



**REPORT ON THE CERTIFICATION TESTING OF AN
GN NETCOM A/S
JABRA PRO 9470 BASE STATION &
SSA-5W-09 UK 075065F SIL SWITCHING ADAPTER
WIDEBAND AUDIO OPERATION
WITH RESPECT TO
FCC RULES CFR 47, PART 15D July 2008
INTENTIONAL RADIATOR SPECIFICATION**



TEST REPORT NO: 8F1722WUS4

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WITH RESPECT TO
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INTENTIONAL RADIATOR SPECIFICATION**



TEST DATE: 17th February – 22nd May 2009

TESTED BY: D WINSTANLEY

APPROVED BY: J CHARTERS
RADIO PRODUCT
MANAGER

DATE: 23rd July 2009.....

Distribution:

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The results herein relate only to the sample tested. Full results are contained in the relevant works order file.

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Notes:	
1. Component failure during test	YES [] NO [X]
2. If Yes, details of failure:	
3. The facilities used for the testing of the product contain in this report are FCC Listed.	
4. The contents of the attached applicants declarations and other supplied information are not covered by the scope of this laboratory's UKAS or FCC accreditations' and is provided in good faith.	



CERTIFICATE OF CONFORMITY & COMPLIANCE

FCC IDENTITY: BCE-9400
PURPOSE OF TEST: Certification
TEST SPECIFICATION: FCC RULES CFR 47, Part 15D July 2008
TEST RESULT: Compliant to Specification
EQUIPMENT UNDER TEST: Jabra PRO 9470 Base Station
EQUIPMENT TYPE: UPCS Transceiver
PRODUCT USE: Personal communications
CARRIER POWER: 19.98dBm (Conducted)
ANTENNA TYPE: Integral
BAND OF OPERATION: 1920 MHz – 1930 MHz
CHANNEL SPACING: 1.728 MHz
NUMBER OF CHANNELS: 5 frequencies, 12 single time slots per frequency giving 60 channels
FREQUENCY GENERATION: SAW Resonator Crystal Synthesiser
MODULATION METHOD: Amplitude Digital Angle
POWER SOURCE(s): +110 Vac
TEST DATE(s): 17th February – 22nd May 2009
ORDER No(s): 2008/11/18-TR001
APPLICANT: GN Netcom A/S
ADDRESS: Lautrupbjerg 7
DK-2750
Ballerup
Denmark

TESTED BY: _____ D WINSTANLEY

APPROVED BY: _____ J CHARTERS
RADIO PRODUCT
MANAGER

APPLICANT'S SUMMARY

EQUIPMENT UNDER TEST (EUT): Jabra PRO 9470 Base Station

EQUIPMENT TYPE: UPCS Transceiver

PURPOSE OF TEST: Certification

TEST SPECIFICATION(s): FCC RULES CFR 47, Part 15D July 2008

TEST RESULT: COMPLIANT Yes [X]
 No []

APPLICANT'S CATEGORY: MANUFACTURER [X]
 IMPORTER []
 DISTRIBUTOR []
 TEST HOUSE []
 AGENT []

APPLICANT'S ORDER No(s): 2009/06/12-TR001

APPLICANT'S CONTACT PERSON(s): Mr Tom Ringtved

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APPLICANT: GN Netcom A/S

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 DK-2750
 Ballerup
 Denmark

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TEST LABORATORY: TRaC Telecoms & Radio, Up Holland

TEST DATE(s): 17th February – 22nd May 2009

TEST REPORT No: 8F1722WUS4

EQUIPMENT TEST / EXAMINATIONS REQUIRED

TEST/EXAMINATION	RULE PART	APPLICABILITY
Coordination with Fixed Microwave Service	15.307 (b)	No note 1
Cross reference to Subpart B	15.309 (b)	Yes
Labelling Requirements	15.311 15.19 (a)(3)	Yes
Measurement Procedures	15.313	Yes
Antenna Requirement	15.317 15.203	Yes
Modulation Techniques	15.319 (b)	Yes
Conducted AC Powerline	15.315 15.207	Yes
Emission Bandwidth	15.323 (a)	Yes
Peak Transmit Power	15.319 (c)	Yes
Power Spectral Density	15.319 (d)	Yes
Antenna Gain	15.319 (e)	Yes
Automatic Discontinuation of Transmission	15.319 (f)	Note 3
Radio Frequency Radiation Exposure	15.319 (i)	Yes
Monitoring Thresholds	15.323 (c)(2) 15.323 (c)(9)	Note 3
Monitoring of Intended Transmit Window and Maximum Reaction Time	15.323 (c)(1)	Note 3
Monitoring Bandwidth	15.323 (c)(7)	Note 3
Access Criteria Functional Test	15.323 (c)(6)	Note 3
Duration of Transmission	15.323 (c)(3)	Note 3
Connection Acknowledgement	15.323 (c)(4)	Note 3
Lower threshold Selected Channel, Power Accuracy, Segment Occupancy	15.323 (c)(5)	Note 3
Monitoring Antenna	15.323 (c)(8)	Note 3
Duplex Connections	15.323 (c)(10)	Note 3
Alternative Monitoring Interval for Co-located Devices	15.323 (c)(11)	Note 3
Fair Access to Spectrum Related to (c)(10) & (c)(11)	15.323 (c)(12)	Note 3
Emission Inside and Outside the Sub-band	15.323 (d)	Yes
Frame Period	15.323 (e)	Yes
Frequency Stability	15.323 (f)	Yes
Note:	<ol style="list-style-type: none"> 1. Requirement removed April 4th 2005 see public notice DX 05-1005. 2. Not utilized by this EUT as devices will not be co-located within 1m of each other. 3. The fixed part realises a maximum 60 channels. Manufacture declares use of upper threshold. See Report 8F1722WUS2 for results. 	

- | | | |
|---|-------------------------|----------|
| 2. Product Use: | Personal Communications | |
| 3. Duty Cycle: | | 8.33% |
| 4. Transmitter bit or pulse rate and level: | | 2Mbps |
| 5. Temperatures: | Ambient (Tnom) | 22°C |
| 6. Supply Voltages: | Vnom | +110 Vac |
- Note: Vnom voltages are as stated above unless otherwise shown on the test report page

- | | | |
|------------------------|----------------|-------------------------------------|
| 7. Equipment Category: | Single channel | <input type="checkbox"/> |
| | Two channel | <input type="checkbox"/> |
| | Multi-channel | <input checked="" type="checkbox"/> |
| 8. Channel spacing: | Narrowband | <input type="checkbox"/> |
| | Wideband | <input checked="" type="checkbox"/> |

9. System Description:

The system is made up of two parts, a fixed part and a portable part. The portable part is a cordless headset device. The portable part is capable of operating on a maximum of 60 channels (time spectrum windows). The fixed part is a desktop transmitters connected to an exchange.

The system operates in the 1920MHz -1930MHz band. The system use 5 different frequency channels 1.728MHz apart using MC/TDMA/TDD (Multi Carrier / Time Division Multiple Access / Time Division Duplex) using QPSK modulation.

The system employs a 10ms frame, divided into 24 equal timeslots, numbered 0-23. The system uses single-slots. The Base station always transmits in the first half of the frame, and the Portable always transmits on the duplex mate in the second half of the frame. A physical bearer is composed of a transmit single-slot and a receive single-slot. The two halves of a given bearer are always exactly half a frame (5ms, 12 slots) apart.

During the testing frequency administration was utilised to allow operation on only certain channels during the tests. The frequency administration was performed using a software interface. A portable part was supplied with a temporary antenna connector to allow conducted measurements where applicable.

CROSS REFERENCE TO SUBPART B – PART 15.309 (b)

The unit contains digital circuitry, which is not directly related to the radio transmitter. See emissions outside the sub-band for results.

LABELLING INFORMATION – PART 15.311 & 15.19 (a)(3)

This information is contained in a separate document. See attached exhibit(s).

ANTENNA REQUIREMENTS – PART 15.317

The units employ an integral antenna arrangement.

MODULATION TECHNIQUES – PART 15.319 (b)

The GN NETCOM A/S Jabra PRO 9470 Base Station is an isochronous device operating in the 1920 MHz – 1930 MHz frequency band.

The GN NETCOM A/S Jabra PRO 9470 Base Stations modulation technique is based on DECT technology as described in European standards EN 300 175-2 and EN 300 175-3.

The GN NETCOM A/S Jabra PRO 9470 Base Stations modulation techniques are MC/TDMA/TDD (Multi Carrier / Time Division Multiple Access / Time Division Duplex) using QPSK modulation.

TRANSMITTER CONDUCTED EMISSIONS – AC POWER LINE PART 15.315

SIGNIFICANT EMISSIONS

FREQUENCY (MHz)	MEASUREMENT RECEIVER READING (dBµV)	DETECTOR	CONDUCTOR (L or N)	Limit (dBµV)
1.388	37.7	Quasi Peak	Live	56.0
4.409	36.6	Quasi Peak	Live	56.0

Notes:

- 1 See Annex C for sample powerline plot.
- 2 Emissions that are 20 dB's or more below the limit are not necessarily recorded.
- 3 The EUT was tested transmitting a dummy bearer and traffic bearer simultaneously.
- 4 Closest emissions to the applicable limit are recorded.

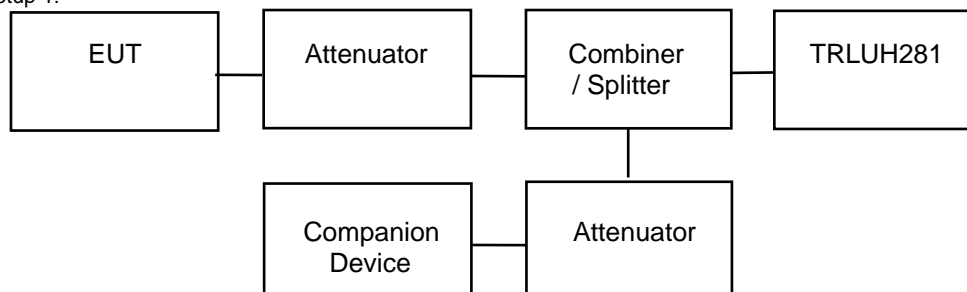
Test Method:

- 1 As per Radio – Noise Emissions, ANSI C63.4: 2003.

TRANSMITTER EMISSION BANDWIDTH – PART 15.323 (a)

The emission bandwidth is measured in accordance with ANSI C63.17 sub-clause 6.1.3 using the setup below

Test Setup 1:



$f_x = 1921.536$ MHz				
ΔP (dBc)	f _l (MHz)	f _h (MHz)	Δf (MHz)	Limit
-26	1920.827791	1922.193175	1.365	50kHz > Δf > 2.5MHz
-12	Note 4			N/A
-6	Note 4			N/A

$f_x = 1924.992$ MHz				
ΔP (dBc)	f _l (MHz)	f _h (MHz)	Δf (MHz)	Limit
-26	1924.287451	1925.640236	1.365	50kHz > Δf > 2.5MHz
-12	Note 4			N/A
-6	Note 4			N/A

$f_x = 1928.448$ MHz				
ΔP (dBc)	f _l (MHz)	f _h (MHz)	Δf (MHz)	Limit
-26	1927.743603	1929.113795	1.370	50kHz > Δf > 2.5MHz
-12	Note 4			N/A
-6	Note 4			N/A

- Notes:
1. See emission bandwidth plots in Annex D.
 2. Emission bandwidth Δf rounded up.
 3. Emission bandwidth measured with an active communications channel.
 4. -6 and -12dB points not recorded, requirement covered un results report in 8F1722WUS2.

ANTENNA GAIN – PART 15.319 (e)

Any directional gain of the antenna exceeding 3dBi has an effect on the limit applied to the measurements taken for the peak transmit power test. If the directional gain of the antenna is less than 3dBi it is not required to be taken into account.

Maximum Antenna Gain	Exceeds 3dBi by
+2dBi	N/A

Note: Statement by manufacturer declaring maximum antenna gain. See attached exhibit.

PEAK TRANSMIT POWER – PART 15.319 (c)

The peak transmit power is measured in accordance with ANSI C63.17 sub-clause 6.1.2 using test setup 1 (page 9).

The limit for Peak Transmit Power (PTP) is calculated using the following formula:

$$PTP = 5 \text{ Log}_{10} \text{ EBW} - 10 \text{ dBm}$$

This limit must be corrected to take into account any gain of the antenna greater than 3dBi.
Where: EBW is the transmitter emission bandwidth in Hz as determined in the previous test.

Limit EBW = 1.370MHz
PTP = $5 \text{ Log}_{10} 1.370\text{MHz} - 10 \text{ dBm}$
PTP = 20.68 dBm

Results

Frequency (MHz)	Peak Transmit Power (dBm)	Limit (dBm)
1921.536	19.74	20.68
1924.992	19.98	20.68
1928.448	19.96	20.68

Note: 1. A connection was made to the antenna connector to enable conducted measurements.
2. Antenna gain < 3dBi and so correction of the limit is not required.
3. See Annex E for Peak Transmit Power Plots.

POWER SPECTRAL DENSITY – PART 15.319 (d)

The power spectral density is measured using test setup 1, (page 9).

Limit

The power spectral density shall not exceed 3mW in any 3 kHz bandwidth as measured with a spectrum analyser having a resolution bandwidth of 3 kHz.

Results

Frequency (MHz)	Power Spectral Density (mW/3kHz)	Limit (mW/3kHz)
1921.536	0.97	3
1924.992	0.72	3
1928.448	1.85	3

Note: 1. See Annex F for Power Spectral Density Plots.

EMISSIONS INSIDE AND OUTSIDE THE SUB-BAND – CONDUCTED – PART 15.323 (d)

RF carrier set to the lowest carrier defined by the EUT.

These measurements are carried out in accordance with ANSI C63.17 sub-clause 6.1.6.

Out-of-Band Emissions from UPCS bandedge	FREQ. (MHz)	MEAS. Rx. (dBm)	CABLE & ATTEN. LOSS (dB)	EMISSION LEVEL (dBm)	LIMIT (dBm)
> - 2.5MHz				Note 10	-39.5
- 1.25 MHz – 2.5 MHz				Note 10	-29.5
- 1.25 MHz				Note 10	-9.5
+ 1.25 MHz				Note 10	-9.5
+ 1.25 MHz – 2.5 MHz				Note 10	-29.5
> + 2.5MHz	3842.390 5763.442	-77.65 -76.21	25.3 26.1	-52.35 -50.11	-39.5 -39.5
Limits	Out-of-Band Emissions From UPCS bandedge		Attenuation (dB) required below Reference power of 112mW		
	± 1.25MHz		30		
	±1.25 MHz – 2.5 MHz		50		
	> ±2.5MHz		60		
	In band Emissions from centre of emission bandwidth		Attenuation (dB) required below permitted peak power for the EUT		
	1B – 2B		30		
	2B – 3B		50		
	3B – UPCS band edge		60		

Notes:

- 1 The EUT was connected via a cable and attenuator.
- 2 Emissions were searched to: (x) 1000MHz inclusive, as per Part 15.33a.
- 3 New / Fully Charged batteries used for battery powered products.
- 4 See Annex G for out of band emissions compliance plots.
- 5 See Annex H for in band emissions compliance plots.
- 6 As per 15.323(g) attenuation to the requirements of 15.209 is not required.
- 7 Resolution bandwidth approximately 1% of emissions bandwidth.
- 8 Video bandwidth 3 x Resolution bandwidth.
- 9 Receiver detector = Peak detector, Max Hold Enabled.
- 10 Only emissions within 20 dB of the limit are recorded.

Test Method:

- 1 The EUT was connected to a spectrum analyser via suitable attenuation or filter.
- 2 The Spectrum analyser was tuned across the required frequency range in steps.
- 3 Any emissions found were measured with the required analyser settings.

EMISSIONS INSIDE AND OUTSIDE THE SUB-BAND – CONDUCTED – PART 15.323 (d)

RF carrier set to the highest carrier defined by the EUT.

These measurements are carried out in accordance with ANSI C63.17 sub-clause 6.1.6.

Out-of-Band Emissions from UPCS bandedge	FREQ. (MHz)	MEAS. Rx. (dBm)	CABLE & ATTEN. LOSS (dB)	EMISSION LEVEL (dBm)	LIMIT (dBm)
> - 2.5MHz				Note 10	-39.5
- 1.25 MHz – 2.5 MHz				Note 10	-29.5
- 1.25 MHz				Note 10	-9.5
+ 1.25 MHz				Note 10	-9.5
+ 1.25 MHz – 2.5 MHz				Note 10	-29.5
> + 2.5MHz	3856.009 5764.153	-79.03 -75.83	25.4 27.1	-53.64 -48.73	-39.5 -39.5
Limits	Out-of-Band Emissions from UPCS bandedge			Attenuation (dB) required below reference power of 112mW	
	± 1.25MHz			30	
	±1.25 MHz – 2.5 MHz			50	
	> ±2.5MHz			60	
	In band Emissions from centre of emission bandwidth			Attenuation (dB) required below permitted peak power for the EUT	
	1B – 2B			30	
	2B – 3B			50	
	3B – UPCS band edge			60	

Notes:

- 1 EUT fitted with temporary antenna connector.
- 2 Emissions were searched to: (x) 1000MHz inclusive, as per Part 15.33a.
- 3 New / Fully Charged batteries used for battery powered products.
- 4 See Annex G for out of band emissions compliance plots.
- 5 See Annex H for in band emissions compliance plots.
- 6 As per 15.323(g) attenuation to the requirements of 15.209 is not required.
- 7 Resolution bandwidth approximately 1% of emissions bandwidth.
- 8 Video bandwidth 3 x Resolution bandwidth.
- 9 Receiver detector = Peak detector, Max Hold Enabled.
- 10 Only emissions within 20 dB of the limit are recorded.

Test Method:

- 1 The EUT was connected to a spectrum analyser via suitable attenuation or filter.
- 2 The Spectrum analyser was tuned across the required frequency range in steps.
- 3 Any emissions found were measured with the required analyser settings.

EMISSIONS OUTSIDE THE SUB-BAND – RADIATED – PART 15.109 & PART 15.209

**RF carrier set to the lowest carrier defined by the EUT.
Bluetooth RF carrier set to the highest carrier defined by the EUT.**

These measurements are carried out in accordance with ANSI C63.17 sub-clause 6.1.6

Channels Bluetooth – Lowest UPCS – Lowest	FREQ. (MHz)	MEAS. Rx. (dBµV)	CABLE LOSS (dB)	PRE AMP (dB)	ANT FACTOR	FIELD STRENGTH (dBµV/m)	FIELD STRENGTH (µV/m)	LIMIT (µV/m)
1.705MHz - 30MHz							Note 11	30
30MHz - 88MHz							Note 11	100
88MHz - 216MHz	140.86	11.89	0.6	-	11.3	23.8	15.48	150
	142.40	11.57	0.6	-	11.2	23.4	14.79	150
216MHz - 960MHz	331.66	18.05	0.9	-	14.0	33.0	44.66	200
	362.56	20.98	1.0	-	14.5	36.5	66.83	200
	368.56	17.45	1.0	-	14.8	33.3	46.24	200
	372.65	20.77	1.0	-	15.0	36.8	69.18	200
	421.11	13.34	1.0	-	16.8	31.1	35.89	200
	493.43	7.50	1.1	-	18.1	26.7	21.63	200
	534.33	6.65	1.2	-	19.0	26.9	22.13	200
663.54	8.32	1.3	-	20.5	30.1	31.98	200	
960MHz - 1GHz							Note 11	500
1GHz - 25GHz								500
								500
								500
								500
								500
Limits	1.705MHz to 30MHz			30µV/m @ 30m				
	30MHz to 88MHz			100µV/m @ 3m				
	88MHz to 216MHz			150µV/m @ 3m				
	216MHz to 960MHz			200µV/m @ 3m				
	960MHz to 1GHz			500µV/m @ 3m				
	1GHz to 25GHz			500µV/m @ 3m				

- Notes:**
- Results quoted are extrapolated as indicated.
 - Emissions were searched to: (x) 1000MHz inclusive, as per Part 15.33a.
 - Emission due to digital circuitry not directly associated with the radio transmitter.
 - Measurements >1GHz @ 3m as per Part 15.31f(1).
 - Receiver detector <1GHz = CISPR, Quasi-Peak, 120kHz bandwidth.
 - Receiver detector >1GHz = Peak Hold, 1MHz resolution bandwidth.
 - New / Fully Charged batteries used for battery powered products.
 - See Annex J for scan plot 30MHz – 1GHz.
 - UPCS Device operating on lowest frequency.
 - Bluetooth device operating on lowest frequency.
 - Only Emissions within 20 dB of the limit are recorded.

- Test Method:**
- As per Radio – Noise Emissions, ANSI C63.4: 2003.
 - Measuring distances as Notes 1 to 4 above.
 - EUT 0.8 metre above ground plane.
 - Emissions maximised by rotation of EUT, on an automatic turntable.
Raising and lowering the receiver antenna between 1m & 4m.
Horizontal and vertical polarisations, of the receive antenna.
EUT orientation in three orthogonal planes.
Maximum results recorded.

EMISSIONS OUTSIDE THE SUB-BAND – RADIATED – PART 15.109 & PART 15.209

**UPCS RF carrier set to the highest carrier defined by the EUT.
Bluetooth RF carrier set to the highest carrier defined by the EUT.**

These measurements are carried out in accordance with ANSI C63.17 sub-clause 6.1.6

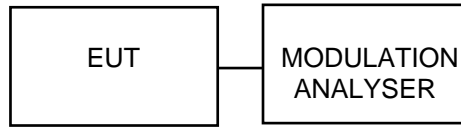
Channels Bluetooth – Highest UPCS – Highest	FREQ. (MHz)	MEAS. Rx. (dBµV)	CABLE LOSS (dB)	PRE AMP (dB)	ANT FACTOR	FIELD STRENGTH (dBµV/m)	FIELD STRENGTH (µV/m)	LIMIT (µV/m)
1.705MHz - 30MHz							Note 11	30
30MHz - 88MHz							Note 11	100
88MHz - 216MHz	140.86	11.89	0.6	-	11.3	23.8	15.48	150
	142.40	11.57	0.6	-	11.2	23.4	14.79	150
216MHz - 960MHz	331.66	18.05	0.9	-	14.0	33.0	44.66	200
	362.56	20.98	1.0	-	14.5	36.5	66.83	200
	368.56	17.45	1.0	-	14.8	33.3	46.24	200
	372.65	20.77	1.0	-	15.0	36.8	69.18	200
	421.11	13.34	1.0	-	16.8	31.1	35.89	200
	493.43	7.50	1.1	-	18.1	26.7	21.63	200
	534.33	6.65	1.2	-	19.0	26.9	22.13	200
663.54	8.32	1.3	-	20.5	30.1	31.98	200	
960MHz - 1GHz							Note 11	500
1GHz - 25GHz								500 500 500
Limits	1.705MHz to 30MHz			30µV/m @ 30m				
	30MHz to 88MHz			100µV/m @ 3m				
	88MHz to 216MHz			150µV/m @ 3m				
	216MHz to 960MHz			200µV/m @ 3m				
	960MHz to 1GHz			500µV/m @ 3m				
	1GHz to 25GHz			500µV/m @ 3m				

- Notes:**
- 1 Results quoted are extrapolated as indicated.
 - 2 Emissions were searched to: (x) 1000MHz inclusive, as per Part 15.33a.
 - 3 Emission due to digital circuitry not directly associated with the radio transmitter.
 - 4 Measurements >1GHz @ 3m as per Part 15.31f(1).
 - 5 Receiver detector <1GHz = CISPR, Quasi-Peak, 120kHz bandwidth.
 - 6 Receiver detector >1GHz = Peak Hold, 1MHz resolution bandwidth.
 - 7 New / Fully Charged batteries used for battery powered products.
 - 8 See Annex J for scan plot.
 - 9 UPCS Device operating on lowest frequency.
 - 10 Bluetooth device operating on lowest frequency.
 - 11 Only Emissions within 20 dB of the limit are recorded.

- Test Method:**
- 1 As per Radio – Noise Emissions, ANSI C63.4: 2003.
 - 2 Measuring distances as Notes 1 to 4 above.
 - 3 EUT 0.8 metre above ground plane.
 - 4 Emissions maximised by rotation of EUT, on an automatic turntable.
Raising and lowering the receiver antenna between 1m & 4m.
Horizontal and vertical polarisations, of the receive antenna.
EUT orientation in three orthogonal planes.
Maximum results recorded.

FRAME PERIOD 15.323 (e)

Frame repetition stability is tested according with ANSI C63.17 sub-clause 6.2.2. Frame period and jitter are tested in accordance with ANSI C63.17 sub-clause 6.2.3. The test setup below is used for the above measurements.



Test Setup 3:

Frame Repetition Stability

This is the mean value of the frame repetition rate recorded over 1000 samples. For devices that divide access in time the repetition rate shall not exceed 10ppm.

Result

Frame Repetition Stability (ppm)	Limit (ppm)	Pass/Fail
1.12 ppm	10ppm	Pass

Frame Period and Jitter

Jitter is the difference in time between the rising edges of consecutive pulses.

Result

Maximum Jitter (µs)	3xSD Jitter (µs)	Frame period (ms)	Limit (µs)		Pass/Fail
			Frame Period (ms)	Jitter (µs)	
-0.01	0.03	10.00003	2 or 10/X	25	Pass

Notes: 1. See Annex J for frame period plots.

The above measurements were performed with a wideband audio communications channel active between the fixed and portable parts. The fixed part was also in communications with the modulation analyser on a non-wideband audio channel. The modulation analyser makes frame repetition stability and jitter measurements on the non-wideband audio channel. As both wideband and non-wideband audio channels use the same timing reference the wideband audio channel is determined to meet the requirements. See annex J for plot showing frame period and both wideband and non-wideband active in the same period.

FREQUENCY STABILITY – PART 15.323 (e)

The frequency stability is tests are carried out according with ANSI C63.17 sub-clause 6.2.1 using test setup number 3 (page 29). This testing is carried out with the following conditions over 5000 samples.

Results

Temperature (°C)	Voltage (Vdc)	Fc (MHz)	offset (kHz)	offset (ppm)	Limit (ppm)
+20	Vnom	1924.992	0	0.0	±10
+20	85% Vnom	1924.992	-3	-1.5	±10
+20	115% Vnom	1924.992	+1	+0.5	±10
-20	Vnom	1924.992	17	+8.8	±10
+55	Vnom	1924.992	19	+9.8	±10

ANNEX A
PHOTOGRAPH

PHOTOGRAPH No. 1

TOP OVERVIEW DISPLAY DOWN







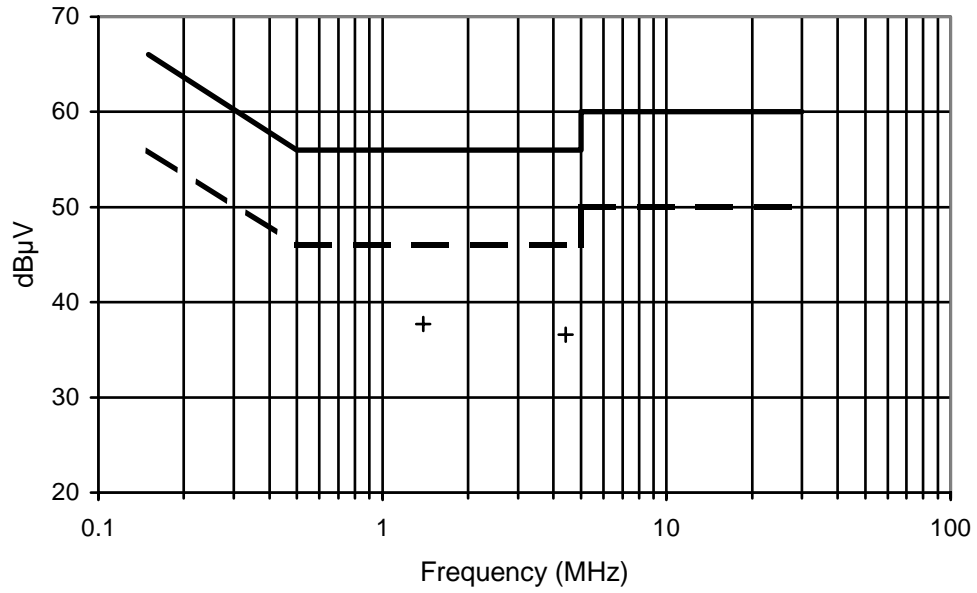
ANNEX B
APPLICANT'S SUBMISSION OF DOCUMENTATION LIST

APPLICANT'S SUBMISSION OF DOCUMENTATION LIST

a.	TCB	-	APPLICATION	[X]
		-	FEE	[X]
b.	AGENT'S LETTER OF AUTHORISATION	-		[X]
c.	MODEL(s) vs IDENTITY	-		[]
d.	ALTERNATIVE TRADE NAME DECLARATION(s)	-		[]
e.	LABELLING	-	PHOTOGRAPHS	[]
		-	DECLARATION	[]
		-	DRAWINGS	[X]
f.	TECHNICAL DESCRIPTION	-		[X]
g.	BLOCK DIAGRAMS	-	Tx	[X]
		-	Rx	[]
		-	PSU	[]
		-	AUX	[]
h.	CIRCUIT DIAGRAMS	-	Tx	[X]
		-	Rx	[]
		-	PSU	[]
		-	AUX	[]
i.	COMPONENT LOCATION	-	Tx	[X]
		-	Rx	[]
		-	PSU	[]
		-	AUX	[]
j.	PCB TRACK LAYOUT	-	Tx	[X]
		-	Rx	[]
		-	PSU	[]
		-	AUX	[]
k.	BILL OF MATERIALS	-	Tx	[X]
		-	Rx	[]
		-	PSU	[]
		-	AUX	[]
l.	USER INSTALLATION / OPERATING INSTRUCTIONS	-		[X]

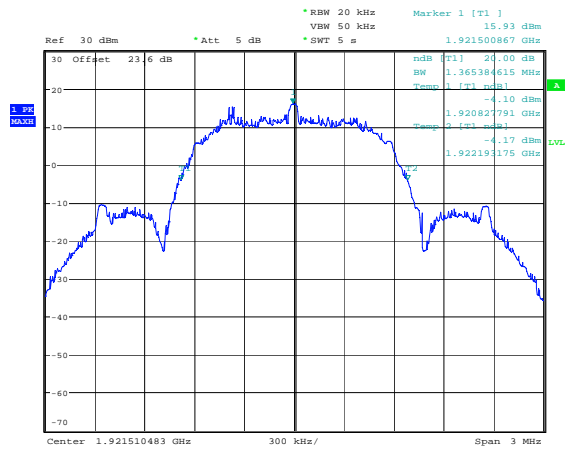
ANNEX C
AC POWERLINE CONDUCTION

AC Powerline Conduction
 (Levels below the limit are only displayed if
 within 20dB of the limit)

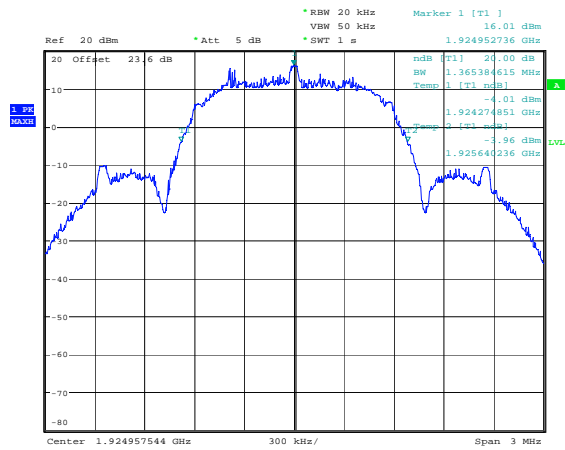


— QP Limit - - - Average Limit + QP Emission × Average Emission

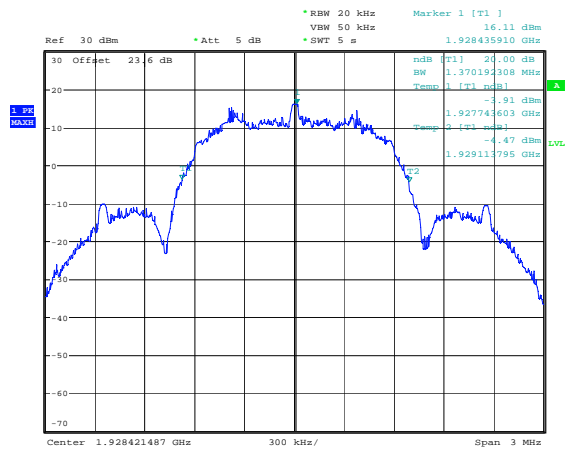
ANNEX D
EMISSION BANDWIDTH



Date: 17.FEB.2009 10:21:17

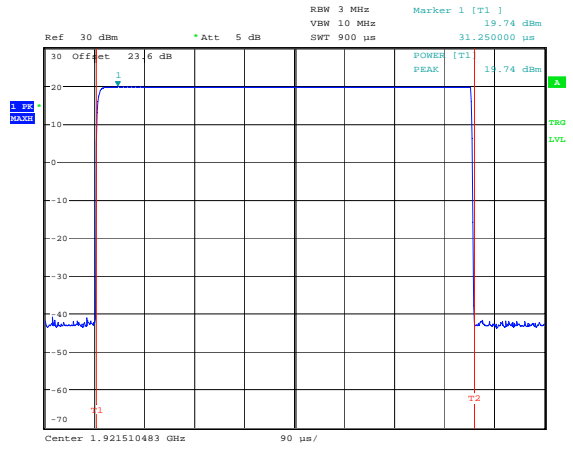


Date: 17.FEB.2009 10:41:46

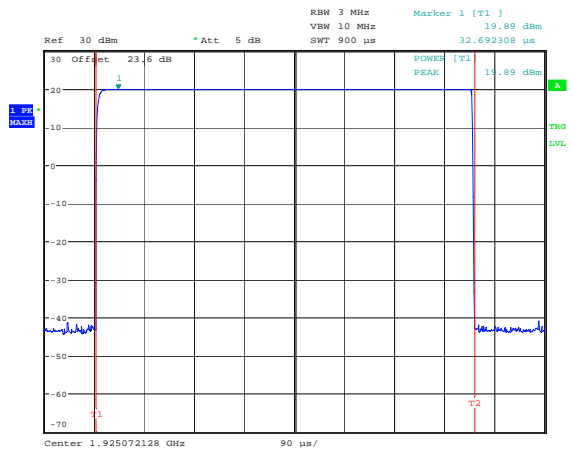


Date: 17.FEB.2009 10:03:10

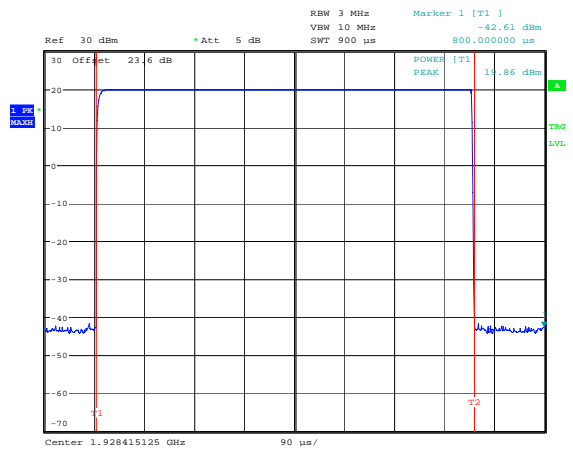
ANNEX E
PEAK TRANSMIT POWER



Date: 17.FEB.2009 10:14:50

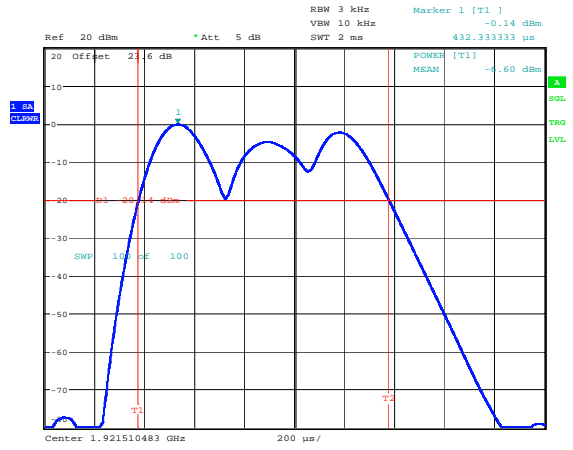


Date: 17.FEB.2009 10:37:30

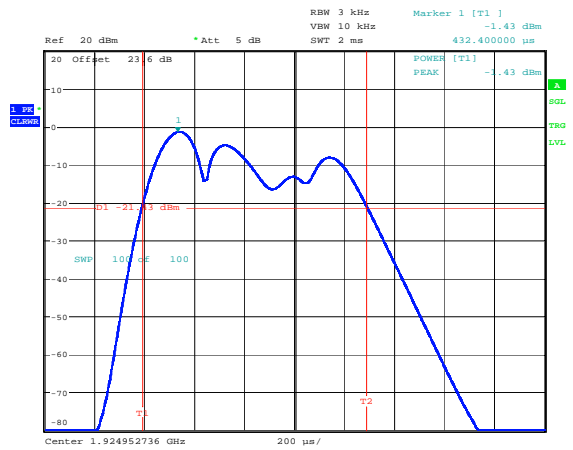


Date: 17.FEB.2009 10:25:04

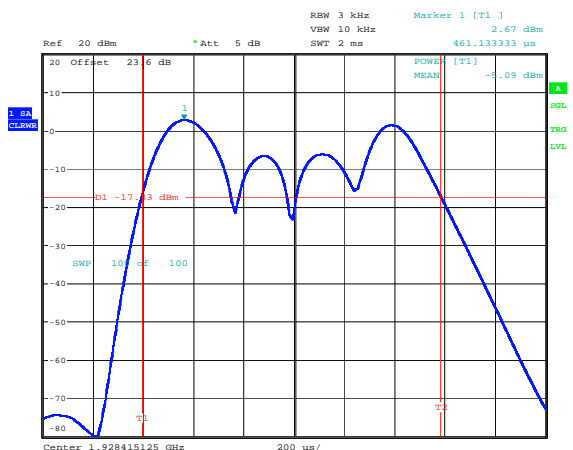
ANNEX F
POWER SPECTRAL DENSITY



Date: 17.FEB.2009 10:17:57



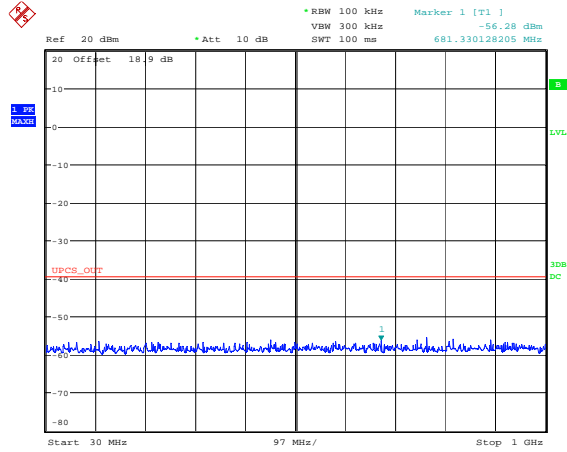
Date: 17.FEB.2009 10:44:45



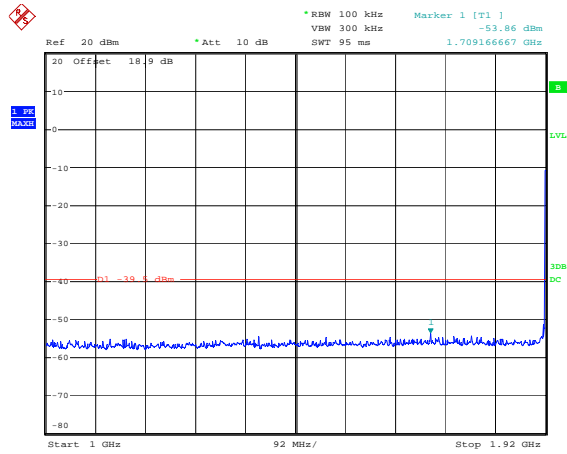
Date: 17.FEB.2009 10:27:10

ANNEX G
EMISSIONS OUTSIDE THE SUB-BAND

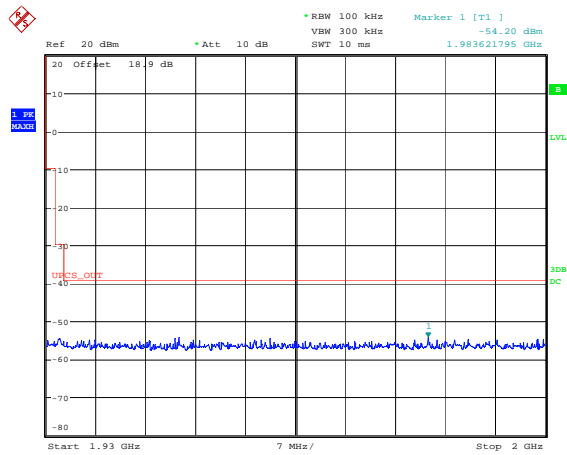
RF carrier set to the lowest carrier defined by the EUT



TET TYU
 Date: 12.JUN.2009 11:13:30

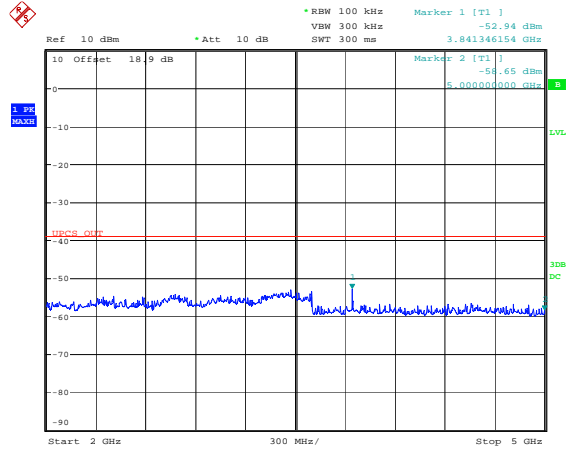


TET TYU
 Date: 12.JUN.2009 11:06:02

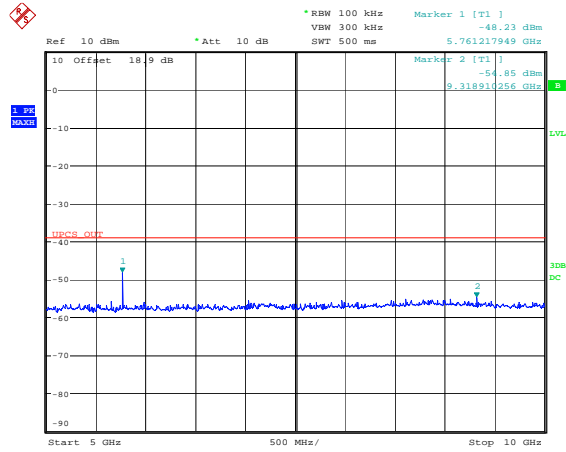


TET TYU
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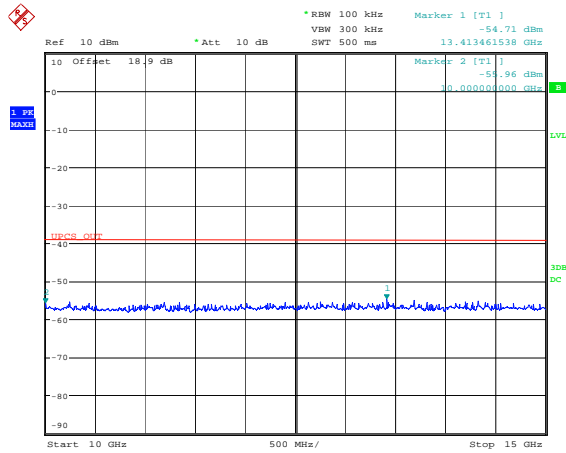
RF carrier set to the lowest carrier defined by the EUT



TET TYU
Date: 12.JUN.2009 11:30:53

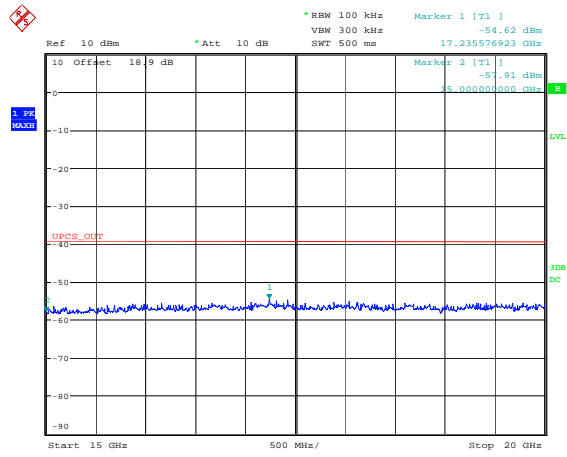


TET TYU
Date: 12.JUN.2009 11:24:03



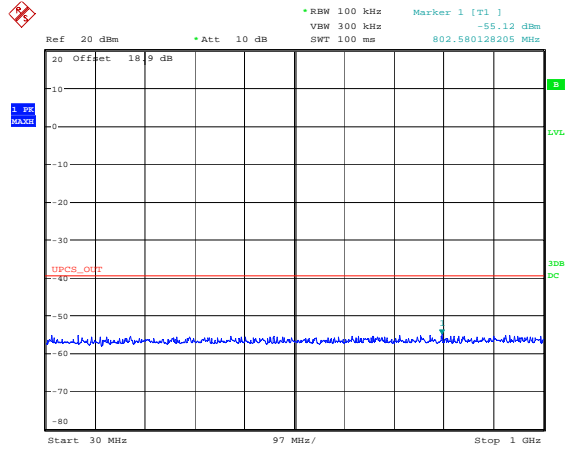
TET TYU
Date: 12.JUN.2009 11:29:03

RF carrier set to the lowest carrier defined by the EUT

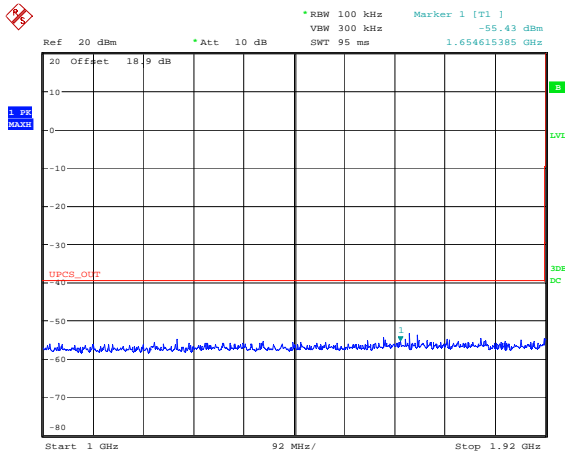


TET TYU
Date: 12.JUN.2009 11:30:39

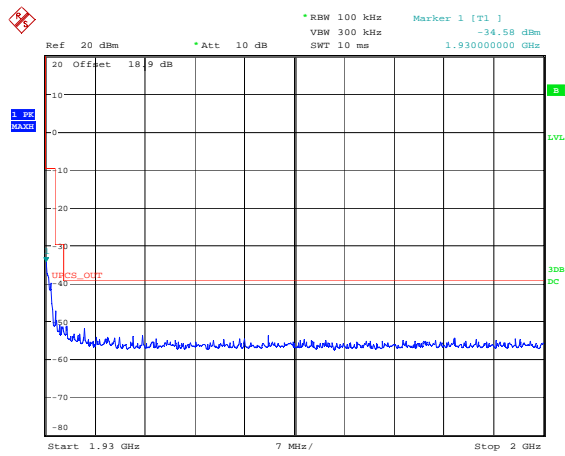
RF carrier set to the highest carrier defined by the EUT



TET TYU
Date: 12.JUN.2009 12:05:44

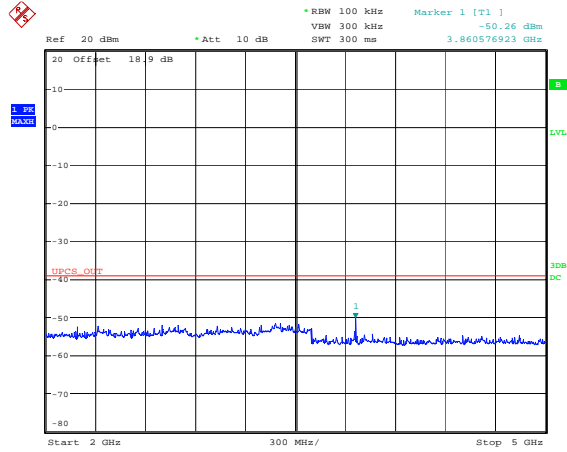


TET TYU
Date: 12.JUN.2009 12:06:09

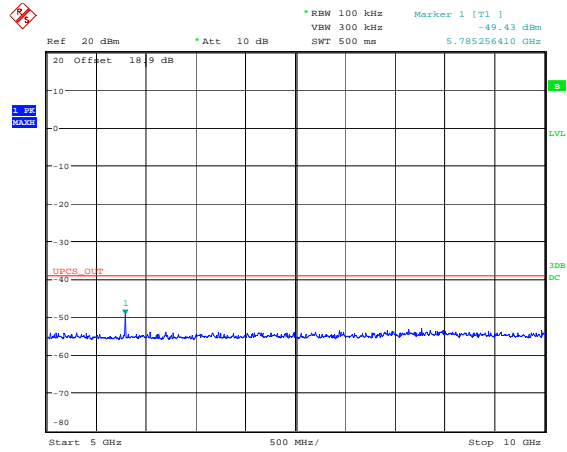


TET TYU
Date: 12.JUN.2009 12:06:47

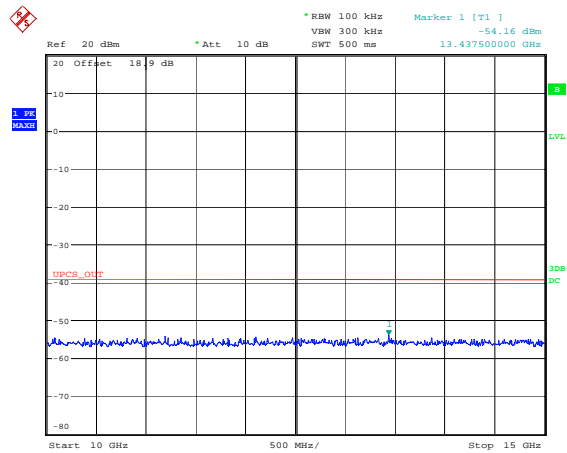
RF carrier set to the highest carrier defined by the EUT



TET TYU
 Date: 12.JUN.2009 12:08:55

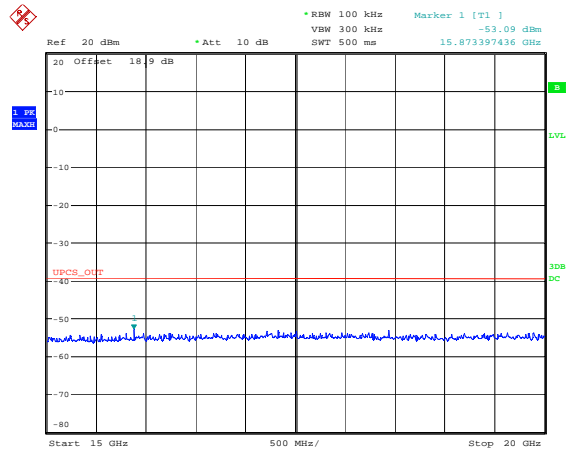


TET TYU
 Date: 12.JUN.2009 12:30:14



TET TYU
 Date: 12.JUN.2009 12:31:26

RF carrier set to the highest carrier defined by the EUT



TET TVU
Date: 12.JUN.2009 12:35:29

ANNEX H
EMISSIONS INSIDE THE SUB-BAND – CONDUCTED

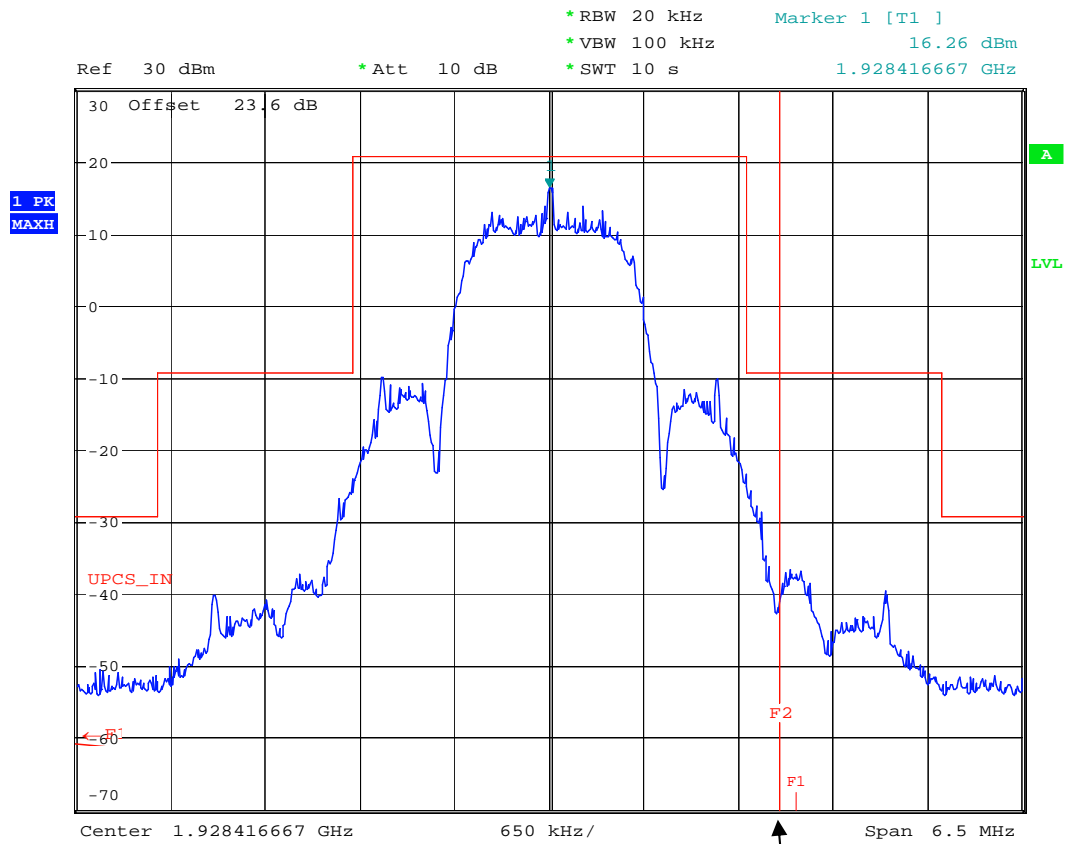
RF carrier set to the lowest carrier defined by the EUT



Date: 17.FEB.2009 16:47:59

Bandedge

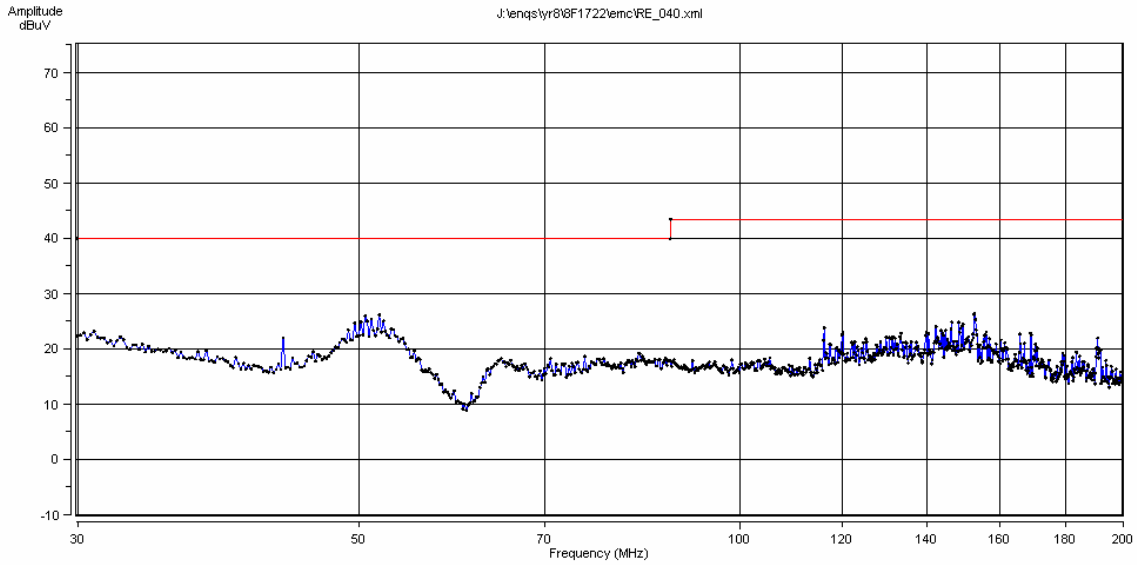
RF carrier set to the highest carrier defined by the EUT



Date: 17.FEB.2009 16:40:21

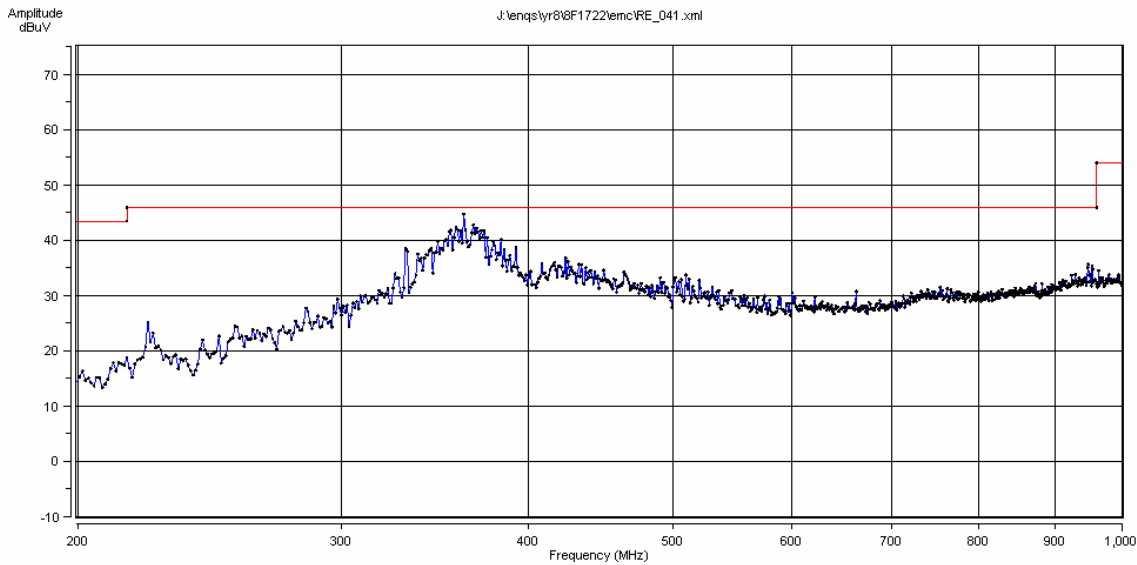
ANNEX I
SPURIOUS EMISSIONS – RADIATED

KTL EMC Emissions Software - Radiated emissions



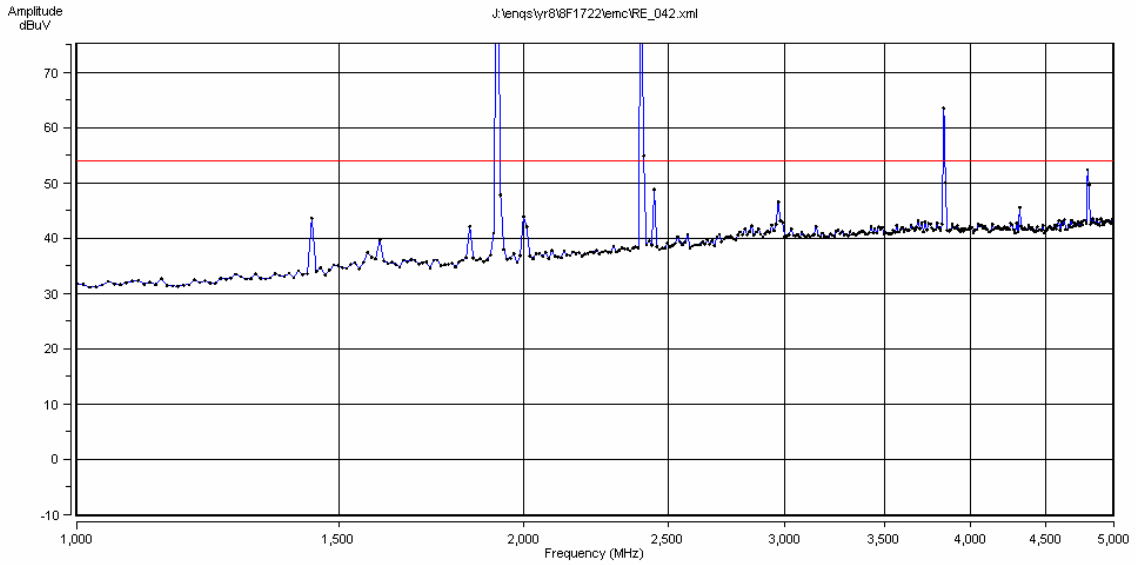
Test Location:	EMC Ferrite	Remote Drive Eq.:	110Vac/60Hz supply
Analyser Type:	ESAI	Sample Numbers:	RFG109
Specification:	FCC 47CFR15:2008, Clause 15.109	Mode/Config/Arrg:	Bluetooth:3Mb EDR 2402MHz Bottom
Spec Distance (m):	3	Mod State:	DECT Double slot mode: TX 1921.53
Measurement Dist (m):	3.0	Engineer:	Martin Leach
EUT Names:	Jabra 9400 series DECT base station and PS	Date/Time:	03/07/2009 15:46:00
Sample Numbers:	S02, S40 and S04	Job Number:	8F1722

KTL EMC Emissions Software - Radiated emissions



Test Location:	EMC Ferrite	Remote Drive Eq.:	110Vac/60Hz supply
Analyser Type:	ESAI	Sample Numbers:	RFG109
Specification:	FCC 47CFR15:2008, Clause 15.109	Mode/Config/Arrg:	Bluetooth:3Mb EDR 2402MHz Bottom
Spec Distance (m):	3	Mod State:	DECT Double slot mode: TX 1921.53
Measurement Dist (m):	3.0	Engineer:	Martin Leach
EUT Names:	Jabra 9400 series DECT base station and PS	Date/Time:	03/07/2009 16:13:47
Sample Numbers:	S02, S40 and S04	Job Number:	8F1722

KTL EMC Emissions Software - Radiated emissions



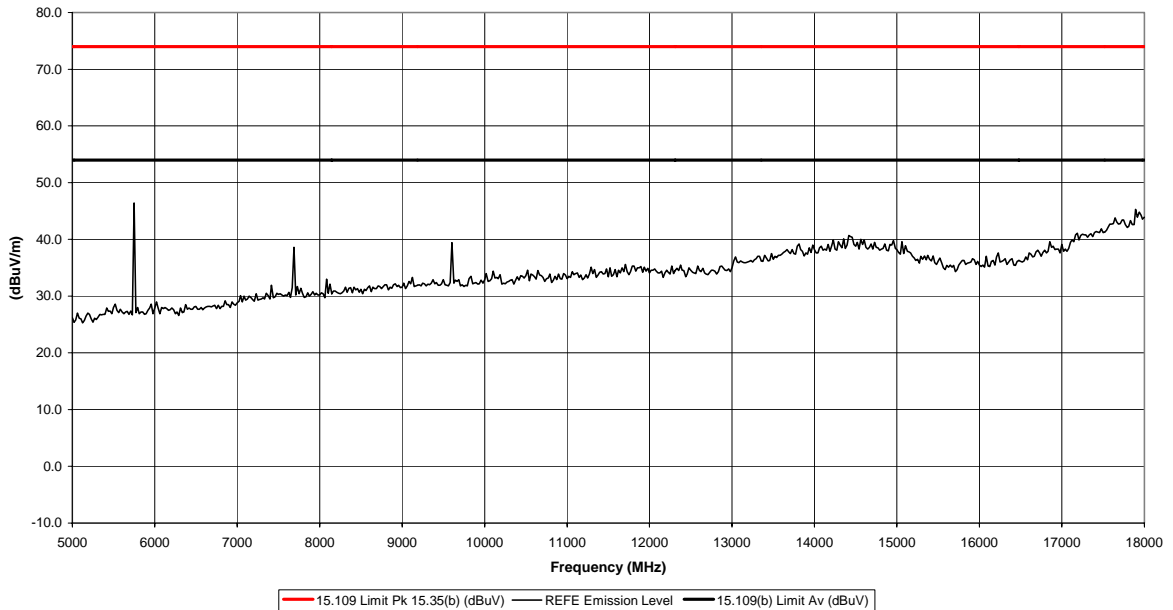
Test Location:	EMC Ferrite	Remote Drive Eq.:	110Vac/60Hz supply
Analyser Type:	E4407B (HP commands)	Sample Numbers:	RFG109
Specification:	FCC 47CFR15:2008, Clause 15.109	Mode/Config/Arrg:	Bluetooth:3Mb EDR 2402MHz Bottom
Spec Distance (m):	3	Mod State:	DECT Double slot mode: TX 1921.53
Measurement Dist (m):	3.0	Engineer:	Martin Leach
EUT Names:	Jabra 9400 series DECT base station and PS	Date/Time:	03/07/2009 17:20:36
Sample Numbers:	S02, S40 and S04	Job Number:	8F1722

Peak Detector Preview Spurious Emissions (HOR/VER Pol) (REFE)

Job No. 8F1722 Sample No. S02, S40 and S04

TX Operating Mode:

TX Operating Mode: Bottom Channel: BT TX 2402MHz and DECT TX 1921.536MHz

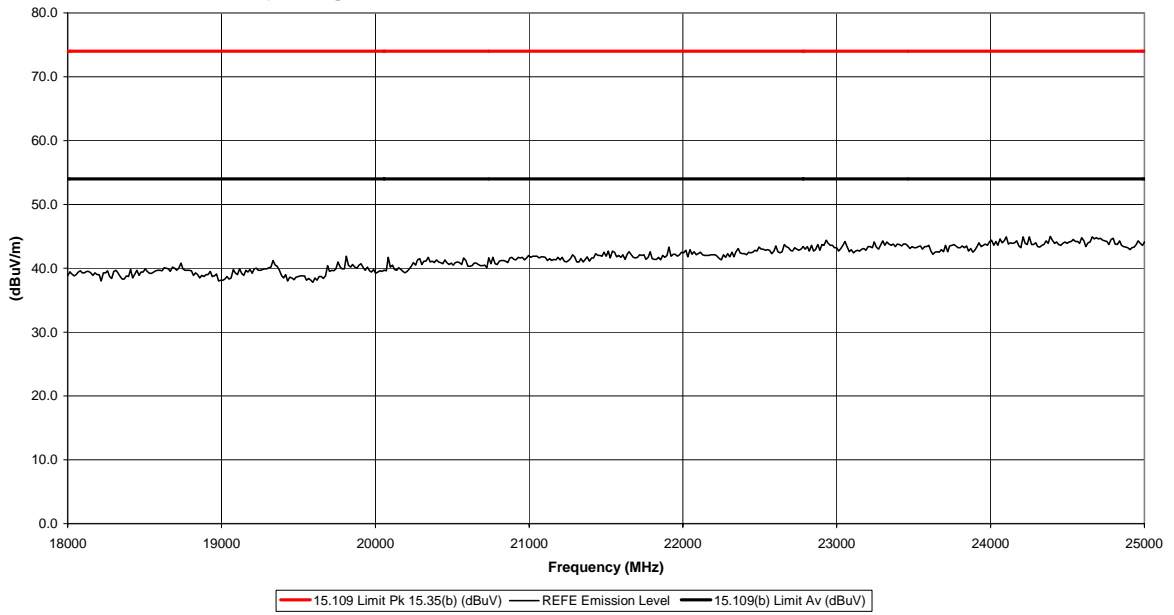


Peak Detector Preview Spurious Emissions (HOR/VER Pol) (REFE)

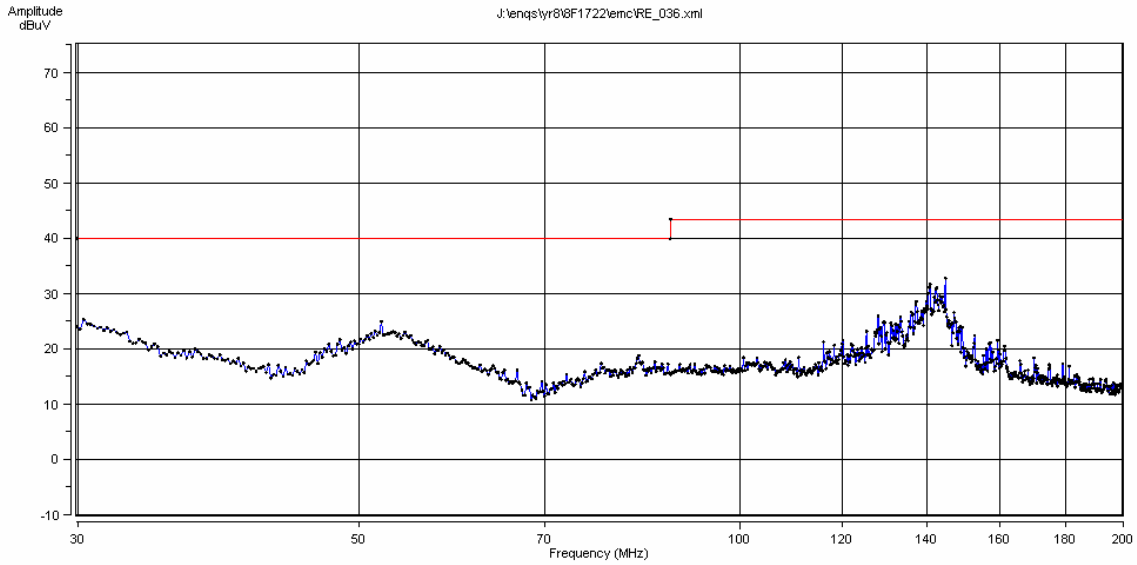
Job No. 8F1722 Sample No. S02, S40 and S04

TX Operating Mode:

TX Operating Mode: Bottom Channel: BT TX 2402MHz and DECT TX 1921.536MHz

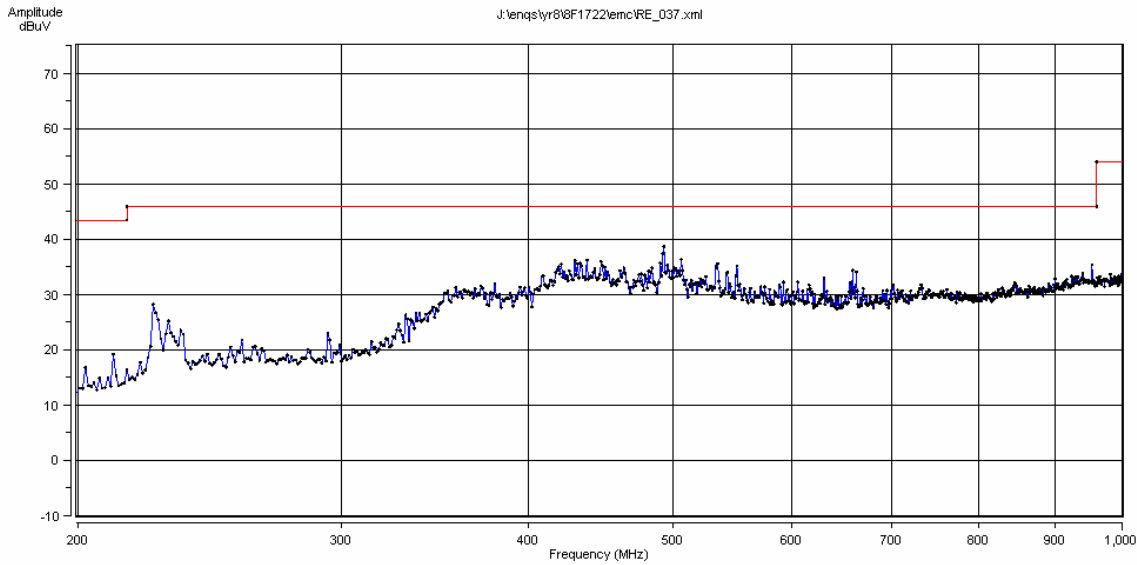


KTL EMC Emissions Software - Radiated emissions



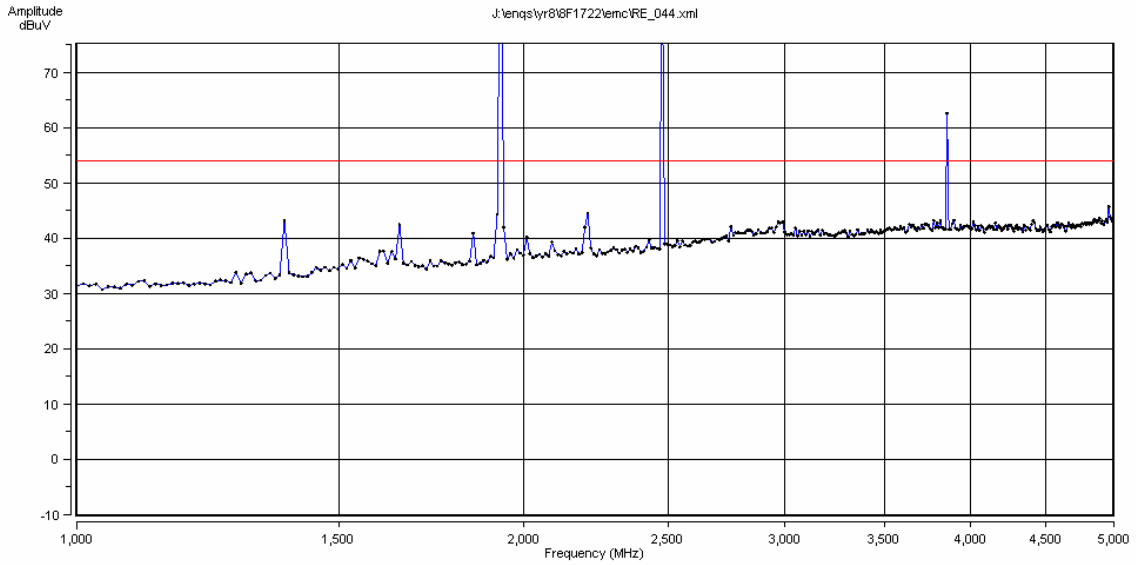
Test Location:	EMC Ferrite	Remote Drive Eq.:	110Vac/60Hz supply
Analyser Type:	ESAI	Sample Numbers:	RFG109
Specification:	FCC 47CFR15:2008, Clause 15.109	Mode/Config/Arrg:	Bluetooth:3Mb EDR 2480MHz Top
Spec Distance (m):	3	Mod State:	DECT Double slot mode: TX 1928.44
Measurement Dist (m):	3.0	Engineer:	Martin Leach
EUT Names:	Jabra 9400 series DECT base station and PS	Date/Time:	03/07/2009 12:50:53
Sample Numbers:	S02 and S40	Job Number:	8F1722

KTL EMC Emissions Software - Radiated emissions



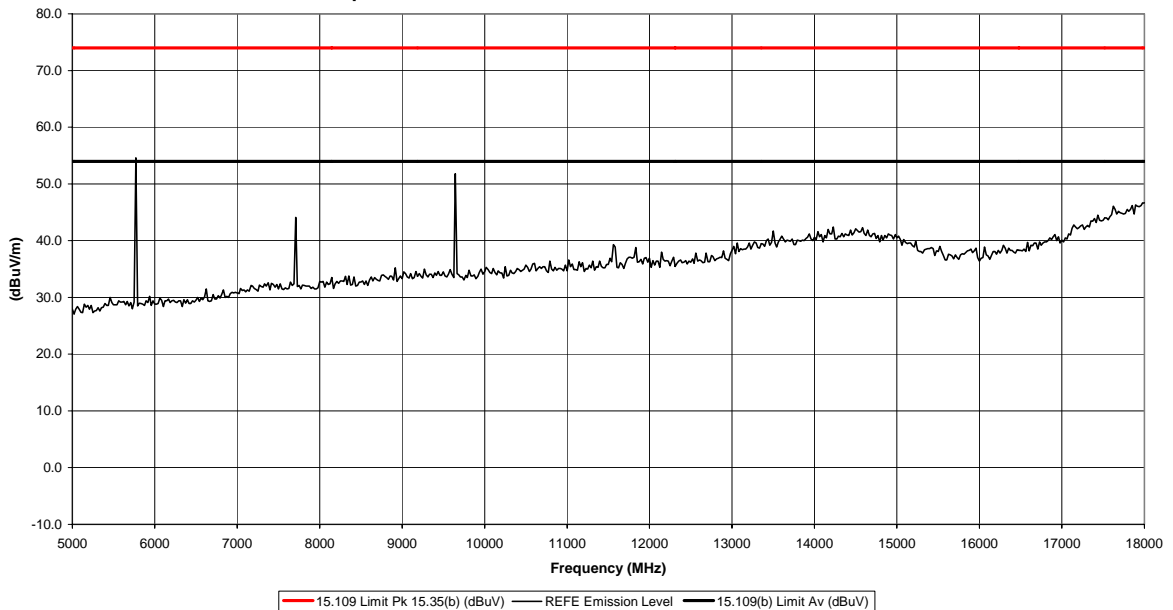
Test Location:	EMC Ferrite	Remote Drive Eq.:	110Vac/60Hz supply
Analyser Type:	ESAI	Sample Numbers:	RFG109
Specification:	FCC 47CFR15:2008, Clause 15.109	Mode/Config/Arrg:	Bluetooth:3Mb EDR 2480MHz Top
Spec Distance (m):	3	Mod State:	DECT Double slot mode: TX 1928.44
Measurement Dist (m):	3.0	Engineer:	Martin Leach
EUT Names:	Jabra 9400 series DECT base station and PS	Date/Time:	03/07/2009 13:02:53
Sample Numbers:	S02 and S40	Job Number:	8F1722

KTL EMC Emissions Software - Radiated emissions

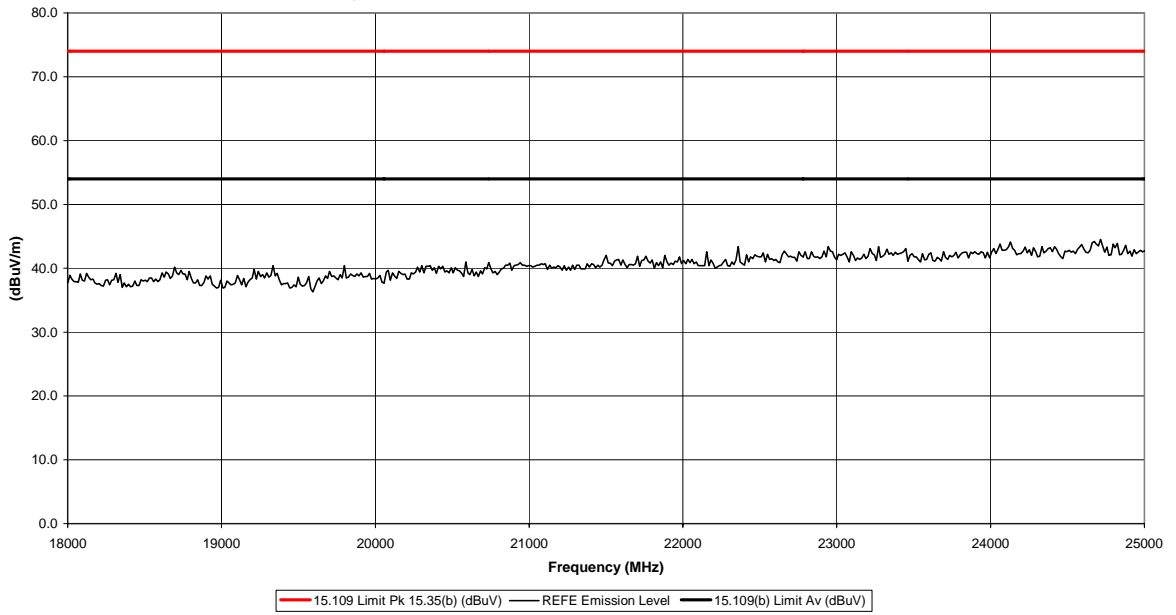


Test Location:	EMC Ferrite	Remote Drive Eq.:	110Vac/60Hz supply
Analyser Type:	E4407B (HP commands)	Sample Numbers:	RF0109
Specification:	FCC 47CFR15:2008, Clause 15.109	Mode/Config/Arg:	Bluetooth:3Mb EDR 2480MHz Top
Spec Distance (m):	3	Mod State:	DECT Double slot mode: TX 1928.44
Measurement Dist (m):	3.0	Engineer:	Martin Leach
EUT Names:	Jabra 9400 series DECT base station and PS	Date/Time:	03/07/2009 17:42:28
Sample Numbers:	S02, S40 and S04	Job Number:	8F1722

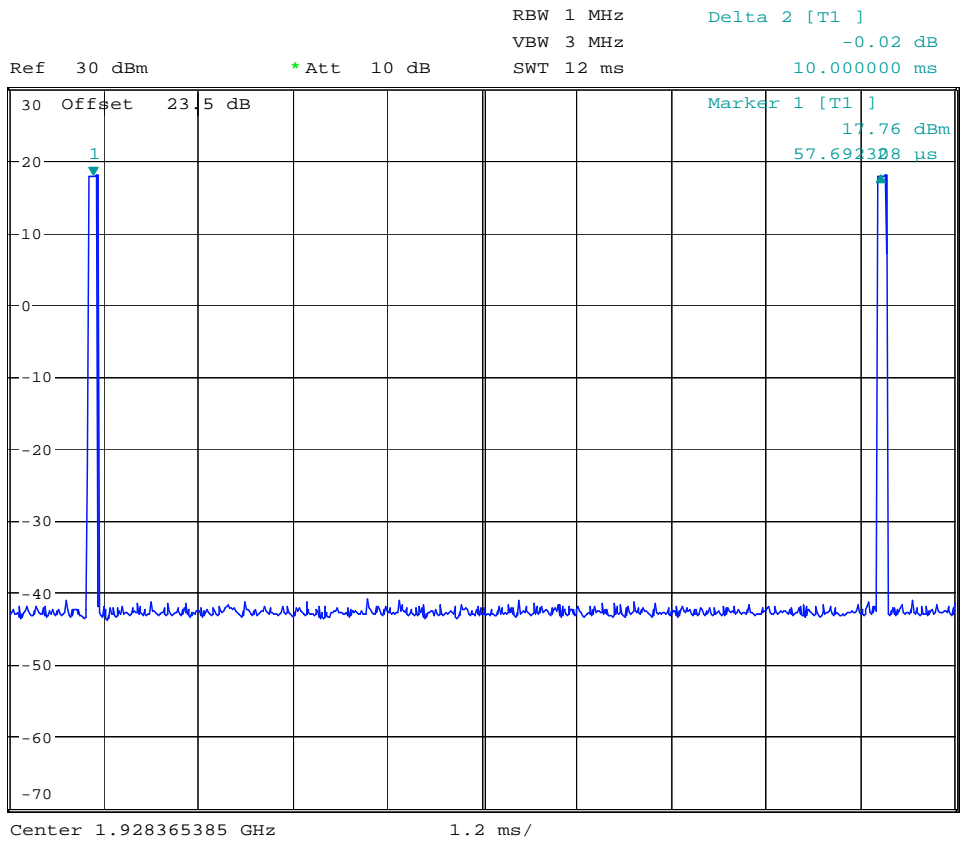
Peak Detector Preview Spurious Emissions (HOR/VER Pol) (REFE)
Job No. 8F1722 Sample No. S02, S40 and S04
TX Operating Mode:
Top Channels: BT TX 2480MHz and DECT TX 1928.448MHz



Peak Detector Preview Spurious Emissions (HOR/VER Pol) (REFE)
Job No. 8F1722 Sample No. S02, S40 and S04
TX Operating Mode:
Top Channels: BT TX 2480MHz and DECT TX 1928.448MHz



ANNEX J
FRAME PERIOD



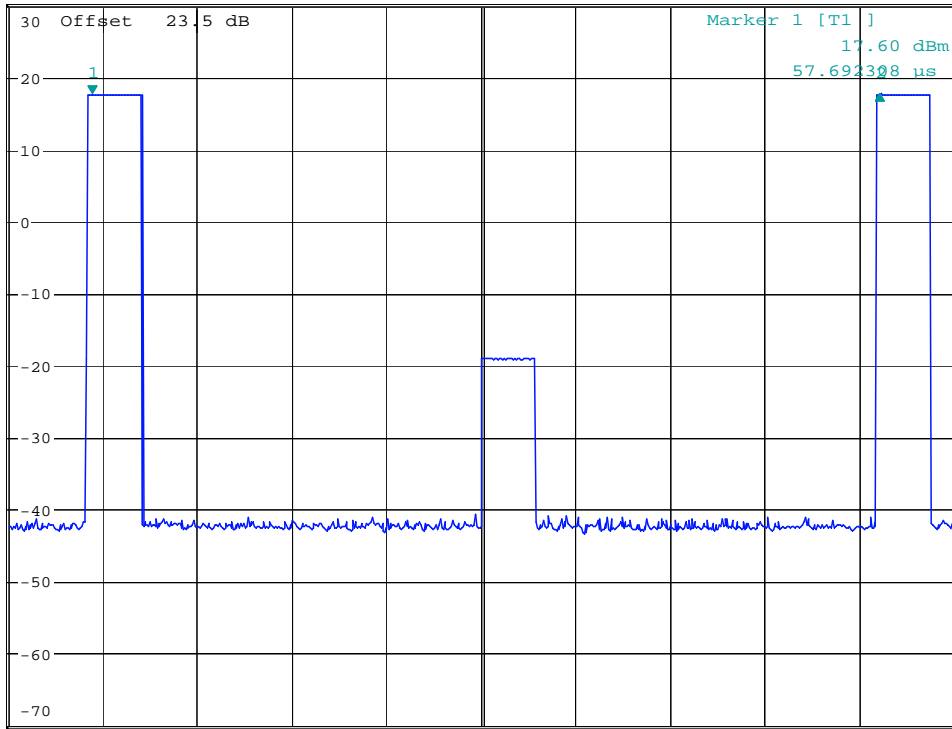
TET TYU

Date: 26.JUN.2009 13:04:17

Control and Signalling Information



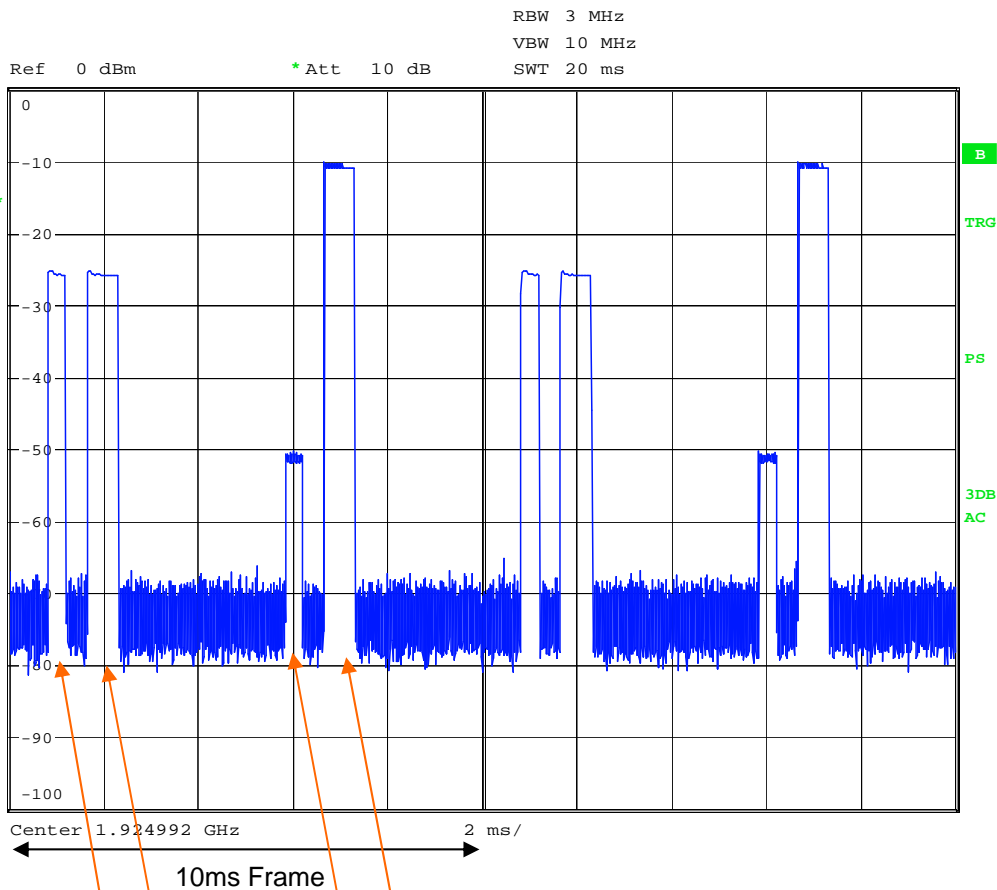
RBW 1 MHz Delta 2 [T1]
VBW 3 MHz -0.00 dB
SWT 12 ms 10.000000 ms



TET TYU

Date: 26.JUN.2009 13:03:40

Communications Channel Active



TET TYU
Date: 3.JUL.2009 12:15:01

- Wideband Portable Part Transmission
- Non-Wideband Modulation Analyser Transmission
- Wideband Fixed Part Transmission
- Non-Wideband Fixed Part Transmission

ANNEX K
EQUIPMENT DETAILS & CALIBRATION

TYPE OF EQUIPMENT	MAKER/SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
TEMPERATURE CHAMBER	SHARTREE	TCC 125-815P	CS 203	11	X
ATTENUATOR	BIRD	8302-060	N/A	106	X
ATTENUATOR	BIRD	8302-100	N/A	173	X
SIGNAL GENERATOR	MARCONI	2042	119388/080	176	X
ATTENUATOR	BIRD	8304-100-N	N/A	222	X
ATTENUATOR	BIRD	8304-0600-N	N/A	246	X
SIGNAL GENERATOR	MARCONI	2042	119562/021	254	X
TEMPERATURE INDICATOR	FLUKE	52 Series II	74700044	426	X
FUNCTION GENERATOR	WAVETEK	178	V644080	638	X
OSCILLOSCOPE	TEKTRONIX	TDS520B	B020491	UH122	X
FUNCTION GENERATOR	WAVETEK	271	C6841078	UH221	X
SPECTRUM ANALYSER	ROHDE & SCHWARZ	FSU 46	200034	UH281	X
POWER SPLITTER/COMBINER	HP	11667A	13723	UH303	X
POWER SPLITTER/COMBINER	HP	11667A	06690	UH305	X
POWER SPLITTER/COMBINER	HP	11667A	332	UH306	X
CRYSTAL DETECTOR	HP	8472A	1822A00897	UH307	X
MODULATION ANALYSER	ROHDE & SCHWARZ	CMD 60	N/A	N/A	X

TRL Number	Equipment Type	Manufacturer	Last Cal Calibration	Calibration Period	Due For Calibration
L011	Temperature chamber	Shartree	Use Calibrated Temperature Indicator		
L106	Attenuator	Bird	Calibrate in use		
L173	Attenuator	Bird	Calibrate in use		
L176	Signal Generator	Marconi	23/06/2009	12	23/06/2010
L222	Attenuator	Bird	Calibrate in use		
L246	Attenuator	Bird	Calibrate in use		
L254	Signal Generator	Marconi	25/02/09	12	25/02/10
L426	Temperature Indicator	Fluke	21/01/2009	12	21/01/2010
L638	Function Generator	Wavetek	Use Calibrated oscilloscope		
UH122	Oscilloscope	Tektronix	10/12/2007	24	10/12/2009
UH221	Function Generator	Wavetek	Use Calibrated oscilloscope		
UH281	Spectrum Analyser	R&S	24/07/2006	12	24/07/2007
UH303	Power Splitter/Combiner	HP	Calibrate in use		
UH305	Power Splitter/Combiner	HP	Calibrate in use		
UH306	Power Splitter/Combiner	HP	Calibrate in use		
UH307	Crystal Detector CMD 60	HP R&S	For information only		

ANNEX L

MEASUREMENT UNCERTAINTY

Radio Testing – General Uncertainty Schedule

All statements of uncertainty are expanded standard uncertainty using a coverage factor of 1.96 to give a 95% confidence where no required test level exists.

[1] Adjacent Channel Power

Uncertainty in test result = **1.86dB**

[2] Carrier Power

Uncertainty in test result (Equipment - TRLUH120) = **2.18dB**

Uncertainty in test result (Equipment – TRL05) = **1.08dB**

Uncertainty in test result (Equipment – TRL479) = **2.48dB**

[3] Effective Radiated Power

Uncertainty in test result = **4.71dB**

[4] Spurious Emissions

Uncertainty in test result = **4.75dB**

[5] Maximum frequency error

Uncertainty in test result (Equipment - TRLUH120) = **119ppm**

Uncertainty in test result (Equipment – TRL05) = **0.113ppm**

Uncertainty in test result (Equipment – TRL479) = **0.265ppm**

[6] Radiated Emissions, field strength OATS 14kHz-18GHz Electric Field

Uncertainty in test result (14kHz – 30MHz) = **4.8dB**, Uncertainty in test result (30MHz – 1GHz) = **4.6dB**,

Uncertainty in test result (1GHz-18GHz) = **4.7dB**

[7] Frequency deviation

Uncertainty in test result = **3.2%**

[8] Magnetic Field Emissions

Uncertainty in test result = **2.3dB**

[9] Conducted Spurious

Uncertainty in test result (Equipment TRL479) Up to 8.1GHz = **3.31dB**

Uncertainty in test result (Equipment TRL479) 8.1GHz – 15.3GHz = **4.43dB**

Uncertainty in test result (Equipment TRL479) 15.3GHz – 21GHz = **5.34dB**

Uncertainty in test result (Equipment TRLUH120) Up to 26GHz = **3.14dB**

[10] Channel Bandwidth

Uncertainty in test result = **15.5%**

[11] Amplitude and Time Measurement – Oscilloscope

Uncertainty in overall test level = **2.1dB**, Uncertainty in time measurement = **0.59%**, Uncertainty in Amplitude measurement = **0.82%**

[11] Power Line Conduction

Uncertainty in test result = **3.4dB**

[12] Spectrum Mask Measurements

Uncertainty in test result = **2.59% (frequency)**
Uncertainty in test result = **1.32dB (amplitude)**

[13] Adjacent Sub Band Selectivity

Uncertainty in test result = **1.24dB**

[14] Receiver Blocking – Listen Mode, Radiated

Uncertainty in test result = **3.42dB**

[15] Receiver Blocking – Talk Mode, Radiated

Uncertainty in test result = **3.36dB**

[16] Receiver Blocking – Talk Mode, Conducted

Uncertainty in test result = **1.24dB**

[17] Receiver Threshold

Uncertainty in test result = **3.23dB**

[18] Transmission Time Measurement

Uncertainty in test result = **7.98%**