





NFC TEST REPORT

No.24T04Z100472-001

for

Guangdong OPPO Mobile Telecommunications Corp., Ltd.

Mobile Phone

CPH2625

FCC ID: R9C-OP23262

with

Hardware Version: 11

Software Version: ColorOS 14.1

Issued Date: 2024-04-26

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
24T04Z100472-001	Rev.0	1 st edition	2024-04-26

Note: the latest revision of the test report supersedes all previous version.





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1. Test Laboratory

1.1. <u>Introduction & Accreditation</u>

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. <u>Testing Location</u>

Location 1: CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,

P. R. China 100191

Location 2: CTTL(Cui Hu)

Address: CuiHu Cloud Center No.1 Gaolizhang

Road, Wenquan Town, Haidian District, Beijing, China

Location 3: CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology

Development Area, Beijing, 100176, P. R. China





1.3. <u>Testing Environment</u>

Normal Temperature: 15-35°C

Extreme Temperature: -20/+50°C

Normal Relative Humidity: 20-75%

Normal Air Pressure 86Kpa-106Kpa

1.4. Project data

Testing Start Date: 2024-04-05 Testing End Date: 2024-04-25

1.5. Signature

苗青华

Miao Qinghua

(Prepared this test report)

Zhou Bin

(Reviewed this test report)

Pang Shuai

(Approved this test report)





2. Client Information

2.1. Applicant Information

Company Name: Guangdong OPPO Mobile Telecommunications Corp., Ltd.

NO.18 HaiBin Road, Wusha Village, Chang'an Town, DongGuan City,

Address: Guangdong Province, P.R. China

Contact: Mei XiLi

Telephone: (86)76986076999 Email: meixili@oppo.com

2.2. Manufacturer Information

Company Name: Guangdong OPPO Mobile Telecommunications Corp., Ltd.

NO.18 HaiBin Road, Wusha Village, Chang'an Town, DongGuan City, Address:

Guangdong Province, P.R. China

Contact: Mei XiLi

Telephone: (86)76986076999 Email: meixili@oppo.com





3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	Mobile Phone
Model Name	CPH2625
FCC ID	R9C-OP23262
GSM Frequency bands	900/1800/1900/850
WCDMA Frequency bands	1/2/4/5/6/8/19
E-UTRA Frequency bands	FDD 1/2/3/4/5/7/8/12/13/17/18/19/20/26/28
	TDD 38/39/40/41/66
5G NR Frequency bands	SA n1/n2/n3/n5/n7/n8/n12/n20/n26/n28/n38/n40/n41/n66/n77/n78
	NSA n1/n3/n5/n7/n8/n20/n26/n28/n38/n40/n41/n66/n77/n78
Operating temperature	0/+35°C
Extreme low voltage	3.4V
Normal voltage	3.91V
Extreme high voltage	4.55V

3.2. Internal Identification of EUT

EUT ID*	SN or IMEI	HW Version	SW Version
UT10a	869029070038491/	11	ColorOS 14.1
UTTUA	869029070038483		
UT09a	869029070036479	11	ColorOS 14.1
UT18a	869029070107510	11	ColorOS 14.1

^{*}EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE

AE ID*	Description	Note	Manufacturer
AE1-1	Battery	BLPA59	Sunwoda
AE1-2	Battery	BLPA59	TWS Technology(GuangZhou) Limited
AE2-1	Charger	VCB8OAUH	Huizhou Golden Lake Industrial Co., Ltd
AE2-2	Charger	VCB8OAUH	Dongguan Aohai Technolgy Co., Ltd.
AE3	USB cable	1	1

^{*}AE ID: is used to identify the ancillary equipment in the lab internally.

3.4. EUT Set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.NFC01-1	UT09a+ AE1-1 + AE2-1 + NFC Card	Charger 1
Set.NFC01-2	UT09a+ AE1-1 + AE2-2 + NFC Card	Charger 2
Set.NFC02-1	UT18a+ AE1-1 + AE2-1 + NFC Card	DUMMY EUT Charger 1
Set.NFC02-2	UT18a+ AE1-1 + AE2-2 + NFC Card	DUMMY EUT Charger 2
Set.NFC03	UT10a	





Set.NFC04 UT09a ---

The Transmit State of NFC: the NFC function is on. The EUT will transmit the NFC data and command continuously during the test.

The Transmit state without modulation: The EUT will transmit the CW signal at the operating frequency.

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters, referring to Annex A for detailed information, are supplied by the client or manufacturer, which are the bases of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
CFR 47 Part 2	Part 2 — Frequency Allocations and Radio Treaty Matters;	2023
	General Rules and Regulations.	
CFR 47 Part 15	Part 15 — Radio Frequency Devices.	2023
	Subpart C — Intentional Radiators.	
	§ 15.35 Measurement detector functions and bandwidths.	
	§ 15.207 Conducted limits.	
	§ 15.209 Radiated emission limits, general requirements.	
	§ 15.215 Additional provisions to the general radiated	
	emission limitations.	
	§ 15.225 Operation within the band 13.110–14.010 MHz.	
ANSI C63.10	American National Standard of Procedures for Compliance	2013
	Testing of Unlicensed Wireless Devices	





5. Test Results

5.1. Summary of Test Results

No	Test Cases	Clause in Regulation	Section in This Report	Verdict
1	Electric Field Strength of	CFR 47 § 15.225(a)		P(Set. NFC04)
	Fundamental Emissions	CFR 47 9 15.225(a)	B.1	P(Set. NFC04)
2	Electric Field Strength of	CFR 47 § 15.225(b)	D. I	D(Set NECO4)
2	Outside the Allocated Bands	CFR 47 § 15.225(c)		P(Set. NFC04)
3	Electric Field Radiated	CFR 47 § 15.209	B.2	P(Set. NFC01-1)
3	Emissions	CFR 47 § 15.225(d)	B.3	P(Set. NFC01-1)
4 Frequency Tolerance		CFR 47 § 15.225(e)	B.4	P(Set. NFC03)
5 20dB Bandwidth		CFR 47 § 15.215(c)	B.5	P(Set. NFC03)
6		OFD 47.0.45.007	D.C	P(Set. NFC02-1,
0	Conducted Emissions	CFR 47 § 15.207	B.6	Set. NFC02-2)
7 Antenna Requirement		CFR 47 § 15.203	B.7	P(Set. NFC03)
The measurement is carried out according to ANSI C63.10. See ANNEX B for details.				

Note:

The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

Test Conditions:

For this report, all the test cases listed above were tested under normal Temperature, Voltage, humidity and Air Pressure except the Frequency Tolerance test case. The specific conditions of Frequency Tolerance test case are listed in section B.4.3

See Table 3 for terms for result verdict:

Table 1 Terms for result verdict

Р	Pass, The EUT complies with the essential requirements in the standard.		
NP	Not Perform, The test was not performed by CTTL		
NA	Not Applicable, The test was not applicable		
F	Fail, The EUT does not comply with the essential requirements in the standard		

5.2. Statements

The test cases listed in Section 5.1 of this report for the EUT specified in Section 3 were performed by CTTL according to the reference documents in Section 4.

The EUT meets all applicable requirements of the regulations and standards in Section 4.2.





6. Test Facilities Utilized

NO.	NAME	TYPE	SERIES NUMBER	PRODUCER	CAL. DUE DATE	CAL. INTERVAL
1.	Spectrum Analyzer	N9030A	MY49432143	Keysight Technologies	2024-12-16	1 Year
2.	Climatic chamber	WK3-340/70	582261175100 10	WEISS	2024-08-08	1 Year
3.	Test Receiver	ESW44	103144	R&S	2024-11-26	1 Year
4.	H-field Antenna	HFH2-Z2	829324/007	R&S	2026-02-05	2 Years
5.	LISN	ENV216	101200	R&S	2024-06-04	1 Year
6.	Test Receiver	ESCI	100344	R&S	2025-02-20	2 years
7.	Test Receiver	ESU26	100376	R&S	2024-05-29	1 Year
8.	EMI Antenna	VULB 9163	01223	SCHWARZBECK	2024-07-18	1 Year





7. Measurement Uncertainty

Item	Uncertainty
Frequency Tolerance	U =74 Hz, k=2
20dB Bandwidth	<i>U</i> =74 Hz, k=2
Radiated	<i>U</i> =4.92 dB, k=2
Emissions(9kHz-30MHz)(huayuan	
North Road)	
Radiated Emissions	<i>U</i> =4.72 dB, k=2
(30MHz-1GHz)(huayuan North Road)	
Radiated Emissions	U =5.73 dB, k=2
(30MHz-1GHz)(BDA)	
Conducted emission	<i>U</i> = 3.08 dB, k=2





ANNEX A: EUT parameters

/





ANNEX B: Detailed Test Results

B.1. Electric Field Strength of Fundamental and Outside the Allocated bands

B.1.1. Reference

See Clause 4, Clause 5 of ANSI C63.10-2013 generally.

B.1.2. Measurement Methods

The transmitter carrier output levels (E-Field) from the EUT are measured in a semi-anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The center of the receiving loop antenna is 1.0 meter above the ground. The E-field is measured with a shielded loop antenna connected to a measurement receiver. Detected E-field was maximized by rotating the EUT through 360° and adjusting the receiving antenna polarizations. The maximization processes were repeated with the EUT positioned respectively in its three orthogonal axes. The measurements were performed with the peak detector and if required, the quasi-peak detector.

The measurement bandwidth is:

Table B-1: Measurement bandwidth

Frequency of Emission (MHz)	RBW/VBW
12.56-14.56	10/30 kHz

The E-field measured at 3m is calculated as:

E-field $(dB\mu V/m) = Rx (dB\mu V) + Cable Loss (dB) + AF@3m (dB/m)$

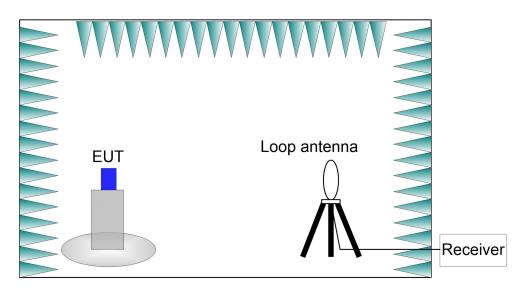


Figure B-1: Measurement Setup

B.1.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of NFC(See 3.4). The EUT is powered by a travel adapter.





During the measurements, the ambient temperature of the electromagnetic anechoic chamber is in the range of 15 \sim 25 $^{\circ}$ C.

B.1.4. Limits

Table B-2: Limits

Frequency Range (MHz)	requency Range (MHz) E-field Strength Limit @ 30 m (μV/m)	
13.560 ± 0.007	+15,848	124
13.410 to 13.553	+334	90
13.567 to 13.710	+334	90
13.110 to 13.410	+106	01
13.710 to 14.010	T 100	81

Note: Where the limits have been defined at one distance, and a signal level measured at another, the limits have been extrapolated using the following formula:

Extrapolat ion(dB) = $40\log_{10}$ (Measuremen t Distance /Specificat ion Distance)

B.1.5. Measurement Results

Measurement results of normal conditions see Figure B-2 for different set-ups of EUT. The results displayed take into account applicable antenna factors and cable losses.

Conclusions: Set.NFC04, PASS.

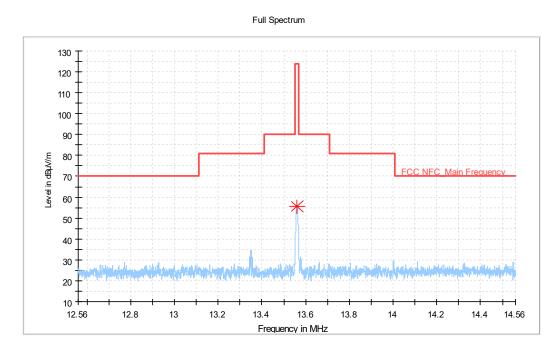


Figure B-2: Measurement results for Electric Field Strength of Fundamental and Outside the Allocated bands

Frequency	MaxPeak	Limit	Margin	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dB)		(deg)	(dB/m)
13.561000	55.59	124.00	68.41	V	180.0	17.9





B.2. Electric Field Radiated Emissions (< 30MHz)

B.2.1. Reference

See Clause 6.4 of ANSI C63.10-2013 specifically. See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

B.2.2. Measurement Methods

The transmitter carrier output levels (E-Field) from the EUT are measured in a semi-anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The center of the receiving loop antenna is 1.0 meter above the ground. The E-field is measured with a shielded loop antenna connected to a measurement receiver. Detected E-field was maximized by rotating the EUT through 360° and adjusting the receiving antenna polarizations. The maximization processes were repeated with the EUT positioned respectively in its three orthogonal axes. The measurements were performed with the peak detector and if required, the quasi-peak detector.

The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/VBW
0.009-0.15	100/300 Hz
0.15-30	10/30 kHz

The E-field measured at 3m is calculated as:

E-field $(dB\mu V/m) = Rx (dB\mu V) + Cable Loss (dB) + AF@3m (dB/m)$

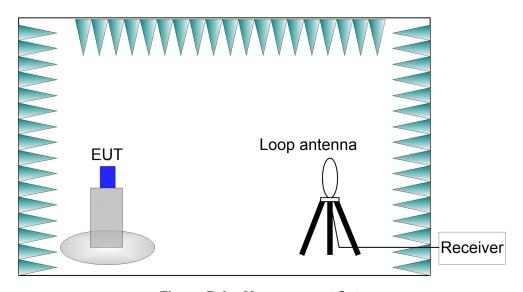


Figure B-3: Measurement Setup

B.2.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of NFC(See 3.4). The EUT is powered by a travel adapter.





During the measurements, the ambient temperature of the electromagnetic anechoic chamber is in the range of 15 \sim 25 $^{\circ}$ C.

B.2.4. Limits

Frequency Range (MHz)	E-field Strength Limit @ 30m (mV/m)	E-field Strength Limit @ 3m (dBµV/m)	
0.009-0.490	2400/F(kHz)	129-94	
0.490-1.705	24000/F(kHz)	74-63	
1.705-30	30	70	

Note: Where the limits have been defined at one distance, and a signal level measured at another, the limits have been extrapolated using the following formula:

Extrapolat ion(dB) = $40\log_{10}$ (Measuremen t Distance /Specificat ion Distance)

B.2.5. Measurement Results

Measurement results of normal conditions see Figure B-4 for different set-ups of EUT. The results displayed take into account applicable antenna factors and cable losses.

Conclusions: Set.NFC04, PASS.

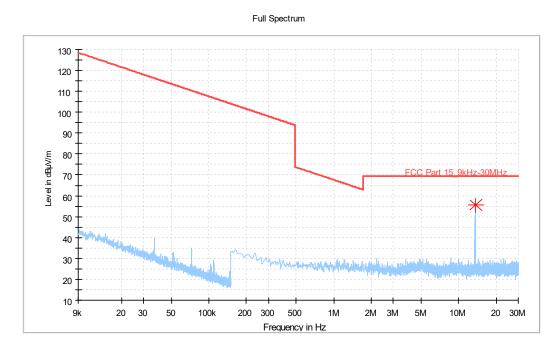


Figure B-4: Measurement results for Electric Field Radiated Emissions (< 30MHz)

Frequency	ency MaxPeak Limit Margin Po		Pol	Azimuth	Corr.	
(MHz)	(dBµV/m)	(dBµV/m)	(dB)		(deg)	(dB/m)
13.560113	55.57	69.50	13.93	٧	180.0	17.9





B.3. Electric Field Radiated Emissions (≥30MHz)

B.3.1. Reference

See Clause 6.5 of ANSI C63.10-2013 specifically. See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

B.3.2. Measurement Methods

The electric field radiated emissions from the EUT are measured in a semi-anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 10m from the receiving antenna. The receiving antennas connected to a measurement receiver. In order to search for maximum field strength emitted from the EUT, the receiving antenna can be moved between the height of 1.0 m to 4.0 m. Detected E-field was maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna positions for both vertical and horizontal antenna polarizations. The maximization processes were repeated with the EUT positioned respectively in its three orthogonal axes. The measurements were performed with the peak detector and if required, the quasi-peak detector.

The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/VBW
30-1000	120kHz

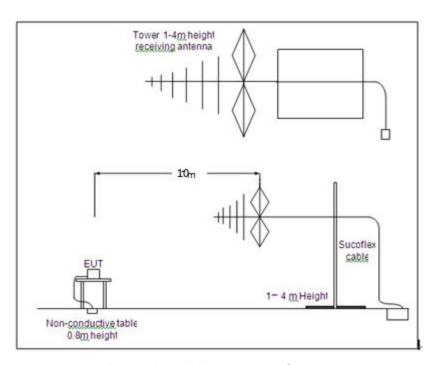


Figure B-5: Measurement Setup

B.3.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of NFC(See 3.4).

The EUT had been connected to a travel adapter.

During the measurements, the ambient temperature of the electromagnetic anechoic chamber is



in the range of 15 \sim 25 °C.

B.3.4. Limits

Eroguopov	E-field Strength Limit	E-field Strength Limit	E-field Strength Limit
Frequency Range (MHz)	@ 3m	@ 3m	@ 10m
Range (WITZ)	(mV/m)	(dBµV/m)	(dBµV/m)
30-88	100	40	30
88-216	150	43.5	33.5
216-960	200	46	36
960-1000	500	54	44

B.3.5. Measurement Results

Measurement results of normal conditions see Figure B-6 for different set-ups of EUT. The results displayed take into account applicable antenna factors and cable losses.

Conclusions: Set.NFC01-1, PASS.

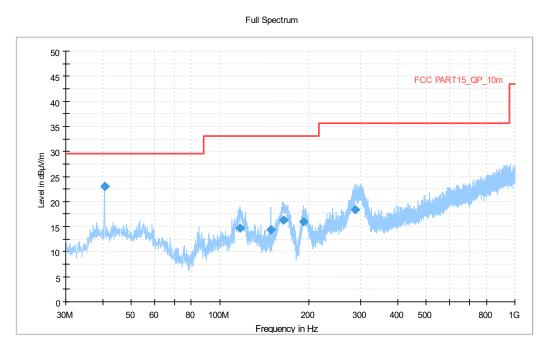


Figure B-6: Measurement results for Electric Field Radiated Emissions (≥30MHz)

Final_Result

Frequency	QuasiPeak	Limit	Margin	Bandwidth	Height	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(kHz)	(cm)		(deg)	(dB/m)
40.670000	22.96	29.54	6.58	120.000	176.0	V	65.0	-11.8
117.300000	14.63	33.06	18.43	120.000	175.0	V	174.0	-13.9
149.116000	14.32	33.06	18.74	120.000	101.0	V	193.0	-15.6
164.636000	16.29	33.06	16.77	120.000	100.0	V	102.0	-14.7
192.184000	15.96	33.06	17.10	120.000	100.0	V	47.0	-12.2
286.856000	18.45	35.56	17.11	120.000	101.0	V	155.0	-9.2





B.4. Frequency Tolerance

B.4.1. Reference

See Clause 6.8 of ANSI C63.10-2013 specifically. See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

B.4.2. Measurement Methods

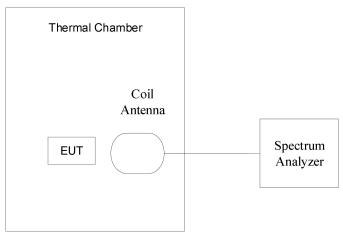


Figure B-7: Measurement Setup

The transmitter output signal was picked up by coil antenna connected to the spectrum analyzer. The center frequency was measured with 30Hz RBW and 1kHz span.

During the test, the EUT was placed in a thermal chamber until thermal balance and lasting appropriate time.

B.4.3. EUT Operating Mode and Test Conditions

The measurement of EUT was carried out under the transmit state of without modulation(See 3.4). EUT had not been connected to a travel adapter. The frequency stability was measured with the different voltage and temperature combinations:

- a) The nominal voltage 3.91V(See 3.1)was used and the temperature was varied from -20 $^{\circ}$ C to +50 $^{\circ}$ C in 10 $^{\circ}$ C increments using an environmental chamber.
- b) The 20 $^{\circ}$ C was used and the voltages were 3.4V, 3.91V and 4.50V (The extreme low voltage ,the normal voltage defined in section 3.1 and 115% of the normal voltage).

The details were as following:

Table B-3: Combinations of Voltage and Temperature

Test items	Voltage	Temperature
Frequency stability with respect to ambient temperature		-20℃
		-10℃
	3.91V	0℃
		10℃
		20℃
		30℃
		40℃
		50℃





Frequency stability	3.4V	
when varying supply	3.91V	20℃
voltage	4.50V	

B.4.4. Test Layouts

See B.4.2.

B.4.5. Limits

The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency.

B.4.6. Measurement Results

Measurement results see Table B-4 for different test conditions.

Conclusions: Set.NFC03, PASS.

Table B-4: Measurement results for Frequency Tolerance

	Tuble B 1. Preusurement results for Frequency Tolerance							
Temperature	Voltage	Frequency (MHz)						
remperature	vollage	Startup	2 Min Later	5 Min Later	10 Min Later			
-20 ℃	3.91V	13.561179000	13.561161000	13.561152000	13.561152000			
-10℃	3.91V	13.561170000	13.561188000	13.561188000	13.561197000			
0℃	3.91V	13.561143000	13.561152000	13.561161000	13.561170000			
10℃	3.91V	13.561125000	13.561134000	13.561134000	13.561143000			
20℃	3.91V	13.561098000	13.561107000	13.561107000	13.561116000			
30℃	3.91V	13.561161000	13.561152000	13.561125000	13.561107000			
40℃	3.91V	13.560108000	13.5601071000	13.5601062000	13.561053000			
50℃	3.91V	13.561053000	13.561044000	13.561044000	13.561044000			
20℃	3.4V	13.560243000	13.560234000	13.560234000	13.560225000			
20℃	4.50V	13.561089000	13.561098000	13.561098000	13.561116000			

Tomporatura	Voltage	Frequency Error (%)					
Temperature	Voltage	Startup	2 Min Later	5 Min Later	10 Min Later		
-20 ℃	3.91V	0.009	0.009	0.008	0.008		
-10℃	3.91V	0.009	0.009	0.009	0.009		
0℃	3.91V	0.008	0.008	0.009	0.009		
10℃	3.91V	0.008	0.008	0.008	0.008		
20℃	3.91V	0.008	0.008	0.008	0.008		
30℃	3.91V	0.009	0.008	0.008	0.008		
40℃	3.91V	0.001	0.001	0.001	0.008		
50℃	3.91V	0.008	0.008	0.008	0.008		
20℃	3.4V	0.002	0.002	0.002	0.002		
20℃	4.50V	0.008	0.008	0.008	0.008		

B.4.7. Measurement Uncertainty





B.5. 20dB Bandwidth

B.5.1. Reference

See Clause 6.9 of ANSI C63.10-2013 specifically. See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

B.5.2. Measurement Methods

The transmitter output signal was picked up by coil antenna connected to the spectrum analyzer. The bandwidth of the center frequency was measured with 300Hz RBW, 1kHz VBW and 10kHz span.

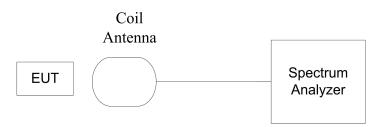


Figure B-8: Measurement Setup

B.5.3. EUT Operating Mode and Test Conditions

The measurement of EUT was carried out under the transmit state of NFC (See 3.4). EUT had not been connected to a travel adapter.

During the measurements, the ambient temperature was in the range of $15 \sim 25$ °C.

B.5.4. Test Layouts

See B.5.2.

B.5.5. Limits

The 20dB bandwidth shall be less than 80% of the permitted frequency band. For 13.56 MHz NFC, the permitted frequency band is 14kHz, so the limit is 11.2 kHz.

B.5.6. Measurement Results

Measurement results see Figure B-9.

Conclusions: Set.NFC03, PASS.



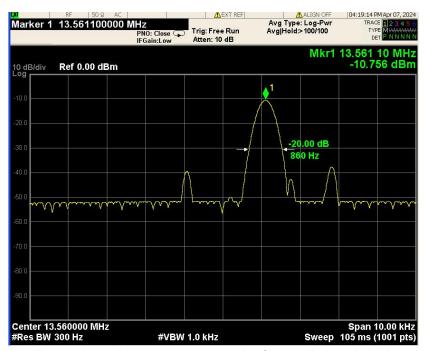


Figure B-9: Measurement results for 20dB Bandwidth

B.5.7. Measurement Uncertainty

Measurement uncertainty: *U* =74 Hz, k=2





B.6. Conducted emission

B.6.1. Reference

See Clause 6.2 of ANSI C63.10-2013 specifically.

See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

B.6.2. Measurement Methods

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver: Quasi-Peak / Average Detector.

The measurement bandwidth is:

Table B-5: Measurement Bandwidth

Frequency of Emission (MHz)	RBW/VBW
0.15-30	9kHz

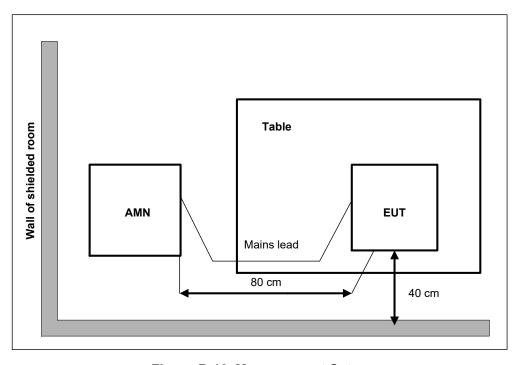


Figure B-10: Measurement Setup

B.6.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of NFC(See 3.4).

The EUT is powered by a travel adapter.

During the measurements, the ambient temperature is in the range of 15 ~ 25 $\,^{\circ}$ C.

B.6.4. Limits

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)
0.15 to 0.5	66 to 56	56 to 46
0.5 to 5	56	46
5 to 30	60	50





B.6.5. Measurement Results

Measurement results see Figure B-11.

Conclusions: Set.NFC02-1 and Set.NFC02-2, PASS.

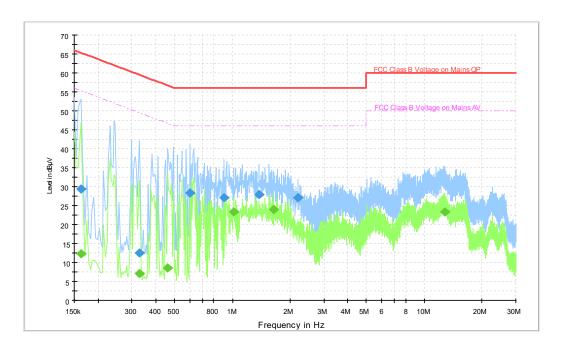


Figure B-11: Measurement results for Conducted Emission(Set.NFC02-1)

Final Result 1

Frequency	QuasiPeak	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)
		(ms)						
0.162000	29.3	2000.0	9.000	On	L1	19.8	36.1	65.4
0.326000	12.6	2000.0	9.000	On	N	19.7	47.0	59.6
0.602000	28.2	2000.0	9.000	On	N	19.7	27.8	56.0
0.906000	27.0	2000.0	9.000	On	N	19.6	29.0	56.0
1.374000	27.8	2000.0	9.000	On	N	19.6	28.2	56.0
2.198000	27.2	2000.0	9.000	On	N	19.6	28.8	56.0

Final Result 2

Frequency	QuasiPeak	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)
		(ms)						
0.162000	12.3	2000.0	9.000	On	N	19.7	43.0	55.4
0.326000	7.0	2000.0	9.000	On	N	19.7	42.5	49.6
0.462000	8.6	2000.0	9.000	On	N	19.7	38.0	46.7
1.018000	23.4	2000.0	9.000	On	N	19.6	22.6	46.0
1.634000	23.9	2000.0	9.000	On	N	19.6	22.1	46.0
12.830000	23.4	2000.0	9.000	On	L1	19.8	26.6	50.0



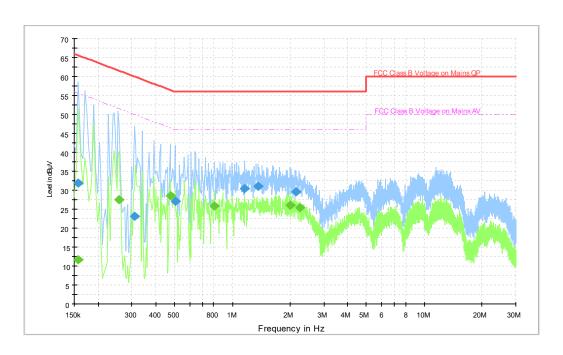


Figure B-12: Measurement results for Conducted Emission(Set.NFC02-2)

Final Result 1

Frequency	QuasiPeak	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)
		(ms)						
0.158000	31.9	2000.0	9.000	On	L1	19.8	33.7	65.6
0.310000	23.1	2000.0	9.000	On	L1	19.7	36.9	60.0
0.502000	27.1	2000.0	9.000	On	L1	19.7	28.9	56.0
1.162000	30.4	2000.0	9.000	On	L1	19.7	25.6	56.0
1.358000	31.1	2000.0	9.000	On	L1	19.6	24.9	56.0
2.134000	29.6	2000.0	9.000	On	L1	19.6	26.4	56.0

Final Result 2

Frequency	QuasiPeak	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	(dBµV)
		(ms)						
0.158000	11.6	2000.0	9.000	On	L1	19.8	44.0	55.6
0.258000	27.4	2000.0	9.000	On	N	19.7	24.1	51.5
0.474000	28.5	2000.0	9.000	On	L1	19.7	18.0	46.4
0.806000	25.9	2000.0	9.000	On	L1	19.7	20.1	46.0
1.994000	26.0	2000.0	9.000	On	L1	19.6	20.0	46.0
2.254000	25.3	2000.0	9.000	On	L1	19.6	20.7	46.0





B.7. Antenna Requirement

B7.1 Reference

See CFR 47 Part 15 § 15.203

B.7.2. Excerpt from §15.203 of the FCC Rules/Regulations

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 antenna of the device is permanently attached.

There are no provisions for connection to an external antenna.

B.7.3. Results

The unit complies with the requirement of FCC Part 15.203.

Conclusions: Set.NFC03, PASS.





ANNEX C: Persons involved in this testing

Test Item	Tester
20dB Bandwidth	Miao Qinghua
Frequency Tolerance	Miao Qinghua
Electric Field Strength of Fundamental and Outside the Allocated bands	Ding Zai & Zhang Tianli
Electric Field Radiated Emissions (< 30MHz)	Ding Zai & Zhang Tianli
Electric Field Radiated Emissions (≥30MHz)	Ding Zai & Zhang Tianli
Conducted Emissions	Yan Hanchen
Antenna Requirement	Miao Qinghua





ANNEX D: Accreditation Certificate





Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

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. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 26th day of June 2023.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 7049.01

Valid to July 31, 2024

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

END OF REPORT