

RF Exposure Evaluation

For

Shen Zhen Simagic Technology Co.,Limited

SIMAGIC Air Link

Test Model: SIMAGIC Air Link

Prepared for : Shen Zhen Simagic Technology Co.,Limited
Room 401, Building 10, DCC Cultural and Creative Park, Pingxin North
Address : Road, Shangmugu Community, Pinghu Street, Longgang District,
Shenzhen, Guangdong, China

Prepared by : Guangzhou LCS Compliance Testing Laboratory Ltd.
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Date of receipt of test sample : May 20, 2026
Number of tested samples : 2
Sample No. : C260519002-1, C260519002-2
Serial number : Prototype
Date of Test : May 20, 2026 ~ June 11, 2026
Date of Report : June 12, 2026

RF Exposure Evaluation

Report Reference No. : LCSC05186027EC

Date of Issue..... : June 12, 2026

Testing Laboratory Name..... : Guangzhou LCS Compliance Testing Laboratory Ltd.

Address..... : No.44-1, Qianfeng North Road, Shiqi, Panyu District, Guangzhou,
Guangdong, China

Testing Location/ Procedure..... : Full application of Harmonised standards ■
Partial application of Harmonised standards □
Other standard testing method □

Applicant's Name..... : Shen Zhen Simagic Technology Co.,Limited

Address..... : Room 401, Building 10, DCC Cultural and Creative Park, Pingxin
North Road, Shangmugu Community, Pinghu Street, Longgang
District, Shenzhen, Guangdong, China

Test Specification

Standard..... : FCC KDB publication 447498 D01 General RF Exposure Guidance
v06
FCC CFR 47 part1 1.1310
FCC CFR 47 part2 2.1091

Test Report Form No..... : TRF-4-E-214 A/0

TRF Originator..... : Guangzhou LCS Compliance Testing Laboratory Ltd.

Master TRF..... : Dated 2011-03

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EUT Description..... : SIMAGIC Air Link

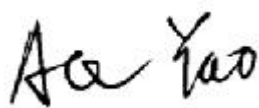
Trade Mark..... : SIMAGIC

Test Model..... : SIMAGIC Air Link

Ratings..... : Please Refer to Page 6

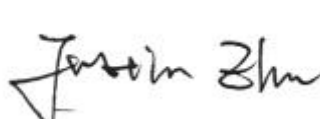
Result : PASS

Compiled by:



Ace Yao/ Administrator

Supervised by:



Justin Zhu/ Technique Director

Approved by:



Gavin Liang/ Manager

RF Exposure Evaluation

Test Report No. : LCSC05186027EC	<u>June 12, 2026</u> Date of issue
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Test Model.....	: SIMAGIC Air Link
EUT.....	: SIMAGIC Air Link
Applicant.....	: Shen Zhen Simagic Technology Co.,Limited
Address.....	: Room 401, Building 10, DCC Cultural and Creative Park, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong, China
Telephone.....	: /
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Manufacturer.....	: Shen Zhen Simagic Technology Co.,Limited
Address.....	: Room 401, Building 10, DCC Cultural and Creative Park, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong, China
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Factory.....	: Shen Zhen Simagic Technology Co.,Limited
Address.....	: Room 401, Building 10, DCC Cultural and Creative Park, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong, China
Telephone.....	: /
Fax.....	: /

Test Result:	PASS
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The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Report Version	Issue Date	Revision Content	Revised By
000	June 12, 2026	Initial Issue	--

TABLE OF CONTENTS

Description	Page
1. PRODUCT INFORMATION	6
2. EVALUATION METHOD	6
3. LIMIT	7
4. MPE CALCULATION METHOD	7
5. ANTENNA INFORMATION	7
6. CONDUCTED POWER	8
7. MANUFACTURING TOLERANCE	9
8. MEASUREMENT RESULTS	10
9. CONCLUSION	11
10. DESCRIPTION OF TEST FACILITY	11
11. MEASUREMENT UNCERTAINTY	11

1. Product Information

EUT	: SIMAGIC Air Link
Test Model	: SIMAGIC Air Link
Ratings	: Input: 5V $\overline{\text{---}}$ 1A
Hardware Version	: Air_Link_V1.2.0_2026.3.31
Software Version	: A1.0.1
WIFI(5.2G Band)	:
Frequency Range	: 5150MHz~5250MHz
Channel Number	: 4 Channels for 20MHz bandwidth(5180MHz~5240MHz) 2 channels for 40MHz bandwidth(5190MHz~5230MHz)
Modulation Type	: IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	: Internal Antenna, 4.37dBi(Max.)
WIFI(5.8G Band)	:
Frequency Range	: 5725MHz~5850MHz
Channel Number	: 5 channels for 20MHz bandwidth(5745MHz~5825MHz) 2 channels for 40MHz bandwidth(5755MHz~5795MHz)
Modulation Type	: IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	: Internal Antenna, 2.61dBi(Max.)
Exposure category	: General population/uncontrolled environment
EUT Type	: Production Unit
Device Type	: Mobile Device

Note: For a more detailed antenna description, please refer to the antenna specifications or the antenna report provided by the customer.

2. Evaluation Method

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

In accordance with KDB447498D01 for Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modelled or measured field strengths or power density, is ≤ 1.0 . The MPE ratio of each antenna is determined at the minimum test separation distance required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to MPE limit, at the test frequency. Either the maximum peak or spatially averaged results from measurements or numerical simulations may be used to determine the MPE ratios. Spatial averaging does not apply when MPE is estimated using simple calculations based on far-field plane-wave equivalent conditions. The antenna installation and operating requirements for the host device must meet the minimum test separation distances required by all antennas, in both standalone and simultaneous transmission operations, to satisfy compliance.

3. Limit

3.1 Refer Evaluation Method

[ANSI C95.1-2019](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz

[FCC KDB publication 447498 D01 General 1 RF Exposure Guidance v06](#): Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

[FCC CFR 47 part1 1.1310](#): Radiofrequency radiation exposure limits.

[FCC CFR 47 part2 2.1091](#): Radiofrequency radiation exposure evaluation: mobile devices.

3.2 Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure				
Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	6
3.0 – 30	1842/f	4.89/f	(900/f ²)*	6
30 – 300	61.4	0.163	1.0	6
300 – 1500	/	/	f/300	6
1500 – 100,000	/	/	5	6
Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure				
Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Uncontrolled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 30	824/f	2.19/f	(180/f ²)*	30
30 – 300	27.5	0.073	0.2	30
300 – 1500	/	/	f/1500	30
1500 – 100,000	/	/	1.0	30

F=frequency in MHz

*=Plane-wave equivalent power density

4. MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S=PG/4\pi R^2$$

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

5. Antenna Information

EUT can only use antennas certificated as follows provided by manufacturer;

Internal/ External Identification	Antenna type and antenna number	Operate frequency band	Maximum antenna gain	Notes
Internal	Internal Antenna	5000MHz ~ 6000MHz	5.2GWIFI: 4.37dBi 5.8GWIFI: 2.61dBi	WIFI Antenna

6. Conducted Power

[5.2G WIFI Max Conducted Power]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
11A	36	5180	11.72
	40	5200	12.07
	48	5240	13.32
11N20 SISO	36	5180	11.67
	40	5200	12.17
	48	5240	13.87
11N40 SISO	38	5190	12.11
	46	5230	13.73
11AC20 SISO	36	5180	8.96
	40	5200	9.92
	48	5240	11.47
11AC40 SISO	38	5190	9.33
	46	5230	10.99
11AX20 SISO	36	5180	7.08
	40	5200	7.87
	48	5240	9.61
11AX40 SISO	38	5190	7.39
	46	5230	9.07

[5.8G WIFI Max Conducted Power]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
11A	149	5745	12.00
	157	5785	12.57
	165	5825	12.56
11N20 SISO	149	5745	11.28
	157	5785	10.78
	165	5825	10.87
11N40 SISO	151	5755	11.30
	159	5795	10.75
11AC20 SISO	149	5745	9.38
	157	5785	9.15
	165	5825	8.90
11AC40 SISO	151	5755	9.16
	159	5795	8.85
11AX20 SISO	149	5745	7.08
	157	5785	7.17
	165	5825	6.99
11AX40 SISO	151	5755	7.25
	159	5795	6.98

7. Manufacturing Tolerance

[5.2G WIFI]			
11A (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	11.0	12.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	11.0	12.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	12.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	8.0	9.0	11.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40 (Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	9.0	10.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	7.0	7.0	9.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40 (Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	7.0	9.0	
Tolerance $\pm$ (dB)	1.0	1.0	

[5.8G WIFI]			
11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	12.0	12.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	11.0	10.0	10.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	11.0	10.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	9.0	9.0	8.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

11AC40 (Average)			
Channel	Channe151		Channel 159
Target (dBm)	9.0		8.0
Tolerance ±(dB)	1.0		1.0
11AX20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	7.0	7.0	6.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX40 (Average)			
Channel	Channe151		Channel 159
Target (dBm)	7.0		6.0
Tolerance ±(dB)	1.0		1.0

8. Measurement Results

8.1 Standalone MPE Evaluation

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, $r = 20\text{cm}$, as well as the gain of the used antenna refer to antenna information, the RF power density can be obtained.

[5.2G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	14.0	25.1189	4.37	2.7353	0.0137	1.0000
IEEE 802.11n HT20	14.0	25.1189	4.37	2.7353	0.0137	1.0000
IEEE 802.11n HT40	14.0	25.1189	4.37	2.7353	0.0137	1.0000
IEEE 802.11ac VHT20	12.0	15.8489	4.37	2.7353	0.0086	1.0000
IEEE 802.11ac VHT40	11.0	12.5893	4.37	2.7353	0.0069	1.0000
IEEE 802.11ax HE20	10.0	10.0000	4.37	2.7353	0.0054	1.0000
IEEE 802.11ax HE40	10.0	10.0000	4.37	2.7353	0.0054	1.0000

[5.8G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	13.0	19.9526	2.61	1.8239	0.0072	1.0000
IEEE 802.11n HT20	12.0	15.8489	2.61	1.8239	0.0058	1.0000
IEEE 802.11n HT40	12.0	15.8489	2.61	1.8239	0.0058	1.0000
IEEE 802.11ac VHT20	10.0	10.0000	2.61	1.8239	0.0036	1.0000
IEEE 802.11ac VHT40	10.0	10.0000	2.61	1.8239	0.0036	1.0000
IEEE 802.11ax HE20	8.0	6.3096	2.61	1.8239	0.0023	1.0000
IEEE 802.11ax HE40	8.0	6.3096	2.61	1.8239	0.0023	1.0000

Remark:

1. Output power including tune-up tolerance;
2. Output power was adjust to duty cycle at 100% if measured duty cycle less than 98%;
3. MPE evaluate distance is 20cm from user manual provide by manufacturer.

8.2 Simultaneous Transmission MPE Evaluation

The sample support only one 5.2G WLAN & 5.8G WLAN, so no need consider simultaneous transmission;

9. Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

10. Description of Test Facility

CNAS Registration Number is L11555

A2LA Certificate Number: 5099.01

FCC Designation Number is CN1379

Test Firm Registration Number: 729882

11. Measurement Uncertainty

5.2GWIFI/5.8GWIFI:

Test Item		Frequency Range	Uncertainty	Note
Output power	:	1GHz-40GHz	$\pm 0.57\text{dB}$	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

-----THE END OF REPORT-----