FCC PART 15, SUBPART C
TEST REPORT
TEST METHOD: ANSI C63.4: 2009

For
SECURITY CONSOLE
Model: 2GIG-CPX900X

Prepared for

2GIG TECHNOLOGIES, INC.
2961 WEST MAPLE LOOP DRIVE
LEHI, UTAH 84043

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DATE: AUGUST 15, 2011

	REPORT BODY	APPENDICES					TOTAL
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GENERAL REPORT SUMMARY

This electromagnetic emission report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced in any form except in full, without the written permission of Compatible Electronics.

This report must not be used to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested:	Security Console Model: 2GIG-CPX900X S/N: 001
Product Description:	See expository statement.
Modifications:	The EUT was not modified during the testing.
Manufacturer:	2GIG Technologies, Inc. 2961 West Maple Loop Drive Lehi, Utah 84043
Test Date:	July 13, 15, 20, and 21, 2011
Test Specifications:	Emissions requirements FCC CFR Title 47, Part 15 Subpart B, Class B FCC CFR Title 47, Part 15 Subpart C, Section 15.205, 15.209, and 15.247 Test Procedure: ANSI C63.4: 2009

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz - 30 MHz.	Complies with the **Class B** limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.207.
2	Spurious Radiated RF Emissions, 10 kHz – 1000 MHz and 1000 MHz – 9300 MHz	Complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.209, and 15.247(d)
3	Fundamental and Emissions produced by the intentional radiator in non-restricted bands, 10 kHz – 9.3 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247(d)
4	Emissions produced by the intentional radiator in restricted bands, 10 kHz – 9.3 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209, and section 15.247 (d)
5	20 dB Bandwidth	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (a)(1) and (a)(1)(i)
6	Peak Power Output	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (b)(2)
7	RF Conducted Antenna Test	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (d)
8	Carrier Frequency Separation	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (a)(1) and 15.247 (a)(1)(i)
9	Average Time of Occupancy	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (a)(1)(i)
10	Peak Power Spectral Density from the Intentional Radiator to the Antenna	This test was not performed because the EUT is a frequency hopping device only.

1. PURPOSE

This document is a qualification test report based on the Emissions tests performed on the Security Console, Model: 2GIG-CPX900X. The emissions measurements were performed according to the measurement procedure described in ANSI C63.4: 2009. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.247.

Note: For the unintentional radiator portion of the test, the EUT was within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

2GIG Technologies, Inc.

Scott Simon	Engineering Vice President

Compatible Electronics Inc.

Kyle Fujimoto	Test Engineer
David Tran	Test Technician
James Ross	Test Engineer

2.4 Date Test Sample was Received

The test sample was received on July 13, 2011.

2.5 Disposition of the Test Sample

The test sample has not been returned to 2GIG Technologies, Inc. as of August 1, 2011.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
Inc.	Incorporated

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this test report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators
ANSI C63.4 2009	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – Emissions

The EUT was tested connected to a line simulator and power supply via its line and power ports, respectively. Unterminated cables were connected to the HW2, HW1, -BELL, +BELL, OPEN COLL, and GND ports on the terminal block inside the EUT. The line simulator was also connected to a telephone via its line port. The EUT was continuously transmitting and receiving on a continuous basis.

Note: A special program was on the EUT to allow the EUT to be tested at the low, middle, and high channels along with allowing the EUT to transmit and receive at the same time.

The highest emissions were found when the EUT was running in the above configuration. The cables were moved to maximize the emissions. The final conducted and radiated data was taken in this mode of operation. All initial investigations were performed with the spectrum analyzer in manual mode scanning the frequency range continuously. The cables were bundled and routed as shown in the photographs in Appendix D.

4.1.2 Cable Construction and Termination

Cable 1 This is a 1.5-meter unshielded cable connecting the telephone to the line simulator. The cable has an RJ-12 connector at each end. The cable was bundled to a length of 50-centimeters.

Cable 2 This is a 30-centimeter unshielded cable connecting the line simulator to an RJ-12 to RJ-45 adapter. The cable has an RJ-12 connector at each end.

Cable 3 This is a 10-meter unshielded cable connecting the RJ-12-to-RJ45 adapter to the EUT. The cable has an RJ-45 connector at each end.

Cable 4 This is a 1.1-meter unshielded cable connecting the EUT to the AC adapter. The cable is hard wired into the + and - power ports on the terminal block inside the EUT and is hard wired at the AC adapter end.

Cable 5 This is a 1-meter unshielded and unterminated cable connected to the EUT's HW2, HW1, -BELL, +BELL, OPEN COLL, and GND ports via hard wire. The cable was bundled to a length of 40-centimeters.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT TYPE	MANUFACTURER	MODEL	SERIAL NUMBER	FCC ID
SECURITY CONSOLE (EUT)	2GIG TECHNOLOGIES, INC.	2GIG-CPX900X	001	WDQ-CPX900X
TELPHONE LINE SIMULATOR	CELTONE	TLS-3	N/A	N/A
TELEPHONE	NORTHERN TELEPHONE	N/A	N/A	N/A
RJ-12-TO-RJ-45 ADAPTER	N/A	N/A	N/A	N/A
POWER SUPPLY	SURE POWER	SW-1401701A	N/A	N/A

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	2637A03618	May 27, 2011	1 Year
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A13404	May 27, 2011	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	May 27, 2011	1 Year
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Radiated Emissions Data Capture Program	Compatible Electronics	2.0	N/A	N/A	N/A
Biconical Antenna	Com Power	AB-900	15250	June 8, 2011	1 Year
Log Periodic Antenna	Com Power	AL-100	16252	June 8, 2011	1 Year
HF Horn Antenna	Com-Power	AH-118	071175	March 18, 2010	2 Year
Preamplifier	Com-Power	PA-102	1017	January 11, 2011	1 Year
HF Preamplifier	Com-Power	PA-118	181656	December 22, 2010	1 Year
Loop Antenna	Com-Power	AL-130	17089	January 21, 2011	1 Year
Turntable	Com Power	TT-100	N/A	N/A	N/A
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
RF CONDUCTED EMISSIONS TEST EQUIPMENT					
Emissions Program	Compatible Electronics	2.3 (SR19)	N/A	N/A	N/A
LISN	Com Power	LI-215	12078	June 20, 2011	1 Year
LISN	Com Power	LI-215	12082	June 20, 2011	1 Year
Transient Limiter	Com Power	252A910	K39-0220	November 2, 2010	1 Year

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1.2 of this report for test location.

6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.

7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

7.1 RF Emissions

7.1.1 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E

The final data was collected under program control by the computer in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The six highest emissions are listed in Table 1.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.207.

7.1.2 Radiated Emissions Test

The spectrum analyzer and EMI Receiver were used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-102 was used for frequencies from 30 MHz to 1 GHz, the Com Power Microwave Preamplifier Model: PA-118 was used for frequencies above 1 GHz. The spectrum analyzer and EMI Receiver were used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer or EMI Receiver records the highest measured reading over all the sweeps.

The quasi-peak adapter was used only for those readings which are marked accordingly on the data sheets.

The frequencies above 1 GHz were adjusted by a “duty cycle correction factor”, derived from 20 log (dwell time / 100 ms).

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 9.3 GHz	1 MHz	Horn Antenna

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4: 2009. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT by the Radiated Emission Manual Test software. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

Radiated Emissions Test (Continued)

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 10-meter test distance from 10 kHz to 30 MHz, and at a 3-meter test distance from 30 MHz to 9.3 GHz to obtain the final test data.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.247 for radiated emissions. Please see Appendix E for the data sheets.

7.1.3 RF Emissions Test Results

Table 1.0 CONDUCTED EMISSION RESULTS (120V)
SECURITY CONSOLE, Model: 2GIG-CPX900X

Frequency MHz	Emission Level* dBuV	Specification Limit dBuV	Delta dB
0.350	52.95 **(QP)**	58.95	-6.02
0.348	42.23 **(A)**	49.00	-6.77
3.311	35.61 **(A)**	46.00	-10.39
3.492	35.52 **(A)**	46.00	-10.48
0.438	35.23 **(A)**	47.11	-11.87
0.409	35.80 **(A)**	47.68	-11.88

Table 2.0 RADIATED EMISSION RESULTS
SECURITY CONSOLE, Model: 2GIG-CPX900X

Frequency MHz	Corrected Reading* dBuV/m	Spec. Limit dBuV/m	Delta dB
3660.00 (Vertical)	51.14 **(A)**	54.00	-2.86
50.653 (Vertical)	37.50 **(QP)**	40.00	-2.50
2730.00 (Vertical)	49.89 **(A)**	54.00	-4.11
5520.00 (Horizontal)	49.82 **(A)**	54.00	-4.18
2745.00 (Vertical)	49.77 **(A)**	54.00	-4.23
5520.00 (Vertical)	49.67 **(A)**	54.00	-4.33

Notes:

* The complete emissions data is given in Appendix E of this report.

QP Quasi-Peak Reading

A Average Reading

8.2 20 dB Bandwidth

The 20 dB Bandwidth was measured using the EMI Receiver. The bandwidth was measured using a direct connection from the RF output of the EUT. The resolution bandwidth was 30 kHz and the video bandwidth was 100 kHz.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (a)(1) and (a)(1)(i). The 20 dB bandwidth is less than the separation between channels. Please see the data sheets located in Appendix E.

8.3 Peak Output Power

The Peak Output Power was measured using the EMI Receiver. The peak output power was measured using a direct connection from the RF output of the EUT. The resolution bandwidth was 10 MHz and the video bandwidth was 10 MHz. The cable loss was also added back into the reading using the reference level offset.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (b)(2). The maximum peak output power is less than 250 mW. Please see the data sheets located in Appendix E.

8.4 RF Antenna Conducted Test

The RF antenna conducted test was performed using the EMI Receiver. The RF antenna conducted test measured using a direct connection from the RF out on the EUT into the input of the EMI Receiver. The resolution bandwidth was 100 kHz, and the video bandwidth was 300 kHz. The spans were wide enough to include all the harmonics and emissions that were produced by the intentional radiator.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d). The RF power that is produced by the intentional radiator is at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of desired power. Please see the radiated emission data sheets located in Appendix E.

8.5 RF Band Edges

The RF band edges were taken at the edges of the ISM spectrum (902 MHz when the EUT was on the low channel and 928 MHz when the EUT was on the high channel) using the EMI Receiver. The RBW was set to 100 kHz and the VBW was set to 300 kHz. Plots of the fundamental were taken to ensure the amplitude at the band edges were at least 20 dB down from the peak of the fundamental emission.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d). The RF power at the band edges at 902 MHz and 928 MHz meet the requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d). Please see the data sheets located in Appendix E.

8.6 Carrier Frequency Separation

The Channel Hopping Separation Test was measured using the EMI Receiver. The EUT was operating in its normal operating mode. The resolution bandwidth was 100 kHz, and the video bandwidth 300 kHz. The frequency span was wide enough to include the peaks of two adjacent channels.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (a)(1) and 15.247 (a)(1)(i). The Channel Hopping Separation is greater than the 20 dB bandwidth. Please see the data sheets located in Appendix D.

8.7 Number of Hopping Frequencies

The Channel Hopping Separation Test was measured using the EMI Receiver. The EUT was operating in its normal operating mode. The resolution bandwidth was 100 kHz, and the video bandwidth was 300 kHz. The frequency span was wide enough to include all of the peaks in the frequency band of operation.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (a)(1) and 15.247 (a)(1)(i). The number of hopping frequencies is 25. Please see the data sheets located in Appendix E.

8.8 Average Time of Occupancy Test

The Average Time of Occupancy Test was measured using the EMI Receiver. The EUT was operating in normal operating mode. The frequency span was taken to 0 Hz with a sweep time of 200 msec to determine the time for each transmission.

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 10 seconds.

The sweep time was then changed to 10 seconds and the number of pulses taken. The number of pulses in a 10 second period was then multiplied by the time for each of the pulses to determine the average time of occupancy.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (a)(1)(i). The EUT does not transmit for more than 400 msec in a 10 second period on any frequency. Please see the data sheets located in Appendix E.

8.9 Spectral Density Test

The spectrum density output was measured using the EMI Receiver. The spectral density output was measured using a direct connection from the RF out on the EUT into the input of the EMI Receiver. The resolution bandwidth 3 kHz, and the video bandwidth was 10 kHz. The highest 1.5 MHz of the signal was used as the frequency span with the sweep rate being 1 second for every 3 kHz of span.

Test Results:

This test was not performed because the EUT is a frequency hopping device only.

8 CHARACTERISTICS OF THE TRANSMITTER

8.1 Transmitter Power

Transmit power is herein defined as the power delivered to a 50 ohm load at the RF output of the EUT.

Power	Channel
19.66 dBm	LOW
19.64 dBm	MIDDLE
20.00 dBm	HIGH

8.2 Channel Number and Frequencies

There are a total of 25 channels. The low channel is at 910.00 MHz and the high channel is at 920.00 MHz. There is a 400 kHz separation between channels.

Channel 1: 910 MHz
Channel 2: 910.4 MHz
(Etc.)

8.3 Antenna Gain

The antenna has a gain of -10.17 dBi.

8. DEVIATIONS FROM THE TEST PROCEDURES

There were no deviations from the test procedures.

9. CONCLUSIONS

The Security Console, Model: 2GIG-CPX900X, as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart C, sections 15.205, 15.207, 15.209, and 15.247.

Note: For the unintentional radiator portion of the test, the EUT was within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B.

APPENDIX A

LABORATORY ACCREDITATIONS

LABORATORY ACCREDITATIONS AND RECOGNITIONS

NVLAP LAB CODES 200063-0, 200528-0, 200527-0

For US, Canada, Australia/New Zealand, Taiwan and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025 an ISO 9002 equivalent. Please follow the link to the NIST site for each of our facilities NVLAP certificate and scope of accreditation.

NVLAP listing links
Agoura Division - http://ts.nist.gov/Standards/scopes/2000630.htm
Brea Division - http://ts.nist.gov/Standards/scopes/2005280.htm
Silverado/Lake Forest Division - http://ts.nist.gov/Standards/scopes/2005270.htm

ANSI listing
CETCB https://www.ansica.org/wwwversion2/outside/ALLdirectoryDetails.asp?menuID=1&prgID=3&orgID=123&status=4

Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA).

Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for Taiwan/BSMI under the US/APEC (Asia-Pacific Economic Cooperation) Mutual Recognition Agreement (MRA).

We are also certified/listed for IT products by the following country/agency:

VCCI Listing, from VCCI site
Enter "Compatible" in search form http://www.vcci.or.jp/vcci_e/activity/registration/setsubi.html

FCC Listing, from FCC OET site
FCC test lab search https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm

Industry Canada Industrie Canada
Compatible Electronics IC listing can be found at:
http://www.ic.gc.ca/eic/site/ic1.nsf/eng/home

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

There were no modifications made to the EUT during the test.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Security Console
Model: 2GIG-CPX900X
S/N: 001

Additional Model Covered Under this Report:

1. 2GIG-CP1-900E
2. 2GIG-CP2-900E
3. 2GIG-CP5-900E.

The above model numbers are for different customers to whom the panels are marketed. The units are electrically and mechanically identical with the exception of the model numbers.

APPENDIX D

DIAGRAMS, CHARTS AND PHOTOS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

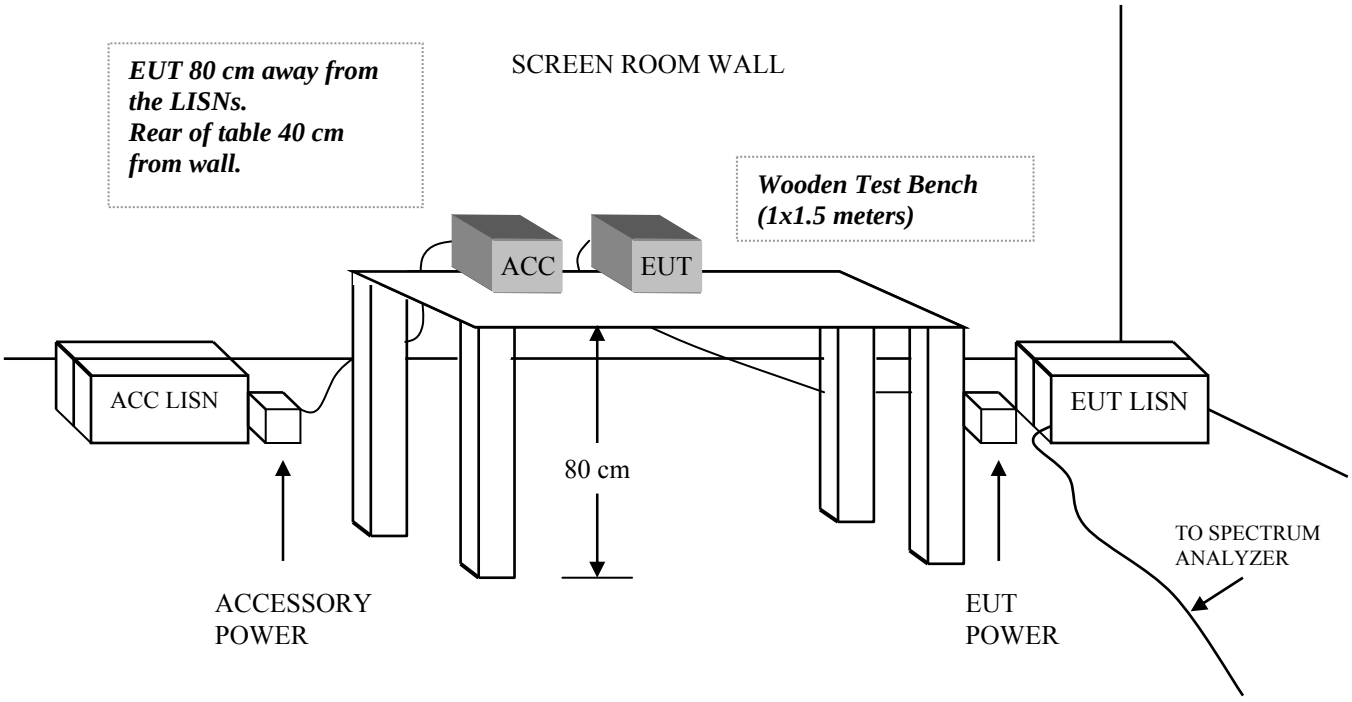


FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE

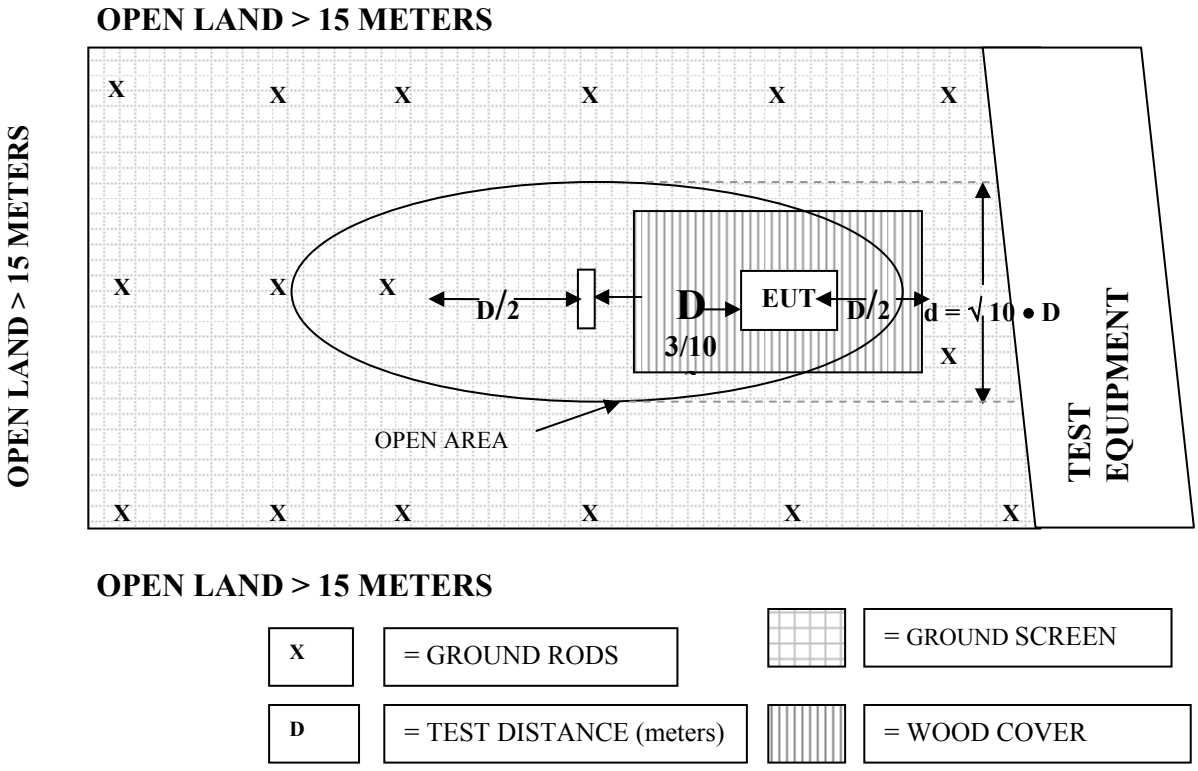
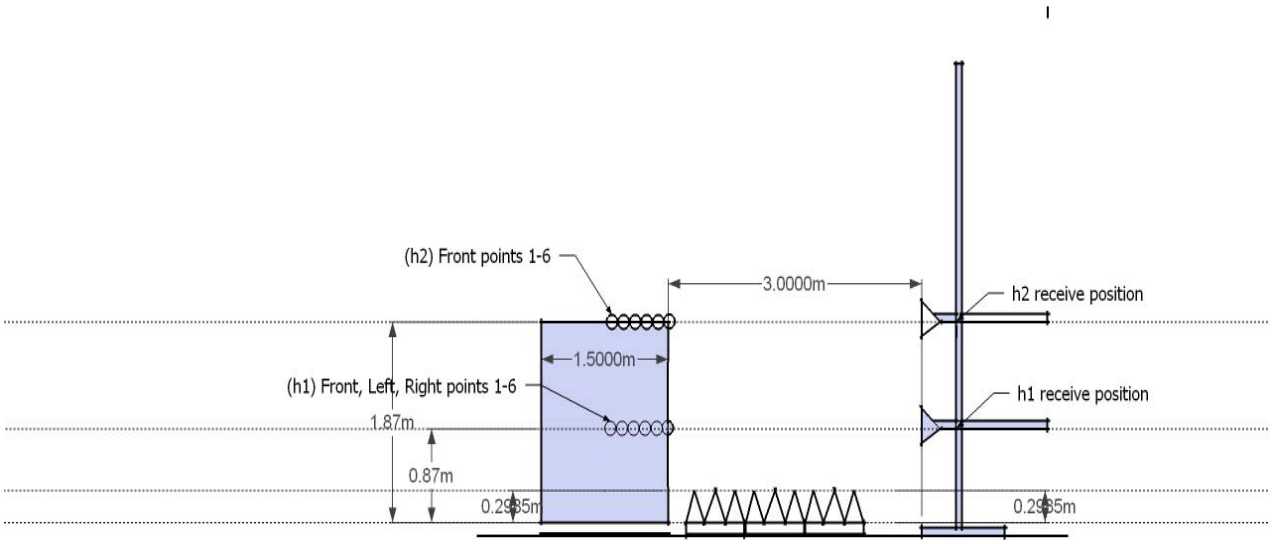


FIGURE 3: HIGH FREQUENCY TEST VOLUME



COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15250

CALIBRATION DATE: JUNE 8, 2011

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	10.90	160	12.40
35	11.00	180	15.70
40	11.80	200	16.20
45	11.60	250	16.10
50	11.40	300	19.00
60	9.80		
70	7.00		
80	5.70		
90	7.00		
100	9.50		
120	12.10		
140	11.40		

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16252

CALIBRATION DATE: JUNE 8, 2011

FREQUENCY (MHz)	FACTOR (dB)
300	13.30
400	15.50
500	15.80
600	20.20
700	20.40
800	20.60
900	20.10
1000	22.80

COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 11, 2011

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.1	300	38.1
40	38.2	350	38.0
50	38.2	400	37.9
60	38.2	450	37.7
70	38.2	500	37.6
80	38.2	550	37.9
90	38.2	600	37.9
100	38.1	650	37.7
125	38.2	700	37.9
150	38.2	750	37.5
175	38.2	800	37.6
200	38.2	850	37.6
225	38.2	900	37.0
250	38.2	950	37.2
275	38.2	1000	36.8

COM-POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: MARCH 18, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1000	22.2	10000	39.8
1500	24.2	10500	40.2
2000	27.2	11000	39.7
2500	27.8	11500	39.9
3000	30.5	12000	41.7
3500	30.9	12500	42.7
4000	31.9	13000	42.3
4500	33.2	13500	40.3
5000	33.6	14000	42.6
5500	36.2	14500	43.4
6000	35.8	15000	41.9
6500	36.1	15500	40.8
7000	37.9	16000	41.0
7500	37.4	16500	41.5
8000	38.0	17000	44.5
8500	38.8	17500	47.6
9000	38.0	18000	50.8
9500	39.2		

COM-POWER PA-118

PREAMPLIFIER

S/N: 181656

CALIBRATION DATE: DECEMBER 22, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1000	24.90	12500	24.92
1500	26.50	13000	24.52
2000	26.79	13500	24.33
2500	26.90	14000	24.56
3000	27.03	14500	24.99
3500	26.94	15000	26.06
4000	27.18	15500	26.87
4500	26.79	16000	25.95
5000	26.25	16500	24.69
5500	26.16	17000	24.20
6000	25.52	17500	25.12
6500	25.29	18000	26.03
7000	24.45		
7500	24.18		
8000	24.02		
8500	24.54		
9000	24.91		
9500	25.42		
10000	26.07		
10500	24.97		
11000	24.79		
11500	24.33		
12000	24.24		

COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: JANUARY 21, 2011

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.9	9.6
0.01	-41.79	9.71
0.02	-41.43	10.07
0.05	-41.53	9.97
0.07	-41.47	10.03
0.1	-41.44	10.06
0.2	-41.61	9.89
0.3	-41.62	9.88
0.5	-41.66	9.84
0.7	-41.48	10.02
1	-41.13	10.37
2	-40.89	10.61
3	-41.00	10.50
4	-41.14	10.36
5	-41.02	10.48
10	-40.69	10.82
15	-40.41	11.09
20	-41.07	10.43
25	-42.10	9.40
30	-41.15	10.35

FRONT VIEW

2GIG TECHNOLOGIES, INC.
SECURITY CONSOLE
Model: 2GIG-CPX900X
FCC SUBPART B and C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

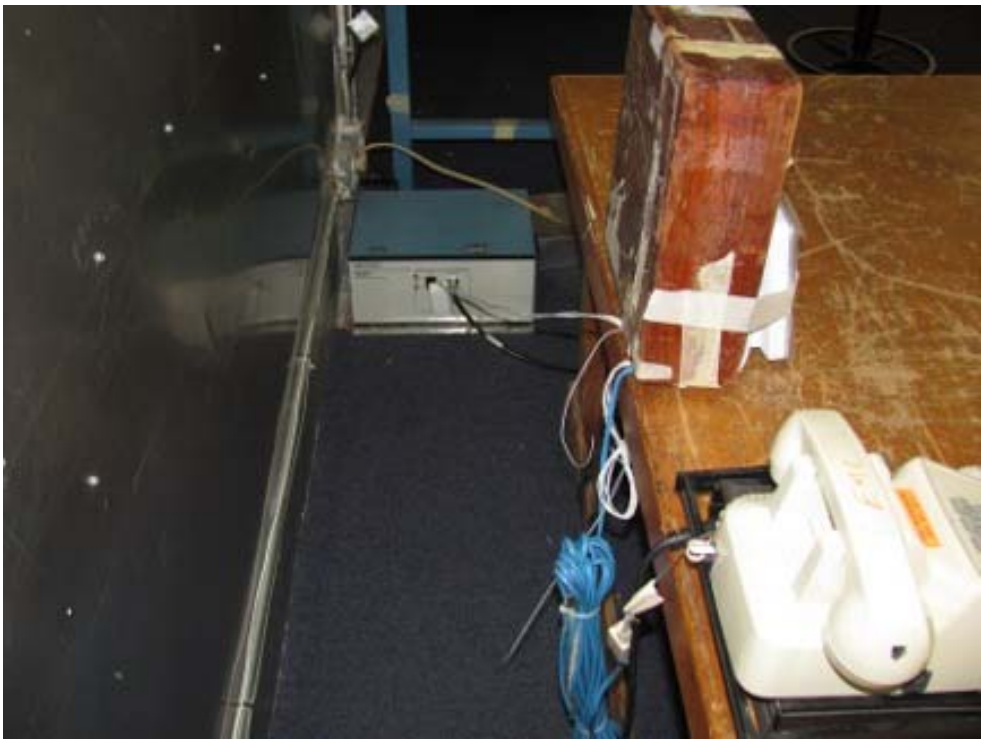
2GIG TECHNOLOGIES, INC.
SECURITY CONSOLE
Model: 2GIG-CPX900X
FCC SUBPART B and C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

FRONT VIEW

2GIG TECHNOLOGIES, INC.
SECURITY CONSOLE
Model: 2GIG-CPX900X
FCC SUBPART B and C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

2GIG TECHNOLOGIES, INC.
SECURITY CONSOLE
Model: 2GIG-CPX900X
FCC SUBPART B and C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

RADIATED EMISISONS

DATA SHEETS

FCC 15.247
2GIG Technologies, Inc.
Security Console
Model: 2GIG-CPX900X

Date: 07/13/2011
Labs: B and D
Tested By: Kyle Fujimoto

Low Channel - Fundamental and Harmonics
Duty Cycle = 43.69%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
910								Done Via Conducted
910								Measurement
1820								Not in
1820								Restricted Band*
2730	57.08	V	74	-16.92	Peak	1.25	150	
2730	49.89	V	54	-4.11	Avg	1.25	150	
3640	53.99	V	74	-20.01	Peak	1.35	155	
3640	46.8	V	54	-7.2	Avg	1.35	155	
4550	50.79	V	74	-23.21	Peak	1.35	145	
4550	43.6	V	54	-10.4	Avg	1.35	145	
5460	56.53	V	74	-17.47	Peak	1.25	155	
5460	49.34	V	54	-4.66	Avg	1.25	155	
6370								Not in
6370								Restricted Band*
7280								**No Emission**
7280								**Detected**
8190								**No Emission**
8190								**Detected**
9100								**No Emission**
9100								**Detected**

*Not in Restricted Band - Measurement performed via conducted measurement

FCC 15.247
2GIG Technologies, Inc.
Security Console
Model: 2GIG-CPX900X

Date: 07/13/2011
Labs: B and D
Tested By: Kyle Fujimoto

Low Channel - Fundamental and Harmonics
Duty Cycle = 43.69%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
910								Done Via Conducted
910								Measurement
1820								Not in
1820								Restricted Band*
2730	55.87	H	74	-18.13	Peak	1.25	155	
2730	48.68	H	54	-5.32	Avg	1.25	155	
3640	52.57	H	74	-21.43	Peak	1.25	165	
3640	45.38	H	54	-8.62	Avg	1.25	165	
4550	50.94	H	74	-23.06	Peak	1.25	175	
4550	43.75	H	54	-10.25	Avg	1.25	175	
5460	54.89	H	74	-19.11	Peak	1.25	185	
5460	47.7	H	54	-6.3	Avg	1.25	185	
6370								Not in
6370								Restricted Band*
7280								**No Emission**
7280								**Detected**
8190								**No Emission**
8190								**Detected**
9100								**No Emission**
9100								**Detected**

*Not in Restricted Band - Measurement performed via conducted measurement

FCC 15.247
2GIG Technologies, Inc.
Security Console
Model: 2GIG-CPX900X

Date: 07/13/2011
Labs: B and D
Tested By: Kyle Fujimoto

Middle Channel - Fundamental and Harmonics
Duty Cycle = 43.69%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
915								Done Via Conducted
915								Measurement
1830								Not in
1830								Restricted Band*
2745	57.46	V	74	-16.54	Peak	1.25	125	
2745	50.27	V	54	-3.73	Avg	1.25	125	
3660	58.83	V	74	-15.17	Peak	1.25	135	
3660	51.64	V	54	-2.36	Avg	1.25	135	
4575	52.09	V	74	-21.91	Peak	1.35	155	
4575	44.9	V	54	-9.1	Avg	1.35	155	
5490	56.13	V	74	-17.87	Peak	1.25	175	
5490	48.94	V	54	-5.06	Avg	1.25	175	
6405								Not in
6405								Restricted Band*
7320								**No Emission**
7320								**Detected**
8235								**No Emission**
8235								**Detected**
9150								**No Emission**
9150								**Detected**

*Not in Restricted Band - Measurement performed via conducted measurement

FCC 15.247
2GIG Technologies, Inc.
Security Console
Model: 2GIG-CPX900X

Date: 07/13/2011
Labs: B and D
Tested By: Kyle Fujimoto

Middle Channel - Fundamental and Harmonics
Duty Cycle = 43.69%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
915								Done Via Conducted
915								Measurement
1830								Not in
1830								Restricted Band*
2745	55.93	H	74	-18.07	Peak	1.35	145	
2745	48.74	H	54	-5.26	Avg	1.35	145	
3660	53.12	H	74	-20.88	Peak	1.25	155	
3660	45.93	H	54	-8.07	Avg	1.25	155	
4575	51.99	H	74	-22.01	Peak	1.35	175	
4575	44.8	H	54	-9.2	Avg	1.35	175	
5490	56.14	H	74	-17.86	Peak	1.25	185	
5490	48.95	H	54	-5.05	Avg	1.25	185	
6405								Not in
6405								Restricted Band*
7320								**No Emission**
7320								**Detected**
8235								**No Emission**
8235								**Detected**
9150								**No Emission**
9150								**Detected**

*Not in Restricted Band - Measurement performed via conducted measurement

FCC 15.247
2GIG Technologies, Inc.
Security Console
Model: 2GIG-CPX900X

Date: 07/13/2011
Labs: B and D
Tested By: Kyle Fujimoto

High Channel - Fundamental and Harmonics
Duty Cycle = 43.69%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
920								Done Via Conducted
920								Measurement
1840								Not in
1840								Restricted Band*
2760	57.07	V	74	-16.93	Peak	1.25	145	
2760	49.88	V	54	-4.12	Avg	1.25	145	
3680	52.57	V	74	-21.43	Peak	1.35	155	
3680	45.38	V	54	-8.62	Avg	1.35	155	
4600	52.35	V	74	-21.65	Peak	1.25	175	
4600	45.16	V	54	-8.84	Avg	1.25	175	
5520	57.36	V	74	-16.64	Peak	1.25	185	
5520	50.17	V	54	-3.83	Avg	1.25	185	
6440								Not in
6440								Restricted Band*
7360								**No Emission**
7360								**Detected**
8280								**No Emission**
8280								**Detected**
9200								**No Emission**
9200								**Detected**

*Not in Restricted Band - Measurement performed via conducted measurement

FCC 15.247
2GIG Technologies, Inc.
Security Console
Model: 2GIG-CPX900X

Date: 07/13/2011
Labs: B and D
Tested By: Kyle Fujimoto

High Channel - Fundamental and Harmonics
Duty Cycle = 43.69%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
920								Done Via Conducted
920								Measurement
1840								Not in
1840								Restricted Band*
2760	56.32	H	74	-17.68	Peak	1.25	135	
2760	49.13	H	54	-4.87	Avg	1.25	135	
3680	56.31	H	74	-17.69	Peak	1.35	145	
3680	49.12	H	54	-4.88	Avg	1.35	145	
4600	51.87	H	74	-22.13	Peak	1.25	155	
4600	44.68	H	54	-9.32	Avg	1.25	155	
5520	57.51	H	74	-16.49	Peak	1.35	155	
5520	50.32	H	54	-3.68	Avg	1.35	155	
6440								Not in
6440								Restricted Band*
7360								**No Emission**
7360								**Detected**
8280								**No Emission**
8280								**Detected**
9200								**No Emission**
9200								**Detected**

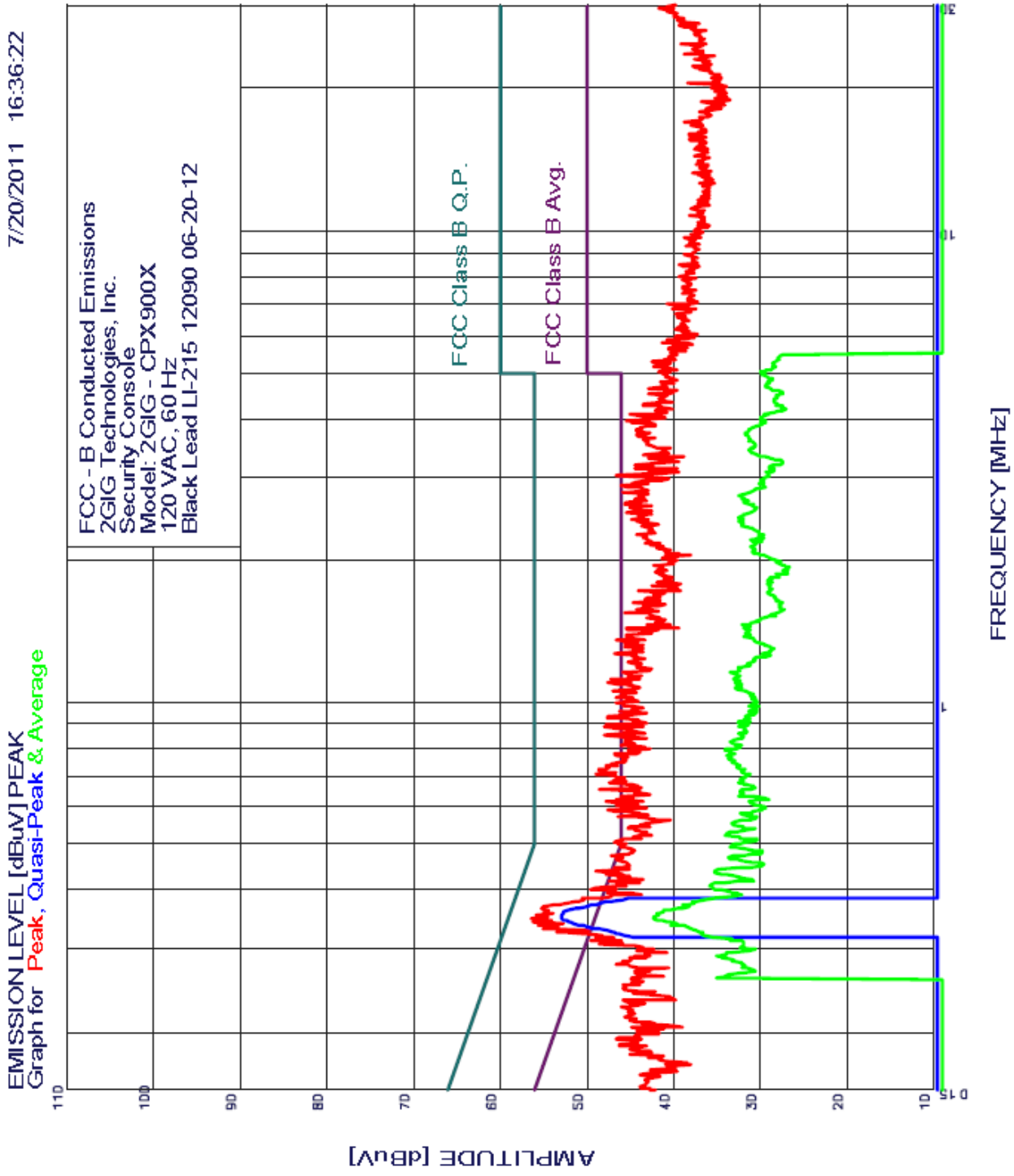
*Not in Restricted Band - Measurement performed via conducted measurement

Test Location : Compatible Electronics **Page** : 1/1
Customer : 2GIG Technologies, Inc. **Date** : 7/21/2011
Manufacturer : 2GIG Technologies, Inc. **Time** : 9:26:56
Eut name : Security Console **Lab** : B and D
Model : 2GIG-CPX900X **Test Distance** : 3.0
Serial # : N/A
Specification : FCC Class B
Distance correction factor (20 * log(test/spec) : 0.00
Test Mode : Test Type: Radiated Emissions Qualification
Test Range: 10 kHz to 9.3 GHz (Vertical and Horizontal)
Transceive Mode
Test Engineer: David Tran

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dB
1V	32.074	59.50	0.29	10.94	38.12	32.61	40.00	-7.39
2V	50.652	66.80	0.81	11.29	38.20	40.70	40.00	0.70
3V	50.653Qp	63.60	0.81	11.29	38.20	37.50	40.00	-2.50
4V	68.266	64.60	1.17	7.46	38.20	35.02	40.00	-4.98
5H	34.888	44.00	0.41	11.00	38.15	17.26	40.00	-22.74
6H	52.796	44.90	0.86	10.92	38.20	18.48	40.00	-21.52
7H	79.970	57.00	1.20	5.70	38.20	25.70	40.00	-14.30
8V	483.097	66.80	2.37	15.75	37.63	47.29	46.00	1.29
9V	483.106Qp	58.66	2.37	15.75	37.63	39.15	46.00	-6.85
10V	786.452	41.70	3.15	20.57	37.57	27.85	46.00	-18.15
11H	786.391	40.00	3.15	20.57	37.57	26.15	46.00	-19.85

CONDUCTED EMISSIONS

DATA SHEETS


7/20/2011 16:36:22
FCC - B Conducted Emissions
2GIG Technologies, Inc.
Security Console
Model: 2GIG - CPX900X
120 VAC, 60 Hz
Black Lead LI-215 12090 06-20-12
FCC Class B Q.P.
FCC Class B Avg.
EMISSION LEVEL [dBuV] PEAK
Graph for Peak, Quasi-Peak & Average
AMPLITUDE [dBuV]
FREQUENCY [MHz]

FCC - B Conducted Emissions 7/20/2011 16:36:22
2GIG Technologies, Inc.
Security Console
Model: 2GIG - CPX900X
120 VAC, 60 Hz
Black Lead LI-215 12090 06-20-12
Test Engineer : David Tran

---

49 highest peaks above -50.00 dB of FCC Class B Q.P. limit line
Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.348	56.47	59.00	-2.53**
2	0.341	56.18	59.18	-3.00**
3	0.354	55.86	58.87	-3.00**
4	0.365	55.17	58.61	-3.44**
5	0.338	55.68	59.26	-3.58**
6	0.332	55.09	59.39	-4.30**
7	0.327	53.40	59.53	-6.12**
8	0.705	48.86	56.00	-7.14**
9	0.655	48.57	56.00	-7.43**
10	0.720	48.56	56.00	-7.44**
11	0.853	47.93	56.00	-8.07**
12	0.885	47.92	56.00	-8.08**
13	0.438	48.98	57.11	-8.12**
14	0.614	47.78	56.00	-8.22**
15	0.899	47.72	56.00	-8.28**
16	0.402	49.48	57.81	-8.33**
17	0.929	47.61	56.00	-8.39**
18	0.592	47.57	56.00	-8.43**
19	1.100	47.50	56.00	-8.50**
20	0.676	47.36	56.00	-8.64**
21	1.118	47.10	56.00	-8.90**
22	0.683	46.96	56.00	-9.04**
23	1.060	46.90	56.00	-9.10**
24	1.269	46.80	56.00	-9.20**
25	0.474	47.19	56.45	-9.25**
26	0.775	46.74	56.00	-9.26**
27	0.505	46.70	56.00	-9.30**
28	1.000	46.60	56.00	-9.40**
29	1.352	46.60	56.00	-9.40**
30	0.624	46.58	56.00	-9.42**
31	3.027	46.57	56.00	-9.43**
32	0.431	47.78	57.24	-9.46**
33	1.027	46.50	56.00	-9.50**
34	0.605	46.48	56.00	-9.52**
35	0.573	46.36	56.00	-9.64**
36	0.953	46.11	56.00	-9.89**
37	0.814	46.04	56.00	-9.96**
38	0.631	45.97	56.00	-10.03**
39	2.885	45.95	56.00	-10.05**
40	0.417	47.28	57.50	-10.22**
41	2.781	45.73	56.00	-10.27**
42	0.445	46.69	56.98	-10.29**
43	1.154	45.70	56.00	-10.30**
44	0.313	49.53	59.88	-10.35**
45	2.637	45.61	56.00	-10.39**
46	1.552	45.60	56.00	-10.40**
47	0.826	45.53	56.00	-10.47**
48	1.311	45.50	56.00	-10.50**
49	1.331	45.50	56.00	-10.50**

** Please See the Quasi-Peak Readings on the Next Page and on the Plot

FCC - B Conducted Emissions 7/20/2011 16:36:22
2GIG Technologies, Inc.
Security Console
Model: 2GIG - CPX900X
120 VAC, 60 Hz
Black Lead LI-215 12090 06-20-12
Test Engineer : David Tran

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1 highest peaks above -50.00 dB of FCC Class B Q.P. limit line
Peak criteria : 1.00 dB, Curve : Quasi-peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.350	52.93	58.95	-6.02

The above readings are the results of the Quasi-Peak readings.

FCC - B Conducted Emissions 7/20/2011 16:36:22
2GIG Technologies, Inc.
Security Console
Model: 2GIG - CPX900X
120 VAC, 60 Hz
Black Lead LI-215 12090 06-20-12
Test Engineer : David Tran

---

49 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.348	56.47	49.00	7.47**
2	0.341	56.18	49.18	7.00**
3	0.354	55.86	48.87	7.00**
4	0.365	55.17	48.61	6.56**
5	0.338	55.68	49.26	6.42**
6	0.332	55.09	49.39	5.70**
7	0.327	53.40	49.53	3.88**
8	0.705	48.86	46.00	2.86**
9	0.655	48.57	46.00	2.57**
10	0.720	48.56	46.00	2.56**
11	0.853	47.93	46.00	1.93**
12	0.885	47.92	46.00	1.92**
13	0.438	48.98	47.11	1.88**
14	0.614	47.78	46.00	1.78**
15	0.899	47.72	46.00	1.72**
16	0.402	49.48	47.81	1.67**
17	0.929	47.61	46.00	1.61**
18	0.592	47.57	46.00	1.57**
19	1.100	47.50	46.00	1.50**
20	0.676	47.36	46.00	1.36**
21	1.118	47.10	46.00	1.10**
22	0.683	46.96	46.00	0.96**
23	1.060	46.90	46.00	0.90**
24	1.269	46.80	46.00	0.80**
25	0.474	47.19	46.45	0.75**
26	0.775	46.74	46.00	0.74**
27	0.505	46.70	46.00	0.70**
28	1.000	46.60	46.00	0.60**
29	1.352	46.60	46.00	0.60**
30	0.624	46.58	46.00	0.58**
31	3.027	46.57	46.00	0.57**
32	0.431	47.78	47.24	0.54**
33	1.027	46.50	46.00	0.50**
34	0.605	46.48	46.00	0.48**
35	0.573	46.36	46.00	0.36**
36	0.953	46.11	46.00	0.11**
37	0.814	46.04	46.00	0.04**
38	0.631	45.97	46.00	-0.03**
39	2.885	45.95	46.00	-0.05**
40	0.417	47.28	47.50	-0.22**
41	2.781	45.73	46.00	-0.27**
42	0.445	46.69	46.98	-0.29**
43	1.154	45.70	46.00	-0.30**
44	0.313	49.53	49.88	-0.35**
45	2.637	45.61	46.00	-0.39**
46	1.552	45.60	46.00	-0.40**
47	0.826	45.53	46.00	-0.47**
48	1.311	45.50	46.00	-0.50**
49	1.331	45.50	46.00	-0.50**

** Please See the Average Readings on the Next Page and on the Plot

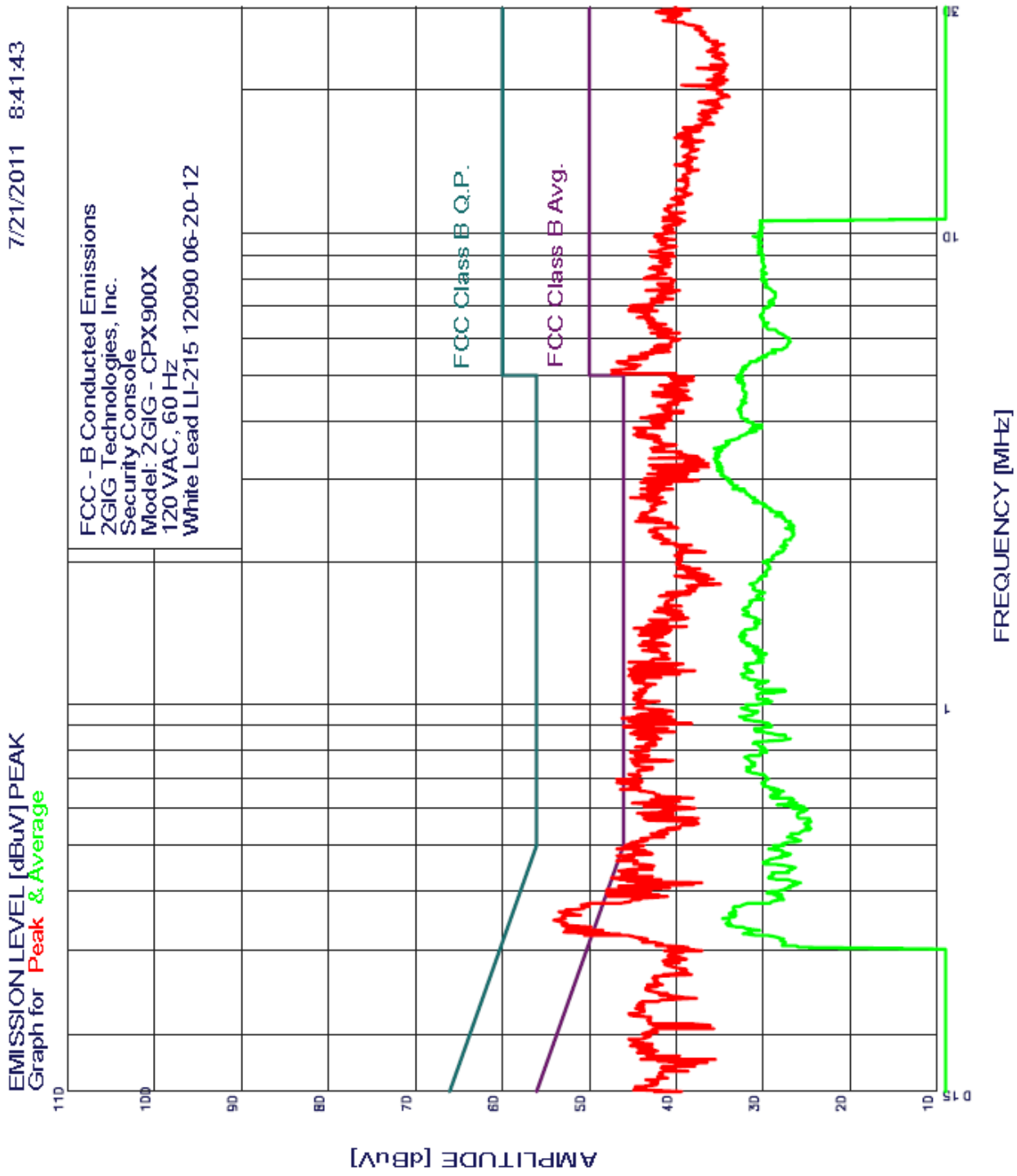
FCC - B Conducted Emissions 7/20/2011 16:36:22
2GIG Technologies, Inc.
Security Console
Model: 2GIG - CPX900X
120 VAC, 60 Hz
Black Lead LI-215 12090 06-20-12
Test Engineer : David Tran

---

29 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 1.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.348	42.23	49.00	-6.77
2	0.438	35.23	47.11	-11.87
3	0.409	35.80	47.68	-11.88
4	0.521	34.04	46.00	-11.96
5	0.792	34.03	46.00	-11.97
6	0.771	33.80	46.00	-12.20
7	0.822	33.47	46.00	-12.53
8	1.154	33.38	46.00	-12.62
9	0.494	33.35	46.09	-12.75
10	0.555	33.14	46.00	-12.86
11	0.469	33.55	46.53	-12.98
12	0.909	32.55	46.00	-13.45
13	0.676	32.47	46.00	-13.53
14	2.751	32.46	46.00	-13.54
15	2.423	32.45	46.00	-13.55
16	0.634	32.37	46.00	-13.63
17	0.580	32.24	46.00	-13.76
18	1.456	32.13	46.00	-13.87
19	3.683	31.72	46.00	-14.28
20	0.958	31.30	46.00	-14.70
21	0.618	31.18	46.00	-14.82
22	2.134	31.13	46.00	-14.87
23	2.214	30.99	46.00	-15.01
24	0.290	34.94	50.54	-15.60
25	1.269	29.74	46.00	-16.26
26	0.260	34.98	51.42	-16.44
27	1.708	29.14	46.00	-16.86
28	4.339	28.43	46.00	-17.57
29	5.005	29.94	50.00	-20.06

The above readings are results of the Averaged readings.


7/21/2011 8:41:43
FCC - B Conducted Emissions
2GIG Technologies, Inc.
Security Console
Model: 2GIG - CPX900X
120 VAC, 60 Hz
White Lead LI-215 12090 06-20-12
FCC Class B Q.P.
FCC Class B Avg.
EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average
AMPLITUDE [dBuV]
FREQUENCY [MHz]

FCC - B Conducted Emissions 7/21/2011 8:41:43
Linear, LLC
Security Console
Model: 2GIG - CPX900X
120 VAC, 60 Hz
White Lead LI-215 12090 06-20-12
Test Engineer : David Tran

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49 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.348	53.97	49.00	4.97**
2	0.362	53.37	48.69	4.67**
3	0.329	52.90	49.48	3.42**
4	0.334	52.69	49.35	3.34**
5	0.324	50.51	49.62	0.89**
6	0.679	46.76	46.00	0.76**
7	0.690	46.76	46.00	0.76**
8	0.494	46.70	46.09	0.60**
9	0.479	46.79	46.36	0.43**
10	0.662	46.37	46.00	0.37**
11	0.466	46.79	46.58	0.21**
12	0.934	46.21	46.00	0.21**
13	0.404	47.88	47.77	0.11**
14	0.895	46.02	46.00	0.02**
15	0.428	47.28	47.28	0.00**
16	0.398	47.87	47.90	-0.03**
17	0.391	47.77	48.03	-0.26**
18	0.502	45.70	46.00	-0.30**
19	0.442	46.59	47.02	-0.43**
20	1.148	45.40	46.00	-0.60**
21	1.223	45.40	46.00	-0.60**
22	0.709	45.36	46.00	-0.64**
23	0.919	45.32	46.00	-0.68**
24	1.184	45.30	46.00	-0.70**
25	0.669	45.27	46.00	-0.73**
26	0.763	45.25	46.00	-0.75**
27	0.867	45.23	46.00	-0.77**
28	1.166	45.20	46.00	-0.80**
29	0.788	45.14	46.00	-0.86**
30	2.736	45.12	46.00	-0.88**
31	0.618	45.08	46.00	-0.92**
32	0.755	45.05	46.00	-0.95**
33	0.435	46.18	47.15	-0.97**
34	1.130	45.00	46.00	-1.00**
35	1.032	44.90	46.00	-1.10**
36	1.197	44.90	46.00	-1.10**
37	0.411	46.48	47.63	-1.16**
38	0.979	44.80	46.00	-1.20**
39	1.112	44.80	46.00	-1.20**
40	1.449	44.80	46.00	-1.20**
41	3.741	44.74	46.00	-1.26**
42	3.841	44.74	46.00	-1.26**
43	0.876	44.72	46.00	-1.28**
44	2.436	44.69	46.00	-1.31**
45	0.814	44.64	46.00	-1.36**
46	0.486	44.80	46.23	-1.43**
47	0.948	44.41	46.00	-1.59**
48	0.589	44.37	46.00	-1.63**
49	3.683	44.34	46.00	-1.66**

** Please See the Average Readings on the Next Page and on the Plot

FCC - B Conducted Emissions 7/21/2011 8:41:43
Linear, LLC
Security Console
Model: 2GIG - CPX900X
120 VAC, 60 Hz
White Lead LI-215 12090 06-20-12
Test Engineer : David Tran

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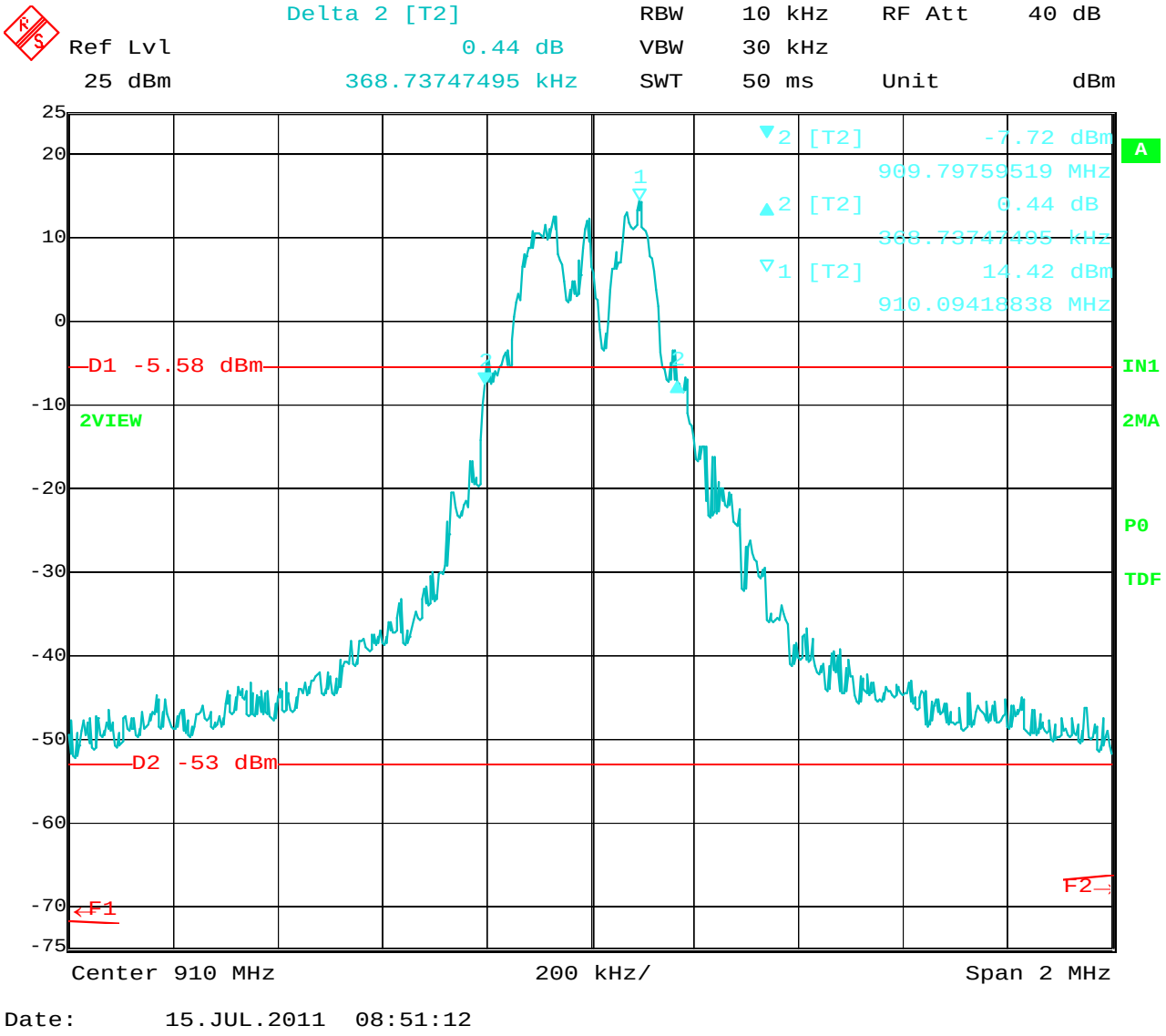
30 highest peaks above -50.00 dB of FCC Class B Avg. limit line
Peak criteria : 1.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	3.311	35.61	46.00	-10.39
2	3.492	35.52	46.00	-10.48
3	4.902	33.10	46.00	-12.90
4	1.389	32.64	46.00	-13.36
5	0.939	32.59	46.00	-13.41
6	1.154	32.41	46.00	-13.59
7	0.979	32.36	46.00	-13.64
8	1.544	32.33	46.00	-13.67
9	0.771	32.00	46.00	-14.00
10	0.731	31.94	46.00	-14.06
11	0.352	34.57	48.91	-14.34
12	1.800	31.55	46.00	-14.45
13	3.862	31.24	46.00	-14.76
14	0.826	31.16	46.00	-14.84
15	1.094	30.90	46.00	-15.10
16	0.881	30.85	46.00	-15.15
17	1.049	30.66	46.00	-15.34
18	0.461	29.89	46.67	-16.78
19	0.658	29.21	46.00	-16.79
20	0.637	29.17	46.00	-16.83
21	0.492	29.31	46.14	-16.83
22	0.327	32.33	49.53	-17.19
23	0.611	28.35	46.00	-17.65
24	0.428	29.29	47.28	-17.99
25	0.398	29.52	47.90	-18.38
26	0.521	27.23	46.00	-18.77
27	9.813	31.03	50.00	-18.97
28	0.601	26.64	46.00	-19.36
29	6.664	30.39	50.00	-19.61
30	0.589	26.00	46.00	-20.00

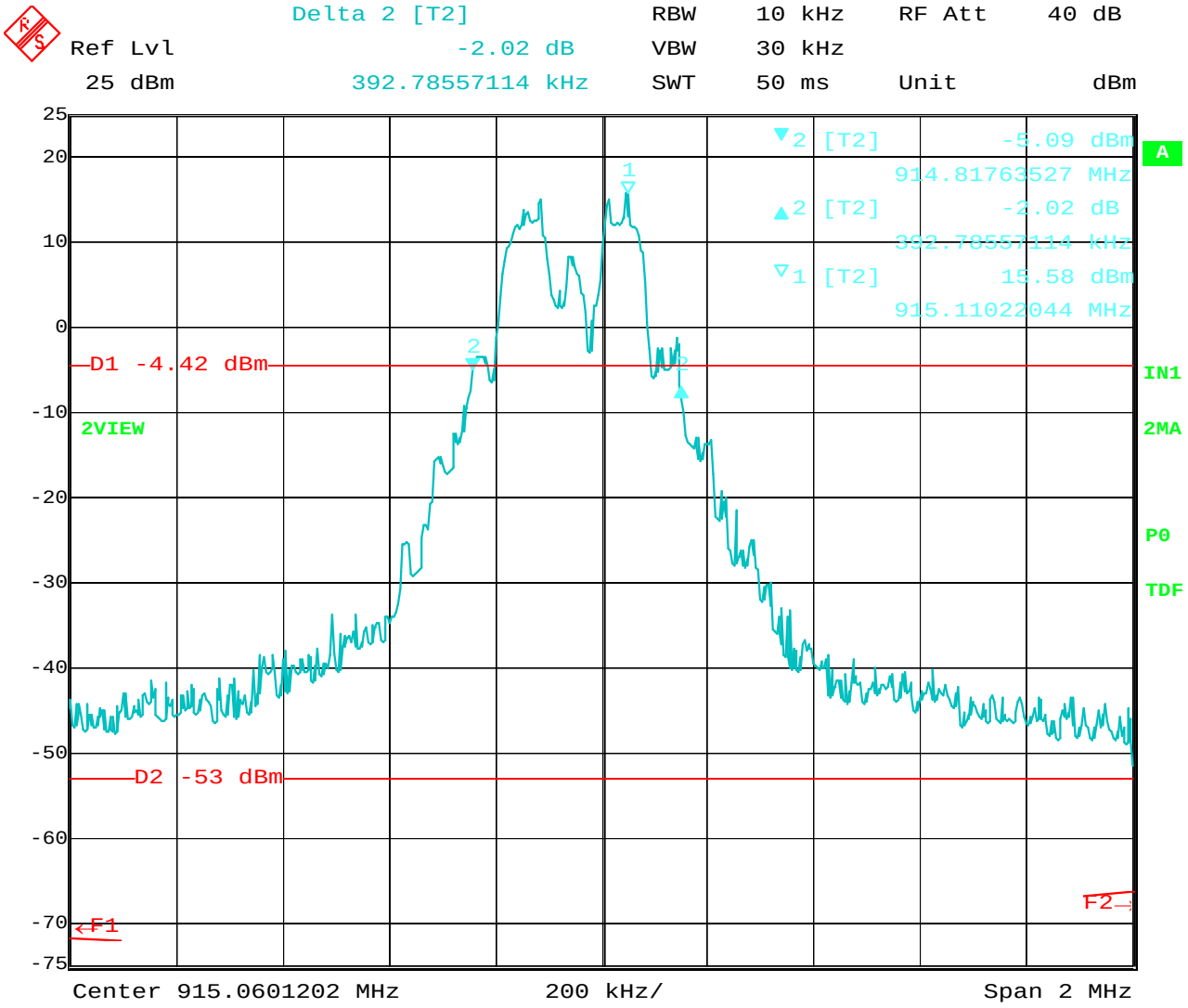
The above readings are results of the Averaged readings.

-20 dB BANDWIDTH

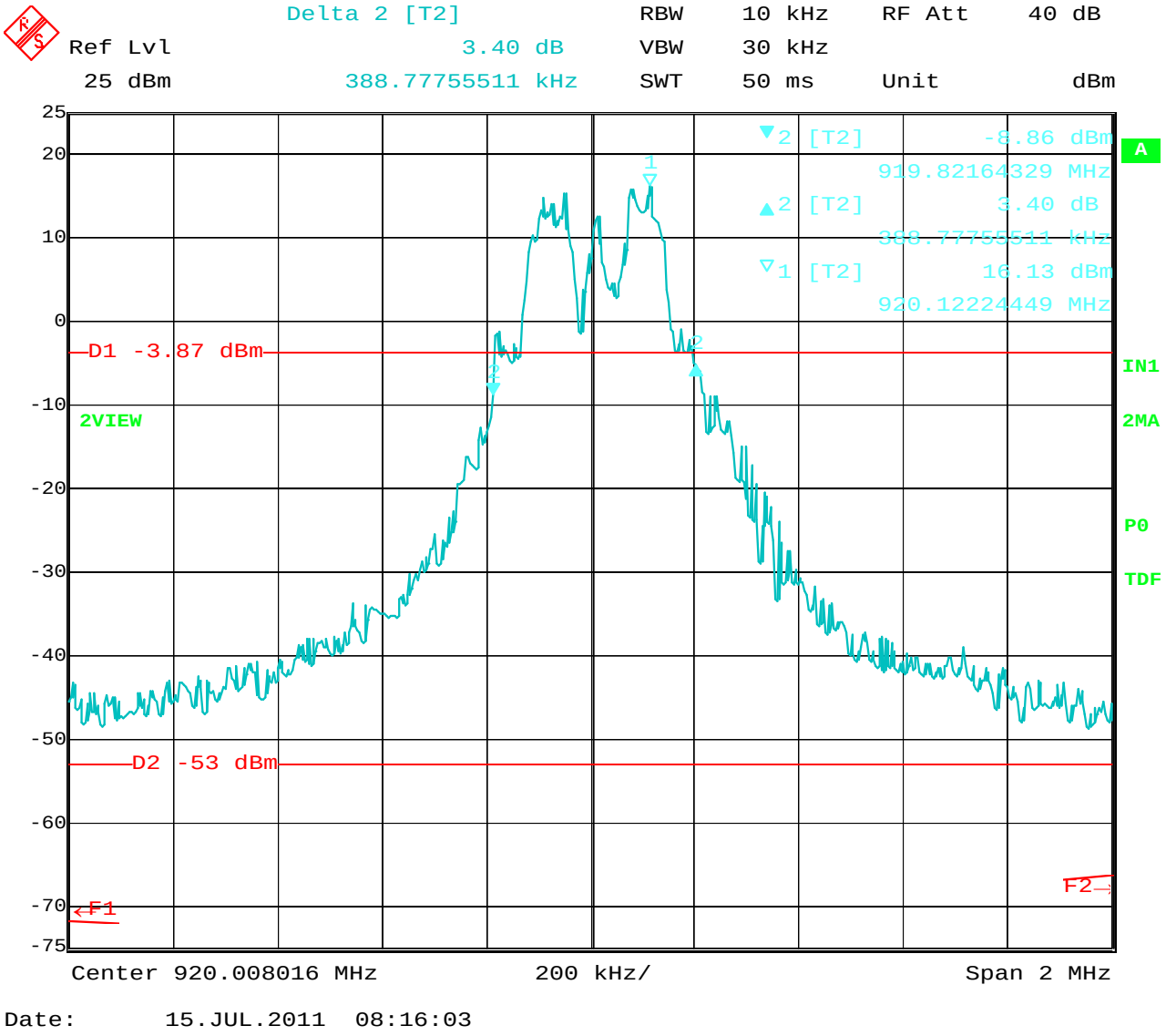
DATA SHEETS



-20 dB Bandwidth of the Low Channel



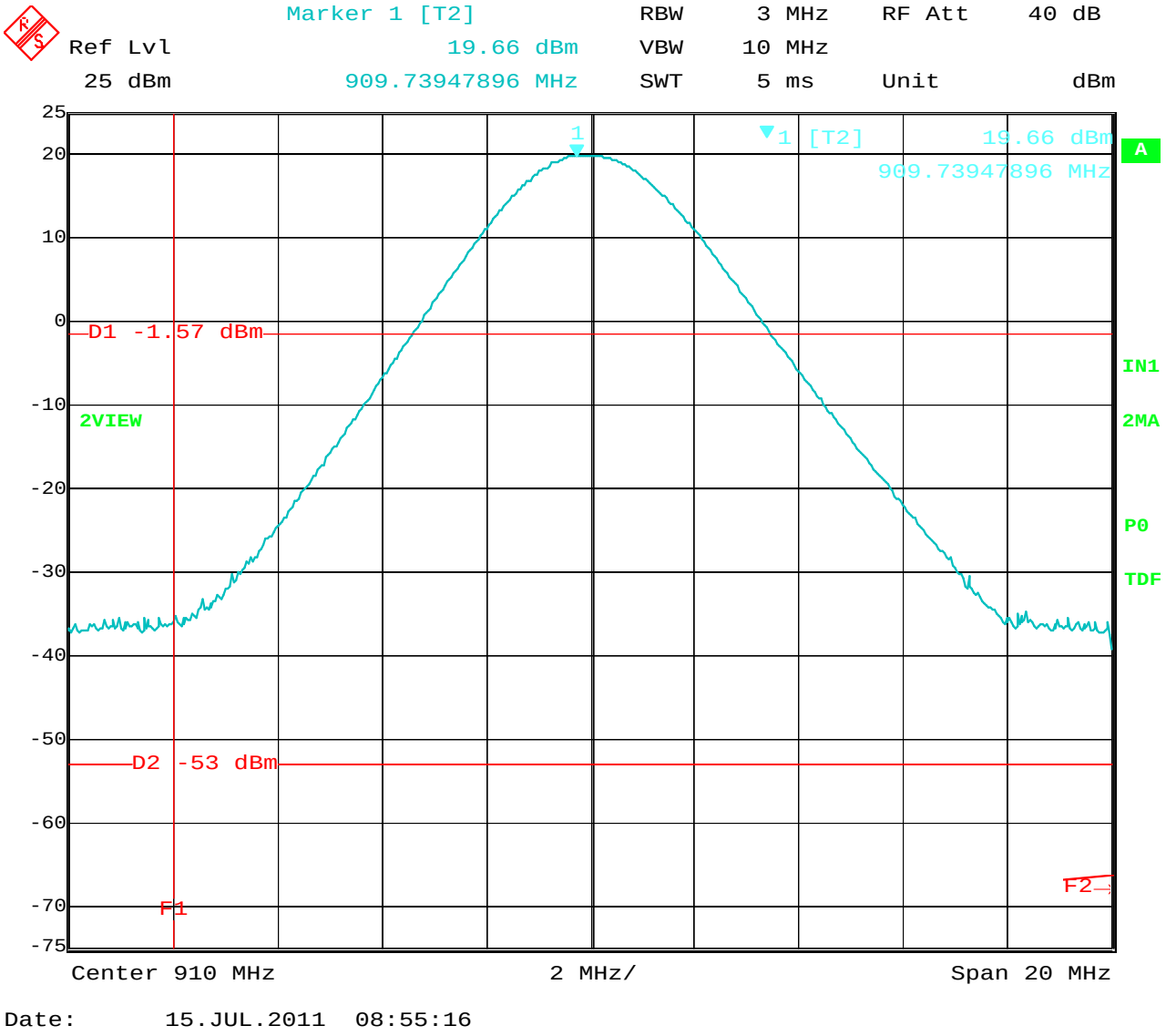
-20 dB Bandwidth of the Middle Channel



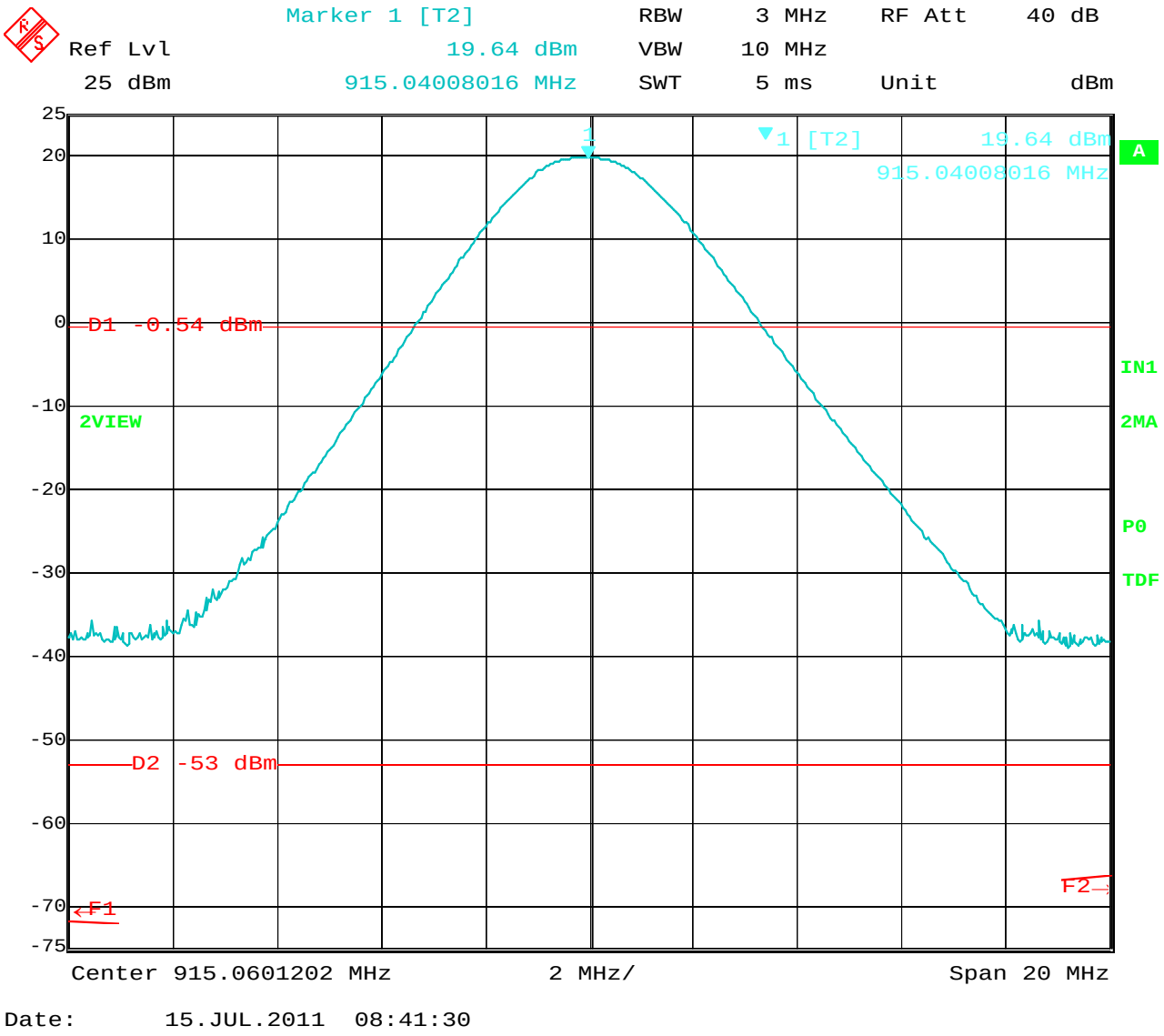
-20 dB Bandwidth of the High Channel

PEAK POWER OUTPUT

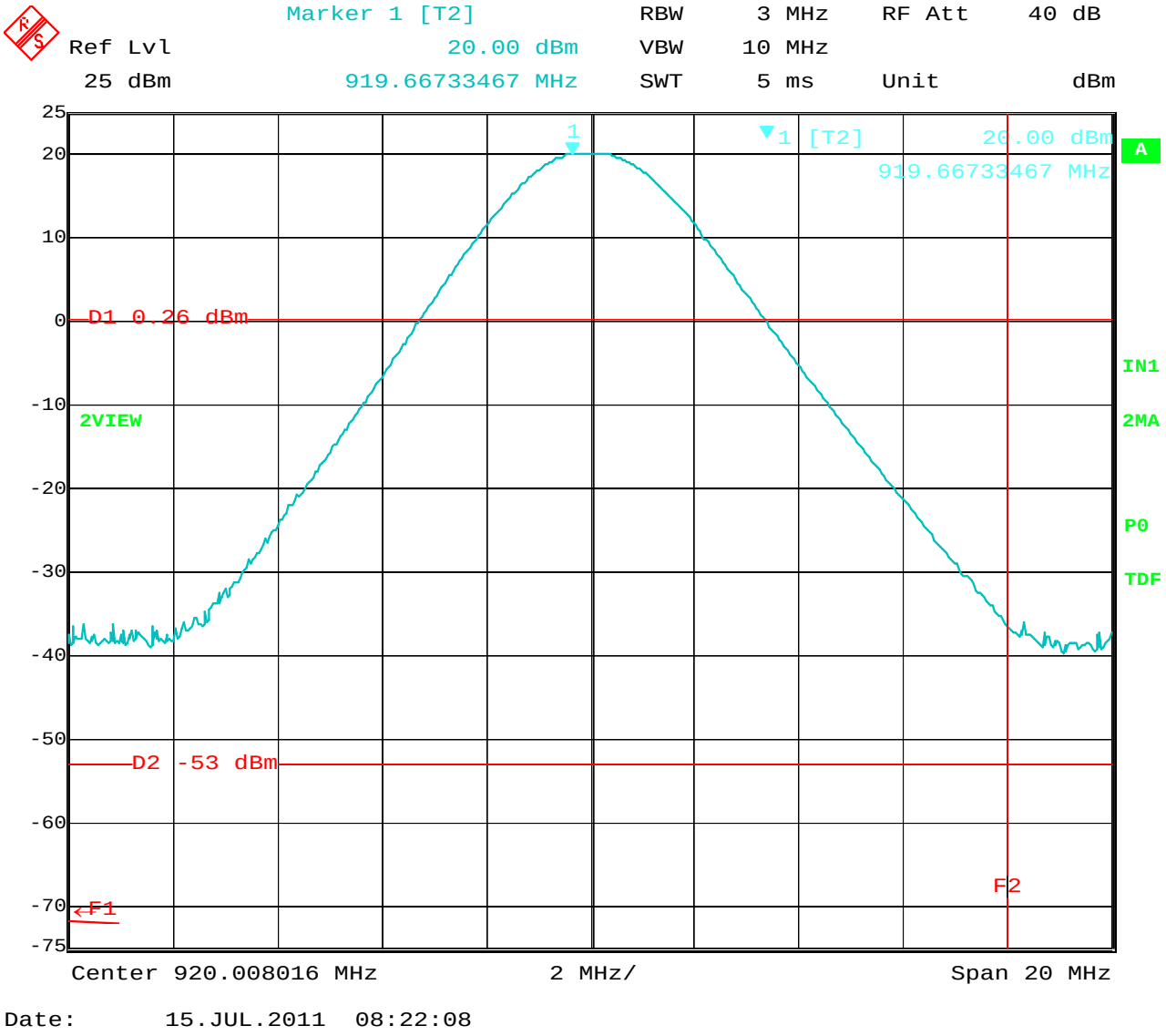
DATA SHEETS



Peak Power Output – Low Channel



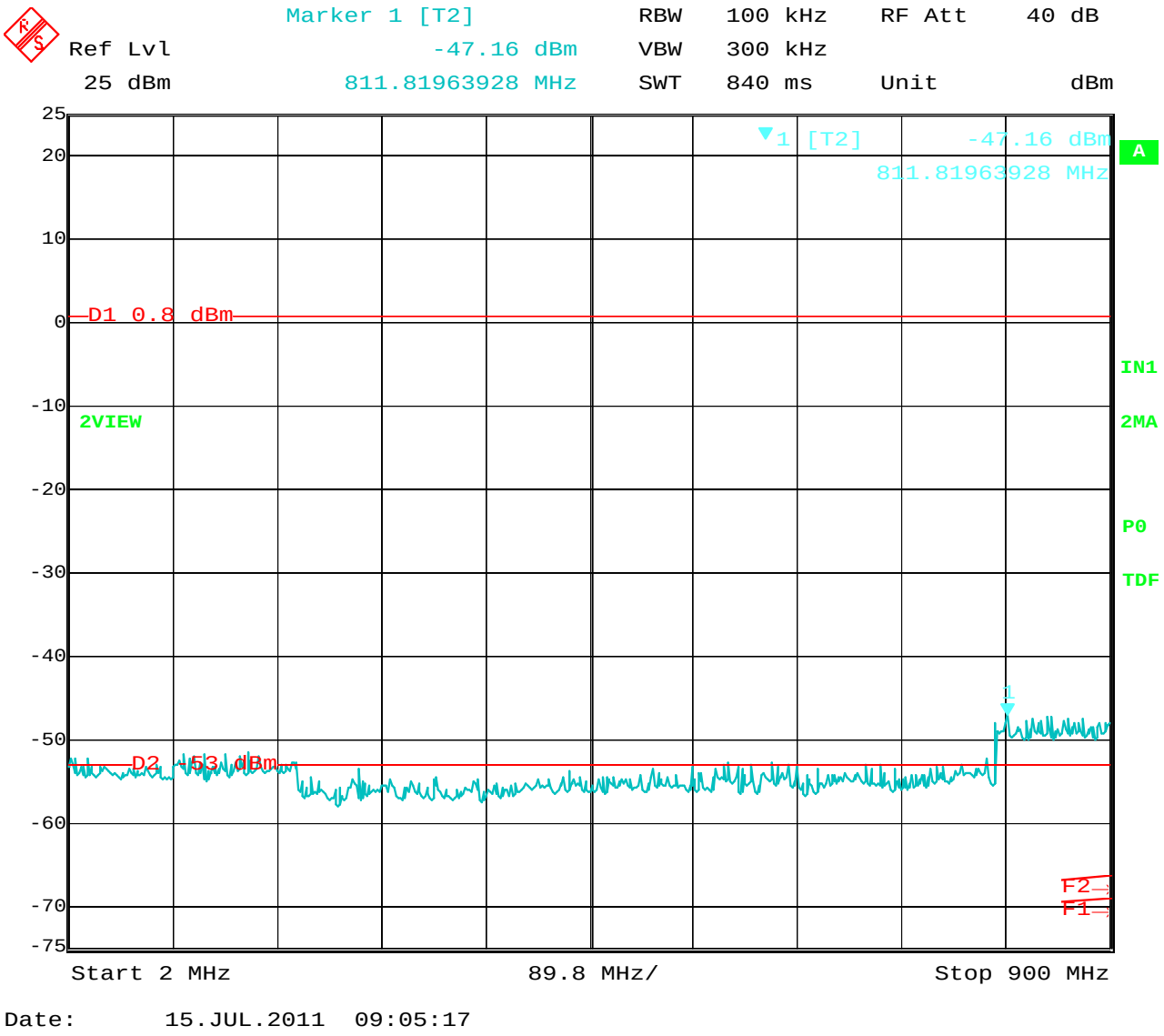
Peak Power Output – Middle Channel



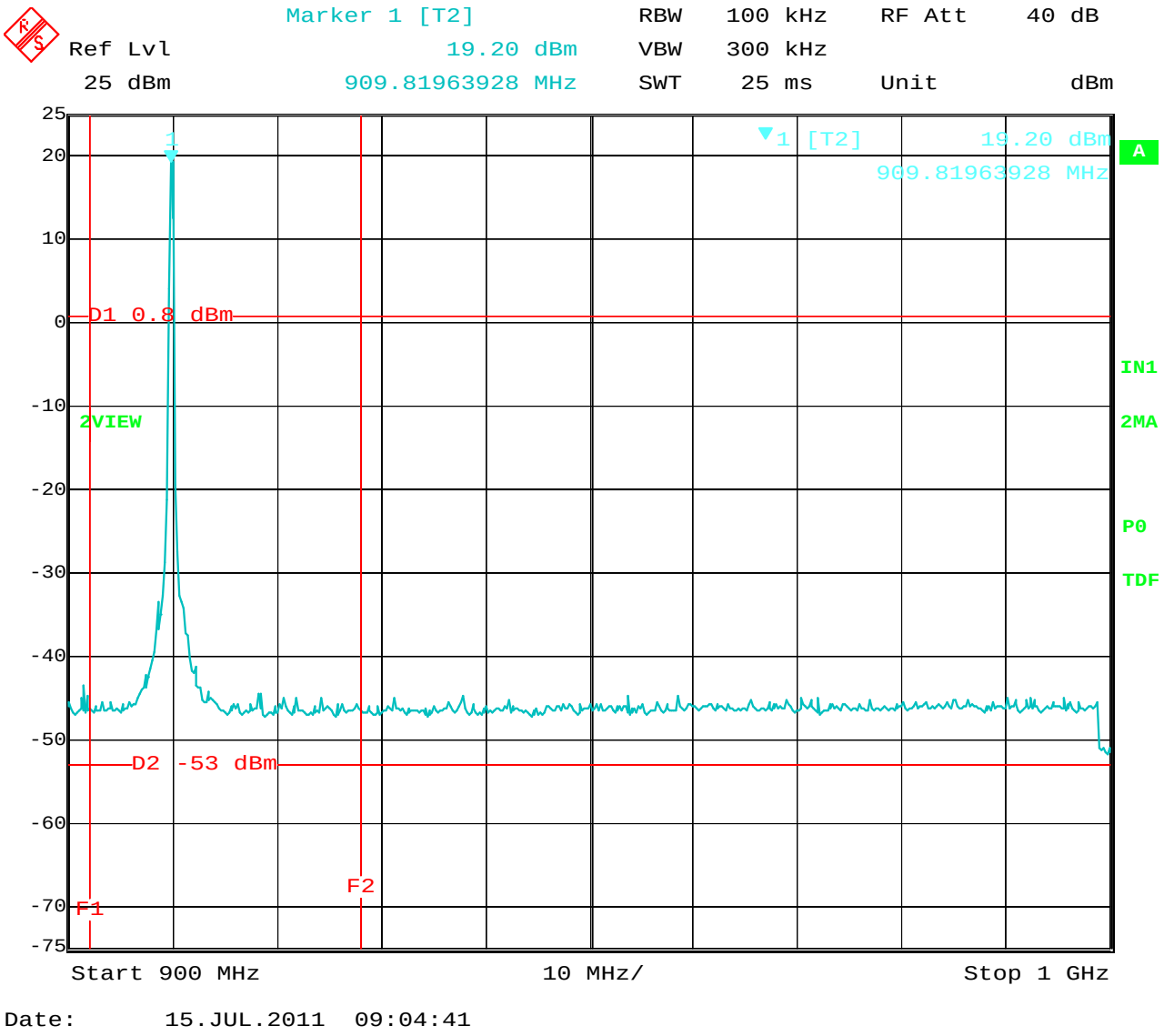
Peak Power Output – High Channel

RF CONDUCTED ANTENNA TEST

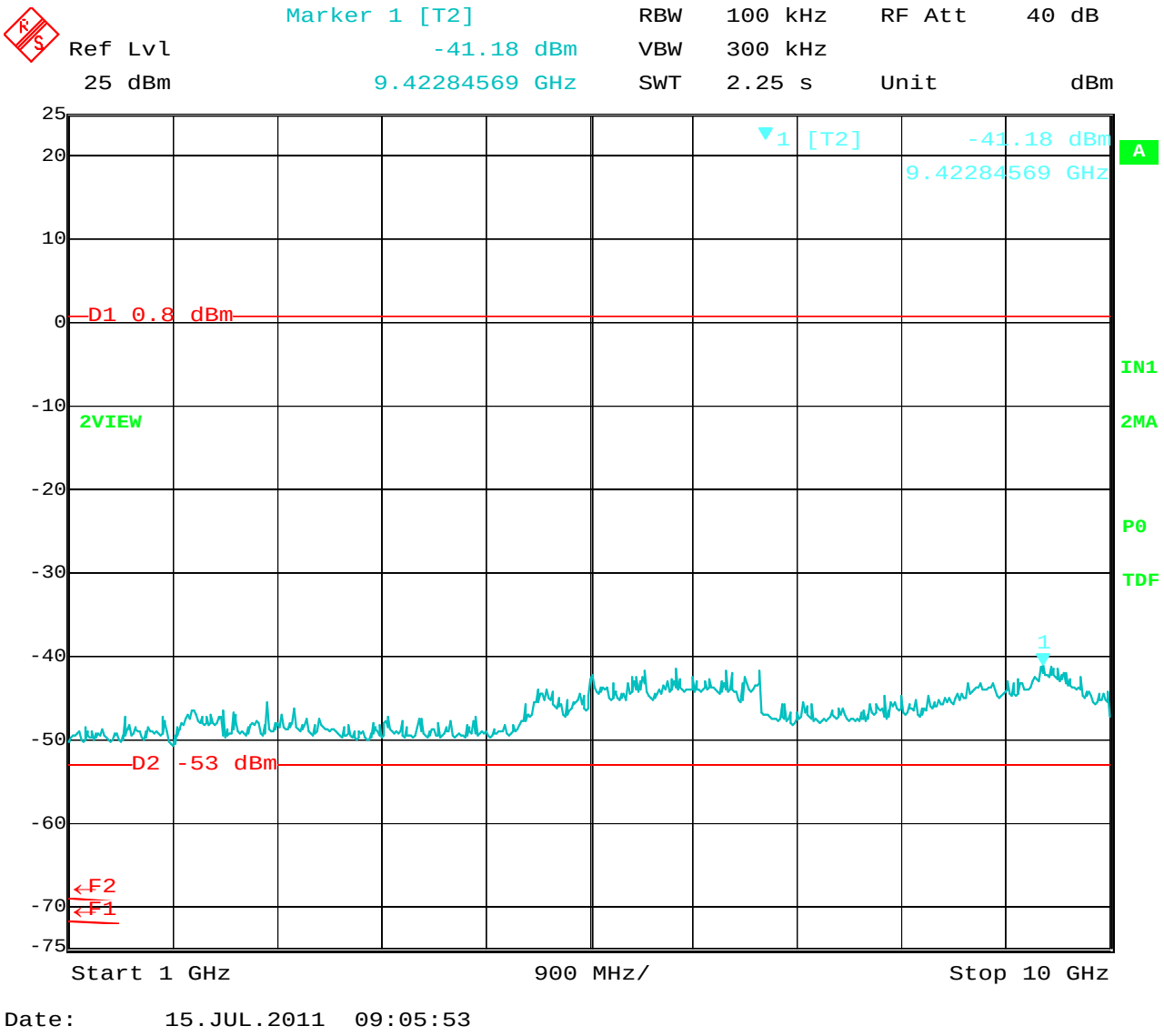
DATA SHEETS



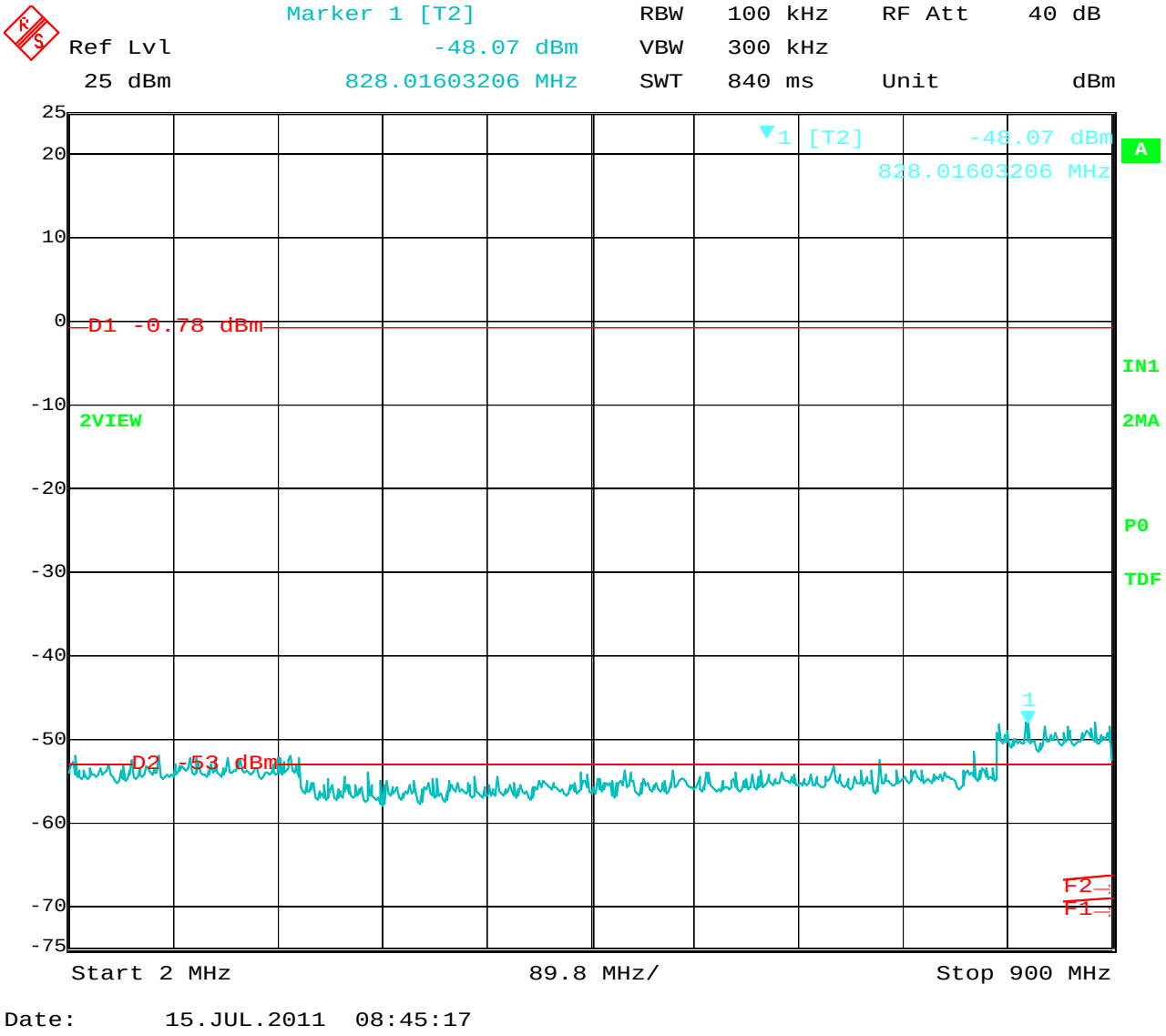
RF Antenna Conducted Test – Low Channel – 2 MHz to 900 MHz



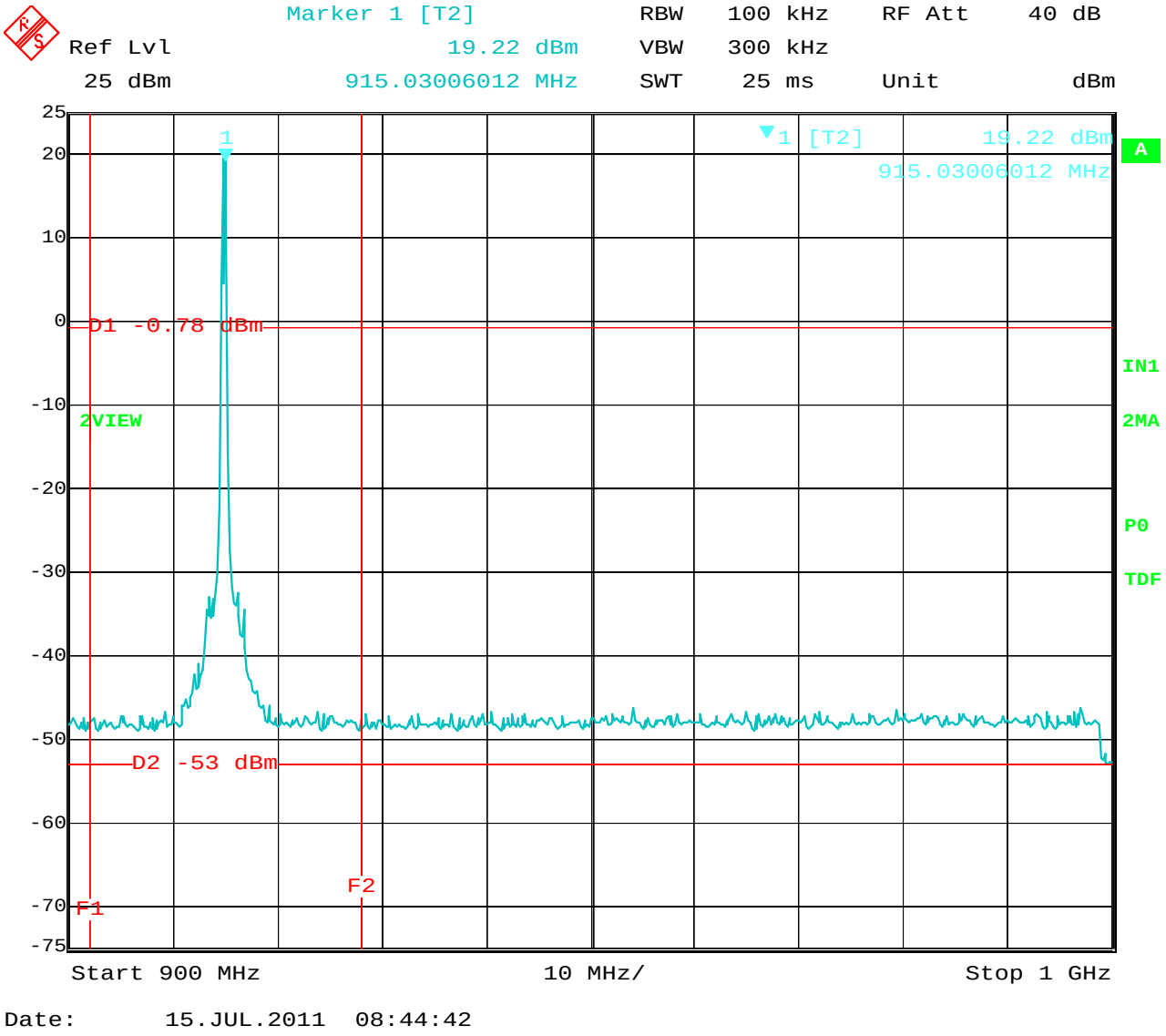
RF Antenna Conducted Test – Low Channel – 900 MHz to 1 GHz



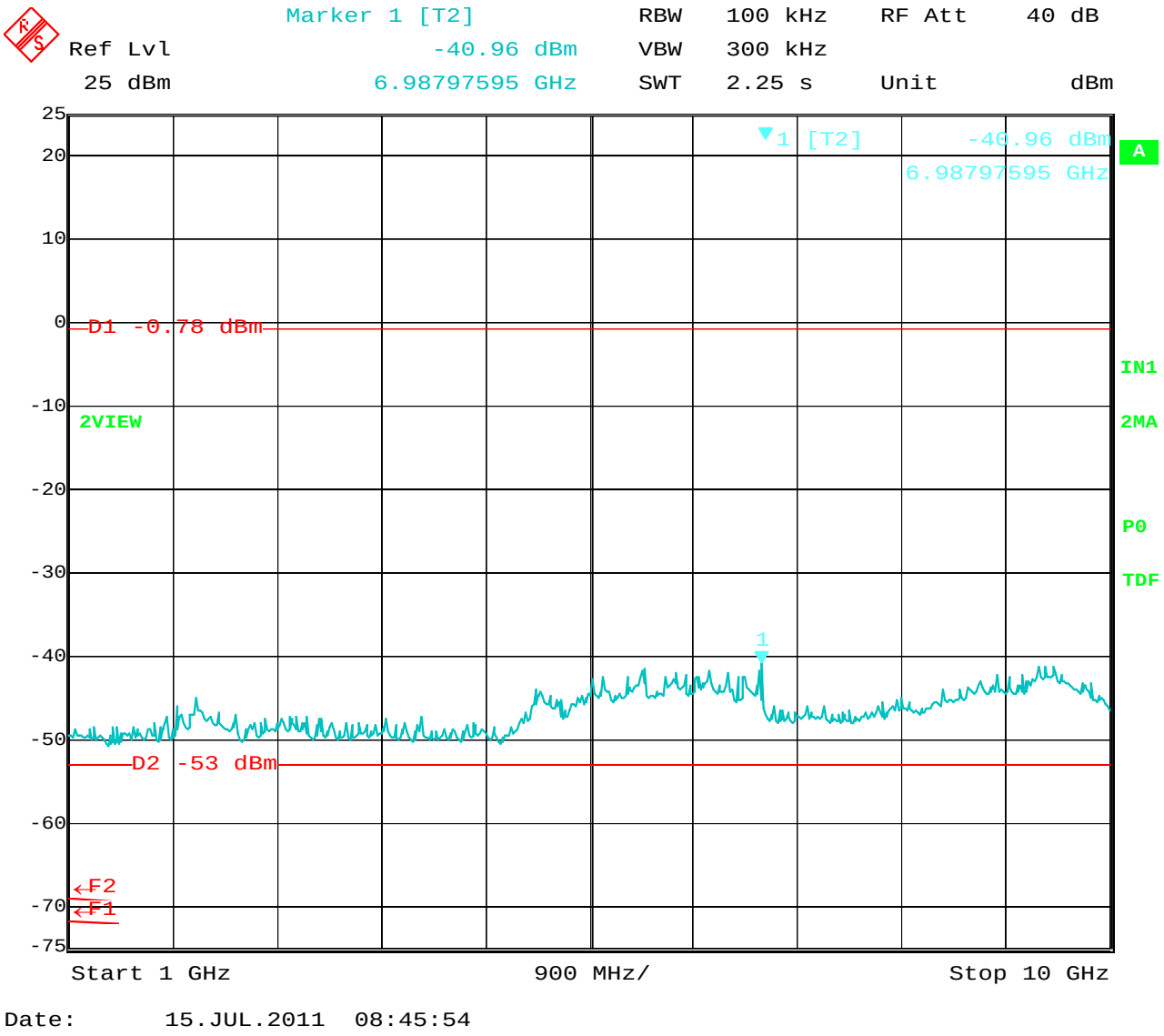
RF Antenna Conducted Test – Low Channel – 1 GHz to 10 GHz



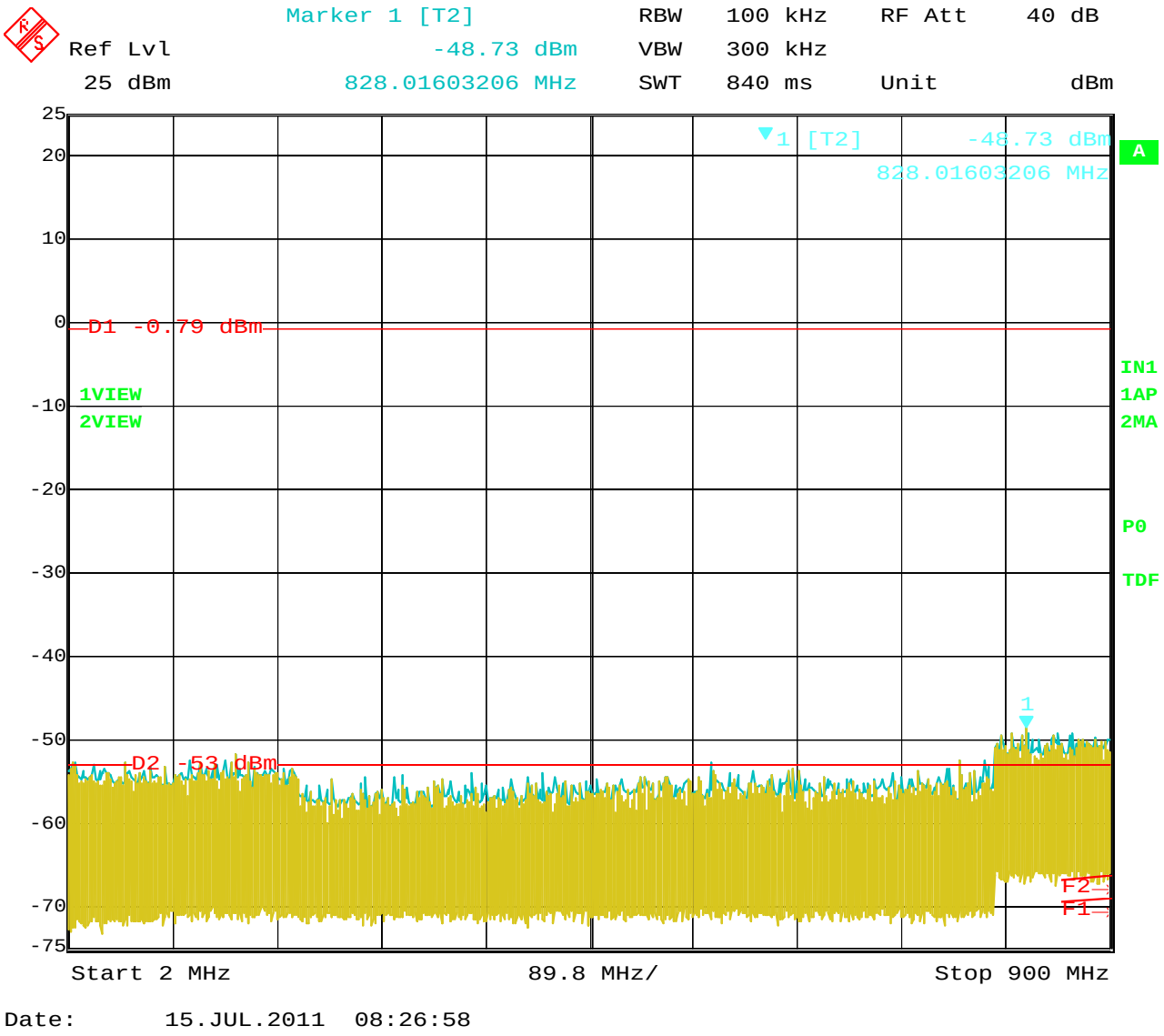
RF Antenna Conducted Test – Middle Channel – 2 MHz to 900 MHz



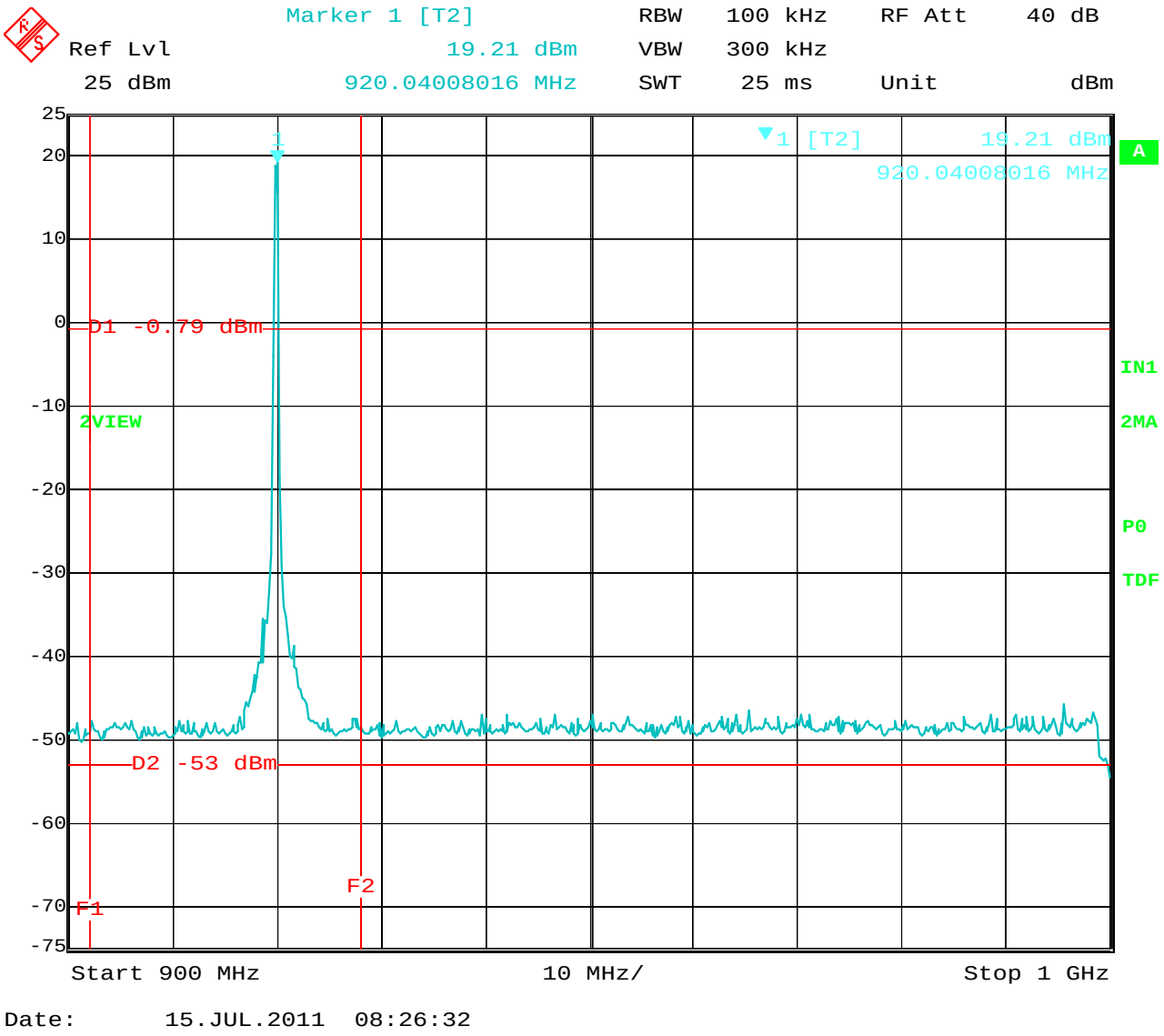
RF Antenna Conducted Test – Middle Channel – 900 MHz to 1 GHz



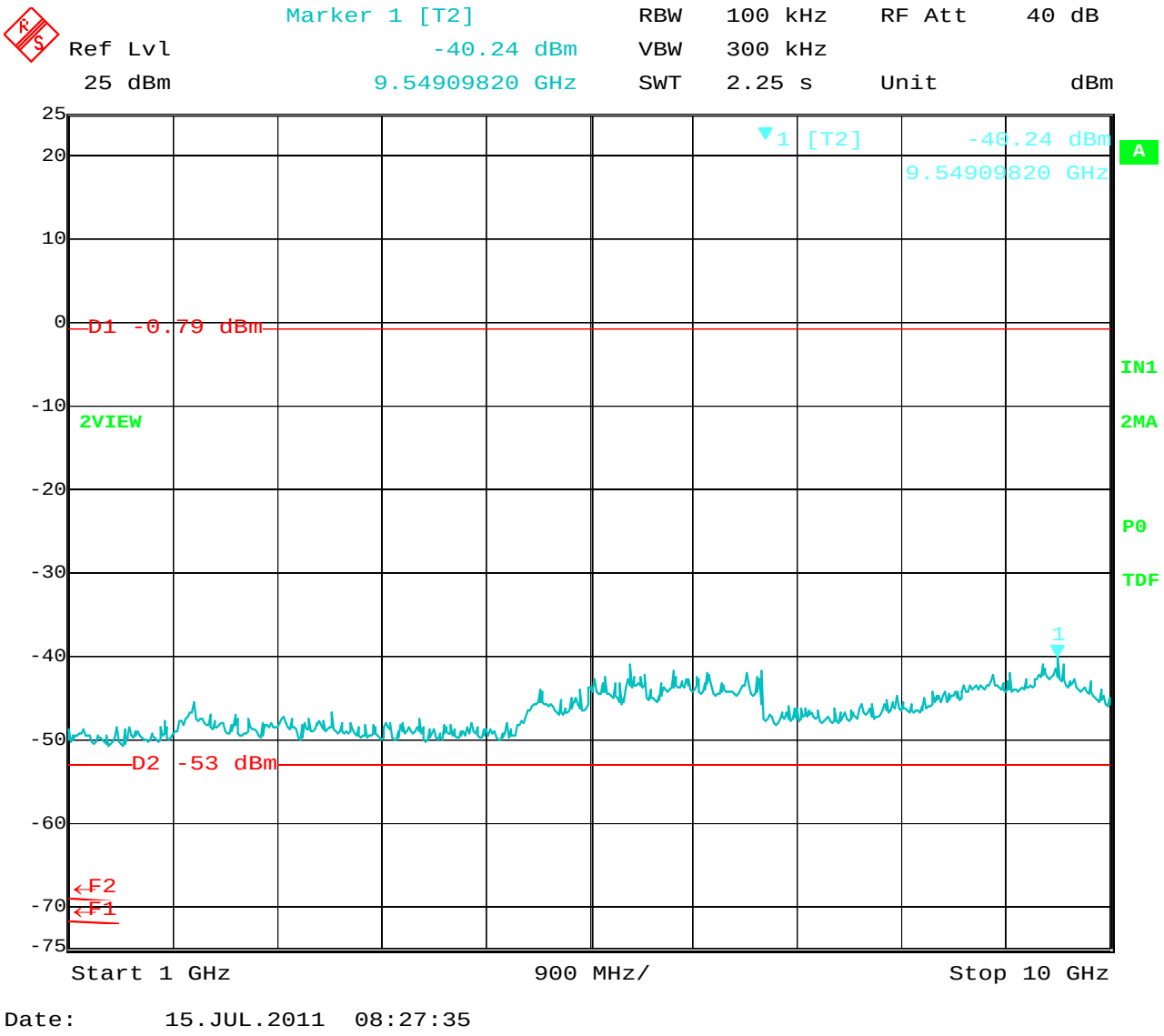
RF Antenna Conducted Test – Middle Channel – 1 GHz to 10 GHz



RF Antenna Conducted Test – High Channel – 2 MHz to 900 MHz



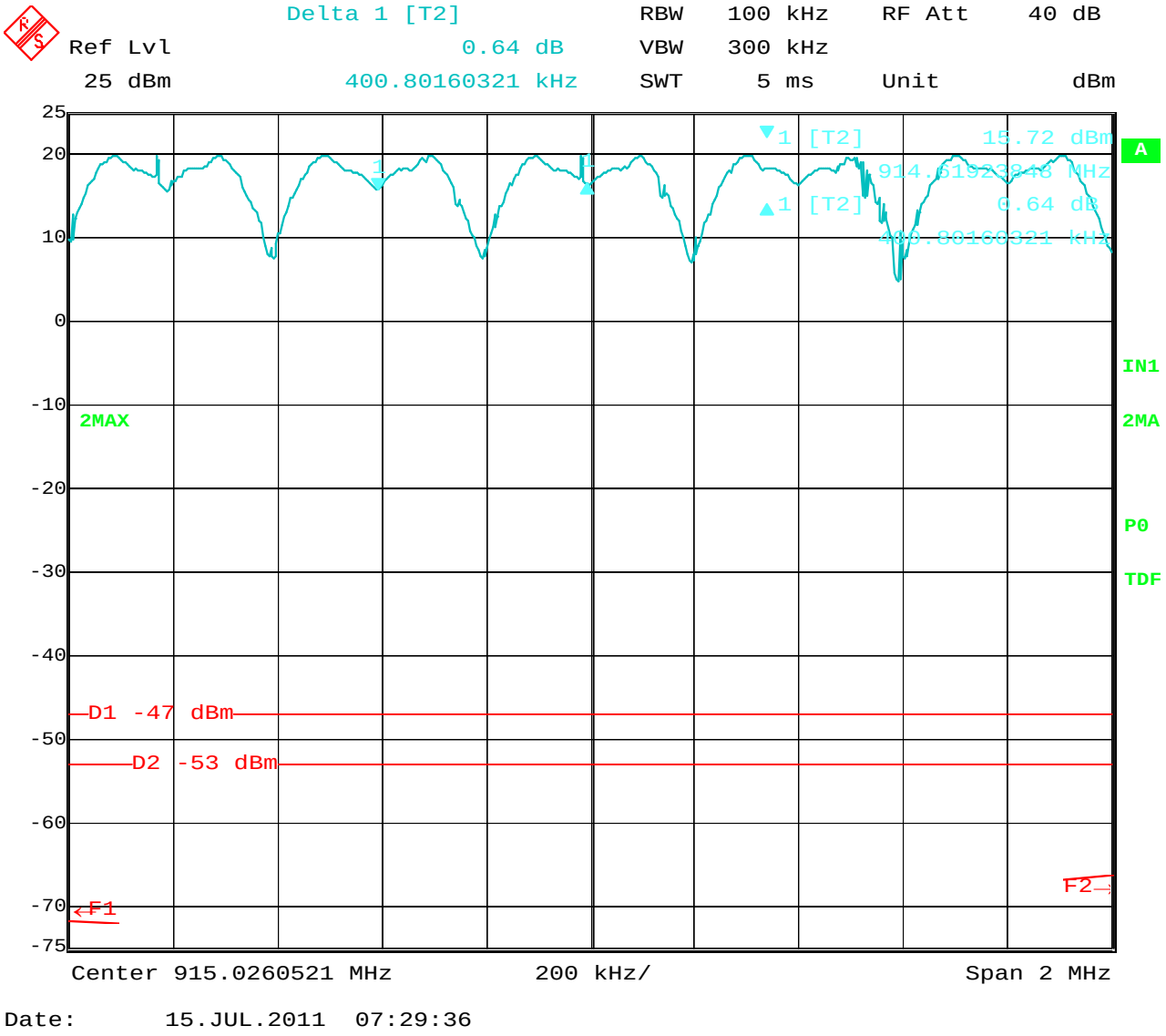
RF Antenna Conducted Test – High Channel – 900 MHz to 1 GHz



RF Antenna Conducted Test – High Channel – 1 GHz to 10 GHz

CHANNEL HOPPING SEPARATION

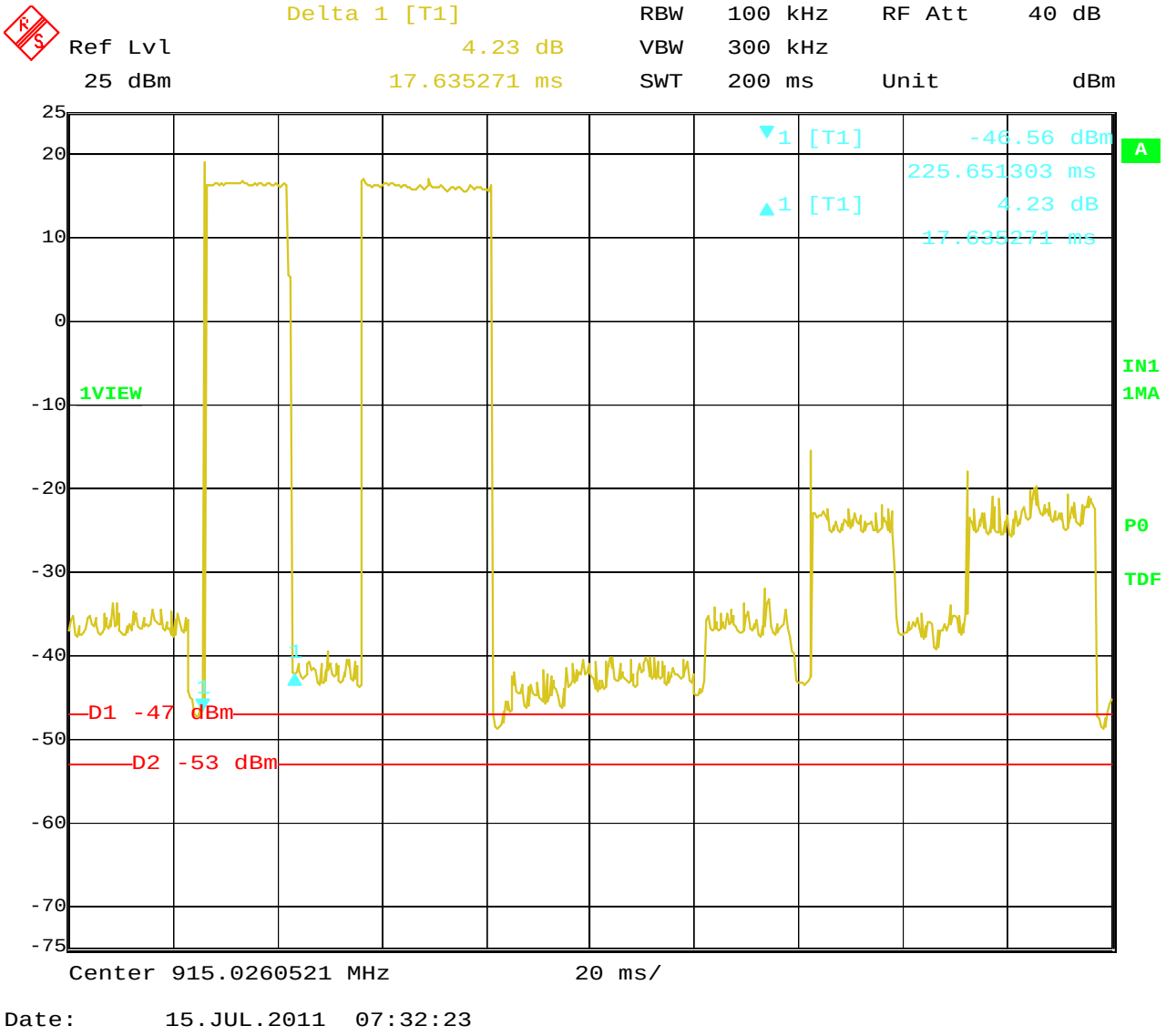
DATA SHEET



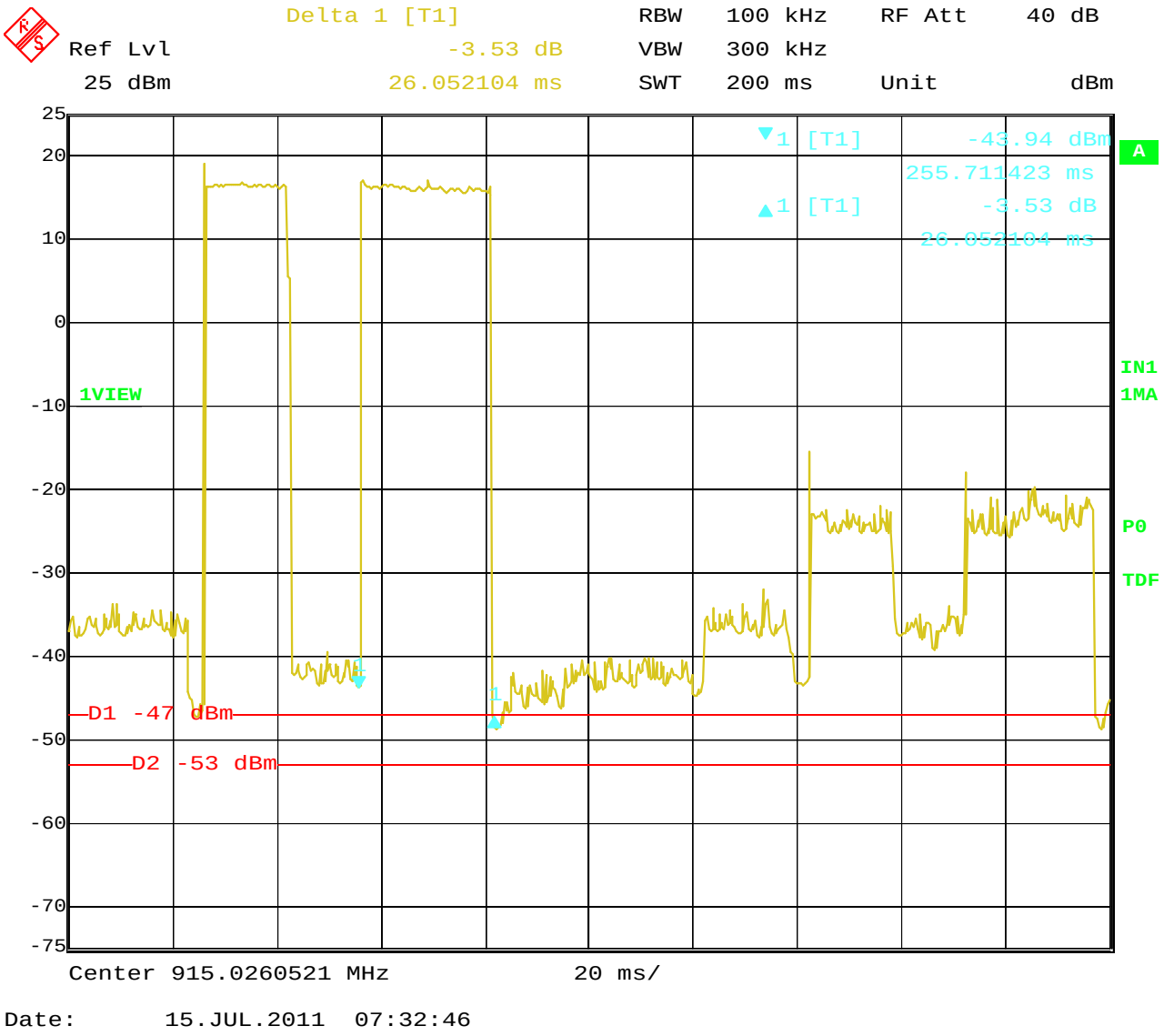
Carrier Frequency Separation Test

AVERAGE TIME OF OCCUPANCY

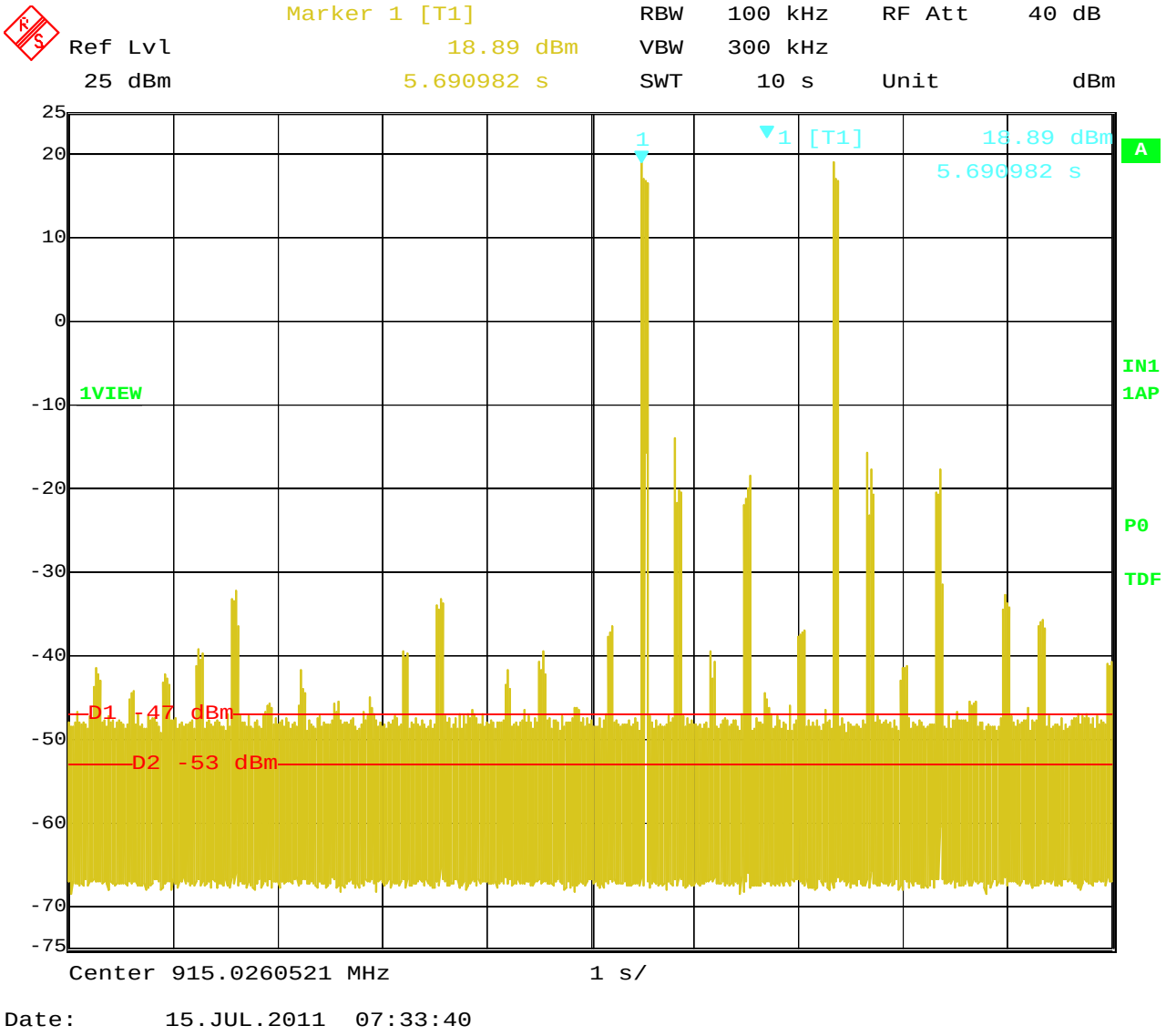
DATA SHEETS



Time of Small Pulse = 17.635271 mS



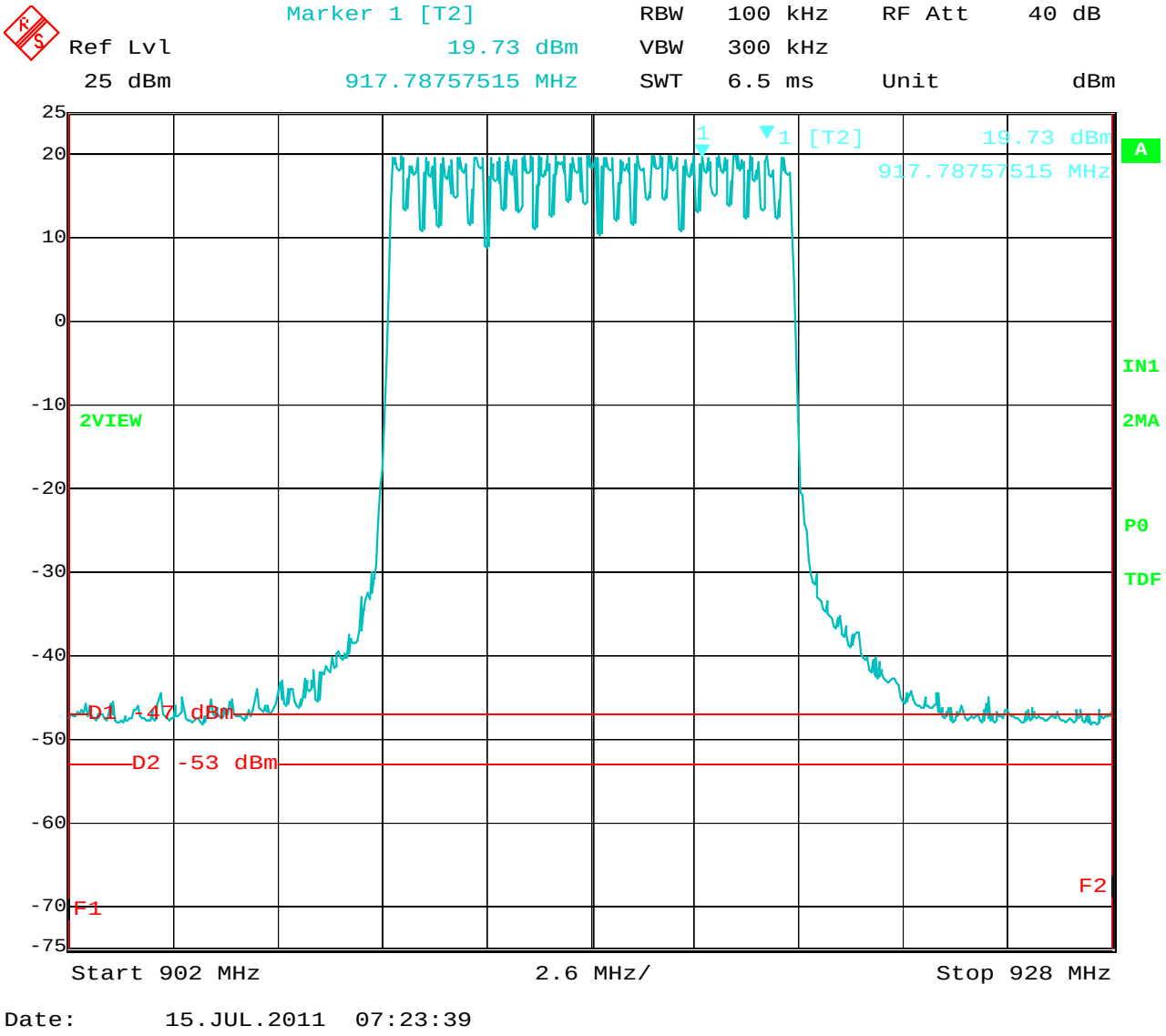
Time of Large Pulse = 26.052104 mS



Number of Pulses in 10 second = 2
Time of Occupancy = (17.635271 ms + 26.052104 ms) * 2 = 87.37475 ms
Limit = 400 ms per 10 seconds

NUMBER OF HOPPING FREQUENCIES

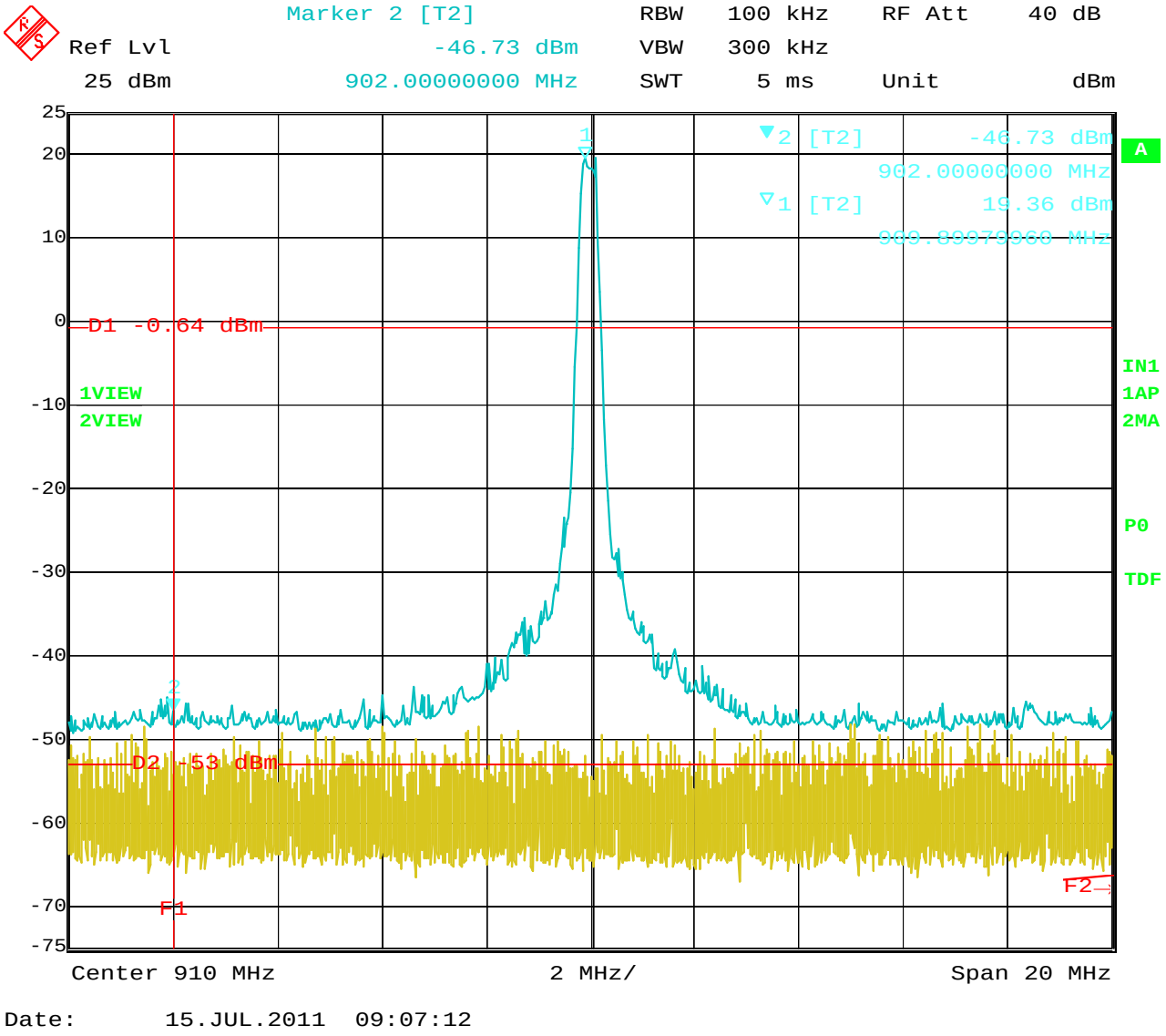
DATA SHEET



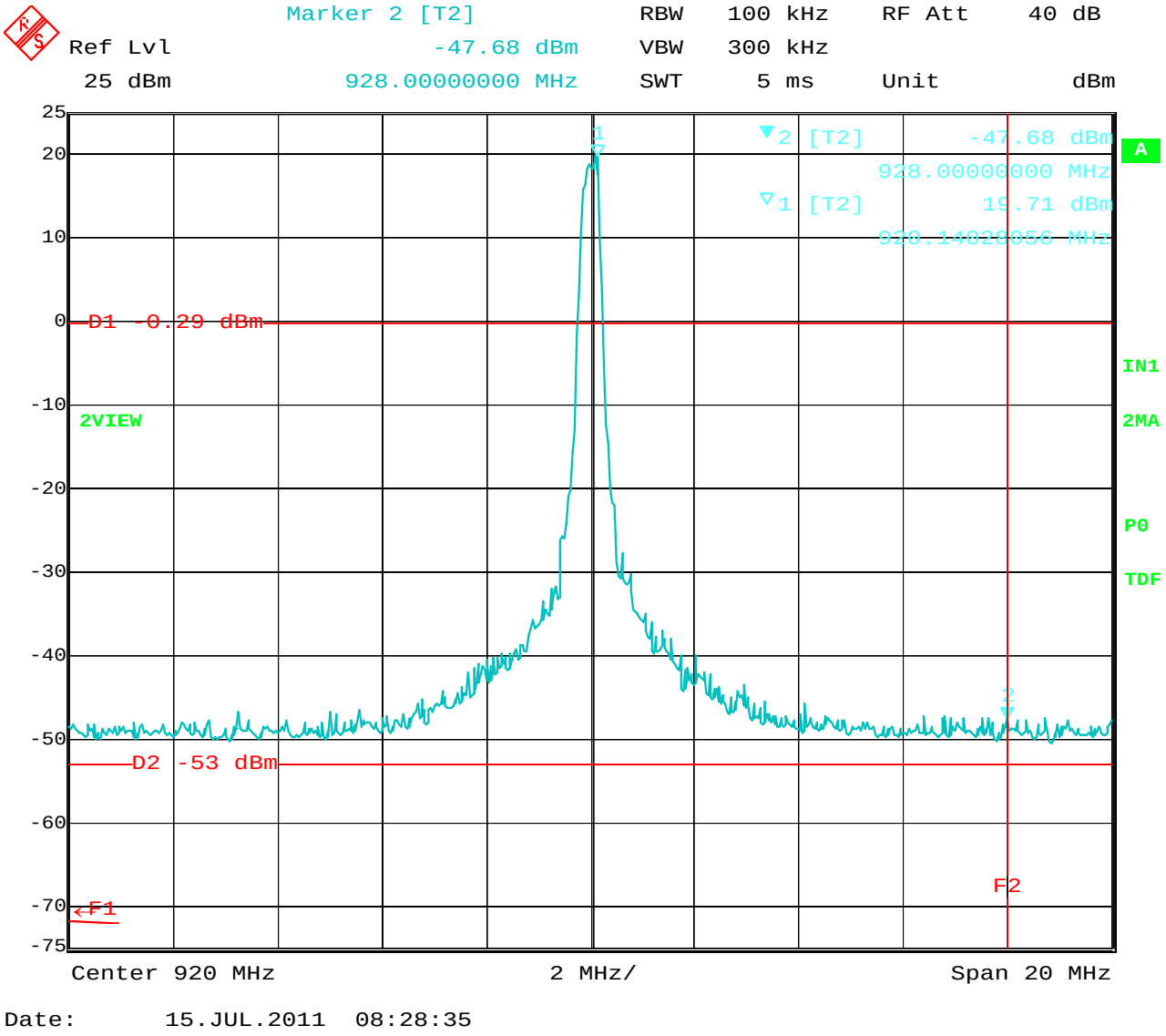
Number of Channel = 25

BAND EDGES

DATA SHEETS



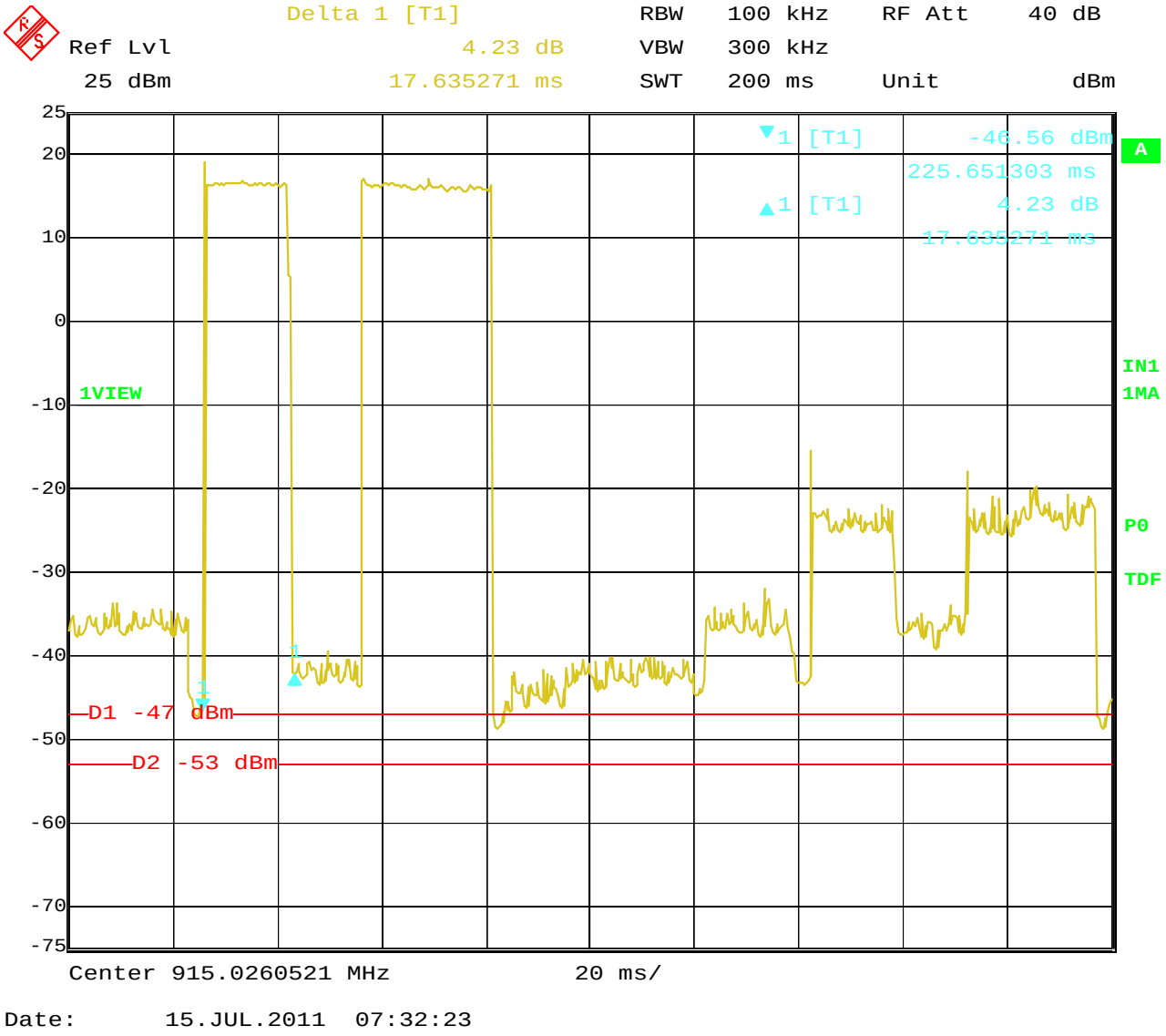
Band Edge – Low Channel



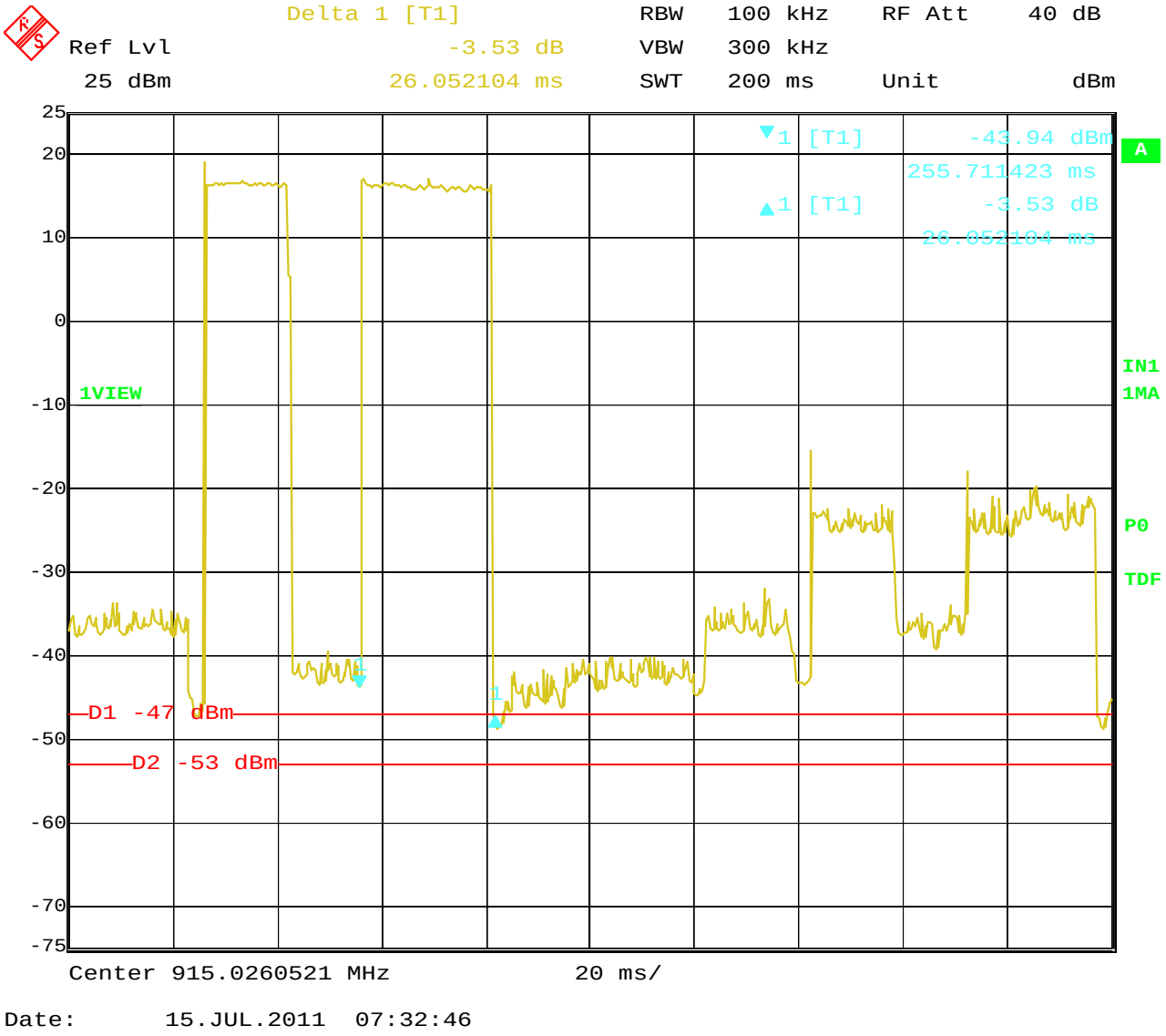
Band Edge – High Channel

DUTY CYCLE INFORMATION

DATA SHEETS



Time of Small Pulse = 17.635271 mS



Time of Large Pulse = 26.052104 mS

Note the Pulse only repeats once in a 100 mS period so the duty cycle is
(17.635271 ms + 26.052104 ms) = 43.687375 ms /100 mS = 43.69%