

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: P1309471

Luminaire Tested: P3SQAS20R459035D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309471
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R459035D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

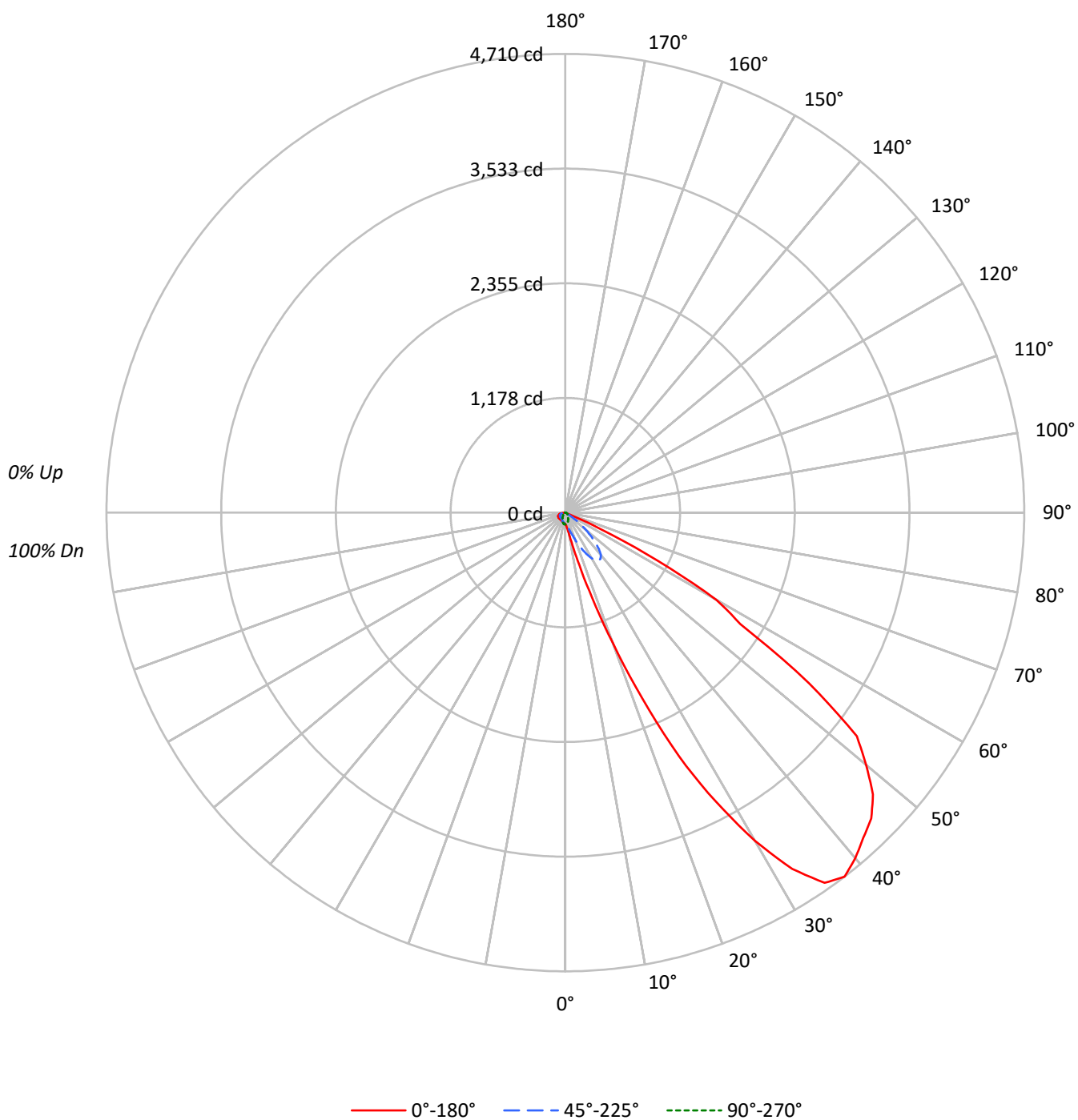
Lumens per Lamp: N/A
Luminaire Lumens: 2104.0 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43		
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36		
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31		
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28	26		
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24	22		
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21	19		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	20959	20959	20959	20959	20959
5°	24947	23149	20746	19242	19242
10°	39820	27054	19464	18240	18240
15°	99187	36266	17669	17045	17669
20°	261278	54158	15285	16257	17210
25°	524607	80286	13207	15202	16855
30°	773388	107527	10719	14875	17281
35°	975537	126105	9146	14612	17913
40°	1040830	127406	8206	15243	19155
45°	1081429	106289	7623	16513	20751
50°	1079708	74056	7448	17710	23283
55°	917688	32879	7837	19847	25582
60°	616764	6579	7784	22148	29347
65°	163657	2853	7784	24084	33294
70°	4381	3525	7855	26285	37665
75°	3460	3460	8118	27748	42786
80°	3471	5157	8629	29357	48300
85°	3359	6916	13832	30826	48018

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 1109267 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.1	0.6
10°-20°	59.3	2.8
20°-30°	244.8	11.6
30°-40°	515.8	24.5
40°-50°	636.4	30.2
50°-60°	477.0	22.7
60°-70°	122.8	5.8
70°-80°	25.4	1.2
80°-90°	10.3	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°	316.2	15.0
0°-40°	832.0	39.5
0°-60°	1945.5	92.5
0°-90°	2104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2104.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	122	122	122	122	122	
5°	144	134	120	111	111	16
15°	556	203	99	96	99	204
25°	2761	422	70	80	89	1286
35°	4640	600	44	70	85	2828
45°	4440	436	31	68	85	3398
55°	3056	110	26	66	85	2639
65°	402	7	19	59	82	579
75°	5	5	12	42	64	6
85°	2	4	7	16	24	2
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°	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7
2.5°	128.6	128.6	128.6	128.6	128.6	128.6	128.6	126.9	125.2	121.7	118.2
5°	144.3	142.6	142.6	142.6	140.8	139.1	139.1	133.9	126.9	120.0	114.7
7.5°	170.4	170.4	168.6	165.2	163.4	159.9	156.5	142.6	126.9	116.5	109.5
10°	227.7	224.3	219.0	215.6	206.9	194.7	186.0	154.7	125.2	111.3	106.0
12.5°	340.7	347.7	330.3	312.9	288.6	266.0	238.2	175.6	125.2	106.0	100.8
15°	556.3	568.5	535.5	500.7	441.6	385.9	333.8	203.4	121.7	99.1	93.9
17.5°	909.2	924.9	869.2	787.5	695.4	584.1	488.5	241.6	118.2	92.1	88.7
20°	1425.6	1423.8	1316.0	1213.5	1036.1	872.7	693.7	295.5	113.0	83.4	83.4
22.5°	2060.1	2067.1	1934.9	1750.7	1498.6	1236.1	951.0	358.1	106.0	76.5	78.2
25°	2760.7	2701.6	2545.1	2320.9	1999.3	1635.9	1260.4	422.5	99.1	69.5	73.0
27.5°	3344.8	3287.5	3108.4	2842.4	2496.5	2065.3	1575.1	486.8	90.4	62.6	67.8
30°	3889.0	3816.0	3600.4	3299.6	2887.6	2421.7	1870.6	540.7	80.0	53.9	62.6
32.5°	4337.5	4271.5	4026.3	3676.9	3228.4	2727.7	2121.0	582.4	69.5	48.7	59.1
35°	4640.0	4572.2	4346.2	3962.0	3473.5	2950.2	2324.4	599.8	60.8	43.5	57.4
37.5°	4709.6	4673.0	4511.4	4151.5	3642.1	3092.8	2454.7	594.6	50.4	40.0	53.9
40°	4629.6	4638.3	4561.8	4262.8	3732.5	3153.6	2508.6	566.7	41.7	36.5	52.2
42.5°	4527.0	4549.6	4544.4	4308.0	3770.8	3157.1	2486.0	511.1	33.0	33.0	50.4
45°	4440.1	4462.7	4494.0	4288.8	3744.7	3111.9	2414.8	436.4	24.3	31.3	50.4
47.5°	4281.9	4306.2	4351.4	4135.9	3612.6	2995.4	2286.1	354.7	17.4	29.6	48.7
50°	4029.8	4042.0	4029.8	3788.2	3358.8	2807.7	2077.5	276.4	12.2	27.8	48.7
52.5°	3770.8	3746.4	3645.6	3339.6	2955.4	2510.4	1815.0	196.4	8.7	26.1	46.9
55°	3056.3	3018.0	2943.3	2755.5	2536.4	2145.3	1467.3	109.5	8.7	26.1	45.2
57.5°	2129.6	2150.5	2176.6	2138.3	2037.5	1689.8	1114.4	48.7	8.7	24.3	45.2
60°	1790.6	1773.3	1775.0	1750.7	1583.8	1232.6	766.7	19.1	8.7	22.6	43.5
62.5°	1069.2	1081.3	1103.9	1109.2	944.0	688.4	401.6	8.7	8.7	20.9	41.7
65°	401.6	420.7	368.6	319.9	253.8	186.0	93.9	7.0	10.4	19.1	38.2
67.5°	12.2	13.9	17.4	15.6	15.6	13.9	10.4	7.0	10.4	17.4	36.5
70°	8.7	8.7	8.7	8.7	8.7	7.0	7.0	7.0	8.7	15.6	33.0
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.7	13.9	29.6
75°	5.2	7.0	5.2	5.2	5.2	5.2	5.2	5.2	8.7	12.2	24.3
77.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	7.0	10.4	20.9
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	5.2	7.0	8.7	17.4
82.5°	3.5	3.5	3.5	1.7	3.5	3.5	3.5	3.5	7.0	7.0	13.9
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.5	5.2	7.0	8.7
87.5°	0.0	0.0	0.0	0.0	1.7	1.7	1.7	3.5	5.2	5.2	5.2
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):

	135°	157.5°	180°
0°	121.7	121.7	121.7
2.5°	114.7	114.7	114.7
5°	111.3	111.3	111.3
7.5°	107.8	107.8	107.8
10°	104.3	104.3	104.3
12.5°	100.8	100.8	102.6
15°	95.6	99.1	99.1
17.5°	92.1	95.6	97.4
20°	88.7	92.1	93.9
22.5°	83.4	88.7	92.1
25°	80.0	86.9	88.7
27.5°	76.5	85.2	88.7
30°	74.8	83.4	86.9
32.5°	71.3	81.7	85.2
35°	69.5	81.7	85.2
37.5°	69.5	80.0	85.2
40°	67.8	80.0	85.2
42.5°	67.8	80.0	85.2
45°	67.8	80.0	85.2
47.5°	66.1	80.0	86.9
50°	66.1	81.7	86.9
52.5°	66.1	81.7	86.9
55°	66.1	81.7	85.2
57.5°	64.3	80.0	85.2
60°	64.3	80.0	85.2
62.5°	60.8	78.2	83.4
65°	59.1	76.5	81.7
67.5°	55.6	74.8	78.2
70°	52.2	69.5	74.8
72.5°	46.9	66.1	71.3
75°	41.7	60.8	64.3
77.5°	36.5	53.9	57.4
80°	29.6	45.2	48.7
82.5°	22.6	34.8	36.5
85°	15.6	22.6	24.3
87.5°	7.0	10.4	12.2
90°	0.0	0.0	0.0

(END OF REPORT)