

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: P1339518

Luminaire Tested: P3A05R459830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339518
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: P3A05R459830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

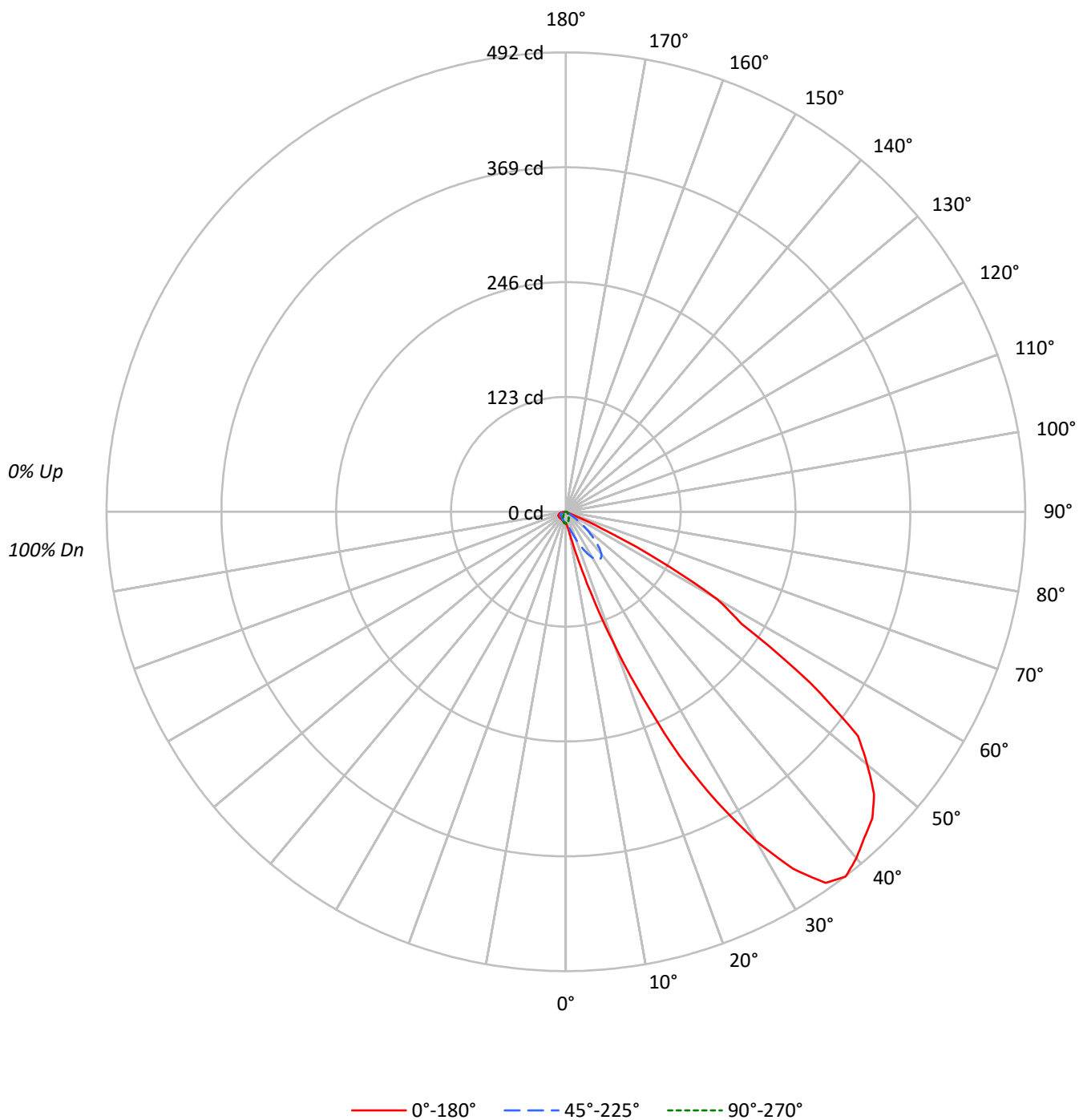
Lumens per Lamp: N/A
Luminaire Lumens: 220.0 lumens
Efficiency: N/A
Efficacy: 30.6 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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: P1339518

CATALOG NUMBER: P3A05R459830DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1339518

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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°	2785	2785	2785	2785	2785
5°	3324	3082	2751	2553	2553
10°	5299	3607	2583	2427	2427
15°	13212	4835	2361	2270	2361
20°	34793	7211	2030	2170	2287
25°	69851	10694	1766	2032	2250
30°	102953	14306	1418	1975	2304
35°	129884	16784	1205	1954	2382
40°	138574	16975	1088	2032	2548
45°	143984	14141	1023	2202	2760
50°	143756	9859	989	2354	3104
55°	122184	4396	1032	2638	3403
60°	82099	877	1053	2938	3903
65°	21792	363	1038	3217	4410
70°	577	449	1026	3526	5001
75°	424	424	1101	3728	5676
80°	505	631	1137	3915	6440
85°	503	1006	1761	4026	6290

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 147682 cd/sqm

TEST NUMBER: P1339518

CATALOG NUMBER: P3A05R459830DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	0.6
10°-20°	6.2	2.8
20°-30°	25.6	11.6
30°-40°	53.9	24.5
40°-50°	66.6	30.3
50°-60°	49.9	22.7
60°-70°	12.8	5.8
70°-80°	2.7	1.2
80°-90°	1.1	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°	33.1	15.0
0°-40°	87.0	39.5
0°-60°	203.4	92.5
0°-90°	220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	220.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	15	14	12	12	12	2
15°	58	21	10	10	10	21
25°	289	44	7	8	9	134
35°	485	63	4	7	9	296
45°	464	46	3	7	9	355
55°	320	12	3	7	9	276
65°	42	1	2	6	8	61
75°	0	0	1	4	7	1
85°	0	0	1	2	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1339518

CATALOG NUMBER: P3A05R459830DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
2.5°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.3	13.1	12.7	12.4
5°	15.1	14.9	14.9	14.9	14.7	14.5	14.5	14.0	13.3	12.5	12.0
7.5°	17.8	17.8	17.6	17.3	17.1	16.7	16.4	14.9	13.3	12.2	11.5
10°	23.8	23.4	22.9	22.5	21.6	20.4	19.5	16.2	13.1	11.6	11.1
12.5°	35.6	36.4	34.5	32.7	30.2	27.8	24.9	18.4	13.1	11.1	10.5
15°	58.2	59.4	56.0	52.4	46.2	40.4	34.9	21.3	12.7	10.4	9.8
17.5°	95.1	96.7	90.9	82.3	72.7	61.1	51.1	25.3	12.4	9.6	9.3
20°	149.1	148.9	137.6	126.9	108.3	91.3	72.5	30.9	11.8	8.7	8.7
22.5°	215.4	216.1	202.3	183.1	156.7	129.2	99.4	37.4	11.1	8.0	8.2
25°	288.7	282.5	266.1	242.7	209.0	171.1	131.8	44.2	10.4	7.3	7.6
27.5°	349.7	343.7	325.0	297.2	261.0	216.0	164.7	50.9	9.5	6.5	7.1
30°	406.6	399.0	376.5	345.0	301.9	253.2	195.6	56.5	8.4	5.6	6.5
32.5°	453.5	446.6	421.0	384.5	337.6	285.2	221.8	60.9	7.3	5.1	6.2
35°	485.2	478.1	454.5	414.3	363.2	308.5	243.0	62.7	6.4	4.5	6.0
37.5°	492.4	488.6	471.7	434.1	380.8	323.4	256.7	62.2	5.3	4.2	5.6
40°	484.1	485.0	477.0	445.7	390.3	329.8	262.3	59.3	4.4	3.8	5.5
42.5°	473.4	475.7	475.2	450.5	394.3	330.1	259.9	53.4	3.5	3.5	5.3
45°	464.3	466.6	469.9	448.5	391.6	325.4	252.5	45.6	2.5	3.3	5.3
47.5°	447.7	450.3	455.0	432.5	377.7	313.2	239.0	37.1	1.8	3.1	5.1
50°	421.4	422.6	421.4	396.1	351.2	293.6	217.2	28.9	1.3	2.9	5.1
52.5°	394.3	391.7	381.2	349.2	309.0	262.5	189.8	20.5	0.9	2.7	4.9
55°	319.6	315.6	307.8	288.1	265.2	224.3	153.4	11.5	0.9	2.7	4.7
57.5°	222.7	224.9	227.6	223.6	213.0	176.7	116.5	5.1	0.9	2.5	4.7
60°	187.2	185.4	185.6	183.1	165.6	128.9	80.2	2.0	0.9	2.4	4.5
62.5°	111.8	113.1	115.4	116.0	98.7	72.0	42.0	0.9	0.9	2.2	4.4
65°	42.0	44.0	38.5	33.4	26.5	19.5	9.8	0.7	1.1	2.0	4.0
67.5°	1.3	1.5	1.8	1.6	1.6	1.5	1.1	0.7	1.1	1.8	3.8
70°	0.9	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.9	1.6	3.5
72.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	1.5	3.1
75°	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.3	2.5
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	1.1	2.2
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.7	0.9	1.8
82.5°	0.4	0.4	0.4	0.2	0.4	0.4	0.4	0.4	0.7	0.7	1.5
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.7	0.9
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.5	0.5	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

TEST NUMBER: P1339518

CATALOG NUMBER: P3A05R459830DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	12.7	12.7	12.7
2.5°	12.0	12.0	12.0
5°	11.6	11.6	11.6
7.5°	11.3	11.3	11.3
10°	10.9	10.9	10.9
12.5°	10.5	10.5	10.7
15°	10.0	10.4	10.4
17.5°	9.6	10.0	10.2
20°	9.3	9.6	9.8
22.5°	8.7	9.3	9.6
25°	8.4	9.1	9.3
27.5°	8.0	8.9	9.3
30°	7.8	8.7	9.1
32.5°	7.5	8.5	8.9
35°	7.3	8.5	8.9
37.5°	7.3	8.4	8.9
40°	7.1	8.4	8.9
42.5°	7.1	8.4	8.9
45°	7.1	8.4	8.9
47.5°	6.9	8.4	9.1
50°	6.9	8.5	9.1
52.5°	6.9	8.5	9.1
55°	6.9	8.5	8.9
57.5°	6.7	8.4	8.9
60°	6.7	8.4	8.9
62.5°	6.4	8.2	8.7
65°	6.2	8.0	8.5
67.5°	5.8	7.8	8.2
70°	5.5	7.3	7.8
72.5°	4.9	6.9	7.5
75°	4.4	6.4	6.7
77.5°	3.8	5.6	6.0
80°	3.1	4.7	5.1
82.5°	2.4	3.6	3.8
85°	1.6	2.4	2.5
87.5°	0.7	1.1	1.3
90°	0.0	0.0	0.0

(END OF REPORT)