Produkte Products



Prüfbericht - Nr.: Test Report No.:	17030657 00	1		<b>von 39</b> 1 of 39
Auftraggeber: Client:	Compupal Group C No.1555 Jiashan Av	_	ı 314113, Zhejiang, (	China
Gegenstand der Prüfung Test item:	: Clock Radio with B	luetooth		
Bezeichnung: Identification:	NS-CLBT02		Serien-Nr.: Serial No.:	n.a.
Wareneingangs-Nr.: Receipt No.:	164002027		Eingangsdatum: Date of receipt:	2012-12-19
Zustand des Prüfgegens Condition of test item at		Test samples damaged.	received are sufficie	nt for testing and no
	Shenzhen Accurate Tech ( Details refer to clause 2		d.	
Test specification:	FCC CFR47 Part 15: Subp FCC CFR47 Part 15: Subp FCC CFR47 Part 15: Subp FCC CFR47 Part 15: Subp FCC CFR47 Part 15: Subp RSS-210 Issue 8 Decemb RSS-Gen Issue 4 March 20	part C Section part C Section part C Section part C Section er 2010 per 2010	15.207 15.209 15.107	
<b>Prüfergebnis:</b> Test Result:	Der Prüfgegenstand ent The test item passed the			llage(n).
Prüflaboratorium: Testing Laboratory:	TÜV Rheinland (Shenzhe	n) Co., Ltd.		
Datum Name/Stell	oject Manager ung Unterschrift	2013-03-05	Winnie Hou/ Ter	Unterschrift
Date Name/Posit  Sonstiges/ Other Aspects	:	Date	Name/Position	Signature
F(ail) = ent N/A = nic N/T = nic	spricht Prüfgrundlage spricht nicht Prüfgrundlage ht anwendbar ht getestet f sich nur auf das o.g. Prüfn	Abbreviati	F(ail) = failed N/A = not app N/T = not tes	olicable ded

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 relates to the a. m. test item. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.



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# **TEST SUMMARY**

5.1.1 ANTENNA REQUIREMENT

RESULT: Passed

5.1.2 PEAK OUTPUT POWER

RESULT: Passed

5.1.3 20DB BANDWIDTH

RESULT: Passed

5.1.4 99% BANDWIDTH

RESULT: Passed

5.1.5 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHZ BANDWIDTH

RESULT: Passed

5.1.6 Spurious Emission

RESULT: Passed

5.1.7 FREQUENCY SEPARATION

RESULT: Passed

5.1.8 NUMBER OF HOPPING FREQUENCY

RESULT: Passed

5.1.9 TIME OF OCCUPANCY

RESULT: Passed

6.1.1 ELECTROMAGNETIC FIELDS

RESULT: Passed



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## 1. General Remarks

# 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test Result

# 2. Test Sites

## 2.1 Test Facilities

Shenzhen Accurate Technology Co., Ltd.

F1, Bldg. A, Changyuan New Meterial Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, P.R. China

FCC Registration No.: 752051

Test site Industry Canada No.: 5077A

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
Spurious emission	and Radiated emission			
Spectrum Analyzer	Agilent	E7405A	MY45115511	2014-01-07
Test Receiver	Rohde & Schwarz	ESCS30	100307	2014-01-07
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2014-01-07
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2014-01-07
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2014-01-07
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	2014-01-07
Pre-Amplifier	Rohde & Schwarz	CBLU11835 40-01	3791	2014-01-07
Radio Test Suite				
Receiver	Rohde & Schwarz	ESPI	100396/003	2014-01-07
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	2014-01-07
Artificial Mains Network	Schwarzbeck	NLSK8126	8126431	2014-01-07



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# 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, 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

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements are  $\pm 3dB$ .

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

# 2.7 Status of Facility Used for Testing

The Shenzhen Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Meterial Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, 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 clock radio with Bluetooth technique. For details refer to the User Manual and Circuit Diagram.

# 3.2 Ratings and System Details

**Table 2: Rating of EUT** 

Kind of Equipment:	Clock Radio with Bluetooth
Type Designation:	NS-CLBT02
FCC ID	Z5YNS-CLBT02
IC	10828A-CLBT02

**Table 3: Technical Specification of EUT** 

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Channel separation	1MHz
Extreme Temperature Range	-20°C to +55°C
Operation Voltage	DC5.4V via AC/DC Adapter
Modulation	GFSK, 8DPSK, $\pi/4$ DQPSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	0dBi
RF Output Power	0.0031W (4.92dBm)

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**Table 4: Frequency hopping information** 

Technical Specification	Description
Hopping Range	Hereby we declare that the maximum frequency of this device is: 2402-2480MHz. This is according the Bluetooth Core Specification V2.1+EDR for devices which will be operated in the USA. This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04-E).
Hopping Sequence	Example of a 79 hopping sequence in data mode:  33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73, 07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56, 69,62,71,64, 7,25,27,66,57,70,74,61,78,63,10,41,05,43, 15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,
Receiver input bandwidth	The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master.  Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings.  Repeating of a packer has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case.  That means a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

# 3.3 Independent Operation Modes

The basic operation modes are:

- A. BT Transmitting
  - 1. Low channel
  - 2. Middle channel
  - 3. High channel
- B. BT Receiving
- C. FM
- D. Playing from AUX
- E. Standby
- F. Off



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# 3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

## 3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Technical Description

- 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 with following accessories

Description	Manufacturer	Туре	Rating
AC/DC Adapter	-	HNA054110U	Input:100-240Vac, 50-60Hz, 0.3A output: 5.4Vdc, 1.1A

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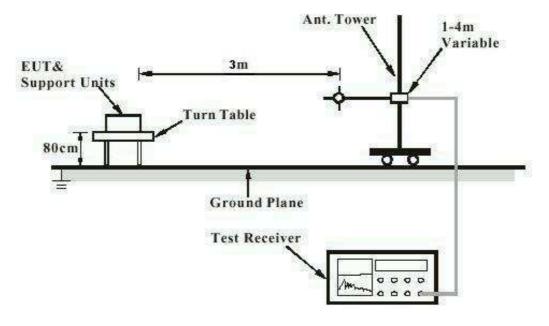
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4.4 Countermeasures to achieve EMC Compliance

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.

# 4.5 Test Setup Diagram

**Diagram of Measurement Configuration for Radiation Test** 





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

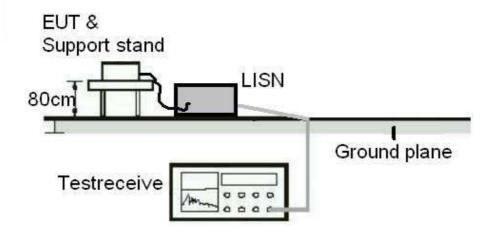
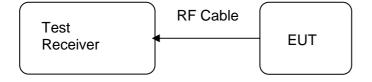


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement





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## 5. Test Results

# 5.1 Transmitter Requirement & Test Suites

## 5.1.1 Antenna Requirement

RESULT: Passed

Test date : 2013-02-02

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

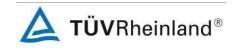
RSS-Gen 7.1.4

Limit : the use of antennas with directional gains that do

not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 0dBi, 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.

Refer to EUT photo for details.



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## 5.1.2 Peak Output Power

**RESULT: Passed** 

Test date 2013-02-02

Test standard FCC Part 15.247(b)(1)

RSS-210 A8.4 (2)

Basic standard ANSI C63.4: 2003

Limit 0.125 Watt Kind of test site Shielded room

**Test setup** 

Low/ Middle/ High Test Channel

Operation Mode Ambient temperature
Relative humidity **22**℃ Relative humidity 53% Atmospheric pressure : 101 kPa

Table 5: Test result of Peak Output Power, GFSK modulation

Channel	Channel Frequency	Peak Output Power		Limit
	(MHz)	(dBm)	(W)	(W)
Low Channel	2402	4.34	0.00272	0.125
Middle Channel	2441	4.77	0.00300	0.125
High Channel	2480	4.92	0.00310	0.125

Remark: RBW is 1MHz

Table 6: Test result of Peak Output Power, 8DPSK modulation

Channel	Channel Frequency	Peak Output Power		Limit
	•	(dBm)	(W)	(W)
Low Channel	2402	3.88	0.00244	0.125
Middle Channel	2441	4.22	0.00264	0.125
High Channel	2480	4.37	0.00274	0.125

Remark: RBW is 3MHz



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#### 5.1.3 20dB Bandwidth

**RESULT: Passed** 

Date of testing Test standard 2013-02-02

FCC Part 15.247(a)(1)

RSS-210 A8.1 (a)

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

**Test setup** 

Low/ Middle/ High

Operation Mode : Ambient temperature : Relative humidity **22**℃ Relative humidity : 52% Atmospheric pressure : 101 kPa

Table 7: Test result of 20dB Bandwidth, GFSK modulation

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	918	/	Pass
Mid Channel	2441	910	/	Pass
High Channel	2480	912	/	Pass

Table 8: Test result of 20dB Bandwidth, 8DPSK modulation

Channel	Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1206	/	Pass
Mid Channel	2441	1118	/	Pass
High Channel	2480	1118	/	Pass



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#### 5.1.4 99% Bandwidth

**RESULT: Passed** 

Date of testing : 2013-02-02

Test standard RSS-Gen clause 4.6.1 Basic standard :
Kind of test site : ANSI C63.4: 2003 Shielded room

**Test setup** 

Low/ Middle/ High

Test Channel
Operation Mode
Ambient temperature

: the burnidity **22**℃ 52% Atmospheric pressure : 101 kPa

Table 9: Test result of 99% Bandwidth, GFSK Modulation

Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	930	/	Pass
Mid Channel	2441	930	/	Pass
High Channel	2480	930	/	Pass

#### Table 10: Test result of 99% Bandwidth, 8DPSK Modulation

Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1206	/	Pass
Mid Channel	2441	1206	/	Pass
High Channel	2480	1206	/	Pass



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## 5.1.5 Conducted spurious emissions measured in 100kHz **Bandwidth**

**RESULT: Passed** 

Date of testing 2013-02-02

Test standard FCC part 15.247(d)

RSS-210 A8.5

Basic standard ANSI C63.4: 2003

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

the band that contains the highest level of the

desired power);

In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated

emission limits specified in 15.209(a)

Kind of test site Shield room

**Test setup** 

Test Channel Low/ High

Operation mode Ambient temperature **22**℃ Relative humidity 52% Atmospheric pressure : 101 kPa

All emissions are more than 20dB below fundamental, details refer to following test plot, and compliance is achived as well.



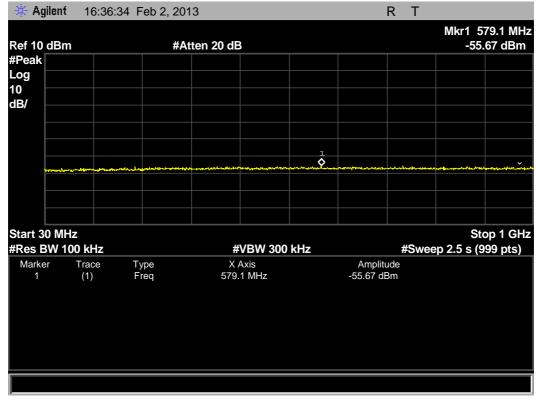
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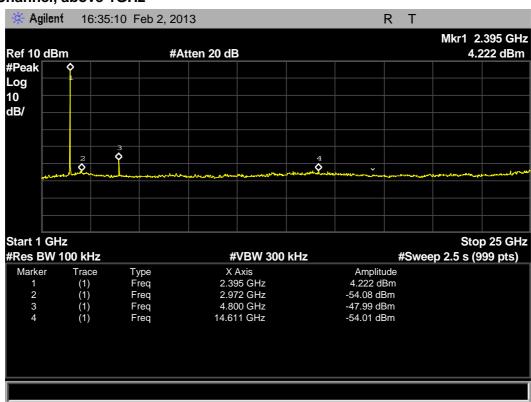
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# Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

Low Channel, below 1GHz



#### Low Channel, above 1GHz



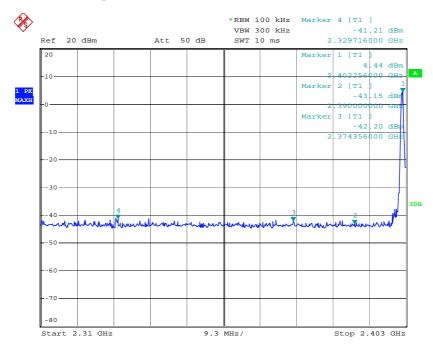


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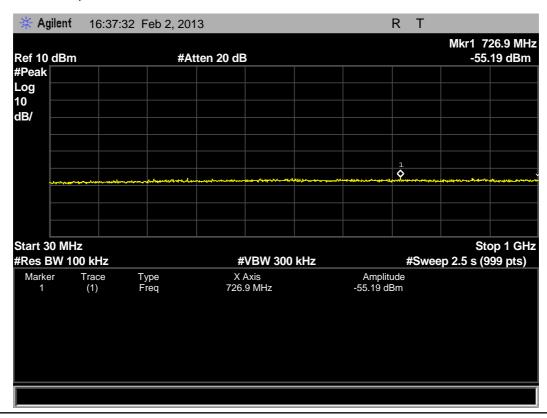
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#### Low Channel, Band Edge



Date: 2.FEB.2013 15:36:01

#### Middle Channel, below 1GHz

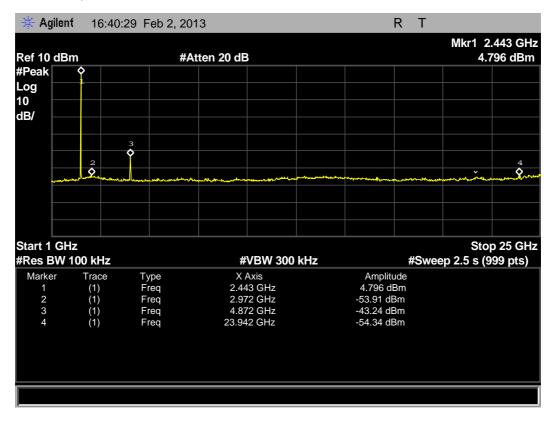


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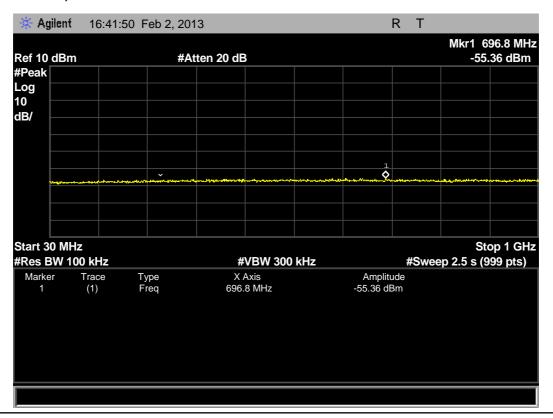
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#### Middle Channel, above 1GHz



#### High Channel, below 1GHz





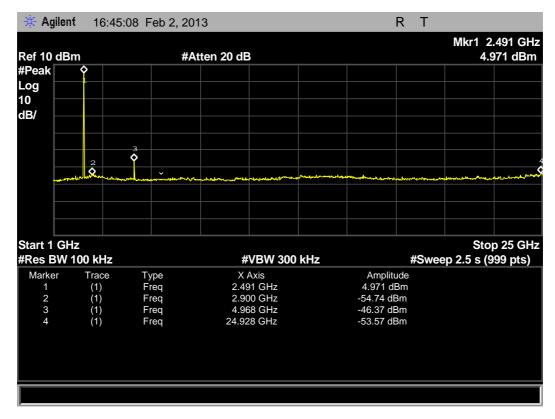
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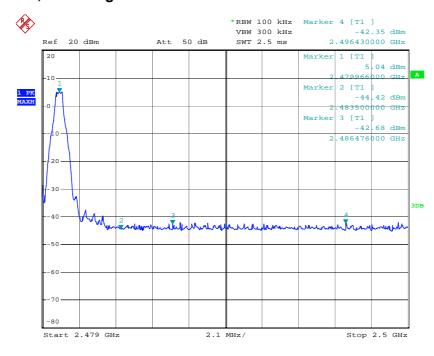
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#### High Channel, above 1GHz



#### High Channel, Band Edge



Date: 2.FEB.2013 15:39:43



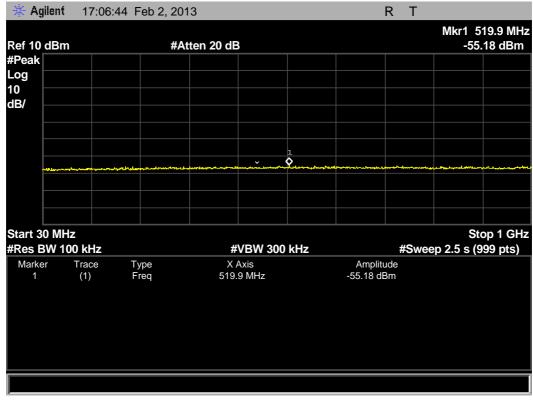
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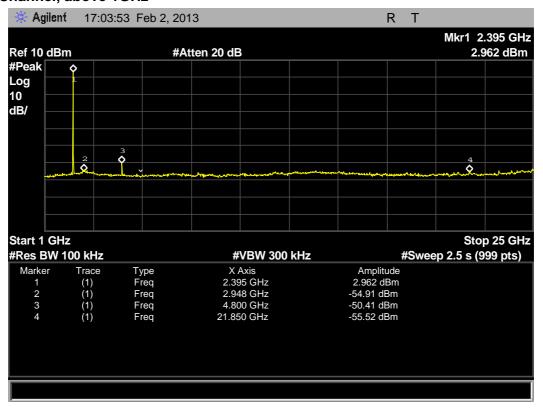
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# Test Plot of 100kHz Bandwidth of Frequency Band Edge, 8DPSK modulation

Low Channel, below 1GHz



#### Low Channel, above 1GHz



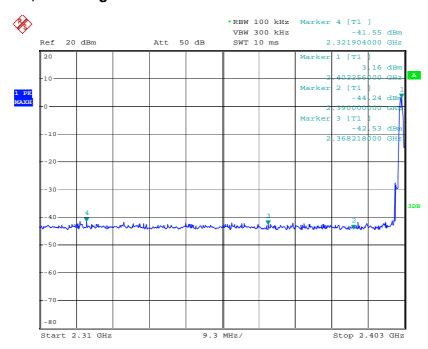


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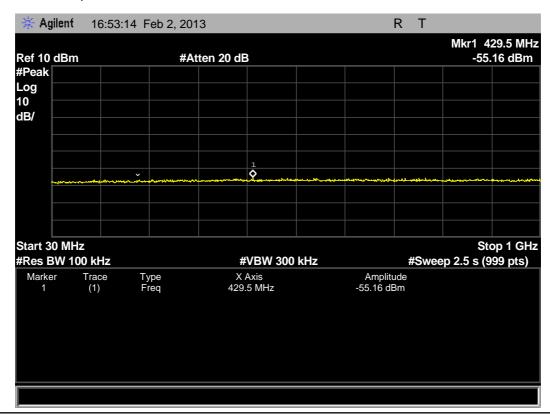
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#### Low Channel, Band Edge



Date: 2.FEB.2013 15:32:24

#### Middle Channel, below 1GHz

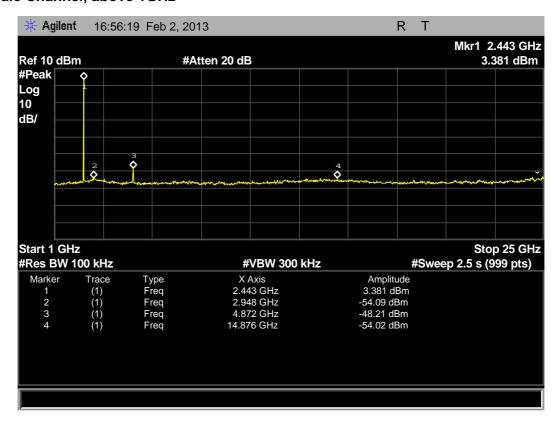




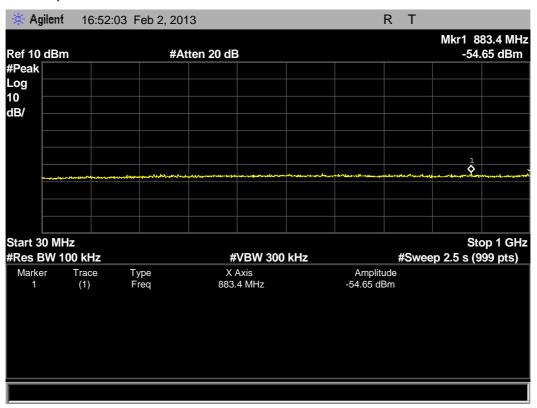
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#### Middle Channel, above 1GHz



#### High Channel, below 1GHz





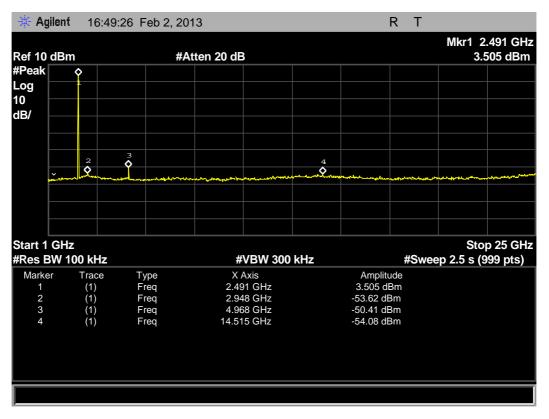
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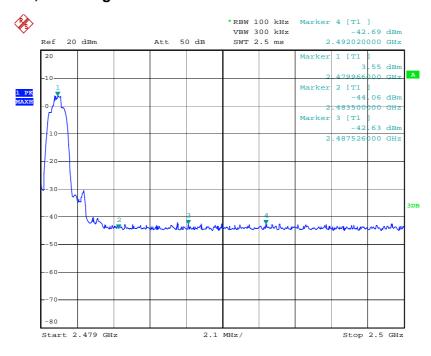
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#### High Channel, above 1GHz



#### High Channel, Band Edge



Date: 2.FEB.2013 15:42:06



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**5.1.6 Spurious Emission** 

**RESULT: Passed** 

Date of testing 2013-02-02 to 2013-02-03

Test standard FCC part 15.247(d)

FCC Part 15.205 RSS-210 Clause 2.2

Basic standard ANSI C63.4: 2003

Limits Refer to 15.209(a) of FCC part 15.247(d)

Refer to RSS-210 Table 2

Kind of test site 3m Semi-Anechoic Chamber

**Test setup** 

Test Channel Low/ Middle/ High

Test Channel :
Operation mode :
Ambient temperature : A, C **24**℃ Relative humidity 48% Atmospheric pressure : 101 kPa

#### Remark:

During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test setup photos.

Testing was carried out within frequency range 9kHz to the tenth harmonics.

For details refer to Appendix 1.



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## **5.1.7 Frequency Separation**

**RESULT: Passed** 

Date of testing 2013-02-02

Test standard FCC part 15.247(a)(1)

RSS-210 A8.1 (b)

Basic standard ANSI C63.4: 2003

Limit ≥ 25kHz or 2/3 of 20dB bandwidth, whichever is

greater

**Test setup** 

Low/ Middle/ High Test Channel

Operation Mode Ambient temperature **22**℃ Relative humidity 52% Atmospheric pressure : 101 kPa

#### **Table 11: Test result of Frequency Separation**

Channel	Channel Frequency (MHz)	Measured Channel Separation (MHz)	Limit (kHz)	Result
Low Channel	2402	1	≥ 25kHz or 2/3 of	Pass
Adjacency Channel	2403	ı	20dB bandwidth	1 033
Mid Channel	2441	1	≥ 25kHz or 2/3 of	Pass
Adjacency Channel	2442	l	20dB bandwidth	
High Channel	2480	1	≥ 25kHz or 2/3 of	Pass
Adjacency Channel	2479	l	20dB bandwidth	



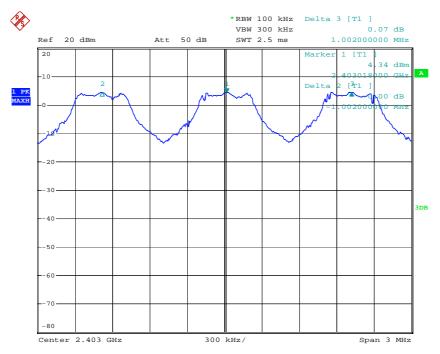
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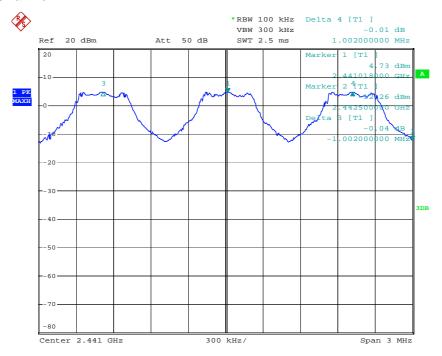
# **Test Plot of Frequency Separation**

#### **Low Channel**



Date: 2.FEB.2013 14:02:05

#### **Middle Channel**



Date: 2.FEB.2013 13:55:58

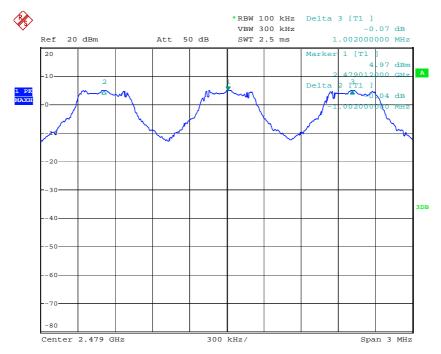


**Products** 

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## **High Channel**



Date: 2.FEB.2013 14:06:50



**Products** 

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## 5.1.8 Number of hopping frequency

**RESULT: Passed** 

Date of testing 2013-02-02

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

RSS-210 A8.1 (d)

Basic standard ANSI C63.4: 2003

Limits ≥ 15 non-overlapping channels

Kind of test site Shield room

**Test setup** 

Test Channel Low/ Middle/ High

Operation Mode Ambient temperature **22**℃ Relative humidity 52% Atmospheric pressure 101 kPa

#### Table 12: Test result of Number of hopping frequency

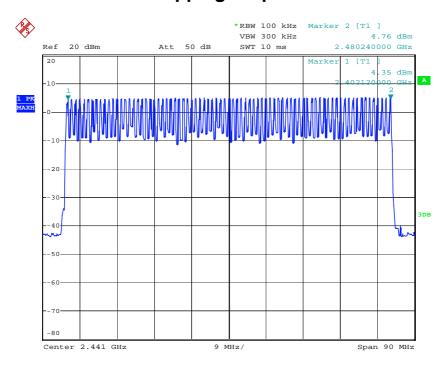
Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2400 to 2483.5 MHz	79	≥15	Pass



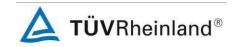
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# **Test Plot of Number of hopping frequencies**



Date: 2.FEB.2013 13:51:29



**Products** 

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Test Report No.

5.1.9 Time of Occupancy

**RESULT: Passed** 

Date of testing 2013-02-02

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

RSS-210 A8.1 (d)

ANSI C63.4: 2003 Basic standard

Limits 0.4s

Kind of test site Shield room

**Test setup** 

Test Channel Low/ Middle/ High

Operation Mode Ambient temperature : Relative humidity : **20**℃ 50% Atmospheric pressure : 101 kPa

Table 13: Test result of Time of Occupancy, GFSK modulation

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
	DH1	0.45	0.14	0.4	Pass
Low Channel	DH3	1.74	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass
Mid Channel	DH1	0.45	0.14	0.4	Pass
	DH3	1.74	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass
High Channel	DH1	0.45	0.14	0.4	Pass
	DH3	1.74	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass



**Products** 

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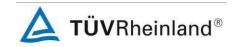
Table 14: Test result of Time of Occupancy, 8DPSK modulation

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
	DH1	0.46	0.15	0.4	Pass
Low Channel	DH3	1.76	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass
Mid Channel	DH1	0.46	0.15	0.4	Pass
	DH3	1.74	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass
High Channel	DH1	0.46	0.15	0.4	Pass
	DH3	1.74	0.28	0.4	Pass
	DH5	3.00	0.32	0.4	Pass

Note:

Dwell time = Pulse width x (Hopping rate / Number of channels) x Period

Period = 0.4 (seconds/ channel) x 79 (channel) = 31.6 seconds



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# 6. Safety Human exposure

# **6.1 Radio Frequency Exposure Compliance**

## 6.1.1 Electromagnetic Fields

RESULT: Passed

Test standard : RSS-102 Issue 4

FCC KDB Publication 447498

The maximum peak output power of the transmitter is 3.1mW only, which less than 20mW. Hence the EUT is exempted from routine evaluation limits (SAR Evaluation) according to clause 2.5.1 of RSS-102 Issue 4.

The minimum distance for the EUT is 5mm, since maximum peak output power of the transmitter is 3.1mW <10mW, hence the EUT is exclueded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile and Portable RF Exposure.Guidance v05.

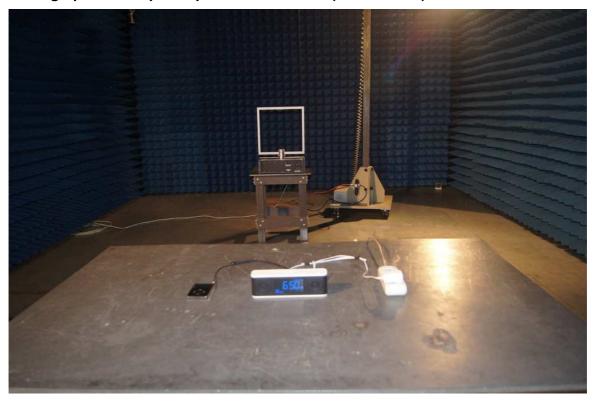


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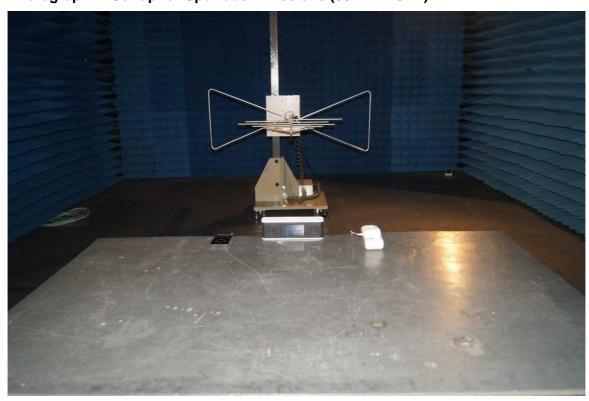
 Test Report No.
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# 7. Photographs of the Test Set-Up

Photograph 1: Set-up for Spurious Emissions (9kHz-30MHz)



Photograph 2: Set-up for Spurious Emissions (30MHz-1GHz)





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Photograph 3: Set-up for Spurious Emissions (1GHz-18GHz)



Photograph 4: Set-up for Spurious Emissions (18GHz-26GHz)





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Test Report No.

### **Photograph 5: Set-up for Conducted Emissions**



Photograph 6: Set-up for Radiated Emissions, below 1GHz





### Produkte

**Products** 

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Test Report No.

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### Photograph 7: Set-up for Radiated Emissions, above 1GHz





### Produkte

**Products** 

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# Appendix 1 17030657 001



Produkte Products

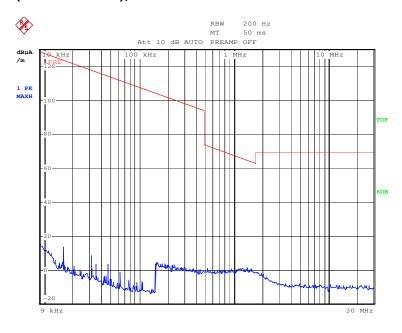
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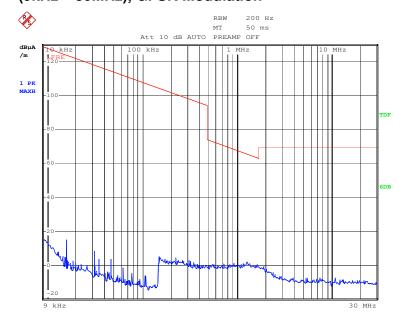


Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 3.FEB.2013 14:26:12

Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 3.FEB.2013 14:28:01

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Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz - 1GHz), GFSK Modulation

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

PYH #783 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

Clock Radio with Bluetooth

Mode: TX 2402MHz Model: NS-CLBT02 Manufacturer: Compupal

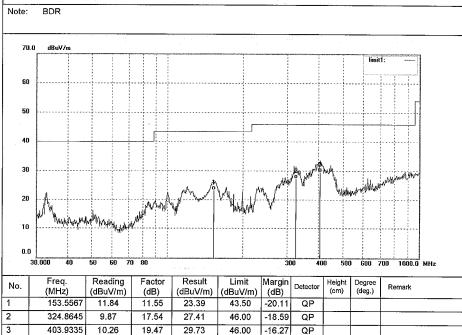
Power Source: AC 120V/60Hz & DC 3V Date: 13/02/03/

Time: 10/52/31

Engineer Signature: PEI

Polarization: Horizontal

Distance: 3m



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Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz), GFSK Modulation

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120.6118

10.62

13.60

24.22

43.50

-19.28

QP

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### Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz -18GHz), GFSK Modulation

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Date: 2013/02/02

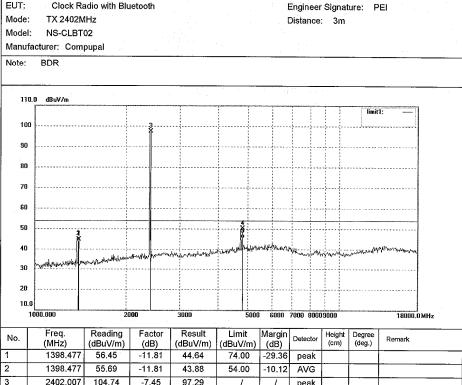
Time: 17:54:30

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

Job No.: PYH #754 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 % EUT:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	1398.477	56.45	-11.81	44.64	74.00	-29.36	peak				
2	1398.477	55.69	-11.81	43.88	54.00	-10.12	AVG				
3	2402.007	104.74	-7.45	97.29	. /	/	peak				
4	4804.010	50.36	-0.30	50.06	74.00	-23.94	peak				
5	4804.010	45.70	-0.30	45.40	54.00	-8.60	AVG				

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Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz - 18GHz), GFSK Modulation

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

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

TX 2402MHz Mode: NS-CLBT02 Model:

4804.035

47.69

-0.30

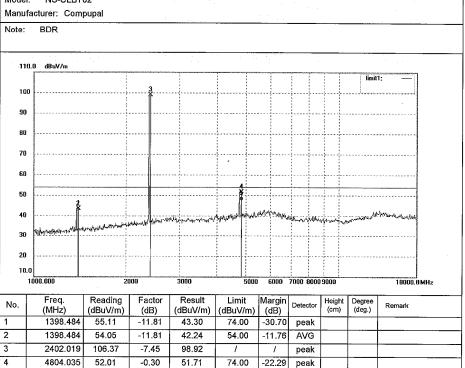
47.39

Power Source: AC 120V/60Hz & DC 3V

Date: 2013/02/02 Time: 18:08:13

Engineer Signature: PEI

Distance: 3m



54.00

-6.61

AVG

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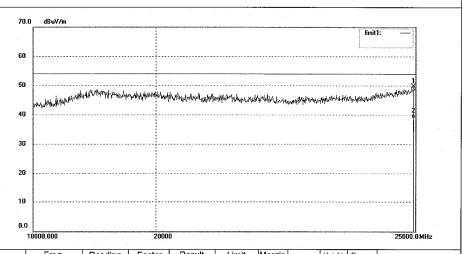
Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz -25GHz), GFSK Modulation



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Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 25 C / 50 % Time: 12/25/20 Clock Radio with Bluetooth EUT: Engineer Signature: PEI TX 2402MHz Mode: Distance: 3m Model: NS-CLBT02 Manufacturer: Compupal Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	24958.889	30.90	18.84	49.74	74.00	-24.26	peak				
2	24958.889	20.16	18.84	39.00	54.00	-15.00	AVG				

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Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz - 25GHz), GFSK Modulation

24983.547

24983.547

30.20

19.85

18.88

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

Standard: FCC Class B 3M Radiated Test item: Radiation Test Temp.( C)/Hum.(%) 25 C / 50 % EUT: Clock Radio with Bluetooth TX 2402MHz Mode: Model: NS-CLBT02 Manufacturer: Compupal Note: BDR

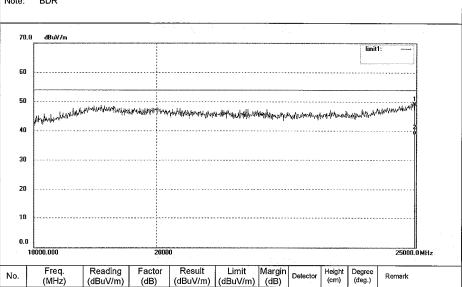
Polarization: Vertical

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 12/17/13

Engineer Signature: PEI

Distance: 3m



74.00

54.00

-24.92

-15.27

peak

AVG

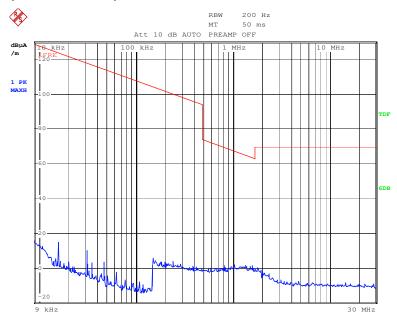
49.08

38.73



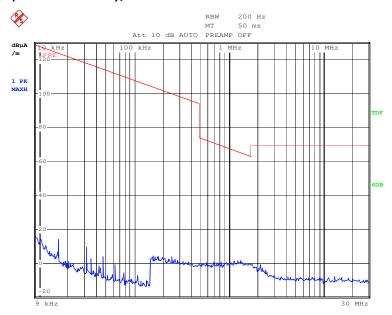
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Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 3.FEB.2013 14:32:22

Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 3.FEB.2013 13:47:13

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Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz - 1GHz), GFSK Modulation



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Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 %

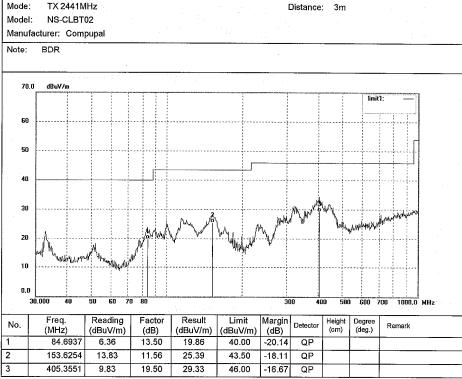
EUT: Clock Radio with Bluetooth Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 11/01/57

Engineer Signature: PEI

Distance: 3m



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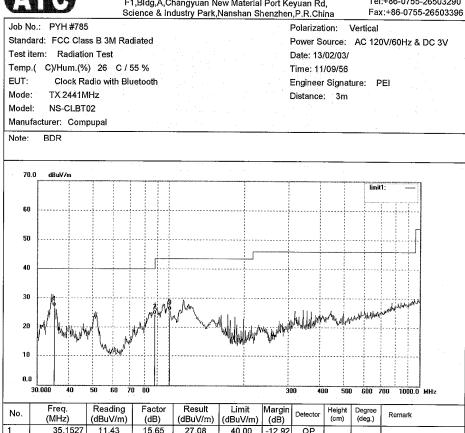


Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz - 1GHz), GFSK Modulation

### 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



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	35.1527	11.43	15.65	27.08	40.00	-12.92	QP				
2	87.8760	10.67	13.73	24.40	40.00	-15.60	QP	_			_
3	101.7676	11.32	14.48	25.80	43.50	-17.70	QP				

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Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz), GFSK Modulation



### ACCURATE TECHNOLOGY CO., LTD.

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

Polarization:

Date: 2013/02/02

Engineer Signature: PEI

Time: 18:47:24

Distance: 3m

Horizontal

Power Source: AC 120V/60Hz & DC 3V

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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Mode: TX 2441MHz
Model: NS-CLBT02

No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398.476	57.29	-11.81	45.48	74.00	-28.52	peak			
2	1398.476	56.05	-11.81	44.24	54.00	-9.76	AVG			
3	2441.021	103.34	-7.35	95.99	./	1	peak			
4	4882.040	50.25	0.14	50.39	74.00	-23.61	peak			
5	4882.040	45.63	0.14	45.77	54.00	-8.23	AVG			

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### Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz - 18GHz), GFSK Modulation



### 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

PYH #759

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

104.48

52.52

48.35

2441.025

4882.038

4882.038

Mode: TX 2441MHz Model: NS-CLBT02 Manufacturer: Compupal

BDR

3

Polarization: Vertical

Power Source: AC 120V/60Hz & DC 3V

Date: 2013/02/02 Time: 18:59:05

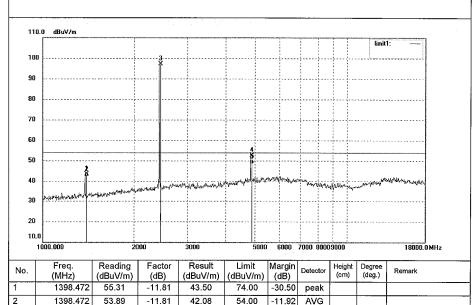
Engineer Signature: PEI

Distance: 3m

peak

peak

AVG



74.00

54.00

-21.34

-5.51

97.13

52.66

48.49

-7.35

0.14

0.14

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Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz), GFSK Modulation

ACCURATE TECHNOLOGY CO., LTD. Site: 2# Chamber F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Tel:+86-0755-26503290 Science & Industry Park, Nanshan Shenzhen, P.R. China Fax:+86-0755-26503396 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 25 C / 50 % Time: 12/33/07 EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: TX 2441MHz Distance: 3m Model: NS-CLBT02 Manufacturer: Compupal Note: BDR 70.0 dBu∀/m 40 0.0 25000.0 MHz Freq. Reading Factor Result Limit Margin Degree Detector Remark (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) (deg.) 24950.674 30.89 18.83 49.72 74.00 -24,28 peak 24950.674 18.99 37.82 18.83 54.00 -16.18 AVG

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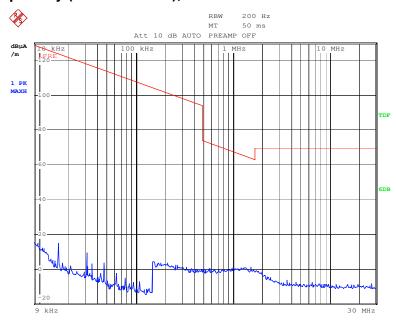
Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz), GFSK Modulation

#### ACCURATE TECHNOLOGY CO., LTD. Site: 2# Chamber F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Tel:+86-0755-26503290 Fax:+86-0755-26503396 Polarization: Vertical Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 25 C / 50 % Time: 12/42/08 EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: TX 2441MHz Distance: 3m Model: NS-CLBT02 Manufacturer: Compupal Note: BDR 70.0 dBuV/m 10 18000.000 25000.0 MHz Reading Factor Result Margin Degree (deg.) Detector Remark (MHz) (dBuV/m) (cm) (dB) (dBuV/m) (dBuV/m) (dB) 24983.547 30.59 18.88 49.47 74.00 -24.53 peak 24983.547 19.75 18.88 38.63 54.00 -15.37

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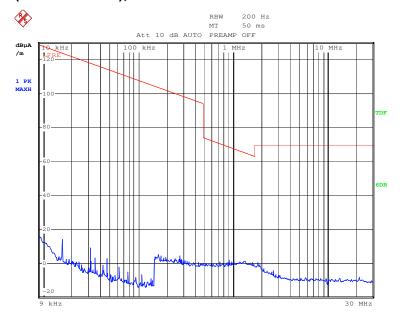


Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 3.FEB.2013 13:51:11

Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 3.FEB.2013 13:53:06

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Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz), GFSK Modulation

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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

Date: 13/02/03/

Time: 11/24/27

Distance: 3m

Engineer Signature: PEI

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

 Job No.:
 PYH #787
 Polarization:
 Horizontal

 Standard:
 FCC Class B 3M Radiated
 Power Source:
 AC 120V/60Hz & DC 3V

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 55 %

EUT: Clock Radio with Bluetooth Mode: TX 2480MHz

Model: NS-CLBT02 Manufacturer: Compupal

330.6220

403.9334

3

11.38

10.42

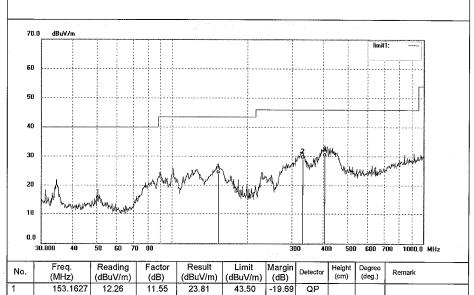
17.77

19.47

29.15

29.89

Note: BDR



46.00

46.00

-16.85

-16.11

QP

QP

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Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), GFSK Modulation



### 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

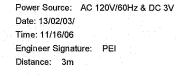
o.: PYH #786 Polarization: Vertical

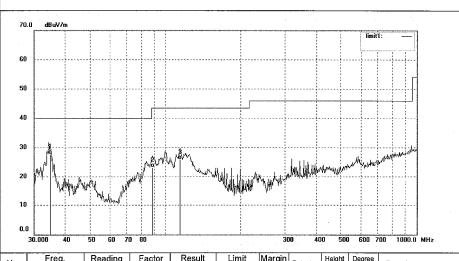
Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Mode: TX 2480MHz
Model: NS-CLBT02
Manufacturer: Compupal

Note: BDR





No.	Freq. (MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Detector	Height (cm)	(deg.)	Remark
1	34.9852	12.04	15.69	27.73	40.00	-12.27	QP			
2	88.8452	9.45	13.79	23.24	43.50	-20.26	QP			
3	114.4197	12.11	13.71	25.82	43.50	-17.68	QP			

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Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz -18GHz), GFSK Modulation

### 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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 %

EUT: Clock Radio with Bluetooth Mode: TX 2480MHz

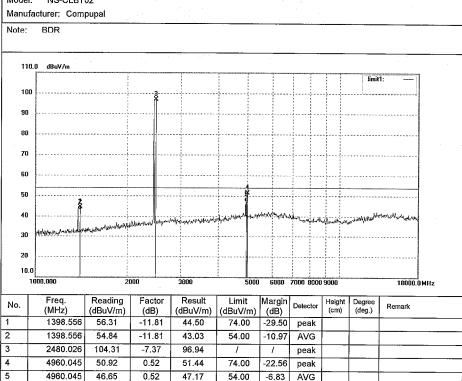
Model: NS-CLBT02 Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 2013/02/02 Time: 19:22:23

Engineer Signature: PEI

Distance: 3m



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Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz - 18GHz), GFSK Modulation

### 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

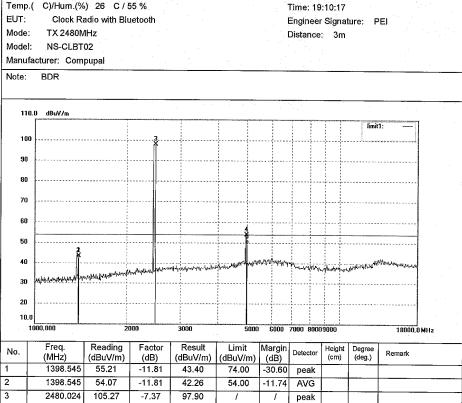
Polarization: Vertical

Date: 2013/02/02

Power Source: AC 120V/60Hz & DC 3V

Standard: FCC Class B 3M Radiated

Test item: Radiation Test



No.         Freq. (MHz)         Reading (dBuV/m)         Factor (dB)         Result (dBuV/m)         Limit (dBuV/m)         Margin (dB)         Detector (cm)         Height (deg.)         Degree (deg.)         Remark           1         1398.545         55.21         -11.81         43.40         74.00         -30.60         peak											
2 1398.545 54.07 -11.81 42.26 54.00 -11.74 AVG 3 2480.024 105.27 -7.37 97.90 / / peak 4 4960.050 53.30 0.52 53.82 74.00 -20.18 peak	No.			1	1			Detector		Remark	
3 2480.024 105.27 -7.37 97.90 / / peak 4 4960.050 53.30 0.52 53.82 74.00 -20.18 peak	1	1398.545	55.21	-11.81	43.40	74.00	-30.60	peak			
4 4960.050 53.30 0.52 53.82 74.00 -20.18 peak	2	1398.545	54.07	-11.81	42.26	54.00	-11.74	AVG			
2010   5011	3	2480.024	105.27	-7.37	97.90	/	1	peak			
5 4960.050 48.95 0.52 49.47 54.00 -4.53 AVG	4	4960.050	53.30	0.52	53.82	74.00	-20.18	peak	_		
	5	4960.050	48.95	0.52	49.47	54.00	-4.53	AVG			

2

24934.254

19.77

18.81

38.58

54.00

-15.42

AVG

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Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz), GFSK Modulation

ACCURATE TECHNOLOGY CO., LTD. Site: 2# Chamber F1,Bldg,A,Changyuan New Material Port Keyuan Rd. Tel:+86-0755-26503290 Science & Industry Park, Nanshan Shenzhen, P.R. China Fax:+86-0755-26503396 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 25 C / 50 % Time: 12/57/13 EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: TX 2480MHz Distance: 3m Model: NS-CLBT02 Manufacturer: Compupal Note: BDR dBuV/m 60 40 18000.000 25000.0 MHz Freq. Reading Factor Result Limit Margin Height (cm) Degree Detector Remark (MHz) (dBuV/m) (deg.) (dB) (dBuV/m) (dBuV/m) (dB) 24934.254 30.72 18.81 49.53 74.00 peak

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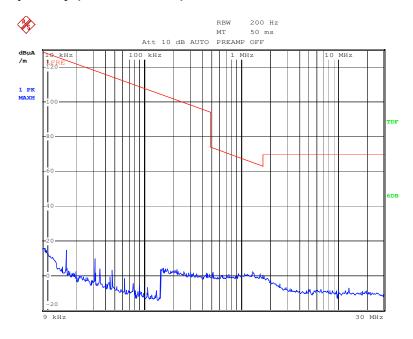


Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz), GFSK Modulation

ACCURATE TECHNOLOGY CO., LTD. Site: 2# Chamber F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Tel:+86-0755-26503290 Science & Industry Park, Nanshan Shenzhen, P.R. China Fax:+86-0755-26503396 Polarization: Vertical Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 25 C / 50 % Time: 12/50/47 EUT: Clock Radio with Bluetooth Engineer Signature: PEI TX 2480MHz Mode: Distance: 3m Model: NS-CLBT02 Manufacturer: Compupal Note: BDR 70.0 dBuV/m 40 30 20 10 25000.0 MHz Reading Factor Result Limit Height (cm) Degree Detector Remark (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) (deg.) 24950.674 30.38 18.83 49.21 74.00 -24.79 peak 24950.674 19.49 18.83 38,32 54.00 -15.68 AVG

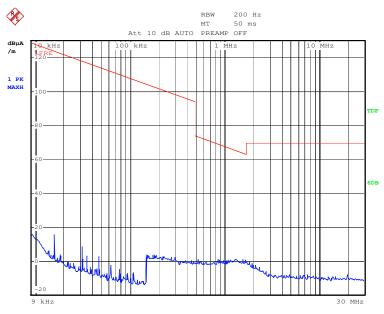
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Figure 25: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 3.FEB.2013 14:34:40

Figure 26: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 3.FEB.2013 14:36:31



Figure 27: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz - 1GHz), 8DPSK Modulation

### 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 #788

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

Temp.( C)/Hum.(%) 26 C / 55 %

Clock Radio with Bluetooth

Mode: TX 2402MHz Model: NS-CLBT02

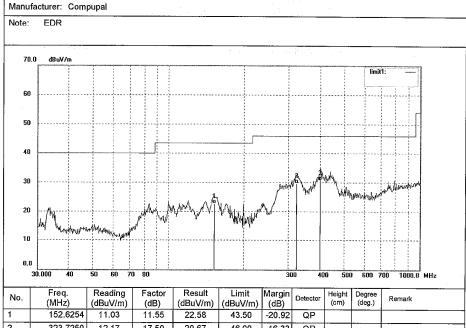
Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 11/31/44

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	152.6254	11.03	11.55	22.58	43.50	-20.92	QP				
2	323.7250	12.17	17.50	29.67	46.00	-16.33	QP				
3	402.9549	11.21	19.46	30.67	46.00	-15.33	QP				



### Figure 28: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz - 1GHz), 8DPSK Modulation

### 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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

Mode: TX 2402MHz

Model: NS-CLBT02 Manufacturer: Compupal Polarization: Vertical

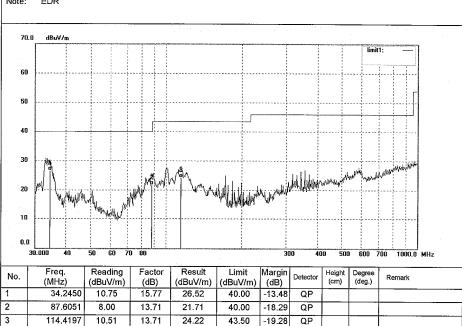
Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 11/39/18

Engineer Signature: PEI

Distance: 3m

EDR Note:



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### Figure 29: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz -18GHz), 8DPSK Modulation



### ACCURATE TECHNOLOGY CO., LTD.

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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 %

EUT: Clock Radio with Bluetooth

TX 2402MHz Mode:

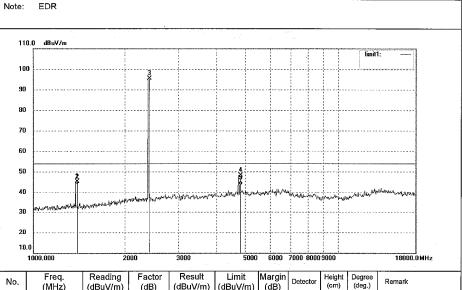
Model: NS-CLBT02 Manufacturer: Compupal Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 8/02/14

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	1398.479	56.91	-11.81	45.10	74.00	-28.90	peak				
2	1398.479	55.74	-11.81	43.93	54.00	-10.07	AVG				
3	2402.022	102.81	-7.45	95.36	1	1	peak				
4	4804.042	48.31	-0.30	48.01	74.00	-25.99	peak				
5	4804.042	43.76	-0.30	43.46	54.00	-10.54	AVG				

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### Figure 30: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz - 18GHz), 8DPSK Modulation

### 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

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

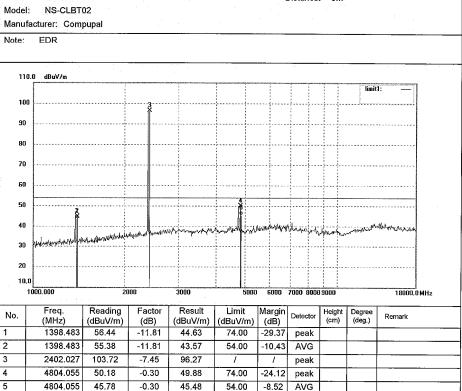
Mode: TX 2402MHz

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 7/49/48

Engineer Signature: PEI

Distance: 3m



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Figure 31: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz), 8DPSK Modulation

# ACCURATE TECHNOLOGY CO., LTD. F1,Bldg,A,Changyuan New Material Port Keyuan Rd,

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

Science & Industry Park,Nanshan Shenzhen,P.R.China

Job No.: PYH #802 Polarization:
Standard: FCC Class B 3M Radiated Power Source

Polarization: Horizontal
Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 13/12/16

Engineer Signature: PEI

Distance: 3m

Mode: TX 2402MHz
Model: NS-CLBT02
Manufacturer: Compupal

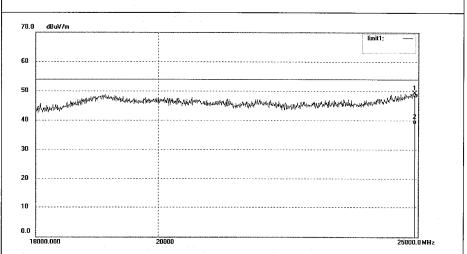
Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 50 %

Clock Radio with Bluetooth

Note: EDR

EUT;



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	24934.254	30.43	18.81	49.24	74.00	-24.76	peak				
2	24934.254	19.87	18.81	38.68	54.00	-15.32	AVG				

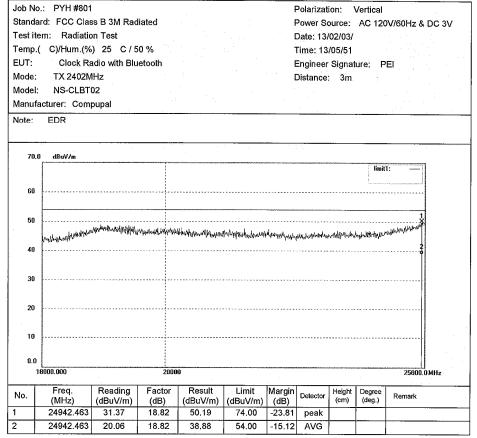
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Figure 32: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation

ATC<sup>®</sup>

### ACCURATE TECHNOLOGY CO., LTD.

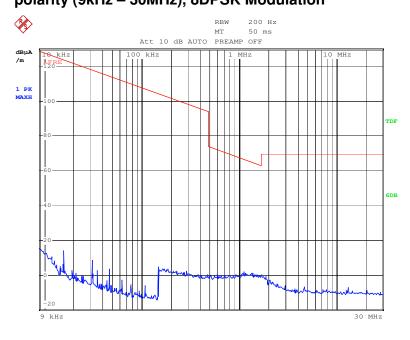
F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396



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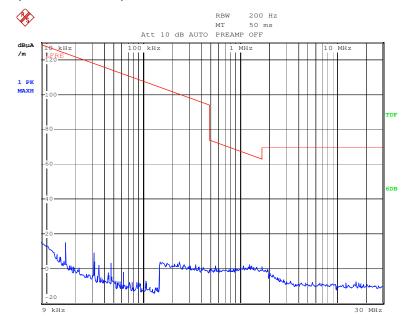


Figure 33: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 3.FEB.2013 14:40:41

Figure 34: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 3.FEB.2013 14:42:53

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Figure 35: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz - 1GHz), 8DPSK Modulation

### 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

Polarization: Horizontal

Engineer Signature: PEI

Date: 13/02/03/

Time: 11/54/40

Power Source: AC 120V/60Hz & DC 3V

500 600 700

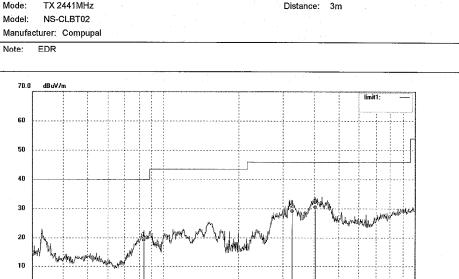
Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

TX 2441MHz Mode: Model: NS-CLBT02 Manufacturer: Compupal

0.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	83.6937	5.17	13.27	18.44	40.00	-21.56	QP			
2	327.1554	10.81	17.64	28.45	46.00	-17.55	QP			
3	402.5168	10.43	19.44	29.87	46.00	-16.13	QP			

230.75

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Figure 36: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz - 1GMHz), 8DPSK Modulation



### 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

Polarization: Vertical Power Source: AC 120V/60Hz & DC 3V

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

TX 2441MHz Mode: Model: NS-CLBT02 Manufacturer: Compupal

(MHz)

2

3

34.1881

101.1188

114.4197

(dBuV/m)

10.26

9.13

10.66

(dB)

15.77

14.59

13.71

(dBuV/m)

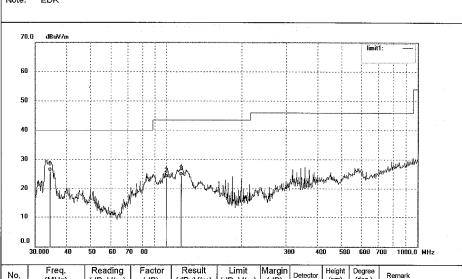
26.03

23.72

24.37

Note: EDR Date: 13/02/03/ Time: 11/46/15 Engineer Signature: PEI

Distance: 3m



(dBuV/m) (dB)

-13.97

-19.78

-19.13

QP

QP

QP

40.00

43,50

43,50

Page: 1

http://www.atc-lab.com

(deg.)

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Figure 37: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz - 18GHz), 8DPSK Modulation

### ACCURATE TECHNOLOGY CO., LTD.

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

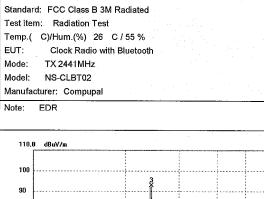
Polarization: Horizontal

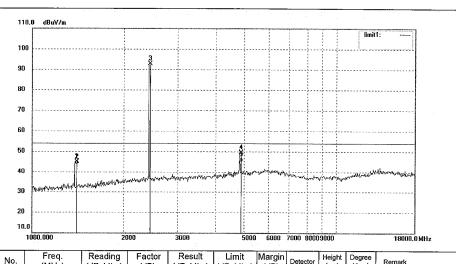
Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 8/50/15

Engineer Signature: PEI

Distance: 3m





No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398.546	56.65	-11.81	44.84	74.00	-29.16	peak			
2	1398.546	55.41	-11.81	43.60	54.00	-10.40	AVG			
3	2441.030	99.98	-7.35	92.63	1	1	peak			
4	4882.028	49.26	0.14	49.40	74.00	-24.60	peak			
5	4882.028	44.78	0.14	44.92	54.00	-9.08	AVG			

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Figure 38: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation

# AIG®

### 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 #768

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: Clock Radio with Bluetooth

Model: TX 2441MHz Model: NS-CLBT02 Manufacturer: Compupal

> 20 10.0

1000,000

Polarization: Vertical

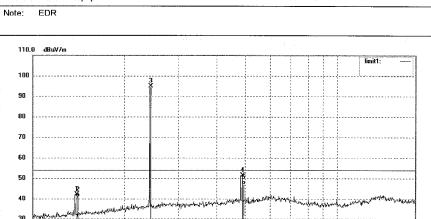
Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 8/39/46

Engineer Signature: PEI

Distance: 3m

6000 7000 80009000



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398.503	53.99	-11.81	42.18	74.00	-31.82	peak			
2	1398.503	52.63	-11.81	40.82	54.00	-13.18	AVG			
3	2441.018	102.26	-7.35	94.91	7	1	peak			
4	4882.036	51.14	0.14	51.28	74.00	-22.72	peak			
5	4882.036	46.73	0.14	46.87	54.00	-7.13	AVG			

18000.0 MHz

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Figure 39: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz - 25GHz), 8DPSK Modulation

#### ACCURATE TECHNOLOGY CO., LTD.

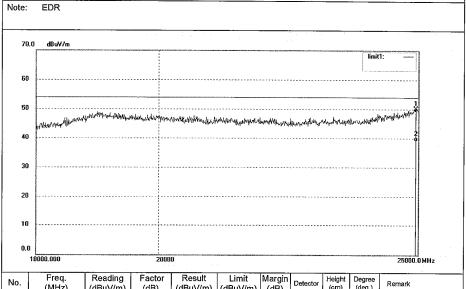
Site: 2# Chamber Tel:+86-0755-26503290 F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China

Distance: 3m

Job No.: PYH #803 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 25 C / 50 % Time: 13/20/06 Clock Radio with Bluetooth Engineer Signature: PEI

Mode: TX 2441MHz Model: NS-CLBT02

Manufacturer: Compupal



$\overline{}$										
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24950.674	31.31	18.83	50.14	74.00	-23.86	peak			
2	24950.674	20.27	18.83	39.10	54.00	-14.90	AVG			

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### Figure 40: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz - 25GHz), 8DPSK Modulation



#### ACCURATE TECHNOLOGY CO., LTD.

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

Date: 13/02/03/

Time: 13/28/30

Distance: 3m

Engineer Signature: PEI

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

Polarization: Vertical Power Source: AC 120V/60Hz & DC 3V

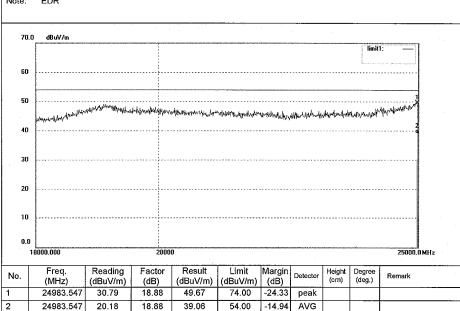
Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 25 C / 50 %

EUT: Clock Radio with Bluetooth Mode: TX 2441MHz

Model: NS-CLBT02 Manufacturer: Compupal

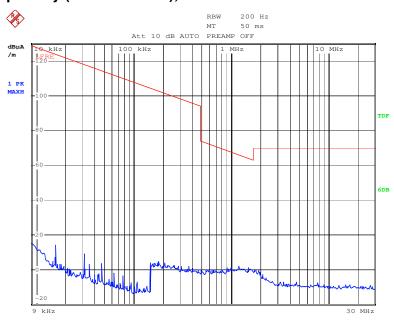
Note: EDR



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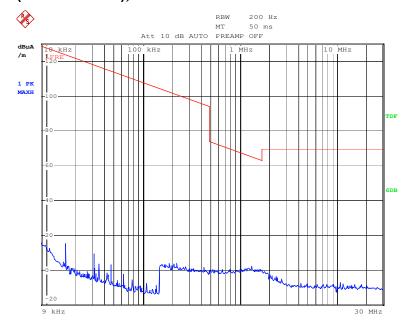


Figure 41: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 3.FEB.2013 14:50:59

Figure 42: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 3.FEB.2013 14:52:50

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Figure 43: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz - 1GHz), 8DPSK Modulation

EUT:

### ACCURATE TECHNOLOGY CO., LTD.

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

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/

Time: 12/02/10

Engineer Signature: PEI

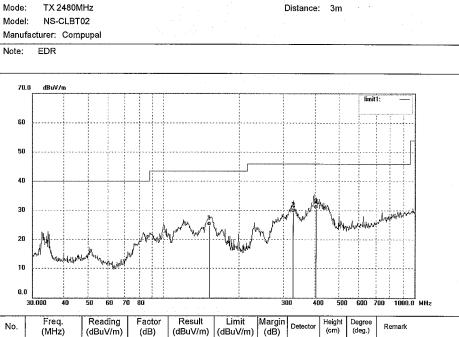
F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China PYH #792 Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 %

Clock Radio with Bluetooth

Model: NS-CLBT02 Manufacturer: Compupal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	152.0902	13.19	11.54	24.73	43.50	-18.77	QP				
2	327.1553	11.63	17.64	29.27	46.00	-16.73	QP				
3	401.8992	11.05	19.43	30.48	46.00	-15.52	QP				

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Figure 44: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), 8DPSK Modulation



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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

Polarization: Vertical

Engineer Signature: PEI

Date: 13/02/03/

Time: 12/10/52

Distance: 3m

Power Source: AC 120V/60Hz & DC 3V

No.: PYH #793

Standard: FCC Class B 3M Radiated

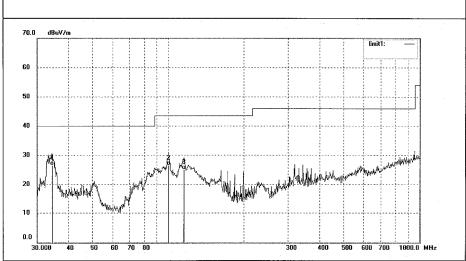
Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Model: TX 2480MHz

Model: NS-CLBT02 Manufacturer: Compupal

Note: EDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	34.4059	10.80	15.75	26.55	40.00	-13.45	QP			
2	99.7676	11.79	14.75	26.54	43.50	-16.96	QP			
3	114.8224	11.42	13.69	25.11	43.50	-18.39	QP			

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Figure 45: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz), 8DPSK Modulation

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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 #770 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Model: TX 2480MHz Model: NS-CLBT02 Manufacturer: Compupal

Note: EDR

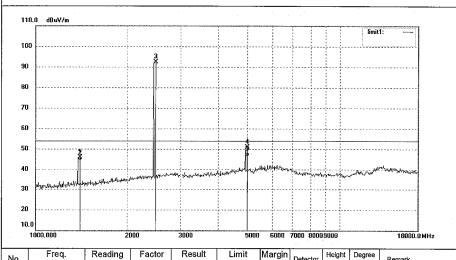
Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 9/04/17

Engineer Signature: PEI

Distance: 3m



No.	Freq. (MHz)	(dBuV/m)	Factor (dB)	(dBuV/m)	(dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	1398.529	57.59	-11.81	45.78	74.00	-28.22	peak				
2	1398.529	56.28	-11.81	44.47	54.00	-9.53	AVG				
3	2480.013	99.75	-7.37	92.38	1	1	peak			-	•
4	4960.025	50.39	0.52	50.91	74.00	-23.09	peak				
5	4960.025	45.87	0.52	46.39	54.00	-7.61	AVG				

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Figure 46: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz - 18GHz), 8DPSK Modulation

### ACCURATE TECHNOLOGY CO., LTD.

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

Date: 13/02/03/

Engineer Signature: PEI

Time: 9/16/25

Distance: 3m

Polarization: Vertical Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

Mode: TX 2480MHz

Model: NS-CLBT02 Manufacturer: Compupal Note: EDR

110.0 dBuV/m 100 70 60 50 40 30 20 10,0 1000.000 6000 7000 8000 9000 18000.0 MHz

No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398.545	54.74	-11.81	42.93	74.00	-31.07	peak			
2	1398.545	53.51	-11.81	41.70	54.00	-12.30	AVG			
3	2480.027	101.49	-7.37	94.12	1	1	peak			
4	4960.068	51.75	0.52	52.27	74.00	-21.73	peak			
5	4960,068	47.27	0.52	47.79	54.00	-6.21	AVG			

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Figure 47: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz -25GHz), 8DPSK Modulation

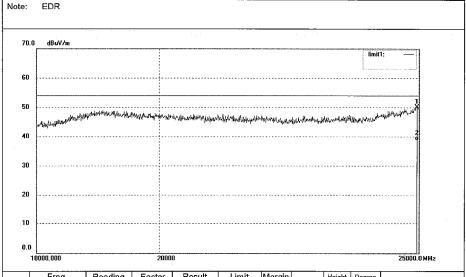
Manufacturer: Compupal

### ACCURATE TECHNOLOGY CO., LTD.

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

Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 25 C / 50 % EUT; Clock Radio with Bluetooth Engineer Signature: PEI TX 2480MHz Mode: Distance: 3m Model: NS-CLBT02

Time: 15/13/43



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24958.889	31.27	18.84	50.11	74.00	-23.89	peak			
2	24958.889	19.95	18.84	38.79	54.00	-15.21	AVG			

Site: 2# Chamber

Tel:+86-0755-26503290 Fax:+86-0755-26503396

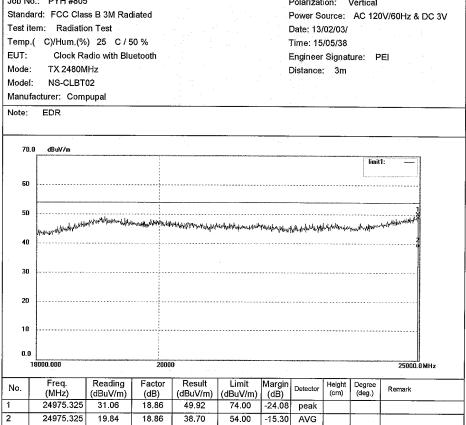
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Figure 48: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz - 25GHz), 8DPSK Modulation

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

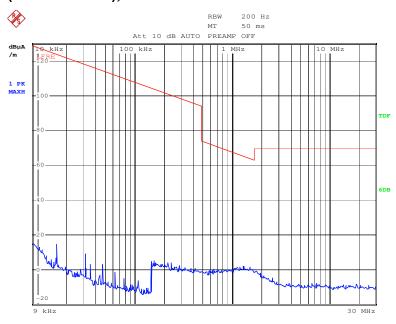
Polarization: Vertical



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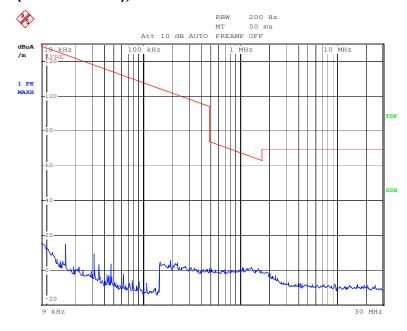


Figure 49: Test figure of spurious emissions, mode B, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 3.FEB.2013 13:39:36

Figure 50: Test figure of spurious emissions, mode B, Vertical polarity (9kHz – 30MHz), GFSK Modulation



Date: 3.FEB.2013 13:56:51

3

402.5168

10.12

19.44

29.56

46.00

-16.44

QP

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# Figure 51: Test figure of spurious emissions, mode B, Horizontal polarity (30MHz – 1GHz), GFSK Modulation

Site: 2# Chamber ACCURATE TECHNOLOGY CO., LTD. F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Tel:+86-0755-26503290 Fax:+86-0755-26503396 Job No PYH #781 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 26 C / 55 % Time: 10/36/54 EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: RX 2402MHz Model: NS-CLBT02 Manufacturer: Compupal BDR Note: 70.0 dBuV/m 60 50 30 20 0.0 60 500 600 700 1000.0 MHz Reading Result Margin Degree (deg.) Height No. Detector Remark (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) 152.6255 13.40 11.55 24.95 43.50 -18.55 QP 327.1554 10.93 17.64 28.57 46.00 -17.43 QP

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Figure 52: Test figure of spurious emissions, mode B, Vertical polarity (30MHz - 1GHz), GFSK Modulation



Job No.: PYH #780

#### **ACCURATE TECHNOLOGY CO., LTD.**

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

Fax:+86-0755-26503396 Polarization: Vertical

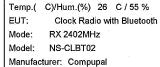
Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/

Time: 10/28/14

Engineer Signature: PEI

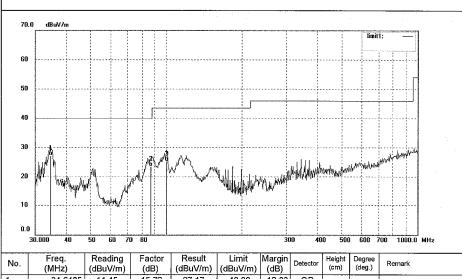
Distance: 3m



Test item: Radiation Test

Standard: FCC Class B 3M Radiated

BDR Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	34.6485	11.45	15.72	27.17	40.00	-12.83	QP				
2	86.9918	9.81	13.68	23.49	40.00	-16.51	QP				
3	100.4712	10.51	14.70	25.21	43.50	-18.29	QP				

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### Figure 53: Test figure of spurious emissions, mode B, Horizontal polarity (1GHz -18GHz), GFSK Modulation

### ACCURATE TECHNOLOGY CO., LTD.

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

Date: 13/02/03/

Time: 9/41/03

Distance: 3m

Engineer Signature: PEI

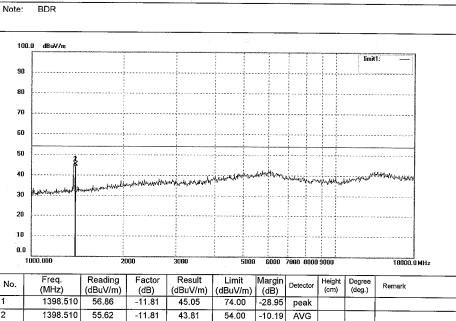
Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

RX 2402MHz Mode: Model: NS-CLBT02

Manufacturer: Compupal



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# Figure 54: Test figure of spurious emissions, mode B, Vertical polarity (1GHz – 18GHz), GFSK Modulation

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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 #775
 Polarization:
 Vertical

 Standard:
 FCC Class B 3M Radiated
 Power Source:
 AC 120V/60Hz & DC 3V

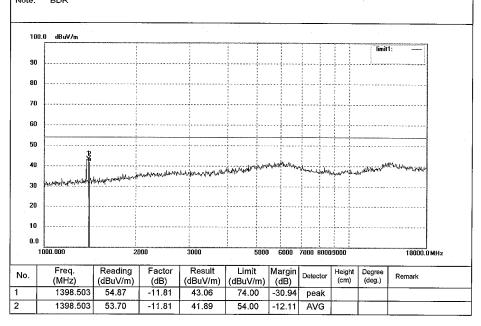
 Test item:
 Radiation Test
 Date: 13/02/03/

 Temp.( C)/Hum.(%) 26 C / 55 %
 Time: 9/49/33

 EUT:
 Clock Radio with Bluetooth
 Engineer Signature: PEI

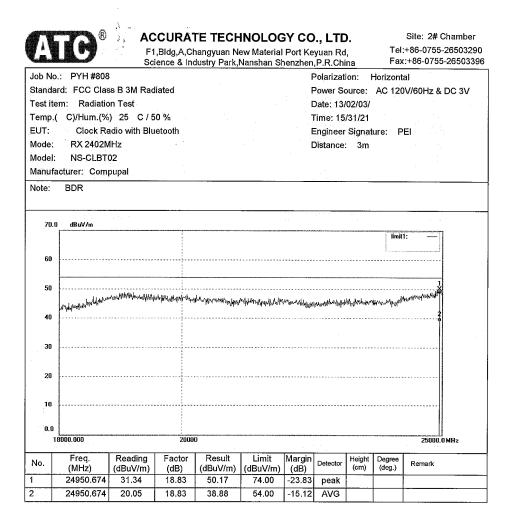
Model: RX 2402MHz Distance: 3m Model: NS-CLBT02

Manufacturer: Compupal



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# Figure 55: Test figure of spurious emissions, mode B, Horizontal polarity (18GHz –25GHz), GFSK Modulation



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### Figure 56: Test figure of spurious emissions, mode B, Vertical polarity (18GHz – 25GHz), GFSK Modulation

Model:

NS-CLBT02

### 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

Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.( C)/Hum.(%) 25 C / 50 %
EUT: Clock Radio with Bluetooth
Mode: RX 2402MHz

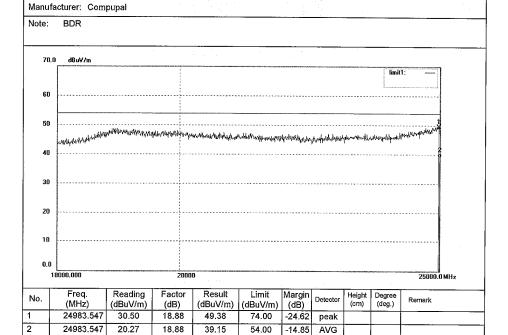
Time: 15/22/04
Engineer Signature: PEI

Polarization: Vertical

Date: 13/02/03/

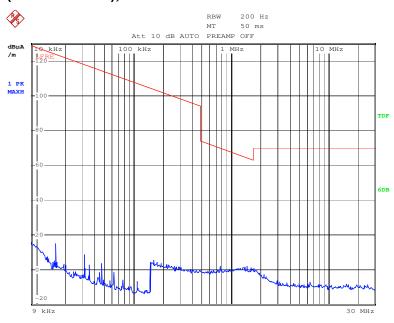
Power Source: AC 120V/60Hz & DC 3V

Distance: 3m



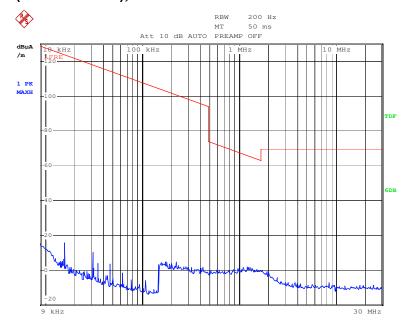
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Figure 57: Test figure of spurious emissions, mode B, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 3.FEB.2013 13:45:23

Figure 58: Test figure of spurious emissions, mode B, Vertical polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 3.FEB.2013 13:41:32

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# Figure 59: Test figure of spurious emissions, mode B, Horizontal polarity (30MHz – 1GHz), 8DPSK Modulation



### 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

Standard: FCC Class B 3M Radiated

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Model: RX 2402MHz
Model: NS-CLBT02
Manufacturer: Compupal

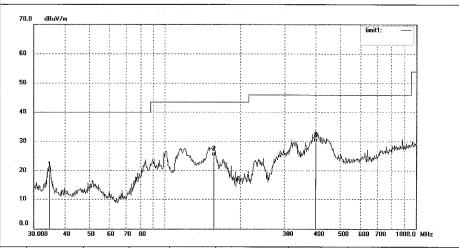
Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 10/13/39 Engineer Signature: PEI

Distance: 3m

anufacturer: Compupal
ote: EDR
70.0 dBuV/m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	34.7705	3.71	15.72	19.43	40.00	-20.57	QP			
2	156.4259	13.31	11.71	25.02	43.50	-18.48	QP			
3	399.6981	10.21	19.39	29.60	46.00	-16.40	QP			



Figure 60: Test figure of spurious emissions, mode B, Vertical polarity (30MHz - 1GHz), 8DPSK Modulation



### 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

Polarization: Vertical

Engineer Signature: PEI

Date: 13/02/03/

Time: 10/20/13

Distance: 3m

Power Source: AC 120V/60Hz & DC 3V

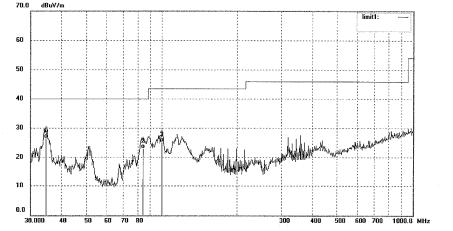
Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

RX 2402MHz Mode: Model: NS-CLBT02

Manufacturer: Compupal

EDR dBuV/m 60



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	34.6485	10.85	15.72	26.57	40.00	-13.43	QP				
2	84.2839	9.65	13.40	23.05	40.00	-16.95	QP	-			
3	99.7676	10.61	14.75	25.36	43.50	-18.14	QP				

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# Figure 61: Test figure of spurious emissions, mode B, Horizontal polarity (1GHz –18GHz), 8DPSK Modulation

### 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

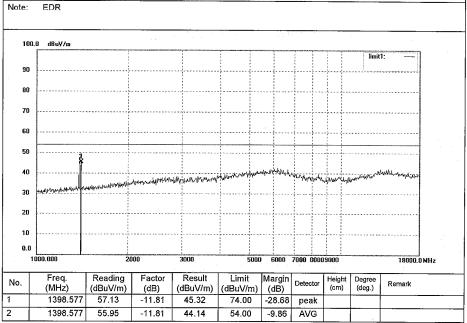
 Job No.:
 PYH #777
 Polarization:
 Horizontal

 Standard:
 FCC Class B 3M Radiated
 Power Source:
 AC 120V/60Hz & DC 3V

Test item: Radiation Test Date: 13/02/03/
Temp.( C)/Hum.(%) 26 C / 55 % Time: 10/05/14

EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: RX 2402MHz Distance: 3m

Model: NS-CLBT02 Manufacturer: Compupal



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# Figure 62: Test figure of spurious emissions, mode B, Vertical polarity (1GHz – 18GHz), 8DPSK Modulation

(ATC)®

### **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

Polarization: Vertical

Engineer Signature: PEI

Date: 13/02/03/

Time: 9/58/02

Distance: 3m

Power Source: AC 120V/60Hz & DC 3V

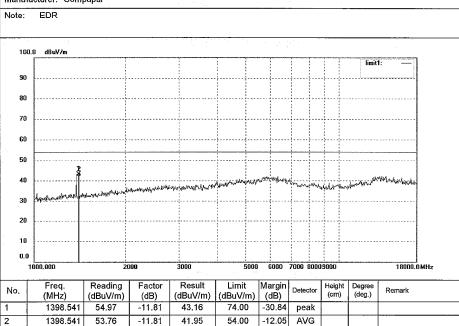
Job No.: PYH #776

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Mode: RX 2402MHz

Model: NS-CLBT02 Manufacturer: Compupal



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# Figure 63: Test figure of spurious emissions, mode B, Horizontal polarity (18GHz –25GHz), 8DPSK Modulation



### ACCURATE TECHNOLOGY CO., LTD.

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

o.: PYH #809 Polarization: Horizontal

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V

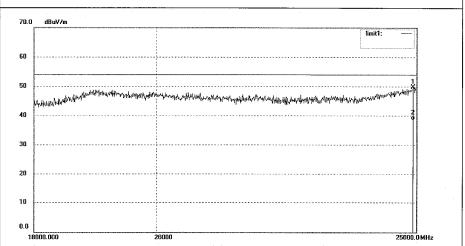
Test item: Radiation Test Date: 13/02/03/
Temp.( C)/Hum.(%) 25 C / 50 % Time: 15/38/04

EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: RX 2402MHz Distance: 3m

Model: NS-CLBT02

Manufacturer: Compupal

Note: EDR



	Fra.	Danding	Faster	Result	1.114	Manain	Γ	11-1-14			
No.	Freq.	Reading	Factor		Limit	lviargin	Detector	Height	Degree	Remark	
140.	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Detector	(cm)	(deg.)	Roman	
1	24934.254	30.96	18.81	49.77	74.00	-24.23					-
2	24934,254	19.85	18,81	38.66	54.00	-15.34	AVG				

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Figure 64: Test figure of spurious emissions, mode B, Vertical polarity (18GHz – 25GHz), 8DPSK Modulation

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 #810 Polarization: Vertical Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 25 C / 50 % Time: 15/46/13 EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: RX 2402MHz Distance: 3m Model: NS-CLBT02 Manufacturer: Compupal Note: EDR dBuV/m 70.0 with a photocological properties the second control of the photocological photoco 10 18000.000 20000 25000.0 MHz Reading Factor Result Limit Margin Height Degree (deg.) No. Detector Remark (MHz) (dBuV/m) (dBuV/m) (dBuV/m) (dB) 24975.325 30.93 18.86 49.79 74.00 peak -24.21 24975.325 19.93 18.86 38.79 54.00 -15.21 AVG

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## Figure 65: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal, GFSK Modulation

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 #757

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test
Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Model: TX 2402MHz
Model: NS-CLBT02
Manufacturer: Compupal

Note: BDR

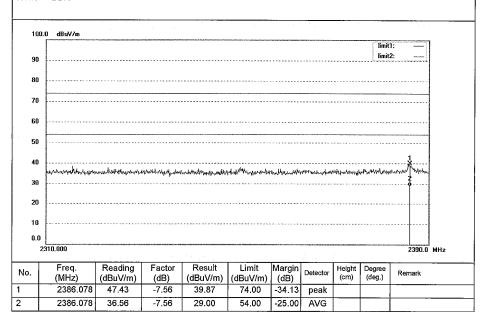
Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 2013/02/02 Time: 18:34:12

Engineer Signature: PEI

Distance: 3m



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# Figure 66: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical, GFSK Modulation

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

p.: PYH #756 Polarization: Vertical Power Source: AC 120V/60Hz & DC 3V

Standard: FCC Part 15 Band Edge (2.4G)
Test item: Radiation Test

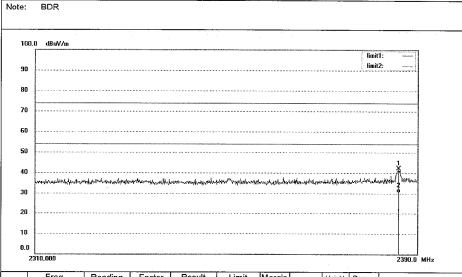
Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Model: TX 2402MHz
Model: NS-CLBT02

Model: NS-CLBT02 Manufacturer: Compupal Time: 18:22:31
Engineer Signature: PEI

Distance: 3m

Date: 2013/02/02



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2386.099	49.65	-7.56	42,09	74.00	-31.91	peak				
2	2386.099	37.96	-7.56	30.40	54.00	-23,60	AVG				

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Polarization: Horizontal

Date: 2013/02/02

Power Source: AC 120V/60Hz & DC 3V



Figure 67: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, GFSK Modulation

### ACCURATE TECHNOLOGY CO., LTD.

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

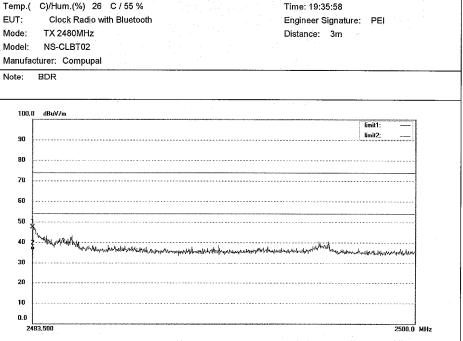
Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

Model: NS-CLBT02



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	54.86	-7.37	47.49	74.00	-26.51	peak			
2	2483.500	43.57	-7.37	36.20	54.00	-17.80	AVG			

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# Figure 68: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, GFSK Modulation



### 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

JOD NO.: PYH #/63

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %

EUT: Clock Radio with Bluetooth

Model: TX 2480MHz
Model: NS-CLBT02
Manufacturer: Compupal

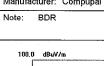
Polarization: Vertical

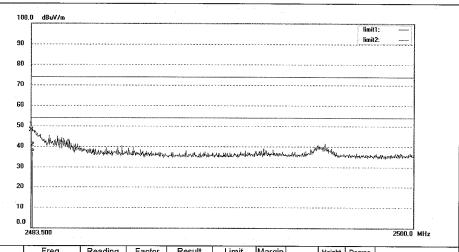
Power Source: AC 120V/60Hz & DC 3V

Date: 2013/02/02 Time: 19:48:19

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	2483.500	55.33	-7.37	47.96	74.00	-26.04	peak				
2	2483.500	44.48	-7.37	37.11	54.00	-16.89	AVG				

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### Figure 69: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal, 8DPSK Modulation



### ACCURATE TECHNOLOGY CO., LTD.

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

Distance: 3m

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

Polarization: Horizontal Standard: FCC Part 15 Band Edge (2.4G) Power Source: AC 120V/60Hz & DC 3V

Test item: Radiation Test Date: 13/02/03/

Temp.( C)/Hum.(%) 26 C / 55 % Time: 8/15/16 EUT: Clock Radio with Bluetooth Engineer Signature: PEI

TX 2402MHz Model: NS-CLBT02 Manufacturer: Compupal

2386.050

2386.050

47.93

36.26

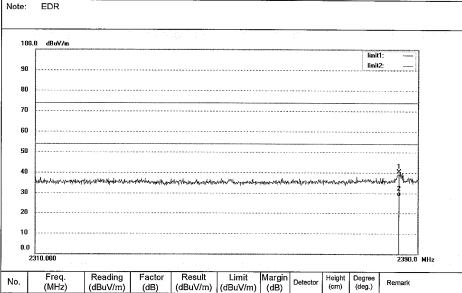
-7.56

-7.56

40.37

28.70

Mode:



74.00

54.00

-33.63

-25.30

peak

AVG

igate  $\mathsf{T}\ddot{\mathsf{U}}\mathsf{V}$ Rheinland $^{ ext{ iny 8}}$ 

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### Figure 70: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical, 8DP SK Modulation



### 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

Polarization: Vertical Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/

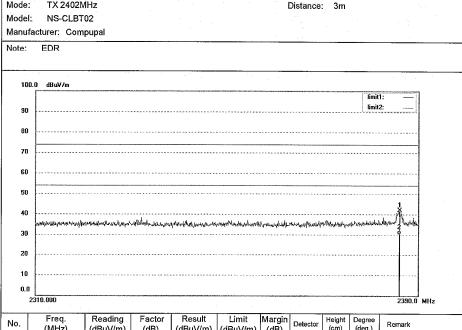
Engineer Signature: PEI

Time: 8/27/42

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

Mode: TX 2402MHz



	No.	Freq.	Reading	Factor	Result	Limit	Margin	Detector	Height	Degree	Domonia	
	140.	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Detector	(cm)	(deg.)	Remark	
	1	2386.105	49.41	-7.56	41.85	74.00	-32.15	peak				
	2	2386.105	37.76	-7.56	30.20	54.00	-23.80	AVG				

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Figure 71: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, 8DPSK Modulation



### 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

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

TX 2480MHz Mode: Model: NS-CLBT02 Manufacturer: Compupal

2483.500

41.17

-7.37

33,80

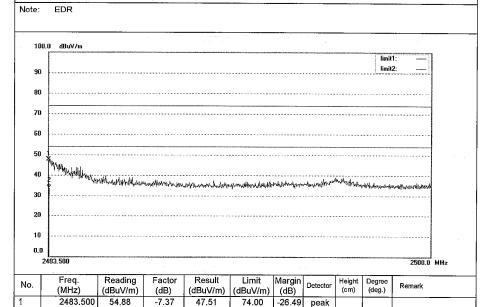
Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 9/33/22

Engineer Signature: PEI

Distance: 3m



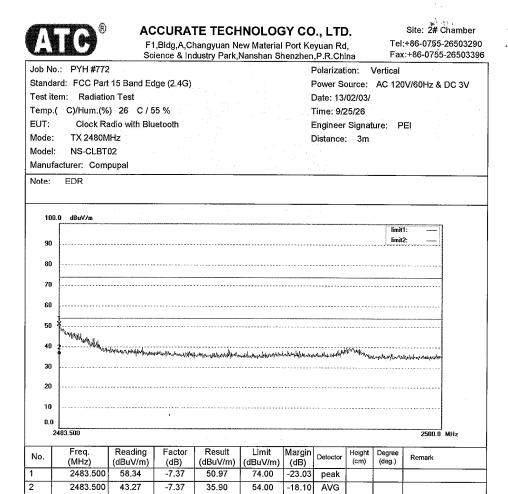
54.00

-20.20

AVG

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# Figure 72: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, 8DPSK Modulation



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Figure 73: Test figure of Conducted emissions, Mode A, line live

#### ACCURATE TECHNOLOGY CO., LTD

#### CONDUCTED EMISSION STANDARD FCC PART 15 B

Clock Radio with Bluetooth M/N:NS-CLBT02

Manufacturer:

Manufacturer: Compupal Operating Condition: Bluetooth Transmitting 1#Shielding Room

Test Site: Operator:

PEI

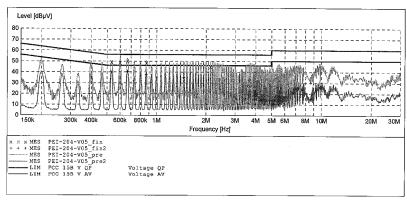
Test Specification: L 120V/60Hz

Comment: Mains port
Start of Test: 2/4/2013 / 9:00:49AM

Transducer Bandw.

SCAN TABLE: "V 150K-30MHz fin"
Short Description:
Start Stop Step Detector Meas.
Frequency Frequency Width
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s Detector Meas. IF
Time Band
QuasiPeak 1.0 s 9 kH NSLK8126 2008

Average



### MEASUREMENT RESULT: "PEI-204-V05\_fin"

2/4/2	2013 9:04	AM						
Fı	equency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
0	.533841	49.00	11.3	56	7.0	QP	L1	GND
(	.599363	48.40	11.3	56	7.6	QP	L1	GND
0	.667575	50.00	11.3	56	6.0	QP	L1	GND
(	.868810	48.30	11.3	56	7.7	QP	L1	GND
2	.133095	45.00	11.3	56	11.0	OP	T.1	GND

#### MEASUREMENT RESULT: "PEI-204-V05 fin2"

2/4/2	013 9:04A	M						
Fr	equency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0	.531714	40.70	11.3	46	5.3	AV	L1	GND
. 0	.664915	41.20	11.3	46	4.8	AV	L1	GND
0	.865349	39.40	11.3	46	6.6	AV	L1	GND
1	.465687	39.90	11.3	46	6.1	AV	T.1	GND



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Figure 74: Test figure of Conducted emissions, Mode A, line neutral

#### ACCURATE TECHNOLOGY CO., LTD

#### CONDUCTED EMISSION STANDARD FCC PART 15 B

Clock Radio with Bluetooth M/N:NS-CLBT02

Manufacturer:

Manufacturer: Compupal Operating Condition: Bluetooth Transmitting

Test Site: 1#Shielding Room

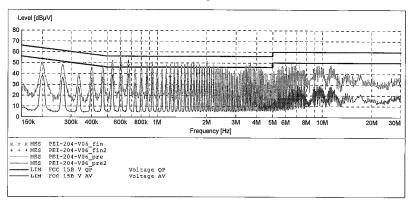
Operator: PEI

Test Specification: N 120V/60Hz
Comment: Mains port
Start of Test: 2/4/2013 / 9:05:03AM

SCAN TABLE: "V 150K-30MHz fin"
Short Description:
Start Stop Step Detector Meas.
Frequency Frequency Width
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s Detector Meas. IF Time Band Transducer Bandw.

NSLK8126 2008

Average



### MEASUREMENT RESULT: "PEI-204-V06 fin"

2	2/4/2013 9:0	8AM						
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
	0.538120	45.30	11.3	56	10.7	QP	N	GND
	0.604167	47.10	11.3	56	8.9	QP	N	GND
	0.670245	47.40	11.3	56	8.6	QP	N	GND
	0.933537	40.10	11.3	56	15.9	OP	N	GND

### MEASUREMENT RESULT: "PEI-204-V06\_fin2"

2/4/2013 9:08	BAM						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.535976	37.70	11.3	46	8.3	AV	N	GND
0.601760	36.50	11.3	46	9.5	AV	N	GND
0.670245	39.10	11.3	46	6.9	AV	N	GND
1.205284	37.00	11.3	46	9.0	AV	N	GND

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Figure 75: Test figure of Conducted emissions, Mode C, line live

## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15 B

Clock Radio with Bluetooth M/N:NS-CLBT02

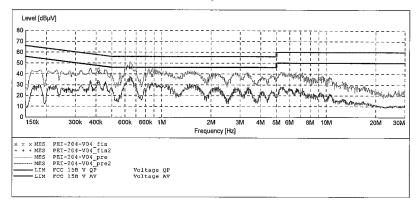
Manufacturer: Compupal Operating Condition: Radio FM

Test Site: 1#Shielding Room Operator: PEI

Operator: FEI 120V/60Hz
Comment: Mains port
Start of Test: 2/4/2013 / 8:53:31AM

SCAN TABLE: "V 150K-30MHz fin"
Short Description:
Start Stop Step Detector Meas.
Frequency Frequency Width
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s Detector Meas. IF
Time Bandw.
QuasiPeak 1.0 s 9 kHz
Average Transducer Bandw.

NSLK8126 2008 Average



# MEASUREMENT RESULT: "PEI-204-V04\_fin"

2	/4/2013 8:56	AM						
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
	0.415134	41.70	11.2	58	15.8	QP	L1	GND
	0.646592	46.10	11.3	56	9.9	QP	L1	GND
	0.875775	38.90	11.3	56	17.1	QP	L1	GND

## MEASUREMENT RESULT: "PEI-204-V04\_fin2"

2/4/2013	8:56A	4						
Freque	- 4	Level	Transd	Limit		Detector	Line	PE
	MHz	dΒμV	dB	dBμV	dB			
0.411	832	31.90	11.2	48	15.7	AV	L1	GND
0.644	016	34.90	11.3	46	11.1	AV	L1	GND
0.875	775	30.00	11.3	46	16.0	AV	Ll	GND

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Figure 76: Test figure of Conducted emissions, Mode C, line neutral

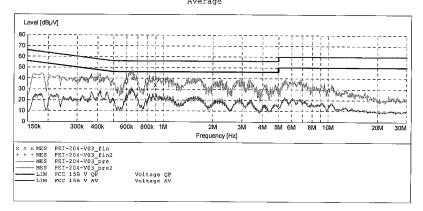
## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15 B

Clock Radio with Bluetooth M/N:NS-CLBT02 Operating Condition: Radio FM
Test Site: 1#Shipar 1#Shielding Room

Test Specification: PEI
Test Specification: N 120V/60Hz
Comment: Mains port
Start of Test: 2/4/2013 / 8:49:58AM

SCAN TABLE: "V 150K-30MHz fin"
Short Description: SUB STD VTERM2 1.70
Start Stop Step Detector Meas. Detector Meas. IF Start Stop Step Frequency Frequency Width 150.0 kHz 30.0 MHz 0.8 % Transducer Bandw. QuasiPeak 1.0 s 9 kHz NSLK8126 2008 Average



## MEASUREMENT RESULT: "PEI-204-V03 fin"

2	/4/2013 8:52	AM						
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
	0.411832	37.50	11.2	58	20.1	QP	N	GND
	0.654382	39.90	11.3	56	16.1	QP	N	GND
	0.897004	34.00	11.3	56	22.0	QP	N	GND

## MEASUREMENT RESULT: "PEI-204-V03\_fin2"

2/4/2013	8:52	AM						
Frequ	ency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.41		26.50 29.20	11.2 11.3	48 46	21.0 16.8	AV AV	N N	GND GND

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Figure 77: Test figure of Conducted emissions, Mode D, line live

## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15 B

Clock Radio with Bluetooth M/N:NS-CLBT02

Manufacturer: Compupal Operating Condition: Aux in

Test Site: 1#Shielding Room PEI Operator:

Test Specification: L 120V/60Hz
Comment: Mains port
Start of Test: 2/4/2013 / 8:33:29AM

SCAN TABLE: "V 150K-30MHz fin"
Short Description: SUB\_STD\_VTERM2 1.70
Start Stop Step Detector Meas. Detector Meas. IF
Time Band Start Stop Step Frequency Frequency Width 150.0 kHz 30.0 MHz 0.8 % Transducer Bandw. QuasiPeak 1.0 s 9 kHz NSLK8126 2008 Average

Level [dBµV] 20M 30M Frequency [Hz] 

# MEASUREMENT RESULT: "PEI-204-V01\_fin"

2/4/2	013 8:42	AM.						
Fr	equency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	đВ			
_								
0	.529596	48.70	11.3	56	7.3	QP	L1	GND
0	.596975	51.90	11.3	56	4.1	QP	L1	GND
0	.662266	53.00	11.3	56	3.0	QP	L1	GND
1	.985196	44.40	11.3	56	11.6	QP	L1	GND

## MEASUREMENT RESULT: "PEI-204-V01\_fin2"

2/4/2013	8:42	AM						
Frequ	ency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.52	9596	40.50	11.3	46	5.5	AV	L1	GND
0.59	6975	40.80	11.3	46	5.2	AV	L1	GND
0.66	4915	42.20	11.3	46	3.8	AV	L1	GND
1.45	9848	39.70	11.3	46	6.3	AV	L1	GND



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Figure 78: Test figure of Conducted emissions, Mode D, line neutral

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### CONDUCTED EMISSION STANDARD FCC PART 15 B

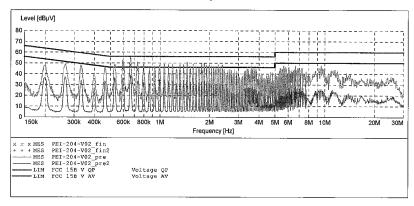
Clock Radio with Bluetooth M/N:NS-CLBT02

Manufacturer: Compupal
Operating Condition: Aux in
Test Site: 1#Shielding Room
Operator: PEI

Test Specification: N 120V/60Hz
Comment: Mains port
Start of Test: 2/4/2013 / 8:43:58AM

SCAN TABLE: "V 150K-30MHz fin"
Short Description: SUB\_STD\_VTERM2 1.70
Start Stop Step Detector Meas.
Frequency Frequency Width 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s Detector Meas. IF
Time Band
QuasiPeak 1.0 s 9 kH Transducer Bandw.

NSLK8126 2008 Average



# MEASUREMENT RESULT: "PEI-204-V02\_fin"

2	/4/2013 8:47	AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
	0.594596	45.10	11.3	56	10.9	OP	N	GND
	0.662266	48.20	11.3	56	7.8	QP	N	GND
	0.731771	44.10	11.3	56	11.9	QP	N	GND
	1.796638	42.20	11.3	56	13.8	QP	N	GND

## MEASUREMENT RESULT: "PEI-204-V02\_fin2"

2/	4/2013 8:47	AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBµV	dB	dΒμV	dB			
	0.529596	34.90	11.3	46	11.1	AV	N	GND
	0.596975	35.00	11.3	46	11.0	AV	N	GND
	0.664915	37.50	11.3	46	8.5	AV	N	GND
	0.995110	33.80	11.3	46	12.2	AV	N	GND

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Figure 79: Test figure of Radiated emissions, Mode C, Below 1GHz, Horizontal

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Tel:+86-0755-26503290 Fax:+86-0755-26503396

Site: 2# Chamber

Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V

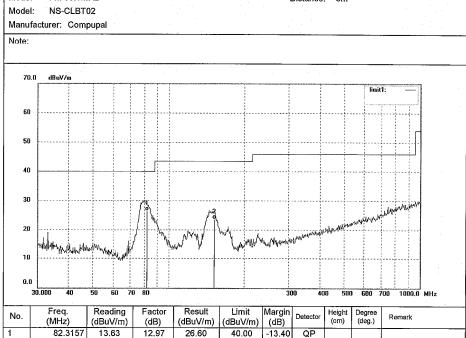
Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

Mode: FM 88.1MHz NS-CLBT02

Time: 16/13/19 Engineer Signature: PEI

Date: 13/02/03/

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	82.3157	13.63	12.97	26.60	40.00	-13.40	QP				
2	151.5567	12.11	11.54	23.65	43.50	-19.85	QP				

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Figure 80: Test figure of Radiated emissions, Mode C, Below 1GHz, Vertical

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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

No.: PYH#814

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 %
EUT: Clock Radio with Bluetooth

Mode: FM 88.1MHz Model: NS-CLBT02 Manufacturer: Compupal Polarization: Vertical

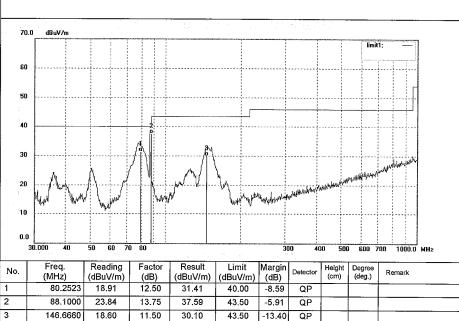
Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 16/21/42

Engineer Signature: PEI

Distance: 3m

Note:



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Figure 81: Test figure of Radiated emissions, Mode C, Above 1GHz, Horizontal

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No.: PYH #820 Polarization: Horizontal

 Standard:
 FCC PK
 Power Source:
 AC 120V/60Hz & DC 3V

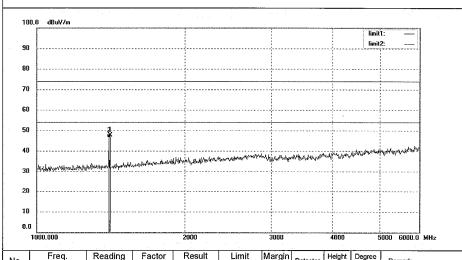
 Test item:
 Radiation Test
 Date: 13/02/03/

Test item: Radiation Test Date: 13/02/03/
Temp.( C)/Hum.(%) 26 C / 55 % Time: 17/06/38

EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: FM 88.1MHz Distance: 3m

Model: NS-CLBT02 Manufacturer: Compupal

Note:



	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
I	1	1407.570	59.51	-11.76	47.75	74.00	-26.25	peak				
l	2	1407.570	58.06	-11.76	46.30	54.00	-7.70	AVG				

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Figure 82: Test figure of Radiated emissions, Mode C, Above 1GHz, Vertical

ACCURATE TECHNOLOGY CO., LTD. Site: 2# Chamber F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Tel:+86-0755-26503290 Fax:+86-0755-26503396 Polarization: Vertical Standard: FCC PK Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 26 C / 55 % Time: 16/59/28 EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode: FM 88.1MHz Distance: 3m Model: NS-CLBT02 Manufacturer: Compupal 100.0 dBuV/m limit1: 90 80 70 40 30 10 0.0 2000 4000 5000 6000.0 MHz Reading Factor Result Limit Margin Height Degree No. Detector Remark (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) (deg.) 1407.614 55.58 43.82 -11.76 74.00 -30.18 peak

1407.614

54.16

-11.76

42.40

54.00

-11.60

AVG

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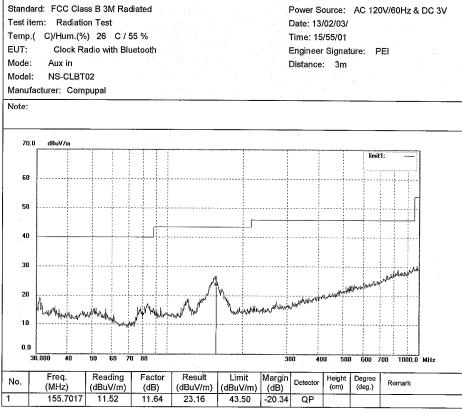
Figure 83: Test figure of Radiated emissions, Mode D, Below 1GHz, Horizontal

Job No.: PYH #811

# 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

Polarization: Horizontal



Page: 1

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Figure 84: Test figure of Radiated emissions, Mode D, Below 1GHz, Vertical



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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

Mode: Aux in Model: NS-CLBT02 Manufacturer: Compupal Polarization: Vertical

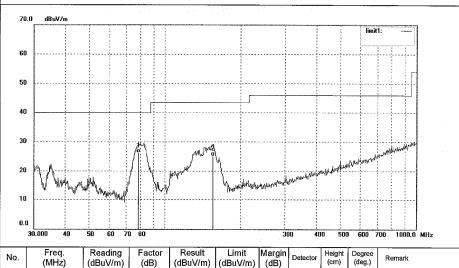
Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 16/04/22

Engineer Signature: PEI

Distance: 3m

Note:



(dBuV/m) (dB)

-13.82

-18.38

QΡ

40.00

43.50

(dBuV/m)

26.18

25.12

(dBuV/m)

14.00

13.52

78.8888

155.3305

(dB)

12.18

11.60

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Figure 85: Test figure of Radiated emissions, Mode D, Above 1GHz, Horizontal

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

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 26 C / 55 % EUT: Clock Radio with Bluetooth

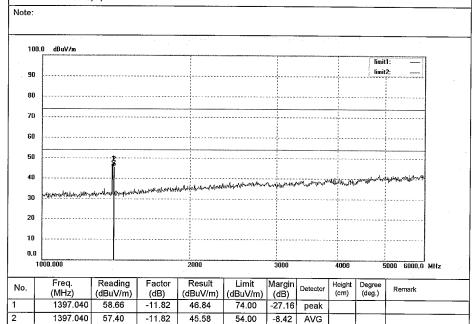
Mode: Aux in NS-CLBT02 Model: Manufacturer: Compupal Polarization: Horizontal

Power Source: AC 120V/60Hz & DC 3V

Date: 13/02/03/ Time: 17/48/17

Engineer Signature: PEI

Distance: 3m



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Figure 86: Test figure of Radiated emissions, Mode D, Above 1GHz, Vertical

ACCURATE TECHNOLOGY CO., LTD. Site: 2# Chamber F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Tel:+86-0755-26503290 Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China Standard: FCC PK Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/02/03/ Temp.( C)/Hum.(%) 26 C / 55 % Time: 17/41/54 Clock Radio with Bluetooth Engineer Signature: PEI Mode: Aux in Distance: 3m Model: NS-CLBT02 Manufacturer: Compupal Note: 100.0 dBuV/m 90 80 70 60 0.0 1000.000 2000 5000 6000.0 MHz Reading Factor Result Limit Freq. Margin Height Degree (deg.) No. Detector Remark (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) 60.38 1397.101 -11.82 48.56 74.00 -25.44 peak

1397.101

58.68

-11.82

46.86

54.00

AVG

-7.14