TEST REPORT
FROM
RFI GLOBAL SERVICES LTD

Test of: Panasonic Mobile Comms Dev of Europe Ltd
VS8x

To: FCC Part 15 Subpart B: 2007 (Sections 15.225)

Test Report Serial No:
RFI/RPTE3/RP72841JD08A

Supersedes Test Report Serial No:
RFI/RPTE2/RP72841JD08A

This Test Report Is Issued Under The Authority Of Steve Flooks, Service Leader RPG:  **pp Brian Watson**	
Checked By: Brian Watson 	**Report Copy No: PDF01**
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1. Client Information

Company Name:	Panasonic Mobile Comms Dev of Europe Ltd
Address:	2 Gables Way Colthrop Thatcham Berkshire RG19 4ZB
Contact Name:	Mr M Hargreaves

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)

Description:	Mobile Handset
Brand Name:	SoftBank
Model Name or Number:	VS8x
Serial Number:	None Stated
IMEI Number:	004401220295543
Hardware Version Number:	Rev BA
Software Version Number:	920PVA01
FCC ID Number:	UCE207004A
Country of Manufacture:	Japan
Date of Receipt:	12 November 2007

Description:	Battery
Brand Name:	SoftBank
Model Name or Number:	EB-BS006JP
Serial Number:	None Stated
Country of Manufacture:	Japan
Date of Receipt:	12 November 2007

2.2. Description of EUT

The equipment under test is a dual mode (W-CDMA/GSM) 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. Additional Information Related to Testing

Power Supply Requirement:	Internal battery supply of 3.7 V
Intended Operating Environment:	Within GSM coverage
Equipment Category:	*Bluetooth,* GSM/GPRS, Shot Range Device, UMTS FDD I
Type of Unit:	Portable (standalone battery powered device)
Transmitter Output Power:	23.3 dBμV/m
Transmit Frequency:	13.56 MHz (Single Channel)

2.5. Port Identification

Port	Description	Type/Length
1	Charge/Data port	Not Applicable
2	AV Out	1.8m multi-core
3	USIM	Not Applicable
4	Micro-SD	Dedicated micro-SD card port

2.6. Support Equipment

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

Description:	AC Charger
Brand Name:	SoftBank
Model Name or Number:	ZTDAA1
Serial Number:	None Stated
Cable Length and Type:	1.5m round twin core
Connected to Port:	Charge/Data port

Description:	DC Charger
Brand Name:	SoftBank
Model Name or Number:	PMJAA1
Serial Number:	None Stated
Cable Length and Type:	2.0m approx. / 2 core curl-cord
Connected to Port:	Charge/Data port

Description:	Personal Hands Free (stereo)
Brand Name:	Panasonic
Model Name or Number:	EB-EM003
Serial Number:	None Stated
Cable Length and Type:	1.8m Multicore
Connected to Port:	AV Out Port

Description:	Micro-SD Memory Card
Brand Name:	Panasonic
Model Name or Number:	Not Applicable
Serial Number:	Not Applicable
Cable Length and Type:	Not Applicable
Connected to Port:	Dedicated micro-SD card port

3. Test Specification, Methods and Procedures

3.1. Test Specifications

Reference:	FCC Part 15 Subpart B: 2007 (Sections 15.225).
Title:	Code of Federal Regulations, Part 15 (47CFR225) Radio Frequency Devices.

3.2. Methods and Procedures

The methods and procedures used were as detailed in:

ANSI/TIA-603-B-2003
Land Mobile Communications Equipment, Measurements and performance Standards

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.

3.3. 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:

- The EUT was operating in transmit mode on a single channel.
- For non-transmit tests the EUT was set to idle mode.

5.2. Configuration and Peripherals

The EUT was tested in the following configuration:

- The EUT was tested in worst case configuration with 110V AC charger connected for idle mode tests but disconnected for radiated as the EUT cannot transmit with the charger connected.
- The EUT was directly connected to a PC in order to programme the unit into test mode, however the PC was disconnected from the unit during testing.

6. Summary of Test Results

Range of Measurements	Section Reference	Port Type	Compliancy Status
Receiver AC Conducted Emissions (150 kHz to 30 MHz)	C.F.R. 47 FCC Part 15: 2004 Section 15.107	AC Mains	Complied
Receiver Radiated Spurious Emissions	C.F.R. 47 FCC Part 15: 2004 Section 15.109	Enclosure	Complied
Transmitter Fundamental Fieldstrength	C.F.R. 47 FCC Part 15: 2004 Section 15.225(a)	Antenna	Complied
Transmitter Radiated Spurious Emissions	C.F.R. 47 FCC Part 15: 2004 Section 15.209	Enclosure	Complied
Transmitter Band Edge Radiated Emissions	C.F.R. 47 FCC Part 15: 2004 Section 15.209	Antenna	Complied
Transmitter 20 dB Bandwidth	C.F.R. 47 FCC Part 2: 2004 Section 2.1049	Antenna	Complied
Transmitter Frequency Stability (Temperature & Voltage Variation)	C.F.R. 47 FCC Part 15: 2004 Section 15.225(c)	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.

FCC Site Registration Number: 90895

IC Site Registration Number: 3485

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.

7.2. Test Results

7.2.1. Receiver AC Mains Conducted Emissions: Section 15.107

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

7.2.1.2. Tests were performed to identify the maximum emission levels on the AC mains line of the EUT.

Results:

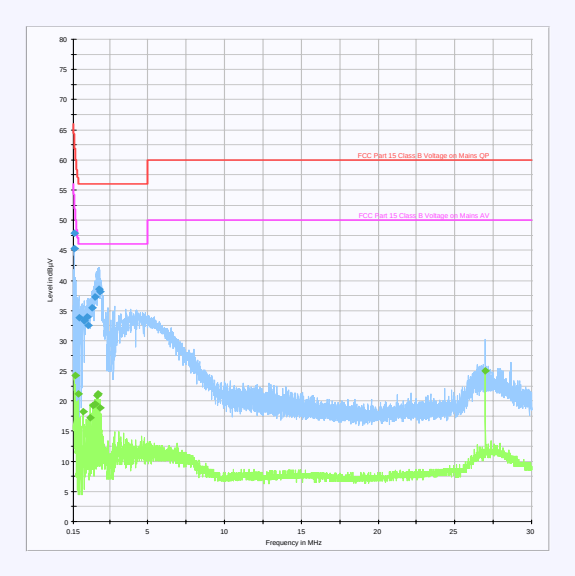
Quasi-Peak Detector Measurements on Live and Neutral Lines

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.194000	Live	45.3	63.9	18.6	Complied
0.206000	Live	47.9	63.4	15.5	Complied
0.518000	Neutral	33.8	56.0	22.2	Complied
0.834000	Neutral	33.4	56.0	22.6	Complied
1.082000	Live	34.0	56.0	22.0	Complied
1.146000	Neutral	32.6	56.0	23.4	Complied
1.382000	Live	35.4	56.0	20.6	Complied
1.566000	Live	37.2	56.0	18.8	Complied
1.850000	Live	38.6	56.0	17.4	Complied
1.862000	Live	38.2	56.0	17.8	Complied

Average Detector Measurements on Live and Neutral Lines

Frequency (MHz)	Line	Level (dBμV)	Limit (dBμV)	Margin (dB)	Result
0.294000	Live	24.2	50.4	26.2	Complied
0.486000	Live	21.1	46.2	25.1	Complied
0.782000	Live	18.3	46.0	27.7	Complied
1.250000	Neutral	17.2	46.0	28.8	Complied
1.462000	Live	19.2	46.0	26.8	Complied
1.562000	Live	19.5	46.0	26.5	Complied
1.670000	Live	21.0	46.0	25.0	Complied
1.774000	Live	21.1	46.0	24.9	Complied
1.862000	Live	18.9	46.0	27.1	Complied
26.998000	Live	25.0	50.0	25.0	Complied

Receiver AC Mains Conducted Emissions: Section 15.107 (Continued)



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

7.2.2. Receiver Radiated Spurious Emissions: Section 15.109

7.2.3. Electric Field Strength Measurements (Frequency Range: 9kHz to 1000 MHz)

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

7.2.3.2. Tests were performed to identify the maximum receiver or standby radiated emission levels.

7.2.3.3. Tests were performed in accordance with C63.4 Section 8 and relevant annexes.

Results:

Frequency (MHz)	Antenna Polarity	Q-P Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
323.012	Horizontal	29.2	46.0	16.8	Complied

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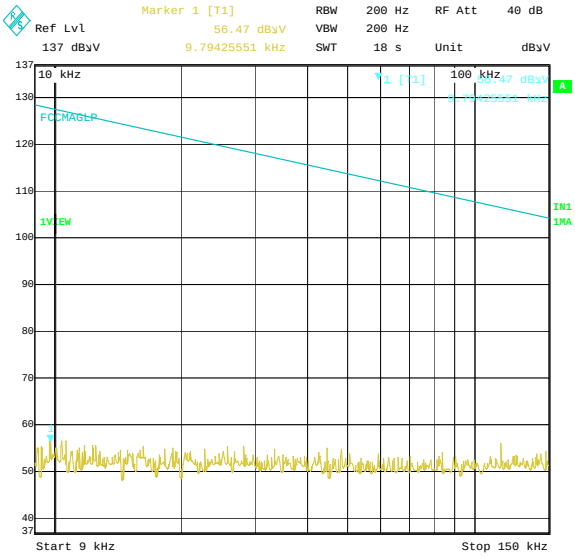
Receiver Radiated Spurious Emissions: Section 15.109 (Continued)



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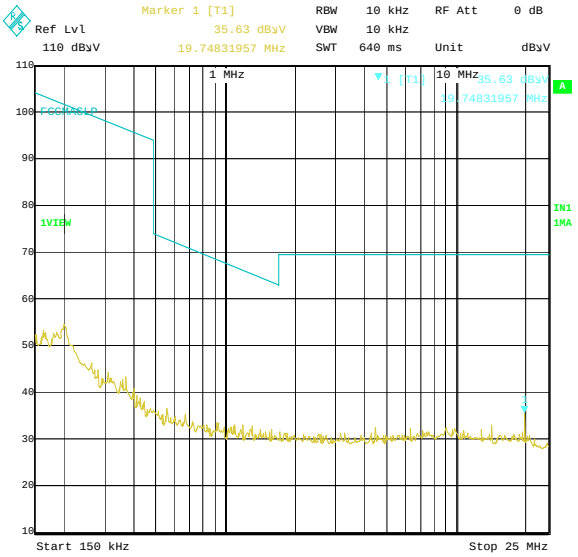

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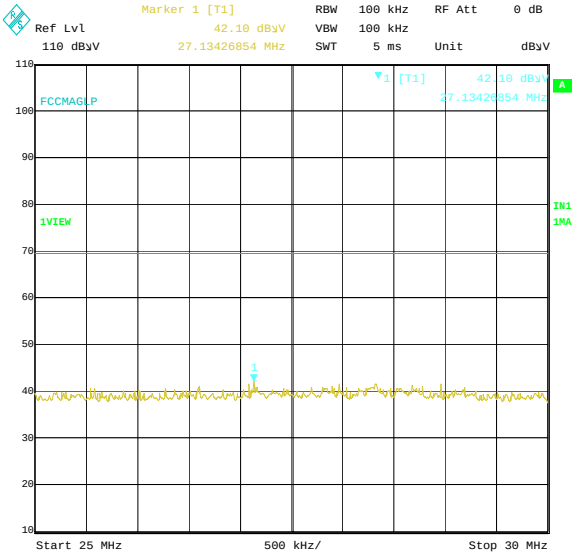

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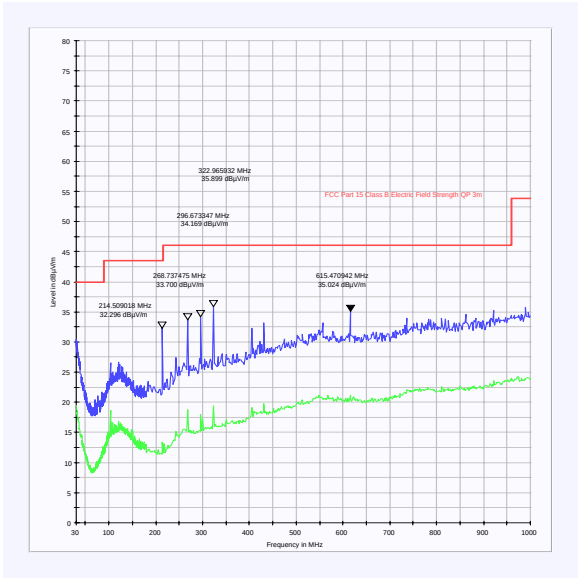


Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying tables.

7.2.4. Transmitter Fundamental Fieldstrength Section 15.225 (a)

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

7.2.4.2. Tests were performed to identify the maximum fieldstrength of the fundamental frequency.

7.2.4.3. Tests were performed in accordance with C63.4 Section 8 and relevant annexes.

7.2.4.4. The limit is specified at a test distance of 30 metres. However as specified by section 15.31 (f(2)), measurements may be performed at a closer distance, and the measured level corrected to the specified measurement distance by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Results:

Frequency (MHz)	Q-P Level (dBμV/m)	Limit at 30 metres (dBμV/m)	Margin (dB)
13.56	23.3	84.0	60.7

7.2.5. Transmitter Radiated Spurious Emissions: Section 15.209

7.2.6. Electric Field Strength Measurements (Frequency Range: 9 kHz to 1000 MHz)

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

7.2.6.2. Tests were performed to identify the maximum radiated spurious emission levels.

7.2.6.3. Tests were performed in accordance with C63.4 Section 8 and relevant annexes.

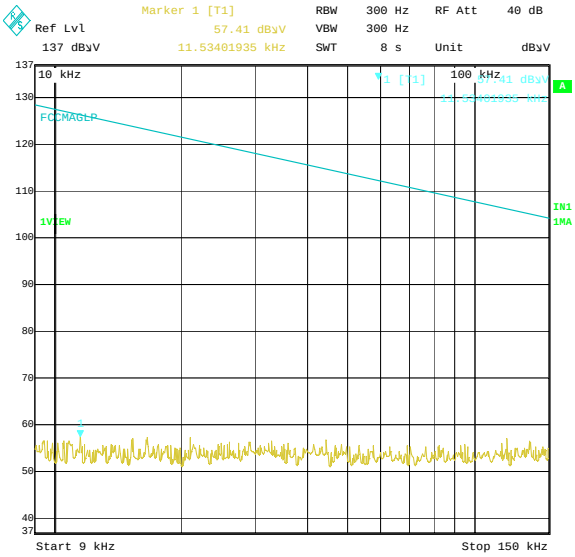
7.2.6.4. Limits below 30 MHz are specified at test distance of 30 metres, whilst below 0.49 MHz they are specified at a test distance of 300 metres. However as specified by section 15.31 (f)(2), measurements may be performed at a closer distance, and the measured level corrected to the specified measurement distance by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Results:

Frequency (MHz)	Antenna Polarity	Q-P Level (dBµV/m)	Limit (dBµV/m)	Measurement Distance (m)	Margin (dB)
14.225	Face On (0º)	25.5	69.5*	3	44.0
108.481	Horizontal	30.0	43.5	3	13.5
122.042	Horizontal	31.6	43.5	3	11.9
271.204	Horizontal	34.5	46.0	3	11.5
366.125	Horizontal	34.7	46.0	3	11.3
433.923	Horizontal	37.4	46.0	3	8.6
461.044	Horizontal	39.5	46.0	3	6.5
474.604	Horizontal	34.5	46.0	3	11.5
501.724	Horizontal	45.5	46.0	3	0.5

**Limit extrapolated to 3 metre test distance, limit at 30 metres is 29.5 dBµV/m*

Transmitter Radiated Spurious Emissions: Section 15.209 (Continued)



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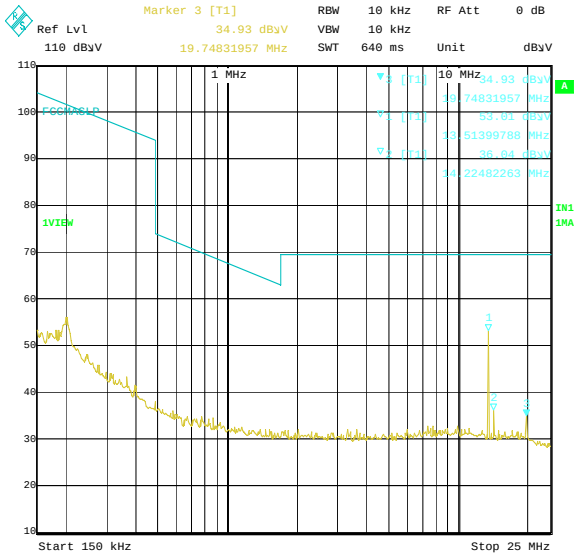

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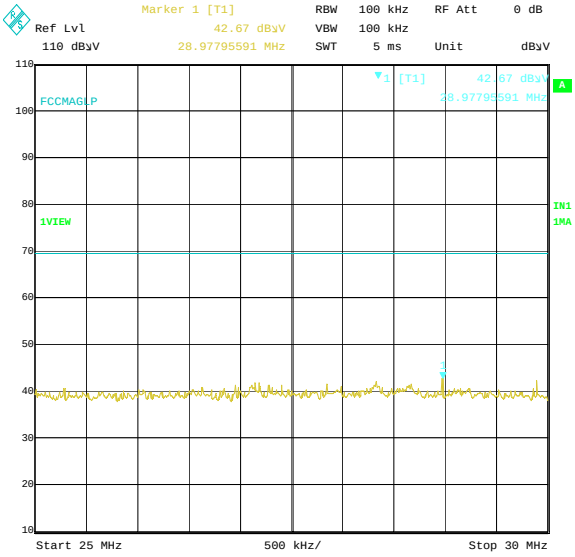

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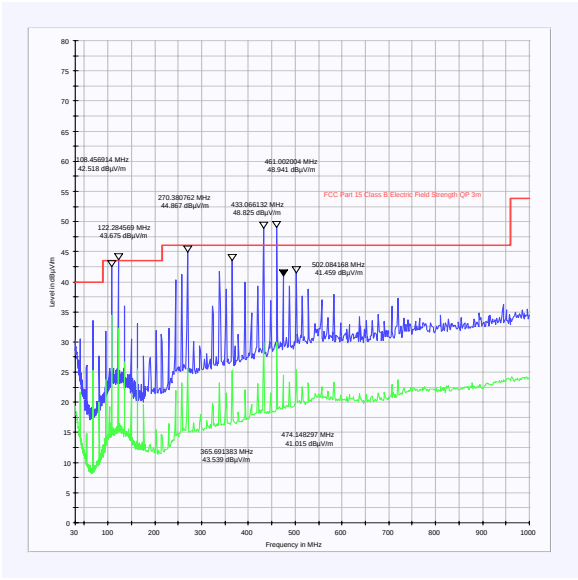


Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying tables.

7.2.7. Transmitter Radiated Emissions at Band Edges: Section 15.209

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

7.2.7.2. Tests were performed in accordance with C63.4 Section 8 and relevant annexes.

7.2.7.3. Tests were performed to identify the maximum emissions level at the band edges of the frequency band that the EUT will operate over.

7.2.7.4. Limits below 30 MHz are specified at test distance of 30 metres, whilst below 0.49 MHz they are specified at a test distance of 300 metres. However as specified by section 15.31 (f)(2), measurements may be performed at a closer distance, and the measured level corrected to the specified measurement distance by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Results:

Tests were performed at 3m.

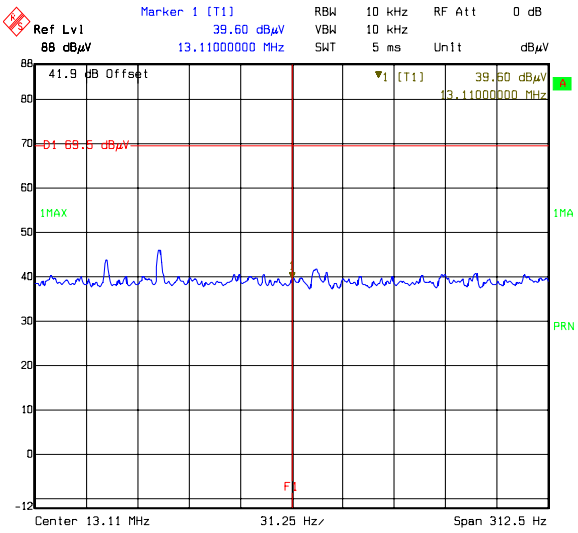
Bottom Band Edge

Frequency (MHz)	Q-P Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
13.11	9.9	29.5	19.6

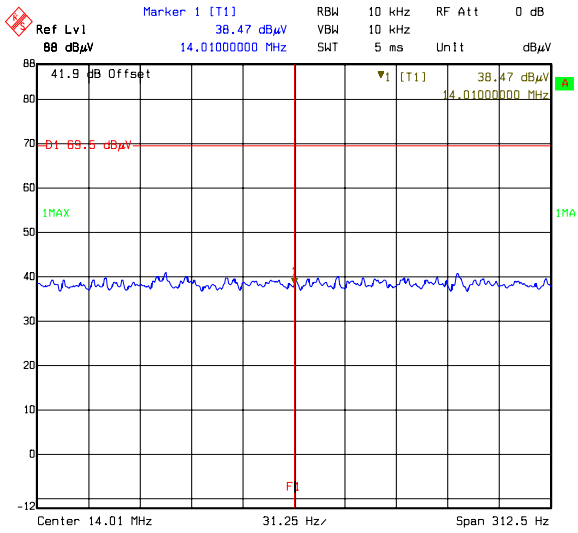
Top Band Edge

Frequency (MHz)	Q-P Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
14.010	8.8	29.5	20.7

Transmitter Radiated Emissions at Band Edges: Section 15.209 (Continued)



Title: 72841JD09 Panasonic FCC testing to Part 15.225
Comment A: EUT: VS8x, Band Edge Measurement.
Date: 25.NOV.2007 13:04:37



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Comment A: EUT: VS8x, Band Edge Measurement.
Date: 25.NOV.2007 13:05:57

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

7.2.8.Transmitter 20 dB Bandwidth: Section 2.1049

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

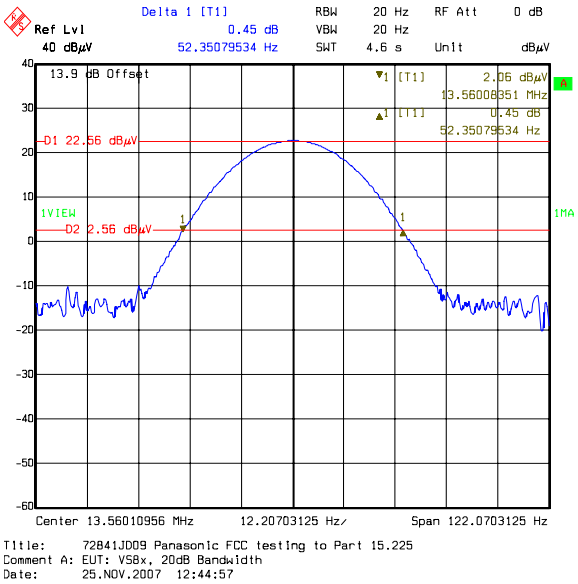
7.2.8.2. Tests were performed to identify the 20 dB bandwidth.

7.2.8.3. This test is not required to show compliance to 15.225 but has been included for information sake to aid Industry Canada (IC) applications.

7.2.8.4. Tests were performed in accordance with C63.4 Section 10.1.8.8 and 13.1.7 and relevant annexes with the only deviation being that the 20 dBc bandwidth was reported.

Transmitter 20 dB Bandwidth (Hz)
52.4

Transmitter 20 dB Bandwidth: Section 2.1049 (Continued)



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

7.2.9. Transmitter Frequency Stability (Temperature & Voltage Variation): Section 15.225 (c)

7.2.9.1. The EUT was configured for frequency stability measurements as described in Section 9 of this report.

7.2.9.2. Tests were performed to identify the maximum frequency error of the EUT with variations in ambient temperature.

7.2.9.3. Tests were performed to identify the maximum frequency error of the EUT with variations in nominal operating voltage at an ambient temperature of 20°C.

7.2.9.4. Tests were performed in accordance with FCC Part 2.1055 but over the frequency range specified in FCC Part 15.

Results:

Maximum frequency error of the EUT with variations in ambient temperature

Temp (°C)	Nominal Frequency (MHz)	Measured Frequency (MHz)	Frequency Error (Hz)	Frequency Error (%)	Limit (%)	Margin (%)
-20	13.56	13.560167	167	0.001232	0.01	0.008768
20	13.56	13.560109	109	0.000848	0.01	0.009196
50	13.56	13.559959	-41	0.000302	0.01	0.009698

Maximum frequency error of the EUT with variations in supply voltage

Tests were performed in accordance with FCC Part 2.1055. The upper voltage is set to 115% of the nominal voltage. The lower voltage is set to 85% of the nominal voltage, or the EUT cut-off voltage.

Results:

Voltage (V)	Nominal Frequency (MHz)	Measured Frequency (MHz)	Frequency Error (Hz)	Frequency Error (%)	Limit (%)	Margin (%)
3.4	13.56	13.560108	108	0.000796	0.01	0.009204
3.7	13.56	13.560109	109	0.000804	0.01	0.009196
4.2	13.56	13.560110	110	0.000811	0.01	0.009189

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
Occupied Bandwidth	N/A	95%	+/- 0.12 %
Frequency Stability	N/A	95%	+/- 11.37 ppm
Radiated Emissions	9 kHz to 30 MHz	95%	+/- 3.53 dB
Radiated Emissions	30 MHz to 1000 MHz	95%	+/- 5.26 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.

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 110V 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

9.2. Receiver Radiated Emissions

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

Initial pre-scans covering the entire measurement band from the lowest generated frequency declared up to the upper frequency detailed in Section 15.33 were performed within a screened chamber 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, and for the duty cycle of the EUT. The test configuration was the same for the initial scans as for the final measurements.

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. A tolerance line was set 6 dB below the specification limit and levels above the tolerance line were re-tested on the open area test site, at the appropriate distance, using a measuring receivers with a Quasi-Peak (or Average) detector (below 1000 MHz), where applicable, for measurements above 1000 MHz average and peak detectors were used.

For the main (final) measurements the EUT was arranged on a non-conducting table on an open area test site, as detailed in the specification.

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 found, the levels were maximised by initially rotating the turntable through 360° and then varying the antenna height between 1 m and 4 m. 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.

Radiated Emissions (Continued)

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

Receiver Function	Initial Scan (Below 30 MHz)	Final Measurements (Below 30 MHz)
Detector Type:	Peak	Quasi-Peak (CISPR) or Average
Mode:	Max Hold	Not applicable
Bandwidth:	9 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

Receiver Function	Initial Scan (30 to 1000 MHz)	Final Measurements (30 to 1000 MHz)
Detector Type:	Peak	Quasi-Peak (CISPR)
Mode:	Max Hold	Not applicable
Bandwidth:	100 kHz	120 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

Transmitter 20 dB Bandwidth

The EUT and spectrum analyser was configured for transmitter radiated emissions measurements.

To determine the occupied bandwidth, a resolution bandwidth of 20 Hz was used, which is greater than 1% of the 20 dB bandwidth. A video bandwidth of a 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 crossed the profile of the emission.

FCC Part 2.1055: Frequency Stability

The EUT was situated within an environmental test chamber and monitored on the test equipment via an antenna test fixture.

Measurements were performed with the EUT operating under extremes of temperatures within the range -20°C to 50°C.

Measurements were also performed at voltage extremes between the declared nominal supply voltage and at the declared endpoint voltage (for hand carried battery operated equipment) or by varying the primary supply voltage from 85% to 115% of the nominal value for all other equipment types.

The requirement was to determine the frequency stability of the device under specified environmental operating conditions.

The EUT was switched off for a minimum of 30 minutes between each stage of testing while the environmental chamber stabilised at the next temperature within the stated temperature range.

The frequency error measured was converted to an error in % using the following formula as defined by TIA-603-B :-

$$ppm\ error = \left(\frac{MCF_{MHz}}{ACF_{MHz}} - 1\right) * 10^6$$

where MCF_{MHz} *is the measured carrier frequency in MHz*
ACF_{MHz} *is the assigned carrier frequency in MHz*

The measured % had to be less then the relevant limits in order to comply

Appendix 1. Test Equipment Used

RFI No.	Instrument	Manufacturer	Type No.	Serial No.	Date Last Calibrated	Cal. Interval (Months)
A007	Antenna	Rohde & Schwarz	HFH2-Z2	880 458/020	14 Feb 2007	12
A1037	Antenna	Chase EMC Ltd	CBL6112B	2413	20 Sep 2006	15
A1394	Attenuator	HUBER + SUHNER AG	753459	6806.17.B	Calibrated before use	-
A259	Antenna	Chase	CBL6111	1513	13 Mar 2007	12
M023	Test Receiver	Rohde & Schwarz	ESVP	872 991/027	24 Apr 2007	12
M024	Spectrum Monitor	Rohde & Schwarz	EZM	873 952/006	Calibration not required	-
M044	Test Receiver	Rohde & Schwarz	ESVP	891 845/026	06 Mar 2007	12
M1068	Thermometer	Iso-Tech	RS55	93102884	26 Jun 2007	12
M1263	Test Receiver	Rohde & Schwarz	ESIB7	100265	25 Jan 2007	12
M1269	Multimeter	Fluke	179	90250210	05 Mar 2007	12
M127	Spectrum Analyser	Rohde & Schwarz	FSEB 30	842 659/016	15 Aug 2007	12
S021	Dual DC Power Supply Unit	Thurlby Thandar Instruments	CPX200	061034	Calibration not required	-
S201	Open Area Test Site	RFI	1	None	25 May 2007	12

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

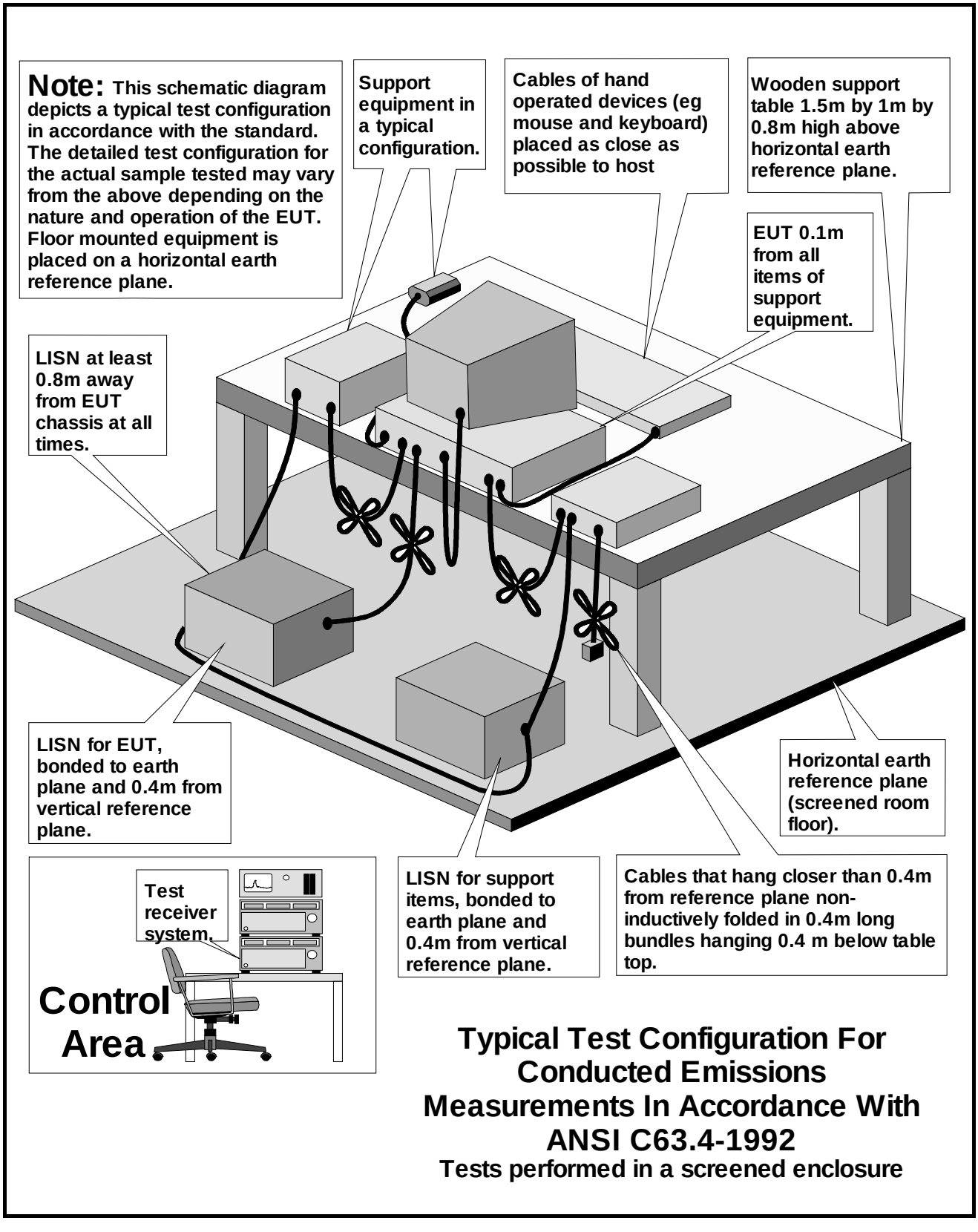
Appendix 2. Test Configuration Drawings

This appendix contains the following drawings:

Drawing Reference Number	Title
DRG\72841JD08\EMICON	Test configuration for measurement of conducted emissions.
DRG\72841JD08\EMIRAD	Test configuration for measurement of radiated emissions.

Test of: Panasonic Mobile Comms Dev of Europe Ltd
VS8x
To: FCC Part 15 Subpart B: 2007 (Sections 15.225)

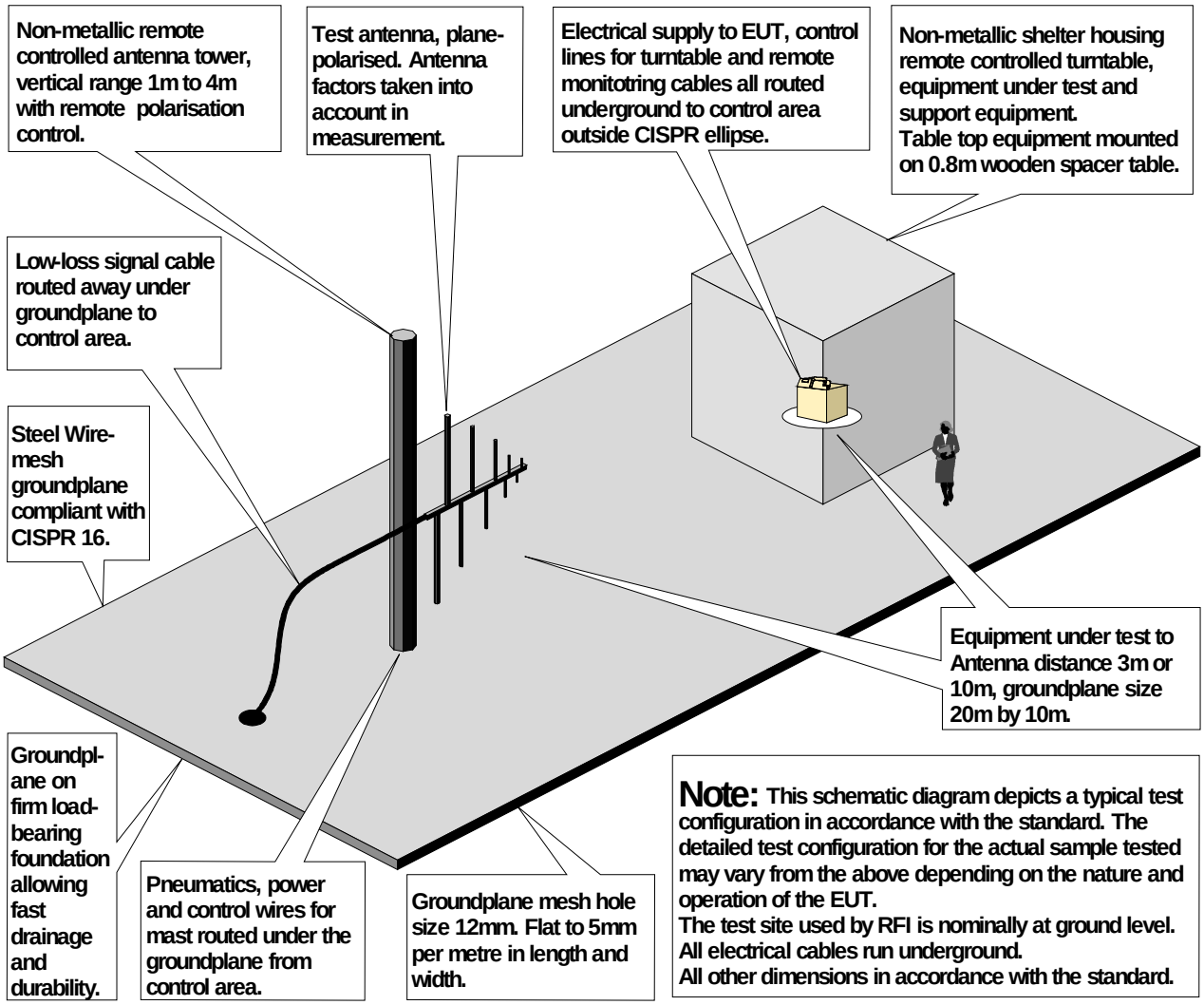
DRG\72841JD08\EMICON



Typical Test Configuration For Conducted Emissions Measurements In Accordance With ANSI C63.4-1992

Tests performed in a screened enclosure

DRG\72841JD08\EMIRAD



Note: This schematic diagram depicts a typical test configuration in accordance with the standard. The detailed test configuration for the actual sample tested may vary from the above depending on the nature and operation of the EUT.
The test site used by RFI is nominally at ground level.
All electrical cables run underground.
All other dimensions in accordance with the standard.

Test Configuration For Radiated Emissions Measurements

Reflection-free area: >60m by 52m (CISPR ellipse)
Groundplane Earthed
Control room outside CISPR ellipse