

 Prüfbericht-Nr.:
 50070340 001
 Auftrags-Nr.:
 164081493
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 Test Report No.:
 Order No.:
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Kunden-Referenz-Nr.: 653930 Auftragsdatum: 12.12.2016

Client Reference No.: Order date:

Auftraggeber: MINDPAX s.r.o.

Client: Oldrichova 106/49, Prague 12800, Czech Republic

Prüfgegenstand: Activity tracker

Test item:

**Bezeichnung / Typ-Nr.:** MindG01 *Identification / Type No.:* (MindG)

Auftrags-Inhalt: FCC Certification Order content:

**Prüfgrundlage:** CFR47 FCC Part 15: Subpart C Section 15.247 *Test specification*: CFR47 FCC Part 15: Subpart C Section 15.209

FCC KDB Publication 447498 v06

Wareneingangsdatum: 12.12.2016

Date of receipt:

**Prüfmuster-Nr.:** A000469880-001 002 003

Test sample No.:

**Prüfzeitraum:** 16.12.2016 - 17.12.2016

Testing period:

Ort der Prüfung: Shenzhen Accurate Place of testing: Technology Co., Ltd.

**Prüflaboratorium:** TÜV Rheinland (Shenzhen)

Testing laboratory: Co., Ltd.

Prüfergebnis\*: Pass

Test result\*:



geprüft von / tested by:

08.02.2017 Winnie Hou / Senior Project Manager

 Datum
 Name / Stellung
 Unterschrift

 Date
 Name / Position
 Signature

kontrolliert von / reviewed by:

15.02.2017 Owen Tian / Technical Certifier

Datum Name / Stellung Unterschrift

Date Name / Position Signature

as

Sonstiges / Other: FCC ID: 2AKLGMINDG

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

Legende: 1 = sehr gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft 2 = autP(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good2 = a c c d3 = satisfactory 4 = sufficient 5 = poorP(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested

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

This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.



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**TEST SUMMARY** 

5.1.1 ANTENNA REQUIREMENT

RESULT: Passed

5.1.2 PEAK OUTPUT POWER

RESULT: Passed

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Passed 5.1.4 -6DB BANDWIDTH RESULT: Passed

5.1.5 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100kHz BANDWIDTH

RESULT: Passed

5.1.6 Spurious Emission

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

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



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## 2.2 List of Test and Measurement Instruments

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

Kind of Equipment	Manufacturer	Туре	S/N	Calibrated until						
Spurious emission and Radiated emission										
Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	06-01-2018						
Test Receiver	Rohde&Schwarz	ESCS30	100307	06-01-2018						
Bilog Antenna	ilog Antenna Schwarzbeck VULB9163 9									
Loop Antenna	Schwarzbeck	FMZB1516	1516131	09-01-2018						
Horn Antenna	Schwarzbeck	BBHA9120D 9120D-65		09-01-2018						
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	09-01-2018						
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	06-01-2018						
Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	06-01-2018						
Radio Spectrum Te	est									
Spectrum Analyzer	Rohde & Schwarz	ESPI3	100396/003	06-01-2018						



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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  $\pm 3$ dB.

## 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.



## Products

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## 3. General Product Information

## 3.1 Product Function and Intended Use

The EUT is an activity tracker & Anti-lost (wrist band) with Bluetooth low energy wireless technology.

## 3.2 Ratings and System Details

**Table 2: Rating of EUT** 

Kind of Equipment:	Activity tracker
Type Designation:	MindG01
FCC ID	2AKLGMINDG

## **Table 3: Technical Specification of EUT**

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Bluetooth Core Version	4.0
Channel separation	2MHz
Extreme Temperature Range	-20°C to +60°C
Operation Voltage	DC 3V via Button Battery
Modulation	GFSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	0.6dBi
RF Output Power	0.00162W (2.09dBm)



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## 3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Bluetooth Transmitting
  - 1. Low channel
  - 2. Middle channel
  - 3. High channel
- B. On, operating
- C. Off

## 3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

## 3.5 Submitted Documents

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

- Circuit Diagram
- Instruction Manual
- Rating Label



Products

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## 4. Test Set-up and Operation Modes

## 4.1 Principle of Configuration Selection

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

## 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2014 and ANSI C63.10: 2013.

## 4.3 Special Accessories and Auxiliary Equipment

The EUT was tested with following accessories

Description	Manufacturer	Туре	S/N		
iPhone 6S plus	Apple	ML6D2 CH/A	C35QJ76JGRWM		

## 4.4 Countermeasures to achieve EMC Compliance

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

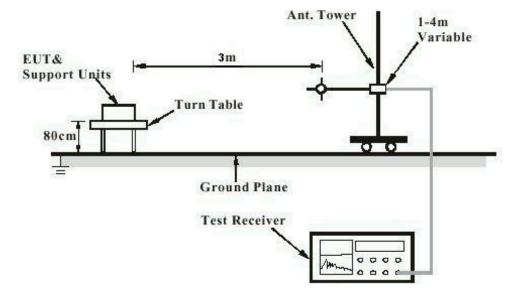


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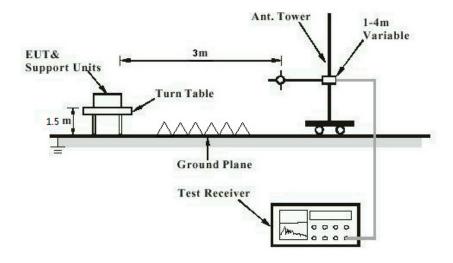
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## 4.5 Test Setup Diagram

**Diagram of Measurement Configuration for Radiation Test (Below 1GHz)** 



**Diagram of Measurement Configuration for Radiation Test (Above 1GHz)** 





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

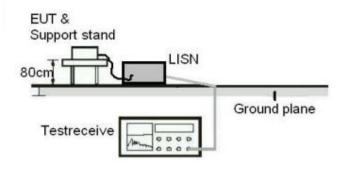
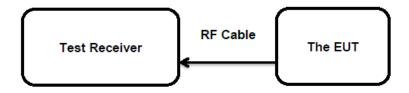


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement





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## 5. Test Results

## 5.1 Transmitter Requirement & Test Suites

## 5.1.1 Antenna Requirement

RESULT: Passed

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

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 0.6dBi, 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 2016-12-16

Test standard FCC Part 15.247(b)(3) Basic standard : ANSI C63.10: 2013

Limit 1 Watt

Kind of test site Shielded room

**Test setup** 

Low/ Middle/ High

Test Channel :
Operation Mode :
Ambient temperature :
Relative humidity :
Atmospheric pressure : Α **25**℃ 55% 101 kPa

**Table 4: Test result of Peak Output Power** 

Channel	Channel Frequency	Peak Out	put Power	Limit
	(MHz)	(dBm)	(W)	(W)
Low Channel	2402	2.09	0.00162	1
Middle Channel	2440	0.78	0.00120	1
High Channel	2480	-0.79	0.00083	1



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Test Report No.

## **5.1.3 Conducted Power Spectral Density**

**RESULT: Passed** 

Test date 2016-12-16

Test standard FCC Part 15.247(e) Basic standard ANSI C63.10: 2013

Limit 8dBm/3kHz Kind of test site Shielded room

**Test setup** 

Test Channel Low/ Middle/ High

Operation Mode Ambient temperature : Relative humidity : **25**℃ 55% Atmospheric pressure : 101 kPa

**Table 5: Test result of Conducted Power Spectral Density** 

Channel	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
Low Channel	2402	-11.15	8
Middle Channel	2440	-13.10	8
High Channel	2480	-14.16	8



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## 5.1.4 -6dB Bandwidth

**RESULT: Passed** 

Date of testing 2016-12-16

Test standard FCC Part 15.247(a)(2) Basic standard
Kind of test site ANSI C63.10: 2013 Shielded room

**Test setup** 

Test Channel Low/ Middle/ High

Operation Mode Ambient temperature :
Relative humidity :
Atmospheric pressure : 25℃ 55% 101 kPa

## Table 6: Test result of -6dB Bandwidth

Channel	Channel Frequency (MHz)	-6dB Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2402	686	500	Pass
Mid Channel	2440	694.6	500	Pass
High Channel	2480	694.7	500	Pass



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## 5.1.5 Conducted spurious emissions measured in 100kHz Bandwidth

**RESULT: Passed** 

Date of testing 2016-12-16

Test standard FCC part 15.247(d) Basic standard ANSI C63.10: 2013

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

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 **25**℃ Relative humidity 55% Atmospheric pressure : 101 kPa

All emissions are more than 20dB below fundamental, details refer to Appendix 1.



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## 5.1.6 Spurious Emission

**RESULT: Passed** 

2016-12-17 Date of testing

Test standard FCC part 15.247(d)

FCC Part 15.205

Basic standard ANSI C63.10: 2013

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

Kind of test site 3m Semi-Anechoic Chamber

**Test setup** 

Test Channel Low/ Middle/ High

Operation mode

Ambient temperature Refer to Appendix 1 Atmospheric pressure : Refer to Appendix 1 Refer to Appendix 1

### 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

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

For details refer to Appendix 1.



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

### ACCURATE TECHNOLOGY CO., LTD

### FCC Class B 3m Radiated

EUT: Smart Band M/N:MindG01
Manufacturer:
Operating Condition: TX 2402MHz
Test Site: 2# Chamber
Operator: LGWADE
Test Specification: DC 3V
Comment: X

 SCAN TABLE: "LFRE Fin"

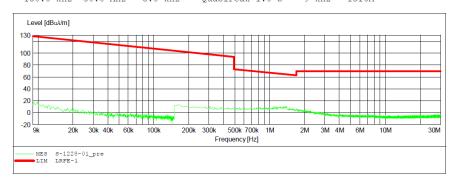
 Short Description:
 \_SUB\_STD\_VTERM2 1.70

 Start
 Stop
 Step
 Detector Meas.
 IF
 Transducer

 Frequency
 Frequency Width
 Time
 Bandw.

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak 1.0 s
 200 Hz
 1516M

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak 1.0 s
 9 kHz
 1516M

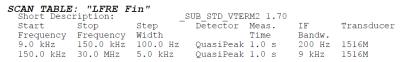


## Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz)

### ACCURATE TECHNOLOGY CO., LTD

### FCC Class B 3m Radiated

EUT: Smart Band M/N:MindG01
Manufacturer:
Operating Condition: TX 2402MHz
Test Site: 2# Chamber
Operator: LGWADE
Test Specification: DC 3V
Comment: Y



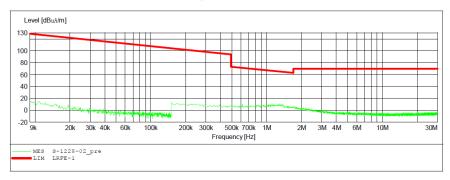




Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz)



## ACCURATE TECHNOLOGY CO., LTD.

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

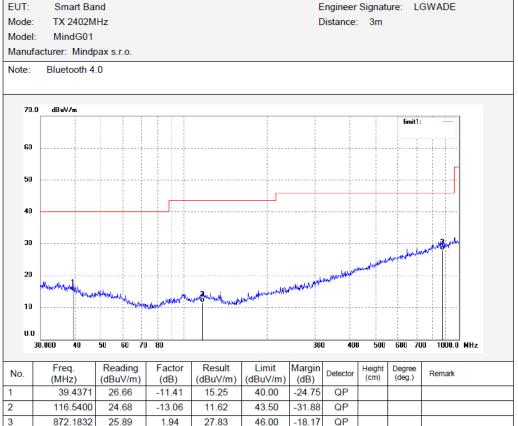
Power Source: DC 3V Date: 16/12/17/

Time:

Site: 2# Chamber

Job No.: Igwade #4761 Standard: FCC Class B 3M Radiated Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 % EUT: Smart Band



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Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

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



## ACCURATE TECHNOLOGY CO., LTD.

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

Polarization: Vertical Power Source: DC 3V Date: 16/12/17/

Time:

Engineer Signature: LGWADE

Distance: 3m

Standard: FCC Class B 3M Radiated Test item: Radiation Test Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Smart Band Mode: TX 2402MHz Model: MindG01

Job No.: Igwade #4762

Manufacturer: Mindpax s.r.o.

3

906.4823

26.47

2.22

28.69

Note: Bluetooth 4.0 70.0 dBuV/m limit1: 60 40 20 10 0.0 1000.0 MHz 60 600 700 30,000 40 400 Result Margin Height (cm) Degree (deg.) Freq. Reading Factor Limit No. Detector Remark (MHz) (dBuV/m) (dBuV/m) (dBuV/m) (dB) (dB) 39.4371 31.18 -11.41 19.77 40.00 -20.23 QP 99.5279 25.70 -13.21 12.49 43.50 -31.01 QP

46.00

-17.31

QP



Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

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



## 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: DC 3V

Date: 16/12/17/

Engineer Signature: LGWADE

Distance: 3m

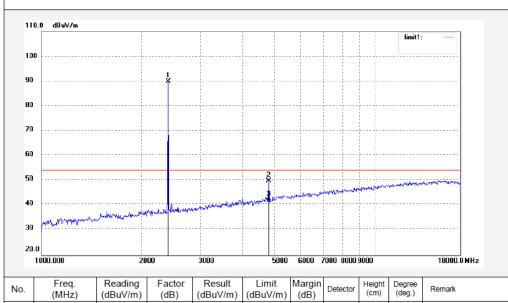
Job No.: Igwade #4745 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

EUT: Smart Band Mode: TX 2402MHz Model: MindG01

Manufacturer: Mindpax s.r.o.

Note: Bluetooth 4.0



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	91.40	-1.61	89.79	54.00	35.79	peak			
2	4804.000	44.83	4.90	49.73	54.00	-4.27	peak			
3	4804.000	36.46	4.90	41.36	54.00	-12.64	AVG			



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

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

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

Polarization: Vertical

Power Source: DC 3V

Engineer Signature: LGWADE

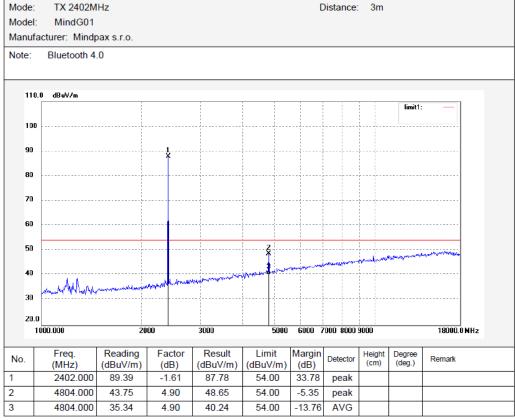
Date: 16/12/17/

Igwade #4746 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

Smart Band Mode: TX 2402MHz

MindG01



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

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

Job No.: Igwade #4756 Standard: FCC Class B 3M Radiated Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 % EUT: Smart Band

Mode: TX 2402MHz
Model: MindG01
Manufacturer: Mindpax s.r.o.

Polarization: Horizontal Power Source: DC 3V Date: 16/12/17/

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth 4.0

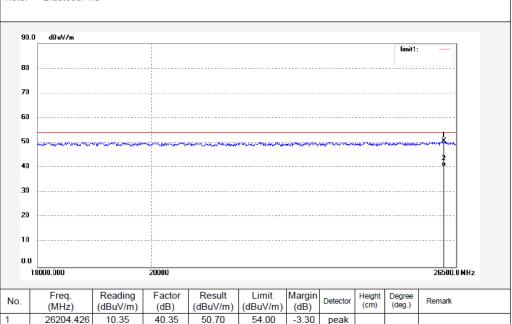
2

26204.426

0.01

40.35

40.36



54.00

-13.64

AVG

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

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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.: Igwade #4755 Standard: FCC Class B 3M Radiated

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

EUT: Smart Band

Mode: TX 2402MHz Model: MindG01 Manufacturer: Mindpax s.r.o.

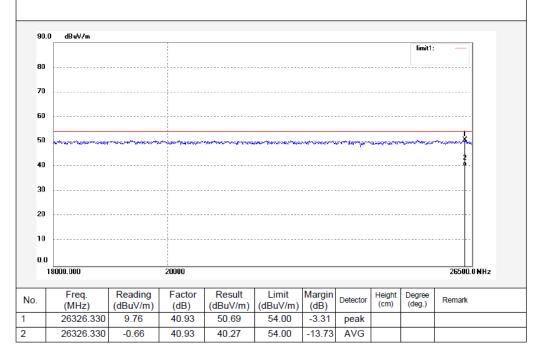
Note: Bluetooth 4.0

Polarization: Vertical
Power Source: DC 3V

Date: 16/12/17/ Time:

Engineer Signature: LGWADE

Distance: 3m



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

### ACCURATE TECHNOLOGY CO., LTD

## FCC Class B 3m Radiated

EUT: Smart Band M/N:MindG01
Manufacturer:
Operating Condition: TX 2440MHz
Test Site: 2# Chamber
Operator: LGWADE
Test Specification: DC 3V
Comment: X

 SCAN TABLE: "LFRE Fin"

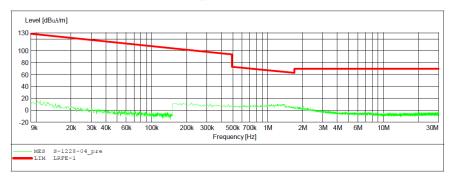
 Short Description:
 \_SUB\_STD\_VTERM2 1.70

 Start
 Stop
 Step
 Detector Meas.
 IF
 Transducer

 Frequency
 Frequency Width
 Time
 Bandw.

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak 1.0 s
 200 Hz
 1516M

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak 1.0 s
 9 kHz
 1516M

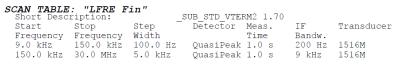


## Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz)

### ACCURATE TECHNOLOGY CO., LTD

### FCC Class B 3m Radiated

EUT: Smart Band M/N:MindG01
Manufacturer:
Operating Condition: TX 2440MHz
Test Site: 2# Chamber
Operator: LGWADE
Test Specification: DC 3V
Comment: Y



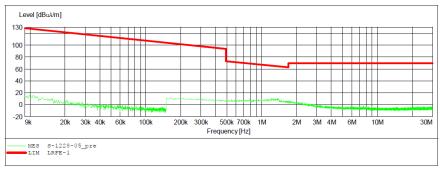




Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz - 1GHz)

## 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

Igwade #4764 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

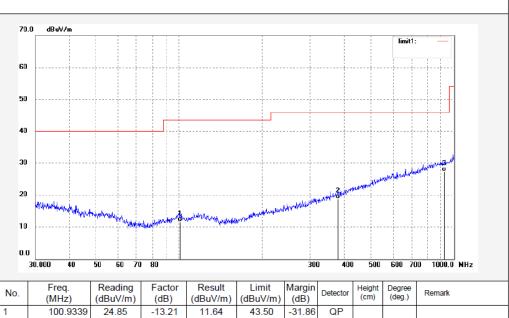
Smart Band Mode: TX 2440MHz Model: MindG01

Manufacturer: Mindpax s.r.o. Note: Bluetooth 4.0

Polarization: Horizontal Power Source: DC 3V Date: 16/12/17/ Time:

Engineer Signature: LGWADE

Distance: 3m



No.	Freq. (MHz)	(dBuV/m)	Factor (dB)	(dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	100.9339	24.85	-13.21	11.64	43.50	-31.86	QP			
2	378.5842	25.74	-7.01	18.73	46.00	-27.27	QP			
3	919.2866	24.85	2.49	27.34	46.00	-18.66	QP			



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

## 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: DC 3V

Engineer Signature: LGWADE

Date: 16/12/17/

Time:

Igwade #4763 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

Smart Band Mode: TX 2440MHz Model: MindG01

Distance: 3m

Manufacturer: Mindpax s.r.o.

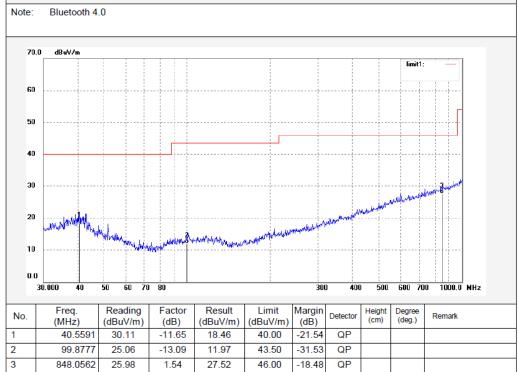




Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz)

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## ACCURATE TECHNOLOGY CO., LTD.

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

Polarization: Horizontal

Engineer Signature: LGWADE

Power Source: DC 3V

Date: 16/12/17/

Time:

Job No.: Igwade #4749 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

EUT: Smart Band Mode: TX 2440MHz Model: MindG01

40MHz Distance: 3m

Manufacturer: Mindpax s.r.o.



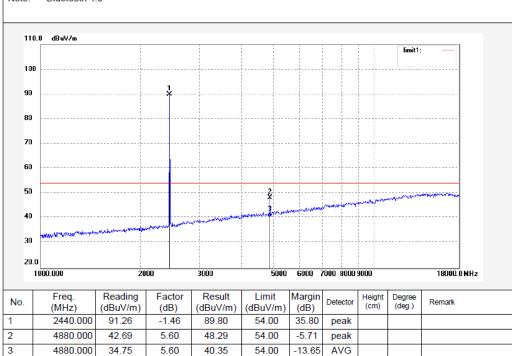




Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz - 18GHz)

## 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

Igwade #4750 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

Mode: TX 2440MHz Model: MindG01 Manufacturer: Mindpax s.r.o.

Engineer Signature: LGWADE

Distance: 3m

Date: 16/12/17/

Polarization: Vertical

Power Source: DC 3V

Bluetooth 4.0

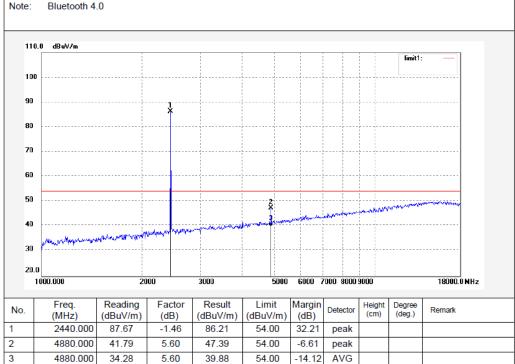




Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz - 25GHz)

## 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 Polarization: Horizontal

Power Source: DC 3V

Engineer Signature: LGWADE

Date: 16/12/17/

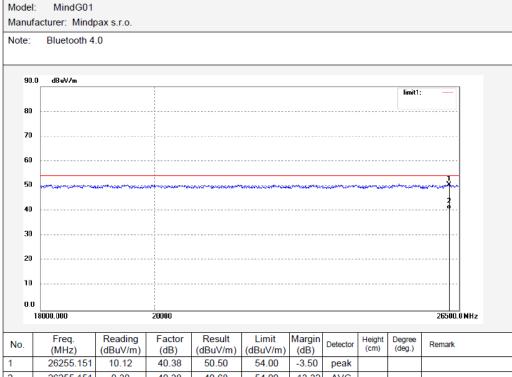
Distance: 3m

Site: 2# Chamber

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

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

Smart Band TX 2440MHz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26255.151	10.12	40.38	50.50	54.00	-3.50	peak			
2	26255.151	0.30	40.38	40.68	54.00	-13.32	AVG			



Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

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



## ACCURATE TECHNOLOGY CO., LTD.

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

> Polarization: Vertical Power Source: DC 3V Date: 16/12/17/

Time:

Engineer Signature: LGWADE

Distance: 3m

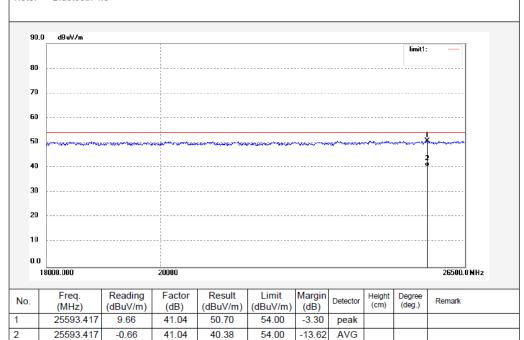
Job No.: Igwade #4758
Standard: FCC Class B 3M Radiated
Test item: Radiation Test

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

EUT: Smart Band Mode: TX 2440MHz Model: MindG01

Manufacturer: Mindpax s.r.o.

Note: Bluetooth 4.0



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

### ACCURATE TECHNOLOGY CO., LTD

### FCC Class B 3m Radiated

EUT: Smart Band M/N:MindG01
Manufacturer:
Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: LGWADE
Test Specification: DC 3V
Comment: X

 SCAN TABLE: "LFRE Fin"

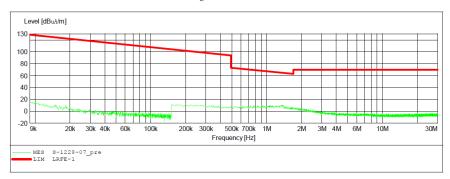
 Short Description:
 \_\_SUB\_STD\_VTERM2 1.70

 Start
 Stop
 Detector
 Meas.
 IF
 Transducer

 Frequency
 Frequency Width
 Time
 Bandw.

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak 1.0 s
 200 Hz
 1516M

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak 1.0 s
 9 kHz
 1516M



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

## ACCURATE TECHNOLOGY CO., LTD

### FCC Class B 3m Radiated

EUT: Smart Band M/N:MindG01
Manufacturer:
Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: LGWADE
Test Specification: DC 3V
Comment: Y

 SCAN TABLE: "LFRE Fin"

 Short Description:
 \_\_SUB\_STD\_VTERM2 1.70

 Start
 Stop
 Step
 Detector Meas.
 IF
 Transducer

 Frequency
 Frequency Width
 Time
 Bandw.

 9.0 kHz
 150.0 kHz
 100.0 Hz
 QuasiPeak 1.0 s
 200 Hz
 1516M

 150.0 kHz
 30.0 MHz
 5.0 kHz
 QuasiPeak 1.0 s
 9 kHz
 1516M

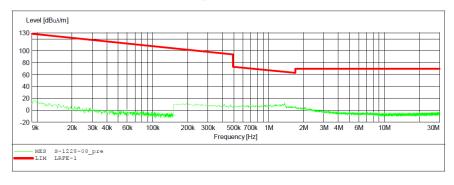




Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz - 1GHz)

## 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

Engineer Signature: LGWADE

Power Source: DC 3V

Date: 16/12/17/

Distance: 3m

Time:

Igwade #4765 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

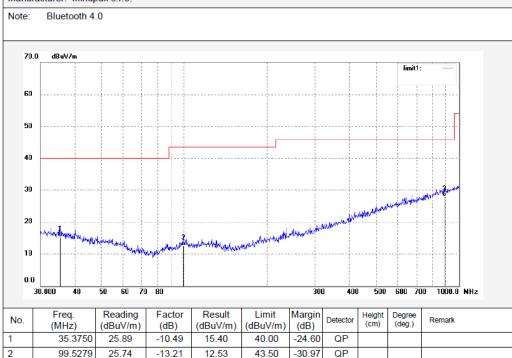
Smart Band Mode: TX 2480MHz Model: MindG01

Manufacturer: Mindpax s.r.o.

3

887.6099

25.79



46.00

-18.09

QP

2.12

27.91



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

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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

Polarization: Vertical

Power Source: DC 3V

Date: 16/12/17/

Job No.: Igwade #4766 Standard: FCC Class B 3M Radiated Test item: Radiation Test

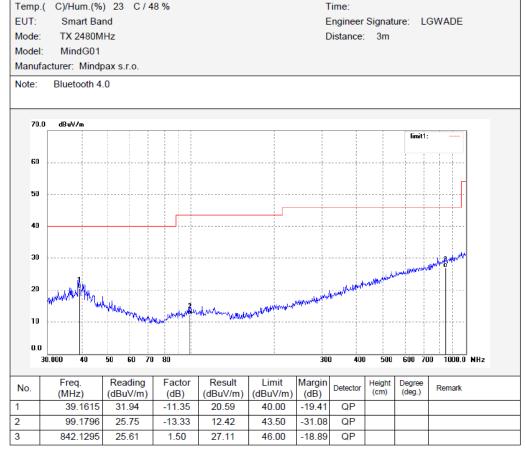




Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz -18GHz)



## 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

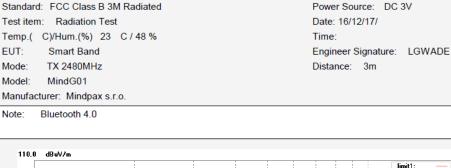
Igwade #4752 Standard: FCC Class B 3M Radiated

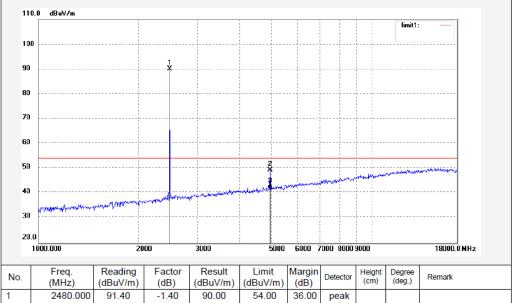
Temp.( C)/Hum.(%) 23 C / 48 %

Mode: TX 2480MHz

Model: MindG01 Manufacturer: Mindpax s.r.o.

Note:





No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	91.40	-1.40	90.00	54.00	36.00	peak			
2	4960.000	43.34	6.10	49.44	54.00	-4.56	peak			
3	4960.000	35.57	6.10	41.67	54.00	-12.33	AVG			

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

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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.: Igwade #4751 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

EUT: Smart Band Mode: TX 2480MHz Model: MindG01

Manufacturer: Mindpax s.r.o.

mart Band X 2480MHz JindG01

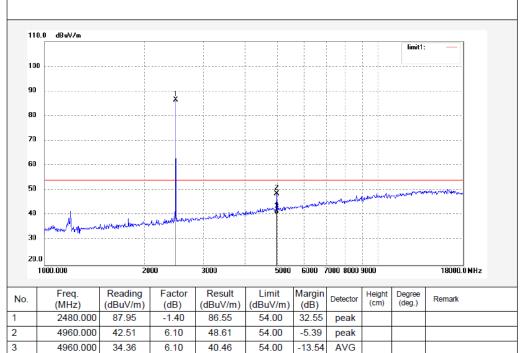
Note: Bluetooth 4.0

Polarization: Vertical Power Source: DC 3V Date: 16/12/17/

Date: 16/12/17/

Engineer Signature: LGWADE

Distance: 3m



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

## 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

Engineer Signature: LGWADE

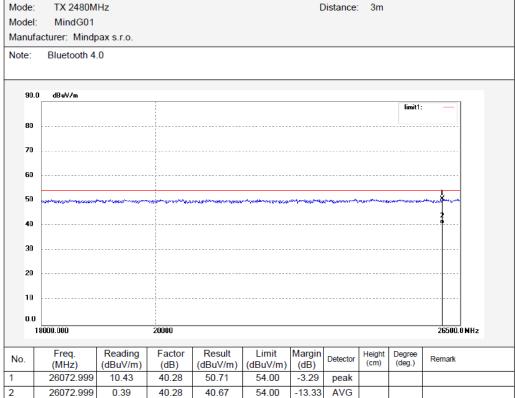
Power Source: DC 3V

Date: 16/12/17/

Igwade #4760 Standard: FCC Class B 3M Radiated Test item: Radiation Test

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

Smart Band Mode: TX 2480MHz



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Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

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

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## ACCURATE TECHNOLOGY CO., LTD.

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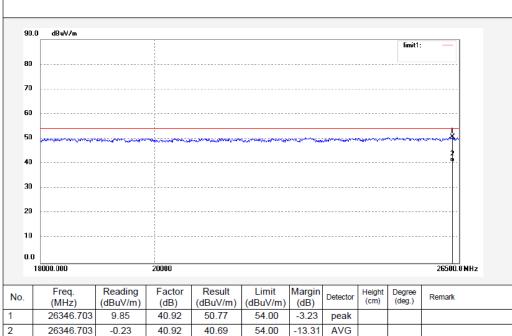
Job No.:Igwade #4759Polarization:VerticalStandard:FCC Class B 3M RadiatedPower Source:DC 3VTest item:Radiation TestDate: 16/12/17/

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

EUT: Smart Band Engineer Signature: LGWADE Mode: TX 2480MHz Distance: 3m

Model: MindG01 Manufacturer: Mindpax s.r.o.

Note: Bluetooth 4.0



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Figure 25: Test figure of Radiated emissions in restricted bands, Mode A.1, 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.: Igwade #4748
Standard: FCC (Band Edge)
Test item: Radiation Test
Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Smart Band

Mode: TX 2402MHz
Model: MindG01
Manufacturer: Mindpax s.r.o.

литет. ттарих

Polarization: Horizontal Power Source: DC 3V Date: 16/12/17/

Engineer Signature: LGWADE

Distance: 3m

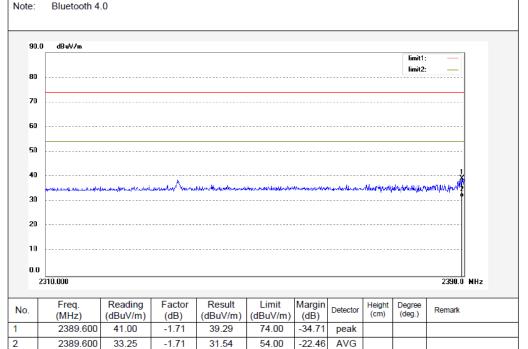




Figure 26: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical

## 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: DC 3V

Engineer Signature: LGWADE

Date: 16/12/17/

Distance: 3m

Igwade #4747 Standard: FCC (Band Edge) Test item: Radiation Test Temp.( C)/Hum.(%) 23 C / 48 %

Smart Band Mode: TX 2402MHz

2389.840

2389.840

2

43.07

32.94

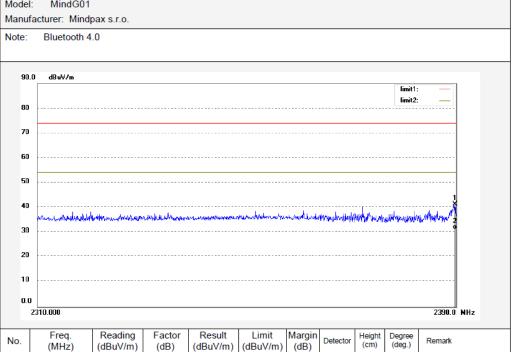
-1.71

-1.71

41.36

31.23

Model: MindG01



74.00

54.00

-32.64

-22.77

peak

AVG



Figure 27: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal

## ACCURATE TECHNOLOGY CO., LTD.

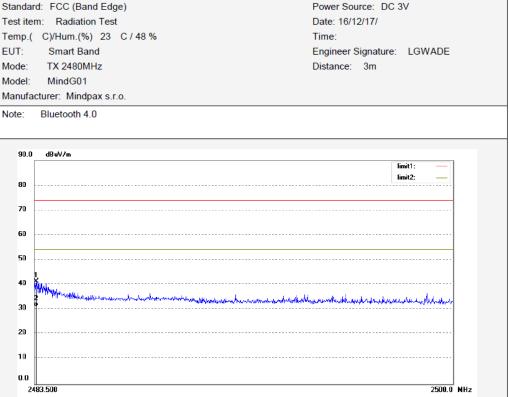
F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

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

Polarization: Horizontal

Igwade #4753 Standard: FCC (Band Edge) Test item: Radiation Test

Model: MindG01



No.	Freq.	Reading	Factor	Result	Limit	Margin	Detector	Height	Degree	Remark
INO.	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Detector	(cm)	(deg.)	Remark
1	2483.566	42.69	-1.40	41.29	74.00	-32.71	peak			
2	2483.566	32.65	-1.40	31.25	54.00	-22.75	AVG			



Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Figure 28: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical

# ACCURATE TECHNOLOGY CO., LTD. F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Job No.: Igwade #4754 Standard: FCC (Band Edge) Power Source Test item: Rediction Test

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

EUT: Smart Band Mode: TX 2480MHz

Model: MindG01 Manufacturer: Mindpax s.r.o. Polarization: Vertical Power Source: DC 3V Date: 16/12/17/

Time:

Engineer Signature: LGWADE

Distance: 3m

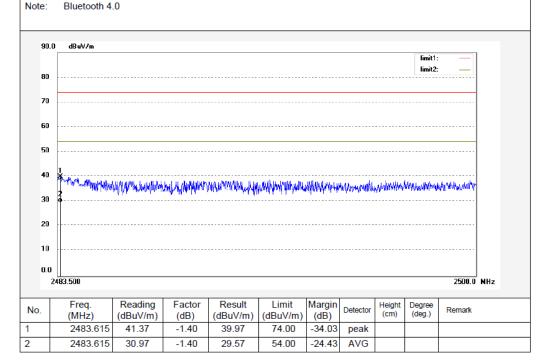
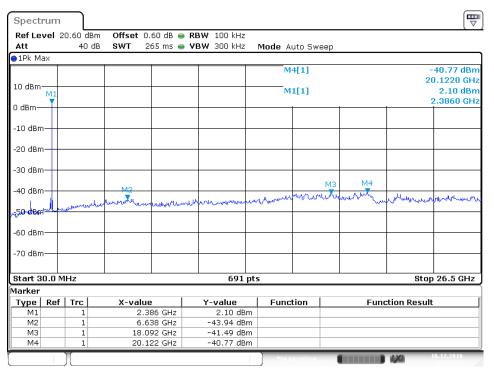


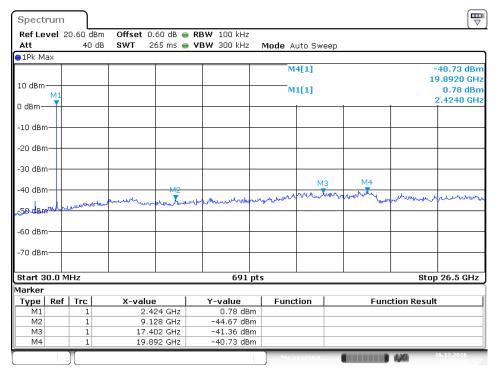


Figure 29: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.1



Date: 16.DEC.2016 15:55:33

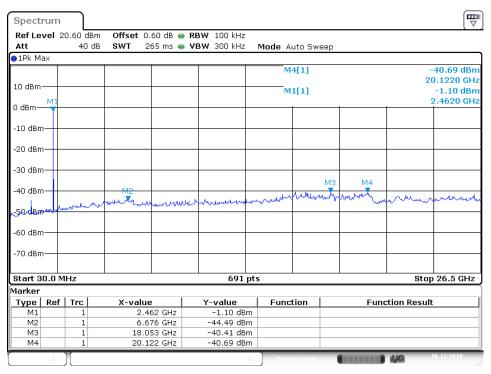
Figure 30: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.2



Date: 16.DEC.2016 15:54:51

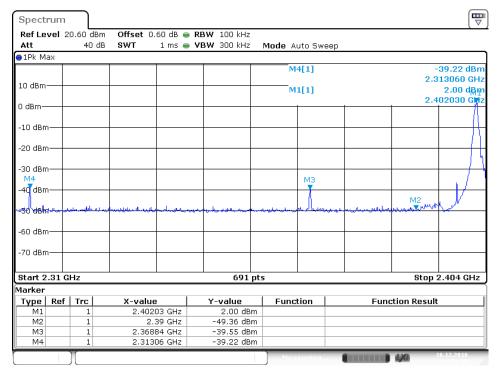
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Figure 31: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.3



Date: 16.DEC.2016 15:54:04

Figure 32: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.1



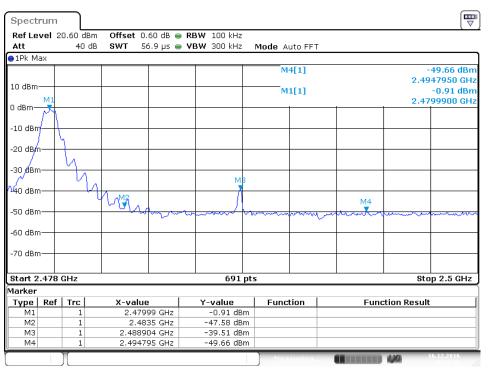
Date: 16.DEC.2016 15:51:56



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**Produkte** 

Figure 33: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.3



Date: 16.DEC.2016 15:52:56