TEST REPORT
FROM
RFI GLOBAL SERVICES LTD

Test of: Softbank 940P

To: FCC Part 15.247: 2008 Subpart C

Test Report Serial No:
RFI/RPT2/RP76194JD07A

Supersedes Test Report Serial No:
RFI/RPT1/RP76194JD07A

This Test Report Is Issued Under The Authority Of Brian Watson, Operations Director: 	
Checked By:	Tony Henriques
Signature: 	
Date of Issue:	22 October 2009

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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. Summary of Testing

2.1. General Information

Specification Reference:	47CFR15.247
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications) 2008: Part 15 Subpart C (Radio Frequency Devices) - Section 15.247
Specification Reference:	47CFR15.107 and 47CFR15.109
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications) 2008: Part 15 Subpart B (Radio Frequency Devices) - Sections 15.107 and 15.109
Site Registration:	FCC: 209735
Location of Testing:	RFI Global Services Ltd, Wade Road, Basingstoke, Hampshire, RG24 8AH.
Test Dates:	13 October 2009 to 14 October 2009

2.2. Summary of Test Results

FCC Reference (47CFR)	Measurement	Port Type	Result
Part 15.107(a)	Receiver/Idle Mode AC Conducted Emissions	AC Mains	✓
Part 15.109	Receiver/Idle Mode Radiated Spurious Emissions	Enclosure	✓
Part 15.207	Transmitter AC Conducted Emissions	AC Mains	✓
Part 15.247(a)(1)	Transmitter 20 dB Bandwidth	Antenna	✓
Part 15.247(a)(1)	Transmitter Carrier Frequency Separation	Antenna	✓
Part 15.247(a)(1)(iii)	Transmitter Average Time of Occupancy	Antenna	✓
Part 15.247(b)(3)	Transmitter Maximum Peak Output Power	Antenna	✓
Part 15.247(d) & 15.209(a)	Transmitter Radiated Emissions	Antenna	✓
Part 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:	SoftBank
Model Name or Number:	940P
IMEI Number:	004401220872242
Hardware Version Number:	Rev C
Software Version Number:	940PVA12
FCC ID Number:	UCE209020A

Description:	AC Charger
Brand Name:	Softbank
Model Name or Number:	ZTDAA1

Description:	Personal Hands Free
Brand Name:	SoftBank
Model Name or Number:	ZTCK01

Description:	Personal Hands Free converter
Brand Name:	SoftBank
Model Name or Number:	PMLAJI

Description:	DC Charger
Brand Name:	SoftBank
Model Name or Number:	PMJAA1

Description:	Micro-SD Memory Card
Brand Name:	None Stated
Model Name or Number:	None Stated

Description:	USB Data Cable
Brand Name:	SoftBank
Model Name or Number:	ZTFE01

Description:	Battery
Brand Name:	SoftBank
Model Name or Number:	PMBAS1

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

No modifications were applied to the EUT during testing.

3.4. Additional Information Related to Testing

Tested Technology:	*Bluetooth*		
Power Supply Requirement:	Nominal	3.7 V	
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:	-2.1 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

3.5. Support Equipment

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

Description:	Laptop PC
Brand Name:	Sony VAIO PCG-551N
Model Name or Number:	283506 2 1208763
Serial Number:	Not stated

4. Operation and Monitoring of the EUT during Testing

4.1. Operating Modes

The EUT was tested in the following operating mode(s):

- 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(s):

- The laptop PC with the client's bespoke application was used to place the EUT into Bluetooth test mode.
- For Transmit tests: Standalone, connected via a radio link to a Bluetooth Tester to provide a test mode for normal mode of operation for the sample.
- For 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 worst 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 AC mains charger connected to the EUT as this was found to be the worst case during prescans. All accessories were individually connected and measurements made during pre-scans to determine the worst case combination.

5. Measurements, Examinations and Derived Results

5.1. General Comments

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 6. Measurement Uncertainty* for details.

5.2. Test Results

5.2.1. Receiver/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):	27
Relative Humidity (%):	28

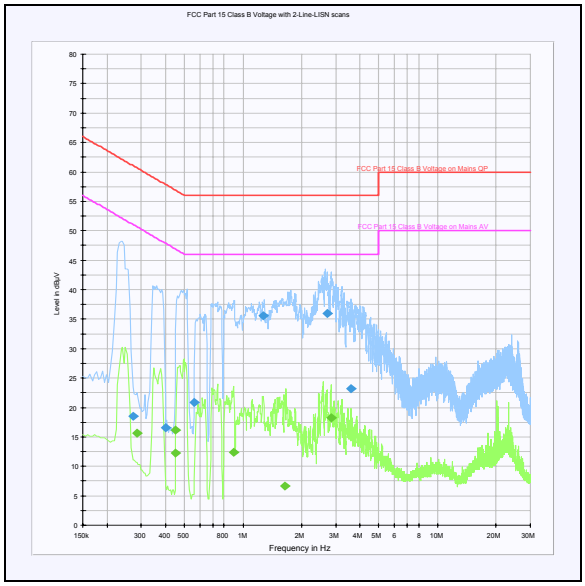
Results: Quasi Peak Detector Measurements

Frequency (MHz)	Line	Quasi Peak Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.271500	Live	18.4	61.1	42.7	Complied
0.397500	Neutral	16.6	57.9	41.3	Complied
0.559500	Neutral	20.9	56.0	35.1	Complied
1.270500	Neutral	35.6	56.0	20.4	Complied
2.701500	Neutral	36.0	56.0	20.0	Complied
3.601500	Neutral	23.2	56.0	32.8	Complied

Results: Average Detector Measurements

Frequency (MHz)	Line	Average Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.285000	Neutral	15.6	50.7	35.1	Complied
0.447000	Neutral	12.3	46.9	34.6	Complied
0.451500	Neutral	16.2	46.8	30.6	Complied
0.892500	Neutral	12.3	46.0	33.7	Complied
1.648500	Neutral	6.7	46.0	39.3	Complied
2.832000	Neutral	18.2	46.0	27.8	Complied

Receiver/Idle Mode AC Conducted Spurious Emissions (continued)



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying table.

5.2.2. Receiver/Idle Mode Radiated Spurious Emissions

Test Summary:

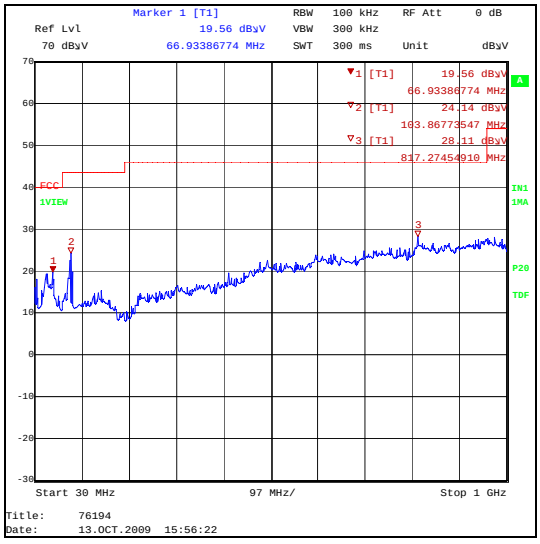
FCC Part:	15.109
Test Method Used:	As detailed in ANSI C63.4 Section 8 and relevant annexes
Frequency Range:	30 MHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	25
Relative Humidity (%):	29

Results:

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
61.586	Vertical	16.2	40.0	23.8	Complied
104.076	Horizontal	25.0	43.0	18.0	Complied



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying table.

Receiver/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):	25
Relative Humidity (%):	29

Highest Peak Level:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
12531.062	Horizontal	40.8	13.1	53.9	74.0	20.1	Complied

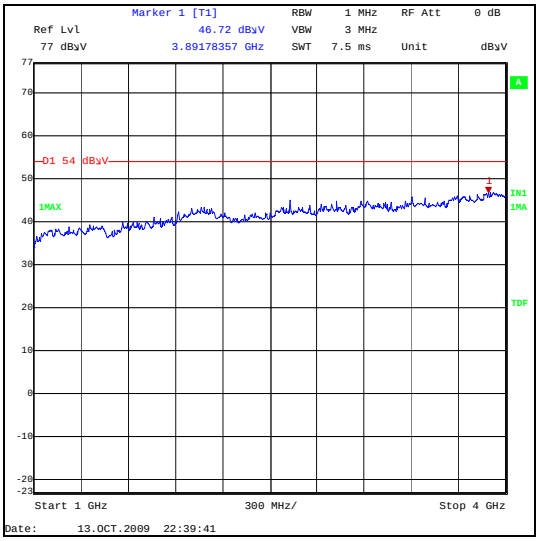
Highest Average Level:

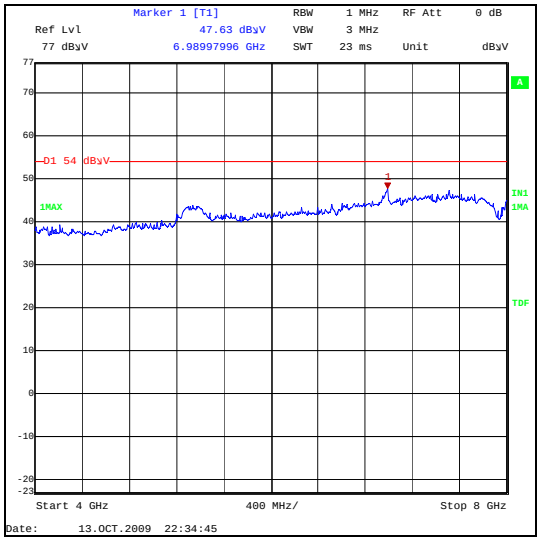
Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
12588.176	Horizontal	28.8	13.1	41.9	54.0	12.1	Complied

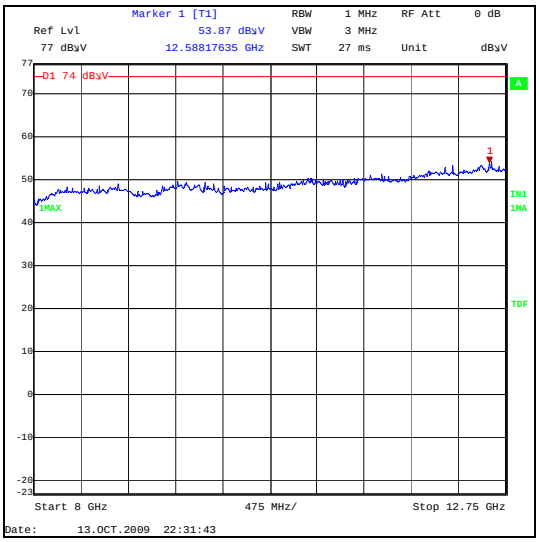
Note(s):

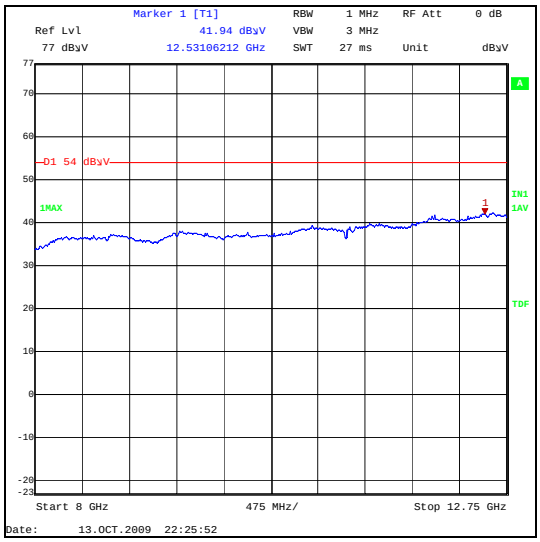
1. No spurious emissions were detected above the noise floor of the measuring receiver; therefore, the highest peak and average noise floor readings of the measuring receiver were recorded as shown in the tables above.
2. All pre-scans were performed with a peak detector against average limits apart from measurements made in the range 8 GHz 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.

Receiver/Idle Mode Radiated Spurious Emissions (continued)









5.2.3. 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

Environmental Conditions:

Temperature (°C):	27
Relative Humidity (%):	28

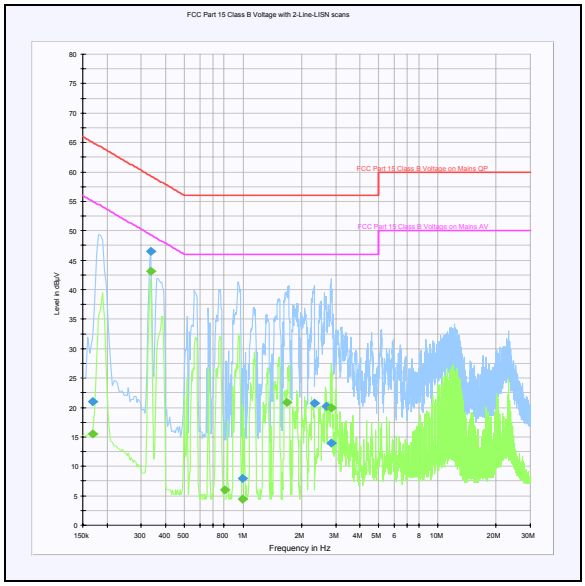
Results: Quasi Peak Detector Measurements

Frequency (MHz)	Line	Quasi Peak Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.168000	Live	21.0	65.1	44.1	Complied
0.334500	Neutral	46.5	59.3	12.8	Complied
0.991500	Neutral	7.9	56.0	48.1	Complied
2.337000	Neutral	20.8	56.0	35.2	Complied
2.670000	Neutral	20.3	56.0	35.7	Complied
2.836500	Neutral	13.9	56.0	42.1	Complied

Results: Average Detector Measurements

Frequency (MHz)	Line	Average Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.168000	Neutral	15.6	55.1	39.5	Complied
0.334500	Neutral	43.1	49.3	6.2	Complied
0.807000	Neutral	5.9	46.0	40.1	Complied
0.991500	Neutral	4.4	46.0	41.6	Complied
1.671000	Neutral	20.9	46.0	25.1	Complied
2.841000	Neutral	20.0	46.0	26.0	Complied

Transmitter AC Conducted Spurious Emissions (continued)



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying table.

5.2.4. 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) (see note below)

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	31

Results: DH5

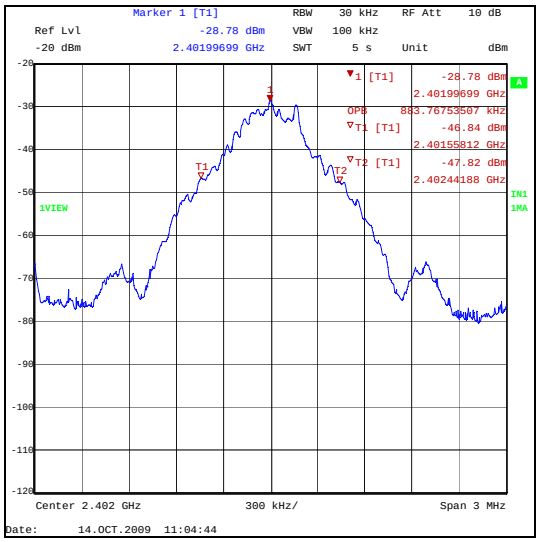
Channel	20 dB Bandwidth (kHz)
Bottom	883.768
Middle	883.768
Top	889.780

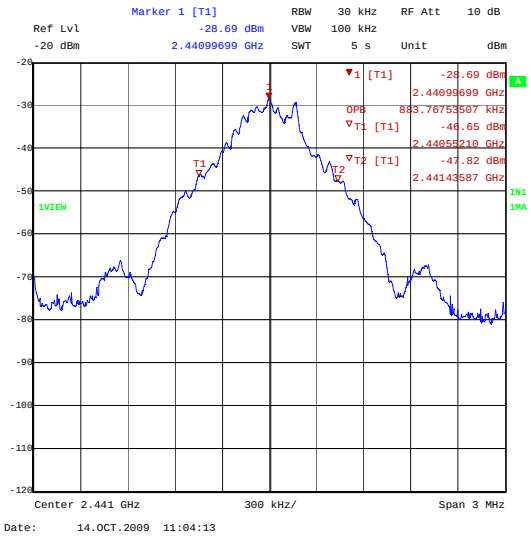
Note(s):

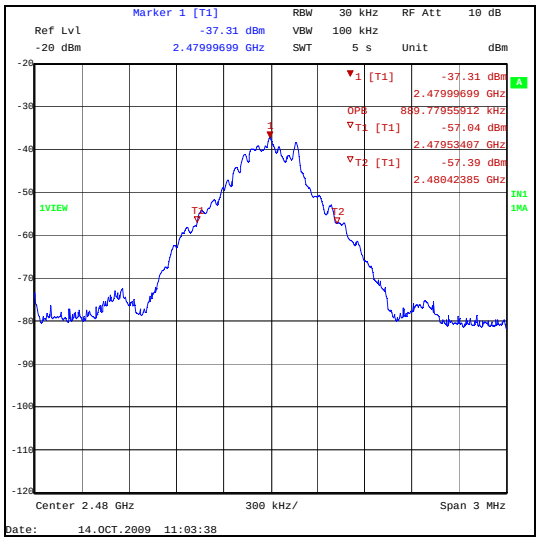
1. In lieu of the test method detailed in Public Notice DA 00-705 the 20 dB bandwidth was measured using the Occupied Bandwidth function of the spectrum analyser.

Transmitter 20 dB Bandwidth (continued)

Results: DH5







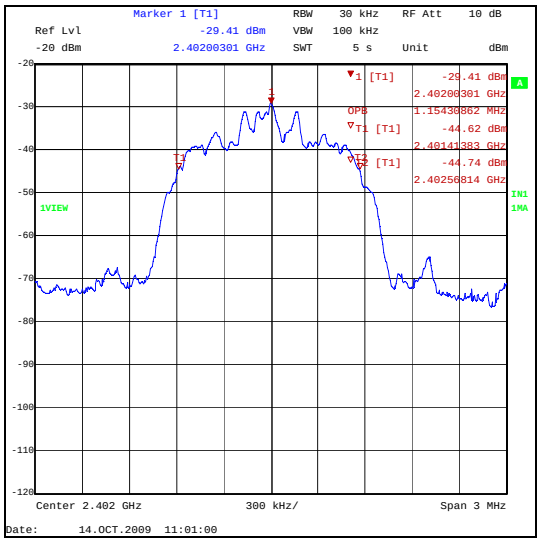
Transmitter 20 dB Bandwidth (continued)

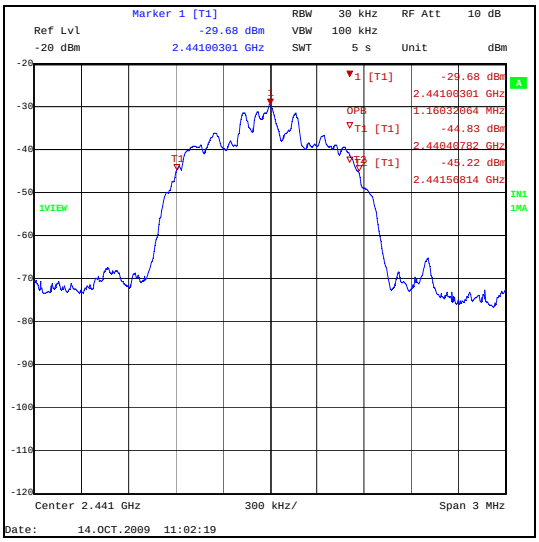
Results: 2DH5

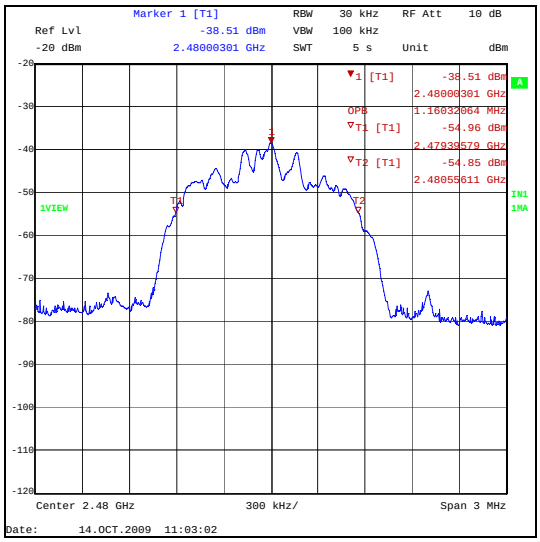
Channel	20 dB Bandwidth (kHz)
Bottom	1154.309
Middle	1160.321
Top	1160.321

Note(s):

1. In lieu of the test method detailed in Public Notice DA 00-705 the 20 dB bandwidth was measured using the Occupied Bandwidth function of the spectrum analyser.







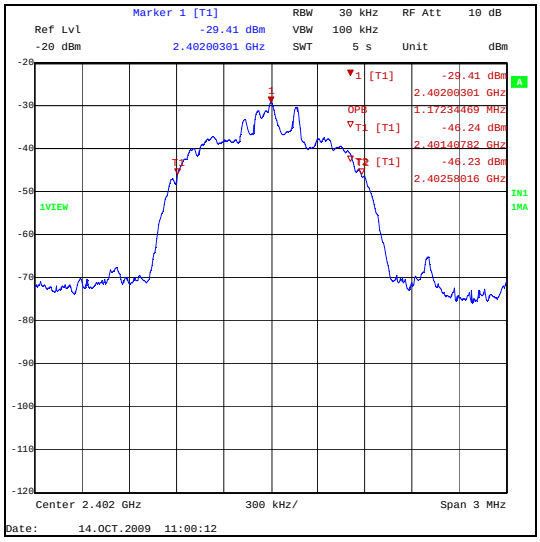
Transmitter 20 dB Bandwidth (continued)

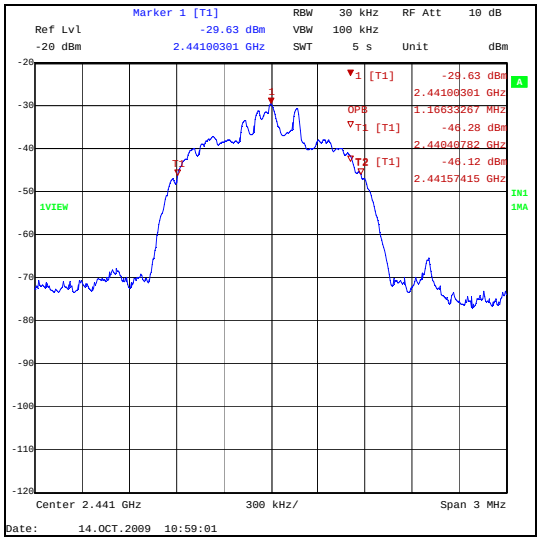
Results: 3DH5

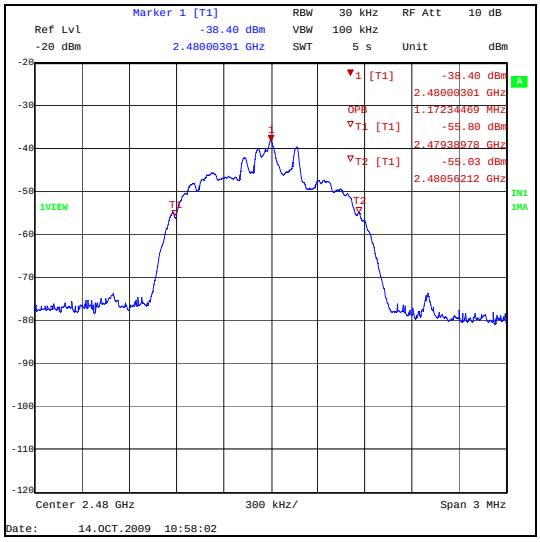
Channel	20 dB Bandwidth (kHz)
Bottom	1172.345
Middle	1166.333
Top	1172.345

Note(s):

1. In lieu of the test method detailed in Public Notice DA 00-705 the 20 dB bandwidth was measured using the Occupied Bandwidth function of the spectrum analyser.







5.2.5. 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:

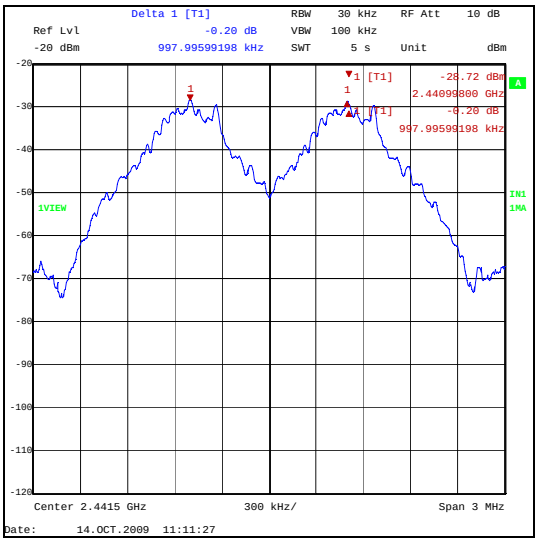
Temperature (°C):	25
Relative Humidity (%):	31

Results DH5:

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
997.996	589.333	408.663	Complied

Note(s):

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



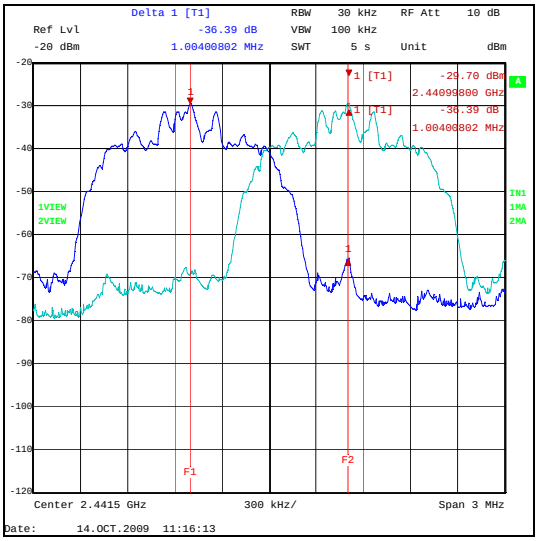
Transmitter Carrier Frequency Separation (continued)

Results 2DH5:

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
1004.008	773.333	230.675	Complied

Note(s):

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



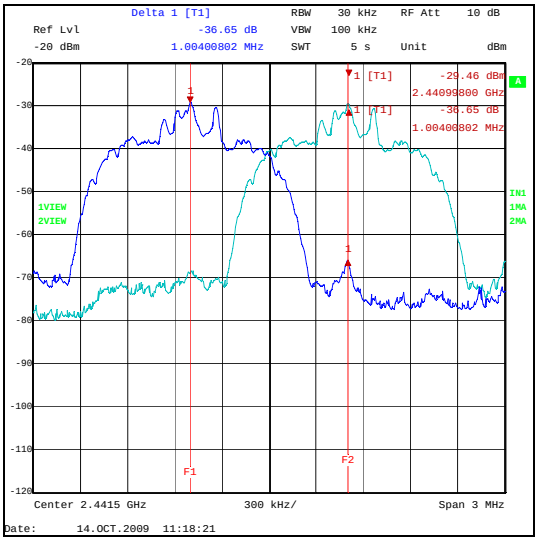
Transmitter Carrier Frequency Separation (continued)

Results 3DH5:

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
1004.008	777.333	226.675	Complied

Note(s):

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



5.2.6. 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):	25
Relative Humidity (%):	31

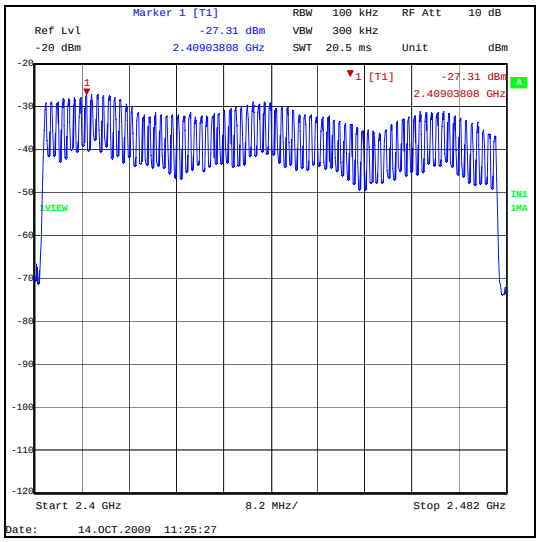
Results:

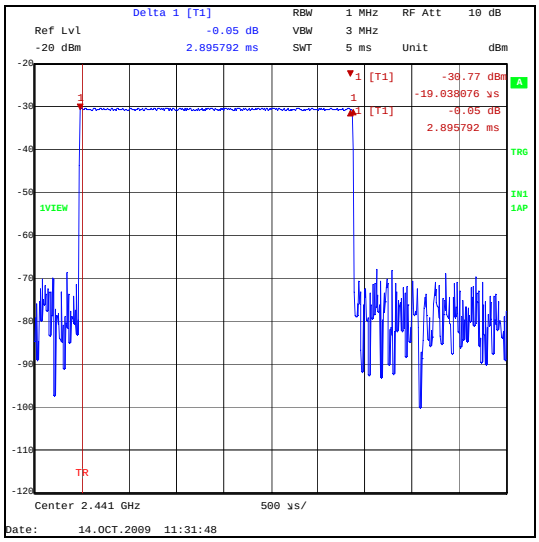
Emission Width (μs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
2895.8	75	0.217	0.4	0.183	Complied

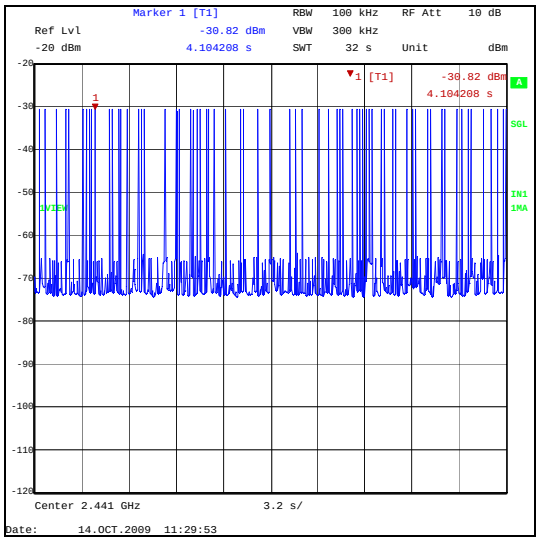
Note(s):

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)







5.2.7. Transmitter Maximum Peak Output Power (EIRP)

Test Summary:

FCC Part:	15.247(b)(3)
Test Method Used:	As detailed in Public Notice DA 00-705 (March 30, 2000), ANSI TIA-603-C-2004 and FCC CFR Part 2

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	33

Results: Basic Rate DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-2.2	30.0	32.2	Complied
Middle	-2.7	30.0	32.7	Complied
Top	-4.9	30.0	34.9	Complied

Results: EDR 2DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-2.6	21.0	23.6	Complied
Middle	-2.9	21.0	23.9	Complied
Top	-5.2	21.0	26.2	Complied

Results: EDR 3DH5

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-2.1	21.0	23.1	Complied
Middle	-2.7	21.0	23.7	Complied
Top	-4.9	21.0	25.9	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.

5.2.8. Transmitter Radiated Emissions

Test Summary:

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

Environmental Conditions:

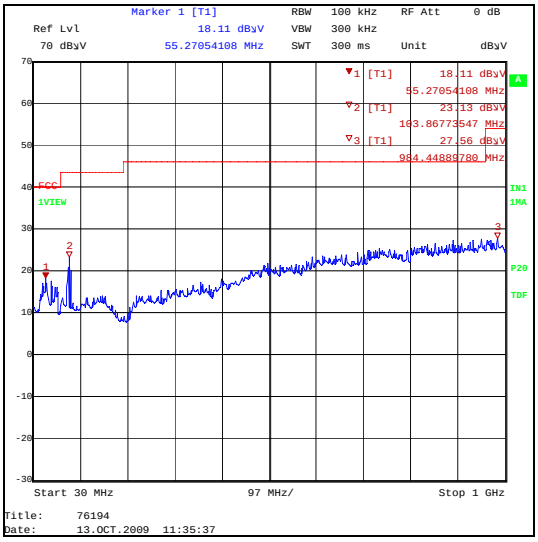
Temperature (°C):	25
Relative Humidity (%):	29

Results: Top Channel - Top Channel DH5

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
55.355	Vertical	16.0	40.0	24.0	Complied
104.084	Horizontal	24.3	43.0	18.7	Complied

Note(s):

1. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the top channel only.



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying table.

5.2.9. Transmitter Radiated Emissions

Test Summary:

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

Environmental Conditions:

Temperature (°C):	25
Relative Humidity (%):	31

Results: Highest Peak Level

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
17.527	Vertical	74.3	16.6	57.7	74.0	16.3	Complied

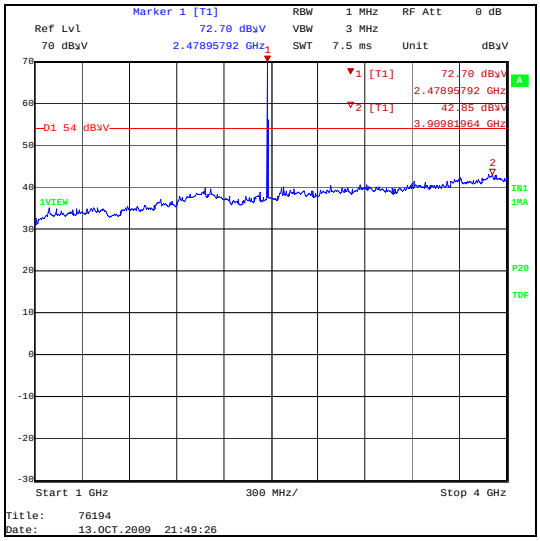
Results: Highest Average Level

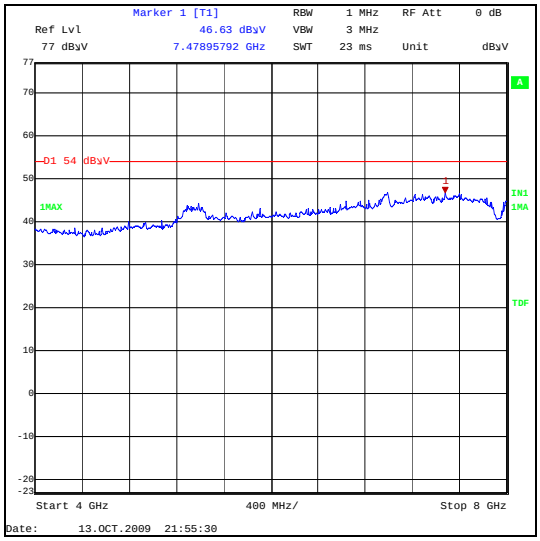
Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
17.453	Vertical	62.3	16.6	45.7	54.0	8.3	Complied

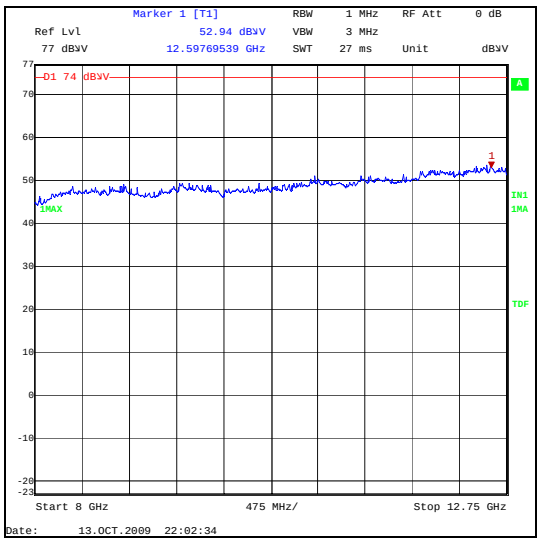
Note(s):

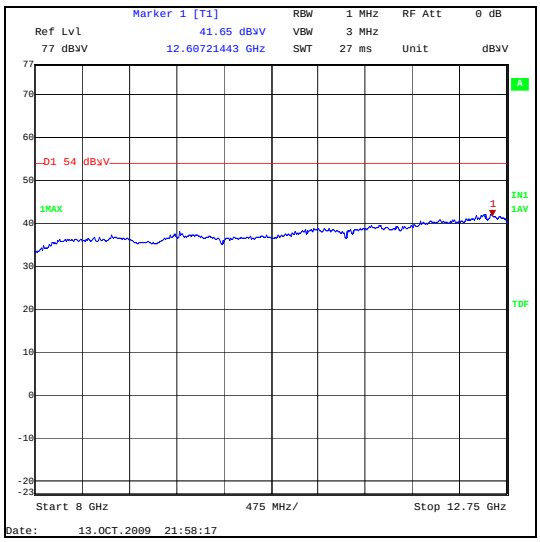
1. No spurious emissions were detected above the noise floor of the measuring receiver; therefore, the highest peak and average noise floor readings of the measuring receiver were recorded as shown in the tables above.
2. All pre-scans were performed with a peak detector against average limits apart from measurements made in the range 8 GHz to 26.5 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.
3. The emission shown on the 1 GHz to 4 GHz plots is the fundamental transmit frequency at 2480 MHz.

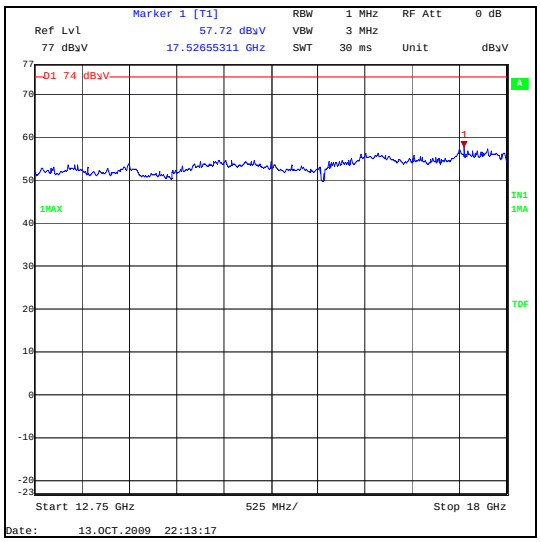
Transmitter Radiated Emissions (continued)

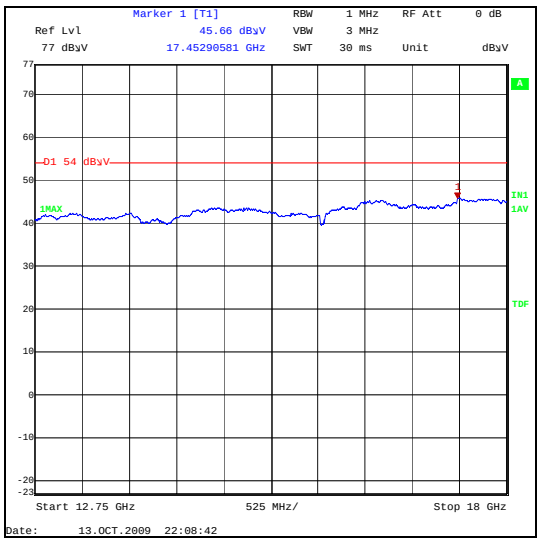




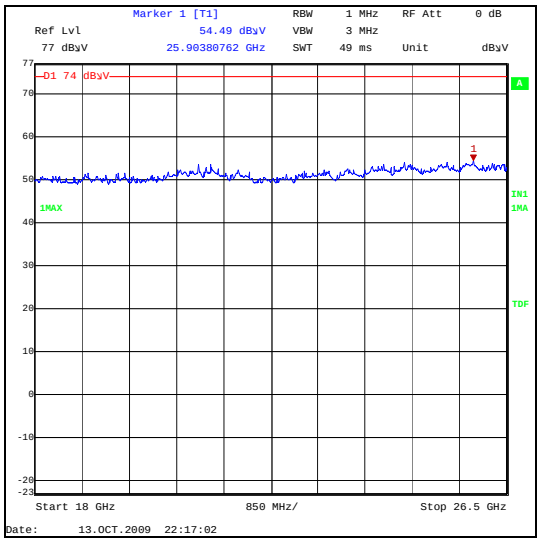


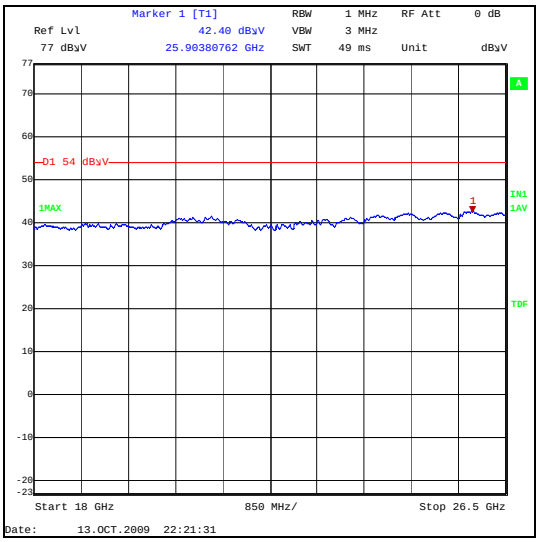






Transmitter Radiated Emissions (continued)





5.2.10. Transmitter Band Edge Radiated Emissions

Test Summary:

FCC Part:	15.247(d) & 15.209(a)
Test Method Used:	As detailed in ANSI C63.4 Section 8 and Public Notice DA 00-705 (March 30, 2000)

Environmental Conditions:

Temperature (°C):	25
Relative Humidity (%):	30

Peak Power Level Hopping Mode DH5:

Frequency (MHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2400.0	Horizontal	55.5	-0.2	55.3	72.9*	17.6	Complied
2483.5	Horizontal	52.4	-0.3	52.1	74.0	21.9	Complied

** -20 dBc limit*

Average Power Level Hopping Mode DH5

Frequency (MHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	38.8	-0.2	38.6	54.0	15.4	Complied

Peak Power Level Hopping Mode 2DH5:

Frequency (MHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2400.0	Horizontal	42.0	-0.2	41.8	72.0*	30.2	Complied
2483.5	Horizontal	54.0	-0.3	53.7	74.0	20.3	Complied

** -20 dBc limit*

Average Power Level Hopping Mode 2DH5

Frequency (MHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	39.8	-0.2	39.6	54.0	14.4	Complied

Transmitter Band Edge Radiated Emissions (Continued)

Peak Power Level Hopping Mode 3DH5:

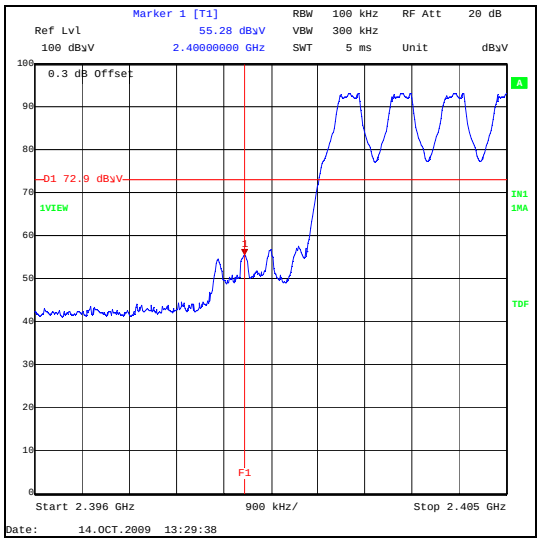
Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2400.0	Horizontal	43.7	-0.2	43.5	72.4*	28.9	Complied
2483.5	Horizontal	56.2	-0.3	55.9	74.0	18.1	Complied

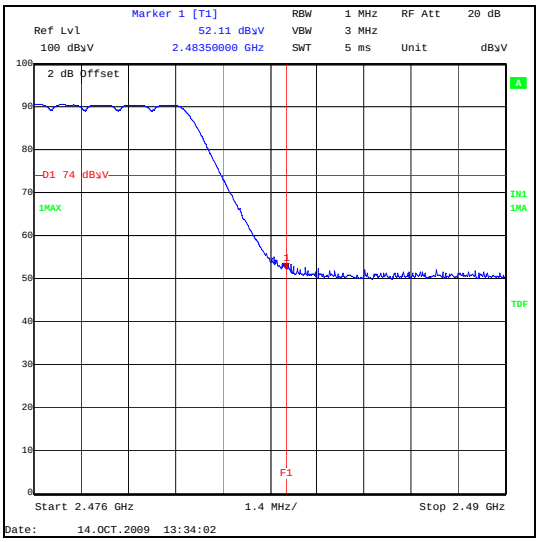
** -20 dBc limit*

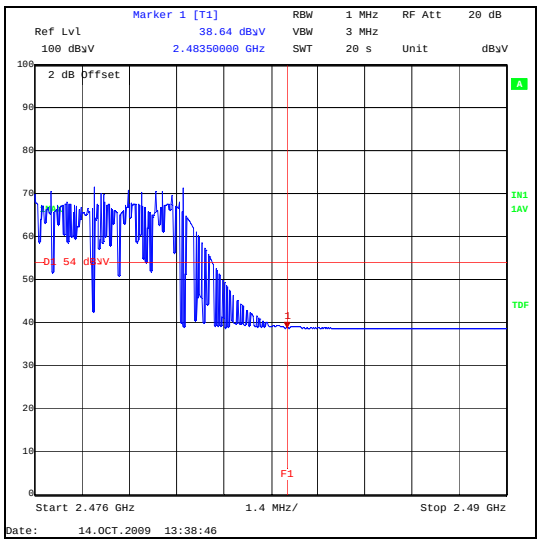
Average Power Level Hopping Mode 3DH5

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	Horizontal	38.8	-0.2	38.6	54.0	15.4	Complied

Transmitter Band Edge Radiated Emissions (continued)

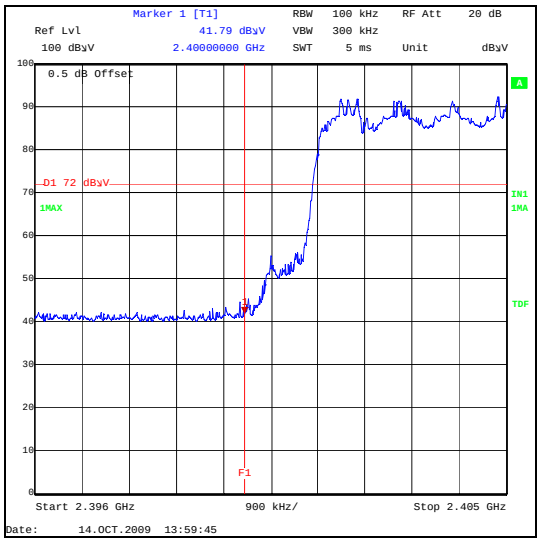


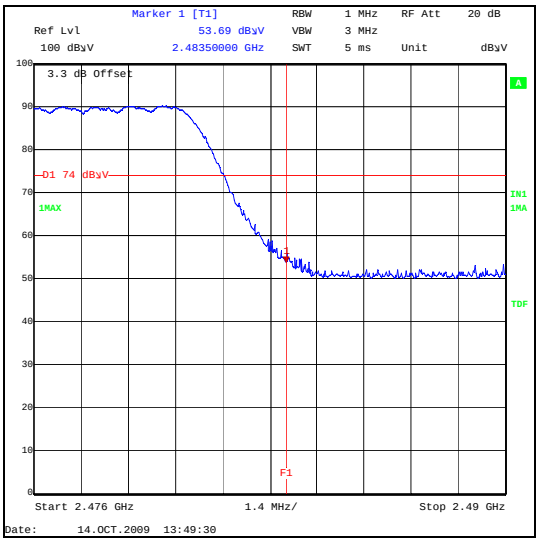


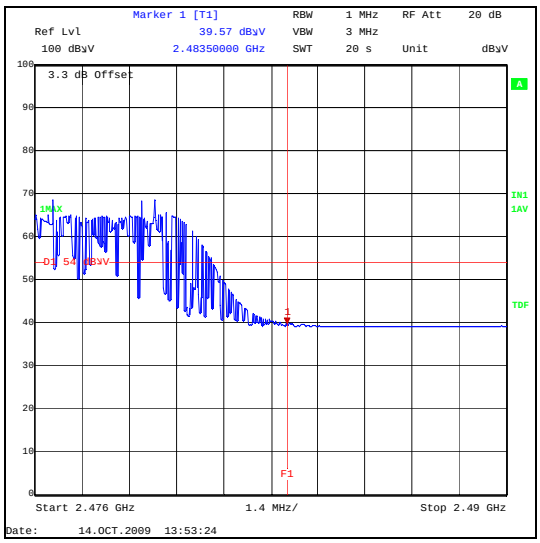


Mode DH5

Transmitter Band Edge Radiated Emissions (continued)

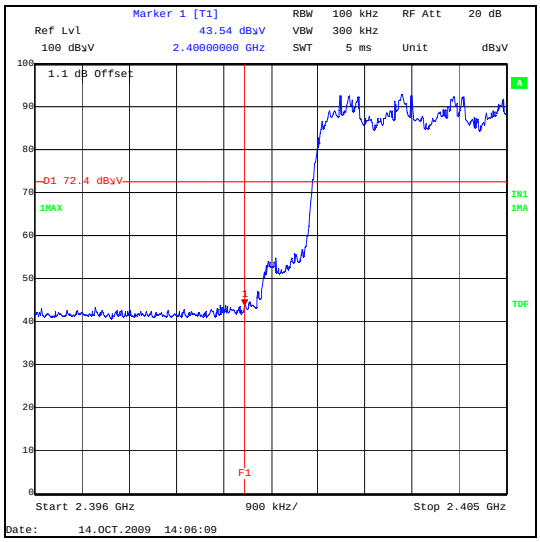


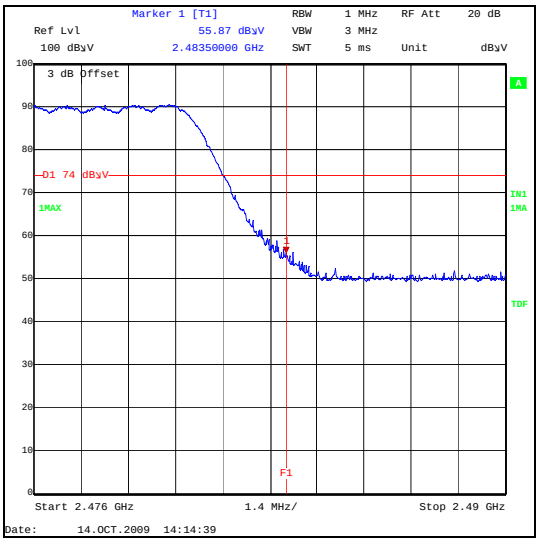


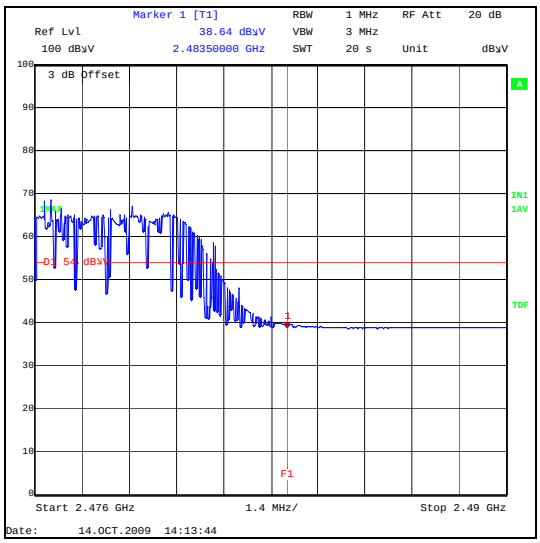


Mode 2DH5

Transmitter Band Edge Radiated Emissions (continued)







Mode 3DH5

Transmitter Band Edge Radiated Emissions (continued)

Peak Power Level Static Mode DH5:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2400.0	Horizontal	55.5	-0.2	55.3	72.9*	17.6	Complied
2483.5	Horizontal	54.4	-0.3	54.1	74.0	19.9	Complied

** -20 dBc limit*

Average Power Level Static Mode DH5:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	Horizontal	41.6	-0.3	41.3	54.0	12.7	Complied

Peak Power Level Static Mode 2DH5:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2400.0	Horizontal	45.6	-0.2	45.4	72.0*	26.6	Complied
2483.5	Horizontal	58.7	-0.3	58.4	74.0	15.6	Complied

** -20 dBc limit*

Average Power Level Static Mode 2DH5:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	Horizontal	43.3	-0.3	43.0	54.0	11.0	Complied

Transmitter Band Edge Radiated Emissions (continued)

Peak Power Level Static Mode 3DH5:

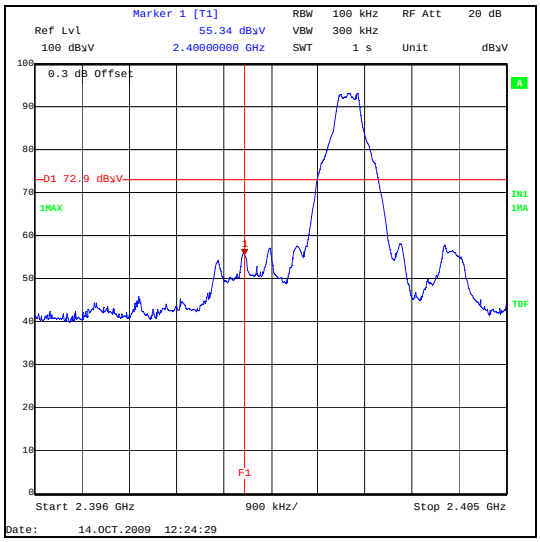
Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2400.0	Horizontal	47.9	-0.2	47.7	72.4*	24.7	Complied
2483.5	Horizontal	57.5	-0.3	57.2	74.0	16.8	Complied

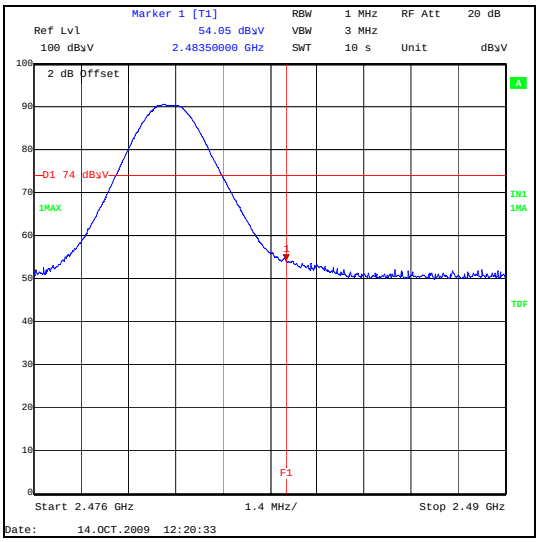
** -20 dBc limit*

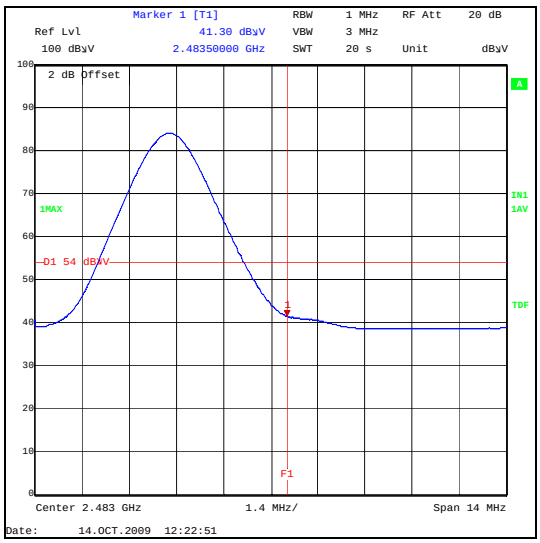
Average Power Level Static Mode 3DH5:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	Horizontal	42.9	-0.3	42.6	54.0	11.4	Complied

Transmitter Band Edge Radiated Emissions (continued)

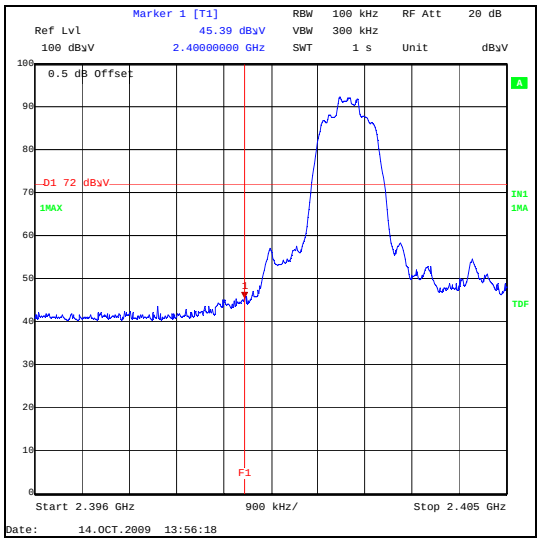


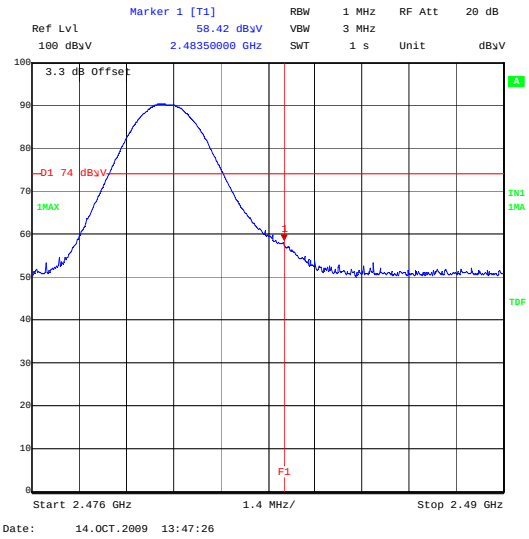


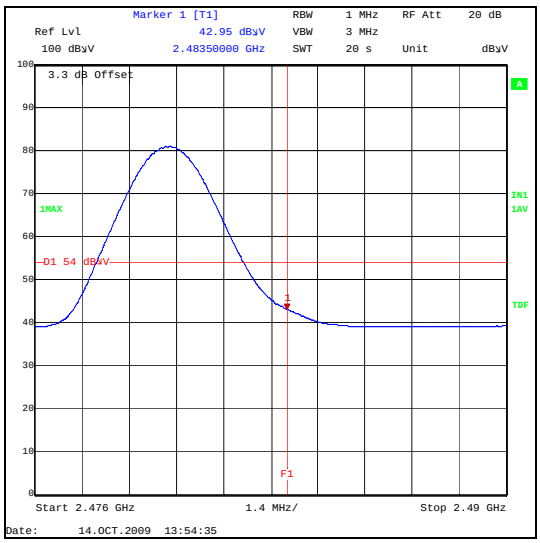


Mode DH5

Transmitter Band Edge Radiated Emissions (continued)

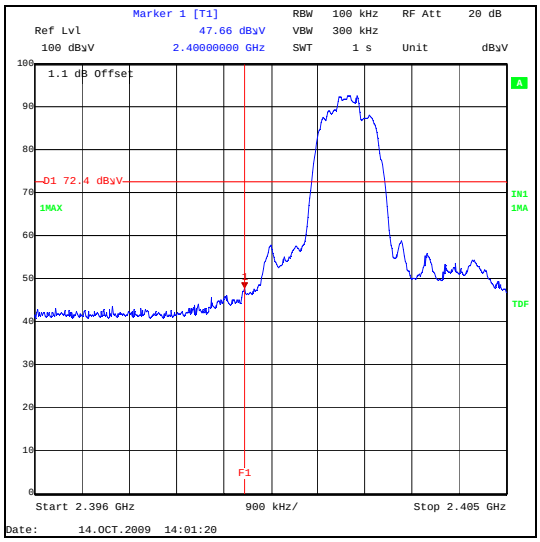


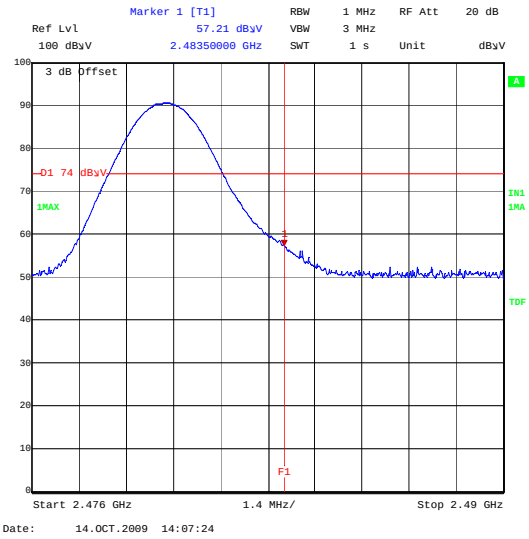


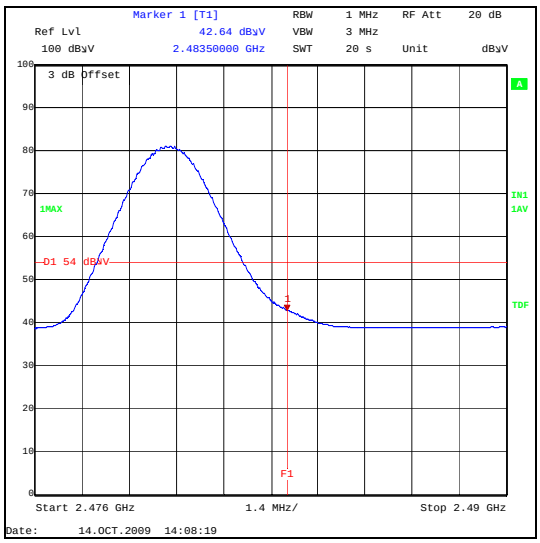


Mode 2DH5

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
Maximum Peak Output Power	Not Applicable	95%	±2.94 dB
Carrier Frequency Separation	Not Applicable	95%	±0.92 ppm
Average Time of Occupancy	Not Applicable	95%	±0.3 ns
20 dB Bandwidth	Not Applicable	95%	±0.92 ppm
Radiated Spurious Emissions	30 MHz 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)
A1391	Attenuator	Huber + Suhner	757987	6810.17.B	Calibrated before use	-
A1392	Attenuator	Huber + Suhner	757456	6820.17.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
A1975	High Pass Filter	AtlanTecRF	AFH-03000	090424010	Calibrated before use	-
A288	Antenna	Chase	CBL6111A	1589	13 Mar 2009	12
A649	LISN	Rohde & Schwarz	ESH3-Z5	825562/008	19 Mar 2009	12
K0002	3m RSE Chamber	Rainford EMC	N/A	N/A	01 Sep 2009	12
M1124	Test Receiver	Rohde & Schwarz	ESIB26	100046K	09 Mar 2009	12
M1263	Test Receiver	Rohde & Schwarz	ESIB7	100265	22 Apr 2009	12
M1447	CBT	Rohde & Schwarz	1153.9000.35	100329	19 Jan 2009	12

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