

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: P1316177

Luminaire Tested: P3SQAS09R709827DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316177
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-83)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R709827DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R70 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

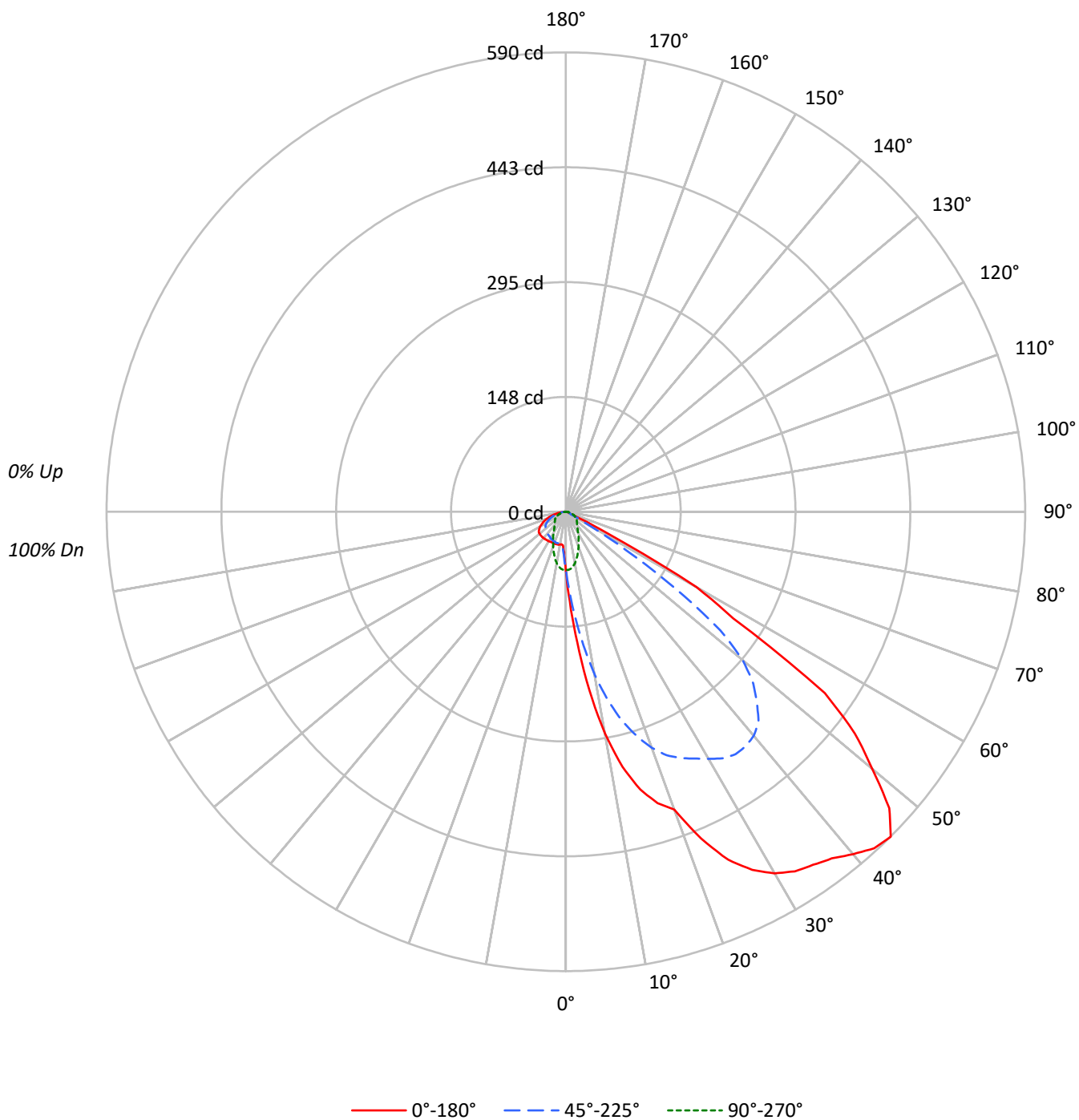
Lumens per Lamp: N/A
Luminaire Lumens: 510.0 lumens
Efficiency: N/A
Efficacy: 46.4 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

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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	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	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87		
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75		
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64		
4	85	74	66	59	83	72	65	59	70	63	58	68	62	57	66	61	57	54		
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47		
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41		
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35		
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31		
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28		
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	12796	12796	12796	12796	12796
5°	29113	23304	12672	8004	7486
10°	50453	37022	11752	7292	7467
15°	65863	49442	10252	7435	7720
20°	74611	59125	8761	7551	8027
25°	93702	66338	7354	7639	8228
30°	106652	72864	6264	7796	8710
35°	116392	79914	5466	7926	9209
40°	129047	84420	5036	8228	9960
45°	143749	84515	4969	8671	10790
50°	137690	79468	4903	9136	11735
55°	121906	51495	5044	9638	12671
60°	66788	11057	5098	9817	13158
65°	4768	2690	4972	9740	13285
70°	2316	2568	4633	9215	12790
75°	2063	2728	4392	8784	11844
80°	1984	2479	4066	8034	11108
85°	1976	2964	3952	7114	10078

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 143749 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.7	1.9
10°-20°	41.4	8.1
20°-30°	79.5	15.6
30°-40°	112.5	22.0
40°-50°	127.2	24.9
50°-60°	100.7	19.8
60°-70°	27.2	5.3
70°-80°	9.0	1.8
80°-90°	2.7	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°	130.7	25.6
0°-40°	243.1	47.7
0°-60°	471.1	92.4
0°-90°	510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	510.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	74	74	74	74	74	
5°	168	135	73	46	43	20
15°	369	277	58	42	43	104
25°	493	349	39	40	43	226
35°	554	380	26	38	44	349
45°	590	347	20	36	44	442
55°	406	172	17	32	42	330
65°	12	7	12	24	33	42
75°	3	4	7	13	18	3
85°	1	2	2	4	5	1
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°	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
2.5°	115.5	115.5	115.0	113.0	111.9	109.4	107.4	101.8	88.0	74.8	64.1
5°	168.4	171.0	167.4	166.9	163.8	159.3	156.2	134.8	101.8	73.3	55.0
7.5°	231.0	232.0	231.0	225.9	221.3	213.7	206.6	173.0	115.5	70.7	48.3
10°	288.5	287.0	283.9	280.4	273.7	265.6	253.4	211.7	128.7	67.2	44.3
12.5°	335.3	334.8	331.2	327.7	319.5	308.9	296.6	246.8	139.9	62.6	42.2
15°	369.4	369.4	365.8	361.8	354.1	345.5	331.8	277.3	149.1	57.5	40.2
17.5°	392.3	391.3	388.7	385.7	379.6	370.9	360.3	301.7	155.2	52.4	39.7
20°	407.1	406.6	404.5	399.9	394.9	388.2	378.6	322.6	157.7	47.8	39.2
22.5°	454.4	450.3	442.7	433.0	420.8	405.0	391.8	338.4	156.7	42.7	38.2
25°	493.1	491.5	483.4	471.7	455.4	435.0	413.2	349.1	151.6	38.7	37.1
27.5°	518.5	516.0	508.3	495.6	478.3	458.5	438.1	357.2	144.5	35.1	35.6
30°	536.3	534.8	527.1	512.9	495.1	473.2	452.3	366.4	134.8	31.5	34.1
32.5°	547.5	546.0	538.3	525.6	508.3	485.4	461.5	375.5	123.1	28.5	32.6
35°	553.6	552.1	543.4	532.2	516.0	493.6	468.1	380.1	108.9	26.0	31.0
37.5°	561.2	558.2	546.5	532.7	516.5	495.6	470.2	379.6	94.6	23.9	30.0
40°	574.0	565.8	549.0	530.7	513.9	493.1	468.6	375.5	78.9	22.4	29.0
42.5°	586.2	574.5	549.5	527.7	508.8	488.5	463.0	366.4	61.6	21.4	28.5
45°	590.2	572.9	542.4	520.5	502.7	481.9	455.4	347.0	41.7	20.4	27.5
47.5°	563.3	550.6	525.1	508.8	492.0	471.7	444.2	326.7	23.9	19.3	26.5
50°	513.9	505.8	491.5	481.4	472.2	457.9	431.0	296.6	14.2	18.3	25.4
52.5°	468.1	465.6	455.4	447.3	442.2	435.6	411.1	250.3	11.7	17.8	24.4
55°	406.0	397.9	395.4	392.3	403.0	402.5	369.4	171.5	11.2	16.8	23.4
57.5°	254.9	258.5	271.7	296.1	325.1	341.9	340.9	91.6	10.7	15.8	21.9
60°	193.9	193.4	197.4	207.6	229.0	252.9	275.3	32.1	10.2	14.8	20.9
62.5°	58.0	59.5	71.7	105.3	126.2	155.7	142.0	7.6	9.7	13.2	18.8
65°	11.7	12.2	12.2	13.7	16.8	25.4	31.0	6.6	9.2	12.2	17.3
67.5°	5.1	5.1	5.1	5.6	5.6	6.6	5.6	6.1	8.1	10.7	15.3
70°	4.6	4.6	4.6	4.6	4.6	4.6	5.1	5.1	7.1	9.2	13.2
72.5°	3.6	3.6	3.6	4.1	4.1	4.1	4.1	4.6	6.1	7.6	11.2
75°	3.1	3.1	3.1	3.1	3.6	3.6	3.6	4.1	5.1	6.6	9.2
77.5°	2.5	2.5	2.5	2.5	2.5	3.1	3.1	3.1	4.1	5.1	7.6
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	3.1	4.1	5.6
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.5	3.1	4.1
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.0	2.5
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.5
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°	74.3	74.3	74.3
2.5°	56.5	53.4	51.9
5°	46.3	43.8	43.3
7.5°	42.7	42.2	42.2
10°	41.7	42.2	42.7
12.5°	41.7	42.7	43.3
15°	41.7	42.7	43.3
17.5°	41.7	42.7	43.3
20°	41.2	42.7	43.8
22.5°	40.7	42.7	43.3
25°	40.2	42.7	43.3
27.5°	39.7	42.2	43.3
30°	39.2	42.2	43.8
32.5°	38.2	42.2	43.8
35°	37.7	42.2	43.8
37.5°	37.1	42.2	44.3
40°	36.6	42.2	44.3
42.5°	36.1	42.2	44.3
45°	35.6	41.7	44.3
47.5°	34.6	41.7	44.3
50°	34.1	41.2	43.8
52.5°	33.1	40.7	43.8
55°	32.1	39.7	42.2
57.5°	30.5	38.2	40.2
60°	28.5	36.1	38.2
62.5°	26.0	33.6	35.1
65°	23.9	30.5	32.6
67.5°	20.9	27.0	29.0
70°	18.3	23.4	25.4
72.5°	15.8	19.8	21.9
75°	13.2	16.3	17.8
77.5°	10.2	13.2	14.2
80°	8.1	10.2	11.2
82.5°	5.6	7.1	7.6
85°	3.6	4.6	5.1
87.5°	1.5	2.0	2.0
90°	0.0	0.0	0.0

(END OF REPORT)