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	Test No:	T5484	Test Report	Page:	1 of 93



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#### **REPORT ON ELECTROMAGNETIC COMPATIBILITY TESTS**

Performed at: TWENTY PENCE TEST SITE

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

> > on

**Sepura PLC** 

### STP9080/STP9280

#### dated

#### 4th November 2014

#### **Document History**

Issue	Date	Affected page(s)	Description of modifications	Revised by	Approved by
1	04/11/14		Initial release		

Based on report template: v090319

	Report No: Issue No:	R3406 1	FCC ID: XX	6STP9080 / XX6S1	ГР9280		
	Test No:	T5484		Test Report		Page:	2 of 93
Equi	oment Unde	er Test (EUT	):	STP9080/ST	FP9280		
Test	Commissio	ned by:		Sepura PLC Radio House St Andrews Cambridge Cambridgesh CB4 1GR	Road hire		
Repr	esentative:			Steve Wood			
Test	Started:			27th August	2014		
Test	Completed	:		30th Octobe	er 2014		
Test	Engineer:			Dave Smith			
Date	of Report:			4th Novembe	er 2014		
Writ	ten by:	Dav	ve Smith	Checked by:	Der	ek Barlow	
Sign	ature:	D-A	Smith	Signature:	DE	Sarta	$\sim$
Date	:	4th Nov	vember 2014	Date:	4th No	vember 20	14

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.

Т

# **Test Standards Applied**

Part 90 of CFR47	Private Land Mobile Radio Services	
		I

CFR 47	Code of Federal Regulations: Pt 15 Subpart B- Radio Frequency Devices -
Class B	Unintentional Radiators

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	Test No:	T5484	Test Report	Page:

### **Emissions Test Results Summary**

Part 90					PASS
Test	Port	Method	Limit	PASS/FAIL	Notes
Output		90.205	90.205(h)	No	#1
Power				Limit	
Radiated					
Output	antenna	90.205	90.205(h)	No	#1
Power		2.1046		Limit	
Conducted					
Types of	antenna	90.207	Specified by		
Emissions		2.1047	manufacturer		
Bandwidth	antenna	90.209	90.209(b)(5)	PASS	#2
		2.1049			
Emissions		90.210	90.221(d)	PASS	#3
Masks		2.1051			
Radiated					
Emissions	antenna	90.210	90.221(d)	PASS	#3
Masks		2.1051			
Conducted					
Frequency	antenna	90.213	90.213	PASS	
Stability		2.1055			
Frequency	antenna	90.214	90.214	N/A	#4
Transient					
Behaviour					
Adjacent		90.221	90.221(b)	PASS	
Channel					
Power					

specs canadav111211

CFR 47					PASS
Test	Port	Method	Limit	PASS/FAIL	Notes
Conducted Emissions	ac power	ANSI C63.4:2003	FCC(B)	N/A	#5
Radiated Emissions		ANSI C63.4:2003	FCC(B)	PASS	

specs\_fccv100412

#1 There is no specific limit on output power.

- #2 The additional note 6 was applied which allows a bandwidth of up to 22kHz providing the additional Adjacent Channel Power requirements are met.
- #3 The additional note 5 was applied which only stipulates limits 75kHz from the carrier providing the additional Adjacent Channel Power requirements are met.
- #4 Not applicable for devices operating in the 809MHz to 824MHz and 854MHz to 869MHz bands.
- #5 Not applicable as the EUT is not mains powered.

# This Report shows that the EUT met all of the requirements for the tests performed - as shown above.

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#### 1 EUT Details

#### 1.1 General

The EUT was a TETRA Voice + Data Hand Portable. The transmitter can operate over the following frequency bands:

809MHz to 824MHz - in Trunked-Mode Operation (TMO) 854MHz to 869MHz - in Direct-Mode Operation (DMO)

The receiver can operate over the following frequency bands:

854MHz to 869MHz

Measurements were made at the top, near middle and bottom of the appropriate frequency ranges:

Bottom:	809 MHz
Middle:	816.5 MHz
Top:	824 MHz

and

Bottom:	854 MHz
Middle:	861.5 MHz
Тор:	869 MHz

The nominal output power is 32.5dBm (1.8W).

The product can be used on a standalone basis in which case it is powered from an internal battery. It can also be used in conjunction with a Car Kit in which case it is powered from a lead acid vehicle battery with nominal voltage of 13.2V.

This report additionally includes radiated emissions measurements:

- o with a Remote Speaker Microphone (RSM) connected;
- o in a Car Kit configuration.

All tests were performed on the STP9080 which is the fully featured unit. For the STP9280 variant it was only considered necessary to perform receiver mode radiated emissions measurements.

Unless otherwise stated, tests were performed with nominal power supply voltage.

The product is intended to comply with the FCC part 90 requirements - specifically the sections applicable to Tetra devices.

Radiated field strength tests were performed at the dB Technology Test Site Registered with the FCC: Registration number: 90528.

#### **Output Stage Settings:**

With reference to the requirements of **2.1046(a)** and **2.1033(c)(8)**, the DC voltages and currents in the elements of the final radio are regulated within the product and not user variable.

#### **Modulation Characteristics:**

With reference to the requirements of **2.1047**, the device uses digital modulation which is not proportional in any way to the level or frequency of the audio signal. We consider that compliance with the relevant Mask of Part 90 using pseudo random digital data is sufficient to adequately demonstrate the Modulation Characteristics as per Section 2.1047.

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#### **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	Original sample as supplied.	
1	R104 changed from 82R to 1K. This resistor change adjusts the bias of the temperature compensation diodes.	

#### 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	Transmitting on selected channel.
2	Receiving on selected channel.

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		1			
Item	Manufacturer	Model	Description	Serial No:	Notes
1	Sepura	STP9080	TETRA Hand Portable	2PN701424G875ZI	
2	Sepura	300 00390	Antenna		
3	Sepura	300 00797	CarKit		
4	Sepura	300 00657	Hands Free Kit		
5	Sepura	300 00492	Handset		
6	Sepura	300 00796	Cradle		
7	Sepura	300 00719	Speaker		
8	Kingshill	18V10CA	Bench Power Supply	566	
	1		1		•

The same sample of Tetra Hand Portable was used for the conducted antenna tests.

The serial number of the STP9280 was 2PN701424G875Z0.

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Photograph 1 STP9080: Connected to Analyser

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Photograph 2 Standalone: Radiated Emissions - Upright



Photograph 3 Standalone: Radiated Emissions - Flat

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Photograph 4 With RSM: Radiated Emissions - Upright



Photograph 5 With RSM: Radiated Emissions - Flat

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Photograph 6 Car Kit: Radiated Emissions - Front



Photograph 7 Car Kit: Radiated Emissions - Back

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Photograph 8 STP9280: Radiated Emissions - Front



Photograph 9 STP9280: Radiated Emissions - Back

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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	Cal
			Date	Interval
A19	EMCO 3115 DR Guide (1-18GHz)	2431	06/02/2014	1 year
A24	Chase X-wing Bilog CBL6144 26MHz-3GHz	27590	28/10/2013	1 year
A30	Schwarzbeck MiniBicon (30MHz to 1GHz)	9115-180	21/01/2013	3 years
A5	Chase Bilog CBL6111A	1760	03/03/2014	1 year
A8	EMCO 3115 DR Guide	6070	11/03/2014	1 year
PM6	Marconi 6960B RF Power Meter	236923/003	17/12/2013	1 year
PRE10	LUCIX 100M-20G pre-amp	10	19/08/2014	1 year
PS10	Marconi 6910 RF Power Sensor (-30dBm / +20dBm) 10MHz to 20GHz	5009	17/12/2013	1 year
PS9	Marconi 6912 RF Power Sensor (-30dBm / +20dBm) 30kHz to 4.2 GHz	973	17/12/2013	1 year
R13	Anritsu MS2830A	6201180830	30/01/2014	1 year
R4	R&S ESVS10	843744/002	13/12/2013	1 year
R8	Agilent E7405A Spectrum Analyser	MY44212494	22/05/2014	1 year
R9	Agilent E7405A Spectrum Analyser	MY45110758	19/11/2013	1 year
RFF15	Band Pass Filter 1GHz to 2GHz	15	13/08/2014	1 year
RFF17	Low Pass RF Filter 550MHz	17	13/08/2014	1 year
RFF22	High Pass Filter - 1.35GHz (10GHz) MicroTronics HPM13017	033	13/08/2014	1 year
SG13	HP 8648C 150kHz-3.2GHz Signal Generator	3426A01238	01/07/2014	1 year
SG16	Marconi 6203 Microwave Test Set (10MHz - 26.5GHz)	236252/025	01/08/2013	2 years
FSU	R&S FSU Spectrum Analyser	200088	14/06/2012	3 years
TTS	IFR 2968 Tetra Test Set	296501/061	19/12/2013	2 years

The Tetra Test Set and FSU are owned by Sepura.

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#### 3 Test Methods

#### 3.1 Antenna Conducted Carrier Power

The antenna output is connected to a spectrum analyser via a suitable PAD. The bandwidth on the spectrum analyser is set to greater than the EUT occupied bandwidth. A peak measurement is recorded. Additional measurements are made with antenna output connected to a power meter providing average measurements.

#### 3.2 Antenna Conducted Transmitter Unwanted Emissions

Measurements are made with the antenna output connected to a spectrum analyser via a suitable PAD. Sweeps are made over the specified frequency ranges . The limit is set relative to the measured carrier power. A peak detector is used.

#### 3.3 Antenna Conducted Occupied Bandwidth

Measurements are made with the antenna output connected to a spectrum analyser via a suitable PAD. Sweeps are made with a 300Hz Resolution Bandwidth and a 1kHz Video Bandwidth. A peak detector is used. Markers are used to determine the 99% power bandwidth.

#### 3.4 Antenna Conducted Adjacent Channel Power

Measurements are made with the antenna output connected to an Tetra Test Set via a suitable PAD. The Analyser is set to make adjacent channel power measurements using the pre-configured settings for Tetra with 25 kHz channel spacing amd 18kHz channel bandwidth.

#### 3.5 Frequency Stability

The EUT is placed in an environmental chamber. The temperature inside the chamber is set to the required level and allowed to stabilise.

For DMO mode the antenna output is connected to a spectrum analyser via a suitable PAD. The EUT is set to transmit with constant carrier (at a frequency 2.25kHz above channel centre frequency). The frequency is measured using the frequency counter function of the spectrum analyser.

For TMO mode the antenna output is connected to a Tetra Test Set. The EUT is set to transmit using normal burst operation. the frequency error, as indicated by the Tetra Test Set, is recorded.

Measurements are made at the specified temperature and over the required voltage supply range of the EUT.

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#### **3.6** Radiated Transmitter Emissions (Substitution Method)

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 EUT cables were manipulated in an attempt to produce maximum emissions. 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 using a substitution method. Maximised emission 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.

The EUT is then replaced with a calibrated reference antenna fed from a signal generator. The level fed into the reference antenna is measured with a power meter. Measurements are made to determine the power output of the signal generator required to give the same emission levels as were observed from the EUT.

The radiated power from the EUT is calculated as:

Signal Level	+ Gain of	+ Radiated Level	<ul> <li>Radiated Level</li> </ul>
fed into Reference	Reference	From EUT	From Reference
Antenna	Antenna		Antenna

For example, assuming following measurements:

Signal Level fed into Reference Antenna	=	-14.3dBm
Gain of Reference Antenna	=	7.1 dBi
Radiated Level from EUT (i.e. Level at Measuring Receiver)	=	37 dBuV
Radiated Level from Reference Antenna (i.e. Level at Measuring Receiver)	=	61.5 dBuV
Then the Radiated Power from the EUT = $-14.3 + 7.1 + 37 - 61.5$ dBm (isotropic	;)	

= - 31.7 dBm (isotropic)

#### 3.7 Receiver Radiated Emissions

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 EUT cables were manipulated in an attempt to produce maximum emissions. 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.

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#### 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 Conducted Antenna Output Power

Factor Set	1:					
Factor Set	2:					
Factor Set	3:					
l est Equip	ment: R13 PS10 PIVI6					
Conducted E	missions (Signal)					
Company:	Sepura PLC		Product: STP9080/STP9280			
Date:	24/09/2014		Test Eng: Dave Smith			
Ports:	antenna					
Test:	90.205 u	sing limits of	90.205(h)			
Test:		sing limits of				
Notes	u	Com	ments and Observations			
	Spectrum anlayse	r results using a	a peak detector are shown in plots 1 to 6.			
	Measurements w	ere also made u	sing a power meter with an average detector.			
	Measurements w	ere made with o	continuous modulation.			
	Taking into account the loss of the cable and attenuators the following measurements were made:					
	Channel	Peak dBm	Average dBm			
	809 MHz	36.5	33.8			
	816.5 MHz	36.4	33.7			
	824 MHz	36.6	33.7			
	854 MHz	36.4	33.6			
	861 5 MHz	36.4	33.7			
		50.4				
	869 MHz	36.5	33.7			
	1					

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### 4.2 Conducted Antenna Occupied Bandwidth

Factor Set 2:	
Factor Set 3:	
Test Equipment: R9	

Conducted	Emissions (Signal)					
Company:	Sepura PLC			Prod	luct:	STP9080/STP9280
Date:	24/09/2014			Test	t Eng:	Dave Smith
Ports:	antenna			00	2001	
Ports:	90.209	usinę	j limits of	90	.209(	(0)(5)
Test:		using	g limits of			
Notes			Со	mments ar	nd Ob	oservations
	Measuremer Spectrum an Using the 99 measuremen	nts were alyser ro % Band ts were	made with esults are s power fund recorded:	n continuou hown in p	us mo lots 7 e spec	odulation applied. 7 to 12. ctrum analyser, the following
	809 MHz	20.76	kHz			
	816.5 MHz	20.76	kHz			
	824 MHz	20.72	kHz			
	854 MHz	20.76	kHz			
	861.5 MHz	20.76	KHZ			
	869 MHz	20.76	kHz			
	Limit:					
	Using note 6 (providing A	of Part djacent	90.209, t Channel Po	he limit is ower requi	22kH reme	lz nts are met).
	PASS					
	I					

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	20 of 93

# 4.3 Frequency Stability - DMO Mode - Absolute Frequency Measurements

Factor Set 1:	
Factor Set 2:	
Factor Set 3:	
Test Equipment: R13	
FrequencyStability	
<sup>Company:</sup> Sepura PLC	Product: STP9080/STP9280
Data: 00/10/2014	Tast Engi Davia Craith

	09/10/2014			Test Eng: Dave	Smith				
::	antenna		- lineite of	00.010					
	90.213	usin	g limits of	90.213					
		usin	g limits of						
;		Comments and Observations							
	DMO Freq	uency (as	recorded from S	Spectrum Analys	er Frequency Counter)				
			854MHz	861.5MHz	869MHz				
			Channel	Channel	Channel				
	-30.0°C	6.4V	854.002144	861.502161	869.002171				
		7.4V	854.002150	861.502155	869.002170				
	-20.0°C	6.4V	854.002114	861.502116	869.002119				
		7.4V	854.002110	861.502107	869.002106				
	-10.0°C	6.4V	854.002150	861.502144	869.002138				
		7.4V	854.002129	861.502127	869.002124				
	0.0°C	6.4V	854.002203	861.502208	869.002209				
		7.4V	854.002192	861.502204	869.002210				
	10.0°C	6.4V	854.002099	861.502118	869.002130				
		7.4V	854.002207	861.502208	869.002212				
	20.0°C	6.4V	854.002093	861.502101	869.002117				
		7.4V	854.002051	861.502071	869.002046				
	30.0°C	6.4V	854.001985	861.501990	869.001992				
		7.4V	854.002017	861.502008	869.002005				
	40.0°C	6.4V	854.002033	861.502031	869.002026				
		7.4V	854.002031	861.502039	869.002036				
	50.0°C	6.4V	854.001906	861.501921	869.001930				
		7.4V	854.001992	861.502016	869.001996				
	55.0°C	6.4V	854.001906	861.501899	869.001910				
		7.4V	854.001906	861.501899	869.001910				

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	21 of 93

### 4.4 Frequency Stability - DMO Mode - Deviations from Nominal Volt/Temp - ppm

Factor Set 1:	
Factor Set 2:	
Factor Set 3:	
Test Equipment:	R13

Umpany.	Sepura PLC			STP9	080/STP9280					
Date: Ports:	09/10/2014			Test Eng: Dave S	Smith					
Test:	90.213	usina	limits of	90.213						
Ports:										
Test:		using	limits of							
Notes	Comments and Observations DMO Frequency deviation from nominal voltage/temperature - ppm									
			854MHz	861.5MHz	869MHz					
			Channel	Channel	Channel					
	-30.0°C	6.4V	0.109	0.104	0.143					
		7.4V	0.116	0.098	0.142					
	-20.0°C	6.4V	0.074	0.052	0.083					
		7.4V	0.069	0.042	0.069					
	10.000	0.41/	0.115	0.005	0.105					
	-10.0°C	6.4V	0.115	0.085	0.105					
		7.4V	0.091	0.005	0.089					
	0.0°C	6.4V	0.177	0.159	0.187					
		7.4V	0.165	0.154	0.188					
	10.0°C	6 4 V	0.057	0.055	0.096					
	10.0 0	0.4V 7.4V	0.183	0.055	0.190					
		,	01100	01100	01100					
	20.0°C	6.4V	0.049	0.035	0.081					
		7.4V	0.000	0.000	0.000					
	30.0°C	6 4V	-0.077	-0 094	-0.062					
		7.4V	-0.040	-0.073	-0.048					
	40.0°C	6.4V	-0.021	-0.047	-0.024					
		7.4V	-0.023	-0.037	-0.012					
	50.0°C	6.4V	-0.170	-0.174	-0.134					
		7.4V	-0.069	-0.064	-0.058					
	55.0°C	6.4V	-0.170	-0.200	-0.158					
		7.4V	-0.170	-0.200	-0.158					

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	22 of 93

### 4.5 Frequency Stability - TMO Mode - Frequency Error Hz

actor Set	: 1:									
Factor Set	: 2:									
actor Set	: 3:									
Test Equip	ment: TTS									
	4- h :!! 4 .									
requencys: Company:		Product: STP9080/STP9280 Test Eng: Dave Smith								
company.	Sepura PLC									
Date:	09/10/2014									
Ports:	antenna		1	00.010						
Ports:	90.213	using	limits of	90.213						
Test:		usina	limits of							
Notes		donig	Comme	nts and Observati	ons					
	TMO Frequ	TMO Frequency Error (as recorded from Tetra Test Set) (Hz)								
			809MHz	816.5MHz	824MHz					
			Channel	Channel	Channel					
	-30.0°C	6.4V	-17.4	-5.9	-15.2					
		7.4V	-13.4	-18.5	-14.2					
	-20.0°C	6.4V	-15.2	-12.7	-20.5					
		7.40	-27.3	-12.6	-13.4					
	-10.0°C	6.4V	-28.8	-21.8	-28.7					
		7.4V	-26.0	-16.4	-24.2					
	0.0°C	6.4V	-26.3	-22.8	-23.6					
		7.4V	-27.6	-29.2	-26.7					
	10.0°C	6 4V	-28.0	-23.0	-36.3					
		0.4V 7.4V	-15.7	-24.7	-24.4					
		,	1017	2,	2					
	20.0°C	6.4V	-25.4	-26.3	-26.7					
		7.4V	-33.0	-34.1	-34.4					
		0.01		00.4	07.0					
	30.0°C	6.4V	-23.6	-28.1	-27.2					
		7.4V	-34.4	-31.4	-40.0					
	40.0°C	6.4V	-27.5	-34.7	-36.0					
		7.4V	-31.9	-32.4	-31.3					
		6.4V	-33.0	-26.5	-35.2					
	50.0 0		-320	-36.5	-29.5					
	50.0 0	7.4V	-52.0							
	55.0°C	7.4V	-30.3	-25.0	-17.3					
	55.0°C	6.4V	-30.3	-25.0	-17.3					

These tests were performed in Mod State 1 See next page for deviation in ppm.

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	23 of 93

### 4.6 Frequency Stability - TMO Mode - Deviation from nominal volt/temp - ppm

auencySta	hility								
Company:	Sepura PLC			Product: STP9	080/STP9280				
Date: (	09/10/2014			Test Eng: Dave S	Smith				
Ports: a	intenna								
Test:	90.213	using	limits of	90.213					
Test:		usina	limits of						
Notes			Comme	nts and Observation	ons				
	TMO Frequency deviation - ppm								
			809MHz	816.5MHz	824MHz				
		0.01/	Channel	Channel	Channel				
	-30.0°C	6.4V 7 4\/	0.019	0.035	0.023				
		7.1.0	0.021	0.010	0.020				
	-20.0°C	6.4V	0.022	0.026	0.017				
		7.4V	0.007	0.026	0.025				
	-10.0°C	6.4V	0.005	0.015	0.007				
		7.4V	0.009	0.022	0.012				
	0.0°C	6.4V	0.008	0.014	0.013				
		7.4V	0.007	0.006	0.009				
	10.0%	6 414	0.006	0.014	0.002				
	10.0 C	0.4V 7.4V	0.000	0.014	0.012				
	20.0°C	6.4V	0.009	0.010	0.009				
		7.4V	0.000	0.000	0.000				
	30.0°C	6.4V	0.012	0.007	0.009				
		7.4V	-0.002	0.003	-0.007				
	40.0°C	6.4V	0.007	-0.001	-0.002				
		7.4V	0.001	0.002	0.004				
	FO 000	6 4) /	0.000	0.000	0.001				
	50.0°C	ט.4∨ ק 4\/	0.000	-0.003	-0.001				
		,. <b>.</b>	0.001	0.000	0.000				
	55.0°C	6.4V	0.003	0.011	0.021				
		7.4V	0.013	0.012	0.001				

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	24 of 93

## 4.7 Conducted Emission Antenna Adjacent Channel Power

enducted	Emissions (Signal)											
Company:	Sepura PI C			Product:	STP908	0/STP928	30					
Date:	14/10/2014			Test Eng:	Dave Smi	th						
Ports:	11,10,2011				Dave en							
Test:	90.221	using lin	nits of	90.221	(b)							
Ports: Test:		usina lin	nits of									
Notes		Comments and Observations										
	Using a spect adjacent char Beadings in d	ctrum analyser with the appropriate Tetra nannel power settings. Captured results are shown in plots 13 to 18.										
	neadings in d	DC		Channel								
		-75kHz	-50kHz	-25kHz	+ 25kHz	+ 50kHz	+ 75kHz					
	809MHz	-79.66	-73.96	-63.33	-60.86	-73.70	-79.55					
	816.5MHz	-80.48	-74.01	-64.31	-61.74	-73.56	-80.05					
	824MHz	-79.29	-73.68	-64.22	-61.50	-73.43	-79.59					
	854MHz	-79.39	-73.460	-63.06	-60.53	-73.53	-78.92					
	861.5MHz	-78.79	-73.680	-63.05	-61.62	-72.77	-78.74					
	869MHz	-79.75	-73.400	-62.2	-61.69	-73.18	-79.55					
	Limit (dBc)	-65	-65	-55	-55	-65	-65					
		PASS	PASS	PASS	PASS	PASS	PASS					
	Limit shown i less than 15 v These tests v PASS	s the maxii W and opei vere perfor	mum allowe rating in the med in Mod	ed level (dB e 809MHz 1 d State 1	c) for a pro to 869MHz	duct with o bands (Par	output power t 90.221(c)					

	Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
(dB)	Test No:	T5484	Test Report	Page:	25 of 93

### 4.8 Conducted Emission Antenna Spurious Emissions

```
Factor Set 1:

Factor Set 2: - - -

Factor Set 3: - - -

Test Equipment: R13 RFF17 RFF15 RFF22
```

Conducted E	missions (Signal)													
Company:	Sepura PLC		Product:	STP9080/STP9280										
Date:	24/09/2014		Test Eng:	Dave Smith										
Ports:	antenna													
Ports:	<u>90.210</u> u	ising limits of	90.221(	d)										
Test:	U	ising limits of												
Notes		Comment	ts and Ob	servations										
	Results of scans s	shown in plots 19 to wn on the plots is at	26. -13dBm.											
	All spurious emiss	sions were below this	s limit.											
	The limit of -13dE	3m was derived as fo	ollows:											
	The applicable Ma	ask is taken from par	rt 90.221	(d) which specifies an attenuation of:										
	43 + 10 log (P)	43 + 10 log (P)												
	If the output is P	Watts, the absolute	limit is g	iven by:										
	10 log (P) - (43 +	- 10 log (P) ) = -43	3dBW											
	converting to dBn	n:												
	-43dBW = -13	dBm												
	This absolute limi output power P.	t is therefore the san	ne ( -13d	Bm) regardless of the actual measured										
	PASS													

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	26 of 93

#### 4.9 Radiated Emissions - Transmit Carrier ERP - Standalone

Factor Set 1:A30\_dBi\_14A - - -Factor Set 2:- - -Factor Set 3:- - -Test Equipment:R8 A24 A30 SG13 PM6 PRE10 PS9 RFF22

Substitution Emissions Company: Sepura PLC Product: STP9080/STP9280 Date: 02/09/2014 Test Eng: Dave Smith Ports: Test: using limits of 90.205 90.205(h) Ports: Test: using limits of Cable Loss Mod CF Freq. Sig Gen Rec'vr Rec'vr Sig Gen Rec'vr Sub'n ERP Limit Margin Note Op Ant Mode State Set MHz Level Ant Level Pol Level Level Level Cable Cable EUT Sub'n Sub'n Gain Ant Ant dBm dBm dBm dBm dBm dBi dBm dBm dB 0 809.000 0.0 0.0 V 4.0 -9.9 -49.9 -6.2 37.9 1 1 -49.4 1 0 1 816.500 0.0 0.0 V 4.3 -9.9 -6.5 37.4 1 0 1 824.000 0.0 0.0 V 4.2 -9.9 -49.4 -6.4 37.2 1 0 809.000 0.0 0.0 н 6.2 -9.9 -47.3 -6.2 37.4 1 0 816.500 0.0 0.0 н 6.1 -9.9 -47.7 -6.5 37.3 1 1 824.000 1 0 1 0.0 0.0 Н 5.6 -9.9 -47.8 -6.4 37.0 854.000 0.0 0.0 -10.2 -49.5 -5.9 37.2 0 V 3.8 1 1 37.8 861.500 0.0 -10.2 -49.4 -5.9 1 0 1 0.0 V 4.5 1 0 1 869.000 0.0 0.0 V 3.8 -10.2 -49.6 -6.3 37.0 854.000 0.0 0.0 6.5 -10.2 -47.3 -5.9 37.8 0 Н 1 1 -5.9 38.2 1 0 1 861.500 0.0 0.0 Н 6.7 -10.2 -47.6 869.000 0.0 0.0 6.9 -10.2 -47.5 -6.3 37.9 1 0 1 Н Minimum Margin Results PASS/FAIL N/A Notes Standalone. Upright and flat. The results above are radiated measurements using the substitution method.

There are no specific limits in the standard for this test.

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	27 of 93

#### 4.10 Radiated Emissions - Transmit Carrier ERP - RSM

Factor Set 1:A30\_dBi\_14A - - -Factor Set 2:- - -Factor Set 3:- - -Test Equipment:R8 A24 A30 SG13 PM6 PRE10 PS9 RFF22

Substi	tution	Emis	ssions											
Com	pany:	Ser	oura PLC					Product:	STP9	080/ST	P9280			
Date	:	02/0	09/2014					Test Eng:	Dave S	Smith				
Ports Test	# :	90.	.205	u	sing limi	its of	f	90.205	(h)					
Ports Test	: :			using limits of										
Op Mode	Mod State	CF Set	Freq. MHz	Cable Sig Gen Level Cable dBm	Loss Rec'vr Level Cable dBm	Ant Pol	Rec'vr Level EUT dBm	Sig Gen Level Sub'n Ant dBm	Rec'vr Level Sub'n Ant dBm	Sub'n Ant Gain dBi	ERP dBm	Limit dBm	Margin dB	Note
1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1	809.000 816.500 824.000 816.500 824.000 854.000 861.500 869.000 861.500 869.000	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	>>> H H H >>> H H H	-3.6 -3.8 -3.8 -1.0 -0.3 -1.4 -3.8 -2.6 -3.0 -1.7 -2.1 -2.1	-9.9 -9.9 -9.9 -9.9 -9.9 -9.9 -10.2 -10.2 -10.2 -10.2 -10.2 -10.2	-49.9 -49.4 -49.4 -47.3 -47.7 -47.8 -49.5 -49.4 -49.6 -47.3 -47.6 -47.5	-6.2 -6.5 -6.4 -6.2 -6.5 -6.4 -5.9 -5.9 -6.3 -5.9 -5.9 -6.3	30.2 29.3 29.3 30.3 31.0 30.1 29.6 30.6 30.1 29.6 29.4 28.9			
	Resul	ts		Minimun PASS/F/	n Margir AIL	n			N/A					
							Not	es						
		RSN The	/I. Upright	and flat. ove are r	adiated	mea	isureme	nts using	the sub	stitution	method			

There are no specific limits in the standard for this test.

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	28 of 93

#### 4.11 Radiated Emissions - Transmit Carrier ERP - Car kit

Factor Set 1:A30\_dBi\_14A - - -Factor Set 2:- - -Factor Set 3:- - -Test Equipment:R8 A24 A30 SG13 PM6 PRE10 PS9 RFF22

Substitution Emissions Product: Company: Sepura PLC STP9080/STP9280 Date: 02/09/2014 Test Eng: Dave Smith Ports: Test: using limits of 90.205 90.205(h) Ports: Test: using limits of Cable Loss Mod CF Rec'vr Sig Gen Rec'vr Sub'n ERP Margin Note Op Freq. Sig Gen Rec'vr Ant Limit Mode State Set MHz Level Ant Level Pol Level Level Level Cable Cable EUT Sub'n Sub'n Gain Ant Ant dBm dBm dBm dBm dBm dBi dBm dBm dB 0 809.000 0.0 0.0 ٧ -1.2 -9.9 -49.9 -6.2 32.7 1 1 1 0 1 816.500 0.0 0.0 V -1.8 -9.9 -49.4 -6.5 31.2 1 0 1 824.000 0.0 0.0 V -0.4 -9.9 -49.4 -6.4 32.7 1 0 809.000 0.0 0.0 н 1.1 -9.9 -47.3 -6.2 32.3 1 0 816.500 0.0 0.0 н -1.4 -9.9 -47.7 -6.5 29.9 1 1 824.000 1 0 1 0.0 0.0 Н 0.5 -9.9 -47.8 -6.4 31.9 854.000 0.0 0.0 -2.0 -10.2 -49.5 -5.9 31.4 0 V 1 1 861.500 0.0 -49.4 -5.9 32.3 1 0 1 0.0 V -1.0 -10.2 1 0 1 869.000 0.0 0.0 V -1.3 -10.2 -49.6 -6.3 31.8 854.000 0.0 0.0 -5.4 -10.2 -47.3 -5.9 25.9 0 Н 1 1 1 0 1 861.500 0.0 0.0 Н -3.2 -10.2 -47.6 -5.9 28.3 869.000 0.0 0.0 -4.4 -10.2 -47.5 26.6 1 0 1 Н -6.3 Minimum Margin Results PASS/FAIL N/A Notes Car Kit. The results above are radiated measurements using the substitution method. There are no specific limits in the standard for this test.

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	29 of 93

### 4.12 Radiated Emissions - Transmit Spurious RSM - Low Band

Factor Set 1:A19\_dBi\_14A - - -Factor Set 2:- - -Factor Set 3:- - -Test Equipment:R8 A8 A19 SG16 PM6 PRE10 PS10 RFF22

Substi	Ibstitution Emissions													
Com	pany:	Sep	oura PLC					Product:	STP9	080/ST	P9280			
Date	:	02/0	09/2014					Test Eng:	Dave S	Smith				
Ports														
Test:	•	90.	210	u	sing limi	ts of		90.221	(d)					
Ports														
Test:				<u>u</u> :	sing limi	ts of								
•		05	_	Cable	Loss			0.0	<u> </u>	<u> </u>				
Op	Mod	CF	Freq.	Sig Gen	Rec'vr	Ant	Rec'vr	Sig Gen	Rec'vr	Sub'n	ERP	Limit	Margin	Note
wode	State	Set	IVIHZ	Cable	Level		Levei	Level Cubin	Level Sub'r	Ant				
				Cable	Cable		EUT	Ant	Ant	Gain				
				dBm	dBm		dBm	dBm	dBm	dBi	dBm	dBm	dB	
				dBill	abiii		abiii	abiii	abiii	(ID)			ub.	
	809N	/Hz 1	o 824MHz k	and										
1	0	1	1618.000	0.0	0.0	V	-44.1	-12.4	-8.3	8.9	-39.3	-13.0	26.3	Lo
1	0	1	1633.000	0.0	0.0	V	-42.1	-12.4	-7.8	8.9	-37.7	-13.0	24.7	Mid
1	0	1	1648.000	0.0	0.0	V	-41.9	-12.4	-7.7	8.9	-37.6	-13.0	24.6	Hi
1	0	1	1618.000	0.0	0.0	н	-46.0	-12.4	-8.3	8.9	-41.1	-13.0	28.1	Lo
1	0	1	1633.000	0.0	0.0	н	-45.3	-12.4	-8.5	8.9	-40.2	-13.0	27.2	Mid
1	0	1	1648.000	0.0	0.0	Н	-44.8	-12.4	-7.9	8.9	-40.4	-13.0	27.4	Hi
4	•		0.4.07.000		0.0		A A 7	10.4	10.0	0.7		10.0	00.0	
1	0	1	2427.000	0.0	0.0		-44.7	-12.4	-10.6	9.7	-36.8	-13.0	23.8	Lo
1	0	1	2449.500	0.0	0.0		-44.4	-12.4	-11.0	9.8	-36.0	-13.0	23.0	Mid
1	0	1	2472.000	0.0	0.0		-43.9	-12.4	-11.0	9.0	-35.5	12.0	22.5	HI
1	0	1	2427.000	0.0	0.0		-45.5	-12.4	-10.8	9.7	-37.4	-13.0	24.4	LO
1	0	1	2443.300	0.0	0.0	н	-44.5	-12.4	-10.3	9.0	-36.3	-13.0	22.0	
	Ŭ		2472.000	0.0	0.0		++.5	12.7	10.0	0.0	-50.5	10.0	20.0	
1	0	1	4854.000	0.0	0.0	V	-52.9	-13.5	-17.2	11.1	-38.2	-13.0	25.2	Io
1	0	1	4899.000	0.0	0.0	v	-52.9	-13.6	-17.2	11.1	-38.2	-13.0	25.2	Mid
1	0	1	4944.000	0.0	0.0	v	-52.4	-13.6	-17.3	11.1	-37.6	-13.0	24.6	Hi
1	0	1	4854.000	0.0	0.0	н	-53.4	-13.5	-17.2	11.1	-38.6	-13.0	25.6	Lo
1	0	1	4899.000	0.0	0.0	н	-53.5	-13.6	-17.2	11.1	-38.8	-13.0	25.8	Mid
1	0	1	4944.000	0.0	0.0	н	-52.9	-13.6	-17.4	11.1	-38.0	-13.0	25.0	Hi
	Rocul	te		Minimur	o Morai	n			22.5	dB				
	nesui	15		PASS/F/	AIL				PASS	uв				
				_			Not	es				·		
	RSM. Maximum of upright and flat. Maximum rotation and height. Measured with 1MHz													

Results of prescans shown in plots 31 to 34.

	Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
(dB)	Test No:	T5484	Test Report	Page:	30 of 93

### 4.13 Radiated Emissions - Transmit Spurious RSM - High Band

Fact Fact Fact Test	or Set or Set or Set Equipr	1: 2: 3: nent	A19_dBi_1   : R8 A8 A1	4A 9 SG16 F	PM6 PS1(	) PRE	10 RFF2	2						
Substi	tution	Emis	ssions											
Com	pany:	Sec	oura PLC					Product:	STP9	080/ST	P9280			
Date	:	02/0	09/2014					Test Eng:	Dave S	Smith				
Ports	S.:													
Test	<i>Test:</i> 90.210 using limits of 90.221(d)													
Ports Test	Ports:													
7031					sing inni									
Op Mode	Mod State	CF Set	Freq. MHz	Cable Sig Gen Level Cable	Loss Rec'vr Level Cable	Ant Pol	Rec'vr Level FUT	Sig Gen Level Sub'n	Rec'vr Level Sub'n	Sub'n Ant Gain	ERP	Limit	Margin	Note
				dBm	dBm		dBm	Ant dBm	Ant dBm	dBi	dBm	dBm	dB	
	0.5.41													
1	8541	1HZ t	0 869MHz 1	and	0.0	v	-11 3	-13.5	-8.9	8 9	-37.0	-13.0	24.0	
1	0	1	1723.000	0.0	0.0	v	-40.3	-13.6	-9.2	8.9	-37.0	-13.0	24.0	Mid
1	0	1	1738.000	0.0	0.0	V	-39.2	-13.7	-9.7	8.9	-34.2	-13.0	21.2	Hi
1	0	1	1708.000	0.0	0.0	н	-40.1	-13.5	-9.1	8.9	-35.6	-13.0	22.6	Lo
1	0	1	1723.000	0.0	0.0	н	-39.0	-13.6	-9.4	8.9	-34.2	-13.0	21.2	Mid
1	0	1	1738.000	0.0	0.0	н	-39.3	-13.7	-9.7	8.9	-34.3	-13.0	21.3	Hi
1	0	1	2562.000	0.0	0.0	v	-47.7	-12.4	-11.5	9.8	-38.8	-13.0	25.8	10
1	0	1	2584.500	0.0	0.0	v	-48.5	-12.4	-11.7	9.9	-39.2	-13.0	26.2	Mid
1	0	1	2607.000	0.0	0.0	v	-47.5	-12.4	-11.5	9.9	-38.5	-13.0	25.5	Hi
1	0	1	2562.000	0.0	0.0	н	-47.7	-12.4	-11.4	9.8	-38.8	-13.0	25.8	Lo
1	0	1	2584.500	0.0	0.0	н	-48.0	-12.4	-11.7	9.9	-38.9	-13.0	25.9	Mid
1	0	1	2607.000	0.0	0.0	Н	-47.2	-12.4	-11.7	9.9	-38.0	-13.0	25.0	Hi
1	0	1	5124.000	0.0	0.0	v	-49.9	-13.5	-17.8	11.1	-34.6	-13.0	21.6	10
1	0	1	5169.000	0.0	0.0	v	-50.4	-13.6	-18.0	11.0	-35.0	-13.0	22.0	Mid
1	0	1	5214.000	0.0	0.0	v	-50.9	-13.7	-18.0	11.0	-35.6	-13.0	22.6	Hi
1	0	1	5124.000	0.0	0.0	н	-51.4	-13.5	-17.8	11.1	-36.1	-13.0	23.1	Lo
1	0	1	5169.000	0.0	0.0	н	-49.5	-13.6	-17.9	11.0	-34.1	-13.0	21.1	Mid
1	0	1	5214.000	0.0	0.0	Н	-52.3	-13.7	-17.9	11.0	-37.1	-13.0	24.1	Hi
	Resul	ts		Minimur	n Mardi	n n			21 1	dB				
	nosu	10		PASS/FA					PASS	uв				
	Notes													

RSM. Maximum of upright and flat. Maximum rotation and height. Measured with 1MHz RBW detector. Limit set at -13dBm.

Results of prescans shown in plots 35 to 39.

	Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
(dB)	Test No:	T5484	Test Report	Page:	31 of 93

### 4.14 Radiated Emissions - Transmit Spur - Car Kit

Factor Set 1:A19\_dBi\_14A - - -Factor Set 2:- - -Factor Set 3:- - -Test Equipment:R8 A8 A19 SG16 PM6 PS10 PRE10 RFF22

Substi	itution	Emis	ssions											
Com	Company:     Sepura PLC       Date:     02/09/2014         Product:     STP9080/STP9280													
Date	e:	02/0	09/2014					Test Eng:	Dave S	Smith				
Ports	s:	~~	010					00 001	( ))					
Ports	; s:	90.	.210	U	sing limi	ts 01	•	90.221	(d)					
Test	:			u	sing limi	ts of	:							
				Cable	Loss									
Ор	Mod	CF	Freq.	Sig Gen	Rec'vr	Ant	Rec'vr	Sig Gen	Rec'vr	Sub'n	ERP	Limit	Margin	Note
iviode	State	Set	IVIHZ	Cable	Cable	POI	FUT	Levei Sub'n	Levei Sub'n	Ant Gain				
				Cable	Cable		LUT	Ant	Ant	Gain				
				dBm	dBm		dBm	dBm	dBm	dBi	dBm	dBm	dB	
	Mid			to 924M	lle bond)									
1						v	-47 5	-12.4	-78	89	-43.0	-13.0	30.0	
1	0	1	2449.500	0.0	0.0	v	-47.5	-12.4	-11.0	9.8	-39.1	-13.0	26.1	
1	0	1	4899.000	0.0	0.0	v	-52.4	-13.6	-17.2	11.1	-37.7	-13.0	24.7	
1	0	1	1633.000	0.0	0.0	н	-43.2	-12.4	-8.5	8.9	-38.1	-13.0	25.1	
1	0	1	2449.500	0.0	0.0	н	-42.9	-12.4	-10.9	9.8	-34.7	-13.0	21.7	
1	0	1	4899.000	0.0	0.0	н	-51.8	-13.6	-17.2	11.1	-37.1	-13.0	24.1	
	Mid (	han	nol (854MH-	to 969M	Uz bond)									
1	0	1	1723 000			v	-43 9	-13.6	-9.2	8.9	-39.3	-13 0	26.3	
1	0	1	2584.500	0.0	0.0	v	-47.0	-12.4	-11.7	9.9	-37.8	-13.0	24.8	
1	0	1	5169.000	0.0	0.0	v	-49.9	-13.6	-18.0	11.0	-34.5	-13.0	21.5	
1	0	1	1723.000	0.0	0.0	н	-46.1	-13.6	-9.4	8.9	-41.3	-13.0	28.3	
1	0	1	2584.500	0.0	0.0	н	-47.0	-12.4	-11.7	9.9	-37.9	-13.0	24.9	
1	0	1	5169.000	0.0	0.0	н	-51.5	-13.6	-17.9	11.0	-36.0	-13.0	23.0	
Results Minimum Margin <b>21.5</b> dB														
	PASS/FAIL PASS													
	Notes													
	Car Kit. Maximum rotation and height. Measured with 1MHz													

RBW detector. Limit set at -13dBm. Results of prescans shown in plots 39 to 42.

Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
Test No:	T5484	Test Report	Page:	32 of 93

#### 4.15 Radiated Emissions - Receive Mode - Below 1GHz

Fact	or Set	1:	A5_14	1A	CBL015_11	A		_				1 m cat	ole
Fact	or Set	2:			_								
Fact	or Set	3:											
Test	Equip	ment:	R4 A	5 R8 A	24 PRE10								
Radia	Radiated Emissions												
Com	Company: Sepura PLC Product: STP9080/STP9280												
Date		29/10/2014											
Port	 s:	20/10/2014 rest Eng. Dave Simili											
Test		ANSI	C63.	4:200	03 usina	limits	sof	FCC	:(B)				
Port	s:				de dellig				(=)				
Test	:				using	limits	s of						
Plot	Ор	Mod	Dist	Fact	Freq.	Ant	Rec.	Corr'n	Corr'n	Total	Limit	Margin	Notes
	Mode	State	m	Set	MHz	Pol	Level	Factor	Factor	Level	FCC_B	FCC_B	
							dBuV	dB/m	dB	dBuV/m	dBuV/m	dB	
	DO												
47	2	<b>/</b>     1	2	1	022 250		5.6	20.0	1.0	27 5	46.0	9 F	#1
47	2	1	ა ვ	1	923.250	V   н	5.0 73	30.9	1.0	37.5	46.0	6.5 6.8	#1
47	2	1	3	1	930 750	v	5.9	31.5	1.0	38.4	46.0	7.6	#1
47	2	1	3	1	930.750	н	6.7	31.5	1.0	39.1	46.0	6.9	#1
47	2	1	3	1	938.250	v	4.8	32.0	1.0	37.8	46.0	8.2	#1
47	2	1	3	1	938.250	н	8.3	32.0	1.0	41.3	46.0	4.7	#1
	Car	Kit											
52	2	1	3	1	923.250	v	7.0	30.9	1.0	38.9	46.0	7.1	#1
52	2	1	3	1	923.250	н	8.4	30.9	1.0	40.2	46.0	5.8	#1
52	2	1	3	1	930.750	V	6.3	31.5	1.0	38.7	46.0	7.3	#1
52	2	1	3	1	930.750	н	7.2	31.5	1.0	39.6	46.0	6.4	#1
52	2	1	3	1	938.250	V	4.8	32.0	1.0	37.8	46.0	8.2	#1
52	2		3	1	938.250	Н	5.8	32.0	1.0	38.8	46.0	7.2	#1
12	Sta		e 2	1	020 750		0.0	21 5	1.0	21.6	46.0	14.4	#1
43	2	1	3 3	1	930.750	V   ц	-0.9	31.5	1.0	30.6	40.0	14.4	#1
+3	STP	9240	5	'	330.730	''	-1.5	51.5	1.0	50.0	40.0	13.4	, "
56	2	1	3	1	444.300	v	3.8	20.7		24.6	46.0	21.4	#2
56	2	1	3	1	444.300	н	4.5	20.7		25.2	46.0	20.8	#2
56	2	1	3	1	930.750	v	0.5	31.5	1.0	32.9	46.0	13.1	#1
56	2	1	3	1	930.750	н	1.8	31.5	1.0	34.3	46.0	11.7	#1
								•					
	Resul	ts					Minimu	m Marg	jin		4.7	dB	
							PASS/F	AIL			PASS		
No	tes	Comments and Observations											
			Resul	ts of	scans show	vn in r	olots 43	47 51	52 and	56			
#	1		Durin	apre	scans in sc	reene	d room	, i, ,o i, these e	mission	ns were id	entified as n	arrow band.	
	-		Meas	surem	ents with a	30H	z RBW/3	BOHz VI	3W pea	ak detecto	or were no m	nore than 1 d	dB
			lower	r than	a measure	ement	with a	120kH	QP det	ector. Be	cause of am	bients/noise	floor,
			a 30H	Hz RB	W/30Hz VI	3W pe	eak dete	ctor w	as used	l on the op	oen area tes	t site and	
	an additional 1dB added to the correction factor.												
#	2		Meas	sured	with 120kl	Hz QP	detecto	or.					
			Measured with 120kHz QP detector.										

	Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
(dB)	Test No:	T5484	Test Report	Page:	33 of 93

#### 4.16 Radiated Emissions - Receive Mode - Above 1GHz - RSM

Factor Set 1:	A19_14A RFF22_14A	PRE10_14B BlueCables_14B	1 m cable
Factor Set 2:			
Factor Set 3:			
Test Equipment:	R8 A19 PRE10		

Radiated Emissions

Com	npany:	<sup>any:</sup> Sepura PLC <i>Product:</i> STP9080/STP9280											
Date	<i>:</i>	29/08	3/201	4				Test	t Eng: D	ave Smitl	<u>ו</u>		
Port:	s:		0.0.5										
Test Port		ANSI	C63.	.4:200	03 using l	imits	of	FCC	C(B)		=FCC B		
Test	s. 				using l	imite	of						
1001					using i	iiiitis							
Plot	QO	Mod	Dist	Fact	Freg.	Ant	Det.	Rec.	Corr'n	Total	Limit	Margin	Notes
	Mode	State	m	Set	MHz	Pol	Туре	Level	Factor	Level	FCC_B	FCC_B	
								dBuV	dB	dBuV/m	dBuV/m	dB	
50	2	0	3	1	5539 500		Pk	11 7	60	50.7	74.0	22.2	
50	2	0	3	1	5539.500	v		39.3	6.0	45.3	54 0	8.7	Lo
50	2	0	3	1	5539.500	н	Pk	43.5	6.0	49.5	74.0	24.5	Lo
50	2	0	3	1	5539.500	н	Avg	36.7	6.0	42.8	54.0	11.2	Lo
50	2	0	3	1	6462.750	v	Pk	46.4	6.0	52.4	74.0	21.6	Lo
50	2	0	3	1	6462.750	v	Avg	42.2	6.0	48.2	54.0	5.8	Lo
50	2	0	3	1	6462.750	н	Pk	45.6	6.0	51.6	74.0	22.4	Lo
50	2	0	3	1	6462.750	н	Avg	40.5	6.0	46.5	54.0	7.5	Lo
50	2	0	3	1	5584.500	V	Pk	46.0	6.0	52.0	74.0	22.0	Mid
50	2	0	3	1	5584.500	V	Avg	41.5	6.0	47.5	54.0	6.5	Mid
50	2	0	3	1	5584.500	Н	Pk	44.7	6.0	50.7	74.0	23.3	Mid
50	2	0	3	1	5584.500	H	Avg	39.2	6.0	45.3	54.0	8.7	Mid
50	2	0	3		6515.250		Pk	47.5	6.1	53.5	74.0	20.5	Mid
50	2	0	3		6515.250		Avg	43.8	6.1	49.9	54.0	4.1	
50	2	0	3		6515.250		PK	45.0	6.1	51.0	74.0	22.4	Mid
50	2	0	2	1	5629 500		AVY PL	40.8	6.0	40.0 51.7	54.0 74.0	22.3	ні
50	2	0	3	1	5629.500			45.0	6.0	47.3	74.0 54.0	6.7	ні
50	2	0	3	1	5629.500	н	Pk	45.2	6.0	51.3	74.0	22.7	Hi
50	2	0	3	1	5629.500	н	Ava	39.6	6.0	45.6	54.0	8.4	Hi
50	2	0	3	1	6567.750	v	Pk	46.6	6.2	52.8	74.0	21.2	Hi
50	2	0	3	1	6567.750	v	Avg	42.2	6.2	48.3	54.0	5.7	Hi
50	2	0	3	1	6567.750	н	Pk	46.5	6.2	52.7	74.0	21.3	Hi
50	2	0	3	1	6567.750	н	Avg	41.8	6.2	48.0	54.0	6.0	Hi
	Resu	lts						Minimu	m Marg	jin	4.1	dB	
								PASS/F	AIL		PASS		
No	otes					Com	ments	and Ob	servati	ons			
			Resu	lts of	scans showr	n in nl	ots 48	3 to 50					
			RSM	. Upr	ight and flat								
			Meas	sured	with 1MHz I	RBW	detect	tor.					
K	Key: gp - guasi-peak, av - average, pk - peak												

	Report No: Issue No:	R3406 1	FCC ID: XX6STP9080 / XX6STP9280		
(dB)	Test No:	T5484	Test Report	Page:	34 of 93

#### 4.17 Radiated Emissions - Receive Mode - Above 1GHz - Car Kit

Factor Set 1:	A19_14A RFF22_14A PRE10_14B BlueCables_14B	1 m cable
Factor Set 2:		
Factor Set 3:		
Test Equipment:	R8 A19 PRE10	

Radiated Emissions

Com	ipany:	Sepu	ura P	LC				Pro	oduct:	<b>STP908</b>	0/STP928	0	
Date	e:	.29/08	3/201	4				Te	st Eng:	Dave Smi	th		
Port:	s <i>:</i>												
Test	:	ANSI	C63	.4:20	03 using	limit	s of	FC	CC(B)		=FCC B		
Port:	s:												
Test	:				using	limite	s of						
Plot	0	Mod	Diet	East	Erog	Ant	Det	Pag	Corrin	Total	Limit	Margin	Notoo
FIOL	Op Mode	State	m	Set	MH <sub>7</sub>	Pol	Type		Eactor				Notes
	livioue	Oluco			10112	101	1 ypc	dBuV	dB	dBuV/m	dBuV/m	dB	
55	2	0	3	1	5539.500	V	Pk	40.3	6.0	46.3	74.0	27.7	Lo
55	2	0	3		5539.500		Avg	37.1	6.0	43.1	54.0	10.9	
55	2		3		5539.500	н		42.7	6.0	48.7	74.0 54.0	25.3	
55	2	0	় ২	1	6462 750		AVY Pk	40.0 45.4	6.0	40.0 51.4	54.0 74.0	22.6	
55	2	0	3	1	6462 750	v		40.7	6.0	46.8	54 0	7.2	
55	2	0	3	1	6462.750	н	Pk	45.0	6.0	51.0	74.0	23.0	Lo
55	2	0	3	1	6462.750	н	Ava	40.2	6.0	46.2	54.0	7.8	Lo
55	2	0	3	1	5584.500	V	Pk	43.6	6.0	49.6	74.0	24.4	Mid
55	2	0	3	1	5584.500	v	Avg	37.5	6.0	43.5	54.0	10.5	Mid
55	2	0	3	1	5584.500	н	Pk	44.3	6.0	50.3	74.0	23.7	Mid
55	2	0	3	1	5584.500	н	Avg	38.6	6.0	44.6	54.0	9.4	Mid
55	2	0	3	1	6515.250	V	Pk	45.4	6.1	51.4	74.0	22.6	Mid
55	2	0	3	1	6515.250	V	Avg	40.8	6.1	46.9	54.0	7.1	Mid
55	2	0	3	1	6515.250	н	Pk	46.3	6.1	52.4	74.0	21.6	Mid
55	2	0	3	1	6515.250	н	Avg	42.2	6.1	48.3	54.0	5.7	Mid
55	2	0	3	1	5629.500	V	Pk	43.7	6.0	49.7	74.0	24.3	Hi
55	2	0	3	1	5629.500	V	Avg	37.7	6.0	43.8	54.0	10.2	Hi
55	2	0	3		5629.500	н	Pk	46.1	6.0	52.1	74.0	21.9	HI
55	2	0	3		5629.500	H	AVG	41.2	6.0	47.2 52.0	54.0	6.8	
55	2		2	1	6567 750			45.9	0.2	52.0 46.5	74.0 54.0	22.0	н
55	2	0	3	1	6567 750	V Н	Pk	40.3	6.2	40.5 51 7	54.0 74.0	223	ні
55	2	0	3	1	6567.750	н	Avg	41.1	6.2	47.3	54.0	6.7	Hi
		4-						N /1			F 7	-10	
	Resul	ts						PASS/F	m iviarg AIL	jin 	PASS	aв	
No	tes					Com	ments	and Ob	servati	ons			
			Resu	lts of	scans show	/n in J	plots 5	53 to 55	ō.				
			Car k	kit.									
12		l	Meas	sured	with 1MHz	KRM	dete	ctor.					
K K	ey:		qp - (	juasi-j	peak, av - a	iverag	ge, pk	- реак					



#### PLOT 1 Conducted Antenna Power - 809MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 809MHz Peak = 36.48 dl Average (meas	3m Jred with power r	neter) = 33.75 dBm			
Facility:	Env. Chamber		Λ	Node:	1
			V	Adification State:	0
		File: H	48244EB.txt A	Analyser:	R13



#### PLOT 2 Conducted Antenna Power - 816.5MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 816.5MHz Peak = 36.43 dB Average (measu	m red with power me	eter) = 33.72 dBm			
Facility:	Env. Chamber		M	lode:	1
			Μ	odification State:	0
	F	file: H4	18244EE.txt A	nalyser:	R13


#### PLOT 3 Conducted Antenna Power - 824MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 824MHz Peak = 36.56 df Average (meas	3m Jred with power n	neter) = 33.68 dBm			
Facility:	Env. Chamber		N	lode:	1
			N	Iodification State:	0
		File: H4	48244F1.txt A	nalyser:	R13



#### PLOT 4 Conducted Antenna Power - 854MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 854MHz Peak = 36.36 dB Average (measu	m red with power m	neter) = 33.6 dBm			
Facility:	Env. Chamber		M	ode:	1
			M	odification State:	0
		File: H	48244F8.txt Ar	nalyser:	R13



#### PLOT 5 Conducted Antenna Power - 861.5MHz

Company:	Sepura	Product:	STP9080	
Date:	24/09/2014	Test Eng:	Dave Smith	
Method:	FCC Part 90	Method:		
Limit1:		Limit2:		
Limit3:		Limit4:		
Tx on 861.5MHz Peak = 36.44 dB Average (measu	m red with power meter) =	33.72 dBm		
Facility:	Env. Chamber	N	lode:	1
		N	Iodification State:	0
	File:	H48244FA.txt A	nalyser:	R13



#### PLOT 6 Conducted Antenna Power - 869MHz

		· · · · · · · · · · · · · · · · · · ·			
Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 869MHz Peak = 36.54 dE Average (measu	3m ired with power r	meter) = 33.7 dBm			
Facility:	Env. Chamber		М	ode:	1
			М	odification State:	0
		File: H	I48244FD.txt Ar	nalyser:	R13



#### PLOT 7 Occupied Bandwidth - 809MHz

		/			
Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 809MHz 99% Occupied B	andwidth Meas	urement = 20.76kHz	Z		
Facility:	Env. Chamber	Height	М	ode:	Тх
Distance		Polarisation	М	odification State:	0
Angle		File: H	.482457E.txt A	nalyser:	R13



#### PLOT 8 Occupied Bandwidth - 816.5MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 816.5MHz 99% Occupied B	andwidth Meas	urement = 20.76kHz	Ζ		
Facility:	Env. Chamber	Height	М	ode:	Tx
Distance		Polarisation	М	odification State:	0
Angle		File: H	4824586.txt Ar	nalyser:	R13



#### PLOT 9 Occupied Bandwidth - 824MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 824MHz 99% Occupied B	andwidth Meas	urement = 20.72kHz	2		
Facility:	Env. Chamber	Height	M	ode:	Тх
Distance		Polarisation	Me	odification State:	0
Angle		File: H	482458C.txt Ar	nalyser:	R13



#### PLOT 10 Occupied Bandwidth - 854MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 854MHz 99% Occupied E	andwidth Meas	urement = 20.76k	Hz		
Facility:	Env. Chamber	Height		Mode:	Тх
Distance		Polarisation		Modification State:	0
Angle		File:	H4824596.txt	Analyser:	R13



#### PLOT 11 Occupied Bandwidth - 861.5MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 861.5MHz 99% Occupied E	andwidth Meas	urement = 20.76kH	Z		
Facility:	Env. Chamber	Height	N	/ode:	Тх
Distance		Polarisation	N	Nodification State:	0
Angle		File: F	1482459A.txt A	nalyser:	R13



#### PLOT 12 Occupied Bandwidth - 869MHz

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Tx on 869MHz 99% Occupied E	andwidth Meas	urement = 20.76kH	z		
Facility:	Env. Chamber	Height		Mode:	Тх
Distance		Polarisation		Modification State:	0
Angle		File: H	1482459E.txt	Analyser:	R13



```
Date: 14.0CT.2014 11:57:35
```

#### PLOT 13 Adjacent Channel Power 809MHz - as an alternative to Masks of 90.210



Date: 14.0CT.2014 11:58:15

#### PLOT 14 Adjacent Channel Power 816.5MHz - as an alternative to Masks of 90.210



```
Date: 14.0CT.2014 11:58:48
```

#### PLOT 15 Adjacent Channel Power 824MHz - as an alternative to Masks of 90.210



```
Date: 14.0CT.2014 11:59:46
```

#### PLOT 16 Adjacent Channel Power 854MHz - as an alternative to Masks of 90.210



```
Date: 14.0CT.2014 12:00:15
```

# PLOT 17 Adjacent Channel Power 861.5MHz - as an alternative to Masks of 90.210



Date: 14.0CT.2014 12:00:43

#### PLOT 18 Adjacent Channel Power 869MHz - as an alternative to Masks of 90.210



## PLOT 19 Antenna Conducted Spurious - LF Band - 9kHz to 500MHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:	-13dBm		Limit2:		
Limit3:			Limit4:		
Black: Tx 809M Blue: Tx 816.5M Red: Tx 824MHz Limit = -13dBm Calculation of lin in note 5.	Hz 1Hz z nit shown in sec	tion 4.8. Mask of 9	0.221(d) used as	an alternative to 90	0.210 as permitted
Facility:	Env. Chamber	Height		Mode:	Тх
Distance		Polarisation		Modification State:	0
Angle		File: H	14824690.txt	Analyser:	R13



## PLOT 20 Antenna Conducted Spurious - LF Band - 500MHz to 1GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:	-13dBm		Limit2:		
Limit3:			Limit4:		
Black: Tx 809M Blue: Tx 816.5M Red: Tx 824MHz Limit = -13dBm Calculation of lim in note 5.	Hz 1Hz nit shown in sec	tion 4.8. Mask of 90	).221(d) used as	an alternative to 90	).210 as permitted
Facility:	Env. Chamber	Height		Mode:	Tx
Distance		Polarisation		Modification State:	0
Angle		File: H	I48246A2.txt	Analyser:	R13



## PLOT 21 Antenna Conducted Spurious - LF Band - 1GHz to 2GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:	-13dBm		Limit2:		
Limit3:			Limit4:		
Black: Tx 809M Blue: Tx 816.5M Red: Tx 824MHz Limit = -13dBm. Calculation of lin in note 5.	Hz 1Hz z nit shown in sec	tion 4.8. Mask of	90.221(d) used as	s an alternative to 90	0.210 as permitted
Facility:	Env. Chamber	Height		Mode:	Tx
Distance		Polarisation		Modification State:	0
Angle		File:	H48246CE.txt	Analyser:	R13



## PLOT 22 Antenna Conducted Spurious - LF Band - 2GHz to 10GHz - Mask of 90.221(d)

Company: Date: Method:	Sepura 24/09/2014 FCC Part 90		Product: Test Eng: Method:	STP9080 Dave Smith	
Limit1:	-13dBm		Limit2:		
Limit3:			Limit4:		
Black: Tx 809M Blue: Tx 816.5M Red: Tx 824MH Limit = -13dBm. Calculation of lin in note 5.	Hz /IHz z nit shown in sec	tion 4.8. Mask of S	90.221(d) used as	s an alternative to 90	).210 as permitted
Facility:	Env. Chamber	Height		Mode:	Тх
Distance		Polarisation		Modification State:	0
Angle		File:	H48246D8.txt	Analyser:	R13



#### PLOT 23 Antenna Conducted Spurious - HF Band - 9kHz to 500MHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:	-13dBm		Limit2:		
Limit3:			Limit4:		
Black: Tx 854M Blue: Tx 861.5M Red: Tx 869MHz Limit = -13dBm. Calculation of lim in note 5.	Hz 1Hz z nit shown in sec	tion 4.8. Mask of	90.221(d) used as	s an alternative to 90	0.210 as permitted
Facility:	Env. Chamber	Height		Mode:	Тх
Distance		Polarisation		Modification State:	0
Angle		File:	H4824680.txt	Analyser:	R13



## PLOT 24 Antenna Conducted Spurious - HF Band - 500MHz to 1GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	ANSI C63.4		Method:		
Limit1:			Limit2:		
Limit3:			Limit4:		
Black: Tx 854Ml Blue: Tx 861.5M Red: Tx 869MHz Limit = -13dBm. Calculation of lim in note 5.	Hz 1Hz hit shown in sec	tion 4.8. Mask of	90.221(d) used as	s an alternative to 90	).210 as permitted
Facility:	Env. Chamber	Height		Mode:	Тх
Distance		Polarisation		Modification State:	0
Angle		File:	H48246B4.txt	Analyser:	R13



## PLOT 25 Antenna Conducted Spurious - HF Band - 1GHz to 2GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:	-13dBm		Limit2:		
Limit3:			Limit4:		
Black: Tx 854M Blue: Tx 861.5M Red: Tx 869MHz Limit = -13dBm. Calculation of lin in note 5.	Hz 1Hz z nit shown in sec	tion 4.8. Mask of 9	0.221(d) used as	s an alternative to 90	0.210 as permitted
Facility:	Env. Chamber	Height		Mode:	Тх
Distance		Polarisation		Modification State:	0
Angle		File:	H48246BD.txt	Analyser:	R13



## PLOT 26 Antenna Conducted Spurious - HF Band - 2GHz to 10GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	24/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:	-13dBm		Limit2:		
Limit3:			Limit4:		
Black: Tx 854M Blue: Tx 861.5M Red: Tx 869MHz Limit = -13dBm. Calculation of lin in note 5.	Hz 1Hz z nit shown in sec	tion 4.8. Mask of s	90.221(d) used as	s an alternative to 90	).210 as permitted
Facility:	Env. Chamber	Height		Mode:	Тх
Distance		Polarisation		Modification State:	0
Angle		File:	H48246E3.txt	Analyser:	R13



## PLOT 27 Radiated Emissions - Standalone - Tx - 25MHz to 1GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080					
Date:	04/09/2014		Test Eng:	Dave Smith					
Method:	FCC Part 90		Method:						
Limit1:	43+10 log(P)@	23m	Limit2:						
Limit3:			Limit4:						
Standalone (with 50R load) Black: 816.5MHz Tx Blue: 861.5MHz Tx Maximum of Vertical and Horizontal Upright and Vertical Limit = approximate field strength @ 3m for a -13dBm transmitter (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.									
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	1				
Distance	3m	Polarisation	V+H	Modification State:	0				
Angle	0-360	File:	H4A025F8.txt	Analyser	R8				



## PLOT 28 Radiated Emissions - Standalone - Tx - 1GHz to 2GHz - Mask of 90.221(d)

					<i></i>				
Company:	Sepura		Product:	STP9080					
Date:	04/09/2014		Test Eng:	Dave Smith					
Method:	FCC Part 90		Method:						
Limit1:(RED)	43+10 log(P)@	@3m	Limit2:						
Limit3:			Limit4:						
Standalone (with 50R load) Black: 816.5MHz Tx Blue: 861.5MHz Tx Maximum of Vertical and Horizontal Upright and Vertical Limit = approximate field strength @ 3m for a -13dBm transmitter (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.									
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	1				
Distance	3m	Polarisation	√+H	Modification State:	0				
Angle	0-360	File:	H4A025FA.txt	Analyser	R8				



## PLOT 29 Radiated Emissions - Standalone - Tx - 2GHz to 6GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080					
Date:	03/09/2014		Test Eng:	Dave Smith					
Method:	FCC Part 90		Method:						
Limit1:(RED)	43+10 log(P)@	⊉1.5m	Limit2:						
Limit3:			Limit4:						
Standalone (with 50R load) Black: 816.5MHz Tx Blue: 861.5MHz Tx Maximum of Vertical and Horizontal Upright and Vertical Limit = approximate field strength @ 1.5m for a -13dBm transmitter (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.									
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1				
Distance	1.5m	Polarisation	V+H	Modification State:	0				
Angle	0-360	File:	H4A02603.txt	Analyser	R8				



## PLOT 30 Radiated Emissions - Standalone - Tx - 6Hz to 10GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080					
Date:	03/09/2014		Test Eng:	Dave Smith					
Method:	FCC Part 90		Method:						
Limit1:(RED)	43+10 log(P)@	01.5m	Limit2:						
Limit3:			Limit4:						
Standalone (with 50R load) Black: 816.5MHz Tx Blue: 861.5MHz Tx Maximum of Vertical and Horizontal Upright and Vertical Limit = approximate field strength @ 1.5m for a -13dBm transmitter (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.									
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1				
Distance	1.5m	Polarisation	V+H	Modification State:	0				
Angle	0-360	File:	H4A02601.txt	Analyser	R8				



## PLOT 31 Radiated Emissions - RSM - Tx - LF band - 25MHz to 1GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080					
Date:	04/09/2014		Test Eng:	Dave Smith					
Method:	FCC Part 90		Method:						
Limit1:(RED)	43+10 log(P)@	03m	Limit2:						
Limit3:			Limit4:						
Limit3: Limit4:   RSM (with 50R load) Black: Tx 809MHz   Blue: Tx 816.5MHz Red: Tx 824MHz   Maximum of Vertical and Horizontal Upright and Vertical Limit = approximate field strength @ 3m for a -13dBm transmitter (43+10log(P)).   Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.									
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	1				
Distance	3m	Polarisation	V+H	Modification State:	0				
Angle	0-360	File:	H480475F	Analyser:	R8				



## PLOT 32 Radiated Emissions - RSM - Tx - LF band - 1GHz to 2GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080					
Date:	04/09/2014		Test Eng:	Dave Smith					
Method:	FCC Part 90		Method:						
Limit1:(RED)	43+10 log(P)@	23m	Limit2:						
Limit3:			Limit4:						
With RSM (50R load) Black: Tx 809MHz Blue: Tx 816.5MHz Red: Tx 824MHz Limit = approximate field strength @ 3m for a -13dBm transmitter (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.									
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1				
Distance	3m	Polarisation	V+H	Modification State:	0				
Angle	0-360	File:	H480452F	Analyser:	R8				



## PLOT 33 Radiated Emissions - RSM - Tx - LF band - 2GHz to 6GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080				
Date:	28/08/2014		Test Eng:	Dave Smith				
Method:	FCC Part 90		Method:					
Limit1:(RED)	43+10log(P)@1.5m		Limit2:					
Limit3:			Limit4:					
With RSM Black: Tx 809MHz Blue: Tx 816.5MHz Red: Tx 824MHz Limit = approximate field strength @ 1.5m for a -13dBm Txr (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.								
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1			
Distance	1.5m	Polarisation	V+H	Modification State:	0			
Angle	0-360	File:	H4A2050F	Analyser:	R8			



## PLOT 34 Radiated Emissions - RSM - Tx - LF band - 5GHz to 10GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080			
Date:	28/08/2014		Test Eng:	Dave Smith			
Method:	FCC Part 90		Method:				
Limit1:(RED)	43+10log(P)@1.5m		Limit2:	<u>2:</u>			
Limit3:			Limit4:				
With RSM Black: Tx 809MHz Blue: Tx 816.5MHz Red: Tx 824MHz Limit = approximate field strength @ 1.5m for a -13dBm Tx (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.							
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1		
Distance	1.5m	Polarisation	V+H	Modification State:	0		
Angle	0-360	File:	H472970A	Analyser:	R8		



## PLOT 35 Radiated Emissions - RSM - Tx - HF band - 25MHz to 1GHz - Mask of 90.221(d)

Company.	Sepura		Product:	STP9080			
Date:	04/09/2014		Test Eng:	Dave Smith			
Method:	FCC Part 90		Method:				
Limit1:(RED)	43+10 log(P)@3m		Limit2:	Limit2:			
Limit3:			Limit4:				
RSM (with 50R load) Black: 854MHz Blue: 861.5MHz Red: 869MHz Maximum of Vertical and Horizontal Upright and Vertical Limit = approximate field strength @ 3m for a -13dBm transmitter (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.							
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	1		
Distance	3m	Polarisation	V+H	Modification State:	0		
Angle	0-360	File:	H4804756	Analyser:	R8		



#### PLOT 36 Radiated Emissions - RSM - Tx - HF band - 1GHz to 2GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080			
Date:	04/09/2014		Test Eng:	Dave Smith			
Method:	FCC Part 90		Method:				
Limit1:(RED)	43+10 log(P)@	23m	Limit2:				
Limit3:			Limit4:				
With RSM (50R load) Black: Tx 854MHz Blue: Tx 861.5MHz Red: Tx 869MHz Limit = approximate field strength @ 3m for a -13dBm transmitter (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.							
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1		
Distance	3m	Polarisation	V+H	Modification State:	0		
Angle	0-360	File:	H480450F	Analyser:	R8		



#### PLOT 37 Radiated Emissions - RSM - Tx - HF band - 2GHz to 6GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080			
Date:	28/08/2014		Test Eng:	Dave Smith			
Method:	FCC Part 90		Method:				
Limit1:(RED)	43+10log(P)@	1.5m	Limit2:				
Limit3:			Limit4:				
With RSM Black: Tx 854MHz Blue: Tx 861.5MHz Red: Tx 869MHz Limit = approximate field strength @ 1.5m for a -13dBm Tx (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.							
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1		
Distance	1.5m	Polarisation	V+H	Modification State:	0		
Angle	0-360	File:	H47296D6	Analyser:	R8		



#### PLOT 38 Radiated Emissions - RSM - Tx - HF band - 5GHz to 10GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080			
Date:	28/08/2014		Test Eng:	Dave Smith			
Method:	FCC Part 90		Method:				
Limit1:(RED)	43+10log(P)@	21.5m	Limit2:				
Limit3:			Limit4:				
With RSM Black: Tx 854MHz Blue: Tx 861.5MHz Red: Tx 869MHz Limit = approximate field strength @ 1.5m for a -13dBm Txr (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.							
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1		
Distance	1.5m	Polarisation	V+H	Modification State:	0		
Angle	0-360	File:	H47296DA	Analyser:	R8		


## PLOT 39 Radiated Emissions - Car Kit - Transmit - 25MHz to 1GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080				
Date:	04/09/2014		Test Eng:	Dave Smith				
Method:	FCC Part 90		Method:					
Limit1:(RED)	43+10 log(P)@	03m	Limit2:					
Limit3:			Limit4:					
Car Kit (with 50F Black: 816.5MHz Blue: 861.5MHz Maximum of Ver Transmit mode. Limit = approxin Calculation of lin in note 5.	Limit3: Limit4: Car Kit (with 50R load) Black: 816.5MHz Tx Blue: 861.5MHz Tx Maximum of Vertical and Horizontal Transmit mode. Transmit Frequency 854MHz. 50R load on antenna port. Limit = approximate field strength @ 3m for a -13dBm transmitter (43+10log(P)). Calculation of limit shown in section 4.8. Mask of 90.221(d) used as an alternative to 90.210 as permitted in note 5.							
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	1			
Distance	3m	Polarisation	V+H	Modification State:	0			
Angle	0-360	File:	H4A1449C	Analyser:	R8			



# PLOT 40 Radiated Emissions - Car Kit - Transmit - 1GHz to 2GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	04/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:(RED)	43+10 log(P)@	23m	Limit2:		
Limit3:			Limit4:		
Car Kit (with 50F Black: 816.5MHz Blue: 861.5MHz Maximum of Ver Transmit mode. Calculation of lin in note 5.	₹ load) z Tx Tx tical and Horizo Limit = approxi nit shown in sec	ntal mate field strengt tion 4.8. Mask of t	h @ 3m for a -13 90.221(d) used a	3dBm transmitter (43 as an alternative to 9	+10log(P)). 0.210 as permitted
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	1
Distance	3m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H4A1449E	Analyser:	R8



# PLOT 41 Radiated Emissions - Car Kit - Transmit - 2GHz to 6GHz - Mask of 90.221(d)

Company:	Sepura		Product:	STP9080	
Date:	03/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:(RED)	43+10log(P)@	21.5m	Limit2:		
Limit3:			Limit4:		
Car Kit (with 50F Black: 816.5MHz Blue: 861.5MHz Maximum of Ver Transmit mode. Calculation of lim in note 5.	R load) z Tx tical and Horizo Limit = approxin nit shown in sect	ntal mate field strengtl tion 4.8. Mask of s	h @ 1.5m for a -1 90.221(d) used a	3dBm transmitter (4 s an alternative to 90	3+10log(P)). 0.210 as permitted
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1
Distance	1.5m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H4A144A1	Analyser:	R8



# PLOT 42 Radiated Emissions - Car Kit - Transmit - 5GHz to 10GHz - Mask of 90.221(d)

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Company:	Sepura		Product:	STP9080	
Date:	03/09/2014		Test Eng:	Dave Smith	
Method:	FCC Part 90		Method:		
Limit1:(RED)	43+10log(P)@	21.5m	Limit2:		
Limit3:			Limit4:		
Car Kit (with 50F Black: 816.5MHz Blue: 861.5MHz Maximum of Ver Transmit mode. transmitter (43+ Calculation of lin in note 5.	₹ load) z Tx Tx tical and Horizo Limit = approxi 10log(P)). nit shown in sec	ntal mate field strengt tion 4.8. Mask of	h @ 1.5m for a - 90.221(d) used a	13dBm as an alternative to 9	0.210 as permitted
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	1
Distance	1.5m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H4A144A2	Analyser:	R8



## PLOT 43 Radiated Emissions - Standalone - Receive - Antenna fitted - 25MHz to 1GHz

Company:	Sepura		Product:	STP9080	
Date:	09/09/2014		Test Eng:	Dave Smith	
Method:	Ansi C63.4		Method:		
Limit1:(RED)	FCC(B)@3m		Limit2:		
Limit3:			Limit4:		
Standalone Receive mode. Black: 854MHz Blue: 861.5MH Red: 869MHzl	Antenna Fitted				
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	2
Distance	3m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H4809702	Analyser:	R8



### PLOT 44 Radiated Emissions - Standalone - Receive - Antenna fitted - 1GHz to 2GHz

Company:	Sepura		Product:	STP9080	
Date:	04/09/2014		Test Eng:	Dave Smith	
Method:	Ansi C63.4		Method:		
Limit1:(RED)	FCC(B)@3m		Limit2:		
Limit3:			Limit4:		
Standalaone Receive mode. Black: 854MHz Blue: 861.5MH Red: 869MHz Maximum of Ho	Antenna Fitted z rizontal and Ver	tical, Upright and	l Flat		
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2
Distance	3m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H48044A0	Analyser:	R8



### PLOT 45 Radiated Emissions - Standalone - Receive - Antenna fitted - 2GHz to 6GHz

Company:	Sepura		Product:	STP9080	
Date:	28/08/2014		Test Eng:	Dave Smith	
Method:	Ansi C63.4		Method:		
Limit1:(RED)	FCC(B)@1.5n	n	Limit2:		
Limit3:			Limit4:		
Standalone Receive mode. Black: 854MHz Blue: 861.5MHz Red: 869MHz Maximum of Ho	Antenna Fitted z rizontal and Ver	tical			
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2
Distance	1.5m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H472972B	Analyser:	R8



### PLOT 46 Radiated Emissions - Standalone - Receive - Antenna fitted - 5GHz to 10GHz

Company:	Sepura		Product:	STP9080	
Date:	28/08/2014		Test Eng:	Dave Smith	
Method:	Ansi C63.4		Method:		
Limit1:(RED)	FCC(B)@1.5n	n	Limit2:		
Limit3:			Limit4:		
Standalone Receive mode. Black: 854MHz Blue: 861.5MHz Red: 869MHz Maximum of Ho	Antenna Fitted z rizontal and Ver	tical			
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2
Distance	1.5m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H4729729	Analyser:	R8



PLOT	47	Radiated Emissions	- RSM - Re	ceive - Antenna	fitted -	25MHz to	1GHz
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Company:	Sepura		Product:	STP9080	
Date:	09/09/2014		Test Eng:	Dave Smith	
Method:	Ansi C63.4		Method:		
Limit1:(RED)	FCC(B)@3m		Limit2:		
Limit3:			Limit4:		
RSM Receive mode. Black: 854MHz Blue: 861.5MHz Red: 869MHzl	Antenna Fitted				
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	2
Distance	3m	Polarisation	V+H	Modification State:	0
Angle	0-360	File:	H4809739	Analyser:	R8



#### PLOT 48 Radiated Emissions - RSM - Receive - Antenna fitted - 1GHz to 2GHz

Company: Date:	Sepura 04/09/2014		Product: Test Eng:	STP9080 Dave Smith	
Method:	Ansi C63.4		Method:		
Limit1:(RED)	FCC(B)@3m		Limit2:		
Limit3:			Limit4:		
RSM Receive mode. Black: 854MHz Blue: 861.5MHz Red: 869MHz Maximum of Ho	Antenna Fitted	tical, Upright and	Flat		
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2
Distance	3m	Polarisation	V+H	Modification State:	0
Anglo	0-360	File	H4804565	Analyser:	R8



### PLOT 49 Radiated Emissions - RSM - Receive - Antenna fitted - 2GHz to 5GHz

Company: Date:	Sepura 28/08/2014		Product: Test Eng:	STP9080 Dave Smith	
Method:	Ansi C63.4		Method:		
Limit1:(RED)	FCC(B)@1.5n	n	Limit2:		
Limit3:			Limit4:		
With RSM Receive mode. Black: 854MHz Blue: 861.5MHz Red: 869MHz Maximum of Hor	Antenna Fitted	rtical			
Facility:	Anech_2	Height 1.	1m,1.3m,1.6m N	lode:	2
Distance	1.5m	Polarisation V	+H M	Iodification State:	0
Angle	0-360	File: H	4729725 A	nalyser:	R8



#### PLOT 50 Radiated Emissions - RSM - Receive - Antenna fitted - 5GHz to 10GHz

Company: Date:	Sepura 28/08/2014		Product: Test Eng:	STP9080 Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@1.5r	n	Limit2:			
Limit3:			Limit4:			
With RSM Receive mode. Antenna Fitted Black: 854MHz Blue: 861.5MHz Red: 869MHz Maximum of Horizontal and Vertical						
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2	
Distance	1.5m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H4729723	Analyser:	R8	



## PLOT 51 Radiated Emissions - Car Kit - Receive - Antenna fitted - 25MHz to 275MHz

Company:	Sepura		Product:	STP9080		
Date:	27/08/2014		Test Eng:	Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@3m		Limit2:			
Limit3:			Limit4:			
Limit3: Limit4: With Car Kit. Receive mode. Antenna Fitted Black: 854MHz Blue: 861.5MHz Red: 869MHz Maximum of Horizontal and Vertical						
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	2	
Distance	3m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H480468C	Analyser:	R8	



PLOT 52 Radiated Emissions - Car Kit - Receive - Antenna fitted - 250MHz to 1GHz

Company:	Sepura		Product:	STP9080		
Date:	27/08/2014		Test Eng:	Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@3m		Limit2:			
Limit3:			Limit4:			
Limita: Limita:   With Car Kit. Receive mode. Antenna Fitted   Black: 854MHz Blue: 861.5MHz   Blue: 861.5MHz Red: 869MHz   Maximum of Horizontal and Vertical Imita:						
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	2	
Distance	3m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H4804696	Analyser:	R8	



#### PLOT 53 Radiated Emissions - Car Kit - Receive - Antenna fitted - 1GHz to 2GHz

Company:	Sepura		Product:	STP9080		
Date:	27/08/2014		Test Eng:	Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@3m		Limit2:			
Limit3:			Limit4:			
Limita: Limita:   With Car Kit.   Receive mode. Antenna Fitted   Black: 854MHz   Blue: 861.5MHz   Red: 869MHz   Maximum of Horizontal and Vertical						
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2	
Distance	3m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H48045A4	Analyser:	R8	



#### PLOT 54 Radiated Emissions - Car Kit - Receive - Antenna fitted - 2GHz to 5GHz

Company:	Sepura		Product:	STP9080		
Date:	27/08/2014		Test Eng:	Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@1.5n	n	Limit2:			
Limit3:			Limit4:			
Limita: Limita:   With Car Kit. Receive mode. Antenna Fitted   Black: 854MHz Blue: 861.5MHz   Blue: 861.5MHz Red: 869MHz   Maximum of Horizontal and Vertical						
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2	
Distance	1.5m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H472971E	Analyser:	R8	



#### PLOT 55 Radiated Emissions - Car Kit - Receive - Antenna fitted - 5GHz to 10GHz

Company: Date:	Sepura 28/08/2014		Product: Test Eng:	STP9080 Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@1.5n	n	Limit2:			
Limit3:			Limit4:			
Limit3: Limit4: With Car Kit. Receive mode. Antenna Fitted Black: 854MHz Blue: 861.5MHz Red: 869MHz Maximum of Horizontal and Vertical						
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2	
Distance	1.5m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H4729720	Analyser:	R8	



## PLOT 56 Radiated Emissions - STP9280 - Receive - Antenna fitted - 25MHz to 1GHz

Company:	Sepura		Product:	STP9080		
Date:	09/09/2014		Test Eng:	Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@3m		Limit2:			
Limit3:			Limit4:			
STP9280 Receive mode. Antenna Fitted Blue: 861.5MHz Maximum of Horizontal and Vertical - upright and flat. 930.75025MHz						
Facility:	Anech_2	Height	1m,1.5m,2m	Mode:	2	
Distance	3m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H480974F	Analyser:	R8	



### PLOT 57 Radiated Emissions - STP9280 - Receive - Antenna fitted - 1GHz to 2GHz

Company:	Sepura		Product:	STP9080		
Date:	04/09/2014		Test Eng:	Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@3m		Limit2:			
Limit3:			Limit4:			
STP9280 Receive mode. Antenna Fitted Blue: 861.5MHz Maximum of Horizontal and Vertical - upright and flat						
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2	
Distance	3m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H4804584	Analyser:	R8	



### PLOT 58 Radiated Emissions - STP9280 - Receive - Antenna fitted - 2GHz to 6GHz

Company:	Sepura		Product:	STP9280		
Date:	28/08/2014		Test Eng:	Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@1.5m	า	Limit2:			
Limit3:			Limit4:			
STP9280 Receive mode. Antenna Fitted Blue: 861.5MHz Maximum of Horizontal and Vertical - upright and flat.						
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2	
Distance	1.5m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H47296C2	Analyser:	R8	



## PLOT 59 Radiated Emissions - STP9280 - Receive - Antenna fitted - 5GHz to 10GHz

Company:	Sepura		Product:	STP9280		
Date:	28/08/2014		Test Eng:	Dave Smith		
Method:	Ansi C63.4		Method:			
Limit1:(RED)	FCC(B)@1.5n	n	Limit2:			
Limit3:			Limit4:			
STP9280 Receive mode. Antenna Fitted Blue: 861.5MHz Maximum of Horizontal and Vertical - upright and flat.						
Facility:	Anech_2	Height	1.1m,1.3m,1.6m	Mode:	2	
Distance	1.5m	Polarisation	V+H	Modification State:	0	
Angle	0-360	File:	H47296C4	Analyser:	R8	