

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: P1316146

Luminaire Tested: P3SQAS09R509827DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316146
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R509827DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

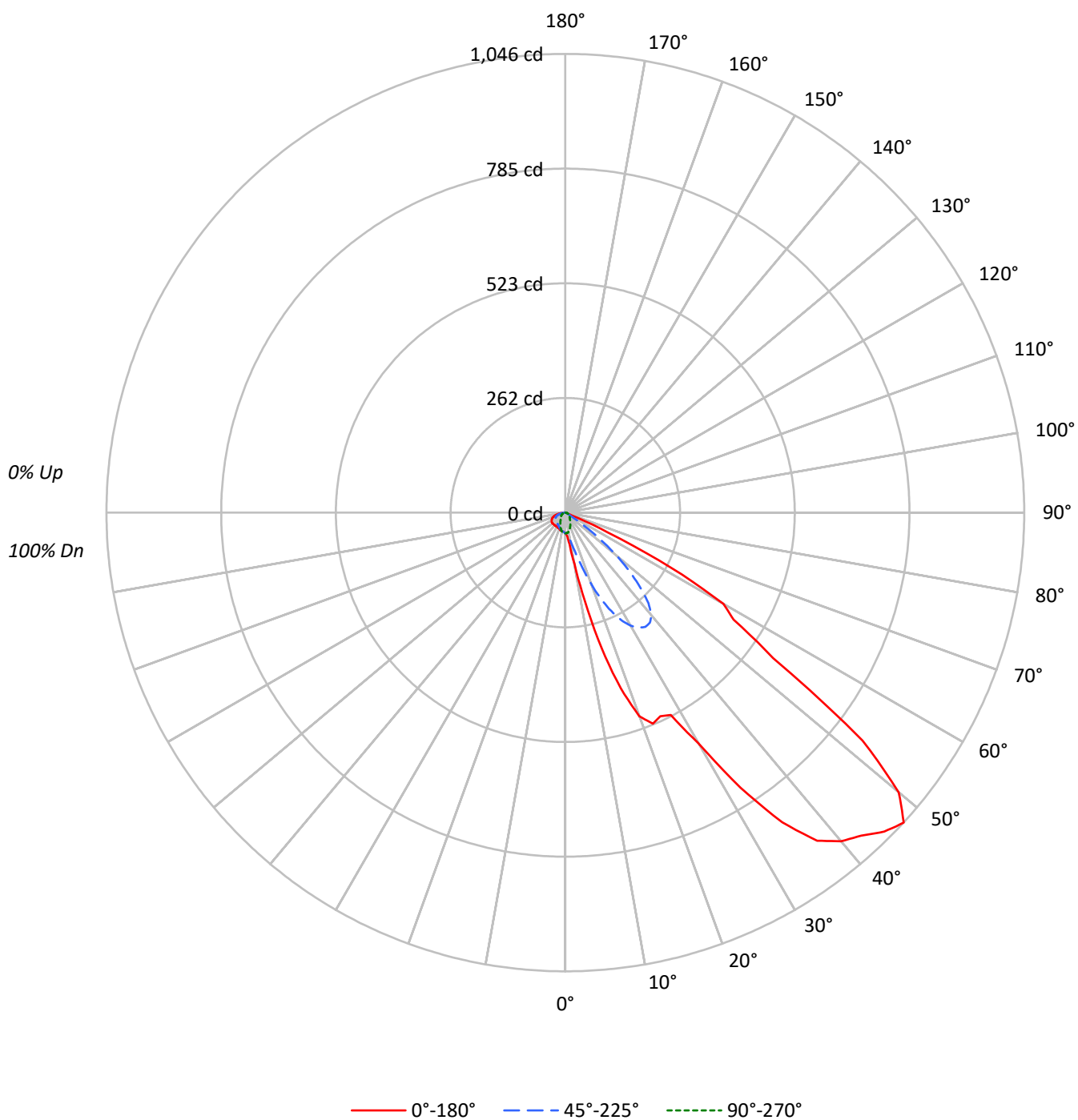
Lumens per Lamp: N/A
Luminaire Lumens: 590.0 lumens
Efficiency: N/A
Efficacy: 53.6 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	98	107	103	100	97	99	96	94	95	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	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8077	8077	8077	8077	8077
5°	9595	8990	8022	7659	7572
10°	20671	11140	7660	7397	7485
15°	57251	18258	6900	7078	7364
20°	90501	32037	5975	6818	7184
25°	97332	47070	5131	6594	7259
30°	120811	59083	4455	6483	7497
35°	181294	66858	3847	6539	7926
40°	219852	68750	3440	6767	8363
45°	250477	58966	3361	7209	9182
50°	265841	40699	3403	7770	10235
55°	173671	16364	3363	8407	11320
60°	143220	2824	3341	9128	12469
65°	43196	1467	3097	9780	13692
70°	1813	1561	3072	10021	14905
75°	1664	1664	3061	10181	16303
80°	1488	1488	3075	10116	16662
85°	988	1976	3952	10078	16203

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 266699 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.9	0.8
10°-20°	27.9	4.7
20°-30°	71.8	12.2
30°-40°	129.0	21.9
40°-50°	172.3	29.2
50°-60°	131.2	22.2
60°-70°	39.8	6.8
70°-80°	9.5	1.6
80°-90°	3.4	0.6
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°	104.6	17.7
0°-40°	233.6	39.6
0°-60°	537.2	91.1
0°-90°	590.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	590.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	47	47	47	47	47	
5°	56	52	46	44	44	7
15°	321	102	39	40	41	94
25°	512	248	27	35	38	244
35°	862	318	18	31	38	529
45°	1028	242	14	30	38	786
55°	578	54	11	28	38	575
65°	106	4	8	24	34	147
75°	2	2	5	15	24	3
85°	0	1	2	5	8	1
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°	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9
2.5°	49.9	49.9	49.9	49.9	49.9	49.9	49.4	49.4	49.4	48.4	47.4
5°	55.5	56.1	55.5	55.5	54.5	54.5	53.5	53.5	52.0	48.9	46.4
7.5°	72.9	72.4	71.9	69.8	68.3	64.7	63.2	60.6	56.1	48.9	45.4
10°	118.2	115.2	113.1	108.5	98.9	92.7	84.6	76.4	63.7	48.9	43.8
12.5°	205.4	204.9	198.7	183.5	169.7	150.8	131.0	111.1	78.5	47.9	41.8
15°	321.1	316.5	307.8	290.0	265.5	235.9	200.3	165.1	102.4	46.4	38.7
17.5°	419.9	414.3	407.7	389.8	361.8	324.6	281.8	233.4	135.0	44.3	35.7
20°	493.8	490.2	484.6	470.4	443.9	410.2	362.3	303.7	174.8	41.8	32.6
22.5°	520.8	520.3	521.3	516.2	503.0	476.5	430.6	369.5	214.0	38.7	29.6
25°	512.2	511.6	518.3	524.9	528.0	517.3	482.1	422.5	247.7	36.2	27.0
27.5°	520.3	518.8	515.7	516.7	525.4	531.5	515.2	463.2	276.7	32.6	24.5
30°	607.5	598.8	585.0	561.6	544.3	542.7	535.6	495.3	297.1	29.0	22.4
32.5°	743.5	732.8	707.8	664.5	623.2	591.7	569.2	522.3	311.4	25.5	19.9
35°	862.3	854.6	825.6	782.8	723.6	664.5	623.8	562.1	318.0	22.4	18.3
37.5°	942.8	939.7	911.2	865.3	805.2	735.4	681.3	602.9	316.5	18.9	16.8
40°	977.9	968.8	944.8	906.1	845.4	782.8	725.7	628.9	305.8	15.3	15.3
42.5°	998.8	988.6	962.6	926.0	866.3	799.6	730.8	617.6	280.3	12.2	14.8
45°	1028.4	1017.7	983.5	944.3	884.2	806.7	710.9	577.9	242.1	9.2	13.8
47.5°	1046.2	1039.1	1013.6	974.4	901.5	796.5	665.0	540.7	199.8	7.1	13.2
50°	992.2	985.1	966.2	939.2	890.3	762.4	624.8	480.6	151.9	5.6	12.7
52.5°	854.1	860.2	863.8	871.4	835.8	685.9	564.6	432.7	102.4	4.6	11.7
55°	578.4	587.6	597.8	628.3	670.1	610.5	501.5	374.1	54.5	4.6	11.2
57.5°	454.6	451.5	448.5	446.4	479.0	503.5	440.8	299.1	23.4	4.6	10.2
60°	415.8	406.7	400.6	402.1	418.4	408.7	349.1	195.2	8.2	4.6	9.7
62.5°	272.6	279.8	293.5	317.0	305.8	262.4	202.8	77.5	4.1	4.6	8.7
65°	106.0	102.4	106.0	112.6	97.3	72.4	45.4	13.8	3.6	4.1	7.6
67.5°	14.3	12.7	9.7	6.1	5.6	5.1	4.1	3.6	3.6	4.1	7.1
70°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.1	3.1	3.6	6.1
72.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.6	5.1
75°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.1	4.6
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	3.6
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	3.1
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.0	2.5
85°	0.5	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.5	2.0
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	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):

	112.5°	135°	157.5°	180°
0°	46.9	46.9	46.9	46.9
2.5°	46.4	45.4	45.4	45.4
5°	45.4	44.3	44.3	43.8
7.5°	43.8	43.3	43.3	43.3
10°	42.8	42.3	42.8	42.8
12.5°	40.8	41.3	41.8	41.8
15°	38.7	39.7	40.8	41.3
17.5°	36.7	38.7	39.7	40.3
20°	34.7	37.2	38.7	39.2
22.5°	33.1	35.7	37.7	38.7
25°	31.1	34.7	37.2	38.2
27.5°	29.0	33.1	36.2	37.7
30°	27.5	32.6	36.2	37.7
32.5°	26.0	31.6	35.7	37.2
35°	25.0	31.1	35.7	37.7
37.5°	24.0	30.6	35.7	37.2
40°	23.4	30.1	35.7	37.2
42.5°	22.9	30.1	35.7	37.7
45°	21.9	29.6	35.7	37.7
47.5°	21.4	29.6	35.7	37.7
50°	20.9	29.0	35.7	38.2
52.5°	20.4	28.5	35.7	38.2
55°	19.4	28.0	35.2	37.7
57.5°	18.9	27.5	34.7	36.7
60°	17.8	26.5	33.6	36.2
62.5°	16.8	25.5	32.6	34.7
65°	15.3	24.0	31.1	33.6
67.5°	13.8	21.9	29.6	32.1
70°	12.2	19.9	27.5	29.6
72.5°	10.7	17.8	25.5	27.0
75°	9.2	15.3	22.4	24.5
77.5°	7.6	13.2	18.9	20.4
80°	5.6	10.2	15.3	16.8
82.5°	4.6	7.6	11.2	12.2
85°	3.1	5.1	7.1	8.2
87.5°	1.5	2.5	3.6	4.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)