

Appendix 1

Test Results

Disturbance Voltage on AC Mains

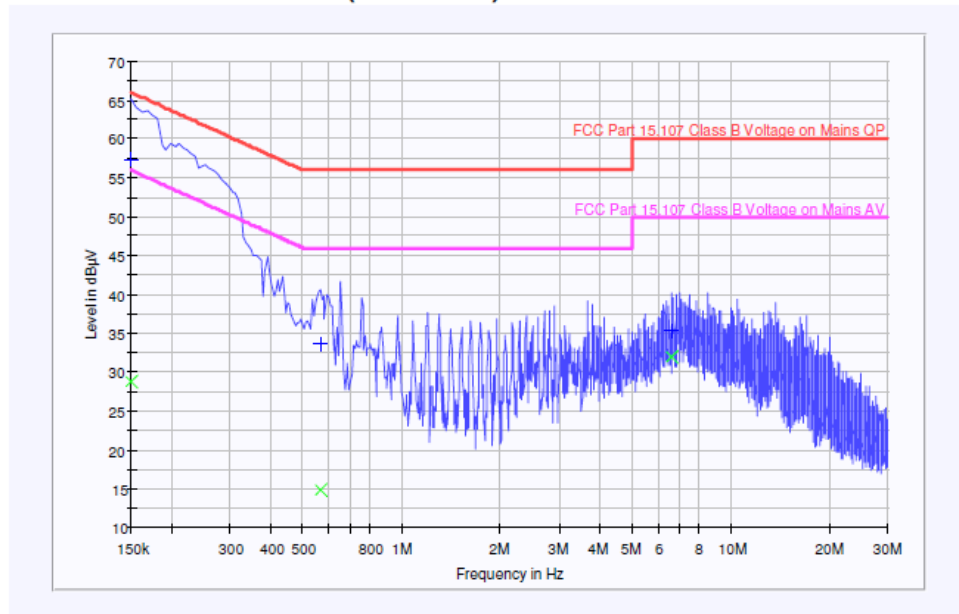
TUV Rheinland Hong Kong Ltd. - EMC Laboratory

Continuous Disturbance

Test Information

EUT Name:	Witron BT Dongle
Serial Number:	MMBTD (00120607135-001)
Test Description:	FCC Part 15
Operating Conditions:	BT Linking Mode
Operator Name:	Chung
Comment:	120V 60Hz
Description:	CE L1

Conducted Emission (FCC-P.15) - Class B



Result Table Single

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)
0.150000	57.4	28.9
0.564000	33.6	14.9
6.606000	35.4	32.1

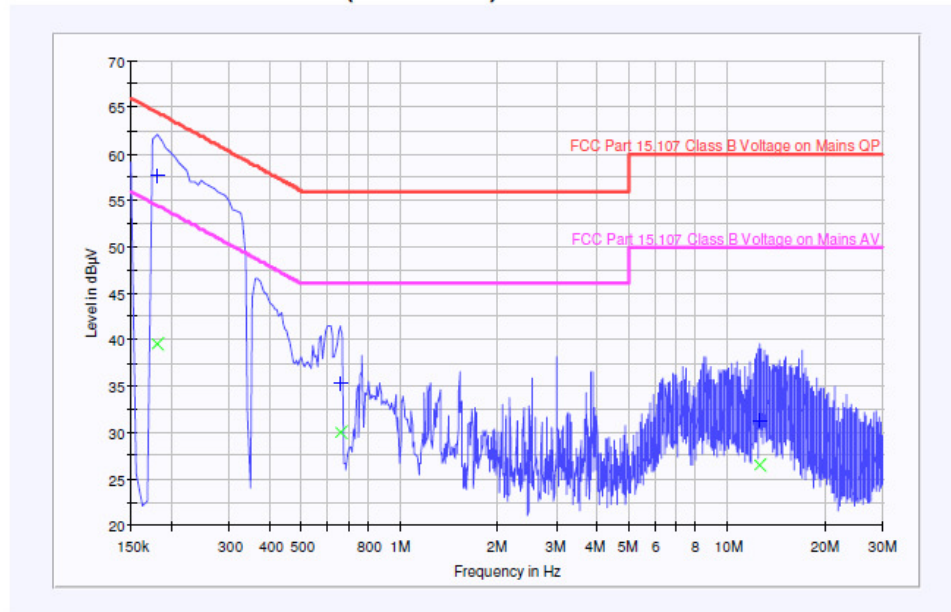
TÜV Rheinland Hong Kong Ltd. - EMC Laboratory

Continuous Disturbance

Test Information

EUT Name:	Witron BT Dongle
Serial Number:	MMBTD (00120607135-001)
Test Description:	FCC Part 15
Operating Conditions:	BT Linking Mode
Operator Name:	Chung
Comment:	120V 60Hz
Description:	CE N

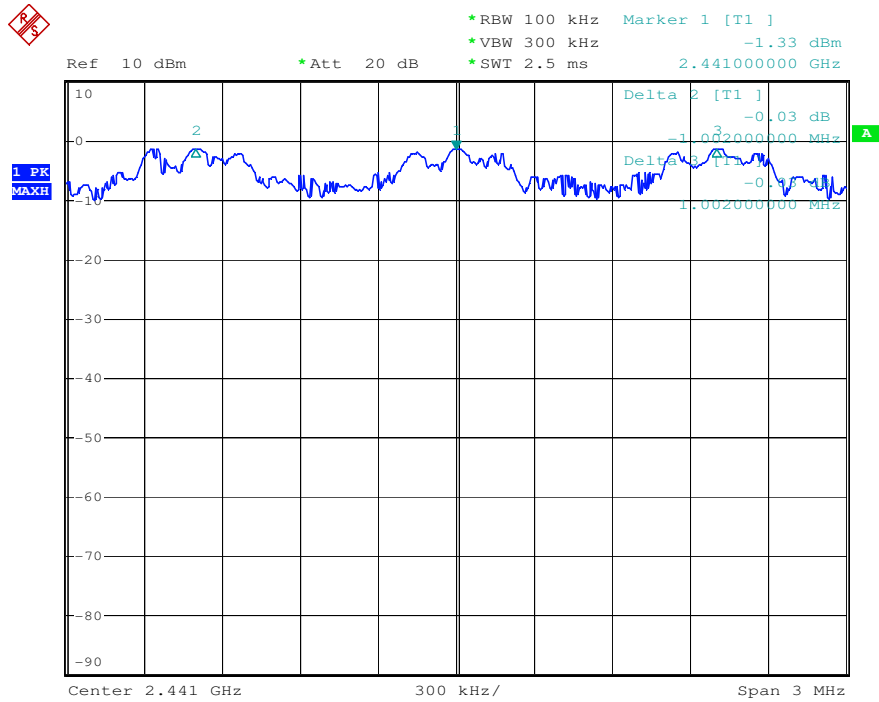
Conducted Emission (FCC-P.15) - Class B



Result Table Single

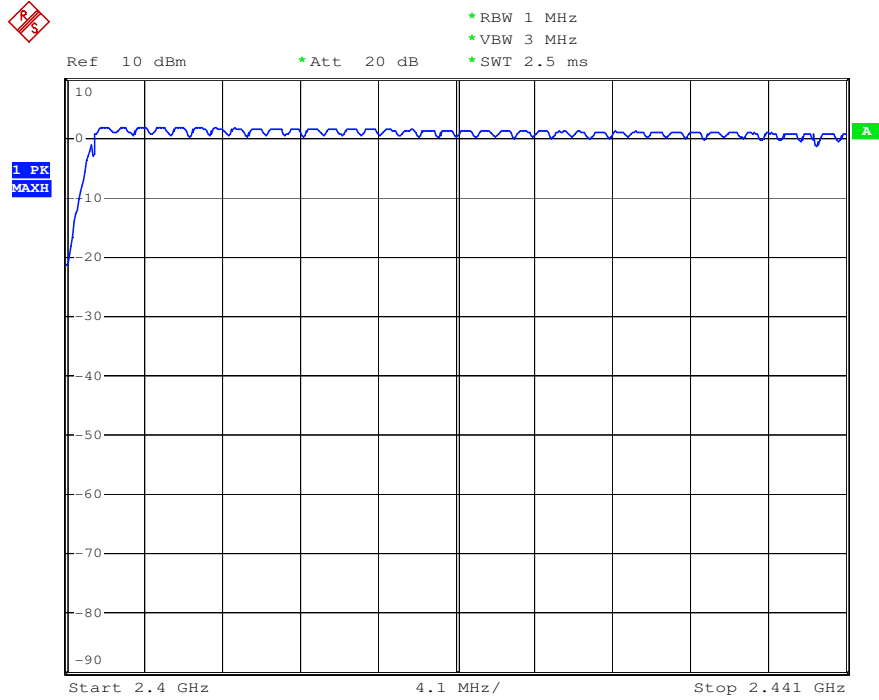
Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)
0.180000	57.7	39.5
0.654000	35.2	30.1
12.672000	31.3	26.6

Carrier Frequency Separation

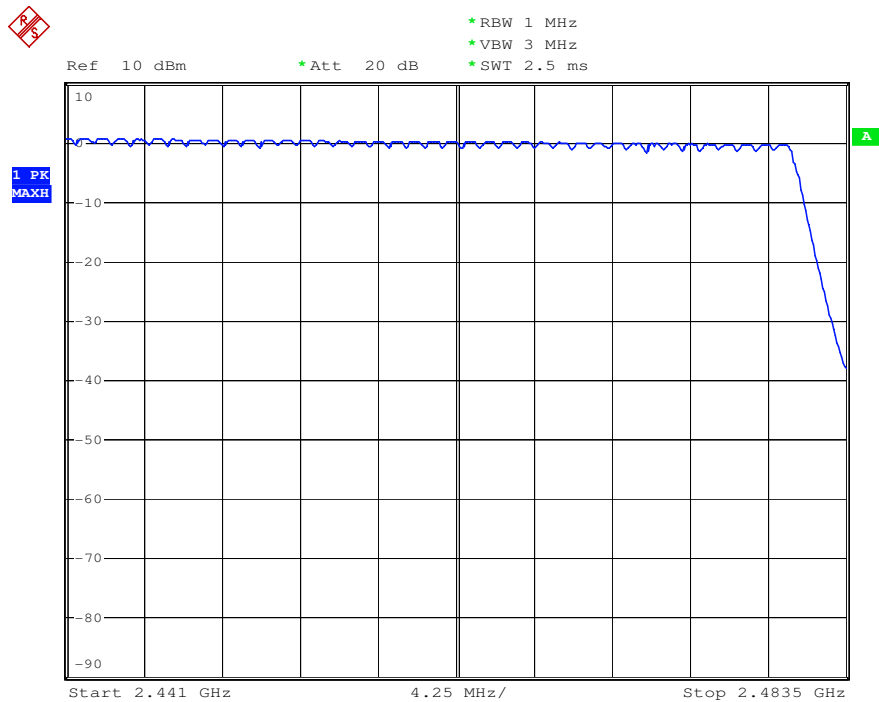


Date: 30.JUL.2012 16:39:35

Number of hopping channels

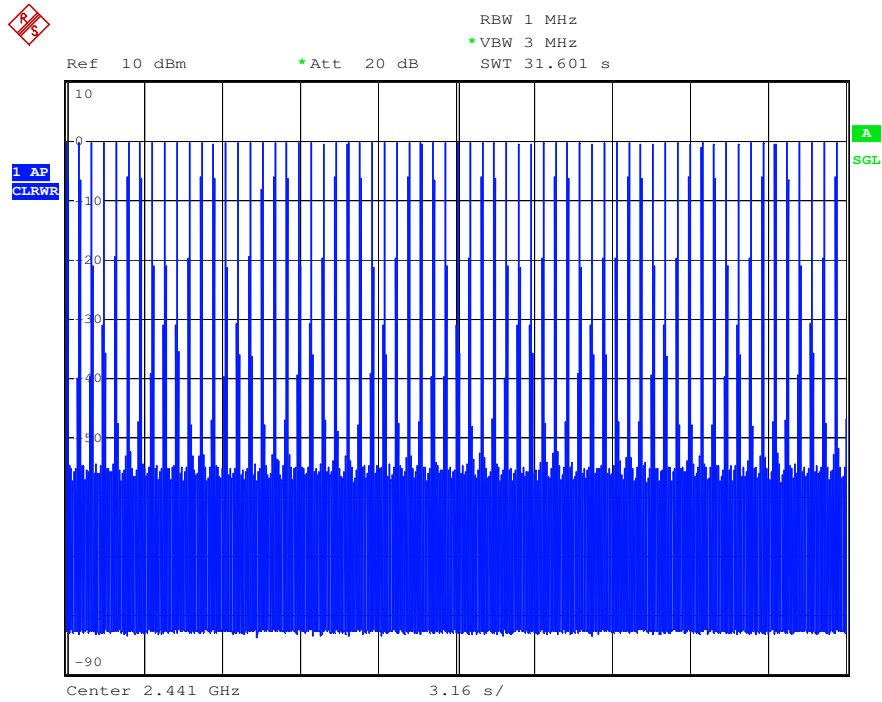


Date: 30.JUL.2012 16:50:44

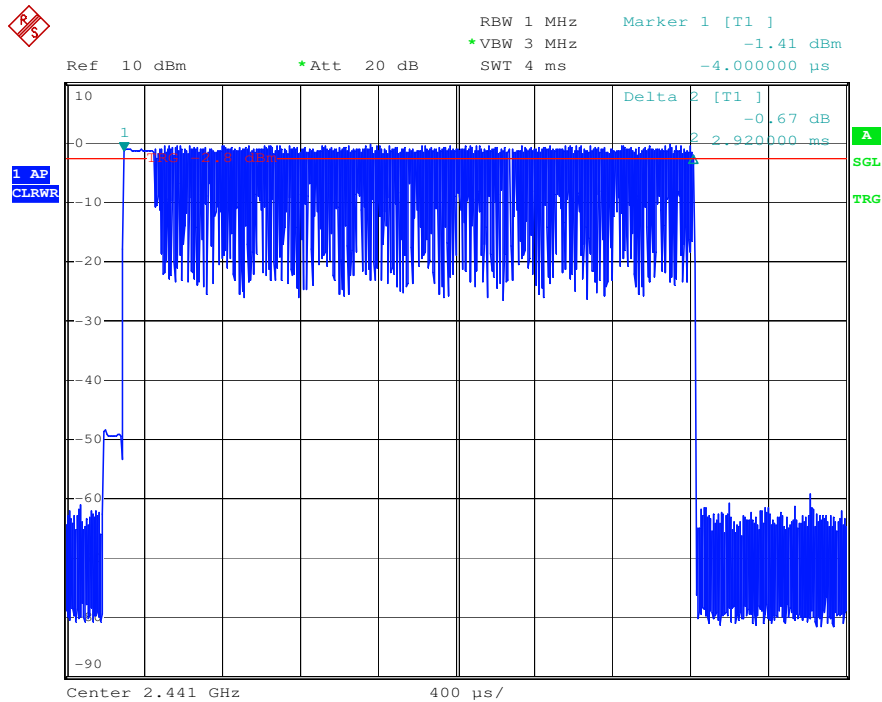


Date: 30.JUL.2012 16:51:18

Dwell Time



Date: 30.JUL.2012 16:43:18

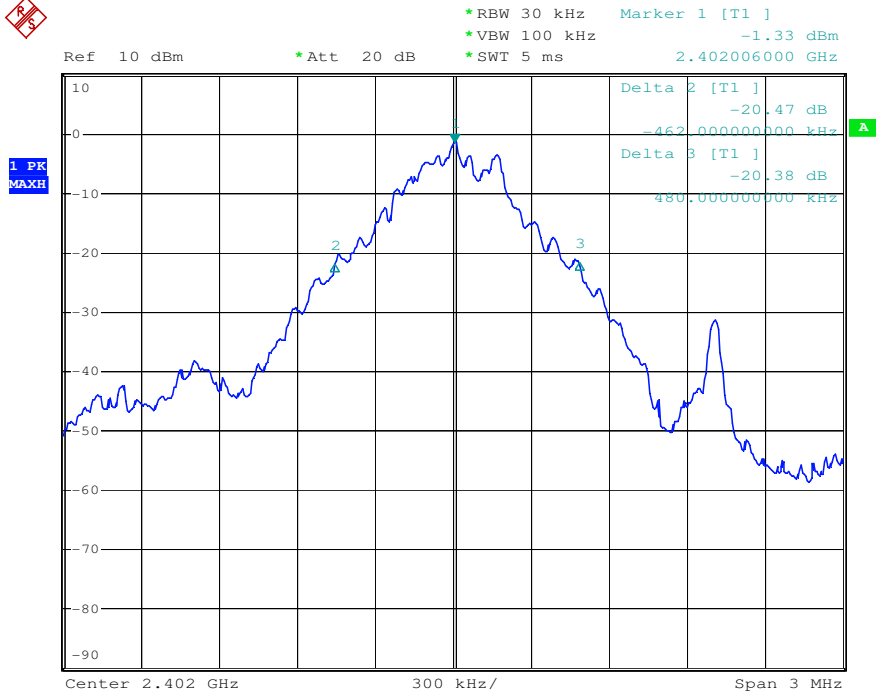


Date: 30.JUL.2012 16:40:57

20dB Bandwidth

Modulation: GFSK

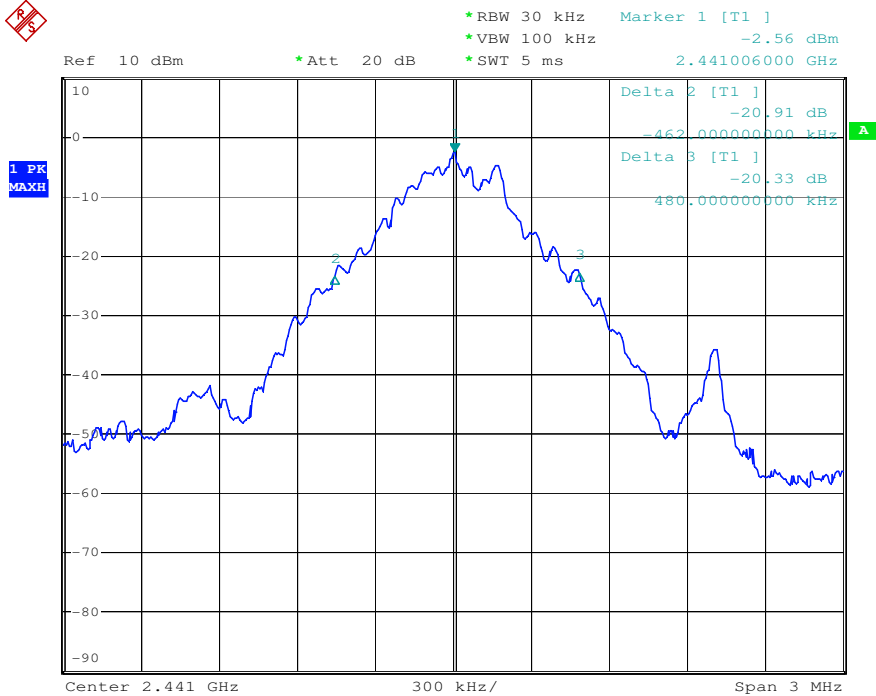
Tx frequency: 2402MHz



Date: 30.JUL.2012 17:00:40

Modulation: GFSK

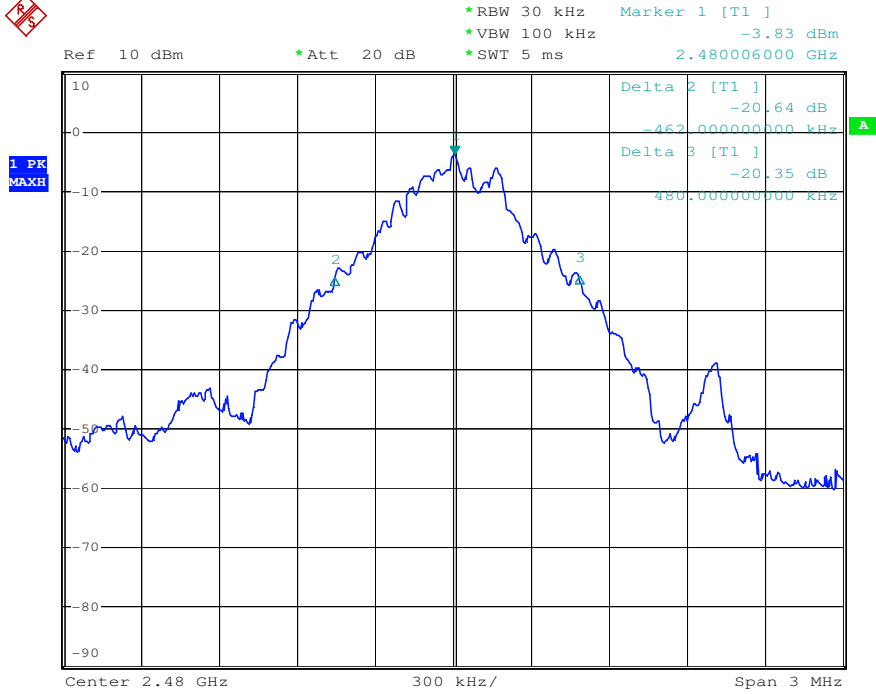
Tx frequency: 2441MHz



Date: 30.JUL.2012 17:05:09

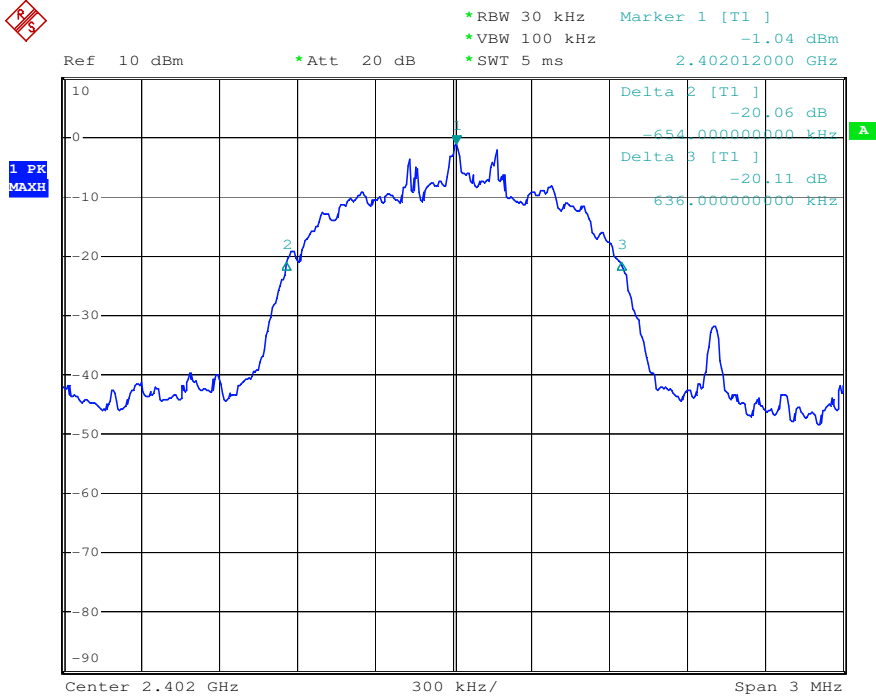
www.tuv.com

Modulation: GFSK
Tx frequency: 2480MHz



Date: 30.JUL.2012 17:10:46

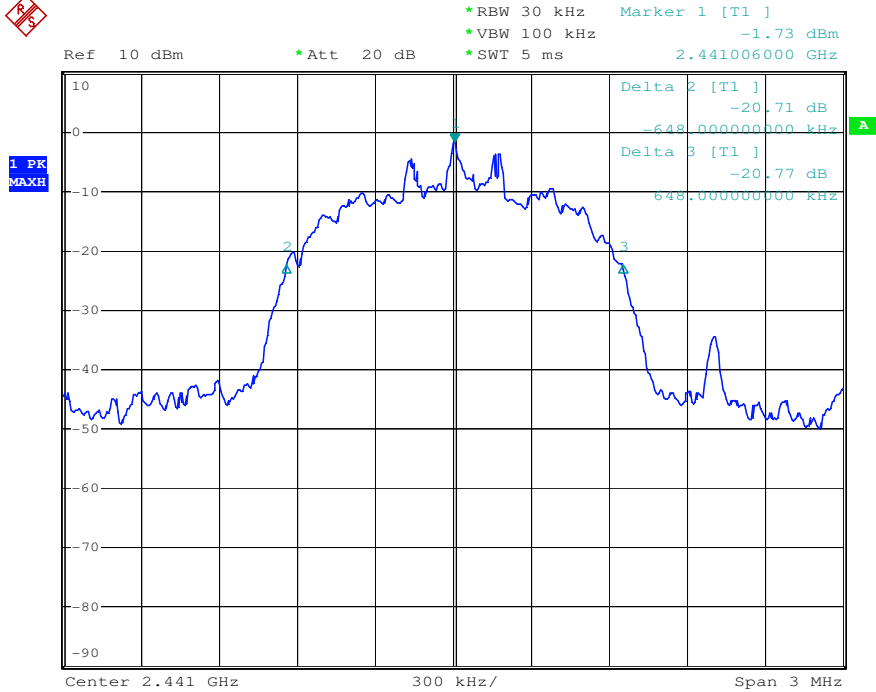
Modulation: 8DPSK
Tx frequency: 2402MHz



Date: 30.JUL.2012 17:23:23

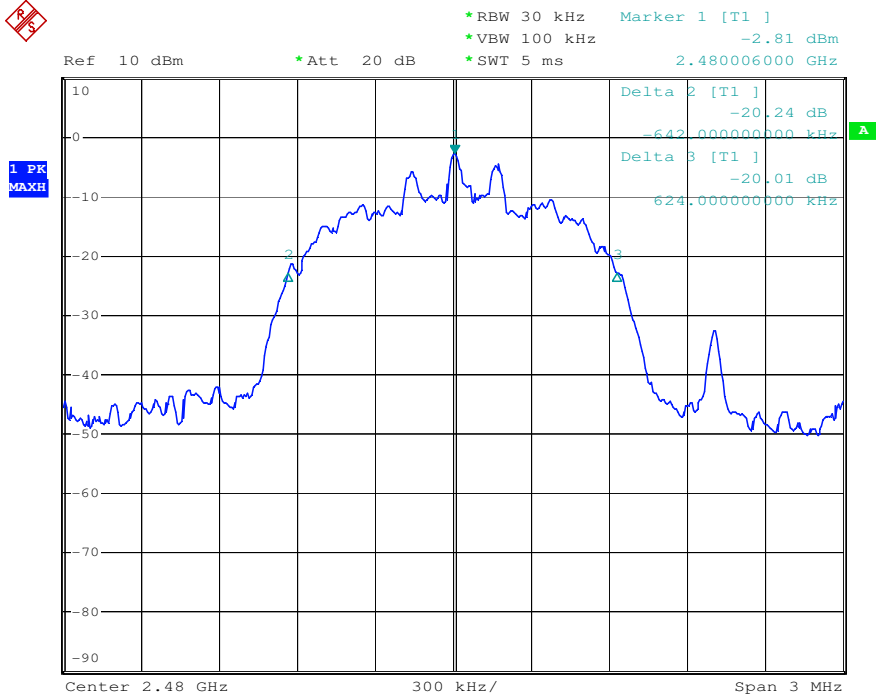
www.tuv.com

Modulation: 8DPSK
Tx frequency: 2441MHz



Date: 30.JUL.2012 17:27:53

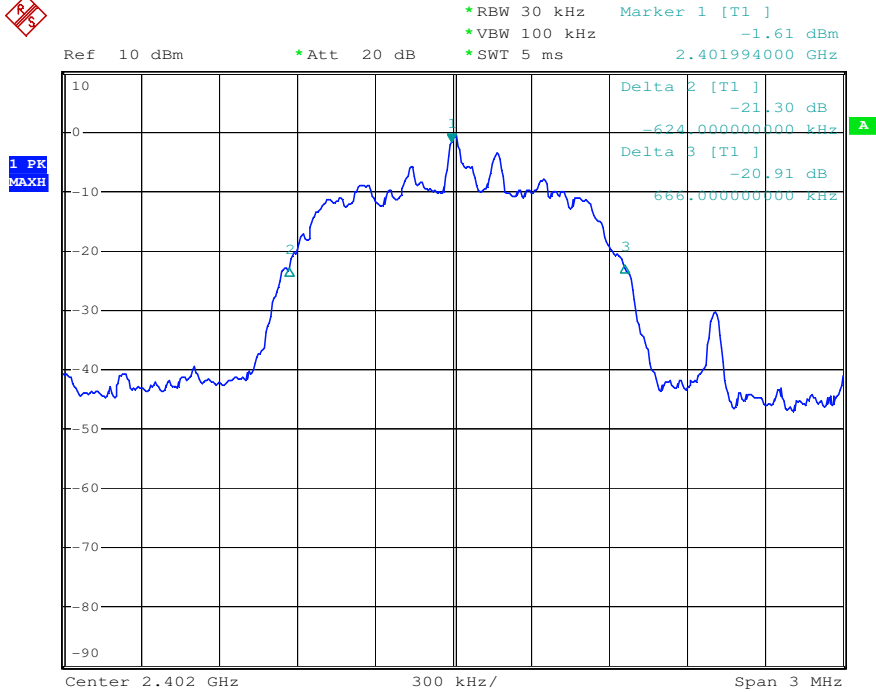
Modulation: 8DPSK
Tx frequency: 2480MHz



Date: 30.JUL.2012 17:33:31

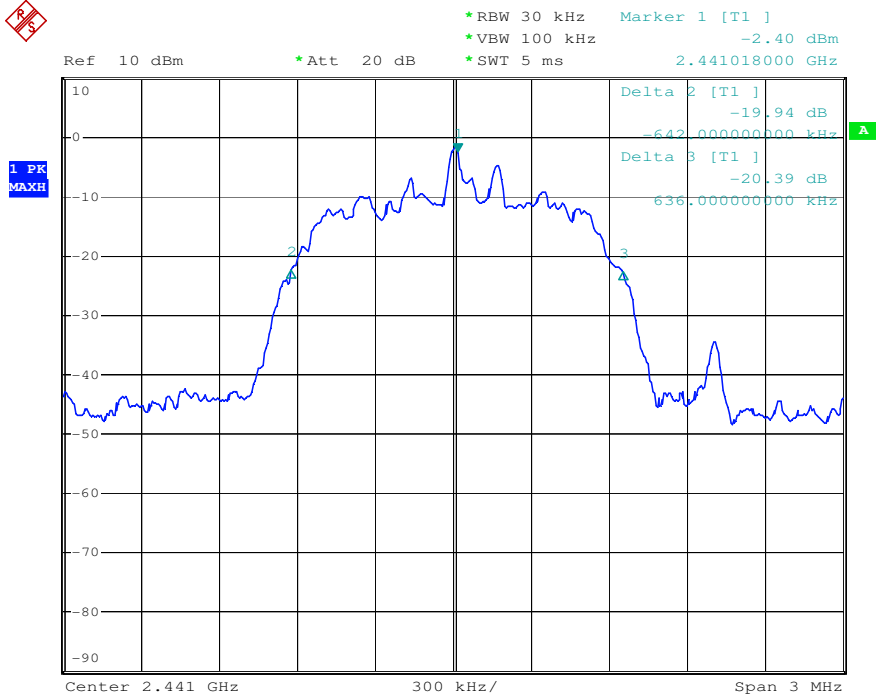
www.tuv.com

Modulation: DQPSK
Tx frequency: 2402MHz



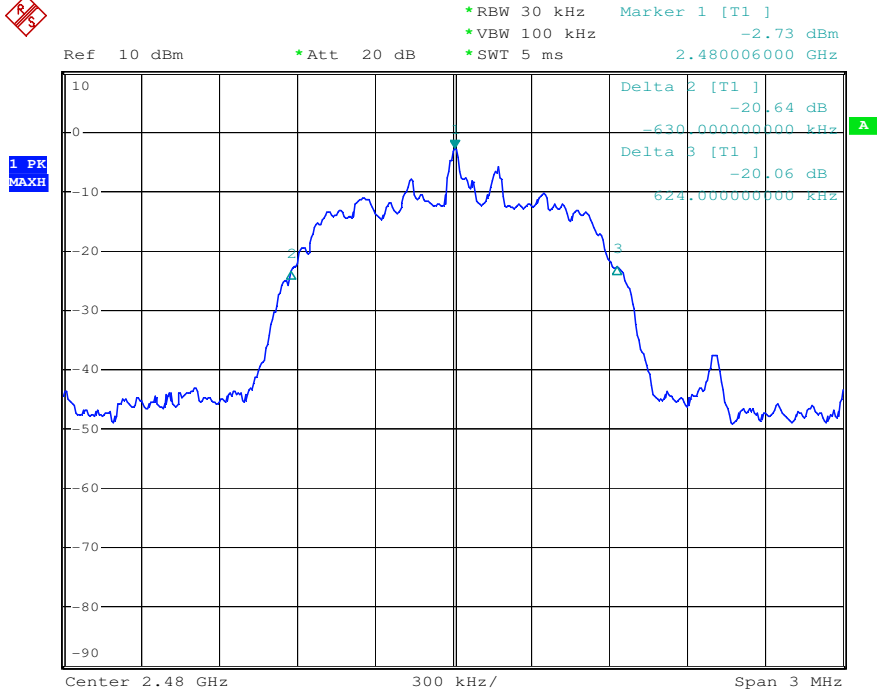
Date: 30.JUL.2012 17:19:12

Modulation: DQPSK
Tx frequency: 2441MHz



Date: 30.JUL.2012 17:20:27

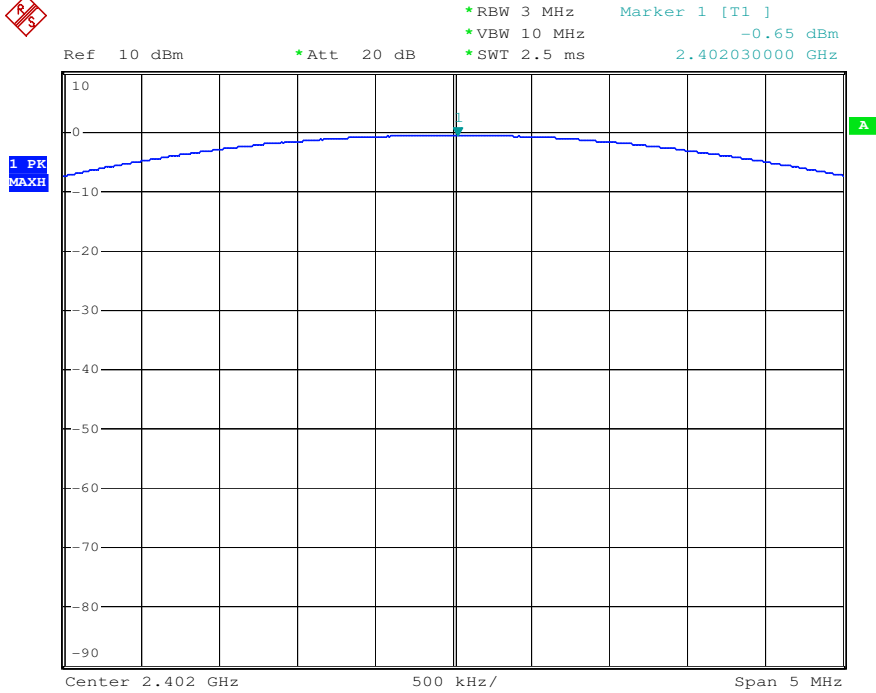
Modulation: DQPSK
 Tx frequency: 2480MHz



Date: 30.JUL.2012 17:22:10

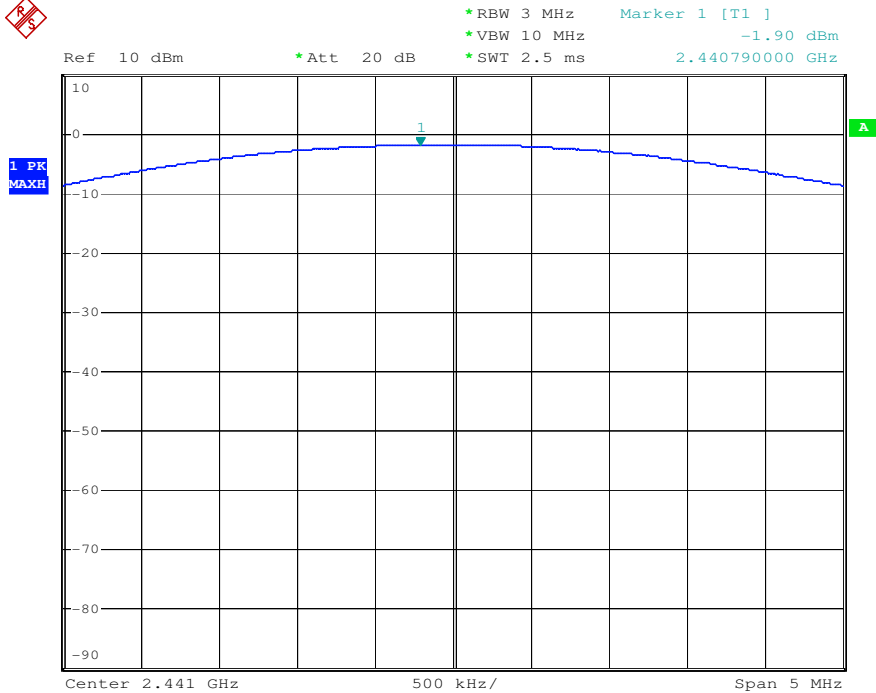
Peak Output Power

Modulation: GFSK
Tx frequency: 2402MHz



Date: 30.JUL.2012 17:00:55

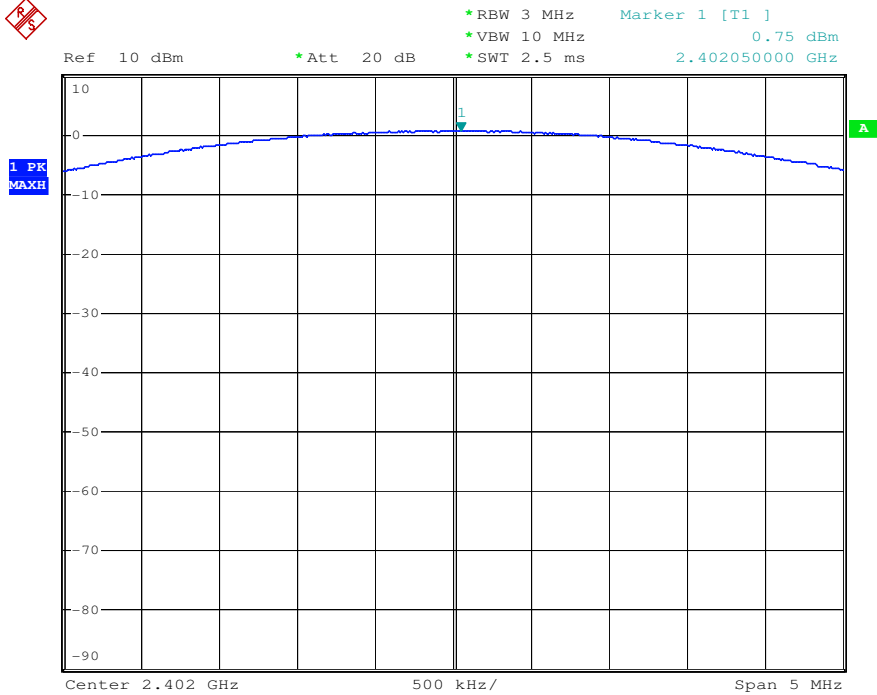
Modulation: GFSK
Tx frequency: 2441MHz



Date: 30.JUL.2012 17:05:26

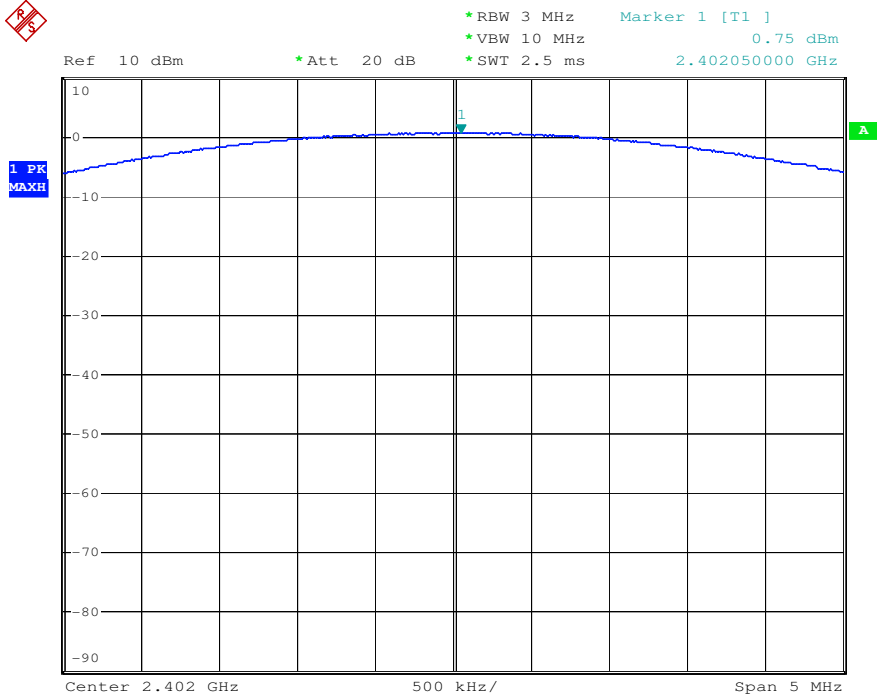
www.tuv.com

Modulation: GFSK
Tx frequency: 2480MHz



Date: 30.JUL.2012 17:19:24

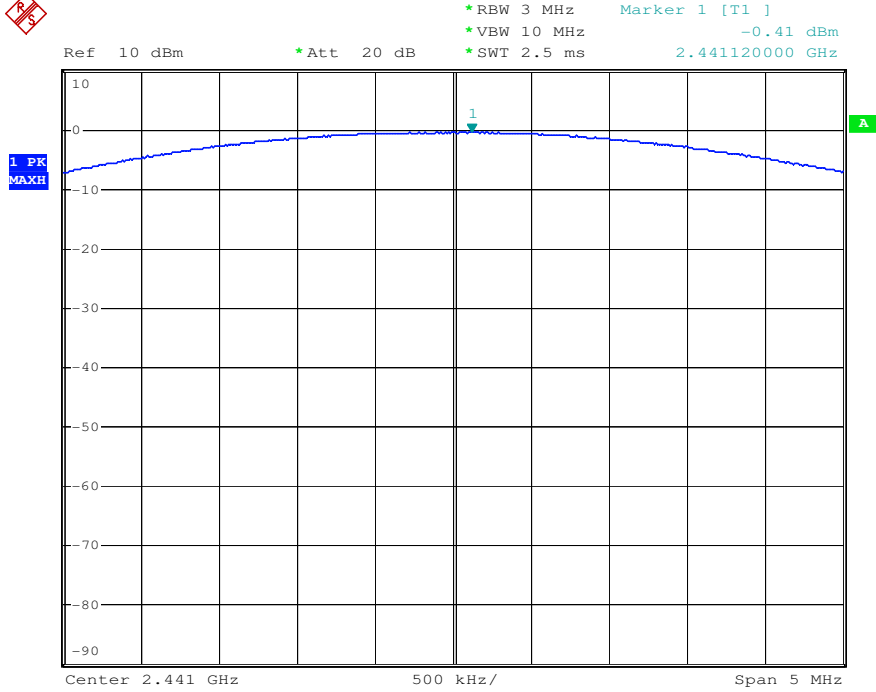
Modulation: Pi/4 DQPSK
Tx frequency: 2402MHz



Date: 30.JUL.2012 17:19:24

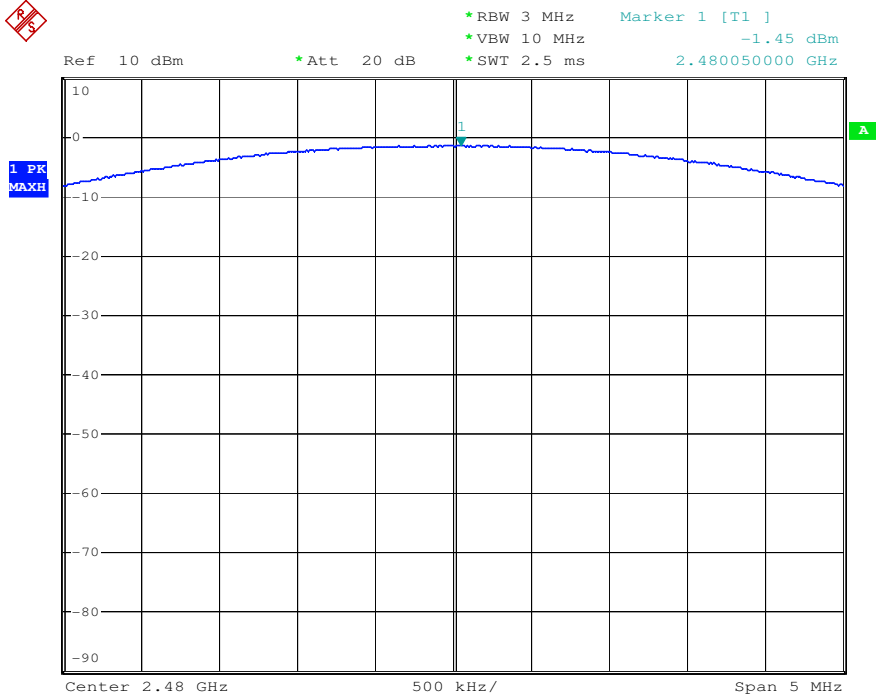
www.tuv.com

Modulation: Pi/4 DQPSK
Tx frequency: 2441MHz



Date: 30.JUL.2012 17:20:42

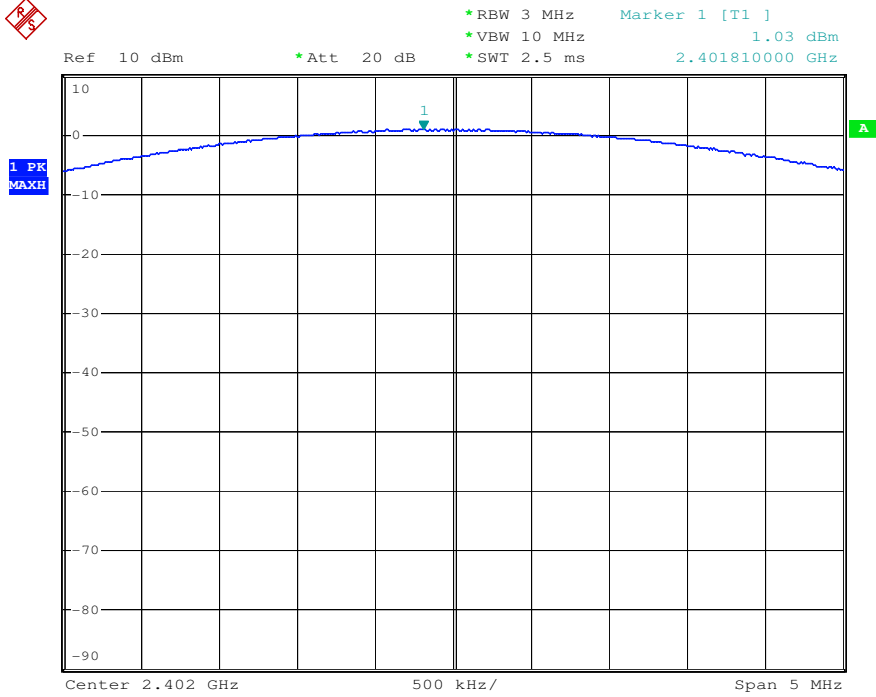
Modulation: Pi/4 DQPSK
Tx frequency: 2480MHz



Date: 30.JUL.2012 17:22:20

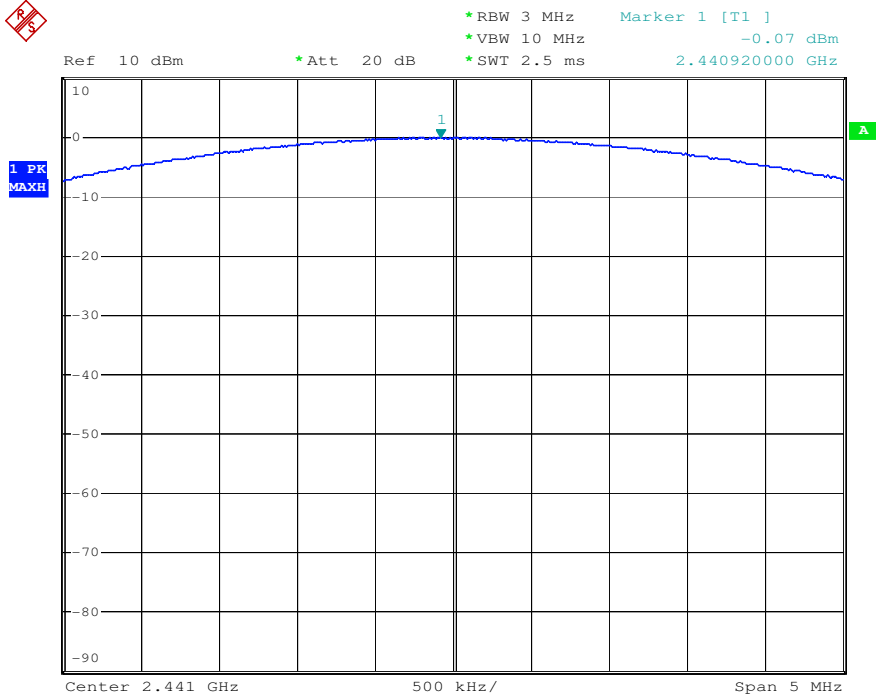
www.tuv.com

Modulation: 8DPSK
Tx frequency: 2402MHz



Date: 30.JUL.2012 17:23:34

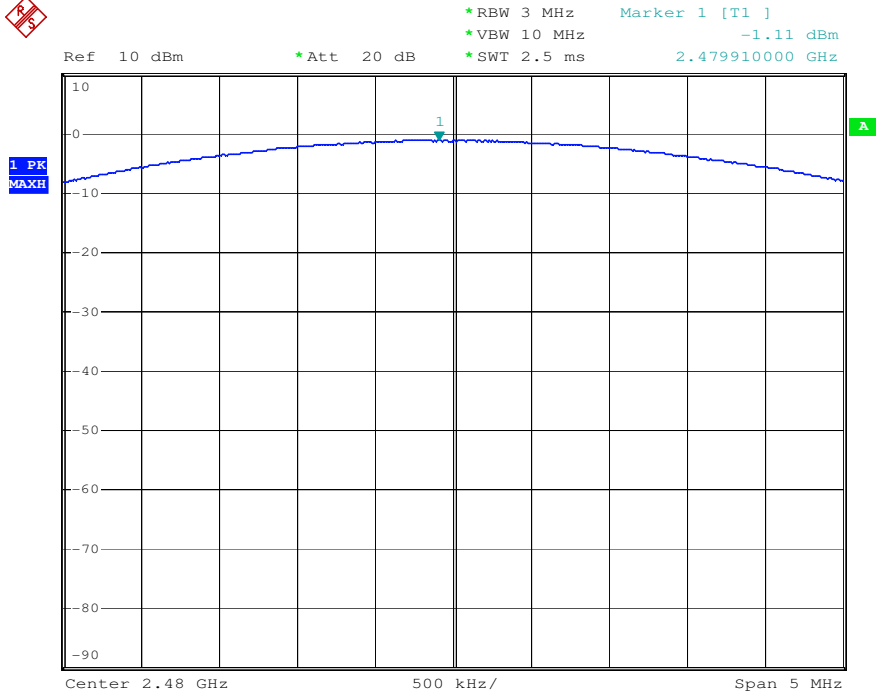
Modulation: 8DPSK
Tx frequency: 2441MHz



Date: 30.JUL.2012 17:28:05

www.tuv.com

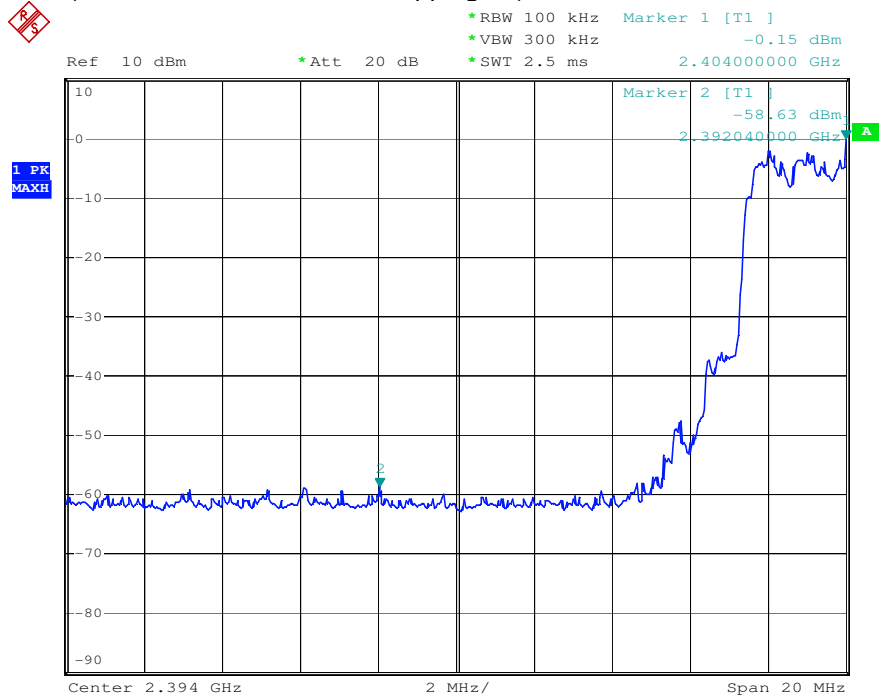
Modulation: 8DPSK
Tx frequency: 2480MHz



Date: 30.JUL.2012 17:33:46

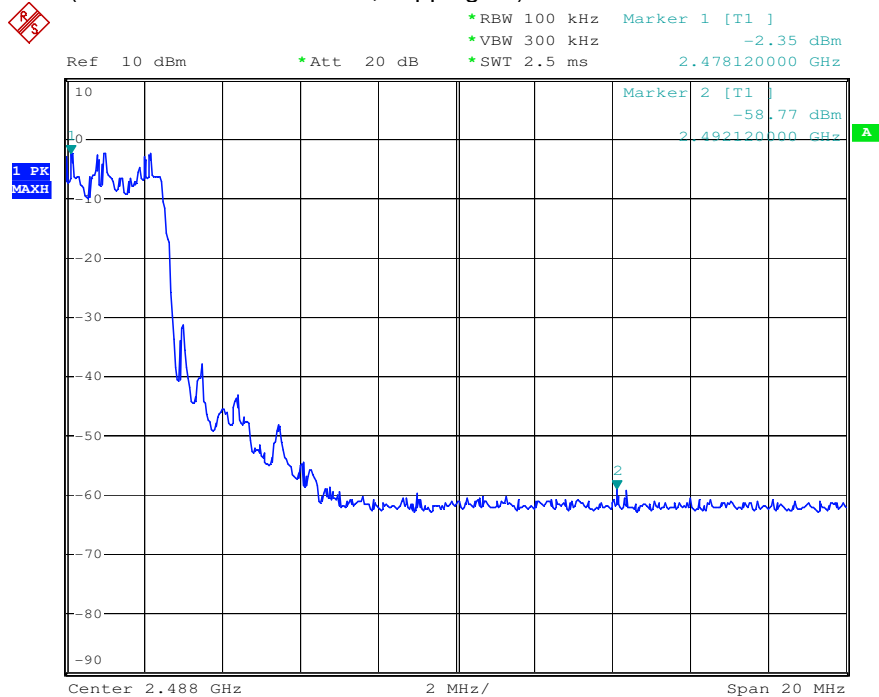
Band Edge Compliance

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



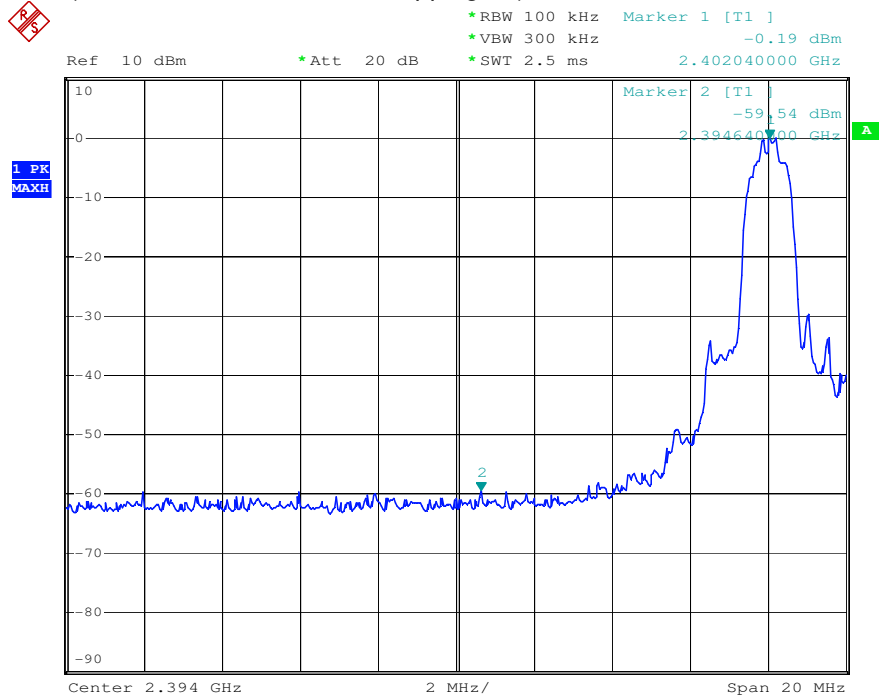
Date: 30.JUL.2012 16:45:53

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



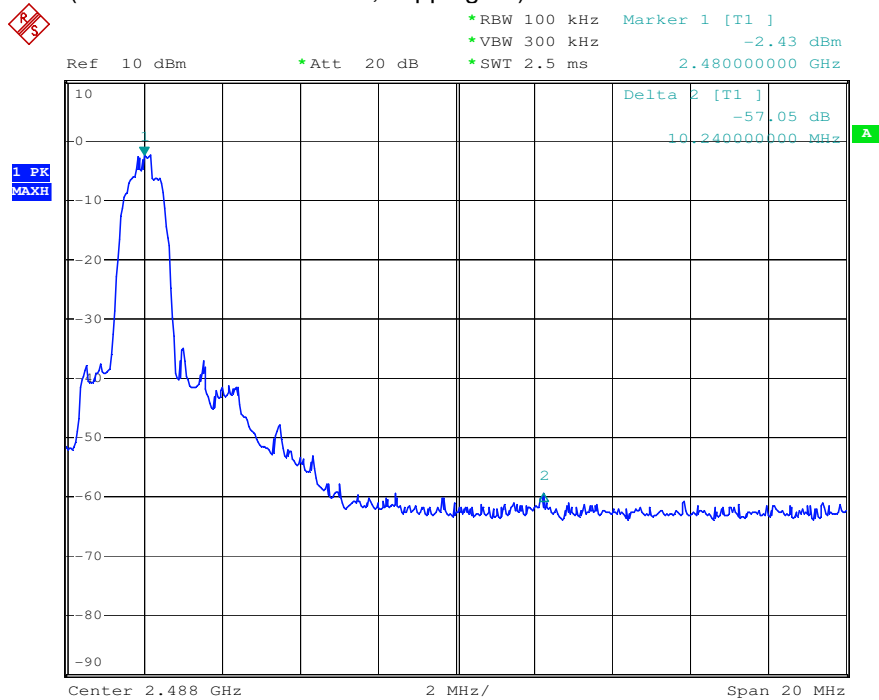
Date: 30.JUL.2012 16:49:23

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



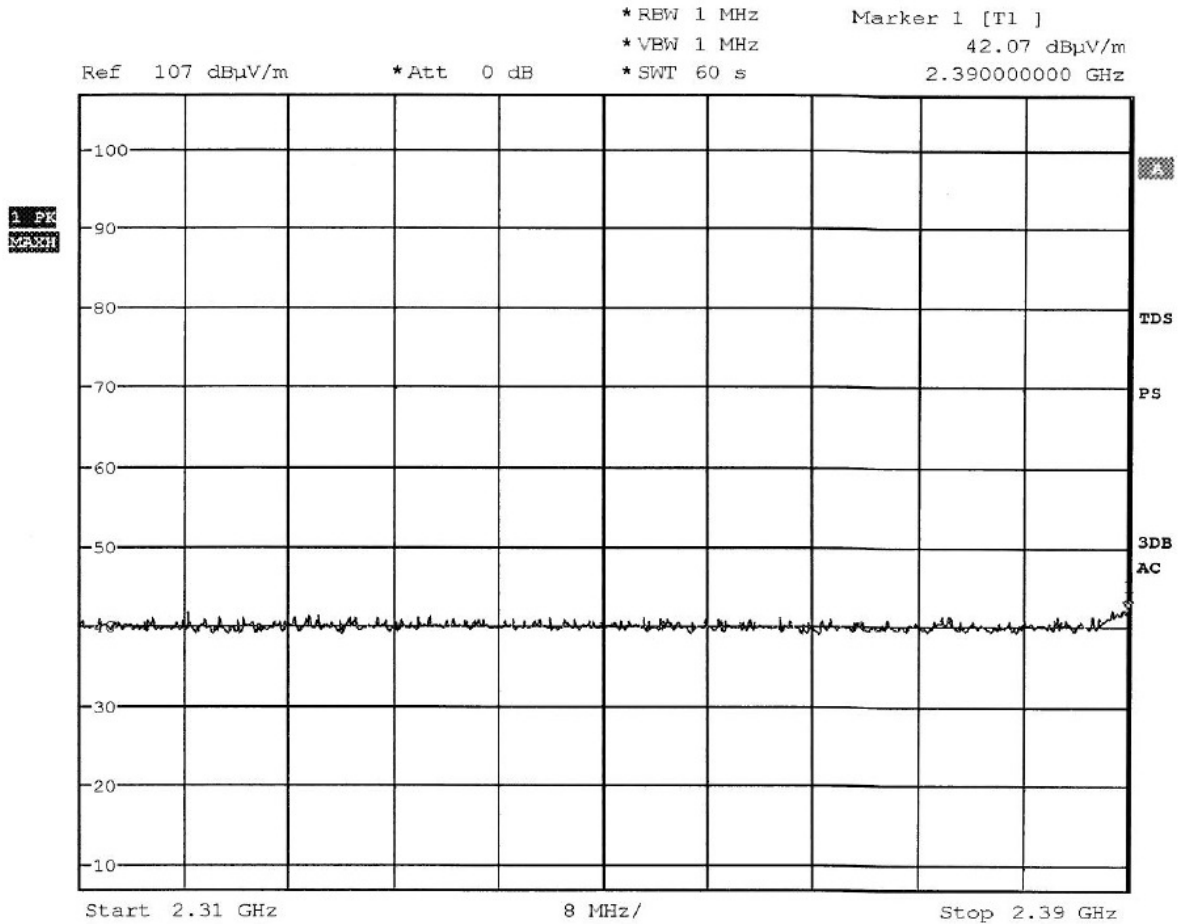
Date: 30.JUL.2012 17:27:01

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



Date: 30.JUL.2012 17:37:08

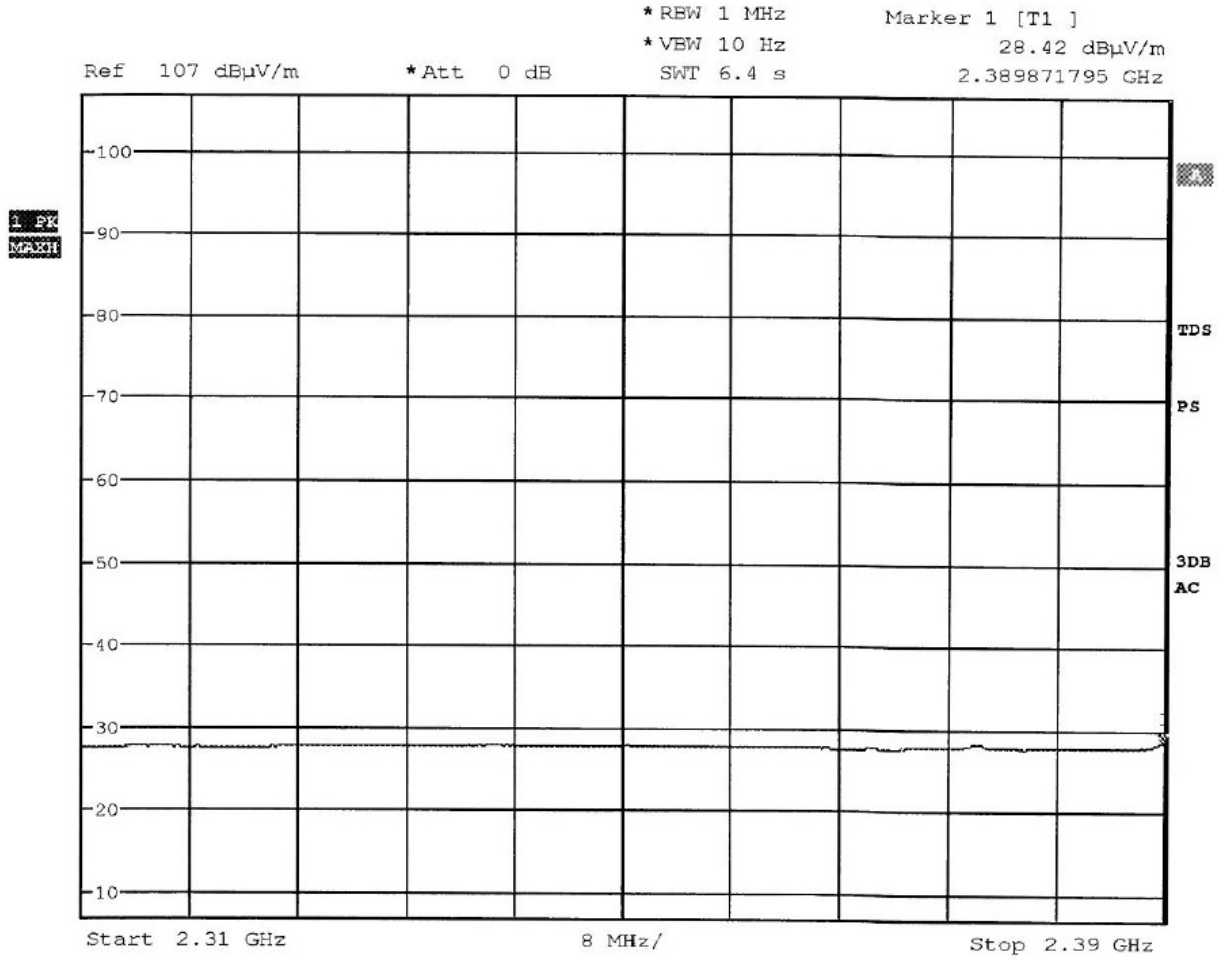
Tx frequency: 2402MHz (radiated measurement)



WITRON/ BT DONGLE/ MMBTD/ 00120607135-001/ 2402MHz/ VERT.

Date: 5.JUL.2012 11:52:37

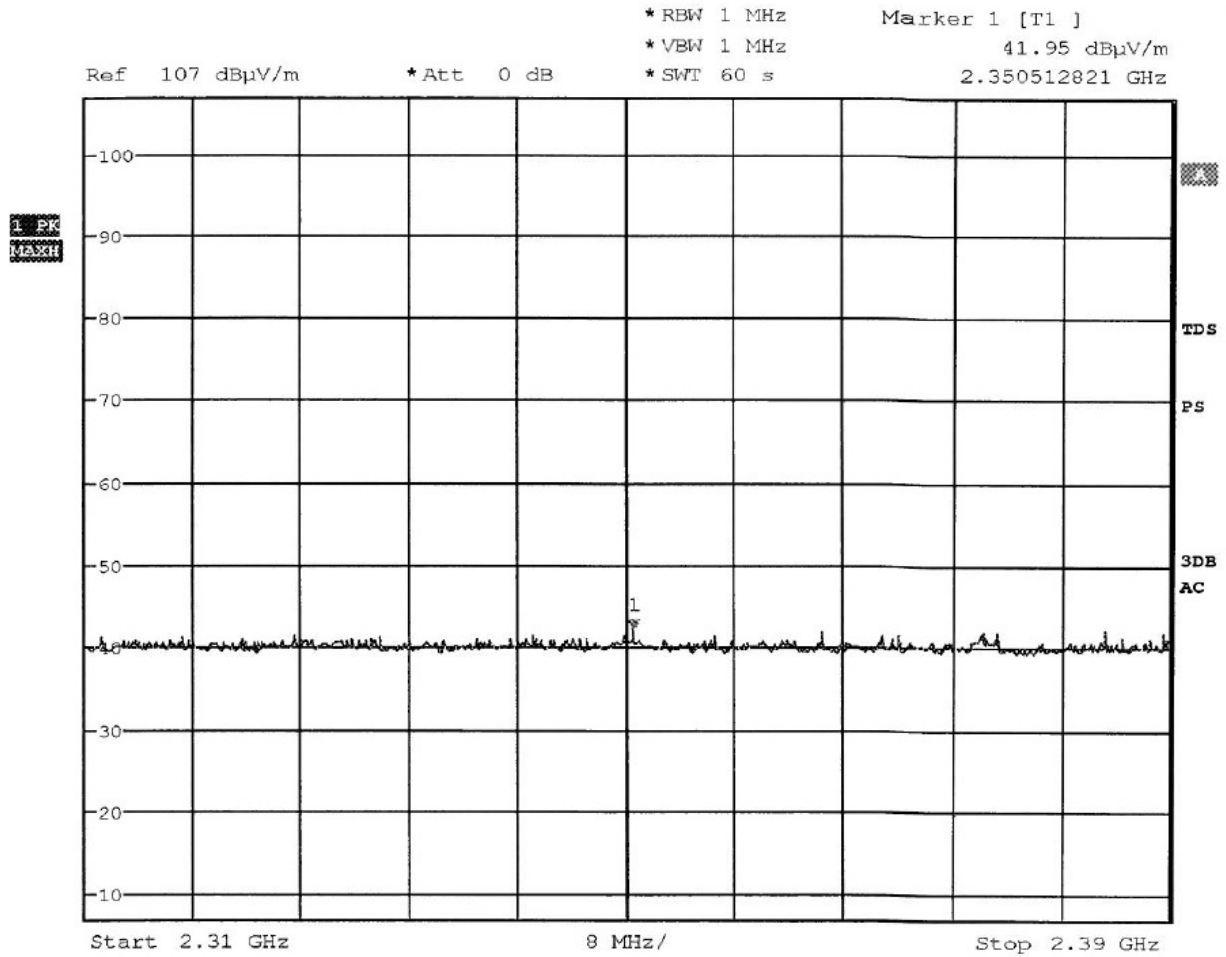
Vertical Polarization



WITRON/ BT DONGLE/ MMBTD/ 00120607135-001/ 2402MHz/ VERT.

Date: 5.JUL.2012 11:52:52

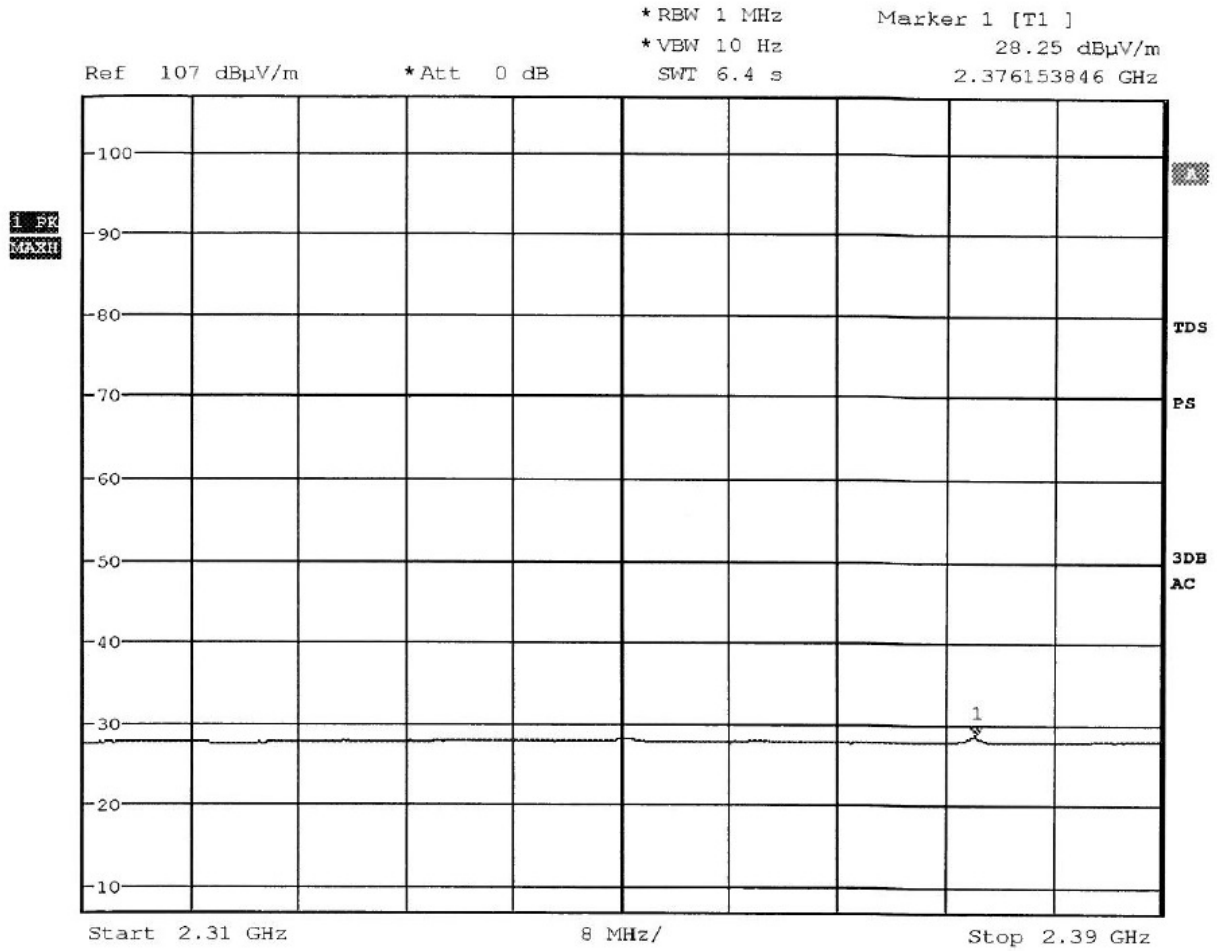
Vertical Polarization



WITRON/ BT DONGLE/ MMBTD/ 00120607135-001/ 2402MHz/ HORI..

Date: 5.JUL.2012 11:50:27

Horizontal Polarization

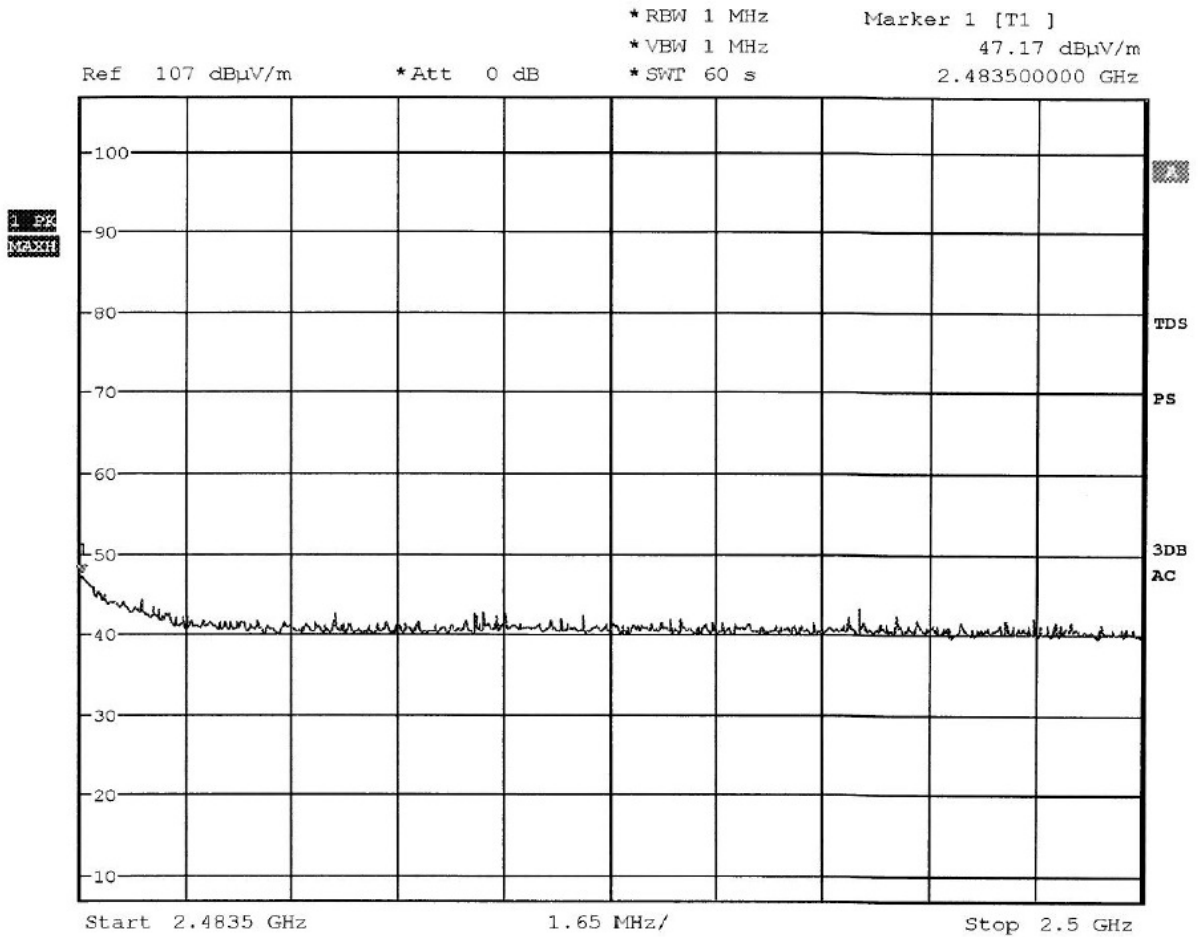


WITRON/ BT DONGLE/ MMBTD/ 00120607135-001/ 2402MHz/ HORI..

Date: 5.JUL.2012 11:51:26

Horizontal Polarization

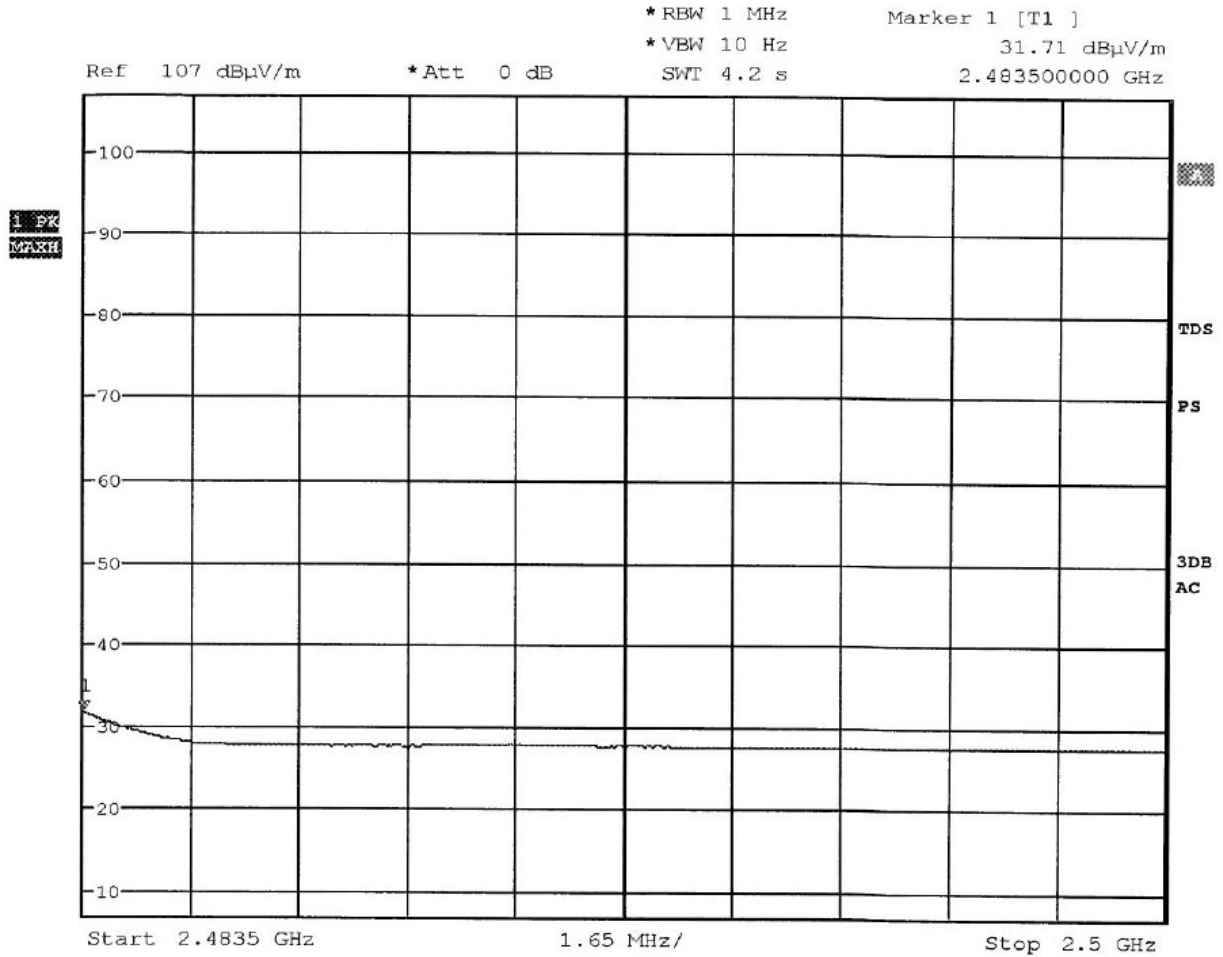
Tx frequency: 2480MHz (radiated measurement)



WITRON/ BT DONGLE/ MMBTD/ 00120607135-001/ 2480MHz/ VERT.

Date: 5.JUL.2012 12:19:51

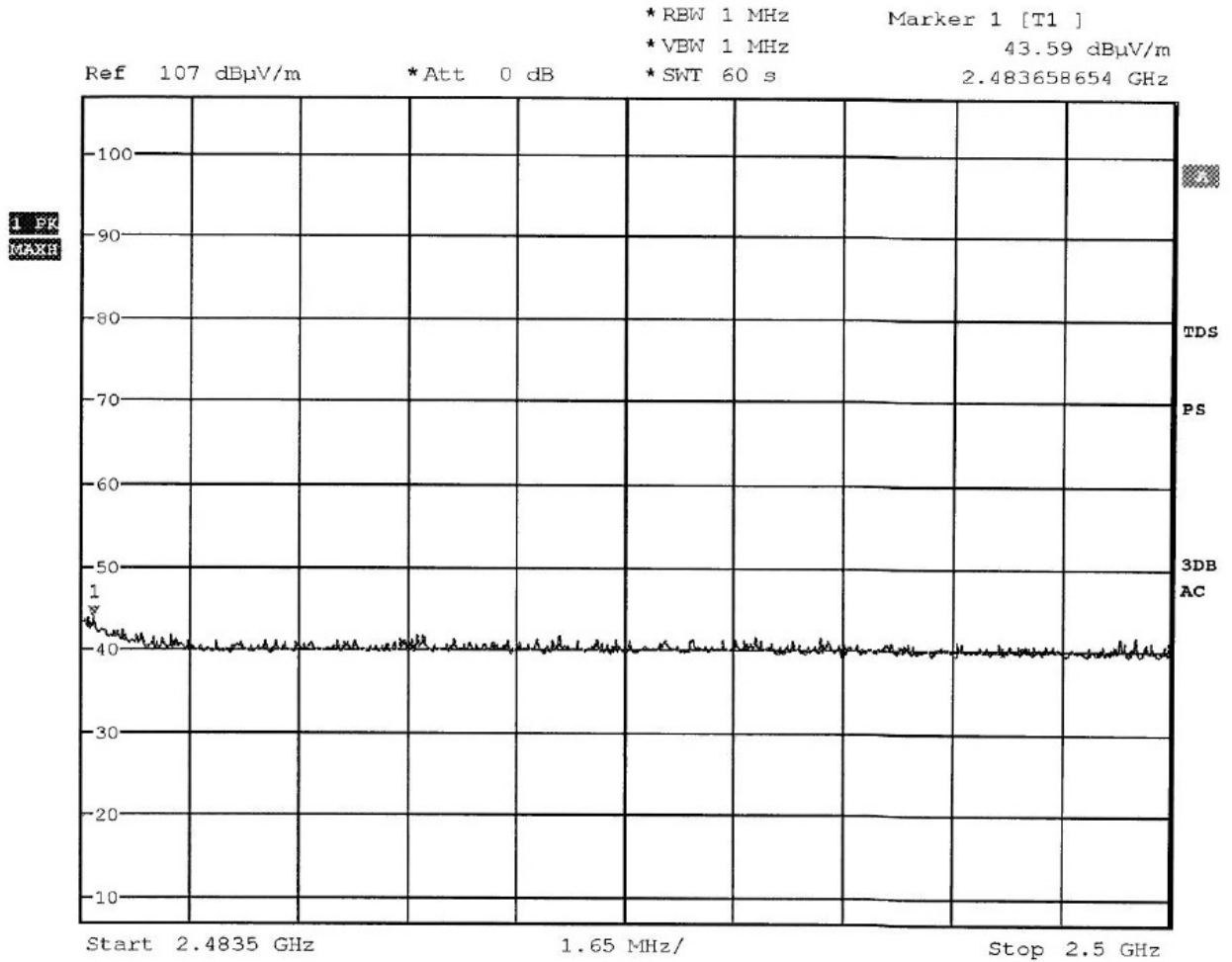
Vertical Polarization



WITRON/ BT DONGLE/ MMBTD/ 00120607135-001/ 2480MHz/ VERT.

Date: 5.JUL.2012 12:20:02

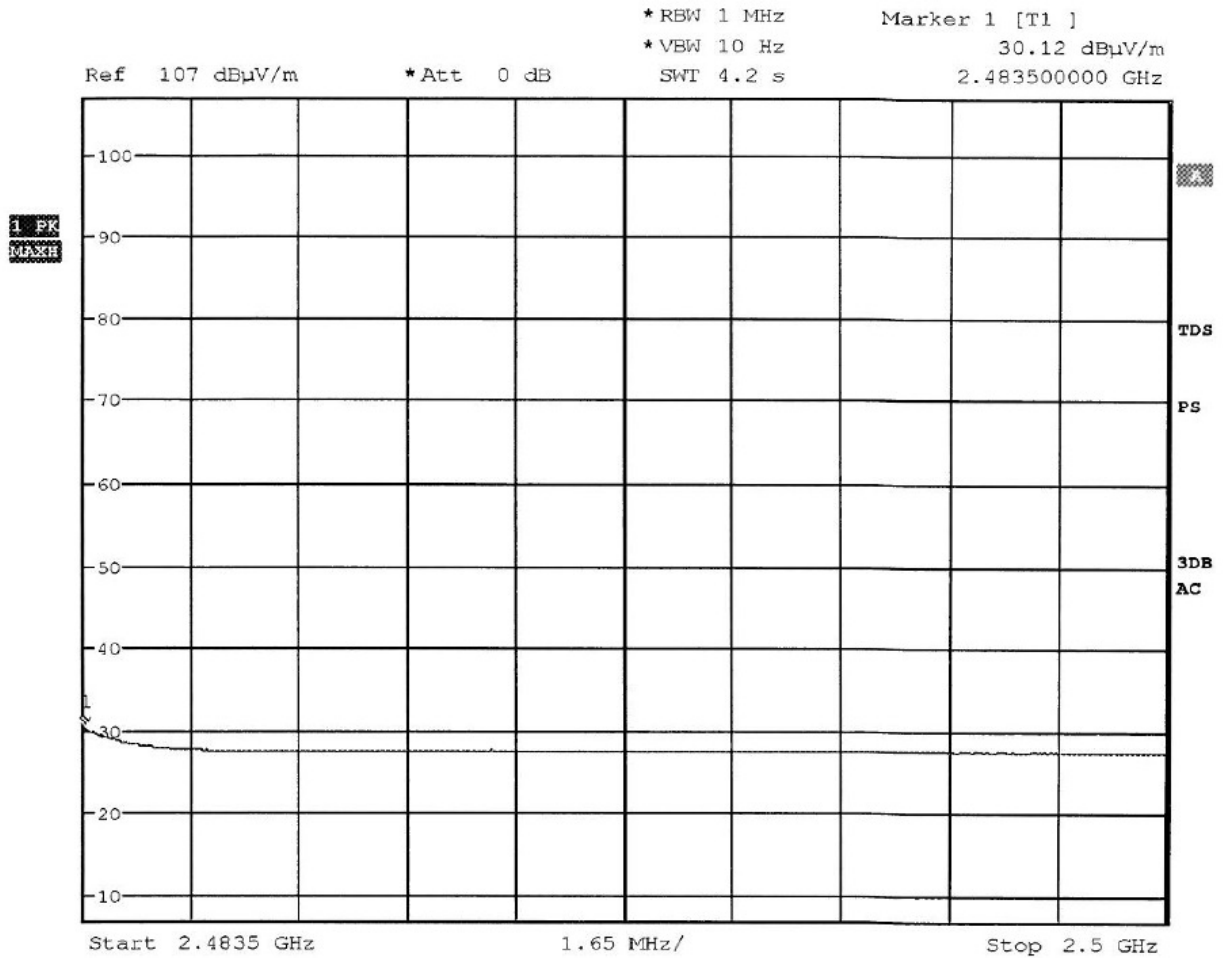
Vertical Polarization



WITRON/ BT DONGLE/ MMBTD/ 00120607135-001/ 2480MHz/ HORI.

Date: 5.JUL.2012 12:21:14

Horizontal Polarization



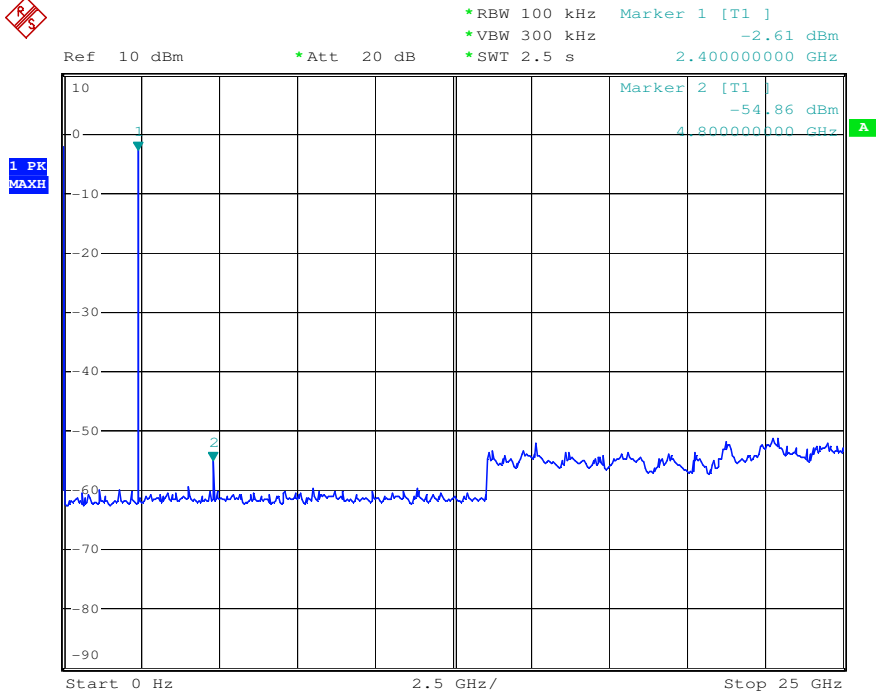
WITRON/ BT DONGLE/ MMBTD/ 00120607135-001/ 2480MHz/ HORI.

Date: 5.JUL.2012 12:21:43

Horizontal Polarization

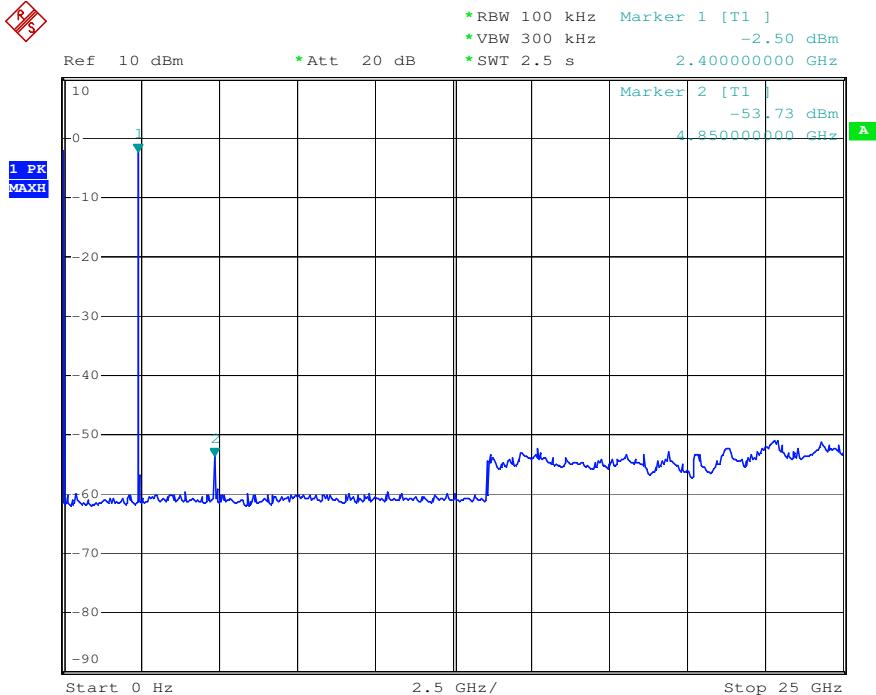
Spurious Emissions - Conducted

Tx frequency: 2402MHz



Date: 30.JUL.2012 17:02:29

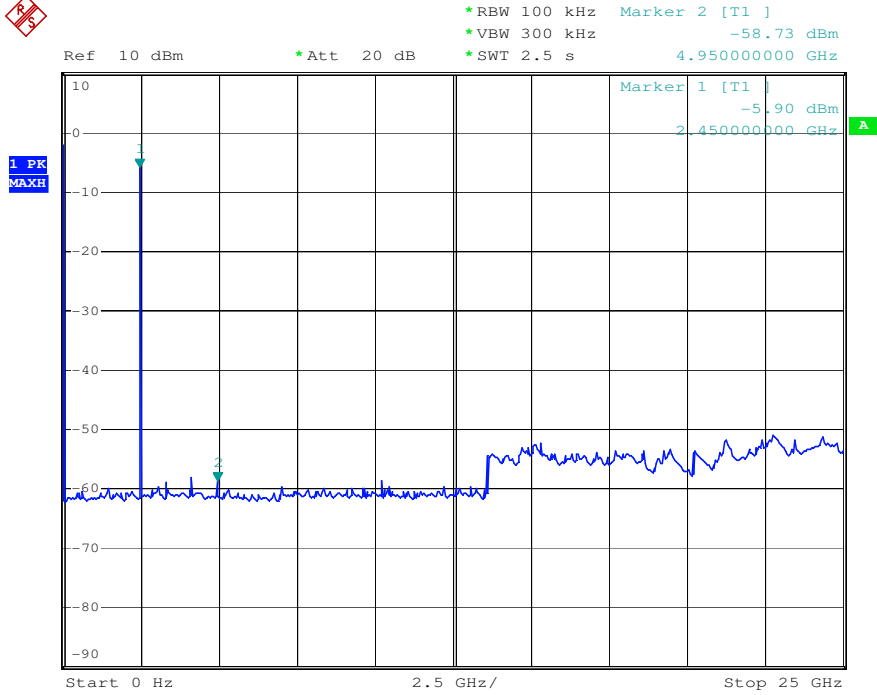
Tx frequency: 2441MHz



Date: 30.JUL.2012 17:09:23

www.tuv.com

Tx frequency: 2480MHz



Date: 30.JUL.2012 17:15:46