



SPORTON LAB.



Certificate No: **FD6D1306**

CERTIFICATE OF COMPLIANCE

Authorized under Declaration of Conformity
according to

47 CFR, Part 2 and Part 15 of the FCC Rules

EQUIPMENT : Expedite module
TRADE NAME : Expedite EU870D
MODEL : EU870D
APPLICANT : Novatel Wireless Inc.
9645 Scranton Rd., Suite 205 San Diego, CA 92121



I HEREBY

CERTIFY THAT:

The measurements shown in this test report were made in accordance with the procedures given in ANSI C63.4 - 2003 and the energy emitted by this equipment was *passed* FCC Part 15 B in both radiated and conducted emission class B limits. Testing was carried out on Dec. 18, 2006 at SPORTON International Inc. LAB.

Roy Wu

Deputy Manager

FCC/IC TEST REPORT

According to

47 CFR Part 15 Subpart B, IC RSS-132 and IC RSS-133

Equipment : Expedite module
Trade Name : Expedite EU870D
Model No. : EU870D
FCC ID : NBZNRM-EU870D
IC ID : 3229A-EU870D
Filing Type : Declaration of Conformity
Applicant : Novatel Wireless Inc.

9645 Scranton Rd., Suite 205 San Diego, CA 92121

- The test result refers exclusively to the test presented test model / sample.
- Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.
- Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsement by NVLAP or any agency of U.S. government.
- Report Version: Rev. 02

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

SPORTON International Inc.

TEL : 886-2-2696-2468

FAX : 886-2-2696-2255

Report Version: Rev. 02

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History of this test report

Report Issue Date: Dec. 25, 2006

Report No.	Description

CERTIFICATE OF COMPLIANCE

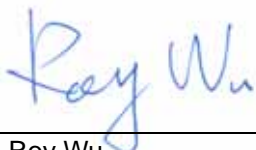
according to

47 CFR Part 15 Subpart B, IC RSS-132 and IC RSS-133

Equipment : Expedite module
Trade Name : Expedite EU870D
Model No. : EU870D
FCC ID : NBZNRM-EU870D
IC ID : 3229A-EU870D
Filing Type : Declaration of Conformity
Applicant : **Novatel Wireless Inc.**
9645 Scranton Rd., Suite 205 San Diego, CA 92121

I **HEREBY** CERTIFY THAT:

The measurements shown in this test report were made in accordance with the procedures given in ANSI C63.4 - 2003 and the energy emitted by this equipment was *passed* FCC Part 15 B, IC RSS-132 and IC RSS-133 in both radiated and conducted emission class B limits. Testing was carried out on Dec. 18, 2006 at SPORTON International Inc. LAB.



Roy Wu
Deputy Manager

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

SPORTON International Inc.

TEL : 886-2-2696-2468
FAX : 886-2-2696-2255
FCC ID : NBZNRM-EU870D
IC ID : 3229A-EU870D

Page No. : 1 of 34
Report Issued Date : Dec. 25, 2006
Report Version : Rev. 02

1. General Description of Equipment under Test

1.1 Applicant

Novatel Wireless Inc.
9645 Scranton Rd., Suite 205 San Diego, CA 92121

1.2 Manufacturer

Novatel Wireless, Inc.
9645 Scranton Rd., Suite 205 San Diego, CA 92121

1.3 Basic Description of Equipment under Test

Equipment : Expedite module
Trade Name : Expedite EU870D
Model No. : EU870D
FCC ID : NBZNRM-EU870D
IC ID : 3229A-EU870D
Power Supply Type : DC source 3.3V
DC Power Cable : DC 3.3V, 0.2 meter, 2 pin

1.4 Feature of Equipment under Test

Product Feature & Specification	
1. DUT Type	Expedite module
2. Trade Name	Expedite EU870D
3. Model Name	EU870D
4. Tx Frequency	GSM850 : 824 ~ 849 MHz PCS1900 : 1850 ~ 1910 MHz WCDMA Band V : 824 ~ 849 MHz WCDMA Band II : 1850 ~ 1910 MHz
5. Rx Frequency	GSM850 : 869 ~ 894 MHz PCS1900 : 1930 ~ 1990 MHz WCDMA Band V : 869 ~ 894 MHz WCDMA Band II : 1930 ~ 1990 MHz
6. Antenna Type	Fixed External
7. Maximum Output Power	GSM850 (GSM) : 32.5 dBm GSM850 (EDGE) : 27.2 dBm PCS1900 (GSM) : 28.4 dBm PCS1900 (EDGE) : 25.2 dBm WCDMA Band V : 24.31 dBm WCDMA Band V (HSDPA) : 22.46 dBm WCDMA Band II : 23.85 dBm WCDMA Band II (HSDPA) : 22.25 dBm
8. HW Version	Rev. 1
9. Firmware Version	10.7.00.0-00
10. Type of Modulation	GSM850 / PCS1900 : GMSK EDGE : 8PSK WCDMA : QPSK
11. DUT Stage	Identical Prototype
12. Application Type	Certificate

2. Test Configuration of Equipment under Test

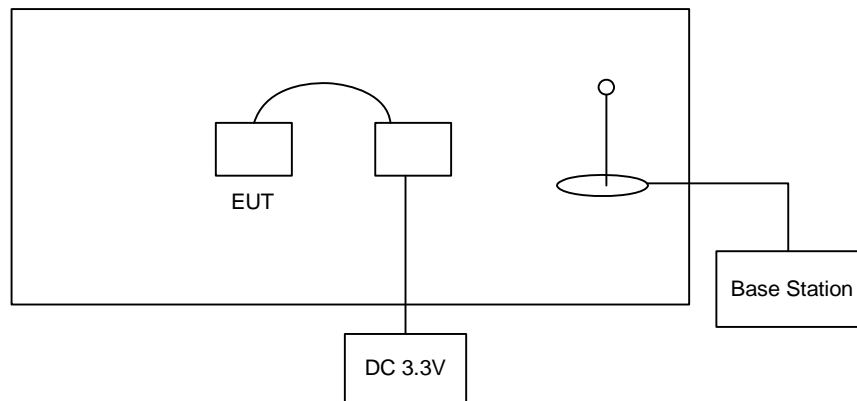
2.1 Test Manner

- a. The EUT has been setup pursuant to ANSI C63.4-2003 and configuration operated in a manner which tended to maximize its emission characteristics in a typical application.
- b. The complete test system refers to 2.2 for EMI test.
- c. The following test modes were tested for radiated emission test:
 - Mode 1: GSM850 Idle Mode
 - Mode 2: EDGE Idle Mode
 - Mode 3: WCDMA Idle Mode
 - Model 4: HSDPA Idle Mode
- d. Frequency range investigated: radiation 30 MHz to 13 GHz.
- e. Conduction emission test is not required for this device.

2.2 Description of Test System

Item	Asset	Model Name	Power Cord
1.	Base Station (R&S)	CMU 200	AC 100-240V

2.3 Connection Diagram of Test System



3. Test Software

The EUT is in Idle mode controlled by Base Station Simulator.

4. General Information of Test

4.1 Test Facility

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055
Test Site No. : 03CH06-HY

4.2 Test Voltage

DC 3.3V

4.3 Standard for Methods of Measurement

ANSI C63.4-2003

4.4 Test in Compliance with

FCC Part 15 Subpart B and IC RSS-132 Issued 2 and RSS-133 Issued 3

4.5 Frequency Range Investigated

a. Radiation: from 30 MHz to 13000MHz

4.6 Test Distance

The test distance of radiated emission from antenna to EUT is 3m.

5. Test of Radiated Emission

Radiated emissions from 30 MHz to 13 GHz were measured with a bandwidth of 120 kHz and 1MHz according to the methods defines in ANSI C63.4-2003. The EUT was placed on a nonmetallic stand, 0.8 meter above the ground plane, as shown in section 6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

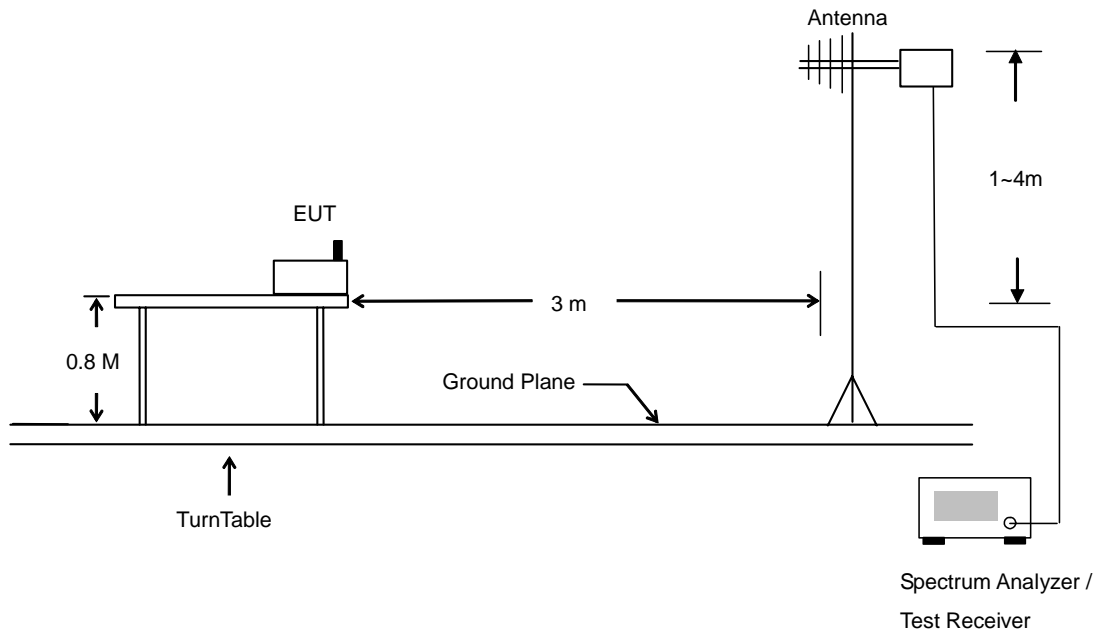
5.1 Major Measuring Instruments

As described in Chapter 6.

5.2 Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a Bi-Log antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both for horizontal polarization and vertical polarization of the antenna.
- e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the quasi-peak method and reported.

5.3 Typical Test Setup Layout of Radiated Emission

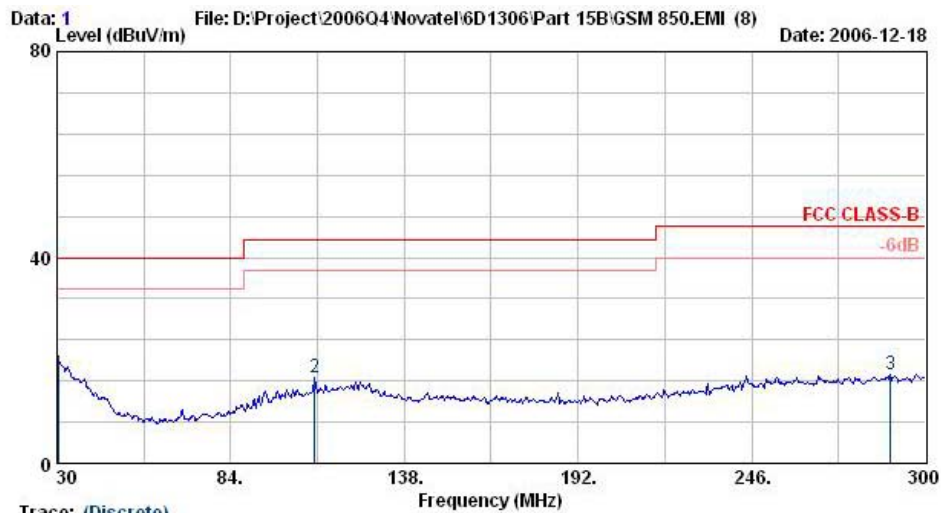


5.4 Test Result of Radiated Emission

5.4.1 Test Mode: Mode 1

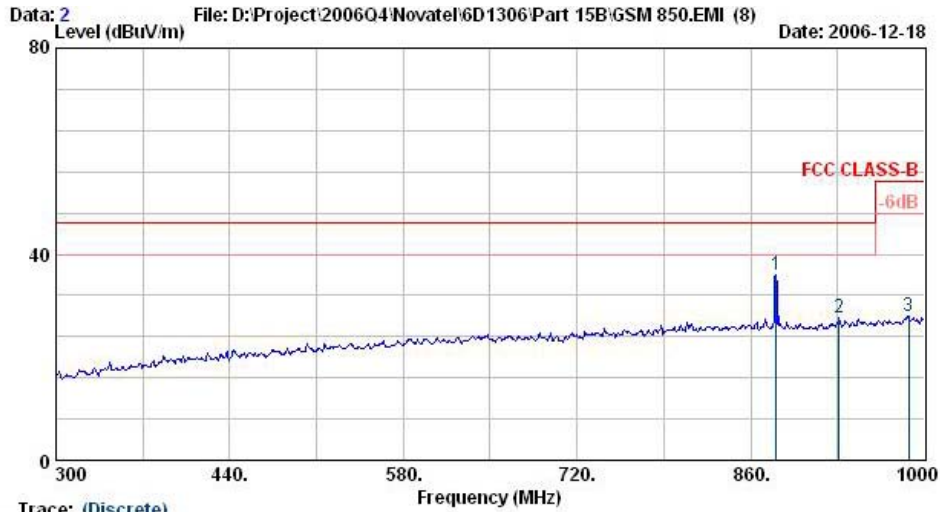
- Test Distance: 3m
- Temperature: 25°C
- Relative Humidity: 52%
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Test Engineer: Andrew
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

The test that passed at the minimum margin was marked by a frame in the following data



Site : 08CH06-HY
 Condition : LP-ANT(951121) HORIZONTAL
 EUT :
 Module :
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle

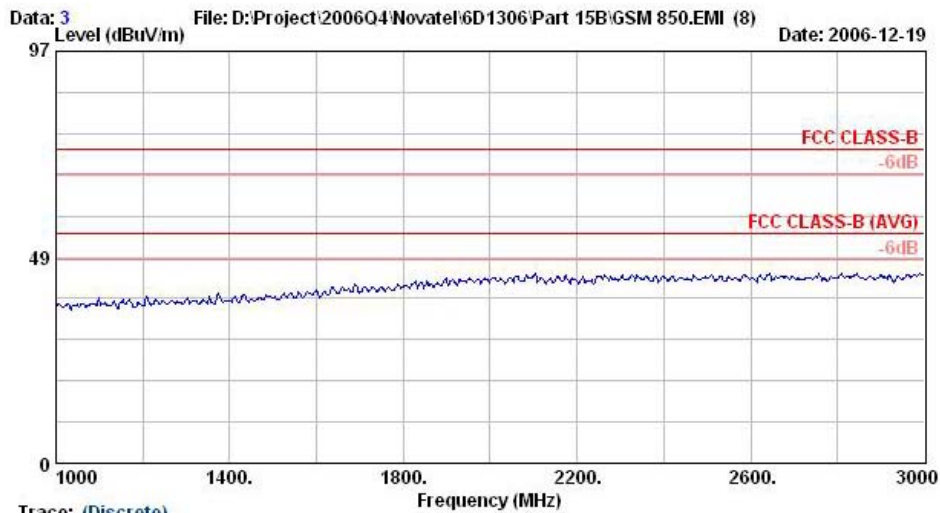
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	30.3	20.73	-19.27	40.00	31.69	19.66	0.84	31.46	---	---	Peak
2 @	110.2	16.77	-26.73	43.50	34.44	11.82	1.54	31.03	---	---	Peak
3 @	289.2	17.23	-28.77	46.00	32.59	13.01	2.59	30.96	---	---	Peak



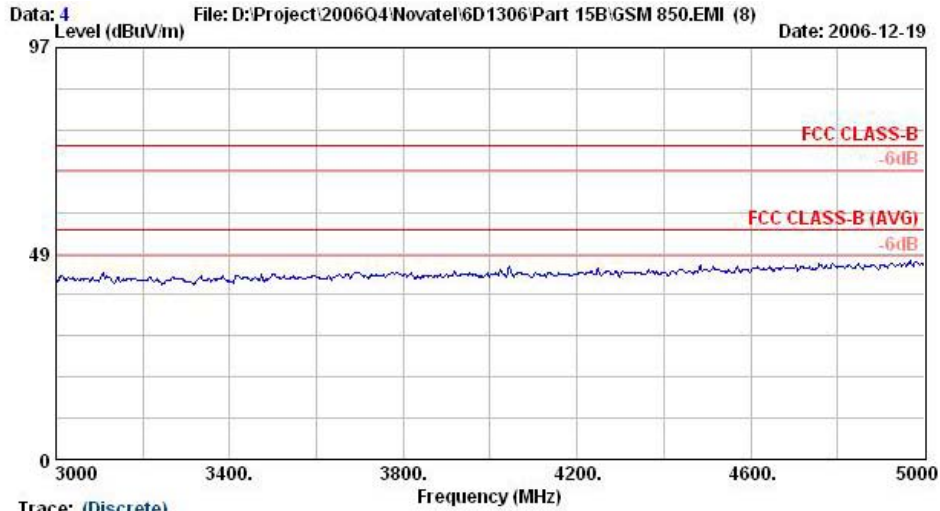
Trace: (Discrete)
 Site : 09CH06-HY
 Condition : LF-ANT(951121) HORIZONTAL
 EUT :
 Module :
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	880.3	36.03			41.28	20.39	4.75	30.39	---	---	Peak
2 @	931.4	27.54	-18.46	46.00	32.19	20.75	4.91	30.31	100	304	Peak
3 @	987.4	28.00	-26.00	54.00	32.03	21.15	5.10	30.27	---	---	Peak

Remark: #1 BS Signal

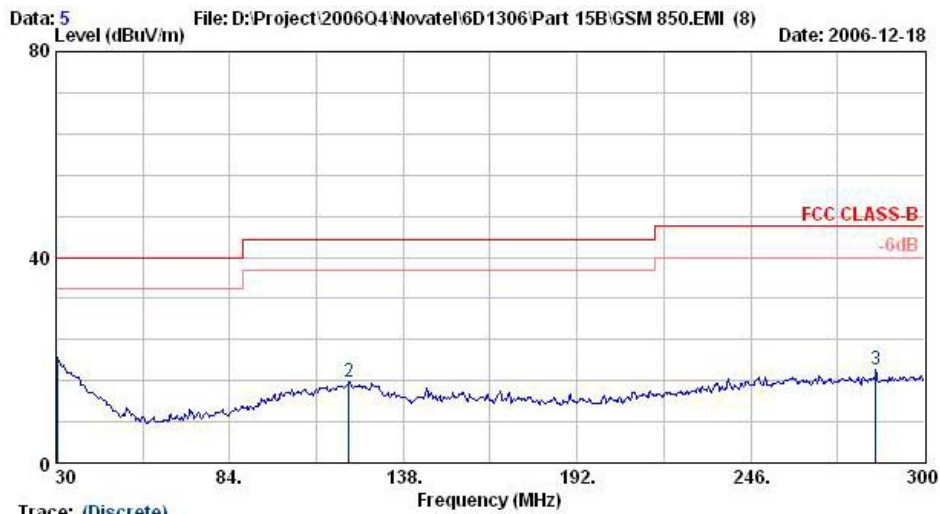


Trace: (Discrete)
 Site : 09CH06-HY
 Condition : HF-ANT-060410 HORIZONTAL
 EUT :
 Module :
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle



Trace: (Discrete)

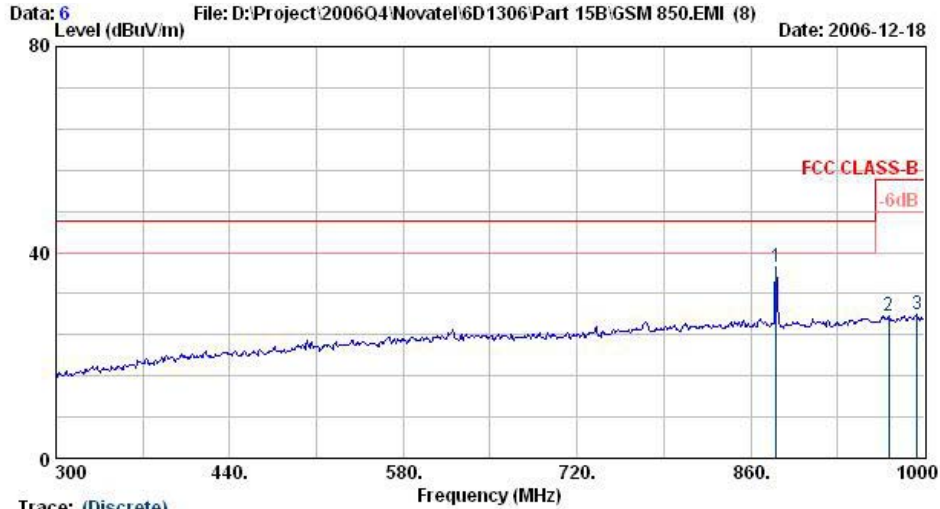
Site : 08CH06-HY
 Condition : HF-ANT-060410 HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle



Trace: (Discrete)

Site : 08CH06-HY
 Condition : LF-ANT951121) VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle

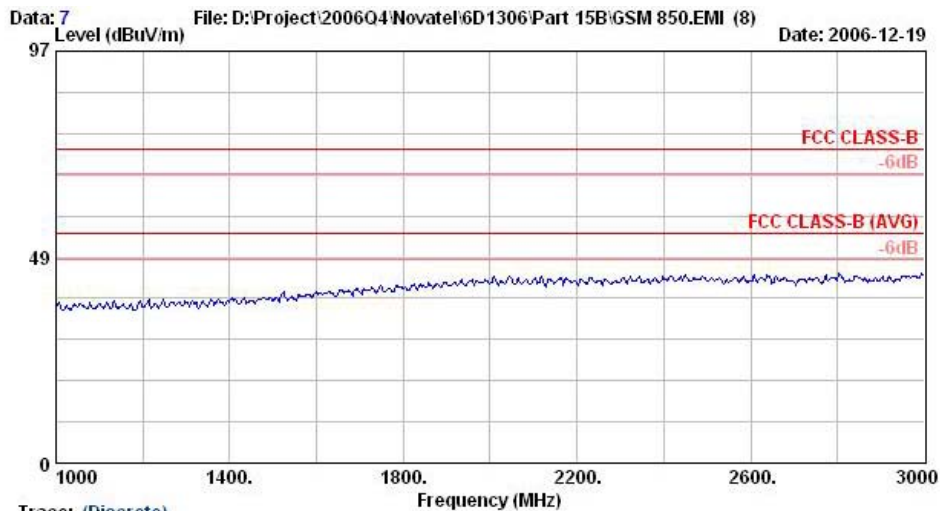
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	30.3	20.46	-19.54	40.00	31.42	19.66	0.84	31.46	100	88	Peak
2 @	121.0	15.77	-27.73	43.50	32.62	12.60	1.64	31.08	---	---	Peak
3 @	284.9	18.07	-27.93	46.00	33.52	12.93	2.58	30.97	---	---	Peak



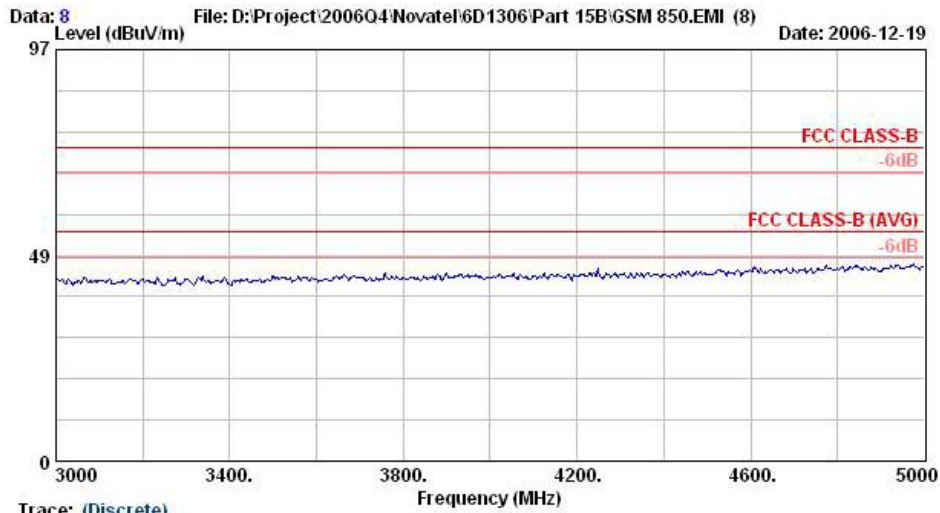
Trace: (Discrete)
 Site : 09CH06-HY
 Condition : LP-ANT(951121) VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	880.3	37.06			42.30	20.39	4.75	30.39	---	---	Peak
2 @	971.3	27.75	-26.25	54.00	31.96	21.03	5.04	30.28	---	---	Peak
3 @	994.4	27.82	-26.18	54.00	31.77	21.20	5.12	30.27	---	---	Peak

Remark: #1 BS Signal



Trace: (Discrete)
 Site : 09CH06-HY
 Condition : HF-ANT-060410 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle



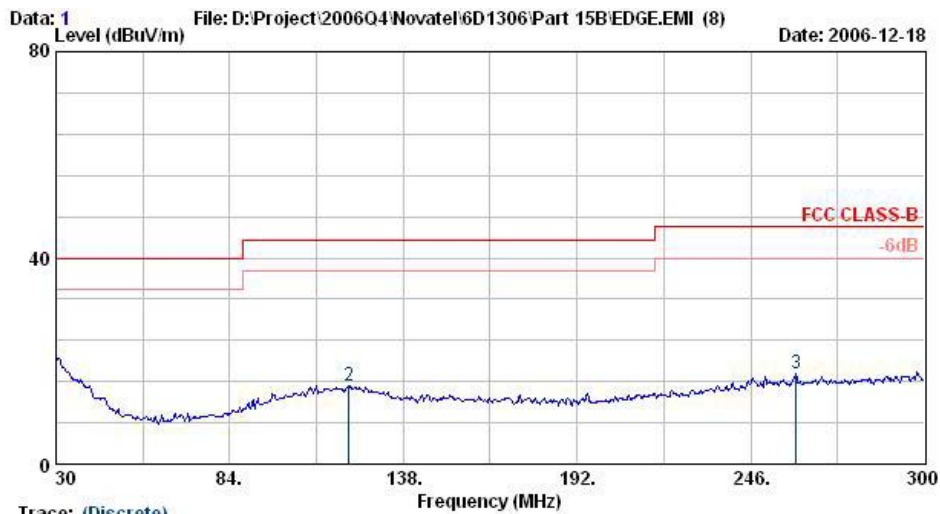
Trace: (Discrete)
 Site : OSCH06-HY
 Condition : HF-ANT-060410 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle

Remark: There's no more obvious spurious emission except the listings above.

5.4.2 Test Mode: Mode 2

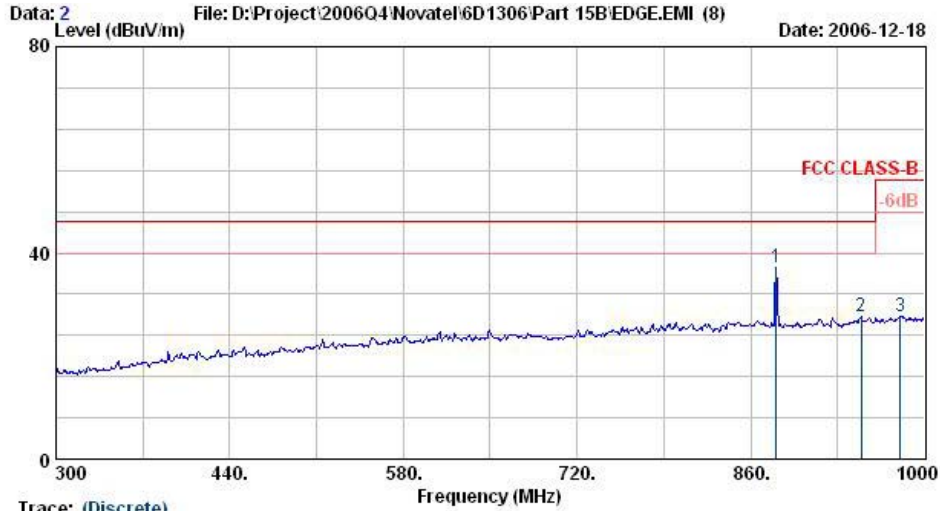
- Test Distance: 3m
- Temperature: 25°C
- Relative Humidity: 52%
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Test Engineer: Andrew
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

The test that passed at the minimum margin was marked by a frame in the following data



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LP-ANT(951121) HORIZONTAL
 EUT :
 Module :
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : EDGE Idle

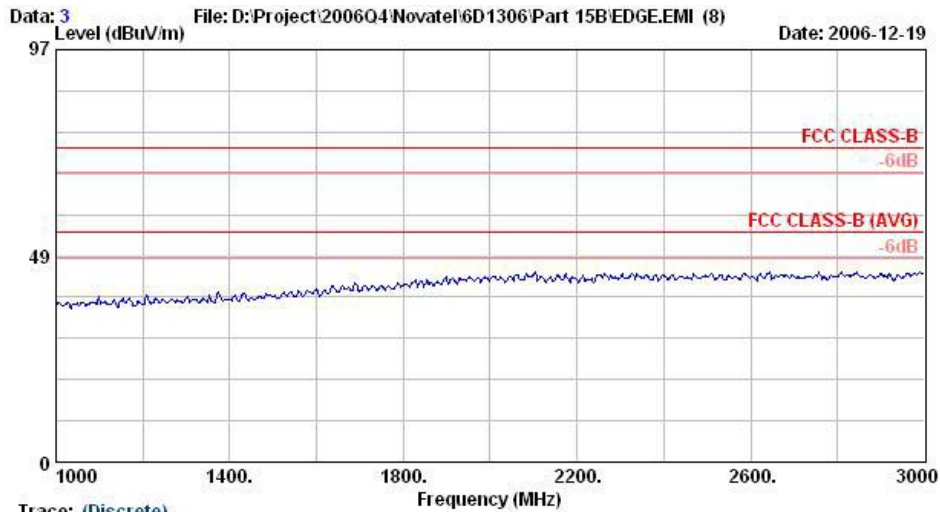
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	30.0	20.82	-19.18	40.00	31.78	19.66	0.84	31.46	---	---	Peak
2	121.0	15.21	-28.29	43.50	32.05	12.60	1.64	31.08	---	---	Peak
3	260.0	17.61	-28.39	46.00	33.62	12.45	2.48	30.95	---	---	Peak



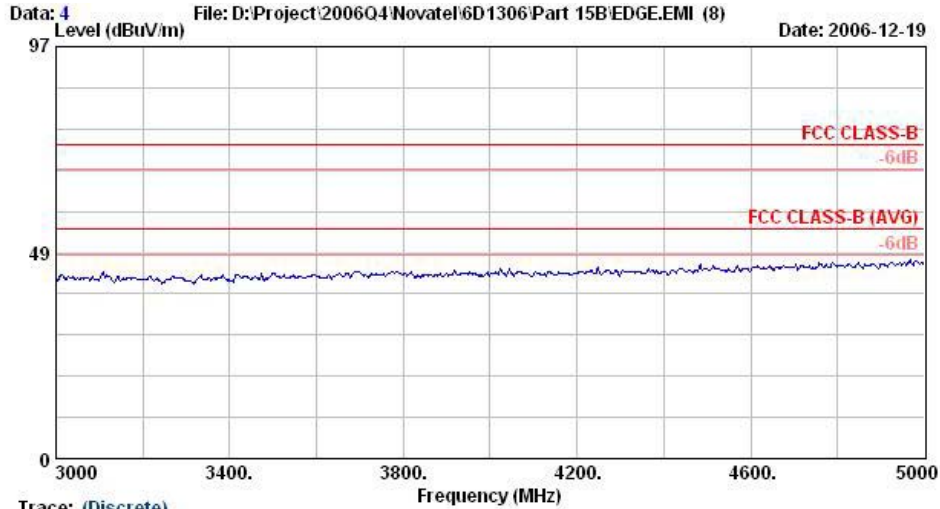
Trace: (Discrete)
 Site : 09CH06-HY
 Condition : LF-ANT(951121) HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : EDGE Idle

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	880.3	37.29			42.54	20.39	4.75	30.39	---	---	Peak
2 @	948.9	27.69	-18.31	46.00	32.14	20.87	4.96	30.28	100	299	Peak
3	980.4	27.70	-26.30	54.00	31.80	21.10	5.07	30.27	---	---	Peak

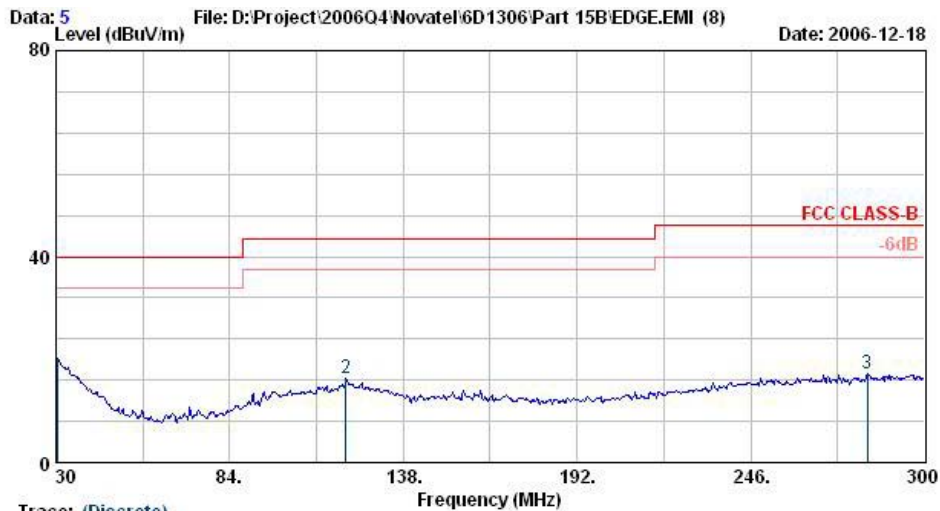
Remark: #1 BS Signal



Trace: (Discrete)
 Site : 09CH06-HY
 Condition : HF-ANT-060410 HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : EDGE Idle

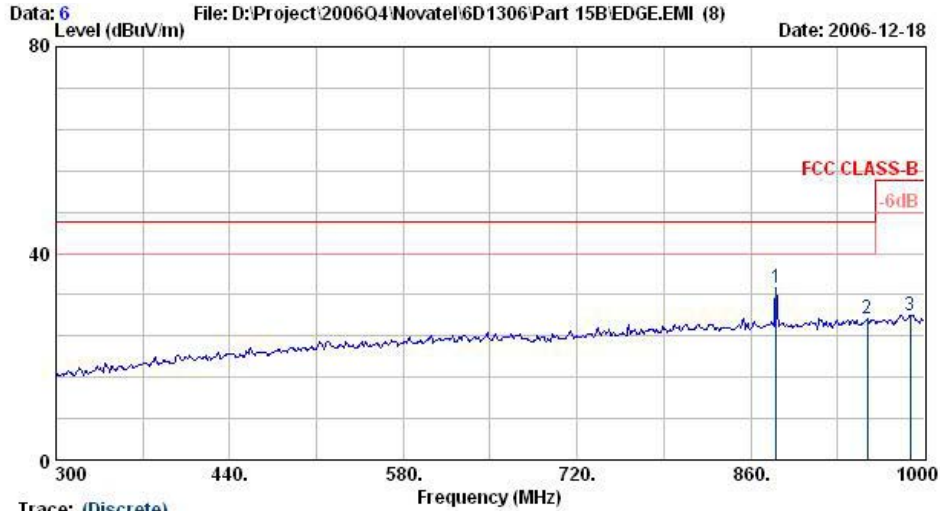


Trace: (Discrete)
 Site : 09CH06-HY
 Condition : HF-ANT-060410 HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : EDGE Idle



Trace: (Discrete)
 Site : 09CH06-HY
 Condition : LF-ANT(951121) VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : EDGE Idle

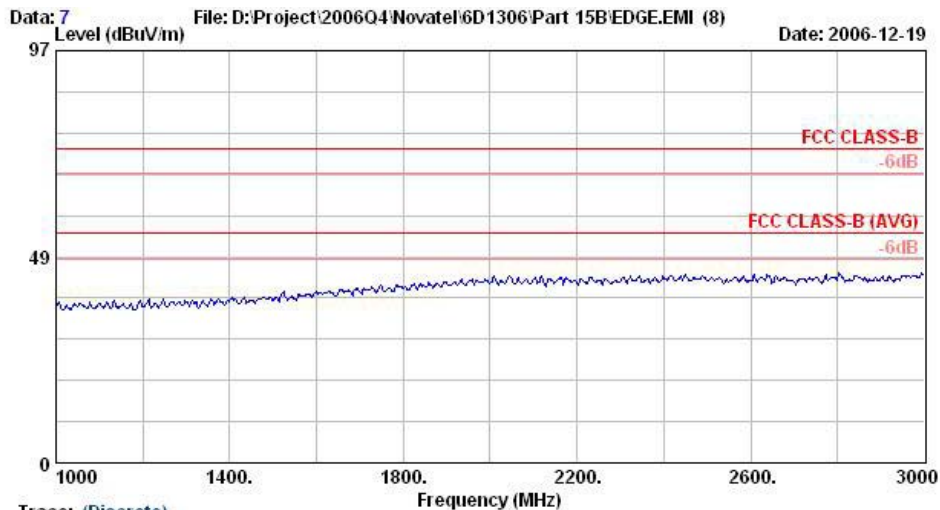
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.3	20.34	-19.66	40.00	31.30	19.66	0.84	31.46	---	---	Peak
2	120.2	16.48	-27.02	43.50	33.34	12.58	1.64	31.08	---	---	Peak
3	282.2	17.30	-28.70	46.00	32.82	12.88	2.57	30.97	---	---	Peak



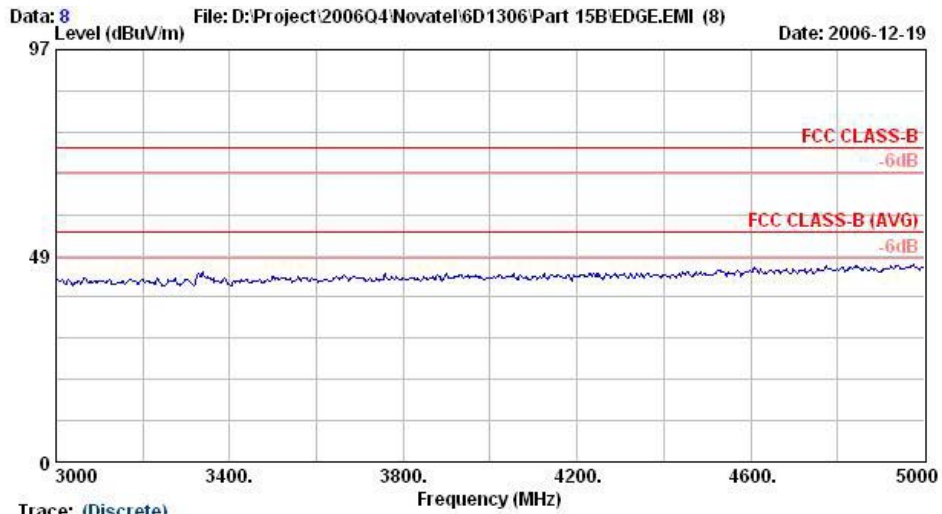
Trace: (Discrete)
 Site : 08CH06-HY
 Condition : LF-ANT951121 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : EDGE Idle

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	880.3	33.33			38.57	20.39	4.75	30.39	---	---	Peak
2 @	953.8	27.29	-18.71	46.00	31.68	20.91	4.97	30.28	100	145	Peak
3	988.8	28.04	-25.96	54.00	32.05	21.16	5.10	30.27	---	---	Peak

Remark: #1 BS Signal



Trace: (Discrete)
 Site : 08CH06-HY
 Condition : HF-ANT-060410 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : EDGE Idle



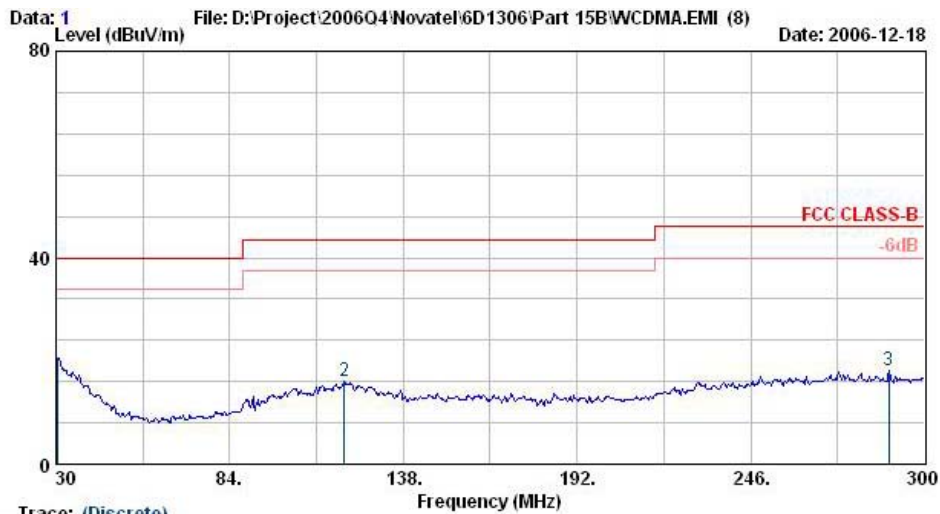
Trace: (Discrete)
 Site : OSCH06-HY
 Condition : HF-ANT-060410 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : EDGE Idle

Remark: There's no more obvious spurious emission except the listings above.

5.4.3 Test Mode: Mode 3

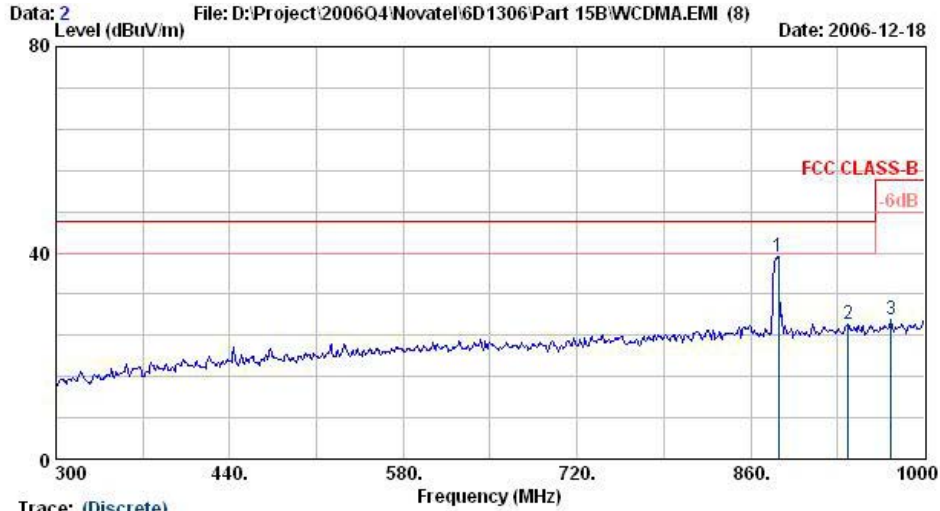
- Test Distance: 3m
- Temperature: 25°C
- Relative Humidity: 52%
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Test Engineer: Andrew
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

The test that passed at the minimum margin was marked by a frame in the following data



Trace: (Discrete)
 Site : 08CH06-HY
 Condition : LP-ANT951121) HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : WCDMA Idle

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.3	20.63	-19.37	40.00	31.59	19.66	0.84	31.46	100	345	Peak
2	119.6	16.16	-27.34	43.50	33.10	12.50	1.63	31.08	---	---	Peak
3	288.9	18.24	-27.76	46.00	33.60	13.01	2.59	30.96	---	---	Peak

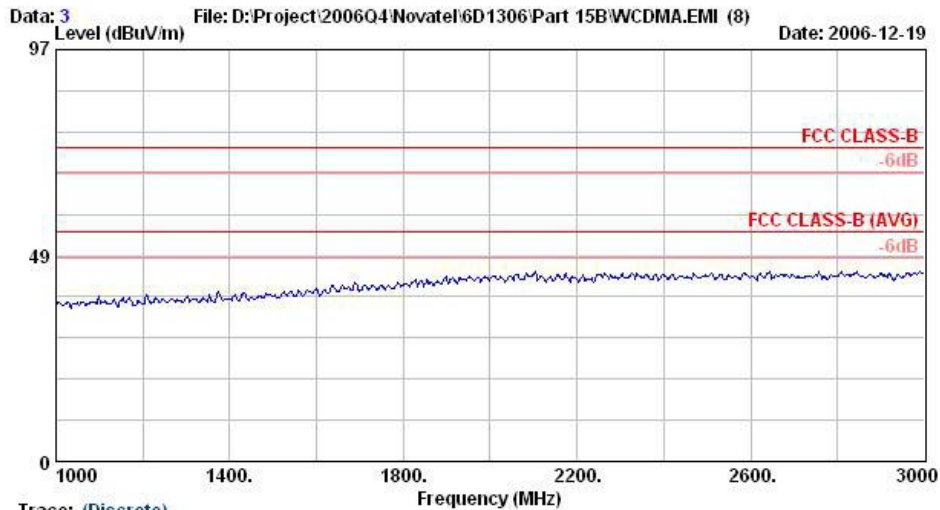


Trace: (Discrete)

Site : 09CH06-HY
 Condition : LF-ANT(951121) HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : WCDMA Idle

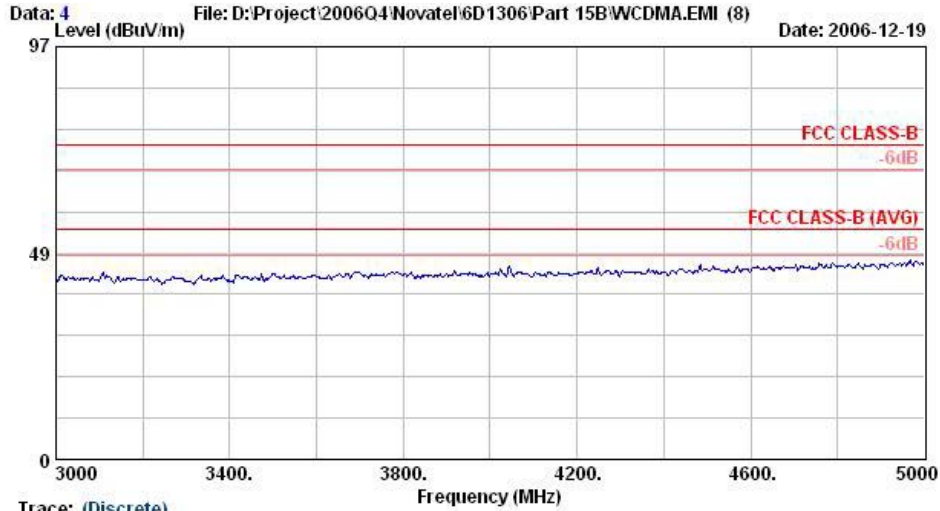
	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	882.4	39.23			44.45	20.41	4.76	30.39	---	---	Peak
2	938.4	26.06	-19.94	46.00	30.64	20.80	4.93	30.30	---	---	Peak
3	973.4	27.05	-26.95	54.00	31.22	21.05	5.05	30.28	---	---	Peak

Remark: #1 BS Signal

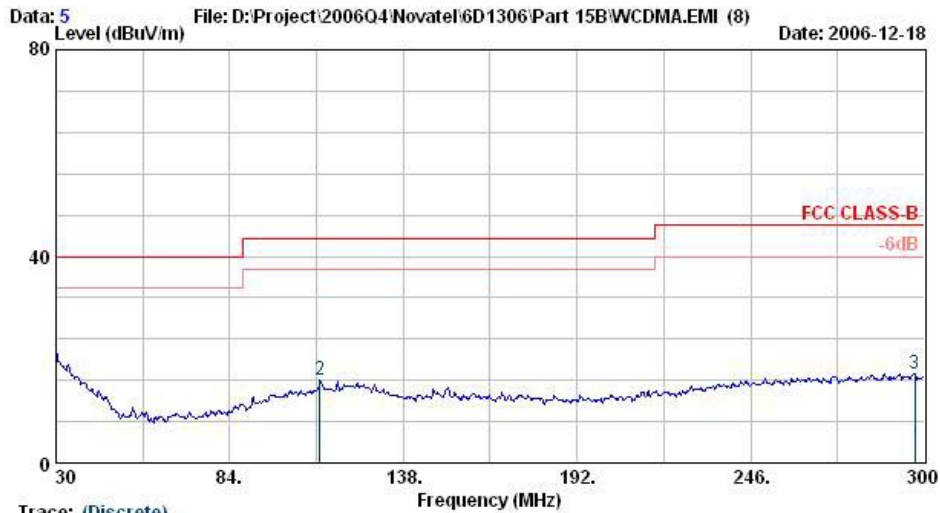


Trace: (Discrete)

Site : 09CH06-HY
 Condition : HF-ANT-060410 HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : WCDMA Idle

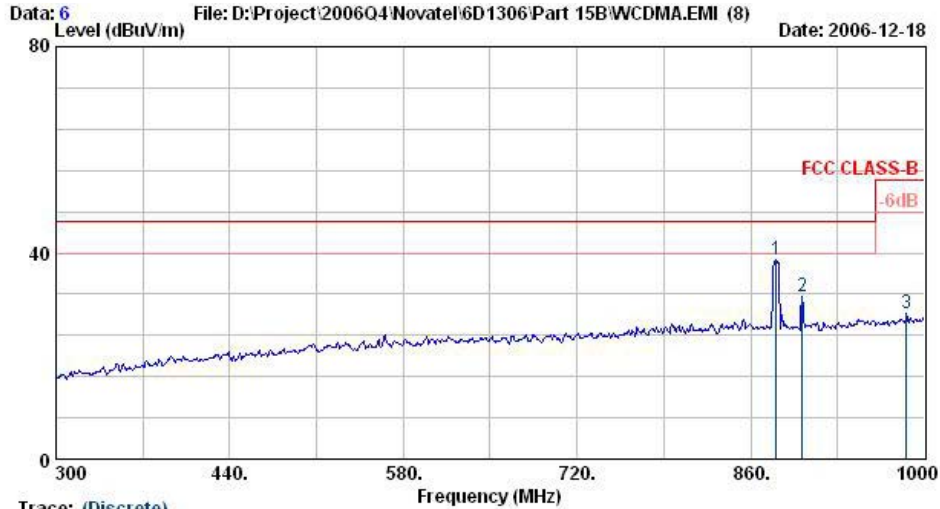


Trace: (Discrete)
 Site : 09CH06-HY
 Condition : HF-ANT-060410 HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : WCDMA Idle



Trace: (Discrete)
 Site : 09CH06-HY
 Condition : LF-ANT(951121) VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : WCDMA Idle

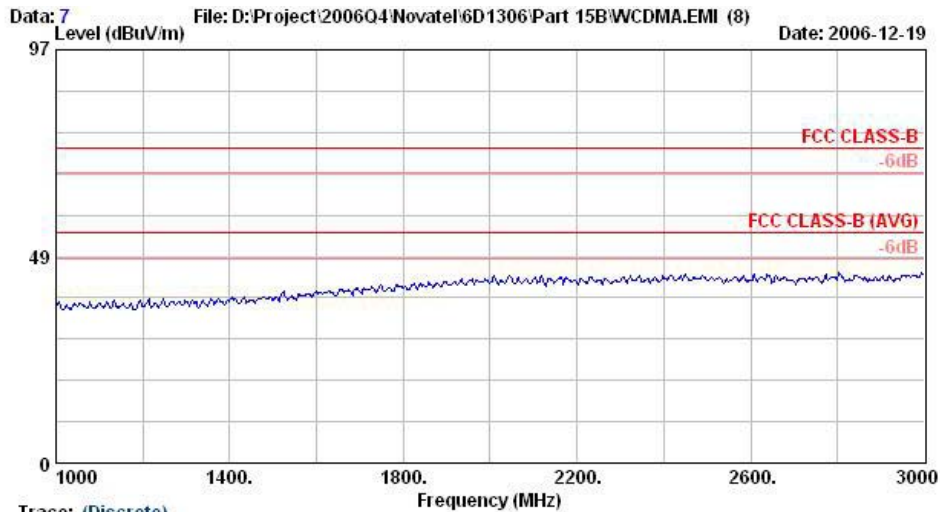
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	30.0	21.95	-18.05	40.00	32.91	19.66	0.84	31.46	---	---	Peak
2	112.1	15.98	-27.52	43.50	33.48	11.97	1.56	31.04	---	---	Peak
3	297.0	17.24	-28.76	46.00	32.41	13.15	2.62	30.94	---	---	Peak



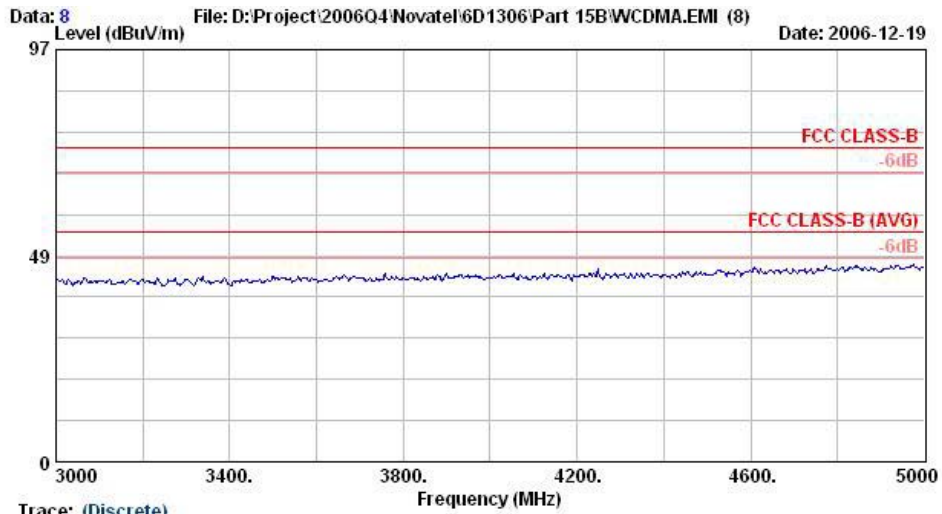
Trace: (Discrete)
 Site : 08CH06-HY
 Condition : LF-ANT951121 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : WCDMA Idle

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	880.3	38.65			43.90	20.39	4.75	30.39	---	---	Peak
2 @	901.3	31.42	-14.58	46.00	36.43	20.54	4.82	30.37	100	207	Peak
3	985.3	28.16	-25.84	54.00	32.21	21.14	5.09	30.27	---	---	Peak

Remark: #1 BS Signal



Trace: (Discrete)
 Site : 08CH06-HY
 Condition : HF-ANT-060410 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle



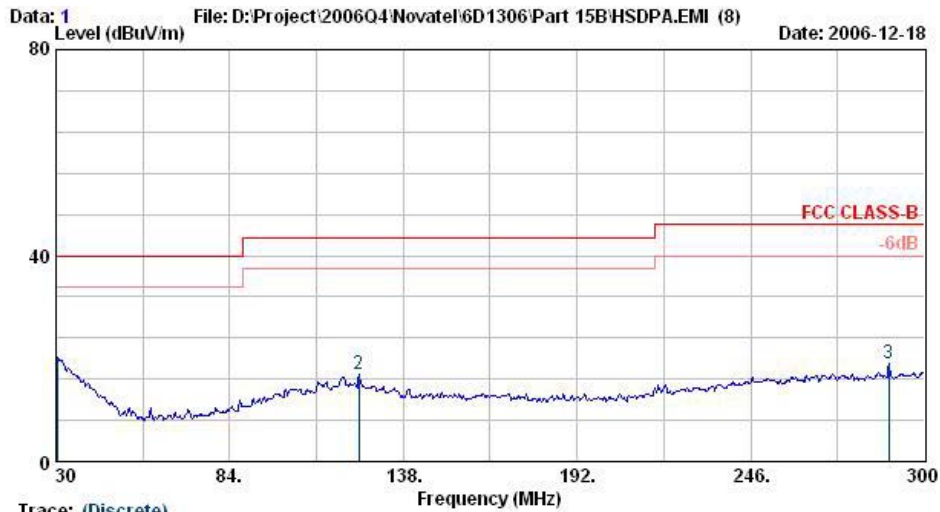
Trace: (Discrete)
 Site : 09CH06-HY
 Condition : HF-ANT-060410 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : GSM 850 Idle

Remark: There's no more obvious spurious emission except the listings above.

5.4.4 Test Mode: Mode 4

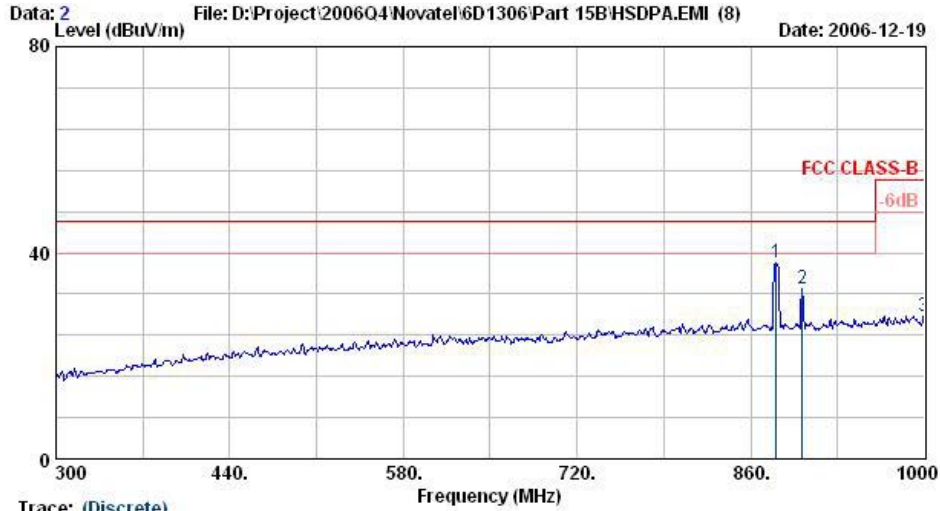
- Test Distance: 3m
- Temperature: 25°C
- Relative Humidity: 52%
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Test Engineer: Andrew
- Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

The test that passed at the minimum margin was marked by a frame in the following data



Trace: (Discrete)
 Site : 08CH06-HY
 Condition : LF-ANT951121) HORIZONTAL
 EUT :
 Module :
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : HSDPA Idle

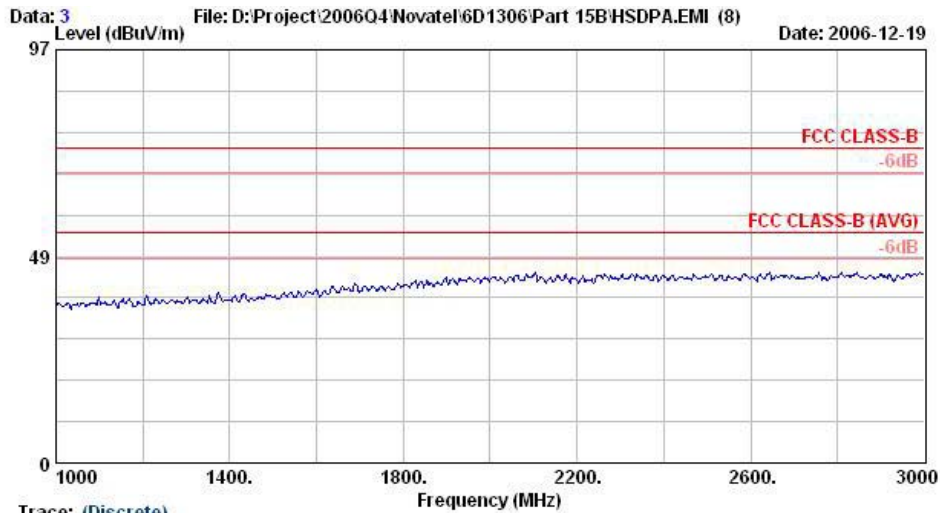
	Freq	Level	Over Limit	Limit Line	Read Antenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.3	20.36	-19.64	40.00	31.32	19.66	0.84	31.46	---	---	Peak
2	124.2	17.05	-26.45	43.50	33.85	12.64	1.64	31.08	---	---	Peak
3	288.9	19.10	-26.90	46.00	34.46	13.01	2.59	30.96	---	---	Peak



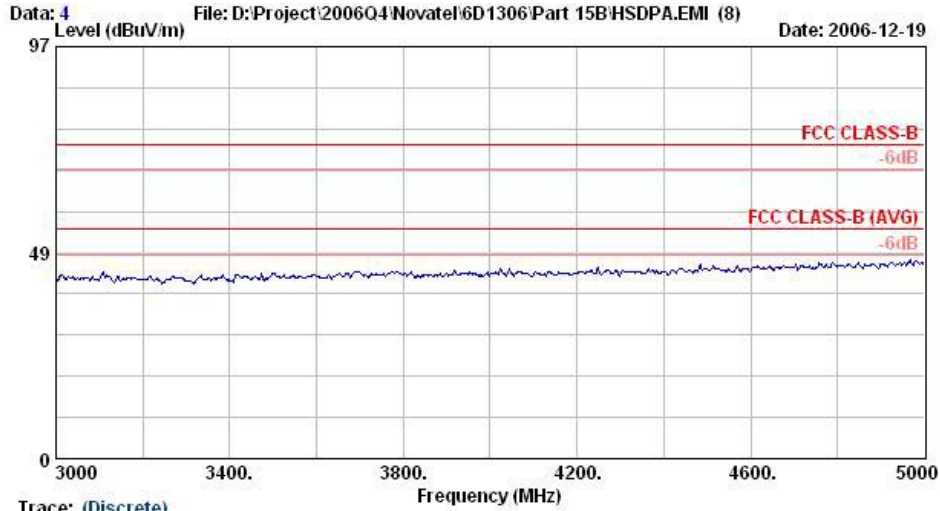
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-ANT(951121) HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : HSDPA Idle

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	880.3	38.06			43.31	20.39	4.75	30.39	---	---	Peak
2	901.3	33.05	-12.95	46.00	38.06	20.54	4.82	30.37	100	320	Peak
3	1000.0	27.79	-26.21	54.00	31.68	21.24	5.14	30.27	---	---	Peak

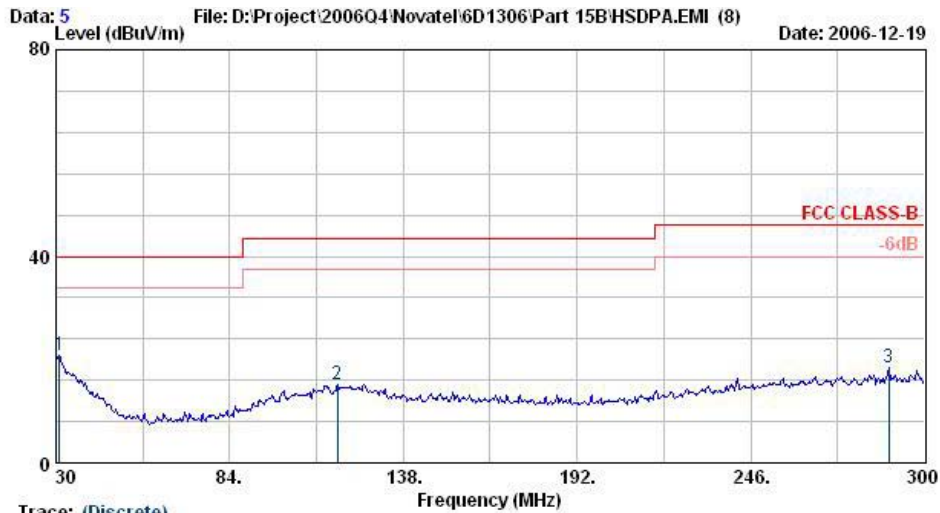
Remark: #1 BS Signal



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : HF-ANT-060410 HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : HSDPA Idle

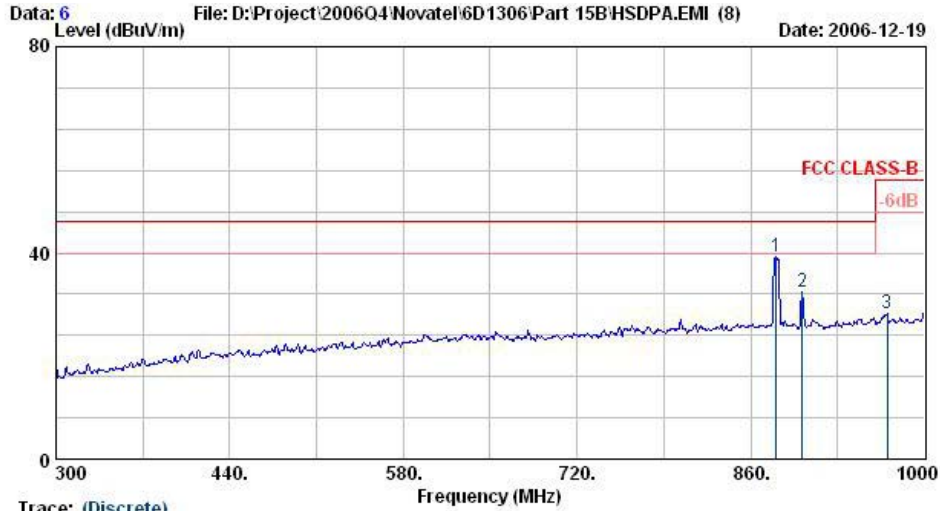


Trace: (Discrete)
 Site : 09CH06-HY
 Condition : HF-ANT(060410) HORIZONTAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : HSDPA Idle



Trace: (Discrete)
 Site : 09CH06-HY
 Condition : LP-ANT(951121) VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : HSDPA Idle

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBUV/m	dB	dBUV/m	dBUV	dB/m	dB	dB	cm	deg	
1	31.1	20.88	-19.12	40.00	32.51	18.95	0.85	31.43	---	---	Peak
2	117.5	15.31	-28.19	43.50	32.42	12.35	1.61	31.07	---	---	Peak
3	288.9	18.43	-27.57	46.00	33.79	13.01	2.59	30.96	---	---	Peak

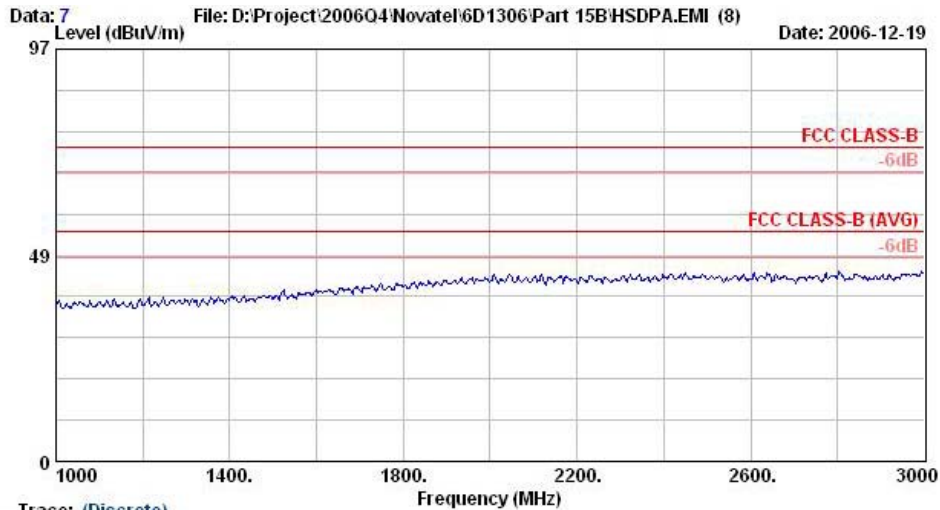


Trace: (Discrete)

Site : 09CH06-HY
 Condition : LF-ANT951121 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Wdc)
 Model : FD 6D1306
 Mode : HSDPA Idle

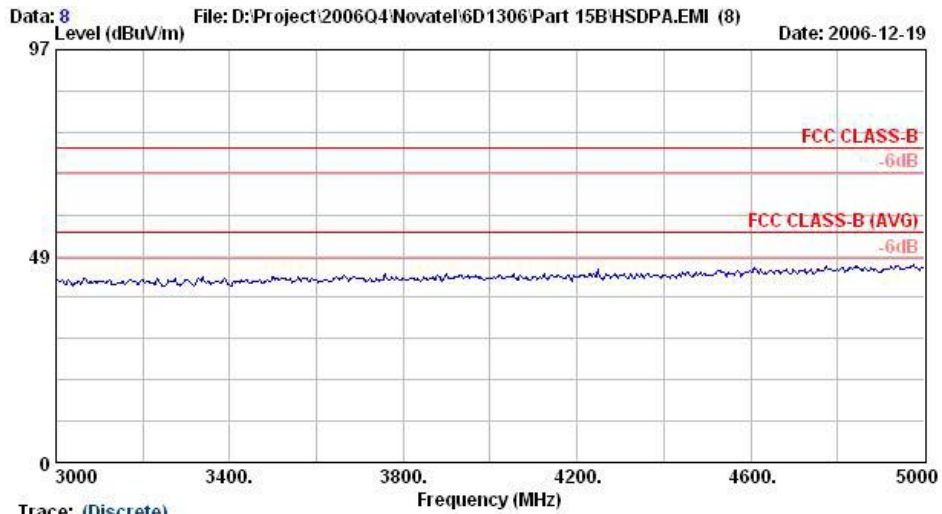
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	880.3	39.14			44.39	20.39	4.75	30.39	---	---	Peak
2	901.3	32.27	-13.73	46.00	37.28	20.54	4.82	30.37	100	324	Peak
3	969.9	28.25	-25.75	54.00	32.46	21.03	5.03	30.28	---	---	Peak

Remark: #1 BS Signal



Trace: (Discrete)

Site : 09CH06-HY
 Condition : HF-ANT-060410 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Wdc)
 Model : FD 6D1306
 Mode : HSDPA Idle



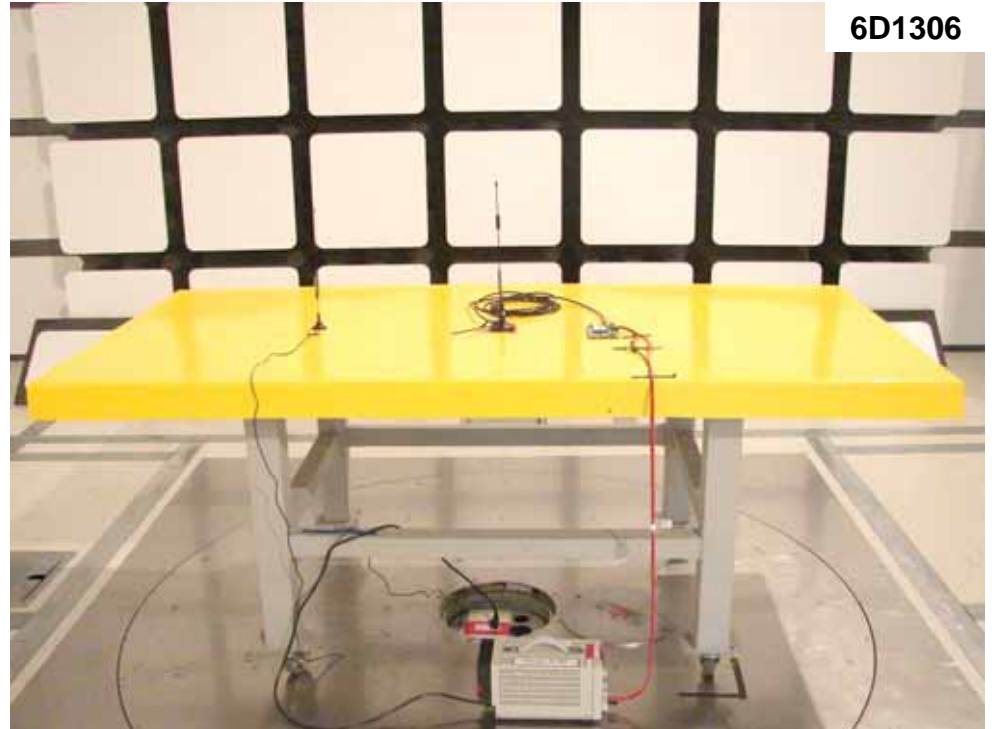
Trace: (Discrete)
 Site : 08CH06-HY
 Condition : HF-ANT-060410 VERTICAL
 EUT : Module
 Power : Dummy Battery (3.3Vdc)
 Model : FD 6D1306
 Mode : HSDPA Idle

Remark: There's no more obvious spurious emission except the listings above.

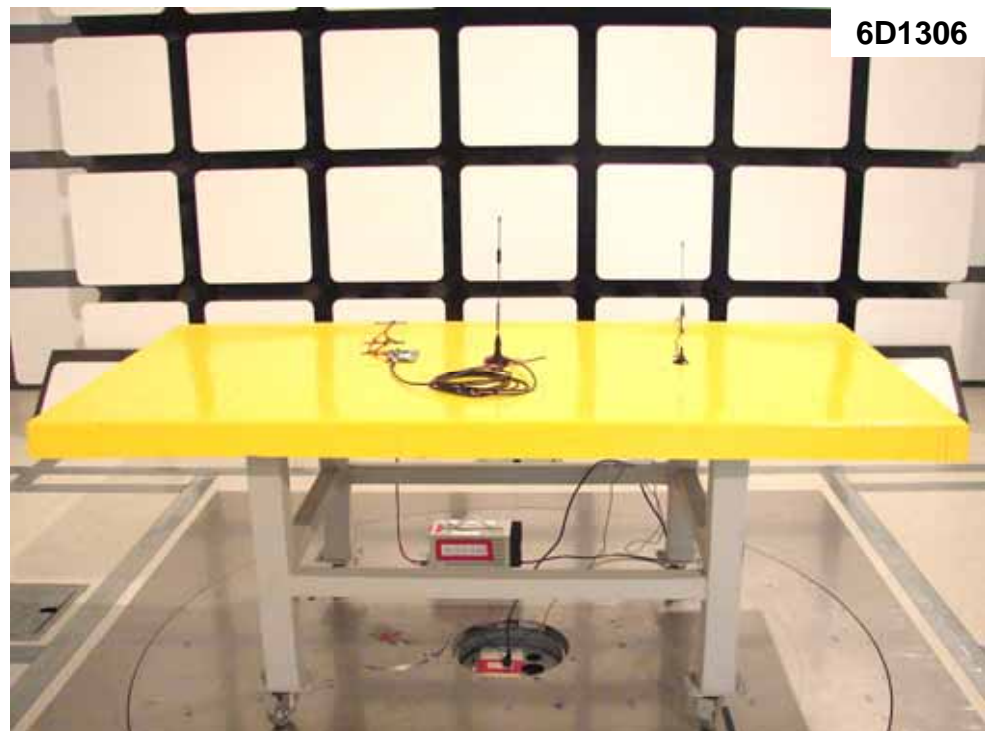
5.5 Photographs of Radiated Emission Test Configuration

Mode 1

FRONT VIEW



REAR VIEW



6. List of Measuring Equipment Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Jul. 25, 2006	Jul. 24, 2007	Radiation (03CH06-HY)
Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jun. 28, 2006	Jun. 27, 2007	Radiation (03CH06-HY)
Controller	CT	SC100	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Horn Antenna	Com-Power	AH118	071025	1G-18G	Feb. 1, 2005	Feb. 1, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Jul. 21, 2006	Jul. 20, 2007	Radiation (03CH06-HY)
Amplifier	MITEQ	AMF-6F	997165	26G - 40G	Jul. 21, 2006	Jul. 20, 2007	Radiation (03CH06-HY)
Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)

7. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
combined standard uncertainty Uc(y)	1.13		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.26		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch	+0.39/-0.41	U-shaped	0.28
combined standard uncertainty Uc(y)	1.27		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.54		

Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncertainty of x_i		$u(x_i)$	C_i	$C_i * u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20 \log(1 - \Gamma_1 * \Gamma_2 * \Gamma_3)$	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty $U_c(y)$	2.36				
Measuring uncertainty for a level of confidence of 95% $U = 2U_c(y)$	4.72				

8. Certificate of NVLAP Accreditation

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:1999

NVLAP LAB CODE: 200079-0

Sporton International, Inc. Hwa Ya EMC Laboratory

Tao Yuan Hsien 333

TAIWAN

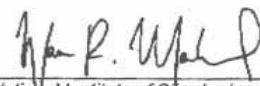
is recognized by the National Voluntary Laboratory Accreditation Program for conformance with criteria set forth in NIST Handbook 150:2001 and all requirements of ISO/IEC 17025:1999.

Accreditation is granted for specific services, listed on the Scope of Accreditation, for:

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

2006-01-01 through 2006-12-31

Effective dates



For the National Institute of Standards and Technology

SPORTON International Inc.

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FCC ID : NBZNRM-EU870D

IC ID : 3229A-EU870D

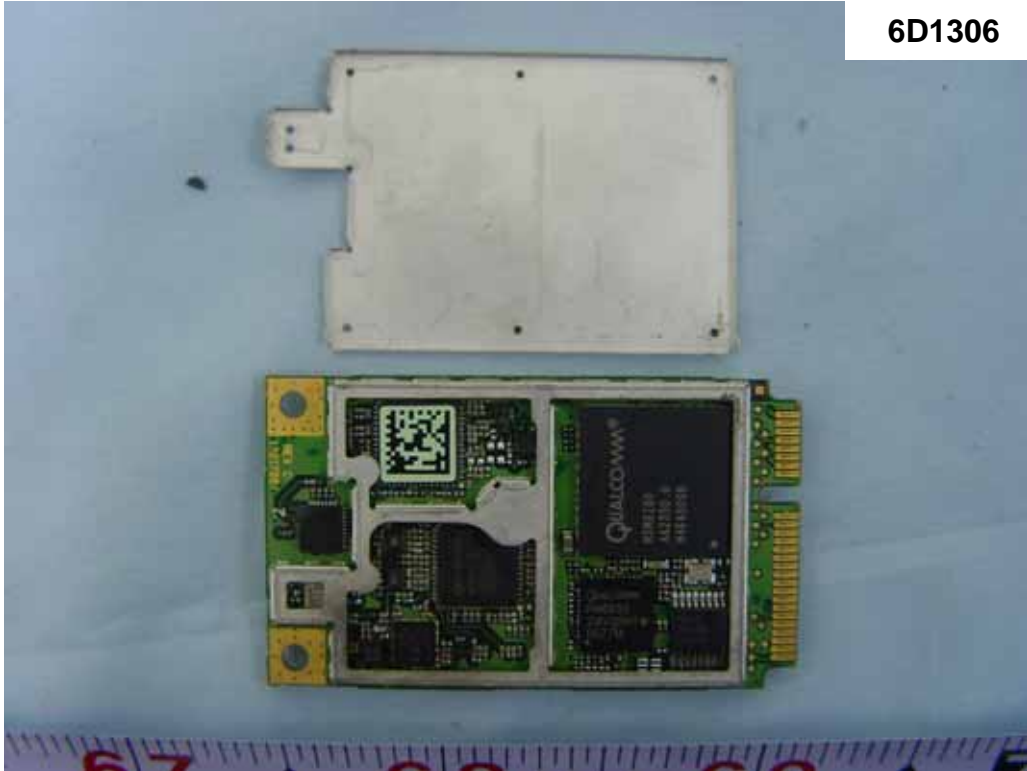
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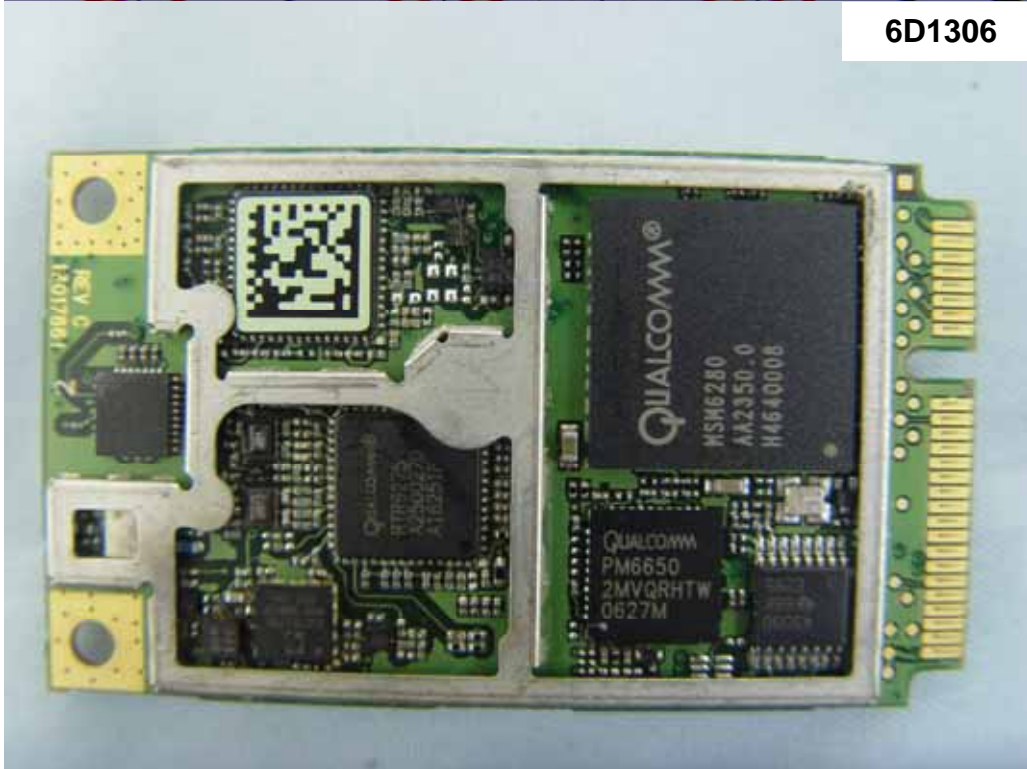
Report Version : Rev. 02

APPENDIX A. Photographs of EUT





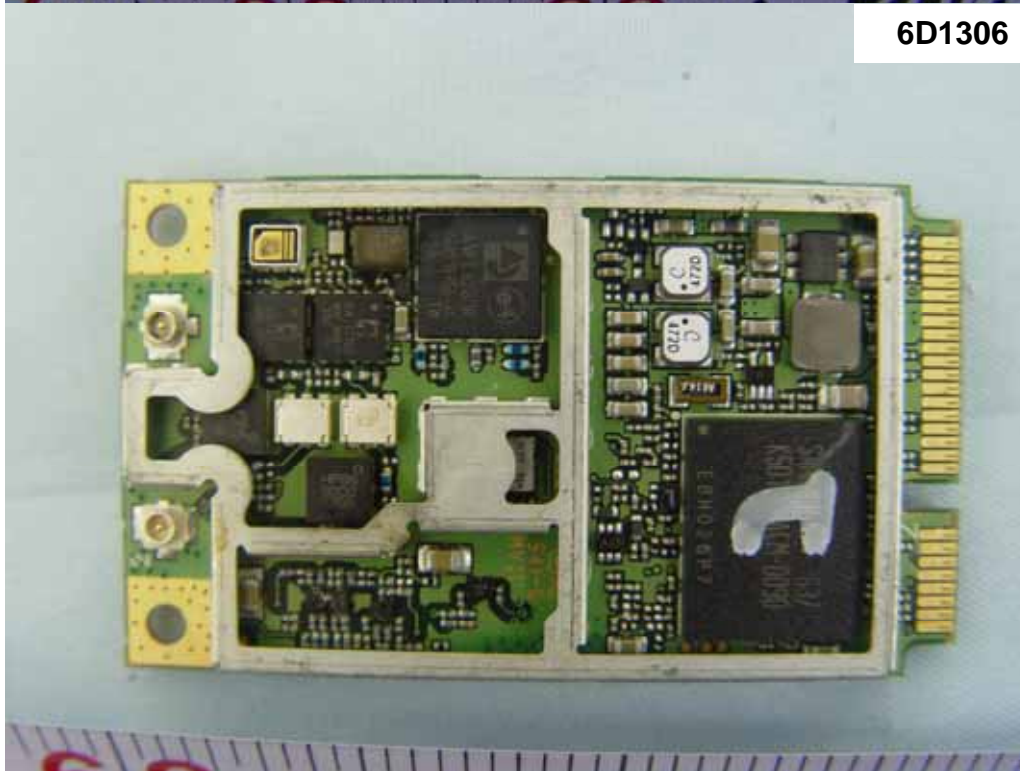
6D1306



6D1306



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6D1306