

Appendix 1

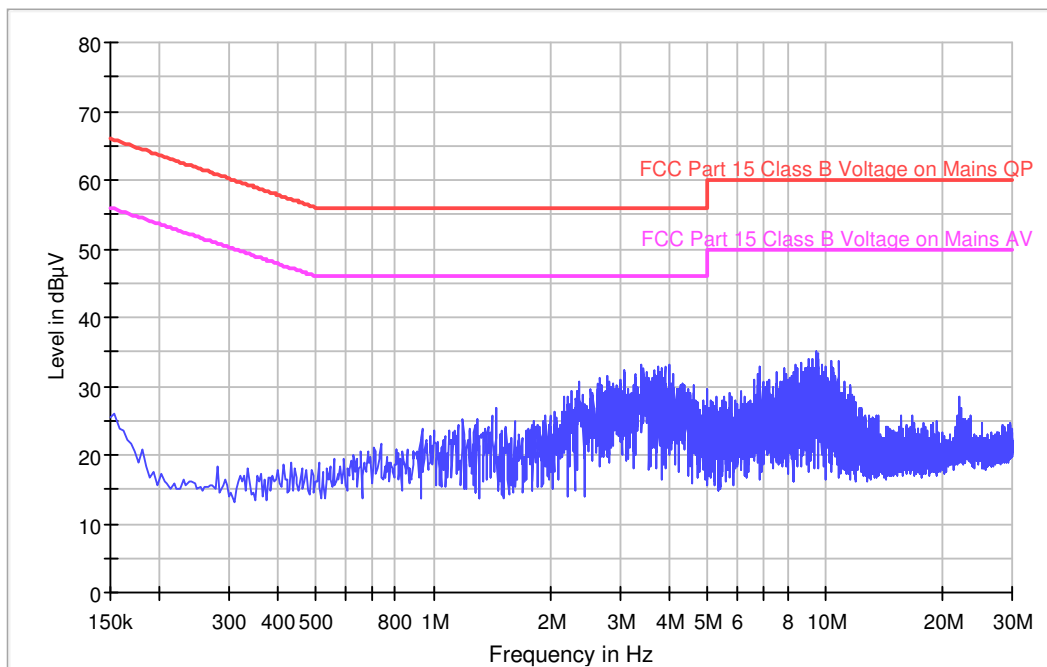
Test Results

Disturbance Voltage on AC Mains

EUT Information

Client / EUT:	ABLE Trend BLE Dual Mode Module
Model no. / Sample no.:	LE2201 (00130905133-001)
Test standard:	FCC Part 15
Operating conditions:	Frequency Hopping
Operator:	Mun
Test voltage / frequency:	120V 60Hz
Line / lead:	L1

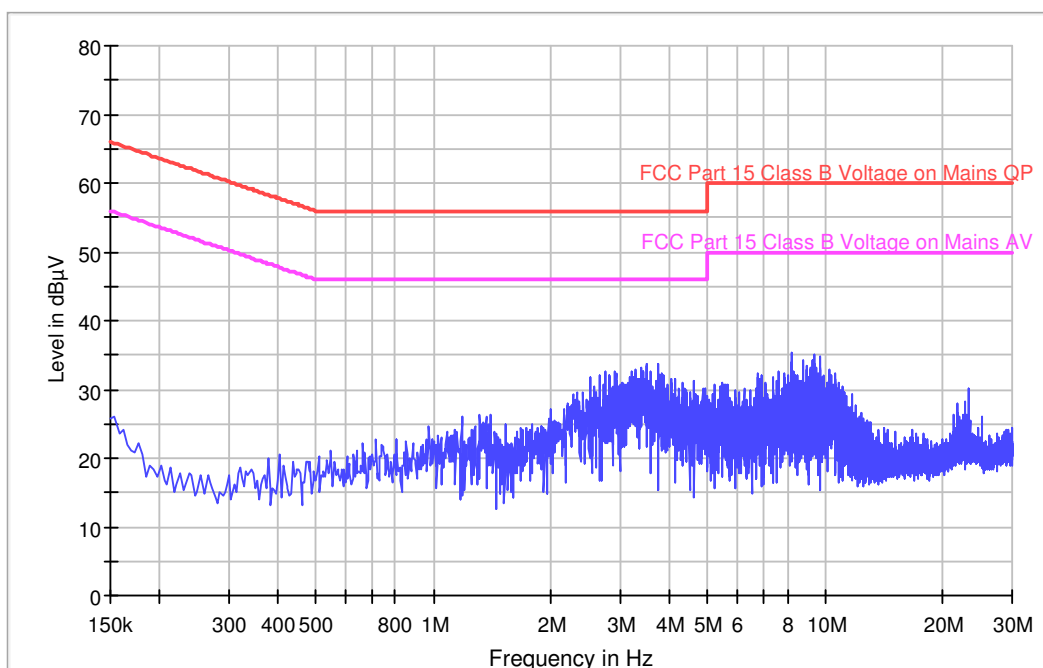
Conducted Emission (150 kHz - 30 MHz)



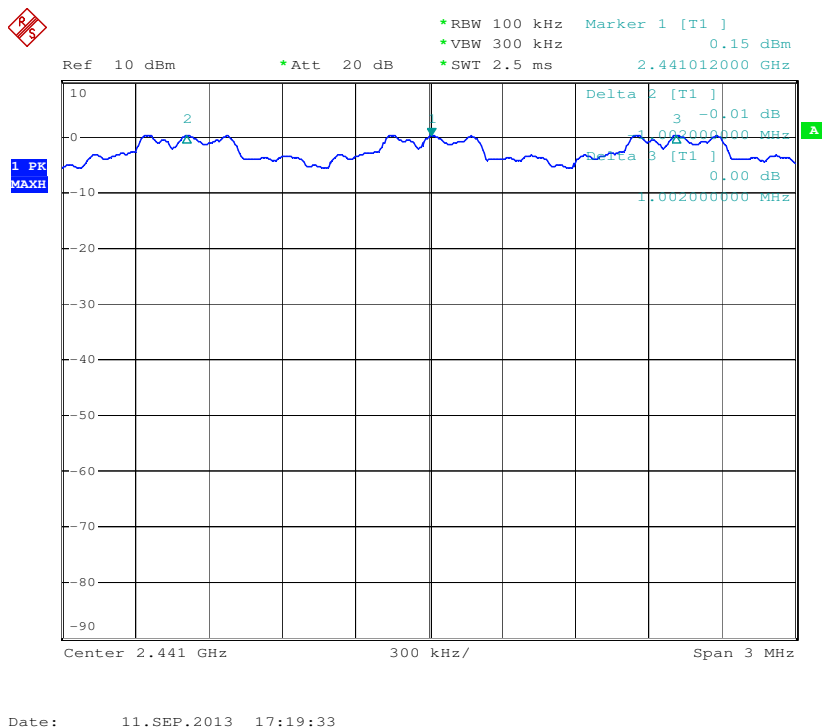
EUT Information

Client / EUT:	ABLE Trend BLE Dual Mode Module
Model no. / Sample no.:	LE2201 (00130905133-001)
Test standard:	FCC Part 15
Operating conditions:	Frequency Hopping
Operator:	Mun
Test voltage / frequency:	120V 60Hz
Line / lead:	N

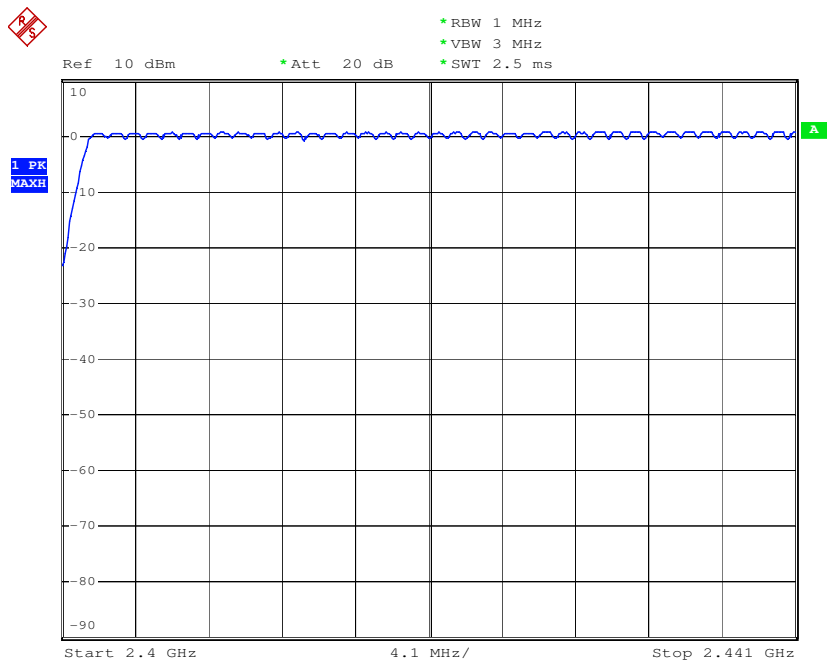
Conducted Emission (150 kHz - 30 MHz)



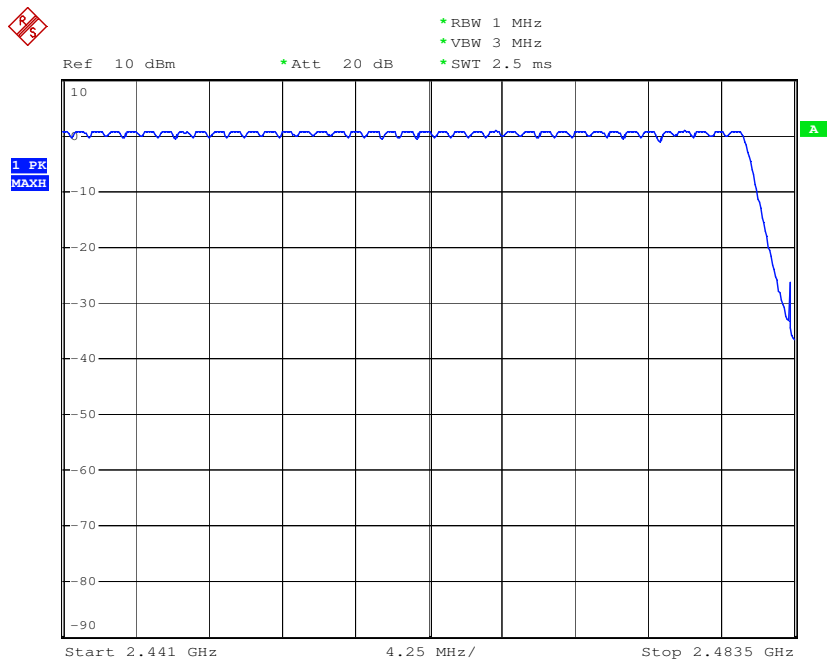
Carrier Frequency Separation



Number of hopping channels

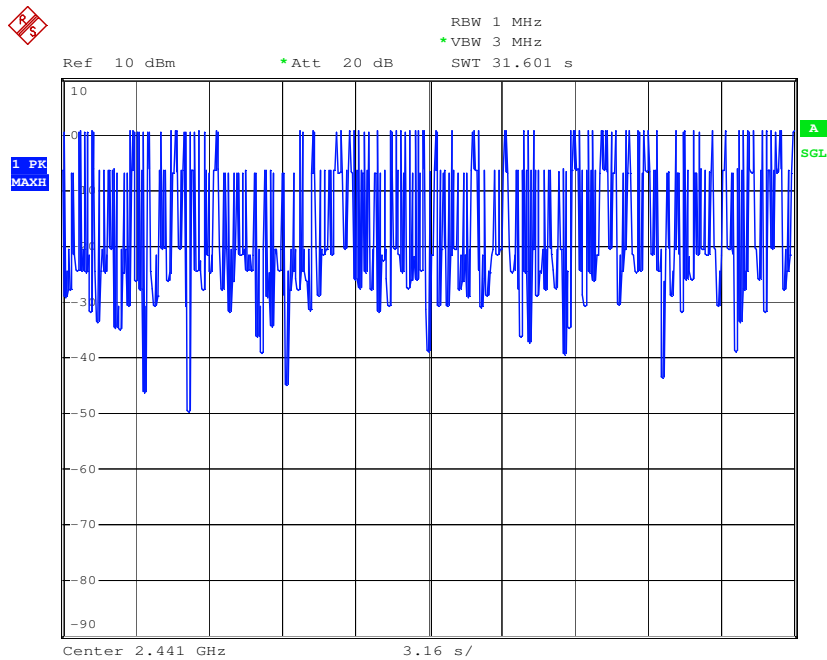


Date: 11.SEP.2013 17:22:01

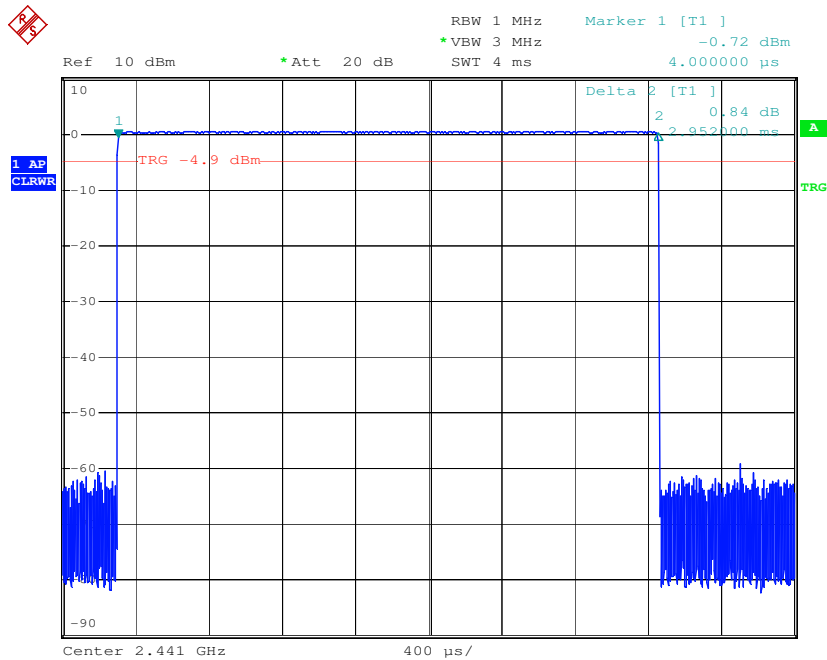


Date: 11.SEP.2013 17:22:33

Dwell Time



Date: 11.SEP.2013 17:27:16

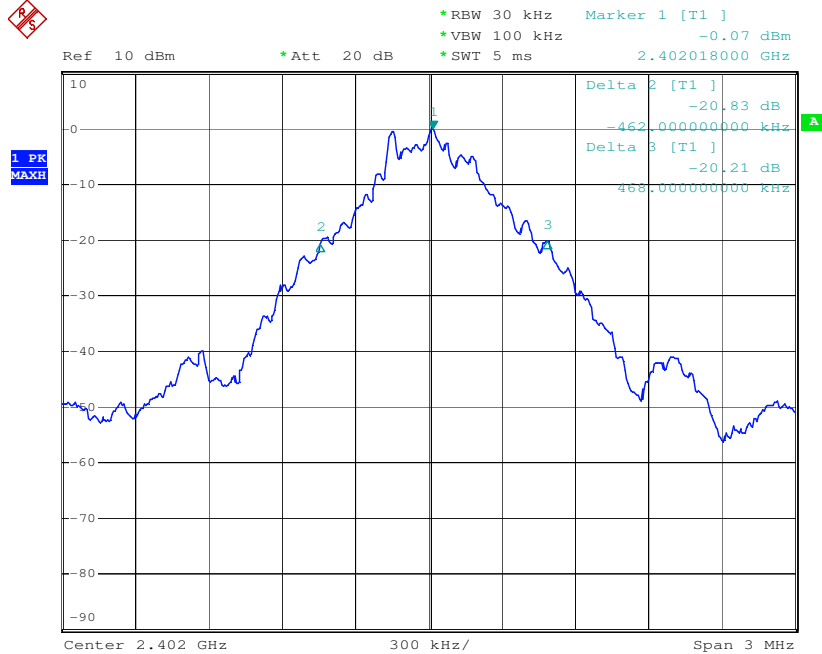


Date: 11.SEP.2013 17:28:14

20dB Bandwidth

Modulation: GFSK

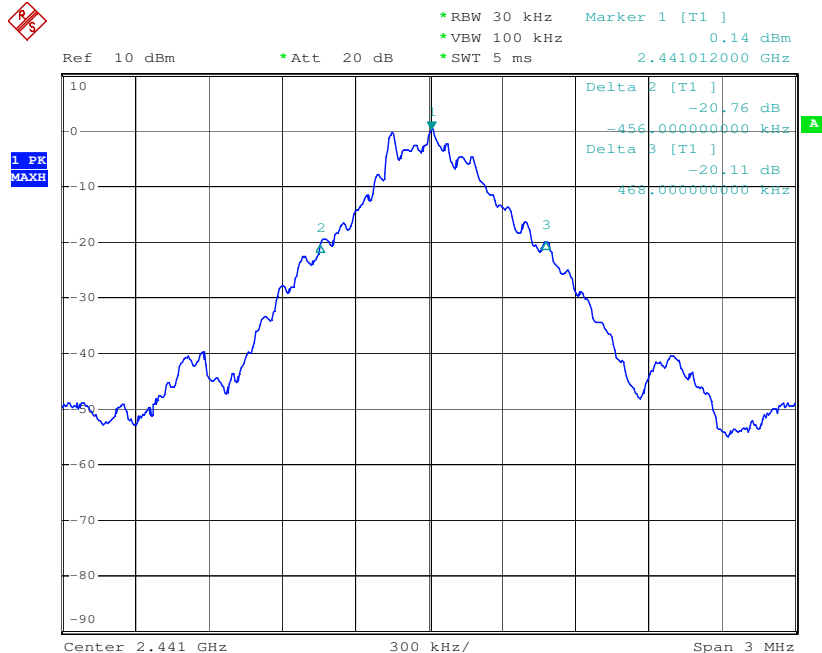
Tx frequency: 2402MHz



Date: 11.SEP.2013 17:30:10

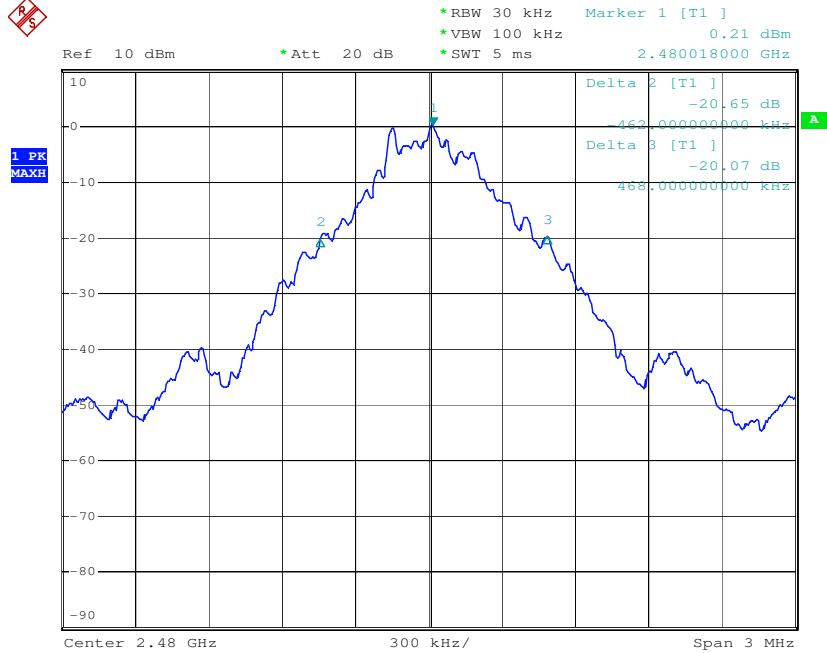
Modulation: GFSK

Tx frequency: 2441MHz



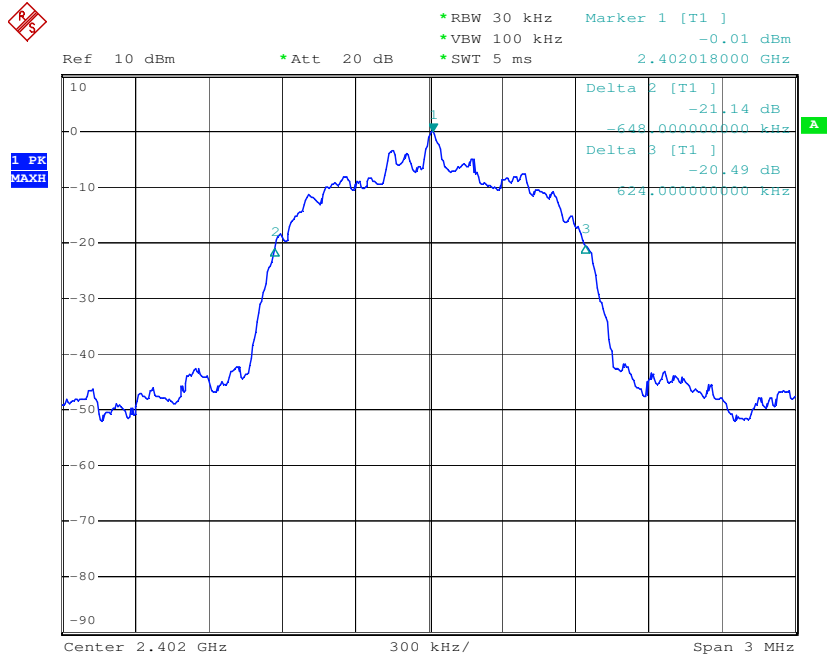
Date: 11.SEP.2013 17:33:57

Modulation: GFSK
Tx frequency: 2480MHz



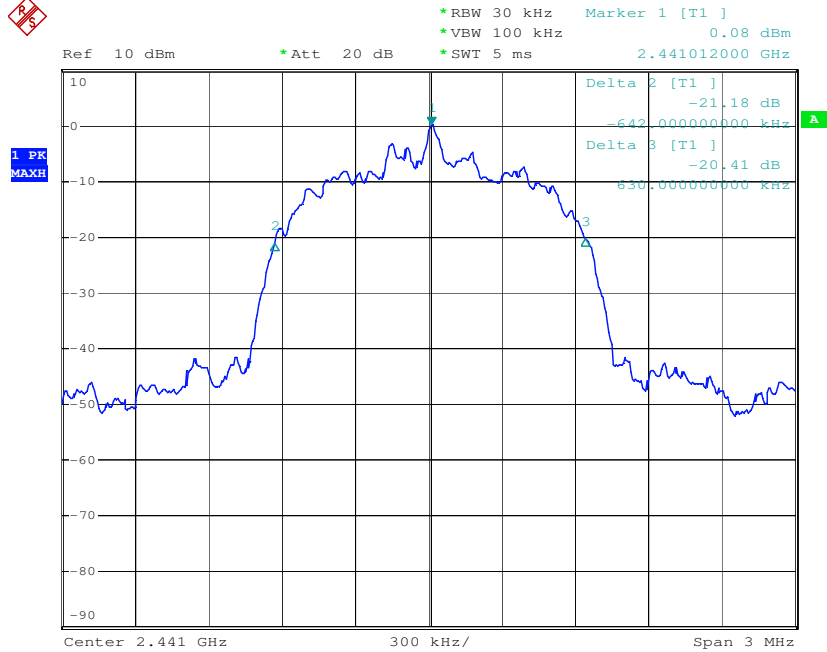
Date: 11.SEP.2013 17:35:09

Modulation: 8DPSK
Tx frequency: 2402MHz

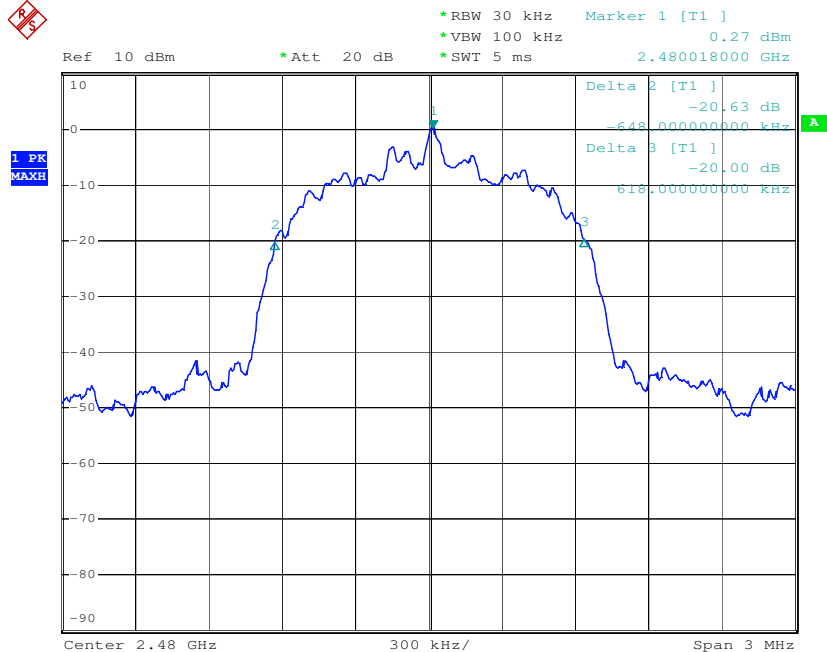


Date: 11.SEP.2013 17:31:39

Modulation: 8DPSK
Tx frequency: 2441MHz

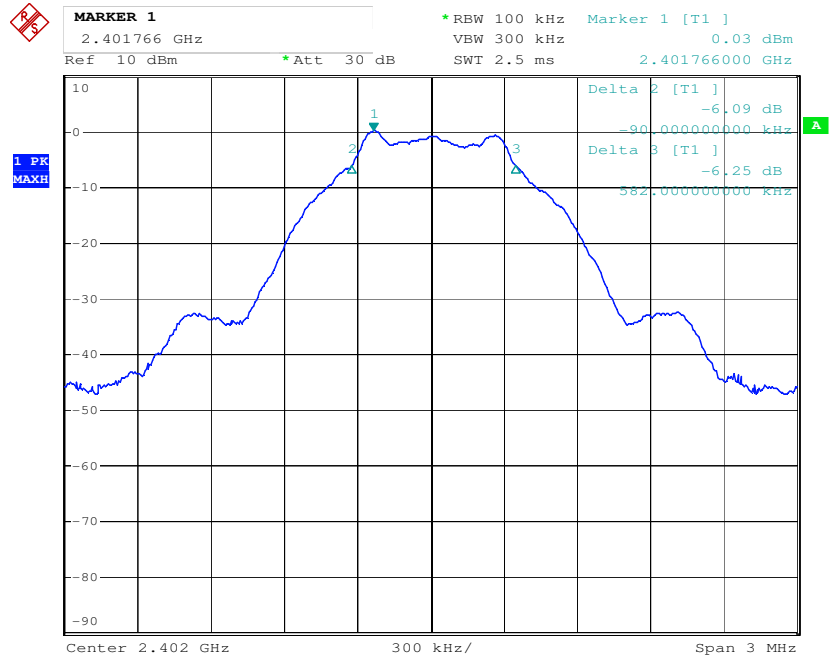


Modulation: 8DPSK
Tx frequency: 2480MHz



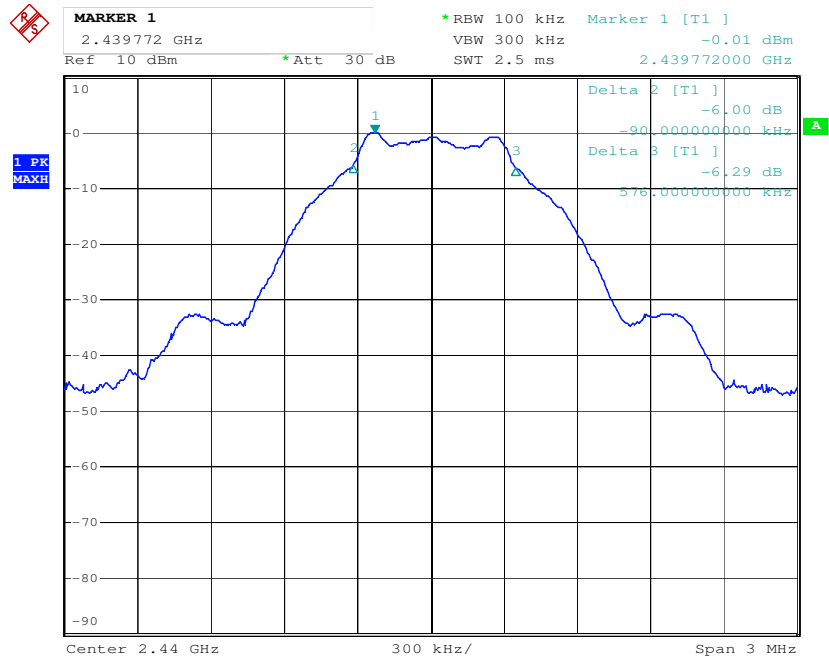
6 dB Bandwidth Measurement

Tx frequency: 2402MHz



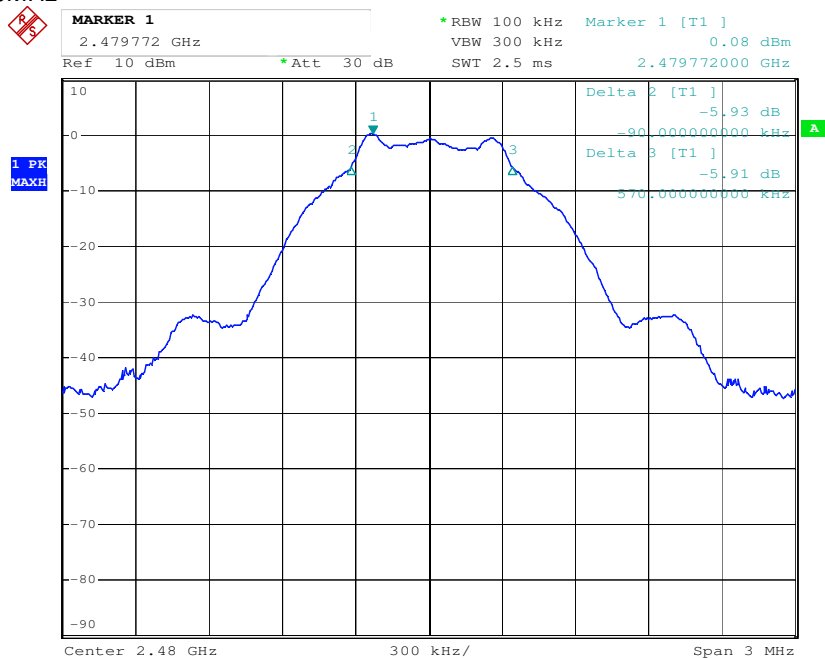
Date: 12.SEP.2013 15:10:33

Tx frequency: 2440MHz



Date: 12.SEP.2013 15:12:37

Tx frequency: 2480MHz



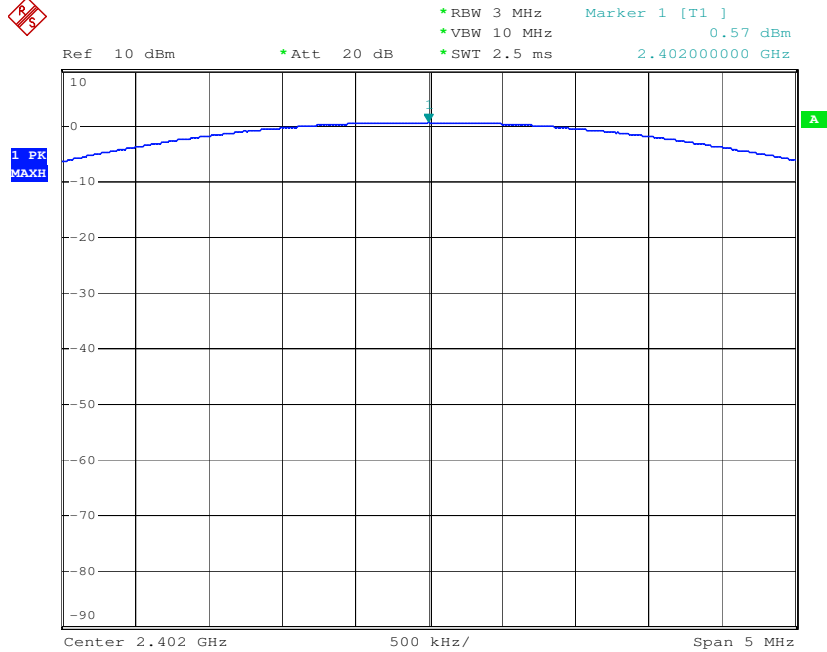
Date: 12.SEP.2013 15:16:32

Peak Output Power

Classic Bluetooth mode

Modulation: GFSK

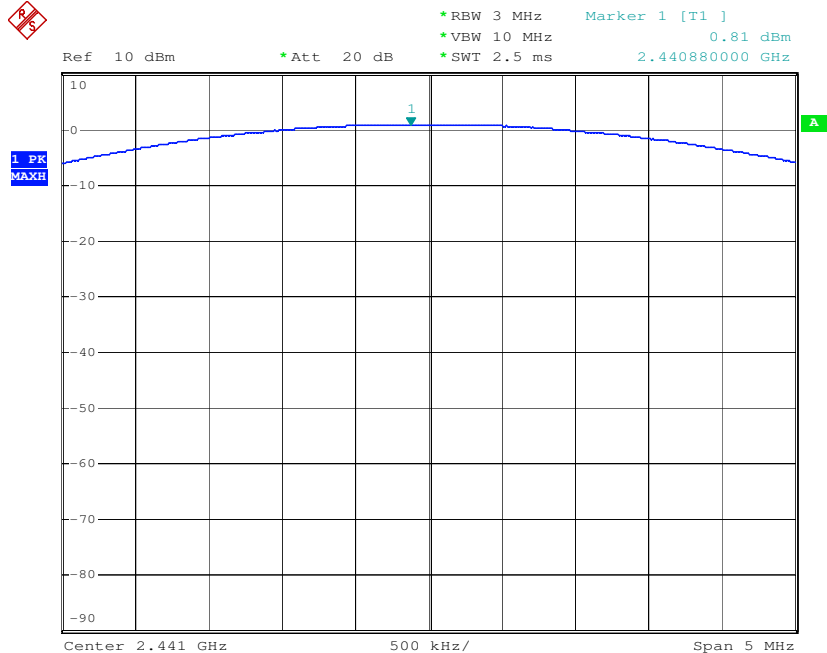
Tx frequency: 2402MHz



Date: 11.SEP.2013 17:37:00

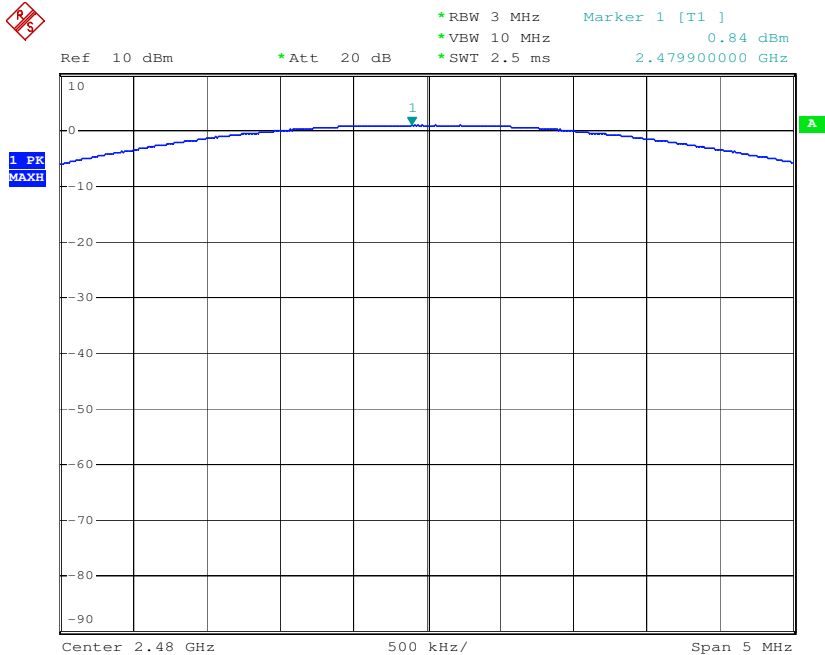
Modulation: GFSK

Tx frequency: 2441MHz



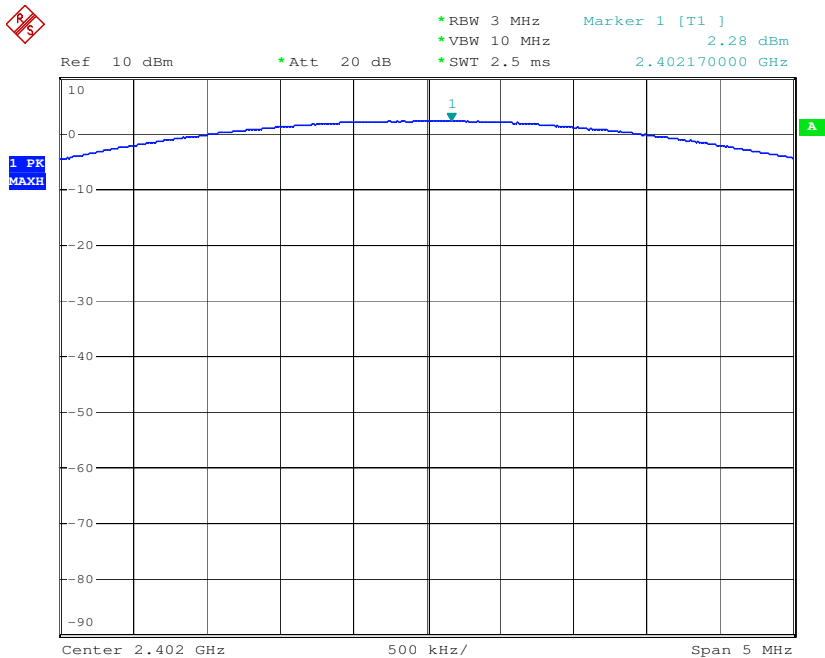
Date: 11.SEP.2013 17:37:27

Modulation: GFSK
Tx frequency: 2480MHz



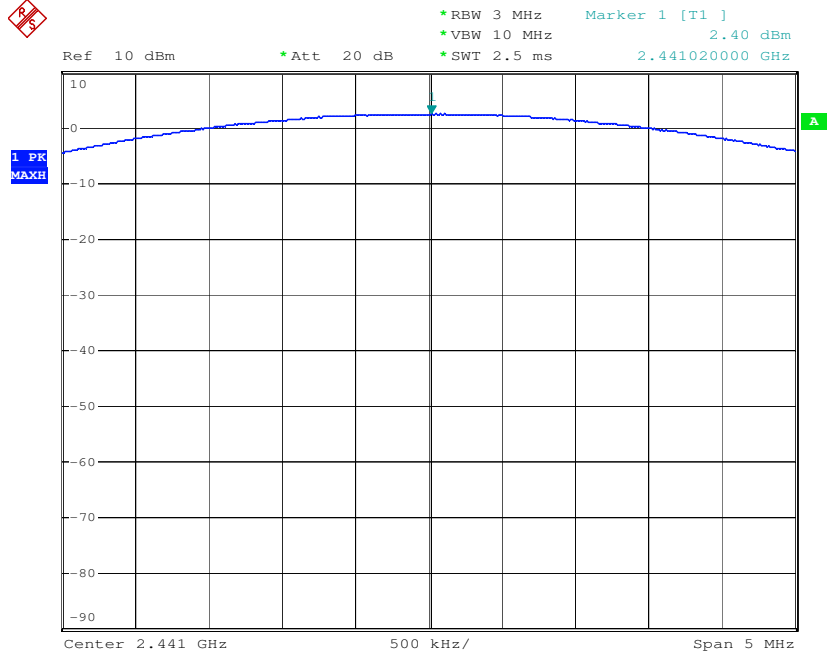
Date: 11.SEP.2013 17:37:52

Modulation: DQPSK
Tx frequency: 2402MHz



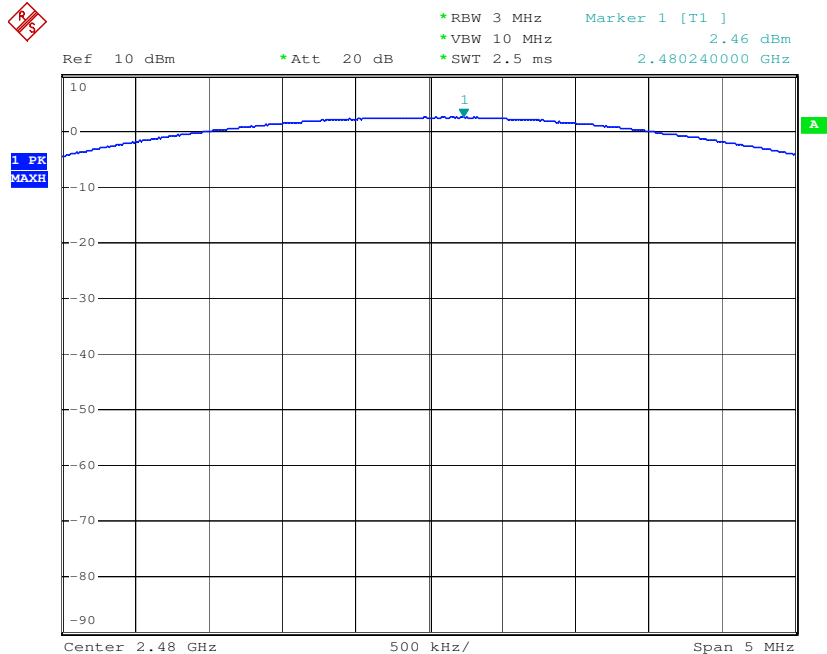
Date: 11.SEP.2013 17:39:01

Modulation: DQPSK
Tx frequency: 2441MHz



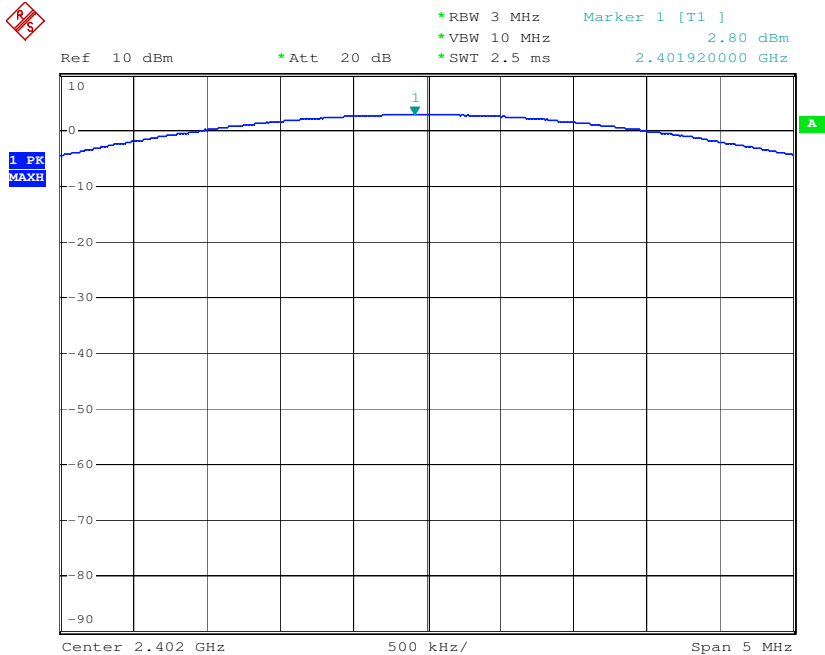
Date: 11.SEP.2013 17:39:36

Modulation: DQPSK
Tx frequency: 2480MHz



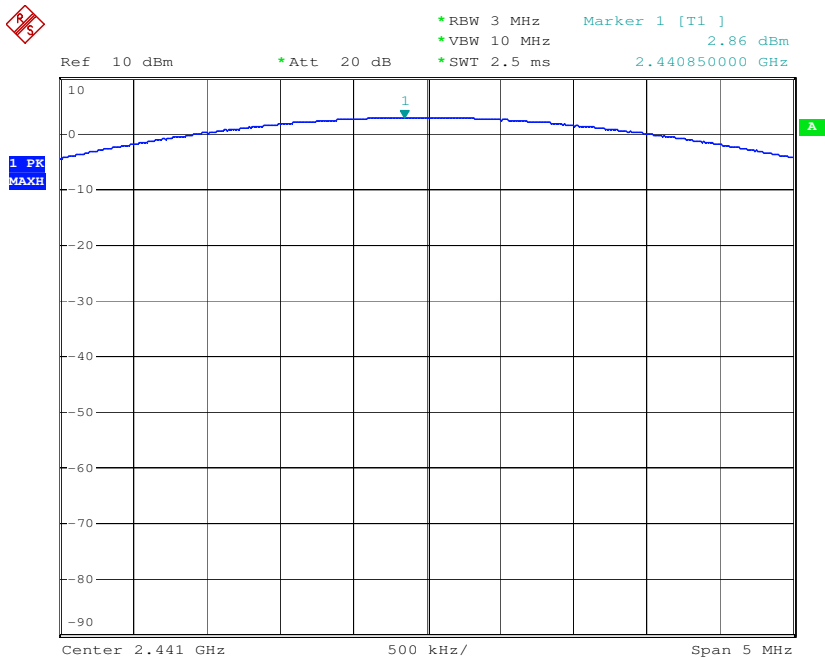
Date: 11.SEP.2013 17:40:18

Modulation: 8DPSK
Tx frequency: 2402MHz



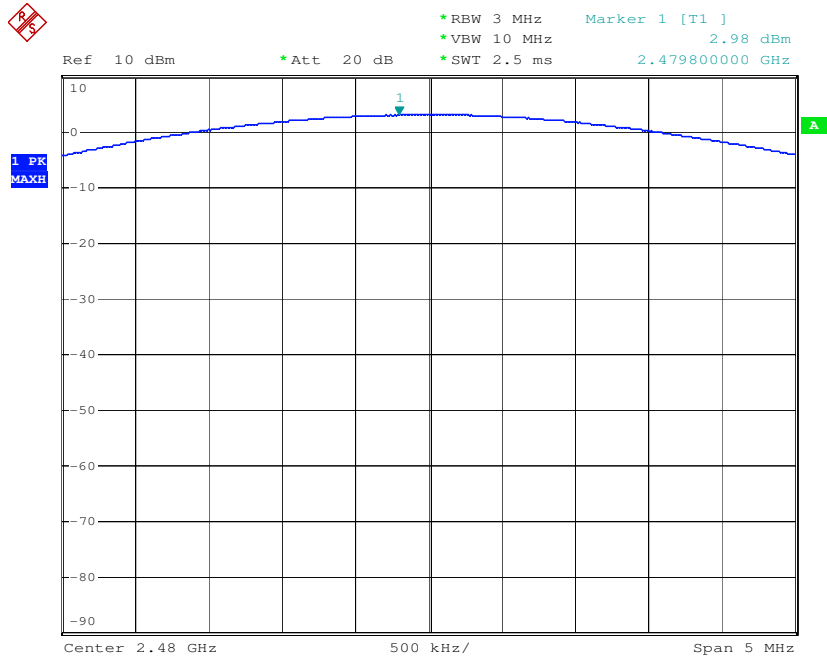
Date: 11.SEP.2013 17:41:42

Modulation: 8DPSK
Tx frequency: 2441MHz



Date: 11.SEP.2013 17:42:16

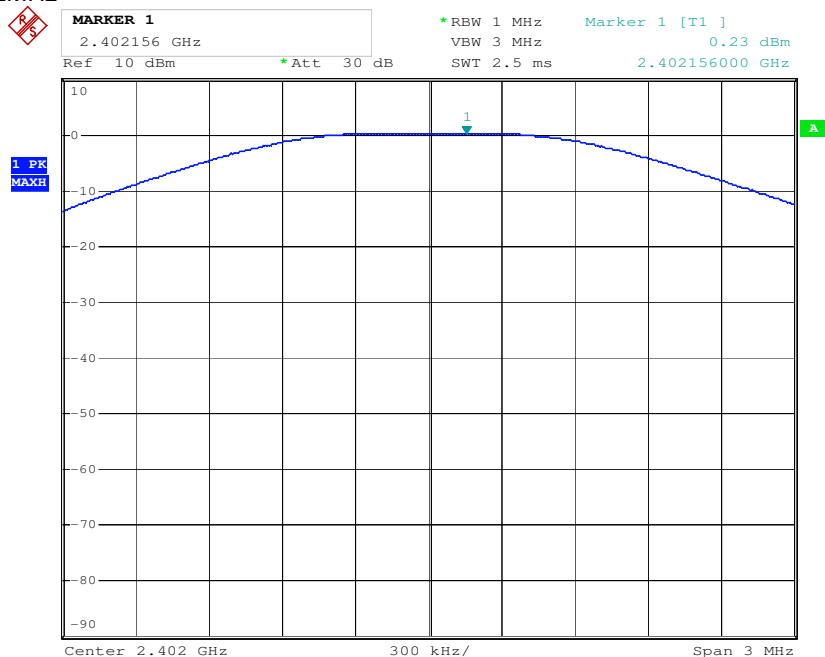
Modulation: 8DPSK
Tx frequency: 2480MHz



Date: 11.SEP.2013 17:43:16

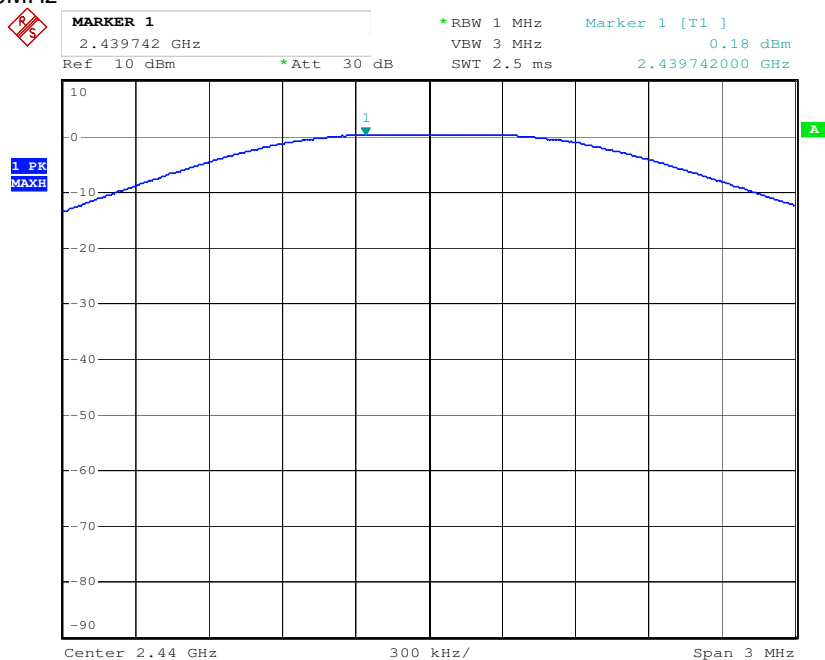
BLE Mode

Tx frequency: 2402MHz



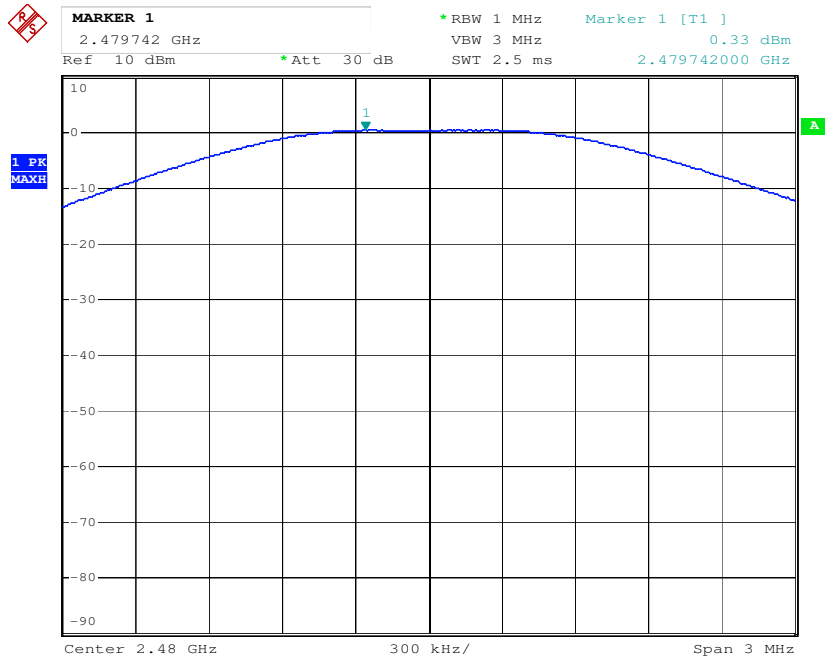
Date: 12.SEP.2013 15:21:49

Tx frequency: 2440MHz



Date: 12.SEP.2013 15:21:09

Tx frequency: 2480MHz

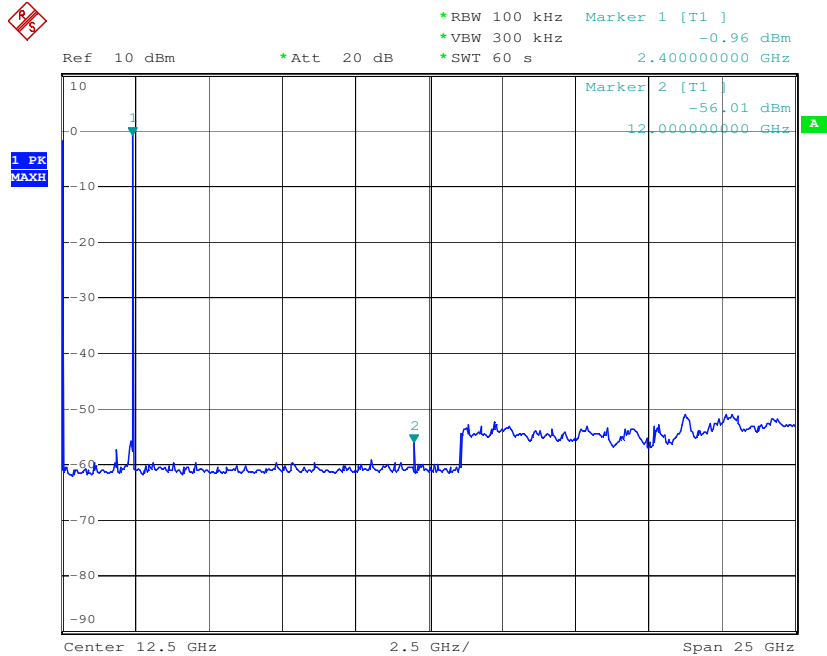


Date: 12.SEP.2013 15:20:23

Spurious Conducted Emissions

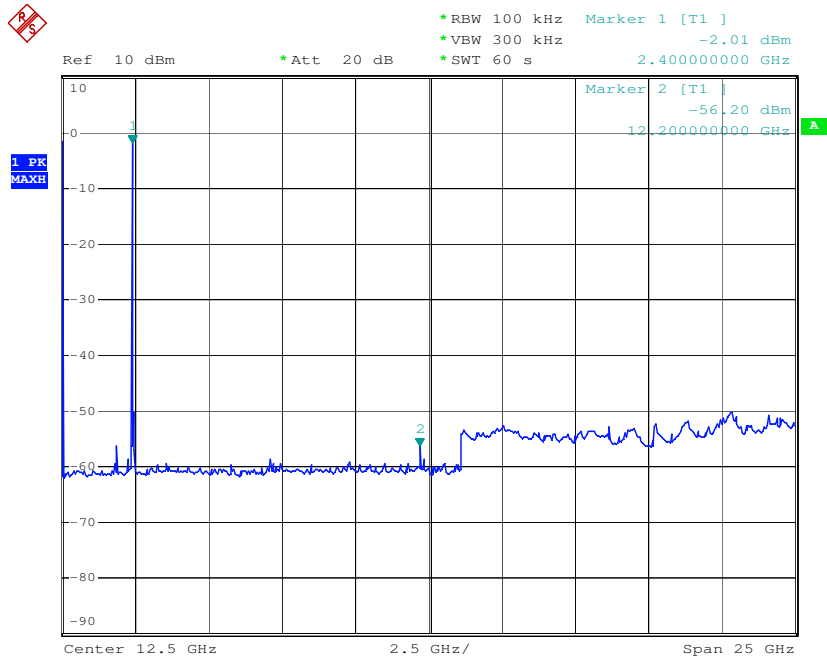
Classic Bluetooth mode

Tx frequency: 2402MHz



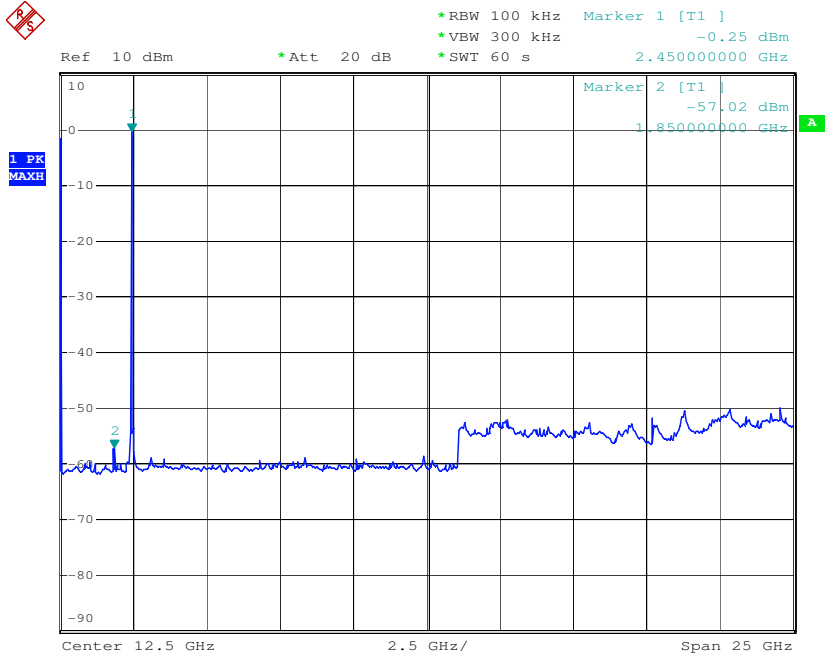
Date: 11.SEP.2013 17:55:40

Tx frequency: 2441MHz



Date: 11.SEP.2013 17:59:22

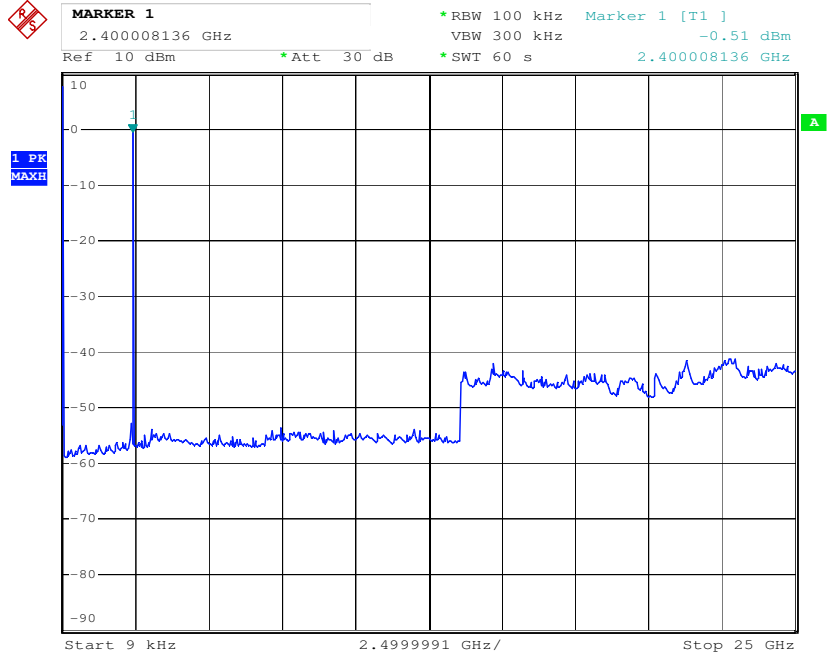
Tx frequency: 2480MHz



Date: 11.SEP.2013 18:03:59

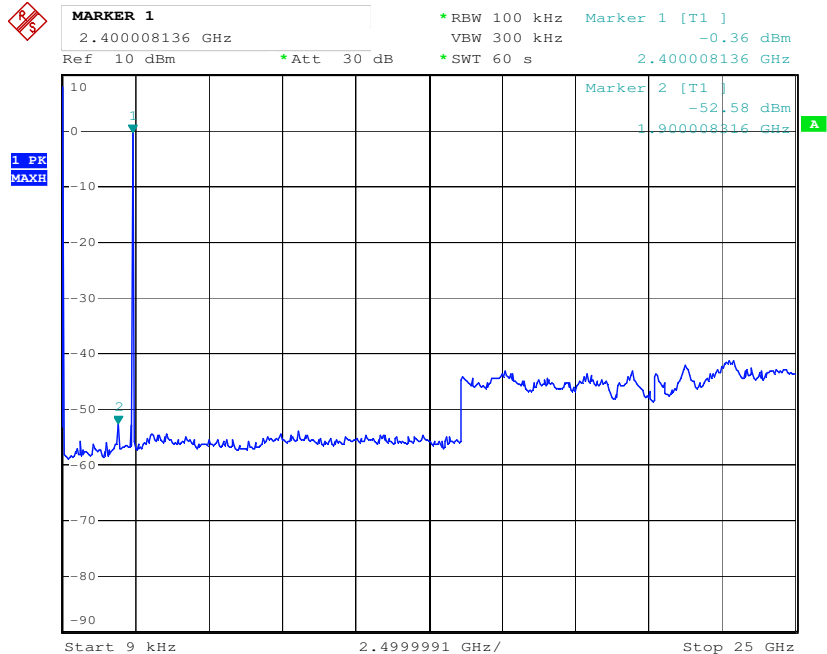
BLE mode

Tx frequency: 2402MHz



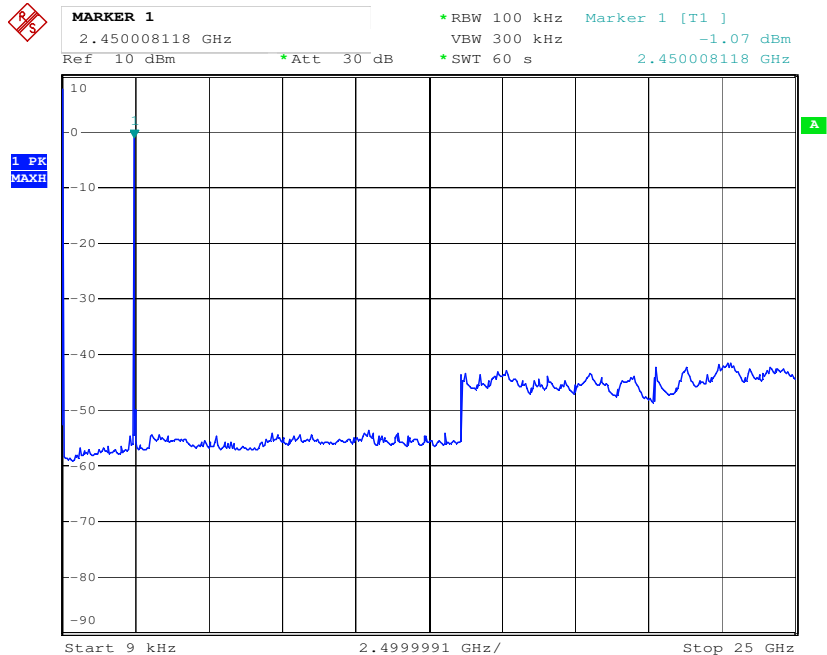
Date: 12.SEP.2013 15:50:23

Tx frequency: 2440MHz



Date: 12.SEP.2013 15:53:14

Tx frequency: 2480MHz

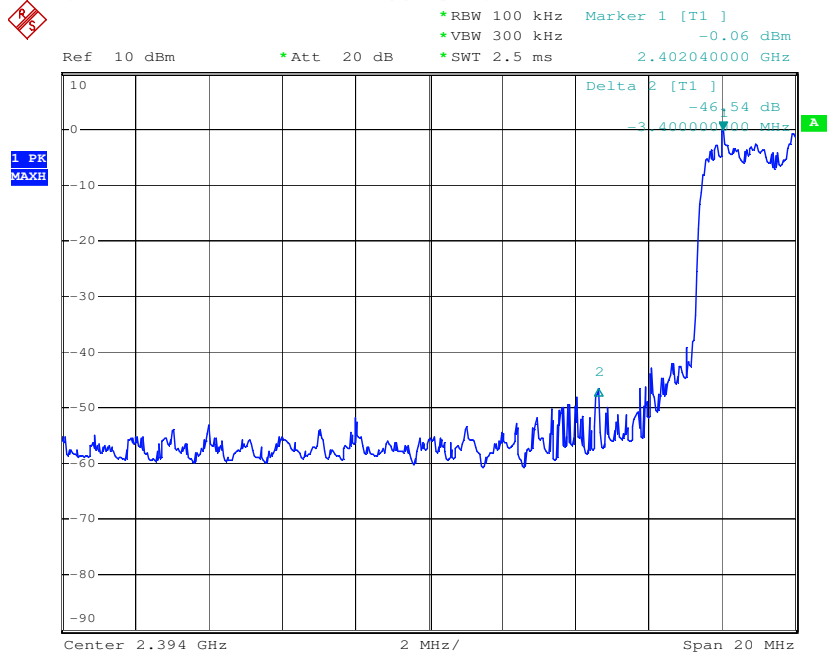


Date: 12.SEP.2013 15:56:17

Band Edge Compliance

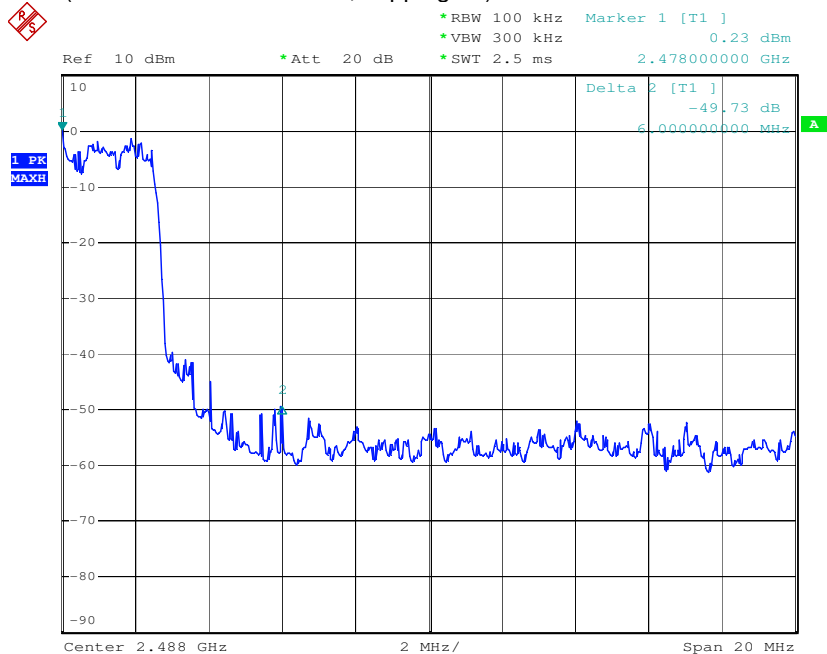
Classic Bluetooth mode

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



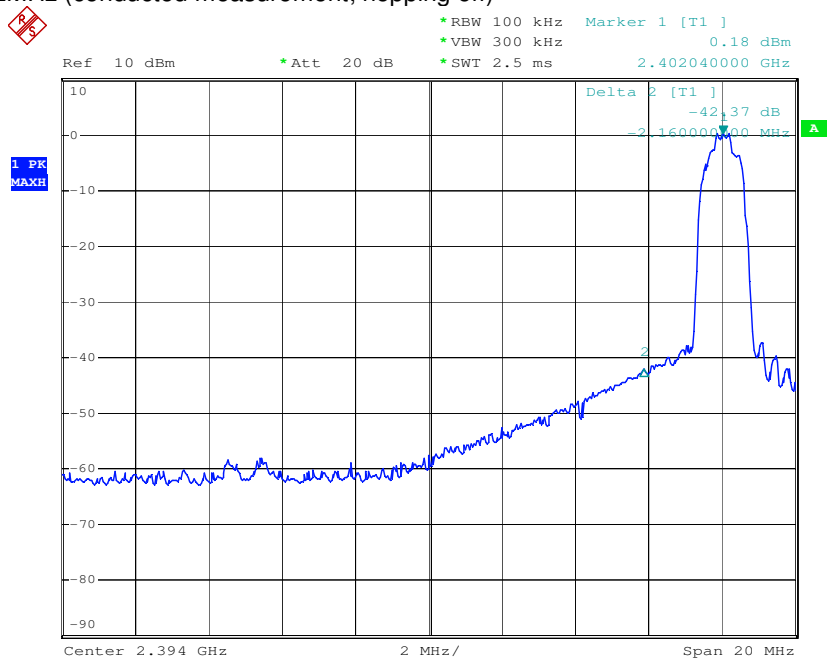
Date: 11.SEP.2013 17:47:08

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



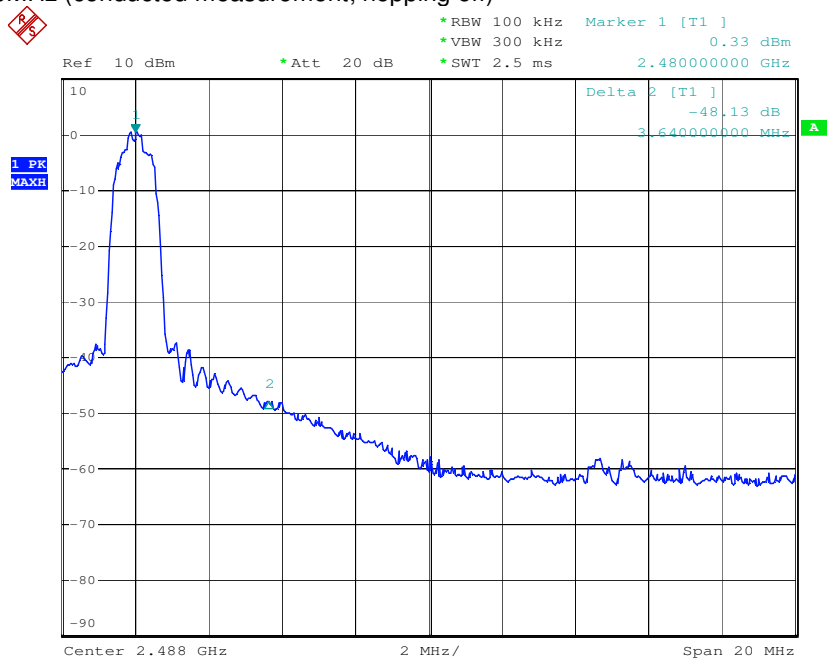
Date: 11.SEP.2013 17:48:35

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



Date: 11.SEP.2013 17:50:19

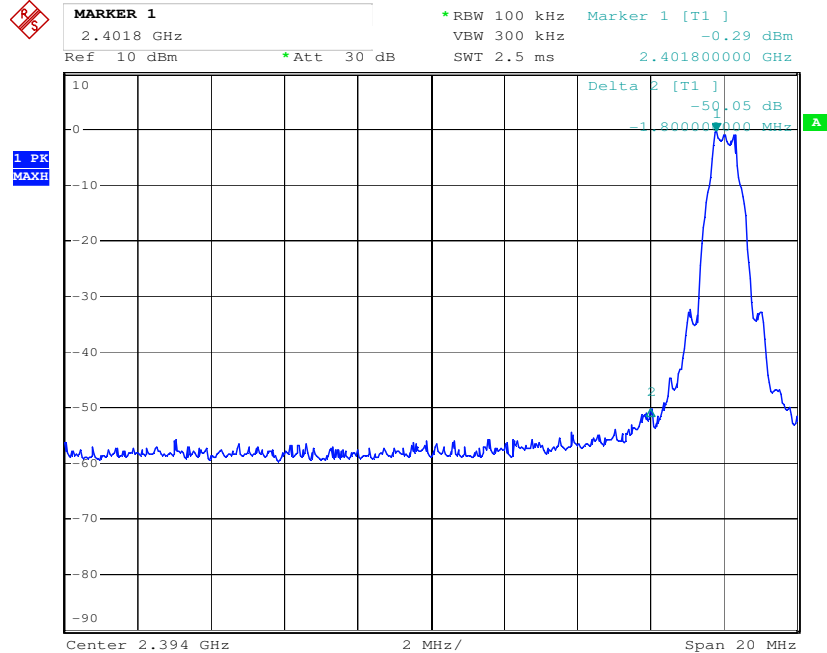
Tx frequency: 2480MHz (conducted measurement; hopping off)



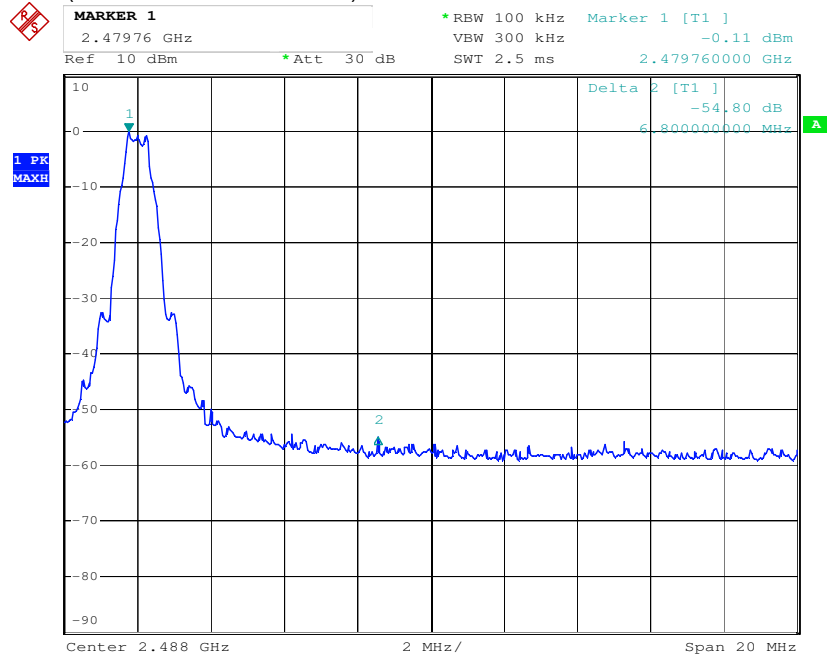
Date: 11.SEP.2013 17:52:38

BLE mode

Tx frequency: 2402MHz (conducted measurement)



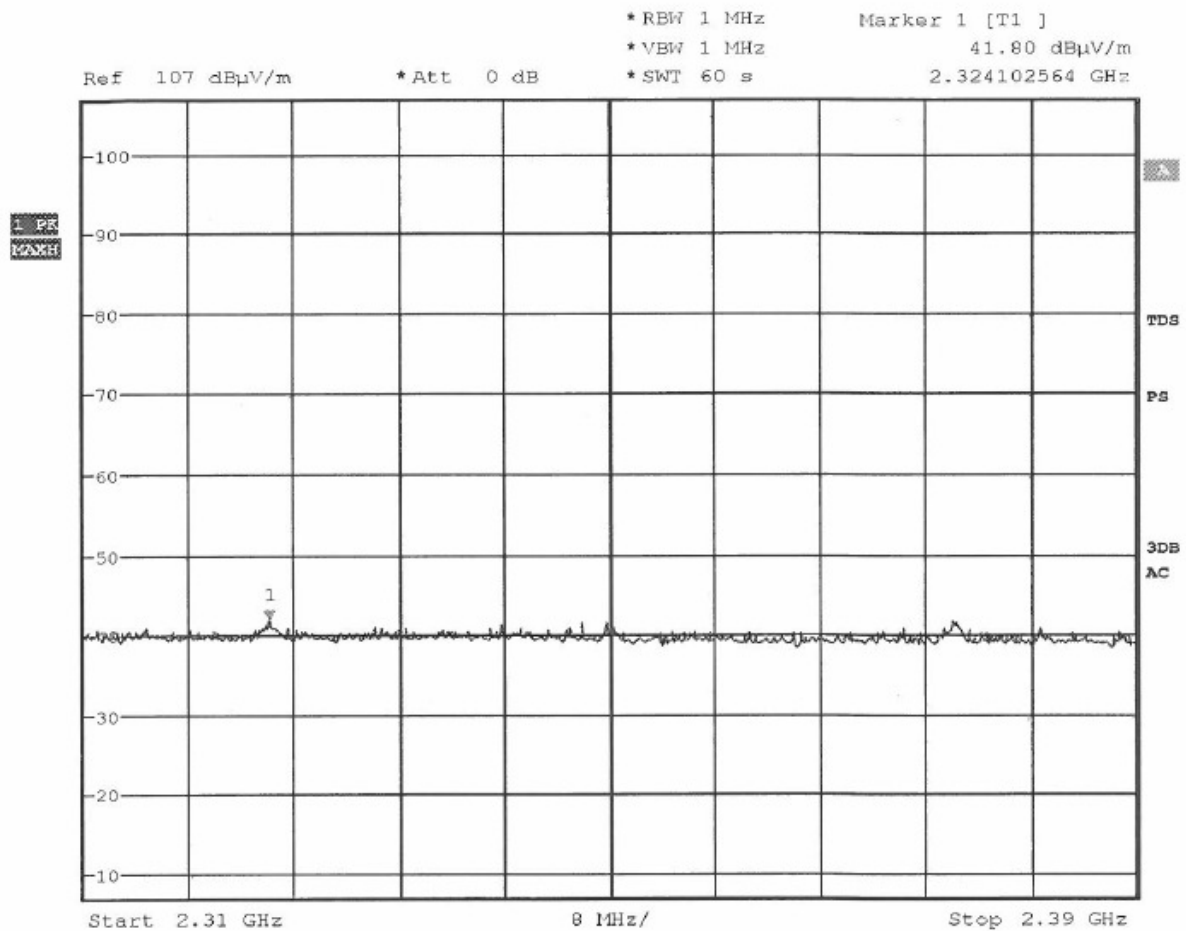
Tx frequency: 2480MHz (conducted measurement)



Restricted Bands Next to The Band Edge

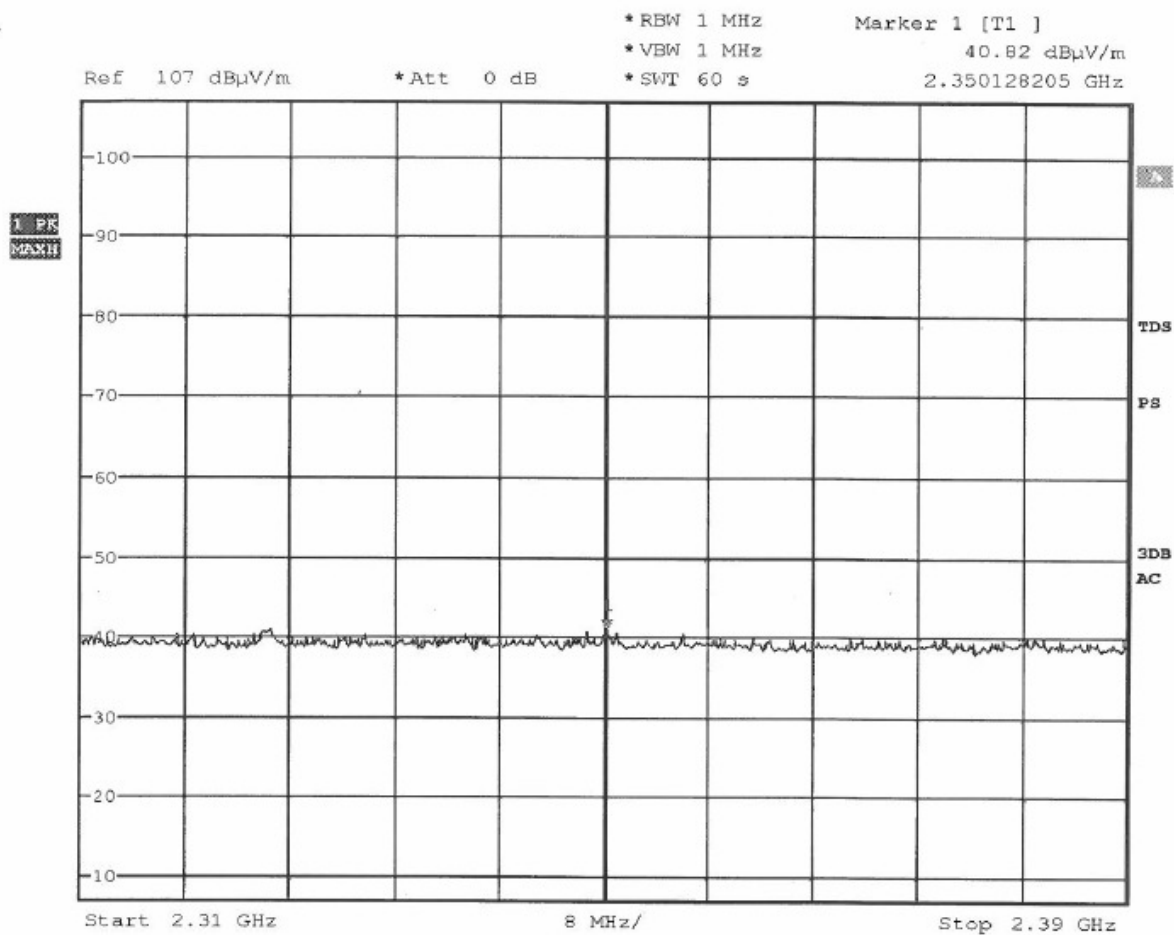
Classic Bluetooth mode

Tx frequency: 2402MHz (radiated measurement)



ABLE TREND/ BLUETOOTH DUAL MODE MODULE/ LE2201/ 00130905133-
 001/ BT MODE/ 2402MHz/ VERT.
 Date: 12.SEP.2013 14:34:30

Vertical Polarization



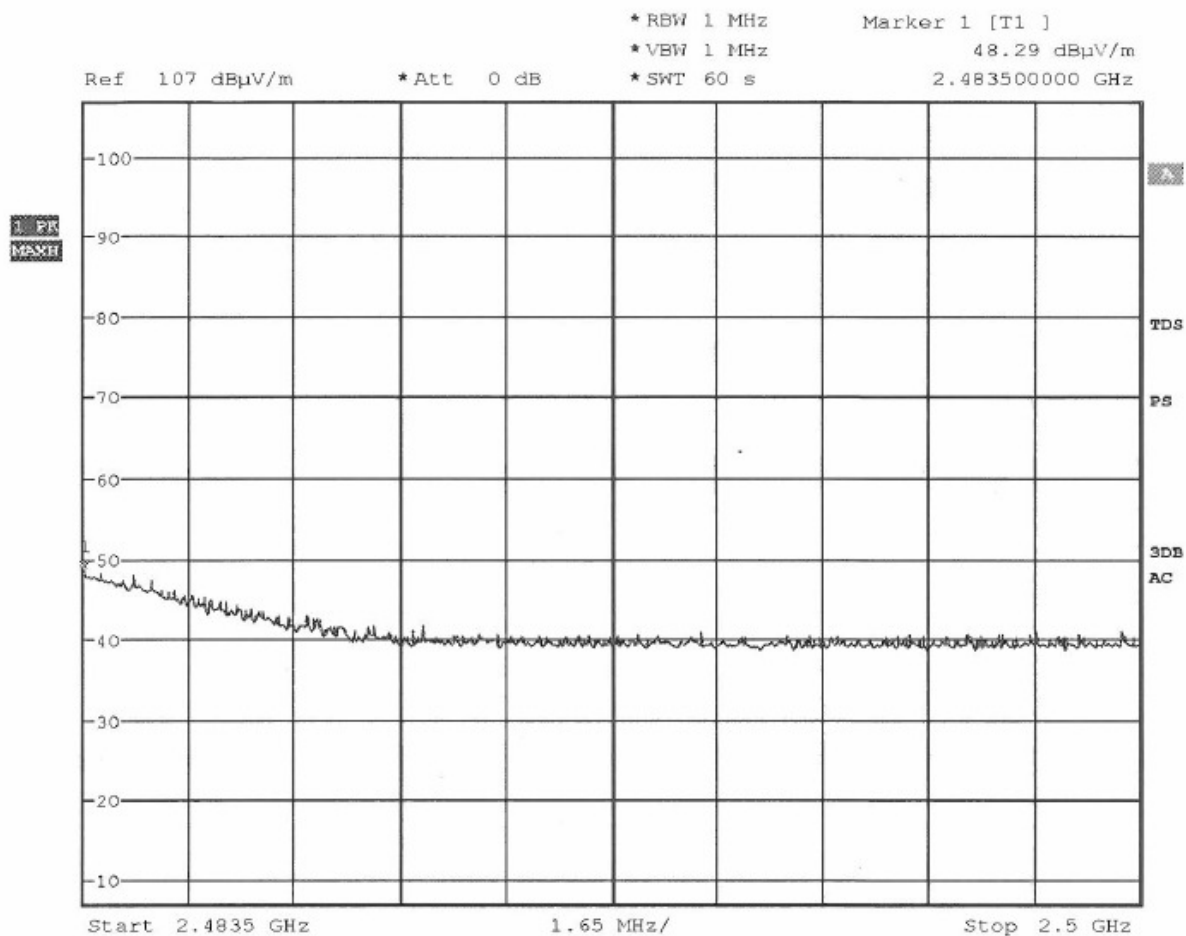
ABLE TREND/ BLUETOOTH DUAL MODE MODULE/ LE2201/ 00130905133-

001/ BT MODE/ 2402MHz/ HORI.

Date: 12.SEP.2013 14:58:08

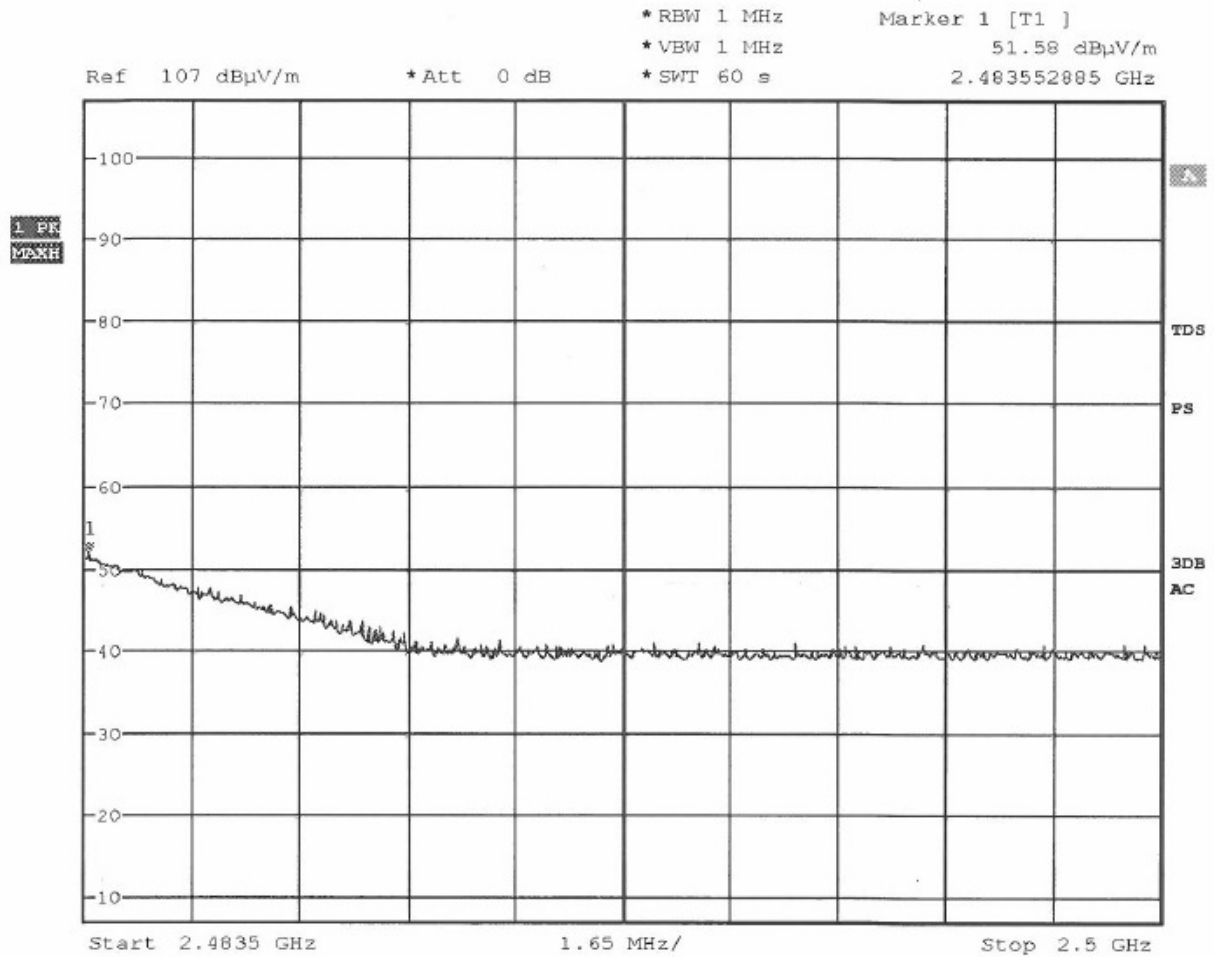
Horizontal Polarization

Tx frequency: 2480MHz (radiated measurement)



ABLE TREND/ BLUETOOTH DUAL MODE MODULE/ LE2201/ 00130905133-
001/ BT MODE/ 2480MHz/ VERT.
Date: 12.SEP.2013 15:21:52

Vertical Polarization

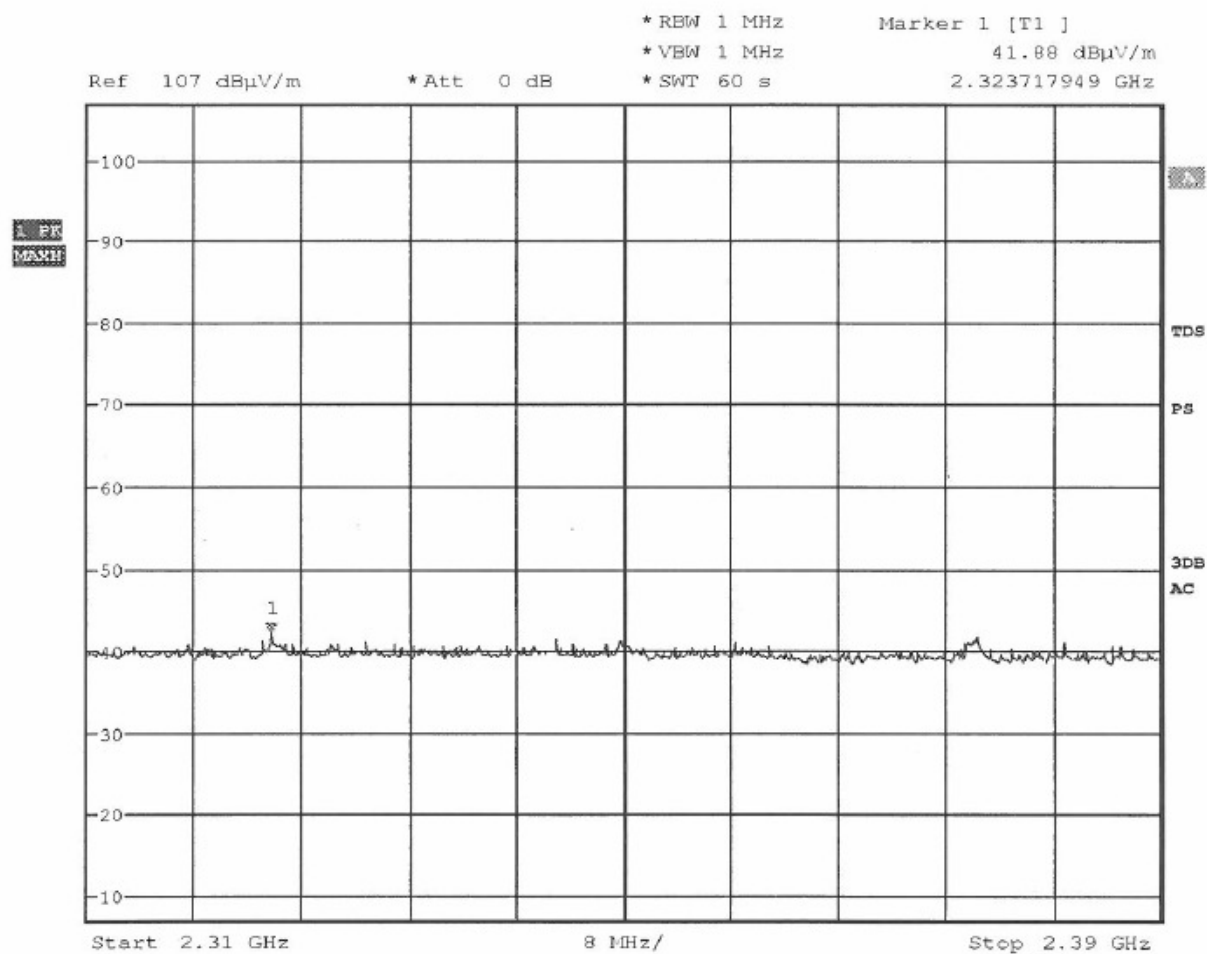


ABLE TREND/ BLUETOOTH DUAL MODE MODULE/ LE2201/ 00130905133-
001/ BT MODE/ 2480MHz/ HORI.
Date: 12.SEP.2013 15:19:58

Horizontal Polarization

BLE mode

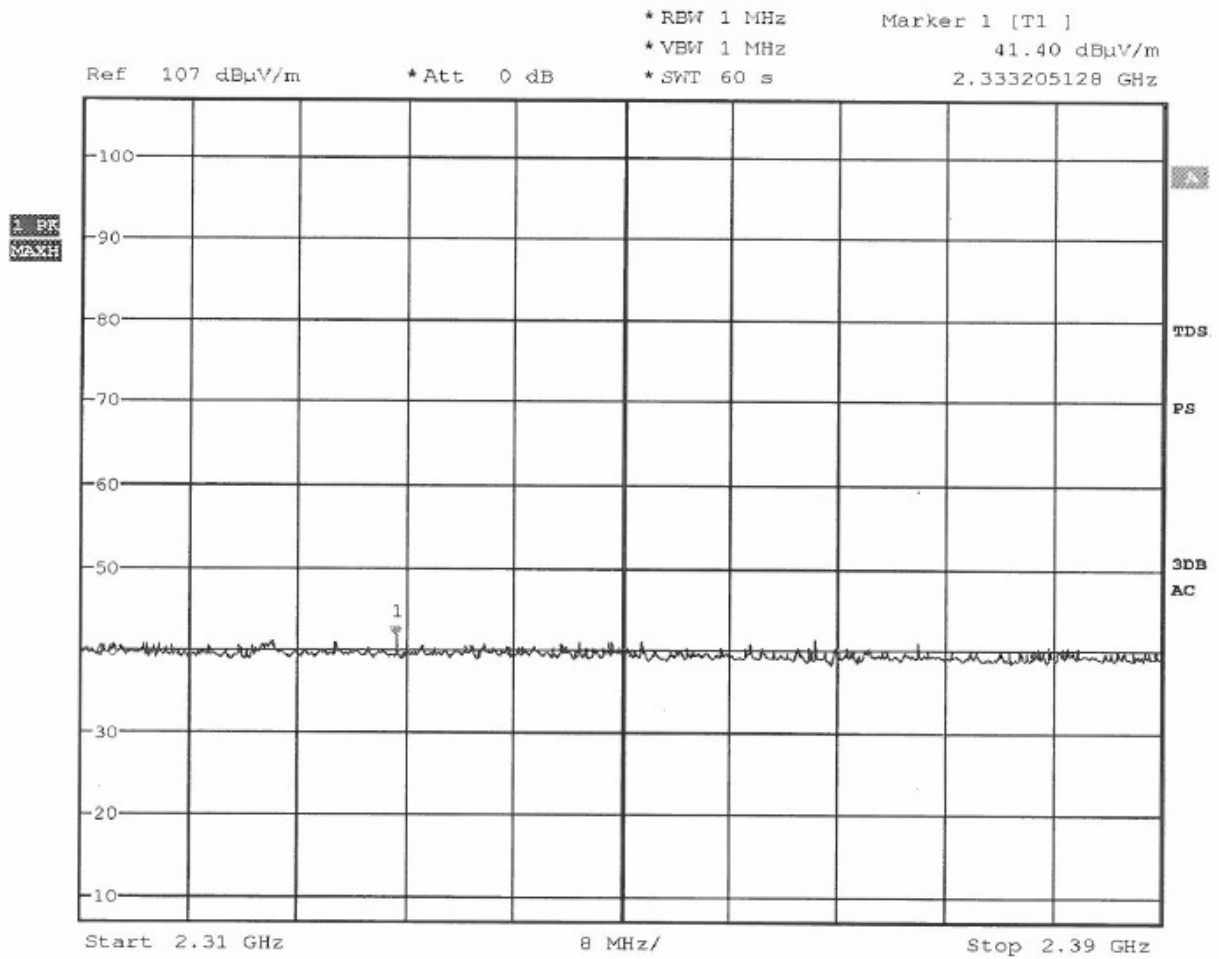
Tx frequency: 2402MHz (radiated measurement)



ABLE TREND/ BLUETOOTH DUAL MODE MODULE/ LE2201/ 00130905133-
001/ BLE MODE/ LOW CH./ VERT.

Date: 12.SEP.2013 15:40:00

Vertical Polarization



ABLE TREND/ BLUETOOTH DUAL MODE MODULE/ LE2201/ 00130905133-
001/ BLE MODE/ LOW CH./ HORI.
Date: 12.SEP.2013 15:38:16

Horizontal Polarization

*RBW 1 MHz Marker 1 [T1]
*VBW 1 MHz 42.00 dBuV/m
Ref 107 dBuV/m *Att 0 dB *SWT 60 s 2.497223558 GHz

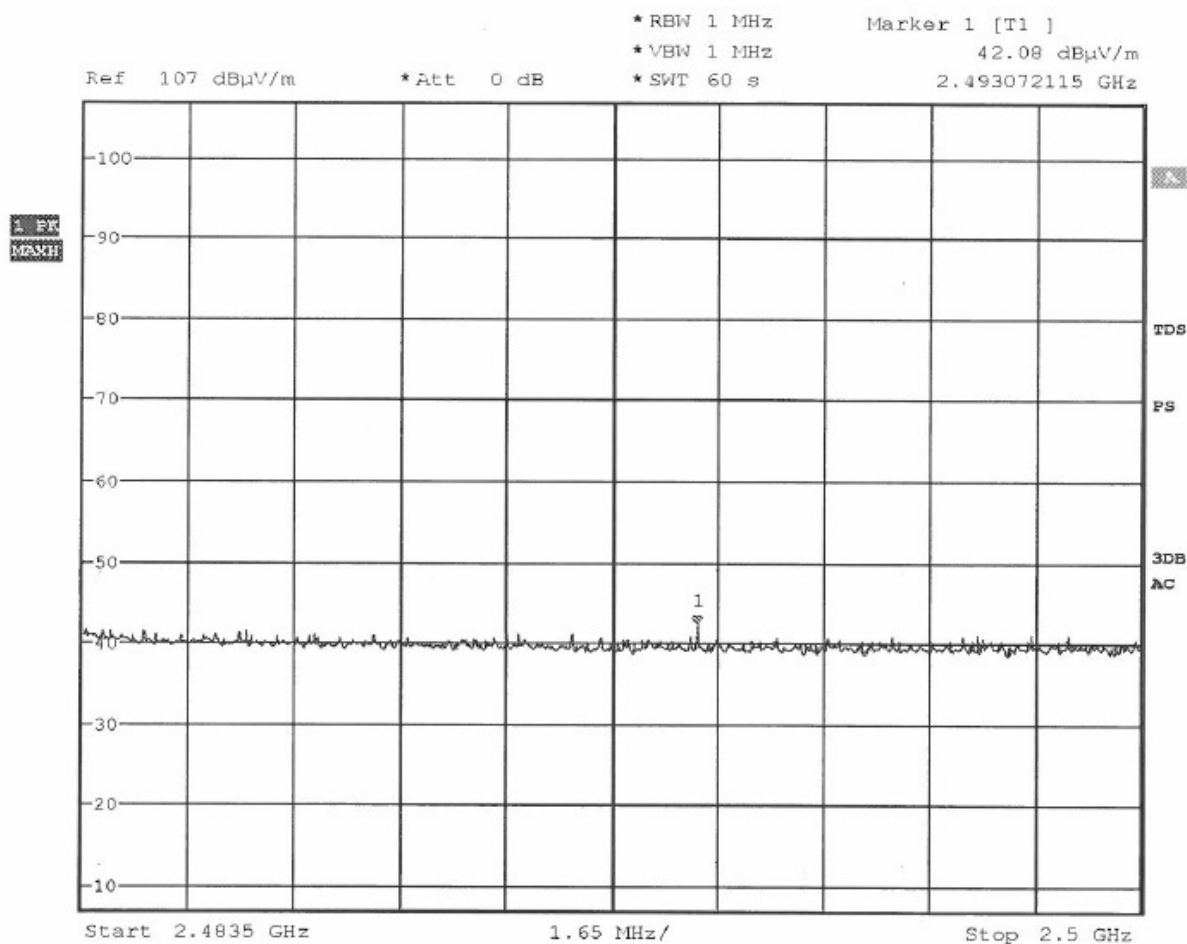
1 PR
MAX

100
90
80
70
60
50
40
30
20
10

TDS
PS
3DB
AC

Start 2.4835 GHz 1.65 MHz/ Stop 2.5 GHz

Vertical Polarization

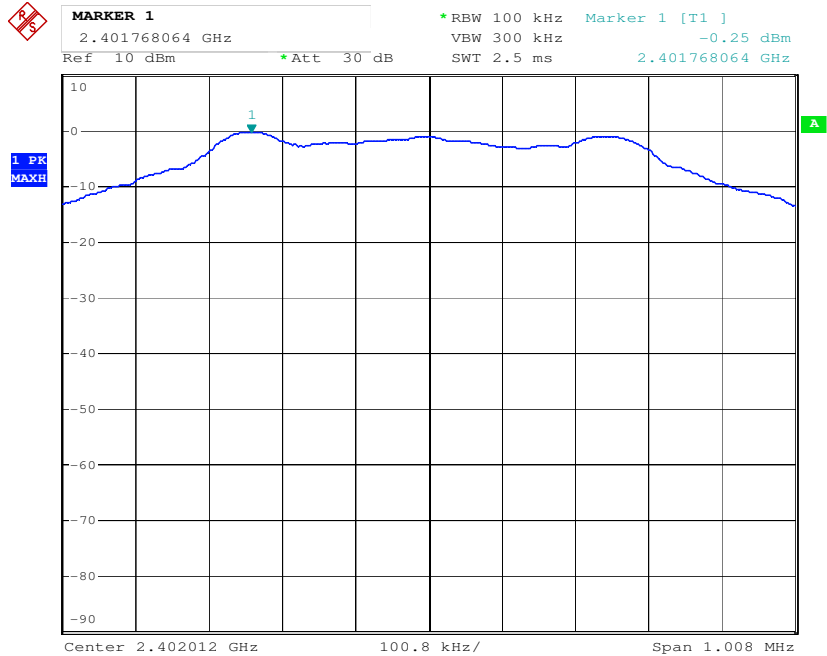


ABLE TREND/ BLUETOOTH DUAL MODE MODULE/ LE2201/ 00130905133-
 001/ BLE MODE/ HIGH CH./ HORI.
 Date: 12.SEP.2013 15:52:11

Horizontal Polarization

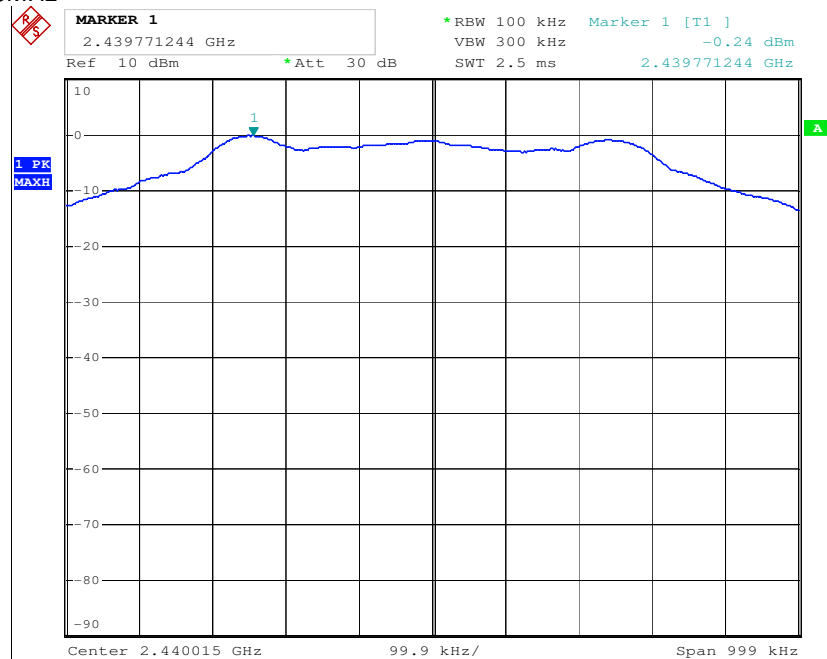
Power Spectral Density

Tx frequency: 2402MHz



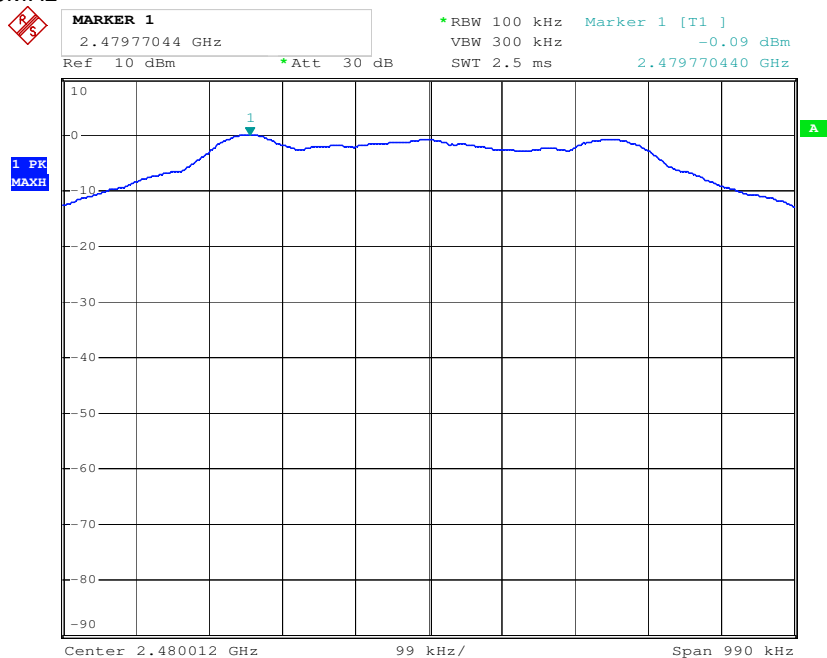
Date: 12.SEP.2013 15:32:31

Tx frequency: 2440MHz



Date: 12.SEP.2013 15:34:57

Tx frequency: 2480MHz



Date: 12.SEP.2013 15:36:27