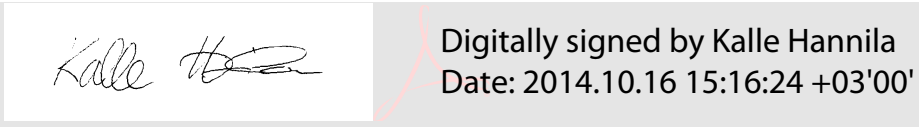
FCC Part 15C Compliance Test Report

Test Report no.:	FCC15CNFC_RM-1041_15.docx	**Date of Report:**	15-Oct-2014
Number of pages:	20	**Customer's Contact person:**	Hu Helen
Testing laboratory:	TCC Microsoft Beijing Laboratory Beijing Economic and Technological Development Area No.5 Donghuan Zhonglu Beijing PRC China 100176 Tel. +86 10 8711 8888 Fax. +86 10 8711 4550	**Customer:**	Microsoft Beijing Economic and Technological Development Area No.5 Donghuan Zhonglu Beijing PRC China 100176 Tel. +86 10 8711 8888 Fax. +86 10 8711 4550
FCC listing no.: **IC recognition no.:**	975940 661AH-1		
Tested devices/ accessories:	**Phone RM-1041 / Battery Samsung BV-T5A / AC-Charger AC-20E / Headset WH-108 / Wireless charger cover CC-3086 /Dummy Battery SD-233R**		
FCC ID:	QTLRM-1041	**IC:**	
Supplement reports:	-		
Testing has been carried out in accordance with:	**CFR 47, FCC rules Part 15 Subpart C, ANSI C63.4 (2009), IC standards. Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".**		
Documentation:	The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 15 years at TCC Microsoft.		
Test Results:	**The EUT complies with the requirements in respect of all parameters subject to the test.** The test results relate only to devices specified in this document		
Date and signature for the contents:			

Kalle Hannila, System Manager, EMC

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

1. Summary for FCC Part 15C Compliance Test Report

Date of receipt	07-Jul-2014
Testing completed	18-Jul-2014
The customer's contact person	Hu Helen
Test Plan referred to	T:\Projects\RM-1038\TestPlan\RS_testplan_RM-1038.xlsm
Notes	-
Document name	FCC15CNFC_RM-1038_20.docx

1.1. EUT and Accessory Information

The EUT is a mobile phone with following features:
GSM/WCDMA/WLAN/Bluetooth
The EUT is tested with maximum rated TX power.

Devices under tests

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-1038	004402479232336	0201	-	02030.00000.14244.22000	54433
Battery	Samsung BV-T5A	4175354224C10106730;0670738	Proto V5	-	-	54453
AC-Charger	AC-20E	486867247243050034l;0675628	-	-	-	54462
Headset	WH-108	3022D71	-	-	-	54456
Wireless charger cover	CC-3086	040-121531	-	-	-	54440
Phone	RM-1038	004402479232278	0201	-	02030.00000.14244.22000	54434
Battery	Samsung BV-T5A	4175354224C10106893;0670738	Proto V5	-	-	54452
AC-Charger	AC-20E	486867247243050026l;0675628	-	-	-	54463
Headset	WH-108	3022D71	-	-	-	54459
Wireless charger cover	CC-3086	040-121531	-	-	-	54438
Dummy battery	SD-233R	DV1450401	-	-	-	54473
Phone	RM-1038	004402479235016	0201	-	02030.00000.14244.22000	54429
Battery	Samsung BV-T5A	4175354224C10106707;0670738	Proto V5-	-	-	54450
Wireless charger cover	CC-3086	040-121531	-	-	-	54447
AC-Charger	AC-20E	486867247243050031l;0675628	-	-	-	54461
Headset	WH-108	3022D71	-	-	-	54455

1.2. Summary of Test Results

NFC:

Section in CFR 47	Section in RSS-GEN or RSS-210	Name of the test	Result
15.209	2.6	Radiated emission below 30 MHz	PASSED
15.209	A2.6	Radiated emission above 30 MHz	PASSED
15.225(a-d)	A2.6	Field strength in the 13.56 MHz band	PASSED
	4.6.1	Occupied Bandwidth	PASSED
15.225(e)	A2.6	Frequency stability, temperature variation	PASSED
15.225(e)	A2.6	Frequency stability, voltage variation	PASSED
15.207	7.2.2	AC power line conducted emission	PASSED

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

The test results of QTLRM-1038 are re-used for certification of the QTLRM-1041. The table above indicates the results which will be re-used.

PASSED	The EUT complies with the essential requirements in the standard.
FAILED	The EUT does not comply with the essential requirements in the standard.
NP	The test was not performed by the TCC Microsoft Laboratory.

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

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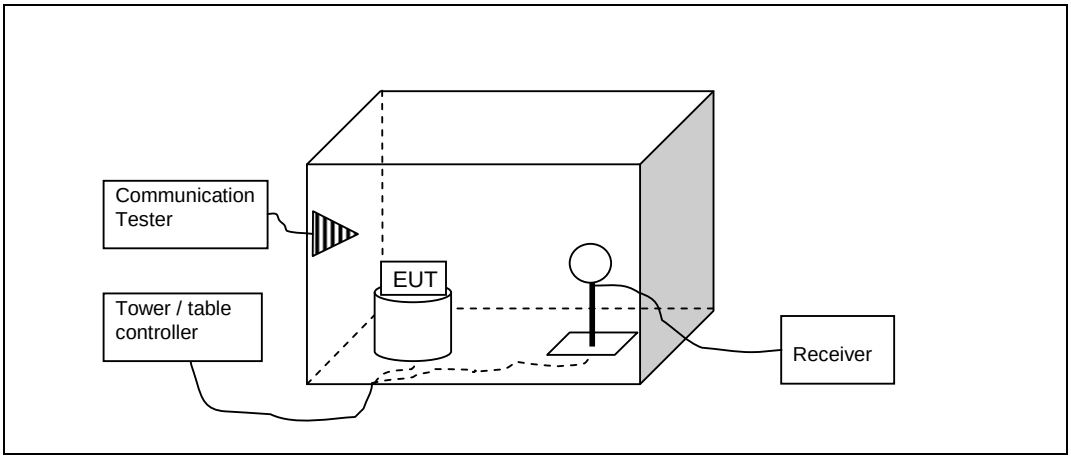
TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

2. Radiated emission below 30 MHz
(FCC 15.209, RSS-210 2.6)

EUT with DUT number	RM-1038, DUT 54429
Accessories with DUT numbers	Samsung BV-T5A, DUT 54450 ; CC-3086, DUT 54447 ; AC-20E, DUT 54461 ; WH-108, DUT 54455
Operation Voltage [V] / [Hz]	115 / 60
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	23/57/100.2
Date of measurements	17-Jul-2014
Measured by	Gao Sherina

2.1.1 Test setup



2.2. Test method and limit

The measurement is made according to ANSI C63.4-2009 and RSS-GEN as follows:

The measurement distance is 3 m.

The limit line has been adjusted with the distance correction factor
(+40 dB for 30 m distance, +80 dB for 300 m distance).

The measurement is divided into the Preliminary Measurement and the Final Measurement.
The suspected frequencies are searched for in Preliminary Measurement with measuring antenna at fixed height using 2-axis EUT position system, set on the turntable, which is rotated 360 degrees.
For all identified emissions, the antenna is adjusted for maximum reading.

The measurement results are obtained as described below:

E *[dBµV/m]* = U_{RX} + *20 dB [1/m]* + L_{CABLES}

Where U_{RX} is receiver reading, *20 dB* the antenna factor of the loop antenna and *L* the cable attenuation.

Limits for radiated emissions measurements (3 m measurement distance)

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

Frequency range [MHz]	Limit [µV/m]	Distance [m]	Detector	RBW [kHz]
0.009 - 0.09	2400 / f[kHz]	300	Pk & Avg*	0.2
0.09 - 0.11	2400 / f[kHz]	300	QP	0.2
0.11 - 0.15	2400 / f[kHz]	300	Pk & Avg	0.2
0.15 - 0.49	2400 / f[kHz]	300	Pk & Avg*	9
0.49 - 1.705	24000 / f[kHz]	30	QP	9
1.705 - 30	30	30	QP	9

* These are average limits. The peak limit is 20 dB above the average limit.

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

2.3. NFC test results

MaxPeak

Frequency [MHz]	Reading [dBµV/m]	Limit [µV/m]	Distance CF [dB]	Limit @ 3m [dBµV/m]	Height [cm]	Pol	Results
0.009	69.3	266.67	80	148.52	170	H	PASSED
0.0093	69.29	258.06	80	148.24	170	H	PASSED
0.0098	69.5	244.90	80	147.78	170	H	PASSED
0.0102	69.14	235.29	80	147.48	170	H	PASSED

Average

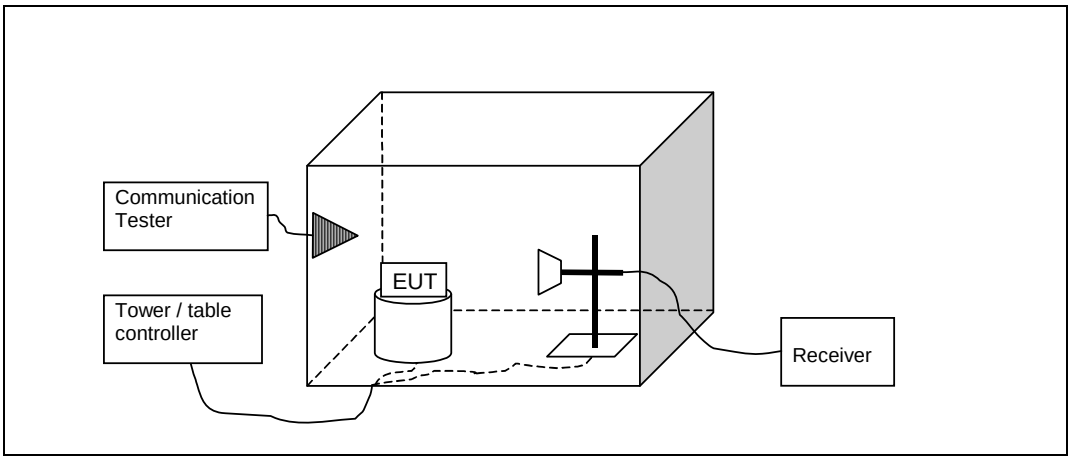
Frequency [MHz]	Reading [dBµV/m]	Limit [µV/m]	Distance CF [dB]	Limit @ 3m [dBµV/m]	Height [cm]	Pol	Results
0.009	65.23	266.67	80	128.52	170	H	PASSED
0.0093	65.27	258.06	80	128.24	170	H	PASSED
0.0098	66.1	244.90	80	127.78	170	H	PASSED
0.0102	65.91	235.29	80	127.48	170	H	PASSED

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

3. Radiated emission above 30 MHz
(FCC 15.209, RSS-210 A2.6)

EUT with DUT number	RM-1038, DUT 54429
Accessories with DUT numbers	Samsung BV-T5A, DUT 54450 ; CC-3086, DUT 54447 ; AC-20E, DUT 54461 ; WH-108, DUT 54455
Operation Voltage [V] / [Hz]	115/60
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	23/59/100.3
Date of measurements	18-Jul-2014
Measured by	Gao Sherina

3.1.1 Test setup



3.2. Test method and limit

The measurement is made according to the ANSI C63.4-2009 and RSS-GEN as follows:
The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with absorbers on the floor and measuring antenna at fixed height using 2-axis EUT position system.

The Final Measurement is performed in the Semi-Anechoic Chamber with conducting metal floor, if the Preliminary Measurement results are closer than 20 dB to the permissible value.

The EUT is placed at nonconductive plate at the turntable center.

For each suspected frequency, the turntable is rotated 360 degrees and antenna is scanned from 1 to 4 m. This is repeated for both horizontal and vertical receive antenna polarizations.

The emissions less than 20 dB below the permissible value are reported.

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

The measurement results are obtained as described below:

$E\ [dB\mu V/m] = U_{RX} + A_{TOT}$

Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable loss, antenna factor and preamplifier gain ($A_{TOT} = L_{CABLES} + A_F - G_{PREAMP}$).

Limits for spurious radiated emissions measurements (3 m measurement distance)

Frequency range [MHz]	Limit [µV/m]	Limit [dBµV/m]	Detector
30 - 88	100	40	Quasi peak
88 – 216	150	43.5	Quasi peak
216 – 960	200	46	Quasi peak
960 – 1000	500	54	Quasi peak
Above 1000	500	54	Average
Above 1000	5000	74	Peak

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

3.3. NFC test results

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

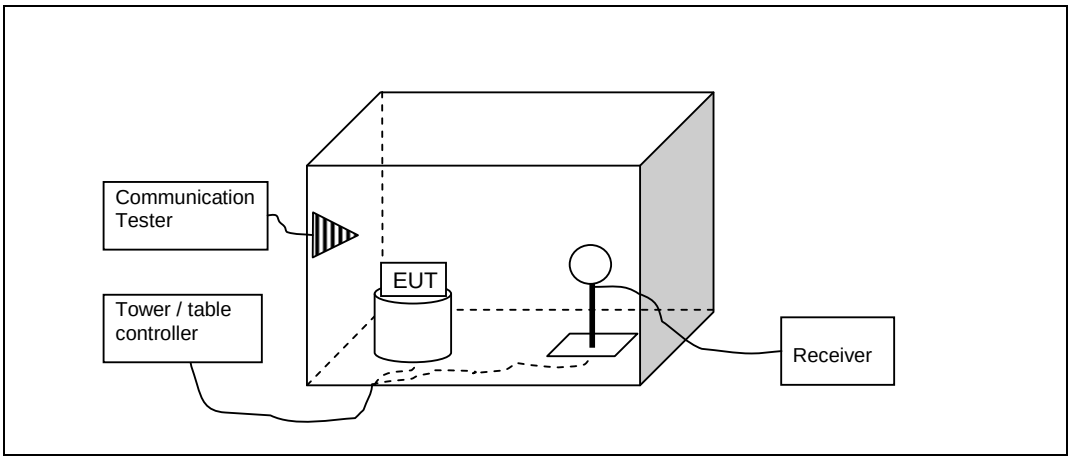
Frequency [MHz]	E [dBµV/m]	E [µV/m]	U_{RX} [dBµV]	A_{TOT} [dB]	Limit [dBµV/m]	Margin	Results
30.42	38.08	80.168	45.88	-7.8	40	1.92	PASSED
30.48	35.94	62.661	43.74	-7.8	40	4.06	PASSED
30.75	37.49	74.903	45.49	-8	40	2.51	PASSED

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

4. Field strength in the 13.56 MHz band

EUT with DUT number	RM-1038, DUT 54429
Accessories with DUT numbers	Samsung BV-T5A, DUT 54450 ; CC-3086, DUT 54447 ; AC-20E, DUT 54461 ; WH-108, DUT 54455
Operation Voltage [V] / [Hz]	115 / 60
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	23/57/100.2
Date of measurements	17-Jul-2014
Measured by	Gao Sherina

4.1.1 Test setup



4.2. Test method and limit

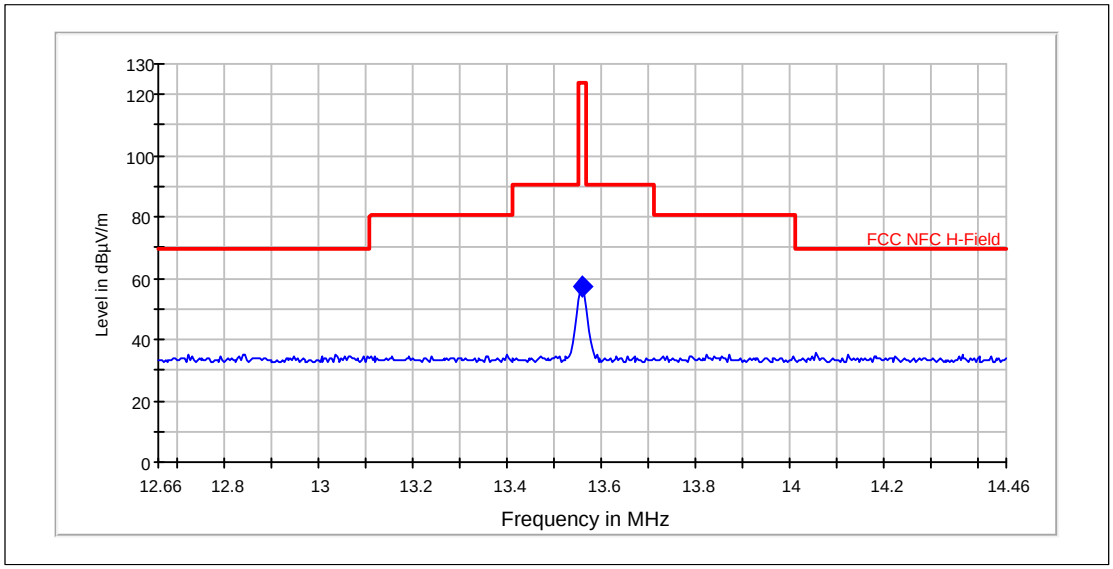
The measurement is made according to EN 302 291-01, Section 7.1.1
The measuring distance was 3 meter in RF anechoic chamber.

The Result [dBµA/m] is derived from formula:
Result [dBµA/m] = Result [dBµV/m] – 31.5 dBohm.
Where -31.5 stands for magnetic field to electric field conversion for HFH2-Z4 loop antenna.

TCC Microsoft Beijing Laboratory
Beijing Economic and Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

4.3. NFC test results

Radiated H-Field, 3 meter distance



QuasiPeak

Frequency [MHz]	Result [dBµV/m]	Limit [dBµV/m]	Result [dBµA/m]	Pol	Results
13.558	57.49	124	25.99	H	PASSED

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

5. Occupied bandwidth

EUT with DUT number	RM-1038, DUT 54434
Accessories with DUT numbers	Samsung BV-T5A , DUT 54452 ; AC-20E, DUT 54463 ; WH-108, DUT 54459; CC-3086, DUT 54438
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	24/59/100.1
Date of measurements	16-Jul-2014
Measured by	Dou Rubo

5.1. Test Setup

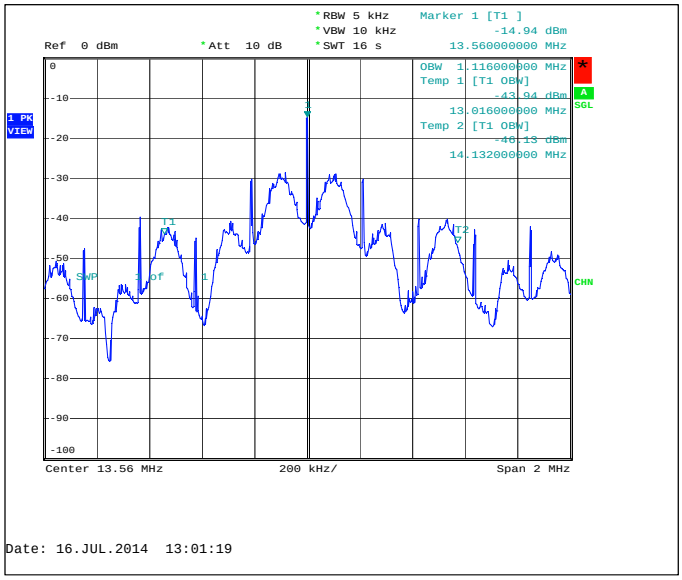
A small whip antenna was placed close to the EUT, and connected to the measuring Spectrum Analyzer.

5.2. Test method and limit

The Test was carried out with the EUT in Test mode with modulation on.

5.3. NFC Test results

NFC TX Frequency = 13.56 MHz



Operation mode (TX on)	Occupied bandwidth [kHz]
NFC, modulated	1116

TCC Microsoft Beijing Laboratory
Beijing Economic and Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

6. Frequency stability, temperature variation
(FCC §15.225 (e) [2], RSS-210 A2.6

EUT with DUT number	RM-1038, DUT 54434
Accessories with DUT numbers	Samsung BV-T5A , DUT 54452 ; AC-20E, DUT 54463 ; WH-108, DUT 54459; CC-3086, DUT 54438
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	24/59/100.1
Date of measurements	16-Jul-2014
Measured by	Dou Rubo

6.1. Test Setup

The EUT was placed in a Climatic Chamber. A small whip antenna was placed close to the EUT, and connected to the measuring Spectrum Analyzer. Measurement performed without modulation on TX.

6.2. Test method and limit

The measurement is made according to FCC rules FCC 47 CFR Part 15 section 15.225 (e) [2] and RSS-210 A2.6

a) The EUT is placed in the chamber in transmit mode.
b) The climate chamber temperature is set to the maximum value and allowed to stabilize.
c) The transmit frequency is measured.
d) Temperature is lowered to the next temperature value and allowed to stabilize.
e) The steps c - d is repeated for each temperature.

Limits for frequency stability, temperature variation measurements

Frequency deviation [%]
+\- 0.01

6.3. NFC Test results

NFC TX Frequency = 13.56 MHz

Temperature [°C]	Frequency [MHz]	Deviation [kHz]	Deviation [%]	Result
50	13.559285	-0.715	-0.005273	PASSED
40	13.559294	-0.706	-0.005206	PASSED
30	13.55931	-0.690	-0.005088	PASSED
20	13.559346	-0.654	-0.004823	PASSED
10	13.559378	-0.622	-0.004587	PASSED
0	13.559405	-0.595	-0.004388	PASSED
-10	13.559413	-0.587	-0.004329	PASSED
-20	13.5594	-0.600	-0.004425	PASSED
-30	13.55936	-0.640	-0.004720	PASSED

TCC Microsoft Beijing Laboratory
Beijing Economic and Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

7. Frequency stability, voltage variation
(FCC §15.225 (e) [2], RSS-210 A2.6

EUT with DUT number	RM-1038, DUT 54434
Accessories with DUT numbers	SD-233R, DUT 54473; CC-3086, DUT 54438
Operation Voltage [V] / [Hz]	Nominal
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	24/59/100.1
Date of measurements	16-Jul-2014
Measured by	Dou Rubo

7.1. Test Setup
A small whip antenna was placed close to the EUT, and connected to the measuring Spectrum Analyzer.

7.2. Test method and limit
The EUT battery was replaced with an adjustable power supply. The frequency stability was measured at nominal voltage and at +5% and –15%. Measurement performed without modulation on TX.

Limits for frequency stability, voltage variation measurements

Frequency deviation [%]
+\- 0.01

7.3. NFC Test results
NFC TX Frequency = 13.56 MHz

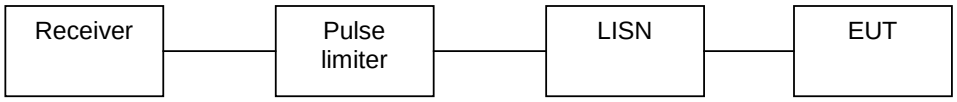
Voltage [V]	Frequency [MHz]	Deviation [kHz]	Deviation [%]	Result
4.2	13.559339	-0.661	-0.004875	PASSED
3.6	13.559341	-0.659	-0.004860	PASSED
4.2	13.559342	-0.658	-0.004853	PASSED

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

8. AC powerline conducted emissions
(FCC §15.207, RSS-GEN 7.2.2)

EUT with DUT number	RM-1038, DUT 54433
Accessories with DUT numbers	Samsung BV-T5A , DUT 54453 ; AC-20E, DUT 54462 ; WH-108, DUT 54456 ; CC-3086, DUT 54440
Operation Voltage [V] / [Hz]	115/60
Results	PASSED
Remarks	-
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	25/52/99.9
Date of measurements	08-Jul-2014
Measured by	Dou Rubo

8.1. Test Setup



8.2. Test method and limit
The EUT is placed on a wooden table 80 cm above the reference groundplane.

The EUT is connected via LISN to a test power supply.

The measurement results are obtained as described below:

$U\ [dB\mu V] = U_{RX} + A_{TOT}$

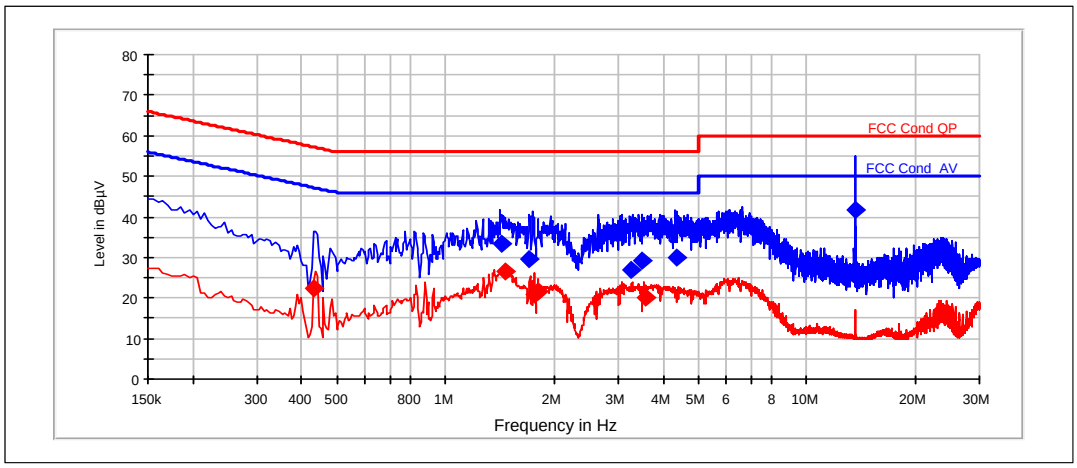
Where U_{RX} is receiver reading and A_{TOT} is total correction factor including cable and pulse limiter attenuations.

CISPR 22 Class B limits

Frequency range [MHz]	Quasi peak limit [dBµV]	Average limit [dBµV]
0.15 - 0.5	66 - 56	56 - 46
0.5 - 5	56	46
5 - 30	60	50

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

8.3. NFC Test results



QuasiPeak (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
1.425	33.22	L1	PASSED
1.705	29.49	N	PASSED
3.26	27.01	L1	PASSED
3.515	29.24	L1	PASSED
4.37	30.13	L1	PASSED
13.56	41.75	N	PASSED

Average (RBW: 9 kHz)

Frequency [MHz]	U [dBµV]	Line	Result
0.43	22.36	N	PASSED
1.47	26.41	N	PASSED
1.765	20.79	N	PASSED
1.795	21.52	L1	PASSED
3.56	19.93	N	PASSED

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

9. Test Equipment

9.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	RF Emission Software	EMC32 Test Software	R&S	22/24/27, 15C, 15B
BJPCHW0020	DC Power supply	Hp6632B	HP	22/24/27, 15C
BJPCPT0040	Receiver	ESCS30	R&S	15C,15B
BJPCPT0069	LISN 50 µH	ESH3-Z5	R&S	15C,15B
BJPCTC0323	Signal Generator	SMR 27	R&S	22/24/27, 15C, 15B
BJPCPT0073	Signal Generator	SMR 20	R&S	22/24/27, 15C, 15B
BJPCPT0191	Pulse Limiter	ESH3-Z2	R&S	15C,15B
BJPCPT0208	UPS	PULSAR RX10	Merlin gerin	15C.15B
BJPCTC0001	DIGITAL CAMERA	PC1015	CANON	15C.15R
BJPCTC0017	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
BJPCTC0062	AC Power source	6812B	Hp	15C.15B
BJPCTC0067	Bluetooth Tester	CBT	R&S	22/24/27, 15C
BJPCTC0082	Humidity and Temperature Sensor	175-H2	Testo	15B,15C
BJPCTC0088	Absolut pressure meter	testo 511	Testo	22/24/27, 15B,15C
BJPCTC0089	Tempreture Test chamber	VT4002	Votsch industrietechnik	22/24/27, 15C
BJPCTC0090	FSP spectrum analyzer	FSP30	R&S	22/24/27, 15C
BJPCTC0094	GPIB-RS232 convertor	GPIB-RS232	NI	22/24/27, 15C
BJPCTC0112	Power Splitter	11667B	Agilent	22/24/27, 15C
BJPCTC0115	Communication Tester	CMU200	R&S	22/24/27, 15B, 15C
BJPCTC0127	AC Power source	SOYI-500VA	SOYI	15B 15C
BJPCTC0128	Communication antenna	JXTXLB-10180	A-INFOMW	22/24/27 15B 15C
BJPCTC0129	Communication antenna	JXTXLB-10180	A-INFOMW	22/24/27 15B 15C
BJPCTC0131	Communication tester	CMW500	R&S	22/24/27 15B 15C
BJPCTC0136	Communication antenna	JXTXLB-880-NF	A-INFOMW	15B 15C
BJPCTC0306	Power Splitter	11667B	Agilent	22/24/27, 15C
BJPCTC0305	GPIB converter	GPIB-RS232	NI	22/24/27, 15C
BJPCTC0304	Spectrum Analyser	FSV30	R&S	22/24/27, 15C
BJPCTC0309	GPIB-RS232 convertor	RS232	NI	22/24/27, 15C
BJPCTC0307	Dual channel battery/charger simulator	2306	KEITHLEY	22/24/27, 15C
BJPCTC0308	Dual channel battery/charger simulator	2306	KEITHLEY	22/24/27, 15C
BJPCTC0352	Signal Generator 20GHz	MG3692B	Anritsu	22/24/27, 15C
BJBDATC0169	Tempreture Test chamber	VT4002	Votsch	22/24/27, 15C
BJPCTC0334	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
BJPCTC0342	Communication Tester	CMU200	R&S	15B, 15C
BJPCTC0343	Power Spliter	1167A	Agilent	EN300328
BJPCTC0344	Power Spliter	1167A	Agilent	EN300328
BJPCTC0345	Power Spliter	1167A	Agilent	EN300328
BJPCTC0346	Attenuator	8496A	Agilent	EN300328
BJPCTC0347	Directional Coupler	4226-20	Narda	EN300328
BJPCTC0348	Signal generator	E4438C	Agilent	EN300328
BJPCTC0336	Signal Generator	SMP22	R&S	22/24/27, 15C

9.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	BT / WLAN Antenna	SPA 2400/75/9/0/V	Huber-Suhner	15C, 15B
-	RF Emission Software	EMC32 Test Software	R&S	22/24/27, 15C, 15B
BJPCPT0072	Receiver	ESI B26	R&S	22/24/27, 15C, 15B

TCC Microsoft Beijing Laboratory
Beijing Economic and
Technological Development Area
No.5 Donghuan Zhonglu
Beijing
PRC China 100176
Tel. +86 10 8711 8888
Fax. +86 10 8711 4550

Eq. No	Equipment	Type	Manufacturer	Used in
BJPCPT0150	High Pass Filter	WHKS1200-10SS	Wainwright	22/24/27, 15C, 15B
BJPCPT0151	Band Reject Filter	WRCD1880/2000-0.2/40-5SSK	Wainwright	24, 15B
BJPCPT0154	Band Reject Filter	WRCT2402/2480-2400/2483.5-30-20SS	Wainwright	15C, 15B
BJPCPT0166	Antenna	VUBA 9117	Swarzbeck	22/24/27
BJPCPT0208	UPS	PULSAR RX10	Merlin gerin	15C.15B
BJPCTC0001	DIGITAL CAMERA	PC1015	CANON	15C.15R
BJPCTC0007	Antenna	HL562	R&S	22/24/27, 15C, 15B
BJPCTC0029	Antenna	HF906	R&S	22/24/27, 15C, 15B
BJPCTC0034	Band Reject Filter	WRCT 800/880-0.2/40-5SSK	Wainwright	22, 15B
BJPCTC0049	Preamplifier	Blma 0118-1A-Bt	Bonn	22/24/27, 15C, 15B
BJPCTC0055	Communication Tester	CMU200	R&S	22/24/27,15C,15B
BJPCTC0058	Bluetooth Tester	CBT	R&S	15C, 15B
BJPCTC0062	AC Power source	6812B	Hp	15C.15B
BJPCTC0064	Band Reject Filter	WRCG1877/1883-1870/1890-40/6SS	Wainwright	24, 15B
BJPCTC0071	Multi-Device Controller	2090	EMCO	22/24/27, 15C, 15B
BJPCTC0072	Anechoic Chamber	3 m Semi / Full Anechoic Chamber	ETS	22/24/27, 15C, 15B
BJPCTC0073	MAST	Model-TR/POL	ETS	22/24/27, 15C, 15B
BJPCTC0074	MAST	Model 2070-2	ETS	22/24/27, 15C, 15B
BJPCTC0075	Turntable	Model 2188	ETS-EMCO	22/24/27, 15C, 15B
BJPCTC0081	Humidity and Temperature Sensor	175-H2	Testo	15B, 15C
BJPCTC0088	Absolut pressure meter	testo 511	Testo	22/24/27, 15B,15C
BJPCTC0113	Receiver	ESI B26	R&S	22/24/27, 15B, 15C
BJPCTC0115	Communication Tester	CMU200	R&S	22/24/27, 15B, 15C
BJPCTC0124	Attenuator	SA18N200W-40	Fairview Microwave	-
BJPCTC0125	Loop Antenna	HFH2-Z2	R&S	15C
BJPCTC0126	Tripod	FHU-Z	R&S	15C
BJPCTC0128	Communication antenna	JXTXLB-10180	A-INFOMW	22/24/27 15B 15C
BJPCTC0129	Communication antenna	JXTXLB-10180	A-INFOMW	22/24/27 15B 15C
BJPCTC0131	Communication tester	CMW500	R&S	22/24/27 15B 15C
BJPCTC0133	Open Swith and contril unit	OSP 150	R&S	15B,15C
BJPCTC0134	Open Swith and contril unit	OSP 150	R&S	15B,15C
BJPCTC0135	Open Swith and contril unit	OSP 130	R&S	15B,15C
BJPCTC0136	Communication antenna	JXTXLB-880-NF	A-INFOMW	15B 15C
BJPCTC0171	Broad-band Horn Antenna	BBHA9120 D	SCHWARZBECK MESS - ELEKTRONIK	22/24/27, 15C, 15B
BJPCTC0310	Horn Antenna	QSH20SMA	Q-par	22/24/27, 15C, 15B
BJPCTC0311	Horn Antenna	QSH18SMA	Q-par	22/24/27, 15C, 15B
BJPCTC0312	Relay Switch Unit	-	-	22/24/27, 15C, 15B
BJPCTC0313	High Pass Filter	WHKX1.0/15G-12SS	Wainwright	22/24/27, 15C, 15B
BJPCTC0314	High Pass Filter	WHKX8.0/18G-88SS	Wainwright	22/24/27, 15C, 15B
BJPCTC0315	High Pass Filter	WHKX3.0/18G-12SS	Wainwright	22/24/27, 15C, 15B
BJPCTC0316	Preamplifier	AMT-5F-18002550-25-108	-	22/24/27, 15C, 15B
BJPCTC0317	Preamplifier	AMF-6D-02001800-29-20P	-	22/24/27, 15C, 15B
BJPCTC0350	Preamplifier	AMF-4D-01000800-30-29P	Miteq	22/24/27, 15C, 15B
BJPCTC0324	Preamplifier	AFS4-00100300-20-23P-6	Miteq	22/24/27, 15C, 15B
BJPCTC0329	Relay Switch Unit	-	-	22/24/27, 15C, 15B
BJPCTC0334	Communication Tester	CMU200	R&S	22/24/27, 15C, 15B
BJPCTC0342	Communication Tester	CMU200	R&S	15B, 15C

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Beijing
PRC China 100176
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Eq. No	Equipment	Type	Manufacturer	Used in
BJPCTC0349	Preamplifier	AMF-4D-01000800-30-79P	Miteg	22/24/27, 15C, 15B
BJPCTC0350	Preamplifier	AMF-4D-01000800-30-29P	Miteg	22/24/27, 15C, 15B
BJPCTC0351	Preamplifier	AFS4-00101800	-	22/24/27, 15C, 15B

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