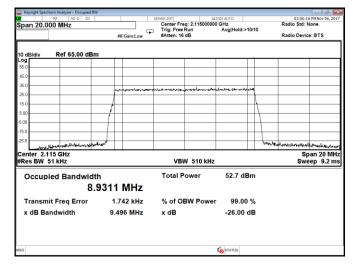


enter Freq 2.175000000 GHz Center Freq: 2.175000000 GHz
Trig: Free Run
#Atten: 16 dB

ALGM AUTO
ALGM AUTO Radio Device: BTS Ref 65.00 dBm Span 20 MHz Sweep 9.2 ms #Res BW 51 kHz VBW 510 kHz Occupied Bandwidth Total Power 51.8 dBm 8.9358 MHz Transmit Freq Error -1.079 kHz % of OBW Power 99.00 % x dB Bandwidth 9.552 MHz x dB -26.00 dB

Figure 8.5-17: Occupied bandwidth, QPSK, LTE, 10 MHz, Port B, mid channel

Figure 8.5-18: Occupied bandwidth, QPSK, LTE, 10 MHz, Port B, high channel



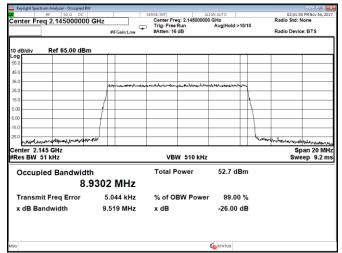
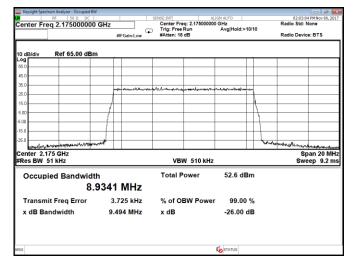


Figure 8.5-19: Occupied bandwidth, QPSK, LTE, 10 MHz, Port C, low channel

Figure 8.5-20: Occupied bandwidth, QPSK, LTE, 10 MHz, Port C, mid channel



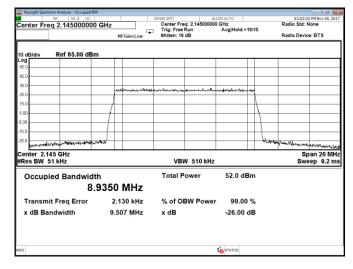


Span 20.000 MHz Center Freq: 2.115000000 GHz
Trig: Free Run
#Atten: 16 dB

ALGM AUTO
ALGM AUTO Radio Device: BTS Ref 65.00 dBn مرادوا والمراود والم Span 20 MHz Sweep 9.2 ms 2.115 GHz #Res BW 51 kHz VBW 510 kHz Occupied Bandwidth Total Power 52.2 dBm 8.9436 MHz Transmit Freq Error 5.840 kHz % of OBW Power 99.00 % x dB Bandwidth 9.502 MHz x dB -26.00 dB

Figure 8.5-21: Occupied bandwidth, QPSK, LTE, 10 MHz, Port C, high channel

Figure 8.5-22: Occupied bandwidth, QPSK, LTE, 10 MHz, Port D, low channel



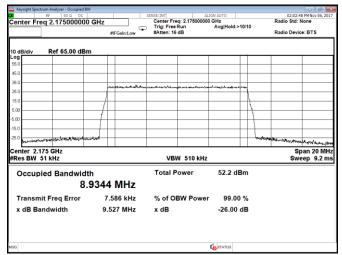
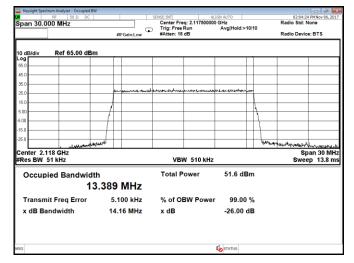


Figure 8.5-23: Occupied bandwidth, QPSK, LTE, 10 MHz, Port D, mid channel

Figure 8.5-24: Occupied bandwidth, QPSK, LTE, 10 MHz, Port D, high channel



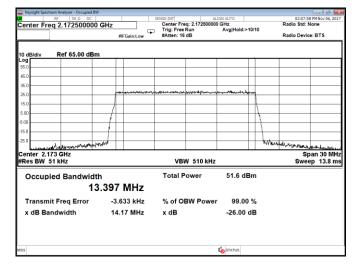


enter Freq 2.145000000 GHz Center Freq: 2.145000000 GHz
Trig: Free Run
#Atten: 16 dB

ALGN AUTO
ALGN AUTO Radio Device: BTS Ref 65.00 dBn Center 2.145 GHz Span 30 MHz Sweep 13.8 ms #Res BW 51 kHz VBW 510 kHz Occupied Bandwidth Total Power 51.7 dBm 13.389 MHz Transmit Freq Error -5.434 kHz % of OBW Power 99.00 % x dB Bandwidth 14.21 MHz x dB -26.00 dB

Figure 8.5-25: Occupied bandwidth, QPSK, LTE, 15 MHz, Port A, low channel

Figure 8.5-26: Occupied bandwidth, QPSK, LTE, 15 MHz, Port A, mid channel



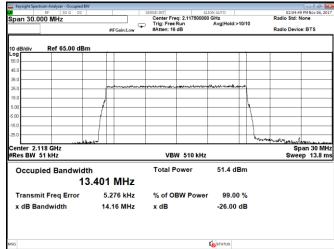
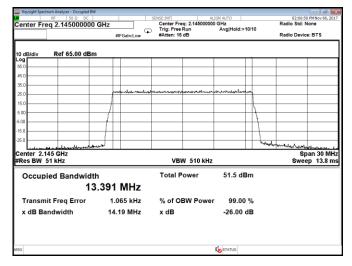


Figure 8.5-27: Occupied bandwidth, QPSK, LTE, 15 MHz, Port A, high channel

Figure 8.5-28: Occupied bandwidth, QPSK, LTE, 15 MHz, Port B, low channel

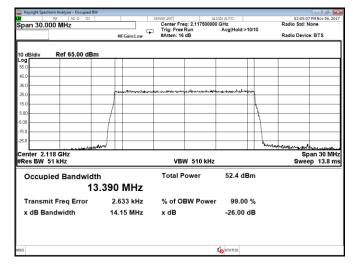




enter Freq 2.172500000 GHz Radio Device: BTS Ref 65.00 dBn Span 30 MHz Sweep 13.8 ms #Res BW 51 kHz VBW 510 kHz Occupied Bandwidth Total Power 51.1 dBm 13.388 MHz Transmit Freq Error -5.752 kHz % of OBW Power 99.00 % x dB Bandwidth 14.25 MHz x dB -26.00 dB

Figure 8.5-29: Occupied bandwidth, QPSK, LTE, 15 MHz, Port B, mid channel

Figure 8.5-30: Occupied bandwidth, QPSK, LTE, 15 MHz, Port B, high channel



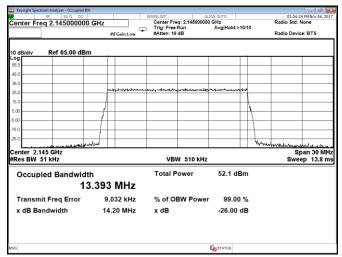
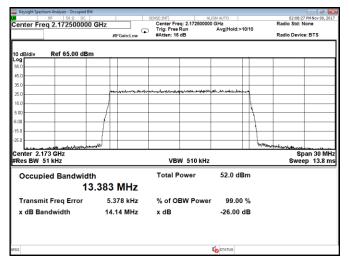


Figure 8.5-31: Occupied bandwidth, QPSK, LTE, 15 MHz, Port C, low channel

Figure 8.5-32: Occupied bandwidth, QPSK, LTE, 15 MHz, Port C, mid channel



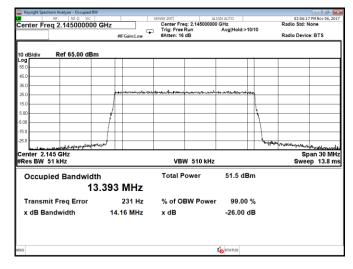


Span 30.000 MHz Center Freq: 2.117500000 GHz
Trig: Free Run
#Atten: 16 dB

ALGM AUTO
ALGM AUTO Radio Device: BTS Ref 65.00 dBn Center 2.118 GHz Sweep 13.8 ms #Res BW 51 kHz VBW 510 kHz Occupied Bandwidth Total Power 51.7 dBm 13.401 MHz Transmit Freq Error 737 Hz % of OBW Power 99.00 % x dB Bandwidth 14.15 MHz x dB -26.00 dB

Figure 8.5-33: Occupied bandwidth, QPSK, LTE, 15 MHz, Port C, high channel

Figure 8.5-34: Occupied bandwidth, QPSK, LTE, 15 MHz, Port D, low channel



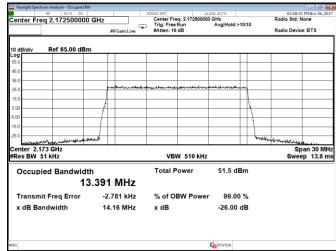
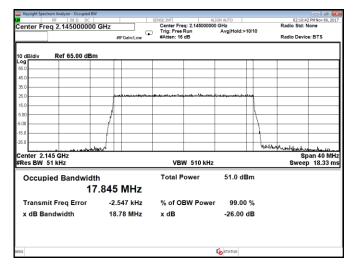


Figure 8.5-35: Occupied bandwidth, QPSK, LTE, 15 MHz, Port D, mid channel

Figure 8.5-36: Occupied bandwidth, QPSK, LTE, 15 MHz, Port D, high channel



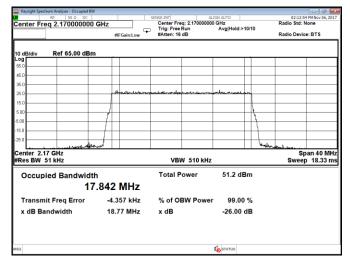


enter Freq 2.145000000 GHz Center Freq: 2.145000000 GHz
Trig: Free Run
#Atten: 16 dB

ALGM AUTO
ALGM AUTO Radio Device: BTS Ref 65.00 dBn Center 2.145 GHz Sweep 18.33 ms #Res BW 51 kHz VBW 510 kHz Occupied Bandwidth Total Power 51.0 dBm 17.845 MHz Transmit Freq Error -2.547 kHz % of OBW Power 99.00 % x dB Bandwidth 18.78 MHz x dB -26.00 dB

Figure 8.5-37: Occupied bandwidth, QPSK, LTE, 20 MHz, Port A, low channel

Figure 8.5-38: Occupied bandwidth, QPSK, LTE, 20 MHz, Port A, mid channel



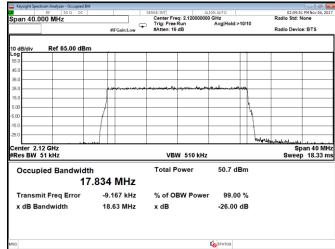
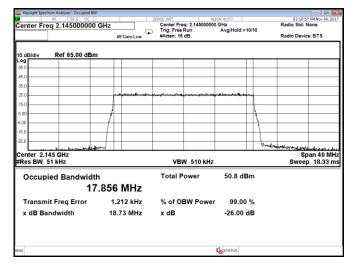


Figure 8.5-39: Occupied bandwidth, QPSK, LTE, 20 MHz, Port A, high channel

Figure 8.5-40: Occupied bandwidth, QPSK, LTE, 20 MHz, Port B, low channel



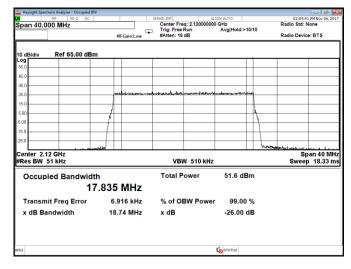


enter Freq 2.170000000 GHz Center Freq: 2.170000000 GHz
Trig: Free Run
#Atten: 16 dB

ALGM AUTO
ALGM AUTO Radio Device: BTS Ref 65.00 dBm Span 40 MH Sweep 18.33 ms #Res BW 51 kHz VBW 510 kHz Occupied Bandwidth Total Power 50.9 dBm 17.881 MHz Transmit Freq Error -11.670 kHz % of OBW Power 99.00 % x dB Bandwidth 18.81 MHz x dB -26.00 dB

Figure 8.5-41: Occupied bandwidth, QPSK, LTE, 20 MHz, Port B, mid channel

Figure 8.5-42: Occupied bandwidth, QPSK, LTE, 20 MHz, Port B, high channel



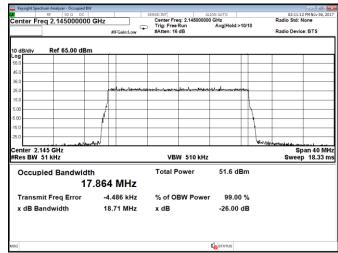
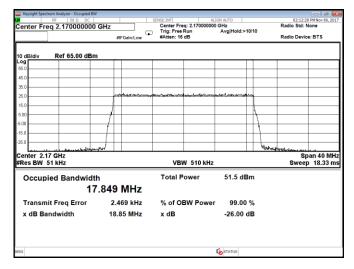


Figure 8.5-43: Occupied bandwidth, QPSK, LTE, 20 MHz, Port C, low channel

Figure 8.5-44: Occupied bandwidth, QPSK, LTE, 20 MHz, Port C, mid channel



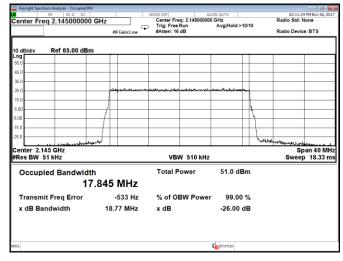


Span 40.000 MHz Center Freq: 2.120000000 GHz
Trig: Free Run
#Atten: 16 dB

ALGM AUTO
ALGM AUTO Radio Device: BTS Ref 65.00 dBn Span 40 MHz Sweep 18.33 ms #Res BW 51 kHz VBW 510 kHz Occupied Bandwidth Total Power 51.3 dBm 17.852 MHz Transmit Freq Error 692 Hz % of OBW Power 99.00 % x dB Bandwidth 18.83 MHz x dB -26.00 dB

Figure 8.5-45: Occupied bandwidth, QPSK, LTE, 20 MHz, Port C, high channel

Figure 8.5-46: Occupied bandwidth, QPSK, LTE, 20 MHz, Port D, low channel



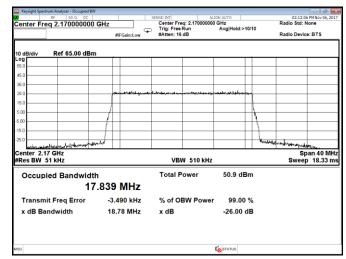


Figure 8.5-47: Occupied bandwidth, QPSK, LTE, 20 MHz, Port D, mid channel

Figure 8.5-48: Occupied bandwidth, QPSK, LTE, 20 MHz, Port D, high channel

Specification FCC Part 2, RSS-Gen, Issue 4



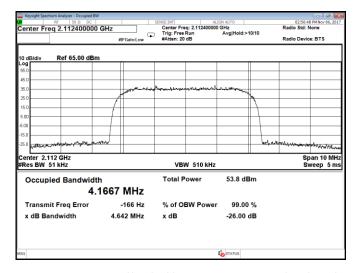


Figure 8.5-49: Occupied bandwidth, QPSK, WCDMA, Port A, low channel

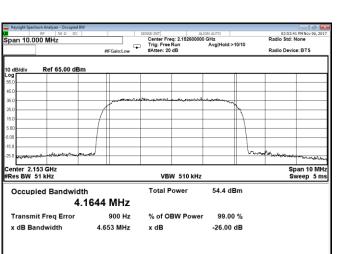


Figure 8.5-51: Occupied bandwidth, QPSK, WCDMA, Port A, high channel

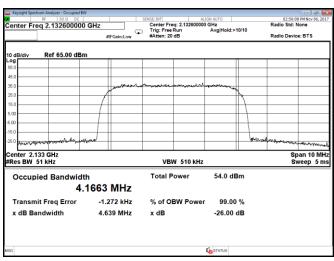


Figure 8.5-50: Occupied bandwidth, QPSK, WCDMA, Port A, mid channel

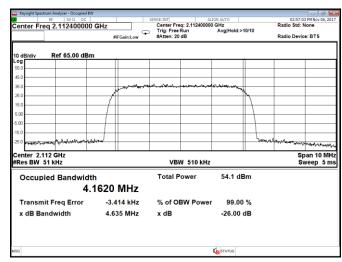


Figure 8.5-52: Occupied bandwidth, QPSK, WCDMA, Port B, low channel



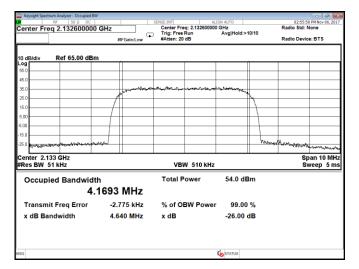


Figure 8.5-53: Occupied bandwidth, QPSK, WCDMA, Port B, mid channel

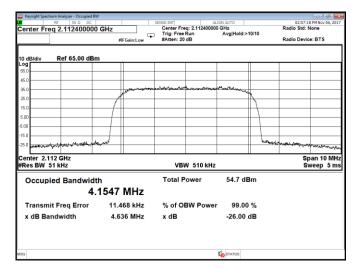


Figure 8.5-55: Occupied bandwidth, QPSK, WCDMA, Port C, low channel

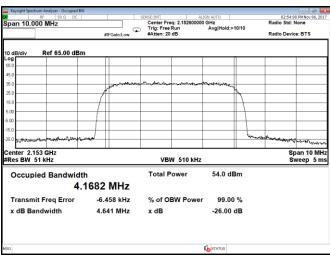


Figure 8.5-54: Occupied bandwidth, QPSK, WCDMA, Port B, high channel

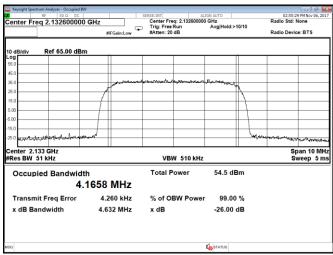


Figure 8.5-56: Occupied bandwidth, QPSK, WCDMA, Port C, mid channel

FCC Part 2.1049 and RSS-Gen, 6.6 Occupied bandwidth FCC Part 2, RSS-Gen, Issue 4



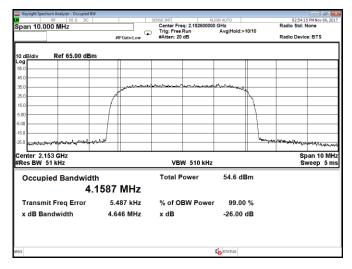


Figure 8.5-57: Occupied bandwidth, QPSK, WCDMA, Port C, high channel

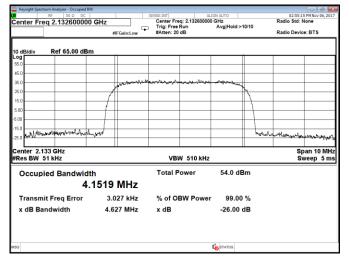


Figure 8.5-59: Occupied bandwidth, QPSK, WCDMA, Port D, mid channel

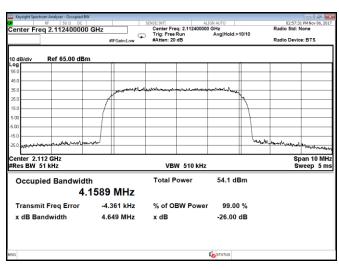


Figure 8.5-58: Occupied bandwidth, QPSK, WCDMA, Port D, low channel

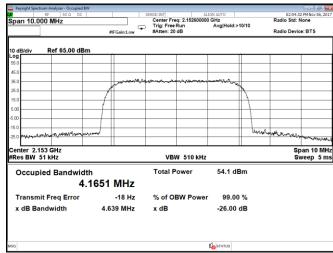


Figure 8.5-60: Occupied bandwidth, QPSK, WCDMA, Port D, high channel

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8.6 RSS-Gen, 7.1.3 Receiver conducted limits

8.6.1 Definitions and limits

If the receiver has a detachable antenna of known impedance, an antenna-conducted spurious emissions measurement is permitted as an alternative to radiated measurement. However, the radiated method of Section 7.1.2 is preferred.

The antenna-conducted test shall be performed with the antenna disconnected and with the receiver antenna terminals connected to a measuring instrument having equal impedance to that specified for the antenna.

The receiver-spurious emissions measured at the antenna terminals by the antenna-conducted method shall then comply with the following limits:

Receiver-spurious emissions at any discrete frequency shall not exceed 2 nW in the band 30-1000 MHz, nor 5 nW above 1000 MHz.

8.6.2 Test summary

| Test date | November 7, 2017 | Temperature | 22 °C |
|---------------|------------------|-------------------|-----------|
| Test engineer | Andrey Adelberg | Air pressure | 1009 mbar |
| Verdict | Pass | Relative humidity | 33 % |

8.6.3 Observations, settings and special notes

Due to 4 antenna array limit line was adjusted by 6 dB ($10 \times Log_{10}$ (4) = 6 dB) Spectrum analyzer settings:

| Detector mode | Peak |
|----------------------|--|
| Resolution bandwidth | 120 kHz (below 1 GHz), 1 MHz (above 1 GHz) |
| Video bandwidth | RBW × 3 |
| Trace mode | Max Hold |



8.6.4 Test data

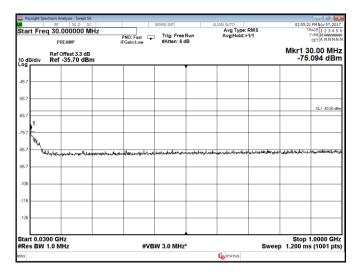


Figure 8.6-1: Receiver spurious emissions at port A, below 1 GHz

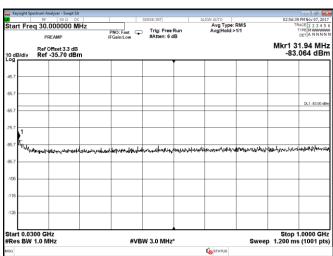


Figure 8.6-2: Receiver spurious emissions at Port B, below 1 GHz

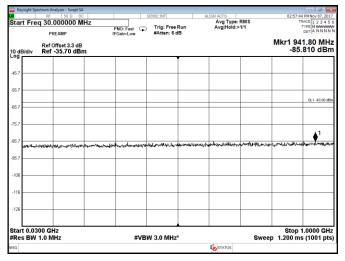


Figure 8.6-3: Receiver spurious emissions at port C, below 1 GHz

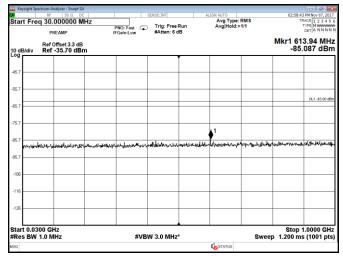


Figure 8.6-4: Receiver spurious emissions at Port D, below 1 GHz



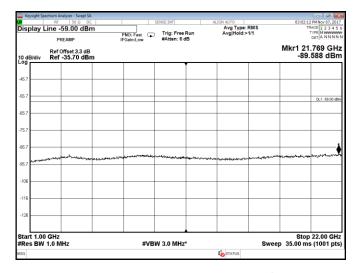


Figure 8.6-5: Receiver spurious emissions at port A, above 1 GHz

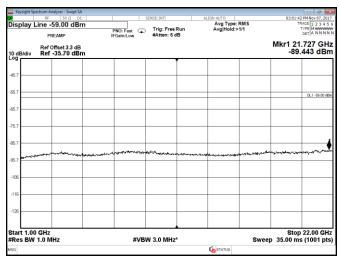


Figure 8.6-6: Receiver spurious emissions at Port B, above 1 GHz

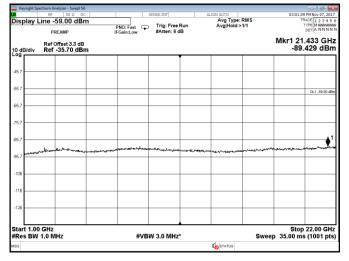


Figure 8.6-7: Receiver spurious emissions at port C, above 1 GHz

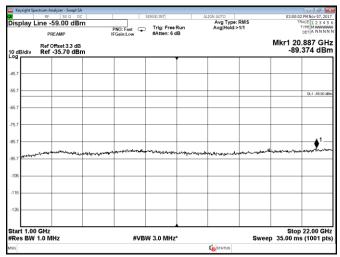
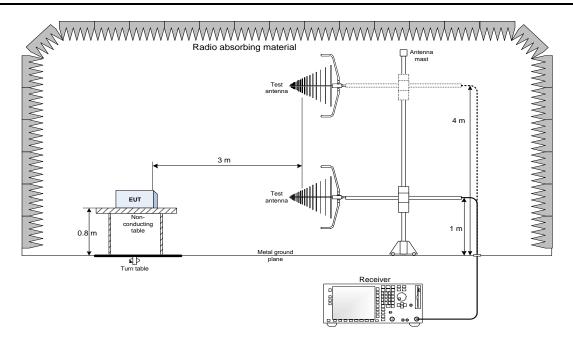


Figure 8.6-8: Receiver spurious emissions at Port D, above 1 GHz

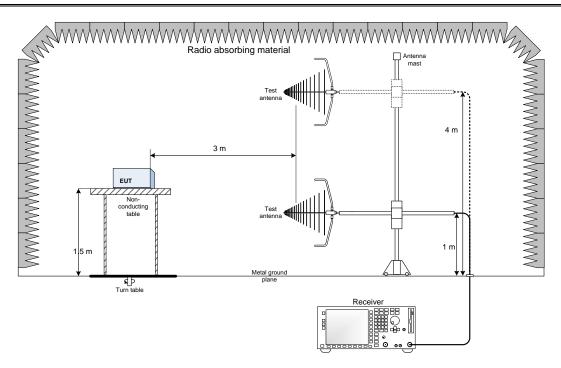


Section 9. Block diagrams of test set-ups

9.1 Radiated emissions set-up for frequencies below 1 GHz



9.2 Radiated emissions set-up for frequencies above 1 GHz





9.3 Conducted emissions set-up

