# CT通测检测 TESTING CENTRE TECHNOLOGY TEST REPORT

FCC ID	2AGEB-5502			
Test Report No:	TCT210926E027			
Date of issue:	Dec. 09, 2021			
Testing laboratory::	SHENZHEN TONGCE TESTING	LAB		
Testing location/ address:		TCT Testing Industrial Park Fuqiao 5th Industrial Zone, Fuhai Street, Bao'an District Shenzhen, Guangdong, 518103, People's Republic of China		
Applicant's name::	Shenzhen ZKC Software Techno	logy Co., Ltd		
Address:	1st Floor, No. 1 Block, Zhongken Xixiang Town, Bao'an District, Sh			
Manufacturer's name :	Shenzhen ZKC Software Techno	logy Co., Ltd		
Address:	1st Floor, No. 1 Block, Zhongken Xixiang Town, Bao'an District, Sh			
Standard(s):	FCC CFR Title 47 Part 2 FCC CFR Title 47 Part22 FCC CFR Title 47 Part27			
Test item description :	Handheld integrated intelligent terminal			
Trade Mark:	ZKC			
Model/Type reference :	5502			
Rating(s):	Adapter Information: Model: GHSOU-090700 Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 9V, 2000mA Rechargeable Li-ion Battery DC 7.4V			
Date of receipt of test item	Sep. 26, 2021			
Date (s) of performance of test:	Sep. 26, 2021 - Dec. 09, 2021			
Tested by (+signature) :	Aaron MO	Amon MARONGCE		
Check by (+signature) :	Beryl ZHAO	Boy master TCT		
Approved by (+signature):	Tomsin	Tomsm #3 85		
Check by (+signature) :	Beryl ZHAO	Boy the TCT		

#### General disclaimer:

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# TCT通测检测 1. General Product Information

# 1.1. EUT description

Test item description:	Handheld integrated intelligent terminal	
Model/Type reference:	5502	S
Sample Number:	TCT210926E008-0101	
Tx Frequency:	LTE Band 5: 824 MHz ~ 849 MHz LTE Band 41: 2555 MHz ~ 2655 MHz	
Rx Frequency:	LTE Band 5: 869 MHz ~ 894 MHz LTE Band 41: 2555 MHz ~ 2655 MHz	
Bandwidth:	LTE Band 5: 1.4MHz /3MHz /5MHz /10MHz LTE Band 41: 5MHz /10MHz /15MHz /20MHz	
Maximum Output Power to Antenna:	LTE Band 5: 21.04dBm LTE Band 41: 25.99dBm	
99% Occupied Bandwidth:	LTE Band 5: 9M00G7D LTE Band 41: 18M0G7D	
Type of Modulation:	QPSK/16QAM	
Antenna Type:	Internal Antenna	
Antenna Gain:	0dBi	
Rating(s):	Adapter Information: Model: GHSOU-090700 Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 9V, 2000mA Rechargeable Li-ion Battery DC 7.4V	

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

# 1.2. Model(s) list

None.



# 1.3. Emission Designator

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LTE Band 5	I 5 QPSK		16QAM	
BW(MHz)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)
1.4	1M09G7D	0.123	1M09W7D	0.094
3	2M70G7D	0.124	2M70W7D	0.094
5	4M50G7D	0.125	4M51W7D	0.094
10	9M00G7D	0.127	9M00W7D	0.098
LTE Band 41	QPSK		16QAM	
BW(MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
5	4M51G7D	0.223	4M50W7D	0.195
10	8M98G7D	0.224	8M98W7D	0.185
15	13M5G7D	0.237	13M5W7D	0.191
<u> </u>	18M0G7D	0.242	17M9W7D	0.177
20	TOIVIUG7D	0.242	1710/3007D	0.177



# TCT通测检测 1.4. Test Frequency

LTE Band	5(1.4MHz)	LTE Band 5(3MHz)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	
20407	824.7	20415	825.5	
20525	836.5	20525	836.5	
20643 848.3		20635	847.5	
LTE Band	5(5MHz)	LTE Band 5(10MHz)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	
20425	826.5	20450	829.0	
20525	836.5	20525	836.5	
20625	846.5	20600	844.0	

LTE Band	41(5MHz)	LTE Band 41(10MHz)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	
40265	2557.5	40290	2560	
40740	2605	40740	2605	
41215	2652.5	41190	2650	
LTE Band	41(15MHz)	LTE Band 41(20MHz)		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	
40315	2562.5	40340	2565	
40740	2605	40740	2605	
41165	2647.5	41140	2645	

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# TCT通测检测 TESTING CENTRE TECHNOLOGY 2. Test Result Summary

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Requirement	CFR 47 Section	Result
Conducted Output Power	§2.1046; §22.913; §27.50(d); §27.50(c); §27.50(b);	PASS
Peak-to-Average Ratio	§2.1046; §27.50(d); §27.50(c); §27.50(b);	PASS
Effective Radiated Power	§2.1046; §22.913; §27.50(d); §27.50(c); §27.50(b);	PASS
Equivalent Isotropic Radiated Power	§2.1046; §22.913; §27.50(d); §27.50(c); §27.50(b);	PASS
Occupied Bandwidth	§2.1049; §27.53;	PASS
Band Edge	§2.1051; §22.917(a); §27.53(h); §27.53(c); §27.53(g);	PASS
Conducted Spurious Emission	§2.1051; §22.917(a); §27.53(h); §27.53(g); §27.53(c);	PASS
Field Strength of Spurious Radiation	§2.1053; §22.917(a); §27.53(g) ; §27.53(c); §27.53(h);	PASS
Frequency Stability for Temperature & Voltage	§2.1055;§22.355; §27.54;	PASS

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

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# 3. General Information

#### 3.1. Test environment and mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010 mbar
Test Mode:	
Operation mode:	Keep the EUT in continuous transmitting with modulation

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

Keep the EUT in communication with CMW500 and select channel with modulation All modes and data rates and positions were investigated.

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

lest Mode			
Band Radiated TCs		Conducted TCs	
LTE Band 5	QPSK Link (1.4MHz / 3MHz / 5MHz / 10MHz)	16QAM Link (1.4MHz / 3MHz / 5MHz / 10MHz)	
LTE Band 41	QPSK Link (5MHz / 10MHz / 15MHz / 20MHz)	16QAM Link (5MHz / 10MHz / 15MHz / 20MHz)	

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

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission. The sample was placed 0.8m/1.5m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarization. The emissions worst-case are shown in Test Results of the following pages.

#### Report No.: TCT210926E027 Bandwidth (MHz) Modulation RB # **Test Channel Test Items** Band 1.4 20 QPSK 16QAM Full н 3 5 10 15 1 Half L Μ 5 ۷ v v v v v v v v v ٧ -/ ÷ v Max. Output Power -41 v v v v v v v v v v v v 5 ۷ v ۷ ۷ -v ۷ v ۷ v v ۷ ۷ Peak-to-Average Ratio 41 v --۷ ۷ v v v ۷ v v v v ۷ 5 v ۷ v v -v ۷ ۷ ۷ ۷ ۷ v v 26dB and 99% Bandwidth 41 -v v v v v v -v v v v 5 v v ۷ ۷ 7 h v ۷ ۷ v v v -/ v **Conducted Band** Edge -41 v ۷ v v v ۷ v v v ÷ v Conducted 5 v v v v -v v v -v ۷ v Spurious Emission 41 --۷ ۷ ۷ ۷ ٧ ۷ ۷ -4 ۷ ۷ v 5 v v -v v v v v v v v Frequency Stability 41 -v v -v v v v v v v v 5 ۷ ۷ v ۷ A ۷ v ۷ ۷ ۷ ۷ v ۷ ¥ E.R.P./ E.I.R.P. 1 41 v v v v ٧ v v v v v ۷ v Radiated 5 --v -v ۷ v -v ۷ ۷ Spurious Emission 41 v -----۷ ٧ ۷ v -- . ۷ ۷ The mark "v" means that this configuration is chosen for testing 1. Note 2. The mark "-" means that this bandwidth is not supported. 3

# 3.2. Description of Support Units

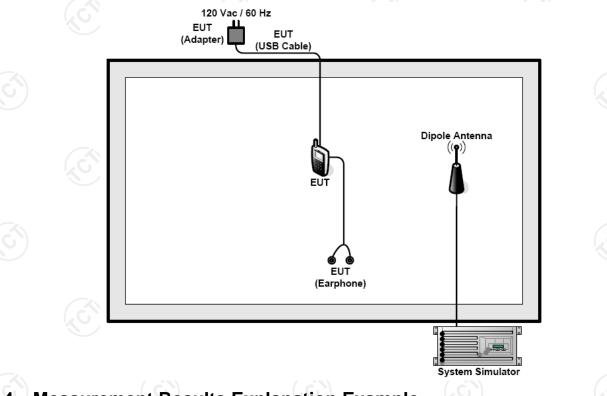
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
	1	1		G

#### Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

# 3.3. Configuration of Tested System



# **3.4. Measurement Results Explanation Example**

#### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level. The spectrum analyzer offset is derived from RF cable loss and attenuator factor. Offset = RF cable loss + attenuator factor.

# 4. Facilities and Accreditations

# 4.1. Facilities

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

• FCC - Registration No.: 645098

CT通测检测 TESTING CENTRE TECHNOLOGY

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC Registration No.: 10668A-1
  - SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

# 4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: TCT Testing Industrial Park Fuqiao 5th Industrial Zone, Fuhai Street, Bao'an District Shenzhen, Guangdong, 518103, People's Republic of China

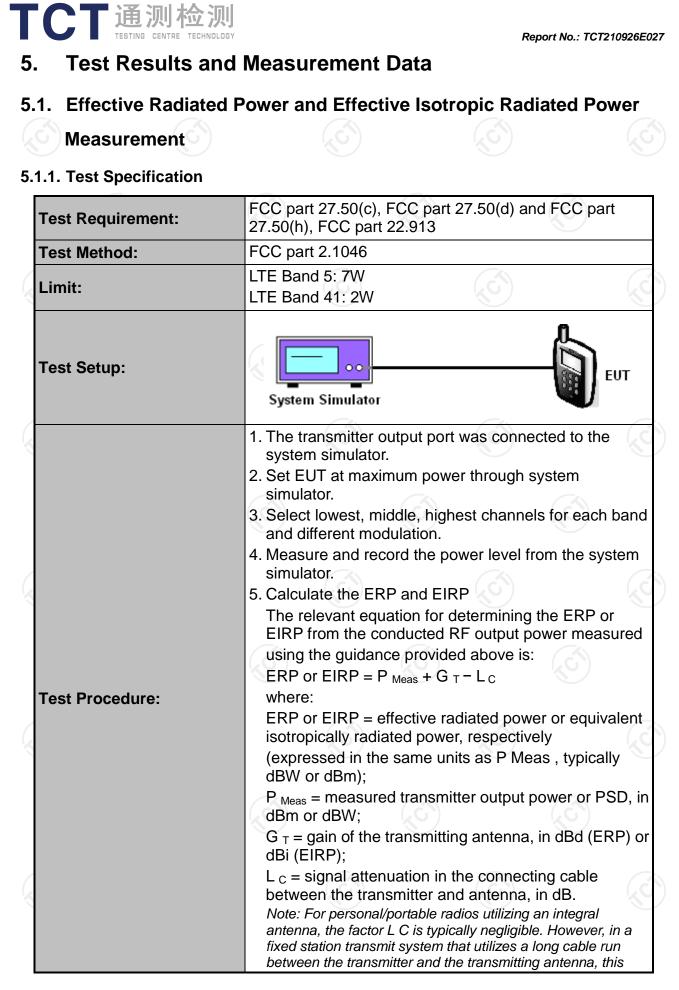
TEL: +86-755-27673339

# 4.3. Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	± 3.10 dB
2	RF power, conducted	± 0.12 dB
3	Spurious emissions, conducted	± 0.11 dB
4	All emissions, radiated(<1 GHz)	± 4.56 dB
5	All emissions, radiated(1 GHz - 18 GHz)	± 4.22 dB
6	All emissions, radiated(18 GHz- 40 GHz)	± 4.36 dB

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		factor can be significant.	

Test Result:

PASS

# 5.1.2. Test Instruments

Equipment	Manufacturer	Model Serial Number		Calibration Due
Wideband Radio Communication Tester	R&S	CMW500	114220	Jul. 07, 2022
RF cable (9kHz-40GHz)	тст	RE-05	N/A	Jul. 07, 2022
Antenna Connector	🕑 тст	RFC-02	N/A	Jul. 07, 2022



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# 5.2. Peak to Average Ratio

#### 5.2.1. Test Specification

Test Requirement:	FCC part 2.1046; 22.913; 27.50(d); 27.50(c); 27.50(b)
Test Method:	FCC KDB 971168 D01v03
Limit:	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.
Test Setup:	System Simulator EUT Spectrum Analyzer
Test Procedure:	<ol> <li>The testing follows FCC KDB 971168 D01v03 Section 5.7.1.</li> <li>The EUT was connected to spectrum analyzer and system simulator via a power divider.</li> <li>Set EUT to transmit at maximum output power.</li> <li>Set the CCDF (Complementary Cumulative Distribution Function) option of the spectrum analyzer. Record the maximum PAPR level associated with a probability of 0.1%.</li> </ol>
Test Result:	PASS

#### 5.2.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due	
Wideband Radio Communication Tester	R&S	CMW500	114220	Jul. 07, 2022	
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022	
RF cable (9kHz-40GHz)	тст	RE-05	N/A	Jul. 07, 2022	
Antenna Connector	ТСТ	RFC-02	N/A	Jul. 07, 2022	
G	G	$(\mathbf{G})$	(G)	(.c	



# 5.3. 99% Occupied Bandwidth and 26dB Bandwidth Measurement

#### 5.3.1. Test Specification

Test Requirement:	FCC part 27.53(h)(3) and FCC part 27.53(m)(6)					
Test Method:	FCC part 2.1049					
Limit:	N/A					
Test Setup:	System Simulator Spectrum Analyzer					
Test Procedure:	<ol> <li>The testing follows FCC KDB 971168 D01v03 Section 4.2.</li> <li>The EUT was connected to the spectrum analyzer and system simulator via a power divider.</li> <li>The RF output of the EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>The 99% occupied bandwidth were measured, set RBW= 1% of OBW, VBW= 3*RBW, sample detector, trace maximum hold.</li> <li>The 26dB bandwidth were measured, set RBW= 1% of EBW, VBW= 3*RBW, peak detector, trace maximum hold.</li> </ol>					
Test Result:	PASS					

#### 5.3.2. Test Instruments

Equipment	Manufacturer	nufacturerModelSerial NumberR&SCMW500114220		Calibration Due
Wideband Radio Communication Tester	R&S			Jul. 07, 2022
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
RF cable (9kHz-40GHz)	тст	RE-05	N/A	Jul. 07, 2022
Antenna Connector	тст	RFC-02	N/A	Jul. 07, 2022
	0)			, Ko

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# 5.4. Band Edge and Conducted Spurious Emission Measurement

#### 5.4.1. Test Specification

Test Requirement:	FCC part 27.53(h), FCC part 27.53(g) , FCC part 27.53(m)(4), FCC part 22.917(a)
Test Method:	FCC part2.1051
Limit:	-13dBm
Test Setup:	System Simulator
Test Procedure:	<ol> <li>The testing follows FCC KDB 971168 D01v03 Section 6.0.</li> <li>The EUT was connected to the spectrum analyzer and system simulator via a power divider.</li> <li>The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>The band edges of low and high channels for the highest RF powers were measured.</li> <li>The conducted spurious emission for the whole frequency range was taken.</li> <li>The RF fundamental frequency should be excluded against the limit line in the operating frequency band.</li> <li>The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts) = P(W) - [43 + 10log(P) ] (dB) = [30 + 10log(P)] (dBm) - [43 + 10log(P) ] (dB) = -13dBm. For Band 17, he limit line is derived from 55 + 10log(P) dB below the transmitter power</li> </ol>
Test Result:	PASS







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#### 5.4.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Wideband Radio Communication Tester	R&S	CMW500	114220	Jul. 07, 2022
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jul. 18, 2022
RF cable (9kHz-40GHz)	тст	RE-05	N/A	Jul. 07, 2022
Antenna Connector	ТСТ	RFC-02	N/A	Jul. 07, 2022
c) (	(C)		$(\mathcal{C})$	(All



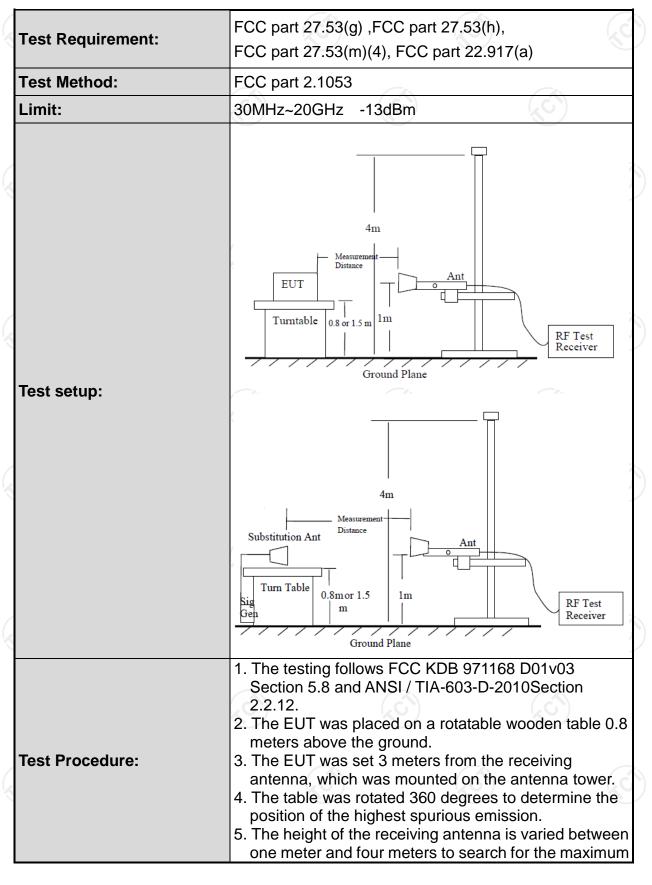




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# 5.5. Field Strength of Spurious Radiation Measurement

#### 5.5.1. Test Specification



TESTING CENTRE TECHNOLOGY	<ul> <li>spurious emission for both horizontal and vertical polarizations.</li> <li>6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.</li> <li>7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.</li> <li>8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.</li> <li>9. Taking the record of output power at antenna port.</li> <li>10. Repeat step 7 to step 8 for another polarization.</li> <li>11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain</li> <li>12. ERP (dBm) = EIRP - 2.15</li> <li>13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.</li> <li>14. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts) = P(W) - [43 + 10log(P)] (dB) = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)</li> </ul>
Test results:	= -13dBm. PASS
Remark:	All modulations have been tested, but only the worst modulation show in this test item.



#### 5.5.2. Test Instruments

	Radiated Em	nission Test Site	e (966)		
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due	
Universal Radio Communication Tester	R&S	CMU200	110188	Jul. 07, 2022	
Spectrum Analyzer	R&S	FSQ40	200061	Jul. 07, 2022	
Signal Generator	HP	83623B	3614A00396	Jul. 18, 2022	
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 04, 2022	
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 04, 2022	
Broadband Antenna	Schwarzbeck	VULB9163	412	Sep. 04, 2022	
Horn Antenna	Schwarzbeck	BBHA 9120D	1201	Sep. 04, 2022	
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Apr. 10, 2023	
Dipole Antenna	тст	TCT-RF	N/A	Sep. 02, 2021	
Coaxial cable	SKET	RC_DC18G-N	N/A	Apr. 08, 2022	
Coaxial cable	SKET	RC-DC18G-N	N/A	Apr. 08, 2022	
Coaxial cable	SKET	RC-DC40G-N	N/A	Jul. 07, 2022	
Antenna Mast	Keleto	CC-A-4M	N/A	N/A	
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A	
$\left( \begin{array}{c} \mathbf{C} \end{array} \right)$	$\left( \begin{array}{c} \\ \\ \\ \end{array} \right)$	(KČ		$\langle \mathcal{C} \rangle$	

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#### 5.5.3. Test Data

#### Frequency Range (9 kHz-30MHz)

Freq	uency (MHz)	Level@3m (dBµV/m)	Limit@3m (dBµV/m)
	- (6)	(6)	(c) (c
			C
	<u> </u>		

**Note:** 1. Emission Level=Reading+ Cable loss+Antenna factor-Amp factor

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement

	requirement							
<u>Hotlii</u>	<u>ne: 400-6611-1</u>	40 Tel: 8	<u>6-755-27673</u>	339 Fax:	<u>86-755-2767</u>	<u>3332 http</u>	Page <mark>://www.tct-la</mark>	20 of 27 1 <b>b.com</b>

Band				Test c	hannel:	Lowest
Testmeder	Band	5(QPSK, 1	0MHz)	Temp	erature:	25°C
Test mode:		<b>`</b>	•		Humidity:	56%
Note: Spuriou	us emissions w	ithin 30-10	00MHz were			low limit line.
		Spurious	Emission			
Frequency			Correction	Spurious	Limit	Result
(MHz)	Polarization	Level	Factor	emissions	(dBm)	Result
		(dBm)	(dB)	(dBm)		
1658.00	Vertical	-60.24	23.15	-37.09	No.	)
2487.00	V	-64.85	23.24	-41.61		
3316.00	V	-79.04	23.35	-55.69	12.00	
1658.00	Horizontal	-59.36	23.15	-36.21	-13.00	PASS
2487.00	Ĥ	-61.68	23.24	-38.44		
3316.00	Н	-77.23	23.35	-53.88		
Band				Test c	hannel:	Middle
Teetmeder	Band	5(QPSK, 1	0MHz)	Temp	erature:	25°C
Test mode:		<b>`</b>	•		Humidity:	56%
Note: Spuriou	us emissions w	ithin 30-10	00MHz were			low limit line.
•			Emission			
Frequency		•	Correction	Spurious	Limit (dBm)	Result
(MHz)	Polarization	Level	Factor	emissions		
<b>、</b>		(dBm)	(dB)	(dBm)		
1673.00	Vertical	-58.97	23.17	-35.80		
2509.50	V	-70.12	23.26	-46.86	(č	
3346.00	V	-78.05	23.38	-54.67	40.00	DAGO
1673.00	Horizontal	-57.47	23.17	-34.30	-13.00	PASS
2509.50	Н	-63.86	23.26	-40.60		
3346.00	H	-77.77	23.38	-54.39		
Band				Test c	hannel:	Highest
	Band	5(QPSK, 1	0MHz)	Temp	erature:	25°C
Test mode:		<b>`</b>	,		Humidity:	56%
Note: Spuriou	us emissions w	ithin 30-10	00MHz were			
•			Emission			
Frequency		•	Correction	Spurious	Limit	
(MHz)	Polarization	Level	Factor	emissions	(dBm)	Result
· · ·		(dBm)	(dB)	(dBm)		
1688.00	Vertical	-61.61	23.19	-38.42		
2532.00	V	-71.26	23.28	-47.98		
3376.00	V	-82.72	23.40	-59.32	10.00	
1688.00	Horizontal	-57.44	23.19	-34.25	-13.00	PASS
2532.00	H	-66.25	23.28	-42.97		
3376.00	H	-81.58	23.40	-58.18		
			==		1	

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Test mode:Temperature:25°CRelative Humidity:56%Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit lineSpurious EmissionLimit (dBm)Frequency (MHz)Level (dBm)Correction (dB)Spurious (dBm)Limit (dBm)Limit (dBm)Correction (dBm)Spurious emissionsLimit (dBm)Result1673.00Vertical-59.2423.17-36.07	Band			Test channel:			Lowest	
Relative Humidity:         56%           Note:         Spurious Emission         Correction Spurious         Emission         Limit         Grequency (MHz)         Polarization         Level (dBm)         Correction Factor (dB)         Spurious (dBm)         Limit (dBm)         Limit (dBm)         Correction (dBm)         Spurious (dBm)         Limit (dBm)         Correction (dBm)         Spurious (dBm)         Limit (dBm)         Correction (dBm)         Limit (dBm)         Correction (dBm)         Limit (dBm)         Correction Frequency (MHz)         Middle Test mode:           Spurious Emission         Test channel:         Middle Test mode:           Spurious Emission         Correction Factor (dBm)         Spurious (dBm)         Limit (dBm)         Correction Factor (dBm)         Spurious (dBm)         Limit (dBm)         Correction Factor (dBm)         Correction Factor (dBm)         Spurious Correction         Spurious Correction         Spurious Correction         Correction Factor (dBm)         Correction Factor (dBm)         Correction Correc	Tantan Is	Band 5(16QAM, 10MHz) Temperature:		erature:	25°C			
Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit lir           Spurious Emission         Level Correction Spurious emissions (dBm)         Limit lir           Frequency (MHz)         Polarization (dBm)         Level (dBm)         Correction (dBm)         Limit and the second (dBm)           1658.00         Vertical         -58.57         23.15         -36.42         -36.42         -40.90         -13.00         PASS           2487.00         V         -64.14         23.24         -40.17         -34.88         -13.00         PASS           2487.00         H         -63.41         23.24         -40.17         -54.76         -13.00         PASS           2487.00         H         -78.11         23.35         -54.76         -54.76         -13.00         PASS           2487.00         H         -78.11         23.35         -54.76         -13.00         PASS           Spurious emissions within 30-1000MHz were found more than 20dB below limit lir           Test channel: Middle           Test channel: Correction (dBm)         Spurious Emission           Test channel: Addition (dBm)           1673.00         Vertical	lest mode:							
Frequency (MHz)         Polarization         Level (dBm)         Correction (dB)         Spurious (dBm)         Limit (dBm)         Result (dBm)           1658.00         Vertical         -58.57         23.15         -35.42           2487.00         V         -64.14         23.24         -40.90           3316.00         V         -79.85         23.35         -56.50           1658.00         Horizontal         -58.03         23.15         -34.88           2487.00         H         -63.41         23.24         -40.17           3316.00         H         -78.11         23.35         -54.76           Band         Band 5(16QAM, 10MHz)         Test channel:         Middle           Test mode:         Spurious emissions within 30-1000MHz were found more than 20dB below limit limit         56%           Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit limit         (dBm)         (dBm)           1673.00         Vertical         -59.24         23.17         -36.07           2509.50         V         -69.92         23.26         -41.46           3346.00         V         -77.44         23.38         -54.80           Band         5(16QAM, 10MHz)         Test channel:         High	Note: Spuriou	us emissions wi	ithin 30-10	00MHz were			ow limit line.	
(MHz)         Polarization         Level (dBm)         Factor (dBm)         emissions (dBm)         (dBm)         Result (dBm)           1658.00         Vertical         -58.57         23.15         -35.42         -40.90           3316.00         V         -79.85         23.35         -56.50         -13.00         PASS           2487.00         H         -63.41         23.24         -40.17         -40.90         -13.00         PASS           2487.00         H         -63.41         23.24         -40.17         -40.90								
(MHz)         Polarization         Level (dBm)         Factor (dB)         emissions (dBm)         (dBm)         (dBm)         (dBm)           1658.00         Vertical         -58.57         23.15         -35.42         -40.90         -3316.00         V         -64.14         23.24         -40.90         -43.08         -13.00         PASS           2487.00         Horizontal         -58.03         23.15         -34.88         -13.00         PASS           2487.00         H         -63.41         23.24         -40.17         -40.17         -13.00         PASS           2487.00         H         -78.11         23.35         -54.76         -58.76         -13.00         PASS           3316.00         H         -78.11         23.35         -54.76         -13.00         Notes         Spurious emissions within 30-1000/Hz were found more than 20dB below limit limit (dBm)         -13.00         Result           Frequency (MHz)         Polarization         Level (dBm)         Correction Factor (dBm)         Spurious emissions         Limit (dBm)         -13.00         PASS           2509.50         V         -69.92         23.26         -41.46         -13.00         PASS           2509.50         H         -64.72 <td< td=""><td>Frequency</td><td></td><td>, Laval</td><td>Correction</td><td>Spurious</td><td>Limit</td><td>Decult</td></td<>	Frequency		, Laval	Correction	Spurious	Limit	Decult	
1658.00         Vertical         -58.57         23.15         -35.42           2487.00         V         -64.14         23.24         -40.90           3316.00         V         -79.85         23.35         -56.50           1658.00         Horizontal         -58.03         23.15         -34.88           2487.00         H         -63.41         23.24         -40.17           3316.00         H         -78.11         23.35         -54.76           Band         -         -         -         Middle           78316.00         H         -78.11         23.35         -54.76           Band         -         -         Test channel:         Middle           Test mode:         Band 5(16QAM, 10MHz)         Test channel:         Middle           Frequency (MHz)         Polarization         Level (dBm)         Correction (dBm)         Spurious (dBm)         Limit (dBm)         Limit (dBm)         Result           1673.00         Vertical         -59.24         23.17         -36.07         -13.00         PASS           2509.50         H         -64.72         23.26         -46.66         -41.46         -13.00         PASS           1673.00         <	(MHz)	Polarization		Factor		(dBm)	Result	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	, , ,		(aBm)	(dB)	(dBm)	· · ·		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1658.00	Vertical	-58.57	23.15	-35.42	le l	)	
1658.00         Horizontal         -58.03         23.15         -34.88         -13.00         PASS           2487.00         H         -63.41         23.24         -40.17         -40.16         -40.17	2487.00	V	-64.14	23.24	-40.90			
Test mode:         Horizontal         -58.03         23.15         -34.88           2487.00         H         -63.41         23.24         -40.17           3316.00         H         -78.11         23.35         -54.76           Test mode:         Band 5(16QAM, 10MHz)         Test channel:         Middle           Test mode:         Spurious emissions within 30-1000MHz were found more than 20dB below limit ling to the second more than 20dB below limit ling t	3316.00	V	-79.85	23.35	-56.50	10.00	5466	
3316.00         H         -78.11         23.35         -54.76           Band         Band 5(16QAM, 10MHz)         Test channel:         Middle           Test mode:         Band 5(16QAM, 10MHz)         Test channel:         Middle           Note:         Spurious         emissions         within 30-1000MHz were found more than 20dB below limit lir           Frequency (MHz)         Polarization         Level (dBm)         Correction (dB)         Spurious         Emissions         Limit (dBm)         Result           1673.00         Vertical         -59.24         23.17         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -36.07         -46.66         -41.46         -46.66         -41.46         -41.46         -41.46         -41.46         -41.46         -41.46         -3346.00         H         -78.18         23.38         -54.80         -41.46         -30.00         Fest channel:         Highes           Band         Band 5(16QAM, 10MHz)         Were         Correction more than 20dB below limit lin         Second         Ge%           Middle         Polarization         Level (dBm)	1658.00	Horizontal	-58.03	23.15	-34.88	-13.00	PASS	
Band Test mode:         Band 5(16QAM, 10MHz)         Test channel:         Middle Temperature:         Middle 25°C           Note:         Spurious emissions within 30-1000MHz were found more than 20dB below limit lir Spurious Emission         Correction         Spurious         Limit         Result           Frequency (MHz)         Polarization         Level (dBm)         Correction         Spurious         Emissions         Limit         Result           1673.00         Vertical         -59.24         23.17         -36.07         -36.07         -13.00         PASS           3346.00         V         -77.44         23.38         -54.06         -13.00         PASS           1673.00         Horizontal         -56.01         23.17         -32.84         -13.00         PASS           2509.50         H         -64.72         23.26         -41.46         -13.00         PASS           Band         Test channel:         Highes         Temperature:         25°C         Relative Humidity:         56%           Note:         Spurious emissions within 30-1000MHz were found more than 20dB below limit lir         Temperature:         25°C           Relative Humidity:         56%         Gamma         (dBm)         (dBm)         (dBm)         (dBm)         Emissions <td>2487.00</td> <td>Ĥ</td> <td>-63.41</td> <td>23.24</td> <td>-40.17</td> <td></td> <td></td>	2487.00	Ĥ	-63.41	23.24	-40.17			
Test mode:         Band 5(16QAM, 10MHz)         Temperature:         25°C           Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit lir           Frequency (MHz)         Polarization         Level (dBm)         Correction Factor (dB)         Spurious (dBm)         Limit (dBm)         Limit (dBm)         Result           1673.00         Vertical         -59.24         23.17         -36.07         -36.07         -36.07         -46.66         -46.72         23.26         -41.46         -46.72         -52.84         -54.80         -46.66         -46.66         -46.66         -46.66         -56.90         -56.80         -46.66         -46.72         -25.07         -46.66         -46.66         -66         -56.90         -66.65         -46.47         25.00         -66.72         -25.02	3316.00	Н	-78.11	23.35	-54.76			
Test mode:         Relative Humidity:         56%           Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit lin         Spurious Emission         Limit         Result           Frequency (MHz)         Polarization         Level (dBm)         Correction Factor         Spurious emissions         Limit (dBm)         Limit (dBm)         Result           1673.00         Vertical         -59.24         23.17         -36.07	Band			•	Test c	hannel:	Middle	
Kelative Humidity:         56%           Note:         Spurious         semissions within 30-1000MHz were found more than 20dB below limit lin           Frequency (MHz)         Polarization         Level (dBm)         Correction Factor         Spurious emissions         Limit (dBm)         Limit (dBm)         Result           1673.00         Vertical         -59.24         23.17         -36.07         -36.07         -46.66         -46.66         -13.00         PASS           3346.00         V         -77.44         23.38         -54.06         -13.00         PASS           2509.50         H         -64.72         23.26         -41.46         -13.00         PASS           2509.50         H         -64.72         23.26         -41.46         -13.00         PASS           3346.00         H         -78.18         23.38         -54.80         -13.00         PASS           Band         Test mode:         Band 5(16QAM, 10MHz)         Temperature:         25°C         Relative Humidity:         56%           Note:         Spurious         Emission         Correction (dBm)         Spurious         Limit (dBm)         (dBm)         Limit (dBm)         (dBm)         Limit (dBm)         -13.00         PASS <td< td=""><td>Testurades</td><td colspan="2" rowspan="2">Band 5(16QAM, 10MHz)</td><td>10MHz)</td><td>Temp</td><td>erature:</td><td>25°C</td></td<>	Testurades	Band 5(16QAM, 10MHz)		10MHz)	Temp	erature:	25°C	
Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit lir           Frequency (MHz)         Polarization Polarization         Level (dBm)         Correction Factor (dB)         Spurious emissions (dB)         Limit (dBm)         Result           1673.00         Vertical         -59.24         23.17         -36.07	lest mode:			,	Relative	Humidity:	56%	
$ \begin{array}{ c c c c } \hline Frequency (MHz) & Polarization & Level (dBm) & Correction (dBm) & Gorrection (dBm) & (dBm) & Limit (dBm) & ($	Note: Spuriou	us emissions wi	ithin 30-10	00MHz were			ow limit line.	
Frequency (MHz)         Polarization         Level (dBm)         Correction Factor (dB)         Spurious emissions (dBm)         Limit (dBm)         Result           1673.00         Vertical         -59.24         23.17         -36.07           2509.50         V         -69.92         23.26         -46.66           3346.00         V         -77.44         23.38         -54.06           1673.00         Horizontal         -56.01         23.17         -32.84           2509.50         H         -64.72         23.26         -41.46           3346.00         H         -78.18         23.38         -54.80           Band         -78.18         23.38         -54.80         Highes           Test mode:         Band 5(16QAM, 10MHz)         Temp=rature:         25°C           Relative Humidity:         56%           Note: Spurious emissions within 30-1000MHz were found more than 20dB bew limit limit           Frequency (MHz)         Polarization         Level (dBm)         Correction Factor (dB)         Spurious (dBm)         Limit (dBm)         Result           1688.00         Vertical         -61.42         23.19         -38.23         -13.00         PASS           2532.00         V         -69.65	•							
	Frequency				Spurious	Limit	Result	
$\begin{tabular}{ c c c c c c c } \hline (dBm) & (dB) & (dBm) & (d$	• •	Polarization		Factor		(dBm)		
2509.50         V         -69.92         23.26         -46.66           3346.00         V         -77.44         23.38         -54.06           1673.00         Horizontal         -56.01         23.17         -32.84           2509.50         H         -64.72         23.26         -41.46           3346.00         H         -78.18         23.38         -54.80           Band         Band 5(16QAM, 10MHz)         Test channel:         Highes           Test mode:         Band 5(16QAM, 10MHz)         Temperature:         25°C           Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit ling         56%           Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit ling         Level (dBm)         Correction (dBm)         Spurious         Limit (dBm)         Result           1688.00         Vertical         -61.42         23.19         -38.23         -38.23         -13.00         PASS           2532.00         V         -69.65         23.28         -46.37         -13.00         PASS           1688.00         Vertical         -56.99         23.19         -33.80         -13.00         PASS           2532.00         H         -67.22         23.28         <	~ /		(dBm)	(dB)	(dBm)	~ /		
3346.00         V         -77.44         23.38         -54.06         -13.00         PASS           1673.00         Horizontal         -56.01         23.17         -32.84         -13.00         PASS           2509.50         H         -64.72         23.26         -41.46         -13.00         PASS           3346.00         H         -78.18         23.38         -54.80         -13.00         PASS           Band         Band 5(16QAM, 10MHz)         Test channel:         Highes         Test channel:         Highes           Test mode:         Band 5(16QAM, 10MHz)         Temperature:         25°C         Relative Humidity:         56%           Note:         Spurious         emissions         Correction         Spurious         Limit         (dBm)           Frequency (MHz)         Polarization         Level (dBm)         Correction         Spurious         Limit         Result           1688.00         Vertical         -61.42         23.19         -38.23         -46.37         -13.00         PASS           2532.00         V         -69.65         23.28         -46.37         -13.00         -13.00         PASS           2532.00         H         -67.22         23.28 <t< td=""><td>1673.00</td><td>Vertical</td><td>-59.24</td><td>23.17</td><td>· · · /</td><td></td><td rowspan="6">PASS</td></t<>	1673.00	Vertical	-59.24	23.17	· · · /		PASS	
Image: Section of the sectio	2509.50	V	-69.92	23.26	-46.66	( ć		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	3346.00	V	-77.44	23.38	-54.06	40.00		
3346.00         H         -78.18         23.38         -54.80           Band         Band 5(16QAM, 10MHz)         Test channel:         Highes           Test mode:         Band 5(16QAM, 10MHz)         Temperature:         25°C           Relative Humidity:         56%           Note:         Spurious emissions within 30-1000MHz were found more than 20dB below limit line           Frequency (MHz)         Polarization         Level (dBm)         Correction (dBm)         Spurious emissions         Limit (dBm)         Result           1688.00         Vertical         -61.42         23.19         -38.23         -46.37         -13.00         PASS           3376.00         V         -79.01         23.40         -55.61         -13.00         PASS           2532.00         H         -67.22         23.28         -43.94         -13.04         PASS	1673.00	Horizontal	-56.01	23.17	-32.84	-13.00		
3346.00         H         -78.18         23.38         -54.80           Band         Band 5(16QAM, 10MHz)         Test channel:         Highes           Test mode:         Band 5(16QAM, 10MHz)         Temperature:         25°C           Relative Humidity:         56%           Note:         Spurious emissions within 30-1000MHz were found more than 20dB below limit lime           Frequency (MHz)         Polarization         Level (dBm)         Correction (dBm)         Spurious emissions         Limit (dBm)         Result           1688.00         Vertical         -61.42         23.19         -38.23         -46.37         -13.00         PASS           3376.00         V         -79.01         23.40         -55.61         -13.00         PASS           2532.00         H         -67.22         23.28         -43.94         -13.04         PASS	2509.50	H	-64.72	23.26	-41.46			
Test mode:Band 5(16QAM, 10MHz)Temperature:25°CRelative Humidity:56%Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit lineSpurious EmissionFrequency (MHz)PolarizationLevel (dBm)Correction FactorSpurious emissionsLimit (dBm)Result1688.00Vertical-61.4223.19-38.23-46.373376.00V-69.6523.28-46.373376.00V-79.0123.40-55.61-13.00PASS1688.00Horizontal-56.9923.19-33.80-13.00PASS	3346.00	H.C.	-78.18	23.38				
Test mode:Band 5(16QAM, 10MHz)Temperature:25°CRelative Humidity:56%Note: Spurious emissions within $30-1000$ MHz were found more than 20dB below limit lineSpurious EmissionFrequency (MHz)Level (dBm)Correction Factor (dB)Limit (dBm)Result1688.00Vertical-61.4223.19-38.23-46.37-13.00PASS2532.00V-79.0123.40-55.61-13.00PASS1688.00Horizontal-56.9923.19-33.80-13.00PASS	Band				Test c	hannel:	Highest	
Relative Humidity:56%Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit lineFrequency (MHz)Correction PolarizationSpurious Level (dBm)Correction Factor (dB)Spurious emissions (dBm)Limit (dBm)Result1688.00Vertical-61.4223.19-38.23-38.23-46.37-13.00PASS2532.00V-79.0123.40-55.61-13.00PASS1688.00Horizontal-56.9923.19-33.80-13.00PASS	Tantan Is	Band 5	(16QAM, <sup>-</sup>	10MHz)	Temp	erature:	25°C	
Note: Spurious emissions within 30-1000MHz were found more than 20dB below limit line           Spurious Emission           Frequency (MHz)         Correction Polarization         Correction (dBm)         Spurious emissions (dB)         Limit (dBm)         Limit (dBm)         Result           1688.00         Vertical         -61.42         23.19         -38.23         -38.23         -46.37         -13.00         PASS           3376.00         V         -79.01         23.40         -55.61         -13.00         PASS           1688.00         Horizontal         -56.99         23.19         -33.80         -13.00         PASS	lest mode:						56%	
Frequency (MHz)         Polarization         Level (dBm)         Correction Factor (dB)         Spurious emissions (dBm)         Limit (dBm)         Result           1688.00         Vertical         -61.42         23.19         -38.23	Note: Spuriou	us emissions wi	ithin 30-10	00MHz were	found more t	han 20dB bel	ow limit line.	
(MHz)         Polarization         Level (dBm)         Factor (dB)         emissions (dBm)         (dBm)         (dBm)         Result           1688.00         Vertical         -61.42         23.19         -38.23         -38.23         -33.23         -33.23         -33.23         -46.37         -13.00         PASS           1688.00         V         -79.01         23.40         -55.61         -13.00         PASS           1688.00         Horizontal         -56.99         23.19         -33.80         -13.00         PASS								
(MHz)         Polarization         Level (dBm)         Factor (dB)         emissions (dBm)         (dBm)         (dBm)         Result           1688.00         Vertical         -61.42         23.19         -38.23         -38.23         -33.23         -33.23         -33.23         -46.37         -13.00         PASS           1688.00         V         -79.01         23.40         -55.61         -13.00         PASS           1688.00         Horizontal         -56.99         23.19         -33.80         -13.00         PASS	Frequency			Correction	Spurious	Limit	Desult	
(dBm)         (dB)         (dBm)           1688.00         Vertical         -61.42         23.19         -38.23           2532.00         V         -69.65         23.28         -46.37           3376.00         V         -79.01         23.40         -55.61           1688.00         Horizontal         -56.99         23.19         -33.80           2532.00         H         -67.22         23.28         -43.94	(MHz)	Polarization		Factor		(dBm)	Result	
1688.00         Vertical         -61.42         23.19         -38.23           2532.00         V         -69.65         23.28         -46.37           3376.00         V         -79.01         23.40         -55.61           1688.00         Horizontal         -56.99         23.19         -33.80           2532.00         H         -67.22         23.28         -43.94	~ /		(aBM)	(dB)	(dBm)	× ,		
2532.00         V         -69.65         23.28         -46.37           3376.00         V         -79.01         23.40         -55.61           1688.00         Horizontal         -56.99         23.19         -33.80           2532.00         H         -67.22         23.28         -43.94	1688.00	Vertical	-61.42	· · ·				
3376.00         V         -79.01         23.40         -55.61         -13.00         PASS           1688.00         Horizontal         -56.99         23.19         -33.80         -13.00         PASS           2532.00         H         -67.22         23.28         -43.94         -13.00         PASS								
1688.00         Horizontal         -56.99         23.19         -33.80         -13.00         PASS           2532.00         H         -67.22         23.28         -43.94         -13.00         PASS						-13.00	5400	
2532.00 H -67.22 23.28 -43.94		Horizontal					PASS	
			-					

TCT 通测检测 TESTING CENTRE TECHNOLOGY

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			Test c	hannel:	Lowest
Band 4	1(QPSK, 2	20MHz)	Temp	25°C	
				56%	
us emissions wi	ithin 30-10	00MHz were			
	•	Correction	Spurious	Limit	Desult
Polarization		Factor	emissions	(dBm)	Result
	(aBm)	(dB)	(dBm)	× ,	
Vertical	-60.61	22.16	-38.45		
V	-65.98	22.99	-42.99		
V	-80.71	23.04	-57.67	05.00	
Horizontal	-60.72	22.16	-38.56	-25.00	PASS
Ĥ	-62.50	22.99	-39.51		
Н	-78.46	23.04	-55.42		
			Test c	hannel:	Middle
Band 41(QPSK, 20MHz		20MHz)	Temp	erature:	25°C
	•	•	Relative	Humidity:	56%
us emissions wi	ithin 30-10	00MHz were			low limit line.
		Correction	Spurious	Limit	Deeult
Polarization		Factor	emissions	(dBm)	Result
	(dBm)	(dB)	(dBm)	× ,	
Vertical	-60.03	22.76	-37.27		PASS
V	-70.25	23.07	-47.18	(.ć	
V	-79.58	23.11	-56.47	05.00	
Horizontal	-56.24	22.76	-33.48	-25.00	
H	-63.42	23.07	-40.35		
H.C.	-78.76	23.11	-55.65	.c	
			Test c	hannel:	Highest
Band 4	1(QPSK, 2	20MHz)	Temp	Temperature:	
		Relative	Humidity:	56%	
us emissions wi	ithin 30-10	00MHz were	found more t	han 20dB be	low limit line.
	Spurious	Emission			
		Correction	Spurious	Limit	Decult
Polarization		Factor	emissions	(dBm)	Result
	(abm)	(dB)	(dBm)	· ·	
Vertical	-62.48	22.42	-40.06		
V	-71.88	22.33	-49.55		
V	-82.59	23.00	-59.59	-25.00	PASS
V I					PA22
Horizontal	-57.25	22.42	-34.83	20.00	17,00
		22.42 22.33	-34.83 -43.18	23.00	
	IS emissions with Polarization Vertical V V Horizontal H H H Band 4 IS emissions with Polarization Vertical V V Horizontal H H H H H H H H H H H H H H H H H H H	Is emissions within 30-10 Spurious Polarization Level (dBm) Vertical -60.61 V -65.98 V -80.71 Horizontal -60.72 H -62.50 H -78.46 Band 41(QPSK, 2 Spurious Polarization Level (dBm) Vertical -60.03 V -70.25 V -79.58 Horizontal -56.24 H -63.42 H -78.76 Band 41(QPSK, 2 Us emissions within 30-10 Spurious N -78.76 Band 41(QPSK, 2 Us emissions within 30-10 Spurious Polarization Level (dBm)	Spurious         Emission           Polarization         Level (dBm)         Correction Factor (dB)           Vertical         -60.61         22.16           V         -65.98         22.99           V         -80.71         23.04           Horizontal         -60.72         22.16           H         -62.50         22.99           H         -78.46         23.04           Band 41(QPSK, 20MHz)           us emissions within 30-1000MHz were           Spurious Emission           Polarization         Level (dBm)         Correction Factor (dB)           Vertical         -60.03         22.76           V         -70.25         23.07           V         -79.58         23.11           Horizontal         -56.24         22.76           V         -79.58         23.11           Horizontal         -56.24         23.07           V         -78.76         23.11           Horizontal         -56.24         22.76           H         -63.42         23.07           V         -78.76         23.11           Band 41(QPSK, 20MHz)         Us emission           u	Band 41(QPSK, 20MHz)         Temp Relative           us emissions within 30-1000MHz were found more to Spurious Emission         Spurious emissions (dBm)           Polarization         Level (dBm)         Correction Factor (dB)         Spurious emissions (dBm)           Vertical         -60.61         22.16         -38.45           V         -65.98         22.99         -42.99           V         -80.71         23.04         -57.67           Horizontal         -60.72         22.16         -38.56           H         -62.50         22.99         -39.51           H         -78.46         23.04         -55.42           Band 41(QPSK, 20MHz)         Temp Relative         Temp Relative           us emissions within 30-1000MHz were found more to Spurious Emission         Spurious emissions (dBm)         Spurious emissions (dBm)           Vertical         -60.03         22.76         -37.27           V         -79.58         23.11         -56.47           Horizontal         -56.24         22.76         -33.48           H         -63.42         23.07         -40.35           H         -78.76         23.11         -56.65           Band 41(QPSK, 20MHz)         Test co Tempus         Tempus	Relative Humidity:           Relative Humidity:           as emissions within 30-1000MHz were found more than 20dB below           Spurious Emission         Limit           Polarization         Level (dBm)         Correction (dB)         Spurious emissions         Limit (dBm)           Vertical         -60.61         22.16         -38.45         Limit (dBm)           V         -65.98         22.99         -42.99         -25.00           V         -80.71         23.04         -57.67         -25.00           Horizontal         -60.72         22.16         -38.56         -25.00           H         -78.46         23.04         -55.42         -25.00           Band 41(QPSK, 20MHz)         Test channel: Temperature: Relative Humidity:         Test channel: Temperature: Relative Humidity:           Js emissions within 30-1000MHz were found more than 20dB be         -25.00           Spurious Emission (dB)         (dBm)         (dBm)           Vertical         -60.03         22.76         -37.27           V         -79.58         23.11         -56.47           H         -78.76         23.11         -55.65           Band 41(QPSK, 20MHz)         Test channel: Temperature: Relative Humidity:

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Band				Test c	hannel:	Lowest	
	Band 41(160 AM 20MHz) Temperature:				25°C		
Test mode:				Humidity:	<u> </u>		
Note: Spuriou	us emissions wi	ithin 30-10	00MHz were				
			Emission				
Frequency			Correction	Spurious	Limit		
(MHz)	Polarization	Level	Factor	emissions	(dBm)	Result	
· · · ·		(dBm)	(dB)	(dBm)	~ /		
5130.00	Vertical	-59.61	22.16	-37.45		)	
7695.00	V	-63.26	22.99	-40.27			
10260.00	V	-81.35	23.04	-58.31	05.00		
5130.00	Horizontal	-58.27	22.16	-36.11	-25.00	PASS	
7695.00	Ĥ	-64.33	22.99	-41.34			
10260.00	Н	-78.55	23.04	-55.51			
Band				Test c	hannel:	Middle	
Teetmeder	Band 41(16QAM, 20MHz)		20MHz)	Temp	erature:	25°C	
Test mode:				Relative	Humidity:	56%	
Note: Spuriou	us emissions wi	ithin 30-10	00MHz were	found more t	han 20dB bel	ow limit line.	
			Emission				
Frequency			Correction	Spurious	Limit	Result	
(MHz)	Polarization		Factor	emissions	(dBm)		
· · ·		(dBm)	(dB)	(dBm)			
5210.00	Vertical	-59.78	22.76	-37.02		PASS	
7815.00	V	-69.96	23.07	-46.89	(.ć		
10420.00	V	-78.51	23.11	-55.40	25.00		
5210.00	Horizontal	-58.44	22.76	-35.68	-25.00		
7815.00	H	-65.36	23.07	-42.29			
10420.00	H.C.	-78.83	23.11	-55.72	.c		
Band				Test c	hannel:	Highest	
Test mode:	Band 4 <sup>4</sup>	1(16QAM,	20MHz)	Temp	erature:	25°C	
lest mode.					Humidity:	56%	
Note: Spuriou	us emissions wi	ithin 30-10	00MHz were	found more t	han 20dB bel	ow limit line.	
	Spurious Emission						
Frequency		Level	Correction	Spurious	Limit	Result	
(MHz)	Polarization	(dBm)	Factor	emissions	(dBm)	Result	
		(ubiii)	(dB)	(dBm)			
5290.00	Vertical	-60.78	22.42	-38.36			
7935.00	V	-70.65	22.33	-48.32			
10580.00	V	-78.55	23.00	-55.55	-25.00	PASS	
5290.00	Horizontal	-57.33	22.42	-34.91	-25.00	FAJJ	
7935.00	Н	-66.52	22.33	-44.19			
	Н	-80.46	23.00	-57.46			

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# 5.6. Frequency Stability Measurement

#### 5.6.1. Test Specification

Test Requirement:	FCC part 27.54, FCC part 22.355				
Test Method:	FCC Part 2.1055				
Limit:	±2.5 ppm				
Test Setup:	System Simulator Thermal Chamber				
Test Procedure:	<ul> <li>Test Procedures for Temperature Variation <ol> <li>The testing follows FCC KDB 971168 D01v03 Section <ol> <li>a.</li> </ol> </li> <li>The EUT was set up in the thermal chamber and <ul> <li>connected with the system simulator.</li> </ul> </li> <li>With power OFF, the temperature was decreased to <ul> <li>-30°C and the EUT was stabilized before testing.</li> <li>Power was applied and the maximum change in frequency was recorded within one minute.</li> </ul> </li> <li>With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.</li> </ol></li></ul> Test Procedures for Voltage Variation <ol> <li>The testing follows FCC KDB 971168 D01v03 Section <ol> <li>a.</li> </ol> </li> <li>The EUT was placed in a temperature chamber at <ul> <li>25±5° C and connected with the system simulator.</li> </ul> </li> <li>The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.</li> <li>The worst case(worst bandwidth) for frequency stability reported in the Test Data. <ul> <li>The worst bandwidth is as follow: <ul> <li>44 M is for LTE Band 5, 5M is for LTE Band 41</li> </ul> </li> </ul></li></ol>				
Test Result:	PASS				





#### 5.6.2. Test Instruments

	Equipment	Manufacturer	Model	Serial Number	Calibration Due
	Wideband Radio Communication Tester	R&S	CMW500	114220	Jul. 07, 2022
	Programable tempratuce and humidity chamber	JQ	MHU-80L	N/A	Jul. 18, 2022
	DC power supply	Kingrang	KR3005K	N/A	Jul. 18, 2022
	RF cable (9kHz-40GHz)	тст	RE-04	N/A	Jul. 18, 2022
1	Antenna Connector	тст	RFC-03	N/A	Jul. 18, 2022















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