TEST REPORT
FROM
RFI GLOBAL SERVICES LTD

Test of: NTT docomo P-07A

To: FCC Part 15.247: 2008 (Subpart C)

Test Report Serial No:
RFI/RPT2/RP74681JD07A

Supersedes Test Report Serial No:
RFI/RPT1/RP74681JD07A

This Test Report Is Issued Under The Authority Of Brian Watson, Operations Director:  **pp**	
Checked By: 	**Report Copy No: PDF01**
Issue Date: 17 March 2009	**Test Dates: 14 February to 22 February 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 United Kingdom

2. Equipment Under Test (EUT)

2.1. Identification of Equipment Under Test (EUT)

Brand Name:	NTT docomo
Model Name or Number:	P-07A
Hardware Version:	Rev. C
Software Version:	B-WN908A-01.02.004 08-2H_CPF_Cv0713528
IMEI	356753020050153
FCC ID Number:	UCE208014A

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:	128 MB Micro-SD Memory Card
Brand Name:	None stated
Model Name or Number:	None stated

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 docomo
Model Name or Number:	P19

2.2. Description of EUT

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

2.3. Modifications Incorporated in the EUT

During the course of testing the EUT was not modified.

2.4. 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

2.5. Additional Information Related to Testing

Tested Technology:	Bluetooth		
Power Supply Requirement (DC):	Nominal (V)	3.7	
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:	-0.2 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

3. Test Specification, Methods and Procedures

3.1. Test Specification

Reference:	FCC Part 15.247: 2008 Subpart C
Title:	Code of Federal Regulations (47CFR15.247) (Intentional Radiators operating within the band 2400 MHz to 2483.5 MHz)

3.2. Methods and Procedures

The methods and procedures used were as detailed in:

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.

DA00-705 (2000)
Title: Filing and Frequency Measurement Guidelines for Frequency Hopping Spread Spectrum Systems.

3.3. Definition of Measurement Equipment

The measurement equipment used complied with the requirements of the standards referenced in the methods & procedures section above. Appendix 1 contains a list of the test equipment used.

4. Deviations from the Test Specification

There were no deviations from the test specification.

5. Operation and Configuration of the EUT during Testing

5.1. 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.

5.2. 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 and Basic rate modes were tested in order to identify the mode that presented the worse case result with regards too amplitude and modulation bandwidth. All tests were performed on the mode that exhibited the highest output power and bandwidth except for output power, bandwidth, band edge and channel separation where all modes were tested.
- Idle mode and transmitter mode radiated spurious emissions tests were performed with the mains charger connected to the EUT and 120VAC supply as this was found to be the worst case during pre-scans. All accessories were individually connected and measurements made during pre-scans to determine the worst case combination.

6. Summary of Test Results

Range of Measurements	Reference	Port Type	Result
AC Conducted Emissions	FCC Part 15.107	AC Mains	Complied
Idle Mode Radiated Spurious Emissions	FCC Part 15.109	Antenna	Complied
Transmitter AC Conducted Emissions	FCC Part 15.207	AC Mains	Complied
Transmitter 20 dB Bandwidth	FCC Part 15.247(a)(1)	Antenna	Complied
Transmitter Carrier Frequency Separation	FCC Part 15.247(a)(1)	Antenna	Complied
Transmitter Average Time of Occupancy	FCC Part 15.247(a)(1)(iii)	Antenna	Complied
Transmitter Maximum Peak Output Power	FCC Part 15.247(b)(3)	Antenna	Complied
Transmitter Radiated Emissions	FCC Part 15.247(d) & 15.209(a)	Antenna	Complied
Transmitter Band Edge Radiated Emissions	FCC Part 15.247(d) & 15.209(a)	Antenna	Complied

6.1. Location of Tests

All the measurements described in this report were performed at the premises of RFI Global Services Ltd, Wade Road, Basingstoke, Hampshire, RG24 8AH.

6.2. Site Registration Numbers

FCC: 209735

7. Measurements, Examinations and Derived Results

7.1. 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.

7.2. Test Results

7.3. Idle Mode AC Conducted Spurious Emissions

Test Summary:

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

Environmental Conditions:

Temperature (°C):	17
Relative Humidity (%):	39

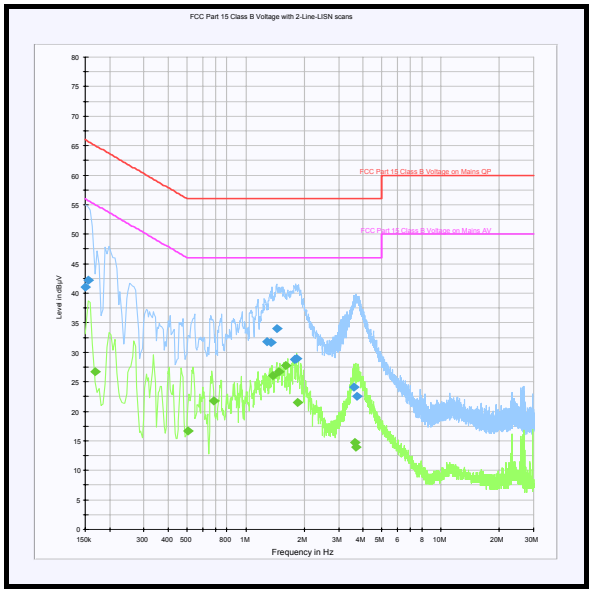
Results: Quasi Peak Detector Measurements

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.150000	Live	41.0	66.0	25.0	Complied
0.154500	Live	42.2	65.8	23.6	Complied
1.284000	Live	31.8	56.0	24.2	Complied
1.347000	Live	31.7	56.0	24.3	Complied
1.450500	Live	34.0	56.0	22.0	Complied
1.788000	Live	28.9	56.0	27.1	Complied
1.828500	Live	28.9	56.0	27.1	Complied
3.606000	Live	24.1	56.0	31.9	Complied
3.727500	v	22.6	56.0	33.4	Complied

Results: Average Detector Measurements

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.168000	Live	26.7	55.1	28.4	Complied
0.505500	Live	16.7	46.0	29.3	Complied
0.681000	Live	21.7	46.0	24.3	Complied
1.383000	Live	26.0	46.0	20.0	Complied
1.477500	Live	26.7	46.0	19.3	Complied
1.599000	Live	27.7	46.0	18.3	Complied
1.837500	Live	21.5	46.0	24.5	Complied
3.615000	Live	14.7	46.0	31.3	Complied
3.687000	Live	13.9	46.0	32.1	Complied

Idle Mode AC Conducted Spurious Emissions (continued)



7.4. Idle Mode Radiated Spurious Emissions

Test Summary:

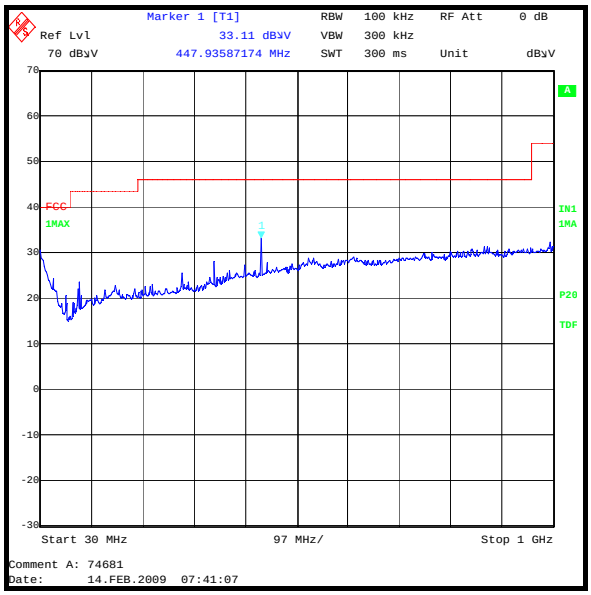
FCC Part:	15.109
Test Method Used:	As detailed in ANSI C63.4 Section 8 and relevant annexes
Frequency Range:	30 MHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	20
Relative Humidity (%):	23

Results: Electric Field Strength Measurements

Frequency (MHz)	Antenna Polarity	Quasi-Peak Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
447.178	Horizontal	33.9	46.0	12.1	Complied



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

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

Environmental Conditions:

Temperature (°C):	20
Relative Humidity (%):	23

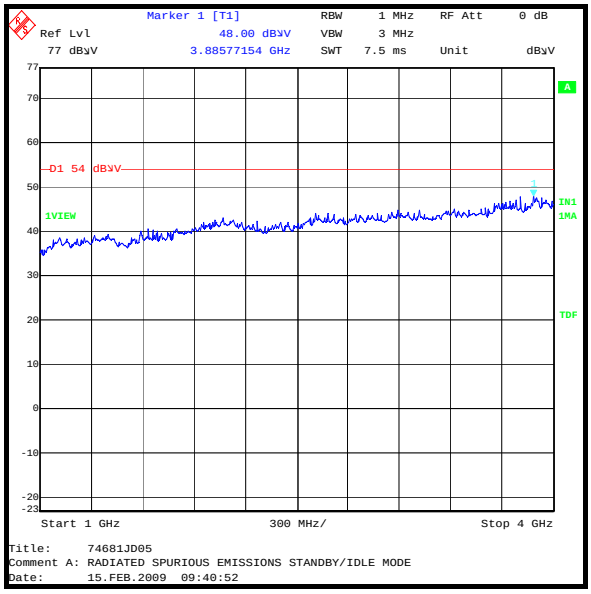
Results: Electric Field Strength Measurements (Highest Peak Level)

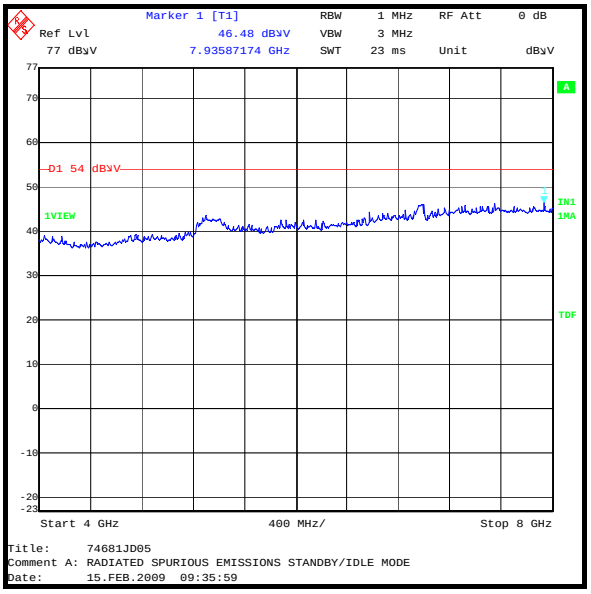
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Peak Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
12.524	Vertical	38.5	13.0	51.5	54.0	2.5	Complied

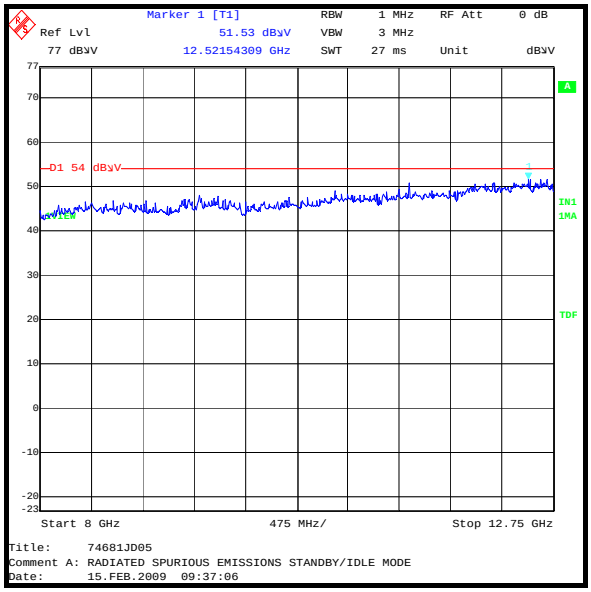
Note(s):

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.

Idle Mode Radiated Spurious Emissions (continued)







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

7.5. 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
Frequency Range:	30 MHz to 1000 MHz

Environmental Conditions:

Temperature(°C):	21
Relative Humidity (%):	29

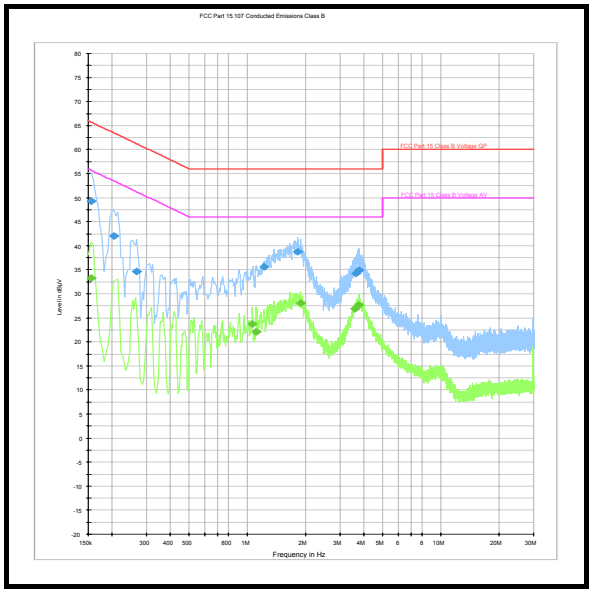
Results: Quasi-Peak Detector Measurements

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.154500	Live	49.2	65.8	16.6	Complied
0.204000	Live	42.0	63.4	21.4	Complied
0.267000	Live	34.6	61.2	26.6	Complied
1.221000	Neutral	35.6	56.0	20.4	Complied
1.810500	Neutral	38.8	56.0	17.2	Complied
3.601500	Neutral	34.3	56.0	21.7	Complied
3.736500	Neutral	34.9	56.0	21.1	Complied

Results: Average Detector Measurements

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.154500	Live	33.3	55.8	22.5	Complied
1.054500	Neutral	23.6	46.0	22.4	Complied
1.104000	Neutral	22.1	46.0	23.9	Complied
1.864500	Neutral	28.1	46.0	17.9	Complied
3.565500	Neutral	26.8	46.0	19.2	Complied
3.736500	Neutral	27.7	46.0	18.3	Complied

Transmitter AC Conducted Spurious Emissions (continued)



7.6. Transmitter 20 dB Bandwidth

Test Summary:

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

Environmental Conditions:

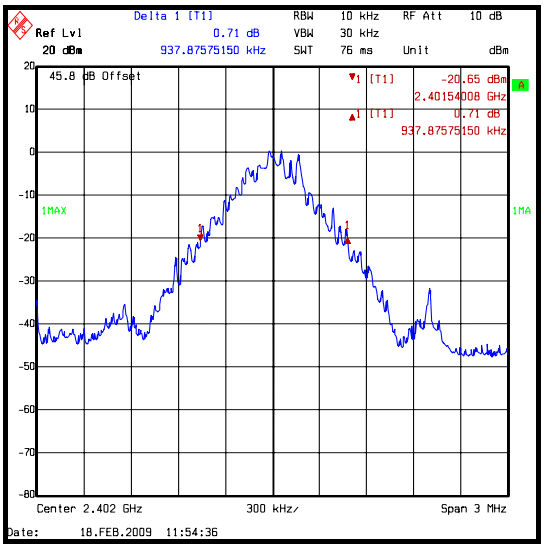
Temperature (°C):	20
Relative Humidity (%):	34

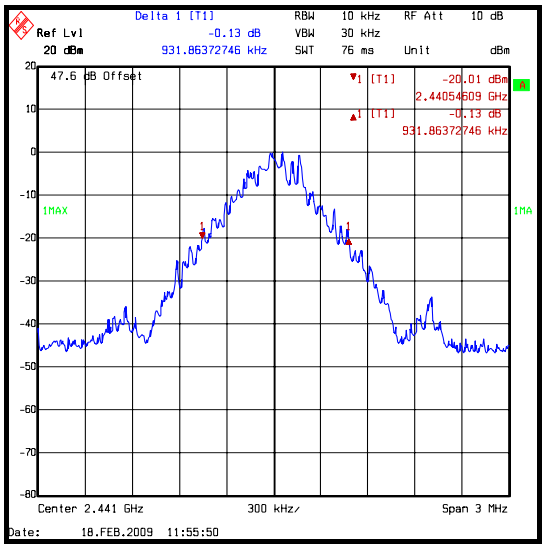
Results: DH5

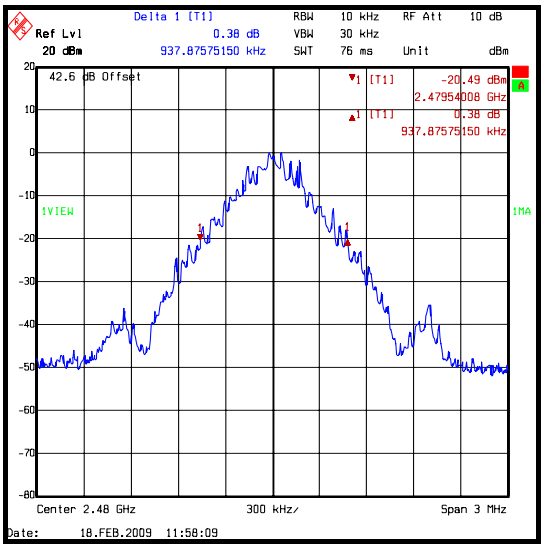
Channel	20 dB Bandwidth (kHz)
Bottom	937.876
Middle	931.864
Top	937.876

Transmitter 20 dB Bandwidth (continued)

DH5



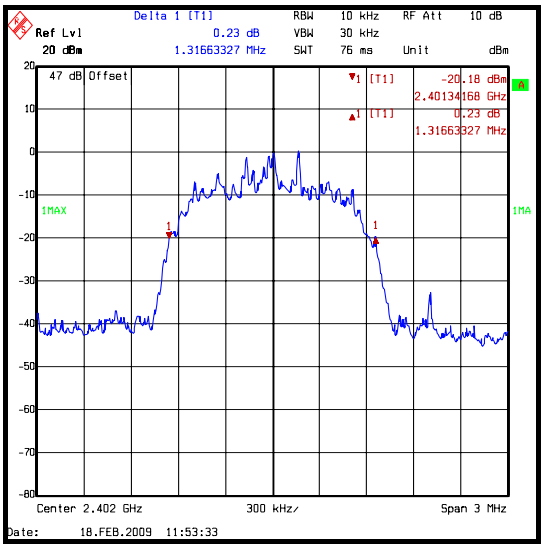


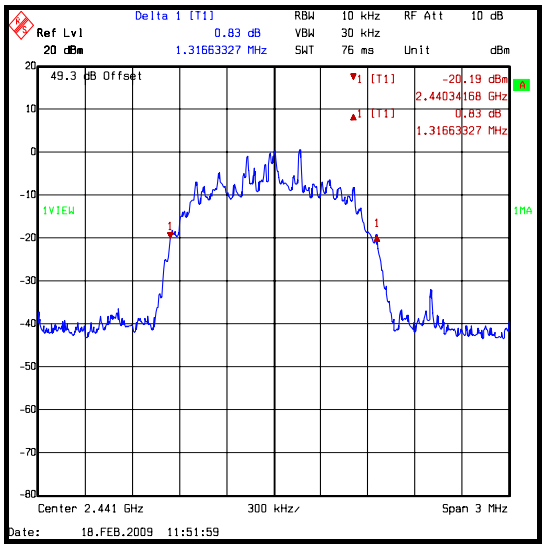


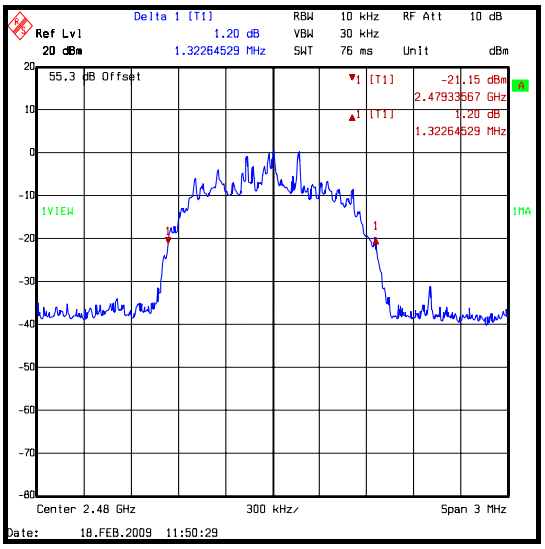
Transmitter 20 dB Bandwidth (continued)

Results: 2DH5

Channel	20 dB Bandwidth (kHz)
Bottom	1316.633
Middle	1316.633
Top	1322.645



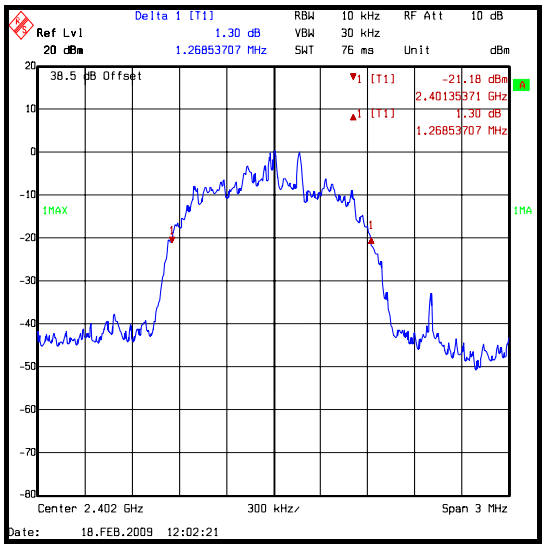


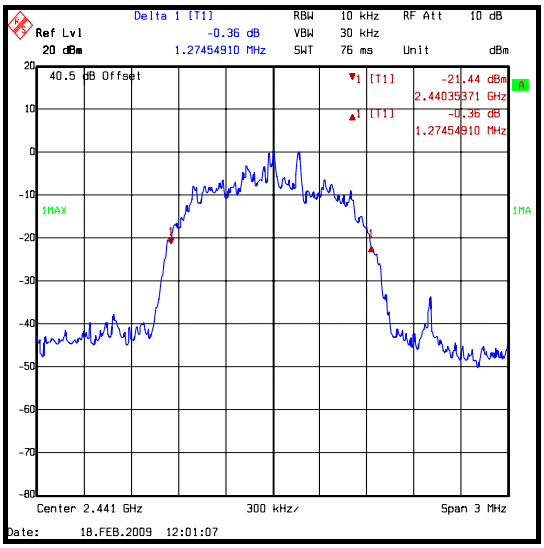


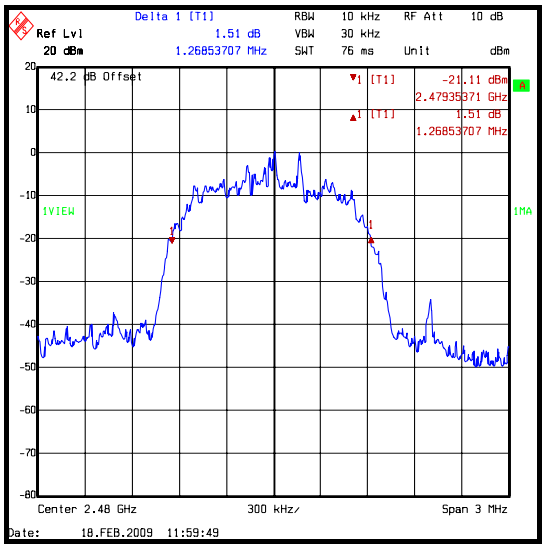
Transmitter 20 dB Bandwidth (continued)

Results: 3DH5

Channel	Transmitter 20 dB 3DH5 Bandwidth (kHz)
Bottom	1268.537
Middle	1274.549
Top	1268.537







7.7. 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)

Environmental Conditions:

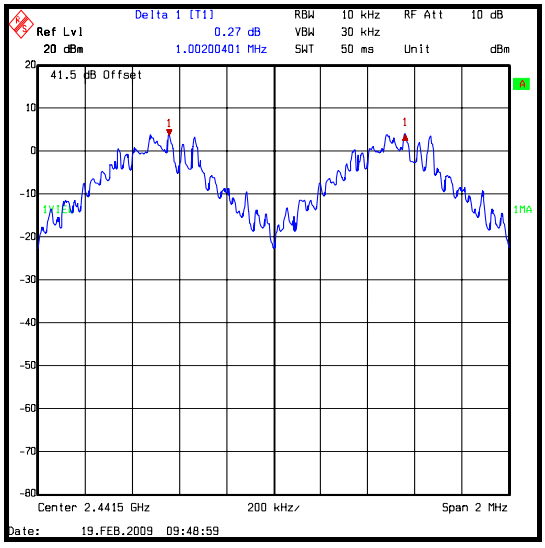
Temperature (°C):	20
Relative Humidity (%):	34

Results: DH5

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
1082.164	621.243	380.761	Complied

Note(s):

1. The 20 dB bandwidth measured for the middle channel operating at 2441 MHz was used to calculate the limit



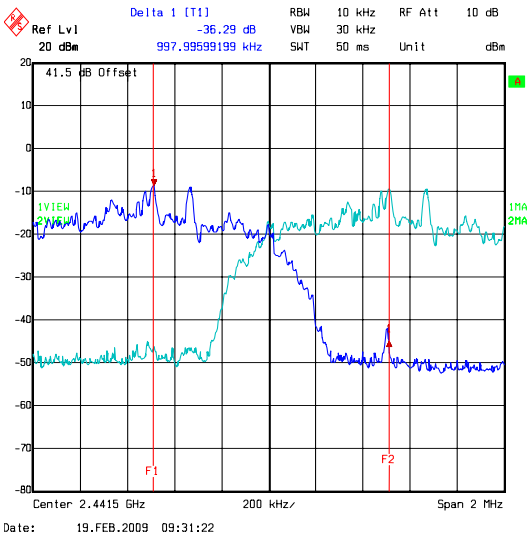
Transmitter Carrier Frequency Separation (continued)

Results: 3DH5

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
997.996	849.699	148.297	Complied

Note(s):

1. The 20 dB bandwidth measured for the middle channel operating at 2441 MHz was used to calculate the limit



7.8. Transmitter Average Time of Occupancy

Test Summary:

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

Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	24

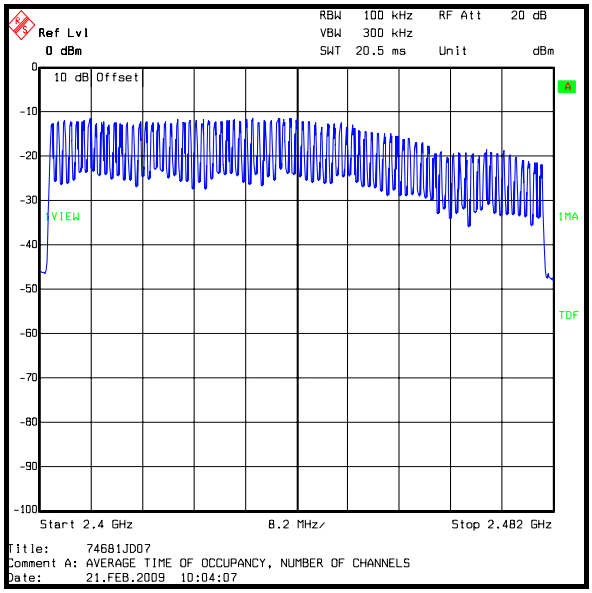
Results:

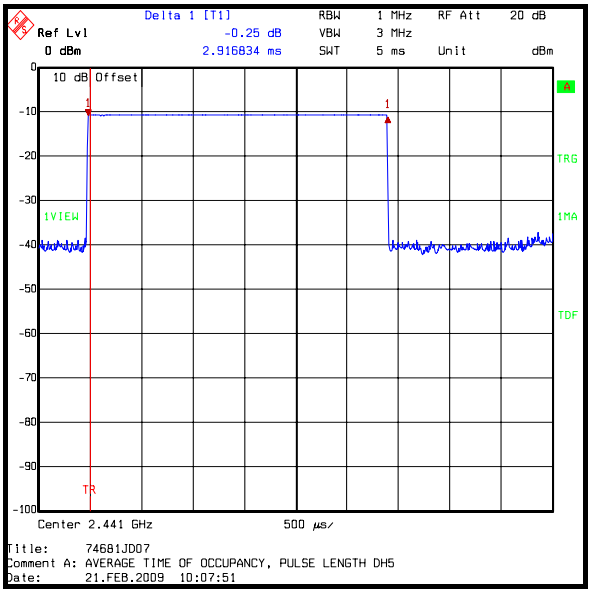
Emission Width (μs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
2916.8	74	0.215	0.4	0.184	Complied

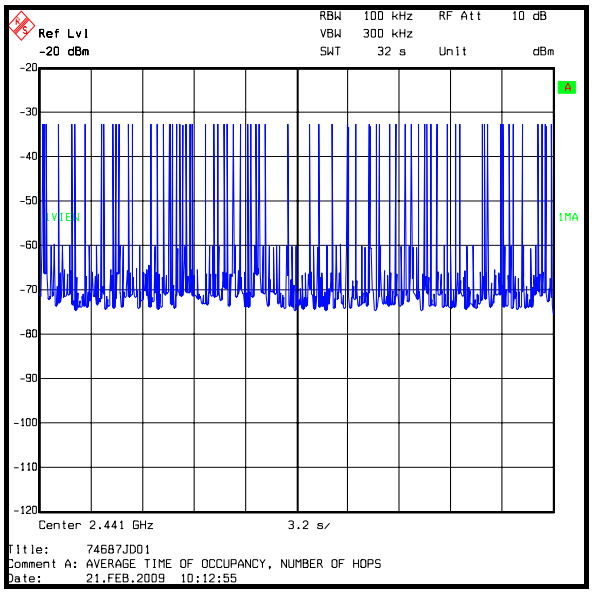
Note(s):

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)







7.9. Transmitter Maximum Peak Output Power (EIRP)

Test Summary:

FCC Part:	15.247(b)(1)
Test Method Used:	DA-705 – Peak Output Power / *De Facto* EIRP

Environmental Conditions:

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

Results: Basic Rate DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-0.8	30.0	30.8	Complied
Middle	-0.2	30.0	30.2	Complied
Top	-2.3	30.0	32.3	Complied

Results: EDR 2DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-1.3	20.0	21.3	Complied
Middle	-1.0	20.0	21.0	Complied
Top	-3.0	20.0	23.0	Complied

Results: EDR 3DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-1.2	20.0	21.2	Complied
Middle	-1.0	20.0	21.0	Complied
Top	-2.8	20.0	22.8	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.

7.10. Transmitter Radiated Emissions

Test Summary:

FCC Part:	15.247(d) and 15.209(a)
Test Method Used:	DA-705 - Spurious Radiated Emissions and as detailed in ANSI C63.4 Section 8.
Frequency Range:	30 MHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	24

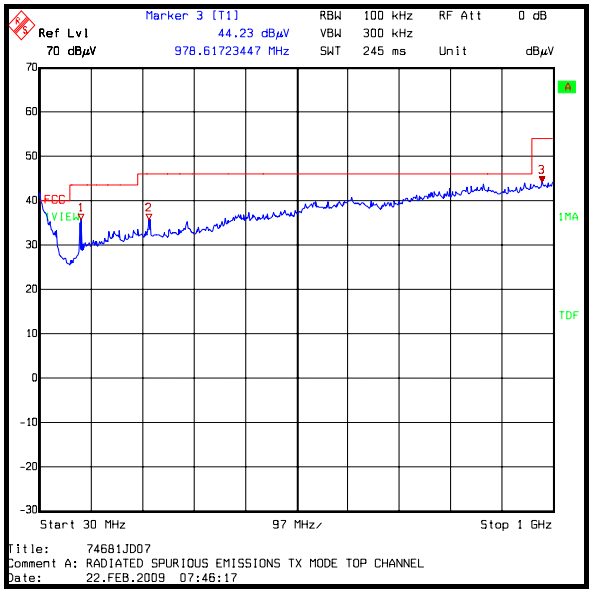
Results: Electric Field Strength Measurement - Top Channel DH5

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
107.594	Vertical	35.7	43.5	7.8	Complied
236.052	Vertical	32.3	46.0	13.7	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 plots are the EUT carrier at 2480 MHz and receive signal from the support equipment at approximately 2400 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:	15.247(d) and 15.209(a)
Test Method Used:	DA-705 - Spurious Radiated Emissions and as detailed in ANSI C63.4 Section 8.
Frequency Range:	1 GHz to 26.5 GHz

Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	24

Results: Electric Field Strength Measurement - Highest Peak Level: Bottom Channel DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
4.804015	Vertical	59.0	-1.8	57.2	74.0	16.8	Complied

Results: Electric Field Strength Measurement - Highest Average Level: Bottom Channel DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
4.804015	Vertical	51.5	-1.8	49.7	54.0	4.3	Complied

Results: Electric Field Strength Measurement - Highest Peak Level: Middle Channel DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
4.881995	Vertical	59.6	-1.3	58.3	74.0	15.7	Complied

Results: Electric Field Strength Measurement - Highest Average Level: Middle Channel DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
4.881995	Vertical	51.7	-1.3	50.4	54.0	3.6	Complied

Transmitter Radiated Emissions (continued)

Results: Electric Field Strength Measurement - Highest Peak Level: Top Channel DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.960008	Vertical	57.4	-1.4	56.0	74.0	18.0	Complied

Results: Electric Field Strength Measurement - Highest Average Level: Top Channel DH5

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.960008	Vertical	50.1	-1.4	48.7	54.0	5.3	Complied

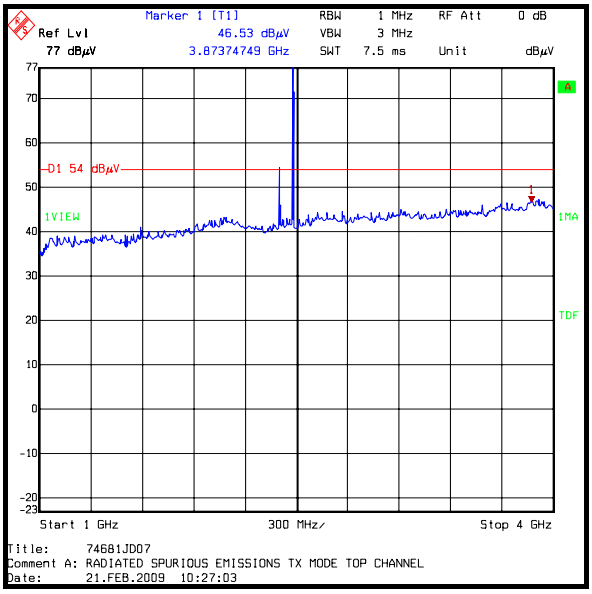
Results: Electric Field Strength Measurement - Highest Peak Level: Hopping Mode DH5

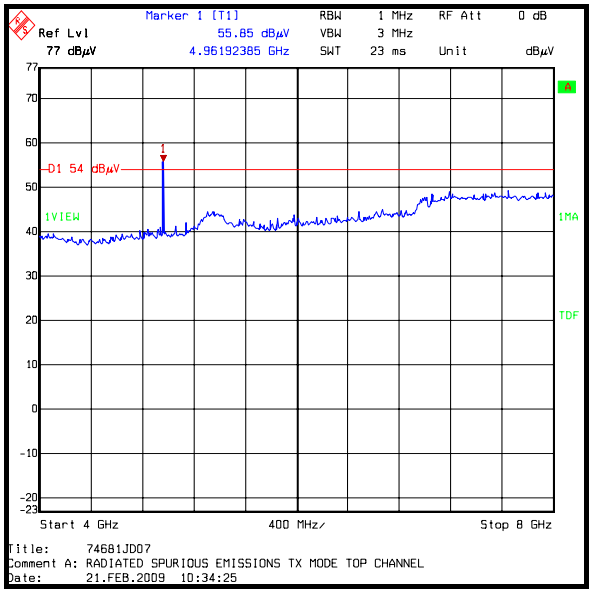
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.845651	Vertical	60.9	-1.5	59.4	74.0	14.6	Complied

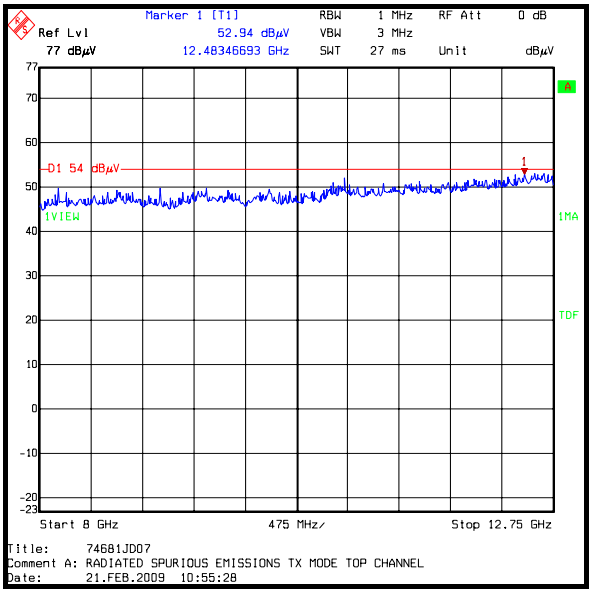
Results: Electric Field Strength Measurement - Highest Average Level: Hopping Mode DH5

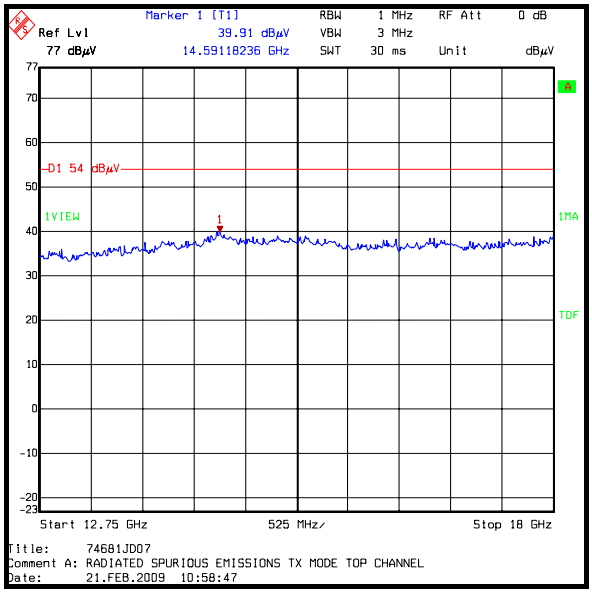
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.845651	Vertical	39.5	-1.5	38.0	54.0	16.0	Complied

Transmitter Radiated Emissions (continued)



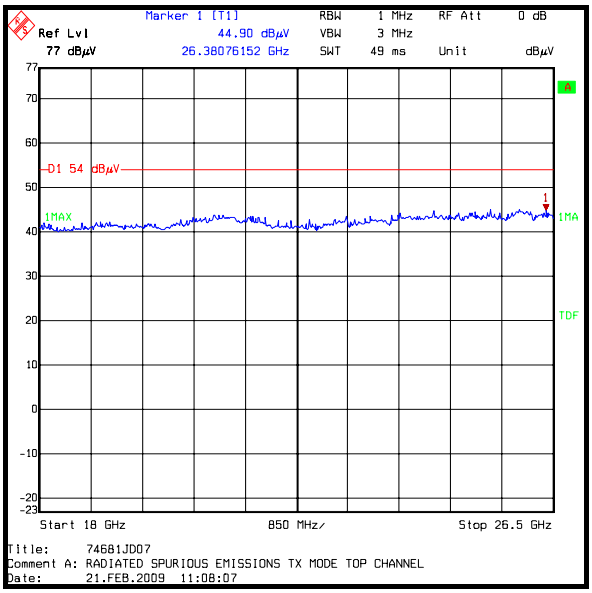






Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Transmitter Radiated Emissions (continued)



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

7.11. Transmitter Band Edge Radiated Emissions

Test Summary:

FCC Part:	15.247(d) and 15.209(a)
Test Method Used:	DA-705 - Spurious Radiated Emissions for Band Edge

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	25

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	54.0	-0.2	53.8	*73.6	19.8	Complied
2.4835	Vertical	58.9	-0.3	58.6	74.0	15.4	Complied

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	46.3	-0.3	46.0	54.0	8.0	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	52.4	-0.2	52.2	*73.6	21.4	Complied
2.4835	Vertical	58.9	-0.3	58.6	74.0	15.4	Complied

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	46.0	-0.3	45.7	54.0	8.3	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	52.8	-0.2	52.6	*73.9	21.3	Complied
2.4835	Vertical	59.1	-0.3	58.8	74.0	15.2	Complied

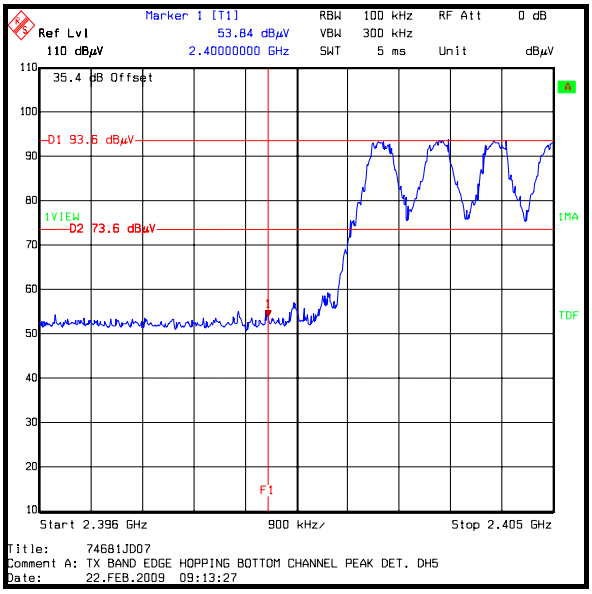
Results: Average Power Level Hopping Mode 3DH5

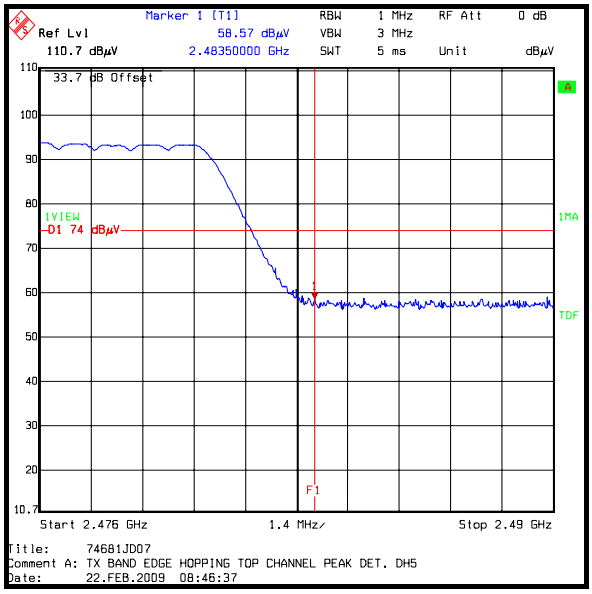
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4835	Vertical	46.3	-0.3	46.0	54.0	8.0	Complied

Note(s):

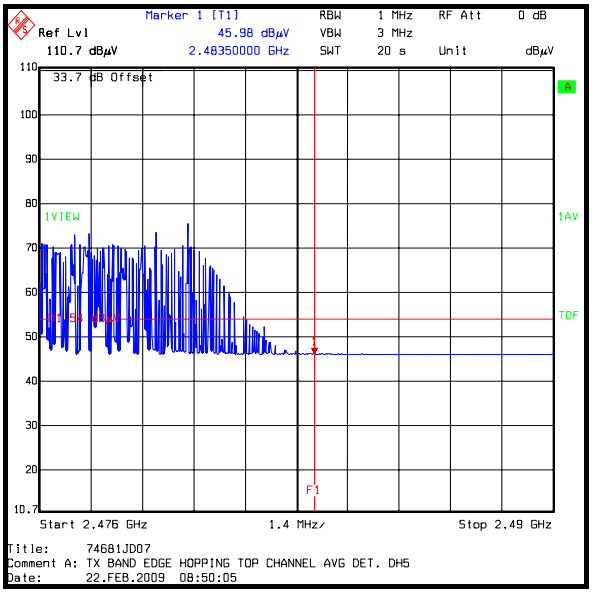
1. * -20 dBc limit

Transmitter Band Edge Radiated Emissions (continued)

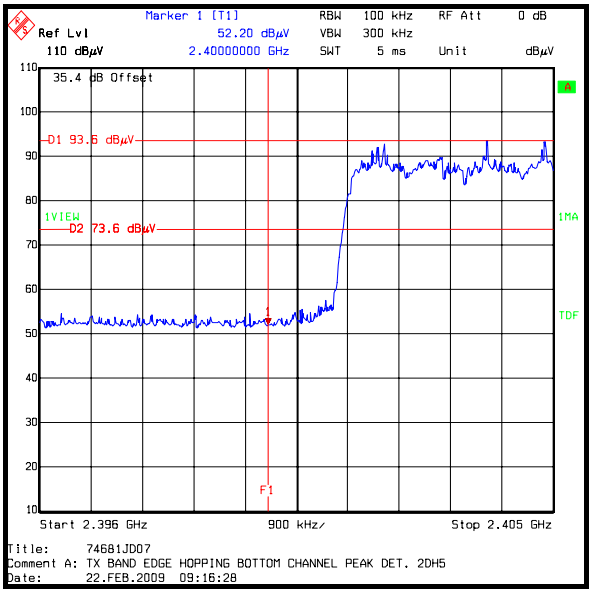


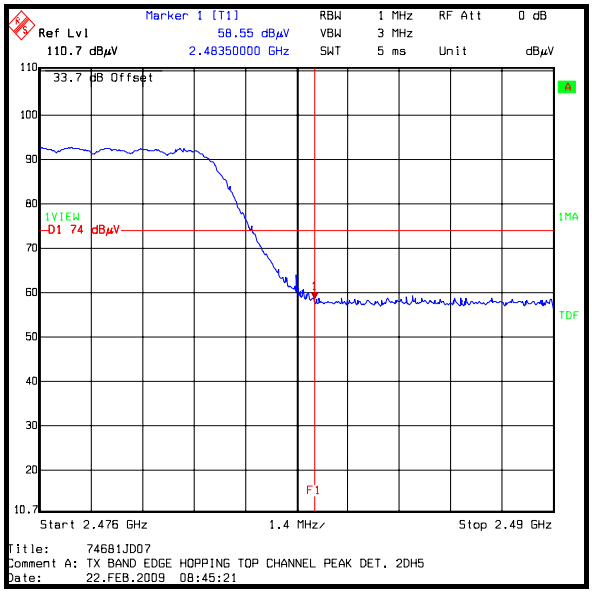


Mode DH5

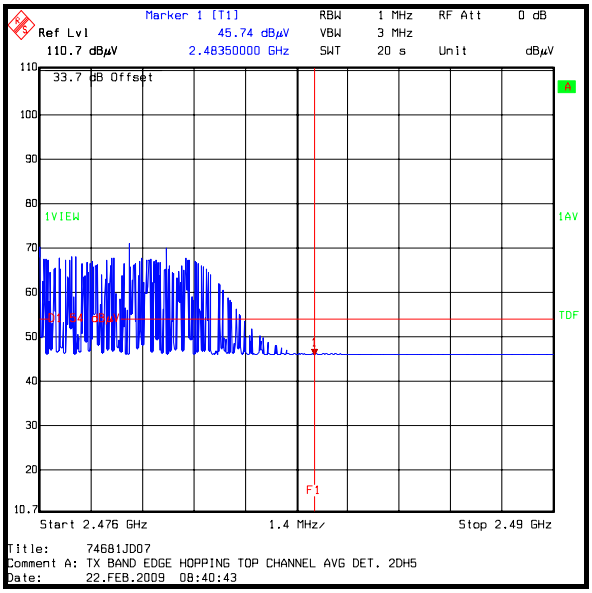


Transmitter Band Edge Radiated Emissions (continued)

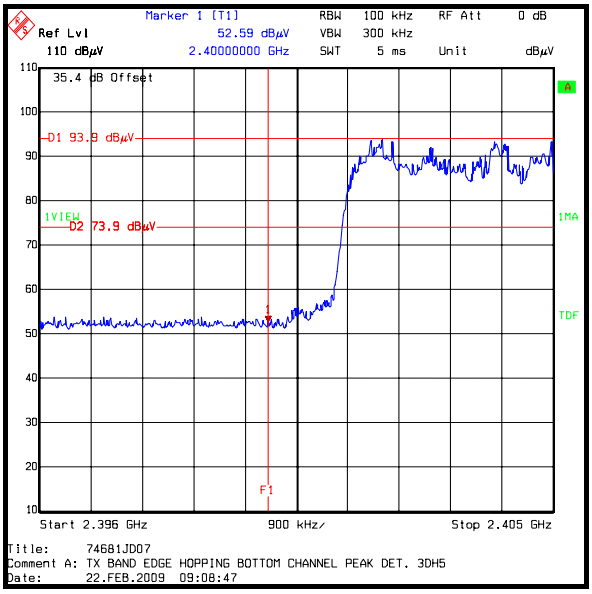


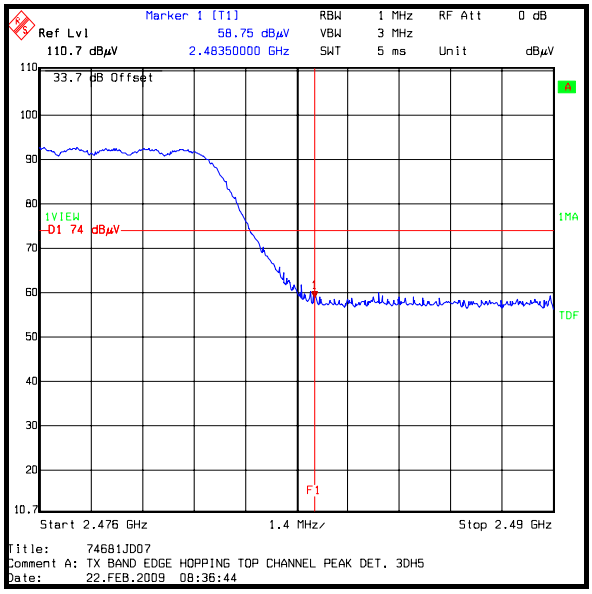


Mode 2DH5

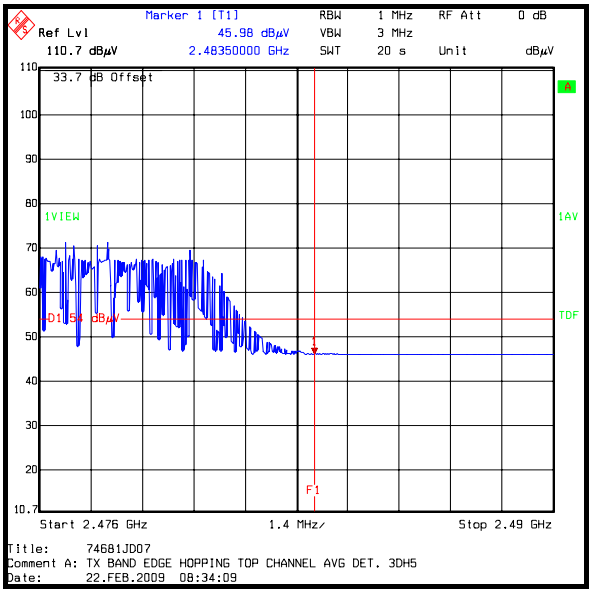


Transmitter Band Edge Radiated Emissions (continued)





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	54.4	-0.2	54.2	*74.4	20.2	Complied
2.4835	Vertical	60.5	-0.3	60.2	74.0	13.8	Complied

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	47.2	-0.3	46.9	54.0	7.1	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	52.1	-0.2	51.9	*73.9	22.0	Complied
2.4835	Vertical	60.8	-0.3	60.5	74.0	13.5	Complied

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	48.0	-0.3	47.7	54.0	6.3	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	52.6	-0.2	52.4	*73.9	21.5	Complied
2.4835	Vertical	60.6	-0.3	60.3	74.0	13.7	Complied

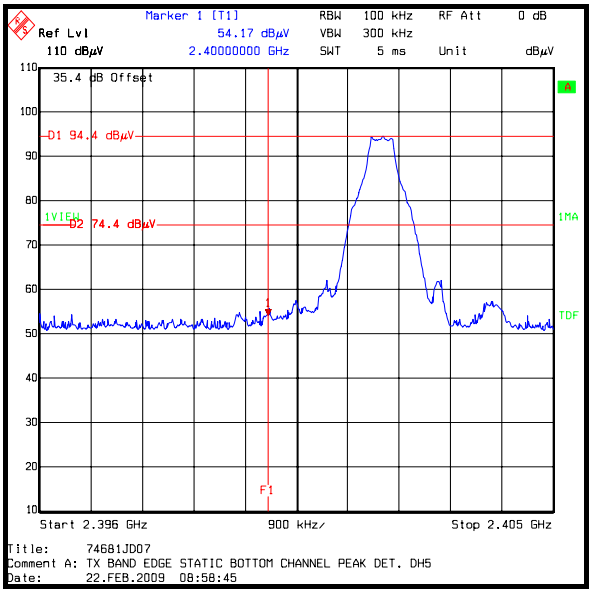
Results: Average Power Level Static Mode 3DH5

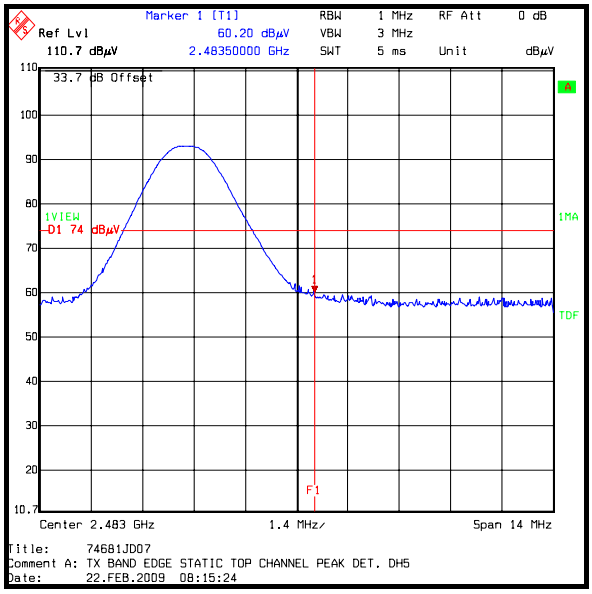
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4835	Vertical	47.8	-0.3	47.5	54.0	6.5	Complied

Note(s):

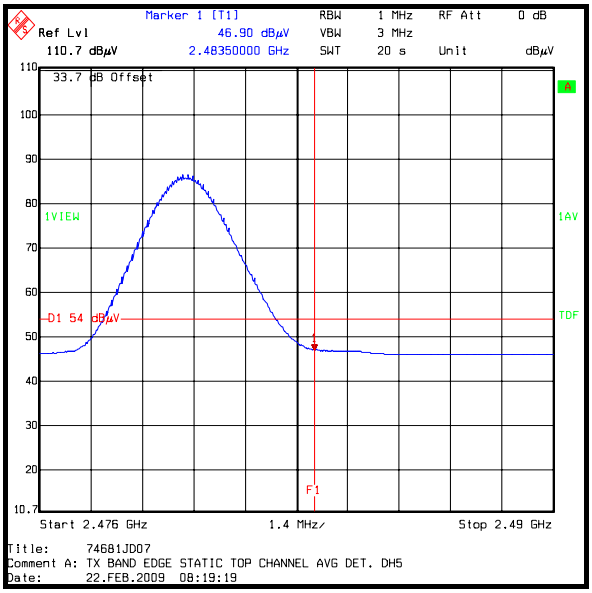
1. * -20 dBc limit

Transmitter Band Edge Radiated Emissions (continued)

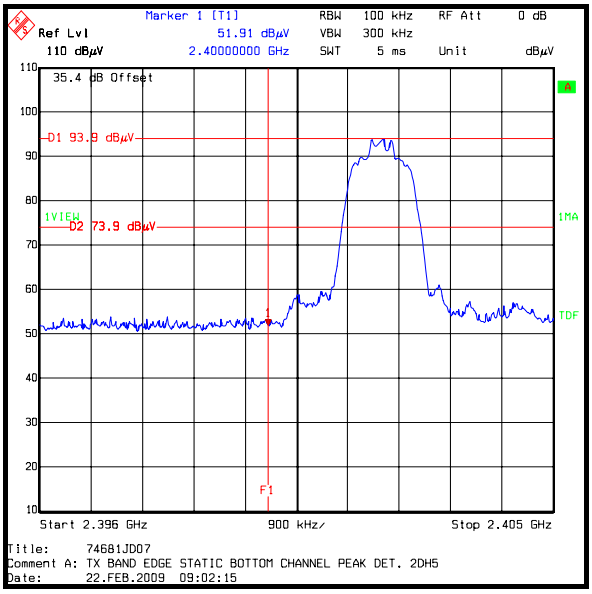


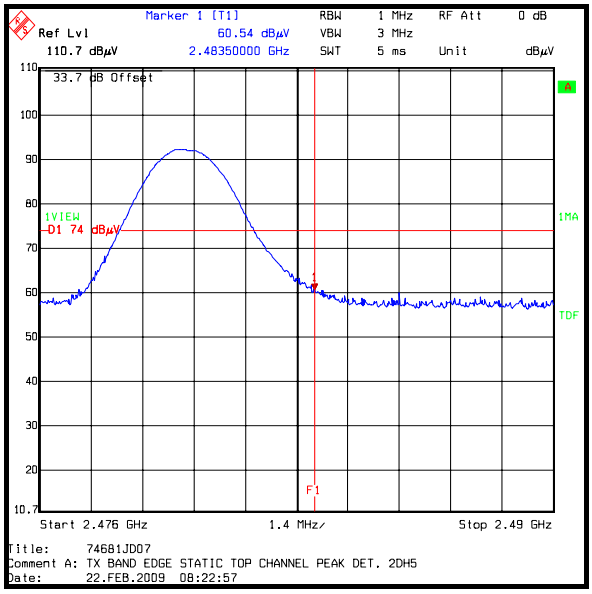


Mode DH5

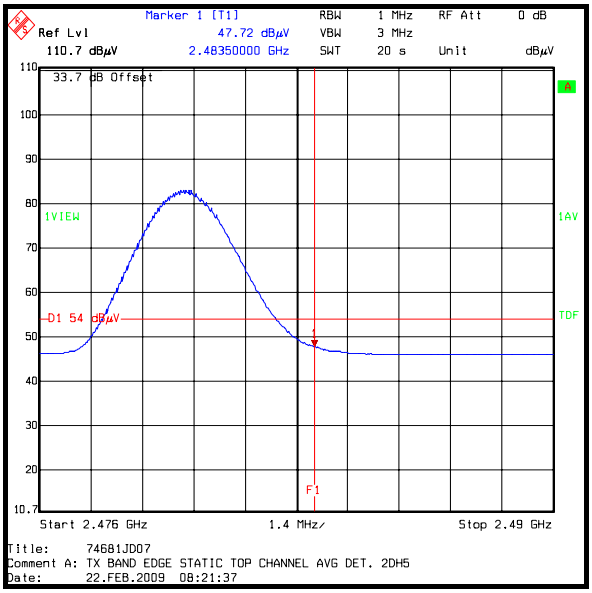


Transmitter Band Edge Radiated Emissions (continued)

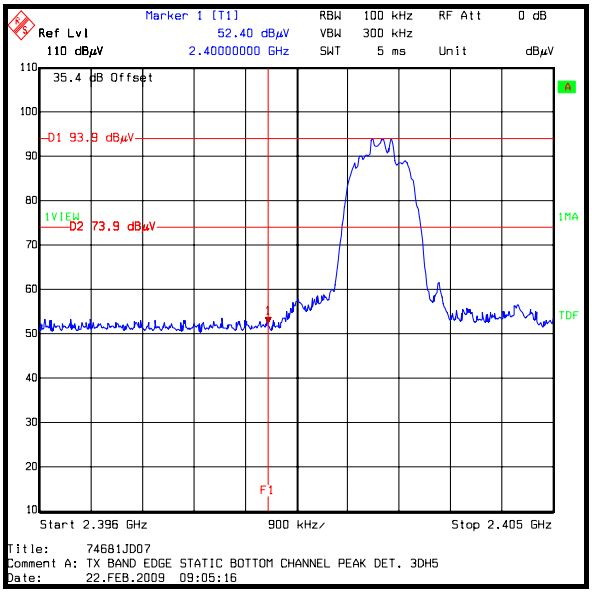


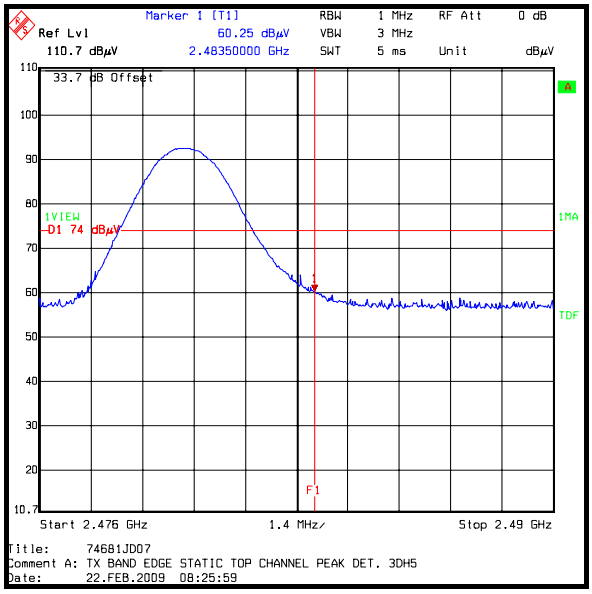


Mode 2DH5

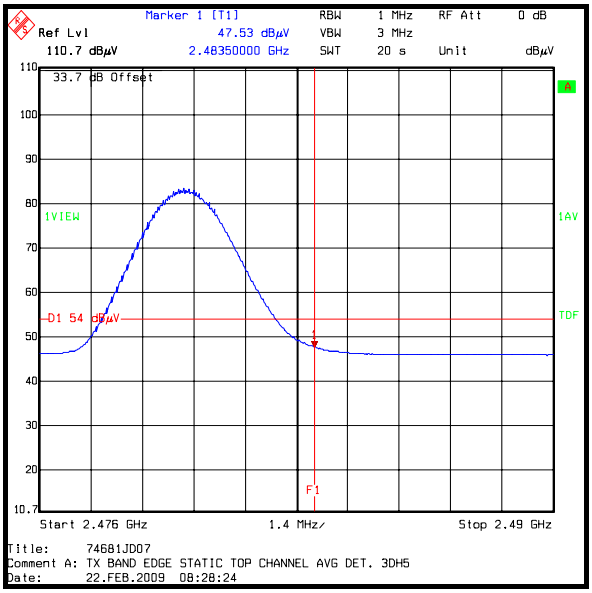


Transmitter Band Edge Radiated Emissions (continued)





Mode 3DH5



8. 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
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
A067	LISN	Rohde & Schwarz	ESH3-Z5	890603/002	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
K0001	5m SA chamber	Rainford EMC	N/A	N/A	13 Aug 2008	12
K0002	3m RSE chamber	Rainford EMC	N/A	N/A	26 Aug 2008	12
M1124	Spectrum Analyser	Rohde & Schwarz	ESIB26	100046K	19 Feb 2009	12
M1242	Spectrum Analyser	Rohde & Schwarz	FSEM30	845986/022	09 Dec 2008	12
M1269	Multimeter	Fluke	179	90250210	09 Apr 2008	12
M1273	Test Receiver	Rhode & Schwarz	ESIB 26	100275	26 Feb 2008	12
M1379	Test Receiver	Rohde & Schwarz	ESIB7	100330	14 Aug 2008	12
M1447	CBT	Rohde & Schwarz	1153.9000.35	100329	19 Jan 2009	12
S0520	DC Power Supply Unit	GW instek	GPC-3030	E835141	Calibrated before use	-

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