


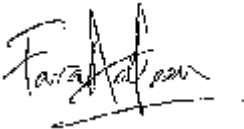

TEST REPORT FROM RFI GLOBAL SERVICES LTD

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.

To: FCC Part 15.247

Test Report Serial No:
RFI/MPTE2/RP70944JD07A

Supersedes Test Report Serial No:
RFI/MPTE1/RP70944JD07A

<p>This Test Report Is Issued Under The Authority Of Andrew Brown, Operations Manager:</p> <div style="text-align: center; margin-top: 20px;">  pp </div>	
<p>Tested By: Fara Razally</p> <div style="text-align: center; margin-top: 10px;">  </div>	<p>Checked By: Nigel Davison</p> <div style="text-align: center; margin-top: 10px;">  </div>
<p>Report Copy No: PDF01</p>	
<p>Issue Date: 27 January 2005</p>	<p>Test Dates: 06 December 2004 to 13 January 2005</p>

This report is issued in Adobe Acrobat portable document format (PDF). It is only a valid copy of the report if it is being viewed in PDF format with the following security options not allowed: Changing the document, Selecting text and graphics, Adding or changing notes and form fields. Furthermore, the date of creation must match the issue date stated above.

This report may be reproduced in full. Partial reproduction may only be made with the written consent of RFI Global Services Ltd.
The results in this report apply only to the sample(s) tested.

**Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.**

To: FCC Part 15.247

This page has been left intentionally blank.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Table of Contents

1. Client Information 4
2. Equipment Under Test (EUT) 5
3. Test Results..... 10
4. Deviations from the Test Specification 11
5. Operation of the EUT During Testing..... 12
6. Summary of Test Results 13
7. Measurements, Examinations and Derived Results 14
8. Measurement Uncertainty 41
9. Measurement Methods 42
Appendix 1. Test Equipment Used 49
Appendix 2. Test Configuration Drawings..... 50

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

1. Client Information

Company Name:	Panasonic Mobile Communications Development of Europe.
Address:	2 Gables Way Colthrop Thatcham Berk RG19 4ZB
Contact Name:	Mr M Hargreaves

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

2. Equipment Under Test (EUT)

The following information (with the exception of the Date of Receipt) has been supplied by the client:

2.1. Identification of Equipment Under Test (EUT)

Brand Name:	Panasonic
Model Name or Number:	Panasonic X800
Unique Type Identification:	EB-X800
IMEI Number:	004400000227163
FCC ID Number:	NWJ21C001A
Country of Manufacture:	Japan
Date of Receipt:	06 December 2004

Brand Name:	Panasonic
Model Name or Number:	Panasonic X800
Unique Type Identification:	EB-X800
Serial Number:	004400000227437
FCC ID Number:	NWJ21C001A
Country of Manufacture:	Japan
Date of Receipt:	06 December 2004

2.2. Accessories

The following accessories were supplied with the EUT:

Description:	AC Battery Charger
Brand Name:	Panasonic
Model Name or Number:	EB-CAX 800
Serial Number:	None Stated
Cable Length and Type:	1.5m
Connected to Port:	Universal Interface Port

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

Accessories (Continued)

Description:	Car Charger
Brand Name:	Panasonic
Model Name or Number:	EB-CDX 800
Serial Number:	None Stated
Cable Length and Type:	2.2m extended approx
Connected to Port:	Universal Interface Port

Description:	Personal Hands free
Brand Name:	Panasonic
Model Name or Number:	EB-EMX800
Serial Number:	None Stated
Cable Length and Type:	1.2m
Connected to Port:	Universal Interface Port

Description:	Branch Cable
Brand Name:	Panasonic
Model Name or Number:	EB-CBX800
Serial Number:	None Stated
Cable Length and Type:	0.16m
Connected to Port:	Universal Interface Port

Description:	USB Data Cable
Brand Name:	Panasonic
Model Name or Number:	EB-USX800
Serial Number:	None Stated
Cable Length and Type:	0.8m
Connected to Port:	Universal Interface Port

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Accessories (Continued)

Description:	Mini-SD Memory Card
Brand Name:	Panasonic
Model Name or Number:	16MB
Serial Number:	None Stated
Cable Length and Type:	N/A
Connected to Port:	Memory Expansion Slot

2.3. Description of EUT

The equipment under test is a 'Flip Type' PCS 1900 mobile cellular telephone with GSM 900, DCS 1800 and Bluetooth support. The mobile includes a camera and IR optical transceiver.

2.4. Modifications Incorporated in EUT

During the course of testing the EUT was not modified.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

2.5. Additional Information Related to Testing

Power Supply Requirement:	Internal Battery supply of 3.7 V Lithium-ion battery		
Intended Operating Environment:	Within proximity of intended partner Bluetooth device.		
Equipment Category:	Short Range (Low Power) GSM 900 / GSM 1800 / GSM 1900		
Type of Unit:	Portable (Standalone battery powered device)		
Interface Ports:	AC Charger DC Charger Personal Hands free USB Data Cable Branch Adaptor Cable		
Transmit Frequency Range:	2402 MHz to 2480 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	1	2402
	Middle	40	2440
	Top	79	2480
Receive Frequency Range:	2402 MHz to 2480 MHz		
Receive Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	1	2402
	Middle	40	2440
	Top	79	2480
Maximum Power Output (EIRP)	-0.2 dBm		

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

2.6. Support Equipment

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

Description:	Bluetooth Test Set
Brand Name:	Anritsu
Model Name or Number:	MT885DA
Serial Number:	6K0000084
Cable Length and Type:	Not Applicable
Connected to Port:	RF Link

Description:	PC
Brand Name:	Panasonic
Model Name or Number:	None Stated
Serial Number:	None Stated
Cable Length and Type:	Serial 1.5
Connected to Port:	EUT comms Port

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

3. Test Results

Reference:	FCC Part 15 Subpart C: 2003 (Section 15.247)
Title:	Code of Federal Regulations, Part 15 (47CFR15) Radio Frequency Devices
Purpose of Test:	To determine whether the equipment complied with the requirements of the specification for the purposes of certification.

3.1. Methods and Procedures

The methods and procedures used were as detailed in:

ANSI C63.2 (1987)

Title: American National Standard for Instrumentation - Electromagnetic noise and field strength.

ANSI C63.4 (2001)

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.

3.2. 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.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

4. Deviations from the Test Specification

None.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

5. Operation of the EUT During Testing

5.1. Operating Conditions

The EUT was tested in a normal laboratory environment.

During testing, the EUT was powered by an Internal battery supply of 3.7 V Lithium-ion battery.

5.2. Operating Modes

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

Preliminary radiated spurious pre-scans were performed in both transmit (Bluetooth active) and idle modes on the highest operating frequency range of the EUT (top channel) with the accessories stated in section 2.2 of this report connected and disconnected. The combination that exhibited the worst case of operation was then used to perform all measurements. The worse case combination was found to be with the EUT connected to the branch cable, AC Charger and a PC all connected simultaneously. Final measurements were then performed on the top, middle and bottom channels and hopping on all channels if an emission was identified.

AC Mains conducted emissions in both transmit (Bluetooth active) and idle modes were performed on the highest operating frequency of the EUT (top channel) in the established worst-case of operation.

For all transmit mode measurements the Bluetooth mode was active and set to transmit on the top, middle and bottom channels and hopping on all channels as necessary.

5.3. Configuration and Peripherals

The EUT was tested in the following configuration:

Configured with branch cable and AC battery charger connected to laptop via USB cable.

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

6. Summary of Test Results

Range of Measurements	Specification Reference	Port Type	Compliance Status
Receiver AC Conducted Emissions (150 kHz to 30 MHz)	C.F.R. 47 FCC Part 15: 2003 Section 15.107	AC Mains	Complied
Receiver Radiated Spurious Emissions	C.F.R. 47 FCC Part 15: 2003 Section 15.109	Antenna	Complied
Transmitter AC Conducted Emissions (150 kHz to 30 MHz)	C.F.R. 47 FCC Part 15: 2003 Section 15.207	AC Mains	Complied
Transmitter 20 dB Bandwidth	C.F.R. 47 FCC Part 2: 2003 Section 2.247(a)(1)(iii)	Antenna	Complied
Transmitter Carrier Frequency Separation	C.F.R. 47 FCC Part 15: 2003 Section 15.247(a)(1)	Antenna	Complied
Transmitter Average Time of Occupancy	C.F.R. 47 FCC Part 15: 2003 Section 15.247(a)(1)(iii)	Antenna	Complied
Transmitter Maximum Peak Output Power	C.F.R. 47 FCC Part 15: 2003 Section 15.247 (c)	Antenna	Complied
Transmitter Radiated Emissions	C.F.R. 47 FCC Part 15: 2003 Section 15.247(c)/15.209(a)	Antenna	Complied
Transmitter Band Edge Radiated Emissions	C.F.R. 47 FCC Part 15: 2003 Section 15.247(c)/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, Ewhurst Park, Ramsdell, Basingstoke, Hampshire, RG26 5RQ, England.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

7. Measurements, Examinations and Derived Results

7.1. General Comments

7.1.1. This section contains test results only.

7.1.2. 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.

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

7.2. Idle Mode AC Conducted Spurious Emissions: Section 15.107

7.2.1. The EUT was configured as for AC conducted emissions measurements as described in Section 9 of this report.

7.2.2. Tests were performed to identify the maximum emissions levels on the AC Mains line of the EUT.

Results:

Quasi-Peak Detector Measurements on Live and Neutral Lines

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)	Result
0.19089	Live	47.70	64.00	16.30	Complied
0.38331	Live	34.95	58.21	23.26	Complied
0.38416	Live	34.17	58.19	24.02	Complied
0.57430	Live	28.86	56.00	27.14	Complied
0.76605	Live	20.81	56.00	35.19	Complied
0.77056	Live	19.39	56.00	36.61	Complied
1.14961	Live	26.96	56.00	29.04	Complied
1.14995	Live	26.78	56.00	29.22	Complied
1.34012	Live	26.63	56.00	29.37	Complied
1.53537	Live	30.66	56.00	25.34	Complied
1.72708	Live	30.36	56.00	25.64	Complied
2.49378	Live	32.09	56.00	23.91	Complied
2.87886	Live	23.32	56.00	32.68	Complied
6.14197	Live	16.01	60.00	43.99	Complied
20.92930	Live	37.67	60.00	22.33	Complied

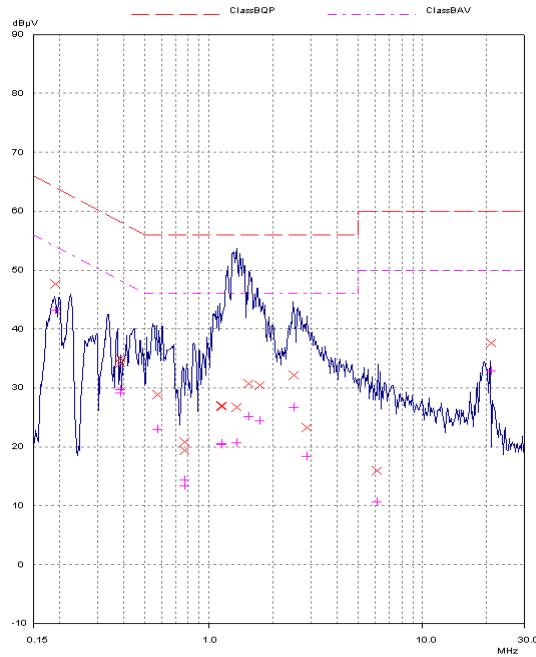
Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Idle Mode AC Conducted Spurious Emissions: Section 15.107 (Continued)**Average Detector Measurements on Live and Neutral Lines**

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)	Result
0.19089	Live	43.23	54.00	10.77	Complied
0.38331	Live	29.75	48.21	18.46	Complied
0.38416	Live	29.17	48.19	19.02	Complied
0.57430	Live	22.94	46.00	23.06	Complied
0.76605	Live	14.34	46.00	31.66	Complied
0.77056	Live	13.29	46.00	32.71	Complied
1.14961	Live	20.53	46.00	25.47	Complied
1.14995	Live	20.35	46.00	25.65	Complied
1.34012	Live	20.71	46.00	25.29	Complied
1.53537	Live	25.05	46.00	20.95	Complied
1.72708	Live	24.47	46.00	21.53	Complied
2.49378	Live	26.75	46.00	19.25	Complied
2.87886	Live	18.32	46.00	27.68	Complied
6.14197	Live	10.63	50.00	39.37	Complied
20.92930	Live	32.92	50.00	17.08	Complied

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Idle AC Conducted Spurious Emissions: Section 15.107 (Continued)



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

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

7.3. Idle Mode Radiated Spurious Emissions: Section 15.109

7.3.1. Electric Field Strength Measurements (Frequency Range: 30 to 1000 MHz)

7.3.1.1. The EUT was configured as for radiated emissions testing as described in Section 9 of this report.

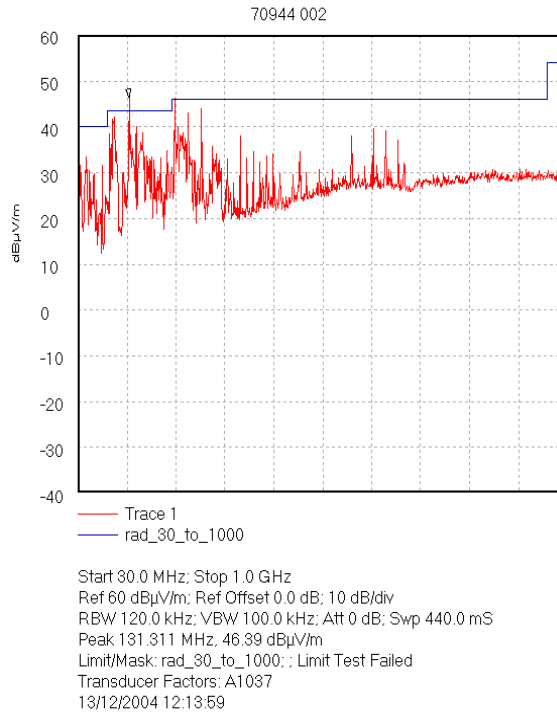
7.3.1.2. Tests were performed to identify the maximum receiver or standby radiated emissions levels.

Results:

Frequency (MHz)	Antenna Polarity	Quasi-Peak Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
45.560	Vert.	17.6	40.0	15.9	Complied
60.973	Vert.	21.4	40.0	20.8	Complied
68.744	Vert.	20.4	40.0	19.2	Complied
125.100	Vert.	16.3	43.5	24.2	Complied
130.000	Vert.	17.6	43.5	19.8	Complied
169.004	Horiz.	20.4	43.5	13.2	Complied
195.003	Horiz.	26.1	43.5	15.7	Complied
247.000	Horiz.	26.4	46.0	15.6	Complied
325.003	Horiz.	25.1	46.0	11.6	Complied
403.967	Vert.	18.9	46.0	26.4	Complied
572.003	Vert.	25.4	46.0	16.7	Complied

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Idle Radiated Spurious Emissions: Section 15.109 (Continued)



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

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

Idle Mode Radiated Emissions: Section 15.109 (Continued)

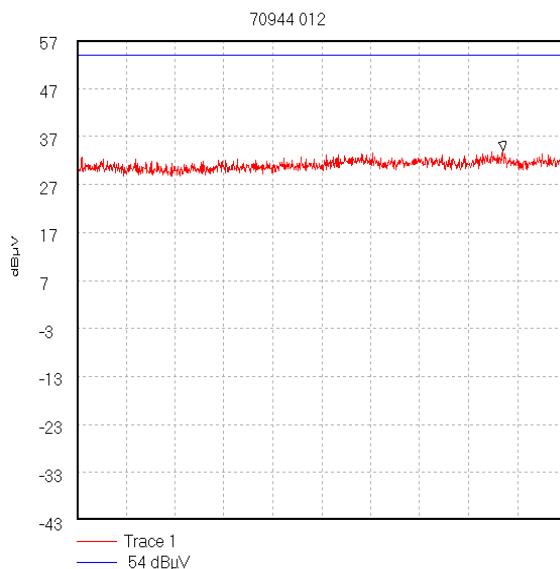
7.3.2. Electric Field Strength Measurements (Frequency Range: 1 to 12.5 GHz)

Results:

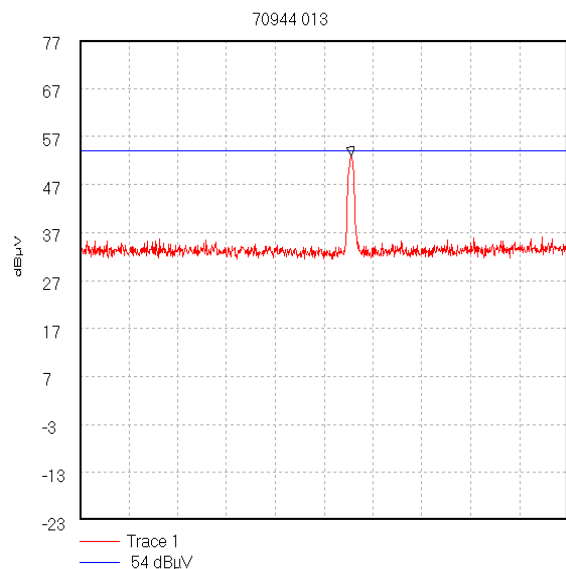
Highest Peak Level: Top Channel

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.518	Horiz.	7.6	24.2	1.7	33.5	54.0	20.5	Complied

Note: The peak level was compared to the average limit as opposed to being compared to the peak limit this is the more onerous limit.



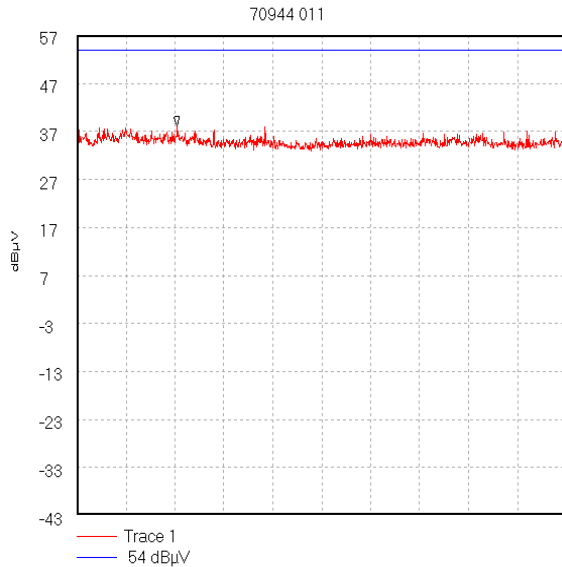
Start 1.0 GHz; Stop 1.85 GHz
 Ref 57 dBμV; Ref Offset 11.8 dB; 10 dB/div
 RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 1.740444 GHz, 34.05 dBμV
 Display Line: 54 dBμV.; Limit Test Passed
 13/12/2004 16:38:21



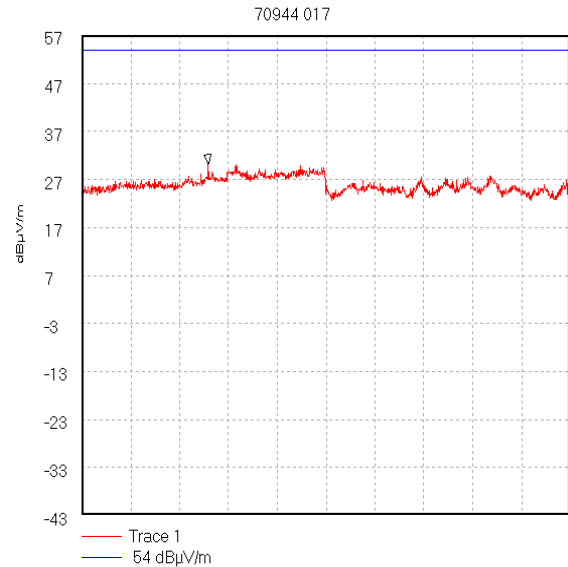
Start 1.91 GHz; Stop 2.0 GHz
 Ref 77 dBμV; Ref Offset 11.8 dB; 10 dB/div
 RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 1.96 GHz, 52.93 dBμV
 Display Line: 54 dBμV.; Limit Test Passed
 13/12/2004 16:44:57

Test of: **Panasonic Mobile Communications Development of Europe.
 EB-X800.**
 To: **FCC Part 15.247**

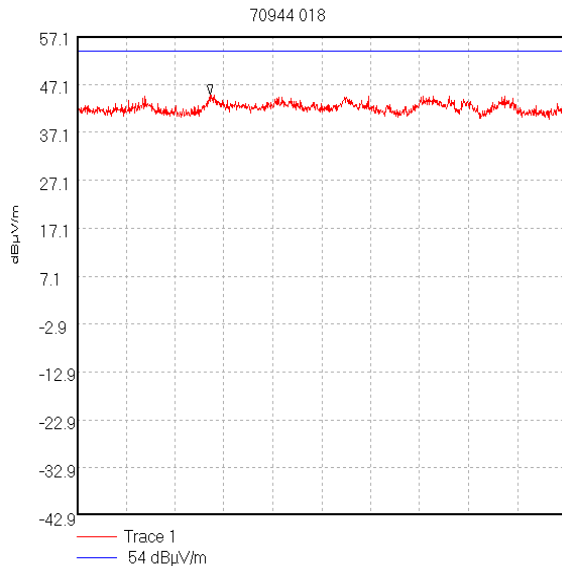
Idle Radiated Spurious Emissions: Section 15.109 (Continued)



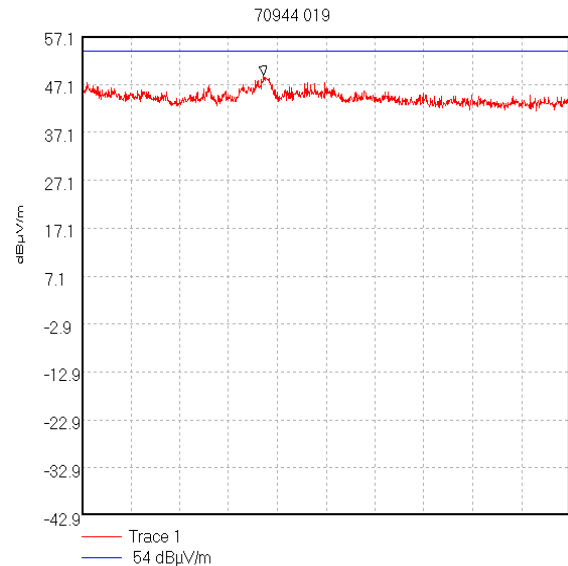
Start 2.0 GHz; Stop 4.0 GHz
 Ref 57 dBµV; Ref Offset 0.0 dB; 10 dB/div
 RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 2.408889 GHz, 38.19 dBµV
 Display Line: 54 dBµV; ; Limit Test Passed
 13/12/2004 16:28:30



Start 4.0 GHz; Stop 6.0 GHz
 Ref 57 dBµV/m; Ref Offset 0.0 dB; 10 dB/div
 RBW 1.0 MHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 4.518 GHz, 30.21 dBµV/m
 Display Line: 54 dBµV/m;
 14/12/2004 15:54:08



Start 6.0 GHz; Stop 8.0 GHz
 Ref 57.1 dBµV/m; Ref Offset 0.0 dB; 10 dB/div
 RBW 1.0 MHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 6.544 GHz, 44.97 dBµV/m
 Display Line: 54 dBµV/m;
 14/12/2004 16:06:09



Start 8.0 GHz; Stop 12.5 GHz
 Ref 57.1 dBµV/m; Ref Offset 0.0 dB; 10 dB/div
 RBW 1.0 MHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 9.675 GHz, 49.08 dBµV/m
 Display Line: 54 dBµV/m;
 14/12/2004 16:14:48

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

NOTE: Emission shown in plot 70944 013 at 1.96 GHz emanates from the test set and not the EUT. Because the emission is not from the EUT, no level has been recorded in the preceding table.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

7.4. Transmitter AC Conducted Spurious Emissions: Section 15.207

7.4.1. The EUT was configured as for AC conducted emissions measurements as described in Section 9 of this report.

7.4.2. Tests were performed to identify the maximum emissions levels on the AC Mains line of the EUT.

Results:

Top Channel: Quasi-Peak Detector Measurements on Live and Neutral Lines

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)	Result
0.30625	Live	37.37	60.07	22.70	Complied
0.41342	Live	38.43	57.58	19.15	Complied
0.52075	Live	38.00	56.00	18.00	Complied
0.62080	Live	38.21	56.00	17.79	Complied
0.82319	Live	43.82	56.00	12.18	Complied
0.88877	Live	43.54	56.00	12.46	Complied
1.06088	Live	44.40	56.00	11.60	Complied
1.12814	Live	50.52	56.00	5.48	Complied
1.27047	Live	54.51	56.00	1.49	Complied
1.46138	Live	55.96	56.00	0.04	Complied
1.54060	Live	52.58	56.00	3.42	Complied
1.66715	Live	50.06	56.00	5.94	Complied
2.46726	Live	45.82	56.00	10.18	Complied
2.66657	Live	46.41	56.00	9.59	Complied
3.87523	Live	36.78	56.00	19.22	Complied

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

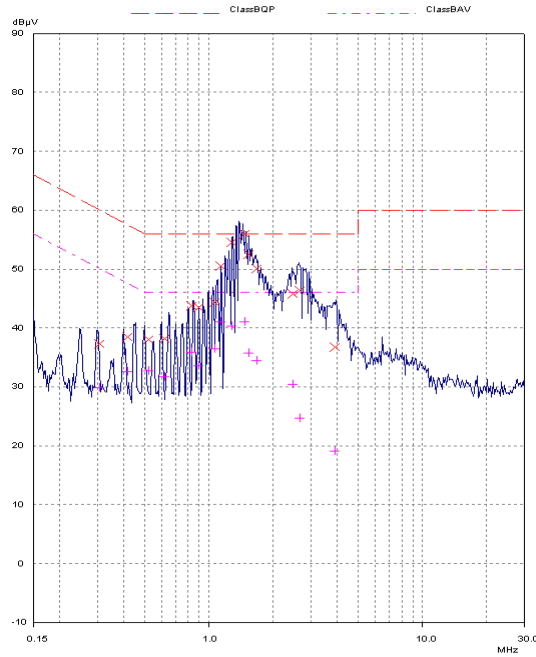
Transmitter AC Conducted Spurious Emissions: Section 15.207 (Continued)

Top Channel: Average Detector Measurements on Live and Neutral Lines

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)	Result
0.30625	Live	29.88	50.07	20.19	Complied
0.41342	Live	32.54	47.58	15.04	Complied
0.52075	Live	32.77	46.00	13.23	Complied
0.62080	Live	31.78	46.00	14.22	Complied
0.823189	Live	35.89	46.00	10.11	Complied
0.88877	Live	33.63	46.00	12.37	Complied
1.06088	Live	36.47	46.00	9.57	Complied
1.12814	Live	41.10	46.00	4.90	Complied
1.27047	Live	40.34	46.00	5.66	Complied
1.46138	Live	41.00	46.00	5.00	Complied
1.54060	Neutral	35.69	46.00	10.31	Complied
1.66715	Live	34.42	46.00	11.58	Complied
2.46726	Live	30.49	46.00	15.51	Complied
2.66657	Live	24.72	46.00	21.28	Complied
3.87523	Live	19.13	46.00	26.87	Complied

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Transmitter AC Conducted Spurious Emissions: Section 15.207 (Continued)



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

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

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

7.5.1. The EUT was configured as for 20 dB bandwidth measurements as described in Section 9 of this report.

7.5.2. Tests were performed to identify the 20 dB bandwidth.

Transmitter 20 dB Bandwidth (kHz)	Limit (kHz)
894.289	None specified



Title: 70944 Panasonic EUT: X800 FCC Part 15.247
 Comment A: 20 dB Bandwidth
 Date: 20.DEC.2004 16:19:17

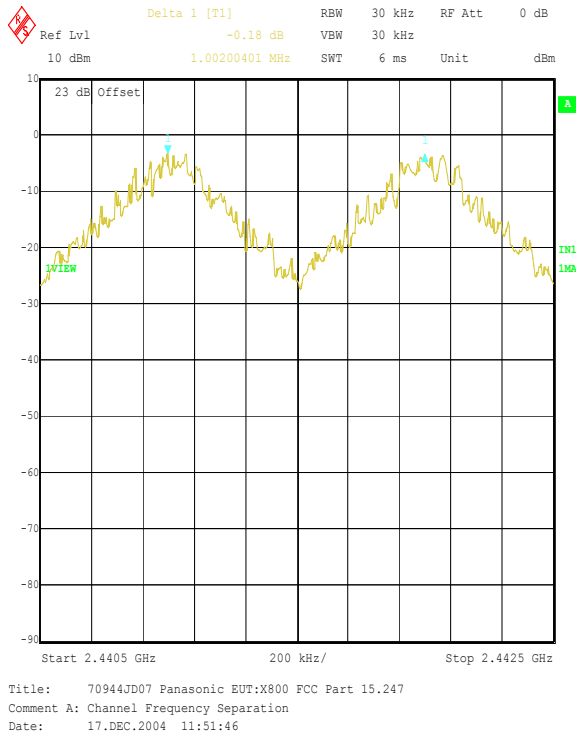
Test of: **Panasonic Mobile Communications Development of Europe.
 EB-X800.**
 To: **FCC Part 15.247**

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

7.6.1. The EUT was configured as for carrier frequency separation measurements as described in Section 9 of this report.

7.6.2. Tests were performed to identify the carrier frequency separation.

Transmitter Carrier Frequency Separation (kHz)	Limit (> 20 dB BW) (kHz)	Margin (kHz)	Result
1002.004	894.289	107.715	Complied



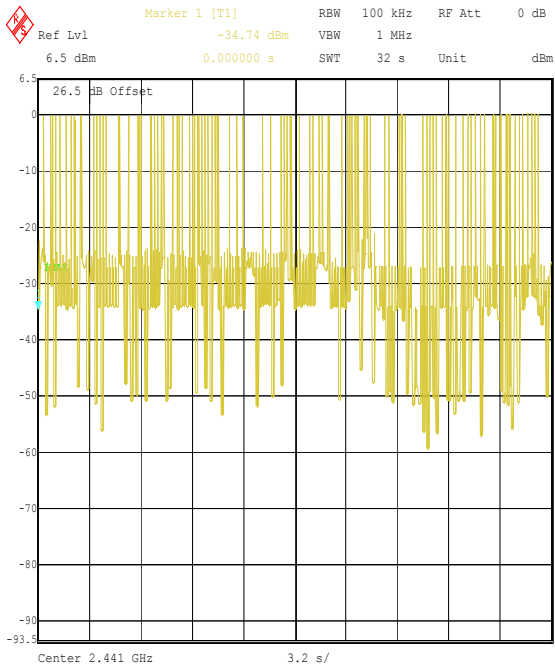
Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

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

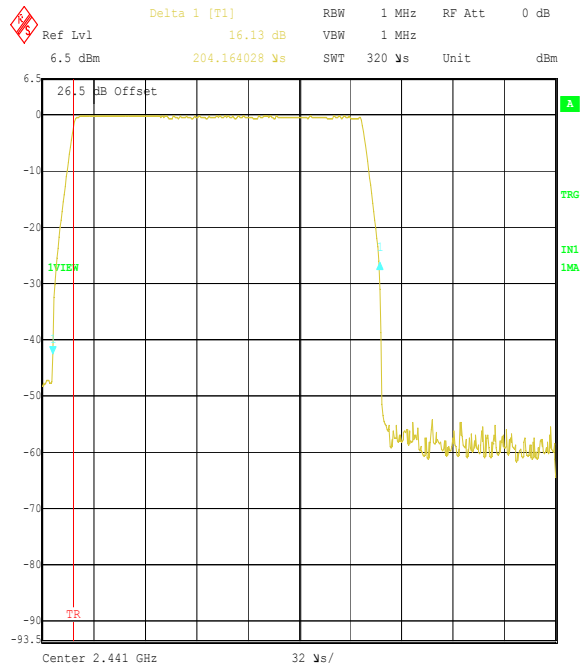
7.7.1. The EUT was configured as for average time of occupancy measurements as described in Section 9 of this report.

7.7.2. 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.

Emission Width (μs)	Number of Hops in 31.6 seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
204.164	111	0.0227	0.4	0.3773	Complied



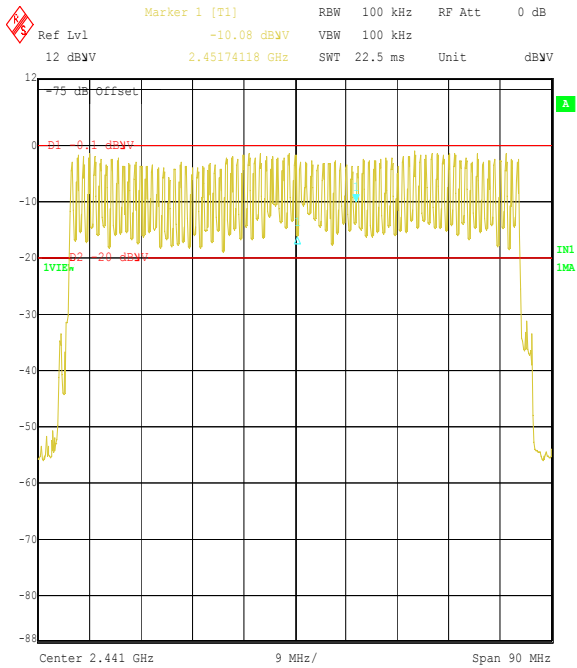
Title: Panasonic 70944JD07 EUT:X800 FCC Part 15.247
 Comment A: Average Time of Occupancy
 Date: 21.DEC.2004 14:37:54



Title: Panasonic 70944JD07 EUT:X800 FCC Part 15.247
 Comment A: Average Time of Occupancy Pulse Width
 Date: 21.DEC.2004 14:50:45

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

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



Title: 70944 Panasonic EUT: X800 FCC Part 15.247
Comment A: Average Time of Occupancy
Date: 20.DEC.2004 16:54:10

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

7.8. Transmitter Maximum Peak Output Power: Section 15.247(b)(3)

7.8.1. The EUT was configured as for transmitter peak output power measurements as described in Section 9 of this report.

7.8.2. Tests were performed to identify the transmitter maximum peak output power (EIRP) of the EUT.

Results:

Battery Powered

Channel	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-0.6	30.0	30.6	Complied
Middle	-0.9	30.0	30.9	Complied
Top	-0.2	30.0	30.2	Complied

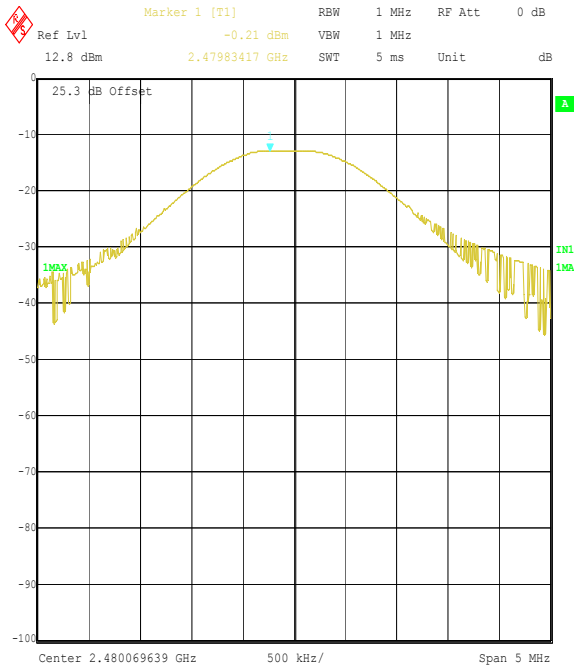
AC Powered

Channel	Input Voltage (AC)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	93.50	-0.6	30.0	30.6	Complied
Bottom	110.00	-0.6	30.0	30.6	Complied
Bottom	126.50	-0.6	30.0	30.6	Complied
Middle	93.50	-0.7	30.0	30.7	Complied
Middle	110.00	-0.9	30.0	30.9	Complied
Middle	126.50	-0.4	30.0	30.4	Complied
Top	93.50	-0.2	30.0	30.2	Complied
Top	110.00	-0.2	30.0	30.2	Complied
Top	126.50	-0.2	30.0	30.2	Complied

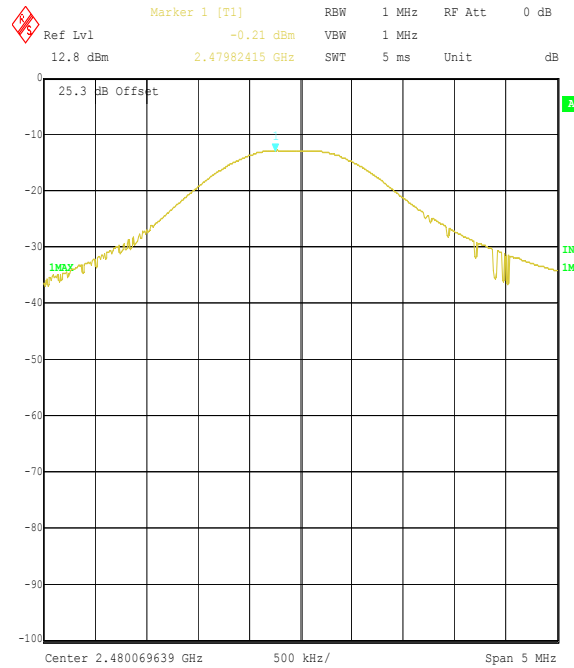
NOTE: These tests were performed radiated; therefore the EUT antenna gain is encompassed in the final result and not measurable.

Test of: **Panasonic Mobile Communications Development of Europe.
 EB-X800.**
 To: **FCC Part 15.247**

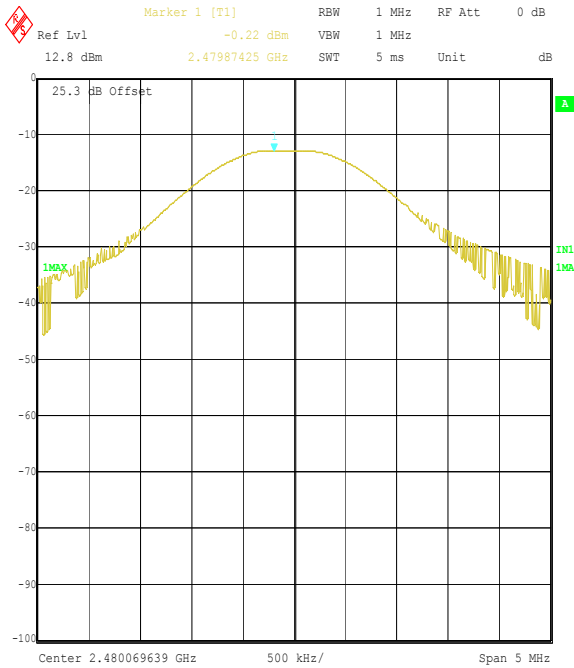
Transmitter Maximum Peak Output Power: Section 15.247(b)(3) (Continued)



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Peak Output Power Top Channel Input Voltage 110V
 Date: 17.DEC.2004 16:08:33



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Peak Output Power Top Channel Input Voltage 93.5V
 Date: 17.DEC.2004 16:07:24



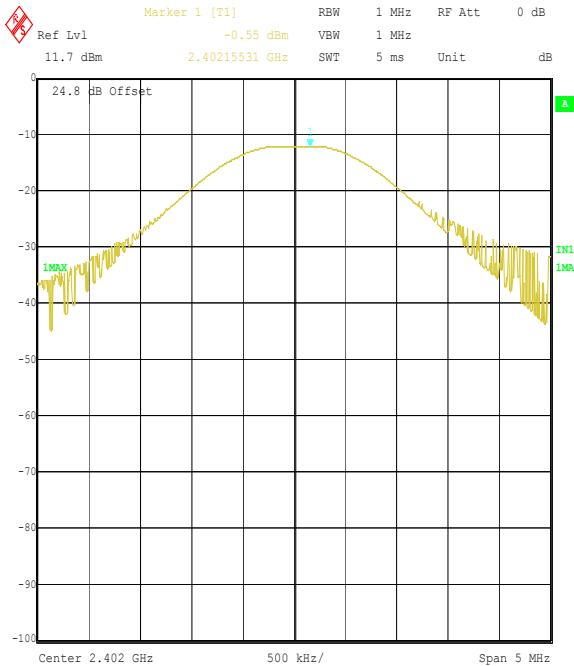
Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Peak Output Power Top Channel Input Voltage 126.5V
 Date: 17.DEC.2004 16:10:02



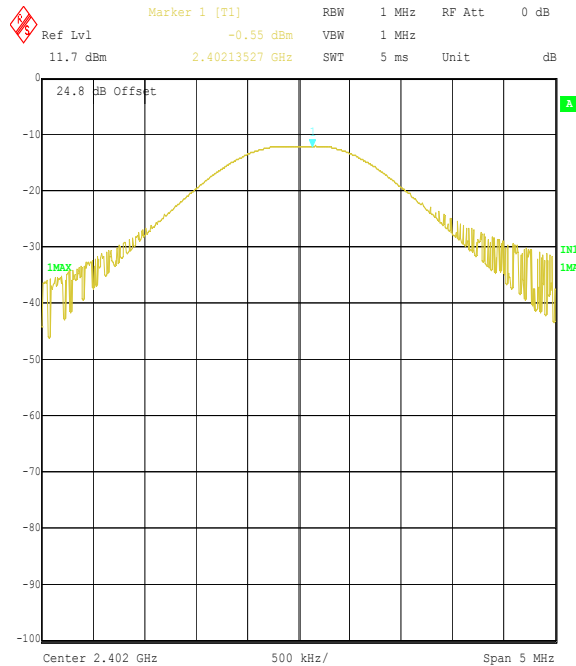
Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Peak Output Power Bottom Channel Input Voltage 110V
 Date: 17.DEC.2004 17:06:24

Test of: **Panasonic Mobile Communications Development of Europe.
 EB-X800.**
 To: **FCC Part 15.247**

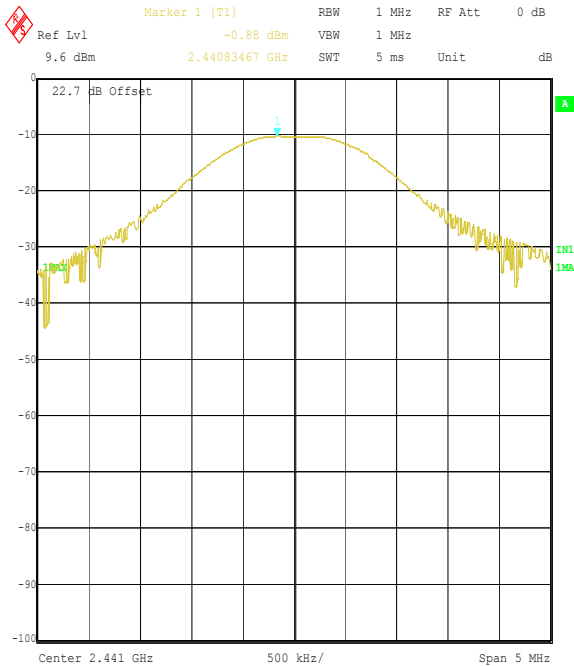
Transmitter Maximum Peak Output Power: Section 15.247(b)(3) (Continued)



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Peak Output Power Bottom Channel Input Voltage 93.5V
 Date: 17.DEC.2004 17:06:58



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Peak Output Power Bottom Channel Input Voltage 126.5V
 Date: 17.DEC.2004 17:07:30



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Peak Output Power Middle Channel Input Voltage 110V
 Date: 17.DEC.2004 16:23:07



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Peak Output Power Middle Channel Input Voltage 93.5V
 Date: 17.DEC.2004 16:23:49

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Transmitter Maximum Peak Output Power: Section 15.247(b)(3) (Continued)



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
Comment A: Peak Output Power Middle Channel Input Voltage 126.5V
Date: 17.DEC.2004 16:24:24

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

7.9. Transmitter Radiated Emissions: Section 15.247(c) and 15.209(a)

7.9.1. The EUT was configured as for radiated emissions testing as described in Section 9 of this report.

7.9.2. Tests were performed to identify the maximum transmitter radiated emission levels.

Top Channel

Frequency (MHz)	Antenna Polarity	Quasi-Peak Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
45.560	Vert.	24.1	40.0	15.9	Complied
60.973	Vert.	19.2	40.0	20.8	Complied
68.744	Vert.	20.8	40.0	19.2	Complied
125.100	Vert.	19.3	43.5	24.2	Complied
130.000	Vert.	23.7	43.5	19.8	Complied
169.004	Horiz.	30.3	43.5	13.2	Complied
195.003	Horiz.	27.8	43.5	15.7	Complied
247.000	Horiz.	30.6	46.0	15.4	Complied
325.003	Horiz.	34.4	46.0	11.6	Complied
403.967	Vert.	19.6	46.0	26.4	Complied
572.003	Vert.	29.3	46.0	16.7	Complied

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

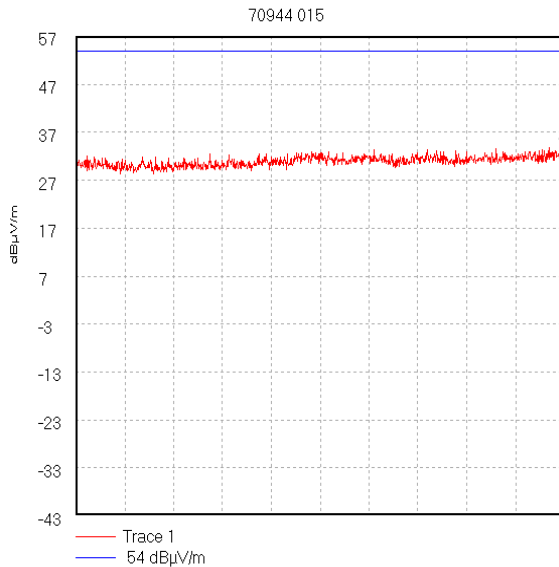
Transmitter Radiated Emissions: Section 15.247(c) and 15.209(a) (Continued)

Highest Peak Level: Top Channel

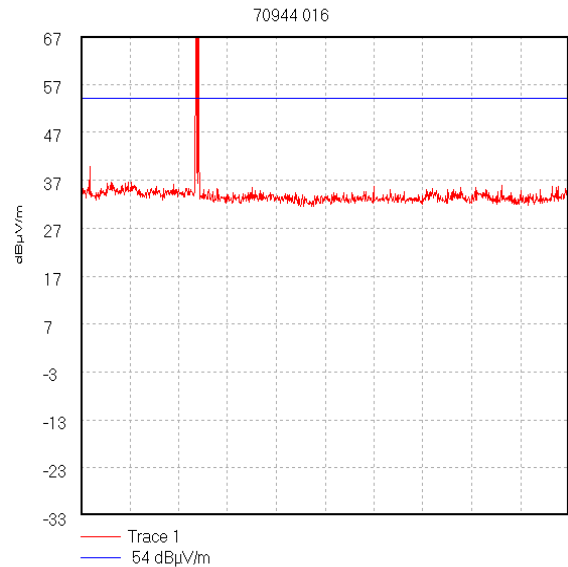
Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Actual Level (dBμV/m)	Average Limit (dBμV/m)	Margin (dB)	Result
24.602	Horiz.	13.0	37.1	3.8	53.8	54.0	0.2	Complied

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

Note 2: The peak level was compared to the average limit as opposed to bring compared to the peak limit because this is the more onerous limit.



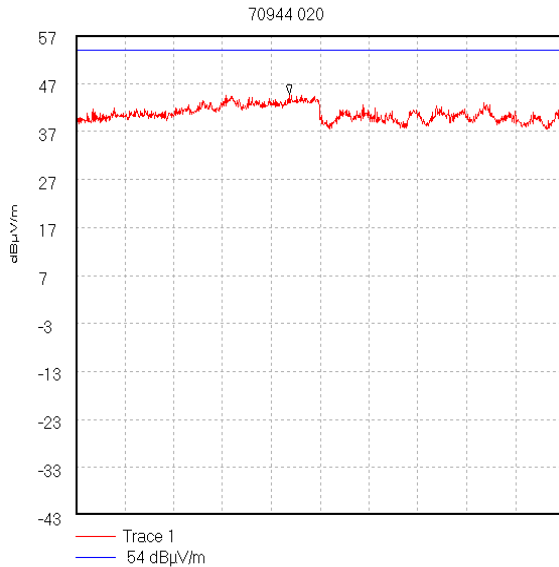
Start 1.0 GHz; Stop 2.0 GHz
 Ref 57 dBμV/m; Ref Offset 11.8 dB; 10 dB/div
 RBW 1.45 MHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 1.999 GHz; 34.0 dBμV/m
 Display Line: 54 dBμV/m;
 14/12/2004 11:03:27



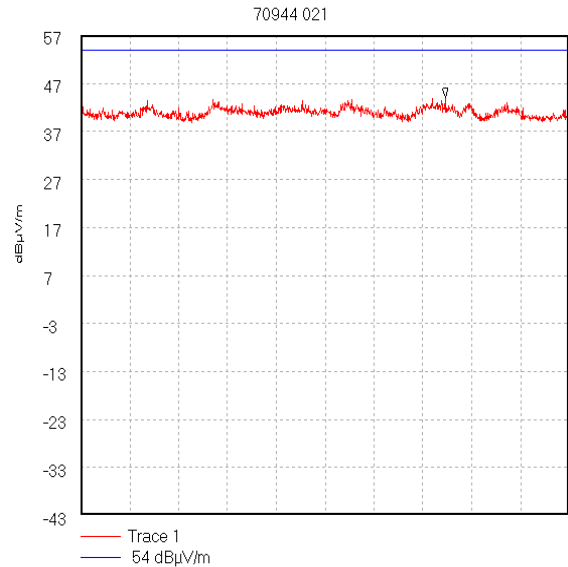
Start 2.0 GHz; Stop 4.0 GHz
 Ref 67 dBμV/m; Ref Offset 11.8 dB; 10 dB/div
 RBW 1.45 MHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 2.471 GHz; 70.98 dBμV/m
 Display Line: 54 dBμV/m;
 14/12/2004 11:11:49

Test of: **Panasonic Mobile Communications Development of Europe.
 EB-X800.**
 To: **FCC Part 15.247**

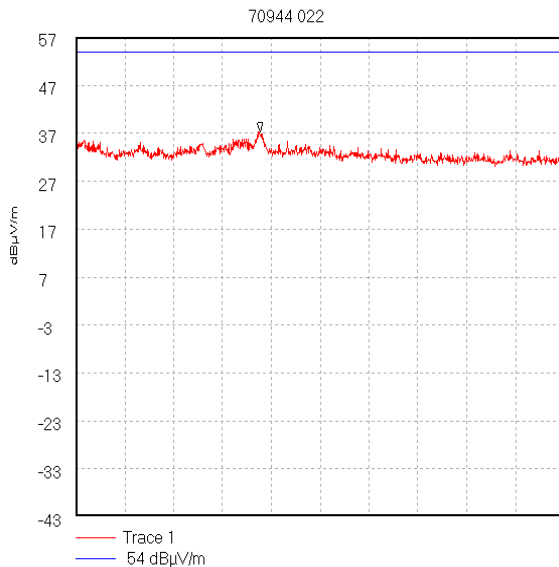
Transmitter Radiated Emissions: Section 15.247(c) and 15.209(a) (Continued)



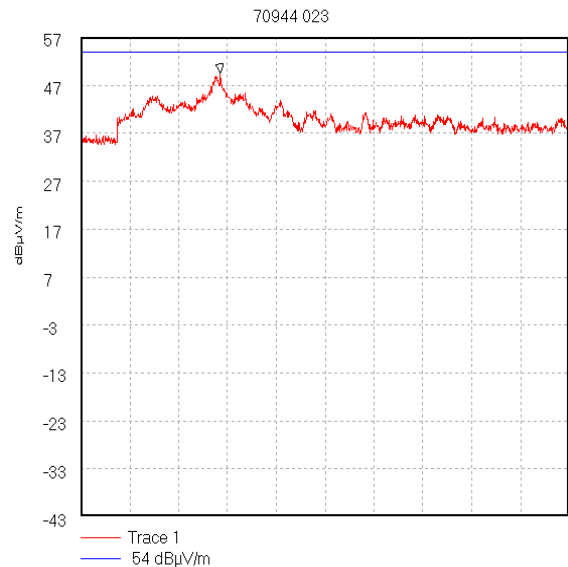
Start 4.0 GHz; Stop 6.0 GHz
 Ref 57 dBµV/m; Ref Offset 0.0 dB; 10 dB/div
 RBW 1.0 MHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 4.873 GHz, 44.74 dBµV/m
 Display Line: 54 dBµV/m;
 15/12/2004 12:10:26



Start 6.0 GHz; Stop 8.0 GHz
 Ref 57 dBµV/m; Ref Offset 0.0 dB; 10 dB/div
 RBW 1.0 MHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 7.493 GHz, 44.13 dBµV/m
 Display Line: 54 dBµV/m;
 15/12/2004 12:17:10



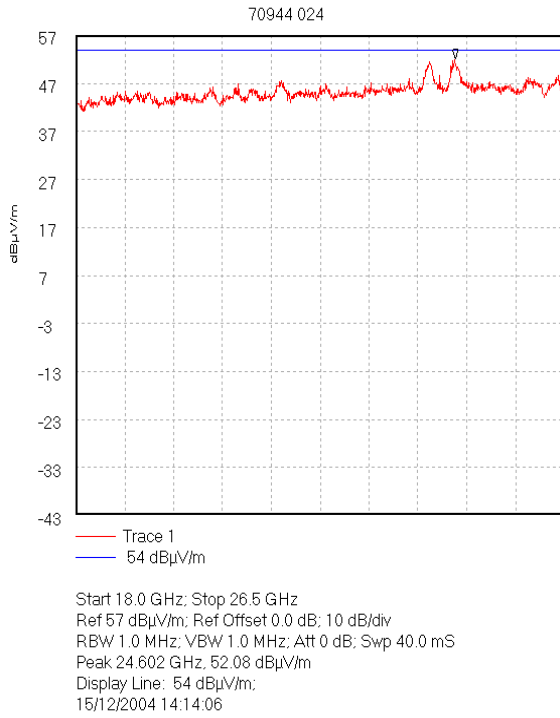
Start 8.0 GHz; Stop 12.5 GHz
 Ref 57 dBµV/m; Ref Offset 0.0 dB; 10 dB/div
 RBW 1.0 MHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS
 Peak 9.695 GHz, 37.38 dBµV/m
 Display Line: 54 dBµV/m;
 15/12/2004 12:25:45



Start 12.5 GHz; Stop 18.0 GHz
 Ref 57 dBµV/m; Ref Offset 0.0 dB; 10 dB/div
 RBW 1.0 MHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS
 Peak 14.071 GHz, 49.62 dBµV/m
 Display Line: 54 dBµV/m;
 15/12/2004 12:34:35

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

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



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

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

7.10. Transmitter Band Edge Radiated Emissions: Section 15.247(c) & 15.209(a)

7.10.1. Electric Field Strength Measurements

7.10.1.1. The EUT was configured as for band edge compliance of radiated emissions measurements as described in Section 9 of this report.

7.10.1.2. Tests were performed to identify the maximum radiated band edge emissions.

Peak Power Level Hopping Mode:

Frequency (GHz)	Antenna Polarity	Detector Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Actual Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2.4000	Horiz.	30.9	20.6	1.3	52.8	75.0*	22.2	Complied
2.4835	Horiz.	27.9	20.6	1.3	49.8	74.0	24.2	Complied

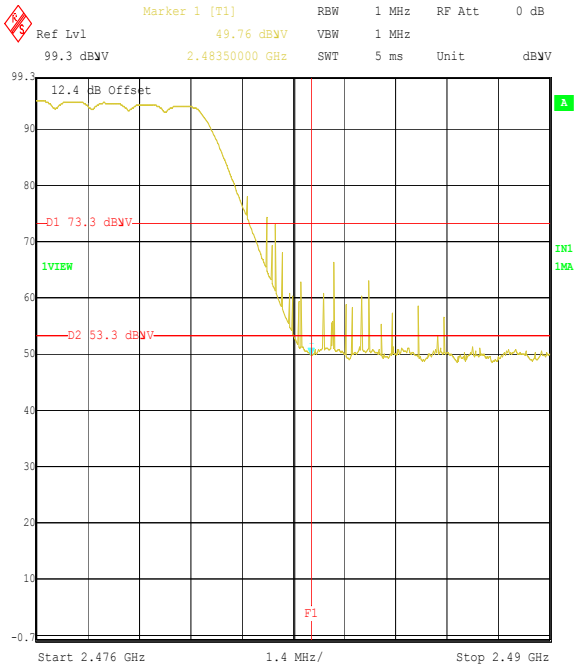
*Note: -20 dBc limit

Average Power Level Hopping Mode:

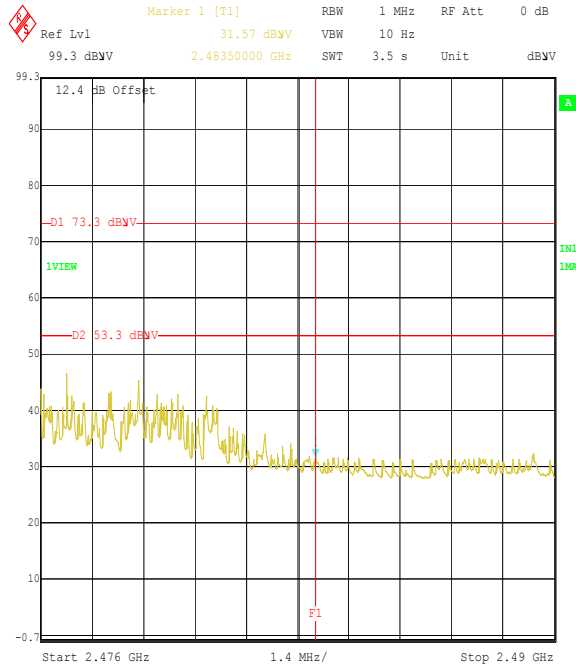
Frequency (GHz)	Antenna Polarity	Detector Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Actual Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2.4835	Horiz.	9.7	20.6	1.3	31.6	54.0	22.4	Complied

Test of: **Panasonic Mobile Communications Development of Europe.
 EB-X800.**
 To: **FCC Part 15.247**

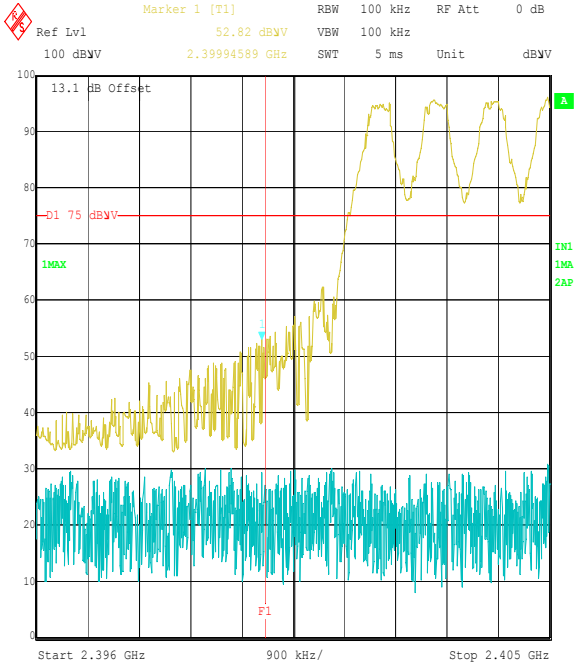
Transmitter Band Edge Radiated Emissions: Section 15.247(c) & 15.209(a) (Continued)



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Radiated Upper Band Edge Hopping Mode
 Date: 17.DEC.2004 15:08:21



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Radiated Upper Band Edge Hopping Mode Average
 Date: 17.DEC.2004 15:09:52



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Radiated Lower Band Edge Hopping Mode
 Date: 17.DEC.2004 15:24:32

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

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Transmitter Band Edge Radiated Emissions: Section 15.247(c) & 15.209(a) (Continued)

Peak Power Level Static Mode:

Frequency (GHz)	Antenna Polarity	Detector Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Actual Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2.4000	Horiz.	30.20	20.6	1.3	52.1	75.0*	22.9	Complied
2.4835	Horiz.	46.9	20.6	1.3	68.8	74.0	5.2	Complied

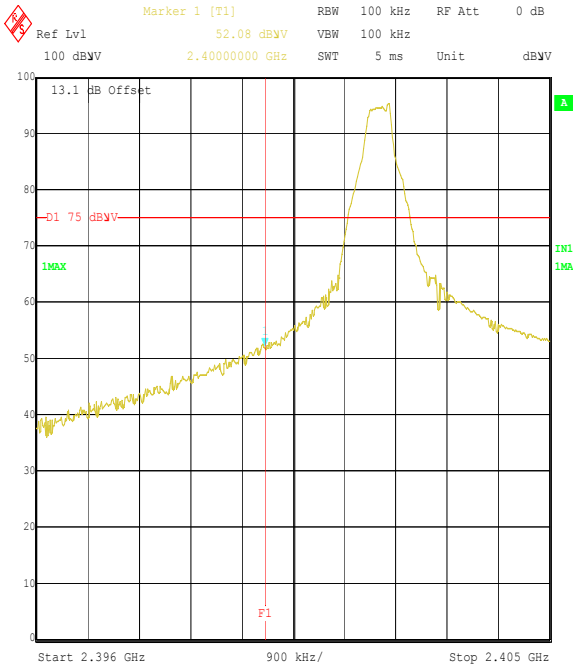
*Note: -20 dBc limit

Average Power Level Static Mode:

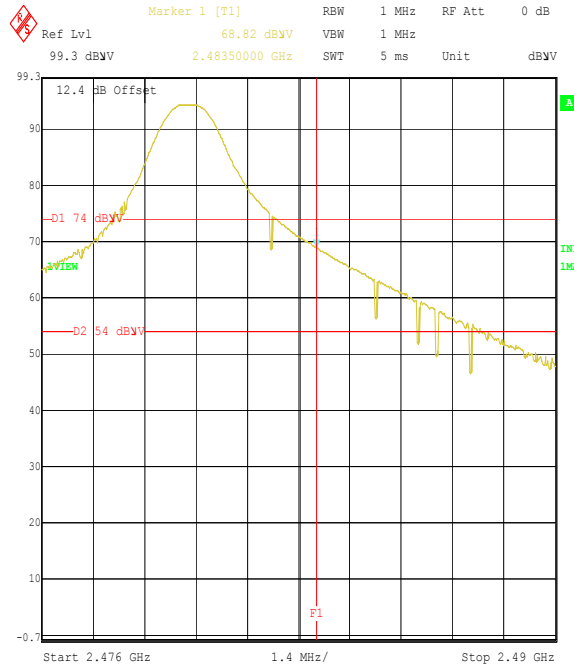
Frequency (GHz)	Antenna Polarity	Detector Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Actual Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2.4835	Horiz.	32.1	20.6	1.3	35.9	54.0	18.1	Complied

Test of: **Panasonic Mobile Communications Development of Europe.
 EB-X800.**
 To: **FCC Part 15.247**

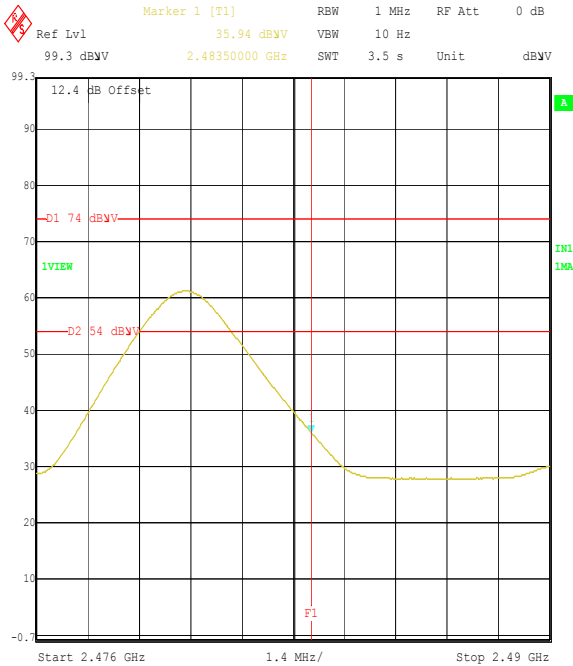
Transmitter Band Edge Radiated Emissions: Section 15.247(c) & 15.209(a) (Continued)



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Radiated Lower Band Edge Static Mode
 Date: 17.DEC.2004 15:26:59



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Radiated Upper Band Edge Static Mode
 Date: 17.DEC.2004 15:34:31



Title: 70944JD07 Panasonic EUT:X800 FCC Part 15.247
 Comment A: Radiated Upper Band Edge Static Mode Average
 Date: 17.DEC.2004 15:32:01

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

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

8. Measurement Uncertainty

8.1. 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.

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

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

8.4. 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%	+/- 3.25 dB
Transmitter Maximum Peak Output Power	Not applicable	95%	+/- 0.46 dB
Conducted Emissions Antenna Port	30 MHz to 40 GHz	95%	+/- 1.2 dB
Spectral Power Density	Not applicable	95%	+/- 1.2 dB
Transmitter Carrier Frequency Separation	Not applicable	95%	+/- 0.01 ppm
Transmitter Average Time of Occupancy	Not applicable	95%	+/- 10 %
20 dB Bandwidth	Not applicable	95%	+/- 0.12 %
Radiated Spurious Emissions	30 MHz to 1000 MHz	95%	+/- 5.26 dB
Radiated Spurious Emissions	1 GHz to 40 GHz	95%	+/- 1.78 dB

8.5. 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.

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

9. Measurement Methods

9.1. AC Mains Conducted Emissions

AC mains conducted emissions measurements were performed in accordance with the standard, against appropriate limits for each detector function.

The test was performed in a shielded enclosure with the equipment arranged as detailed in the standard on a wooden bench using the floor of the screened enclosure as the ground reference plane. The EUT was powered with 115V 60 Hz AC mains supplied via a Line Impedance Stabilisation Network (LISN).

Initial measurements in the form of swept scans covering the entire measurement band were performed in order to identify frequencies on which the EUT was generating interference. In order to minimise the time taken for these swept measurements, a Peak detector was used in conjunction with the appropriate detector IF measuring bandwidths (see table below). Repetitive scans were performed to allow for emissions with low repetition rates, and the duty cycle of the EUT. The test configuration was the same for the initial scans as for the final measurements.

Following the initial scans, a graph was produced giving an overview of the emissions from the EUT plotted against the appropriate specification limit. A tolerance line was set 6 dB below the specification limit and levels above the tolerance line were re-tested (at individual frequencies) using the appropriate detector function.

The test equipment settings for conducted emissions measurements were as follows:

Receiver Function	Initial Scan	Final Measurements
Detector Type:	Peak	Quasi-Peak (CISPR)/Average
Mode:	Max Hold	Not applicable
Bandwidth:	10 kHz*	9 kHz*
Amplitude Range:	60 dB	20 dB
Measurement Time:	Not applicable	> 1 s
Observation Time:	Not applicable	> 15 s
Step Size:	Continuous sweep	Not applicable
Sweep Time:	Coupled	Not applicable

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

9.2. Radiated Emissions

Radiated emissions measurements were performed in accordance with the standard, against appropriate limits for each detector function.

Initial measurements covering the entire measurement band in the form of swept scans in a shielded enclosure were performed in order to identify frequencies on which the EUT was generating interference. This determined the frequencies on which the EUT should be re-measured in full on the open area test site. In order to minimise the time taken for the swept measurements, a Peak detector was used in conjunction with the appropriate detector IF measuring bandwidth (see table below). Repetitive scans were performed to allow for emissions with low repetition rates.

The initial scans were performed using an antenna height of 1.5 m and a measurement distance of 3 m. Following the initial scans, graphs were produced giving an overview of the emissions from the EUT plotted against the appropriate specification limit. Any emission within 20 dB of the limit were then measured on the open area test site, except in cases where the noise floor was within 20 dB of the limit, in these cases the highest point of the noise floor was measured.

Where an emission fell inside a restricted band, measurements were made at the appropriate test distance using a measuring receiver with a Quasi-Peak detector for measurements below 1000 MHz and an Average and Peak detector for measurements above 1000 MHz. A peak detector was used for all other measurements.

For the final measurements the EUT was arranged on a non-conducting turn table on a standard test site compliant with ANSI C63.4 – 2001 Clause 5.4.

All measurements on the open area test site were performed using broadband antennas.

On the open area test site, at each frequency where a signal was to be measured, the trace was maximised by rotating a turntable through 360°. The angle at which the maximum signal was observed was locked out. For frequencies below 1000 MHz the test antenna was varied in height between 1 m and 4 m in order to further maximise the target emission.

For frequencies above 1000 MHz where a horn antenna was used, height searching was performed to locate the optimal height of the horn with respect to the EUT. At this point the horn was locked off and the turntable was again rotated through 360° to maximise the target signal. It should be noted that the received signal from the EUT would diminish very quickly after it exits the beam width of the horn antenna, for this reason it may not be necessary to fully height search with the horns.

At this point, any signals found to be between the limit and a level 6 dB below it were further maximised by changing the configuration of the EUT, e.g. re-routing cables to peripherals and moving peripherals with respect to the EUT.

Scans were performed to the upper frequency limits as stated in Section 15.33

The final field strength was determined as the indicated level in dB μ V plus cable loss and antenna factor.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

Radiated Emissions (Continued)

The test equipment settings for radiated emissions measurements were as follows:

Receiver Function	Initial Scan	Final Measurements Below 1 GHz	Final Measurements Above 1 GHz
Detector Type:	Peak	Quasi-Peak (CISPR)	Peak / Average
Mode:	Max Hold	Not applicable	Max Hold
Bandwidth:	(120 kHz < 1 GHz) (1 MHz > 1 GHz)	120 kHz	1 MHz
Amplitude Range:	100 dB	100 dB	100 dB
Step Size:	Continuous sweep	Not applicable	Not applicable
Sweep Time:	Coupled	Not applicable	Not applicable

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

9.3. Carrier Frequency Separation / 20 dB Bandwidth

The EUT and spectrum analyser was configured as for radiated measurements, and as per FCC Public Notice DA 00-705, Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems.

To determine the bandwidth and separation of each transmission channel the measurement analyser was configured to measure two adjacent channels whilst the EUT was in hopping mode. The spectrum analyser was configured with a resolution bandwidth and video bandwidth greater than 1% of the frequency span.

The analyser was set for a maximum hold scan to capture the profile of the signal. The peak points on the two adjacent channels were noted and the separation between them recorded.

To determine the occupied bandwidth, a resolution bandwidth of 10 kHz was used, which is greater than 1% of the 20 dB bandwidth. A video bandwidth of, at least, the same value was used.

The analyser was set for a maximum hold scan to capture the profile of the signal. The peak level was then determined, and a reference line was drawn 20 dB below the peak level.

The bandwidth was determined at the points where the 20 dB reference line intercepted the power envelope of the emission.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

9.4. Average Time of Occupancy

The EUT and spectrum analyser was configured as for radiated measurements, and as per FCC Public Notice DA 00-705, Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems.

First the maximum packet length was determined on the centre channel.

The measurement analyser was configured to the time domain mode by setting the span to zero with a sweep time sufficiently wide enough to measure one pulse.

The EUT was configured to operate in normal mode of operation. The pulse width of one transmission was then recorded. The measurement analyser was then configured in zero span i.e. in the time domain and the sweep time was set to 32 seconds (the closest allowable setting to 31.6 seconds). This 31.6 second period was determined by multiplying the number of channels the device operates over (79) by 0.4 seconds.

The number of transmissions within this period was noted and multiplied by the pulse width recorded earlier. This gives the maximum occupancy over 31.6 seconds.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

9.5. Peak Output Power

The EUT and spectrum analyser were configured as for conducted antenna port measurements and as per FCC Public Notice DA 00-705, Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems.

Prior to testing being performed a suitable RF attenuator and cable were calibrated for the required frequencies. For each frequency to be measured, the calibrated level of the attenuator and cable were entered as an offset into a spectrum analyser to compensate for the measurement set up.

To determine the transmitter output power, the EUT was operated at maximum power and a result was obtained from the spectrum analyser using the channel power function set up according the defined bandwidth and channel spacing of the EUT.

The EUT was configured as for conducted antenna port emissions measurements.

Prior to testing being performed a suitable RF attenuator and cable were calibrated for the required frequencies. For each frequency to be measured, the calibrated level of the attenuator and cable were entered as an offset into the wideband peak power meter to compensate for the measurement set up.

To determine the transmitter output power, the EUT was operated at maximum power and a result was obtained using a wideband peak power meter.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

9.6. Band Edge Compliance of RF Radiated Emissions

The EUT and spectrum analyser were configured as for radiated measurements and as per FCC Public Notice DA 00-705, Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems.

To determine band edge compliance, the analyser resolution bandwidth was set to $\geq 1\%$ of the analyser span. The video bandwidth was set to be \geq to the resolution bandwidth. The sweep was set to auto and the detector to peak. The trace was set to max hold and a trace was produced.

A plot of the upper band edge of the allocated frequency band was produced. A limit line was set to the level of the highest in band emission with a further limit line set to 20 dB below this. A marker was then placed on the highest out of band emission (the specification states that either the band edge level must be measured or the highest out of band emission, whichever is the greater). The plots show that the highest out of band emission complies with the -20 dBc Limit. The above procedure was then repeated for the lower band edge.

It should be noted that if the upper or lower band edges fell on a restricted band edge (as defined in Section 15.205(a)) then the limit set for the restricted band would be applied instead of the -20 dBc limit i.e. the general limits defined in Section 15.209(a).

Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

Appendix 1. Test Equipment Used

RFI No.	Instrument	Manufacturer	Type No.	Serial No.
A004	ESH3-Z5 LISN	Rohde & Schwarz	ESH3-Z5	890 604/027
A028	Horn Antenna	Eaton	91888-2	304
A1256	Power supply	Farnell	11E30/1B	000378
A1362	Eaton	Stoddart Aircraft Radio Co., Inc.	91889-1	N/A
A197	Site 2 Controller SC144	Unknown	SC144	150720
A255	WG 16 Microwave Horn	Flann Microwave	16240-20	519
A256	WG 18 Microwave Horn	Flann Microwave	18240-20	400
A259	Bilog Antenna	Chase	CBL6111	1513
A288	Bilog Antenna	Chase	CBL6111A	1589
A428	WG 12 horn	Flann	12240-20	134
A509	Co-ax Switch	RS components	DC-1.5 GHz	N/A
E013	PCN Environmental Chamber	Sanyo	ATMOS chamber	None
L0733	Anritsu MT8820A	Anritsu	MT8820A	6K0001055
M003	Spectrum Monitor	Rohde & Schwarz	EZM	883 580/008
M023	ESVP Receiver	Rohde & Schwarz	ESVP	872 991/027
M069	ESMI Spectrum Analyser / Receiver	Rohde & Schwarz	ESMI	829 808/007 (DU) / 827 063/008 (RU)
M1124	Rohde & Schwarz	Rohde & Schwarz	ESIB26	100046K
M1149	Anritsu	Anritsu	MT8852A	6K00001529
M173	Turntable Controller	R.H.Electrical Services	RH351	3510020
M505	Analyser Display Unit	Rohde & Schwarz	ESAI-D	825316/010
M506	RF unit	Rohde & Schwarz	ESBI-RF	827060/004
S001	DC Supply	GW	GPQ-2030	7112644
S503	Antenna Mast	EMCO	1051-25	9205 1670

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

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

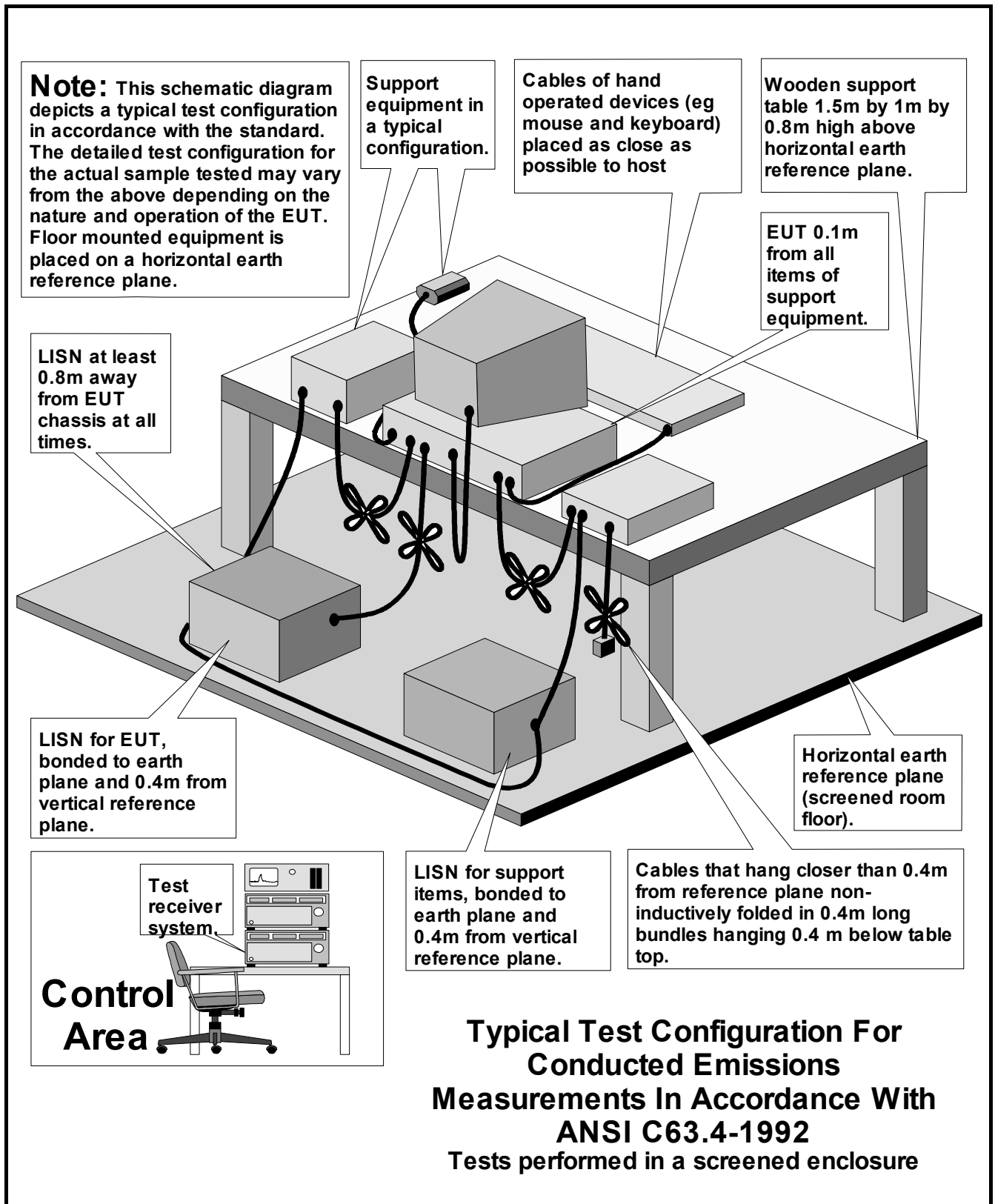
Appendix 2. Test Configuration Drawings

This appendix contains the following drawings:

Drawing Reference Number	Title
DRG\70944JD07\EMICON	Test configuration for measurement of conducted emissions.
DRG\70944JD07\EMIRAD	Test configuration for measurement of radiated emissions.

Test of: Panasonic Mobile Communications Development of Europe.
EB-X800.
To: FCC Part 15.247

DRG\70944JD07\EMICON



Test of: Panasonic Mobile Communications Development of Europe.
 EB-X800.
 To: FCC Part 15.247

DRG\70944JD07\EMIRAD

