

Prüfbericht-Nr.: 50055015 001 Auftrags-Nr.: 164066510 Seite 1 von 32 Test Report No.: Order No.: Page 1 of 32 Kunden-Referenz-Nr.: N/A Auftragsdatum: 20.06.2016 Client Reference No.: Order date: Auftraggeber: SolidLabs, Unit 19, 14 Southgate Road, London, N1 3LY, United Kingdom Client: Prüfgegenstand: Cubetto Test item: Bezeichnung / Typ-Nr.: CUBT001 Identification / Type No.: Auftrags-Inhalt: FCC/IC Test report Order content: Prüfarundlage: CFR47 FCC Part 15: Subpart C Section 15.247 Test specification: CFR47 FCC Part 15: Subpart C Section 15.209 FCC KDB publication 447498 D01 v06 RSS-247 Issue 1 May 2015 RSS-Gen Issue 4 November 2014 RSS-102 Issue 5 March 2015 Wareneingangsdatum: 15.08.2016 Date of receipt: Prüfmuster-Nr.: A000392067-003. Test sample No.: A000392067-005 Prüfzeitraum: 18.08.2016 - 02.09.2016 Testing period: Refer to photo documents Ort der Prüfung: Accurate Technology Co., Ltd. Place of testing: Prüflaboratorium: TÜV Rheinland (Shenzhen) Testing laboratory: Co., Ltd. Prüfergebnis\*: **Pass** Test result\*: geprüft von / tested by: kontrolliert von I reviewed by: 05.09.2016 Sam Lin / Assistant Manager 06.09.2016 Winnie Hou? Datum Name / Stellung Unterschrift Datum Name / Stellung Unterschrift Date Name / Position Signature Date Name / Position Signature Sonstiges / Other: This report is FCC/IC test report for Bluetooth device. FCC ID: 2AHFBCUBT001 IC: 21133-CUBT001 **HVIN:1.0** Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt Condition of the test item at delivery: Test item complete and undamaged \* Legende: 1 = sehr aut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ai!) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good3 = satisfactory 4 = sufficient 5 = poorP(ass) = passed a.m. test specification(s) F(ail) = falled 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: Pass

**5.1.2 PEAK OUTPUT POWER** 

RESULT: Pass

5.1.3 6DB BANDWIDTH AND 99% BANDWIDTH

RESULT: Pass

5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH

RESULT: Pass

5.1.5 POWER SPECTRAL DENSITY

RESULT: Pass

5.1.6 Spurious Emissions

RESULT: Pass

5.1.7 CONDUCTED EMISSIONS

RESULT: Not applicable

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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 A: Test Results of Bluetooth 4.0 Low Energy mode

Appendix B: Test Results of RF Exposure - Bluetooth 4.0 Low Energy mode

## 2. Test Sites

## 2.1 Test Facilities

Accurate Technology Co., Ltd.

(FCC Registration No.: 752051 & IC Registration Number: 5077A-2)

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

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

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## 2.2 List of Test and Measurement Instruments

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

| Kind of<br>Equipment        | Manufacturer         | Туре               | S/N        | Calibrated until |  |  |  |  |
|-----------------------------|----------------------|--------------------|------------|------------------|--|--|--|--|
| Radio Spectrum Te           | st                   |                    |            |                  |  |  |  |  |
| Spectrum Analyzer           | R&S                  | FSV40              | 101495     | Jan.9, 2017      |  |  |  |  |
| Conducted emission          | Conducted emissions  |                    |            |                  |  |  |  |  |
| Test Receiver               | R&S                  | ESCS30             | 100307     | Jan.9, 2017      |  |  |  |  |
| L.I.S.N.                    | Schwarzbeck          | NLSK8126           | 8126431    | Jan.9, 2017      |  |  |  |  |
| Pulse Limiter               | R&S                  | ESH3-Z2            | 100815     | Jan.9, 2017      |  |  |  |  |
| 50ΩCoaxial Switch           | Anritsu Corp         | MP59B              | 6200283933 | Jan.9, 2017      |  |  |  |  |
| Radiated emissions          | 5                    | 1                  | 1          |                  |  |  |  |  |
| Spectrum Analyzer           | R&S                  | FSV40              | 101495     | Jan.9, 2017      |  |  |  |  |
| Test Receiver               | R&S                  | ESCS30             | 100307     | Jan.9, 2017      |  |  |  |  |
| Bilog Antenna               | Schwarzbeck          | VULB9163           | 9163-323   | Jan.14, 2017     |  |  |  |  |
| Loop Antenna                | Schwarzbeck          | FMZB1516           | 1516131    | Jan.14, 2017     |  |  |  |  |
| Horn Antenna                | Schwarzbeck          | BBHA9120D          | 9120D-655  | Jan.14, 2017     |  |  |  |  |
| Horn Antenna                | Schwarzbeck          | BBHA9170           | 9170-359   | Jan.14, 2017     |  |  |  |  |
| RF Switching<br>Unit+PreAMP | Compliance Direction | RSU-M2             | 38322      | Jan.9, 2017      |  |  |  |  |
| Pre-Amplifier               | R&S                  | CBLU11835<br>40-01 | 3791       | Jan.9, 2017      |  |  |  |  |
| 50 Coaxial Switch           | Anritsu Corp         | MP59B              | 6200506474 | Jan.9, 2017      |  |  |  |  |
| RF Coaxial Cable            | SUHNER               | N-3m               | No.8       | Jan.9, 2017      |  |  |  |  |
| RF Coaxial Cable            | RESENBERGER          | N-3.5m             | No.9       | Jan.9, 2017      |  |  |  |  |
| RF Coaxial Cable            | SUHNER               | N-6m               | No.10      | Jan.9, 2017      |  |  |  |  |
| RF Coaxial Cable            | RESENBERGER          | N-12m              | No.11      | Jan.9, 2017      |  |  |  |  |
| RF Coaxial Cable            | RESENBERGER          | N-0.5m             | No.12      | Jan.9, 2017      |  |  |  |  |

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## 2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

### 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table,

| Items              |                            | Extended Uncertainty |
|--------------------|----------------------------|----------------------|
| CE                 | Disturbance Voltage (dBuV) | U=1.94dB, k=2, σ=95% |
| RE (9kHz-30MHz)    | Field strength (dBuV/m)    | U=3.08dB, k=2, σ=95% |
| RE (30-1000MHz)    | Field strength (dBuV/m)    | U=4.42dB, k=2, σ=95% |
| RE (above 1000MHz) | Field strength (dBuV/m)    | U=4.06dB, k=2, σ=95% |

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A 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 Accurate Technology Co., Ltd. facility located at F1, Bldg A, Changyuan New Material 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 wireless toy using Bluetooth technology.

## 3.2 Ratings and System Details

**Table 2: Technical Specification of EUT** 

| Technical Specification      | Value                                    |
|------------------------------|--|
| Kind of Equipment:           | Cubetto                                  |
| Type Designation:            | CUBT001                                  |
| FCC ID:                      | 2AHFBCUBT001                             |
| IC:                          | 21133-CUBT001                            |
| HVIN:                        | 1.0                                      |
| Type of Equipment:           | Class B digital equipment                |
| Equiupment Class:            | DTS                                      |
| Wireless Technology:         | Bluetooth 4.0 Low Energy                 |
| Rated output power:          | -5 dBm                                   |
| Operating Frequency Range:   | 2402-2480 MHz for Bluetooth              |
| Channel Number:              | 40 channels for Bluetooth 4.0 Low Energy |
| Channel Separation:          | 2 MHz for Bluetooth 4.0 Low Energy       |
| Type of Modulation:          | GFSK                                     |
| Operating Voltage:           | DC 4.5V via 3xAA ALKALINE Battery        |
| Operating Temperature Range: | -20℃ to 55℃                              |
| Antenna Type:                | Integral PCB Printed Antenna             |
| Smart Antenna Systems:       | Not Applicable                           |
| Number of Antenna:           | 1  |
| Antenna Gain:                | Max1dBi for Bluetooth                    |

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Table 3: List of Radio Frequency Channel, Bluetooth 4.0 Low Energy

| RF      | Frequency | RF      | Frequency | RF      | Frequency | RF      | Frequency |
|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| Channel | (MHz)     | Channel | (MHz)     | Channel | (MHz)     | Channel | (MHz)     |
| 0       | 2402.00   | 11      | 2424.00   | 22      | 2446.00   | 33      | 2468.00   |
| 1       | 2404.00   | 12      | 2426.00   | 23      | 2448.00   | 34      | 2470.00   |
| 2       | 2406.00   | 13      | 2428.00   | 24      | 2450.00   | 35      | 2472.00   |
| 3       | 2408.00   | 14      | 2430.00   | 25      | 2452.00   | 36      | 2474.00   |
| 4       | 2410.00   | 15      | 2432.00   | 26      | 2454.00   | 37      | 2476.00   |
| 5       | 2412.00   | 16      | 2434.00   | 27      | 2456.00   | 38      | 2478.00   |
| 6       | 2414.00   | 17      | 2436.00   | 28      | 2458.00   | 39      | 2480.00   |
| 7       | 2416.00   | 18      | 2438.00   | 29      | 2460.00   |         |           |
| 8       | 2418.00   | 19      | 2440.00   | 30      | 2462.00   |         |           |
| 9       | 2420.00   | 20      | 2442.00   | 31      | 2464.00   |         |           |
| 10      | 2422.00   | 21      | 2444.00   | 32      | 2466.00   |         |           |

## 3.3 Independent Operation Modes

The basic operation modes are:

- A. Bluetooth Low Energy operating
  - 1. Transmitting
    - i. Low channel
    - ii. Middle channel
    - iii. High channel
  - 2. Receiving
    - i. Low channel
    - ii. Middle channel
    - iii. High channel
- B. Off

## 3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

## 3.5 Submitted Documents

| - Bill of Material | - Circuit Diagram    |
|--------------------|----------------------|
| - PCB Layout       | - Instruction Manual |
| - Photo Document   | - Rating Label       |

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## 4. Test Set-up and Operation Modes

## 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation 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.

During testing, test software (nRFgo Studio) provided by the applicant was used to control the operating channel as well as output power for Bluetooth operation.

Table 4: List of Frequencies under Test, Bluetooth 4.0 Low Energy operation

| RF Channel of Bluetooth 4.0 Low Energy             |    |         |                         |  |  |  |
|--|----|---------|-------------------------|--|--|--|
| Test Channel Channel number Frequency (MHz) Remark |    |         |                         |  |  |  |
| Low  | 0  | 2402.00 | Max. output power level |  |  |  |
| Middle   | 19 | 2440.00 | Max. output power level |  |  |  |
| High   | 39 | 2480.00 | Max. output power level |  |  |  |

## 4.3 Special Accessories and Auxiliary Equipment

**Table 5: List of Accessories and Auxiliary Equipment** 

| Description | Manufacturer | Model         | S/N        |
|-------------|--------------|---------------|------------|
| Notebook PC | Lenovo       | ThinkPad X240 | SL10F31638 |

### **Table 6: List of Accessories and Cables**

| Interface(s) / Port (s) | Max. cable length, Shielding | Cable classification |
|-------------------------|------------------------------|----------------------|
|                         |                              |                      |



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## 4.4 Countermeasures to achieve EMC Compliance

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

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## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test below 1 GHz

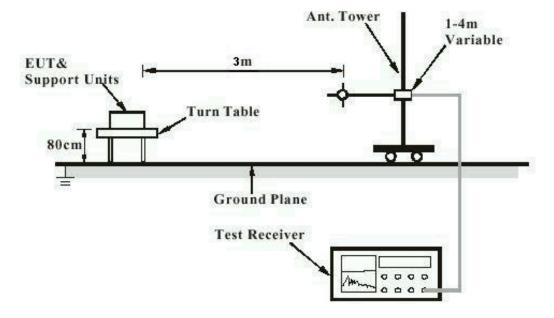
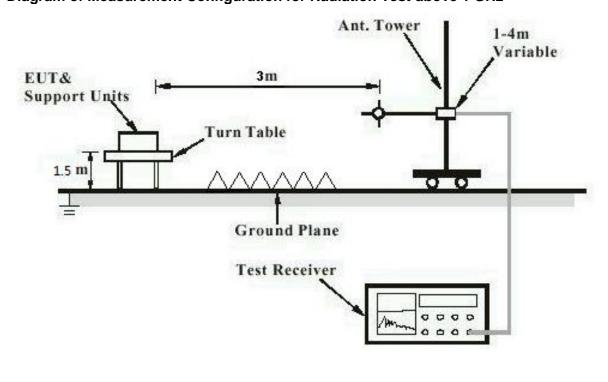


Diagram of Measurement Configuration for Radiation Test above 1 GHz



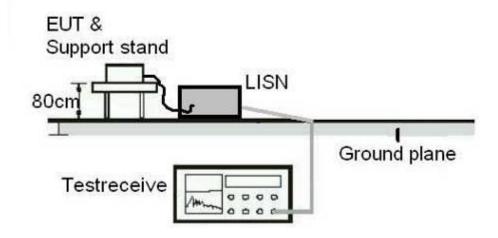


**Products** 

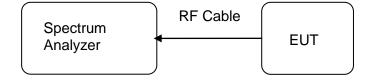
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**Diagram of Measurement Equipment Configuration for Conduction Measurement** 



**Diagram of Measurement Equipment Configuration for Transmitter Measurement** 





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## 5. Test Results

# 5.1 Test Requirements & Test Suites - Part 15 Subpart C DTS equipment

## 5.1.1 Antenna Requirement

RESULT: Pass

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 -1 dBi for Bluetooth, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to compliance the provision.

Refer to EUT photo for details.



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## 5.1.2 Peak Output Power

**RESULT: Pass** 

Date of testing 2016-08-18 to 2016-09-02 Test standard FCC Part 15.247(b)(3)

RSS-247 Section 5.4

RSS-Gen Issue 4 Clause 6.12

ANSI C63.10:2013 Basic standard

FCC KDB 558074 v03r05

1Watt Limit

Shielded room Kind of test site

**Test setup** 

Test Channel Low/ Middle/ High

Operation Mode A.1 Ambient temperature **23**℃ Relative humidity 51% 101.0 kPa Atmospheric pressure :

Table 7: Test result of Peak Output Power, Bluetooth Low Energy operation

|                | Channal              | Bluetooth 4.0 Low Energy |               |                 |         |              |         |  |
|----------------|----------------------|--------------------------|---------------|-----------------|---------|--------------|---------|--|
| Channel        | Channel<br>Frequency | Measured<br>Result       | Cable<br>Loss | Peak C<br>Power | Output  | Limit<br>(W) | Verdict |  |
|                | (MHz)                | (dBm)                    | (dB)          | dBm             | W       |              |         |  |
| Low Channel    | 2402                 | -6.87                    | 0             | -6.87           | 0.00021 | 1            | Pass    |  |
| Middle Channel | 2440                 | -6.13                    | 0             | -6.13           | 0.00024 | 1            | Pass    |  |
| High Channel   | 2480                 | -5.21                    | 0             | -5.21           | 0.00030 | 1            | Pass    |  |

### Note:

2. Cable loss included in measured result

<sup>1.</sup> Peak Output Power (dBm) = Measured Result + Cable Loss



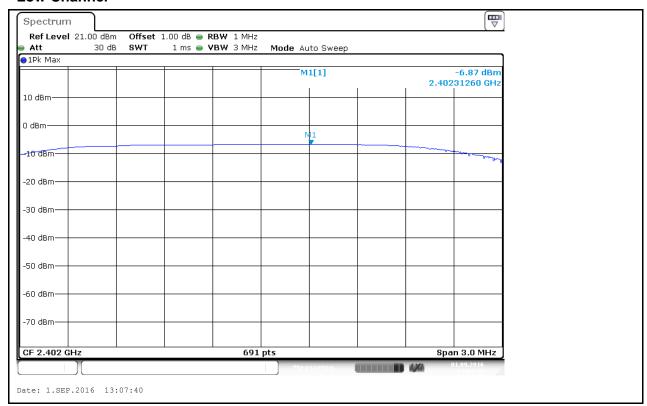
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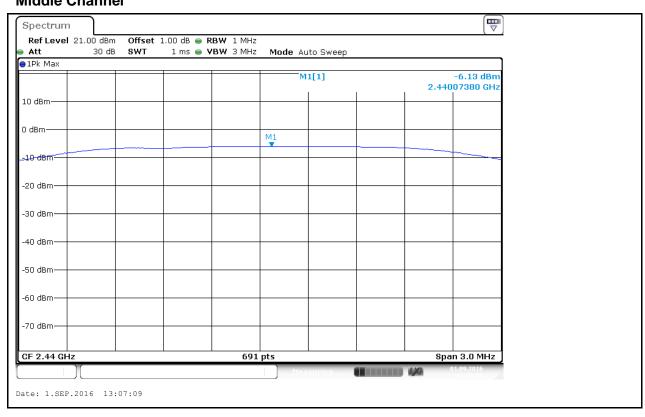
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## Test Graph of Peak Output Power, Bluetooth 4.0 Low Energy mode **Low Channel**



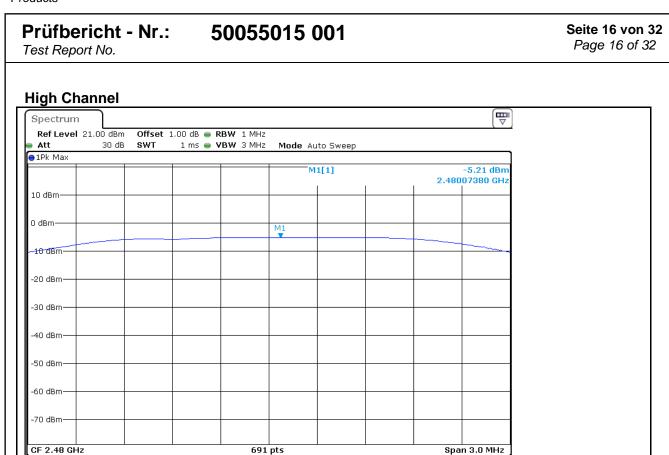
### **Middle Channel**





Date: 1.SEP.2016 13:06:36

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### 5.1.3 6dB Bandwidth and 99% Bandwidth

**RESULT: Pass** 

Date of testing 2016-08-18 to 2016-09-02 Test standard FCC Part 15.247(a)(2) RSS-247 Section 5.2

RSS-Gen Issue 4 Clause 6.6

Basic standard ANSI C63.10:2013

FCC KDB 558074 v03r05

Kind of test site Shielded room

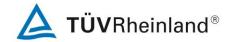
**Test setup** 

Test Channel Low/ Middle/ High

Operation Mode A.1 Ambient temperature **23**℃ Relative humidity 51% 101.0 kPa Atmospheric pressure

Table 8: Test result of 6dB Bandwidth and 99% Bandwidth, Bluetooth Low Energy operation

| Bluetooth 4.0 Low Energy  |      |        |         |              |      |  |  |
|---|------|--------|---------|--------------|------|--|--|
| Channel 6dB 99% Channel Frequency Bandwidth Bandwidth Limit (kHz) Verdict (MHz) (kHz) (kHz) |      |        |         |              |      |  |  |
| Low Channel   | 2402 | 1250.4 | 2092.62 | at least 500 | Pass |  |  |
| Mid Channel   | 2440 | 1185.2 | 2222.87 | at least 500 | Pass |  |  |
| High Channel  | 2480 | 1154.9 | 2162.08 | at least 500 | Pass |  |  |



**Products** 

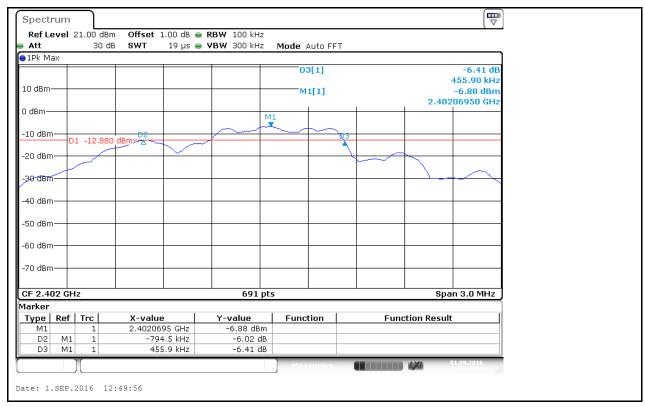
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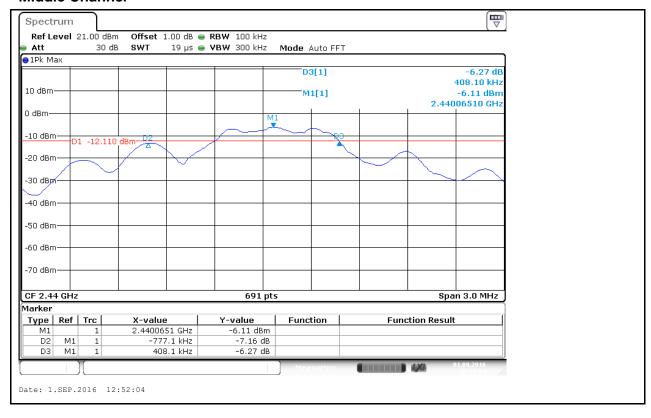
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## Test Graph of 6dB Bandwidth, Bluetooth 4.0 Low Energy mode

### **Low Channel**

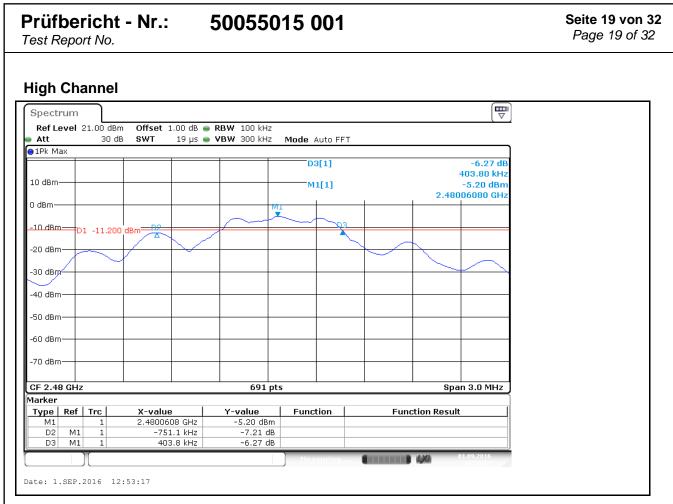


#### **Middle Channel**





**Products** 

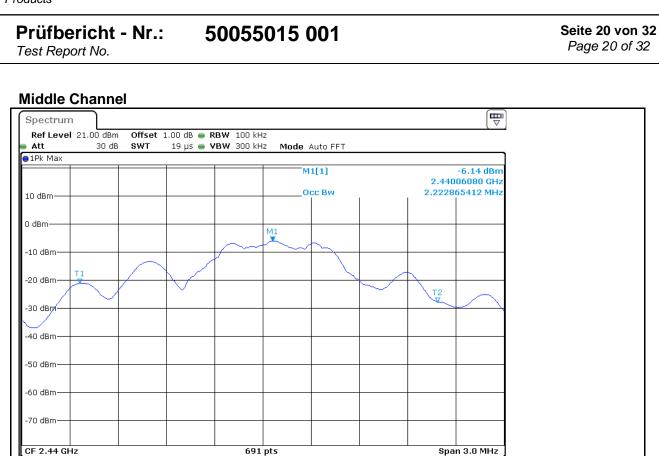


## Test Graph of 99% Bandwidth, Bluetooth 4.0 Low Energy mode Low Channel



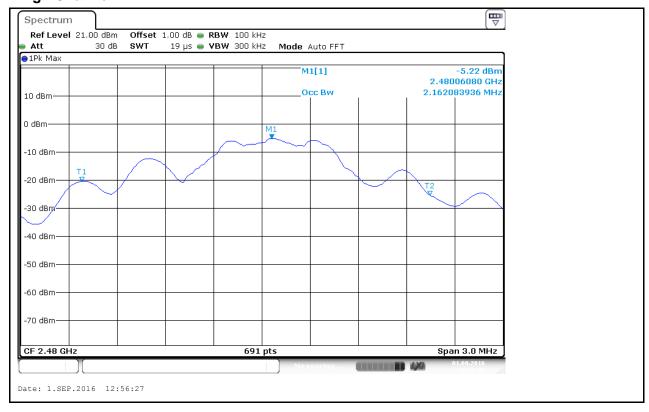


**Products** 



### **High Channel**

Date: 1.SEP.2016 12:57:44





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## **5.1.4 Conducted Spurious Emissions measured in 100 kHz Bandwidth**

RESULT: Pass

Date of testing : 2016-08-18 to 2016-09-02 Test standard : FCC part 15.247(d)

RSS-247 Section 5.5

RSS-Gen Issue 4 Clause 6.13

Basic standard : ANSI C63.10:2013

FCC KDB 558074 v03r05

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/ Middle/ High

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to following test graph, and compliance is achived as well.



**Products** 

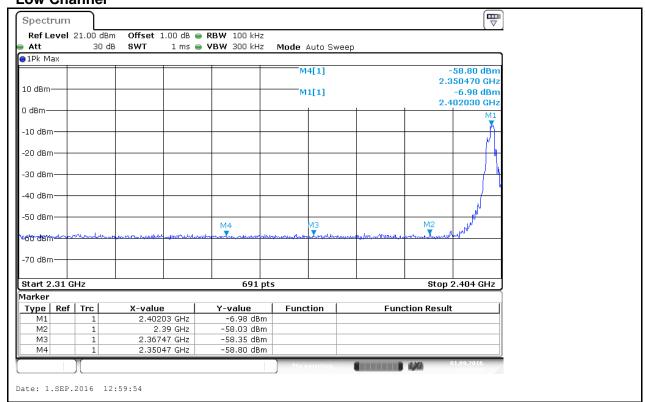
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# Test Graph of 100 kHz Bandwidth of Frequency Band Edge, Bluetooth 4.0 Low Energy mode

**Low Channel** 









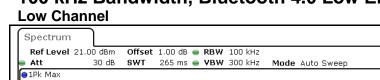
**Products** 

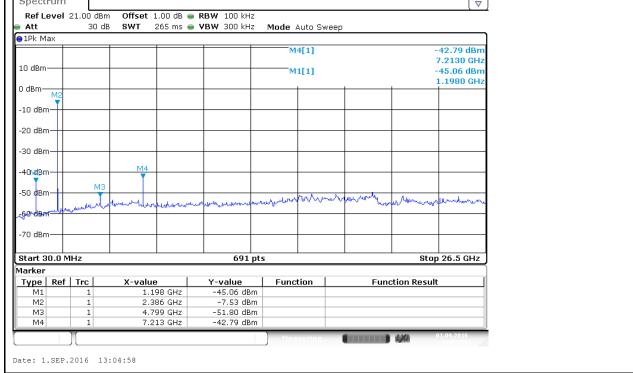
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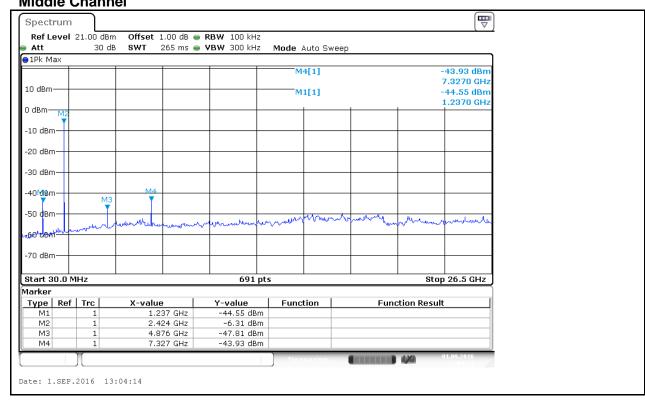
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## Test Graph of Conducted spurious emissions measured in 100 kHz Bandwidth, Bluetooth 4.0 Low Energy mode





### Middle Channel

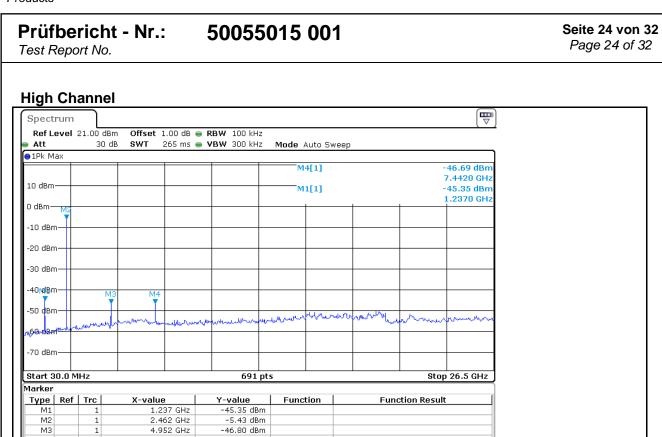




**Products** 

Μ4

Date: 1.SEP.2016 13:05:44



-46.69 dBm

7.442 GHz



**Products** 

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Test Report No.

## 5.1.5 Power spectral density

**RESULT: Pass** 

Date of testing 2016-08-18 to 2016-09-02

Test standard FCC part 15.247(e)

RSS-247 Section 5.2

Basic standard ANSI C63.10:2013

FCC KDB 558074 v03r05

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

**Test setup** 

Test Channel Low/ Middle/ High

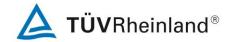
Operation mode A.1 Ambient temperature **23**℃ Relative humidity 51% Atmospheric pressure 101.0 kPa

Table 9: Test result of Power spectral density, Bluetooth Low Energy operation

| Operation Mode           | Channel | Result | Cable<br>Loss<br>(dB) |        | Limit<br>(dBm/3kHz) | Verdict |
|--------------------------|---------|--------|-----------------------|--------|---------------------|---------|
|                          | 2402    | -20.71 | 0                     | -20.71 | 8                   | Pass    |
| Bluetooth 4.0 Low Energy | 2440    | -20.37 | 0                     | -20.37 | 8                   | Pass    |
| Lifeigy                  | 2480    | -19.77 | 0                     | -19.77 | 8                   | Pass    |

<sup>1.</sup> PSD = Measured Result + Cable Loss

<sup>2.</sup> Cable loss included in measured result



**Products** 

Prüfbericht - Nr.: 50055015 001

Test Report No.

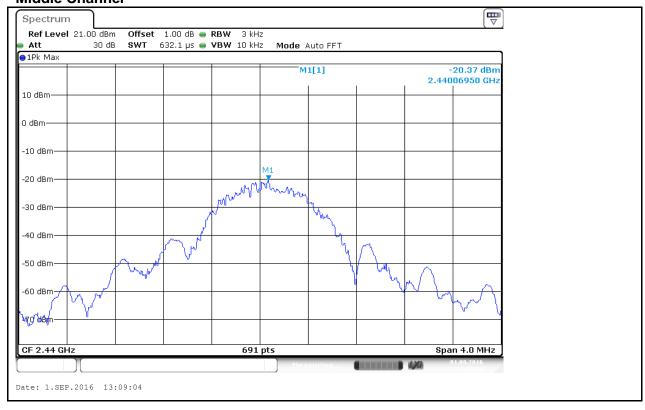
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## Test Graph of Power Spectral Density, Bluetooth 4.0 Low Energy mode

### **Low Channel**



### Middle Channel





**Products** 

Date: 1.SEP.2016 13:09:32





**Products** 

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## **5.1.6 Spurious Emissions**

**RESULT: Pass** 

Date of testing 2016-08-18 to 2016-09-02

Test standard FCC part 15.247(d)

FCC part 15.209

RSS-247 Section 5.5 and Section 3.3

RSS-Gen Issue 4 Clause 6.13

Basic standard ANSI C63.10:2013 Limits

Refer to 15.209(a)

RSS-Gen Issue 4 Clause 8.9 and 8.10

Kind of test site 3m Semi-Anechoic Chamber

**Test setup** 

Test Channel Low/ Middle/ High

: Operation mode A.1 Ambient temperature **23**℃ Relative humidity 48% Atmospheric pressure : 101.0 kPa

Refer to attached Appendix A for details.



### Produkte Products

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### 5.1.7 Conducted emissions

RESULT: Not applicable

Test standard : FCC Part 15.207

RSS-Gen Clause 8.8

Basic standard : ANSI C63.10: 2013
Frequency range : 0.15MHz – 30MHz
Limits : FCC Part 15.207(a)

Table 3 of RSS-Gen

Kind of test site : Shield Room

Conclusion:

The EUT does not have AC mains port, therefore this requirement is not applicable for EUT.



Products

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## **Appendix A**

## **Test Results of Bluetooth 4.0 Low Energy Mode**

| APPENDIX A.1: Spurious Emissions of Bluetooth 4.0 Low Energy operation2 |     |  |  |  |  |
|---|-----|--|--|--|--|
| Low Channel   | 2   |  |  |  |  |
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### Appendix A.1: Spurious Emissions of Bluetooth 4.0 Low Energy operation Low Channel

### ACCURATE TECHNOLOGY CO., LTD

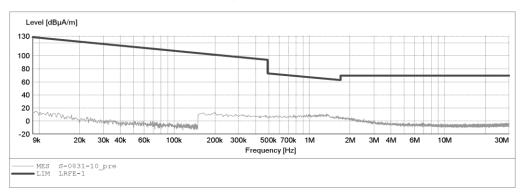
### FCC Class B 3M Radiated

Cubetto M/N:CUBT001

manufacturer: SolidLabs
Operating Condition: TX 2402MHz
Test Site: 2# Chamber
Operator: Lawre Test Specification: DC 4.5V Comment:

Start of Test: 2016-8-31 /

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step \_SUB\_STD\_VTERM2 1.70 \_SUB\_STD\_VIENTE ...
Detector Meas.
Time Transducer Bandw. 200 Hz 1516M 1516M





### Produkte **Products**

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#### ACCURATE TECHNOLOGY CO., LTD

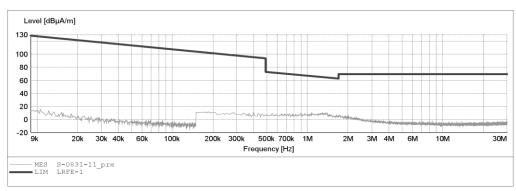
#### FCC Class B 3M Radiated

Cubetto M/N:CUBT001

manufacturer: SolidLabs
Operating Condition: TX 2402MHz
Test Site: 2# Chamber
Operator: LGWADE Test Specification: DC 4.5V Comment: Start of Test: 2016-8-31 /

Transducer

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas. IF Transcription:
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





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#### ACCURATE TECHNOLOGY CO., LTD

#### FCC Class B 3M Radiated

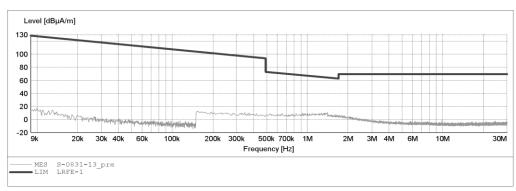
Cubetto M/N:CUBT001

manufacturer: SolidLabs
Operating Condition: TX 2402MHz
Test Site: 2# Chamber
Operator: LGWADE Test Specification: DC 4.5V Comment: Start of Test:

2016-8-31 /

Transducer

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas. IF Transcription:
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



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Job No.: Igwade #1447

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2402MHz

Model: CUBT001

Manufacturer: SolidLabs

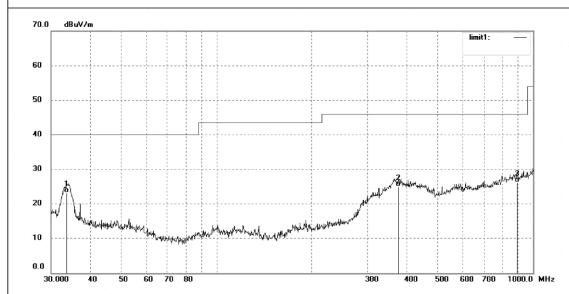
Polarization: Vertical
Power Source: DC 4.5V
Date: 2016/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



| No | о. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|----|----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1  |    | 33.5623        | 32.29               | -9.15          | 23.14              | 40.00             | -16.86         | QP       |                |                  |        |
| 2  |    | 375.9384       | 32.28               | -7.42          | 24.86              | 46.00             | -21.14         | QP       |                |                  |        |
| 3  |    | 890.7278       | 24.81               | 1.27           | 26.08              | 46.00             | -19.92         | QP       |                |                  |        |

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Polarization: Horizontal Power Source: DC 4.5V

Date: 2016/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m

Job No.: Igwade #1448

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

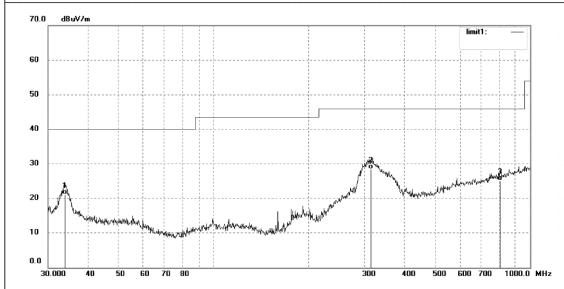
EUT: Cubetto

Mode: TX 2402MHz

Model: CUBT001

Manufacturer: SolidLabs

Note:



| - |     |                |                     |                |                    |                   |                |          |             |                  |        |
|---|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
|   | No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|   | 1   | 33.9174        | 30.56               | -9.47          | 21.09              | 40.00             | -18.91         | QP       |             |                  |        |
|   | 2   | 314.3765       | 37.32               | -8.89          | 28.43              | 46.00             | -17.57         | QP       |             |                  |        |
|   | 3   | 804.6028       | 25.05               | 0.11           | 25.16              | 46.00             | -20.84         | QP       |             |                  |        |

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eyuan Rd, Tel:+86-0755-26503290 n,P.R.China Fax:+86-0755-26503396 Polarization: Vertical

Site: 2# Chamber

Job No.: Igwade #1407

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2402MHz

Model: CUBT001

Manufacturer: SolidLabs

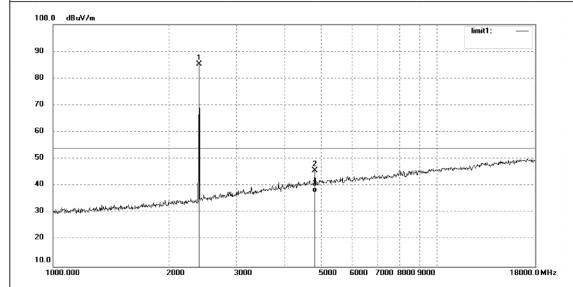
Time:

Engineer Signature: LGWADE

Power Source: DC 4.5V

Distance: 3m

Date: 16/08/18/



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 2402.000       | 92.67               | -7.45          | 85.22              | /                 | /              | peak     |                |                  |        |
| 2   | 4804.025       | 45.93               | -0.30          | 45.63              | 74.00             | -28.37         | peak     |                |                  |        |
| 3   | 4804.025       | 37.93               | -0.30          | 37.63              | 54.00             | -16.37         | AVG      |                |                  |        |

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Site: 2# Chamber

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td, Tel:+86-0755-26503290 hina Fax:+86-0755-26503396

Job No.: Igwade #1408 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2402MHz

Model: CUBT001

Manufacturer: SolidLabs

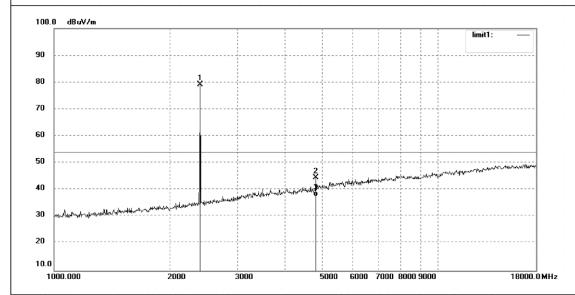
Polarization: Horizontal Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 2402.000       | 86.57               | -7.45          | 79.12              | /                 | /              | peak     |             |                  |        |
| 2   | 4804.026       | 44.86               | -0.30          | 44.56              | 74.00             | -29.44         | peak     |             |                  |        |
| 3   | 4804.026       | 37.86               | -0.30          | 37.56              | 54.00             | -16.44         | AVG      |             |                  |        |

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Job No.: Igwade #1413

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2402MHz

Model: CUBT001

Model: CUBT001

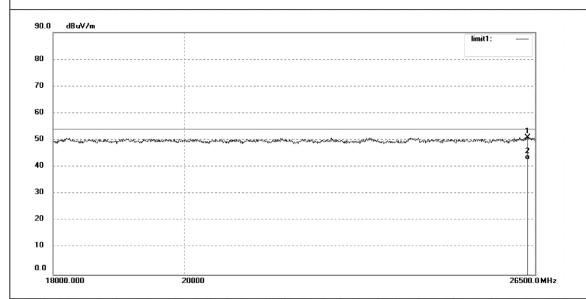
Manufacturer: SolidLabs

Polarization: Horizontal Power Source: DC 4.5V

Date: 16/08/18/ Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 26346.703      | 34.42               | 16.50          | 50.92              | 74.00             | -23.08         | peak     |             |                  |        |
| 2   | 26346.703      | 26.12               | 16.50          | 42.62              | 54.00             | -11.38         | AVG      |             |                  |        |

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Job No.: Igwade #1414

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2402MHz

Model: CUBT001

Manufacturer: SolidLabs

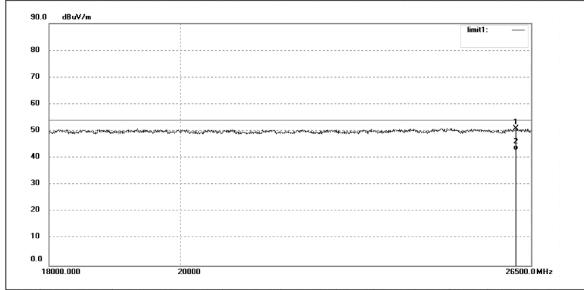
Polarization: Vertical Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 26184.163      | 33.76               | 17.11          | 50.87              | 74.00             | -23.13         | peak     |             |                  |        |
| 2   | 26184.163      | 25.78               | 17.11          | 42.89              | 54.00             | -11.11         | AVG      |             |                  |        |



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#### Middle Channel

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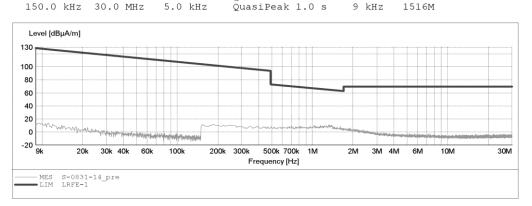
#### FCC Class B 3M Radiated

Cubetto M/N:CUBT001

Operating Condition: TX 2440MHz
Test Site: 2# Chamber
Operator: Test Condition: Tax 240 MHz Test Specification: DC 4.5V Comment:

Start of Test: 2016-8-31 /

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas. IF
Frequency Frequency Width Time Bandw.
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz Transducer 200 Hz 1516M





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#### FCC Class B 3M Radiated

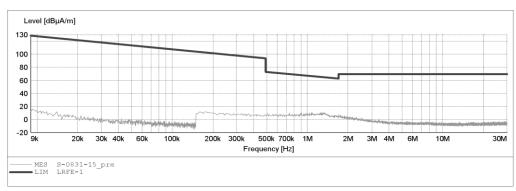
Cubetto M/N:CUBT001

Manufacturer: SolidLabs
Operating Condition: TX 2440MHz
Test Site: 2# Chamber
Operator: TGMADE Test Specification: DC 4.5V Comment: Start of Test:

2016-8-31 /

Transducer

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas. IF Transcription:
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





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#### ACCURATE TECHNOLOGY CO., LTD

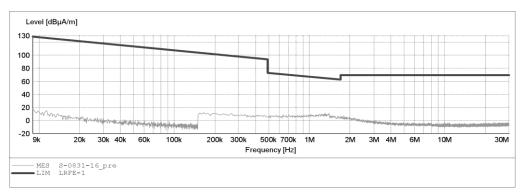
#### FCC Class B 3M Radiated

Cubetto M/N:CUBT001

manufacturer: SolidLabs
Operating Condition: TX 2440MHz
Test Site: 2# Chamber
Operator: LGWADE Test Specification: DC 4.5V Comment: Start of Test: 2016-8-31 /

Transducer

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas. IF Transcription:
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



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Job No.: Igwade #1449

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2440MHz

Model: CUBT001

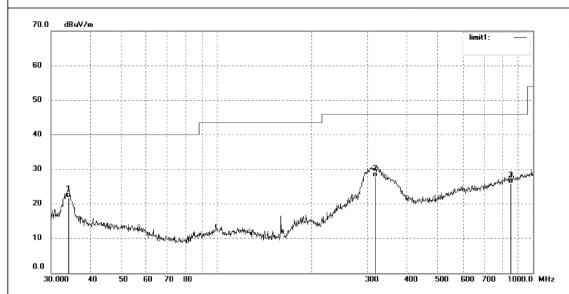
Manufacturer: SolidLabs

Polarization: Horizontal Power Source: DC 4.5V Date: 2016/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No | 0. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|----|----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1  |    | 34.1561        | 31.27               | -9.49          | 21.78              | 40.00             | -18.22         | QP       |                |                  |        |
| 2  |    | 317.7010       | 36.54               | -8.81          | 27.73              | 46.00             | -18.27         | QP       |                |                  |        |
| 3  |    | 851.0353       | 25.17               | 0.72           | 25.89              | 46.00             | -20.11         | QP       |                |                  |        |



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Job No.: Igwade #1450 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2440MHz

Model: CUBT001

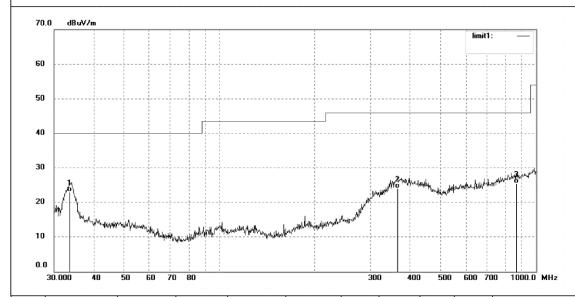
Manufacturer: SolidLabs

Polarization: Vertical
Power Source: DC 4.5V
Date: 2016/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 33.6802        | 32.22               | -9.18          | 23.04              | 40.00             | -16.96         | QP       |                |                  |        |
| 2   | 365.5391       | 31.69               | -7.56          | 24.13              | 46.00             | -21.87         | QP       |                |                  |        |
| 3   | 866.0878       | 24.46               | 1.03           | 25.49              | 46.00             | -20.51         | QP       |                |                  |        |

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Site: 2# Chamber

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Power Source: DC 4.5V

Polyal TKI, Fax:+86-0755-26503396

Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m

Job No.: Igwade #1409

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

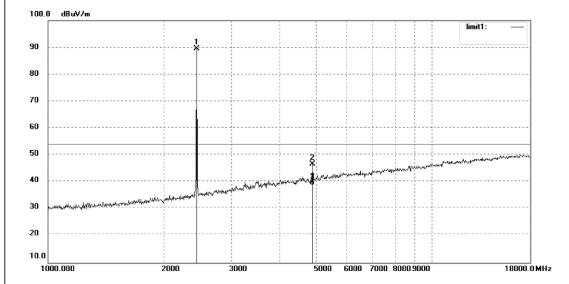
Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Cubetto

Mode: TX 2440MHz

Model: CUBT001

Manufacturer: SolidLabs



| ı |     |                |                     |                |                    |                   |                |          |             |                  |        |
|---|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
|   | No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|   | 1   | 2440.000       | 96.82               | -7.36          | 89.46              | /                 | /              | peak     |             |                  |        |
|   | 2   | 4880.027       | 46.50               | 0.13           | 46.63              | 74.00             | -27.37         | peak     |             |                  |        |
| ı | 3   | 4880.027       | 38.45               | 0.13           | 38.58              | 54.00             | -15.42         | AVG      |             |                  |        |

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Job No.: Igwade #1410

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2440MHz

Model: CUBT001

Manufacturer: SolidLabs

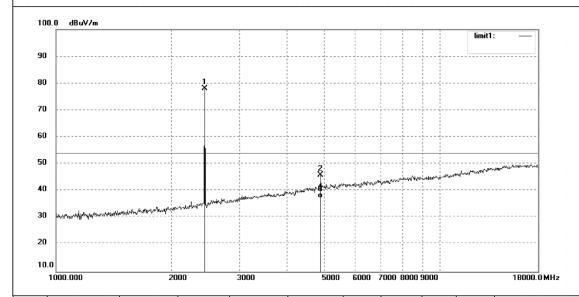
Polarization: Vertical Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 2440.000       | 85.47               | -7.36          | 78.11              | /                 | /              | peak     |                |                  |        |
| 2   | 4880.024       | 45.70               | 0.13           | 45.83              | 74.00             | -28.17         | peak     |                |                  |        |
| 3   | 4880.024       | 37.10               | 0.13           | 37.23              | 54.00             | -16.77         | AVG      |                |                  |        |

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Job No.: Igwade #1415

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

(dBuV/m)

33.56

25.74

(dB)

17.05

17.05

(MHz)

26275.468

26275.468

1

2

EUT: Cubetto

Mode: TX 2440MHz

Model: CUBT001

Manufacturer: SolidLabs

Polarization: Vertical Power Source: DC 4.5V

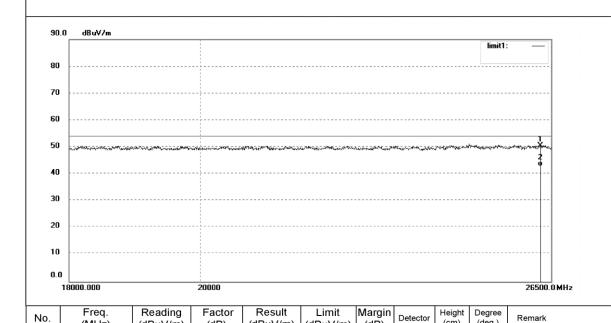
Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



(dBuV/m)

50.61

42.79

Page: 1

(dBuV/m)

74.00

54.00

(dB)

-23.39

-11.21

peak

AVG

http://www.atc-lab.com

# igapla $\mathsf{T}\ddot{\mathsf{U}}\mathsf{V}\mathsf{R}$ heinland $^{ ext{@}}$

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

Job No.: Igwade #1416

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

(dBuV/m)

34.45

26.89

(dB)

16.50

16.50

(MHz)

2

26214.563

26214.563

EUT: Cubetto Mode: TX 2440MHz Model: CUBT001 Manufacturer: SolidLabs Polarization: Horizontal Power Source: DC 4.5V

Date: 16/08/18/

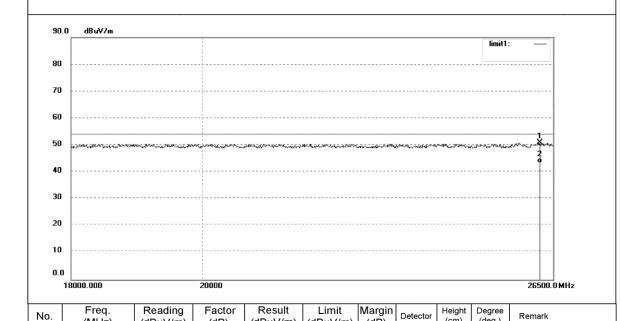
Time:

Engineer Signature: LGWADE

(deg.)

Distance: 3m

Note:



(dBuV/m)

74.00

54.00

(dB)

-23.05

-10.61

peak

AVG

(dBuV/m)

50.95

43.39



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#### High Channel

#### ACCURATE TECHNOLOGY CO., LTD

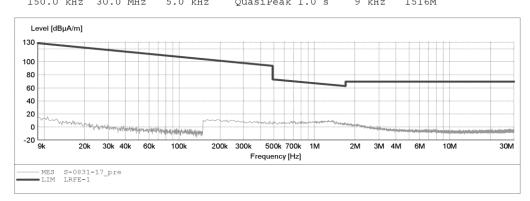
#### FCC Class B 3M Radiated

Cubetto M/N:CUBT001

Manufacturer: Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: Test Condition: Tax 2480MHz Test Specification: DC 4.5V Comment:

Start of Test: 2016-8-31 /

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas. IF Transcription:
Frequency Frequency Width Time Bandw.
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M Transducer





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#### ACCURATE TECHNOLOGY CO., LTD

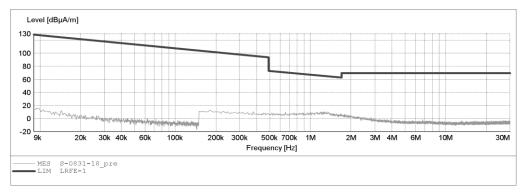
#### FCC Class B 3M Radiated

Cubetto M/N:CUBT001

manufacturer: SolidLabs
Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: LGWADE Test Specification: DC 4.5V Comment: Start of Test: 2016-8-31 /

Transducer

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas. IF Transcription:
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





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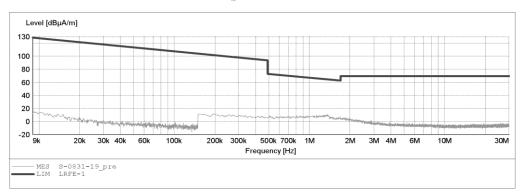
#### FCC Class B 3M Radiated

Cubetto M/N:CUBT001

Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: LGWADE Test Specification: DC 4.5V Comment: Start of Test: 2016-8-31 /

Transducer

SCAN TABLE: "LFRE Fin"
Short Description:
Start Stop Step Detector Meas. IF Transcription:
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



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Polarization: Vertical
Power Source: DC 4.5V
Date: 2016/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m

Job No.: Igwade #1451

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

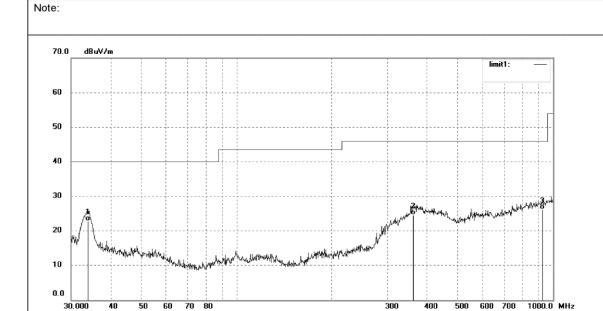
Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Cubetto

Mode: TX 2480MHz

Model: CUBT001

Manufacturer: SolidLabs



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 33.9174        | 32.17               | -9.26          | 22.91              | 40.00             | -17.09         | QP       |                |                  |        |
| 2   | 361.7139       | 32.24               | -7.60          | 24.64              | 46.00             | -21.36         | QP       |                |                  |        |
| 3   | 925.7563       | 24.39               | 1.74           | 26.13              | 46.00             | -19.87         | QP       |                |                  |        |



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

Site: 2# Chamber

Job No.: Igwade #1452

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2480MHz

Model: CUBT001

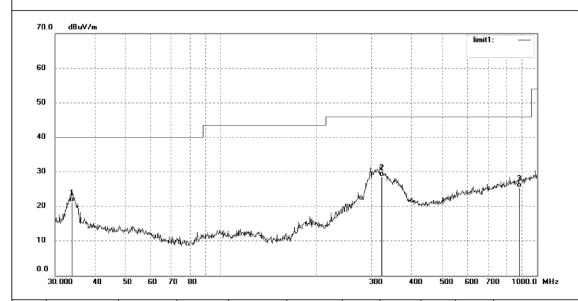
Manufacturer: SolidLabs

Polarization: Horizontal Power Source: DC 4.5V Date: 2016/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 33.9174        | 30.65               | -9.47          | 21.18              | 40.00             | -18.82         | QP       |                |                  |        |
| 2   | 323.3204       | 37.29               | -8.61          | 28.68              | 46.00             | -17.32         | QP       |                |                  |        |
| 3   | 878.3214       | 24.29               | 1.13           | 25.42              | 46.00             | -20.58         | QP       |                |                  |        |

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Job No.: Igwade #1411

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2480MHz

Model: CUBT001

Manufacturer: SolidLabs

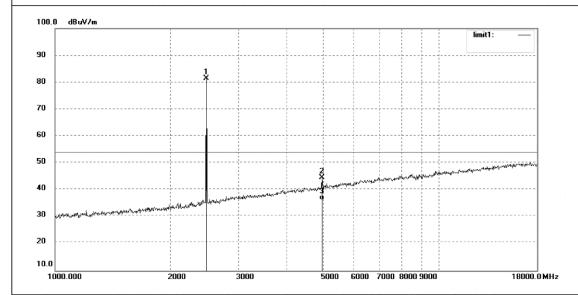
Polarization: Vertical Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 2480.000       | 88.82               | -7.37          | 81.45              | /                 | /              | peak     |             |                  |        |
| 2   | 4960.025       | 44.09               | 0.52           | 44.61              | 74.00             | -29.39         | peak     |             |                  |        |
| 3   | 4960.025       | 35.72               | 0.52           | 36.24              | 54.00             | -17.76         | AVG      |             |                  |        |

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Polarization: Horizontal Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m

Job No.: Igwade #1412

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

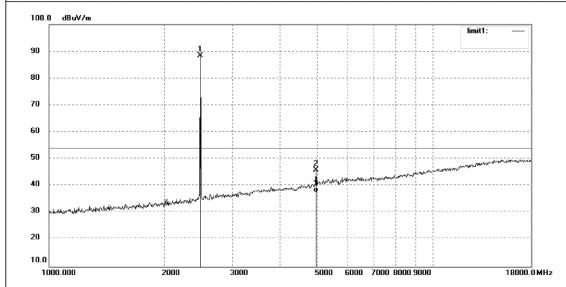
Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Cubetto

Mode: TX 2480MHz

Model: CUBT001

Manufacturer: SolidLabs



| П |     |                |                     |                |                    |                   |                |          |             |                  |        |
|---|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
|   | No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|   | 1   | 2480.000       | 95.78               | -7.37          | 88.41              | /                 | /              | peak     |             |                  |        |
|   | 2   | 4960.029       | 45.39               | 0.52           | 45.91              | 74.00             | -28.09         | peak     |             |                  |        |
|   | 3   | 4960.029       | 36.93               | 0.52           | 37.45              | 54.00             | -16.55         | AVG      |             |                  |        |

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Job No.: Igwade #1417 Standard: FCC Class B 3M Radiated

Test item: Radiation Test

rest item. Radiation rest

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

EUT: Cubetto

Mode: TX 2480MHz

Model: CUBT001

Manufacturer: SolidLabs

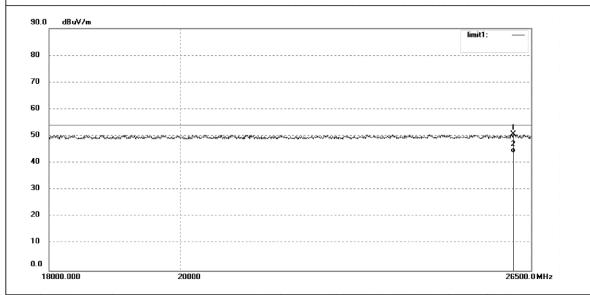
Polarization: Horizontal Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 26123.470      | 34.18               | 16.50          | 50.68              | 74.00             | -23.32         | peak     |             |                  |        |
| 2   | 26123.470      | 27.23               | 16.50          | 43.73              | 54.00             | -10.27         | AVG      |             |                  |        |

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Job No.: Igwade #1418

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2480MHz

Model: CUBT001

Manufacturer: SolidLabs

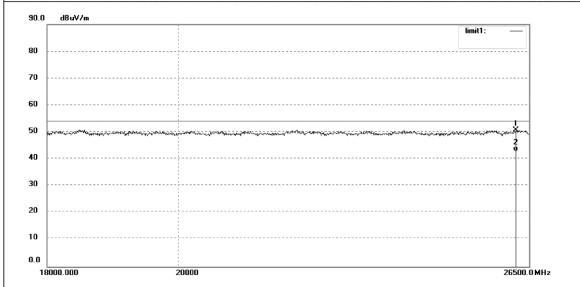
Polarization: Vertical Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| - |     |           |          |        |          |          |        |          |        |        |        |
|---|-----|-----------|----------|--------|----------|----------|--------|----------|--------|--------|--------|
|   | No. | Freq.     | Reading  | Factor | Result   | Limit    | Margin | Detector | Height | Degree | Remark |
|   | NO. | (MHz)     | (dBuV/m) | (dB)   | (dBuV/m) | (dBuV/m) | (dB)   | Detector | (cm)   | (deg.) | Remark |
|   | 1   | 26224.704 | 33.58    | 17.08  | 50.66    | 74.00    | -23.34 | peak     |        |        |        |
|   | 2   | 26224.704 | 25.75    | 17.08  | 42.83    | 54.00    | -11.17 | AVG      |        |        |        |

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# **Appendix A.2: Radiated Emissions in Restricted Bands**Low Channel



### 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 4.5V

Date: 16/08/18/

Time:

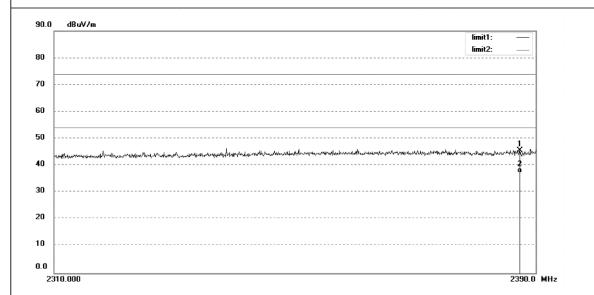
Engineer Signature: LGWADE

Distance: 3m

Job No.: Igwade #1419
Standard: FCC (Band Edge)
Test item: Radiation Test

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

Mode: TX 2402MHz Model: CUBT001 Manufacturer: SolidLabs



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 2387.360       | 43.47               | 2.08           | 45.55              | 74.00             | -28.45         | peak     |             |                  |        |
| 2   | 2387.360       | 35.14               | 2.08           | 37.22              | 54.00             | -16.78         | AVG      |             |                  |        |

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Job No.: Igwade #1420 Standard: FCC (Band Edge) Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2402MHz

Model: CUBT001

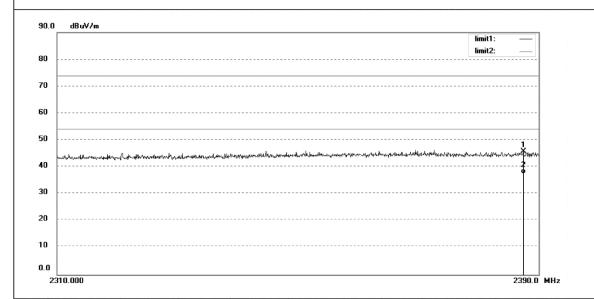
Manufacturer: SolidLabs

Polarization: Horizontal Power Source: DC 4.5V

Date: 16/08/18/ Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 2387.440       | 43.66               | 2.08           | 45.74              | 74.00             | -28.26         | peak     |             |                  |        |
| 2   | 2387.440       | 35.45               | 2.08           | 37.53              | 54.00             | -16.47         | AVG      |             |                  |        |

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Site: 2# Chamber

Tel:+86-0755-26503290

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#### High Channel



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

Polarization: Horizontal

Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m

Job No.: Igwade #1421 Standard: FCC (Band Edge) Test item: Radiation Test

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

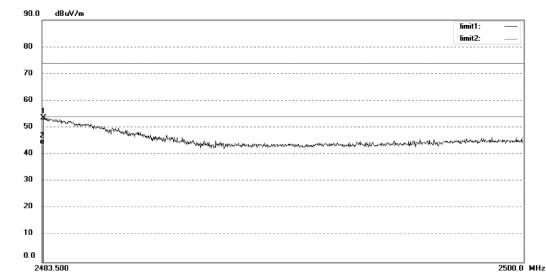
EUT: Cubetto

Mode: TX 2480MHz

Model: CUBT001

Manufacturer: SolidLabs





| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 2483.550       | 51.49               | 2.12           | 53.61              | 74.00             | -20.39         | peak     |             |                  |        |
| 2   | 2483.550       | 41.56               | 2.12           | 43.68              | 54.00             | -10.32         | AVG      |             |                  |        |

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Job No.: Igwade #1422 Standard: FCC (Band Edge) Test item: Radiation Test

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

EUT: Cubetto

Mode: TX 2480MHz

Model: CUBT001

Manufacturer: SolidLabs

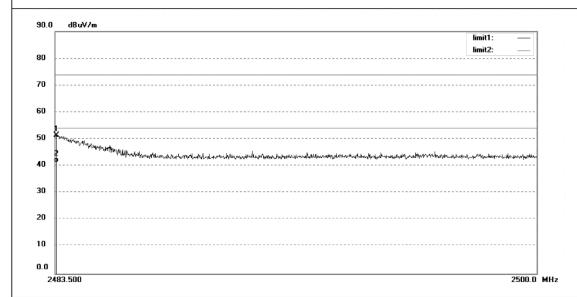
Polarization: Vertical Power Source: DC 4.5V

Date: 16/08/18/

Time:

Engineer Signature: LGWADE

Distance: 3m



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height (cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|-------------|------------------|--------|
| 1   | 2483.550       | 49.19               | 2.12           | 51.31              | 74.00             | -22.69         | peak     |             |                  |        |
| 2   | 2483.550       | 39.23               | 2.12           | 41.35              | 54.00             | -12.65         | AVG      |             |                  |        |

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# **Appendix B**

# Test Results of RF Exposure - Bluetooth 4.0 Low Energy Mode

| APPENDIX B.1: RF EXPOSURE COMPLIANCE | 2 |
|--------------------------------------|---|
|--------------------------------------|---|

# Appendix B

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### Appendix B.1: RF Exposure Compliance

# **Radio Frequency Exposure Compliance**

RESULT: Pass

Test standard : FCC 1.1310

RSS-102 Issue 5

KDB 447498 D01 General RF Exposure Guidance v06

This device is Bluetooth 4.0 Low Energy.

This RF exposure evaluation is only for Bluetooth 4.0 Low Energy operation.

Since the maximum peak output power of the transmitter is 0.3 mW. The maximum peak output power is less than 10mW (FCC Limit) and 4mW (IC Limit), hence the EUT is exclueded from SAR evaluation according to FCC KDB 447498 D01: Mobile Portable RF Exposure and RSS-102 Issue 5