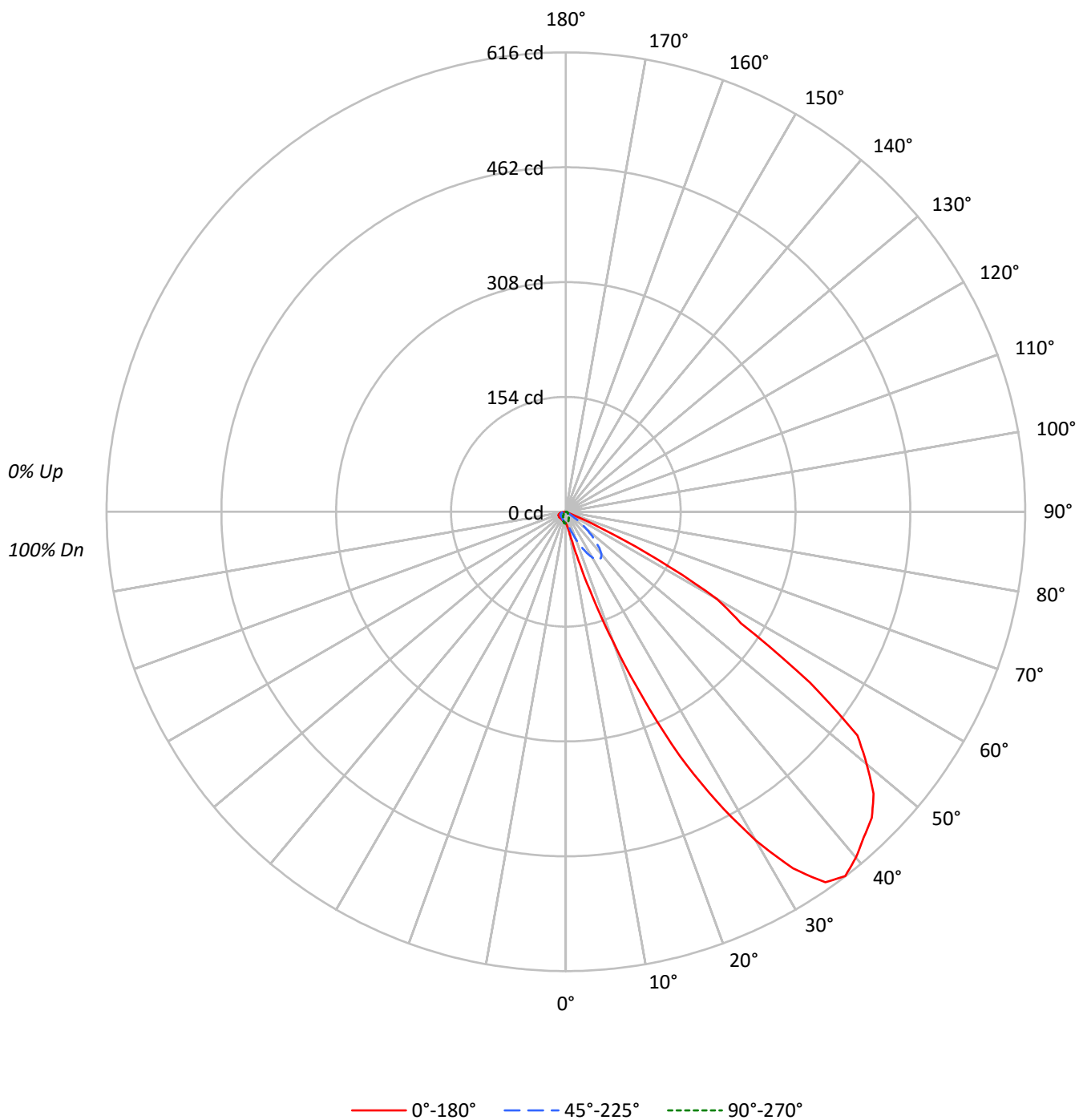
Lumens per Lamp: N/A
Luminaire Lumens: 275.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3487	3487	3487	3487	3487
5°	4160	3852	3456	3192	3192
10°	6635	4498	3229	3028	3028
15°	16504	6039	2951	2838	2951
20°	43474	9007	2544	2707	2870
25°	87295	13356	2202	2540	2807
30°	128703	17901	1772	2481	2887
35°	162355	20987	1526	2436	2971
40°	173210	21211	1374	2548	3177
45°	179957	17676	1271	2760	3442
50°	179679	12315	1228	2934	3889
55°	152731	5467	1300	3288	4244
60°	102623	1096	1316	3684	4868
65°	27240	467	1297	3995	5552
70°	705	577	1282	4360	6283
75°	593	593	1356	4660	7117
80°	631	884	1389	4925	8082
85°	503	1258	2264	5032	8051

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 184587 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.6
10°-20°	7.8	2.8
20°-30°	32.0	11.6
30°-40°	67.4	24.5
40°-50°	83.2	30.2
50°-60°	62.3	22.7
60°-70°	16.0	5.8
70°-80°	3.3	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°	41.3	15.0
0°-40°	108.8	39.5
0°-60°	254.3	92.5
0°-90°	275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	275.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	19	18	16	14	14	2
15°	73	27	13	12	13	27
25°	361	55	9	10	12	168
35°	606	78	6	9	11	370
45°	580	57	4	9	11	444
55°	400	14	3	9	11	345
65°	52	1	2	8	11	76
75°	1	1	2	6	8	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°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
2.5°	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.6	16.4	15.9	15.5
5°	18.9	18.6	18.6	18.6	18.4	18.2	18.2	17.5	16.6	15.7	15.0
7.5°	22.3	22.3	22.0	21.6	21.4	20.9	20.5	18.6	16.6	15.2	14.3
10°	29.8	29.3	28.6	28.2	27.0	25.4	24.3	20.2	16.4	14.5	13.9
12.5°	44.5	45.4	43.2	40.9	37.7	34.8	31.1	22.9	16.4	13.9	13.2
15°	72.7	74.3	70.0	65.4	57.7	50.4	43.6	26.6	15.9	13.0	12.3
17.5°	118.8	120.9	113.6	102.9	90.9	76.3	63.9	31.6	15.5	12.0	11.6
20°	186.3	186.1	172.0	158.6	135.4	114.1	90.7	38.6	14.8	10.9	10.9
22.5°	269.3	270.2	252.9	228.8	195.9	161.6	124.3	46.8	13.9	10.0	10.2
25°	360.8	353.1	332.7	303.3	261.3	213.8	164.7	55.2	13.0	9.1	9.5
27.5°	437.2	429.7	406.3	371.5	326.3	269.9	205.9	63.6	11.8	8.2	8.9
30°	508.3	498.8	470.6	431.3	377.4	316.5	244.5	70.7	10.5	7.0	8.2
32.5°	566.9	558.3	526.3	480.6	422.0	356.5	277.2	76.1	9.1	6.4	7.7
35°	606.5	597.6	568.1	517.8	454.0	385.6	303.8	78.4	8.0	5.7	7.5
37.5°	615.6	610.8	589.7	542.6	476.0	404.2	320.8	77.7	6.6	5.2	7.0
40°	605.1	606.2	596.2	557.2	487.9	412.2	327.9	74.1	5.5	4.8	6.8
42.5°	591.7	594.7	594.0	563.1	492.9	412.6	324.9	66.8	4.3	4.3	6.6
45°	580.3	583.3	587.4	560.6	489.4	406.7	315.6	57.0	3.2	4.1	6.6
47.5°	559.7	562.8	568.7	540.6	472.2	391.5	298.8	46.4	2.3	3.9	6.4
50°	526.7	528.3	526.7	495.1	439.0	367.0	271.5	36.1	1.6	3.6	6.4
52.5°	492.9	489.7	476.5	436.5	386.3	328.1	237.2	25.7	1.1	3.4	6.1
55°	399.5	394.5	384.7	360.2	331.5	280.4	191.8	14.3	1.1	3.4	5.9
57.5°	278.4	281.1	284.5	279.5	266.3	220.9	145.7	6.4	1.1	3.2	5.9
60°	234.0	231.8	232.0	228.8	207.0	161.1	100.2	2.5	1.1	3.0	5.7
62.5°	139.7	141.3	144.3	145.0	123.4	90.0	52.5	1.1	1.1	2.7	5.5
65°	52.5	55.0	48.2	41.8	33.2	24.3	12.3	0.9	1.4	2.5	5.0
67.5°	1.6	1.8	2.3	2.0	2.0	1.8	1.4	0.9	1.4	2.3	4.8
70°	1.1	1.1	1.1	1.1	1.1	0.9	0.9	0.9	1.1	2.0	4.3
72.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1	1.8	3.9
75°	0.7	0.9	0.7	0.7	0.7	0.7	0.7	0.7	1.1	1.6	3.2
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	1.4	2.7
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.9	1.1	2.3
82.5°	0.5	0.5	0.5	0.2	0.5	0.5	0.5	0.5	0.9	0.9	1.8
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.9	1.1
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°	15.9	15.9	15.9
2.5°	15.0	15.0	15.0
5°	14.5	14.5	14.5
7.5°	14.1	14.1	14.1
10°	13.6	13.6	13.6
12.5°	13.2	13.2	13.4
15°	12.5	13.0	13.0
17.5°	12.0	12.5	12.7
20°	11.6	12.0	12.3
22.5°	10.9	11.6	12.0
25°	10.5	11.4	11.6
27.5°	10.0	11.1	11.6
30°	9.8	10.9	11.4
32.5°	9.3	10.7	11.1
35°	9.1	10.7	11.1
37.5°	9.1	10.5	11.1
40°	8.9	10.5	11.1
42.5°	8.9	10.5	11.1
45°	8.9	10.5	11.1
47.5°	8.6	10.5	11.4
50°	8.6	10.7	11.4
52.5°	8.6	10.7	11.4
55°	8.6	10.7	11.1
57.5°	8.4	10.5	11.1
60°	8.4	10.5	11.1
62.5°	8.0	10.2	10.9
65°	7.7	10.0	10.7
67.5°	7.3	9.8	10.2
70°	6.8	9.1	9.8
72.5°	6.1	8.6	9.3
75°	5.5	8.0	8.4
77.5°	4.8	7.0	7.5
80°	3.9	5.9	6.4
82.5°	3.0	4.5	4.8
85°	2.0	3.0	3.2
87.5°	0.9	1.4	1.6
90°	0.0	0.0	0.0

(END OF REPORT)