


EMI TEST REPORT

Product Name: IP Phone

Model Number: eSpace 6805

Brand Name: 
HUAWEI

Prepared for Huawei Technologies Co., Ltd.

FCC ID : QIS-ESPACE6805

Classification: Part 15 Class B Computing Device
Peripheral(JBP)

According to FCC 47 CFR Part 15, Subpart B



Test Report #: SHE-1606-11516-FCC

Prepared by: Nancy ECMG
Nancy Han /Assistant Company Name

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

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

Test Report Released by: Swall Zhang July 6th, 2016
Swall Zhang Date

Verdict

Test Result :	Pass*
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**:In the configuration, the EUT complied with the standard specified above.*

Revision History

Rev.	Issue date	Revision	Revised by
01	07/06/2016	Initial review	Jawen Yin
/	/	/	/

Test Location

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

Test Site Location:

*NTEK Testing Technology
Co., Ltd.*

*1/F, Building E, Fenda
Science Park Sanwei
Community, Xixiang Street,
Baoan District, Shenzhen,
Guangdong*

Tel:

(86)-755- 61156588

Fax:

(86)-755- 61156599

Accreditation Bodies

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

IC Registration No.: 9270A

The 3m alternate test site of NTEK Testing Technology Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.:9270A on Aug, 2012.

FCC-Registration No.: 238937

NTEK Testing Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 238937, Sep 06, 2013

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List Attached Files

<i>Exhibit Type</i>	<i>File Description</i>	<i>File Name</i>
<i>Test Report</i>	<i>Test Report</i>	<i>QIS-ESPACE6805 _Test Report.pdf</i>
<i>Operation Description</i>	<i>Technical Description</i>	<i>QIS-ESPACE6805 _Operation description.pdf</i>
<i>External Photos</i>	<i>External Photos</i>	<i>QIS-ESPACE6805 _External Photos</i>
<i>Internal Photos</i>	<i>Internal Photos</i>	<i>QIS-ESPACE6805 _Internal Photos</i>
<i>Block Diagram</i>	<i>Block Diagram</i>	<i>QIS-ESPACE6805 _Block Diagram.pdf</i>
<i>Schematics</i>	<i>Circuit Diagram</i>	<i>QIS-ESPACE6805 _Schematics.pdf</i>
<i>ID Label/Location</i>	<i>Label and Location</i>	<i>QIS-ESPACE6805 _Label & Location.pdf</i>
<i>User Manual</i>	<i>User Manual</i>	<i>QIS-ESPACE6805 _User Manual.pdf</i>
<i>Test setup photos</i>	<i>Test set-up photos</i>	<i>QIS-ESPACE6805 _Test Set-up Photos</i>

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Reproduction Clause

Any reproduction of this document must be done in full. No single part of this document may be reproduced without permission from ECMG Electronic Technical Testing Corp (Shenzhen).

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 : *eSpace 6805*

Model Tested : *eSpace 6805*

Date of Receipt : *June 30th, 2016*

Date Tested : *June 30th, 2016*

Applicant : *Huawei Technologies Co., Ltd.*

Address : *Administration Building, Huawei Base
Bantian Longgang District, Shenzhen
518129 P.R.C*

Telephone : *(86)-755-28786132*

Fax : *(86)-755-28566543*

Manufacturer : *Huawei Technologies Co., Ltd.*

Address : *Administration Building, Huawei Base
Bantian Longgang District, Shenzhen
518129 P.R.C*

Telephone : *(86)-755-28786132*

Fax : *(86)-755-28566543*

Factory : *Huawei Technologies Co., Ltd.*

Address : *Administration Building, Huawei Base
Bantian Longgang District, Shenzhen
518129 P.R.C*

Telephone : *(86)-755-28786132*

Fax : *(86)-755-28566543*

EUT Description

Huawei Technologies Co., Ltd. Model Tested eSpace 6805 (referred to as the EUT in this report) is an IP Phone.

Technical specifications are as follows:

Parameter		Ranges
<i>Basic parameters</i>	<i>Rated voltage</i>	<i>5.0V</i>
	<i>Rated Current</i>	<i>800mA</i>
<i>I/O Ports</i>	<i>LAN Ports</i>	<i>RJ-45 port for LAN(Uplink) connection,support PoE</i>
	<i>PC port</i>	<i>Connected with an PC</i>
	<i>Headset Jack</i>	<i>Connected with an headset</i>
	<i>Handset Jack</i>	<i>Connected with an handset</i>
	<i>/</i>	<i>/</i>
<i>Power Adapter</i>	<i>Input</i>	<i>AC 100-240 V 50/60 Hz</i>
	<i>Output</i>	<i>DC 5V, 800mA</i>
	<i>Model</i>	<i>NBS05B050080VU</i>
	<i>Brand name</i>	<i>Mass power</i>
	<i>Input</i>	<i>100-240VAC 50/60Hz</i>
	<i>Output</i>	<i>DC 5V, 800mA</i>
	<i>Model</i>	<i>R60UC0500080B</i>
	<i>Brand name</i>	<i>SUNLIGHT</i>

For other informations &features please refer to user's manual of EUT.

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:

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

Note: Since the highest frequency operated of the EUT is 208MHz, so upper frequency of radiated emission test is up to 2GHz as per §15.33(b)(1).

Test Summary

The Electromagnetic Compatibility requirements on model eSpace 6805 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
<i>FCC Part 15.107 ANSI C63.4 -2014</i>	<i>Conducted Emission</i>	<i>Passed</i>	<i>AC Input Port</i>	<i>Attachment 1</i>
<i>FCC Part 15.109 ANSI C63.4 -2014</i>	<i>Radiated Emission</i>	<i>Passed</i>	<i>Enclosure</i>	<i>Attachment 2</i>

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:

<i>Pre-Test Mode</i>	
<i>EMI Test Mode</i>	Mode 1: <i>Communication with PC& IP Phone + Mass Power</i>
	Mode 2: <i>Communication with PC& IP Phone + Sunlight Power</i>
	Mode 3: <i>PoE Mode</i>
<i>Final Test Mode</i>	
<i>EMI Test Mode</i>	Mode 1: <i>Communication with PC& IP Phone + Mass Power</i>
	Mode 2: <i>Communication with PC& IP Phone + Sunlight Power</i>
	Mode 3: <i>PoE Mode</i>

EUT Exercise Software

No test software support this test.

Equipment Modification

Any modifications installed previous to testing by Huawei Technologies Co., Ltd. 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).

EUT Sample Photos

EUT Model: eSpace 6805



EUT- Top View



EUT- Bottom View

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EUT- Left Side View



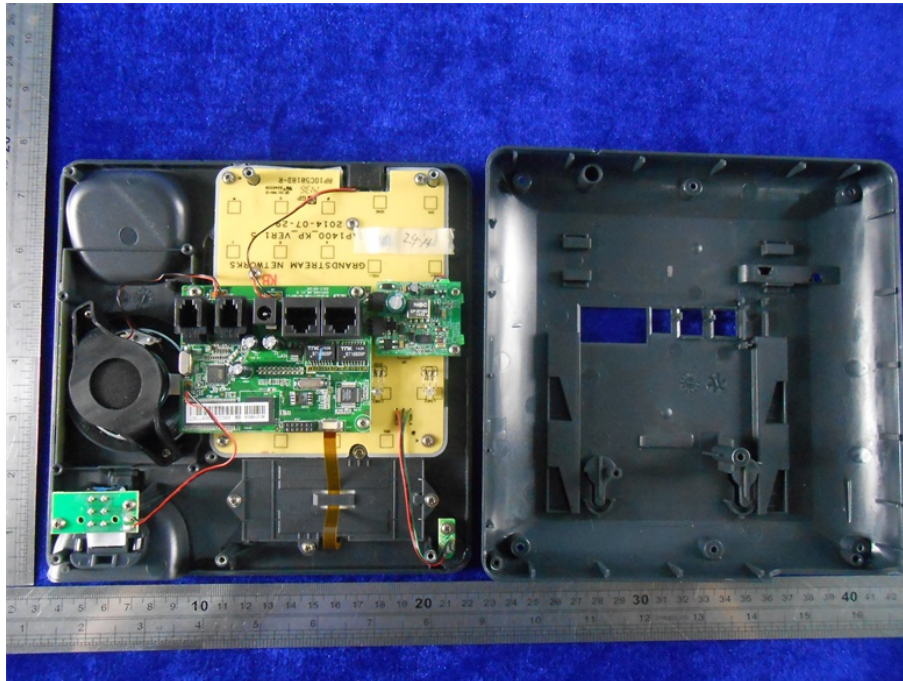
EUT- Right Side View



Power Adapter View(Manufacturer: Mass power)



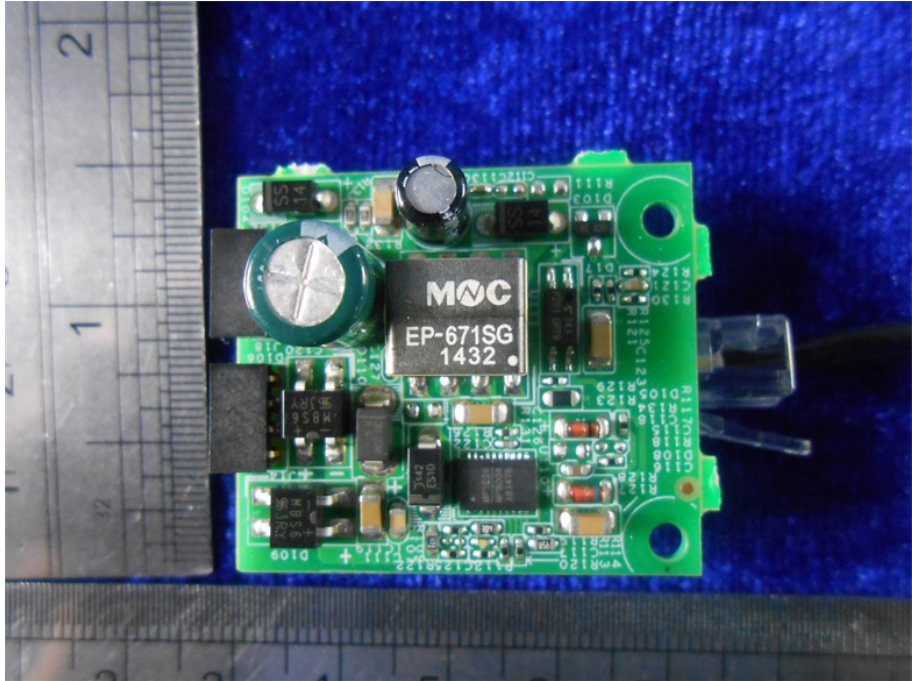
Power Adapter View(Manufacturer: Sunlight)



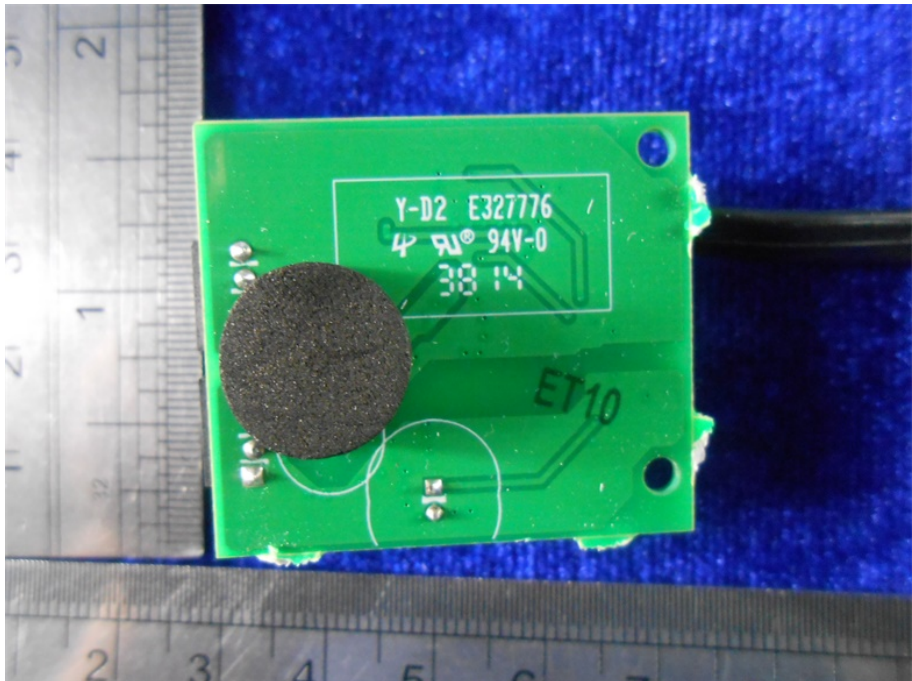
EUT-Uncovered View 01



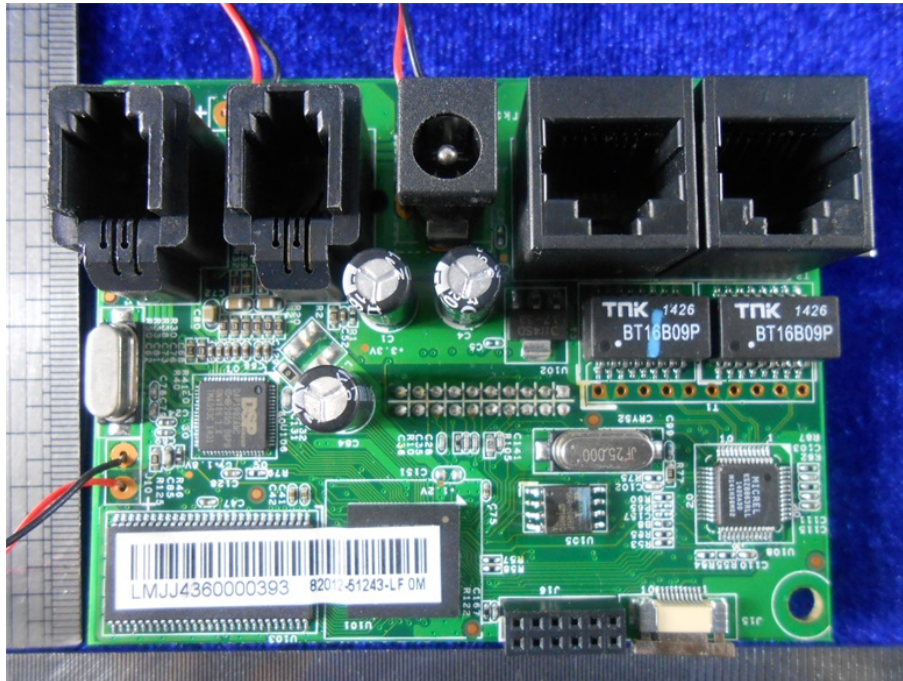
EUT-Uncovered View 02



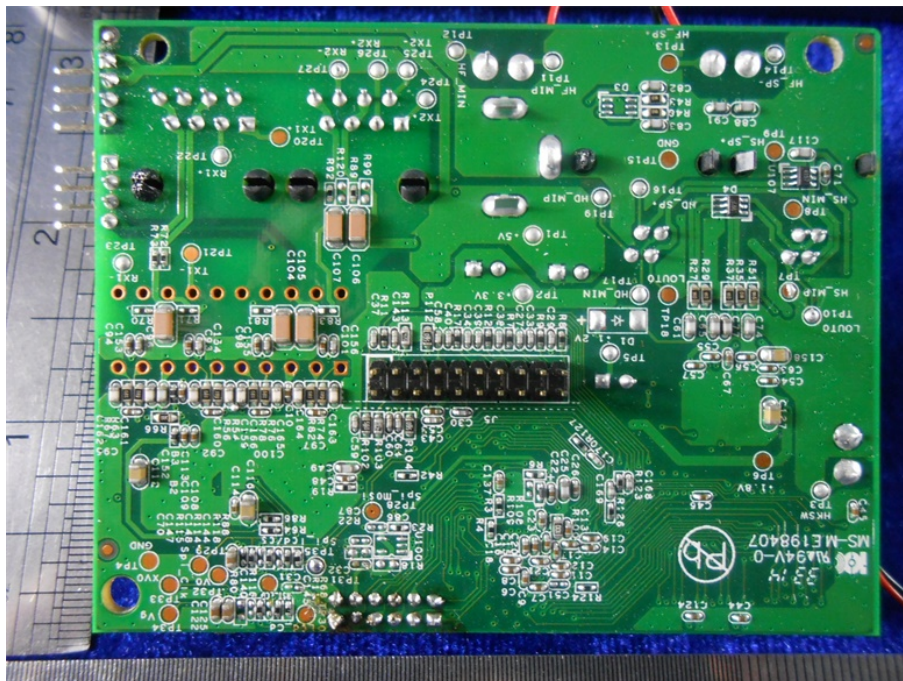
PoE Board-Top View



PoE Board-Bottom View



Mainboard-Top View



Mainboard-Bottom View

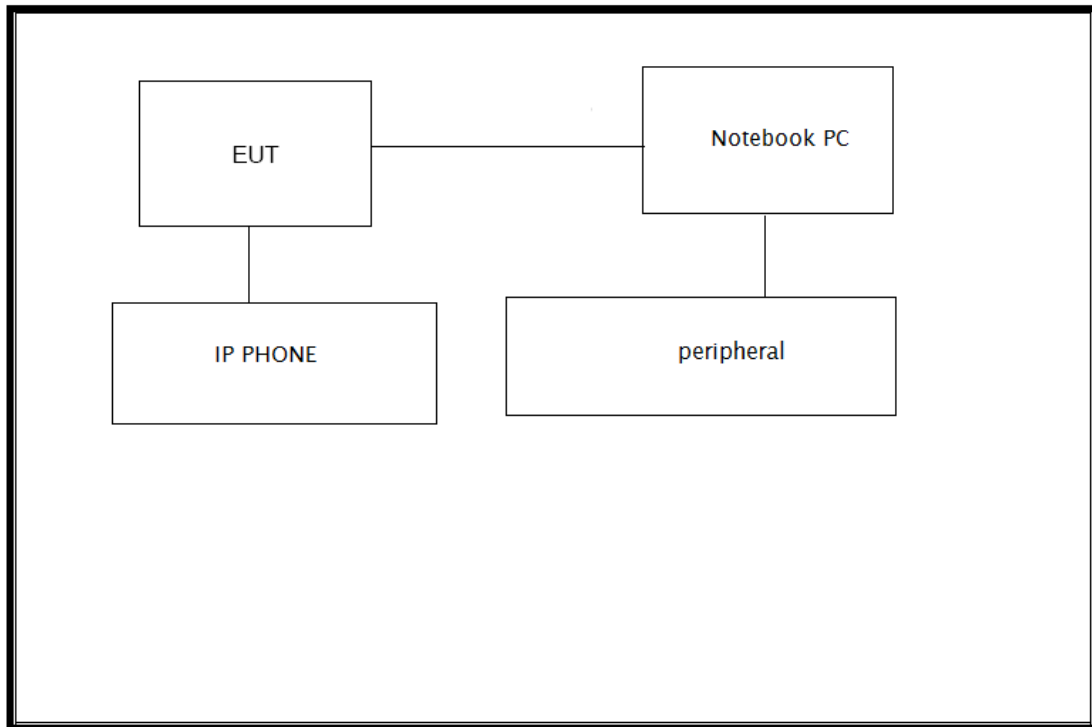
Test System Details

EUT				
<i>Model Number:</i>	<i>eSpace 6805</i>			
<i>Description:</i>	<i>IP Phone</i>			
<i>Manufacturer:</i>	<i>Huawei Technologies Co., Ltd.</i>			
<i>Input Voltage:</i>	<i>DC 5V</i>			
Support Equipment				
<i>Description</i>	<i>Model Number</i>	<i>Serial Number</i>	<i>Certificate</i>	<i>Manufacturer</i>
<i>Notebook PC</i>	<i>T400</i>	<i>6475</i>	<i>DoC</i>	<i>IBM</i>
<i>Monitor</i>	<i>U2142M</i>	<i>/</i>	<i>DoC</i>	<i>DELL</i>
<i>Mouse</i>	<i>N889</i>	<i>/</i>	<i>DoC</i>	<i>DELL</i>

Cable Description						
<i>Cable No.</i>	<i>Type of Cable</i>	<i>From</i>	<i>To</i>	<i>Length (Meters)</i>	<i>Shielded (Y/N)</i>	<i>Ferrite (Y/N)</i>
<i>1</i>	<i>VGA Cable</i>	<i>Notebook PC</i>	<i>Monitor</i>	<i>1.2</i>	<i>Y</i>	<i>Y</i>
<i>2</i>	<i>Mouse cable</i>	<i>Notebook PC</i>	<i>Mouse</i>	<i>1.2</i>	<i>N</i>	<i>Y</i>
<i>3</i>	<i>RJ-45 Cable -1</i>	<i>EUT</i>	<i>Notebook PC</i>	<i>1.5</i>	<i>N</i>	<i>N</i>
<i>4</i>	<i>RJ-45 Cable -2</i>	<i>EUT</i>	<i>IP Phone</i>	<i>2.0</i>	<i>N</i>	<i>N</i>
<i>5</i>	<i>Power Adapter Cable</i>	<i>EUT</i>	<i>AC Plug</i>	<i>1.5</i>	<i>N</i>	<i>N</i>

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.

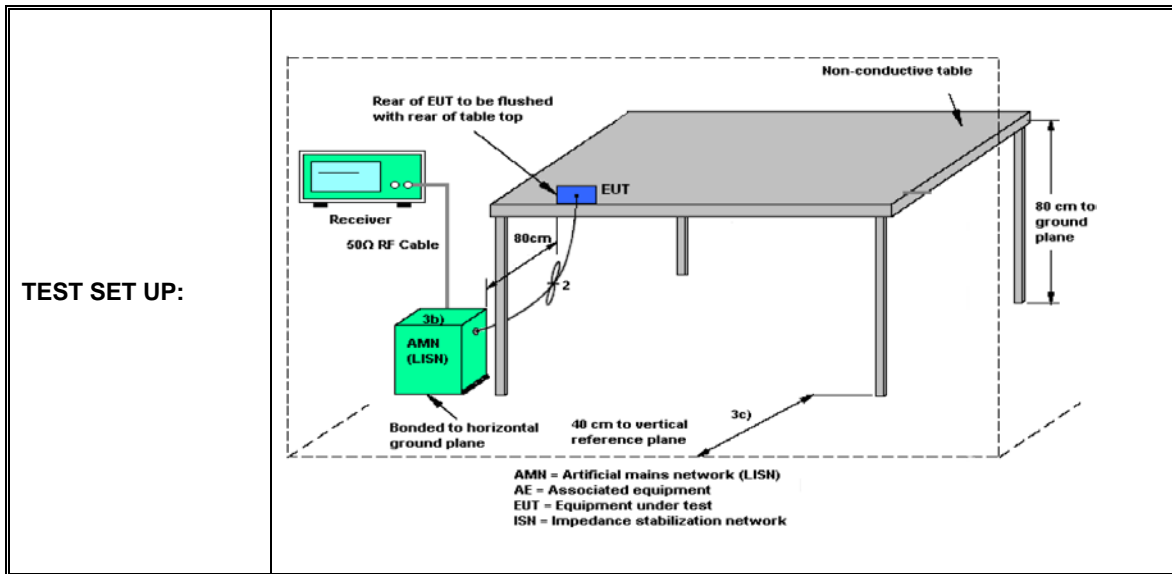
Configuration of Tested System



ATTACHMENT 1 - CONDUCTED EMISSION TEST RESULTS

CLIENT:	Huawei Technologies Co., Ltd.	TEST STANDERD:	Section 15.107
MODEL NUMBERS:	eSpace 6805	PRODUCT:	IP Phone
MODEL TESTED:	eSpace 6805	EUT DESIGNATION:	Home or Office
TEMPERATURE:	22°C	HUMIDITY:	48%
ATM PRESSURE:	103kPa	GROUNDING:	None
TESTED BY:	Alex Yu	DATE OF TEST:	June 30 th , 2016
TEST REFERENCE:	ANSI C63.4- 2014		
TEST PROCEDURE:	<p>The EUT was set up according to the guidelines of ANSI C63.4: 2014 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.</p> <p>The frequency range investigated was from 150KHz to 30MHz.</p> <p>Corrected Amplitude & Margin Calculation. The basic equation as follow: $VC = VR + AC + VDF;$ Herein, VC: corrected voltage amplitude VR: reading voltage amplitude AC: attenuation caused by cable loss VDF: voltage division factor of AMN or ISN.</p> <p>The "Margin" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the maximum limit. The equation for margin calculation is as follows: $\text{Margin} = \text{Limit} - \text{Corrected Amplitude}.$</p>		
TEST MODE:	Mode 1, Mode 2		
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:	The maximum measurement uncertainty is evaluated as: 150KHz~30MHz: 3.2dB. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.		

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EMI Receiver Set-up:

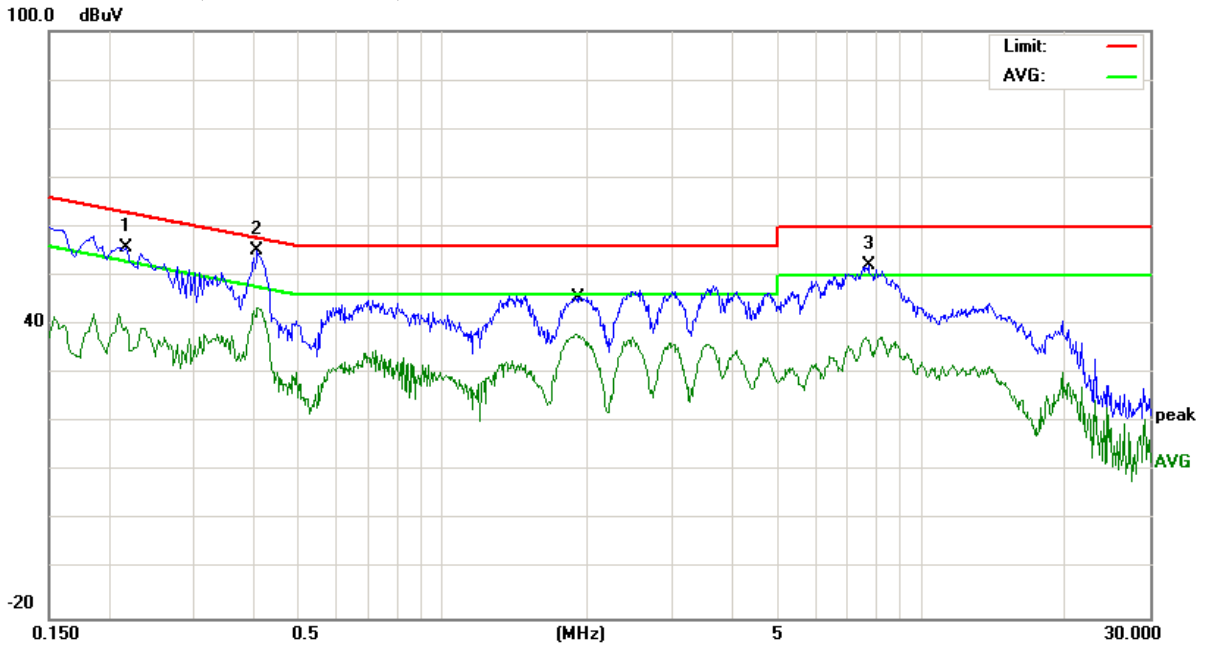
Frequency [MHz]	IF B/W
0.15 - 30	9KHz

Conducted Emission Limit:

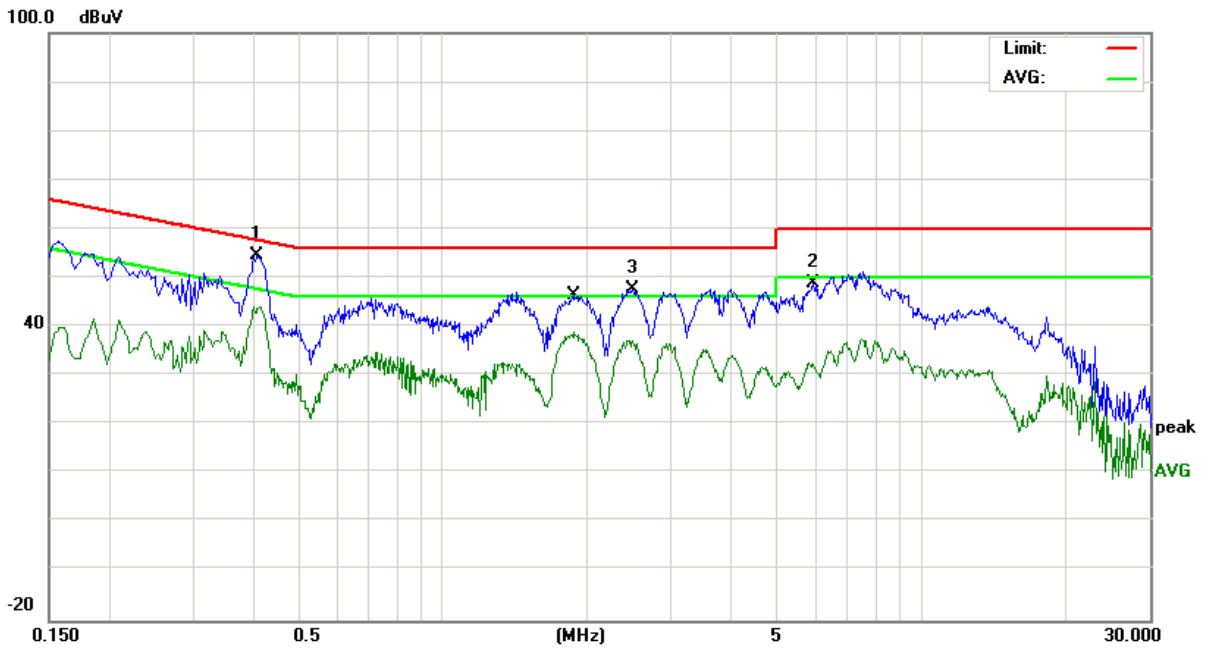
Frequency [MHz]	Field strength [dBuV]	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

Mode 1: (Mass Power)

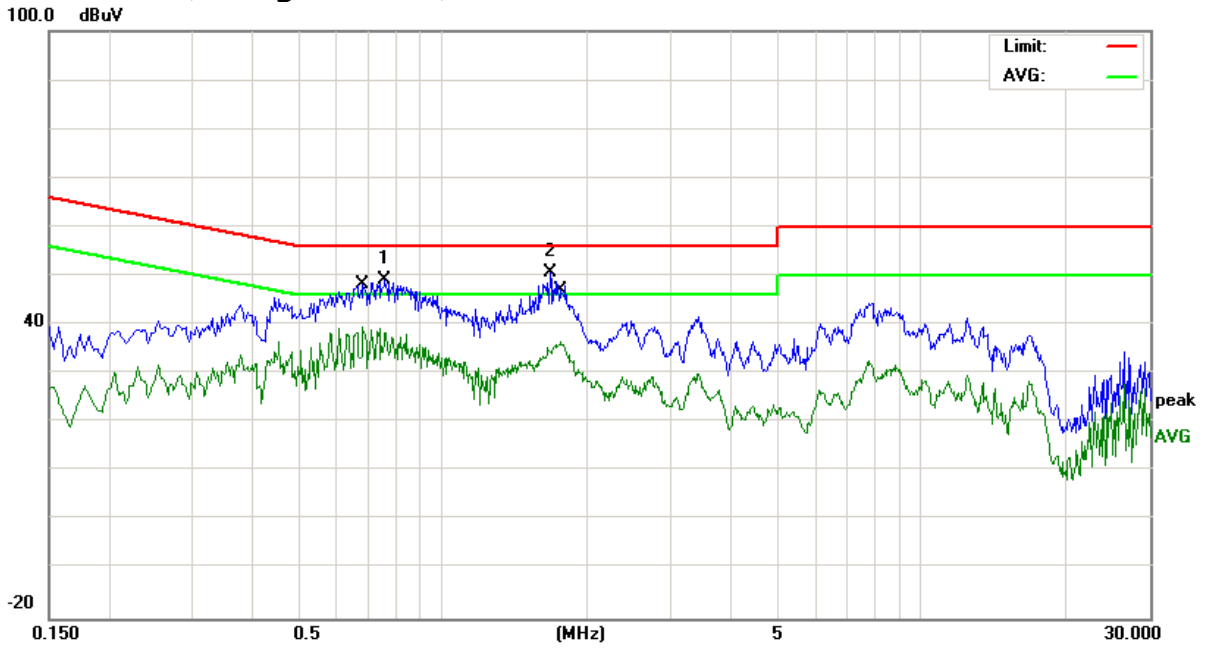


Line L Conducted Emission Graph

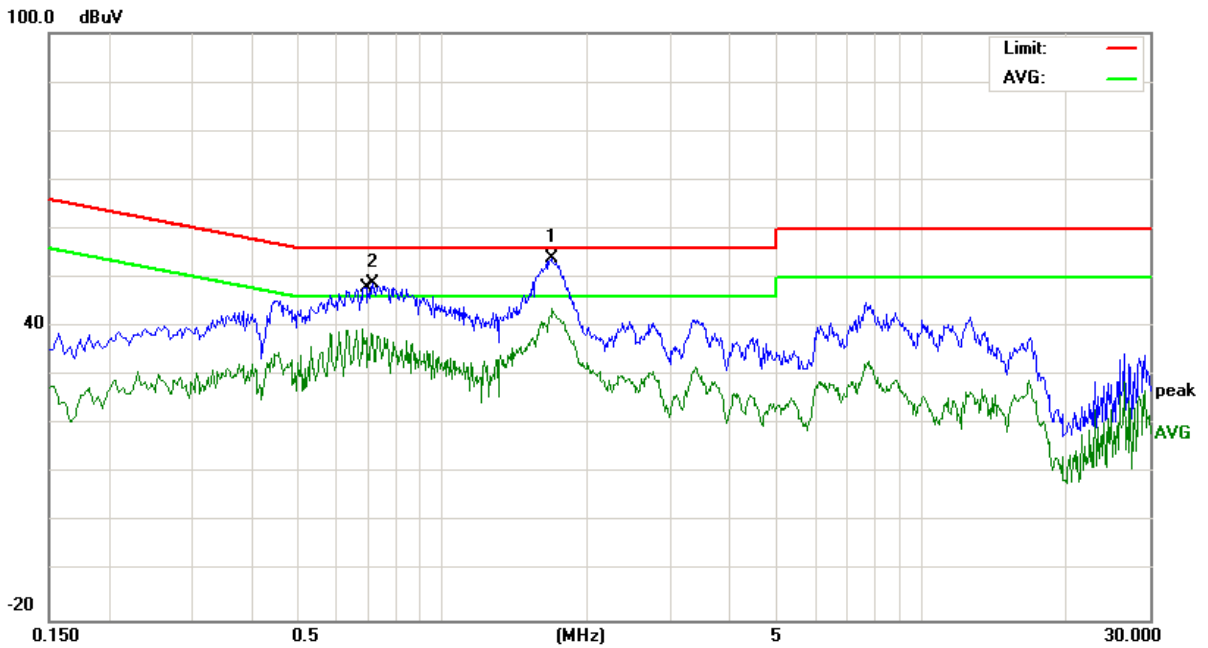


Line N Conducted Emission Graph

Mode 2:(Sunlight Power)



Line L Conducted Emission Graph



Line N Conducted Emission Graph

**Test Data:
Mode 1:**

Lines	Frequency (MHz)	Corrected QP Level (dBuV)	Limits QP (dBuV)	Over Limit QP(dB)	Frequency (MHz)	Corrected AVE Level (dBuV)	Limits AVE (dBuV)	Over Limit AVE (dB)
L	0.218	55.60	62.89	-7.29	0.410	43.21	47.65	-4.44
L	0.410	54.70	57.65	-2.95	1.894	37.29	46	-8.71
/	/	/	/	/	/	/	/	/
N	0.410	54.60	57.65	-3.05	0.414	44.10	47.57	-3.47
N	5.930	48.73	60	-11.27	1.886	38.93	46	-7.07
/	/	/	/	/	/	/	/	/

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 limit that are not reported.

Mode 2:

Lines	Frequency (MHz)	Corrected QP Level (dBuV)	Limits QP (dBuV)	Over Limit QP(dB)	Frequency (MHz)	Corrected AVE Level (dBuV)	Limits AVE (dBuV)	Over Limit AVE (dB)
L	0.758	49.10	56	-6.90	0.682	39.40	46	-6.60
L	1.678	50.78	56	-5.22	1.766	36.58	46	-9.42
/	/	/	/	/	/	/	/	/
N	1.682	53.90	56	-2.10	0.682	39.65	46	-6.35
N	0.714	48.96	56	-7.04	1.690	43.60	46	-2.40
/	/	/	/	/	/	/	/	/


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 limit that are not reported.

Test Equipment List:

<i>Test Equipment</i>	<i>Model No.</i>	<i>Manufacturer</i>	<i>Serial No.</i>	<i>Last Cal.</i>	<i>Cal. Interval</i>
<i>EMI Test Receiver</i>	<i>ESCI</i>	<i>R&S</i>	<i>101160</i>	<i>2016.04.25</i>	<i>2017.04.24</i>
<i>Line impedance stabilization network</i>	<i>ENV216</i>	<i>R&S</i>	<i>101313</i>	<i>2016.04.25</i>	<i>2017.04.24</i>

Note: All testing were performed using internationally recognized standards. All test instruments were calibrated.

TESTED BY: 
ENGINEER

REVIEWED BY: 
SENIOR ENGINEER



Conducted Emission Test Set-up -Front view



Conducted Emission Test Set-up -Rear view

ATTACHMENT 2 – RADIATED EMISSION MEASUREMENT

CLIENT:	Huawei Technologies Co., Ltd.	TEST STANDERD:	Section 15.109
MODEL NUMBERS:	eSpace 6805	PRODUCT:	IP Phone
EUT MODEL:	eSpace 6805	EUT DESIGNATION:	Home or Office
TEMPERATURE:	22°C	HUMIDITY:	47%RH
ATM PRESSURE:	103.0kPa	GROUNDING:	None
TESTED BY:	Alex Yu	DATE OF TEST:	June 30 th , 2016
TEST REFERENCE:	ANSI C63.4: 2014		
TEST PROCEDURE:	<p>The EUT was set up according to the guidelines of ANSI C63.4: 2014 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 frequency range of 30 MHz to 1GHz and average and peak in the frequency range of 1GHz to 2GHz at an anechoic chamber.</p> <p>The following data lists the significant emission frequencies, measured levels, correction factors (including cable and antenna correction factors), and the corrected readings against the limits. Explanation of the Correction Factor are given as follows:</p> <p>FS= RA + AF + CF - AG</p> <p>Where: FS = Field Strength</p> <p>RA = Receiver Amplitude</p> <p>AF = Antenna Factor</p> <p>CF = Cable Attenuation Factor</p> <p>AG = Amplifier Gain</p>		
TEST MODE:	Mode 1, Mode 2, Mode 3		
TESTED RANGE:	30 to 2000MHz		
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:	<p>The maximum measurement uncertainty is evaluated as :</p> <p>30~1000MHz: 4.7dB; 1~2GHz: 4.5dB.</p> <p>This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.</p>		

Continue on to next page...

EMI Receiver Set-up:

Frequency [MHz]	RBW	VBW	Detector
0.009-0.015	200Hz	1KHz	Quasi-peak
0.015-30	9KHz	30kHz	Quasi-peak
30-1000	120KHz	300KHz	Quasi-peak
Above 1GHz	1MHz	3MHz	Peak
	1MHz	3MHz	Average

Note 1: In the emission table above, the tighter limit applies at the band edges.

Note 2: (d) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Radiated Emission Limit:

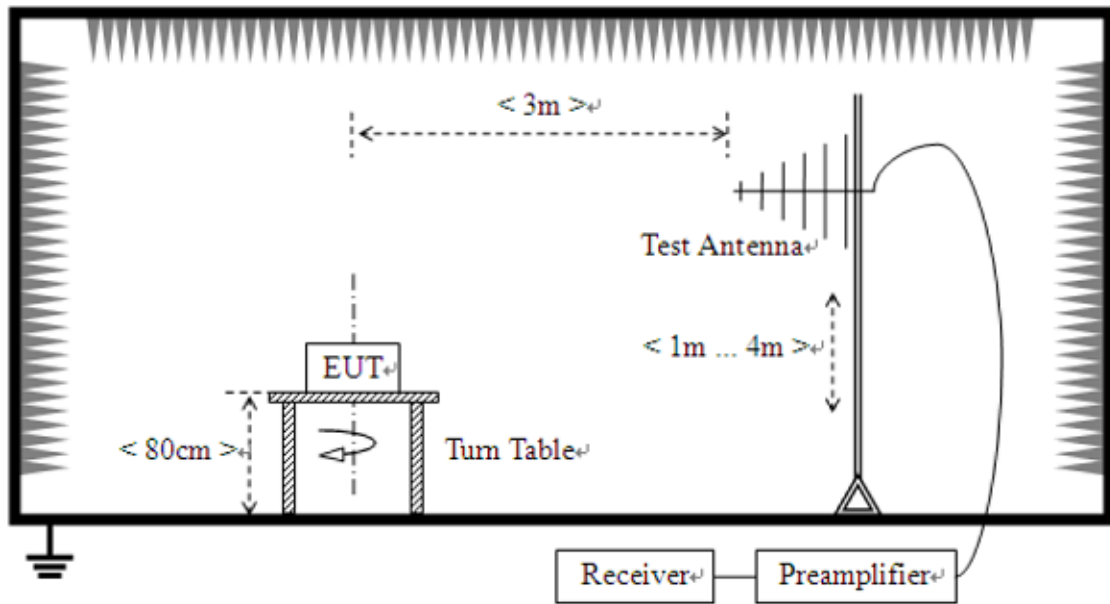
FCC Part 15 Subpart B&C Paragraph 15.109&15.209			
Frequency [MHz]	Field strength [V/m]	Limit@3m (dBuV/m)	Distance [Meters]
0.009-0.490	2400/F(KHz)	128.5~93.8	300
0.490-1.705	24000/F(KHz)	73.8~63.0	30
1.705-30	30	69.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Note 1: The lower limit shall apply at the transition frequency.

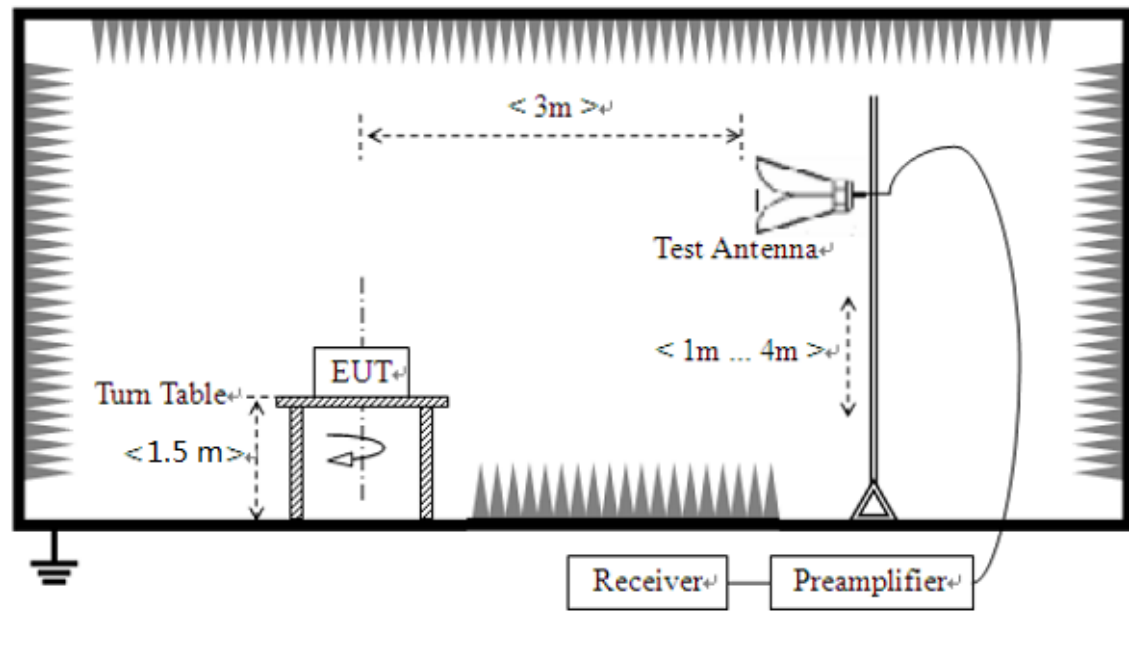
Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: $E \text{ field strength (dB}\mu\text{V/m)} = 20 \log E \text{ field strength (}\mu\text{V/m)}$

Frequency measured at 30MHz to 1000MHz:



Frequency measured at Above 1GHz:



Mode 1(Mass):

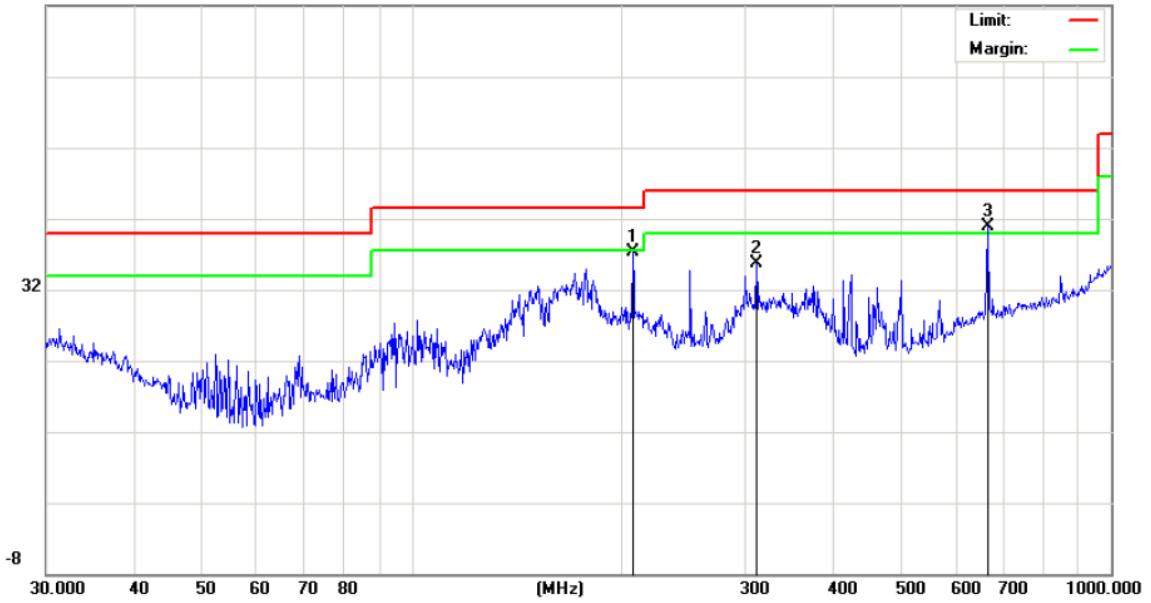
File :RE0630

Data :#8

Date: 2016/06/30

Time: PM 07:02:14

72.0 dBuV/m



Horizontal: Radiated Emission Test Plot(30-1000MHz)

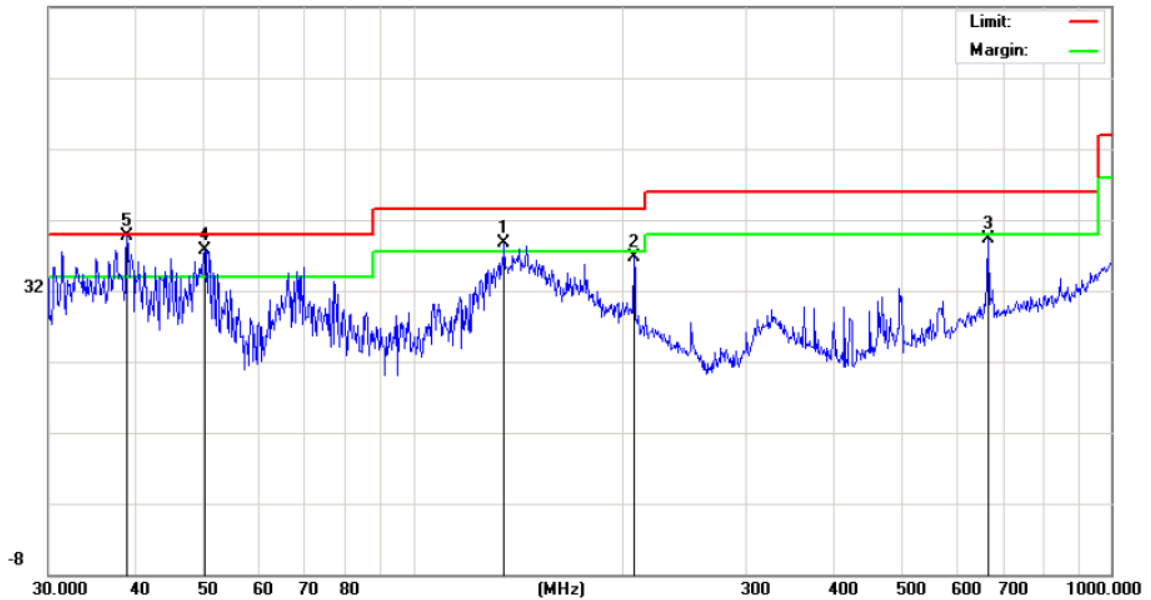
File :RE0630

Data :#7

Date: 2016/06/30

Time: PM 07:00:49

72.0 dBuV/m



Vertical: Radiated Emission Test Plot(30-1000MHz)

Mode 2(Sunlight):

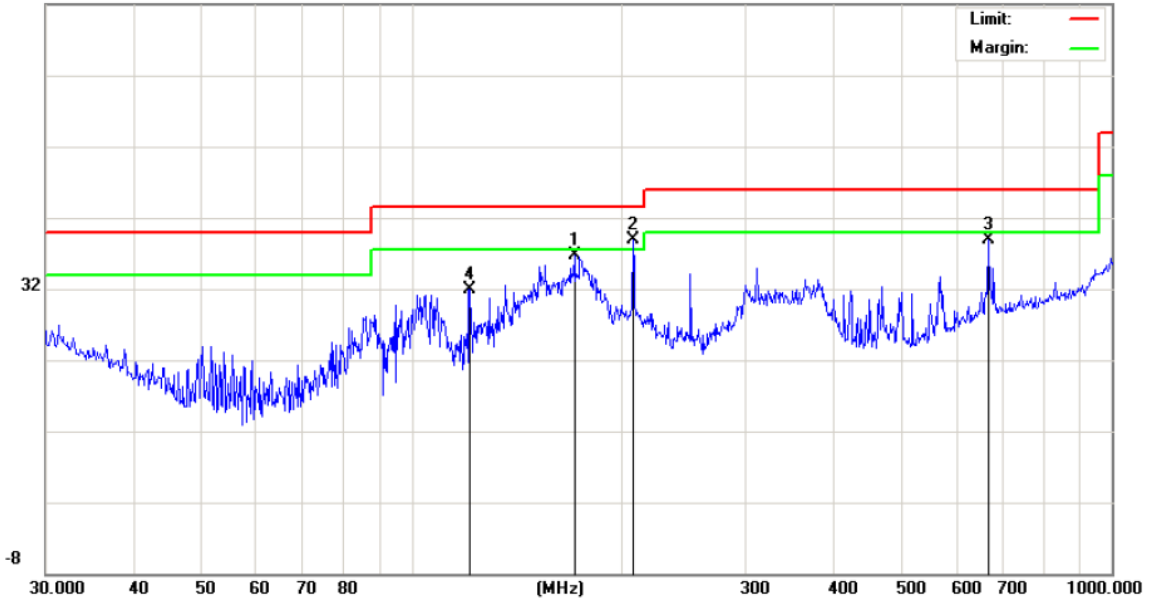
File :RE0630

Data :#6

Date: 2016/06/30

Time: PM 06:56:35

72.0 dBuV/m



Horizontal: Radiated Emission Test Plot-(30-1000MHz)

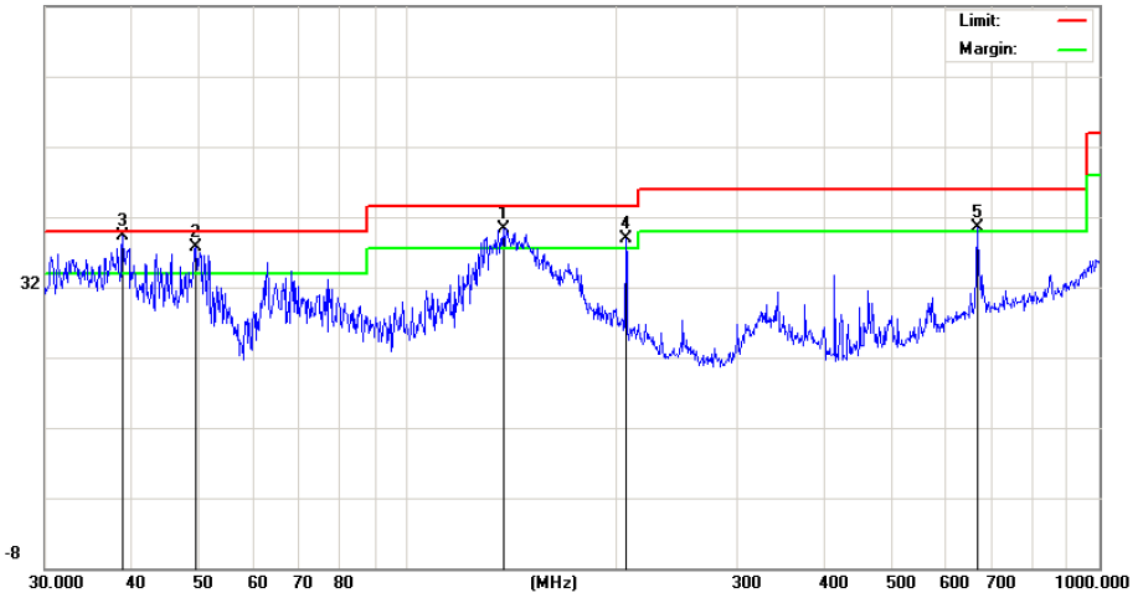
File :RE0630

Data :#5

Date: 2016/06/30

Time: PM 06:54:57

72.0 dBuV/m



Vertical: Radiated Emission Test Plot (30-1000MHz)

Mode 3(PoE):

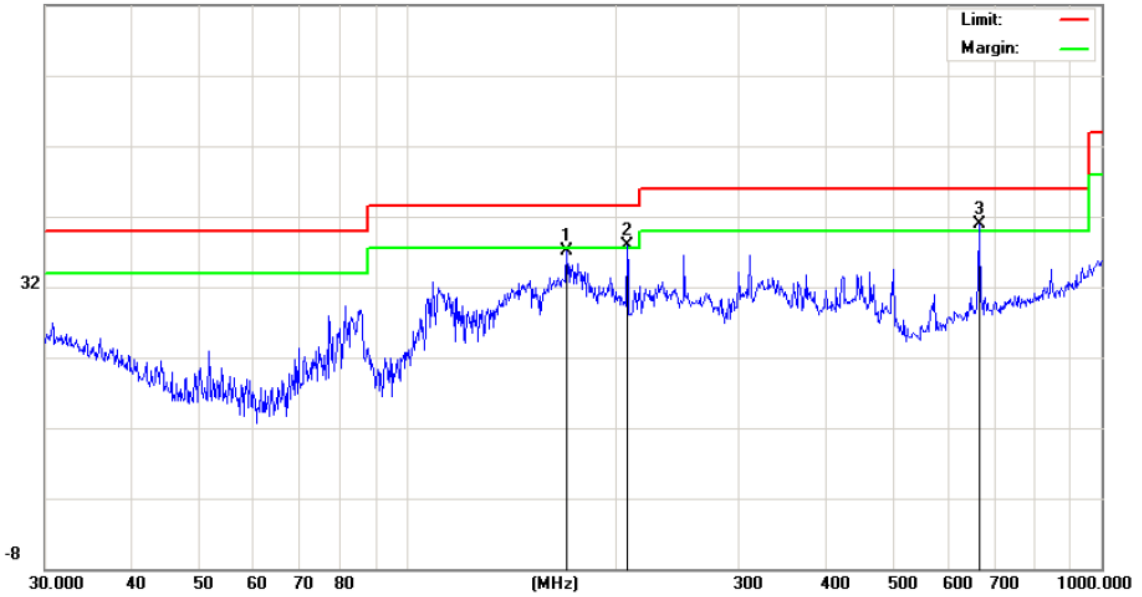
File :RE0630

Data :#10

Date: 2016/06/30

Time: PM 07:09:09

72.0 dBuV/m



Horizontal: Radiated Emission Test Plot-(30-1000MHz)

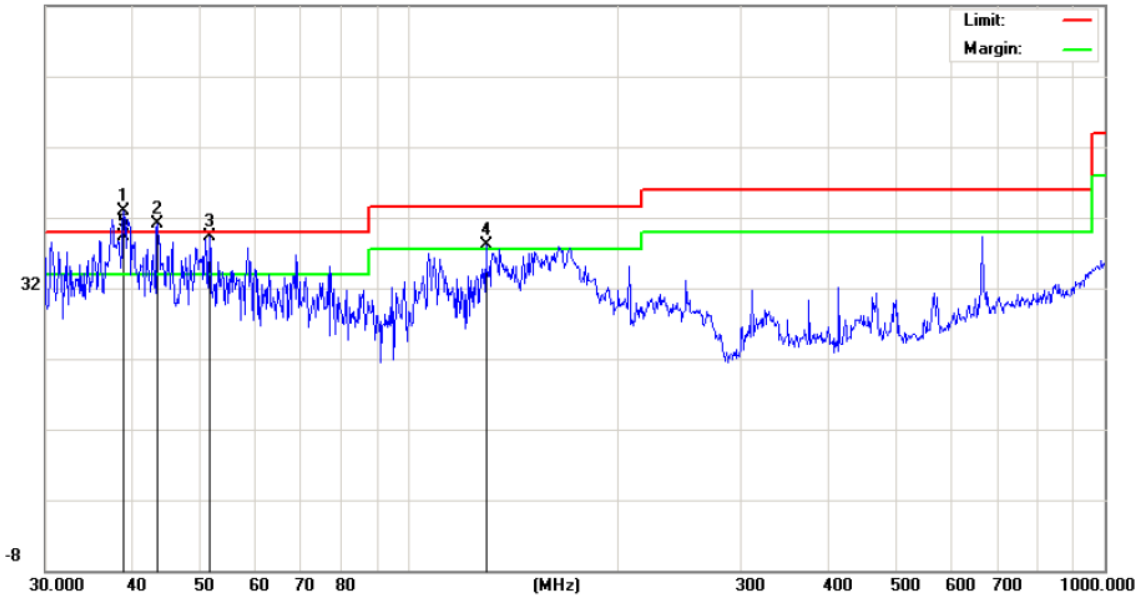
File :RE0630

Data :#9

Date: 2016/06/30

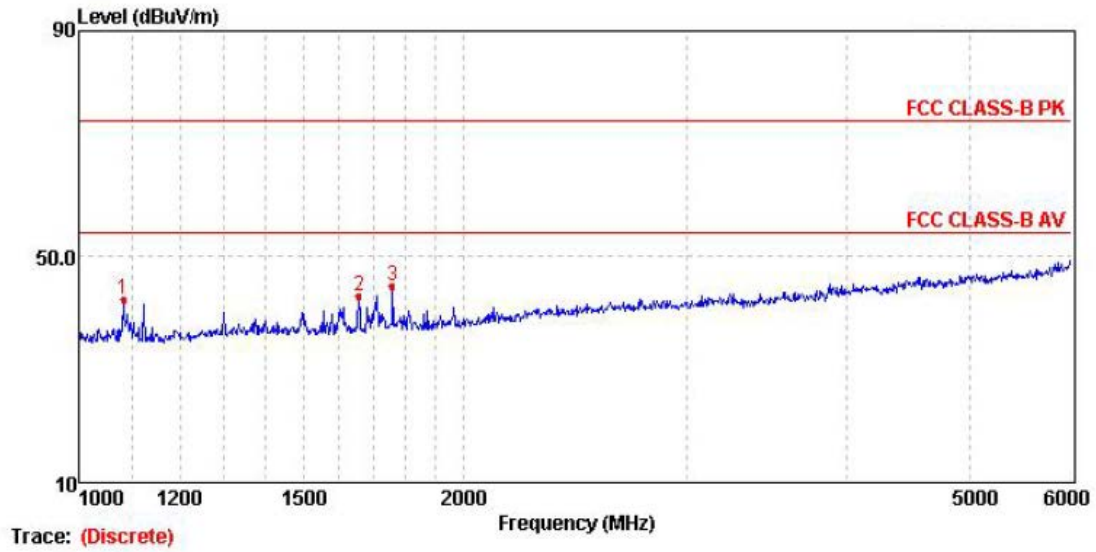
Time: PM 07:06:31

72.0 dBuV/m

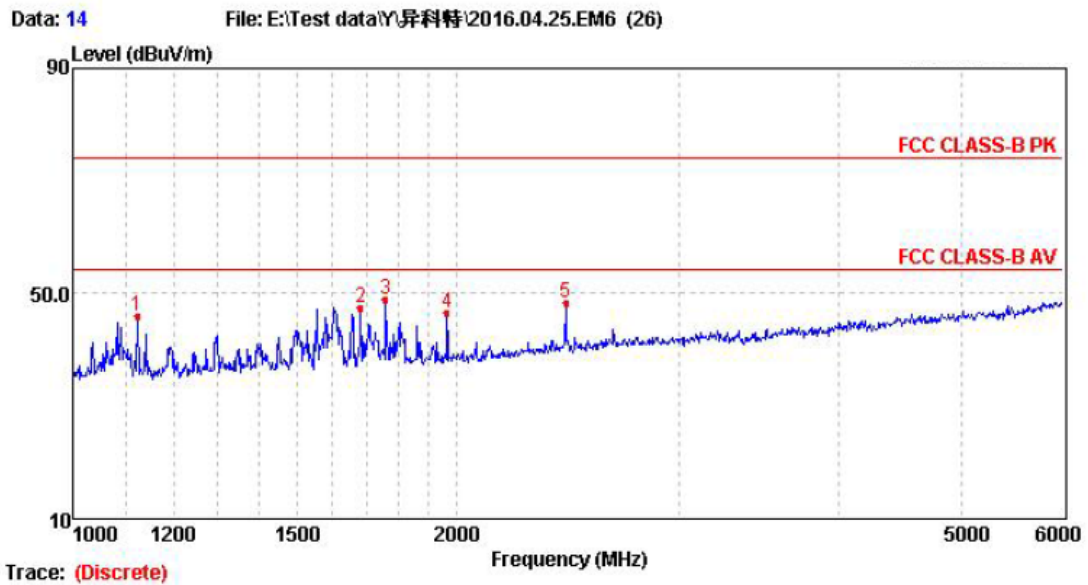


Vertical: Radiated Emission Test Plot(30-1000MHz)

Mode 1:



Horizontal: Radiated Emission Test Plot(1-6GHz)



Vertical: Radiated Emission Test Plot(1-6GHz)

**Test Data:
Mode 1&Below 1GHz:**

Frequency (MHz)	Polarization(H/V)	Factor (dB)	Reading Level QP (dBuV/m)	Emission Level QP (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)
207.12	H	12.61	24.60	37.21	43.5	-6.29
375.94	H	14.29	21.38	35.57	46	-10.33
625.08	H	22.00	18.84	40.84	46	-5.16
/	/	/	/	/	/	/
/	/	/	/	/	/	/
/	/	/	/	/	/	/
135.03	V	12.06	26.60	38.66	40	-1.34
207.12	V	12.61	24.17	36.78	43.5	-6.72
665.80	V	22.00	17.38	39.38	46	-6.62
38.89	V	15.85	21.84	37.69	40	-2.31
/	/	/	/	/	/	/
/	/	/	/	/	/	/

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 + Antenna Factor + Cable Loss - Preamplifier Factor.
3. The other emission levels are 20dB below the official limits that are not reported.

Mode 2&Below 1GHz:

Frequency (MHz)	Polarization(H/V)	Factor (dB)	Reading Level QP (dBuV/m)	Emission Level QP (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)
207.12	H	12.61	26.28	38.89	43.5	-4.61
170.79	H	13.58	23.15	36.73	43.5	-6.77
665.80	H	22.00	16.82	38.82	46	-7.18
/	/	/	/	/	/	/
/	/	/	/	/	/	/
/	/	/	/	/	/	/
137.90	V	12.08	24.78	36.86	40	-3.14
207.12	V	12.61	26.29	38.90	43.5	-4.60
668.14	V	22.06	18.54	40.60	46	-5.40
38.89	V	15.85	21.84	37.33	40	-2.67
/	/	/	/	/	/	/
/	/	/	/	/	/	/

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 + Antenna Factor + Cable Loss -Preamplifier Factor.
3. The other emission levels are 20dB below the official limits that are not reported.

Mode 3&Below 1GHz:

Frequency (MHz)	Polarization(H/V)	Factor (dB)	Reading Level QP (dBuV/m)	Emission Level QP (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)
207.12	H	12.61	25.30	37.91	43.5	-5.59
169.60	H	13.54	23.56	37.10	43.5	-6.40
665.80	H	22.00	18.88	40.88	46	-5.12
/	/	/	/	/	/	/
/	/	/	/	/	/	/
/	/	/	/	/	/	/
43.51	V	13.56	25.10	38.66	40	-1.34
51.66	V	9.69	27.09	36.78	40	-3.22
665.80	V	22.00	17.38	39.38	46	-6.62
38.89	V	15.85	22.84	38.69	40	-1.31
/	/	/	/	/	/	/
/	/	/	/	/	/	/

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 + 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)	Factor (dB)	Reading Level (dBuV/m)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Polarization (H/V)
Peak Measurement						
1083.97	-14.85	57.02	42.17	74	-31.83	H
1657.44	-13.45	56.03	42.58	74	-31.42	H
1761.55	-13.15	57.53	44.38	74	-29.62	H
/	/	/	/	/	/	/
1684.39	-13.42	60.69	47.27	74	-26.73	V
1761.55	-13.15	61.70	48.55	74	-25.45	V
2440.73	-10.01	58.18	48.17	74	-25.83	V
/	/	/	/	/	/	/
Avarage Measurement						
1083.97	-14.85	45.33	30.48	54	-23.52	H
1657.44	-13.45	46.03	32.58	54	-21.42	H
1761.55	-13.15	47.53	34.38	54	-19.62	H
/	/	/	/	/	/	/
1684.39	-13.42	50.69	37.27	54	-16.73	V
1761.55	-13.15	51.70	38.55	54	-15.45	V
2440.73	-10.01	48.18	38.17	54	-15.83	V
/	/	/	/	/	/	/


Note:

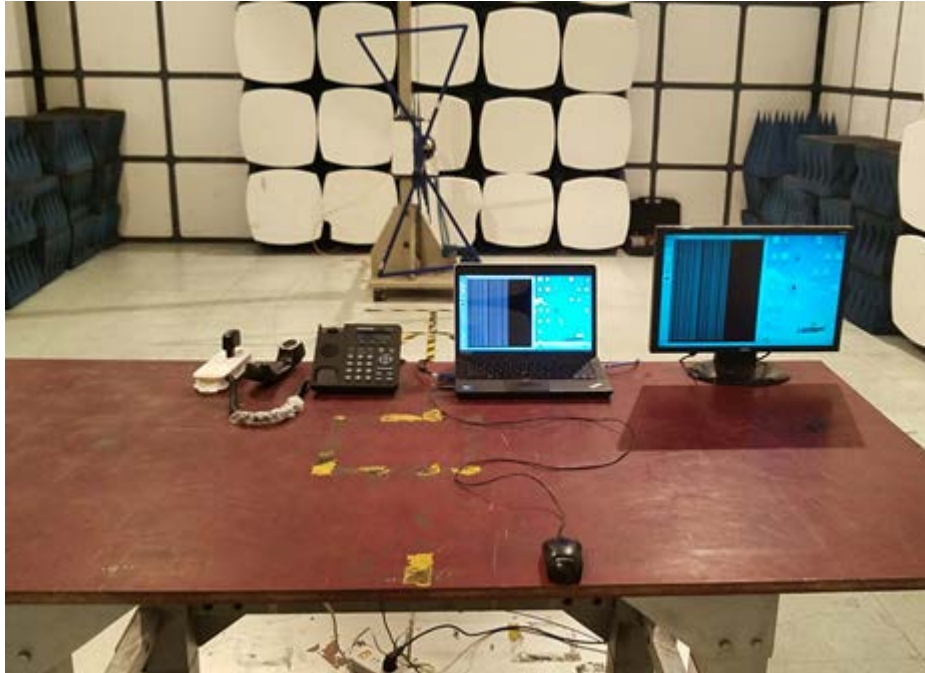
1. The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows: Emission Level = Reading Level + Antenna Factor + Cable Loss - Preamplifier Factor.
2. The limits shown are based on Peak value and Average value 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:

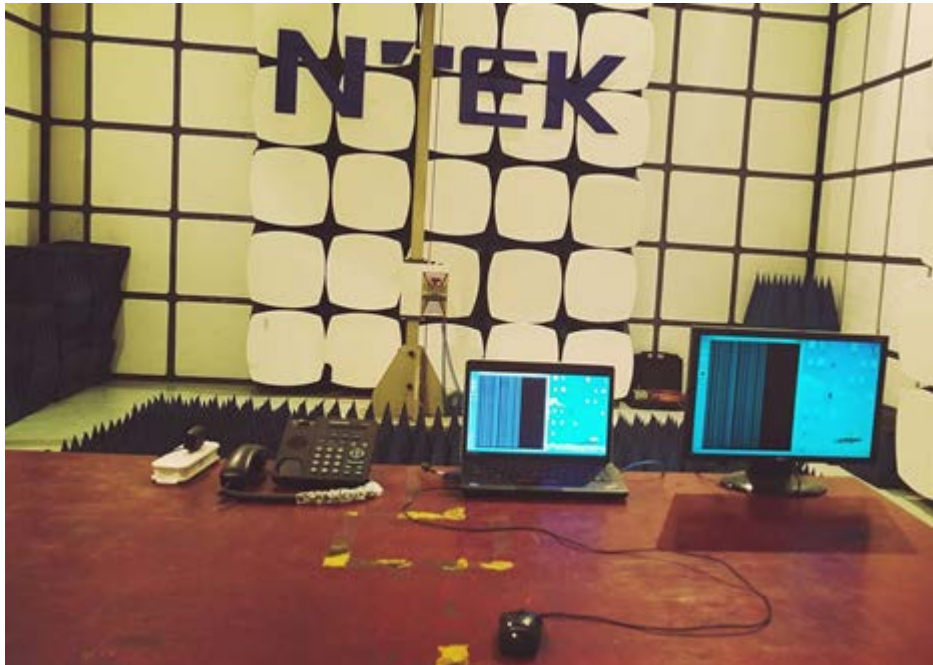
Test Equipment	Manufacturer	Model	Cal. Interval	Serial No.	Cal. Due Date
EMI Test Receiver	R&S	ESPI7	1 year	101318	2017.04.24
Bilog Antenna	TESEQ	CBL6111D	1 year	31216	2017.04.24
Horn Antenna	Schwarzbeck	BBHA 9120A	1 year	451	2017.04.24
Low Noise Pre-Amplifier	TSJ	MLA-0120-A20-34	1 year	2648A04738	2017.01.04
Low Noise Pre-Amplifier	EMCI	EMC051835	1 year	980075	2017.01.04

TESTED BY: 
ENGINEER

REVIEWED BY: 
SENIOR ENGINEER



Radiated Emission Test Set-up(30-1000MHz)



Radiated Emission Test Set-up(Above 1GHz)

****** End Of Report ******