



Shenzhen HTT Technology Co., Ltd.

RF Exposure MPE	
Report Reference No.....:	HTT202509777F08
FCC ID.....:	2AZHU-S52
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Date of issue	Oct. 14, 2025
Testing Laboratory Name	Shenzhen HTT Technology Co.,Ltd.
Address.....:	1F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road,Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China
Applicant's name.....:	Shenzhen Zigxico Technology Co., Ltd
Address.....:	Room 201, building B, Shuichanjingwan First Industrial Park, Gushu,
Standard	47CFR §1.1310 47CFR §2.1091 KDB447498 D01 General RF Exposure Guidance v06
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Test item description	Smart Camera
Manufacturer	Shenzhen Zigxico Technology Co., Ltd
Trade Mark	N/A
Model/Type reference	S52
Rating	Input: DC 5.0V 2.0A 10W Battery: 3.7V 7800mAh
Result	PASS

TEST REPORT

Equipment under Test : Smart Camera

Model /Type : S52

Listed Models : S24, S25, S26, S29, S43, S46, S49, S53, S54, S55, S56, S57, S58, S59, S60, S61, S62, S63, S64, S65, S66, S67, S68, S69, S70, S71, S72, S73, S74

Model difference : The PCB board, circuit, structure and internal of these models are the same, Only model number is different for these model.

Applicant : Shenzhen Zigxico Technology Co., Ltd

Address : Room 201, building B, Shuichanjingwan First Industrial Park, Gushu, Xixiang Street, Baoan District, Shenzhen,China.

Manufacturer : Shenzhen Zigxico Technology Co., Ltd

Address : Room 201, building B, Shuichanjingwan First Industrial Park, Gushu, Xixiang Street, Baoan District, Shenzhen,China.

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.

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1 TEST STANDARDS

The tests were performed according to following standards:

[ANSI C95.1-1999](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

[FCC KDB 447498 D01 General RF Exposure Guidance v06](#): Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.

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

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

2 SUMMARY

2.1 General Remarks

Date of receipt of test sample	:	Sep. 16, 2025
Testing commenced on	:	Sep. 16, 2025
Testing concluded on	:	Oct. 14, 2025

2.2 Product Description

Product Name:	Smart Camera
Model/Type reference:	S52
Power supply:	Input: DC 5.0V 2.0A 10W Battery: 3.7V 7800mAh
Adapter Information (Auxiliary test provided by the lab):	Mode: GS-0500200 Input: AC100-240V, 50/60Hz, 0.3A max Output: DC 5V, 2A
Hardware version:	v2.0
Software version:	1.0.28
Testing sample ID:	HTT202509777-1# (Engineer sample) HTT202509777-2# (Normal sample)
LTE	
Operation Band:	E-UTRA Band2
Support Bandwidth:	Band 2: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
TX/RXFrequency Range:	E-UTRA Band 2(1850 MHz -1910MHz)
Modulation Type:	QPSK, 16QAM
Release Version:	Release 9
Category:	Cat 1
Antenna Type:	External Antenna
Antenna Gain:	3.08dBi
Operation Band:	E-UTRA Band 4
Support Bandwidth:	Band 4: 1.4MHz, 3MHz, 5MHz,10MHz, 15MHz, 20MHz
TX/RXFrequency Range:	E-UTRA Band 4(1710 MHz -1755MHz)
Modulation Type:	QPSK, 16QAM
Release Version:	Release 9
Category:	Cat 1
Antenna Type:	External Antenna
Antenna Gain:	2.67dBi
Operation Band:	E-UTRA Band 5
Support Bandwidth:	Band 5: 1.4MHz, 3MHz, 5MHz,10MHz,
TX/RXFrequency Range:	E-UTRA Band 5(824 MHz -849MHz)

Modulation Type:	QPSK, 16QAM
Release Version:	Release 9
Category:	Cat 1
Antenna Type:	External Antenna
Antenna Gain:	1.66dBi
Operation Band:	E-UTRA Band 12
Support Bandwidth:	Band 12: 1.4MHz, 3MHz, 5MHz, 10MHz,
TX/RXFrequency Range:	E-UTRA Band 12(699 MHz -716MHz)
Modulation Type:	QPSK, 16QAM
Release Version:	Release 9
Category:	Cat 1
Antenna Type:	External Antenna
Antenna Gain:	1.08dBi
Operation Band:	E-UTRA Band 13
Support Bandwidth:	5MHz,10MHz,
TX/RXFrequency Range:	E-UTRA Band 4(777 MHz -787MHz)
Modulation Type:	QPSK, 16QAM
Release Version:	Release 9
Category:	Cat 1
Antenna Type:	External Antenna
Antenna Gain:	2.17dBi
Operation Band:	E-UTRA Band 17
Support Bandwidth:	Band 17: 5MHz, 10MHz,
TX/RXFrequency Range:	E-UTRA Band 17(704 MHz -716MHz)
Modulation Type:	QPSK, 16QAM
Release Version:	Release 9
Category:	Cat 1
Antenna Type:	External Antenna
Antenna Gain:	1.08dBi
Operation Band:	E-UTRA Band 66
Support Bandwidth:	Band 66: 1.4MHz, 3MHz, 5MHz,10MHz, 15MHz, 20MHz
TX/RXFrequency Range:	E-UTRA Band 66(1710 MHz -1780MHz)
Modulation Type:	QPSK, 16QAM
Release Version:	Release 9

Category:	Cat 1
Antenna Type:	External Antenna
Antenna Gain:	2.67dBi

2.3 Special Accessories

The following is the EUT test of the auxiliary equipment provided by the laboratory:

Description	Manufacturer	Model	Technical Parameters	Certificate	Provided by
/	/	/	/	/	/

2.4 Modifications

No modifications were implemented to meet testing criteria.

3 TEST ENVIRONMENT

3.1 Address of the test laboratory

Shenzhen HTT Technology Co.,Ltd.

1F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road,Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China

3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 779513 Designation Number: CN1319

Shenzhen HTT Technology Co.,Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert. No.: 6435.01

Shenzhen HTT Technology Co.,Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

3.3 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen HTT Technology Co.,Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen HTT Technology Co.,Ltd. :

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	9KHz~30MHz	3.12 dB	(1)
Radiated Emission	30~1000MHz	4.37 dB	(1)
Radiated Emission	1~18GHz	5.40 dB	(1)
Radiated Emission	18-40GHz	5.45 dB	(1)
Conducted Disturbance	0.15~30MHz	2.68 dB	(1)
Output Peak power	30MHz~18GHz	0.57 dB	(1)
Power spectral density	/	0.54 dB	(1)
Spectrum bandwidth	/	1.2%	(1)
Time	/	± 10%	(1)
Radiated spurious emission (30MHz-1GHz)	30~1000MHz	4.25 dB	(1)
Radiated spurious emission (1GHz-18GHz)	1~18GHz	4.15 dB	(1)
Radiated spurious emission (18GHz-40GHz)	18-40GHz	5.35 dB	(1)
Spurious RF Conducted Emission	9KHz~40GHz	1.20 dB	(1)

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Band Edge Compliance of RF Emission	9KHz~40GHz	1.20 dB	(1)
Occupied Bandwidth	9KHz~40GHz	-	(1)

4 Test limit

4.1 Requirement

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/Controlled 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

4.2 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

4.3 Conducted Power Results and Manufacturing tolerance

LTE	Max Conducted Power (dBm)	Target (dBm)	Tolerance $\pm$ (dB)
Band2	29.3	29.0	1.0
Band4	27.31	27.0	1.0
Band5	28.42	28.0	1.0
Band12	28.65	28.0	1.0
Band13	28.34	28.0	1.0
Band17	28.08	28.0	1.0
Band66	27.31	27.0	1.0

4.4 Standalone MPE Result

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 is refer to section 2.2, the RF power density can be obtained.

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
Band2	30.0	1000.0000	3.08	2.0324	0.4045	1.00
Band4	28.0	630.9573	2.67	1.8493	0.2322	1.00
Band5	29.0	794.3282	1.66	1.4655	0.2317	0.55
Band12	29.0	794.3282	1.08	1.2823	0.2027	0.47
Band13	29.0	794.3282	2.17	1.6482	0.2606	0.52
Band17	29.0	794.3282	1.08	1.2823	0.2027	0.47
Band66	28.0	630.9573	2.67	1.8493	0.2322	0.47

Remark:

1. Output power average including turn-up tolerance;
2. MPE evaluate distance is 20cm from user manual provide by manufacturer.

5 Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device Threshold per KDB 447498 D01v06

***** End of Report *****