

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: P1334796

Luminaire Tested: P3A02R259827DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334796
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R259827DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

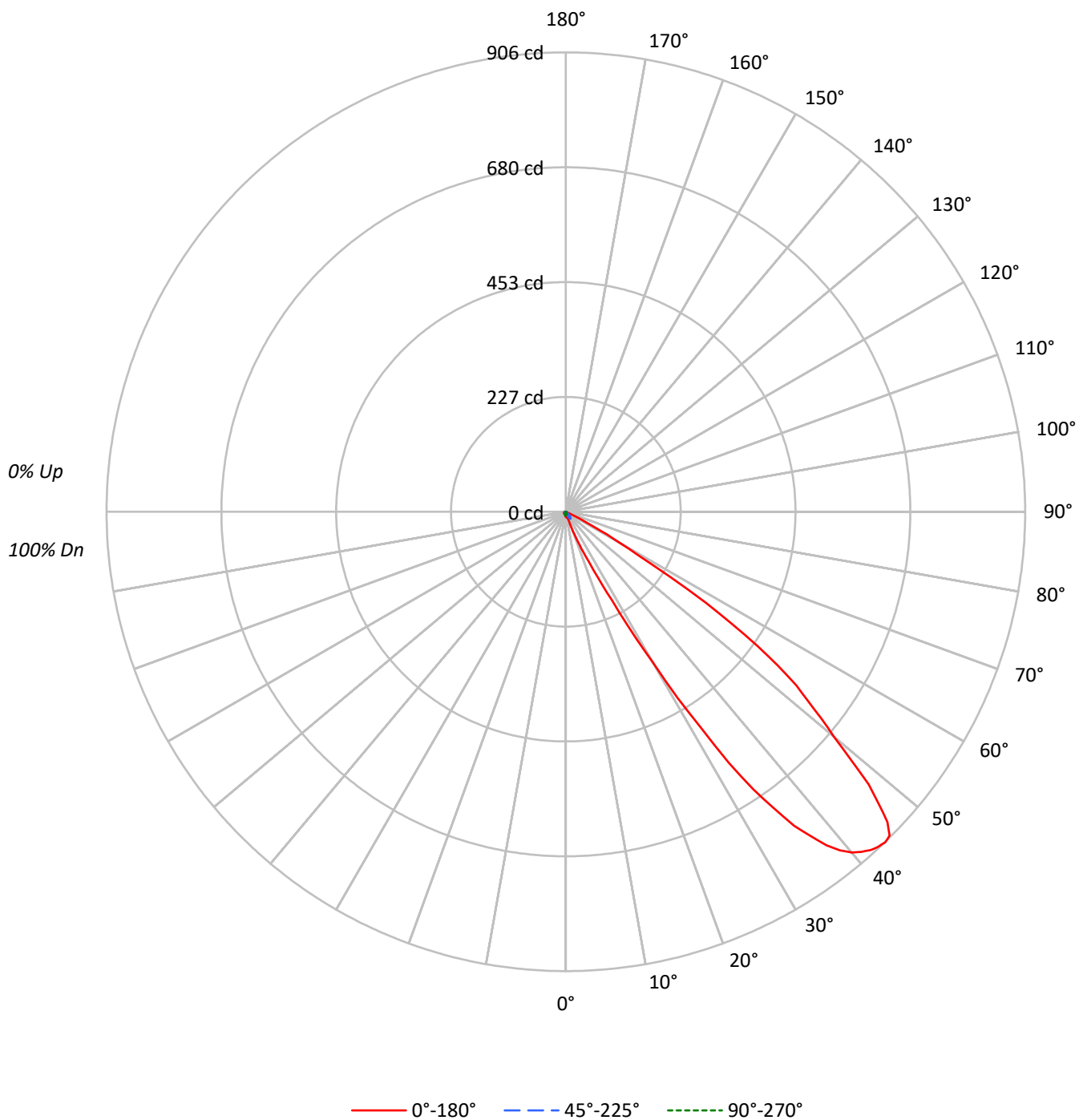
Lumens per Lamp: N/A
Luminaire Lumens: 189.0 lumens
Efficiency: N/A
Efficacy: 52.5 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			0
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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2105	2105	2105	2105	2105
5°	2421	2311	2047	1827	1783
10°	2405	2182	1737	1514	1514
15°	2679	1884	1362	1294	1362
20°	9474	1867	1050	1097	1213
25°	27244	2371	847	1016	1161
30°	86925	3671	684	962	1190
35°	190383	4310	589	937	1205
40°	251128	3893	487	945	1288
45°	280060	2729	465	1023	1395
50°	235728	1433	443	1092	1535
55°	176242	573	459	1223	1720
60°	54557	132	439	1316	1886
65°	4670	0	519	1401	2075
70°	321	128	513	1603	2372
75°	254	169	678	1694	2711
80°	253	253	1010	1894	3157
85°	503	503	1761	2013	3271

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 280060 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.5
10°-20°	2.2	1.2
20°-30°	10.5	5.5
30°-40°	50.3	26.6
40°-50°	78.9	41.7
50°-60°	40.5	21.4
60°-70°	3.8	2.0
70°-80°	1.3	0.7
80°-90°	0.7	0.3
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°	13.6	7.2
0°-40°	63.9	33.8
0°-60°	183.3	97.0
0°-90°	189.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	189.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10	10	10	10	10	
5°	11	10	9	8	8	1
15°	12	8	6	6	6	5
25°	113	10	4	4	5	70
35°	711	16	2	4	4	432
45°	903	9	2	3	4	661
55°	461	2	1	3	4	384
65°	9	0	1	3	4	28
75°	0	0	1	2	3	0
85°	0	0	1	1	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
2.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.3	10.3	10.5	10.3	10.3
5°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	10.8	10.8	10.8	10.5
7.5°	11.1	11.0	11.0	11.0	11.0	11.0	11.0	11.0	10.8	10.8	10.3
10°	10.8	10.8	10.8	10.8	10.6	10.6	10.6	10.5	10.5	10.5	9.8
12.5°	10.8	10.8	10.8	10.8	10.6	10.6	10.5	10.5	10.3	10.1	9.0
15°	11.8	11.8	11.8	11.6	11.5	11.3	11.1	11.0	10.8	10.5	8.3
17.5°	17.3	16.8	16.6	16.0	15.1	14.3	13.6	13.0	12.3	11.8	8.0
20°	40.6	40.4	39.6	37.6	35.4	32.9	30.4	27.6	23.6	21.0	8.0
22.5°	70.4	69.4	67.9	66.4	62.5	58.0	53.4	48.1	42.9	37.4	8.5
25°	112.6	114.9	109.9	105.9	99.3	91.1	82.3	75.0	65.7	57.0	9.8
27.5°	195.8	197.3	187.4	174.5	159.0	141.9	125.2	112.8	97.1	82.8	12.3
30°	343.3	344.8	328.3	300.7	268.8	240.7	202.6	169.1	138.4	114.6	14.5
31°	428.4	416.8	397.7	370.9	330.5	288.1	242.3	201.9	163.0	131.7	15.1
32°	502.4	501.4	479.2	438.6	398.0	345.6	288.9	236.2	188.4	149.0	15.6
33°	589.8	583.1	551.7	513.4	459.7	407.0	333.8	273.6	214.5	168.3	16.0
34°	659.8	641.8	628.8	585.1	528.4	461.2	382.9	313.2	247.1	186.9	16.1
35°	711.2	707.3	682.1	641.3	583.6	514.9	435.7	354.3	274.4	208.6	16.1
36°	765.6	753.7	729.1	692.2	636.0	565.0	476.2	389.8	306.2	228.0	16.0
37°	799.6	792.7	768.2	730.1	675.1	607.2	521.4	427.4	331.5	247.5	15.6
38°	834.7	820.6	796.5	760.1	706.0	642.3	554.2	456.4	354.8	264.6	15.1
39°	859.0	844.4	819.8	783.5	730.6	667.4	580.1	481.0	375.0	277.4	14.5
40°	877.3	863.2	838.2	801.0	748.8	687.2	601.7	502.8	392.0	288.6	13.6
41°	888.6	875.5	850.7	813.6	761.2	698.5	615.9	516.9	403.5	296.0	12.8
42°	898.1	884.6	859.4	821.4	768.9	708.2	624.5	525.9	411.3	299.9	12.1
43°	903.4	890.0	865.3	826.6	773.5	712.7	629.2	530.0	414.0	299.4	11.0
44°	906.4	892.4	867.7	828.9	775.5	713.8	629.5	529.2	412.1	295.4	10.0
45°	903.1	889.3	865.3	826.6	772.0	710.2	626.2	524.7	405.1	287.6	8.8
46°	881.5	870.8	848.9	813.3	761.1	700.9	617.7	516.1	394.3	277.9	7.5
47°	843.4	834.9	813.6	787.2	739.9	683.7	602.1	499.6	379.2	263.4	6.0
48°	803.6	791.2	771.4	744.3	704.3	653.0	576.3	475.5	356.2	244.5	5.3
49°	744.9	737.6	720.1	689.9	656.8	611.5	539.9	444.6	328.1	223.9	4.7
50°	691.0	686.1	661.6	639.3	604.2	562.0	490.5	403.8	293.2	198.2	4.2
51°	649.0	643.0	625.3	597.6	560.2	511.1	443.7	350.9	253.1	167.8	3.3
52°	605.1	601.7	586.1	557.5	520.7	471.8	398.3	306.0	214.2	141.9	2.7
53°	569.1	564.3	545.2	519.7	480.0	429.4	349.1	264.3	181.5	119.2	2.3
54°	516.7	514.7	502.4	475.8	432.8	377.7	304.5	222.5	151.3	101.1	2.0
55°	461.0	454.4	441.9	420.8	381.2	329.8	253.0	184.4	122.4	85.2	1.5
56°	393.2	392.8	370.6	352.9	317.8	263.3	202.1	144.0	99.5	71.0	1.3
57°	328.3	317.8	296.4	278.9	241.2	199.7	150.0	107.9	77.8	57.5	1.0
58°	242.8	237.3	231.7	206.1	171.1	141.5	107.1	75.8	57.5	43.9	0.7
59°	164.8	164.7	158.0	138.5	118.4	88.1	66.9	51.6	39.6	32.3	0.5
60°	124.4	121.4	108.1	95.3	74.5	55.7	39.6	30.4	24.6	20.8	0.3
62.5°	43.6	45.2	39.7	32.9	25.1	20.6	15.8	12.8	10.5	8.5	0.0
65°	9.0	9.8	8.5	8.0	6.3	5.5	4.8	4.2	3.5	3.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.2	1.0	1.0	1.0	0.8	0.8	0.8	0.8	0.7	0.7	0.2
70°	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.2
72.5°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
75°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
77.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
85°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	9.6	9.6	9.6	9.6	9.6	9.6
2.5°	10.1	9.8	9.3	9.1	9.0	9.0
5°	10.0	9.3	8.8	8.3	8.1	8.1
7.5°	9.5	8.6	8.0	7.7	7.5	7.3
10°	9.0	7.8	7.2	6.8	6.8	6.8
12.5°	8.0	7.0	6.3	6.2	6.3	6.3
15°	7.2	6.0	5.7	5.7	5.8	6.0
17.5°	6.2	5.3	5.0	5.2	5.3	5.5
20°	5.5	4.5	4.5	4.7	5.2	5.2
22.5°	4.8	4.0	4.0	4.5	4.8	5.0
25°	4.3	3.5	3.7	4.2	4.7	4.8
27.5°	3.7	3.0	3.3	4.0	4.5	4.7
30°	3.2	2.7	3.2	3.8	4.3	4.7
31°	3.0	2.5	3.2	3.7	4.3	4.7
32°	2.7	2.5	3.0	3.7	4.3	4.5
33°	2.5	2.3	3.0	3.7	4.3	4.5
34°	2.3	2.2	2.8	3.7	4.3	4.5
35°	2.0	2.2	2.8	3.5	4.2	4.5
36°	1.8	2.0	2.8	3.5	4.2	4.5
37°	1.7	2.0	2.7	3.5	4.2	4.5
38°	1.5	1.8	2.7	3.5	4.2	4.5
39°	1.3	1.8	2.5	3.5	4.2	4.5
40°	1.2	1.7	2.5	3.3	4.2	4.5
41°	1.2	1.7	2.5	3.3	4.2	4.5
42°	1.0	1.7	2.5	3.3	4.2	4.5
43°	0.8	1.5	2.5	3.3	4.2	4.5
44°	0.7	1.5	2.3	3.3	4.2	4.5
45°	0.7	1.5	2.3	3.3	4.2	4.5
46°	0.5	1.3	2.3	3.3	4.2	4.5
47°	0.3	1.3	2.3	3.2	4.2	4.5
48°	0.3	1.3	2.3	3.2	4.2	4.5
49°	0.3	1.3	2.2	3.2	4.2	4.5
50°	0.3	1.3	2.2	3.2	4.2	4.5
51°	0.2	1.2	2.2	3.2	4.2	4.5
52°	0.2	1.2	2.2	3.2	4.2	4.7
53°	0.2	1.2	2.2	3.2	4.2	4.5
54°	0.2	1.2	2.0	3.2	4.2	4.5
55°	0.2	1.2	2.0	3.2	4.2	4.5
56°	0.2	1.0	2.0	3.0	4.2	4.5
57°	0.3	1.0	2.0	3.0	4.2	4.3
58°	0.3	1.0	2.0	3.0	4.0	4.3
59°	0.3	1.0	2.0	3.0	4.0	4.3
60°	0.3	1.0	1.8	3.0	4.0	4.3
62.5°	0.3	1.0	1.8	2.8	3.8	4.2
65°	0.3	1.0	1.7	2.7	3.8	4.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.3	0.8	1.7	2.5	3.7	3.8
70°	0.5	0.8	1.5	2.5	3.5	3.7
72.5°	0.5	0.8	1.5	2.2	3.2	3.5
75°	0.5	0.8	1.3	2.0	3.0	3.2
77.5°	0.5	0.8	1.2	1.8	2.7	2.8
80°	0.7	0.8	1.0	1.5	2.3	2.5
82.5°	0.7	0.8	0.8	1.2	1.8	2.0
85°	0.5	0.7	0.7	0.8	1.2	1.3
87.5°	0.5	0.7	0.5	0.3	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)