

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: P1338958

Luminaire Tested: P3A05R409735DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338958
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R409735DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

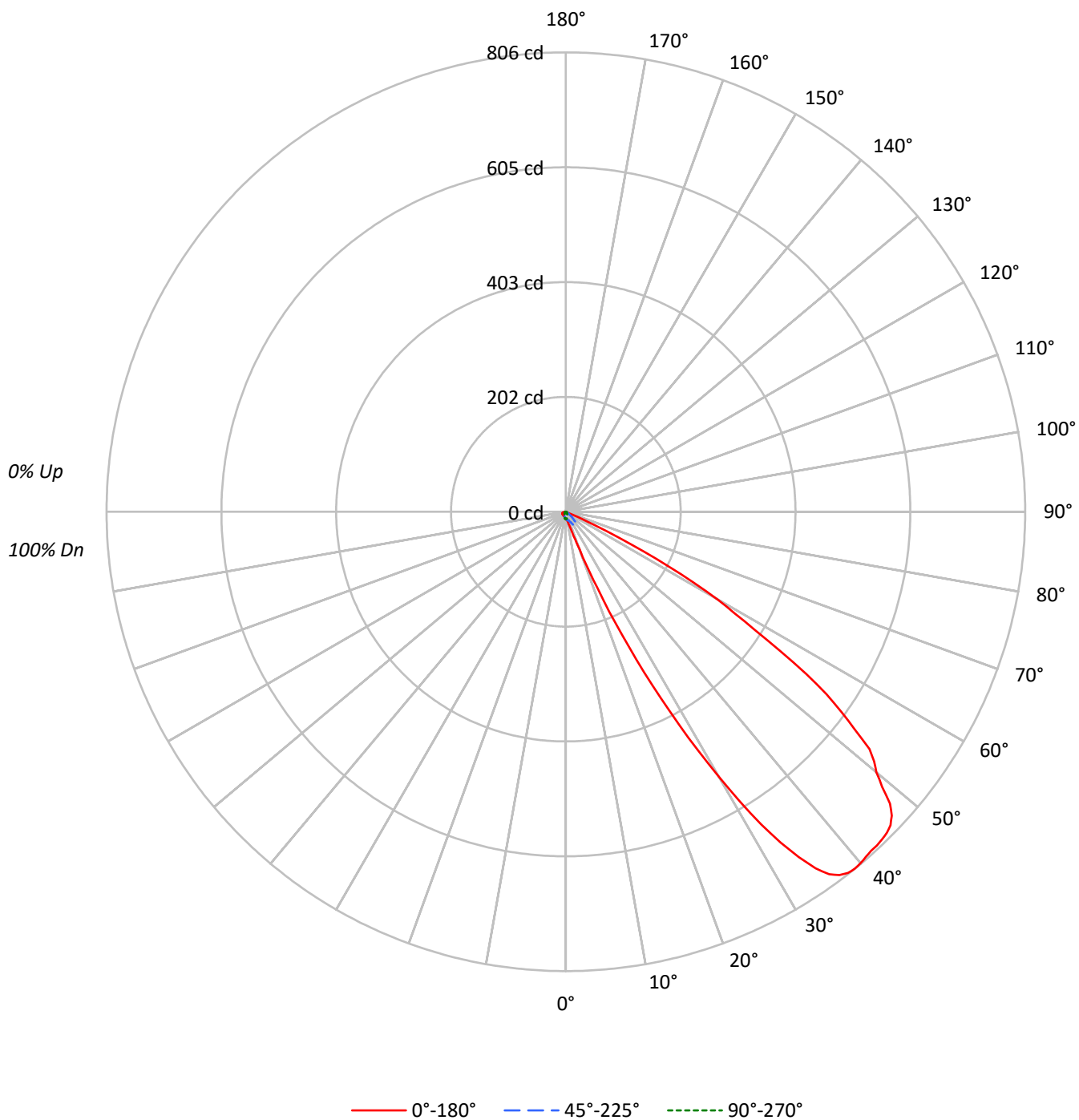
Lumens per Lamp: N/A
Luminaire Lumens: 249.0 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

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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	82	78	84	80	76	81	78	75
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2807	2807	2807	2807	2807
5°	3126	3016	2773	2509	2465
10°	3763	3206	2538	2293	2249
15°	6175	3473	2179	2020	2066
20°	16335	4107	1820	1820	1984
25°	62955	5081	1428	1669	1936
30°	135844	6786	1165	1621	1899
35°	204463	8031	990	1579	1954
40°	230346	8044	859	1632	2090
45°	247002	6233	775	1706	2264
50°	242755	3889	716	1808	2490
55°	213555	1912	688	2026	2791
60°	135165	395	789	2193	3114
65°	27655	104	830	2387	3424
70°	577	128	898	2629	3975
75°	593	424	932	2881	4490
80°	631	253	1137	3157	5177
85°	503	503	2264	3522	5787

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 251466 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.5
10°-20°	3.9	1.6
20°-30°	19.3	7.8
30°-40°	62.9	25.3
40°-50°	86.7	34.8
50°-60°	60.4	24.3
60°-70°	11.4	4.6
70°-80°	2.1	0.8
80°-90°	1.0	0.4
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°	24.5	9.8
0°-40°	87.4	35.1
0°-60°	234.5	94.2
0°-90°	249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	249.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	14	14	13	11	11	1
15°	27	15	10	9	9	10
25°	260	21	6	7	8	134
35°	764	30	4	6	7	462
45°	796	20	2	6	7	606
55°	559	5	2	5	7	477
65°	53	0	2	5	7	94
75°	1	0	1	3	5	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
2.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.0	12.8
5°	14.2	14.2	14.2	14.2	13.9	13.9	13.9	13.7	13.7	13.3	12.6
7.5°	15.1	15.1	15.1	15.1	14.9	14.6	14.4	14.4	14.2	13.0	12.1
10°	16.9	16.9	16.7	16.5	16.2	15.8	15.5	15.1	14.4	12.8	11.4
12.5°	20.6	20.1	19.9	19.4	18.8	17.8	16.9	16.2	14.6	12.3	10.7
15°	27.2	26.8	25.8	24.5	23.1	21.3	19.7	18.1	15.3	11.7	9.6
17.5°	38.9	37.5	36.1	33.8	30.4	27.2	23.8	20.8	16.2	11.0	8.7
20°	70.0	69.1	60.8	54.4	44.1	36.8	30.0	24.9	17.6	10.3	7.8
22.5°	144.3	134.7	121.2	99.2	77.3	56.9	41.4	31.3	19.0	9.4	6.9
25°	260.2	245.1	216.1	173.8	128.3	90.8	59.9	40.9	21.0	8.5	5.9
27.5°	394.0	378.7	333.6	275.3	201.0	137.0	85.5	54.2	23.8	7.5	5.3
30°	536.5	523.4	466.3	385.5	283.3	191.9	114.6	67.7	26.8	6.6	4.6
31°	593.9	577.2	515.4	429.4	322.0	214.5	126.2	73.4	27.9	6.4	4.3
32°	646.7	627.7	563.7	471.5	353.3	239.0	139.0	78.4	28.8	5.9	4.1
33°	692.2	670.0	608.3	511.3	387.8	261.8	152.3	83.2	29.5	5.5	3.9
34°	730.8	711.6	645.3	551.3	418.5	283.8	165.3	88.0	30.0	5.3	3.7
35°	763.8	746.4	680.8	581.7	448.4	305.0	177.2	92.6	30.0	4.8	3.7
36°	785.9	770.9	711.4	612.8	473.6	323.1	187.3	96.7	30.0	4.3	3.4
37°	798.1	783.4	731.5	638.5	498.3	340.9	196.4	99.9	29.7	4.1	3.2
38°	804.2	791.4	746.4	659.3	515.4	353.8	204.4	102.4	29.5	3.7	3.2
39°	805.8	795.1	755.8	674.4	532.1	366.6	210.1	103.8	28.8	3.4	3.0
40°	804.7	795.3	760.8	687.8	544.9	376.6	214.3	104.3	28.1	3.0	3.0
41°	802.4	795.1	764.5	697.2	555.2	383.0	215.9	103.4	27.2	2.5	2.7
42°	800.4	792.3	766.1	703.6	562.3	386.2	215.6	101.5	25.8	2.3	2.7
43°	800.4	791.2	766.3	707.7	565.7	386.5	212.9	98.1	24.0	2.1	2.5
44°	799.0	790.5	767.4	710.5	566.6	384.4	208.5	94.4	22.0	1.8	2.5
45°	796.5	787.5	767.2	710.7	565.0	379.4	201.5	89.6	20.1	1.4	2.5
46°	791.7	783.7	765.1	709.1	560.2	372.0	193.0	84.8	18.1	1.1	2.3
47°	782.1	775.9	759.6	703.6	552.9	361.3	182.9	79.3	16.5	0.9	2.3
48°	765.6	761.2	750.3	691.5	539.0	348.0	172.2	73.4	14.9	0.9	2.3
49°	735.4	732.0	725.6	672.1	521.1	331.8	160.5	66.8	13.3	0.7	2.3
50°	711.6	708.0	694.9	639.4	495.5	311.2	147.7	60.1	11.4	0.5	2.1
51°	695.8	689.9	669.3	601.4	458.3	283.8	133.8	53.5	9.6	0.5	2.1
52°	676.0	667.0	641.4	567.3	424.2	256.3	118.7	46.9	8.5	0.5	2.1
53°	634.3	631.1	605.8	530.7	390.1	230.0	103.1	41.4	7.3	0.5	2.1
54°	598.0	593.2	558.6	480.0	353.1	200.8	87.1	36.6	6.2	0.5	2.1
55°	558.6	549.3	518.6	437.2	309.6	173.8	71.8	31.6	5.0	0.5	1.8
56°	509.0	500.8	467.9	391.5	269.6	146.4	60.1	25.8	3.9	0.5	1.8
57°	448.7	441.1	415.7	335.2	228.0	119.6	48.9	20.8	3.0	0.5	1.8
58°	390.3	381.9	352.8	281.3	184.1	94.9	40.9	16.9	2.3	0.5	1.8
59°	345.5	334.1	296.6	236.2	144.1	72.0	32.5	13.5	1.6	0.5	1.8
60°	308.2	298.9	260.0	196.7	113.0	53.1	24.0	10.3	0.9	0.5	1.8
62.5°	178.6	176.1	141.1	101.3	53.3	24.7	11.9	4.8	0.5	0.7	1.8
65°	53.3	46.4	36.1	21.5	13.7	8.2	4.3	1.6	0.2	0.7	1.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.6	1.6	1.6	1.6	1.6	1.6	0.9	0.5	0.2	0.7	1.6
70°	0.9	0.7	0.7	0.7	0.7	0.5	0.5	0.2	0.2	0.7	1.4
72.5°	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.2	0.5	0.7	1.1
75°	0.7	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.7	1.1
77.5°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.5	0.7	1.1
80°	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	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):

	112.5°	135°	157.5°	180°
0°	12.8	12.8	12.8	12.8
2.5°	12.3	12.1	11.9	11.9
5°	11.9	11.4	11.4	11.2
7.5°	11.2	10.7	10.7	10.7
10°	10.5	10.3	10.3	10.1
12.5°	9.6	9.6	9.6	9.6
15°	8.9	8.9	9.1	9.1
17.5°	8.0	8.2	8.7	8.9
20°	7.3	7.8	8.2	8.5
22.5°	6.9	7.3	8.0	8.2
25°	6.2	6.9	7.8	8.0
27.5°	5.7	6.6	7.3	7.8
30°	5.3	6.4	7.1	7.5
31°	5.3	6.2	7.1	7.5
32°	5.0	5.9	7.1	7.3
33°	5.0	5.9	7.1	7.3
34°	4.8	5.9	6.9	7.3
35°	4.8	5.9	6.9	7.3
36°	4.6	5.7	6.9	7.3
37°	4.6	5.7	6.9	7.3
38°	4.3	5.7	6.9	7.3
39°	4.3	5.7	6.9	7.3
40°	4.3	5.7	6.9	7.3
41°	4.1	5.7	6.9	7.3
42°	4.1	5.7	6.9	7.3
43°	4.1	5.5	6.9	7.3
44°	4.1	5.5	6.9	7.3
45°	3.9	5.5	6.9	7.3
46°	3.9	5.5	6.9	7.3
47°	3.9	5.5	6.9	7.3
48°	3.9	5.5	6.9	7.3
49°	3.9	5.5	6.9	7.3
50°	3.7	5.3	6.9	7.3
51°	3.7	5.3	6.9	7.3
52°	3.7	5.3	6.9	7.3
53°	3.7	5.3	6.9	7.3
54°	3.4	5.3	6.9	7.3
55°	3.4	5.3	6.9	7.3
56°	3.4	5.3	6.9	7.1
57°	3.4	5.3	6.6	7.1
58°	3.4	5.0	6.6	7.1
59°	3.4	5.0	6.6	7.1
60°	3.4	5.0	6.6	7.1
62.5°	3.2	5.0	6.4	6.9
65°	3.0	4.6	6.4	6.6



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	3.0	4.3	5.9	6.4
70°	2.7	4.1	5.7	6.2
72.5°	2.3	3.9	5.3	5.7
75°	2.1	3.4	4.8	5.3
77.5°	1.8	3.0	4.3	4.6
80°	1.6	2.5	3.7	4.1
82.5°	1.1	1.8	3.0	3.2
85°	0.9	1.4	2.1	2.3
87.5°	0.7	0.7	1.1	1.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)