

# Annex 1: Measurement diagrams to TEST REPORT No.: 16-1-0141801T07c-C1

According to:  
**FCC Regulations**  
Part 22, Part 24

**IC-Regulations**  
RSS-132 Issue 3, RSS-133 Issue 6,  
RSS-Gen Issue 4

for

Daimler Trucks North America

ECU  
CTPBASEDTNA

FCC-ID: 2AKC8CTP054631  
IC: 22221-CTP054631  
HVIN: CTPBASEDTNA  
PMN: CTPBASEDTNA  
FVIN: 16.095.2

| Laboratory Accreditation and Listings                                                                                                                                                                                                                                                                                      |                                                                                                                                                       |                                                                                                                                                   |                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>Deutsche<br>Akkreditierungsstelle<br>D-PL-12047-01-01                                                                                                                                                                               | <br>FEDERAL COMMUNICATIONS COMMISSION<br>USA<br>MRA US-EU 0003     | <br>Industry Canada<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 |
|  AUTHORIZED<br>RF LABORATORY                                                                                                                                                                                                            | <br>Authorized <sup>TM</sup><br>Test Lab<br>Lab Code: 20011130-00 |                                                                                                                                                   |                                                                                                                                                                                              |
| accredited according to DIN EN ISO/IEC 17025                                                                                                                                                                                                                                                                               |                                                                                                                                                       |                                                                                                                                                   |                                                                                                                                                                                              |
| <b>CETECOM GmbH</b><br>Laboratory Radio Communications & 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 |                                                                                                                                                       |                                                                                                                                                   |                                                                                                                                                                                              |

## Table of contents

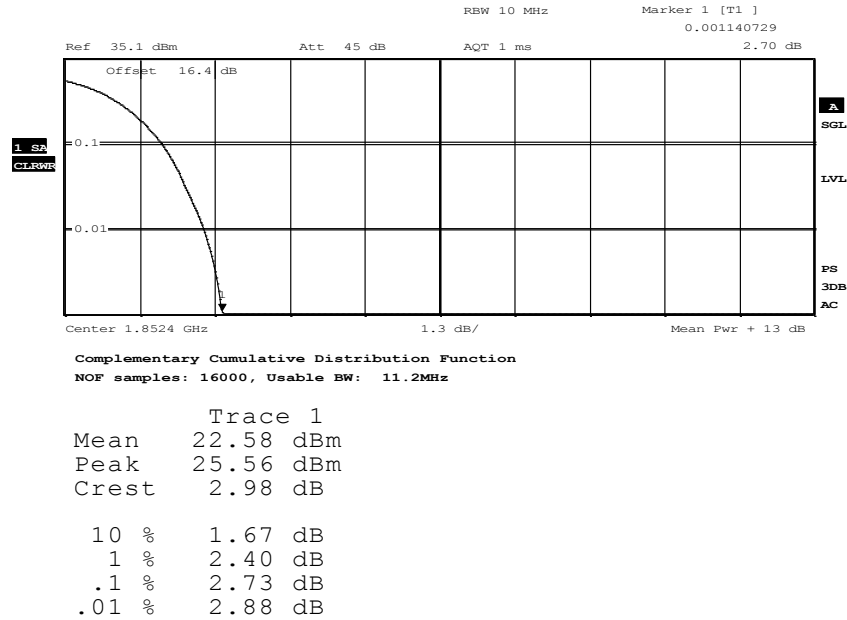
|                                                                              |          |
|------------------------------------------------------------------------------|----------|
| <b>1. MEASUREMENT DIAGRAMS.....</b>                                          | <b>3</b> |
| 1.1. Peak power output and PAPR-Value .....                                  | 3        |
| 1.2. Magnetic field emissions radiated (FDD Band II transmitting mode) ..... | 6        |
| 1.3. Magnetic field emissions radiated (FDD Band V transmitting mode).....   | 9        |
| 1.4. Spurious emissions radiated (FDD Band II transmitting mode) .....       | 12       |
| 1.5. Spurious emissions radiated (FDD Band V transmitting mode) .....        | 15       |
| 1.6. Radiated emissions on FDD Band II band-edge .....                       | 18       |
| 1.7. Radiated emissions on FDD Band V band-edge.....                         | 20       |

## 1. Measurement diagrams

### 1.1. Peak power output and PAPR-Value

#### 1.1.1. FDD Band 2

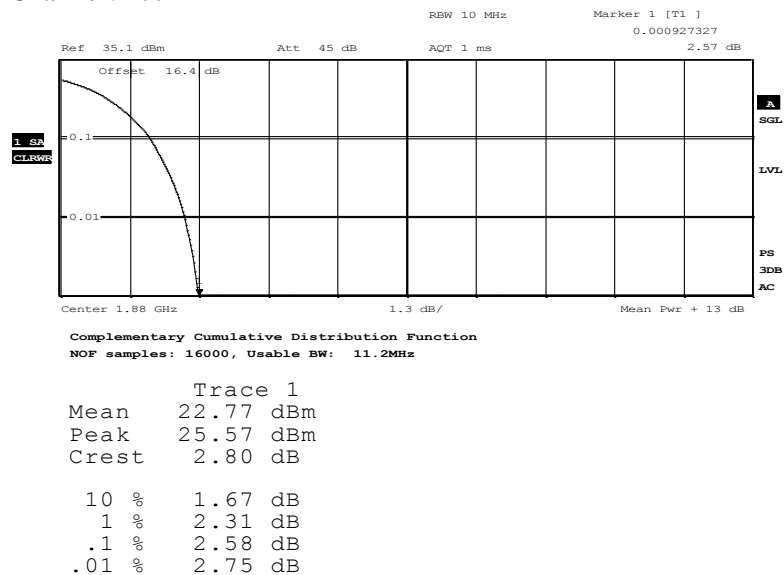
##### Channel 9262



Date: 14.DEC.2016 15:17:34

##### Diagram CCDF\_Ch\_9262

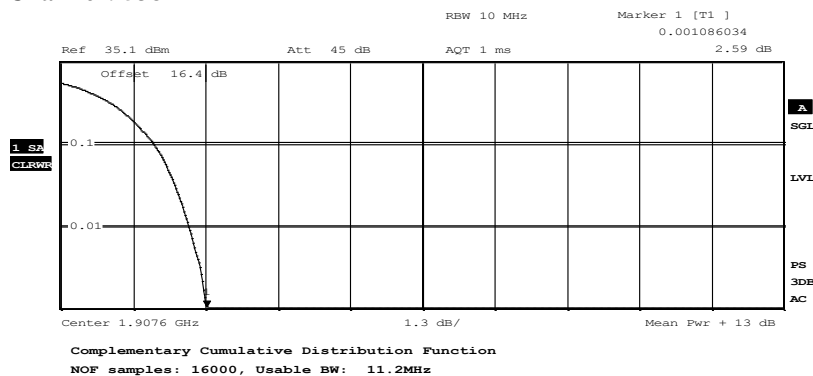
##### Channel 9400



Date: 14.DEC.2016 15:19:54

##### Diagram CCDF\_Ch\_9400

## Channel 9538



Trace 1

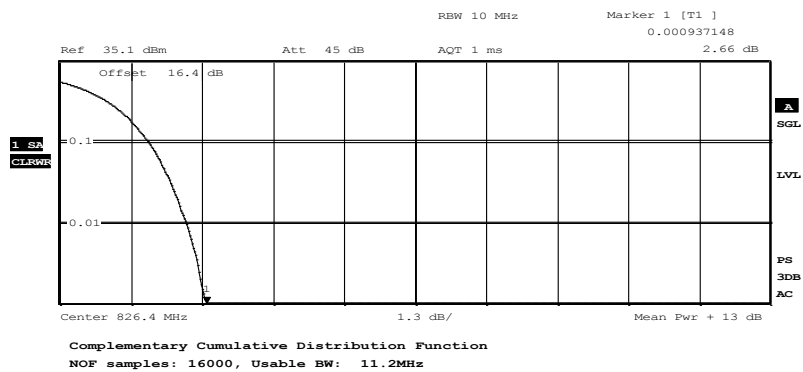
|       |           |
|-------|-----------|
| Mean  | 22.63 dBm |
| Peak  | 25.55 dBm |
| Crest | 2.91 dB   |
| 10 %  | 1.65 dB   |
| 1 %   | 2.29 dB   |
| .1 %  | 2.60 dB   |
| .01 % | 2.81 dB   |

Date: 14.DEC.2016 15:22:06

## Diagram CCDF\_Ch\_9538

### 1.1.2. FDD Band 5

## Channel 4132



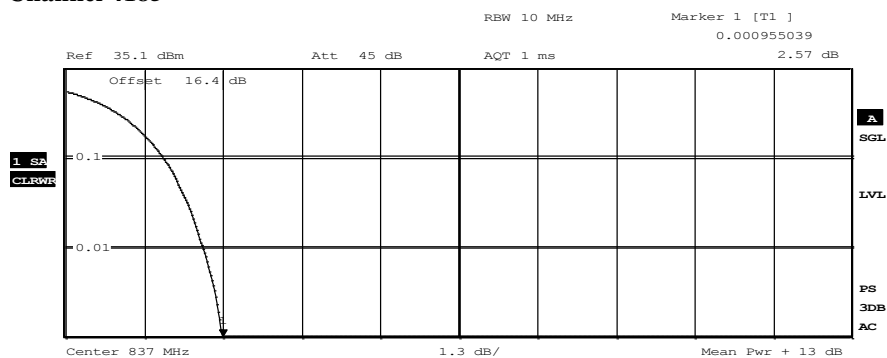
Trace 1

|       |           |
|-------|-----------|
| Mean  | 23.72 dBm |
| Peak  | 26.57 dBm |
| Crest | 2.85 dB   |
| 10 %  | 1.60 dB   |
| 1 %   | 2.29 dB   |
| .1 %  | 2.67 dB   |
| .01 % | 2.79 dB   |

Date: 14.DEC.2016 15:10:49

## Diagram CCDF\_Ch\_4132

## Channel 4185



Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

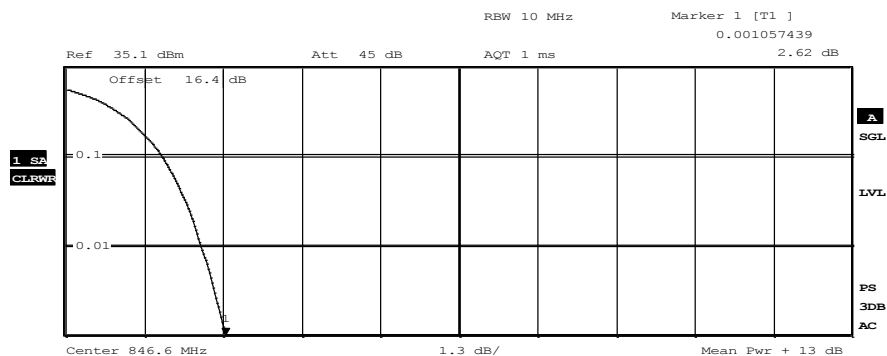
Trace 1  
Mean 23.65 dBm  
Peak 26.43 dBm  
Crest 2.78 dB

10 % 1.60 dB  
1 % 2.25 dB  
.1 % 2.58 dB  
.01 % 2.75 dB

Date: 14.DEC.2016 15:14:07

## Diagram CCDF\_Ch\_4185

## Channel 4233



Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1  
Mean 23.44 dBm  
Peak 26.27 dBm  
Crest 2.83 dB

10 % 1.58 dB  
1 % 2.23 dB  
.1 % 2.63 dB  
.01 % 2.81 dB

Date: 14.DEC.2016 15:15:30

## Diagram CCDF\_Ch\_4233

## 1.2. Magnetic field emissions radiated (FDD Band II transmitting mode)

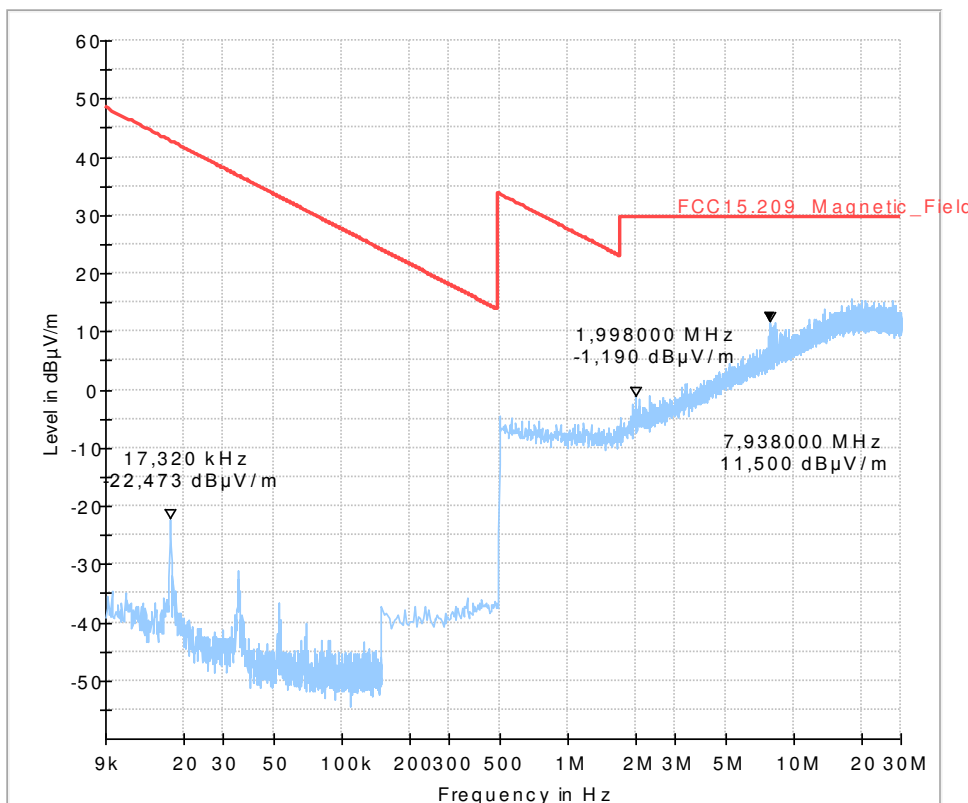
### Diagram No. 2.07\_FDD\_Band2\_Ch9262

|                          |                                                                     |             |
|--------------------------|---------------------------------------------------------------------|-------------|
| Date:                    | 13.12.2016                                                          | Page 1 of 5 |
| Test description:        | Magnetic Field Strength 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: | EMC32 V9.25.0                                                       |             |
| 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 4                               |             |
| Operator:                | YSa                                                                 |             |
| Operating conditions:    | FDD Band2 Ch9262                                                    |             |
| Power during tests:      | 12V DC                                                              |             |
| Comment 1:               | Channel low                                                         |             |
| Comment 2:               |                                                                     |             |

#### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003843                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



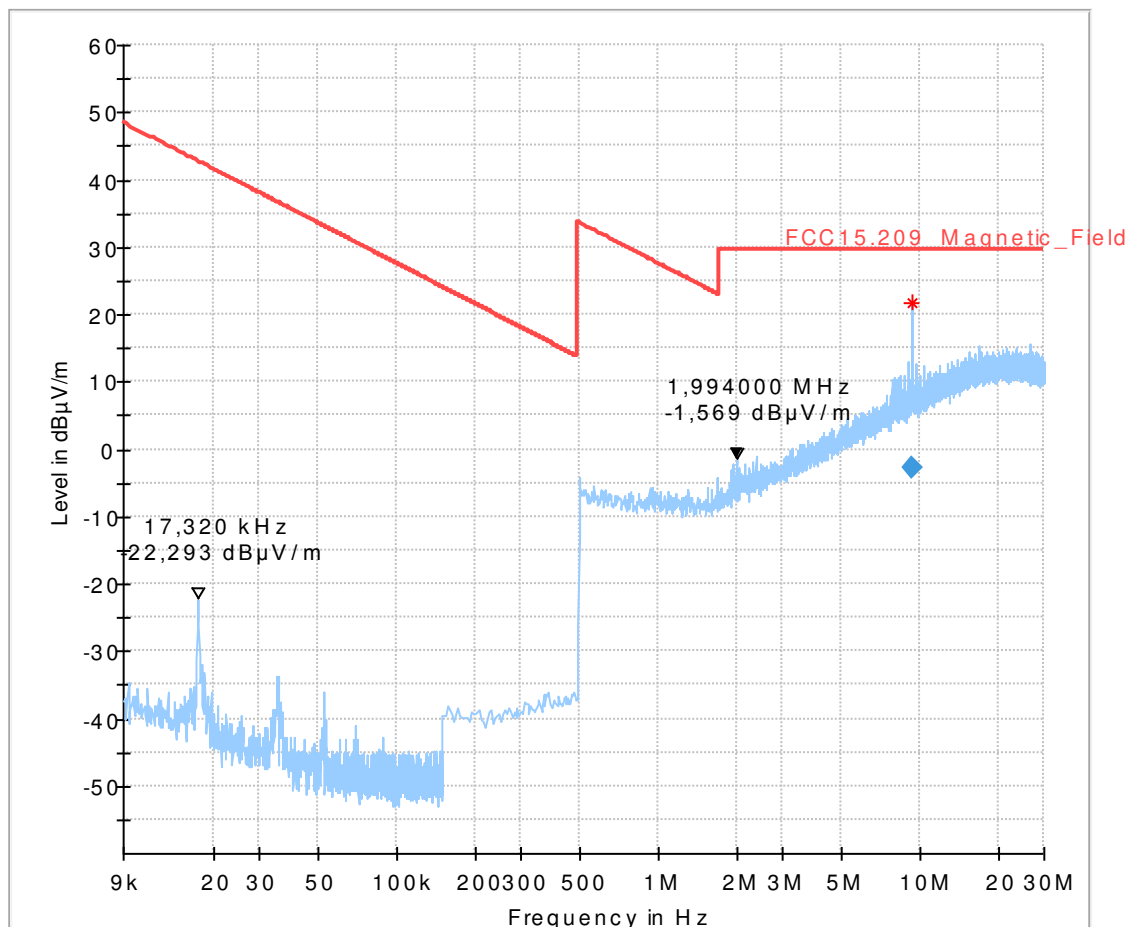
## Diagram No. 2.08\_FDD\_Band2\_Ch9400

|                          |                                                                     |
|--------------------------|---------------------------------------------------------------------|
| Test description:        | Date: 13.12.2016 Page 1 of 1                                        |
| Test site and distance:  | Magnetic Field Strength Measurement related to 30/300 m distance    |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction:     | EMC32 V9.25.0                                                       |
| Technical Data:          | used accord. table, pls. see test report                            |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup            |
| Used filter:             | height 1.00 m, parallel and 90° to EUT polarisation                 |
| Test specification:      | bypass                                                              |
|                          | FCC 15.205 § 15.209; RSS-Gen: Issue 4                               |
| Operator:                | YSa                                                                 |
| Operating conditions:    | FDD Band2 Ch9400                                                    |
| Power during tests:      | 12V DC                                                              |
| Comment 1:               | Channel middle                                                      |
| Comment 2:               |                                                                     |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003843                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



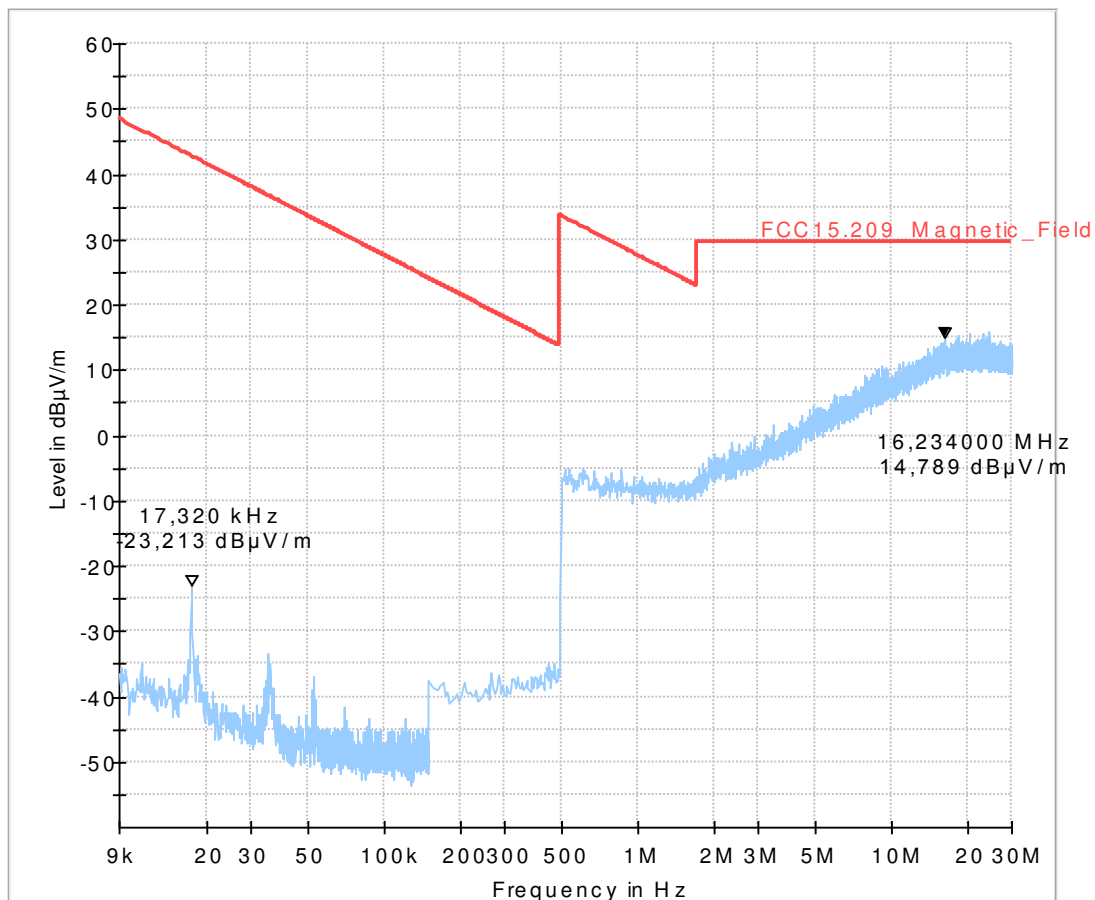
## Diagram No. 2.09\_FDD\_Band2\_Ch9538

|                          |                                                                     |
|--------------------------|---------------------------------------------------------------------|
| Test description:        | Date: 13.12.2016 Page 1 of 1                                        |
| Test site and distance:  | Magnetic Field Strength Measurement related to 30/300 m distance    |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction:     | EMC32 V9.25.0                                                       |
| Technical Data:          | used accord. table, pls. see test report                            |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup            |
| Used filter:             | height 1.00 m, parallel and 90° to EUT polarisation                 |
| Test specification:      | bypass                                                              |
|                          | FCC 15.205 § 15.209; RSS-Gen: Issue 4                               |
| Operator:                | YSa                                                                 |
| Operating conditions:    | FDD Band2 Ch9538                                                    |
| Power during tests:      | 12V DC                                                              |
| Comment 1:               | Channel high                                                        |
| Comment 2:               |                                                                     |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDTNA                                             |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003843                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum





### 1.3. Magnetic field emissions radiated (FDD Band V transmitting mode)

#### 2.10a\_FDDV\_Ch4132

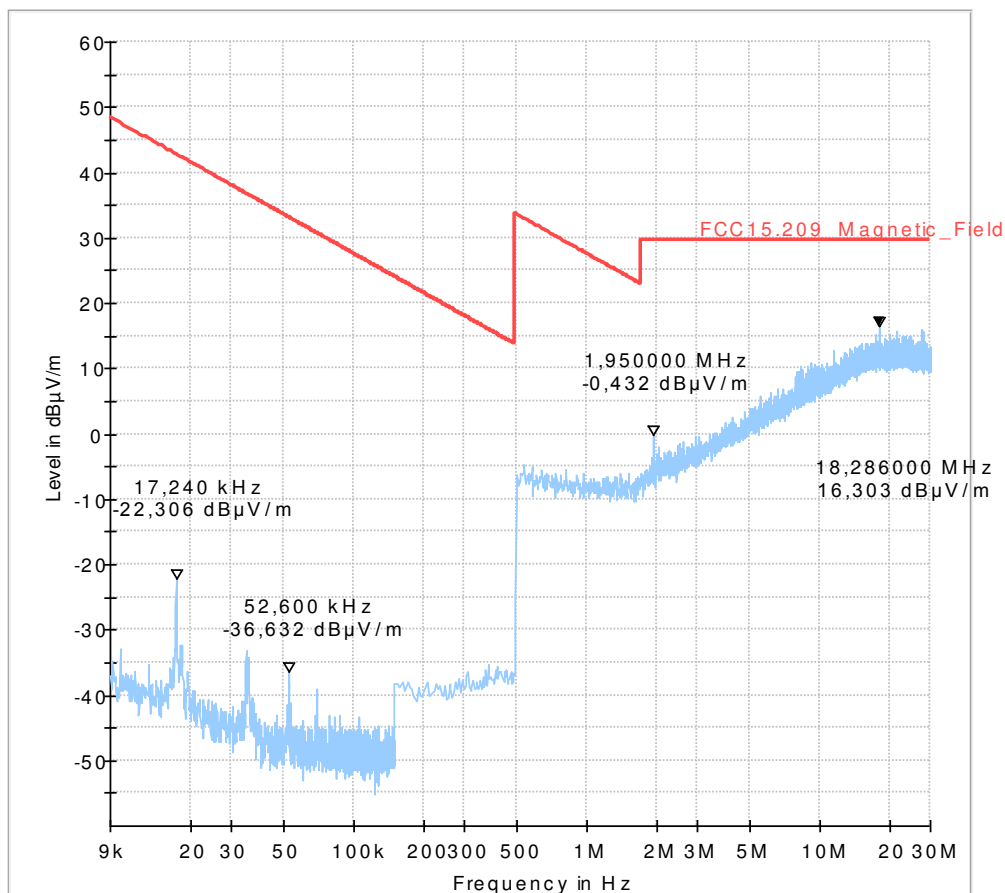
##### Common Information

|                          |                                                                     |
|--------------------------|---------------------------------------------------------------------|
| Test description:        | Magnetic Field Strength 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: | EMC32 V9.25.0                                                       |
| 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 4                               |
| Operator:                | RIs                                                                 |
| Operating conditions:    | UMTS FDD BandV Ch4132                                               |
| Power during tests:      | 12V DC                                                              |
| Comment 1:               | Channel low                                                         |

##### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



## 2.11a\_FDDV\_Ch4185

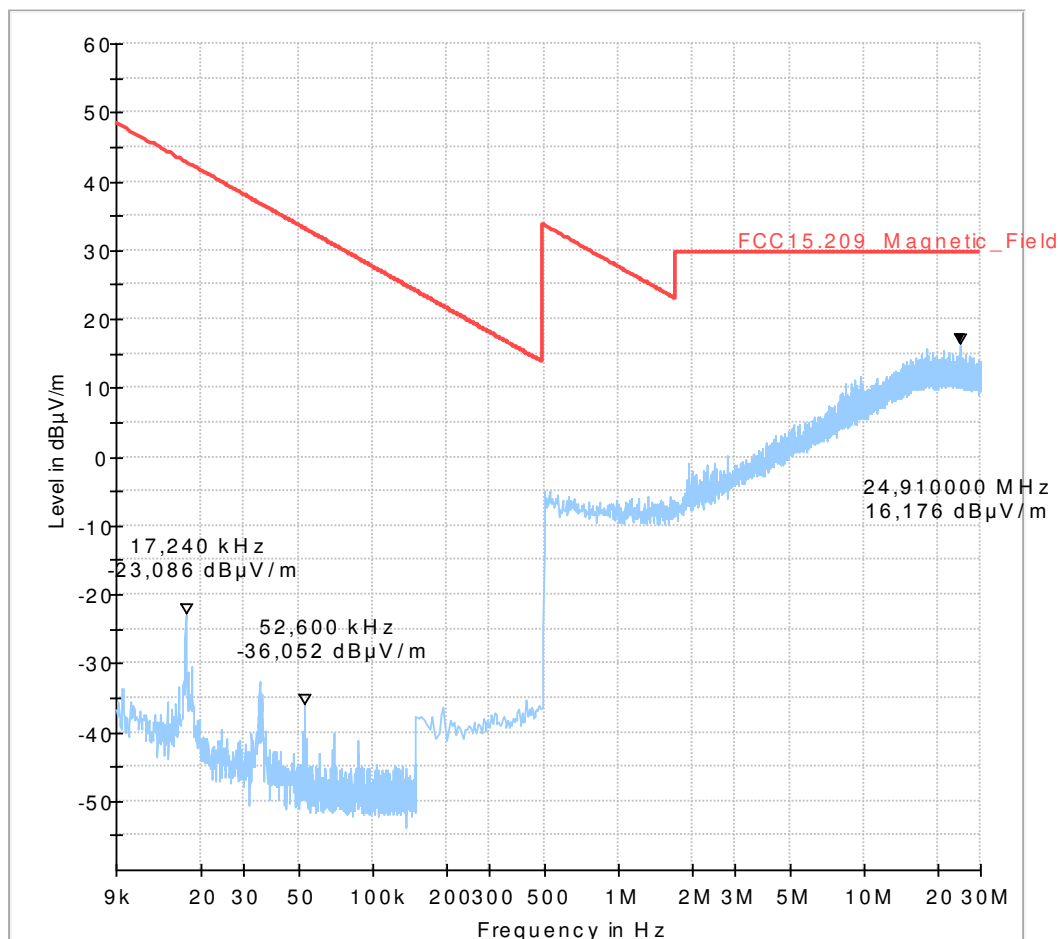
### Common Information

|                          |                                                                     |
|--------------------------|---------------------------------------------------------------------|
| Test description:        | Magnetic Field Strength 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: | EMC32 V9.25.0                                                       |
| 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 4                               |
| Operator:                | RIs                                                                 |
| Operating conditions:    | UMTS FDD BandV Ch4185                                               |
| Power during tests:      | 12V DC                                                              |
| Comment 1:               | Channel mid                                                         |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



## 2.12a\_FDDV\_Ch4233

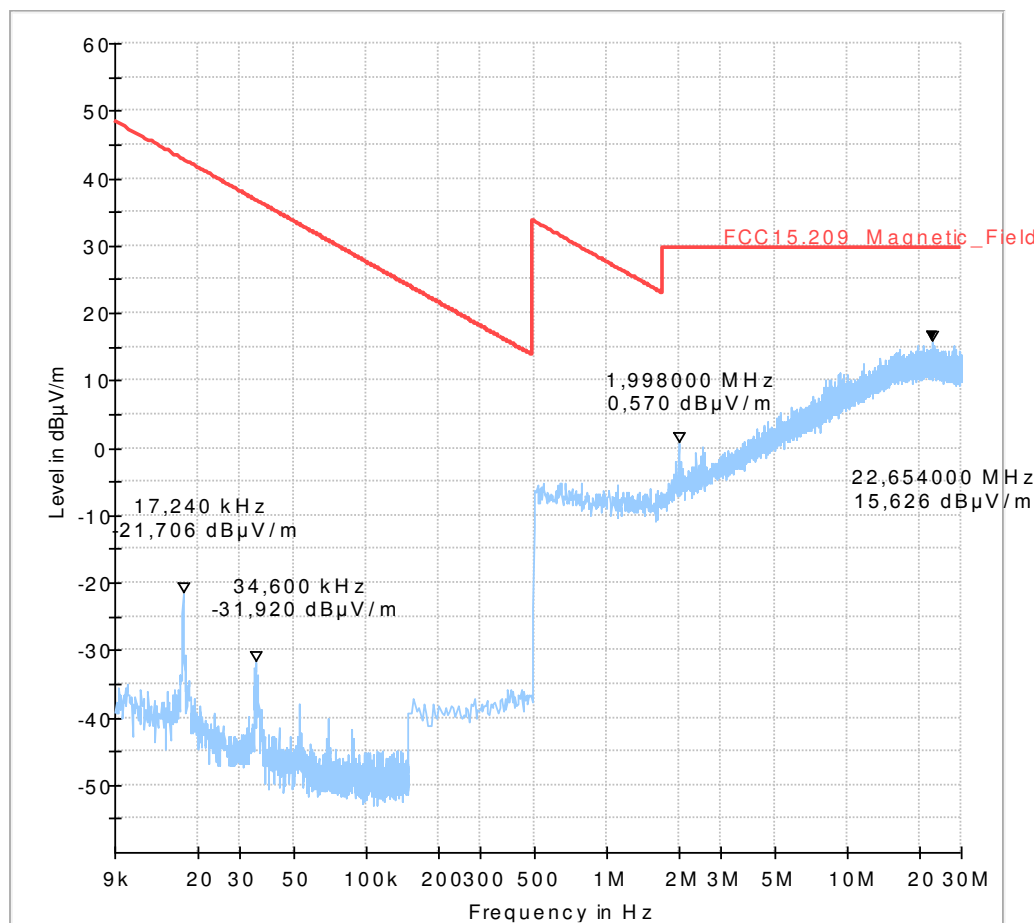
### Common Information

|                          |                                                                     |
|--------------------------|---------------------------------------------------------------------|
| Test description:        | Magnetic Field Strength 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: | EMC32 V9.25.0                                                       |
| 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 4                               |
| Operator:                | RIIs                                                                |
| Operating conditions:    | UMTS FDD BandV Ch4233                                               |
| Power during tests:      | 12V DC                                                              |
| Comment 1:               | Channel high                                                        |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| <hr/>                 |                                                           |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



## 1.4. Spurious emissions radiated (FDD Band II transmitting mode)

### 8.20a\_RSE\_R\_Ch9262\_RMC

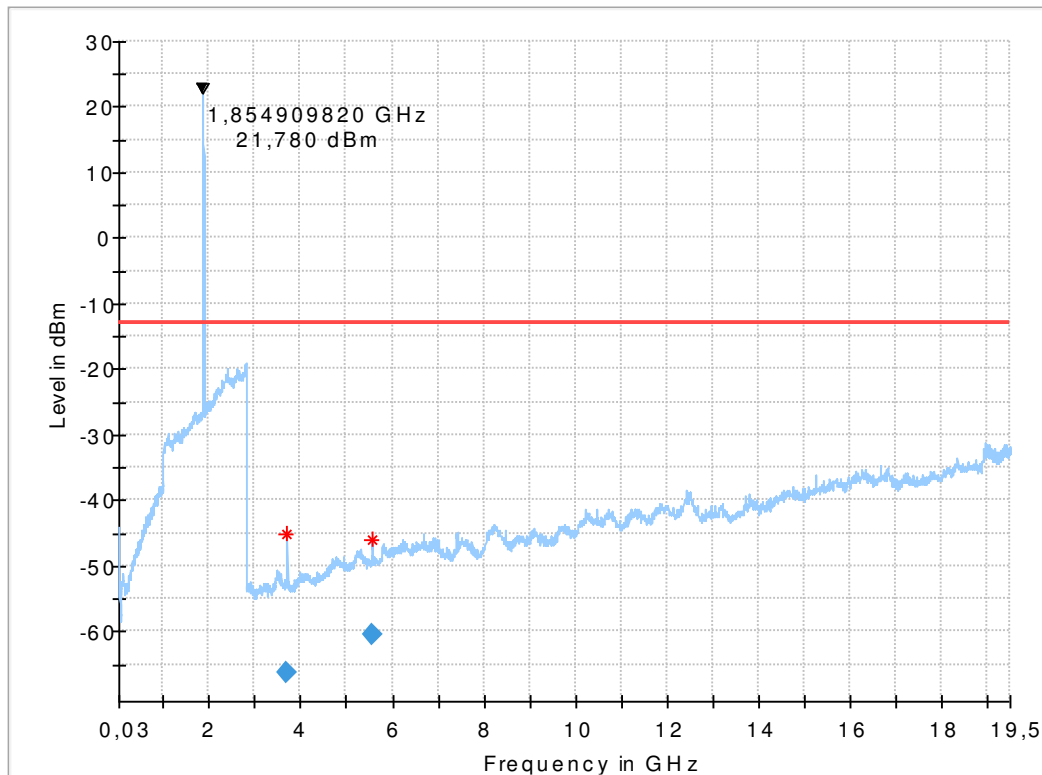
#### Common Information

|                           |                                             |
|---------------------------|---------------------------------------------|
| Test Description:         | Radiated Spurious Emissions UMTS FDDII      |
| Test Site Location:       | CETECOM Essen                               |
| Test Site:                | Fully Anechoic Room (FAR)                   |
| Test Standard:            | FCC Part 24                                 |
| Operating Mode:           | UE allocated channel 9262 (fc = 1852.4 MHz) |
| Environmental Conditions: | Humidity: 43%rH; Temperature: 20°C          |
| Operator:                 | RIs                                         |

#### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



#### Final Result

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 3706.177354     | -66.23        | 13.00       | 53.23       | 10000.0         | 1000.000        | V   | 315.0         | 0.0             | -94.9      |
| 5547.269539     | -60.43        | 13.00       | 47.43       | 10000.0         | 1000.000        | V   | -11.0         | 0.0             | -89.9      |

## 8.21a\_RSE\_R\_Ch9400\_RMC

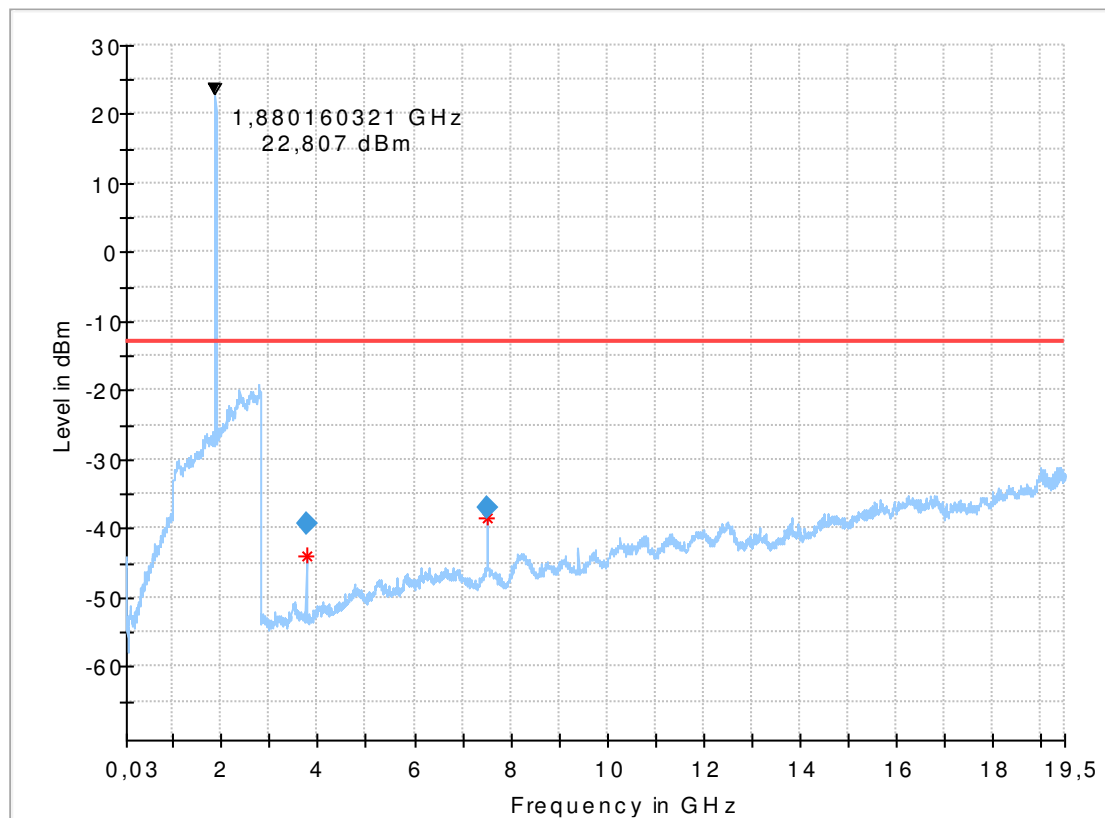
### Common Information

|                           |                                             |
|---------------------------|---------------------------------------------|
| Test Description:         | Radiated Spurious Emissions UMTS FDDII      |
| Test Site Location:       | CETECOM Essen                               |
| Test Site:                | Fully Anechoic Room (FAR)                   |
| Test Standard:            | FCC Part 24                                 |
| Operating Mode:           | UE allocated channel 9400 (fc = 1880.0 MHz) |
| Environmental Conditions: | Humidity: 43%rH; Temperature: 20°C          |
| Operator:                 | RLs                                         |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDTNA                                             |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



### Final Result

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 3761.457916     | -39.31        | 13.00       | 26.31       | 10000.0         | 1000.000        | V   | 334.0         | 0.0             | -95.1      |
| 7517.139278     | -36.83        | 13.00       | 23.83       | 10000.0         | 1000.000        | V   | 317.0         | 90.0            | -83.3      |

## 8.22a\_RSE\_R\_Ch9538\_RMC

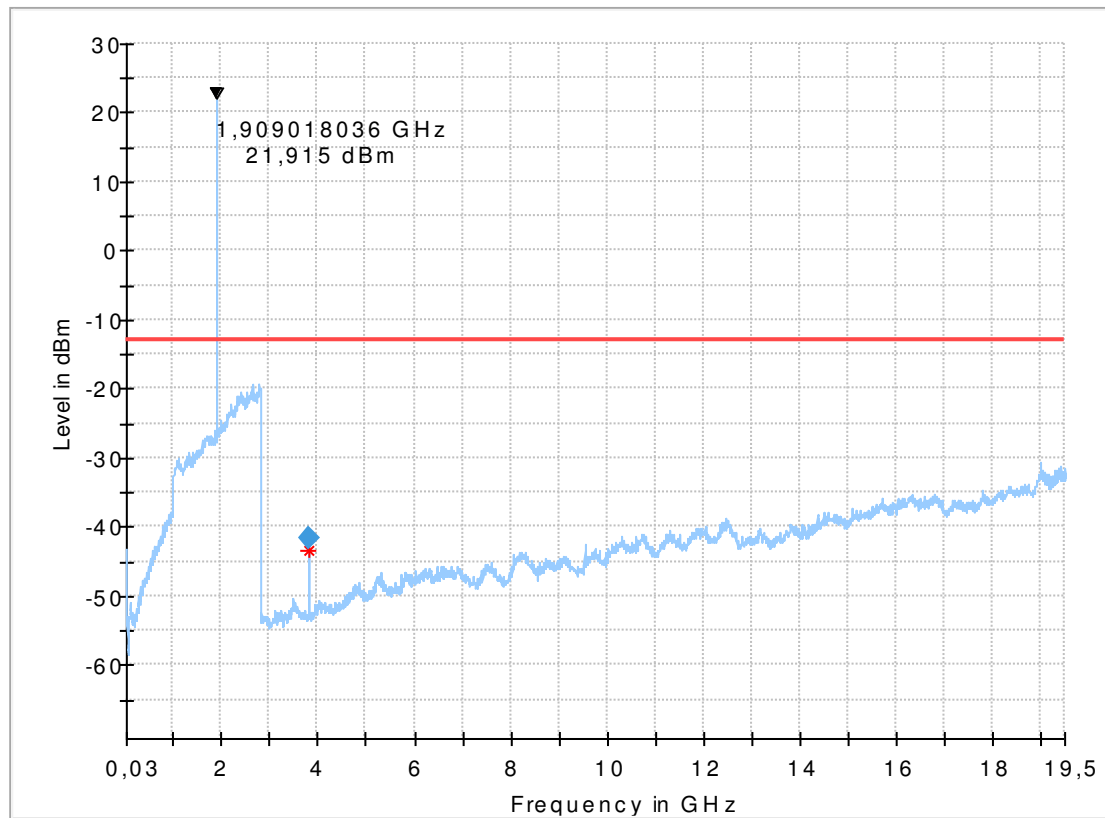
### Common Information

|                           |                                             |
|---------------------------|---------------------------------------------|
| Test Description:         | Radiated Spurious Emissions UMTS FDDII      |
| Test Site Location:       | CETECOM Essen                               |
| Test Site:                | Fully Anechoic Room (FAR)                   |
| Test Standard:            | FCC Part 24                                 |
| Operating Mode:           | UE allocated channel 9538 (fc = 1907.6 MHz) |
| Environmental Conditions: | Humidity: 43%rH; Temperature: 20°C          |
| Operator:                 | RI                                          |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



### Final Result

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 3816.648297     | -41.59        | 13.00       | 28.59       | 10000.0         | 1000.000        | H   | 32.0          | 90.0            | -95.1      |

## 1.5. Spurious emissions radiated (FDD Band V transmitting mode)

### 8.50a\_RSE\_R\_Ch4132\_RMC

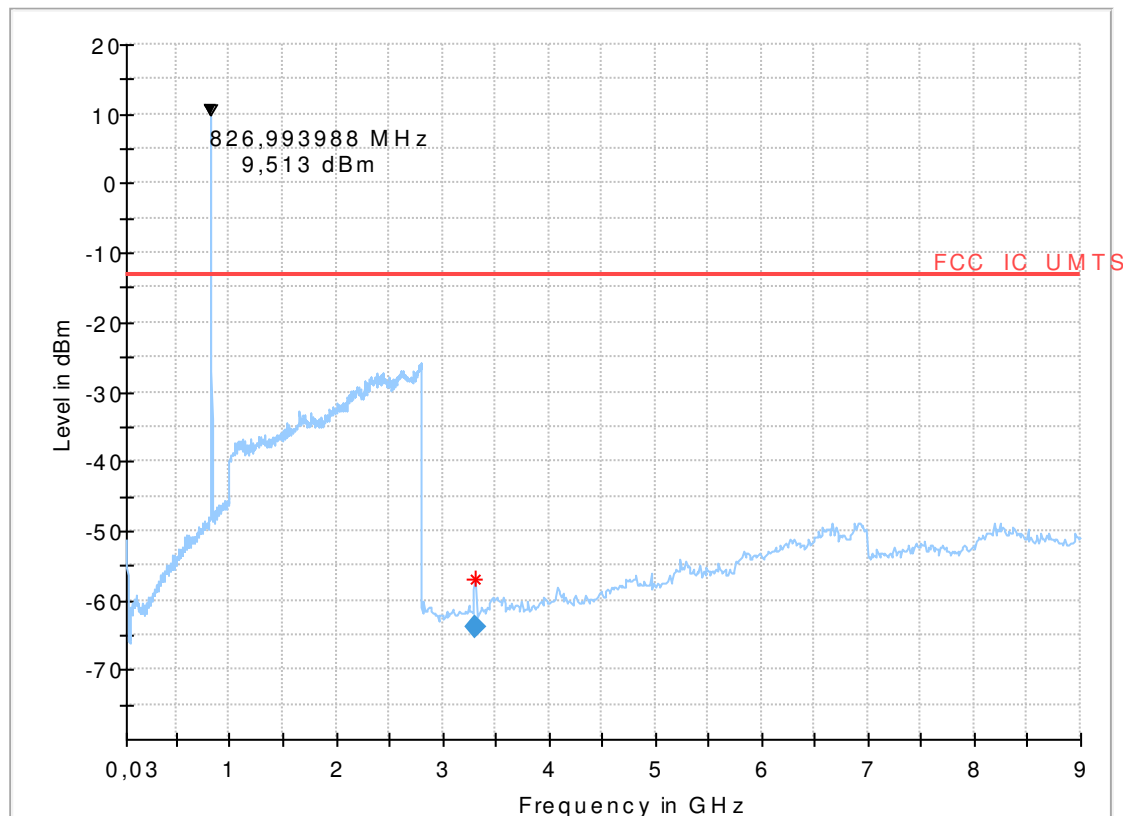
#### Common Information

|                           |                                                                              |
|---------------------------|------------------------------------------------------------------------------|
| Test Description:         | Radiated Spurious Emissions UMTS FDDV                                        |
| Test Site Location:       | CETECOM Essen                                                                |
| Test Site:                | Fully Anechoic Room (FAR)                                                    |
| Test Standard:            | FCC Part 22.917(a)                                                           |
| Operating Mode:           | UE allocated channel 4133 (fc = 826.6 MHz), Voice/HSDPA/HSUPA/HSPA+, H-Set x |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C                                           |
| Operator:                 | RIIs                                                                         |

#### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



#### Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 3310.370742     | -           | 50.84       | 1000.0          | 100.000         | V   | 270.0         | 0.0             | -95.7      |

## 8.51a\_RSE\_R\_Ch4183\_RMC

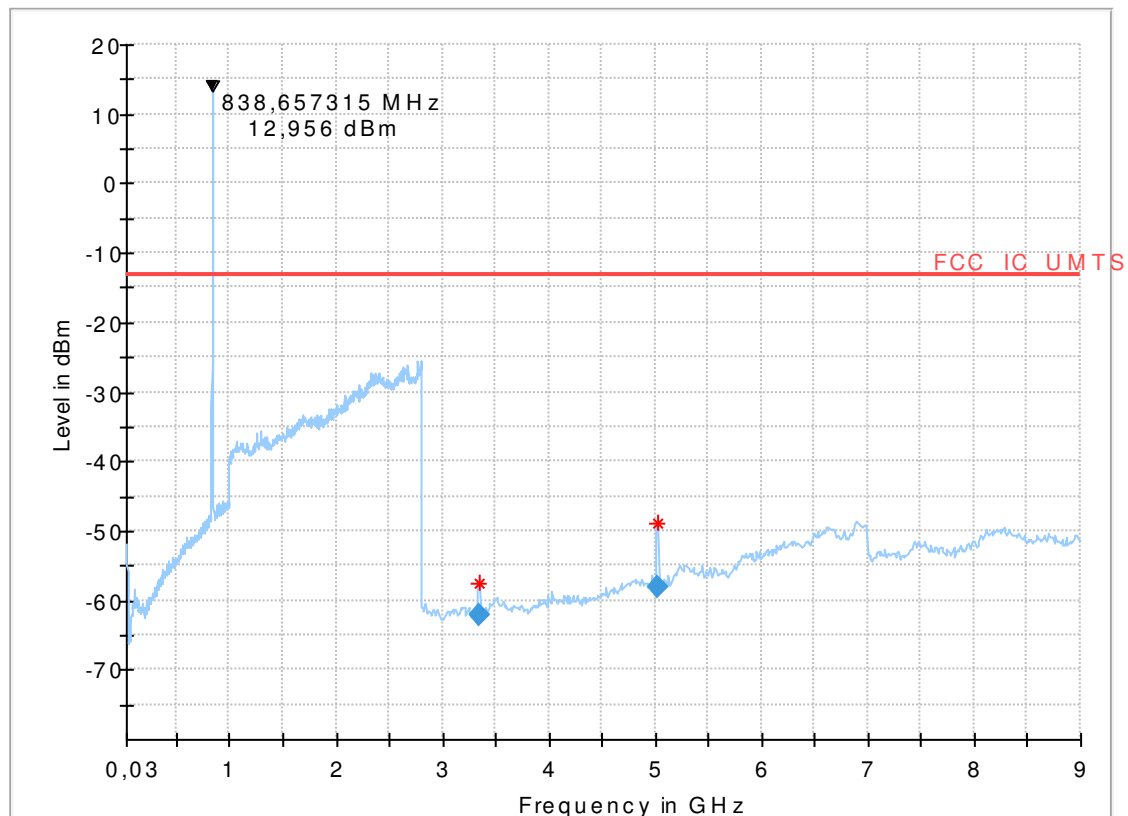
### Common Information

|                           |                                            |
|---------------------------|--------------------------------------------|
| Test Description:         | Radiated Spurious Emissions UMTS FDDV      |
| Test Site Location:       | CETECOM Essen                              |
| Test Site:                | Fully Anechoic Room (FAR)                  |
| Test Standard:            | FCC Part 22.917(a)                         |
| Operating Mode:           | UE allocated channel 4183 (fc = 836.4 MHz) |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C         |
| Operator:                 | RI                                         |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDTNA                                             |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



### Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 3343.557114     | -           | 49.12       | 1000.0          | 100.000         | V   | 281.0         | 0.0             | -95.6      |
| 5022.034068     | -           | 45.22       | 1000.0          | 100.000         | H   | 311.0         | 90.0            | -91.1      |



## 8.52a\_RSE\_R\_Ch4233\_RMC

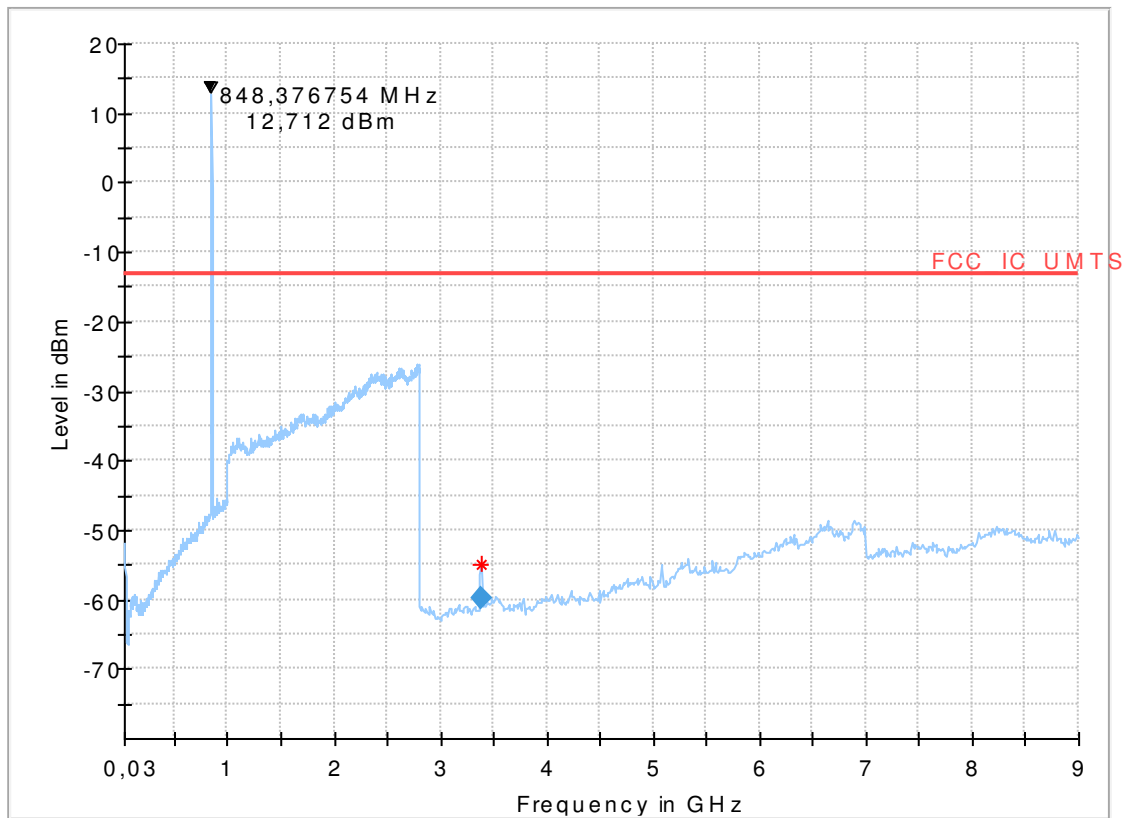
### Common Information

|                           |                                            |
|---------------------------|--------------------------------------------|
| Test Description:         | Radiated Spurious Emissions UMTS FDDV      |
| Test Site Location:       | CETECOM Essen                              |
| Test Site:                | Fully Anechoic Room (FAR)                  |
| Test Standard:            | FCC Part 22.917(a)                         |
| Operating Mode:           | UE allocated channel 4233 (fc = 846.6 MHz) |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C         |
| Operator:                 | RI                                         |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



### Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 3383.537074     | -           | 46.79       | 1000.0          | 100.000         | V   | 267.0         | 0.0             | -95.5      |

## 1.6. Radiated emissions on FDD Band II band-edge

### 9.20a\_BE\_R\_Ch9262\_RMC

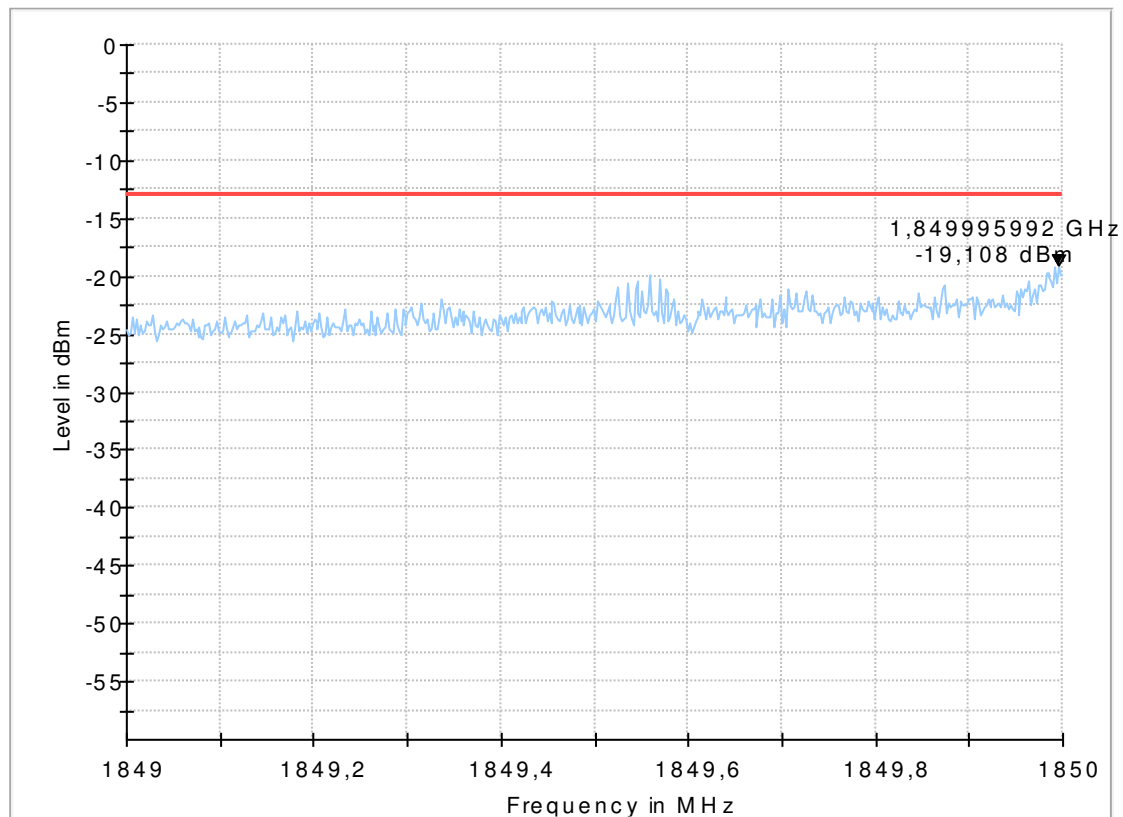
#### Common Information

|                           |                                            |
|---------------------------|--------------------------------------------|
| Test Description:         | Radiated Band Edge Compliance UMTS FDDII   |
| Test Site Location:       | CETECOM Essen                              |
| Test Site:                | Fully Anechoic Room (FAR)                  |
| Test Standard:            | FCC Part 27                                |
| Operating Mode:           | MS allocated channel 9262 (fc = 1852.4MHz) |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 22°C         |
| Operator:                 | Rls                                        |

#### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| -----                 | -----                                                     |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



## 9.21a\_BE\_R\_Ch9538\_RMC

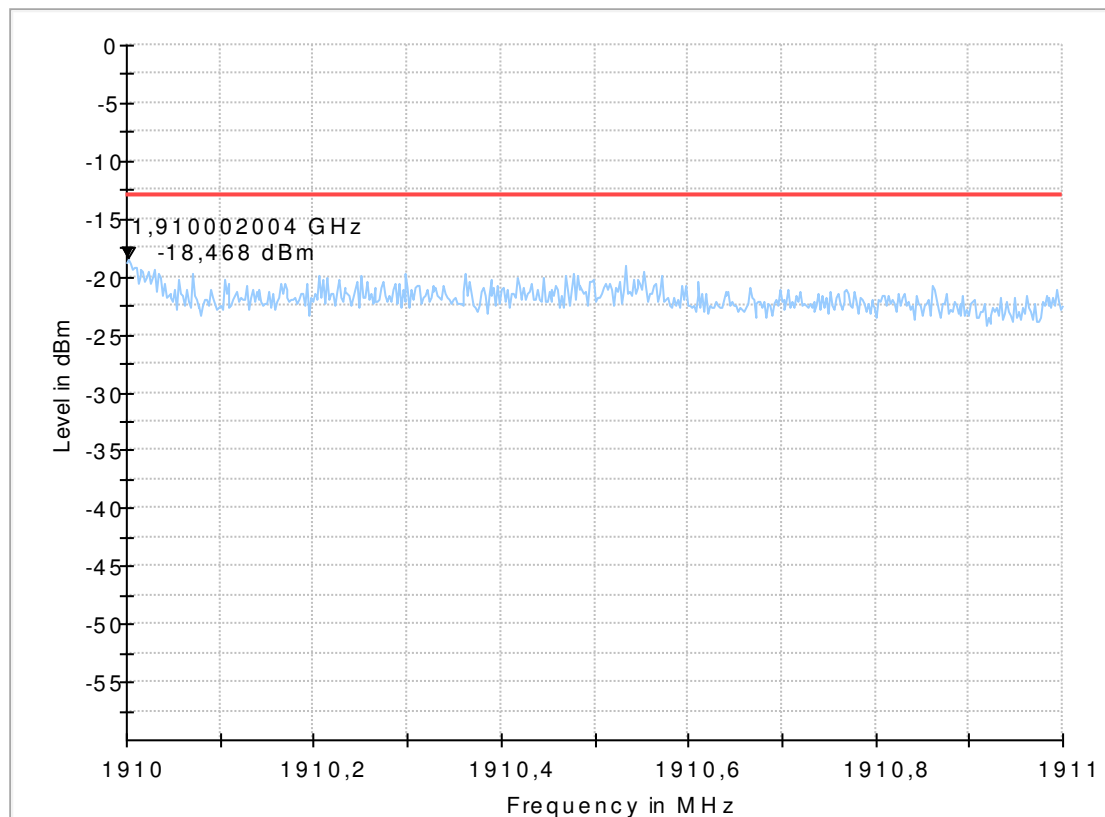
### Common Information

|                           |                                             |
|---------------------------|---------------------------------------------|
| Test Description:         | Radiated Band Edge Compliance UMTS-FDDII    |
| Test Site Location:       | CETECOM Essen                               |
| Test Site:                | Fully Anechoic Room (FAR)                   |
| Test Standard:            | FCC Part 22.917                             |
| Operating Mode:           | UE allocated channel 9538 (fc = 1907.6 MHz) |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C          |
| Operator:                 | RI                                          |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDTNA                                             |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



## 1.7. Radiated emissions on FDD Band V band-edge

### 9.50a\_BE\_R\_Ch4132\_RMC

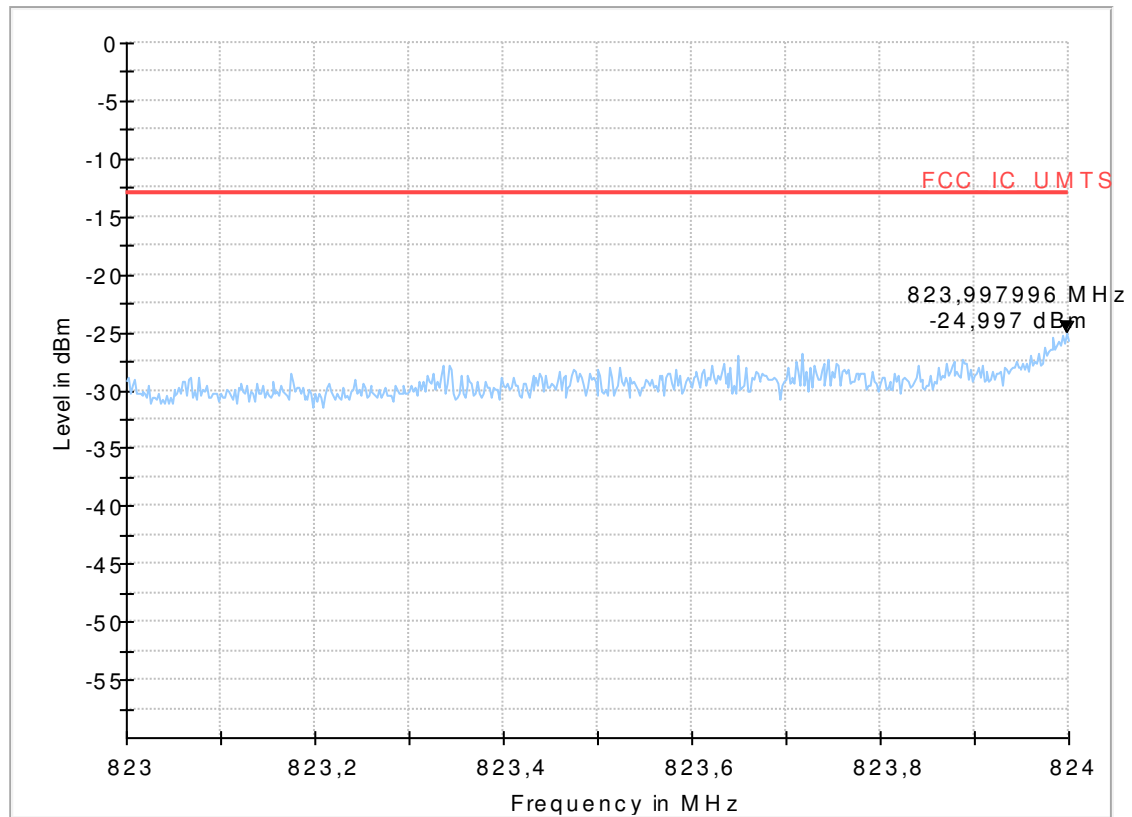
#### Common Information

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Test Description:         | Band-Edge low - Radiated Spurious Emissions UMTS FDDV |
| Test Site Location:       | CETECOM Essen                                         |
| Test Site:                | Fully Anechoic Room (FAR)                             |
| Test Standard:            | FCC Part 22.917(a)                                    |
| Operating Mode:           | UE allocated channel 4132                             |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C                    |
| Operator:                 | RLs                                                   |

#### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| <hr/>                 |                                                           |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum



## 9.51a\_BE\_R\_Ch4233\_RMC

### Common Information

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Test Description:         | Band-Edge low - Radiated Spurious Emissions UMTS FDDV |
| Test Site Location:       | CETECOM Essen                                         |
| Test Site:                | Fully Anechoic Room (FAR)                             |
| Test Standard:            | FCC Part 22.917(a)                                    |
| Operating Mode:           | UE allocated channel 4233                             |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C                    |
| Operator:                 | RI                                                    |

### EUT Information

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Manufacturer:         | Bosch Car Multimedia Portugal, S.A.                       |
| EuT:                  | ECU CTPMIDDTNA                                            |
| HW Version:           | G05                                                       |
| SW Version:           | 95.2                                                      |
| Serial Number:        | 2820003846                                                |
| Connected Interfaces: | USB-cable + main wiring + GSM/GNSS antenna + WLAN antenna |
| Power Supply:         | 12 V DC                                                   |

Full Spectrum

