

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: P1308309

Luminaire Tested: P3SQAS20R309030D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308309
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: P3SQAS20R309030D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

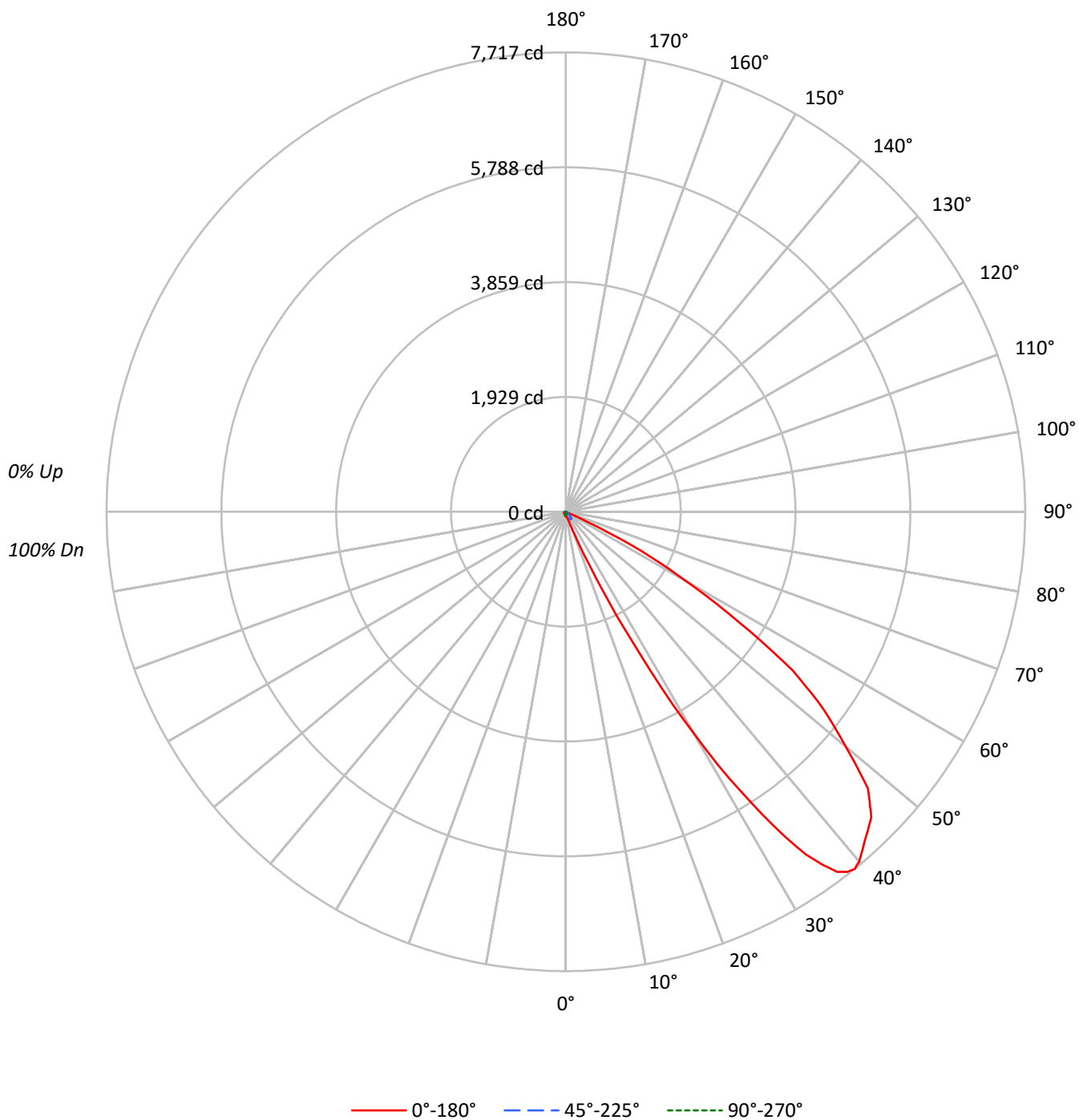
Lumens per Lamp: N/A
Luminaire Lumens: 2006.0 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1308309

CATALOG NUMBER: P3SQAS20R309030D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1308309

CATALOG NUMBER: P3SQAS20R309030D010 E3SQCA451MMS

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	0
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°	13382	13382	13382	13382	13382
5°	14315	14021	13139	11981	11687
10°	15669	13885	11525	10335	10056
15°	22893	13854	9646	8737	9040
20°	57603	15175	7441	7441	8357
25°	267482	18946	5777	6746	7715
30°	851523	26210	4375	6384	7736
35°	1477560	31978	3553	6034	7821
40°	1723206	31902	2653	6070	7981
45°	1767244	22627	2874	6576	8646
50°	1643461	12673	2251	6779	9967
55°	1396784	6606	2522	7597	11170
60°	806691	1757	2893	8163	12228
65°	164595	0	3423	9658	13774
70°	2568	856	4230	11078	16164
75°	2262	1131	4525	11246	19097
80°	1686	1686	6744	13389	21819
85°	0	3359	13437	13437	26676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1767244 cd/sqm

TEST NUMBER: P1308309

CATALOG NUMBER: P3SQAS20R309030D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.0	0.4
10°-20°	20.2	1.0
20°-30°	115.7	5.8
30°-40°	540.3	26.9
40°-50°	764.1	38.1
50°-60°	470.1	23.4
60°-70°	71.6	3.6
70°-80°	11.3	0.6
80°-90°	5.7	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°	142.9	7.1
0°-40°	683.3	34.1
0°-60°	1917.4	95.6
0°-90°	2006.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2006.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	78	78	78	78	78	
5°	83	81	76	69	68	8
15°	128	78	54	49	51	46
25°	1408	100	30	36	41	866
35°	7028	152	17	29	37	4218
45°	7256	93	12	27	36	5501
55°	4652	22	8	25	37	3958
65°	404	0	8	24	34	731
75°	3	2	7	17	29	4
85°	0	2	7	7	14	1
90°	0	0	0	0	0	

TEST NUMBER: P1308309

CATALOG NUMBER: P3SQAS20R309030D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
2.5°	79.4	79.4	81.1	81.1	79.4	81.1	81.1	81.1	77.7	76.0	72.7
5°	82.8	82.8	82.8	84.5	82.8	82.8	81.1	79.4	76.0	71.0	69.3
7.5°	86.2	86.2	84.5	86.2	84.5	84.5	81.1	77.7	72.7	67.6	64.2
10°	89.6	89.6	87.9	87.9	86.2	86.2	79.4	74.3	65.9	60.8	59.1
12.5°	99.7	99.7	98.0	96.3	92.9	91.2	77.7	69.3	59.1	54.1	52.4
15°	128.4	126.7	123.4	118.3	109.8	108.1	77.7	64.2	54.1	49.0	49.0
17.5°	175.7	174.0	169.0	155.5	140.3	135.2	77.7	57.5	47.3	43.9	43.9
20°	314.3	300.8	275.4	241.6	206.2	187.6	82.8	50.7	40.6	38.9	40.6
21°	410.6	397.1	365.0	309.2	246.7	226.4	86.2	49.0	38.9	37.2	40.6
22°	559.3	544.1	478.2	402.2	312.6	277.1	87.9	45.6	35.5	35.5	38.9
23°	780.7	755.3	643.8	522.1	390.3	339.6	91.2	43.9	33.8	35.5	37.2
24°	1022.3	1000.3	873.6	691.1	498.5	425.8	94.6	42.2	32.1	32.1	35.5
25°	1407.6	1382.2	1157.5	871.9	632.0	512.0	99.7	38.9	30.4	30.4	35.5
26°	1906.1	1789.5	1490.4	1123.7	779.0	642.1	104.8	37.2	28.7	30.4	33.8
27°	2379.2	2282.9	1946.6	1441.4	963.2	789.1	111.5	35.5	27.0	28.7	33.8
28°	3001.0	2865.8	2441.7	1823.3	1213.3	954.7	118.3	33.8	25.3	28.7	32.1
29°	3697.2	3508.0	2996.0	2252.5	1495.4	1140.6	125.0	32.1	23.7	27.0	32.1
30°	4281.9	4104.5	3592.5	2761.1	1819.9	1385.6	131.8	30.4	22.0	27.0	32.1
31°	4967.9	4699.2	4079.1	3192.0	2098.7	1630.6	138.6	27.0	20.3	25.3	30.4
32°	5523.9	5336.3	4677.3	3678.6	2465.4	1901.0	143.6	25.3	20.3	25.3	30.4
33°	6061.2	5809.4	5172.4	4145.0	2796.6	2178.1	148.7	23.7	18.6	23.7	30.4
34°	6574.9	6343.4	5640.5	4521.8	3109.2	2441.7	152.1	20.3	18.6	23.7	28.7
35°	7027.8	6759.1	6052.8	4890.2	3430.2	2681.7	152.1	18.6	16.9	22.0	28.7
36°	7321.8	7129.1	6411.0	5253.5	3720.9	2909.8	152.1	16.9	15.2	22.0	27.0
37°	7573.5	7348.8	6698.2	5532.3	3935.5	3092.3	152.1	15.2	15.2	22.0	27.0
38°	7676.6	7484.0	6896.0	5779.0	4136.6	3278.2	150.4	13.5	13.5	20.3	27.0
39°	7717.2	7544.8	7044.7	5956.4	4285.3	3403.2	147.0	11.8	13.5	20.3	27.0
40°	7664.8	7534.7	7120.7	6071.3	4403.5	3494.4	141.9	10.1	11.8	20.3	27.0
42.5°	7448.5	7362.3	7103.8	6186.2	4504.9	3562.0	123.4	6.8	11.8	18.6	27.0
45°	7255.9	7161.2	6933.1	6066.3	4373.1	3428.5	92.9	3.4	11.8	18.6	27.0
47.5°	6882.4	6823.3	6644.2	5760.4	4084.2	3127.8	65.9	1.7	10.1	16.9	25.3
50°	6133.9	6078.1	5841.5	5001.7	3513.0	2644.5	47.3	1.7	8.4	16.9	25.3
52.5°	5463.0	5403.9	5064.2	4158.5	2698.6	1938.2	30.4	1.7	8.4	16.9	25.3
55°	4651.9	4548.9	4102.8	3156.5	1912.8	1299.4	22.0	1.7	8.4	15.2	25.3
57.5°	3443.8	3293.4	2894.6	2152.8	1101.7	704.6	11.8	1.7	8.4	15.2	25.3
60°	2342.0	2252.5	1811.4	1135.5	469.8	297.4	5.1	1.7	8.4	15.2	23.7
62.5°	1419.4	1306.2	910.8	483.3	202.8	135.2	0.0	3.4	8.4	15.2	23.7
65°	403.9	358.2	238.3	109.8	57.5	43.9	0.0	3.4	8.4	15.2	23.7
67.5°	13.5	13.5	13.5	11.8	8.4	8.4	1.7	3.4	8.4	15.2	22.0
70°	5.1	5.1	5.1	3.4	3.4	1.7	1.7	3.4	8.4	13.5	22.0
72.5°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	3.4	6.8	11.8	20.3
75°	3.4	3.4	3.4	1.7	1.7	1.7	1.7	5.1	6.8	11.8	16.9
77.5°	3.4	3.4	3.4	1.7	1.7	1.7	1.7	5.1	6.8	10.1	16.9
80°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	5.1	6.8	10.1	13.5



TEST NUMBER: P1308309

CATALOG NUMBER: P3SQAS20R309030D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.7	1.7	1.7	0.0	0.0	0.0	1.7	5.1	6.8	6.8	10.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.1	6.8	5.1	6.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.1	5.1	5.1	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1308309

CATALOG NUMBER: P3SQAS20R309030D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	77.7	77.7
2.5°	72.7	72.7
5°	67.6	67.6
7.5°	62.5	62.5
10°	57.5	57.5
12.5°	54.1	54.1
15°	49.0	50.7
17.5°	45.6	47.3
20°	43.9	45.6
21°	43.9	45.6
22°	42.2	43.9
23°	42.2	43.9
24°	40.6	42.2
25°	38.9	40.6
26°	38.9	40.6
27°	38.9	40.6
28°	37.2	40.6
29°	37.2	38.9
30°	37.2	38.9
31°	35.5	38.9
32°	35.5	38.9
33°	35.5	37.2
34°	33.8	37.2
35°	33.8	37.2
36°	33.8	37.2
37°	33.8	35.5
38°	33.8	37.2
39°	33.8	35.5
40°	33.8	35.5
42.5°	33.8	35.5
45°	33.8	35.5
47.5°	33.8	37.2
50°	33.8	37.2
52.5°	33.8	37.2
55°	33.8	37.2
57.5°	33.8	35.5
60°	33.8	35.5
62.5°	32.1	35.5
65°	32.1	33.8
67.5°	32.1	33.8
70°	30.4	32.1
72.5°	28.7	30.4
75°	25.3	28.7
77.5°	23.7	25.3
80°	20.3	22.0



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	16.9	16.9
85°	11.8	13.5
87.5°	6.8	6.8
90°	0.0	0.0

(END OF REPORT)