

TEST REPORT

of

FCC Part 15 Subpart C §15.247 / RSS-210 Issue 8, RSS-Gen Issue 3

FCC ID/IC Certification: S4YLZT700 / 10932A-LZT700

Equipment Under Test : Tablet PC

Model Name : LZ-T700

Serial No. : N/A

Applicant : OVIT CO., LTD

Manufacturer : BKLCD

Date of Test(s) : 2013.03.25 ~ 2013.04.05

Date of Issue : 2013.05.08

In the configuration tested, the EUT complied with the standards specified above.

Tested By:



Date:

2013.05.08

Harim Lee

Approved By:



Date:

2013.05.08

Logan Lee

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SGS Korea Co., Ltd. (Gunpo Laboratory)

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1. General Information

1.1. Testing Laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)

- Wireless Div. 3FL, 18-34, Sanbon-dong, Gunpo-si, Gyeonggi-do, Korea 435-040

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1.2. Details of Applicant

Applicant : OVIT CO., LTD
Address : 6F, 1023-7, Youngtong-Dong, Youngtong-Gu, Suwon-City, Kyunggi-Do, 443-470, KOREA
Contact Person : Park, Youn-Hak
Phone No. : +82 707 7404 5011

1.3. Description of EUT

Kind of Product	Tablet PC
Model Name	LZ-T700
Serial Number	N/A
Power Supply	DC 3.7 V
Frequency Range	2 402 MHz ~ 2 480 MHz
Modulation Technique	GFSK, π/4DQPSK, 8DPSK
Number of Channels	79
Antenna Gain	2.48 dB i

1.4. Declaration by the manufacturer

- WLAN & BT do not transmit simultaneously.

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1.5. Information about the FHSS characteristics:

1.5.1. Pseudorandom Frequency Hopping Sequence

The channel is represented by a pseudo-random hopping sequence hopping through the 79 RF channels. The hopping sequence is unique for the piconet and is determined by the Bluetooth device address of the master; the phase in the hopping sequence is determined by the Bluetooth clock of the master. The channel is divided into time slots where each slot corresponds to an RF hop frequency. Consecutive hops correspond to different RF hop frequencies. The nominal hop rate is 1 600 hops/s.

1.5.2. Equal Hopping Frequency Use

All Bluetooth units participating in the piconet are time and hop-synchronized to the channel.

1.5.3. System Receiver Input Bandwidth

Each channel bandwidth is 1 MHz

1.5.4. Equipment Description

15.247(a)(1) that the rx input bandwidths shift frequencies in synchronization with the transmitted

15.247(g): In accordance with the Bluetooth Industry Standard, the system is designed to comply with all of the regulations in Section 15.247 when the transmitter is presented with a continuous data (or information) system.

15.247(h): In accordance with the Bluetooth Industry Standard, the system does not coordinate its channels selection/ hopping sequence with other frequency hopping systems for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters.

1.6. Test Equipment List

Equipment	Manufacturer	Model	S/N	Cal Date	Cal Interval	Cal Due.
Signal Generator	R&S	SMR40	100272	Aug. 23, 2012	Annual	Aug. 23, 2013
Spectrum Analyzer	R&S	FSV30	100768	Mar. 28, 2013	Annual	Mar. 28, 2014
Attenuator	AEROFLEX / INMET	26A – 10dB	3	Apr. 05, 2013	Annual	Apr. 05, 2014
High Pass Filter	Wainwright	WHK3.0/18G-10SS	344	Sep. 12, 2012	Annual	Sep. 12, 2013
High Pass Filter	Wainwright	WHK7.5//26.5G-6SS	N/A	Jul. 12, 2012	Annual	Jul. 12, 2013
Low Pass Filter	Mini circuits	NLP-1200+	V8979400903-1	Jul. 12, 2012	Annual	Jul. 12, 2013
Power Sensor	R&S	NRP-Z81	100748	Jul. 10, 2012	Annual	Jul. 10, 2013
DC Power Supply	Agilent	6553A	MY40000695	Jul. 02, 2012	Annual	Jul. 02, 2013
Preamplifier	H.P.	8447F	2944A03909	Jul. 04, 2012	Annual	Jul. 03, 2013
Preamplifier	R&S	SCU 18	10117	Jan. 14, 2013	Annual	Jan. 14, 2014
Preamplifier	MITEQ Inc.	JS44-18004000-35-8P	1546891	Jul. 12, 2012	Annual	Jul. 12, 2013
Test Receiver	R&S	ESU26	100109	Feb. 28, 2013	Annual	Feb. 28, 2014
Bilog Antenna	SCHWARZBECK MESSELEKTRONIK	VULB9163	396	May 12, 2011	Biennial	May 12, 2013
Loop Antenna	R&S	HFH2-Z2	100118	Aug. 24, 2011	Biennial	Aug. 24, 2013
Horn Antenna	R&S	HF906	100326	Nov. 23, 2011	Biennial	Nov. 23, 2013
Horn Antenna	SCHWARZBECK MESSELEKTRONIK	BBHA9170	BBHA9170431	May 15, 2012	Biennial	May 15, 2014
Antenna Master	INN-CO	MM4000	N/A	N.C.R.	N/A	N.C.R.
Turn Table	INN-CO	DS 1200S	N/A	N.C.R.	N/A	N.C.R.
Anechoic Chamber	SY Corporation	L x W x H (9.6 m x 6.4 m x 6.6 m)	N/A	N.C.R.	N/A	N.C.R.
Two-Line V-Network	R&S	ENV216	100190	Jan. 14, 2013	Annual	Jan. 14, 2014
Test Receiver	R&S	ESHS10	863365/018	Jun. 04, 2012	Annual	Jun. 04, 2013

► Support equipment

Description	Manufacturer	Model	Serial Number
Notebook PC	Dell Inc.	Latitude E6320	BTXYBS1

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1.7. Summary of Test Results

The EUT has been tested according to the following specifications:

APPLIED STANDARD:FCC Part15 subpart C, RSS-210, RSS-Gen			
Section in FCC 15	Section in RSS-210	Test Item	Result
15.205(a) 15.209 15.247(d)	A8.5	Transmitter Radiated Spurious Emissions Conducted Spurious Emission	Complied
15.247(a)(1)	RSS-210 A8.1(a) RSS-Gen 4.6.1	20 dB Bandwidth and 99% BW	Complied
15.247(b)(1)	A8.4(2)	Maximum Peak Output Power	Complied
15.247(a)(1)	A8.1(b)	Frequency Separation	Complied
15.247(a)(1)(iii)	A8.4(d)	Number of Hopping Frequency	Complied
15.247(a)(1)(iii)	A8.1(d)	Time of Occupancy (Dwell Time)	Complied

1.8. Sample calculation

Where relevant, the following sample calculation is provided:

1.8.1. Conducted test

Offset value (dB) = Attenuator (dB) + Cable loss (dB)

1.8.2. Radiation test

Field strength level (dB μ V/m) = Measured level (dB μ V) + Antenna factor (dB) + Cable loss (dB) – amplifier gain (dB)

1.9. Test report revision

Revision	Report number	Description
0	F690501/RF-RTL006438	Initial
1	F690501/RF-RTL006438-1	Changed model name

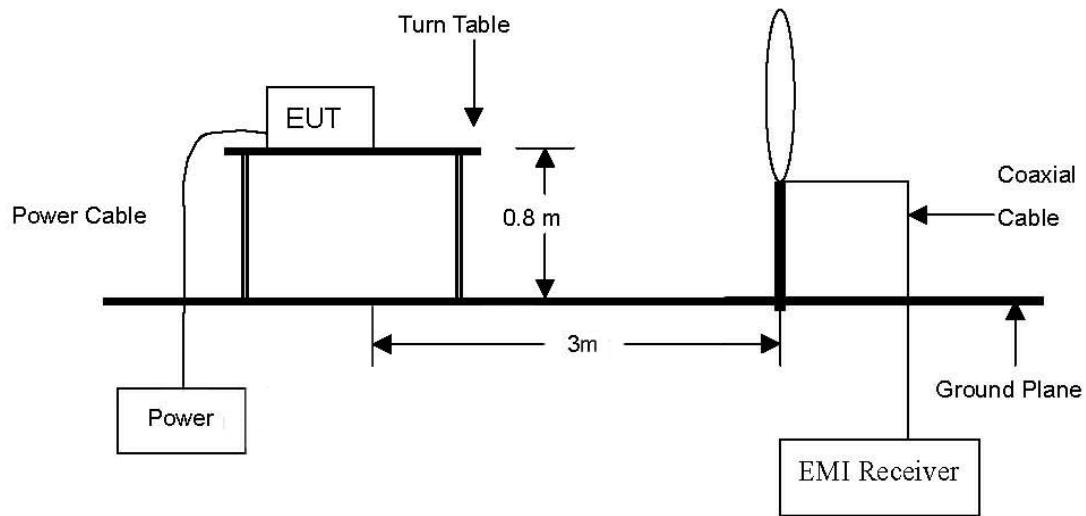
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2. Transmitter Radiated Spurious Emissions and Conducted Spurious Emission

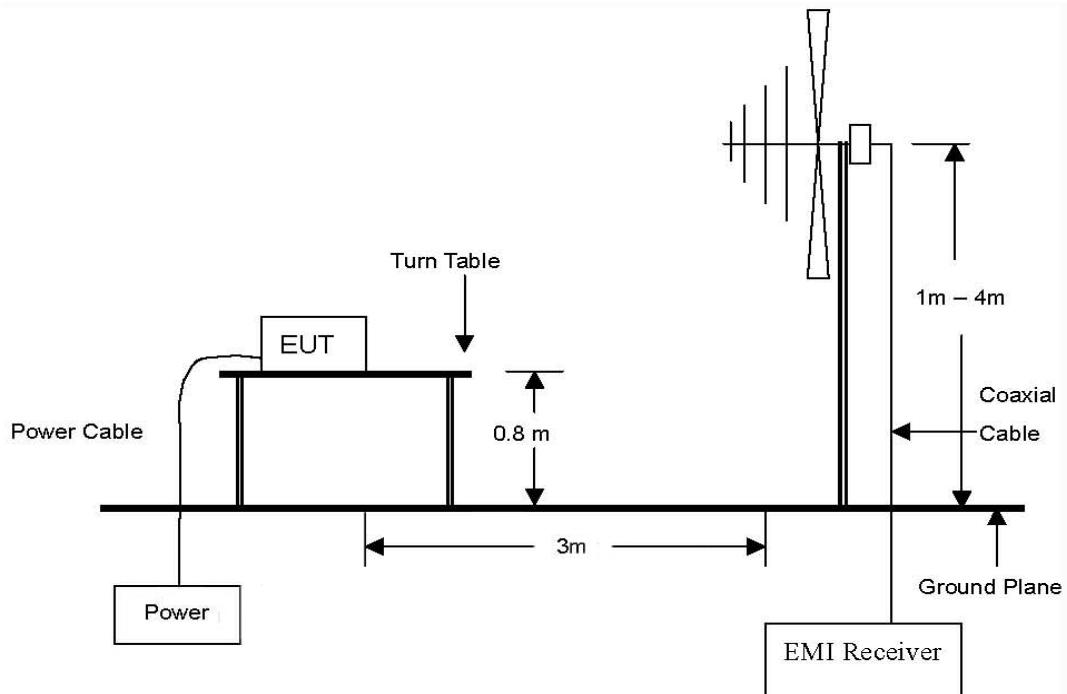
2.1. Test Setup

2.1.1. Transmitter Radiated Spurious Emissions

The diagram below shows the test setup that is utilized to make the measurements for emission from 9 kHz to 30 MHz Emissions.

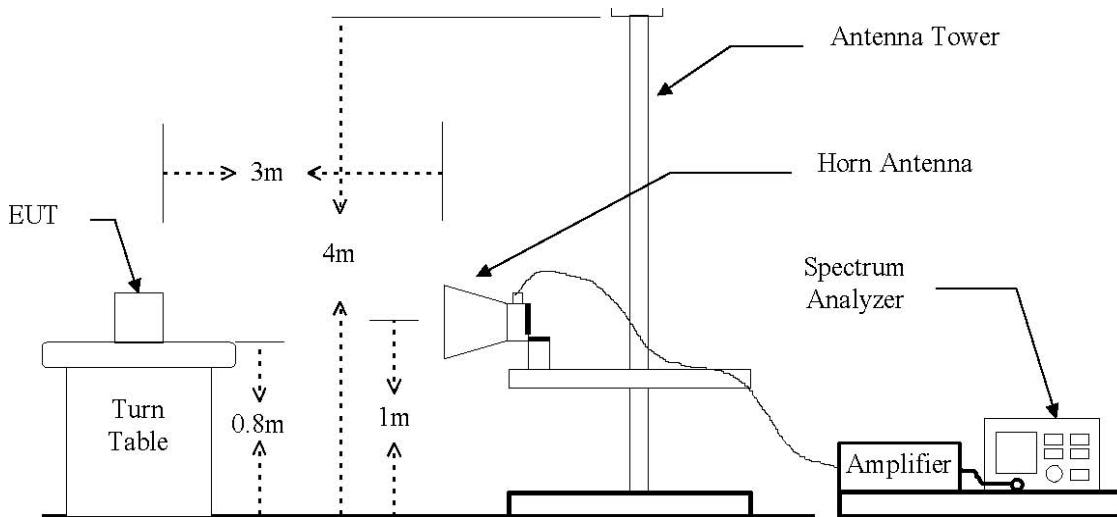


The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz Emissions.



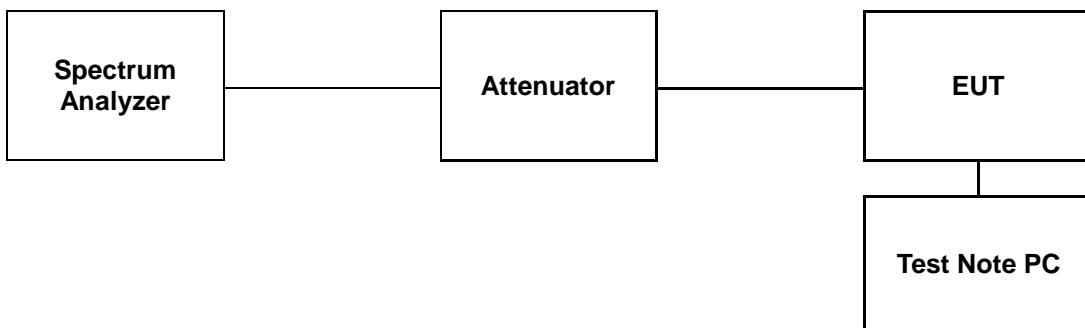
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The diagram below shows the test setup that is utilized to make the measurements for emission. The spurious emissions were investigated from 1 GHz to the 10th harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.



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2.1.2. Conducted Spurious Emissions



2.2. Limit

According to §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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval , as permitted under paragraph(b)(3) of this section , the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in section §15.209(a) is not required. In addition, radiated emission which in the restricted band, as define in section §15.205(a), must also comply the radiated emission limits specified in section §15.209(a) (see section §15.205(c))

According to § 15.209(a), Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table :

Frequency (MHz)	Distance (Meters)	Field Strength (dB μ V/m)	Field Strength (μ V/m)
30 - 88	3	40.0	100
88 – 216	3	43.5	150
216 – 960	3	46.0	200
Above 960	3	54.0	500

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2.3. Test Procedures

Radiated emissions from the EUT were measured according to the dictates of DA000705 and ANSI C63.4 2003

2.3.1. Test Procedures for Radiated Spurious Emissions

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
2. During performing radiated emission below 1 GHz, the EUT was set 3 meters away from the interference receiving antenna, which was mounted on the top of a variable-height antenna tower. During performing radiated emission above 1 GHz, the EUT was set 3 meter away from the interference-receiving antenna.
3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE :

All data rates and modes were investigated for radiated spurious emissions. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1 GHz.
4. When Average result is different from peak result over 20 dB (over-averaging), According to 15.35 (c), as a "duty cycle correction factor", pulse averaging with 20 log(duty cycle) has to be used.
5. To get a maximum emission level from the EUT, the EUT is manipulated through three orthogonal planes.

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2.3.2. Test Procedures for Conducted Spurious Emissions

NOTE ;

All data rates and modes were investigated for conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section.

2.3.2.1. Band-edge Compliance of RF Conducted Emissions

The transmitter output was connected to the spectrum analyzer.

Span = wide enough to capture the peak level of the emission operating on the channel closest to the bandedge, as well as any modulation products which fall outside of the authorized band of operation.

RBW \geq 100 kHz

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

2.3.2.2. Spurious RF Conducted Emissions

The transmitter output was connected to the spectrum analyzer.

RBW = 100 kHz

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

2.4. Test Results

Ambient temperature : (23 ± 2) °C

Relative humidity : 47 % R.H.

2.4.1. Spurious Radiated Emission (Worst case configuration_ GFSK mode, 1 Mbps, High channel)

The frequency spectrum from 9 MHz to 1 000 MHz was investigated. All reading values are peak values.

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ N)	Detect Mode	Pol.	AF (dB/m)	AMP + CL (dB)	Actual (dB μ N/m)	Limit (dB μ N/m)	Margin (dB)
72.68	38.91	Peak	V	8.20	-26.50	20.61	40.00	19.39
240.49	44.26	Peak	H	12.30	-25.10	31.46	46.00	14.54
288.02	50.88	Peak	H	12.60	-24.70	38.78	46.00	7.22
335.55	36.26	Peak	V	13.00	-24.70	24.56	46.00	21.44
384.05	39.49	Peak	H	13.60	-25.00	28.09	46.00	17.91
480.08	36.31	Peak	V	15.50	-25.30	26.51	46.00	19.49
576.11	41.97	Peak	H	17.20	-25.40	33.77	46.00	12.23
672.14	39.20	Peak	V	18.90	-25.00	33.10	46.00	12.90
839.95	43.86	Peak	H	21.90	-24.30	41.46	46.00	4.54
Above 900.00	Not detected	-	-	-	-	-	-	-

Remark:

1. All spurious emissions at channels are almost the same below 1 GHz, so that middle channel was chosen at representative in final test.
2. Actual = Reading + AF + AMP + CL

2.4.2. Spurious Radiated Emission

The frequency spectrum above 1 000 MHz was investigated.

Operating Mode: GFSK(1 Mbps)**A. Low Channel (2 402 MHz)**

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*2 390.00	23.85	Peak	V	28.05	6.23	58.13	74.00	15.87
*2 390.00	12.27	Average	V	28.05	6.23	46.55	54.00	7.45

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*4 804.54	39.98	Peak	V	32.27	-34.18	38.07	74.00	35.93
*4 804.54	28.71	Average	V	32.27	-34.18	26.80	54.00	27.20
Above 4 900.00	Not detected	-	-	-	-	-	-	-

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B. Middle Channel (2 441 MHz)

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*4 878.80	39.24	Peak	V	32.83	-33.33	38.74	74.00	35.26
*4 878.80	27.92	Average	V	32.83	-33.33	27.42	54.00	26.58
Above 4 900.00	Not detected	-	-	-	-	-	-	-

C. High Channel (2 480 MHz)

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*2 483.50	23.04	Peak	V	28.31	6.49	57.84	74.00	16.16
*2 483.50	12.64	Average	V	28.31	6.49	47.44	54.00	6.56

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*4 949.65	40.21	Peak	V	33.27	-33.58	39.90	74.00	34.10
*4 949.65	28.20	Average	V	33.27	-33.58	27.89	54.00	26.11
Above 5 000.00	Not detected	-	-	-	-	-	-	-

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Operating Mode: 8DPSK(3 Mbps)

A. Low Channel (2 402 MHz)

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*2 390.00	23.69	Peak	V	28.05	6.23	57.97	74.00	16.03
*2 390.00	12.26	Average	V	28.05	6.23	46.54	54.00	7.46

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*4 804.82	39.84	Peak	V	32.28	-34.26	37.86	74.00	36.14
*4 804.82	28.66	Average	V	32.28	-34.26	26.68	54.00	27.32
Above 4 900.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (2 441 MHz)

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*4 881.15	40.80	Peak	V	32.85	-33.33	40.32	74.00	33.68
*4 881.15	29.40	Average	V	32.85	-33.33	28.92	54.00	25.08
Above 4 900.00	Not detected	-	-	-	-	-	-	-

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C. High Channel (2 480 MHz)

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*2 483.50	22.92	Peak	V	28.31	6.49	57.72	74.00	16.28
*2 483.50	12.61	Average	V	28.31	6.49	47.41	54.00	6.59

Radiated Emissions			Ant	Correction Factors		Total	FCC Limit	
Frequency (MHz)	Reading (dB μ V)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
*4 972.25	40.41	Peak	V	33.38	-34.00	39.79	74.00	34.21
*4 972.25	28.14	Average	V	33.38	-34.00	27.52	54.00	26.48
Above 5 000.00	Not detected	-	-	-	-	-	-	-

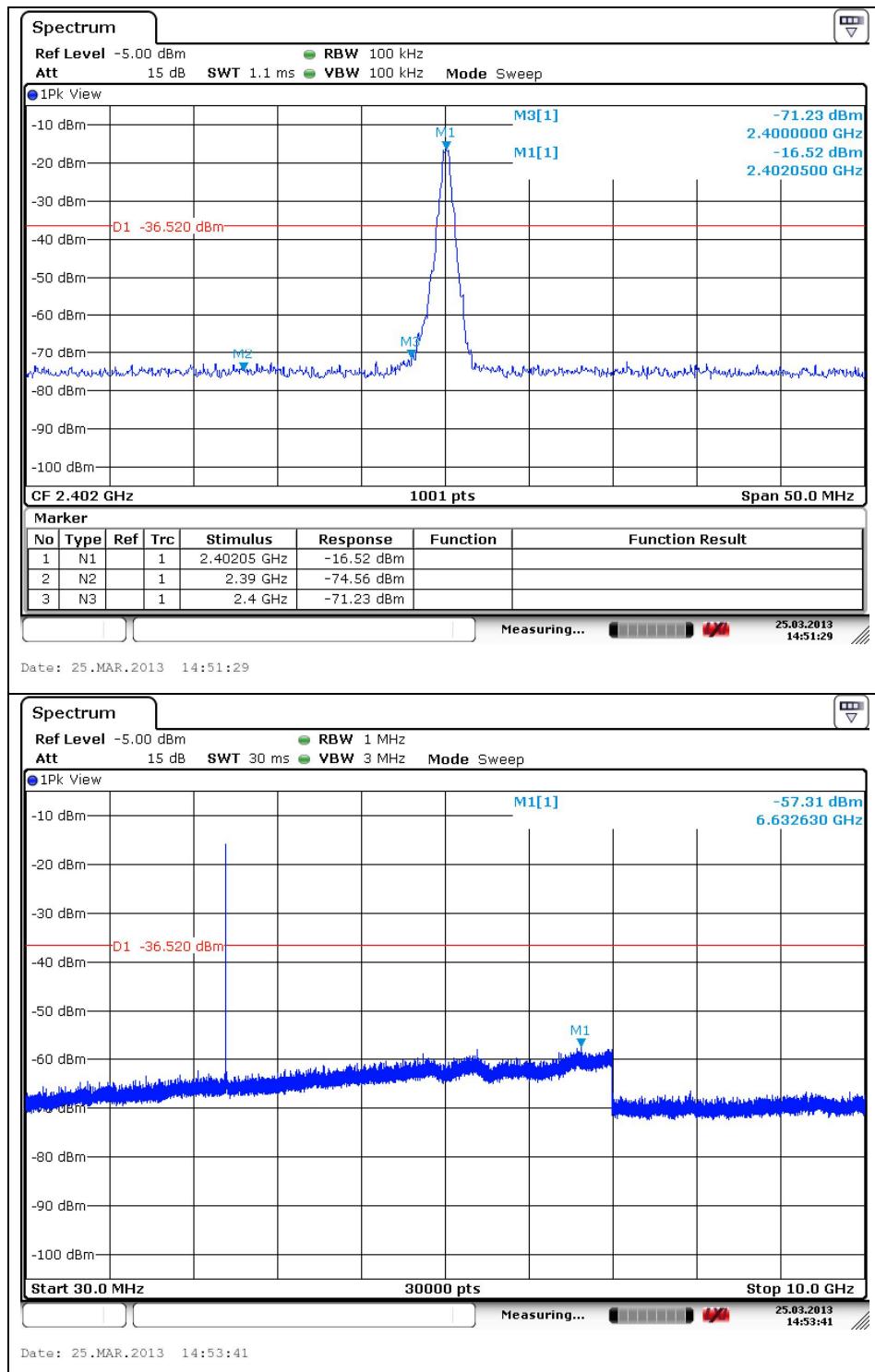
Remarks:

1. “**” means the restricted band.
2. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
3. Radiated emissions measured in frequency above 1 000 MHz were made with an instrument using peak/average detector mode.
4. Actual = Reading + AF + AMP + CL

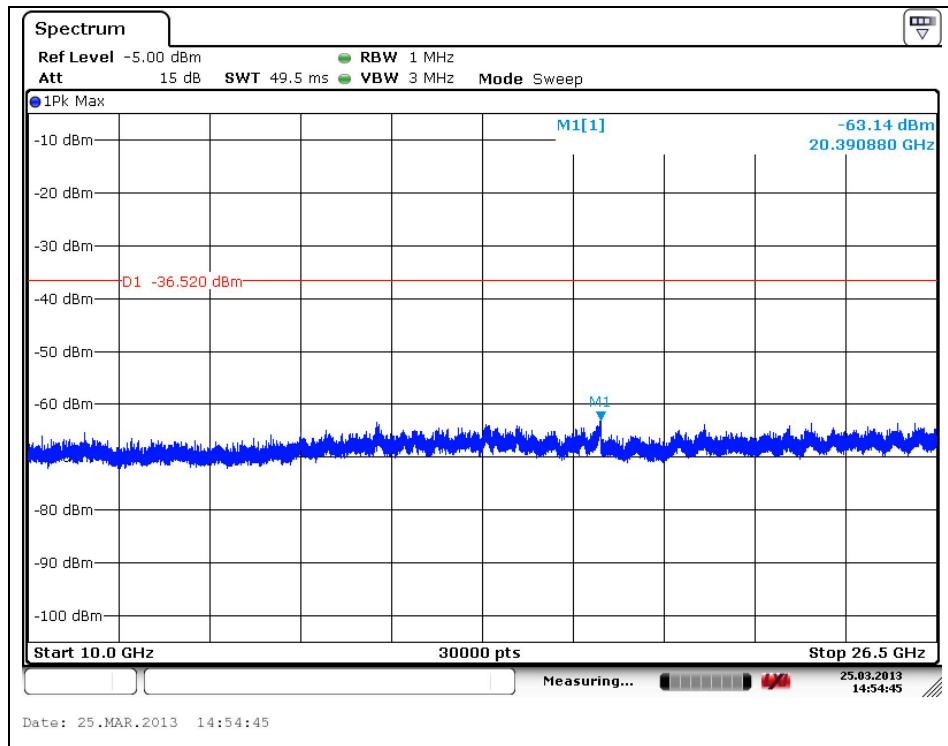
2.4.3. Spurious RF Conducted Emissions: Plot of Spurious RF Conducted Emission

Operating Mode: GFSK(1 Mbps)

Low Channel



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Note:

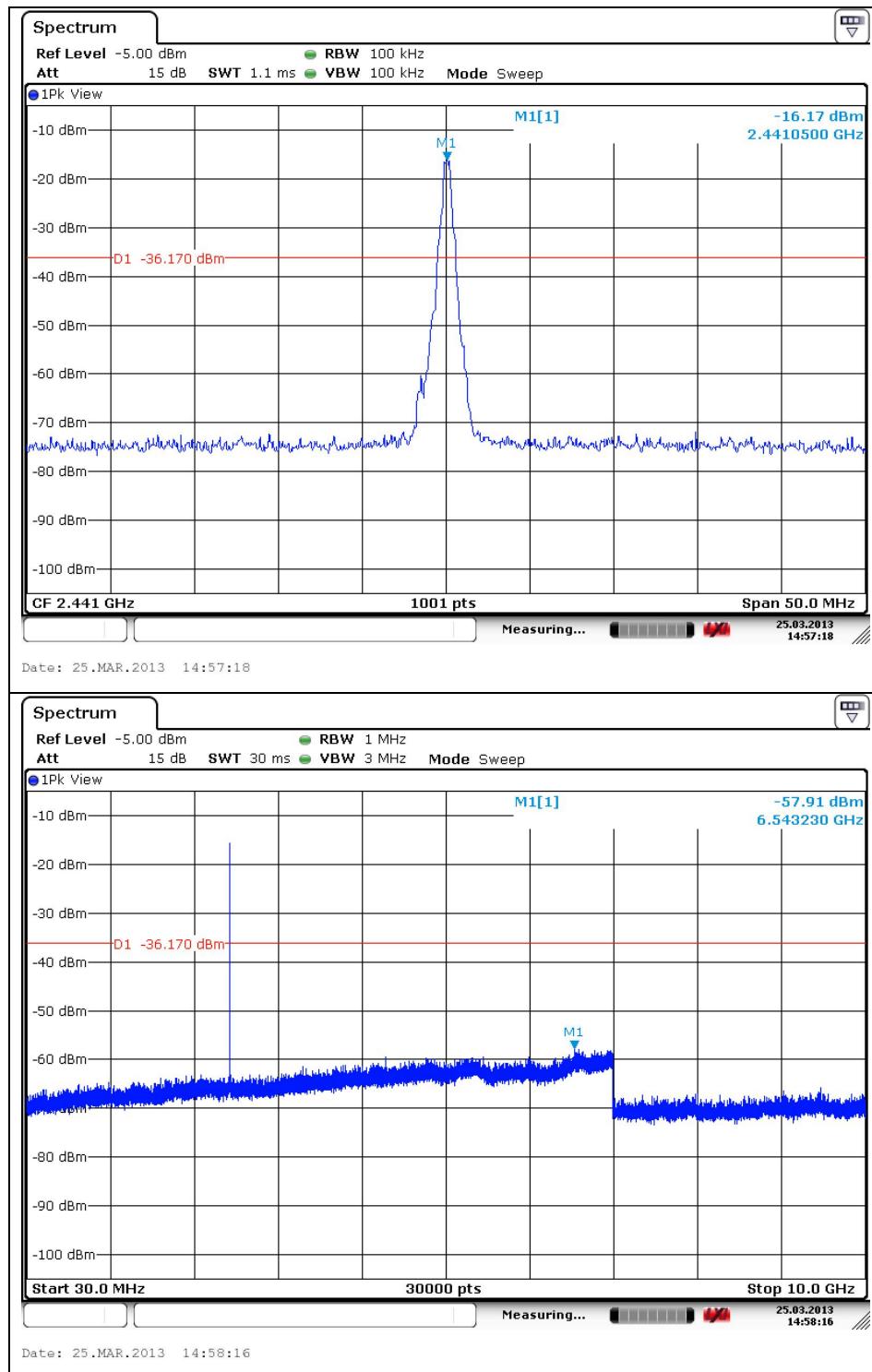
Offset (dB) = Attenuator (dB) + Cable loss (dB)

Final Result (dB m) = Reading values (dB m) + Spurious offset (dB)

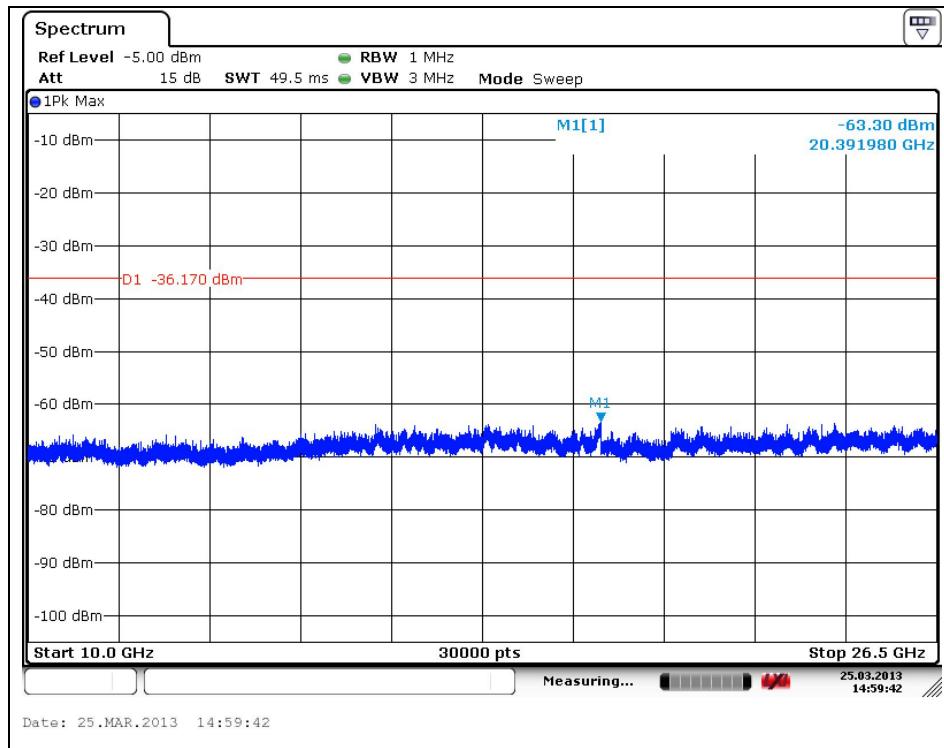
Frequency (MHz)	Reading values (dB m)	Spurious offset (dB)	Final Result (dB m)
2 390.00	-74.56	21.16	-53.40
2 400.00	-71.23	21.17	-50.06
6 632.63	Noise floor	-	-
20 390.88	Noise floor	-	-

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Middle Channel



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**Note:**

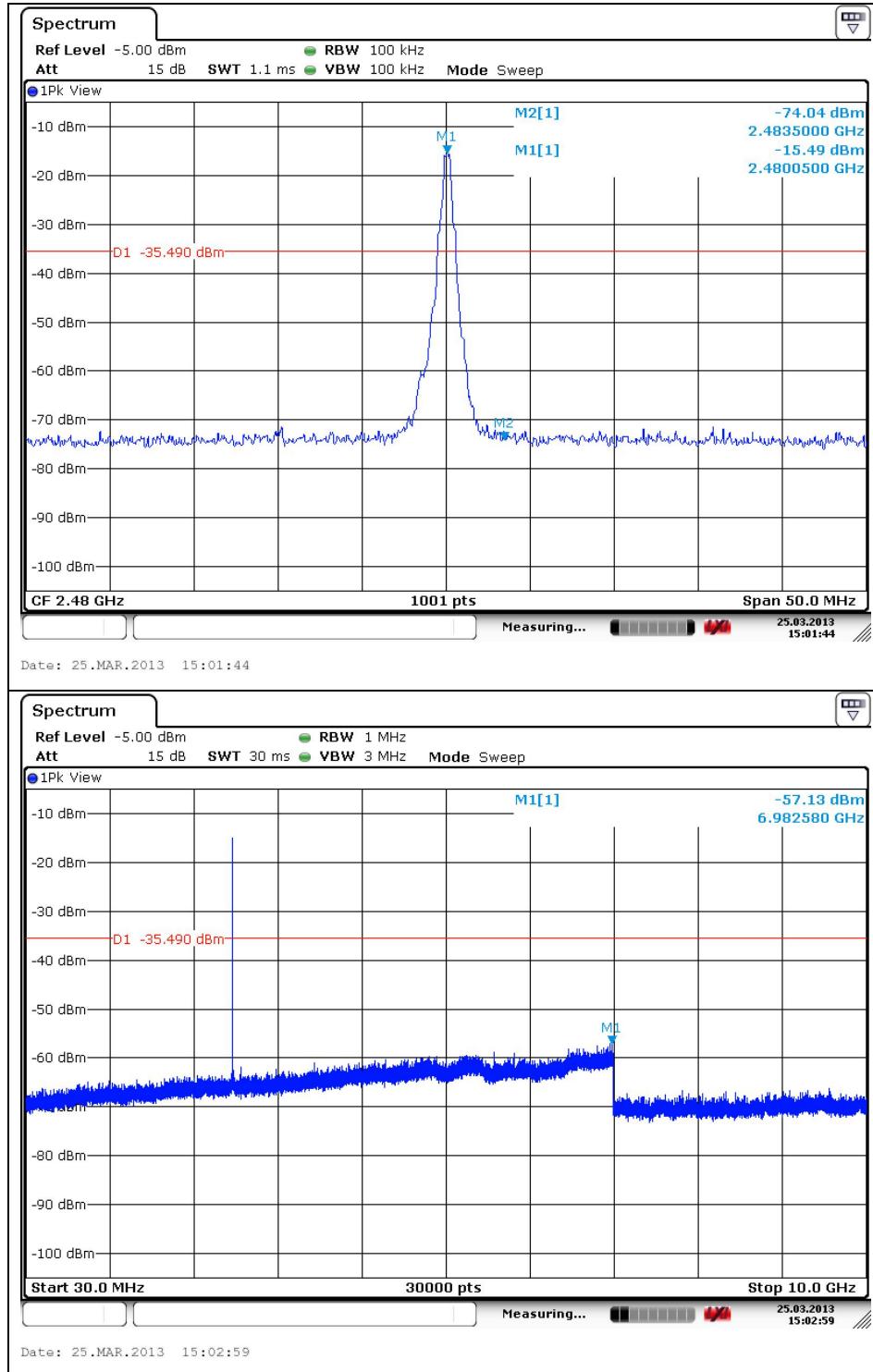
Offset (dB) = Attenuator (dB) + Cable loss (dB)

Final Result (dB m) = Reading values (dB m) + Spurious offset (dB)

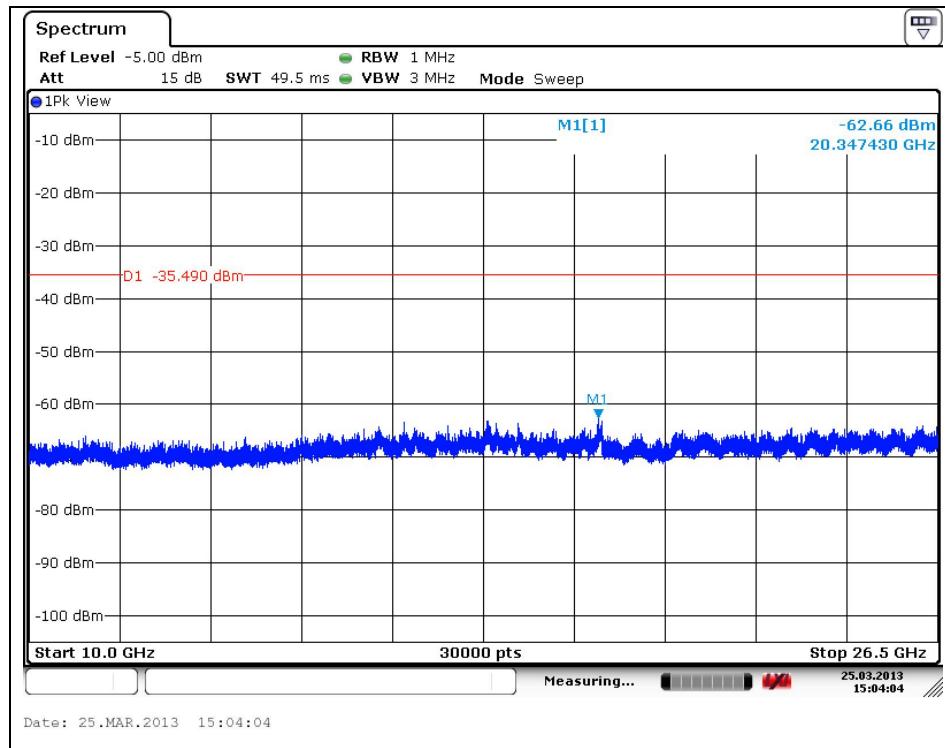
Frequency (MHz)	Reading values (dB m)	Spurious offset (dB)	Final Result (dB m)
6 543.23	Noise floor	-	-
20 391.98	Noise floor	-	-

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High Channel



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**Note:**

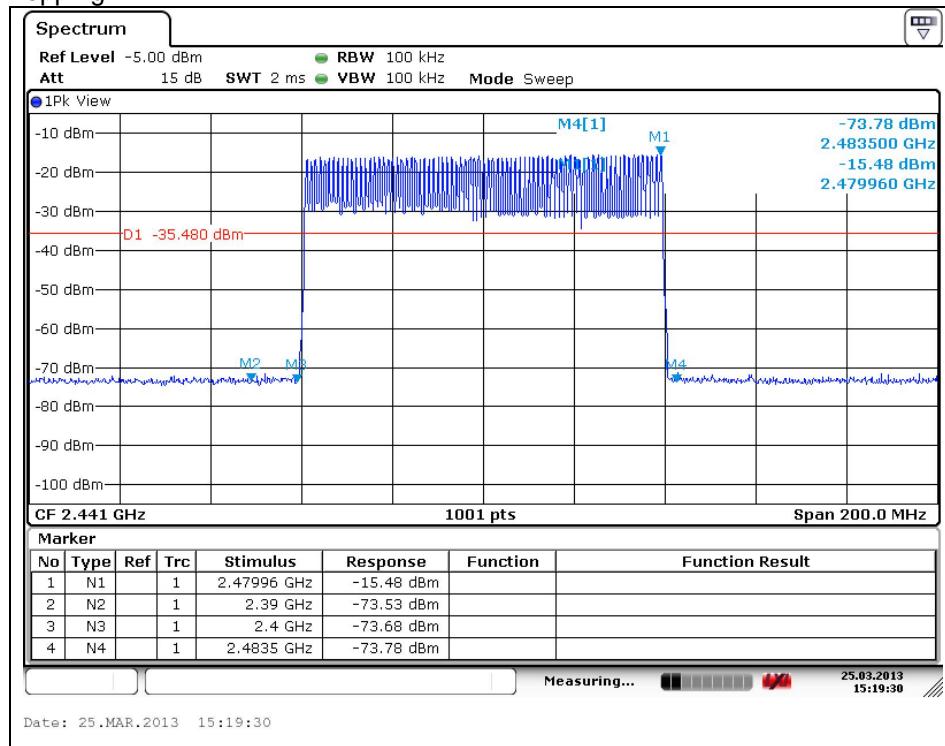
Offset (dB) = Attenuator (dB) + Cable loss (dB)

Final Result (dB m) = Reading values (dB m) + Spurious offset (dB)

Frequency (MHz)	Reading values (dB m)	Spurious offset (dB)	Final Result (dB m)
2 483.50	-74.04	21.21	-52.83
6 982.58	Noise floor	-	-
20 347.43	Noise floor	-	-

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Band edge at Hopping



Note:

Offset (dB) = Attenuator (dB) + Cable loss (dB)

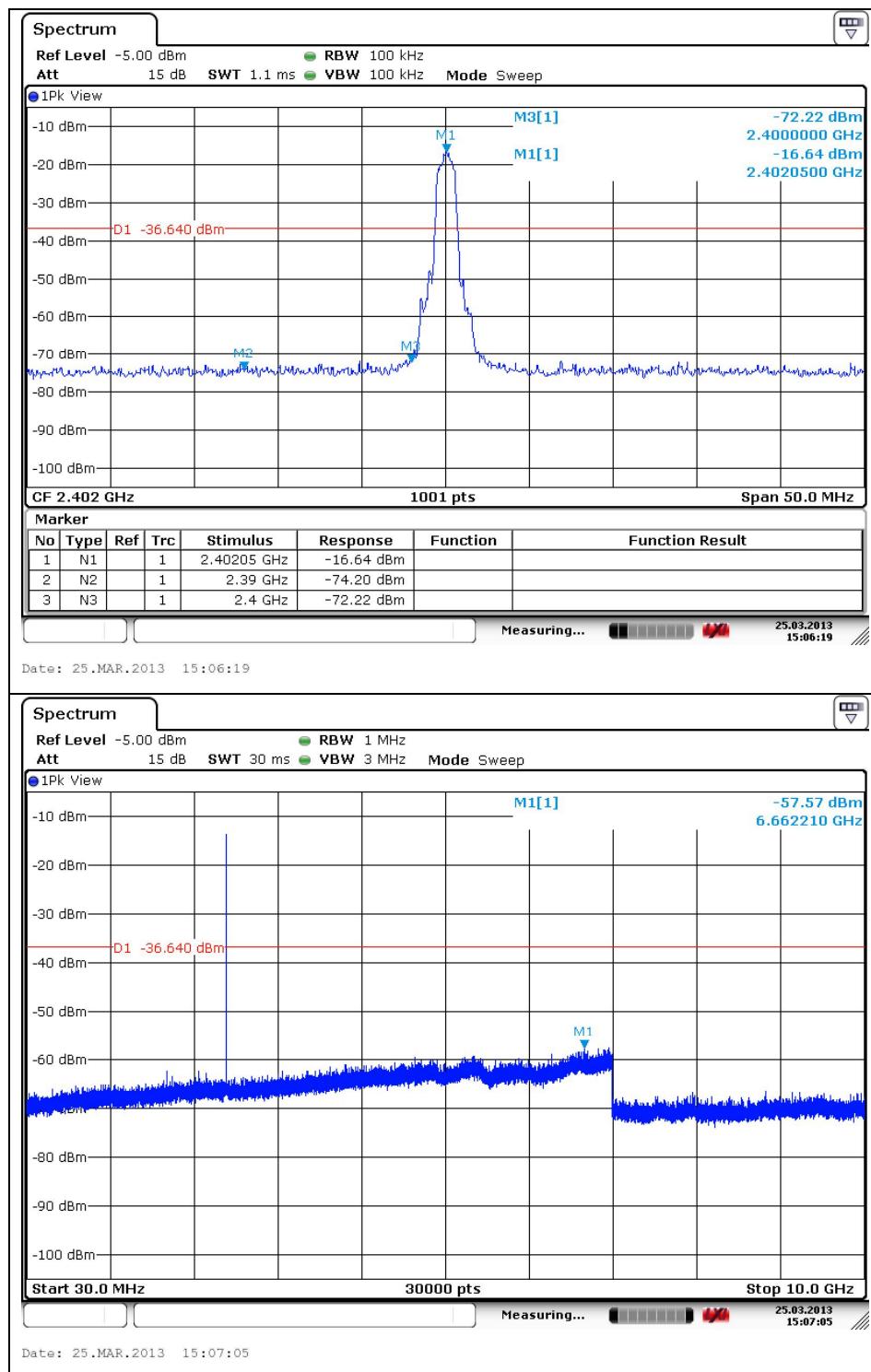
Final Result (dB m) = Reading values (dB m) + Spurious offset (dB)

Frequency (MHz)	Reading values (dB m)	Spurious offset (dB)	Final Result (dB m)
2 390.00	-73.53	21.16	-52.37
2 400.00	-73.68	21.17	-52.51
2 483.50	-73.78	21.21	-52.57

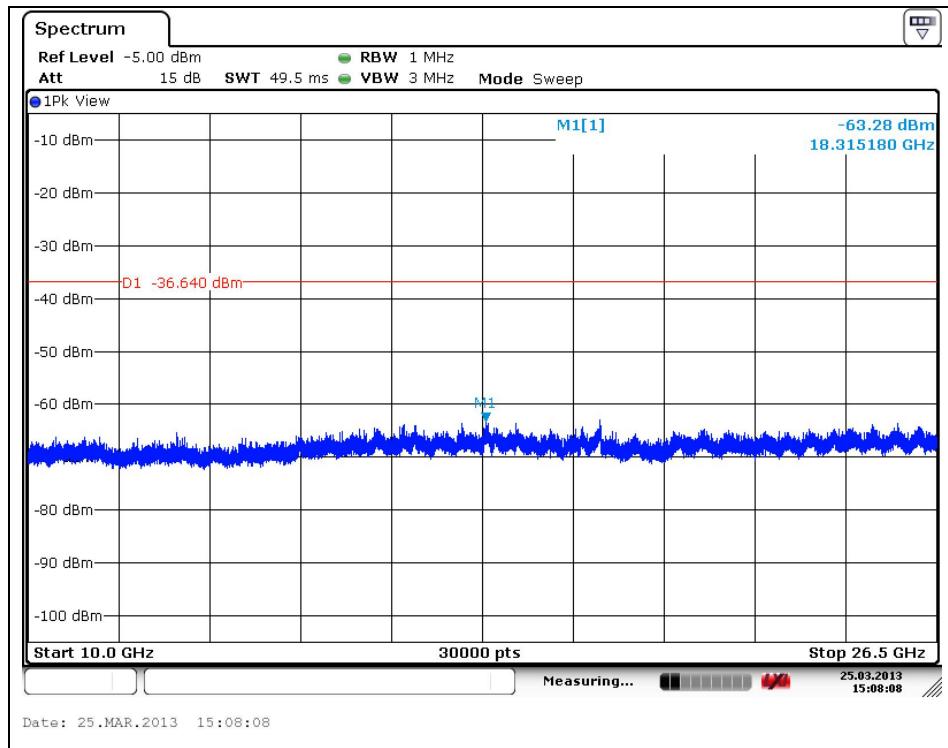
The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

Operating Mode : 8DPSK(3 Mbps)

Low Channel



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Note:

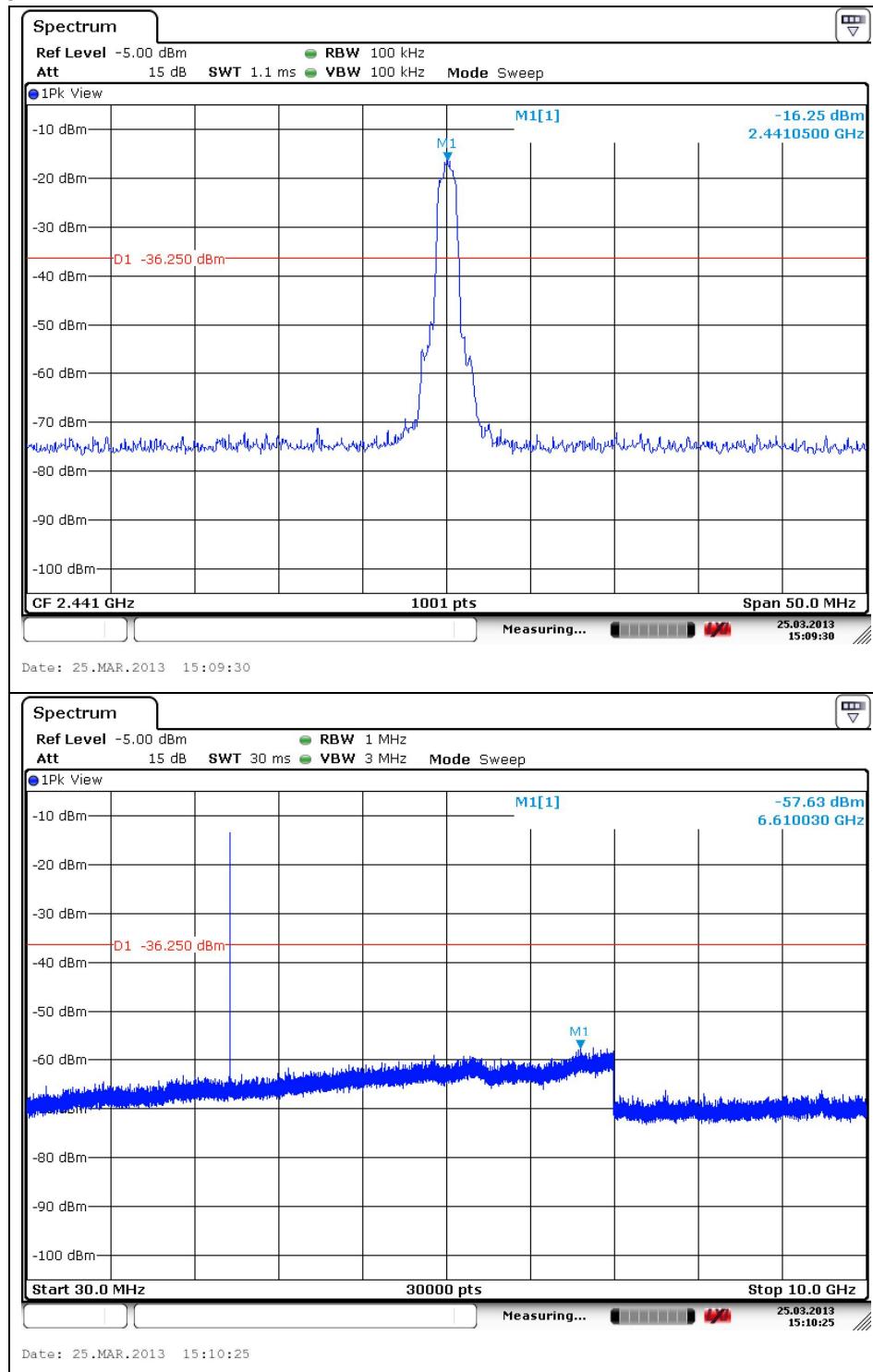
Offset (dB) = Attenuator (dB) + Cable loss (dB)

Final Result (dB m) = Reading values (dB m) + Spurious offset (dB)

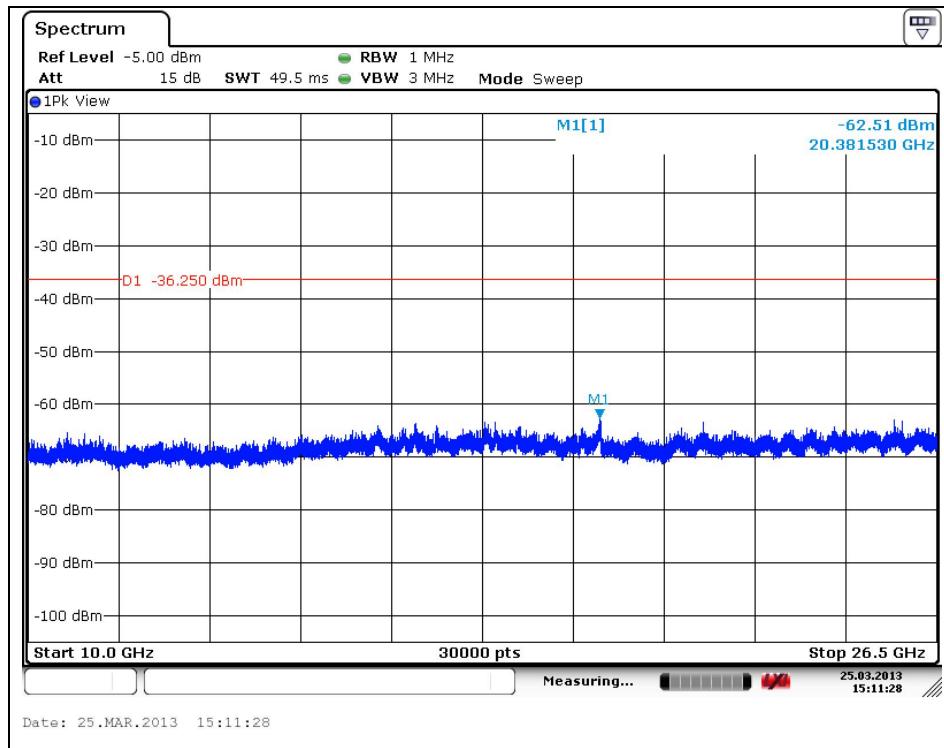
Frequency (MHz)	Reading values (dB m)	Spurious offset (dB)	Final Result (dB m)
2 390.00	-74.20	21.16	-53.04
2 400.00	-72.22	21.17	-51.05
6 662.21	Noise floor	-	-
18 315.18	Noise floor	-	-

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Middle Channel



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**Note:**

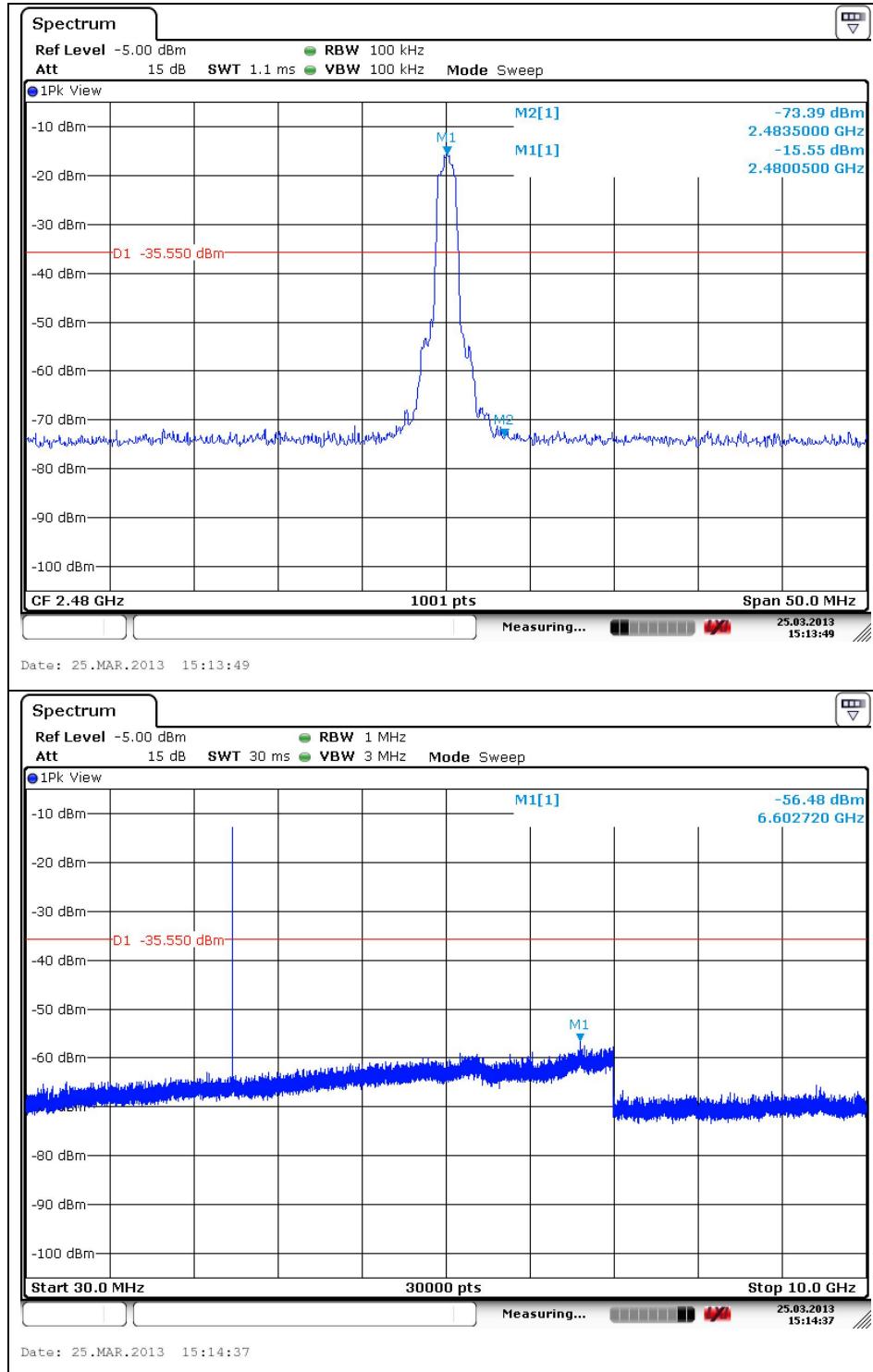
Offset (dB) = Attenuator (dB) + Cable loss (dB)

Final Result (dB m) = Reading values (dB m) + Spurious offset (dB)

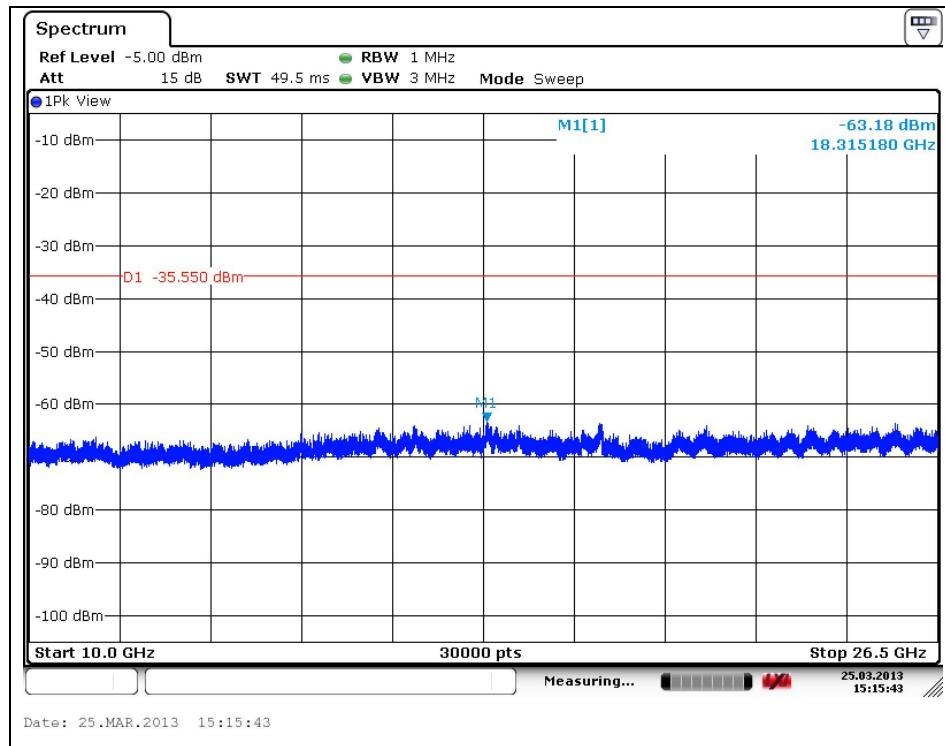
Frequency (MHz)	Reading values (dB m)	Spurious offset (dB)	Final Result (dB m)
6 610.03	Noise floor	-	-
20 381.53	Noise floor	-	-

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High Channel



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

**Note:**

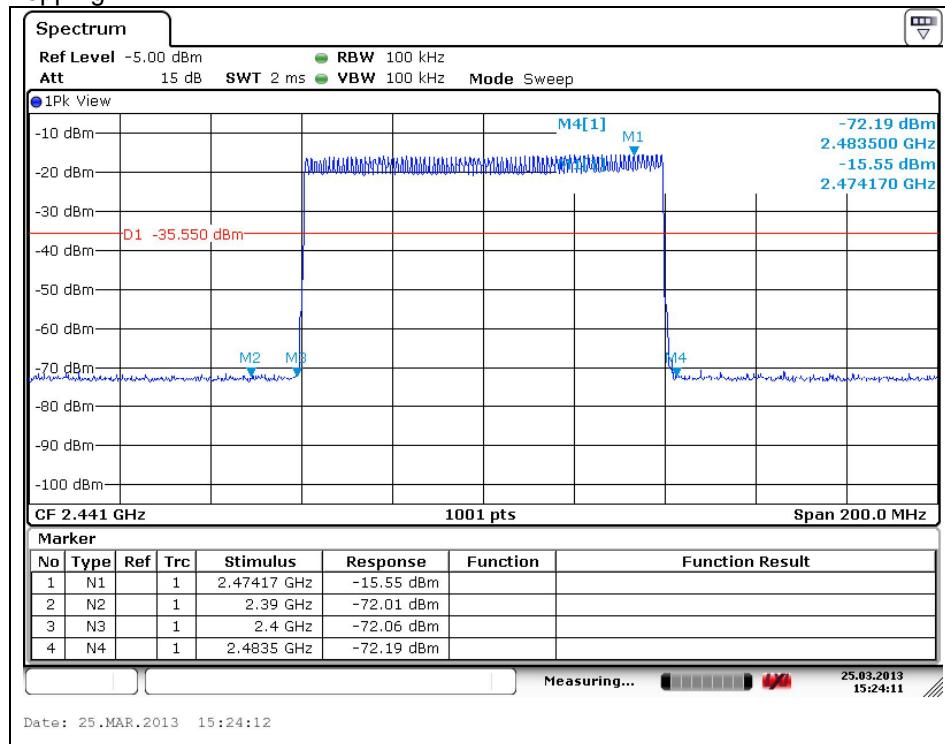
Offset (dB) = Attenuator (dB) + Cable loss (dB)

Final Result (dB m) = Reading values (dB m) + Spurious offset (dB)

Frequency (MHz)	Reading values (dB m)	Spurious offset (dB)	Final Result (dB m)
2 483.50	-73.39	21.21	-52.18
6 602.72	Noise floor	-	-
18 315.18	Noise floor	-	-

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Band edge at Hopping



Note:

Offset (dB) = Attenuator (dB) + Cable loss (dB)

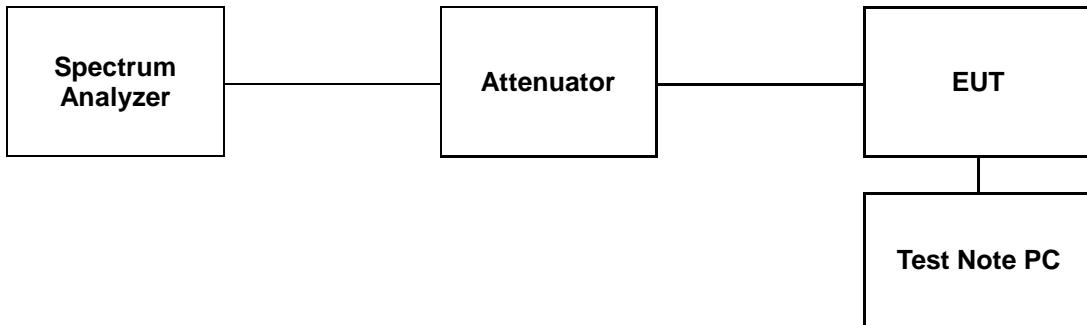
Final Result (dB m) = Reading values (dB m) + Spurious offset (dB)

Frequency (MHz)	Reading values (dB m)	Spurious offset (dB)	Final Result (dB m)
2 390.00	-72.01	21.16	-50.85
2 400.00	-72.06	21.17	-50.89
2 483.50	-72.19	21.21	-50.98

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3. 20 dB Bandwidth Measurement and 99 % BW

3.1. Test Setup



3.2. Limit

Limit: Not Applicable

3.3. Test Procedure

3.3.1. 20 dB Bandwidth

All data rates and modes were investigated for this test. The full data for the worst case data rate are reported in this section.

The test follows DA000705

The 20 dB band width was measured with a spectrum analyzer connected to RF antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency.

Use the following spectrum analyzer setting :

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel.

RBW = greater than 1 % of the 20 dB bandwidth

VBW = RBW

Sweep = auto

Detector = peak

Trace = max hold

The marker-to-peak function to set the mark to the peak of the emission. Use the marker-delta function to measure 20 dB down one side of the emission. Reset the function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is 20 dB bandwidth of the emission.

3.3.2. 99% Bandwidth

Set the spectrum analyzer as SPAN = 2 or 3 times necessary bandwidth, RBW = approximately 1 % of the SPAN, VBW is set to 3 times RBW, Detector = sampling, Trace mode = max hold.

Measure lowest and highest frequencies are placed in a running sum until 0.5 % and 99.5 % of the total is reached.

Record the SPAN between the lowest and the highest frequencies for the 99 % occupied bandwidth.

Repeat until all the test channels are investigated.

3.4. Test Results

Ambient temperature : (23 ± 2) °C

Relative humidity : 47 % R.H.

Operation Mode	Data Rate	Channel	Channel Frequency (MHz)	20 dB Bandwidth(MHz)	99 % Bandwidth(MHz)
GFSK	1 Mbps	Low	2 402	1.04	0.93
		Middle	2 441	1.05	0.93
		High	2 480	1.05	0.94
8DPSK	3 Mbps	Low	2 402	1.31	1.17
		Middle	2 441	1.30	1.17
		High	2 480	1.30	1.17

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