

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: P1312739

Luminaire Tested: P3SQAS20R309727D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312739
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: P3SQAS20R309727D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

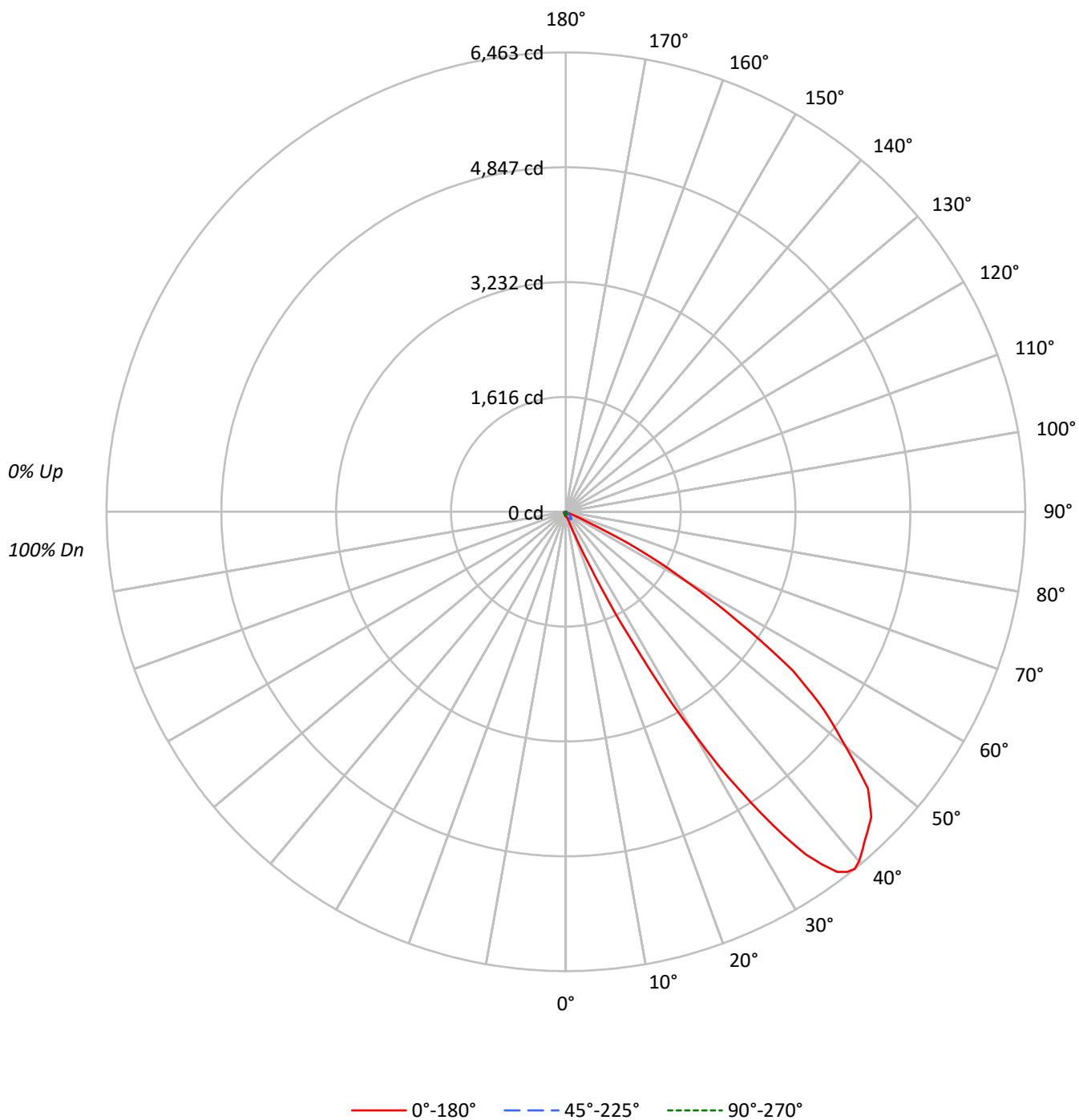
Lumens per Lamp: N/A
Luminaire Lumens: 1680.0 lumens
Efficiency: N/A
Efficacy: 58.3 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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°	11212	11212	11212	11212	11212
5°	11981	11739	11012	10027	9785
10°	13116	11629	9653	8657	8412
15°	19185	11607	8077	7310	7578
20°	48238	12701	6231	6231	7001
25°	224003	15867	4846	5644	6461
30°	713132	21955	3659	5349	6463
35°	1237439	26785	2985	5067	6539
40°	1443169	26731	2226	5081	6677
45°	1480039	18949	2411	5504	7234
50°	1376361	10610	1902	5680	8333
55°	1169787	5525	2132	6366	9338
60°	675595	1447	2446	6820	10230
65°	137821	0	2893	8069	11533
70°	2115	705	3575	9265	13545
75°	1863	932	3793	9449	16037
80°	1389	1389	5653	11207	18249
85°	0	2766	11263	11263	22329

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1480039 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.9	0.4
10°-20°	16.9	1.0
20°-30°	96.9	5.8
30°-40°	452.5	26.9
40°-50°	639.9	38.1
50°-60°	393.7	23.4
60°-70°	60.0	3.6
70°-80°	9.5	0.6
80°-90°	4.7	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°	119.7	7.1
0°-40°	572.2	34.1
0°-60°	1605.8	95.6
0°-90°	1680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	65	65	65	65	65	
5°	69	68	64	58	57	7
15°	108	65	45	41	42	38
25°	1179	84	26	30	34	725
35°	5886	127	14	24	31	3532
45°	6077	78	10	23	30	4607
55°	3896	18	7	21	31	3315
65°	338	0	7	20	28	612
75°	3	1	6	14	24	3
85°	0	1	6	6	11	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°	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
2.5°	66.5	66.5	67.9	67.9	66.5	67.9	67.9	67.9	65.1	63.7	60.9
5°	69.3	69.3	69.3	70.8	69.3	69.3	67.9	66.5	63.7	59.4	58.0
7.5°	72.2	72.2	70.8	72.2	70.8	70.8	67.9	65.1	60.9	56.6	53.8
10°	75.0	75.0	73.6	73.6	72.2	72.2	66.5	62.3	55.2	50.9	49.5
12.5°	83.5	83.5	82.1	80.7	77.8	76.4	65.1	58.0	49.5	45.3	43.9
15°	107.6	106.1	103.3	99.1	92.0	90.6	65.1	53.8	45.3	41.0	41.0
17.5°	147.2	145.8	141.5	130.2	117.5	113.2	65.1	48.1	39.6	36.8	36.8
20°	263.2	251.9	230.7	202.4	172.6	157.1	69.3	42.5	34.0	32.5	34.0
21°	343.9	332.6	305.7	259.0	206.6	189.6	72.2	41.0	32.5	31.1	34.0
22°	468.4	455.7	400.5	336.8	261.8	232.1	73.6	38.2	29.7	29.7	32.5
23°	653.8	632.6	539.2	437.3	326.9	284.4	76.4	36.8	28.3	29.7	31.1
24°	856.2	837.8	731.6	578.8	417.5	356.6	79.2	35.4	26.9	26.9	29.7
25°	1178.8	1157.6	969.4	730.2	529.3	428.8	83.5	32.5	25.5	25.5	29.7
26°	1596.3	1498.7	1248.2	941.1	652.4	537.8	87.7	31.1	24.1	25.5	28.3
27°	1992.5	1911.9	1630.3	1207.1	806.6	660.9	93.4	29.7	22.6	24.1	28.3
28°	2513.3	2400.1	2044.9	1527.0	1016.1	799.6	99.1	28.3	21.2	24.1	26.9
29°	3096.4	2937.9	2509.1	1886.4	1252.4	955.2	104.7	26.9	19.8	22.6	26.9
30°	3586.0	3437.4	3008.6	2312.4	1524.1	1160.4	110.4	25.5	18.4	22.6	26.9
31°	4160.6	3935.6	3416.2	2673.2	1757.6	1365.6	116.0	22.6	17.0	21.2	25.5
32°	4626.2	4469.1	3917.2	3080.8	2064.7	1592.1	120.3	21.2	17.0	21.2	25.5
33°	5076.2	4865.3	4331.8	3471.4	2342.1	1824.1	124.5	19.8	15.6	19.8	25.5
34°	5506.4	5312.5	4723.8	3787.0	2603.9	2044.9	127.4	17.0	15.6	19.8	24.1
35°	5885.7	5660.6	5069.1	4095.5	2872.8	2245.9	127.4	15.6	14.2	18.4	24.1
36°	6131.9	5970.6	5369.1	4399.7	3116.2	2436.9	127.4	14.2	12.7	18.4	22.6
37°	6342.8	6154.5	5609.7	4633.2	3295.9	2589.7	127.4	12.7	12.7	18.4	22.6
38°	6429.1	6267.7	5775.3	4839.9	3464.3	2745.4	125.9	11.3	11.3	17.0	22.6
39°	6463.0	6318.7	5899.8	4988.4	3588.8	2850.1	123.1	9.9	11.3	17.0	22.6
40°	6419.2	6310.2	5963.5	5084.7	3687.9	2926.6	118.9	8.5	9.9	17.0	22.6
42.5°	6238.0	6165.9	5949.3	5180.9	3772.8	2983.2	103.3	5.7	9.9	15.6	22.6
45°	6076.7	5997.5	5806.4	5080.4	3662.4	2871.4	77.8	2.8	9.9	15.6	22.6
47.5°	5764.0	5714.4	5564.4	4824.3	3420.4	2619.5	55.2	1.4	8.5	14.2	21.2
50°	5137.0	5090.3	4892.2	4188.9	2942.1	2214.7	39.6	1.4	7.1	14.2	21.2
52.5°	4575.2	4525.7	4241.2	3482.7	2260.0	1623.2	25.5	1.4	7.1	14.2	21.2
55°	3895.9	3809.6	3436.0	2643.5	1602.0	1088.3	18.4	1.4	7.1	12.7	21.2
57.5°	2884.1	2758.1	2424.2	1802.9	922.7	590.1	9.9	1.4	7.1	12.7	21.2
60°	1961.4	1886.4	1517.1	951.0	393.4	249.1	4.2	1.4	7.1	12.7	19.8
62.5°	1188.7	1093.9	762.8	404.7	169.8	113.2	0.0	2.8	7.1	12.7	19.8
65°	338.2	300.0	199.5	92.0	48.1	36.8	0.0	2.8	7.1	12.7	19.8
67.5°	11.3	11.3	11.3	9.9	7.1	7.1	1.4	2.8	7.1	12.7	18.4
70°	4.2	4.2	4.2	2.8	2.8	1.4	1.4	2.8	7.1	11.3	18.4
72.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	2.8	5.7	9.9	17.0
75°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	4.2	5.7	9.9	14.2
77.5°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	4.2	5.7	8.5	14.2
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.7	8.5	11.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.4	1.4	1.4	0.0	0.0	0.0	1.4	4.2	5.7	5.7	8.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.2	5.7	4.2	5.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.2	4.2	4.2	2.8
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°	65.1	65.1
2.5°	60.9	60.9
5°	56.6	56.6
7.5°	52.4	52.4
10°	48.1	48.1
12.5°	45.3	45.3
15°	41.0	42.5
17.5°	38.2	39.6
20°	36.8	38.2
21°	36.8	38.2
22°	35.4	36.8
23°	35.4	36.8
24°	34.0	35.4
25°	32.5	34.0
26°	32.5	34.0
27°	32.5	34.0
28°	31.1	34.0
29°	31.1	32.5
30°	31.1	32.5
31°	29.7	32.5
32°	29.7	32.5
33°	29.7	31.1
34°	28.3	31.1
35°	28.3	31.1
36°	28.3	31.1
37°	28.3	29.7
38°	28.3	31.1
39°	28.3	29.7
40°	28.3	29.7
42.5°	28.3	29.7
45°	28.3	29.7
47.5°	28.3	31.1
50°	28.3	31.1
52.5°	28.3	31.1
55°	28.3	31.1
57.5°	28.3	29.7
60°	28.3	29.7
62.5°	26.9	29.7
65°	26.9	28.3
67.5°	26.9	28.3
70°	25.5	26.9
72.5°	24.1	25.5
75°	21.2	24.1
77.5°	19.8	21.2
80°	17.0	18.4

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	14.2	14.2
85°	9.9	11.3
87.5°	5.7	5.7
90°	0.0	0.0

(END OF REPORT)