

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: P1309800

Luminaire Tested: P3SQAS02R509040DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309800
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS02R509040DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

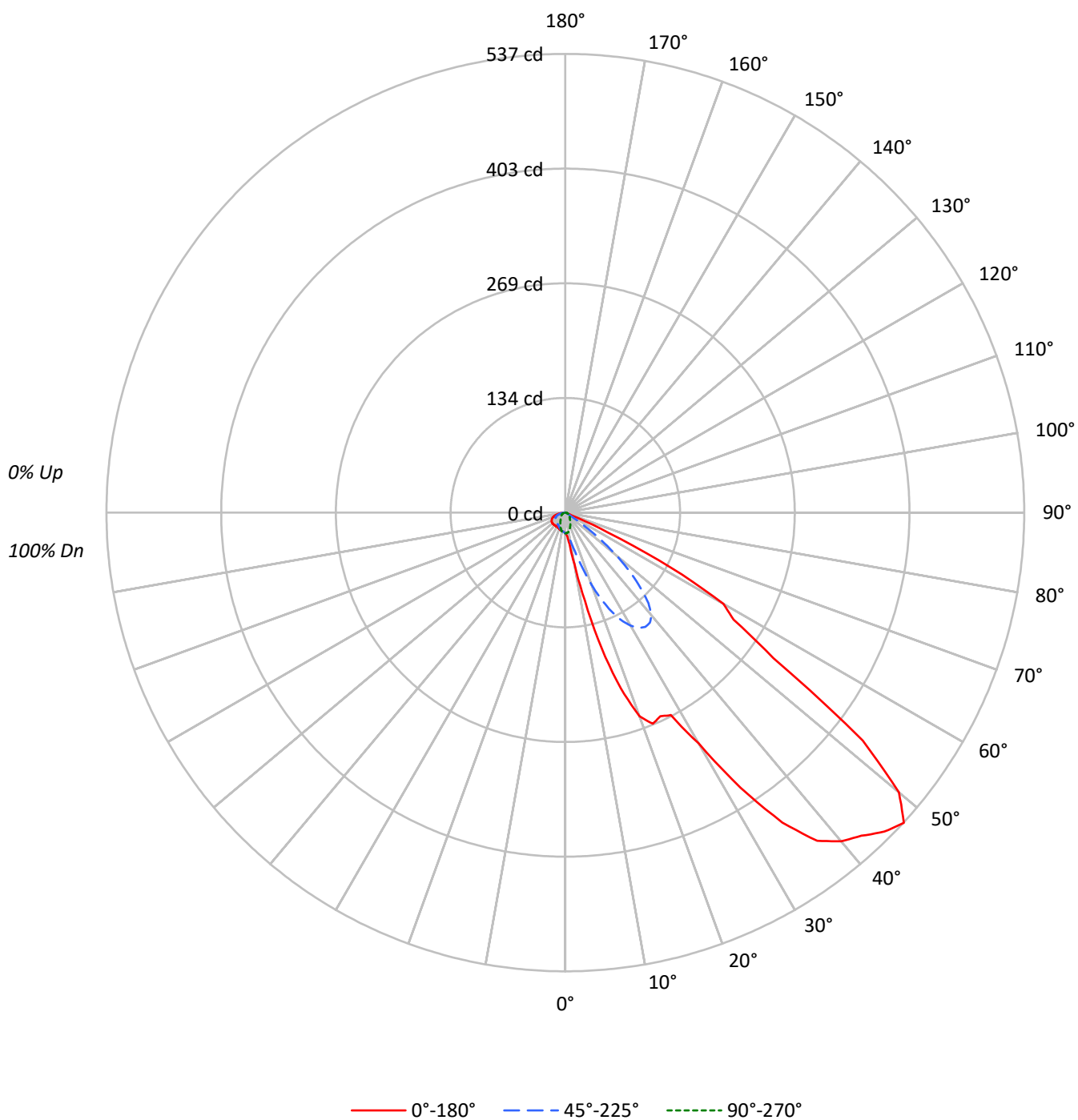
Lumens per Lamp: N/A
Luminaire Lumens: 303.0 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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: P1309800

CATALOG NUMBER: P3SQAS02R509040DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1309800

CATALOG NUMBER: P3SQAS02R509040DE010 E3SQCA451MB

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	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		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	63	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	63	54	47	74	62	53	47	60	52	46		58	51	46		56	50	45	43
6	69	56	47	40	67	55	46	40	53	45	39		51	44	39		50	43	39	37
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	58	44	36	30	57	44	35	29	42	35	29		41	34	29		40	34	29	27
9	54	40	31	26	53	39	31	26	38	31	25		37	30	25		36	30	25	23
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33	27	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4151	4151	4151	4151	4151
5°	4927	4616	4115	3942	3890
10°	10615	5719	3935	3795	3847
15°	29401	9378	3548	3637	3780
20°	46479	16458	3061	3501	3702
25°	49977	24171	2641	3382	3725
30°	62046	30347	2287	3321	3858
35°	93096	34333	1976	3364	4079
40°	112905	35297	1776	3462	4294
45°	128624	30274	1729	3702	4725
50°	136538	20899	1742	3992	5251
55°	89178	8407	1742	4324	5825
60°	73574	1447	1722	4684	6407
65°	22169	734	1589	5012	7050
70°	906	806	1561	5136	7654
75°	865	865	1597	5257	8384
80°	793	793	1587	5157	8529
85°	593	988	1976	5138	8299

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 136969 cd/sqm

TEST NUMBER: P1309800

CATALOG NUMBER: P3SQAS02R509040DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.5	0.8
10°-20°	14.3	4.7
20°-30°	36.9	12.2
30°-40°	66.2	21.9
40°-50°	88.5	29.2
50°-60°	67.4	22.2
60°-70°	20.5	6.8
70°-80°	4.9	1.6
80°-90°	1.8	0.6
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°	53.7	17.7
0°-40°	120.0	39.6
0°-60°	275.9	91.1
0°-90°	303.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	303.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	24	24	24	24	24	
5°	28	27	24	23	22	4
15°	165	53	20	20	21	49
25°	263	127	14	18	20	126
35°	443	163	9	16	19	272
45°	528	124	7	15	19	404
55°	297	28	6	14	19	295
65°	54	2	4	12	17	75
75°	1	1	2	8	13	1
85°	0	0	1	3	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1309800

CATALOG NUMBER: P3SQAS02R509040DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
2.5°	25.6	25.6	25.6	25.6	25.6	25.6	25.4	25.4	25.4	24.9	24.3
5°	28.5	28.8	28.5	28.5	28.0	28.0	27.5	27.5	26.7	25.1	23.8
7.5°	37.4	37.2	36.9	35.9	35.1	33.2	32.5	31.1	28.8	25.1	23.3
10°	60.7	59.1	58.1	55.7	50.8	47.6	43.4	39.3	32.7	25.1	22.5
12.5°	105.5	105.2	102.1	94.2	87.2	77.5	67.3	57.1	40.3	24.6	21.5
15°	164.9	162.5	158.1	148.9	136.4	121.2	102.9	84.8	52.6	23.8	19.9
17.5°	215.7	212.8	209.4	200.2	185.8	166.7	144.7	119.9	69.4	22.8	18.3
20°	253.6	251.8	248.9	241.6	228.0	210.7	186.1	156.0	89.8	21.5	16.7
22.5°	267.5	267.2	267.7	265.1	258.3	244.7	221.1	189.7	109.9	19.9	15.2
25°	263.0	262.8	266.2	269.6	271.1	265.6	247.6	217.0	127.2	18.6	13.9
27.5°	267.2	266.4	264.9	265.4	269.8	273.0	264.6	237.9	142.1	16.7	12.6
30°	312.0	307.5	300.4	288.4	279.5	278.7	275.1	254.4	152.6	14.9	11.5
32.5°	381.8	376.3	363.5	341.3	320.1	303.8	292.3	268.3	159.9	13.1	10.2
35°	442.8	438.9	424.0	402.0	371.6	341.3	320.3	288.7	163.3	11.5	9.4
37.5°	484.2	482.6	467.9	444.4	413.5	377.7	349.9	309.6	162.5	9.7	8.6
40°	502.2	497.5	485.2	465.3	434.2	402.0	372.7	323.0	157.0	7.9	7.9
42.5°	513.0	507.7	494.4	475.5	444.9	410.6	375.3	317.2	143.9	6.3	7.6
45°	528.1	522.6	505.1	485.0	454.1	414.3	365.1	296.8	124.3	4.7	7.1
47.5°	537.3	533.6	520.5	500.4	463.0	409.1	341.5	277.7	102.6	3.7	6.8
50°	509.6	505.9	496.2	482.3	457.2	391.5	320.9	246.8	78.0	2.9	6.5
52.5°	438.6	441.8	443.6	447.5	429.2	352.3	290.0	222.2	52.6	2.4	6.0
55°	297.0	301.8	307.0	322.7	344.2	313.5	257.5	192.1	28.0	2.4	5.8
57.5°	233.4	231.9	230.3	229.3	246.0	258.6	226.4	153.6	12.0	2.4	5.2
60°	213.6	208.8	205.7	206.5	214.9	209.9	179.3	100.2	4.2	2.4	5.0
62.5°	140.0	143.7	150.7	162.8	157.0	134.8	104.2	39.8	2.1	2.4	4.4
65°	54.4	52.6	54.4	57.8	50.0	37.2	23.3	7.1	1.8	2.1	3.9
67.5°	7.3	6.5	5.0	3.1	2.9	2.6	2.1	1.8	1.8	2.1	3.7
70°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.6	1.6	1.8	3.1
72.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.8	2.6
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.6	2.4
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.0	1.6
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	1.0	1.3
85°	0.3	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.8	1.0
87.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.8	0.8
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: P1309800

CATALOG NUMBER: P3SQAS02R509040DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	24.1	24.1	24.1	24.1
2.5°	23.8	23.3	23.3	23.3
5°	23.3	22.8	22.8	22.5
7.5°	22.5	22.2	22.2	22.2
10°	22.0	21.7	22.0	22.0
12.5°	20.9	21.2	21.5	21.5
15°	19.9	20.4	20.9	21.2
17.5°	18.8	19.9	20.4	20.7
20°	17.8	19.1	19.9	20.2
22.5°	17.0	18.3	19.4	19.9
25°	16.0	17.8	19.1	19.6
27.5°	14.9	17.0	18.6	19.4
30°	14.1	16.7	18.6	19.4
32.5°	13.3	16.2	18.3	19.1
35°	12.8	16.0	18.3	19.4
37.5°	12.3	15.7	18.3	19.1
40°	12.0	15.4	18.3	19.1
42.5°	11.8	15.4	18.3	19.4
45°	11.3	15.2	18.3	19.4
47.5°	11.0	15.2	18.3	19.4
50°	10.7	14.9	18.3	19.6
52.5°	10.5	14.7	18.3	19.6
55°	9.9	14.4	18.1	19.4
57.5°	9.7	14.1	17.8	18.8
60°	9.2	13.6	17.3	18.6
62.5°	8.6	13.1	16.7	17.8
65°	7.9	12.3	16.0	17.3
67.5°	7.1	11.3	15.2	16.5
70°	6.3	10.2	14.1	15.2
72.5°	5.5	9.2	13.1	13.9
75°	4.7	7.9	11.5	12.6
77.5°	3.9	6.8	9.7	10.5
80°	2.9	5.2	7.9	8.6
82.5°	2.4	3.9	5.8	6.3
85°	1.6	2.6	3.7	4.2
87.5°	0.8	1.3	1.8	2.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)