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# **FCC REPORT**

Report Reference No.    :    CHTEW21100001    Report Verification:      Project No.    :    SHT2107003404EW      FCC ID.    :    2AYEZ-TE620      Applicant's name    :    Telo Communication (Shenzhen) Co., Ltd      Address.    :    6/F, No.42 Liuxian 1st Road, Bao'an District, Shenzhen, China      Test item description    :    TE620      Trade Mark    :    TELOX, Telo Systems      Model/Type reference    :    TELOX.TE620,Telo-TE620,TE620A,TE620B,TE620C, TE620D,TE620E,TE620F,TE620G,TE620H,TE620J,TE620K, TE620L,TE620D,TE620E,TE620G,TE620B,TE620T,TE620U, TE620V,TE620X,TE620Q,TE620R,TE620S,TE620T,TE620U, TE620V,TE620X,TE620Y,TE620X,TE620Y,TE620S,TE620T,TE620U, TE620V,TE620X,TE620Y      Standard    :    FCC CFR Title 47 Part 2
FCC ID
Applicant's name:Telo Communication (Shenzhen) Co., LtdAddress6/F, No.42 Liuxian 1st Road, Bao'an District, Shenzhen, ChinaTest item description:TE620Trade Mark:TELOX, Telo SystemsModel/Type reference:Listed Model(s):TELOX-TE620,Telo-TE620A,TE620B,TE620C, TE620D,TE620E,TE620F,TE620G,TE620H,TE620J,TE620K, TE620L,TE620M,TE620Q,TE620R,TE620S,TE620T,TE620U, TE620V,TE620X,TE620Y
Address6/F, No.42 Liuxian 1st Road, Bao'an District, Shenzhen, ChinaTest item descriptionTE620Trade MarkTELOX, Telo SystemsModel/Type referenceTE620Listed Model(s)TELOX-TE620,Telo-TE620,TE620A,TE620B,TE620C, TE620D,TE620E,TE620F,TE620G,TE620H,TE620J,TE620K, TE620L,TE620M,TE620Q,TE620R,TE620S,TE620T,TE620U, TE620V,TE620X,TE620Y
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Standard: FCC CFR Title 47 Part 2
FCC CFR Title 47 Part 22 FCC CFR Title 47 Part 24 FCC CFR Title 47 Part 27
Date of receipt of test sample: Sep. 10, 2021
Date of testing Sep. 11, 2021- Oct. 08, 2021
Date of issue Oct. 09, 2021
Result Pass
Compiled by (position+printedname+signature): File administrators Silvia Li
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Testing Laboratory Name: Shenzhen Huatongwei International Inspection Co., Ltd.
Address

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The test report merely correspond to the test sample.

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# 1. TEST STANDARDS AND REPORT VERSION

### **1.1. Applicable Standards**

The tests were performed according to following standards:

FCC Rules Part 2: FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

FCC Rules Part 22: PUBLIC MOBILE SERVICES

FCC Rules Part 24: PERSONAL COMMUNICATIONS SERVICES

FCC Rules Part 27: MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

<u>TIA/EIA 603 E March 2016</u>:Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

ANSI C63.26: 2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

KDB 971168 D01 Power Meas License Digital Systems v03: MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS

#### 1.2. Report version information

Revision No.	Date of issue	Description
N/A	2021-10-09	We have spot check test on the product, and the result have no major different from the value in the module report, which meets the requirements of reference module certification from KDB 484596.

# 2. <u>Test Description</u>

Test Item	Section in CFR 47	Result	Test Engineer
Conducted Output Power	Part 2.1046 Part 22.913(a) Part 24.232(c) Part 27.50	Pass*	N/A
Peak-to-Average Ratio	Part 24.232 Part 27.50	Pass*	N/A
99% Occupied Bandwidth & 26 dB Bandwidth	Part 2.1049 Part 22.917(b) Part 24.238(b) Part 27.53	Pass*	N/A
Band Edge	Part 2.1051 Part 22.917 Part 24.238 Part 27.53	Pass*	N/A
Conducted Spurious Emissions	Part 2.1051 Part 22.917 Part 24.238 Part 27.53	Pass*	N/A
Frequency stability vs temperature	Part 2.1055(a)(1)(b) Part 22.355 Part 24.235 Part 27.54	Pass*	N/A
Frequency stability vs voltage	Part 2.1055(d)(1)(2) Part 22.355 Part 24.235 Part 27.54	Pass*	N/A
ERP and EIRP	Part 22.913(a) Part 24.232(b) Part 27.50	Pass	Jiongsheng Feng
Radiated Spurious Emissions	Part 2.1053 Part 22.917 Part 24.238 Part 27.53	Pass	Jiongsheng Feng

Note:

1. The measurement uncertainty is not included in the test result.

2. \* reference to module report , which FCC ID is XMR202005SC200RNA

# 3. <u>SUMMARY</u>

### 3.1. Client Information

Applicant:	Telo Communication (Shenzhen) Co., Ltd		
Address:	6/F, No.42 Liuxian 1st Road, Bao'an District, Shenzhen, China		
Manufacturer:	Telo Communication (Shenzhen) Co., Ltd		
Address:	6/F, No.42 Liuxian 1st Road, Bao'an District, Shenzhen, China		

### 3.2. Product Description

Name of EUT:	TE620		
Trade Mark:	TELOX, Telo Systems		
Model No.:	TE620		
Listed Model(s):	TELOX-TE620,Telo-TE620, TE620A, TE620B, TE620C, TE620D, TE620E, TE620F, TE620G, TE620H, TE620J, TE620K, TE620L, TE620M, TE620Q, TE620R, TE620S, TE620T, TE620U, TE620V, TE620X, TE620Y		
SIM Information:	Support One SIM Card		
Power supply:	DC 3.8V		
Adapter information:	Model: SR-D505 Input: AC100-240V, 50/60Hz, 0.3A Output: 5.0Vdc, 2.0A Manufacturer:SHENZHEN SNROX ELECTRONIC CO.,LTD		
Hardware version:	TE620 V2.2		
Software version:	TE620_INT_V7_20210902		
3G:			
Operation Band:	FDD Band II, FDD Band IV , FDD Band V		
Power Class:	Class 3		
Modulation Type:	QPSK		
Transmit frequency:	FDD Band II:      1852.40MHz~1907.60MHz        FDD Band IV:      1712.40MHz~1752.60MHz        FDD Band V:      826.40MHz~846.60MHz		
Receive frequency:	FDD Band II:      1932.40MHz~1987.60MHz        FDD Band IV:      2112.40MHz~2152.60MHz        FDD Band V:      871.40MHz~891.60MHz		
Antenna type:	PIFA Antenna		
Antenna gain:	Band II: 0.6dBi, Band IV: 0.5dBi, Band V: -0.5dBi		

## 3.3. Operation state

#### Test frequency list

FDD Band II		FDD	Band IV	FDD Band V		
Channel	Frequency (MHz) Channel Frequency (MHz)		Channel	Frequency (MHz)		
9262	1852.40	1312	1712.40	4132	826.40	
9400	1880.00	1413	1732.60	4182	836.40	
9538	1907.60	1513	1752.60	4233	846.60	

#### Test mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03 and ANSI C63.26-2015 with maximum output power.

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

30 MHz to 10th harmonic for FDD Band II, Band IV, Band V.

All modes and data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

Test modes							
Band	Band Radiated						
WCDMA Band V	RMC 12.2Kbps Link	RMC 12.2Kbps Link					
WCDMA Band II	RMC 12.2Kbps Link	RMC 12.2Kbps Link					
WCDMA Band IV	RMC 12.2Kbps Link	RMC 12.2Kbps Link					

#### 3.4. EUT configuration

#### The following peripheral devices and interface cables were connected during the measurement:

- supplied by the manufacturer
- supplied by the lab

0	/	Manufacturer:	/
		Model No.:	/
0		Manufacturer:	/
		Model No.:	/

#### 3.5. Modifications

No modifications were implemented to meet testing criteria.

# 4. TEST ENVIRONMENT

### 4.1. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.			
Laboratory Location	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China			
Connect information:	Information:      Tel: 86-755-26715499        E-mail: cs@szhtw.com.cn      http://www.szhtw.com.cn			
Qualifications	Туре	Accreditation Number		
Qualifications	FCC	762235		

### 4.2. Equipments Used during the Test

•	Radiated Spu	irious Emission					
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Semi-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	N/A	2018/09/27	2022/09/26
•	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2021/9/13	2022/9/12
•	Loop Antenna	R&S	HTWE0170	HFH2-Z2	100020	2021/04/06	2022/04/05
•	Broadband Horn Antenna	SCHWARZBECK	HTWE0103	BBHA9170	BBHA9170472	2020/4/27	2023/4/27
•	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0123	VULB9163	538	2021/04/06	2022/04/05
•	Horn Antenna	SCHWARZBECK	HTWE0126	9120D	1011	2020/04/01	2023/03/31
•	Pre-amplifier	CD	HTWE0071	PAP-0102	12004	2020/11/13	2021/11/12
•	Broadband Preamplifier	SCHWARZBECK	HTWE0201	BBV 9718	9718-248	2021/03/05	2022/03/04
•	RF Connection Cable	HUBER+SUHNER	HTWE0120- 01	6m 18GHz S Serisa	N/A	2021/02/26	2022/02/25
•	RF Connection Cable	HUBER+SUHNER	HTWE0120- 02	6m 3GHz RG Serisa	N/A	2021/02/26	2022/02/25
•	RF Connection Cable	HUBER+SUHNER	HTWE0120- 03	6m 3GHz RG Serisa	N/A	2021/02/26	2022/02/25
•	RF Connection Cable	HUBER+SUHNER	HTWE0120- 04	6m 3GHz RG Serisa	N/A	2021/02/26	2022/02/25
٠	RF Connection Cable	HUBER+SUHNER	HTWE0121- 01	6m 18GHz S Serisa	N/A	2021/02/26	2022/02/25
•	EMI Test Software	Audix	N/A	E3	N/A	N/A	N/A

### 4.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

	VN=Nominal Voltage	DC 3.80V
Voltage	VL=Lower Voltage	DC 3.60V
	VH=Higher Voltage	DC 4.35V
Tomporatura	TN=Normal Temperature	25 °C
Temperature	Extreme Temperature	From -30° to + 50° centigrade
Humidity	30~60 %	
Air Pressure	950-1050 hPa	

#### 4.4. 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 compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurementof mobile radio equipment characteristics;Part 1"and TR-100028-02 "Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurement characteristics;Part 2" and is documented in the Shenzhen Huatongwei International Inspection 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 Huatongwei laboratory is reported:

Test Items	Measurement Uncertainty	Notes	
Transmitter power conducted	0.51 dB	(1)	
Transmitter power Radiated	2.66dB for <1GHz 3.44dB for >1GHz	(1)	
Conducted spurious emissions 9kHz~40GHz	0.51 dB	(1)	
Radiated spurious emissions	2.66dB for <1GHz 3.44dB for >1GHz	(1)	
Occupied Bandwidth	15Hz for <1GHz 70Hz for >1GHz	(1)	
Frequency error	15Hz for <1GHz 70Hz for >1GHz	(1)	

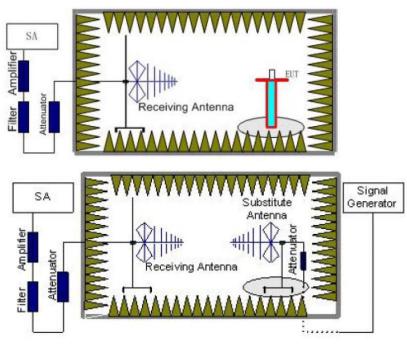
 This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

### 4.5. ERP and EIRP

LIMIT

WCDMA Band V: 7W (38.45dBm) ERP WCDMA Band II: 2W (33dBm) EIRP WCDMA Band IV: 1W (30dBm) EIRP

#### **TEST CONFIGURATION**



#### TEST PROCEDURE

- 1. Place the EUT in the center of the turntable.
  - a) For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table at a nominal height of 80 cm above the reference ground plane
  - b) For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table at a nominal height of 1.5 m above the ground plane.
- 2. Unless the EUT uses an integral antenna, the EUT shall be terminated with a non-radiating transmitter load. In cases where the EUT uses an adjustable antenna, the antenna shall be adjusted through typical positions and lengths to maximize emissions levels.
- 3. The EUT shall be tested while operating on the frequency per manufacturer specification. Set the transmitter to operate in continuous transmit mode.
- Receiver or Spectrum set as follow: Below 1GHz, RBW=100kHz, VBW=300kHz, Detector=Peak, Sweep time=Auto Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peck, Sweep time=Auto
- 5. Each emission under consideration shall be evaluated:
  - a) Raise and lower the measurement antenna from 1 m to 4 m, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
  - b) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.
  - c) Return the turntable to the azimuth where the highest emission amplitude level was observed.
  - d) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
  - e) Record the measured emission amplitude level and frequency
- 6. Repeat step 5 for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.
- Set-up the substitution measurement with the reference point of the substitution antenna located as near as possible to where the center of the EUT radiating element was located during the initial EUT measurement.
- 8. Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.

- 9. Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.
- 10. For each emission that was detected and measured in the initial test
  - a) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.
  - b) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step 5 and step 6.
  - c) Record the output power level of the signal generator when equivalence is achieved in step b).
- Repeat step 8 through step 10 with the measurement antenna oriented in the opposite polarization.
  Calculate the emission power in dBm referenced to a half-wave dipole using the following equation: Pe = Ps(dBm) - cable loss (dB) + antenna gain (dBd)
  - where

Pe = equivalent emission power in dBm

Ps = source (signal generator) power in dBm

NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.

- Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from: gain (dBd) = gain (dBi) 2.15 dB.
- If necessary, the antenna gain can be calculated from calibrated antenna factor information
- 14. Provide the complete measurement results as a part of the test report.

#### TEST MODE:

Please refer to the clause 3.3

#### TEST RESULTS

☑ Passed □ Not Applicable

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Issued: 2021-10-09

Mode	Channel	Antenna Pol.	EIRP	Limit (dBm)	Result	
	0262	V	11.08			
	9262	Н	18.46			
WCDMA Band II	0400	V	13.21	-22.00	Dooo	
	9400	Н	19.64	<33.00	Pass	
	9538	V	14.45			
	9000	Н	20.39			

Mode	Channel	Antenna Pol.	EIRP	Limit (dBm)	Result
	1312	V	13.55		
	1312	Н	21.47		
	1110	V	13.05	-20.00	Deee
WCDMA Band IV	1413	Н	21.41	<30.00	Pass
	1510	V	12.44		
	1513	Н	21.33		

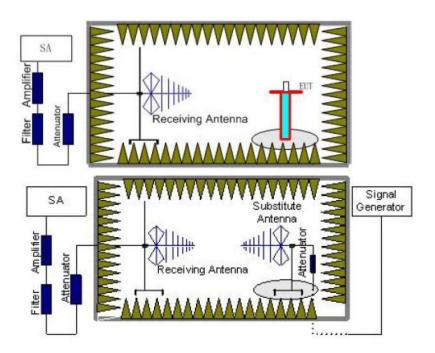
Mode	Channel	Antenna Pol.	ERP	Limit (dBm)	Result
	4132	V	20.16		
	4132	Н	11.40		
WCDMA Band V	4492	V	19.94	-29.45	Dooo
	4183	Н	10.63	<38.45	Pass
	4000	V	20.13		
	4233	Н	9.89		

### 4.6. Radiated Spurious Emission

#### <u>LIMIT</u>

-13dBm

#### **TEST CONFIGURATION**



#### TEST PROCEDURE

- 1. Place the EUT in the center of the turntable.
  - a) For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table at a nominal height of 80 cm above the reference ground plane
  - b) For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table at a nominal height of 1.5 m above the ground plane.
- Unless the EUT uses an integral antenna, the EUT shall be terminated with a non-radiating transmitter load. In cases where the EUT uses an adjustable antenna, the antenna shall be adjusted through typical positions and lengths to maximize emissions levels.
- 3. The EUT shall be tested while operating on the frequency per manufacturer specification. Set the transmitter to operate in continuous transmit mode.
- Receiver or Spectrum set as follow: Below 1GHz, RBW=100kHz, VBW=300kHz, Detector=Peak, Sweep time=Auto Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peck, Sweep time=Auto
- 5. Each emission under consideration shall be evaluated:
  - a) Raise and lower the measurement antenna from 1 m to 4 m, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
  - b) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.
  - c) Return the turntable to the azimuth where the highest emission amplitude level was observed.
  - d) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
  - e) Record the measured emission amplitude level and frequency
- 6. Repeat step 5 for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.
- Set-up the substitution measurement with the reference point of the substitution antenna located as near as possible to where the center of the EUT radiating element was located during the initial EUT measurement.
- 8. Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.
- 9. Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any

potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.

- 10. For each emission that was detected and measured in the initial test
  - a) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.
  - Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step 5 and step 6.
  - c) Record the output power level of the signal generator when equivalence is achieved in step b).
- 11. Repeat step 8 through step 10 with the measurement antenna oriented in the opposite polarization.
- 12. Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:
  Pe = Ps(dBm) cable loss (dB) + antenna gain (dBd)
  where
  Pe = equivalent emission power in dBm
  - Ps = source (signal generator) power in dBm
  - NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.
- Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from: gain (dBd) = gain (dBi) 2.15 dB.
  - If necessary, the antenna gain can be calculated from calibrated antenna factor information
- 14. Provide the complete measurement results as a part of the test report.

#### TEST MODE:

Please refer to the clause 3.3

#### TEST RESULTS

☑ Passed □ Not Applicable

Note: Worst case at WCDMA Band II/WCDMA Band IV/ WCDMA Band V

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<u>Band II</u> 1852.4						Poloria	ation: Hari	zontol				
1852.4	Polarization: Horizontal											
-	Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark		
	1	32.99	-77.21	28.75	6.49	30.92	-72.89	-13.00	-59.89	Peak		
	2	800.80	-78.26	29.96	9.56	29.43	-68.17	-13.00	-55.17	Peak		
	3	1424.40	-68.82	37.00	12.27	28.87	-48.42	-13.00	-35.42	Peak		
	4	2461.72	-69.02	39.48	13.62	26.78	-42.70	-13.00	-29.70	Peak		
	5	3705.85	-57.16	42.28	7.02	37.06	-44.92	-13.00	-31.92	Peak		
	6	5562.15	-66.26	43.79	9.40	35.24	-48.31	-13.00	-35.31	Peak		
1852.4		Polarization: Vertical										
-	Maale		Deedlas		Cable.				0	Demands		
	Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark		
	1	32.99	-62.02	20.99	6.49	30.92	-65.46	-13.00	-52.46	Peak		
	2	600.20	-73.76	27.54	8.94	29.88	-67.16	-13.00	-54.16	Peak		
	3	1563.83	-67.99	37.76	11.69	28.28	-46.82	-13.00	-33.82	Peak		
	4	2456.32	-67.53	39.27	13.58	26.83	-40.02	-13.00	-28.51	Peak		
	5	3700.48	-57.28	42.31	7.01	37.05	-45.01	-13.00	-32.01	Peak		
	6	5554.08	-63.14	43.95	9.39	35.25	-45.05	-13.00	-32.01	Peak		
1880						Polariz	ation: Hori	zontal				
-												
	Mark	Frequency	-	Antenna				Limit	Over	Remark		
		MHz	dBm	dB	dB	dB	dBm	dBm	limit			
	1	32.99	-68.51	28.75	6.49	30.92	-64.19	-13.00	-51.19	Peak		
	2	800.80	-75.17	29.96	9.56	29.43	-65.08	-13.00	-52.08	Peak		
	3	1323.32	-68.86	37.00	12.84	28.97	-47.99	-13.00	-34.99	Peak		
	4	2299.63	-69.00	40.38	12.88	27.87	-43.61	-13.00	-30.61	Peak		
	5	3759.98	-57.10	42.23	7.08	37.12	-44.91	-13.00	-31.91	Peak		
	6	5643.40	-67.59	43.78	9.47	35.00	-49.34	-13.00	-36.34	Peak		
1880	Polarization: Vertical											
-	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark		
	marik	MHz	dBm	dB	dB	dB	dBm	dBm	limit	Kellidi K		
	1	32.99	-61.60	20.99	6.49	30.92	-65.04	-13.00	-52.04	Peak		
	2	800.80	-74.18	29.49	9.56	29.43	-64.56	-13.00	-51.56	Peak		
	3											
	3 4	1330.61 2191.11	-69.11 -68.82	37.46 41.58	12.80 12.57	28.96 28.34	-47.81 -43.01	-13.00 -13.00	-34.81 -30.01	Peak Peak		
	5	3759.98 5635.22	-59.28 -65.88	42.14 43.94	7.08 9.46	37.12 35.01	-47.18 -47.49	-13.00 -13.00	-34.18 -34.49	Peak Peak		
		3033.22	-05.00	43.94	9.40				-34.49	FEAK		
1907.6						Polariz	ation: Hori	zontal				
-	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark		
	THAT IN	MHz	dBm	dB	dB	dB	dBm	dBm	limit	AND IN THE REAL PROPERTY OF		
	1	32.99	-68.39	28.75	6.49	30.92	-64.07	-13.00	-51.07	Peak		
	2	800.80	-76.28	29.96	9.56	29.43	-66.19	-13.00	-53.19	Peak		
	3	1295.99	-68.98	36.94	12.90	29.45	-48.09	-13.00	-35.09	Peak		
	4	2635.25	-63.34	36.94 39.11	12.90	28.95	-48.09	-13.00	-35.09	Peak Peak		
					7.14	37.02						
	5	3809.38	-56.98	42.14			-44.72	-13.00	-31.72	Peak		
	6	5725.84	-66.28	43.90	9.56	34.86	-47.68	-13.00	-34.68	Peak		
1907.6						Polariz	ation: Vert	ical				
-	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark		
	CONTENT	MHz	dBm	dB	dB	dB	dBm	dBm	limit			
	1	31.96	-62.65	20.84	6.47	30.92	-66.26	-13.00	-53.26	Peak		
	2	826.55	-69.47	30.00	9.63	29.35	-59.19	-13.00	-46.19	Peak		
	3	1366.16	-69.02	37.61	12.61	28.94	-47.74	-13.00	-34.74	Peak		
	4	2472.57	-67.27	39.26	13.69	26.67	-40.99	-13.00	-27.99	Peak		
			-57.99	42.00	7.14	37.02	-40.99	-13.00	-27.99	Peak		
	E									FEOK		
	5	3809.38 5725.84	-68.35	44.05	9.56	34.86	-49.60	-13.00	-36.60	Peak		

Remark:

1.

The emission behaviour belongs to narrowband spurious emission. The emission levels of not record in the report are very lower than the limit and not show in test report. 2.

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3and IV 1712.4						Polariz	ation: Hori	zontal			
	Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark	
	1	32.99	-76.16	28.75	6.49	30.92	-71.84	-13.00	-58.84	Peak	
	2	598.09	-78.20	27.94	8.94	29.88	-71.20	-13.00	-58.20	Peak	
	3 4	2113.10	-63.62	40.18	12.37	28.26	-39.33	-13.00	-26.33	Peak	
	4 5	2635.25	-65.72 -56.58	39.11 39.89	14.45 6.72	25.18 36.62	-37.34 -46.59	-13.00 -13.00	-24.34 -33.59	Peak Peak	
	6	3421.73 5135.72	-56.50	44.08	8.96	35.45	-48.89	-13.00	-35.89	Peak	
4740 4					0100					- Cart	
1712.4						Polariz	ation: Vert	ical			
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark	
	Pior K	MHz	dBm	dB	dB	dB	dBm	dBm	limit	Nelliar K	
	1	94.74	-78.77	26.81	6.95	30.72	-75.73	-13.00	-62.73	Peak	
	2	496.39	-77.90	26.49	8.63	29.87	-72.65	-13.00	-59.65	Peak	
	3	1305.99	-69.41	37.35	12.94	28.97	-48.09	-13.00	-35.09	Peak	
	4	2635.25	-68.91	39.43	14.45	25.18	-40.21	-13.00	-27.21	Peak	
	5	3421.73	-61.33	39.91	6.72	36.62	-51.32	-13.00	-38.32	Peak	
	6	5135.72	-66.07	44.11	8.96	35.45	-48.45	-13.00	-35.45	Peak	
1732.6			Polarization: Horizontal								
-	Marali	Engeneration	Dondine	Anton	Cable	Decem	Level	Limit	0	Domark	
	Mark	Frequency	Reading	Antenna	Cable	Preamp			Over limit	Remark	
		MHz	dBm	dB	dB	dB	dBm	dBm		Deels	
	1	32.99	-76.90	28.75	6.49	30.92	-72.58	-13.00	-59.58	Peak	
	2	893.04	-73.22	29.77	9.81	29.34	-62.98	-13.00	-49.98	Peak	
	3	1378.22	-69.35	37.12	12.54	28.93	-48.62	-13.00	-35.62	Peak	
	4	2136.44	-66.67	40.40	12.43	28.27	-42.11	-13.00	-29.11	Peak	
	5	3466.69	-59.01	40.53	6.76	36.57	-48.29	-13.00	-35.29	Peak	
	6	5195.65	-68.62	43.96	8.96	35.39	-51.09	-13.00	-38.09	Peak	
1732.6		Polarization: Vertical									
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	0ver	Remark	
	T IGHT IX	MHz	dBm	dB	dB	dB	dBm	dBm	limit	includer in	
	1	50.66	-62,26	20.41	6.65	30.85	-66.05	-13.00	-53.05	Peak	
	2	678.81	-79.18	28.47	9.19	29.73	-71.25	-13.00	-58.25	Peak	
	3	2129.41	-67.33	40.56	12.41	28.26	-42.62	-13.00	-29.62	Peak	
	4	2635.25	-67.59	39.43	14.45	25.18	-38.89	-13.00	-25.89	Peak	
	5	3466.69	-64.88	40.61	6.76	36.57		-13.00	-41.08	Peak	
	6	5195.65	-69.49	40.61	8.96	35.39	-54.08 -51.99	-13.00	-38.99	Peak	
	Ŭ.				0.00				50.33	- Curk	
1752.6						Polariz	ation: Hori	zontal			
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark	
		MHz	dBm	dB	dB	dB	dBm	dBm	limit		
	1	51.56	-68.00	21.68	6.66	30.85	-70.51	-13.00	-57.51	Peak	
	2	767.71	-79.06	29.53	9.44	29.58	-69.67	-13.00	-56.67	Peak	
	3	1323.32	-69.76	37.00	12.84	28.97	-48.89	-13.00	-35.89	Peak	
	4	2708.63	-71.90	39.84	14.34	24.48	-42.20	-13.00	-29.20	Peak	
	5	3502.06	-55.82	41.03	6.79	36.62	-44.62	-13.00	-31.62	Peak	
	6	5263.91	-66.74	43.99	9.26	35.35	-48.84	-13.00	-35.84	Peak	
1752.6						Polariz	ation: Vert	ical			
-	Mercli			A	C-1-1-		1	ع السال (	0	Derradi	
	Mark	Frequency	Reading	Antenna	Cable	Preamp		Limit	Over	Remark	
		MHz	dBm	dB	dB	dB	dBm	dBm	limit	- ·	
	1	89.87	-80.86	28.24	6.92	30.75	-76.45	-13.00	-63.45	Peak	
	2	608.70	-77.71	27.82	8.97	29.88	-70.80	-13.00	-57.80	Peak	
	3	1337.94	-68.43	37.49	12.76	28.96	-47.14	-13.00	-34.14	Peak	
	4	2208.03	-68.92	41.63	12.61	28.36	-43.04	-13.00	-30.04	Peak	
	_	3507.14	-61.53	41.23	6.79	36.64	-50.15	-13.00	-37.15	Peak	
	5	5263.91	-67.94	43.98	9.26	35.35	-50.05	-13.00	-37.05	Peak	

Remark:

1. The emission behaviour belongs to narrowband spurious emission.

2. The emission levels of not record in the report are very lower than the limit and not show in test report.

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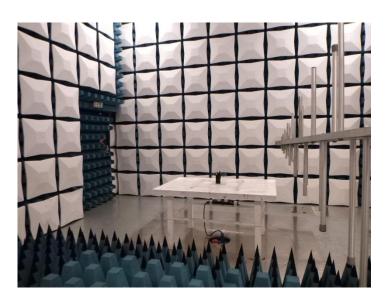
Band V												
826.4					Polariz	Polarization: Horizontal						
			Deed/are		c-11-					Description		
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark		
		MHz	dBm	dB	dB	dB	dBm	dBm	limit			
	1	32.99	-66.51	28.75	6.49	30.92	-62.19	-13.00	-49.19	Peak		
	2	401.97	-78.13	26.18	8.32	30.09	-73.72	-13.00	-60.72	Peak		
	3	1884.95	-68.38	37.77	11.96	25.61	-44.26	-13.00	-31.26	Peak		
	4	2652.67	-65.02	39.29	14.43	24.90	-36.20	-13.00	-23.20	Peak		
	5	4853.30	-70.79	43.84	8.59	35.15	-53.51	-13.00	-40.51	Peak		
	6	7348.04	-73.64	48.37	10.13	34.07	-49.21	-13.00	-36.21	Peak C		
826.4						Polariz	zation: Vert	ical				
-												
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Eevel	Limit	Over	Remark		
		MHz	dBm	dB	dB	dB	dBm	dBm	limit			
	1	32.99	-62.55	20.99	6.49	30.92	-65.99	-13.00	-52.99	Peak		
	2	88.93	-73.55	27.87	6.91	30.76	-69.53	-13.00	-56.53	Peak		
	3	1856.18	-68.14	37.01	11.91	25.33	-44.55	-13.00	-31.55	Peak		
	4	2467.14			13.66	26.72	-44.33		-28.32	Peak		
			-67.52	39.26				-13.00				
	5	4888.62 8821.27	-71.12 -75.08	44.02 49.44	8.68 11.94	35.19 34.94	-53.61 -48.64	-13.00 -13.00	-40.61 -35.64	Peak Peak		
836.6	0	0021.27	-75.00	43.44	11.94		zation: Hori		-55.04	Feak		
	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark		
		MHz	dBm	dB	dB	dB	dBm	dBm	limit			
	1	32.99	-68.43	28.75	6.49	30,92	-64.11	-13.00	-51.11	Peak		
	2	164.55	-75.19	20.62	7.35	30.47	-77.69	-13.00	-64.69	Peak		
	3											
		1370.67	-68.83	37.10	12.58	28.94	-48.09	-13.00	-35.09	Peak		
	4	2067.18	-68.87	39.75	12.29	28.04	-44.87	-13.00	-31.87	Peak		
	5	4687.28	-70.52	43.54	8.20	35.81	-54.59	-13.00	-41.59	Peak		
	6	7564.29	-74.26	47.79	10.43	33.45	-49.49	-13.00	-36.49	Peak		
836.6		Polarization: Vertical										
-	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark		
	THAT IS	MHz	dBm	dB	dB	dB	dBm	dBm	limit	richiar is		
										Deed		
	1	32.99	-62.63	20.99	6.49	30.92	-66.07	-13.00	-53.07	Peak		
	2	87.68	-73.19	27.38	6.91	30.77	-69.67	-13.00	-56.67	Peak		
	3	1467.29	-69.02	37.76	11.99	28.77	-48.04	-13.00	-35.04	Peak		
	4	2475.28	-62.02	39.25	13.71	26.65	-35.71	-13.00	-22.71	Peak		
	5	4666.94	-70.33	43.54	8.18	35.93	-54.54	-13.00	-41.54	Peak		
	6	7401.51	-73.93	48.59	10.26	34.01	-49.09	-13.00	-36.09	Peak		
	<u> </u>	,		.0755	10720				20.05	1 CMN		
846.6						Polariz	zation: Hori	zontal				
-	Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark		
		MHz	dBm	dB	dB	dB	dBm	dBm	limit			
	1	32.99	-69.04	28.75	6.49					Peak		
						30.92	-64.72	-13.00	-51.72			
	2	400.56	-77.71	26.20	8.32	30.09	-73.28	-13.00	-60.28	Peak		
	3	1263.65	-67.85	36.87	12.33	28.86	-47.51	-13.00	-34.51	Peak		
	4	1965.30	-68.72	38.71	12.13	26.97	-44.85	-13.00	-31.85	Peak		
	5	3196.27	-63.44	41.36	6.45	37.00	-52.63	-13.00	-39.63	Peak		
	6	7433.79	-73.89	48.39	10.33	33.98	-49.15	-13.00	-36.15	Peak		
846.6						Polariz	zation: Vert	ical				
-												
	Mark	Frequency	Reading	Antenna	Cable	Preamp		Limit	Over	Remark		
		MHz	dBm	dB	dB	dB	dBm	dBm	limit			
	1	32.99	-62.45	20.99	6.49	30.92	-65.89	-13.00	-52.89	Peak		
	2	400.56	-76.67	26.03	8.32	30.09	-72.41	-13.00	-59.41	Peak		
	3											
	5	1333.54	-69.03	37.47	12.78	28.96	-47.74	-13.00	-34.74	Peak		
		0400 40	CO 00	20.02								
	4	2429.48	-68.28	39.29	13.40	27.07	-42.66	-13.00	-29.66	Peak		
		2429.48 4996.14 7348.04	-68.28 -70.41 -74.43	39.29 44.49 48.60	13.40 8.81 10.13	27.07 35.24 34.07	-42.66 -52.35 -49.77	-13.00 -13.00 -13.00	-29.66 -39.35 -36.77	Peak Peak Peak		

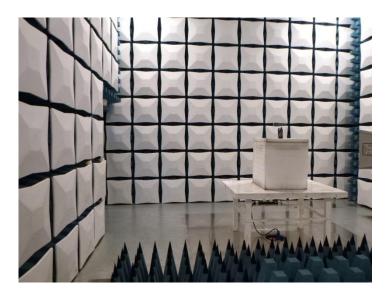
Remark:

1. The emission behaviour belongs to narrowband spurious emission.

2. The emission levels of not record in the report are very lower than the limit and not show in test report

# 5. TEST SETUP PHOTOS OF THE EUT

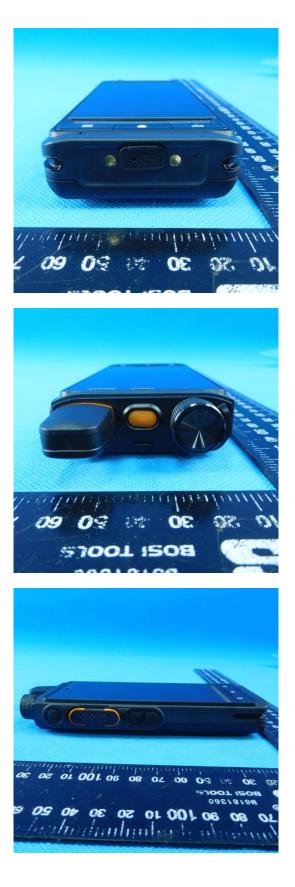


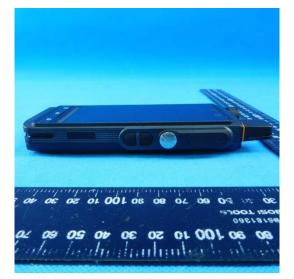


# 6. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

# **EXTERNAL PHOTOS OF THE EUT**







# **INTERNAL PHOTOS OF THE EUT**







Shenzhen Huatongwei International Inspection Co., Ltd.







Shenzhen Huatongwei International Inspection Co., Ltd.





## -----END OF REPORT-----