

Prüfbericht-Nr.: Test Report No.:	50056107 001	Auftrags-Nr.: Order No.:	164071084	Seite 1 von 25 Page 1 of 25
Kunden-Referenz-Nr.: Client Reference No.:	N/A	Auftragsdatum: Order date:	09.08.2016	
Auftraggeber: Client:	TOMY International, Inc. 1111 W. 22nd Street, Suite 320, Oak Brook, IL 60523, United States			
Prüfgegenstand: Test item:	Fusion Core			
Bezeichnung / Typ-Nr.: Identification / Type No.:	L71000 (TOMY)			
Auftrags-Inhalt: Order content:	FCC Certification			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 FCC KDB Publication 447498 v06 CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109 RSS-247 Issue 1 May 2015 RSS-102 Issue 5 March 2015 RSS-Gen Issue 4 November 2014			
Wareneingangsdatum: Date of receipt:	19.09.2016			
Prüfmuster-Nr.: Test sample No.:	A000423505-001 A000423505-002			
Prüfzeitraum: Testing period:	22.09.2016 - 20.10.2016			
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: 10.02.2017 Winnie Hou / Senior Project Manager <i>Winnie Hou</i>		kontrolliert von / reviewed by: 15.02.2017 Sam Lin / Technical Certifier <i>Sam Lin</i>		
Datum Date	Name / Stellung Name / Position	Unterschrift Signature	Datum Date	Name / Stellung Name / Position
Sonstiges / Other: FCC ID: BMW-L71000, IC: 6195A-L71000, HVIN: L71000				
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt 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 99% BANDWIDTH

RESULT: *Passed*

5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100kHz BANDWIDTH

RESULT: *Passed*

5.1.7 SPURIOUS EMISSION

RESULT: *Passed*

5.1.8 CONDUCTED EMISSIONS

RESULT: *Passed*

5.1.9 RADIATED EMISSION

RESULT: *Passed*

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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix 1: Test Result

2. Test Sites

2.1 Test Facilities

Shenzhen Accurate Technology Co., Ltd.

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

FCC Registration No.: 752051

Test site Industry Canada No.: 5077A-2

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	06-01-2018
Test Receiver	Rohde&Schwarz	ESCS30	100307	06-01-2018
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	09-01-2018
Loop Antenna	Schwarzbeck	FMZB1516	1516131	09-01-2018
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	09-01-2018
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	09-01-2018
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	06-01-2018
Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	06-01-2018
Radio Spectrum Test				
Spectrum Analyzer	Rohde & Schwarz	ESPI	100396/003	06-01-2018
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	06-01-2018
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	06-01-2018
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	06-01-2018
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	06-01-2018

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 basis using in house standards or comparisons.

2.5 Measurement Uncertainty

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

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix 1 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 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.

3. General Product Information

3.1 Product Function and Intended Use

The EUT is Fusion Core which supports Bluetooth 4.0 low energy wireless technology

3.2 Ratings and System Details

Table 2: Rating of EUT

Kind of Equipment:	Fusion Core
Type Designation:	L71000
FCC ID	BMW-L71000
IC	6195A-L71000
HVIN	L71000

Table 3: Technical Specification of EUT

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Bluetooth Core Version	4.0
Channel separation	2MHz
Extreme Temperature Range	-20°C - +55°C
Operation Voltage	DC3.7V via Lithium Battery
Modulation	GFSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	2.0dBi
RF Output Power	0.00058W (-2.39dBm)

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, Operation with Bluetooth
- C. On, Charging
- D. 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 |
| - Technical Description | |

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
Notebook PC	Lenovo	ThinkPad X240	N/A
Printer	HP	HP laserjet 1015	CNFG030424
Notebook PC	Lenovo	4290-RT8	R9-FW93G

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)

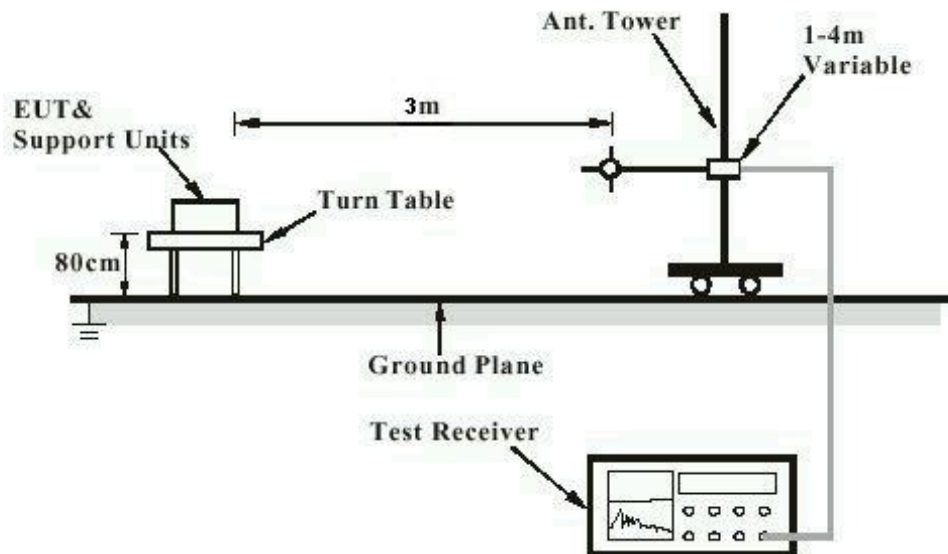


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

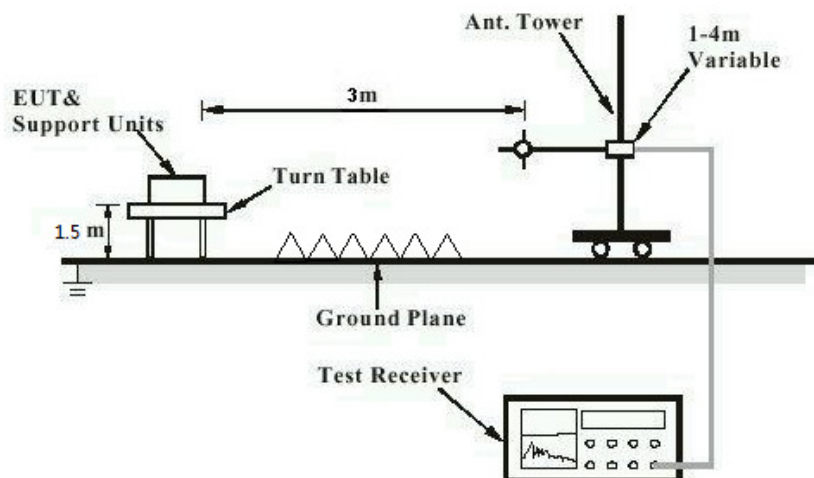


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

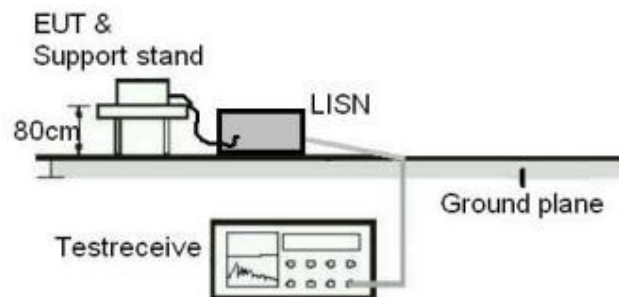
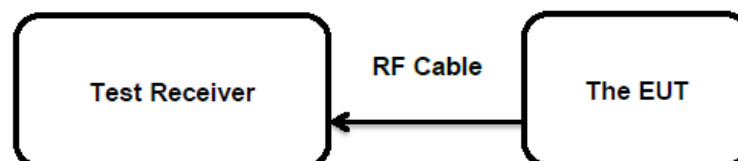


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test standard	:	FCC Part 15.247(b)(4) and Part 15.203 RSS-Gen 6.7
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 2.0 dBi, 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 : 2016-10-18
 Test standard : FCC Part 15.247(b)(3)
 RSS-247 Clause 5.4(2)&(4)
 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°C
 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	-2.39	0.00058	1
Middle Channel	2440	-4.39	0.00036	1
High Channel	2480	-2.81	0.00052	1

5.1.3 Conducted Power Spectral Density

RESULT:**Passed**

Test date : 2016-10-18
Test standard : FCC Part 15.247(e)
RSS-247 Clause 5.2(2)
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°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Table 5: Test result of Conducted Power Spectral Density

Channel	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
Low Channel	2402	-18.83	8
Middle Channel	2440	-20.91	8
High Channel	2480	-19.45	8

5.1.4 -6dB Bandwidth**RESULT:****Passed**

Date of testing : 2016-10-18
Test standard : FCC Part 15.247(a)(2)
RSS-247 Clause 5.2(1)
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°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Table 6: Test result of -6dB Bandwidth

Channel	Channel Frequency (MHz)	-6dB Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2402	556	>500	Pass
Mid Channel	2440	557	>500	Pass
High Channel	2480	582	>500	Pass

5.1.5 99% Bandwidth**RESULT:****Passed**

Date of testing : 2016-10-18
Test standard : RSS-Gen clause 6.6
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°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Table 7: Test result of 99% Bandwidth

Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (MHz)	Result
Low Channel	2402	1046	/	Pass
Mid Channel	2440	1068	/	Pass
High Channel	2480	1077	/	Pass

**5.1.6 Conducted spurious emissions measured in 100kHz
Bandwidth****RESULT:****Passed**

Date of testing	:	2016-10-18
Test standard	:	FCC part 15.247(d) RSS-247 Clause 5.5
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°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

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

5.1.7 Spurious Emission

RESULT:**Passed**

Date of testing	:	2016-10-14 to 2016-10-20
Test standard	:	FCC part 15.247(d) FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Table 4 & Table 5
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A
Ambient temperature	:	25°C
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.

5.1.8 Conducted emissions

RESULT:**Passed**

Date of testing	:	2016-09-25
Test standard	:	FCC Part 15.107(a) & FCC Part 15.207(a) RSS-Gen Clause 8.8 & ICES-003
Basic standard	:	ANSI C63.10: 2013 & ANSI C63.4: 2014
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207(a) & FCC Part 15.207(a) RSS-Gen Table 3 & ICES-003 Table 2
Kind of test site	:	Shield room

Test setup

Input Voltage	:	AC 120V, 60Hz via AC input of Notebook
Operation Mode	:	B, C
Earthing	:	Not connected
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

For details refer to Appendix 1.

5.1.9 Radiated Emission

RESULT:**Passed**

Date of testing	:	2016-09-22
Test standard	:	FCC Part 15.109(a) & FCC Part 15.209(a) RSS-Gen 8.9 & ICES-003
Basic standard	:	ANSI C63.4: 2014
Frequency range	:	30 - 6000MHz
Classification	:	Class B
Limit	:	FCC Part 15.109(a) & FCC Part 15.209(a) RSS-Gen Table 4 & ICES-003 Table 5 & Table 7
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Input Voltage	:	DC 5V via USB Port of Notebook
Operation mode	:	C
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

Test data refer to Appendix 1.

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

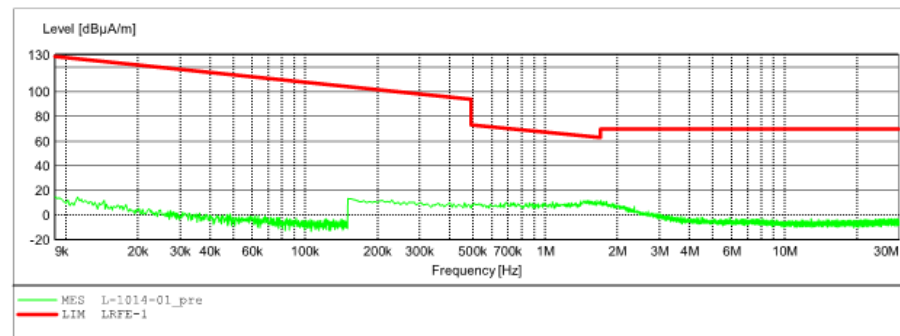
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
 Manufacturer:
 Operating Condition: TX 2402MHz
 Test Site: 2# Chamber
 Operator: PING
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
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



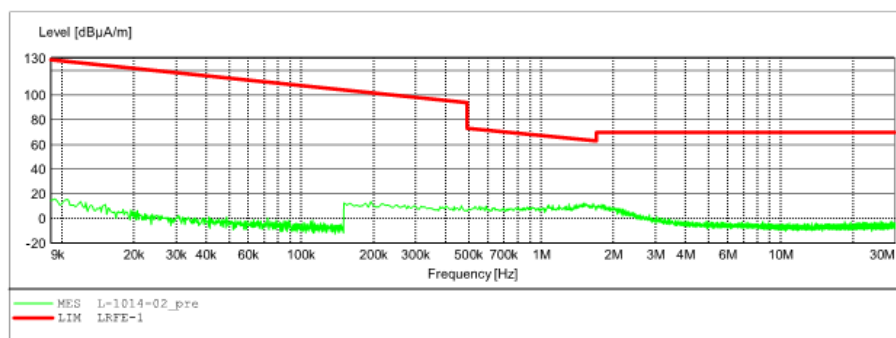
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: TX 2402MHz
Test Site: 2# Chamber
Operator: PING
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
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



ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: TX 2402MHz
Test Site: 2# Chamber
Operator: PING
Test Specification: DC 3.7V
Comment: Z
Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
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

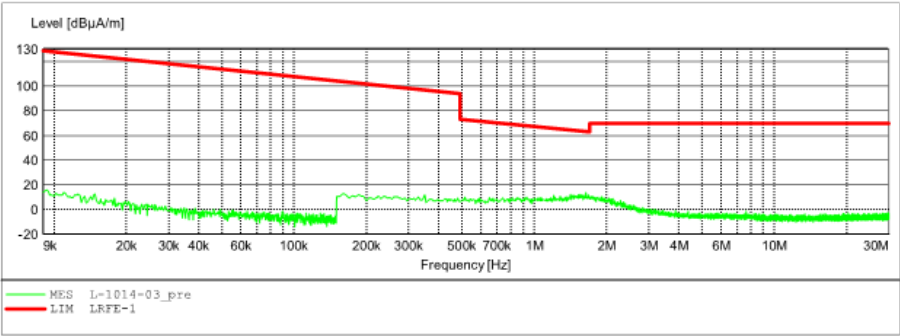


Figure 2: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz)

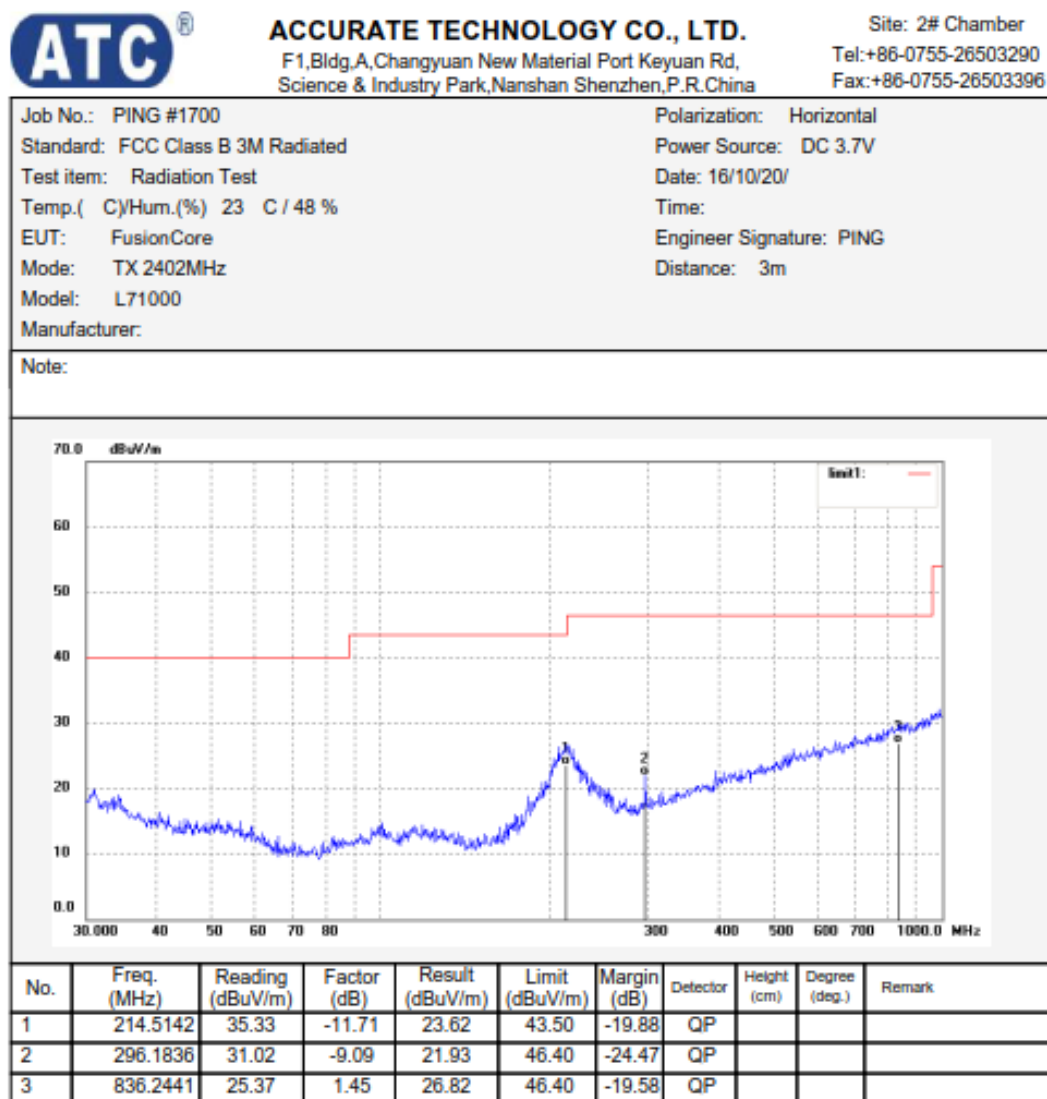


Figure 3: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz)

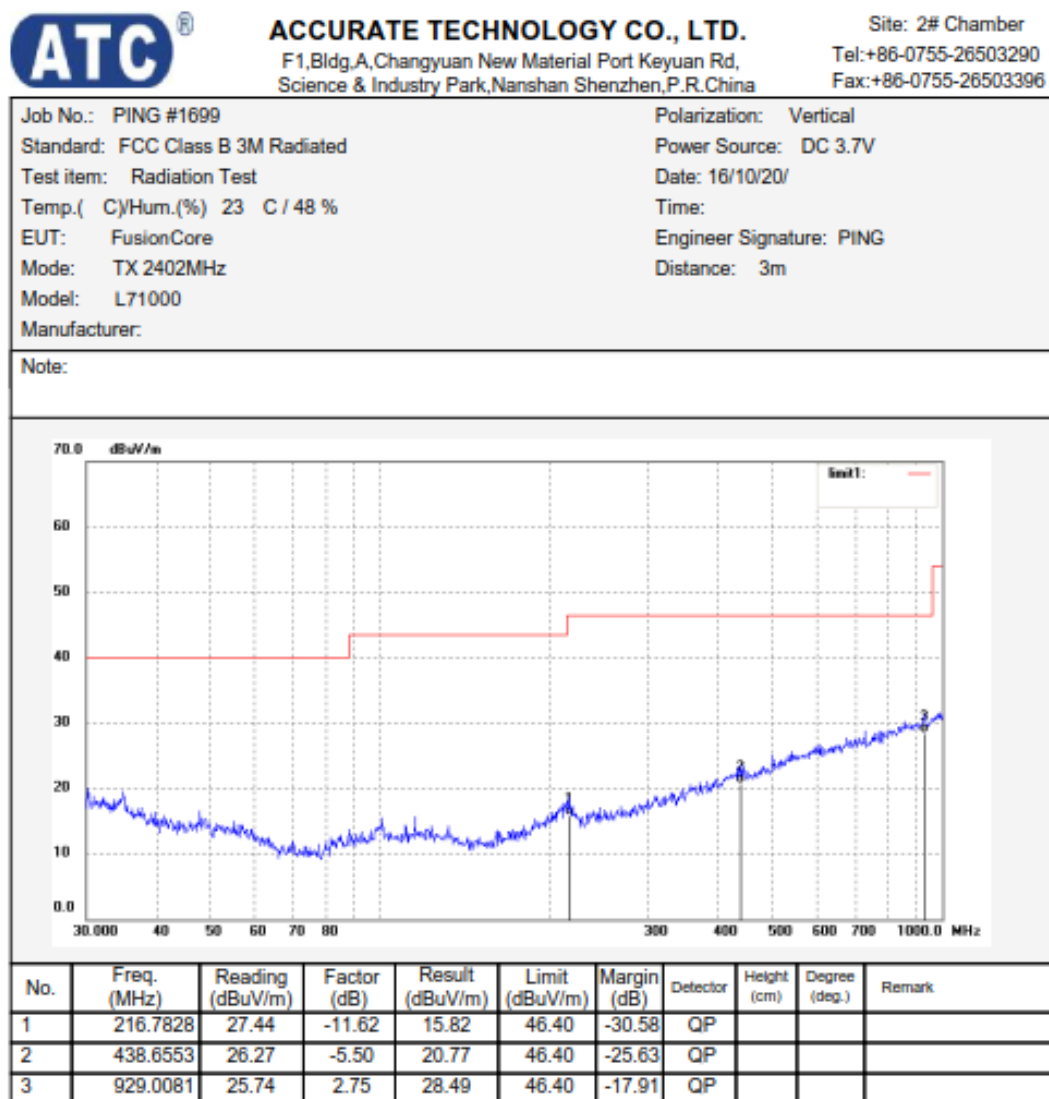


Figure 4: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –18GHz)

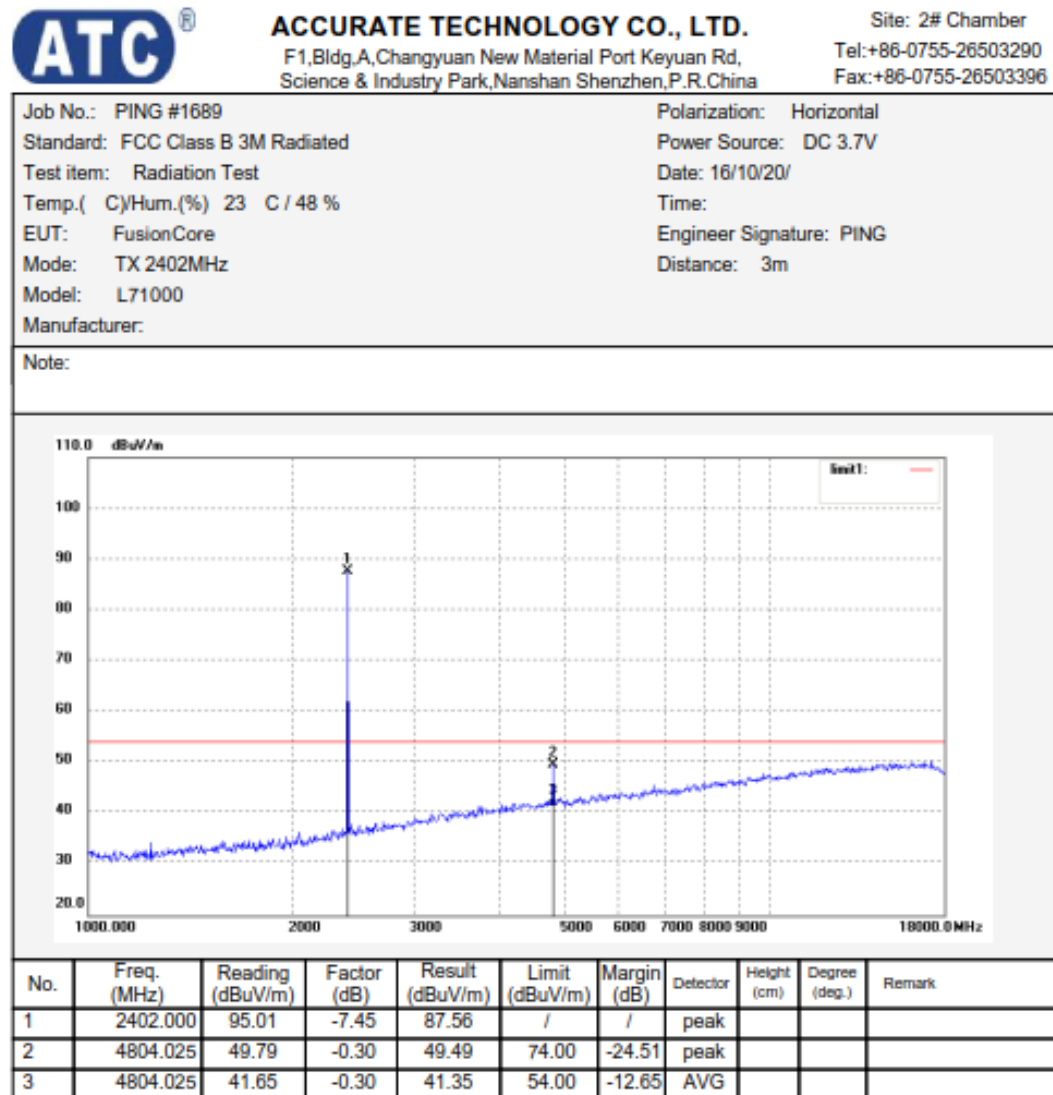


Figure 5: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz)

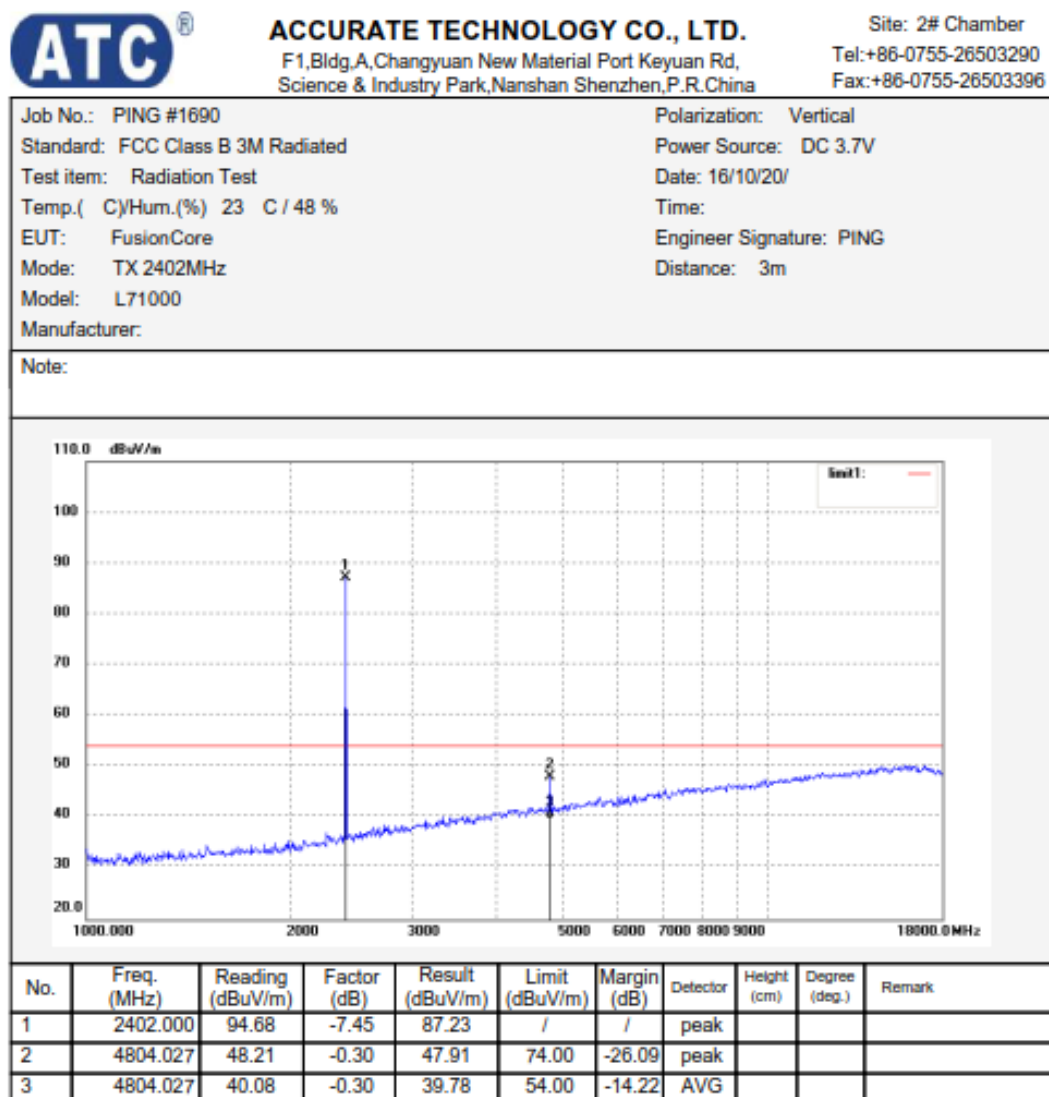


Figure 6: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz)

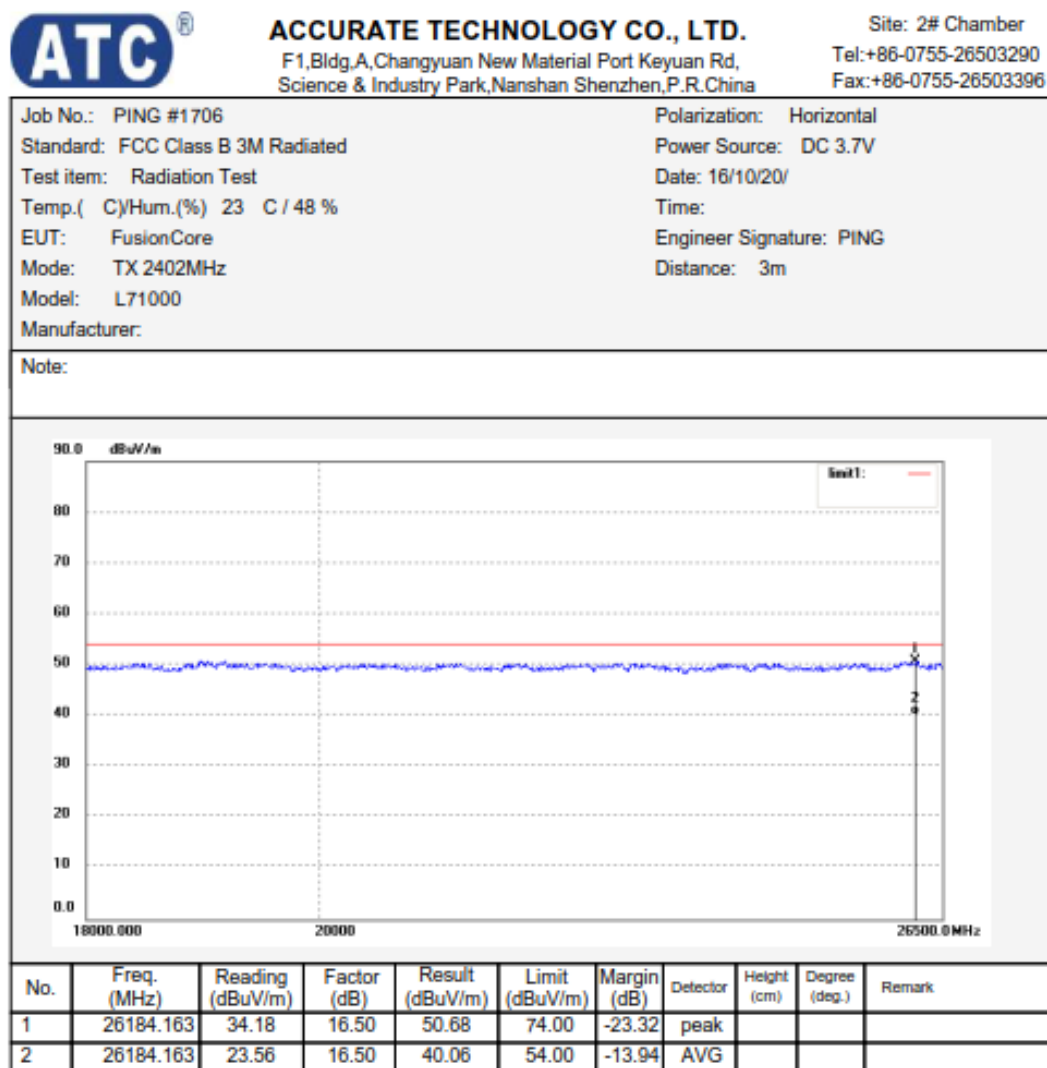


Figure 7: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz)

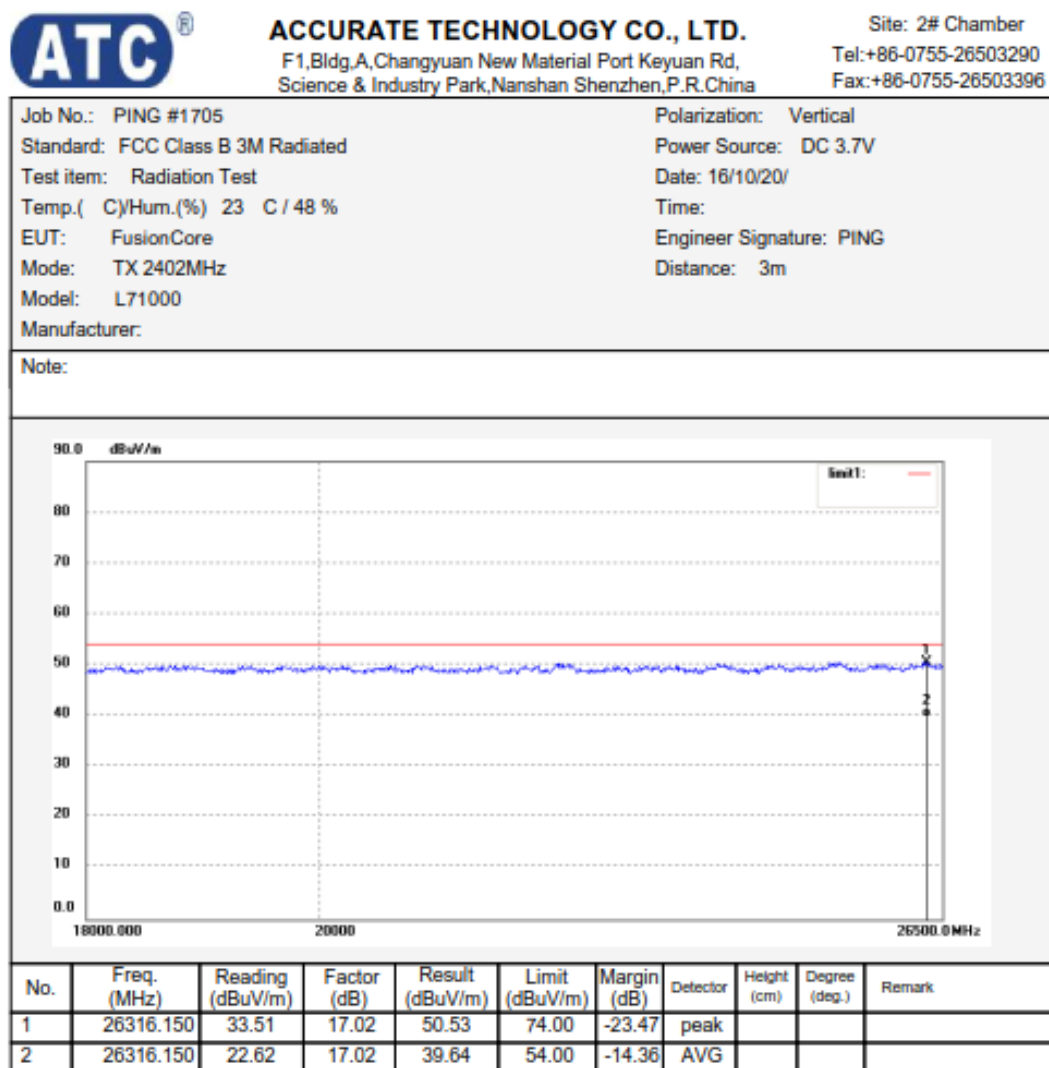


Figure 8: Test figure of spurious emissions, mode A.2 (9kHz – 30MHz)

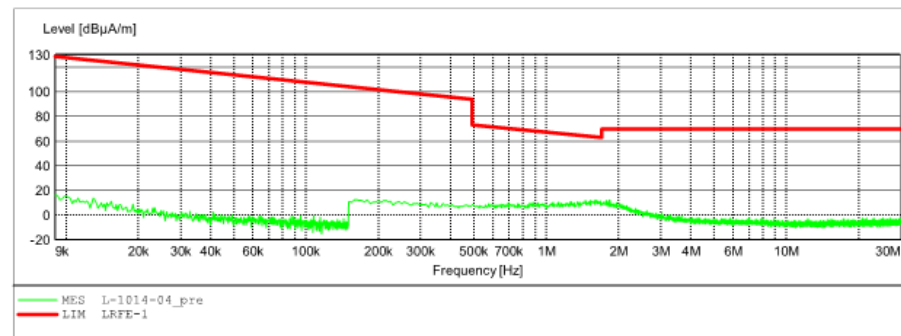
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
 Manufacturer:
 Operating Condition: TX 2440MHz
 Test Site: 2# Chamber
 Operator: PING
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
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



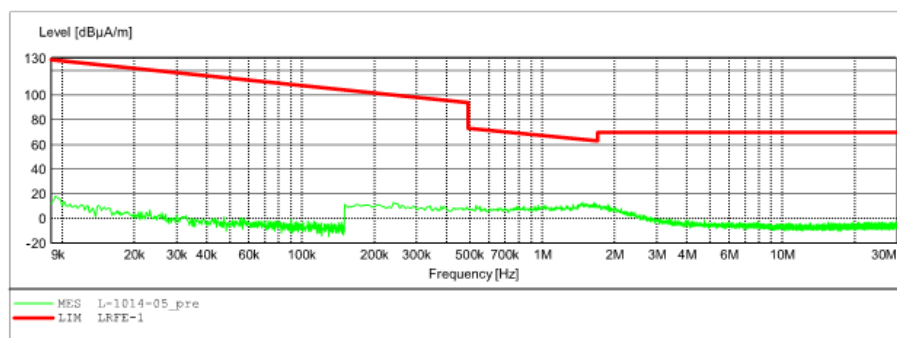
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: TX 2440MHz
Test Site: 2# Chamber
Operator: PING
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
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



ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: TX 2440MHz
Test Site: 2# Chamber
Operator: PING
Test Specification: DC 3.7V
Comment: Z
Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
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

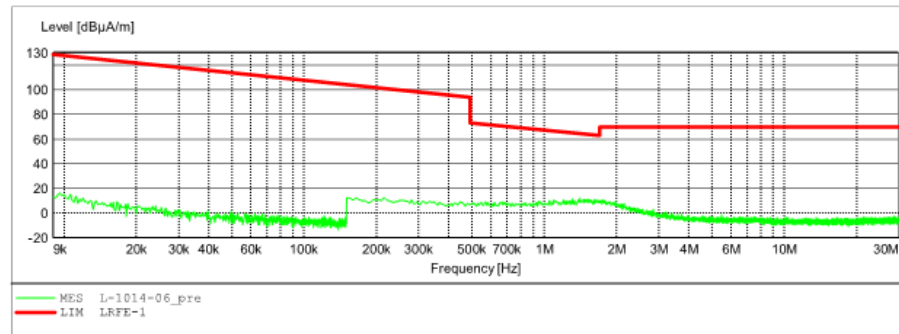


Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)

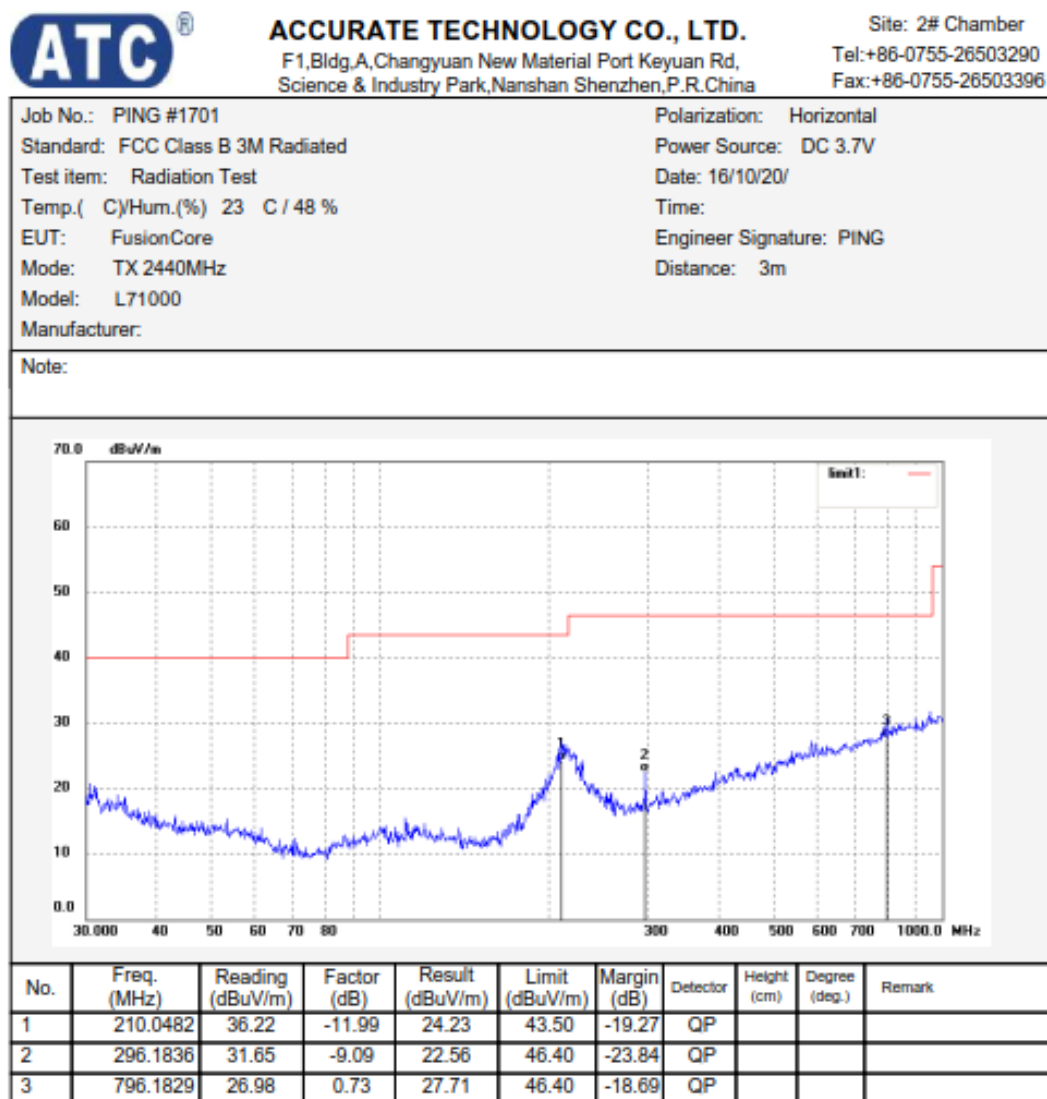


Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz)

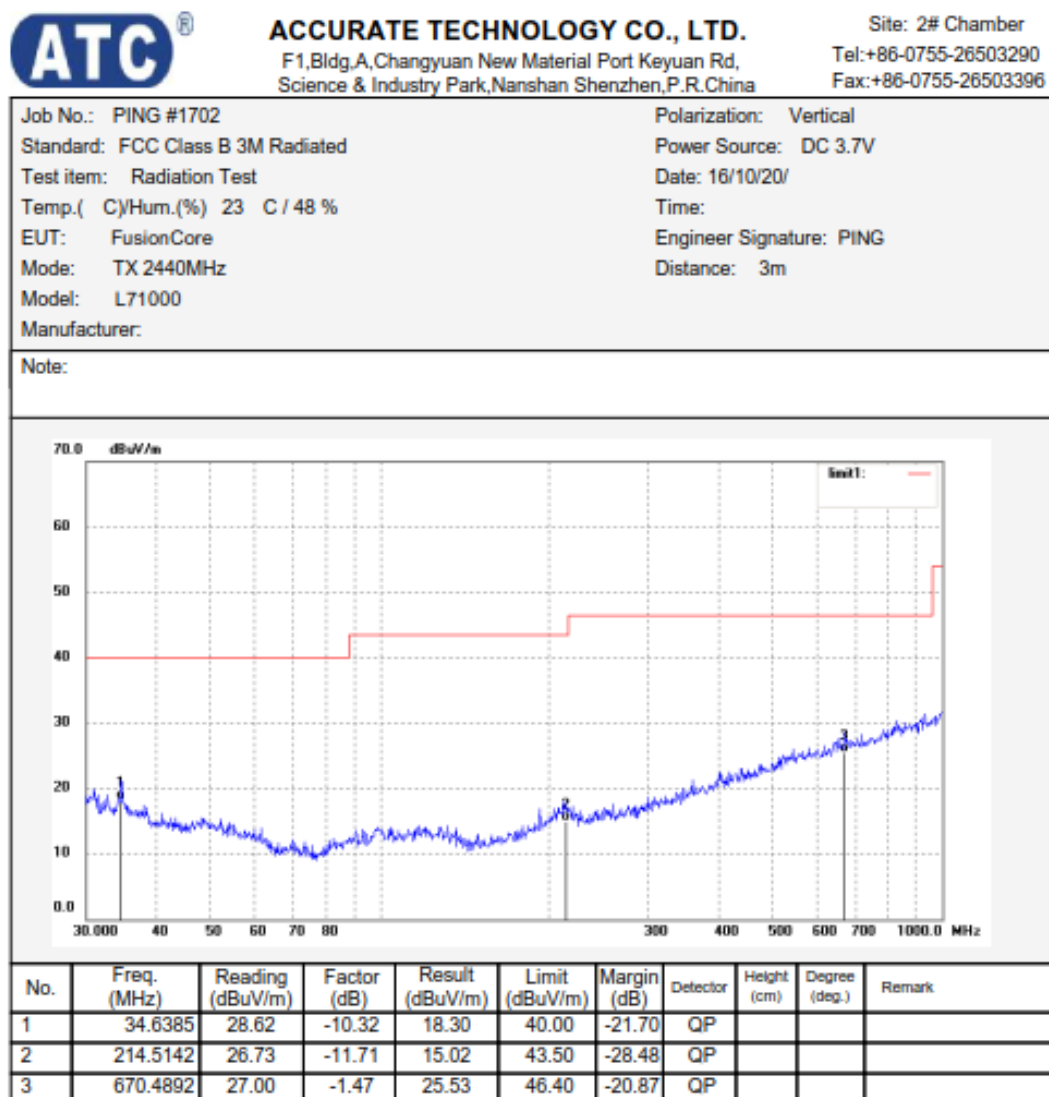


Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz)

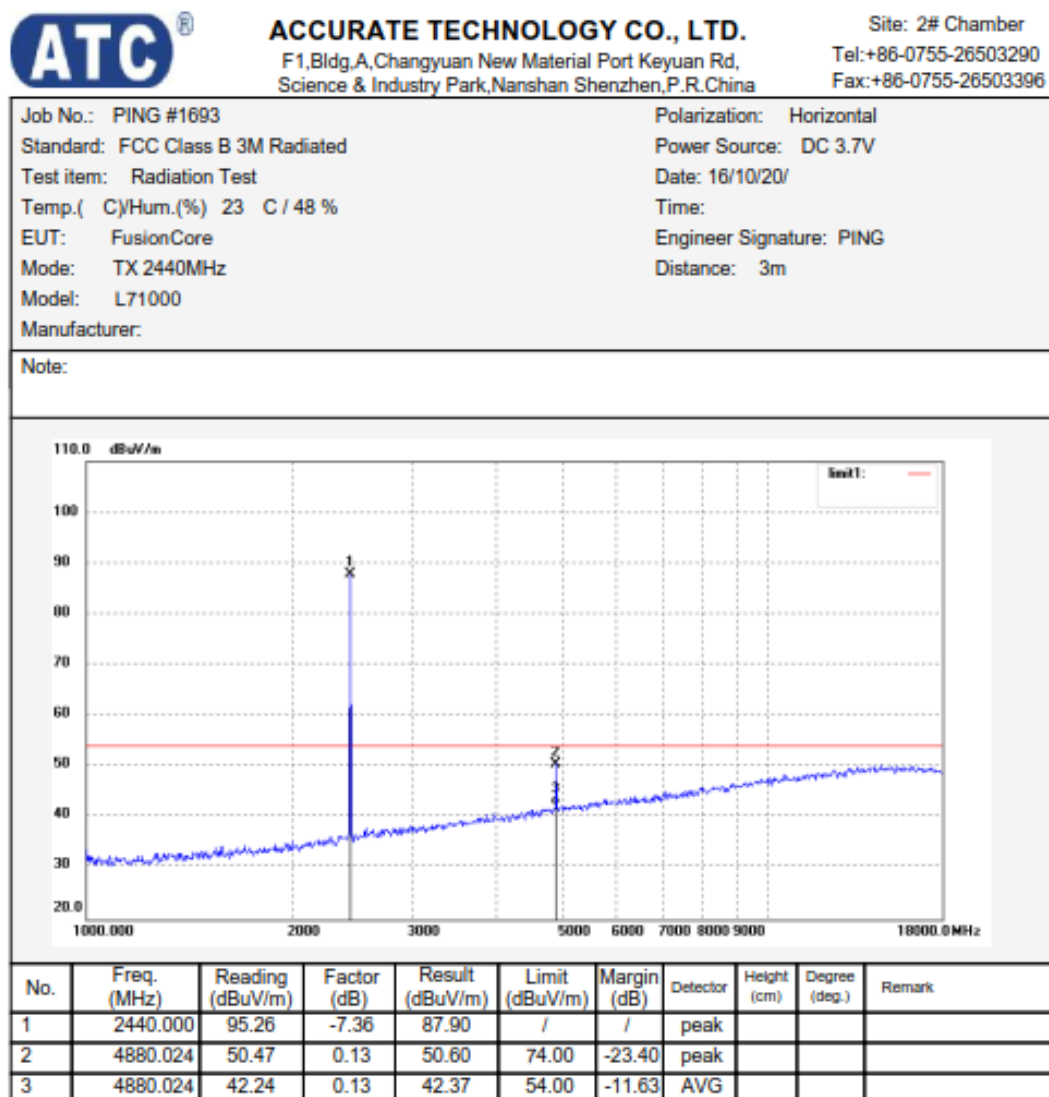


Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz)

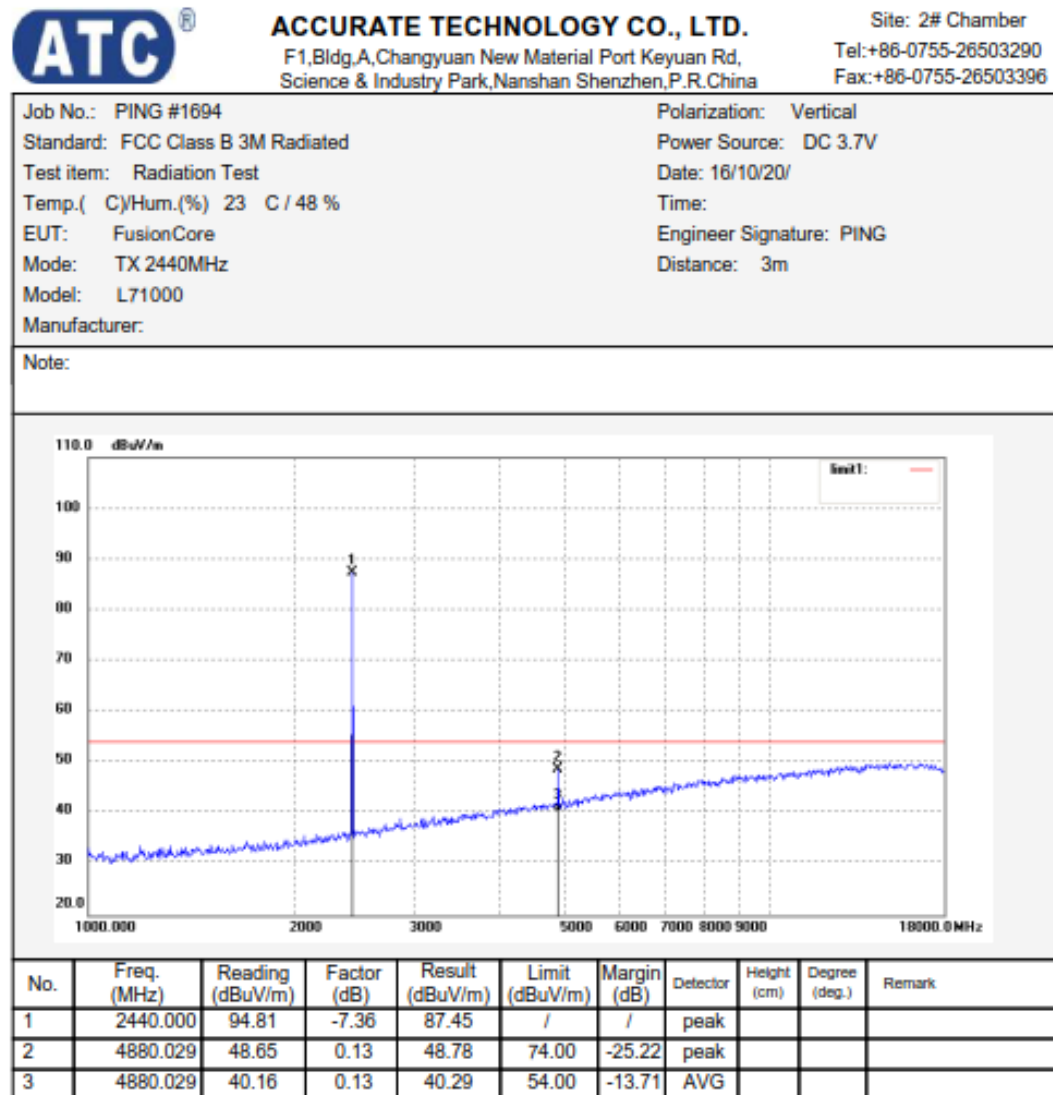


Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz)

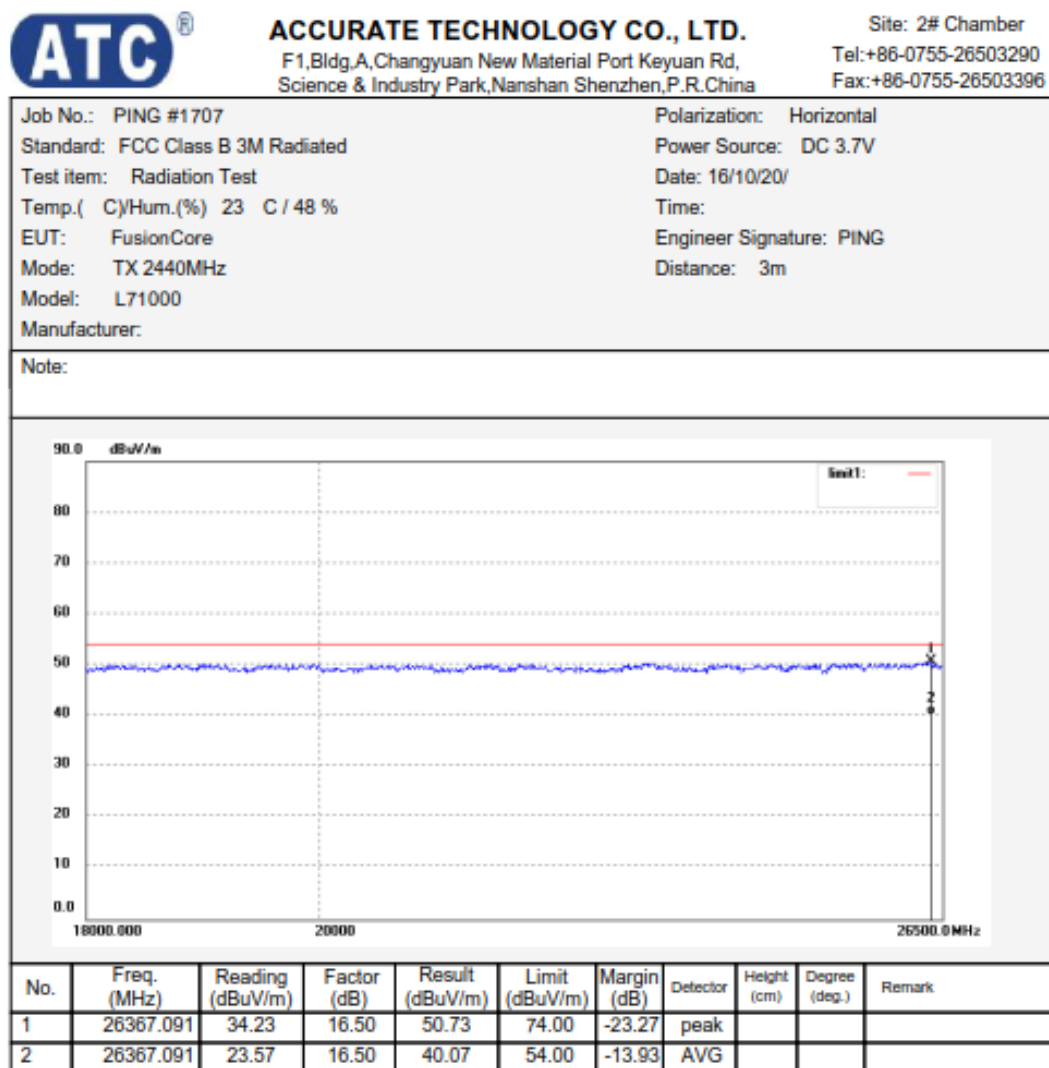


Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz)

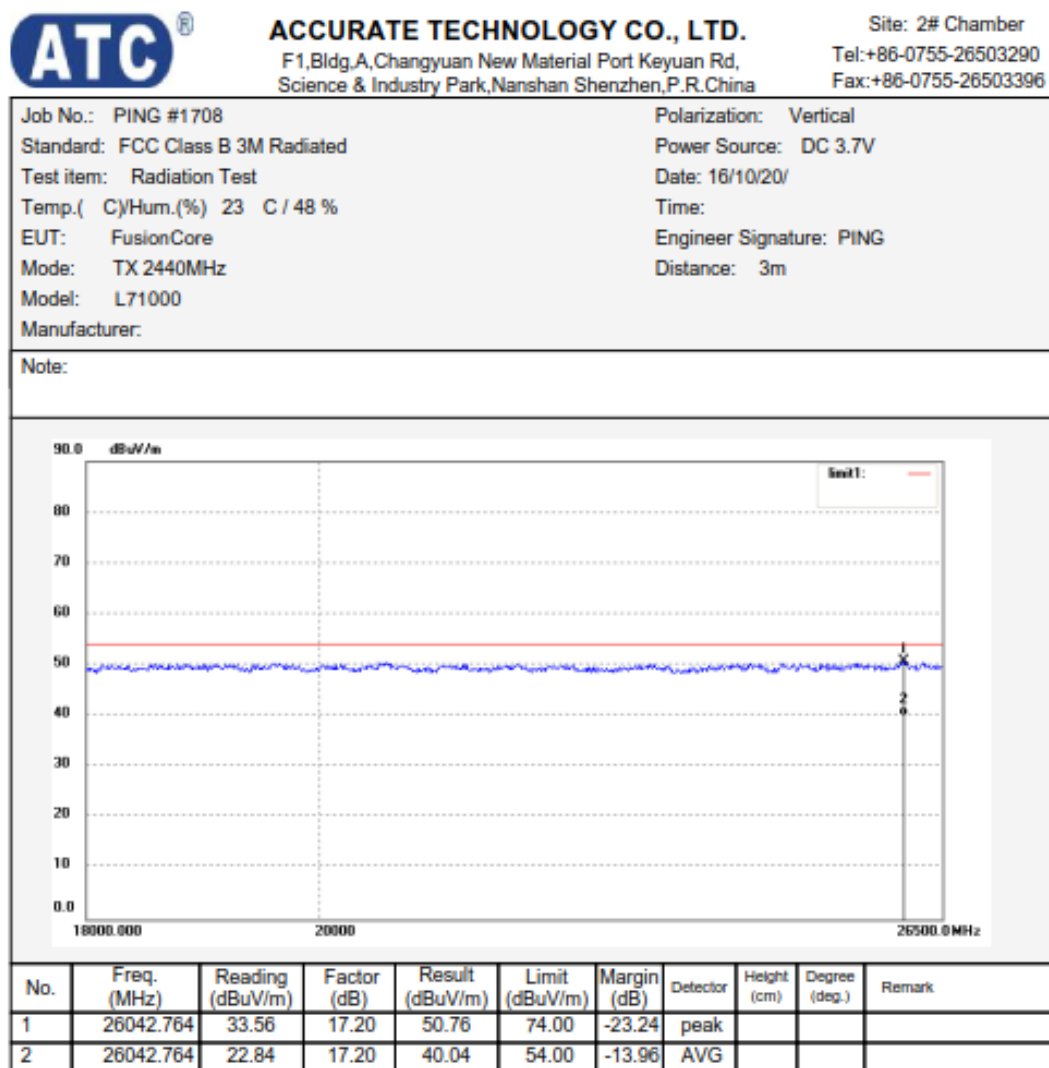


Figure 15: Test figure of spurious emissions, mode A.3 (9kHz – 30MHz)

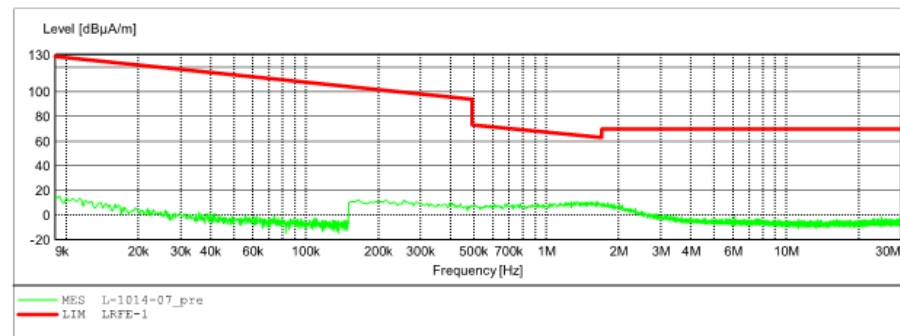
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
 Manufacturer:
 Operating Condition: TX 2480MHz
 Test Site: 2# Chamber
 Operator: PING
 Test Specification: DC 3.7V
 Comment: X
 Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
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



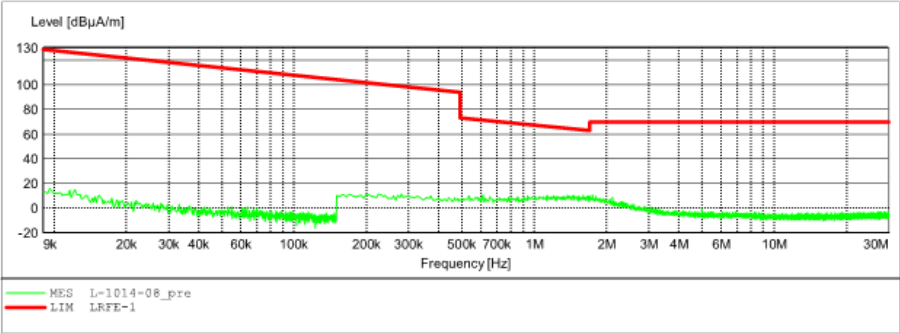
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: PING
Test Specification: DC 3.7V
Comment: Y
Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Short Description:			SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
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



ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3M Radiated

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: PING
Test Specification: DC 3.7V
Comment: Z
Start of Test: 2016-10-14 /

SCAN TABLE: "LFRE Fin"

Short Description:			_SUB STD VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
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

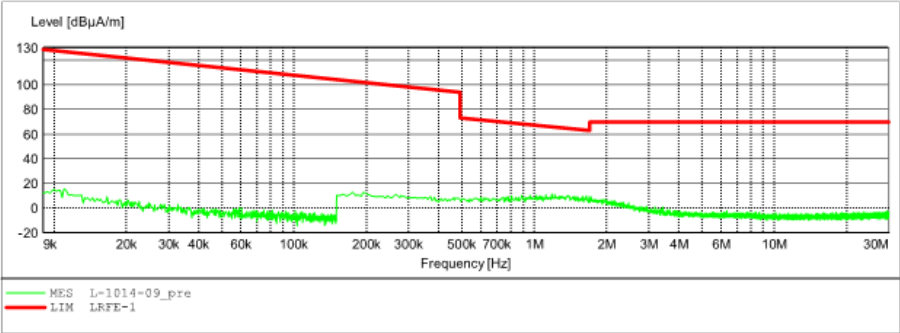


Figure 16: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz)

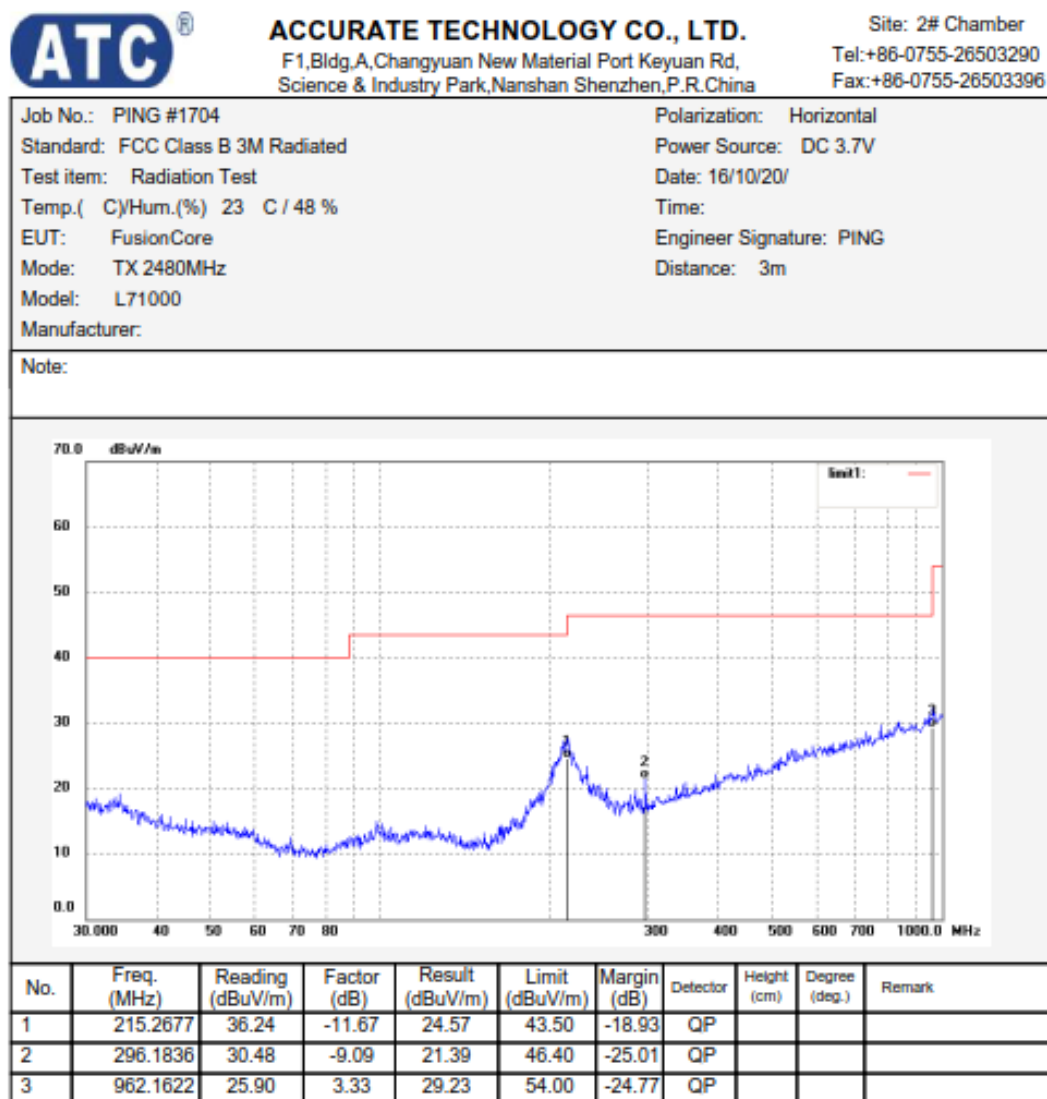


Figure 17: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz)

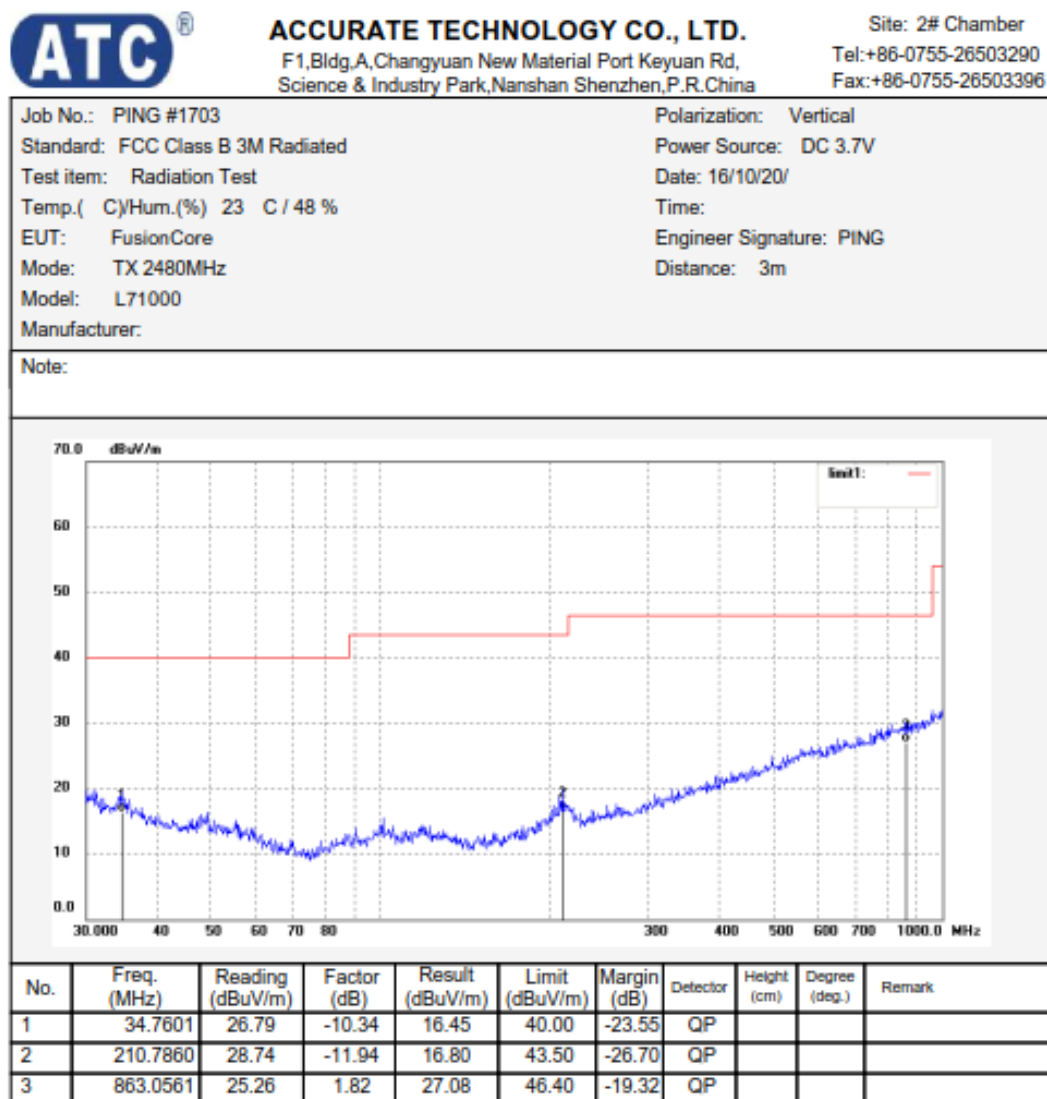


Figure 18: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz)

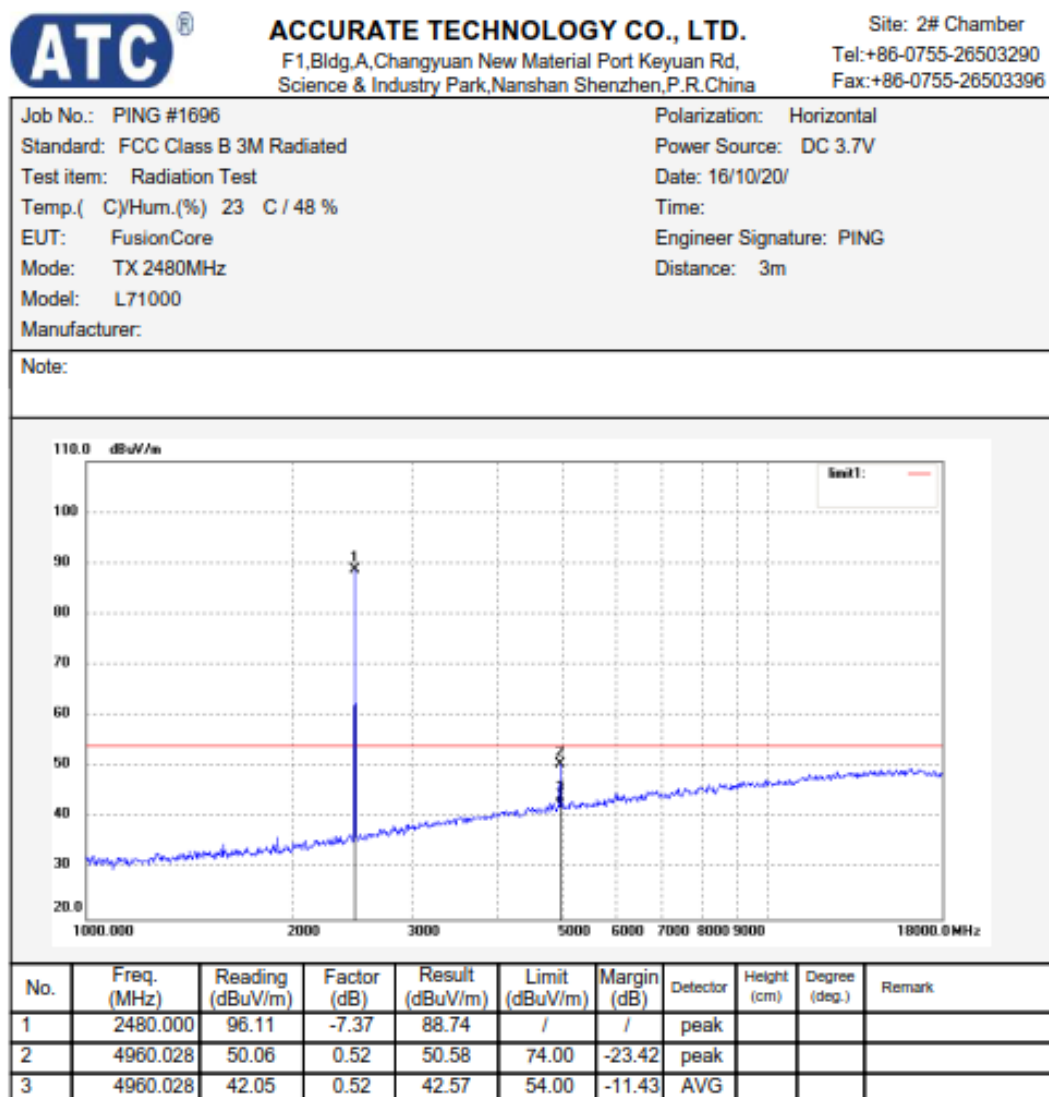


Figure 19: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz)

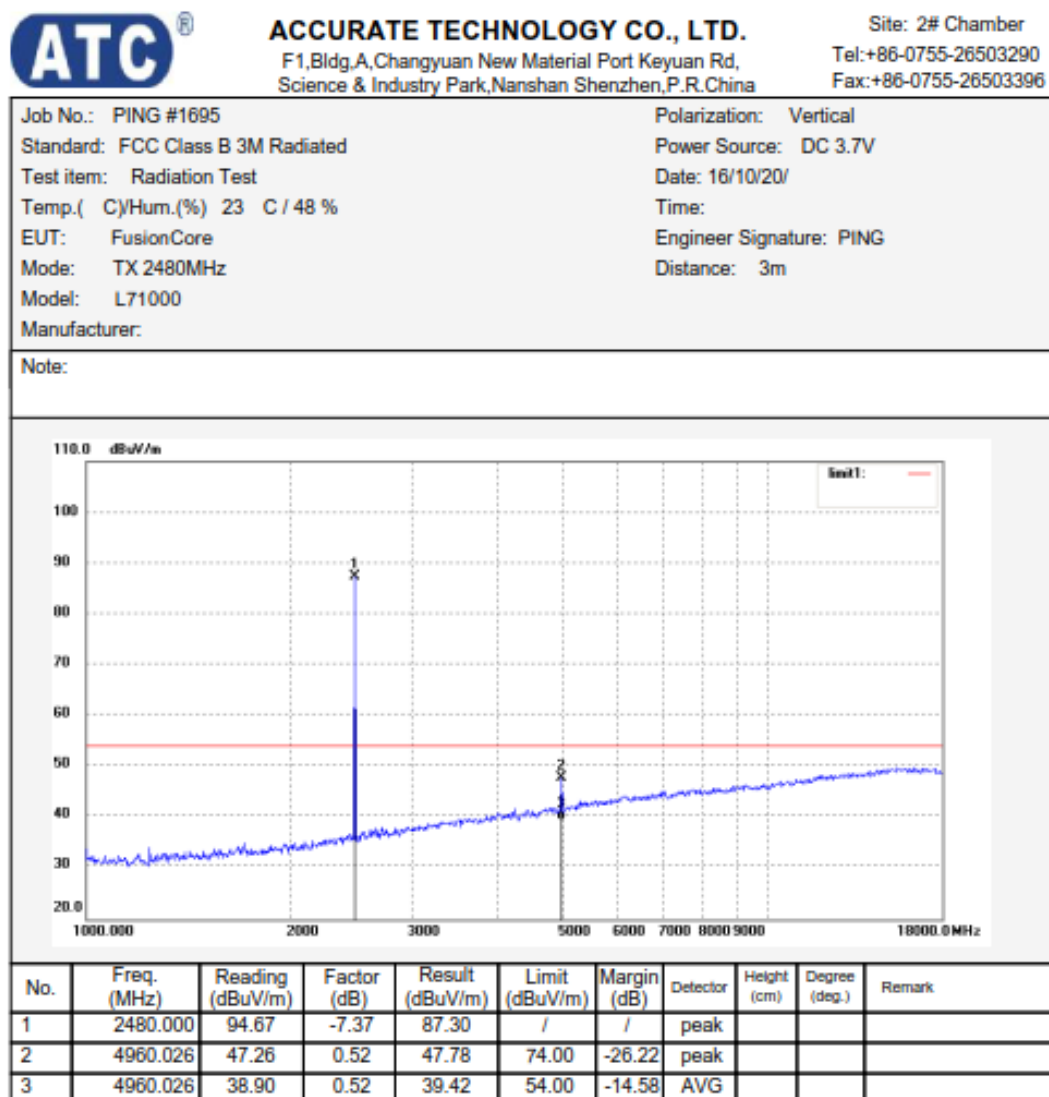


Figure 20: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz)

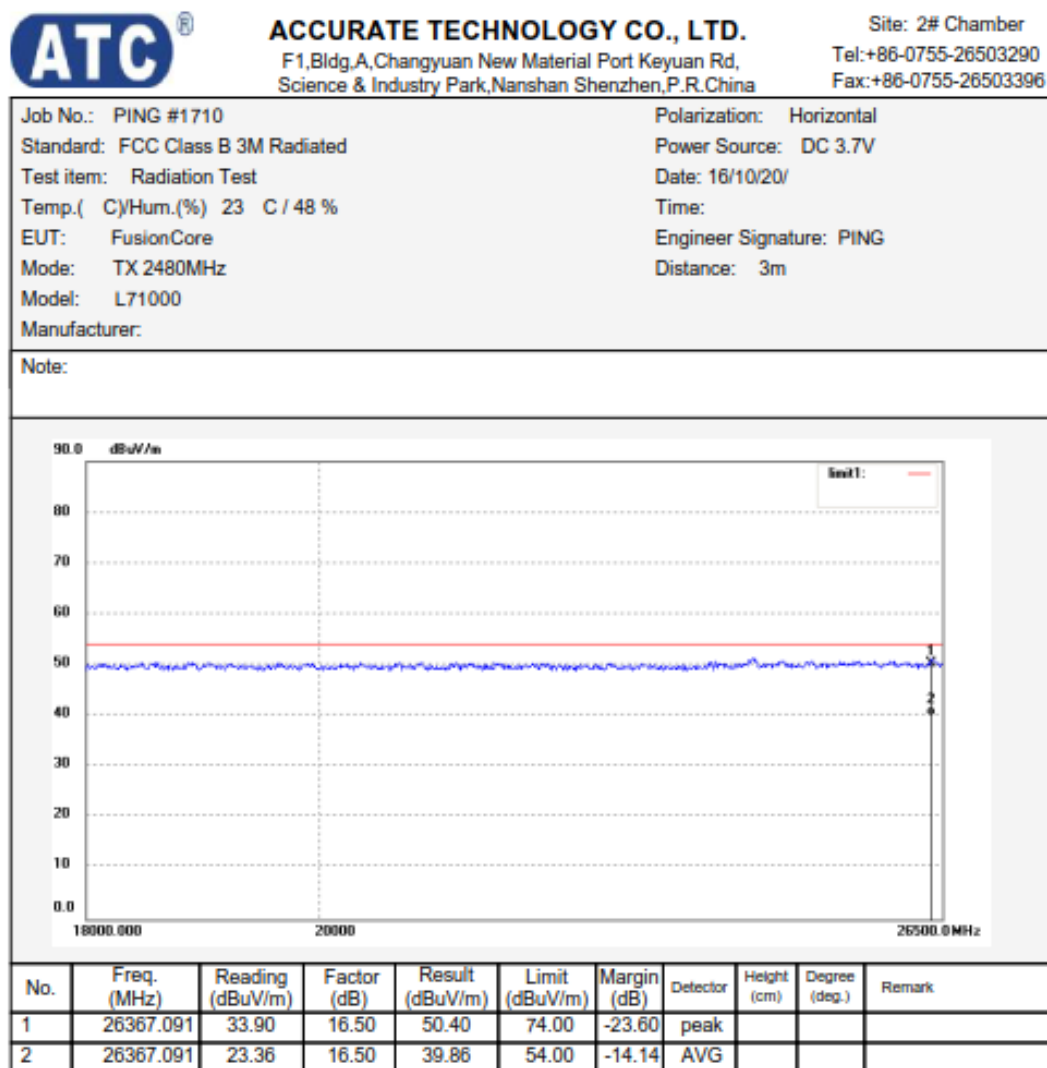


Figure 21: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz)

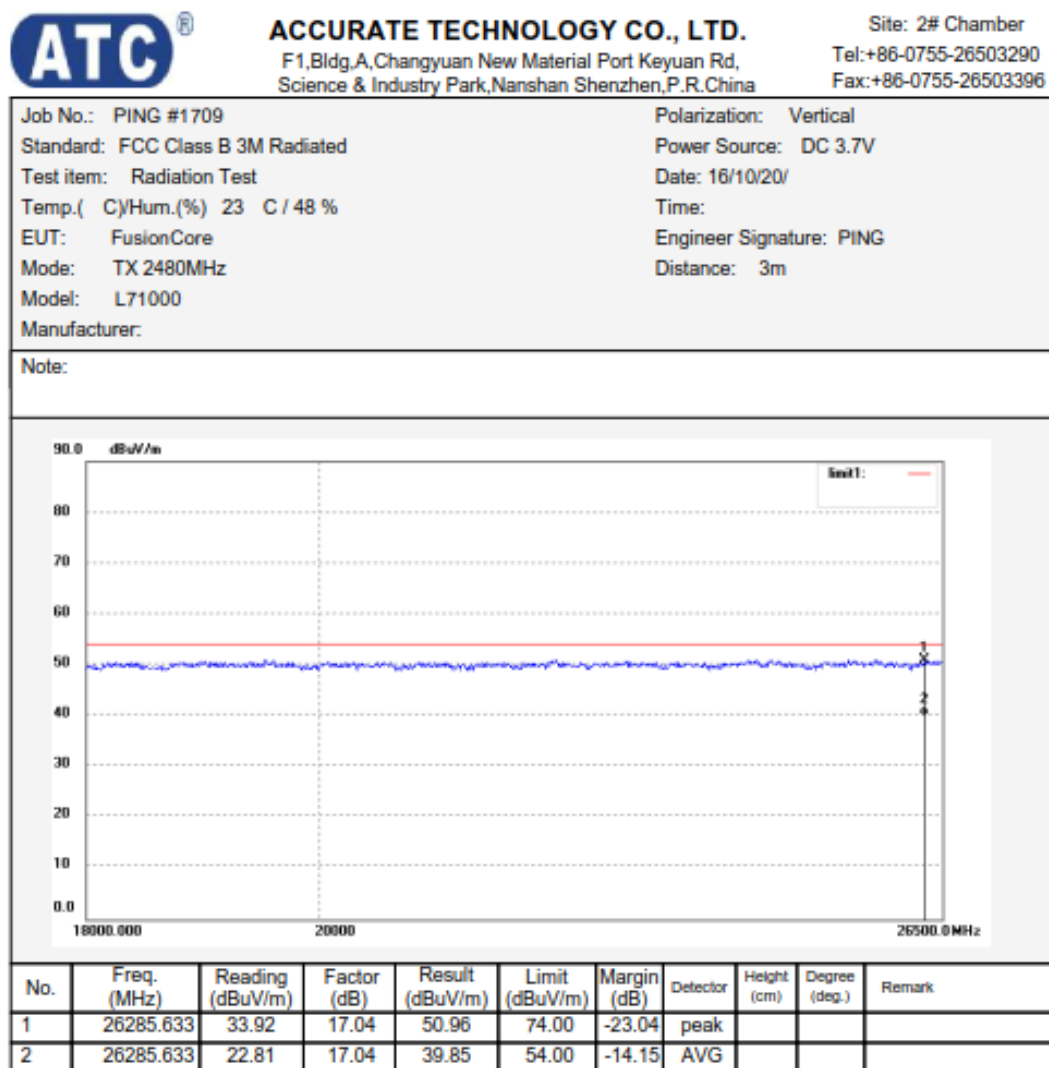


Figure 22: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal

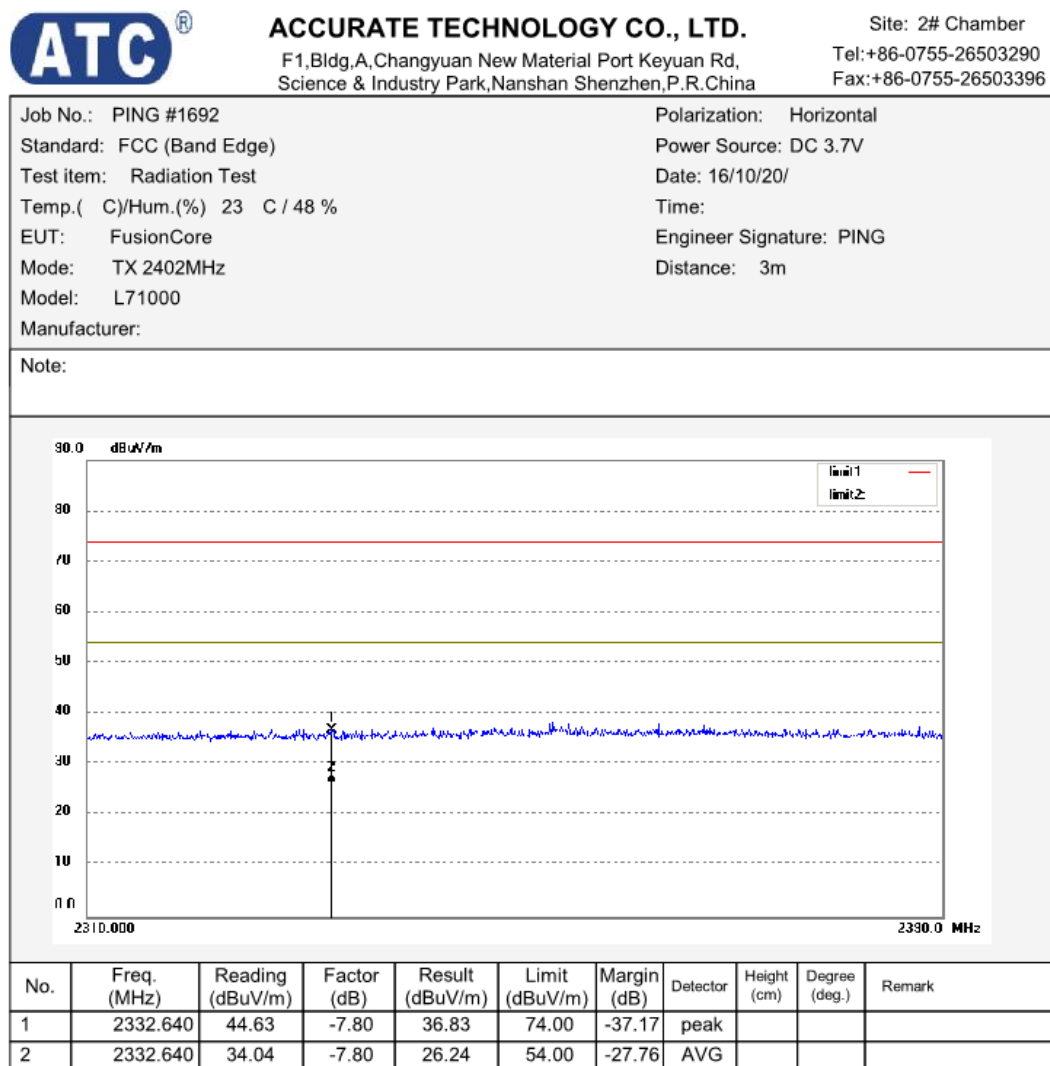


Figure 23: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical

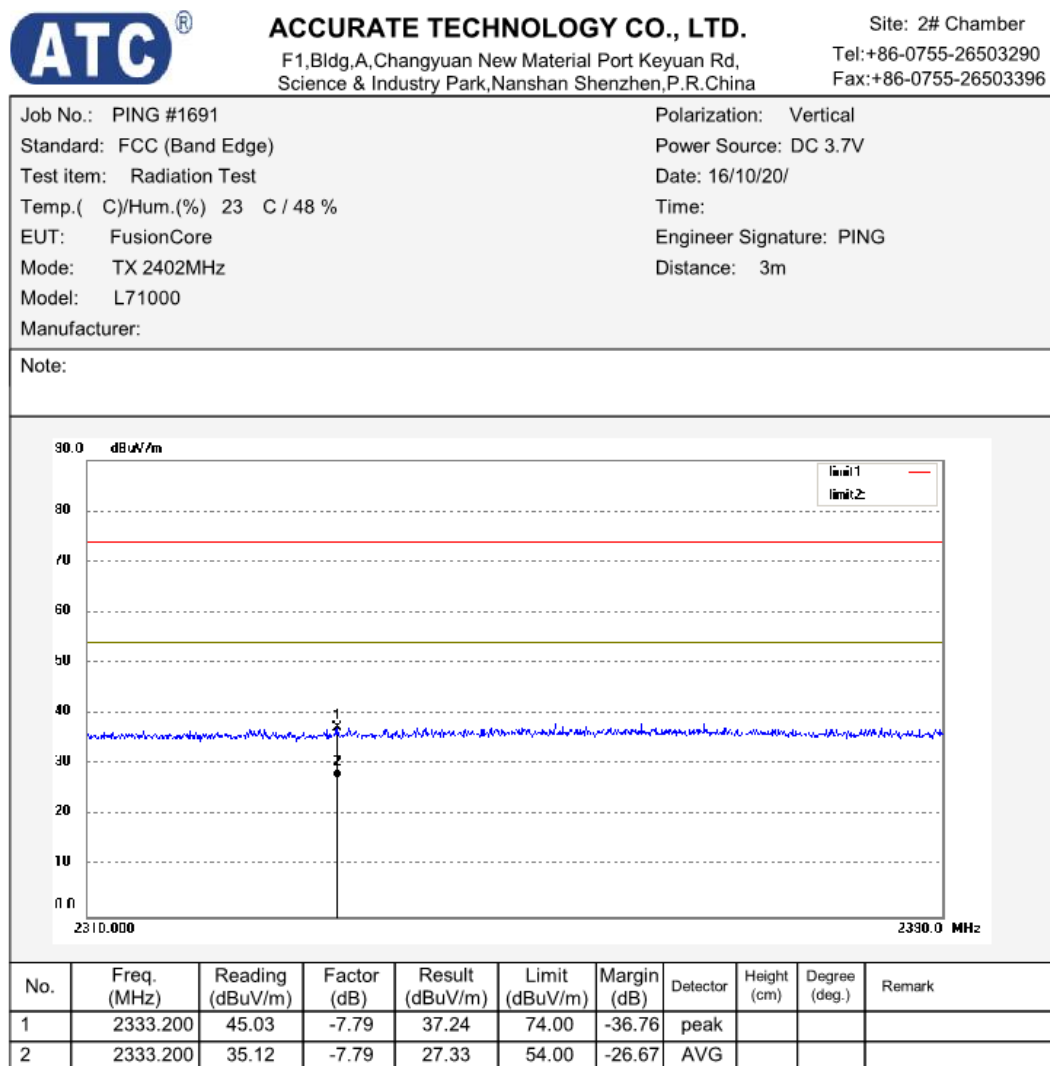


Figure 24: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal

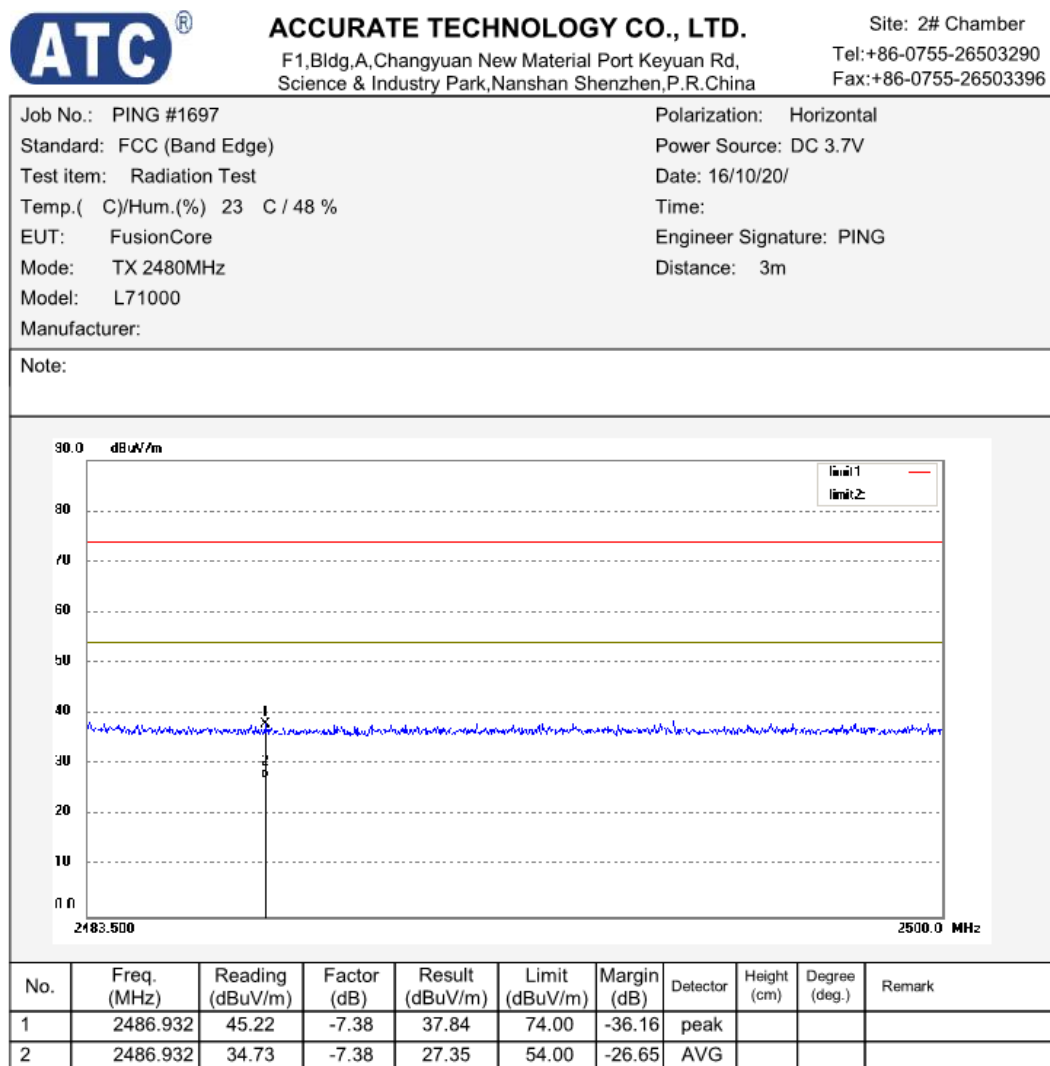


Figure 25: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical

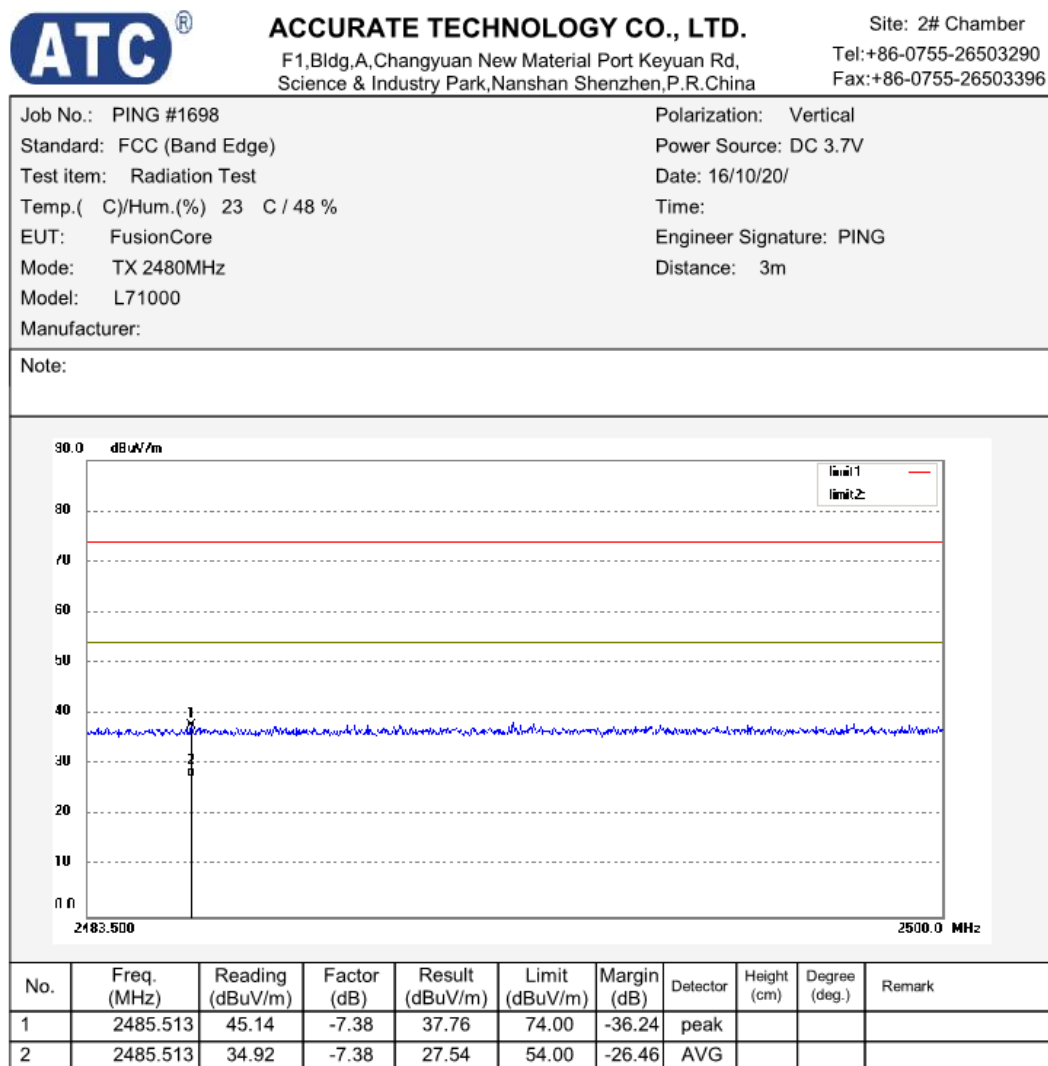
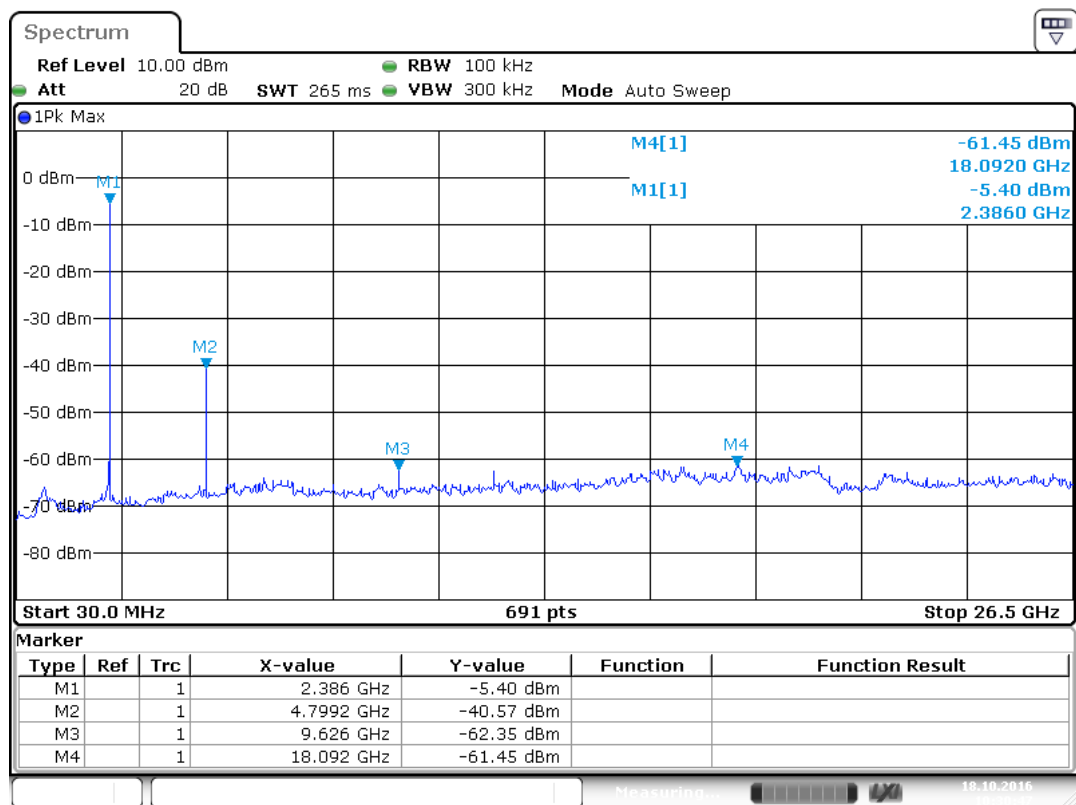
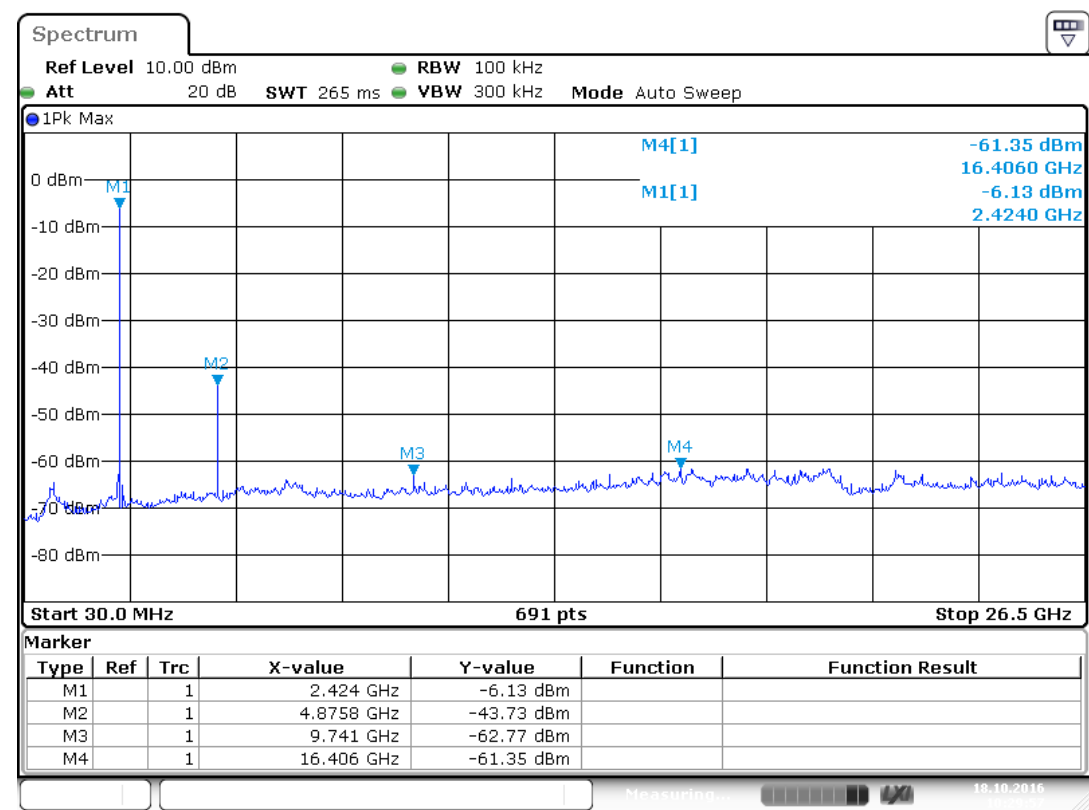


Figure 26: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.1



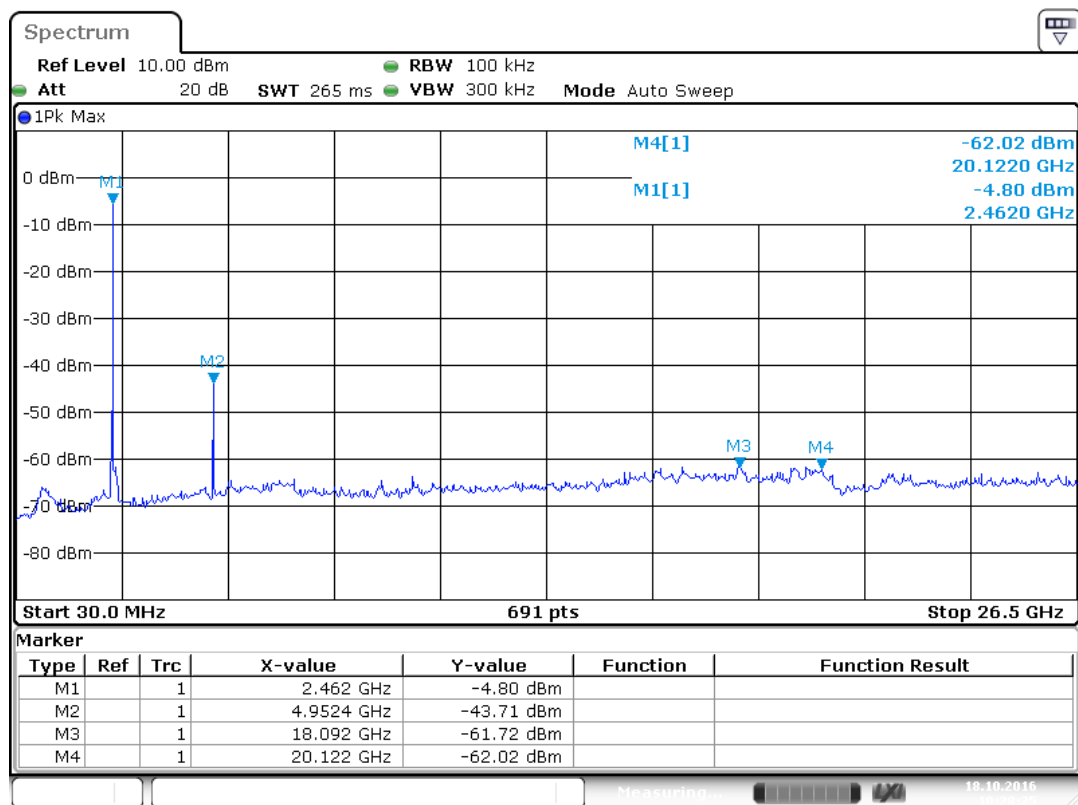
Date: 18.OCT.2016 10:30:47

Figure 27: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.2



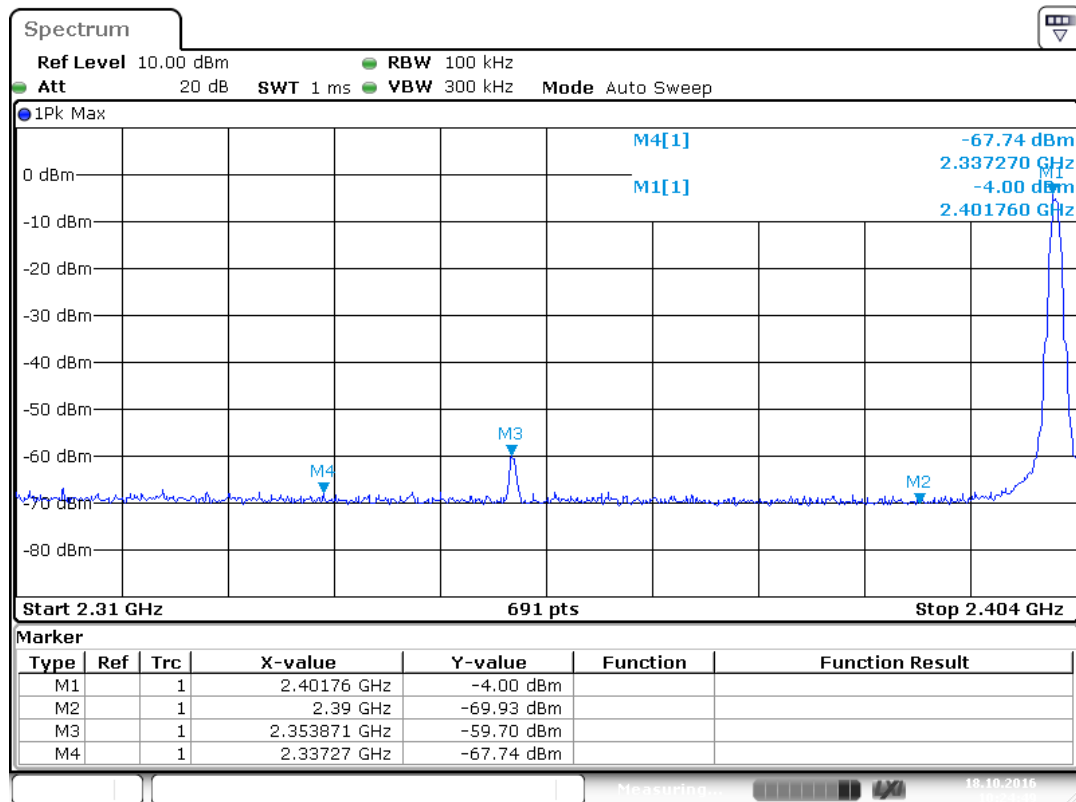
Date: 18.OCT.2016 10:29:58

Figure 28: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.3



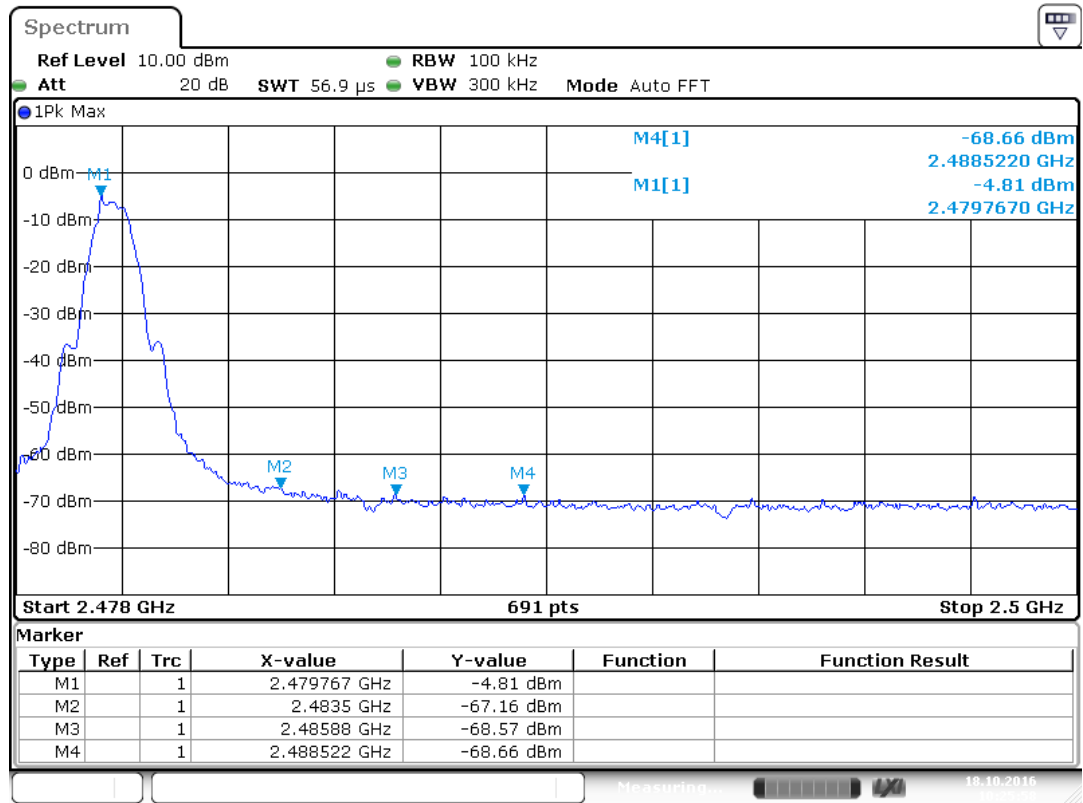
Date: 18.OCT.2016 10:28:26

Figure 29: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.1



Date: 18.OCT.2016 10:24:49

Figure 30: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.3



Date: 18.OCT.2016 10:25:58

Figure 31: Test figure of Conducted emissions, Mode B, line live

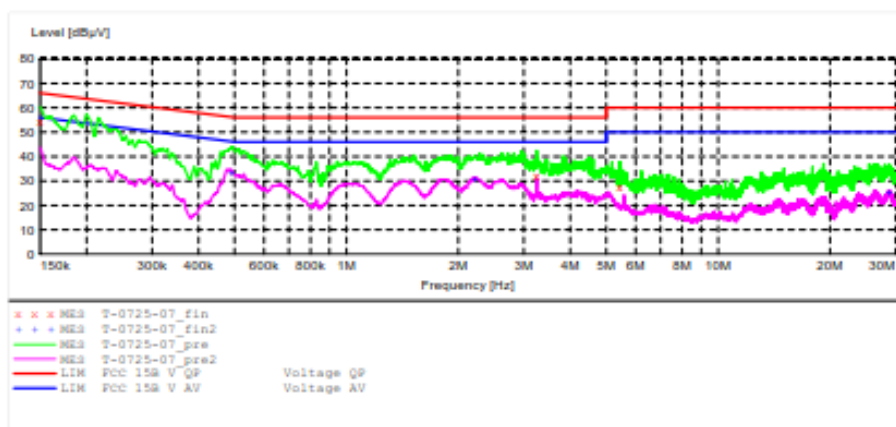
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: Transmitting
Test Site: 1#Shielding Room
Operator: PING
Test Specification: L 120V/60Hz
Comment: Mains Port
Start of Test: 9/25/2016 /

SCAN TABLE: "V 9K-30MHz 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 NSLK8126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "T-0925-07_fin"

9/25/2016

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	54.20	10.5	66	11.8	QP	L1	GND
3.250000	32.00	11.1	56	24.0	QP	L1	GND
5.440000	27.60	11.2	60	32.4	QP	L1	GND

MEASUREMENT RESULT: "T-0925-07_fin2"

9/25/2016

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.490000	33.20	10.7	46	13.0	AV	L1	GND
2.210000	30.70	11.0	46	15.3	AV	L1	GND
28.780000	24.50	11.5	50	25.5	AV	L1	GND

Figure 32: Test figure of Conducted emissions, Mode B, line neutral

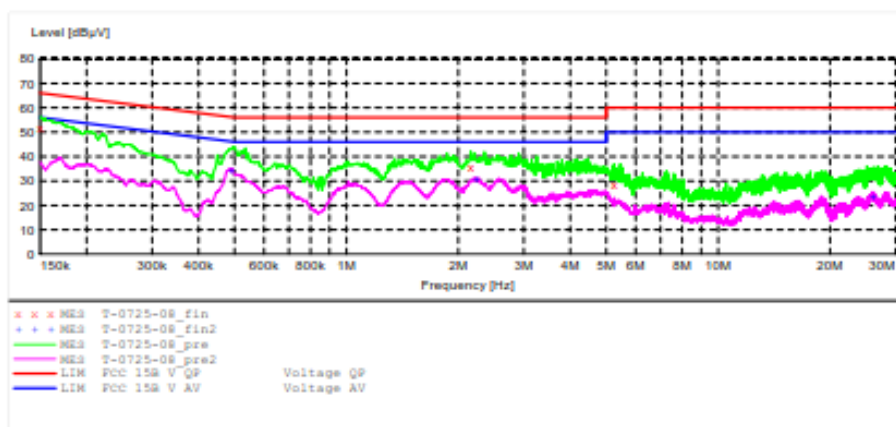
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: Transmitting
Test Site: 1#Shielding Room
Operator: PING
Test Specification: N 120V/60Hz
Comment: Mains Port
Start of Test: 9/25/2016 /

SCAN TABLE: "V 9K-30MHz 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 NSLK8126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "T-0925-08_fin"

9/25/2016

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	51.70	10.5	66	14.3	QP	N	GND
2.160000	35.70	11.0	56	20.3	QP	N	GND
5.250000	28.90	11.2	60	31.1	QP	N	GND

MEASUREMENT RESULT: "T-0925-08_fin2"

9/25/2016

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.490000	34.00	10.7	46	12.2	AV	N	GND
2.230000	30.60	11.0	46	15.4	AV	N	GND
26.035000	23.10	11.5	50	26.9	AV	N	GND

Figure 33: Test figure of Conducted emissions, Mode C, line live

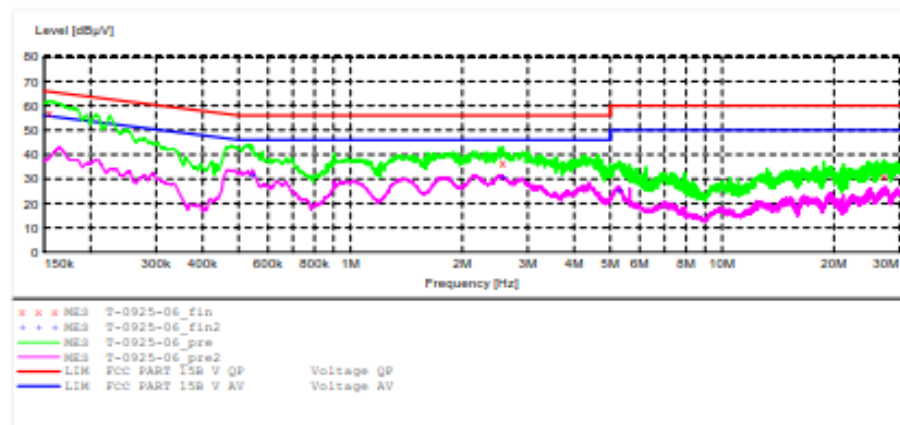
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: Charging
Test Site: 1#Shielding Room
Operator: PING
Test Specification: L 120V/60Hz
Comment: Mains Port
Start of Test: 9/25/2016 /

SCAN TABLE: "V 9K-30MHz 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 NSLK8126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "T-0925-06_fin"

9/25/2016

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.155000	57.20	10.5	66	8.5	QP	L1	GND
2.570000	36.40	11.0	56	19.6	QP	L1	GND
27.280000	31.30	11.5	60	28.7	QP	L1	GND

MEASUREMENT RESULT: "T-0925-06_fin2"

9/25/2016

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.545000	31.50	10.7	46	14.5	AV	L1	GND
2.560000	30.50	11.0	46	15.5	AV	L1	GND
5.280000	24.80	11.2	50	25.2	AV	L1	GND

Figure 34: Test figure of Conducted emissions, Mode C, line neutral

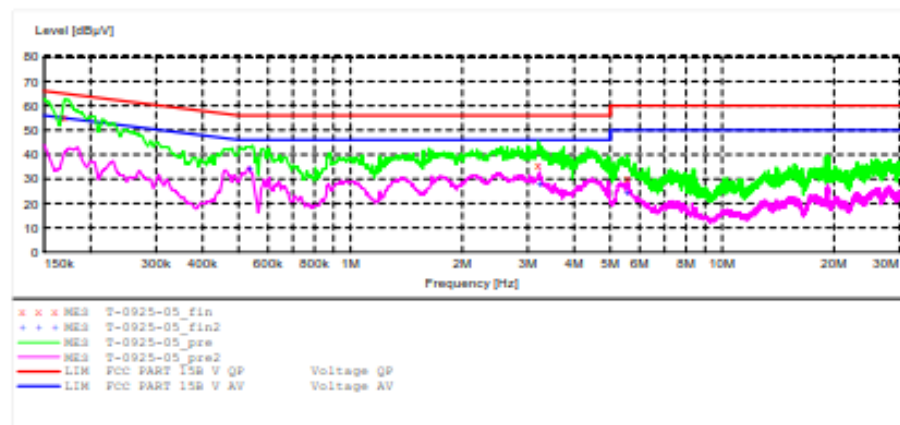
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: FusionCore M/N:L71000
Manufacturer:
Operating Condition: Charging
Test Site: 1#Shielding Room
Operator: PING
Test Specification: N 120V/60Hz
Comment: Mains Port
Start of Test: 9/25/2016 /

SCAN TABLE: "V 9K-30MHz 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 NSLK8126 2008
Average
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
Average



MEASUREMENT RESULT: "T-0925-05_fin"

9/25/2016

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.170000	55.20	10.5	65	9.8	QP	N	GND
3.200000	35.20	11.1	56	20.8	QP	N	GND
5.560000	30.20	11.2	60	29.8	QP	N	GND

MEASUREMENT RESULT: "T-0925-05_fin2"

9/25/2016

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.535000	33.70	10.7	46	12.3	AV	N	GND
3.230000	28.00	11.1	46	18.0	AV	N	GND
5.550000	24.10	11.2	50	25.9	AV	N	GND

Figure 35: Test figure of Radiated emissions, Mode C, Below 1GHz, Horizontal

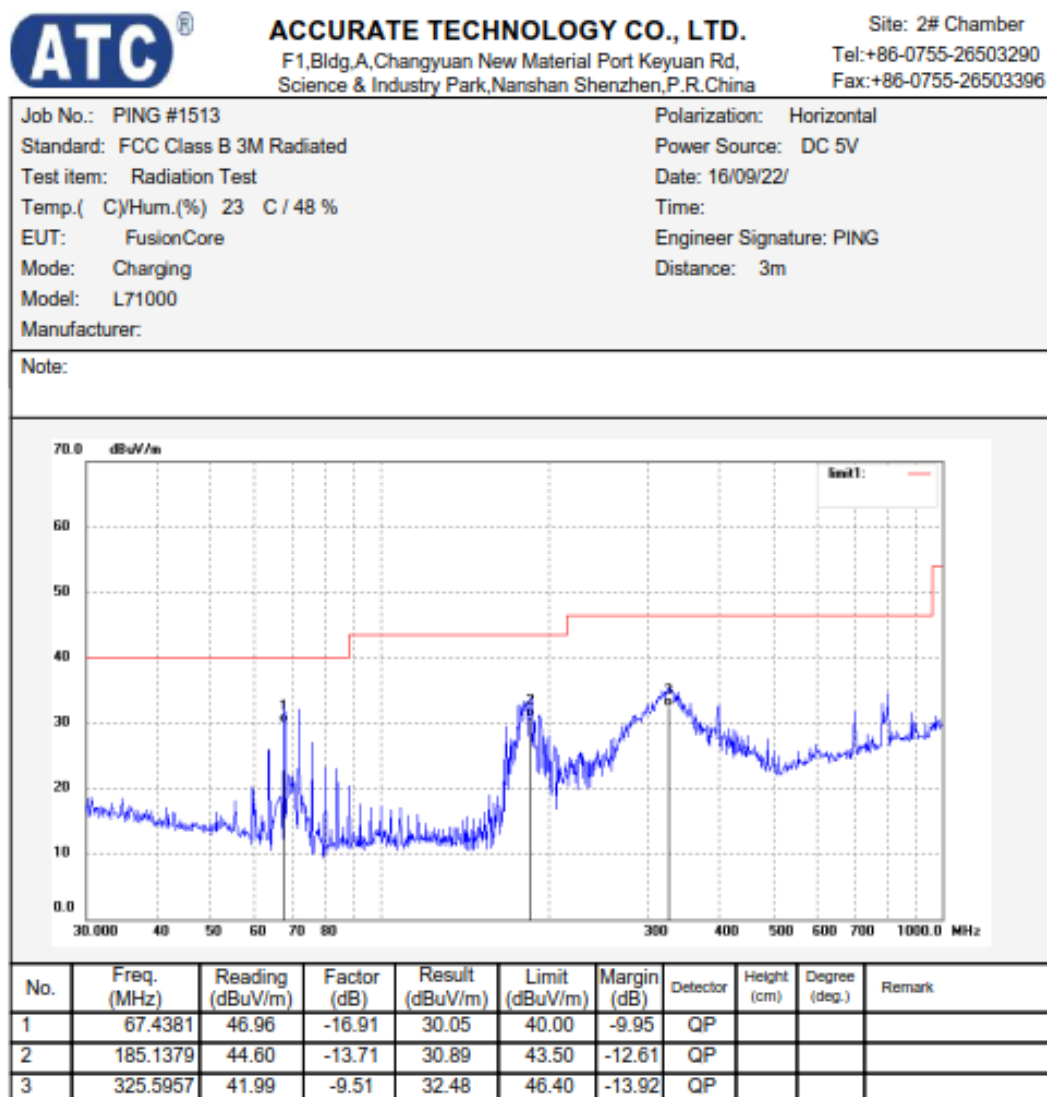


Figure 36: Test figure of Radiated emissions, Mode C, Below 1GHz, Vertical

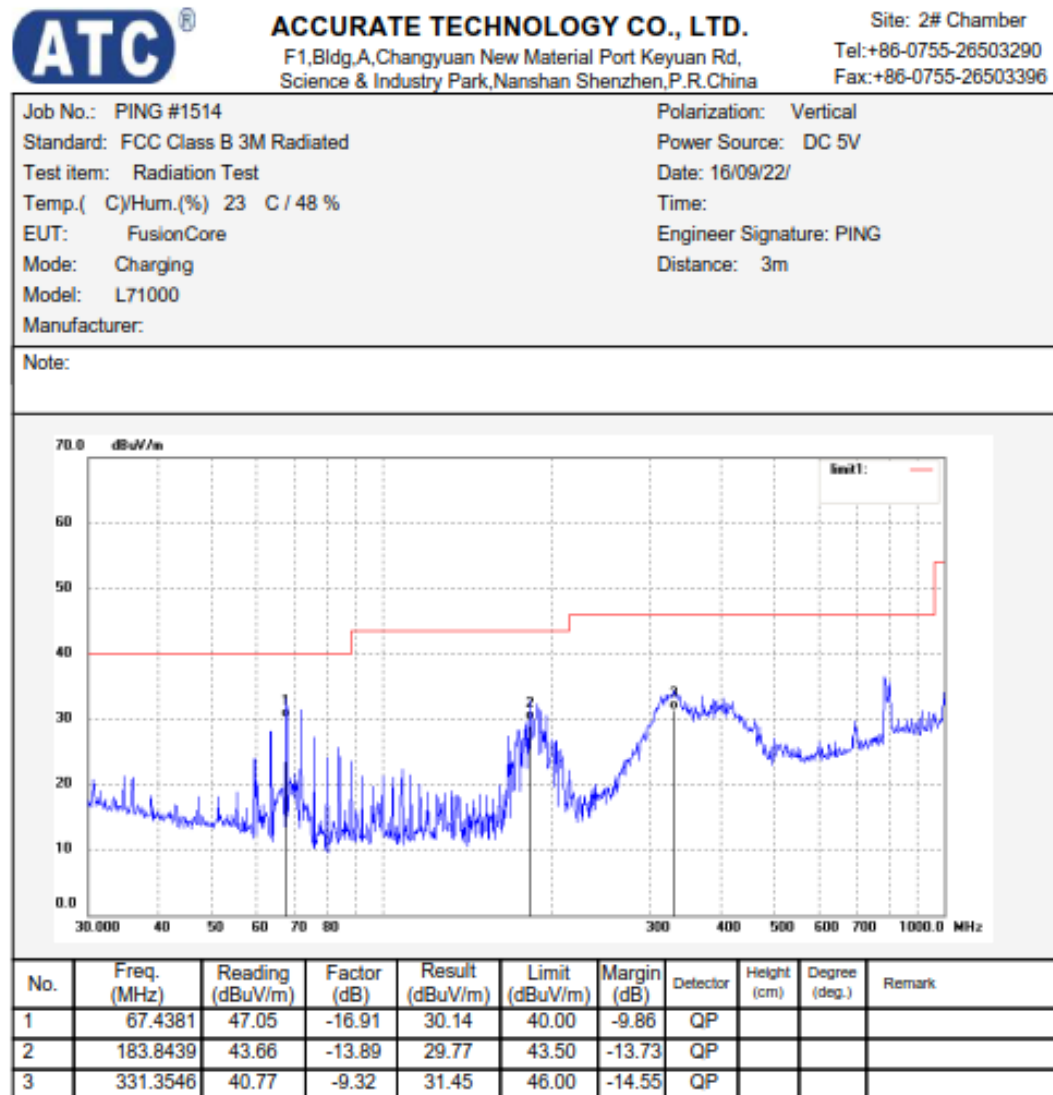


Figure 37: Test figure of Radiated emissions, Mode C, Above 1GHz, Horizontal

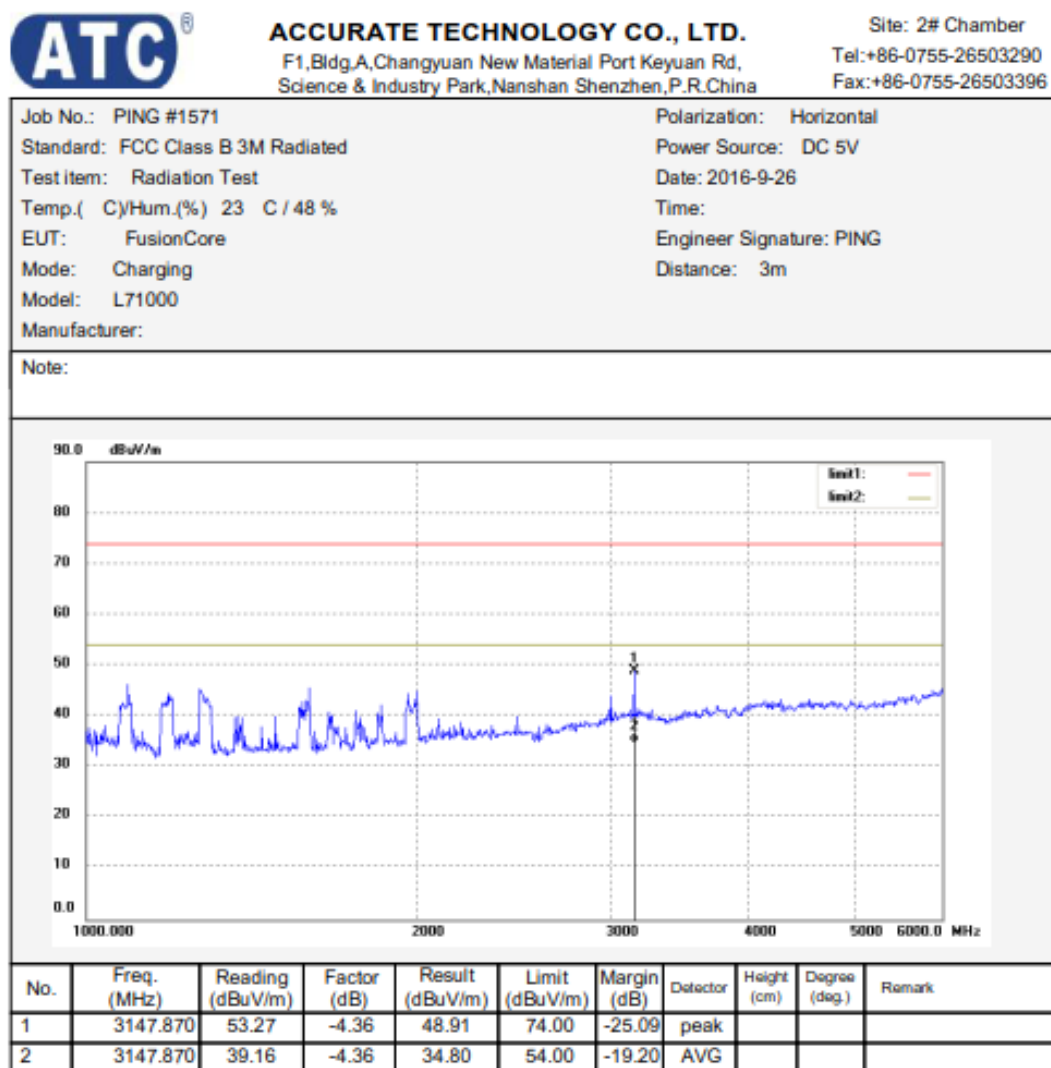


Figure 38: Test figure of Radiated emissions, Mode C, Above 1GHz, Vertical

