TEST REPORT

Report No.: SRTC2011-H024-E0095

Product Name: CDMA 1X Digital Mobile Phone

with Bluetooth

Product Model: ZTE-C S186

Applicant: ZTE Corporation

Manufacturer: ZTE Corporation

Specification: 47CFR Part 15 July 10, 2008, Subpart C

FCC ID: Q78-ZTECS186

The State Radio_monitoring_center Testing Center (SRTC)

No.80 Beilishi Road Xicheng District Beijing, China

Tel: 86-10-68009202   Fax: 86-10-68009205

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1．General information

1.1 Notes of the test report

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The test results relate only to individual items of the samples which have been tested.

1.2 Information about the testing laboratory

Company: The State Radio_monitoring_center Testing Center (SRTC)
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1.3 Applicant's details

Company: ZTE Corporation
Address: ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, 518057
City: Shenzhen
Country or Region: P.R.China
Grantee Code: Q78
Contacted person: Min Zhang
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1.4 Manufacturer's details

Company: ZTE Corporation
Address: ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, 518057
City: Shenzhen
Country or Region: P.R.China
Contacted person: Li Dezi
Tel: +86-021-68895196
Fax: +86-021-50801070
Email: li.dezi@zte.com.cn

1.5 Application details

Date of reception of test sample: 27th Dec 2011
Date of test: 28th Dec 2011 to 3th Feb 2012

1.6 Reference specification

47CFR Part 15, July 10, 2008, Subpart C

1.7 Information of EUT

1.7.1 General information

Name of EUT	CDMA 1X Digital Mobile Phone with Bluetooth
FCC ID	Q78-ZTECS186
Frequency range	2.4000~2.4835GHz
Number of channel	79
Modulation type	GFSK, π/4DQPSK,8DPSK
Duplex mode	TDD
Channel spacing	1MHz
Data rate	1Mbps,2 Mbps,3 Mbps
Antenna type	Integral
Power Supply	Battery or charger
Rated Power Supply Voltage	3.7V
HW Version	cw6B
SW Version	STDEN_S186_RBTN02FV1.0.0B04

1.7.2 EUT details

Name	Model	MEID
CDMA 1X Digital Mobile Phone with Bluetooth	ZTE-C S186	A00000321AF743

1.7.3 Auxiliary equipment details

Equipment	Charger
Manufacturer	ZTE
Model Number	STC-A22O50I700USBA-Z
Input Voltage	100V-240V a.c.
Output Voltage	5.0V d.c.
Frequency	50/60Hz

Equipment	Battery
Manufacturer	ZTE
Model Number	Li3708T42P3h553447
Capacity	820mAh
Rated Voltage	3.7V d.c.

2. Test information

2.1 Summary of the test results

No.	Test case	FCC reference	Verdict
1	Occupied Bandwidth	15.247(a) (1)	Pass
2	Peak Power Output	15.247(a) (1)	Pass
3	Spurious RF Conducted Emissions	15.247(d)	Pass
4	Spurious Radiated Emissions	15.247(d), 15.35(b), 15.209	Pass
5	Band Edge Compliance	15.247(d)	Pass
6	Dwell time	15.247(a) (1)(ⅲ)	Pass
7	Channel separation	15.247(a) (1)	Pass
8	Number of Hopping frequencies	15.247(a) (ⅲ)	Pass

This Test Report Is Issued by: Mr. Song Qizhu Director of the test lab	Checked by: Mr. Wang Junfeng Deputy director of the test lab
Tested by: Mr. Li Bin Test engineer	Issued date: **2012.02.06**
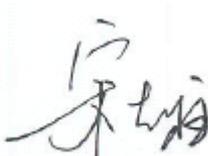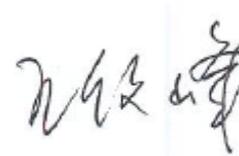
2.2 Test result

2.2.1 Occupied Bandwidth-§15.247(a) (1)

2.2.1.1 Ambient condition

Temperature	Relative humidity	Pressure
22°C	40%	101.1kPa

2.2.1.2 Test Description

The measurement is made according to Public notice DA 00-705 and ANSI C63.4.

The Equipment Under Test (EUT) was setup in a shielded room to perform the occupied bandwidth measurements.

The reference level is the level of the highest amplitude signal observed from the transmitter at either the fundamental frequency or first-order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical.

The results recorded were measured with the modulation which produces the worst-case (widest) occupied bandwidth. The resolution bandwidth for measuring the reference level and the occupied bandwidth was 10 kHz.

The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss.
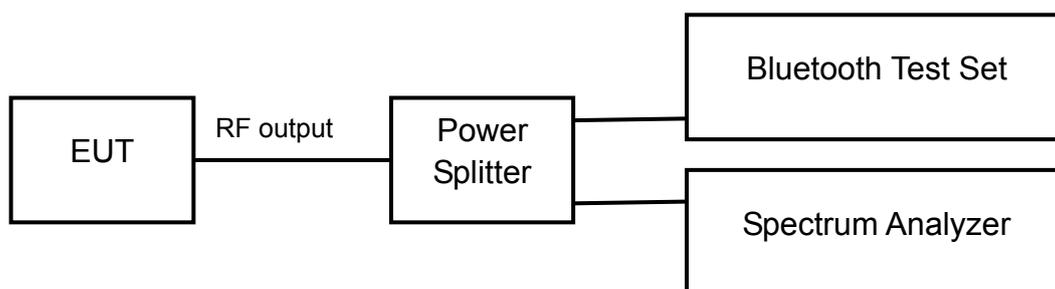
2.2.1.3 Test limit

FCC Part 15, Subpart C, §15.247 (a) (1)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

2.2.1.4 Test result

Modulation type: GFSK

Carrier frequency (MHz)	Channel No.	20 dB bandwidth(KHz)
2402	0	836.54
2441	39	1009.62
2480	79	1007.39

Modulation type: π/4DQPSK

Carrier frequency (MHz)	Channel No.	20 dB bandwidth(KHz)
2402	0	1307.69
2441	39	1304.49
2480	79	1284.06

Modulation type: 8DPSK

Carrier frequency (MHz)	Channel No.	20 dB bandwidth(KHz)
2402	0	1250.00
2441	39	1253.21
2480	79	1256.41

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK

```
                                    * RBW  10 kHz      Delta 3 [T1 ]
                                    * VBW  30 kHz               -20.66 dB
    Ref   15 dBm      * Att  10 dB    SWT  80 ms        504.543589746 kHz
                                                   Marker 1 [T1 ]
   10                                                      -1.86 dBm
                                                    2.440989200 GHz        A
    0                                              Delta 2 [T1 ]
                                                           -20.52 dB
  -10                                               -505.071794883 kHz
  -20
  -30
  -40                                                                    3DB
  -60
  -70
  -80
   Center  2.441 GHz         200 kHz/              Span 2 MHz
```
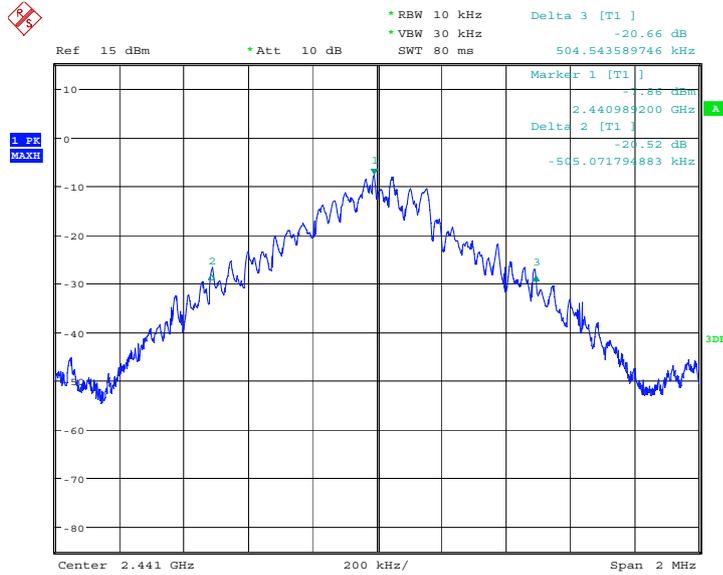
Date: 27.DEC.2011 11:10:51

<div align="center">

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: GFSK

</div>


```
                                    * RBW  10 kHz      Delta 3 [T1 ]
                                    * VBW  30 kHz               -20.47 dB
    Ref   15 dBm      * Att  10 dB    SWT  80 ms        500.312820519 kHz
                                                   Marker 1 [T1 ]
   10                                                      -5.22 dBm
                                                    2.479991200 GHz        A
    0                                              Delta 2 [T1 ]
                                                           -20.88 dB
  -10                                               -507.071794882 kHz
  -20
  -30
  -40                                                                    3DB
  -60
  -70
  -80
   Center  2.48 GHz          200 kHz/              Span 2 MHz
```
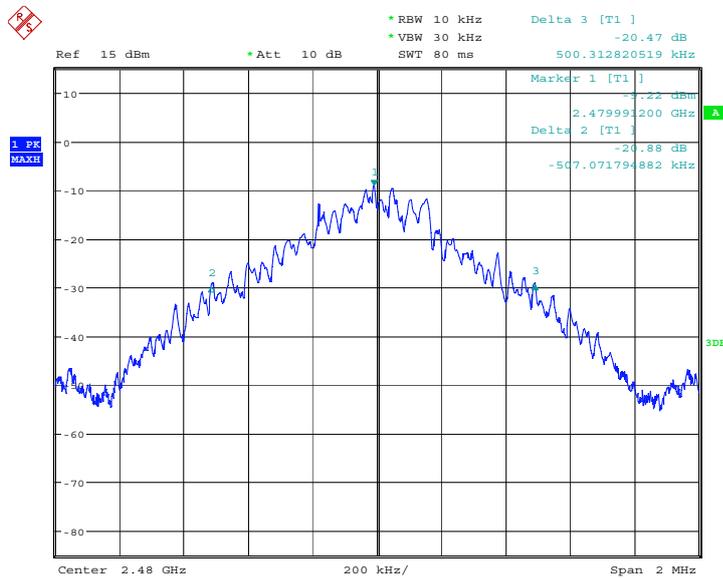
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<div align="center">

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

</div>

```
* RBW 10 kHz        Delta 3 [T1 ]
* VBW 30 kHz              -20.89 dB
Ref  15 dBm        * Att  10 dB    SWT 80 ms         655.712820516 kHz
                                        Marker 1 [T1 ]
                                              -8.03 dBm
                                        2.401990800 GHz
                                        Delta 2 [T1 ]
                                              -20.99 dB
                                        -651.979487190 kHz
```

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: π/4DQPSK

```
Date: 27.DEC.2011  11:29:11
```

```
* RBW 10 kHz        Delta 2 [T1 ]
* VBW 30 kHz              -20.47 dB
Ref  10 dBm        * Att  10 dB    SWT 80 ms         -647.574358989 kHz
                                        Marker 1 [T1 ]
                                              -10.32 dBm
                                        2.440990000 GHz
                                        Delta 3 [T1 ]
                                              -20.96 dB
                                        656.912830528 kHz
```

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: π/4DQPSK

```
Date: 28.DEC.2011  09:41:42
```
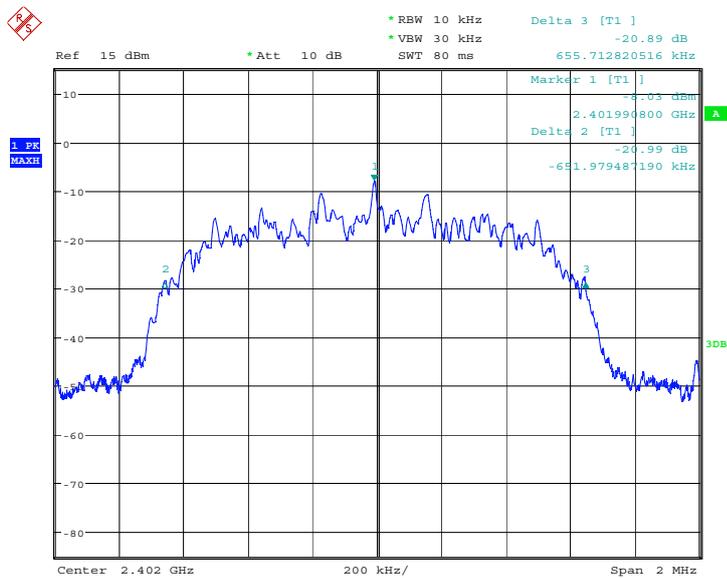
Date: 28.DEC.2011 09:54:38

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: π/4DQPSK

Date: 28.DEC.2011 09:59:18

Carrier frequency (MHz): 2402
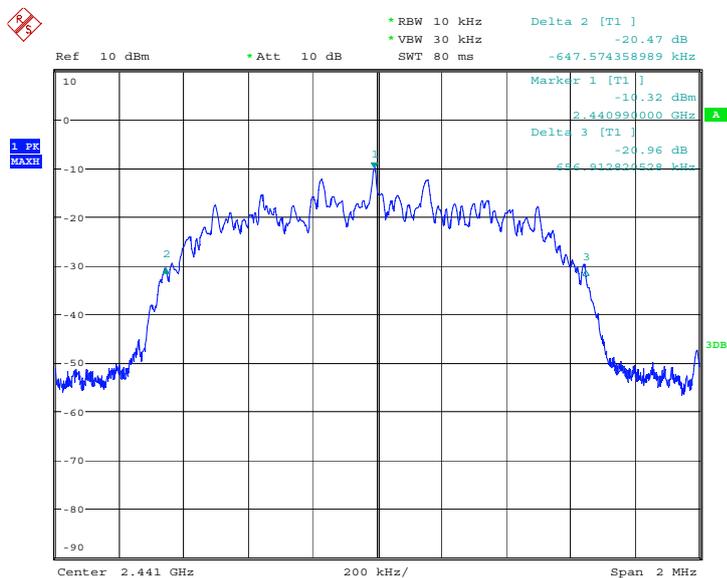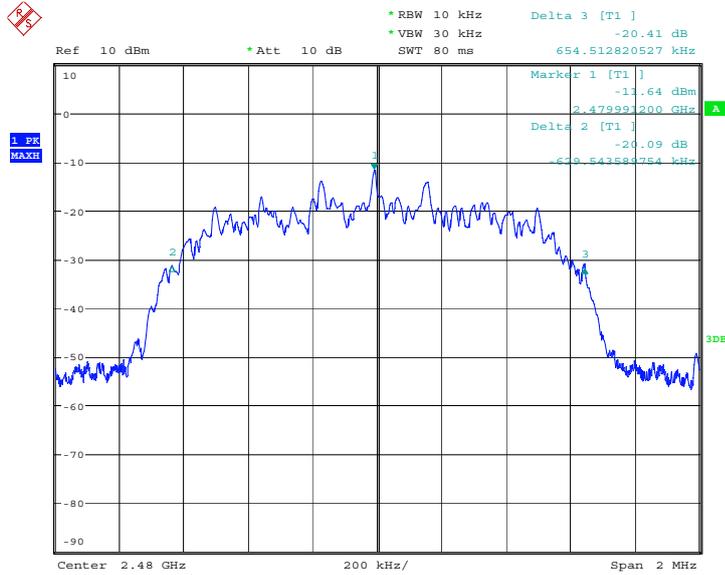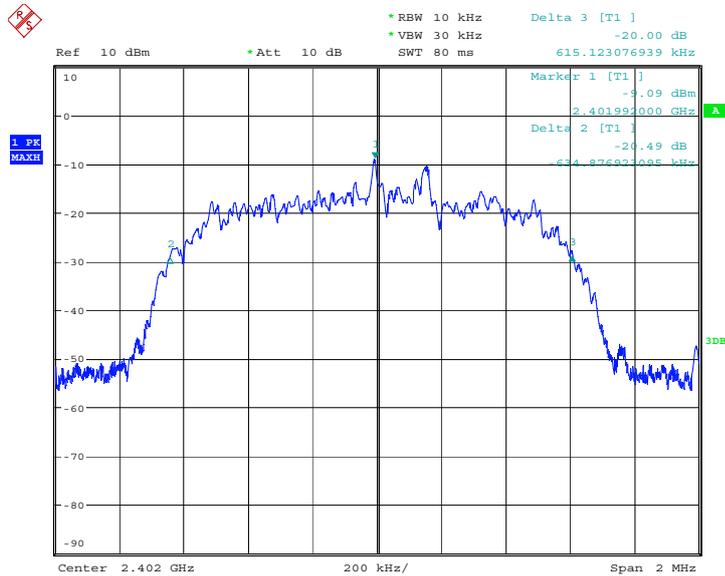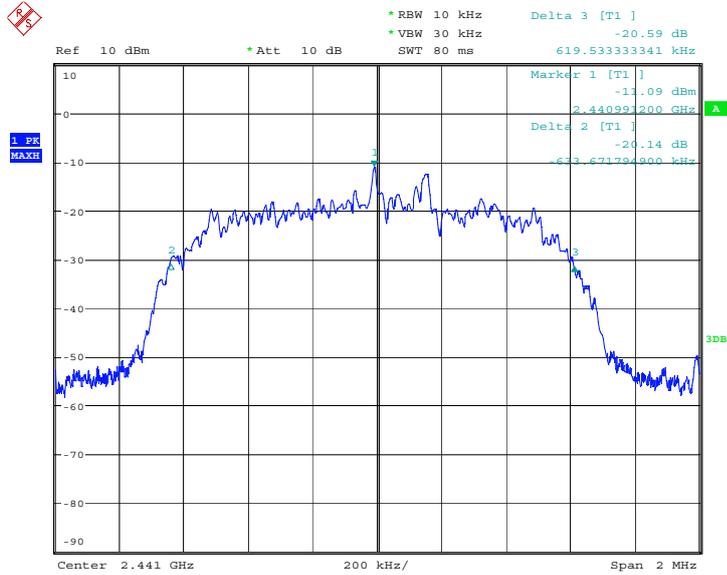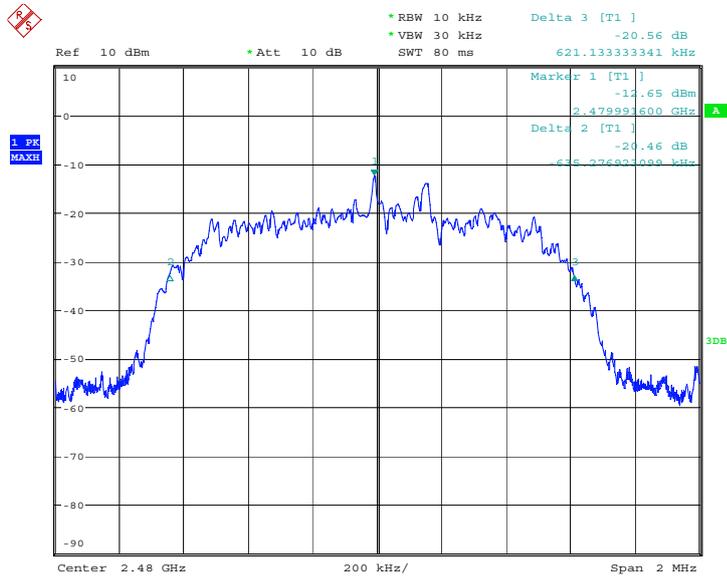Channel No.:0
Modulation type: 8DPSK

```
                                    *RBW 10 kHz        Delta 3 [T1 ]
                                    *VBW 30 kHz                  -20.59 dB
          Ref 10 dBm      *Att 10 dB  SWT 80 ms        619.533333341 kHz
          10                                           Marker 1 [T1 ]
                                                              -11.09 dBm
           0                                          2.440991200 GHz  A
                                                       Delta 2 [T1 ]
         -10                                                  -20.14 dB
                                                      -633.671794900 kHz
         -20
         -30
         -40
         -50                                                            3DB
         -60
         -70
         -80
         -90
          Center 2.441 GHz        200 kHz/              Span 2 MHz
```

Date: 28.DEC.2011 10:04:57

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: 8DPSK


```
                                    *RBW 10 kHz        Delta 3 [T1 ]
                                    *VBW 30 kHz                  -20.56 dB
          Ref 10 dBm      *Att 10 dB  SWT 80 ms        621.133333341 kHz
          10                                           Marker 1 [T1 ]
                                                              -12.65 dBm
           0                                          2.479991600 GHz  A
                                                       Delta 2 [T1 ]
         -10                                                  -20.46 dB
                                                      -635.276933099 kHz
         -20
         -30
         -40
         -50                                                            3DB
         -60
         -70
         -80
         -90
          Center 2.48 GHz        200 kHz/              Span 2 MHz
```

Date: 28.DEC.2011 10:08:00

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: 8DPSK

2.2.2 Peak power output-§15.247(a) (1)

2.2.2.1 Ambient condition:

| Temperature	Relative humidity	Pressure
22°C	40%	101.1kPa

2.2.2.2 Test Description

The Equipment Under Test (EUT) was set up in a shielded room to perform the output power measurements.
The results recorded were measured with the modulation which produces the worst-case (highest) output power.
The resolution bandwidth for measuring the output power was 2 MHz.
The reference level of the spectrum analyzer was set higher than the output power of the EUT.
The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss.
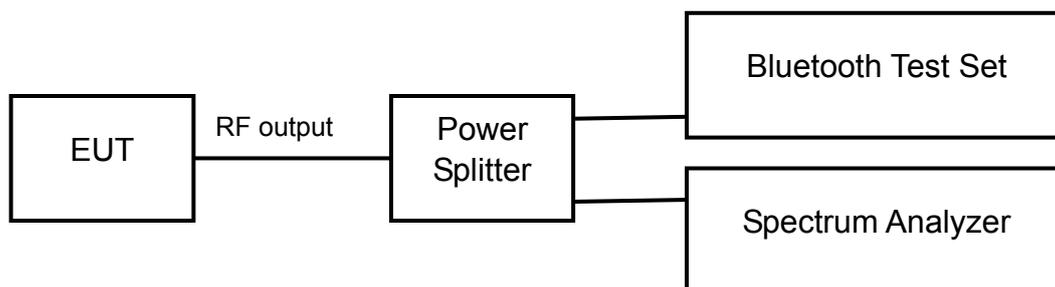
2.2.2.3 Test limit

FCC Part 15, Subpart C, §15.247 (b) (1)
For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt.

Used conversion factor: Limit (dBm) = 10 log (Limit (W)/1mW)
==> Maximum Output Power: 30 dBm

2.2.2.4 Test result:

Offset= the insertion loss of the power splitter+ cable loss
=7.00+0.50=7.50dB

Modulation type: GFSK

Carrier frequency (MHz)	Channel No.	Peak Conducted Output Power (dBm)
2402	0	7.08
2441	39	5.53
2480	78	4.11

Modulation type: π/4DQPSK

Carrier frequency (MHz)	Channel No.	Peak Conducted Output Power (dBm)
2402	0	6.31
2441	39	4.89
2480	78	3.49

Modulation type: 8DPSK

Carrier frequency (MHz)	Channel No.	Peak Conducted Output Power (dBm)
2402	0	5.91
2441	39	4.30
2480	78	3.10
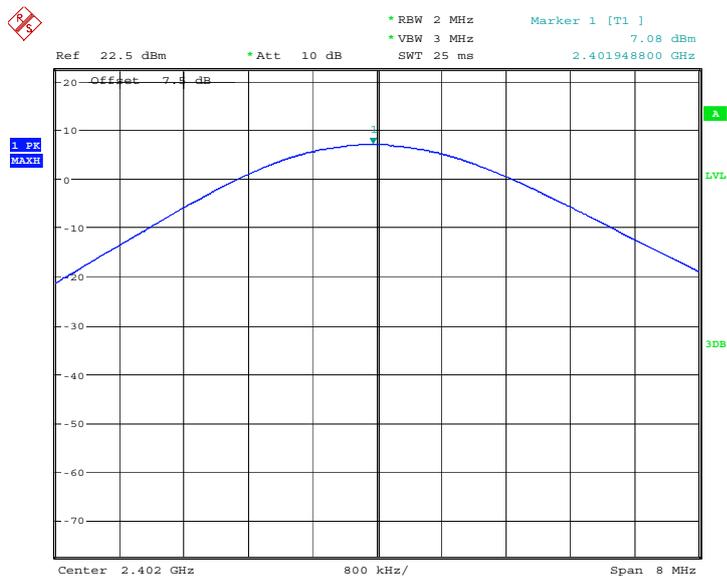
Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK
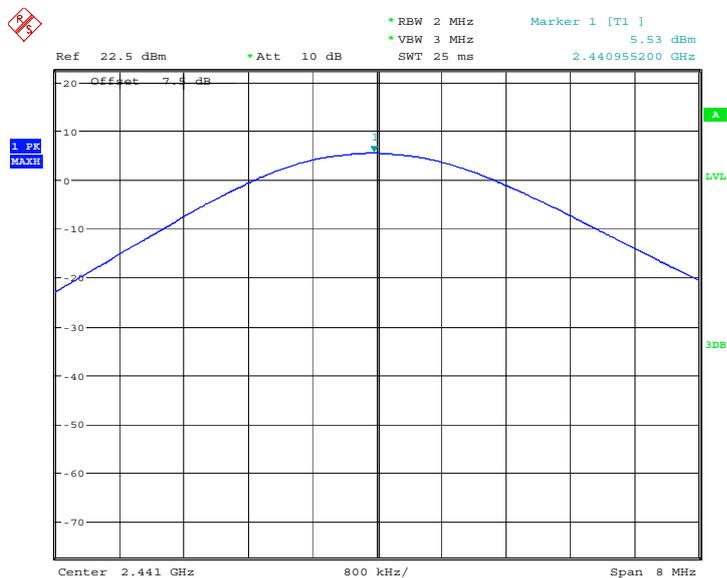
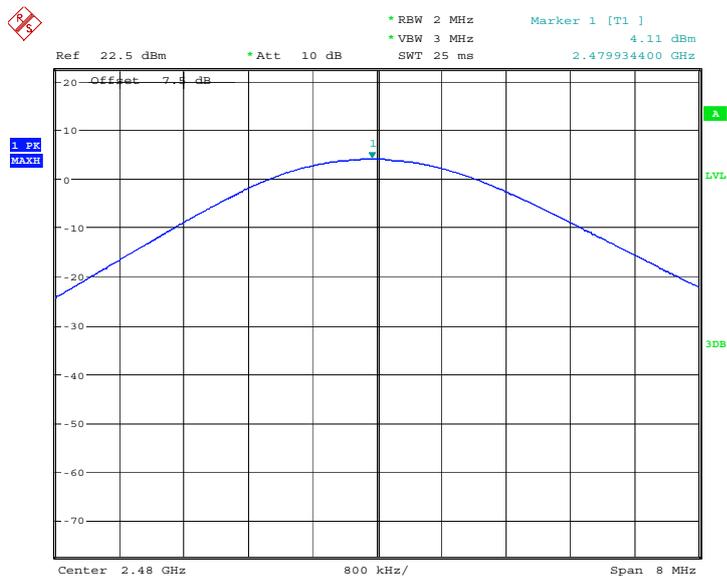Carrier frequency (MHz): 2441
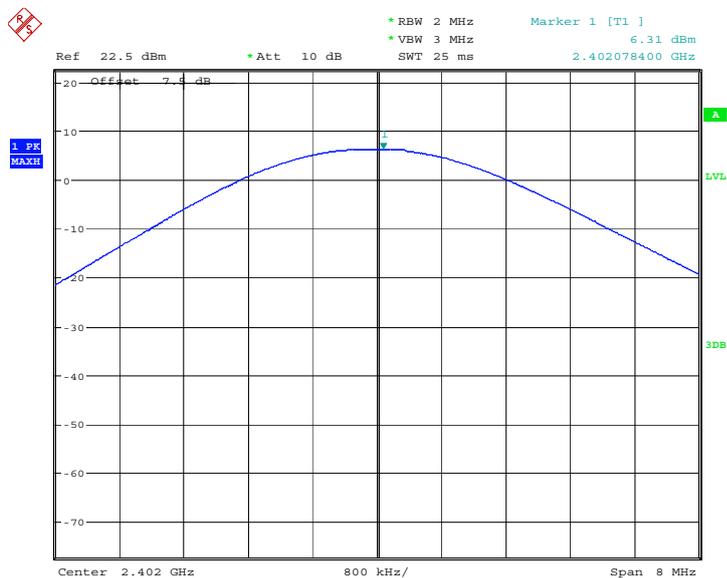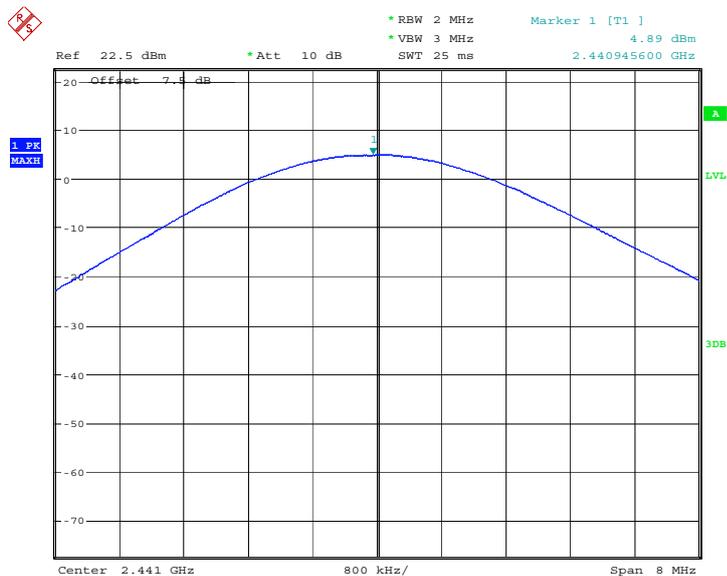Channel No.:39
Modulation type: GFSK

Date: 28.DEC.2011 10:23:01

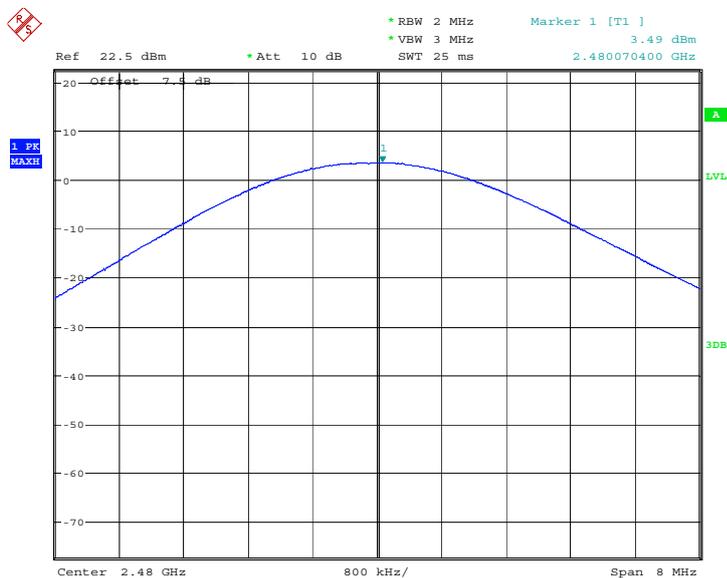Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

Date: 28.DEC.2011 10:24:51

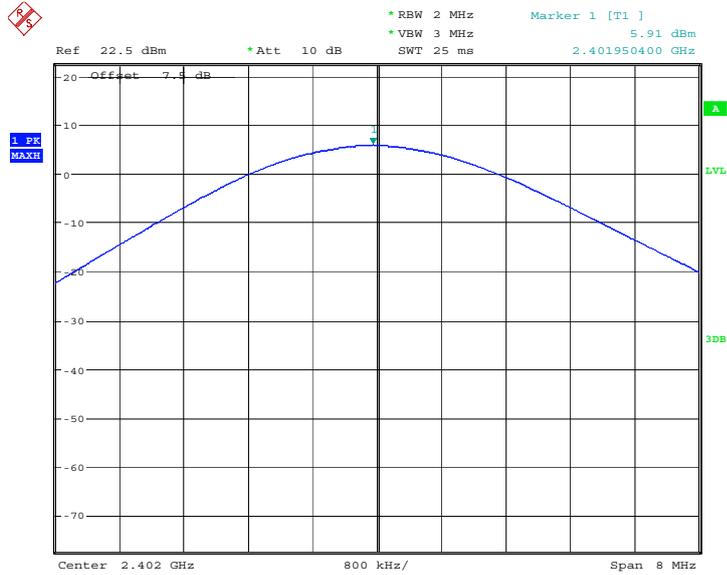Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: π/4DQPSK

```
* RBW 2 MHz        Marker 1 [T1 ]
* VBW 3 MHz                  4.89 dBm
Ref  22.5 dBm    * Att  10 dB    SWT 25 ms        2.440945600 GHz
```

Date: 28.DEC.2011 10:27:45

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: π/4DQPSK


```
* RBW 2 MHz        Marker 1 [T1 ]
* VBW 3 MHz                  3.49 dBm
Ref  22.5 dBm    * Att  10 dB    SWT 25 ms        2.480070400 GHz
```

Date: 28.DEC.2011 10:30:47
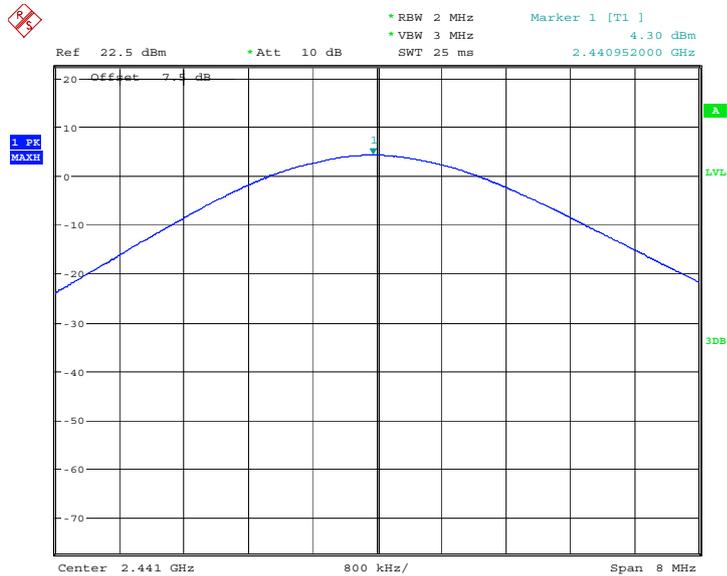
Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: π/4DQPSK

```
                                      * RBW  2 MHz      Marker 1 [T1 ]
                                      * VBW  3 MHz              5.91 dBm
         Ref   22.5 dBm     * Att  10 dB    SWT  25 ms      2.401950400 GHz
```

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: 8DPSK

```
                                      * RBW  2 MHz      Marker 1 [T1 ]
                                      * VBW  3 MHz              4.30 dBm
         Ref   22.5 dBm     * Att  10 dB    SWT  25 ms      2.440952000 GHz
```

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: 8DPSK

```
                                        * RBW  2 MHz      Marker 1 [T1 ]
                                        * VBW  3 MHz                  3.10 dBm
     Ref   22.5 dBm       * Att  10 dB    SWT  25 ms        2.479963200 GHz
```
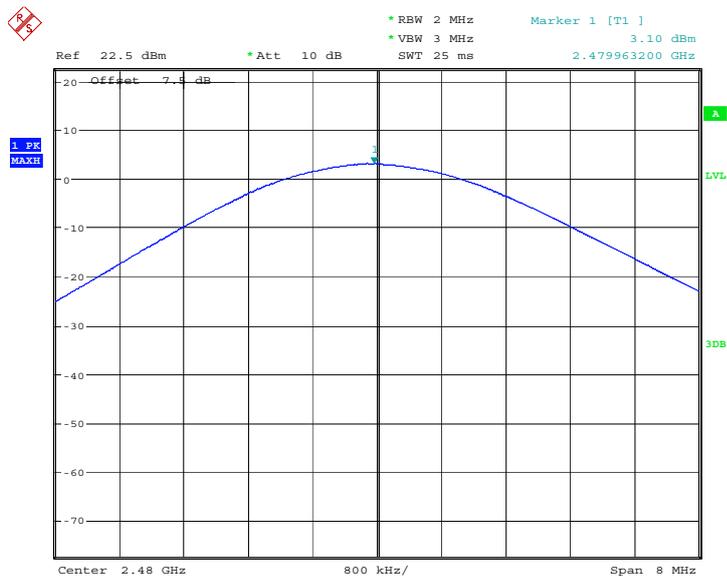
Date: 28.DEC.2011 10:44:46

<div align="center">

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: 8DPSK

</div>

2.2.3 Spurious RF conducted emissions-§15.247(d)

2.2.3.1 Ambient condition:

| Temperature	Relative humidity	Pressure
22°C	40%	101.1kPa

2.2.3.2 Test Description

The Equipment Under Test (EUT) was set up in a shielded room to perform the spurious emissions measurements.
The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss.
Analyzer settings:
- Detector: Peak-Maxhold
- Frequency range: 30 ~25000 MHz
- Resolution Bandwidth (RBW): 100 kHz
- Video Bandwidth (VBW): 300 kHz

The reference value for the measurement of the spurious RF conducted emissions is determined during the test "band edge compliance" (cf. chapter 4.5). This value is used to calculate the 20 dBc limit.
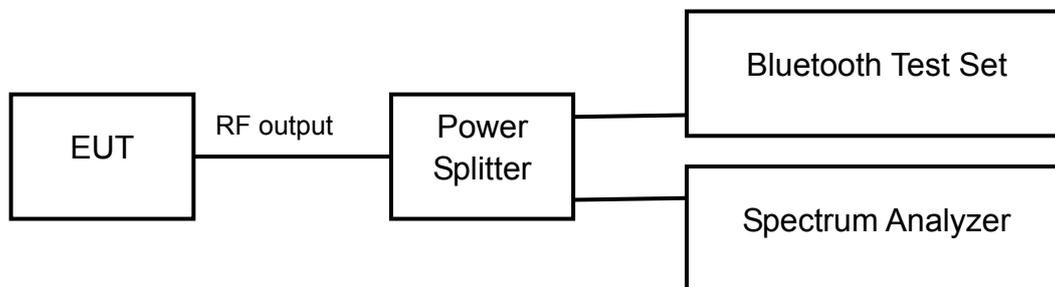
2.2.3.3 Test limit

FCC Part 15, Subpart C, §15.247 (d)
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

2.2.3.4 Test result

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK

Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: GFSK

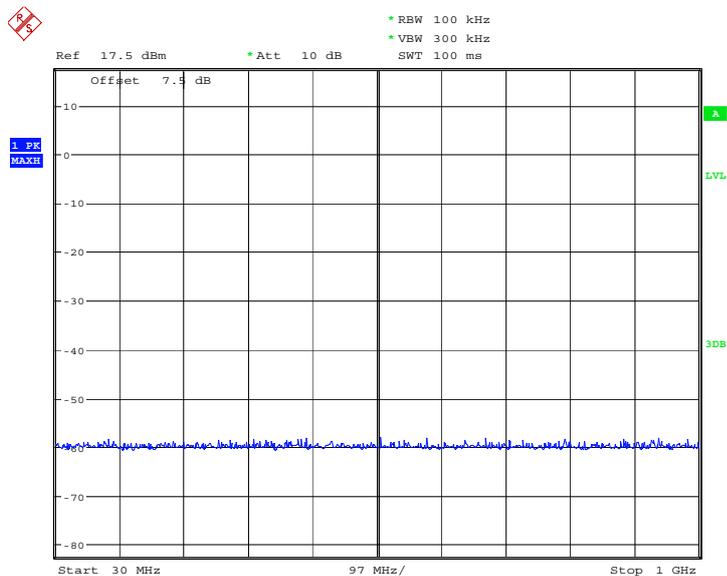| Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

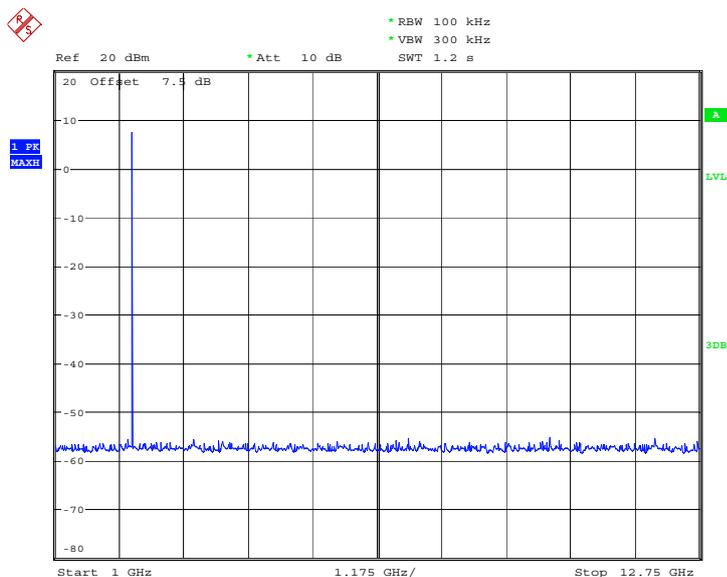Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

Note: The Reference value see 2.2.5 Band edge compliance

* RBW 100 kHz
* VBW 300 kHz
Ref 17.5 dBm   * Att 10 dB   SWT 100 ms

Offset 7.5 dB

```
  10
1 PK
MAXH
   0
 -10
 -20
 -30
 -40
 -50
 -60
 -70
 -80
```

A

LVL

3DB

Start 30 MHz   97 MHz/   Stop 1 GHz

Date: 29.DEC.2011 14:24:43

* RBW 100 kHz
* VBW 300 kHz
Ref 20 dBm   * Att 10 dB   SWT 1.2 s

20 Offset 7.5 dB

```
  10
1 PK
MAXH
   0
 -10
 -20
 -30
 -40
 -50
 -60
 -70
 -80
```

A

LVL

3DB

Start 1 GHz   1.175 GHz/   Stop 12.75 GHz

Date: 29.DEC.2011 15:10:34

```
                                          * RBW  100 kHz
                                          * VBW  300 kHz
        Ref   20 dBm          * Att   10 dB      SWT  1.25 s
         20  Offset   7.5  dB
```
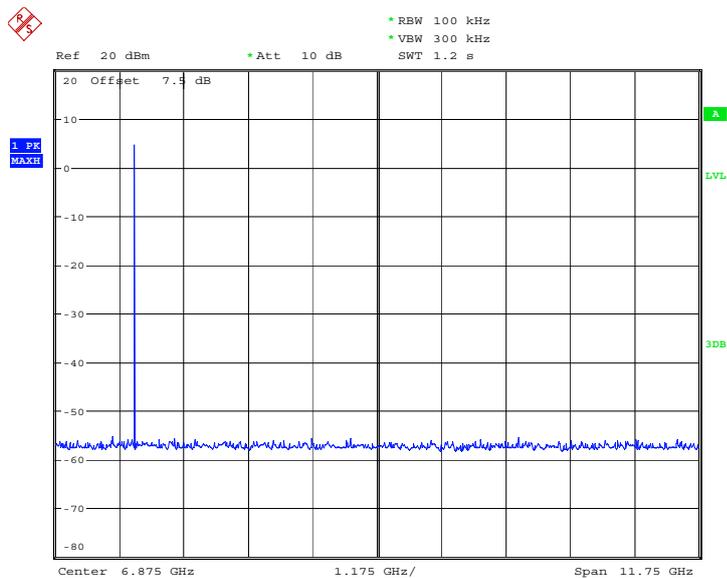
Date: 29.DEC.2011 15:26:36

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK

```
                                          * RBW  100 kHz
                                          * VBW  300 kHz
        Ref  17.5 dBm          * Att   10 dB      SWT  100 ms
             Offset   7.5  dB
```

Date: 29.DEC.2011 14:59:26

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
  Ref   20 dBm        * Att  10 dB    SWT 1.2 s
   20  Offset   7.5 dB
 A
    10
 1 PK
 MAXH                                              LVL
     0

   -10

   -20
                                                   3DB
   -30

   -40

   -50

   -60

   -70

   -80
  Center  6.875 GHz        1.175 GHz/      Span 11.75 GHz
```

Date: 29.DEC.2011 15:13:12

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
  Ref   20 dBm        * Att  10 dB    SWT 1.25 s
   20  Offset   7.5 dB
 A
    10
 1 PK
 MAXH                                              LVL
     0

   -10

   -20

   -30
                                                   3DB
   -40

   -50

   -60

   -70

   -80
  Start 12.75 GHz        1.225 GHz/      Stop  25 GHz
```
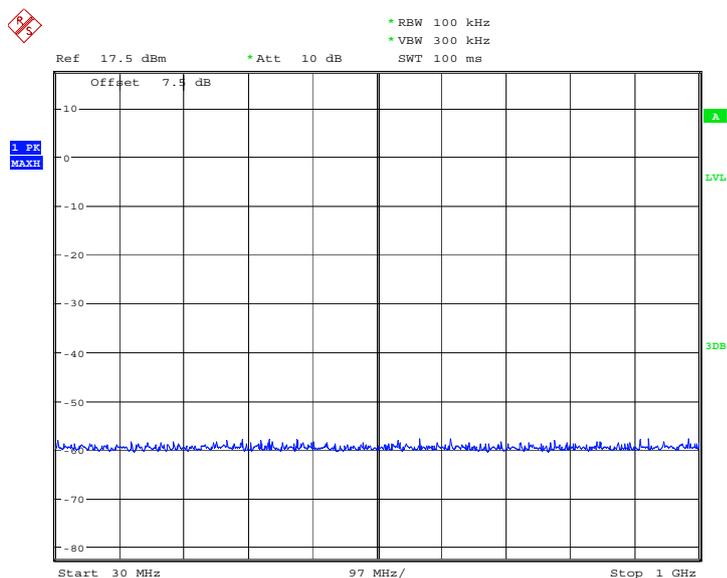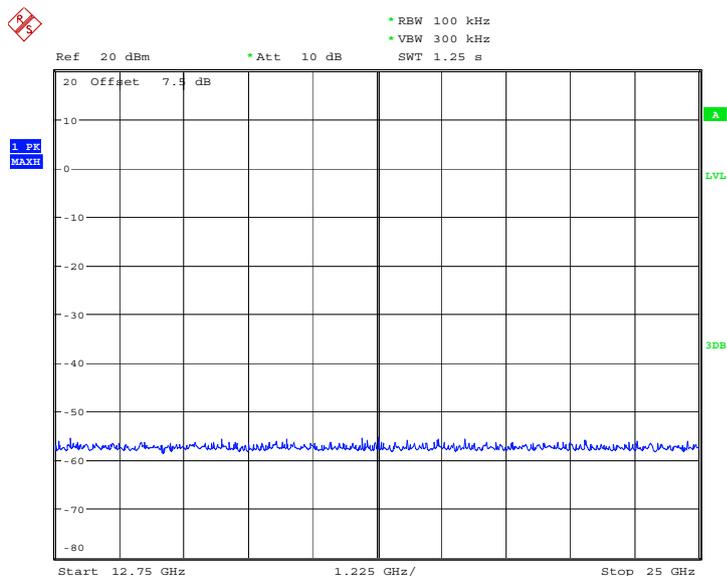
Date: 29.DEC.2011 15:29:32
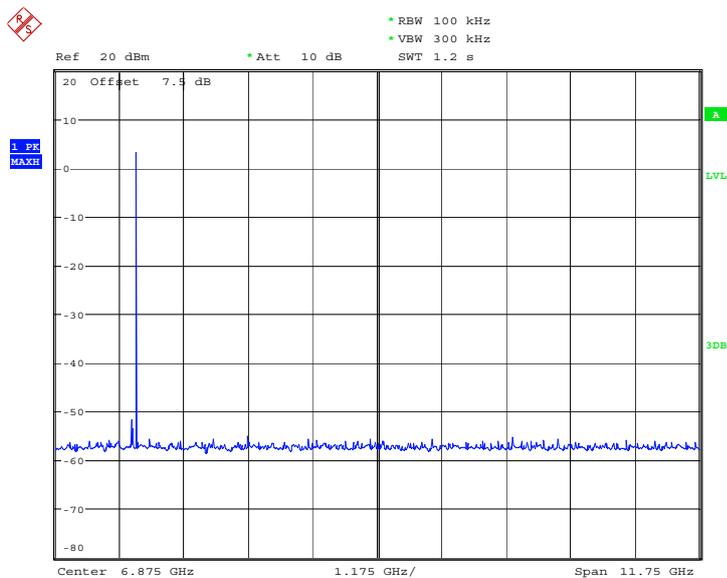
Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: GFSK

```
                                          * RBW 100 kHz
                                          * VBW 300 kHz
     Ref  17.5 dBm        * Att  10 dB      SWT 100 ms
       Offset  7.5 dB
   10                                                        A

 1 PK
 MAXH   0                                                    LVL

  -10

  -20

  -30

  -40                                                        3DB

  -50

  -60

  -70

  -80
   Start 30 MHz              97 MHz/              Stop  1 GHz
```

Date: 29.DEC.2011 15:05:12

```
                                          * RBW 100 kHz
                                          * VBW 300 kHz
     Ref  20 dBm          * Att  10 dB      SWT 1.2 s
   20  Offset  7.5 dB
   10                                                        A

 1 PK
 MAXH   0                                                    LVL

  -10

  -20

  -30

  -40                                                        3DB

  -50

  -60

  -70

  -80
   Center  6.875 GHz        1.175 GHz/       Span  11.75 GHz
```

Date: 29.DEC.2011 15:15:02

```
                                              *RBW  100 kHz
                                              *VBW  300 kHz
Ref  20 dBm           *Att  10 dB     SWT  1.25 s
```



```
Start  12.75 GHz          1.225 GHz/          Stop  25 GHz
```
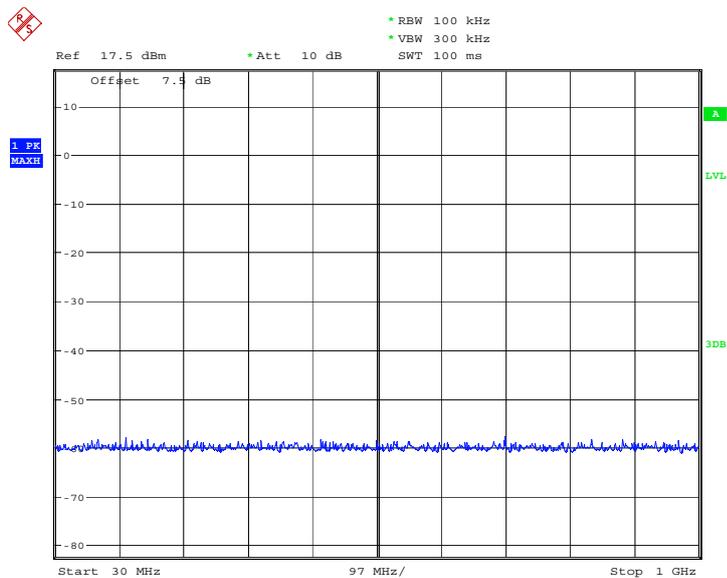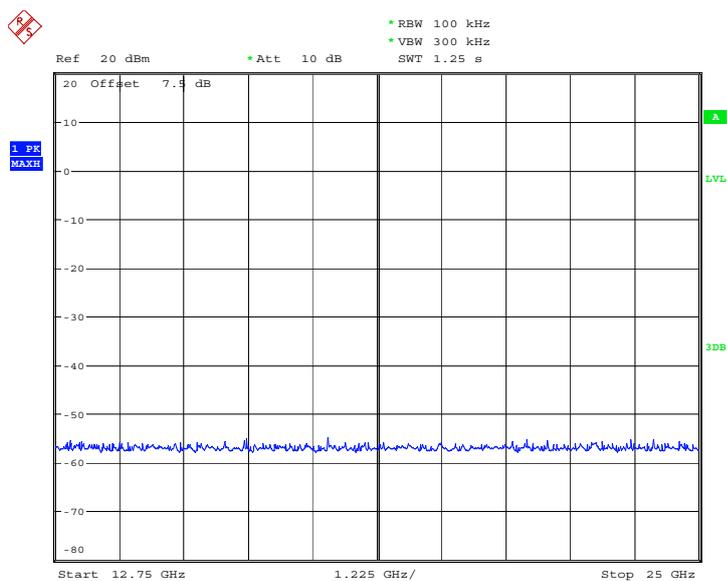
Date: 29.DEC.2011 15:39:44

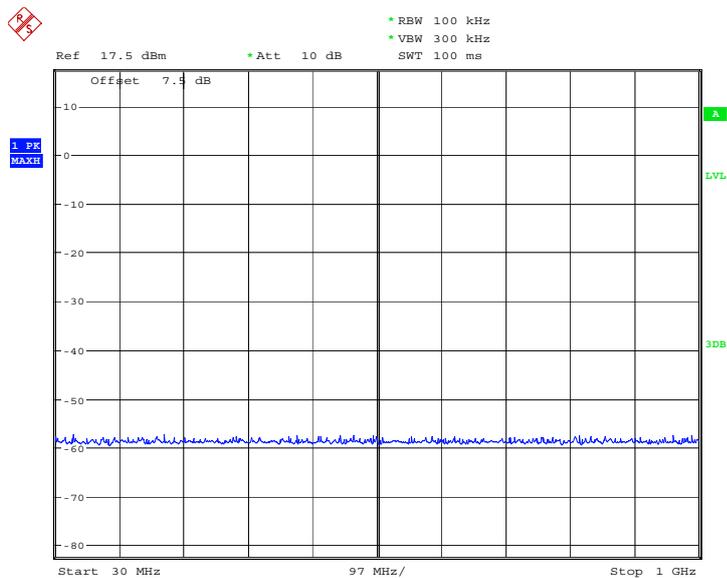Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

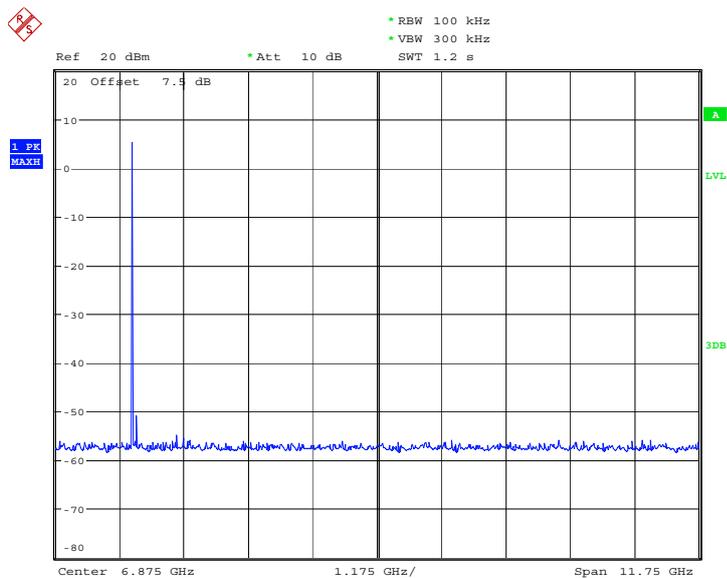Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: π/4DQPSK

Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: π/4DQPSK

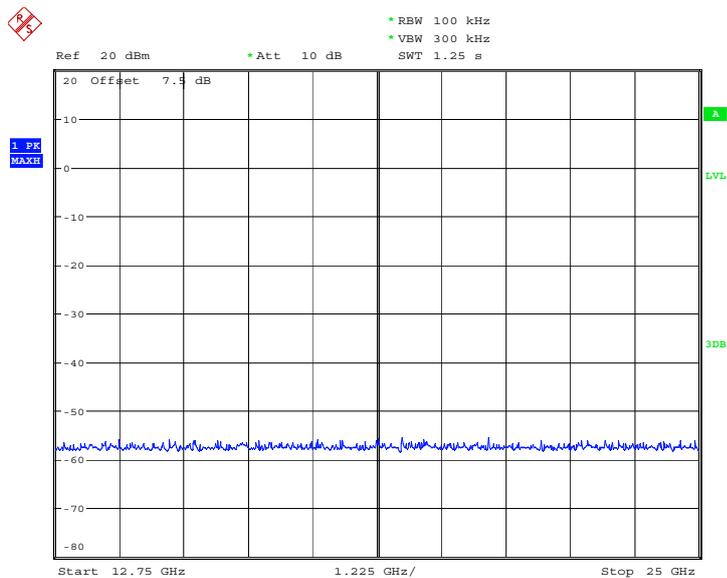| Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: π/4DQPSK

Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

Note: The Reference value see 2.2.5 Band edge compliance

```
                                              * RBW  100 kHz
                                              * VBW  300 kHz
        Ref   17.5 dBm        * Att  10 dB      SWT  100 ms
          Offset   7.5 dB
        10                                                              A

1 PK
MAXH    0                                                              LVL

        -10

        -20

        -30

        -40                                                            3DB

        -50

        -60

        -70

        -80
        Start 30 MHz              97 MHz/              Stop  1 GHz
```

Date: 29.DEC.2011 14:56:27

```
                                              * RBW  100 kHz
                                              * VBW  300 kHz
        Ref   20 dBm           * Att  10 dB      SWT  1.2 s
        20  Offset   7.5 dB
        10                                                              A

1 PK
MAXH    0                                                              LVL

        -10

        -20

        -30

        -40                                                            3DB

        -50

        -60

        -70

        -80
        Center  6.875 GHz        1.175 GHz/          Span  11.75 GHz
```

Date: 29.DEC.2011 15:17:01

```
                                            * RBW 100 kHz
                                            * VBW 300 kHz
Ref  20 dBm          * Att  10 dB     SWT 1.25 s
20  Offset   7.5 dB                                              A
10
0                                                               LVL
-10
-20
-30
-40                                                             3DB
-50
-60
-70
-80
Start 12.75 GHz              1.225 GHz/              Stop 25 GHz
```

Date: 29.DEC.2011 15:27:53

<div align="center">

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: π/4DQPSK

</div>

```
                                            * RBW 100 kHz
                                            * VBW 300 kHz
Ref  17.5 dBm        * Att  10 dB     SWT 100 ms
    Offset   7.5 dB                                              A
10
0                                                               LVL
-10
-20
-30
-40                                                             3DB
-50
-60
-70
-80
Start 30 MHz                 97 MHz/               Stop 1 GHz
```

Date: 29.DEC.2011 15:04:06

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
   Ref  20 dBm        * Att  10 dB    SWT  1.2 s
    20  Offset   7.5  dB
```



```
   Center  6.875 GHz      1.175 GHz/      Span  11.75 GHz
```

Date: 29.DEC.2011 15:17:22

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
   Ref  20 dBm        * Att  10 dB    SWT  1.25 s
    20  Offset   7.5  dB
```



```
   Start  12.75 GHz      1.225 GHz/      Stop  25 GHz
```
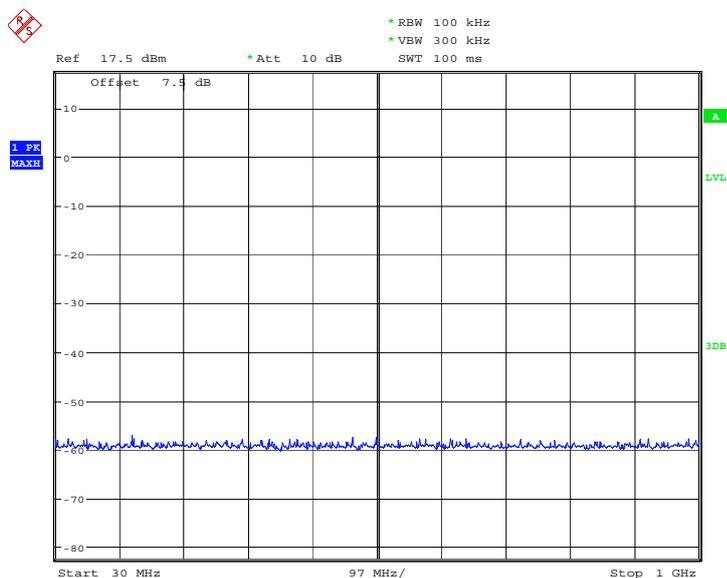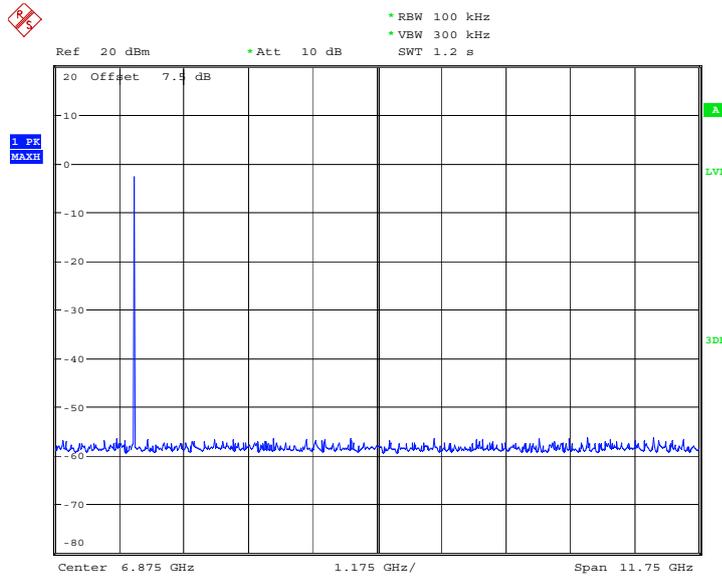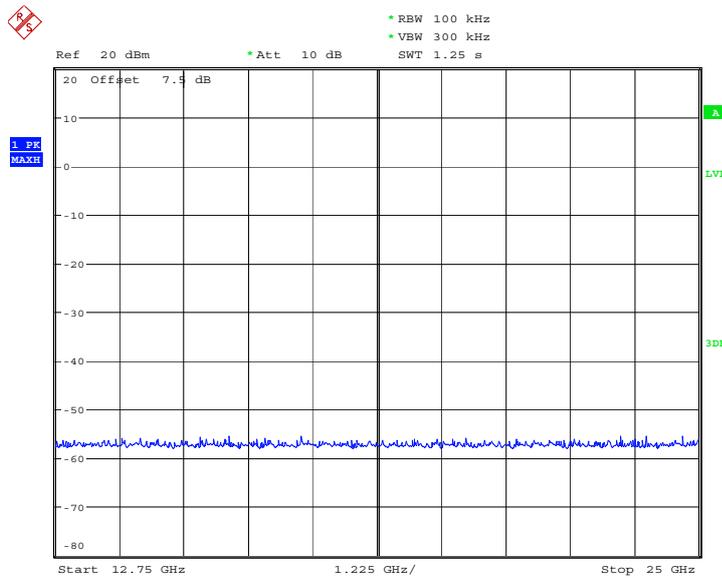
Date: 29.DEC.2011 15:31:38

<div align="center">

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: π/4DQPSK

</div>

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
  Ref  17.5 dBm        * Att  10 dB    SWT  100 ms
   Offset   7.5 dB
```



```
  Start  30 MHz           97 MHz/              Stop  1 GHz
```

Date: 29.DEC.2011 15:05:22

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
  Ref  20 dBm          * Att  10 dB    SWT  1.2 s
   20  Offset   7.5 dB
```



```
  Center  6.875 GHz         1.175 GHz/          Span  11.75 GHz
```

Date: 29.DEC.2011 15:19:24

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
       Ref  20 dBm          * Att  10 dB      SWT 1.25 s

       20  Offset   7.5 dB                                              A
   10

    0                                                                  LVL

  -10

  -20

  -30                                                                  3DB

  -40

  -50

  -60

  -70

  -80
       Start 12.75 GHz           1.225 GHz/            Stop 25 GHz
```
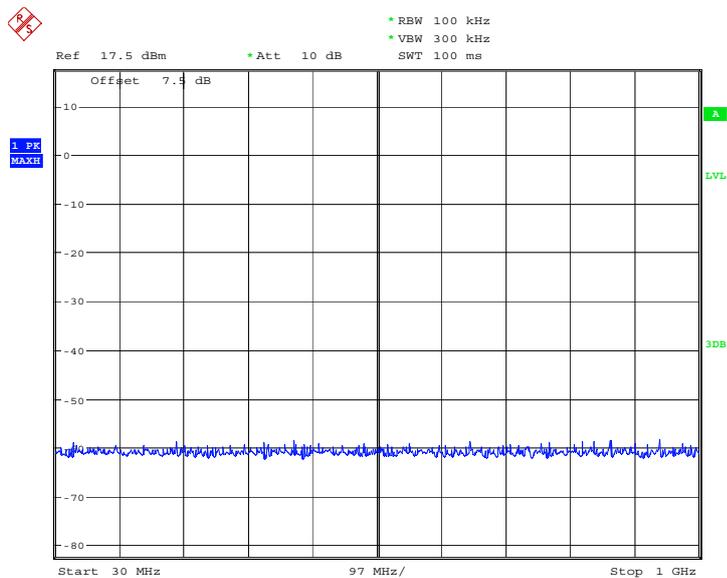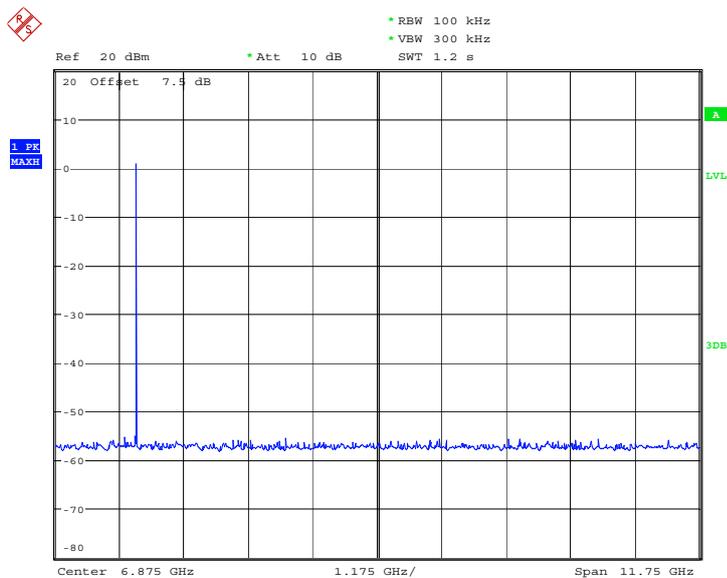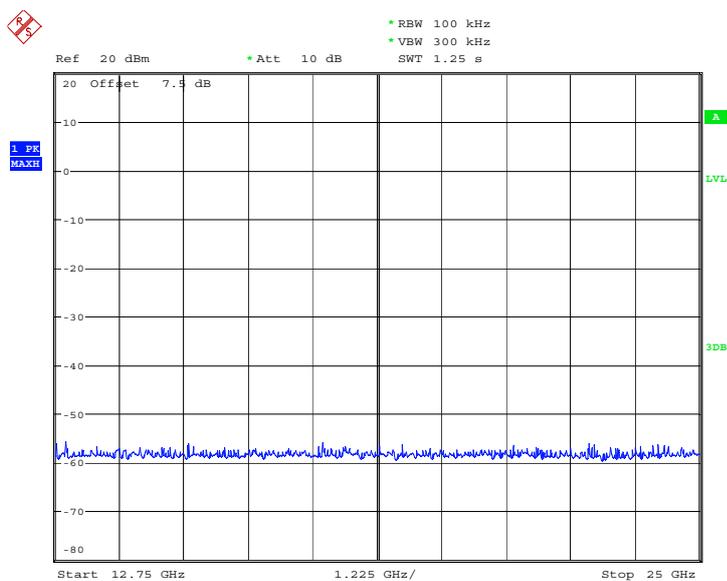
Date: 29.DEC.2011 15:39:56

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: π/4DQPSK

Carrier frequency (MHz): 2402

Channel No.:0

Modulation type: 8DPSK

Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

Carrier frequency (MHz): 2441

Channel No.:39

Modulation type: 8DPSK

Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

Carrier frequency (MHz): 2480

Channel No.:78

Modulation type: 8DPSK

Frequency MHz	Corrected measurement value dBm	Reference value dBm	Limit dBm	Delta dB
---	---	---	---	---
---	---	---	---	---

Note: The Reference value see 2.2.5 Band edge compliance

```
                                          * RBW  100 kHz
                                          * VBW  300 kHz
    Ref  17.5 dBm          * Att  10 dB    SWT  100 ms

      Offset   7.5 dB
     10                                                    A

 1 PK
 MAXH   0                                                  LVL

      -10

      -20

      -30

      -40                                                  3DB

      -50

      -60

      -70

      -80

    Start  30 MHz           97 MHz/            Stop  1 GHz
```

Date: 29.DEC.2011 14:57:08

```
                                          * RBW  100 kHz
                                          * VBW  300 kHz
    Ref  20 dBm            * Att  10 dB    SWT  1.2 s

   20  Offset   7.5 dB
     10                                                    A

 1 PK
 MAXH   0                                                  LVL

      -10

      -20

      -30

      -40                                                  3DB

      -50

      -60

      -70

      -80

    Center  6.875 GHz        1.175 GHz/       Span  11.75 GHz
```

Date: 29.DEC.2011 15:20:49

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
Ref  20 dBm           * Att  10 dB    SWT  1.25 s
```

Start 12.75 GHz   1.225 GHz/   Stop 25 GHz

Date: 29.DEC.2011 15:28:14

<div align="center">

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: 8DPSK

</div>

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
Ref  17.5 dBm         * Att  10 dB    SWT  100 ms
```

Start 30 MHz   97 MHz/   Stop 1 GHz

Date: 29.DEC.2011 15:04:21

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
  Ref   20 dBm          * Att  10 dB    SWT  1.2 s
  20  Offset   7.5 dB
                                                            A
  10
1 PK
MAXH  0                                                    LVL

  -10

  -20

  -30                                                      3DB

  -40

  -50

  -60

  -70

  -80
  Center  6.875 GHz          1.175 GHz/         Span  11.75 GHz
```

Date: 29.DEC.2011 15:22:05

```
                                    * RBW  100 kHz
                                    * VBW  300 kHz
  Ref   20 dBm          * Att  10 dB    SWT  1.25 s
  20  Offset   7.5 dB
                                                            A
  10
1 PK
MAXH  0                                                    LVL

  -10

  -20

  -30                                                      3DB

  -40

  -50

  -60

  -70

  -80
  Start  12.75 GHz           1.225 GHz/          Stop  25 GHz
```
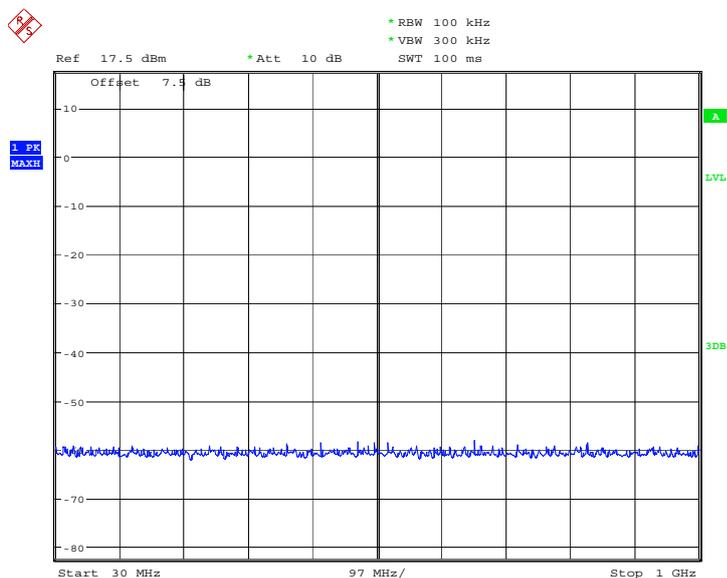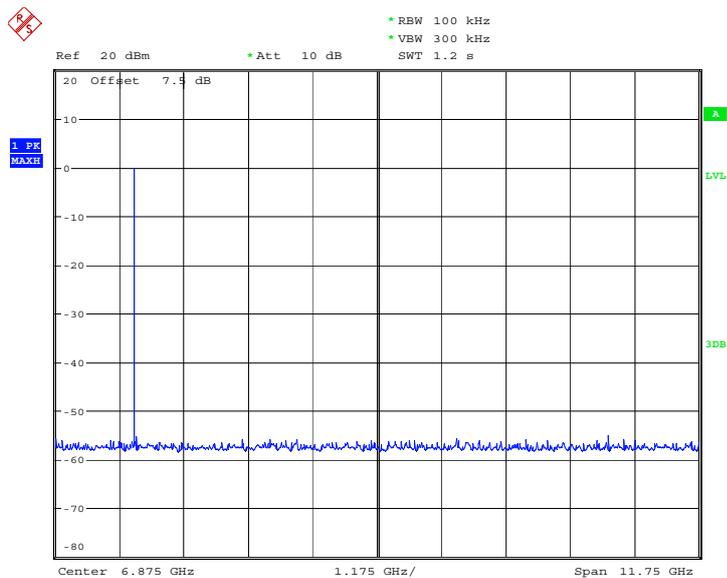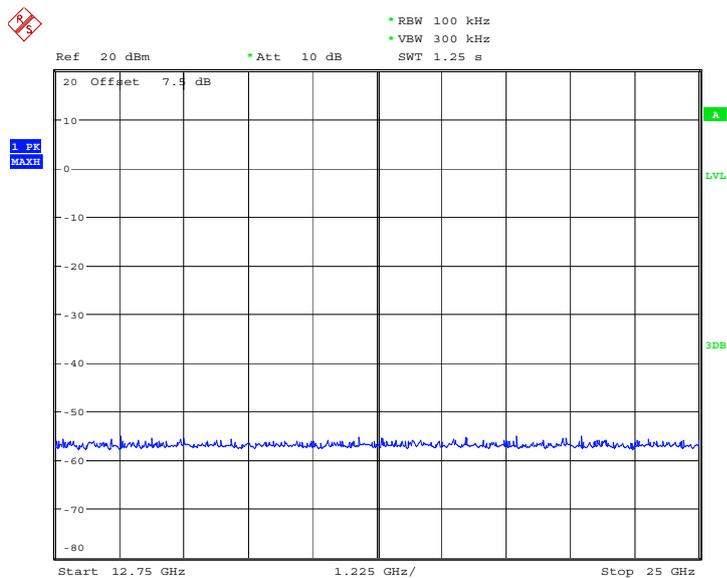
Date: 29.DEC.2011 15:35:56

<div align="center">

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: 8DPSK

</div>

```
                                          * RBW  100 kHz
                                          * VBW  300 kHz
        Ref   17.5 dBm        * Att   10 dB      SWT  100 ms
```



```
Start 30 MHz                    97 MHz/              Stop  1 GHz
```

Date: 29.DEC.2011 15:08:13

```
                                          * RBW  100 kHz
                                          * VBW  300 kHz
        Ref   20 dBm          * Att   10 dB      SWT  1.2 s
```



```
Center  6.875 GHz               1.175 GHz/           Span  11.75 GHz
```

Date: 29.DEC.2011 15:24:54

```
                                              * RBW  100 kHz
                                              * VBW  300 kHz
    Ref  20 dBm              * Att  10 dB       SWT  1.25 s
     20  Offset   7.5 dB
                                                                    A
   10

    0                                                              LVL

  -10

  -20

  -30                                                              3DB

  -40

  -50

  -60

  -70

  -80
    Start  12.75 GHz            1.225 GHz/            Stop  25 GHz
```
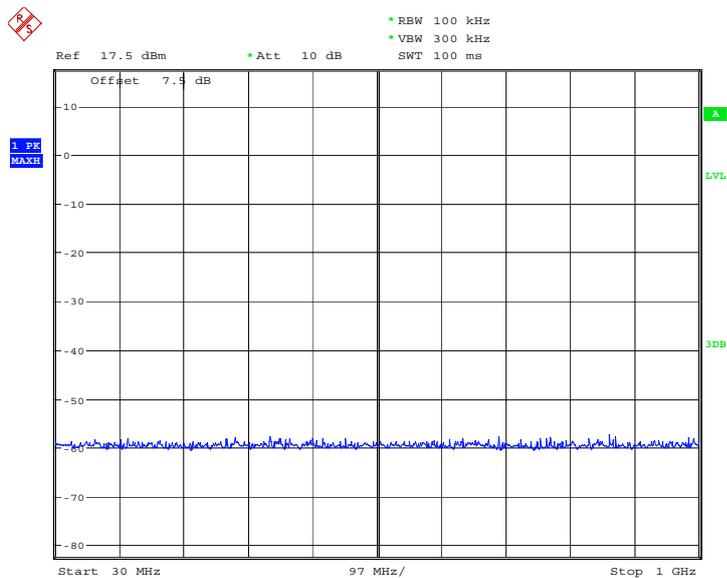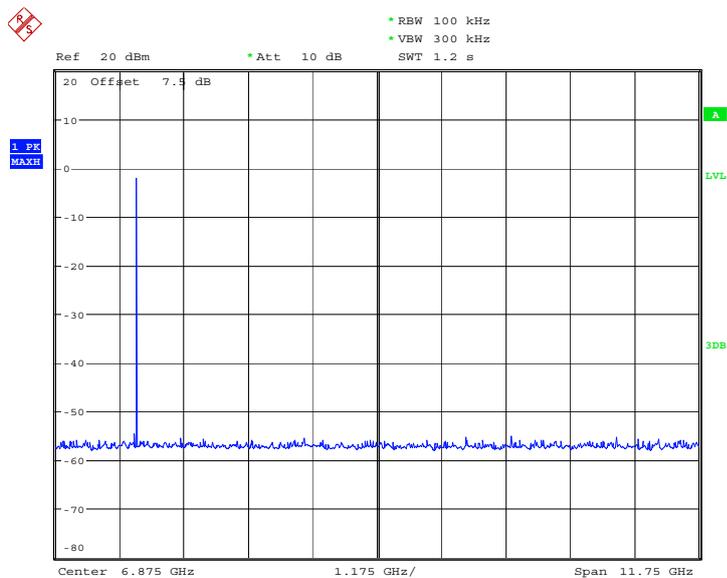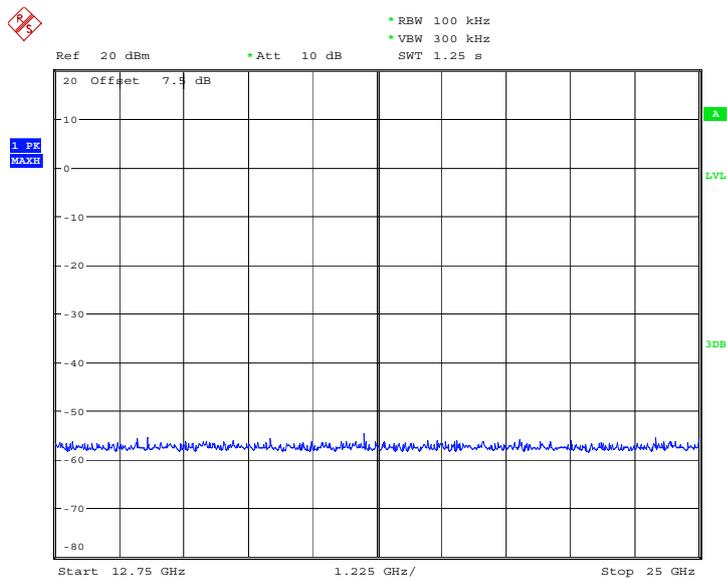
Date: 29.DEC.2011 15:41:04

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: 8DPSK

2.2.4 Spurious radiated emissions-§15.247(d),§15.35(b),§15.209

2.2.4.1 Ambient condition

Temperature	Relative humidity	Pressure
27.5°C	35.0%	99.8kPa

2.2.4.2 Test Description

The measurement is made according to Public notice DA 00-705 and ANSI C63.4.

The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna.

The radiated emissions measurements were made in a typical installation configuration.

Then start the test software ES-K1. Sweep the whole frequency band through the range from 9kHz to 1GHz or above, using receive loop antenna HFH2-Z2, log period antenna HL562 or Ridge horn antenna HF906.

During the test, the antenna height and EUT azimuth were varied in order to identify the maximum level of emission from the EUT. The height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees. The measurements shall be repeated with orthogonal polarization of the test antenna.

The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.
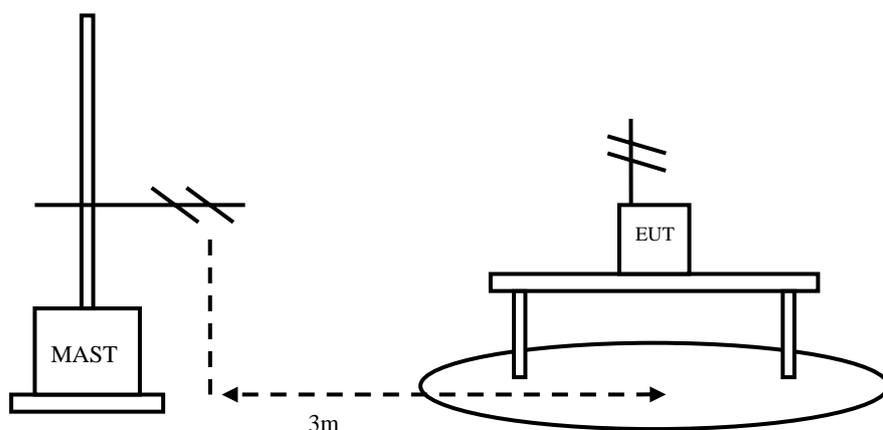
2.2.4.3 Test limit

FCC Part 15, Subpart C, §15.247 (d)

... In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

FCC Part 15, Subpart C, §15.209, Radiated Emission Limits

Frequency Range (MHz)	Field Strength(µV/m)	Class B Limit (dBµV/m)
0.009 – 0.490	2400/F(kHz)	20log(2400/F(kHz)/ 1µV/m)
0.490 – 1.705	24000/F(kHz)	20log(24000/F(kHz)/ 1µV/m)
1.705 – 30	30	29.5
30 – 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.0
above 960	500	54.0

§15.33(b)

…A unintentional radiator, excluding a digital device, in which the highest frequency generated in the device, the highest frequency used in the device and the highest frequency on which the device operates or tunes are less than 30 MHz and which, in accordance with Section 15.109, is required to comply with standards on the level of radiated emissions within the frequency range 9 kHz to 30 MHz…

§15.35(b)

..., there is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit....

Used conversion factor: Limit (dBµV/m) = 20 log (Limit (µV/m)/1µV/m)

2.2.4.4 Test result

Carrier frequency (MHz): 2441
Channel No.:39

Frequency Range: 9 kHz -30 MHz
Detector: PK mode
Modulation type: GFSK

Frequency Range: 30 MHz -1000 MHz
Detector: PK mode
Modulation type: GFSK

Frequency Range: 1 GHz -3 GHz
Detector: PK mode
Modulation type: GFSK
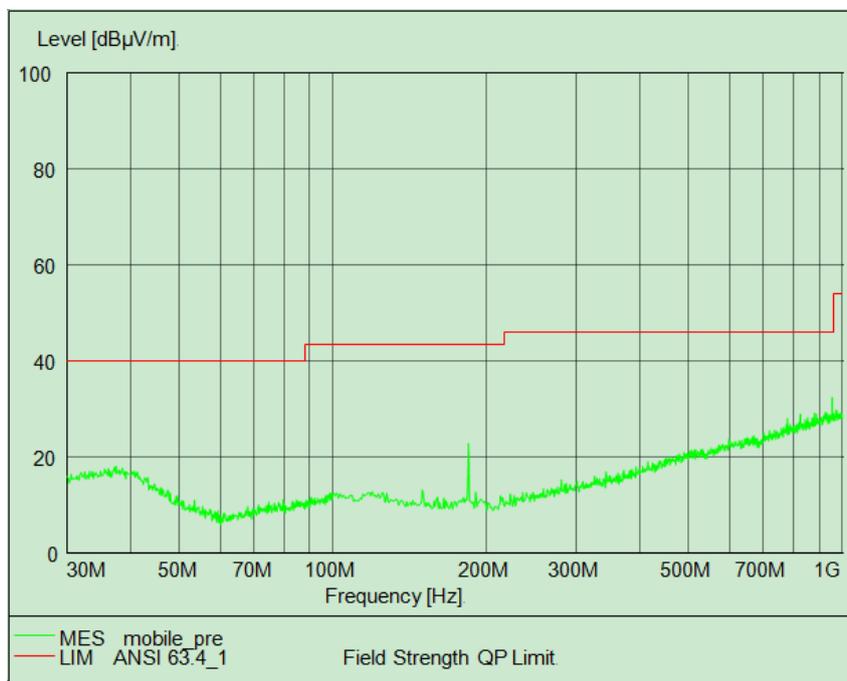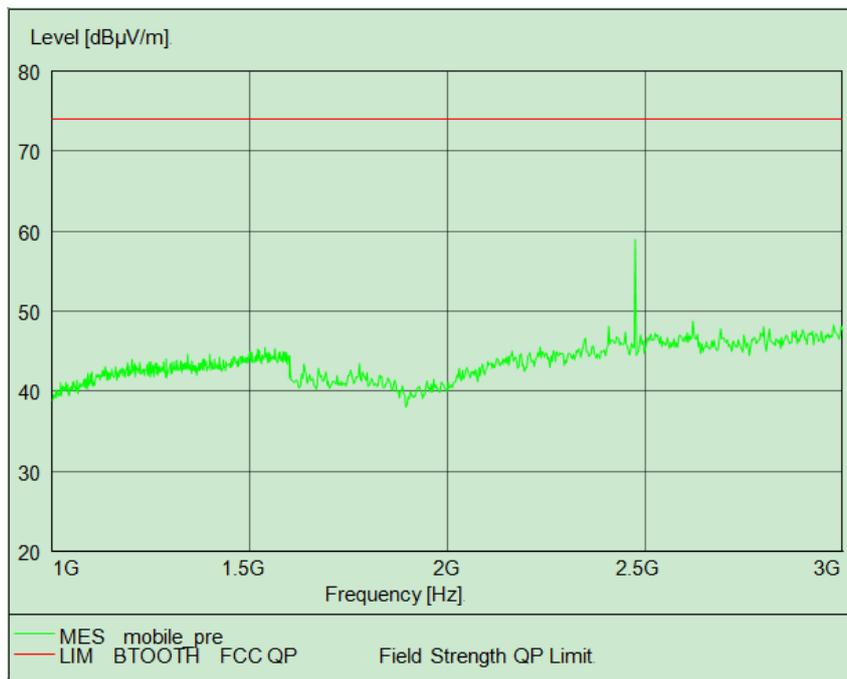

Frequency Range: 3 GHz - 25 GHz
Detector: PK mode
Modulation type: GFSK

Frequency Range: 9 kHz -30 MHz
Detector: PK mode
Modulation type: π/4DQPSK

Frequency Range: 30 MHz -1000 MHz
Detector: PK mode
Modulation type: π/4DQPSK

Frequency Range: 1 GHz - 3 GHz
Detector: PK mode
Modulation type: π/4DQPSK

Frequency Range: 3 GHz - 25 GHz
Detector: PK mode
Modulation type: π/4DQPSK

Frequency Range: 9 kHz -30 MHz
Detector: PK mode
Modulation type: 8DPSK

Frequency Range: 30 MHz -1000 MHz
Detector: PK mode
Modulation type: 8DPSK

Frequency Range: 1 GHz - 3 GHz
Detector: PK mode
Modulation type: 8DPSK

Frequency Range: 3 GHz - 25 GHz
Detector: PK mode
Modulation type: 8DPSK

2.2.5 Band edge compliance-§15.247(d)

2.2.5.1 Ambient condition

Temperature	Relative humidity	Pressure
22°C	40%	101.1kPa

2.2.5.2 Test Description

The measurement is made according to Public notice DA 00-705 and ANSI C63.4-2009.

2.2.5.2.1 RF Conducted Measurement：

The Equipment Under Test (EUT) was set up in a shielded room to perform the spurious emissions measurements.
The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss.

For the first measurement the EUT is set to transmit on the lowest channel (2402 MHz). The lower band edge is 2390 MHz.
Analyzer settings:
- Detector: Peak
- RBW= 100 kHz
- VBW= 300 kHz

For the second measurement the EUT is set to transmit on the highest channel (2480MHz). The higher band edge is 2483.5 MHz.
Analyzer settings:
- Detector: Peak
- RBW= 100 kHz
- VBW= 300 kHz
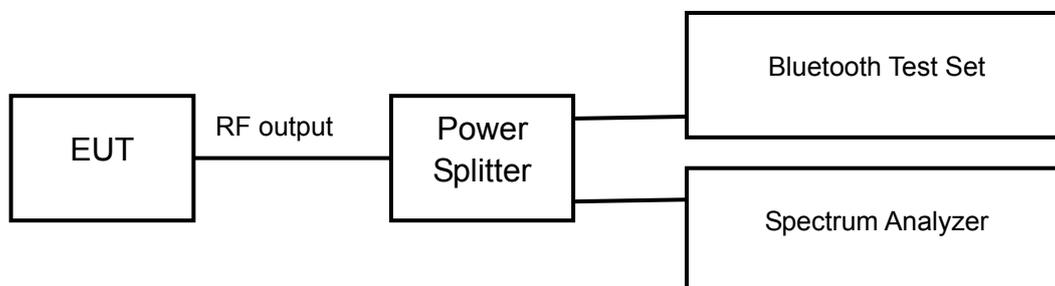
2.2.5.2.2 RF Radiated Measurement

The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna.

The radiated emissions measurements were made in a typical installation configuration.

During the test, the antenna height and EUT azimuth were varied in order to identify the maximum level of emission from the EUT. The height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees.

The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.
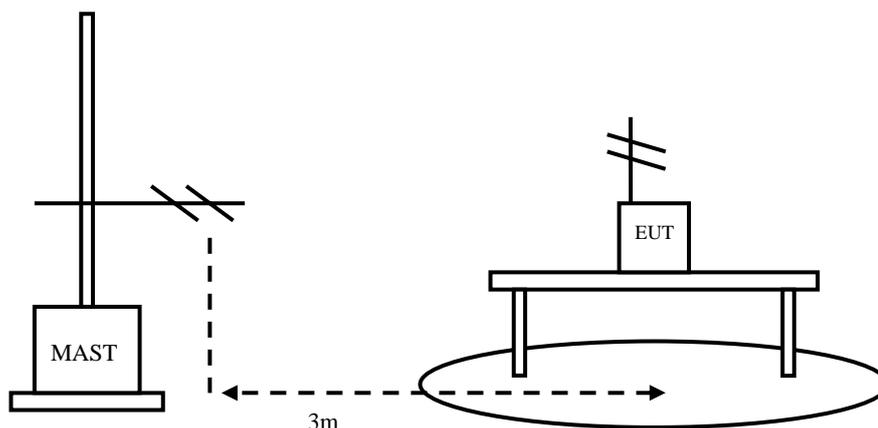
2.2.5.3 Test limit

FCC Part 15.247 (d)

"In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

2.2.5.4 Test result

RF Conducted Measurement
Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK

Frequency MHz	Measured value dBm	Reference value dBm	Limit dBm	Delta dB
2390	-47.17	7.56	-12.44	54.73

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

Frequency MHz	Measured value dBm	Reference value dBm	Limit dBm	Delta dB
2483.5	-54.09	3.57	-16.43	57.66

RF Radiated Measurement
Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK

Frequency MHz	Correction Factor dB/m	Reading Level dBuV	Emission Level dBuV/m	Detector
2402	2.7	71.86	74.56	Peak

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

Frequency MHz	Correction Factor dB/m	Reading Level dBuV	Emission Level dBuV/m	Detector
2480	2.5	72.38	74.88	Peak

Band Edge Test Data

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK

Frequency MHz	Fundamental (dBuV/m)	Delta dB	Band Edge Field Strength (dBuV/m)	Detector
2390	74.56	54.73	19.83	Peak

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

Frequency MHz	Fundamental (dBuV/m)	Delta dB	Band Edge Field Strength (dBuV/m)	Detector
2483.5	74.88	57.66	16.56	Peak

Note:
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge
measurements per the Marker-Delta Method with the following formula:
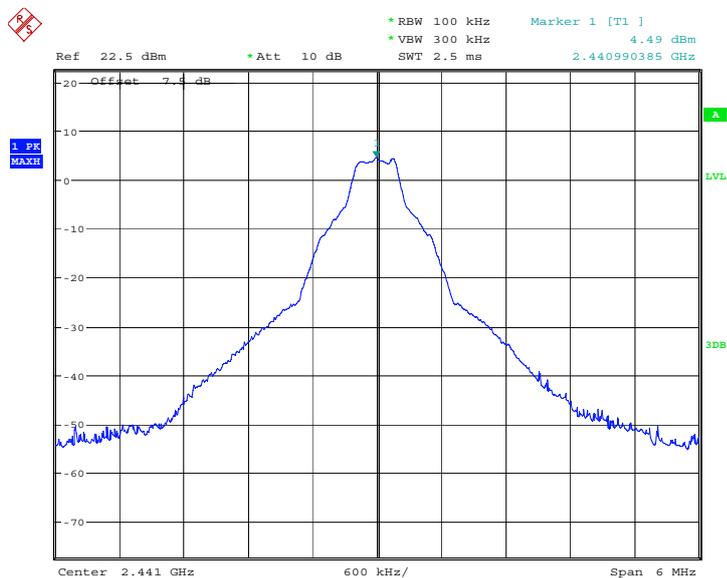Band Edge field Strength = F - Delta
F = Fundamental field Strength (Peak or Average)
Delta= Conducted Band Edge Delta (Peak or Average)

```
* RBW 100 kHz          Marker 2 [T1 ]
* VBW 300 kHz                 -47.17 dBm
Ref  22.5 dBm      * Att  10 dB    SWT  2.5 ms          2.400000000 GHz
Offset   7.5  dB                              Marker 1 [T1 ]
                                                   7.56 dBm
                                              2.402000000 GHz

Center 2.4 GHz              600 kHz/                  Span 6 MHz
```
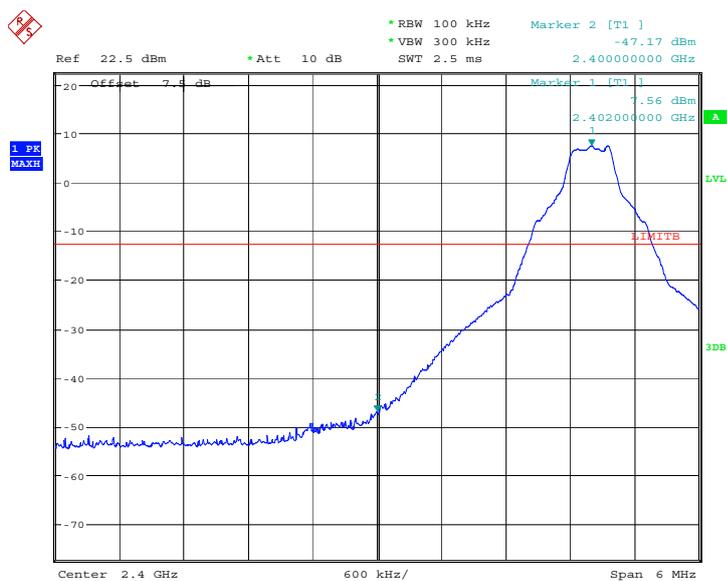
Date: 29.DEC.2011 08:40:50

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK


```
* RBW 100 kHz          Marker 1 [T1 ]
* VBW 300 kHz                  4.49 dBm
Ref  22.5 dBm      * Att  10 dB    SWT  2.5 ms          2.440990385 GHz
Offset   7.5  dB

Center 2.441 GHz            600 kHz/                  Span 6 MHz
```

Date: 29.DEC.2011 08:43:50

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: GFSK
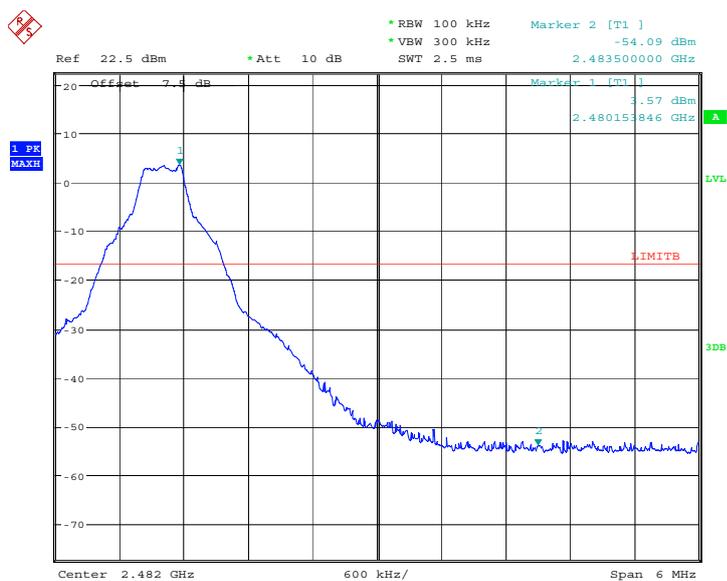
Date: 29.DEC.2011 08:55:38

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

RF Conducted Measurement

Carrier frequency (MHz): 2402

Channel No.:0

Modulation type: π/4DQPSK

Frequency MHz	Measured value dBm	Reference value dBm	Limit dBm	Delta dB
2390	-47.28	6.14	-13.86	53.42

Carrier frequency (MHz): 2480

Channel No.:78

Modulation type: π/4DQPSK

Frequency MHz	Measured value dBm	Reference value dBm	Limit dBm	Delta dB
2483.5	-53.48	2.21	-17.79	55.69

RF Radiated Measurement

Carrier frequency (MHz): 2402

Channel No.:0

Modulation type: π/4DQPSK

Frequency MHz	Correction Factor dB/m	Reading Level dBuV	Emission Level dBuV/m	Detector
2402	2.7	73.36	76.06	Peak

Carrier frequency (MHz): 2480

Channel No.:78

Modulation type: π/4DQPSK

Frequency MHz	Correction Factor dB/m	Reading Level dBuV	Emission Level dBuV/m	Detector
2480	2.5	73.58	76.08	Peak

Band Edge Test Data

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: π/4DQPSK

Frequency MHz	Fundamental (dBuV/m)	Delta dB	Band Edge Field Strength (dBuV/m)	Detector
2390	76.06	53.42	22.64	Peak

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: π/4DQPSK

Frequency MHz	Fundamental (dBuV/m)	Delta dB	Band Edge Field Strength (dBuV/m)	Detector
2483.5	76.08	55.69	20.39	Peak

Note:
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge
measurements per the Marker-Delta Method with the following formula:
Band Edge field Strength = F - Delta
F = Fundamental field Strength (Peak or Average)
　　　　Delta= Conducted Band Edge Delta (Peak or Average)

```
                                        * RBW  100 kHz    Marker 2 [T1 ]
                                        * VBW  300 kHz              -46.35 dBm
Ref  22.5 dBm        * Att  10 dB       SWT  2.5 ms        2.400000000 GHz
Offset  7.5 dB                                            Marker 1 [T1 ]
                                                                    6.14 dBm
                                                           2.402009615 GHz
```
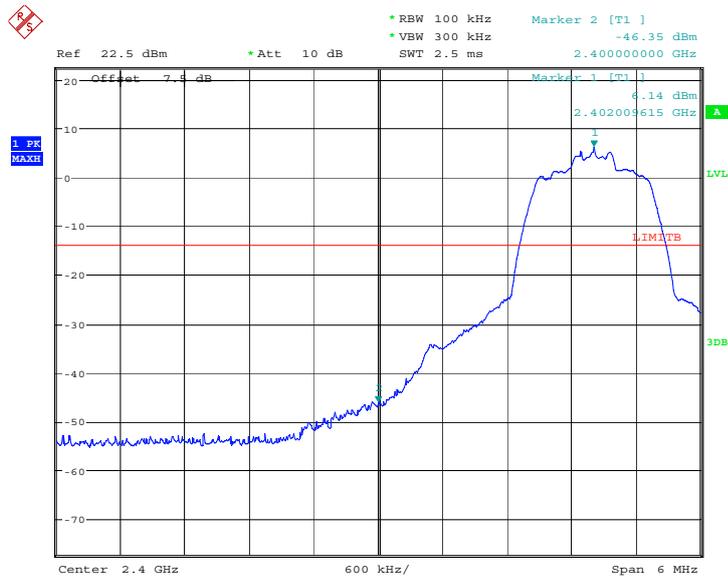
Date: 29.DEC.2011 09:02:12

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: π/4DQPSK


```
                                        * RBW  100 kHz    Marker 1 [T1 ]
                                        * VBW  300 kHz               2.18 dBm
Ref  22.5 dBm        * Att  10 dB       SWT  2.5 ms        2.441000000 GHz
Offset  7.5 dB
```
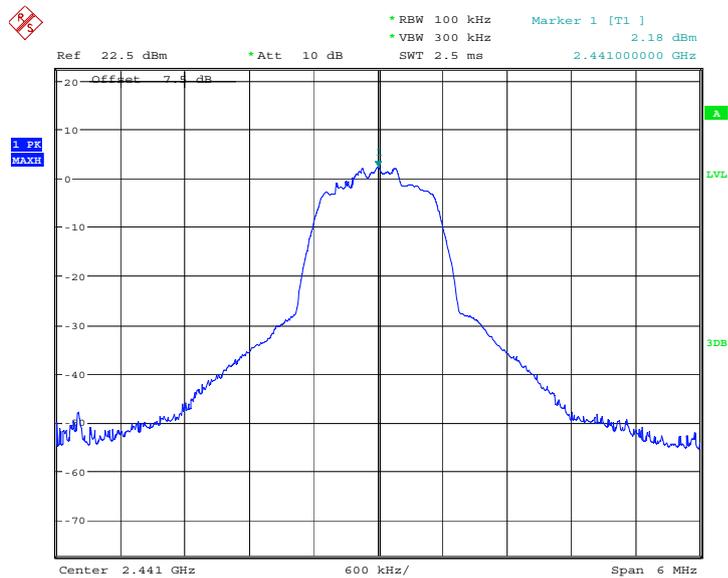
Date: 29.DEC.2011 09:05:43

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: π/4DQPSK
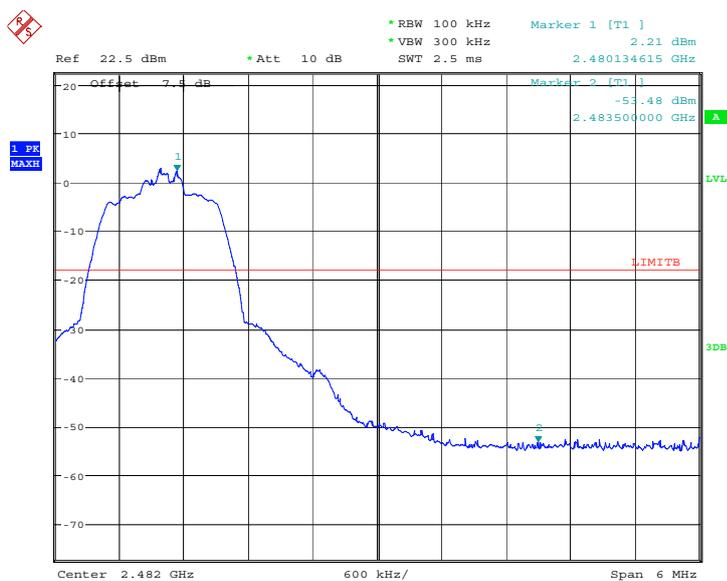
Date: 29.DEC.2011 09:19:00

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: π/4DQPSK

RF Conducted Measurement

Carrier frequency (MHz): 2402

Channel No.:0

Modulation type: 8DPSK

Frequency MHz	Measured value dBm	Reference value dBm	Limit dBm	Delta dB
2390	-48.92	4.10	-15.90	53.02

Carrier frequency (MHz): 2480

Channel No.:78

Modulation type: 8DPSK

Frequency MHz	Measured value dBm	Reference value dBm	Limit dBm	Delta dB
2483.5	-54.28	1.94	-18.06	56.22

RF Radiated Measurement

Carrier frequency (MHz): 2402

Channel No.:0

Modulation type: GFSK

Frequency MHz	Correction Factor dB/m	Reading Level dBuV	Emission Level dBuV/m	Detector
2402	2.7	72.97	75.67	Peak

Carrier frequency (MHz): 2480

Channel No.:78

Modulation type: GFSK

Frequency MHz	Correction Factor dB/m	Reading Level dBuV	Emission Level dBuV/m	Detector
2480	2.5	72.86	75.36	Peak

Band Edge Test Data

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK

Frequency MHz	Fundamental (dBuV/m)	Delta dB	Band Edge Field Strength (dBuV/m)	Detector
2390	75.67	53.02	22.65	Peak

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: GFSK

Frequency MHz	Fundamental (dBuV/m)	Delta dB	Band Edge Field Strength (dBuV/m)	Detector
2483.5	75.36	56.22	19.14	Peak

Note:
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge
measurements per the Marker-Delta Method with the following formula:
Band Edge field Strength = F - Delta
F = Fundamental field Strength (Peak or Average)
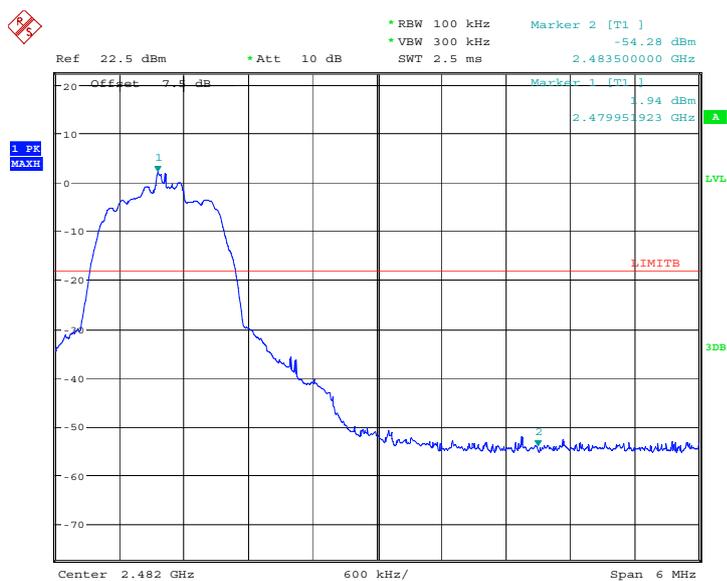Delta= Conducted Band Edge Delta (Peak or Average)
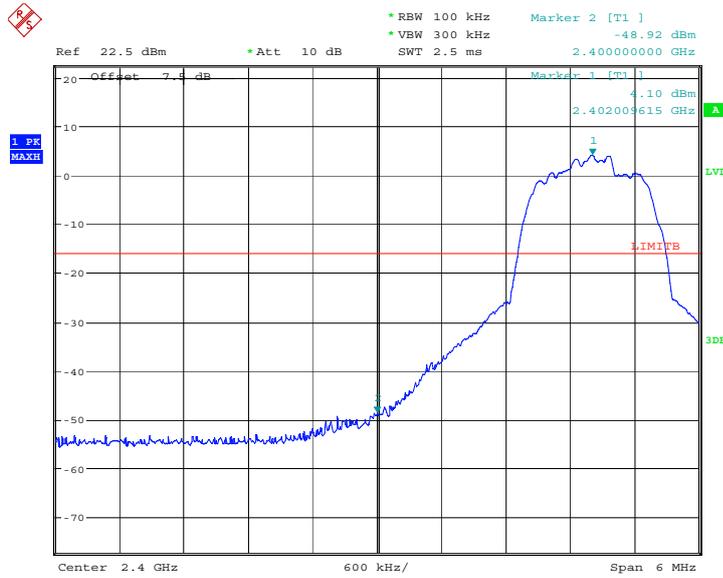
Date: 29.DEC.2011 09:22:53

Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: 8DPSK
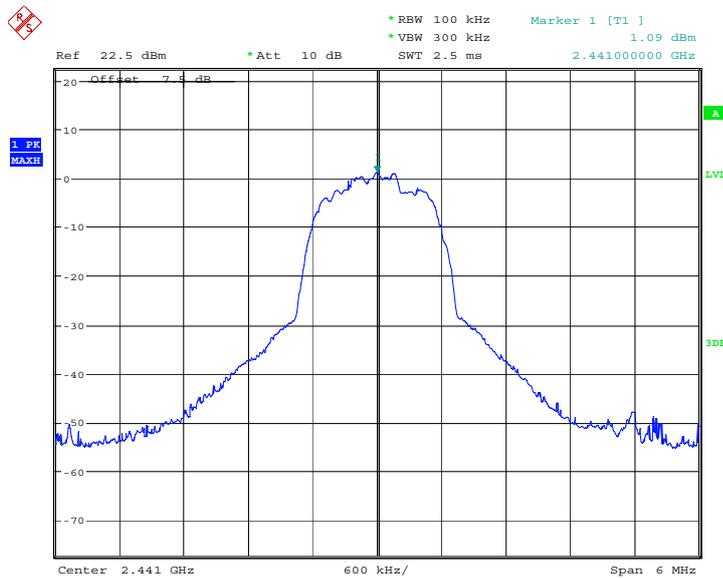
Date: 29.DEC.2011 09:27:01

Carrier frequency (MHz): 2441
Channel No.:39
Modulation type: 8DPSK

```
                                    * RBW  100 kHz      Marker 2 [T1 ]
                                    * VBW  300 kHz              -54.28 dBm
   Ref   22.5 dBm       * Att   10 dB    SWT  2.5 ms      2.483500000 GHz
    20  Offset   7.5 dB                           Marker 1 [T1 ]
                                                         1.94 dBm
                                                  2.479951923 GHz   A
    10
1 PK
MAXH                                                             LVL
     0

                                                            LIMITB
   -20

                                                                3DB
   -30

   -40

   -50                            2

   -60

   -70

   Center  2.482 GHz          600 kHz/              Span  6 MHz
```

Date: 29.DEC.2011 09:32:59

Carrier frequency (MHz): 2480
Channel No.:78
Modulation type: 8DPSK

2.2.6 Dwell time-§15.247(a) (1)(iii)

2.2.6.1 Ambient condition

Temperature	Relative humidity	Pressure
22°C	40%	101.1kPa

2.2.6.2 Test Description

The Equipment Under Test (EUT) was set up in a shielded room to perform the dwell time measurements.

The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss.

The time slot length is measured of three different packet types which are available in the Bluetooth technology. Those are DH1, DH3 and DH5 packets.

The dwell time is calculated by:

Dwell time = time slot length * hop rate * 31.6/ number of hopping channels

with:
- hop rate=1600/2 * 1/s for DH1 packets =800
- hop rate=1600/4 * 1/s for DH3 packets =400
- hop rate=1600/6 * 1/s for DH5 packets =266.67
- number of hopping channels=79
- 31.6 s=0.4 seconds multiplied by the number of hopping channels=0.4s * 79
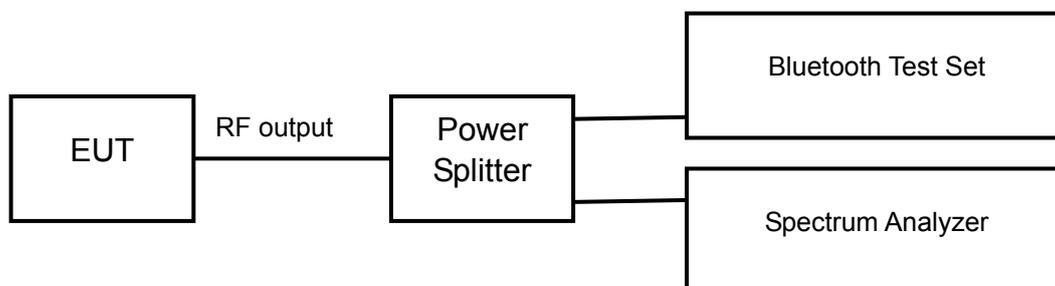
2.2.6.3 Test limit

FCC Part 15, Subpart C, §15.247 (a) (1) (iii)

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.
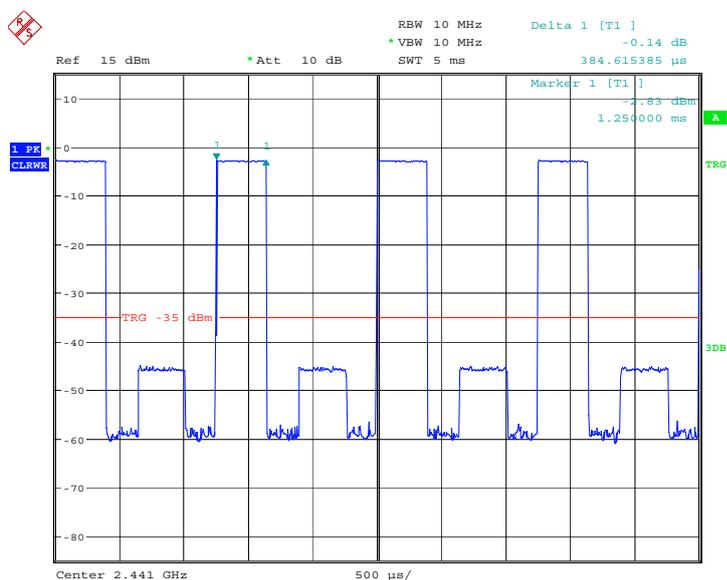
The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

Since the Bluetooth technology uses 79 channels this period is calculated to be 31.6 seconds.
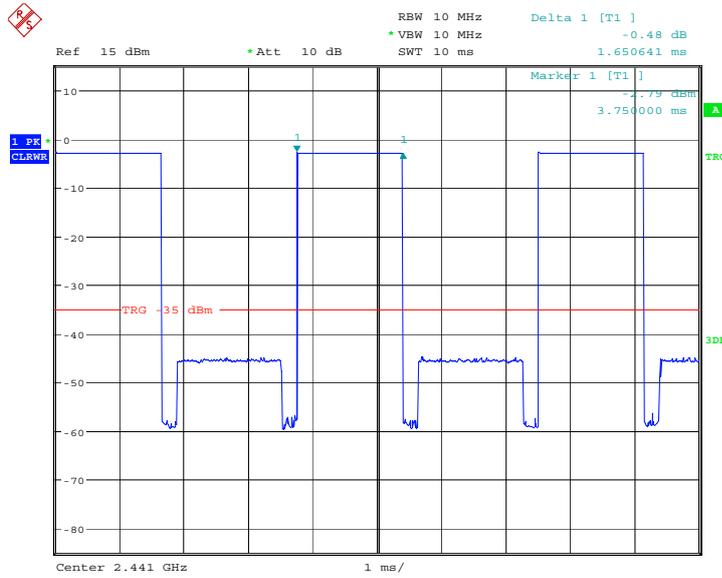
2.2.6.4 Test result

Modulation type: GFSK

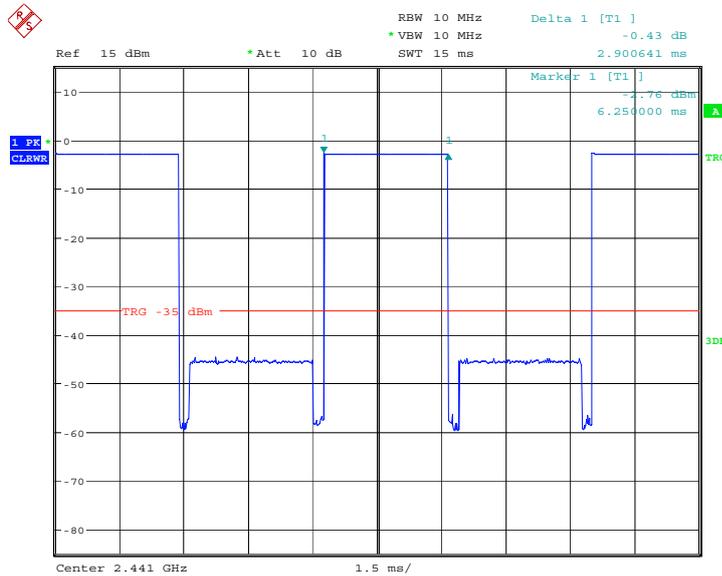| Packet type	Time slot length ms	Dwell time	Dwell time ms
DH1	0.3846	time slot length *31.6 1600/2 /79	123.07
DH3	1.6506	time slot length * 31.6 *1600/4 /79	264.10
DH5	2.9006	time slot length * 31.6 *1600/6 /79	309.40


```
                                    RBW  10 MHz      Delta 1 [T1 ]
                                  * VBW  10 MHz                -0.14 dB
        Ref  15 dBm    * Att  10 dB   SWT  5 ms          384.615385 µs
                                            Marker 1 [T1 ]
                                                   -2.83 dBm
                                                  1.250000 ms      A

  1 PK *
  CLRWR                                                           TRG

                  TRG -35 dBm                                     3DB


        Center 2.441 GHz          500 µs/
```

Date: 29.DEC.2011 15:48:17

Carrier frequency (MHz): 2441
Packet type: DH1
Modulation type: GFSK

Date: 29.DEC.2011 15:49:20

Carrier frequency (MHz): 2441
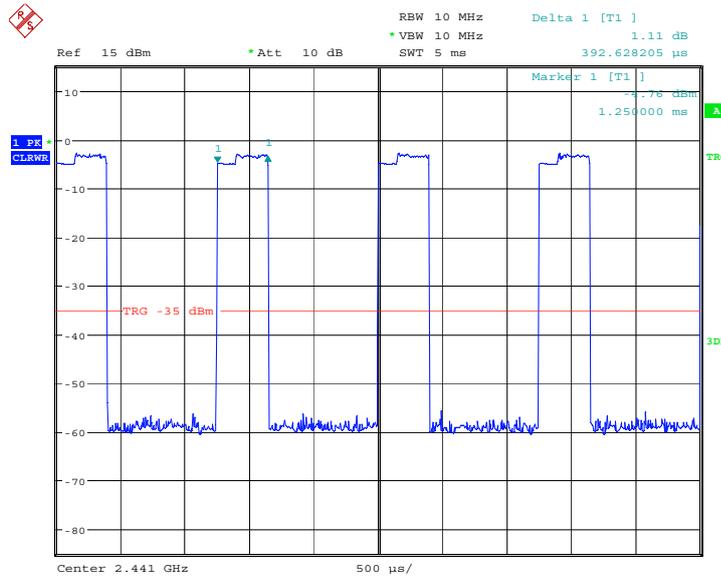Packet type: DH3
Modulation type: GFSK

Date: 29.DEC.2011 15:50:01

Carrier frequency (MHz): 2441
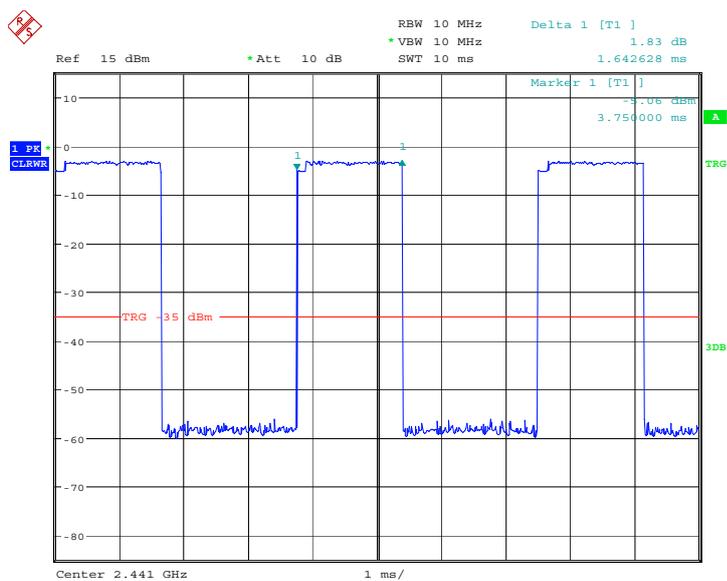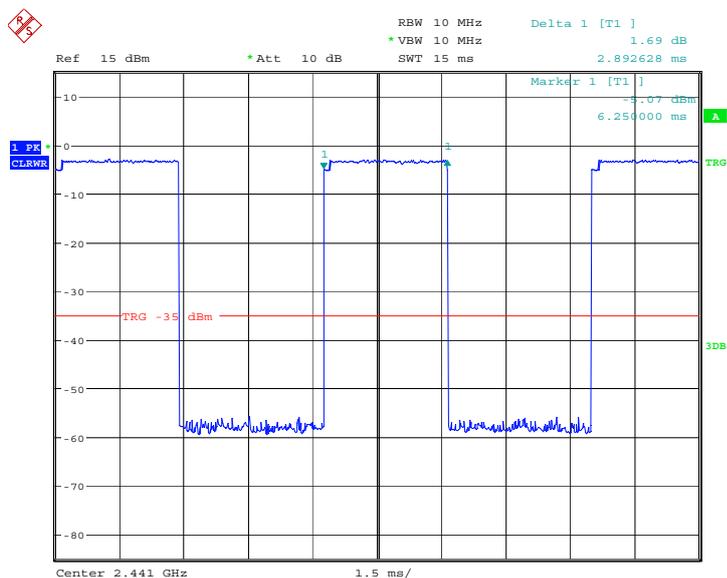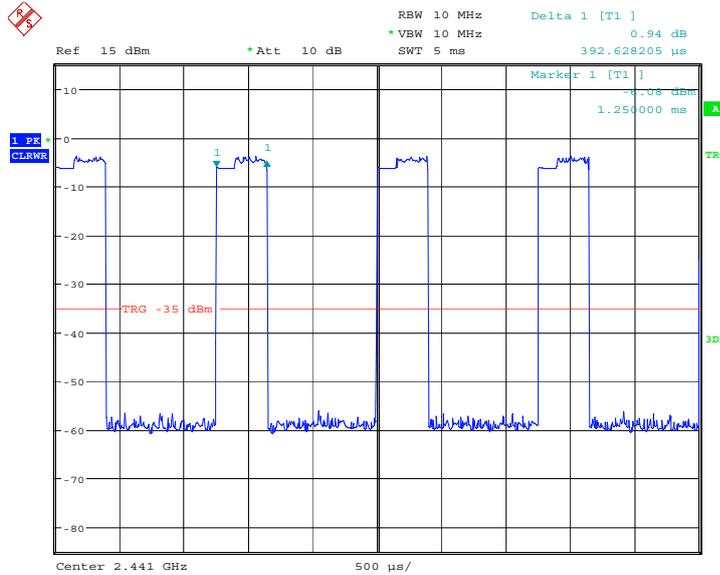Packet type: DH5
Modulation type: GFSK

Modulation type: π/4DQPSK

Packet type	Time slot length ms	Dwell time	Dwell time ms
DH1	0.3926	time slot length *31.6 1600/2 /79	125.63
DH3	1.6426	time slot length * 31.6 *1600/4 /79	262.82
DH5	2.8926	time slot length * 31.6 *1600/6 /79	308.54

Date: 29.DEC.2011 15:54:36

Carrier frequency (MHz): 2441
Packet type: DH1
Modulation type: π/4DQPSK

```
                                    RBW  10 MHz      Delta 1 [T1 ]
                                  * VBW  10 MHz                1.83 dB
      Ref  15 dBm      * Att  10 dB    SWT  10 ms            1.642628 ms
                                                   Marker 1 [T1 ]
                                                          -5.06 dBm
                                                          3.750000 ms
```

Center 2.441 GHz   1 ms/

Date: 29.DEC.2011 16:00:22

Carrier frequency (MHz): 2441
Packet type: DH3
Modulation type: π/4DQPSK

```
                                    RBW  10 MHz      Delta 1 [T1 ]
                                  * VBW  10 MHz                1.69 dB
      Ref  15 dBm      * Att  10 dB    SWT  15 ms            2.892628 ms
                                                   Marker 1 [T1 ]
                                                          -5.07 dBm
                                                          6.250000 ms
```

Center 2.441 GHz   1.5 ms/

Date: 29.DEC.2011 16:01:21

Carrier frequency (MHz): 2441
Packet type: DH5
Modulation type: π/4DQPSK

Modulation type: 8DPSK

| Packet type	Time slot length ms	Dwell time	Dwell time ms
DH1	0.3926	time slot length *31.6 1600/2 /79	125.63
DH3	1.6426	time slot length * 31.6 *1600/4 /79	262.82
DH5	2.8926	time slot length * 31.6 *1600/6 /79	308.54

Date: 29.DEC.2011 16:03:52

Carrier frequency (MHz): 2441
Packet type:DH1
Modulation type: 8DPSK
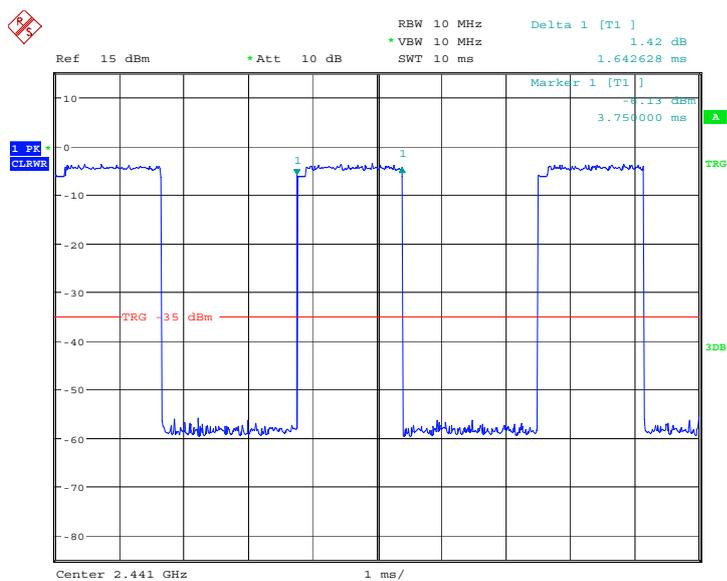
Date: 29.DEC.2011 16:05:02

Carrier frequency (MHz): 2441
Packet type:DH3
Modulation type: 8DPSK
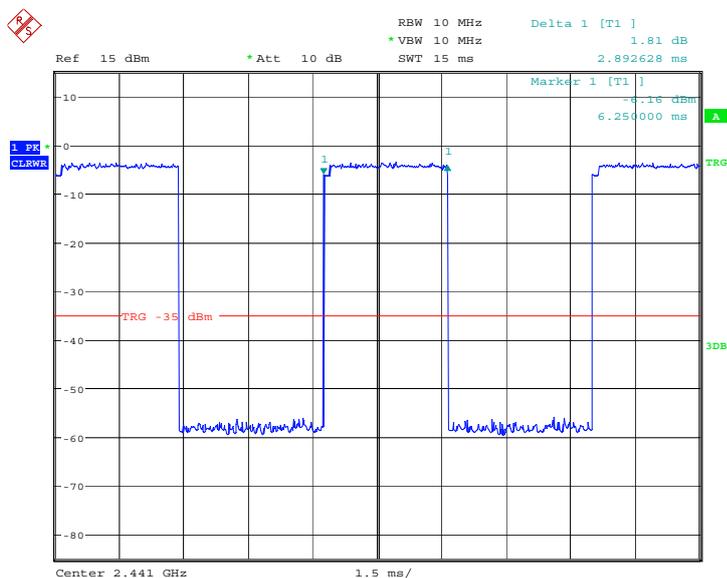
Date: 29.DEC.2011 16:05:46

Carrier frequency (MHz): 2441
Packet type:DH5
Modulation type: 8DPSK

2.2.7 Channel separation-§15.247(a) (1)

2.2.7.1 Ambient condition

Temperature	Relative humidity	Pressure
22°C	40%	101.1kPa

2.2.7.2 Test Description

The measurement is made according to Public notice DA 00-705 and ANSI C63.4.

The Equipment Under Test (EUT) was set up in a shielded room to perform the channel separation measurements.

The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss.

Analyzer settings:

- Detector: Peak-Maxhold
- Span: 3 MHz
- Centre Frequency: 2441 MHz
- Resolution Bandwidth (RBW): 30 kHz
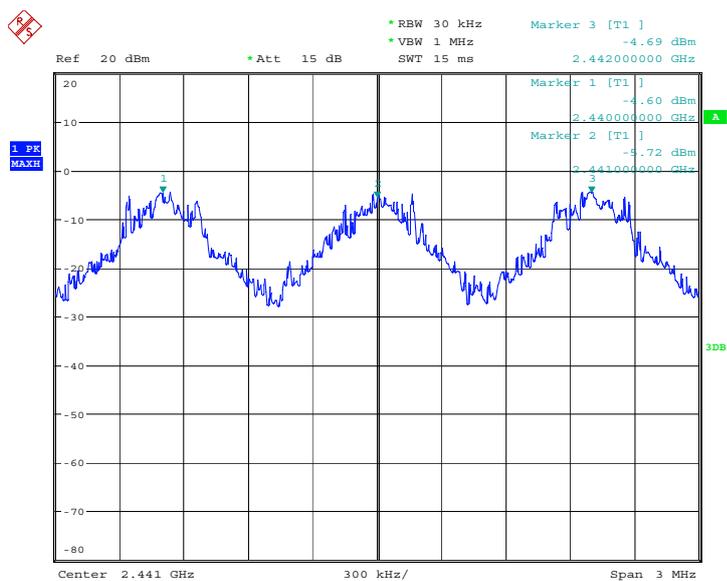- Video Bandwidth (VBW): 1 MHz
- Sweep Time: Coupled
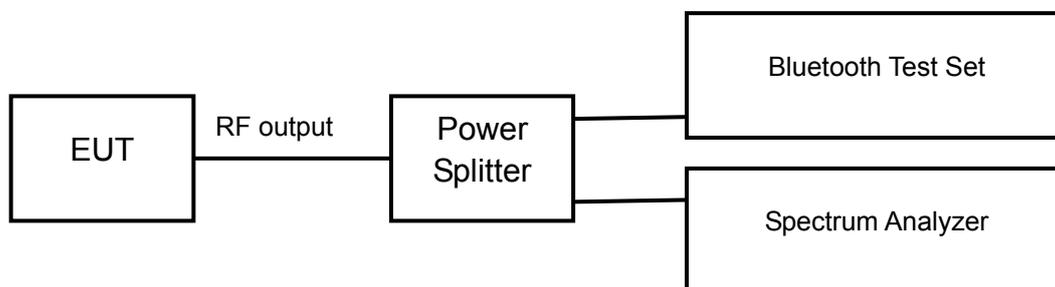
2.2.7.3 Test limit

FCC Part 15, Subpart C, §15.247 (a) (1)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

2.2.7.4 Test result

Op-mode	Channel separation MHz
Hopping mode	1

Date: 29.DEC.2011 16:10:02

Op-mode: Hopping mode

2.2.8 Number of hopping frequencies-§15.247(a) (ⅲ)

2.2.8.1 Ambient condition

| Temperature	Relative humidity	Pressure
22°C	40%	101.1kPa

2.2.8.2 Test Description

The measurement is made according to Public notice DA 00-705 and ANSI C63.4.

The Equipment Under Test (EUT) was set up in a shielded room to perform the number of hopping frequencies measurement.

The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss.

Analyzer settings:

- Detector: Peak-Maxhold
- Start frequency: 2400 MHz
- Stop frequency: 2483.5 MHz
- Resolution Bandwidth (RBW): 30 kHz
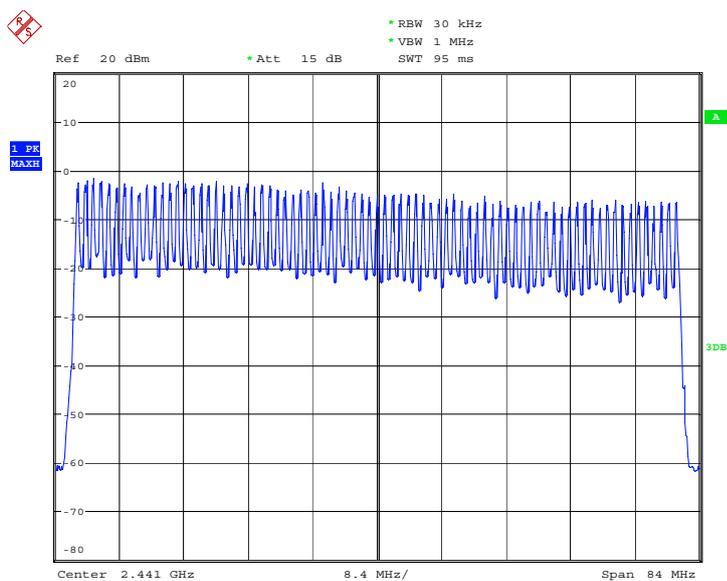- Video Bandwidth (VBW): 1 MHz
- Sweep Time: Coupled
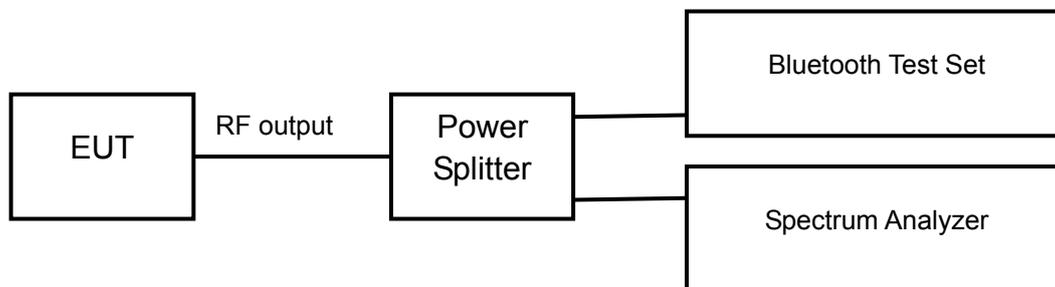
2.2.8.3 Test limit

FCC Part 15, Subpart C, §15.247 (a) (iii)

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

2.2.8.4 Test result

Op-mode	Result
Hopping mode	79

```
                                          * RBW  30 kHz
                                          * VBW  1 MHz
     Ref  20 dBm          * Att  15 dB     SWT  95 ms
```

Date: 29.DEC.2011 16:16:51

Op-mode: Hopping mode

2.3. List of test equipment

No.	Name	Model	Serial Number	Cal Due date
1.	Spectrum Analyzer	FSQ 40	200065	2012/3
2.	Signal Generator	E8257D	MY46520645	2012/8
3.	Oscilloscope	54622A	MY40010227	2012/8
4.	Temperature chamber	SH241	92000390	2012/8
5.	Power meter	NRVS	836333/050	2012/8
6.	Bluetooth Test Set	MT8852B	001007002	2012/8
7.	Attenuation	779	04702	2012/8
8.	Cable	N-N	6-046	2012/8
9.	Cable	N-N	6-050	2012/8
10.	Power Splitter	11850C	026057	2012/8
11.	DC Power Supply	E3645A	MY40000740	2012/8
12.	Shield Room	SR1	SR1	---
13.	EMI Receiver Tester	ESI 40	100015	2012/8
14.	Ultra log test antenna	HL562	100016	2012/8
15.	Fully-Anechoic Chamber	12.65m×8.03m×7.50m	---	---
16.	Turn table	PS2000	---	---
17.	Antenna master	MA 260	---	---
18.	Double-Ridged Waveguide Horn Antenna	HF 906	100030 100029	2012/8
19.	Rubidium Frequency Standard	8040A	0226005347	2012/8
20.	Loop Antenna	HFH2-Z2	---	2012/8