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EMI TEST REPORT

On Model Name: IP Phone

Model Number: GXP2130

Brand Name: Grandstream

Prepared for Grandstream Networks, Inc.

FCC ID Number: YZZGXP2130V2

According to FCC 47 CFR Part 15, Subpart B

Test Report #: SHE-1408-11202-FCC

Tested by: _____ *MRT*
Andy Zhu /Engineer *Company Name*

Reviewed by: _____ *ECMG*
Jawen Yin/ Senior Engineer *Company Name*

QC Manager: _____ *ECMG*
Swall Zhang/QC Manager *Company Name*

Test Report Released by: _____ *sep.16th, 2014*
Swall Zhang *Date*

Test Location

Tests performed in a Certified ANSI Semi-Anechoic Chamber and Shielded Room.

Test Site Location:

MRT Technology (Suzhou) co., Ltd.

D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China

Accreditation Bodies

The test facility was recognized, certified, or accredited by the following organizations:

- *MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.*

- *MRT facility is a FCC registered (MRT Reg. No. 809388) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules and Industry Canada (11384A-1).*

- *MRT facility is an IC registered (11384A-1) test laboratory with the site description on file at Industry Canada.*

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List Attached Files

Exhibit Type	File Description	File Name
Test Report	Test Report	YZZGXP2130V2 _Test report.pdf
Operation Description	Technical Description	YZZGXP2130V2_operation description.pdf
External Photos	External Photos	YZZGXP2130V2_External Photos
Internal Photos	Internal Photos	YZZGXP2130V2_Internal Photos
Block Diagram	Block Diagram	YZZGXP2130V2_Block Diagram.pdf
Schematics	Circuit Diagram	YZZGXP2130V2 _Schematics.pdf
ID Label/Location	Label and Location	YZZGXP2130V2_Label & Location.pdf
User Manual	User Manual	YZZGXP2130V2 _User Manual.pdf
Test set-up photos	Test set-up photos	YZZGXP2130V2 _Test Set-up Photos

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Opinions and Interpretations

This test report relates to the abovementioned equipment under test (EUT).Without the permission of ECMG Electronic Technical Testing Corp (Shenzhen) Test Lab this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark on this or similar products. The manufacturer has sole responsibility of continued compliance of the device.

Statement of Measurement Uncertainty

The data and results referenced in the document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities that can account for a nominal measurement error. Furthermore, component and process variability of devices similar to that tested may result in additional deviation.

Administrative Data

Test Sample	*: IP Phone*
Model Numbers	*: GXP2130*
Model Tested	*: GXP2130*
Receipt Date	*: Aug.8th, 2014*
Date Tested	*: Sep.10th, 2014*
Applicant	*: Grandstream Networks, Inc.*
Address	*5F, Bldg #1, No.2 Kefa Rd., Science & Technology Park, Shenzhen, China*
Telephone	*: (86)-755-26014600*
Fax	*: (86)-755-26014601*
Manufacturer	*: Grandstream Networks, Inc.*
Address	*5F, Bldg #1, No.2 Kefa Rd., Science & Technology Park, Shenzhen, China*
Telephone	*: (86)-755-26014600*
Fax	*: (86)-755-26014601*
Factory	*: Grandstream Networks, Inc.*
Address	*5F, Bldg #1, No.2 Kefa Rd., Science & Technology Park, Shenzhen, China*
Telephone	*: (86)-755-26014600*
Fax	*: (86)-755-26014601*

EUT Description

Grandstream Networks, Inc. model tested GXP2130 (referred to as the EUT in this report) is an IP Phone.

Technical specifications of the EUT are as belows:

Parameter		***Range***
Basic parameters	*Rated voltage*	*+12VDC*
	Rated Current	*0.5A*
PoE		*Integrated Power-over-Ethernet (802.3af)*
I/O Ports	*Power Cable*	*Power Adapter connection*
	LAN Port	*Connect to the internal LAN network or router.*
	PC Port	*Connect to PC*
	Handset	*Connect to handset*
	Headset	*Connect to headset*
Power Adapter #1 (Mass power)	*Input*	*100-240VAC 50/60Hz 0.15A*
	Output	*12VDC,0.5A*
	Model	*WCF1200050A1BA*
	Brand name	*Mass power*
Power Adapter #2 (UE power)	*Input*	*100-240VAC 50/60Hz 0.2A*
	Output	*12VDC,0.5A*
	Model	*UE06L8-120050SPAU*
	Brand name	*UE power*

NOTE: For more detailed informations or features please refer to user's manual of EUT.

Test Summary

The Electromagnetic Compatibility requirements on model GXP2130 for this test are stated below. All results listed in this report relate exclusively to this above-mentioned model as the Equipment under Test. This report confers no approval or endorsement upon any other component, host or subsystem used in the test set-up.

Emission Tests				
Specifications	***Description***	***Test Results***	***Test Point***	***Remark***
FCC Part 15.107 ANSI C63.4:2009	*Conducted Emission*	*Passed*	*AC Input Port*	*Attachment 1*
FCC Part 15.109 ANSI C63.4:2009	*Radiated Emission*	*Passed*	*Enclosure*	*Attachment 2*

Test Mode Justification

Pre-Scan has been conducted to determine the worst-case from all possible combination between available operation mode .Following mode(s) was (were) selected for the final test as listed below:

Pre-Test Mode	
EMI Test Mode	*Mode 1: Communication with PC&Phone+Mass Power*
	Mode 2: Communication with PC&Phone+UE Power
	Mode 3: PoE mode
Final Test Mode	
EMI Test Mode	*Mode 1: Communication with PC&Phone+Mass Power*
	Mode 3: PoE mode
EMS Test Mode	*Not Applicable*

EUT Exercise Software

No exercise sofware support this test.

Equipment Modification

Any modifications installed previous to testing by Grandstream Networks, Inc. will be incorporated in each production model sold or leased in United States.

There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen). Test personnel.

§15.33 Frequency range of radiated measurements

(b) For unintentional radiators:

(1) Except as otherwise indicated in paragraphs (b)(2) or (b)(3) of this section, for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	***Upper frequency of measurement range (MHz)***
Below 1.705	*30.*
1.705-108	*1000.*
108-500	*2000.*
500-1000	*5000.*
Above 1000	*5th harmonic of the highest frequency or 40 GHz, whichever is lower.*

Note: *As the highest frequency operated of the EUT is 600MHz, so upper frequency of radiated emission test is up to 5GHz as per §15.33(b)(1).*

EUT Sample Photos for model GXP2130

EUT- Front View

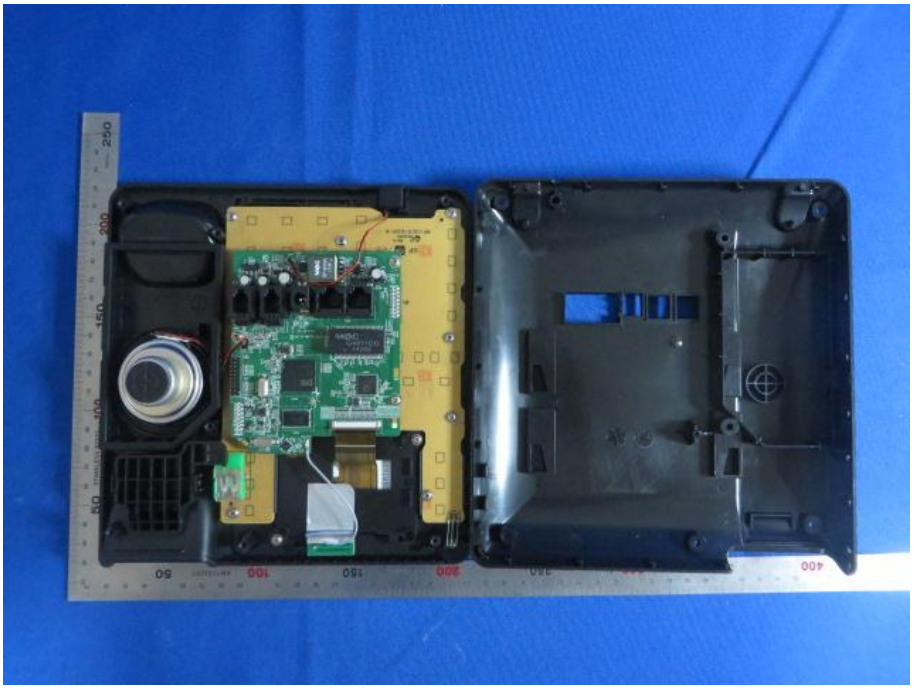
EUT- Rear View

EUT- Top View

EUT- Bottom View

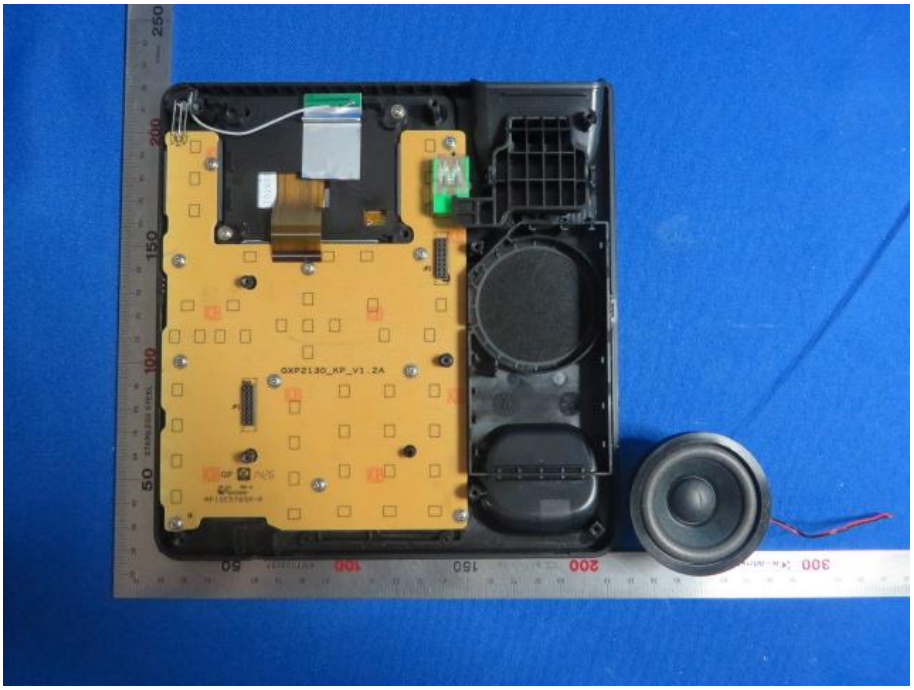
EUT- Right Side View

EUT- Left Side View

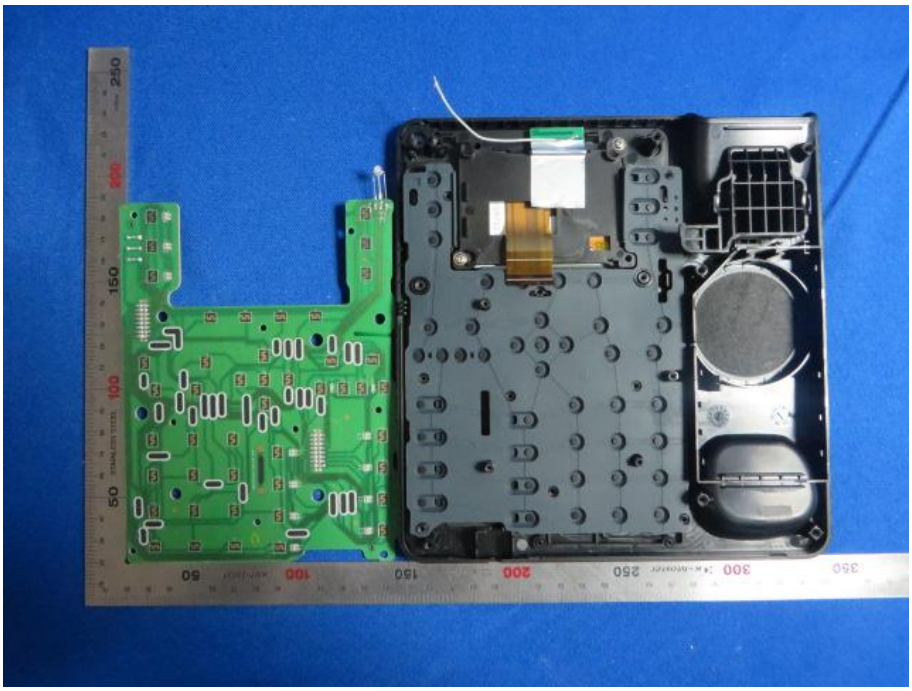


EUT-Uncovered View #1

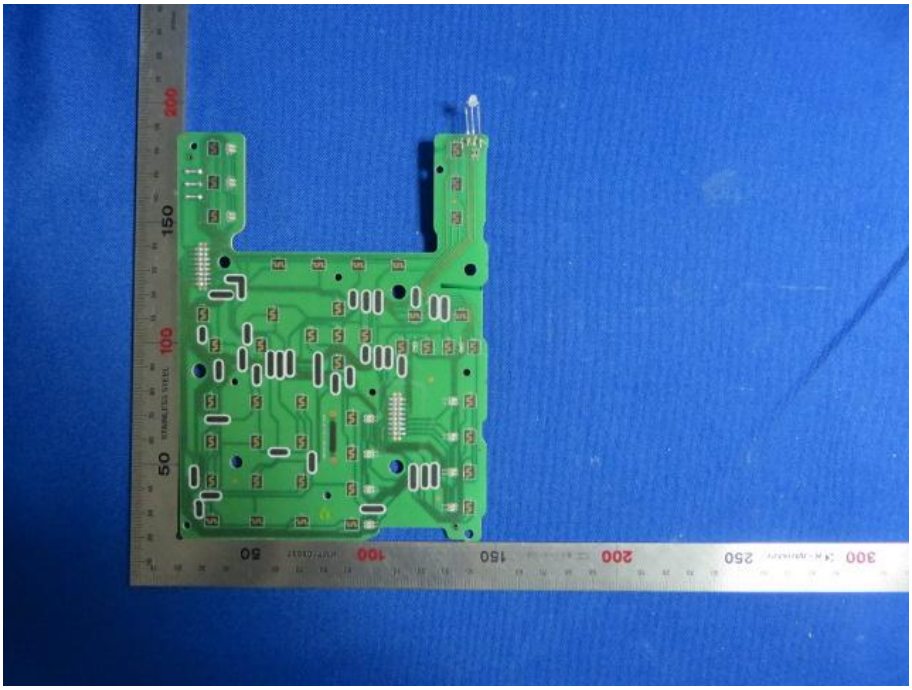
EUT-Uncovered View #2



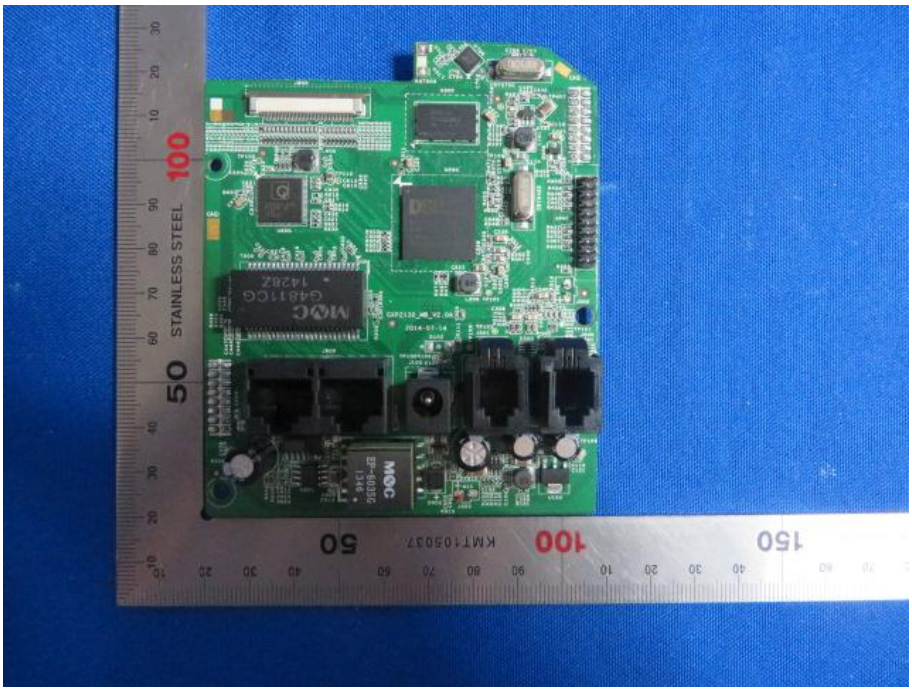
EUT-Uncovered View #3



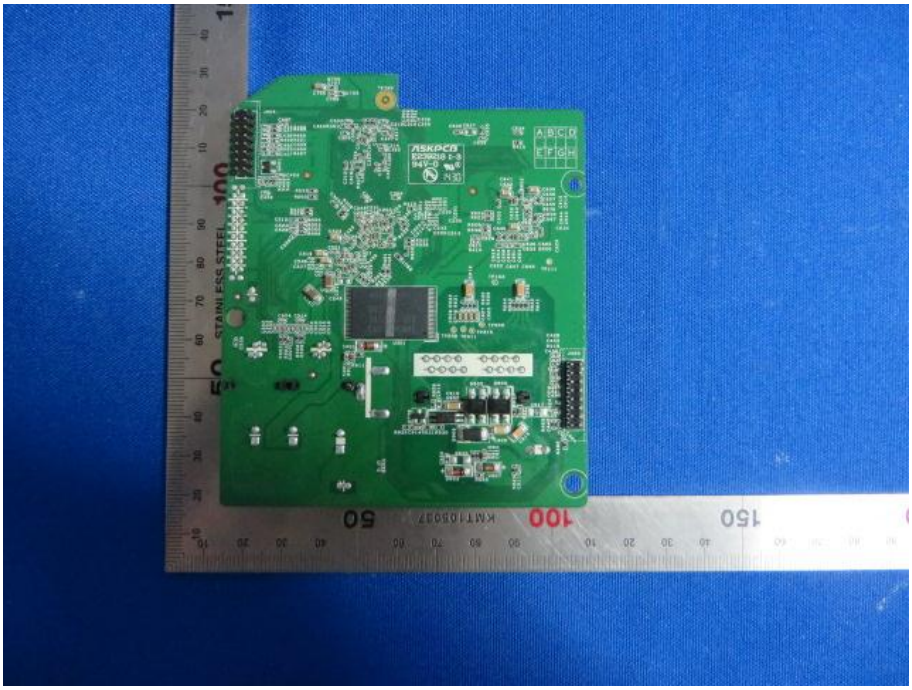
EUT-Uncovered View #4



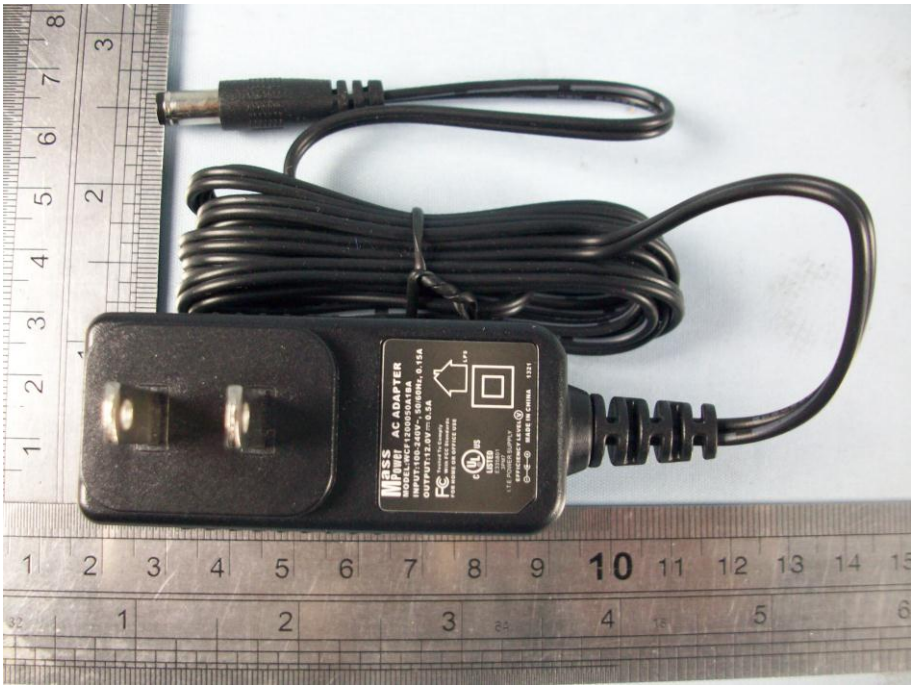
EUT-Uncovered View #5



Main board- Top View



Main board- Bottom View



Power Adaptor #1 View (Manufacturer: Mass Power)

Power Adaptor #2 View (Manufacturer: UE power)

Test System Details

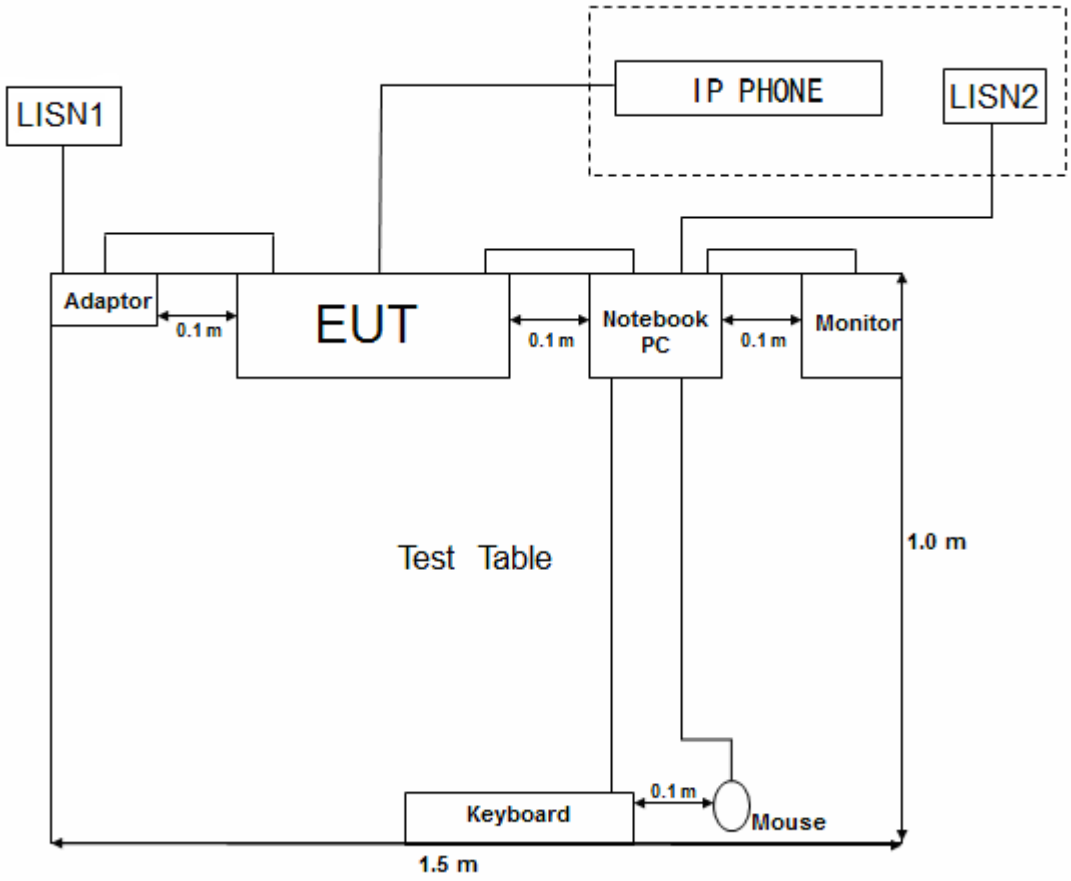
EUT			
Model Number:	GXP2130		
Model Tested:	GXP2130		
Description:	IP PHONE		
Input:	AC 120V/60Hz		
Manufacturer:	Grandstream Networks, Inc.		
Support Equipment			
Description	**Model Number**	**Serial Number**	**Manufacturer**
Notebook Computer	X201	3626AM3	Lenovo
Mouse	MO32B0	23-033131	IBM
Keyboard	SK-1788	/	Lenovo
Monitor	TFT1780PS	B8879HA021638	AOC

Continue on to next page…

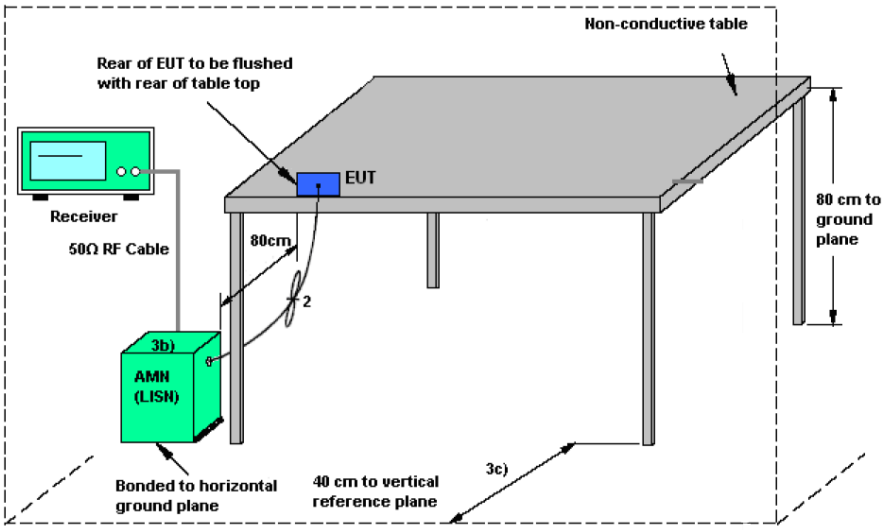
Cable Description					
Description	**From**	**To**	**Length (Meters)**	**Shielded (Y/N)**	**Ferrite (Y/N)**
Power Cord Of Notebook Computer	Plug	Notebook Computer	1.8	N	Y
Mouse cord	Mouse	Plug	1.2	N	Y
Keyboard cord	Keyboard	Plug	1.2	N	Y
VGA Cord	Monitor	PC	1.2	Y	Y
RJ-45 Cord 1	EUT	Notebook Computer	1.5	N	N
RJ-45 Cord 2	EUT	IP PHONE	3.0	N	N
Power cord of power Adapter #1 (Mass power)	EUT	Plug	1.8	N	N
Power cord of power Adapter #2 (UE power)	EUT	Plug	1.8	N	N
Note:The "EUT" means "IP PHONE".					

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

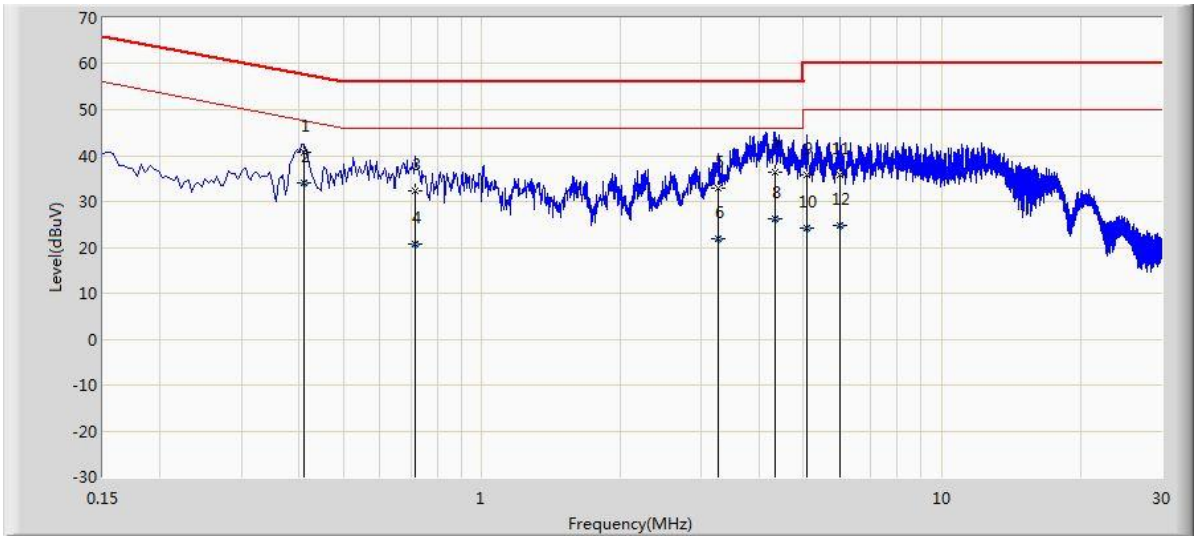
Configuration of Tested System



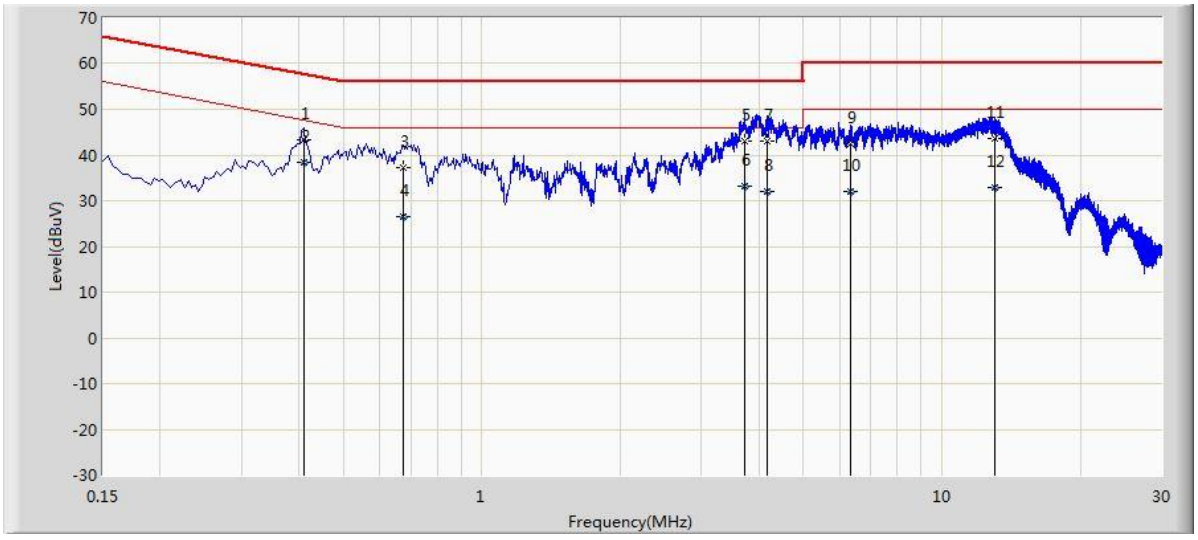
ATTACHMENT 1 - CONDUCTED EMISSION TEST RESULTS

CLIENT:	Grandstream Networks, Inc.	**TEST STANDERD:**	FCC Part 15, Subpart B, Section 15.107
MODEL NUMBERS:	GXP2130	**PRODUCT:**	IP Phone
MODEL TESTED:	GXP2130	**EUT DESIGNATION:**	Home or Office
TEMPERATURE:	23°C	**HUMIDITY:**	51%
ATM PRESSURE:	103kPa	**GROUNDING:**	None
TESTED BY:	Andy Zhu	**DATE OF TEST:**	Sep. 10th , 2014
TEST REFERENCE:	ANSI C63.4:2009		
TEST PROCEDURE:	The EUT was set up according to the guidelines of ANSI C63.4:2009 for conducted emissions. The measurement was using a AMN on each line and an EMI receiver peak scan was made at the frequency measurement range. The six highest significant peaks were then marked, and these signals were then quasi-peaked and averaged. The frequency range investigated was from 150KHz to 30MHz.		
TEST MODE:	Mode 1		
TEST SET UP:			
TESTED RANGE:	150kHz to 30MHz		
TEST VOLTAGE:	AC 120V/60Hz		
RESULTS:	The EUT meets the requirements of test reference for Conducted Emissions. The test results relate only to the equipment under test provided by client.		
CHANGES OR MODIFICATIONS:	There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen). test personnel.		
M. UNCERTAINTY:	Freq. ± $2x10^{-7}$ x Center Freq., Amp ± 2.6 dB		

Mode 1:



Line L Conducted Emission Graph



Line N Conducted Emission Graph

Test Data:

Mode 1:

Lines	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor	Type
L	0.410	40.758	31.073	-16.890	57.648	9.685	QP
L	0.410	34.007	24.322	-13.641	47.648	9.685	AV
L	0.718	32.329	22.653	-23.671	56.000	9.676	QP
L	0.718	20.705	11.028	-25.295	46.000	9.676	AV
L	3.254	32.857	23.088	-23.143	56.000	9.770	QP
L	3.254	21.955	12.185	-24.045	46.000	9.770	AV
L	4.350	36.404	26.483	-19.596	56.000	9.920	QP
L	4.350	26.318	16.398	-19.682	46.000	9.920	AV
L	5.082	35.798	25.785	-24.202	60.000	10.014	QP
L	5.082	24.333	14.319	-25.667	50.000	10.014	AV
L	5.990	35.697	25.613	-24.303	60.000	10.084	QP
L	5.990	24.871	14.787	-25.129	50.000	10.084	AV
N	0.410	43.419	33.769	-14.230	57.648	9.650	QP
N	0.410	38.329	28.679	-9.320	47.648	9.650	AV
N	0.674	37.220	27.553	-18.780	56.000	9.667	QP
N	0.674	26.423	16.756	-19.577	46.000	9.667	AV
N	3.730	42.972	33.102	-13.028	56.000	9.871	QP
N	3.730	33.158	23.287	-12.842	46.000	9.871	AV
N	4.170	42.961	33.043	-13.039	56.000	9.918	QP
N	4.170	32.042	22.124	-13.958	46.000	9.918	AV
N	6.326	42.533	32.413	-17.467	60.000	10.119	QP
N	6.326	32.165	22.045	-17.835	50.000	10.119	AV
N	12.994	43.712	33.658	-16.288	60.000	10.054	QP
N	12.994	32.975	22.921	-17.025	50.000	10.054	AV

Note:

1. *All readings are using a bandwidth of 9 kHz, with a 500 ms sweep time. A video filter was not used.*
2. *Other emission levels are too low against official limt that are not reported.*

Test Equipment List:

Test Equipment	*Model No.*	*Manufacturer*	*Serial No.*	*Last Cal.*	*Cal. Interval*
EMI Receiver	*ESR7*	*R&S*	*/*	*2013.11.08*	*2014.11.07*
Two-Line V-Network	*ENV216*	*R&S*	*/*	*2013.11.08*	*2014.11.07*
Temperature/ Meter Humidity	*TH101B*	*Anymetre*	*/*	*2013.11.15*	*2014.11.14*
Note: All testing were performed using internationally recognized standards. All test instruments were calibrated.					

TESTED BY: Andy Zhu ***MRT***

ENGINEER ***COMPANY NAME***

REVIEWED BY: ***ECMG***

SENIOR ENGINEER ***COMPANY NAME***

Conducted Emission Test Set-up- Front View

Conducted Emission Test Set-up- Rear View

ATTACHMENT 2 – RADIATED EMISSION MEASUREMENT

CLIENT:	Grandstream Networks, Inc.	**TEST STANDERD:**	FCC Part 15,Subpart B, Section 15.109
MODEL NUMBERS:	GXP2130	**PRODUCT:**	IP Phone
EUT MODEL:	GXP2130	**EUT DESIGNATION:**	Home or Office
TEMPERATURE:	23°C	**HUMIDITY:**	49%RH
ATM PRESSURE:	103.0kPa	**GROUNDING:**	None
TESTED BY:	Andy Zhu	**DATE OF TEST:**	Sep. 10th , 2014
TEST REFERENCE:	ANSI C63.4:2009		
TEST PROCEDURE:	The EUT was set up according to the guidelines of ANSI C63.4:2009 for radiated emissions. An EMI receiver peak scan was made at the frequency measurement range (pre-scan) in an Anechoic chamber.signal discrimination was then performed and the significant peaks marked.these peaks were then quasi-peaked in the frequ ency range of 30 MHz to 1GHz and average and peak in the frequency range of 1 GHz to 5GHz at an anechoic chamber. The following data lists the significant emission frequencies, measured levels, correction factors (including cable and antenna correction factors), and the corrected rea dings against the limits. Explanation of the Correction Factor are given as follows: FS= RA + AF + CF - AG Where: FS = Field Strength RA = Receiver Amplitude AF = Antenna Factor CF = Cable Attenuation Factor AG = Amplifier Gain		
TEST MODE:	Mode 1,Mode 3		
TESTED RANGE:	9K-30MHz and 30MHz to 5GHz		
TEST VOLTAGE:	AC 120V/60Hz		
RESULTS:	The EUT meet the requirements of test reference for radiated emissions. The test results relate only to the equipment under test provided by client.		
CHANGES OR MODIFICATIONS:	There were no modifications installed by ECMG Electronic Technical Testing Corp (Shenzhen). Test personnel.		
M. UNCERTAINTY:	Freq. $\pm$ 2x10^{-7} x Center Freq., Amp $\pm$ 3.6 dB		

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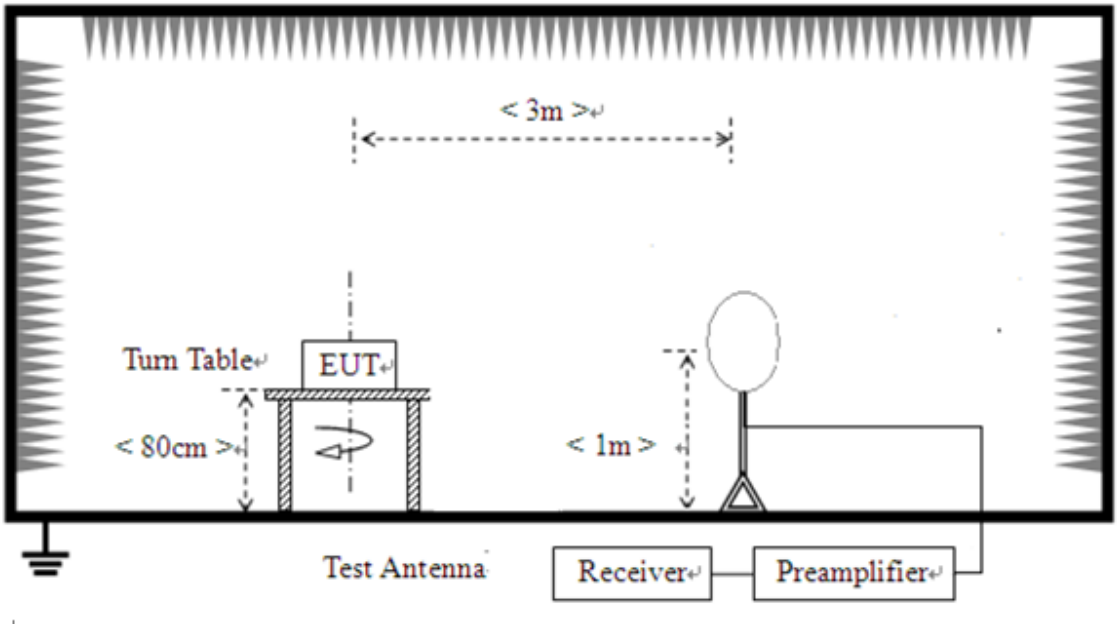
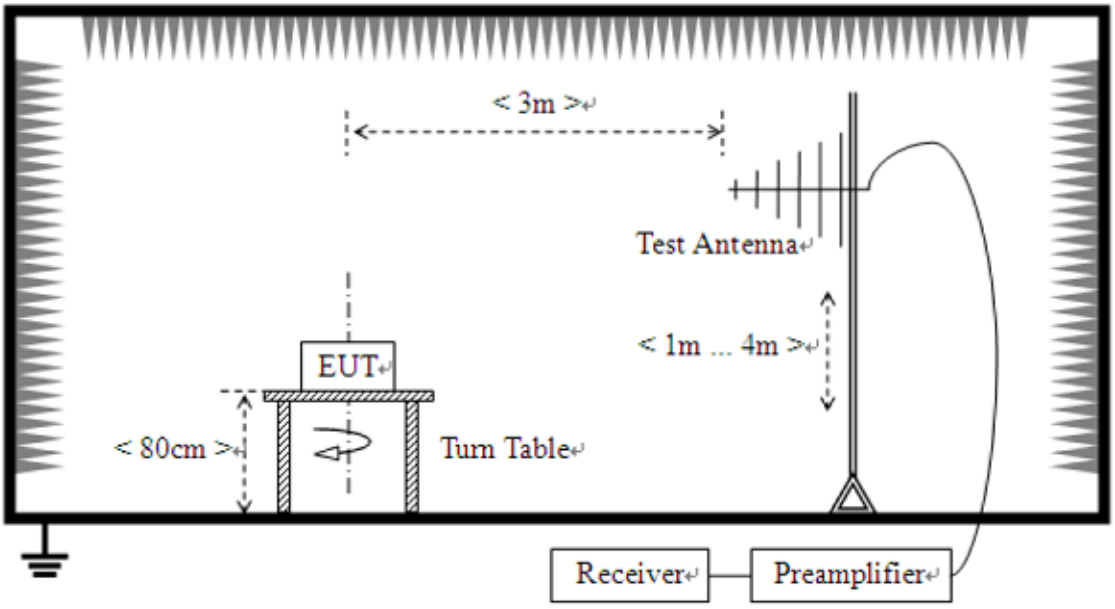
TEST SET-UP:

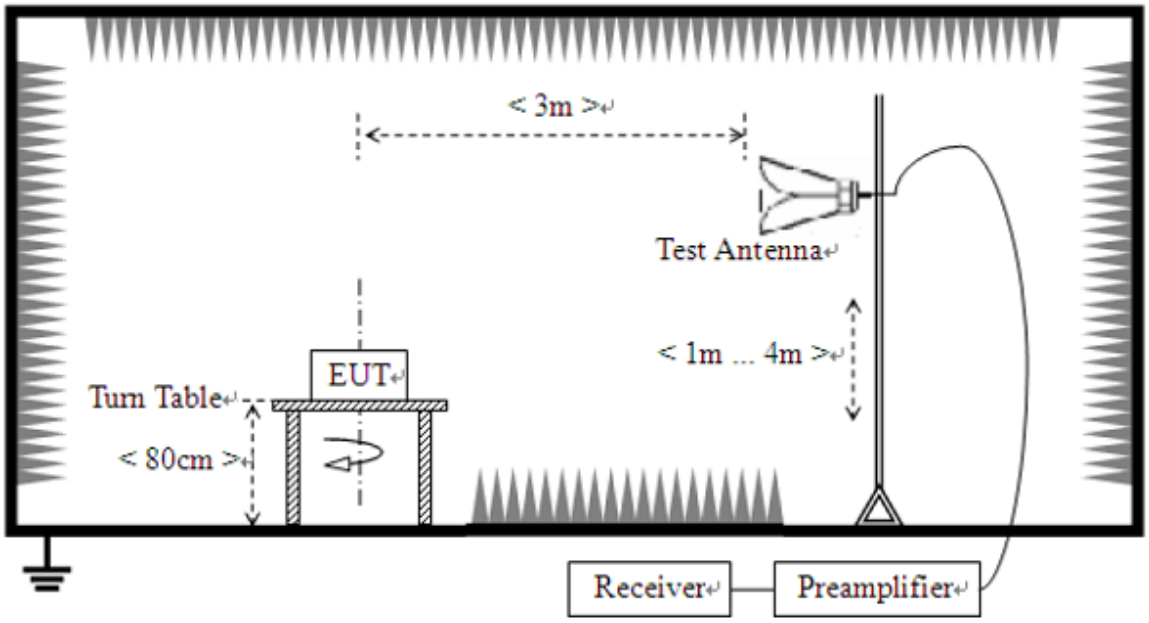
Frequency measured at 9KHz to 30MHz:



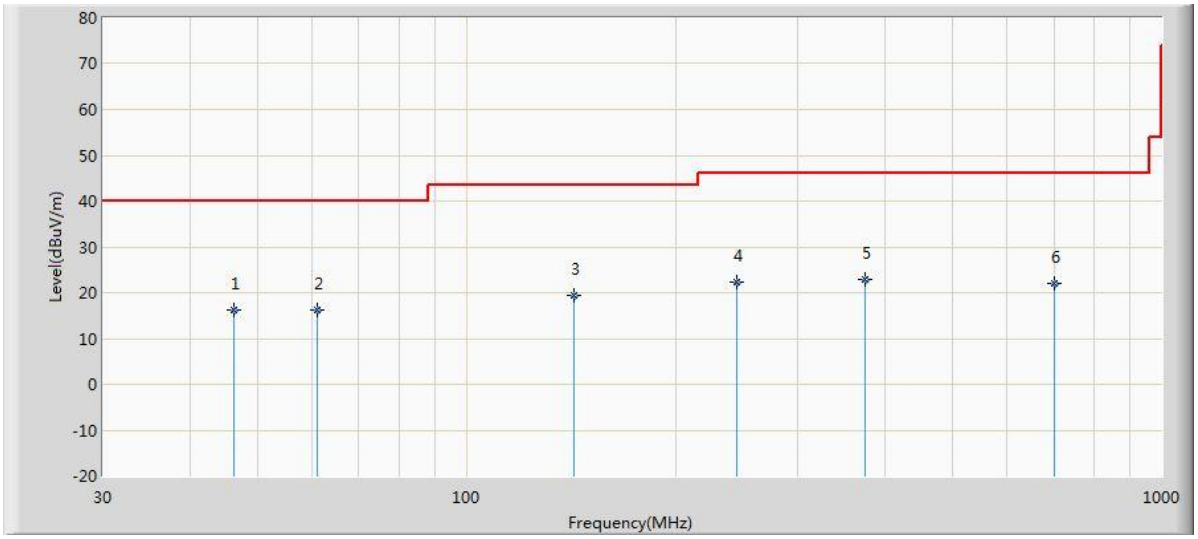
Frequency measured at 30MHz to 1000MHz:



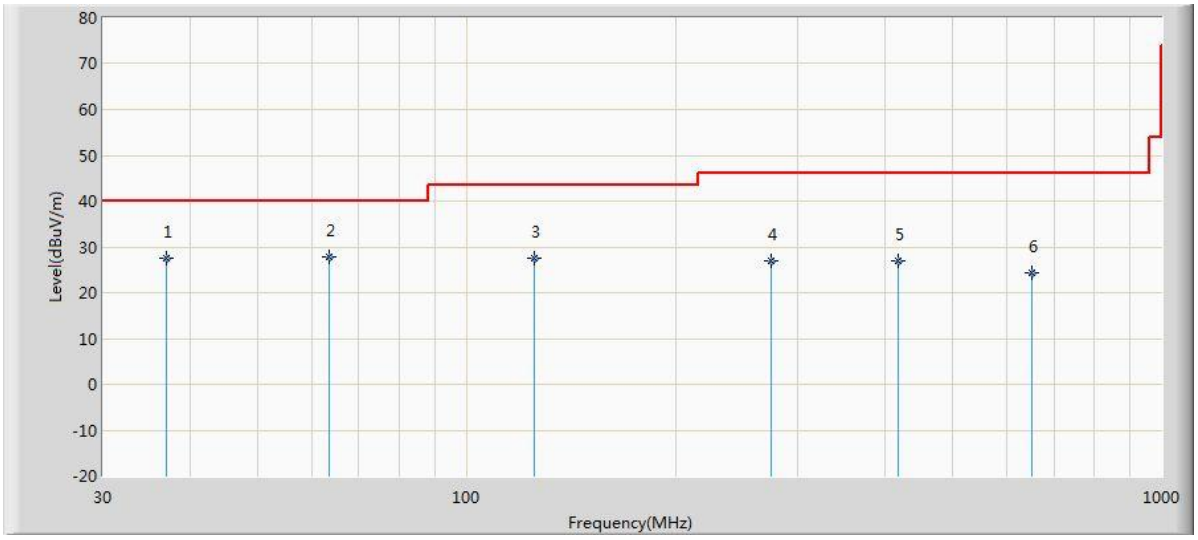
Frequency measured at Above 1GHz:



Mode 1&below 1GHz:

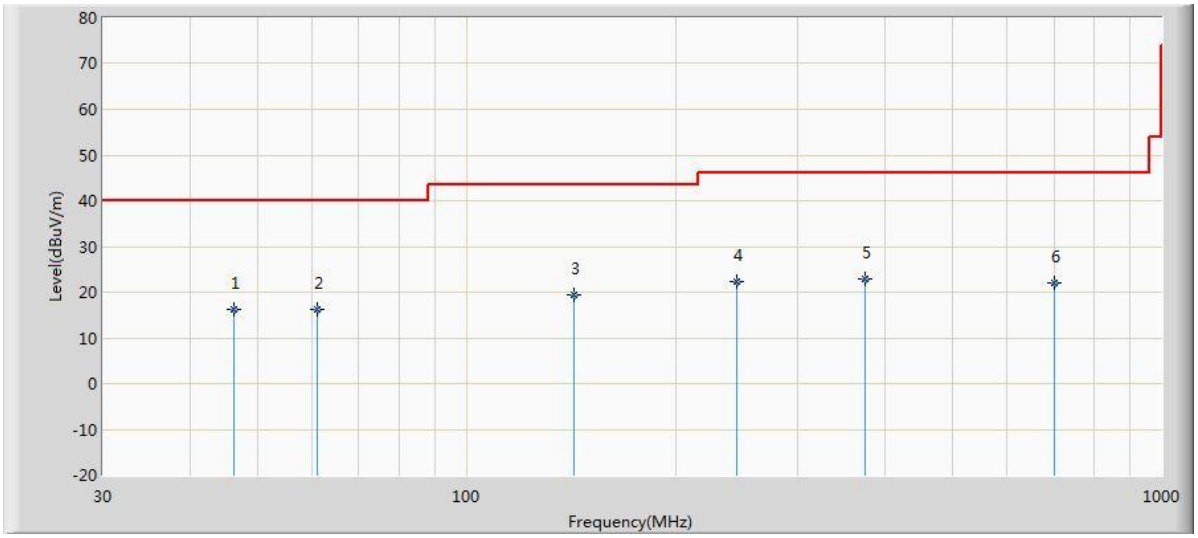


Horizontal: Radiated Emission Test Plot (Peak,maxhold)

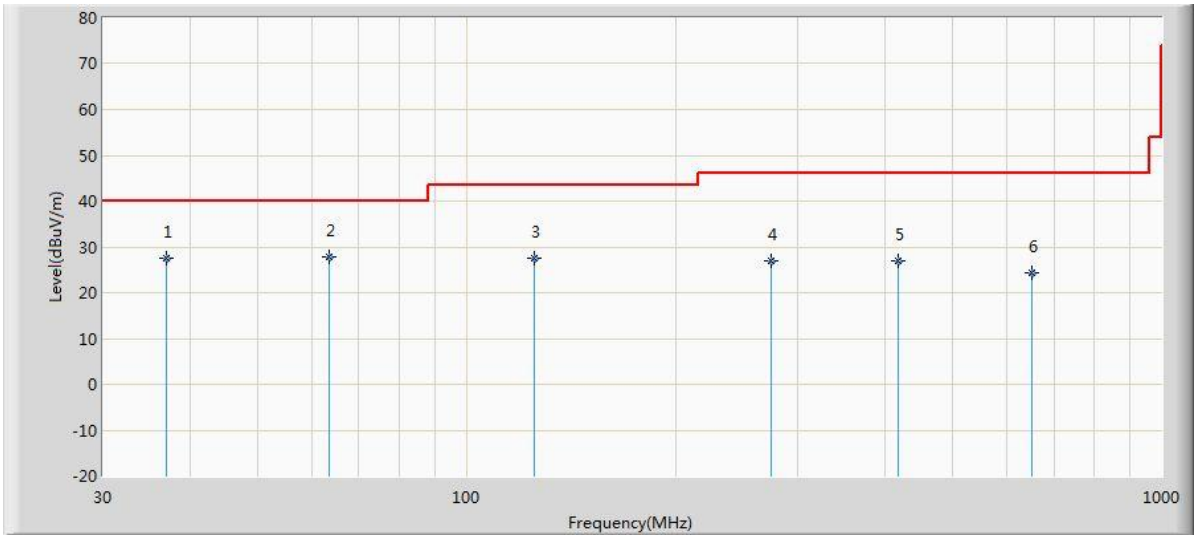


Vertical: Radiated Emission Test Plot (Peak,maxhold)

Mode 3&below 1GHz:

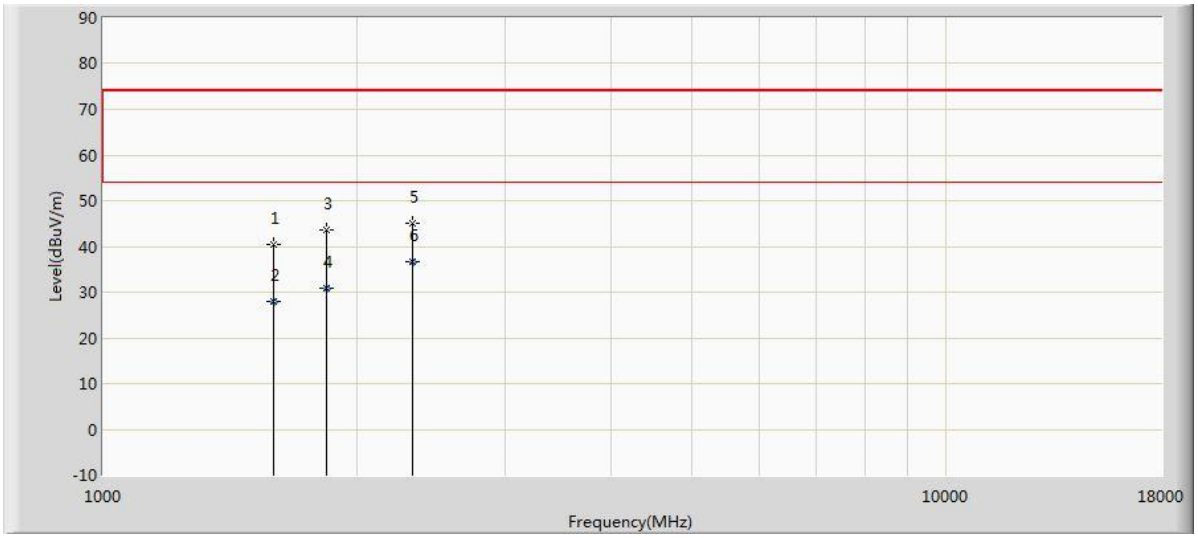


Horizontal:Radiated Emission Test Plot

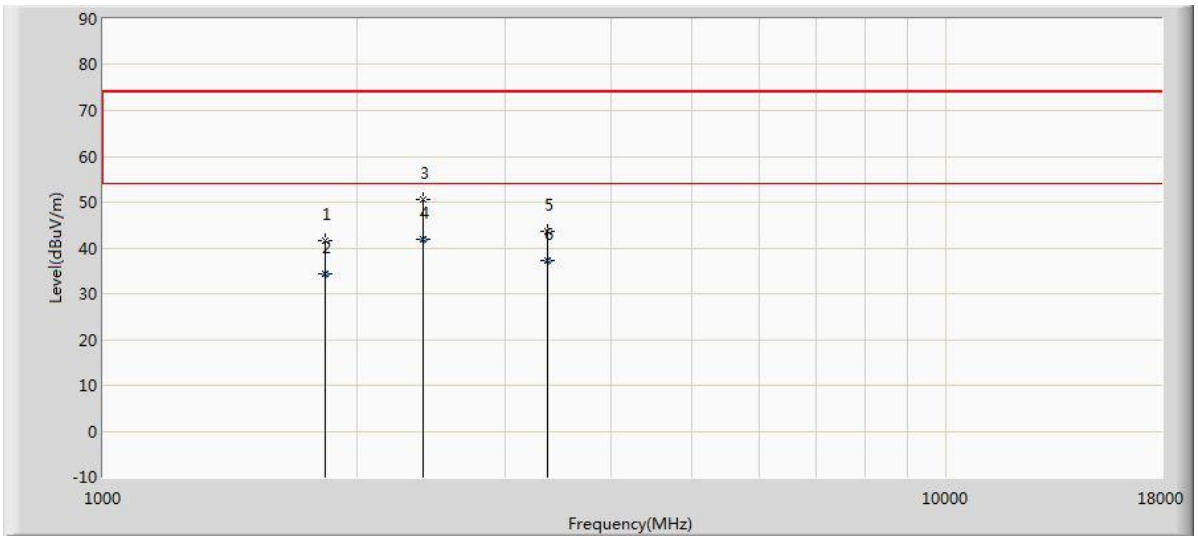


Vertical:Radiated Emission Test Plot

Mode 1&Above 1GHz:

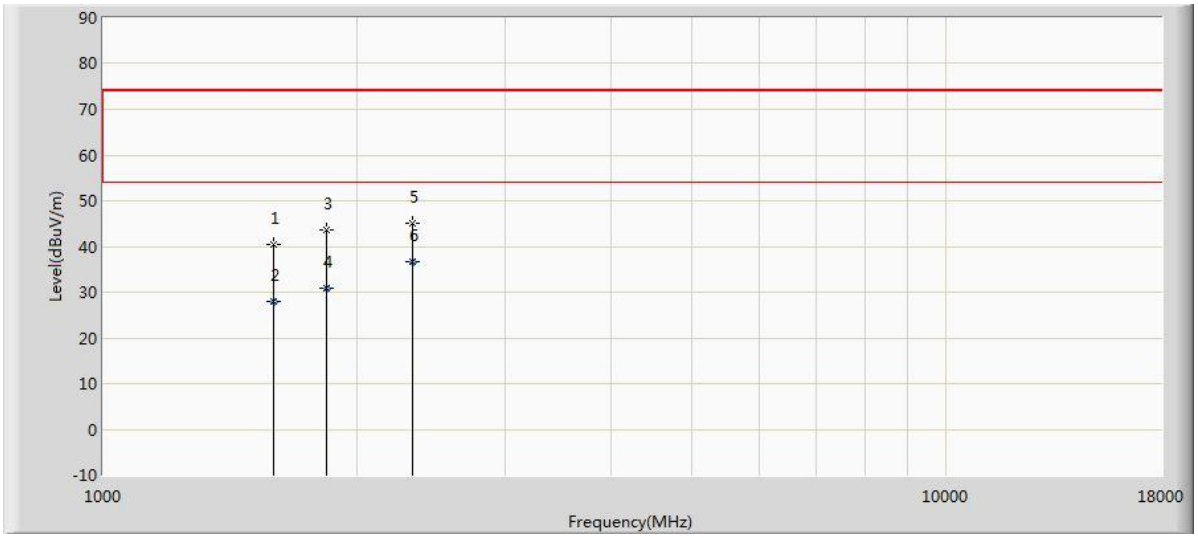


Horizontal:Radiated Emission Test Plot

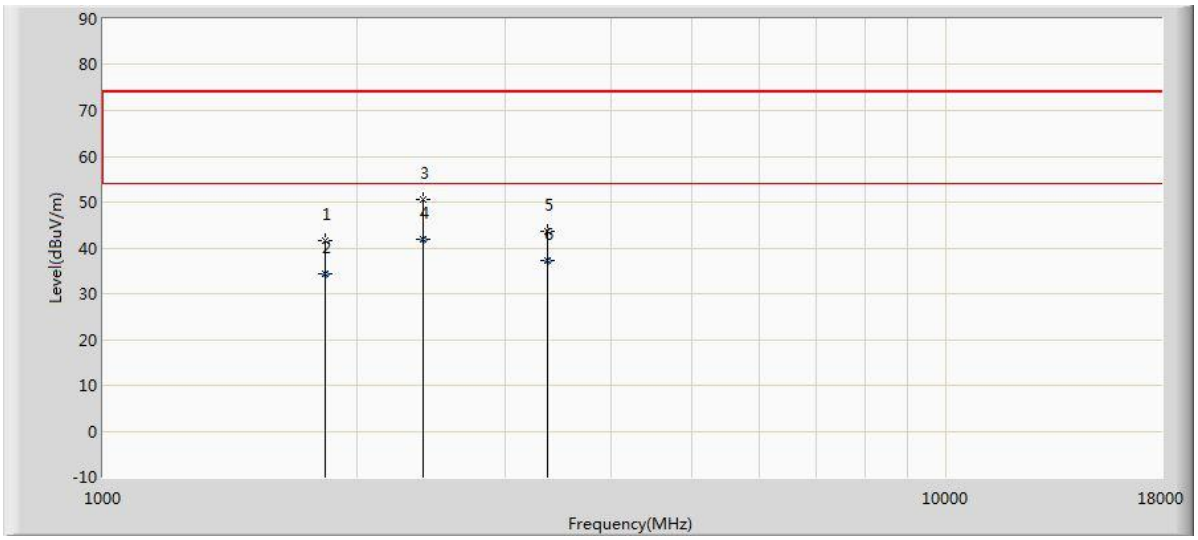


Vertical:Radiated Emission Test Plot

Mode 3&Above 1GHz:



Horizontal:Radiated Emission Test Plot



Vertical:Radiated Emission Test Plot

Test Data:

9KHz to 30MHz:

Test No.#:	Frequency (MHz)	Factor (dB)	Reading Level QP (dBuV/m)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	/	/	/	/	/	/
2	/	/	/	/	/	/
3	/	/	/	/	/	/
4	/	/	/	/	/	/
5	/	/	/	/	/	/
6	/	/	/	/	/	/

Note:

1. *The field strength is calculated by adding the antenna factor, cable factor. The basic equation with a sample calculation is as follows: Emission Level =Reading Level +Factor.*
2. *For band in 9KHz to 30MHz,Pre-scan has been conducted to determine the worst-case mode.mode 1 was selected for the final testing.*
3. *The limits shown are based on quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz. the bandwidth of Test Receiver was set at 200Hz in frequency range of 9KHz to 150KHz, 9kHz in the frequency range of 150KHz to 30MHz.*
4. *All emission levels in the frequency range of 9KHz to 30MHz are 20dB below the official limits that are not reported.*

Test Data:

Mode 1&Below 1GHz:

Frequency (MHz)	*Emission Level (dBuV/m)*	*Reading Level (dBuV/m)*	*Over Limit (dB)*	*Limits (dBuV/m)*	*Factor (dB)*	*Type*
Horizontal						
46.395	*16.264*	*38.130*	*-23.736*	*40.000*	*-23.443*	*QP*
61.040	*16.103*	*41.557*	*-23.897*	*40.000*	*-25.454*	*QP*
143.005	*19.459*	*50.676*	*-24.041*	*43.500*	*-31.217*	*QP*
244.370	*22.215*	*49.640*	*-23.785*	*46.000*	*-27.425*	*QP*
375.320	*22.994*	*47.869*	*-23.006*	*46.000*	*-24.876*	*QP*
700.270	*22.041*	*41.639*	*-23.959*	*46.000*	*-19.598*	*QP*
Vertical						
36.965	*27.449*	*51.920*	*-12.551*	*40.000*	*-24.470*	*QP*
63.465	*27.879*	*54.114*	*-12.121*	*40.000*	*-26.234*	*QP*
125.060	*27.430*	*57.421*	*-16.070*	*43.500*	*-29.991*	*QP*
274.925	*26.841*	*53.772*	*-19.159*	*46.000*	*-26.931*	*QP*
418.000	*26.814*	*50.959*	*-19.186*	*46.000*	*-24.145*	*QP*
649.830	*24.278*	*44.790*	*-21.722*	*46.000*	*-20.512*	*QP*

Note:

1. *All readings are quasi-peak unless stated otherwise, using a QPA bandwidth of 120kHz, with a 60 s sweep time. A video filter was not used.*
2. *The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows: Emission Level =Reading Level + Factor(Antenna Factor + Cable Loss –Preamplifier Factor).*
3. *The other emission levels are 20dB below the official limits that are not reported.*

Mode 1&Above 1GHz:

Frequency (MHz)	Emission Level (dBuV/m)	Reading Level (dBuV/m)	Over Limit (dB)	Limits (dBuV/m)	Factor (dB)	Type
Horizontal						
1595.000	40.475	41.557	-33.525	74.000	-1.082	PK
1595.000	28.086	29.168	-25.914	54.000	-1.082	AV
1841.500	43.731	43.464	-30.269	74.000	0.267	PK
1841.500	31.012	30.745	-22.988	54.000	0.267	AV
2326.000	44.971	42.046	-29.029	74.000	2.925	PK
2326.000	36.554	33.629	-17.446	54.000	2.925	AV
Vertical						
1833.000	41.730	41.546	-32.270	74.000	0.184	PK
1833.000	34.353	34.169	-19.647	54.000	0.184	AV
2394.000	50.605	47.892	-23.395	74.000	2.713	PK
2394.000	41.969	39.256	-12.031	54.000	2.713	AV
3371.500	43.598	40.429	-30.402	74.000	3.169	PK
3371.500	37.347	34.178	-16.653	54.000	3.169	AV

Note:

1. *The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows: Emission Level =Reading Level +Factor(Antenna Factor + Cable Loss –Preamplifier Factor).*
2. *The limits shown are based on Peak value and Average value detector above 1GHz,the bandwidth of Test Receiver was set at 1MHz above 1GHz.*
3. *The other emission levels are 20dB below the official limits that are not reported.*

Mode 3&below 1GHz:

Frequency (MHz)	Emission Level (dBuV/m)	Reading Level (dBuV/m)	Over Limit (dB)	Limits (dBuV/m)	Factor (dB)	Type
Horizontal						
46.395	16.264	38.130	-23.736	40.000	-23.443	QP
61.040	16.103	41.557	-23.897	40.000	-25.454	QP
143.005	19.459	50.676	-24.041	43.500	-31.217	QP
244.370	22.215	49.640	-23.785	46.000	-27.425	QP
375.320	22.994	47.869	-23.006	46.000	-24.876	QP
700.270	22.041	41.639	-23.959	46.000	-19.598	QP
Vertical						
36.965	27.449	51.920	-12.551	40.000	-24.470	QP
63.465	27.879	54.114	-12.121	40.000	-26.234	QP
125.060	27.430	57.421	-16.070	43.500	-29.991	QP
274.925	26.841	53.772	-19.159	46.000	-26.931	QP
418.000	26.814	50.959	-19.186	46.000	-24.145	QP
649.830	24.278	44.790	-21.722	46.000	-20.512	QP

Note:

1. *All readings are quasi-peak unless stated otherwise, using a QPA bandwidth of 120kHz, with a 60 s sweep time. A video filter was not used.*
2. *The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows: Emission Level =Reading Level + Factor(Antenna Factor + Cable Loss –Preamplifier Factor).*
3. *The other emission levels are 20dB below the official limits that are not reported.*

Mode 3&Above 1GHz:

Frequency (MHz)	Emission Level (dBuV/m)	Reading Level (dBuV/m)	Over Limit (dB)	Limits (dBuV/m)	Factor (dB)	Type
Horizontal						
1595.000	40.475	41.557	-33.525	74.000	-1.082	PK
1595.000	28.086	29.168	-25.914	54.000	-1.082	AV
1841.500	43.731	43.464	-30.269	74.000	0.267	PK
1841.500	31.012	30.745	-22.988	54.000	0.267	AV
2326.000	44.971	42.046	-29.029	74.000	2.925	PK
2326.000	36.554	33.629	-17.446	54.000	2.925	AV
Vertical						
1833.000	41.730	41.546	-32.270	74.000	0.184	PK
1833.000	34.353	34.169	-19.647	54.000	0.184	AV
2394.000	50.605	47.892	-23.395	74.000	2.713	PK
2394.000	41.969	39.256	-12.031	54.000	2.713	AV
3371.500	43.598	40.429	-30.402	74.000	3.169	PK
3371.500	37.347	34.178	-16.653	54.000	3.169	AV

Note:

1. *The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows: Emission Level =Reading Level + Factor(Antenna Factor + Cable Loss –Preamplifier Factor).*
2. *The limits shown are based on Peak value and Average value detector above 1GHz,the bandwidth of Test Receiver was set at 1MHz above 1GHz.*
3. *The other emission levels are 20dB below the official limits that are not reported.*

Test Equipment List:

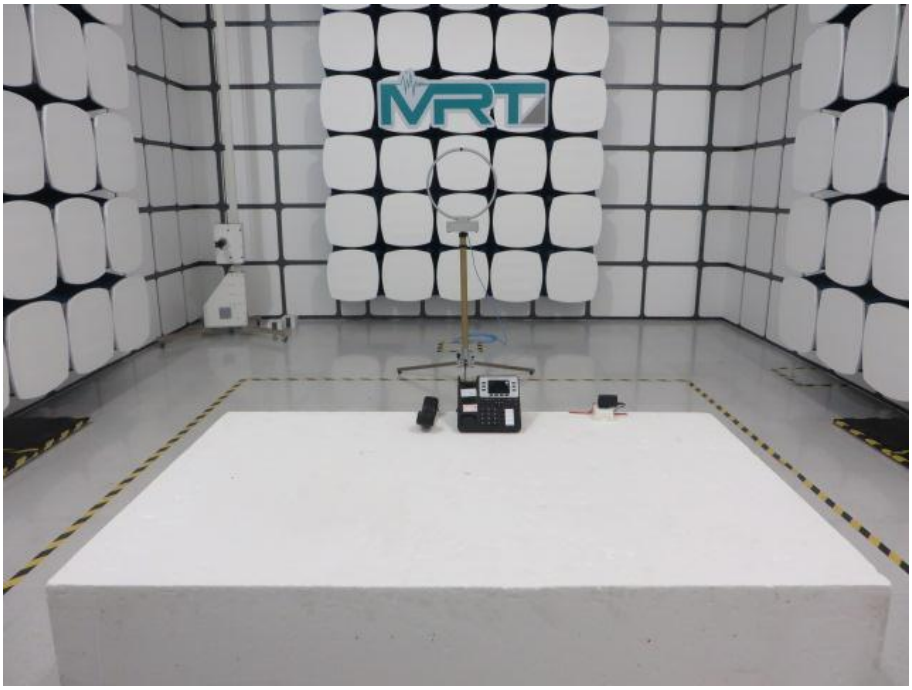
Test Equipment	*Manufacturer*	*Model No.*	*Serial No.*	*Last Cal.*	*Cal. Due*
EMI Test Receiver	*R&S*	*ESR7*	*/*	*2013.10.08*	*2014.10.07*
Loop Antenna	*Schwarzbeck*	*FMZB1519*	*/*	*2013.10.08*	*2014.10.07*
TRILOG Antenna	*Schwarzbeck*	*VULB9162*	*/*	*2013.11.25*	*2014.11.24*
Broad-Band Horn Antenna	*Schwarzbeck*	*BBHA9120D*	*/*	*2013.11.25*	*2014.11.24*
Preamplifier	*MRT*	*AP01G18*	*/*	*2013.10.08*	*2014.10.07*
Spectrum Analyzer	*Agilent*	*N9010A*	*/*	*2014.01.05*	*2014.01.04*
Note: All testing were performed using internationally recognized standards. All test instruments were calibrated.					

TESTED BY: Andy Zhu ***MRT***

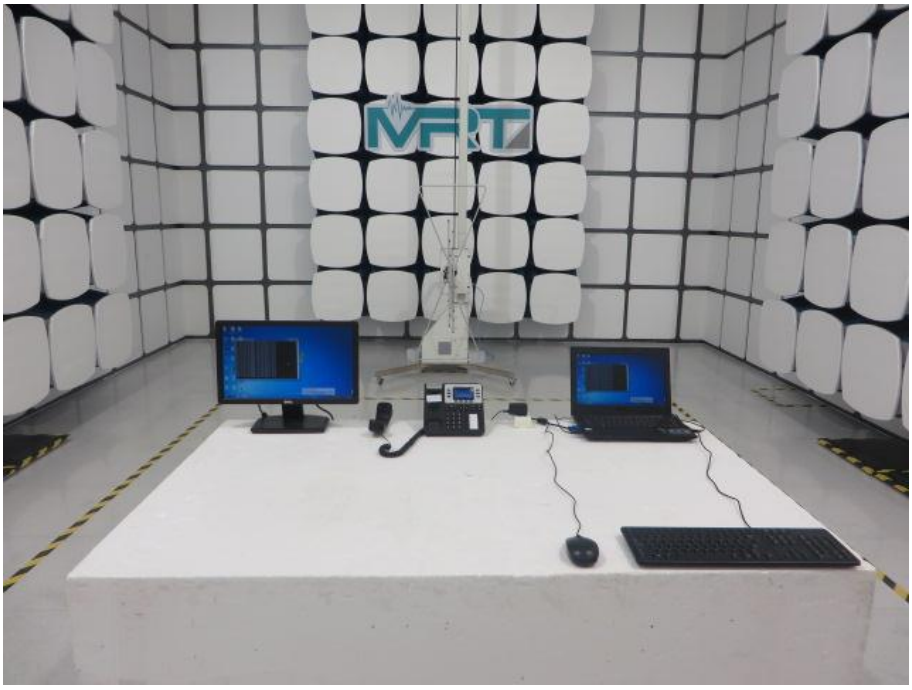
ENGINEER ***COMPANY NAME***

REVIEWED BY: ***ECMG***

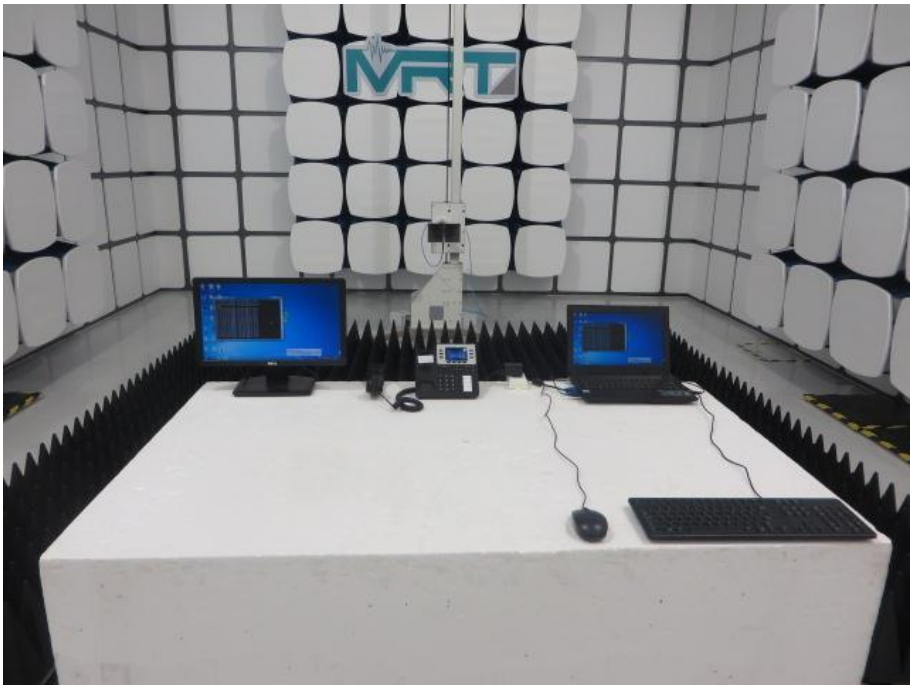
SENIOR ENGINEER ***COMPANY NAME***



Radiated Emission Test Set-up (9KHz-30MHz)



Radiated Emission Test Set-up (Below 1GHz)



Radiated Emission Test Set-up (Above 1GHz)

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