



NFC TEST REPORT

No.23T04Z70626-06

for

Samsung Electronics Co., Ltd.

Multi-band GSM/WCDMA/LTE/5GNR Phone with Bluetooth, WLAN

SM-M556B/DS

FCC ID: ZCASMM556B

with

Hardware Version: REV1.0

Software Version: M556B.001

Issued Date: 2024-01-12

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:

CTTL-Telecommunication Technology Labs, CAICT

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: cttl_terminals@caict.ac.cn, website: www.caict.ac.cn



REPORT HISTORY

Report Number	Revision	Description	Issue Date
23T04Z70626-06	Rev.0	1 st edition	2024-01-12

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

CONTENTS

1. TEST LABORATORY	4
1.1. INTRODUCTION & ACCREDITATION.....	4
1.2. TESTING LOCATION	4
1.3. TESTING ENVIRONMENT	5
1.4. PROJECT DATA	5
1.5. SIGNATURE	5
2. CLIENT INFORMATION.....	6
2.1. APPLICANT INFORMATION.....	6
2.2. MANUFACTURER INFORMATION.....	6
3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)	7
3.1. ABOUT EUT	7
3.2. INTERNAL IDENTIFICATION OF EUT	7
3.3. INTERNAL IDENTIFICATION OF AE	7
3.4. EUT SET-UPS.....	7
4. REFERENCE DOCUMENTS	8
4.1. DOCUMENTS SUPPLIED BY APPLICANT	8
4.2. REFERENCE DOCUMENTS FOR TESTING.....	8
5. TEST RESULTS	9
5.1. SUMMARY OF TEST RESULTS	9
5.2. STATEMENTS.....	9
6. TEST FACILITIES UTILIZED	10
7. MEASUREMENT UNCERTAINTY	11
ANNEX A: EUT PARAMETERS.....	12
ANNEX B: DETAILED TEST RESULTS.....	13
ANNEX C: PERSONS INVOLVED IN THIS TESTING	25
ANNEX D: ACCREDITATION CERTIFICATE	26



1. Test Laboratory

1.1. Introduction & Accreditation

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. Testing Location

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

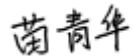
1.3. Testing Environment

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: 2023-12-15
Testing End Date: 2023-12-28

1.5. Signature



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: Samsung Electronics Co., Ltd.
Address: 19 Chapin Rd., Building D Pine Brook, NJ 07058
Contact: Jenni Chun
Telephone: +1-201-937-4203
Email: j1.chun@samsung.com

2.2. Manufacturer Information

Company Name: Samsung Electronics Co., Ltd.
Address: Samsung R5, Maetan dong 129, Samsung ro
Youngtong gu, Suwon city 443 742, Korea
Contact: Sunghoon Cho
Telephone: +82-10-2722-4159
Email: ggobi.cho@samsung.com

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

3.1. About EUT

Description	Multi-band GSM/WCDMA/LTE/5G NR Phone with Bluetooth, WLAN
Model Name	SM-M556B/DS
FCC ID	ZCASMM556B
GSM Frequency bands	850/900/1800/1900
UMTS Frequency bands	FDD I/II/IV/V/VIII
E-UTRA Frequency bands	FDD 1/2/3/4/5/7/8/12/17/20/25/26/28A+B/66 TDD 38/40/41
5G NR Frequency bands	SA n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n66/n77/n78 NSA n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n66/n77/n78
Operating temperature	-10/+55°C
Extreme low voltage	3.6V
Normal voltage	3.85V
Extreme high voltage	4.4V

3.2. Internal Identification of EUT

EUT ID*	SN or IMEI	HW Version	SW Version
UT32a	2370626UT32a	REV1.0	M556B.001
UT33a	2370626UT33a	REV1.0	M556B.001

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

3.3. Internal Identification of AE

AE ID*	Description	SN	Remarks
AE1	Battery	HQ-6887NAS	Ningde Amperex Technology Limited
AE2-1*	Adapter	EP-TA845	SoluM Co.,Ltd.
AE3-1	Date Cable1 C-C	EP-DN975BWE	ASAP TECHNOLOGY(JIANGXI) CO.,LTD.
AE3-2	Date Cable2 C-C	EP-DN975BWE	RFTECH ELECTRONICS (HUIZHOU) CO., LTD

*AE ID: is used to identify the test sample in the lab internally.

*AE2-1 is not the AE for EUT, provided by the client for relevant tests.

3.4. EUT Set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.NFC01	UT33a + AE1 + AE2-1 + AE3-1	Charge
Set.NFC02	UT33a + AE1	NFC
Set.NFC03	UT32a	---

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; General Rules and Regulations.	2019
CFR 47 Part 15	Part 15 — Radio Frequency Devices. 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.	2019
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013

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 Fundamental Emissions	CFR 47 § 15.225(a)	B.1	P(Set. NFC02)
2	Electric Field Strength of Outside the Allocated Bands	CFR 47 § 15.225(b) CFR 47 § 15.225(c)		P(Set. NFC02)
3	Electric Field Radiated Emissions	CFR 47 § 15.209	B.2	P(Set. NFC01)
		CFR 47 § 15.225(d)	B.3	P(Set. NFC01)
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	Conducted Emissions	CFR 47 § 15.207	B.6	P(Set. NFC01)
The measurement is carried out according to ANSI C63.10. See ANNEX B for details.				

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

P	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	2023-12-17	1 Year
2.	Climatic chamber	WK3-340/70	58226117510010	WEISS	2024-08-08	1 Year
3.	Test Receiver	ESW44	103023	R&S	2024-06-08	1 Year
4.	H-field Antenna	HFH2-Z2	829324/007	R&S	2024-12-21	1 Year
5.	EMI Antenna	VULB9163	01222	Schwarzbeck	2024-02-28	1 Year
6.	Test Receiver	ESCI	100344	R&S	2024-02-21	1 Year
7.	LISN	ENV216	101200	R&S	2024-06-04	1 Year

Note: The Spectrum Analyzer which SERIES NUMBER is MY49432143 was before CAL. DUE DATE when used.

7. Measurement Uncertainty

Item	Uncertainty
Frequency Tolerance	$U = 74 \text{ Hz}, k=2$
20dB Bandwidth	$U = 74 \text{ Hz}, k=2$
Radiated Emissions(9kHz-30MHz)	$U = 4.92 \text{ dB}, k=2$
Radiated Emissions (30MHz-1GHz)	$U = 4.72 \text{ dB}, k=2$
Radiated Emissions (>1GHz)	$U = 5.76 \text{ dB}, k=2$
Conducted emission	$U = 3.08 \text{ dB}, k=2$



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:

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

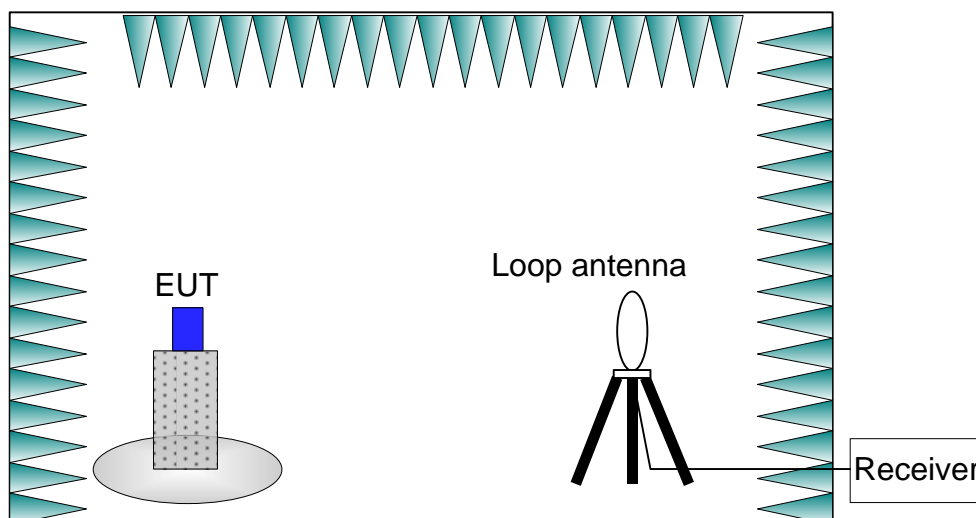


Figure B-1: Measurement Setup

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 ~ 25 °C.

B.1.4. Limits

Table B-2: Limits

Frequency Range (MHz)	E-field Strength Limit @ 30 m (μV/m)	E-field Strength Limit @ 3 m (dBμV/m)
13.560 ± 0.007	+15,848	124
13.410 to 13.553 13.567 to 13.710	+334	90
13.110 to 13.410 13.710 to 14.010	+106	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:
 $Extrapolation(dB) = 40\log_{10}(Measurement\ Distance/Specification\ Distance)$

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.NFC02, **PASS.**

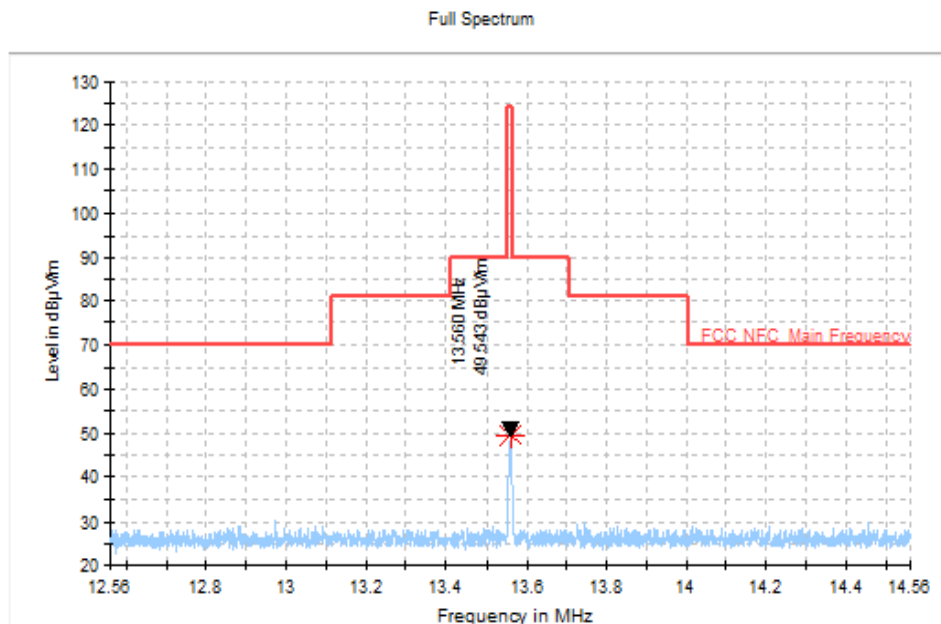


Figure B-2: Measurement results for Electric Field Strength of Fundamental and Outside the Allocated bands

Critical_Freqs

Frequency (MHz)	Max Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Azimuth (deg)
13.560000	49.54	124.00	74.46	V	194.0

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:

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

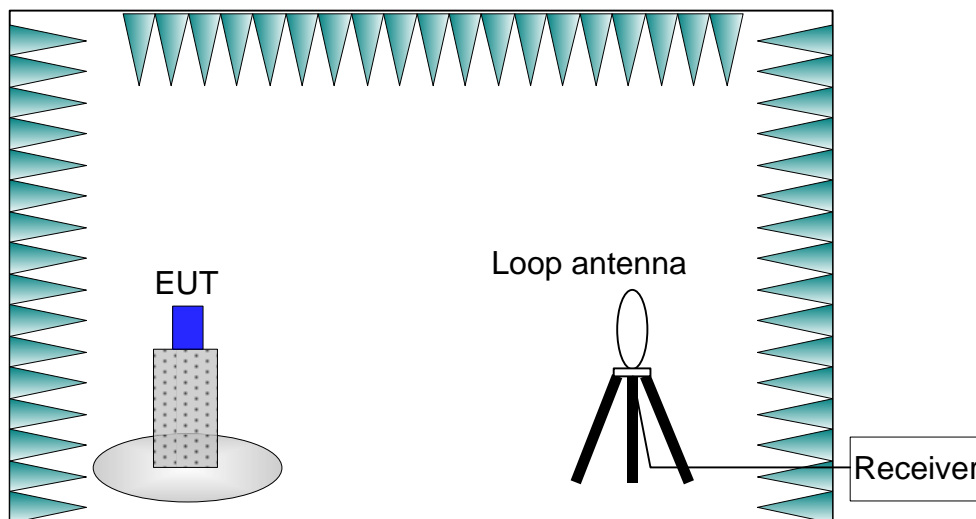


Figure B-3: Measurement Setup

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 ~ 25 °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:
 Extrapolation(dB) = $40\log_{10}(\text{Measurement Distance}/\text{Specification Distance})$

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.NFC01, **PASS**.

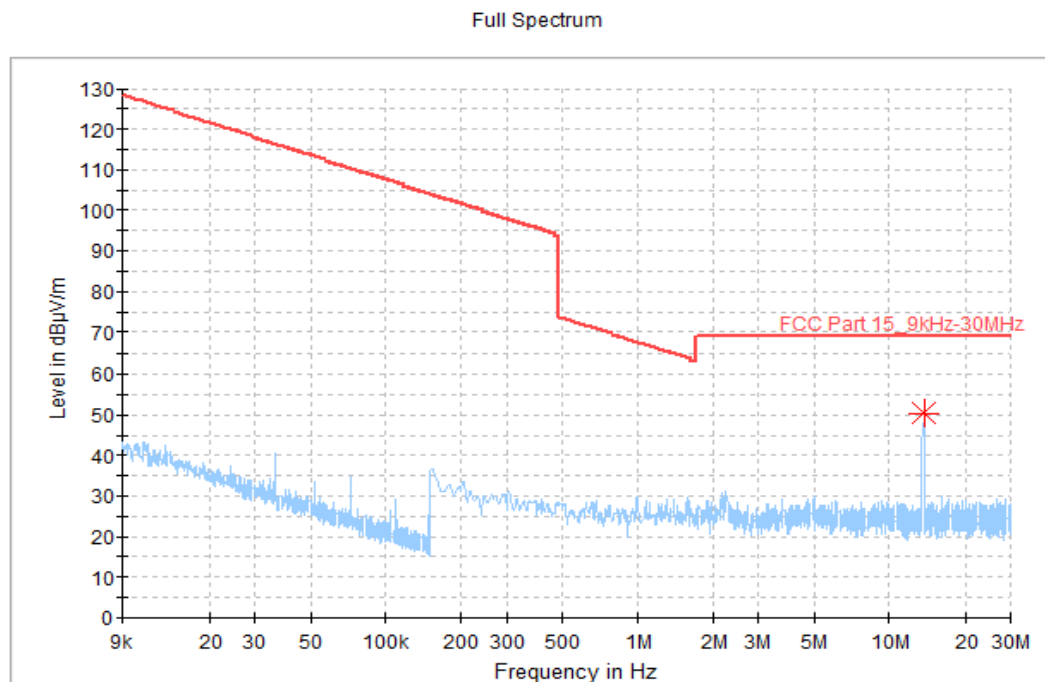


Figure B-4: Measurement results for Electric Field Radiated Emissions (< 30MHz)

Critical_Freqs

Frequency (MHz)	Max Peak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Azimuth (deg)
13.560113	50.27	69.50	19.23	V	0.0

B.3. Electric Field Radiated Emissions ($\geq 30\text{MHz}$)

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

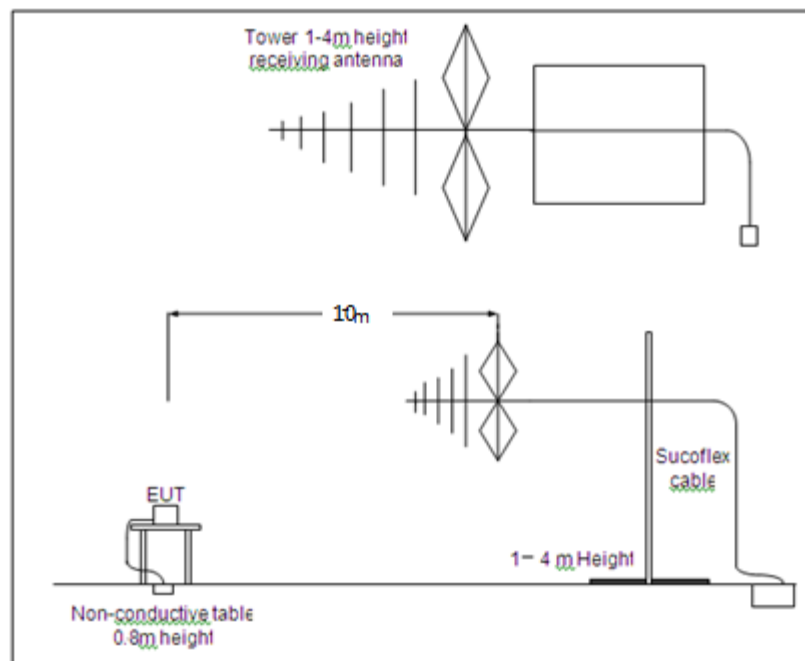


Figure B-5: Measurement Setup

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 ~ 25 °C.

B.3.4. Limits

Frequency Range (MHz)	E-field Strength Limit @ 3m (mV/m)	E-field Strength Limit @ 3m (dBµV/m)	E-field Strength Limit @ 10m (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, **PASS**.

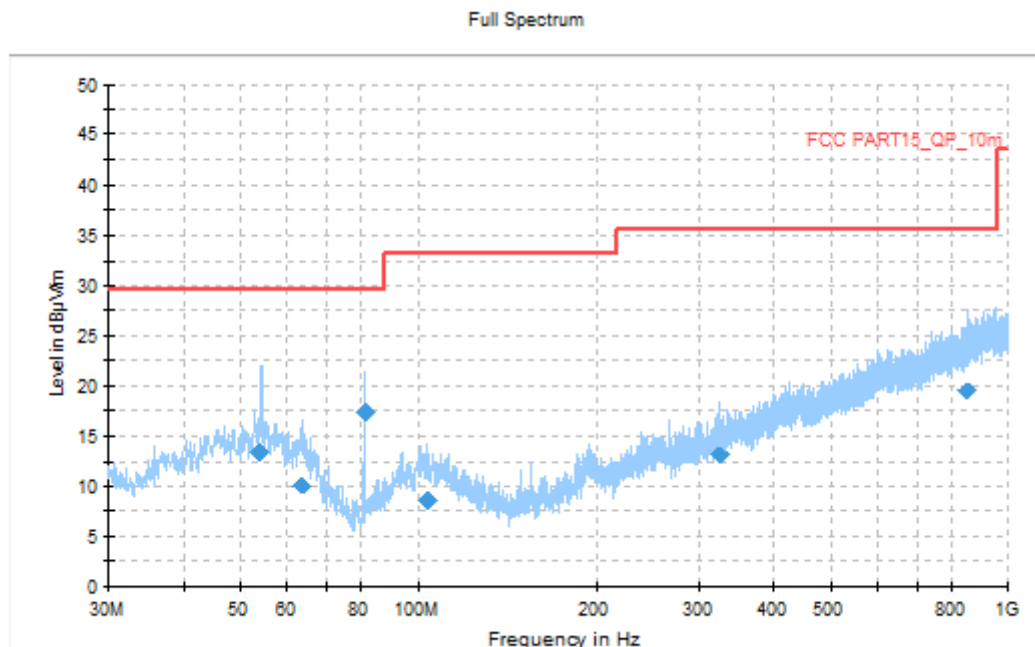


Figure B-6: Measurement results for Electric Field Radiated Emissions (≥30MHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
54.153000	13.47	29.54	16.07	123.0	V	45.0
63.368000	10.09	29.54	19.45	225.0	V	303.0
81.313000	17.39	29.54	12.15	175.0	V	264.0
103.817000	8.62	33.06	24.44	183.0	V	135.0
323.813000	13.18	35.56	22.38	225.0	H	263.0
847.031000	19.54	35.56	16.02	175.0	V	122.0

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

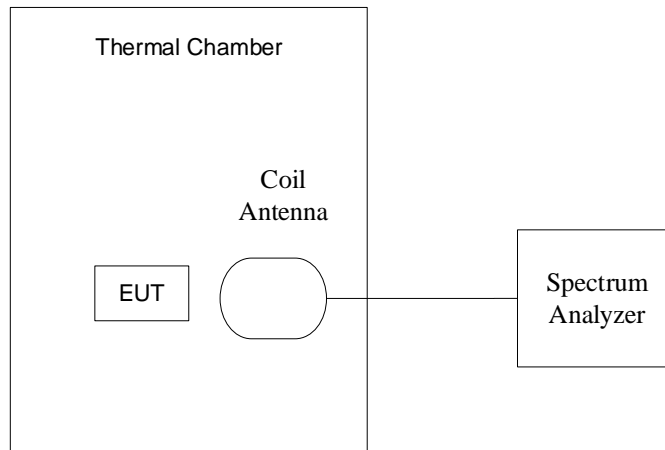


Figure B-7: Measurement Setup

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 3.85V(See 3.1)was used and the temperature was varied from -20°C to +50°C in 10°C increments using an environmental chamber.
- b) The 20°C was used and the voltages were 3.6V, 3.85V and 4.4V (The extreme low voltage ,the normal voltage and the extreme high voltage).

The details were as following:

Table B-3: Combinations of Voltage andTemperature

Test items	Voltage	Temperature
Frequency stability with respect to ambient temperature	3.85V	-20°C
		-10°C
		0°C
		10°C
		20°C
		30°C
		40°C

		50°C
Frequency stability when varying supply voltage	3.6V	20°C
	3.85V	
	4.4V	

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

Temperature	Voltage	Frequency (MHz)			
		Startup	2 Min Later	5 Min Later	10 Min Later
-20°C	3.85V	13.560688000	13.560704000	13.560711000	13.560720000
-10°C	3.85V	13.560702000	13.560711000	13.560728000	13.560752000
0°C	3.85V	13.560612000	13.560657000	13.5600675000	13.560693000
10°C	3.85V	13.560639000	13.560657000	13.560657000	13.560672000
20°C	3.85V	13.560594000	13.560063900	13.560648000	13.560657000
30°C	3.85V	13.560675000	13.560657000	13.560621000	13.560594000
40°C	3.85V	13.560585000	13.560594000	13.560594000	13.560610000
50°C	3.85V	13.560486000	13.560504000	13.560540000	13.560549000
20°C	3.6V	13.560558000	13.560558000	13.560603000	13.560603000
20°C	4.4V	13.560612000	13.560612000	13.560621000	13.560630000

Temperature	Voltage	Frequency Error (%)			
		Startup	2 Min Later	5 Min Later	10 Min Later
-20°C	3.85V	0.005	0.005	0.005	0.005
-10°C	3.85V	0.005	0.005	0.005	0.006
0°C	3.85V	0.005	0.005	0.000	0.005
10°C	3.85V	0.005	0.005	0.005	0.005
20°C	3.85V	0.004	0.000	0.005	0.005
30°C	3.85V	0.005	0.005	0.005	0.004
40°C	3.85V	0.004	0.004	0.004	0.004
50°C	3.85V	0.004	0.004	0.004	0.004
20°C	3.6V	0.004	0.004	0.004	0.004
20°C	4.4V	0.005	0.005	0.005	0.005

B.4.7. Measurement Uncertainty

Measurement uncertainty: $U = 74 \text{ Hz}$, $k=2$

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 470Hz RBW, 1.5kHz VBW and 10kHz span.

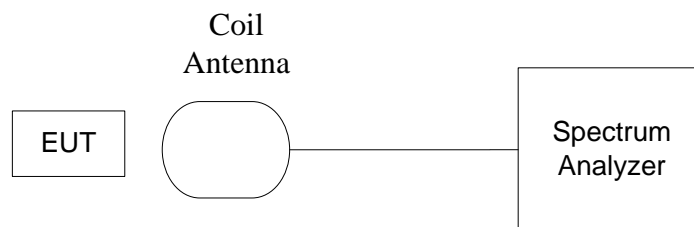


Figure B-8: Measurement Setup

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 ~ 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.

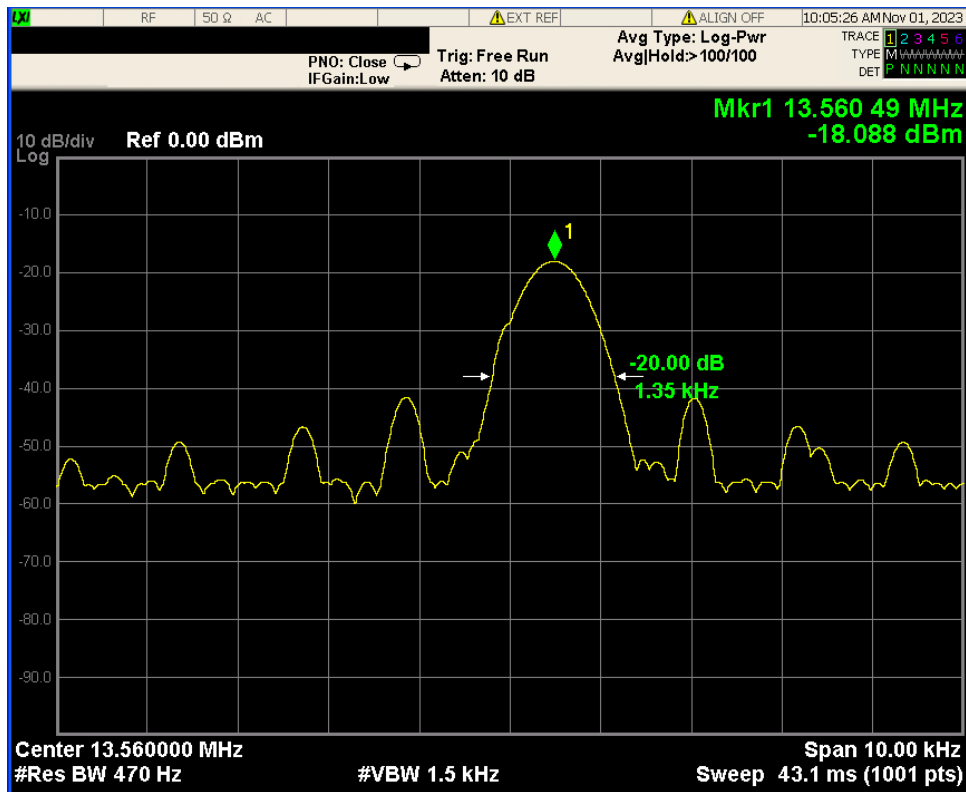


Figure B-9: Measurement results for 20dB Bandwidth

B.5.7. Measurement Uncertainty

Measurement uncertainty: $U = 74 \text{ Hz}$, $k=2$

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

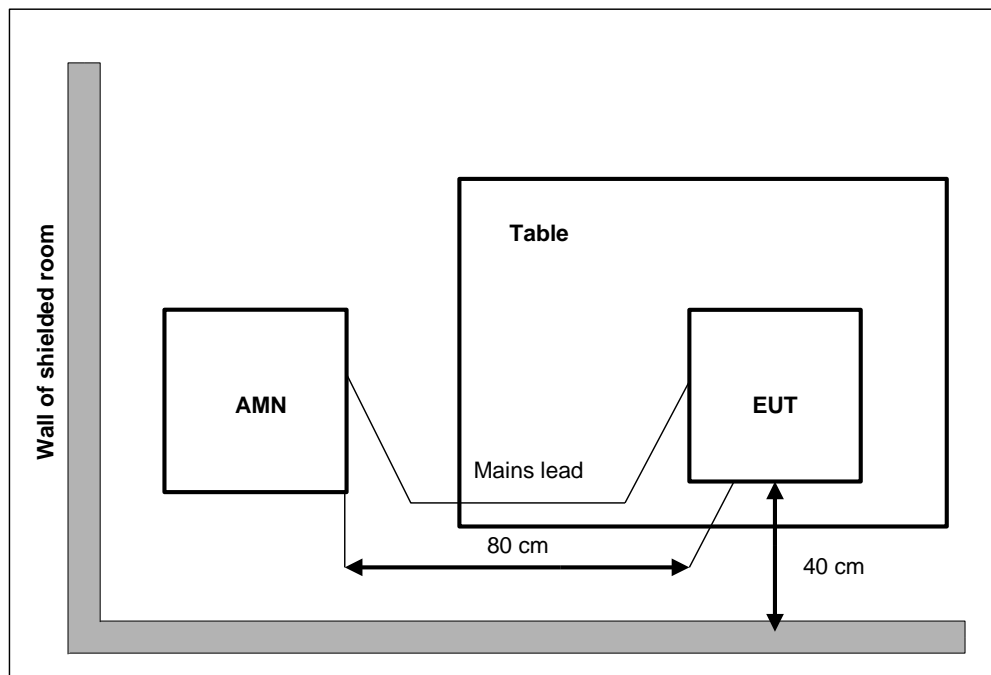


Figure B-10: Measurement Setup

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 °C.

B.6.4. Limits

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Average Limit (dB μ V)
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.NFC01, PASS.

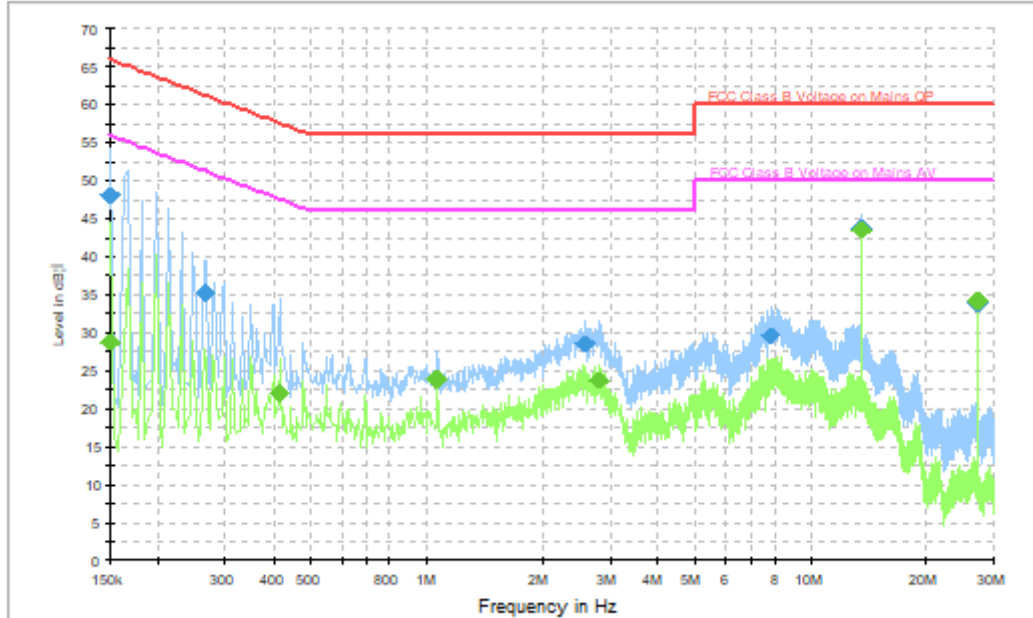


Figure B-11: Measurement results for Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	48.1	L1	20.0	17.9	66.0
0.266000	35.3	L1	19.7	25.9	61.2
2.590000	28.5	N	19.6	27.5	56.0
7.842000	29.5	L1	19.7	30.5	60.0
13.562000	43.7	L1	19.7	16.3	60.0
27.118000	34.0	L1	19.9	26.0	60.0

Final Result 2

Frequency (MHz)	Average (dBuV)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	28.8	L1	20.0	27.2	56.0
0.414000	22.1	L1	19.7	25.4	47.6
1.070000	23.9	L1	19.7	22.1	46.0
2.794000	23.7	N	19.6	22.3	46.0
13.562000	43.6	L1	19.7	6.4	50.0
27.122000	34.1	L1	19.9	15.9	50.0

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
Electric Field Radiated Emissions (< 30MHz)	Ding Zai
Electric Field Radiated Emissions (≥ 30 MHz)	Ding Zai
Conducted Emissions	Li Pengfei

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 McInturf, 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*****