TEST REPORT
FROM
RFI GLOBAL SERVICES LTD

Test of: NTT docomo P-08A

To: FCC Part 15.247: 2008 (Subpart C)

Test Report Serial No:
RFI/RPT1/RP74716JD07A

This Test Report Is Issued Under The Authority Of Brian Watson, Operations Director: 	
Checked By:	A.HENRIQUES
Signature: 	
Date of Issue:	20 March 2009

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Registered in England and Wales. Company number:2117901

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1. Customer Information

Company Name:	Panasonic Mobile Communications Development of Europe Ltd.
Address:	Panasonic House Willoughby Road Bracknell Berkshire RG12 8FP

2. Summary of Testing

2.1. General Information

Specification Reference:	FCC Part 15.247: 2008 Subpart C
Specification Title:	Code of Federal Regulations, Part 15.247 (47CFR) (Intentional Radiators operating within the band 2400 MHz to 2483.5 MHz)
Site Registration:	209735
Location of Testing:	RFI Global Services Ltd, Wade Road, Basingstoke, Hampshire, RG24 8AH.
Test Dates:	03 March 2009 to 07 March 2009

2.2. Summary of Test Results

Clause	Measurement	Port Type	Result
Section 15.107	Receiver AC Conducted Emissions	AC Mains	✓
Section 15.109	Receiver Radiated Spurious Emissions	Antenna	✓
Section 15.207	Transmitter AC Conducted Emissions	AC Mains	✓
Section 15.247(a)(1)	Transmitter 20 dB Bandwidth	Antenna	✓
Section 15.247(a)(1)	Transmitter Carrier Frequency Separation	Antenna	✓
Section 15.247(a)(1)(iii)	Transmitter Average Time of Occupancy	Antenna	✓
Section 15.247(b)(1)	Transmitter Maximum Peak Output Power	Antenna	✓
Sections 15.247(d) & 15.209(a)	Transmitter Radiated Emissions	Antenna	✓
Sections 15.247(d) & 15.209(a)	Transmitter Band Edge Radiated Emissions	Antenna	✓

Key to Results

✓ = Complied ✗ = Did not comply

2.3. Methods and Procedures

Reference:	ANSI C63.4 (2003)
Title:	American National Standard Methods of Measurement of Electromagnetic Emissions from Low Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
Reference:	DA00-705 (2000)
Title:	Filing and Frequency Measurement Guidelines for Frequency Hopping Spread Spectrum Systems

2.4. Deviations from the Test Specification

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

3. Equipment Under Test (EUT)

3.1. Identification of Equipment Under Test (EUT)

Brand Name:	NTT docomo
Model Name or Number:	P-08A
Hardware Version:	Rev C
Software Version:	B-WN908D-01.03.001 08-2H_CPF_Cv0A1352A
IMEI	356754020050086 & 356754020050060
FCC ID Number:	UCE208015A

Description:	Micro SD memory card
Brand Name:	Not stated
Model Name or Number:	Not stated

Description:	AC charger
Brand Name:	NTT docomo
Model Name or Number:	FOMA AC Adaptor 01 for Global use / MAS-BH0008-A 002

Description:	DC charger
Brand Name:	NTT docomo
Model Name or Number:	FOMA DC Adaptor 02

Description:	Charge/USB data cable
Brand Name:	NTT docomo
Model Name or Number:	FOMA USB Cable with Charge Function 02

Description:	Personal hands-free
Brand Name:	NTT docomo
Model Name or Number:	Stereo Earphone Set 01

Description:	Battery 3.7V 800 mAh
Brand Name:	NTT
Model Name or Number:	P19

3.2. Description of EUT

The equipment under test was a dual mode UMTS/GSM cellular handset with *Bluetooth* and RFID

3.3. Modifications Incorporated in the EUT

During the course of testing the EUT was not modified.

3.4. Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	Dummy battery
Model Name or Number:	Not stated
Serial Number:	Not stated

Description:	Laptop PC
Model Name or Number:	Sony VAIO PCG-551N
Serial Number:	283506 2 1208763

3.5. Additional Information Related to Testing

Power Supply Requirement:	Nominal	3.7 V	
Equipment Category:	*Bluetooth*		
Type of Unit:	Transceiver		
Channel Spacing:	1 MHz		
Mode:	Basic Rate	Enhanced Data Rate	
Modulation:	GFSK	π/4-DQPSK	8DQPSK
Packet Type: (Maximum Payload)	DH5	2DH5	3DH5
Data Rate (Mbit/s):	1	2	3
Maximum Transmit EIRP:	-0.1 dBm		
Transmit Frequency Range:	2402 MHz to 2480 MHz		
Transmit Channels Tested:	**Channel ID**	**Channel Number**	**Channel Frequency (MHz)**
	Bottom	0	2402
	Middle	39	2441
	Top	78	2480
Receive Frequency Range:	2402 MHz to 2480 MHz		
Receive Channels Tested:	**Channel ID**	**Channel Number**	**Channel Frequency (MHz)**
	Bottom	0	2402
	Middle	39	2441
	Top	78	2480

4. Operation and Configuration of the EUT during Testing

4.1. Operating Modes

The EUT was tested in the following operating modes, unless otherwise stated:

- Receive/Idle Mode
- Transmit Mode with Basic Rate (DH5 packets) or EDR (2DH5 or 3DH5 packets) as required.

4.2. Configuration and Peripherals

The EUT was tested in the following configuration:

- For Transmit tests: Standalone, connected via a radio link to a Bluetooth Tester in order to place the EUT into Bluetooth test mode. The laptop PC with the Client's bespoke application was used to place the EUT into Bluetooth test mode.
- For Receive/Idle mode tests: Standalone, with the Bluetooth mode active but not transmitting.
- Both EDR/Basic rate modes were compared and tests were performed with the mode that presented the worse case result. For output power, bandwidth, band edge and channel separation, all modes were tested.
- Idle mode and transmitter mode radiated spurious emissions tests were performed with the personal hands free connected to the EUT this was found to be the worst case during prescans. All accessories were individually connected and measurements made during prescans to determine the worst case combination.

5. Measurements, Examinations and Derived Results

5.1. General Comments

This section contains test results only.

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to section 8 for details of measurement uncertainties.

5.2. Test Results

5.3. Receive/Idle Mode AC Conducted Spurious Emissions

Test Summary:

FCC Part:	15.107
Test Method Used:	As detailed in ANSI C63.4 Section 7 and relevant annexes
EUT Tested (IMEI):	356754020050086

Environmental Conditions:

Temperature (°C):	18
Relative Humidity (%):	42

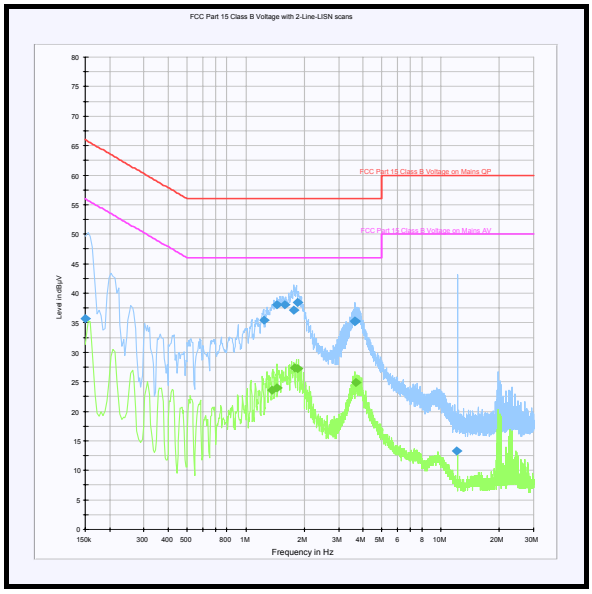
Results: Quasi Peak Detector Measurements

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.150000	Live	35.7	66.0	30.3	Complied
1.243500	Neutral	35.5	56.0	20.5	Complied
1.437000	Neutral	38.1	56.0	17.9	Complied
1.576500	Neutral	38.1	56.0	17.9	Complied
1.765500	Neutral	37.2	56.0	18.8	Complied
1.837500	Neutral	38.5	56.0	17.5	Complied
3.624000	Neutral	35.3	56.0	20.7	Complied
3.633000	Neutral	35.2	56.0	20.8	Complied
12.115500	Live	13.3	60.0	46.7	Complied

Results: Average Detector Measurements on Live and Neutral Lines - Top Channel

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
1.360500	Neutral	23.6	46.0	22.4	Complied
1.437000	Neutral	23.9	46.0	22.1	Complied
1.774500	Neutral	27.4	46.0	18.6	Complied
1.842000	Neutral	27.2	46.0	18.8	Complied
3.687000	Neutral	24.9	46.0	21.1	Complied

Receive/Idle Mode AC Conducted Emissions (continued)



5.4. Receive/Idle Mode Radiated Spurious Emissions

Test Summary:

FCC Part:	15.109
Test Method Used:	As detailed in ANSI C63.4 Section 8 and relevant annexes
Frequency Range:	30 MHz to 1000 MHz
EUT Tested (IMEI):	356754020050086

Environmental Conditions:

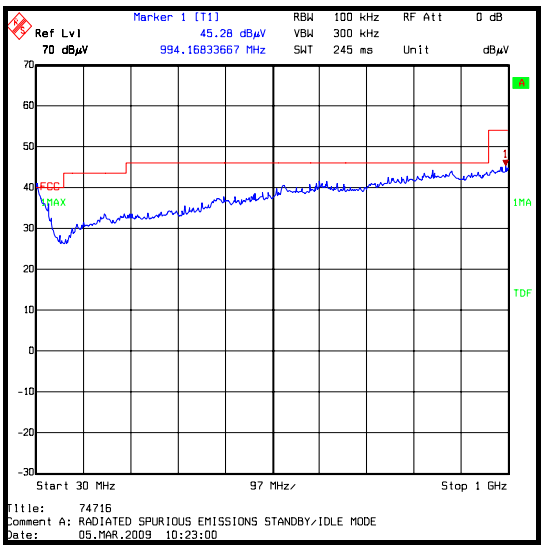
Temperature (°C):	24
Relative Humidity (%):	22

Results:

Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
994.168	Horizontal	45.3	54.0	8.7	Complied

Note(s):

1. No spurious emissions were detected above the noise floor of the measuring receiver; therefore, the highest peak noise floor reading of the measuring receiver was recorded as shown in the table above.



Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Receive/Idle Mode Radiated Spurious Emissions (continued)

Test Summary:

FCC Part:	15.109
Test Method Used:	As detailed in ANSI C63.4 Section 8 and relevant annexes
Frequency Range:	1 GHz to 12.75 GHz
EUT Tested (IMEI):	356754020050086

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	22

Results: Highest Peak Level:

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
12.598	Horizontal	41.0	13.1	54.1	74.0	19.9	Complied

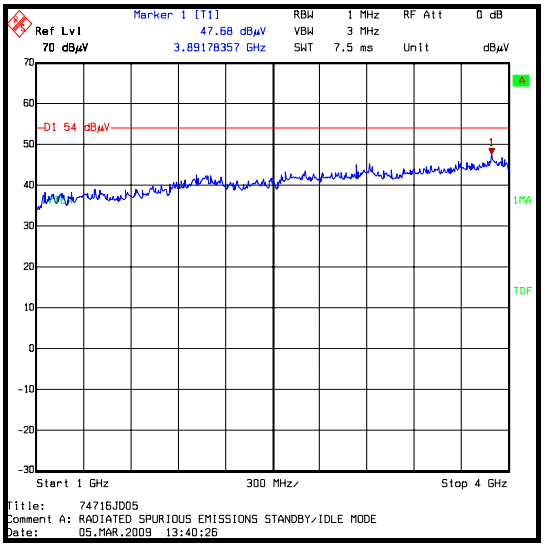
Results: Highest Average Level:

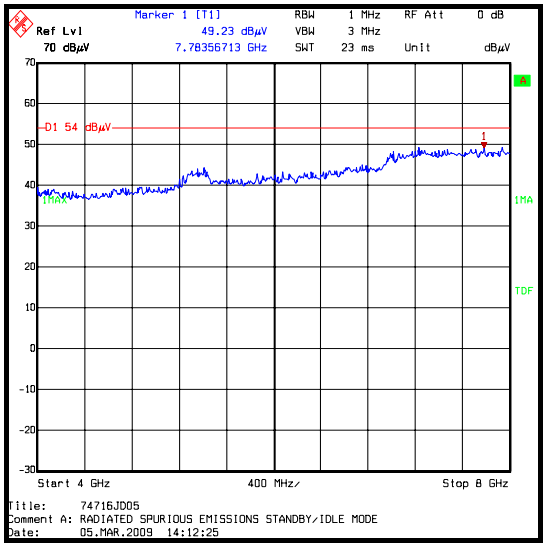
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
12.607	Horizontal	307	13.1	43.8	54.0	10.2	Complied

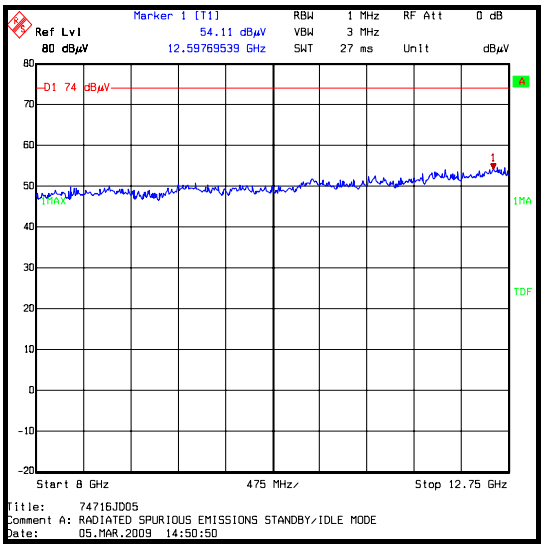
Note(s):

1. No spurious emissions were detected above the noise floor of the measuring receiver; therefore, the highest peak noise floor reading of the measuring receiver was recorded as shown in the table above.
   The peak level was compared to the average limit as opposed to being compared to the peak limit because this is the more onerous limit.
2. All pre-scans were performed with a peak detector against average or Q-P limits apart from measurements made in the range of 8 to 12.75 GHz where pre-scans were performed with peak and average detectors and the applicable limit applied. This was due to the noise floor exceeding the average limit when using a peak detector.

Receive/Idle Mode Radiated Spurious Emissions (continued)







Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

5.5. Transmitter AC Conducted Spurious Emissions

Test Summary:

FCC Part:	15.207
Test Method Used:	As detailed in ANSI C63.4 Section 7 and relevant annexes
EUT Tested (IMEI):	356754020050086

Environmental Conditions:

Temperature (°C):	18
Relative Humidity (%):	42

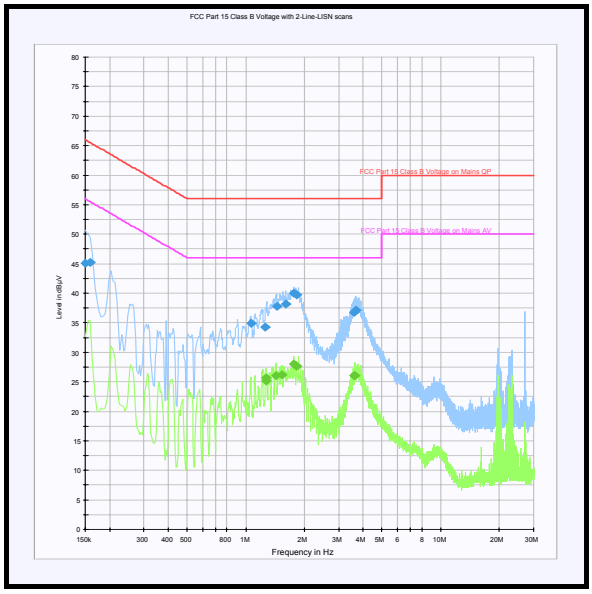
Results: Quasi Peak Detector Measurements

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.150000	Live	45.1	66.0	20.9	Complied
0.159000	Neutral	45.3	65.5	20.2	Complied
1.068000	Neutral	34.9	56.0	21.1	Complied
1.257000	Neutral	34.2	56.0	21.8	Complied
1.441500	Neutral	37.8	56.0	18.2	Complied
1.603500	Neutral	38.2	56.0	17.8	Complied
1.765500	Neutral	40.0	56.0	16.0	Complied
1.819500	Neutral	39.7	56.0	16.3	Complied
3.583500	Neutral	36.7	56.0	19.3	Complied
3.691500	Neutral	37.1	56.0	18.9	Complied

Results: Average Detector Measurements - Top Channel

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
1.266000	Neutral	25.1	46.0	20.9	Complied
1.275000	Neutral	25.7	46.0	20.3	Complied
1.419000	Neutral	26.1	46.0	19.9	Complied
1.527000	Neutral	26.2	46.0	19.8	Complied
1.765500	Neutral	28.0	46.0	18.0	Complied
1.815000	Neutral	27.6	46.0	18.4	Complied
3.579000	Neutral	26.0	46.0	20.0	Complied
3.628500	Neutral	26.1	46.0	19.9	Complied

Transmitter AC Conducted Spurious Emissions (continued)



5.6. Transmitter 20 dB Bandwidth

Test Summary:

FCC Part:	15.248(a)(1)
Test Method Used:	As detailed in Public Notice DA 00-705 (March 30, 2000)
EUT Tested (IMEI):	356754020050060

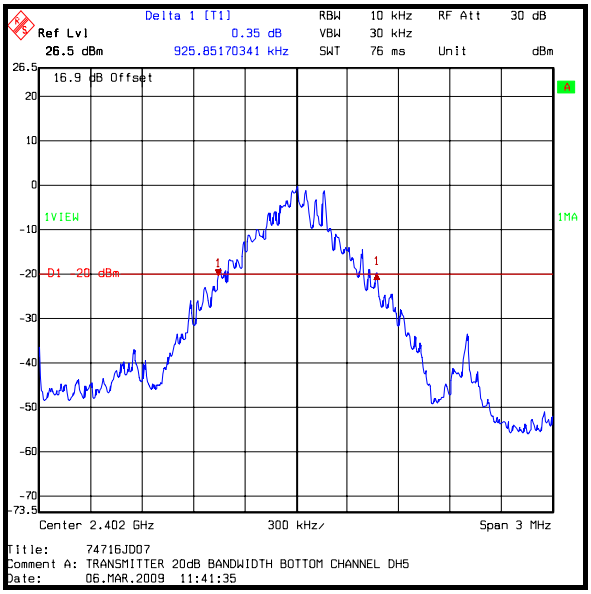
Environmental Conditions:

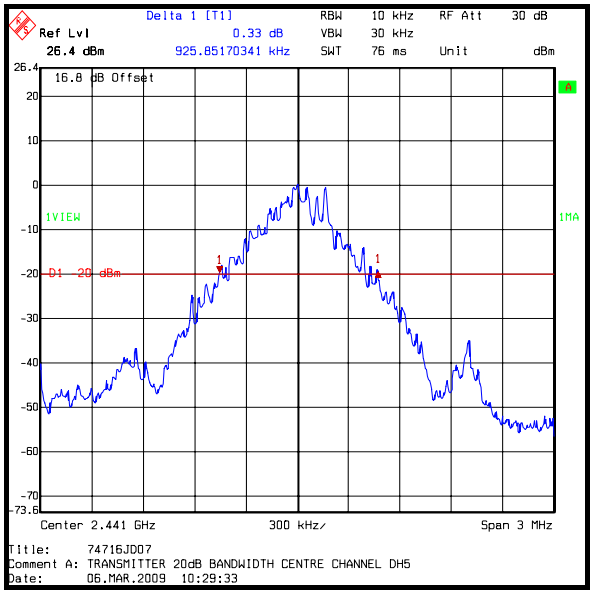
Temperature (°C):	24
Relative Humidity (%):	24

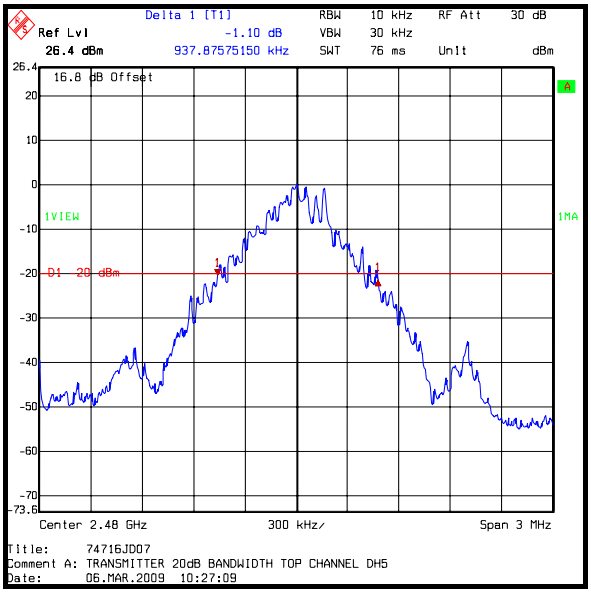
Results: DH5

Channel	Transmitter 20 dB DH5 Bandwidth (kHz)	Limit (kHz)
Bottom	925.852	None specified
Middle	925.852	None specified
Top	937.876	None specified

Transmitter 20 dB Bandwidth (continued)



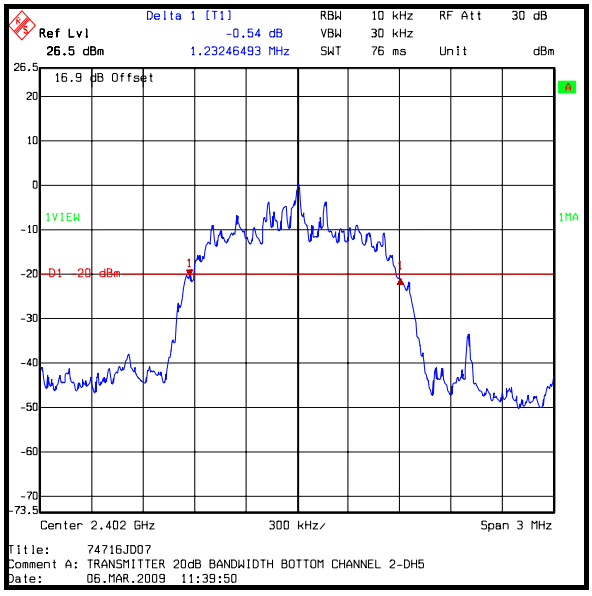


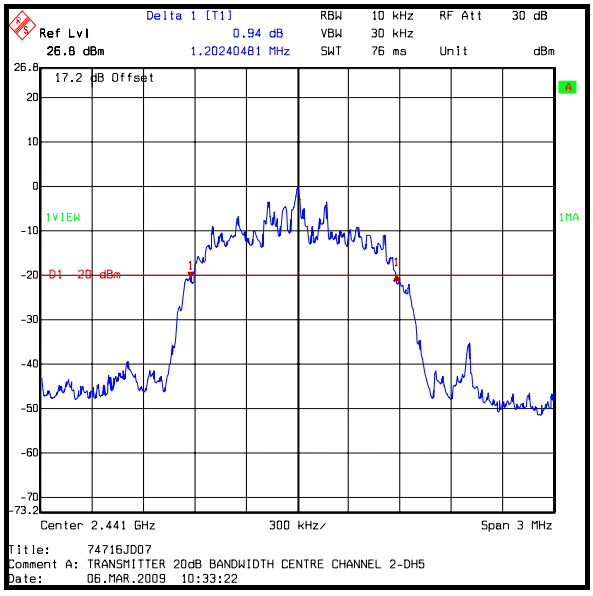


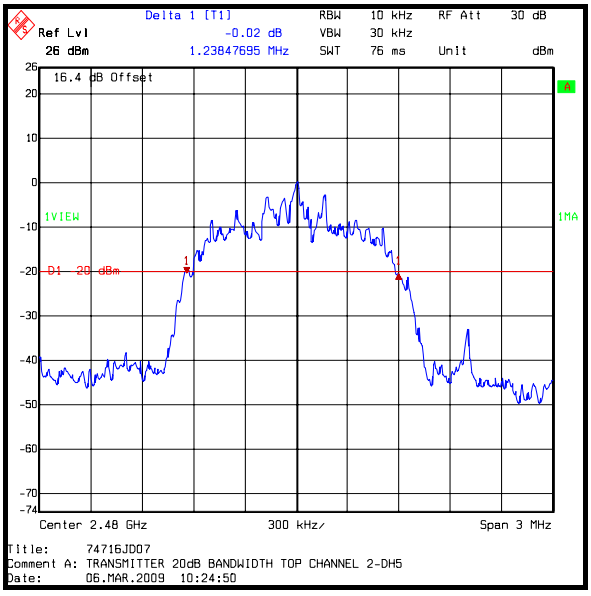
Transmitter 20 dB Bandwidth (continued)

Results: 2DH5

Channel	Transmitter 20 dB 2DH5 Bandwidth (kHz)	Limit (kHz)
Bottom	1232.465	None specified
Middle	1202.405	None specified
Top	1238.477	None specified



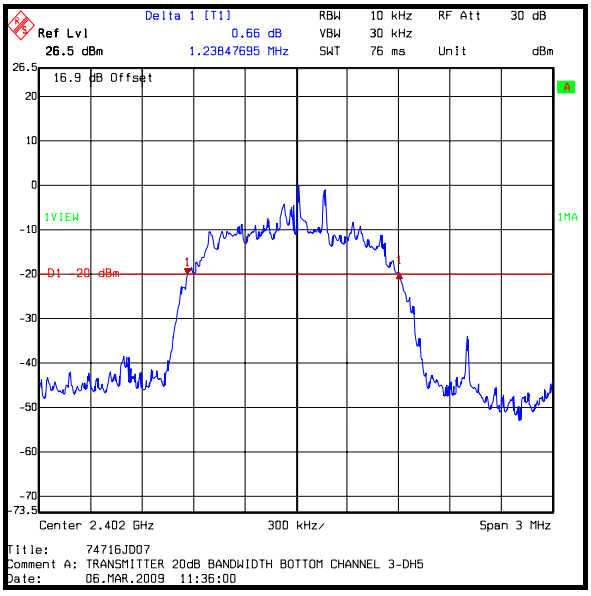


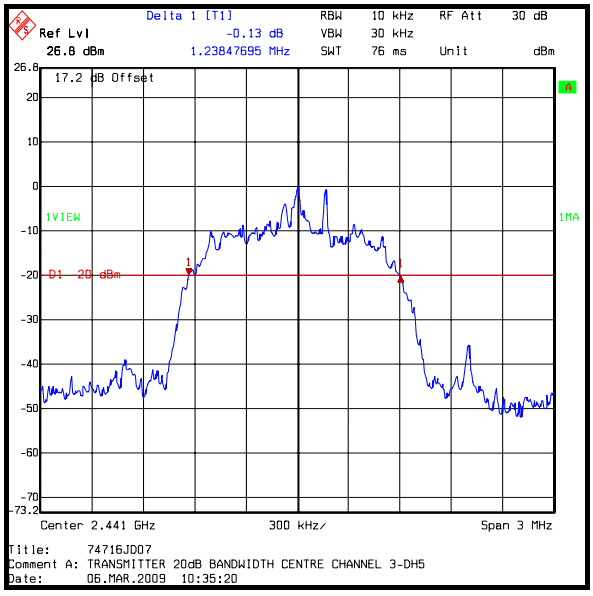


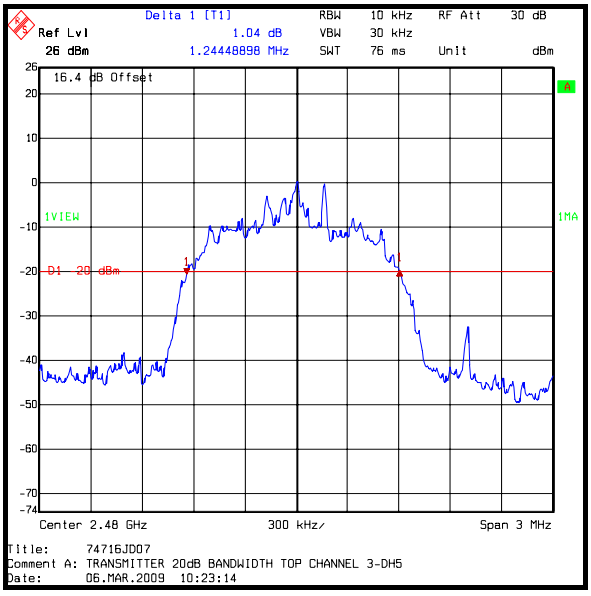
Transmitter 20 dB Bandwidth (continued)

Results: 3DH5

Channel	Transmitter 20 dB 3DH5 Bandwidth (kHz)	Limit (kHz)
Bottom	1238.477	None specified
Middle	1238.477	None specified
Top	1244.489	None specified







5.7. Transmitter Carrier Frequency Separation

Test Summary:

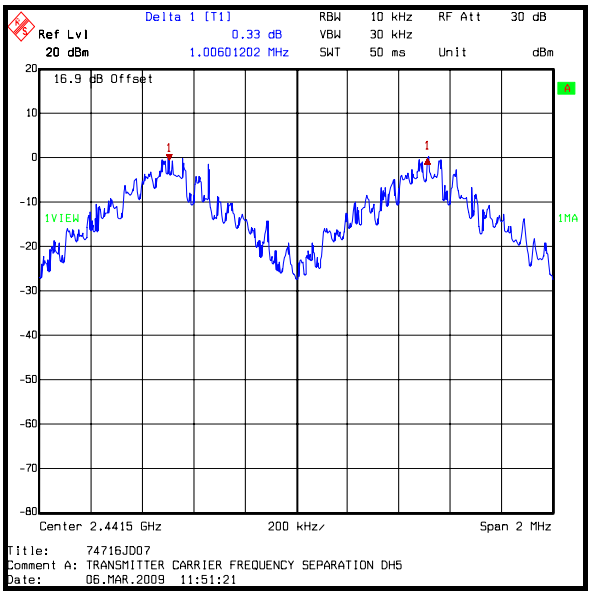
FCC Part:	15.247(a)(1)
Test Method Used:	As detailed in Public Notice DA 00-705 (March 30, 2000)
EUT Tested (IMEI):	356754020050060

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	24

Results:

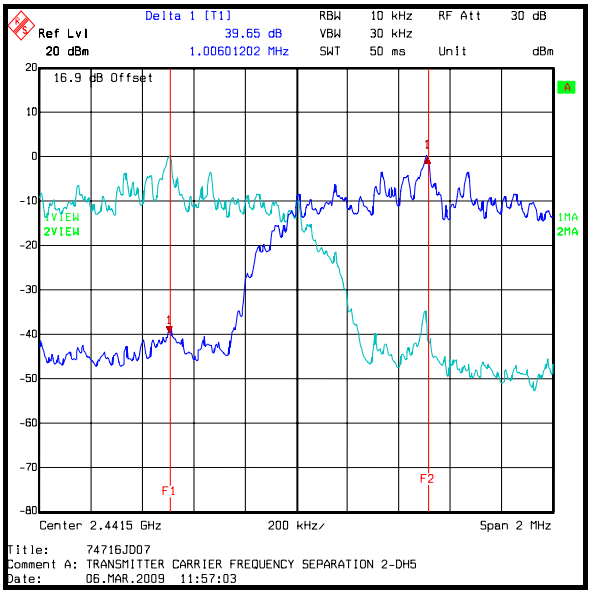
Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
1006.012	625.251	380.761	Complied



Transmitter Carrier Frequency Separation (continued)

Results: 2DH5

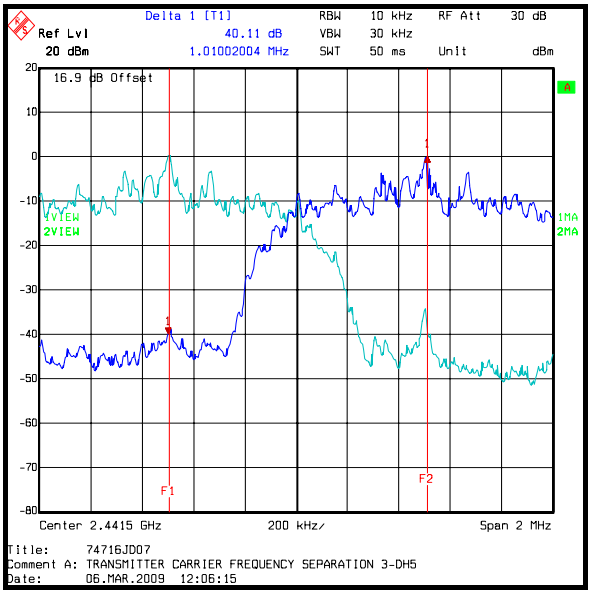
Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
1006.012	825.651	180.361	Complied



Transmitter Carrier Frequency Separation (continued)

Results: 3DH5

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
1010.020	829.660	180.360	Complied



5.8. Transmitter Average Time of Occupancy

Test Summary:

FCC Part:	Section 15.247(a)(1)(iii)
Test Method Used:	As detailed in Public Notice DA 00-705 (March 30, 2000)
EUT Tested (IMEI):	356754020050060

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	24

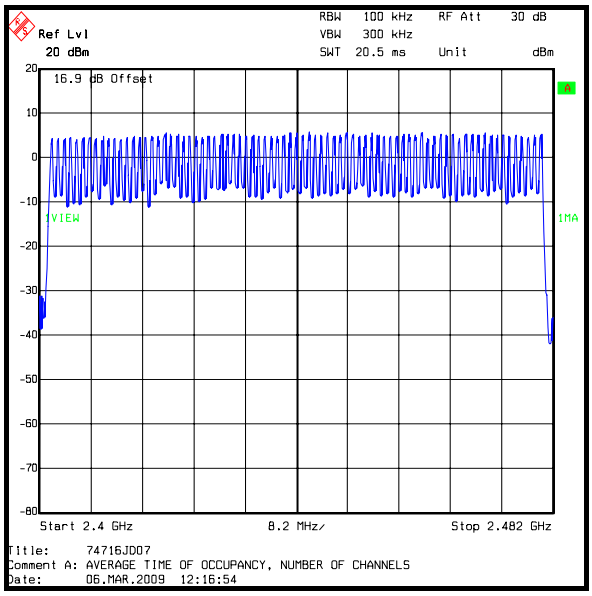
Results:

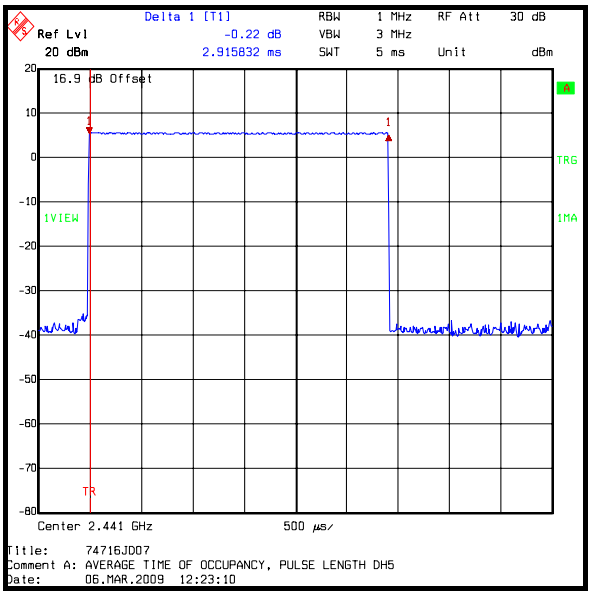
Emission Width (μs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
2915.832	63	0.184	0.4	0.216	Complied

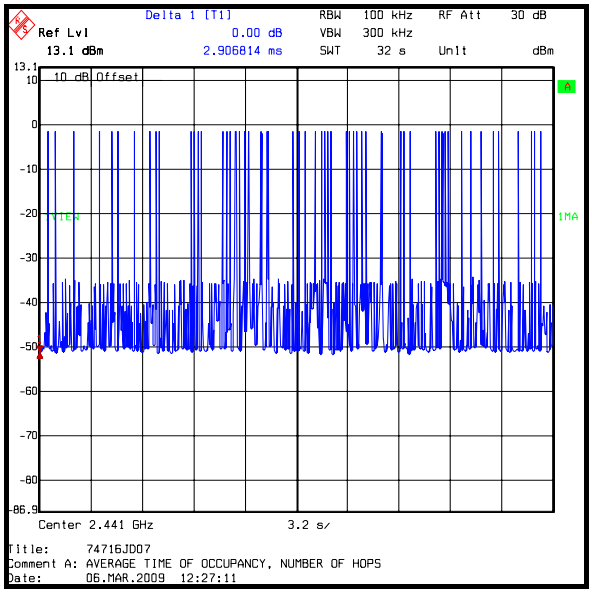
Note(s):

1. Tests were performed to identify the average time of occupancy in number of channels (79) x 0.4 seconds. The calculated period is 31.6 seconds.

Transmitter Average Time of Occupancy (continued)







5.9. Transmitter Maximum Peak Output Power

Test Summary:

FCC Part:	Section 15.247(b)(1)
Test Method Used:	As detailed in Public Notice DA 00-705 (March 30, 2000)
EUT Tested (IMEI):	356754020050086

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	27

Results: Basic Rate DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-2.0	30.0	32.0	Complied
Middle	-0.6	30.0	30.6	Complied
Top	-1.2	30.0	31.2	Complied

Results: EDR 2DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-1.2	20.0	21.2	Complied
Middle	-0.3	20.0	20.3	Complied
Top	-1.2	20.0	21.2	Complied

Results: EDR 3DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-0.9	20.0	20.9	Complied
Middle	-0.1	20.0	20.1	Complied
Top	-1.0	20.0	21.0	Complied

Note(s):

1. Measurements were performed with the test antenna in the vertical and horizontal planes and the EUT in the X, Y and Z planes. The highest level was recorded.

5.10. Transmitter Radiated Emissions

Test Summary:

FCC Part:	Section 15.247(d) & 15.209(a)
Frequency Range:	30 MHz to 1000 MHz
Test Method Used:	As detailed in Public Notice DA 00-705 (March 30, 2000) and ANSI C63.4 Section 8.
EUT Tested (IMEI):	356754020050086

Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	25

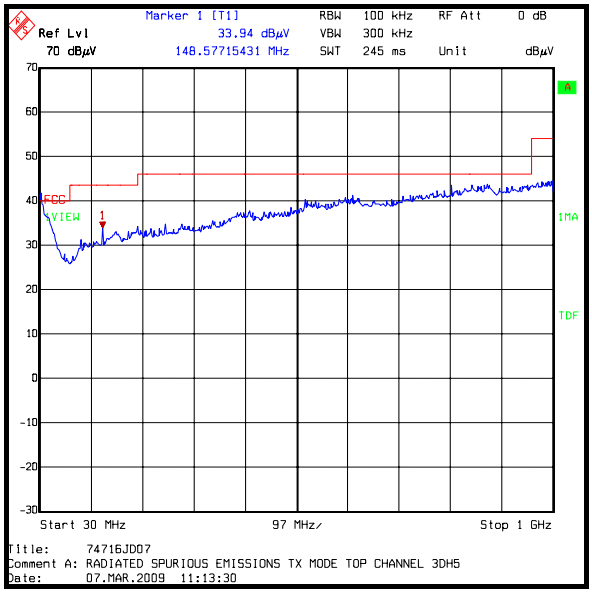
Results: Emissions Occurring in the Restricted Bands - Top Channel 3DH5

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
149.048	Horizontal	34.9	43.5	8.6	Complied

Note(s):

1. The preliminary scans showed similar emission levels below 1 GHz, for each mode of operation. Therefore final radiated emissions measurements were performed with the EUT set to the top channel only.
2. The emissions shown on the 1 GHz to 4 GHz plot are the EUT carrier at 2480 MHz and receive signal from the support equipment at approximately 2430 MHz.

Transmitter Radiated Emissions (continued)



Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Transmitter Radiated Emissions (continued)

Test Summary:

FCC Part:	Section 15.247(d) & 15.209(a)
Frequency Range:	1 GHz to 26.5 GHz
Test Method Used:	As detailed in Public Notice DA 00-705 (March 30, 2000) and ANSI C63.4 Section 8.
EUT Tested (IMEI):	356754020050086

Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	25

Results: Highest Peak Level: Bottom Channel 3DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.803852	Vertical	63.4	-1.8	61.6	74.0	12.4	Complied

Results: Highest Average Level: Bottom Channel 3DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.803852	Vertical	52.2	-1.8	50.4	54.0	3.6	Complied

Results: Highest Peak Level: Middle Channel 3DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.882100	Vertical	64.4	-1.3	63.1	74.0	10.9	Complied

Results: Highest Average Level: Middle Channel 3DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.882100	Vertical	53.8	-1.3	52.5	54.0	1.5	Complied

Transmitter Radiated Emissions (continued)

Results: Highest Peak Level: Top Channel 3DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.959899	Vertical	61.3	-1.4	59.9	74.0	14.1	Complied

Results: Highest Average Level: Top Channel 3DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.959899	Vertical	48.0	-1.4	46.6	54.0	7.4	Complied

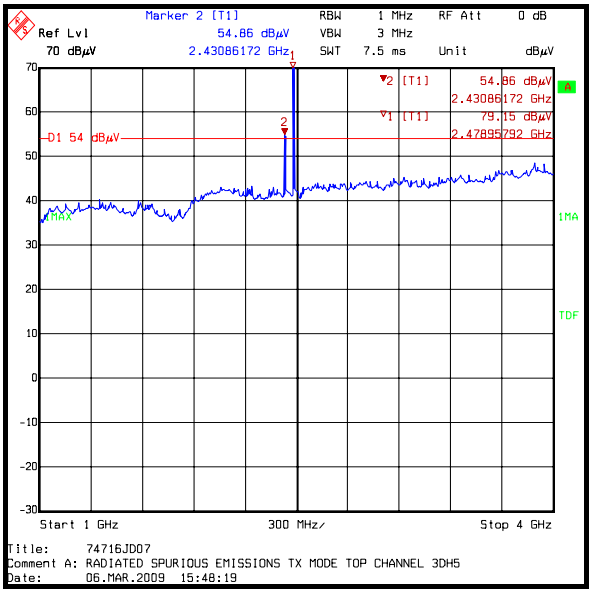
Results: Highest Peak Level: Hopping Mode 3DH5

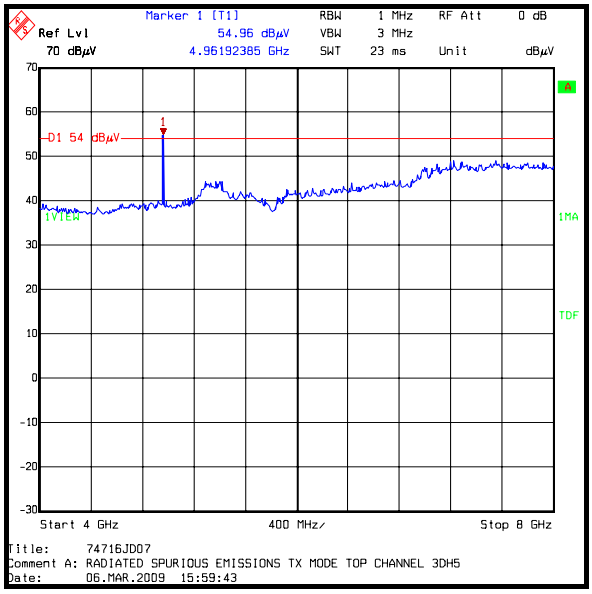
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.879719	Vertical	65.5	-1.3	64.2	74.0	9.8	Complied

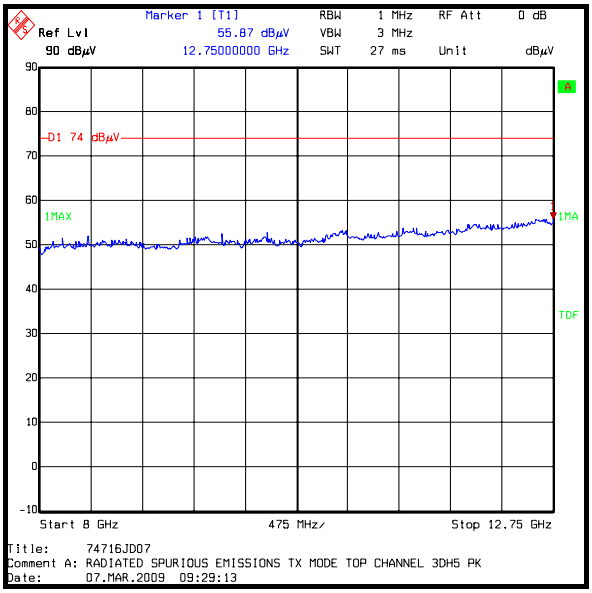
Results: Highest Average Level: Hopping Mode 3DH5

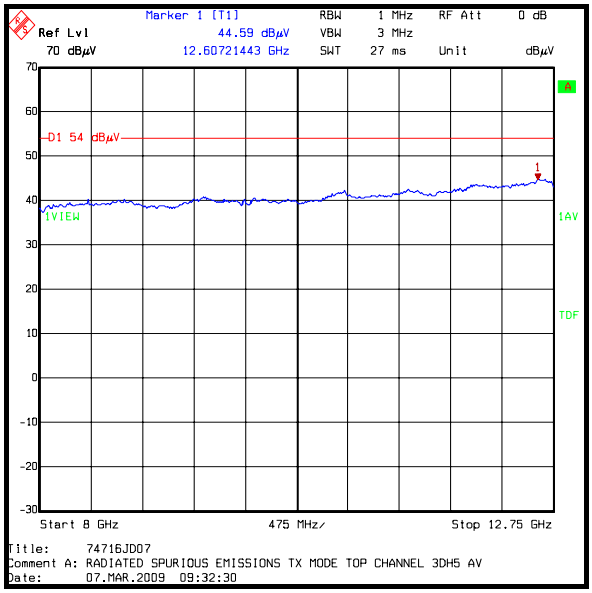
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.879719	Vertical	40.4	-1.3	39.1	54.0	14.9	Complied

Transmitter Radiated Emissions (continued)



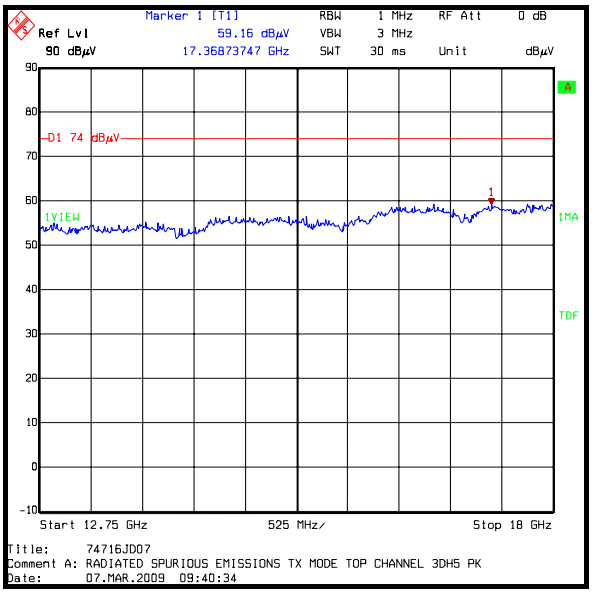


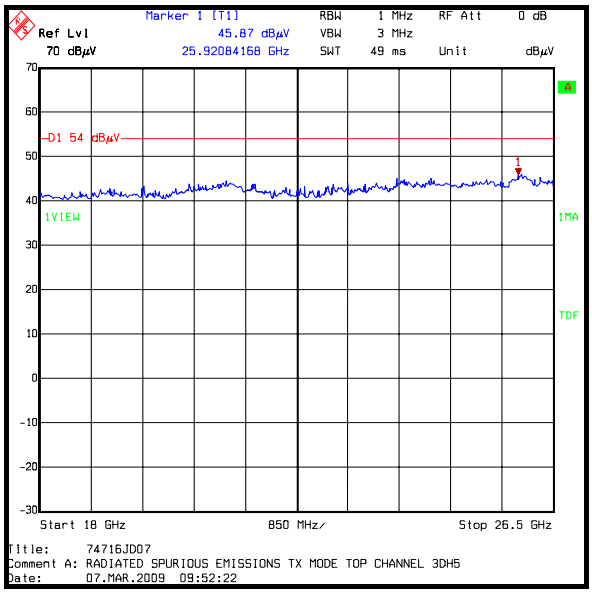




Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Transmitter Radiated Emissions (continued)





Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

5.11. Transmitter Band Edge Radiated Emissions

Test Summary:

FCC Part:	15.247(d) 15.209(a)
Test Method Used:	As detailed in Public Notice DA 00-705 (March 30, 2000)
EUT Tested (IMEI):	367554020050060

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	24

Results: Peak Power Level Hopping Mode DH5:

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4000	Vertical	53.5	-0.2	53.3	*73.4	20.1	Complied
2.4835	Vertical	53.9	-0.3	53.6	74.0	20.4	Complied

** -20 dBc limit*

Results: Average Power Level Hopping Mode DH5:

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4835	Vertical	31.6	-0.3	31.3	54.0	22.7	Complied

Results: Peak Power Level Hopping Mode 2DH5:

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4000	Vertical	47.9	-0.2	47.7	*73.5	25.8	Complied
2.4835	Vertical	55.9	-0.3	55.6	74.0	18.4	Complied

** -20 dBc limit*

Results: Average Power Level Hopping Mode 2DH5:

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4835	Vertical	30.3	-0.3	30.0	54.0	14.0	Complied

Transmitter Band Edge Radiated Emissions (continued)

Results: Peak Power Level Hopping Mode 3DH5:

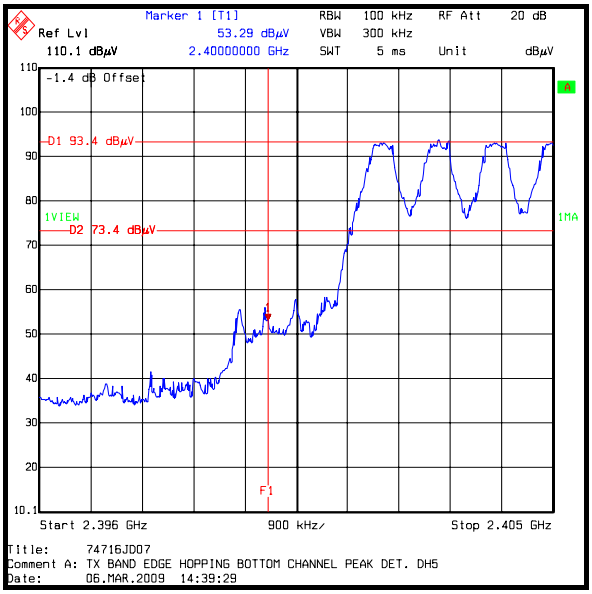
Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4000	Vertical	42.8	-0.2	42.6	*73.5	30.9	Complied
2.4835	Vertical	57.5	-0.3	57.2	74.0	16.8	Complied

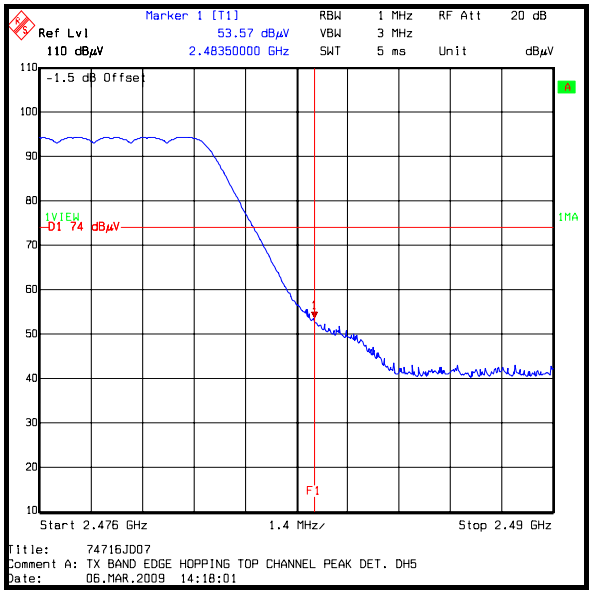
** -20 dBc limit*

Results: Average Power Level Hopping Mode 3DH5:

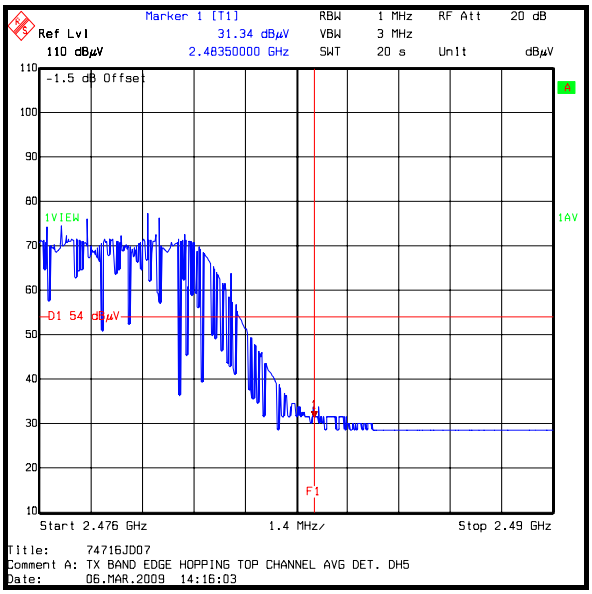
Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4835	Vertical	32.8	-0.3	32.5	54.0	21.5	Complied

Transmitter Band Edge Radiated Emissions (continued)

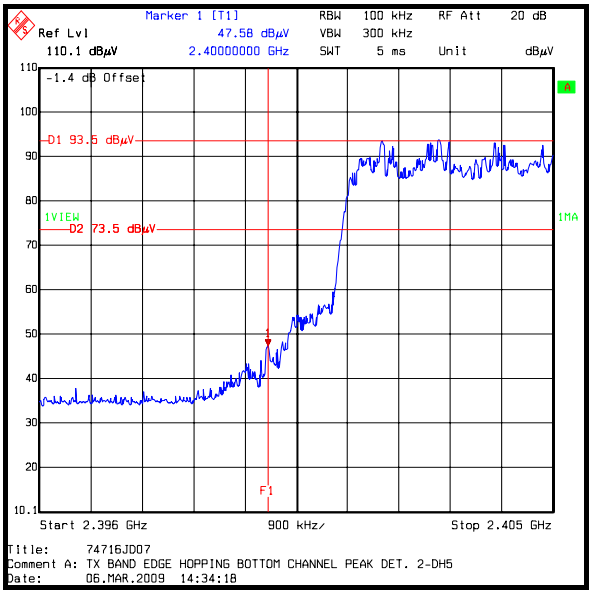


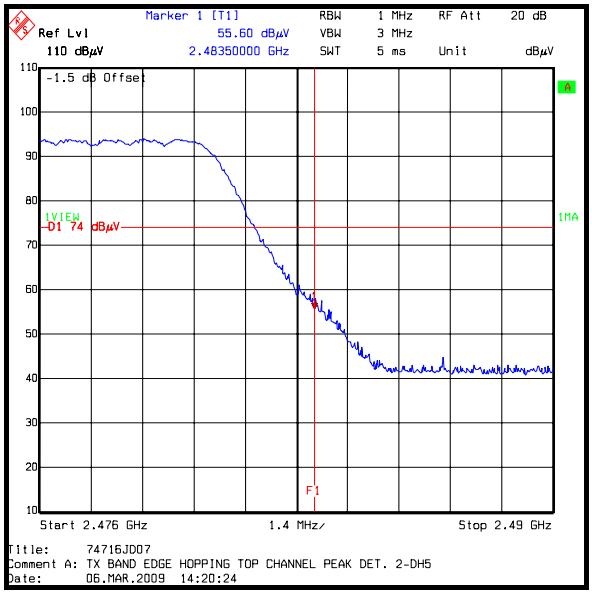


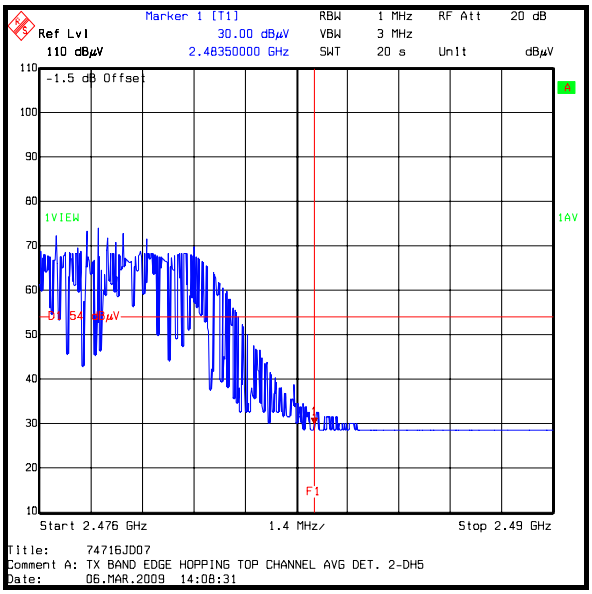
Mode DH5



Transmitter Band Edge Radiated Emissions (continued)

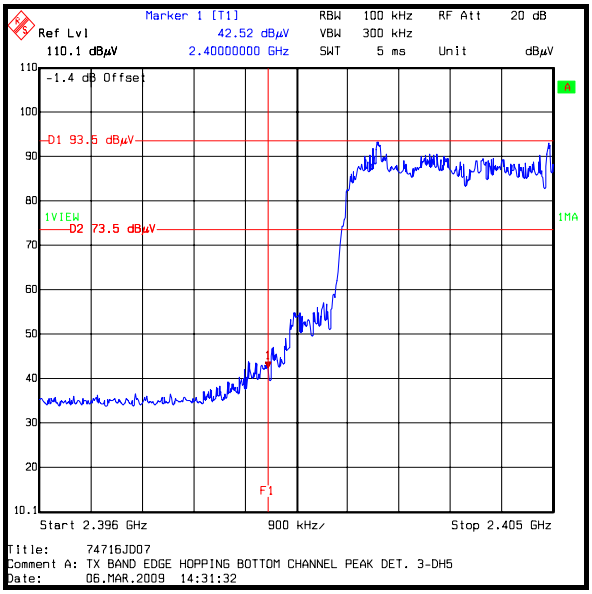


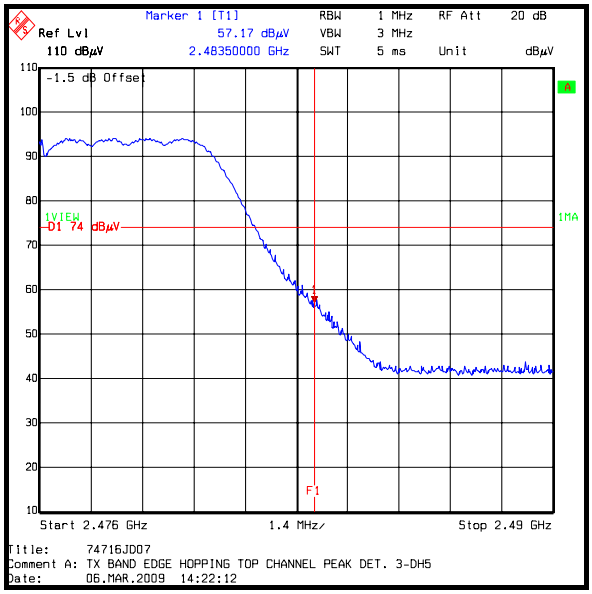




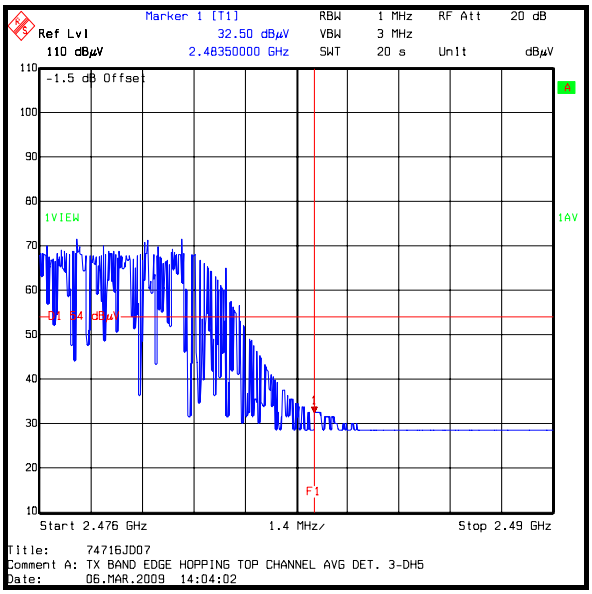
Mode 2DH5

Transmitter Band Edge Radiated Emissions (continued)





Mode 3DH5



Transmitter Band Edge Radiated Emissions (continued)

Results: Peak Power Level Static Mode DH5:

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4000	Vertical	53.8	-0.2	53.6	*73.4	19.8	Complied
2.4835	Vertical	54.7	-0.3	54.4	74.0	19.6	Complied

** -20 dBc limit*

Results: Average Power Level Static Mode DH5:

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4835	Vertical	40.3	-0.3	40.0	54.0	14.0	Complied

Results: Peak Power Level Static Mode 2DH5:

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4000	Vertical	48.3	-0.2	48.1	*74.0	25.9	Complied
2.4835	Vertical	59.5	-0.3	59.2	74.0	14.8	Complied

** -20 dBc limit*

Results: Average Power Level Static Mode 2DH5:

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4835	Vertical	42.0	-0.3	41.7	54.0	12.3	Complied

Transmitter Band Edge Radiated Emissions (continued)

Results: Peak Power Level Static Mode 3DH5:

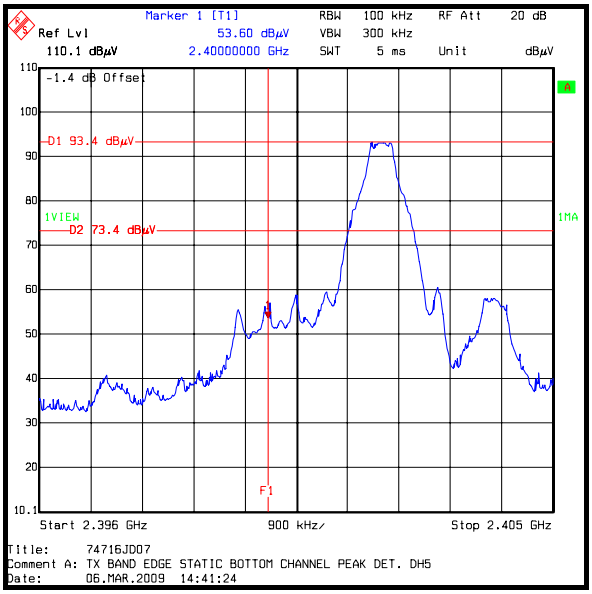
Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4000	Vertical	48.4	-0.2	48.2	*74.0	25.8	Complied
2.4835	Vertical	59.4	-0.3	59.1	74.0	14.9	Complied

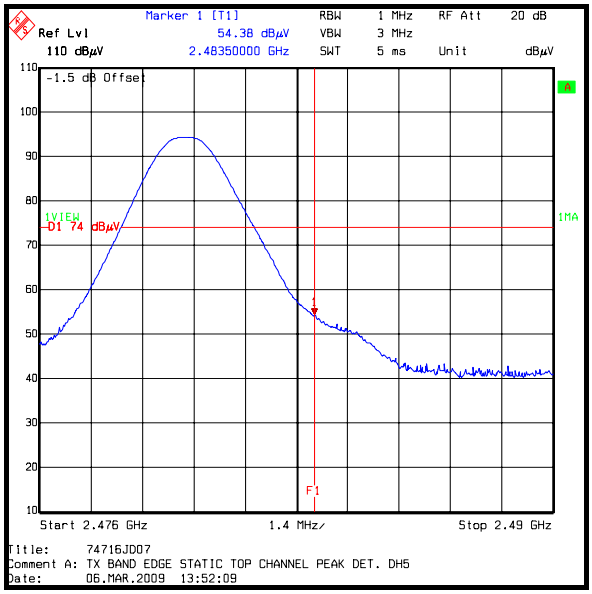
** -20 dBc limit*

Average Power Level Static Mode 3DH5:

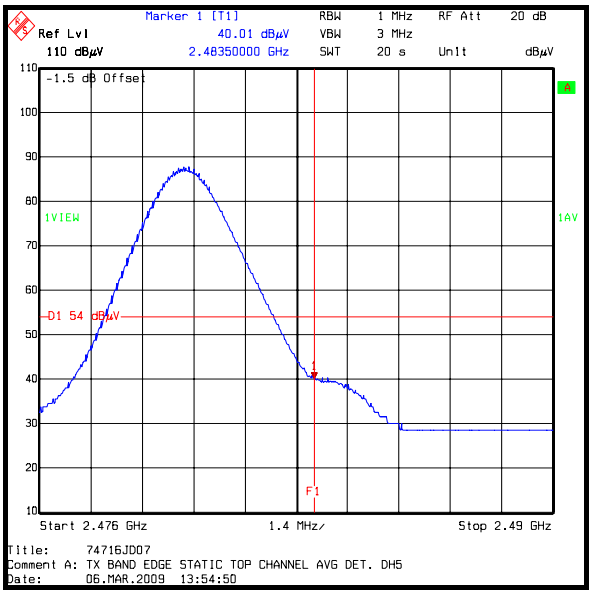
Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2.4835	Vertical	42.3	-0.3	42.0	54.0	12.0	Complied

Transmitter Band Edge Radiated Emissions (continued)

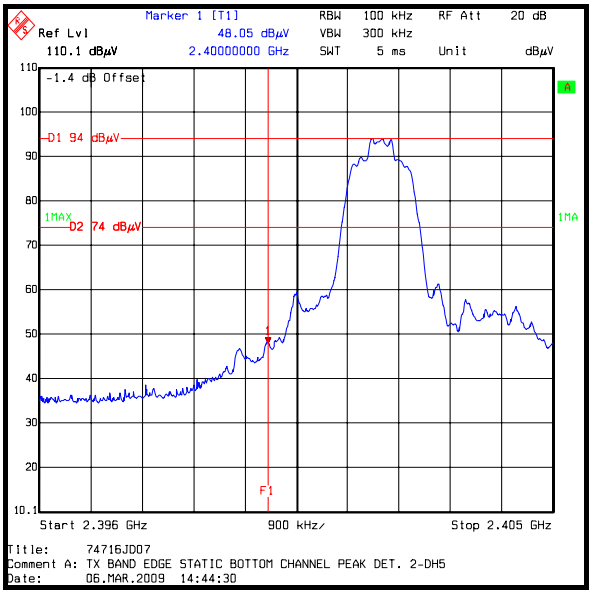


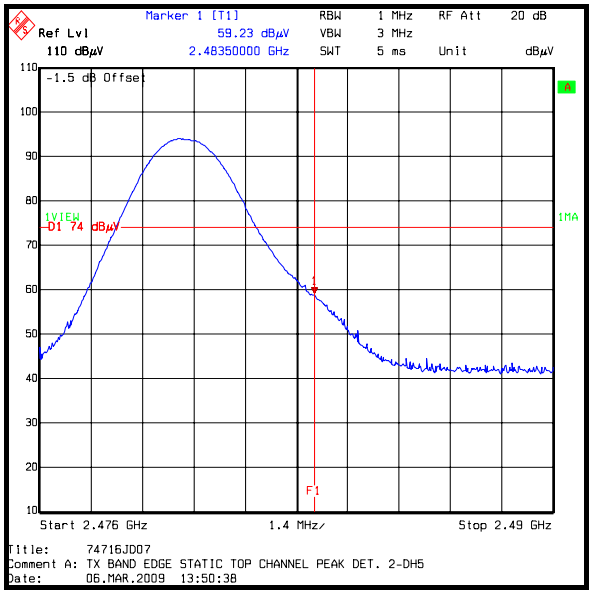


Mode DH5

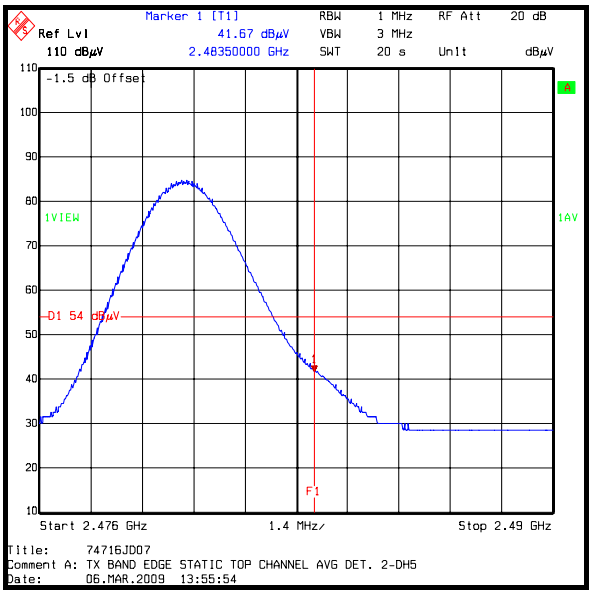


Transmitter Band Edge Radiated Emissions (continued)

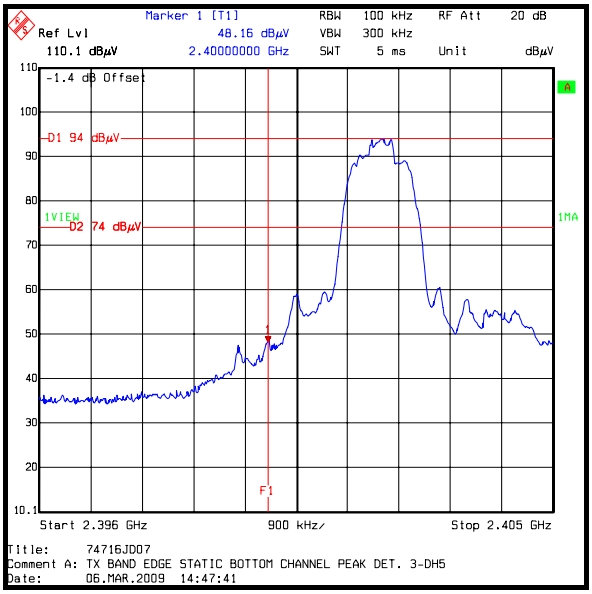


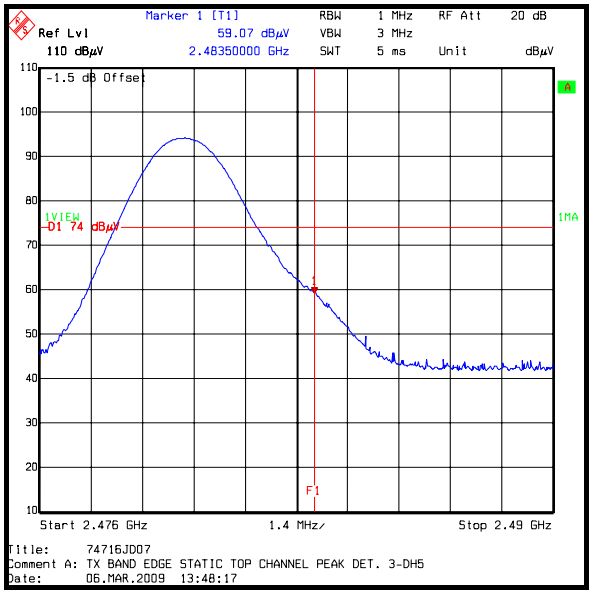


Mode 2DH5

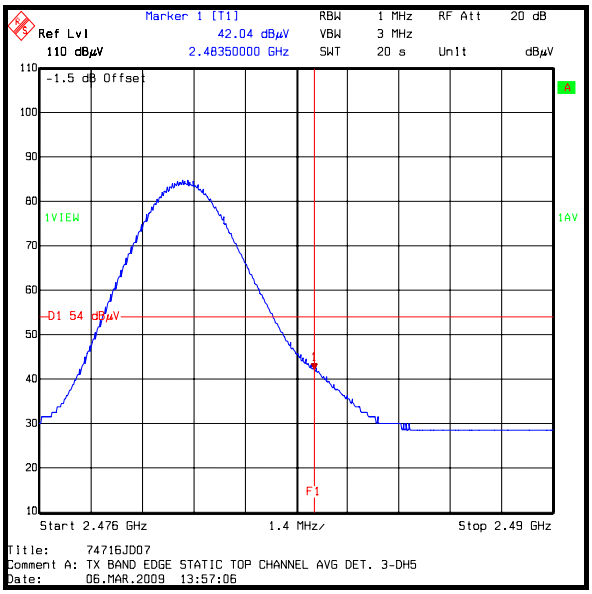


Transmitter Band Edge Radiated Emissions (continued)





Mode 3DH5



6. Measurement Uncertainty

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently, the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor, such that a confidence level of approximately 95% is maintained. For the purposes of this document “approximately” is interpreted as meaning “effectively” or “for most practical purposes”.

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
AC Conducted Spurious Emissions	0.15 MHz to 30 MHz	95%	±3.72 dB
Transmitter Maximum Peak Output Power	Not Applicable	95%	±2.94 dB
Conducted Emissions Antenna Port	30 MHz to 40 GHz	95%	±0.28 dB
Transmitter Carrier Frequency Separation	Not Applicable	95%	±11.4 ppm
Transmitter Average Time of Occupancy	Not Applicable	95%	±0.3 ns
20 dB Bandwidth	Not Applicable	95%	±11.4 ppm
Radiated Spurious Emissions	30 MHz to 1000 MHz	95%	±4.64 dB
Radiated Spurious Emissions	1 GHz to 40 GHz	95%	±2.94 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty, the published guidance of the appropriate accreditation body is followed.

Appendix 1. Test Equipment Used

RFI No.	Instrument	Manufacturer	Type No.	Serial No.	Date Last Calibrated	Cal. Interval (Months)
A004	LISN	Rohde & Schwarz	ESH3-Z5	890604/027	19 May 2008	12
A1299	Antenna	Schaffner	CBL6143	5094	28 Jul 2008	12
A1391	Attenuator	Huber + Suhner	757987	6810.17.B	Calibrated before use	-
A1534	Pre Amplifier	Hewlett Packard	8449B OPT H02	3008A00405	Calibrated before use	-
A1818	Antenna	EMCO	3115	00075692	25 Oct 2008	12
A1830	Pulse Limiter	Rhode & Schwarz	ESH3-Z2	100668	05 Jan 2009	12
A436	Antenna	Flann	20240-20	330	24 Apr 2006	36
K0002	3m RSE Chamber	Rainford EMC	N/A	N/A	13 Aug 2008	-
M1227	Power Sensor	Agilent	8487D	3318A02122	02 Feb 2009	12
M1242	Spectrum Analyser	Rohde & Schwarz	FSEM30	845986/022	09 Dec 2008	12
M127	Spectrum Analyser	Rohde & Schwarz	FSEB 30	842 659/016	21 Aug 2008	12
M1379	Test Receiver	Rohde & Schwarz	ESIB7	100330	14 Aug 2008	12
M1447	CBT	Rohde & Schwarz	1153.900 0.35	100329	19 Jan 2009	12

NB In accordance with UKAS requirements, all the measurement equipment is on a calibration schedule.