

DIGITAL EMC CO., LTD.

683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080 Tel: +82-31-321-2664 Fax: +82-31-321-1664 http://www.digitalemc.com

CERTIFICATION OF COMPLIANCE

Cresyn Co., Ltd.

8-22, Jamwon-Dong, Seocho-Gu, Seoul, Korea

Dates of Tests: July 22 ~ 30, 2008 Test Report S/N: DR50110808C Test Site: DIGITAL EMC CO., LTD.

FCC ID

APPLICANT

V2R-C400B

Cresyn Co., Ltd.

FCC Equipment Class : Part 15 Spread Spectrum Transmitter(DSS)

Device name : Bluetooth Mono Headset

Manufacturer : Cresyn Co., Ltd.

FCC ID : V2R-C400B

Model name : C400B

Test Device Serial number : Identical prototype

FCC Rule Part(s) : FCC Part 15.247 Subpart C

ANSI C63.4-2003

Frequency Range : 2402 ~ 2480 MHz

Max. Output power : 6.82 dBm Conducted

Data of issue : August 04, 2008

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.



NVLAP LAB CODE 200559-0

TABLE OF CONTENTS

1. GENERAL INFORMATION	3
2. INFORMATION ABOUT TEST ITEM	4
3. TEST REPORT	5
3.1 SUMMARY OF TESTS	5
3.2 TRANSMITTER REQUIREMENTS	6
3.2.1 CARRIER FREQUENCY SEPARATION	6
3.2.2 NUMBER OF HOPPING FREQUENCIES	8
3.2.3 20 dB BANDWIDTH	11
3.2.4 TIME OF OCCUPANCY (Dwell Time)	14
3.2.5 PEAK OUTPUT POWER	17
3.2.6 CONDUCTED SPURIOUS EMISSIONS	20
3.2.7 RADIATED EMISSIONS	27
3.2.8 AC LINE CONDUCTED EMISSIONS	33
APPENDIX TEST EQUIPMENT FOR TESTS	36

1. General information

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

Address: 683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080 http://www.digitalemc.com E-mail: Harveysung@digitalemc.com

Tel: +82-31-321-2664 Fax: +82-31-321-1664

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

This laboratory is accredited by NVLAP for NVLAP Lab. Code: 200559-0.

Test operator: engineer

August 4, 2008 D.C.Cha

Data Name Signature

Report Reviewed By: manager

August 4, 2008 Harvey Sung

Data Name Signature

Ordering party:

Company name : Cresyn Co., Ltd.

Address : 8-22, Jamwon-Dong, Seocho-Gu

City/town : Seoul Country : Korea

Date of order : July 22, 2008

2. Information about test item

V2R-C400B

2.1 Equipment information

Equipment model no.	C400B
Equipment serial no.	Identical prototype
Type of equipment	Bluetooth Mono Headset
Frequency band	2402 ~ 2480 MHz
Type of Modulation	GFSK
Spread Spectrum	Frequency Hopping
Channel Spacing	1.0 MHz
Type of antenna	Chip Antenna

⁻ This device does not have EDR function.

2.2 Tested frequency

Frequency	TX	RX
Low frequency	2402MHz	2402MHz
Middle frequency	2441MHz	2441MHz
High frequency	2480MHz	2480MHz

2.3 Tested environment

Temperature	:	15 ~ 35 (°C)
Relative humidity content	:	20 ~ 75 %
Air pressure	:	86 ~ 103 kPa
Details of power supply	:	3.7 V DC

2.4 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
Adapter	SW06-05001200EU	N/A	TOP-ASIA ELECTRONICS GROUP

2.5 EMI Suppression Device(s)/Modifications

EMI suppression device(s) added and/or modifications made during testing

-> None

3. Test Report

3.1 Summary of tests

15.247(a) Number of 20 dB Ba	Parameter requency Separation of Hopping Frequencies	(Using in 2400 ~ 2483.5MHz) >= 20dB BW or >= Two- Thirds of the 20dB BW >= 15 hops	Condition	(note 1)
Carrier F 15.247(a) Number of 20 dB Ba	of Hopping Frequencies	Thirds of the 20dB BW		С
15.247(a) Number of 20 dB Ba	of Hopping Frequencies	Thirds of the 20dB BW		С
15.247(a) Number of 20 dB Ba	of Hopping Frequencies			
20 dB Ba		>= 15 hops		1
	undwidth			С
Dwell Ti	ina w ia in	None		С
	Dwell Time =< 0.4 seconds		G 1 . 1	С
15 247(h) Turani'i	4O. 44 P	=< 1Watt , if CHs >= 75	Conducted	С
15.247(b) Transmit	ter Output Power	Others =<0.125W		
Band-edg	ge /Conducted	The radiated emission to any 100 kHz of outband shall be		С
15.247(c) Conducte	ed Spurious Emissions	at least 20dB below the highest inband spectral density.		С
15.205	Emissions	FCC 15.209 Limits	Radiated	C
15.209 Radiated	Eliissions	Tee 13.207 Emilies	Radiated	
15.207 AC Cond	lucted Emissions	EN 55022	AC Line	C
13.201 AC COIR	deted Emissions	1.11 33022	Conducted	

The sample was tested according to the following specification:

FCC Parts 15.247; ANSI C-63.4-2003, DA00-705

3.2 Transmitter requirements

3.2.1 Carrier Frequency Separation

Procedure:

The carrier frequency separation was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function enabled.

After the trace being stable, the reading value between the peaks of the adjacent channels using the marker-delta function was recorded as the measurement results.

The spectrum analyzer is set to:

Span = 3 MHz (wide enough to capture the peaks of two adjacent channels)

RBW = 30 kHz Sweep = auto

VBW = 30 kHz Detector function = peak

Trace = max hold

Measurement Data:

Frequency of marker #1	Frequency of marker #2	Test R	Results
(MHz)	(MHz)	Carrier Frequency Separation (MHz)	Result
2440.980	2441.995	1.015	Comply

⁻ See next pages for actual measured spectrum plots.

Minimum Standard:

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

Measurement Setup

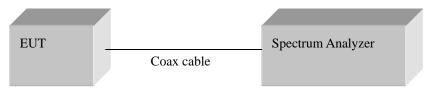
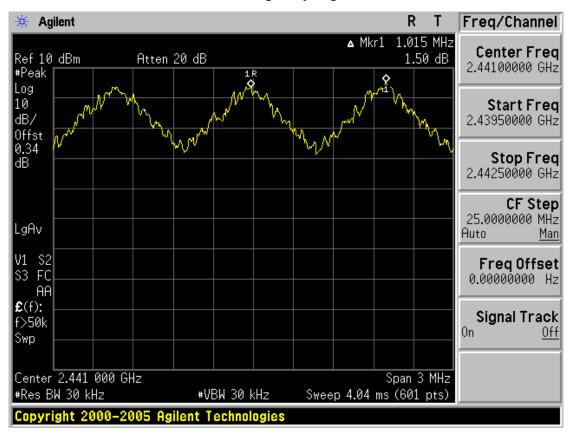


Figure 1: Measurement setup for the carrier frequency separation

Carrier Frequency Separation



3.2.2 Number of Hopping Frequencies

Procedure:

The number of hopping frequencies was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function enabled.

To get higher resolution, four frequency ranges within the 2400 ~ 2483.5 MHz FH band were examined.

The spectrum analyzer is set to:

Frequency range 1: Start = 2389.5MHz, Stop = 2414.5 MHz 2: Start = 2414.5MHz, Stop = 2439.5 MHz 3: Start = 2439.5MHz, Stop = 2464.5 MHz

4: Start = 2464.5MHz, Stop = 2489.5 MHz

RBW = 300 kHz (1% of the span or more) Sweep = auto VBW = 300 kHz (VBW $\geq RBW$) Detector function = peak

Trace = $\max \text{ hold}$ Span = 25MHz

Measurement Data: Comply

Total number of Hopping Channels	79
----------------------------------	----

- See next pages for actual measured spectrum plots.

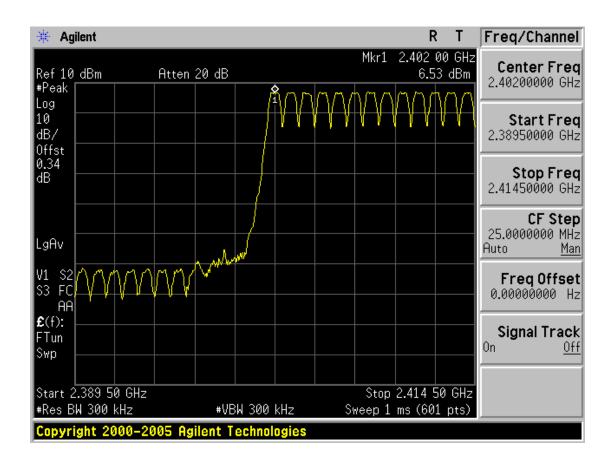
Minimum Standard:

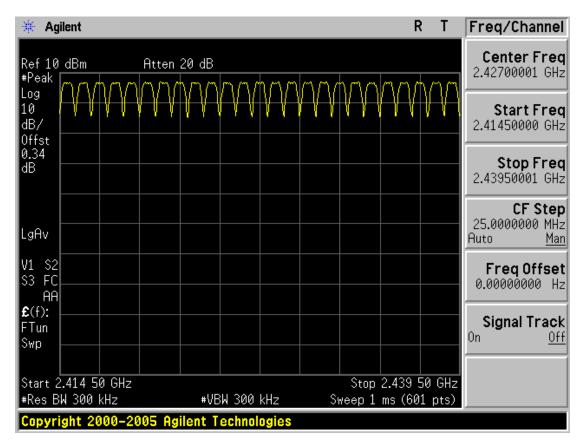
At least 15 hopes

Measurement Setup

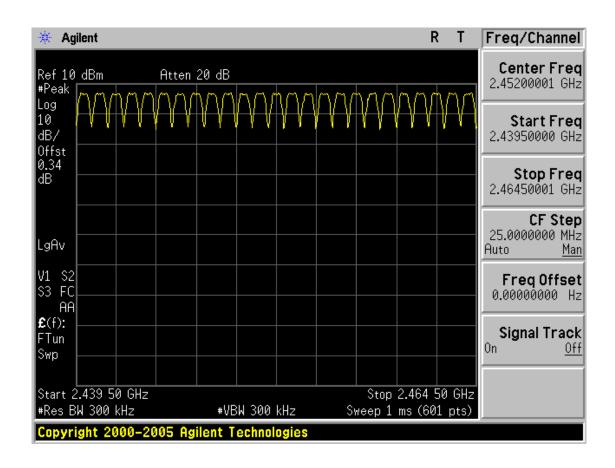
Same as the Chapter 3.2.1 (Figure 1)

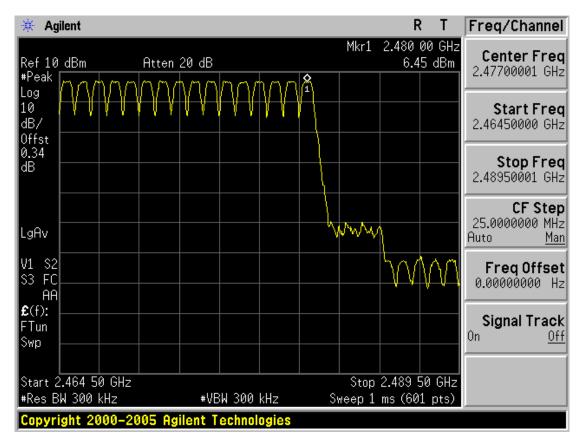
Number of Hopping Frequencies





Number of Hopping Frequencies





3.2.3 20 dB Bandwidth

Procedure:

The bandwidth at 20 dB below the highest inband spectral density was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels...

After the trace being stable, Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 20dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 20 dB bandwidth of the emission.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

Span = 5 MHz (approximately 2 or 3 times of the 20 dB bandwidth)

RBW = 10 kHz (1% of the 20dB bandwidth or more) Sweep = auto

 $VBW = 30 \text{ kHz} (VBW \ge RBW)$ Detector function = peak

Trace = max hold

Measurement Data:

Frequency		Test 1	Results
(MHz)	Channel No.	Measured Bandwidth (MHz)	Result
2402	1	0.950	Comply
2441	40	0.958	Comply
2480	79	0.950	Comply

⁻ See next pages for actual measured spectrum plots.

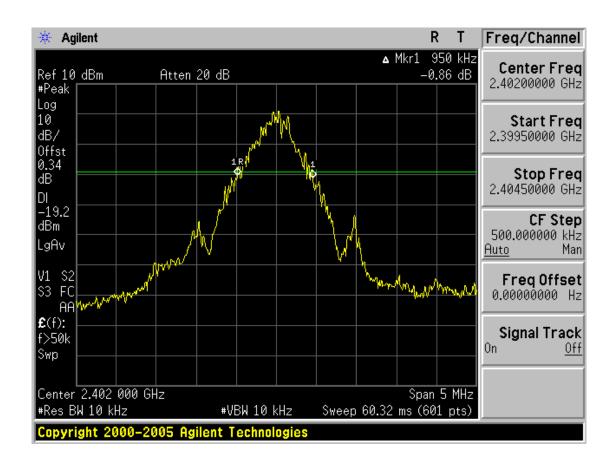
Minimum Standard:

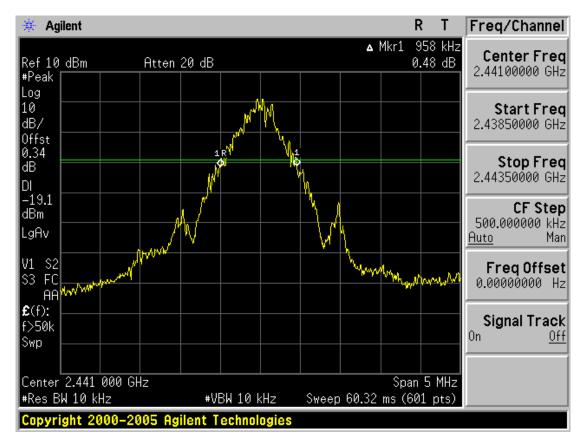
None

Measurement Setup

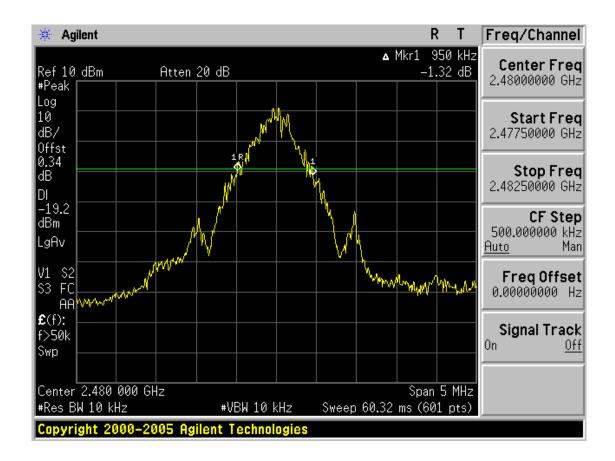
Same as the Chapter 3.2.1 (Figure 1)

20 dB Bandwidth





20 dB Bandwidth



3.2.4 Time of Occupancy (Dwell Time)

Procedure:

The dwell time was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function enabled.

The spectrum analyzer is set to:

Center frequency = 2441 MHz Span = zero

RBW = 1 MHz $VBW = 1 MHz (VBW \ge RBW)$

Trace = max hold Detector function = peak

Measurement Data: See next pages for actual measured spectrum plots.

Packet Type	Burst On Time (ms)	Period (ms)	Number of hopping Channels	DWELL TIME (s)	Result
DH 1	0.391	1.258	79	0.124	Comply
DH 3	1.143	2.508	79	0.182	Comply
DH 5	2.900	3.750	79	0.309	Comply

Note: Each new transmission event begins on the next channel in the hopping sequence after the final channel used in the previous transmission event. DWELL TIME=(0.4 x Number of hopping Channels) x Burst On time / (period x Number of hopping Channels)

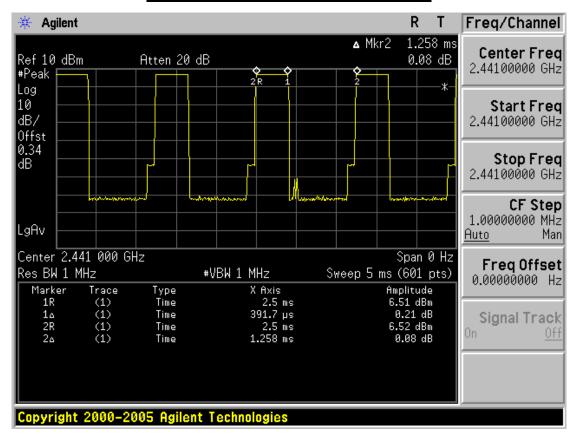
Minimum Standard:

No greater than 0.4 seconds

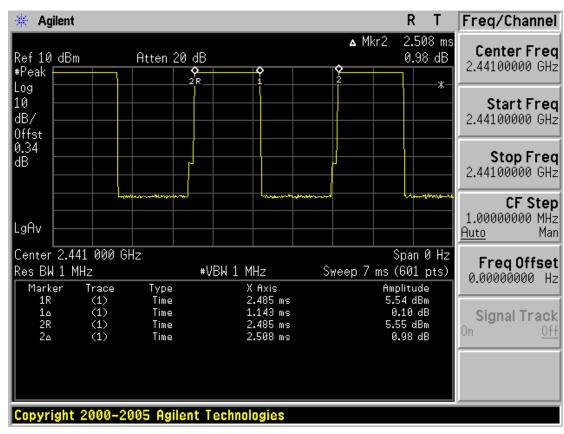
Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

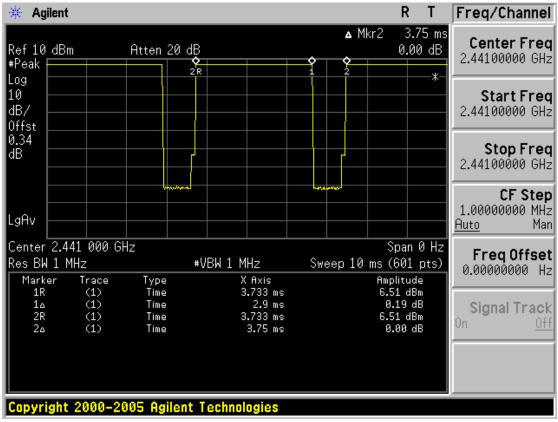
Time of Occupancy for Packet Type DH 1



Time of Occupancy for Packet Type DH 3



Time of Occupancy for Packet Type DH 5



3.2.5 Peak Output Power

Procedure:

The peak output power was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels..

After the trace being stable, Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

Span = 5 MHz (approximately 5 times of the 20 dB bandwidth)

RBW = 1 MHz (greater than the 20dB bandwidth of the emission being measured)

 $VBW = 1 MHz (VBW \ge RBW)$ Detector function = peak

Trace = \max hold Sweep = auto

Measurement Data:

Frequency	Ch		Test Results	
(MHz)	Ch.	dBm	mW	Result
2402	1	6.79	4.775	Comply
2441	40	6.82	4.808	Comply
2480	79	6.74	4.721	Comply

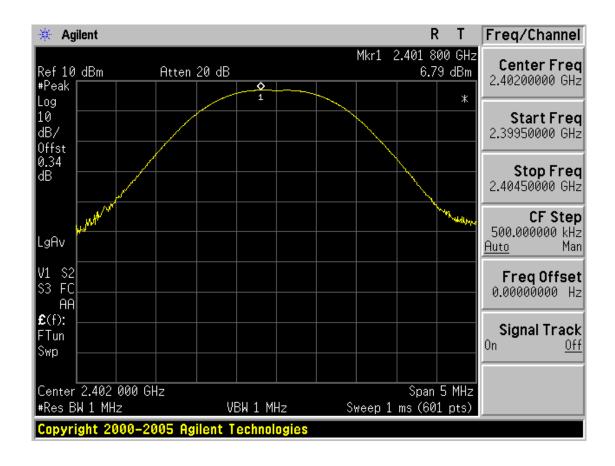
⁻ See next pages for actual measured spectrum plots.

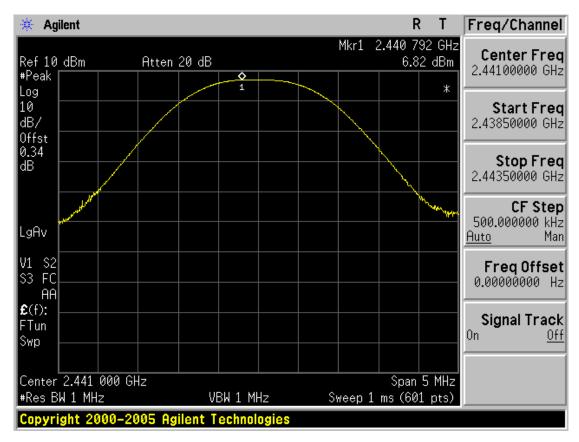
Minimum Standard:	For frequency hopping systems operating in the 2400-2483.5 MHz band
	employing at least 75 non-overlapping hopping channels, and all frequency
	hopping systems in the 5725-5850 MHz band: 1 Watt. For all other
	frequency hopping systems in the 2400-2483.5 MHz band: 0.125 Watts

Measurement Setup

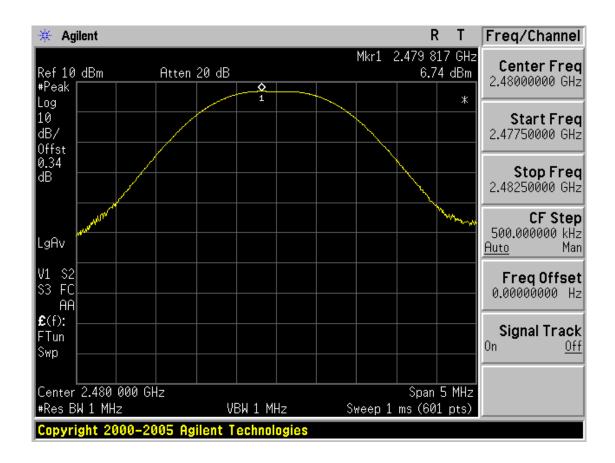
Same as the Chapter 3.2.1 (Figure 1)

Peak Output Power





Peak Output Power



3.2.6 Conducted Spurious Emissions

Procedure:

The bandwidth at 20dB down from the highest inband spectral density is measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels.

After the trace being stable, Use the marker-to-peak function to measure 20 dB down both sides of the intentional emission.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

RBW = 100 kHz VBW = 100 kHz

Span = 100 MHz Detector function = peak

Trace = \max hold Sweep = auto

Measurement Data: Comply

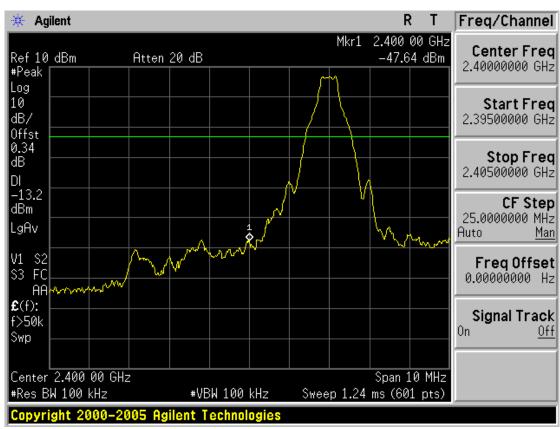
- See next pages for actual measured spectrum plots.

Minimum Standard:	> 20 dBc
-------------------	----------

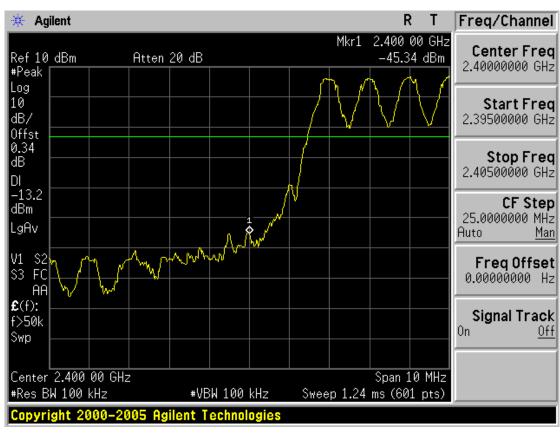
Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

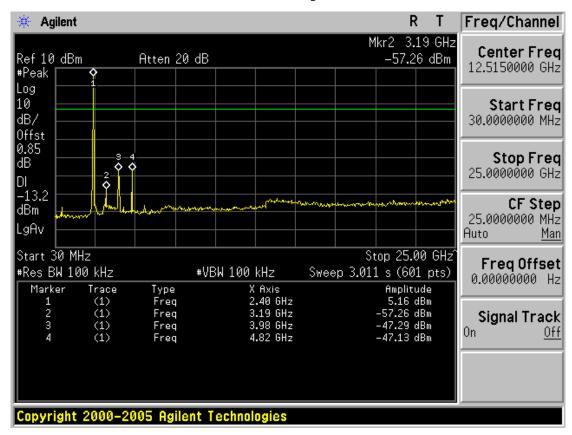
Low band with hopping disabled



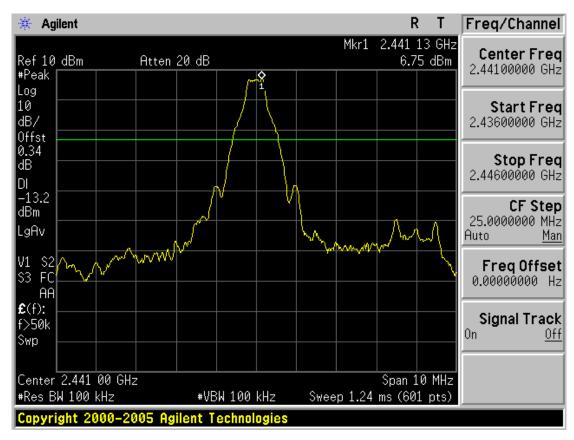
Low band with hopping enabled



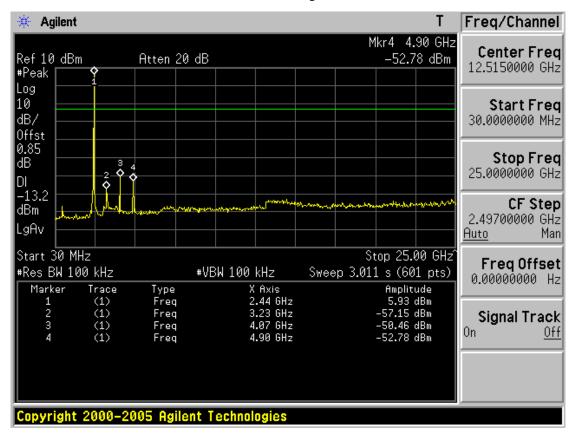
Low channel spurious



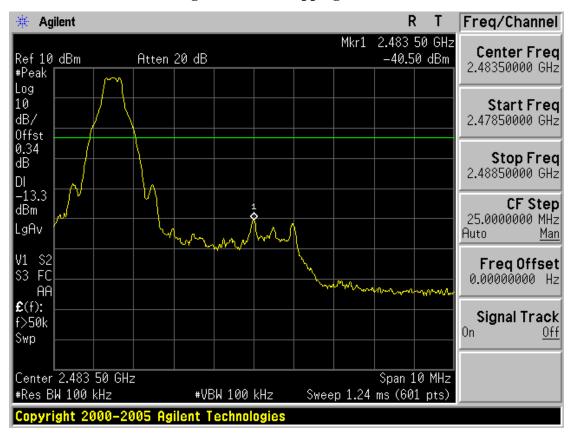
Mid channel ref



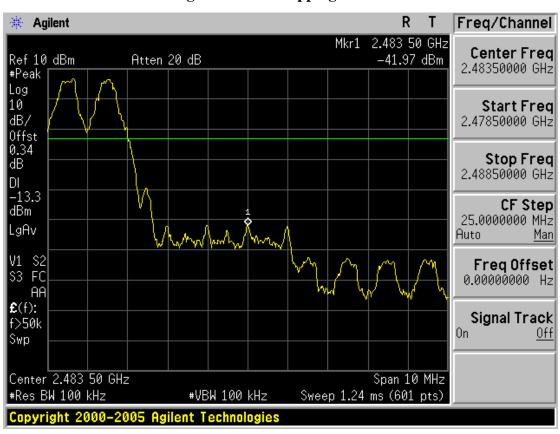
Mid channel spurious



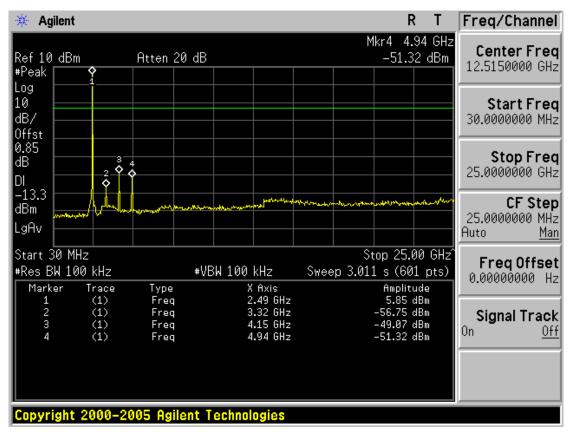
High band with hopping disabled



High band with hopping enabled



High channel spurious



3.2.7 Radiated Emissions

Procedure:

The EUT was placed on a 0.8m high wooden table inside a shielded enclosure. An antenna was placed near the EUT and measurements of frequencies and amplitudes of field strengths were recorded for reference during final measurements. For final radiated testing, measurements were performed in OATS. Measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

The spectrum analyzer is set to:

Center frequency = the worst channel

Frequency Range = 30 MHz ~ 10th harmonic.

 $RBW = 120 \text{ kHz} (30 \text{MHz} \sim 1 \text{ GHz})$ $VBW \geq RBW (Peak)$

= 1 MHz $(1 \text{ GHz} \sim 10^{\text{th}} \text{ harmonic})$ VBW = 10 Hz (Average)

Trace = \max hold Sweep = auto

Measurement Data: Comply

Refer to the next page.

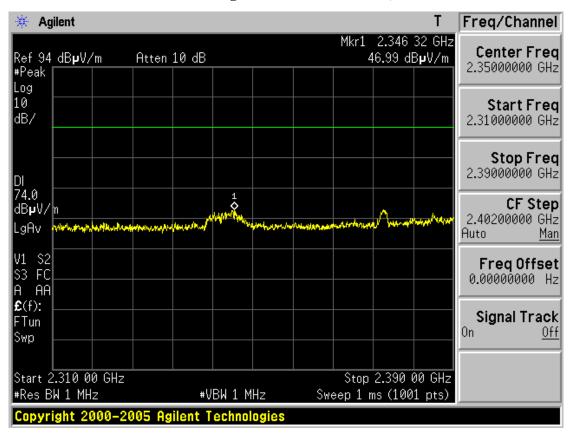
Minimum Standard: FCC Part 15.205 (a), 15.205(b), 15.209(a) and (b)

Limit : FCC P15.209(a)

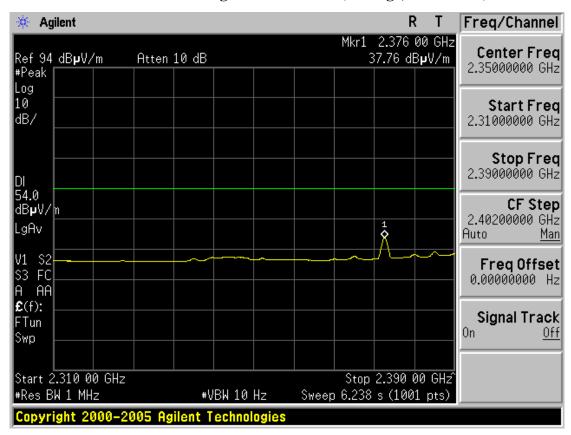
Frequency (MHz)	Limit (uV/m) @ 3m
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

^{**} Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88MHz, 174-216MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

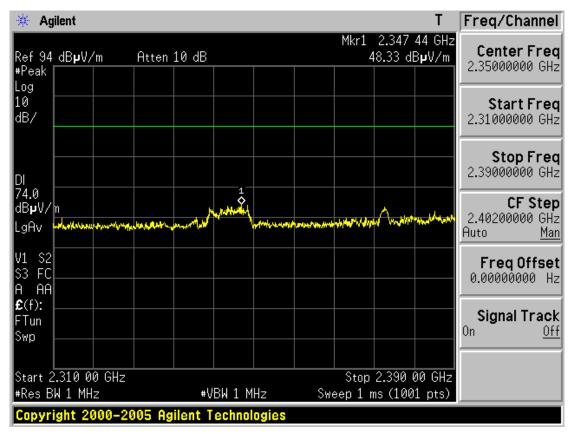
Restricted Band Edge: Low Channel (Peak, Horizontal)



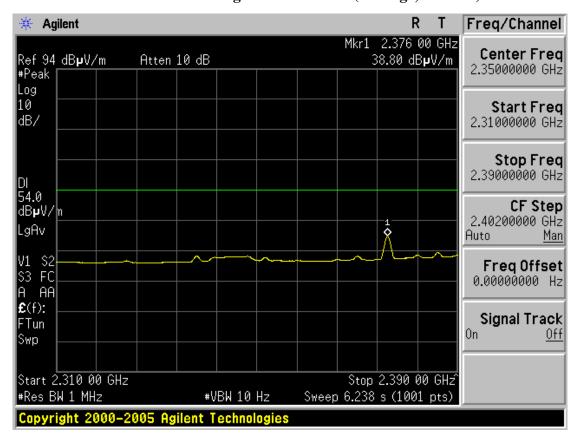
Restricted Band Edge: Low Channel (Average, Horizontal)



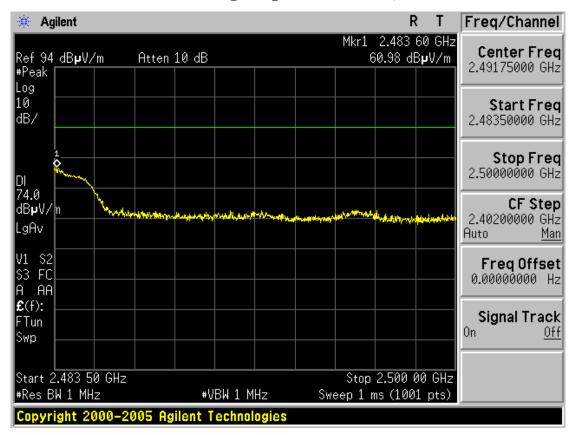
Restricted Band Edge: Low Channel (Peak, Vertical)



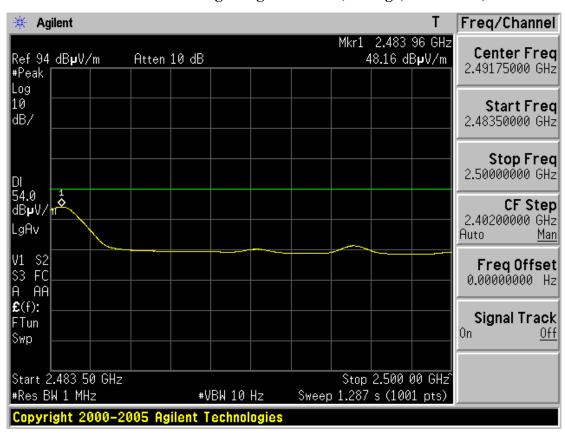
Restricted Band Edge: Low Channel (Average, Vertical)



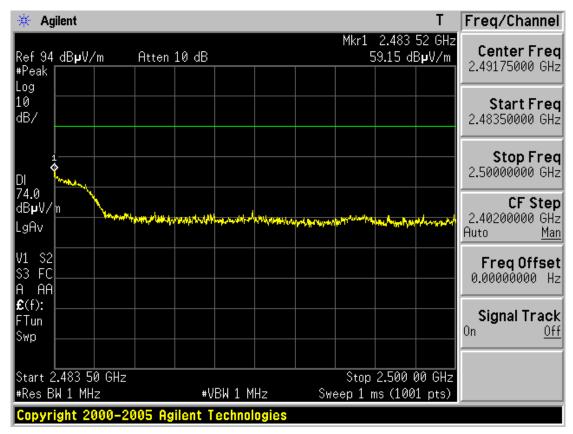
Restricted Band Edge: High Channel (Peak, Horizontal)



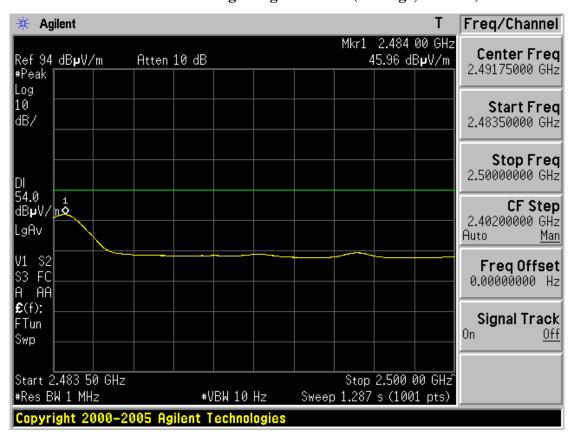
Restricted Band Edge: High Channel (Average, Horizontal)



Restricted Band Edge: High Channel (Peak, Vertical)



Restricted Band Edge: High Channel (Average, Vertical)



Harmonic and other emissions Measurement Data: Fundamental Frequency = 2402MHz

Frequency	ANT	ANT Reading(dBuV)		T.F	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)			
(MHz)	Pol	QP	PK	AV	(dB)	QP	PK	AV	QP	PK	AV	QP	PK	AV
4804	Hor	-	50.86	40.96	7.19	-	58.05	48.15	-	74.00	54.00	-	15.95	5.85
4804	Ver	-	52.46	43.02	7.19	-	59.65	50.21	-	74.00	54.00	-	14.35	3.79
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Harmonic and other emissions Measurement Data: Fundamental Frequency = 2441MHz

Frequency	ANT	Reading(dBuV)		T.F	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)			
(MHz)	Pol	QP	PK	AV	(dB)	QP	PK	AV	QP	PK	AV	QP	PK	AV
4882	Hor	-	51.39	41.45	7.48	-	58.87	48.93	-	74.00	54.00	-	15.13	5.07
4882	Ver	-	54.06	43.60	7.48	-	61.54	51.08	-	74.00	54.00	-	12.46	2.92
-	-	-	-	-	-					-	-	-	-	-

Harmonic and other emissions Measurement Data: Fundamental Frequency = 2480MHz

Frequency	ANT	ANT Reading(dBuV)		T.F	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)			
(MHz)	Pol	QP	PK	AV	(dB)	QP	PK	AV	QP	PK	AV	QP	PK	AV
4960	Hor	-	50.74	38.58	7.89	-	58.63	46.47	-	74.00	54.00	-	15.37	7.53
4960	Ver	-	53.03	39.84	7.89	-	60.92	47.73	-	74.00	54.00	-	13.08	6.27
	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note.

- 1. No other spurious and harmonic emissions were detected at a level greater than 20dB below limit.
- 2. If peak result meet AV limit, AV measurement is omitted.
- 3. Sample Calculation.

$$\begin{aligned} & Margin = Limit - Result & / & Result = Reading + T.F & / & T.F = AF + CL - AG \\ & Where, & T.F = Total Factor, & AF = Antenna Factor, & CL = Cable Loss, & AG = Amplifier Gain \\ & AG = Amplifier Gain \\ & & AG = Amplifier Ga$$

3.2.8 AC Line Conducted Emissions

Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its hopping function disabled at the middle channels in line with Section 15.31(m). Emissions closest to the limit are measured in the quasi-peak and average detector mode with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

Measurement Data: Comply (See next pages for actual measured spectrum plots.)

Note: When this device is in charging mode, the Bluetooth function is disabled. So the conducted emission test was performed with charging mode only.

Minimum Standard: FCC Part 15.207(a)/EN 55022

Frequency Range	Conducted Limit (dBuV)						
(MHz)	Quasi-Peak	Average					
0.15 ~ 0.5	66 to 56 *	56 to 46 *					
0.5 ~ 5	56	46					
5 ~ 30	60	50					

^{*} Decreases with the logarithm of the frequency

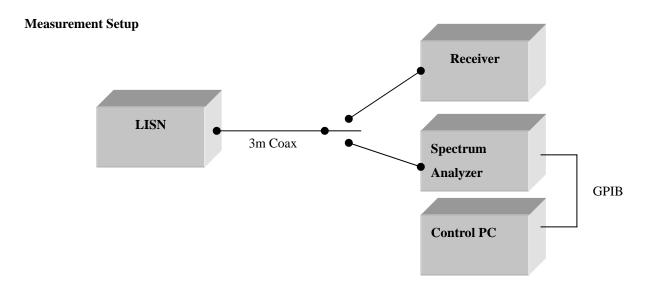
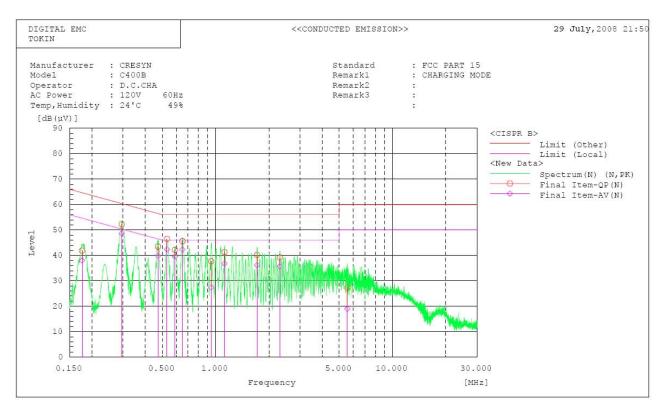
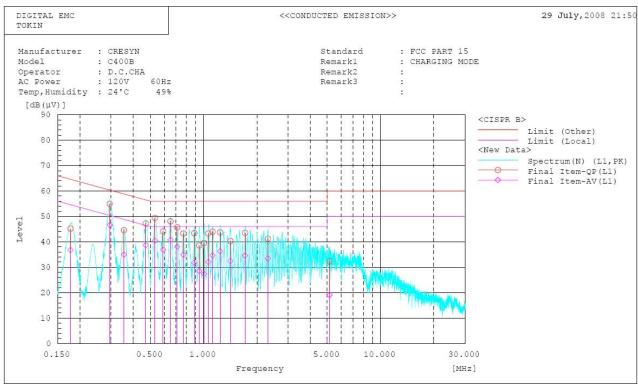


Figure 2: Measurement setup for AC Conducted Emission

- Conducted Emission Graph -





-Conducted Emission List -

****	******	******	********	******	*******	*******		GITAL EMC		******	***************************************
											29 July,2008 21:50
Mode Oper AC F Temp Rema Rema Rema	facturer 1 ator ower , Humidity rkl rk2	:	N								
	l Result	*******	*********		********	********	*******	*******	******		***********
No.	N Phase Frequency [MHz]	Reading QP [dB(uV)]	Reading AV [dB(µV)]	c.f	Result QP [dB(uV)]	Result AV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	0.295	52.2	48.5	0.1	52.3	48.6	60.4	ξαΒ(μν)] 50.4	8.1	1.8	
2	0.176	41.8	37.9	0.1	41.9	38.0	64.7	54.7	22.8	16.7	
3	0.473	43.4	39.8	0.1	43.5	39.9	56.5	46.5	13.0	6.6	
4	0.532	46.4	42.3	0.1	46.5	42.4	56.0	46.0	9.5	3.6	
5	0.590	42.1	39.5	0.1	42.2	39.6	56.0	46.0	13.8	6.4	
6	0.650	45.5	42.2	0.1	45.6	42.3	56.0	46.0	10.4	3.7	
7	0.945	37.5	27.2	0.2	37.7	27.4	56.0	46.0	18.3	18.6	
8	1.123	41.1	36.6	0.2	41.3	36.8	56.0	46.0	14.7	9.2	
9 10	1.714 2.306	40.0 38.9	36.0 35.4	0.2	40.2 39.2	36.2 35.7	56.0 56.0	46.0 46.0	15.8 16.8	9.8	
11	5.549	27.0	18.6	0.4	27.4	19.0	60.0	50.0	32.6	31.0	
	0.012	2	20.0		27.1	22.0			02.0		
	Ll Phase	-									
No.	Frequency	Reading	Reading	c.f	Result	Result	Limit	Limit	Margin		Remark
		QP	AV		QP	AV	QP	AV	QP	AV	
	[MHz]	[dB(µV)]	[dB(µV)]	[dB]	[dB(µ∇)]	[dB(µV)]	[dB(µV)]	[dB(µ∇)]	[dB]	[dB]	
1 2	0.295	54.8 45.0	46.4 36.6	0.2	55.0 45.2	46.6 36.8	60.4 64.6	50.4 54.6	5.4 19.4	3.8 17.8	
3	0.355	44.4	34.8	0.2	44.6	35.0	58.8	48.8	14.2	13.8	
4	0.472	47.0	38.5	0.2	47.2	38.7	56.5	46.5	9.3	7.8	
5	0.532	49.1	40.2	0.3	49.4	40.5	56.0	46.0	6.6	5.5	
6	0.591	43.8	36.6	0.3	44.1	36.9	56.0	46.0	11.9	9.1	
7	0.650	47.8	40.5	0.3	48.1	40.8	56.0	46.0	7.9	5.2	
8	0.709	45.4	37.8	0.3	45.7	38.1	56.0	46.0	10.3	7.9	
9	0.769	43.0	34.7	0.3	43.3	35.0	56.0	46.0	12.7	11.0	
10 11	0.886	43.1	31.5 28.3	0.3	43.4	31.8 28.6	56.0 56.0	46.0 46.0	12.6 17.4	14.2 17.4	
12	1.006	39.3	28.3	0.3	39.6	25.6	56.0	46.0	16.4	18.6	
13	1.064	43.0	31.8	0.3	43.3	32.1	56.0	46.0	12.7	13.9	
14	1.123	43.7	34.4	0.3	44.0	34.7	56.0	46.0	12.0	11.3	
15	1.241	43.4	36.0	0.3	43.7	36.3	56.0	46.0	12.3	9.7	
16	1.418	40.0	32.2	0.3	40.3	32.5	56.0	46.0	15.7	13.5	
17	1.714	43.1	34.2	0.4	43.5	34.6	56.0	46.0	12.5	11.4	
18	2.306	40.8	33.1	0.4	41.2	33.5	56.0	46.0	14.8	12.5	
19	5.145	31.8	18.6	0.5	32.3	19.1	60.0	50.0	27.7	30.9	

APPENDIX

TEST EQUIPMENT FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment.

	Туре	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
01	Spectrum Analyzer	Agilent	E4404B	21/03/08	21/03/09	US41061134
02	Spectrum Analyzer	Agilent	E4440A	15/11/07	15/11/08	MY45304199
03	Spectrum Analyzer	H.P	8563E	09/10/07	09/10/09	3551A04634
04	Spectrum Analyzer	Rohde Schwarz	FSP	06/09/07	06/09/08	100385
05	Spectrum Analyzer	H.P	8591E	26/04/08	26/04/09	3649A05889
06	EMI TEST RECEIVER	R&S	ESU	11/01/08	11/01/09	100014
07	EMI TEST RECEIVER	R&S	ESCI	13/05/08	13/05/09	100364
08	Power Meter	H.P	EMP-442A	10/07/08	10/07/09	GB37170413
09	Power Sensor	H.P	8481A	14/07/08	14/07/09	3318A96566
10	Frequency Counter	H.P	5342A	06/09/07	06/09/08	2119A04450
11	Signal Generator	Rohde Schwarz	SMR20	02/04/08	02/04/09	101251
12	Signal Generator	H.P	ESG-3000A	09/07/08	09/07/09	US37230529
13	Vector Signal Generator	Rohde Schwarz	SMJ100A	17/01/08	17/01/09	100148
14	Audio Analyzer	H.P	8903B	09/07/08	09/07/09	3011A09448
15	Modulation Analyzer	H.P	8901B	1807/08	18/07/09	3028A03029
16	Oscilloscope	Tektronix	TDS3052	02/11/07	02/11/08	B016821
17	8960 Series 10 Wireless Comms. Test Set	Agilent	E5515C	31/07/07	31/07/09	GB43461134
18	Universal Radio communication Tester	Rohde Schwarz	CMU 200	02/04/08	02/04/09	107631
19	Bluetooth Tester	TESCOM	TC-3000A	01/08/08	01/08/09	3000A4A0121
20	Power Splitter	WEINSCHEL	1593	05/10/07	05/10/08	332
21	Power Splitter	Anritsu	K241B	19/10/07	19/10/08	020611
22	BAND Reject Filter	Microwave Circuits	N0308372	18/10/07	18/10/08	3125-01DC0312
23	BAND Reject Filter	Wainwright	WRCG1750	18/10/07	18/10/08	SN2
24	AC Power supply	DAEKWANG	5KVA	20/03/08	20/03/09	N/A
25	DC Power Supply	H.P	6622A	20/03/08	20/03/09	465487
26	HORN ANT	ETS	3115	13/06/08	13/06/09	6419
27	HORN ANT	ETS	3115	09/10/07	09/10/08	21097
28	HORN ANT	A.H.Systems	SAS-574	13/06/08	13/06/09	154
29	HORN ANT	A.H.Systems	SAS-574	13/06/08	13/06/09	155

	Туре	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
30	Dipole Antenna	Schwarzbeck	VHA9103	19/12/07	19/12/08	2116
31	Dipole Antenna	Schwarzbeck	VHA9103	19/12/07	19/12/08	2117
32	Dipole Antenna	Schwarzbeck	UHA9105	20/12/07	20/12/08	2261
33	Dipole Antenna	Schwarzbeck	UHA9105	20/12/07	20/12/08	2262
34	TEMP & HUMIDITY Chamber	JISCO	J-RHC2	02/10/07	02/10/08	021031
35	Log Periodic Antenna	Schwarzbeck	UHALP9108A1	01/10/07	01/10/08	1098
36	Biconical Antenna	Schwarzbeck	VHA9103	01/10/07	01/10/08	2233
37	Digital Multimeter	H.P	34401A	20/03/08	20/03/09	3146A13475
38	Attenuator (10dB)	WEINSCHEL	23-10-34	05/10/07	05/10/08	BP4386
39	Attenuator (10dB)	WEINSCHEL	23-10-34	30/01/08	30/01/09	BP4387
40	High-Pass Filter	ANRITSU	MP526D	08/10/07	08/10/08	MP27756
41	Attenuator (3dB)	Agilent	8491B	15/07/08	15/07/09	58177
42	20dB Attenuator	Aeroflex/Weinschel	86-20-11	25/10/07	25/10/08	432
43	10dB Attenuator	Aeroflex/Weinschel	86-10-11	25/10/07	25/10/08	446
44	10dB Attenuator	Aeroflex/Weinschel	86-10-11	25/10/07	25/10/08	408
45	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0088CAN	11/07/08	11/07/09	788
46	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0185CAN	11/07/08	11/07/09	790
47	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0215CAN	11/07/08	11/07/09	112
48	Amplifier (25dB)	Agilent	8447D	21/05/08	21/05/09	2944A10144
49	Amplifier (30dB)	Agilent	8449B	25/10/07	25/10/08	3008A01590
50	Amplifier (22dB)	H.P	8447E	27/02/08	27/02/09	2945A02865
51	Position Controller	TOKIN	5901T	N/A	N/A	14173
52	Driver	TOKIN	5902T2	N/A	N/A	14174
53	RFI/FIELD Intensity Meter	Kyorits	KNW-2402	06/09/07	06/09/08	4N-170-3
54	LISN	Kyorits	KNW-407	30/08/07	30/08/08	8-317-8
55	LISN	Kyorits	KNW-242	06/10/07	06/10/08	8-654-15
56	CVCF	NF Electronic	4400	N/A	N/A	344536 4420064
57	Software	ToYo EMI	EP5/RE	N/A	N/A	Ver 2.0.800
58	Software	ToYo EMI	EP5/CE	N/A	N/A	Ver 2.0.801
59	Software	AUDIX	e3	N/A	N/A	Ver 3.0
60	Software	Agilent	Benchlink	N/A	N/A	A.01.09 021211