

Prüfbericht - Nr.: 17030656 001 Seite 1 von Page 1 on Page				
Auftraggeber: Client:	Compupal Group C No.1555 Jiashan Av		ı 314113, Zhejiang, (China
Gegenstand der Prüfung: Test item:	Clock Radio with B	luetooth	-	- 11 - 1 d d
Bezeichnung: Identification:	NS-CLBT01-B NS-CLBT01-W		Serien-Nr.: Serial No.:	n.a.
Wareneingangs-Nr.: Receipt No.:	164002027	•	Eingangsdatum: Date of receipt:	2012-12-19
Zustand des Prüfgegensta Condition of test item at d		Test samples damaged.	received are sufficie	nt for testing and not
	henzhen Accurate Tech Details refer to clause 2	• • •	d.	
Test specification: F F F R R	CC CFR47 Part 15: Subp CC CFR47 Part 15: Subp CC CFR47 Part 15: Subp CC CFR47 Part 15: Subp CC CFR47 Part 15: Subp SS-210 Issue 8 Decemb SS-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	
	Der Prüfgegenstand ent The test item passed the t			ilage(n).
Prüflaboratorium: Testing Laboratory:	TÜV Rheinland (Shenzhe	n) Co., Ltd.		
geprüft/ tested by: 2013-03-01 Sam Lin/ Proje	ect Manager	ontrolliert/ revie	Winnie Hou/ Te	
Datum Name/Stellur Date Name/Position		Datum Date	Name/Stellung Name/Position	Unterschrift Signature
Sonstiges/ Other Aspects:				
F(ail) = entsp N/A = nicht	oricht Prüfgrundlage oricht nicht Prüfgrundlage anwendbar getestet	Abbreviati	F(ail) = failed N/A = not apj N/T = not tes	plicable ited

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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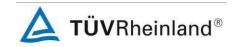
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2.2 List of Test and Measurement Instruments

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. Bothe models are identical except different color of enclosure. 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-CLBT01-B, NS-CLBT01-W
FCC ID	Z5YNS-CLBT01
IC	10828A-CLBT01

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	0.00216W (3.35dBm)

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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

Due to the models' difference indicated in clause 3.1, full test was applied on NS-CLBT01-B.

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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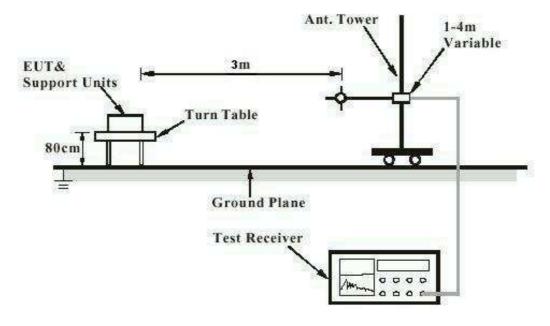
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4.4 Countermeasures to achieve EMC Compliance

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

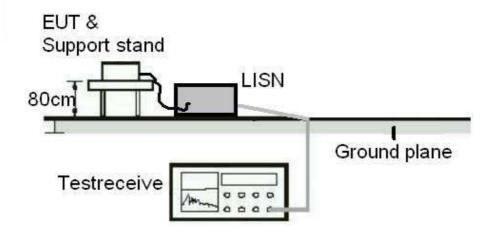
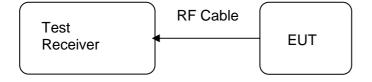


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement





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5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: Passed

Test date : 2013-01-26

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

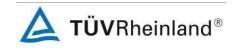
RSS-Gen 7.1.4

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 2013-01-31

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	3.35	0.00216	0.125
Middle Channel	2441	3.22	0.00210	0.125
High Channel	2480	2.72	0.00187	0.125

Remark: RBW is 1MHz

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

Channel	Channel Frequency	Peak Output Power		Limit
	(MHz)	(dBm)	(W)	(W)
Low Channel	2402	2.95	0.00197	0.125
Middle Channel	2441	2.98	0.00199	0.125
High Channel	2480	2.49	0.00177	0.125

Remark: RBW is 3MHz



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5.1.3 20dB Bandwidth

RESULT: Passed

Date of testing Test standard 2013-01-26

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	924	/	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	1266	/	Pass
Mid Channel	2441	1264	/	Pass
High Channel	2480	1260	/	Pass



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5.1.4 99% Bandwidth

RESULT: Passed

Date of testing : 2013-01-26

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

Channel
Chann **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	936	/	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	1230	/	Pass
Mid Channel	2441	1242	/	Pass
High Channel	2480	1248	/	Pass



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

RESULT: Passed

Date of testing 2013-01-26

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.

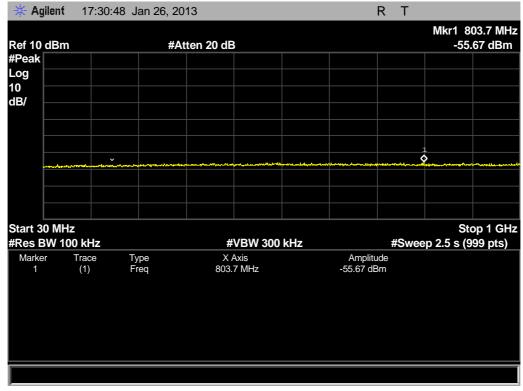


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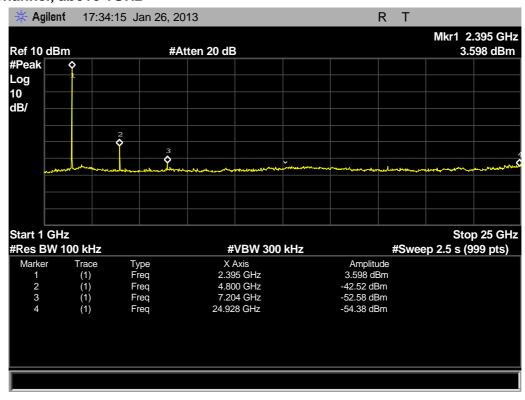
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Test Plot of 100kHz Bandwidth of Frequency Band Edge, GFSK modulation

Low Channel, below 1GHz



Low Channel, above 1GHz



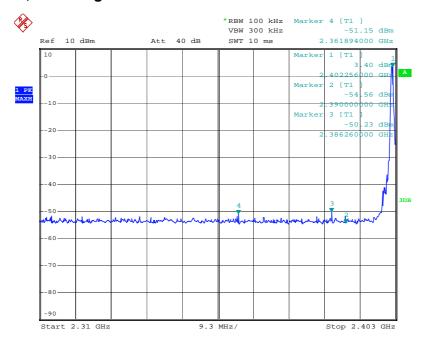


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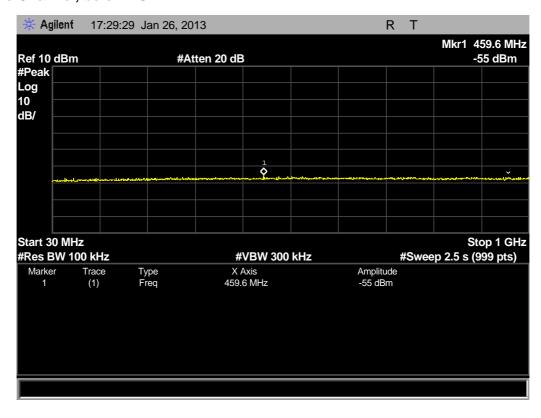
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Low Channel, Band Edge



Date: 26.JAN.2013 11:31:01

Middle Channel, below 1GHz



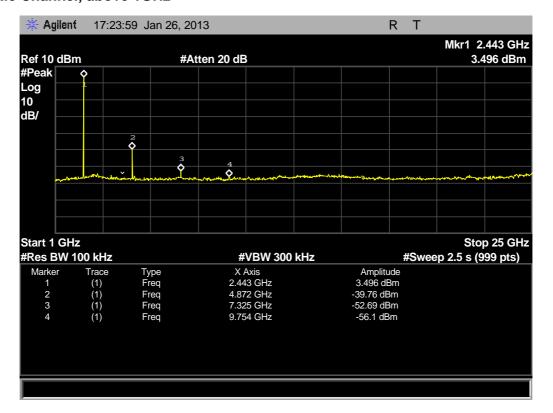


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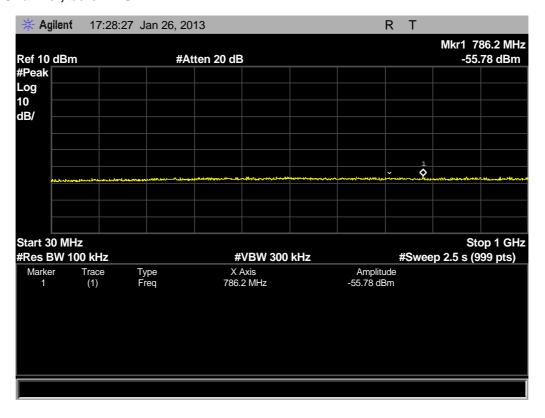
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Middle Channel, above 1GHz



High Channel, below 1GHz

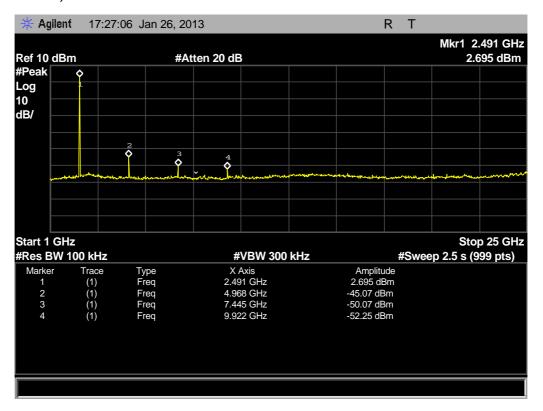




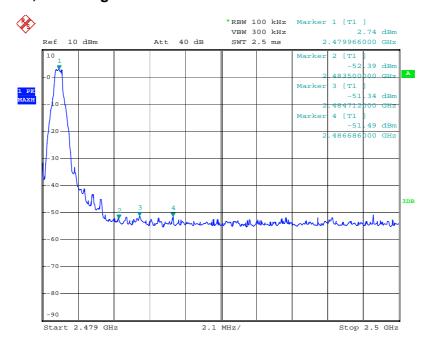
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High Channel, above 1GHz



High Channel, Band Edge



Date: 26.JAN.2013 11:33:00

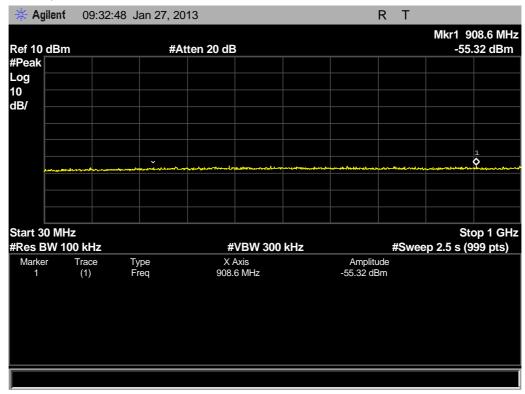


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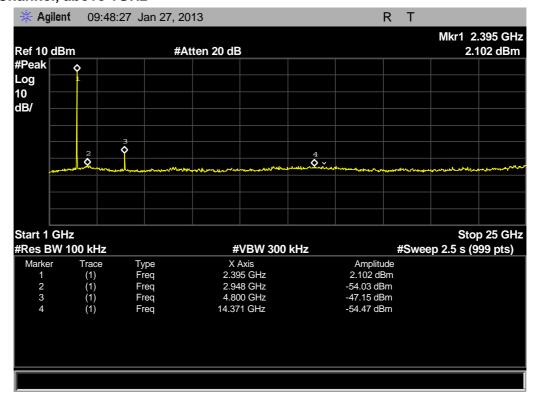
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Test Plot of 100kHz Bandwidth of Frequency Band Edge, 8DPSK modulation

Low Channel, below 1GHz



Low Channel, above 1GHz



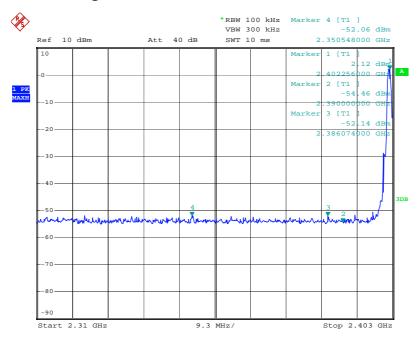


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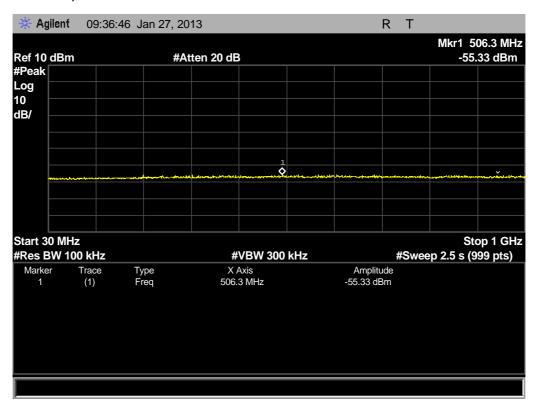
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Low Channel, Band Edge



Date: 26.JAN.2013 11:28:04

Middle Channel, below 1GHz

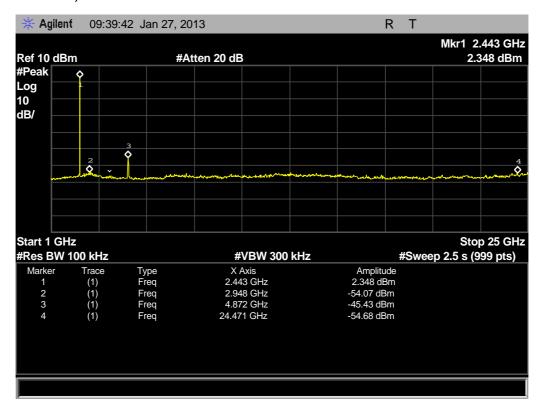


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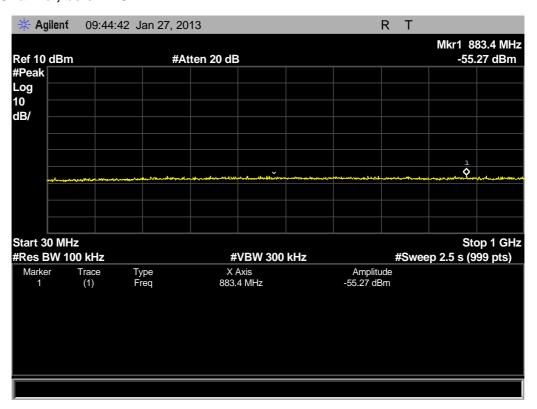
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Middle Channel, above 1GHz



High Channel, below 1GHz





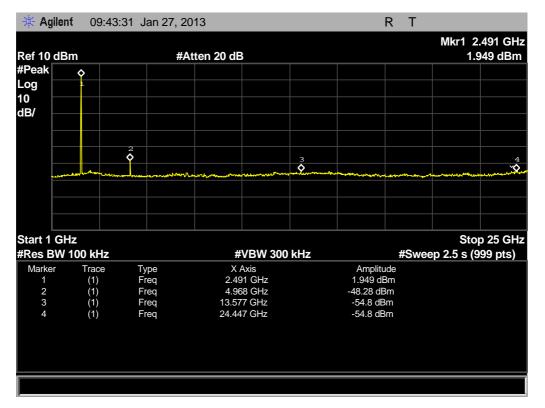
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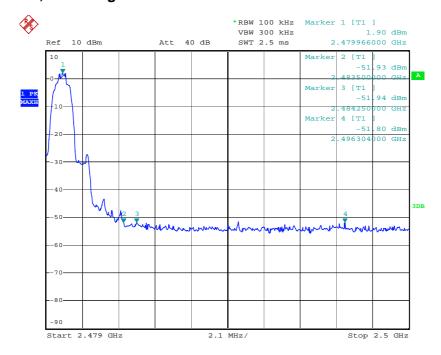
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High Channel, above 1GHz



High Channel, Band Edge



Date: 26.JAN.2013 11:34:31



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5.1.6 Spurious Emission

RESULT: Passed

Date of testing 2013-01-27 to 2013-01-28

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

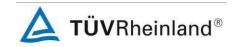
Test Channel :
Operation mode :
Ambient temperature : A, C **24**℃ Relative humidity 48% Atmospheric pressure : 101 kPa

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 2013-01-26

Test standard FCC part 15.247(a)(1)

RSS-210 A8.1 (b)

Basic standard ANSI C63.4: 2003

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

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		20dB bandwidth	1 433
Mid Channel	2441	1	≥ 25kHz or 2/3 of	Pass
Adjacency Channel	2442	l	20dB bandwidth	F 455
High Channel	2480	1	≥ 25kHz or 2/3 of	Pass
Adjacency Channel	2479	ı	20dB bandwidth	



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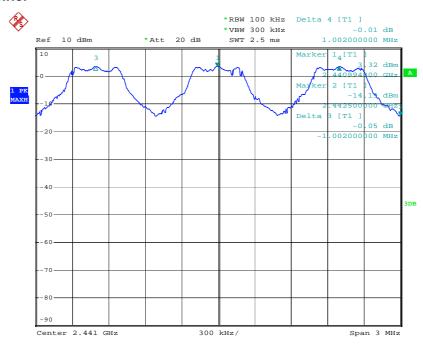
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Test Plot of Frequency Separation

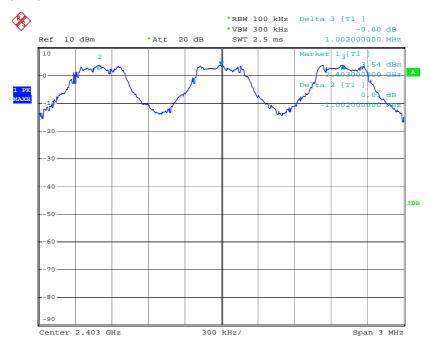
Low Channel

Test Report No.



Date: 26.JAN.2013 09:15:06

Middle Channel



Date: 26.JAN.2013 09:18:30



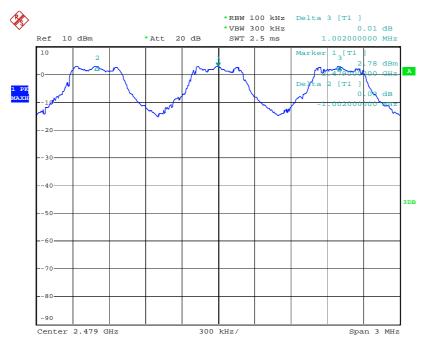
Products

Prüfbericht - Nr.: 17030656 001

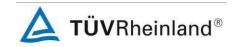
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Test Report No.

High Channel



Date: 26.JAN.2013 09:22:01



Products

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Test Report No.

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5.1.8 Number of hopping frequency

RESULT: Passed

Date of testing 2013-01-26

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

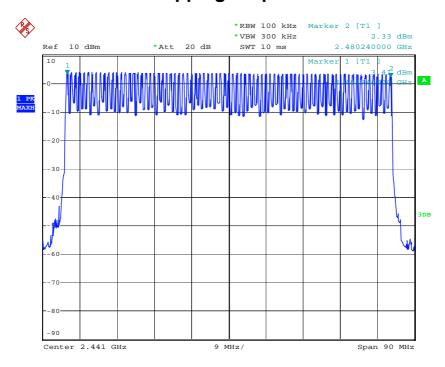
Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2400 to 2483.5 MHz	79	≥15	Pass



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Test Plot of Number of hopping frequencies



Date: 26.JAN.2013 09:09:46



Products

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Test Report No.

5.1.9 Time of Occupancy

RESULT: Passed

Date of testing 2013-01-26

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
Low Channel	DH1	0.55	0.18	0.4	Pass
	DH3	1.82	0.29	0.4	Pass
	DH5	3.09	0.33	0.4	Pass
Mid Channel	DH1	0.55	0.17	0.4	Pass
	DH3	1.84	0.29	0.4	Pass
	DH5	3.12	0.33	0.4	Pass
High Channel	DH1	0.55	0.17	0.4	Pass
	DH3	1.84	0.29	0.4	Pass
	DH5	3.09	0.33	0.4	Pass



Products

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Test Report No.

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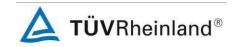
Table 14: Test result of Time of Occupancy, 8DPSK modulation

Channel	Data Mode	Pulse width (ms)	Measured Dwell time (s)	Limit (s)	Result
Low Channel	DH1	0.57	0.18	0.4	Pass
	DH3	1.84	0.29	0.4	Pass
	DH5	3.09	0.33	0.4	Pass
Mid Channel	DH1	0.56	0.18	0.4	Pass
	DH3	1.84	0.29	0.4	Pass
	DH5	3.09	0.33	0.4	Pass
High Channel	DH1	0.57	0.18	0.4	Pass
	DH3	1.84	0.29	0.4	Pass
	DH5	3.09	0.33	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 2.16mW 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 2.16mW <10mW, hence the EUT is exclueded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile and Portable RF Exposure.Guidance v05.

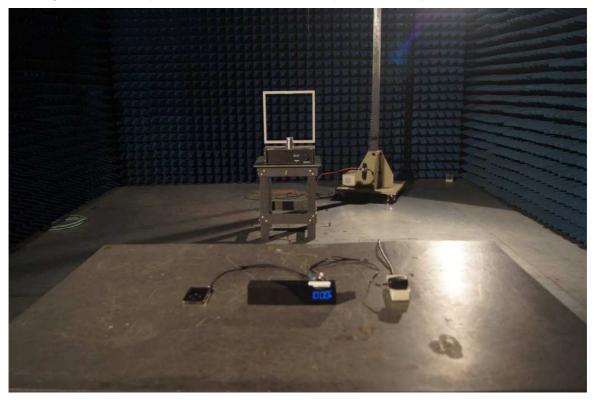


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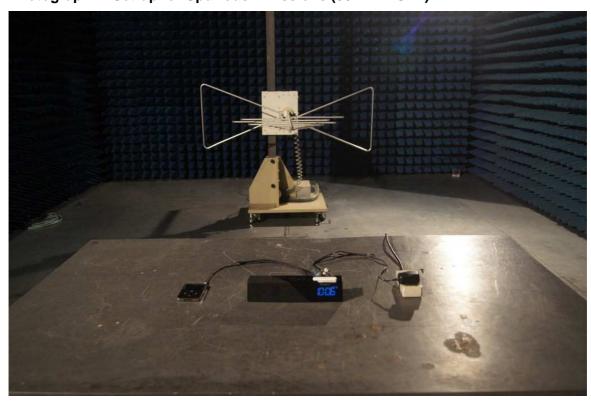
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7. Photographs of the Test Set-Up

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



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





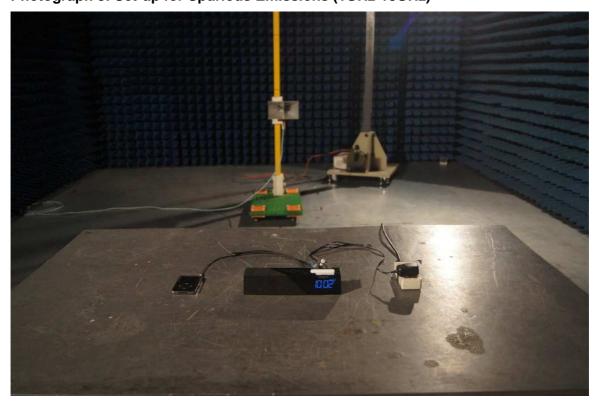
Produkte Products

Test Report No.

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



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





Produkte Products

Test Report No.

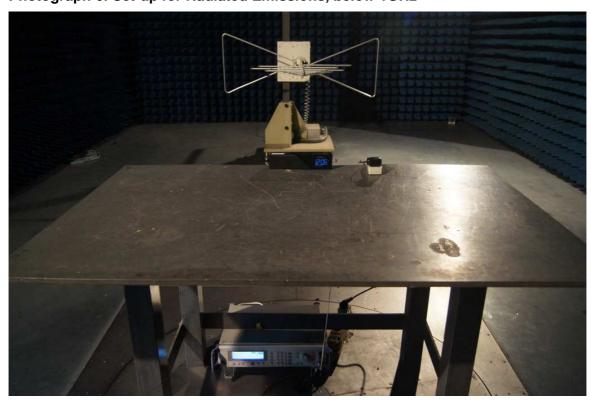
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Photograph 5: Set-up for Conducted Emissions



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





Produkte

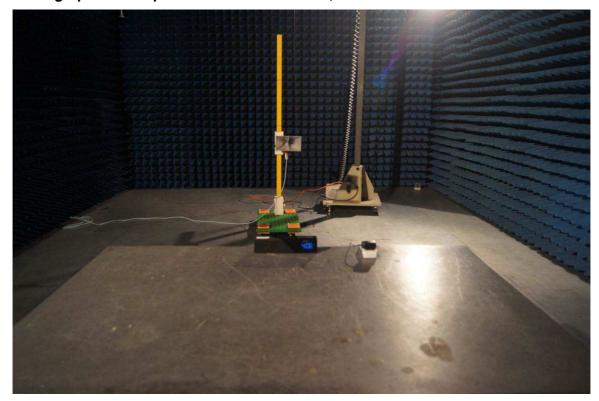
Products

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





Produkte

Products

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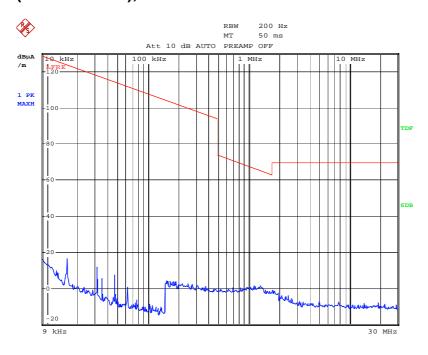
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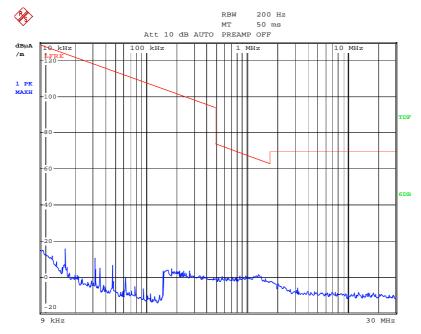


Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz - 30MHz), GFSK Modulation



Date: 27.JAN.2013 16:22:27

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



Date: 27.JAN.2013 16:24:27



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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

Job No.: PYH #565

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-CLBT01

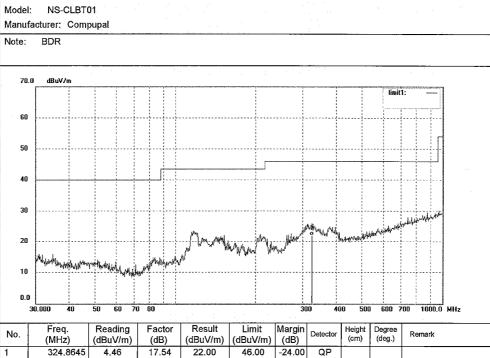
Polarization: Horizontal

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

Date: 13/01/27/ Time: 14/41/28

Engineer Signature: PEI

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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Job No.: PYH #564
Standard: FCC Class B 3M Radiated
Test item: Radiation Test

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

Model: TX 2402MHz
Model: NS-CLBT01
Manufacturer: Compupal

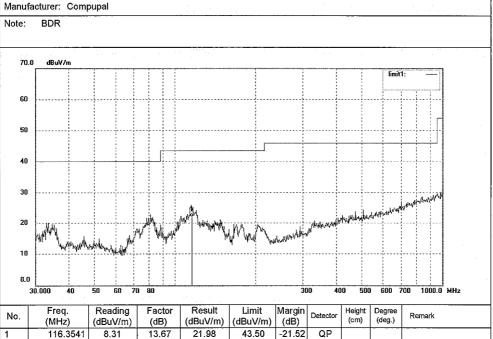
Polarization: Vertical

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

Date: 13/01/27/ Time: 14/34/50

Engineer Signature: PEI

Distance: 3m



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



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Job No.: PYH #529

Standard: FCC Class B 3M Radiated

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

Model: TX 2402MHz
Model: NS-CLBT01
Manufacturer: Compupal

Note: BDR

3

4

2402.010

4804.015

4804.015

101.97

51.78

46.36

-7.45

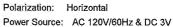
-0.30

-0.30

94.52

51.48

46.06

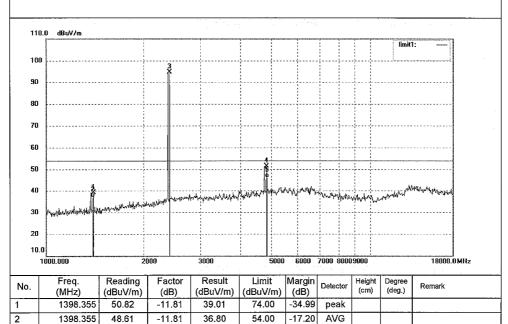


Power Source: AC 120V/60Hz & DC 3V

Date: 13/01/27/ Time: 8/33/21

Engineer Signature: PEI

Distance: 3m



1

74,00

54.00

1

-22.52

-7,94

peak

peak

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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Polarization:

Date: 13/01/27/

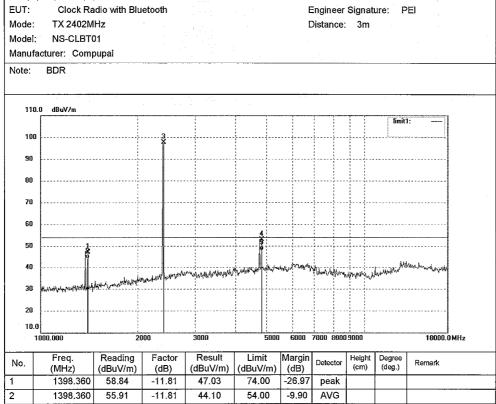
Time: 8/46/20

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

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

Standard: FCC Class B 3M Radiated

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



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398.360	58.84	-11.81	47.03	74.00	-26.97	peak			
2	1398.360	55.91	-11.81	44.10	54.00	-9.90	AVG			
3	2402.021	105.06	-7.45	97.61	1	1	peak			
4	4804.035	53.11	-0.30	52.81	74.00	-21.19	peak			
5	4804.035	48.11	-0.30	47.81	54.00	-6.19	AVG			



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



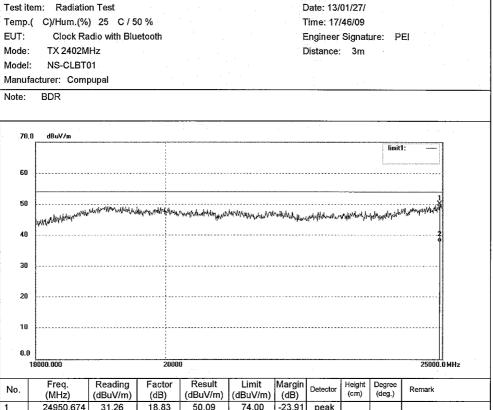
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Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

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

Test item: Radiation Test



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	31.26	18.83	50.09	74.00	-23.91	peak			
2	24950,674	18.95	18.83	37.78	54.00	-16.22	AVG			

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



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Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Clock Radio with Bluetooth Mode: TX 2402MHz

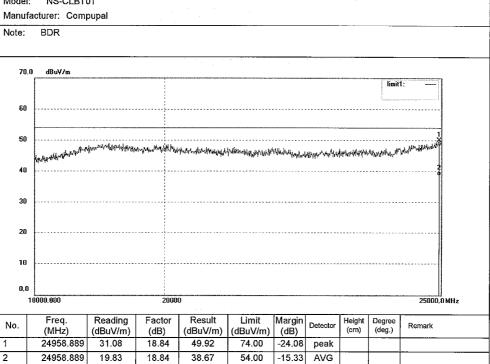
Model: NS-CLBT01 Polarization: Vertical

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

Date: 13/01/27/ Time: 17/54/43

Engineer Signature: PEI

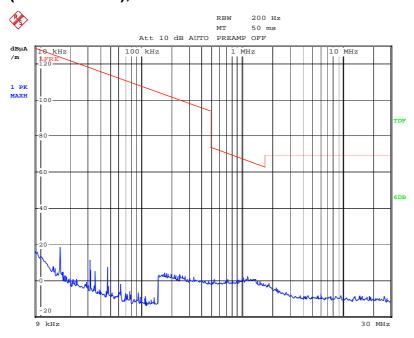
Distance: 3m





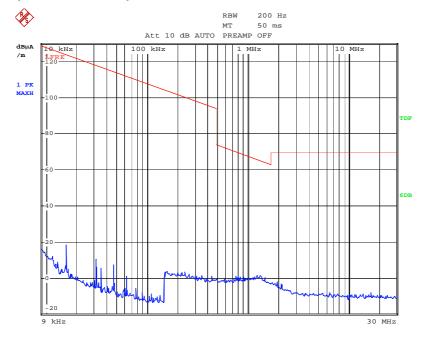
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Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz - 30MHz), GFSK Modulation



Date: 27.JAN.2013 16:35:43

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



Date: 27.JAN.2013 16:37:37



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

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Job No.: PYH #566

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-CLBT01
Manufacturer: Compupal

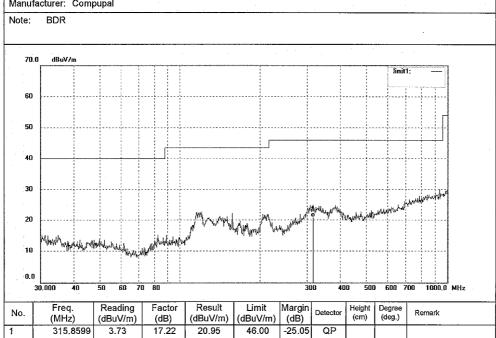
Polarization: Horizontal

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

Date: 13/01/27/ Time: 14/48/28

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 Fax:+86-0755-26503396

Job No.: PYH #567

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-CLBT01
Manufacturer: Compupal

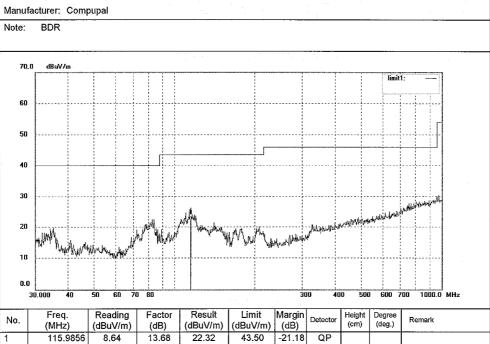
Polarization: Vertical

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

Date: 13/01/27/ Time: 14/55/26

Engineer Signature: PEI

Distance: 3m



17030656 001



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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

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

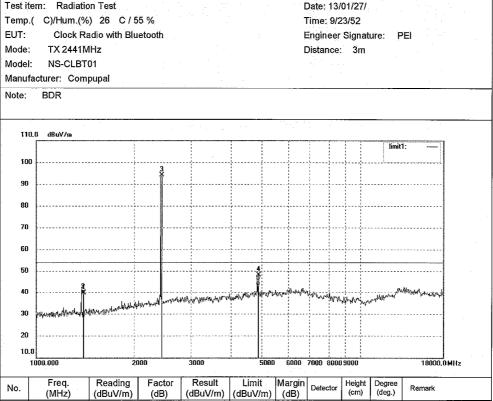
Polarization: Horizontal

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

Job No.: PYH #533

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	Height (cm)	Degree (deg.)	Remark	
1	1398.278	51.51	-11.81	39.70	74.00	-34.30	peak				
2	1398.278	51.04	-11.81	39.23	54.00	-14.77	AVG				
3	2441.015	101.36	-7.35	94.01	1	/	peak				
4	4882.033	48.03	0.14	48.17	74.00	-25.83	peak				
5	4882.033	43.06	0.14	43.20	54.00	-10.80	AVG				



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

EUT:

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

Site: 2# Chamber

Job No.: PYH #534 Standard: FCC Class B 3M Radiated

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

Clock Radio with Bluetooth Mode: TX 2441MHz NS-CLBT01 Model:

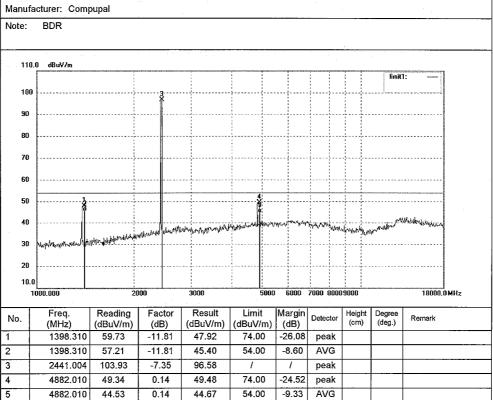
Polarization: Vertical

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

Date: 13/01/27/ Time: 9/35/08

Engineer Signature: PEI

Distance: 3m



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Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz), 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 #573

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-CLBT01 Manufacturer: Compupal

24942.463

24942.463

31.49

20.50

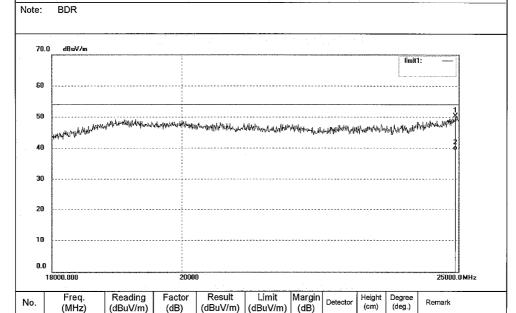
Polarization: Horizontal

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

Date: 13/01/27/ Time: 18/12/00

Engineer Signature: PEI

Distance: 3m



74.00

54.00

-23.69

-14.68

peak

AVG

50.31

39.32

18.82

18.82



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Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz - 25GHz), 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 Power Source: AC 120V/60Hz & DC 3V

Standard: FCC Class B 3M Radiated

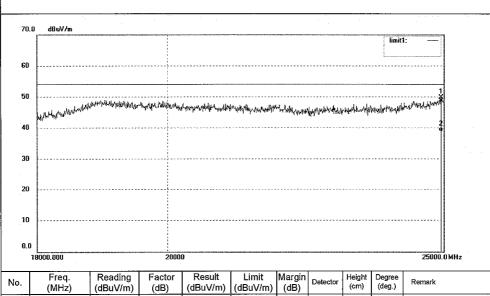
Test item: Radiation Test Date: 13/01/27/ Temp.(C)/Hum.(%) 25 C / 50 % Time: 18/03/19

EUT: Clock Radio with Bluetooth Engineer Signature: PEI Mode:

TX 2441MHz Distance: 3m

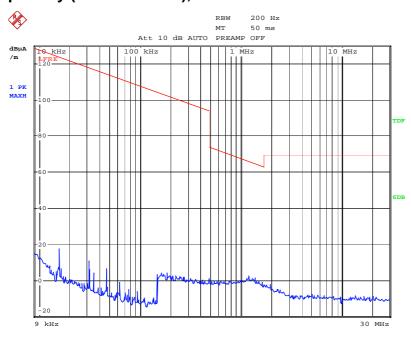
NS-CLBT01 Model: Manufacturer: Compupal BDR

Note:



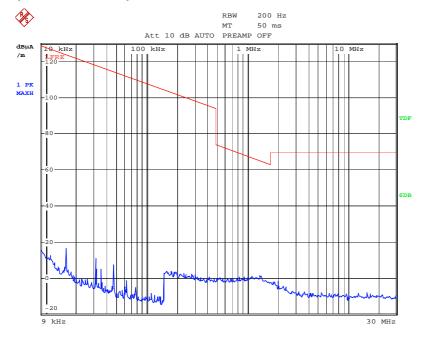
24950.674 31.04 18.83 49.87 74.00 -24.13 24950.674 19.95 18.83 38.78 54.00 -15.22 AVG Page 18 of 81

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



Date: 27.JAN.2013 16:41:30

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



Date: 27.JAN.2013 16:43:20

17030656 001



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Figure 19: Test figure of spurious emissions, mode A.3, Horizontal 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

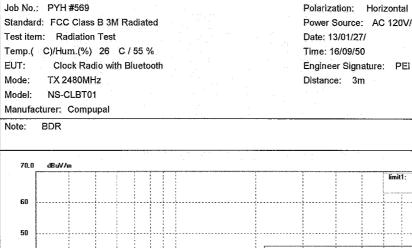
Polarization: Horizontal

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

Site: 2# Chamber

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

Date: 13/01/27/ Time: 16/09/50



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0.0	30.000 40	50 60 7	0 80			30	10 40	0 500	600 7	700 1000.0	MHz
Vo.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
	319.8599	5.02	17.33	22.35	46.00	-23.65	QP				

17030656 001

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Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz), GFSK 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 #568

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-CLBT01

Manufacturer: Compupal

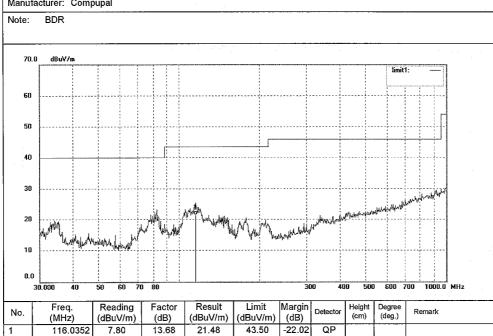
Polarization: Vertical

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

Date: 13/01/27/ Time: 16/02/16

Engineer Signature: PEI

Distance: 3m



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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

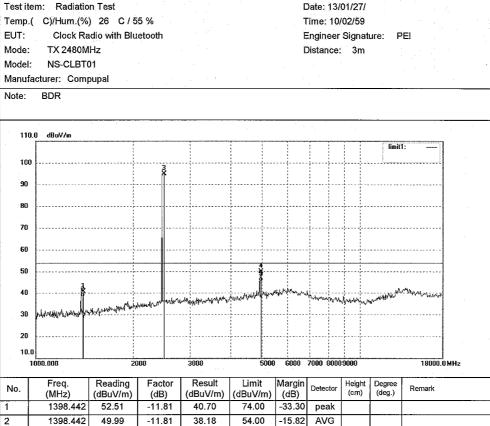
Polarization: Horizontal

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

Job No.: PYH #536

Standard: FCC Class B 3M Radiated

Test item: Radiation Test



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398,442	52.51	-11.81	40.70	74.00	-33.30	peak			
2	1398.442	49.99	-11.81	38.18	54.00	-15.82	AVG			
3	2480.040	102.22	-7.37	94.85	1	1	peak			
4	4960.028	49.31	0.52	49.83	74.00	-24.17	peak			
5	4960.028	44.85	0.52	45.37	54.00	-8.63	AVG			

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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

Polarization:

Date: 13/01/27/

Vertical

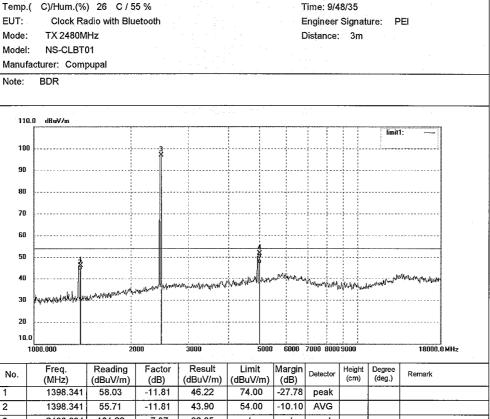
Power Source: AC 120V/60Hz & DC 3V

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

Job No.: PYH #535

Standard: FCC Class B 3M Radiated

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



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398.341	58.03	-11.81	46.22	74.00	-27.78	peak			
2	1398.341	55.71	-11.81	43.90	54.00	-10.10	AVG			
3	2480.034	104.22	-7.37	96.85	1	1	peak			
4	4960.024	51.03	0.52	51.55	74.00	-22.45	peak			
5	4960.024	46.29	0.52	46.81	54.00	-7.19	AVG			



Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz -25GHz), 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.(%) 25 C / 50 %

EUT: Clock Radio with Bluetooth

Mode: TX 2480MHz NS-CLBT01 Model: Manufacturer: Compupal

24942.463

24942.463

31.24

19.38

Polarization: Horizontal

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

Date: 13/01/27/ Time: 18/21/21

Engineer Signature: PEI

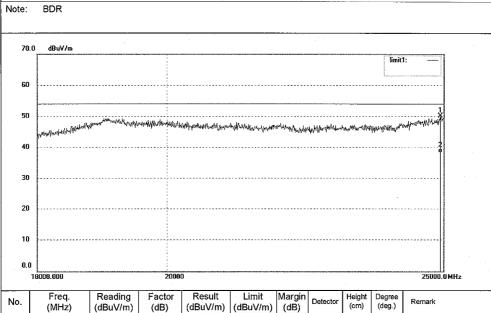
Distance: 3m

peak

AVG

-23.94

-15.80



74.00

54.00

50,06

38.20

18.82

18.82



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

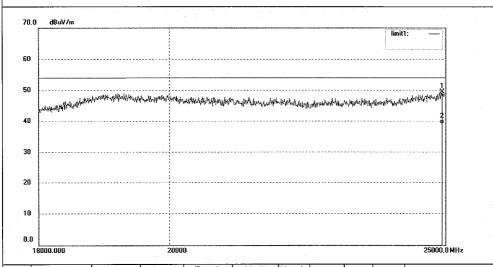
Job No.:PYH #575Polarization:VerticalStandard:FCC Class B 3M RadiatedPower Source:AC 120V/60Hz & DC 3VTest item:Radiation TestDate: 13/01/27/

Temp.(C)/Hum.(%) 25 C / 50 % Time: 18/30/08

EUT: Clock Radio with Bluetooth Engineer Signature: PEI

Mode: TX 2480MHz Model: NS-CLBT01 Manufacturer: Compupal

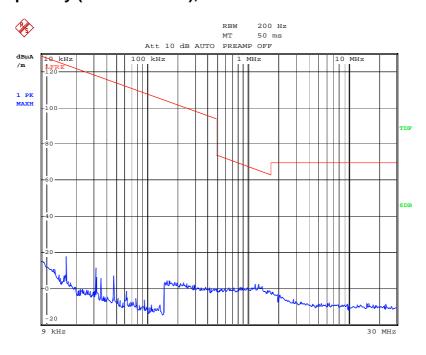
Note: BDR



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24942.463	30.64	18.82	49.46	74.00	-24.54	peak			
2	24942.463	20.27	18.82	39.09	54.00	-14.91	AVG			

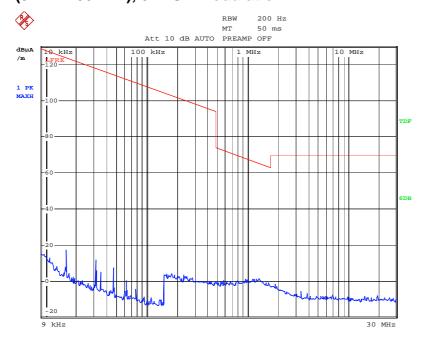


Figure 25: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 27.JAN.2013 16:48:02

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



Date: 27.JAN.2013 16:50:21

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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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Mode:

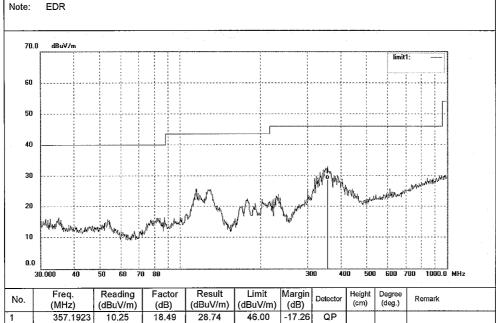
TX 2402MHz

Model: NS-CLBT01 Manufacturer: Compupal



Distance: 3m

Polarization: Horizontal





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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

Date: 13/01/27/

Time: 13/22/52

Distance: 3m

Engineer Signature: PEI

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

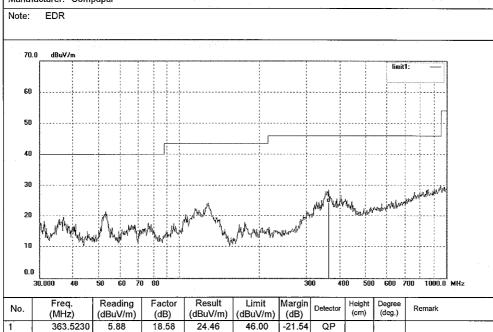
Polarization: Vertical Power Source: AC 120V/60Hz & DC 3V

Standard: FCC Class B 3M Radiated

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

EUT: Clock Radio with Bluetooth

Mode: TX 2402MHz NS-CLBT01 Model: Manufacturer: Compupal





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

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Job No.: PYH #540

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-CLBT01 Manufacturer: Compupal

4804.015

4804.015

4

46.98

41.63

Polarization: Horizontal

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

Date: 13/01/27/ Time: 10/54/38

Engineer Signature: PEI

Distance: 3m

Note: EDR 110.0 dBuV/m 90 60 50 40 20 10.0 18000.0 MHz 1000.000 7000 80009000 Reading Factor Result Limit Margin Degree (deg.) Remark (dBuV/m) (MHz) (dBuV/m) (dB) (dBuV/m) (dB) 1398.347 50.89 -11.81 39.08 74.00 -34.92 peak 2 1398.347 48.41 -11.81 36,60 54.00 -17.40 AVG 90.86 2402.009 98.31 -7.45 3 peak

74.00

54.00

-27.32

-12.67

peak

AVG

46.68

41.33

-0.30

-0.30

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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

Polarization:

Date: 13/01/27/

Time: 10/41/40

Engineer Signature: PEI

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

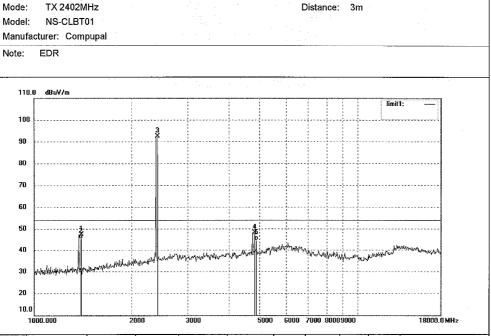
Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

Mode: TX 2402MHz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398.403	59.08	-11.81	47.27	74.00	-26.73	peak			
2	1398,403	57.31	-11.81	45.50	54.00	-8.50	AVG			
3	2402.005	99.73	-7.45	92.28	1	1	peak			
4	4803.997	48.41	-0.30	48.11	74.00	-25.89	peak			
5	4803.997	44.90	-0.30	44.60	54.00	-9.40	AVG			



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

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Job No.: PYH #576

Standard: FCC Class B 3M Radiated

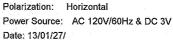
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Clock Radio with Bluetooth

Model: TX 2402MHz
Model: NS-CLBT01
Manufacturer: Compupal

24917.845

2

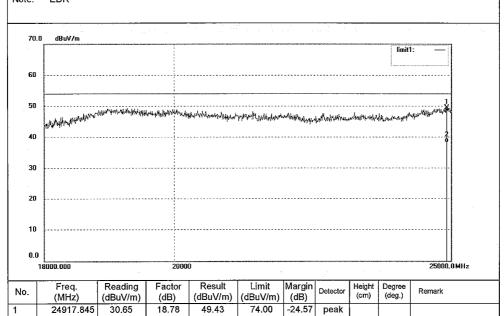
Note: EDR



Date: 13/01/27/ Time: 18/38/33

Engineer Signature: PEI

Distance: 3m



54.00

-15.82

AVG

18.78

19.40

38.18

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

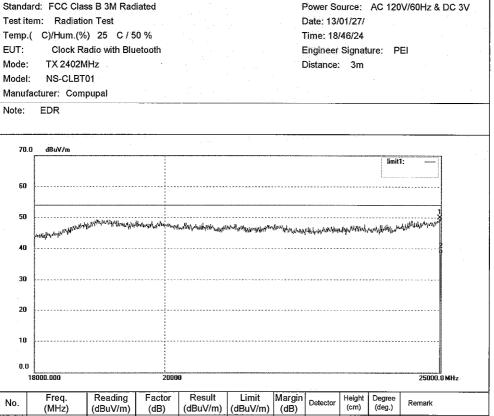
ACCURATE TECHNOLOGY CO., LTD.

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

Polarization:

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

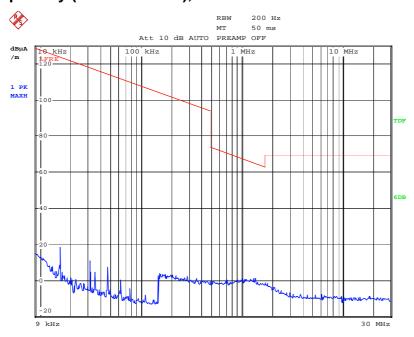
Standard: FCC Class B 3M Radiated



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	24983.547	31.02	18.88	49.90	74.00	-24.10	peak			
2	24983.547	19.51	18.88	38.39	54.00	-15.61	AVG			

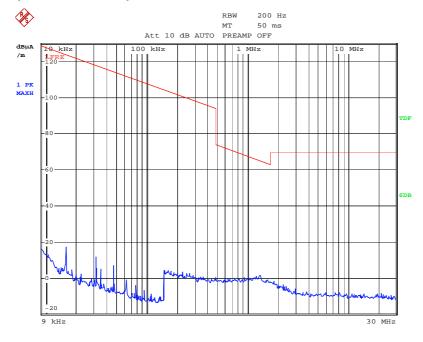


Figure 33: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz - 30MHz), 8DPSK Modulation



Date: 27.JAN.2013 16:54:27

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



Date: 27.JAN.2013 16:56:34



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



Job No.: PYH #556

ACCURATE TECHNOLOGY CO., LTD.

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

Polarization: Horizontal

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

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

Fax:+86-0755-26503396

Date: 13/01/27/ Time: 13/37/16

Engineer Signature: PEI

Distance: 3m

Clock Radio with Bluetooth TX 2441MHz Mode: Model: NS-CLBT01 Manufacturer: Compupal

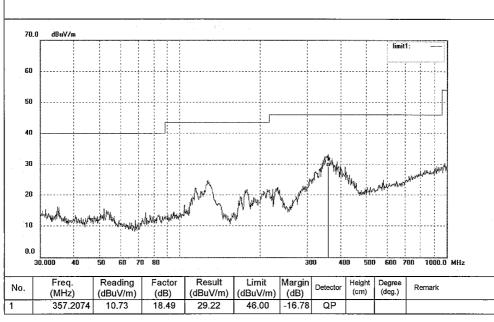
Test item: Radiation Test

Standard: FCC Class B 3M Radiated

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

EDR Note:

EUT:



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Figure 36: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GMHz), 8DPSK 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 #555

Standard: FCC Class B 3M Radiated

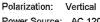
Test item: Radiation Test

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

EUT: Clock Radio with Bluetooth

Model: TX 2441MHz
Model: NS-CLBT01
Manufacturer: Compupal

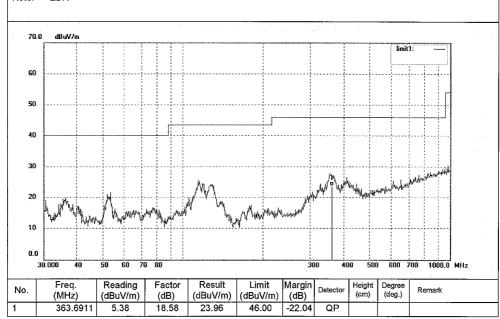
Note: EDR



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

Date: 13/01/27/ Time: 13/29/14

Engineer Signature: PEI



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Figure 37: Test figure of spurious emissions, mode A.2, 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 #544

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-CLBT01
Manufacturer: Compupal

2441.006

4882.012

4882.012

3

4

98.51

45.27

40.66

-7.35

0.14

0.14

91.16

45.41

40.80

Note: EDR

Polarization: Horizontal

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

Date: 13/01/27/ Time: 11/47/25

Engineer Signature: PEI

Distance: 3m

peak

peak

AVG

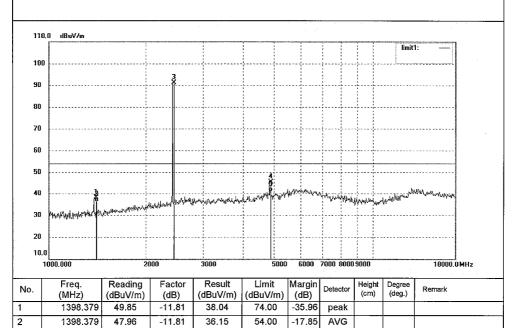
1

-28.59

-13.20

74.00

54.00



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

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Job No.: PYH #543

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-CLBT01
Manufacturer: Compupal

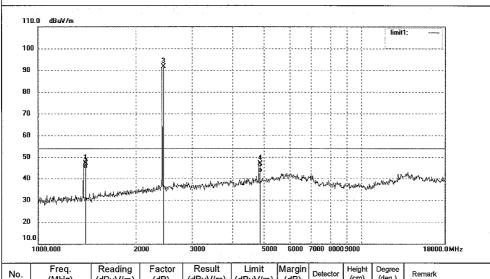
Note: EDR

Polarization: Vertical

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

Date: 13/01/27/ Time: 11/36/02

Engineer Signature: PEI



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398,435	58.90	-11.81	47.09	74.00	-26.91	peak			
2	1398.435	56.41	-11.81	44.60	54.00	-9.40	AVG			
3	2441.021	98.92	-7.35	91.57	1	1	peak			
4	4882.040	46.84	0.14	46.98	74.00	-27.02	peak			
5	4882.040	42.75	0.14	42.89	54.00	-11.11	AVG			



Figure 39: Test figure of spurious emissions, mode A.2, 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

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

Job No.: PYH #579 Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 % EUT: Clock Radio with Bluetooth

Mode: TX 2441MHz NS-CLBT01 Model: Manufacturer: Compupal

24967.105

20.01

Engineer Signature: PEI

Distance: 3m

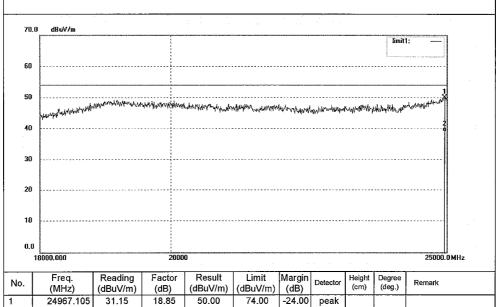
Date: 13/01/27/

Time: 19/04/11

Polarization: Horizontal

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





54.00

-15.14

AVG

38.86

18.85

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

Polarization: Vertical

Date: 13/01/27/ Time: 18/55/13

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

JOD NO.: PYH #5/8

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Clock Radio with Bluetooth

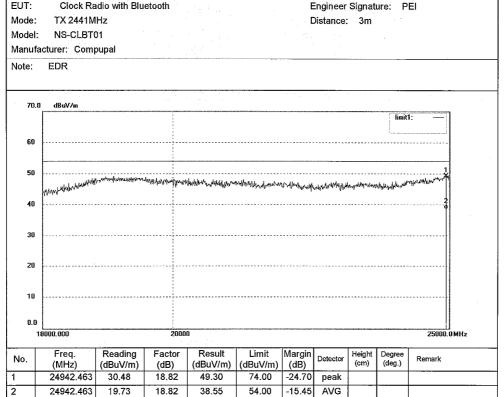
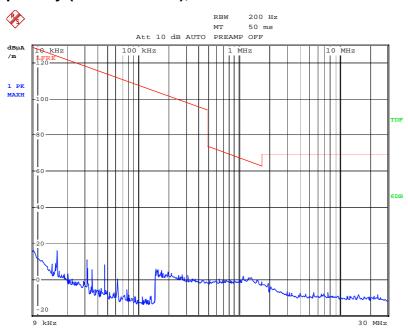


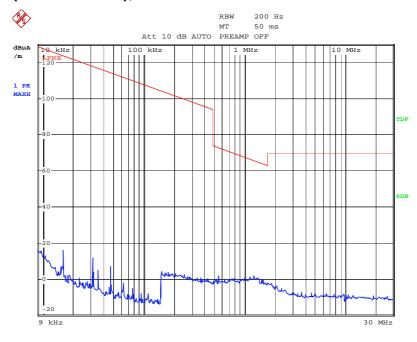


Figure 41: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 27.JAN.2013 17:03:15

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



Date: 27.JAN.2013 17:05:04

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

ACCURATE TECHNOLOGY CO., LTD.

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

Polarization: Horizontal

Date: 13/01/27/

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

Job No.: PYH #557

Standard: FCC Class B 3M Radiated

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

Mode: NS-CLBT01 Model: Manufacturer: Compupal

Note:

50

40

30

0.0

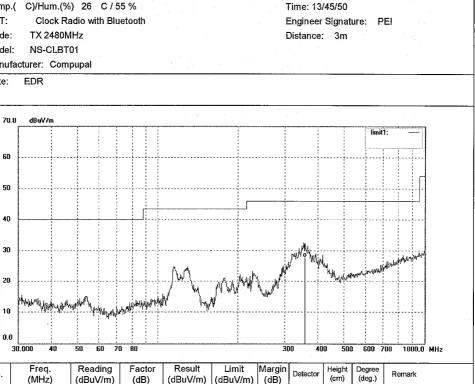
(MHz)

357.1936

(dBuV/m)

9.46

No.



(dBuV/m)

27.95

(dBuV/m)

46.00

(dB)

(dB)

18.49

Remark

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Figure 44: Test figure of spurious emissions, mode A.3, 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

Job No.: PYH #558

Standard: FCC Class B 3M Radiated

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

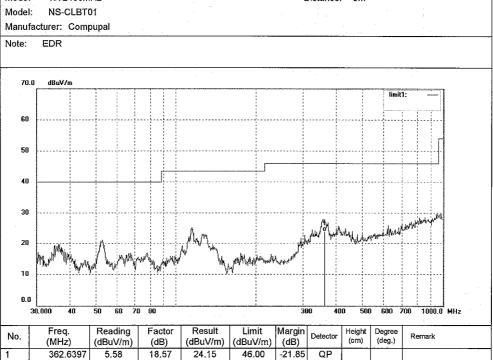
TX 2480MHz Mode: NS-CLBT01

Polarization:

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

Date: 13/01/27/ Time: 13/54/50

Engineer Signature: PEI



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

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Polarization: Horizontal

Date: 13/01/27/

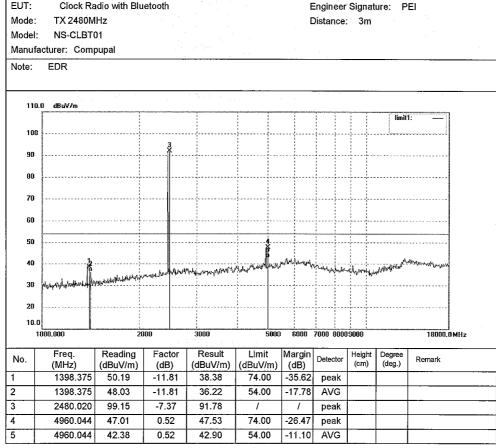
Time: 11/58/30

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

Job No.: PYH #545

Standard: FCC Class B 3M Radiated

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



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Figure 46: Test figure of spurious emissions, mode A.3, Vertical 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 #546

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-CLBT01 Manufacturer: Compupal

Note: EDR

4

47.28

42.68

4960.045

0.52

0.52

43.20

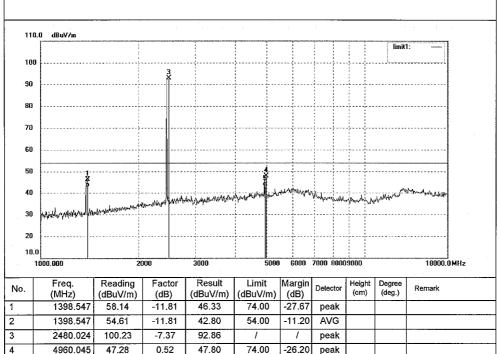
Polarization: Vertical

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

Date: 13/01/27/ Time: 12/09/16

Engineer Signature: PEI

Distance: 3m



74.00

54.00

-26.20

-10.80

peak

AVG

TÜVRheinland®

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

AIG

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Job No.: PYH #580

Standard: FCC Class B 3M Radiated

Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: Clock Radio with Bluetooth

Mode: TX 2480MHz
Model: NS-CLBT01
Manufacturer: Compupal

Polarization: Horizontal

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

Date: 13/01/27/ Time: 19/15/02

Engineer Signature: PEI

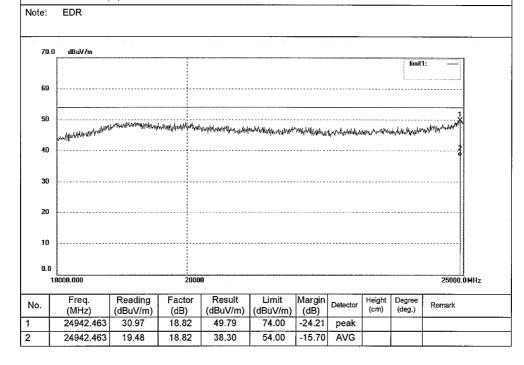




Figure 48: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz - 25GHz), 8DPSK Modulation

ACCURATE TECHNOLOGY CO., LTD.

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

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

Job No.: PYH #581

Mode:

Standard: FCC Class B 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 50 % EUT: Clock Radio with Bluetooth

TX 2480MHz

Model: NS-CLBT01 Manufacturer: Compupal Polarization: Vertical

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

Date: 13/01/27/ Time: 19/24/53

Engineer Signature: PEI

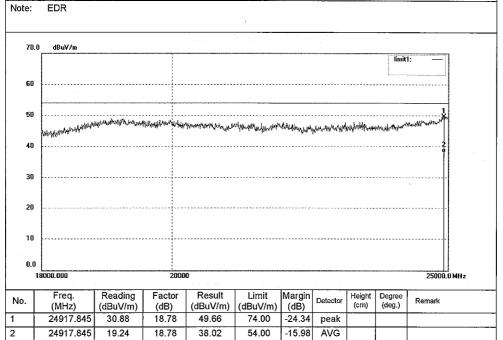
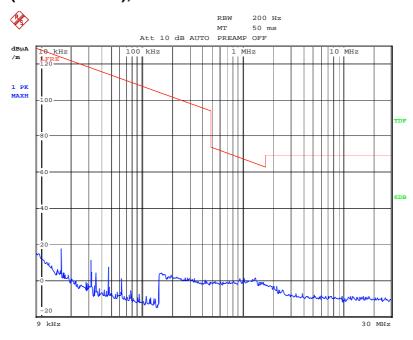


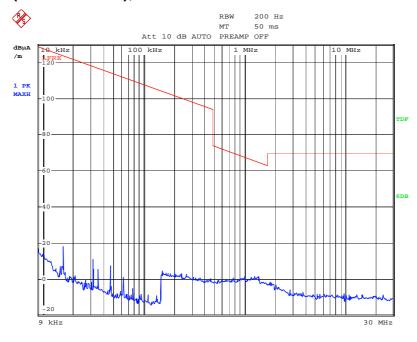


Figure 49: Test figure of spurious emissions, mode B, Horizontal polarity (9kHz – 30MHz), GFSK Modulation



Date: 27.JAN.2013 17:09:08

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



Date: 27.JAN.2013 17:11:03



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Figure 51: Test figure of spurious emissions, mode B, Horizontal 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

Polarization: Horizontal

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

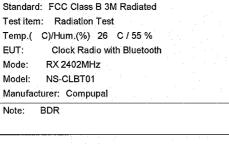
Site: 2# Chamber

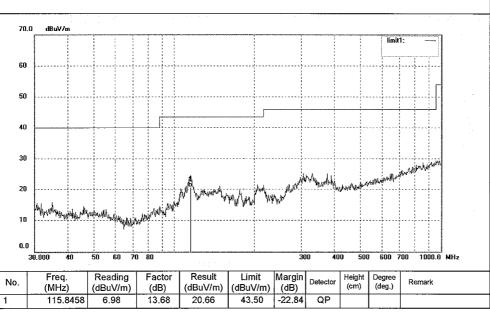
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Date: 13/01/27/ Time: 14/19/04

Engineer Signature: PEI





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

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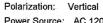
F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: PYH #562

Standard: FCC Class B 3M Radiated

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

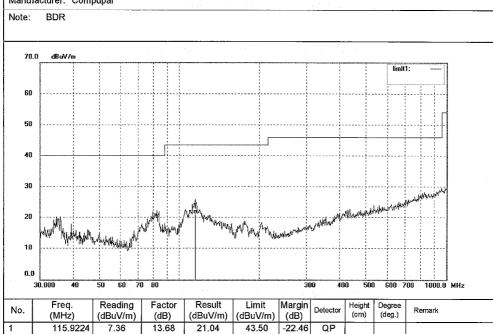
Model: RX 2402MHz
Model: NS-CLBT01
Manufacturer: Compupal



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

Date: 13/01/27/ Time: 14/26/05

Engineer Signature: PEI





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

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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

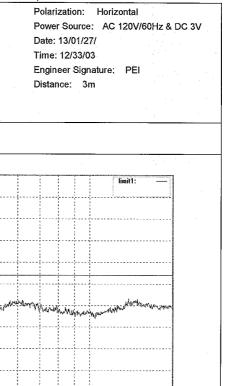
Mode: RX 2402MHz NS-CLBT01 Model: Manufacturer: Compupal

Note: BDR

100.0

50 40

20 10



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1398.506	51.57	-11.81	39.76	74.00	-34.24	peak			
2	1398,506	51.21	-11.81	39.40	54.00	-14.60	AVG			

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

ob No.: PYH #550

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-CLBT01
Manufacturer: Compupal

1398.586

56.42

-11.81

44.61

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

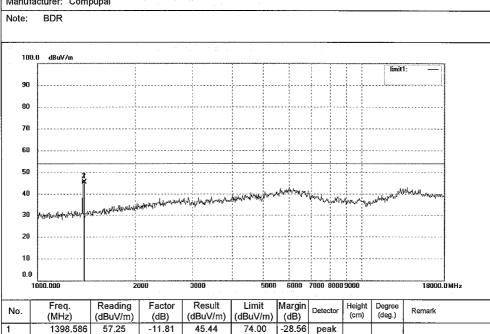
Date: 13/01/27/

Date: 13/01/27/ Time: 12/45/44

Engineer Signature: PEI

Polarization: Vertical

Distance: 3m



54.00

-9.39

AVG

17030656 001 Page 51 of 81



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

Job No.: PYH #582

EUT:

ACCURATE TECHNOLOGY CO., LTD.

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

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

Standard: FCC Class B 3M Radiated Power Source: AC 120V/60Hz & DC 3V Test item: Radiation Test Date: 13/01/27/ Temp.(C)/Hum.(%) 25 C / 50 % Time: 19/36/26

Mode: RX 2402MHz NS-CLBT01 Model: Manufacturer: Compupal

Clock Radio with Bluetooth

Engineer Signature: PEI Distance: 3m

Polarization: Horizontal

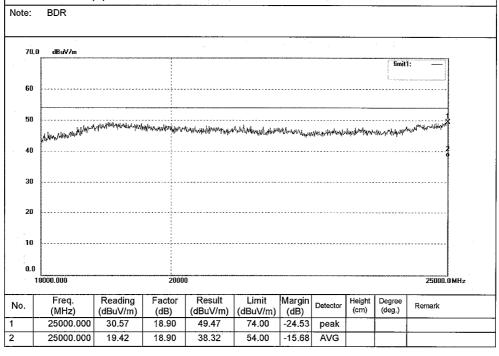




Figure 56: Test figure of spurious emissions, mode B, Vertical polarity (18GHz - 25GHz), GFSK Modulation

ACCURATE TECHNOLOGY CO., LTD.

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

Job No.: PYH #583 Polarization: Standard: FCC Class B 3M Radiated Test item: Radiation Test

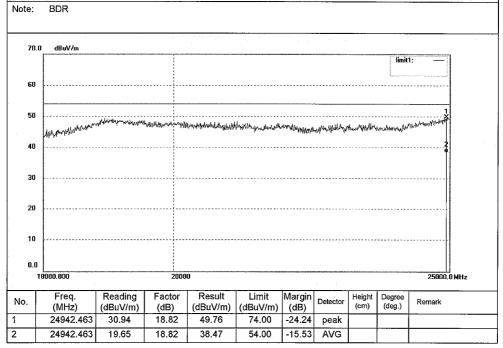
Temp.(C)/Hum.(%) 25 C / 50 % EUT: Clock Radio with Bluetooth

Mode: RX 2402MHz NS-CLBT01 Model: Manufacturer: Compupal

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

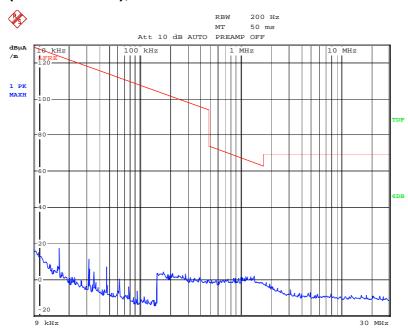
Date: 13/01/27/ Time: 19/47/33

Engineer Signature: PEI



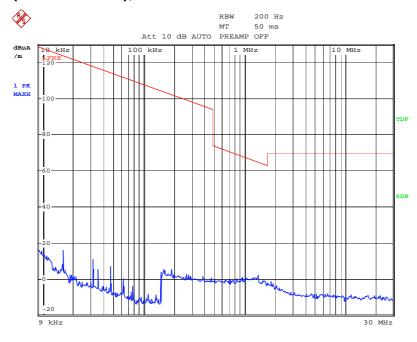
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Figure 57: Test figure of spurious emissions, mode B, Horizontal polarity (9kHz – 30MHz), 8DPSK Modulation



Date: 27.JAN.2013 17:17:30

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



Date: 27.JAN.2013 17:19:38

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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

Polarization:

Date: 13/01/27/

Time: 14/11/48

Distance: 3m

Engineer Signature: PEI

Horizontal

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

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

Job No.: PYH #560 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-CLBT01 Manufacturer: Compupal

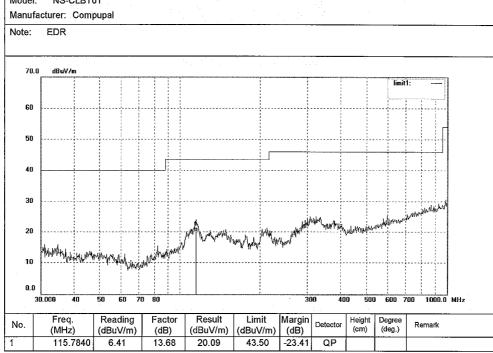




Figure 60: Test figure of spurious emissions, mode B, Vertical polarity (30MHz - 1GHz), 8DPSK Modulation

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

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-CLBT01 Polarization:

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

Date: 13/01/27/ Time: 14/03/16

Engineer Signature: PEI

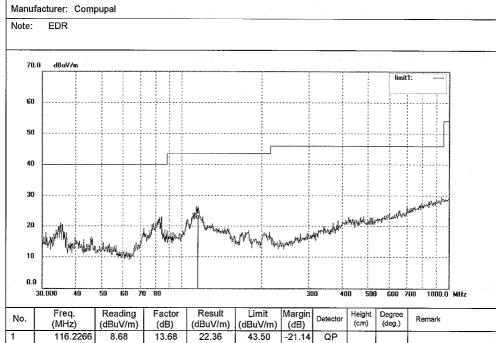




Figure 61: Test figure of spurious emissions, mode B, Horizontal polarity (1GHz -18GHz), 8DPSK Modulation

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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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

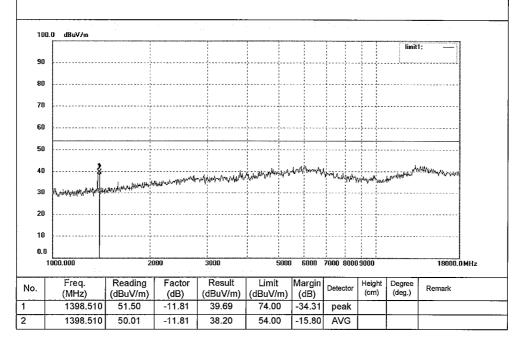
Mode: RX 2402MHz NS-CLBT01 Model: Manufacturer: Compupal

Note: EDR Polarization: Horizontal

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

Date: 13/01/27/ Time: 13/05/14

Engineer Signature: PEI



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Figure 62: Test figure of spurious emissions, mode B, Vertical 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 #551

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-CLBT01

ass B 3M Radiated Power Source: AC 120V/60Hz & DC 3V

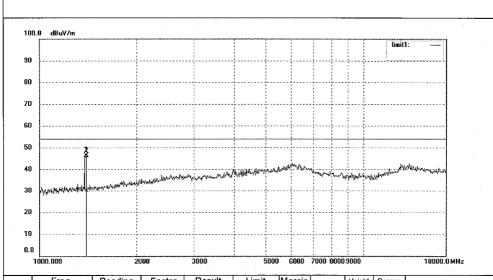
Date: 13/01/27/ Time: 12/57/21

Polarization: Vertical

Engineer Signature: PEI

Distance: 3m

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	1398.555	58.27	-11.81	46.46	74.00	-27.54	peak			
2	1398.555	57.01	-11.81	45.20	54.00	-8.80	AVG			



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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

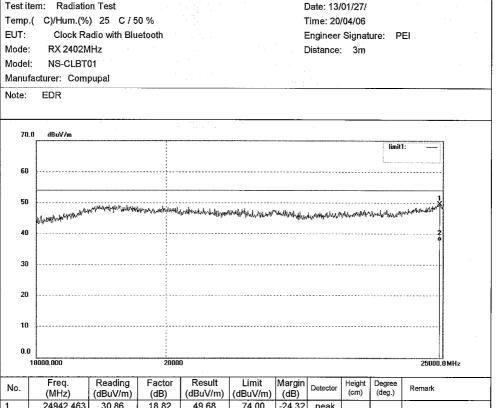
Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Polarization: Horizontal

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

Standard: FCC Class B 3M Radiated

Test item: Radiation Test



					*						
	No.	Freq.	Reading	Factor	Result	Limit	Margin	Detector	Height	Degree	Remark
ļ	INO.	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Detector	(cm)	(deg.)	Remark
i	1	24942.463	30.86	18.82	49.68	74.00	-24.32	peak			
ĺ	2	24942.463	18.86	18.82	37.68	54.00	-16.32	AVG			



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Figure 64: Test figure of spurious emissions, mode B, 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 Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

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

Date: 13/01/27/

Time: 19/55/41

Distance: 3m

Engineer Signature: PEI

lob No.: PYH #584 Polarization: Vertical

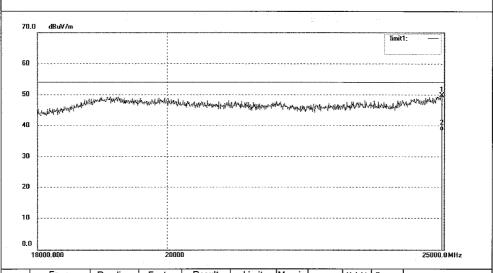
Standard: FCC Class B 3M Radiated

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

EUT: Clock Radio with Bluetooth

Model: RX 2402MHz
Model: NS-CLBT01
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	24958.889	30.93	18.84	49.77	74.00	-24.23	peak			
2	24958.889	19.53	18.84	38.37	54.00	-15.63	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

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test

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

TX 2402MHz Mode:

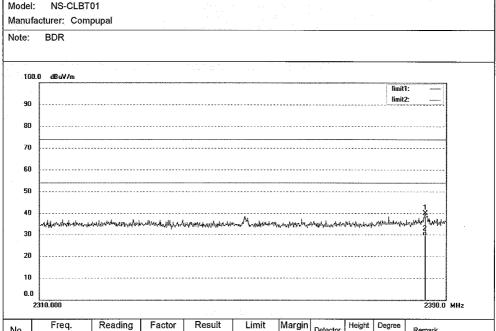
Model: NS-CLBT01

Polarization: Horizontal

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

Date: 13/01/27/ Time: 9/11/59

Engineer Signature: PEI



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2385.978	47.46	-7.56	39.90	74.00	-34.10	peak			
2	2385.978	36.96	-7.56	29.40	54.00	-24.60	AVG			

17030656 001



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

ATO[®]

Job No.: PYH #531

ACCURATE TECHNOLOGY CO., LTD.

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

n,P.R.China Fax:+86-0755-26503396
Polarization: Vertical

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

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

Date: 13/01/27/ Time: 8/59/42

Engineer Signature: PEI

Distance: 3m

Model: TX 2402MHz
Model: NS-CLBT01
Manufacturer: Compupal

2385.927

35.56

-7.56

28.00

Test item: Radiation Test

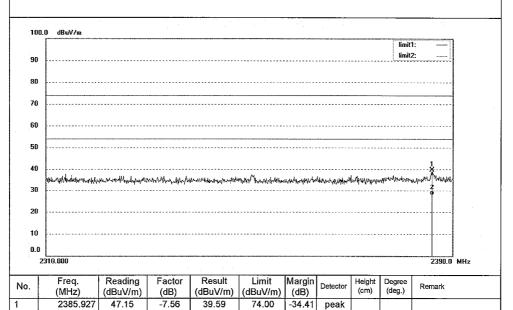
Standard: FCC Part 15 Band Edge (2.4G)

Clock Radio with Bluetooth

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

Note: BDR

EUT:



54.00

-26.00

AVG



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

Job No.: PYH #537

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 2480MHz NS-CLBT01 Model: Manufacturer: Compupal Polarization: Horizontal

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

Date: 13/01/27/ Time: 10/17/57 Engineer Signature: PEI

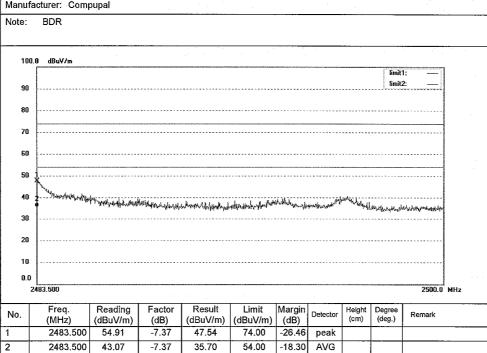




Figure 68: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical, GFSK Modulation

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

Polarization: Vertical

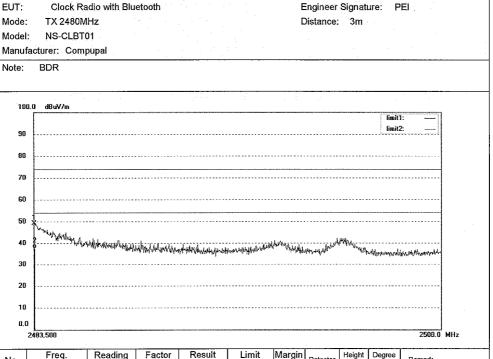
Date: 13/01/27/ Time: 10/29/15

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

Job No.: PYH #538

Standard: FCC Part 15 Band Edge (2.4G)

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



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	56.57	-7.37	49.20	74.00	-24.80	peak			
2	2483.500	45.07	-7.37	37.70	54.00	-16.30	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

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

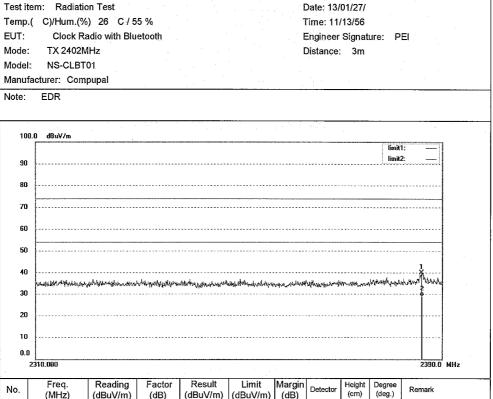
Polarization: Horizontal

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

Job No.: PYH #541

Standard: FCC Part 15 Band Edge (2.4G)

Test item: Radiation Test



No.	Freq.	Reading	Factor	Result		Margin	Detector	Height	Degree	Remark	
110.	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Detector	(cm)	(deg.)	rtomant	
1	2385.978	47.52	-7.56	39.96	74.00	-34.04	peak				
2	2385.978	36.56	-7.56	29.00	54.00	-25.00	AVG				



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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

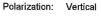
Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Standard: FCC Part 15 Band Edge (2.4G)

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

EUT: Clock Radio with Bluetooth

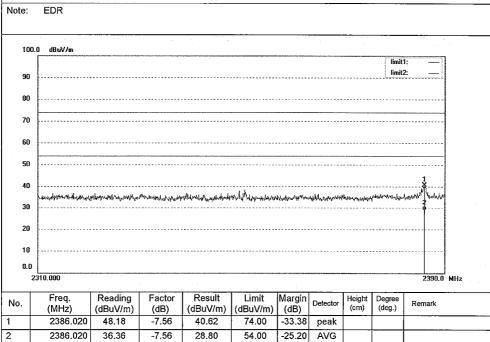
Mode: TX 2402MHz NS-CLBT01 Model: Manufacturer: Compupal



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

Date: 13/01/27/ Time: 11/24/08

Engineer Signature: PEI



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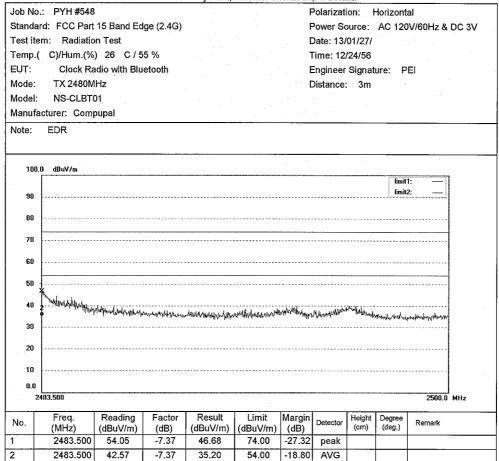
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Figure 71: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal, 8DPSK Modulation

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



-18.80 AVG Page 67 of 81

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



Job No.: PYH #547

ACCURATE TECHNOLOGY CO., LTD.

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

n,P.R.China Fax:+86-0755-26503396
Polarization: Vertical

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

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

Date: 13/01/27/ Time: 12/14/44

Engineer Signature: PEI

Distance: 3m

Test item: Radiation Test

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

EUT: Clock Radio with Bluetooth

Mode: TX 2480MHz

Model: NS-CLBT01

Standard: FCC Part 15 Band Edge (2.4G)

Note: EDR

Manufacturer: Compupal

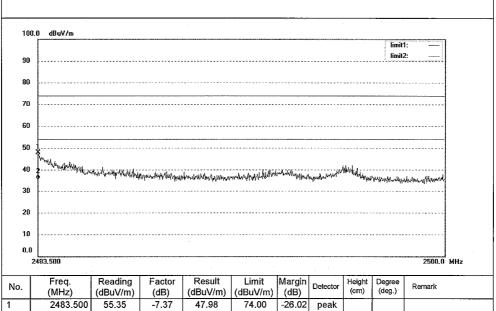
2483.500

2

43.07

-7.37

35.70



54.00

AVG

-18.30



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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-CLBT01

Manufacturer:

Manufacturer: Compupal Operating Condition: Bluetooth Transmitting Test Site: 1#Shielding Room
Operator: PEI
Test Specification: L 120V/60Hz & DC 3V
Comment: Mains port
Start of Test: 1/28/2013 / 10:22:56AM

SCAN TABLE: "V 150K-30MHz fin"
Short Description: SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas. TF

Start Stop Step Frequency Frequency Width 150.0 kHz 30.0 MHz 0.8 % Detector Meas. Time QuasiPeak 1.0 s Transducer Bandw. 9 kHz NSLK8126 2008

Level [dBµV] 0 L 150k 2M 800k 1M 4M 5M 6M 20M 30M Frequency [Hz] PEI-0128-V11_fin PEI-0128-V11_fin2 PEI-0128-V11_pre PEI-0128-V11_pre2 FCC 15B V QP FCC 15B V AV Voltage QP Voltage AV

MEASUREMENT RESULT: "PEI-0128-V11 fin"

1/28/20	13 10:2	25AM						
Freq	uency	Level	Transd	Limit	Margin	Detector	Line	PE
_	MHz	dBuV	dB	dBuV	dB			
0.3	63895	41.70	11.2	59	16.9	OP	L1	GND
	31288	47.20	11.3	56	8.8	ÕP	L1	GND
						*-		
1.2	74563	40.60	11.3	56	15.4	QP	L1	GND

MEASUREMENT RESULT: "PEI-0128-V11_fin2"

1	/28/2013 10:	25AM						
	Frequency	Level	Transd		~	Detector	Line	PE
	MHz	dΒμV	dB	dBµV	dB			
								~~~
	0.633814	35.10	11.3	46	10.9	AV	L1	GND
	0.780036	30.10	11.3	46	15.9	AV	L1	GND
	1 430998	28.80	11.3	4.6	17.2	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

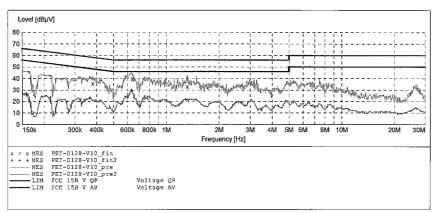
Clock Radio with Bluetooth M/N:NS-CLBT01

Manufacturer: Compupal Operating Condition: Bluetooth Transmitting L#OL PEI Test Site: 1#Shielding Room Operator: Test Specification: N 120V/60Hz & DC 3V
Comment: Mains port
Start of Test: 1/28/2013 / 10:19:55AM

Start of Test:

SCAN TABLE: "V 150K-30MHz fin"
Short Description: SUB_STD_VTERM2 1.70
Start Stop Step Detector Meas.
Frequency Frequency Width Start Stop Frequency Frequency 150.0 kHz 30.0 MHz Detector Meas. Time TF Transducer Bandw. QuasiPeak 1.0 s NSLK8126 2008 0.8 % 9 kHz

Average



#### MEASUREMENT RESULT: "PEI-0128-V10 fin"

1/28/2013 10:	22AM						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.380230	35.40	11.2	58	22.9	QP	N	GND
0.638894	39.60	11.3	56	16.4	QP	N	GND
1 221100	22 00	11 2	5.6	22 0	ΩD	N	CMD

#### MEASUREMENT RESULT: "PEI-0128-V10 fin2"

1/28/2013	10:22AM						
Frequen M	cy Level Hz dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.1586	22 25.60	11.2	56	29.9	AV	N	GND
0.3653	50 22.90	11.2	49	25.7	AV	N	GND
0.6338	14 29.30	11.3	46	16.7	AV	N	GND



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

#### ACCURATE TECHNOLOGY CO., LTD

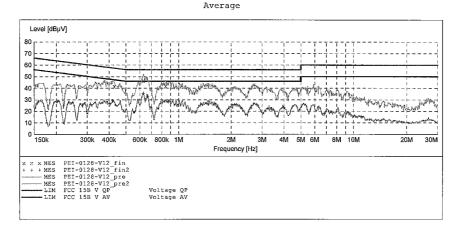
### CONDUCTED EMISSION STANDARD FCC PART 15 B

Clock Radio with Bluetooth M/N:NS-CLBT01

Manufacturer: Compupal

Manufacturer: Compupal
Operating Condition: Radio FM
Test Site: 1#Shielding Room
Operator: PEI
Test Specification: L 120V/60Hz & DC 3V
Comment: Mains port
Start of Test: 1/28/2013 / 10:26:40AM

SCAN TABLE: "V 150K-30MHz fin"
Short Description:
Start Stop Step Detector Meas.
Frequency Frequency Width Time
150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s SUB_STD_VTERM2 1...
Detector Meas.
Time IF Bandw. NSLK8126 2008



# MEASUREMENT RESULT: "PEI-0128-V12 fin"

1	/28/2013 10:	29AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBµV	dВ	dΒμV	dB			
	0.428605	41.40	11.2	57	15.9	QP	L1	GND
	0.628773	46.30	11.3	56	9.7	QP	L1	GND
	0.844868	41.70	11.3	56	14.3	OP	L1	GND

# MEASUREMENT RESULT: "PEI-0128-V12_fin2"

1	/28/2013 10:	29AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
	0.420135	28.90	11.2	47	18.5	AV	L1	GND
	0.628773	35.20	11.3	46	10.8	AV	L1	GND
	0.664915	33.00	11.3	46	13.0	AV	L1	GND
	0.872285	27.80	11.3	46	18.2	AV	L1	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

EUT: Clock Radio with Bluetooth M/N:NS-CLBT01

Compupal

Manufacturer: Compupal
Operating Condition: Radio FM
Test Site: 1#Shielding Room
Operator: PEI
Test Specification: N 120V/60Hz & DC 3V

Comment: Mains port
Start of Test: 1/28/2013 / 10:29:50AM

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

Average

Level [dBµV] 70 60 50 3M 150k 2M 4M 5M 6M 20M 30M x MES PEI-0128-V13_fin + MES PEI-0128-V13_fin2 - MES PEI-0128-V13_pre - MES PEI-0128-V13_pre2 - LIM FCC 15B V QP - LIM FCC 15B V AV Voltage QP Voltage AV

# MEASUREMENT RESULT: "PEI-0128-V13 fin"

 8/2013 10:3 Frequency MHz	B2AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.415134 0.628773 0.654382 1.214945	33.60 38.40 36.90 27.70	11.2 11.3 11.3 11.3	58 56 56 56	23.9 17.6 19.1 28.3	QP QP QP QP	N N N	GND GND GND GND

## MEASUREMENT RESULT: "PEI-0128-V13 fin2"

1/28/2013 10:	32AM						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
MHz	dΒμV	dB	dΒμV	dB			
0.628773	29.00	11.3	46	17.0	AV	N	GND
0.664915	27.10	11.3	46	18.9	AV	N	GND
0.844868	22.30	11.3	46	23.7	AV	N	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-CLBT01

Manufacturer: Compupal

Manufacturer: Compupal
Operating Condition: Aux in
Test Site: 1#Shielding Room
Operator: PEI
Test Specification: L 120V/60Hz & DC 3V Comment: Mains port Start of Test: 1/28/2013 / 10:01:02AM

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

 Short Description:
 SUB_STD_VTERM2 1.70

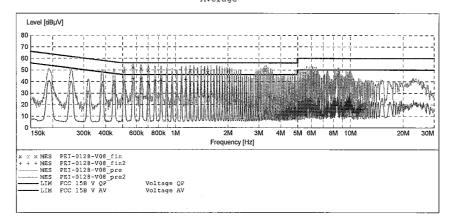
 Start
 Stop
 Step

 Frequency
 Frequency
 Width

 150.0 kHz
 30.0 MHz
 0.8 %

 QuasiPeak
 1.0 s

 Detector Meas. IF Transducer Bandw. 9 kHz NSLK8126 2008 Average



# MEASUREMENT RESULT: "PEI-0128-V08 fin"

1/28/2013 10: Frequency MHz	:07AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.573613 0.636349 0.700333	52.40 50.90 50.10	11.3 11.3 11.3	56 56	3.6 5.1 5.9	QP QP QP	L1 L1 L1	GND GND GND
1.214945 1.531483 3.256746	49.40 47.80 50.10	11.3 11.3 11.4	56 56 56	6.6 8.2 5.9	QP QP QP	L1 L1 L1	GND GND GND

## MEASUREMENT RESULT: "PEI-0128-V08_fin2"

1/28	/2013 10:0	07AM						
F	requency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBµV	dB	dBµV	dB			
	0.573613	42.50	11.3	46	3.5	AV	L1	GND
	0.638894	42.70	11.3	46	3.3	AV	L1	GND
	0.700333	39.30	11.3	46	6.7	AV	L1	GND
	0.767679	40.90	11.3	46	5.1	AV	L1	GND
	0.828172	40.80	11.3	46	5.2	AV	L1	GND
	1.148907	41.50	11.3	46	4.5	AV	L1	GND

Page 1/1 1/28/2013 10:07AM PEI-0128-V08



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

## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15 B

Clock Radio with Bluetooth M/N:NS-CLBT01

Manufacturer: Compupal

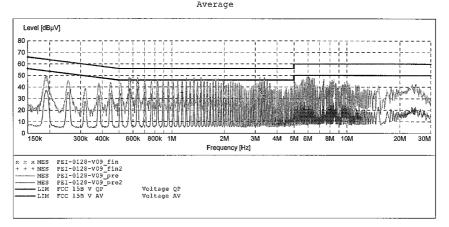
Manufacturer: Compupal
Operating Condition: Aux in
Test Site: 1#Shielding Room
Operator: PEI
Test Specification: N 120V/60Hz & DC 3V
Comment: Mains port
Start of Test: 1/28/2013 / 10:08:00AM

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

 Short Description:
 SUB_STD_VTERM2 1.70

 Start
 Stop
 Step
 Detector
 Meas.

 Frequency
 Frequency
 Width
 Time
 QuasiPeak
 1.0 s
 Detector Meas. Time TF Transducer Bandw. 9 kHz NSLK8126 2008



## MEASUREMENT RESULT: "PEI-0128-V09_fin"

1/	28/2013 10:	15AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBuV	dB	dBuV	dB			
		•						
	0.575905	46.30	11.3	56	9.7	OP	N	GND
	0.638892	44.30	11.3	56	11.7	OP	N	GND
	3.192375	37.90	11.4	56	18.1	OP	N	GND
	3.192313	57.50	TT.4	20	10.1	Δr	LV	GND

# MEASUREMENT RESULT: "PEI-0128-V09_fin2"

1/28/2013 10: Frequency MHz	15AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.573611	37.40	11.3	46	8.6	AV	N	GND
0.638892	37.30	11.3	46	8.7	AV	N	GND
1.148903	35.00	11.3	46	11.0	AV	N	GND
3.389375	32.10	11.4	4.6	13.9	AV	N	GND

**TÜV**Rheinland®

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



# 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 #589

Standard: FCC Class B 3M Radiated

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

Model: FM 88.1MHz
Model: NS-CLBT01
Manufacturer: Compupal

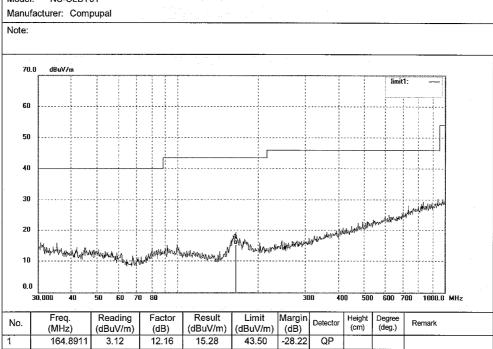
Polarization: Horizontal

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

Date: 13/01/28/ Time: 12/13/05

Engineer Signature: PEI

Distance: 3m





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



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Job No.: PYH #588

Standard: FCC Class B 3M Radiated

Clock Radio with Bluetooth

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

Model: FM 88.1MHz
Model: NS-CLBT01
Manufacturer: Compupal

Polarization: Vertical

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

Date: 13/01/28/ Time: 12/04/35

Engineer Signature: PEI

Distance: 3m

Note:

EUT:

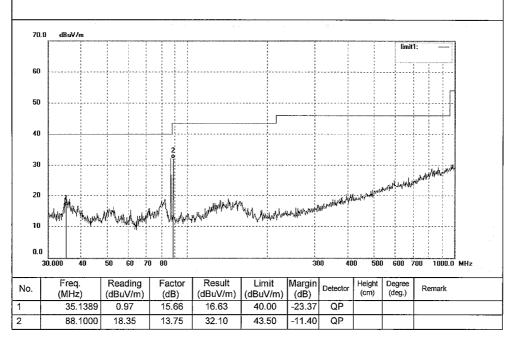




Figure 81: Test figure of Radiated emissions, Mode C, Above 1GHz, Horizontal

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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: FM 88.1MHz NS-CLBT01

1407.529

54.85

-11.76

43.09

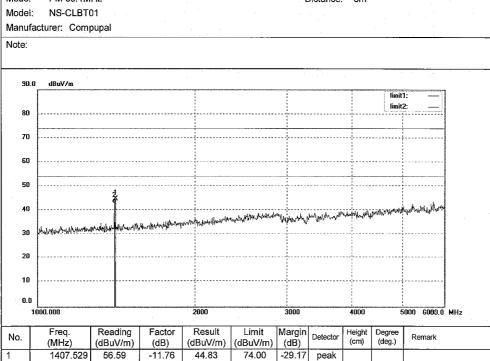
Polarization: Horizontal

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

Date: 13/01/28/ Time: 13/22/01

Engineer Signature: PEI

Distance: 3m



54.00

AVG

-10.91



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

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Job No.: PYH #596

Standard: FCC Class B 3M Radiated

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

Model: FM 88.1MHz
Model: NS-CLBT01
Manufacturer: Compupal

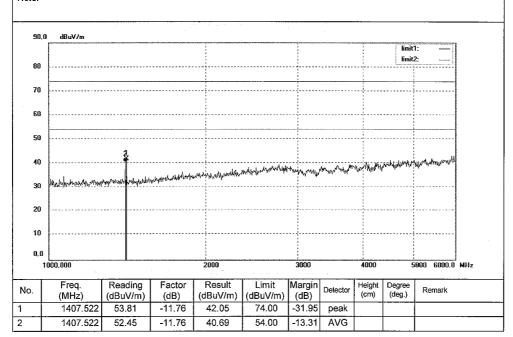
Polarization: Vertical

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

Date: 13/01/28/ Time: 13/13/25 Engineer Signature: PEI

Distance: 3m

Note:





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

(AIC)®

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Job No.: PYH #586
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-CLBT01
Manufacturer: Compupal

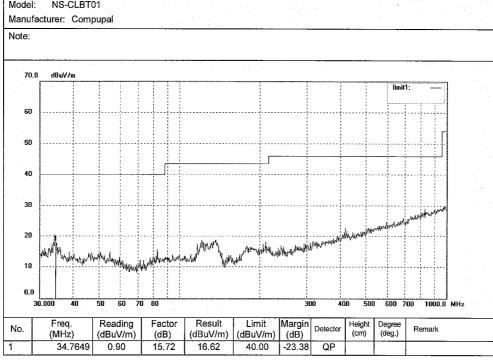
Polarization: Horizontal

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

Date: 13/01/28/ Time: 11/41/35

Engineer Signature: PEI

Distance: 3m





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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

Job No.: PYH #587

Standard: FCC Class B 3M Radiated

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

Mode: Aux in NS-CLBT01 Model:

Polarization:

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

Date: 13/01/28/ Time: 11/57/44 Engineer Signature: PEI

Distance: 3m

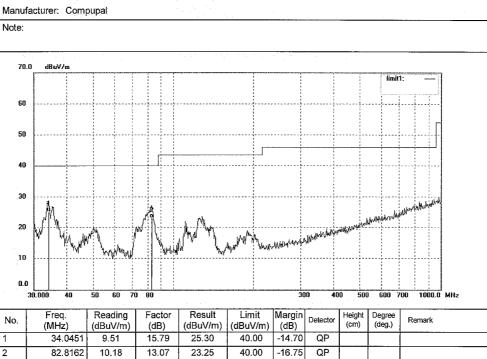




Figure 85: Test figure of Radiated emissions, Mode D, Above 1GHz, Horizontal

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Job No.: PYH #595

Standard: FCC Class B 3M Radiated

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

Model: Aux in Model: NS-CLBT01 Manufacturer: Compupal

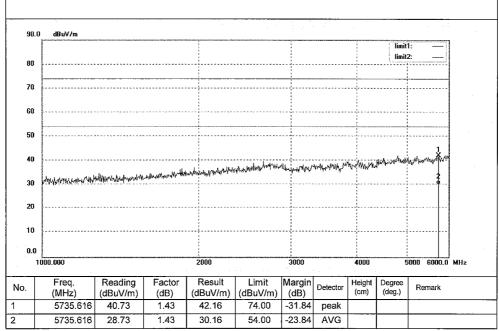
Polarization: Horizontal

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

Date: 13/01/28/
Time: 13/05/47
Engineer Signature: PEI

Distance: 3m

Note:





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

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

Job No.: PYH #594

Standard: FCC Class B 3M Radiated

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

Model: Aux in

Model: NS-CLBT01

Manufacturer: Compupal

Polarization: Vertical

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

Date: 13/01/28/ Time: 12/57/05

Engineer Signature: PEI Distance: 3m

Note:

