	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: 8739A-STP9040 FCC ID: XX6STP9040	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: 1 of 28



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|----- ( Cambridge Ltd. ) -----|

EMC  
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email: mail@dbtechnology.co.uk

## REPORT ON ELECTROMAGNETIC COMPATIBILITY TESTS

Performed at:  
**TWENTY PENCE TEST SITE**

Twenty Pence Road,  
Cottenham,  
Cambridge  
U.K.  
CB24 8PS

on

**Sepura PLC**

**STP9040 - Bluetooth**

dated


**15th December 2013**

### Document History

Issue	Date	Affected page(s)	Description of modifications	Revised by	Approved by
1	20/12/13		Initial release		

Based on report template:  
v090319

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	Report No: <b>R3297</b> Issue No: <b>1</b>	<b>IC ID: 8739A-STP9040</b> <b>FCC ID: XX6STP9040</b>	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: <b>2 of 28</b>

Equipment Under Test (EUT): STP9040 - Bluetooth

Test Commissioned by: Sepura PLC  
Radio House  
St Andrews Road  
Cambridge  
Cambridgeshire  
CB4 1GR

Representative: Steve Wood

Test Started: 18th October 2013

Test Completed: 23rd October 2013

Test Engineer: Dave Smith

Date of Report: 15th December 2013

Written by: Dave Smith Checked by: Derek Barlow

Signature:  Signature: 


Date: 15 December 2013 Date: 20th December 2013

**dB Technology can only report on the specific unit(s) tested at its site. The responsibility for extrapolating this data to a product line lies solely with the manufacturer.**

## Test Standards Applied

<b>RSS-210</b> <b>Issue 8</b>	<i>Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment</i>  <i>Annex 8: Spurious Radiated Emissions Only</i>
<b>CFR 47</b>	<i>Code of Federal Regulations: Pt 15 Subpart C - Radio Frequency Devices - Intentional Radiators</i>  <i>15.247: Spurious radiated emissions only</i>

**Note: this report only covers spurious radiated emissions**

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## Emissions Test Results Summary

### RSS-210

**PASS**

Test	Port	Method	Limit	PASS/FAIL	Notes
Radiated Spurious Emissions	enclosure	ANSI C63.4:2003	RSS_GEN	PASS	


specs\_canadav111211

### CFR 47

**PASS**


Test	Port	Method	Limit	PASS/FAIL	Notes
Radiated Emissions	ac power	ANSI C63.4:2003	15.209	PASS	

specs\_fccv100412

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## 1 EUT Details

### 1.1 General

The EUT was a Sepura Tetra Portable. The device includes a Bluetooth transmitter operating in the 2.4GHz to 2.4835GHz range. The device has an integral antenna and is battery powered.

This report only covers the radiated spurious transmissions from the Bluetooth circuitry.

Tests were performed with the device operating at three frequencies - at the top, middle and bottom of its operating range.

- o 2402MHz
- o 2441MHz
- o 2480MHz

Details of the EUT and associated peripherals used during the tests are listed below. Figure 1 shows the interconnections between the EUT and peripherals.

Item	Manufacturer	Model	Description	Serial No:	Notes
1	Sepura	STP9040	EUT	1PR201327G8099S	

### 1.2 Modifications to EUT and Peripherals


Details of any modifications that were required to achieve compliance are listed below. The modification numbers are referred to in the results sections as appropriate.

Mod No:	Details	Implemented for
0	The unit tested was a Production Build unit. No modifications were made during the course of testing.	

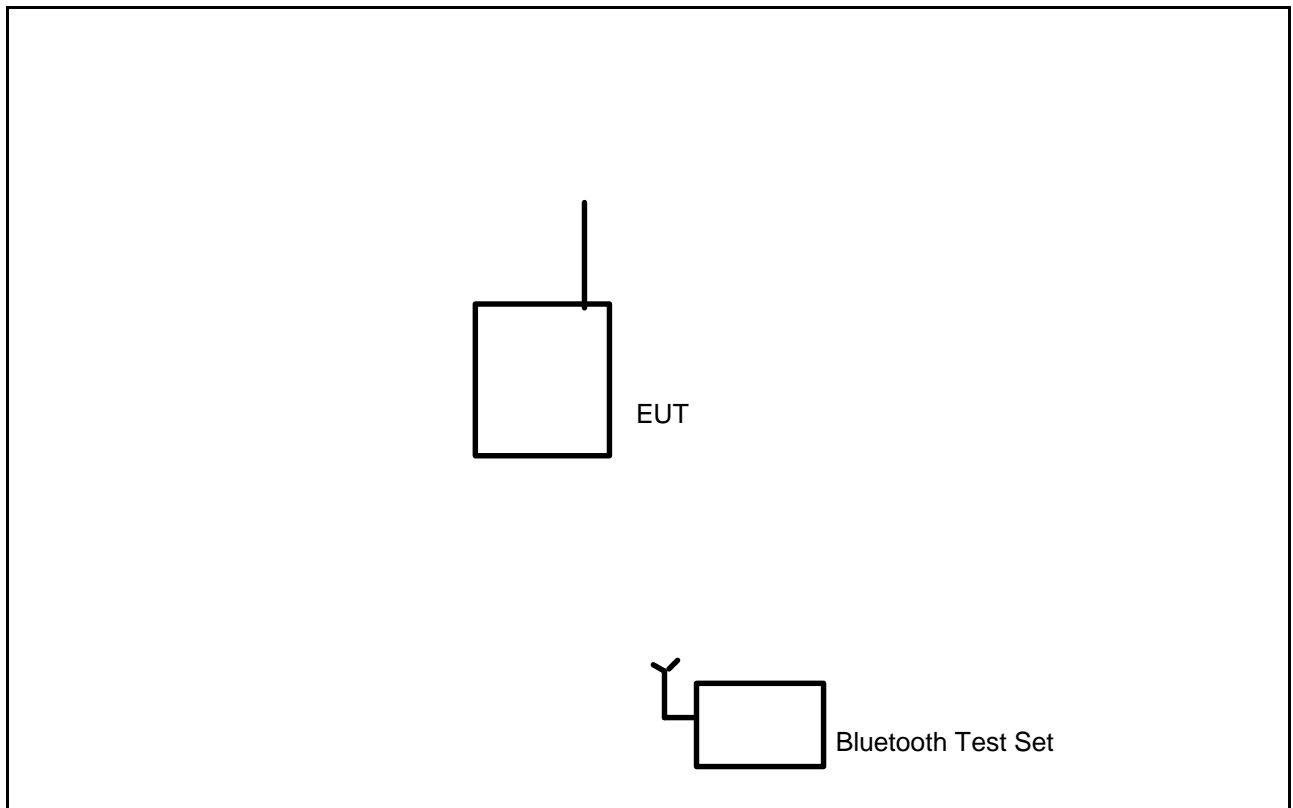
### 1.3 EUT Operating Modes

The EUT was tested in the following operating mode or modes. Generally, operating modes are chosen that will exercise the functions of the EUT as fully as possible and in a manner likely to produce maximum emission levels or susceptibility. Individual test result sheets reference the operating mode of the EUT.

Operating Mode	Details
1	Continuous transmission at maximum power on selected channel. In order to maintain continuous transmission it was necessary to locate a Bluetooth simulator test set with a suitable antenna in the test area. The test set was allocated a different channel to the EUT.

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**Figure 1 General Arrangement of EUT and Peripherals**



The Bluetooth Test Set was necessary in order for the EUT to transmit continuously

Bluetooth Test set was an Anritsu MT8850A. S/N 6K00000284



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**Photograph 1 Radiated Emissions**



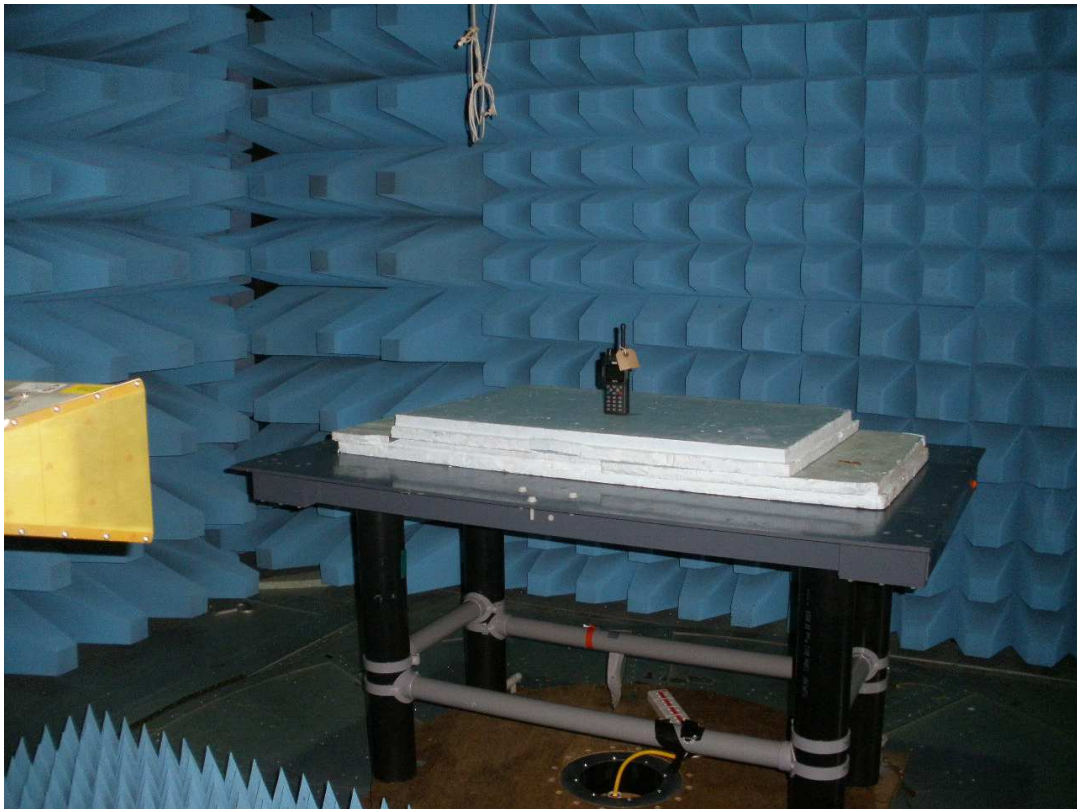
**Photograph 2 Radiated Emissions**



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**Photograph 3 Radiated Emissions**



**Photograph 4 Radiated Emissions**

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## 2 Test Equipment

The test equipment used during the tests was one or more of the items listed below. Individual test result sheets indicate which items were used.

Ref No:	Details	Serial Number	Cal Date	Cal Frequency
A12	Chase Bilog CBL6111A	1012	30/01/2013	1 year
A20	Alpha 61932500 Horn Antenna (18-26GHz)	050	28/10/2013	1 year
A22	Alpha 61932400 Horn Antenna (12.4-18GHz)	055	28/10/2013	1 year
A23	EMCO 3115 DR Guide (1-18GHz)	9507-4525	28/10/2013	1 year
A24	Chase X-wing Bilog CBL6144 26MHz-3GHz	27590	28/10/2013	1 year
PRE10	LUCIX 100M-20G pre-amp	10	20/08/2013	1 year
PRE12	LUCIX 100M-20G pre-amp	12	20/08/2013	1 year
PRE16	LUCIX 18GHz to 26.5GHz	16	20/08/2013	1 year
R4	R&S ESVS10	843744/002	17/12/2012	1 year
R8	Agilent E7405A Spectrum Analyser	MY44212494	24/09/2013	1 year
R9	Agilent E7405A Spectrum Analyser	MY45110758	19/11/2013	1 year
RFF01	High Pass RF Filter 3GHz to 12.75GHz	1	20/08/2013	1 year
RFF04	Low Pass RF Filter 0MHz to 2GHz	4	20/08/2013	1 year

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### 3 Test Methods

#### 3.1 Radiated Emissions

This section describes the general method of performing this test. The specific method used and any deviations from this general method are listed in the appropriate results section.

Initial scans are performed in a semi-anechoic screened room at a distance of 3m. Scans are performed over the frequency range specified in the test standard with the antenna both horizontally and vertically polarised. During these scans the EUT and peripherals are rotated through 360°. Bench top EUTs are placed on a non-conducting bench at a height of 0.8m above the ground plane. Floor standing EUTs are placed 0.1m above the ground plane. The results of the scans are shown in the plots included at the end of the report.

Significant emissions identified by the scans are measured on an open area test site at the appropriate test distance using a CISPR16 quasi-peak receiver. Maximised readings are obtained by rotating the EUT through 360° and adjusting the height of the antenna from 1m to 4m. Measurements are made with the antenna both horizontally and vertically polarised and the results tabulated.

Tabulated results show levels based on the following calculation:

Field Strength (dBuV) = receiver reading (dBuV) + CF (dB/m)

CF is the correction factor for the antenna and cable.


For example:

at 114MHz receiver reading was 17.9 dBuV, combined correction factor = 13.1 (dB/m).

Total field strength = 17.9 + 13.1 = 31.0 dBuV/m.

### 4 Test Results

The following sections contain tabulated test results. Plots of various scans are included at the back of this section.


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#### 4.1 Radiated Emissions Results - Below 1GHz

Factor Set 1: A12_FS_13B - - CBL015_11A	1 m cable
Factor Set 2: - - - -	
Factor Set 3: - - - -	
Test Equipment: R4 A12	

##### Radiated Emissions

Company: Sepura PLC					Product: STP9040 - Bluetooth								
Date: 23/10/2013					Test Eng: Dave Smith								
Ports: ac power													
Test: ANSI C63.4:2003					using limits of					15.209			
Ports: enclosure													
Test: ANSI C63.4:2003					using limits of					RSS GEN			
Plot	Op Mode	Mod State	Dist m	Fact Set	Freq. MHz	Ant Pol	Rec. Level dBuV	Corr'n Factor dB/m	Corr'n Factor dB	Total Level dBuV/m	Limit 15.209 dBuV/m	Margin 15.209 dB	Notes
1	1	0	3	1	66.880	V	18.4	5.8		24.2	40.0	15.8	#1
1	1	0	3	1	66.880	H	17.9	5.8		23.7	40.0	16.3	#1
1	1	0	3	1	73.130	V	18.4	6.5		24.9	40.0	15.1	#1
1	1	0	3	1	73.130	H	13.9	6.5		20.4	40.0	19.6	#1
2	1	0	3	1	325.000	V	7.8	16.3		24.1	46.0	21.9	
2	1	0	3	1	325.000	H	7.8	16.3		24.1	46.0	21.9	
Results											Minimum Margin		
											PASS/FAIL		
											15.1 dB		
											PASS		
Notes	Comments and Observations												
#1	Results of scans shown in plots 1 and 2.												
	Emissions believed to be from Bluetooth test set.												
	Tabulated measurements above were made with the unit transmitting on the lower channel. The prescans showed emissions significantly below the limit - the lower channel showed emissions closest to the restricted bands limits.												
	Readings above are maximised measurements using 120kHz QP detector.												


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## 4.2 Radiated Emissions Results - Above 1GHz

Factor Set 1:	A23_3m_12F RFF01_12A PRE10_12A CBL050_11A	1 m cable
Factor Set 2:	- - -	
Factor Set 3:	- - -	
Test Equipment:	R9 A23 PRE10 RFF01	

### Radiated Emissions

Company: Sepura PLC					Product: STP9040 - Bluetooth								
Date: 18/10/2013					Test Eng: Dave Smith								
Ports: ac power													
Test: ANSI C63.4:2003					using limits of					15.209			
Ports: enclosure													
Test: ANSI C63.4:2003					using limits of					RSS GEN			
Plot	Op Mode	Mod State	Dist m	Fact Set	Freq. MHz	Ant Pol	Rec. Level dBuV	Corr'n Factor dB/m	Corr'n Factor dB	Total Level dBuV/m	Limit 15.209 dBuV/m	Margin 15.209 dB	Notes
5	1	0	1.5	1	3308.025	V	47.2	-3.9		43.3	60.0	16.7	
5	1	0	1.5	1	3308.025	H	54.7	-3.9		50.8	60.0	9.2	
5	1	0	1.5	1	4803.710	V	49.5	-1.3		48.2	60.0	11.8	
5	1	0	1.5	1	4803.710	H	51.9	-1.3		50.6	60.0	9.4	
5	1	0	1.5	1	4881.680	V	49.6	-0.9		48.8	60.0	11.2	
5	1	0	1.5	1	4881.680	H	49.3	-0.9		48.4	60.0	11.6	
5	1	0	1.5	1	4959.738	V	47.2	-0.5		46.7	60.0	13.3	
5	1	0	1.5	1	4959.738	H	44.6	-0.5		44.1	60.0	15.9	
Results											Minimum Margin		
											PASS/FAIL		
											9.2 dB		
											PASS		
Notes													
Comments and Observations													
Results of scans shown in plots 3 to 11.													
Measurements were made with a 1MHz RBW peak detector. Average measurements are likely to give lower readings. A reduction in levels could also be made by taking into account the duty cycle of the Bluetooth pulses.													

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### 4.3 Radiated Emissions Results - Band Edges

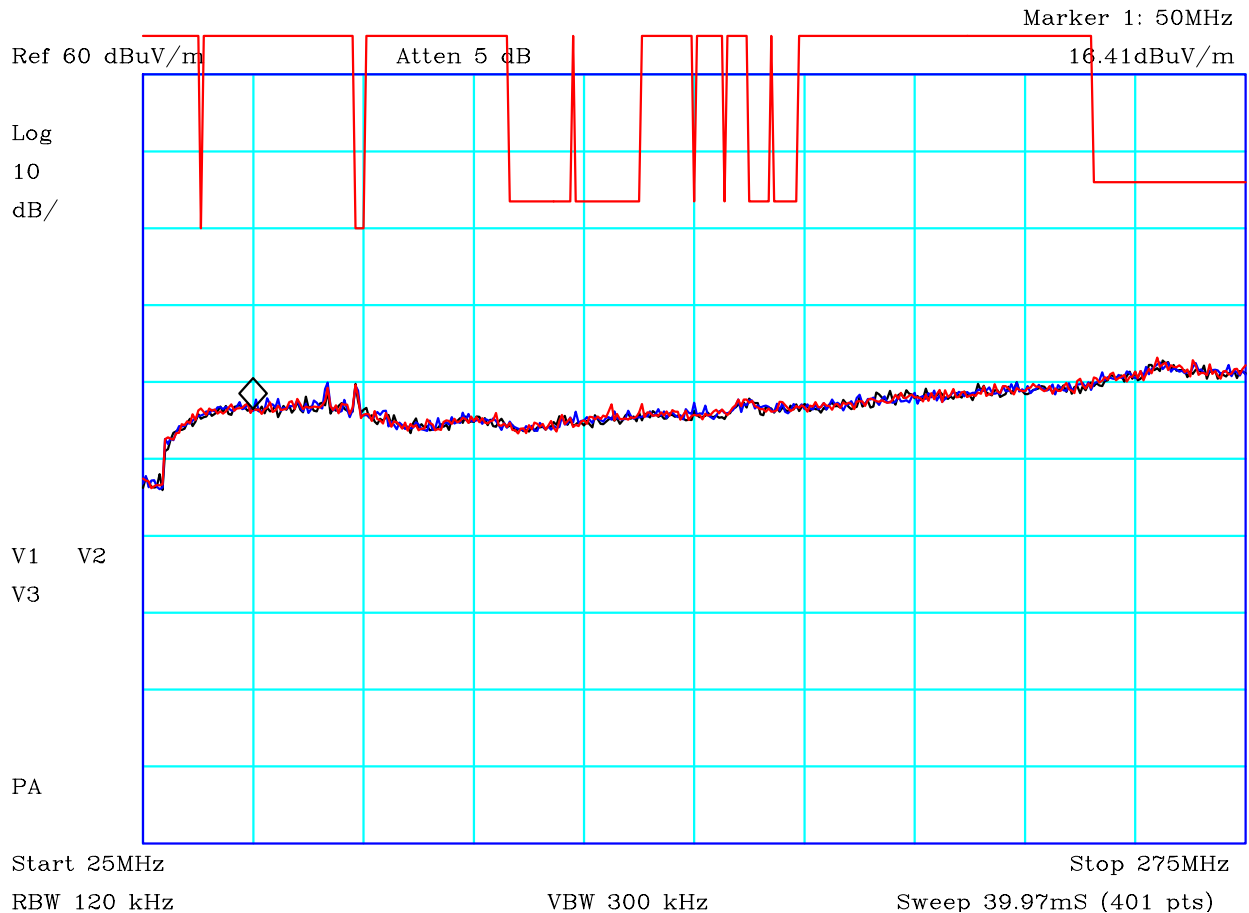
Factor Set 1:	A23_3m_12F RFF01_12A PRE10_12A CBL050_11A	1 m cable
Factor Set 2:	- - - -	
Factor Set 3:	- - - -	
Test Equipment:	R9 A23 PRE10 RFF01	

#### Radiated Emissions

Company: Sepura PLC					Product: STP9040 - Bluetooth								
Date: 18/10/2013					Test Eng: Dave Smith								
Ports: ac power													
Test: ANSI C63.4:2003					using limits of					15.209			
Ports: enclosure													
Test: ANSI C63.4:2003					using limits of					RSS GEN			
Plot	Op Mode	Mod State	Dist m	Fact Set	Freq. MHz	Ant Pol	Rec. Level dBuV	Corr'n Factor dB/m	Corr'n Factor dB	Total Level dBuV/m	Limit 15.209 dBuV/m	Margin 15.209 dB	Notes
12	1	0	1.5	1	2400.000	V	77.0	-7.6		69.4			pk
12	1	0	1.5	1	2400.000	V	63.0	-7.6		55.4			avg
13	1	0	1.5	1	2400.000	H	77.6	-7.6		70.0			pk
13	1	0	1.5	1	2400.000	H	63.6	-7.6		56.0			avg
14	1	0	1.5	1	2483.500	V	65.5	-7.5		58.0	80.0	22.0	pk
14	1	0	1.5	1	2483.500	H	55.5	-7.5		48.1	60.0	11.9	avg
15	1	0	1.5	1	2483.500	V	66.1	-7.5		58.7	80.0	21.3	pk
15	1	0	1.5	1	2483.500	H	54.7	-7.5		47.3	60.0	12.7	avg
Results											Minimum Margin		
											PASS/FAIL		
											11.9 dB		
											PASS		
Notes													
Comments and Observations													
Measurements at band edges are shown in plots 12 to 15.													
There is no radiated emissions limit at the lower band edge because is is not within a restricted band.													
Measurements made with 1MHz RBW. Video bandwidth reduced to show average. Further reduction in average measurements could be made by taking into account the Bluetooth duty cycle.													




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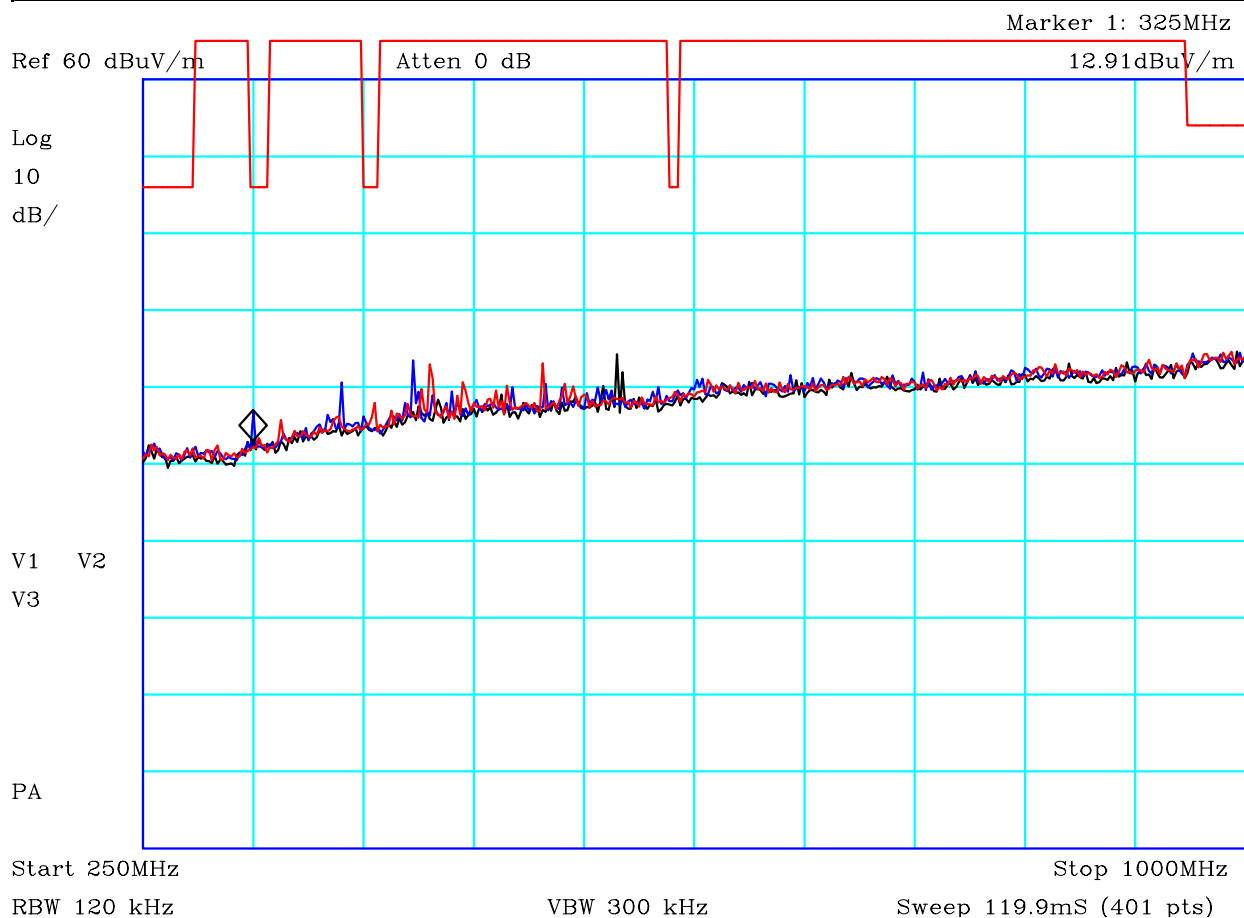


CF1:A24\_3m\_130215   CF2:CBL059\_CBL018\_CBL065\_CBL060\_100806   CF4:RFF04\_120716

## PLOT 1 Radiated Emissions - Bluetooth - Tx - 25MHz to 275MHz

Company:	Sepura	Product:	STP9040
Date:	23/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Restricted Bands	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel Maximised height and angle - upright and flat			
Facility:	Anech_2	Height	1m,1.5m,2m
Distance	3m	Polarisation	V+H
Angle	0-360	File:	H3B0792E
		Mode:	Bluetooth
		Modification State:	0
		Analyser:	R9


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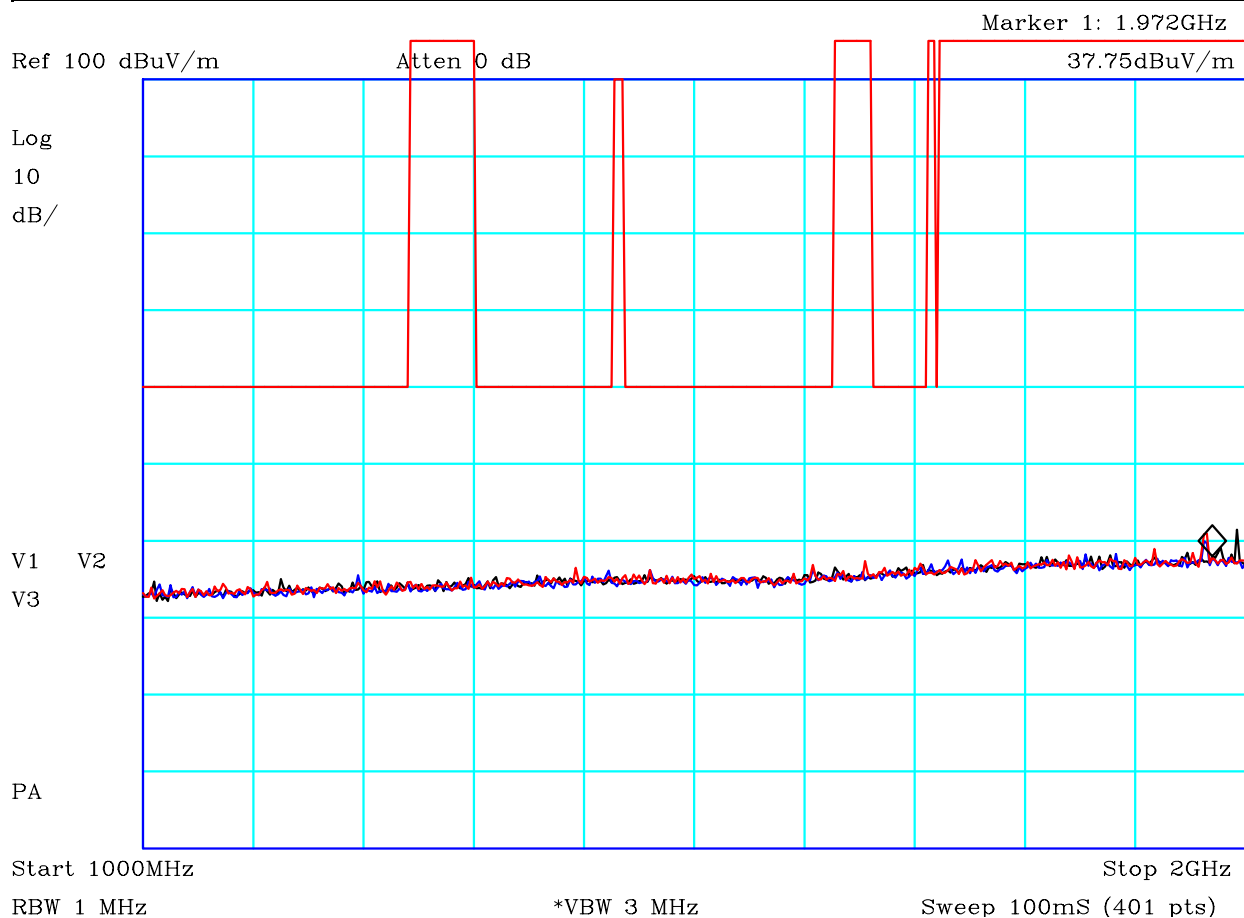


CF1:A24\_3m\_130215   CF2:CBL059\_CBL018\_CBL065\_CBL060\_100806   CF3:PRE10\_120627   CF4:RFF04\_120716

## PLOT 2 Radiated Emissions - Bluetooth - Tx - 250MHz to 1GHz

Company:	Sepura	Product:	STP9040
Date:	23/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Restricted Bands	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel Maximised height and angle - upright and flat			
Facility:	Anech_2	Height	1m,1.5m,2m
Distance	1.5m	Polarisation	V+H
Angle	0-360	File:	H3B0794D
		Mode:	Bluetooth
		Modification State:	0
		Analysers:	R9


	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: 8739A-STP9040 FCC ID: XX6STP9040	
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CF1:A23\_3m\_120820 CF2:CBL059\_CBL018\_CBL065\_CBL060\_100806 CF3:PRE10\_120627 CF4:RFF04\_120716

### PLOT 3 Radiated Emissions - Bluetooth - Tx - 1GHz to 2GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel Maximised height and angle - upright and flat			
Facility:	Anech_2	Height	1.1m,1.3m,1.5m
Distance	1.5m	Polarisation	H
Angle	0-360	File:	H39187F1
		Mode:	Bluetooth
		Modification State:	0
		Analysers:	R9

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Marker 1: 2.402GHz

Ref 115 dBuV/m

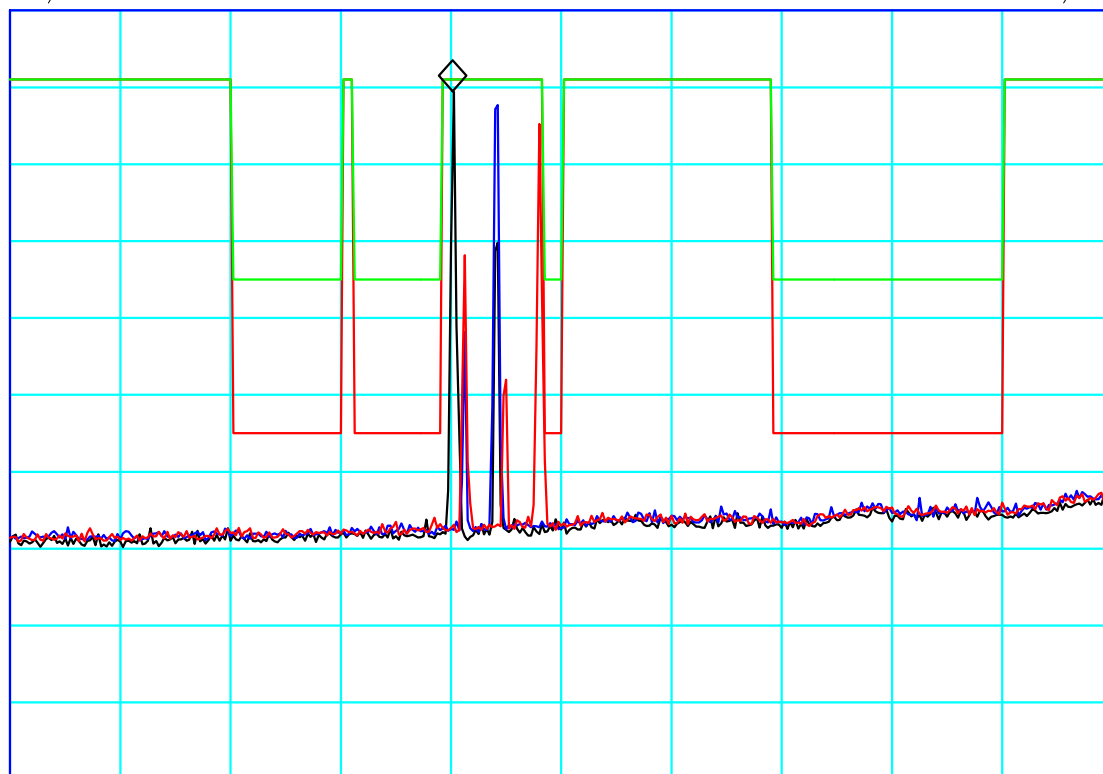
Atten 0 dB

104.4dBuV/m

Log  
10  
dB/

V1 V2  
V3

PA



Start 2GHz

Stop 3GHz

RBW 1 MHz

\*VBW 3 MHz


Sweep 4mS (401 pts)

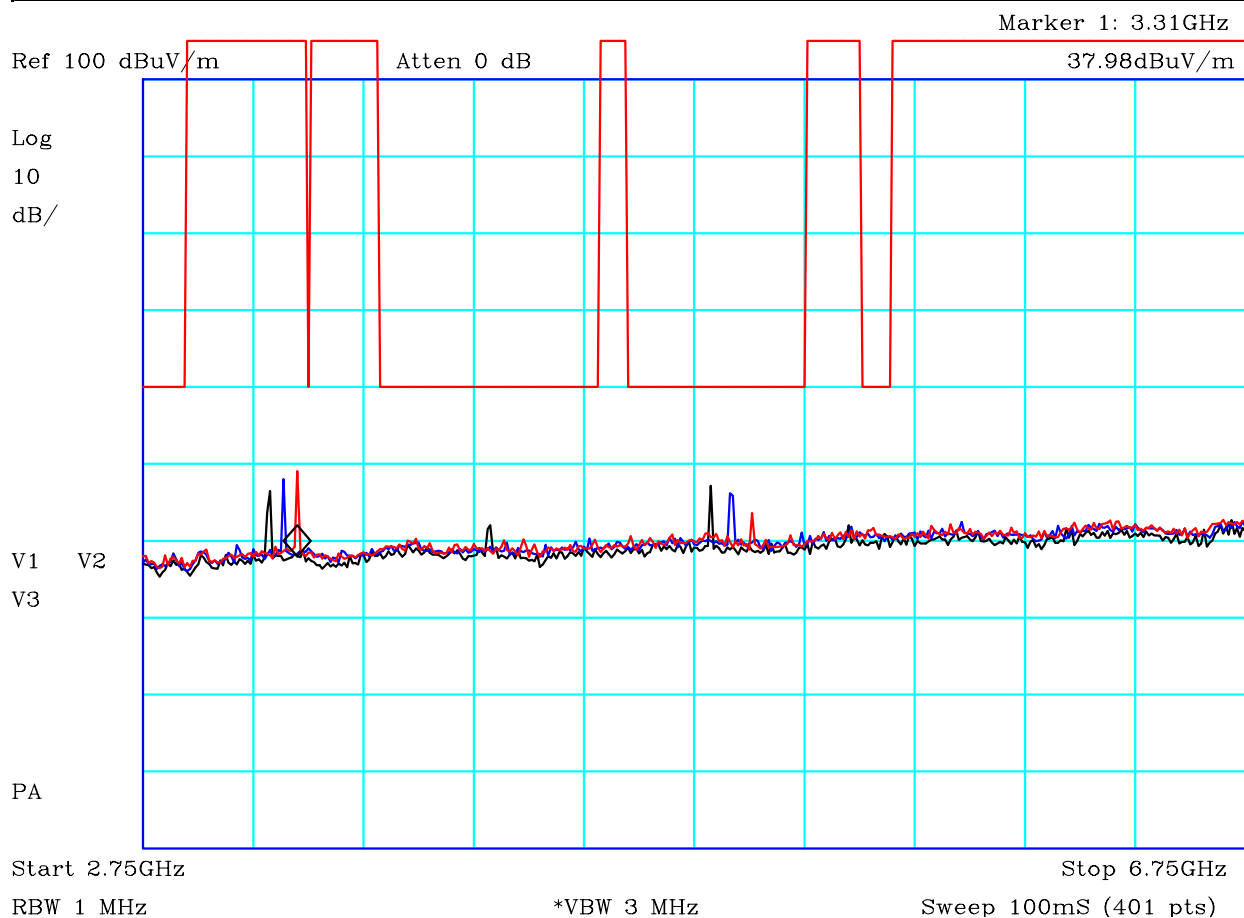
CF1:A23\_3m\_120820 CF2:CBL050\_110107

#### PLOT 4 Radiated Emissions - Bluetooth - Tx - 2GHz to 3GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m Avg	Limit2:(GRN)	FCC Rest'd Bands@1.5m PK
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel Maximised height and angle - upright and flat			
Facility:	Anech_2	Height	1.05,1.2,1.4,1.8m
Distance	1.5m	Polarisation	H
Angle	0-360	File:	H39186B2
Mode:	Bluetooth	Modification State:	0
		Analyser:	R9

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	Test No: <b>T5115</b>	<b>Test Report</b>	Page: 18 of 28




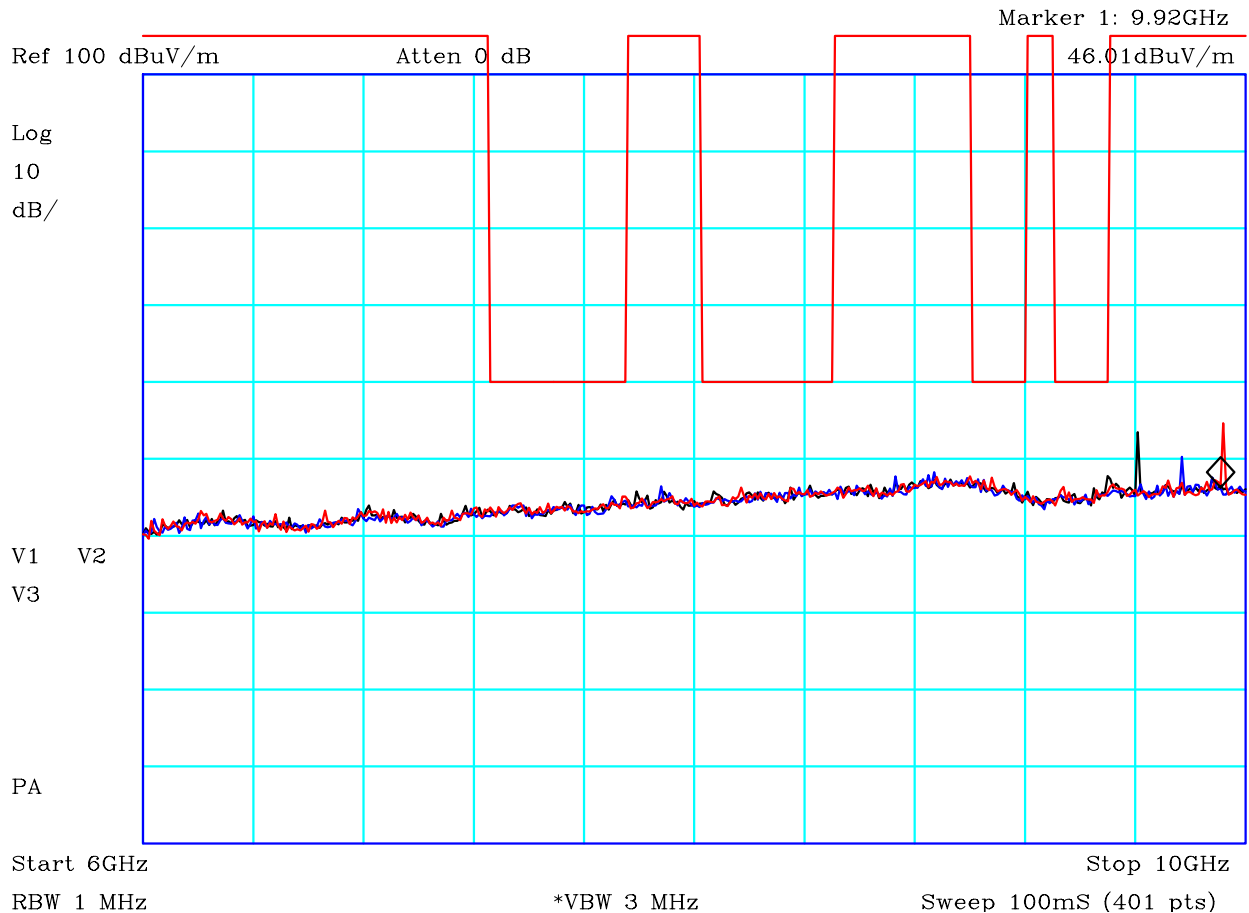
CF1:A23\_3m\_120820   CF2:CBL050\_110107   CF3:PRE10\_120627   CF4:RFF01\_120716

## PLOT 5 Radiated Emissions - Bluetooth - Tx - 2.75GHz to 6.75GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel Maximised height and angle - upright and flat			
Facility:	Anech_2	Height	1.05,1.2,1.4,1.8m
Distance	1.5m	Polarisation	H+V
Angle	0-360	File:	H39186ED
Mode:	Bluetooth	Modification State:	0
Analysed:		Analysed:	R9




	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: 8739A-STP9040 FCC ID: XX6STP9040	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: 19 of 28

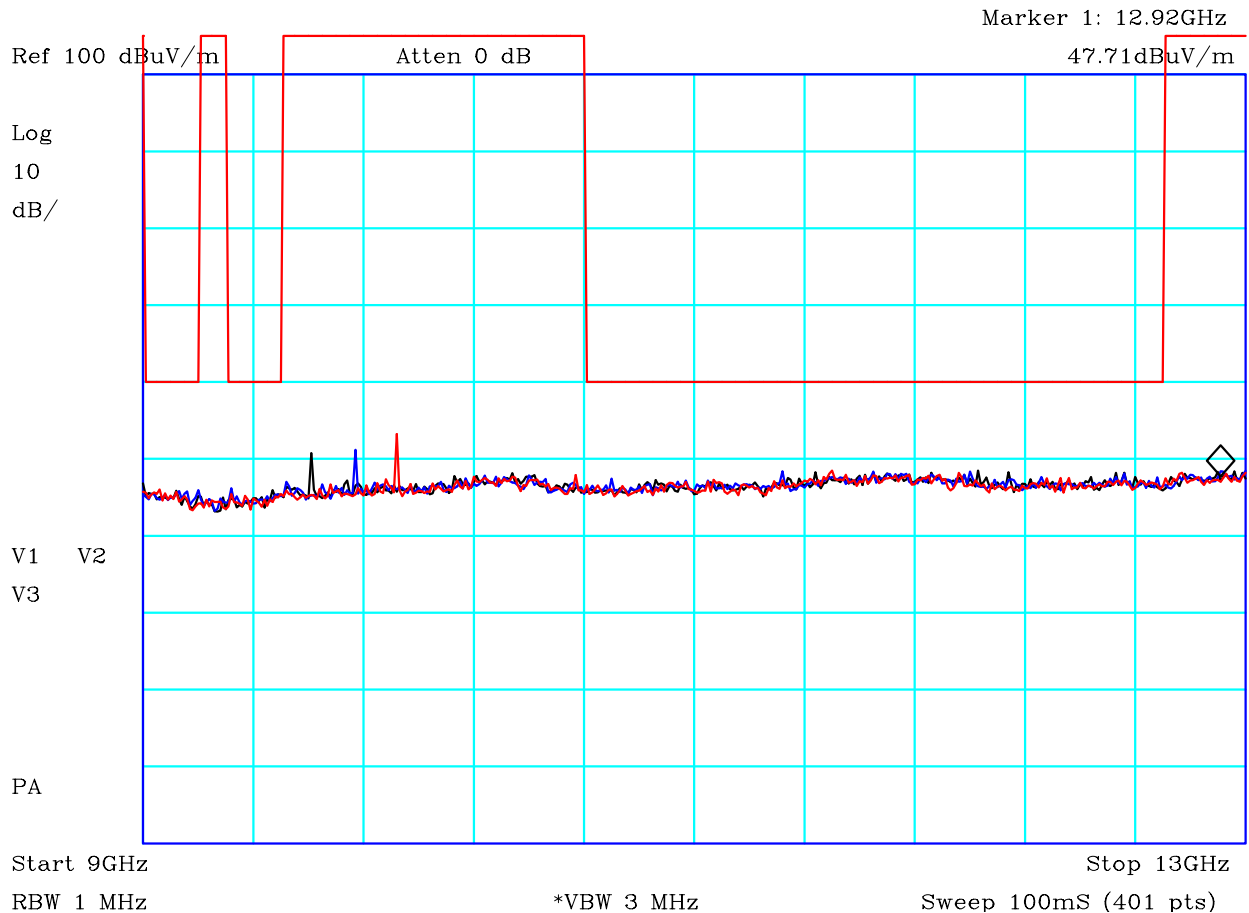


CF1:A23\_3m\_120820   CF2:CBL050\_110107   CF3:PRE10\_120627   CF4:RFF01\_120716

## PLOT 6 Radiated Emissions - Bluetooth - Tx - 6GHz to 10GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel EUT manually rotated 360deg in all axis.			
Facility:	Anech_2	Height	1.5m
Distance	1.5m	Polarisation	V
Angle	0-360	File:	H3918756
		Mode:	Bluetooth
		Modification State:	0
		Analyser:	R9


	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: <b>8739A-STP9040</b> FCC ID: <b>XX6STP9040</b>	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: <b>20 of 28</b>

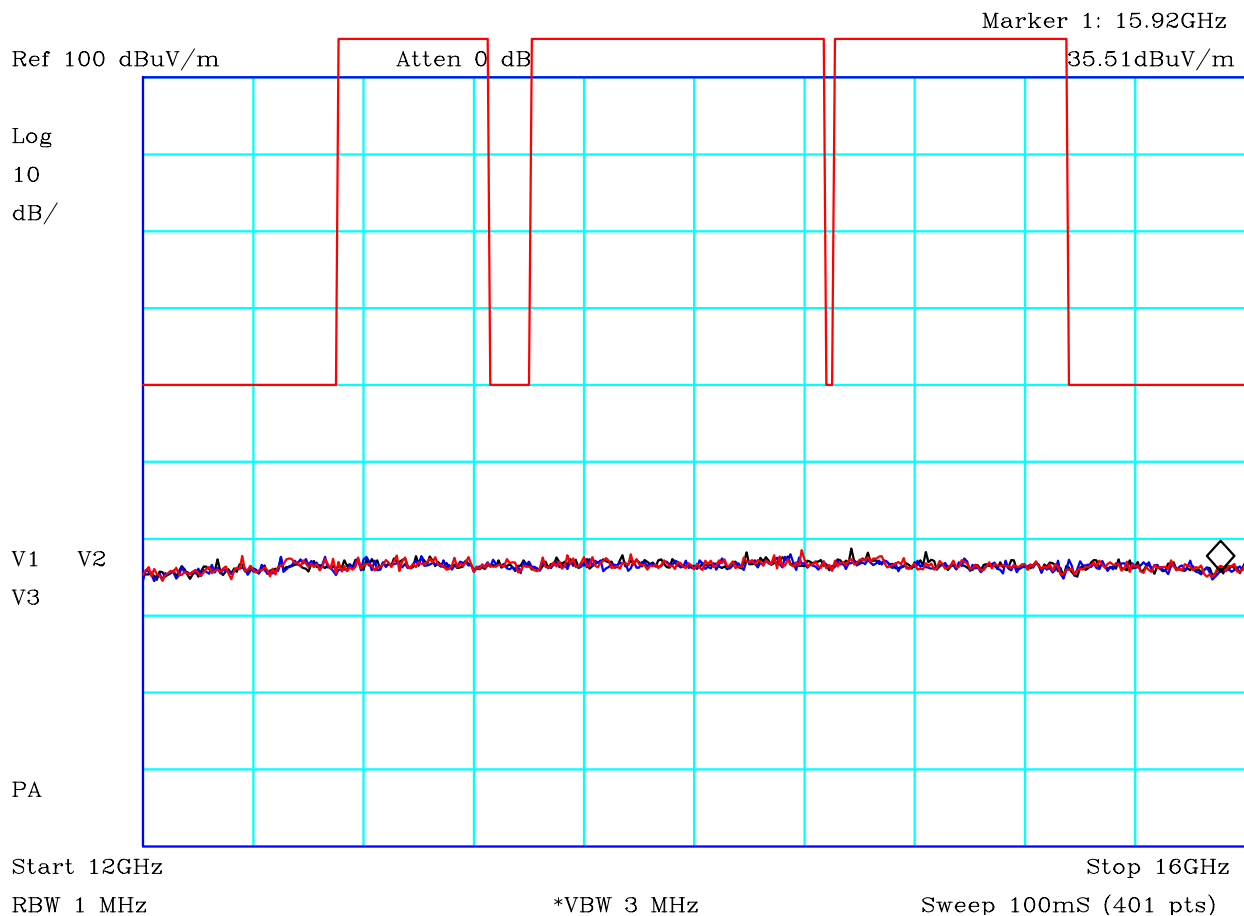


CF1:A23\_3m\_120820 CF2:CBL050\_110107 CF3:PRE10\_120627 CF4:RFF01\_120716

## PLOT 7 Radiated Emissions - Bluetooth - Tx - 9GHz to 13GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel EUT manually rotated 360deg in all axis.			
Facility:	Anech_2	Height	1.5m
Distance	1.5m	Polarisation	V
Angle	0-360	File:	H391875F
		Mode:	Bluetooth
		Modification State:	0
		Analyser:	R9


	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: 8739A-STP9040 FCC ID: XX6STP9040	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: 21 of 28

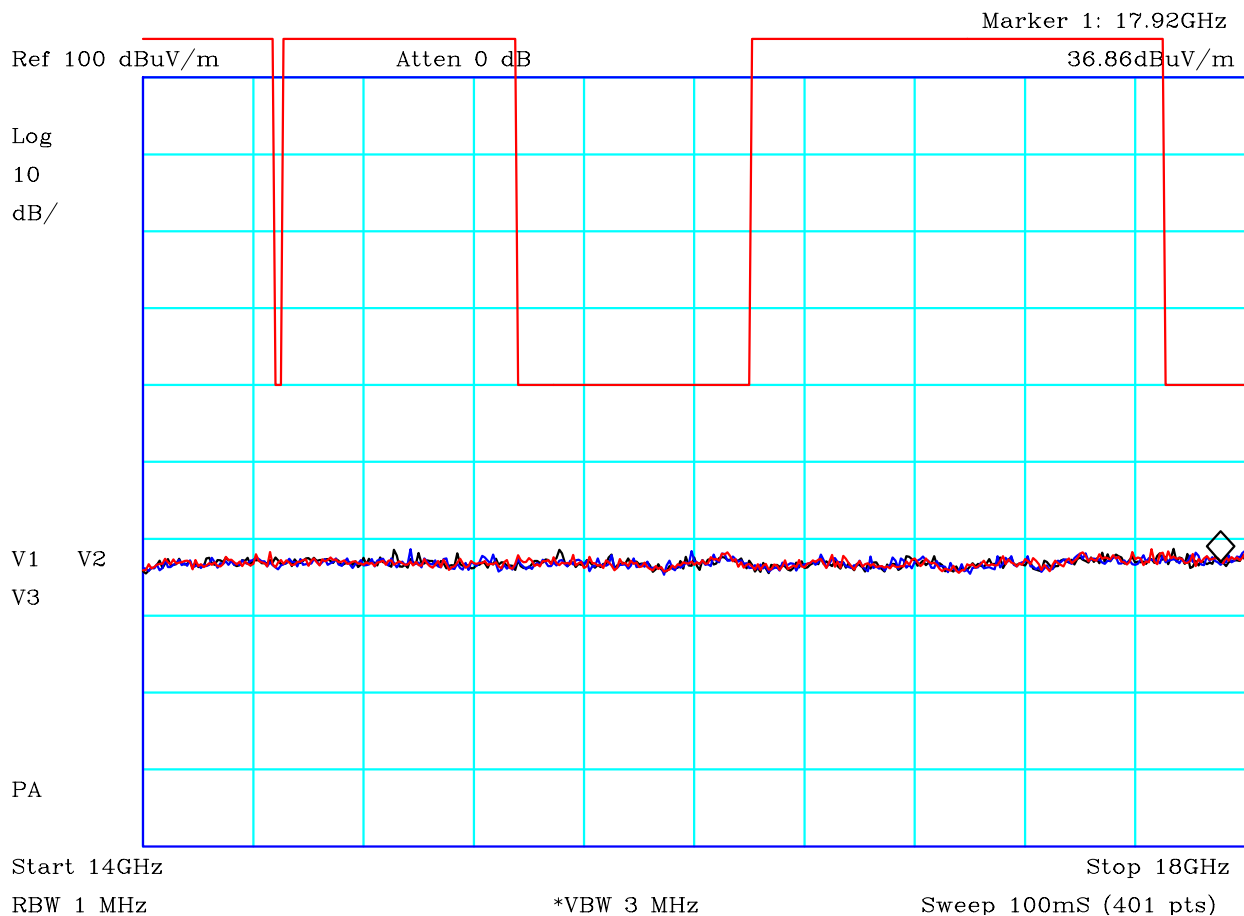


CF1:A22\_3m\_100201 CF2:CBL050\_110107 CF3:PRE12\_120627

## PLOT 8 Radiated Emissions - Bluetooth - Tx - 12GHz to 16GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel EUT manually rotated 360deg in all axis.			
Facility:	Anech_2	Height	1.5m
Distance	1.5m	Polarisation	V
Angle	0-360	File:	H3918782
Mode:	Bluetooth	Modification State:	0
		Analyser:	R9


	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: <b>8739A-STP9040</b> FCC ID: <b>XX6STP9040</b>	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: <b>22 of 28</b>

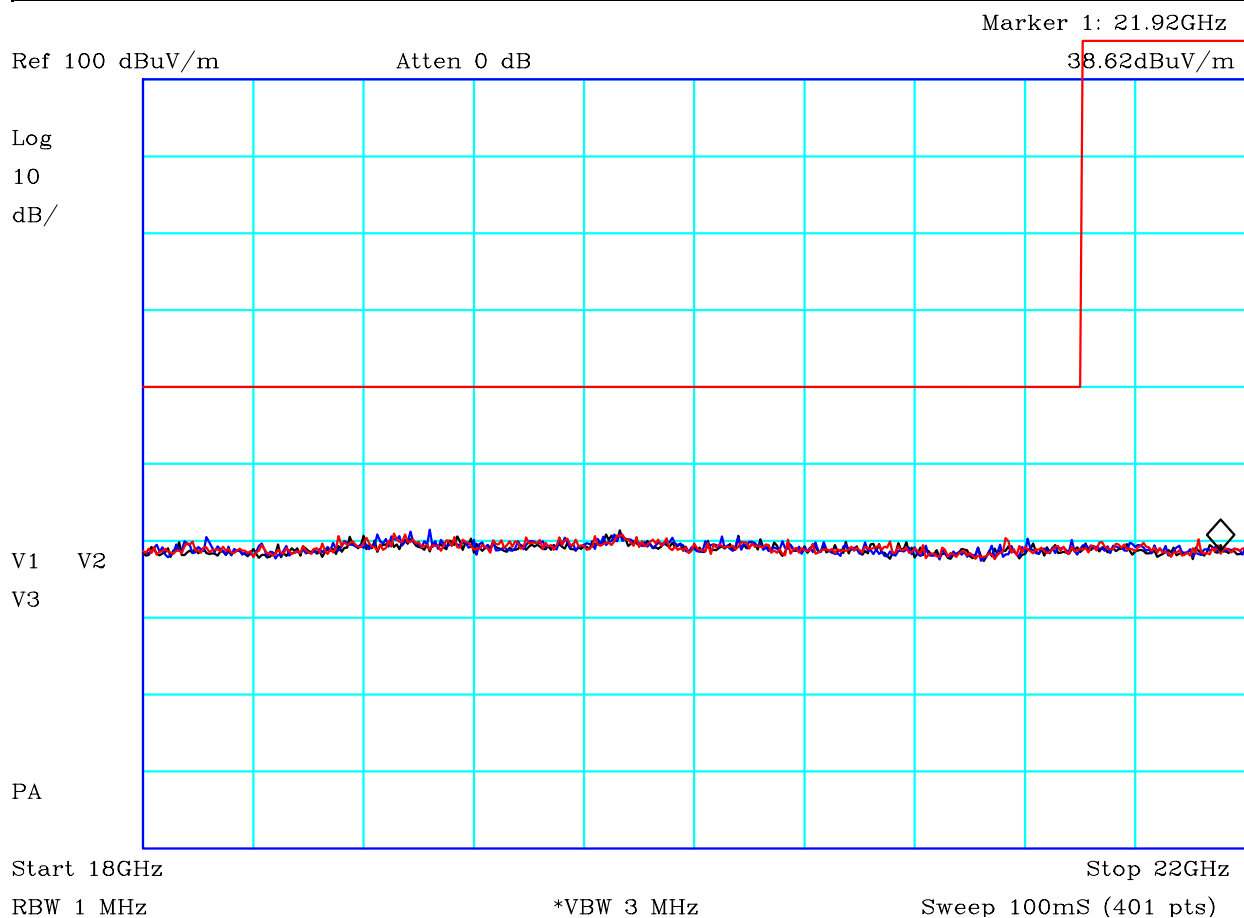


CF1:A22\_3m\_100201 CF2:CBL050\_110107 CF3:PRE12\_120627

## PLOT 9 Radiated Emissions - Bluetooth - Tx - 14GHz to 18GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel EUT manually rotated 360deg in all axis.			
Facility:	Anech_2	Height	1.5m
Distance	1.5m	Polarisation	V
Angle	0-360	File:	H3918793
Mode:	Bluetooth	Modification State:	0
Analysed:		Analysed:	R9

	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: <b>8739A-STP9040</b> FCC ID: <b>XX6STP9040</b>	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: <b>23 of 28</b>




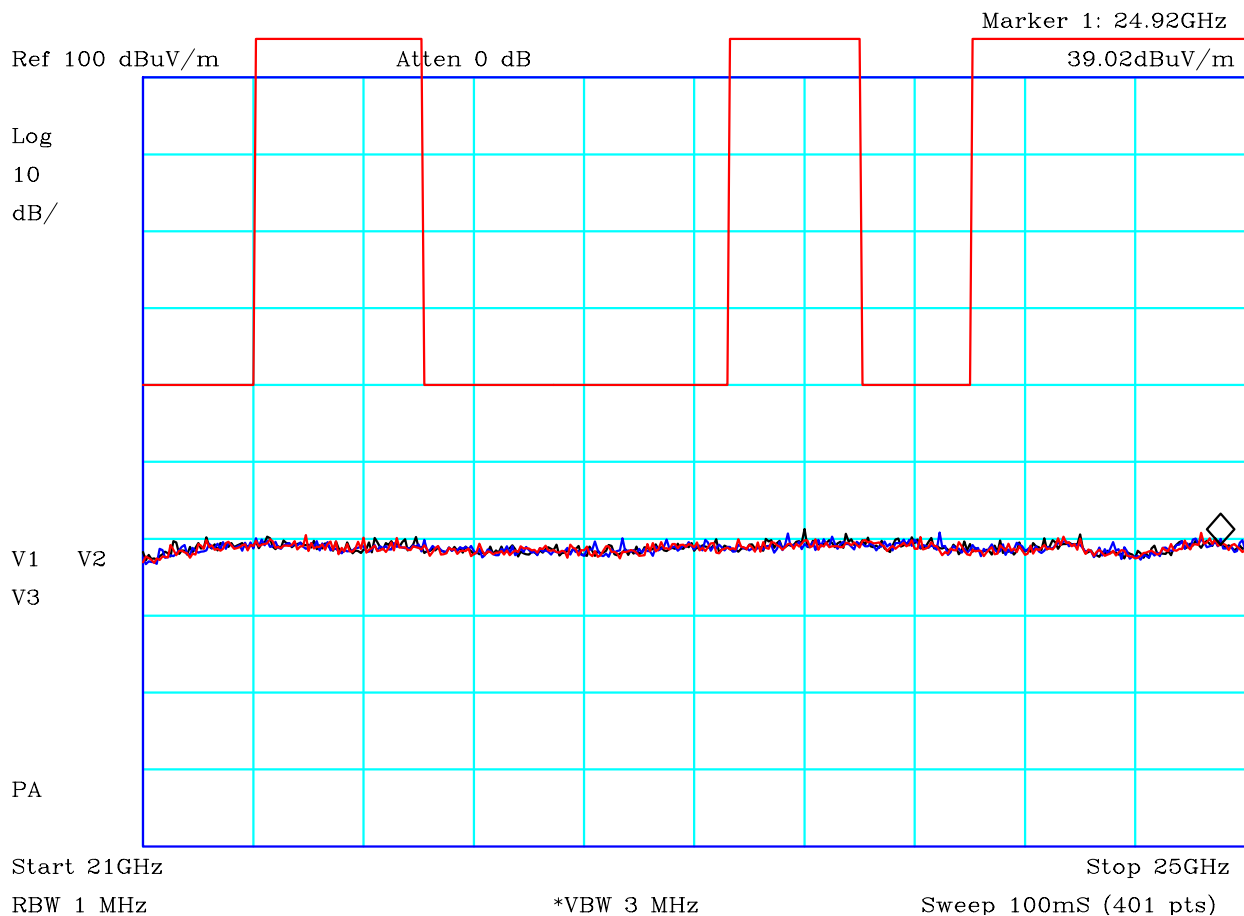
CF1:A20\_3m\_100201 CF2:CBL050\_110107 CF3:PRE16\_120627

## PLOT 10 Radiated Emissions - Bluetooth - Tx - 18GHz to 22GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel EUT manually rotated 360deg in all axis.			
Facility:	Anech_2	Height	1.5m
Distance	1.5m	Polarisation	V
Angle	0-360	File:	H39187A4
		Mode:	Bluetooth
		Modification State:	0
		Analyser:	R9




	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: <b>8739A-STP9040</b> FCC ID: <b>XX6STP9040</b>	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: <b>24 of 28</b>

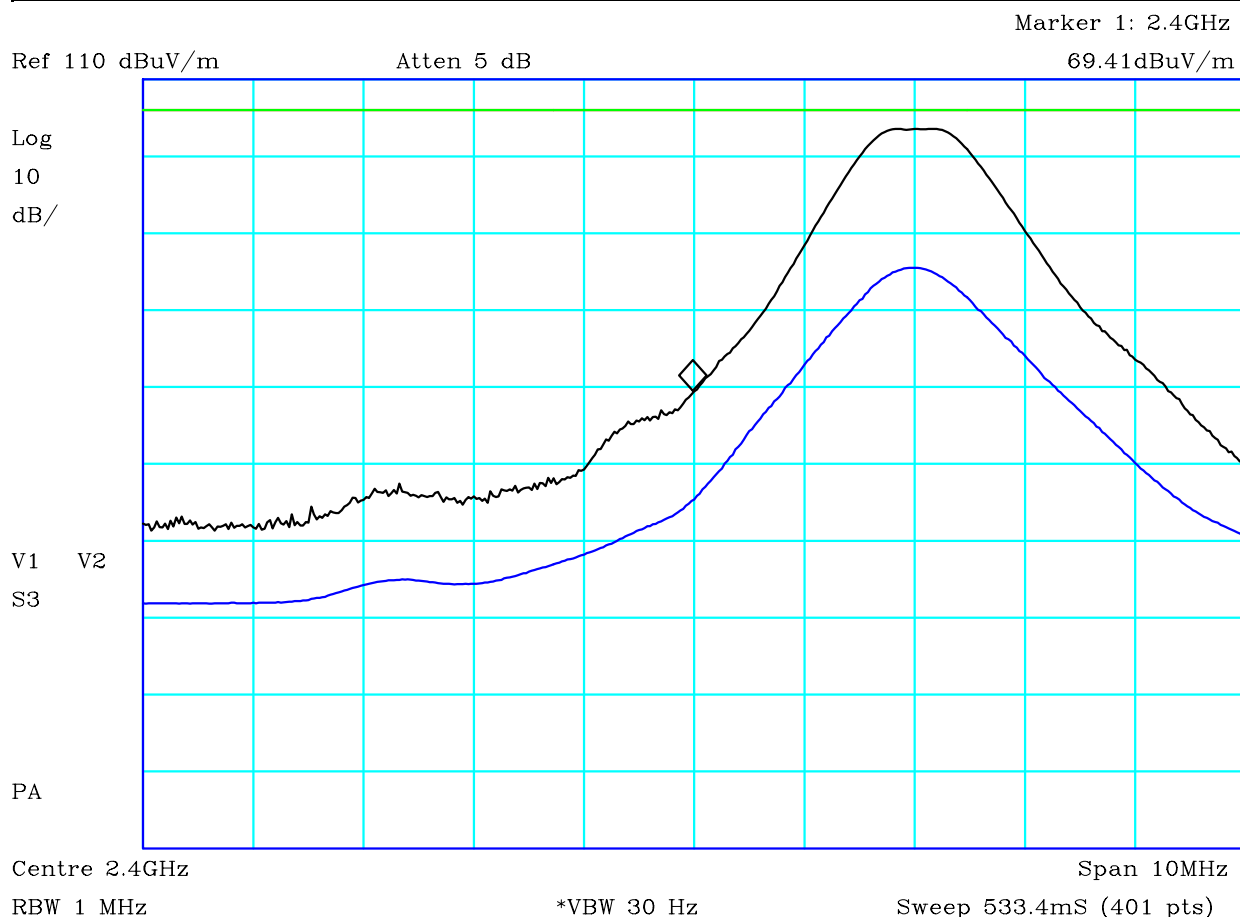


CF1:A20\_3m\_100201 CF2:CBL050\_110107 CF3:PRE16\_120627

## PLOT 11 Radiated Emissions - Bluetooth - Tx - 21GHz to 25GHz

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:	
Limit3:		Limit4:	
Black: Low channel Blue: Mid channel Red: High channel EUT manually rotated 360deg in all axis.			
Facility:	Anech_2	Height	1.5m
Distance	1.5m	Polarisation	V
Angle	0-360	File:	H39187AC
		Mode:	Bluetooth
		Modification State:	0
		Analysers:	R9


	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: <b>8739A-STP9040</b> FCC ID: <b>XX6STP9040</b>	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: <b>25 of 28</b>

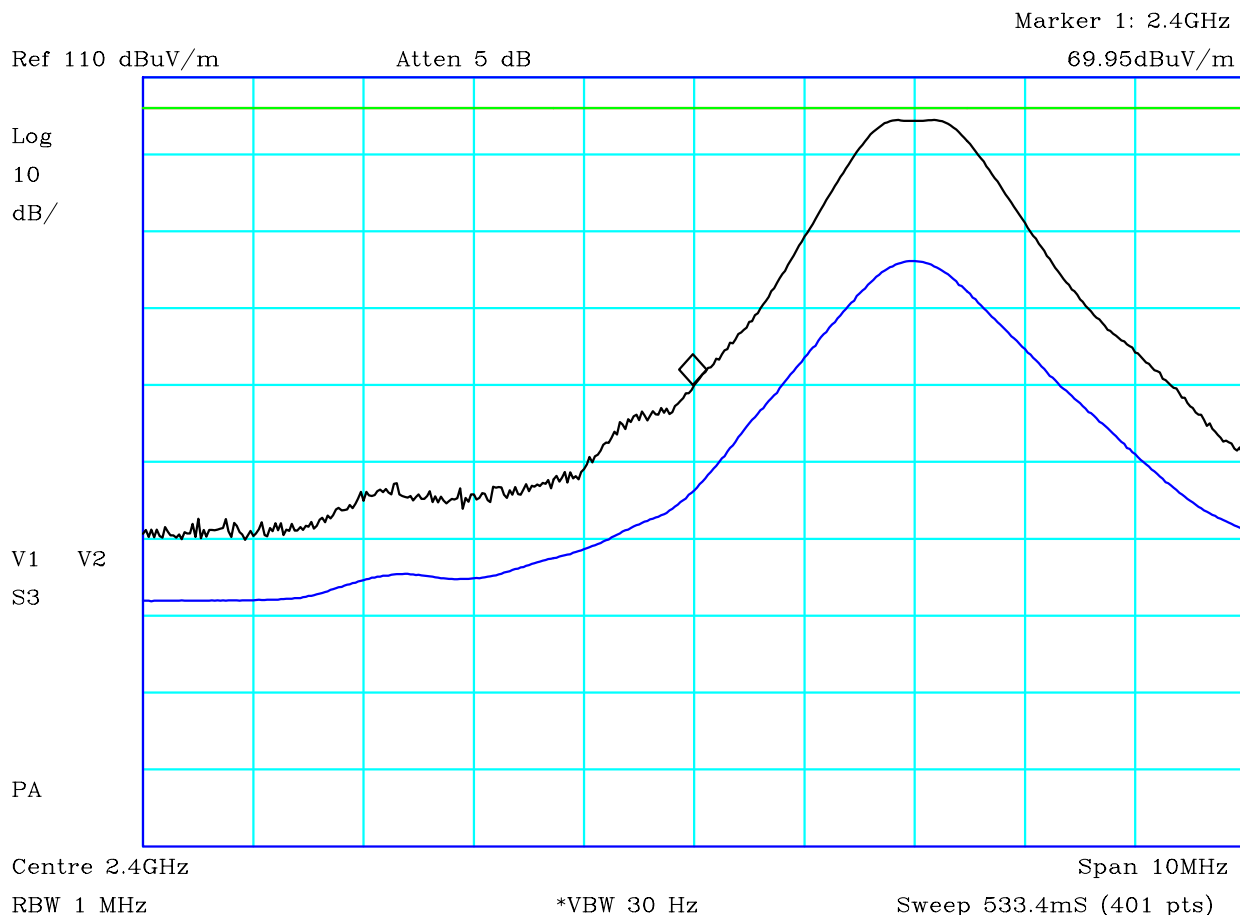


CF1:A23\_3m\_120820 CF2:CBL050\_110107

## PLOT 12 Radiated Emissions - Lower Band Edge - Vertical

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:(GRN)	FCC Rest'd Bands@1.5m PK
Limit3:		Limit4:	
Low Channel Black: 3MHz Video BW (peak reading) Blue: 30Hz Video BW (average) Maximised height and angle - upright and flat - Vertical			
Facility:	Anech_2	Height	1.05
Distance	1.5m	Polarisation	V
Angle	Maximised	File:	H39185CA
		Mode:	Bluetooth
		Modification State:	0
		Analyser:	R9


	Report No: <b>R3297</b> Issue No: <b>1</b>	<b>IC ID: 8739A-STP9040</b> <b>FCC ID: XX6STP9040</b>	
	Test No: <b>T5115</b>		<b>Test Report</b>

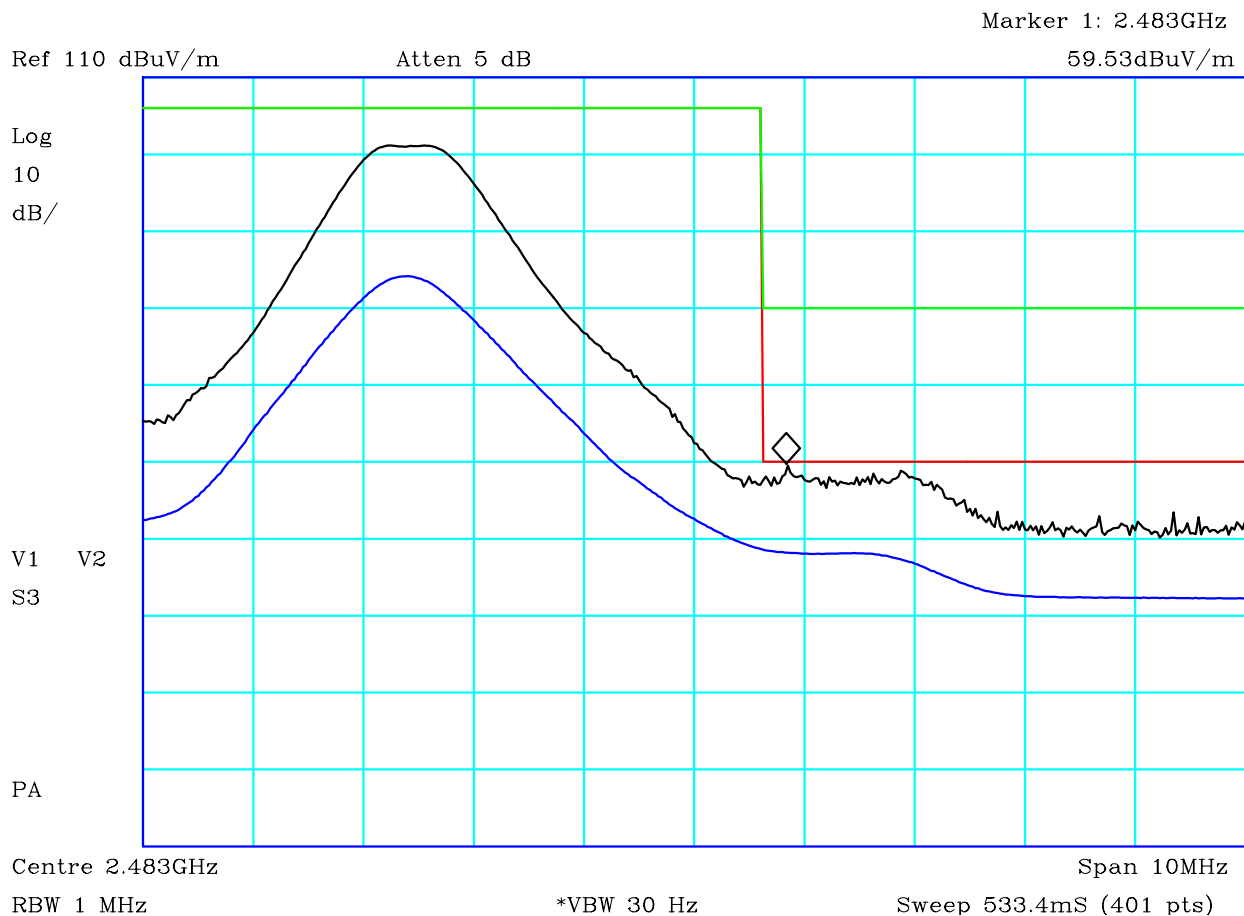


CF1:A23\_3m\_120820 CF2:CBL050\_110107

### PLOT 13 Radiated Emissions - Lower Band Edge - Horizontal

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m	Limit2:(GRN)	FCC Rest'd Bands@1.5m PK
Limit3:		Limit4:	
Low Channel Black: 3MHz Video BW (peak reading) Blue: 30Hz Video BW (average) Maximised height and angle - upright and flat - Horizontal			
Facility:	Anech_2	Height	1.05
Distance	1.5m	Polarisation	H
Angle	Maximised	File:	H39185D2
Mode:	Bluetooth	Modification State:	0
Analysed:		Analysed:	R9


	Report No: <b>R3297</b> Issue No: <b>1</b>	IC ID: <b>8739A-STP9040</b> FCC ID: <b>XX6STP9040</b>	
	Test No: <b>T5115</b>	<b>Test Report</b>	Page: <b>27 of 28</b>



CF1:A23\_3m\_120820 CF2:CBL050\_110107

## PLOT 14 Radiated Emissions - Upper Band Edge - Vertical

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5mAVG	Limit2:(GRN)	FCC Rest'd Bands@1.5m PK
Limit3:		Limit4:	
High Channel Black: 3MHz Video BW (peak reading) Blue: 30Hz Video BW (average) Maximised height and angle - upright and flat - Vertical			
Facility:	Anech_2	Height	1.05
Distance	1.5m	Polarisation	V
Angle	Maximised	File:	H39185C2
		Mode:	Bluetooth
		Modification State:	0
		Analyser:	R9

	Report No: <b>R3297</b> Issue No: <b>1</b>	<b>IC ID: 8739A-STP9040</b> <b>FCC ID: XX6STP9040</b>	
	Test No: <b>T5115</b>		<b>Test Report</b>

Marker 1: 2.484GHz

Ref 110 dBuV/m

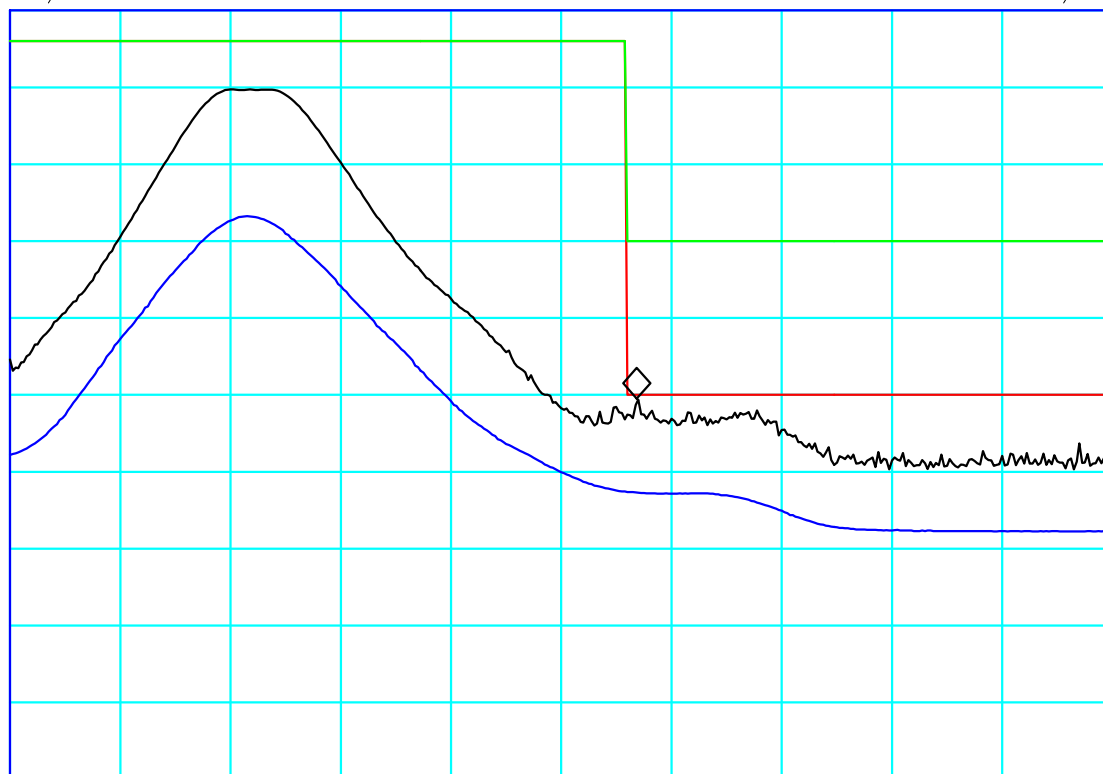
Atten 5 dB

59.39dBuV/m

Log  
10  
dB/

V1 V2  
S3

PA



Centre 2.483GHz

Span 10MHz

RBW 1 MHz

\*VBW 30 Hz

Sweep 533.4mS (401 pts)

CF1:A23\_3m\_120820 CF2:CBL050\_110107

## PLOT 15 Radiated Emissions - Upper Band Edge - Horizontal

Company:	Sepura	Product:	STP9040
Date:	18/10/13	Test Eng:	Dave Smith
Method:	ANSI C63.4	Method:	
Limit1:(RED)	FCC Rest'd Bands@1.5m AVG	Limit2:(GRN)	FCC Rest'd Bands@1.5m PK
Limit3:		Limit4:	
High Channel Black: 3MHz Video BW (peak reading) Blue: 30Hz Video BW (average) Maximised height and angle - upright and flat - Horizontal			
Facility:	Anech_2	Height	1.05
Distance	1.5m	Polarisation	H
Angle	Maximised	File:	H39185B4
Mode:	Bluetooth	Modification State:	0
		Analyser:	R9

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