

# ANNEX A1: DIAGRAMS OF TESTING







## No.:6-0082-11-1-2c

According to:  
**FCC Regulations**  
 Part 15.107 & 15.111, Part 15.109 Class B  
**IC-Regulations**  
 RSS-132 Issue 2 & RSS-133 Issue 5  
 RSS-Gen, Issue 3

for

**u-blox AG**

RF-Data Module LISA-U200  
*FCC-ID: XPYLISAU200*  
*IC-ID: 8595A-LISAU200*

Laboratory Accreditation and Listings			
 Deutsche Akkreditierungsstelle D-PL-12047-01-01	 Reg. No.: 736496 MRA US-EU 0003	 Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2665, R-2666 C-2914, T-1967, G-301
 AUTHORIZED RF LABORATORY	 LAB CODE 20011130-00		
accredited according to DIN EN ISO/IEC 17025			
<p style="text-align: center;"><b>CETECOM GmbH</b> Laboratory Radio Communications &amp; Electromagnetic Compatibility Im Teelbruch 116 • 45219 Essen • Germany Registered in Essen, Germany, Reg. No.: HRB Essen 8984 Tel.: + 49 (0) 20 54 / 95 19-954 • Fax: + 49 (0) 20 54 / 95 19-964 E-mail: info@cetecom.com • Internet: www.cetecom.com</p>			

**Table of contents**

**1. DIAGRAMS .....4**

1.1. Diagrams of conducted AC-emission .....4

1.2. Diagrams of radiated field strength emissions (<1 GHz).....12

1.3. Diagrams of radiated electrical field strength emissions (>1 GHz) .....19

1.4. Conducted emissions on antenna port in receive mode .....27

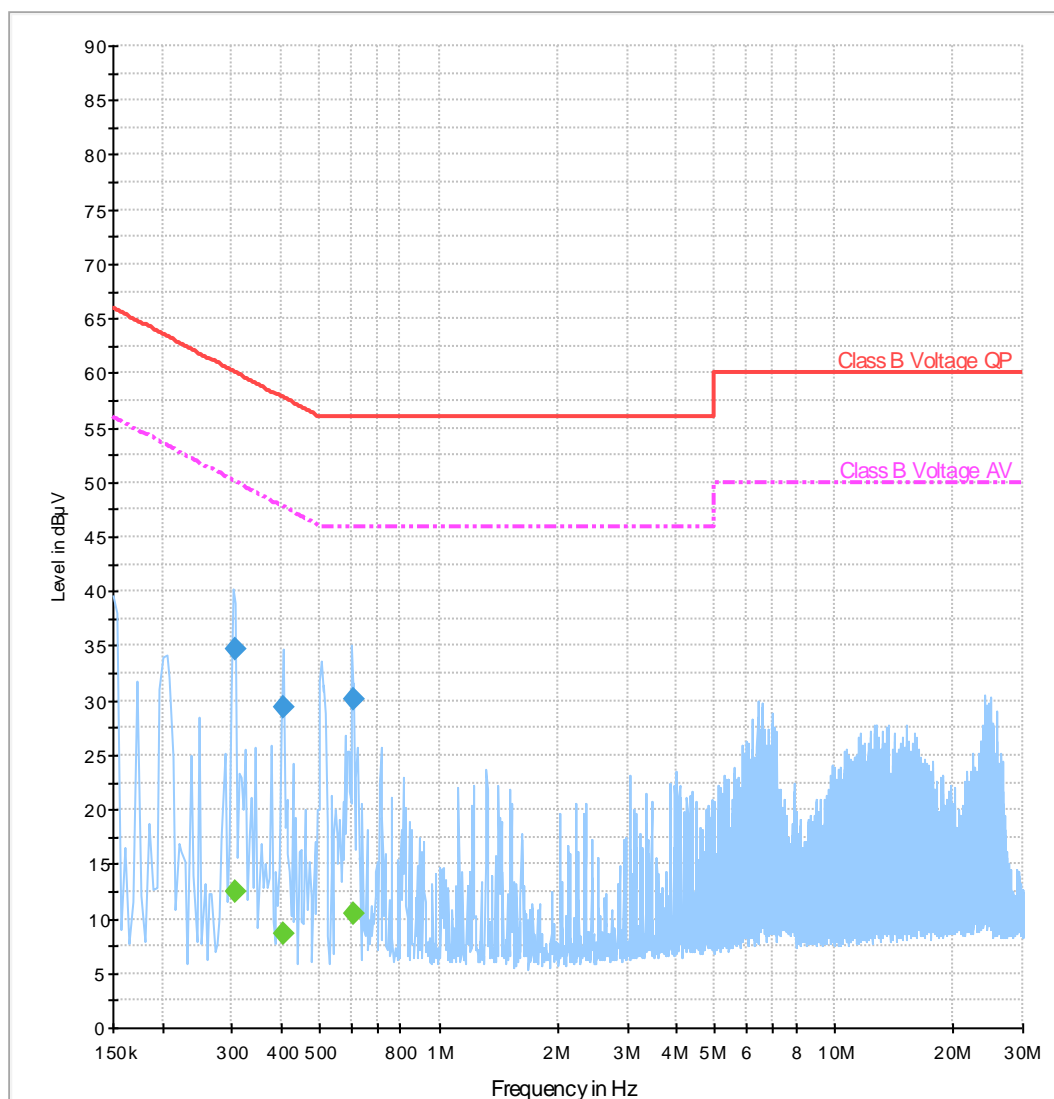
## 1. Diagrams

### 1.1. Diagrams of conducted AC-emission

Diagram No. a\_1.1

Test Description:	Conducted Voltage Measurement Class B
Testspecification:	FCC 15.107 Class B
Technical Data:	Please see next page for detailed information
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operator name:	HLA
Report.- Nr.	6-0082-11-1-2c
EUT:	LISA-U200
Manufacturer:	U-blox
Operating mode:	GSM 850 Idle
Measured on line:	Mains AC L1 and N
Power during test:	110 V AC 60 Hz
Comment 1:	channel (182)
Accessories:	two USB cables 1,80 m one connected to the laptop + AC/DC adapter + GA.107 Ant.

01\_Class B\_Voltage\_PK\_QPAV\_N\_L1



**Final Result 1**

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.304844	34.7	15000.0	9.000	GND	L1	0.0	25.4	60.1
0.406406	29.4	15000.0	9.000	GND	L1	0.0	28.3	57.7
0.605625	30.2	15000.0	9.000	GND	L1	0.0	25.8	56.0

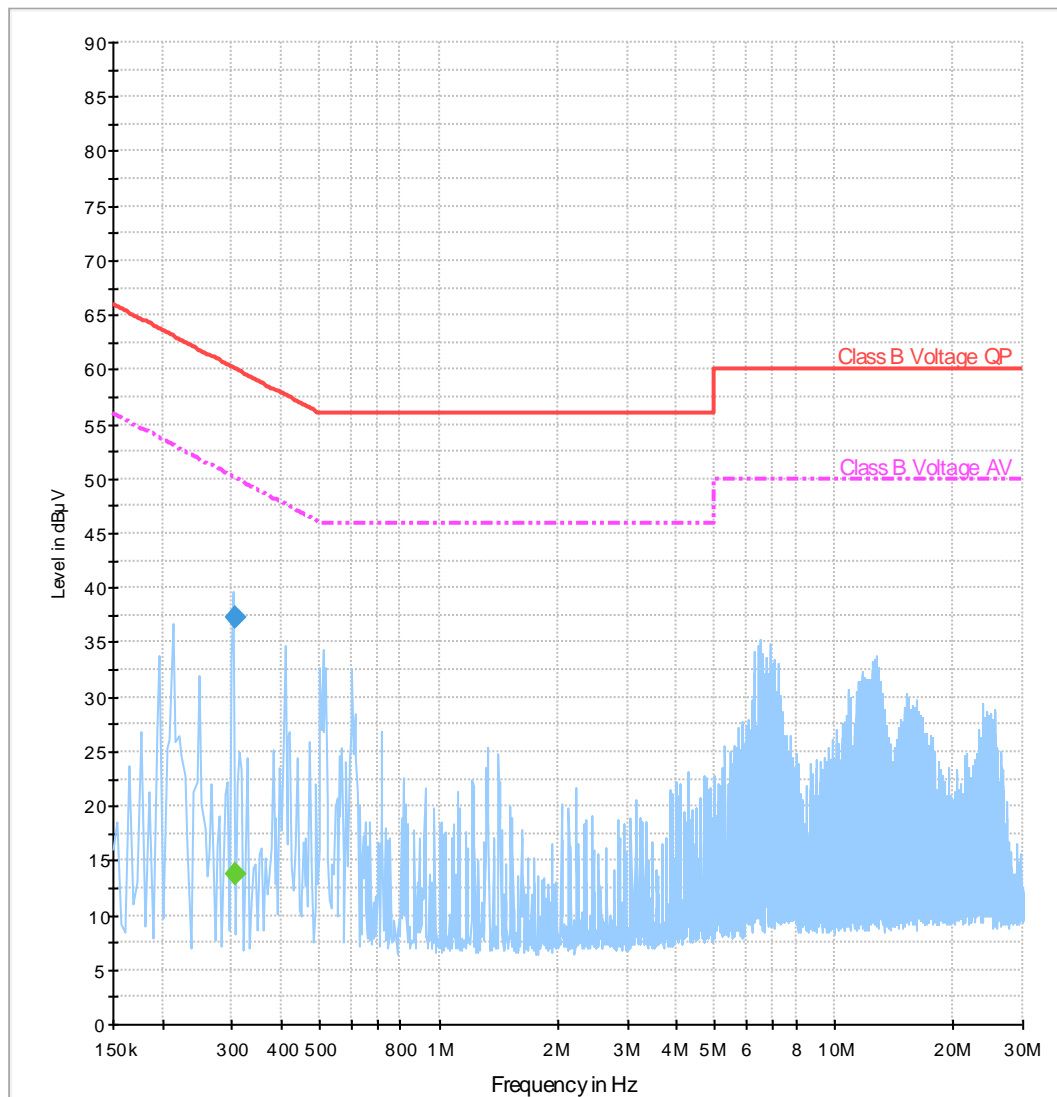
**Final Result 2**

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.304844	12.6	15000.0	9.000	GND	L1	0.0	37.5	50.1
0.406406	8.6	15000.0	9.000	GND	L1	0.0	39.1	47.7
0.605625	10.4	15000.0	9.000	GND	L1	0.0	35.6	46.0

**Diagram No. a\_1.8**

Test Description:	Conducted Voltage Measurement Class B
Testspecification:	FCC 15.107 Class B
Technical Data:	Please see next page for detailed information
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operator name:	HLA
Report.- Nr.	6-0082-11-1-2c
EUT:	LISA-U200
Manufacturer:	U-blox
Operating mode:	EGPRS GSM 1900 RX
Measured on line:	Mains AC L1 and N
Power during test:	110 V AC 60 Hz
Accessories :	two USB cables 1,80 m one connected to the laptop + AC/DC adapter + GA.107 antenna
Comment 1:	DL ch 651

01\_Class B\_Voltage\_PK\_QPAV\_N\_L1



**Final Result 1**

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.304844	37.3	15000.0	9.000	GND	L1	0.0	22.8	60.1

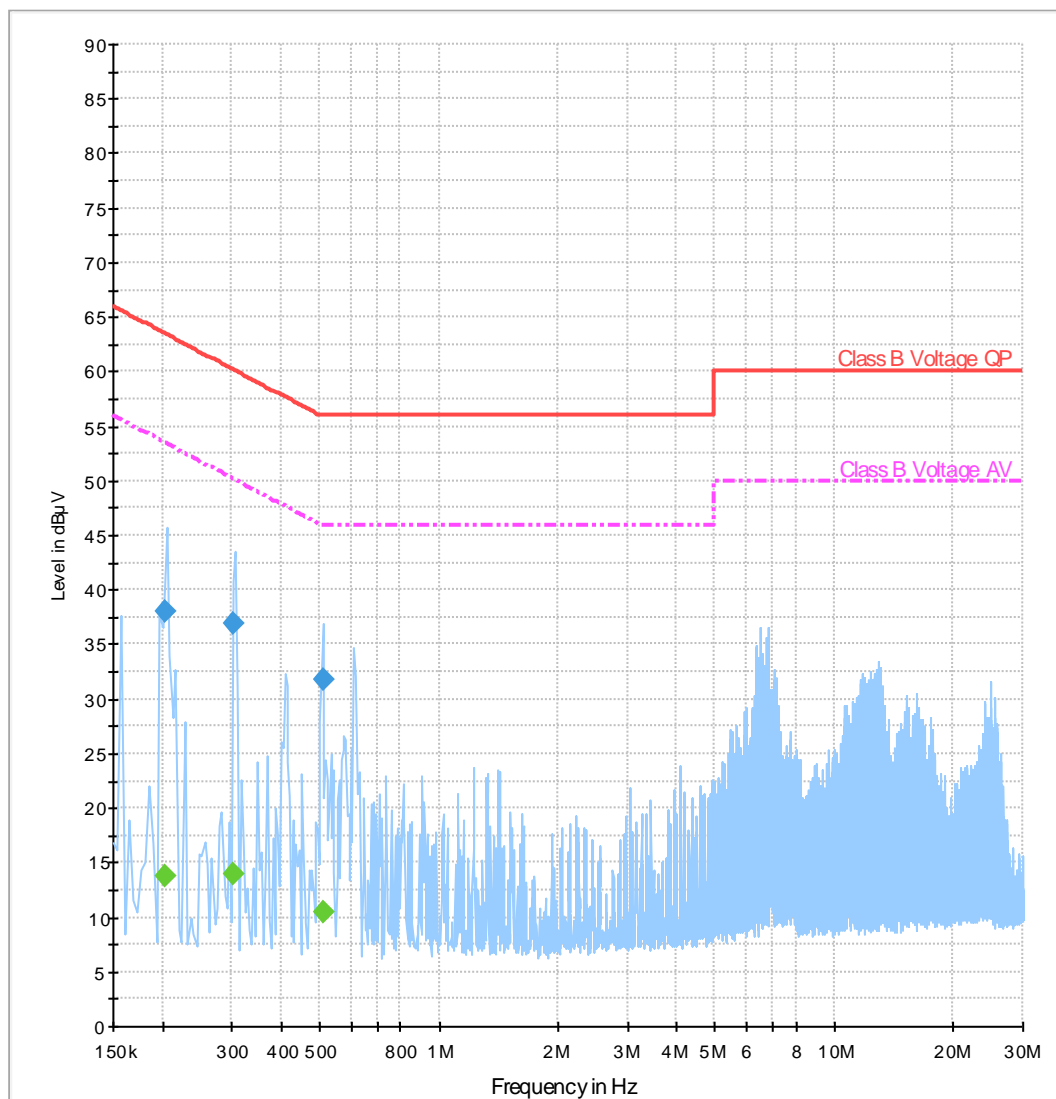
**Final Result 2**

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.304844	13.8	15000.0	9.000	GND	L1	0.0	36.4	50.1

**Diagram No. b\_1.8**

Test Description:	Conducted Voltage Measurement Class B
Testspecification:	FCC 15.107 Class B
Technical Data:	Please see next page for detailed information
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operator name:	HLA
Report.- Nr.	6-0082-11-1-2c
EUT:	LISA-U200
Manufacturer:	U-blox
Operating mode:	FDD II RX
Measured on line:	Mains AC L1 and N
Power during test:	110 V AC 60 Hz
Accessories :	two USB cables 1,80 m one connected to the laptop + AC/DC adapter + GA.107 ant.
Comment 1:	DL ch 9800

01\_Class B\_Voltage\_PK\_QPAV\_N\_L1



**Final Result 1**

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.202188	38.0	15000.0	9.000	GND	L1	0.0	25.5	63.5
0.303750	36.9	15000.0	9.000	GND	N	0.0	23.3	60.1
0.511875	31.8	15000.0	9.000	GND	N	0.0	24.2	56.0

**Final Result 2**

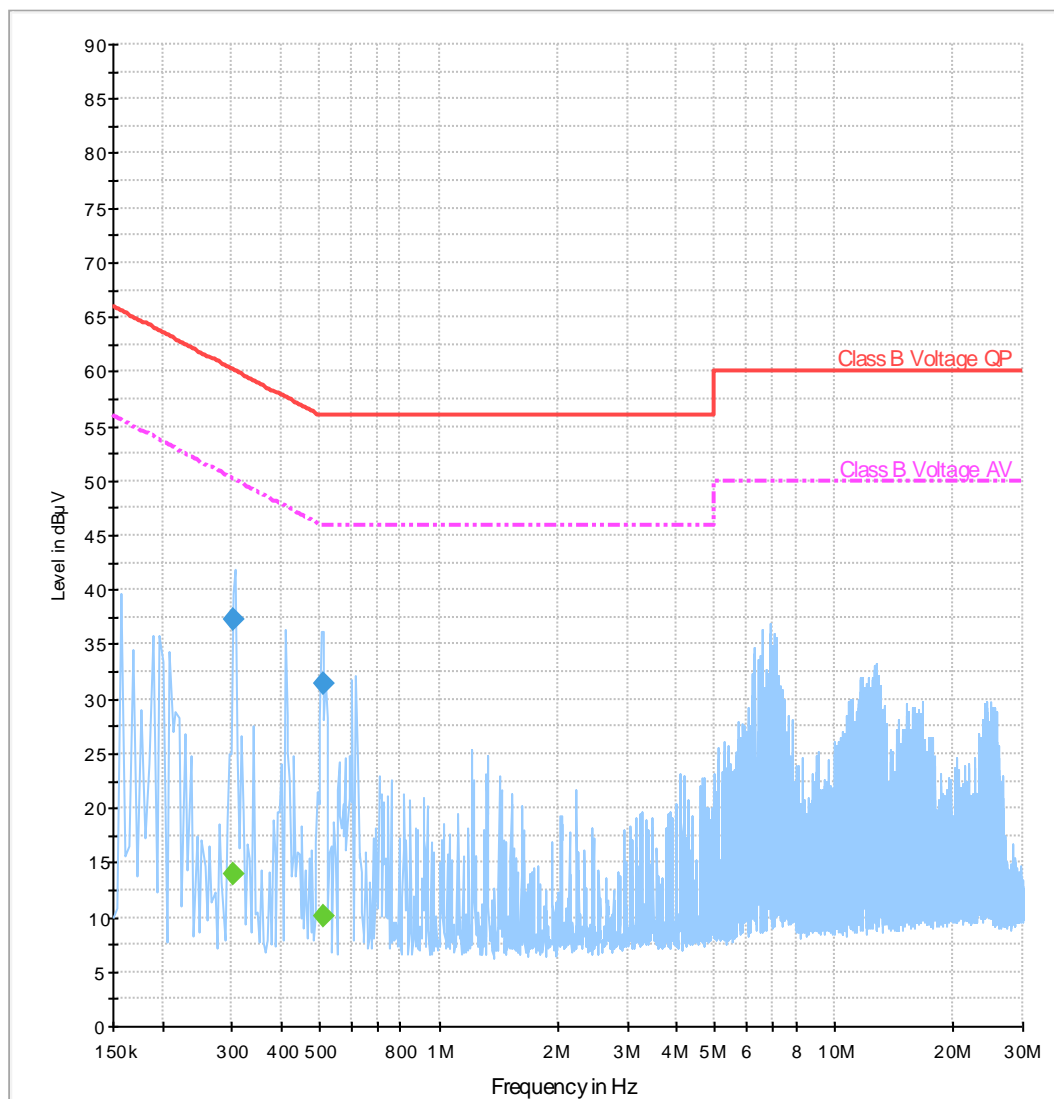
Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.202188	13.8	15000.0	9.000	GND	L1	0.0	39.7	53.5
0.303750	13.9	15000.0	9.000	GND	N	0.0	36.2	50.1
0.511875	10.5	15000.0	9.000	GND	N	0.0	35.5	46.0



**Diagram No. b\_1.7**

Test Description:	Conducted Voltage Measurement Class B
Testspecification:	FCC 15.107 Class B
Technical Data:	Please see next page for detailed information
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operator name:	HLA
Report.- Nr.	6-0082-11-1-2c
EUT:	LISA-U200
Manufacturer:	U-blox
Operating mode:	FDD V RX
Measured on line:	Mains AC L1 and N
Power during test:	110 V AC 60 Hz
Accessories :	two USB cables 1,80 m one connected to the laptop + AC/DC adapter + GA.107 ant.
Comment 1:	DL ch 4407

01\_Class B\_Voltage\_PK\_QPAV\_N\_L1



**Final Result 1**

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.303750	37.3	15000.0	9.000	GND	L1	0.0	22.9	60.1
0.512969	31.4	15000.0	9.000	GND	N	0.0	24.6	56.0

**Final Result 2**

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.303750	14.0	15000.0	9.000	GND	L1	0.0	36.2	50.1
0.512969	10.2	15000.0	9.000	GND	N	0.0	35.8	46.0

## 1.2. Diagrams of radiated field strength emissions (<1 GHz)

**Diagram No. a\_2.01**

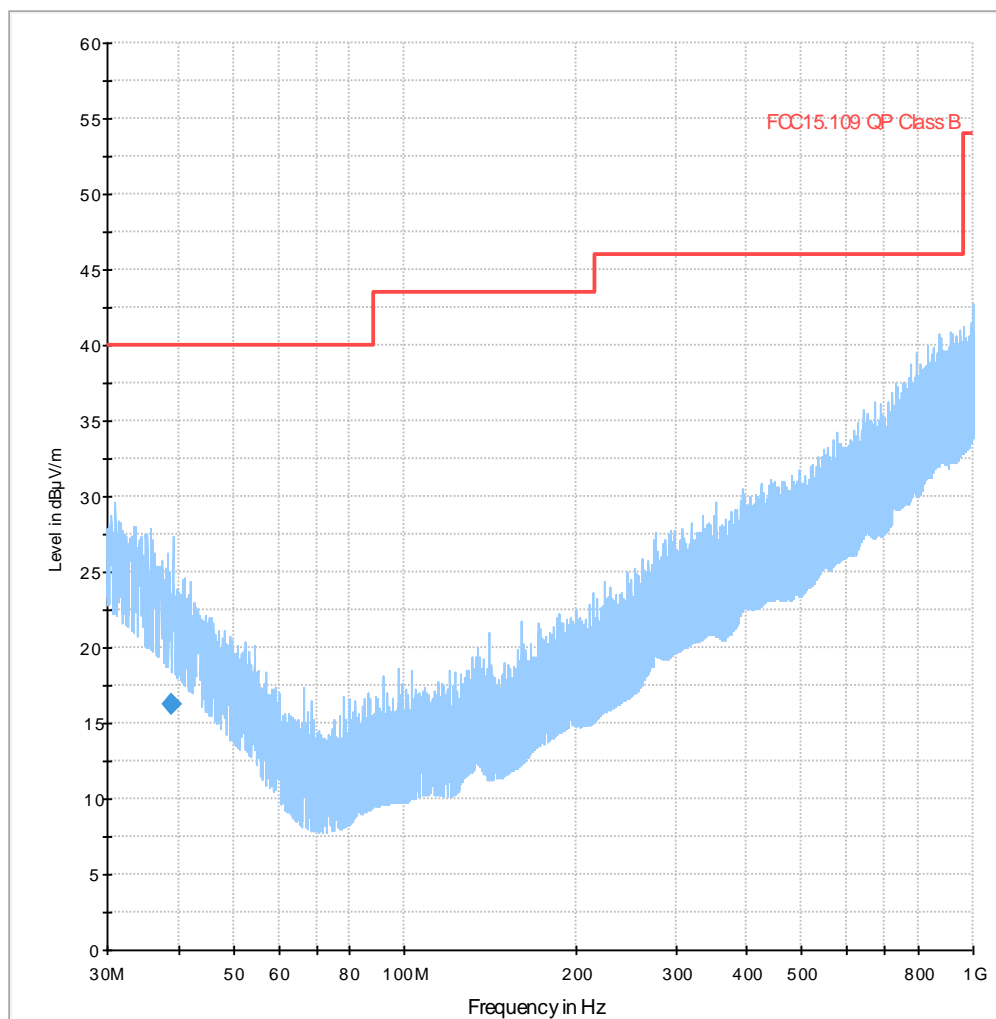
Test description: Electric Fieldstrength Measurement. measurement distance 3 m  
 Test site and distance: Semi Anechoic Room (SAR) with 3 m measurement distance  
 Measured sides of EUT: front, right, rear, left, top, under  
 Rec. antenna (pre-scan): height 1.00 m and 1.82 m, horizontal and vertical polarisation  
 Rec. antenna (final): height between 1 m to 4 m, polarisation according to pre-scan results  
 Turntable step: 90° during pre-scan, continuously turning during final measurement  
 Used filter: lowpass 1200 MHz  
 Test specification.: FCC 15.109 Class B: RSS-Gen: Issue 3

Operator: HLa  
 Operating conditions: IDLE 850  
 Power during tests: 110V/60Hz  
 Comment 1: Channel GSM850 middle (182)

### EUT Information

EUT Name: M/N LISA-U200  
 Manufacturer: Ublox  
 IMEI: 358901040001734  
 FW: 21.0.3

FCC15.109\_hor+vert



### Final Result 1

Freq. (MHz)	Quasi Pk (dBµV/m)	Meas Time	Bandwid. (kHz)	Hght. (cm)	Pol.	Azim. (deg)	Corr (dB)	Mar- gin (dB)	Limit (dBµV/ m)
38.80000	16.3	1000.	120.000	199.0	H	263.0	17.9	23.7	40.0

## Diagram No. a\_2.02

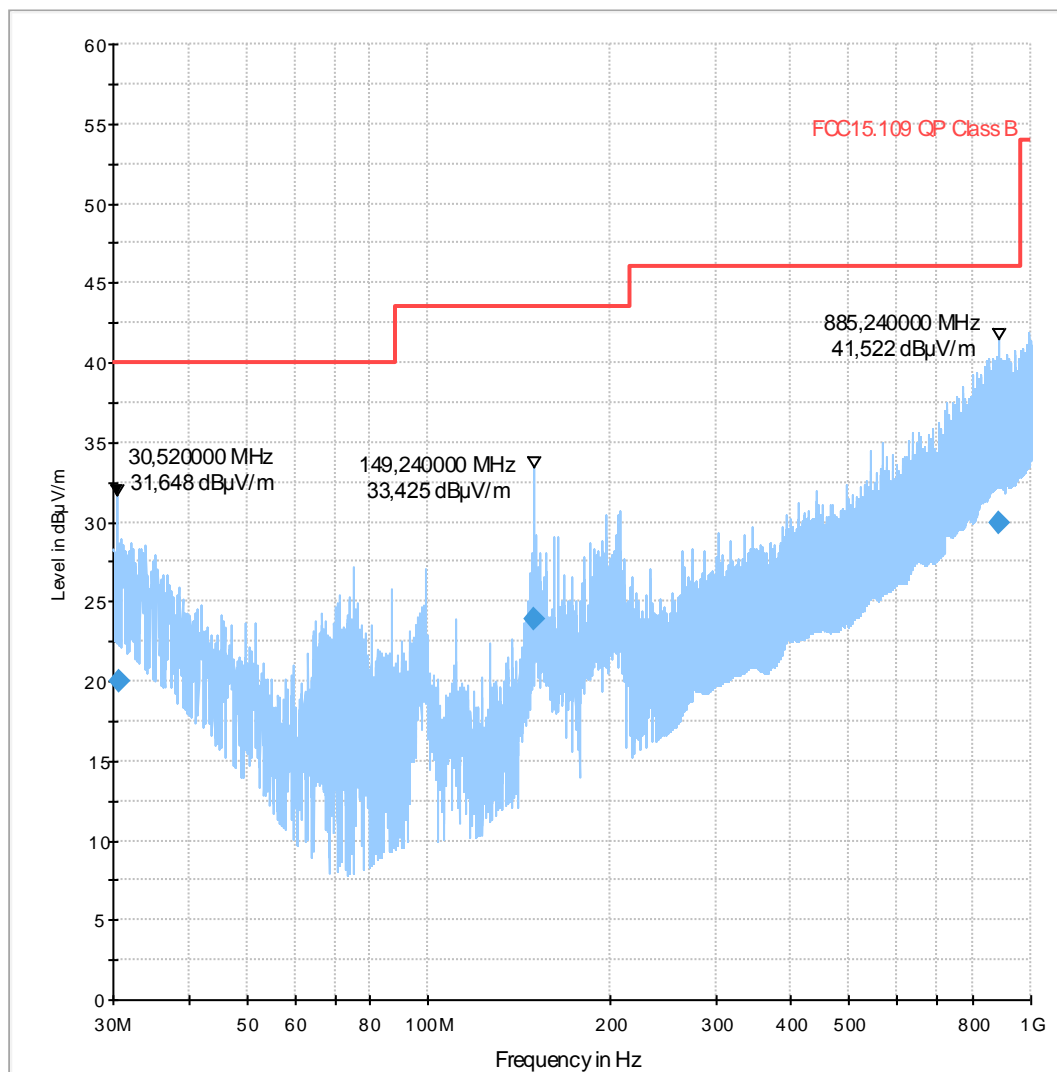
Test description: Electric Fieldstrength Measurement. measurement distance 3 m  
 Test site and distance: Semi Anechoic Room (SAR) with 3 m measurement distance  
 Measured sides of EUT: front, right, rear, left, top, under  
 Rec. antenna (pre-scan): height 1.00 m and 1.82 m, horizontal and vertical polarisation  
 Rec. antenna (final): height between 1 m to 4 m, polarisation according to pre-scan results  
 Turntable step: 90° during pre-scan, continuously turning during final measurement  
 Used filter: lowpass 1200 MHz  
 Test specification.: FCC 15.109 Class B; RSS-Gen: Issue 3

Operator: HLa  
 Operating conditions: IDLE 1900  
 Power during tests: 110V/60Hz  
 Comment 1: Channel GSM 1900 middle (651)

### EUT Information

EUT Name: M/N LISA-U200  
 Manufacturer: u-blox AG  
 IMEI: 358901040001734  
 FW: 21.03  
 Accessories: Two USB cable (1.8m) connected and one to the laptop +GA.107ant. + AC/DC

FCC15.109\_hor+vert



**Final Result 1**

Frequency (MHz)	Quasi Peak (dB $\mu$ V/ m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Correction (dB)	Margin (dB)	Limit (dB $\mu$ V/ m)	Comment
30.8100	20.0	1000	120.000	142.0	V	72.0	21.5	20.0	40.0	
150.190	23.9	1000	120.000	100.0	V	270.0	8.7	19.6	43.5	
885.240	30.0	1000	120.000	140.0	H	351.0	26.3	16.0	46.0	

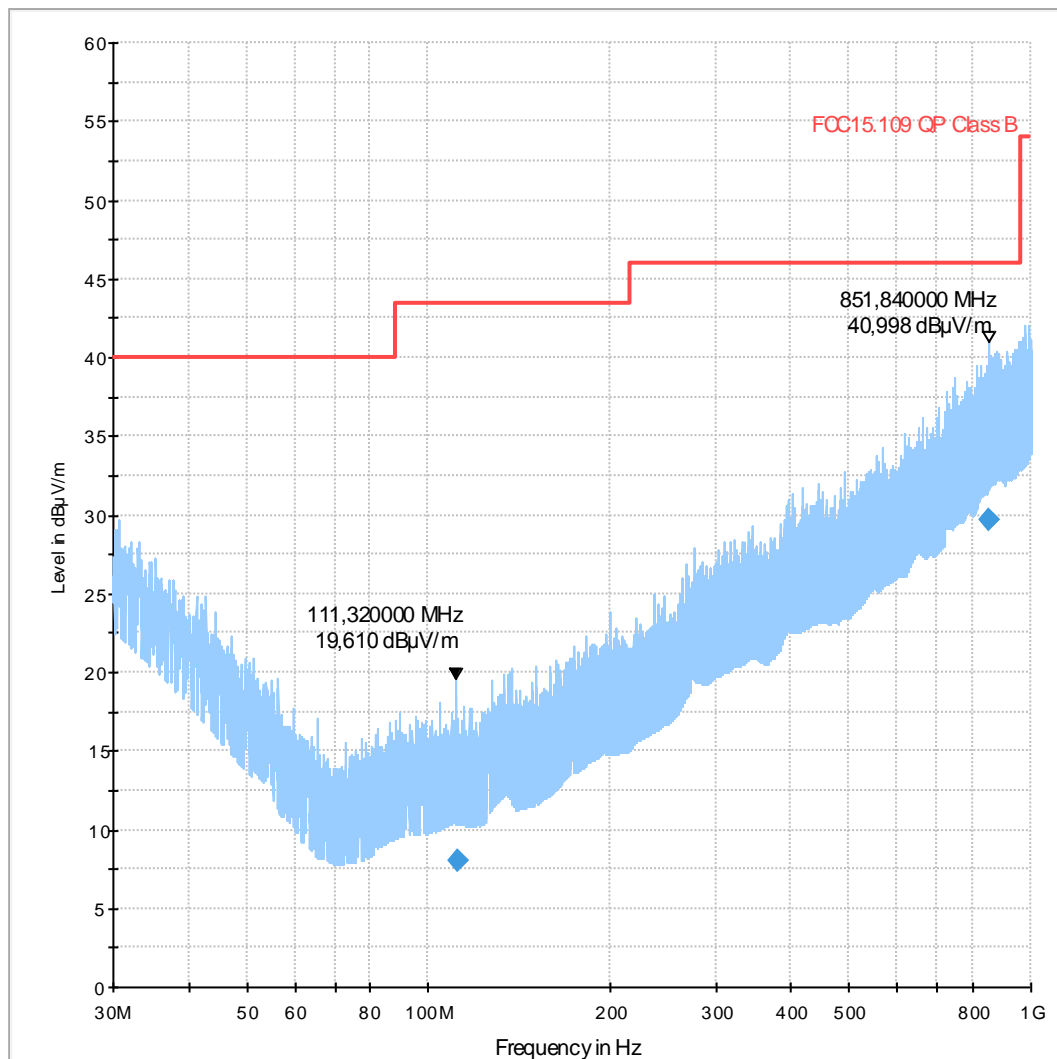
### Diagram No. b\_2.02

Test description:	Electric Fieldstrength Measurement, measurement distance 3 m
Test site and distance:	Semi Anechoic Room (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left, top, under
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (final):	height between 1 m to 4 m, polarisation according to pre-scan results
Turntable step:	90° during pre-scan, continuously turning during final measurement
Used filter:	lowpass 1200 MHz
Test specification:	FCC 15.109 Class B: RSS-Gen: Issue 3
Operator:	HLA
Operating conditions:	FDD II Idle
Power during tests:	110V/60Hz
Comment 1:	Channel FDD II middle (9400)

#### EUT Information

EUT Name:	M/N LISA-U200
Manufacturer:	u-blox AG
IMEI:	358901040001734
FW:	21.03
Accessories:	Two USB cable (1.8m) connected and one to the laptop +GA.107 ant. + AC/DC

FCC15.109\_hor+vert



**Final Result 1**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Measurement Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Correction (dB)	Margin (dB)	Limit (dB $\mu$ V/m)	Comment
111.680	8.0	1000	120.000	100.0	H	285.0	8.4	35.5	43.5	
852.760	29.6	1000	120.000	331.0	H	103.0	25.6	16.4	46.0	

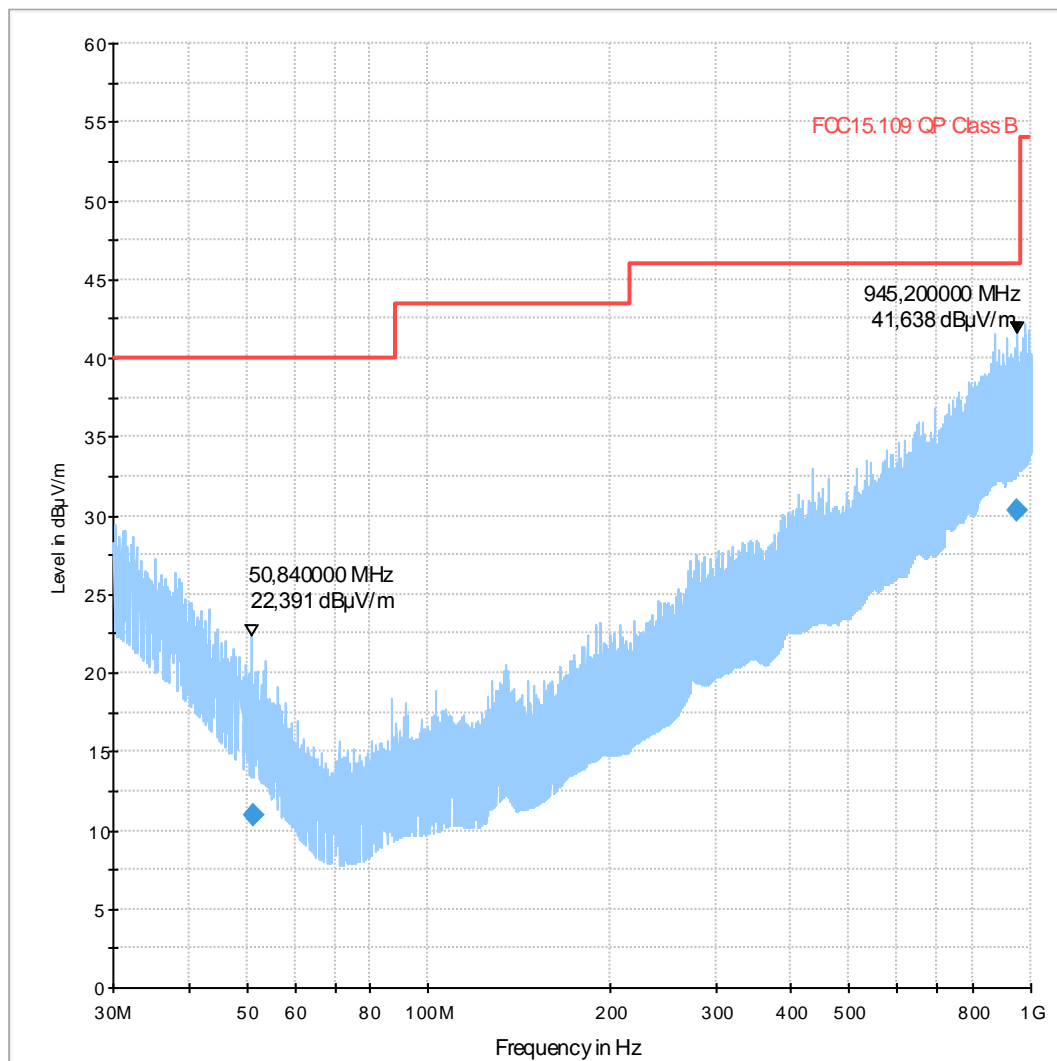
## Diagram No. b\_2.01

Test description:	Electric Fieldstrength Measurement. measurement distance 3 m
Test site and distance:	Semi Anechoic Room (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left, top, under
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (final):	height between 1 m to 4 m, polarisation according to pre-scan results
Turntable step:	90° during pre-scan, continuously turning during final measurement
Used filter:	lowpass 1200 MHz
Test specification.:	FCC 15.109 Class B: RSS-Gen: Issue 3
Operator:	HLA
Operating conditions:	FDD V Idle
Power during tests:	110V/60Hz
Comment 1:	Channel FDD V middle

### EUT Information

EUT Name:	M/N LISA-U200
Manufacturer:	u-blox AG
IMEI:	358901040001734
FW:	21.03
Accessories:	Two USB cable (1.8m) connected and one to the laptop +GA.107 ant. + AC/DC

FCC15.109\_hor+vert





**Final Result 1**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Measurement Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Correction (dB)	Margin (dB)	Limit (dB $\mu$ V/m)	Comment
51.2200	10.9	1000	120.000	187.0	V	69.0	12.7	29.1	40.0	
945.990	30.3	1000	120.000	152.0	V	8.0	26.8	15.7	46.0	

### 1.3. Diagrams of radiated electrical field strength emissions (>1 GHz)

#### a\_5.01

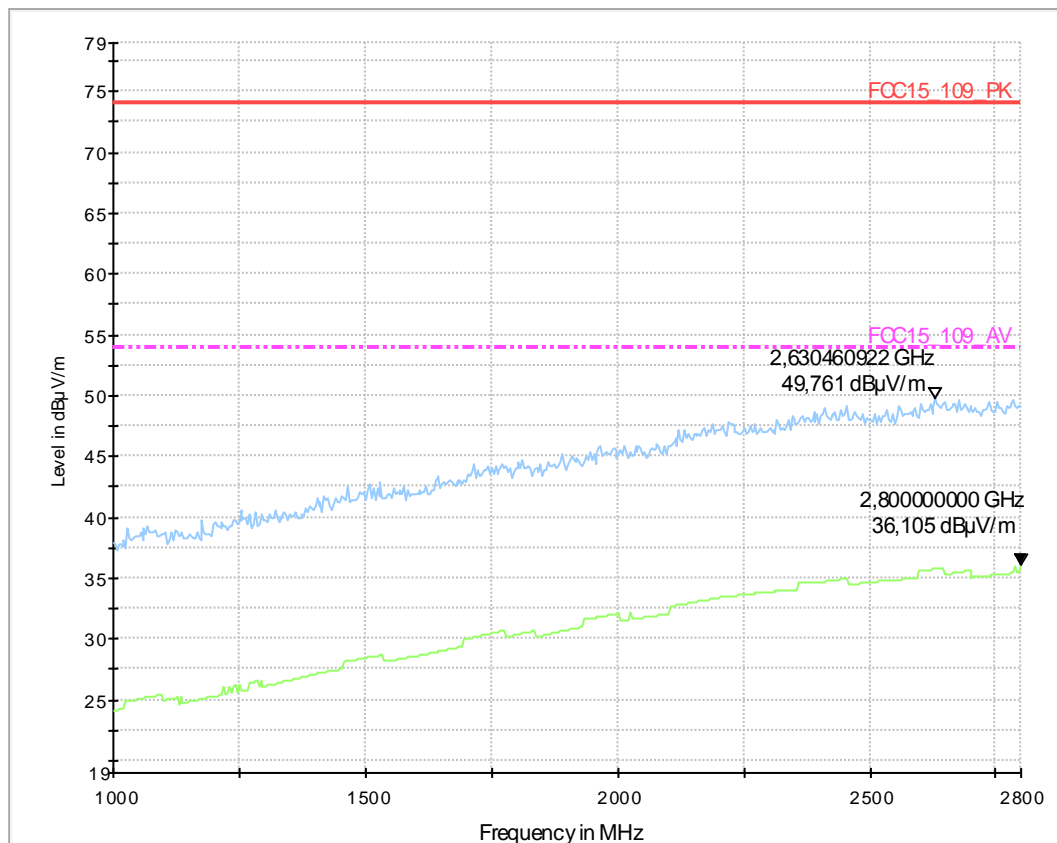
##### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.109 Unintentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	IDLE Mode GSM850
Operator Name:	Tas/dpa
Comment:	Downlink channel middle: 182 External Antenna of EUT used

##### EUT Information

Manufacturer:	u-blox
Model:	LISA-U200
Type:	GSM/WCDMA Module
EUT:	-
EUT additional information:	-
HW version:	-
SW version:	21.03
Additional SW:	-
Config:	-
Serial number:	358901040001353
Aux. Devices:	Magnet Antenna GA107, USB Port 1 connected 1,8m standard USB cable, USB Port 2 connected 1,8m standard USB cable to Notebook, AC/DC 12V Charger
Power Supply:	AC Charger connected to 110 V / 60 Hz
Comments:	

01\_Sweep1\_FSEK\_SM1\_KP1\_PA1\_10ms



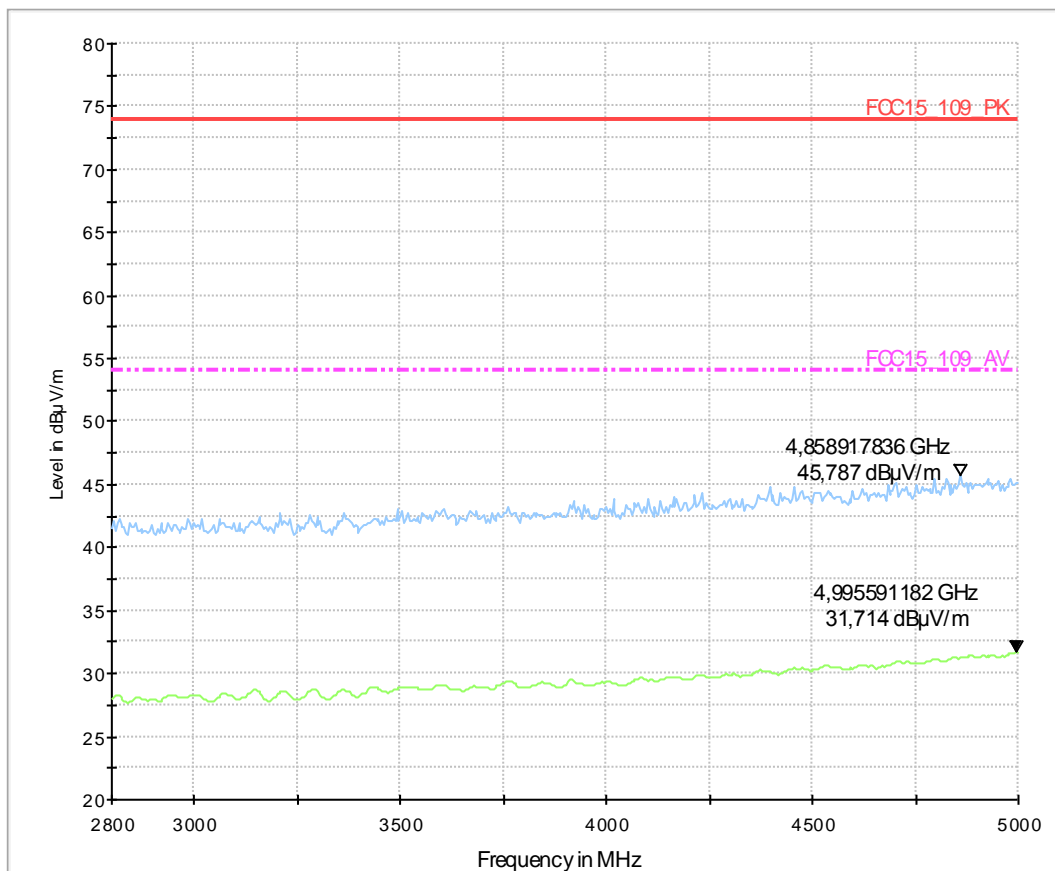
**a\_5.02****Common Information**

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.109 Unintentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	IDLE Mode GSM850
Operator Name:	dpa
Comment:	Downlink channel middle: 182

**EUT Information**

Manufacturer:	u-blox
Model:	LISA-U200
Type:	GSM/WCDMA Module
-----	
EUT:	-
EUT additional information:	-
HW version:	-
SW version:	21.03
Additional SW:	-
Config:	-
Serial number:	358901040001353
Aux. Devices:	Magnet Antenna GA107, USB Port 1 connected 1,8m standard USB cable, USB Port 2 connected 1,8m standard USB cable to Notebook, AC/DC 12V Charger
Power Supply:	AC Charger connected to 110 V / 60 Hz
Comments:	

03\_Sweep2\_FSEK\_SM1\_KP1\_PA1\_10ms\_IDLE850



## Diagram No.: a\_5.09

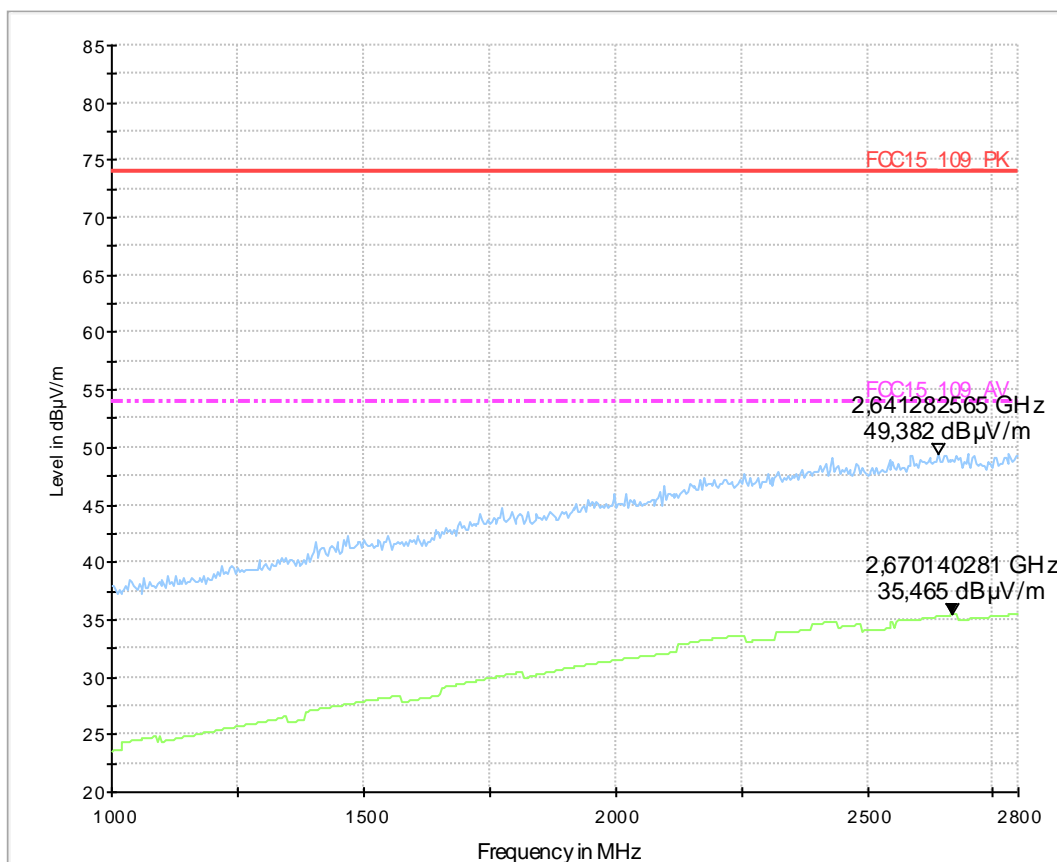
### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.109 Unintentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	IDLE Mode PCS1900 (DL: ARFCN 651)
Operator Name:	Oou
comment	Internal/External Antenna of EUT used

### EUT Information

Manufacturer:	u-blox
Model:	LISA-U200
Type:	GSM/WCDMA Module
-----	
EUT:	-
EUT additional information:	-
HW version:	-
SW version:	21.03
Additional SW:	-
Config:	-
Serial number:	358901040001353
Aux. Devices:	Magnet Antenna GA107, USB Port 1 connected 1,8m standard USB cable, USB Port 2 connected 1,8m standard USB cable to Notebook, AC/DC 12V Charger
Power Supply:	AC Charger connected to 110 V / 60 Hz
Comments:	

01\_Sweep1\_FSEK\_SM1\_KP1\_PA1\_10ms



## Diagram No.: a\_5.10\_RX

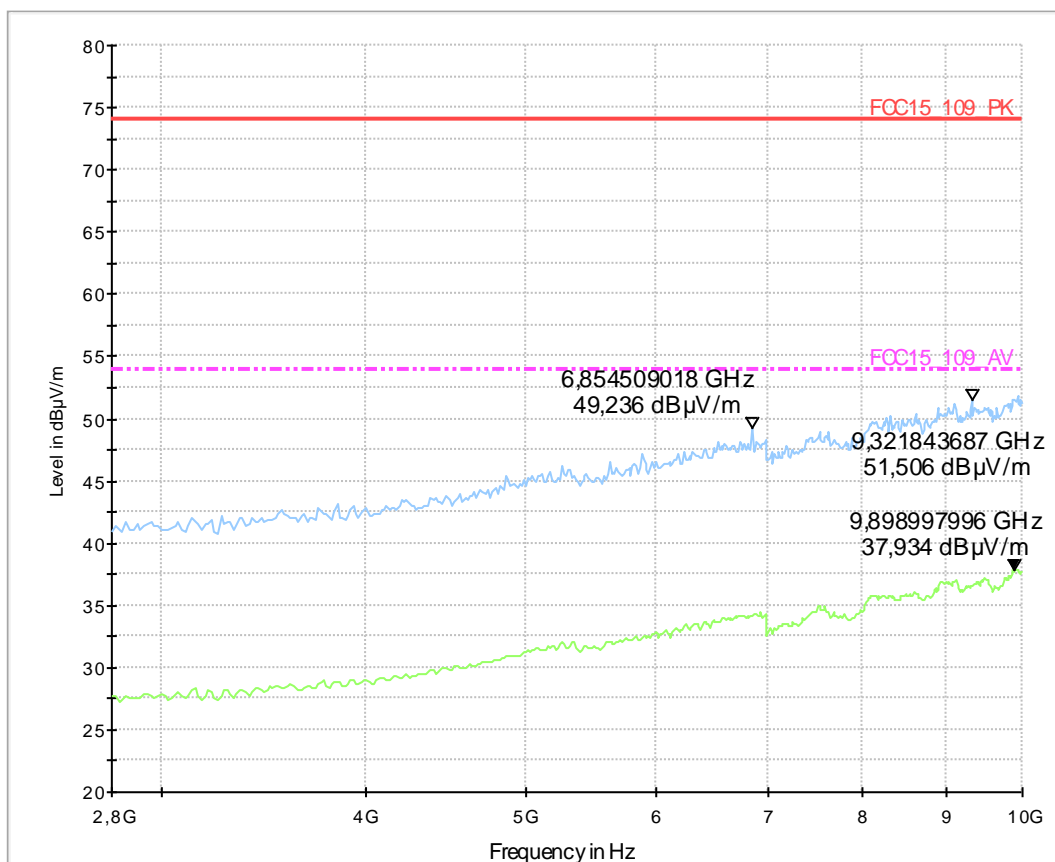
### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.109 Unintentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	IDLE Mode PCS1900 (DL: ARFCN 651)
Operator Name:	Oou
comment	External Antenna of EUT used

### EUT Information

Manufacturer:	u-blox
Model:	LISA-U200
Type:	GSM/WCDMA Module
-----	
EUT:	-
EUT additional information:	-
HW version:	-
SW version:	21.03
Additional SW:	-
Config:	-
Serial number:	358901040001353
Aux. Devices:	Magnet Antenna GA107, USB Port 1 connected 1,8m standard USB cable, USB Port 2 connected 1,8m standard USB cable to Notebook, AC/DC 12V Charger
Power Supply:	AC Charger connected to 110 V / 60 Hz
Comments:	

02\_Sweep2\_FSEK\_SM1\_KP1\_PA1\_10ms\_IDLE1900



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## Diagram No.: b\_5.17

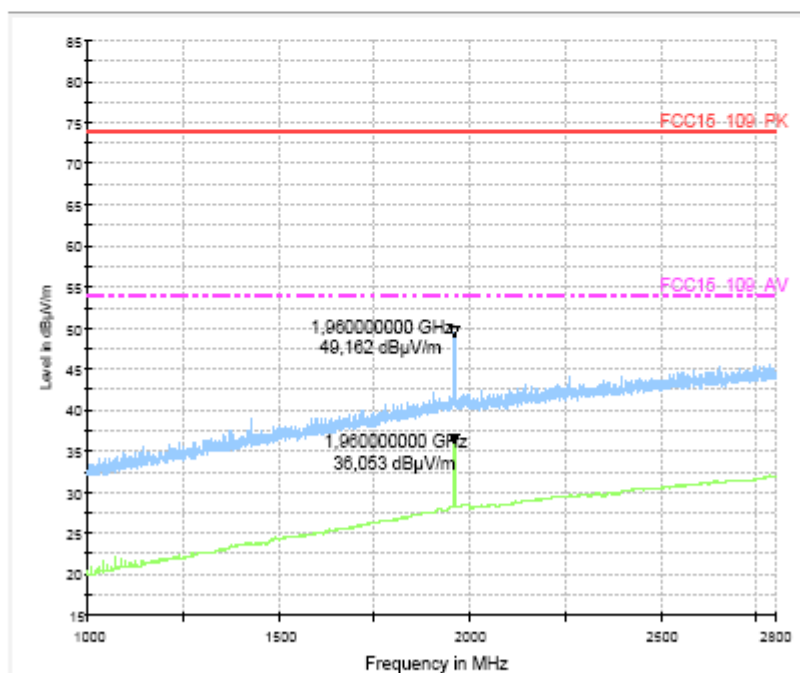
## Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.109 Unintentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	Idle-Mode FDD II (DL: UARFCN 9600)
Operator Name:	Tas
Comment:	6-0082-11-1-2b Downlink channel at 1960 MHz visible

## EUT Information

Manufacturer:	u-blox
Model:	LISA-U200
Type:	GSM/WCDMA Module
EUT:	-
EUT additional information:	-
HW version:	-
SW version:	21.03
Additional SW:	-
Config:	-
Serial number:	358901040001353
Aux. Devices:	Magnet Antenna GA107, USB Port 1 connected 1,8m standard USB cable, USB Port 2 connected 1,8m standard USB cable to Notebook, AC/DC 12V Charger
Power Supply:	AC Charger connected to 110 V / 60 Hz
Comments:	

Sweep1\_SM1\_K1



10.11.2011

07:32:12

## Diagram No.: b\_5.18

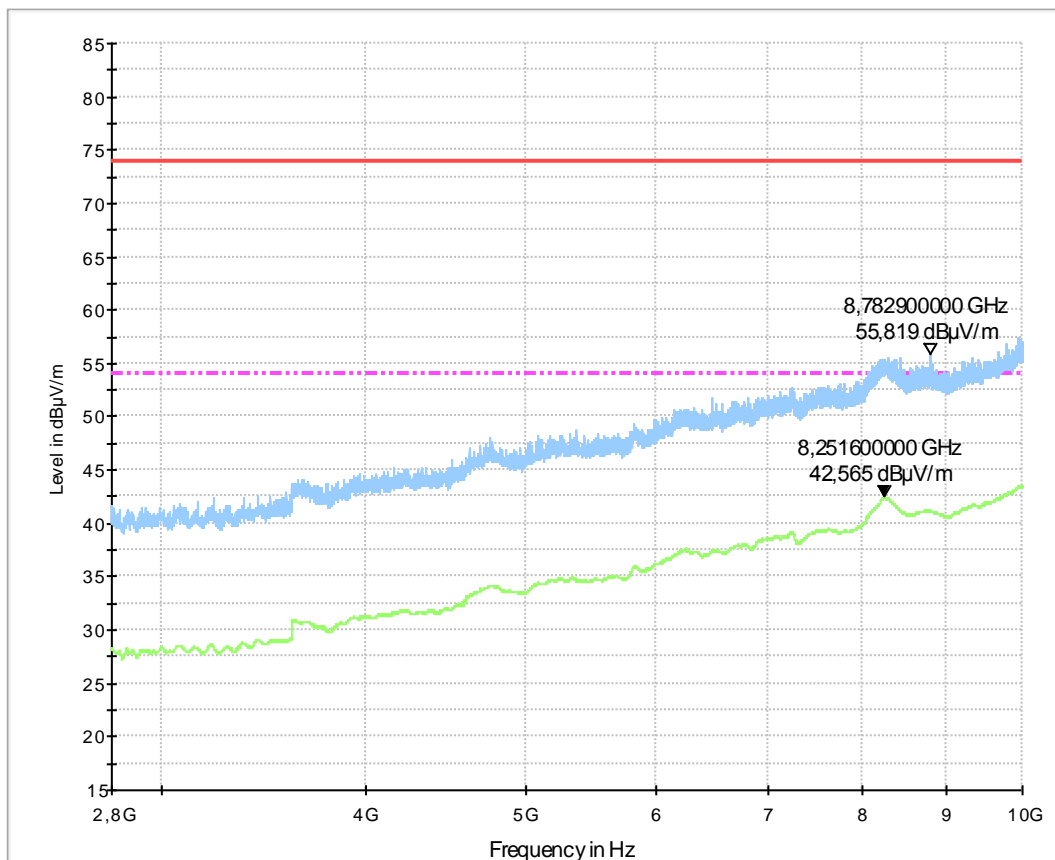
### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC 15.109 Unintentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	Idle-Mode FDD II (DL: UARFCN 9800)
Operator Name:	Tas
Project no.:	6-0082-11-1-2b

### EUT Information

Manufacturer:	u-blox
Model:	LISA-U200
Type:	GSM/WCDMA Module
-----	
EUT:	-
EUT additional information:	-
HW version:	-
SW version:	21.03
Additional SW:	-
Config:	-
Serial number:	358901040001353
Aux. Devices:	Magnet Antenna GA107, USB Port 1 connected 1,8m standard USB cable, USB Port 2 connected 1,8m standard USB cable to Notebook, AC/DC 12V Charger
Power Supply:	AC Charger connected to 110 V / 60 Hz
Comments:	

030441\_FCC\_Part15.109\_Unintentional\_Radiator\_1G-18G



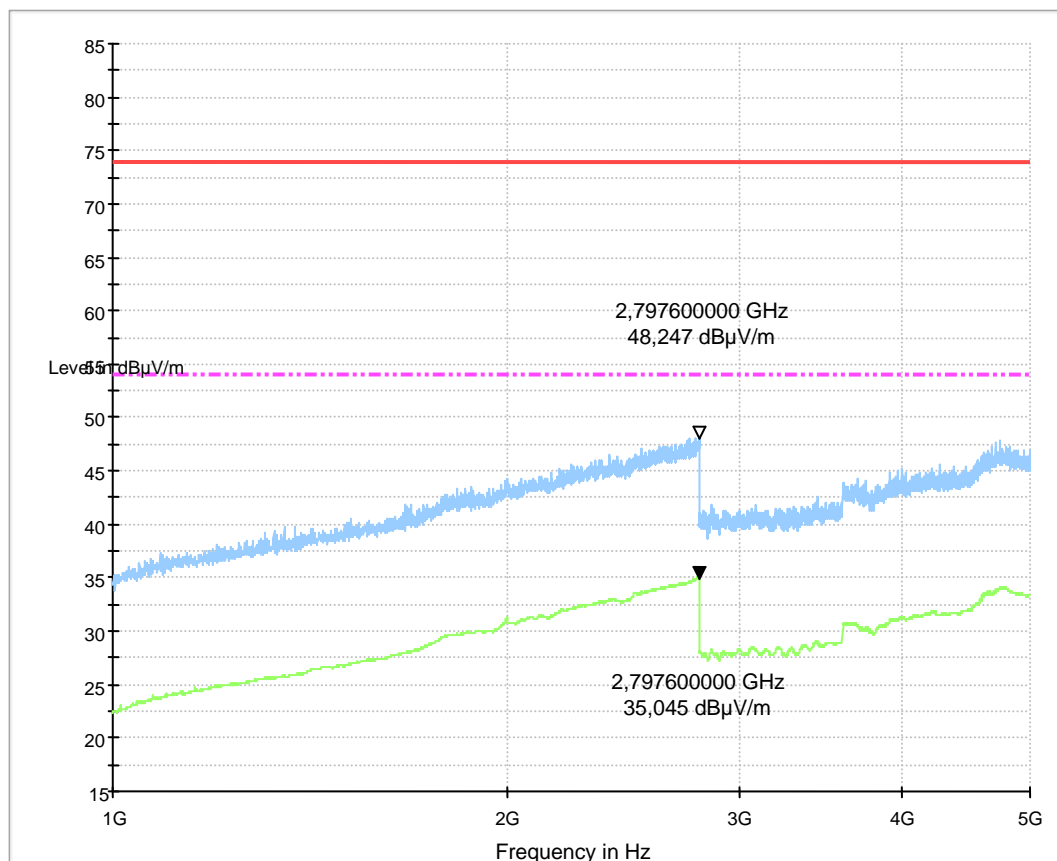
**Diagram No.: b\_5.19****Common Information**

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.109 Unintentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	Idle-Mode FDD V
Operator Name:	Tas
Comment:	6-0082-11-1-2b

**EUT Information**

Manufacturer:	u-blox
Model:	LISA-U200
Type:	GSM/WCDMA Module
-----	
EUT:	-
EUT additional information:	-
HW version:	-
SW version:	21.03
Additional SW:	-
Config:	-
Serial number:	358901040001353
Aux. Devices:	Magnet Antenna GA107, USB Port 1 connected 1,8m standard USB cable, USB Port 2 connected 1,8m standard USB cable to Notebook, AC/DC 12V Charger
Power Supply:	AC Charger connected to 110 V / 60 Hz
Comments:	

030441\_FCC\_Part15.109\_Unintentional\_Radiator\_1G-18G







## 1.4. Conducted emissions on antenna port in receive mode

### Diagram No.: a\_4.33

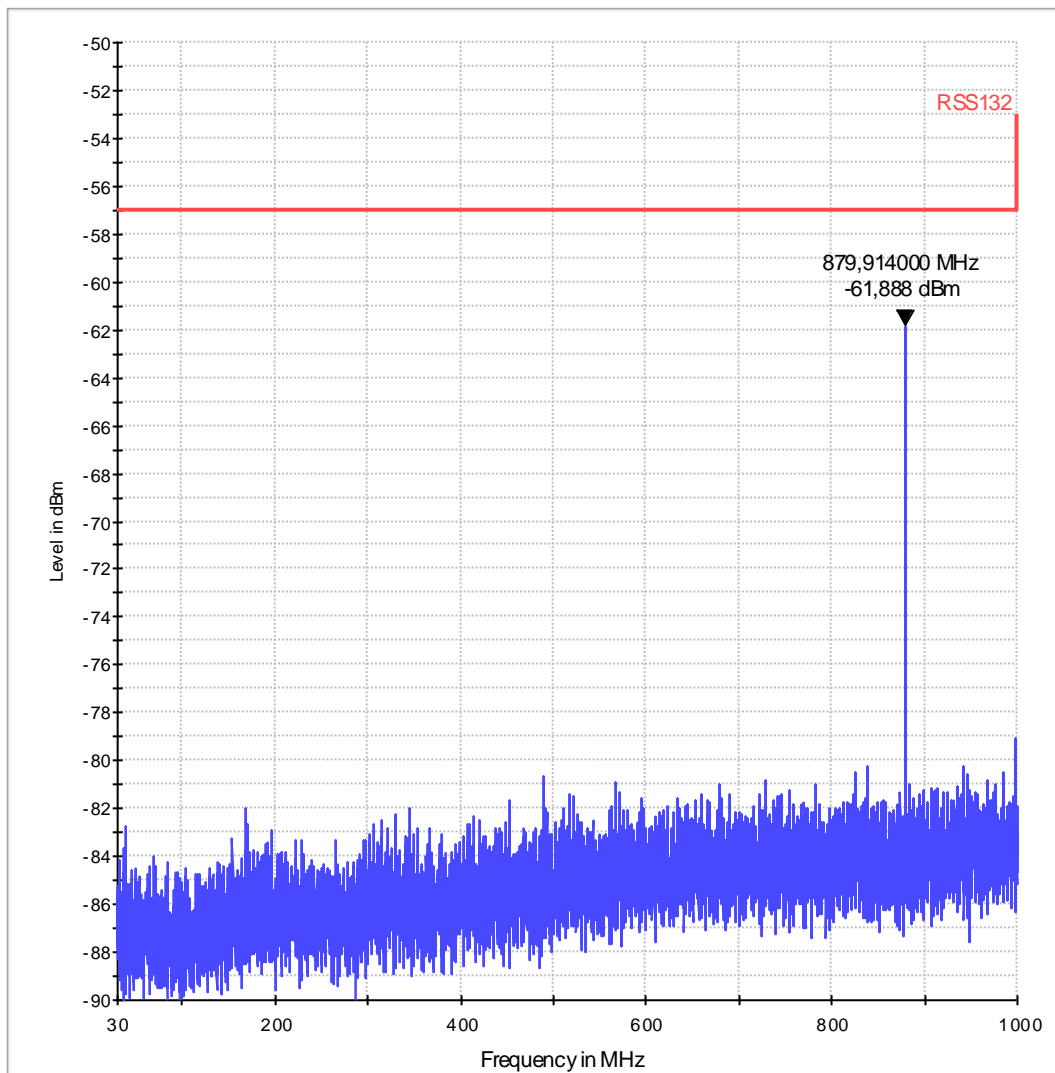
#### Common Information

Test Description:	RX Spurious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC 2.1051 , RSS 132
Operating condition:	23°C 47%
Operation mode:	Idle, G850 (ARFCN 182)
Operator Name:	Tas
Comment:	6-0082-11-1-2a DL at 880 MHz visible

#### EUT Information

EUT Name:	LISA-U200
Manufacturer:	u-blox AG
Serial Number:	358901040001353
Hardware Rev:	21.03
Voltage:	3,8 VDC

Sweep1



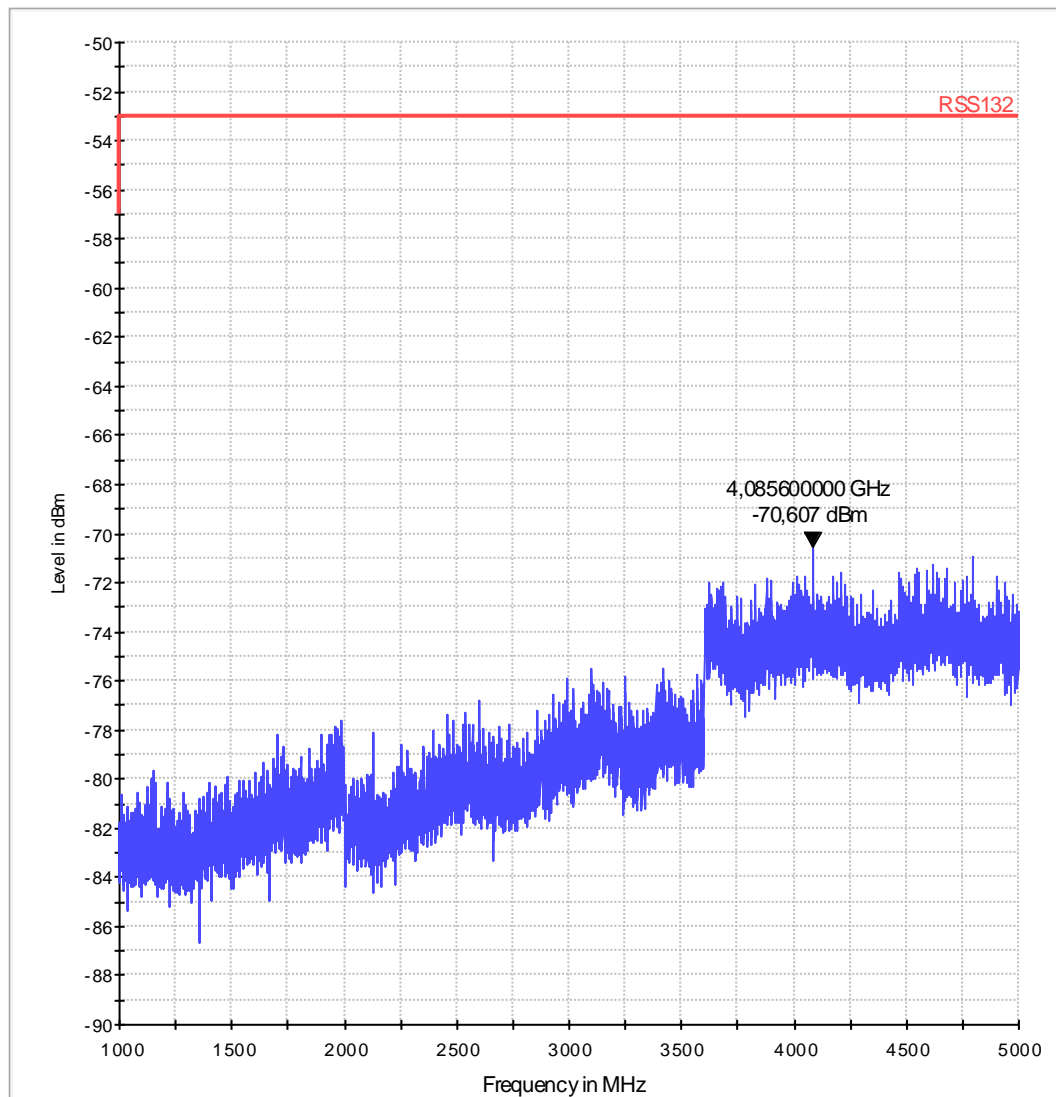
**Diagram No.: a\_4.34****Common Information**

Test Description:	RX Spurious Emission conducted
Test Site:	Radio laboratory
Test Standard:	FCC 2.1051 , RSS 132
Operating condition	23°C 47%
Op. mode	Idle, G850 (ARFCN 182)
Operator	Tas
Project no.	6-0082-11-1-2a

**EUT Information**

EUT Name:	LISA-U200
Manufacturer:	u-blox AG
Serial Number:	358901040001353
Hardware Rev:	21.03
Voltage:	3,8 VDC

Sweep2



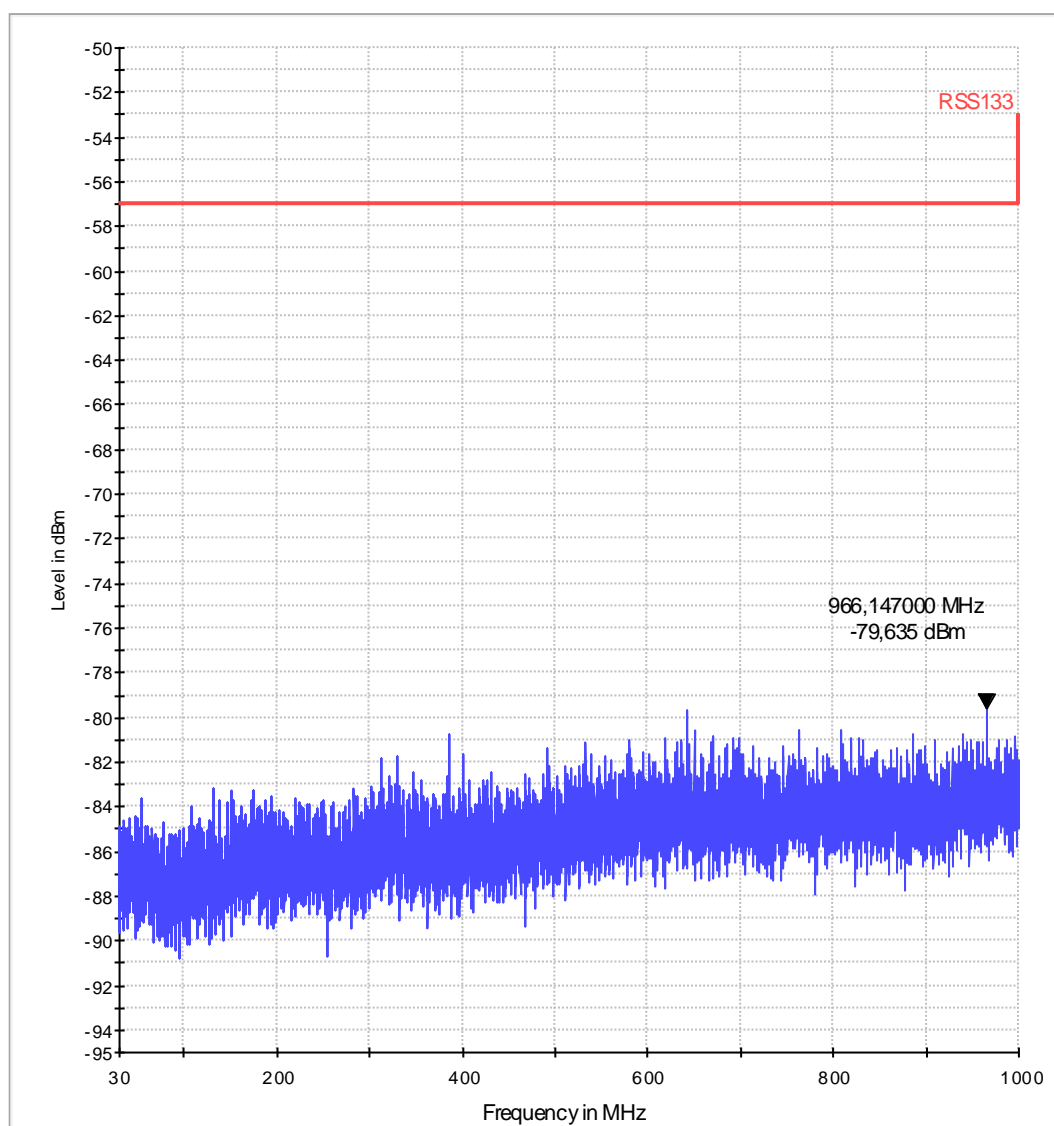
**a\_4.31****Common Information**

Test Description:	Receiver Conducted Emissions (IDLE)
Test Site:	Radio laboratory
Test Standard:	FCC Part 24.238, RSS-133
Test condition:	24.5°C 39%
Operation mode:	EGPRS-RX, PCS19000 (Downlink ch. 651)
Operator Name:	dpa

**EUT Information**

EUT Name:	LISA-U200
Manufacturer:	u-blox AG
Serial Number:	358901040001353
Hardware Rev:	21.03
Voltage:	3,8 VDC

Sweep1



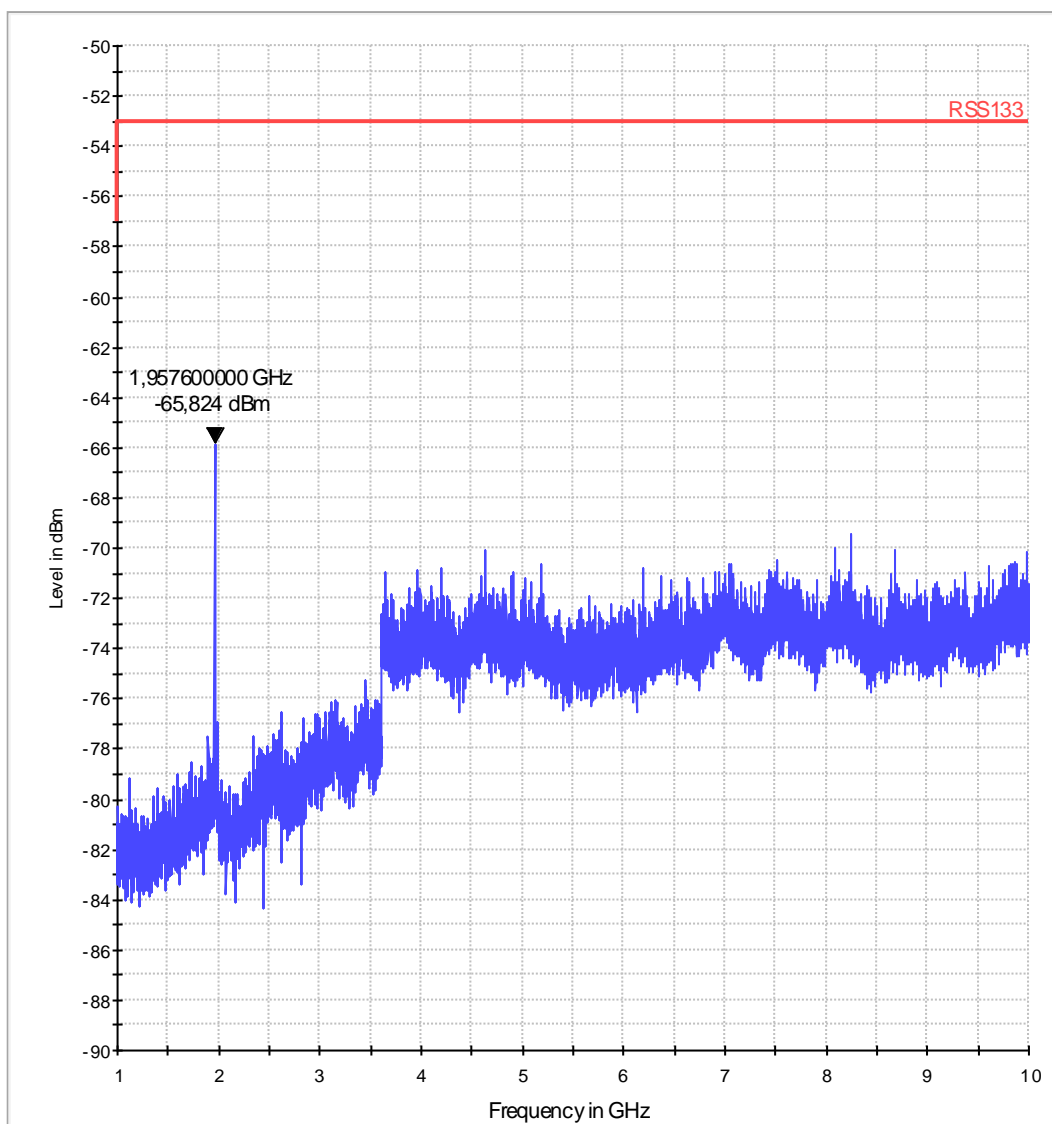
**a\_4.32****Common Information**

Test Description:	Receiver Conducted Emissions (IDLE)
Test Site:	Radio laboratory
Test Standard:	FCC Part 24.238, RSS-133
Test condition:	24.5°C 39%
Operation mode:	EGPRS-RX, PCS19000 (Downlink ch. 651 visible)
Operator Name:	dpa

**EUT Information**

EUT Name:	LISA-U200
Manufacturer:	u-blox AG
Serial Number:	358901040001353
Hardware Rev:	21.03
Voltage:	3,8 VDC

Sweep2



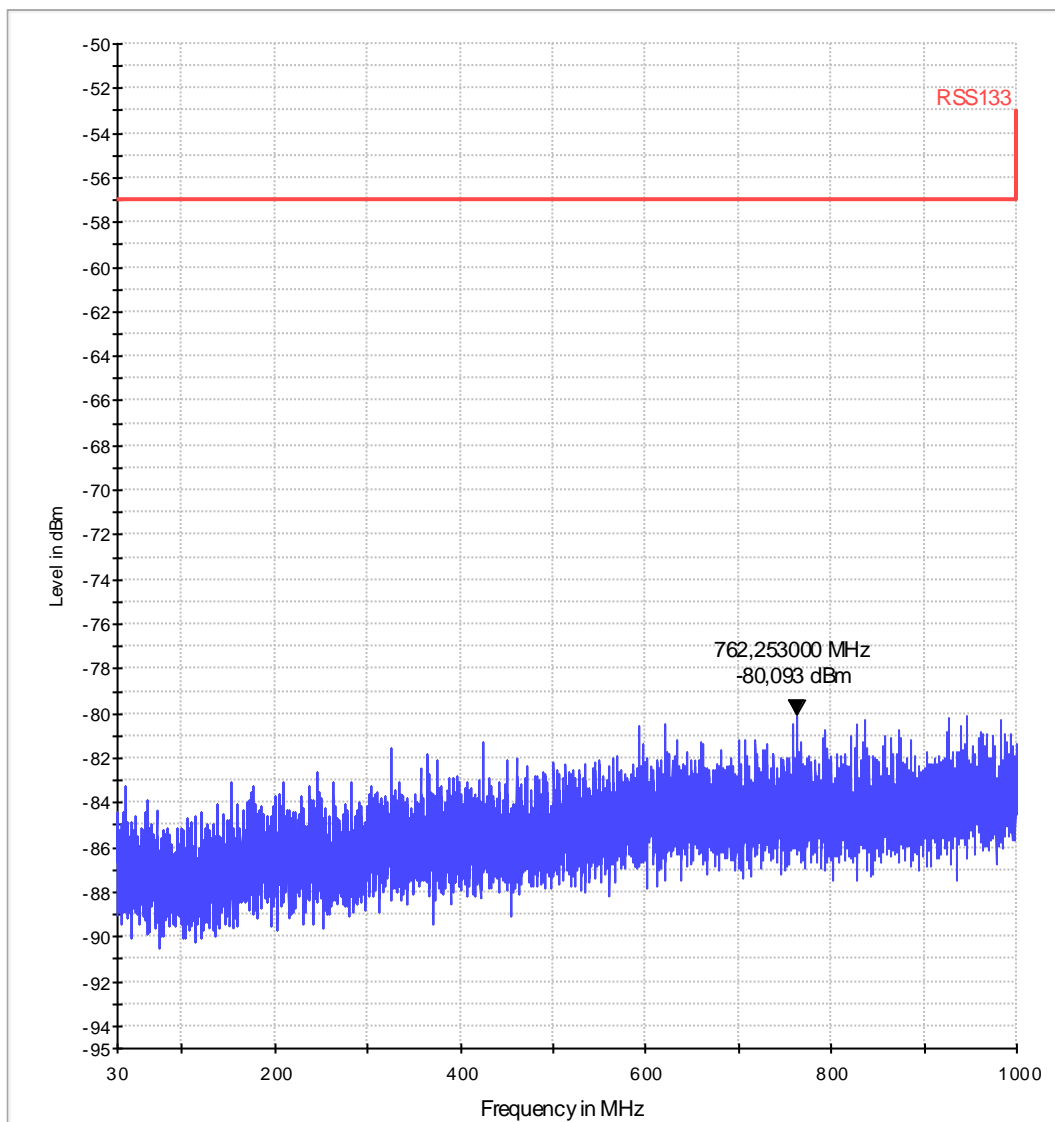
**b\_4.29****Common Information**

Test Description:	Receiver Conducted Emissions (IDLE)
Test Site:	Radio laboratory
Test Standard:	FCC Part 24.238, RSS-133
Test Conditions:	23°C 41%
Operation mode:	FDDII-RX (Downlink 9800 (1960MHz))
Operator Name:	dpa
Comment:	

**EUT Information**

EUT Name:	LISA-U200
Manufacturer:	u-blox AG
Serial Number:	358901040001353
Hardware Rev:	21.03
Voltage:	3,8 VDC

Sweep1



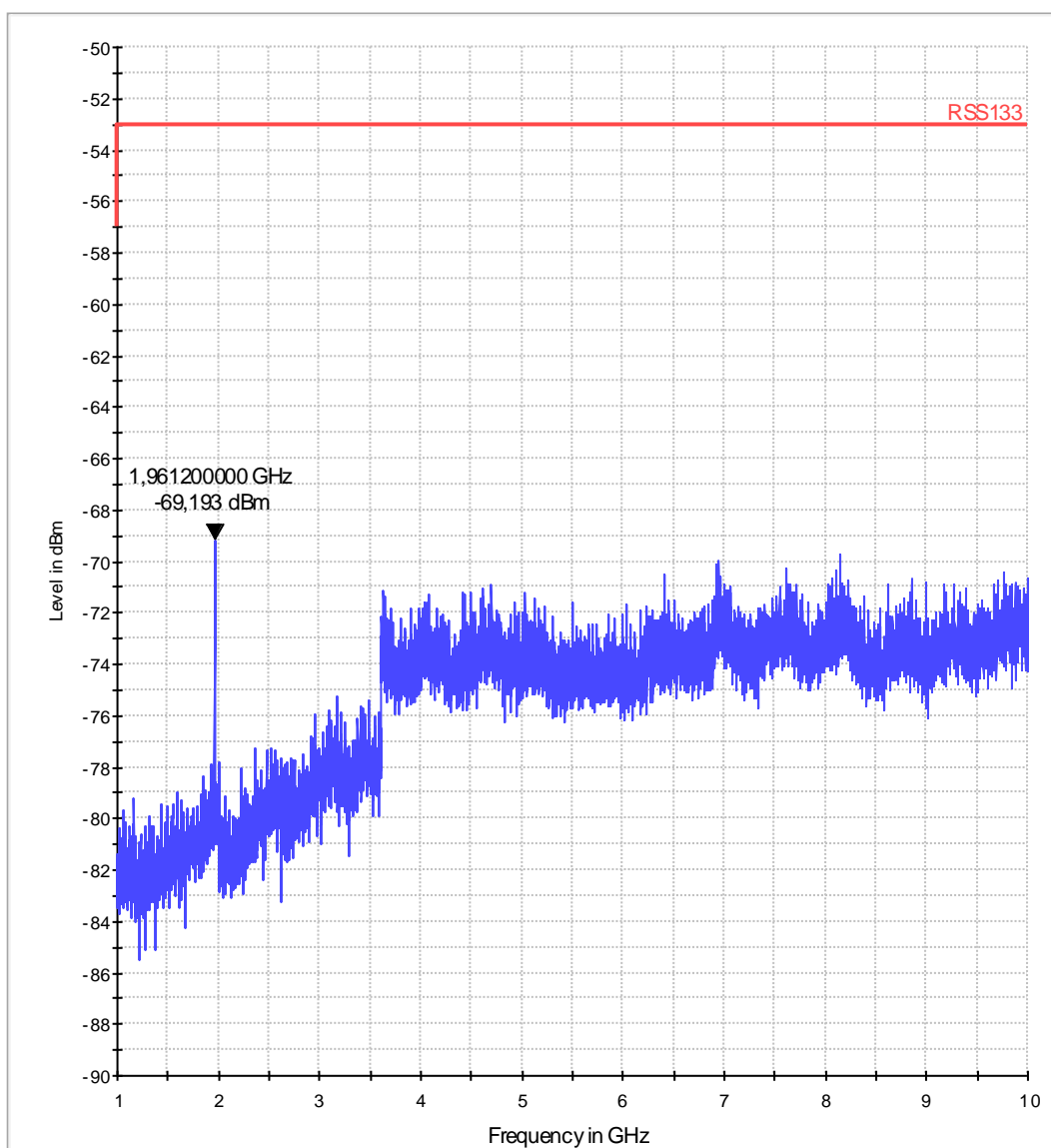
**b\_4.30****Common Information**

Test Description:	Receiver Conducted Emissions (IDLE)
Test Site:	Radio laboratory
Test Standard:	FCC Part 24.238, RSS-133
Test Conditions:	23°C 41%
Operation mode:	FDDII-RX (Downlink ch. 9800 (visible1960MHz))
Operator Name:	dpa

**EUT Information**

EUT Name:	LISA-U200
Manufacturer:	u-blox AG
Serial Number:	358901040001353
Hardware Rev:	21.03
Voltage:	3,8 VDC

Sweep2



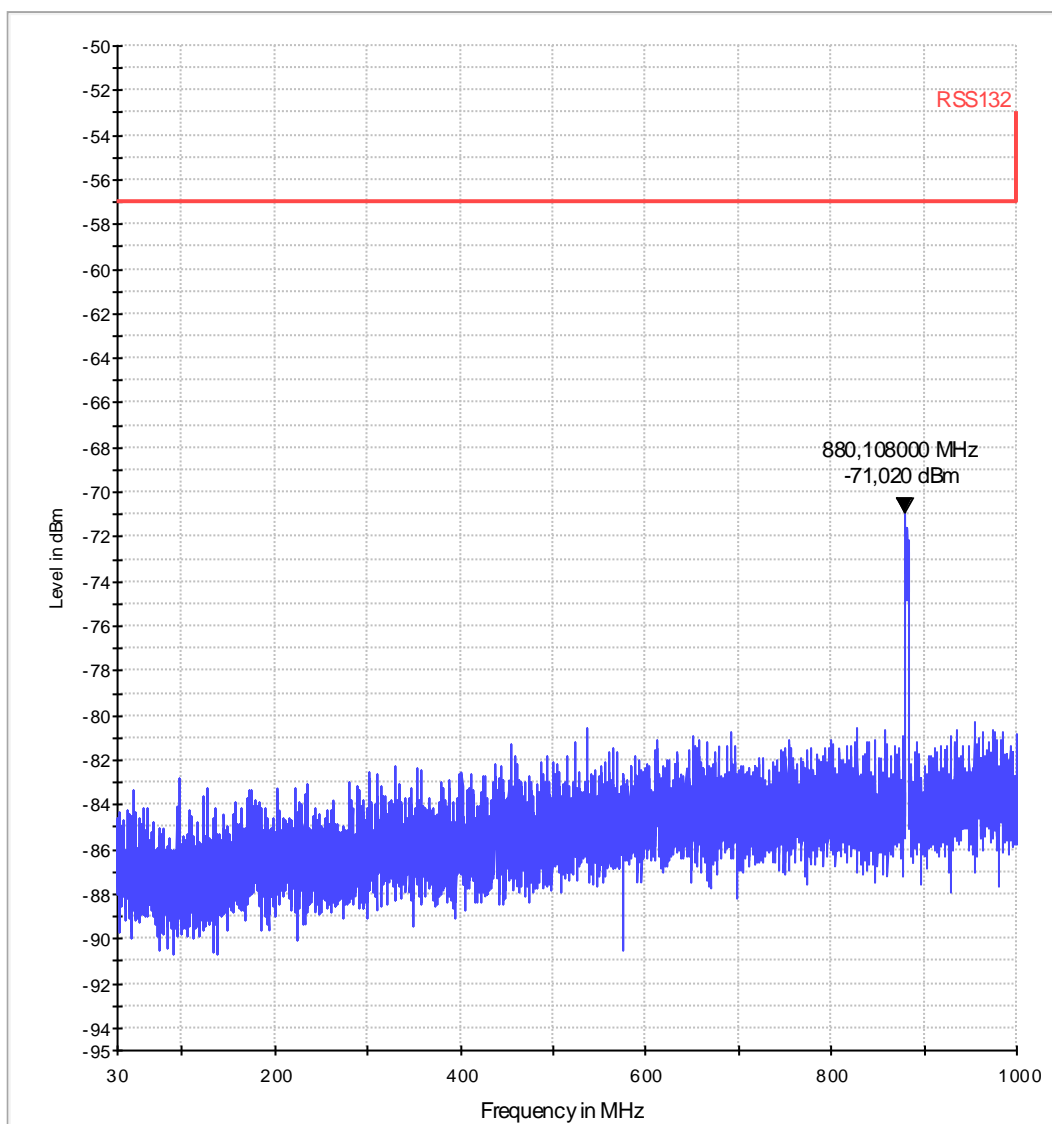
**b\_4.17****Common Information**

Test Description:	Receiver Conducted Emissions (IDLE)
Test Site:	Radio laboratory
Test Standard:	FCC Part 22, RSS-132
Test condition:	23°C 41%
Operation mode:	FDDV-RX (Downlink ch. 4407 (visible 880,1 MHz))
Operator:	dpa

**EUT Information**

EUT Name:	LISA-U200
Manufacturer:	u-blox AG
Serial Number:	358901040001353
Hardware Rev:	21.03
Voltage:	3,8 VDC

Sweep1





**b\_4.18****Common Information**

Test Description:	Receiver Conducted Emissions (IDLE)
Test Site:	Radio laboratory
Test Standard:	FCC Part 22, RSS-132
Test condition:	23°C 41%
Operation mode:	FDDV-RX (Downlink ch. 4407 (881,4MHz))
Operator:	dpa

**EUT Information**

EUT Name:	LISA-U200
Manufacturer:	u-blox AG
Serial Number:	358901040001353
Hardware Rev:	21.03
Voltage:	3,8 VDC

Sweep2

