

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: P1311621

Luminaire Tested: P3SQAS20R309050D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R309050D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 5000K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

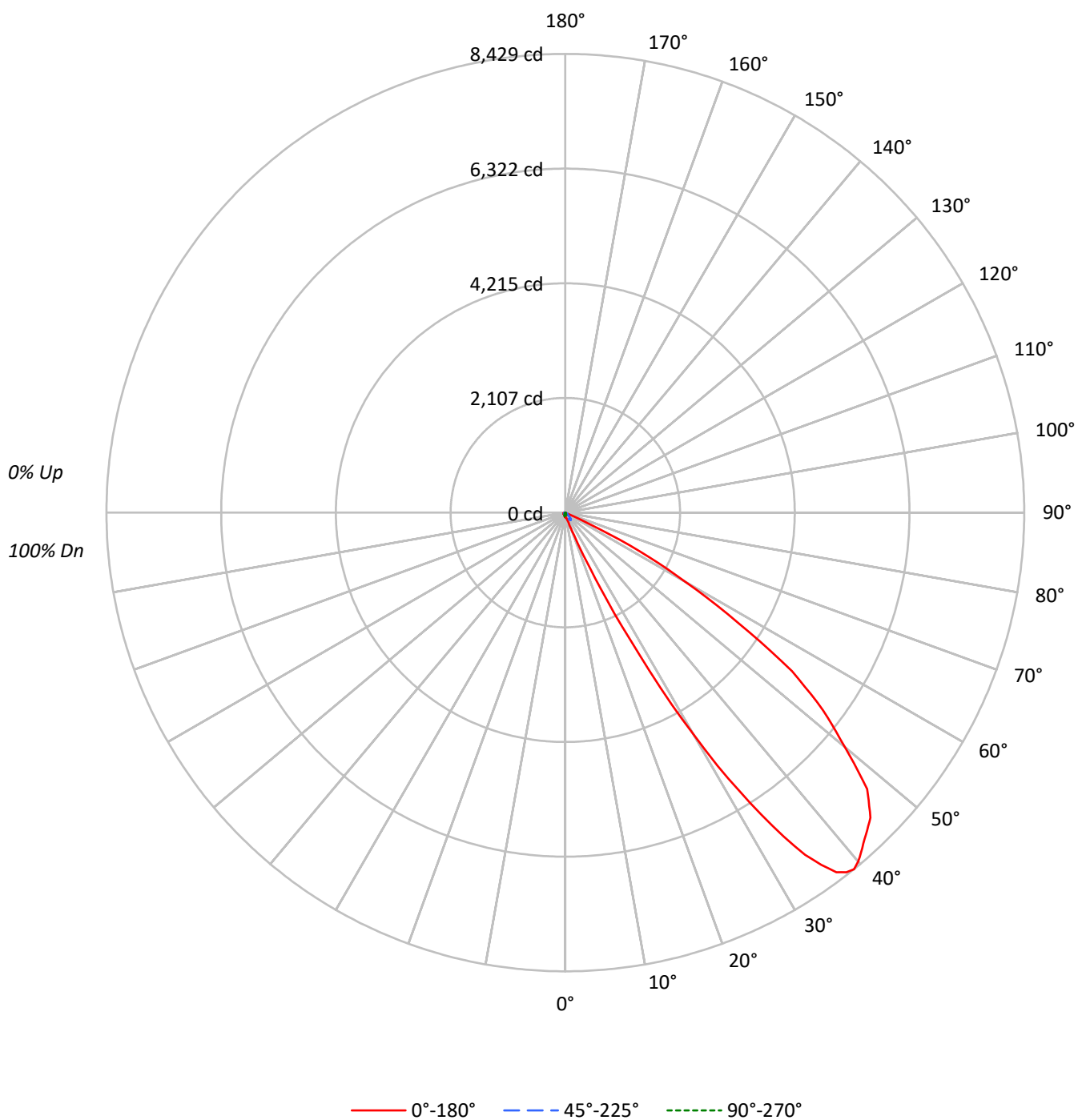
Lumens per Lamp: N/A
Luminaire Lumens: 2191.0 lumens
Efficiency: N/A
Efficacy: 76.1 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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
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	100	97	100	97	94	96	93	91	92	90	89	87		
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	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	14622	14622	14622	14622	14622
5°	15628	15317	14366	13087	12759
10°	17103	15162	12591	11297	10982
15°	25015	15138	10537	9539	9878
20°	62918	16568	8119	8119	9127
25°	292147	20694	6309	7373	8418
30°	930055	28637	4773	6980	8432
35°	1613820	34922	3890	6602	8536
40°	1882131	34847	2900	6632	8723
45°	1930210	24721	3142	7185	9450
50°	1795003	13852	2465	7422	10878
55°	1525626	7206	2762	8317	12191
60°	881091	1894	3169	8887	13364
65°	179754	0	3749	10514	15037
70°	2769	906	4633	12085	17674
75°	2462	1198	4924	12310	20894
80°	1785	1785	7339	14679	23803
85°	0	3557	14623	14623	29245

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1930210 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.7	0.4
10°-20°	22.1	1.0
20°-30°	126.4	5.8
30°-40°	590.1	26.9
40°-50°	834.5	38.1
50°-60°	513.4	23.4
60°-70°	78.2	3.6
70°-80°	12.4	0.6
80°-90°	6.2	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°	156.1	7.1
0°-40°	746.3	34.1
0°-60°	2094.2	95.6
0°-90°	2191.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2191.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	85	85	85	85	85	
5°	90	89	83	76	74	9
15°	140	85	59	54	55	50
25°	1537	109	33	39	44	946
35°	7676	166	18	31	41	4607
45°	7925	102	13	30	39	6008
55°	5081	24	9	28	41	4323
65°	441	0	9	26	37	798
75°	4	2	7	18	31	4
85°	0	2	7	7	15	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
2.5°	86.7	86.7	88.6	88.6	86.7	88.6	88.6	88.6	84.9	83.1	79.4
5°	90.4	90.4	90.4	92.3	90.4	90.4	88.6	86.7	83.1	77.5	75.7
7.5°	94.1	94.1	92.3	94.1	92.3	92.3	88.6	84.9	79.4	73.8	70.1
10°	97.8	97.8	96.0	96.0	94.1	94.1	86.7	81.2	72.0	66.4	64.6
12.5°	108.9	108.9	107.0	105.2	101.5	99.7	84.9	75.7	64.6	59.1	57.2
15°	140.3	138.4	134.7	129.2	120.0	118.1	84.9	70.1	59.1	53.5	53.5
17.5°	191.9	190.1	184.6	169.8	153.2	147.6	84.9	62.8	51.7	48.0	48.0
20°	343.3	328.5	300.8	263.9	225.2	204.9	90.4	55.4	44.3	42.4	44.3
21°	448.5	433.7	398.7	337.7	269.5	247.3	94.1	53.5	42.4	40.6	44.3
22°	610.9	594.3	522.3	439.3	341.4	302.7	96.0	49.8	38.8	38.8	42.4
23°	852.7	825.0	703.2	570.3	426.3	371.0	99.7	48.0	36.9	38.8	40.6
24°	1116.6	1092.6	954.2	754.9	544.5	465.1	103.4	46.1	35.1	35.1	38.8
25°	1537.4	1509.7	1264.2	952.3	690.3	559.2	108.9	42.4	33.2	33.2	38.8
26°	2081.8	1954.5	1627.8	1227.3	850.8	701.3	114.4	40.6	31.4	33.2	36.9
27°	2598.6	2493.4	2126.1	1574.3	1052.0	861.9	121.8	38.8	29.5	31.4	36.9
28°	3277.8	3130.1	2666.9	1991.4	1325.1	1042.8	129.2	36.9	27.7	31.4	35.1
29°	4038.2	3831.5	3272.3	2460.2	1633.4	1245.8	136.6	35.1	25.8	29.5	35.1
30°	4676.8	4483.0	3923.8	3015.7	1987.7	1513.4	144.0	33.2	24.0	29.5	35.1
31°	5426.1	5132.6	4455.3	3486.3	2292.2	1781.0	151.3	29.5	22.1	27.7	33.2
32°	6033.3	5828.4	5108.6	4017.9	2692.7	2076.3	156.9	27.7	22.1	27.7	33.2
33°	6620.2	6345.2	5649.4	4527.3	3054.5	2379.0	162.4	25.8	20.3	25.8	33.2
34°	7181.3	6928.4	6160.6	4938.8	3395.9	2666.9	166.1	22.1	20.3	25.8	31.4
35°	7675.9	7382.4	6611.0	5341.2	3746.6	2929.0	166.1	20.3	18.5	24.0	31.4
36°	7997.0	7786.6	7002.2	5738.0	4064.0	3178.1	166.1	18.5	16.6	24.0	29.5
37°	8272.0	8026.5	7316.0	6042.5	4298.4	3377.5	166.1	16.6	16.6	24.0	29.5
38°	8384.6	8174.2	7531.9	6312.0	4518.0	3580.5	164.3	14.8	14.8	22.1	29.5
39°	8428.9	8240.6	7694.3	6505.8	4680.5	3717.1	160.6	12.9	14.8	22.1	29.5
40°	8371.7	8229.6	7777.4	6631.3	4809.6	3816.7	155.0	11.1	12.9	22.1	29.5
42.5°	8135.4	8041.3	7758.9	6756.8	4920.4	3890.5	134.7	7.4	12.9	20.3	29.5
45°	7925.0	7821.7	7572.5	6625.7	4776.4	3744.7	101.5	3.7	12.9	20.3	29.5
47.5°	7517.2	7452.6	7256.9	6291.7	4460.8	3416.2	72.0	1.8	11.1	18.5	27.7
50°	6699.5	6638.6	6380.3	5463.0	3837.0	2888.4	51.7	1.8	9.2	18.5	27.7
52.5°	5966.8	5902.2	5531.3	4542.0	2947.4	2116.9	33.2	1.8	9.2	18.5	27.7
55°	5081.0	4968.4	4481.1	3447.6	2089.2	1419.3	24.0	1.8	9.2	16.6	27.7
57.5°	3761.3	3597.1	3161.5	2351.3	1203.3	769.6	12.9	1.8	9.2	16.6	27.7
60°	2558.0	2460.2	1978.5	1240.2	513.1	324.8	5.5	1.8	9.2	16.6	25.8
62.5°	1550.3	1426.7	994.8	527.8	221.5	147.6	0.0	3.7	9.2	16.6	25.8
65°	441.1	391.3	260.2	120.0	62.8	48.0	0.0	3.7	9.2	16.6	25.8
67.5°	14.8	14.8	14.8	12.9	9.2	9.2	1.8	3.7	9.2	16.6	24.0
70°	5.5	5.5	5.5	3.7	3.7	1.8	1.8	3.7	9.2	14.8	24.0
72.5°	3.7	3.7	3.7	3.7	1.8	1.8	1.8	3.7	7.4	12.9	22.1
75°	3.7	3.7	3.7	1.8	1.8	1.8	1.8	5.5	7.4	12.9	18.5
77.5°	3.7	3.7	3.7	1.8	1.8	1.8	1.8	5.5	7.4	11.1	18.5
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.5	7.4	11.1	14.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.8	1.8	1.8	0.0	0.0	0.0	1.8	5.5	7.4	7.4	11.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.8	5.5	7.4	5.5	7.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.8	5.5	5.5	5.5	3.7
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):

	157.5°	180°
0°	84.9	84.9
2.5°	79.4	79.4
5°	73.8	73.8
7.5°	68.3	68.3
10°	62.8	62.8
12.5°	59.1	59.1
15°	53.5	55.4
17.5°	49.8	51.7
20°	48.0	49.8
21°	48.0	49.8
22°	46.1	48.0
23°	46.1	48.0
24°	44.3	46.1
25°	42.4	44.3
26°	42.4	44.3
27°	42.4	44.3
28°	40.6	44.3
29°	40.6	42.4
30°	40.6	42.4
31°	38.8	42.4
32°	38.8	42.4
33°	38.8	40.6
34°	36.9	40.6
35°	36.9	40.6
36°	36.9	40.6
37°	36.9	38.8
38°	36.9	40.6
39°	36.9	38.8
40°	36.9	38.8
42.5°	36.9	38.8
45°	36.9	38.8
47.5°	36.9	40.6
50°	36.9	40.6
52.5°	36.9	40.6
55°	36.9	40.6
57.5°	36.9	38.8
60°	36.9	38.8
62.5°	35.1	38.8
65°	35.1	36.9
67.5°	35.1	36.9
70°	33.2	35.1
72.5°	31.4	33.2
75°	27.7	31.4
77.5°	25.8	27.7
80°	22.1	24.0

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	18.5	18.5
85°	12.9	14.8
87.5°	7.4	7.4
90°	0.0	0.0

(END OF REPORT)