



# TEST REPORT

FCC ID::	ZLE-RG930I					
Test Report No::	TCT210824E069					
Date of issue::	Sep. 27, 2021					
Testing laboratory:	SHENZHEN TONGCE TESTING	G LAB				
Testing location/ address:	TCT Testing Industrial Park Fug Street, Bao'an District Shenzher Republic of China	iao 5th Industrial Zone, Fuhai n, Guangdong, 518103, People's				
Applicant's name::	Power Idea Technology (Shenzhen) Co., Ltd.					
Address::	4th Floor, A Section, Languang Xinxi RD, Hi-Tech Industrial Par ShenZhen, 518057 China					
Manufacturer's name:	Power Idea Technology (Shenzi	•				
Address::	4th Floor, A Section, Languang Science&technology, Xinxi RD, Hi-Tech Industrial Park North, Nanshan, ShenZhen, 518057 China					
Standard(s)::	FCC CFR Title 47 Part 15 Subp	art C Section 15.225				
Test item description:	LTE SMART TABLET					
Trade Mark::	RugGear					
Model/Type reference:	RG930i					
Rating(s)::	Refer to EUT description of pag	e 3				
Date of receipt of test item:	Aug. 24, 2021					
Date (s) of performance of test:	Aug. 24, 2021 ~ Sep. 27, 2021					
Tested by (+signature):	Brave Zeng	Branc. Zenf.				
Check by (+signature):	Beryl Zhao	Bery There				
Approved by (+signature):	Tomsin	Tomsin				

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1. General Product Information

Report No.: TCT210824E069

## 1.1.EUT description

	1201	
Test item description:	LTE SMART TABLET	
Model/Type reference:	RG930i	Ch
Sample Number:	TCT210824E004-0101	((0))
Operation Frequency:	13.56MHz	
Antenna Type:	Internal Antenna	(c
Antenna Gain:	0dBi	
Rating(s):	Adapter Information: MODEL: HKC0115021-2D INPUT: AC 100-240V, 50/60Hz, 0.5A OUTPUT: DC 5V, 2A Rechargeable Li-ion Battery DC 3.7V	

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.



Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



# 2. Test Result Summary

Requirement	CFR 47 Section IC Paragraph	Result
Antenna requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Spurious emissions	§15.225/ §15.209	PASS
Occupied Bandwidth	§15.215 (c)	PASS
Frequency stability	§15.225	PASS

#### Note:

- 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.



#### 3. General Information

#### 3.1. Test Environment and Mode

Operating Environment:					
Condition	Conducted Emission	Radiated Emission			
Temperature:	24.8 °C	24.6 °C			
Humidity:	50 % RH	47 % RH			

T 1		 
IACT	11/	ω.
Test	IV	┖.

Operation mode:	Keep the EUT in continuous transmitting
	with modulation

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) 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(Z axis) are shown in Test Results of the following pages.

#### 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	1		

#### 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.

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**Facilities and Accreditations** 

#### 4.1. Facilities

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

• FCC - Registration No.: 645098

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 Fugiao 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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#### 5. Test Results and Measurement Data

#### 5.1. Antenna Requirement

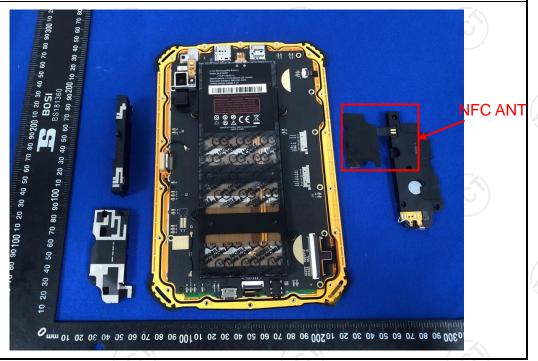
Standard requirement: FCC Part15 C Section 15.203

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

#### **E.U.T Antenna:**

The NFC antenna is internal antenna which permanently attached, and the best case gain of the antenna is 0dBi.



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#### 5.2. Conducted Emission

## 5.2.1. Test Specification

	1				
Test Requirement:	FCC Part15 C Section 15.207				
Test Method:	ANSI C63.10:2013				
Frequency Range:	150 kHz to 30 MHz				
Receiver setup:	RBW=9 kHz, VBW=30	kHz, Sweep time	=auto		
Limits:	Frequency range (MHz) 0.15-0.5 0.5-5 5-30	ABuV) Average 56 to 46* 46 50			
Test Setup:	Reference Plane  LISN 40cm 80cm Filter AC power  Equipment Test table/Insulation plane  Remark: E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Network				
Test Mode:	Refer to section 3.1 for details				
Test Procedure:	<ol> <li>The E.U.T is connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.</li> </ol>				
Test Result:	PASS				



5.2.2. Test Instruments

Hotline: 400-6611-140

Tel: 86-755-27673339

Report No.: TCT210824E069

Conducted Emission Shielding Room Test Site (843)						
Equipment	Manufacturer	Model	Serial Number	Calibration Due		
EMI Test Receiver	R&S	ESCI3	100898	Jul. 07, 2022		
Line Impedance Stabilisation Newtork(LISN)	Schwarzbeck	NSLK 8126	8126453	Mar. 11, 2022		
Line-5 TCT CE-0		CE-05	N/A	Jul. 07, 2022		
EMI Test Software	Shurple Technology	EZ-EMC N/A		N/A		

Fax: 86-755-27673332

http://www.tct-lab.com

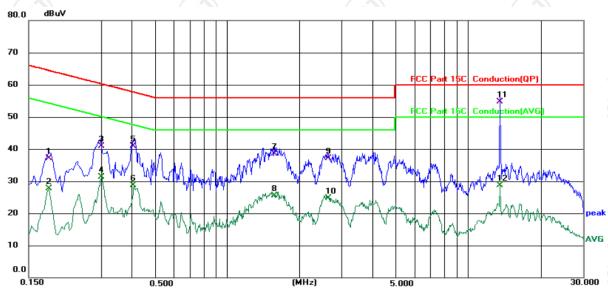


5.2.3. Test data

#### Report No.: TCT210824E069

#### Please refer to following diagram for individual

#### Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)



Site 844 Shielding Room

Phase: L1

Temperature: 24.8 (°C)

Humidity: 50 %

Limit: FCC Part 15C Conduction(QP)

Power: AC 120 V/60 Hz

N	o. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBpW	dB	dBuV	dBuV	dB	Detector	Comment
	1	0.1819	27.54	9.54	37.08	64.40	-27.32	QP	
	2	0.1819	18.22	9.54	27.76	54.40	-26.64	AVG	
	3	0.2980	31.55	9.36	40.91	60.30	-19.39	QP	
	4	0.2980	21.94	9.36	31.30	50.30	-19.00	AVG	
	5	0.4060	31.65	9.25	40.90	57.73	-16.83	QP	
	3	0.4060	19.47	9.25	28.72	47.73	-19.01	AVG	
	7	1.5700	29.13	9.35	38.48	56.00	-17.52	QP	
	3	1.5700	16.12	9.35	25.47	46.00	-20.53	AVG	
	9	2.6180	27.76	9.41	37.17	56.00	-18.83	QP	
1	)	2.6180	15.30	9.41	24.71	46.00	-21.29	AVG	
1	1 *	13.5660	45.04	9.65	54.69	60.00	-5.31	QP	
1	2	13.5660	19.10	9.65	28.75	50.00	-21.25	AVG	

#### Note:

Freq. = Emission frequency in MHz

Reading level  $(dB\mu V)$  = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

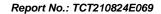
Measurement ( $dB\mu V$ ) = Reading level ( $dB\mu V$ ) + Corr. Factor (dB)

Limit (dBµV) = Limit stated in standard

 $Margin (dB) = Measurement (dB\mu V) - Limits (dB\mu V)$ 

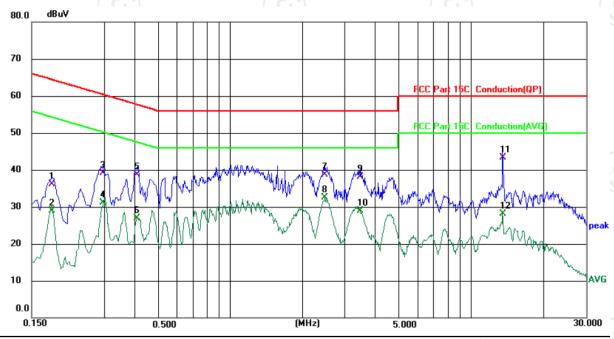
Q.P. =Quasi-Peak, AVG =average

<sup>\*</sup> is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz





#### Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)



Site 844 Shielding Room Phase: N Temperature: 24.8 (°C) Humidity: 50 %

Limit: FCC Part 15C Conduction(QP) Power: AC 120 V/60 Hz

No	. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBpW	dB	dBuV	dBuV	dB	Detector	Comment	
•		0.1819	26.66	9.54	36.20	64.40	-28.20	QP		
2	2	0.1819	19.40	9.54	28.94	54.40	-25.46	AVG		
	3	0.2940	29.80	9.36	39.16	60.41	-21.25	QP		
		0.2940	21.68	9.36	31.04	50.41	-19.37	AVG		
- {	;	0.4100	29.41	9.25	38.66	57.65	-18.99	QP		
(	)	0.4100	17.60	9.25	26.85	47.65	-20.80	AVG		
	,	2.4660	29.34	9.39	38.73	56.00	-17.27	QP		
8	*	2.4660	23.05	9.39	32.44	46.00	-13.56	AVG		
(	)	3.4780	28.60	9.43	38.03	56.00	-17.97	QP		
10	)	3.4780	19.48	9.43	28.91	46.00	-17.09	AVG		
1		13.5420	33.75	9.65	43.40	60.00	-16.60	QP		
12	2	13.5420	18.49	9.65	28.14	50.00	-21.86	AVG		

#### Note:

Freq. = Emission frequency in MHz

Reading level  $(dB\mu V)$  = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

Measurement  $(dB\mu V)$  = Reading level  $(dB\mu V)$  + Corr. Factor (dB)

 $Limit (dB\mu V) = Limit stated in standard$ 

 $Margin (dB) = Measurement (dB\mu V) - Limits (dB\mu V)$ 

Q.P. =Quasi-Peak

AVG =average

<sup>\*</sup> is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz



5.3. Radiated Emission Measurement

#### 5.3.1. Test Specification

Limit:

FCC Part15 C Section 15.225						
ANSI C63.10	D: 2013					
9 kHz to 100	00 MHz			(0)		
3 m						
Horizontal &	Vertical					
Frequency	Detector	RBW	VBW	Remark		
9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value		
150kHz- Quasi-peak 30MHz		9kHz	30kHz	Quasi-peak Value		
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value		
FCC Part15	C Section	15.225		(O)		
-	-	Limit (uV/m @30m)	Limit (dBuV/r @3m)	n Detector		
13.110-13	3.410	106	80.5	QP		
13.410-13	3.553	334	90.5	QP		
13.553-13.567 15848 124.0						
13.567-13	3.7110	224	90.5	QP		
13.710-14	4.010	106	80.5	QP		
	ANSI C63.10  9 kHz to 100  3 m  Horizontal &  Frequency 9kHz- 150kHz 150kHz- 30MHz 30MHz-1GHz  FCC Part15  Freque (MHz 13.110-1: 13.410-1: 13.553-1: 13.710-1	ANSI C63.10: 2013  9 kHz to 1000 MHz  3 m  Horizontal & Vertical  Frequency Detector 9kHz- 150kHz Quasi-peak 150kHz- Quasi-peak 30MHz 30MHz-1GHz Quasi-peak FCC Part15 C Section  Frequency (MHz)  13.110-13.410 13.410-13.553 13.553-13.567 13.567-13.7110 13.710-14.010	ANSI C63.10: 2013  9 kHz to 1000 MHz  3 m  Horizontal & Vertical  Frequency Detector RBW 9kHz- 150kHz Quasi-peak 200Hz 150kHz- Quasi-peak 9kHz 30MHz 30MHz-1GHz Quasi-peak 120kHz  FCC Part15 C Section 15.225  Frequency (MHz) (MHz)  13.110-13.410 106 13.410-13.553 13.410-13.553 13.567-13.7110 224 13.710-14.010 106	ANSI C63.10: 2013  9 kHz to 1000 MHz  3 m  Horizontal & Vertical  Frequency Detector RBW VBW 9kHz- 150kHz Quasi-peak 200Hz 1kHz 150kHz- Quasi-peak 9kHz 30kHz 30MHz 30MHz-1GHz Quasi-peak 120kHz 300kHz FCC Part15 C Section 15.225  Frequency (MHz) Limit (dBuV/r (a) (dBuV/r (a) (a) (a) (b) (a) (b) (a) (a) (a) (b) (a) (a) (a) (a) (a) (a) (a) (a) (a) (a		

Note:  $RF\ Voltage\ (dBuV) = 20\ log\ RF\ Voltage\ (uV)$ Limit (dBuV/m @3m) = 20log(Limit (uV/m @30m)) + 40

#### FCC Part15 C Section 15,209

OCT art 13 C Section 13.203									
Frequency Range (MHz)	Distance (m)	Field strength (dBµ V/m)	Detector						
0.009-0.490	3	20log 2400/F (kHz) + 80	QP						
0.490-1.705	3	20log 24000/F (kHz) + 40	QP						
1.705-30	3	20log 30 + 40	QP						
30-88	3	40.0	QP						
88-216	3	43.5	QP						
216-960	3	46.0	QP						
Above 960	3	54.0	QP						

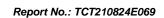
#### Note:

- 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.
- 5. If measurement is made at 3m distance, then F.S Limitation at 3m distance is adjusted by using the formula Ld1 = Ld2 \* (d2/d1)

Report No.: TCT210824E069



TESTING CENTRE TECHNOLOGY	Report No.: TCT210824E00
Test Procedure:	<ol> <li>The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber in below 1GHz. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li> </ol>
Test setup:	For radiated emissions below 30MHz  Distance = 3m  Computer  Pre-Amplifier  Receiver  30MHz to 1GHz  Antenna Tower  Search Antenna  RF T est Receiver  Ground Plane  Ground Plane
Test Mode:	Refer to section 3.1 for details
Test results:	PASS





# 5.3.2. Test Instruments

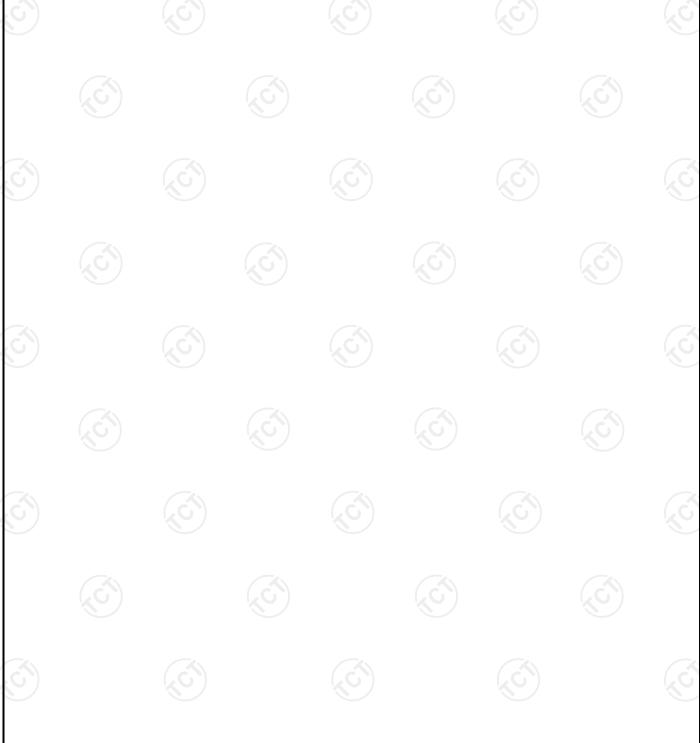
	Radiated En	nission Test Site	e (966)		
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due	
EMI Test Receiver	R&S	ESIB7	100197	Jul. 07, 2022	
Spectrum Analyzer	R&S	FSQ40	200061	Jul. 07, 2022	
Pre-amplifier	SKET	LNPA_0118G- 45	SK20210121 02	Mar. 11, 2022	
Pre-amplifier	SKET	LNPA_1840G- 50	SK20210920 3500	Apr. 08, 2022	
Pre-amplifier	HP	8447D	2727A05017	Jul. 07, 2022	
Loop antenna	ZHINAN	ZN30900A	12024	Sep. 05, 2022	
Broadband Antenna	Schwarzbeck	VULB9163	340	Sep. 04, 2022	
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Sep. 04, 2022	
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Apr. 10, 2023	
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	
EMI Test Software	Shurple Technology	EZ-EMC	N/A	N/A	



#### 5.3.3. Test Data

#### **Field Strength of Fundamental**

Frequency	Emission	Limits	Detector	Margin
(MHz)	(dBuV/m)	(dBuV/m)		(dB)
13.56	76.53	80.5	QP	-3.97



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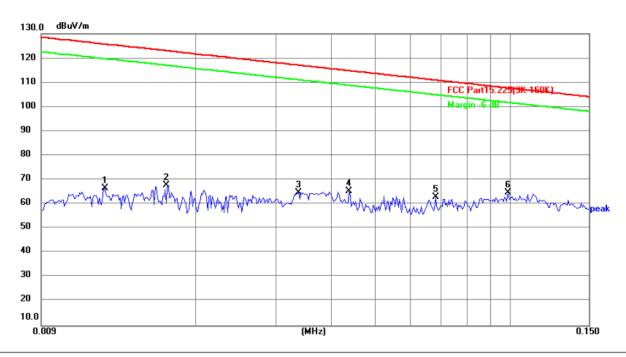
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#### **Spurious Emissions**

#### 9KHz-30MHz

#### 9KHz-150KHz:

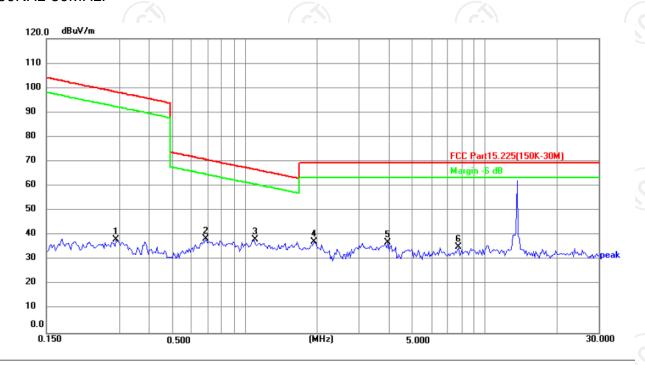


Site Polarization: Temperature: 25(°C) Limit: FCC Part15.225(9K-150K) Power: DC 3.7V Humidity: 55 %

	No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
, <u> </u>	1	0.0125	44.11	22.40	66.51	125.66	-59.15	peak
	2	0.0171	47.66	19.99	67.65	122.94	-55.29	peak
	3	0.0337	45.31	19.32	64.63	117.06	-52.43	peak
	4	0.0437	45.33	19.99	65.32	114.80	-49.48	peak
	5	0.0680	41.19	21.63	62.82	110.97	-48.15	peak
X	6 *	0.0989	40.90	23.74	64.64	107.71	-43.07	peak



#### 150KHz-30MHz:



Site Polarization: Temperature:  $25(^{\circ}\text{C})$  Limit: FCC Part15.225(150K-30M) Power: DC 3.7V Humidity: 55%

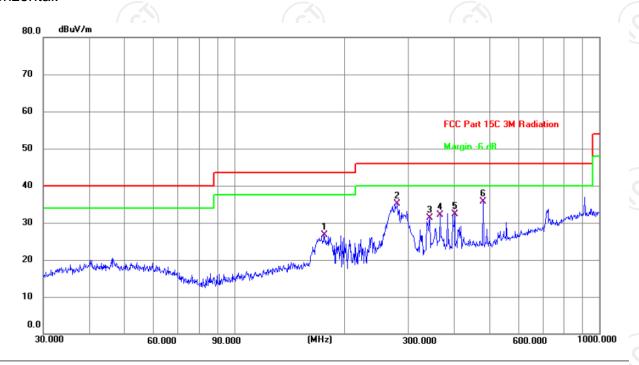
	No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	0.2923	12.16	26.22	38.38	98.30	-59.92	peak
X	2	0.6895	13.32	25.16	38.48	70.84	-32.36	peak
-	3 *	1.0988	13.08	25.02	38.10	66.81	-28.71	peak
Ī	4	1.9489	12.52	24.77	37.29	69.50	-32.21	peak
	5	3.9639	12.50	24.66	37.16	69.50	-32.34	peak
	6	7.8102	9.53	25.57	35.10	69.50	-34.40	peak

Note: 1) Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier





#### Horizontal:



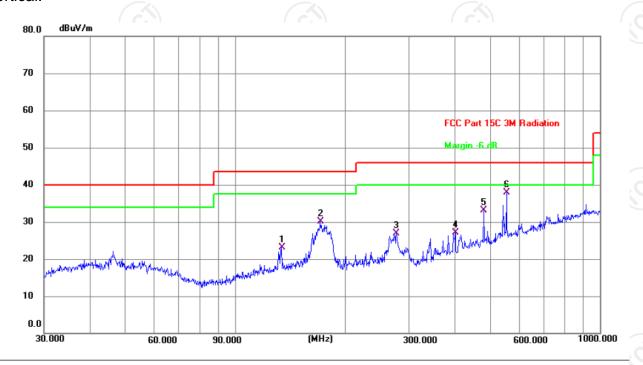
Site Polarization: Horizontal Temperature: 24.6(C)
Limit: FCC Part 15C 3M Radiation Power: DC 3.7 V Humidity: 47 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	176.2686	14.94	11.70	26.64	43.50	-16.86	QP	Р	
2	280.0237	20.96	14.19	35.15	46.00	-10.85	QP	Р	
3	343.1800	16.15	15.25	31.40	46.00	-14.60	QP	Р	
\$ 4	366.8231	16.05	16.09	32.14	46.00	-13.86	QP	Р	
5	401.8385	15.02	17.29	32.31	46.00	-13.69	QP	Р	
6 *	480.5276	16.68	18.98	35.66	46.00	-10.34	QP	Р	





#### Vertical:



Site Polarization: Vertical Temperature: 24.6(C)

Limit: FCC Part 15C 3M Radiation Power: DC 3.7 V Humidity: 47 %

	No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
	1	134.0882	10.26	12.87	23.13	43.50	-20.37	QP	Р	
	2	171.3926	17.89	12.22	30.11	43.50	-13.39	QP	Р	
Г	3	277.0935	12.86	13.95	26.81	46.00	-19.19	QP	Р	
	4	401.8385	9.90	17.29	27.19	46.00	-18.81	QP	Р	
	5	480.5276	14.21	18.98	33.19	46.00	-12.81	QP	Р	
	6 *	554.8254	17.47	20.41	37.88	46.00	-8.12	QP	Р	

Note: 1) Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier





# 5.4. Occupied Bandwidth

# 5.4.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.215(c)
Test Method:	ANSI C63.10: 2013
Limit:	N/A
Test Procedure:	<ol> <li>According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Use the following spectrum analyzer settings for 20dB Bandwidth measurement.         Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel; RBW ≥ 1% of the 20 dB bandwidth; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold.     </li> <li>Measure and record the results in the test report.</li> </ol>
Test setup:	Spectrum Analyzer EUT
Test Mode:	Refer to section 3.1 for details
Test results:	PASS

#### 5.4.2. Test Instruments

RF Test Room								
Equipment Manufacturer Model Serial Number Calibration D								
Spectrum Analyzer	R&S	FSU	200054	Jul. 18, 2022				

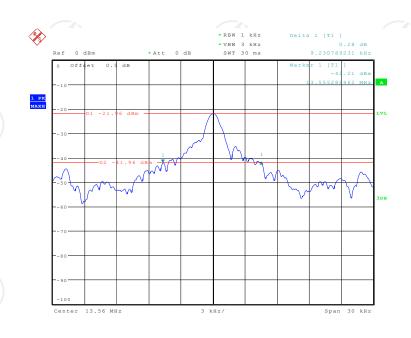


5.4.3. Test data

Report No.: TCT210824E069

Frequency(MHz)	20dB Occupy Bandwidth (kHz)	Limit (kHz)	Conclusion
13.56	9.23		PASS

Test plots as follows:



Date: 14.SEP.2021 16:28:58





# 5.5. Frequency stability

# 5.5.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.225			
Test Method:	ANSI C63.10 : 2013			
Operation mode:	Refer to item 4.1			
Limit:	+/-0.01%			
Test Setup:	Spectrum Analyzer EUT  Thermal Chamber			
Test Procedure:	<ol> <li>The equipment under test was connected to an external DC power supply and input rated voltage.</li> <li>RF output was connected to a spectrum analyzer.</li> <li>The EUT was placed inside the temperature chamber.</li> <li>Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency.</li> <li>Turn EUT off and set the chamber temperature to -20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> <li>Repeat step measure with 10°C increased per stage until the highest temperature of +55°C reached.</li> <li>Repeat step measure with a variation in the primary supply voltage from 85% to 115% of the rated supply</li> </ol>			
Test Result:	voltage at a temperature of 20 degrees C PASS			

# 5.5.2. Test Instruments

	RF Test Room					
Equipment	Manufacturer	Model	Serial Number	Calibration Due		
Spectrum Analyzer	R&S	FSU	200054	Jul. 18, 2022		
DC power supply	Kingrang	KR3005K	N/A	Jul. 18, 2022		



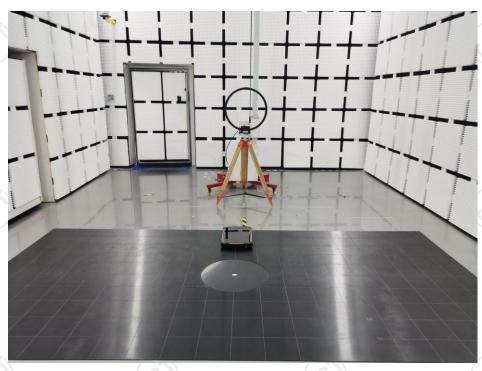
#### 5.5.3. Test Data

Voltage (Vdc)	Temperature (°C)	Frequency (MHz)	Deviation (%)	Limit (%)
3.7	-20	13.560264	0.00195	
3.7	-10	13.560217	0.00160	
3.7	0	13.560139	0.00103	
3.7	10	13.560260	0.00192	
3.7	20	13.560154	0.00114	
3.7	30	13.560288	0.00212	+/-0.01%
3.7	40	13.560203	0.00150	\
3.7	50	13.560208	0.00153	)
3.7	55	13.560208	0.00153	
4.2	20	13.560167	0.00123	
3.2	20	13.560154	0.00114	



# Appendix A: Photographs of Test Setup Product: LTE SMART TABLET

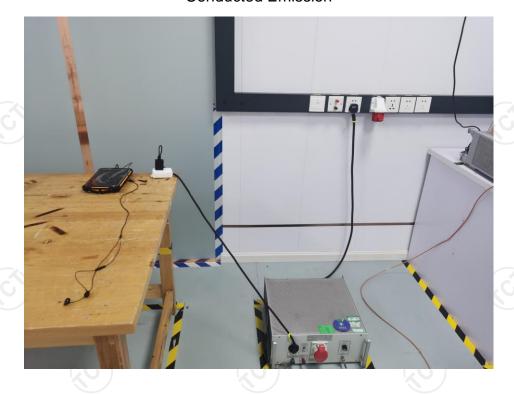
Product: LTE SMART TABLET
Model: RG930i
Radiated Emission







#### **Conducted Emission**













# Appendix B: Photographs of EUT

Refer to the test report No. TCT210824E004



