13.56 MHz Radio Test Report

FCC ID: SIB-SNB02-NV7A
IC: 6719D-SNB02NV7A

This report concerns (check one) : ☒ **Original Grant** ☐ **Class I Change**

Issued Date	:	Mar. 26, 2014
Project No.	:	1403C085
Equipment	:	nabi Tablet
Model Name	:	SNB02-NV7A
Applicant	:	Foxconn International Inc.
Address	:	No.2,Ziyou St.,Tucheng Dist., New Taipei City 236,Taiwan

Tested by: Neutron Engineering Inc. EMC Laboratory
Date of Receipt: Mar. 13, 2014
Date of Test: Mar. 13, 2014 ~ Mar. 25, 2014

Testing Engineer : David Mao
(David Mao)

Technical Manager : Leo Hung
(Leo Hung)

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(Steven Lu)

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Declaration

Neutron represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**., or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FICP-3-1403C085	Original Issue.	Mar. 26, 2014

1. CERTIFICATION

Equipment	:	nabi Tablet
Brand Name	:	nabi
Model Name	:	SNB02-NV7A
Applicant	:	Foxconn International Inc.
Manufacturer	:	FUHU INC
Address	:	909 N SEPULVEDA BLVD STE 540 EL SEGUNDO, CA 90245-2733
Factory	:	Hongfujin precision industry(wuhan) Co.,Ltd.
Address	:	1#,2nd GUANG GU ROAD,DONGHU NEW TECHNOLOGY DEVELOPMENT DISTRICT,WUHAN CITY,HUBEI PROVINCE,CHINA
Date of Test	:	Mar. 13, 2014 ~ Mar. 25, 2014
Test Item	:	ENGINEERING SAMPLE
Standard(s)	:	FCC Part 15, Subpart C: 15.225 / ANSI C63.4: 2009 Canada RSS-210:2010; Canada RSS-GEN:2010

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FICP-3-1403C085) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part 15, Subpart C: 15.225 / Canada RSS-210 :2010 ; RSS-GEN :2010				
Standard(s) Section		Test Item	Judgment	Remark
15.207	RSS-GEN 7.2.2	Conducted emission	PASS	
15.35 / 15.205 / 15.209 / 15.225	RSS-210 Annex 2(A2.6)	Radiated emission	PASS	
15.225(e)	RSS-210 Annex 2(A2.6)	Frequency Stability	PASS	
15.203		Antenna Requirement	PASS	
	RSS-210 Annex 8(A8.5)	20dB Occupied Bandwidth Measurement	PASS	

NOTE:

(1) ”N/A” denotes test is not applicable in this test report.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-CB03** at the location of No.3,Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792
Neutron's test firm number for FCC: 319330
Neutron's test firm number for IC: 4428B-1

2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty is not specified by FCC rules and for reference only.
The reported uncertainty of measurement **y** ± **U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95**%.
The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U，(dB)	NOTE
DG-C02	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U，(dB)	Note
DG-CB03	CISPR	9KHz~30MHz	V	3.79	
		9KHz~30MHz	H	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	H	3.60	
		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	H	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	H	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	H	4.14	

3.GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	nabi Tablet	
Brand Name	nabi	
Model Name	SNB02-NV7A	
Model Difference	A model for multiple appearance, only differ in the color.	
Product Description	Operation Frequency:	13.56 MHz
	Antenna Designation:	Loop Antenna
	More details of EUT technical specification, please refer to the User's Manual.	
Power Source	#1 DC voltage supplied from AC adapter. Brand / Model: Chicony / W12-010N3A #2 Supplied from rechargeable Li-ion polymer battery. Brand / Model: McNair / MLP4566111	
Power Rating	#1 I/P: AC 100-240V~50/60Hz 0.3A O/P: DC 5V 2A #2 DC 3.7V 4350mAh 16.10Wh	
Connecting I/O Port(s)	Please refer to the User's Manual	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. Table for Filed Antenna

Group 1

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	晶鈦	AH-JT-0214Y2111	Loop Antenna	N/A	N/A

Group 2

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	Cortec	NB0309-N2S-N	Loop Antenna	N/A	N/A

Note: The EUT has two group antennas, only differ in model name and manufacture.

3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Test Mode	Description
Mode 1	TX MODE

Conducted emission test	
Final Test Mode	Description
Mode 1	TX MODE

Radiated emission test	
Final Test Mode	Description
Mode 1	TX MODE

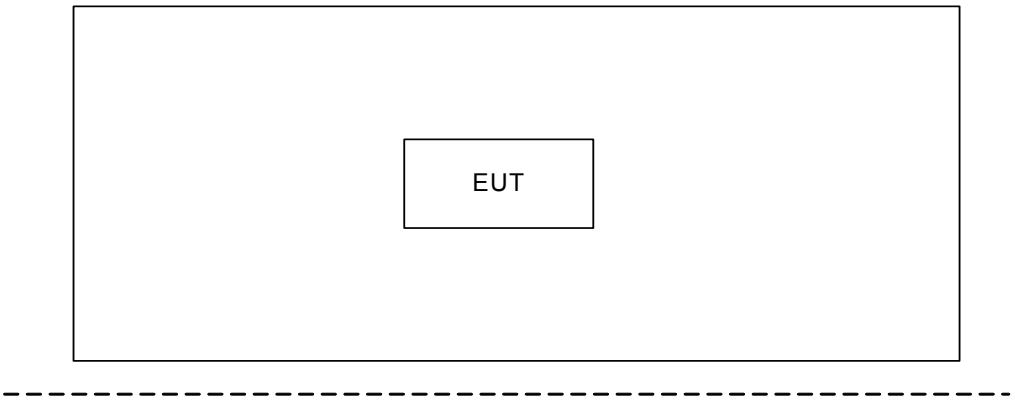
Frequency Stability test/ Antenna Requirement test/ 20dB Occupied Bandwidth Measurement	
Final Test Mode	Description
Mode 1	TX MODE

(1) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted TX Mode:

Radiated TX Mode:



3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID/IC	Series No.	Note
-	-	-	-	-	-	

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150KHz-30MHz)

Frequency (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

4.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

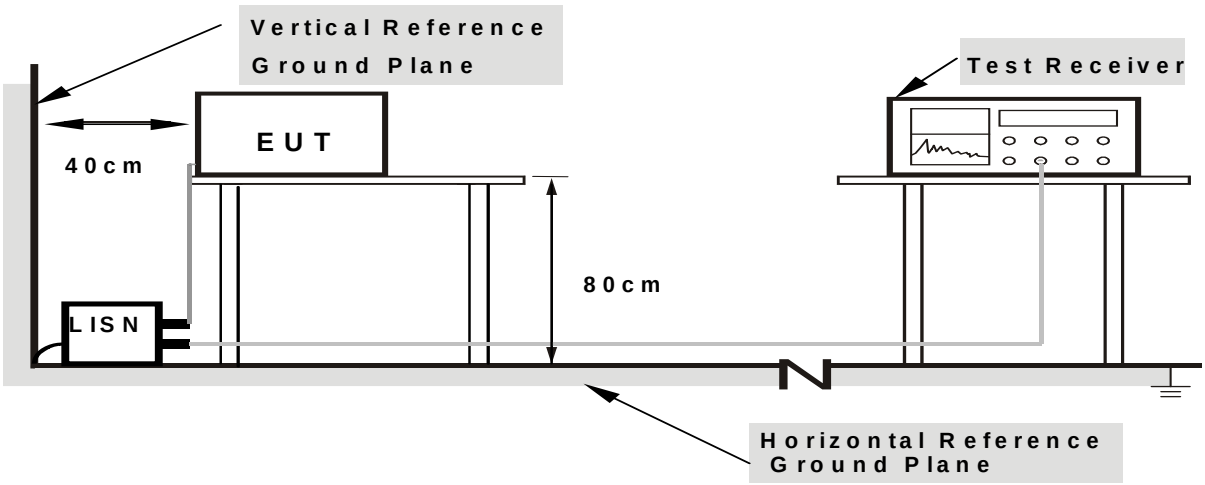
d. LISN at least 80 cm from nearest part of EUT chassis.

e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.
The EUT was programmed to be in continuously transmitting mode.

4.1.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

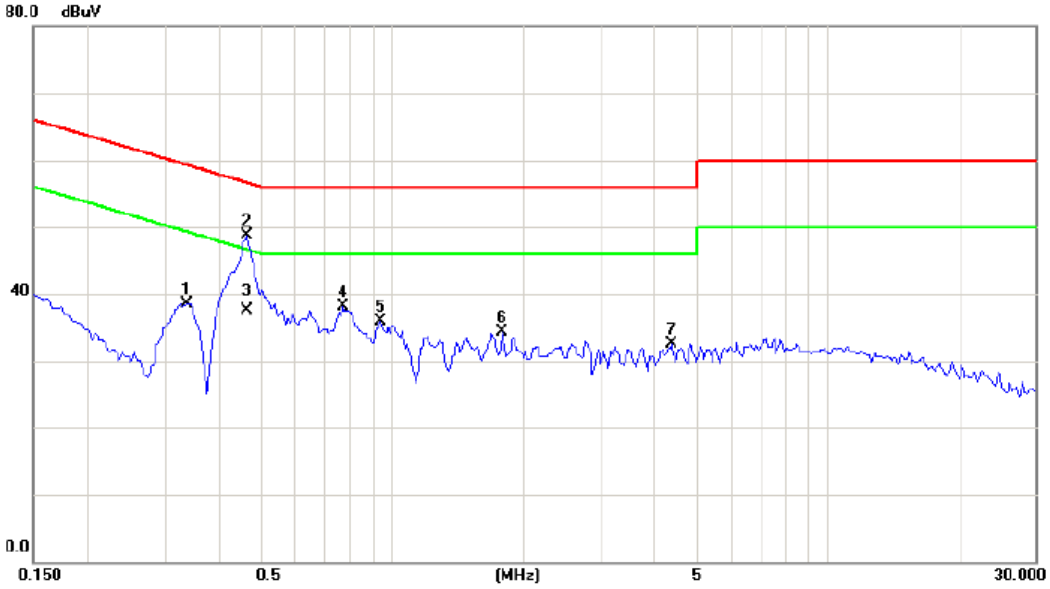
4.1.6 TEST RESULTS

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn‘t perform in this case, a “*” marked in AVG Mode column of Interference Voltage Measured.
(2) Measuring frequency range from 150KHz to 30MHz.

Test Mode :	TX MODE

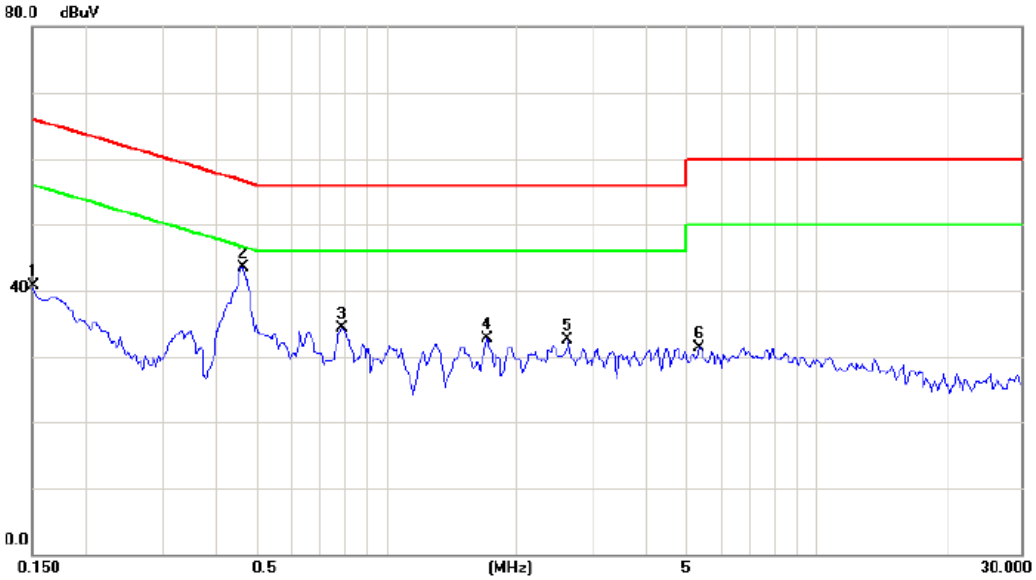
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3375	28.91	9.67	38.58	59.26	-20.68	peak	
2	*	0.4625	39.05	9.70	48.75	56.65	-7.90	peak	
3		0.4625	27.80	9.70	37.50	46.65	-9.15	AVG	
4		0.7750	28.31	9.72	38.03	56.00	-17.97	peak	
5		0.9391	26.16	9.74	35.90	56.00	-20.10	peak	
6		1.7867	24.51	9.82	34.33	56.00	-21.67	peak	
7		4.3828	22.68	9.90	32.58	56.00	-23.42	peak	

Test Mode :	TX MODE

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	31.10	9.70	40.80	66.00	-25.20	peak	
2	*	0.4625	33.80	9.74	43.54	56.65	-13.11	peak	
3		0.7867	24.60	9.75	34.35	56.00	-21.65	peak	
4		1.7125	22.94	9.84	32.78	56.00	-23.22	peak	
5		2.6461	22.65	9.88	32.53	56.00	-23.47	peak	
6		5.3516	21.40	9.97	31.37	60.00	-28.63	peak	

4.2 RADIATED EMISSION TEST

4.2.1 LIMIT

FCC Part 15.209				
Frequency (MHz)	Field Strength Limitation		Field Strength Limitation at 3m Measurement Dist	
	(uV/m)	Dist	(uV/m)	(dBuV/m)
0.009 – 0.490	2400 / F(KHz)	300m	10000 * 2400/F(KHz)	20log 2400/F(KHz) + 80
0.490 – 1.705	24000 / F(KHz)	30m	100 * 24000/F(KHz)	20log 24000/F(KHz) + 40
1.705 – 30.00	30	30m	100* 30	20log 30 + 40
30.0 – 88.0	100	3m	100	20log 100
88.0 – 216.0	150	3m	150	20log 150
216.0 – 960.0	200	3m	200	20log 200
Above 960.0	500	3m	500	20log 500
FCC Part 15.225(a)/(b)/(c)				
Frequency (MHz)	Field Strength Limitation		Field Strength Limitation at 3m Measurement Dist	
	(uV/m)	Dist	(uV/m)	(dBuV/m)
13.553 – 13.567	15,848	30 m	15,848*100	124
13.567 – 13.710	334	30 m	334*100	90.5
13.110 – 13.410 13.710 – 14.010	106	30 m	106*100	80.5

Note
:

(1) The tighter limit shall apply at the boundary between two frequency range.
(2) Limitation expressed in dBuV/m is calculated by 20log Emission Level (uV/m).
(3) If measurement is made at 3m distance, then F.S Limitation at 3m distance is adjusted by using the formula of $L_{d1} = L_{d2} * (d_2/d_1)^2$.
Example:
F.S Limit at 30m distance is 30uV/m , then F.S Limitation at 3m distance is adjusted as $L_{d1} = L_1 = 30uV/m * (10)^2 = 100 * 30$ uV/m
(4) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
Margin Level = Measurement Value – Limit Value

4.2.2 TEST PROCEDURE

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

NOTE: (FCC PART 15.209)

a. Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode with Detector BW=120 kHz.
b. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform.

NOTE: (FCC PART 15.225)

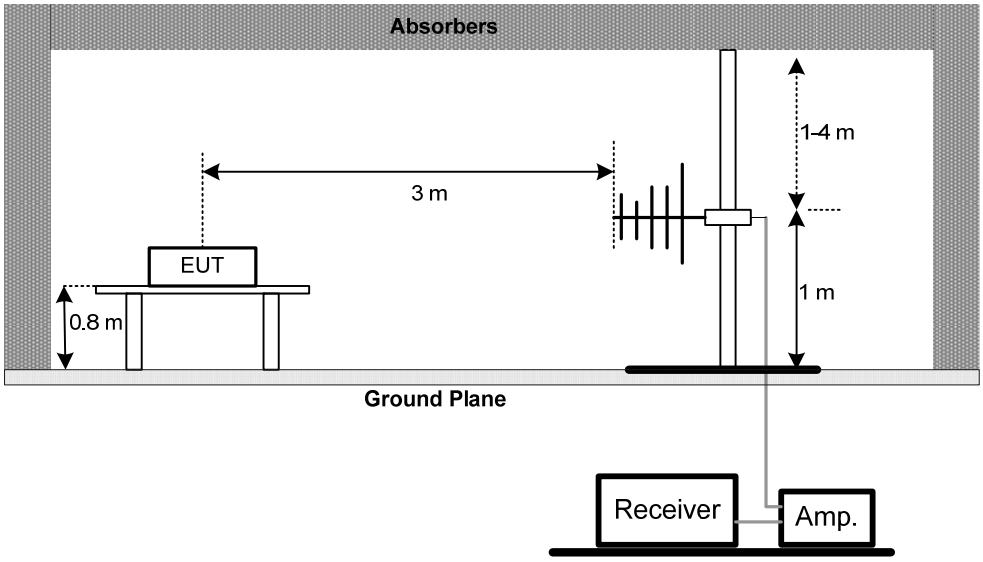
a. Spectrum Setting:
   9 KHz – 150 KHz, RBW= 200Hz, VBW=200Hz, Sweep time = 200 ms.
   150 K Hz – 30 MHz, RBW= 10 KHz, VBW=10 KHz, Sweep time = 200 ms.
   30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.
b. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform.
c. The Log-Bicon Antenna will use to test frequency range from 30MHz to 1000MHz and the Loop Antenna will use to test frequency below 30MHz.

4.2.3 DEVIATION FROM TEST STANDARD

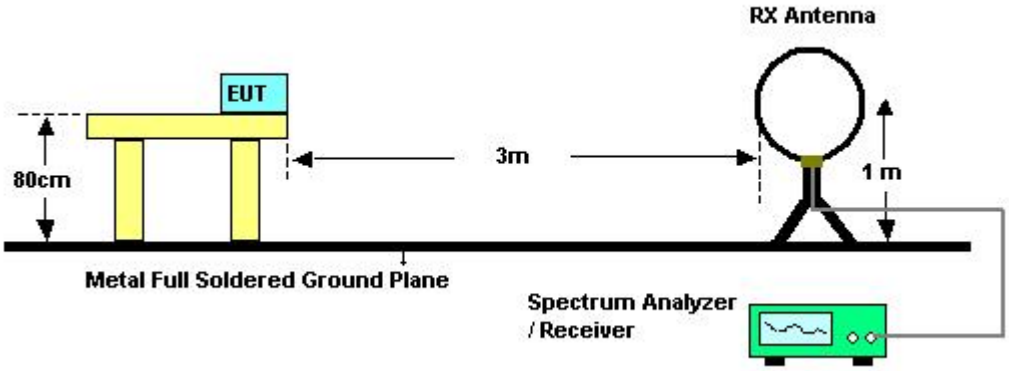
No deviation

4.2.4 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) For radiated emissions below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

4.2.6 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: DC 3.7V

4.2.7 TEST RESULTS (BELOW 30MHZ) - FCC PART 15.209

Test Mode :	TX MODE

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0095	0°	68.38	24.30	92.68	128.08	-35.40	AV
0.0095	0°	72.32	24.30	96.62	148.08	-51.46	PK
0.0133	0°	70.38	24.30	94.68	125.13	-30.45	AV
0.0133	0°	79.34	24.30	103.64	145.13	-41.49	PK
0.0242	0°	56.32	24.03	80.35	119.93	-39.57	AV
0.0242	0°	60.15	24.03	84.18	139.93	-55.74	PK
0.0325	0°	61.32	23.51	84.83	117.37	-32.54	AV
0.0325	0°	65.34	23.51	88.85	137.37	-48.52	PK
0.5630	0°	18.75	20.00	38.75	72.59	-33.84	QP
1.7552	0°	18.91	19.52	38.43	69.54	-31.11	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0094	90°	76.33	24.30	100.63	128.19	-27.56	AVG
0.0094	90°	82.38	24.30	106.68	148.19	-41.51	PK
0.0235	90°	56.33	24.08	80.41	120.18	-39.77	AVG
0.0235	90°	59.31	24.08	83.39	140.18	-56.79	PK
0.0314	90°	57.39	23.58	80.97	117.67	-36.70	AVG
0.0314	90°	58.23	23.58	81.81	137.67	-55.86	PK
0.0421	90°	59.64	22.90	82.54	115.12	-32.58	AVG
0.0421	90°	63.75	22.90	86.65	135.12	-48.47	PK
0.4917	90°	17.64	19.82	37.46	73.77	-36.31	QP
1.7158	90°	18.72	19.53	38.25	69.54	-31.29	QP

Remark:

(1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported ◦

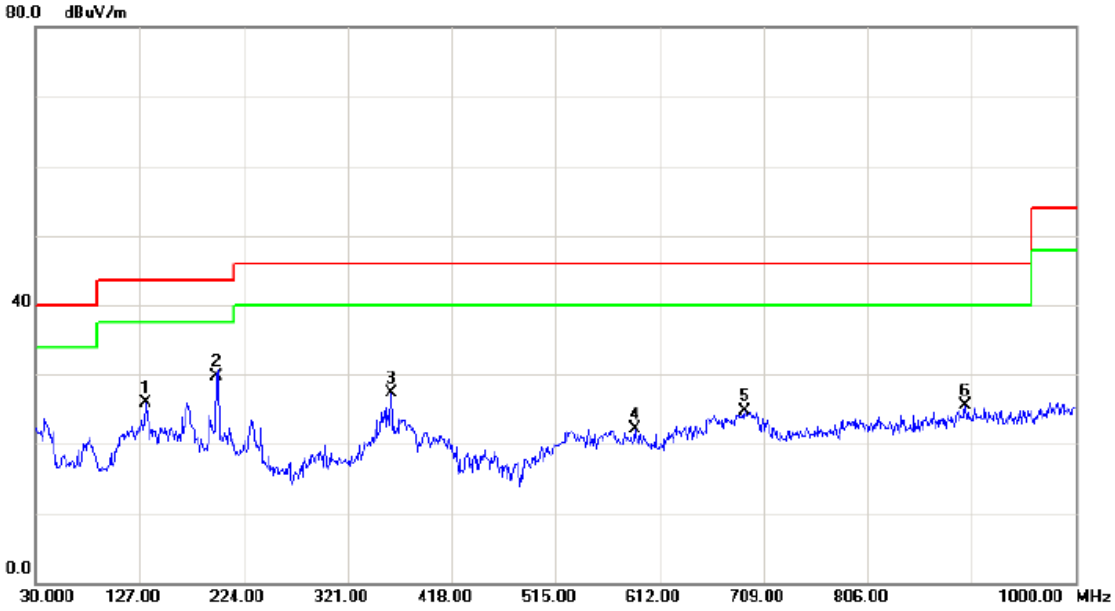
(2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB); ◦

(3) Limit line = specific limits (dBuV) + distance extrapolation factor. ◦

4.2.8 TEST RESULTS - (30-1000MHZ) - FCC PART 15.209

Test Mode:	TX MODE

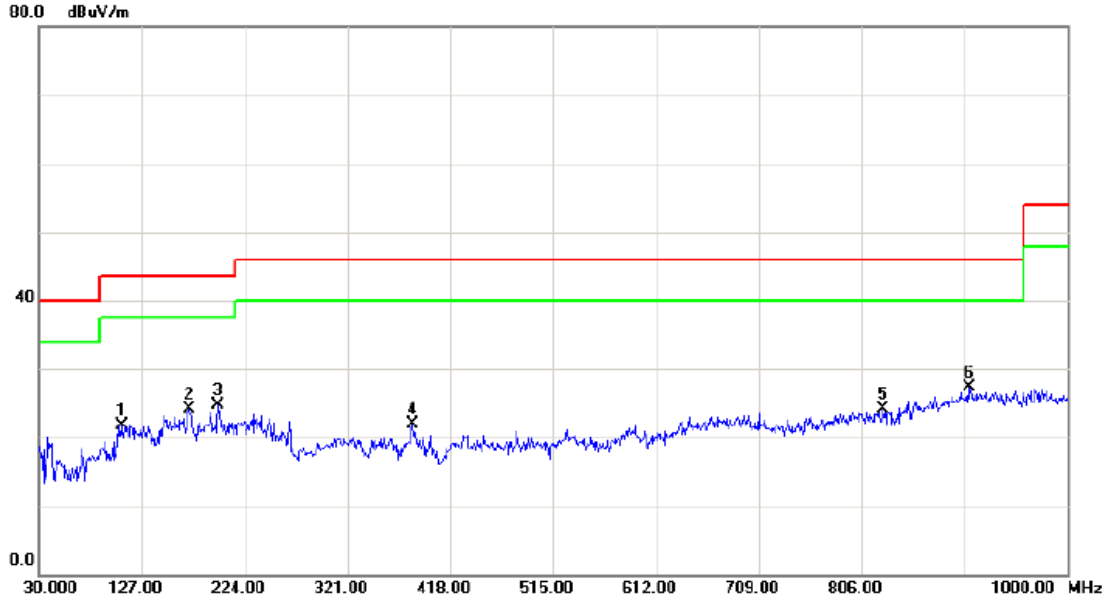
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		132.8200	39.30	-13.46	25.84	43.50	-17.66	peak	
2	*	198.7800	44.78	-15.09	29.69	43.50	-13.81	peak	
3		361.7400	38.38	-11.09	27.29	46.00	-18.71	peak	
4		588.7200	30.18	-7.99	22.19	46.00	-23.81	peak	
5		691.5400	29.54	-4.93	24.61	46.00	-21.39	peak	
6		897.1800	26.94	-1.40	25.54	46.00	-20.46	peak	

Test Mode:	TX MODE

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		107.6000	36.88	-15.10	21.78	43.50	-21.72	peak	
2		171.6200	36.88	-12.74	24.14	43.50	-19.36	peak	
3		198.7800	39.80	-15.09	24.71	43.50	-18.79	peak	
4		382.1100	32.31	-10.45	21.86	46.00	-24.14	peak	
5		825.4000	27.56	-3.40	24.16	46.00	-21.84	peak	
6	*	906.8800	28.38	-1.16	27.22	46.00	-18.78	peak	

4.2.9 TEST RESULTS- FCC PART 15.225

Test Mode	TX MODE

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
13.560	0°	45.77	10.99	56.76	124.00	-67.24	
27.130	0°	18.77	9.33	28.10	69.54	-41.44	

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
13.560	90°	41.56	10.99	52.55	124.00	-71.45	
27.160	90°	18.63	9.33	27.96	69.54	-41.58	

4.3 FREQUENCY STABILITY MEASUREMENT

4.3.1 LIMIT

FCC Part 15.225(e)
The frequency tolerance of the carrier signal shall be maintained within +/-0.01% of the operating frequency over a temperature variation of - 20 degrees to + 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

4.3.2 TEST PROCEDURE

a. The equipment under test was connected to an external AC power supply and the RF output was connected to a frequency counter via feed through attenuators. The EUT was placed inside the temperature chamber.
   After the temperature stabilized for approximately 20 minutes, the frequency of the output signal was recorded from the counter.
b. At room temperature (25±5°C), an external variable AC power supply was connected to the EUT. The frequency of the transmitter was measured for 115%, 100% and 85% of the nominal operating input voltage.

4.3.3 DEVIATION FROM TEST STANDARD

No deviation

4.3.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

4.3.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: DC 3.7V

4.3.6 TEST RESULTS

Test Mode:	TX MODE

Frequency Stability Versus Environmental Temperature						
	Temperature (°C)	**Voltage (DC)**	**Frequency (MHz)**	**Frequency Error (kHz)**	**Limit (kHz)**	**Result**
	20	3.7V	13.5600			
0 min	50	3.7V	13.5610	0.0001	+/- 1.356	PASS
	-20	3.7V	13.5613	0.0012	+/- 1.356	PASS
2 min	50	3.7V	13.5604	0.0023	+/- 1.356	PASS
	-20	3.7V	13.5606	0.0008	+/- 1.356	PASS
5 min	50	3.7V	13.5609	0.0006	+/- 1.356	PASS
	-20	3.7V	13.5613	0.0017	+/- 1.356	PASS
10 min	50	3.7V	13.5616	0.0013	+/- 1.356	PASS
	-20	3.7V	13.5611	0.0002	+/- 1.356	PASS

Fuequency Stability Versus Input Voltage						
Temperature (°C)	**Voltage (AC)**		**Frequency (MHz)**	**Frequency Error (kHz)**	**Limit (kHz)**	**Result**
20	**V-nom**	3.7V	13.5600			
20	**V-min**	3.33V	13.5605	0.012	+/- 1.356	PASS
20	**V-max**	4.07V	13.5613	0.023	+/- 1.356	PASS

5. 20dB SPECTRUM BANDWIDTH MEASUREMENT

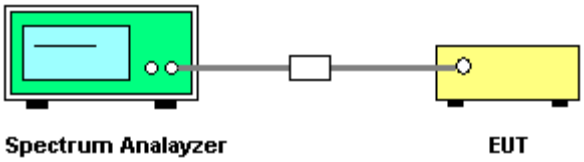
5.1. LIMIT OF 20dB BANDWIDTH MEASUREMENT

The 20dB bandwidth shall be specified in operating frequency band.

5.2.TEST PROCEDURES

The bandwidth of the fundamental frequency was measured by spectrum analyzer with 10kHz RBW and 10kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

5.3. TEST SETUP LAYOUT



5.4. TEST DEVIATION

There is no deviation with the original standard.

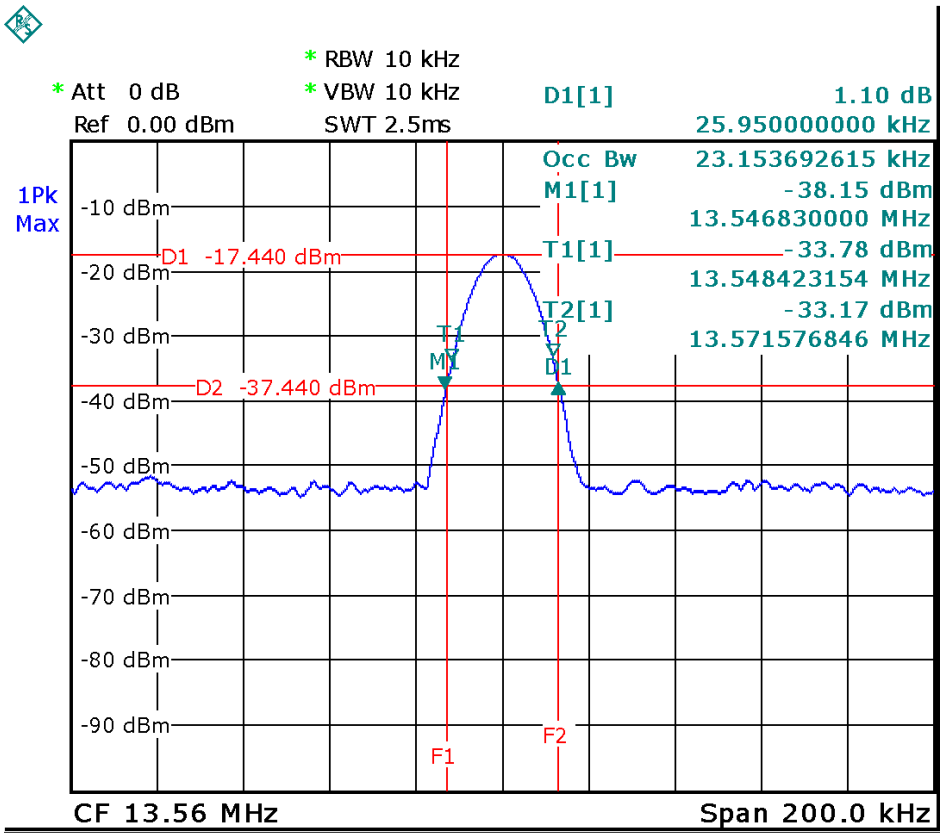
5.5. EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

5.6. TEST RESULT

Test Mode : TX Mode

TX CH 01



6. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Apr. 25, 2014
2	LISN	R&S	ENV216	100087	Nov. 09, 2014
3	Test Cable	N/A	C_17	N/A	Mar.14, 2015
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	Apr. 25, 2014
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Apr. 25, 2014

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Apr. 25, 2014
2	Amplifier	HP	8447D	2944A09673	Apr. 25, 2014
3	Test Receiver	R&S	ESCI	100382	Apr. 25, 2014
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 02, 2014
5	Antenna	ETS	3115	00075789	Apr. 25, 2014
6	Amplifier	Agilent	8449B	3008A02274	Apr. 25, 2014
7	Spectrum	Agilent	E4408B	US39240143	Nov. 09, 2014
8	Test Cable	HUBER+SUHNER	C-45	N/A	Apr. 30, 2014
9	Controller	CT	SC100	N/A	N/A
10	Horn Antenna	EMCO	3115	9605-4803	Apr. 25, 2014
11	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Apr. 25, 2014
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct. 22, 2014

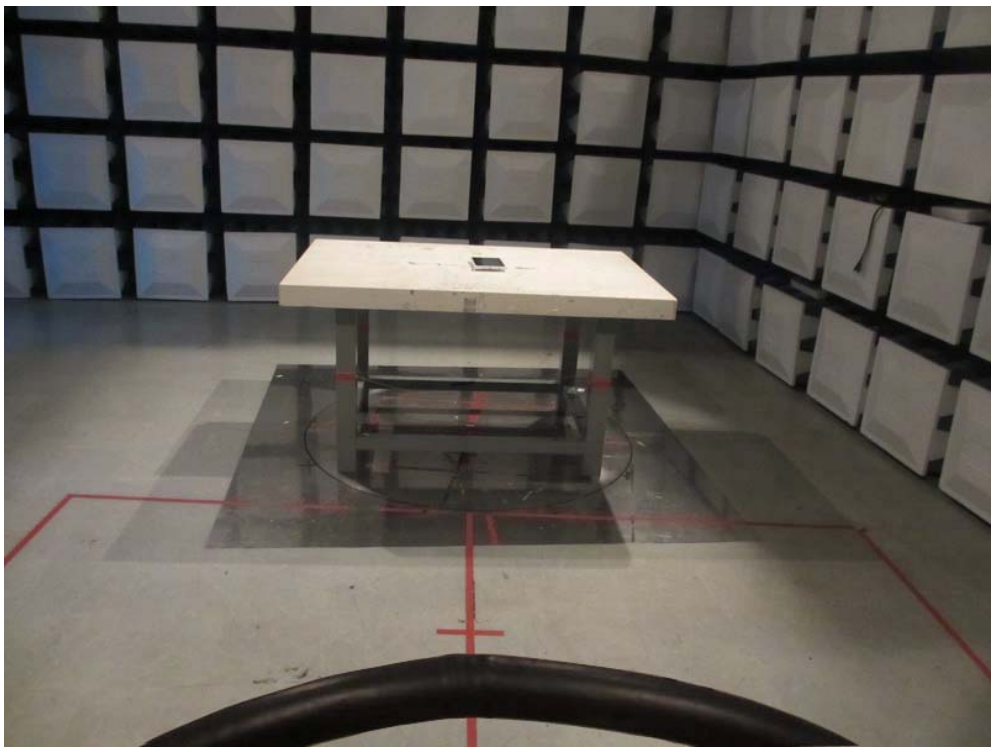
6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 09, 2014

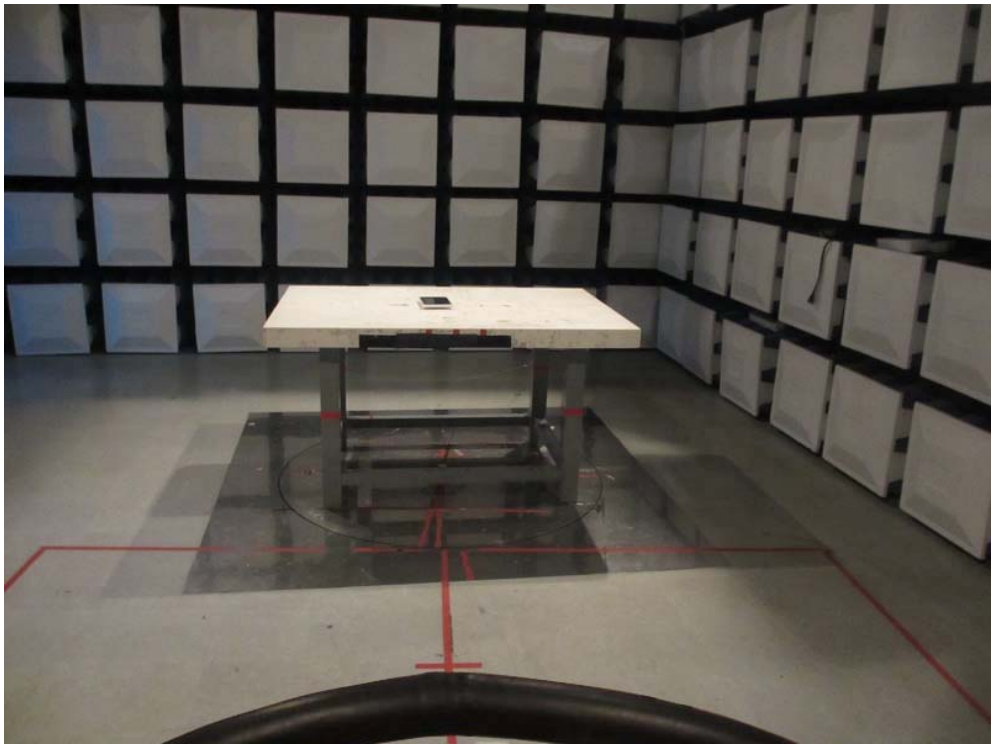
Remark: ”N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

7. EUT TEST PHOTO

Conducted Measurement Photos

Radiated Measurement Photos
9K~30MHz





Radiated Measurement Photos
30~1000MHz