

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: P1343096

Luminaire Tested: P3A09R459840DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343096
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: P3A09R459840DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

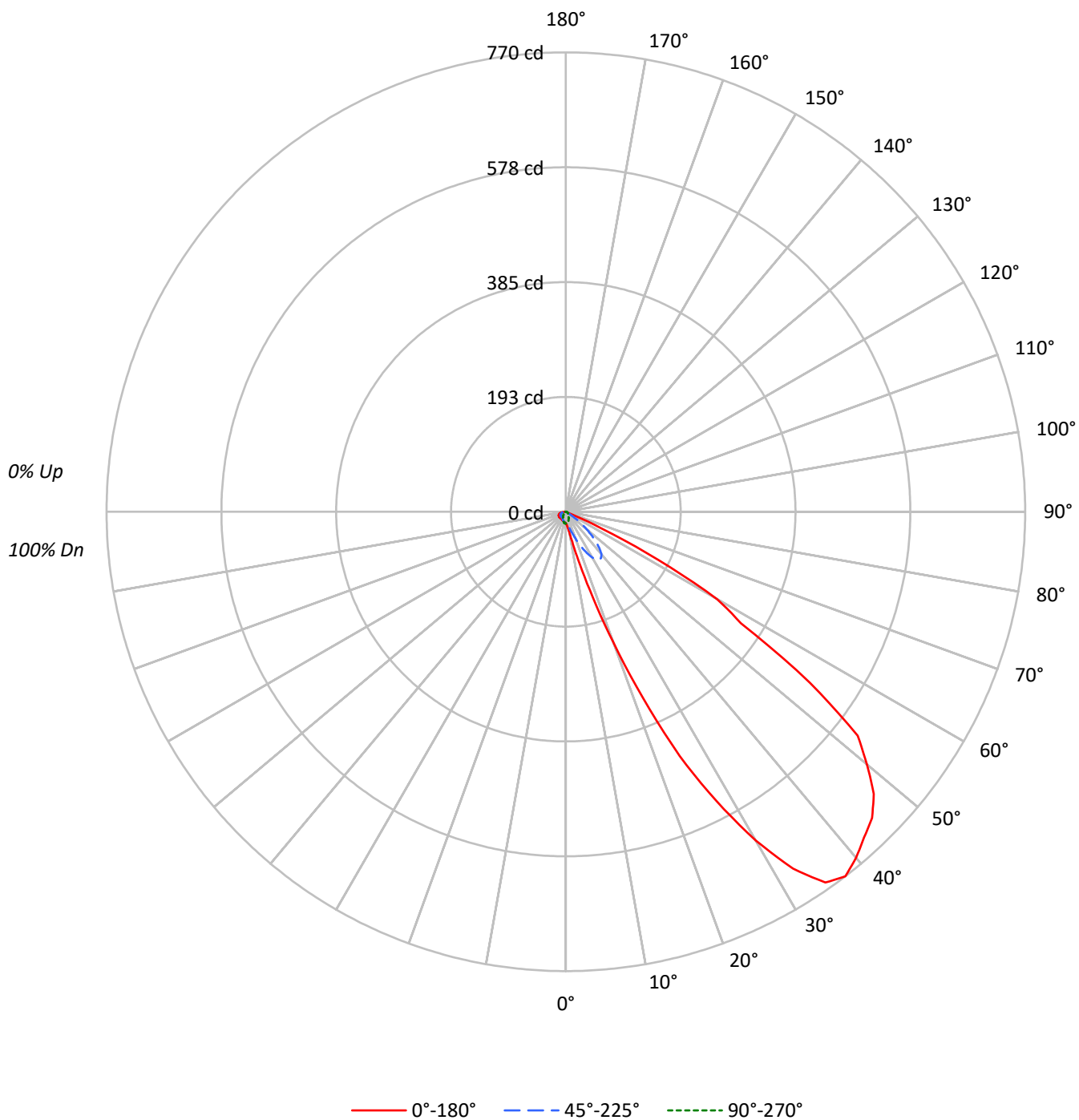
Lumens per Lamp: N/A
Luminaire Lumens: 344.0 lumens
Efficiency: N/A
Efficacy: 31.3 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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

TEST NUMBER: P1343096

CATALOG NUMBER: P3A09R459840DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1343096

CATALOG NUMBER: P3A09R459840DE010 E3A451WMH

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	107	104	100	97	99	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	80	72	66	77	70	65		74	69	64		71
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4364	4364	4364	4364	4364
5°	5195	4821	4314	4006	4006
10°	8283	5633	4052	3808	3808
15°	20658	7560	3678	3541	3678
20°	54395	11271	3174	3384	3570
25°	109216	16719	2758	3170	3508
30°	160987	22383	2228	3089	3595
35°	203071	26261	1901	3052	3721
40°	216663	26535	1718	3177	3979
45°	225109	22111	1582	3442	4311
50°	224777	15420	1535	3684	4844
55°	191037	6843	1644	4129	5314
60°	128411	1360	1623	4605	6096
65°	34089	571	1608	5033	6953
70°	898	705	1667	5450	7822
75°	763	763	1694	5761	8896
80°	758	1137	1768	6061	10102
85°	755	1510	2768	6542	10064

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 230904 cd/sqm

TEST NUMBER: P1343096

CATALOG NUMBER: P3A09R459840DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.6
10°-20°	9.7	2.8
20°-30°	40.0	11.6
30°-40°	84.3	24.5
40°-50°	104.1	30.2
50°-60°	78.0	22.7
60°-70°	20.1	5.8
70°-80°	4.2	1.2
80°-90°	1.7	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°	51.7	15.0
0°-40°	136.0	39.5
0°-60°	318.1	92.5
0°-90°	344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	344.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	20	20	20	20	20	
5°	24	22	20	18	18	3
15°	91	33	16	16	16	33
25°	451	69	11	13	14	210
35°	759	98	7	11	14	462
45°	726	71	5	11	14	556
55°	500	18	4	11	14	431
65°	66	1	3	10	13	95
75°	1	1	2	7	10	1
85°	0	1	1	3	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1343096

CATALOG NUMBER: P3A09R459840DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
2.5°	21.0	21.0	21.0	21.0	21.0	21.0	21.0	20.7	20.5	19.9	19.3
5°	23.6	23.3	23.3	23.3	23.0	22.7	22.7	21.9	20.7	19.6	18.8
7.5°	27.9	27.9	27.6	27.0	26.7	26.1	25.6	23.3	20.7	19.0	17.9
10°	37.2	36.7	35.8	35.2	33.8	31.8	30.4	25.3	20.5	18.2	17.3
12.5°	55.7	56.8	54.0	51.2	47.2	43.5	38.9	28.7	20.5	17.3	16.5
15°	91.0	92.9	87.5	81.9	72.2	63.1	54.6	33.3	19.9	16.2	15.3
17.5°	148.7	151.2	142.1	128.8	113.7	95.5	79.9	39.5	19.3	15.1	14.5
20°	233.1	232.8	215.2	198.4	169.4	142.7	113.4	48.3	18.5	13.6	13.6
22.5°	336.8	338.0	316.4	286.2	245.0	202.1	155.5	58.6	17.3	12.5	12.8
25°	451.4	441.7	416.1	379.5	326.9	267.5	206.1	69.1	16.2	11.4	11.9
27.5°	546.9	537.5	508.2	464.7	408.2	337.7	257.5	79.6	14.8	10.2	11.1
30°	635.8	623.9	588.7	539.5	472.1	395.9	305.8	88.4	13.1	8.8	10.2
32.5°	709.2	698.4	658.3	601.2	527.8	446.0	346.8	95.2	11.4	8.0	9.7
35°	758.6	747.5	710.6	647.8	567.9	482.4	380.0	98.1	9.9	7.1	9.4
37.5°	770.0	764.0	737.6	678.8	595.5	505.7	401.3	97.2	8.2	6.5	8.8
40°	756.9	758.3	745.8	697.0	610.3	515.6	410.2	92.7	6.8	6.0	8.5
42.5°	740.2	743.9	743.0	704.3	616.5	516.2	406.5	83.6	5.4	5.4	8.2
45°	725.9	729.6	734.8	701.2	612.3	508.8	394.8	71.3	4.0	5.1	8.2
47.5°	700.1	704.1	711.4	676.2	590.6	489.7	373.8	58.0	2.8	4.8	8.0
50°	658.9	660.9	658.9	619.4	549.1	459.0	339.7	45.2	2.0	4.5	8.0
52.5°	616.5	612.5	596.0	546.0	483.2	410.4	296.7	32.1	1.4	4.3	7.7
55°	499.7	493.4	481.2	450.5	414.7	350.8	239.9	17.9	1.4	4.3	7.4
57.5°	348.2	351.6	355.9	349.6	333.1	276.3	182.2	8.0	1.4	4.0	7.4
60°	292.8	289.9	290.2	286.2	258.9	201.5	125.3	3.1	1.4	3.7	7.1
62.5°	174.8	176.8	180.5	181.3	154.3	112.6	65.7	1.4	1.4	3.4	6.8
65°	65.7	68.8	60.3	52.3	41.5	30.4	15.3	1.1	1.7	3.1	6.3
67.5°	2.0	2.3	2.8	2.6	2.6	2.3	1.7	1.1	1.7	2.8	6.0
70°	1.4	1.4	1.4	1.4	1.4	1.1	1.1	1.1	1.4	2.6	5.4
72.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.4	2.3	4.8
75°	0.9	1.1	0.9	0.9	0.9	0.9	0.9	0.9	1.4	2.0	4.0
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1	1.7	3.4
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.9	1.1	1.4	2.8
82.5°	0.6	0.6	0.6	0.3	0.6	0.6	0.6	0.6	1.1	1.1	2.3
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.9	1.1	1.4
87.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.6	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1343096

CATALOG NUMBER: P3A09R459840DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	19.9	19.9	19.9
2.5°	18.8	18.8	18.8
5°	18.2	18.2	18.2
7.5°	17.6	17.6	17.6
10°	17.1	17.1	17.1
12.5°	16.5	16.5	16.8
15°	15.6	16.2	16.2
17.5°	15.1	15.6	15.9
20°	14.5	15.1	15.3
22.5°	13.6	14.5	15.1
25°	13.1	14.2	14.5
27.5°	12.5	13.9	14.5
30°	12.2	13.6	14.2
32.5°	11.7	13.4	13.9
35°	11.4	13.4	13.9
37.5°	11.4	13.1	13.9
40°	11.1	13.1	13.9
42.5°	11.1	13.1	13.9
45°	11.1	13.1	13.9
47.5°	10.8	13.1	14.2
50°	10.8	13.4	14.2
52.5°	10.8	13.4	14.2
55°	10.8	13.4	13.9
57.5°	10.5	13.1	13.9
60°	10.5	13.1	13.9
62.5°	9.9	12.8	13.6
65°	9.7	12.5	13.4
67.5°	9.1	12.2	12.8
70°	8.5	11.4	12.2
72.5°	7.7	10.8	11.7
75°	6.8	9.9	10.5
77.5°	6.0	8.8	9.4
80°	4.8	7.4	8.0
82.5°	3.7	5.7	6.0
85°	2.6	3.7	4.0
87.5°	1.1	1.7	2.0
90°	0.0	0.0	0.0

(END OF REPORT)