

TEST REPORT No. 120924IOT01

for

Estone Technology Inc

Tablet PC

Model Name: R8

Marketing Name: /

FCC ID: NV8-R8

Hardware Version: VerD

Software Version: R802R007

Issued Date: January 5th, 2013



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 TMC Beijing.

Test Laboratory:

CNAS accreditation (ISO/IEC 17025(CNAS-CL01)): No. CNAS L0442

FCC 2.948 Listed: No.733176 IC O.A.T.S listed: No.6629A-1

TMC Beijing, Telecommunication Metrology Center of Ministry of Industry and Information Technology

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1. Test Laboratory

1.1. Testing Location

Company Name:

TMC Beijing, Telecommunication Metrology Center of MIIT

Address:

No 52, Huayuanbei Road, Haidian District, Beijing, P.R.China

Postal Code:

100191

Telephone:

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+86-10-62304633-2504

1.2. Testing Environment

Ambient Temperature:

15 ~ 25 °C

Relative Humidity:

30 ~ 60 %

Air pressure

860 ~ 1060 mbar

See Section 5 and corresponding parts of this report for the general requirements and recorded climatic conditions for each test environments.

1.3. Project Data

Receipt of Sample:

September 24th, 2012

Testing Start Date:

September 25th, 2012

Testing End Date:

December 3rd, 2012

1.4. Signature

Yang Jun

rang oun

(Prepared this test report)

Sun Qian

(Reviewed this test report)

Wang Hongbo

Deputy Director of the laboratory

(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: Estone Technology Inc

Address /Post: 3324 secor road #8, Toledo, OH

City: Toledo
Postal Code: 43606
Country: America

Telephone: (419) 536 5299 Fax: (419) 536 5406

2.2. Manufacturer Information

Company Name: Shenzhenshi ChuangZhiCheng Technology Co., Ltd Manufacturing

Center

Address /Post: 3F, Block A2, A3, Beida Funder Hi-tech park, Songbai Road,

ShiyanStreet, Baoan District, Shenzhen

City: Shenzhen
Postal Code: 518000
Country: China

Telephone: 0755-26610323 Fax: 0755-26612059



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

3.1. About EUT

Description:	Tablet PC
Model Name:	R8
Marketing Name:	1
FCC ID:	NV8-R8
IC ID:	1
With RFID Function:	Yes
Frequency:	13.56 MHz
Antenna:	Integral Antenna
Operation Voltage:	DC 9 ~ 12.6 V
Operation Temperature:	-10 ~ 50 °C

Note1: Photographs of EUT are shown in ANNEX A of this test report. For component list, please refer to documents of the manufacturer.

Note2: High and low voltage values of extreme conditions are given by the manufacturer.

3.2. Internal Identification of EUT Used during the Test

Mobile phone identification

EUT ID* SN / IMEI HW Version SW Version

EUT1 CZC1260024620020 VerD R802R007

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

3.3. Internal Identification of AE Used during the Test

AE ID* Description Model

AE1 charger HKA03619021-6C

AE1

Model HKA03619021-6C

Manufacturer huntkey

Length of cable /

3.4. General Description

The EUT is a Tablet PC with integrated antennas. It supports CDMA 800/1900 MHz bands and revA.

It has RFID(@13.56MHz), MP3, Camera, USB memory, Bluetooth, WLAN (802.11b/g/n/20MHz/40MHz/MIMO).

It consists of normal options: Charger.

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



Manuals and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

Manufacturer's declaration: RFID work does not depend on other access methods, such as WLAN, GPRS, etc.

3.5. EUT Set-ups

EUT Set-up No.	Combination of EUT and AE	Remarks
Set. RFID01	EUT1+AE1	*
Set. RFID02	EUT1	

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

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



4. Reference Documents

4.1. Documents Supplied by the Applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Regulations and Standards

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;	2012
	General Rules and Regulations.	
CFR 47 Part 15	Part 15 — Radio Frequency Devices.	2012
	Subpart C — Intentional Radiators.	
	§ 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 C63.4	American National Standard for Methods of Measurement	2009
	of Radio-Noise Emissions from Low-Voltage Electrical and	
	Electronic Equipment in the Range of 9 kHz to 40 GHz.	



5. LABORATORY ENVIRONMENT

Semi-Anechoic Chamber SAC-2 (10m×6.7m×6.15m) did not exceed following limits along the testing:

Temperature	Min. = 15 °C, Max. = 25 °C
Transform Participant Control of the	Section of the sectio
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness Electrical insulation	> 110 dB
Ground system resistance	> 2 MΩ < 1 Ω
Normalised site attenuation (NSA)	< 1 52 < ±3.5 dB, 3 m distance, from 30 to 1000 MHz
Site voltage standing-wave ratio (SVSWR)	Between 0 and 6 dB, from 1 to 18 GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 3000 MHz

Fully-Anechoic Chamber FAC-3 (8.6m×6.1m×3.85m) did not exceed following limits along the testing:

Temperature	Min. = 15 °C, Max. = 25 °C
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 2 MΩ
Ground system resistance	<1 Ω
Site voltage standing-wave ratio (S _{VSWR})	Between 0 and 6 dB, from 1 to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 4000 MHz

Conducted Chamber did not exceed following limits along the testing:

Temperature	Min. = 15 °C, Max. = 25 °C
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 2 MΩ
Ground system resistance	< 0.5 Ω

Control Room did not exceed following limits along the testing:

germete en vezes en en en en en en entrez de menten en e	100 - 100 -
Temperature	Min. = 15 °C, Max. = 25 °C
Relative humidity	Min. =30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 2 MΩ
Ground system resistance	< 0.5 Ω



6. SUMMARY OF TEST RESULTS

6.1. Summary of Test Results

No	Test Cases	Clause in Regulation	Section in This Report	Verdict
и	Electric Field Strength of	OFD 47 0 45 005(5)	A 4	P(Set. RFID01)
1	Fundamental Emissions	CFR 47 § 15.225(a)		
•	Electric Field Strength of	CFR 47 § 15.225(b)	A.1	D/Cot DEIDO4)
2	Outside the Allocated Bands	CFR 47 § 15.225(c)		P(Set. RFID01)
3	Electric Field Radiated	CFR 47 § 15.209	A.2	P(Set. RFID01)
3	Emissions	CFR 47 § 15.225(d)	A.3	P(Set. RFID01)
4	Frequency Tolerance	CFR 47 § 15.225(e)	A.4	P(Set. RFID02)
5	20dB Bandwidth	CFR 47 § 15.215(c)	A.5	P(Set. RFID02)
6	Conducted Emissions	CFR 47 § 15.207	A.6	P(Set. RFID01)
The measurement is carried out according to ANSI C63.4. See ANNEX A for details.				

Test Conditions:

For this report, all the test cases listed above were tested under normal Temperature, Voltage, Humidity, and Air Pressure. The specific conditions are as following:

furnitity, and All 1963are. The apecine conditions are as following.		
	T min	-20 °C
Temperature	T nom	20 °C
	T max	50 ℃
Voltage	V min	9 V
	Vnom	10.8 V
	V max	12.6 V
Humidity	H nom	44 %
Air Pressure	Anom	1010 mbar

6.2. Terms Used in the Summary of Test Results

Terms Used in Condition Column:

T nom	Normal Temperature
T min	Low Temperature
T max	High Temperature
Vnom	Normal Voltage
V min	Low Voltage



V max	High voltage
Hnom	Norm Humidity
Anom	Norm Air Pressure

Terms Used in Verdict Column:

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

Abbreviations:

AC	Alternating Current		
AFH	Adaptive Frequency Hopping		
BW	Band Width		
E.I.R.P.	equivalent isotropical radiated power		
ISM	Industrial, Scientific and Medical		
RF	Radio Frequency		
Tx	Transmitter		

6.3. Statements

The test cases listed in Section 6.1 of this report for the EUT specified in Section 3 were performed by TMC according to the reference documents in Section 4.

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



7. Test Equipments Utilized

No.	Name	Туре	Serial No.	Manufacturer	Calibration Due Date
1.	NFC Tester	E1141	000019	AT4 Wireless	1
2.	RFID Tester	NI-R100	16929DF	VI	2012-12-06
3.	H-field Antenna	HFH2-Z2	829324/0007	R&S	2014-06-02
4.	Spectrum Analyzer	RSA3408A	B 010277	Tektronix	2013-06-06
5.	Test Receiver	ESU26	100376	R&S	2013-11-07
6.	Spectrum Analyzer	E4440A	MY48250642	Agilent	2013-03-04
7.	EMI Antenna	VULB 9163	514	Schwarzbeck	2014-11-10
8.	Test Receiver	ESCI	100344	R&S	2013-03-28
9.	LISN	ESH2-Z5	829991/012	R&S	2013-04-16
10.	Signal Generator	SMF100A	101295	R&S	2013-11-08
11.	Power Meter	NRVD	830954/042	R&S	2012-12-13
12.	Power Amplifier	250W1000	26339	AR	1
13.	Power Amplifier	AS0104-100/55	1034090	MILMEGA	1
14.	EMS Antenna	HL046	358714	R&S	1
15.	EMS Antenna	AT4002A	321428	AR	1
16.	Signal Generator	SML01	106247	R&S	2013-04-27
17.	Power Meter	NRVD	102040	R&S	2013-05-27
18.	Power Amplifier	150A220	0326453	AR	2015-03-01
19.	Coupling/decoupling network	CDN-M2/32	9912001C	EM TEST	2013-07-31
20.	Current Clamp	F-120-9A	182	FCC	2013-04-03
21.	Electrostatic Discharge Simulator	dito	V0805103393	EM TEST	2013-05-17
22.	Surge Generator	NSG2050	313	SCHAFFNER	2013-09-18
23.	Electrical Fast Transients / Burst Generator	NSG2025	2054	SCHAFFNER	2013-08-31
24.	Ultr-compact Simulator	UCS500-N7	V0940105198	EM TEST	2013-04-24
25.	Universal Radio Communication Tester	CMU200	116455	R&S	2013-05-20
26.	Universal Radio Communication Tester	CMU200	100680	R&S	2013-09-05
27.	Thermal Chamber	SH-641	92009470	ESPEC	2013-02-18
28.	Coil antenna	T	1	VI	1



ANNEX A: MEASUREMENT RESULTS

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

A.1.1. Reference

See Clause 13.5, Clause 13.4, Clause 8, and Annex E of ANSI C63.4-2009 specifically. See Clause 4, Clause 5, and Clause 6 of ANSI C63.4-2009 generally.

A.1.2. Measurement Methods

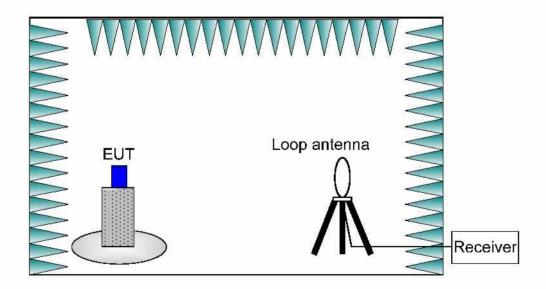
The transmitter carrier output levels (E-Field) from the EUT are measured in a semi-anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The center of the receiving loop antenna is 1.0 meter above the ground. The E-field 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:

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

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

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



A.1.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of RFID (See 3.5). The EUT is powered by a travel adapter.



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

A.1.4. Limits

Frequency Range (MHz)	E-field Strength Limit @ 30 m (µV/m)	E-field Strength Limit @ 3 m (dBµV/m) 124	
13.560 ± 0.007	+15,848		
13.410 to 13.553	1224	90	
13.567 to 13.710	+334		
13.110 to 13.410	1100	81	
13.710 to 14.010	+106		

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) = 40log₁₀ (Measurement Distance/Specification Distance)

A.1.5. Measurement Results

Measurement results of normal conditions see Figure A-1 for different set-ups of EUT. The result displayed take into account applicable antenna factors and cable losses.

Conclusions: Set. RFID01, PASS.

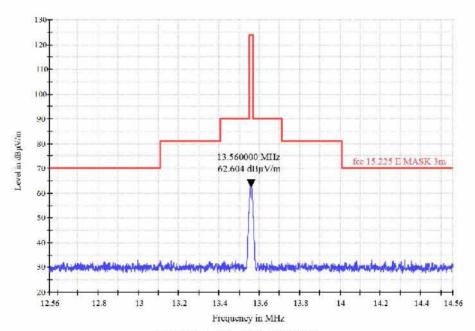


Figure A-1: Set. RFID01

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

A.2.1. Reference



See Clause 13.4, Clause 8 and Annex E of ANSI C63.4-2009 specifically. See Clause 4, Clause 5, and Clause 6 of ANSI C63.4-2009 generally.

A.2.2. Measurement Methods

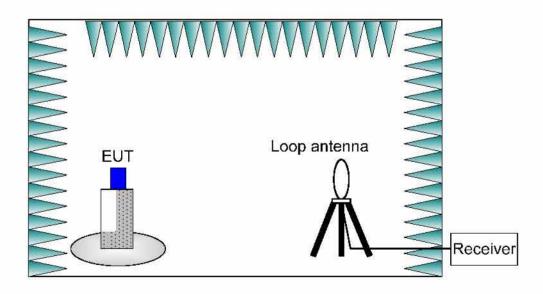
The transmitter carrier output levels (E-Field) from the EUT are measured in a semi-anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The center of the receiving loop antenna is 1.0 meter above the ground. The E-field 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 $(dB\mu V/m) = Rx (dB\mu V) + Cable Loss (dB) + AF@3m (dB/m)$



A.2.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of RFID (See 3.5).

The EUT is powered by a travel adapter.

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



A.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) = $40\log_{10}$ (Measurement Distance/Specification Distance)

A.2.5. Measurement Results

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

Conclusions: Set. RFID01, PASS.

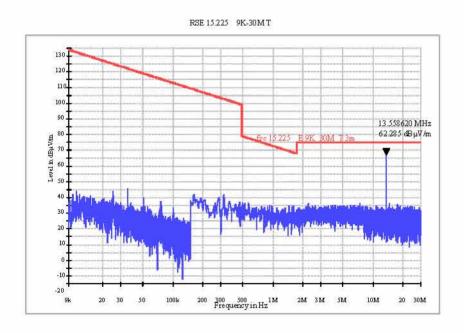


Figure A-2: Set. RFID01

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

A.3.1. Reference

See Clause 13.4, Clause 8, and Annex E of ANSI C63.4-2009 specifically. See Clause 4, Clause 5, and Clause 6 of ANSI C63.4-2009 generally.

A.3.2. Measurement Methods



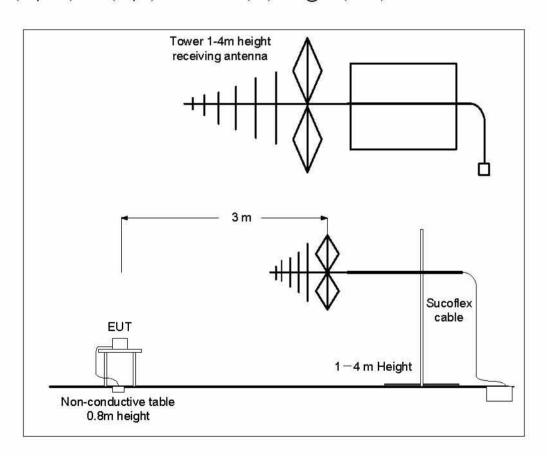
The electric field radiated emissions from the EUT are measured in a semi-anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The receiving antennas connected to a measurement receiver comply with Clause 15 of ANSI C63.2-1996 and Clause 4.1.5 of ANSI C63.4-2009. 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	

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

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



A.3.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of RFID (See 3.5).

EUT1 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.



A.3.4. Limits

Frequency Range (MHz)	E-field Strength Limit @ 3m (mV/m)	E-field Strength Limit @ 3m (dBµV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46

A.3.5. Measurement Results

Measurement results of normal conditions see Figure A-3 for different set-ups of EUT. The result displayed take into account applicable antenna factors and cable losses.

Conclusions: Set. RFID01, PASS.

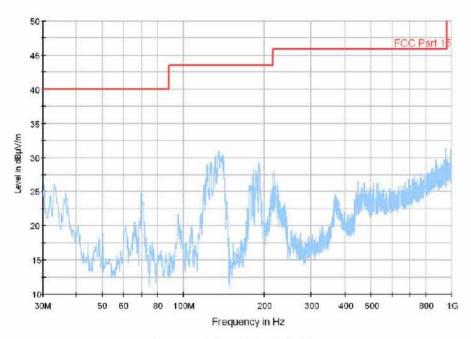


Figure A-3: Set. RFID01

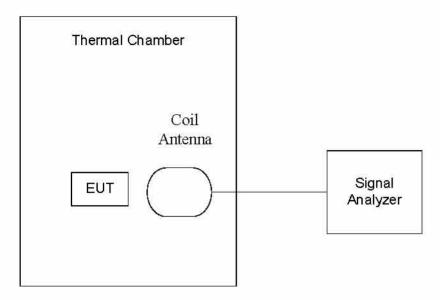
A.4. Frequency Tolerance

A.4.1. Reference

See Clause 13.6 of ANSI C63.4-2009 specifically. See Clause 4, Clause 5, and Clause 6 of ANSI C63.4-2009 generally.

A.4.2. Measurement Methods





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.

A.4.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of without modulation (See 3.5). EUT1 had been not connected to a travel adapter.

Operation Temperature: T min, T nom, and T max with V nom.

Operation Voltage: V min and V max with T nom.

A.4.4. Test Layouts

See A.4.2.

A.4.5. Limits

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

A.4.6. Measurement Results

Measurement results see Table A-1 for different test conditions.

Conclusions: Set. RFID02, PASS.

Table A-1: Frequency Stability VS Temperature and Voltage



Tomporatura	Voltage	Frequency Error (MHz)			
Temperature	Voltage	Startup	2 Min Later	5 Min Later	10 Min Later
T min	V nom	13.5598813	13.5598969	13.5599063	13.5599188
T max	V nom	13.5598063	13.5597657	13.5597407	13.5597063
T nom	V nom	13.5596969	13.5596969	13.5597000	13.5597000
T nom	V min	13.5597750	13.5597656	13.5597594	13.5597563
T nom	V max	13.5596969	13.5596969	13.5597000	13.5597000

Tomporaturo	Voltage -	Frequency Error (%)			
Temperature		Startup	2 Min Later	5 Min Later	10 Min Later
T min	V nom	-0.001	-0.001	-0.001	-0.001
T max	V nom	-0.001	-0.002	-0.002	-0.002
T nom	V nom	-0.002	-0.002	-0.002	-0.002
T nom	V min	-0.002	-0.002	-0.002	-0.002
T nom	V max	-0.002	-0.002	-0.002	-0.002

A.5. 20dB Bandwidth

A.5.1. Reference

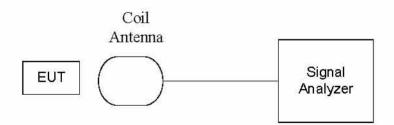
See Clause 13.7 of ANSI C63.4-2009 specifically.

See Clause 4, Clause 5, and Clause 6 of ANSI C63.4-2009 generally.

A.5.2. Measurement Methods

The transmitter output signal was picked up by coil antenna to the spectrum analyzer.

The transmitter output signal was picked up by coil antenna connected to the spectrum analyzer. The bandwidth of the center frequency was measured with 100Hz RBW, 300Hz VBW and 5kHz span.



A.5.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of RFID and without modulation (See 3.5).

EUT1 had been not connected to a travel adapter...

During the measurements, the ambient temperature is in the range of 15 ~ 25 °C.



A.5.4. Test Layouts

See A.5.2.

A.5.5. Limits

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

A.5.6. Measurement Results

Measurement results see Figure A-4 and Figure B-5.

Conclusions: Set. RFID02, PASS.

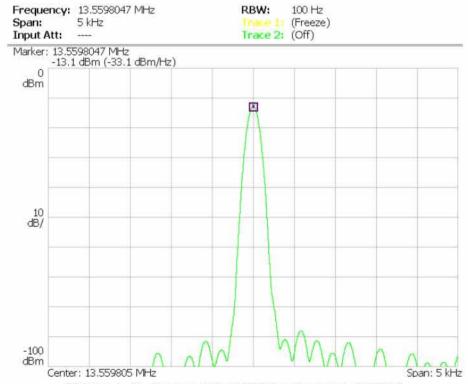


Figure A-4: Test result of EUT1 at test set. RFID02



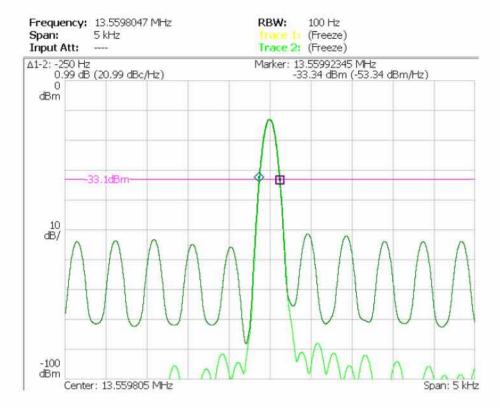


Figure A-5: Test result of EUT1 at test set. RFID02

A.6 Conducted emission

A.6.1. Reference

See Clause 13.3 and Clause 7 of ANSI C63.4-2009 specifically. See Clause 4, Clause 5, and Clause 6 of ANSI C63.4-2009 generally.

A.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:

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

A.6.3. EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state of RFID (See 3.5). The EUT is powered by a travel adapter.

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



A.6.4. Limits

Frequency range (MHz)	Quasi-peak Limit (dΒμV)	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		

A.6.5. Measurement Results

Measurement results see Figure A-6. **Conclusions:** Set. RFID01, **PASS**.

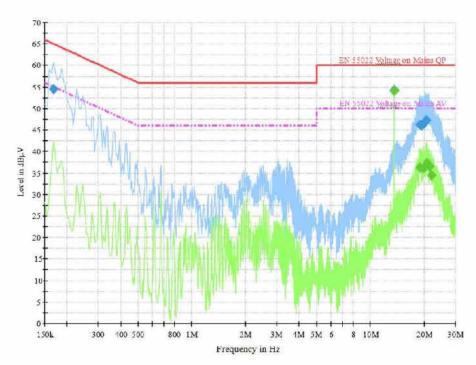


Figure A-6: Test result of EUT1 at test set. RFID01

Final Result 1

Frequency	QuasiPeak	PE	Line	Corr.	Margin	Limit
(MHz)	(dBµV)			(dB)	(dB)	(dBµV)
0.168000	54.6	GN	L1	10.0	10.4	65.1
13.560000	54.3	GN	L1	9.7	5.7	60.0
18.910500	46.2	GN	L1	9.6	13.8	60.0
19.473000	45.9	GN	L1	9.6	14.1	60.0
20.022000	46.6	GN	L1	9.5	13.4	60.0
20.575500	47.3	GN	L1	9.5	12.7	60.0

Final Result 2



Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
13.560000	54.2	GN	L1	9.7	-4.2	50.0
18.861000	36.4	GN	L1	9.6	13.6	50.0
19.950000	36.0	GN	N	9.6	14.0	50.0
20.715000	37.4	GN	L1	9.5	12.6	50.0
21.529500	36.5	GN	L1	9.5	13.5	50.0
22.101000	34.6	GN	L1	9.5	15.4	50.0

Note: The measurement result at 13.56MHz is the fundamental emission of RFID signal.

END OF REPORT