Prüfbericht-Nr.: *Test Report No.:*	**17040437 005**	**Auftrags-Nr.:** *Order No.:*	164014360	Seite 1 von 26 *Page 1 of 26*
Kunden-Referenz-Nr.: *Client Reference No.:*	N/A	**Auftragsdatum:** *Order date:*	20.05.2014	
Auftraggeber: *Client:*	KEEN HIGH TECHNOLOGIES LTD. Block A1 & A2, Ze Da Li Industrial Park, Tangwei Area, Fuyong, Bao'an, Shenzhen, Guangdong, China			
Prüfgegenstand: *Test item:*	Tablet			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	NS-15AT10			
Auftrags-Inhalt: *Order content:*	FCC/IC Certification			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109 ICES-003 Issue 5 August 2012			
Wareneingangsdatum: *Date of receipt:*	25.05.2014			
Prüfmuster-Nr.: *Test sample No.:*	A000073356-003			
Prüfzeitraum: *Testing period:*	25.05.2014 - 08.06.2014			
Ort der Prüfung: *Place of testing:*	Accurate Technology Co., Ltd. Shenzhen Academy of Metrology and Quality Inspection			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von / *tested by:*

13.06.2014	Owen Tian/Project Manager	
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

kontrolliert von / *reviewed by:*

13.06.2014	Sam Lin/Technical Certicier	
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar	5 = mangelhaft N/T = nicht getestet
Legend:	*1 = very good* *P(ass) = passed a.m. test specification(s)*	*2 = good*	*3 = satisfactory* *F(ail) = failed a.m. test specification(s)*	*4 = sufficient* *N/A = not applicable*	*5 = poor* *N/T = not tested*

TÜV Rheinland LGA Products GmbH · Tillystraße 2 · D - 90431 Nürnberg · Tel.: +49 911 655 5225 · Fax: +49 911 655 5226
Mail: service@de.tuv.com · Web: www.tuv.com

TEST SUMMARY

5.1.1 CONDUCTED EMISSIONS

RESULT: Pass

5.2.1 RADIATED EMISSION

RESULT: Pass

CONTENTS

1. General Remarks

1.1 Complementary Materials

None.

2. Test Sites

2.1 Test Facilities

Accurate Technology Co., Ltd.

(FCC Registration No.: 752051)
(Test site Industry Canada No.: 5077A-2)

F1, Bldg. A, Changyuan New Material Port
Keyuan Rd., Science & Industry Park, Nanshan
Shenzhen, P.R. China

Shenzhen Academy of Metrology and Quality Inspection

(FCC Registration No.: 979748)
(Test site Industry Canada No.: 144376)

NETC Building, No. 4 Tongfa Rd., Xili, Nanshan, Shenzhen, China

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	2015-01-11
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	2015-01-11
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	2015-01-11
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	2015-01-11
Radiated Emission				
Spectrum Analyzer	Agilent	E7405A	MY45115511	2015-01-11
Test Receiver	Rohde & Schwarz	ESCS30	100307	2015-01-11
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2015-01-11
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2015-01-11
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2015-01-11
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2015-01-11
Pre-Amplifier	Rohde & Schwarz	CBLU1183540-01	3791	2015-01-11
RF Coaxial Cable (966 Chamber) (for below 1GHz test)	Suhner	N-3m	No.8	2015-01-11
RF Coaxial Cable (966 Chamber) (for below 1GHz test)	Resenberger	N-3.5m	No.9	2015-01-11
RF Coaxial Cable (966 Chamber) (for below 1GHz test)	Suhner	N-6m	No.10	2015-01-11
RF Coaxial Cable (966 Chamber) (for above 1GHz test)	Resenberger	N-12m	No.11	2015-01-11
RF Coaxial Cable (966 Chamber) (for above 1GHz test)	Resenberger	N-0.5m	No.12	2015-01-11
Radiated Emission (SMQ) (for 26.5 - 40GHz)				
EMI Receiver	Rohde & Schwarz	ESU40	SB8501/09	2015-05-14
Horn Antenna	Rohde & Schwarz	3160-10	SB8501/12	2014-08-15

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO/IEC 17025 are:

Table 2: Measurement Uncertainty

Items		Extended Uncertainty
Conducted Emission (0.15 - 30MHz)	Disturbance Voltage (dBuV)	U=±2.23dB, k=2, σ=95%
Radiated Emission (30 - 1000MHz)	Field strength (dBuV/m)	U=±4.42dB, k=2, σ=95%
Radiated Emission (1 - 26.5GHz)	Field strength (dBuV/m)	U=±4.06dB, k=2, σ=95%
Radiated Emission (26.5 - 40GHz)	Field strength (dBuV/m)	U=±5.54dB, k=2, σ=95%

2.6 Location of Original Data

The original copies of all test data taken during actual testing were retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan, Shenzhen, P.R. China and Shenzhen Academy of Metrology and Quality Inspection test facility located at NETC Building, No. 4 Tongfa Rd., Xili, Nanshan, Shenzhen, China are listed on the US Federal Communications Commission list of facilities approved to perform measurements.

2.8 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

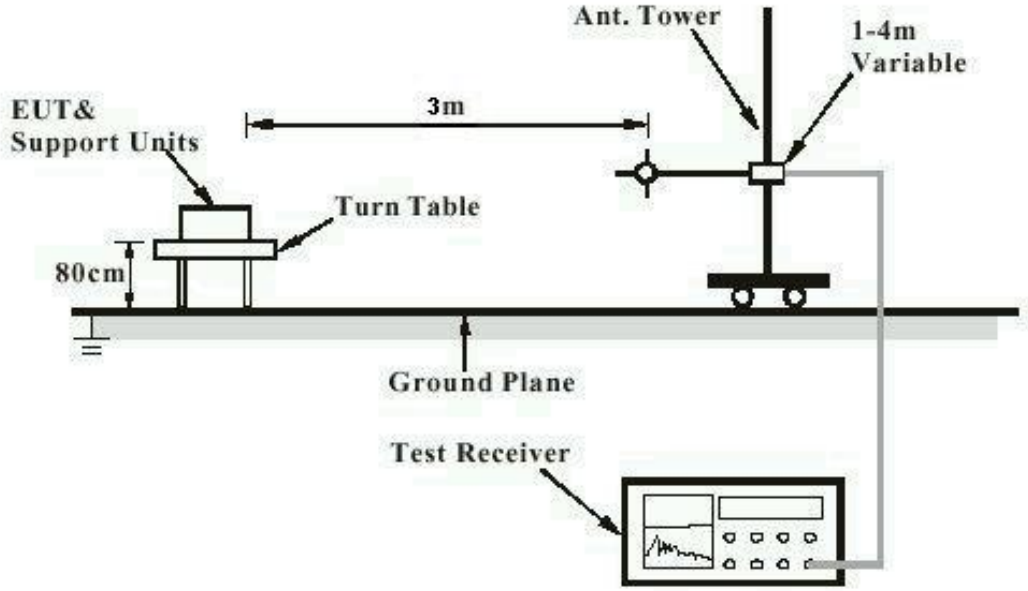
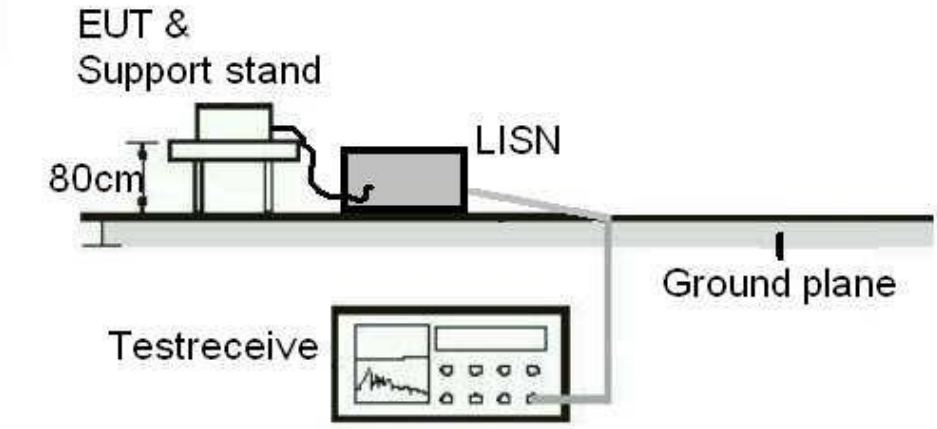


Diagram of Measurement Equipment Configuration for Conduction Measurement



3. General Product Information

3.1 Product Function and Intended Use

The EUT is 10'' tablet with Wi-Fi, Bluetooth & GPS function.
For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

Technical Specification	Value
Kind of Equipment	Tablet
Type Designation	NS-15AT10
FCC ID	XUZNS-15AT10
IC	10558A-NS15AT10
Extreme Temperature Range	-30~+75℃
Operation Voltage	DC 3.7V (via built in battery)
	DC 5V (via AC/DC adapter)

3.3 Independent Operation Modes

The basic operation modes are:

A. On, connecting to PC
B. Standby
C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material
- Constructional Drawing
- PCB Layout
- Photo Document
- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2003.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

Description	Manufacturer	Part No.	S/N
Notebook PC	Lenovo	4290-RT8	R9-FW93G
Printer	HP	HP laserjet 1015	CNFG030424

The EUT was tested with following cables:

Interface(s)/Port(s):	Max. cable length, shielding	Cable classification
Micro USB port	4 cores, non-shielded port, 3m	DC Power Input

4.4 Countermeasures to Achieve ERM Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF). No additional measures were employed to achieve compliance.

5. Test Results EMISSION

5.1 Emission in the Frequency Range up to 30 MHz

5.1.1 Conducted emissions

RESULT: **Pass**

Date of testing	:	2014-05-26
Test standard	:	FCC Part 15.107 (a) ICES-003 Issue 5 August 2012
Basic standard	:	ANSI C63.4: 2003
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.107(a) ICES-003 Issue 5 August 2012
Kind of test site	:	Shield room

Test setup

Input Voltage	:	AC 120V, 60Hz
Operation Mode	:	A
Earthing	:	Not Connected
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

For details refer to following test plot.

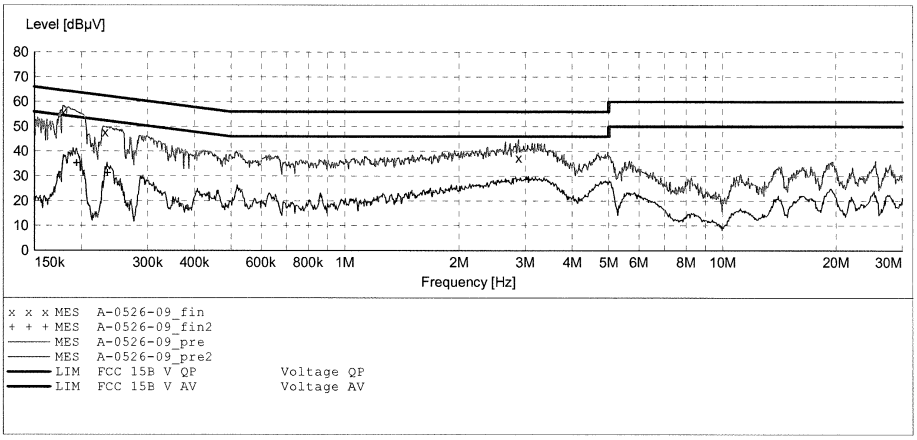
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

```
EUT:                  Tablet M/N:NS-15AT10
Manufacturer:         Keen High
Operating Condition:  Transfer data
Test Site:            1#Shielding Room
Operator:             LAN
Test Specification:   L 120V/60Hz
Comment:
Start of Test:        5/26/2014 / 9:26:35AM
```

SCAN TABLE: "V 150K-30MHz fin"

```
  Short Description:              _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF       Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   4.5 kHz   QuasiPeak 1.0 s     9 kHz    NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "A-0526-09_fin"

5/26/2014 9:36AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.178803	55.80	10.5	65	8.7	QP	L1	GND
0.230851	47.70	10.6	62	14.7	QP	L1	GND
2.877655	37.40	11.0	56	18.6	QP	L1	GND

MEASUREMENT RESULT: "A-0526-09_fin2"

5/26/2014 9:36AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.193664	35.20	10.5	54	18.7	AV	L1	GND
0.233633	31.20	10.6	52	21.1	AV	L1	GND
3.055234	28.60	11.1	46	17.4	AV	L1	GND

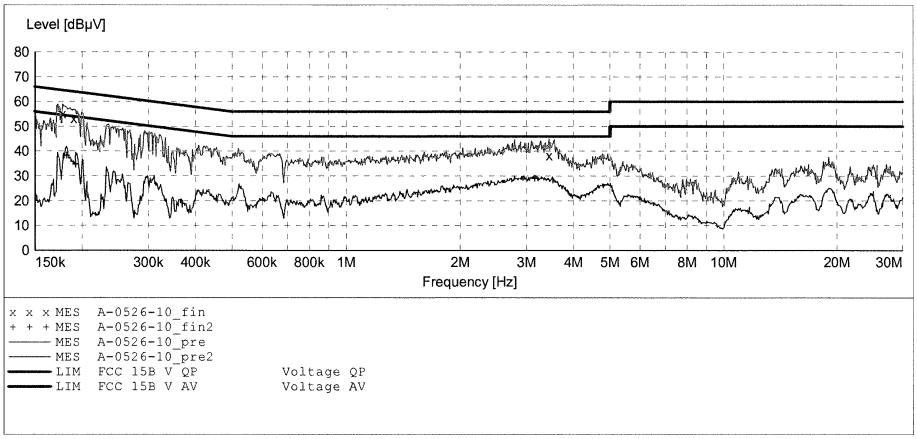
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

```
EUT:                  Tablet M/N:NS-15AT10
Manufacturer:         Keen High
Operating Condition:  Transfer data
Test Site:            1#Shielding Room
Operator:             LAN
Test Specification:   N 120V/60Hz
Comment:
Start of Test:        5/26/2014 / 9:37:18AM
```

SCAN TABLE: "V 150K-30MHz fin"

```
  Short Description:              _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF       Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   4.5 kHz   QuasiPeak 1.0 s     9 kHz    NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "A-0526-10_fin"

5/26/2014 9:45AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.177381	55.20	10.5	65	9.4	QP	N	GND
0.189837	53.20	10.5	64	10.8	QP	N	GND
3.443942	38.20	11.1	56	17.8	QP	N	GND

MEASUREMENT RESULT: "A-0526-10_fin2"

5/26/2014 9:45AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181681	38.20	10.5	54	16.2	AV	N	GND
0.192124	34.70	10.5	54	19.2	AV	N	GND
3.154381	29.00	11.1	46	17.0	AV	N	GND

5.2 Emission in the Frequency Range above 30 MHz

5.2.1 Radiated Emission

RESULT: **Pass**

Date of testing	:	2014-06-08
Test standard	:	FCC Part 15.109 (a) ICES-003 Issue 5 August 2012
Test procedure	:	ANSI C63.4: 2003
Frequency range	:	30 - 40000MHz
Equipment Classification	:	Class B
Limits	:	FCC Part 15.109(a) ICES-003 Issue 5 August 2012
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Input Voltage	:	AC 120V, 60Hz
Operation mode	:	A
Earthing	:	Not connected
Ambient temperature	:	25℃
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

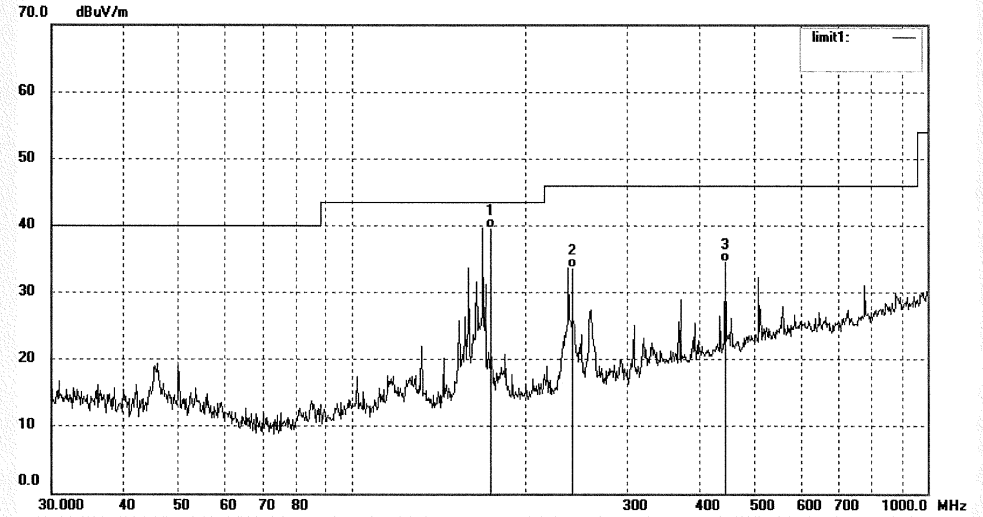
For details refer to following test plot.

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LAN2014 #144	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2014/05/26
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Tablet	Engineer Signature: PEI
Mode: Transfer data	Distance:
Model: NS-15AT10	
Manufacturer: Keen High	

Note:



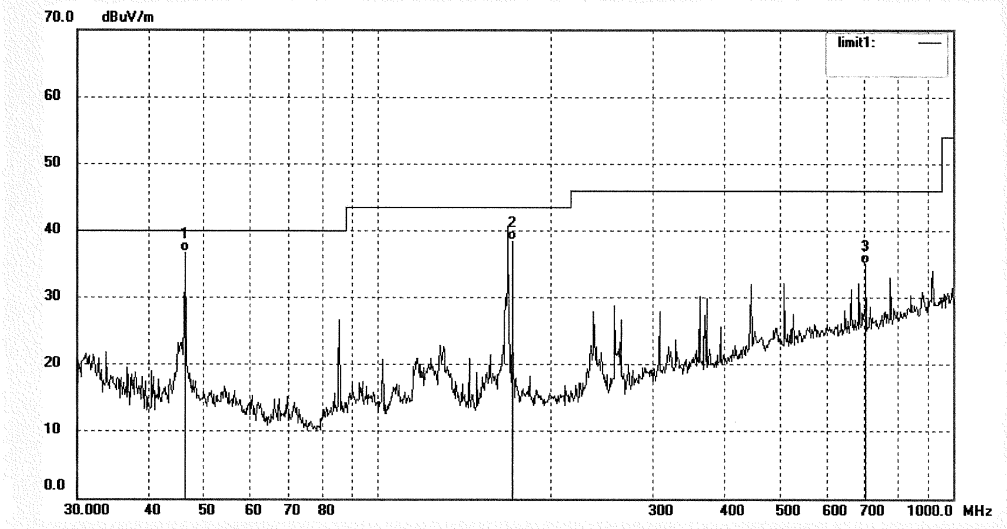
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	171.4043	53.30	-13.67	39.63	43.50	-3.87	QP			
2	242.7927	44.52	-10.82	33.70	46.00	-12.30	QP			
3	446.1299	40.34	-5.84	34.50	46.00	-11.50	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LAN2014 #143	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2014/05/26
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Tablet	Engineer Signature: PEI
Mode: Transfer data	Distance:
Model: NS-15AT10	
Manufacturer: Keen High	

Note:



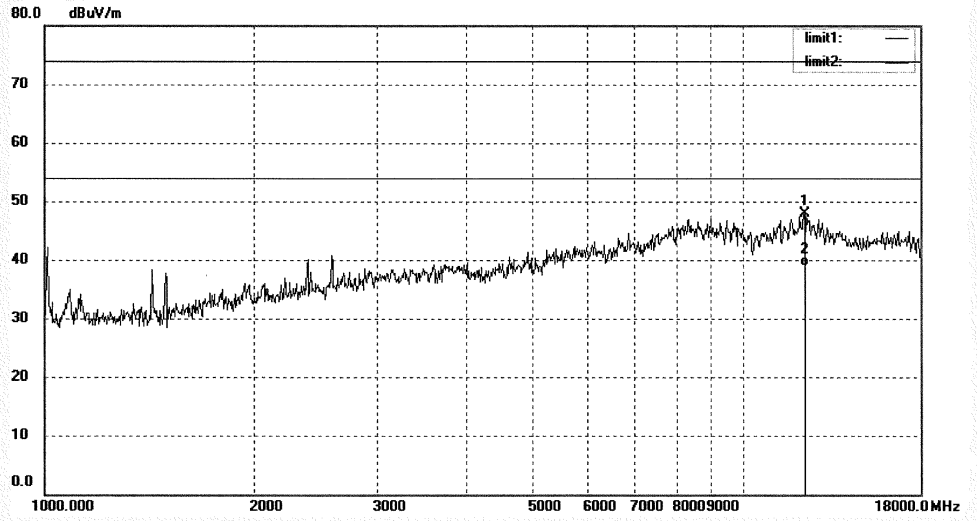
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	46.2180	49.44	-12.63	36.81	40.00	-3.19	QP			
2	171.4380	52.31	-13.67	38.64	43.50	-4.86	QP			
3	703.7314	36.75	-1.68	35.07	46.00	-10.93	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LAN2014 #146	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2014/05/25
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Tablet	Engineer Signature: PEI
Mode: Transfer data	Distance:
Model: NS-15AT10	
Manufacturer: Keen High	

Note:



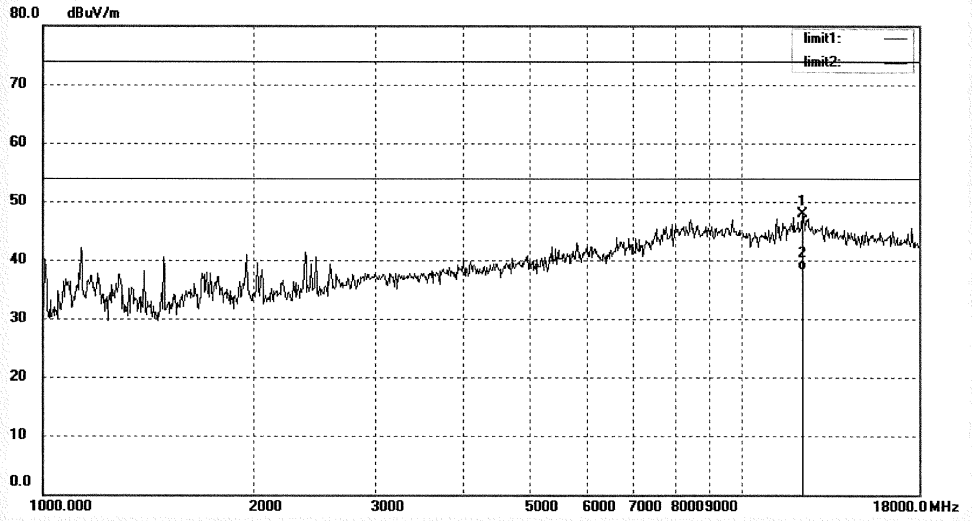
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12257.686	9.70	38.16	47.86	74.00	-26.14	peak			
2	12257.686	0.69	38.16	38.85	54.00	-15.15	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LAN2014 #145	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2014/05/25
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Tablet	Engineer Signature: PEI
Mode: Transfer data	Distance:
Model: NS-15AT10	
Manufacturer: Keen High	

Note:



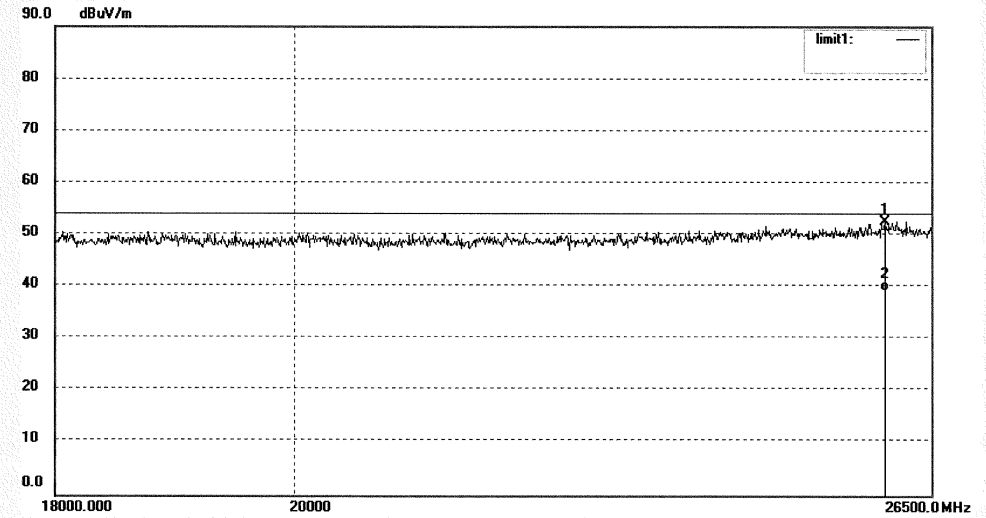
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12222.059	9.72	38.12	47.84	74.00	-26.16	peak			
2	12222.059	0.27	38.12	38.39	54.00	-15.61	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PZ #524	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 14/06/08/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Tablet	Engineer Signature: PEI
Mode: Transfer data	Distance:
Model: NS-15AT10	
Manufacturer: Keen High	

Note:



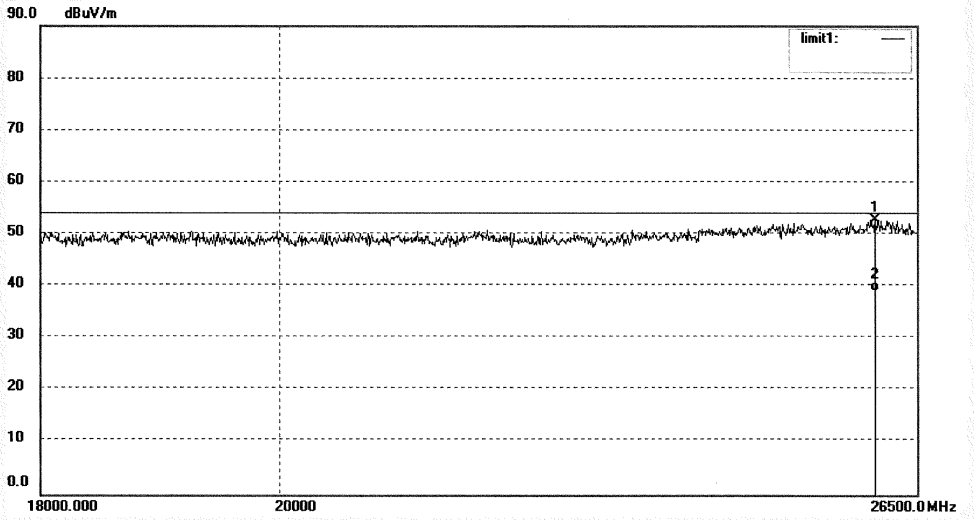
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25961.241	33.81	18.71	52.52	74.00	-21.48	peak			
2	25961.241	20.64	18.71	39.35	54.00	-14.65	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: PZ #523	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 14/06/08/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Tablet	Engineer Signature: PEI
Mode: Transfer data	Distance:
Model: NS-15AT10	
Manufacturer: Keen High	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26021.678	33.99	18.73	52.72	74.00	-21.28	peak			
2	26021.678	20.35	18.73	39.08	54.00	-14.92	AVG			

Test 1 / 1

Radiated Emission

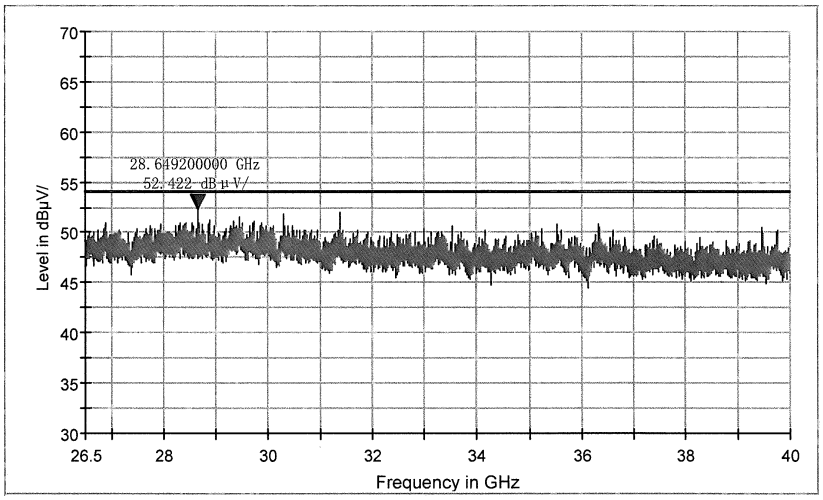
EUT Information

EUT Model Name:	Tablet M/N:NS-15AT10
Operation mode:	Transfer data
Test Voltage:	AC 120V/60Hz
Comment:	

Common Information

Test Site:	SMQ EMC Lab.
Environment Conditions:	
Antenna Polarization:	Horizontal
Operator Name:	
Comment:	

Copy of FCC Electric Field Strength 26.5-40GHz



2014-6-5

Test 1 / 1

Radiated Emission

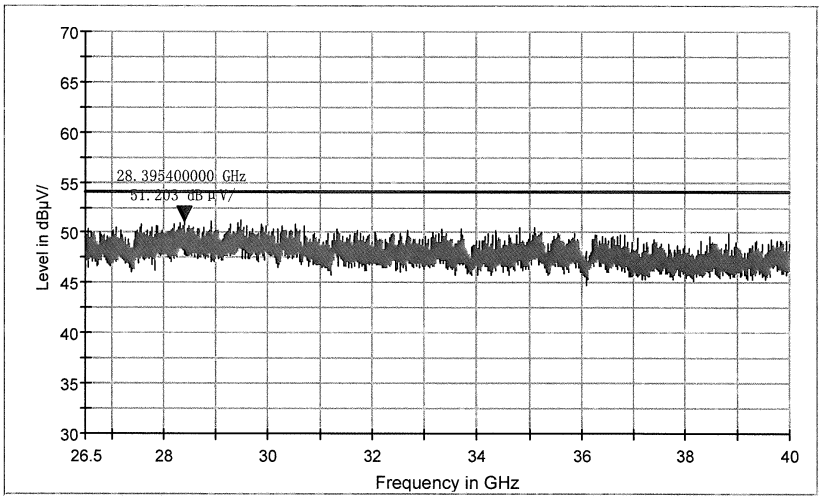
EUT Information

EUT Model Name:	Tablet M/N:NS-15AT10
Operation mode:	Transfer data
Test Voltage:	AC 120V/60Hz
Comment:	

Common Information

Test Site:	SMQ EMC Lab.
Environment Conditions:	
Antenna Polarization:	Vertical
Operator Name:	
Comment:	

Copy of FCC Electric Field Strength 26.5-40GHz

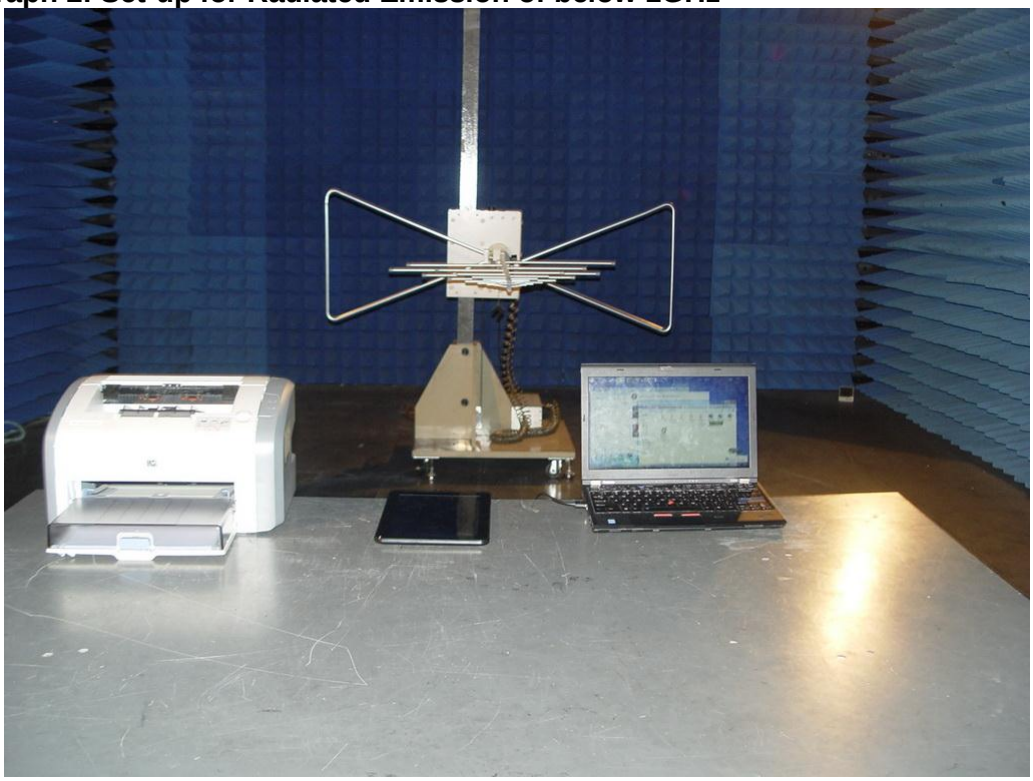


2014-6-5

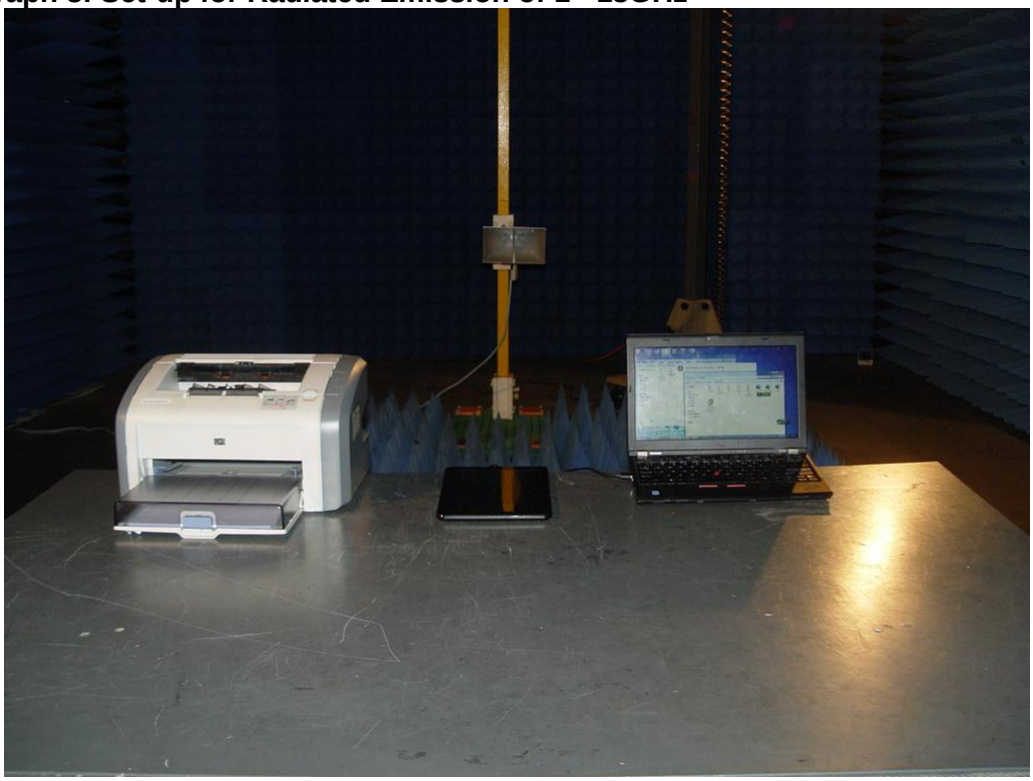
6. Photographs of the Test Set-Up

Photograph 1: Set-up for Conducted Emission

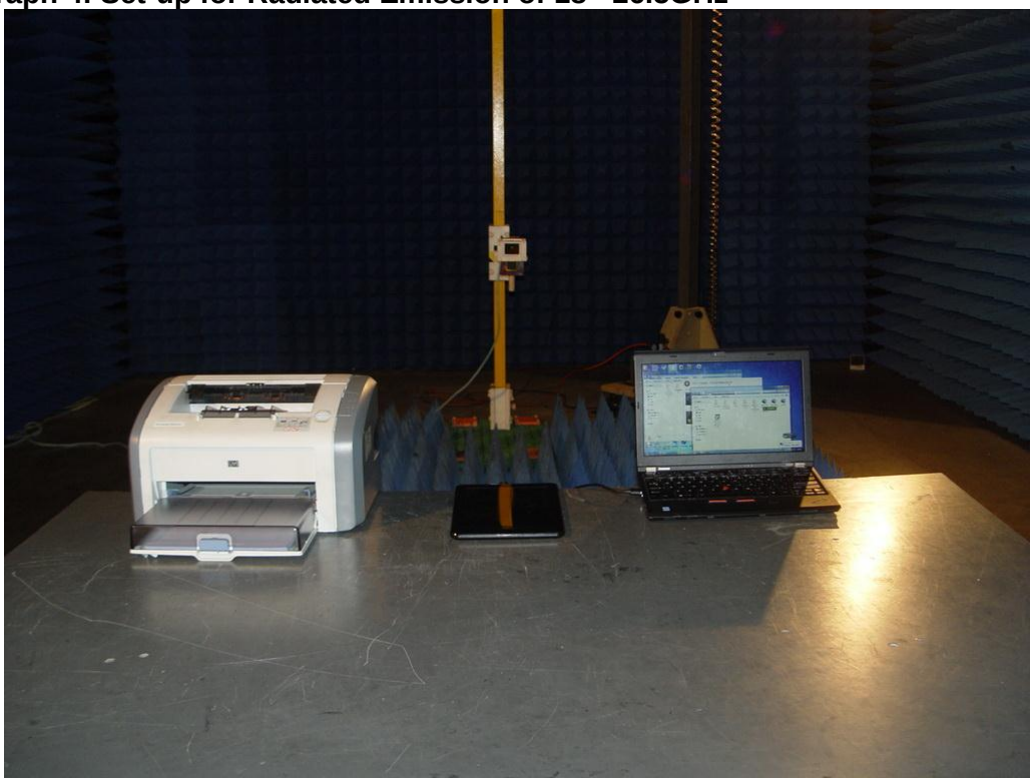
Photograph 2: Set-up for Radiated Emission of below 1GHz



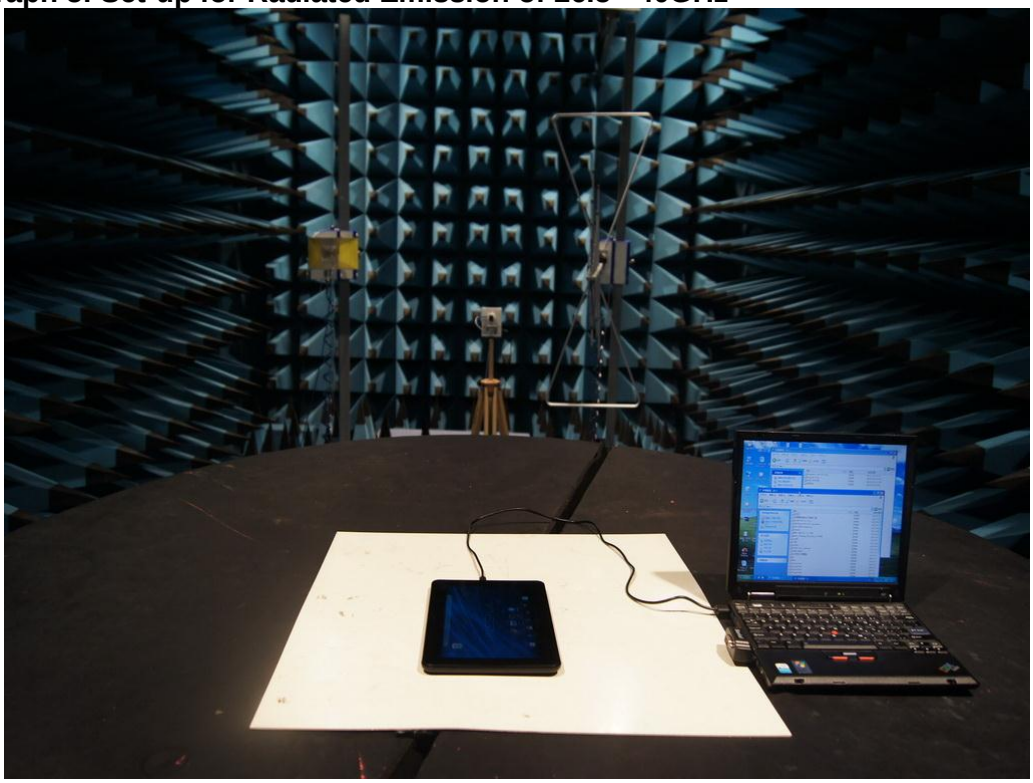
Photograph 3: Set-up for Radiated Emission of 1 - 18GHz



Photograph 4: Set-up for Radiated Emission of 18 - 26.5GHz



Photograph 5: Set-up for Radiated Emission of 26.5 - 40GHz



7. List of Tables

8. List of Photographs