

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: P1308277

Luminaire Tested: P3SQAS20R209030D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R209030D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

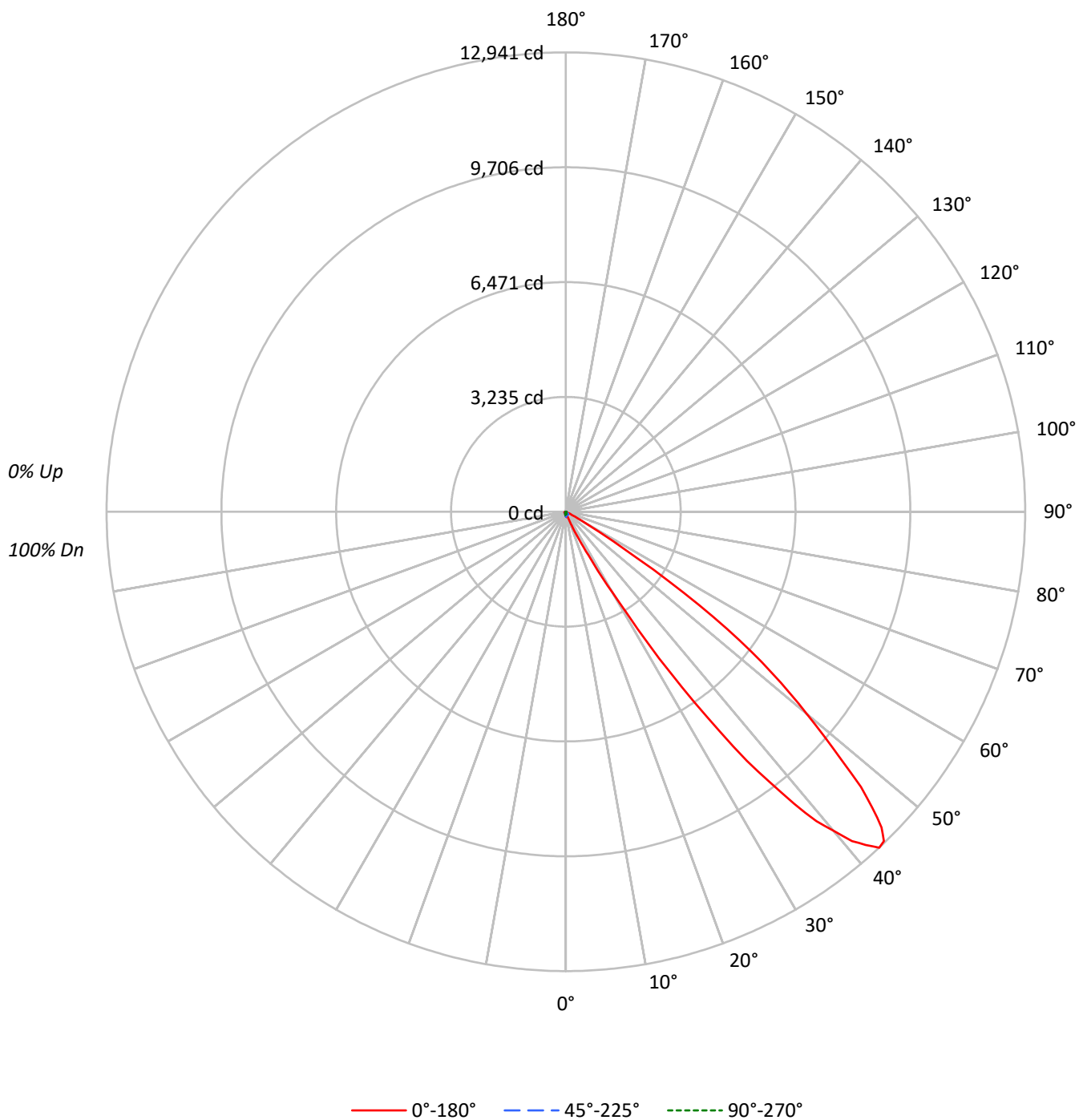
Lumens per Lamp: N/A
Luminaire Lumens: 1798.0 lumens
Efficiency: N/A
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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	65	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	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	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	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	21528	21528	21528	21528	21528
5°	25120	23373	20158	17530	16942
10°	24815	21283	15949	13588	13291
15°	21699	16261	11750	10841	11447
20°	32202	13617	8669	9292	10227
25°	138700	14119	6746	8342	9957
30°	524528	17142	5707	8074	9744
35°	1590104	20604	5319	8179	10302
40°	2636742	20504	4564	8746	11016
45°	3064759	13980	4116	9060	11934
50°	2379065	7690	4073	9512	13584
55°	1376937	5074	4054	10659	14713
60°	232811	1171	3479	11057	16292
65°	17890	0	4116	12388	18583
70°	2568	0	5086	13596	21250
75°	2262	1131	5590	15770	24754
80°	1686	1686	8331	16761	28464
85°	3359	3359	13437	16599	30036

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3064759 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.7	0.6
10°-20°	22.5	1.3
20°-30°	71.8	4.0
30°-40°	458.5	25.5
40°-50°	839.2	46.7
50°-60°	344.8	19.2
60°-70°	29.1	1.6
70°-80°	14.5	0.8
80°-90°	6.8	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°	105.0	5.8
0°-40°	563.5	31.3
0°-60°	1747.6	97.2
0°-90°	1798.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1798.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	125	125	125	125	125	
5°	145	135	117	101	98	14
15°	122	91	66	61	64	39
25°	730	74	36	44	52	480
35°	7563	98	25	39	49	4787
45°	12583	57	17	37	49	9035
55°	4586	17	14	36	49	4009
65°	44	0	10	30	46	143
75°	3	2	8	24	37	4
85°	2	2	7	8	15	1
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°	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0
2.5°	136.9	136.9	136.9	135.2	135.2	136.9	135.2	135.2	135.2	135.2	133.5
5°	145.3	145.3	145.3	145.3	145.3	145.3	145.3	143.6	143.6	141.9	135.2
7.5°	148.7	148.7	148.7	148.7	147.0	147.0	147.0	147.0	145.3	143.6	131.8
10°	141.9	141.9	141.9	140.2	140.2	140.2	138.6	138.6	136.9	135.2	121.7
12.5°	128.4	128.4	128.4	128.4	126.7	126.7	125.0	125.0	123.3	121.7	106.5
15°	121.7	121.7	121.7	120.0	120.0	118.3	116.6	114.9	113.2	109.8	91.2
17.5°	131.8	131.8	130.1	130.1	126.7	123.3	121.7	116.6	113.2	108.1	81.1
20°	175.7	177.4	170.7	165.6	162.2	152.1	147.0	138.6	131.8	123.3	74.3
22.5°	354.8	348.1	336.2	317.7	295.7	277.1	243.3	216.3	197.7	172.3	72.7
25°	729.9	723.2	691.1	664.1	596.5	544.1	471.4	412.3	351.5	292.3	74.3
27.5°	1387.2	1341.6	1333.2	1209.8	1115.2	980.0	839.8	721.5	613.4	493.4	79.4
30°	2637.6	2585.2	2401.1	2215.2	1960.0	1671.1	1395.7	1138.9	924.3	729.9	86.2
31°	3347.3	3398.0	3181.7	2808.3	2431.5	2061.4	1684.6	1358.5	1081.4	839.8	89.6
32°	4400.0	4178.6	3950.5	3567.0	3019.5	2546.4	2073.3	1603.5	1238.5	958.1	92.9
33°	5395.2	5265.1	4917.0	4438.8	3781.5	3117.5	2504.1	1892.5	1431.2	1101.7	94.6
34°	6456.3	6312.7	6030.5	5344.5	4623.0	3752.8	2935.0	2225.3	1661.0	1241.9	96.3
35°	7563.1	7502.3	6958.2	6363.4	5476.3	4427.0	3453.7	2590.3	1885.7	1370.3	98.0
36°	8676.6	8480.6	8054.8	7186.3	6260.3	5050.5	3997.8	2929.9	2113.8	1522.4	98.0
37°	9514.7	9470.8	8906.4	8059.9	6971.7	5716.2	4467.6	3306.7	2343.6	1652.5	98.0
38°	10439.0	10264.9	9692.1	8830.4	7640.8	6326.2	4959.3	3634.5	2561.6	1770.8	96.3
39°	11217.9	10959.4	10381.5	9529.9	8225.4	6789.2	5349.6	3952.2	2754.2	1868.8	94.6
40°	11728.2	11549.1	10945.9	9987.8	8756.0	7226.8	5745.0	4214.1	2897.8	1943.2	91.2
41°	12290.9	11993.5	11397.0	10433.9	9141.3	7612.1	5993.4	4386.5	3009.4	1992.2	87.9
42°	12627.1	12383.8	11675.8	10733.0	9416.7	7831.8	6196.1	4518.3	3076.9	2017.5	81.1
43°	12941.4	12610.2	11920.8	10907.0	9599.2	7987.2	6289.1	4579.1	3092.1	2017.5	72.7
44°	12899.2	12584.9	11870.1	10930.7	9639.7	8032.8	6327.9	4580.8	3068.5	1992.2	64.2
45°	12583.2	12270.6	11626.8	10724.5	9494.4	7943.3	6250.2	4513.2	3002.6	1948.2	57.4
46°	12003.6	11692.7	11199.3	10379.8	9224.1	7740.5	6069.4	4366.2	2892.8	1877.3	50.7
47°	11373.4	11070.9	10565.7	9823.9	8762.8	7378.9	5807.5	4160.0	2739.0	1774.2	45.6
48°	10459.2	10270.0	9763.1	9129.4	8122.4	6812.9	5347.9	3823.8	2532.9	1640.7	38.9
49°	9651.6	9452.2	9007.8	8326.8	7287.7	6153.9	4798.7	3414.9	2264.2	1492.0	33.8
50°	8879.4	8705.3	8294.7	7525.9	6534.1	5358.0	4057.0	2899.5	1926.3	1307.8	28.7
51°	8124.1	7994.0	7574.9	6868.6	5861.6	4746.4	3514.6	2414.6	1591.7	1084.8	27.0
52°	7365.4	7350.2	6895.7	6180.9	5207.6	4136.4	2987.4	2037.8	1350.1	910.7	25.3
53°	6549.3	6451.3	6054.2	5412.1	4477.7	3501.1	2532.9	1718.4	1162.5	775.6	22.0
54°	5619.9	5510.1	5084.3	4504.7	3658.2	2867.4	2041.2	1388.9	968.2	655.6	20.3
55°	4585.8	4398.3	4089.1	3494.3	2857.3	2188.2	1576.5	1100.0	773.9	545.8	16.9
56°	3479.1	3291.5	3117.5	2679.9	2096.9	1632.2	1174.3	843.2	604.9	430.9	15.2
57°	2419.6	2409.5	2124.0	1787.7	1402.4	1111.8	804.3	594.8	427.5	334.6	11.8
58°	1569.7	1517.3	1334.9	1140.5	917.5	694.5	517.0	403.8	290.6	228.1	10.1
59°	1100.0	995.2	897.2	760.4	577.9	437.6	332.9	258.5	201.1	158.8	6.8
60°	675.9	653.9	588.0	463.0	375.1	309.2	248.4	190.9	147.0	113.2	3.4
62.5°	192.6	196.0	177.4	157.1	135.2	116.6	104.8	89.6	74.3	59.1	0.0
65°	43.9	42.2	45.6	42.2	38.9	38.9	33.8	30.4	27.0	25.3	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°	13.5	13.5	11.8	11.8	11.8	10.1	10.1	8.4	8.4	6.8	0.0
70°	5.1	5.1	5.1	5.1	5.1	3.4	3.4	3.4	1.7	1.7	0.0
72.5°	5.1	5.1	5.1	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7
75°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7
77.5°	3.4	3.4	3.4	3.4	3.4	1.7	3.4	1.7	1.7	1.7	1.7
80°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
85°	1.7	1.7	1.7	1.7	0.0	0.0	1.7	1.7	1.7	0.0	1.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	125.0	125.0	125.0	125.0	125.0	125.0
2.5°	130.1	123.3	118.3	113.2	111.5	111.5
5°	126.7	116.6	106.5	101.4	98.0	98.0
7.5°	116.6	104.8	94.6	89.6	87.9	87.9
10°	104.8	91.2	81.1	77.7	77.7	76.0
12.5°	91.2	77.7	71.0	69.3	69.3	69.3
15°	76.0	65.9	60.8	60.8	62.5	64.2
17.5°	64.2	54.1	52.4	55.8	59.1	59.1
20°	54.1	47.3	47.3	50.7	54.1	55.8
22.5°	45.6	40.6	42.2	47.3	52.4	54.1
25°	40.6	35.5	38.9	43.9	49.0	52.4
27.5°	33.8	32.1	35.5	42.2	49.0	50.7
30°	28.7	28.7	33.8	40.6	47.3	49.0
31°	27.0	27.0	33.8	40.6	47.3	49.0
32°	25.3	27.0	32.1	40.6	47.3	49.0
33°	23.7	25.3	32.1	38.9	47.3	49.0
34°	22.0	25.3	32.1	38.9	47.3	49.0
35°	20.3	25.3	32.1	38.9	47.3	49.0
36°	18.6	23.7	30.4	38.9	47.3	49.0
37°	16.9	23.7	30.4	38.9	47.3	49.0
38°	15.2	22.0	30.4	38.9	47.3	49.0
39°	15.2	22.0	28.7	38.9	45.6	49.0
40°	13.5	20.3	28.7	38.9	45.6	49.0
41°	11.8	20.3	28.7	37.2	45.6	49.0
42°	10.1	18.6	27.0	37.2	45.6	49.0
43°	8.4	18.6	27.0	37.2	45.6	49.0
44°	8.4	16.9	27.0	37.2	45.6	49.0
45°	6.8	16.9	27.0	37.2	45.6	49.0
46°	5.1	16.9	27.0	37.2	45.6	49.0
47°	5.1	15.2	25.3	37.2	45.6	49.0
48°	3.4	15.2	25.3	37.2	45.6	49.0
49°	3.4	15.2	25.3	37.2	45.6	50.7
50°	3.4	15.2	25.3	35.5	45.6	50.7
51°	1.7	15.2	25.3	35.5	45.6	50.7
52°	1.7	15.2	23.7	35.5	47.3	50.7
53°	1.7	13.5	23.7	35.5	47.3	50.7
54°	1.7	13.5	23.7	35.5	47.3	49.0
55°	1.7	13.5	23.7	35.5	45.6	49.0
56°	1.7	11.8	23.7	35.5	45.6	49.0
57°	1.7	11.8	22.0	33.8	45.6	47.3
58°	1.7	11.8	22.0	33.8	45.6	47.3
59°	1.7	11.8	22.0	33.8	43.9	47.3
60°	3.4	10.1	20.3	32.1	43.9	47.3
62.5°	3.4	10.1	20.3	32.1	42.2	45.6
65°	3.4	10.1	18.6	30.4	42.2	45.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.4	8.4	16.9	28.7	40.6	43.9
70°	3.4	10.1	16.9	27.0	38.9	42.2
72.5°	5.1	8.4	15.2	25.3	37.2	40.6
75°	5.1	8.4	15.2	23.7	35.5	37.2
77.5°	6.8	8.4	13.5	20.3	32.1	33.8
80°	6.8	8.4	11.8	16.9	27.0	28.7
82.5°	6.8	8.4	8.4	13.5	20.3	22.0
85°	5.1	6.8	6.8	8.4	13.5	15.2
87.5°	5.1	6.8	5.1	3.4	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)