

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: P1307336

Luminaire Tested: P3SQAS24R309027D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307336
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: P3SQAS24R309027D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

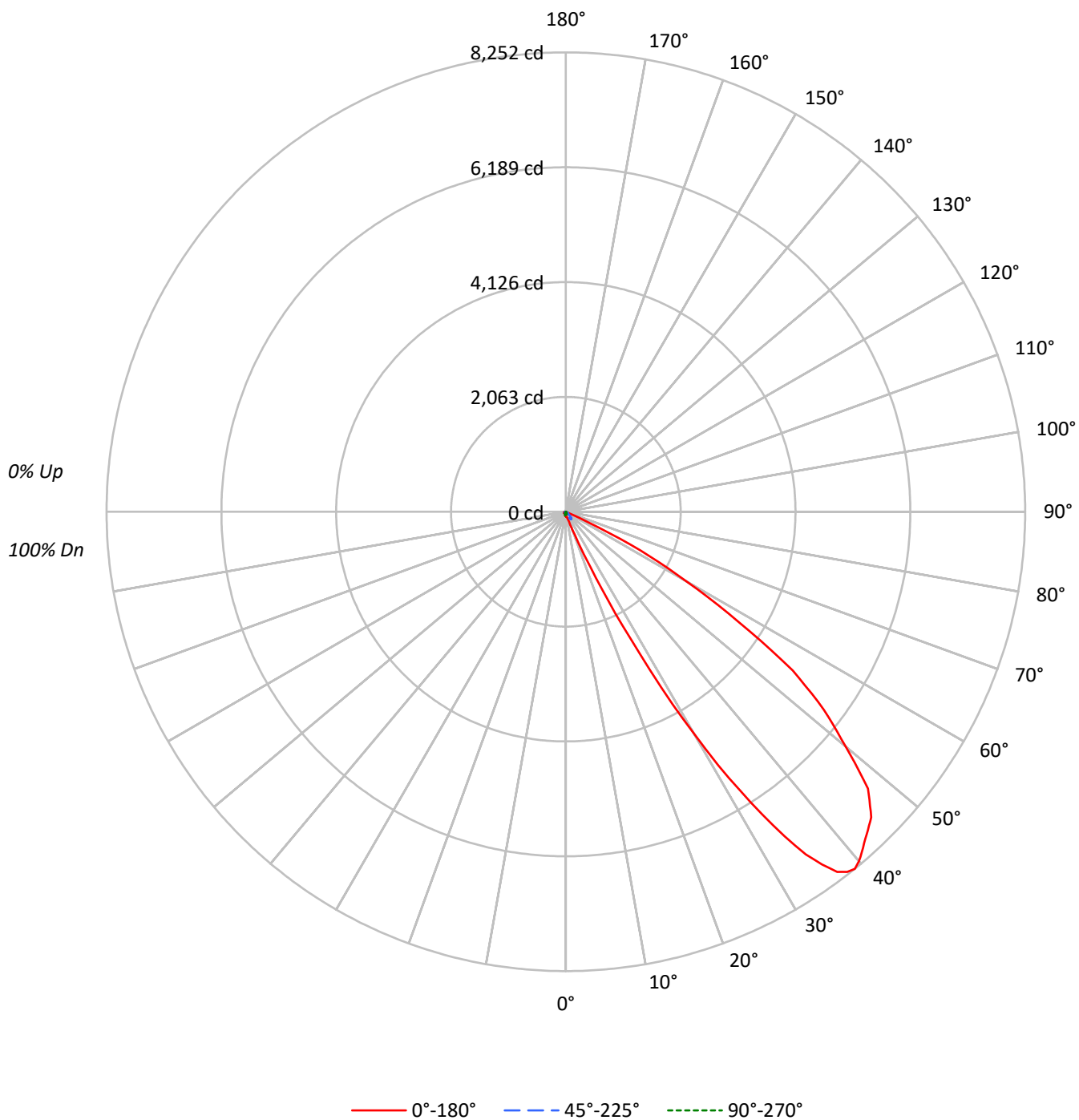
Lumens per Lamp: N/A
Luminaire Lumens: 2145.0 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1307336

CATALOG NUMBER: P3SQAS24R309027D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1307336

CATALOG NUMBER: P3SQAS24R309027D010 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61	61	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50	50	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42	42	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35	35	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29	29	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24	24	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20	20	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	14312	14312	14312	14312	14312
5°	15300	14989	14055	12810	12499
10°	16753	14847	12329	11052	10738
15°	24480	14817	10306	9343	9664
20°	61599	16220	7954	7954	8944
25°	286009	20257	6176	7202	8247
30°	910526	28020	4673	6821	8273
35°	1579928	34186	3805	6455	8368
40°	1842608	34128	2833	6497	8521
45°	1889681	24210	3069	7039	9231
50°	1757332	13557	2411	7261	10664
55°	1493588	7056	2702	8137	11950
60°	862594	1860	3100	8714	13054
65°	175964	0	3668	10310	14711
70°	2719	906	4532	11833	17272
75°	2396	1198	4791	12044	20428
80°	1785	1785	7141	14381	23307
85°	0	3557	14227	14227	28652

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1889681 cd/sqm

TEST NUMBER: P1307336

CATALOG NUMBER: P3SQAS24R309027D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.5	0.4
10°-20°	21.6	1.0
20°-30°	123.7	5.8
30°-40°	577.8	26.9
40°-50°	817.0	38.1
50°-60°	502.6	23.4
60°-70°	76.5	3.6
70°-80°	12.1	0.6
80°-90°	6.0	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°	152.8	7.1
0°-40°	730.6	34.1
0°-60°	2050.3	95.6
0°-90°	2145.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2145.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	83	83	83	83	83	
5°	88	87	81	74	72	9
15°	137	83	58	52	54	49
25°	1505	107	32	38	43	926
35°	7515	163	18	31	40	4510
45°	7759	99	13	29	38	5882
55°	4974	24	9	27	40	4233
65°	432	0	9	25	36	782
75°	4	2	7	18	31	4
85°	0	2	7	7	14	1
90°	0	0	0	0	0	

TEST NUMBER: P1307336

CATALOG NUMBER: P3SQAS24R309027D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
2.5°	84.9	84.9	86.7	86.7	84.9	86.7	86.7	86.7	83.1	81.3	77.7
5°	88.5	88.5	88.5	90.3	88.5	88.5	86.7	84.9	81.3	75.9	74.1
7.5°	92.1	92.1	90.3	92.1	90.3	90.3	86.7	83.1	77.7	72.3	68.7
10°	95.8	95.8	94.0	94.0	92.1	92.1	84.9	79.5	70.5	65.0	63.2
12.5°	106.6	106.6	104.8	103.0	99.4	97.6	83.1	74.1	63.2	57.8	56.0
15°	137.3	135.5	131.9	126.5	117.4	115.6	83.1	68.7	57.8	52.4	52.4
17.5°	187.9	186.1	180.7	166.2	150.0	144.5	83.1	61.4	50.6	47.0	47.0
20°	336.1	321.6	294.5	258.4	220.4	200.6	88.5	54.2	43.4	41.6	43.4
21°	439.1	424.6	390.3	330.7	263.8	242.1	92.1	52.4	41.6	39.8	43.4
22°	598.1	581.8	511.3	430.0	334.3	296.3	94.0	48.8	37.9	37.9	41.6
23°	834.8	807.7	688.4	558.3	417.4	363.2	97.6	47.0	36.1	37.9	39.8
24°	1093.1	1069.7	934.1	739.0	533.0	455.3	101.2	45.2	34.3	34.3	37.9
25°	1505.1	1478.0	1237.7	932.3	675.8	547.5	106.6	41.6	32.5	32.5	37.9
26°	2038.1	1913.5	1593.6	1201.6	833.0	686.6	112.0	39.8	30.7	32.5	36.1
27°	2544.1	2441.1	2081.5	1541.2	1029.9	843.8	119.3	37.9	28.9	30.7	36.1
28°	3209.0	3064.4	2610.9	1949.6	1297.3	1020.9	126.5	36.1	27.1	30.7	34.3
29°	3953.4	3751.0	3203.6	2408.5	1599.1	1219.6	133.7	34.3	25.3	28.9	34.3
30°	4578.6	4388.9	3841.4	2952.4	1946.0	1481.6	140.9	32.5	23.5	28.9	34.3
31°	5312.2	5024.9	4361.8	3413.2	2244.1	1743.6	148.2	28.9	21.7	27.1	32.5
32°	5906.6	5706.1	5001.4	3933.5	2636.2	2032.7	153.6	27.1	21.7	27.1	32.5
33°	6481.2	6212.0	5530.8	4432.2	2990.3	2329.0	159.0	25.3	19.9	25.3	32.5
34°	7030.5	6782.9	6031.3	4835.2	3324.6	2610.9	162.6	21.7	19.9	25.3	30.7
35°	7514.7	7227.4	6472.2	5229.0	3667.9	2867.5	162.6	19.9	18.1	23.5	30.7
36°	7829.1	7623.1	6855.2	5617.5	3978.7	3111.4	162.6	18.1	16.3	23.5	28.9
37°	8098.3	7858.0	7162.4	5915.7	4208.2	3306.5	162.6	16.3	16.3	23.5	28.9
38°	8208.6	8002.6	7373.8	6179.5	4423.2	3505.3	160.8	14.5	14.5	21.7	28.9
39°	8251.9	8067.6	7532.8	6369.2	4582.2	3639.0	157.2	12.6	14.5	21.7	28.9
40°	8195.9	8056.8	7614.1	6492.0	4708.7	3736.6	151.8	10.8	12.6	21.7	28.9
42.5°	7964.6	7872.5	7596.0	6614.9	4817.1	3808.9	131.9	7.2	12.6	19.9	28.9
45°	7758.6	7657.5	7413.5	6486.6	4676.1	3666.1	99.4	3.6	12.6	19.9	28.9
47.5°	7359.3	7296.1	7104.6	6159.6	4367.2	3344.5	70.5	1.8	10.8	18.1	27.1
50°	6558.9	6499.3	6246.3	5348.3	3756.5	2827.7	50.6	1.8	9.0	18.1	27.1
52.5°	5841.6	5778.3	5415.2	4446.7	2885.6	2072.5	32.5	1.8	9.0	18.1	27.1
55°	4974.3	4864.1	4387.1	3375.2	2045.4	1389.5	23.5	1.8	9.0	16.3	27.1
57.5°	3682.4	3521.6	3095.1	2301.9	1178.1	753.5	12.6	1.8	9.0	16.3	27.1
60°	2504.3	2408.5	1937.0	1214.2	502.3	318.0	5.4	1.8	9.0	16.3	25.3
62.5°	1517.8	1396.7	973.9	516.8	216.8	144.5	0.0	3.6	9.0	16.3	25.3
65°	431.8	383.1	254.8	117.4	61.4	47.0	0.0	3.6	9.0	16.3	25.3
67.5°	14.5	14.5	14.5	12.6	9.0	9.0	1.8	3.6	9.0	16.3	23.5
70°	5.4	5.4	5.4	3.6	3.6	1.8	1.8	3.6	9.0	14.5	23.5
72.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	3.6	7.2	12.6	21.7
75°	3.6	3.6	3.6	1.8	1.8	1.8	1.8	5.4	7.2	12.6	18.1
77.5°	3.6	3.6	3.6	1.8	1.8	1.8	1.8	5.4	7.2	10.8	18.1
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.4	7.2	10.8	14.5



TEST NUMBER: P1307336

CATALOG NUMBER: P3SQAS24R309027D010 E3SQCA451MB

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	5.4	7.2	7.2	10.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.8	5.4	7.2	5.4	7.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.8	5.4	5.4	5.4	3.6
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: P1307336

CATALOG NUMBER: P3SQAS24R309027D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	83.1	83.1
2.5°	77.7	77.7
5°	72.3	72.3
7.5°	66.9	66.9
10°	61.4	61.4
12.5°	57.8	57.8
15°	52.4	54.2
17.5°	48.8	50.6
20°	47.0	48.8
21°	47.0	48.8
22°	45.2	47.0
23°	45.2	47.0
24°	43.4	45.2
25°	41.6	43.4
26°	41.6	43.4
27°	41.6	43.4
28°	39.8	43.4
29°	39.8	41.6
30°	39.8	41.6
31°	37.9	41.6
32°	37.9	41.6
33°	37.9	39.8
34°	36.1	39.8
35°	36.1	39.8
36°	36.1	39.8
37°	36.1	37.9
38°	36.1	39.8
39°	36.1	37.9
40°	36.1	37.9
42.5°	36.1	37.9
45°	36.1	37.9
47.5°	36.1	39.8
50°	36.1	39.8
52.5°	36.1	39.8
55°	36.1	39.8
57.5°	36.1	37.9
60°	36.1	37.9
62.5°	34.3	37.9
65°	34.3	36.1
67.5°	34.3	36.1
70°	32.5	34.3
72.5°	30.7	32.5
75°	27.1	30.7
77.5°	25.3	27.1
80°	21.7	23.5

TEST NUMBER: P1307336

CATALOG NUMBER: P3SQAS24R309027D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	18.1	18.1
85°	12.6	14.5
87.5°	7.2	7.2
90°	0.0	0.0

(END OF REPORT)