

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

According to:  
**FCC Regulations**  
Part 15.109, Part 15.247

for

Sony Mobile Communications

Tablet PC  
(W-LAN 5.7 GHz-Band)

FCC-ID: PY7TM-0042

Laboratory Accreditation and Listings			
 <p><b>DAkkS</b> Deutsche Akkreditierungsstelle D-PL-12047-01-01</p>	 <p>FEDERAL COMMUNICATIONS COMMISSION <b>FC</b> USA</p> <p>Reg. No.: 736496 MRA US-EU 0003</p>	 <p>Industry Canada</p> <p>Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3</p>	 <p>Voluntary Controls for Electromagnetic Emissions</p> <p>Reg. No.: R-2666 C-2914, T-1967, G-301</p>
 <p><b>WiFi</b> ALLIANCE</p> <p>AUTHORIZED RF LABORATORY</p>	 <p><b>CTIA</b> Authorized Test Lab LAB CODE 20011130-00</p>		
accredited according to DIN EN ISO/IEC 17025			
<p 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

<b>1. MAGNETIC FIELD STRENGTH MEASUREMENTS <math>F &lt; 30\text{MHz}</math> .....</b>	<b>3</b>
1.1. Channel 149 (a-Mode, 48Mbit data rate) .....	3
1.2. Channel 155 (AC80-Mode, MCS0 data rate) .....	4
<b>2. RADIATED FIELD STRENGTH MEASUREMENTS <math>30\text{MHz} &lt; F &lt; 1\text{GHz}</math> .....</b>	<b>5</b>
2.1. Channel 149 (a-Mode, 48Mbps data rate) .....	5
2.2. Channel 157 (AC20-Mode, MCS5 data rate) .....	6
2.3. Channel 165 (n-Mode, 26Mbit data rate) .....	7
2.4. Channel 151 (AC40-Mode, MCS4 data rate) .....	8
2.5. Channel 159 (AC40-Mode, MCS6 data rate) .....	9
2.6. Channel 155 (AC80-Mode, MCS0 data rate) .....	10
<b>3. RADIATED FIELD STRENGTH MEASUREMENTS <math>1\text{GHz} &lt; F &lt; 18\text{GHz}</math> .....</b>	<b>11</b>
3.1. Channel 149 (a-Mode, 48Mbit data rate) .....	11
3.2. Channel 157 (AC20-Mode, MCS5 data rate) .....	13
3.3. Channel 165 (n-Mode, MCS5 data rate) .....	15
3.4. Channel 151 (AC40-Mode, MCS4 data rate) .....	17
3.5. Channel 159 (AC40-Mode, MCS6 data rate) .....	19
3.6. Channel 155 (AC80-Mode, MCS0 data rate) .....	21
<b>4. RADIATED FIELD STRENGTH MEASUREMENTS <math>18\text{GHz} &lt; F &lt; 40\text{GHz}</math> .....</b>	<b>23</b>
4.1. Channel 149 (a-Mode, 48Mbit) .....	23
4.2. Channel 157 (AC20-Mode, MCS5) .....	24
4.3. Channel 165 (n-Mode, 26Mbit) .....	25
4.4. Channel 151 (AC40-Mode, MCS4) .....	26
4.5. Channel 159 (AC40-Mode, MCS6) .....	27
4.6. Channel 155 (AC80-Mode, MCS0) .....	28
<b>5. RADIATED BAND-EDGE MEASUREMENTS ACCORD. §15.209 &amp; §15.205 .....</b>	<b>29</b>
5.1. Channel 149 (a-Mode, 48Mbit) .....	29
5.2. Channel 165 (n-Mode, 26Mbit) .....	30
5.3. Channel 151 (AC40-Mode, MCS4) .....	31
5.4. Channel 159 (AC40-Mode, MCS6) .....	32
5.5. Channel 155 (AC80-Mode, MCS0) .....	33
<b>6. RADIATED EMI MEASUREMENTS ACCORD. §15.109 CLASS B .....</b>	<b>34</b>
6.1. Frequency range 30MHz to 1000MHz .....	34
6.2. Frequency range 1GHz to 18GHz .....	35

# 1. Magnetic field strength measurements $f < 30\text{MHz}$

## 1.1. Channel 149 (a-Mode, 48Mbit data rate)

### Diagram No. 2.01\_UN3\_Ch149\_48MBit\_HT20

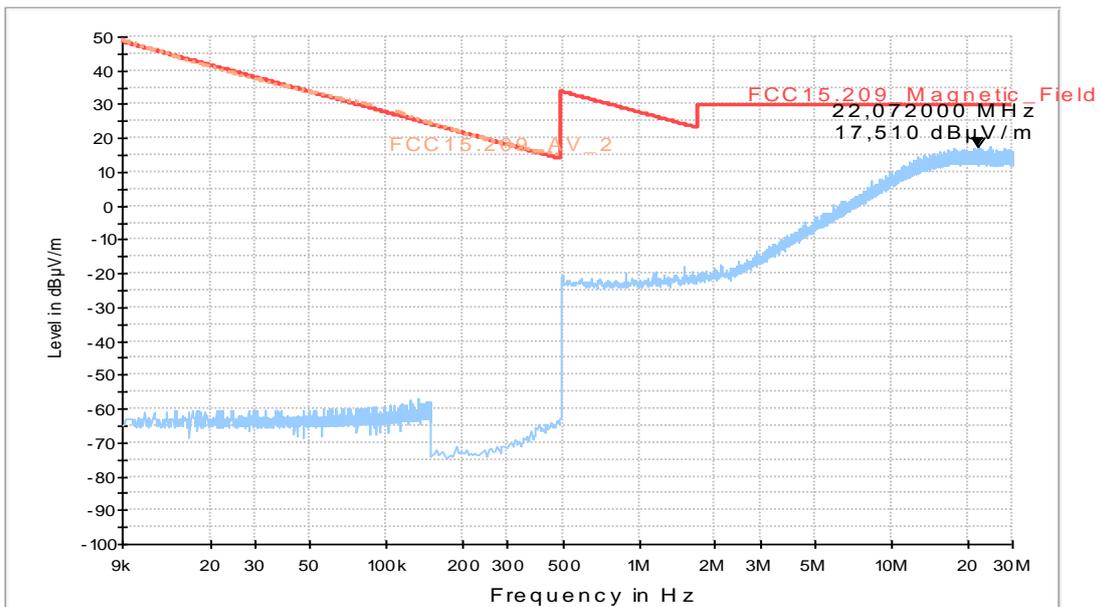
Date:	11.03.2014	Page 1 of 2
Test description:	Magnetic Fieldstrength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	8.51.0	
Distance correction:	used accord. table, pls. see test report	
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:	KRe
Operating conditions:	TX-on continuous, 48MBit, a-Mode
Power during tests:	12V DC, 120V/60Hz, full loaded batteries
Comment 1:	Channel 149
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:	-

FCC 15.209\_magn hor+vert



EMI Auto Test Template: FCC15.209\_magn hor+vert

1.2. Channel 155(AC80-Mode, MCS0 data rate)

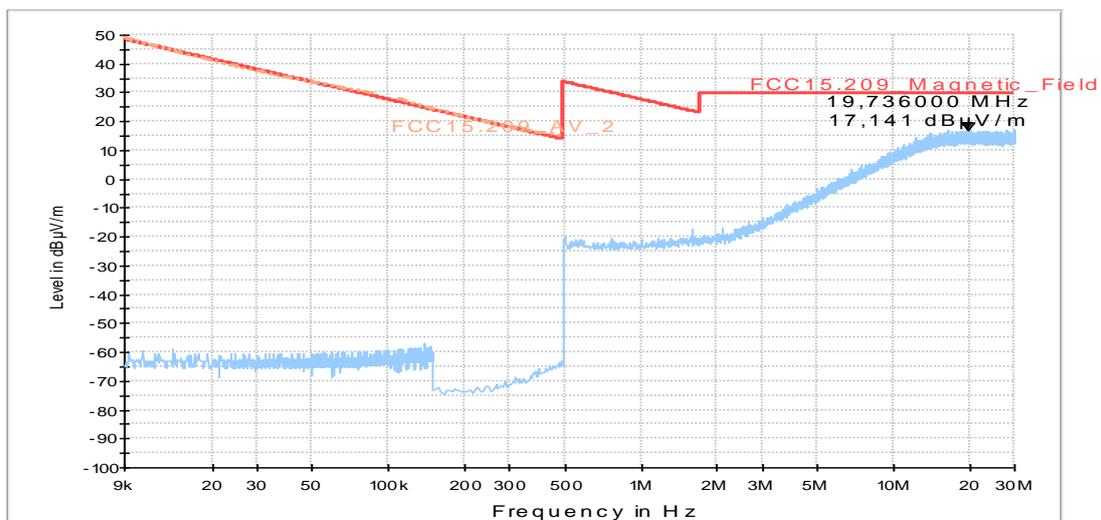
Diagram No. 2.02\_UN3\_Ch155\_MCS9\_HT80

Date:	11.03.2014	Page 1 of 2
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:	KRe	
Operating conditions:	TX-on continuous, MCS9, ac80-Mode	
Power during tests:	12V DC, 120V/60Hz, full loaded batteries	
Comment 1:	Channel 155	
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



EMI Auto Test Template: FCC15.209\_magn hor+vert

## 2. Radiated field strength measurements 30MHz<f<1GHz

### 2.1. Channel 149 (a-Mode, 48Mbps data rate)

#### Diagram No. 3.01\_UN3\_Ch149\_48MBit

13.03.2014 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: EMC32 V8.51.0  
 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: FTe  
 Operating conditions: BT  
 Power during tests: 120V 60Hz  
 Comment 1:

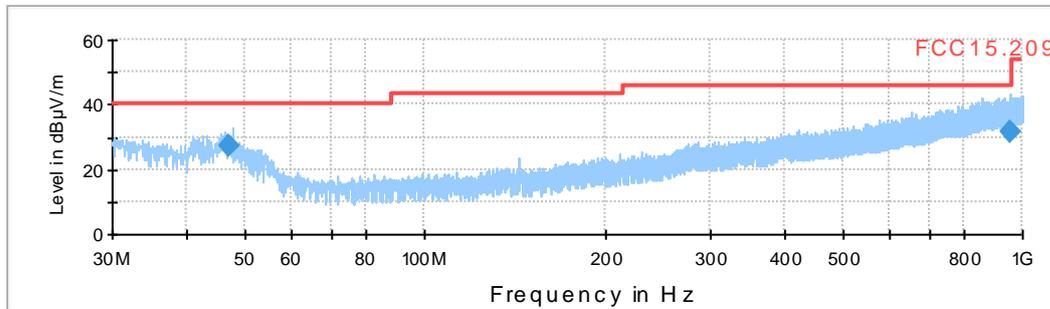
#### EUT Information

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: CB5126DPPP9  
 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)	Polariz.	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
46.960000	27.1	1000.0	120.000	105.0	V	277.0	90.0	14.7	12.90	40.00
952.150000	31.4	1000.0	120.000	148.0	V	110.0	0.0	27.5	14.60	46.00

## 2.2. Channel 157 (AC20-Mode, MCS5 data rate)

### Diagram No. 3.02\_UN3\_Ch157\_MCS5

13.03.2014 Page 1 of 1  
 Electric Fieldstrength Measurement  
 Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance  
 Version of Testsoftware: EMC32 V8.51.0  
 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

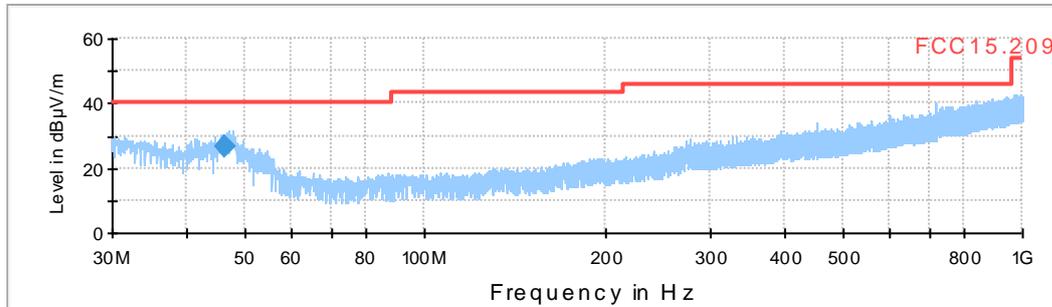
Operator: FTe  
 Operating conditions: BT  
 Power during tests: 120V 60Hz  
 Comment 1:

#### 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: 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: -

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)	Corr. (dB)	Margin (dB)
46.170000	26.8	1000.0	120.000	105.0	V	320.0	90.0	15.0	13.20

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

Frequency	Limit (dBµV/m)
46.170000	40.00

### 2.3. Channel 165 (n-Mode, 26Mbit data rate)

## Diagram No. 3.03\_UN3\_Ch165\_26MBit

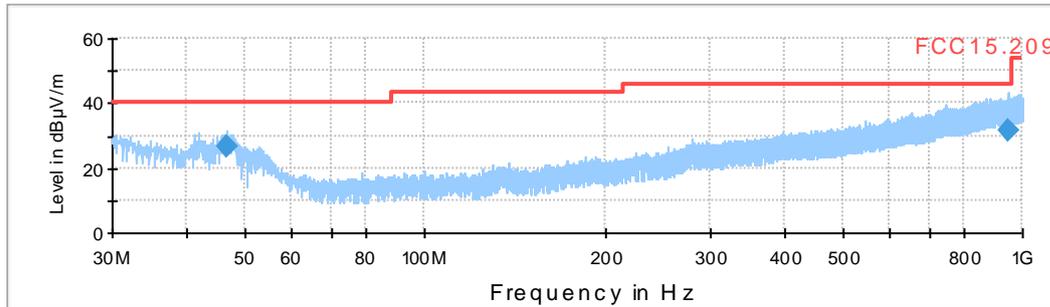
13.03.2014 Page 1 of 1  
 Test description: Electric Fieldstrength Measurement  
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance  
 Version of Testsoftware: EMC32 V8.51.0  
 Distance correction: not used  
 Used filter: not used  
 Technical Data: please see page 2 for detailed data of measurement setup  
 Test specification.: FCC 15.209; RSS-Gen: Issue 3

Operator: FTe  
 Operating conditions: BT  
 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: 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: -

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)	Corr. (dB)	Margin (dB)
46.790000	26.3	1000.0	120.000	105.0	V	270.0	90.0	14.7	13.70
...	...	...	...	...	...	...	...	...	...

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

Frequency	Limit (dBµV/m)
46.790000	40.00
...	...

## 2.4. Channel 151 (AC40-Mode, MCS4 data rate)

### Diagram No. 3.04\_UN3\_Ch151\_MCS4

13.03.2014 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: EMC32 V8.51.0  
 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: ABA  
 Operating conditions: WLAN  
 Power during tests: 120V 60Hz  
 Comment 1:

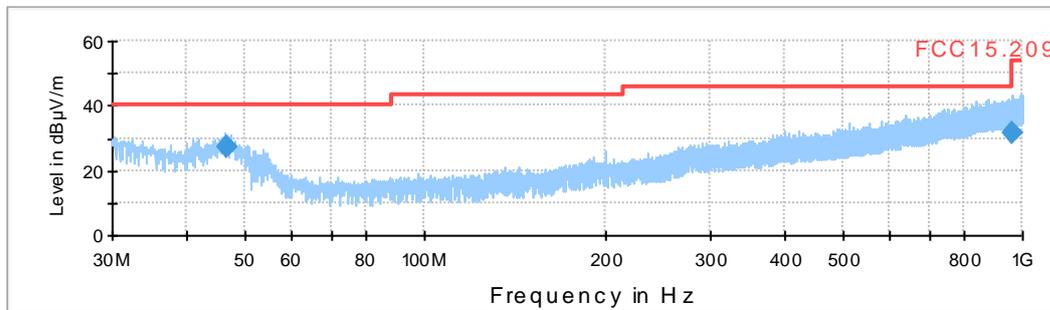
#### EUT Information

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: 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: -

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)	Corr. (dB)	Margin (dB)
46.710000	27.2	1000.0	120.000	105.0	V	273.0	90.0	14.8	12.80
...	...	...	...	...	...	...	...	...	...

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

Frequency	Limit (dBµV/m)
46.710000	40.00
...	...

## 2.5. Channel 159 (AC40-Mode, MCS6 data rate)

### Diagram No. 3.05\_UN3\_Ch159\_MCS6

14.03.2014 Page 1 of 1  
 Electric Fieldstrength Measurement  
 Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance  
 Version of Testsoftware: EMC32 V8.51.0  
 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: ABA  
 Operating conditions: WLAN  
 Power during tests: 120V 60Hz  
 Comment 1:

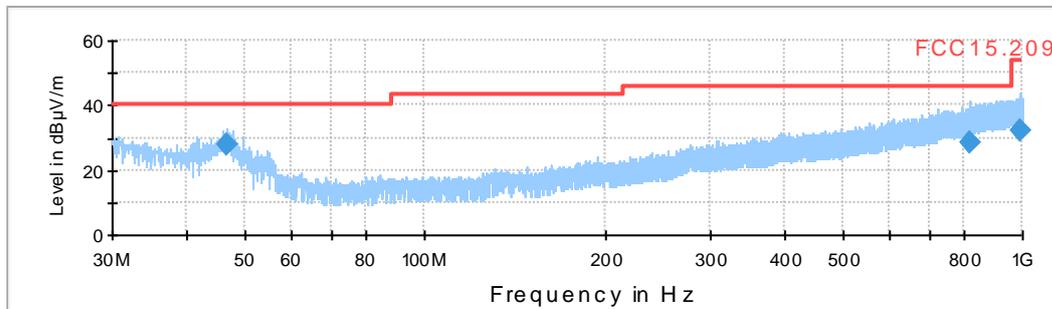
#### EUT Information

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: 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: -

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)	Corr. (dB)	Margin (dB)
46.580000	27.6	1000.0	120.000	105.0	V	257.0	90.0	14.8	12.40
...	...	...	...	...	...	...	...	...	...

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

Frequency	Limit (dBµV/m)
46.580000	40.00
...	...

## 2.6. Channel 155 (AC80-Mode, MCS0 data rate)

### Diagram No. 3.06\_UN3\_Ch155\_MCS0

14.03.2014 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: EMC32 V8.51.0  
 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: ABA  
 Operating conditions: WLAN  
 Power during tests: 120V 60Hz  
 Comment 1:

#### EUT Information

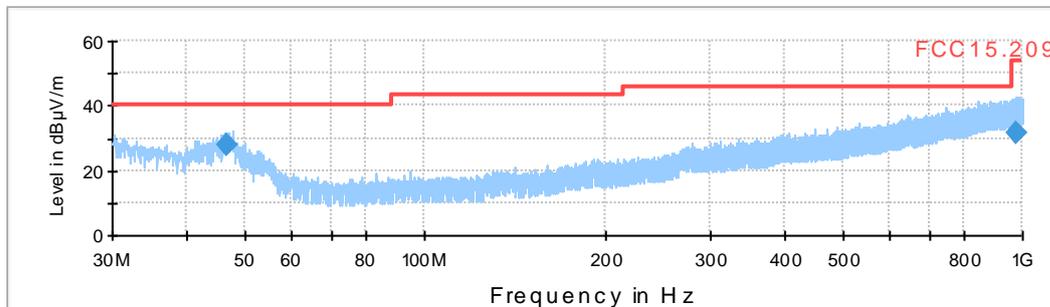
Manufacturer: Sony  
 FCC ID: PY7TM-0042  
 Type: GSM-/ WCDMA- /LTE Tablet PC

---

EUT: RSE #01  
 HW version: AP1  
 SW version: 17.1.D.0.108  
 SVN: -  
 Config: -  
 Serial number: 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: -

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)	Corr. (dB)	Margin (dB)
46.770000	27.7	1000.0	120.000	105.0	V	285.0	90.0	14.8	12.30
...	...	...	...	...	...	...	...	...	...

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

Frequency	Limit (dBµV/m)
46.770000	40.00
...	...

### 3. Radiated field strength measurements 1GHz < f < 18GHz

#### 3.1. Channel 149 (a-Mode, 48Mbit data rate)

#### Diagram No.: 4.01a

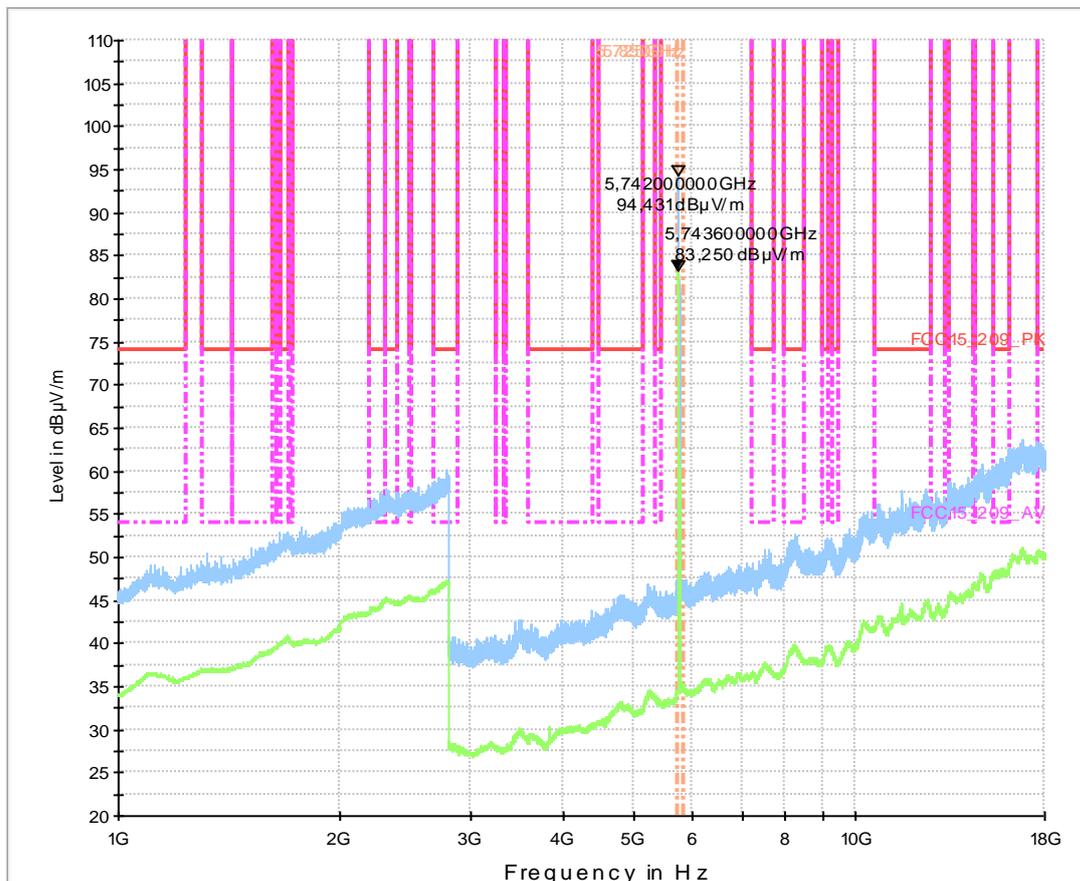
##### Common Information

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:	ABA
Comment:	Channel no. 149 a-Mode, 48MBit
Op. Mode:	WLAN 5GHz

##### 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:	-

00431\_FCC15247\_5GHz\_Band\_SM1\_KP1\_WLAN\_1ms



## Diagram No.: 4.01b\_UN3\_Ch149\_48MBit

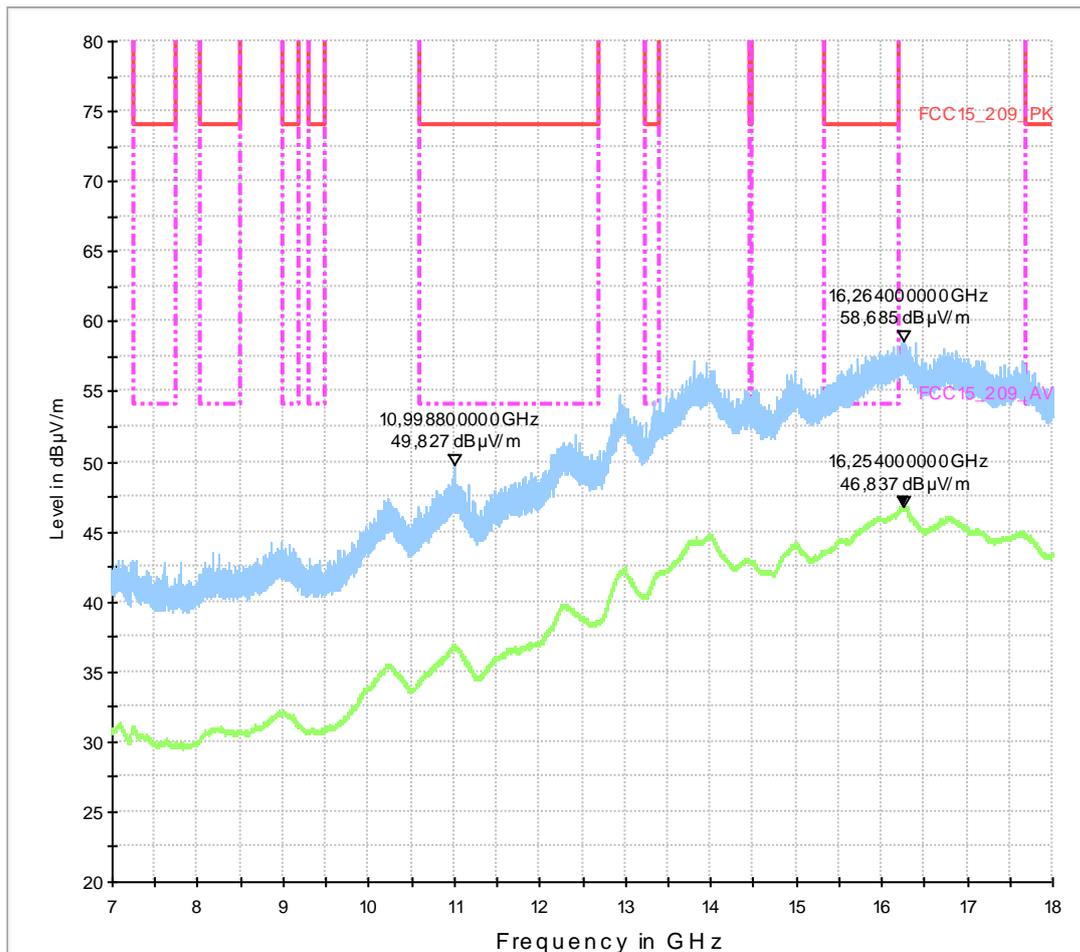
### Common Information

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	WLAN 5G TX, continuous, a-Mode, 48MB, Ch149
Test Condition:	Humidity: 38%rH; Temperature: 20°C
Operator Name:	YZH

### 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:	-

Sweep2\_SM1\_KP1\_W LAN\_FCC15247



### 3.2. Channel 157 (AC20-Mode, MCS5 data rate)

## Diagram No.: 4.02a\_UN3\_Ch157\_MCS5

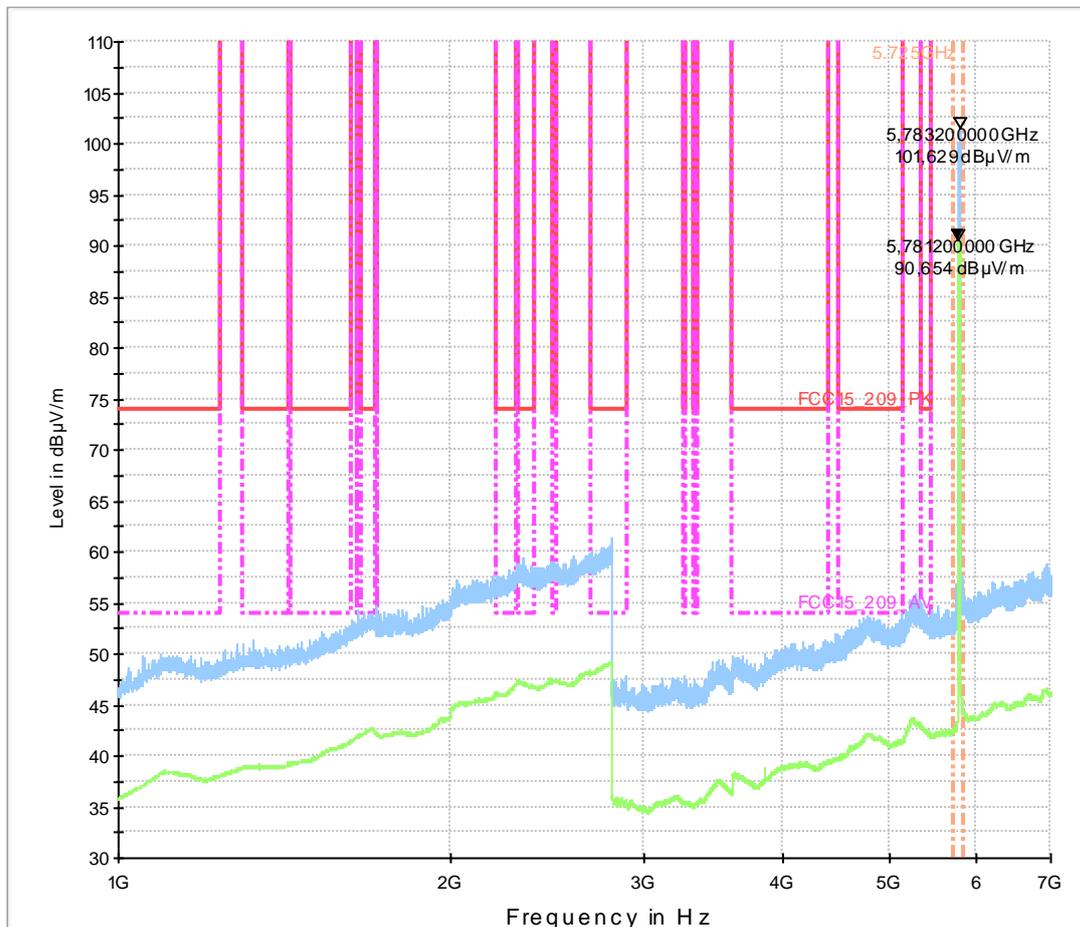
#### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous, a-Mode, MCS5
Operator Name:	ABA
Comment:	Channel no. low=157

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_W LAN\_FCC15247



## Diagram No.: 4.02b\_UN3\_Ch157\_MCS5

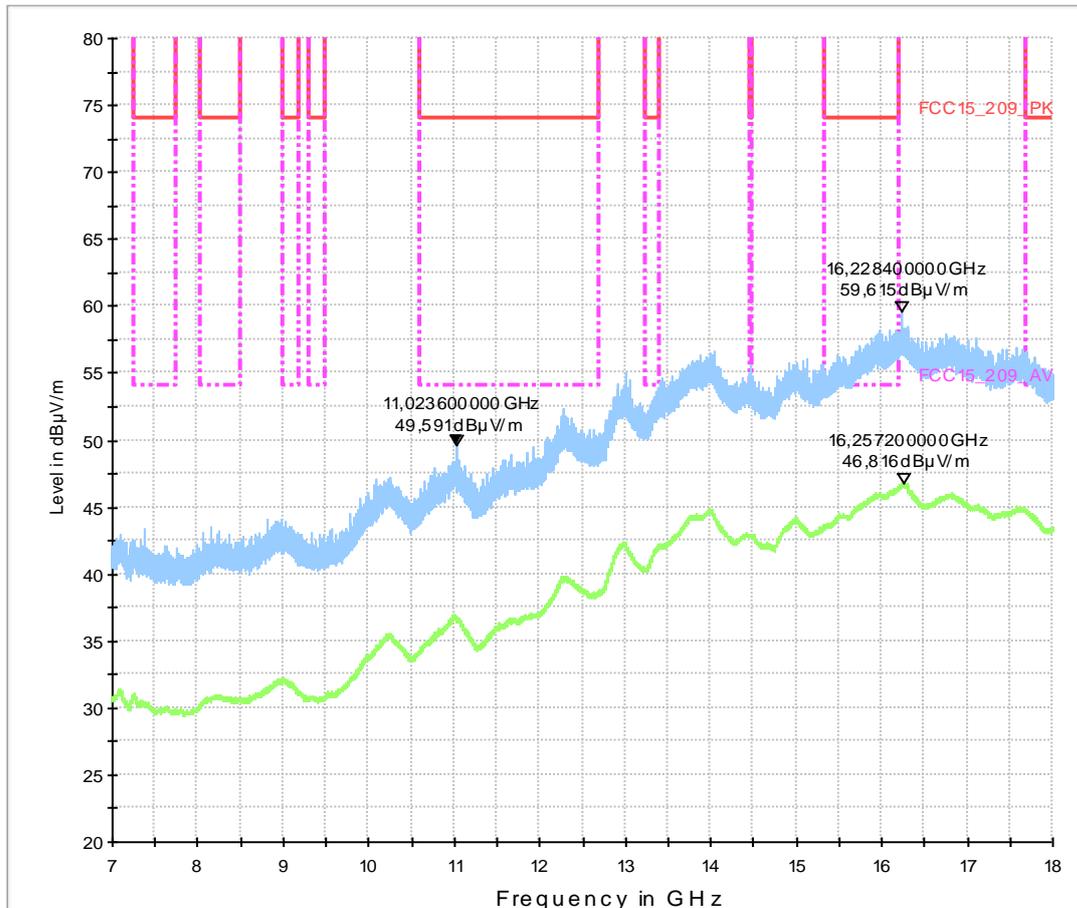
### Common Information

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	WLAN 5G TX, continuous, AC20-Mode, MCS5, Ch157
Test Condition:	Humidity: 38%rH; Temperature: 20°C
Operator Name:	YZH

### 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:	-

Sweep2\_SM1\_KP1\_W LAN\_FCC15247



### 3.3. Channel 165 (n-Mode, MCS5 data rate)

## Diagram No.: 4.03a\_UN3\_Ch165\_MCS5

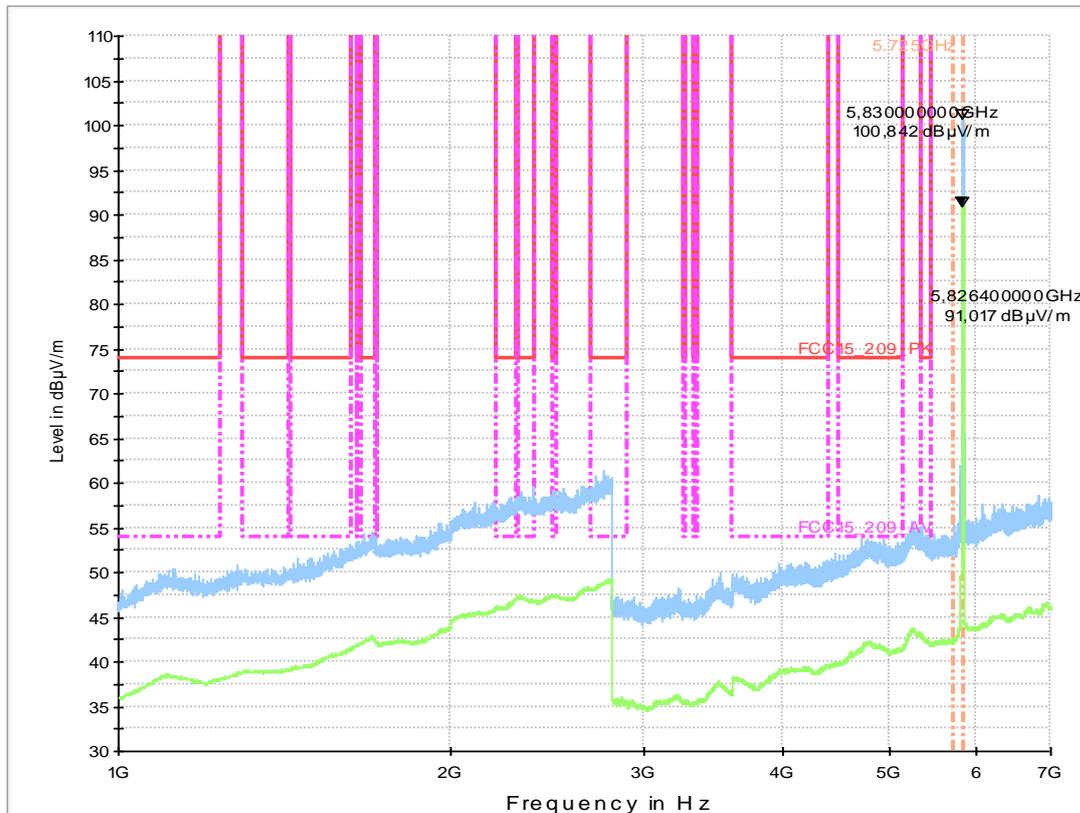
#### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous, n-Mode, MCS5 - 26MBit
Operator Name:	ABA
Comment:	Channel no. low=157

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_WLAN\_FCC15247



EMI Auto Test Template: 00431\_Sweep1\_SM1\_KP1\_WLAN\_FCC15247

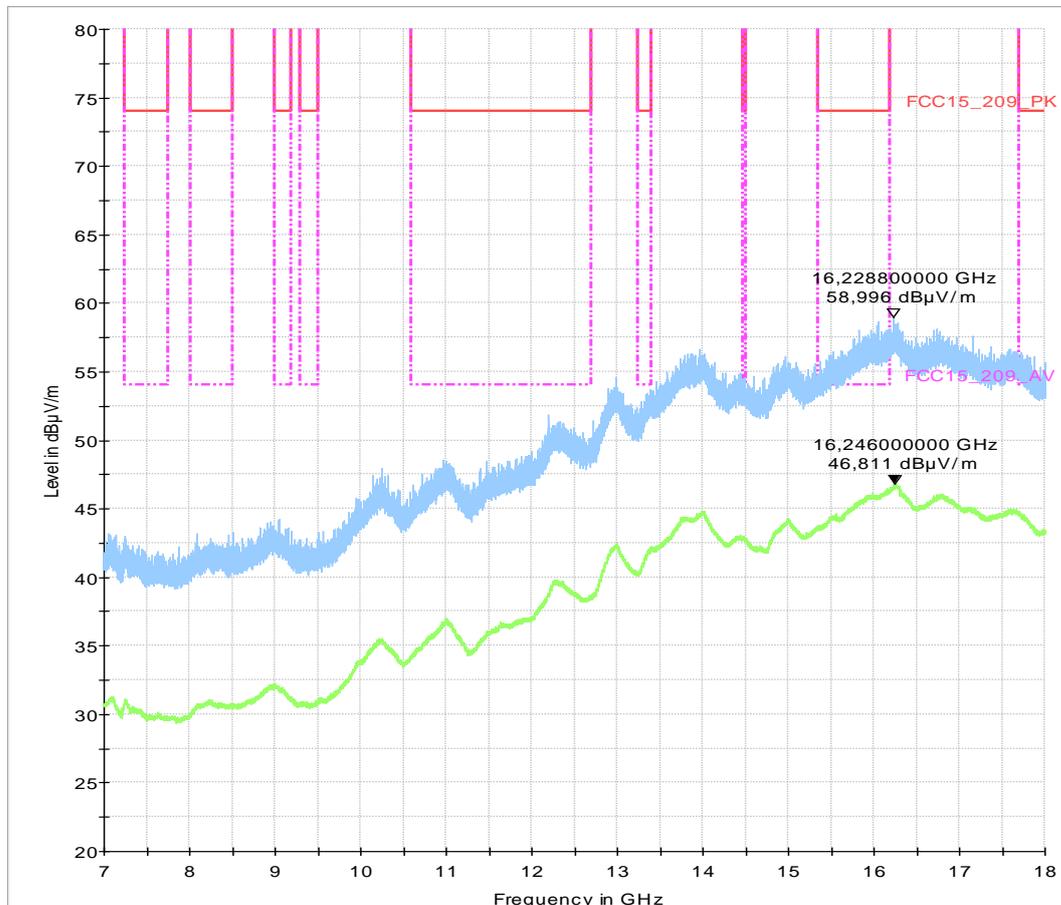
## Diagram No.: 4.03b\_UN3\_Ch165\_MCS5

### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous, n-Mode, MCS5 - 26MBit
Operator Name:	ABA
Comment:	Channel no. low=157

### 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:	-



### 3.4. Channel 151 (AC40-Mode, MCS4 data rate)

## Diagram No.: 4.04a\_UN3\_Ch151\_MCS4

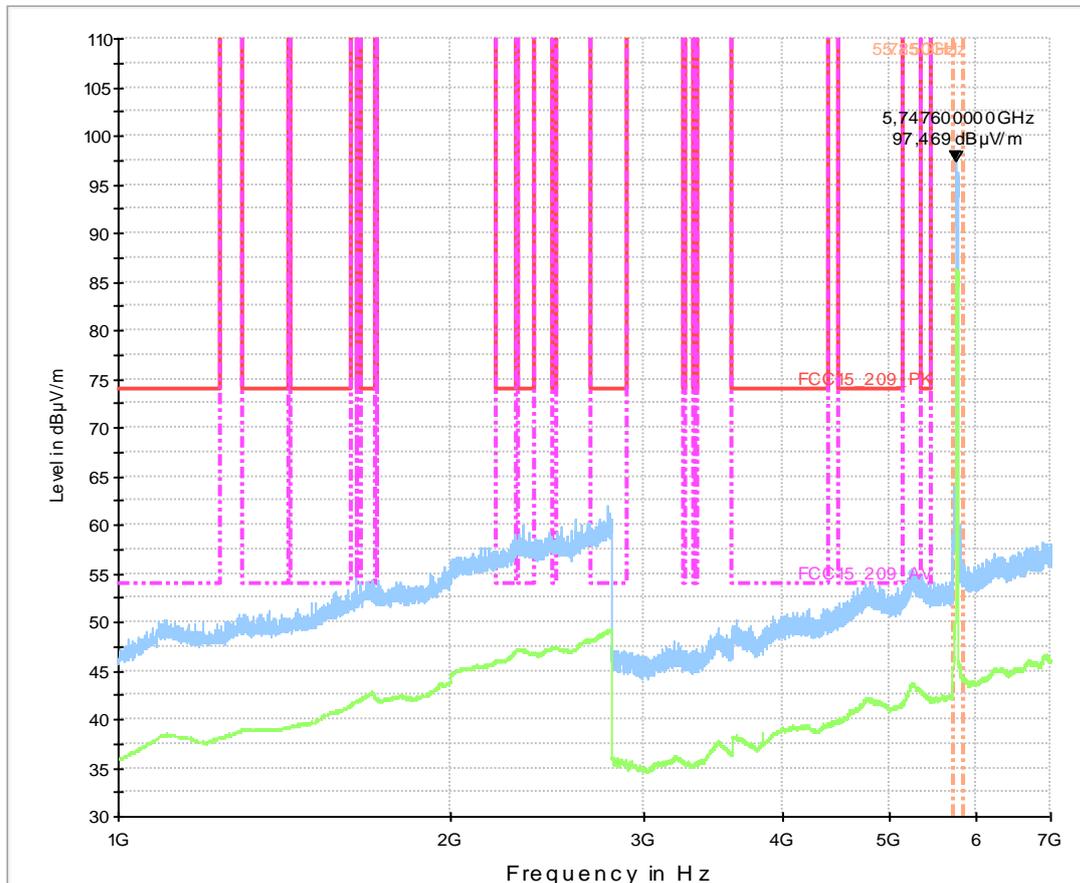
#### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous, n-Mode, MCS4
Operator Name:	ABA
Comment:	Channel no. low=151

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_W LAN\_FCC15247



## Diagram No.: 4.04b\_UN3\_Ch151\_MCS4

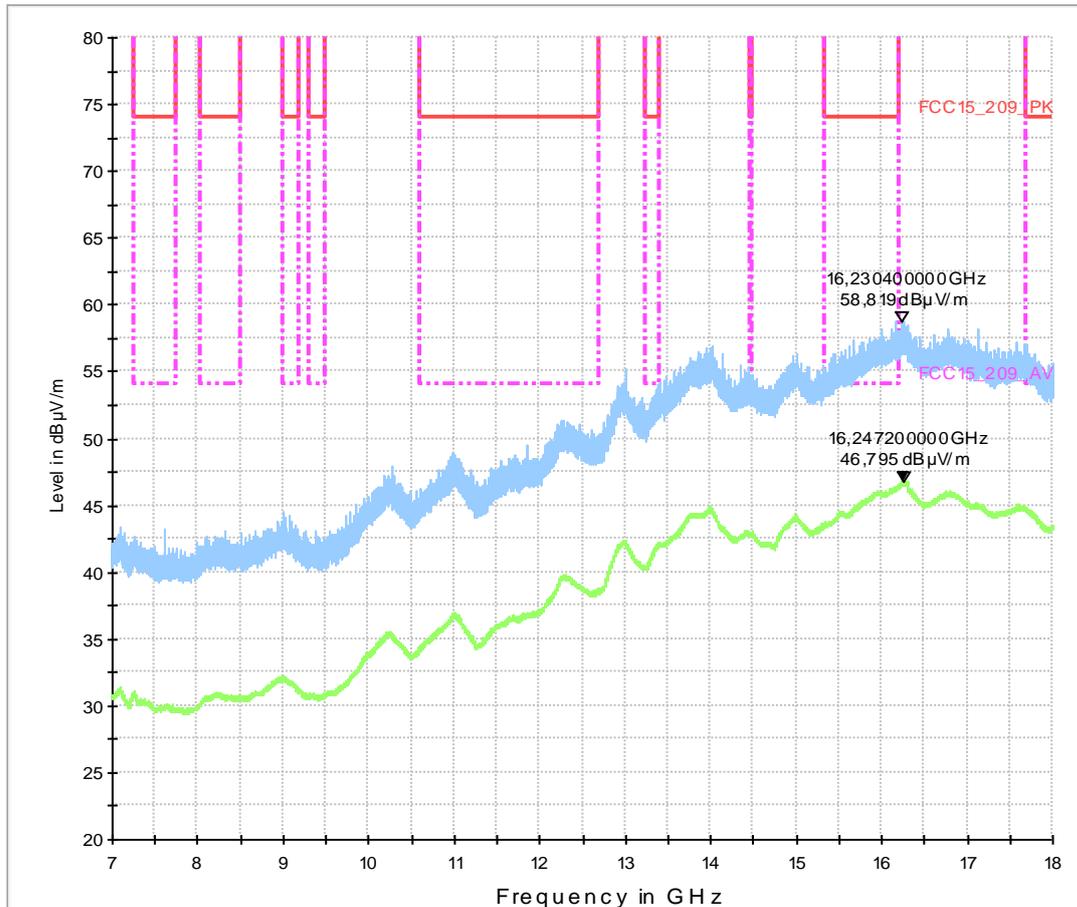
### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	WLAN 5G TX, continuous, AC40Mode, MCS4, Ch151
Test Condition:	Humidity: 38%rH; Temperature: 20°C
Operator Name:	YZH

### 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:	-

Sweep2\_SM1\_KP1\_WLAN\_FCC15247



### 3.5. Channel 159 (AC40-Mode, MCS6 data rate)

## Diagram No.: 4.05a\_UN3\_Ch159\_MCS6

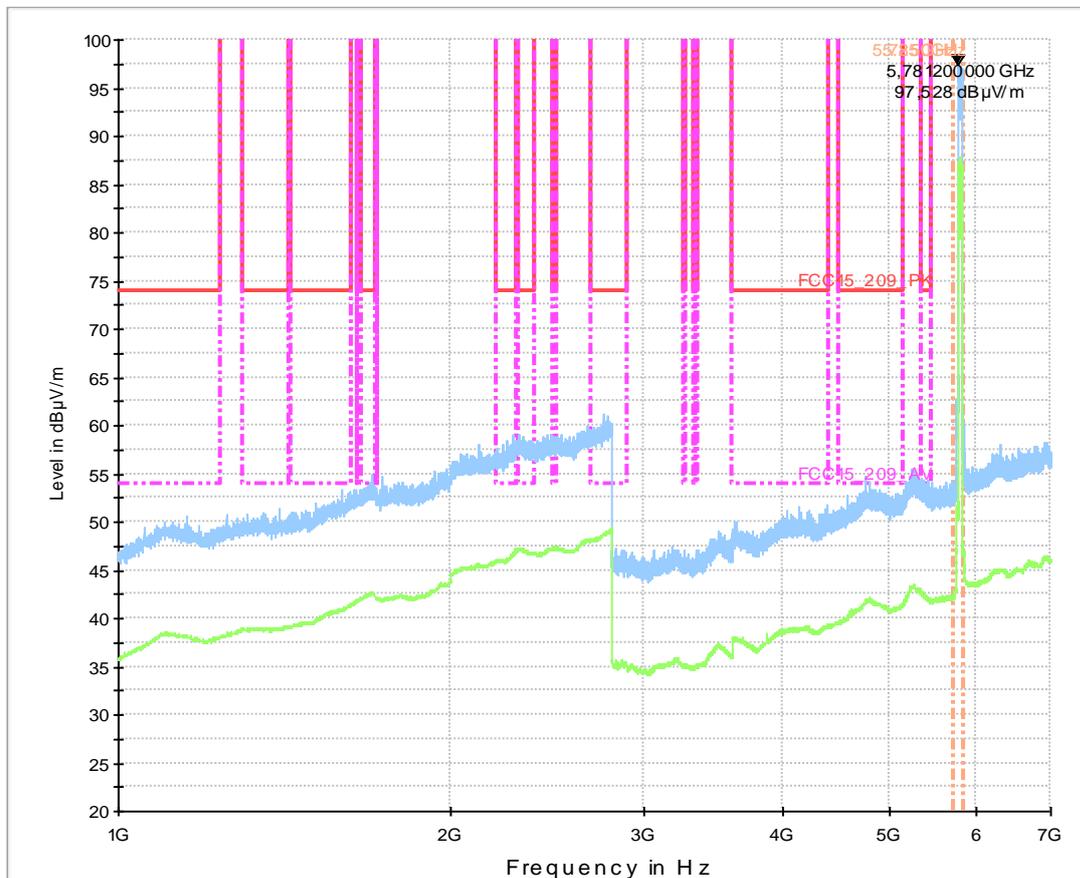
#### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous, AC40-Mode, MCS6
Operator Name:	cta
Comment:	Channel no. low=159
Test Conditions:	Humidity: 34%rH; Temperature: 22°C

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_W LAN\_FCC15247



## Diagram No.: 4.05b\_UN3\_Ch159\_MCS6

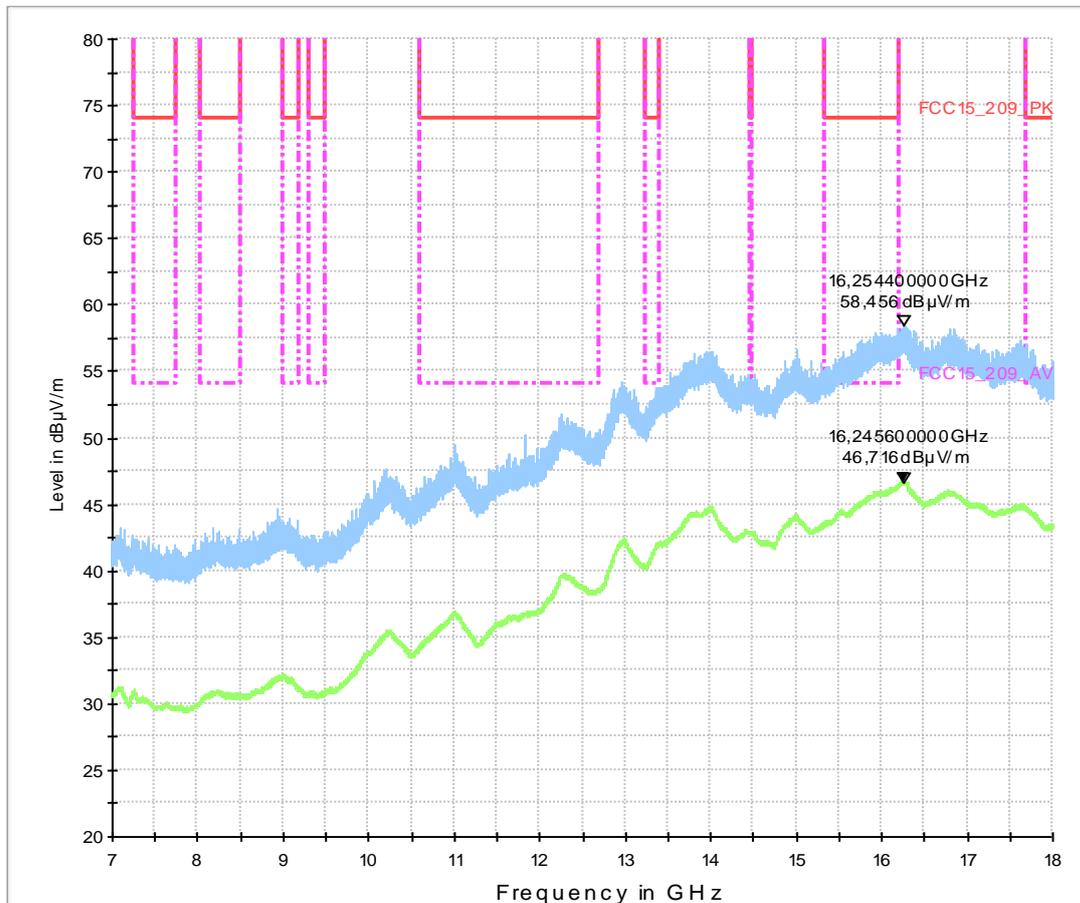
### Common Information

Test Description:	Radiated field strength emission in 1m distance
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	WLAN 5G TX, continuous, AC40-Mode, MCS6
Operator Name:	кта
Comment:	Channel no. high=159
Test Conditions:	Humidity: 34%rH; Temperature: 22°C

### 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:	-

Sweep2\_SM1\_KP1\_W LAN\_FCC15247



### 3.6. Channel 155 (AC80-Mode, MCS0 data rate)

## Diagram No.: 4.06a\_UN3\_Ch155\_MCS0

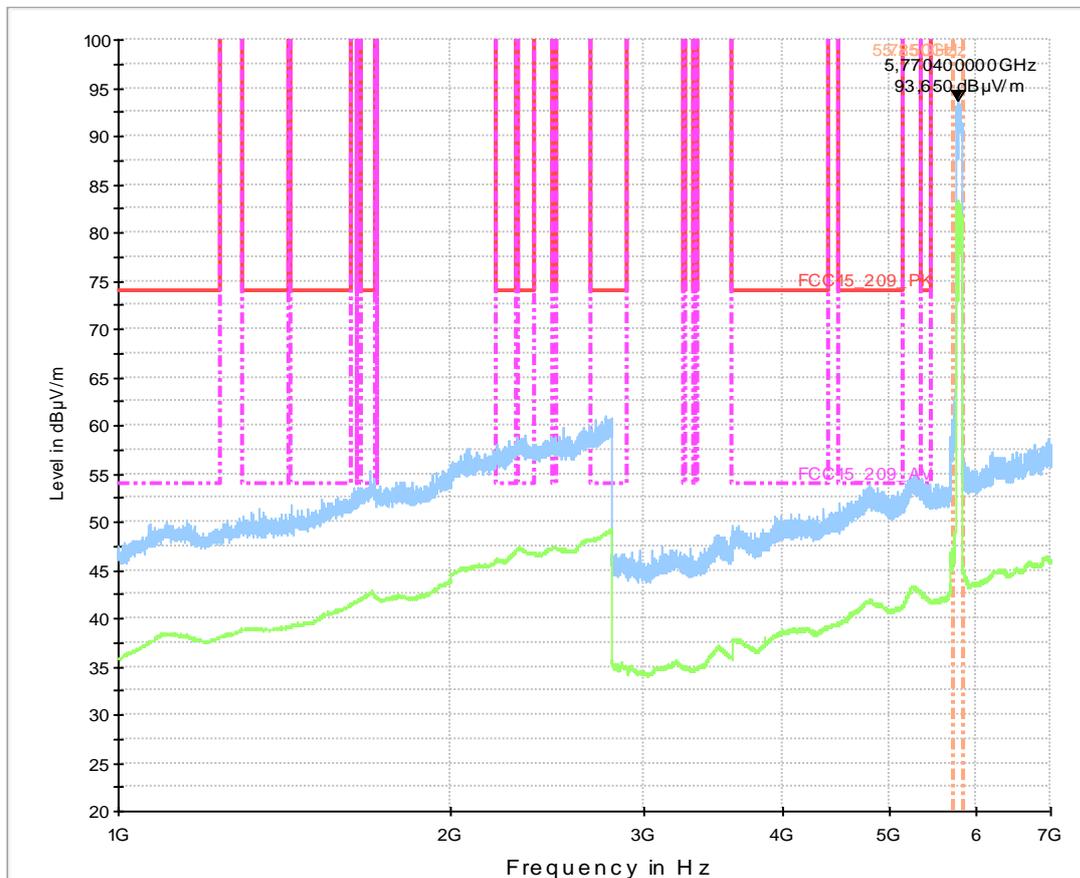
#### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous, AC80-Mode, MCS0
Operator Name:	cta
Comment:	Channel no.155
Test Conditions:	Humidity: 34%rH; Temperature: 22°C

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_W LAN\_FCC15247



## Diagram No.: 4.06b\_UN3\_Ch155\_MCS0

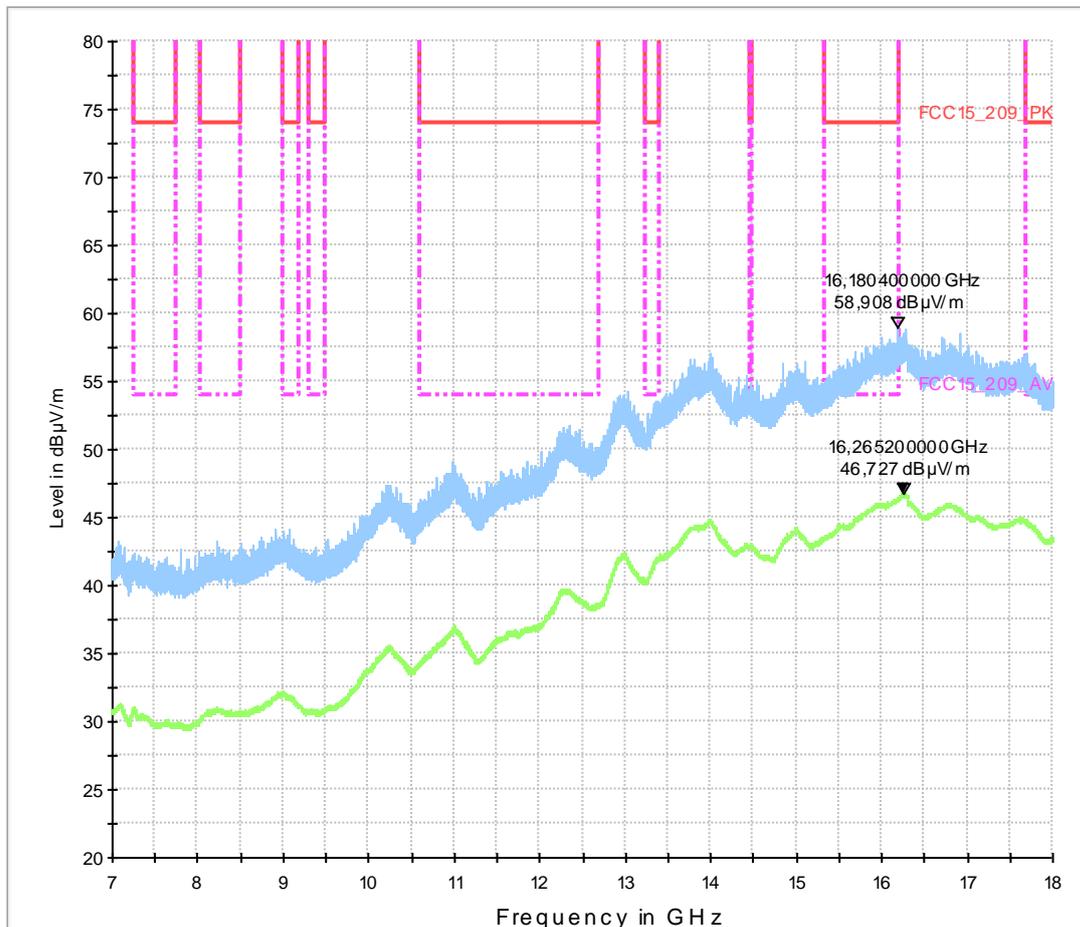
### Common Information

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous, AC80-Mode, MCS0
Operator Name:	кта
Comment:	Channel no.155
Test Conditions:	Humidity: 33%rH; Temperature: 22°C

### 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:	-

Sweep2\_SM1\_KP1\_W LAN\_FCC15247



## 4. Radiated field strength measurements 18GHz < f < 40GHz

### 4.1. Channel 149 (a-Mode, 48Mbit)

#### Diagram No.: 4.01c

#### Common Information

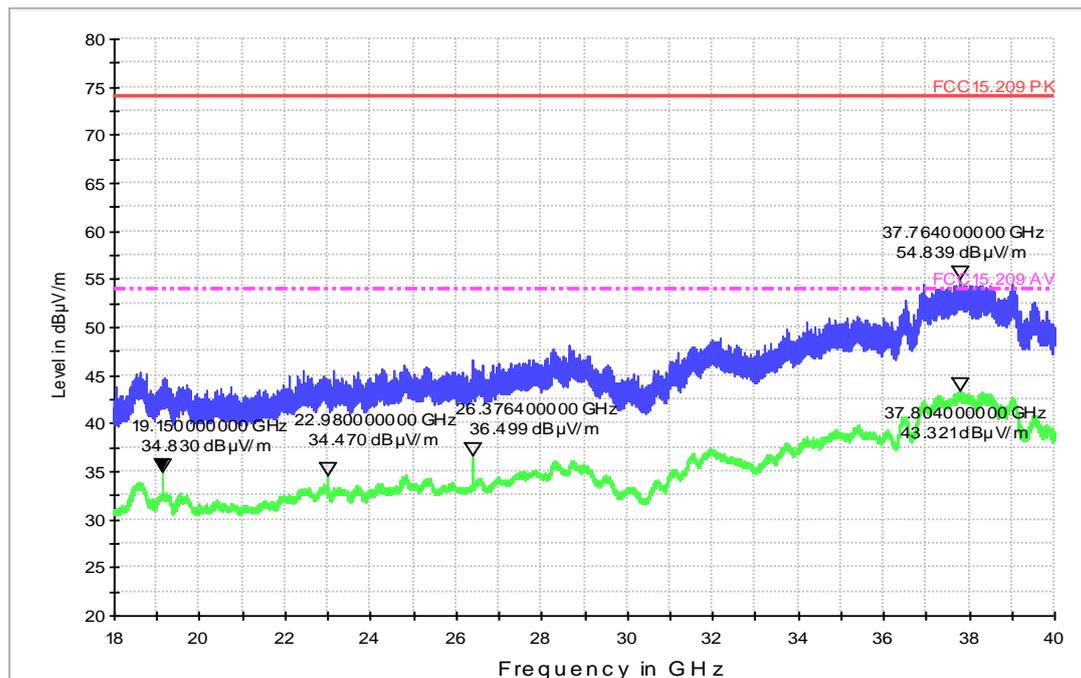
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
Operation mode:	WLAN 5GHz, TX mode continuous
Operator Name:	dpa
Comment:	Ch149, a-mode, 48 MB

#### 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:	-

EMI Scan\_18\_40GHz\_Pre\_fast\_500us



## 4.2. Channel 157 (AC20-Mode, MCS5)

### Diagram No.: 4.02c

#### Common Information

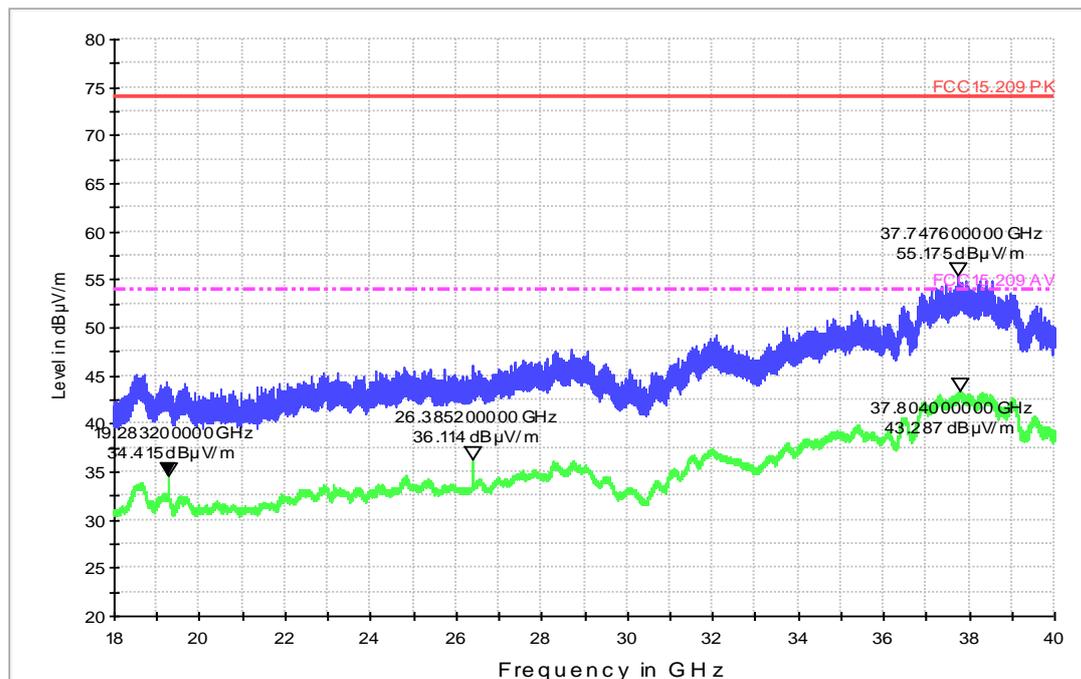
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
Operation mode:	WLAN 5GHz, TX mode continuous
Operator Name:	dpa
Comment:	Ch157, 20ac-mode, MCS5

#### 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:	-

EMI Scan\_18\_40GHz\_Pre\_fast\_500us



### 4.3. Channel 165 (n-Mode, 26Mbit)

#### Diagram No.: 4.03c

#### Common Information

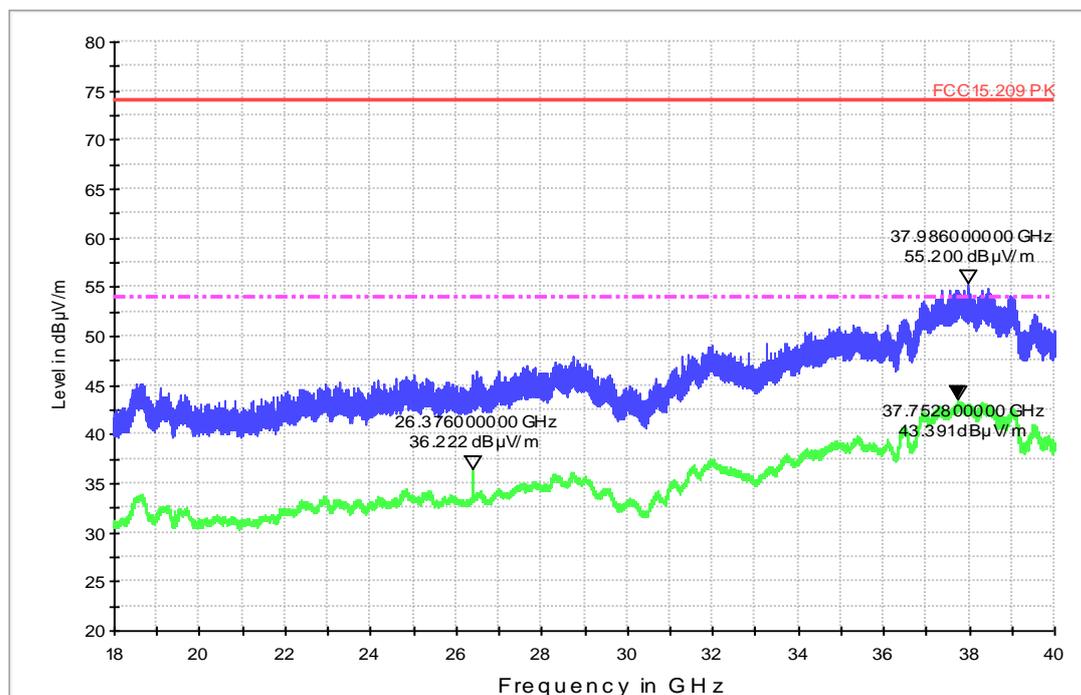
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
Operation mode:	WLAN 5GHz, TX mode continuous
Operator Name:	dpa
Comment:	Ch165, 20n-mode, 26MB

#### 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:	-

EMI Scan\_18\_40GHz\_Pre\_fast\_500us



#### 4.4. Channel 151 (AC40-Mode, MCS4)

### Diagram No.: 4.04c

#### Common Information

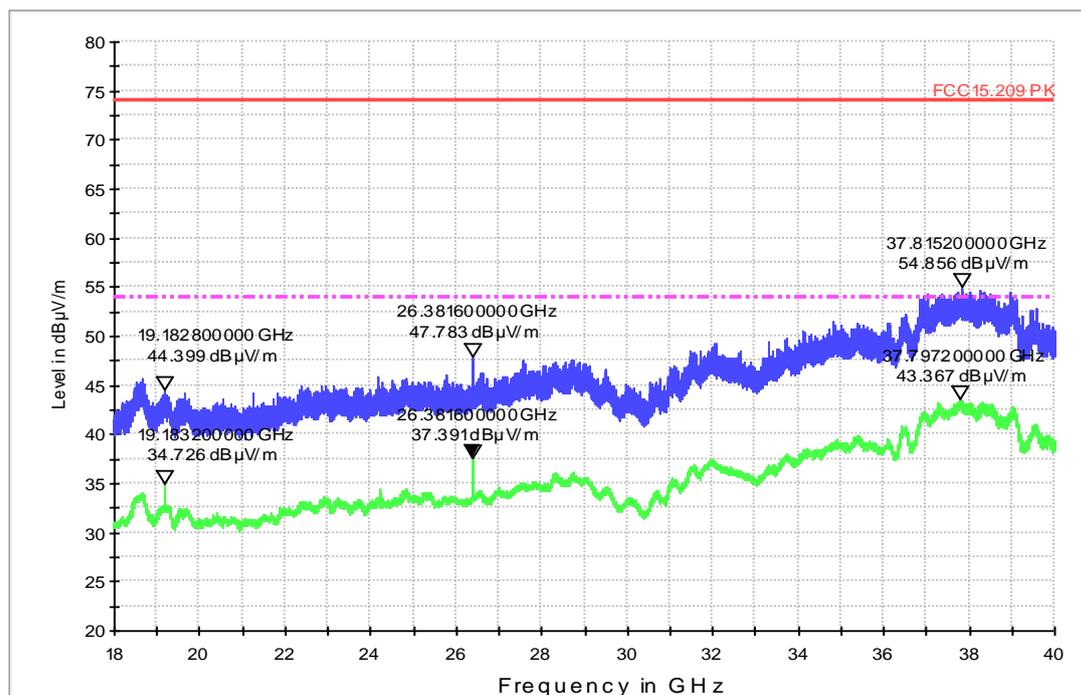
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
Operation mode:	WLAN 5GHz, TX mode continuous
Operator Name:	dpa
Comment:	Ch151, ac40-mode, MCS4

#### 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:	-

EMI Scan\_18\_40GHz\_Pre\_fast\_500us



## 4.5. Channel 159 (AC40-Mode, MCS6)

### Diagram No.: 4.05c

#### Common Information

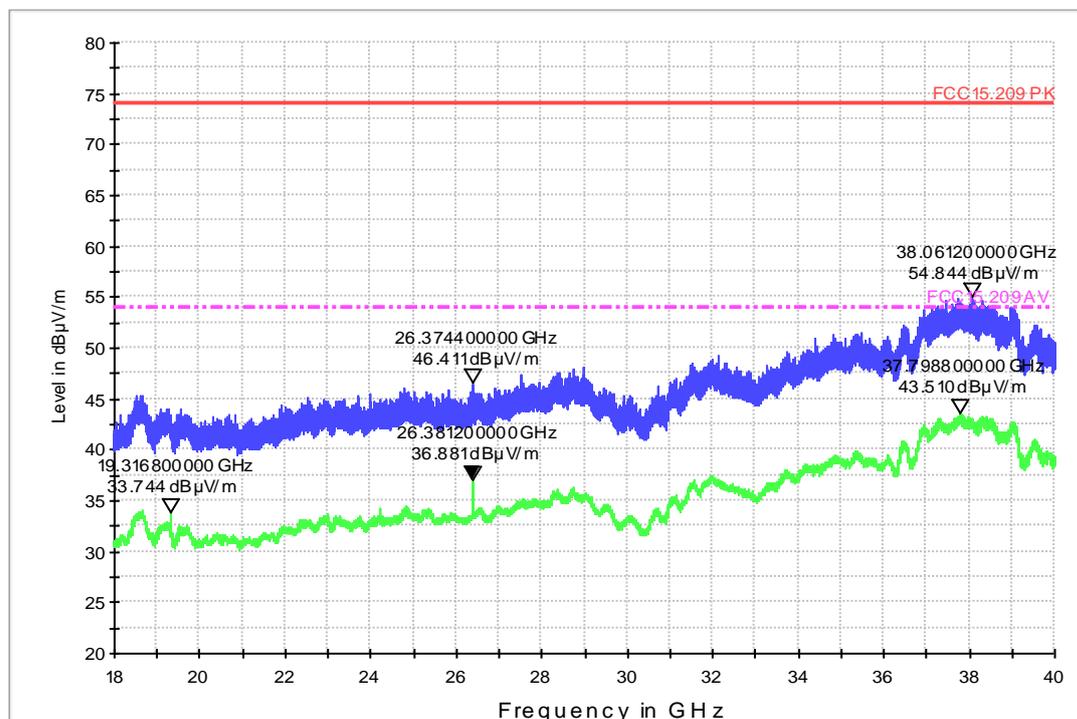
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
Operation mode:	WLAN 5GHz, TX mode continuous
Operator Name:	dpa
Comment:	Ch159, ac40-mode, MCS6

#### 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:	-

EMI Scan\_18\_40GHz\_Pre\_fast\_500us



## 4.6. Channel 155 (AC80-Mode, MCS0)

### Diagram No.: 4.06c

#### Common Information

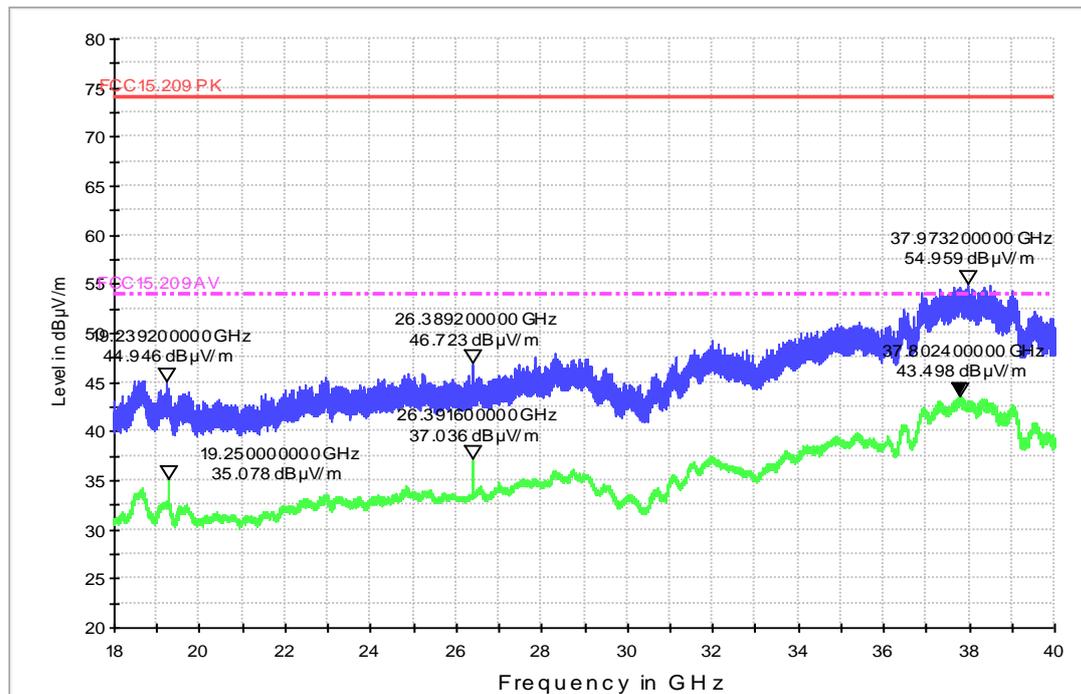
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
Operation mode:	WLAN 5GHz, TX mode continuous
Operator Name:	dpa
Comment:	Ch155, ac80-mode, MCS0

#### 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:	-

EMI Scan\_18\_40GHz\_Pre\_fast\_500us



## 5. Radiated band-edge measurements accord. §15.209 & §15.205

### 5.1. Channel 149 (a-Mode,48Mbit)

#### Diagram No.: 9.01\_BE-Left\_Ch149\_48MBit

#### Common Information

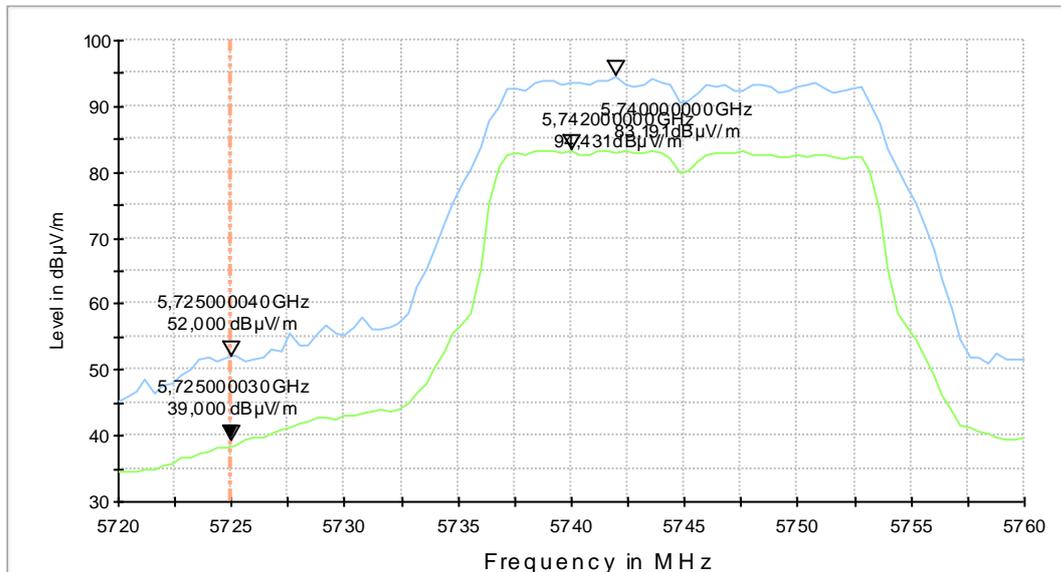
Test Description:	Radiated Band-Edge emissions accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & 15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical

Operator Name:	ABA
Comment:	Channel no. 149 a-Mode, 48MBit
Op. Mode:	WLAN 5GHz

#### 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:	-

00431\_FCC15247\_5GHz\_Band\_SM1\_KP1\_WLAN\_1ms



## 5.2. Channel 165 (n-Mode, 26Mbit)

### Diagram No.: 9.03\_BE\_Ch165\_26Mbit

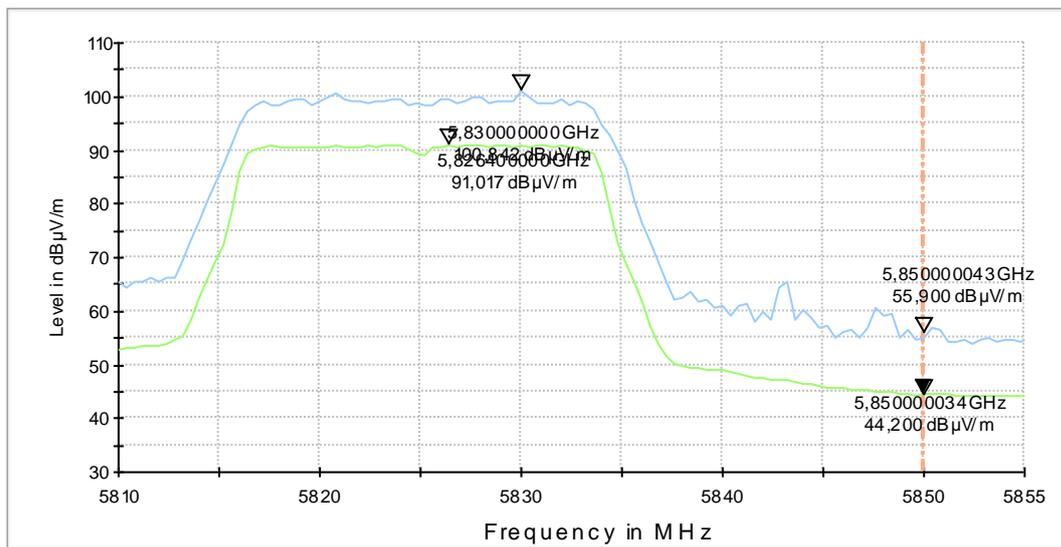
#### Common Information

Test Description:	Radiated Band-Edge emissions 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:	ABA
Comment:	Channel no. High=165
Op. Mode:	WLAN 5GHz

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_WLAN\_FCC15247



### 5.3. Channel 151 (AC40-Mode, MCS4)

## Diagram No.: 9.04\_BE\_Ch151\_MCS4

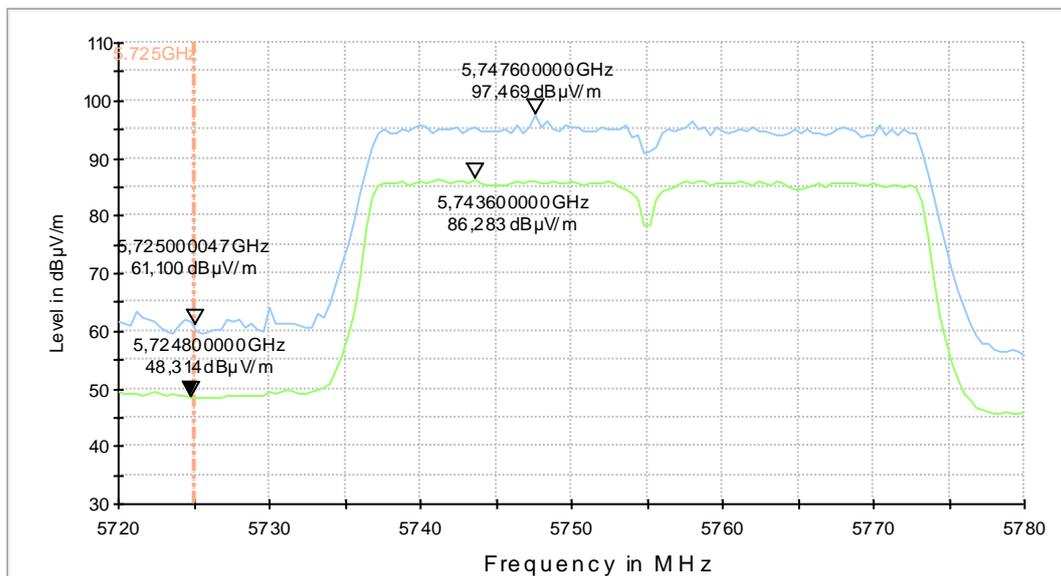
#### Common Information

Test Description:	Radiated Band-Edge emissions accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	ABA
Comment:	Channel no. low=151

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_W LAN\_FCC15247



### 5.4. Channel 159 (AC40-Mode, MCS6)

## Diagram No.: 9.05\_BE\_Ch159\_MCS6

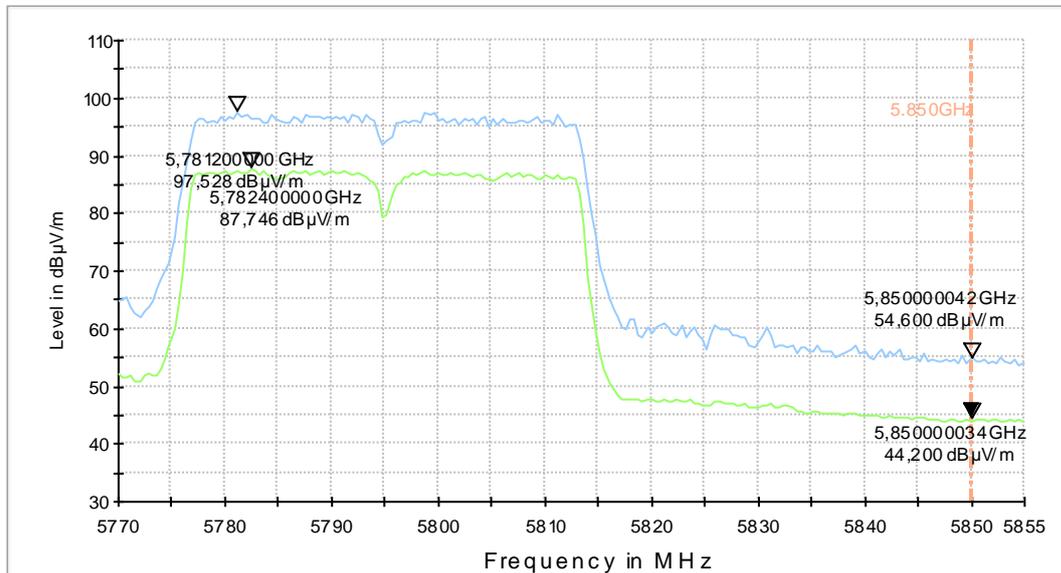
#### Common Information

Test Description:	Radiated Band-Edge emissions accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	ABA
Comment:	Channel no. high=159

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_W LAN\_FCC15247



### 5.5. Channel 155 (AC80-Mode, MCS0)

## Diagram No.: 9.06\_BE\_Ch155\_MCS0

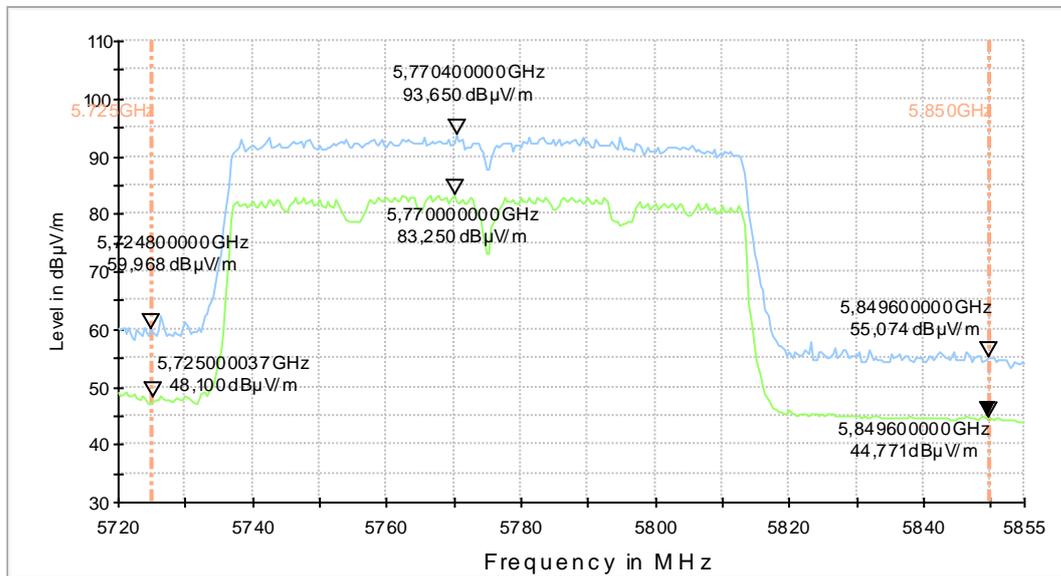
#### Common Information

Test Description:	Radiated Band-Edge emissions accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	ABA
Comment:	Channel no. middle=155

#### 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:	-

00431\_Sweep1\_SM1\_KP1\_W LAN\_FCC15247



## 6. Radiated EMI measurements accord. §15.109 class B

### 6.1. Frequency range 30MHz to 1000MHz

#### Diagram No. 3.07\_RX\_Mode\_Ch157

Test description: Electric Fieldstrength Measurement  
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3m measurement distance  
 Version of Testsoftware: 8.51.0  
 Distance correction: not used  
 Used filter: not used  
 Test specification: FCC15.109, class B; RSS-Gen.: Issue 3

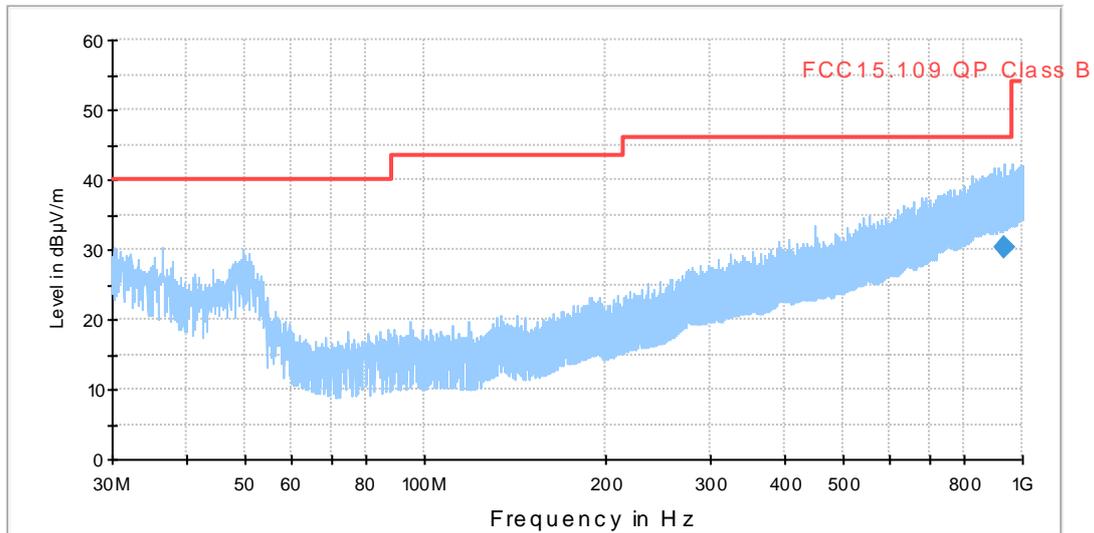
Operator: FTe  
 Operating conditions: RX Mode, Ch157  
 Measured sides of EUT: front, right, rear, left, top, under  
 Power during tests: 110V 60Hz  
 Comment 1: 120 V AC 60 Hz  
 Comment 2:

#### 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\_FCC 15.109\_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 - QPK (dB)	Limit - QPK (dBµV/m)
934.210000	30.4	1000.0	120.000	105.0	H	7.0	90.0	27.0	15.6	46.0

## 6.2. Frequency range 1GHz to 18GHz

### 4.07\_UN3\_Ch157\_RX

#### Common Information

Test Description:	Radiated Filed Strength Emission
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 15.109
Operating Mode:	WLAN 5G RX, Ch157
Environmental Conditions:	Humidity: 44%rH; Temperature: 20°C
Operator:	GAr

#### 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:	-

030442\_FCC\_Part15.109\_Unint\_Rad\_Class\_B\_1G-20G\_ESU 40

