



Test Report No.: PSU-NQN2412090110RF12



Certificate #6613.01

RADIO TEST REPORT

(FCC Part 15 Subpart C)

Applicant:	HMD Global Oy
Address:	Bertel Jungin aukio 9, 02600 Espoo, Finland

Manufacturer:	HMD Global Oy
Address:	Bertel Jungin aukio 9, 02600 Espoo, Finland
Product:	Mobile phone
Brand Name:	HMD
Model Name:	H1702V
FCC ID:	2AJOTTA-1702
Date of tests:	Jan, 13, 2025 ~ Mar. 13, 2025

The tests have been carried out according to the requirements of the following standard:

Part 15 Subpart C §15. 225

ANSI C63.10-2020

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Hanwen Xu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department

Date: Mar. 13, 2025 Date: Mar. 13, 2025

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TABLE OF CONTENTS

1 GENERAL DESCRIPTION	6
1.1 GENERAL DESCRIPTION OF EUT	6
1.2 MODIFICATION OF EUT	8
1.3 APPLICABLE STANDARDS	8
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	9
2.1 DESCRIPTIONS OF TEST MODE	9
2.2 TEST CONFIGURATIONS	10
2.3 SUPPORT EQUIPMENT	11
2.4 TEST SETUP	11
2.5 MEASUREMENT RESULTS EXPLANATION EXAMPLE	13
3 TEST RESULT	14
3.1 20DB AND 99% BANDWIDTH MEASUREMENT	14
3.1.1 LIMIT OF 20DB AND 99% BANDWIDTH	14
3.1.2 TEST PROCEDURES	14
3.1.3 TEST RESULT OF 20DB AND 99% BANDWIDTH	15
3.2 FREQUENCY STABILITY MEASUREMENT	17
3.2.1 LIMIT OF FREQUENCY STABILITY	17
3.2.2 TEST PROCEDURES	17
3.2.3 TEST RESULT OF FREQUENCY STABILITY	17
3.3 FIELD STRENGTH OF FUNDAMENTAL EMISSIONS AND MASK MEASUREMENT	19
3.3.1 LIMIT OF FIELD STRENGTH OF FUNDAMENTAL EMISSIONS AND MASK	19
3.3.2 TEST PROCEDURES	19
3.3.3 TEST RESULTS OF FIELD STRENGTH OF FUNDAMENTAL EMISSIONS AND MASK (1.705 MHZ ~ 30 MHZ)	20
3.4 RADIATED EMISSIONS MEASUREMENT	22
3.4.1 LIMIT	22
3.4.2 MEASURING INSTRUMENT SETTING	22
3.4.3 TEST PROCEDURES	23
3.4.4 TEST RESULTS OF RADIATED EMISSIONS (9 KHZ ~ 30 MHZ)	24
3.4.5 TEST RESULT OF RADIATED SPURIOUS EMISSION (30MHZ ~ 1GHZ)	26
3.5 AC CONDUCTED EMISSION MEASUREMENT	28
3.5.1 LIMIT OF AC CONDUCTED EMISSION	28
3.5.2 TEST PROCEDURES	28
3.5.3 TEST RESULT OF AC CONDUCTED EMISSION	29
3.6 ANTENNA REQUIREMENTS	31
3.6.1 STANDARD APPLICABLE	31
3.6.2 ANTENNA CONNECTED CONSTRUCTION	31



3.6.3	ANTENNA GAIN	31
4	LIST OF MEASURING EQUIPMENT.....	32
5	UNCERTAINTY OF EVALUATION.....	33



Test Report No.: PSU-NQN2412090110RF12

REPORT REVISE RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-NQN2412090110RF12	Original release	Mar. 13, 2025



Test Report No.: PSU-NQN2412090110RF12

SUMMARY OF TEST RESULT

FCC Rule	Description	Limit	Result	Remark
-	99% Bandwidth	-	Pass	-
15.225(a)(b)(c)	Field Strength of Fundamental Emissions	15.225(a)(b)(c)	Pass	-
15.215	20dB Spectrum Bandwidth	15.215	Pass	-
15.225(d) 15.209	Radiated Emission	15.225(d) & 15.209	Pass	-
15.207	AC Conducted Emission	15.207(a)	Pass	-
15.225(e)	Frequency Stability	< ±100 ppm	Pass	-
15.203	Antenna Requirement	N/A	Pass	-



1 GENERAL DESCRIPTION

1.1 GENERAL DESCRIPTION OF EUT

Items	Description
Tx/Rx Frequency Range	13.553MHz ~ 13.567MHz
Channel Number	1
20dBW	233.00 kHz
99%OBW	725.04 kHz
Antenna Type	Coil Antenna
Type of Modulation	ASK
HW VERSION*	V1.0
SW VERSION*	000T_0_310

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



1. The differences between the sample 1 and sample 2 as Listings below, others are the same. And only the worst case was shown in the test report.

Raptor 5G(H1702V)

Object	Sample 1 1 st source		Sample 2 2 nd source	
	Specifications	Supplier	Specifications	Supplier
Display	Y92232	DZX	TD-TCHJ6615-5D	CDOT
Memory	LPDDR4X 6GB FLXC4006G-49	Longsys	BWCC4X32N2A-48G-X	Biwin
	128GB eMMC5.1 MEMDNN128G-M1D03	Longsys	MEMDNN128G-M1D03	Biwin
Motor	C0830H-C138ZN-021	KunWang	CY0830-05-FPC-182	Chaoying
Mic	SM2718B381YR2-01	Rayking	S150B381-155	Goertek
Charger IC	UPM6720	Unisemi	SC8541CFFR	Southchip

2. List of Accessory:

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Battery	HMD	HuiZhou GanFeng LiEnergy Battery Technology Co., Ltd.	HBA-5033AA	Capacity : 3.87Vdc, 4900mAh
USB Cable	Saibao	Saibao (Jiangxi) Industry Co.,Ltd.	SZN-A047A	Signal Line,1.0meter



1.2 MODIFICATION OF EUT

No modifications are made to the EUT during all test items.

1.3 APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.225
- ANSI C63.10-2020



2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

2.1 DESCRIPTIONS OF TEST MODE

Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	
AC Power Line Conducted Emissions	Field Strength of Fundamental Emissions
20dB Spectrum Bandwidth	Frequency Stability
Radiated Emissions 9kHz~30MHz	Radiated Emissions 30MHz~1GHz

Note:

1. The EUT was programmed to be in continuously transmitting mode.
2. The ancillary equipment, NFC card, is used to make the EUT (NFC) continuously transmit at 13.56MHz and is placed around 3 cm gap to the EUT.
3. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, work in modes and data rates. Selected for the final test as listed below.

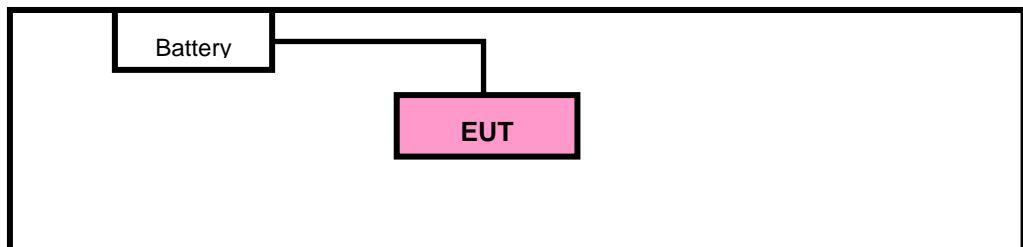
Frequency	Work in Modes	Type	Data Rate (Kbps)
13.56 MHz	<input type="checkbox"/> Card Emulation <input checked="" type="checkbox"/> Reader/Writer <input type="checkbox"/> Peer-to-Peer	<input type="checkbox"/> A <input type="checkbox"/> B <input checked="" type="checkbox"/> F <input type="checkbox"/> V	<input type="checkbox"/> 106 <input checked="" type="checkbox"/> 212 <input type="checkbox"/> 424 <input type="checkbox"/> 848

Remark:
The mark "✓" means is chosen for testing;
The mark "□" means is not chosen for testing.



2.2 TEST CONFIGURATIONS

< For Fundamental Emissions and Mask and Radiated Emissions Measurement >



*Test Table



* Kept in a remote area

2.3 SUPPORT EQUIPMENT

FOR ALL TESTS

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Adapter	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB Line: Shielded, Detachable 1.0m;

2.4 TEST SETUP

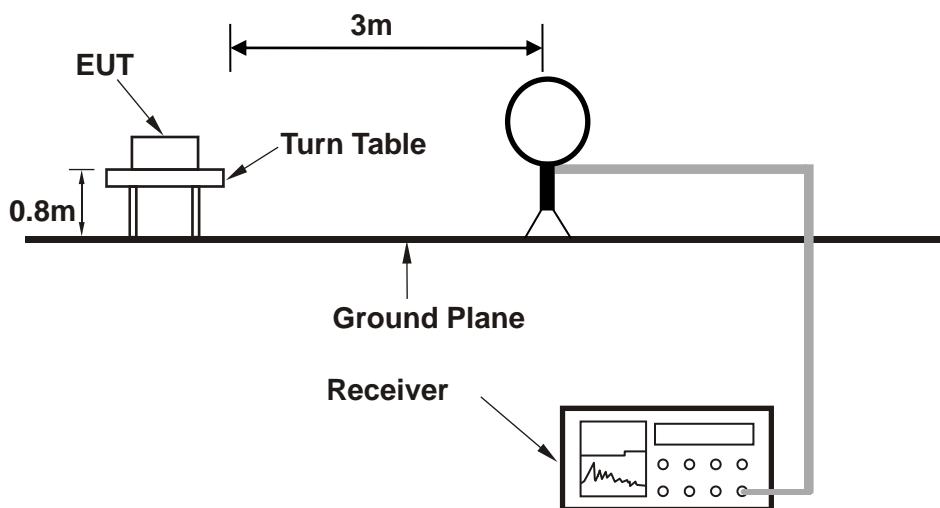
The EUT is continuously communicating during the tests.

EUT was set in the Hidden menu mode to enable NFC communications.

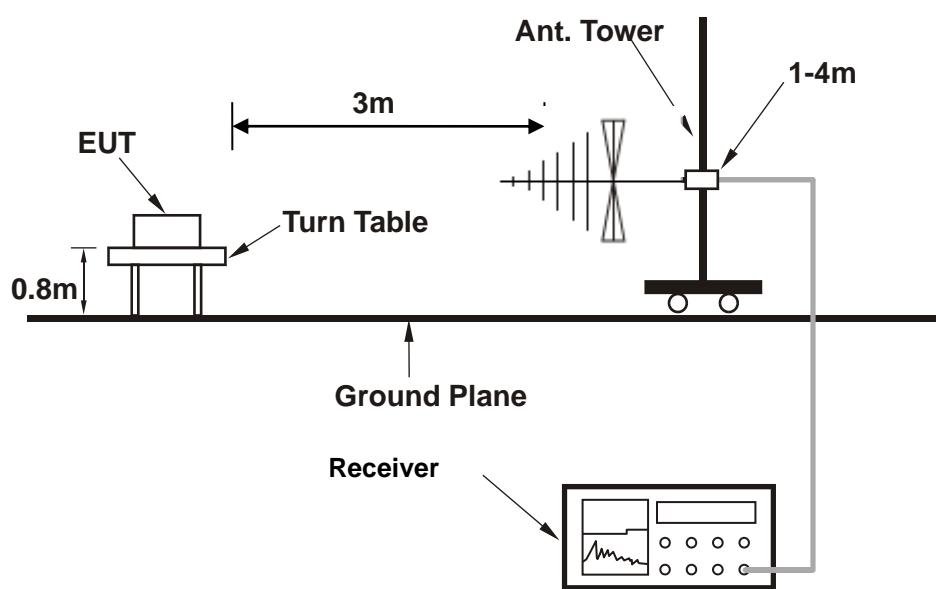
Setup diagram for Conducted Test



Setup diagram for Radiation(9KHz~30MHz) Test



Setup diagram for Radiation (Below 1G) Test





2.5 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 EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

$$= 5 + 10 = 15 \text{ (dB)}$$



3 TEST RESULT

3.1 20DB AND 99% BANDWIDTH MEASUREMENT

3.1.1 LIMIT OF 20DB AND 99% BANDWIDTH

Intentional radiators must be designed to ensure that the 20dB and 99% emission bandwidth in the specific band 13.553~13.567MHz.

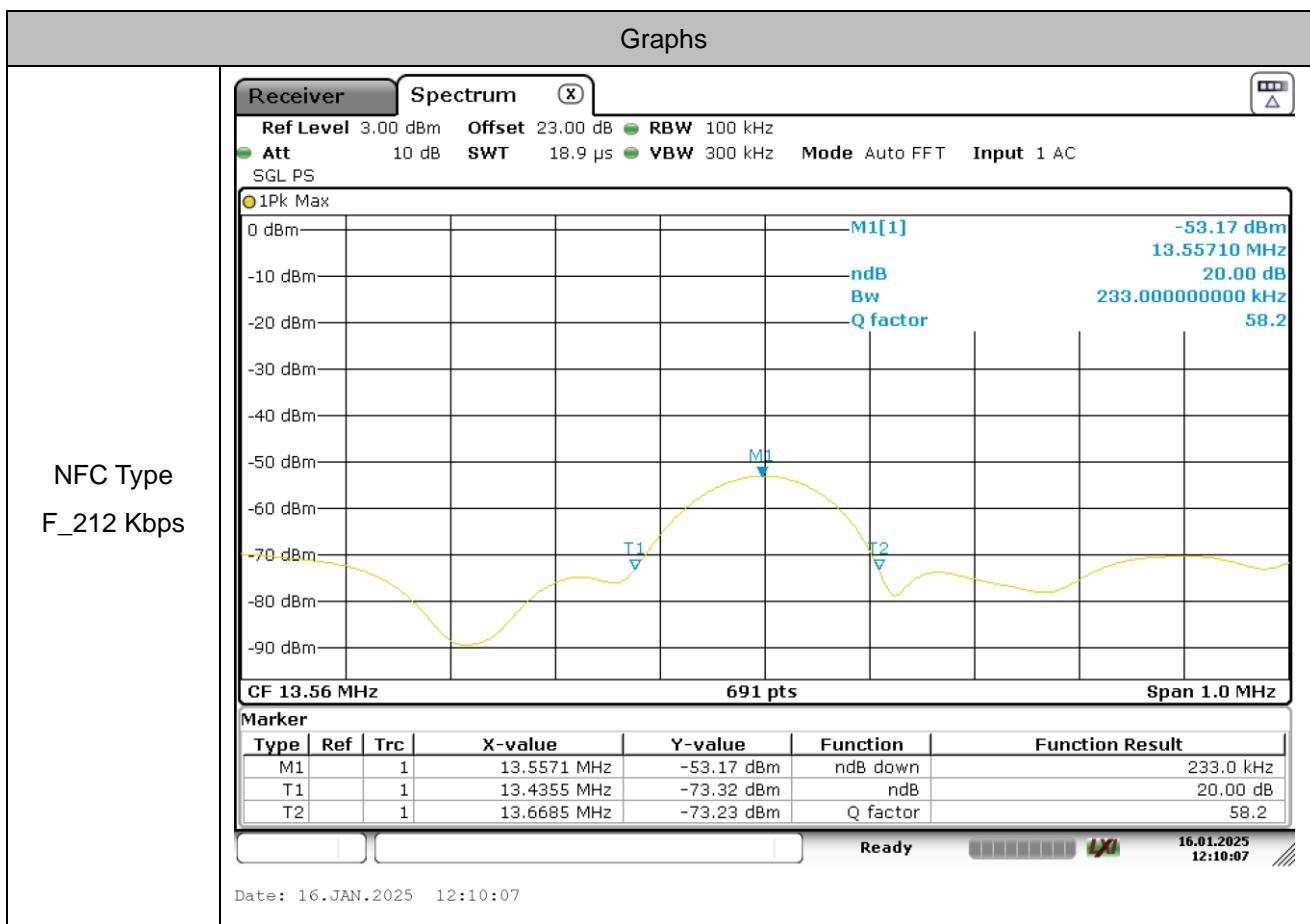
3.1.2 TEST PROCEDURES

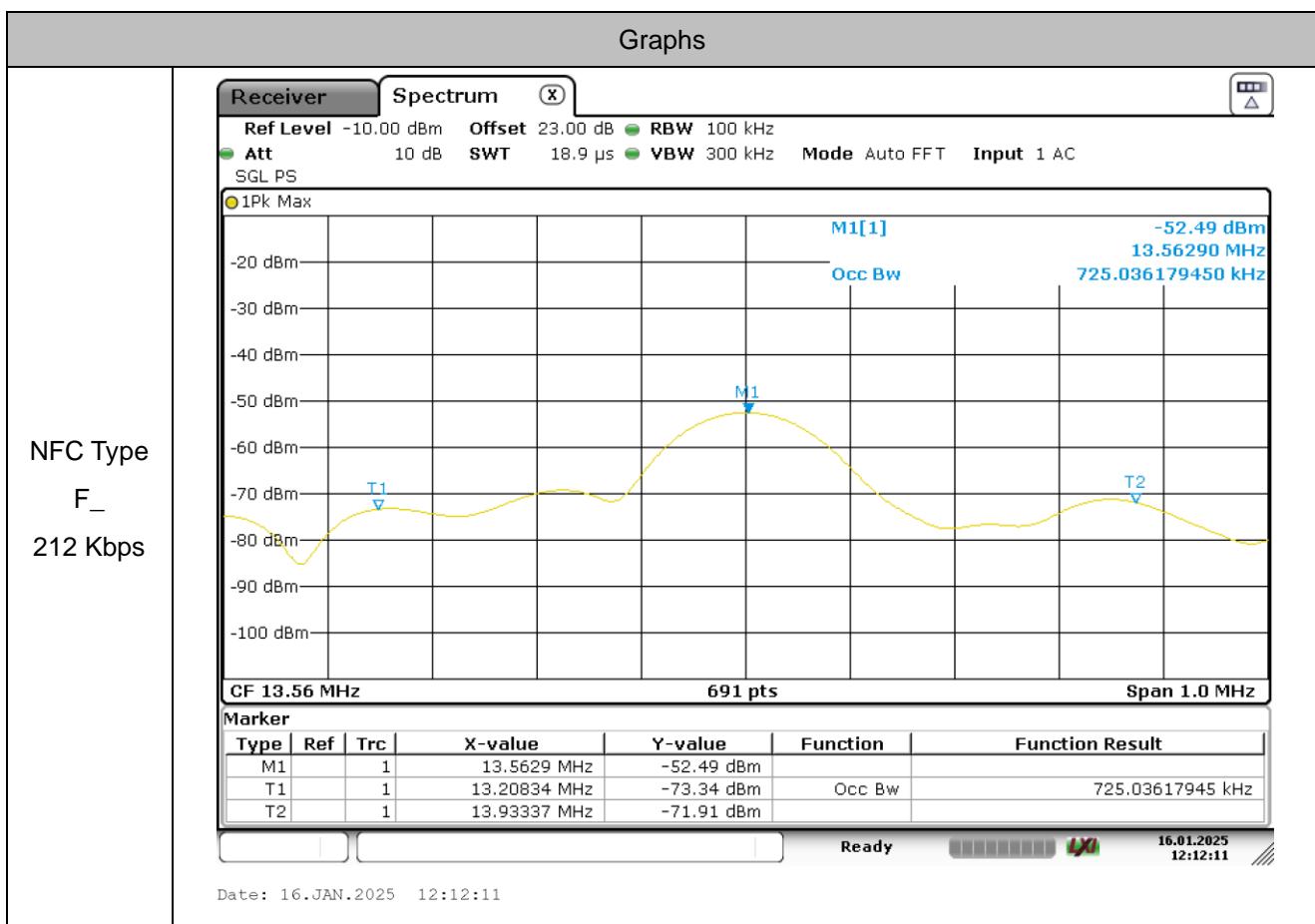
1. The spectrum analyzer connected via a receive antenna placed near the EUT in peak Max hold mode.
2. The resolution bandwidth of 1 kHz and the video bandwidth of 3 kHz were used. (Since the signal being measured is CW or CW-like, it is impractical to adjust RBW according to C63.10 because the bandwidth measured will always follow RBW and the result will be approximately twice as large as RBW.)
3. Measured the spectrum width with power higher than 20dB below carrier.
4. Measured the 99% OBW.

3.1.3 TEST RESULT OF 20DB AND 99% BANDWIDTH

Test Mode :	NFC	Temperature :	23°C	
Test Engineer :	Hanwen Xu	Relative Humidity :	50%	
Mode	Frequency	20dB Bandwidth [kHz]	99% OBW [kHz]	Verdict
NFC Type F_212 Kbps	13.56MHz	233.00	725.04	PASS

20dB Bandwidth & 99% Bandwidth Plot







3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMIT OF FREQUENCY STABILITY

The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% (100ppm) 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.

3.2.2 TEST PROCEDURES

1. The spectrum analyzer connected via a receive antenna placed near the EUT.
2. EUT have transmitted signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire emissions bandwidth.
4. Set RBW = 1 kHz, VBW = 3 kHz with peak detector and maxhold settings.
5. The fc is declaring of channel frequency. Then the frequency error formula is $(fc-f)/fc \times 10^6$ ppm and the limit is less than ± 100 ppm.
6. Extreme temperature rule is -20°C~50°C.

3.2.3 TEST RESULT OF FREQUENCY STABILITY

The NFC Type F_212 Kbps is the worst case, Only report worst mode data



Test Report No.: PSU-NQN2412090110RF12

NFC Type F_212 Kbps

Voltage (Vdc)	Temperature (°C)	Measurement Frequency (MHz)	Frequency Tolerance(ppm)	Limit(ppm)	Result
3.6	20	13.55994	-4.42	± 100	Pass
4.45		13.56014	10.32		Pass
3.87	-20	13.56024	17.70		Pass
	-10	13.56022	16.22		Pass
	0	13.55981	-14.01		Pass
	10	13.55986	-10.32		Pass
	20	13.55998	-1.47		Pass
	30	13.55981	-14.01		Pass
	40	13.55987	-9.59		Pass
	50	13.56031	22.86		Pass



3.3 FIELD STRENGTH OF FUNDAMENTAL EMISSIONS AND MASK MEASUREMENT

3.3.1 LIMIT OF FIELD STRENGTH OF FUNDAMENTAL EMISSIONS AND MASK

Rules and specifications	FCC CFR 47 Part 15 section 15.225			
Description	Compliance with the spectrum mask is tested with RBW set to 9kHz.			
Freq. of Emission (MHz)	Field Strength (μ V/m) at 30m	Field Strength (dB μ V/m) at 30m	Field Strength (dB μ V/m) at 10m	Field Strength (dB μ V/m) at 3m
1.705~13.110	30	29.5	48.58	69.5
13.110~13.410	106	40.5	59.58	80.5
13.410~13.553	334	50.5	69.58	90.5
13.553~13.567	15848	84.0	103.08	124.0
13.567~13.710	334	50.5	69.58	90.5
13.710~14.010	106	40.5	59.58	80.5
14.010~30.000	30	29.5	48.58	69.5

3.3.2 TEST PROCEDURES

1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the loop receiving antenna mounted antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the receiving antenna was fixed at one meter above ground to find the maximum emissions field strength.
4. For Fundamental emissions, use the receiver to measure QP reading.
5. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
6. Compliance with the spectrum mask is tested with RBW set to 9kHz.

Note: Emission level (dB μ V/m) = 20 log Emission level (μ V/m).

3.3.3 TEST RESULTS OF FIELD STRENGTH OF FUNDAMENTAL EMISSIONS AND MASK (1.705 MHZ ~ 30 MHZ)

Test Mode :	NFC (13.56 MHz)		Temperature :	23°C				
Test Engineer :	Hanwen Xu		Relative Humidity :	50%				
Frequency Range	13.11MHz~14.01MHz		Polarization :	Horizontal				
								
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+: QPK Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	13.560	40.72	124.00	83.28	20.26	H	348.1	1.00



Test Report No.: PSU-NQN2412090110RF12

Test Mode :	NFC (13.56 MHz)	Temperature :	23°C
Test Engineer :	Hanwen Xu	Relative Humidity :	50%
Frequency Range	13.11MHz~14.01MHz	Polarization :	Vertical



Rg	Frequency [MHz]	PK+ Level [dB μ V/m]	PK+: QPK Limit [dB μ V/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	13.560	40.01	124.00	83.99	20.26	V	320.9	1.00



3.4 RADIATED EMISSIONS MEASUREMENT

3.4.1 LIMIT

The field strength of any emissions which appear outside of 13.110 ~14.010MHz band shall not exceed the general radiated emissions limits.

Frequencies (MHz)	Field Strength (μ V/m)	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

3.4.2 MEASURING INSTRUMENT SETTING

The following table is the setting of receiver.

Receiver Parameter	Setting
Attenuation	Auto
Frequency Range: 9kHz~150kHz	RBW 200Hz for QP
Frequency Range: 150kHz~30MHz	RBW 9kHz for QP
Frequency Range: 30MHz~1000MHz	RBW 120kHz for Peak

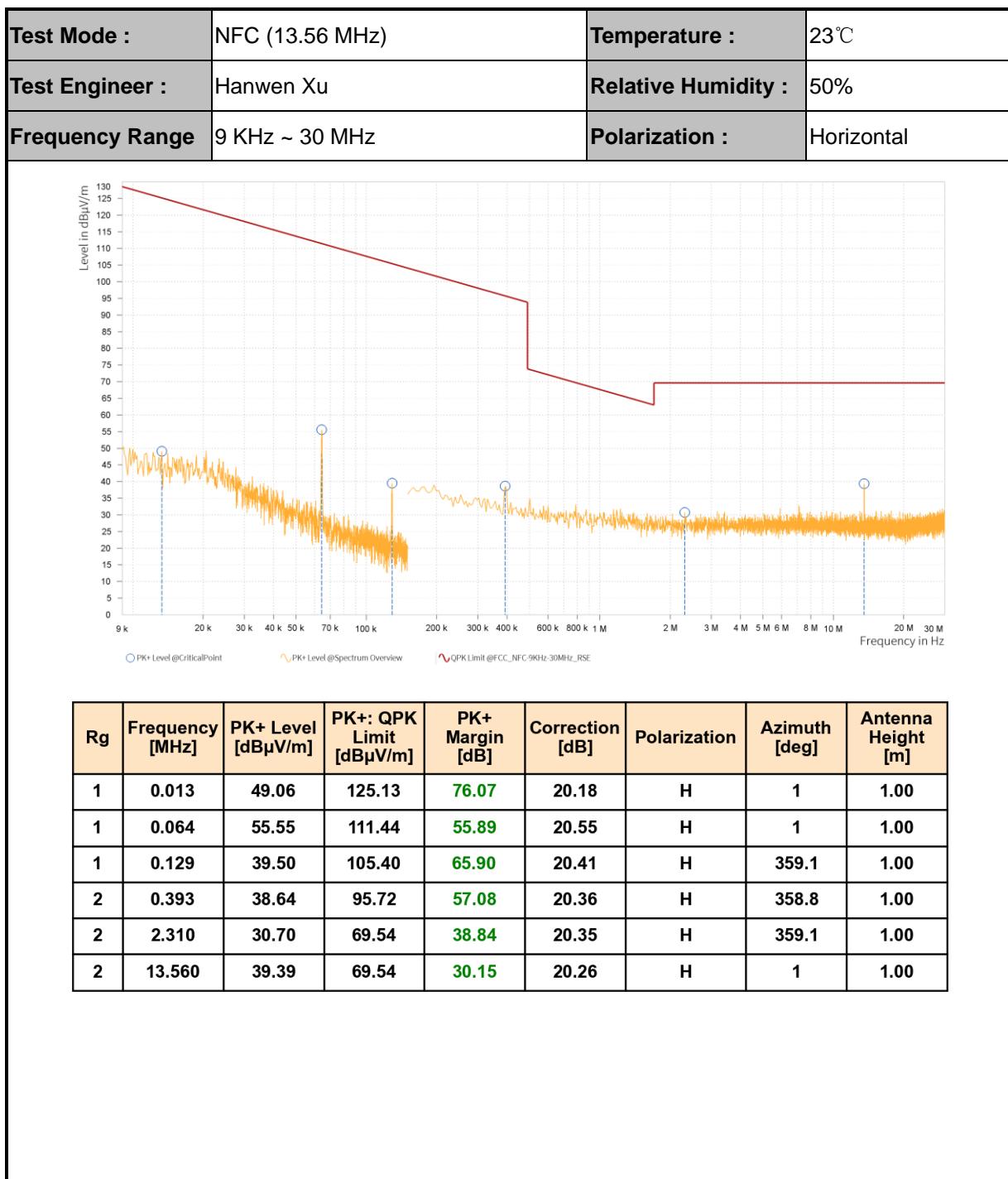
Note: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.



3.4.3 TEST PROCEDURES

1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
7. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver.

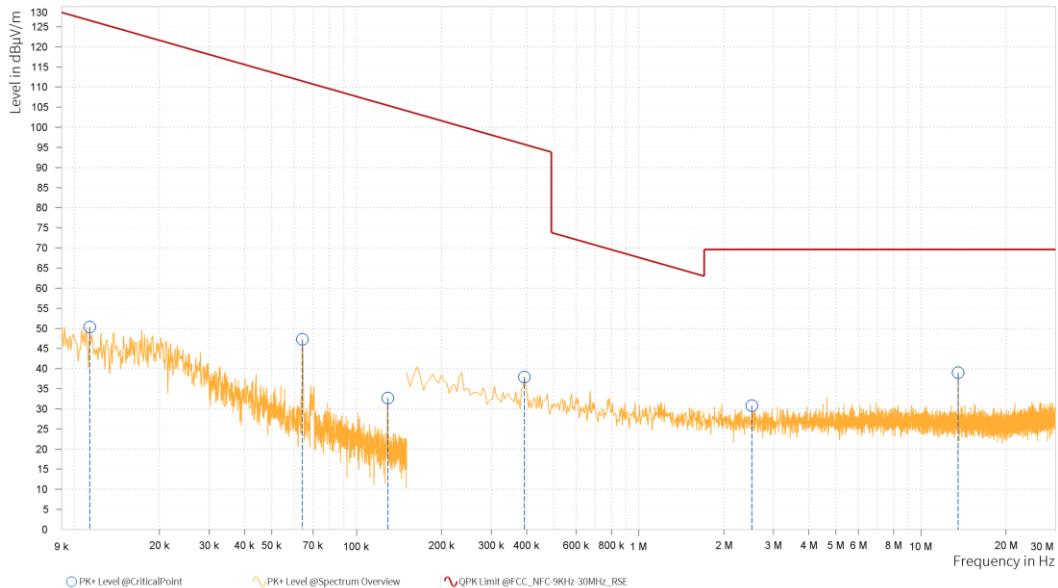
3.4.4 TEST RESULTS OF RADIATED EMISSIONS (9 KHZ ~ 30 MHZ)





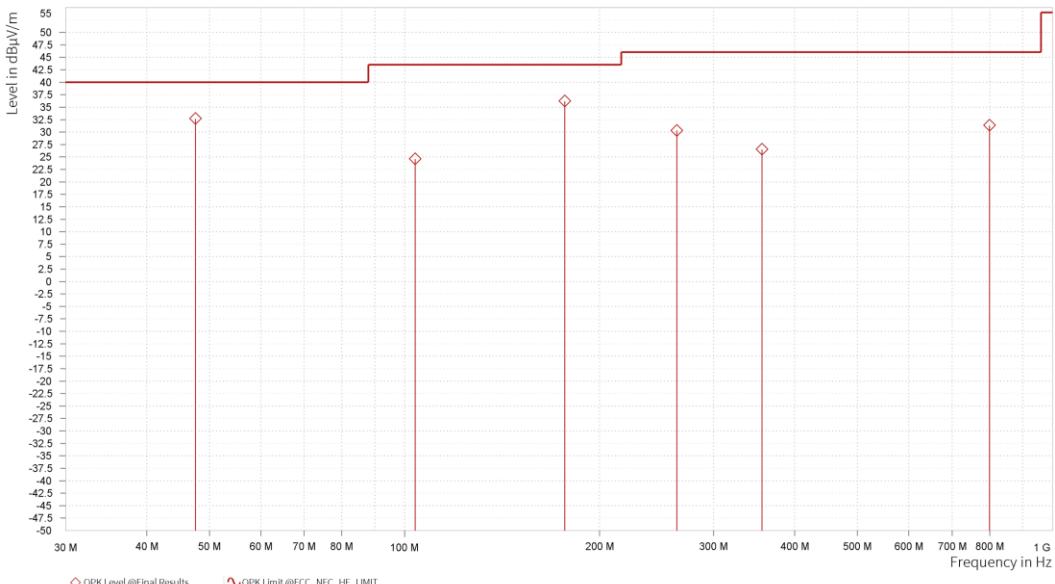
Test Report No.: PSU-NQN2412090110RF12

Test Mode :	NFC (13.56 MHz)	Temperature :	23°C
Test Engineer :	Hanwen Xu	Relative Humidity :	50%
Frequency Range	9 KHz ~ 30 MHz	Polarization :	Vertical



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+: QPK Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	0.011	50.34	126.54	76.20	20.12	V	359.1	1.00
1	0.064	47.27	111.45	64.18	20.55	V	4.9	1.00
1	0.129	32.68	105.40	72.72	20.41	V	359.1	1.00
2	0.393	37.92	95.72	57.80	20.36	V	358.7	1.00
2	2.517	30.83	69.54	38.71	20.34	V	358.7	1.00
2	13.560	39.00	69.54	30.54	20.26	V	1	1.00

3.4.5 TEST RESULT OF RADIATED SPURIOUS EMISSION (30MHZ ~ 1GHZ)

Test Mode :	NFC (13.56MHz)		Temperature :	23°C																																																																						
Test Engineer :	Hanwen Xu		Relative Humidity :	50%																																																																						
Frequency Range	30MHz~1GHz		Polarization :	Horizontal																																																																						
																																																																										
<table border="1"> <thead> <tr> <th>Rg</th> <th>Frequency [MHz]</th> <th>QPK Level [dBμV/m]</th> <th>QPK Limit [dBμV/m]</th> <th>QPK Margin [dB]</th> <th>Correction [dB]</th> <th>Polarization</th> <th>Azimuth [deg]</th> <th>Antenna Height [m]</th> <th>Meas. BW [kHz]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>47.592</td> <td>32.70</td> <td>40.00</td> <td>7.30</td> <td>-2.77</td> <td>H</td> <td>1</td> <td>2.00</td> <td>120.000</td> </tr> <tr> <td>1</td> <td>103.896</td> <td>24.60</td> <td>43.50</td> <td>18.90</td> <td>-4.91</td> <td>H</td> <td>359</td> <td>1.00</td> <td>120.000</td> </tr> <tr> <td>1</td> <td>176.823</td> <td>36.21</td> <td>43.50</td> <td>7.29</td> <td>-6.88</td> <td>H</td> <td>223.2</td> <td>2.00</td> <td>120.000</td> </tr> <tr> <td>1</td> <td>263.109</td> <td>30.32</td> <td>46.00</td> <td>15.68</td> <td>-1.64</td> <td>H</td> <td>132.2</td> <td>1.00</td> <td>120.000</td> </tr> <tr> <td>1</td> <td>356.008</td> <td>26.54</td> <td>46.00</td> <td>19.46</td> <td>1.94</td> <td>H</td> <td>272.1</td> <td>1.00</td> <td>120.000</td> </tr> <tr> <td>1</td> <td>799.430</td> <td>31.33</td> <td>46.00</td> <td>14.67</td> <td>6.42</td> <td>H</td> <td>132.2</td> <td>1.00</td> <td>120.000</td> </tr> </tbody> </table>					Rg	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	1	47.592	32.70	40.00	7.30	-2.77	H	1	2.00	120.000	1	103.896	24.60	43.50	18.90	-4.91	H	359	1.00	120.000	1	176.823	36.21	43.50	7.29	-6.88	H	223.2	2.00	120.000	1	263.109	30.32	46.00	15.68	-1.64	H	132.2	1.00	120.000	1	356.008	26.54	46.00	19.46	1.94	H	272.1	1.00	120.000	1	799.430	31.33	46.00	14.67	6.42	H	132.2	1.00	120.000
Rg	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]																																																																	
1	47.592	32.70	40.00	7.30	-2.77	H	1	2.00	120.000																																																																	
1	103.896	24.60	43.50	18.90	-4.91	H	359	1.00	120.000																																																																	
1	176.823	36.21	43.50	7.29	-6.88	H	223.2	2.00	120.000																																																																	
1	263.109	30.32	46.00	15.68	-1.64	H	132.2	1.00	120.000																																																																	
1	356.008	26.54	46.00	19.46	1.94	H	272.1	1.00	120.000																																																																	
1	799.430	31.33	46.00	14.67	6.42	H	132.2	1.00	120.000																																																																	



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Test Mode :	NFC (13.56MHz)		Temperature :	23°C																																																																						
Test Engineer :	Hanwen Xu		Relative Humidity :	50%																																																																						
Frequency Range	30MHz~1GHz		Polarization :	Vertical																																																																						
<p>Level in dBμV/m</p> <p>Frequency in Hz</p> <p>Legend: QPK Level @Final Results (red diamond), QPK Limit @FCC_NFC_HF_LIMIT (red line)</p>																																																																										
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3.5 AC CONDUCTED EMISSION MEASUREMENT

3.5.1 LIMIT OF AC CONDUCTED EMISSION

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

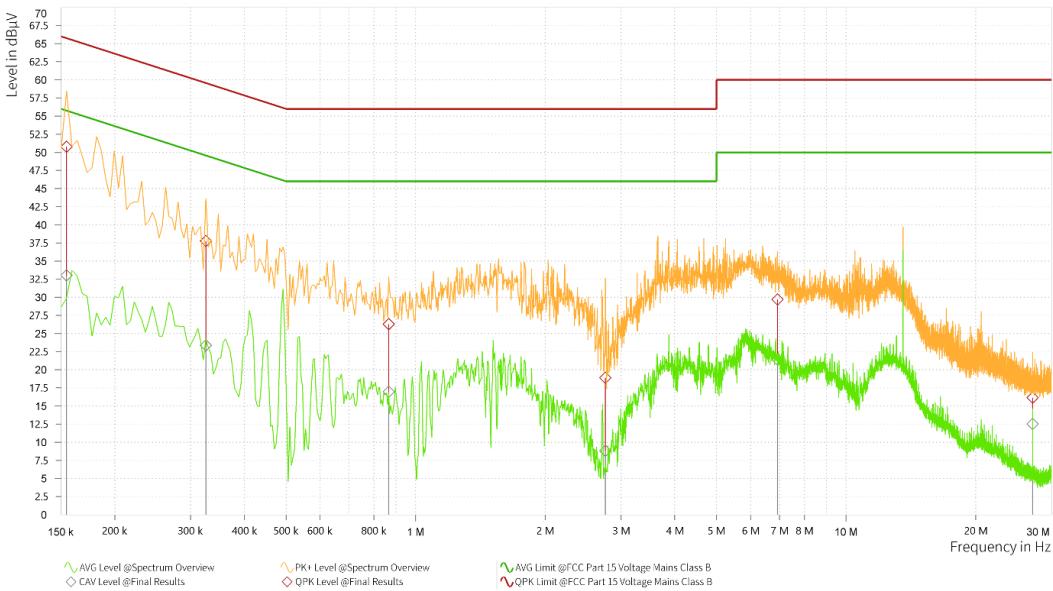
*Decreases with the logarithm of the frequency.

3.5.2 TEST PROCEDURES

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.5.3 TEST RESULT OF AC CONDUCTED EMISSION

Test Mode :	NFC		Temperature :	26°C									
Test Engineer :	Hanwen Xu		Relative Humidity :	51%									
Test Voltage :	120Vac / 60Hz		Phase :	Line									
Function Type :	NFC												
 <p>Legend:</p> <ul style="list-style-type: none"> AVG Level @Spectrum Overview PK Level @Spectrum Overview CAV Level @Final Results QPK Level @Final Results AVG Limit @FCC Part 15 Voltage Mains Class B QPK Limit @FCC Part 15 Voltage Mains Class B 													
Rg	Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	CAV Level [dBµV]	CAV: AVG Limit [dBµV]	CAV Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]			
1	0.159	48.72	65.52	16.80	32.15	55.52	23.37	12.47	L1	9.000			
1	0.492	31.77	56.13	24.36	25.63	46.13	20.50	11.75	L1	9.000			
1	1.244	23.24	56.00	32.76	15.99	46.00	30.01	11.75	L1	9.000			
1	3.881	26.34	56.00	29.66	17.99	46.00	28.01	11.78	L1	9.000			
1	10.581	33.37	60.00	26.63	26.06	50.00	23.94	11.83	L1	9.000			
1	27.123	14.93	60.00	45.07	11.30	50.00	38.70	11.90	L1	9.000			

Test Mode :	NFC	Temperature :	26°C																																																																													
Test Engineer :	Hanwen Xu	Relative Humidity :	51%																																																																													
Test Voltage :	AC 120V/60Hz	Phase :	Neutral																																																																													
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3.6 ANTENNA REQUIREMENTS

3.6.1 STANDARD APPLICABLE

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. 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 shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.

3.6.2 ANTENNA CONNECTED CONSTRUCTION

An Loop Antenna design is used.

3.6.3 ANTENNA GAIN

The antenna peak gain of EUT is less than 6 dBi.



4 LIST OF MEASURING EQUIPMENT

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
WIDEBANDRADIO COMMUNICATION TESTER	Rohde&Schwarz	CMW500	169399	Jun.19,24	Jun.18,26
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-0 2Chamber	Nov.24,22	Nov.23,25
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Dec.26,23	Dec.25,25
Loop Antenna	R&S	HFH2-Z2/Z2 E	100976	Feb.23,23	Feb.22,25
Loop Antenna	R&S	HFH2-Z2/Z2 E	100976	Feb.22,25	Feb.21,27
Antenna Power Supply	RS	N/A	N/A	N/A	N/A
EMI Test Receiver	R&S	ESW44	101973	Mar.28,24	Mar.27,26
Measurement Software	R&S	ELEKTRA	N/A	N/A	N/A
Pre-Amplifier	R&S	SCU08F1	101028	Jan.22,24	Jan.21,26
CABLE	R&S	W13.01	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W13.02	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W12.14	N/A	Apr.27,24	Apr.26,25

NOTE: 1. The calibration interval of the above test instruments is 12/ 24/ 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in 3m Chamber.
3. The FCC Site Registration No. is 434559; The Designation No. is CN1325.

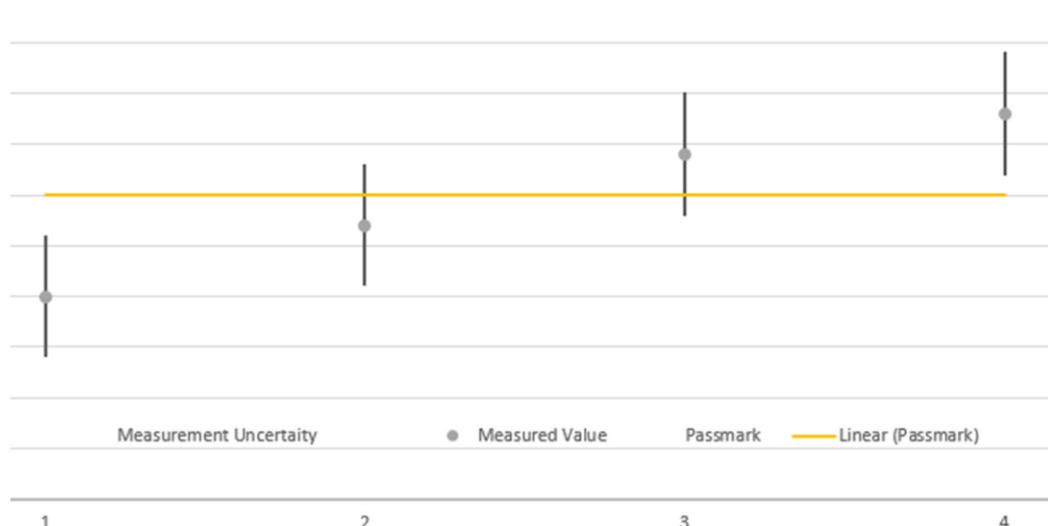


5 UNCERTAINTY OF EVALUATION

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
AC Power Conducted emissions	$\pm 2.70\text{dB}$
Radiated emissions (9KHz~30MHz)	$\pm 2.68\text{dB}$
Radiated emissions (30MHz~1GHz)	$\pm 4.98\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Frequency Stability	$\pm 76.97\text{Hz}$

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.



The verdicts in this test report are given according the above diagram:

Case	Measured Value	Uncertainty Range	Verdict
1	below pass mark	below pass mark	Passed
2	below pass mark	within pass mark	Passed
3	above pass mark	within pass mark	Failed
4	above pass mark	above pass mark	Failed

That means, the laboratory applies, as decision rule (see ISO/IEC 17025:2017), the so-called shared risk principle.

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