TEST REPORT
FROM
RFI GLOBAL SERVICES LTD

Test of: Panasonic
VS85

To: FCC Part 15.247: 2008 (Subpart C)

Test Report Serial No:
RFI/RPT2/RP74290JD05A

Supersedes Test Report Serial No:
RFI/RPT1/RP74290JD05A

This Test Report Is Issued Under The Authority Of Steve Flooks, Service Leader: 	
Checked By: Steve Flooks 	**Report Copy No: PDF01**
Issue Date: 08 December 2008	**Test Dates: 10 November to 14 November 2008**

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Registered in England and Wales. Company number:2117901

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1. Customer Information

Company Name:	Panasonic Mobile Comms Dev of Europe Ltd
Address:	Panasonic House Willoughby Road Bracknell Berkshire RG12 8FP

2. Equipment Under Test (EUT)

2.1. Identification of Equipment Under Test (EUT)

Description:	Cellular Mobile Telephone incorporating Bluetooth and RFID.
Brand Name:	Panasonic
Model Name or Number:	VS85
IMEI Number:	004401220651620
FCC ID Number:	UCE208011A

Description:	Micro-SD Memory Card
Brand Name:	Not marked
Model Name or Number:	2GB MicroSD
Cable Length & Type:	Not Applicable
Connected to Port:	Dedicated micro-SD card port

Description:	AC Adaptor
Brand Name:	SoftBank
Model Name or Number:	ZTDAA1
Cable Length & Type:	2.0m multicore
Connected to Port:	Charge/Data port

Description:	Personal Hands Free (stereo)
Brand Name:	SoftBank
Model Name or Number:	Stereo PHF#01
Cable Length & Type:	1.8m / multi-core
Connected to Port:	AV Out port

Identification of Equipment Under Test (EUT) (Continued)

Description:	USB cable
Model Name or Number:	None Stated
Serial Number:	C23
Cable Length:	1.1 metre / multicore

Description:	DC Charger
Brand Name:	SoftBank
Model Name or Number:	PMJAA1
Cable Length and Type:	2.0m approx / 2 core curl-cord
Connected to Port:	Charge/Data port

2.2. Description of EUT

The equipment under test was a dual mode (W-CDMA FDDI/GSM900/1800/1900MHz) cellular mobile telephone with Bluetooth & 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:	Laptop PC
Model Name or Number:	SONY Vaio PCG-VX7/BD
Serial Number:	Serial number has been partially erased and cannot be read
Cable Length and Type:	Not Applicable
Connected to Port:	USB

2.5. Additional Information Related to Testing

Power Supply Requirement:	V-Nom	3.7V	V-Min	3.4V	V-Max	4.2V
Transmit Frequency Range:	2402 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 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, Part 15.247 (47CFR15) (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 C63.2 (1996)
Title: American National Standard for Instrumentation - Electromagnetic Noise and Field Strength Instrumentation, 10 Hz to 40 GHz.

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.

ANSI C63.5 (1988)
Title: American National Standard for the Calibration of antennas used for Radiated Emission measurements in Electromagnetic Interference (EMI) control.

ANSI C63.7 (1988)
Title: American National Standard Guide for Construction of Open Area Test Sites for performing Radiated Emission Measurements.

CISPR 16-1: (1999)
Title: Specification For Radio Disturbance and Immunity Measuring Apparatus and Methods. Part 1: Radio Disturbance and Immunity Measuring Apparatus.

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 of the EUT during Testing

5.1. Operating Modes

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

- Idle Mode
- Transmit Mode with Basic Rate or EDR 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 to provide a test mode and normal mode of operation for the sample.
- For Idle mode tests: Standalone, with the Bluetooth mode active but not transmitting. The GSM, 3G and RFID modules were active.
- Both EDR/Basic rate modes were compared and tests were performed with the mode that presented the worse case result. For bandwidth and channel separation, both modes were tested. The output power was the same for both modes therefore all power related tests were performed in the Basic Rate mode.
- The Micro SD card was present in the EUT during all tests.
- Receiver/idle and transmitter 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 prescans. All accessories were individually connected and measurements made during prescans to determine the worst case combination.

6. Summary of Test Results

Range of Measurements	Specification Reference	Port Type	Result
Receiver/Idle Mode AC Conducted Emissions (150 kHz to 30 MHz)	C.F.R. 47 FCC Part 15 Section 15.107	AC Mains	Complied
Receiver/Idle Mode Radiated Spurious Emissions	C.F.R. 47 FCC Part 15 Section 15.109	Antenna	Complied
Transmitter AC Conducted Emissions (150 kHz to 30 MHz)	C.F.R. 47 FCC Part 15 Section 15.207	AC Mains	Complied
Transmitter 20 dB Bandwidth	C.F.R. 47 FCC Part 15 Section 15.247(a)(1)	Antenna	Complied
Transmitter Carrier Frequency Separation	C.F.R. 47 FCC Part 15 Section 15.247(a)(1)	Antenna	Complied
Transmitter Average Time of Occupancy	C.F.R. 47 FCC Part 15 Section 15.247(a)(1)(iii)	Antenna	Complied
Transmitter Maximum Peak Output Power	C.F.R. 47 FCC Part 15 Section 15.247(b)(1)	Antenna	Complied
Transmitter Radiated Emissions	C.F.R. 47 FCC Part 15 Sections 15.247(d) & 15.209(a)	Antenna	Complied
Transmitter Band Edge Radiated Emissions	C.F.R. 47 FCC Part 15 Sections 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

7.2.1. Receiver/Idle Mode Conducted Emissions: Section 15.107(a)

Ambient Temperature: 20ºC Relative Humidity: 48%

Tests were performed using the test methods detailed in ANSI C63.4 Section 7.

Results:

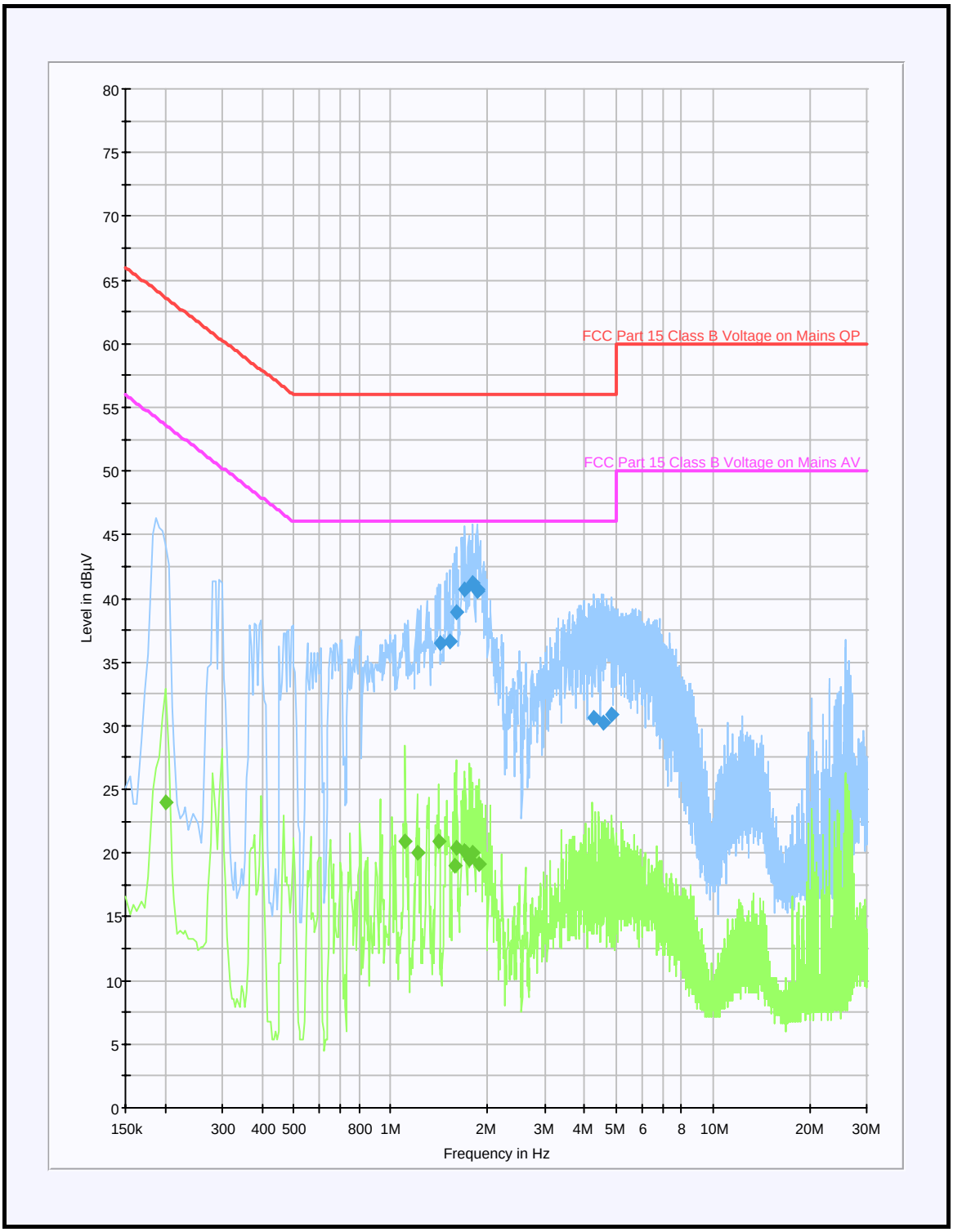
Quasi-Peak Detector Measurements on Live and Neutral Lines

Frequency (MHz)	Line	Level (dBµV)	Limit (dBµV)	Margin (dB)	Result
1.419000	Live	36.5	56.0	19.5	Complied
1.518000	Live	36.7	56.0	19.3	Complied
1.603500	Live	39.0	56.0	17.0	Complied
1.702500	Live	40.8	56.0	15.2	Complied
1.792500	Live	41.2	56.0	14.8	Complied
1.851000	Live	40.5	56.0	15.5	Complied
1.864500	Live	40.7	56.0	15.3	Complied
4.263000	Live	30.6	56.0	25.4	Complied
4.546500	Live	30.2	56.0	25.8	Complied
4.830000	Live	30.8	56.0	25.2	Complied

Average Detector Measurements

Frequency (MHz)	Line	Level (dBµV)	Limit (dBµV)	Margin (dB)	Result
0.199500	Live	24.0	53.6	29.6	Complied
1.108500	Live	20.9	46.0	25.1	Complied
1.207500	Live	20.0	46.0	26.0	Complied
1.405500	Live	20.9	46.0	25.1	Complied
1.576500	Live	19.0	46.0	27.0	Complied
1.590000	Live	20.4	46.0	25.6	Complied
1.684500	Live	20.2	46.0	25.8	Complied
1.761000	Live	19.5	46.0	26.5	Complied
1.792500	Live	20.1	46.0	25.9	Complied
1.878000	Live	19.2	46.0	26.8	Complied

Receiver/Idle Mode Conducted Emissions (Continued)



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

7.2.2. Receiver/Idle Mode Radiated Spurious Emissions: Section 15.109(a)

Ambient Temperature: 21ºC Relative Humidity: 39%

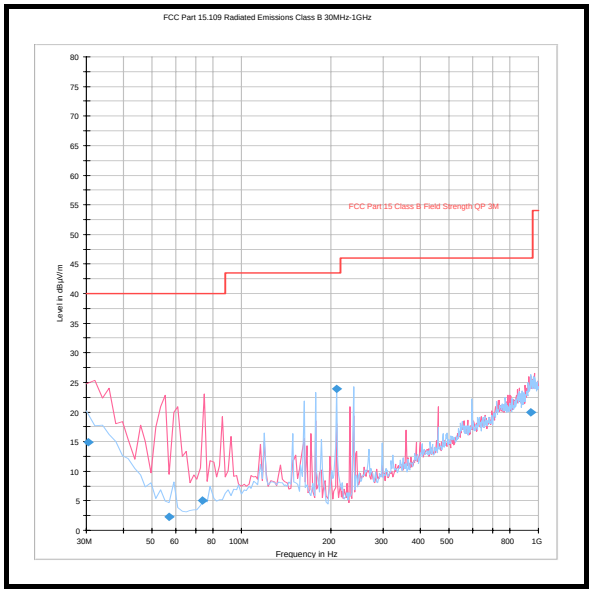
Results: Frequency Range: 30 MHz to 1000 MHz

Frequency (MHz)	Antenna Polarity	Quasi-Peak Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
208.678958	Horizontal	23.9	43.5	19.6	Complied

Note(s):

1. *All other emissions shown on the plots were investigated and found to be ambient or >20dB below the applicable limit.*

Receiver/Idle Mode Radiated Spurious Emissions (Continued)



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

7.2.3. Receiver Radiated Spurious Emissions: Section 15.109 (Continued)

Results: Frequency Range: 1 GHz to 12.75 GHz

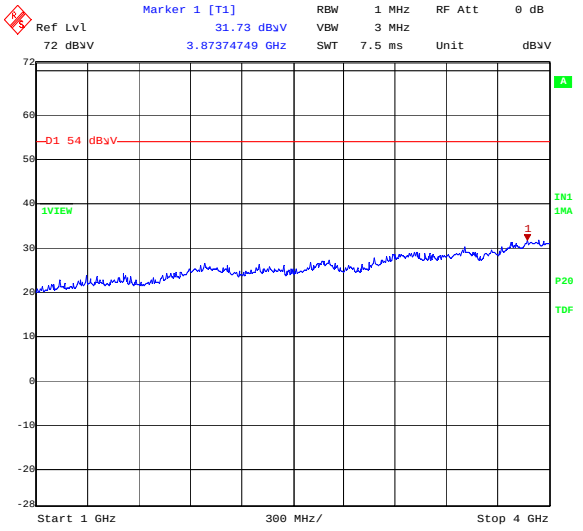
Highest Peak Level:

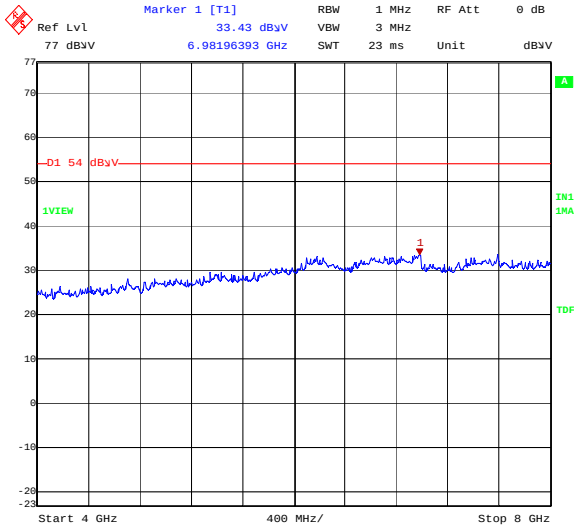
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
11.902	Horizontal	33.9	2.4	36.3	54.0	17.7	Complied

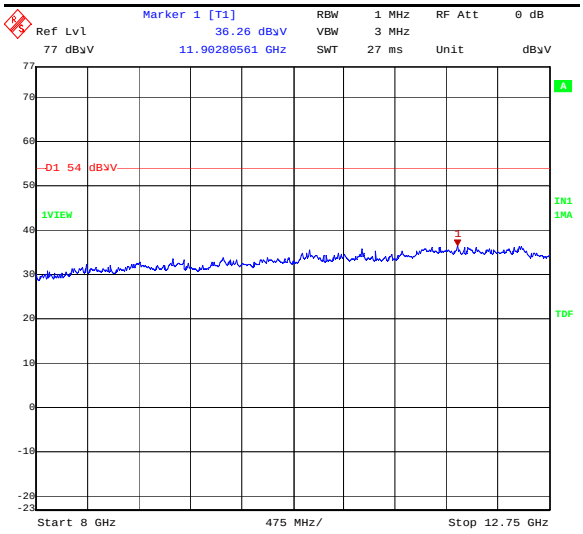
Note(s):

1. **Note: 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: 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.*

Receiver Radiated Spurious Emissions: Section 15.109 (Continued)







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

7.2.4. Transmitter AC Conducted Spurious Emissions: Section 15.207

Ambient Temperature: 22ºC Relative Humidity: 38%

Results: Top Channel

Quasi-Peak Detector Measurements on Live and Neutral Lines

Frequency (MHz)	Line	Level (dBµV)	Limit (dBµV)	Margin (dB)	Result
1.419000	Live	29.7	56.0	26.3	Complied
1.545000	Live	33.1	56.0	22.9	Complied
1.756500	Neutral	35.8	56.0	20.2	Complied
1.981500	Neutral	38.1	56.0	17.9	Complied
2.166000	Neutral	38.4	56.0	17.6	Complied
2.454000	Neutral	32.3	56.0	23.7	Complied
2.526000	Neutral	37.4	56.0	18.6	Complied
2.575500	Neutral	31.2	56.0	24.8	Complied
2.715000	Neutral	35.6	56.0	20.4	Complied
2.967000	Neutral	34.5	56.0	21.5	Complied

Average Detector Measurements on Live and Neutral Lines

Frequency (MHz)	Line	Level (dBµV)	Limit (dBµV)	Margin (dB)	Result
0.370500	Live	7.4	48.5	41.1	Complied
0.825000	Neutral	13.7	46.0	32.3	Complied
0.937500	Live	19.9	46.0	26.1	Complied
1.297500	Live	5.3	46.0	40.7	Complied
1.419000	Live	10.9	46.0	35.1	Complied
1.644000	Neutral	12.8	46.0	33.2	Complied
1.765500	Neutral	11.7	46.0	34.3	Complied
1.860000	Neutral	20.7	46.0	25.3	Complied
2.031000	Neutral	19.1	46.0	26.9	Complied
23.127000	Neutral	26.8	50.0	23.2	Complied

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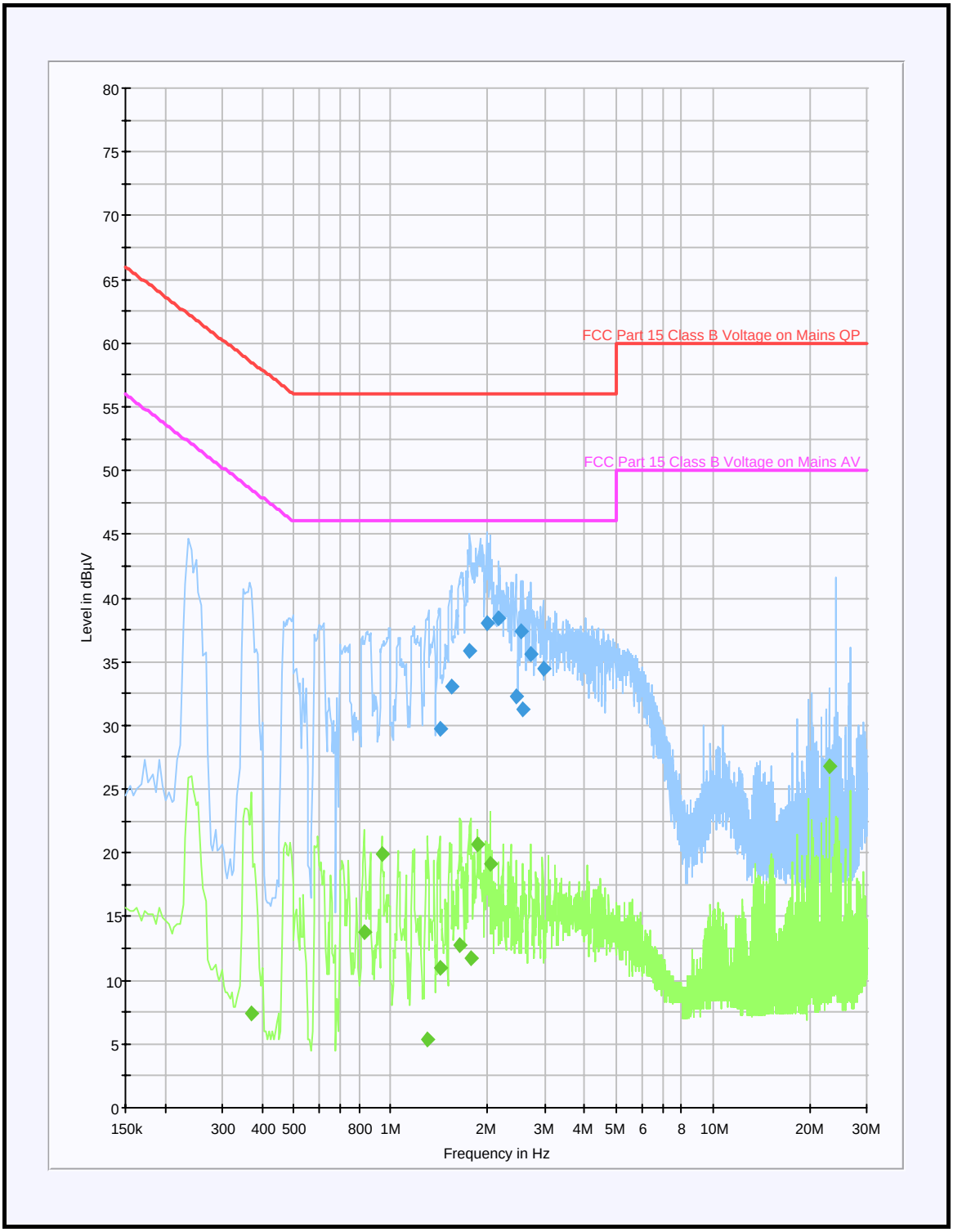
Transmitter AC Conducted Spurious Emissions (Continued)



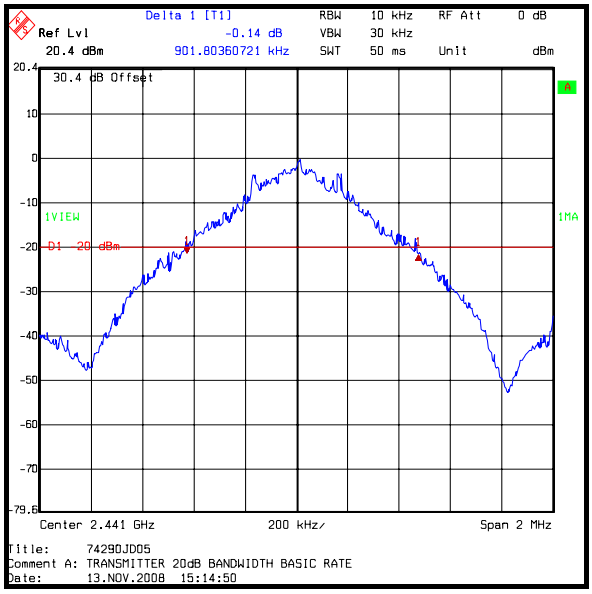
Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying tables.

7.2.5. Transmitter 20 dB Bandwidth: Section 15.247(a)(1)

Ambient Temperature: 21ºC Relative Humidity: 33%

Results: Basic Rate

Transmitter 20 dB Bandwidth (kHz)
901.804



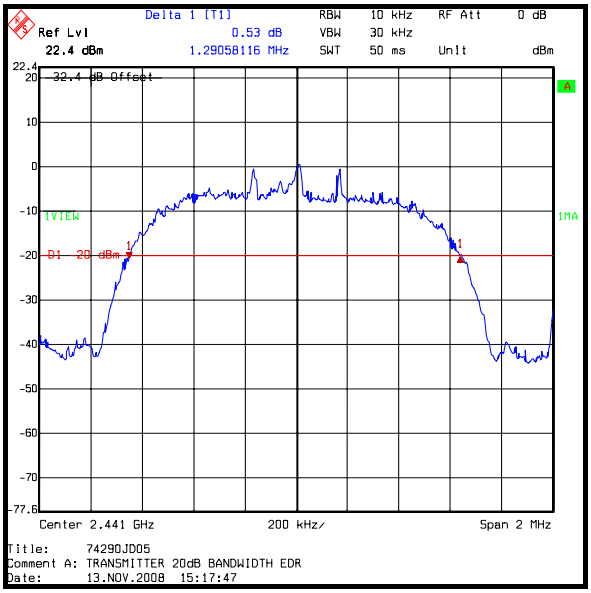
Note(s):

1. *20 dB bandwidth measurements were performed in Basic Rate and EDR modes. EDR was found to have the widest bandwidth and the results are shown in this report.*

Transmitter 20 dB Bandwidth: Section 15.247(a)(1) - Continued

Results: EDR

Transmitter 20 dB Bandwidth (kHz)
1290.581



Note(s):

1. *20 dB bandwidth measurements were performed in Basic Rate and EDR modes. EDR was found to have the widest bandwidth and the results are shown in this report.*

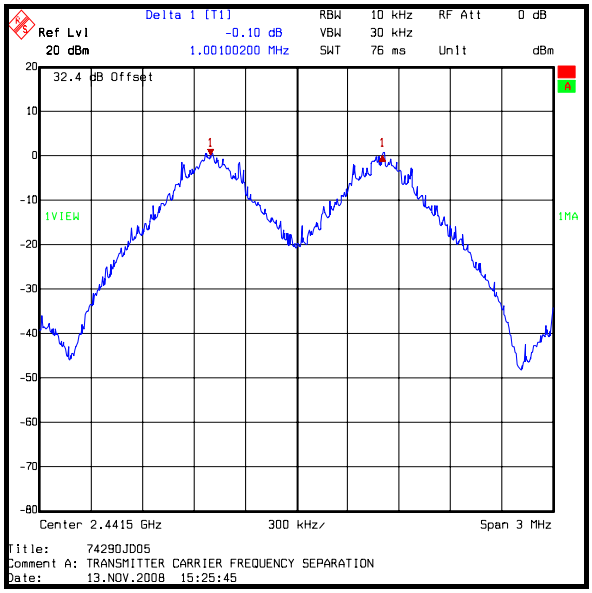
7.2.6. Transmitter Carrier Frequency Separation: Section 15.247(a)(1)

Ambient Temperature: 22ºC Relative Humidity: 48%

Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000).

Results: Basic Rate

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
1001.00200	601.203	399.799	Complied



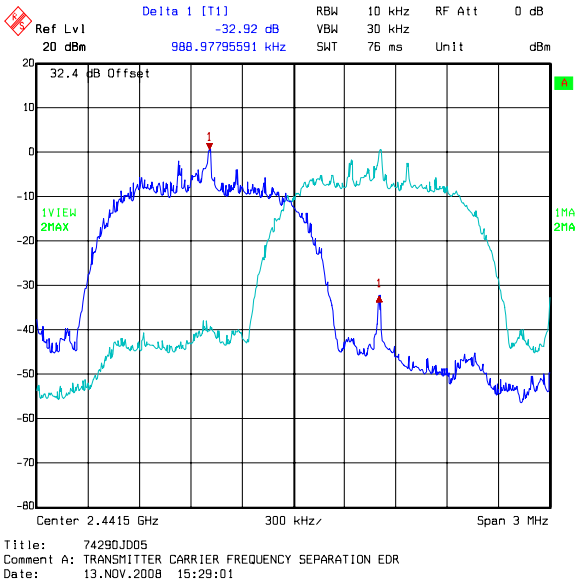
Note(s):

1. *The Trace 1 delta maker on the EDR plot is positioned directly under the peak of the Trace 2/higher channel. This is because the spectrum analyser markers are only active on Trace 1.*

Transmitter Carrier Frequency Separation: Section 15.247(a)(1) (continued)

Results: EDR

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
988.978	860.387	128.591	Complied



Note(s):

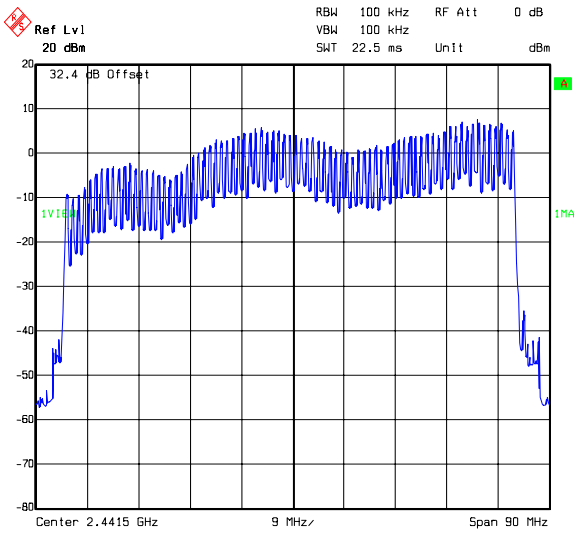
1. *The Trace 1 delta maker on the EDR plot is positioned directly under the peak of the Trace 2/higher channel. This is because the spectrum analyser markers are only active on Trace 1.*

7.2.7. Transmitter Average Time of Occupancy: Section 15.247(a)(1)(iii)

Ambient Temperature: 22ºC Relative Humidity: 48%

Results:

Emission Width (µs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
2915.832	95	0.277	0.4	0.123	Complied



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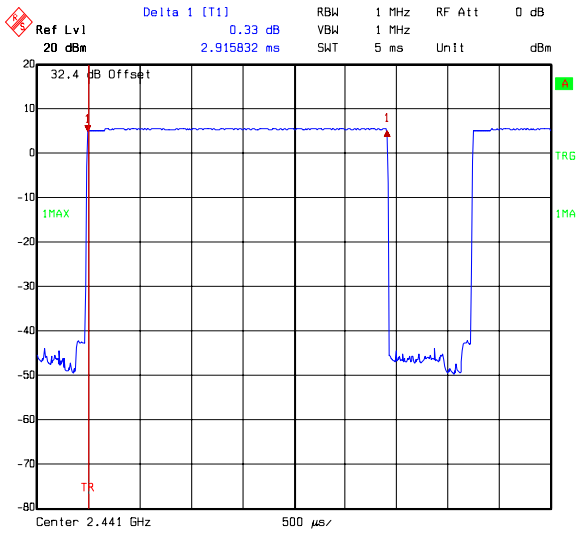
Date: 13.NOV.2008 16:07:56



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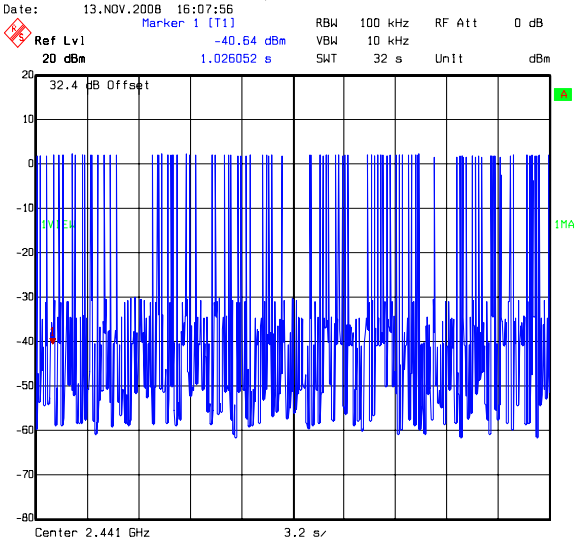

Title: 74290JD05
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Date: 13.NOV.2008 16:17:46

7.2.8. Transmitter Maximum Peak Output Power: (EIRP)

Ambient Temperature: 21ºC Relative Humidity: 33%

Results: Basic rate

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-2.7	30.0	32.7	Complied
Middle	-2.5	30.0	32.5	Complied
Top	-3.1	30.0	33.1	Complied

Results: EDR

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-2.7	30.0	32.7	Complied
Middle	-2.5	30.0	32.5	Complied
Top	-3.2	30.0	33.1	Complied

Note(s):

1. *These tests were performed radiated; therefore the EUT antenna gain is encompassed in the final result and not measurable.*

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7.2.9. Transmitter Radiated Emissions: Section 15.247(d) and 15.209(a)

Ambient Temperature: 21ºC Relative Humidity: 33%

Results: Frequency Range 30 MHz to 1000 MHz (Emissions Occurring in the Restricted Bands)

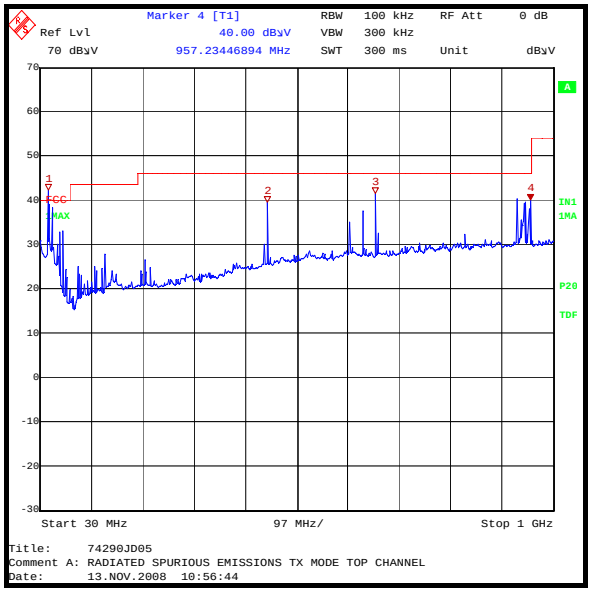
Top Channel

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
998.0	Horizontal	31.0	54.0	23.0	Complied

Note(s):

1. *All other emissions shown on the plots were investigated and found to be ambient or >20dB below the applicable limit.*
2. *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.*

Transmitter Radiated Emissions (Continued)



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

Transmitter Radiated Emissions: Section 15.247(d) and 15.209(a) (Continued)

Results: Frequency Range: 1 GHz to 26.5 GHz (Emissions Occurring in the Restricted Bands)

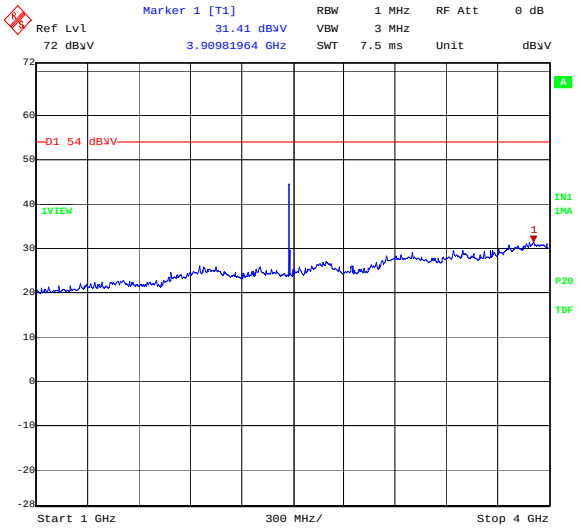
Highest Peak Level: Top Channel

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
18.0	Vertical	32.9	4.3	37.2	54.0	16.8	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 other emissions shown on the plots were investigated and found to be ambient or >20dB below the applicable limit.*
3. *The carrier at 2.48 GHz is shown on the 1 to 4 GHz plot.*

Transmitter Radiated Emissions (Continued)



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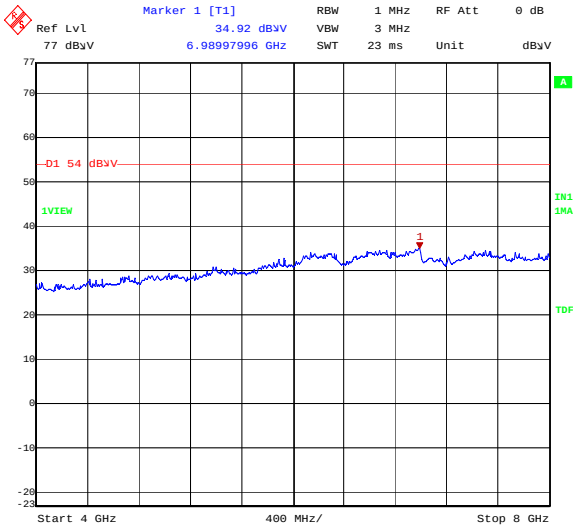

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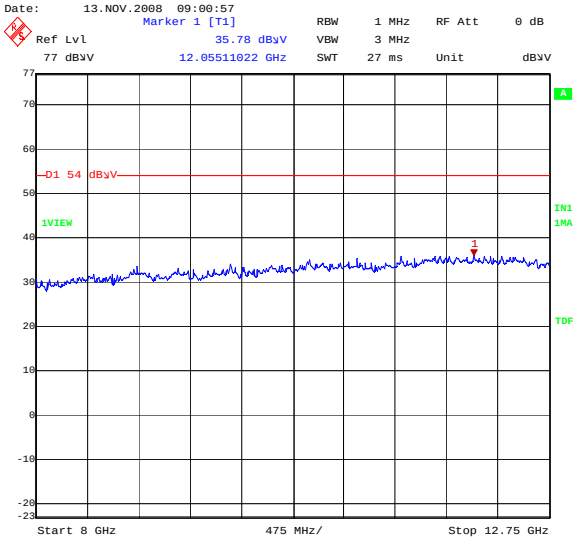

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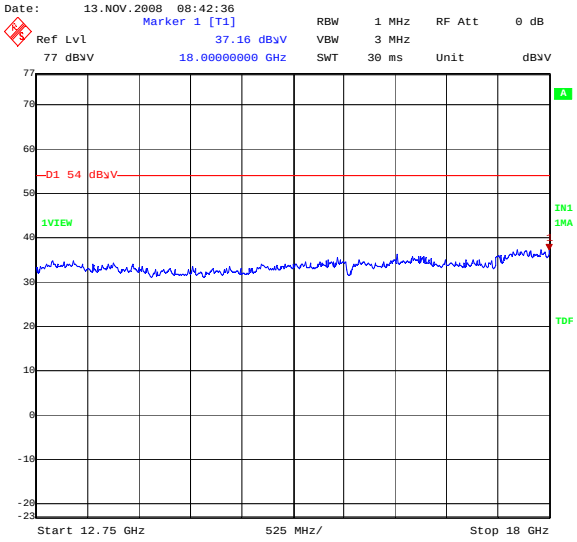

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Date: 13.NOV.2008 08:12:23

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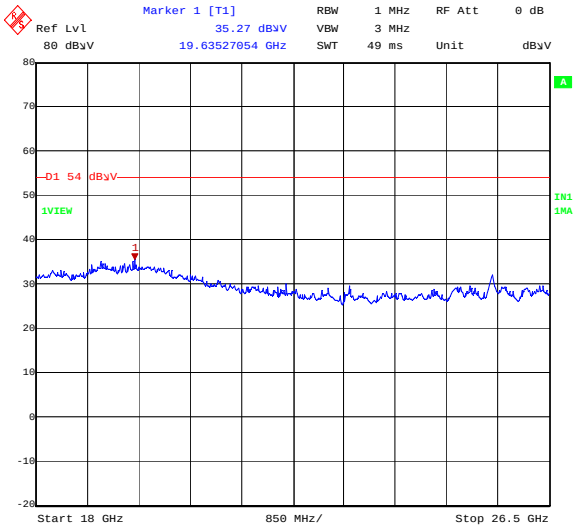
VS85

To: FCC Part 15.247: 2008 (Subpart C)

Transmitter Radiated Emissions (Continued)



Title: 74290JD05
Comment A: RADIATED SPURIOUS EMISSIONS TX MODE
Date: 12.NOV.2008 17:23:35

7.2.10. Transmitter Band Edge Radiated Emissions: Section 15.247(d) and 15.209(a)

Ambient Temperature: 21ºC Relative Humidity: 33%

Results Basic Rate/EDR Mode

Peak Power Level: Hopping Mode

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4000	Vertical	59.9	-7.7	52.2	72.1*	19.9	Complied
2.4835	Vertical	59.9	-8.0	51.9	74.0	22.1	Complied

***Note:** -20 dBc limit*

Average Power Level: Hopping Mode

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4835	Vertical	37.8	-8.0	29.5	54.0	24.5	Complied

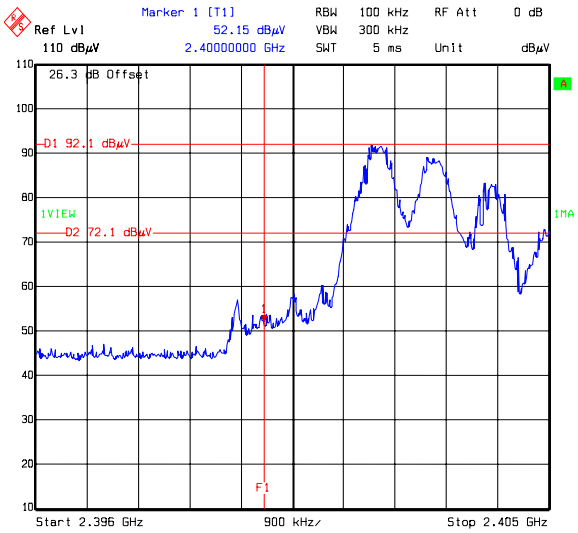
Note(s):

1. *Band edge measurements were performed in Basic Rate and EDR modes. Basic Rate was found to have the highest level at the lower band edge and the results are shown in this report. EDR was found to have the highest level at the upper band edge and the results are shown in this report.*

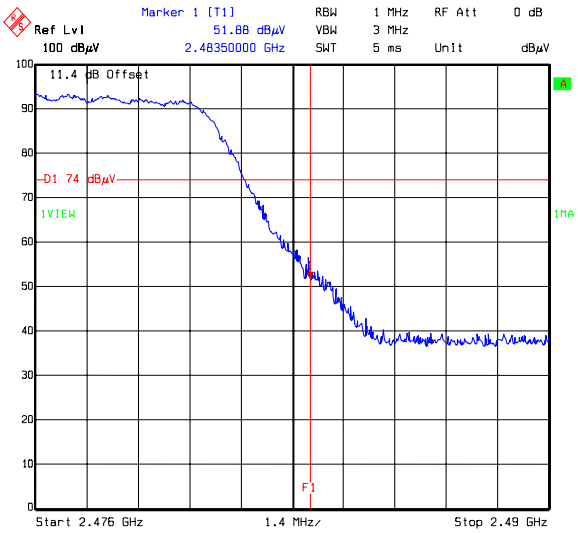
Test of: Panasonic
VS85

To: FCC Part 15.247: 2008 (Subpart C)

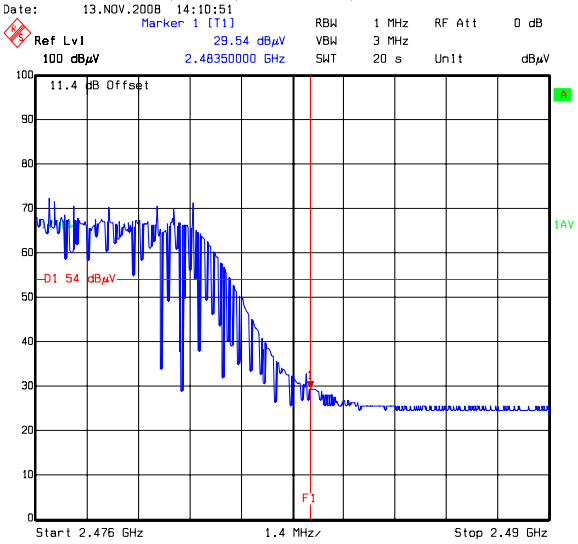
Transmitter Band Edge Radiated Emissions (Continued)



Title: 74290JD05
Comment A: TX BAND EDGE, HOPPING, BOTTOM CHANNEL, BASIC RATE
Date: 13.NOV.2008 14:10:51



Title: 74290JD05
Comment A: TX BAND EDGE, HOPPING, TOP CHANNEL, EDR, PEAK DET
Date: 13.NOV.2008 14:38:35



Title: 74290JD05
Comment A: TX BAND EDGE, HOPPING, TOP CHANNEL, EDR, AVG DET
Date: 13.NOV.2008 14:45:46

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

7.2.11. Transmitter Band Edge Radiated Emissions: Section 15.247(d) and 15.209(a)

Ambient Temperature: 21ºC Relative Humidity: 33%

Results Basic Rate/EDR Mode

Peak Power Level: Static Mode

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4000	Vertical	62.7	-7.7	55.0	72.1*	17.1	Complied
2.4835	Vertical	64.9	-8.0	56.9	74.0	17.1	Complied

***Note:** -20 dBc limit*

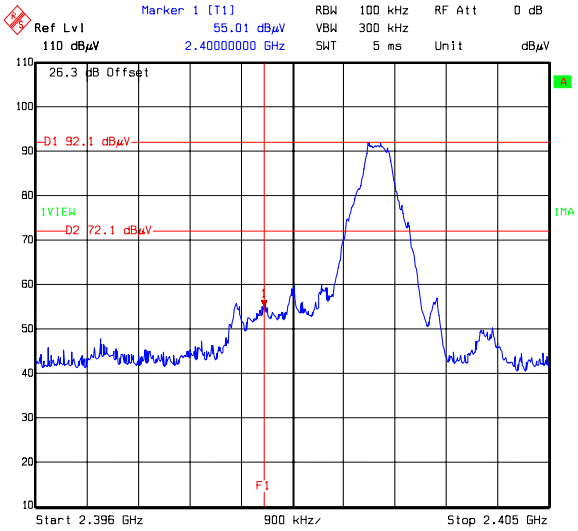
Average Power Level: Static Mode

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4835	Vertical	47.6	-8.0	39.6	54.0	14.4	Complied

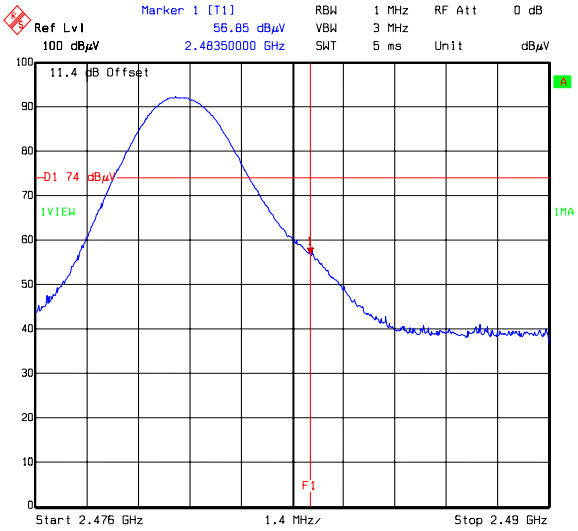
Note(s):

2. *Band edge measurements were performed in Basic Rate and EDR modes. Basic Rate was found to have the highest level at the lower band edge and the results are shown in this report. EDR was found to have the highest level at the upper band edge and the results are shown in this report.*

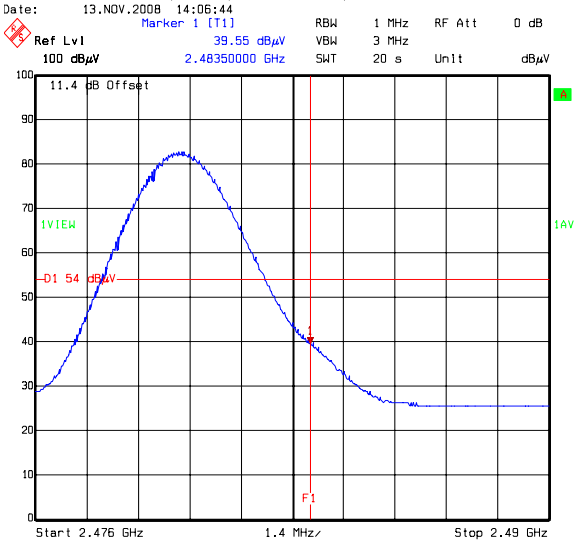
Transmitter Band Edge Radiated Emissions (Continued)



Title: 74290JD05
Comment A: TX BAND EDGE, STATIC, BOTTOM CHANNEL, BASIC RATE
Date: 13.NOV.2008 14:06:44



Title: 74290JD05
Comment A: TX BAND EDGE, STATIC, TOP CHANNEL, EDR, PEAK DET
Date: 13.NOV.2008 14:33:48



Title: 74290JD05
Comment A: TX BAND EDGE, STATIC, TOP CHANNEL, EDR, AVG DET
Date: 13.NOV.2008 14:29:41

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
20 dB Bandwidth	Not Applicable	95%	±11.4 ppm
Transmitter Carrier Frequency Separation	Not Applicable	95%	±11.4 ppm
Transmitter Average Time of Occupancy	Not Applicable	95%	±0.3 ns
Transmitter Maximum Peak Output Power	Not Applicable	95%	±2.94 dB
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	Line Impedance Stabilization Network	Rohde & Schwarz	ESH3-Z5	890 604/027	19 May 2008	12
A1299	Antenna	Schaffner	CBL6143	5094	28 Jul 2008	12
A1793	Pre Amplifier	A.H.Systems Inc.	PAM-0118	183	03 Jul 2008	12
A1818	Antenna	EMCO	3115	00075692	25 Oct 2008	12
A1830	Pulse Limiter	Rhode & Schwarz	ESH3-Z2	100668	16 Jan 2008	12
A259	Antenna	Chase	CBL6111	1513	25 Jul 2008	12
K0001	Site Reference 4420	Rainford EMC	N/A	N/A	13 Aug 2008	12
K0002	Site Reference 4421	Rainford EMC	N/A	N/A	26 Aug 2008	12
M1124	Spectrum Analyser	Rohde & Schwarz	ESIB26	100046K	19 Feb 2008	12
M1242	Spectrum Analyser	Rohde & Schwarz	FSEM30	845986/022	29 Nov 2007	12
M1253	Spectrum Analyser	HP	8564E	3442A00262	21 Oct 2008	12
M1273	Test Receiver	Rhode & Schwarz	ESIB 26	100275	26 Feb 2008	12

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