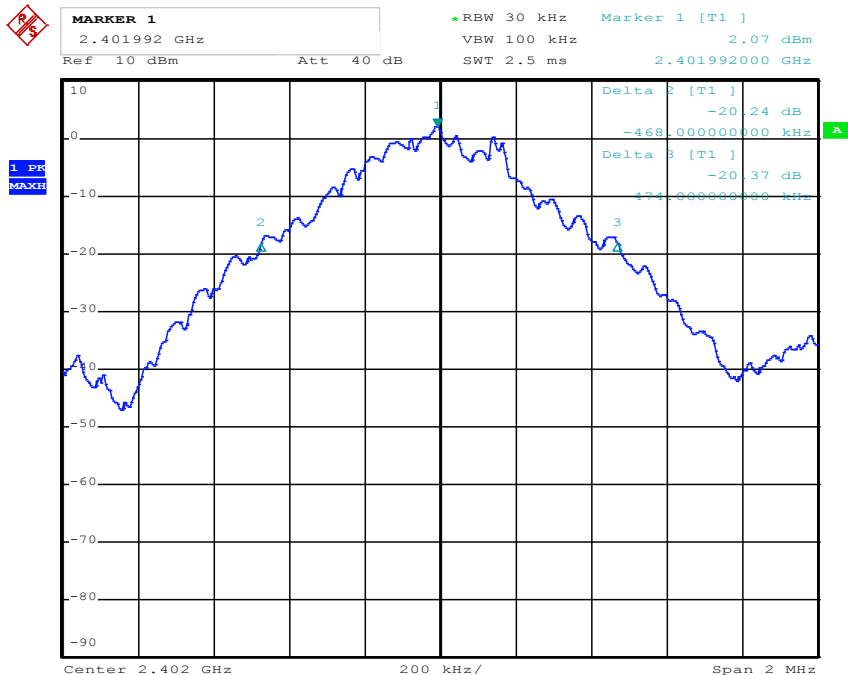# Appendix 1

Test Results

20dB Bandwidth

Modulation: GFSK
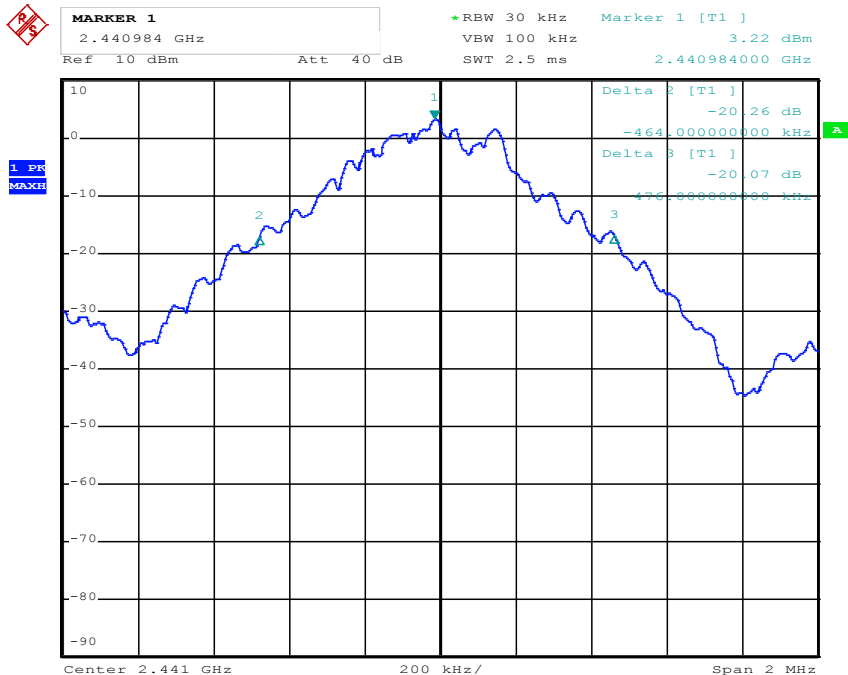Tx frequency: 2402MHz

Date: 15.JAN.2016 09:18:18
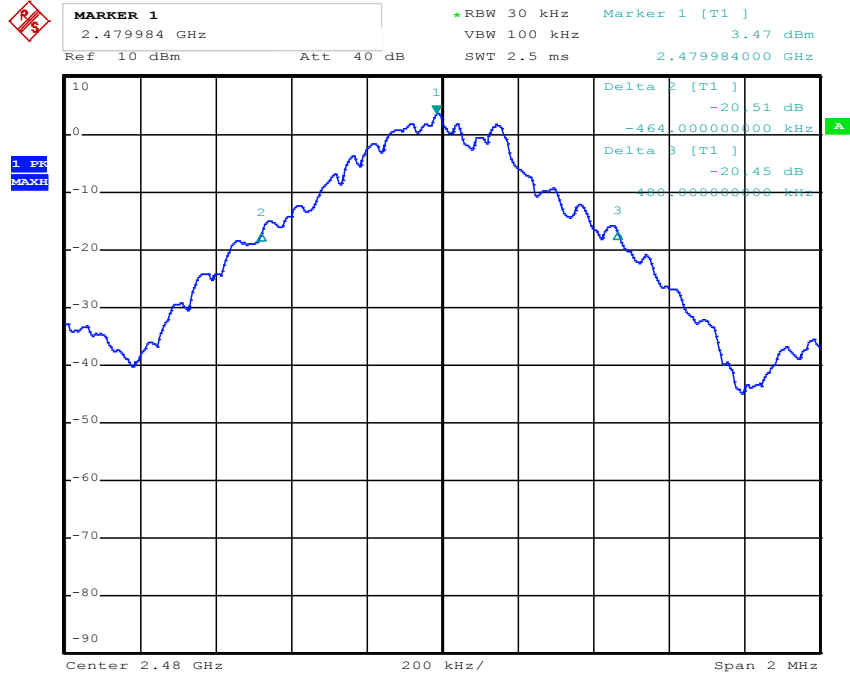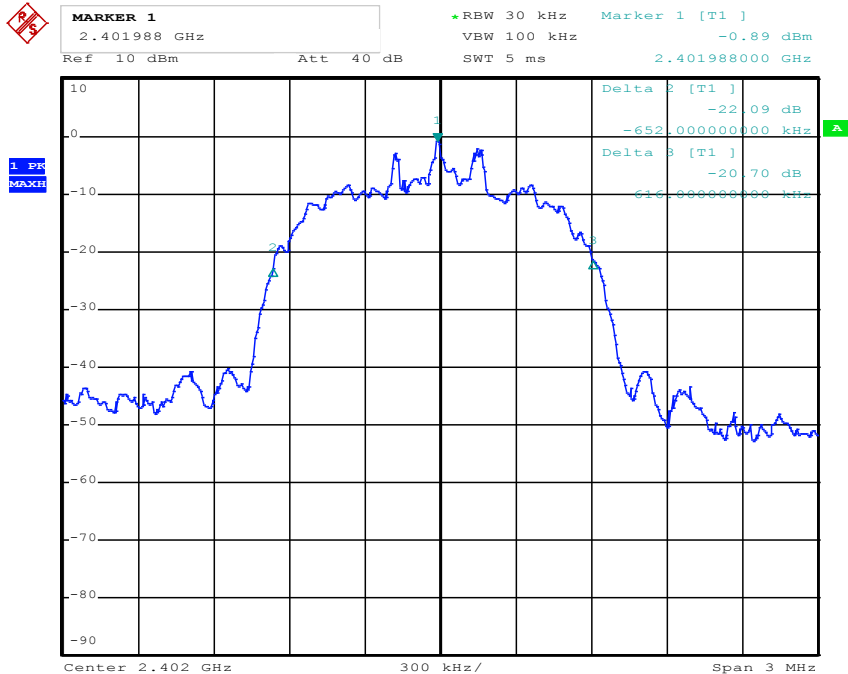
Modulation: GFSK
Tx frequency: 2441MHz

Date: 15.JAN.2016 09:19:10

Modulation: GFSK
Tx frequency: 2480MHz
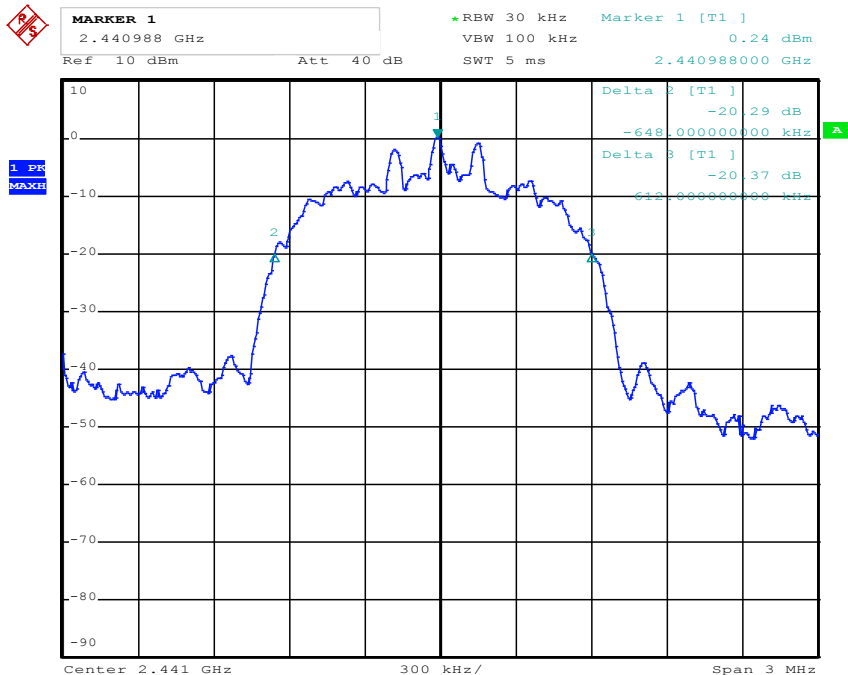
Modulation: 8DPSK
Tx frequency: 2402MHz

Date: 15.JAN.2016 09:11:50

Modulation: 8DPSK
Tx frequency: 2441MHz

Date: 15.JAN.2016 09:12:41

14042312 001   **Appendix 1**   **4 / 28**

Modulation: 8DPSK
Tx frequency: 2480MHz

MARKER 1		★RBW 30 kHz	Marker 1 [T1]
2.479988 GHz		VBW 100 kHz	0.58 dBm
Ref 10 dBm	Att 40 dB	SWT 5 ms	2.479988000 GHz

Delta 2 [T1]
-21.42 dB
-654.000000000 kHz

Delta 3 [T1]
-20.06 dB
612.000000000 kHz

Center 2.48 GHz   300 kHz/   Span 3 MHz
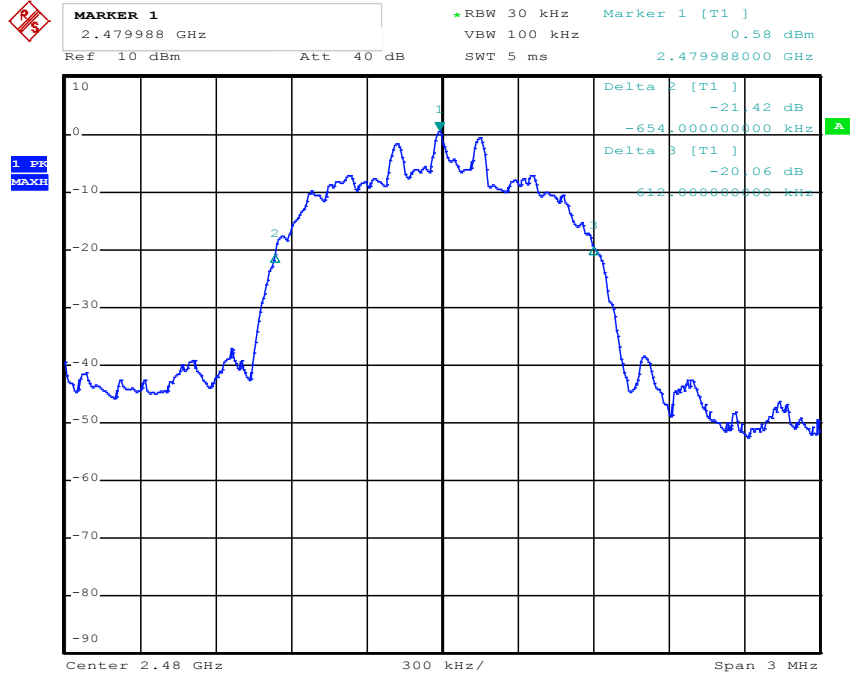
Date: 15.JAN.2016 09:13:29

TÜVRheinland®

Carrier Frequency Separation

GFSK
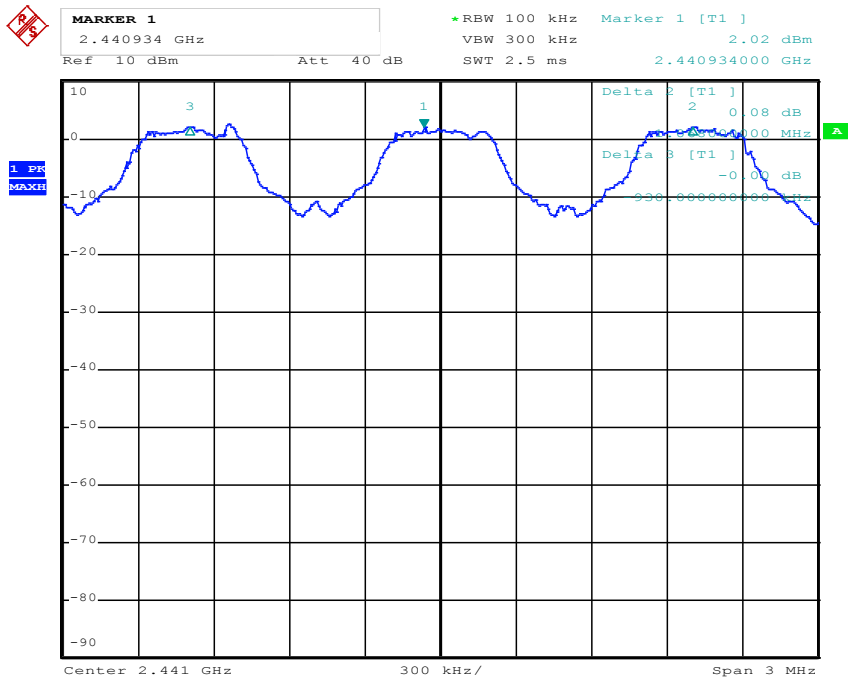
Date: 23.DEC.2015 14:56:47

8DPSK

Date: 23.DEC.2015 14:26:13

Number of hopping channels

GFSK

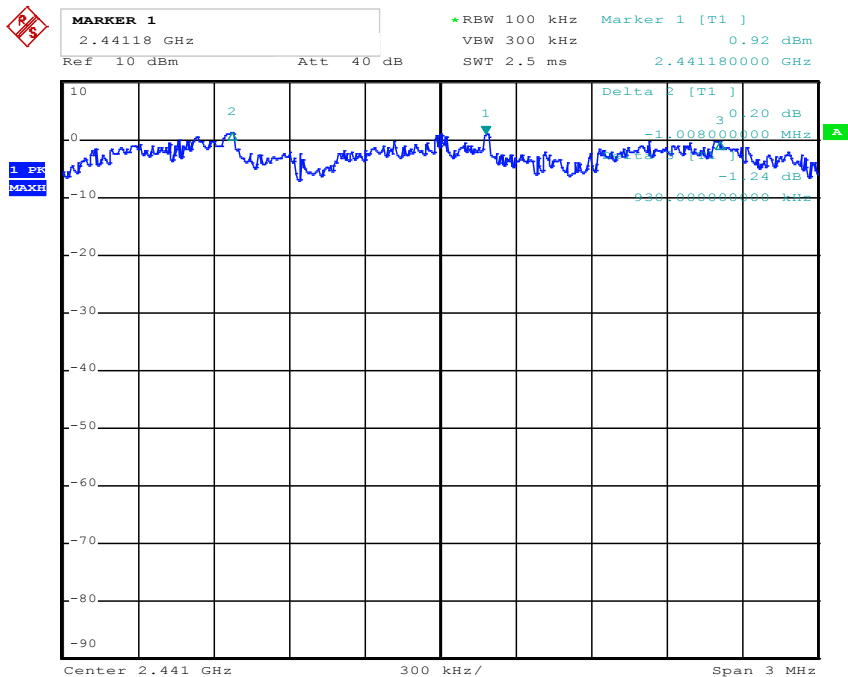# Dwell Time

GFSK

MARKER 1			RBW 1 MHz	Marker 1 [T1]
-10 µs			VBW 3 MHz	-12.32 dBm
Ref 10 dBm		Att 40 dB	SWT 5 ms	-10.000000 µs

Delta 2 [T1]
1.61 dB
2.920000 ms

Center 2.441 GHz   500 µs/

Date: 23.DEC.2015 14:58:14

SWEEP TIME			RBW 1 MHz	Marker 1 [T1]
31.6 s			VBW 3 MHz	-104.99 dBm
Ref 10 dBm		Att 40 dB	SWT 31.6 s	-10.000000 µs

Delta 2 [T1]
0.00 dB

Center 2.441 GHz   3.16 s/
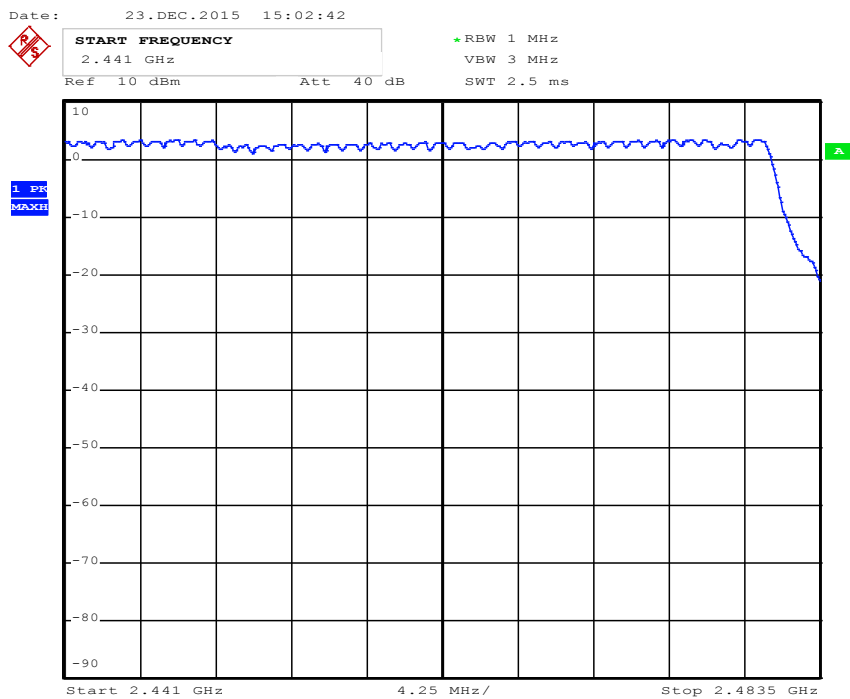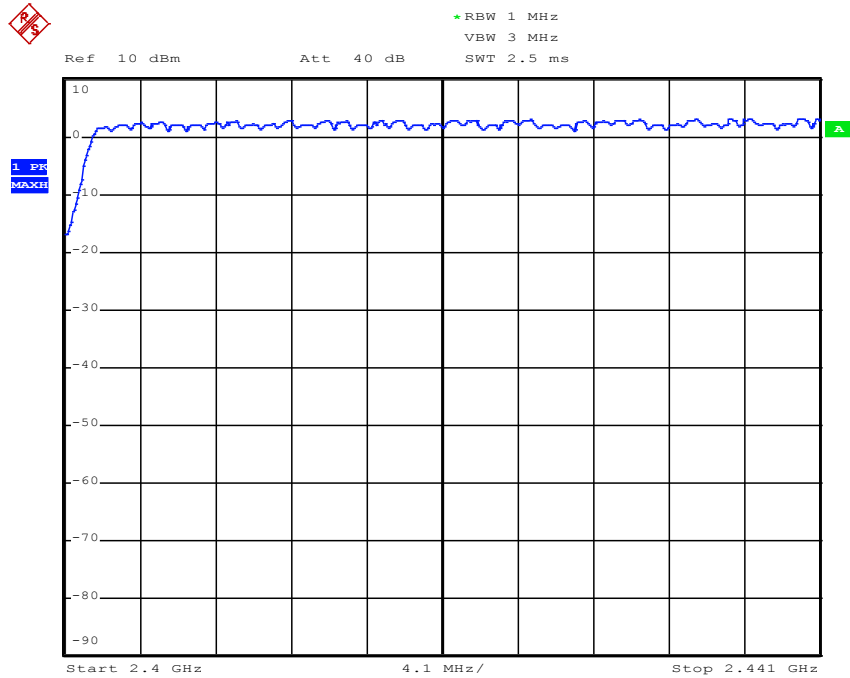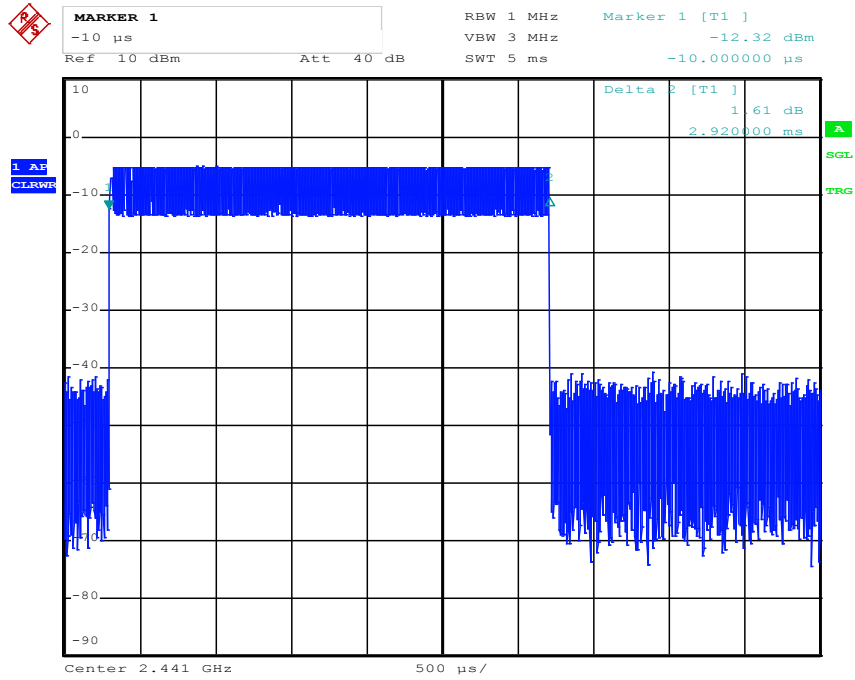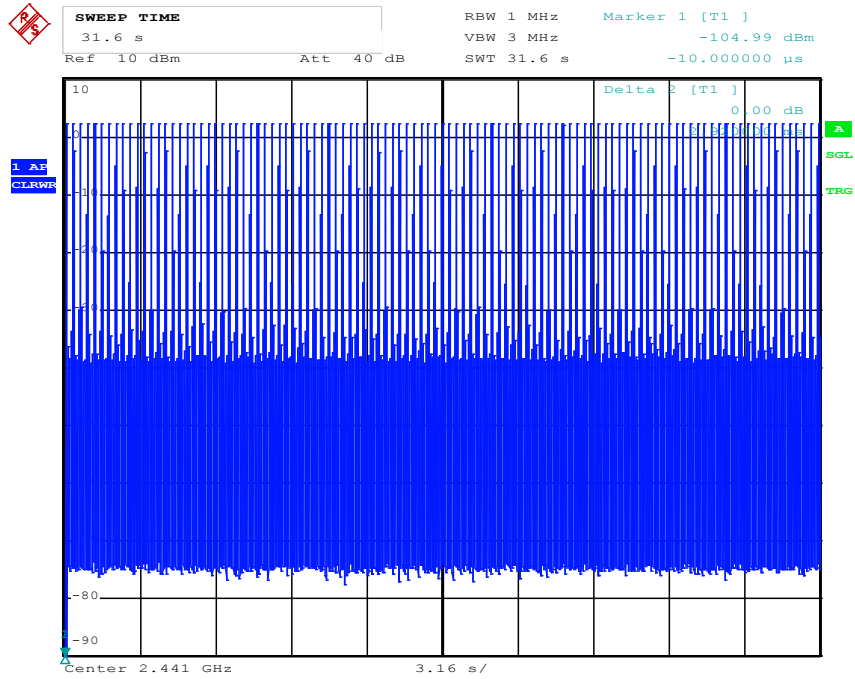
Date: 23.DEC.2015 14:59:53

Peak Output Power

Modulation: GFSK
Tx frequency: 2402MHz

	⭐RBW 3 MHz	Marker 1 [T1]
	VBW 10 MHz	4.43 dBm
Ref 10 dBm	Att 40 dB	SWT 2.5 ms	2.402060000 GHz

Center 2.402 GHz   500 kHz/   Span 5 MHz
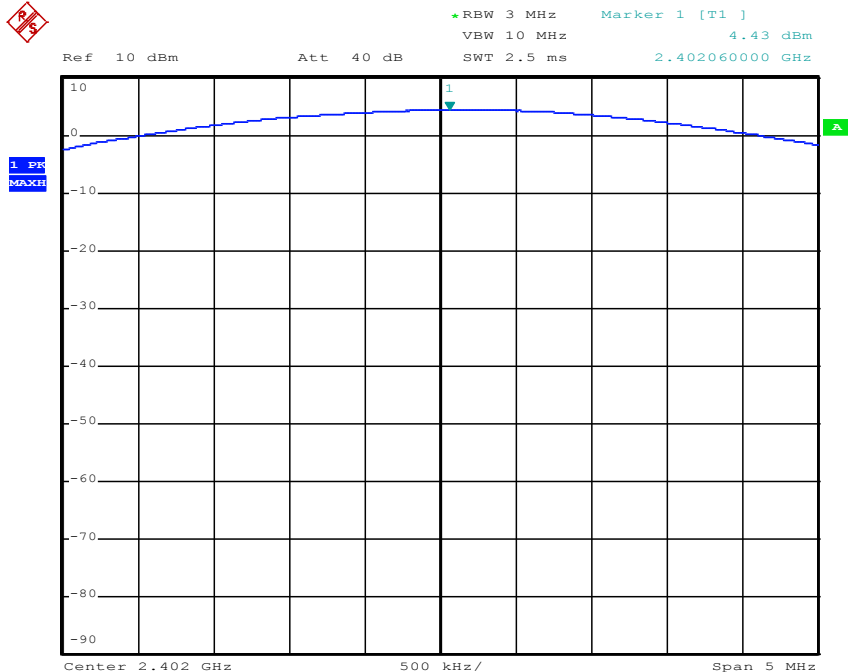
Date: 15.JAN.2016 08:50:24

Modulation: GFSK
Tx frequency: 2441MHz

MARKER 1	⭐RBW 3 MHz	Marker 1 [T1]
2.44071 GHz	VBW 10 MHz	5.71 dBm
Ref 10 dBm	Att 40 dB	SWT 2.5 ms	2.440710000 GHz

Center 2.441 GHz   500 kHz/   Span 5 MHz
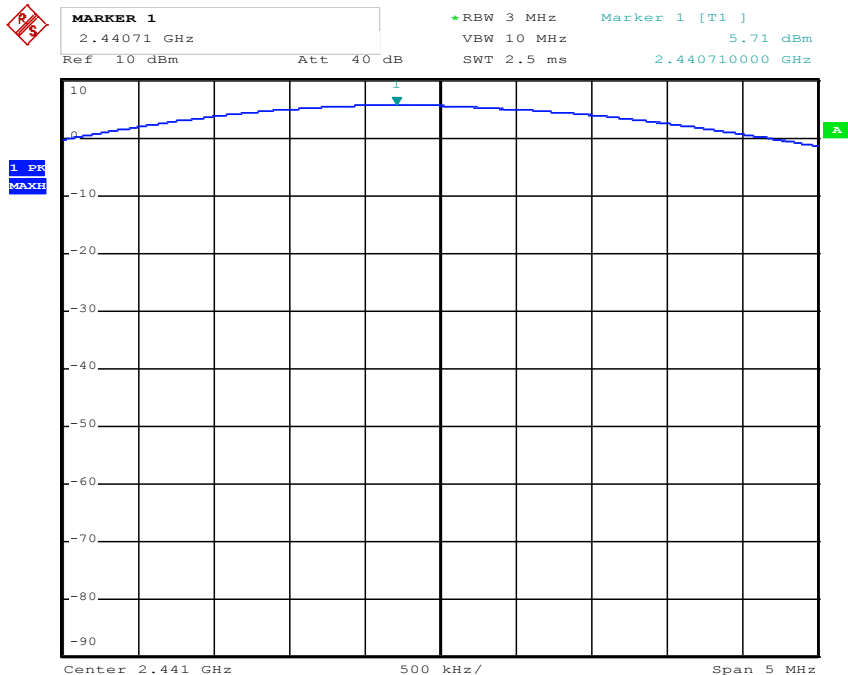
Date: 15.JAN.2016 08:51:45

Modulation: GFSK
Tx frequency: 2480MHz

MARKER 1		★RBW 3 MHz	Marker 1 [T1]
2.47971 GHz		VBW 10 MHz	5.83 dBm
Ref 10 dBm	Att 40 dB	SWT 2.5 ms	2.479710000 GHz

Center 2.48 GHz   500 kHz/   Span 5 MHz

Date: 15.JAN.2016 08:52:12

TÜVRheinland®

Modulation: Pi/4 DQPSK
Tx frequency: 2402MHz

MARKER 1		★RBW 3 MHz	Marker 1 [T1]
2.40187 GHz		VBW 10 MHz	1.92 dBm
Ref 10 dBm	Att 40 dB	SWT 2.5 ms	2.401870000 GHz

Center 2.402 GHz   500 kHz/   Span 5 MHz
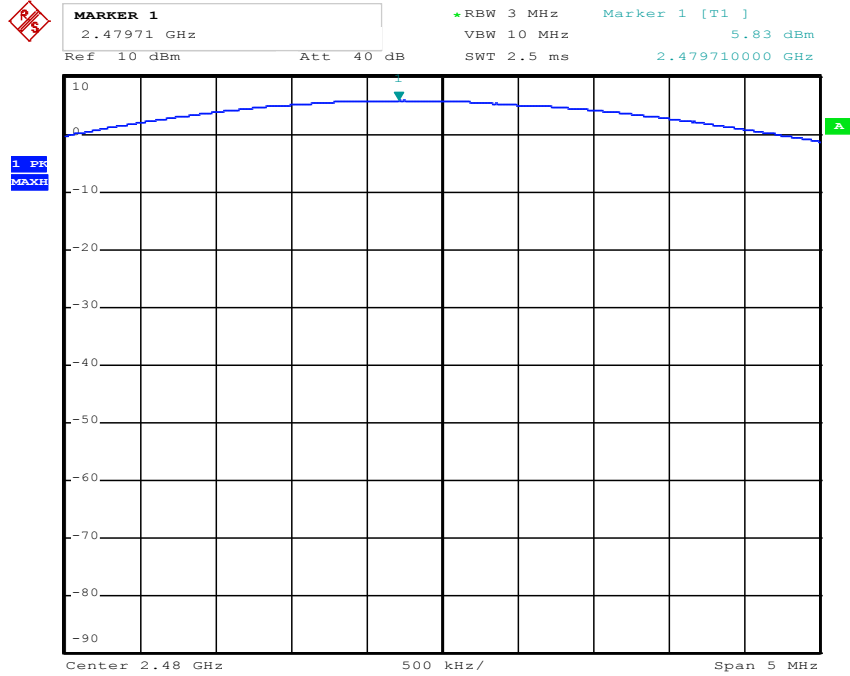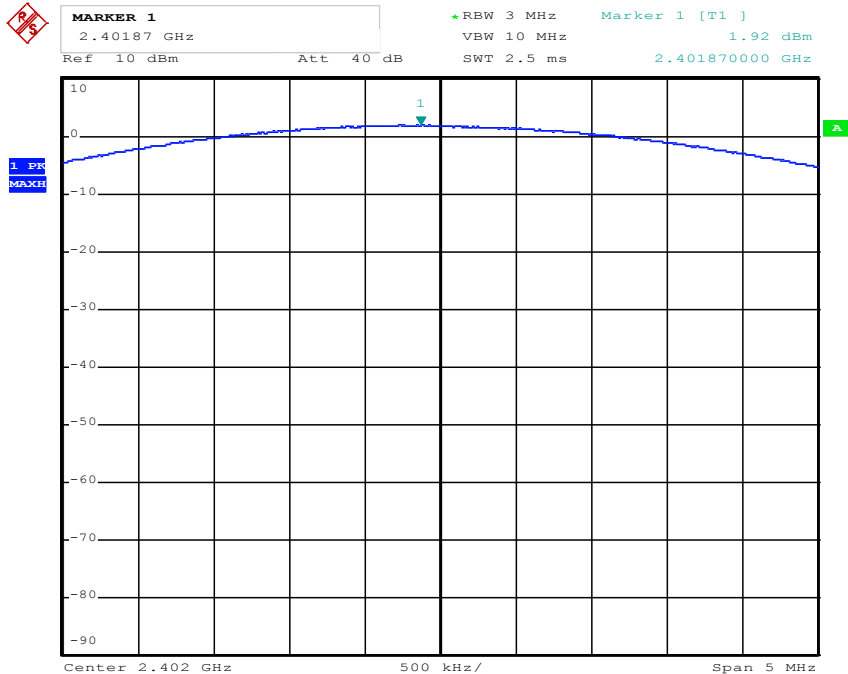
Date: 15.JAN.2016 08:56:47

Modulation: Pi/4 DQPSK
Tx frequency: 2441MHz

MARKER 1		★RBW 3 MHz	Marker 1 [T1]
2.44072 GHz		VBW 10 MHz	3.20 dBm
Ref 10 dBm	Att 40 dB	SWT 2.5 ms	2.440720000 GHz

Center 2.441 GHz   500 kHz/   Span 5 MHz
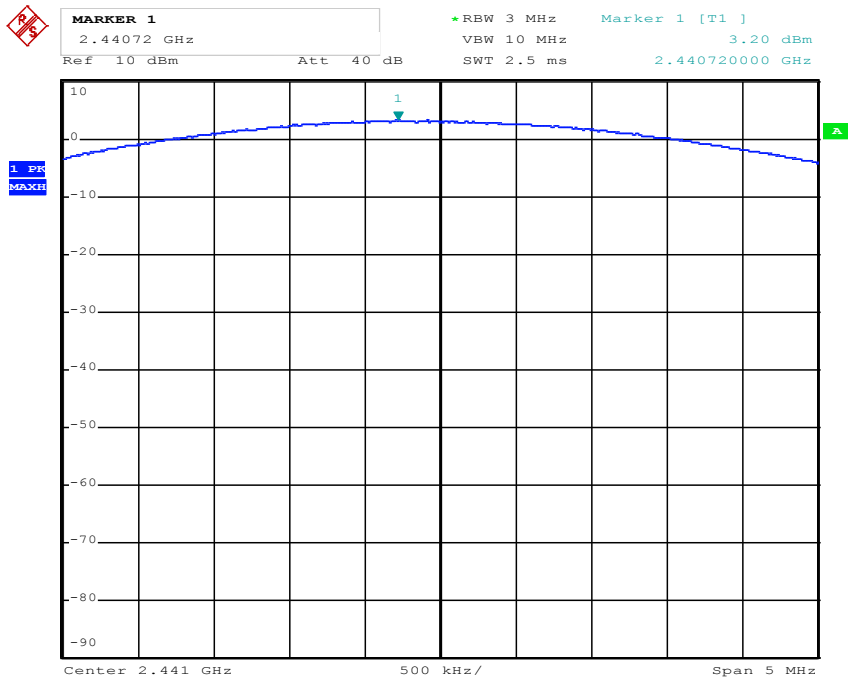
Date: 15.JAN.2016 08:57:08

Modulation: Pi/4 DQPSK
Tx frequency: 2480MHz


```
MARKER 1              * RBW 3 MHz      Marker 1 [T1 ]
2.47968 GHz             VBW 10 MHz            3.42 dBm
Ref  10 dBm      Att  40 dB    SWT 2.5 ms    2.479680000 GHz
```
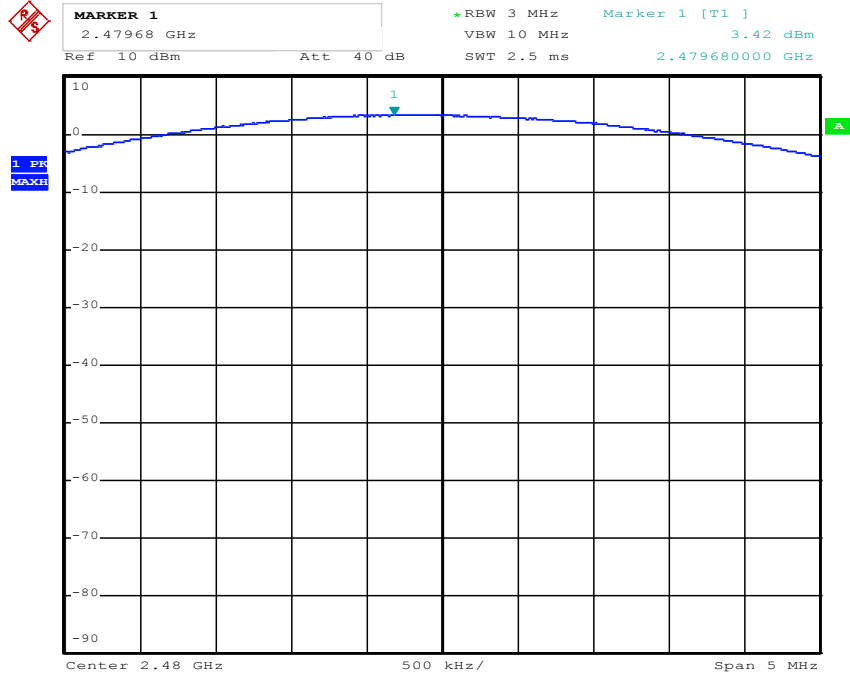
Date: 15.JAN.2016 08:57:39

Modulation: 8DPSK
Tx frequency: 2402MHz
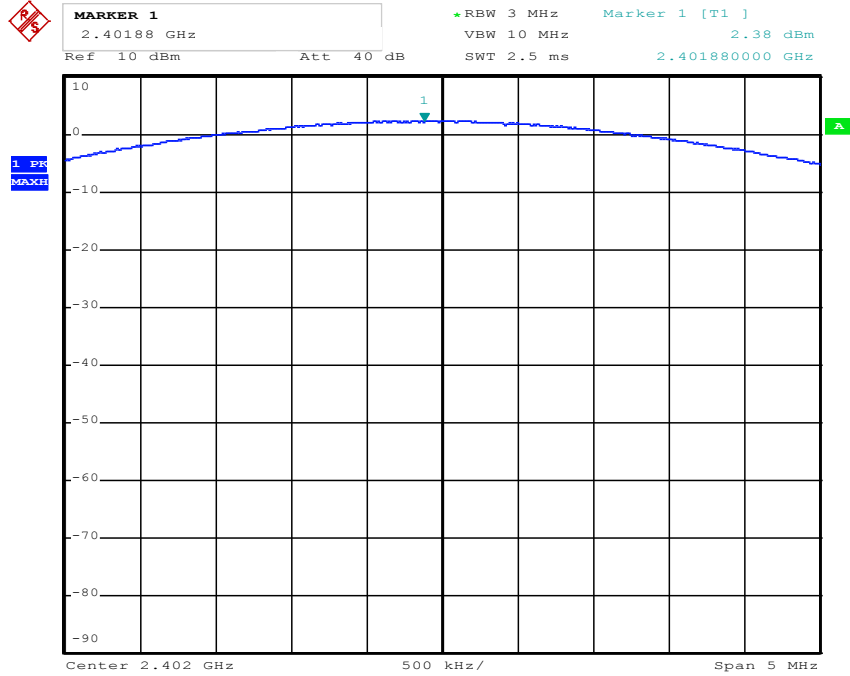
Modulation: 8DPSK
Tx frequency: 2441MHz

Modulation: 8DPSK
Tx frequency: 2480MHz


```
MARKER 1                        ★RBW  3 MHz      Marker 1 [T1 ]
  2.47979 GHz                    VBW 10 MHz              4.00 dBm
Ref  10 dBm           Att  40 dB  SWT 2.5 ms       2.479790000 GHz
```

Center 2.48 GHz   500 kHz/   Span 5 MHz
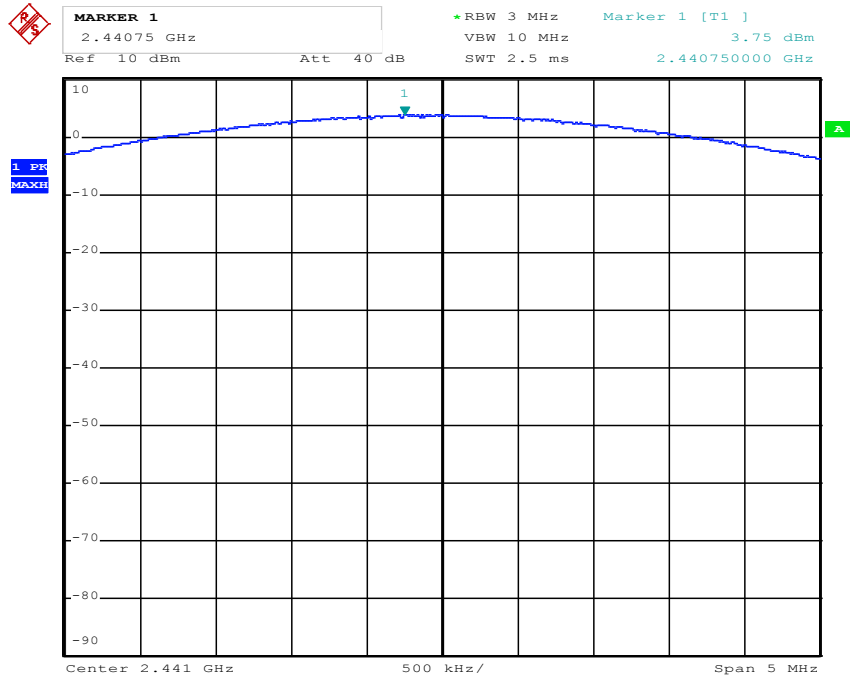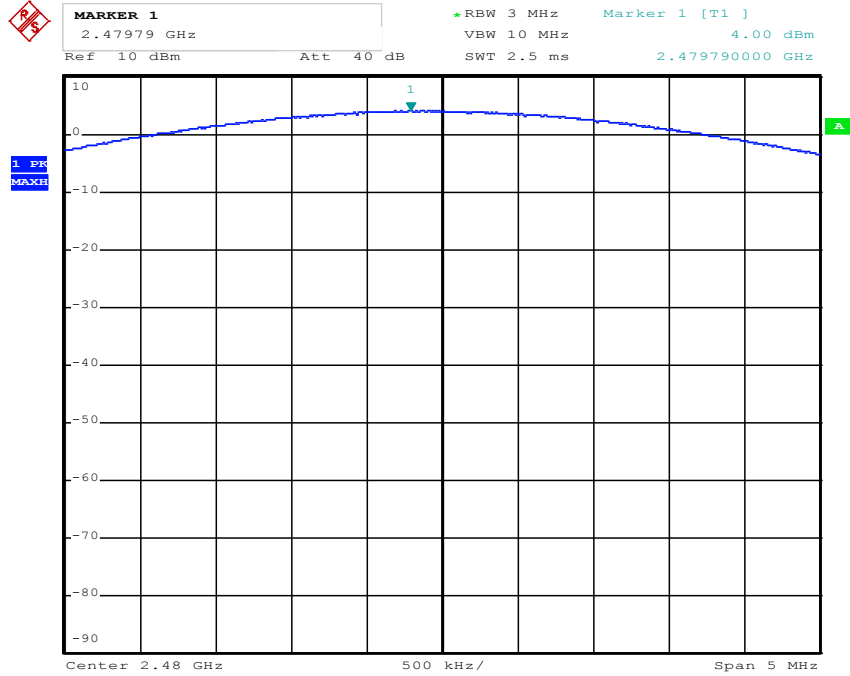
Date: 15.JAN.2016 08:53:16

Spurious Emissions - Conducted

GFSK
Tx frequency: 2402MHz

MARKER 1			★RBW 300 Hz	Marker 1 [T1]
9.846 kHz			VBW 1 kHz	−53.62 dBm
Ref 10 dBm		Att 40 dB	SWT 1.6 s	9.846000000 kHz

Start 9 kHz   14.1 kHz/   Stop 150 kHz

Date: 23.DEC.2015 15:27:48

MARKER 1			★RBW 10 kHz	Marker 1 [T1]
150 kHz			VBW 30 kHz	−52.05 dBm
Ref 10 dBm		Att 40 dB	SWT 300 ms	150.000000000 kHz

Start 150 kHz   2.985 MHz/   Stop 30 MHz

Date: 23.DEC.2015 15:24:31

TÜVRheinland®

GFSK

Tx frequency: 2402MHz

MARKER 1
2.39054 GHz

Ref 10 dBm   Att 40 dB

★RBW 100 kHz   Marker 1 [T1]
 VBW 300 kHz   1.09 dBm
 SWT 1.3 s   2.390540000 GHz

Marker 2 [T1
                        -44.96 dBm
               10.380060000 GHz

```
 10
  0
-10
-20
-30
-40
-50
-60
-70
-80
-90
```

1 PK
MAXH

A

Start 30 MHz   1.297 GHz/   Stop 13 GHz

Date: 23.DEC.2015 15:12:42

MARKER 1
24.568 GHz

Ref 10 dBm   Att 40 dB

★RBW 100 kHz   Marker 1 [T1]
 VBW 300 kHz   -31.55 dBm
 SWT 1.2 s   24.568000000 GHz

```
 10
  0
-10
-20
-30
-40
-50
-60
-70
-80
-90
```

1 PK
MAXH

A

Start 13 GHz   1.2 GHz/   Stop 25 GHz

Date: 23.DEC.2015 15:22:05

GFSK
Tx frequency: 2441MHz

MARKER 1		★RBW 300 Hz	Marker 1 [T1]
10.41 kHz		VBW 1 kHz	-56.85 dBm
Ref 10 dBm	Att 40 dB	SWT 1.6 s	10.410000000 kHz

Start 9 kHz   14.1 kHz/   Stop 150 kHz

Date: 23.DEC.2015 15:28:14

MARKER 1		★RBW 10 kHz	Marker 1 [T1]
209.7 kHz		VBW 30 kHz	-52.40 dBm
Ref 10 dBm	Att 40 dB	SWT 300 ms	209.700000000 kHz

Start 150 kHz   2.985 MHz/   Stop 30 MHz
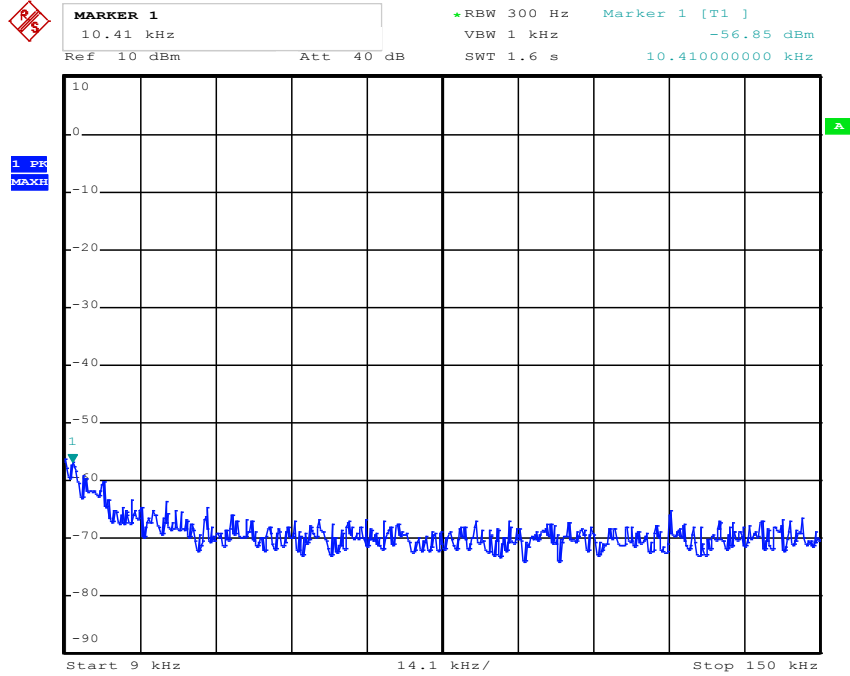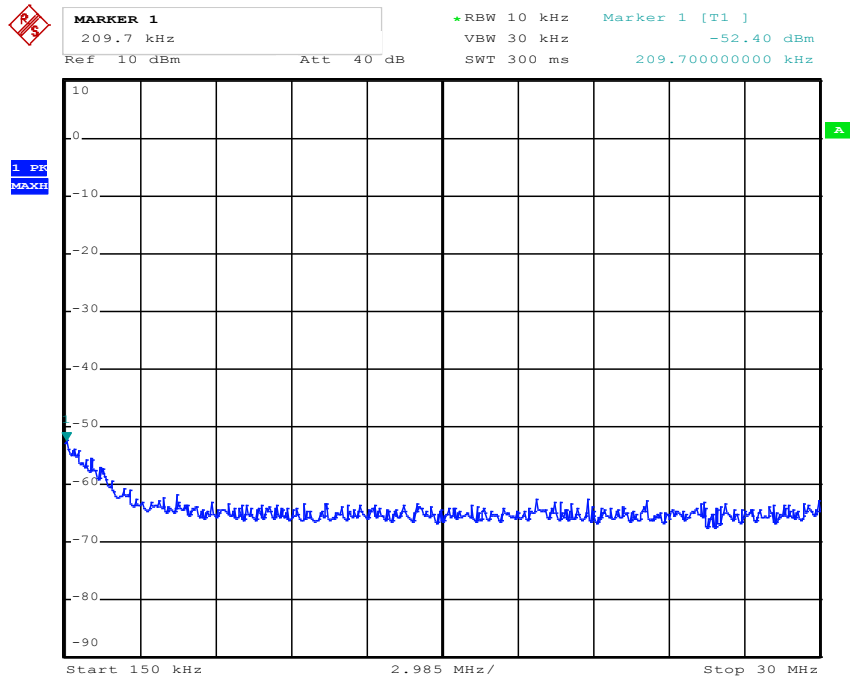
Date: 23.DEC.2015 15:24:08

GFSK
Tx frequency: 2441MHz

MARKER 1		*RBW 100 kHz	Marker 1 [T1]
2.44242 GHz		VBW 300 kHz	1.75 dBm
Ref 10 dBm	Att 40 dB	SWT 1.3 s	2.442420000 GHz

Marker 2 [T1
-45.11 dBm
10.509760000 GHz

Start 30 MHz   1.297 GHz/   Stop 13 GHz

Date: 23.DEC.2015 15:14:40

MARKER 1		*RBW 100 kHz	Marker 1 [T1]
22.84 GHz		VBW 300 kHz	-31.88 dBm
Ref 10 dBm	Att 40 dB	SWT 1.2 s	22.840000000 GHz

Start 13 GHz   1.2 GHz/   Stop 25 GHz
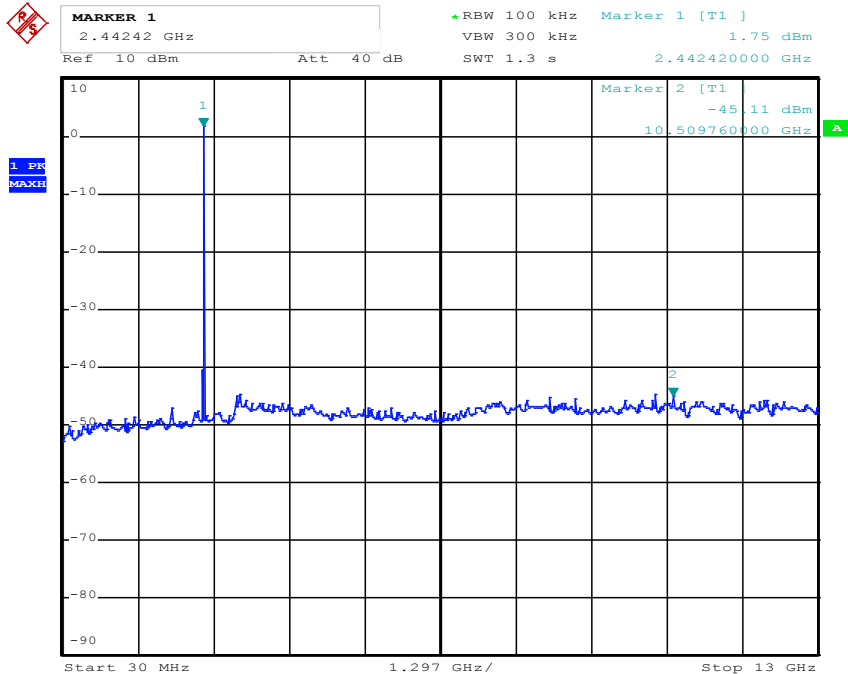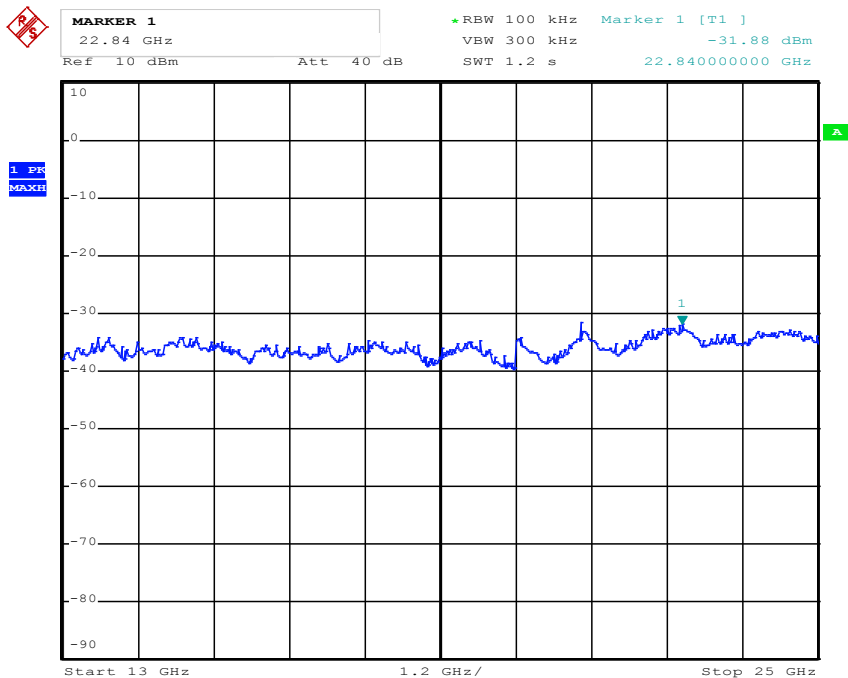
Date: 23.DEC.2015 15:22:40

GFSK
Tx frequency: 2480MHz

MARKER 1		★RBW 300 Hz	Marker 1 [T1]
9.846 kHz		VBW 1 kHz	-56.96 dBm
Ref 10 dBm	Att 40 dB	SWT 1.6 s	9.846000000 kHz

Start 9 kHz   14.1 kHz/   Stop 150 kHz

Date: 23.DEC.2015 15:28:41

MARKER 1		★RBW 10 kHz	Marker 1 [T1]
150 kHz		VBW 30 kHz	-51.14 dBm
Ref 10 dBm	Att 40 dB	SWT 300 ms	150.000000000 kHz

Start 150 kHz   2.985 MHz/   Stop 30 MHz
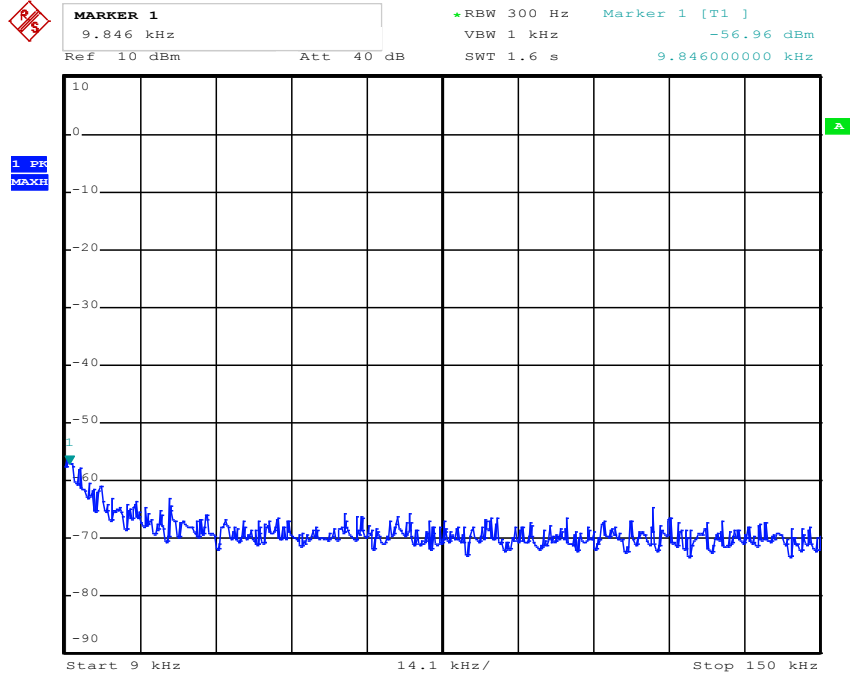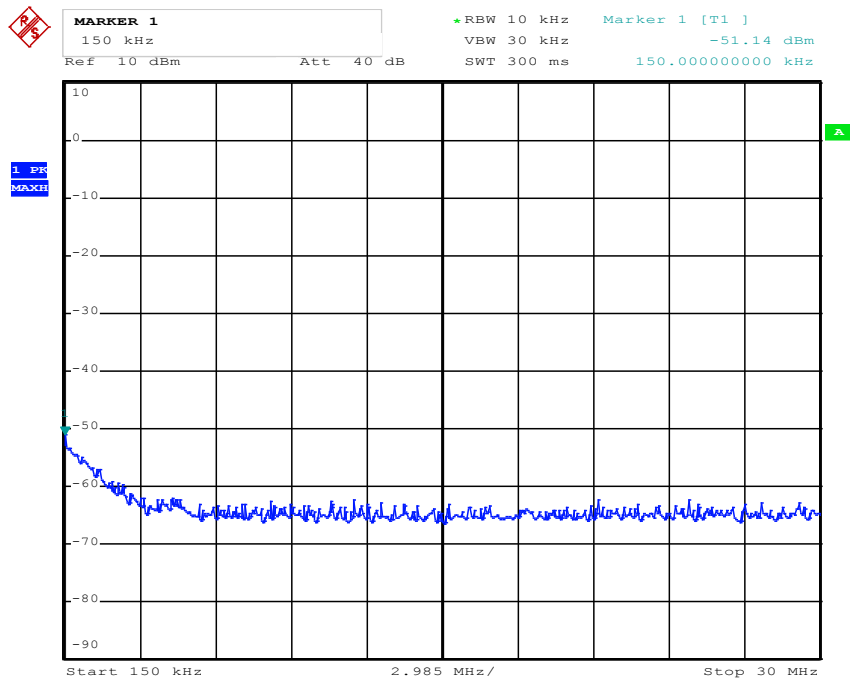
Date: 23.DEC.2015 15:23:45

GFSK
Tx frequency: 2480MHz

MARKER 1
2.46836 GHz

Ref 10 dBm   Att 40 dB

RBW 100 kHz   Marker 1 [T1]
VBW 300 kHz   2.30 dBm
SWT 1.3 s   2.468360000 GHz

Marker 2 [T1
                  -44.82 dBm
7.837940000 GHz

Start 30 MHz   1.297 GHz/   Stop 13 GHz

Date: 23.DEC.2015 15:16:07

MARKER 1
22.744 GHz

Ref 10 dBm   Att 40 dB

RBW 100 kHz   Marker 1 [T1]
VBW 300 kHz   -31.23 dBm
SWT 1.2 s   22.744000000 GHz

Start 13 GHz   1.2 GHz/   Stop 25 GHz

Date: 23.DEC.2015 15:23:12

TÜVRheinland®

8DPSK
Tx frequency: 2402MHz

MARKER 1		RBW 300 Hz	Marker 1 [T1]
9.564 kHz		VBW 1 kHz	−56.56 dBm
Ref 10 dBm	Att 40 dB	SWT 1.6 s	9.564000000 kHz

Start 9 kHz   14.1 kHz/   Stop 150 kHz

Date: 23.DEC.2015 15:30:18

MARKER 1		RBW 10 kHz	Marker 1 [T1]
150 kHz		VBW 30 kHz	−51.84 dBm
Ref 10 dBm	Att 40 dB	SWT 300 ms	150.000000000 kHz

Start 150 kHz   2.985 MHz/   Stop 30 MHz

Date: 23.DEC.2015 15:30:46

8DPSK
Tx frequency: 2402MHz

MARKER 1		★RBW 100 kHz	Marker 1 [T1]
2.39054 GHz		VBW 300 kHz	0.02 dBm
Ref 10 dBm	Att 40 dB	SWT 1.3 s	2.390540000 GHz

Marker 2 [T1]
-45.67 dBm
7.889820000 GHz

Start 30 MHz   1.297 GHz/   Stop 13 GHz

Date: 23.DEC.2015 15:17:39

MARKER 1		★RBW 100 kHz	Marker 1 [T1]
22.864 GHz		VBW 300 kHz	-31.79 dBm
Ref 10 dBm	Att 40 dB	SWT 1.2 s	22.864000000 GHz

Start 13 GHz   1.2 GHz/   Stop 25 GHz

Date: 23.DEC.2015 15:21:07

8DPSK
Tx frequency: 2441MHz

MARKER 1				★RBW 300 Hz	Marker 1 [T1]	
9.846 kHz				VBW 1 kHz		-55.18 dBm
Ref 10 dBm		Att 40 dB	SWT 1.6 s		9.846000000 kHz

Date: 23.DEC.2015 15:29:51

MARKER 1				★RBW 10 kHz	Marker 1 [T1]	
150 kHz				VBW 30 kHz		-51.51 dBm
Ref 10 dBm		Att 40 dB	SWT 300 ms		150.000000000 kHz
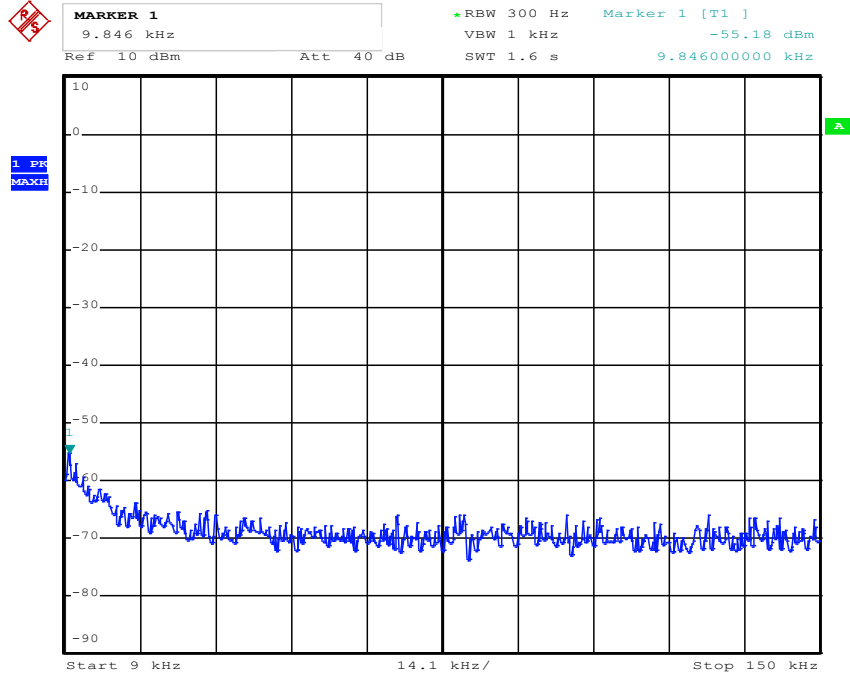
Date: 23.DEC.2015 15:31:08

8DPSK
Tx frequency: 2441MHz
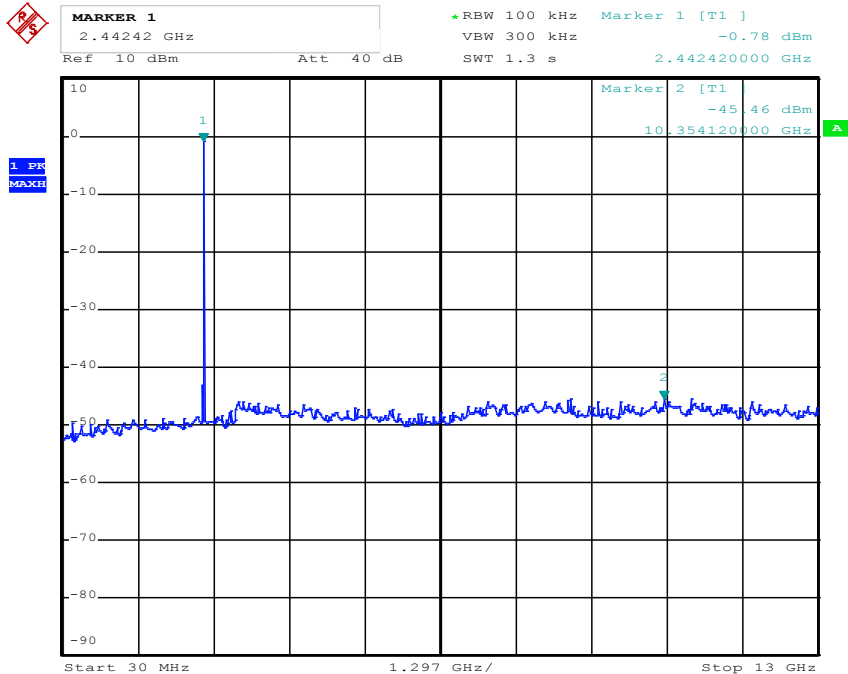
Date: 23.DEC.2015 15:18:36
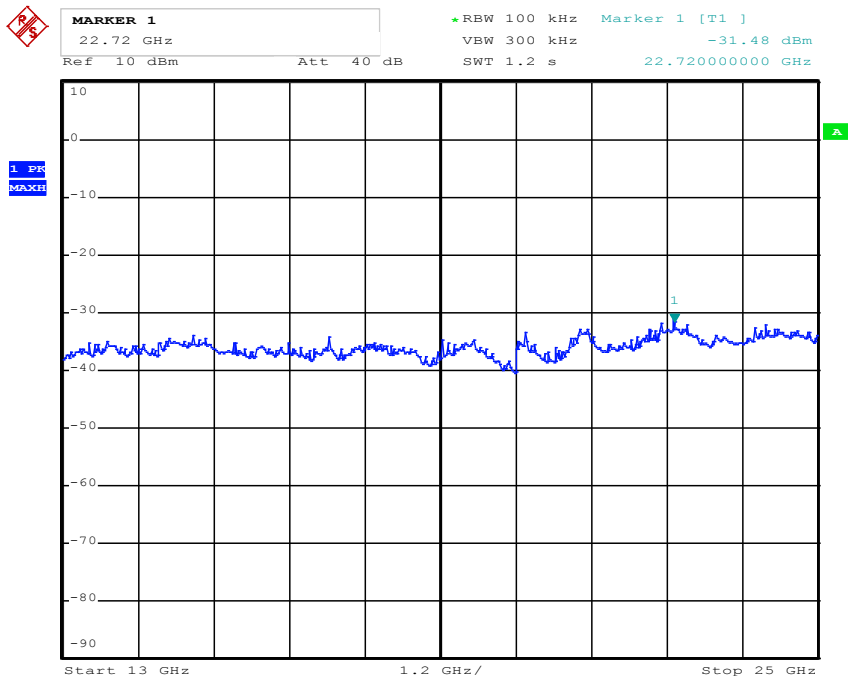
Date: 23.DEC.2015 15:20:36

8DPSK
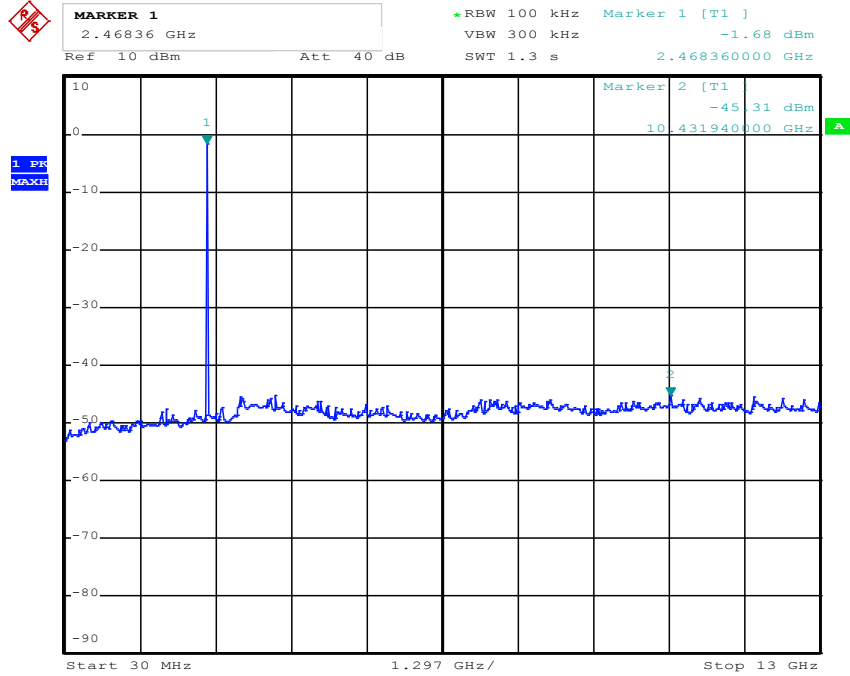Tx frequency: 2480MHz

MARKER 1		★RBW 300 Hz	Marker 1 [T1]
9 kHz		VBW 1 kHz	-55.74 dBm
Ref 10 dBm	Att 40 dB	SWT 1.6 s	9.000000000 kHz

Start 9 kHz   14.1 kHz/   Stop 150 kHz

Date: 23.DEC.2015 15:29:19

MARKER 1		★RBW 10 kHz	Marker 1 [T1]
269.4 kHz		VBW 30 kHz	-52.52 dBm
Ref 10 dBm	Att 40 dB	SWT 300 ms	269.400000000 kHz

Start 150 kHz   2.985 MHz/   Stop 30 MHz
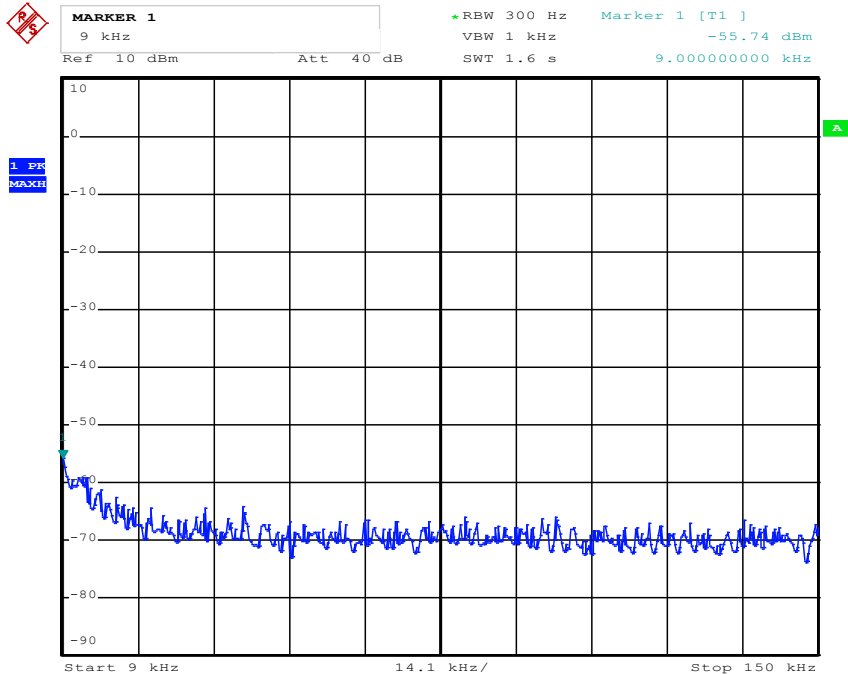
Date: 23.DEC.2015 15:31:29

TÜVRheinland®
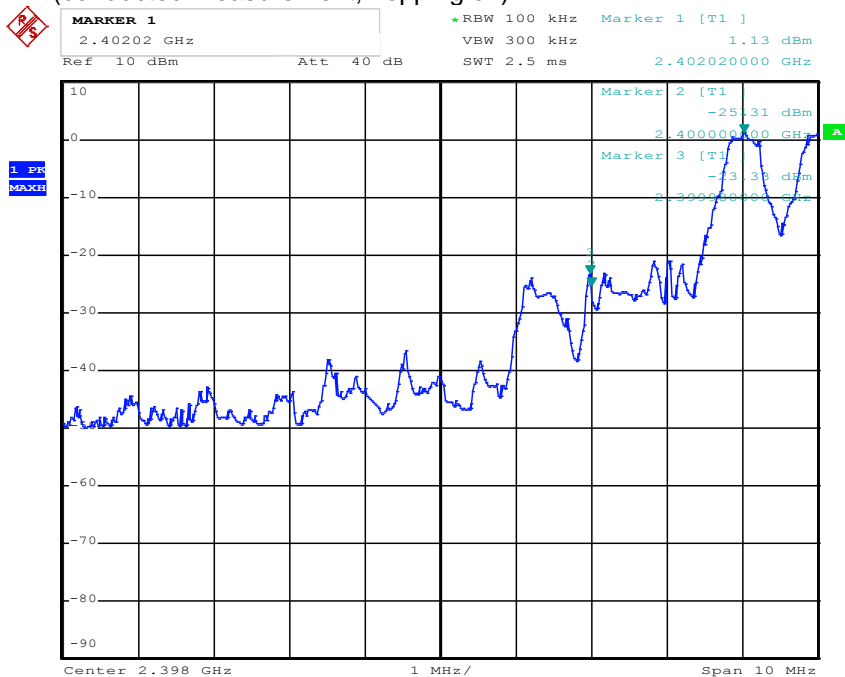
8DPSK
Tx frequency: 2480MHz

Date: 23.DEC.2015   15:19:41
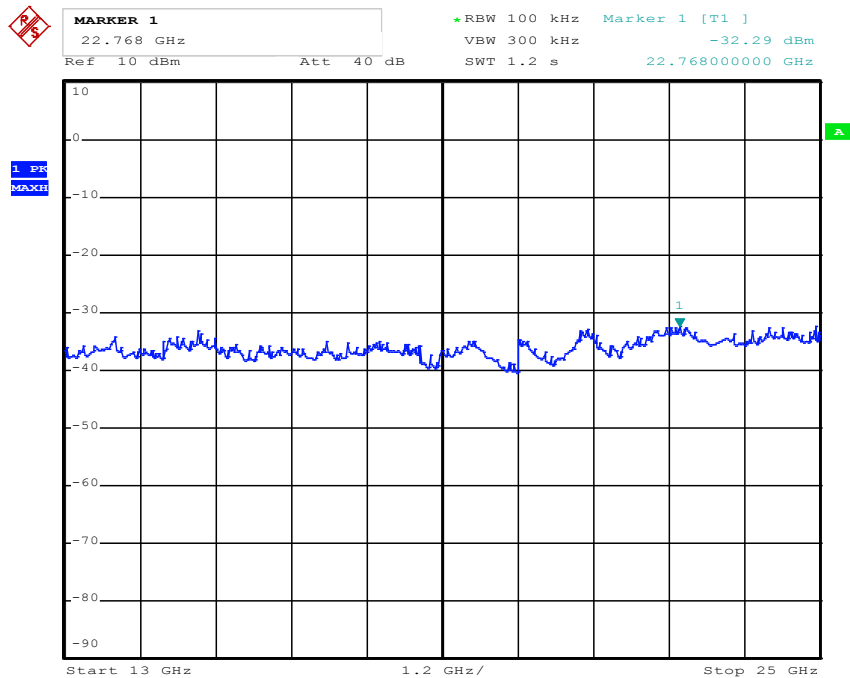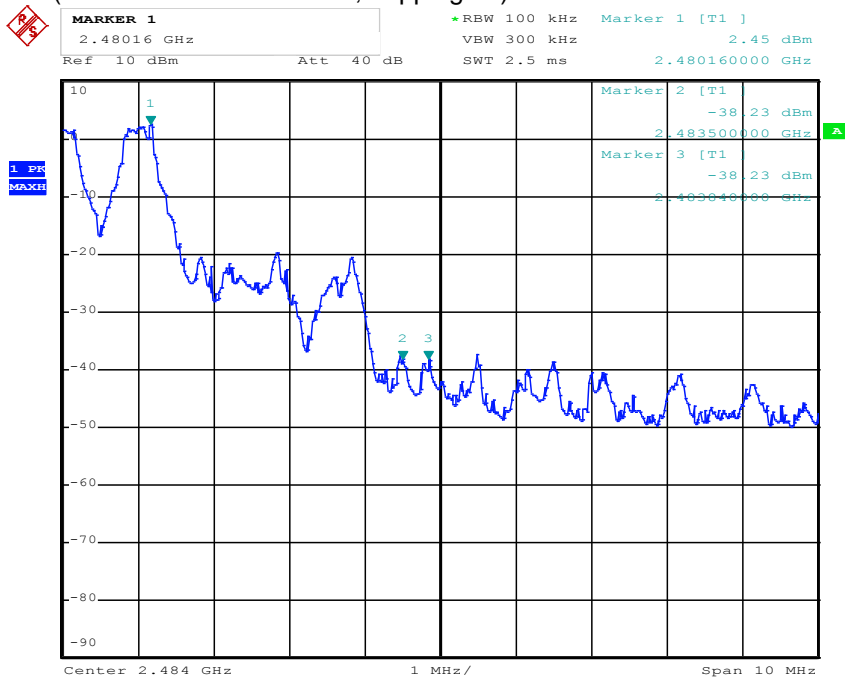

Date: 23.DEC.2015   15:20:08

Band Edge Compliance

Tx frequency: 2402MHz (conducted measurement; hopping on)
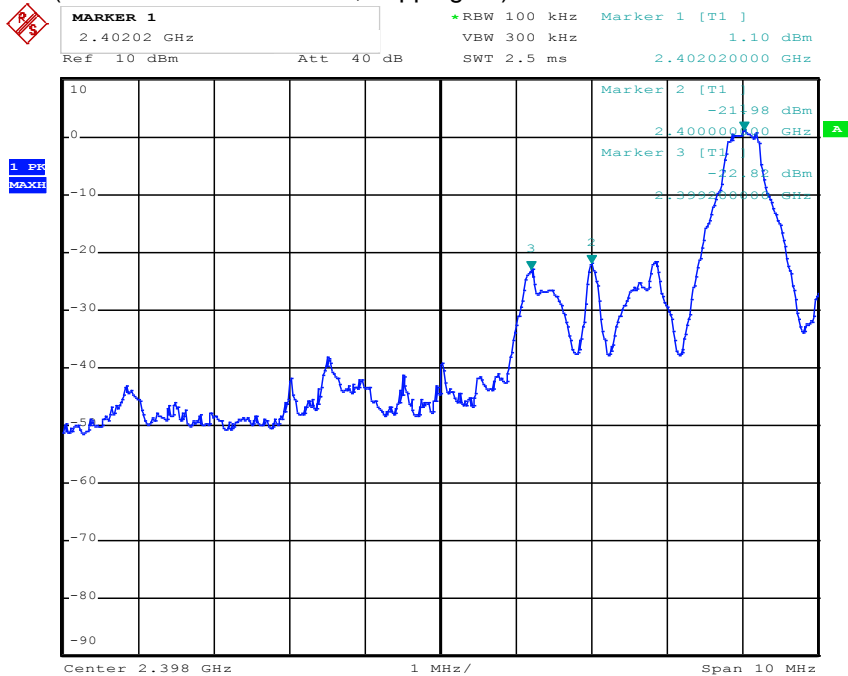

Date: 23.DEC.2015   14:49:26

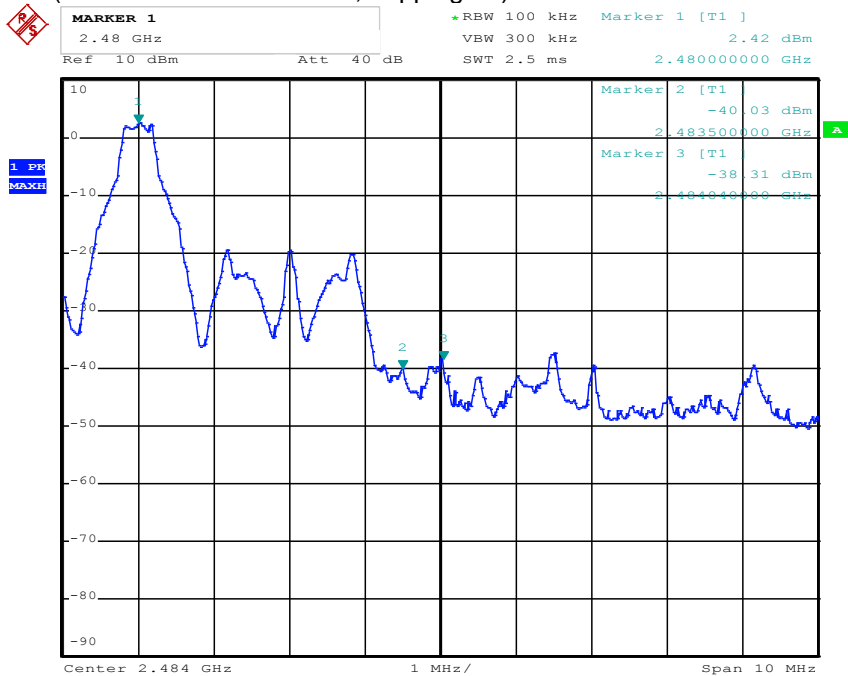Tx frequency: 2480MHz (conducted measurement; hopping on)

Date: 23.DEC.2015   14:52:28

Tx frequency: 2402MHz (conducted measurement; hopping off)

Tx frequency: 2480MHz (conducted measurement; hopping off)