

Prüfbericht-Nr.: 17037987 001 Auftrags-Nr.: 164010423 Seite 1 von 49 Test Report No.: Order No.: Page 1 of 49 Kunden-Referenz-Nr.: N/A Auftragsdatum: 09.01.2014 Client Reference No.: Order date: Auftraggeber: Mae Tay Precision Co., Ltd. 6F., No.99, Ruihu St., Neihu Dist., Taipei City, 114, Client: Taiwan Prüfgegenstand: Wireless Keyboard Test item: Bezeichnung / Typ-Nr.: NS-PNK5011 Identification / Type No.: Auftrags-Inhalt: **FCC Certification** Order content: Prüfgrundlage: CFR47 FCC Part 15: Subpart C Section 15.249 CFR47 FCC Part 15: Subpart C Section 15.209 Test specification: FCC KDB Publication 447498 v05r01 Wareneingangsdatum: N/A Date of receipt: Prüfmuster-Nr.: N/A Test sample No.: Prüfzeitraum: 04.01.2014 - 06.01.2014 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 / tested by: kontrolliert von / reviewed by: 0 29.01.2014 Owen Tian/Project Manager 29.01.2014 Winnie Hou/Technical Certifier Datum Name / Stellung Unterschrift Datum Name / Stellung Unterschrift Name / Position Date Name / Position Signature Date Signature Sonstiges / Other: Zustand des Prüfgegenstandes bei Anlieferung: Details im vorherigen Abschnitt Condition of the test item at delivery: Details in the previous section * 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 Legend: 1 = very good 2 = good3 = satisfactory 4 = sufficient 5 = poor

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

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

N/A = not applicable

N/T = not tested

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

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TEST SUMMARY

5.1.1 FUNDAMENTAL & HARMONICS RADIATED EMISSION

RESULT: Pass

5.1.2 RADIATED EMISSIONS OUTSIDE OF THE BAND

RESULT: Pass

6.1.1 ELECTROMAGNETIC FIELDS

RESULT: Pass

Produkte Products

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1. General Remarks

1.1 Complementary Materials

None.

2. Test Sites

2.1 Test Facilities

Accurate Technology Co., Ltd.

(FCC Registration No.: 752051)

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 | Туре | S/N | Calibrated until | | | | | |
|--|-----------------|----------------|------------|------------------|--|--|--|--|--|
| Transmitter spurious emissions & Receiver spurious emissions | | | | | | | | | |
| Spectrum Analyzer | Agilent | E7405A | MY45115511 | 2015-01-07 | | | | | |
| Test Receiver | Rohde & Schwarz | ESCS30 | 100307 | 2015-01-07 | | | | | |
| Bilog Antenna | Schwarzbeck | VULB9163 | 9163-323 | 2015-01-07 | | | | | |
| Loop Antenna | Schwarzbeck | FMZB1516 | 1516131 | 2015-01-07 | | | | | |
| Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-655 | 2015-01-07 | | | | | |
| Horn Antenna | Schwarzbeck | BBHA9170 | 9170-359 | 2015-01-07 | | | | | |
| 50 Coaxial Switch | Anritsu Corp | MP59B | 6200506474 | 2015-01-07 | | | | | |
| RF Coaxial Cable | SUHNER | N-3m | No.8 | 2015-01-07 | | | | | |
| RF Coaxial Cable | RESENBERGER | N-3.5m | No.9 | 2015-01-07 | | | | | |
| RF Coaxial Cable | SUHNER | N-6m | No.10 | 2015-01-07 | | | | | |
| RF Coaxial Cable | RESENBERGER | N-12m | No.11 | 2015-01-07 | | | | | |
| RF Coaxial Cable | RESENBERGER | N-0.5m | No.12 | 2015-01-07 | | | | | |
| Pre-Amplifier | Rohde & Schwarz | CBLU1183540-01 | 3791 | 2015-01-07 | | | | | |
| Radio Spectrum Test | | l | | | | | | | |
| Spectrum Analyzer | Rohde & Schwarz | ESPI3 | 100396/003 | 2015-01-07 | | | | | |
| Spectrum Analyzer | Agilent | E7405A | MY45115511 | 2015-01-07 | | | | | |
| Temp. & Humid. Chamber | Gongwen | HSD-500 | 0109 | 2015-01-07 | | | | | |
| Conducted Emission | | | | | | | | | |
| Test Receiver | Rohde & Schwarz | ESCS30 | 100307 | 2015-01-07 | | | | | |
| L.I.S.N. | Schwarzbeck | NLSK8126 | 8126431 | 2015-01-07 | | | | | |
| L.I.S.N. | Rohde & Schwarz | ESH3-Z5 | 100310 | 2015-01-07 | | | | | |
| Pulse Limiter | Rohde & Schwarz | ESH3-Z2 | 100815 | 2015-01-07 | | | | | |
| 50Ω Coaxial Switch | Anritsu Corp | MP59B | 6200283933 | 2015-01-07 | | | | | |
| RF Coaxial Cable | SUHNER | N-2m | No.3 | 2015-01-07 | | | | | |
| Radiated Emission | | | | | | | | | |
| Spectrum Analyzer | Agilent | E7405A | MY45115511 | 2015-01-07 | | | | | |
| Test Receiver | Rohde & Schwarz | ESCS30 | 100307 | 2015-01-07 | | | | | |
| Bilog Antenna | Schwarzbeck | VULB9163 | 9163-323 | 2015-01-07 | | | | | |
| Loop Antenna | Schwarzbeck | FMZB1516 | 1516131 | 2015-01-07 | | | | | |
| Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-655 | 2015-01-07 | | | | | |
| Horn Antenna | Schwarzbeck | BBHA9170 | 9170-359 | 2015-01-07 | | | | | |
| 50 Coaxial Switch | Anritsu Corp | MP59B | 6200506474 | 2015-01-07 | | | | | |
| RF Coaxial Cable | SUHNER | N-3m | No.8 | 2015-01-07 | | | | | |
| RF Coaxial Cable | RESENBERGER | N-3.5m | No.9 | 2015-01-07 | | | | | |
| RF Coaxial Cable | SUHNER | N-6m | No.10 | 2015-01-07 | | | | | |
| RF Coaxial Cable | RESENBERGER | N-12m | No.11 | 2015-01-07 | | | | | |
| RF Coaxial Cable | RESENBERGER | N-0.5m | No.12 | 2015-01-07 | | | | | |
| Pre-Amplifier | Rohde & Schwarz | CBLU1183540-01 | 3791 | 2015-01-07 | | | | | |



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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

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 and 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 wireless keyboard used with a USB dongle. It operates at 2.4GHz ISM frequency band.

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 | Wireless Keyboard |
| Type Designation | NS-PNK5011 |
| FCC ID | 2AAIL-PNK5011 |
| Operating Frequency band | 2408 – 2474MHz |
| Channel separation | 2MHz |
| Channel number | 34 |
| Extreme Temperature Range | -20~+45°C |
| Operation Voltage | DC 3V (2 x AAA siza battery) |
| Modulation | FSK |
| Antenna Gain | 4.78dBi |

3.3 Independent Operation Modes

The basic operation modes are:

- A. On
 - 1. Trnasmitting
 - 2. Receiving
- B. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.



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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

None.

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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4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

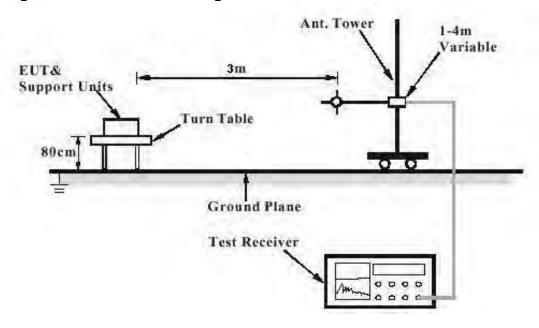
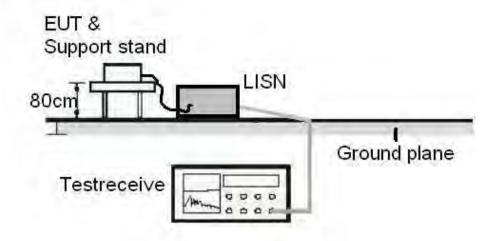


Diagram of Measurement Equipment Configuration for Conduction Measurement





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5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Fundamental & Harmonics Radiated Emission

RESULT: Pass

Date of testing

: 2014-01-04 : FCC part 15.249(a) : ANSI C63.4: 2003 : FCC part 15.249(a) : 3m Semi-Apact Test standard Basic standard Limits

Kind of test site 3m Semi-Anechoic Chamber

Test setup

Test channel Low/ Middle/ High

DC 3V (2 x AAA siza battery)

Test channel : Input voltage : Operation mode : Ambient temperature : A.1 **25**℃ 52% Relative humidity Atmospheric pressure : 101kPa

Table 4: Polarization of the measurement for the larger power level channel 2440MHz: Vertical

| | | Fundai | mental | 2 nd Harmonic | | |
|------------------------|------------|----------|--------|--------------------------|--------|--|
| Test co | nditions | Frequ | iency | Frequency | | |
| | | 2440 | MHz | 4948MHz | | |
| | Unit | (dBµV/m) | (mV/m) | (dBµV/m) | (µV/m) | |
| $T_{nom}(25^{\circ}C)$ | Horizontal | 80.61 | 20.18 | 45.05 | 178.85 | |
| | Vertical | 87.02 | 22.44 | 46.28 | 206.06 | |
| Liı | mit | 94 | 50 | 54 | 500 | |

The final measurement for frequencies below 1000MHz is performed with Quasi Peak detector; the final measurement for frequencies above 1000MHz is performed with Average detector.

The worst case was shown in above Table 5.

Disturbance other than those mentioned are small or not detectable.

For details refer to following test plot.



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Test Plot of fundamental & harmonics radiated emission



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.: lan #1967

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: Wireless Keyboard

Mode: TX 2408MHz NS-PNK5011 Model:

Polarization: Horizontal Power Source: DC 3V

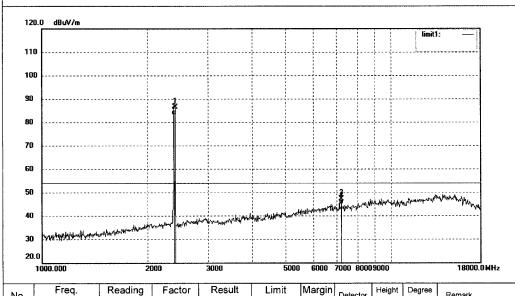
Date: 14/01/04/ Time: 15/07/51

Engineer Signature: PEI

Distance: 3m

Note:

Manufacturer: Mae Tay Precision Co., Ltd.



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1 | 2408.020 | 93.76 | -7.44 | 86.32 | 1 | 1 | peak | | | |
| 2 | 2408.020 | 90.59 | -7.44 | 83.15 | 1 | 1 | AVG | | | |
| 3 | 7224.034 | 44.10 | 3.01 | 47.11 | 74.00 | -26.89 | peak | | | |
| 4 | 7224.034 | 41.95 | 3.01 | 44.96 | 54,00 | -9.04 | AVG | | | |



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ATC®

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.: lan #1966

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

Mode: TX 2408MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

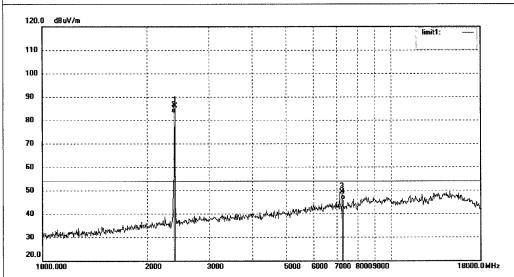
Note:

Polarization: Vertical
Power Source: DC 3V
Date: 14/01/04/

Engineer Signature: PEI

Distance: 3m

Time: 14/55/02



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark | |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|--|
| 1 | 2408.015 | 93.67 | -7.44 | 86.23 | 1 | 1 | peak | | | | |
| 2 | 2408.015 | 90.54 | -7.44 | 83.10 | 1 | / | AVG | | | | |
| 3 | 7224.126 | 46.15 | 3.01 | 49.16 | 74.00 | -24.84 | peak | | | | |
| 4 | 7224.126 | 42.99 | 3.01 | 46.00 | 54.00 | -8.00 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1968

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

Mode: TX 2440MHz Model: NS-PNK5011

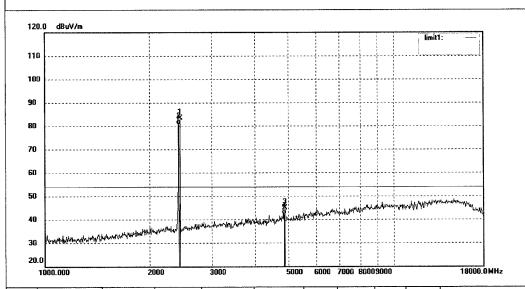
Manufacturer: Mae Tay Precision Co., Ltd.

Polarization: Horizontal Power Source: DC 3V Date: 14/01/04/ Time: 15/19/20

Engineer Signature: PEI

Distance: 3m

| Ν | 0 | Ţ | ᆮ | : |
|---|---|---|---|---|
| | | | | |



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1 | 2440.024 | 90.73 | -7.35 | 83.38 | 1 | 1 | peak | | | |
| 2 | 2440.024 | 87.96 | -7.35 | 80.61 | 1 | 1 | AVG | | | |
| 3 | 4880.040 | 44.68 | 0.13 | 44.81 | 74.00 | -29.19 | peak | | | |
| 4 | 4880.040 | 42.08 | 0.13 | 42.21 | 54.00 | -11.79 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1969

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

Mode: TX 2440MHz Model: NS-PNK5011

Model. No-114K3011

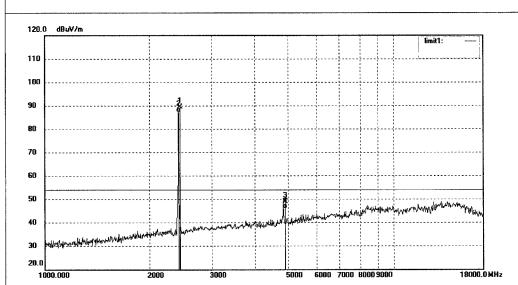
Manufacturer: Mae Tay Precision Co., Ltd.

Polarization: Vertical Power Source: DC 3V Date: 14/01/04/ Time: 15/31/42

Engineer Signature: PEI

Distance: 3m

Note:



| i | | | | | | | | | | | |
|-----|----------------|------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|--|
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark | |
| 1 | 2440.031 | 96.78 | -7.35 | 89.43 | / | 1 | peak | | | | |
| 2 | 2440.031 | 94.37 | -7.35 | 87.02 | 1 | 1 | AVG | | | | |
| 3 | 4880.049 | 48.78 | 0.13 | 48.91 | 74.00 | -25.09 | peak | | | | |
| 4 | 4880.049 | 45.84 | 0.13 | 45.97 | 54.00 | -8.03 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1971

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

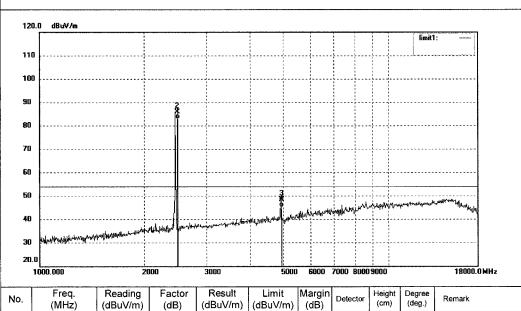
Mode: TX 2474MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

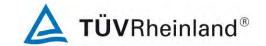
Note:

Polarization: Horizontal
Power Source: DC 3V
Date: 14/01/04/
Time: 15/54/24
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 | 2474.026 | 90.34 | -7.37 | 82.97 | 1 | 1 | AVG | | | |
| 2 | 2474.026 | 93.20 | -7.37 | 85.83 | / | 1 | peak | | | |
| 3 | 4948.046 | 47.94 | 0.47 | 48.41 | 74.00 | -25.59 | peak | | | |
| 4 | 4948.046 | 44.58 | 0.47 | 45.05 | 54.00 | -8.95 | AVG | | | |



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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

Polarization: Vertical

Power Source: DC 3V

Engineer Signature: PEI

Date: 14/01/04/

Time: 15/43/32

Distance: 3m

Job No.: lan #1970

Standard: FCC Class B 3M Radiated

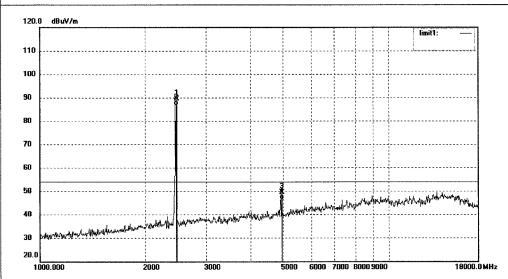
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

Mode: TX 2474MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

/4MHZ JK5011





| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1 | 2474.035 | 96.71 | -7.37 | 89.34 | 1 | 1 | peak | | | |
| 2 | 2474.035 | 93.93 | -7.37 | 86.56 | 1 | 1 | AVG | | | |
| 3 | 4948.060 | 48.95 | 0.47 | 49.42 | 74.00 | -24.58 | peak | | | |
| 4 | 4948.060 | 45.81 | 0.47 | 46.28 | 54.00 | -7.72 | AVG | | | |



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5.1.2 Radiated emissions outside of the band

RESULT: Pass

2014-01-06

Date of testing : Test standard : FCC Part 15.209(a)

FCC Part 15.209(a)
FCC Part 15.249(d)

: ANSI C63.4: 2003
: 0.009 – 25000MHz*
: FCC Part 15.209(a)
FCC Part 15.209(a) Basic standard Frequency range Limits

FCC Part 15.249(d)

3m Semi-Anechoic Chamber Kind of test site

Test Setup

Low/ Middle/ High

DC 3V (2 x AAA siza battery)

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

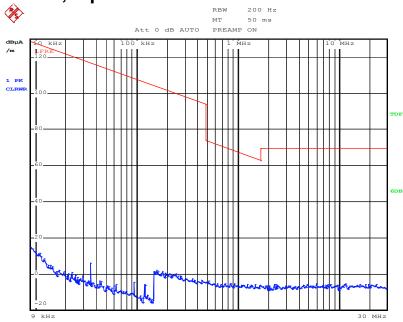
For details refer to following test plot.

^{*-} The EUT's highest frequency generated and used is 2474MHz, hence the highest scan frequency is up to 25GHz.



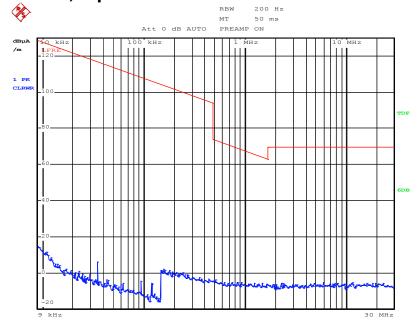
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Test Plot of radiated emissions outside of the band Low channel, X polarization:



Date: 6.JAN.2014 11:43:02

Low channel, Y polarization:



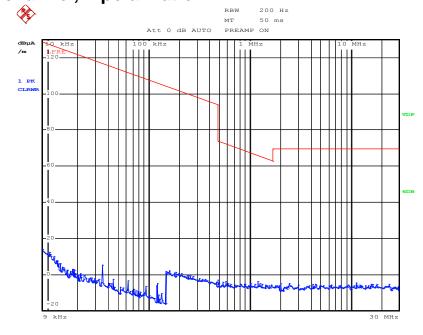
Date: 6.JAN.2014 11:46:25

Products

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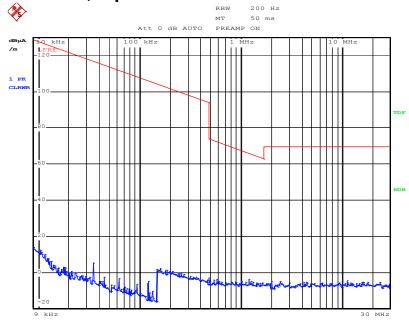
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Low channel, Z polarization:



Date: 6.JAN.2014 11:48:44

Middle channel, X polarization:



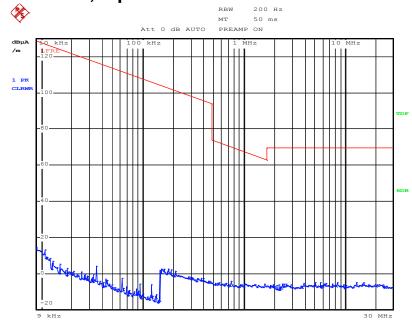
Date: 6.JAN.2014 11:53:00

Products

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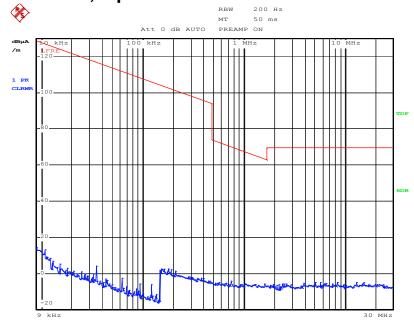
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Middle channel, Y polarization:



Date: 6.JAN.2014 11:55:15

Middle channel, Z polarization:



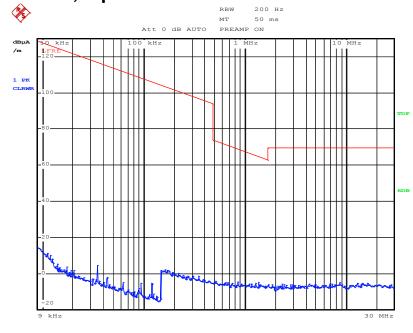
Date: 6.JAN.2014 11:58:35

Products

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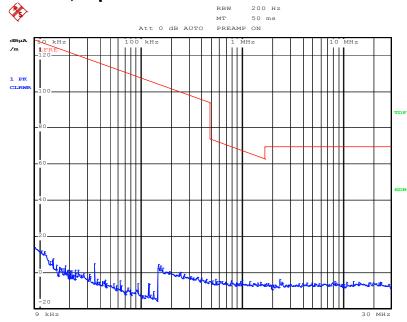
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High channel, X polarization:



Date: 6.JAN.2014 12:01:47

High channel, Y polarization:



Date: 6.JAN.2014 12:03:58

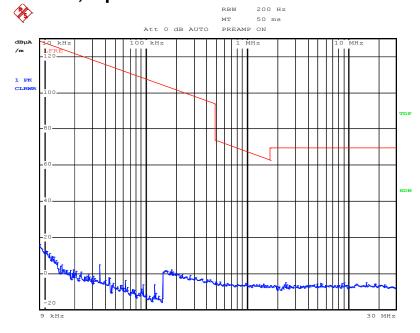


Products

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High channel, Z polarization:



Date: 6.JAN.2014 12:06:11



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

Polarization: Horizontal

Engineer Signature: PEI

Power Source: DC 3V

Date: 14/01/04/

Time: 8/34/40

Job No.: lan #1924 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard
Mode: TX 2408MHz

Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

Hz Distance: 3m

Note:

2

3

468.1650

887.3978

38.65

35.13

-5.53

1.23

33.12

36.36

46.00

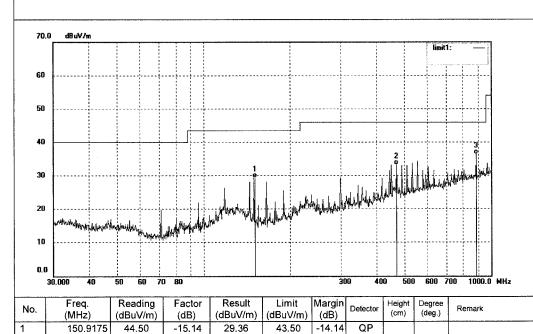
46.00

-12.88

-9.64

QΡ

QP





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

Job No.: lan #1925

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Keyboard

Mode: TX 2408MHz

Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

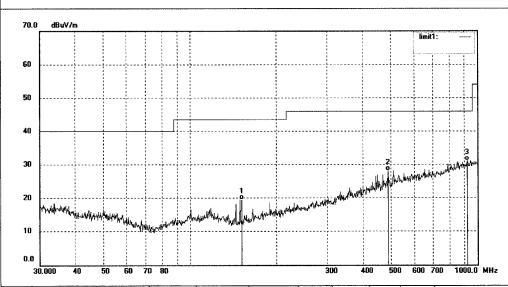
Polarization: Vertical Power Source: DC 3V

Date: 14/01/04/ Time: 8/43/49

Engineer Signature: PEI

Distance: 3m

Note:



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1 | 151.9175 | 34.62 | -15.14 | 19.48 | 43.50 | -24.02 | QP | | | |
| 2 | 488.3263 | 33.28 | -5.21 | 28.07 | 46.00 | -17.93 | QP | | | |
| 3 | 922.3667 | 29.41 | 1.65 | 31.06 | 46.00 | -14.94 | QP | | | |



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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

Mode: TX 2408MHz Model: NS-PNK5011

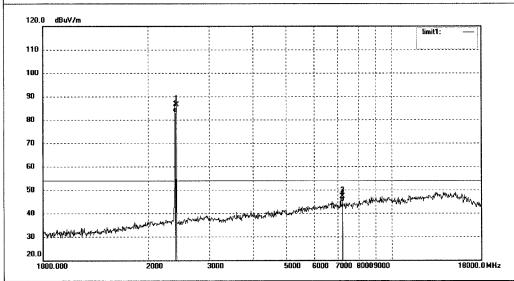
Manufacturer: Mae Tay Precision Co., Ltd.

Polarization: Horizontal Power Source: DC 3V Date: 14/01/04/ Time: 15/07/51

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 | 2408.020 | 93.76 | -7.44 | 86.32 | 1 | / | peak | | | |
| 2 | 2408.020 | 90.59 | -7.44 | 83.15 | 1 | / | AVG | | | |
| 3 | 7224.034 | 44.10 | 3.01 | 47.11 | 74.00 | -26.89 | peak | | | |
| 4 | 7224.034 | 41.95 | 3.01 | 44.96 | 54.00 | -9.04 | AVG | | | |



Products

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ACCURATE TECHNOLOGY CO., LTD.

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

Polarization: Vertical Job No.: lan #1966

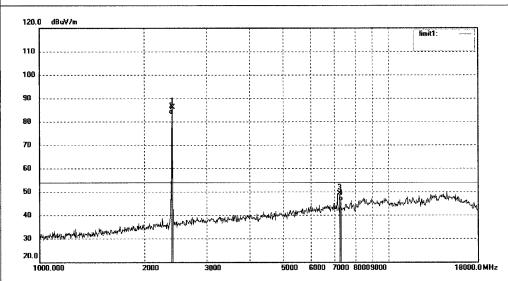
Standard: FCC Class B 3M Radiated Power Source: DC 3V

Date: 14/01/04/ Test item: Radiation Test Temp.(C)/Hum.(%) 23 C / 48 % Time: 14/55/02 Wireless Keyboard EUT: Engineer Signature: PEI

Distance: 3m Mode: TX 2408MHz

Model: NS-PNK5011 Manufacturer: Mae Tay Precision Co., Ltd.

Note:



| ł | | | | | | | | | | |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
| 1 | 2408.015 | 93.67 | -7.44 | 86.23 | 1 | 1 | peak | | | |
| 2 | 2408.015 | 90.54 | -7.44 | 83.10 | 1 | 1 | AVG | | | |
| 3 | 7224.126 | 46.15 | 3.01 | 49.16 | 74.00 | -24.84 | peak | | | |
| 4 | 7224.126 | 42.99 | 3.01 | 46.00 | 54.00 | -8.00 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1994

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Keyboard Mode: TX 2408MHz

Model: NS-PNK5011

Model: 140 1 14 To D

Polarization: Horizontal Power Source: DC 3V

Date: 14/01/04/ Time: 19/33/46

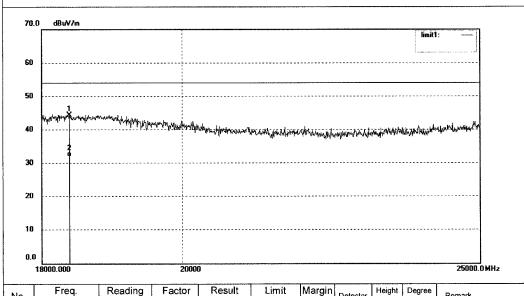
Engineer Signature: PEI

Distance: 3m

Note:

Manufacturer: Mae Tay Precision Co., Ltd.





| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark | |
|-----|----------------|------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|--|
| 1 | 18377.167 | 27.47 | 16.93 | 44.40 | 74.00 | -29.60 | peak | | | | |
| 2 | 18377.167 | 15.03 | 16.93 | 31.96 | 54.00 | -22.04 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Vertical

Power Source: DC 3V

Engineer Signature: PEI

Date: 14/01/04/

Time: 19/42/37

Distance: 3m

Job No.: lan #1995

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Keyboard Mode: TX 2408MHz

Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

manufacturer: Mae Tay Precision Co., Li



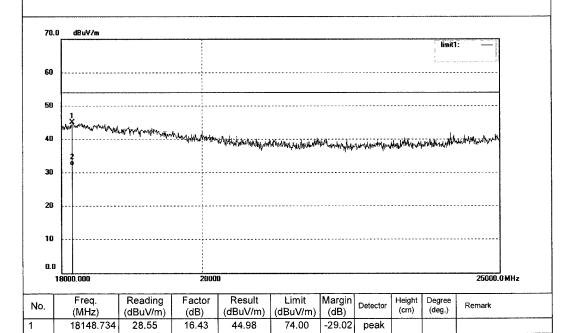
2

18148.734

15.68

16.43

32.11



54.00

-21.89

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

Polarization:

Time: 9/00/06

Distance: 3m

Power Source: DC 3V Date: 14/01/04/

Engineer Signature: PEI

Horizontal

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

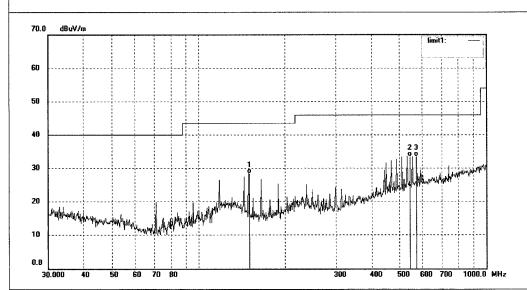
Job No.: lan #1927 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

Mode: TX 2440MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

Note:



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1 | 150.9175 | 43.57 | -15.14 | 28.43 | 43.50 | -15.07 | QP | | | |
| 2 | 540.2910 | 37.29 | -3.85 | 33.44 | 46.00 | -12.56 | QP | | | |
| 3 | 564.1708 | 36.95 | -3.40 | 33.55 | 46.00 | -12.45 | QP | | | |



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

Polarization: Vertical

Power Source: DC 3V Date: 14/01/04/

Engineer Signature: PEI

Time: 8/52/00

Distance: 3m

Job No.: lan #1926

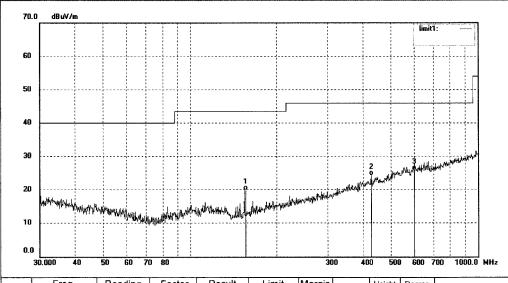
Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard
Mode: TX 2440MHz

Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

Note:



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1 | 156.2427 | 34.83 | -14.97 | 19.86 | 43.50 | -23.64 | QP | | | |
| 2 | 425.7932 | 30.45 | -6.15 | 24.30 | 46.00 | -21.70 | QP | | | |
| 3 | 602.9287 | 28.73 | -2.93 | 25.80 | 46.00 | -20.20 | QP | | | |



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

Job No.: lan #1968 Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 23 C / 48 % EUT: Wireless Keyboard

Mode: TX 2440MHz NS-PNK5011 Model:

Manufacturer: Mae Tay Precision Co., Ltd.

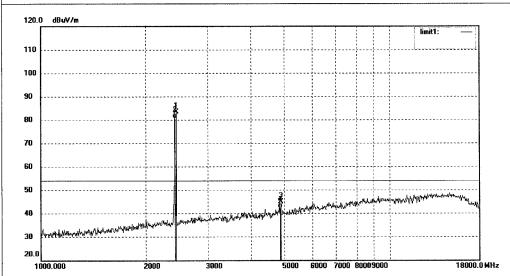
Polarization: Horizontal Power Source: DC 3V

Date: 14/01/04/ Time: 15/19/20

Engineer Signature: PEI

Distance: 3m

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|-----|---|----|---|---|
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| | | | | |



| l . | | | | | | | | | | | |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|--|
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark | |
| 1 | 2440.024 | 90.73 | -7.35 | 83.38 | 1 | / | peak | | | | |
| 2 | 2440.024 | 87.96 | -7.35 | 80.61 | 1 | / | AVG | | | | |
| 3 | 4880.040 | 44.68 | 0.13 | 44.81 | 74.00 | -29.19 | peak | | | | |
| 4 | 4880.040 | 42.08 | 0.13 | 42.21 | 54.00 | -11.79 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1969

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

Mode: TX 2440MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

Power Source: DC 3V Date: 14/01/04/ Time: 15/31/42

Engineer Signature: PEI

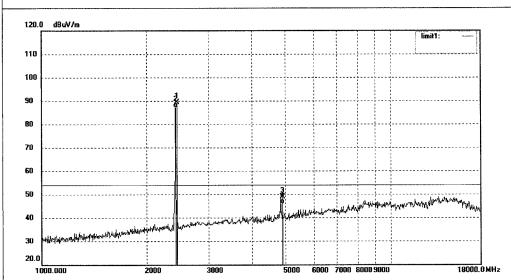
Vertical

Distance: 3m

Polarization:

Note:

andracturer. Mae ray riccision co., Etc



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1 | 2440.031 | 96.78 | -7.35 | 89.43 | / | / | peak | | | |
| 2 | 2440.031 | 94.37 | - 7.35 | 87.02 | 1 | 1 | AVG | | | |
| 3 | 4880.049 | 48.78 | 0.13 | 48.91 | 74.00 | -25.09 | peak | | | |
| 4 | 4880.049 | 45.84 | 0.13 | 45.97 | 54.00 | -8.03 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: Wireless Keyboard

Mode: TX 2440MHz Model: NS-PNK5011

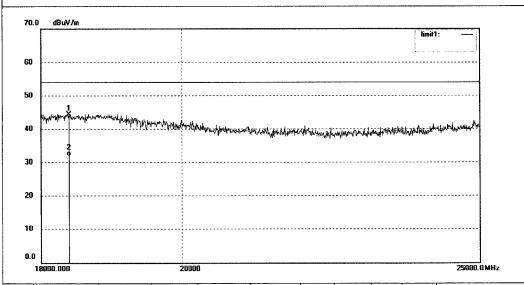
Manufacturer: Mae Tay Precision Co., Ltd.

Polarization: Horizontal Power Source: DC 3V Date: 14/01/04/ Time: 19/50/46

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 | 18377.167 | 27.47 | 16.93 | 44.40 | 74.00 | -29.60 | peak | | | |
| 2 | 18377.167 | 15.03 | 16.93 | 31.96 | 54.00 | -22.04 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1997

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Keyboard

Mode: TX 2440MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

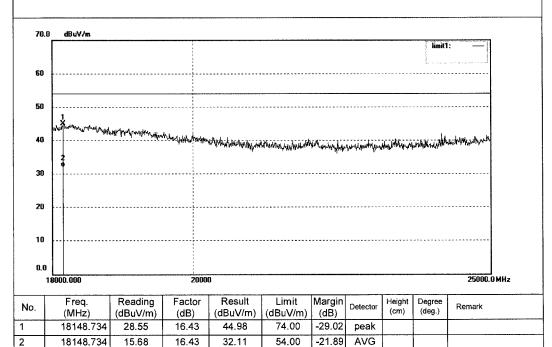
Polarization: Vertical Power Source: DC 3V

Date: 14/01/04/ Time: 19/57/37

Engineer Signature: PEI

Distance: 3m

Note:





Products

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ATC[®]

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.: lan #1929 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Keyboard

Mode: TX 2474MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

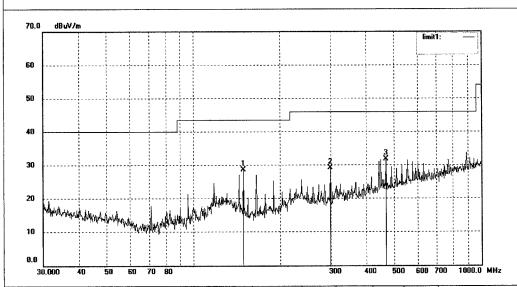
Polarization: Horizontal Power Source: DC 3V

Date: 14/01/04/ Time: 9/17/07

Engineer Signature: PEI

Distance: 3m

Note:



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1 | 148.9175 | 43.77 | -15.17 | 28.60 | 43.50 | -14.90 | peak | | | |
| 2 | 298.5932 | 38.54 | -9.32 | 29.22 | 46.00 | -16.78 | peak | | | |
| 3 | 468.1650 | 37.21 | - 5.53 | 31.68 | 46.00 | -14.32 | peak | | | |



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

Job No.: lan #1928

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 23 C / 48 % EUT: Wireless Keyboard

TX 2474MHz Mode: NS-PNK5011 Model:

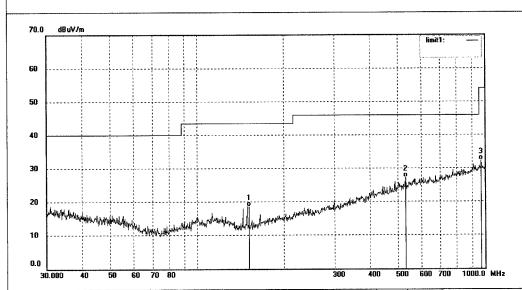
Manufacturer: Mae Tay Precision Co., Ltd.

Polarization: Vertical Power Source: DC 3V Date: 14/01/04/

Time: 9/08/41

Engineer Signature: PEI





| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1 | 151.9173 | 33.71 | -15.14 | 18.57 | 43.50 | -24.93 | QP | | | |
| 2 | 533.2910 | 31.19 | -4.03 | 27.16 | 46.00 | -18.84 | QP | | | |
| 3 | 974.2826 | 29.79 | 2.48 | 32.27 | 54.00 | -21.73 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Horizontal

Engineer Signature: PEI

Power Source: DC 3V

Date: 14/01/04/

Time: 15/54/24

Distance: 3m

Job No.: lan #1971

Standard: FCC Class B 3M Radiated

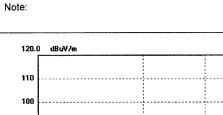
Test item: Radiation Test Temp.(C)/Hum.(%) 23 C / 48 % EUT: Wireless Keyboard

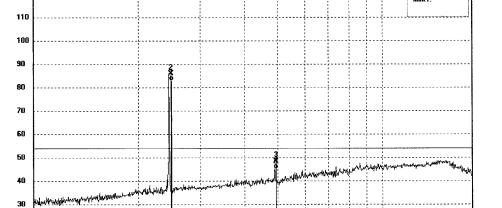
Mode: TX 2474MHz Model: NS-PNK5011

20.0

1000.000

Manufacturer: Mae Tay Precision Co., Ltd.





| 1 | | | | | | | | | | |
|-----|----------------|------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
| 1 | 2474.026 | 90.34 | -7.37 | 82.97 | 1 | 1 | AVG | | | |
| 2 | 2474.026 | 93.20 | -7.37 | 85.83 | 1 | 1 | peak | | | |
| 3 | 4948.046 | 47.94 | 0.47 | 48.41 | 74.00 | -25.59 | peak | | | |
| 4 | 4948.046 | 44.58 | 0.47 | 45.05 | 54.00 | -8.95 | AVG | | | |

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

Standard: FCC Class B 3M Radiated Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 % EUT: Wireless Keyboard

Mode: TX 2474MHz NS-PNK5011 Model:

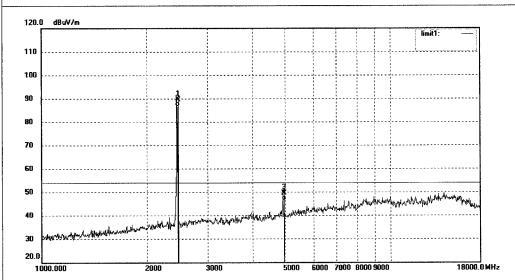
Manufacturer: Mae Tay Precision Co., Ltd.

Polarization: Vertical Power Source: DC 3V

Date: 14/01/04/ Time: 15/43/32

Engineer Signature: PEI





| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark | |
|-----|----------------|------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|--|
| 1 | 2474.035 | 96.71 | -7.37 | 89.34 | 1 | 1 | peak | | ! | | |
| 2 | 2474.035 | 93.93 | -7.37 | 86.56 | / | 1 | AVG | | | | |
| 3 | 4948.060 | 48.95 | 0.47 | 49.42 | 74.00 | -24.58 | peak | | | | |
| 4 | 4948.060 | 45.81 | 0.47 | 46.28 | 54.00 | -7.72 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: Ian #1998 Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

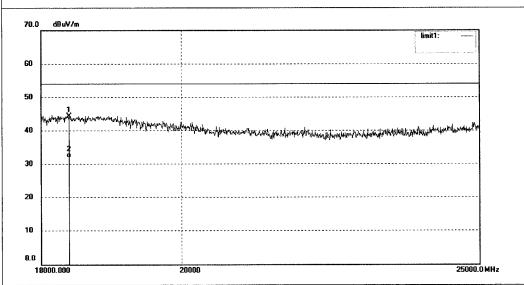
Mode: TX 2474MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

Polarization: Horizontal
Power Source: DC 3V
Date: 14/01/04/
Time: 20/05/46

Engineer Signature: PEI







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

Job No.: lan #1999

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Keyboard

Mode: TX 2474MHz Model: NS-PNK5011

18148.734

18148.734

2

28.55

15.68

16.43

16.43

44.98

32.11

Manufacturer: Mae Tay Precision Co., Ltd.

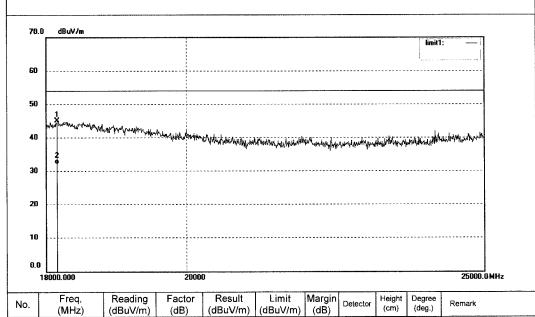
Polarization: Vertical Power Source: DC 3V

Date: 14/01/04/ Time: 20/13/37

Engineer Signature: PEI

Distance: 3m

Note:



74.00

54.00

-29.02

-21.89

peak

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

Job No.: lan #1979

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Keyboard

Mode: TX 2408MHz Model: NS-PNK5011

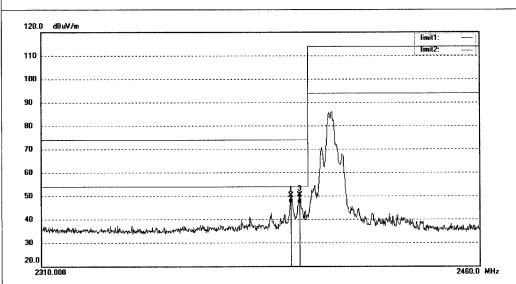
Manufacturer: Mae Tay Precision Co., Ltd.

Power Source: DC 3V Date: 14/01/04/ Time: 17/09/25

Polarization: Horizontal

Engineer Signature: PEI





| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1 | 2394.363 | 57.57 | -7.49 | 50.08 | 74.00 | -23.92 | peak | | | |
| 2 | 2394.363 | 54.39 | -7.49 | 46.90 | 54.00 | -7.10 | AVG | | | |
| 3 | 2397.384 | 57.94 | -7.48 | 50.46 | 74.00 | -23.54 | peak | | | |
| 4 | 2397.384 | 54.08 | -7.48 | 46.60 | 54.00 | -7.40 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1978

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Keyboard

Mode: TX 2408MHz
Model: NS-PNK5011

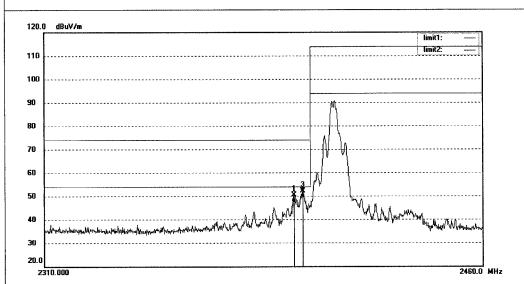
Manufacturer: Mae Tay Precision Co., Ltd.

Power Source: DC 3V Date: 14/01/04/ Time: 16/57/35

Polarization: Vertical

Engineer Signature: PEI





| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1 | 2394.363 | 57.87 | -7.49 | 50.38 | 74.00 | -23.62 | peak | | | |
| 2 | 2394.363 | 54.63 | -7.49 | 47.14 | 54.00 | -6.86 | AVG | | | |
| 3 | 2397.384 | 59.54 | -7.48 | 52.06 | 74.00 | -21.94 | peak | | | |
| 4 | 2397,384 | 56.56 | -7.48 | 49.08 | 54.00 | -4.92 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1980

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Wireless Keyboard

Mode: TX 2474MHz Model: NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

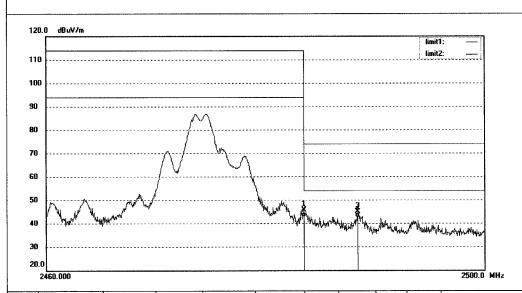
Polarization: Horizontal
Power Source: DC 3V

Pate: 14/01/04/

Date: 14/01/04/ Time: 17/20/01

Engineer Signature: PEI





| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1 | 2483.449 | 53.00 | -7.37 | 45.63 | 114.00 | -68.37 | peak | | | |
| 2 | 2483.449 | 50.11 | -7.37 | 42.74 | 94.00 | -51.26 | AVG | | | |
| 3 | 2488.391 | 52.29 | -7.38 | 44.91 | 74.00 | -29.09 | peak | | | |
| 4 | 2488.391 | 49.64 | -7.38 | 42.26 | 54.00 | -11.74 | 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: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: lan #1981

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT:

Wireless Keyboard

Mode:

TX 2474MHz

Model:

NS-PNK5011

Manufacturer: Mae Tay Precision Co., Ltd.

Polarization: Vertical

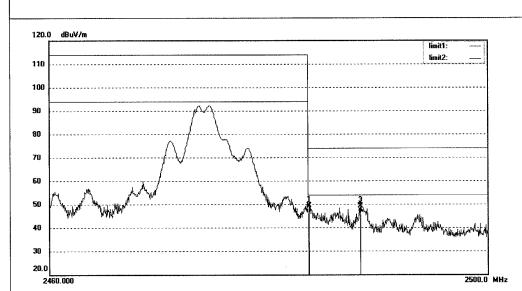
Power Source: DC 3V

Date: 14/01/04/ Time: 17/31/43

Engineer Signature: PEI

Distance: 3m

Note:



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1 | 2483.650 | 56.66 | -7.37 | 49.29 | 74.00 | -24.71 | peak | | | |
| 2 | 2483.650 | 53.54 | -7.37 | 46.17 | 54.00 | -7.83 | AVG | | | |
| 3 | 2488.350 | 56.58 | -7.38 | 49.20 | 74.00 | -24.80 | peak | | | |
| 4 | 2488,350 | 53.67 | -7.38 | 46.29 | 54.00 | -7.71 | AVG | | | |



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6. Safety Human exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT: Pass

Test standard : FCC KDB Publication 447498 D01 v05r01

The maximum peak output power of the tranmister is 0.15mW (-8.2dBm), which far below than the SAR exclusion threshold level (Appendix A, SAR Test Exclusion Thresholds for 100 MHz − 6 GHz and ≤50 mm):

| MHz | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | mm |
|------|----|----|----|----|----|----|----|----|----|----|----|
| 2450 | 10 | 19 | 29 | 38 | 48 | 57 | 67 | 77 | 86 | 96 | mW |

Therefore the transmistter is deemed comply with the requirement without SAR testing.

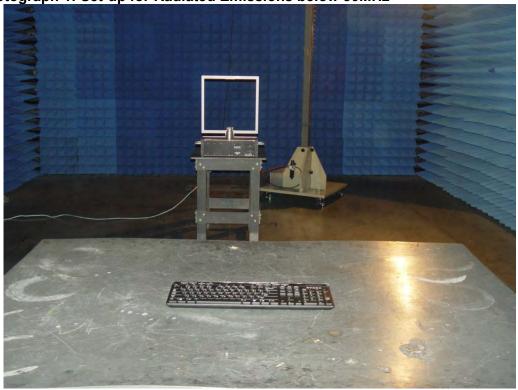


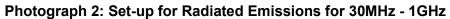
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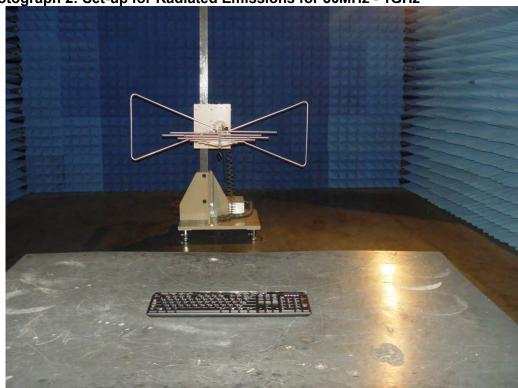
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7. Photographs of the Test Set-Up

Photograph 1: Set-up for Radiated Emissions below 30MHz







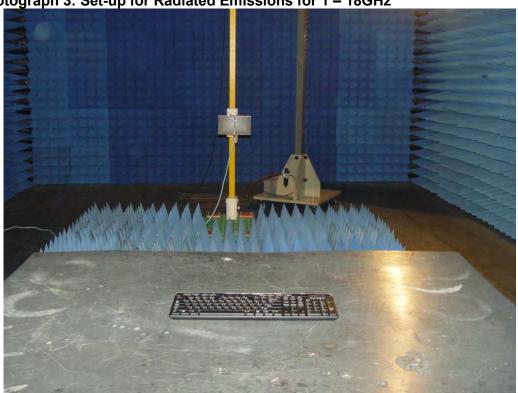


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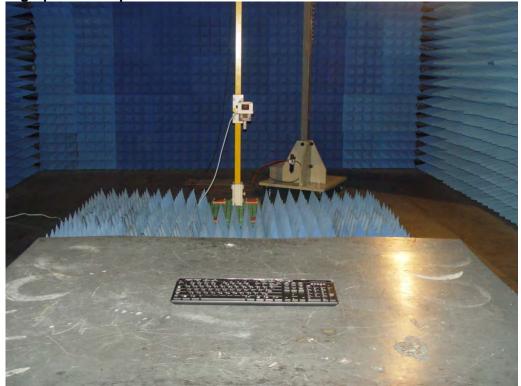
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Photograph 3: Set-up for Radiated Emissions for 1 – 18GHz









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|--|---|--------------------------------------|
| 8. List of Table | s | |
| Table 2: Measurement Uncer Table 3: Technical Specificat | surement Equipmenttaintyion of EUTeasurement for the larger power level channel 2 | 6 7 |
| 9. List of Photo | graphs | |
| Photograph 2: Set-up for Rac Photograph 3: Set-up for Rac | liated Emissions below 30MHzliated Emissions for 30MHz - 1GHzliated Emissions for 1 – 18GHzliated Emissions for 18 – 26.5GHzliated Emissions for 18 – 26.5GHz | 47 48 |
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