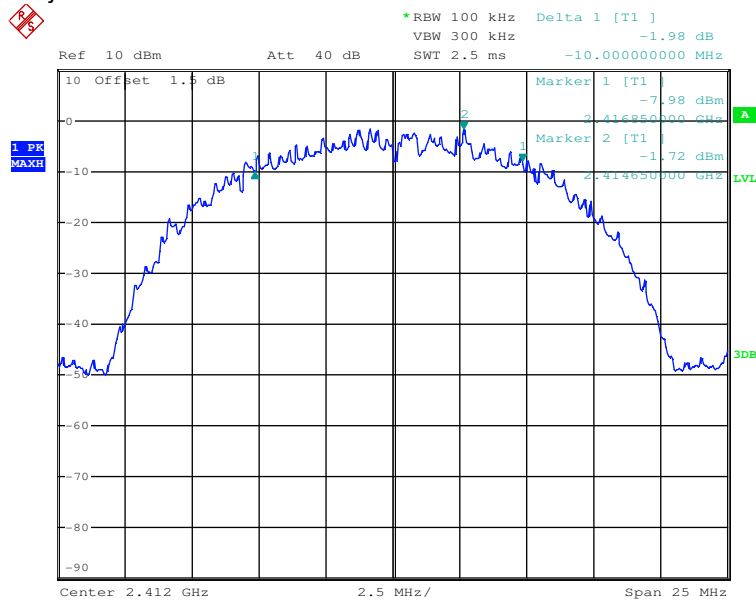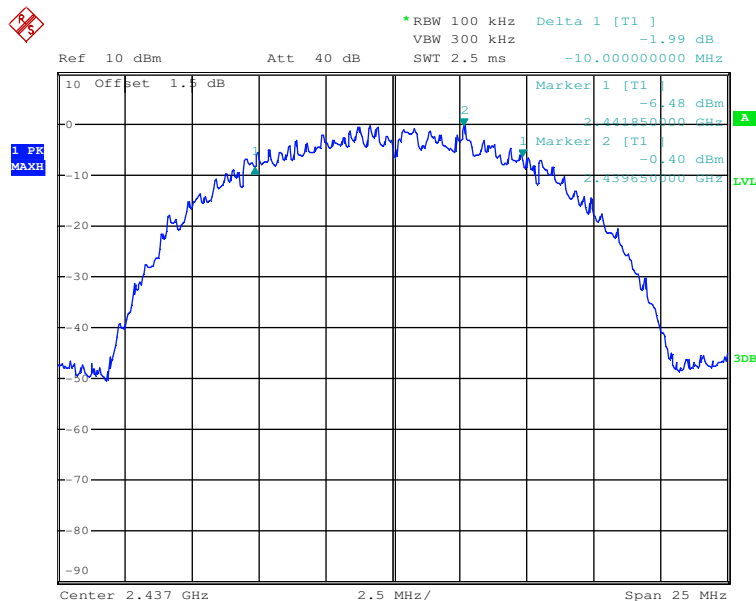TÜVRheinland®

Appendix 1

Test Results

6 dB Bandwidth Measurement
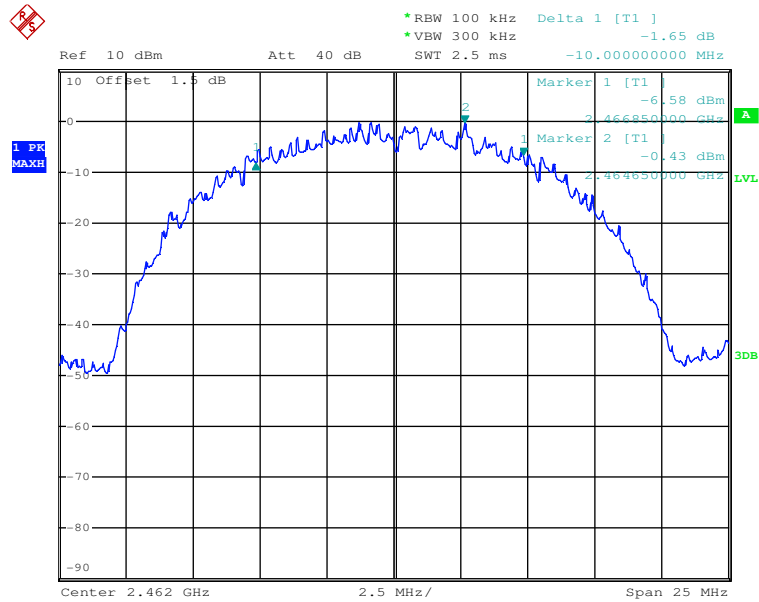
802.11B TX frequency: 2412MHz

Date: 29.SEP.2016 15:40:47

802.11B TX frequency: 2437MHz

Date: 29.SEP.2016 15:43:24

802.11B TX frequency: 2462MHz

Date: 30.SEP.2016 10:14:32

802.11G TX frequency: 2412MHz
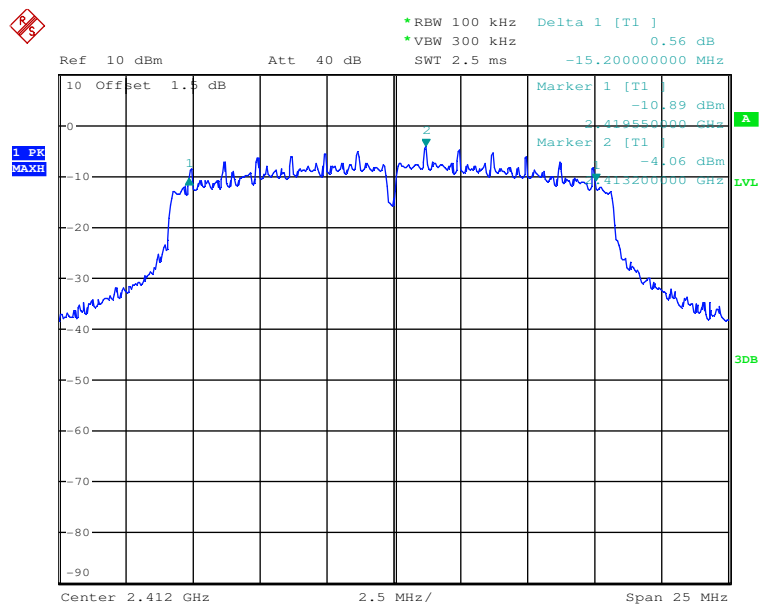
Date: 29.SEP.2016 19:00:45

TÜVRheinland®

802.11G TX frequency: 2437MHz

Date: 29.SEP.2016 19:02:02

802.11G TX frequency: 2462MHz

Date: 29.SEP.2016 19:03:14

TÜVRheinland®

802.11N TX frequency: 2412MHz

Date: 30.SEP.2016 10:01:52

802.11N TX frequency: 2437MHz

Date: 30.SEP.2016 10:20:11

802.11N TX frequency: 2462MHz
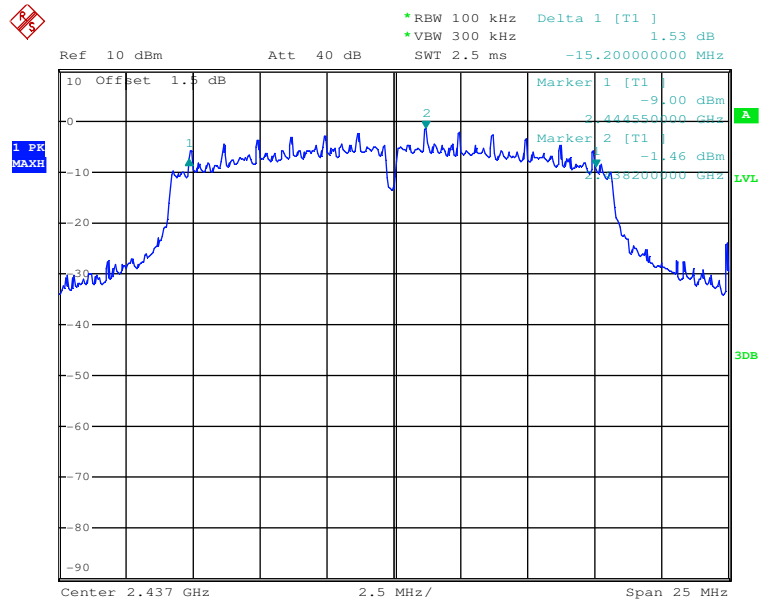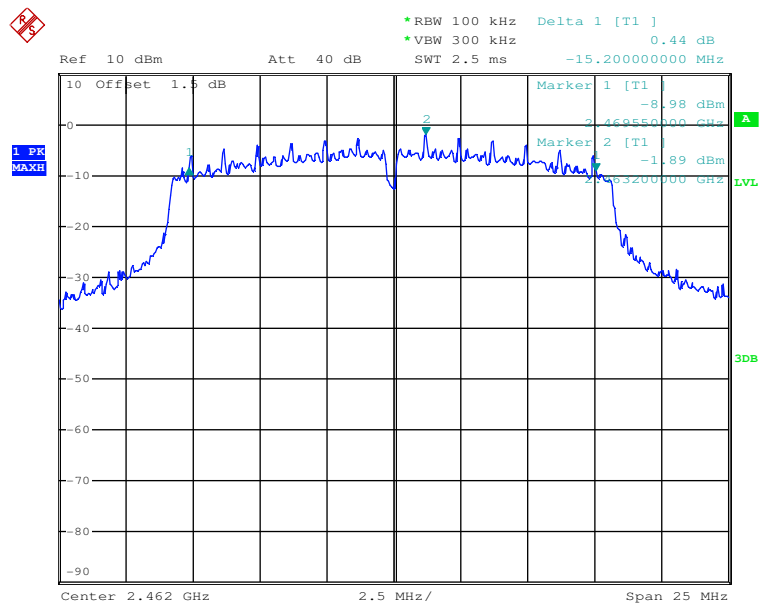

Date: 30.SEP.2016 10:22:24

Maximum Conducted (Average) Output power

802.11B TX frequency: 2412MHz

```
                                        * RBW 300 kHz      Marker 1 [T1 ]
                                        * VBW 1 MHz                0.16 dBm
  Ref  20 dBm              Att  40 dB   SWT 2.5 ms         2.410724000 GHz
     Offset  1.5 dB
  -10
    0                              1
  A
  - 10
1 RM *
MAXH  - 20
  - 30
  - 40
  - 50
  - 60                                                                    LVL
  - 70
                                                                         3DB
  Center 2.412 GHz           2.2 MHz/              Span 22 MHz

  Tx Channel
  Bandwidth           10 MHz      Power              11.63 dBm
```

Date: 29.SEP.2016 16:17:19

802.11B TX frequency: 2437MHz

```
                                        * RBW 300 kHz      Marker 1 [T1 ]
                                        * VBW 1 MHz                1.36 dBm
  Ref  20 dBm              Att  40 dB   SWT 2.5 ms         2.435724000 GHz
     Offset  1.5 dB
  -10
    0                           1
  A
  - 10
1 RM *
MAXH  - 20
  - 30
  - 40
  - 50
  - 60                                                                    LVL
  - 70
                                                                         3DB
  Center 2.437 GHz           2.2 MHz/              Span 22 MHz

  Tx Channel
  Bandwidth           10 MHz      Power              12.94 dBm
```
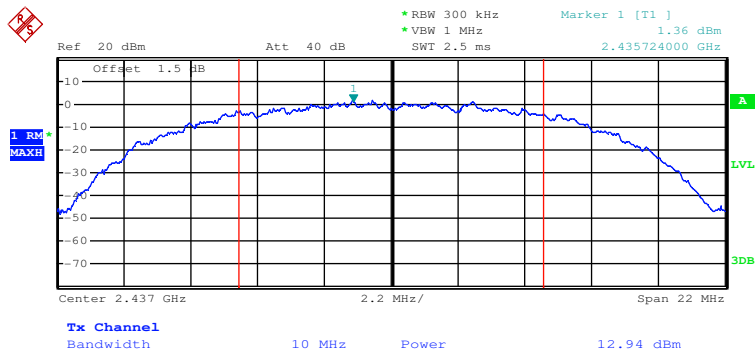
Date: 29.SEP.2016 16:13:56

802.11B TX frequency: 2462MHz

Date: 29.SEP.2016   16:15:20

802.11G TX frequency: 2412MHz

Date: 29.SEP.2016   19:33:03
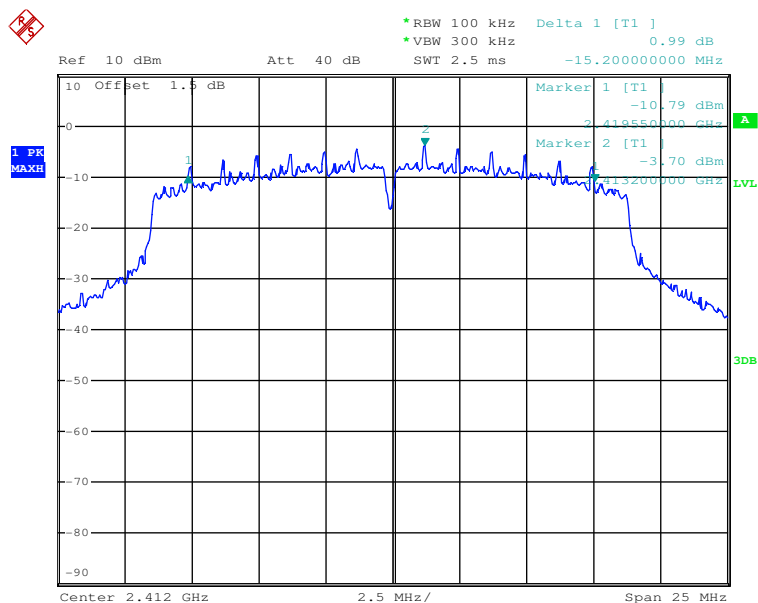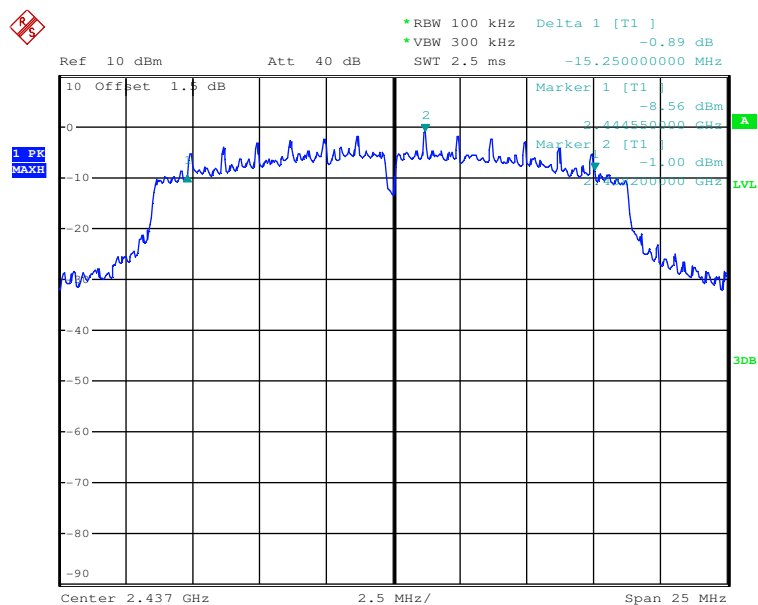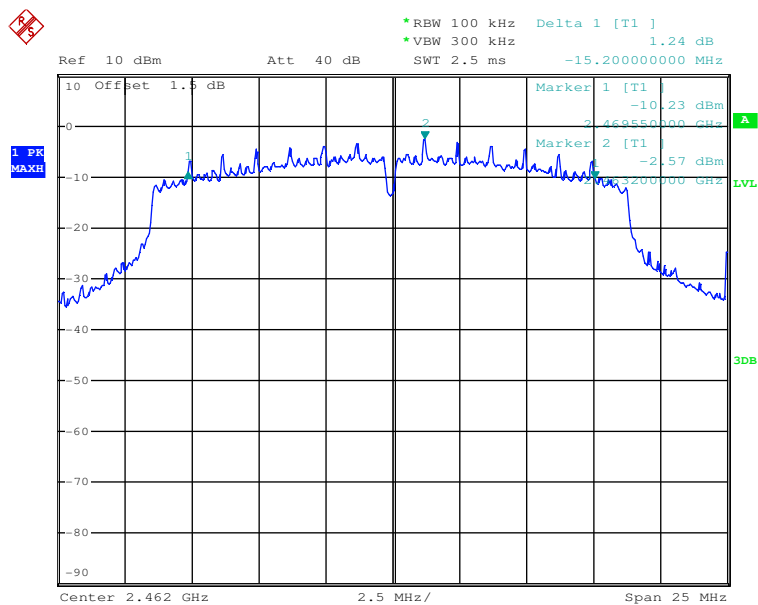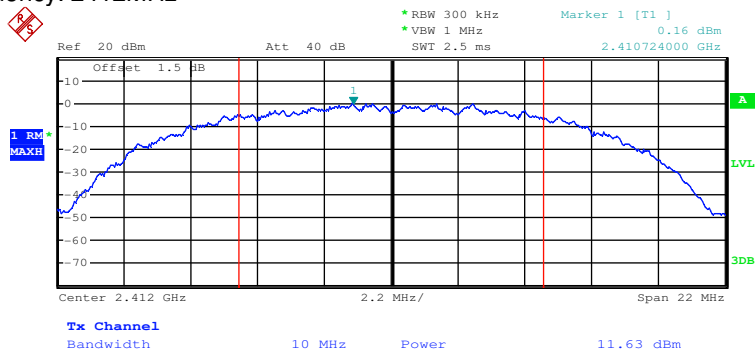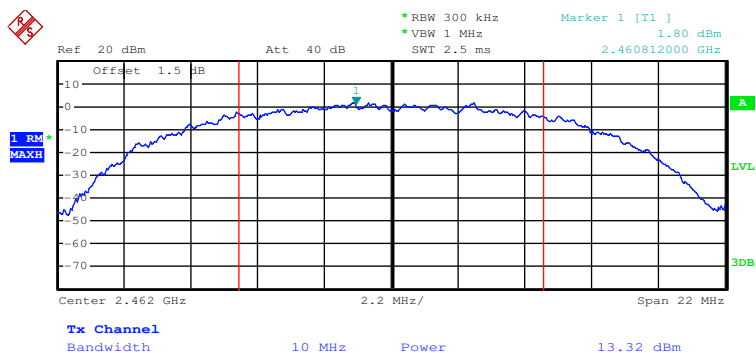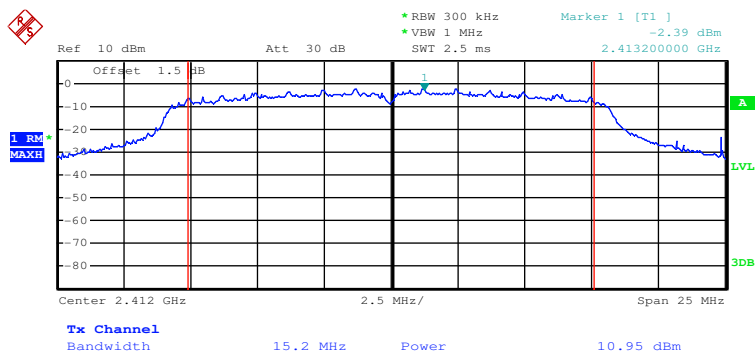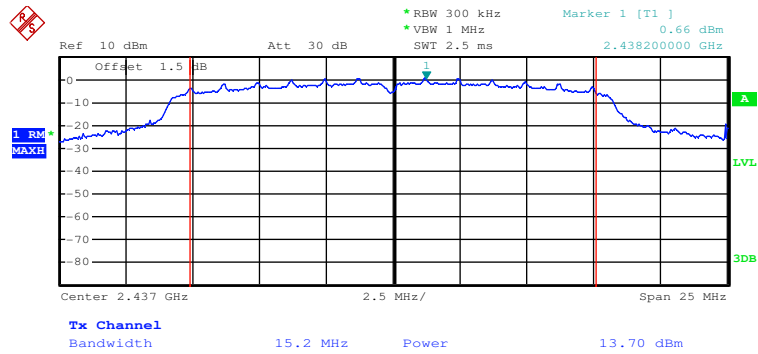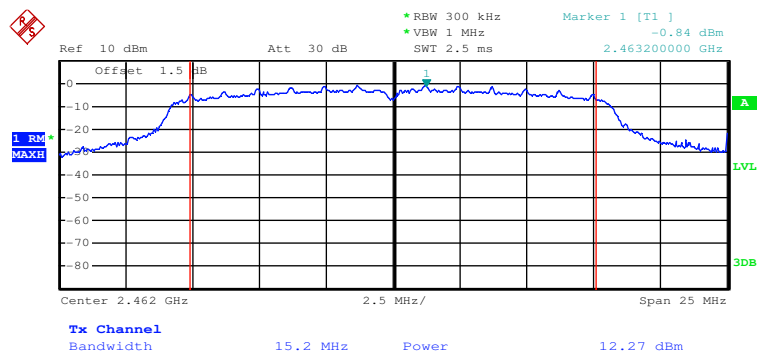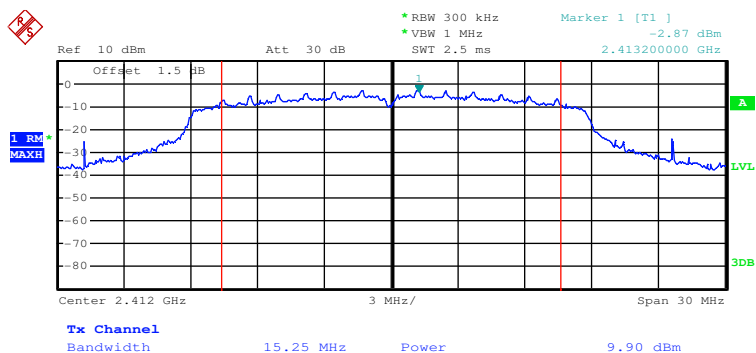
802.11G TX frequency: 2437MHz


```
                                          *RBW 300 kHz      Marker 1 [T1 ]
                                          *VBW 1 MHz                 0.66 dBm
  Ref  10 dBm            Att  30 dB       SWT 2.5 ms        2.438200000 GHz
       Offset  1.5 dB
     0                              1                                        A
    10
    20
    30
    40                                                                     LVL
    50
    60
    70
    80                                                                     3DB
  Center 2.437 GHz              2.5 MHz/              Span 25 MHz
```

Tx Channel
Bandwidth   15.2 MHz   Power   13.70 dBm

Date: 29.SEP.2016 19:24:08

802.11G TX frequency: 2462MHz


```
                                          *RBW 300 kHz      Marker 1 [T1 ]
                                          *VBW 1 MHz                -0.84 dBm
  Ref  10 dBm            Att  30 dB       SWT 2.5 ms        2.463200000 GHz
       Offset  1.5 dB
     0                              1                                        A
    10
    20
    40                                                                     LVL
    50
    60
    70
    80                                                                     3DB
  Center 2.462 GHz              2.5 MHz/              Span 25 MHz
```

Tx Channel
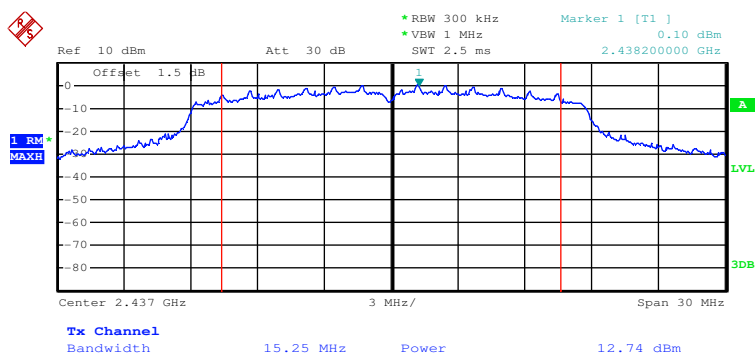Bandwidth   15.2 MHz   Power   12.27 dBm

Date: 29.SEP.2016 19:25:47

802.11N TX frequency: 2412MHz

Date: 30.SEP.2016 10:32:34

802.11N TX frequency: 2437MHz

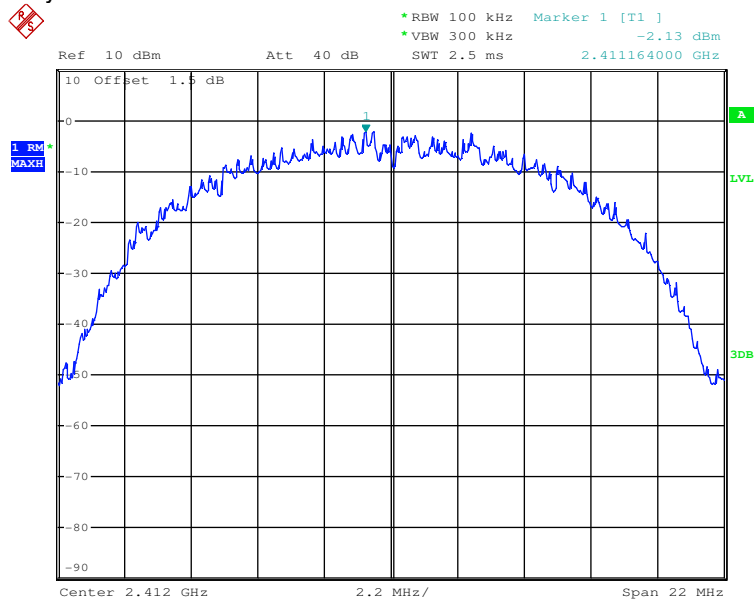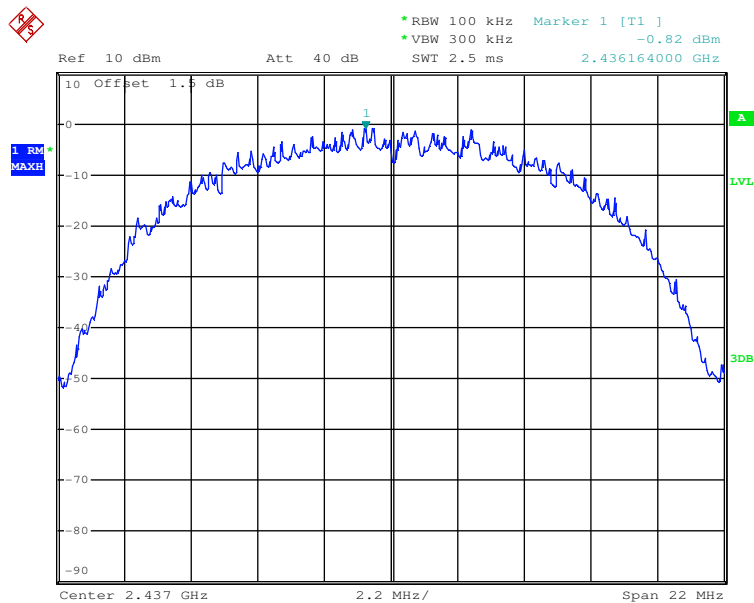
Date: 30.SEP.2016 10:38:50

802.11N TX frequency: 2462MHz

Date: 30.SEP.2016 10:29:41
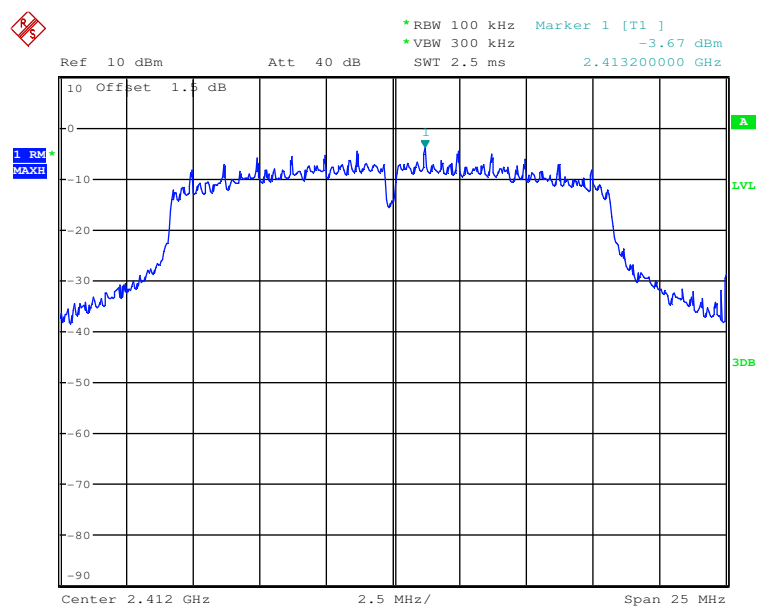
Power Spectral Density

802.11B TX frequency: 2412MHz


```
*RBW 100 kHz   Marker 1 [T1 ]
*VBW 300 kHz              -2.13 dBm
Ref  10 dBm        Att  40 dB   SWT 2.5 ms      2.411164000 GHz
10 Offset  1.5 dB

Center 2.412 GHz          2.2 MHz/          Span 22 MHz
```

Date: 29.SEP.2016 16:19:01

802.11B TX frequency: 2437MHz


```
*RBW 100 kHz   Marker 1 [T1 ]
*VBW 300 kHz              -0.82 dBm
Ref  10 dBm        Att  40 dB   SWT 2.5 ms      2.436164000 GHz
10 Offset  1.5 dB

Center 2.437 GHz          2.2 MHz/          Span 22 MHz
```

Date: 29.SEP.2016 16:20:59

802.11B TX frequency: 2462MHz


```
                                        *RBW 100 kHz   Marker 1 [T1 ]
                                        *VBW 300 kHz              -0.53 dBm
        Ref  10 dBm          Att  40 dB  SWT 2.5 ms      2.461120000 GHz
        10 Offset  1.5 dB                                              A
  1 RM *                                                              LVL
  MAXH
                                                                      3DB
        Center 2.462 GHz           2.2 MHz/          Span 22 MHz
```
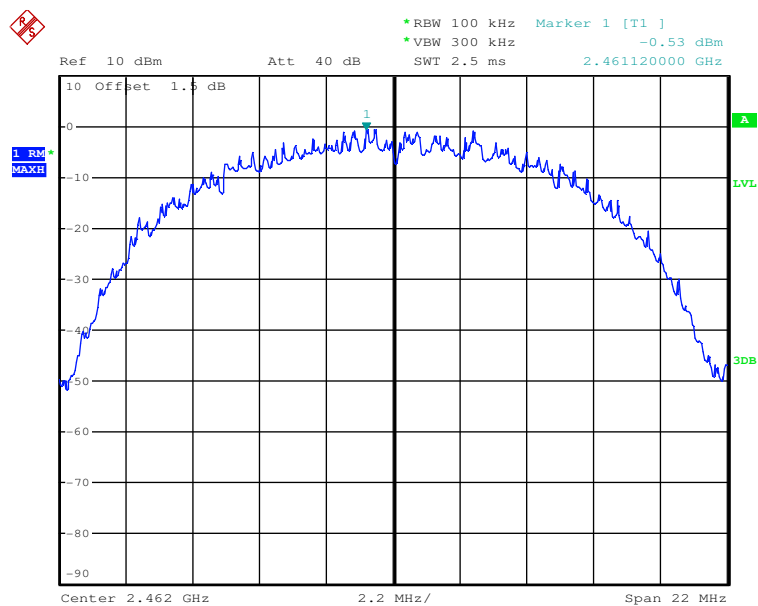
Date: 29.SEP.2016 16:21:42

802.11G TX frequency: 2412MHz


```
                                        *RBW 100 kHz   Marker 1 [T1 ]
                                        *VBW 300 kHz              -3.67 dBm
        Ref  10 dBm          Att  40 dB  SWT 2.5 ms      2.413200000 GHz
        10 Offset  1.5 dB                                              A
  1 RM *                                                              LVL
  MAXH
                                                                      3DB
        Center 2.412 GHz           2.5 MHz/          Span 25 MHz
```

Date: 30.SEP.2016 09:13:52

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802.11G TX frequency: 2437MHz


```
                              *RBW 100 kHz   Marker 1 [T1 ]
                              *VBW 300 kHz            -0.82 dBm
Ref   10 dBm      Att  40 dB   SWT 2.5 ms     2.438200000 GHz
10  Offset  1.5 dB
                                                              A
 0
1 RM *
 MAXH
-10                                                          LVL
-20
-40
-50                                                         3DB
-60
-70
-80
-90
Center 2.437 GHz        2.5 MHz/            Span 25 MHz
```
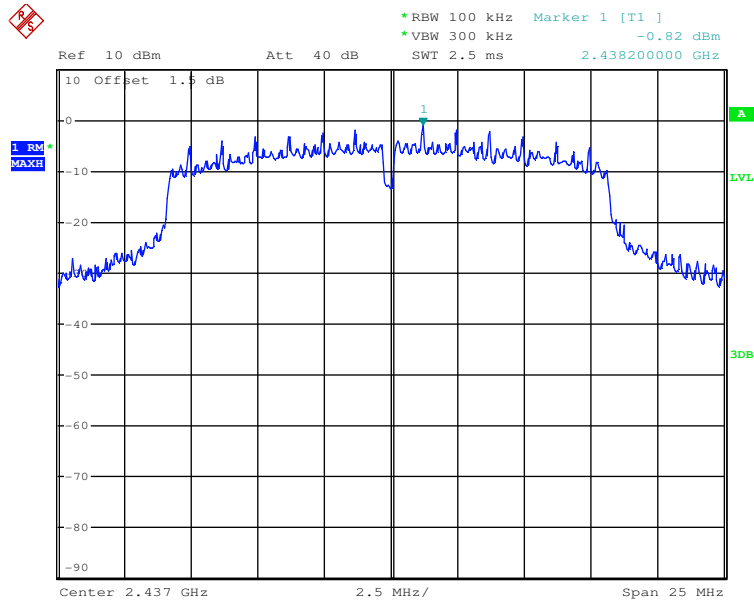
Date: 30.SEP.2016 09:14:55

802.11G TX frequency: 2462MHz


```
                              *RBW 100 kHz   Marker 1 [T1 ]
                              *VBW 300 kHz            -2.29 dBm
Ref   10 dBm      Att  40 dB   SWT 2.5 ms     2.463200000 GHz
10  Offset  1.5 dB
                                                              A
 0
1 RM *
 MAXH
-10                                                          LVL
-20
-30
-40
-50                                                         3DB
-60
-70
-80
-90
Center 2.462 GHz        2.5 MHz/            Span 25 MHz
```
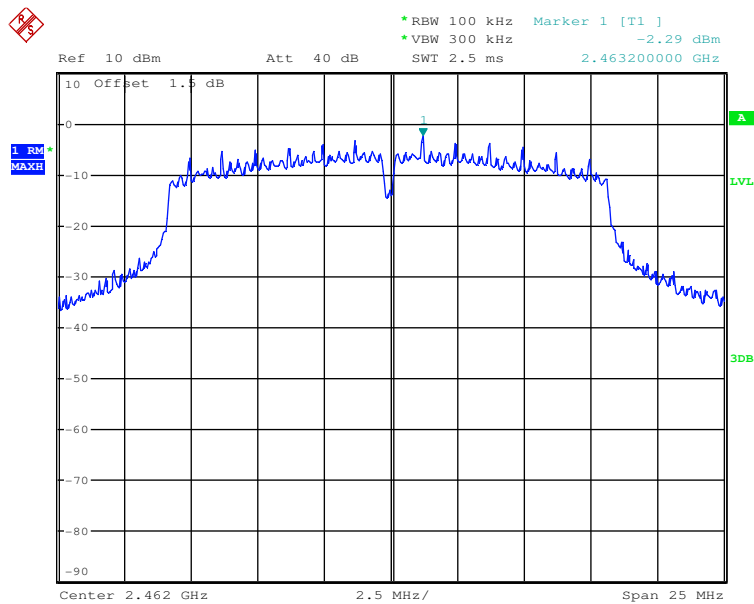
Date: 30.SEP.2016 09:16:17

802.11N TX frequency: 2412MHz
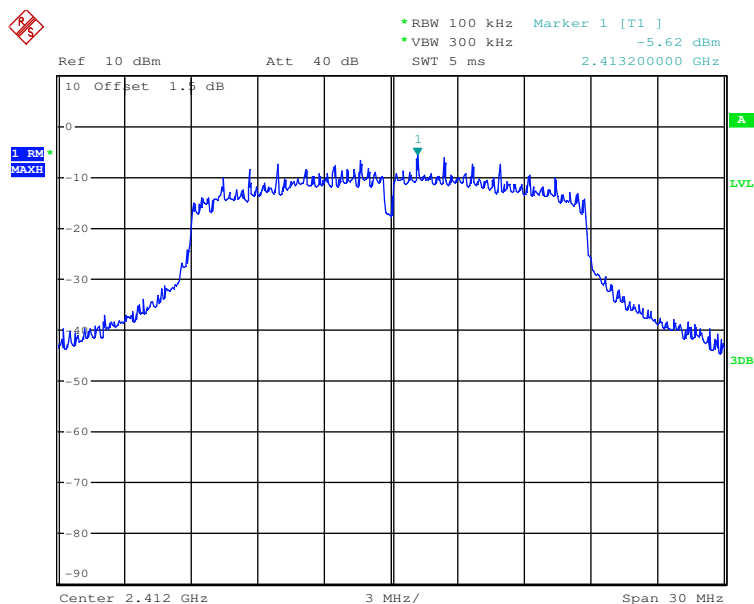
Date: 30.SEP.2016 10:34:04

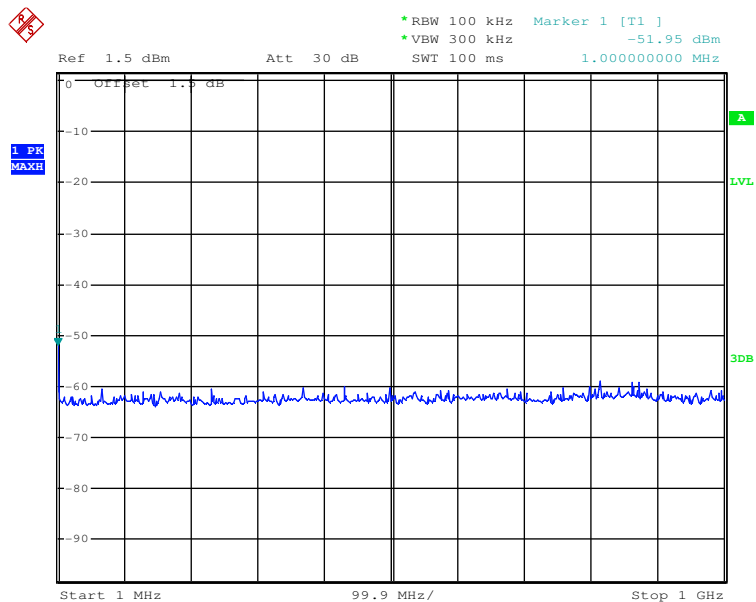802.11N TX frequency: 2437MHz
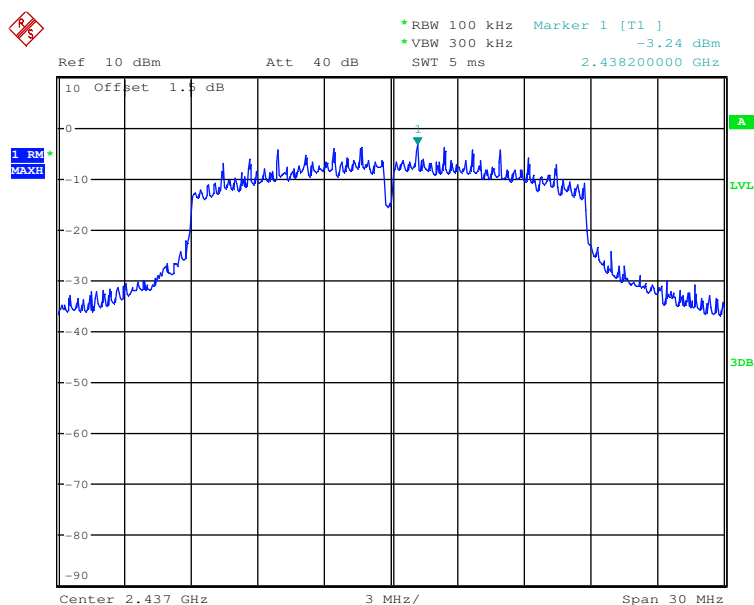
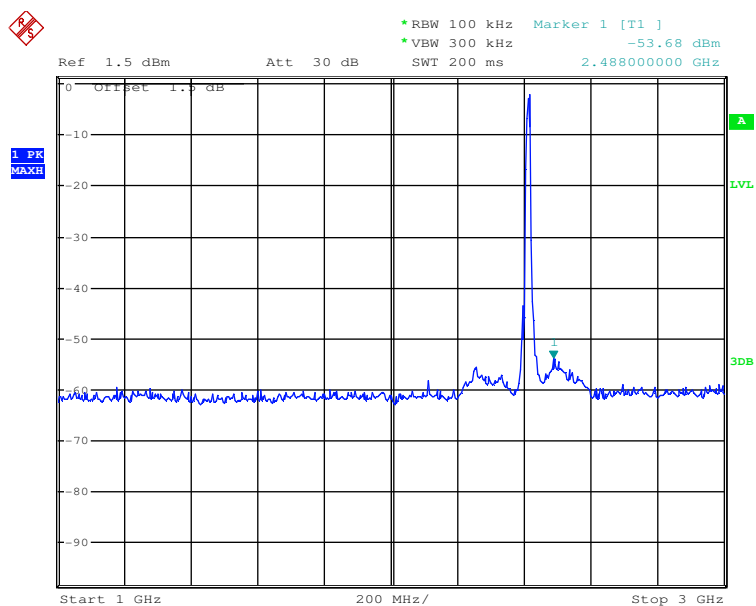Date: 30.SEP.2016 10:35:08

802.11N TX frequency: 2462MHz
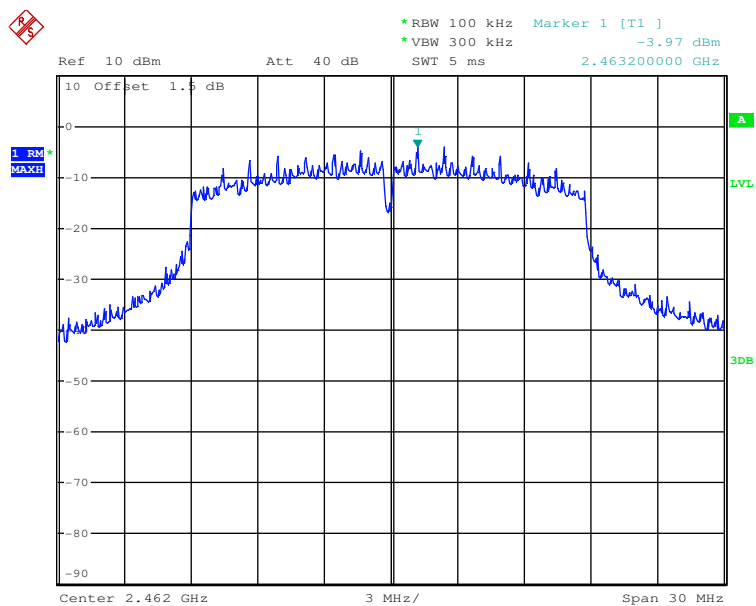
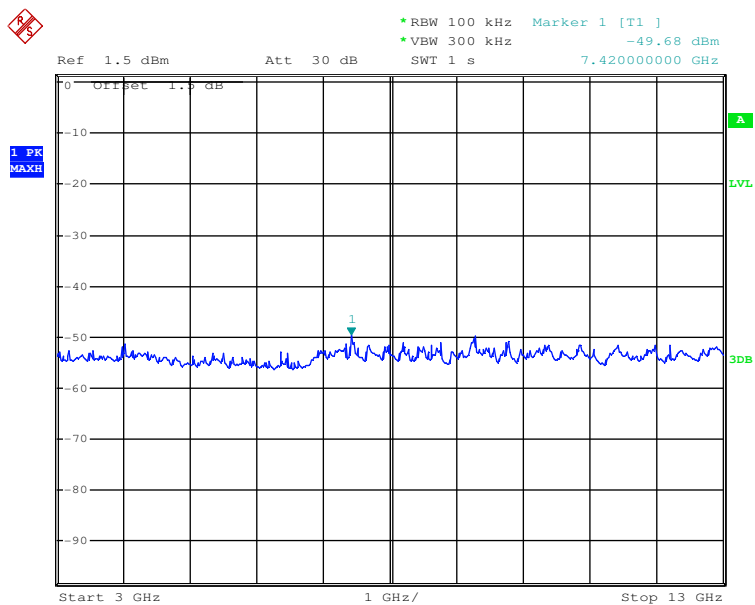Date: 30.SEP.2016 10:39:58

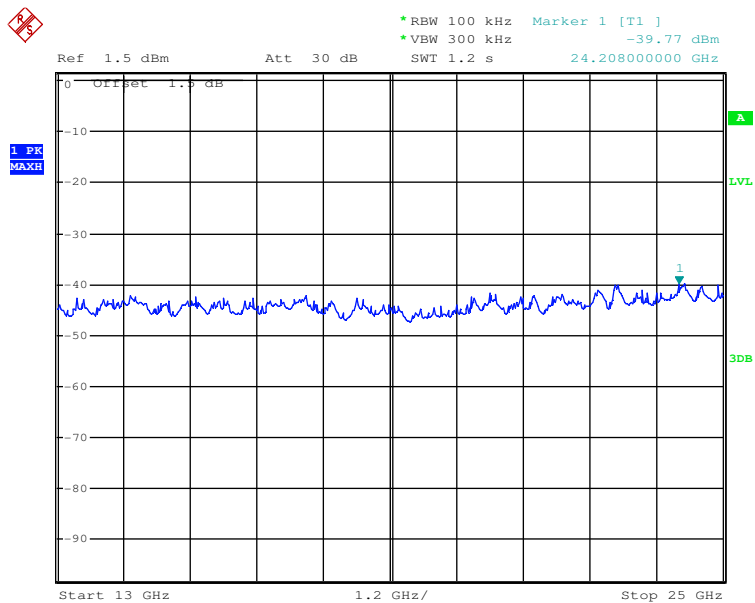## Spurious Conducted Emissions

802.11B TX frequency: 2412MHz

Date: 29.SEP.2016 18:16:56

Date: 29.SEP.2016 18:16:11

TÜVRheinland®

```
              *RBW 100 kHz   Marker 1 [T1 ]
              *VBW 300 kHz          -49.68 dBm
Ref  1.5 dBm        Att  30 dB   SWT 1 s        7.420000000 GHz
```

Date: 29.SEP.2016 18:17:50

```
              *RBW 100 kHz   Marker 1 [T1 ]
              *VBW 300 kHz          -39.77 dBm
Ref  1.5 dBm        Att  30 dB   SWT 1.2 s      24.208000000 GHz
```

Date: 29.SEP.2016 18:18:37
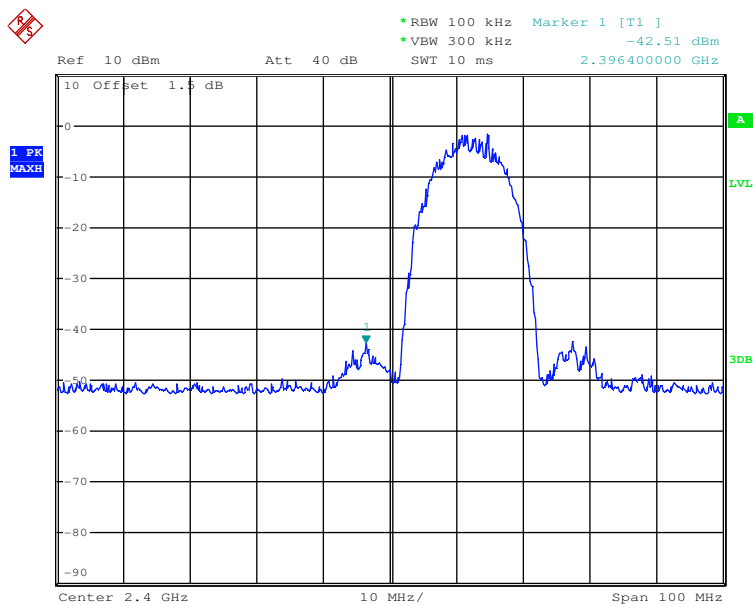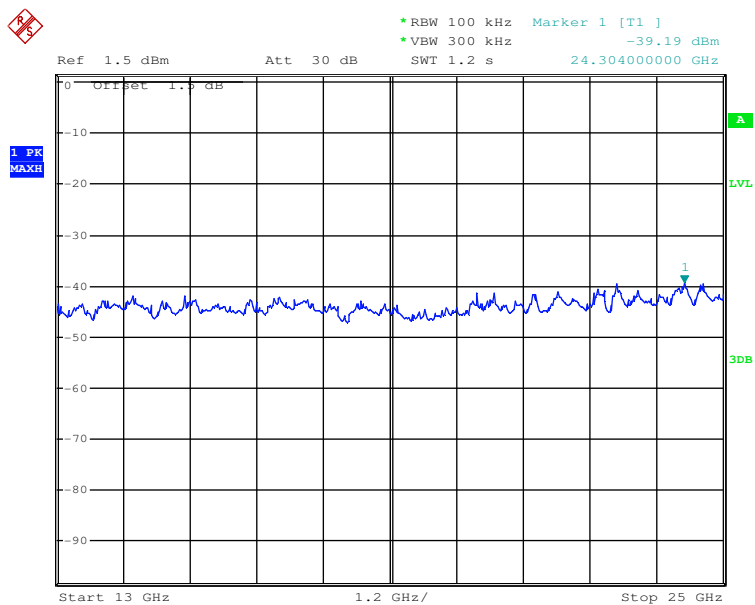
Date: 29.SEP.2016 17:36:10

802.11B TX frequency: 2437MHz
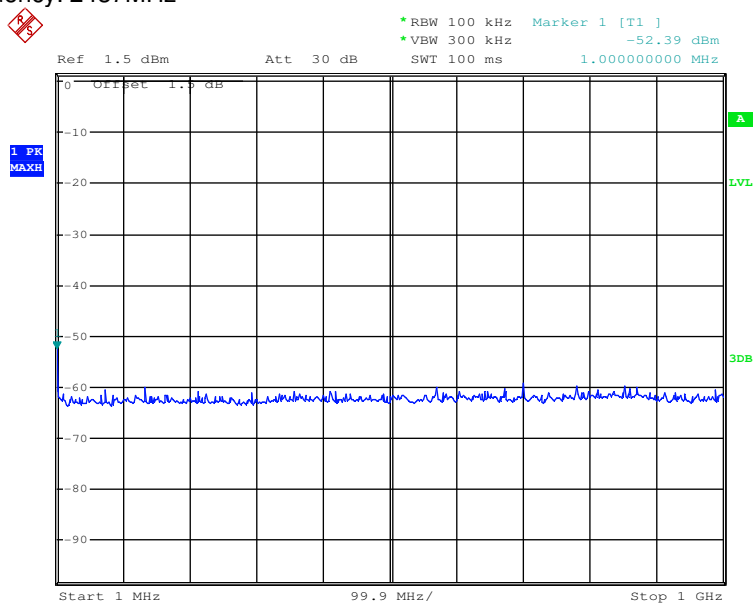
Date: 29.SEP.2016 17:56:14
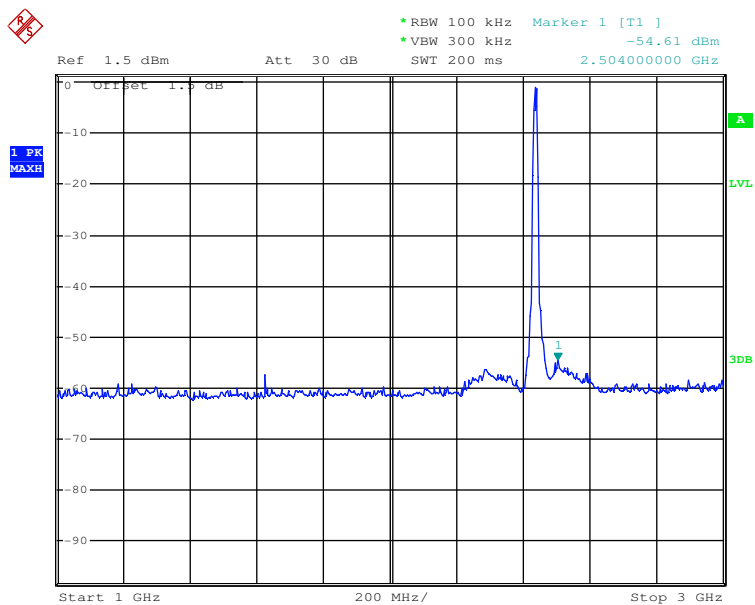
Date: 29.SEP.2016 17:50:13

Date: 29.SEP.2016 17:54:20
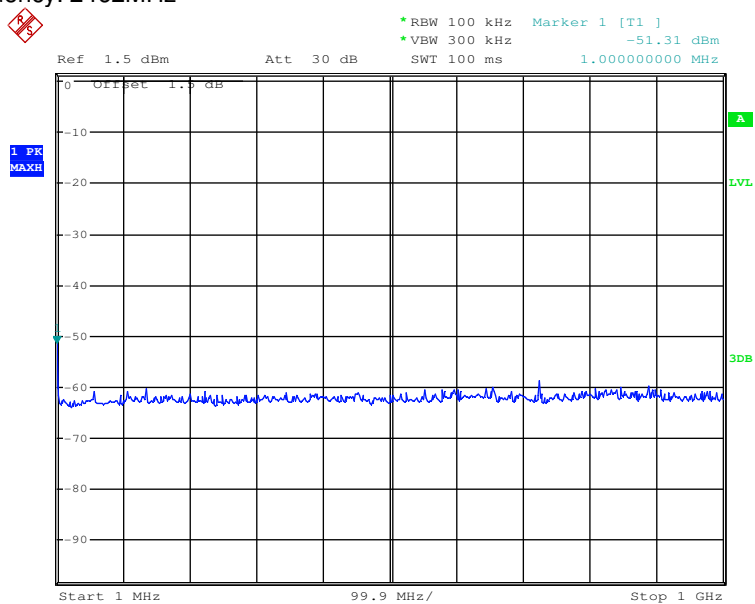

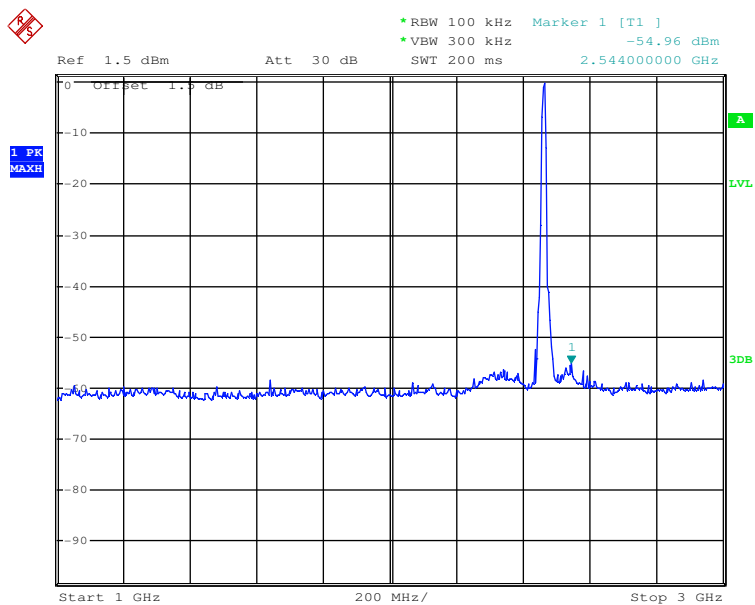**Test Report No.: 14045898 001**   **Appendix 1**

TÜVRheinland®
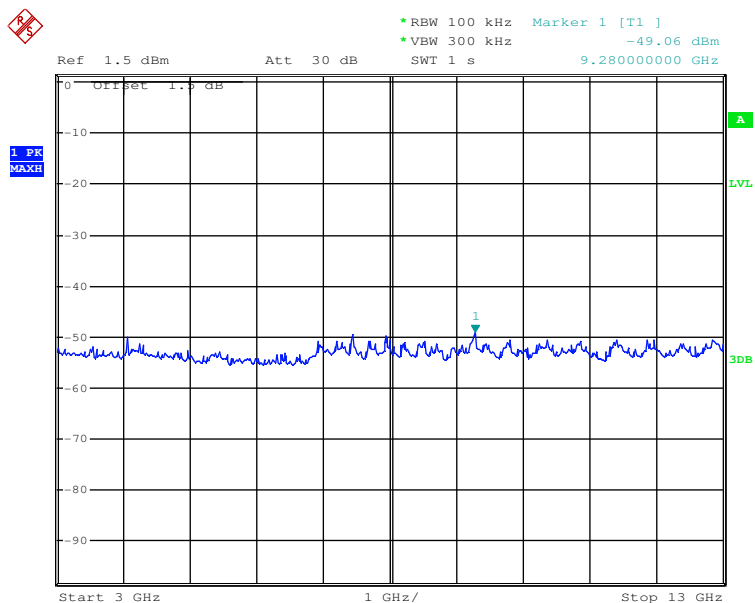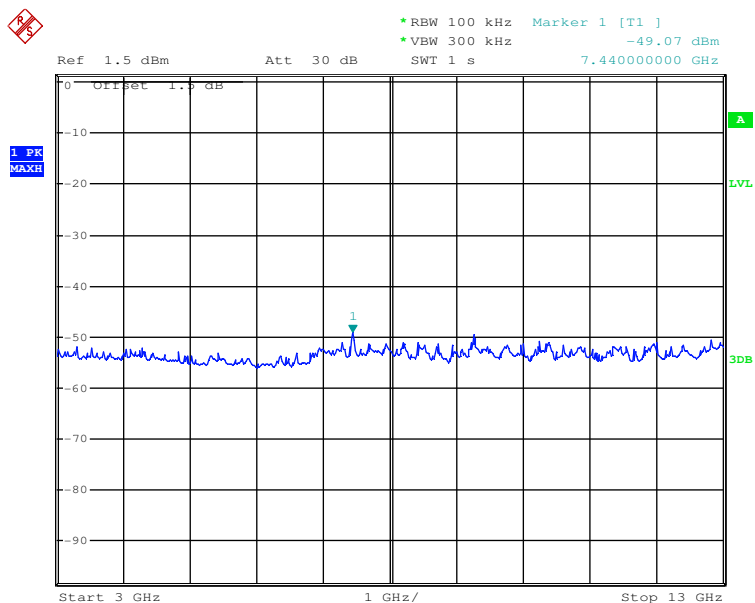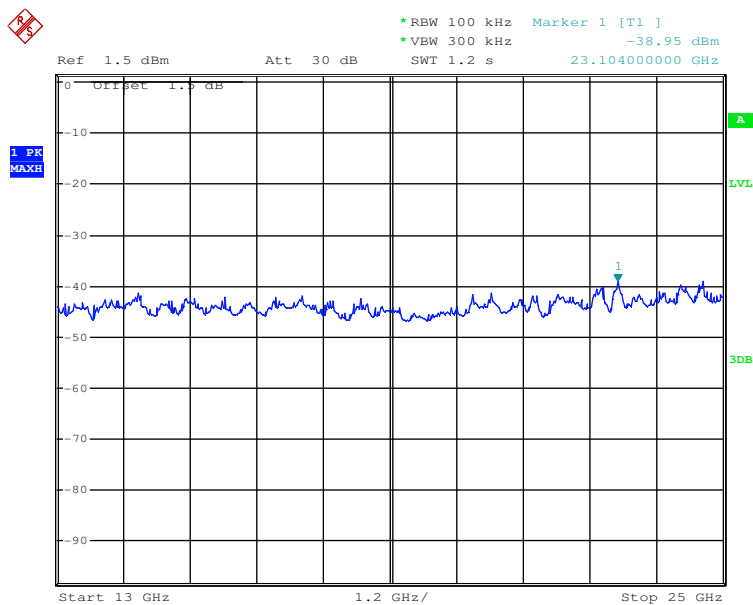

Date: 29.SEP.2016 17:57:23

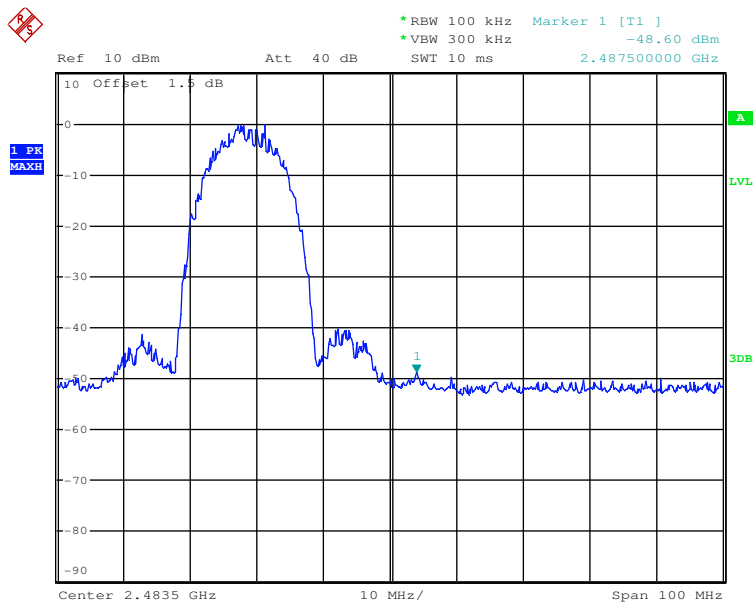802.11B TX frequency: 2462MHz

Date: 29.SEP.2016 18:05:44

Date: 29.SEP.2016 18:04:26

Date: 29.SEP.2016 18:07:19

R&S

```
                              *RBW 100 kHz   Marker 1 [T1 ]
                              *VBW 300 kHz           -38.95 dBm
 Ref  1.5 dBm      Att  30 dB  SWT 1.2 s      23.104000000 GHz
```
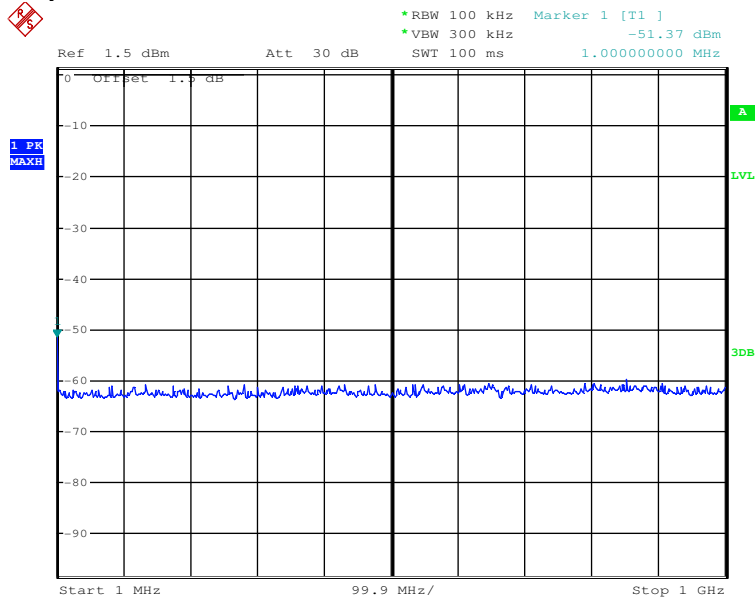
```
 0   Offset  1.5 dB                                          A
-10
                                                            LVL
-20
-30
                                              1
-40                                          ▼
-50
                                                            3DB
-60
-70
-80
-90
 Start 13 GHz              1.2 GHz/              Stop 25 GHz
```

1 PK
MAXH

Date: 29.SEP.2016 18:08:42

R&S

```
                              *RBW 100 kHz   Marker 1 [T1 ]
                              *VBW 300 kHz           -48.60 dBm
 Ref  10 dBm       Att  40 dB  SWT 10 ms       2.487500000 GHz
```

```
 10  Offset  1.5 dB                                          A
  0
                                                            LVL
-10
-20
-30
-40
                            1
-50                        ▼                                3DB
-60
-70
-80
-90
 Center 2.4835 GHz         10 MHz/              Span 100 MHz
```
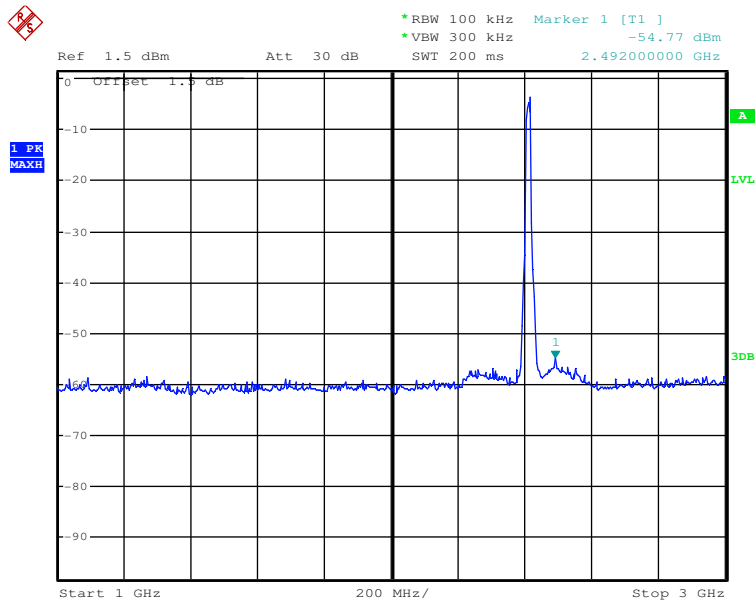
1 PK
MAXH

Date: 29.SEP.2016 18:12:59
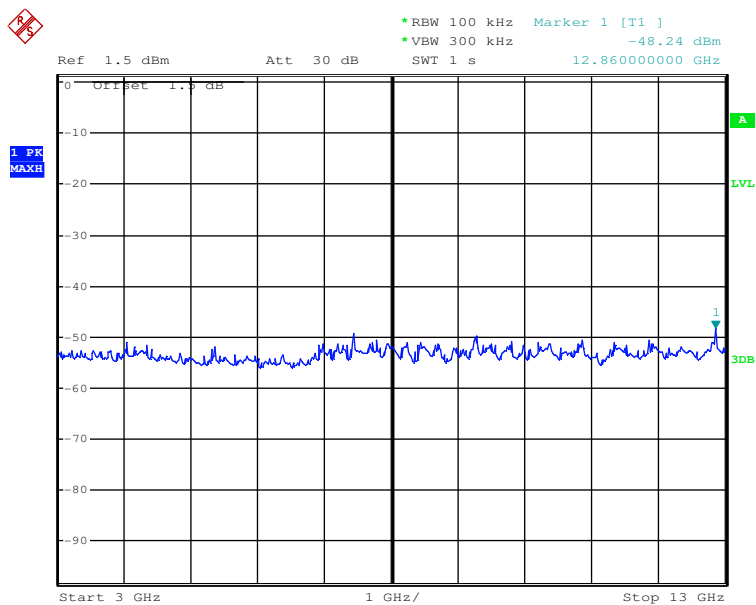
802.11G TX frequency: 2412MHz

Date: 30.SEP.2016 09:43:40
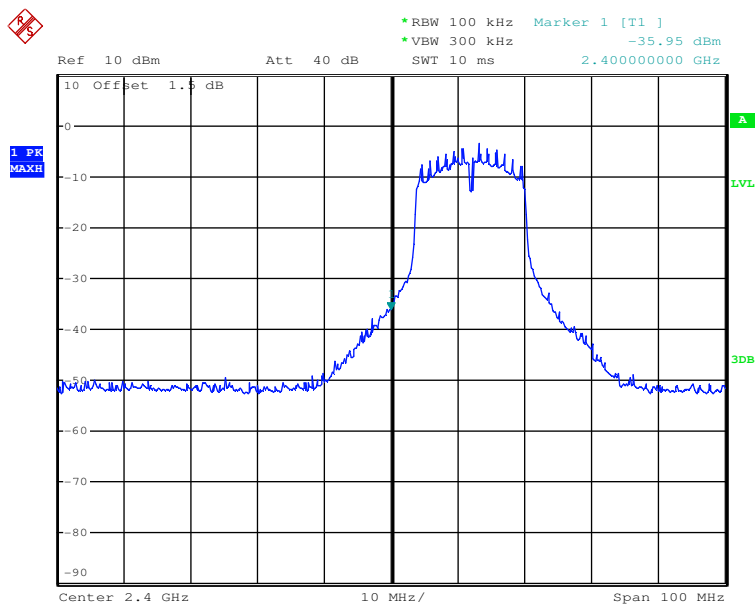

Date: 30.SEP.2016 09:46:12

TÜVRheinland®


```
                                    *RBW 100 kHz   Marker 1 [T1 ]
                                    *VBW 300 kHz           -48.24 dBm
         Ref  1.5 dBm      Att  30 dB    SWT 1 s       12.860000000 GHz
      0   Offset  1.5 dB                                              A

        -10

1 PK    -20                                                          LVL
MAXH
        -30

        -40

        -50                                                      1
                                                                    3DB
        -60

        -70

        -80

        -90

         Start 3 GHz              1 GHz/              Stop 13 GHz
```

Date: 30.SEP.2016 09:47:28


```
                                    *RBW 100 kHz   Marker 1 [T1 ]
                                    *VBW 300 kHz           -39.02 dBm
         Ref  1.5 dBm      Att  30 dB    SWT 1.2 s     24.592000000 GHz
      0   Offset  1.5 dB                                              A

        -10

1 PK    -20                                                          LVL
MAXH
        -30

        -40                                                     1

        -50                                                        3DB

        -60

        -70

        -80

        -90

         Start 13 GHz             1.2 GHz/            Stop 25 GHz
```

Date: 30.SEP.2016 09:50:41

```
                                          *RBW 100 kHz   Marker 1 [T1 ]
                                          *VBW 300 kHz          -35.95 dBm
     Ref  10 dBm          Att  40 dB      SWT 10 ms       2.400000000 GHz
```
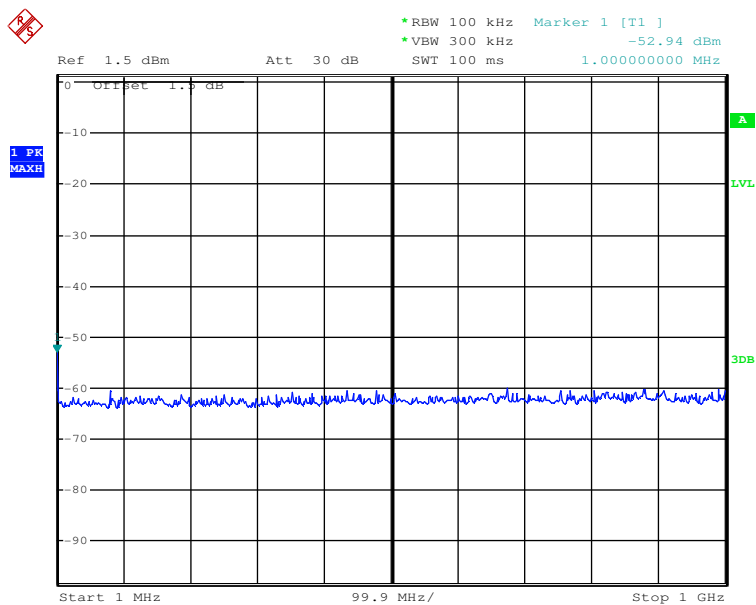
Date: 30.SEP.2016 09:41:29

802.11G TX frequency: 2437MHz


```
                                          *RBW 100 kHz   Marker 1 [T1 ]
                                          *VBW 300 kHz          -39.63 dBm
     Ref  1.5 dBm         Att  30 dB      SWT 1.2 s      24.280000000 GHz
```

Date: 30.SEP.2016 09:58:11

*RBW 100 kHz   Marker 1 [T1]
*VBW 300 kHz   −52.94 dBm
Ref 1.5 dBm   Att 30 dB   SWT 100 ms   1.000000000 MHz

Date: 30.SEP.2016 09:53:51

TÜVRheinland®
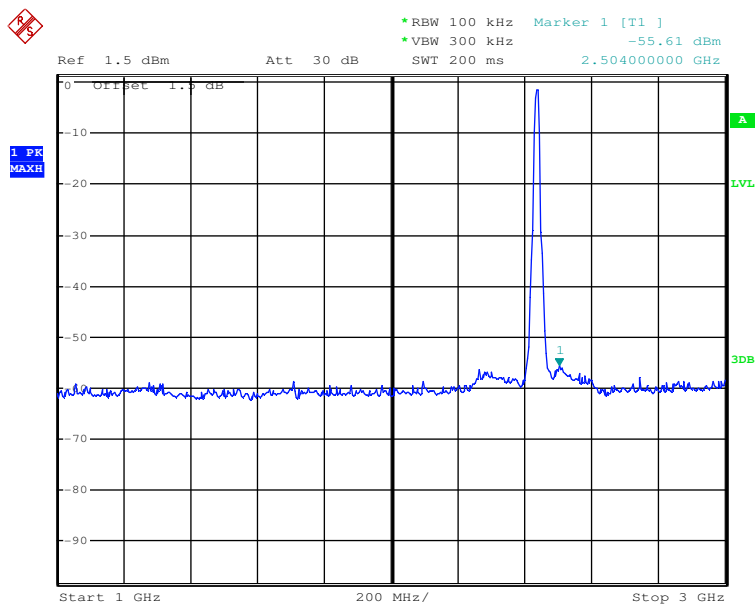
Date: 30.SEP.2016 09:56:15
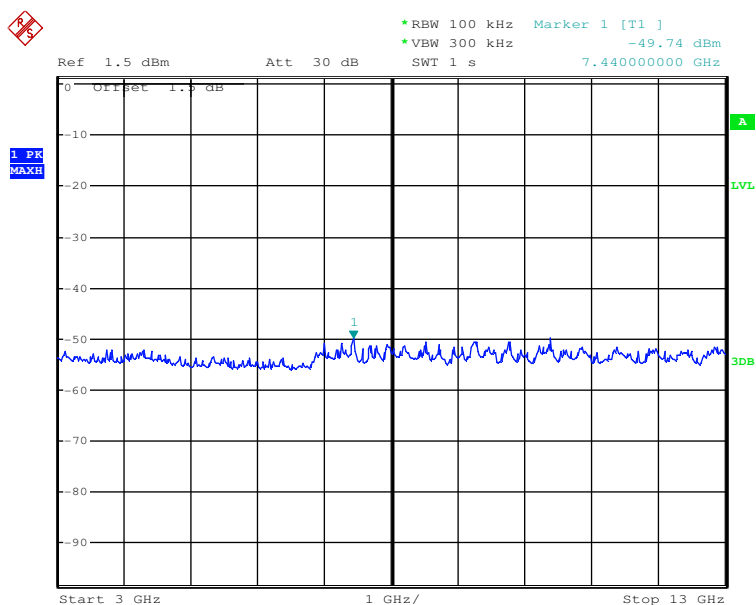
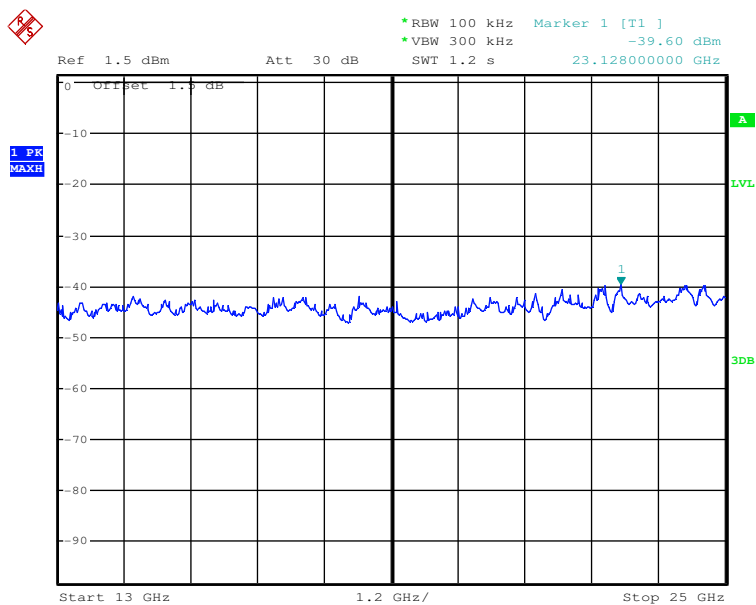
Date: 30.SEP.2016 09:57:02

802.11G TX frequency: 2462MHz


```
                                          *RBW 100 kHz   Marker 1 [T1 ]
                                          *VBW 300 kHz           -51.76 dBm
Ref  1.5 dBm            Att  30 dB   SWT 100 ms       1.000000000 MHz
```

Date: 30.SEP.2016 09:23:04


```
                                          *RBW 100 kHz   Marker 1 [T1 ]
                                          *VBW 300 kHz           -57.51 dBm
Ref  1.5 dBm            Att  30 dB   SWT 200 ms       2.304000000 GHz
```

Date: 30.SEP.2016 09:25:08

Test Report No.: 14045898 001   **Appendix 1**
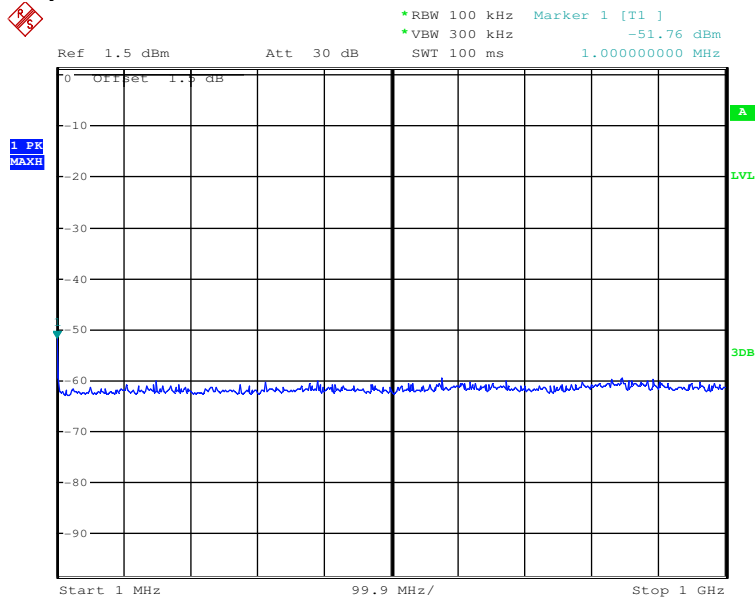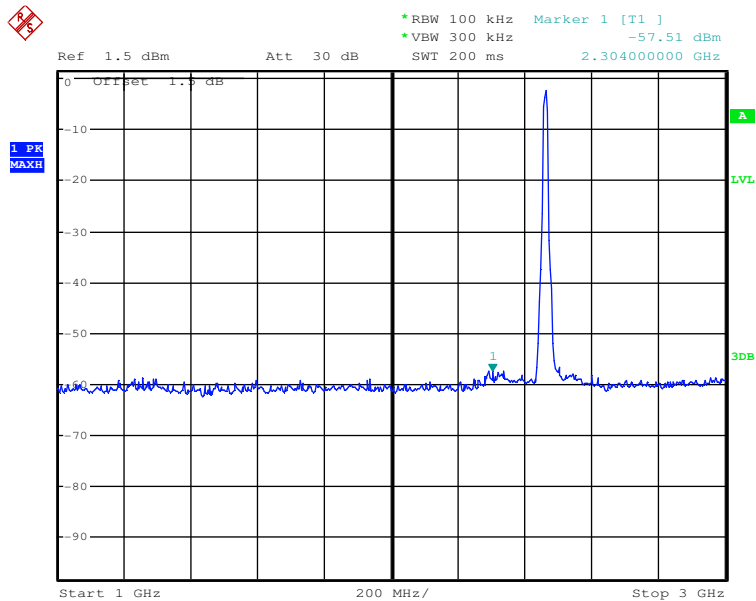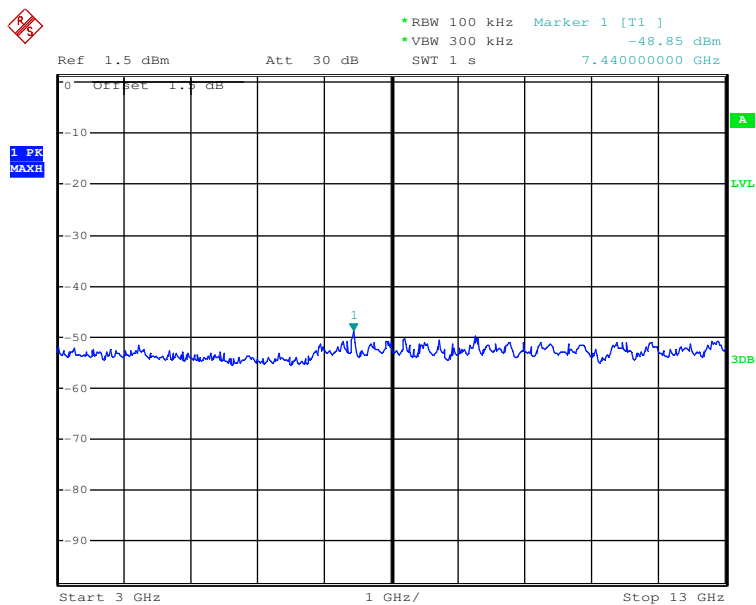
Date: 30.SEP.2016   09:30:07

Date: 30.SEP.2016   09:30:55

TÜVRheinland®

*RBW 100 kHz   Marker 1 [T1]
*VBW 300 kHz   -46.16 dBm
Ref 10 dBm   Att 40 dB   SWT 10 ms   2.484300000 GHz
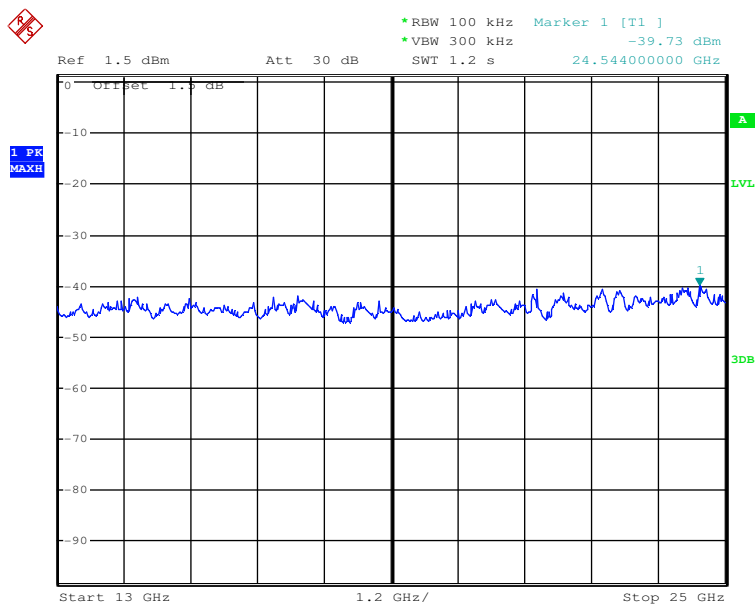
Center 2.4835 GHz   10 MHz/   Span 100 MHz
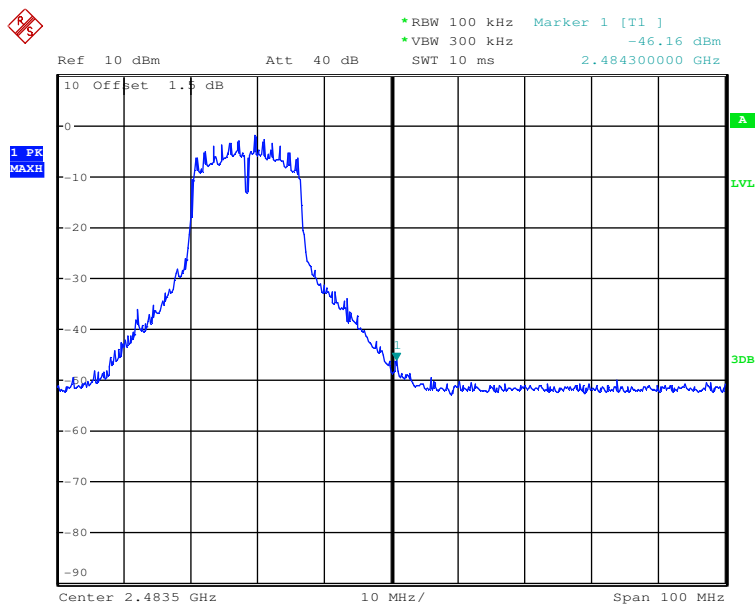
Date: 30.SEP.2016 09:18:39

802.11N TX frequency: 2412MHz

*RBW 100 kHz   Marker 1 [T1]
*VBW 300 kHz   -52.05 dBm
Ref 1.5 dBm   Att 30 dB   SWT 100 ms   1.000000000 MHz

Start 1 MHz   99.9 MHz/   Stop 1 GHz
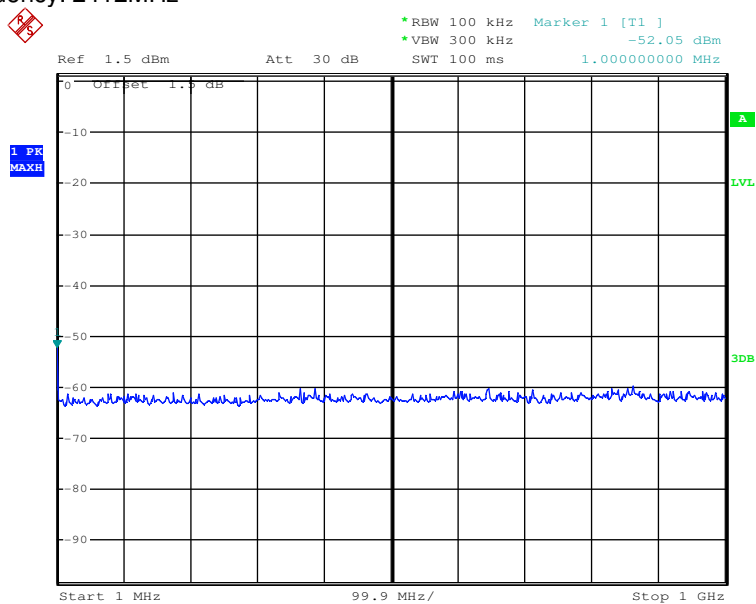
Date: 30.SEP.2016 10:46:34

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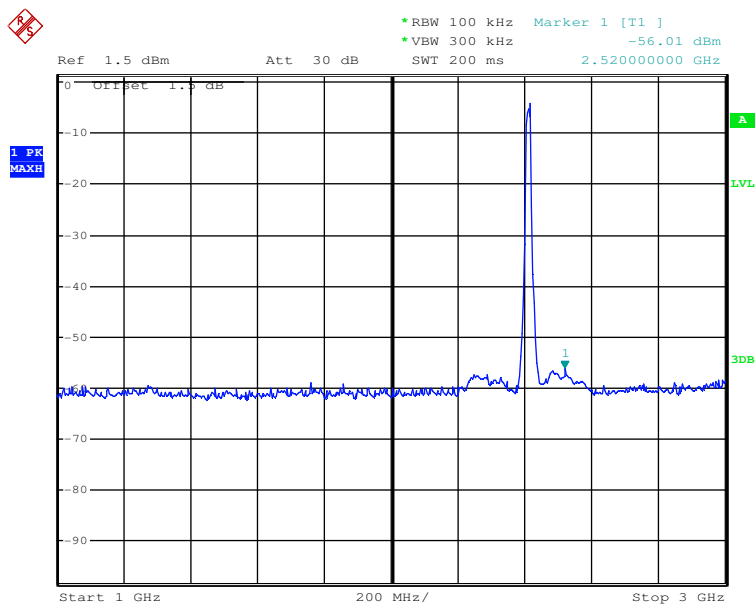
Date: 30.SEP.2016 10:48:04

Date: 30.SEP.2016 10:48:56

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```
                                    *RBW 100 kHz   Marker 1 [T1 ]
                                    *VBW 300 kHz            -39.73 dBm
 Ref   1.5 dBm      Att  30 dB      SWT 1.2 s       24.544000000 GHz
```

Date: 30.SEP.2016 10:49:27


```
                                    *RBW 100 kHz   Marker 1 [T1 ]
                                    *VBW 300 kHz            -35.48 dBm
 Ref   10 dBm       Att  40 dB      SWT 10 ms      2.400000000 GHz
```
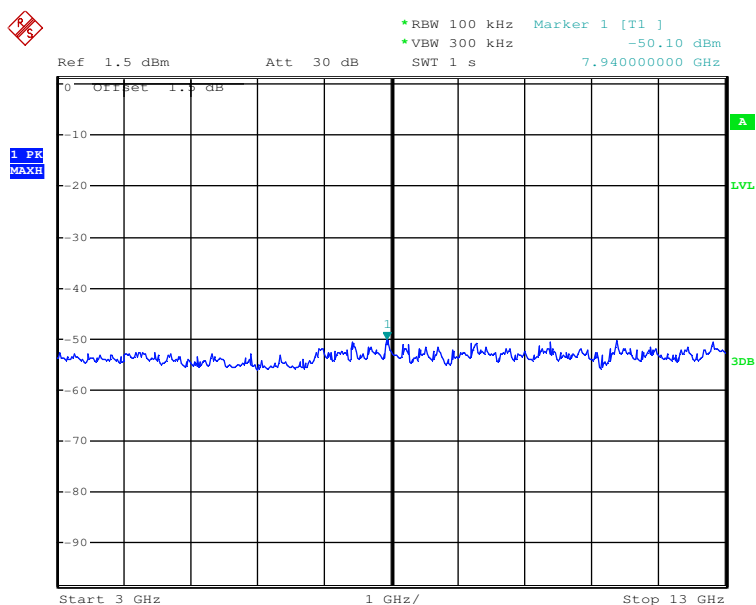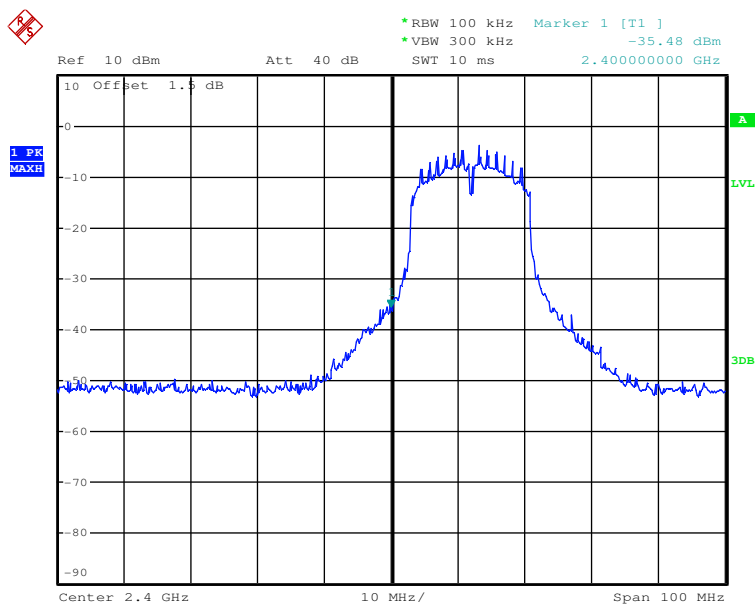
Date: 30.SEP.2016 10:44:10
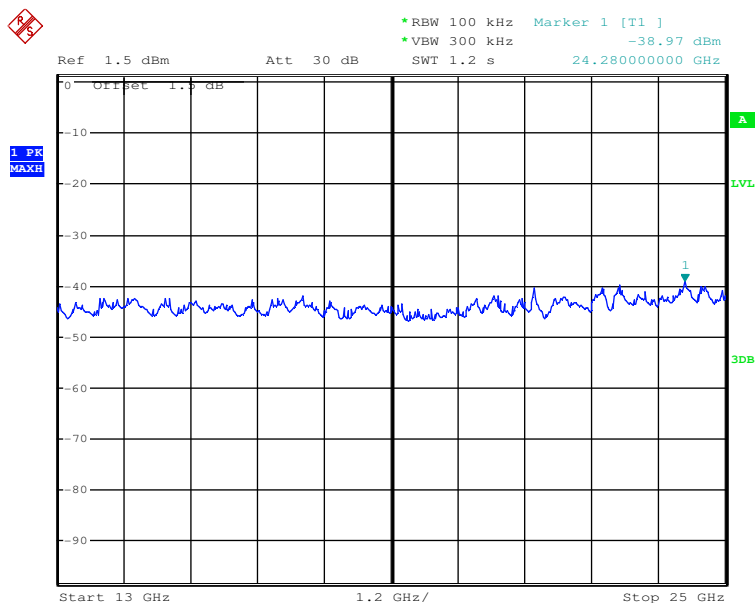
802.11N TX frequency: 2437MHz
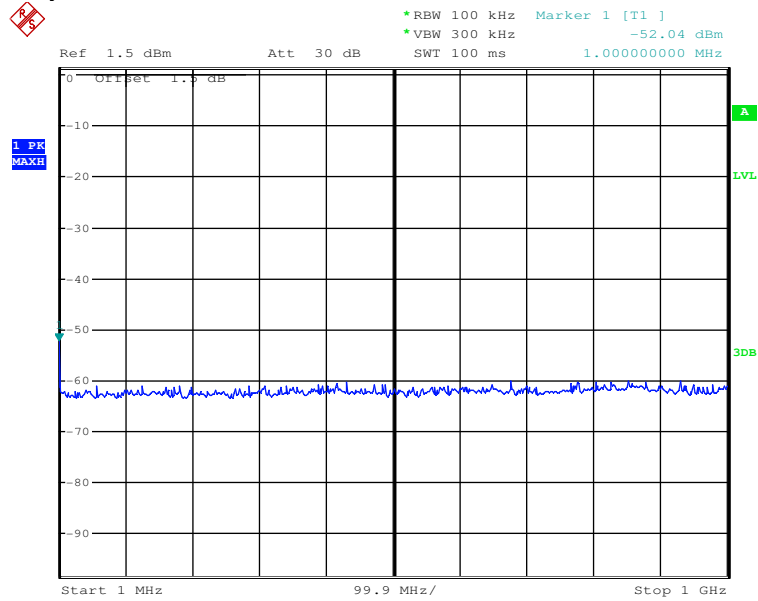
Date: 30.SEP.2016 10:52:05
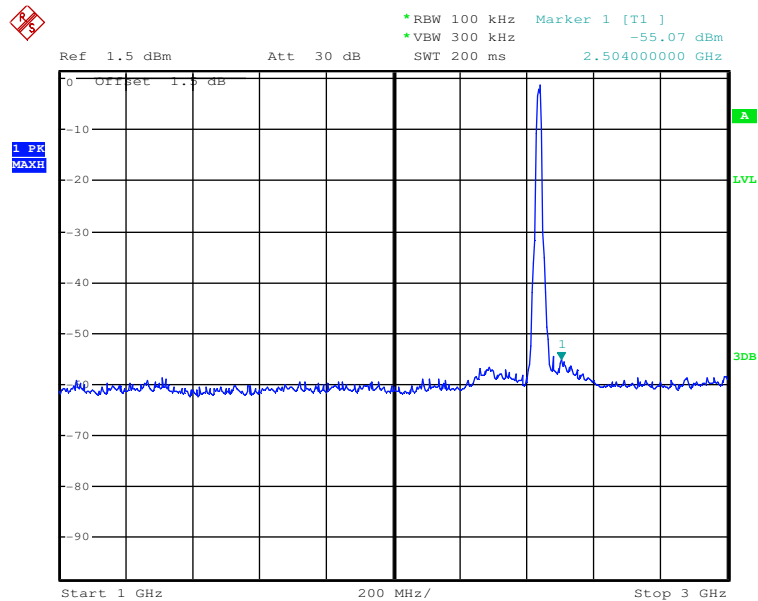
Date: 30.SEP.2016 10:53:36
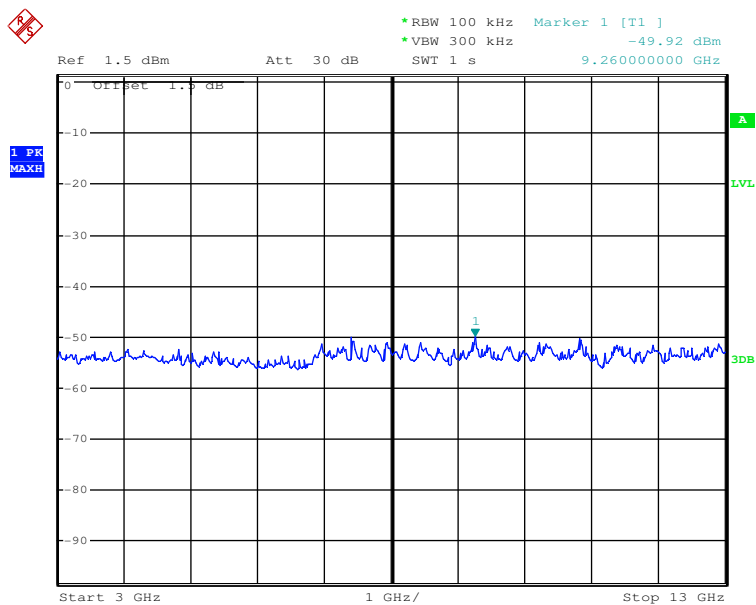
Date: 30.SEP.2016 10:54:23
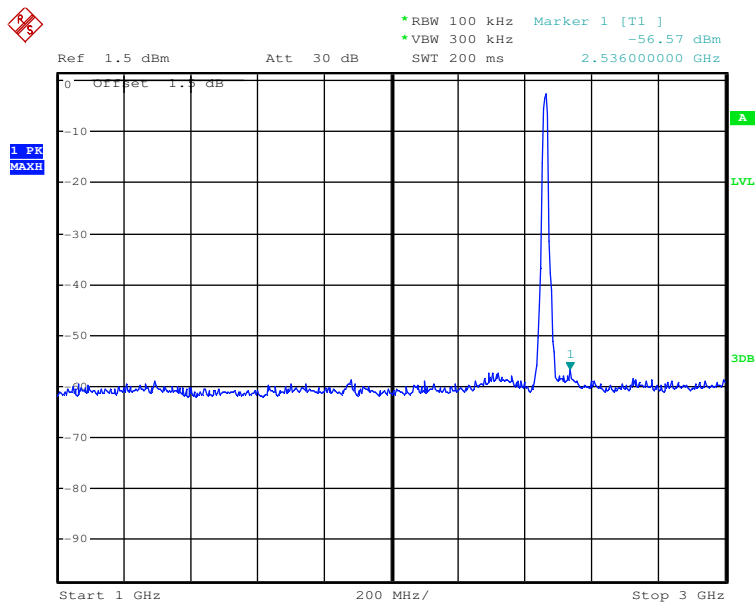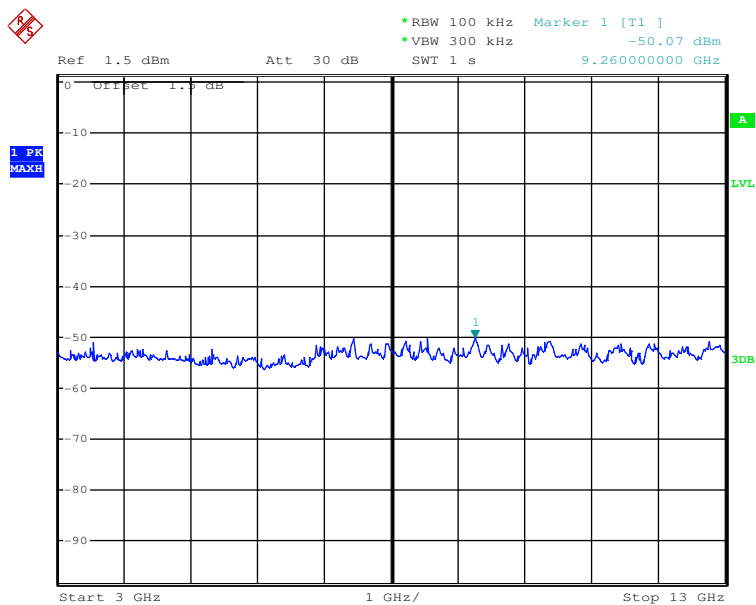

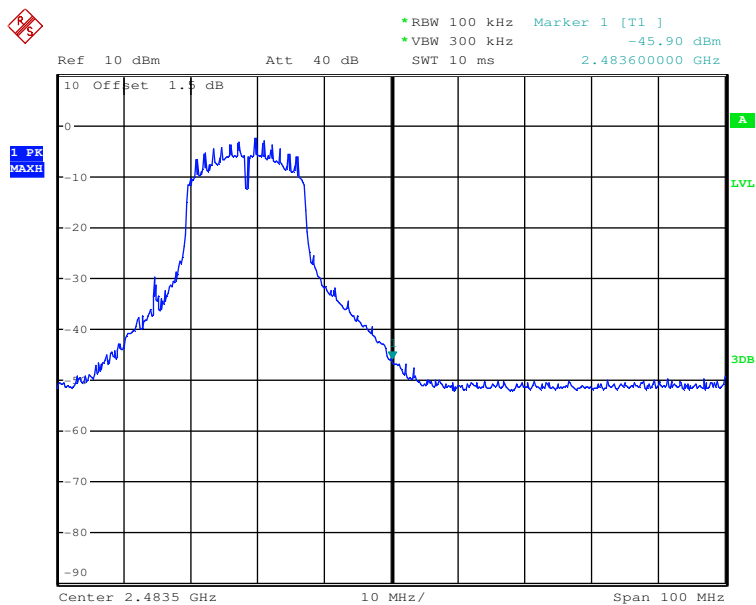Date: 30.SEP.2016 10:55:22

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802.11N TX frequency: 2462MHz
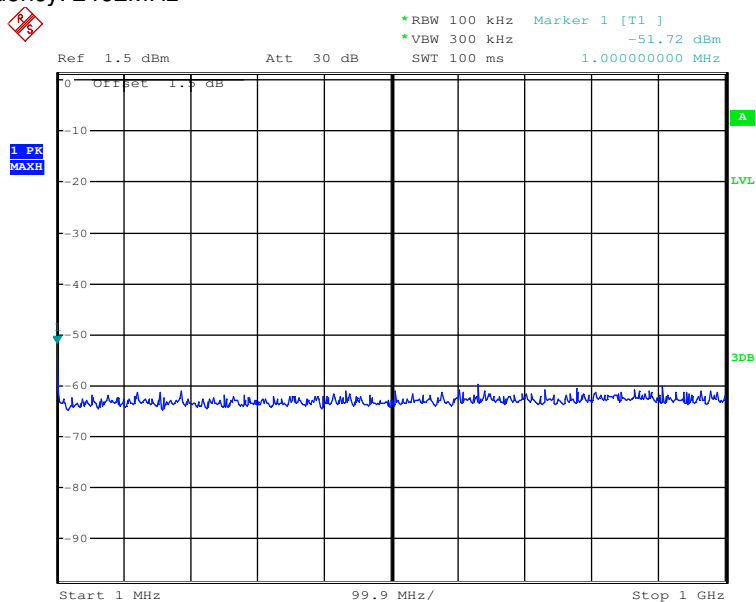
Date: 30.SEP.2016 11:03:05

Date: 30.SEP.2016 11:04:32

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```
                                        *RBW 100 kHz   Marker 1 [T1 ]
                                        *VBW 300 kHz          -50.07 dBm
     Ref  1.5 dBm          Att  30 dB    SWT 1 s         9.260000000 GHz
```

Date: 30.SEP.2016 11:05:27


```
                                        *RBW 100 kHz   Marker 1 [T1 ]
                                        *VBW 300 kHz          -40.26 dBm
     Ref  1.5 dBm          Att  30 dB    SWT 1.2 s       23.080000000 GHz
```

Date: 30.SEP.2016 11:06:01

Test Report No.: 14045898 001   **Appendix 1**

Date: 30.SEP.2016 11:02:34