Legend:

1 = very good

2 = good

P(ass) = passed a.m. test specification(s)



Prüfbericht-Nr.: 17032143 001 Auftrags-Nr.: 164003749 Seite 1 von 81 Test Report No.: Order No.: Page 1 of 81 Kunden-Referenz-Nr.: N/A Auftragsdatum: 22.03.2013 Client Reference No.: Order date: Auftraggeber: KEEN HIGH TECHNOLOGIES LTD., Block A1 & A2, Ze Da Li Industrial Park. Client: Tangwei Area, Fuyong, Bao'an, Shenzhen, Guangdong, China Prüfgegenstand: Tablet Test item: Bezeichnung / Typ-Nr.: NS-14T004 Identification / Type No.: Auftrags-Inhalt: FCC/IC Certification Order content: Prüfgrundlage: FCC CFR47 Part 15: Subpart C Section 15.247 FCC CFR47 Part 15: Subpart C Section 15.207 Test specification: FCC CFR47 Part 15: Subpart C Section 15.209 RSS-210 Issue 8 December 2010 RSS-Gen Issue 3 December 2010 Wareneingangsdatum: 22.03.2013 Date of receipt: Prüfmuster-Nr.: N/A Test sample No.: Prüfzeitraum: 13.04.2013 - 20.04.2013 Testing period: Ort der Prüfung: Accurate Technology Co., Ltd. Place of testing: Prüflaboratorium: TÜV Rheinland (Shenzhen) Co., Ltd. Testing laboratory: Prüfergebnis\*: Pass Test result\*: geprüft von I tested by: kontrolliert von I reviewed by: Owen Tian/Rroject Manager 09-06-2013 09-06-2013 Sam Lin/Technical Certicier Name / Stellung Datum nterschrift Datum Name / Stellung Unterschrift Signature Name / Position Date Date Name | Position Signature Sonstiges I 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 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be

F(ail) = failed a.m. test specification(s)

4 = sufficient

N/A = not applicable

5 = poor

N/T = not tested

3 = satisfactory



Produkte

**Products** 

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# **TEST SUMMARY**

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 PEAK OUTPUT POWER

RESULT: Pass

5.1.3 20DB BANDWIDTH AND 99% BANDWIDTH

RESULT: Pass

5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHZ BANDWIDTH

RESULT: Pass

5.1.5 Spurious Emission

RESULT: Pass

5.1.6 FREQUENCY SEPARATION

RESULT: Pass

5.1.7 NUMBER OF HOPPING FREQUENCY

RESULT: Pass

5.1.8 TIME OF OCCUPANCY

RESULT: Pass

5.1.9 CONDUCTED EMISSIONS

RESULT: Pass



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# 1. General Remarks

# 1.1 Complementary Materials

None.

## 2. Test Sites

## 2.1 Test Facilities

 $\label{eq:conditional} \textbf{Accurate Technology Co.}, \textbf{Ltd.}$ 

(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

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



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# 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment** 

Kind of Equipment	Manufacturer	urer Type		Calibrated until			
Transmitter spurious emissions & Receiver spurious emissions							
Spectrum Analyzer	Agilent	E7405A	MY45115511	2014-01-06			
Test Receiver	Rohde & Schwarz	ESCS30	100307	2014-01-06			
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2014-01-06			
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2014-01-06			
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2014-01-06			
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	2014-01-06			
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2014-01-06			
RF Coaxial Cable	SUHNER	N-3m	No.8	2014-01-06			
RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	2014-01-06			
RF Coaxial Cable	SUHNER	N-6m	No.10	2014-01-06			
RF Coaxial Cable	RESENBERGER	N-12m	No.11	2014-01-06			
RF Coaxial Cable	RESENBERGER	N-0.5m	No.12	2014-01-06			
Pre-Amplifier	Rohde & Schwarz	CBLU118354	3791	2014-01-06			
		0-01					
Radio Spectrum Test							
Spectrum Analyzer	Rohde & Schwarz	ESPI3	100396/003	2014-01-06			
Temp. & Humid. Chamber	Gongwen	HSD-500	0109	2014-01-06			
Conducted Emission							
Test Receiver	Rohde & Schwarz	ESCS30	100307	2014-01-06			
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	2014-01-06			
L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100310	2014-01-06			
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	2014-01-06			
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	2014-01-06			
RF Coaxial Cable	SUHNER	N-2m	No.3	2014-01-06			

# 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.

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# 2.5 Measurement Uncertainty

#### **Table 2: Measurement Uncertainty**

Parameter	Uncertainty
Radio Spectrum	< ± 0.60 dB
Radiated emission of transmitter, valid up to 12.75 GHz	< ± 4.42 dB
Radiated emission of receiver, valid up to 12.75 GHz	< ± 4.42 dB
Conducted Emission	< ± 2.23 dB
Radiated Emission	< ± 4.42 dB

## 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 is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

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## 3. General Product Information

## 3.1 Product Function and Intended Use

The EUT is a 10.1" 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 (Bluetooth)** 

Technical Specification	Value
Kind of Equipment	Tablet
Type Designation	NS-14T004
Operating Frequency band	2402 – 2480MHz
Bluetooth Version	2.1+EDR
Channel separation	1MHz
Extreme Temperature Range	-30~+75°C
Operation Voltage	DC 3.7V (via built in battery)
	DC 5V (via AC/DC adapter)
Modulation	FHSS, GFSK, 8DPSK, $\pi/4$ DQPSK
Antenna Gain	3.85dBi



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# 3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Bluetooth mode
  - 1. Transmitting
  - 2. Receiving
- B. Standby
- C. Off

# 3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

## 3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document

- Circuit Diagram
- Instruction Manual
- Rating Label



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# 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	Rating
Notebook PC	Lenovo	4290-RT8	R9-FW93G	N/A
AC/DC Adapter	SHEN ZHEN JING QUAN HUA ELECTRONICS CO.,LTD	NSA12UU-050200	N/A	Input: AC 100-240V, 50/60Hz, 0.5A Output: DC 5V, 2A

#### The EUT was tested with following cables:

Interface(s)/Port(s):	Max. cable length, shielding	Cable classification
AC Mains of adapter	2 cores, non-shielded port, 3m	AC Power Input
Micro USB port	4 cores, non-shielded port, 3m	DC Power Input

# 4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

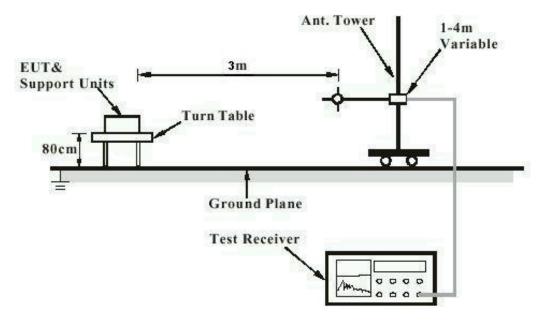


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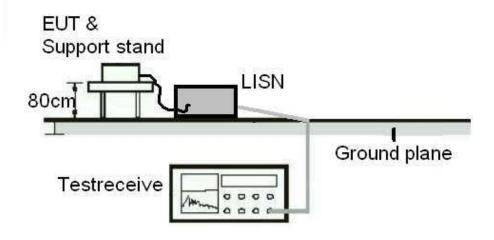
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# 4.5 Test Setup Diagram

**Diagram of Measurement Configuration for Radiation Test** 



**Diagram of Measurement Equipment Configuration for Conduction Measurement** 





# Produkte

Products 17032143 001 Prüfbericht - Nr.: Seite 11 von 81 Page 11 of 81 Test Report No. **Diagram of Measurement Equipment Configuration for Transmitter Measurement** RF Cable Test EUT Receiver

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## 5. Test Results

# 5.1 Transmitter Requirement & Test Suites

## 5.1.1 Antenna Requirement

RESULT: Pass

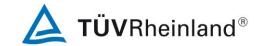
Test standard : FCC Part 15.247(b)(4) and Part 15.203

RSS-Gen 7.1.4

Limit The use of antennas with directional gains that do

not exceed 6dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 3.85dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.



## Produkte

**Products** 

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## **5.1.2 Peak Output Power**

RESULT: Pass

Test date : 2013-04-18

Test standard : FCC Part 15.247(b)(1)

RSS-210 A8.4(2)

Basic standard : ANSI C63.4: 2003

Limit : 125mW

Kind of test site : Shielded room

**Test setup** 

Test Channel : Low/ Middle/ High

Table 4: Test result of Peak Output Power of BDR mode

Channel	Channel Frequency	Peak Output Power	Limit
Chamilei	(MHz)	(dBm)	(dBm)
Low Channel	2402	8.93	21
Middle Channel	2441	8.92	21
High Channel	2480	8.70	21

Table 5: Test result of Peak Output Power of EDR mode

Channel	Channel Frequency	Peak Output Power	Limit
Chamer	(MHz)	(dBm)	(dBm)
Low Channel	2402	9.59	21
Middle Channel	2441	9.62	21
High Channel	2480	9.44	21



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#### 5.1.3 20dB Bandwidth and 99% Bandwidth

**RESULT: Pass** 

Date of testing 2013-04-18

Test standard FCC Part 15.247(a)(1)

RSS-210 A8.1(a)

ANSI C63.4: 2003 Basic standard Kind of test site Shielded room

**Test setup** 

Low/ Middle/ High

:
Ambient temperature
Relative humidity
Atmospheric A.1 **25**℃ 52% 101kPa

Table 6: Test result of 20dB & 99% Bandwidth of BDR mode

Channel	Channel	20dB Bandwidth	99% Bandwidth
Chamilei	Frequency (MHz)	(MHz)	(MHz)
Low Channel	2402	0.912	0.924
Mid Channel	2441	0.918	0.924
High Channel	2480	0.918	0.930

#### Table 7: Test result of 20dB & 99% Bandwidth of EDR mode

Channal	Channel	20dB Bandwidth	99% Bandwidth
Channel	Frequency (MHz)	(MHz)	(MHz)
Low Channel	2402	1.302	1.206
Mid Channel	2441	1.302	1.242
High Channel	2480	1.308	1.248



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## 5.1.4 Conducted Spurious Emissions measured in 100kHz Bandwidth

RESULT: Pass

Date of testing : 2013-04-18

Test standard : FCC part 15.247(d)

RSS-210 A8.5

Basic standard : ANSI C63.4: 2003

Limit : 20dB (below that in the 100kHz bandwidth within

the band that contains the highest level of the

desired power);

Kind of test site : Shield room

**Test setup** 

Test Channel : Low/ Middle/ High

For details refer to following test plot.



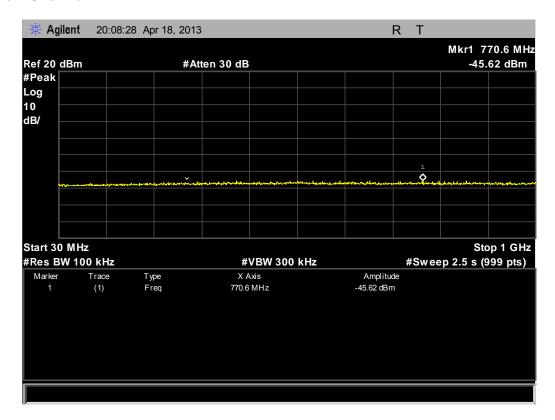
Prüfbericht - Nr.: 17032143 001

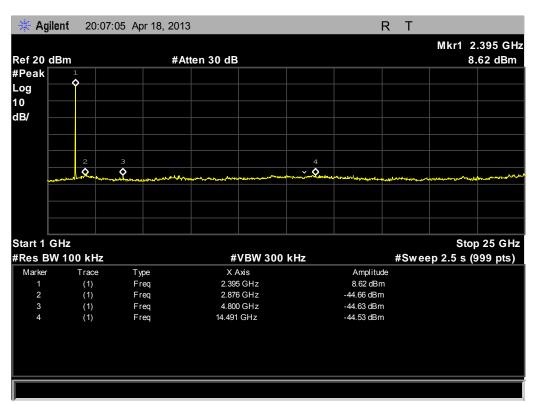
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# Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of BDR mode

#### **Low Channel**



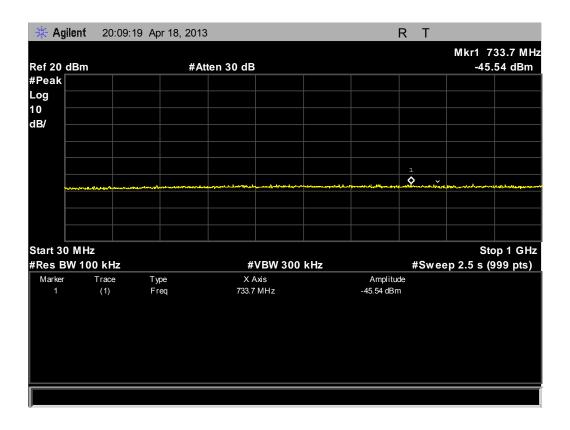


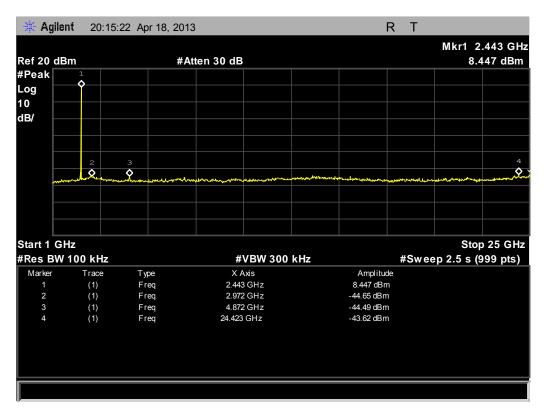
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#### **Middle Channel**





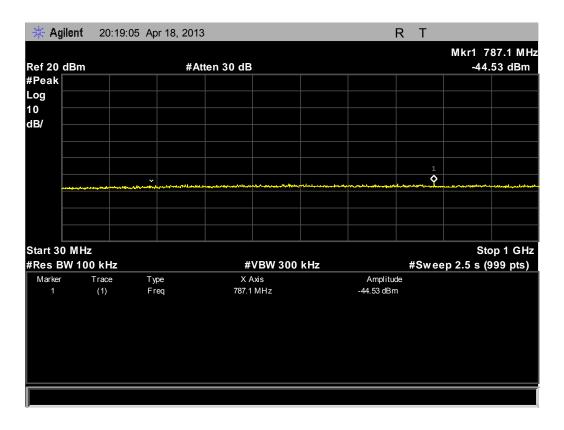


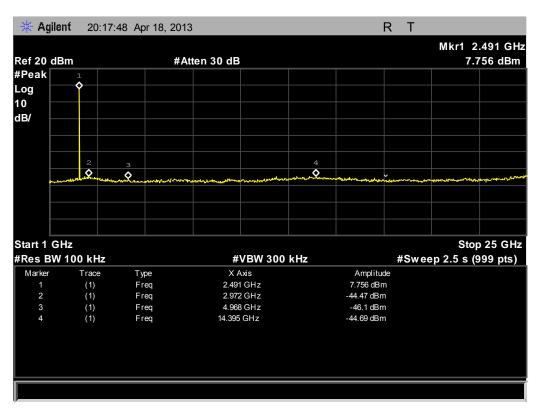
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## **High Channel**



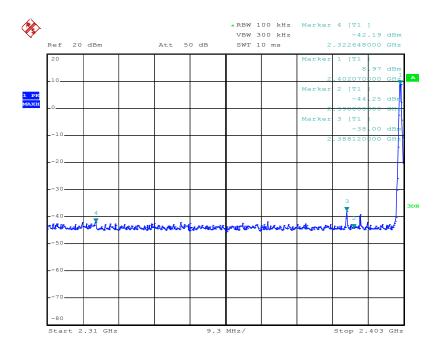




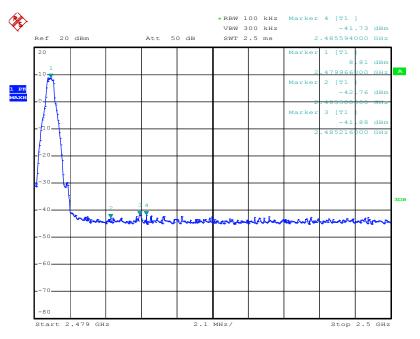
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## **Band Edge**



Date: 18.APR.2013 20:42:49



Date: 18.APR.2013 20:46:51



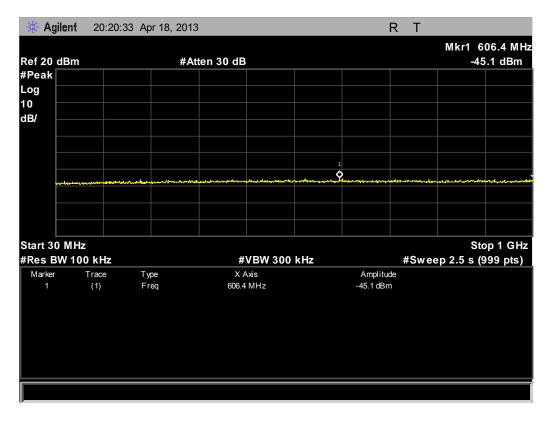
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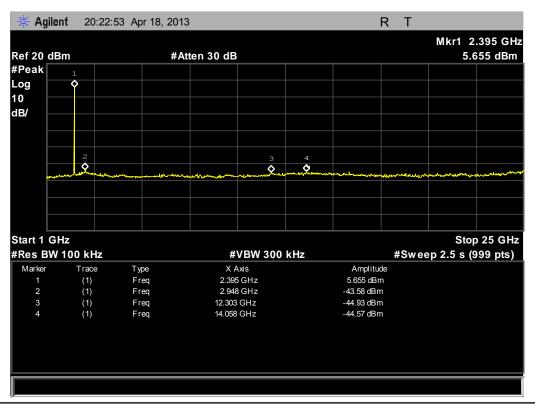
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## Test Plot of Conducted spurious emissions measured in 100kHz Bandwidth of EDR mode

## **Low Channel**

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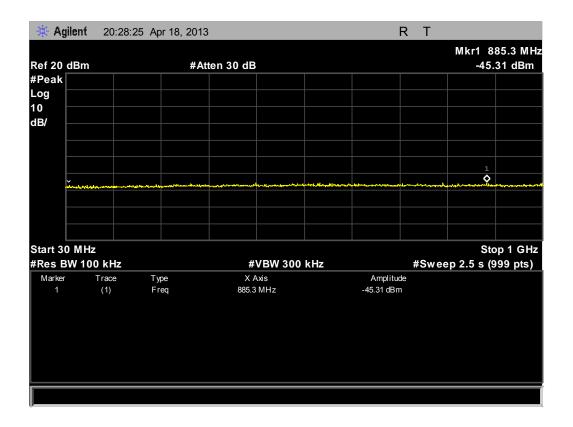


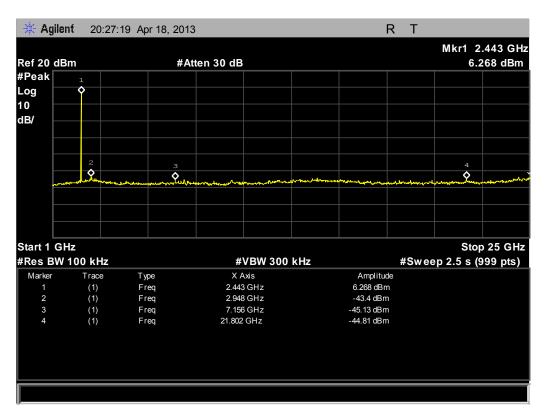
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#### **Middle Channel**



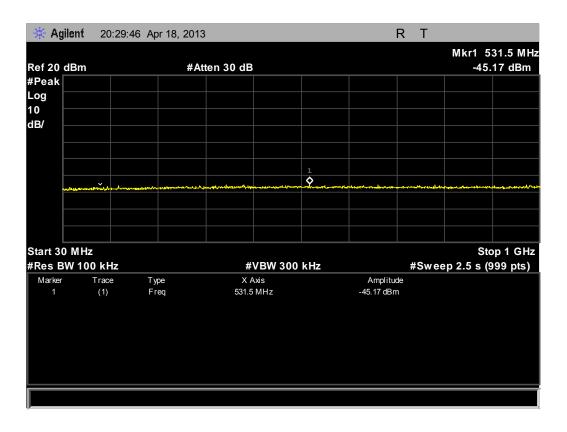


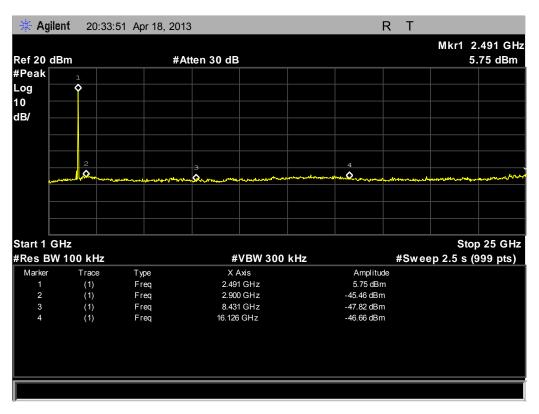
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## **High Channel**



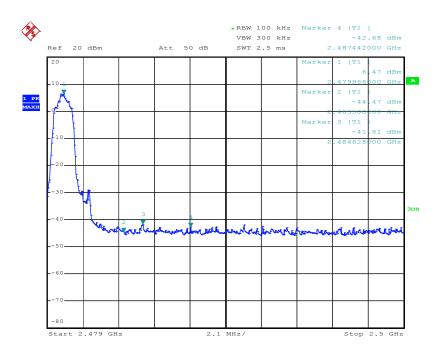




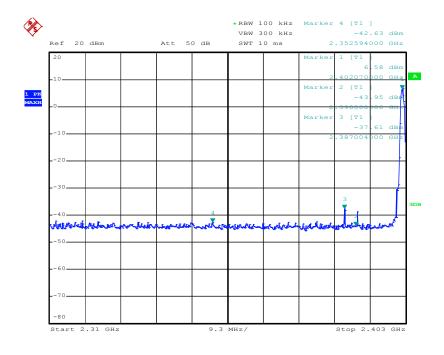
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## **Band Edge**



Date: 18.APR.2013 21:04:13



Date: 18.APR.2013 21:06:00



# **Produkte**

**Products** 

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## **5.1.5 Spurious Emission**

**RESULT: Pass** 

Date of testing 2013-04-20

Test standard FCC part 15.247(d)

RSS-210 Clause 2.2

Basic standard ANSI C63.4: 2003 Limits FCC part 15.209(a)

3m Semi-Anechoic Chamber Kind of test site

**Test setup** 

Test Channel Low/ Middle/ High

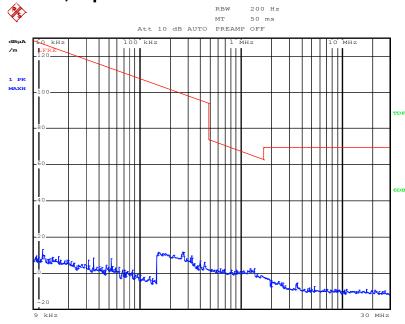
Operation mode : Ambient temperature : A.1, A.2 **25**℃ Relative humidity 52% Atmospheric pressure : 101kPa

For details refer to following test plot.

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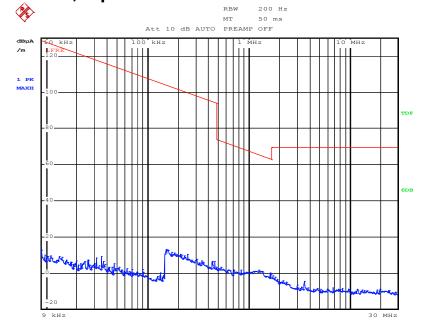
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# Test Plot of Spurious Emission of transmitting Low channel, X polarization:



Date: 20.APR.2013 20:59:53

## Low channel, Y polarization:

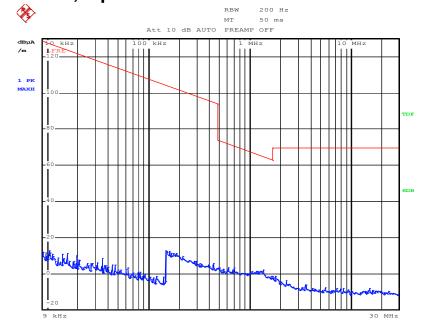


Date: 20.APR.2013 21:01:54

 Prüfbericht - Nr.:
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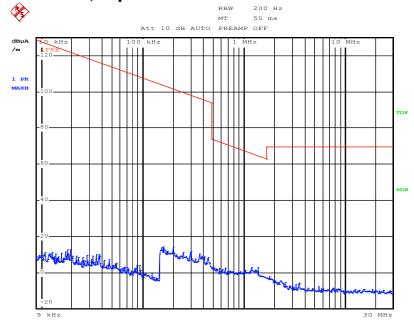
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# Low channel, Z polarization:



Date: 20.APR.2013 21:03:54

## Middle channel, X polarization:

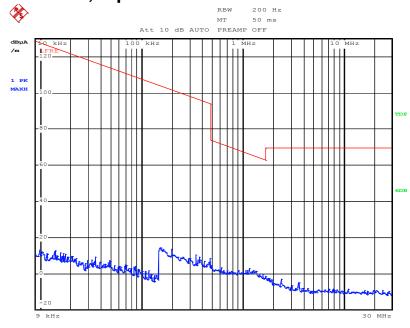


Date: 20.APR.2013 21:06:54

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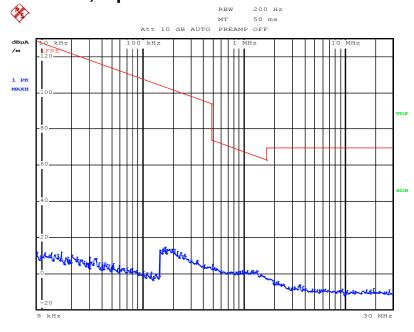
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# Middle channel, Y polarization:



Date: 20.APR.2013 21:08:54

## Middle channel, Z polarization:

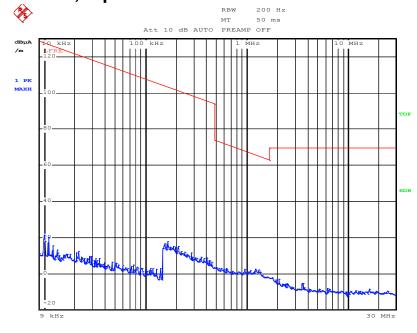


Date: 20.APR.2013 21:11:00

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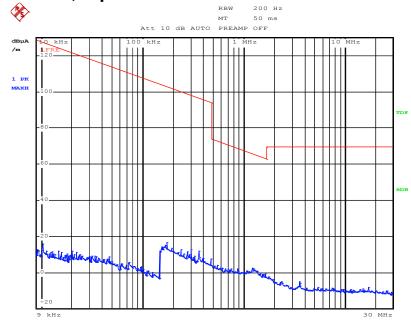
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# High channel, X polarization:



Date: 20.APR.2013 21:13:05

# High channel, Y polarization:



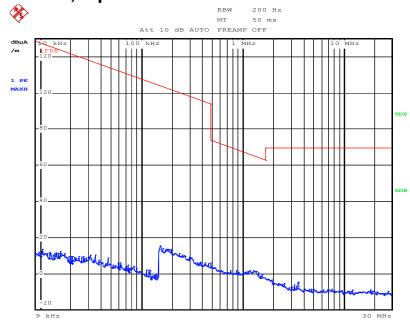
Date: 20.APR.2013 21:15:35



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# High channel, Z polarization:



Date: 20.APR.2013 21:18:02



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#### **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.: PYH #1764

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet Mode: TX 2480MHz Model: NS-14T004

Manufacturer: Keen High

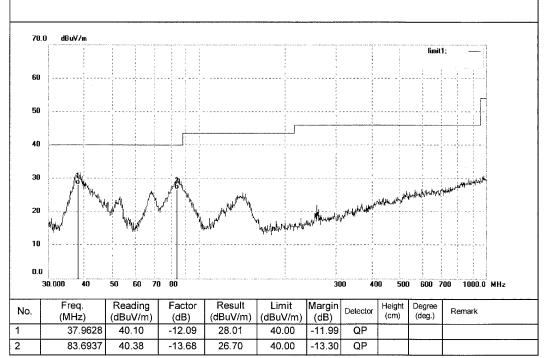
Vertical Polarization:

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 9:16:38

Engineer Signature: PEI

Distance: 3m





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### 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.: PYH #1744

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: TX 2402MHz Model: NS-14T004

Manufacturer: Keen High

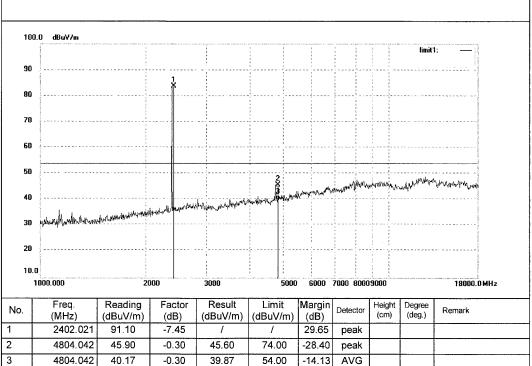
Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-19 Time: 22:57:44

Engineer Signature: PEI

Distance: 3m





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### 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.: PYH #1743

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet Mode: TX 2402MHz

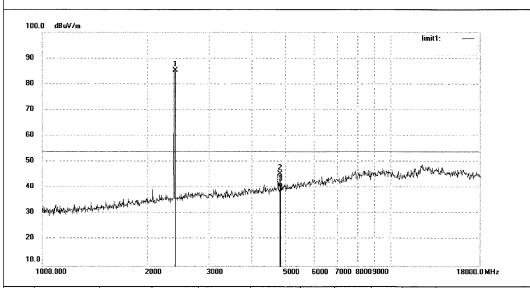
NS-14T004 Model: Manufacturer: Keen High Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013-4-19 Time: 22:45:38

Engineer Signature: PEI

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.019	92.78	-7.45	1	1	31.33	peak			-
2	4804.030	45.82	-0.30	45.52	74.00	-28.48	peak			
3	4804.030	40.55	-0.30	40.25	54.00	-13.75	AVG			



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ATO !

### 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.: PYH #1748

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: TX 2441MHz

Model: NS-14T004

Manufacturer: Keen High

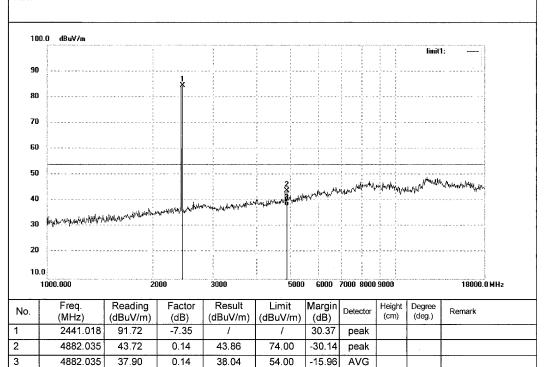
Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-19 Time: 23:41:49

Engineer Signature: PEI

Distance: 3m





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#### ACCURATE TECHNOLOGY CO., LTD.

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

Polarization:

Date: 2013-4-19

Time: 23:30:12

Distance: 3m

Engineer Signature: PEI

Vertical Power Source: AC 120V/60Hz

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

Job No.: PYH #1747

Standard: FCC Class B 3M Radiated

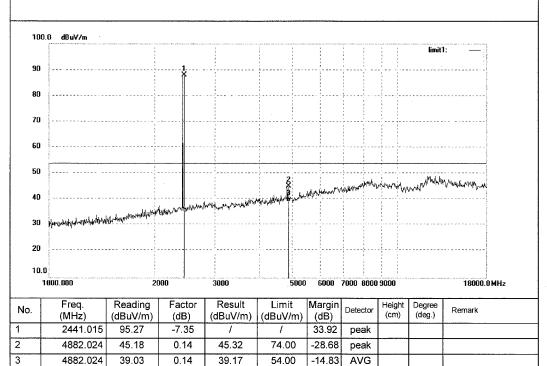
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet

Mode: TX 2441MHz Model: NS-14T004

Manufacturer: Keen High





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## **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.: PYH #1749

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet
Mode: TX 2480MHz

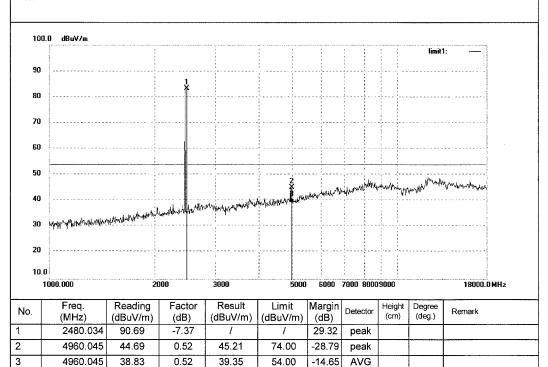
Model: NS-14T004 Manufacturer: Keen High Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-19 Time: 23:52:11

Engineer Signature: PEI

Distance: 3m





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#### **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.: PYH #1750

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

4960.028

39.67

0.52

40.19

3

Mode: TX 2480MHz

Model: NS-14T004 Manufacturer: Keen High Polarization: Vertical

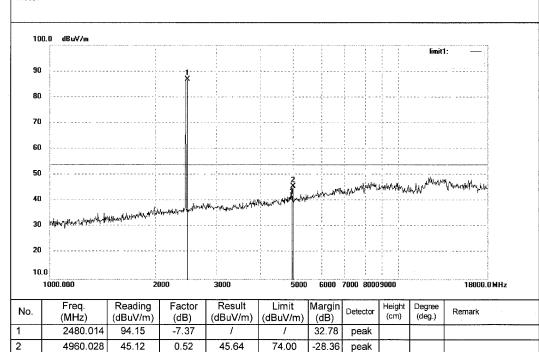
Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 0:04:14

Engineer Signature: PEI

Distance: 3m

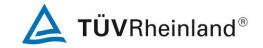
Note:



54.00

-13.81

AVG



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#### **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.: PYH #1771

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: TX 2402MHz Model: NS-14T004

Manufacturer: Keen High

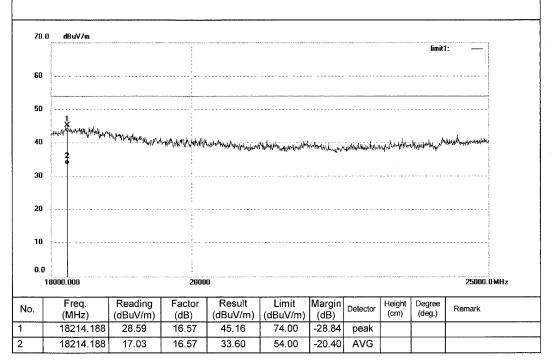
Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 10:26:07

Engineer Signature: PEI

Distance: 3m





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## 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

PYH #1772 Job No .

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: TX 2402MHz NS-14T004

Model:

Manufacturer: Keen High

Note:

Polarization: Vertical

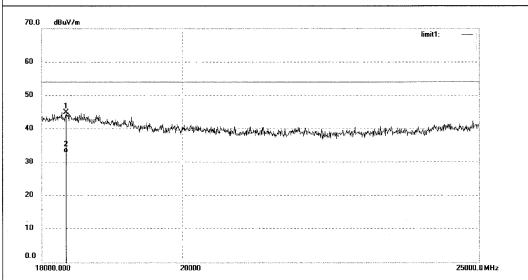
Power Source: AC 120V/60Hz

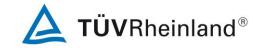
Date: 2013-4-20 Time: 10:34:44

Engineer Signature: PEI

Distance: 3m







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#### 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

PYH #1774 Job No.:

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Mode: TX 2441MHz

Model:

NS-14T004 Manufacturer: Keen High

18359.029

18359.029

1

2

27.14

15.04

Polarization: Horizontal

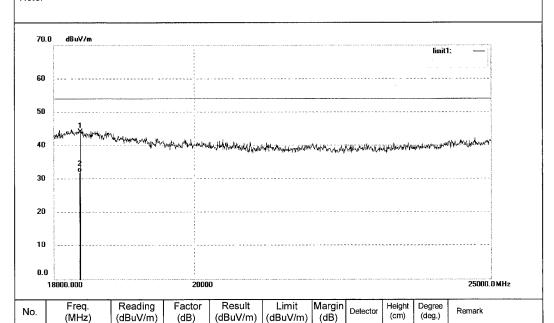
Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 10:51:16

Engineer Signature: PEI

Distance: 3m

Note:



74.00

54.00

peak

AVG

-29.97

-22.07

44.03

31.93

16.89

16.89



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### 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

PYH #1773 Job No.:

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: TX 2441MHz NS-14T004 Model: Manufacturer: Keen High Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 10:42:34

Engineer Signature:

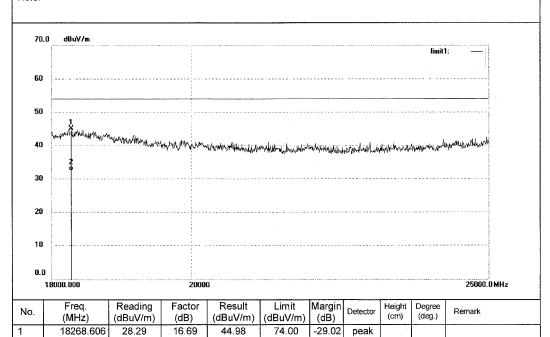
Distance: 3m

Note:

2

18268.606

15.86



54.00

-21.45

AVG

32.55

16.69



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### 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.: PYH #1775

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: TX 2480MHz NS-14T004 Model:

Manufacturer: Keen High

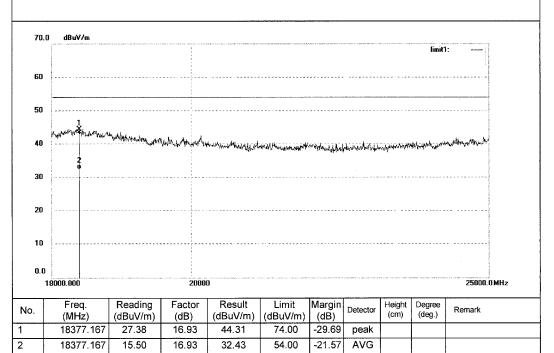
Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 11:02:37

Engineer Signature: PEI

Distance: 3m





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#### ACCURATE TECHNOLOGY CO., LTD.

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

Polarization:

Date: 2013-4-20

Time: 11:13:28

Distance: 3m

Engineer Signature: PEI

Vertical Power Source: AC 120V/60Hz

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

Job No.: PYH #1776

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet

Mode: TX 2480MHz NS-14T004 Model:

Manufacturer: Keen High

Note:

1

2

18340.909

18340.909

27.34

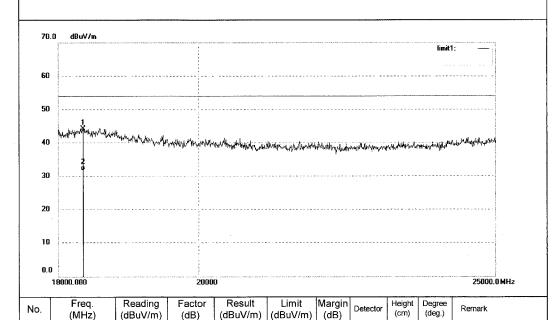
14.99

16.85

16.85

44.19

31.84



74.00

54.00

-29.81

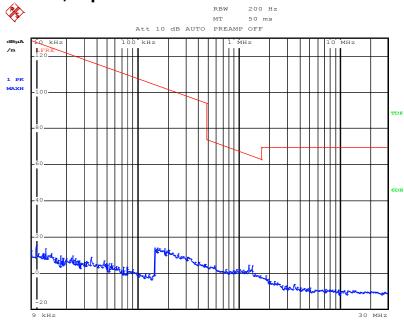
-22.16

peak

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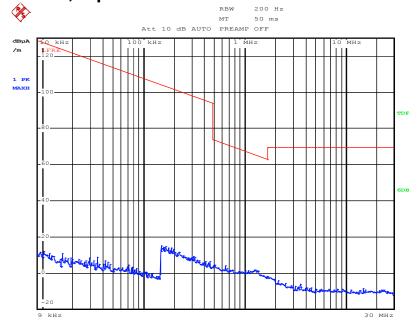
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# Test Plot of Spurious Emission of receiving Low channel, X polarization:



Date: 20.APR.2013 21:22:53

# Low channel, Y polarization:

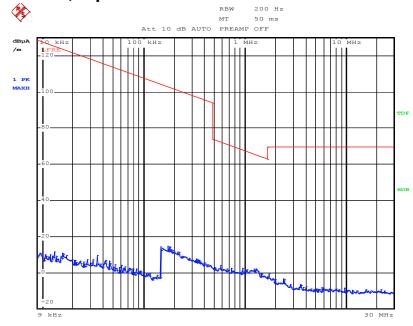


Date: 20.APR.2013 21:24:51

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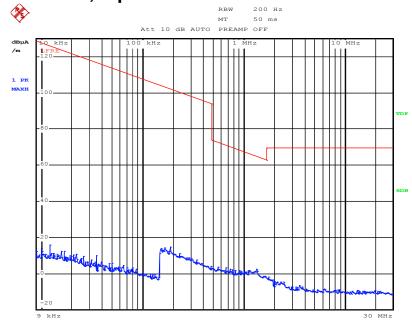
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# Low channel, Z polarization:



Date: 20.APR.2013 21:26:53

# Middle channel, X polarization:

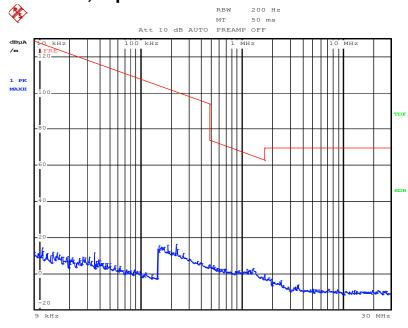


Date: 20.APR.2013 21:29:03

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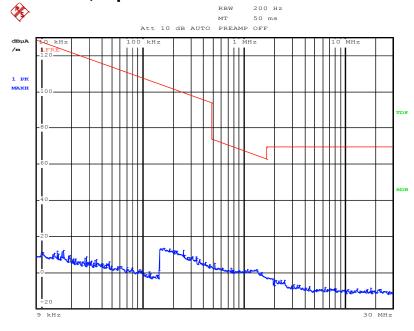
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# Middle channel, Y polarization:



Date: 20.APR.2013 21:31:10

# Middle channel, Z polarization:

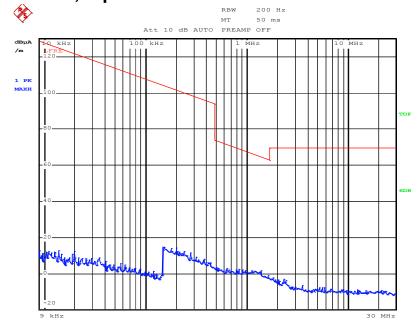


Date: 20.APR.2013 21:33:11

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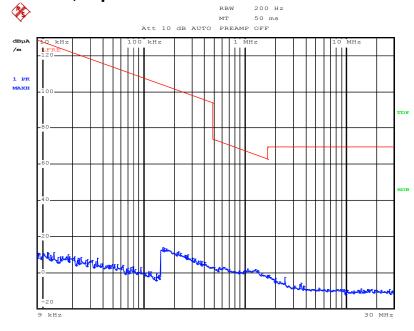
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# High channel, X polarization:



Date: 20.APR.2013 21:35:12

# High channel, Y polarization:



Date: 20.APR.2013 21:37:14

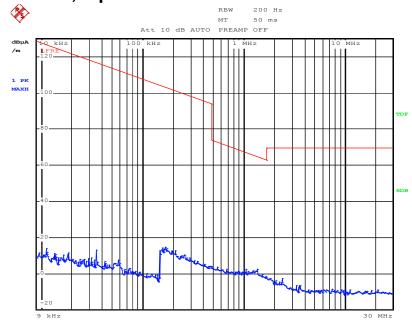


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# High channel, Z polarization:



Date: 20.APR.2013 21:39:20



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ACCURATE TECHNOLOGY CO., LTD.

Site: 2# Chamber Tel:+86-0755-26503290 F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China

Job No.: PYH #1766

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet

RX 2402MHz

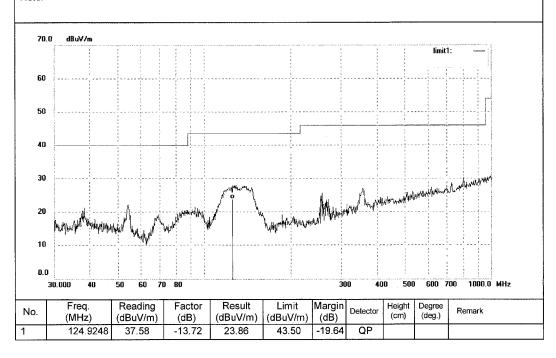
Mode: NS-14T004 Model: Manufacturer: Keen High Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 9:35:29

Engineer Signature: PEI

Distance: 3m





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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

PYH #1765 Job No.:

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: RX 2402MHz NS-14T004 Model:

Manufacturer: Keen High

Vertical Polarization:

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 9:24:49

Engineer Signature: PEI

Distance: 3m

Note:

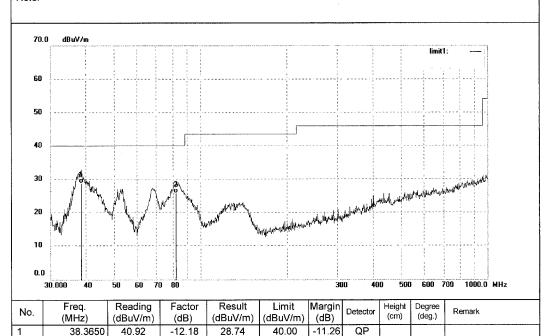
2

82.2362

39.75

-14.01

25.74



40.00

-14.26

QP



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### **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.: PYH #1767

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: RX 2441MHz NS-14T004

Model:

Manufacturer: Keen High

Polarization: Horizontal

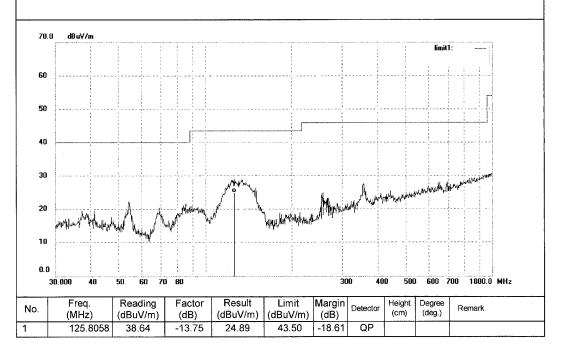
Power Source: AC 120V/60Hz

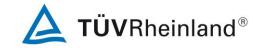
Date: 2013-4-20

Time: 9:43:58 Engineer Signature: PEI

Distance: 3m







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ACCURATE TECHNOLOGY CO., LTD.

Site: 2# Chamber Tel:+86-0755-26503290 F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China

> Vertical Power Source: AC 120V/60Hz

Polarization:

Date: 2013-4-20

Engineer Signature: PEI

Time: 9:54:25

Distance: 3m

Job No.: PYH #1768

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

2

82.7619

38.35

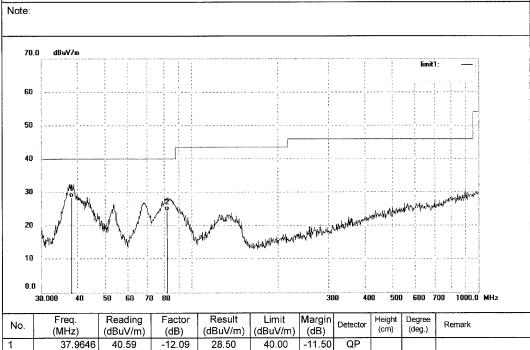
-13.90

24.45

Tablet

RX 2441MHz Mode: NS-14T004 Model:

Manufacturer: Keen High



40.00

-15.55

QP



Site: 2# Chamber

#### **Produkte Products**

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ACCURATE TECHNOLOGY CO., LTD.

Tel:+86-0755-26503290 F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China

> Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 10:15:13

Engineer Signature: PEI

Distance: 3m

PYH #1770 Job No.:

Standard: FCC Class B 3M Radiated

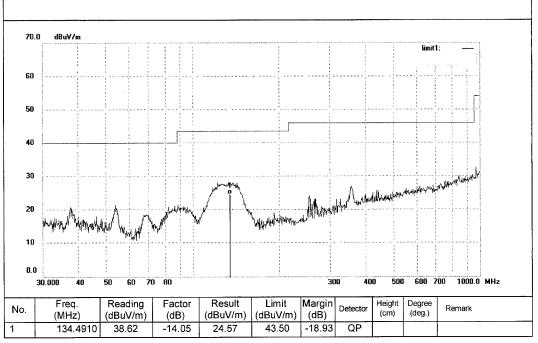
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: RX 2480MHz NS-14T004 Model: Manufacturer: Keen High





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#### ACCURATE TECHNOLOGY CO., LTD.

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

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

Job No.: PYH #1769

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet RX 2480MHz

Model: RX 2480MHz Model: NS-14T004 Manufacturer: Keen High Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 10:05:13

Engineer Signature: PEI

Distance: 3m

Note:

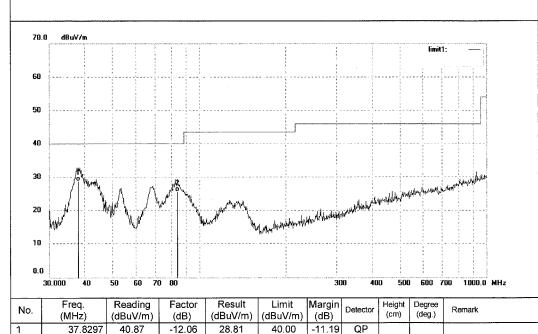
2

83.6937

39.28

-13.68

25.60



40.00

-14.40

QP



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#### ACCURATE TECHNOLOGY CO., LTD.

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

Polarization:

Date: 2013-4-20

Engineer Signature: PEI

Time: 0:35:32

Distance: 3m

Horizontal Power Source: AC 120V/60Hz

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

Job No.: PYH #1753

Standard: FCC Class B 3M Radiated

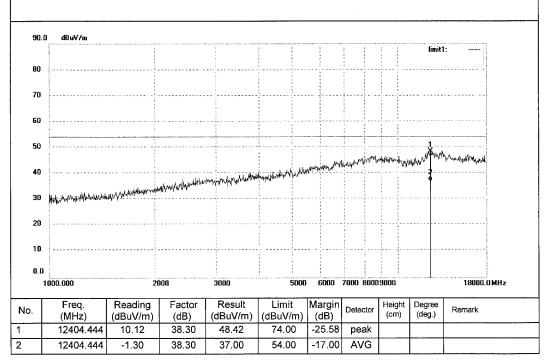
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet

Mode: RX 2402MHz NS-14T004 Modei:

Manufacturer: Keen High





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#### ACCURATE TECHNOLOGY CO., LTD.

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

Polarization:

Date: 2013-4-20

Engineer Signature: PEI

Time: 0:46:10

Distance: 3m

6000 7000 80009000

Vertical Power Source: AC 120V/60Hz

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

Job No.: PYH #1754

1000.000

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode:

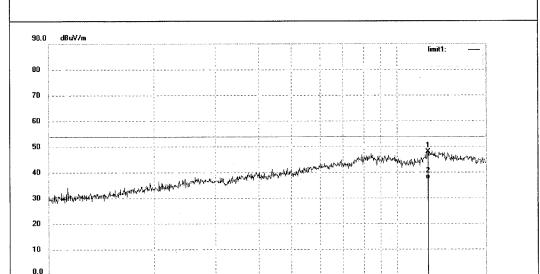
RX 2402MHz

Model:

NS-14T004

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	12256.470	10.14	38.16	48.30	74.00	-25.70	peak			
2	12256.470	-0.56	38.16	37.60	54.00	-16.40	AVG			

3000

2000

18000.0 MHz



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#### 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.: PYH #1756

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet RX 2441MHz Mode:

NS-14T004 Model:

Manufacturer: Keen High

Note:

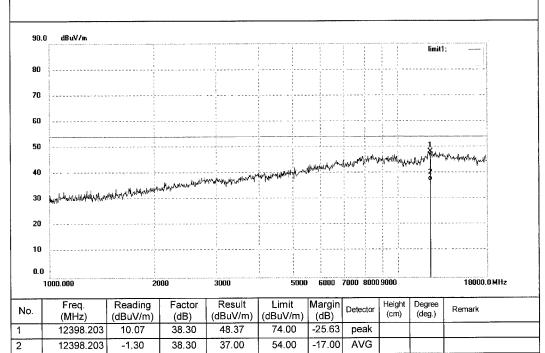
Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 1:06:59

Engineer Signature: PEI

Distance: 3m





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**ACCURATE TECHNOLOGY CO., LTD.** 

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

Tel:+86-0755Fax:+86-0755

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

Job No.: PYH #1755

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet RX 2441MHz

Model: RX 2441MHz Model: NS-14T004 Manufacturer: Keen High

12508.436

2

-2.11

38.41

36.30

Polarization: Vertical

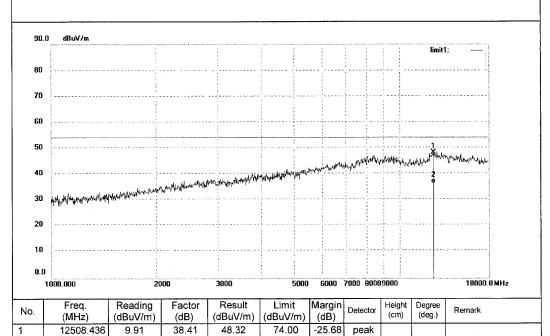
Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 0:55:57

Engineer Signature: PEI

Distance: 3m

Note:



54.00

-17.70



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ACCURATE TECHNOLOGY CO., LTD.

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

Polarization:

Date: 2013-4-20

Engineer Signature: PEI

Time: 1:14:11

Distance: 3m

Horizontal Power Source: AC 120V/60Hz

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

Job No.: PYH #1757

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: RX 2480MHz NS-14T004 Model:

Manufacturer: Keen High

Note:

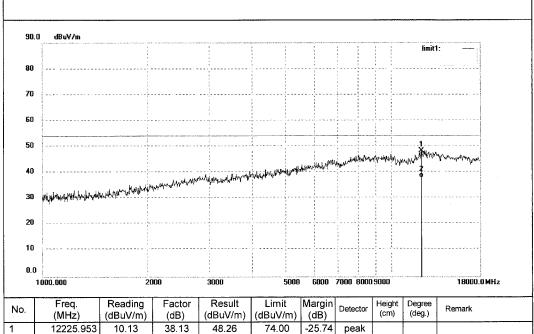
2

12225.953

-0.23

38.13

37.90



54.00

-16.10



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## ACCURATE TECHNOLOGY CO., LTD.

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

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

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 1:25:05

Engineer Signature: PEI

Distance: 3m

Job No.: PYH #1758

Standard: FCC Class B 3M Radiated

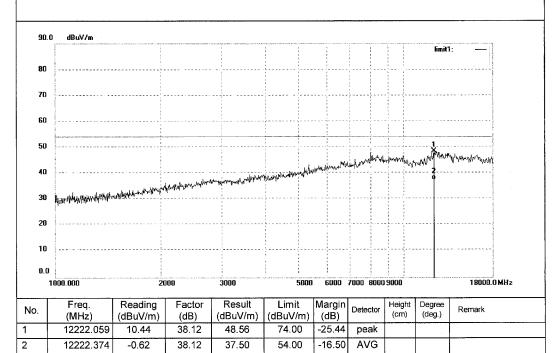
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: RX 2480MHz NS-14T004 Model: Manufacturer: Keen High





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### 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.: PYH #1777

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: RX 2402MHz

NS-14T004 Model: Manufacturer: Keen High

18274.620

15.26

16.70

31.96

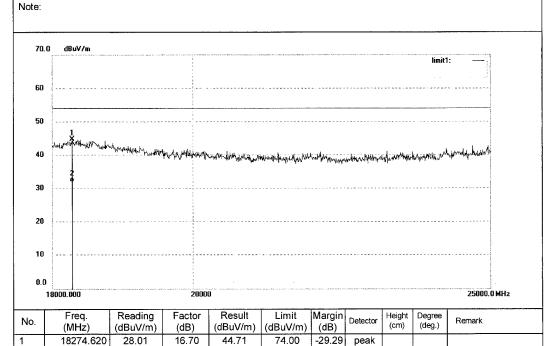
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 11:24:46

Engineer Signature: PEI

Distance: 3m



54.00

-22.04



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## **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.: PYH #1778

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet
Mode: RX 2402MHz

Model: NS-14T004
Manufacturer: Keen High

18328.838

14.96

16.82

31.78

Polarization: Vertical

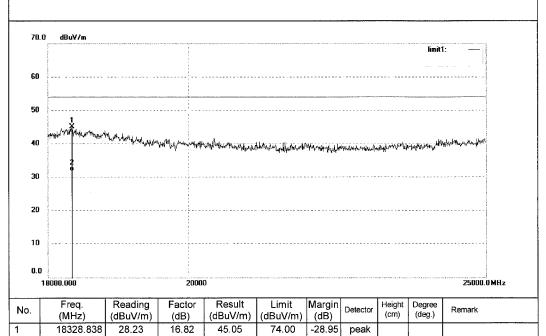
Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 11:32:54

Engineer Signature: PEI

Distance: 3m

Note:



54.00

-22.22



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### **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.: PYH #1780

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet RX 2441MHz

Model: RX 2441MHz Model: NS-14T004 Manufacturer: Keen High Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 11:53:19

Engineer Signature: PEI

Distance: 3m

Note:

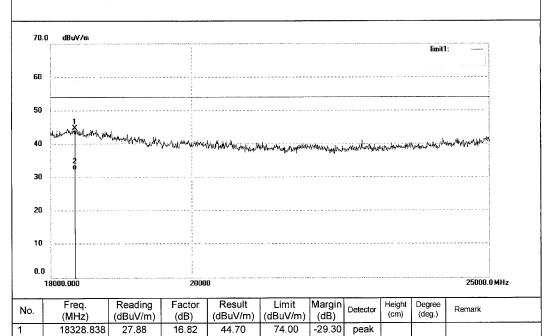
2

18328.838

15.39

16.82

32.21



54.00

-21.79



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## **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.: PYH #1779

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

Mode: RX 2441MHz Model: NS-14T004

Model: NS-141004

Manufacturer: Keen High

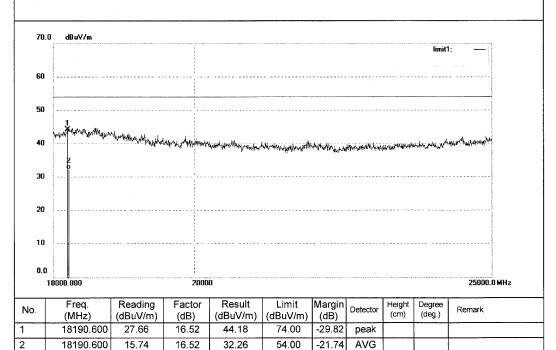
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 11:44:30

Engineer Signature: PEI

Distance: 3m





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### 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.: PYH #1781

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet

Mode: RX 2480MHz

Model: NS-14T004

Model: NS-14T004 Manufacturer: Keen High Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 12:07:48

Engineer Signature: PEI

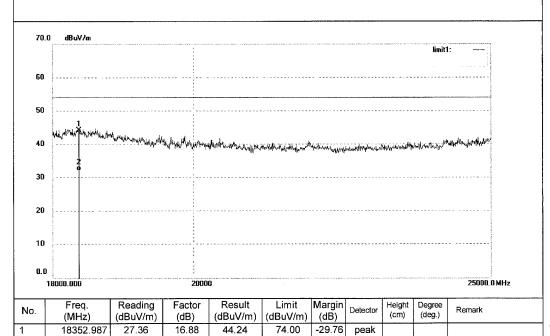
Distance: 3m

Note:

2

18352.987

15.31



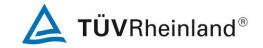
54.00

-21.81

AVG

32.19

16.88



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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.: PYH #1782

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet Mode: RX 2480MHz NS-14T004 Model:

Manufacturer: Keen High

Note:

2

18232.561

16.61

15.64

32.25

Polarization:

Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 12:13:26

Engineer Signature: PEI

Distance: 3m

70.	0 dBuV/m	4-84-14-1								4.
	-		1						limit1	1.
60										
							V			
50	1									
40	Marin Marine	highwalegheardsgaren	apply the paper	arainsk frank spikarite	ight the particular could	Pandiplo (literation)	addition of the contraction of	girkat kontota	digitation of the state of the	and processing refreshers
30	ā		i							
20										
20 10										
10 0.0	I have a contract to the contract of the contr									
10 0.0	18000.000		2000	0						25000.0 MHz

54.00

-21.75



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Test Report No.

# **Test Plot of Frequency Band Edge**



## 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.: PYH #1745

Standard: FCC (Band Edge)
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT:

Tablet

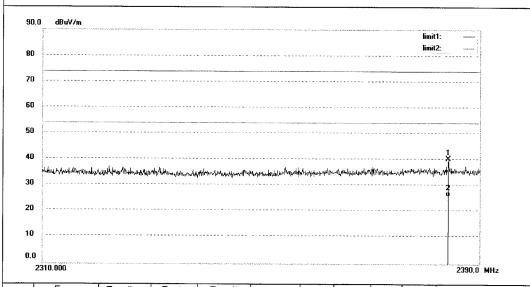
Model: TX 2402MHz Model: NS-14T004 Manufacturer: Keen High Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013-4-19 Time: 23:09:26

Engineer Signature: PEI

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2384.202	47.96	-7.56	40.40	74.00	-33.60	peak		*****	
2	2384.202	33.46	-7.56	25.90	54.00	-28.10	AVG			



**Products** 

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## 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.: PYH #1746

Standard: FCC (Band Edge) Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet

Mode: TX 2402MHz NS-14T004

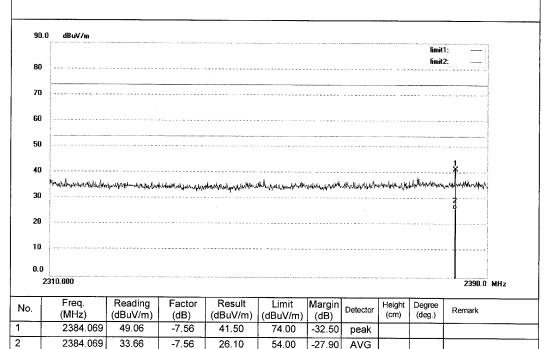
Model: Manufacturer: Keen High Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013-4-19 Time: 23:18:28

Engineer Signature: PEI

Distance: 3m





**Products** 

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## 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.: PYH #1752

Standard: FCC (Band Edge) Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Mode:

Tablet TX 2480MHz

Model:

NS-14T004

Manufacturer: Keen High

Polarization: Horizontal

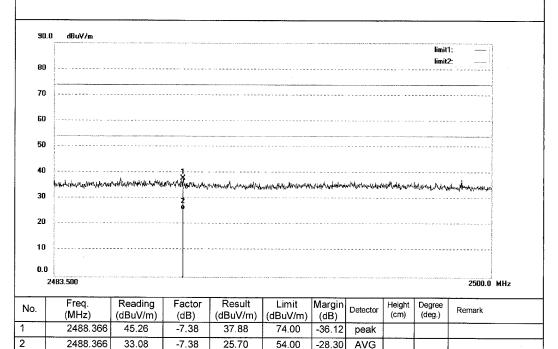
Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 0:24:32

Engineer Signature: PEI

Distance: 3m







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#### 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.: PYH #1751

Standard: FCC (Band Edge)
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Tablet

Mode: TX 2480MHz Model: NS-14T004

Manufacturer: Keen High

Polarization: Vertical

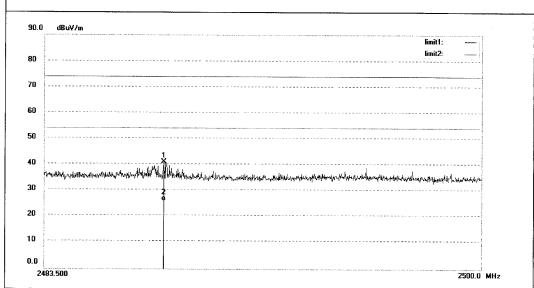
Power Source: AC 120V/60Hz

Date: 2013-4-20 Time: 0:15:35

Engineer Signature: PEI

Distance: 3m





No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2488.021	48.35	-7.38	40.97	74.00	-33.03	peak			
2	2488.021	33.38	-7.38	26.00	54.00	-28.00	AVG			



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## 5.1.6 Frequency Separation

RESULT: Pass

Date of testing : 2013-04-18

Test standard : FCC part 15.247(a)(1)

RSS-210 A8.1(b)

Basic standard : ANSI C63.4: 2003

Limit : ≥ 25kHz or two-thirds of 20dB bandwidth,

whichever is greater

Kind of test site : Shield room

**Test setup** 

Test Channel : Low/ Middle/ High

## **Table 8: Test result of Frequency Separation**

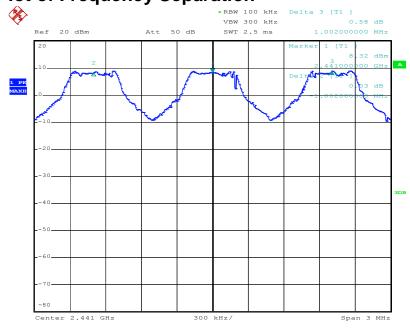
Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result	
Low Channel	2402	1.002	≥ 25kHz or two- thirds of 20dB	Pass	
Adjacency Channel	2403	1.002	bandwidth	rass	
Mid Channel	2441	1.002	≥ 25kHz or two- thirds of 20dB	Pass	
Adjacency Channel	2442	1.002	bandwidth	F455	
High Channel	2479	1.002	≥ 25kHz or two- thirds of 20dB	Doos	
Adjacency Channel	2480	1.002	bandwidth	Pass	



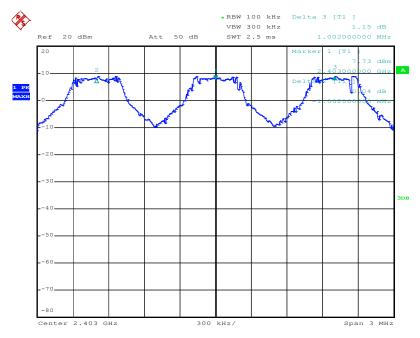
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# **Test Plot of Frequency Separation**



Date: 18.APR.2013 18:17:39

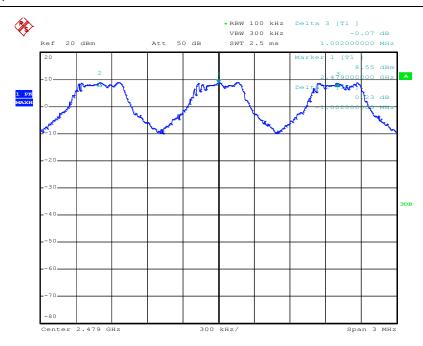


Date: 18.APR.2013 18:20:47



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Date: 18.APR.2013 18:22:55



Products

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## **5.1.7 Number of hopping frequency**

RESULT: Pass

Date of testing : 2013-04-18

Test standard : FCC part 15.247(a)(1)(iii)

RSS-210 A8.1(d)

Basic standard : ANSI C63.4: 2003

Limits :  $\geq$  15 non-overlapping channels

Kind of test site : Shield room

**Test setup** 

Test Channel : Low/ Middle/ High

Operation Mode : A.1

Ambient temperature : 25°C

Relative humidity : 52%

Atmospheric pressure : 101kPa

## **Table 9: Test result of Number of hopping frequency**

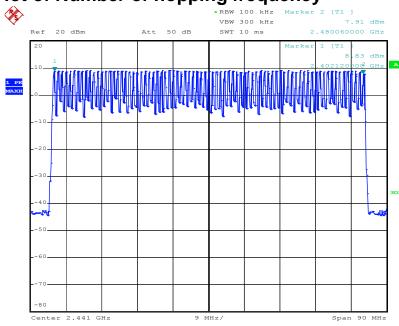
Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2402 to 2480MHz	79	≥15	Pass



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# **Test Plot of Number of hopping frequency**



Date: 18.APR.2013 18:14:03



**Products** 

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# 5.1.8 Time of Occupancy

RESULT: Pass

Date of testing : 2013-04-18

Test standard : FCC part 15.247(a)(1)(iii)

RSS-210 A8.1(d)

Basic standard : ANSI C63.4: 2003

Limits : 0.4s

Kind of test site : Shield room

**Test setup** 

Test Channel : Low/ Middle/ High

## **Table 10: Test result of Time of Occupancy**

Mode	Packet Type	Channel Frequency (MHz)	Packet Duration [ms]	Number of Hops per Channel	Dwell Time (ms)	Limit [ms]
		2402	0.44	266	117.04	400
	DH1	2441	0.44	267	117.48	400
		2480	0.44	266	117.04	400
		2402	1.72	156	268.32	400
BDR	DH3	2441	1.72	143	245.96	400
		2480	1.72	150	258.00	400
		2402	2.97	109	323.73	400
	DH5	2441	2.97	113	335.61	400
		2480	2.97	111	329.67	400
	DH1	2402	0.44	266	117.04	400
		2441	0.44	262	115.28	400
		2480	0.44	271	119.24	400
		2402	1.72	141	242.52	400
EDR	DH3	2441	1.72	151	259.72	400
		2480	1.72	148	254.56	400
		2402	2.97	101	299.97	400
	DH5	2441	3.00	106	318.00	400
		2480	2.97	100	297.00	400



**Products** 

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#### 5.1.9 Conducted emissions

RESULT: Pass

Date of testing : 2013-04-13 Test standard : FCC Part 15.207

RSS-210 Clause 2.6

Basic standard : ANSI C63.4: 2003
Frequency range : 0.15 – 30MHz
Limits : FCC Part 15.207

Table 4 of RSS-Gen

Kind of test site : Shield room

**Test setup** 

Input Voltage : AC 120V, 60Hz

Operation Mode : A

Earthing : Not Connected

For details refer to following test plot.



**Products** 

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#### ACCURATE TECHNOLOGY CO., LTD

#### CONDUCTED EMISSION STANDARD FCC PART 15 B

Tablet M/N:NS-14T004

Manufacturer: Keen High

Operating Condition: On with Bluetooth Operating Constitution 1#SP Test Site: 1#SP PEI 1#Shielding Room

Test Specification: L 120V/60Hz

Comment: Start of Test: 4/13/2013 / 4:14:50PM

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

 Short Description:
 SUB\_STD\_VTERM2
 1.70

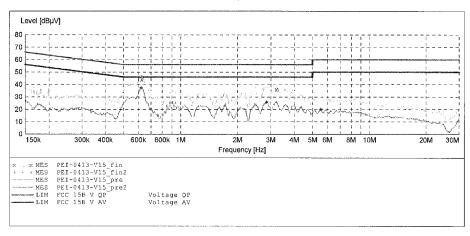
 Start
 Stop
 Detector
 Meas.

 Frequency
 Frequency
 Width
 Time

 150.0 kHz
 30.0 MHz
 4.5 kHz
 QuasiPeak
 1.0 s
 Detector Meas. Transducer Bandw.

9 kHz NSLK8126 2008

Average



#### MEASUREMENT RESULT: "PEI-0413-V15 fin"

4/13/2013 4:17PM										
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE			
MHz	dBµV	dB	dBµV	dB						
0.606060	44 10	10 6	5.0	11 0	0.70	T 2	aur			
0.626268	44.10	12.6	56	11.9	QP	$_{\rm L1}$	GND			
3.217975	35.90	12.3	56	20.1	QP	L1	GND			

#### MEASUREMENT RESULT: "PEI-0413-V15\_fin2"

4,	/13/2013 4:1	7 PM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBµV	dB	dΒμV	dB			
	0.621288	37.20	12.6	46	8.8	AV	L1	GND
	2.843398	25.70	12.3	46	20.3	AV	L1	GND
	5.538187	20.10	12.2	50	29.9	AV	L1	GND



**Products** 

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#### ACCURATE TECHNOLOGY CO., LTD

#### CONDUCTED EMISSION STANDARD FCC PART 15 B

Tablet M/N:NS-14T004

Manufacturer: Keen High Operating Condition: On with Bluetooth 1#Shielding Room

Test Site: Operator: PEI

Test Specification: N 120V/60Hz

Comment: Start of Test: 4/13/2013 / 4:17:44PM

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

 Short Description:
 SUB\_STD\_VTERM2 1.70

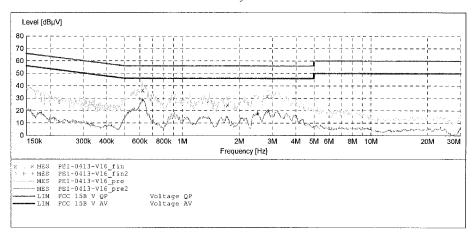
 Start
 Stop
 Step
 Detector
 Meas.

 Frequency
 Frequency
 Width
 Time

 150.0 kHz
 30.0 MHz
 4.5 kHz
 QuasiPeak
 1.0 s
 Detector Meas. IF Transducer Bandw.

QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



## MEASUREMENT RESULT: "PEI-0413-V16\_fin"

4,	/13/2013 4:2	0PM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
	0.621288	36.60	12.6	56	19.4	QP	N	GND
	1.733234	24.70	12.4	56	31.3	QP	N	GND
	2.820786	31.60	12.3	56	24.4	QP	N	GND

#### MEASUREMENT RESULT: "PEI-0413-V16\_fin2"

4	/13/2013 4:2	0 PM						
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
	0.621288	28.40	12.6	46	17.6	AV	N	GND
	2.502412	17.90	12.4	46	28.1	AV	N	GND
	2.854771	19.90	12.3	46	26.1	AV	N	GND



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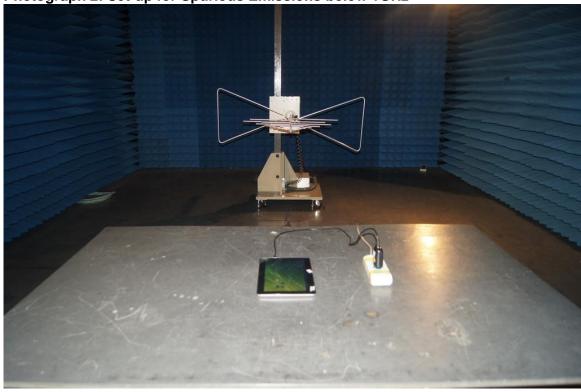
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# 6. Photographs of the Test Set-Up

**Photograph 1: Set-up for Conducted Emissions** 



Photograph 2: Set-up for Spurious Emissions below 1GHz



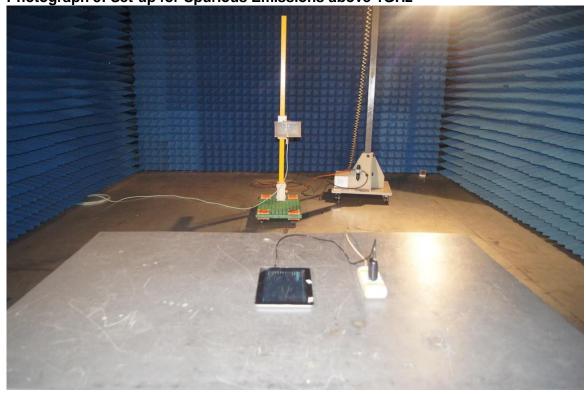


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Photograph 3: Set-up for Spurious Emissions above 1GHz





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