Prüfbericht-Nr.: *Test Report No.*:	**50053810 001**	**Auftrags-Nr.:** *Order No.*:	164058309	Seite 1 von 20 *Page 1 of 20*
Kunden-Referenz-Nr.: *Client Reference No.*:	N/A	**Auftragsdatum:** *Order date*:	21.03.2016	
Auftraggeber: *Client*:	**Midland Radio Corporation** 5900 Parretta Drive, Kansas City, Missouri 64120-2134, United States			
Prüfgegenstand: *Test item*:	Bluetooth button			
Bezeichnung / Typ-Nr.: *Identification / Type No.*:	Midland BTT Button (MIDLAND®)			
Auftrags-Inhalt: *Order content*:	FCC Certification and Verification			
Prüfgrundlage: *Test specification*:	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.209 FCC KDB publication 447498 D01 v06			

Wareneingangsdatum: *Date of receipt*:	12.04.2016
Prüfmuster-Nr.: *Test sample No.*:	A000364406-002, 003, 004
Prüfzeitraum: *Testing period*:	27.05.2016 - 02.06.2016
Ort der Prüfung: *Place of testing*:	Shenzhen Accurate Technology Co., Ltd.
Prüflaboratorium: *Testing laboratory*:	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüfergebnis*: *Test result**:	Pass

geprüft von / *tested by*:			**kontrolliert von /** *reviewed by*:		
24.09.2016	Winnie Hou / Senior Project Manager		29.09.2016	Owen Tian / Technical Certifier	
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

Sonstiges / *Other*:

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	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(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.

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

Contents

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.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Spurious emission and Radiated emission				
Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	2017-01-09
Test Receiver	Rohde&Schwarz	ESCS30	100307	2017-01-09
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	2017-01-09
Loop Antenna	Schwarzbeck	FMZB1516	1516131	2017-01-09
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	2017-01-09
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	2017-01-09
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	2017-01-09
Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	2017-01-09
Radio Spectrum Test				
Spectrum Analyzer	Rohde & Schwarz	ESPI3	100396/003	2017-01-09
Spectrum Analyzer	Agilent	E7405A	MY45115511	2017-01-09
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	2017-01-09
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	2017-01-09
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	2017-01-09
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	2017-01-09

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 ±3dB.

2.6 Location of Original Data

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

2.7 Status of Facility Used for Testing

The Shenzhen Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Meterial Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUT is Midland BTT Button with Bluetooth low energy technology.

3.2 Ratings and System Details

Table 2: Rating of EUT

Kind of Equipment:	Bluetooth Button
Type Designation:	Midland BTT Button
FCC ID	MMABTTBUTTON

Table 3: Technical Specification of EUT

Technical Specification	**Value**
Operating Frequency band	2402 – 2480 MHz
Bluetooth Core Version	4.0 (Single mode)
Channel separation	2MHz
Extreme Temperature Range	-10ºC to +50ºC
Operation Voltage	DC 3V via Button Battery
Modulation	GFSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	0dBi
RF Output Power	0.00079W (-1.01dBm)

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

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	Type	S/N
iPhone 6	Apple	MG4J2 CH/A	F17NTK2QG5MV

4.4 Countermeasures to achieve EMC Compliance

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

4.5 Test Setup Diagram

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

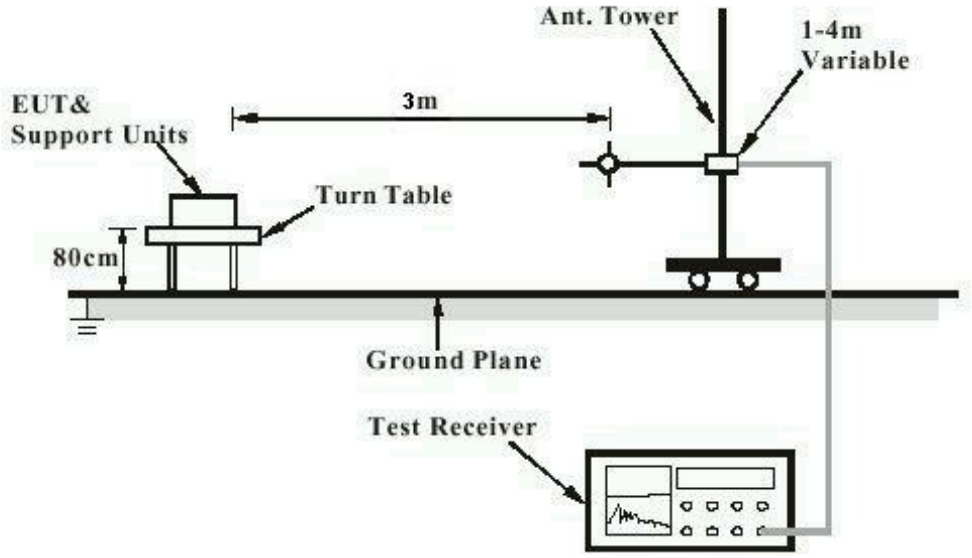


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

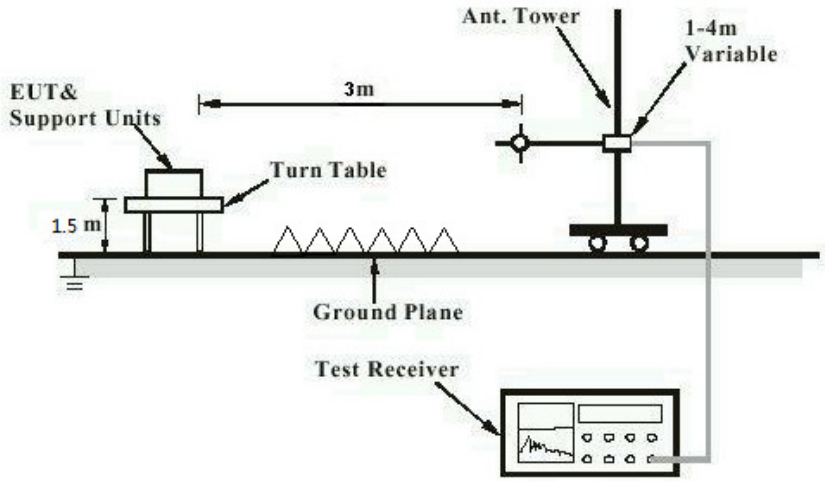


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

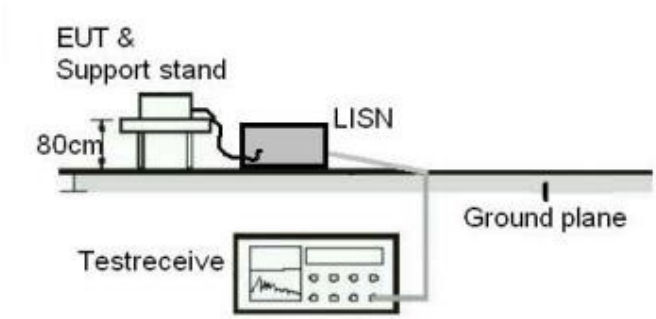
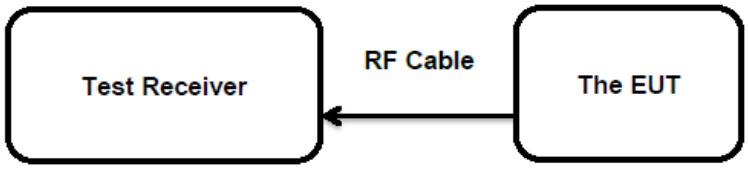


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Passed**

Test date	:	2016-05-28
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 0dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT photo for details.

5.1.2 Peak Output Power

RESULT: **Passed**

Test date	:	2016-05-28
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

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	25℃
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Table 4: Test result of Peak Output Power

Channel	Channel Frequency (MHz)	Peak Output Power		Limit
		(dBm)	(W)	(W)
Low Channel	2402	-1.01	0.00079	1
Middle Channel	2440	-1.07	0.00078	1
High Channel	2480	-1.32	0.00074	1

5.1.3 Conducted Power Spectral Density

RESULT: **Passed**

Test date	:	2016-05-28
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	:	A
Ambient temperature	:	25℃
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Table 5: Test result of Peak Output Power

Channel	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
Low Channel	2402	-13.61	8
Middle Channel	2440	-13.53	8
High Channel	2480	-14.20	8

5.1.4 -6dB Bandwidth

RESULT: **Passed**

Date of testing	:	2016-05-28
Test standard	:	FCC Part 15.247(a)(2)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded room

Test setup

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	25℃
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Table 6: Test result of 20dB Bandwidth

Channel	Channel Frequency (MHz)	-6dB Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2402	712.0	500	Pass
Mid Channel	2440	707.7	500	Pass
High Channel	2480	703.4	500	Pass

5.1.5 Conducted spurious emissions measured in 100kHz Bandwidth

RESULT: **Passed**

Date of testing	:	2016-05-28
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	:	A
Ambient temperature	:	25℃
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

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

5.1.6 Spurious Emission

RESULT: **Passed**

Date of testing	:	2016-05-27 to 2016-06-02
Test standard	:	FCC part 15.247(d) FCC Part 15.205
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A
Ambient temperature	:	25℃
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Remark:
During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test setup photos.
Testing was carried out within frequency range 9kHz to the tenth harmonics.

For details refer to Appendix 1.

7. List of Tables

8. List of Photographs

List of Figures

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

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

```
EUT:                 Midland BTT Button M/N:C1238
Manufacturer:        CTE International
Operating Condition: TX 2402MHz
Test Site:           2# Chamber
Operator:            LGWADE
Test Specification:  DC 3V
Comment:             X
Start of Test:       2016-6-2 /
```

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
```

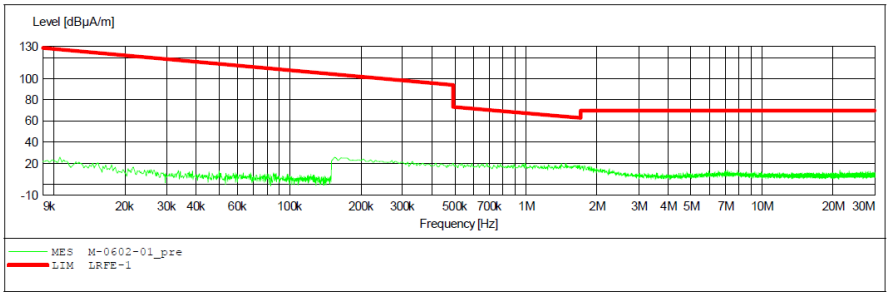


Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

```
EUT:                 Midland BTT Button M/N:C1238
Manufacturer:        CTE International
Operating Condition: TX 2402MHz
Test Site:           2# Chamber
Operator:            LGWADE
Test Specification:  DC 3V
Comment:             Y
Start of Test:       2016-6-2 /
```

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
```

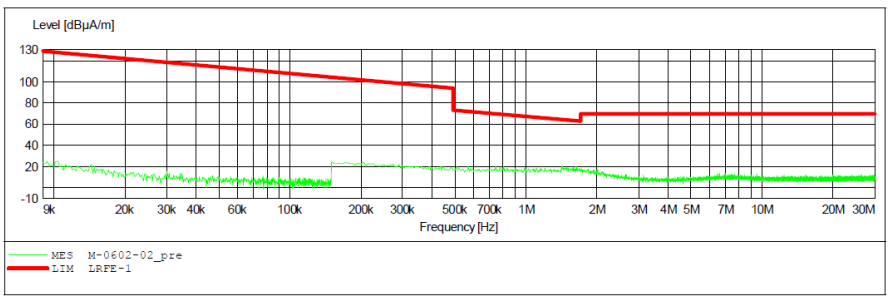
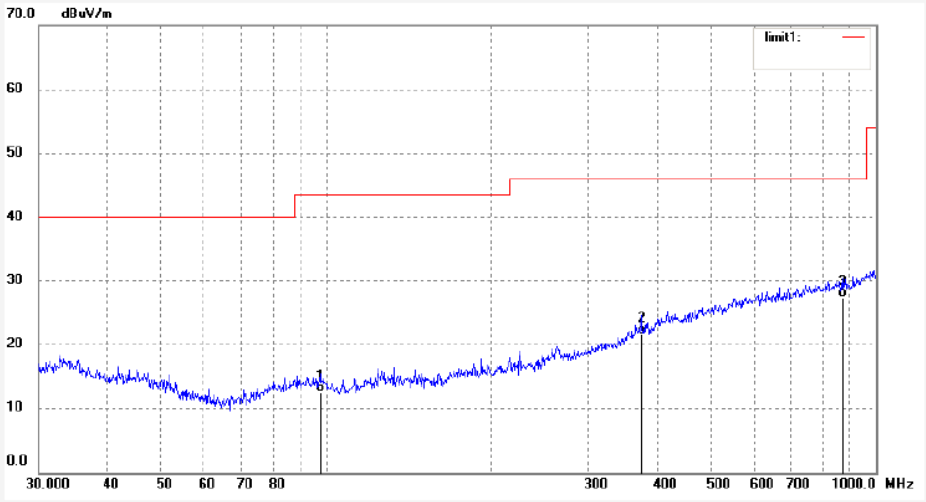


Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz)

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

Job No.: LGWADE #1843	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



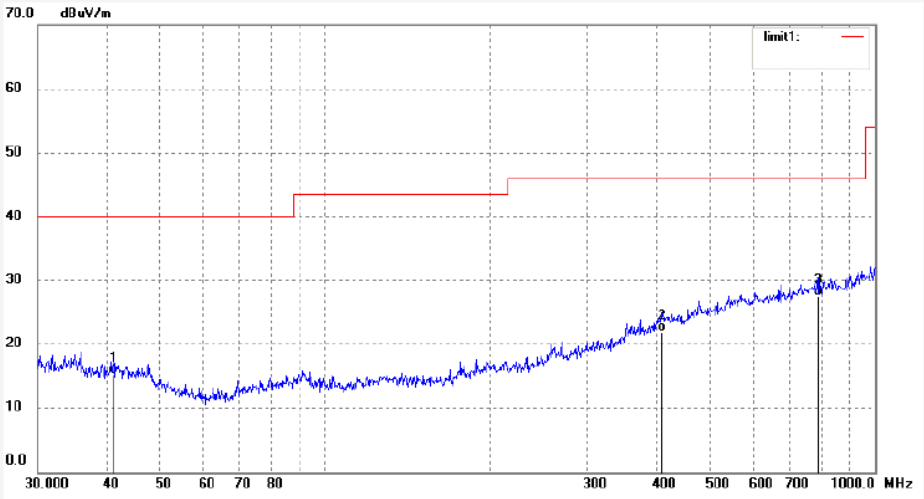
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	97.4560	25.40	-12.87	12.53	43.50	-30.97	QP			
2	374.6225	26.17	-4.64	21.53	46.00	-24.47	QP			
3	869.1301	25.39	2.03	27.42	46.00	-18.58	QP			

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

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

Job No.: LGWADE #1842	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



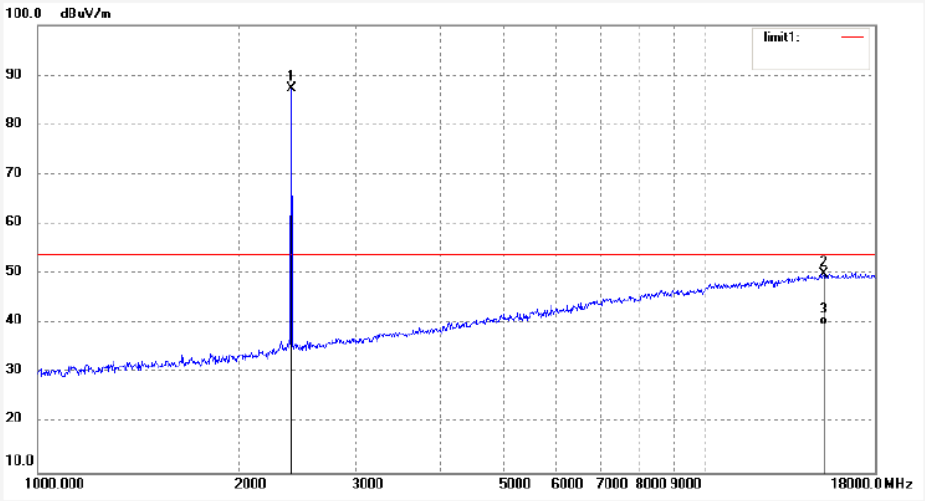
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	41.2764	26.19	-10.85	15.34	40.00	-24.66	QP			
2	410.3824	25.36	-3.35	22.01	46.00	-23.99	QP			
3	787.8513	26.51	1.11	27.62	46.00	-18.38	QP			

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

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

Job No.: LGWADE #1860	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



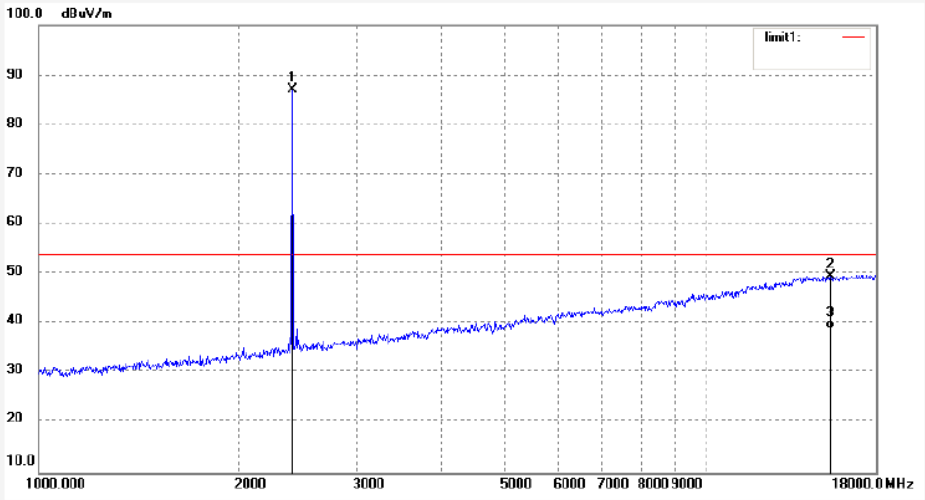
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	94.69	-7.45	87.24	/	/	peak			
2	15090.405	8.93	40.92	49.85	74.00	-24.15	peak			
3	15090.405	-1.23	40.92	39.69	54.00	-14.31	AVG			

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

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

Job No.: LGWADE #1861	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



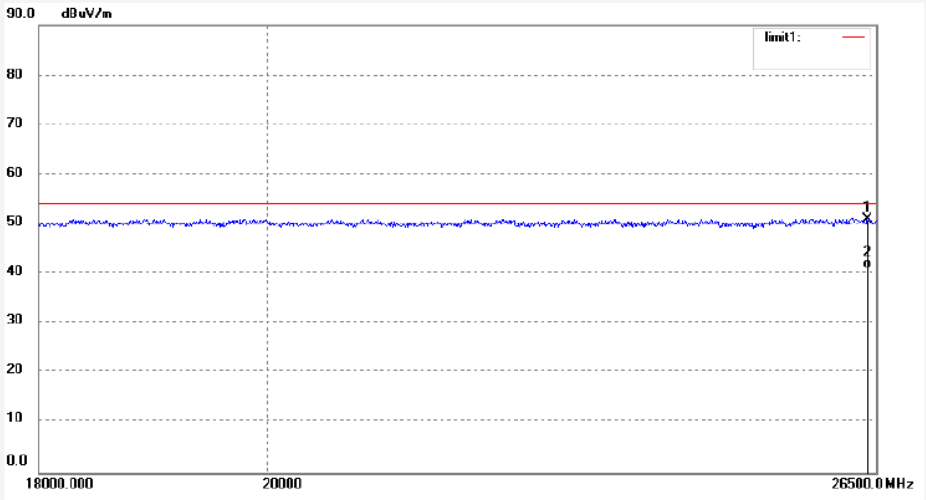
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	94.53	-7.45	87.08	/	/	peak			
2	15398.832	9.25	40.30	49.55	74.00	-24.45	peak			
3	15398.832	-1.36	40.30	38.94	54.00	-15.06	AVG			

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

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

Job No.: LGWADE #1870	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



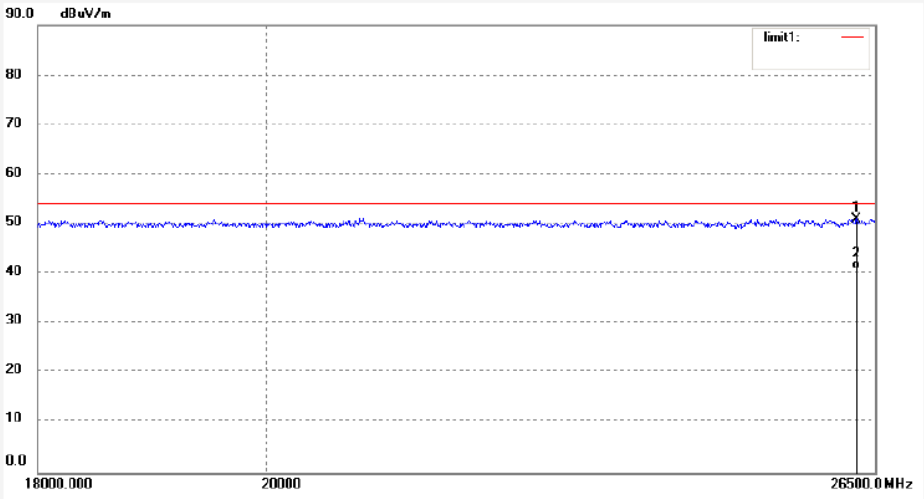
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26397.703	34.41	16.50	50.91	74.00	-23.09	peak			
2	26397.703	24.47	16.50	40.97	54.00	-13.03	AVG			

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

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

Job No.: LGWADE #1871	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26275.468	33.80	17.05	50.85	74.00	-23.15	peak			
2	26275.468	23.89	17.05	40.94	54.00	-13.06	AVG			

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

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

```
EUT:                  Midland BTT Button M/N:C1238
Manufacturer:         CTE International
Operating Condition:  TX 2440MHz
Test Site:            2# Chamber
Operator:             LGWADE
Test Specification:   DC 3V
Comment:              X
Start of Test:        2016-6-2 /
```

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
```

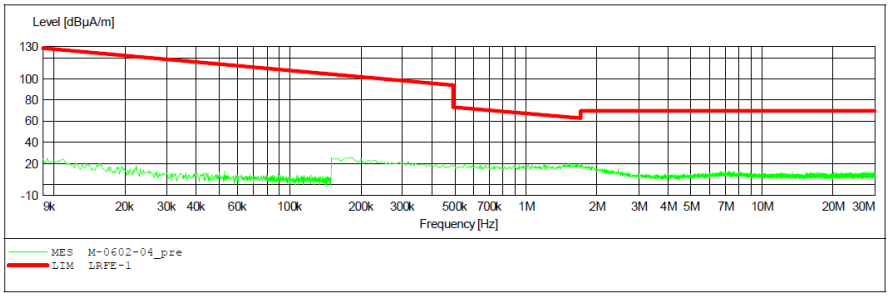


Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

```
EUT:                  Midland BTT Button M/N:C1238
Manufacturer:         CTE International
Operating Condition:  TX 2440MHz
Test Site:            2# Chamber
Operator:             LGWADE
Test Specification:   DC 3V
Comment:              Y
Start of Test:        2016-6-2 /
```

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
```

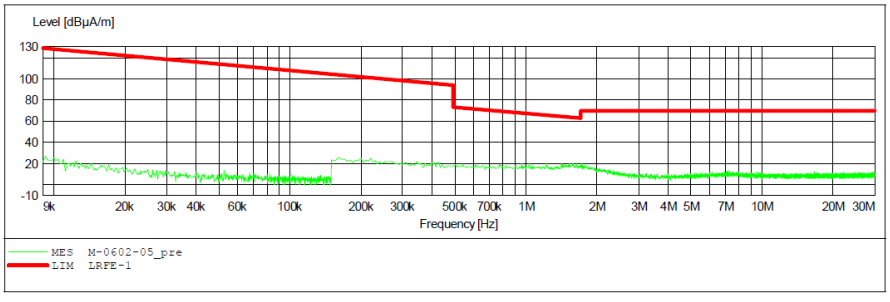


Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)

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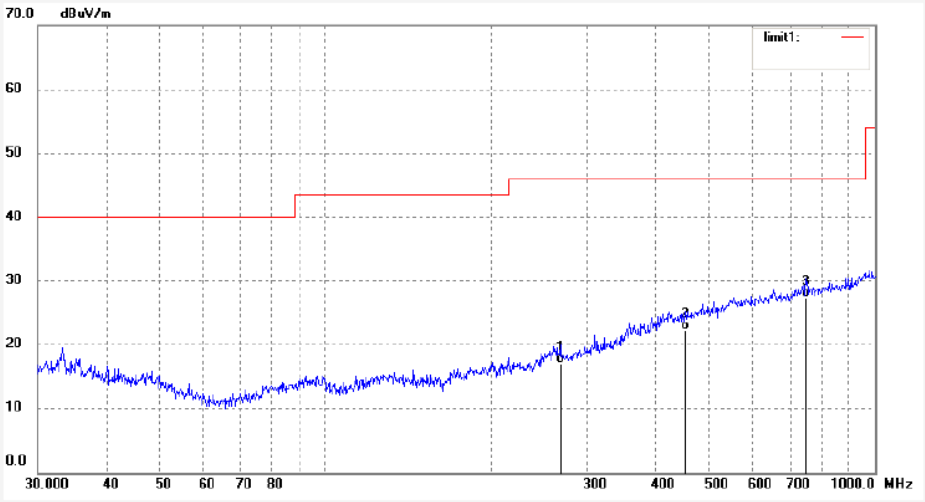
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1844	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	267.5455	24.80	-7.76	17.04	46.00	-28.96	QP			
2	452.7196	25.55	-3.27	22.28	46.00	-23.72	QP			
3	750.1082	26.54	0.86	27.40	46.00	-18.60	QP			

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

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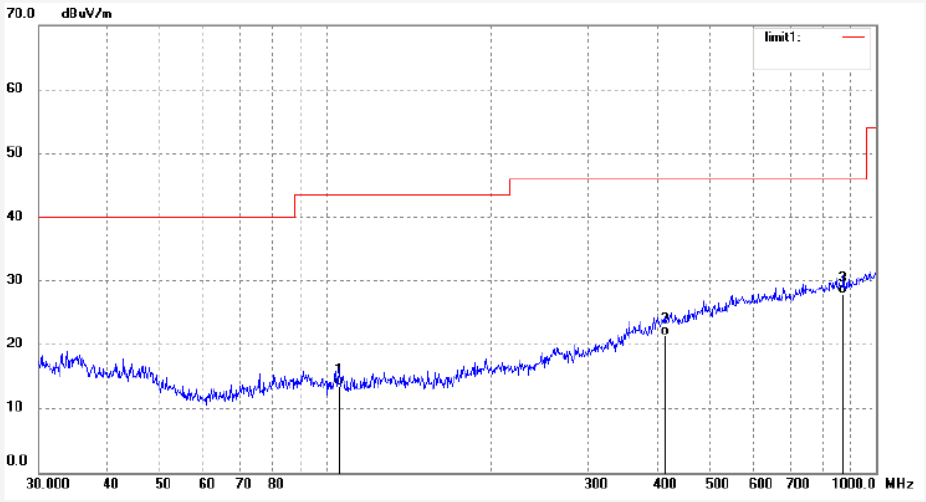
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1845	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	105.6414	26.05	-12.50	13.55	43.50	-29.95	QP			
2	414.7223	24.67	-3.20	21.47	46.00	-24.53	QP			
3	872.1832	25.82	2.07	27.89	46.00	-18.11	QP			

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

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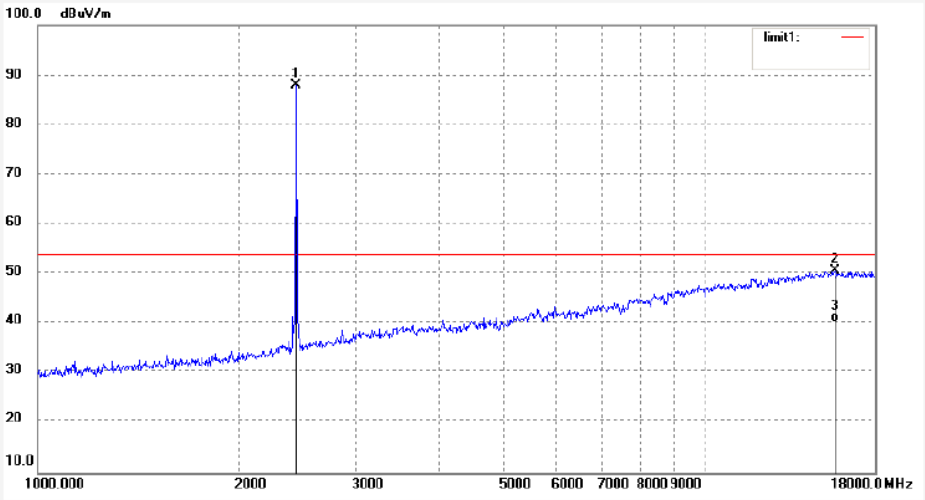
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1865	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	95.33	-7.36	87.97	/	/	peak			
2	15668.211	10.47	40.07	50.54	74.00	-23.46	peak			
3	15668.211	0.23	40.07	40.30	54.00	-13.70	AVG			

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

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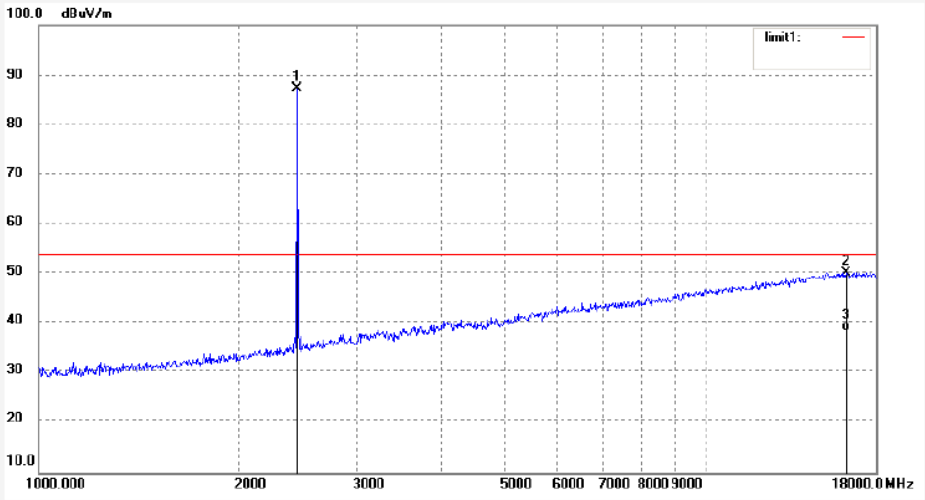
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1864	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.000	94.64	-7.36	87.28	/	/	peak			
2	16221.189	9.95	40.13	50.08	74.00	-23.92	peak			
3	16221.189	-1.68	40.13	38.45	54.00	-15.55	AVG			

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

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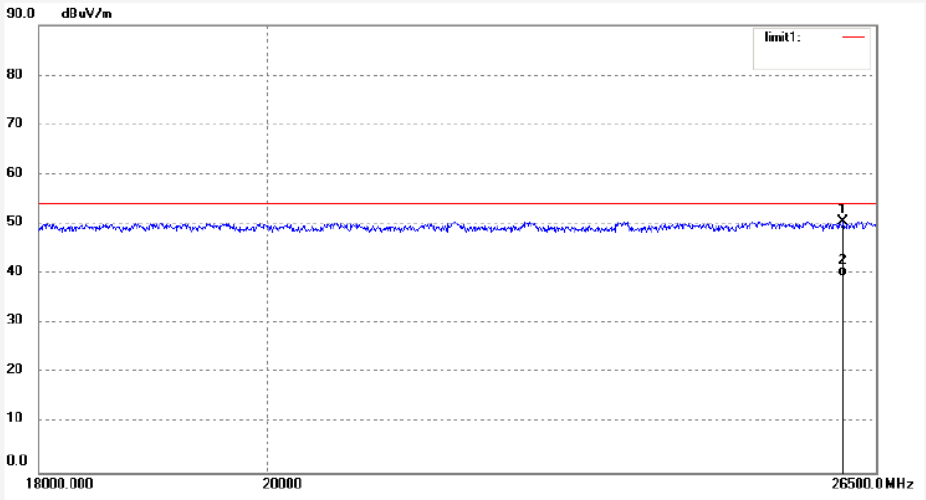
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1873	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26103.270	33.96	16.50	50.46	74.00	-23.54	peak			
2	26103.270	23.10	16.50	39.60	54.00	-14.40	AVG			

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

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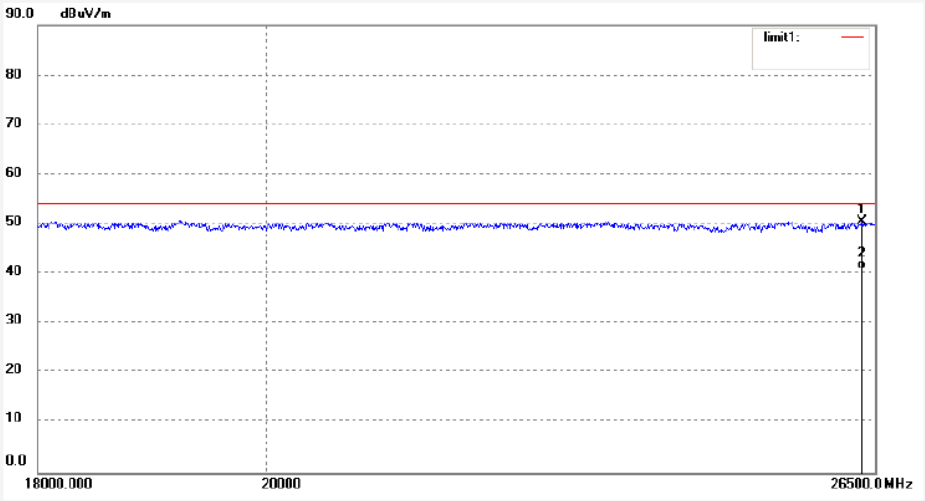
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1872	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2440MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26346.703	33.41	17.00	50.41	74.00	-23.59	peak			
2	26346.703	23.84	17.00	40.84	54.00	-13.16	AVG			

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

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

```
EUT:                  Midland BTT Button M/N:C1238
Manufacturer:         CTE International
Operating Condition:  TX 2480MHz
Test Site:            2# Chamber
Operator:             LGWADE
Test Specification:   DC 3V
Comment:              X
Start of Test:        2016-6-2 /
```

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
```

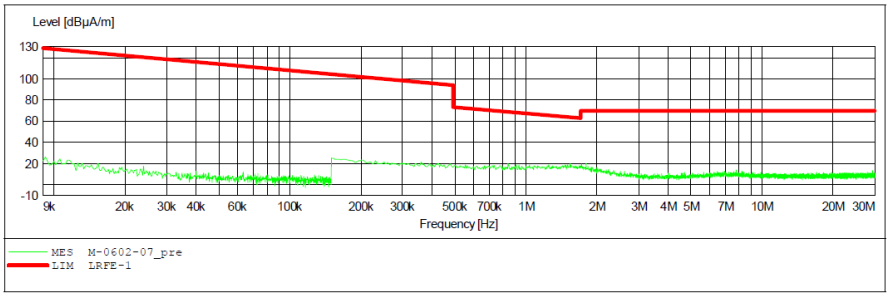


Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

```
EUT:                  Midland BTT Button M/N:C1238
Manufacturer:         CTE International
Operating Condition:  TX 2480MHz
Test Site:            2# Chamber
Operator:             LGWADE
Test Specification:   DC 3V
Comment:              Y
Start of Test:        2016-6-2 /
```

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
```

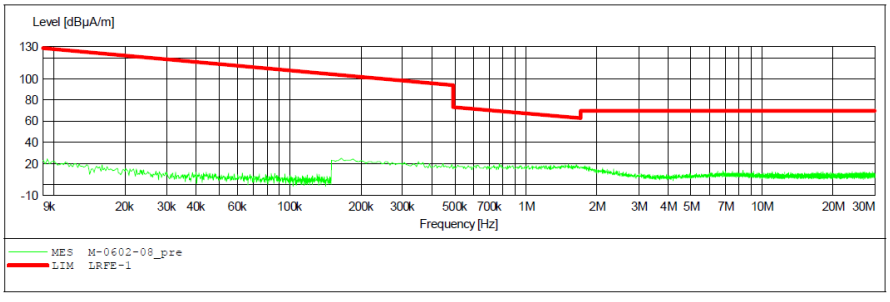


Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz)

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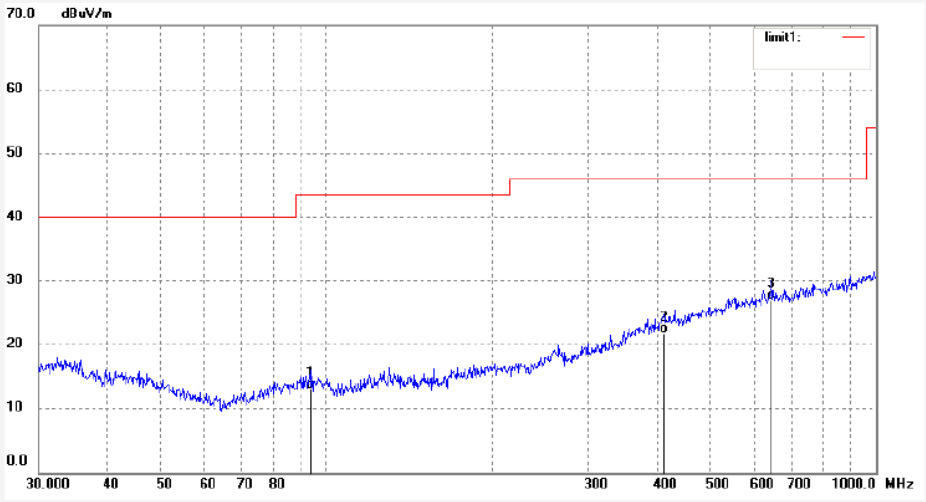
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1847	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	93.4402	25.89	-12.90	12.99	43.50	-30.51	QP			
2	411.8240	25.14	-3.30	21.84	46.00	-24.16	QP			
3	645.1195	27.48	-0.52	26.96	46.00	-19.04	QP			

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

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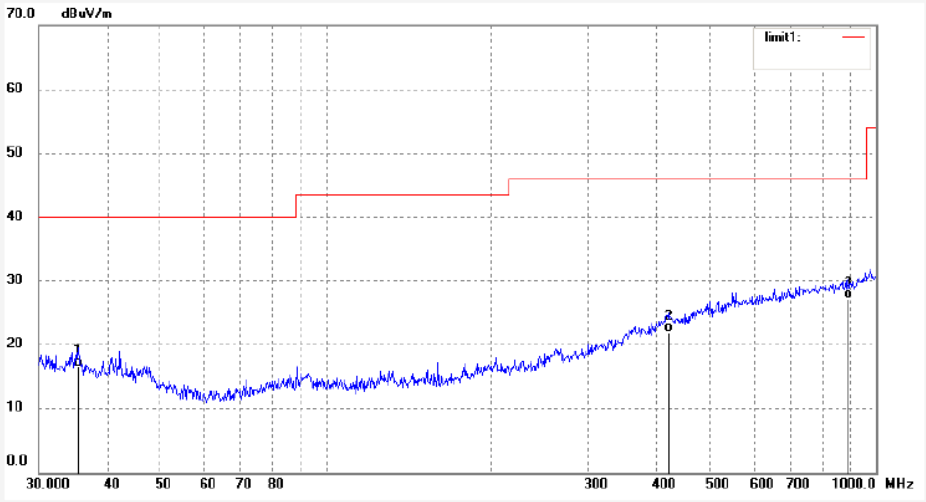
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1846	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	35.3750	26.90	-10.44	16.46	40.00	-23.54	QP			
2	419.1080	25.04	-3.07	21.97	46.00	-24.03	QP			
3	890.7278	24.97	2.27	27.24	46.00	-18.76	QP			

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

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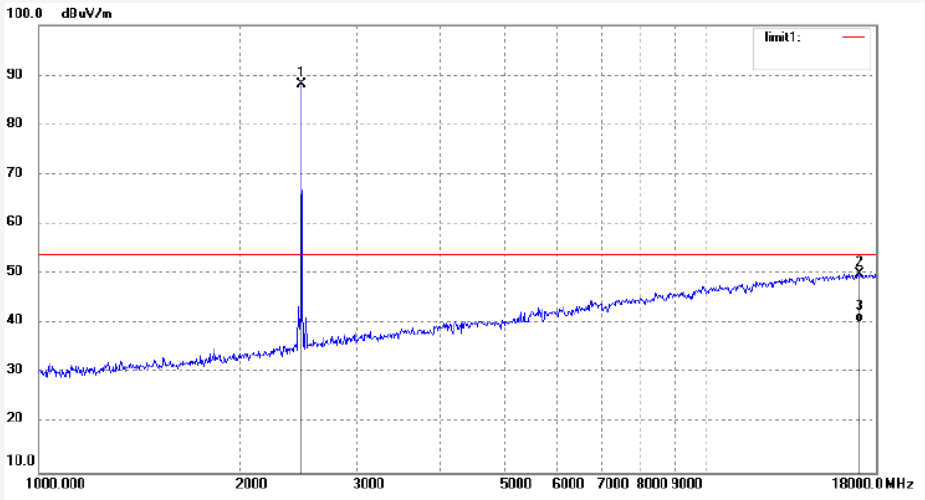
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1866	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

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	95.57	-7.37	88.20	/	/	peak			
2	16988.970	8.37	41.67	50.04	74.00	-23.96	peak			
3	16988.970	-1.45	41.67	40.22	54.00	-13.78	AVG			

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

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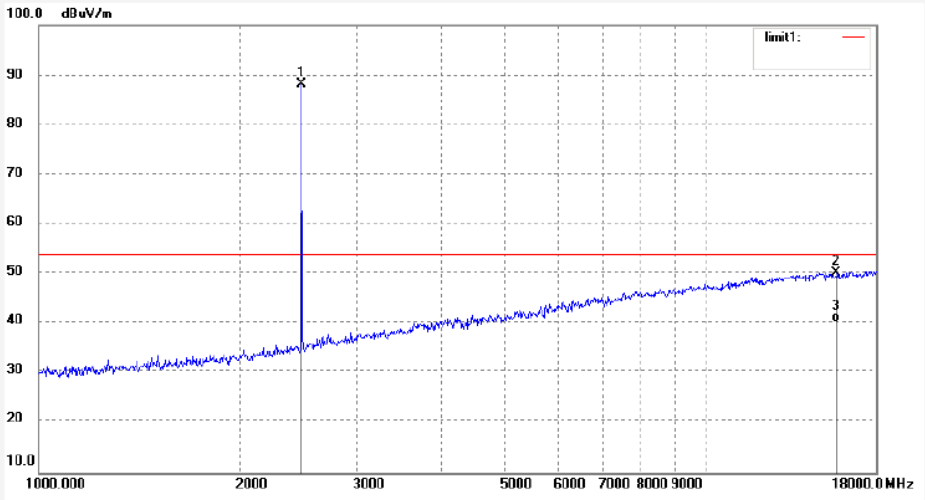
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1867	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

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	95.47	-7.37	88.10	/	/	peak			
2	15713.564	10.16	40.06	50.22	74.00	-23.78	peak			
3	15713.564	0.29	40.06	40.35	54.00	-13.65	AVG			

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

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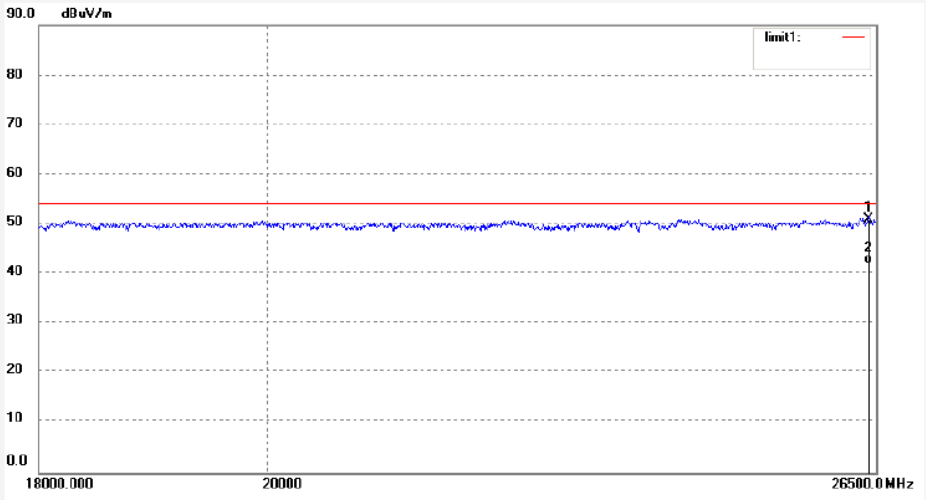
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1874	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26407.915	34.42	16.50	50.92	74.00	-23.08	peak			
2	26407.915	25.53	16.50	42.03	54.00	-11.97	AVG			

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

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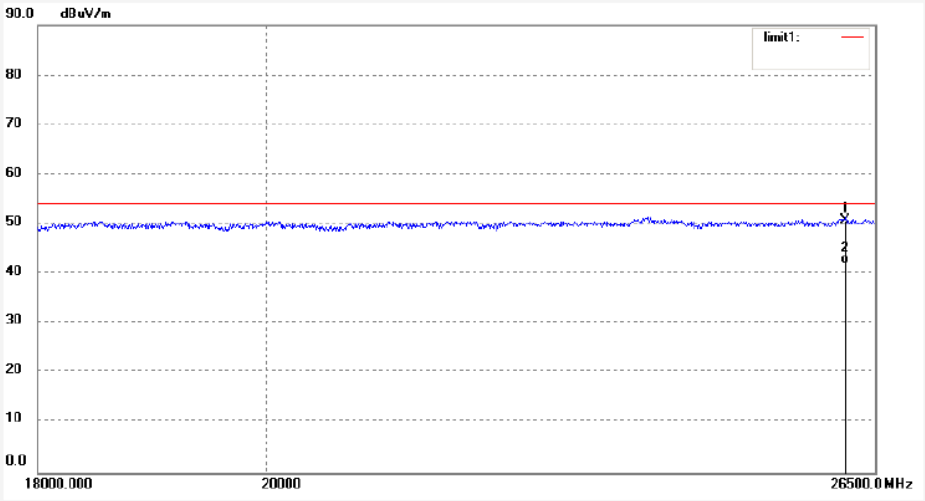
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1875	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26143.685	33.59	17.14	50.73	74.00	-23.27	peak			
2	26143.685	24.81	17.14	41.95	54.00	-12.05	AVG			

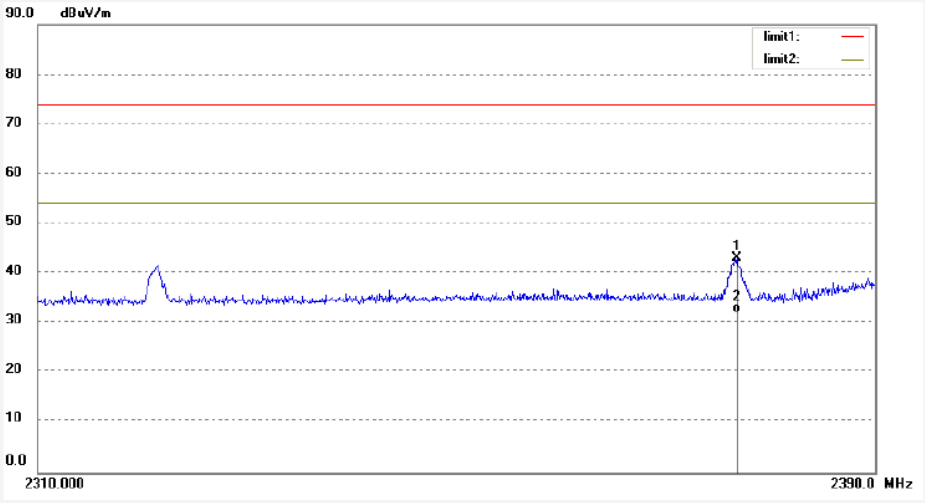
Figure 25: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal

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.: LGWADE #1863	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2376.640	50.60	-7.61	42.99	74.00	-31.01	peak			
2	2376.640	39.78	-7.61	32.17	54.00	-21.83	AVG			

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

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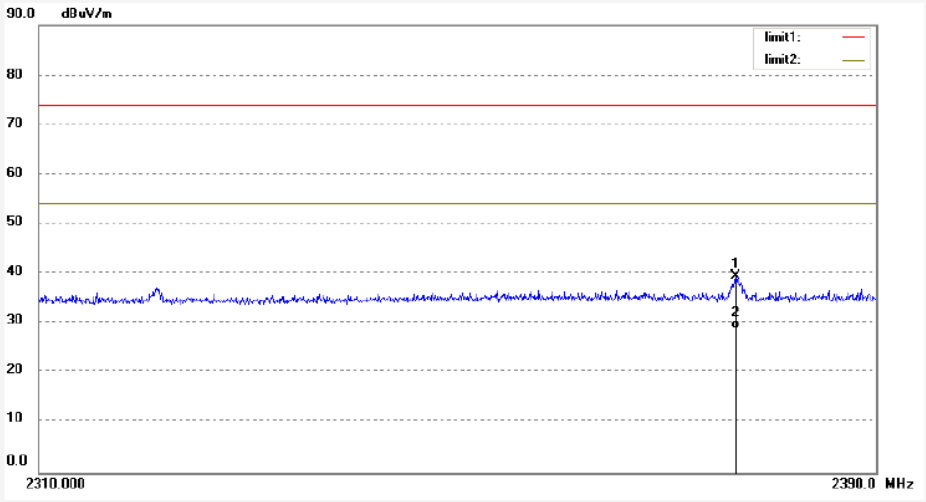
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGWADE #1862	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: DC 3V
Test item: Radiation Test	Date: 2016/05/27
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2376.400	47.01	-7.61	39.40	74.00	-34.60	peak			
2	2376.400	36.45	-7.61	28.84	54.00	-25.16	AVG			

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

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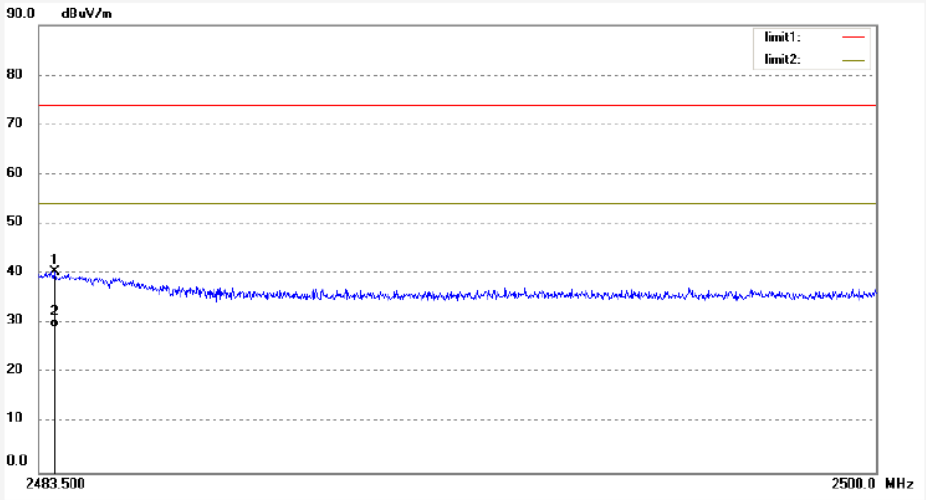
Job No.: LGWADE #1869	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.814	47.75	-7.38	40.37	74.00	-33.63	peak			
2	2483.814	36.59	-7.38	29.21	54.00	-24.79	AVG			

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

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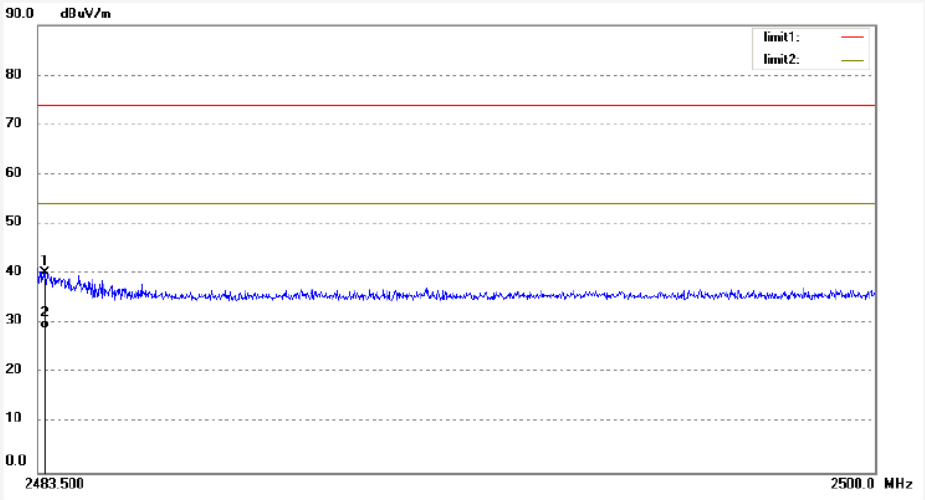
Tel:+86-0755-26503290
Fax:+86-0755-26503396

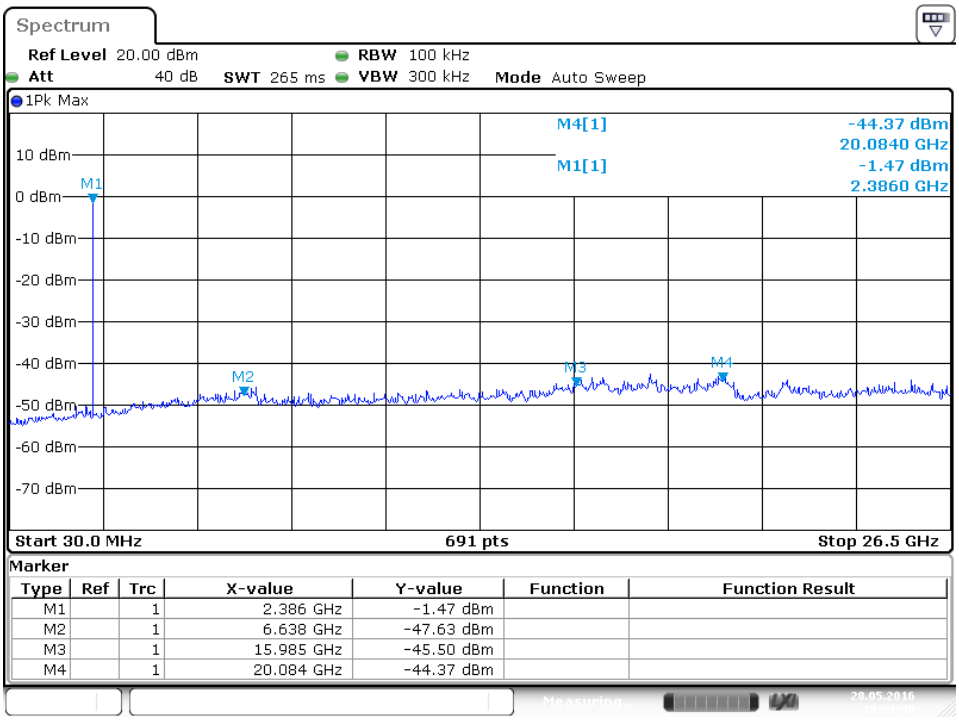
Job No.: LGWADE #1868	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: DC 3V
Test item: Radiation Test	Date: 16/05/28/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Midland BTT Button	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: C1238	
Manufacturer: CTE International	

Note:



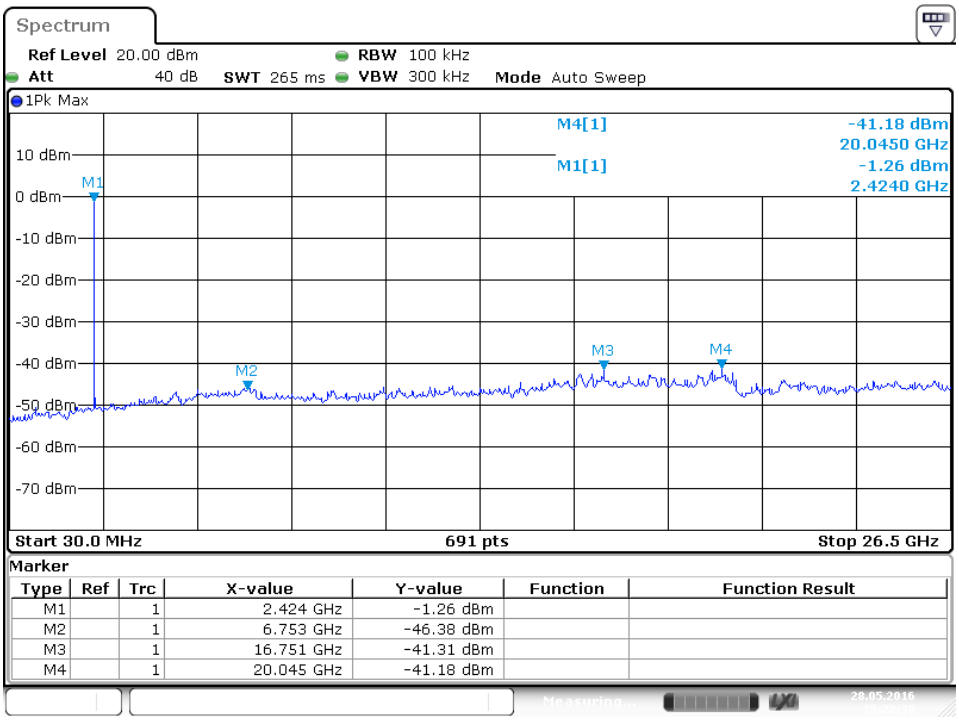
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.648	47.53	-7.37	40.16	74.00	-33.84	peak			
2	2483.648	36.23	-7.37	28.86	54.00	-25.14	AVG			

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



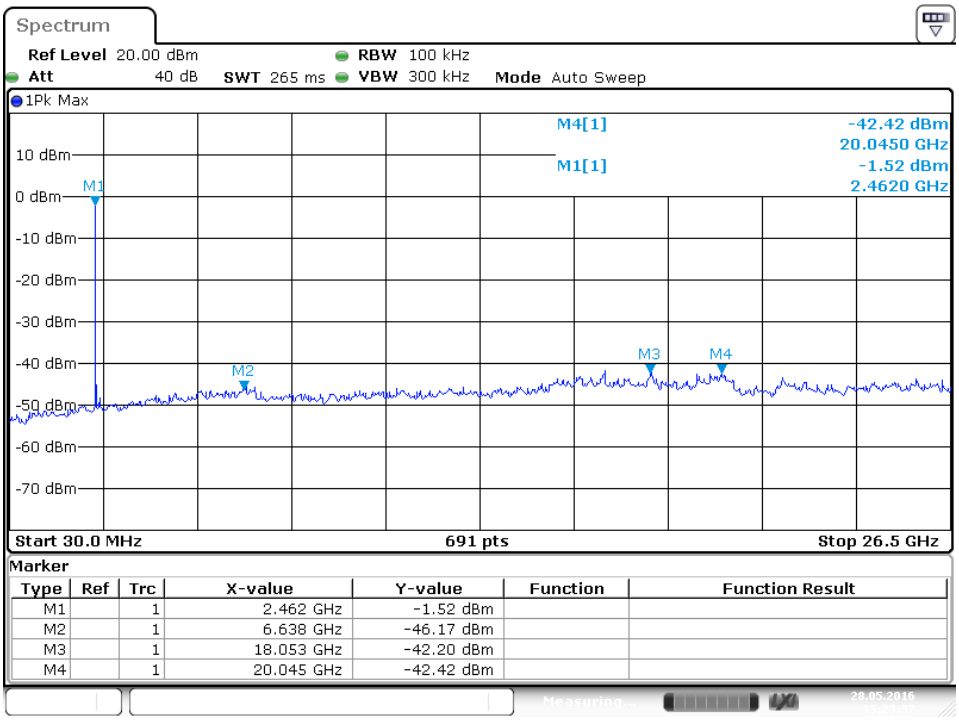
Date: 28.MAY.2016 15:21:40

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



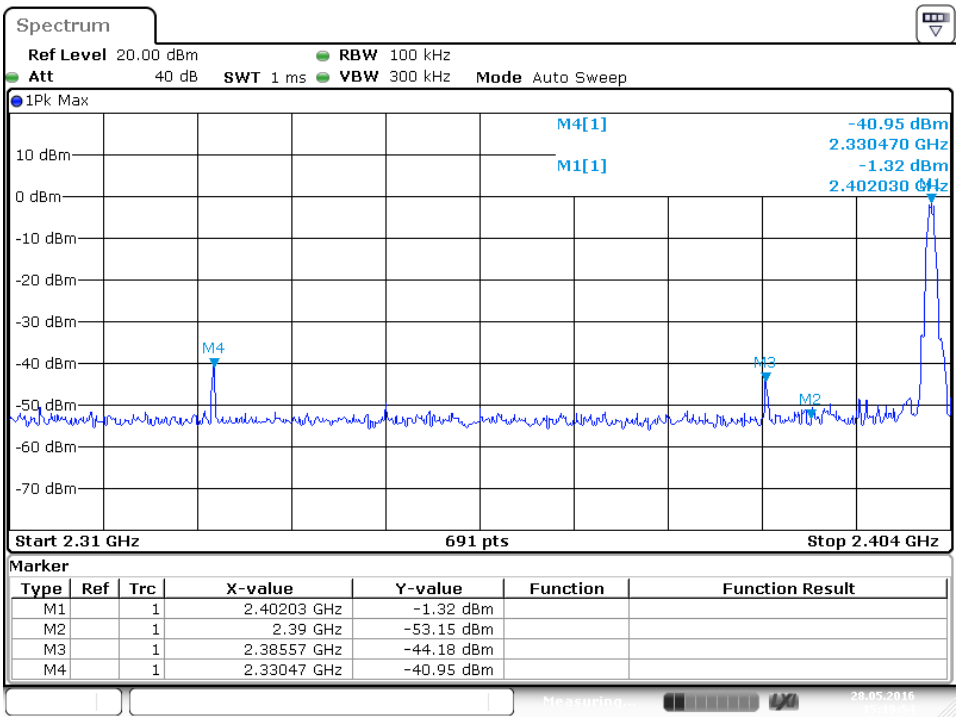
Date: 28.MAY.2016 15:22:39

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



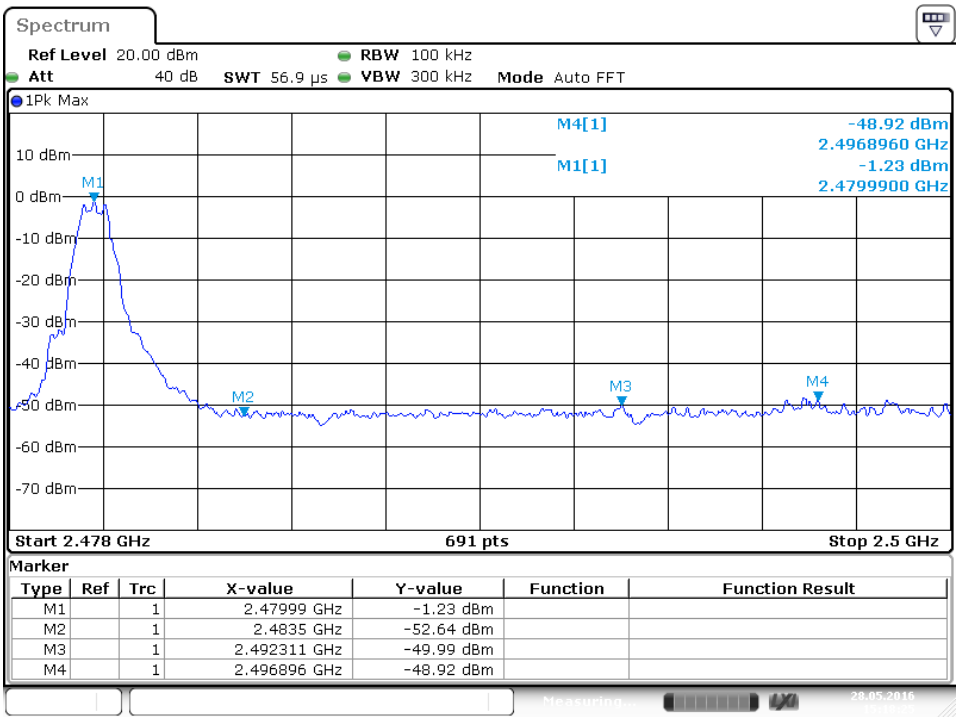
Date: 28.MAY.2016 15:23:37

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



Date: 28.MAY.2016 15:19:54

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



Date: 28.MAY.2016 15:18:25