

FCC RF Test Report

(NFC)

Applicant: TECNO MOBILE LIMITED

Address of Applicant: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE
19-25 SHAN MEI STREET FOTAN NT HONGKONG

Equipment Under Test (EUT)

Product Name: Mobile Phone

Model No.: KJ6

Trade Mark: TECNO

FCC ID: 2ADYY-KJ6

Applicable Standards: FCC CFR Title 47 Part 15C (§15.225)

Date of Sample Receipt: 14 Sep., 2023

Date of Test: 15 Sep., to 19 Oct., 2023

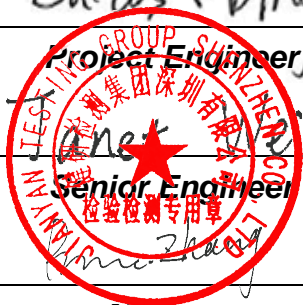
Date of Report Issue: 20 Oct., 2023

Test Result: PASS

Project by: Lucas Ding **Date:** 20 Oct., 2023
Project Engineer

Reviewed by: ane **Date:** 20 Oct., 2023
Senior Engineer

Approved by: Zhang **Date:** 20 Oct., 2023
Manager



This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

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1 Version

Version No.	Date	Description
00	20 Oct., 2023	Original

2 Contents

Page

Cover Page	1
1 Version	2
2 Contents	3
3 General Information	4
3.1 Client Information	4
3.2 General Description of E.U.T.	4
3.3 Test Mode and Environment	5
3.4 Description of Test Auxiliary Equipment	5
3.5 Measurement Uncertainty	5
3.6 Additions to, Deviations, or Exclusions From the Method.....	5
3.7 Laboratory Facility	5
3.8 Laboratory Location.....	6
3.9 Test Instruments List	6
4 Measurement Setup and Procedure	7
4.1 Test Setup	7
4.2 Test Procedure	9
5 Test Results	10
5.1 Summary	10
5.1.1 Clause and Data Summary.....	10
5.1.2 Test Limit.....	11
5.2 Antenna Requirement	12
5.3 AC Power Line Conducted Emission	13
5.4 20dB Bandwidth	17
5.5 Field Strength of Fundamental.....	18
5.6 Field Strength of Spurious Emissions	20
5.7 Frequency Tolerance	24

3 General Information

3.1 Client Information

Applicant:	TECNO MOBILE LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Manufacturer:	TECNO MOBILE LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Factory:	SHENZHEN TECNO TECHNOLOGY CO., LTD.
Address:	101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R.China

3.2 General Description of E.U.T.

Product Name:	Mobile Phone
Model No.:	KJ6
Operation Frequency:	13.56MHz
Channel Numbers:	1
Modulation Type:	ASK
Antenna Type:	Induction Coil Antenna
Power Supply:	Rechargeable Li-ion Polymer Battery DC3.87V,4900mAh
AC Adapter:	Adapter1: Model: U330TSA Input: AC100-240V, 50/60Hz, 1.5A Output: DC 5.0V, 3.0A 15W or 10.0V, 3.3A 33.0W MAX Adapter2: Model: U330TSB Input: AC100-240V, 50/60Hz, 1.5A Output: DC 5.0V, 3.0A 15W or 5V-10.0V, 3.3A or 11 V3.0A 33.0W MAX
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

3.3 Test Mode and Environment

Test Mode:	
Transmitting mode:	Keep the EUT in transmitting mode with modulation
<i>Remark: Pre-scan The EUT was placed on three different polar directions tested: i.e. X axis, Y axis, Z axis, and found Y axis was worse case, so the report only reflects the worse axis tested data.</i>	
Operating Environment:	
Temperature:	15°C ~ 35°C
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.87 Vdc, Extreme: Low 3.45 Vdc, High 4.45 Vdc
Test Engineer:	Robin Gu (Conducted measurement) Kiran Zeng (Radiated measurement)

3.4 Description of Test Auxiliary Equipment

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
N/A	N/A	N/A	N/A	N/A

3.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Conducted Emission for LISN (9kHz ~ 150kHz)	3.57 dB
Conducted Emission for LISN (150kHz ~ 30MHz)	3.14 dB
Radiated Emission (9kHz ~ 30MHz) (3m SAC)	3.3 dB
Radiated Emission (30MHz ~ 200MHz) (3m SAC)	4.6 dB
Radiated Emission (200MHz ~ 1000MHz) (3m SAC)	5.8 dB
Radiated Emission (1GHz ~ 6GHz) (3m SAC)	4.5 dB
Radiated Emission (6GHz ~ 18GHz) (3m SAC)	4.7 dB

Note: All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

3.6 Additions to, Deviations, or Exclusions From the Method

No

3.7 Laboratory Facility

<p>The test facility is recognized, certified, or accredited by the following organizations:</p> <ul style="list-style-type: none"> ● FCC - Designation No.: CN1211 JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551. ● ISED – CAB identifier.: CN0021 The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1. ● CNAS - Registration No.: CNAS L15527 JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527. ● A2LA - Registration No.: 4346.01 This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf
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3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.
 Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.
 Tel: +86-755-23118282, Fax: +86-755-23116366
 Email: info-JYTee@lets.com, Website: <http://jyt.lets.com>

3.9 Test Instruments List

Radiated Emission(3m SAC):					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	ETS	9m*6m*6m	WXJ001-1	04-14-2021	04-13-2024
Loop Antenna	Schwarzbeck	FMZB 1519 B	WXJ002-4	02-09-2023	02-08-2024
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ002	02-09-2023	02-08-2024
Pre-amplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9743B	WXJ001-2	01-10-2023	01-09-2024
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	01-11-2023	01-10-2024
Coaxial Cable (9kHz ~ 30MHz)	JYT	JYT3M-1G-BB-5M	WXG001-6	01-18-2023	01-17-2024
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-8M	WXG001-4	01-18-2023	01-17-2024
Test Software	Tonscend	TS+	Version: 3.0.0.1		
EMI Test Software	AUDIX	E3	Version: 6.110919b		

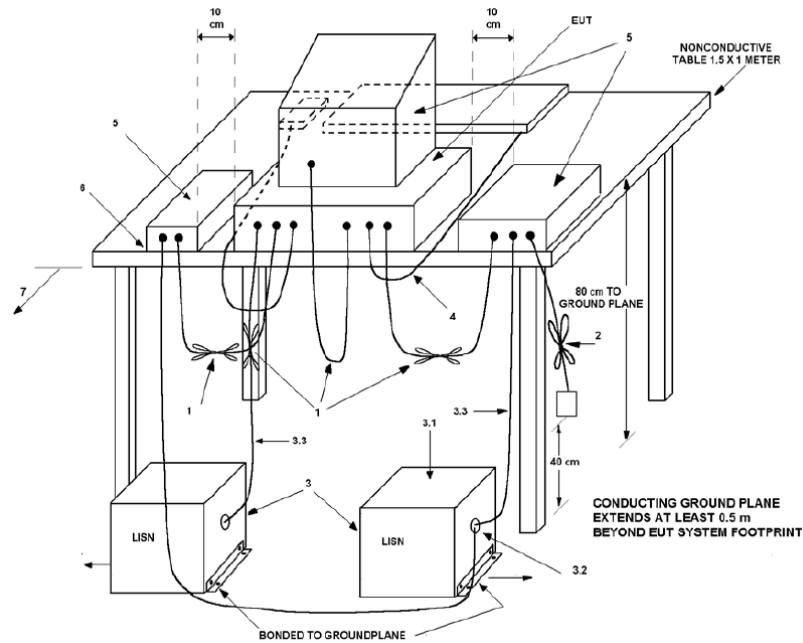
Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESR3	WXJ003-2	07-05-2023	07-04-2024
LISN	Schwarzbeck	NSLK 8127	QCJ001-13	01-10-2023	01-09-2024
LISN	Rohde & Schwarz	ESH3-Z5	WXJ005-1	01-11-2023	01-10-2024
LISN Coaxial Cable (9kHz ~ 30MHz)	JYTSZ	JYTCE-1G-NN-2M	WXG003-1	02-22-2023	02-21-2024
RF Switch	TOP PRECISION	RSU0301	WXG003	N/A	
Test Software	AUDIX	E3	Version: 6.110919b		

Conducted Method:					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Spectrum Analyzer	Keysight	N9020B	WXJ081-1	06-13-2023	06-12-2024

4 Measurement Setup and Procedure

4.1 Test Setup

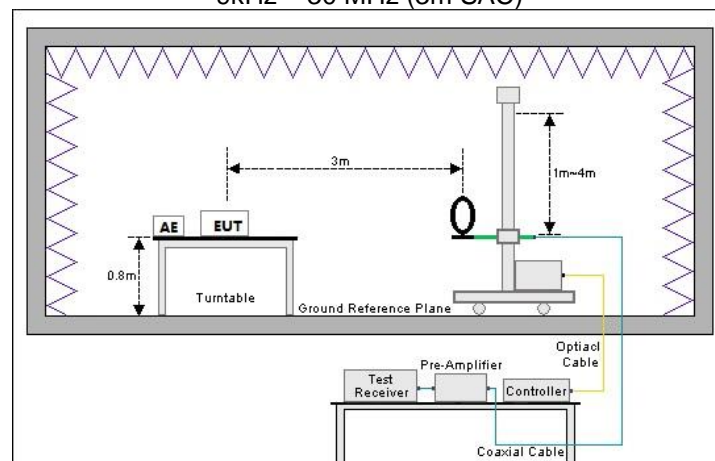
1) Conducted emission measurement:



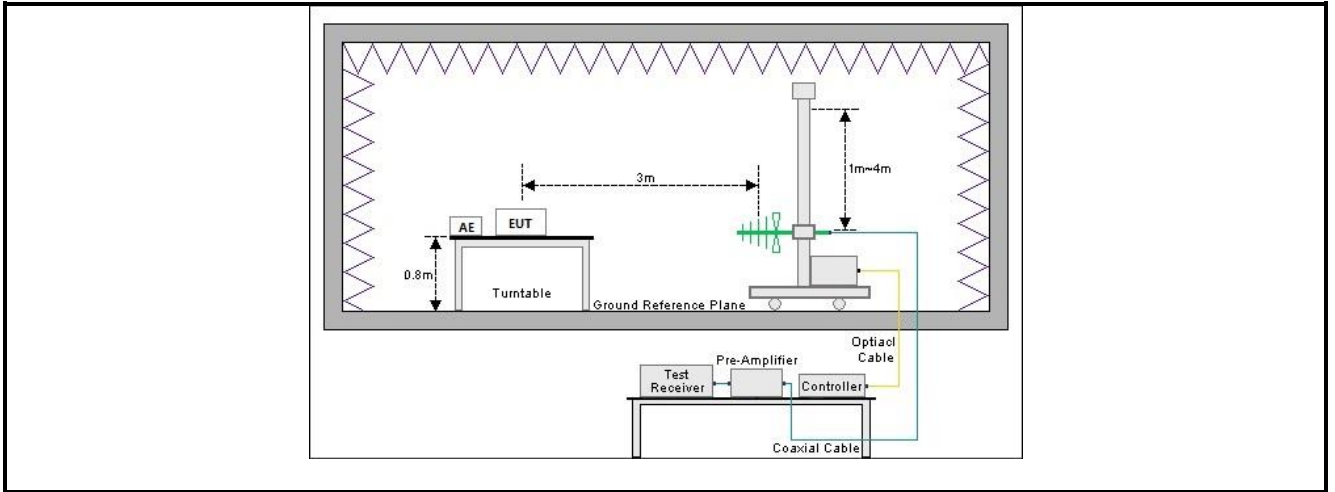
Note: The detailed descriptions please refer to Figure 8 of ANSI C63.4:2014.

2) Radiated emission measurement:

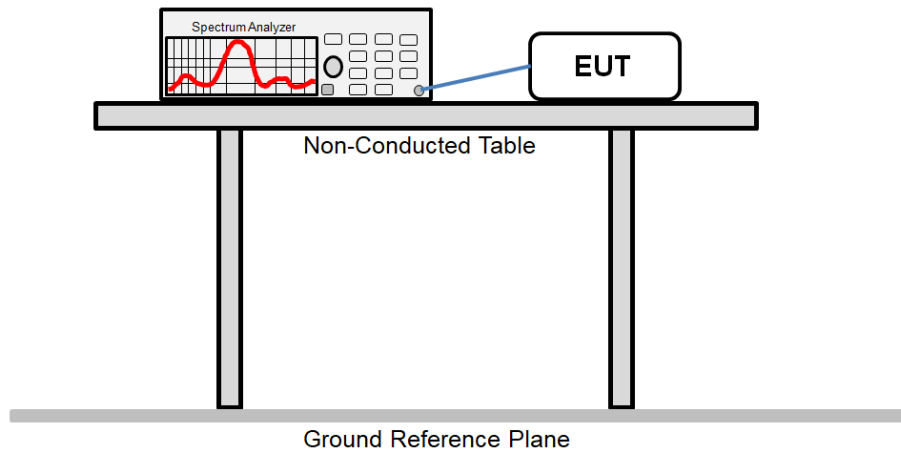
9kHz ~ 30 MHz (3m SAC)



30 MHz ~ 1GHz (3m SAC)



Conducted test method:



4.2 Test Procedure

Test method	Test step
Conducted emission	<ol style="list-style-type: none"> 1. The E.U.T and simulators are 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. 2. 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). 3. 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 on conducted measurement.
Radiated emission	<ol style="list-style-type: none"> 1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m. 2. EUT works in each mode of operation that needs to be tested, and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
Conducted test method	<ol style="list-style-type: none"> 1. The antenna port of EUT was connected to the RF port of the spectrum analyzer through an RF cable. 2. The EUT is keeping in continuous transmission mode and tested in all modulation modes. 3. The test data is saved by the screenshot function of the spectrum analyzer.

5 Test Results

5.1 Summary

5.1.1 Clause and Data Summary

Test items	Standard clause	Test data	Result
Antenna Requirement	15.203	See Section 5.2	Pass
AC Power Line Conducted Emission	15.207	See Section 5.3	Pass
20dB Bandwidth	15.215(c)	See Section 5.4	Pass
Field Strength of Fundamental	15.225 (a)(b)(c)	See Section 5.5	Pass
Field Strength of Spurious Emissions	15.209 15.225 (d)	See Section 5.6	Pass
Frequency Tolerance	15.225 (e)	See Section 5.7	Pass
Remark: 1. Pass: The EUT complies with the essential requirements in the standard. 2. N/A: Not Applicable.			
Test Method:	ANSI C63.4-2014 ANSI C63.10-2013		

5.1.2 Test Limit

Items	Limit																								
AC Power Line Conducted Emission	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: center;">Frequency (MHz)</th> <th colspan="2" style="text-align: center;">Limit (dBµV)</th> </tr> <tr> <th style="text-align: center;">Quasi-Peak</th> <th style="text-align: center;">Average</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0.15 – 0.5</td> <td style="text-align: center;">66 to 56 <small>Note 1</small></td> <td style="text-align: center;">56 to 46 <small>Note 1</small></td> </tr> <tr> <td style="text-align: center;">0.5 – 5</td> <td style="text-align: center;">56</td> <td style="text-align: center;">46</td> </tr> <tr> <td style="text-align: center;">5 – 30</td> <td style="text-align: center;">60</td> <td style="text-align: center;">50</td> </tr> </tbody> </table> <p>Note 1: The limit level in dBµV decreases linearly with the logarithm of frequency. Note 2: The more stringent limit applies at transition frequencies.</p>	Frequency (MHz)	Limit (dBµV)		Quasi-Peak	Average	0.15 – 0.5	66 to 56 <small>Note 1</small>	56 to 46 <small>Note 1</small>	0.5 – 5	56	46	5 – 30	60	50										
Frequency (MHz)	Limit (dBµV)																								
	Quasi-Peak	Average																							
0.15 – 0.5	66 to 56 <small>Note 1</small>	56 to 46 <small>Note 1</small>																							
0.5 – 5	56	46																							
5 – 30	60	50																							
20dB Bandwidth	N/A																								
Field Strength of Fundamental Field Strength of Spurious Emissions	<p>(a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.</p> <p>(b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.</p> <p>(c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.</p> <p>(d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Frequency (MHz)</th> <th style="text-align: center;">Field strength (microvolts/meter)</th> <th style="text-align: center;">Measurement distance (meters)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0.009 – 0.490</td> <td style="text-align: center;">2400/F(kHz)</td> <td style="text-align: center;">300</td> </tr> <tr> <td style="text-align: center;">0.490 – 1.705</td> <td style="text-align: center;">24000/F(kHz)</td> <td style="text-align: center;">30</td> </tr> <tr> <td style="text-align: center;">1.705 – 30.0</td> <td style="text-align: center;">30</td> <td style="text-align: center;">30</td> </tr> <tr> <td style="text-align: center;">30 – 88</td> <td style="text-align: center;">100**</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">88 – 216</td> <td style="text-align: center;">150**</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">216 – 960</td> <td style="text-align: center;">200**</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">Above 960</td> <td style="text-align: center;">500</td> <td style="text-align: center;">3</td> </tr> </tbody> </table> <p>** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.</p>	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)	0.009 – 0.490	2400/F(kHz)	300	0.490 – 1.705	24000/F(kHz)	30	1.705 – 30.0	30	30	30 – 88	100**	3	88 – 216	150**	3	216 – 960	200**	3	Above 960	500	3
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)																							
0.009 – 0.490	2400/F(kHz)	300																							
0.490 – 1.705	24000/F(kHz)	30																							
1.705 – 30.0	30	30																							
30 – 88	100**	3																							
88 – 216	150**	3																							
216 – 960	200**	3																							
Above 960	500	3																							
Frequency Tolerance	The frequency tolerance of the carrier signal shall be maintained within ±0.01% of the operating frequency over a temperature variation of –20 degrees to + 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.																								

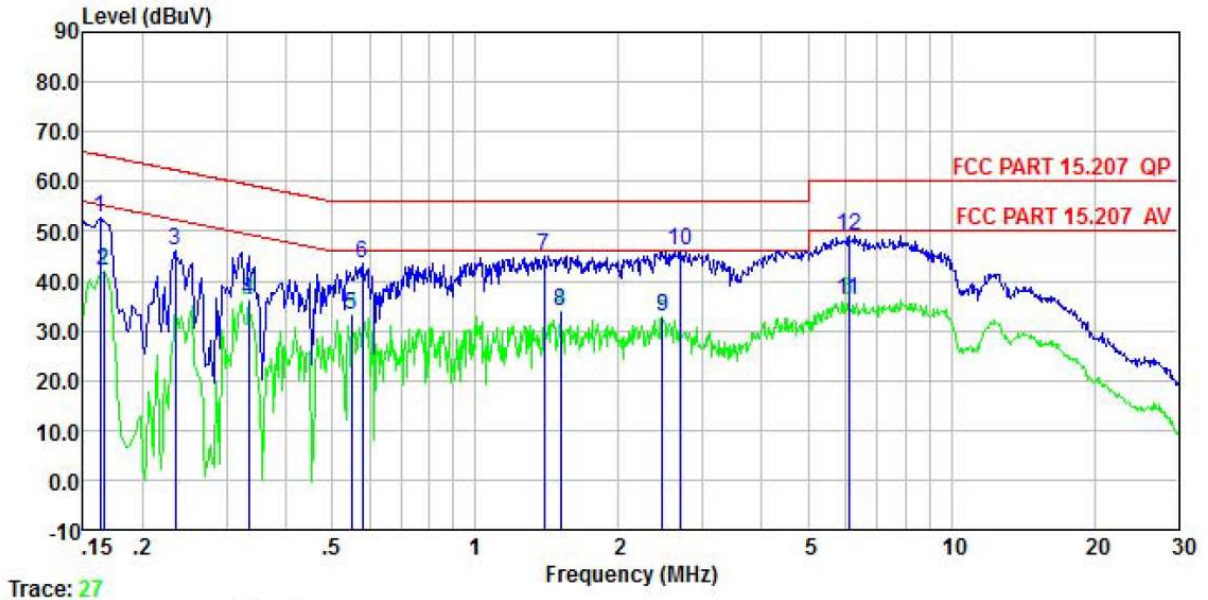
5.2 Antenna Requirement

Standard requirement:	FCC Part15 C Section 15.203
<p>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.</p>	
E.U.T Antenna:	The EUT make use of an induction coil antenna.

5.3 AC Power Line Conducted Emission

Adapter1:

Product name:	Mobile Phone	Product model:	KJ6
Test by:	Kiran	Test mode:	NFC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz		



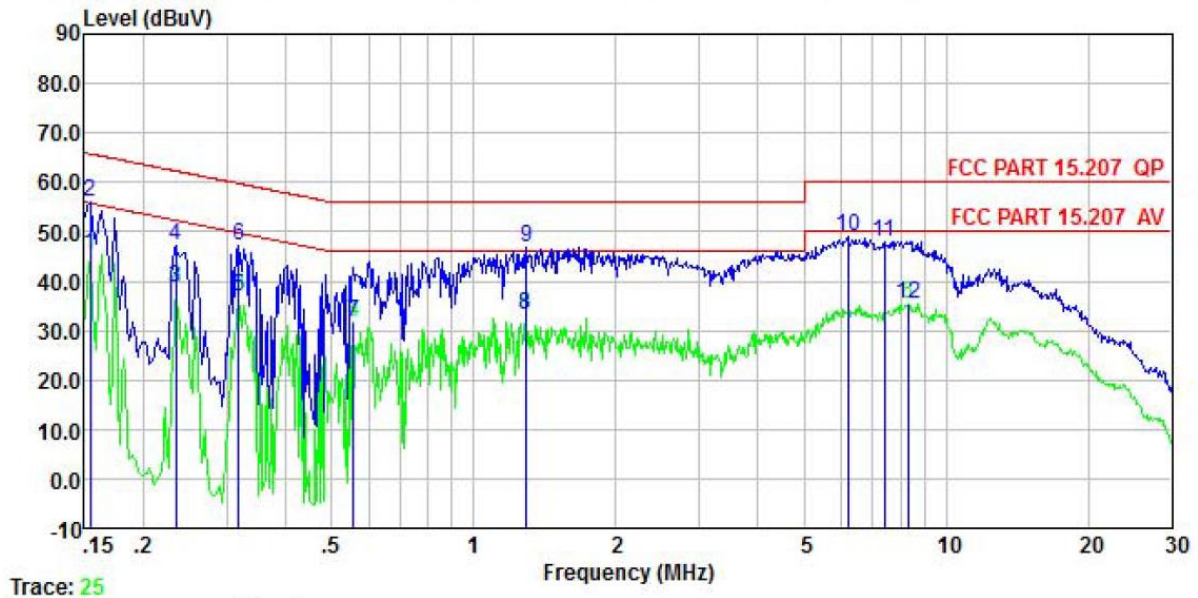
Trace: 27

	Freq	Read Level	LISN Factor	Aux2 Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.162	41.93	0.20	10.50	0.01	52.64	65.34	-12.70	QP
2	0.166	31.22	0.20	10.50	0.01	41.93	55.16	-13.23	Average
3	0.234	35.33	0.20	10.50	0.02	46.05	62.30	-16.25	QP
4	0.334	25.48	0.20	10.50	0.02	36.20	49.35	-13.15	Average
5	0.549	22.31	0.20	10.50	0.02	33.03	46.00	-12.97	Average
6	0.579	32.64	0.20	10.50	0.02	43.36	56.00	-12.64	QP
7	1.396	34.24	0.20	10.50	0.13	45.07	56.00	-10.93	QP
8	1.511	23.13	0.20	10.50	0.15	33.98	46.00	-12.02	Average
9	2.474	21.89	0.20	10.50	0.14	32.73	46.00	-13.27	Average
10	2.692	35.20	0.20	10.50	0.11	46.01	56.00	-9.99	QP
11	6.089	25.45	0.20	10.50	0.09	36.24	50.00	-13.76	Average
12	6.089	38.36	0.20	10.50	0.09	49.15	60.00	-10.85	QP

Remark:

1. Level = Read level + LISN Factor + Cable Loss.

Product name:	Mobile Phone	Product model:	KJ6
Test by:	Kiran	Test mode:	NFC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz		



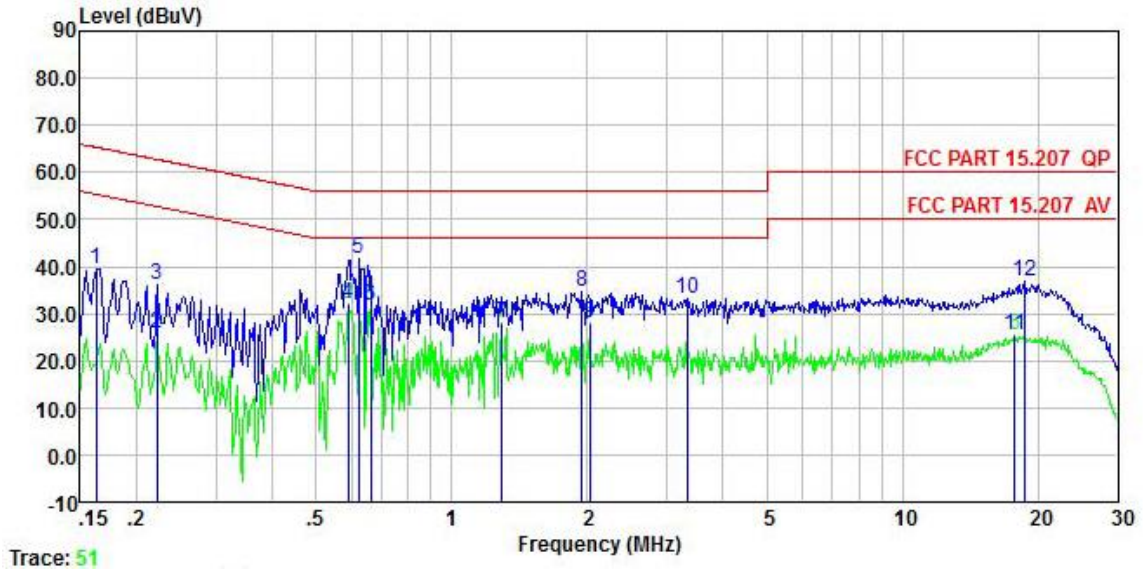
	Read Freq	Read Level	LISN Factor	Aux2 Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.154	34.76	0.20	10.50	0.01	45.47	55.78	-10.31	Average
2	0.154	45.38	0.20	10.50	0.01	56.09	65.78	-9.69	QP
3	0.234	27.89	0.20	10.50	0.02	38.61	52.30	-13.69	Average
4	0.234	36.65	0.20	10.50	0.02	47.37	62.30	-14.93	QP
5	0.318	25.97	0.20	10.50	0.03	36.70	49.75	-13.05	Average
6	0.318	36.47	0.20	10.50	0.03	47.20	59.75	-12.55	QP
7	0.555	20.91	0.20	10.50	0.02	31.63	46.00	-14.37	Average
8	1.289	22.27	0.24	10.50	0.11	33.12	46.00	-12.88	Average
9	1.296	35.93	0.24	10.50	0.11	46.78	56.00	-9.22	QP
10	6.186	38.05	0.30	10.50	0.09	48.94	60.00	-11.06	QP
11	7.407	37.18	0.32	10.50	0.10	48.10	60.00	-11.90	QP
12	8.323	24.59	0.35	10.50	0.10	35.54	50.00	-14.46	Average

Remark:

1. Level = Read level + LISN Factor + Cable Loss.

Adapter2:

Product name:	Mobile Phone	Product model:	KJ6
Test by:	Kiran	Test mode:	NFC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz		



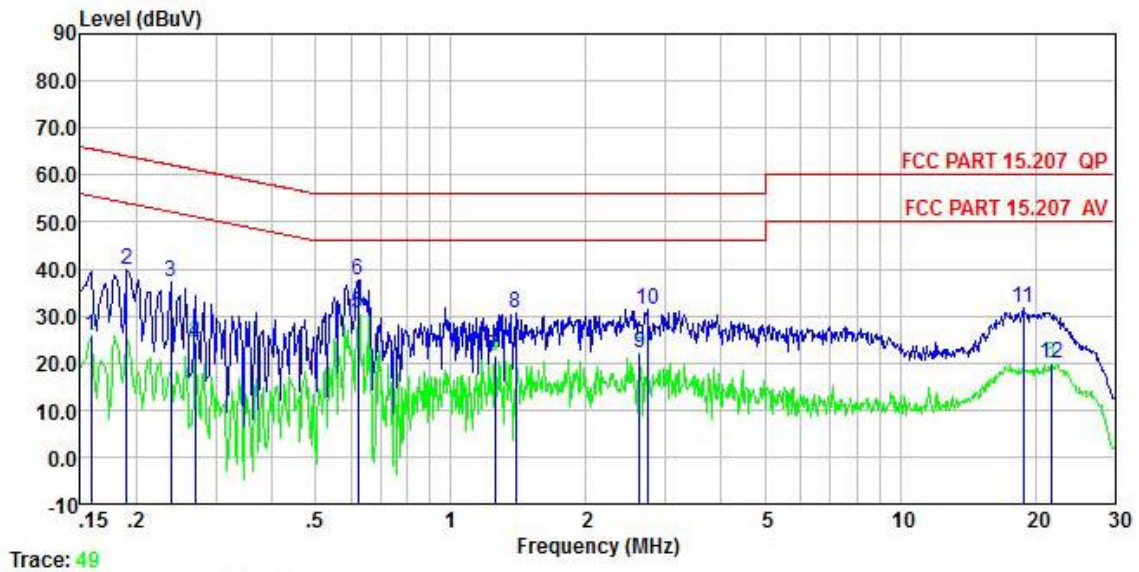
Trace: 51

	Freq	Read Level	LISN Factor	Aux2 Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.162	28.83	0.20	10.50	0.01	39.54	65.34	-25.80	QP
2	0.222	15.04	0.20	10.50	0.03	25.77	52.74	-26.97	Average
3	0.222	25.44	0.20	10.50	0.03	36.17	62.74	-26.57	QP
4	0.589	21.19	0.20	10.50	0.02	31.91	46.00	-14.09	Average
5	0.621	30.88	0.20	10.50	0.02	41.60	56.00	-14.40	QP
6	0.661	21.10	0.20	10.50	0.03	31.83	46.00	-14.17	Average
7	1.289	17.08	0.20	10.50	0.11	27.89	46.00	-18.11	Average
8	1.949	23.69	0.20	10.50	0.20	34.59	56.00	-21.41	QP
9	2.023	17.10	0.20	10.50	0.20	28.00	46.00	-18.00	Average
10	3.346	22.43	0.20	10.50	0.07	33.20	56.00	-22.80	QP
11	17.755	14.63	0.26	10.50	0.15	25.54	50.00	-24.46	Average
12	18.622	26.04	0.27	10.50	0.15	36.96	60.00	-23.04	QP

Remark:

1. Level = Read level + LISN Factor + Cable Loss.

Product name:	Mobile Phone	Product model:	KJ6
Test by:	Kiran	Test mode:	NFC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz		



Trace: 49

	Freq	Read Level	LISN Factor	Aux2 Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.158	15.08	0.20	10.50	0.01	25.79	55.56	-29.77	Average
2	0.190	29.07	0.20	10.50	0.03	39.80	64.02	-24.22	QP
3	0.238	26.45	0.20	10.50	0.02	37.17	62.17	-25.00	QP
4	0.270	13.55	0.20	10.50	0.02	24.27	51.12	-26.85	Average
5	0.621	19.71	0.20	10.50	0.02	30.43	46.00	-15.57	Average
6	0.621	26.86	0.20	10.50	0.02	37.58	56.00	-18.42	QP
7	1.255	10.50	0.23	10.50	0.10	21.33	46.00	-24.67	Average
8	1.396	19.66	0.25	10.50	0.13	30.54	56.00	-25.46	QP
9	2.636	11.36	0.30	10.50	0.11	22.27	46.00	-23.73	Average
10	2.736	20.34	0.30	10.50	0.10	31.24	56.00	-24.76	QP
11	18.820	20.62	0.40	10.50	0.15	31.67	60.00	-28.33	QP
12	21.715	8.69	0.38	10.50	0.16	19.73	50.00	-30.27	Average

Remark:

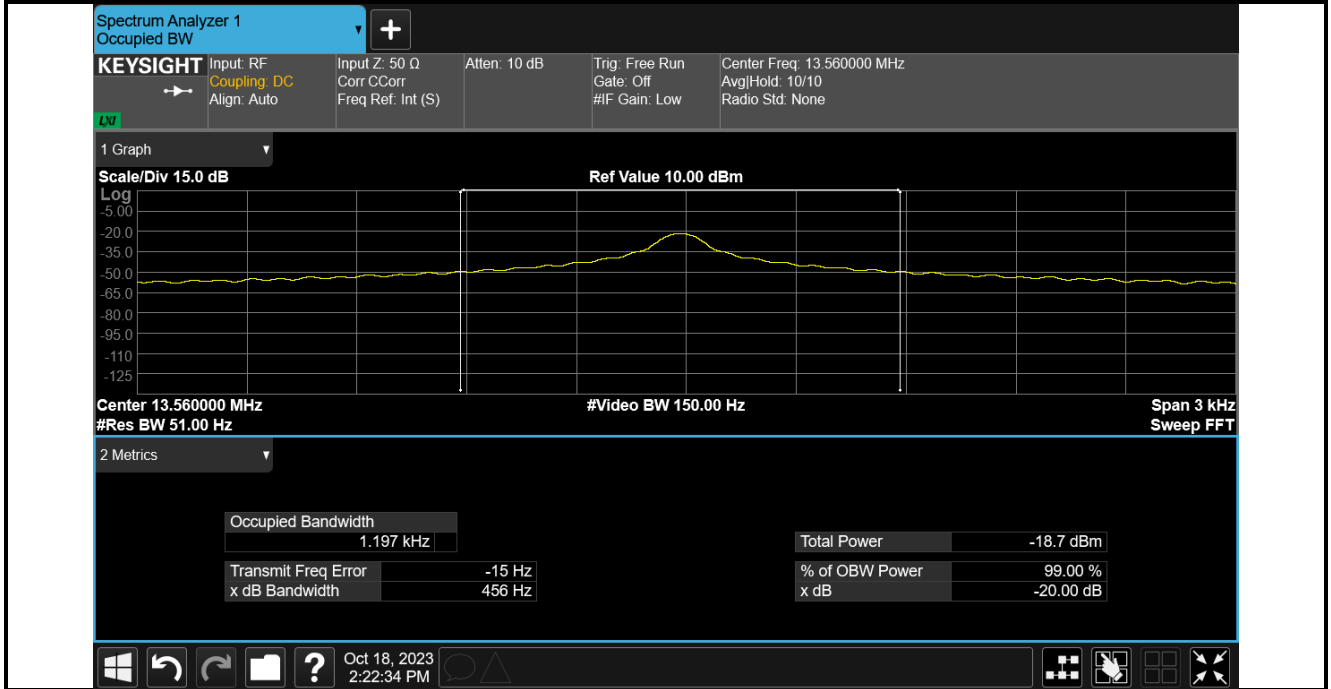
1. Level = Read level + LISN Factor + Cable Loss.

5.4 20dB Bandwidth

20dB bandwidth (kHz)	Limit (kHz)	Results
0.456	11.2	Passed

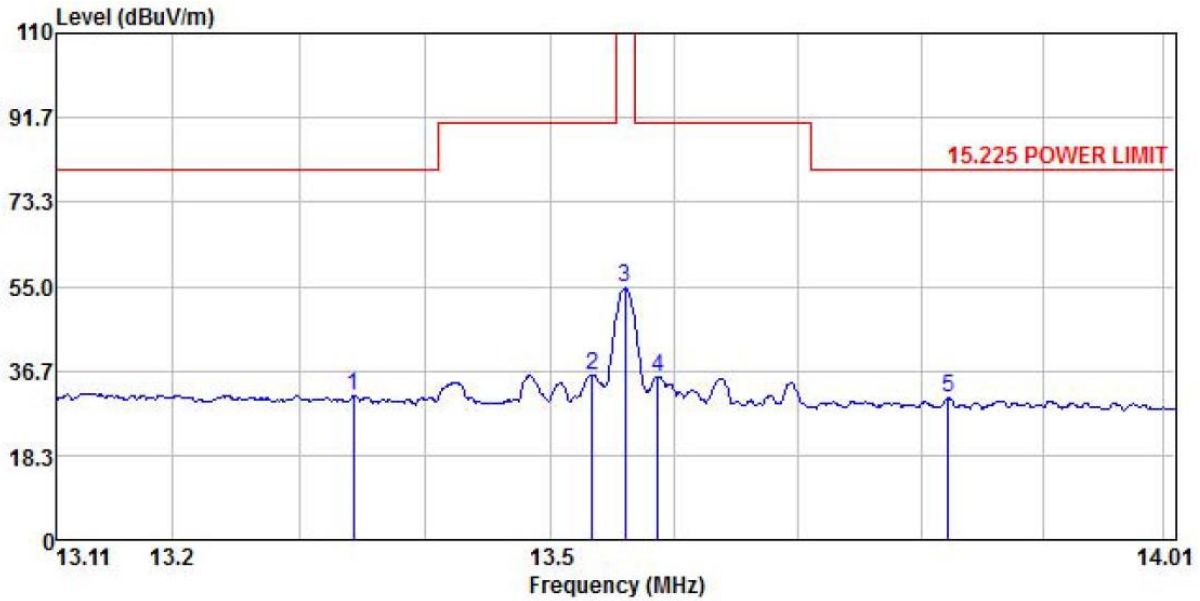
Note: For 13.56MHz, permitted Band is 14 kHz, so the Limit is 11.2 kHz.

Test plot as follows:



5.5 Field Strength of Fundamental

Product Name:	Mobile Phone	Product Model:	KJ6
Test By:	Robin	Test mode:	NFC Tx mode
Test Voltage:	DC 3.87V	Polarization:	Coxial

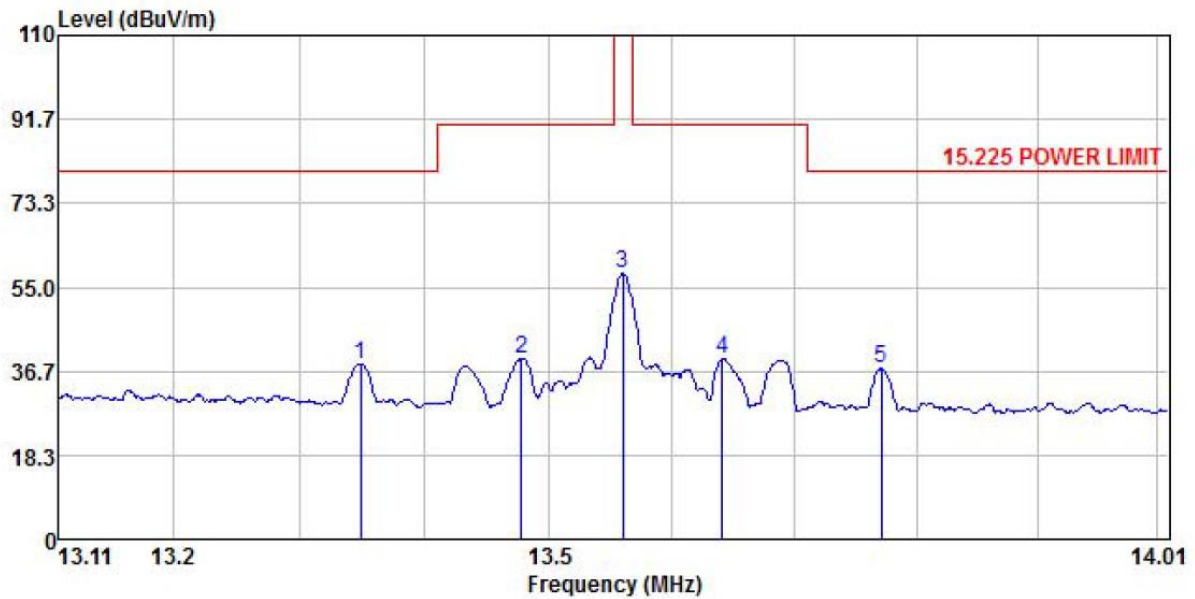


	ReadAntenna	Cable Preamp	Limit	Over					
Freq	Level	Loss	Line	Limit	Remark				
MHz	dBuV	dB/m	dB	dB	dBuV/m				
1	13.343	11.19	19.63	0.40	0.00	31.22	80.50	-49.28	Peak
2	13.534	15.89	19.59	0.41	0.00	35.89	90.50	-54.61	Peak
3	13.560	34.63	19.59	0.41	0.00	54.63	124.00	-69.37	Peak
4	13.586	15.47	19.59	0.41	0.00	35.47	90.50	-55.03	Peak
5	13.822	10.81	19.54	0.43	0.00	30.78	80.50	-49.72	Peak

Remark:

1. Level = Read level + Antenna Factor + Cable Loss – Preamp Factor.

Product Name:	Mobile Phone	Product Model:	KJ6
Test By:	Robin	Test mode:	NFC Tx mode
Test Voltage:	DC 3.87V	Polarization:	Coplanar



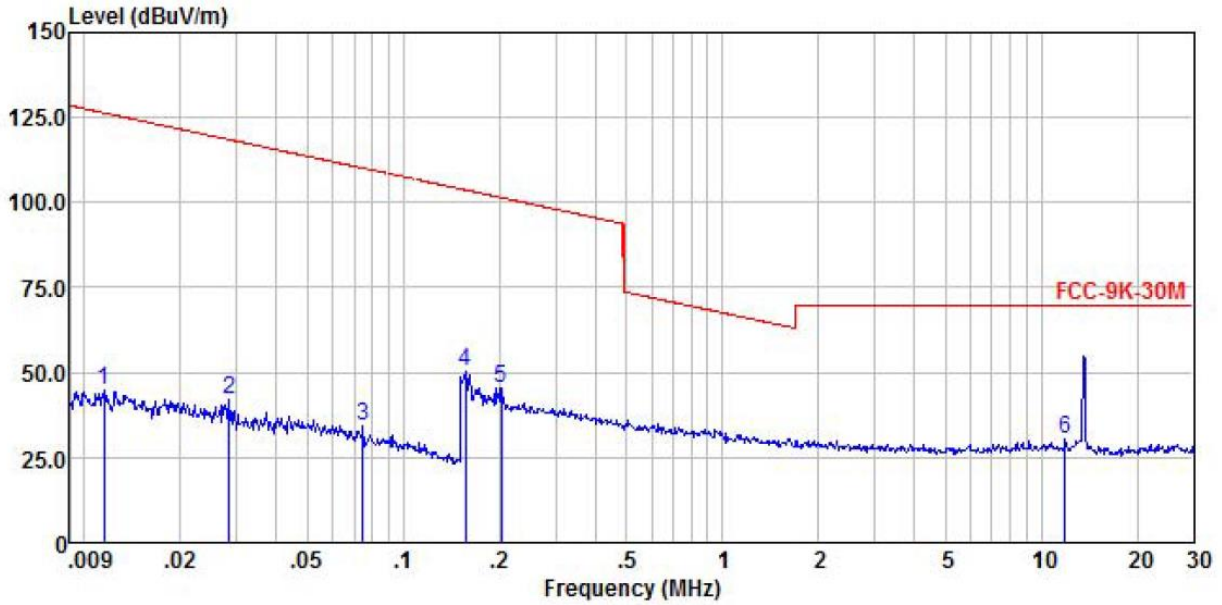
	Freq	ReadAntenna	Cable	Preamp	Level	Limit	Over	Remark
	MHz	Level	Loss	Factor	dBuV/m	Line	Limit	
		dBuV	dB/m	dB		dBuV/m	dB	
1	13.349	18.23	19.63	0.40	0.00	38.26	80.50	-42.24 Peak
2	13.478	19.54	19.61	0.41	0.00	39.56	90.50	-50.94 Peak
3	13.560	37.96	19.59	0.41	0.00	57.96	124.00	-66.04 Peak
4	13.641	19.33	19.57	0.42	0.00	39.32	90.50	-51.18 Peak
5	13.771	17.26	19.54	0.43	0.00	37.23	80.50	-43.27 Peak

Remark:

1. Level = Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor.

5.6 Field Strength of Spurious Emissions

Product Name:	Mobile Phone	Product Model:	KJ6
Test By:	Robin	Test mode:	NFC Tx mode
Test Frequency:	9 kHz – 30 MHz	Polarization:	Coxial
Test Voltage:	DC 3.87V		

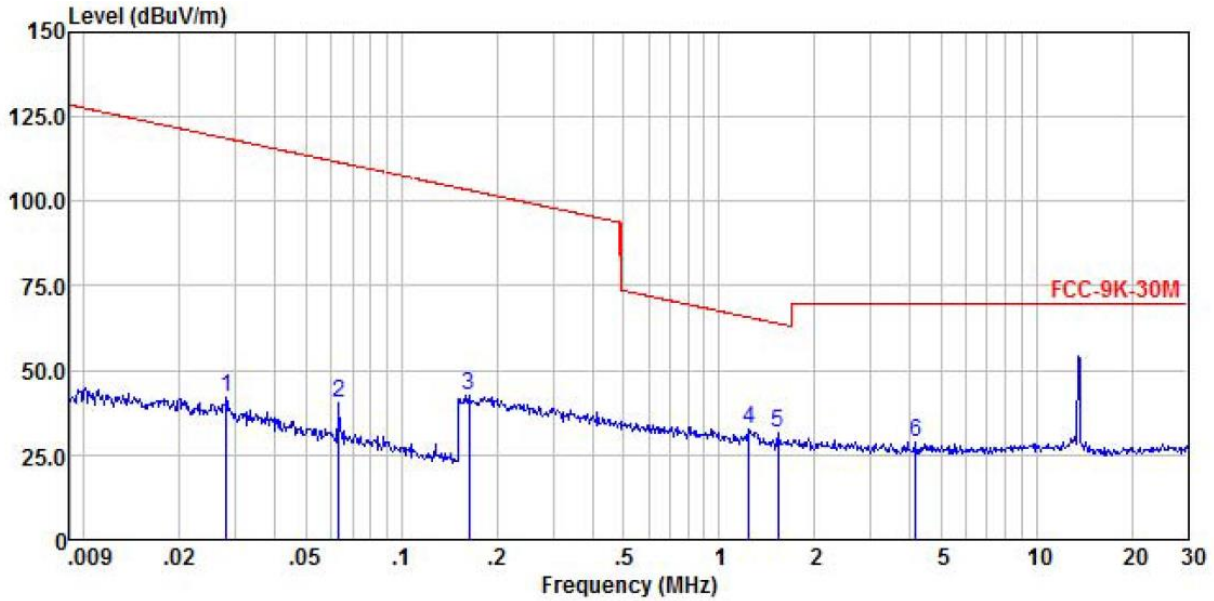


	Read Freq	Antenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	0.011	24.41	20.46	0.01	0.00	44.88	126.39	-81.51	Peak
2	0.028	22.06	20.21	0.01	0.00	42.28	118.50	-76.22	Peak
3	0.075	13.59	20.55	0.02	0.00	34.16	110.11	-75.95	Peak
4	0.156	30.11	20.22	0.03	0.00	50.36	103.74	-53.38	Peak
5	0.203	25.25	20.35	0.04	0.00	45.64	101.48	-55.84	Peak
6	11.899	10.02	19.96	0.41	0.00	30.39	69.50	-39.11	Peak

Remark:

1. Level = Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor.
2. The emission levels of 9 kHz–150 kHz are background noise and very lower than the limit, so not show in test report.

Product Name:	Mobile Phone	Product Model:	KJ6
Test By:	Robin	Test mode:	NFC Tx mode
Test Frequency:	9 kHz – 30 MHz	Polarization:	Coplanar
Test Voltage:	DC 3.87V		

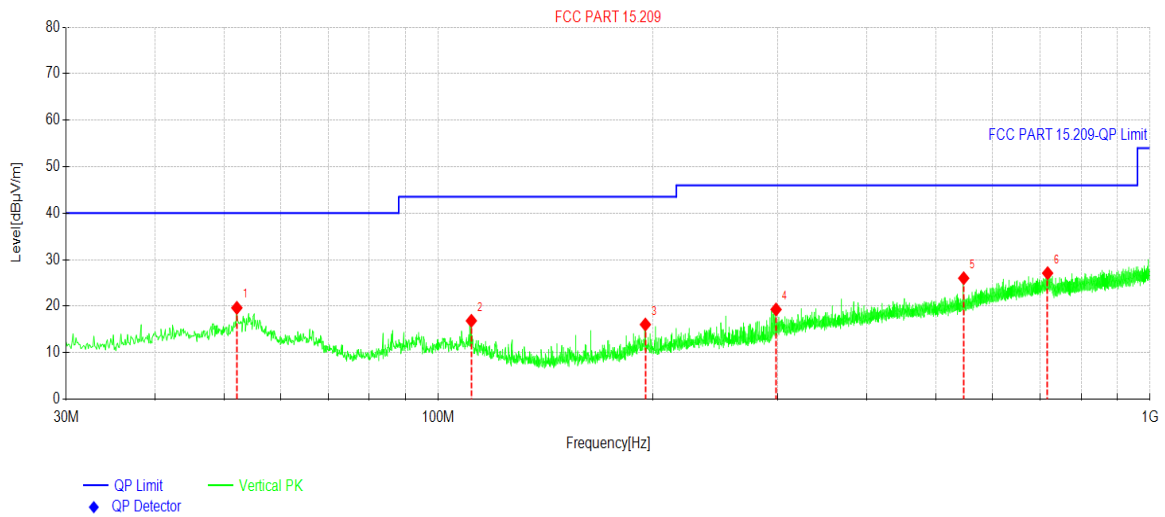


	Read Freq	Antenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	0.028	21.63	20.22	0.01	0.00	41.86	118.64	-76.78	Peak
2	0.064	20.00	20.53	0.02	0.00	40.55	111.52	-70.97	Peak
3	0.163	22.54	20.24	0.03	0.00	42.81	103.38	-60.57	Peak
4	1.248	11.97	20.48	0.17	0.00	32.62	65.70	-33.08	Peak
5	1.541	11.13	20.46	0.17	0.00	31.76	63.88	-32.12	Peak
6	4.179	8.51	20.20	0.27	0.00	28.98	69.50	-40.52	Peak

Remark:

1. Level = Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor.
2. The emission levels of 9 kHz–150 kHz are background noise and very lower than the limit, so not show in test report.

Product Name:	Mobile Phone	Product Model:	KJ6
Test By:	Robin	Test mode:	NFC Tx mode
Test Frequency:	30 MHz – 1000 MHz	Polarization:	Vertical
Test Voltage:	DC 3.87V		

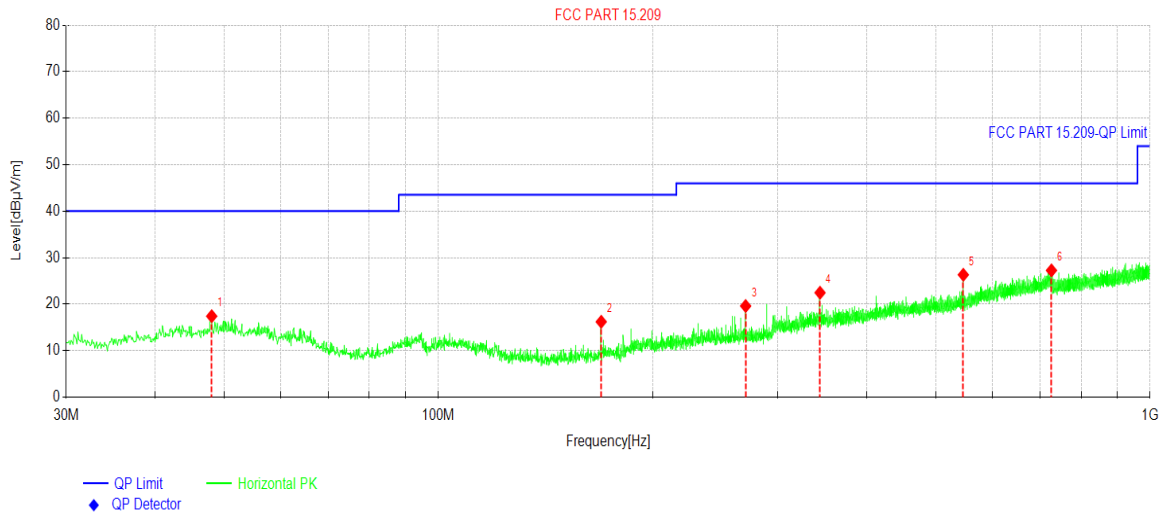


Suspected Data List								
NO.	Freq. [MHz]	Reading[dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	52.1182	32.33	-12.70	19.63	40.00	20.37	PK	Vertical
2	111.294	31.95	-15.10	16.85	43.50	26.65	PK	Vertical
3	195.401	30.98	-14.93	16.05	43.50	27.45	PK	Vertical
4	298.231	32.20	-12.92	19.28	46.00	26.72	PK	Vertical
5	547.255	34.31	-8.30	26.01	46.00	19.99	PK	Vertical
6	717.992	31.77	-4.68	27.09	46.00	18.91	PK	Vertical

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Pre-amplifier Factor).

Product Name:	Mobile Phone	Product Model:	KJ6
Test By:	Robin	Test mode:	NFC Tx mode
Test Frequency:	30 MHz – 1000 MHz	Polarization:	Horizontal
Test Voltage:	DC 3.87V		



Suspected Data List								
NO.	Freq. [MHz]	Reading[dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	48.0438	30.10	-12.70	17.40	40.00	22.60	PK	Horizontal
2	169.402	33.27	-17.06	16.21	43.50	27.29	PK	Horizontal
3	270.293	32.97	-13.38	19.59	46.00	26.41	PK	Horizontal
4	343.826	33.83	-11.37	22.46	46.00	23.54	PK	Horizontal
5	546.576	34.61	-8.30	26.31	46.00	19.69	PK	Horizontal
6	726.917	31.79	-4.54	27.25	46.00	18.75	PK	Horizontal

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

5.7 Frequency Tolerance

Frequency Stability V.S. Temperature Measurement:

Voltage (Vdc)	Temperature (°C)	Frequency Tolerance (kHz)	Frequency Error (%)	Limit (%)	Results
3.87	-20	-0.035	0.000	±0.01	Pass
	-10	0.057	0.000	±0.01	Pass
	0	0.042	0.000	±0.01	Pass
	+10	-0.026	0.000	±0.01	Pass
	+20	-0.045	0.000	±0.01	Pass
	+30	0.030	0.000	±0.01	Pass
	+40	0.042	0.000	±0.01	Pass
	+50	-0.019	0.000	±0.01	Pass

Frequency Stability V.S. Voltage Measurement:

Temperature (°C)	Voltage (Vdc)	Frequency Tolerance (kHz)	Frequency Error (%)	Limit (%)	Results
25.0	3.87	-0.021	0.000	±0.01	Pass
	3.45	0.018	0.000	±0.01	Pass
	4.45	-0.040	0.000	±0.01	Pass

-----End of report-----