

Annex 4: Measurement diagrams to  
**TEST REPORT**  
 No.: 2-20828020a-14

**FCC Regulations**  
 Part 22, Subpart H  
 Part 24, Subpart E  
 Part 27, Subpart C

for

Sony Mobile Communications

Smartphone FCC-ID: PY7PM-0740  
 with  
 Qi-Charging Phone Cover AI-0070

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

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# 1. Measurements diagrams

## 8.01\_GSM850\_Ch192

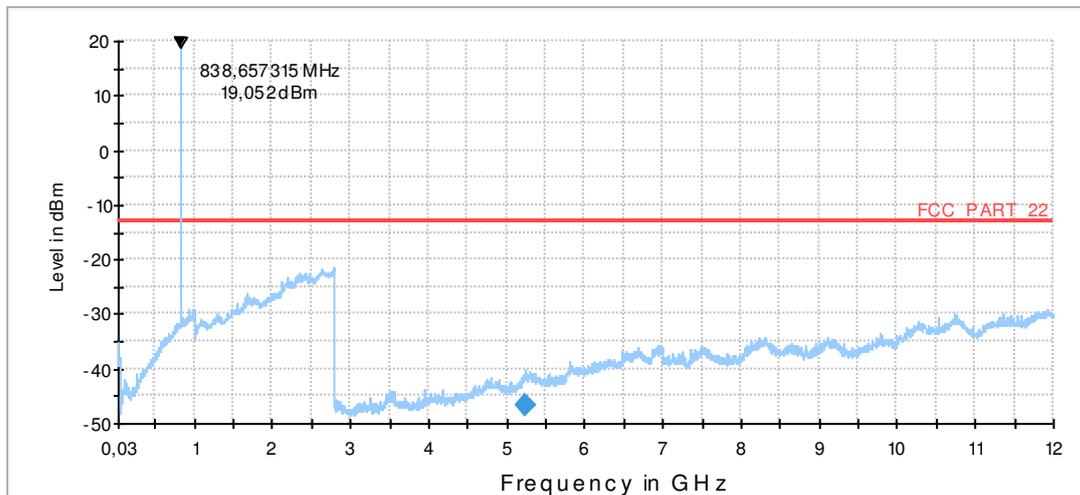
### Common Information

|                           |  |
|---------------------------|--|
| Test Description:         | Radiated Emissions GSM850                                    |
| Test Site Location:       | CETECOM GmbH Essen   |
| Test Site:                | Fully Anechoic Room (FAR)                                    |
| Test Standard:            | FCC Part22.917   |
| Test SW:                  | R&S EMC32, V8.53.0   |
| Operating Mode:           | GSM850 - MS allocated UL channel 192 (33dBm) and Qi charging |
| Exclusionband:            | 824 - 849MHz   |
| Environmental Conditions: | Humidity: 44%rH; Temperature: 20°C                           |
| Operator:                 | dpa  |

### EUT Information

|                       |   |
|-----------------------|---|
| Manufacturer:         | Sony  |
| Model:                | AI-0700   |
| Type:                 | Qi Cover  |
| -----                 |   |
| EUT:                  | WCR12   |
| HW version:           | #24967  |
| SW version:           | -   |
| SVN:                  | -   |
| Config:               | -   |
| Serial number:        | 1415FF2E0000252   |
| Connected Interfaces: | Mobile #24734, SW 17.1.A.0.70 ; USB-cable EC803 Type AI-0404, SN 134912A71205832 ; HS MH-410c, Type AG-1100, SN12311A150001F46 ; Qi Transmitter LPIC-L0001, HW Rev04, FW Rev1.1.0349.1, SN 070811000261 |
| Power Supply:         | 120VAC/60Hz during test   |
| Comments:             | -   |

030401\_FCC\_Part22\_GSM850\_TX\_all\_channels\_30M-12G



### Final Result 1

| Frequency (MHz) | MaxPeak (dBm) | Meas. Time (ms) | Bandwidth (kHz) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) | Limit (dBm) |
|-----------------|---------------|-----------------|-----------------|--------------|---------------|-----------------|------------|-------------|-------------|
| 5251.913828     | -46.7         | 5000.0          | 1000.000        | H            | 202.0         | 0.0             | -88.5      | 33.7        | -13.0       |

## Diagram No. 8.02\_GSM1900\_Ch661

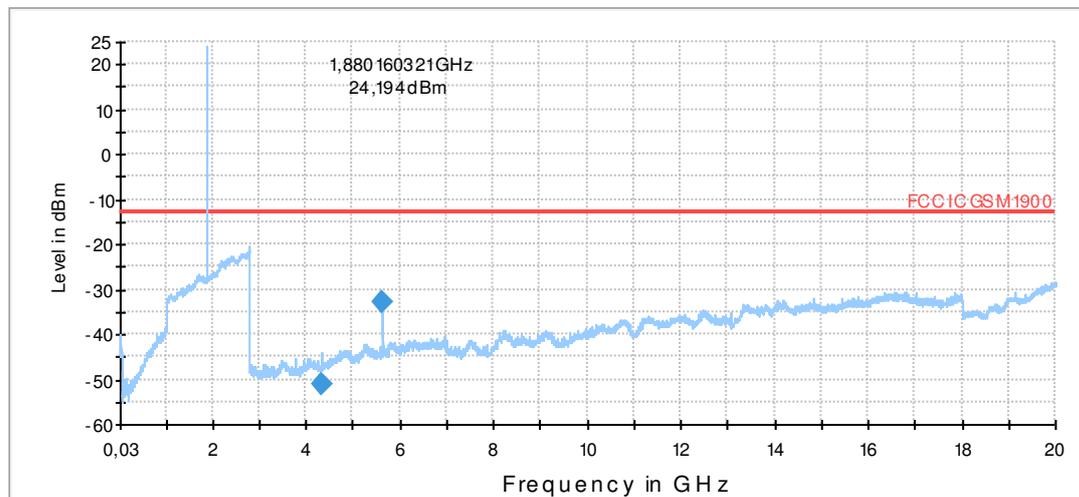
### Common Information

|                           |   |
|---------------------------|---|
| Test Description:         | Radiated Spurious Emissions GSM1900                       |
| Test Site Location:       | CETECOM GmbH Essen  |
| Test Site:                | Fully Anechoic Room (FAR)                                 |
| Test Standard:            | FCC Part 24.238   |
| Test SW:                  | R&S EMC32, V8.53.0  |
| Comm. Link:               | GSM1900, Voice  |
| Operating Mode:           | MS allocated channel 661 (UL = 1880.0MHz) and Qi charging |
| Exclusionband:            | 1850- 1910MHz   |
| Environmental Conditions: | Humidity: 44%rH; Temperature: 20°C                        |
| Operator:                 | FTE   |

### EUT Information

|                       |   |
|-----------------------|---|
| Manufacturer:         | Sony  |
| Model:                | AI-0700   |
| Type:                 | Qi Cover  |
| -----                 |   |
| EUT:                  | WCR12   |
| HW version:           | #24967  |
| SW version:           | -   |
| SVN:                  | -   |
| Config:               | -   |
| Serial number:        | 1415FF2E0000252   |
| Connected Interfaces: | Mobile #24734, SW 17.1.A.0.70 ; USB-cable EC803 Type AI-0404, SN 134912A71205832 ; HS MH-410c, Type AG-1100, SN12311A150001F46 ; Qi Transmitter LPIC-L0001, HW Rev04, FW Rev1.1.0349.1, SN 070811000261 |
| Power Supply:         | 120VAC/60Hz during test   |
| Comments:             | -   |

030404\_FCC\_Part24\_GSM1900\_TX\_all\_channels\_30M-20G



### Final Result 1

| Frequency (MHz) | MaxPeak (dBm) | Meas. Time (ms) | Bandwidth (kHz) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) | Limit (dBm) |
|-----------------|---------------|-----------------|-----------------|--------------|---------------|-----------------|------------|-------------|-------------|
| 4346.087175     | -51.2         | 1000.0          | 1000.000        | H            | 13.0          | 0.0             | -93.3      | 38.2        | -13.0       |
| 5640.195391     | -32.8         | 1000.0          | 1000.000        | H            | -35.0         | 90.0            | -89.7      | 19.8        | -13.0       |

## Diagram No.: 8.03\_UMTS\_FDD\_IV\_Ch1450

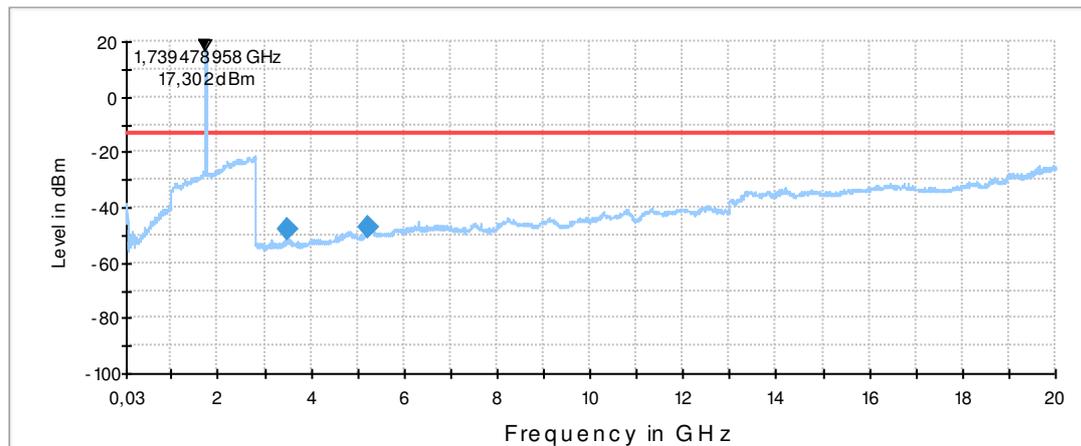
### Common Information

Test Description: Radiated field strength emission in 3m distance  
 Test Site: CETECOM GmbH Essen  
 Test Standard: FCC 27.53(g)  
 Test SW: R&S EMC32, V8.53.0  
 Antenna polarisation: horizontal/vertical  
 Operation mode: TX, continuous UMTS FDD IV and Qi charging  
 Operator Name: FTe  
 Comment: Channel no. 1450; Uplink at 1,740 GHz

### EUT Information

Manufacturer: Sony  
 Model: AI-0700  
 Type: Qi Cover

EUT: WCR12  
 HW version: #24967  
 SW version: -  
 SVN: -  
 Config: -  
 Serial number: 1415FF2E0000252  
 Connected Interfaces: Mobile #24734, SW 17.1.A.0.70 ; USB-cable EC803 Type AI-0404, SN 134912A71205832 ; HS MH-410c, Type AG-1100, SN12311A150001F46 ; Qi Transmitter LPIC-L0001, HW Rev04, FW Rev1.1.0349.1, SN 070811000261  
 Power Supply: 120VAC/60Hz during test  
 Comments: -



### Final Result 1

| Frequency (MHz) | MaxPeak (dBm) | Meas. Time (ms) | Bandwidth (kHz) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) | Limit (dBm) |
|-----------------|---------------|-----------------|-----------------|--------------|---------------|-----------------|------------|-------------|-------------|
| 3478.256513     | -48.3         | 10000.0         | 1000.000        | V            | 276.0         | 0.0             | -93.9      | 35.3        | -13.0       |
| 5220.941883     | -47.5         | 10000.0         | 1000.000        | V            | 258.0         | 0.0             | -88.8      | 34.5        | -13.0       |