

Annex 4: Diagrams to
PARTIAL TEST REPORT
No.: 2-20823287m/13

According to:
FCC Regulations
Part 15.109, Part15.247

for
Sony Mobile Communications

Tablet PC
(Bluetooth LE)

FCC-ID: PY7TM-0042

Laboratory Accreditation and Listings			
 DAkks 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-2666 C-2914, T-1967, G-301
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1. Transmitter spurious emissions

1.1. Frequency range $f < 30\text{MHz}$

Diagram No. 2.02_BT_LE_Ch19

Date: 11.03.2014 Page 1 of 1
 Test description: Magnetic Fieldstrength Measurement related to 30/300 m distance
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: 8.51.0
 Distance correction: used accord. table, pls. see test report
 Technical Data: Please see page 2 for detailed data of measurement setup
 Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
 Used filter: bypass
 Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 3

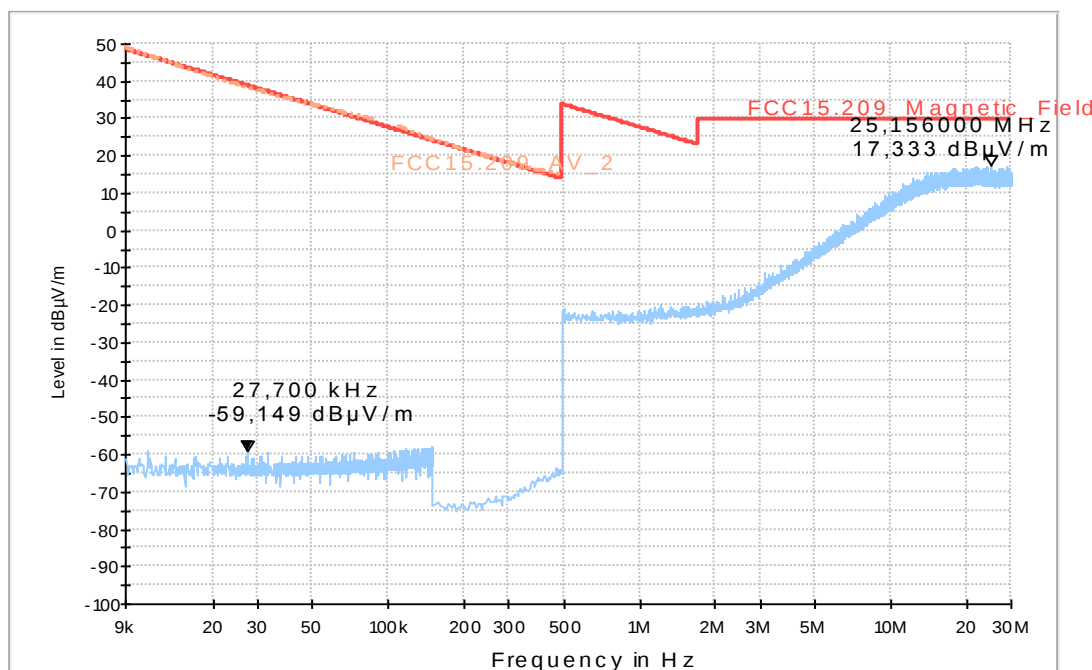
Operator: HLa
 Operating conditions: TX-on continuous, BT LE_Ch19
 Power during tests: 12V DC, 110V/60Hz, full loaded batteries
 Comment 1: Channel middle
 Comment 2:

EUT Information

Manufacturer: Sony
 FCC ID: PY7TM-0042
 Type: GSM-/ WCDMA- /LTE Tablet PC

EUT: RSE #01
 HW version: AP1
 SW version: 17.1.D.0.108
 SVN: -
 Config: -
 Serial number: CB5126DPP9
 Connected Interfaces: Power Supply (EP850) ; USB-cable (EC700)
 Power Supply: Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
 Comments: -

FCC15.209_magn hor+vert



1.2. Frequency range 30MHz<f<1GHz

Diagram No. 3.04_BT-LE-Ch0

12.03.2014 Page 1 of 1
 Test description: Electric Fieldstrength Measurement
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: 8.51.0
 Distance correction: not used
 Used filter: not used
 Technical Data: please see page 2 for detailed data of measurement setup
 Test specification.: FCC 15.209; RSS-Gen: Issue 3

Operator: KRe
 Operating conditions: TX-on continuous, BT-LE-Ch0
 Power during tests: 120V 60Hz
 Comment 1: -

EUT Information

Manufacturer: Sony
 FCC ID: PY7TM-0042
 Type: GSM-/ WCDMA- /LTE Tablet PC

 EUT: RSE #01
 HW version: AP1
 SW version: 17.1.D.0.108
 SVN: -
 Config: -
 Serial number: CB5126DQ9V
 Connected Interfaces: Power Supply (EP850) ; USB-cable (EC700)
 Power Supply: Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
 Comments: -

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
913.250000	30.6	1000.0	120.000	165.0	V	134.0	0.0	27.4	15.40	46.00

01_FCC15.209_hor+vert_kipp

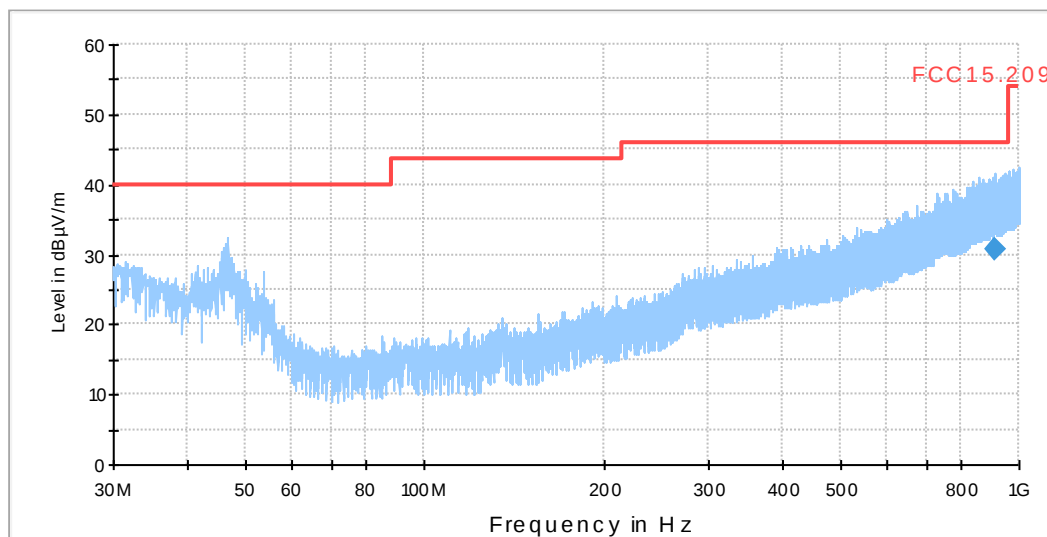


Diagram No. 3.05_BT-LE-Ch19

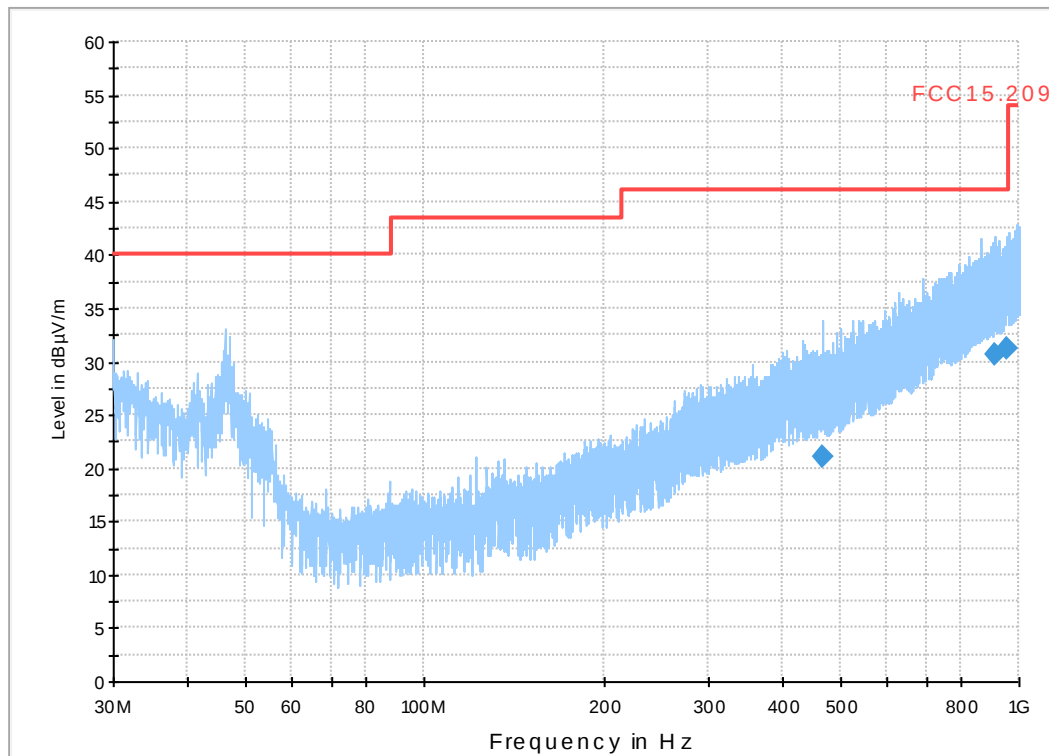
Test description:	12.03.2014 Page 1 of 2
Test site and distance:	Electric Fieldstrength Measurement
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	8.51.0
Used filter:	not used
Technical Data:	not used
Test specification.:	please see page 2 for detailed data of measurement setup
	FCC 15.209; RSS-Gen: Issue 3
Operator:	KRe
Operating conditions:	TX-on continuous, BT-LE-Ch19
Power during tests:	120V 60Hz
Comment 1:	-

EUT Information

Manufacturer:	Sony
FCC ID:	PY7TM-0042
Type:	GSM-/ WCDMA- /LTE Tablet PC

EUT:	RSE #01
HW version:	AP1
SW version:	17.1.D.0.108
SVN:	-
Config:	-
Serial number:	CB5126DQ9V
Connected Interfaces:	Power Supply (EP850) ; USB-cable (EC700)
Power Supply:	Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
Comments:	-

01_FCC15.209_hor+vert_kipp



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Correction (dB)	Margin - QPK (dB)
468.050000	21.0	1000.0	120.000	223.0	V	2.0	0.0	19.7	25.00
908.470000	30.7	1000.0	120.000	165.0	V	297.0	90.0	27.4	15.30
957.790000	31.3	1000.0	120.000	215.0	V	259.0	90.0	27.5	14.70

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Limit - QPK (dBμV/m)
468.050000	46.00
908.470000	46.00
957.790000	46.00

Diagram No. 3.06_BT-LE-Ch39

12.03.2014 Page 1 of 2
 Electric Fieldstrength Measurement
 Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: 8.51.0
 Distance correction: not used
 Used filter: not used
 Technical Data: please see page 2 for detailed data of measurement setup
 Test specification.: FCC 15.209; RSS-Gen: Issue 3

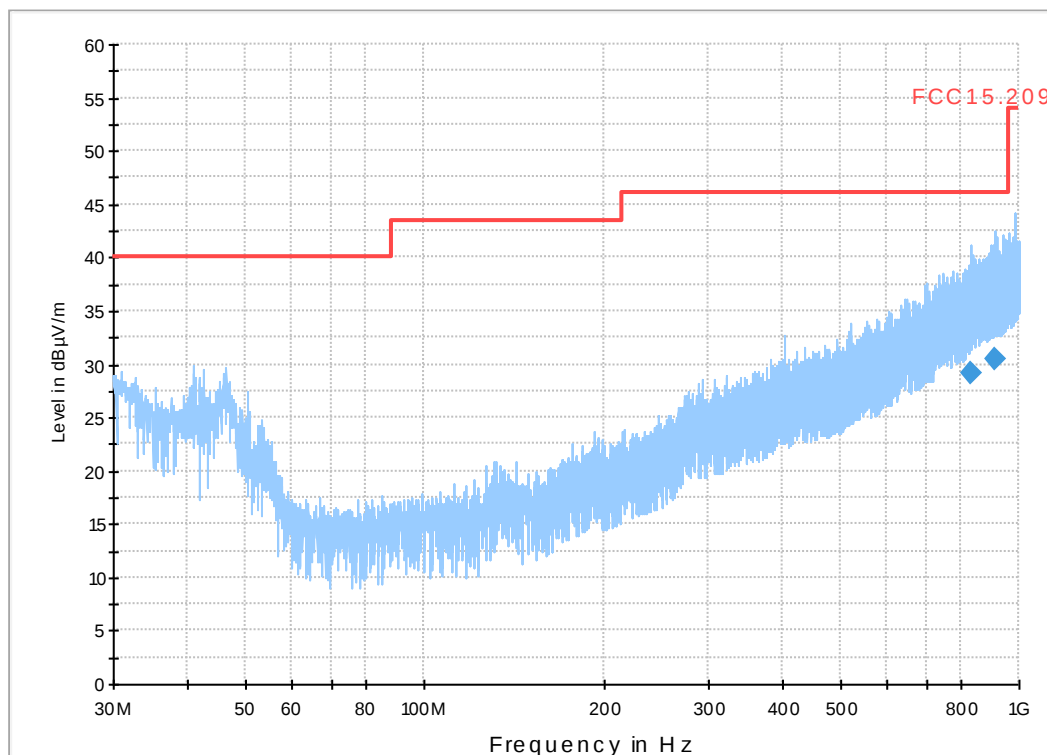
Operator: KRe
 Operating conditions: TX-on continuous, BT-LE-Ch39
 Power during tests: 120V 60Hz
 Comment 1: -

EUT Information

Manufacturer: Sony
 FCC ID: PY7TM-0042
 Type: GSM-/ WCDMA- /LTE Tablet PC

EUT: RSE #01
 HW version: AP1
 SW version: 17.1.D.0.108
 SVN: -
 Config: -
 Serial number: CB5126DQ9V
 Connected Interfaces: Power Supply (EP850) ; USB-cable (EC700)
 Power Supply: Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
 Comments: -

01_FCC15.209_hor+vert_kipp



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Correction (dB)	Margin - QPK (dB)
827.700000	29.2	1000.0	120.000	190.0	H	72.0	0.0	26.0	16.80
913.460000	30.5	1000.0	120.000	338.0	V	107.0	90.0	27.4	15.50

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Limit - QPK (dBμV/m)
827.700000	46.00
913.460000	46.00

1.3. Frequency range $f > 1\text{GHz}$

Diagram No.: 4.04_BT-LE-Ch0

Common Information

Test Description:	Radiated field strength emission accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & §15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operator Name:	кта
Comment:	Channel no. low=0
Op. Mode:	Bluetooth_LE

EUT Information

Manufacturer:	Sony
FCC ID:	PY7TM-0042
Type:	GSM-/ WCDMA- /LTE Tablet PC

EUT:	RSE #01
HW version:	AP1
SW version:	17.1.D.0.108
SVN:	-
Config:	-
Serial number:	CB5126DQ9V
Connected Interfaces:	Power Supply (EP850) ; USB-cable (EC700)
Power Supply:	Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
Comments:	-

00431_SM1_KP1_W LAN_500us

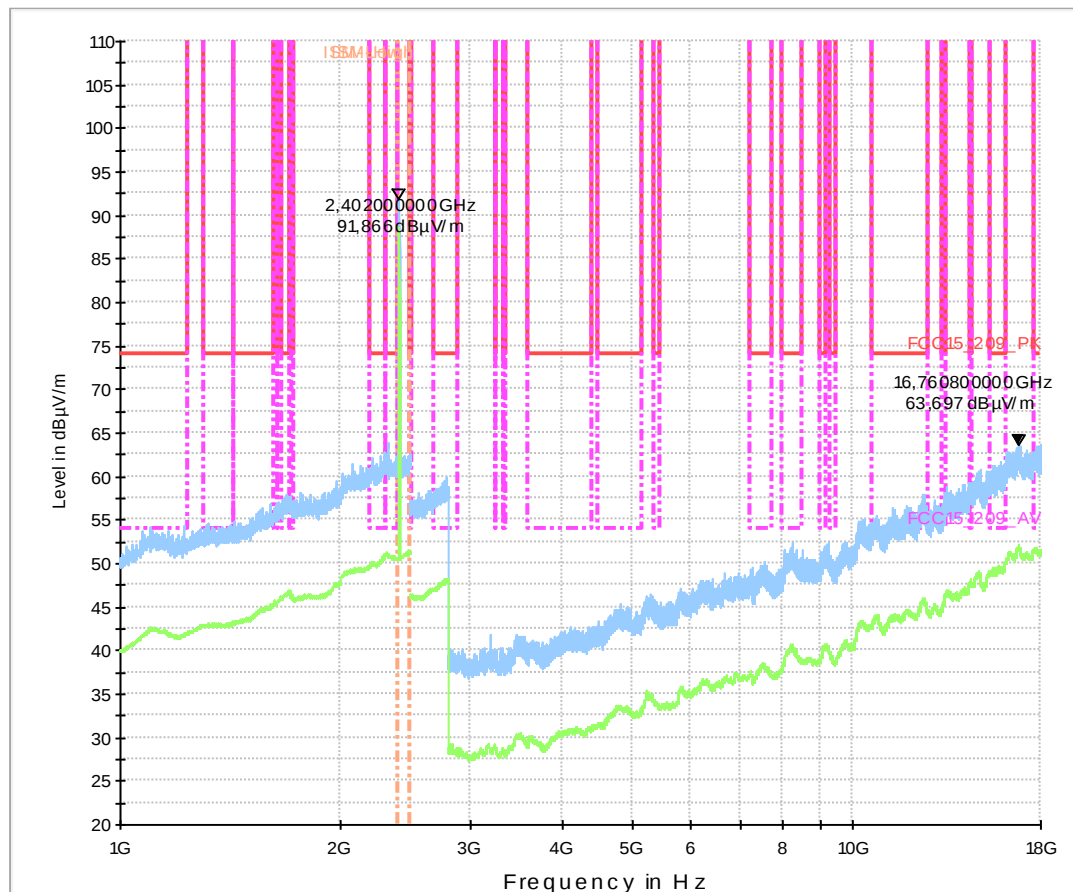


Diagram No.: 4.05_BT-LE-Ch19

Common Information

Test Description:	Radiated field strength emission accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & §15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operator Name:	cta
Comment:	Channel no. middle=19
Op. Mode:	Bluetooth_LE

EUT Information

Manufacturer:	Sony
FCC ID:	PY7TM-0042
Type:	GSM-/ WCDMA- /LTE Tablet PC

EUT:	RSE #01
HW version:	AP1
SW version:	17.1.D.0.108
SVN:	-
Config:	-
Serial number:	CB5126DQ9V
Connected Interfaces:	Power Supply (EP850) ; USB-cable (EC700)
Power Supply:	Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
Comments:	-

00431_SM1_KP1_W LAN_1ms

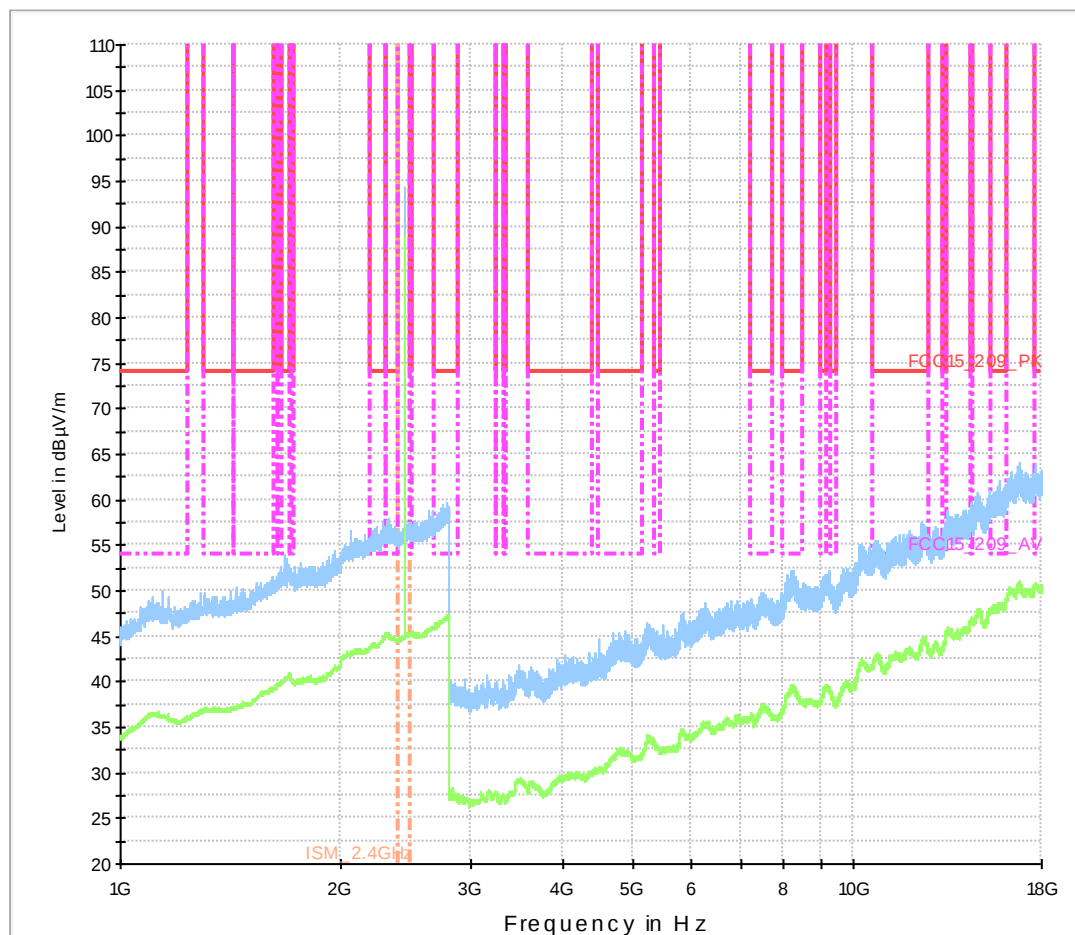


Diagram No.: 4.06_BT-LE-Ch39

Common Information

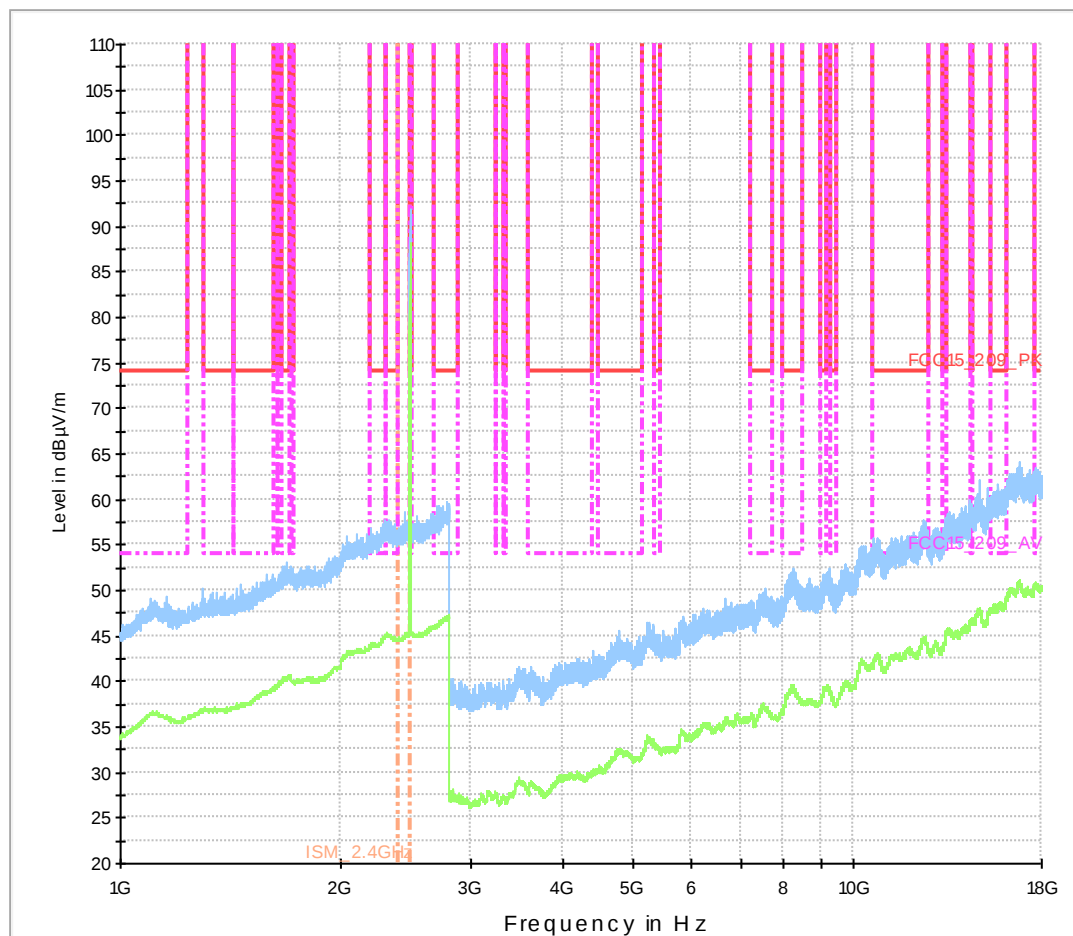
Test Description:	Radiated field strength emission accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & §15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operator Name:	кта
Comment:	Channel no. high=39
Op. Mode:	Bluetooth_LE

EUT Information

Manufacturer:	Sony
FCC ID:	PY7TM-0042
Type:	GSM-/ WCDMA- /LTE Tablet PC

EUT:	RSE #01
HW version:	AP1
SW version:	17.1.D.0.108
SVN:	-
Config:	-
Serial number:	CB5126DQ9V
Connected Interfaces:	Power Supply (EP850) ; USB-cable (EC700)
Power Supply:	Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
Comments:	-

00431_SM1_KP1_W LAN_1ms



2. Band-Edge radiated

2.1. Left Band-Edge on Channel 0

Diagram No.: 9.01_Ch0

Common Information

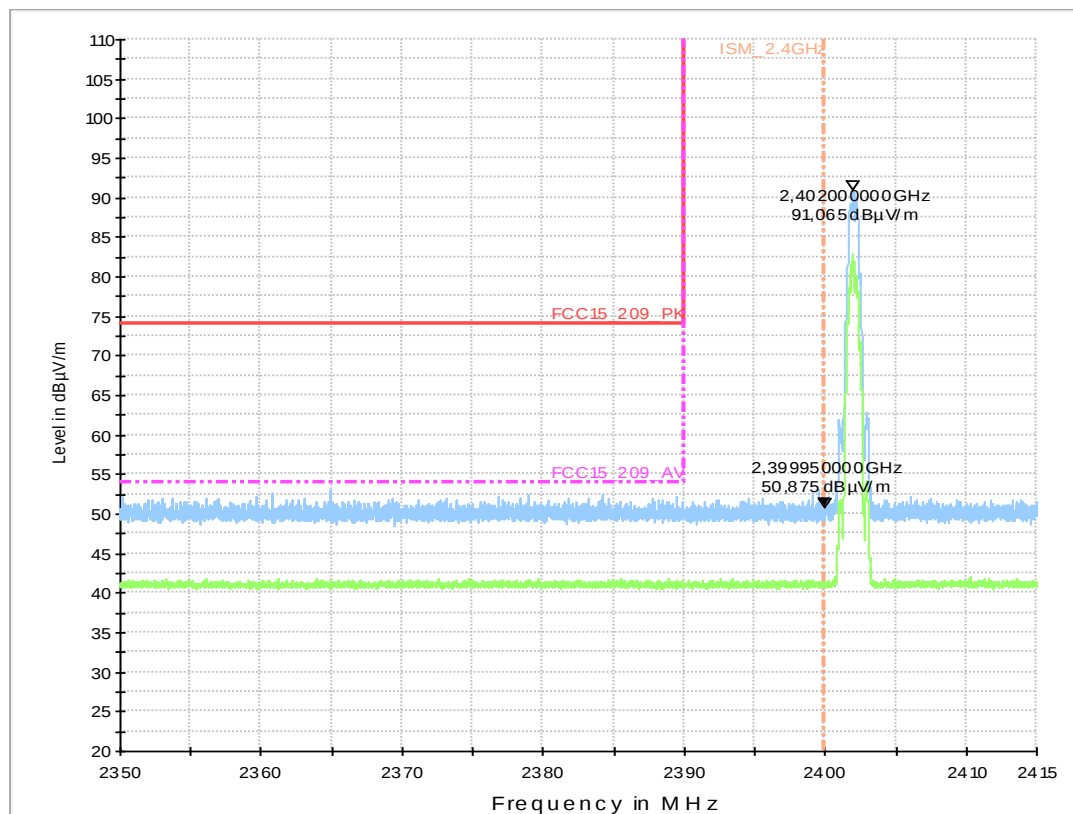
Test Description:	Radiated field strength emission accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & §15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operator Name:	кта
Comment:	Channel no. low=0
Op. Mode:	Bluetooth_LE

EUT Information

Manufacturer:	Sony
FCC ID:	PY7TM-0042
Type:	GSM-/ WCDMA-/ LTE Tablet PC

EUT:	RSE #01
HW version:	AP1
SW version:	17.1.D.0.108
SVN:	-
Config:	-
Serial number:	CB5126DQ9V
Connected Interfaces:	Power Supply (EP850) ; USB-cable (EC700)
Power Supply:	Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
Comments:	-

00431_BE_Low_SM1_KP1_W LAN_1ms



2.2. Right Band-Edge on Channel 78

Diagram No.: 9.02_Ch39

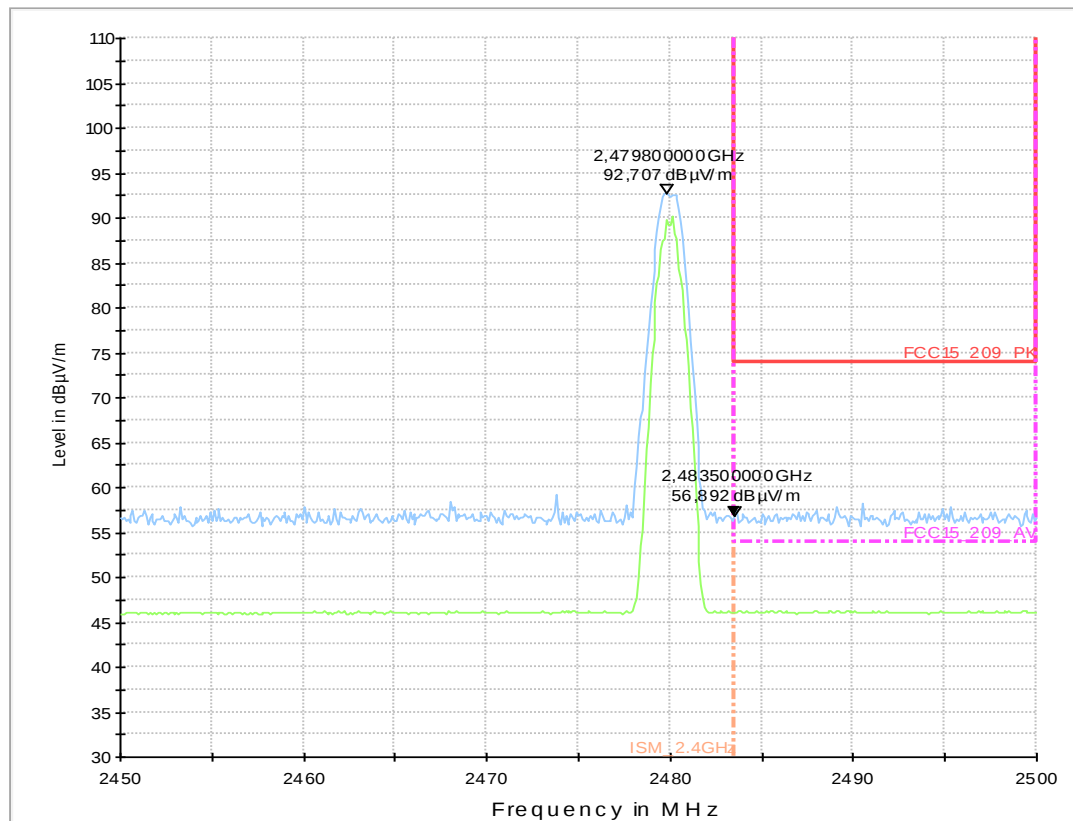
Common Information

Test Description:	Radiated field strength emission accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & §15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operator Name:	cta
Comment:	Channel no. high=39
Op. Mode:	Bluetooth_LE

EUT Information

Manufacturer:	Sony
FCC ID:	PY7TM-0042
Type:	GSM-/ WCDMA- /LTE Tablet PC
EUT:	RSE #01
HW version:	AP1
SW version:	17.1.D.0.108
SVN:	-
Config:	-
Serial number:	CB5126DQ9V
Connected Interfaces:	Power Supply (EP850) ; USB-cable (EC700)
Power Supply:	Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
Comments:	-

00431_BE_High_SM1_KP1_WLAN_1ms



3. Receiver spurious emissions

3.1. Frequency range 30MHz<f<1GHz

Diagram No. 3.07_BT-LE-Ch19_RX

Date: 13.03.2014 Page 1 of 1
 Test description: Electric Fieldstrength Measurement
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3m measurement distance
 Version of Testsoftware: EMC32 V8.51.0
 Distance correction: not used
 Technical Data: Please see page 2 for detailed data of measurement setup
 Used filter: not used
 Test specification: FCC15.109, class B; RSS-Gen.: Issue 3

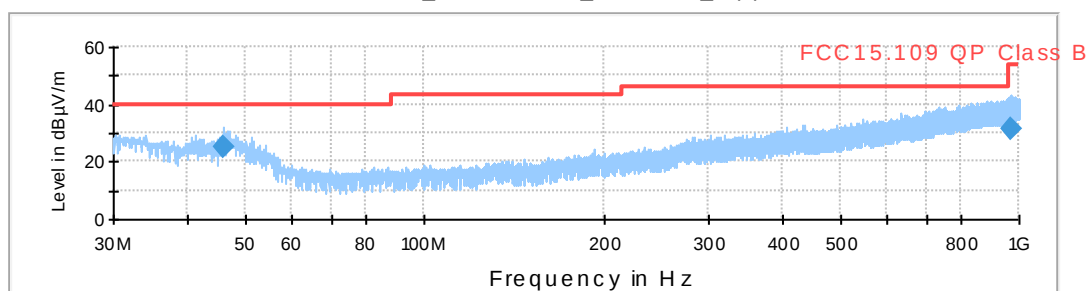
Operator: FTe
 Operating conditions: BT_LE_Ch19_RX
 Measured sides of EUT: front, right, rear, left
 Power during tests: 110V 60Hz
 Comment 1: 120 V AC 60 Hz
 Comment 2:

EUT Information

Manufacturer: Sony
 FCC ID: PY7TM-0042
 Type: GSM-/ WCDMA- /LTE Tablet PC

EUT: RSE #01
 HW version: AP1
 SW version: 17.1.D.0.108
 SVN: -
 Config: -
 Serial number: CB5126DQ9V
 Connected Interfaces: Power Supply (EP850) ; USB-cable (EC700)
 Power Supply: Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 120VAC/60Hz during test
 Comments: -

05_FCC15.109_hor+vert_kipp



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
45.990000	25.1	1000.0	120.000	105.0	V	299.0	90.0	15.1	14.9	40.0
966.370000	31.3	1000.0	120.000	368.0	H	8.0	90.0	27.6	22.7	54.0

3.2. Frequency range $f > 1\text{GHz}$

4.07_BT-LE-Ch19_RX

Common Information

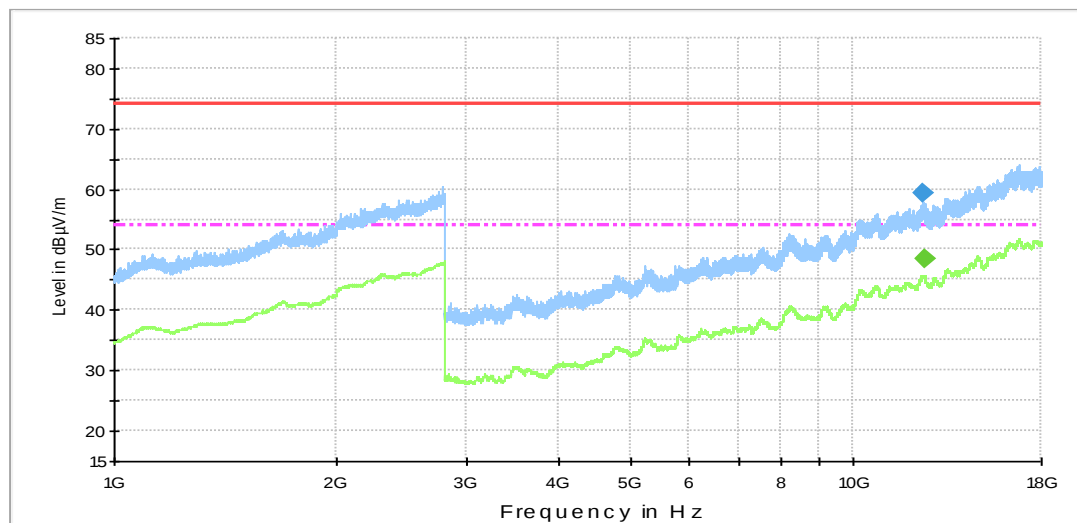
Test Description:	Radiated Field Strength Emission
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 15.109
Operating Mode:	BT LE RX-Mode
Equipment Class:	Class B
Environmental Conditions:	Humidity: 22,2%rH; Temperature: 31°C
Operator:	HLA

EUT Information

Manufacturer:	Sony Mobile Communications AB
EuT:	PY7TM-0042
Type:	GSM-/ WCDMA- /LTE Tablet PC

EUT:	RSE #01
HW Version:	AP1
SW Version:	17.1.D.0.108
SVN:	-
Config:	-
Serial Number:	CB5126DPP9
Connected Interfaces:	Power Supply (EP850) ; USB-cable (EC700)
Power Supply:	Battery fully charged before test, Device is powered via Power Supply & USB cable connected to 230VAC during test
Comments:	-

030442_FCC_Part15.109_Unint_Rad_Class_B_1G-20G_ESU40



Final Result 1

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
12477.000000	59.2	100.0	1000.000	H	330.0	0.0	19.8	14.8	74.0

Final Result 2

Frequency (MHz)	RMS (dBµV/m)	Meas. Time	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
12506.200000	48.4	100.0	1000.000	H	235.0	0.0	19.9	5.6	54.0