APPLICATION CERTIFICATION
On Behalf of
Cogent Systems Inc.

CS Bluetooth Module
Model No.: CS0907A

FCC ID: TLDCS0907A

Prepared for	:	Cogent Systems Inc.
Address	:	Fiyta Hi-tech Building, Gaoxinnanyi Avenue, Southern District of Hi-tech Park, Nanshan District, Shenzhen China
Prepared by	:	ACCURATE TECHNOLOGY CO. LTD
Address	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China Tel: (0755) 26503290 Fax: (0755) 26503396

Report Number	:	ATE20091209
Date of Test	:	July 9-17, 2009
Date of Report	:	July 21, 2009

TABLE OF CONTENTS

Description Page

Test Report Certification

Applicant **:** Cogent Systems Inc.

Manufacturer **:** Cogent Systems Inc.

EUT Description **:** CS Bluetooth Module

(A) MODEL NO.: CS0907A

(B) SERIAL NO.: N/A

(C) POWER SUPPLY: DC 3.3V

Measurement Procedure Used:

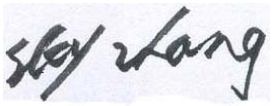
FCC Rules and Regulations Part 15 Subpart C Section 15.247
ANSI C63.4: 2003

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

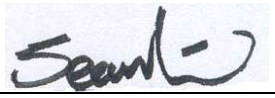
Date of Test : July 9-17, 2009

Prepared by :



(Engineer)

Approved & Authorized Signer :



(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	CS Bluetooth Module
Model Number	:	CS0907A
Frequency Band	:	2402MHz-2480MHz
Number of Channels	:	79
Antenna Gain	:	0.85dBi
Power Supply	:	DC 3.3V
Applicant	:	Cogent Systems Inc.
Address	:	Fiyta Hi-tech Building, Gaoxinnanyi Avenue, Southern District of Hi-tech Park, Nanshan District, Shenzhen China
Manufacturer	:	Cogent Systems Inc.
Address	:	Fiyta Hi-tech Building, Gaoxinnanyi Avenue, Southern District of Hi-tech Park, Nanshan District, Shenzhen China
Date of sample received	:	July 7, 2009
Date of Test	:	July 9-17, 2009

1.2.Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen Listed by FCC The Registration Number is 752051 Listed by Industry Canada The Registration Number is 5077A-2 Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	:	ACCURATE TECHNOLOGY CO. LTD
Site Location	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	=	4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	03.28.2010
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	03.28.2010
Spectrum Analyzer	Agilent	E7405A	MY45115511	03.28.2010
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	03.30.2010
Loop Antenna	Schwarzbeck	FMZB1516	1516131	03.28.2010
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	03.28.2010
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	12.19.2009
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	10.09.2009
LISN	Rohde&Schwarz	ESH3-Z5	100305	03.28.2010
LISN	Schwarzbeck	NSLK8126	8126431	03.28.2010

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

The mode is used: Transmitting mode
Low Channel: 2402MHz
Middle Channel: 2441MHz
High Channel: 2480MHz
Hopping

3.2.Configuration and peripherals

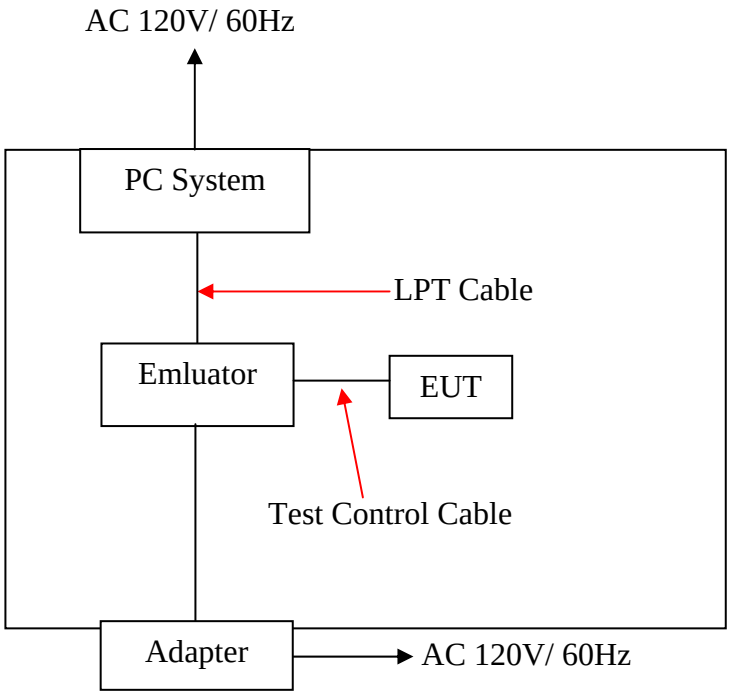


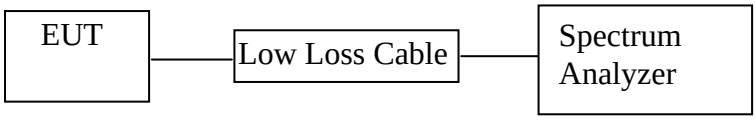
Figure 1 Setup: Transmitting mode

4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.247(a)(1)	20dB Bandwidth Test	Compliant
Section 15.247(a)(1)	Carrier Frequency Separation Test	Compliant
Section 15.247(a)(1)(iii)	Number Of Hopping Frequency Test	Compliant
Section 15.247(a)(1)(iii)	Dwell Time Test	Compliant
Section 15.247(b)(1)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.207	Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

5. 20DB BANDWIDTH TEST

5.1.Block Diagram of Test Setup



(EUT: CS Bluetooth Module)

5.2.The Requirement For Section 15.247(a)(1)

Section 15.247(a)(1): Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

5.3.EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1.CS Bluetooth Module (EUT)

Model Number	**:**	CS0907A
Serial Number	**:**	N/A
Manufacturer	**:**	Cogent Systems Inc.

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in TX(Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

5.5. Test Procedure

5.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

5.5.2. Set RBW of spectrum analyzer to 30kHz and VBW to 100kHz.

5.5.3. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

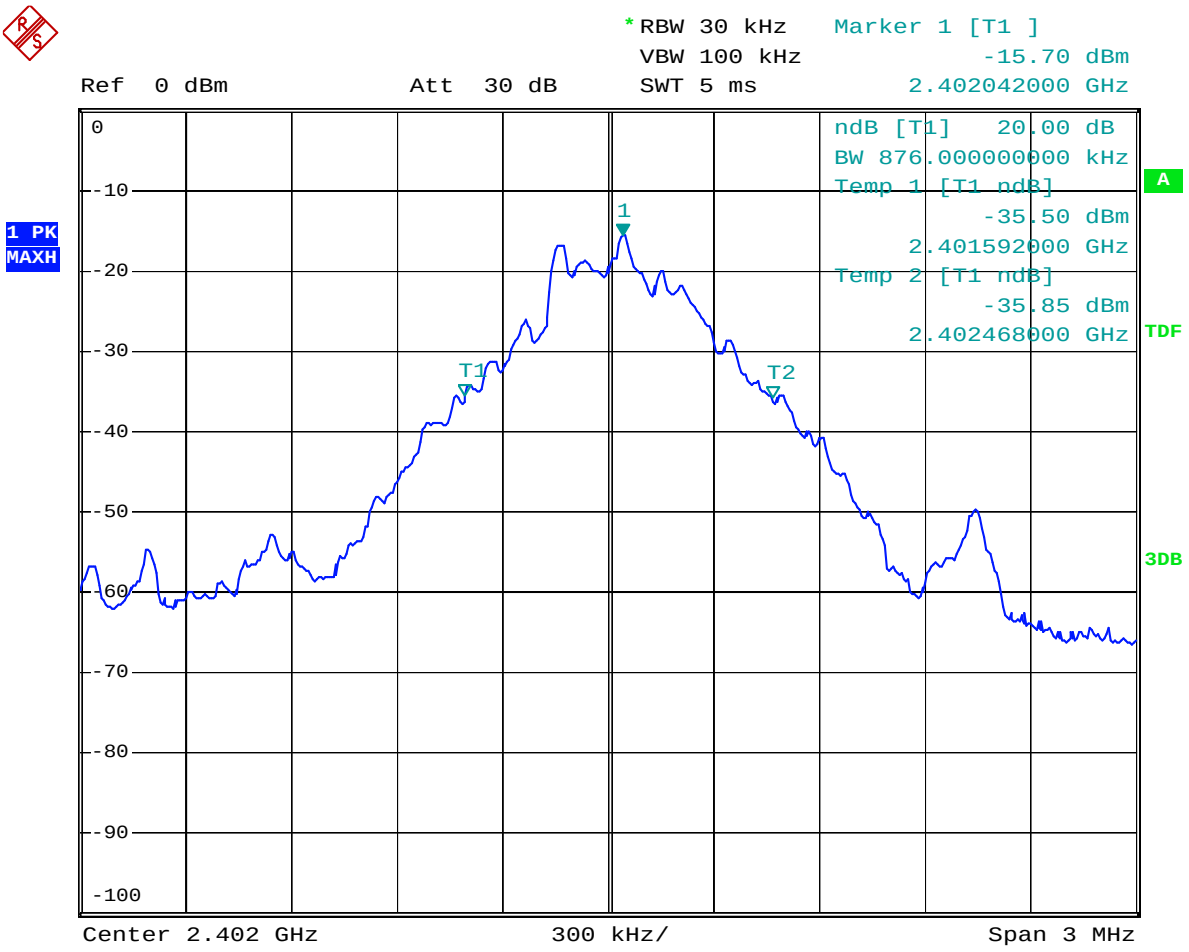
5.6. Test Result

PASS.

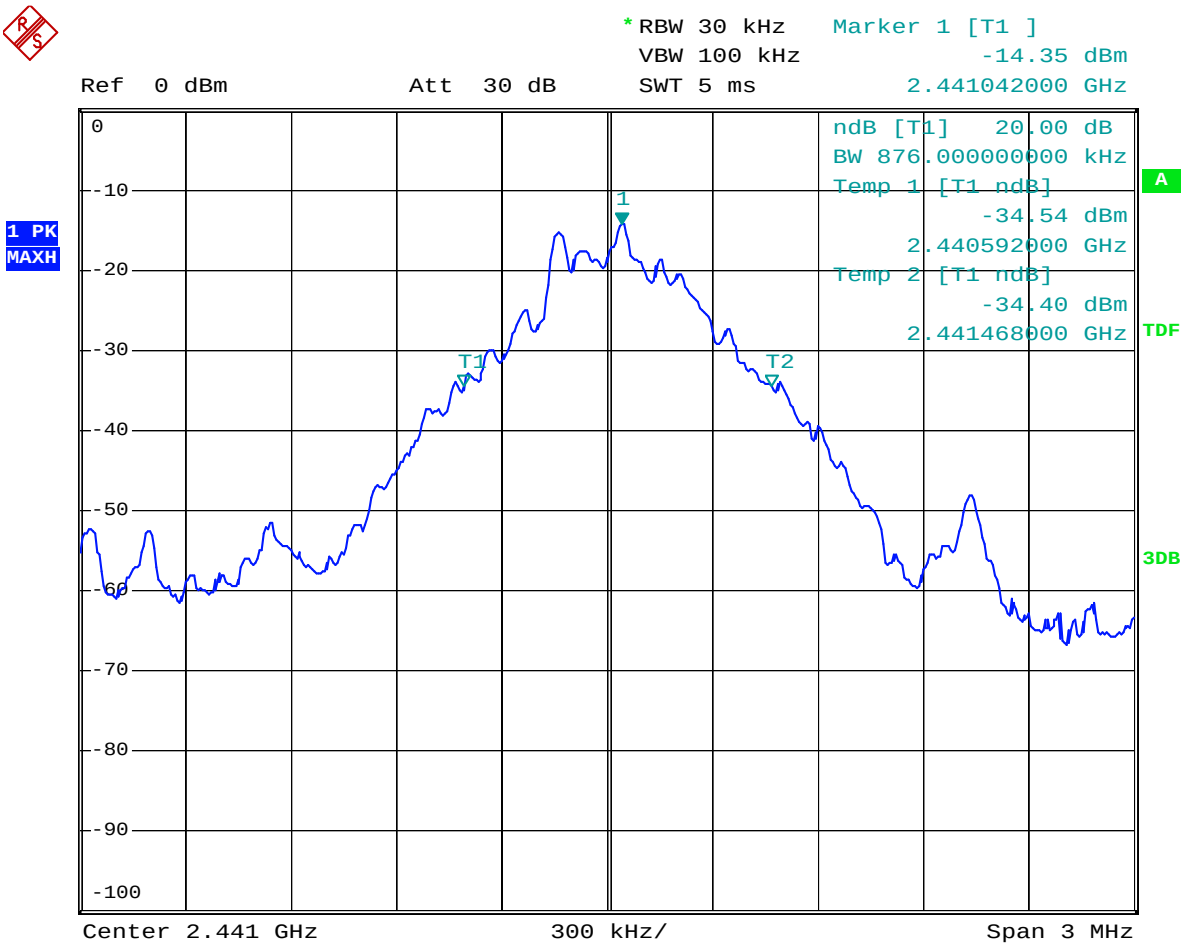
Date of Test:	July 13, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	TX	Test Engineer:	Joe

Channel	Frequency (MHz)	20dB Bandwidth (MHz)	Limit (MHz)
Low	2402	0.876	---
Middle	2441	0.876	---
High	2480	0.882	---

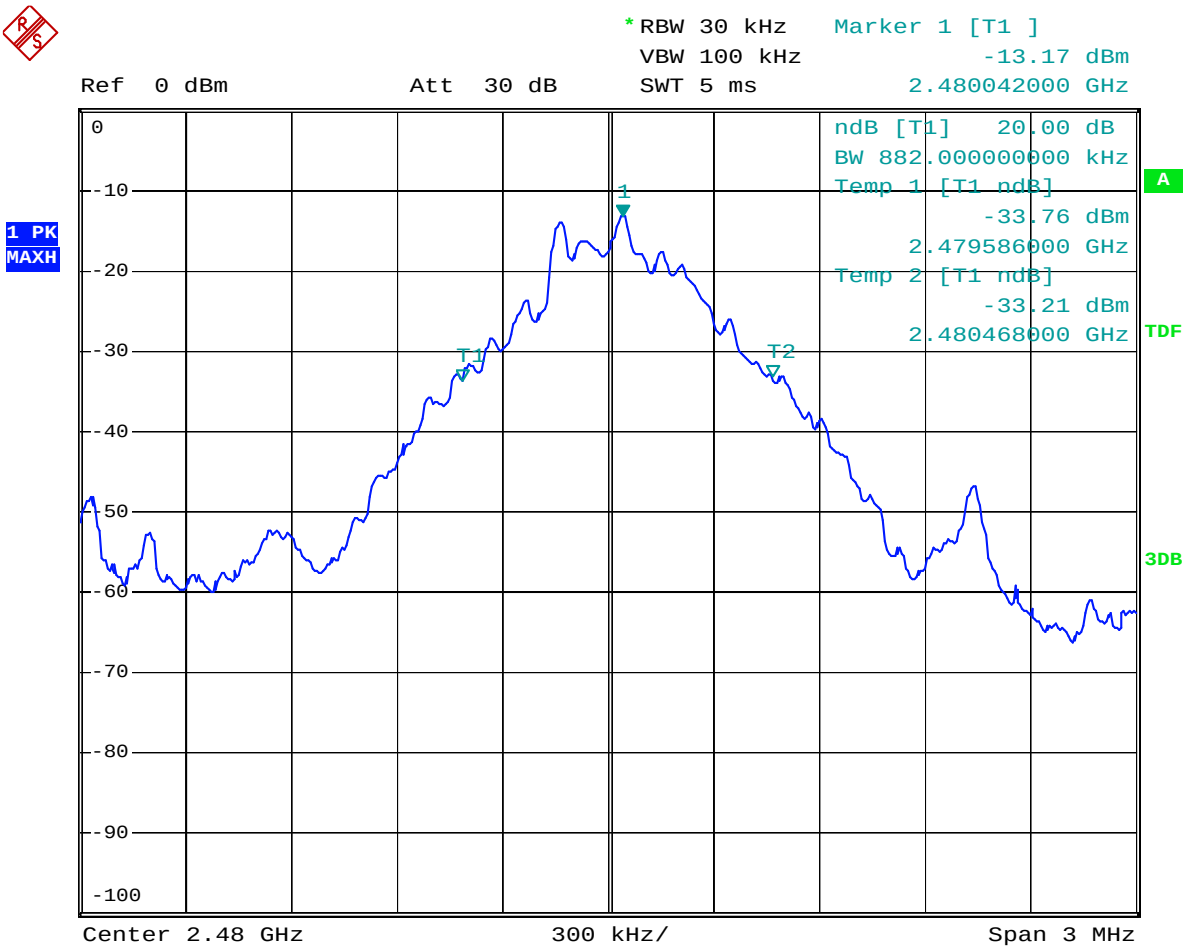
The spectrum analyzer plots are attached as below.



Date: 13.JUL.2009 15:40:45



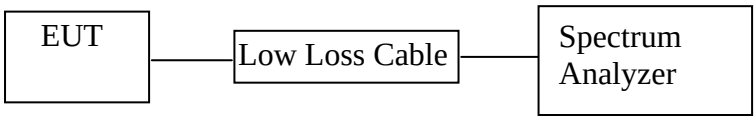
Date: 13.JUL.2009 15:42:04



Date: 13.JUL.2009 15:43:23

6. CARRIER FREQUENCY SEPARATION TEST

6.1.Block Diagram of Test Setup



(EUT: CS Bluetooth Module)

6.2.The Requirement For Section 15.247(a)(1)

Section 15.247(a)(1): Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudorandomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

6.3.EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.3.1.CS Bluetooth Module (EUT)

Model Number	**:**	CS0907A
Serial Number	**:**	N/A
Manufacturer	**:**	Cogent Systems Inc.

6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 6.1.

6.4.2.Turn on the power of all equipment.

6.4.3.Let the EUT work in TX (Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

6.5. Test Procedure

6.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

6.5.2. Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz. Adjust Span to 3 MHz.

6.5.3. Set the adjacent channel of the EUT maxhold another trace.

6.5.4. Measurement the channel separation

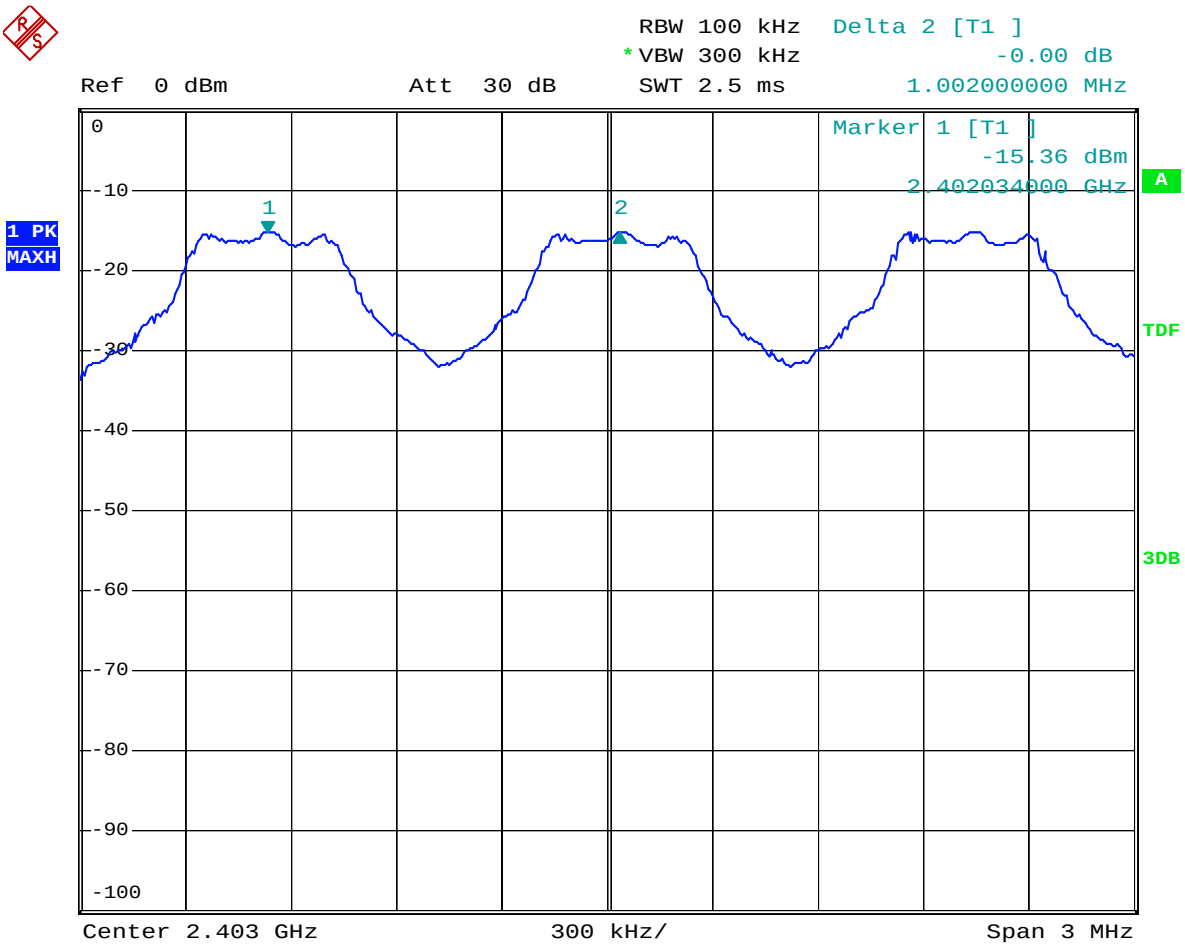
6.6. Test Result

PASS.

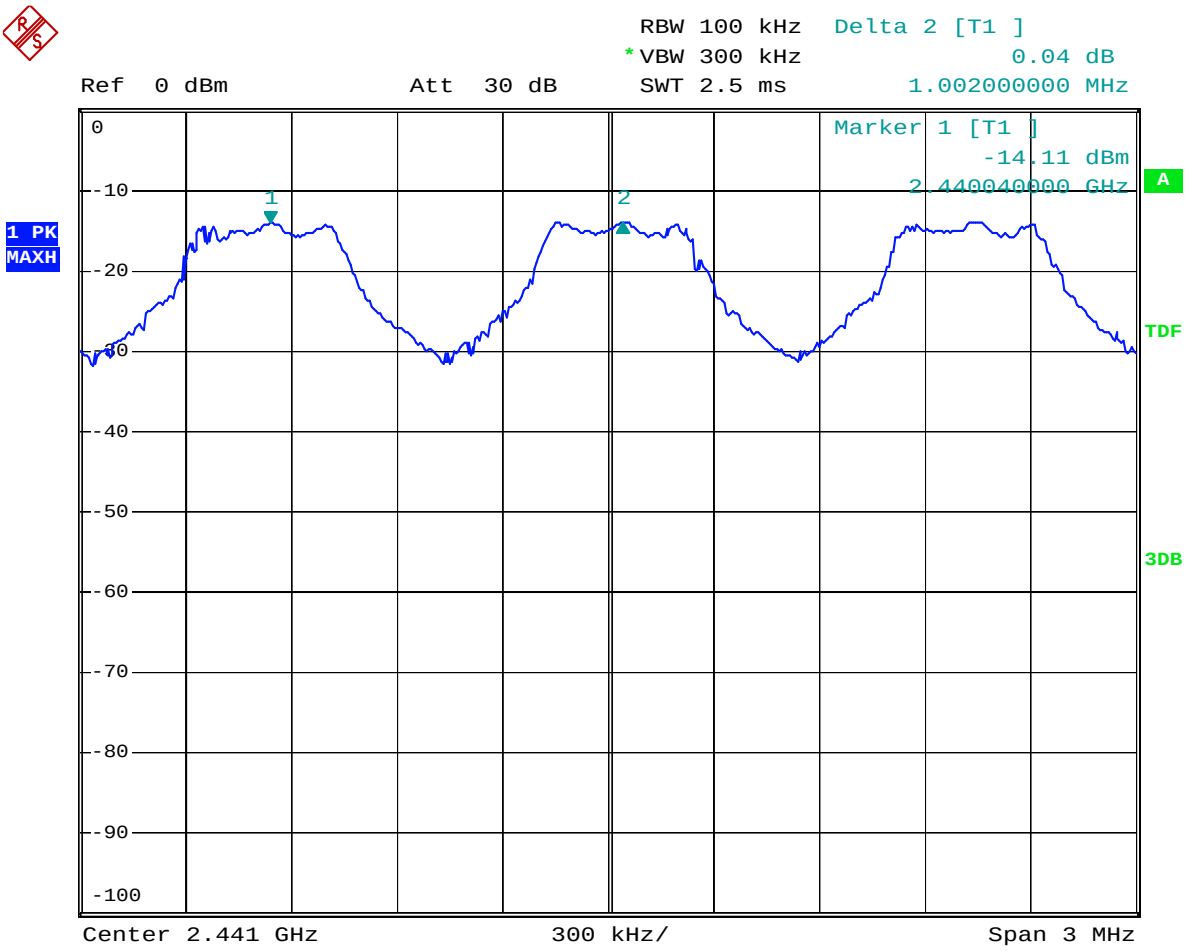
Date of Test:	July 13, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	Hopping	Test Engineer:	Joe

Channel	Channel Frequency (MHz)	Channel separation (MHz)	Limit
Low	2402	1.002	> the 20dB Bandwidth or 25kHz (whichever is greater)
Middle	2441	1.002	> the 20dB Bandwidth or 25kHz (whichever is greater)
High	2480	1.002	> the 20dB Bandwidth or 25kHz (whichever is greater)

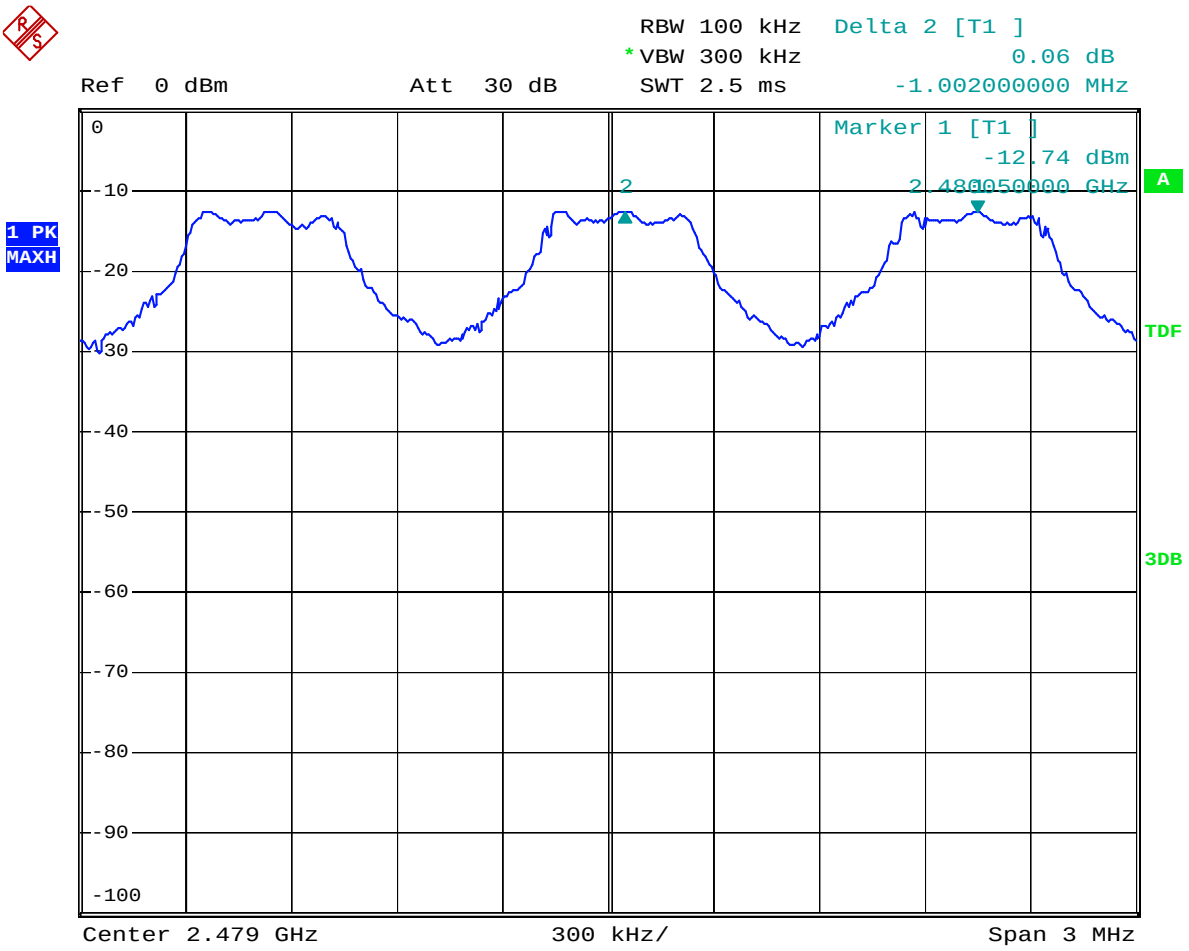
The spectrum analyzer plots are attached as below.



Date: 13.JUL.2009 16:31:02



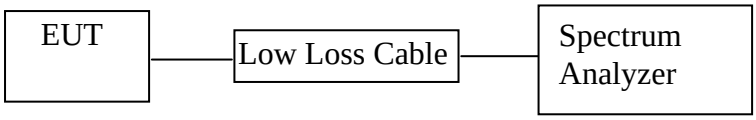
Date: 13.JUL.2009 16:35:13



Date: 13.JUL.2009 16:42:15

7. NUMBER OF HOPPING FREQUENCY TEST

7.1.Block Diagram of Test Setup



(EUT: CS Bluetooth Module)

7.2.The Requirement For Section 15.247(a)(1)(iii)

Section 15.247(a)(1)(iii): Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

7.3.EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.3.1.CS Bluetooth Module (EUT)

Model Number	:	CS0907A
Serial Number	:	N/A
Manufacturer	:	Cogent Systems Inc.

7.4.Operating Condition of EUT

7.4.1.Setup the EUT and simulator as shown as Section 7.1.

7.4.2.Turn on the power of all equipment.

7.4.3.Let the EUT work in TX (Hopping on) modes measure it.

7.5. Test Procedure

7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.2. Set the spectrum analyzer as Span=30MHz, RBW=300kHz, VBW=300kHz.

7.5.3. Max hold, view and count how many channel in the band.

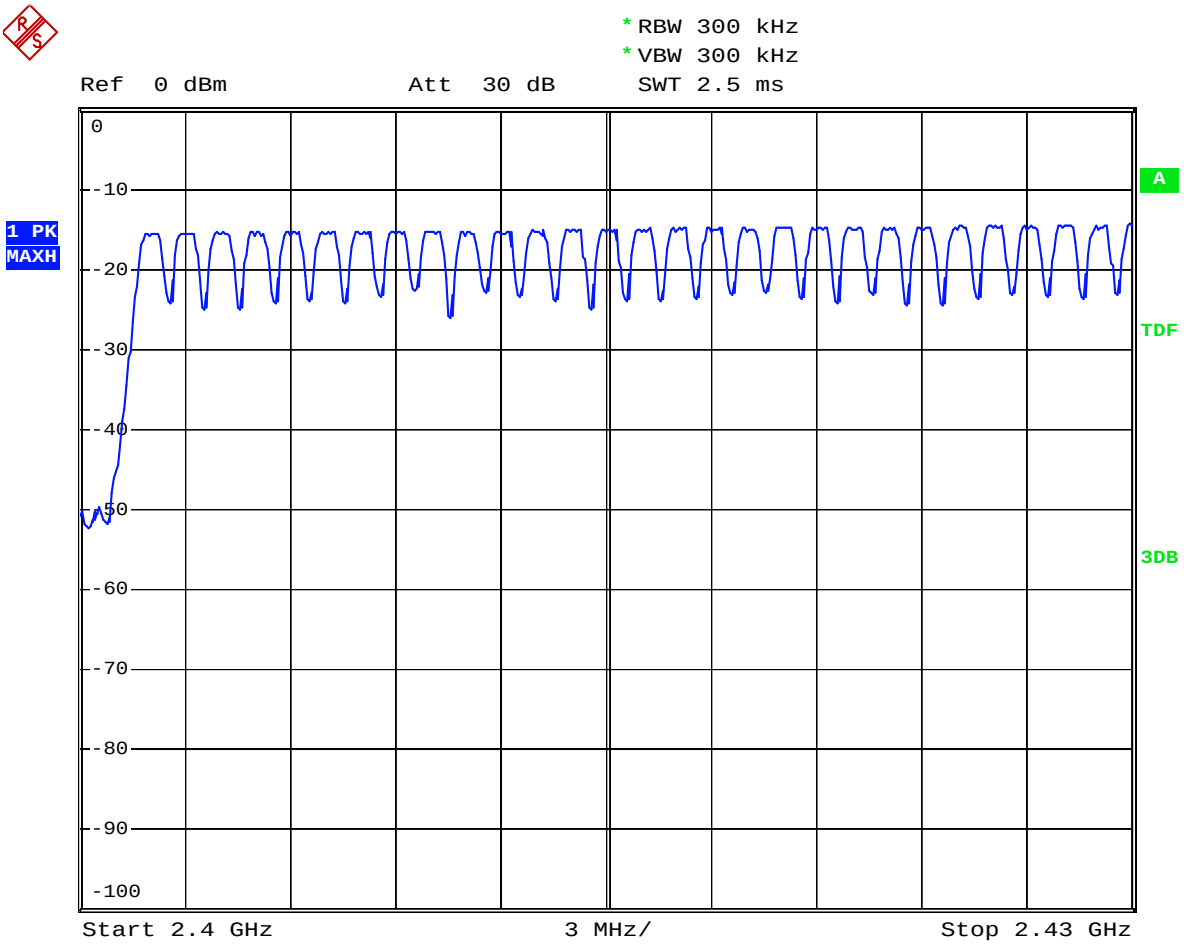
7.6. Test Result

PASS.

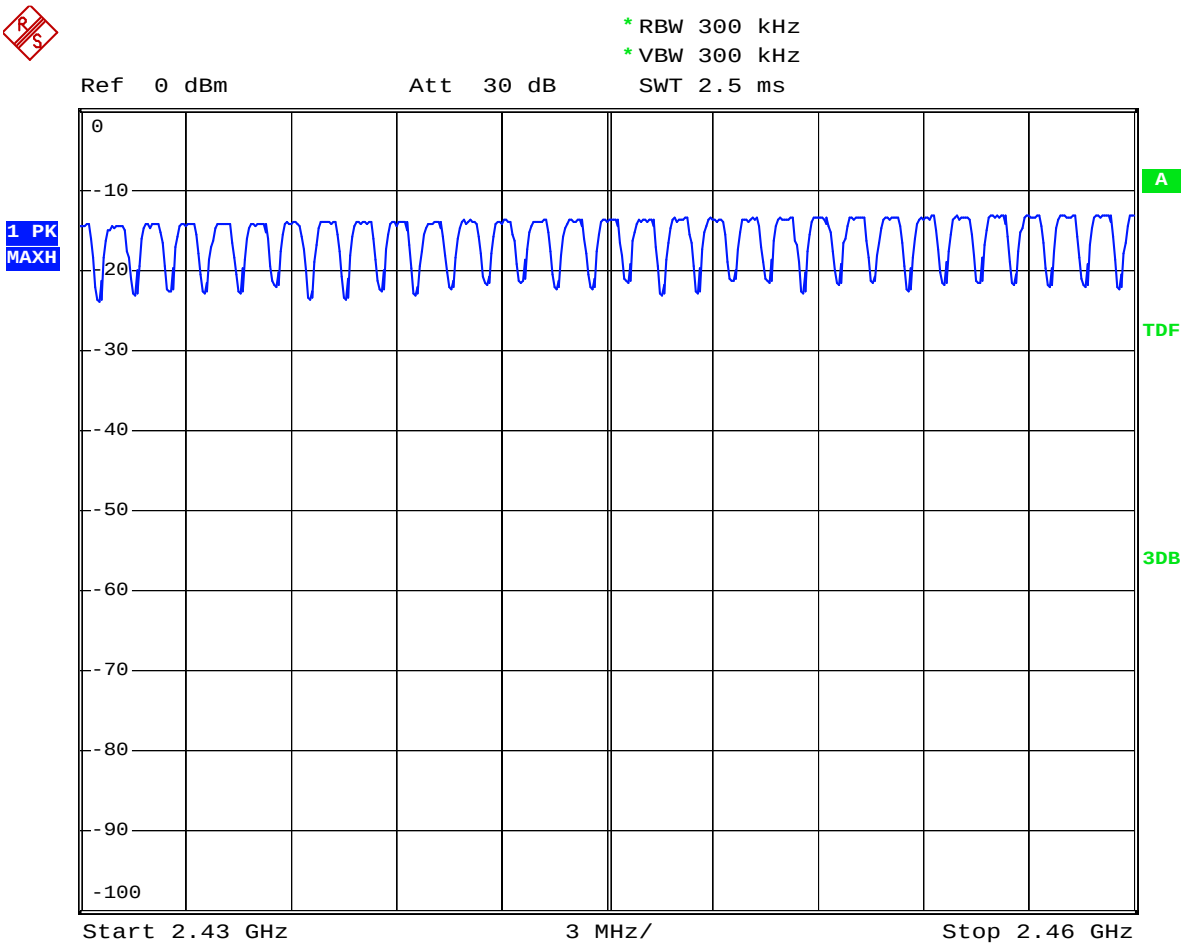
Date of Test:	July 13, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	Hopping	Test Engineer:	Joe

Total number of hopping channel	Measurement result (CH)	Limit (CH)
	79	>15

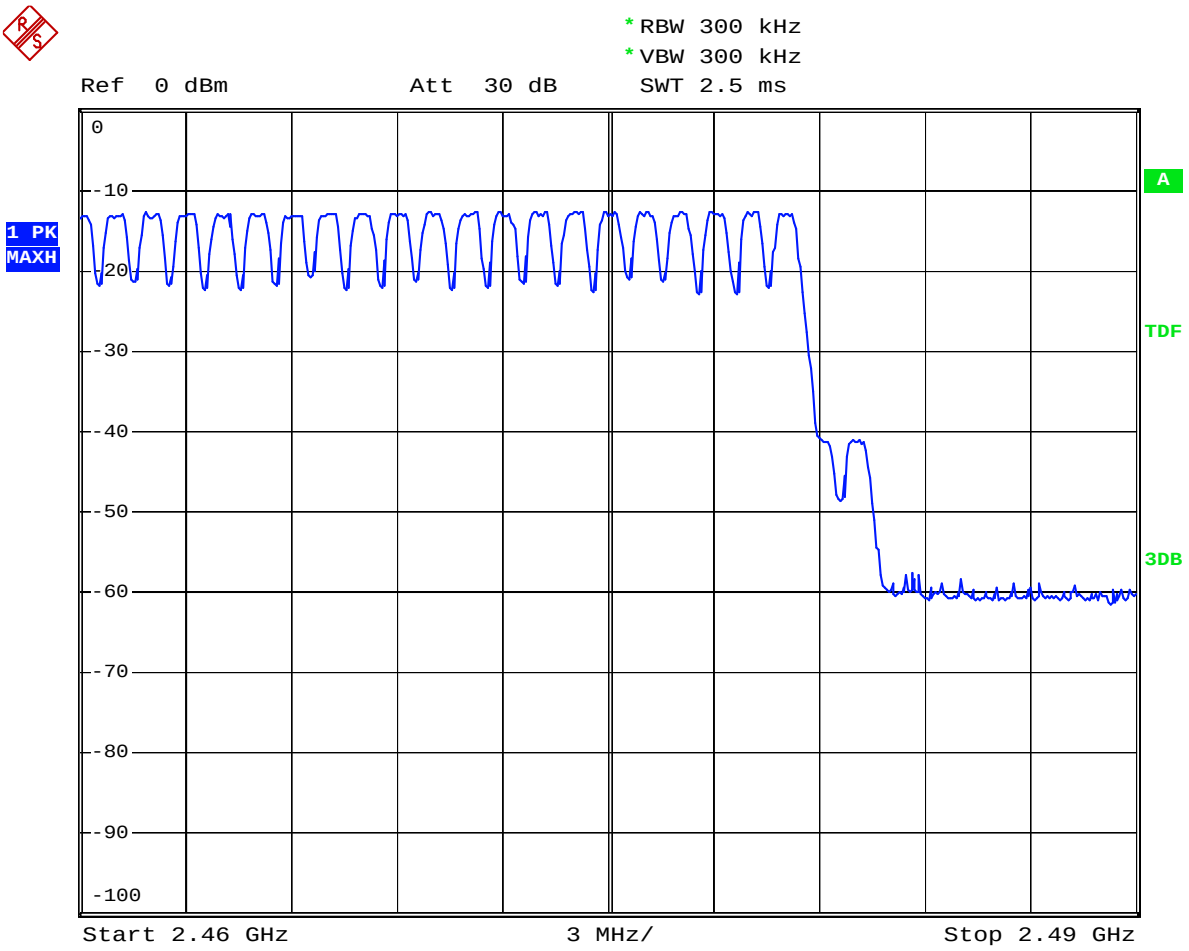
The spectrum analyzer plots are attached as below.



Date: 13.JUL.2009 15:07:34



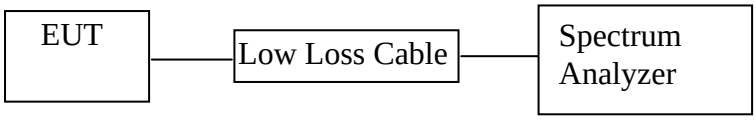
Date: 13.JUL.2009 15:09:14



Date: 13.JUL.2009 15:10:28

8. DWELL TIME TEST

8.1.Block Diagram of Test Setup



(EUT: CS Bluetooth Module)

8.2.The Requirement For Section 15.247(a)(1)(iii)

Section 15.247(a)(1)(iii): Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

8.3.EUT Configuration on Measurement

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.3.1.CS Bluetooth Module (EUT)

Model Number	**:**	CS0907A
Serial Number	**:**	N/A
Manufacturer	**:**	Cogent Systems Inc.

8.4.Operating Condition of EUT

8.4.1.Setup the EUT and simulator as shown as Section 8.1.

8.4.2.Turn on the power of all equipment.

8.4.3.Let the EUT work in TX (Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

8.5. Test Procedure

8.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

8.5.2. Set center frequency of spectrum analyzer = operating frequency.

8.5.3. Set the spectrum analyzer as RBW=100kHz, VBW=300kHz, Span=0Hz, Adjust Sweep=1s. Get the burst (in 1 sec.).

8.5.4. Set the spectrum analyzer as RBW=1MHz, VBW=3MHz, Span=0Hz, Adjust Sweep=2ms. Get the pulse time.

8.5.5. Repeat above procedures until all frequency measured were complete.

8.6. Test Result

PASS.

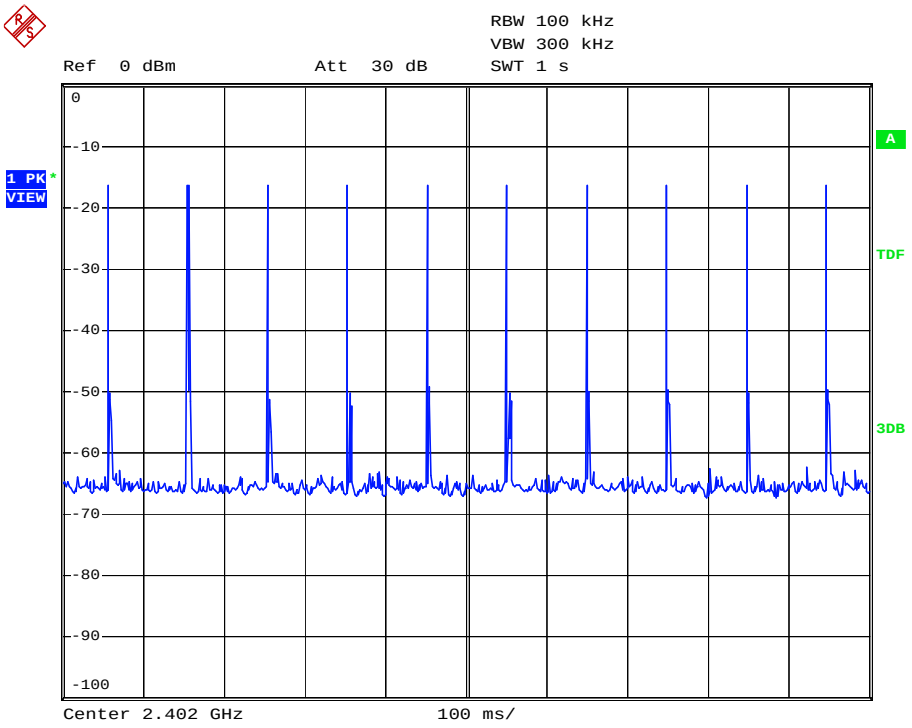
Date of Test:	July 13, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	Hopping	Test Engineer:	Joe

A period transmit time = 0.4 × 79 = 31.6

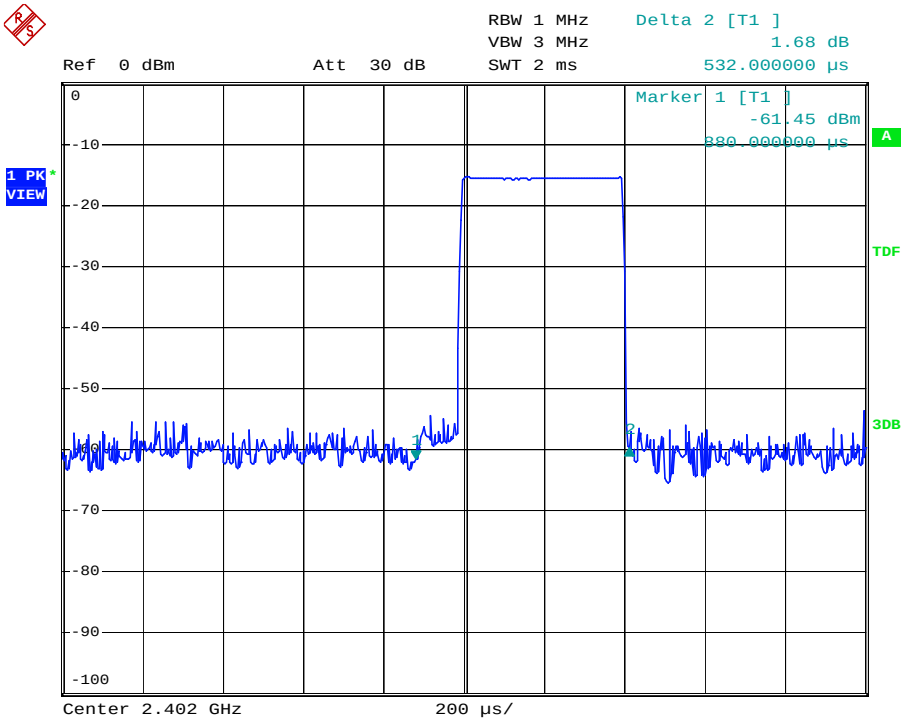
Dwell time = pulse time × burst (in 1 sec.)×31.6

Channel	Channel Frequency (MHz)	Pulse Time (ms)	Burst (in 1 sec.)	Dwell Time (ms)	Limit (ms)
Low	2402	0.532	10	168.1	400
Middle	2441	0.536	10	169.4	400
High	2480	0.536	10	169.4	400

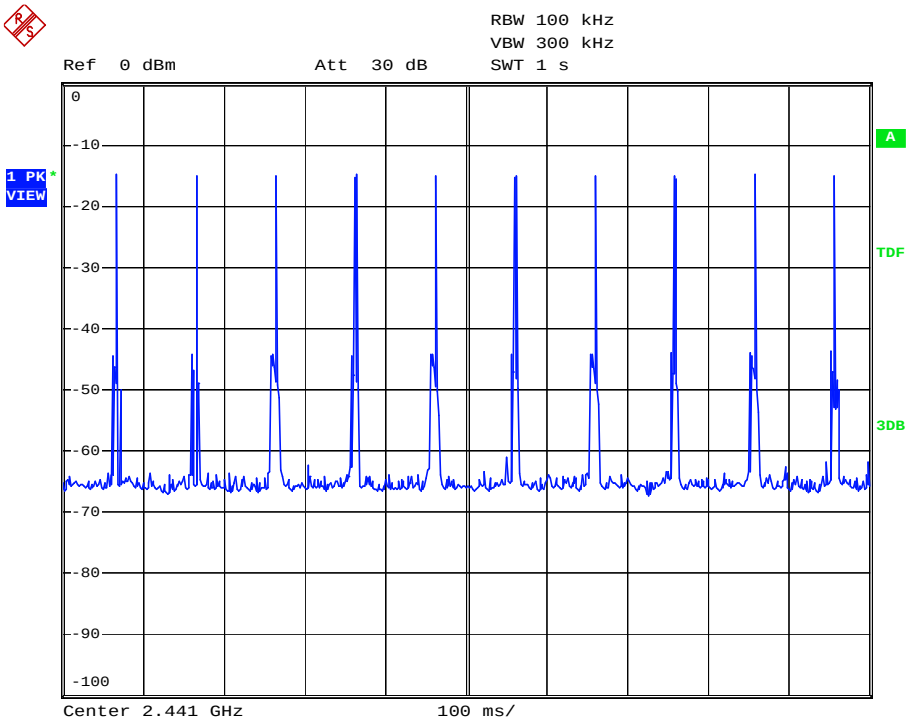
The spectrum analyzer plots are attached as below.



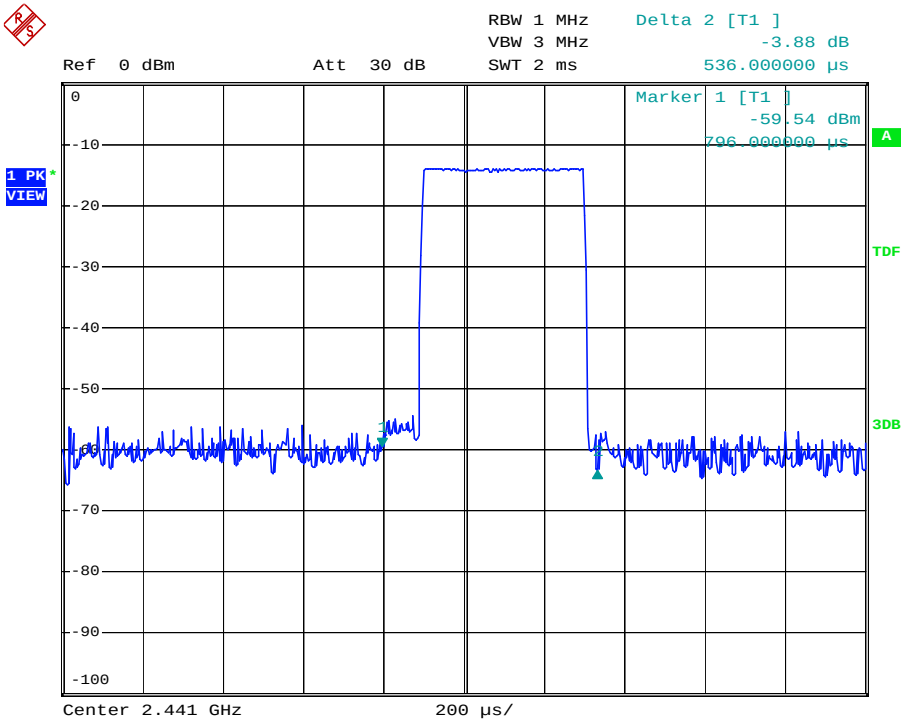
Date: 13.JUL.2009 15:12:01



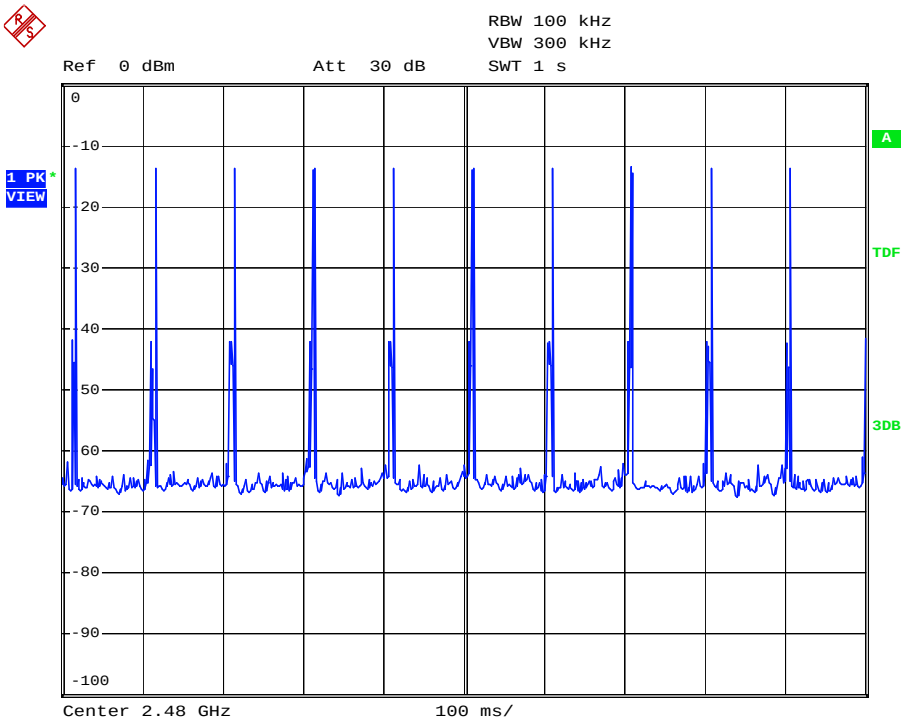
Date: 13.JUL.2009 15:31:26



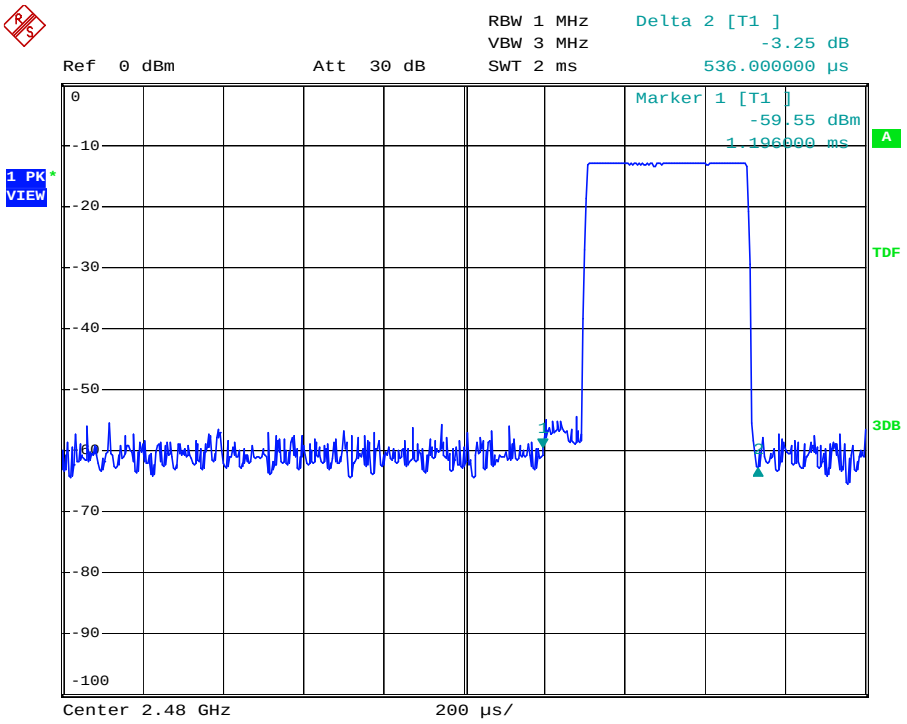
Date: 13.JUL.2009 15:13:20



Date: 13.JUL.2009 15:28:21



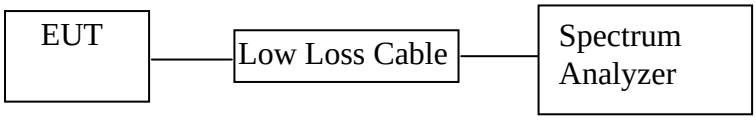
Date: 13.JUL.2009 15:14:45



Date: 13.JUL.2009 15:33:20

9. MAXIMUM PEAK OUTPUT POWER TEST

9.1.Block Diagram of Test Setup



(EUT: CS Bluetooth Module)

9.2.The Requirement For Section 15.247(b)(1)

Section 15.247(b)(1): For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

9.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.3.1.CS Bluetooth Module (EUT)

Model Number	**:**	CS0907A
Serial Number	**:**	N/A
Manufacturer	**:**	Cogent Systems Inc.

9.4.Operating Condition of EUT

9.4.1.Setup the EUT and simulator as shown as Section 9.1.

9.4.2.Turn on the power of all equipment.

9.4.3.Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

9.5. Test Procedure

9.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

9.5.2. Set RBW of spectrum analyzer to 1MHz and VBW to 3MHz.

9.5.3. Measurement the maximum peak output power.

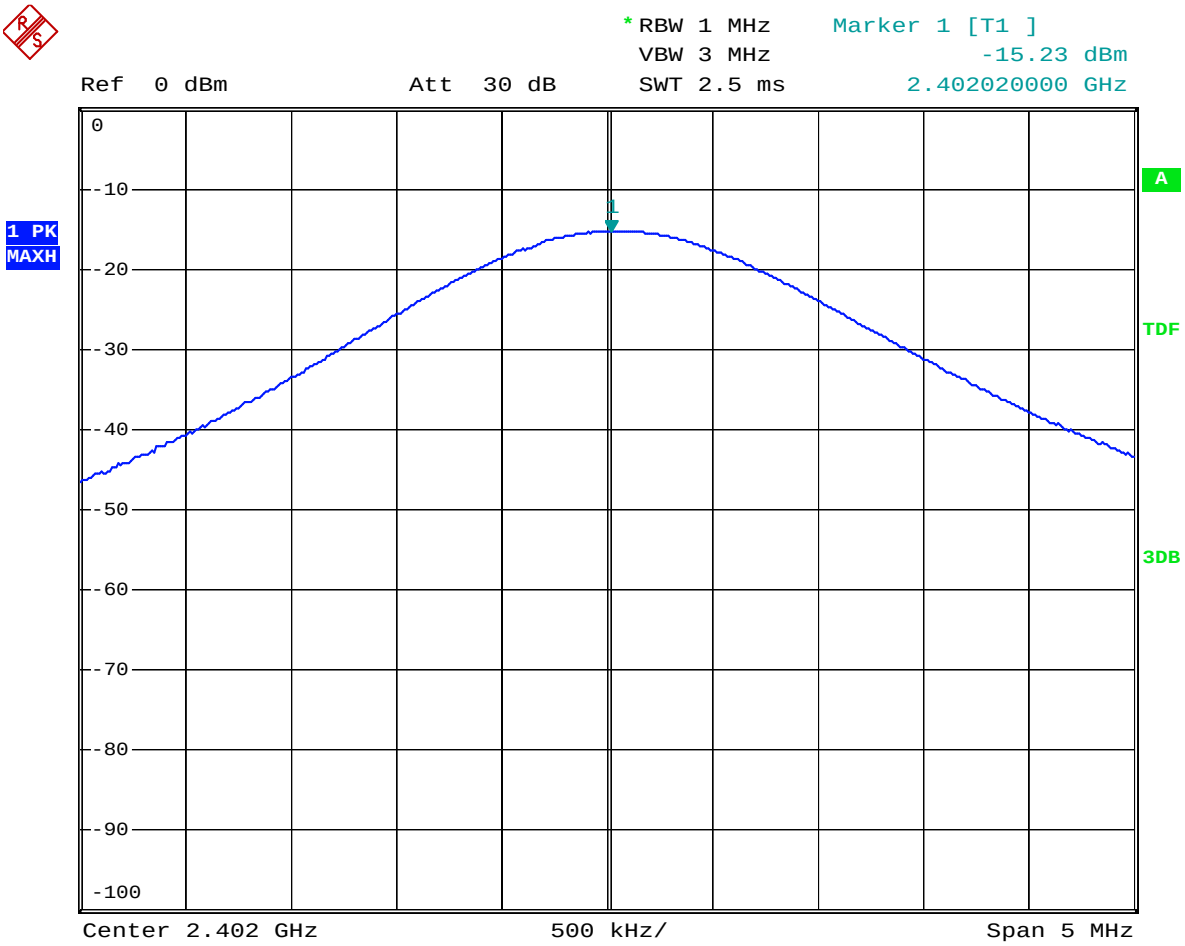
9.6. Test Result

PASS.

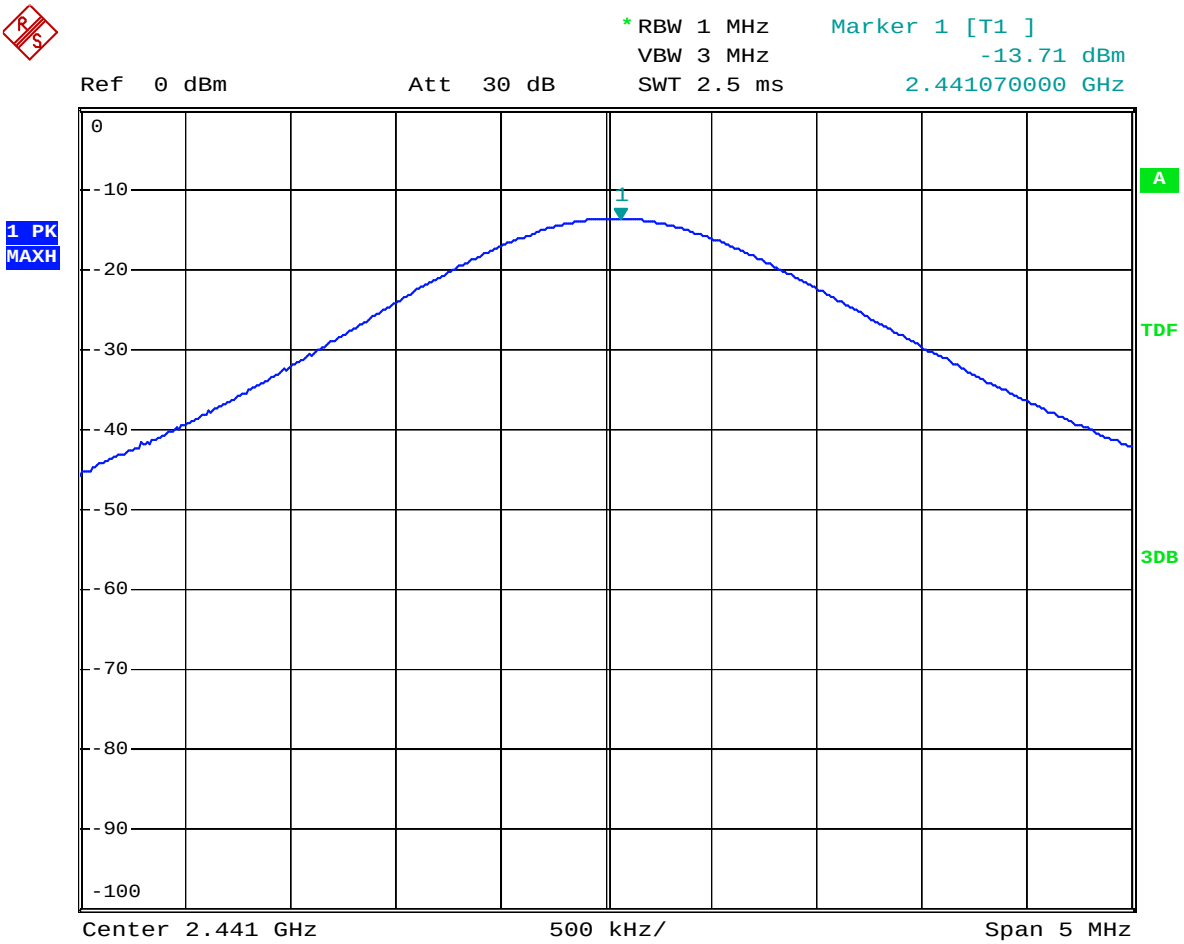
Date of Test:	July 13, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	TX	Test Engineer:	Joe

Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2402	-15.23	0.030	30 dBm / 1 W
Middle	2441	-13.71	0.043	30 dBm / 1 W
High	2480	-12.51	0.056	30 dBm / 1 W

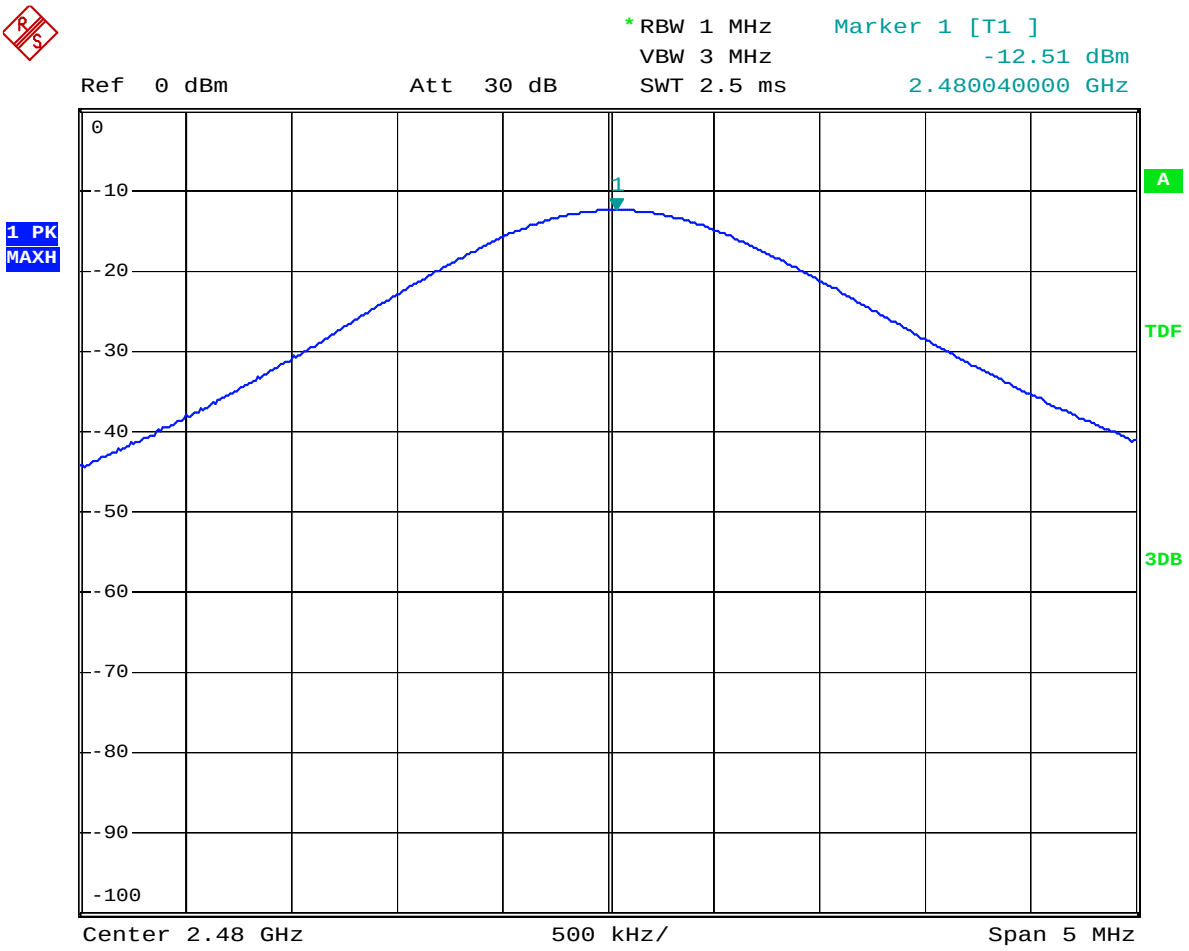
The spectrum analyzer plots are attached as below.



Date: 13.JUL.2009 15:02:02



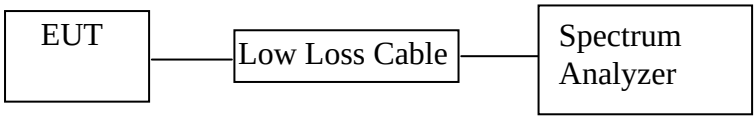
Date: 13.JUL.2009 15:03:21



Date: 13.JUL.2009 15:04:11

10. BAND EDGE COMPLIANCE TEST

10.1. Block Diagram of Test Setup



(EUT: CS Bluetooth Module)

10.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

10.3. EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

10.3.1. CS Bluetooth Module (EUT)

Model Number	:	CS0907A
Serial Number	:	N/A
Manufacturer	:	Cogent Systems Inc.

10.4.Operating Condition of EUT

10.4.1.Setup the EUT and simulator as shown as Section 10.1.

10.4.2.Turn on the power of all equipment.

10.4.3.Let the EUT work in TX (Hopping off, Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2480MHz TX frequency to transmit.

10.5.Test Procedure

10.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

10.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

10.5.3.The band edges was measured and recorded.

10.6.Test Result

Pass

Date of Test:	July 13, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	TX (Hopping off)	Test Engineer:	Joe

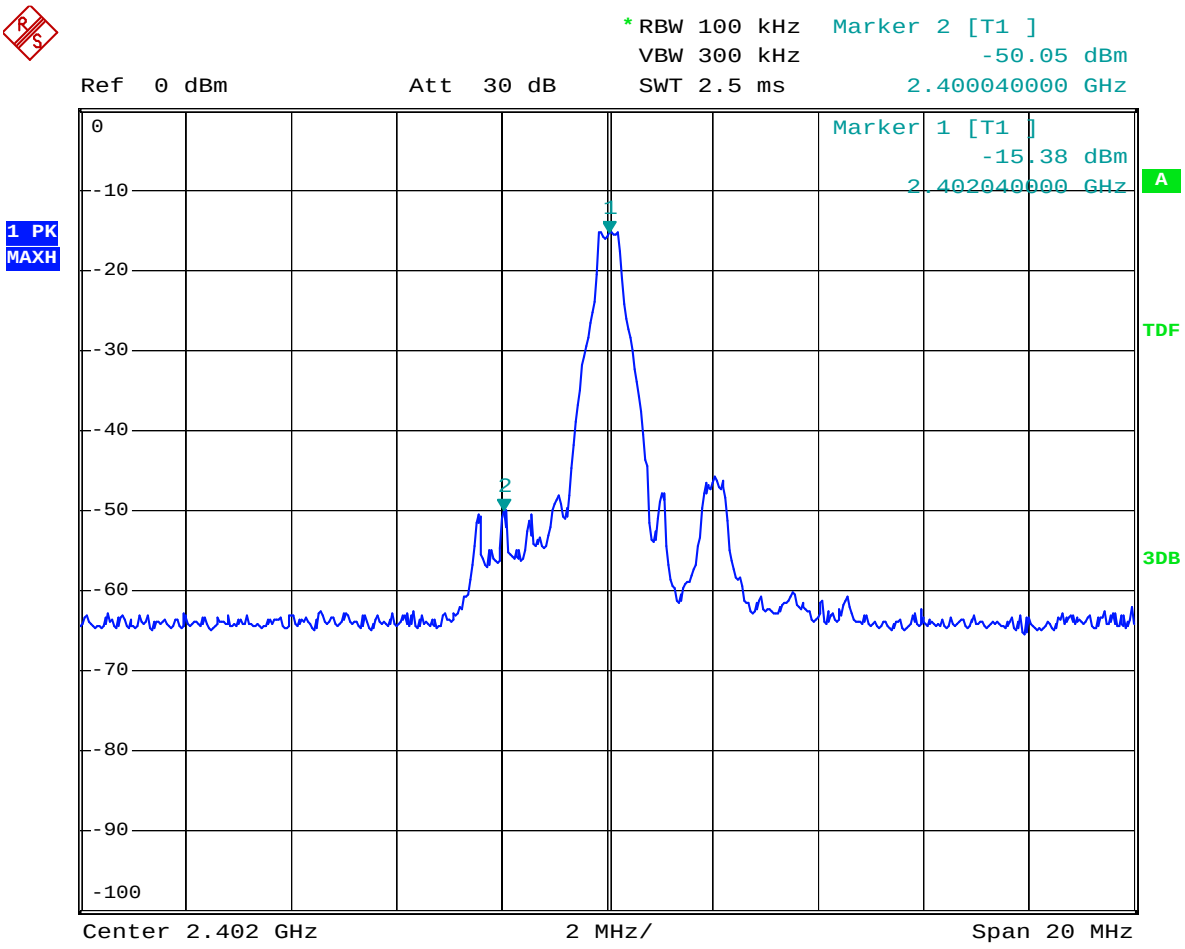
Conducted test

Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2402	34.67	> 20dBc
2480	45.69	> 20dBc

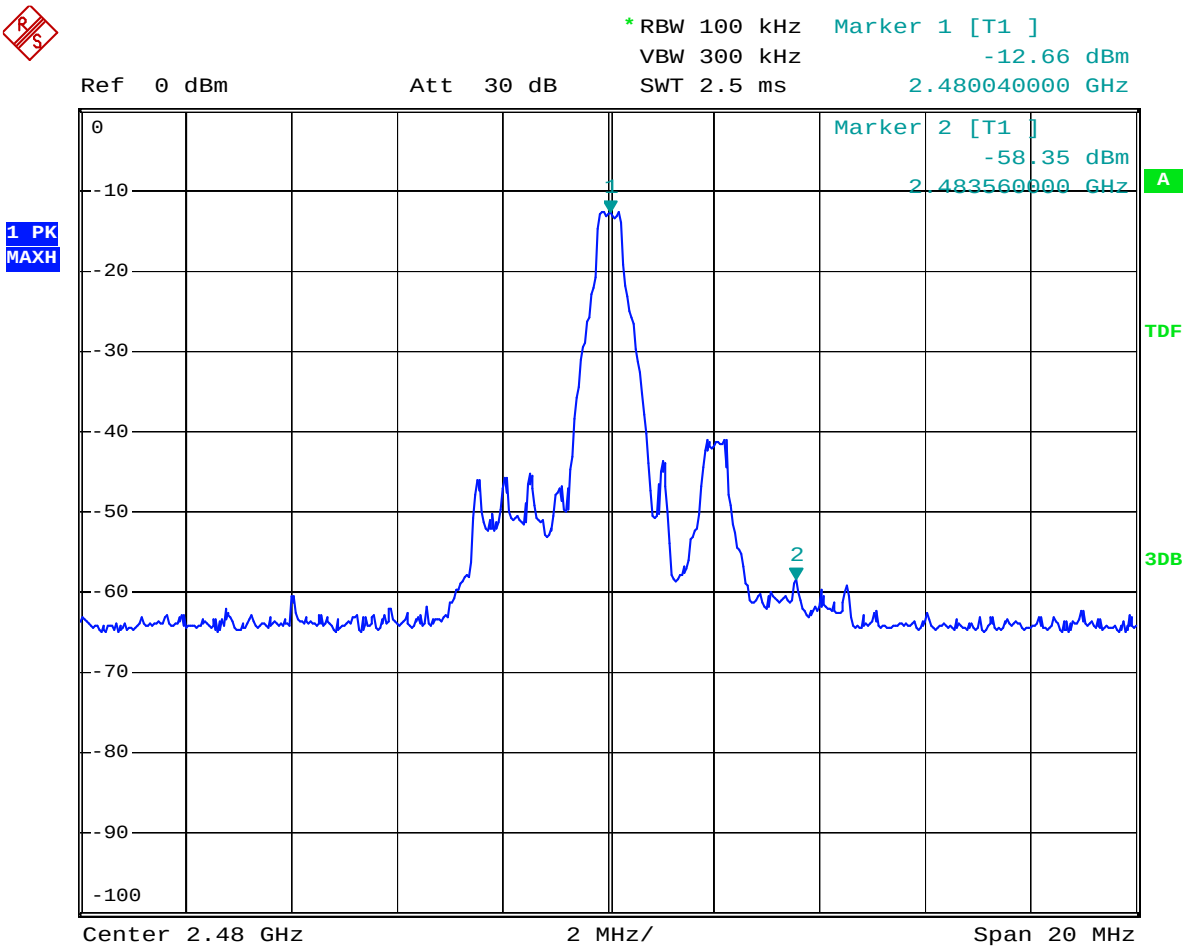
Date of Test:	July 13, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	TX (Hopping on)	Test Engineer:	Joe

Conducted test

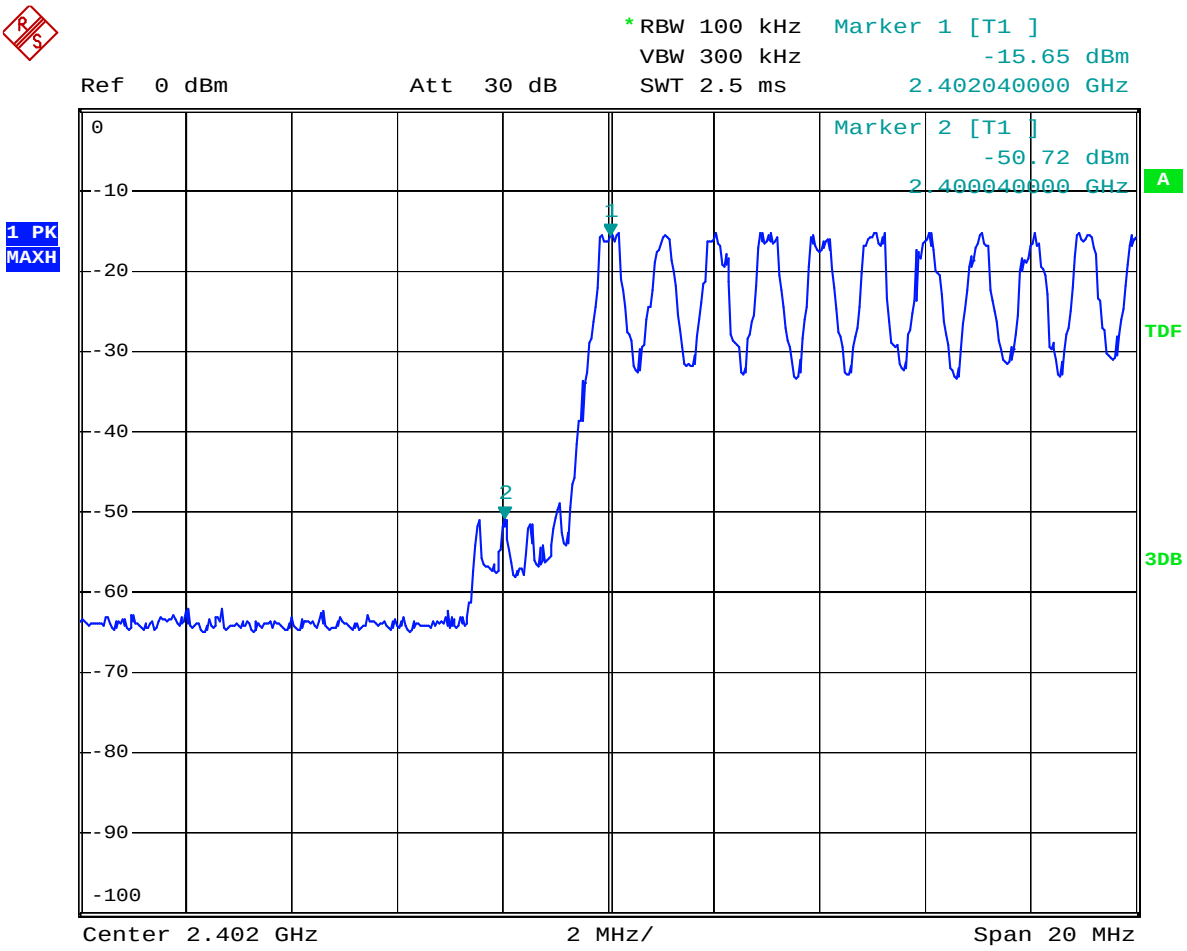
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2402	35.07	> 20dBc
2480	46.59	> 20dBc



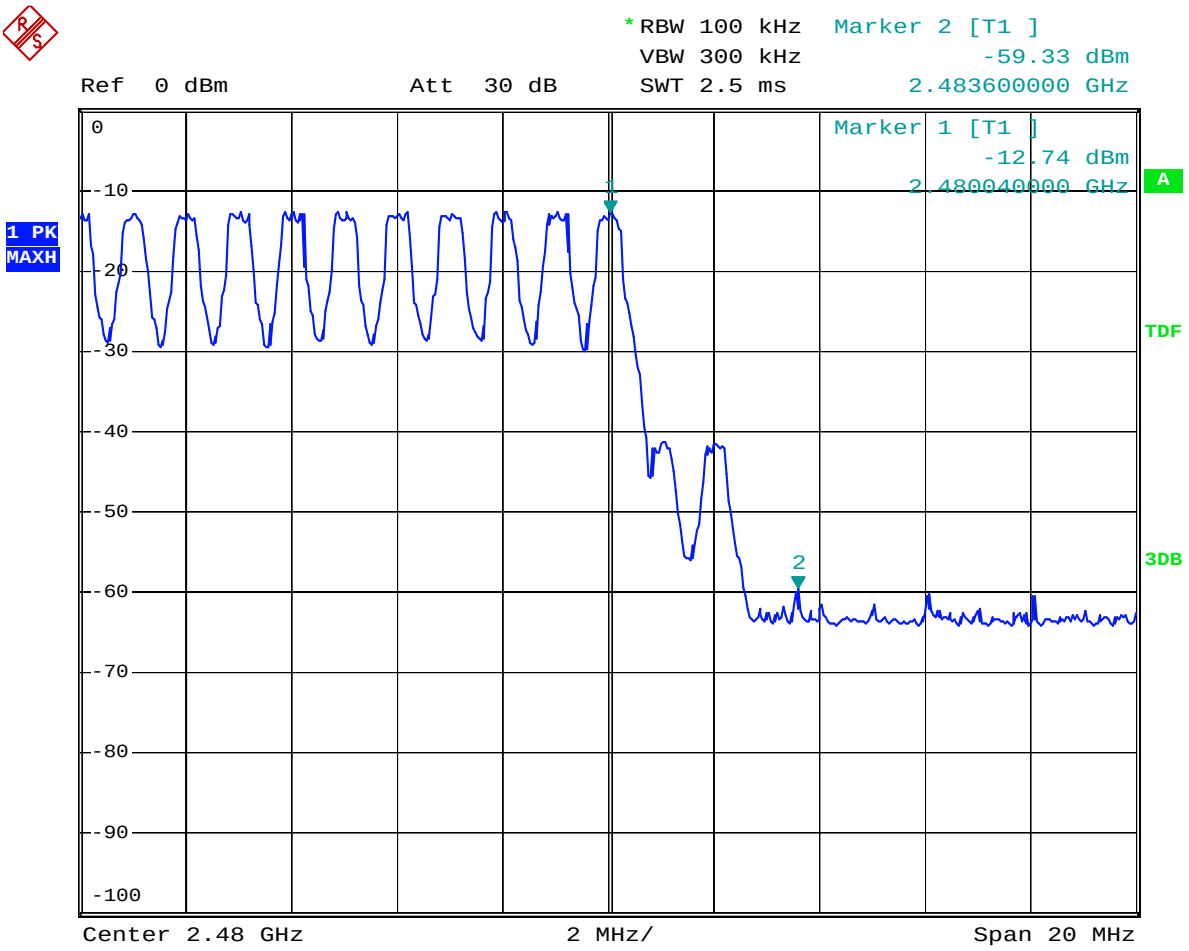
Date: 13.JUL.2009 15:48:10



Date: 13.JUL.2009 15:46:21



Date: 13.JUL.2009 15:53:49

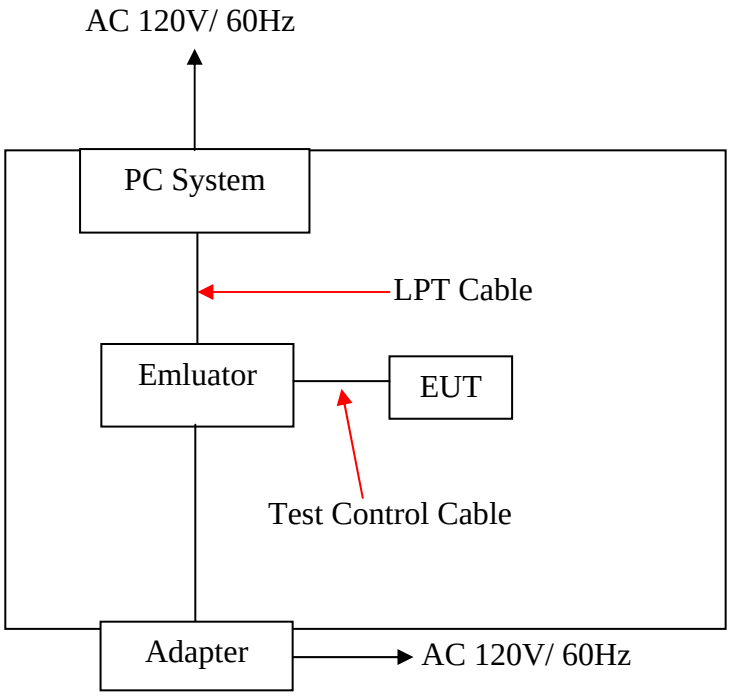


Date: 13.JUL.2009 15:59:40

11.RADIATED SPURIOUS EMISSION TEST

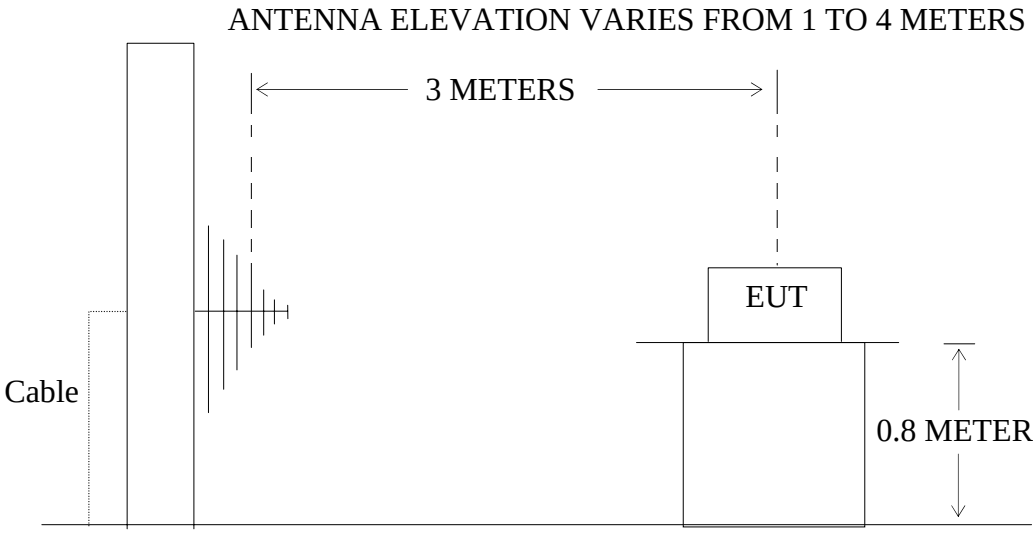
11.1.Block Diagram of Test Setup

11.1.1.Block diagram of connection between the EUT and simulators



Setup: Transmitting mode
(EUT: CS Bluetooth Module)

11.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: CS Bluetooth Module)

11.2.The Limit For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

11.3.Restricted bands of operation

11.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510

[2]Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

11.4.Configuration of EUT on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

11.4.1.CS Bluetooth Module (EUT)

Model Number	**:**	CS0907A
Serial Number	**:**	N/A
Manufacturer	**:**	Cogent Systems Inc.

11.5.Operating Condition of EUT

11.5.1.Setup the EUT and simulator as shown as Section 11.1.

11.5.2.Turn on the power of all equipment.

11.5.3.Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

11.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver (R&S ESI26) is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

The frequency range from 30MHz to 25000MHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

11.7.The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	July 9, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	TX (2402MHz)	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m) QP	Factor Corr. (dB)	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
122.5361	18.04	14.87	32.91	43.50	-10.59	Vertical
131.9853	18.48	14.81	33.29	43.50	-10.21	Vertical
499.9769	10.46	23.99	34.45	46.00	-11.55	Vertical
116.2266	18.26	14.37	32.63	43.50	-10.87	Horizontal
138.3565	17.51	14.55	32.06	43.50	-11.44	Horizontal
399.9821	13.13	22.20	35.33	46.00	-10.67	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2400.000	42.03	46.37	-7.46	34.57	38.91	54	74	-19.43	-35.09	Vertical
2402.021	96.96	101.22	-7.45	89.51	93.77	-	-	-	-	Vertical
*4804.038	50.56	54.89	-0.30	50.26	54.59	54	74	-3.74	-19.41	Vertical
2400.000	40.64	44.99	-7.46	33.18	37.53	54	74	-20.82	-36.47	Horizontal
2402.021	96.37	100.72	-7.45	88.92	93.27	-	-	-	-	Horizontal
*4804.038	50.11	54.44	-0.30	49.81	54.14	54	74	-4.19	-19.86	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	July 9, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	TX (2441MHz)	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
118.5669	16.94	14.56	31.50	43.50	-12.00	Vertical
133.2853	16.91	14.75	31.66	43.50	-11.84	Vertical
499.9769	11.32	23.99	35.31	46.00	-10.69	Vertical
116.2266	17.23	14.37	31.60	43.50	-11.90	Horizontal
139.7906	17.76	14.50	32.26	4.50	-11.24	Horizontal
362.7114	14.17	21.37	35.54	46.00	-10.46	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2441.043	96.20	100.39	-7.35	88.85	93.04	-	-	-	-	Vertical
*4882.072	50.17	54.46	0.14	50.31	54.60	54	74	-3.69	-19.40	Vertical
2441.043	96.66	100.96	-7.35	89.31	93.61	-	-	-	-	Horizontal
*4882.072	49.36	53.55	0.14	49.50	53.69	54	74	-4.50	-20.31	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	July 9, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	DC 3.3V
Test Mode:	TX (2480MHz)	Test Engineer:	Joe

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
118.5686	16.42	14.56	30.98	43.50	-15.52	Vertical
133.6853	16.00	14.74	30.74	43.50	-12.76	Vertical
499.9769	10.89	23.99	34.88	46.00	-11.12	Vertical
119.9282	16.45	14.67	31.12	43.50	-12.38	Horizontal
139.8120	17.02	14.50	31.52	43.50	-11.98	Horizontal
399.9821	13.47	22.20	35.67	46.00	-10.33	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2480.037	96.49	100.73	-7.37	89.12	93.36	-	-	-	-	Vertical
2483.500	41.01	45.35	-7.37	33.64	37.98	54	74	-20.36	-36.02	Vertical
*4960.056	50.04	54.30	0.52	50.56	54.82	54	74	-3.44	-19.18	Vertical
2480.037	96.98	101.21	-7.37	89.61	93.84	-	-	-	-	Horizontal
2483.500	40.37	44.64	-7.37	33.00	37.27	54	74	-21.00	-36.73	Horizontal
*4960.056	49.37	53.66	0.52	49.89	54.18	84	74	-4.11	-19.82	Horizontal

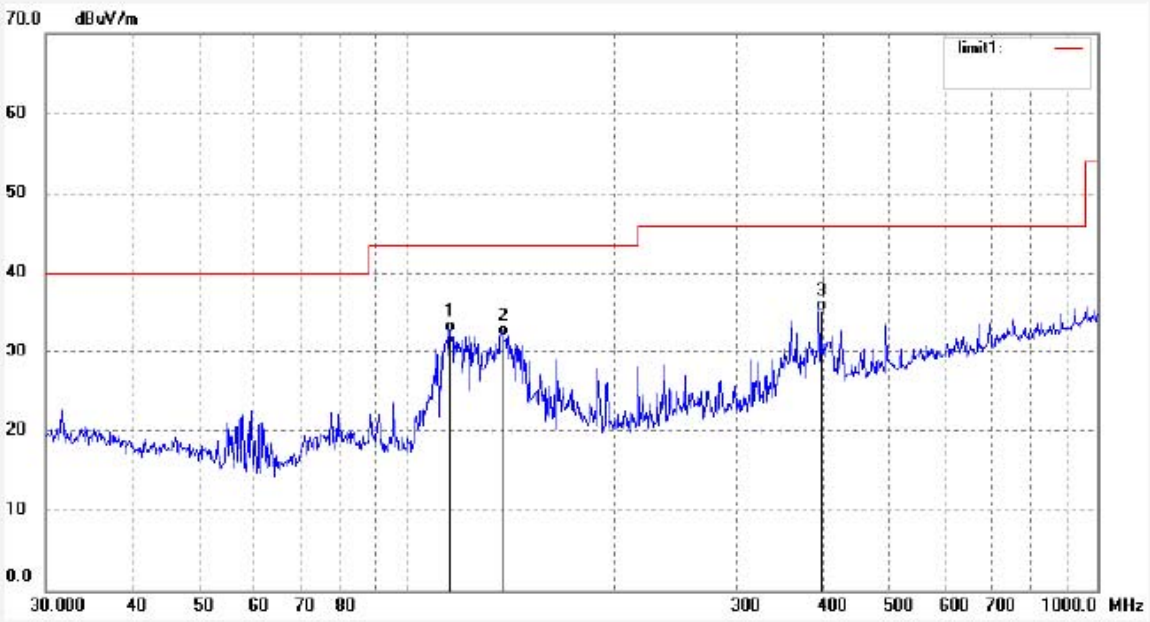
Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2158	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 17/24/06
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2402MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209



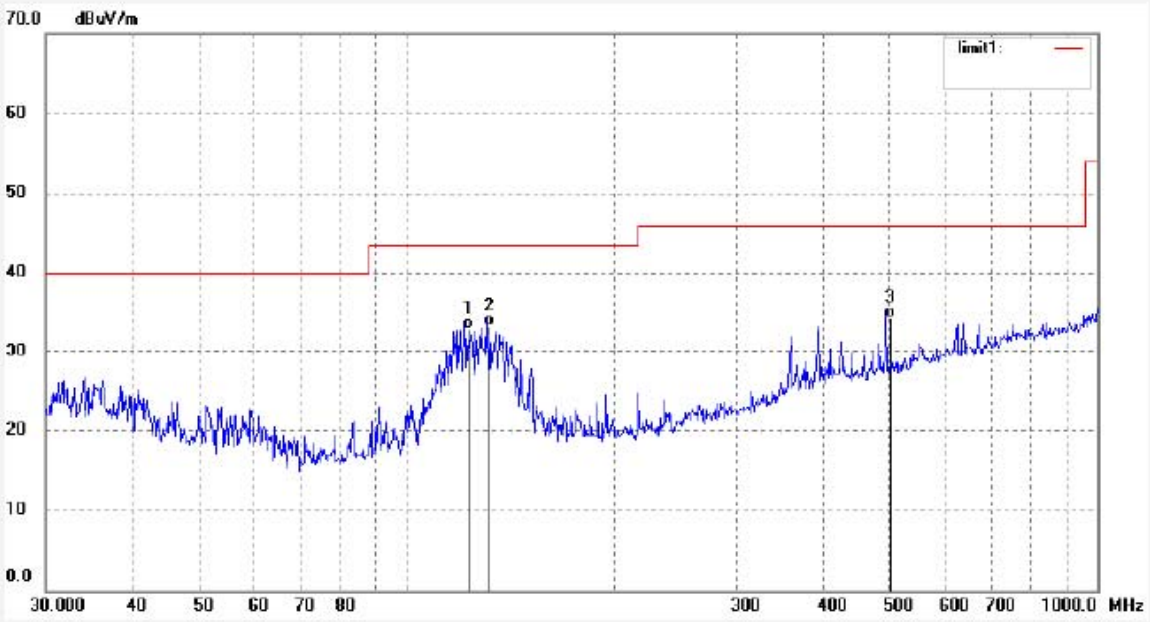
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	116.2266	18.26	14.37	32.63	43.50	-10.87	QP			
2	138.3565	17.51	14.55	32.06	43.50	-11.44	QP			
3	399.9821	13.13	22.20	35.33	46.00	-10.67	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2157
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2402MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Vertical
Power Source: DC 3.3V
Date: 09/07/09/
Time: 17/20/42
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209



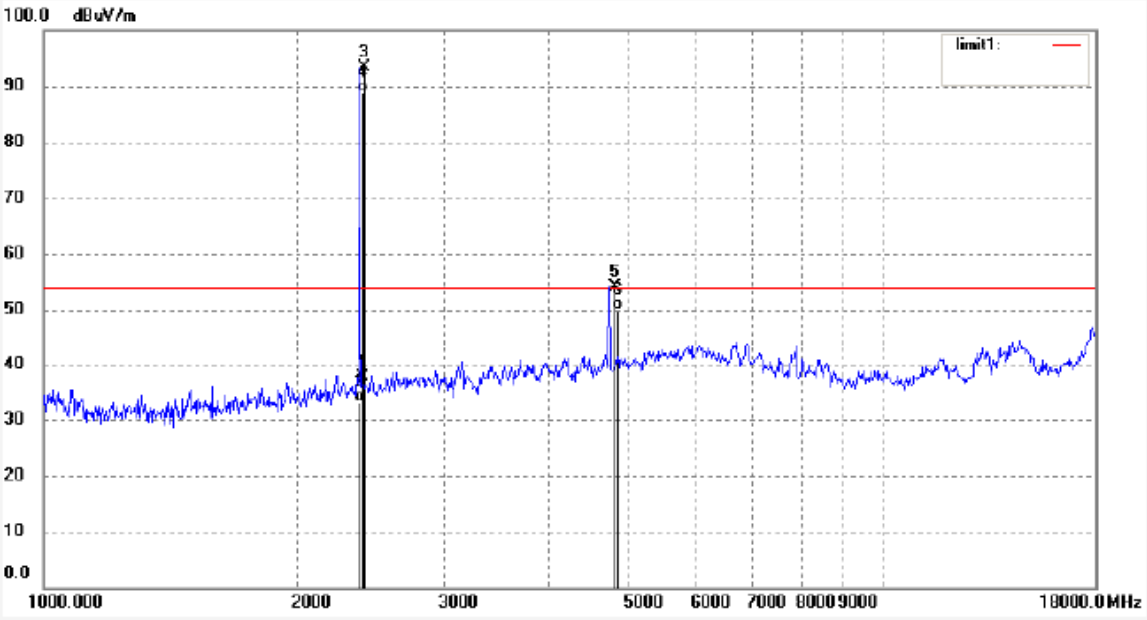
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	122.5361	18.04	14.87	32.91	43.50	-10.59	QP			
2	131.9853	18.48	14.81	33.29	43.50	-10.21	QP			
3	499.9769	10.46	23.99	34.45	46.00	-11.55	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2151
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2402MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Horizontal
Power Source: DC 3.3V
Date: 09/07/09/
Time: 15/36/28
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209



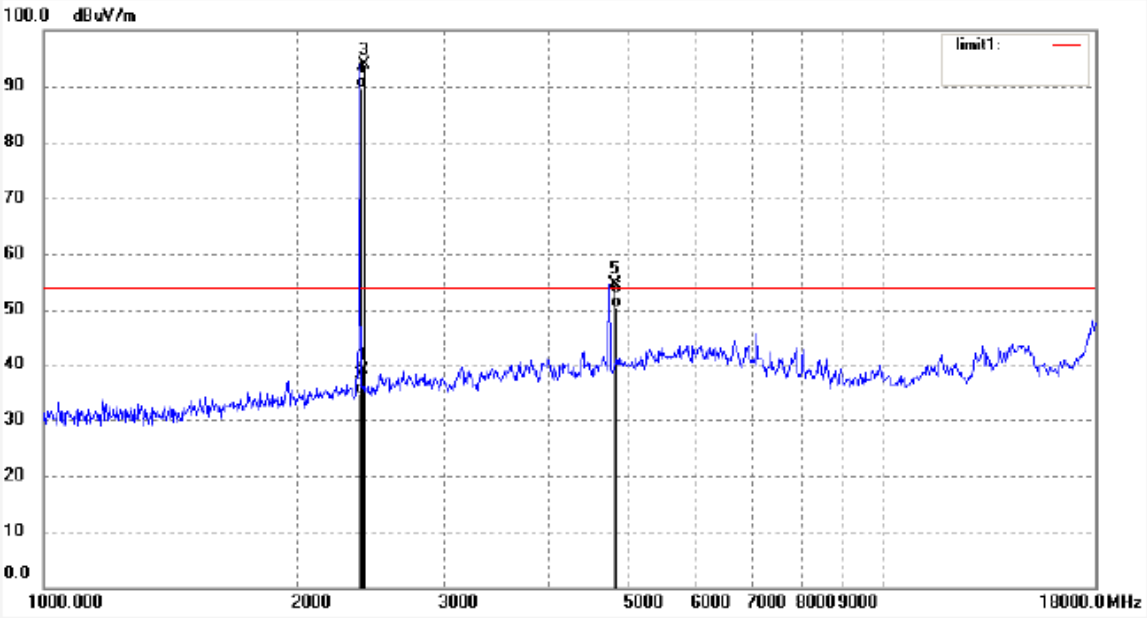
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	44.99	-7.46	37.53	74.00	-36.47	peak			
2	2400.000	40.64	-7.46	33.18	54.00	-20.82	AVG			
3	2402.021	100.72	-7.45	93.27	-	-	peak			
4	2402.021	96.37	-7.45	88.92	-	-	AVG			
5	4804.038	54.44	-0.30	54.14	74.00	-19.86	peak			
6	4804.038	50.11	-0.30	49.81	54.00	-4.19	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2152
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2402MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Vertical
Power Source: DC 3.3V
Date: 09/07/09/
Time: 15/39/37
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209

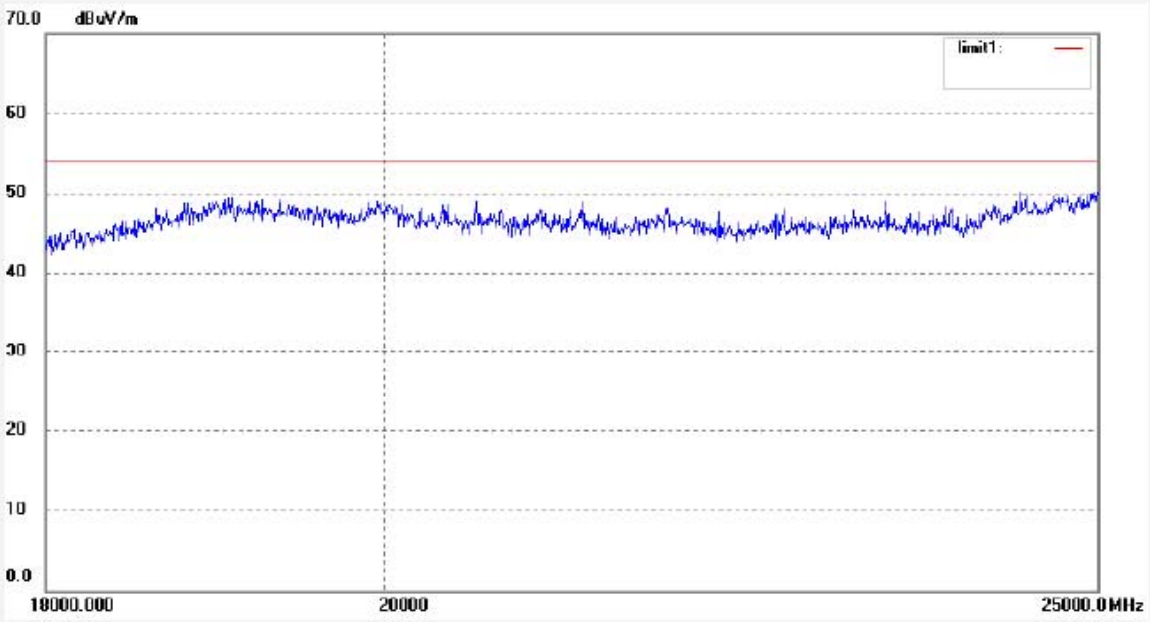


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	46.37	-7.46	38.91	74.00	-35.09	peak			
2	2400.000	42.03	-7.46	34.57	54.00	-19.43	AVG			
3	2402.021	101.22	-7.45	93.77	-	-	peak			
4	2402.021	96.96	-7.45	89.51	-	-	AVG			
5	4804.038	54.89	-0.30	54.59	74.00	-19.41	peak			
6	4804.038	50.56	-0.30	50.26	54.00	-3.74	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2163	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 17/45/20
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2402MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209

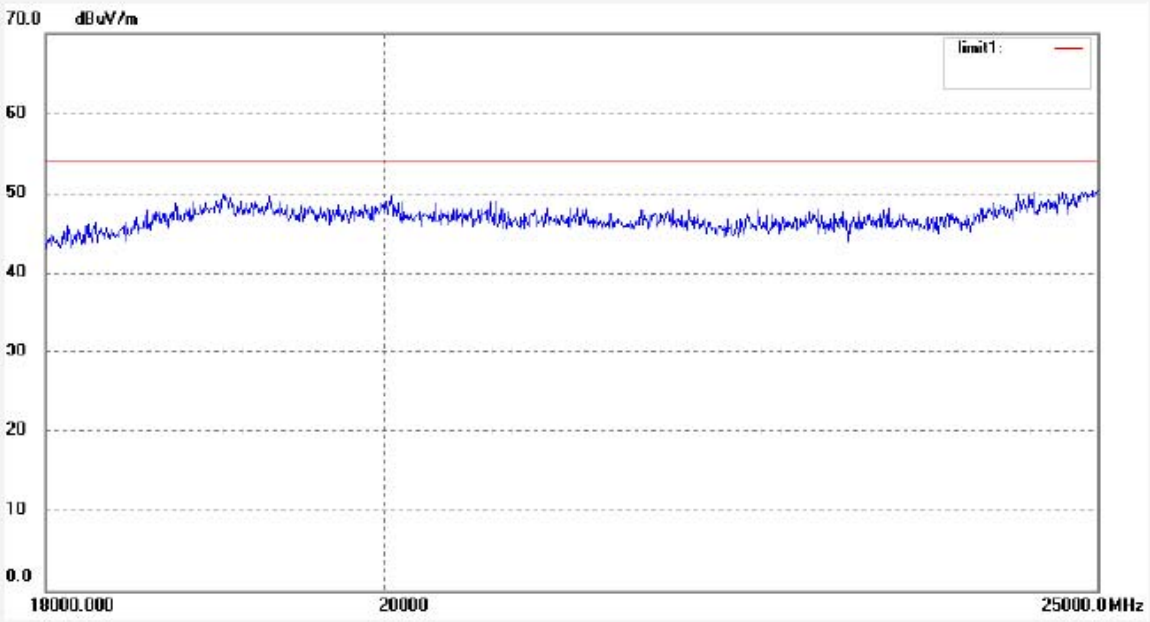


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2164	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 17/48/32
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2402MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209



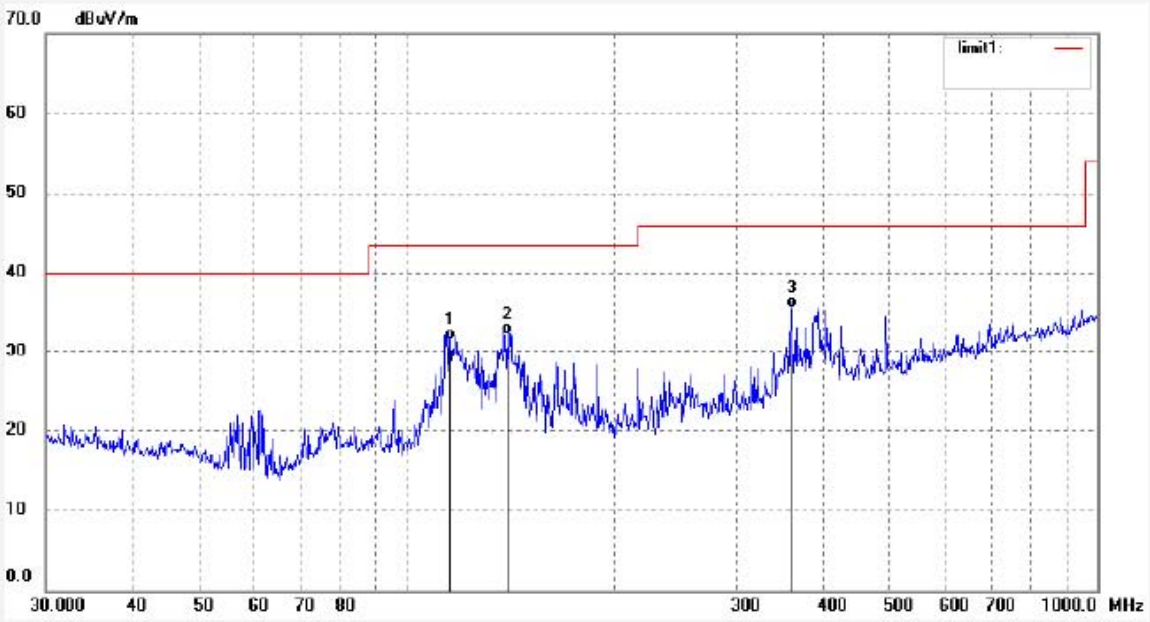
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2159
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2441MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Horizontal
Power Source: DC 3.3V
Date: 09/07/09/
Time: 17/28/03
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209

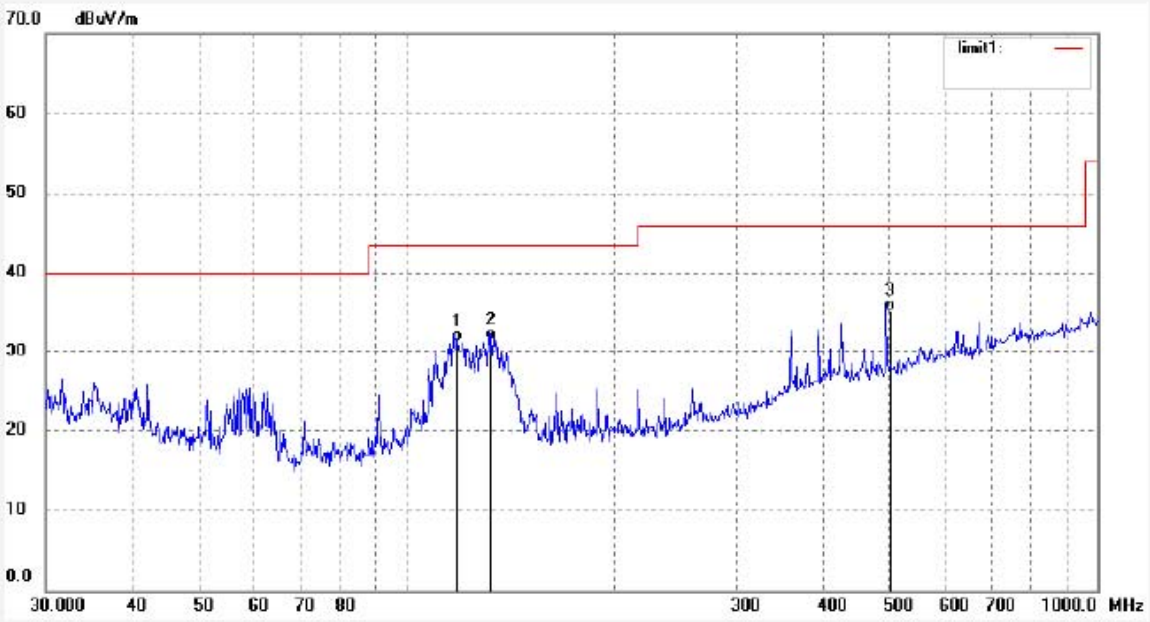


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	116.2266	17.23	14.37	31.60	43.50	-11.90	QP			
2	139.7906	17.76	14.50	32.26	43.50	-11.24	QP			
3	362.7114	14.17	21.37	35.54	46.00	-10.46	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2160	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 17/31/25
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2441MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209



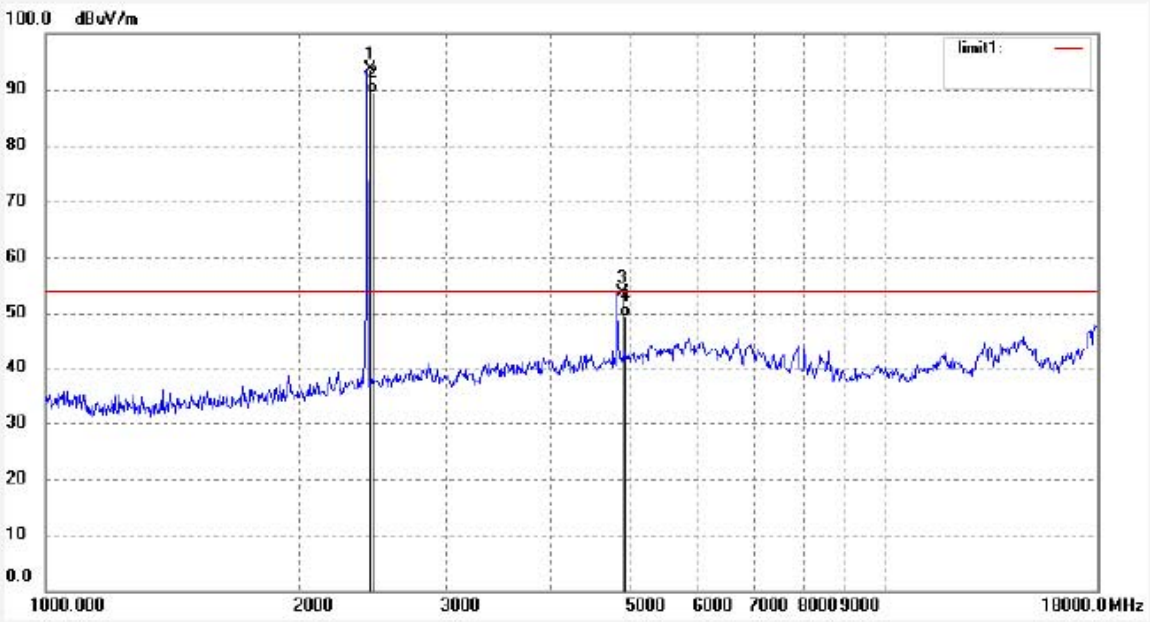
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	118.5669	16.94	14.56	31.50	43.50	-12.00	QP			
2	133.2853	16.91	14.75	31.66	43.50	-11.84	QP			
3	499.9769	11.32	23.99	35.31	46.00	-10.69	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2154
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2441MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Horizontal
Power Source: DC 3.3V
Date: 09/07/09/
Time: 15/48/33
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209



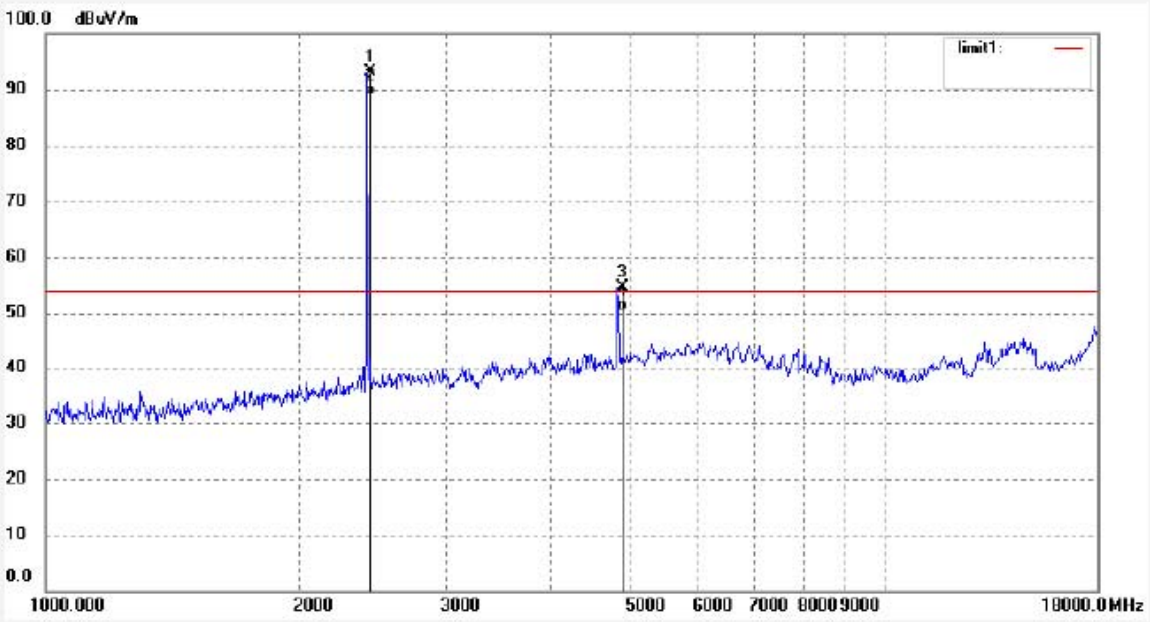
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.043	100.96	-7.35	93.61	-	-	peak			
2	2441.043	96.66	-7.35	89.31	-	-	AVG			
3	4882.072	53.55	0.14	53.69	74.00	-20.31	peak			
4	4882.072	49.36	0.14	49.50	54.00	-4.50	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2153
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2441MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Vertical
Power Source: DC 3.3V
Date: 09/07/09/
Time: 15/45/25
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209

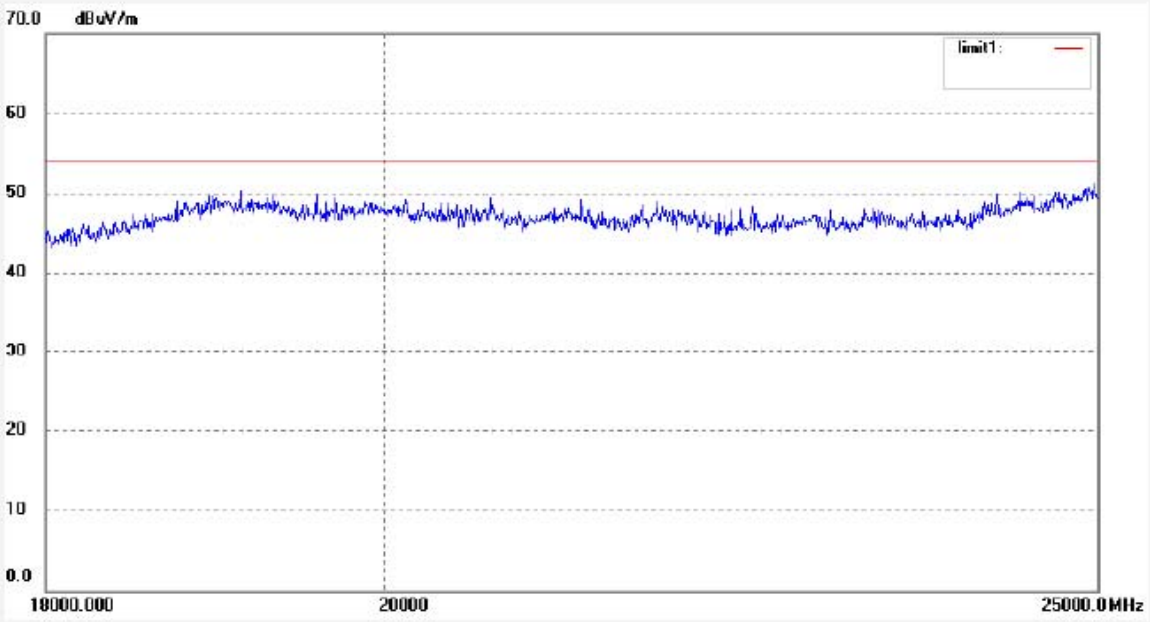


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.043	100.39	-7.35	93.04	-	-	peak			
2	2441.043	96.20	-7.35	88.85	-	-	AVG			
3	4882.072	54.46	0.14	54.60	74.00	-19.40	peak			
4	4882.072	50.17	0.14	50.31	54.00	-3.69	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2166	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 17/54/09
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2441MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209

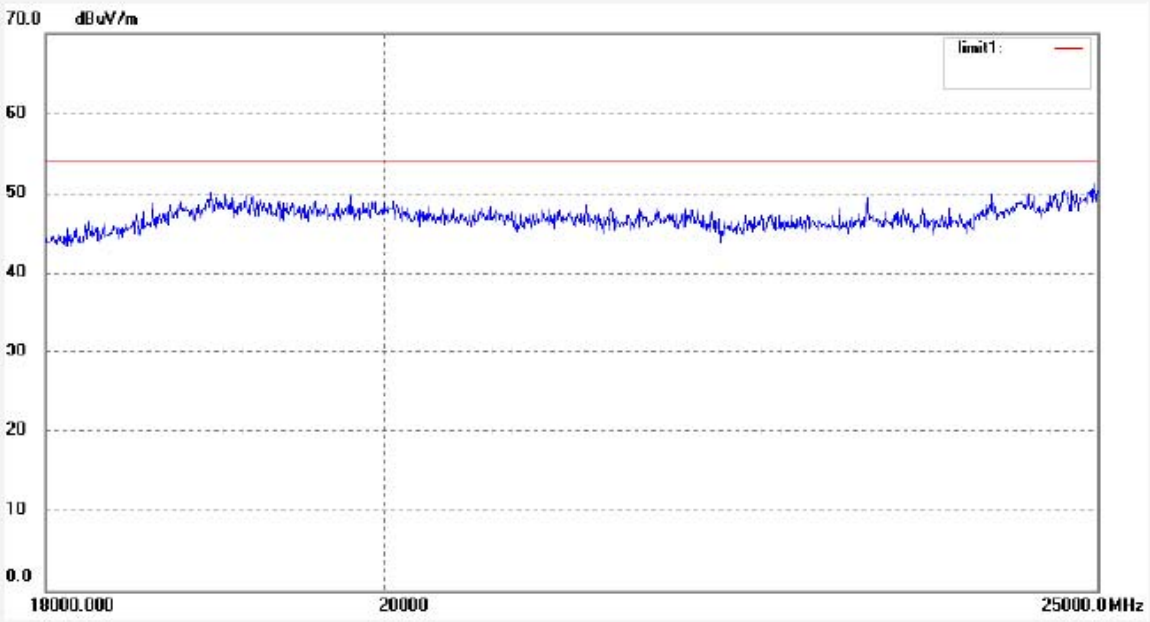


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2165	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 17/51/50
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2441MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209

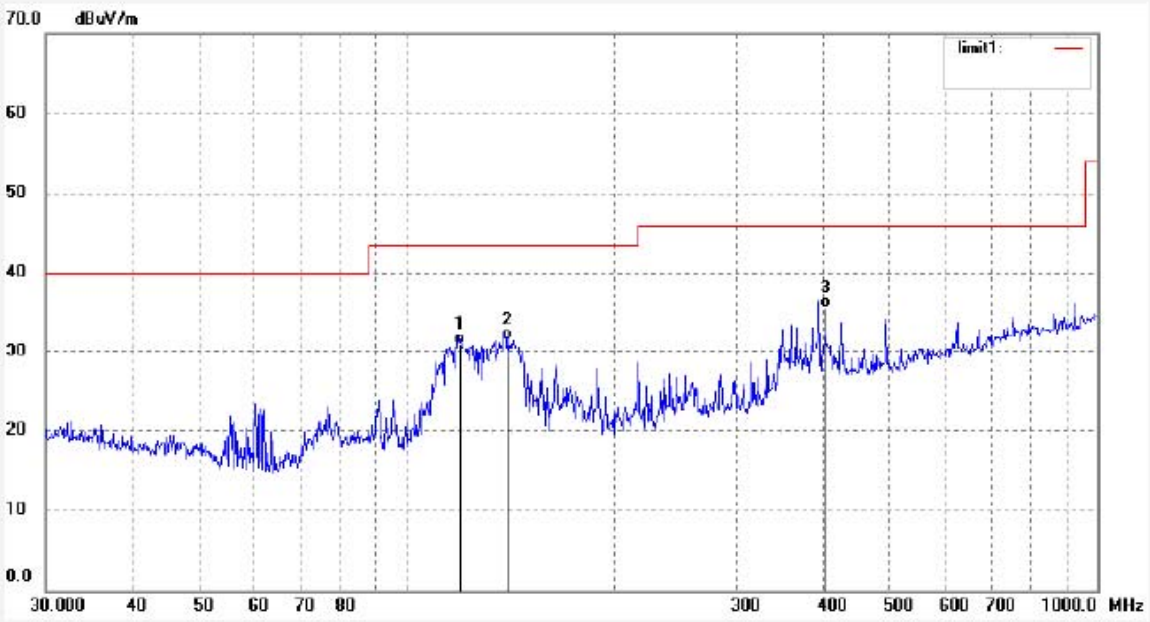


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2162	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 17/39/57
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2480MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209



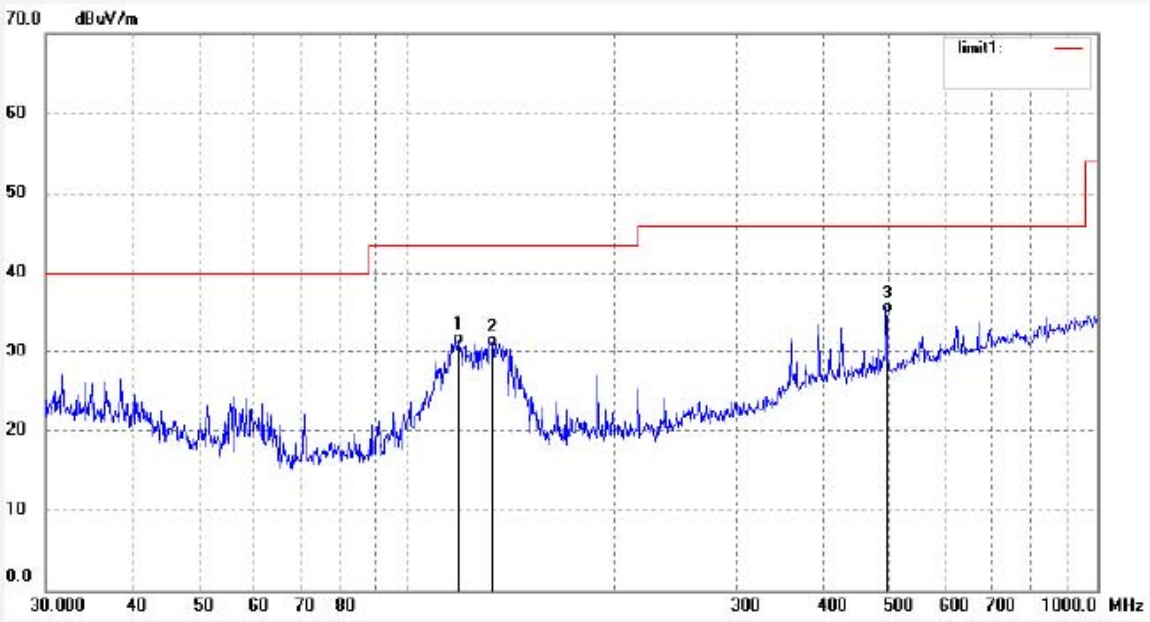
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	119.9282	16.45	14.67	31.12	43.50	-12.38	QP			
2	139.8120	17.02	14.50	31.52	43.50	-11.98	QP			
3	399.9821	13.47	22.20	35.67	46.00	-10.33	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2161
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2480MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Vertical
Power Source: DC 3.3V
Date: 09/07/09/
Time: 17/36/38
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209



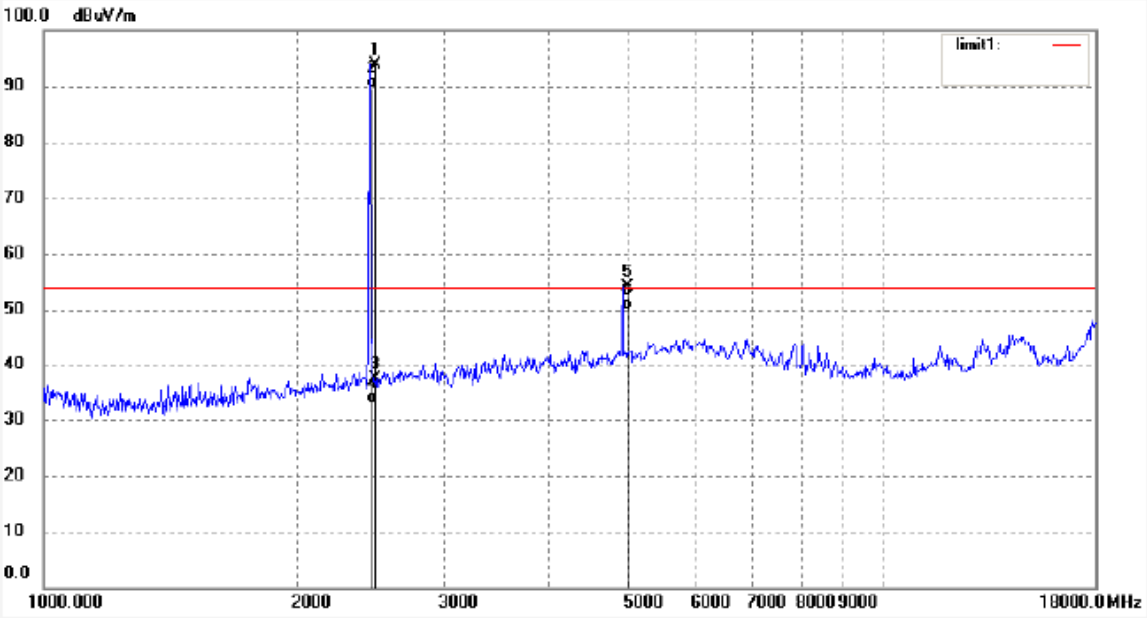
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	118.5686	16.42	14.56	30.98	43.50	-12.52	QP			
2	133.6853	16.00	14.74	30.74	43.50	-12.76	QP			
3	499.9769	10.89	23.99	34.88	46.00	-11.12	QP			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2155
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2480MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Horizontal
Power Source: DC 3.3V
Date: 09/07/09/
Time: 15/53/09
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209



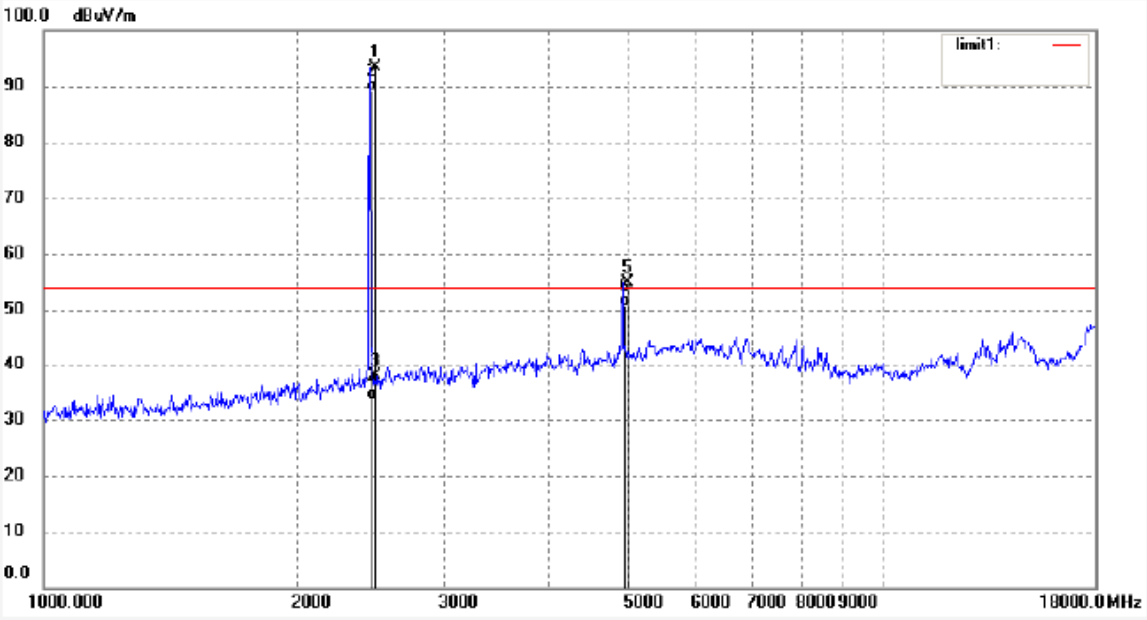
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.037	101.21	-7.37	93.84	-	-	peak			
2	2480.037	96.98	-7.37	89.61	-	-	AVG			
3	2483.500	44.64	-7.37	37.27	74.00	-36.73	peak			
4	2483.500	40.37	-7.37	33.00	54.00	-21.00	AVG			
5	4960.056	53.66	0.52	54.18	74.00	-19.82	peak			
6	4960.056	49.37	0.52	49.89	54.00	-4.11	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2156
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 50 %
EUT: CS bluetooth module
Mode: TX 2480MHz
Model: CS0907A
Manufacturer: Cogent System (ShenZhen) Inc

Polarization: Vertical
Power Source: DC 3.3V
Date: 09/07/09/
Time: 15/56/21
Engineer Signature: Joe
Distance: 3m

Note: Sample No.:091463 Report No.:ATE20091209

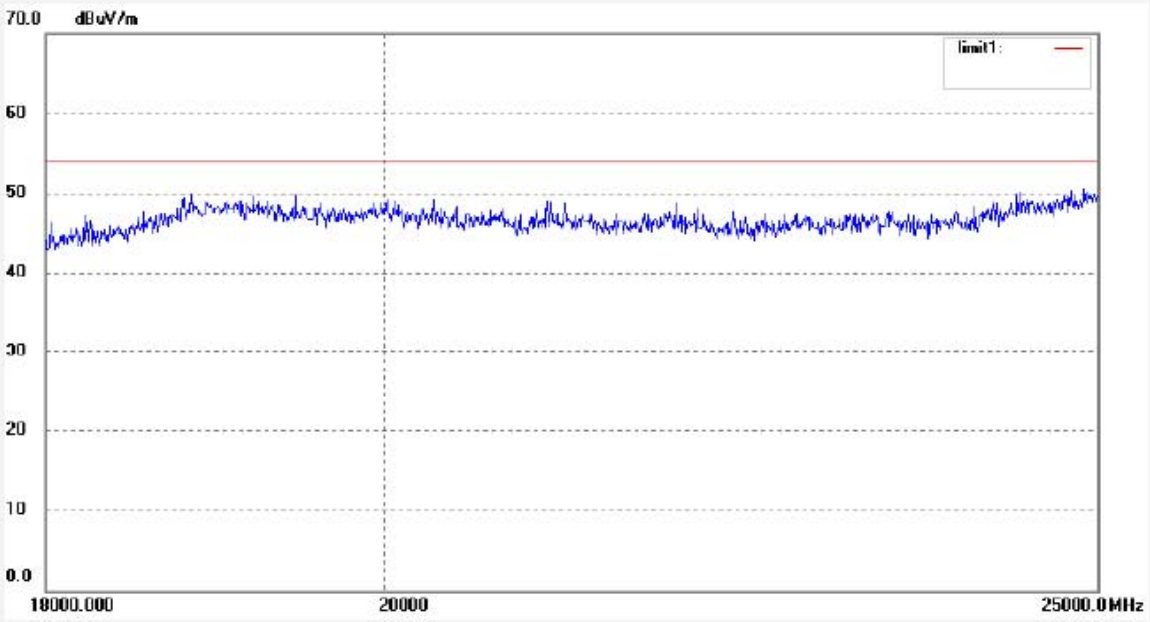


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.037	100.73	-7.37	93.36	-	-	peak			
2	2480.037	96.49	-7.37	89.12	-	-	AVG			
3	2483.500	45.35	-7.37	37.98	74.00	-36.02	peak			
4	2483.500	41.01	-7.37	33.64	54.00	-20.36	AVG			
5	4960.056	54.30	0.52	54.82	74.00	-19.18	peak			
6	4960.056	50.04	0.52	50.56	54.00	-3.44	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2167	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 17/58/21
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2480MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209

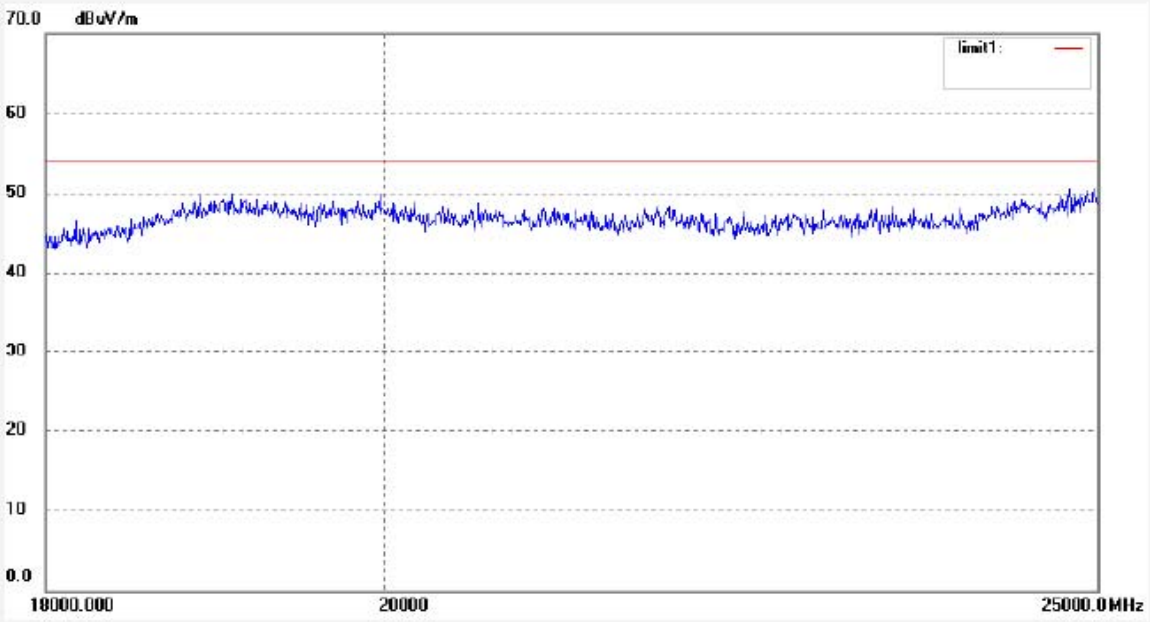


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #2168	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.3V
Test item: Radiation Test	Date: 09/07/09/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 18/01/38
EUT: CS bluetooth module	Engineer Signature: Joe
Mode: TX 2480MHz	Distance: 3m
Model: CS0907A	
Manufacturer: Cogent System (ShenZhen) Inc	

Note: Sample No.:091463 Report No.:ATE20091209

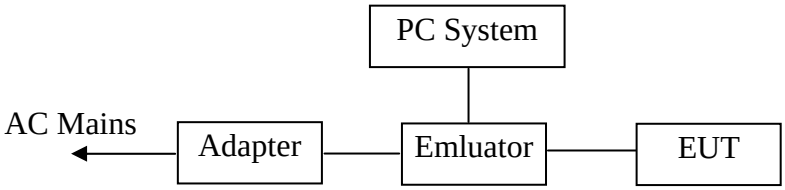


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

12. CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

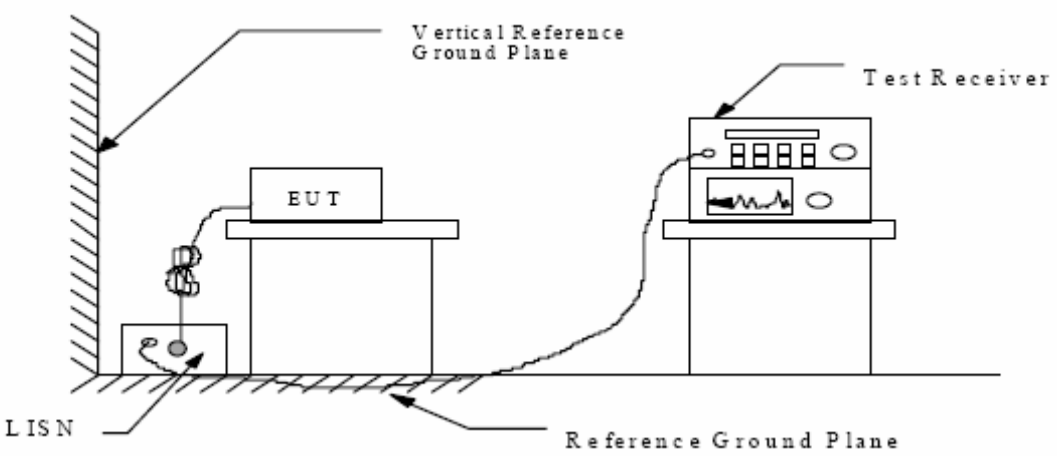
12.1. Block Diagram of Test Setup

12.1.1. Block diagram of connection between the EUT and simulators



(EUT: CS Bluetooth module)

12.1.2. Shielding Room Test Setup Diagram



(EUT: CS Bluetooth module)

12.2. The Emission Limit

12.2.1. Conducted Emission Measurement Limits According to Section 15.207(a)

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

* Decreases with the logarithm of the frequency.

12.3.Configuration of EUT on Measurement

The following equipment are installed on the Conducted Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

12.3.1.CS Bluetooth module (EUT)

Model Number	**:**	CS0907A
Serial Number	**:**	N/A
Manufacturer	**:**	Cogent Systems Inc.

12.4.Operating Condition of EUT

12.4.1.Setup the EUT and simulator as shown as Section 12.1.

12.4.2.Turn on the power of all equipment.

12.4.3.Let the EUT work in TX mode measure it.

12.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2003 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

12.6.Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Date of Test:	July 17, 2009	Temperature:	25°C
EUT:	CS Bluetooth Module	Humidity:	50%
Model No.:	CS0907A	Power Supply:	AC 120V/ 60Hz
Test Mode:	TX	Test Engineer:	Joe

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.177000	43.30	11.1	65	21.3	QP	N	GND
0.397500	42.20	11.8	58	15.7	QP	N	GND
0.564000	34.70	12.0	56	21.3	QP	N	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.348000	28.70	11.7	49	20.3	AV	N	GND
0.397500	36.00	11.8	48	11.9	AV	N	GND
0.555000	28.00	12.0	46	18.0	AV	N	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.195000	49.40	11.2	64	14.4	QP	L1	GND
0.393000	46.60	11.8	58	11.4	QP	L1	GND
0.532500	37.50	12.0	56	18.5	QP	L1	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	39.70	11.2	54	14.5	AV	L1	GND
0.312000	34.00	11.6	50	15.9	AV	L1	GND
0.397500	38.60	11.8	48	9.3	AV	L1	GND

ACCURATE TECHNOLOGY CO.,LTD

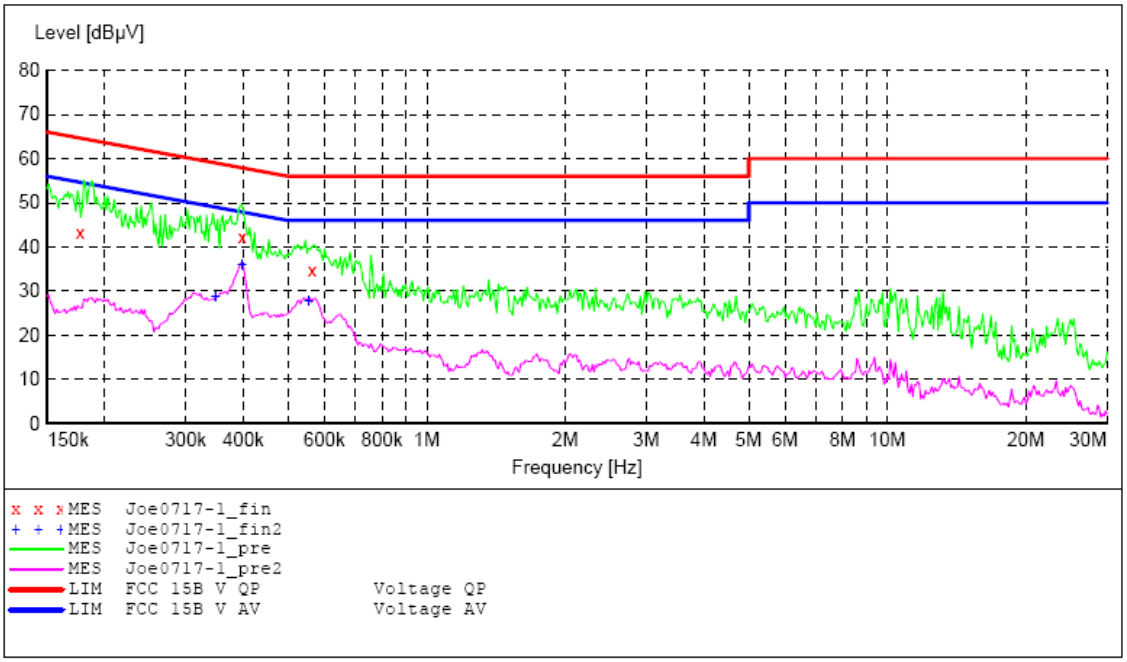
CONDUCTED EMISSION STANDARD FCC PART15B

```
EUT:                  CS bluetooth module  M/N:CS0907A
Manufacturer:         Cogent Systems (ShenZhen) Inc
Operating Condition:  Bluetooth
Test Site:            1#Shielding Room
Operator:             Joe
Test Specification:   Va 120V/60Hz
Comment:              Sample No.:09463  Report No.:ATE20091209
Start of Test:        7/17/2009 / 5:48:02PM
```

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

Short Description: _SUB_STD_VTERM2 1.70

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



MEASUREMENT RESULT: "Joe0717-1_fin"

7/17/2009 5:51PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.177000	43.30	11.1	65	21.3	QP	N	GND
0.397500	42.20	11.8	58	15.7	QP	N	GND
0.564000	34.70	12.0	56	21.3	QP	N	GND

MEASUREMENT RESULT: "Joe0717-1_fin2"

7/17/2009 5:51PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.348000	28.70	11.7	49	20.3	AV	N	GND
0.397500	36.00	11.8	48	11.9	AV	N	GND
0.555000	28.00	12.0	46	18.0	AV	N	GND

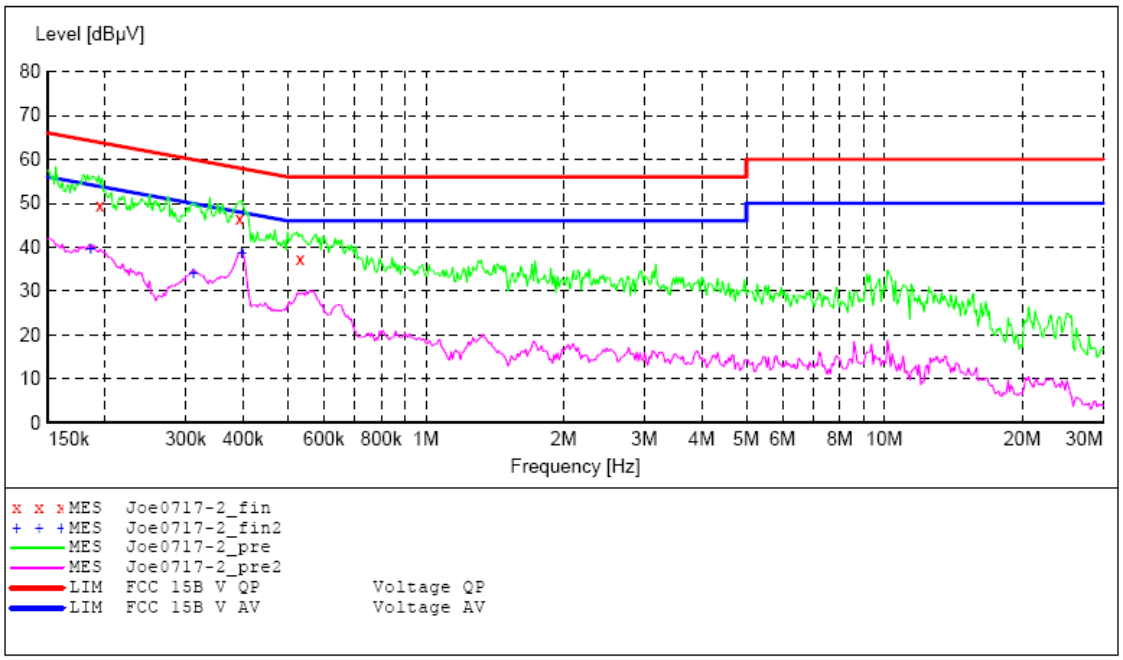
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART15B

```
EUT:                  CS bluetooth module  M/N:CS0907A
Manufacturer:         Cogent Systems (ShenZhen) Inc
Operating Condition:  Bluetooth
Test Site:            1#Shielding Room
Operator:             Joe
Test Specification:   Vb 120V/60Hz
Comment:              Sample No.:09463  Report No.:ATE20091209
Start of Test:        7/17/2009 / 5:52:34PM
```

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

```
  Short Description:          _SUB_STD_VTERM2 1.70
  Start      Stop       Step      Detector  Meas.     IF      Transducer
  Frequency  Frequency  Width               Time      Bandw.
  150.0 kHz  30.0 MHz   0.8 %     QuasiPeak 1.0 s     9 kHz   NSLK8126 2008
                                  Average
```



MEASUREMENT RESULT: "Joe0717-2_fin"

7/17/2009 5:56PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.195000	49.40	11.2	64	14.4	QP	L1	GND
0.393000	46.60	11.8	58	11.4	QP	L1	GND
0.532500	37.50	12.0	56	18.5	QP	L1	GND

MEASUREMENT RESULT: "Joe0717-2_fin2"

7/17/2009 5:56PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	39.70	11.2	54	14.5	AV	L1	GND
0.312000	34.00	11.6	50	15.9	AV	L1	GND
0.397500	38.60	11.8	48	9.3	AV	L1	GND

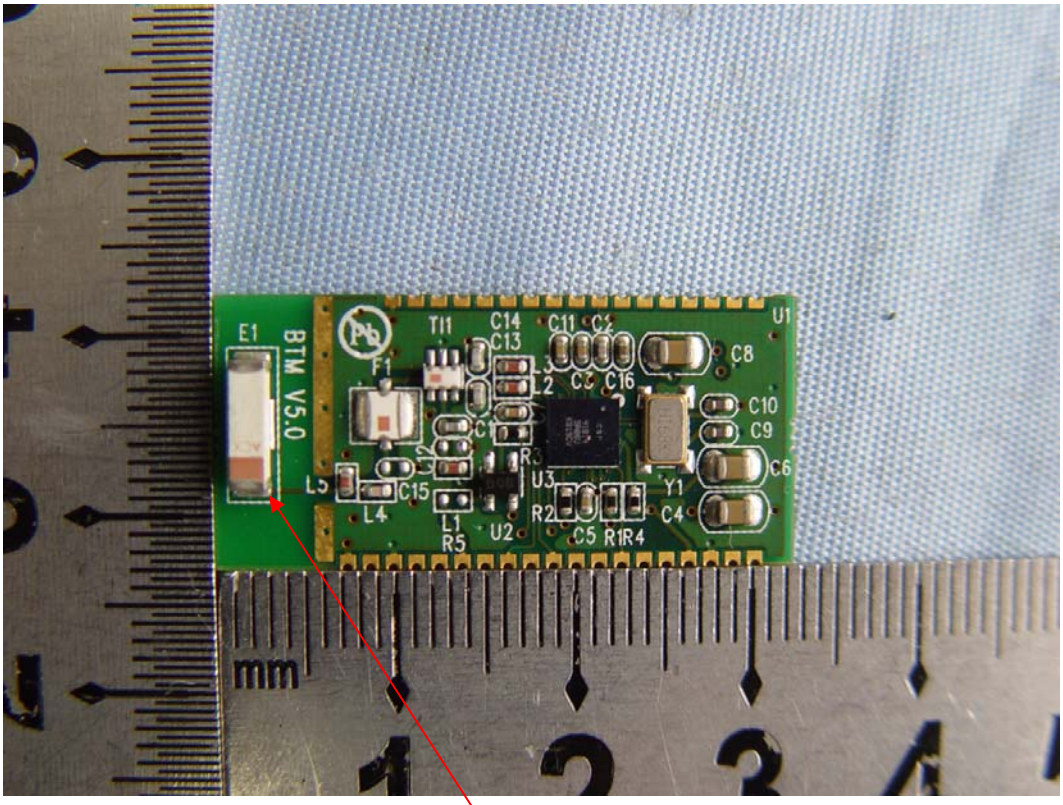
13. ANTENNA REQUIREMENT

13.1. The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

13.2. Antenna Construction

The transmitter utilizes SMD chip antenna, no consideration of replacement. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna