FCC PART 15, SUBPART B and C
TEST REPORT

for

WIRELESS eNODE

MODEL: ENM-1004-FW

Prepared for

MOJIX, INC.
11075 SANTA MONICA BOULEVARD
LOS ANGELES, CALIFORNIA 90025

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DATE: SEPTEMBER 17, 2009

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GENERAL REPORT SUMMARY

This electromagnetic emission test 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 without the written permission of Compatible Electronics, unless done so in full.

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

Device Tested:	Wireless eNode Model: ENM-1004-FW S/N: N/A
Product Description:	See Expository Statement
Modifications:	The EUT was modified in order to meet the specifications. Please see the list located in Appendix B.
Manufacturer:	Mojix, Inc. 11075 Santa Monica Boulevard Los Angeles, California 90025
Test Dates:	August 22 and 23, 2009
Test Specifications:	EMI requirements CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.247
Test Procedure:	ANSI C63.4: 2003
Test Deviations:	The test procedure was not deviated from during the testing.

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, 30 MHz – 1000 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 15.209
3	Spurious Radiated RF Emissions, 10 kHz – 30 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 15.247(d)
4	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)
5	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)
6	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)
7	Peak Power Output	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (b)(2)
8	RF Conducted Antenna Test	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (d)
9	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)
10	Average Time of Occupancy	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (a)(1)(i)
11	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 Electromagnetic Interference (EMI) tests performed on the Wireless eNode, Model: ENM-1004-FW. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2003. 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 EMI 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

Mojix, Inc.

John Gevargiz VP Engineering

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer
Michael Christensen Lab Manager, Brea Division

2.4 Date Test Sample was Received

The test sample was received prior to the date of testing.

2.5 Disposition of the Test Sample

The test sample was returned prior to the date of this report.

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
N/A	Not Applicable

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
ANSI C63.4 2003	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - EMI

The Wireless eNode, Model: ENM-1004-FW (EUT) was connected to a sensor, antenna, (3) 50 Ohm terminators, and a power supply via its sense, 243, 240 through 242, and power in ports, respectively. The EUT was continousuly transmiting and receiving on a continuous basis.

Note: The EUT was communicating with an RFID Reader Model: Wireless STAR 1000 via a wireless link. The RFID Reader was connected to a power supply and laptop via its DC power and ethernet ports, respectively. The laptop was also connected to an AC Adapter via its power port. The power supply was also connected to earth ground via a 2-meter cable. The RFID Reader, laptop and its AC Adapter were placed 20 meters away from the test site.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.

4.1.1 Cable Construction and Termination

Cable 1 This is a 1-meter braid shielded cable connecting the EUT's 240 port to a 50 ohm terminator. The cable has an SMA connector at the EUT end and a BNC connector at the other end. The cable was bundled to a length of 40 centimeters. The shield of the cable was grounded to the chassis via the connectors.

Cable 2 This is a 1-meter braid shielded cable connecting the EUT's 241 port to a 50 ohm terminator. The cable has an SMA connector at the EUT end and a BNC connector at the other end. The cable was bundled to a length of 40 centimeters. The shield of the cable was grounded to the chassis via the connectors.

Cable 3 This is a 1-meter braid shielded cable connecting the EUT's 242 port to a 50 ohm terminator. The cable has an SMA connector at the EUT end and a BNC connector at the other end. The cable was bundled to a length of 40 centimeters. The shield of the cable was grounded to the chassis via the connectors.

Cable 4 This is a 6.1-meter braid shielded cable connecting the EUT's 243 port to the transmit antenna. The cable has an SMA connector at the EUT end and a TNC connector at the transmit antenna end. The cable was bundled to a length of 1 meter. The shield of the cable was grounded to the chassis via the connectors.

Cable 5 This is a 2-meter unshielded cable connecting the EUT to the power supply. The cable has a 2 pin power connector at the EUT end and is hared wired into the power supply. The cable was bundled to a length of 1 meter.

Cable 6 This is a 2-meter unshielded cable connecting the EUT to the sensor. The cable has a high density DB-26 connector at the EUT end and is hard wired into the sensor. The cable was bundled to a length of 1 meter.

Cable 7 This is a 1-meter braid and foil shielded cable connecting the RFID Reader to the power supply. The cable has an Aphenol P/N: 97-3102A-20-27S connector at each end. The shield of the cable was grounded to the chassis via the connectors.

Cable 8 This is a 10-meter braid and foil shielded cable connecting the RFID Reader to the laptop. The cable has a metallic RJ-45 connector at each end. The shield of the cable was grounded to the chassis via the connectors.

Cable 9 This is a 2-meter unshielded cable connecting the power supply to earth ground. The cable is hard wired at each end.

Cable 10 This is a 2-meter unshielded cable connecting the laptop to the AC Adapter. The cable has a one pin connector at the laptop end and is hard wired into the AC Adapter.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
WIRELESS eNODE (EUT)	MOJIX, INC.	ENM-1004-FW	N/A	VEDWENODE
SENSOR	BANNER	Q60BB6AF2000	N/A	N/A
ANTENNA	MTI	MT-262006-TRH/A/K	00789	N/A
POWER SUPPLY	ASTRODYNE	SP024-108	04007866	N/A
DC POWER SUPPLY	MOJIX, INC.	STAR-1000	07104018G137	N/A
LAPTOP	DELL	PP19L	CN-0MG532-70166-6BR-01LS	DoC
POWER SUPPLY (FOR LAPTOP)	DELL	AA22850	CN-05V092-16291-32Q-01VF	N/A
ANTENNA	ANTENNA FACTOR	ANT-916-CW-HWR-RPS	N/A	N/A
DC POWER SUPPLY	MOJIX, INC.	STAR-1000	07104018G137	N/A
RFID READER	MOJIX, INC.	WIRELESS STAR 1000	N/A	VEDWSTAR1000

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	May 29, 2009	May 29, 2010
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A14530	May 29, 2009	May 29, 2010
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	May 29, 2009	May 29, 2010
EMI Receiver	Rohde & Schwarz	ESIB40	100194	September 17, 2008	Sept. 17, 2010
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Biconical Antenna	Com Power	AB-900	15250	February 23, 2009	Feb. 23, 2010
Log Periodic Antenna	Com Power	AL-100	16060	June 15, 2009	June 15, 2010
Preamplifier	Com-Power	PA-102	1017	January 12, 2009	Jan. 12, 2010
Loop Antenna	Com-Power	AL-130	17089	September 29, 2008	Sept. 29, 2009
Horn Antenna	Com-Power	AH-118	071175	June 27, 2008	June 27, 2010
Microwave Preamplifier	Com Power	PA-122	181921	March 12, 2009	March 12, 2010
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Emissions Program	Compatible Electronics	2.3 (SR19)	N/A	N/A	N/A
LISN	Com Power	LI-215	12076	September 29, 2008	Sept. 29, 2009
LISN	Com Power	LI-215	12090	September 29, 2008	Sept. 29, 2009
Transient Limiter	Com Power	252A910	1	September 26, 2008	Sept. 26, 2009

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for EMI 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 grounded to earth ground via the safety ground of the power cord.

7. CHARACTERISTICS OF THE TRANSMITTER

7.1 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
29.91 dBm	LOW
29.75 dBm	MIDDLE
29.67 dBm	HIGH

7.2 Channel Number and Frequencies

There are a total of 50 channels. The low channel is at 902.75 MHz and the high channel is at 927.25 MHz. There is a 500 kHz separation between channels.

Channel 1: 902.75 MHz
Channel 2: 903.25 MHz
(Etc.)

7.3 Antenna Gain

The antenna has a gain of 6 dBi.

8. TEST PROCEDURES

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

8.1 RF Emissions

8.1.1 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: 2003. 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.

Test Results:

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.

8.1.2 Radiated Emissions (Spurious and Harmonics) 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 and the Com Power Microwave Preamplifier Model: PA-122 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 and EMI Receiver record 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 averaged manually by narrowing the video filter down to 10 Hz and putting the sweep time on AUTO on the EMI Receiver to keep the amplitude reading calibrated.

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: 2003. 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 (Spurious and Harmonics) Test (con't)

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 3 meter test distance from 10 kHz to 25 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 (d) for radiated emissions. Please see Appendix E for the data sheets.

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)(1). The maximum peak output power is less than 1 watt. 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 50. 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 100 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 20 seconds.

The sweep time was then changed to 5 seconds and the number of pulses taken. The number of pulses was then multiplied by 4 to determine the number of pulses in a 20 second period. The number of pulses in a 20 second period was then multiplied by the time for each pulse 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 20 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.

9. CONCLUSIONS

The Wireless eNode Model: ENM-1004-FW 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 RECOGNITIONS

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

Industry Canada

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.247 specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

Modifications:

1) Added a ferrite with 1 ½ turns (FairRite P/N: 0443164151) to the power cable at the EUT end.
2) Ground Sensor Connector pin #1 to the backshell of the DB26 connector using a jumper wire.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Wireless eNode
Model: ENM-1004-FW
S/N: N/A

There were no additional models covered under this report.

APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

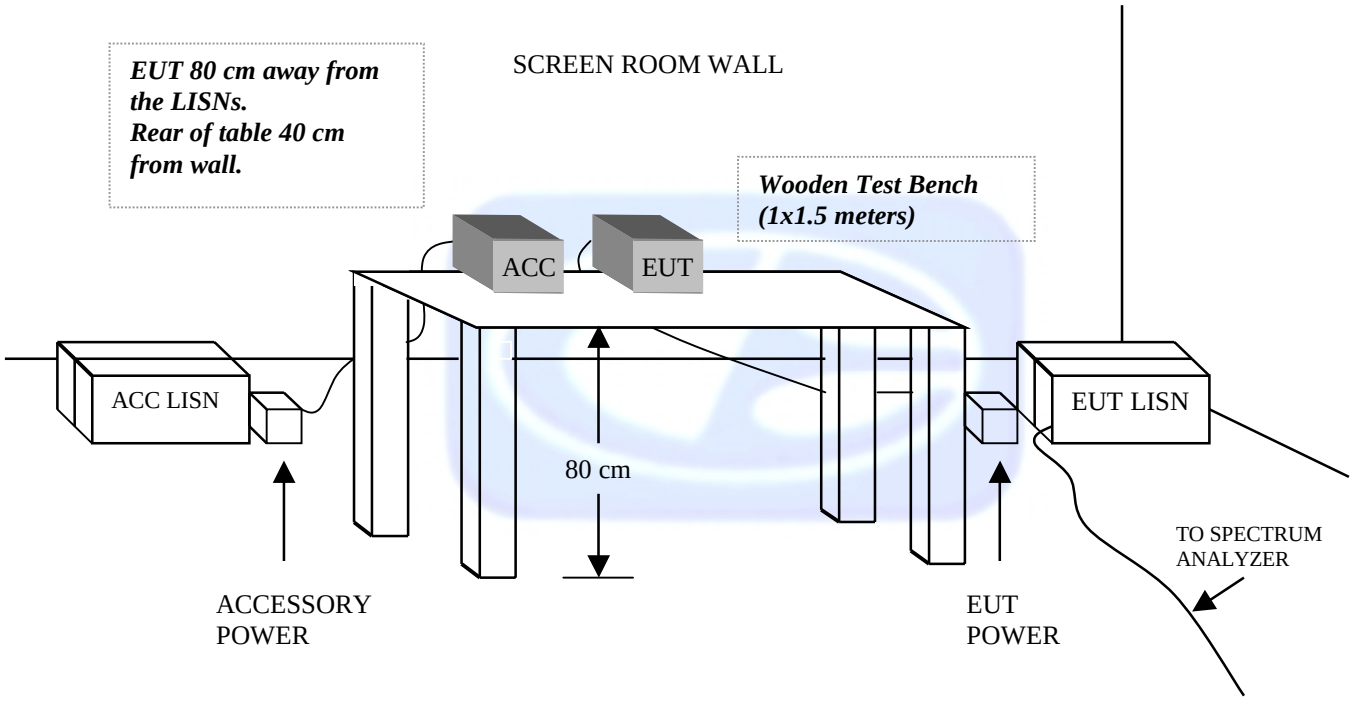
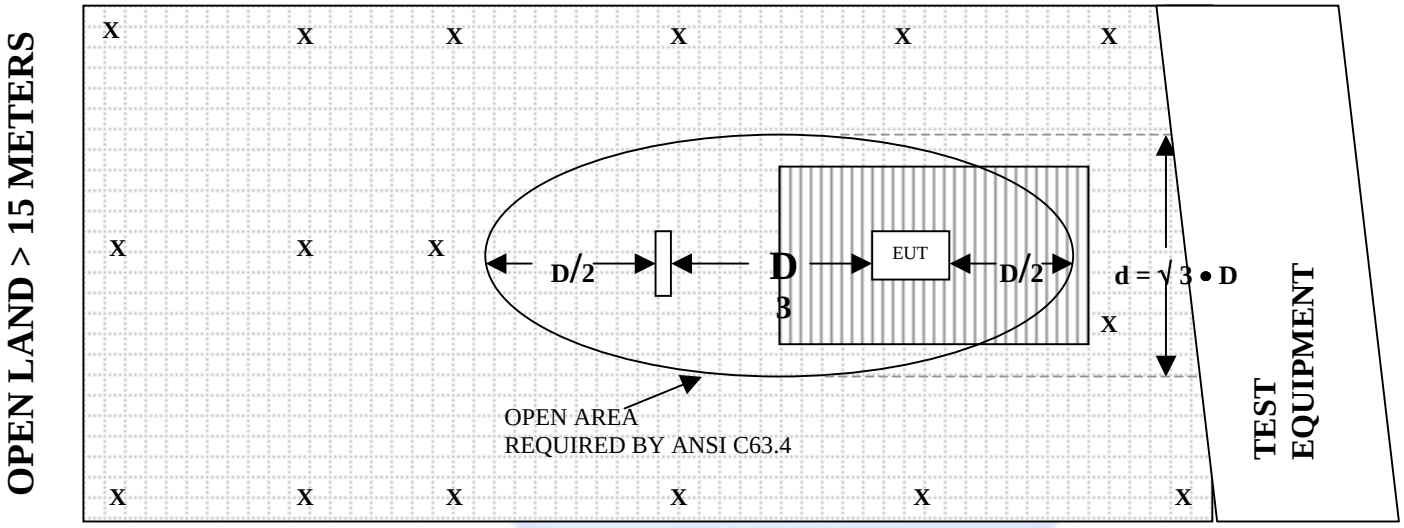


FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE – 3 METERS

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

X = GROUND RODS	= GROUND SCREEN
D = TEST DISTANCE (meters)	= WOOD COVER

COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15250

CALIBRATION DATE: FEBRUARY 23, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	13.0	100	11.1
35	11.1	120	13.6
40	10.2	140	12.4
45	11.2	160	12.9
50	11.6	180	16.5
60	9.1	200	17.0
70	8.4	250	16.3
80	6.2	275	18.2
90	8.5	300	17.9

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: JUNE 15, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	14.2	700	20.1
400	15.9	800	21.2
500	17.1	900	21.3
600	18.8	1000	22.3

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: JUNE 27, 2008

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.5	10.0	39.4
1.5	25.4	10.5	39.7
2.0	28.3	11.0	39.0
2.5	28.9	11.5	40.0
3.0	29.7	12.0	39.7
3.5	30.8	12.5	41.7
4.0	31.4	13.0	42.7
4.5	32.6	13.5	41.2
5.0	33.7	14.0	41.6
5.5	34.4	14.5	43.2
6.0	34.7	15.0	42.3
6.5	35.4	15.5	39.3
7.0	37.0	16.0	41.7
7.5	37.4	16.5	39.6
8.0	37.6	17.0	43.0
8.5	37.6	17.5	47.1
9.0	38.5	18.0	46.2
9.5	38.6		

COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 12, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	39.0	300	38.8
40	39.0	350	38.8
50	38.8	400	38.7
60	38.7	450	38.6
70	38.8	500	38.3
80	38.8	550	38.9
90	39.1	600	38.4
100	39.1	650	38.8
125	38.9	700	38.4
150	38.9	750	38.5
175	38.9	800	38.3
200	38.8	850	38.4
225	39.0	900	38.1
250	38.9	950	37.4
275	38.8	1000	38.1

COM-POWER PA-122

PREAMPLIFIER

S/N: 181921

CALIBRATION DATE: MARCH 12, 2009

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	36.46	10.0	35.06
1.5	35.36	10.5	34.82
2.0	34.76	11.0	33.12
2.5	34.94	11.5	34.33
3.0	34.59	12.0	34.75
3.5	34.55	12.5	33.94
4.0	34.25	13.0	35.50
4.5	33.89	13.5	34.89
5.0	34.22	14.0	36.56
5.5	34.81	14.5	36.06
6.0	35.74	15.0	36.67
6.5	36.51	15.5	36.84
7.0	36.66	16.0	34.31
7.5	35.72	16.5	35.11
8.0	33.28	17.0	35.35
8.5	33.11	17.5	34.11
9.0	34.71	18.0	33.88
9.5	35.50	18.5	32.20

COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: SEPTEMBER 29, 2008

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.57	9.93
0.01	-42.06	9.44
0.02	-42.43	9.07
0.05	-42.50	9.00
0.07	-42.10	9.40
0.1	-42.03	9.47
0.2	-44.50	7.00
0.3	-41.93	9.57
0.5	-41.90	9.60
0.7	-41.73	9.77
1	-41.23	10.27
2	-40.90	10.60
3	-41.20	10.30
4	-41.30	10.20
5	-40.70	10.80
10	-41.10	10.40
15	-42.17	9.33
20	-42.00	9.50
25	-42.20	9.30
30	-43.10	8.40

FRONT VIEW

MOJIX, INC.
WIRELESS eNODE
MODEL: ENM-1004-FW
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

MOJIX, INC.
WIRELESS eNODE
MODEL: ENM-1004-FW
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

FRONT VIEW

MOJIX, INC.
WIRELESS eNODE
MODEL: ENM-1004-FW
FCC SUBPART B AND C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

MOJIX, INC.
WIRELESS eNODE
MODEL: ENM-1004-FW
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
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

Low Channel
Transmit Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
902.75	129.09	V	--	--	Peak	1	0	
902.75	123.71	V	--	--	Avg	1	0	
1805.5	51.23	V	--	--	Peak	1.35	150	
1805.5	44.37	V	--	--	Avg	1.35	150	
2708.25	42.36	V	74	-31.64	Peak	1.55	135	
2708.25	31.72	V	54	-22.28	Avg	1.55	135	
3611	40.29	V	74	-33.71	Peak	1.58	135	
3611	27.96	V	54	-26.04	Avg	1.58	135	
4513.75	42.66	V	74	-31.34	Peak	1.58	158	
4513.75	30.01	V	54	-23.99	Avg	1.58	158	
5416.5	46.99	V	74	-27.01	Peak	1.35	150	
5416.5	33.72	V	54	-20.28	Avg	1.35	150	
6319.25	44.54	V	--	--	Peak	1.58	175	Not in
6319.25	31.27	V	--	--	Avg	1.58	175	Restricted Band
7222	46.43	V	74	-27.57	Peak	1.59	180	
7222	34.01	V	54	-19.99	Avg	1.59	180	
8124.75	47.09	V	74	-26.91	Peak	1.65	0	
8124.75	34.85	V	54	-19.15	Avg	1.65	0	
9027.5	47.56	V	74	-26.44	Peak	1.25	135	
9027.5	36.11	V	54	-17.89	Avg	1.25	135	

FCC 15.247
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

Low Channel
Transmit Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
902.75	127.69	H	--	--	Peak	1.5	0	
902.75	121.91	H	--	--	Avg	1.5	0	
1805.5	50.93	H	--	--	Peak	1.25	135	Not in
1805.5	43.98	H	--	--	Avg	1.25	135	Restricted Band
2708.25	41.92	H	74	-32.08	Peak	1.35	150	
2708.25	29.41	H	54	-24.59	Avg	1.35	150	
3611	40.16	H	74	-33.84	Peak	1.25	150	
3611	25.11	H	54	-28.89	Avg	1.25	150	
4513.75	41.25	H	74	-32.75	Peak	1.35	150	
4513.75	25.69	H	54	-28.31	Avg	1.35	150	
5416.5	47.22	H	74	-26.78	Peak	1.58	150	
5416.5	33.99	H	54	-20.01	Avg	1.58	150	
6319.25	46.75	H	--	--	Peak	1.85	180	Not in
6319.25	34.27	H	--	--	Avg	1.85	180	Restricted Band
7222	46.64	H	74	-27.36	Peak	1.56	135	
7222	35.39	H	54	-18.61	Avg	1.56	135	
8124.75	48.94	H	74	-25.06	Peak	1.58	150	
8124.75	37.71	H	54	-16.29	Avg	1.58	150	
9027.5	50.15	H	74	-23.85	Peak	1.35	165	
9027.5	37.58	H	54	-16.42	Avg	1.35	165	

FCC 15.247
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

Middle Channel
Transmit Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
915.23	130.06	V	--	--	Peak	1	0	
915.23	124.09	V	--	--	Avg	1	0	
1830.46	54.03	V	--	--	Peak	1.25	135	Not in
1830.46	47.59	V	--	--	Avg	1.25	135	Restricted Band
2745.69	40.98	V	74	-33.02	Peak	1.52	135	
2745.69	27.33	V	54	-26.67	Avg	1.52	135	
3660.92	40.34	V	74	-33.66	Peak	1.58	150	
3660.92	27.65	V	54	-26.35	Avg	1.58	150	
4576.15	43.34	V	74	-30.66	Peak	1.59	175	
4576.15	30.24	V	54	-23.76	Avg	1.59	175	
5491.38	44.64	V	74	-29.36	Peak	2.05	0	
5491.38	32.91	V	54	-21.09	Avg	2.05	0	
6406.61	46.29	V	--	--	Peak	1.35	150	Not in
6406.61	32.01	V	--	--	Avg	1.35	150	Restricted Band
7321.84	44.93	V	74	-29.07	Peak	1.58	0	
7321.84	33.35	V	54	-20.65	Avg	1.58	0	
8237.07	46.81	V	74	-27.19	Peak	1.59	180	
8237.07	34.67	V	54	-19.33	Avg	1.59	180	
9152.3	48.98	V	74	-25.02	Peak	1.25	150	
9152.3	35.99	V	54	-18.01	Avg	1.25	150	

FCC 15.247
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

Middle Channel
Transmit Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
915.23	127.39	H	--	--	Peak	1.35	0	
915.23	121.43	H	--	--	Avg	1.35	0	
1830.46	47.87	H	--	--	Peak	1.35	150	Not in
1830.46	41.77	H	--	--	Avg	1.35	150	Restricted Band
2745.69	38.14	H	74	-35.86	Peak	1.58	135	
2745.69	25.48	H	54	-28.52	Avg	1.58	135	
3660.92	40.23	H	74	-33.77	Peak	1.59	135	
3660.92	28.42	H	54	-25.58	Avg	1.59	135	
4576.15	43.41	H	74	-30.59	Peak	1.58	150	
4576.15	31.42	H	54	-22.58	Avg	1.58	150	
5491.38	45.57	H	74	-28.43	Peak	1.35	225	
5491.38	32.97	H	54	-21.03	Avg	1.35	225	
6406.61	46.71	H	--	--	Peak	1.35	225	Not in
6406.61	34.69	H	--	--	Avg	1.35	225	Restricted Band
7321.84	45.42	H	74	-28.58	Peak	1.58	135	
7321.84	35.48	H	54	-18.52	Avg	1.58	135	
8237.07	49.01	H	74	-24.99	Peak	1.38	225	
8237.07	37.43	H	54	-16.57	Avg	1.38	225	
9152.3	48.83	H	74	-25.17	Peak	1.58	155	
9152.3	37.29	H	54	-16.71	Avg	1.58	155	

FCC 15.247
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

High Channel
Transmit Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
927.22	131.03	V	--	--	Peak	1.35	0	
927.22	124.99	V	--	--	Avg	1.35	0	
1854.44	66.44	V	--	--	Peak	1.35	150	Not in
1854.44	58.76	V	--	--	Avg	1.35	150	Restricted Band
2781.66	48.63	V	74	-25.37	Peak	1.25	155	
2781.66	37.31	V	54	-16.69	Avg	1.25	155	
3708.88	43.79	V	74	-30.21	Peak	1.58	135	
3708.88	33.69	V	54	-20.31	Avg	1.58	135	
4636.1	45.73	V	74	-28.27	Peak	1.25	150	
4636.1	34.11	V	54	-19.89	Avg	1.25	150	
5563.32	48.24	V	74	-25.76	Peak	1.25	150	
5563.32	36.43	V	54	-17.57	Avg	1.25	150	
6490.54	47.89	V	--	--	Peak	1.35	135	Not in
6490.54	35.76	V	--	--	Avg	1.35	135	Restricted Band
7417.76	47.63	V	74	-26.37	Peak	1.25	150	
7417.76	36.02	V	54	-17.98	Avg	1.25	150	
8344.98	51.37	V	74	-22.63	Peak	1.25	135	
8344.98	39.65	V	54	-14.35	Avg	1.25	135	
9272.2	48.44	V	74	-25.56	Peak	1.25	135	
9272.2	36.16	V	54	-17.84	Avg	1.25	135	

FCC 15.247
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

High Channel
Transmit Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
927.22	127.15	H	--	--	Peak	1.35	0	
927.22	121.84	H	--	--	Avg	1.35	0	
1854.44	66.72	H	--	--	Peak	1.35	150	Not in
1854.44	58.84	H	--	--	Avg	1.35	150	Restricted Band
2781.66	42.12	H	74	-31.88	Peak	1.35	135	
2781.66	27.25	H	54	-26.75	Avg	1.35	135	
3708.88	44.22	H	74	-29.78	Peak	1.25	150	
3708.88	29.35	H	54	-24.65	Avg	1.25	150	
4636.1	46.59	H	74	-27.41	Peak	1.35	180	
4636.1	35.91	H	54	-18.09	Avg	1.35	180	
5563.32	47.91	H	74	-26.09	Peak	1.52	195	
5563.32	33.97	H	54	-20.03	Avg	1.52	195	
6490.54	47.77	H	--	--	Peak	2.05	135	Not in
6490.54	35.91	H	--	--	Avg	2.05	135	Restricted Band
7417.76	46.56	H	74	-27.44	Peak	1.58	90	
7417.76	35.41	H	54	-18.59	Avg	1.58	90	
8344.98	50.19	H	74	-23.81	Peak	1.35	270	
8344.98	37.69	H	54	-16.31	Avg	1.35	270	
9272.2	49.95	H	74	-24.05	Peak	1.26	175	
9272.2	37.65	H	54	-16.35	Avg	1.26	175	

FCC Class B

Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

Receiver and Digital Portion - 10 kHz to 1 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
124.41	32.41	V	43.5	-11.09	Peak	1.35	150	
127.36	33.13	H	43.5	-10.37	Peak	1.52	180	
131.75	38.23	V	43.5	-5.27	Peak	1.25	90	
133.22	38.31	V	43.5	-5.19	Peak	1.25	90	
136.16	38.41	V	43.5	-5.09	Peak	1.35	90	
137.61	40.6	V	43.5	-2.9	Peak	1.35	225	
139.08	40.09	V	43.5	-3.41	Peak	1.25	150	
140.52	39.05	V	43.5	-4.45	Peak	1.35	180	
141.97	40.08	V	43.5	-3.42	Peak	1	125	
143.43	41.11	V	43.5	-2.39	Peak	1	135	
144.88	40.41	V	43.5	-3.09	Peak	1	135	
146.35	38.56	V	43.5	-4.94	Peak	1	150	
147.79	37.43	V	43.5	-6.07	Peak	1	135	
149.25	37.07	V	43.5	-6.43	Peak	1	150	
150.73	36.71	V	43.5	-6.79	Peak	1	135	
152.15	34.98	V	43.5	-8.52	Peak	1	180	
153.62	34.53	V	43.5	-8.97	Peak	1	175	
155.08	33.61	V	43.5	-9.89	Peak	1	135	
156.55	37.28	V	43.5	-6.22	Peak	1	135	
158.03	35.58	V	43.5	-7.92	Peak	1	90	
168.44	33.45	V	43.5	-10.05	Peak	1	180	
179.99	40.03	V	43.5	-3.47	Peak	1	135	
184.71	38.34	V	43.5	-5.16	Peak	1	180	

FCC Class B

Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

Receiver and Digital Portion - 10 kHz to 1 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
124.41	32.41	V	43.5	-11.09	Peak	1.35	150	
125.08	30.89	H	43.5	-12.61	Peak	1.52	270	
131.07	34.92	H	43.5	-8.58	Peak	1.52	270	
132.55	34.02	H	43.5	-9.48	Peak	1.52	270	
136.72	37.06	H	43.5	-6.44	Peak	1.52	270	
138.21	38.61	H	43.5	-4.89	Peak	1.52	270	
161.75	36.93	H	43.5	-6.57	Peak	1.53	180	
163.25	35.42	H	43.5	-8.08	Peak	1.75	225	
186.31	38.35	V	43.5	-5.15	Peak	1.35	150	
273.43	37.61	V	43.5	-5.89	Peak	1.35	150	
273.43	36.84	H	46	-9.16	Peak	2.58	180	
336.01	23.83	V	46	-22.17	Peak	2.58	180	
351.53	29.35	V	46	-16.65	Peak	2.58	180	
371.08	28.55	V	46	-17.45	Peak	2.58	180	
410.13	23.71	V	46	-22.29	Peak	2.58	180	
429.67	26.87	V	46	-19.13	Peak	2.58	225	
507.78	27.72	V	46	-18.28	Peak	1.35	90	
527.35	27.55	V	46	-18.45	Peak	1.02	180	
554.33	25.71	V	46	-20.29	Peak	1.85	180	
638.31	32.02	V	46	-13.98	Peak	1.85	180	
789.22	33.88	V	46	-12.12	Peak	1.85	180	

FCC Class B and RSS-210

Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

Receiver and Digital Portion - 10 kHz to 1 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
312.47	27.03	H	46	-18.97	Peak	1.35	180	
329.31	23.71	H	46	-22.29	Peak	1.35	180	
335.98	31.17	H	46	-14.83	Peak	1.58	135	
351.54	31.69	H	46	-14.31	Peak	1.25	180	
371.08	32.67	H	46	-13.33	Peak	1.25	180	
390.61	29.96	H	46	-16.04	Peak	1.25	180	
410.14	31.59	H	46	-14.41	Peak	1.25	180	
429.67	29.08	H	46	-16.92	Peak	1.35	150	
449.21	27.61	H	46	-18.39	Peak	1.35	150	
507.81	32.24	H	46	-13.76	Peak	1.58	160	
527.33	33.37	H	46	-12.63	Peak	1.58	135	
566.41	33.95	H	46	-12.05	Peak	2.05	180	
585.692	33.21	H	46	-12.79	Peak	1.35	150	
664.04	31.13	H	46	-14.87	Peak	1.35	150	
761.68	32.01	H	46	-13.99	Peak	1.35	150	
								No Emissions Found for the
								Receiver Mode and Digital Portion
								from 1 GHz to 9.3 GHz
								for both Vertical and Horizontal
								Polarizations

FCC Class B and RSS-210

Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW

Date: 08/21/09
Labs: B and D
Tested By: Kyle Fujmoto

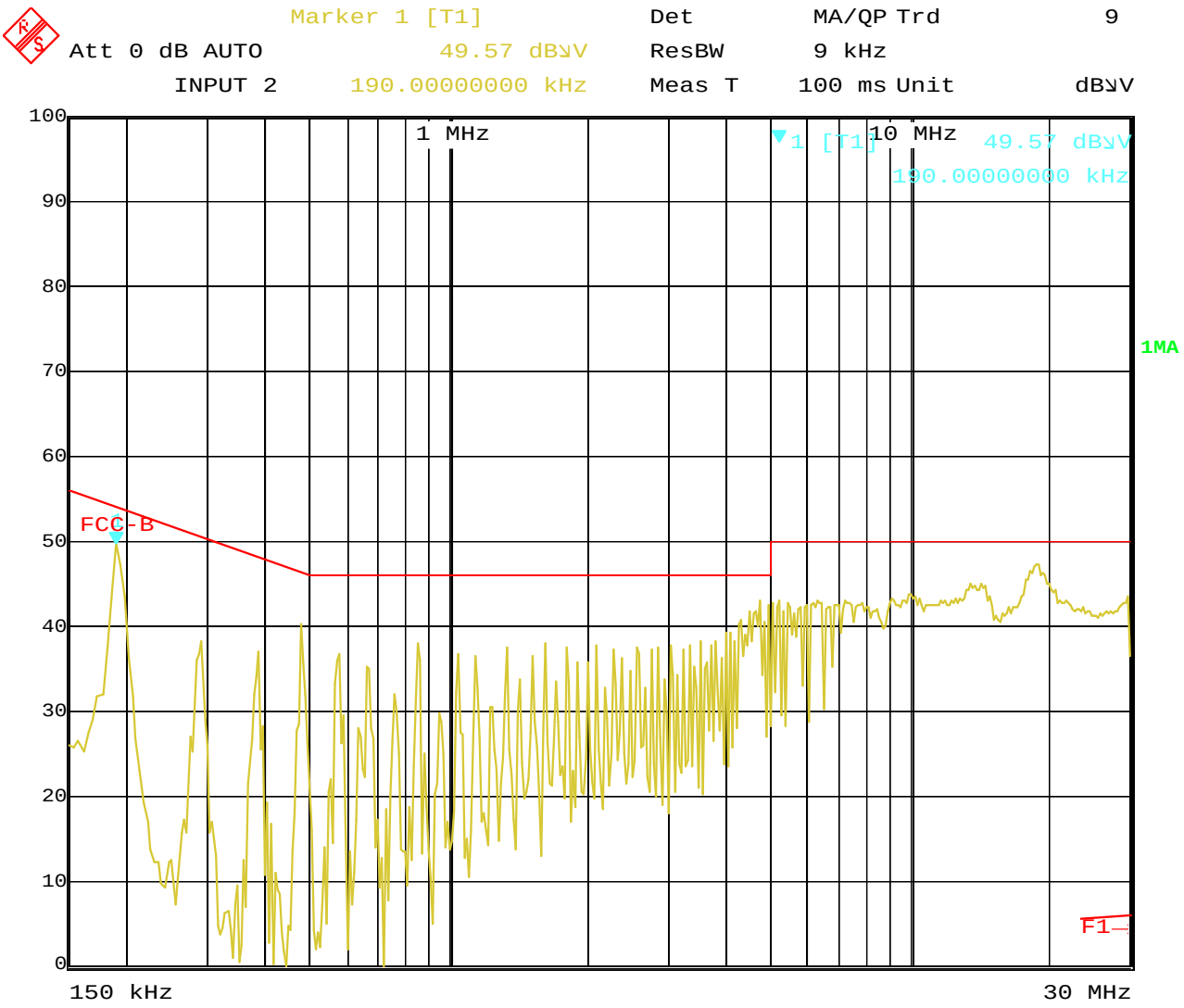
Non Harmonic Emissions from the Tx - 10 kHz to 9.3 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
117.24	37.24	V	43.5	-6.26	Peak	1	90	
118.85	36.66	V	43.5	-6.84	Peak	1	135	
121.73	38.01	V	43.5	-5.49	Peak	1.35	135	
124.77	34.54	V	43.5	-8.96	Peak	1	135	
127.22	39.34	V	43.5	-4.16	Peak	1.35	150	
133.28	42.32	V	43.5	-1.18	Peak	1.55	165	
136.69	47.36	H	43.5	3.86	Peak	1.25	135	
136.69	42.95	H	43.5	-0.55	QP	1.25	135	
136.7	46.3	V	43.5	2.8	Peak	1	135	
136.7	42.7	V	43.5	-0.8	QP	1	135	
137.56	36.39	H	43.5	-7.11	Peak	1.25	135	
138.73	36.84	V	43.5	-6.66	Peak	1	135	
162.47	31.33	V	43.5	-12.17	Peak	1	135	
167.32	31.01	H	43.5	-12.49	Peak	1.25	135	
172.93	33.54	H	43.5	-9.96	Peak	1.25	135	
253.87	36.21	V	46	-9.79	Peak	1	135	
265.16	32.61	V	46	-13.39	Peak	1	135	
273.43	35.58	V	46	-10.42	Peak	1	135	
332.001	31.621	H	46	-14.379	Peak	1	135	
332.02	33.77	H	46	-12.23	Peak	1	135	
410.13	43.6	H	46	-2.4	Peak	1	135	
410.13	42.54	H	46	-3.46	QP	1	135	

CONDUCTED EMISSIONS

DATA SHEETS

FCC Conducted Emissions
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW
FCC Class B – Black Lead
Configuration: Transceiver Mode
Tested By: Kyle Fujimoto



Date: 26.AUG.2009 13:24:22

FCC Conducted Emissions
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW
FCC Class B – Black Lead
Configuration: Transceiver Mode
Tested By: Kyle Fujimoto

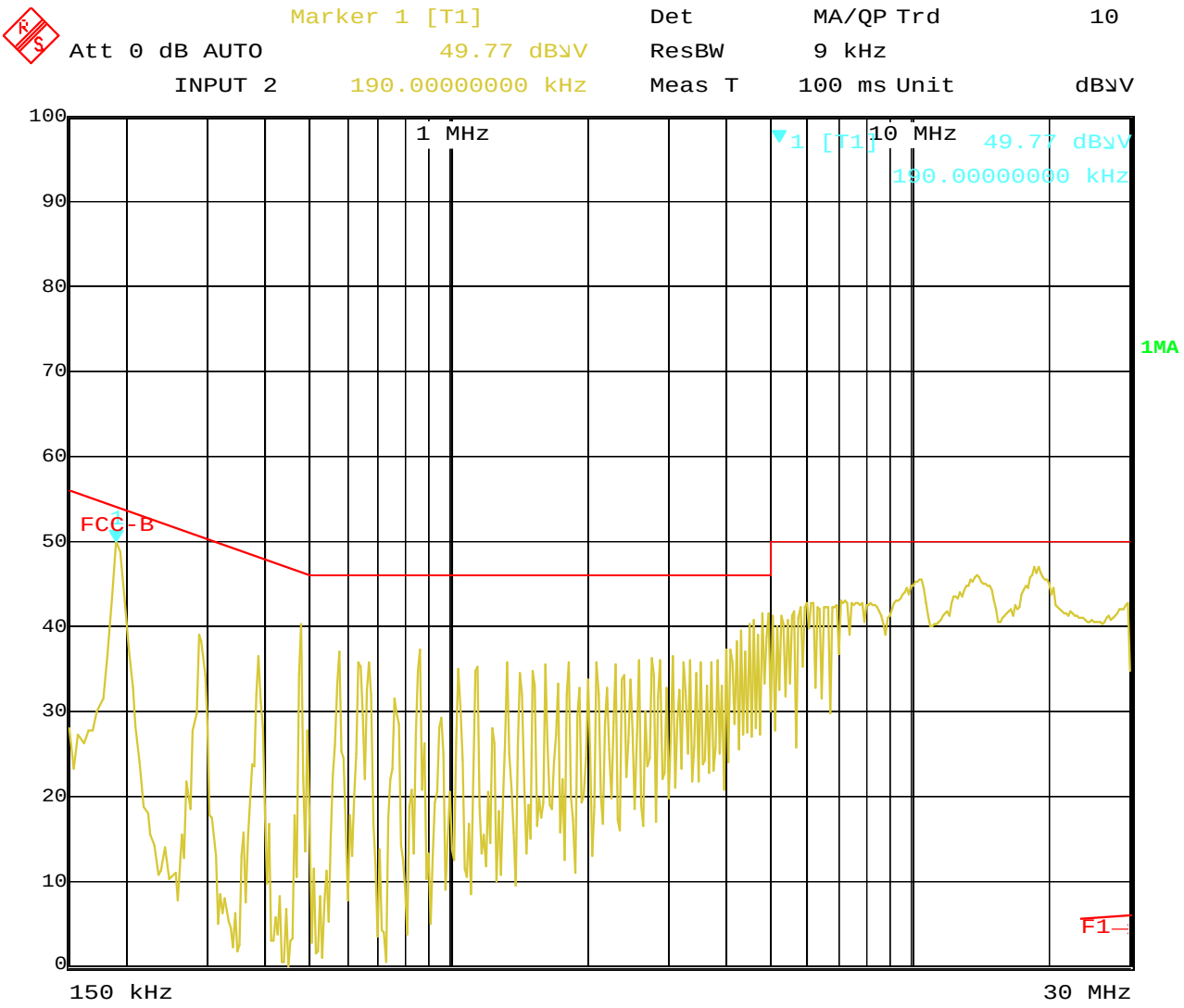
EDIT PEAK LIST (Final Results)

Trace1:	FCC-B	Trace2:	---
Trace3:	---	Trace4:	---

TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Max Peak	19.0900 MHz	47.14	-2.85
1 Max Peak	18.9900 MHz	47.13	-2.86
1 Max Peak	18.6140 MHz	46.99	-3.00
1 Max Peak	4.7700 MHz	42.79	-3.20
1 Max Peak	18.8980 MHz	46.69	-3.30
1 Max Peak	18.7100 MHz	46.68	-3.31
1 Max Peak	18.8060 MHz	46.51	-3.48
1 Max Peak	4.9620 MHz	42.43	-3.56
1 Max Peak	18.2300 MHz	46.34	-3.65
1 Max Peak	19.1820 MHz	46.28	-3.71
1 Max Peak	18.5100 MHz	46.11	-3.88
1 Max Peak	19.4740 MHz	46.03	-3.96
1 Max Peak	18.3220 MHz	45.96	-4.03
1 Max Peak	19.6620 MHz	45.89	-4.10
1 Max Peak	19.2780 MHz	45.87	-4.13
1 Max Peak	19.5620 MHz	45.81	-4.18
1 Max Peak	18.4260 MHz	45.74	-4.25
1 Max Peak	4.6740 MHz	41.58	-4.41
1 Max Peak	4.4820 MHz	41.57	-4.42
1 Max Peak	190.0000 kHz	49.57	-4.46

Date: 26.AUG.2009 13:25:11

FCC Conducted Emissions
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW
FCC Class B – White Lead
Configuration: Transceiver Mode
Tested By: Kyle Fujimoto



Date: 26.AUG.2009 13:30:28

FCC Conducted Emissions
Mojix, Inc.
Wireless eNode
Model: ENM-1004-FW
FCC Class B – White Lead
Configuration: Transceiver Mode
Tested By: Kyle Fujimoto

EDIT PEAK LIST (Final Results)

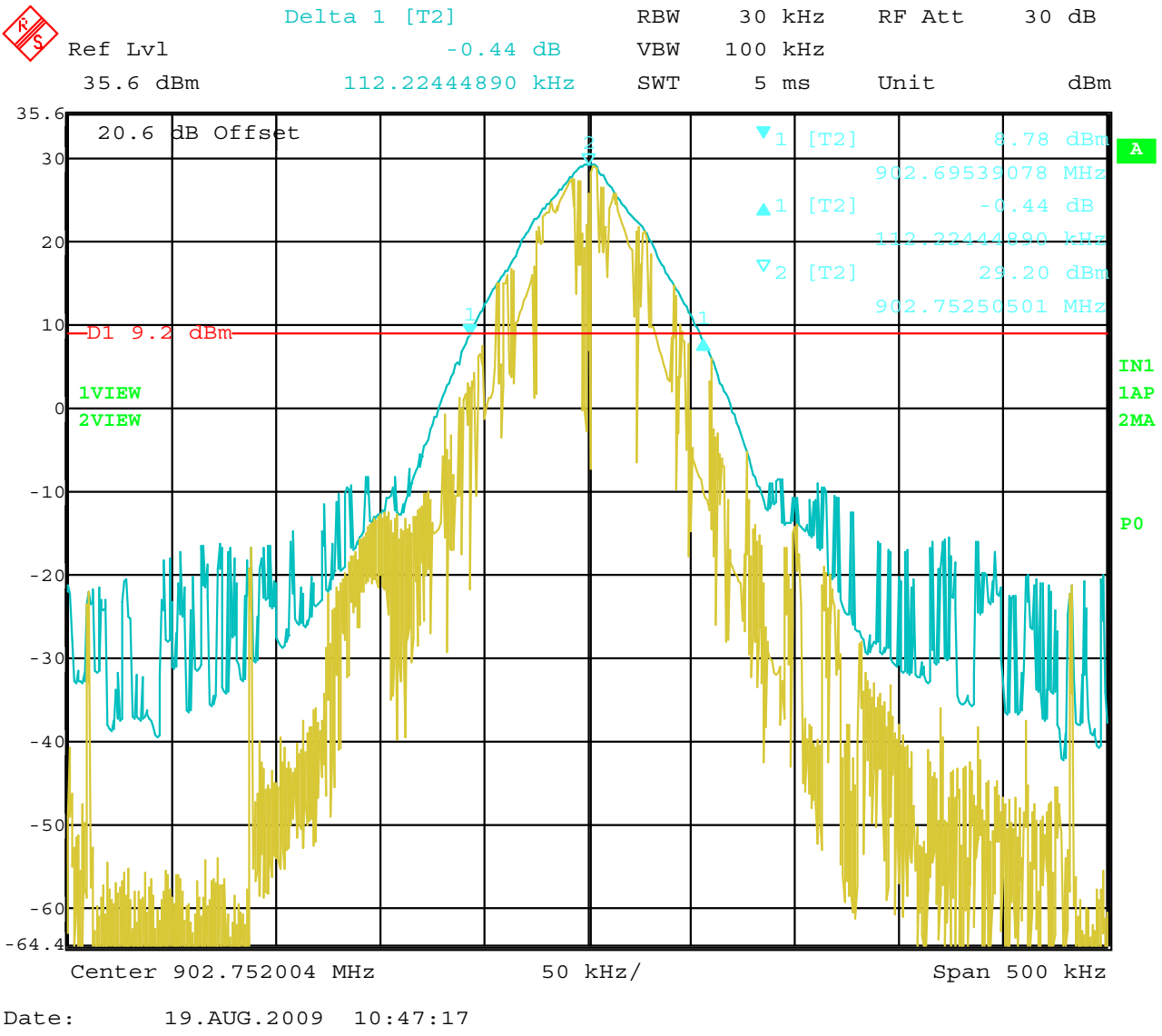
Trace1:	FCC-B	Trace2:	---
Trace3:	---	Trace4:	---

TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Max Peak	19.1460 MHz	46.79	-3.20
1 Max Peak	18.7660 MHz	46.77	-3.22
1 Max Peak	18.6620 MHz	46.76	-3.23
1 Max Peak	19.0500 MHz	46.40	-3.59
1 Max Peak	19.2380 MHz	46.05	-3.94
1 Max Peak	18.9540 MHz	46.03	-3.96
1 Max Peak	18.8540 MHz	46.02	-3.97
1 Max Peak	13.9740 MHz	45.97	-4.02
1 Max Peak	18.5700 MHz	45.88	-4.11
1 Max Peak	18.4740 MHz	45.87	-4.12
1 Max Peak	13.8820 MHz	45.74	-4.25
1 Max Peak	190.0000 kHz	49.77	-4.26
1 Max Peak	18.2860 MHz	45.61	-4.38
1 Max Peak	19.4300 MHz	45.56	-4.43
1 Max Peak	14.2580 MHz	45.51	-4.48
1 Max Peak	13.5900 MHz	45.48	-4.52
1 Max Peak	19.7180 MHz	45.45	-4.54
1 Max Peak	19.6260 MHz	45.45	-4.55
1 Max Peak	10.6220 MHz	45.40	-4.59
1 Max Peak	4.9780 MHz	41.37	-4.62

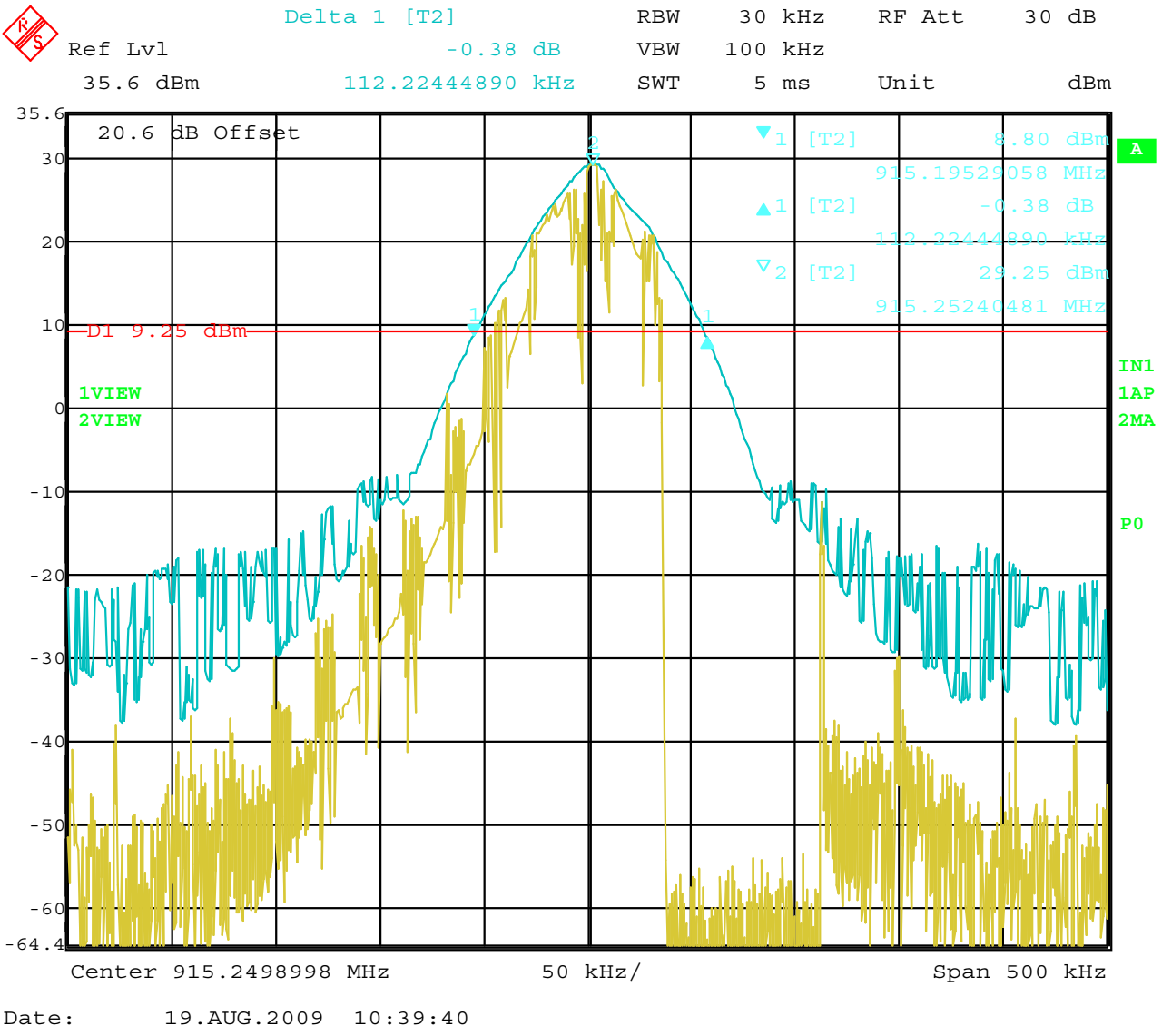
Date: 26.AUG.2009 13:30:47

-20 dB BANDWIDTH

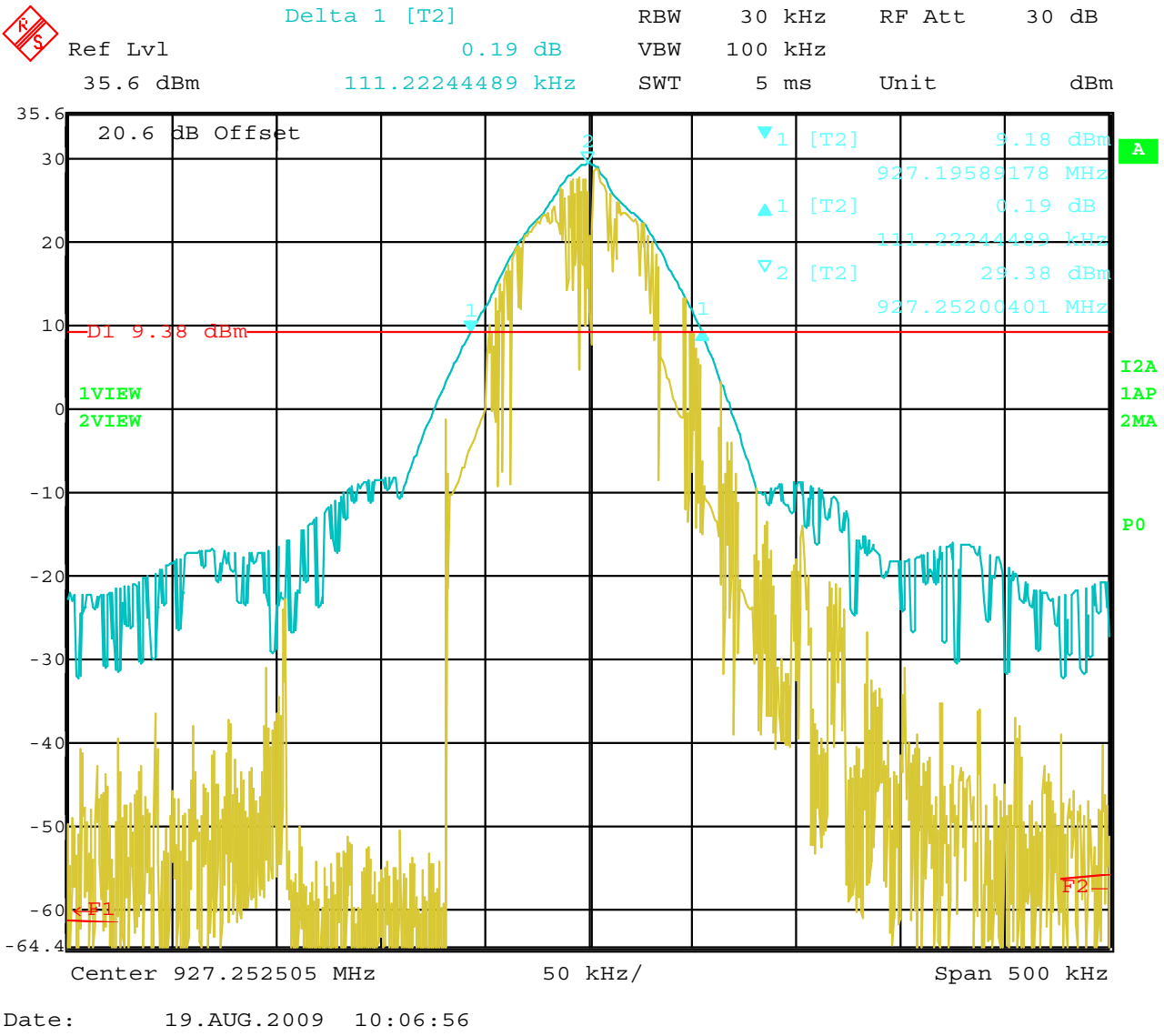
DATA SHEETS



20 dB Bandwidth of Fundamental – Low Channel



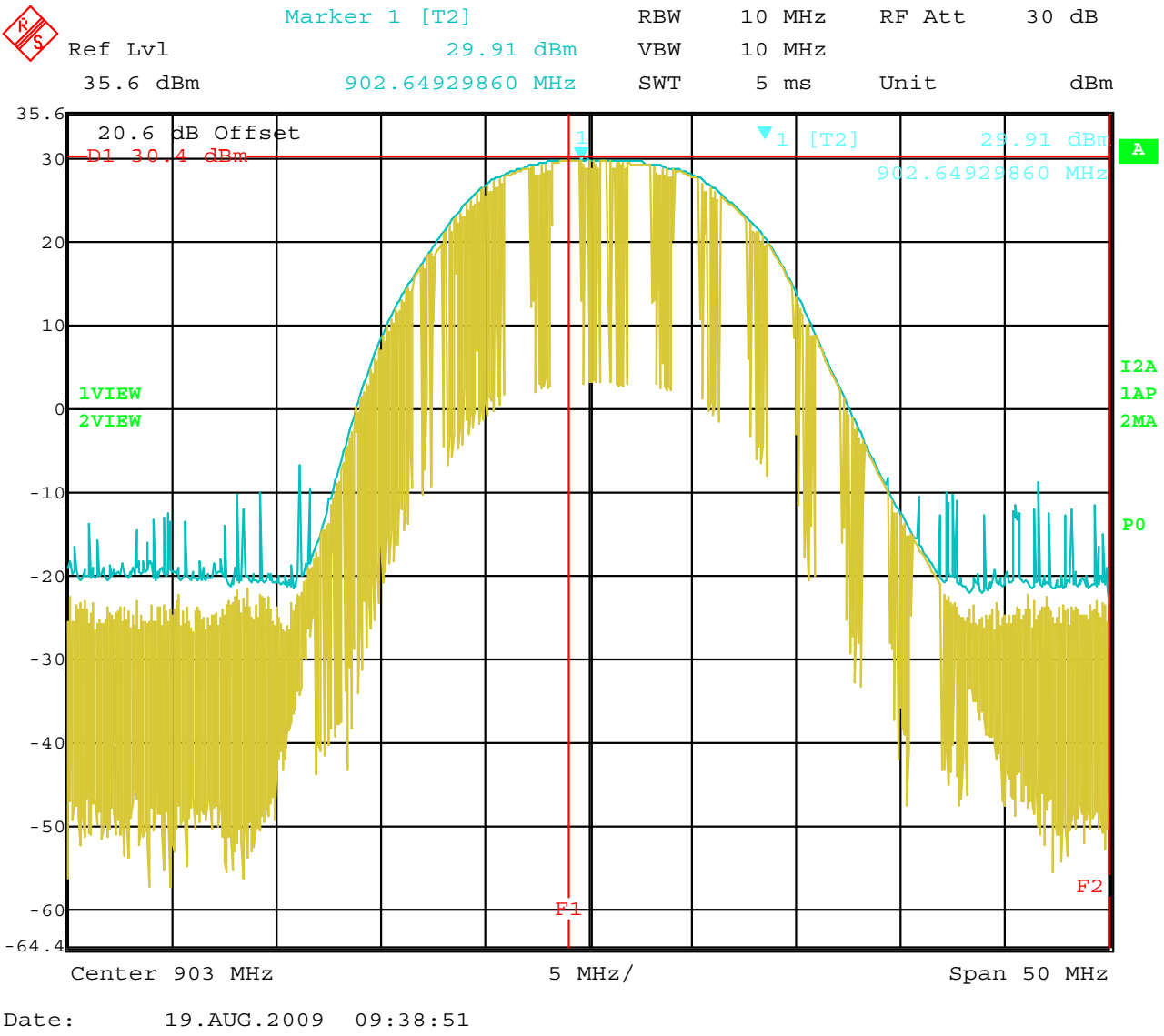
20 dB Bandwidth of Fundamental – Middle Channel



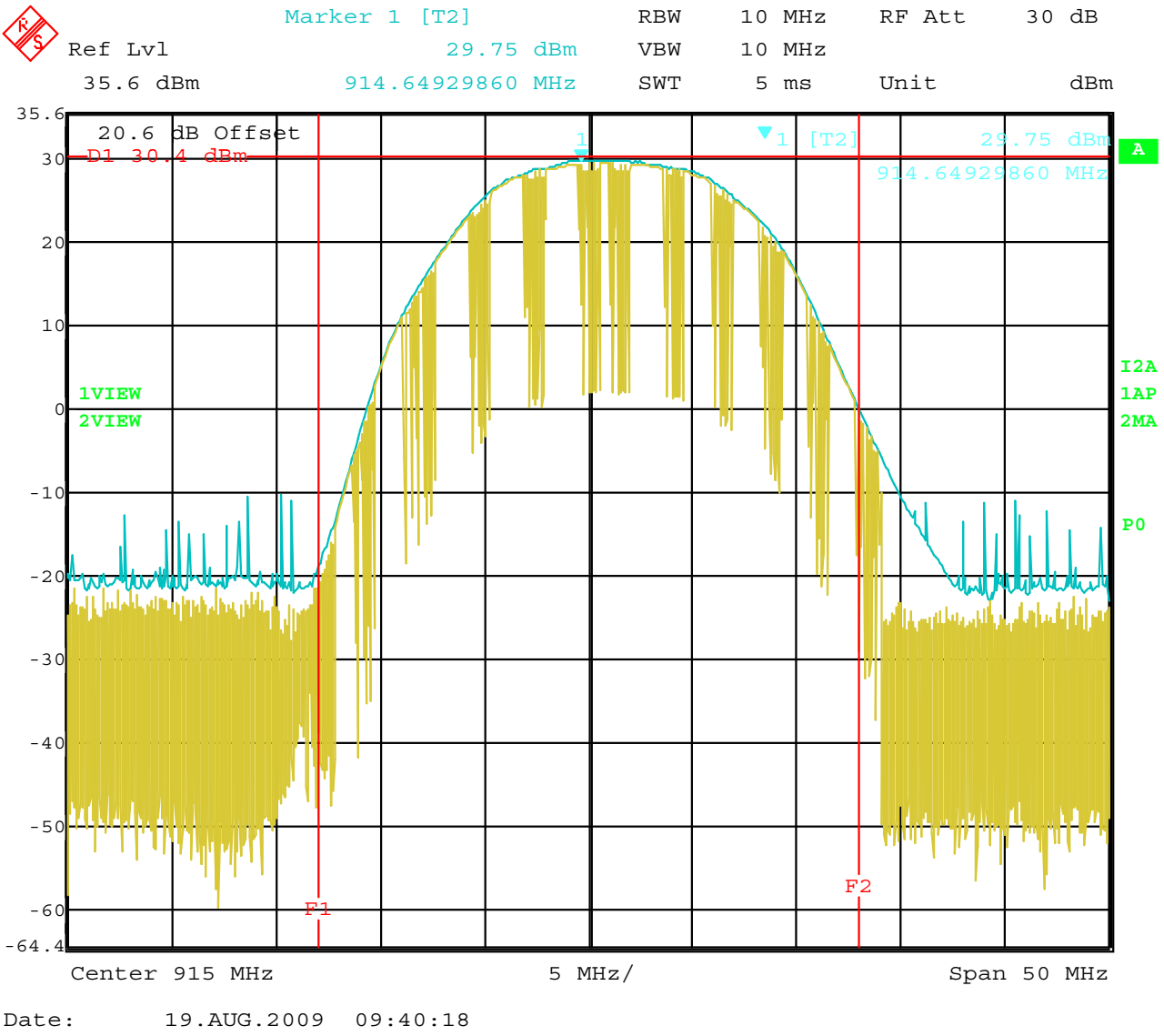
20 dB Bandwidth of Fundamental – High Channel

PEAK POWER OUTPUT

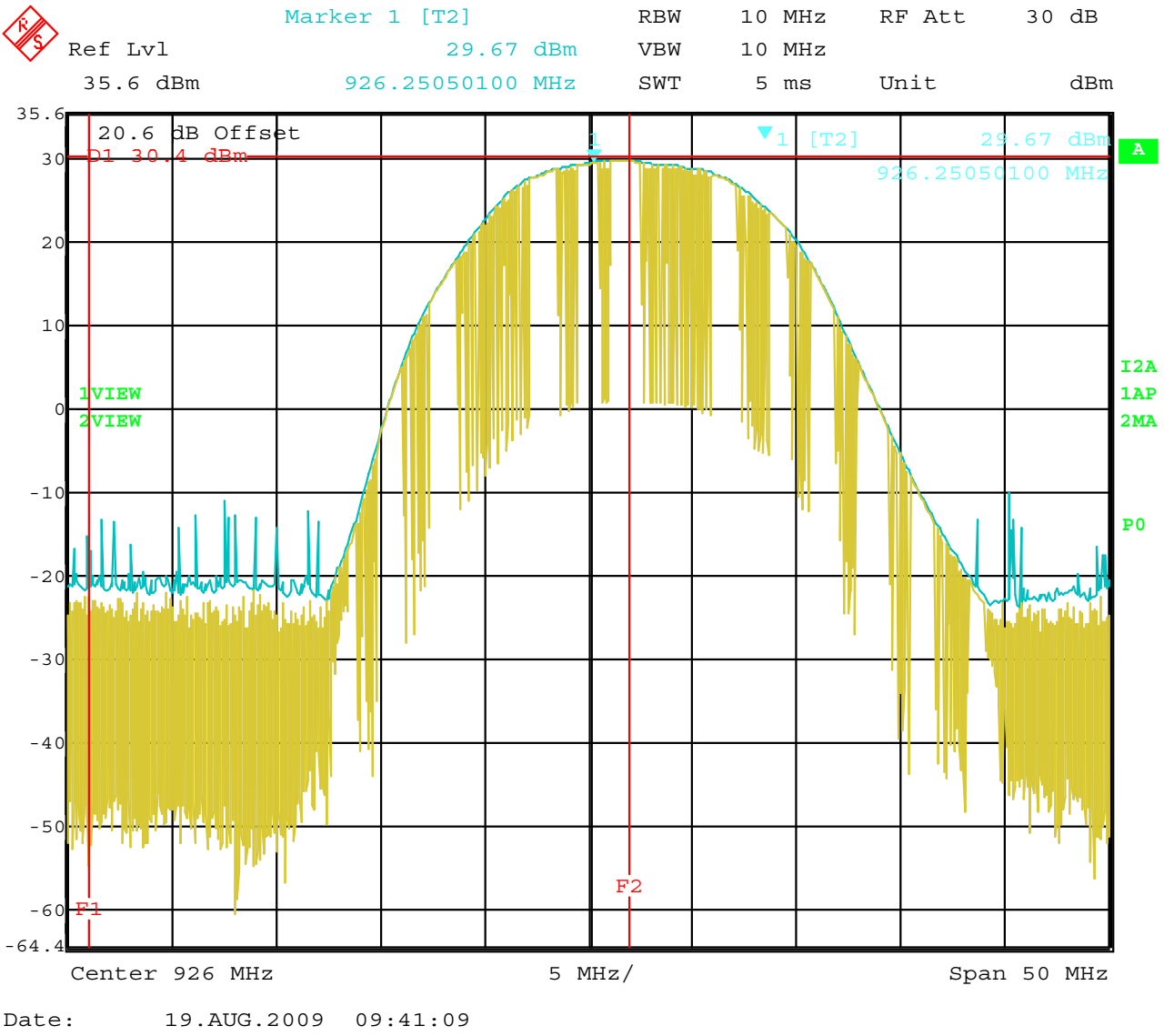
DATA SHEETS



Peak Power Output – Low Channel – Antenna Port #4



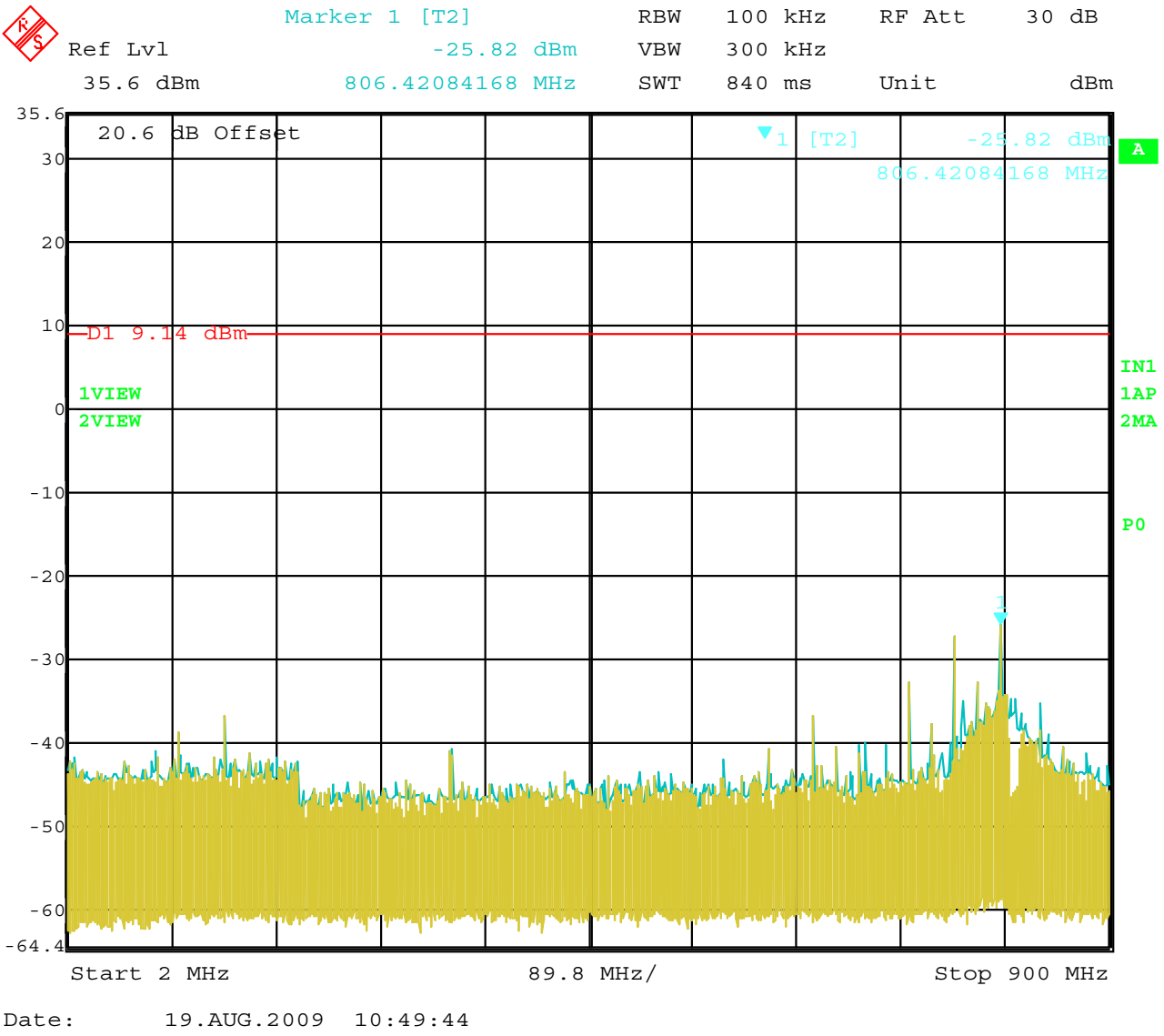
Peak Power Output –Middle Channel – Antenna Port #4



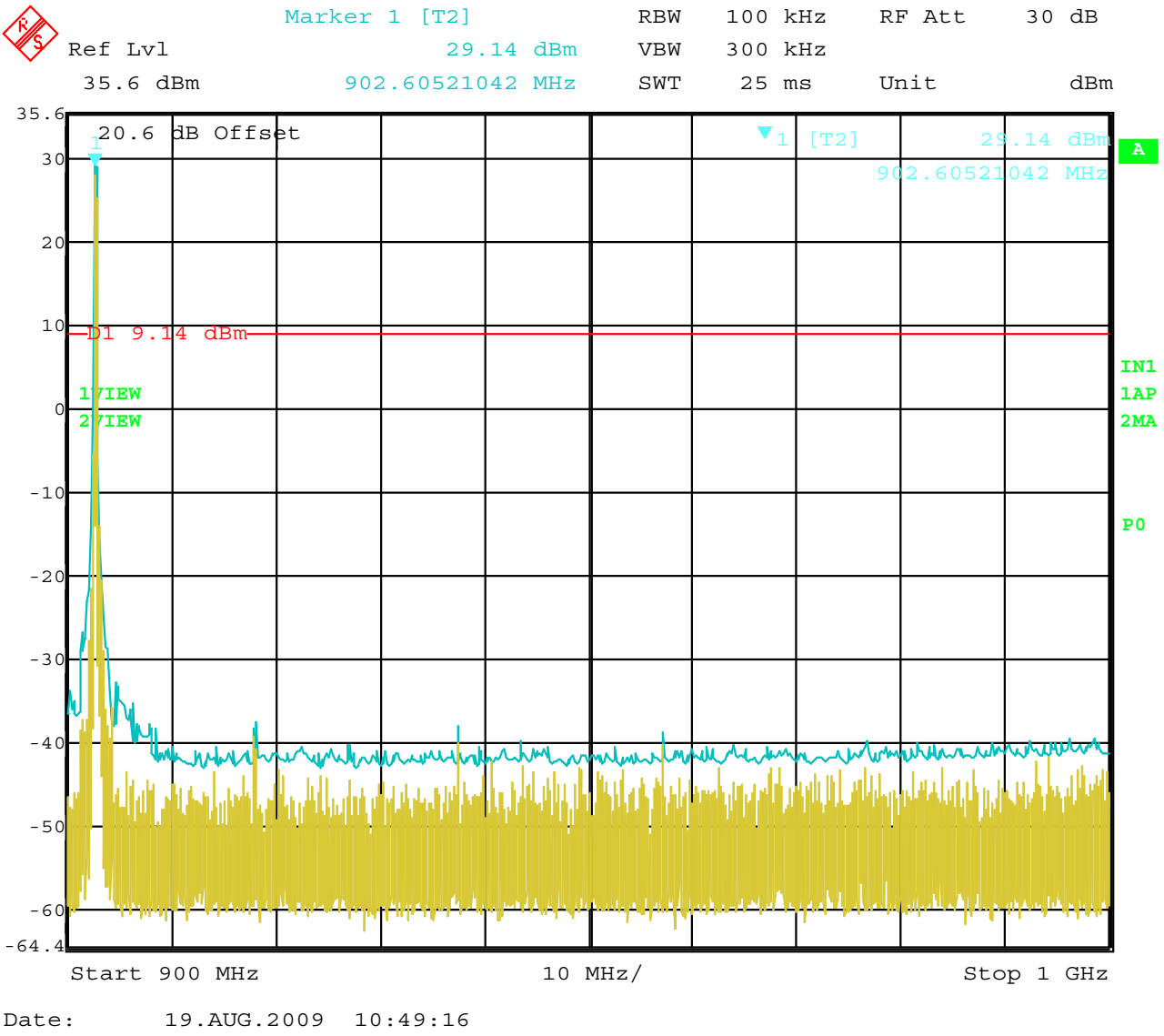
Peak Power Output – High Channel – Antenna Port #4

RF CONDUCTED ANTENNA TEST

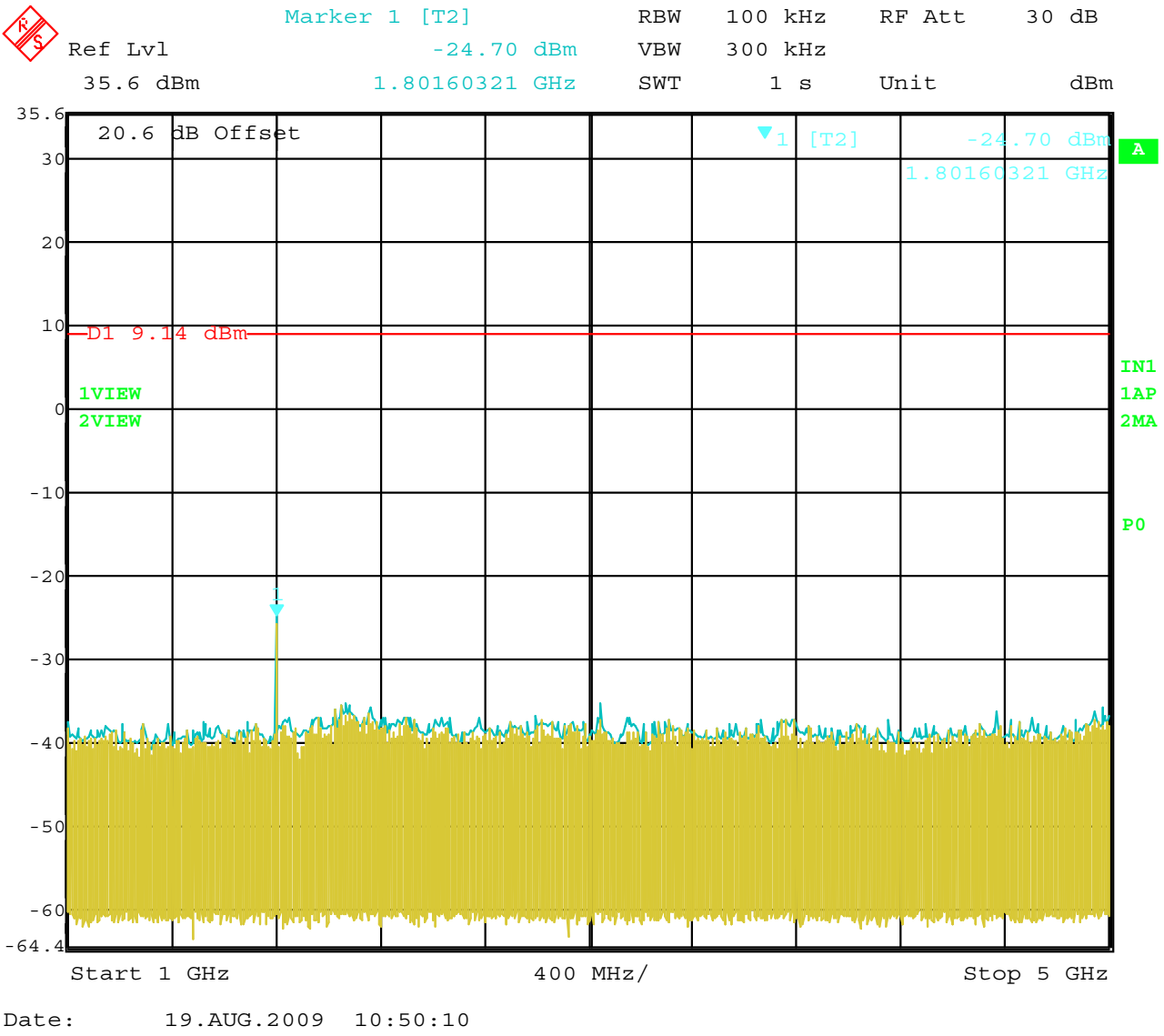
DATA SHEETS



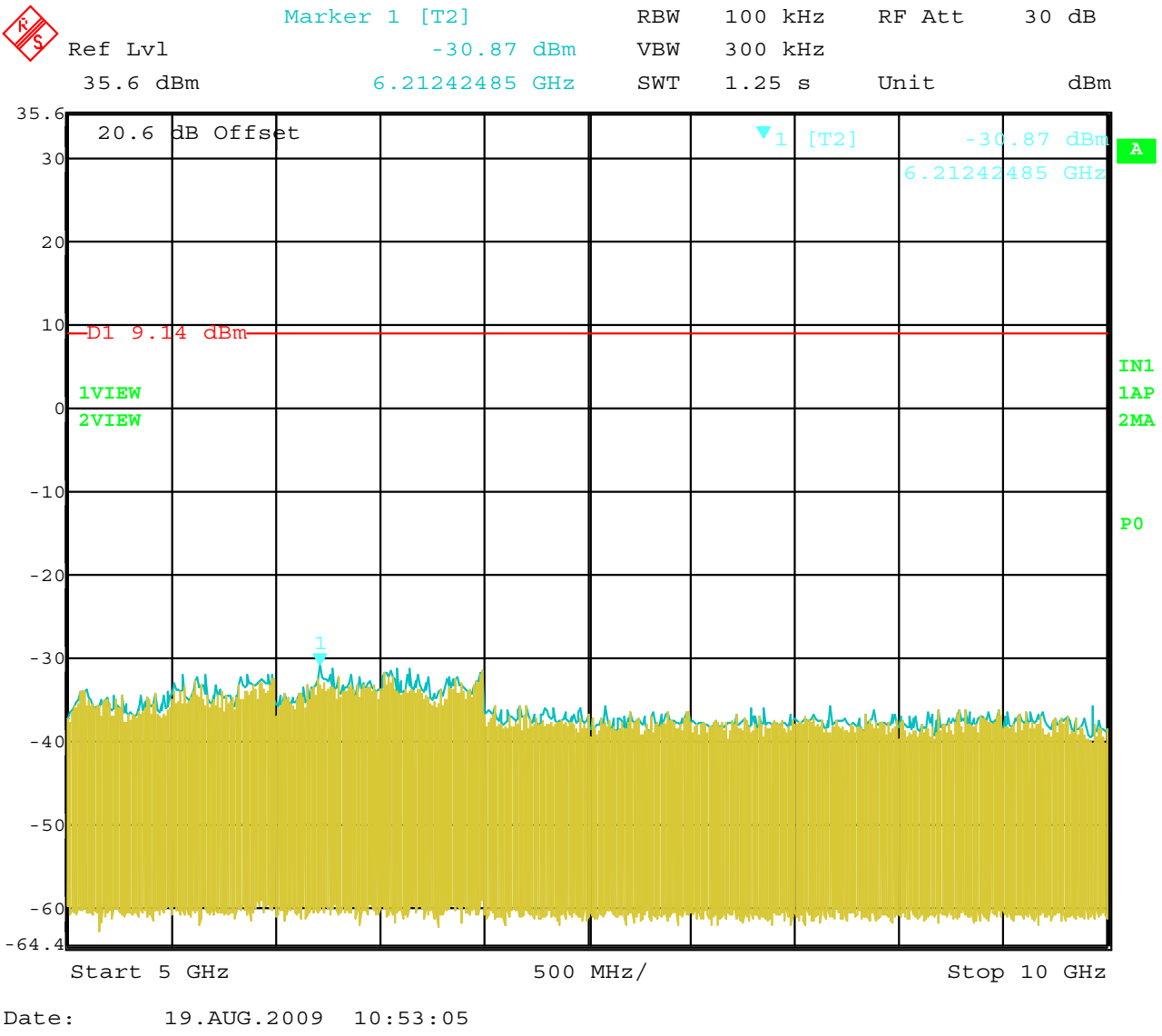
RF Antenna Conducted Test – Low Channel – 2 MHz to 900 MHz



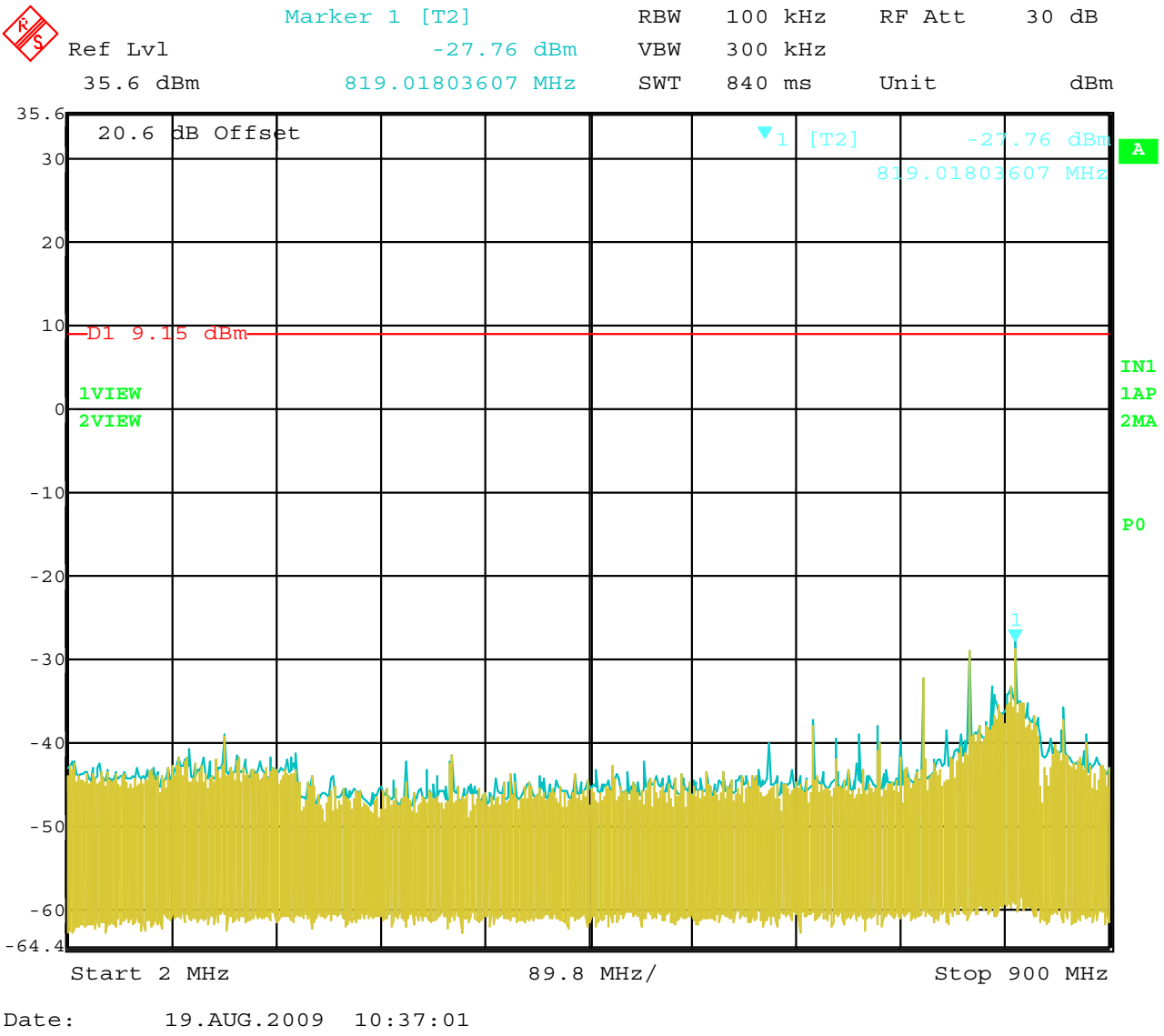
RF Antenna Conducted Test – Low Channel – 900 MHz to 1 GHz



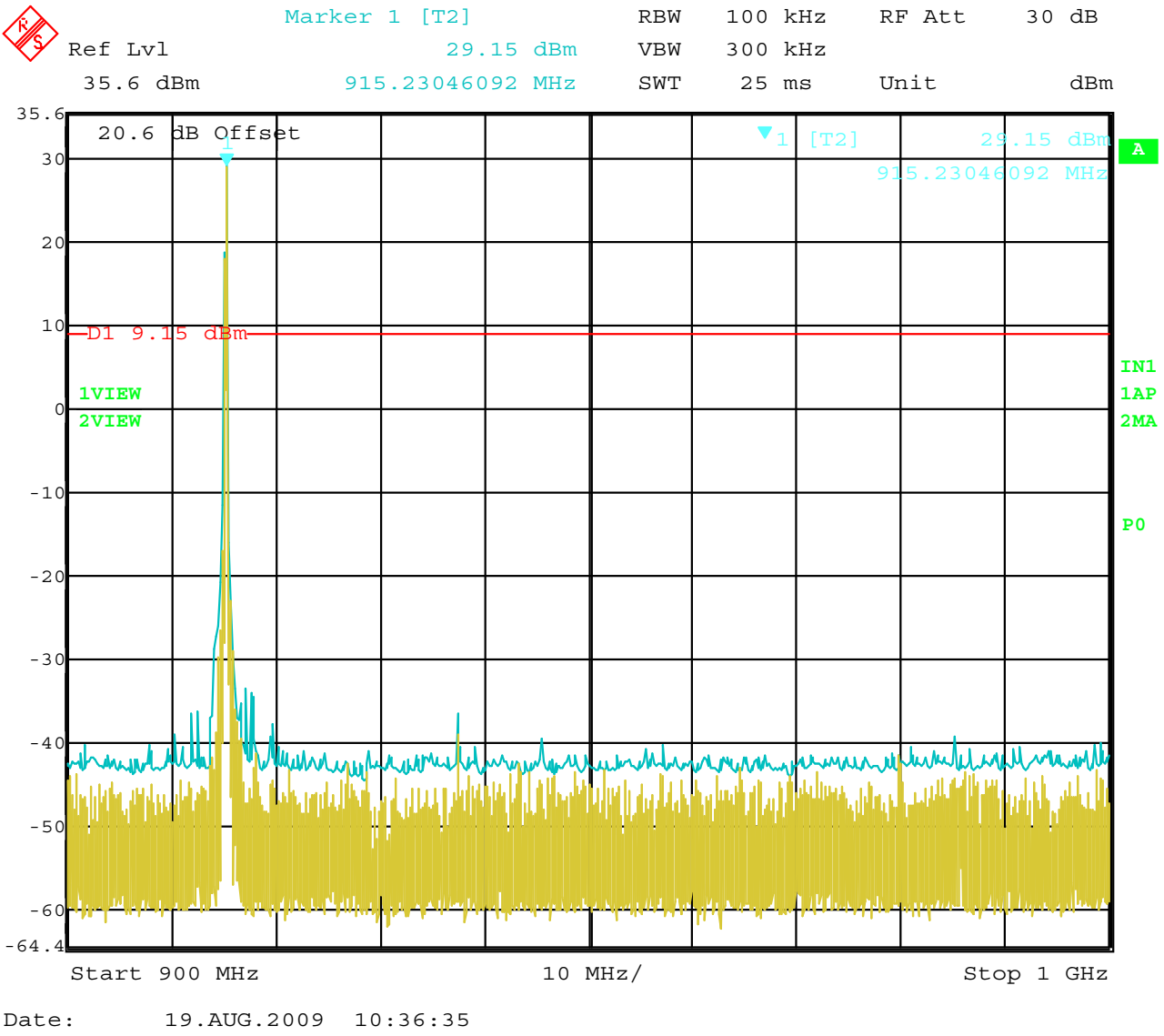
RF Antenna Conducted Test – Low Channel – 1 GHz to 5 GHz



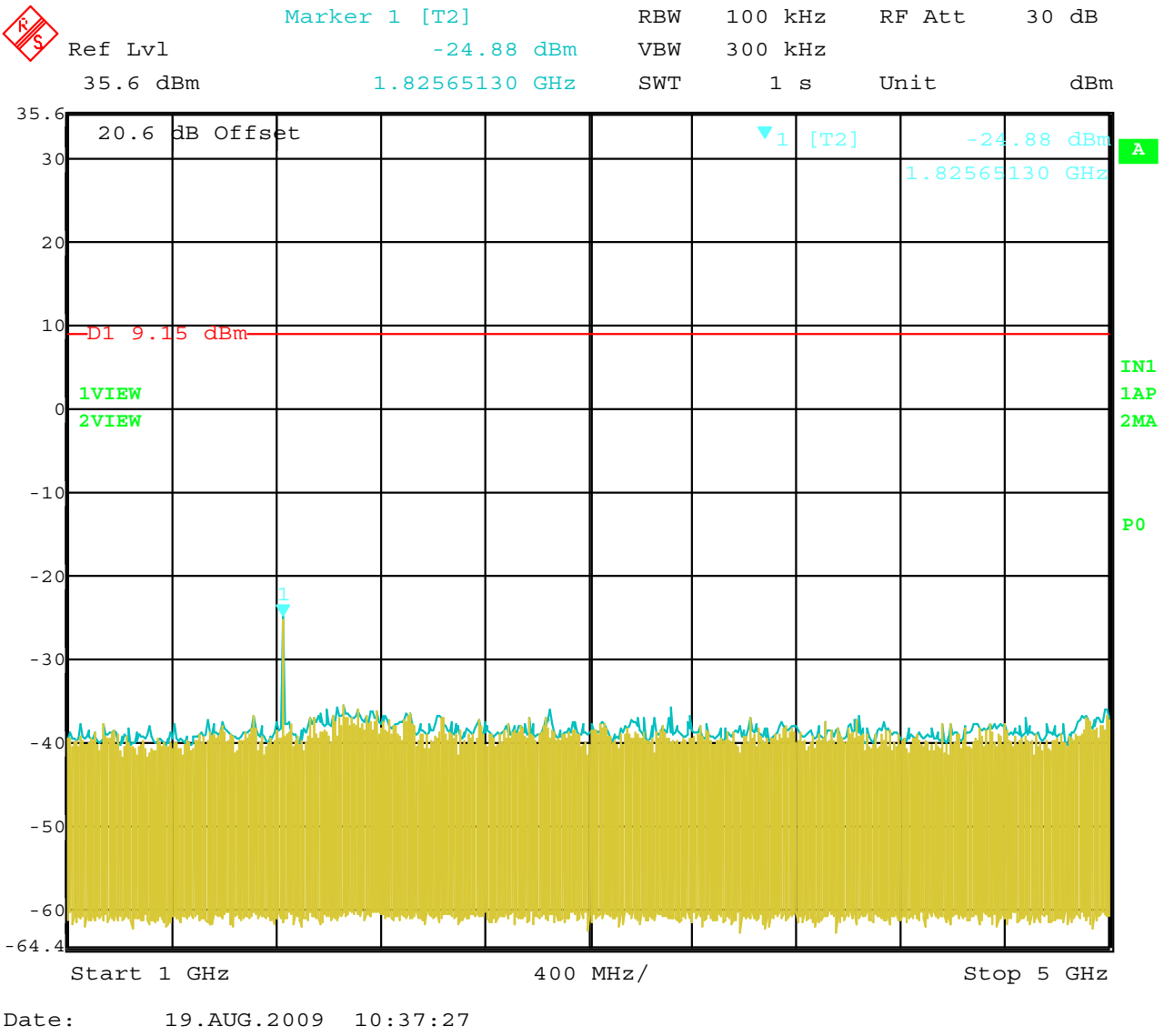
RF Antenna Conducted Test – Low Channel – 5 GHz to 10 GHz



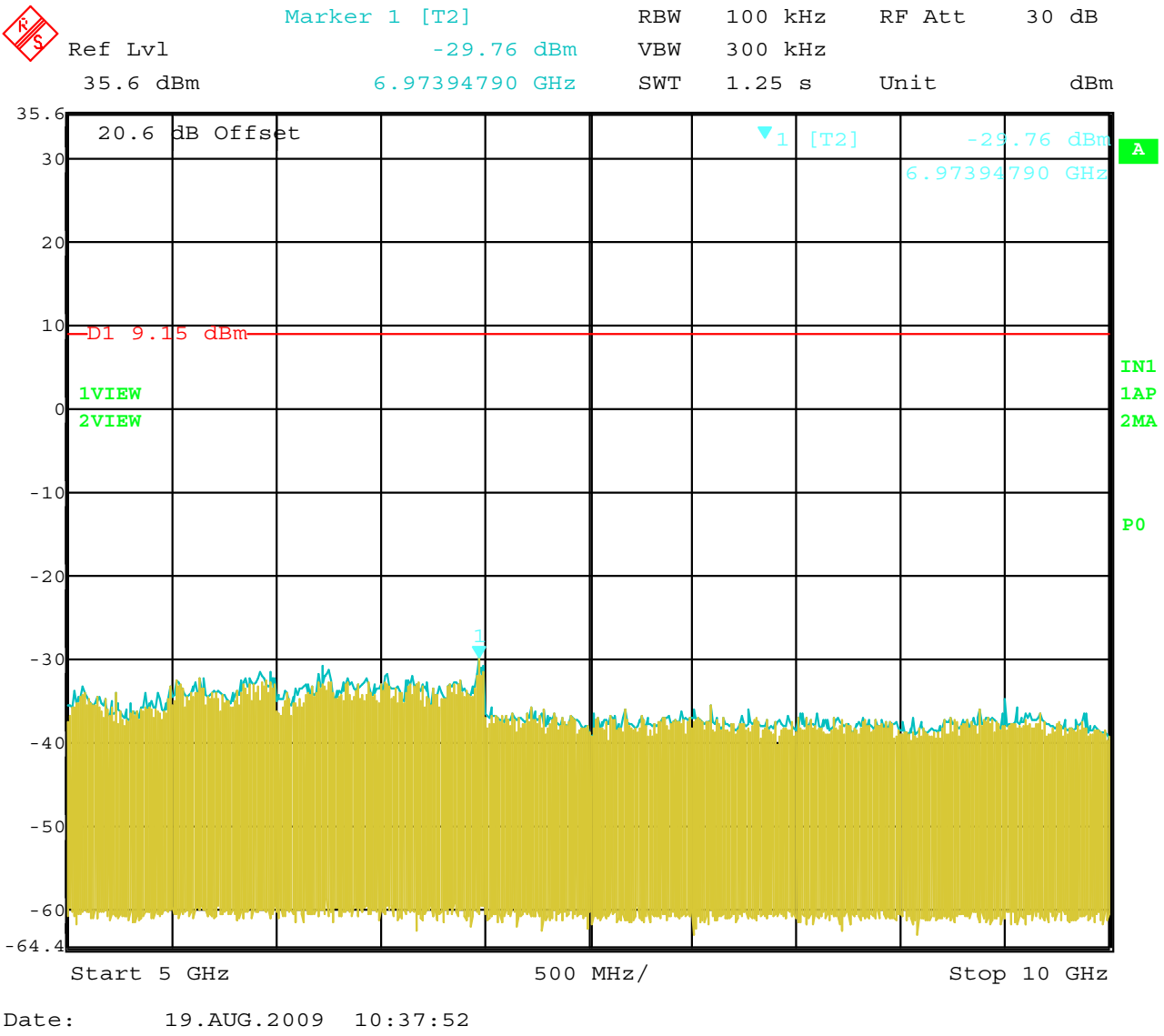
RF Antenna Conducted Test – Middle Channel – 2 MHz to 900 MHz



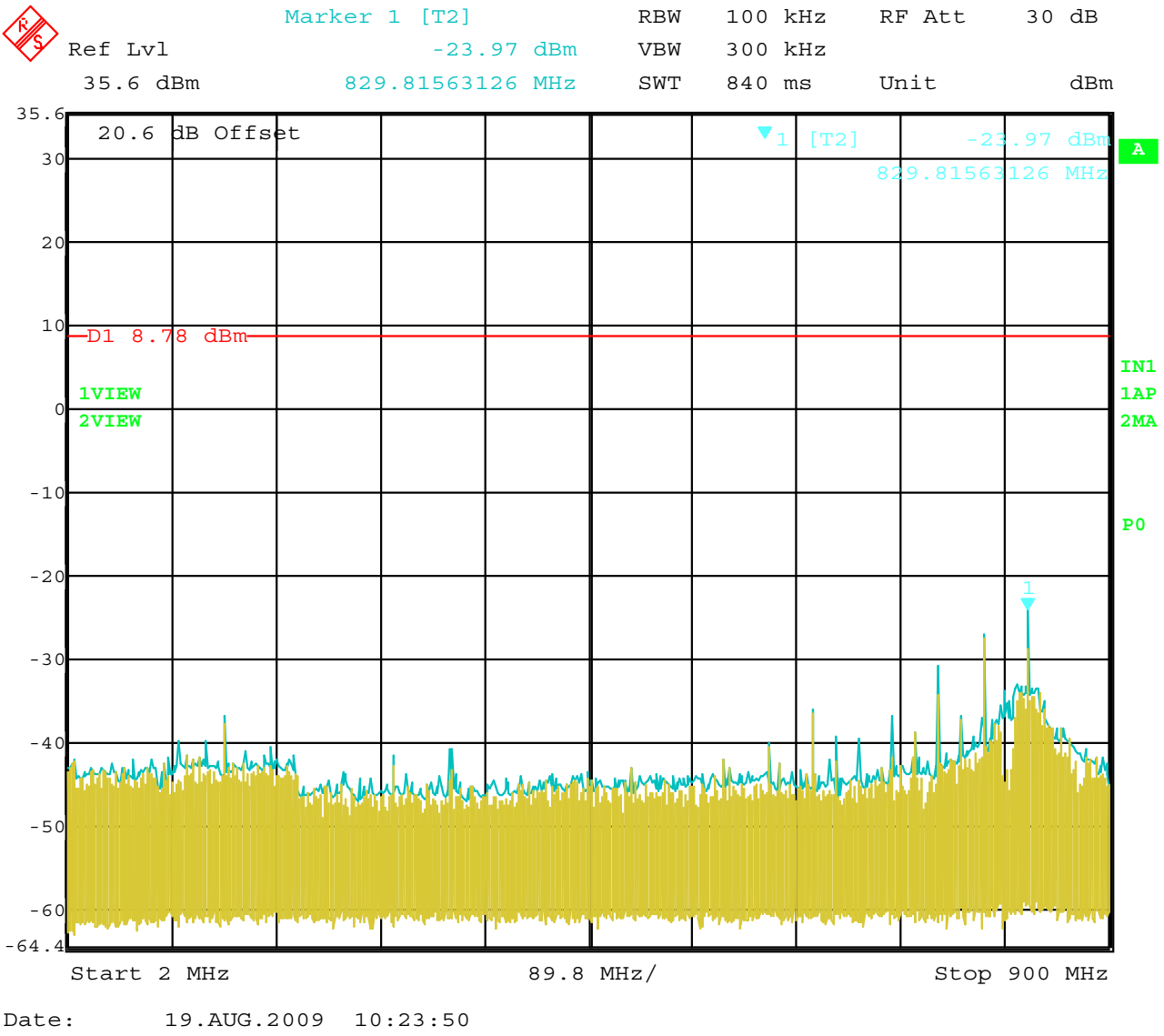
RF Antenna Conducted Test – Middle Channel – 900 MHz to 1 GHz



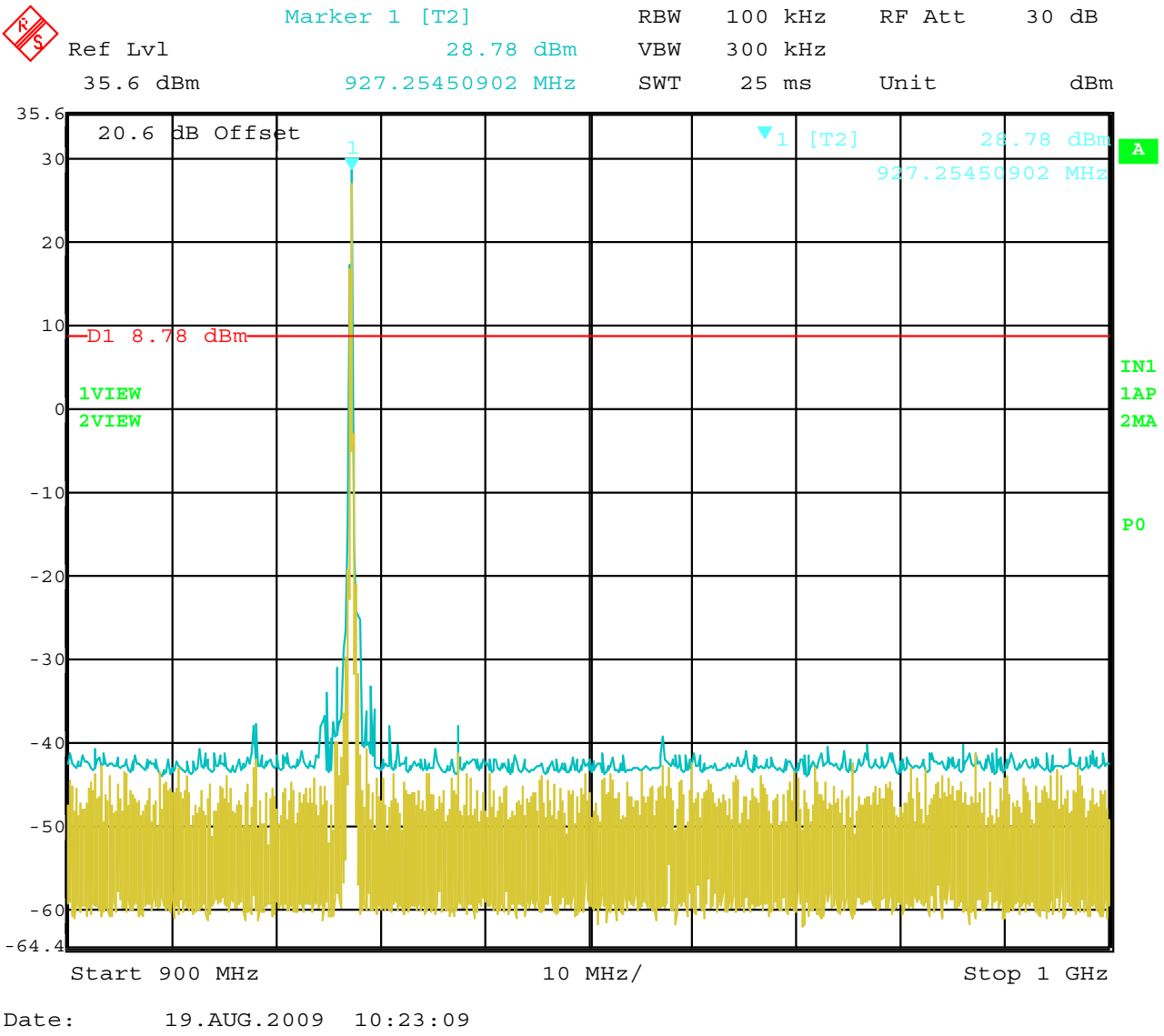
RF Antenna Conducted Test – Middle Channel – 1 GHz to 5 GHz



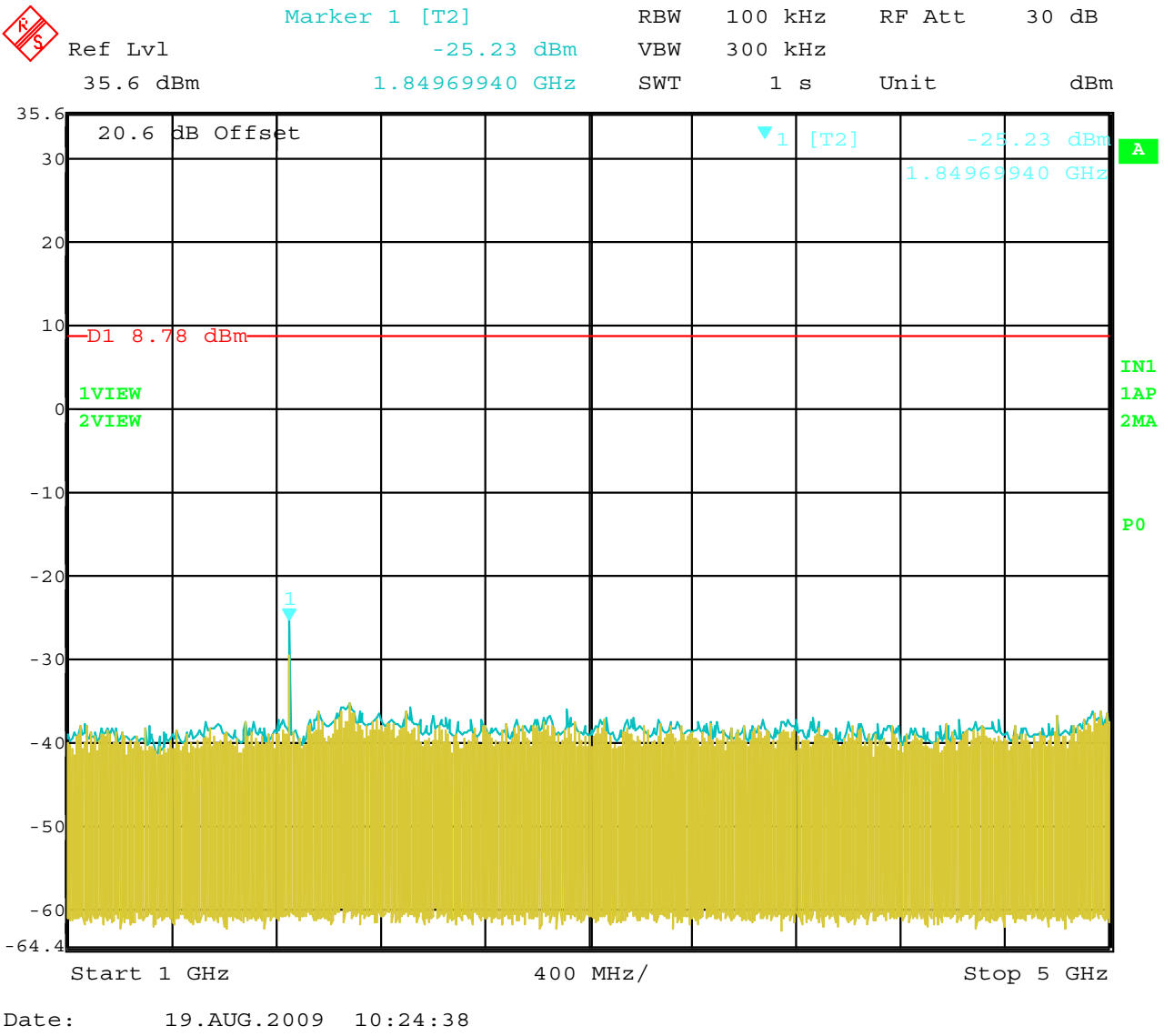
RF Antenna Conducted Test – Middle Channel – 5 GHz to 10 GHz



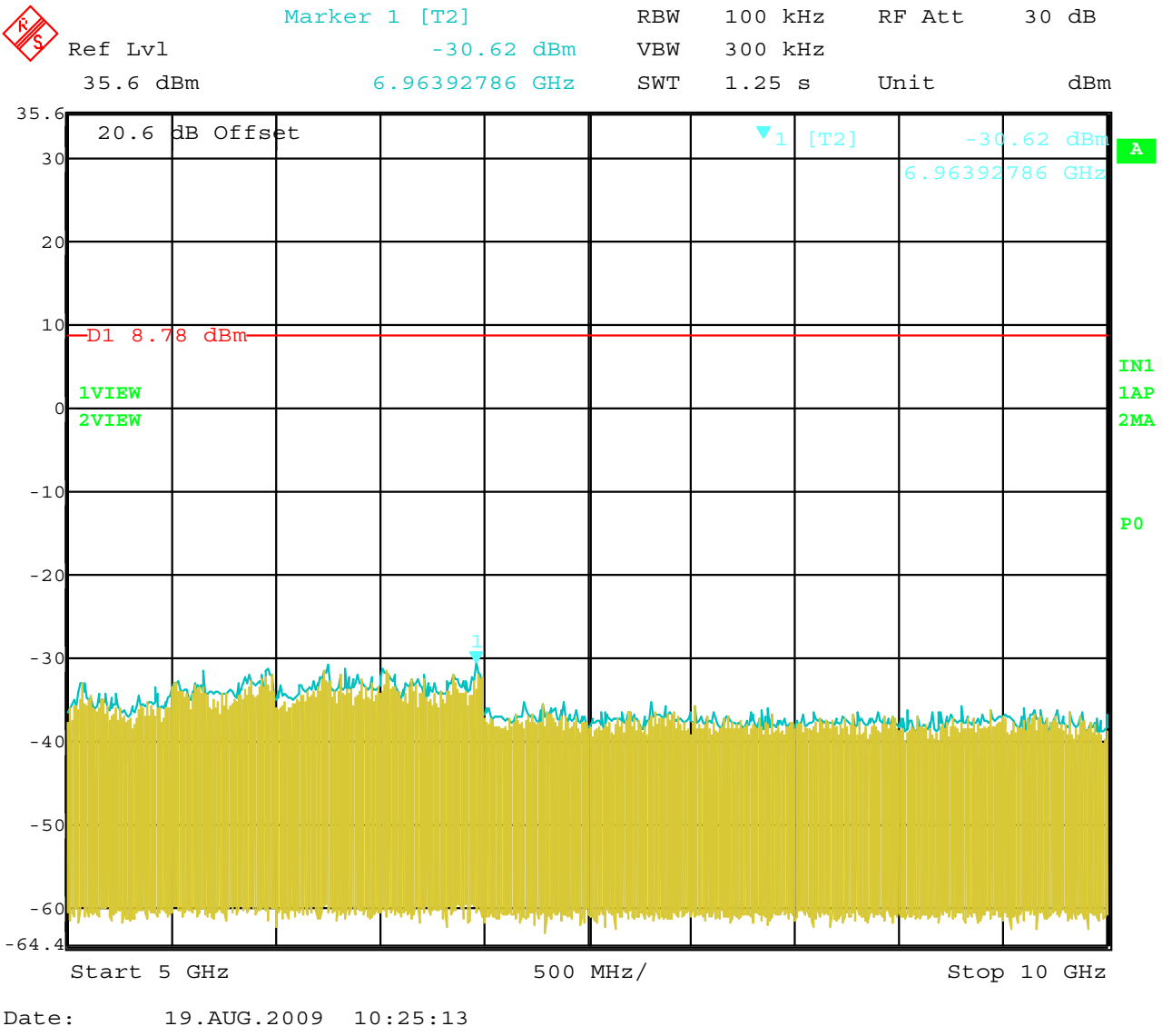
RF Antenna Conducted Test – High Channel – 2 MHz to 900 MHz



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



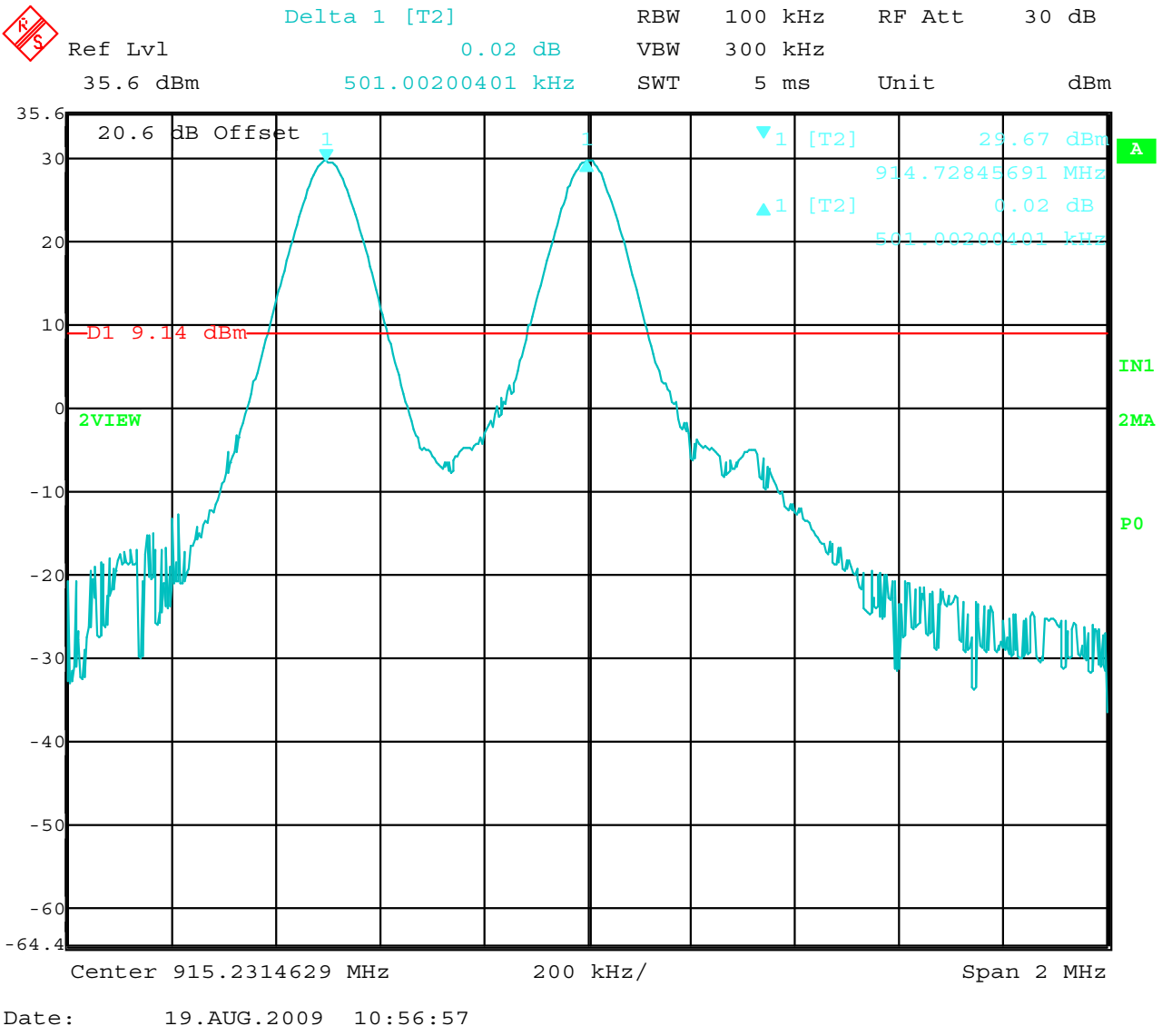
RF Antenna Conducted Test – High Channel – 1 GHz to 5 GHz



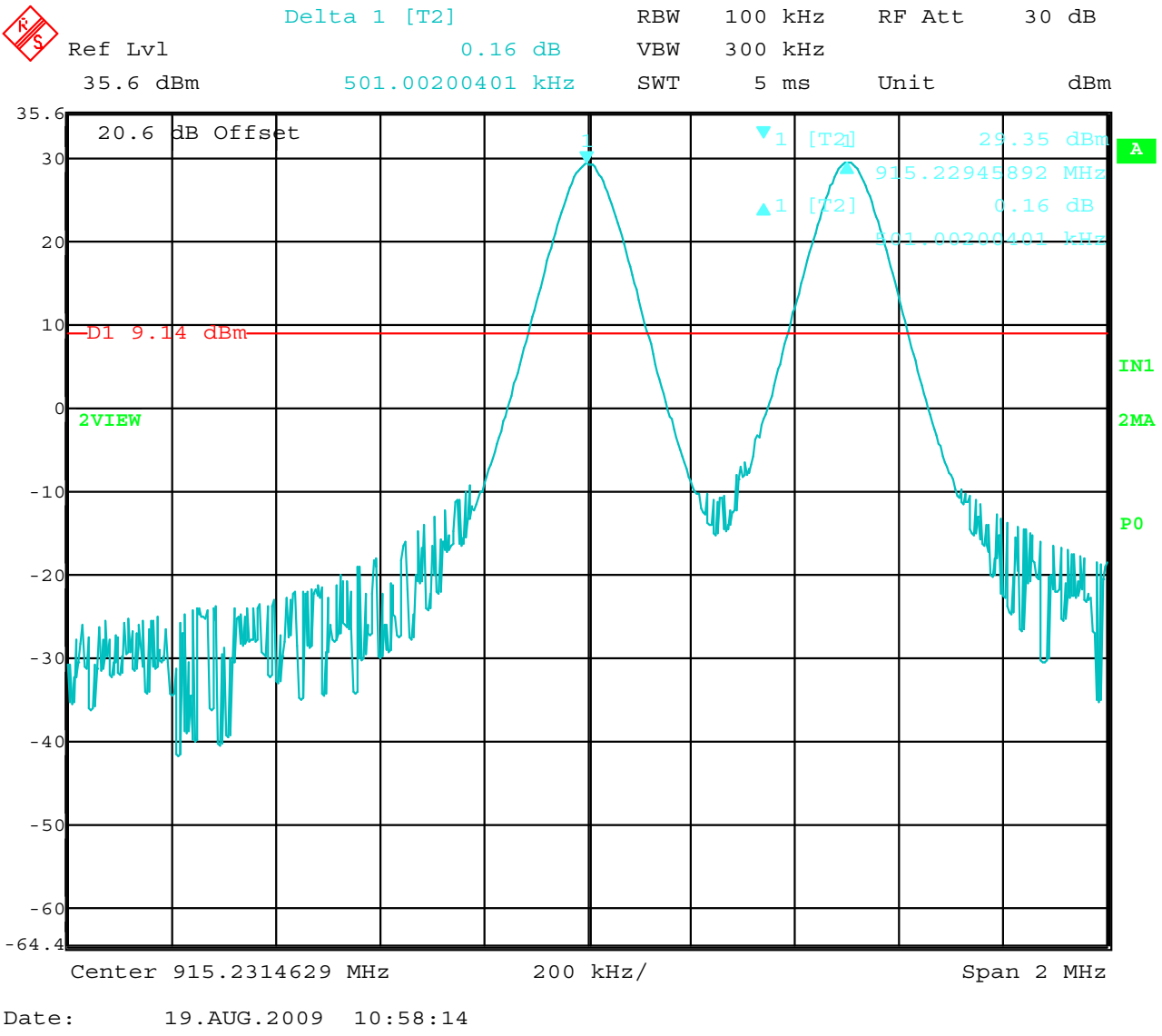
RF Antenna Conducted Test – High Channel – 5 GHz to 10 GHz

CHANNEL HOPPING SEPARATION

DATA SHEET



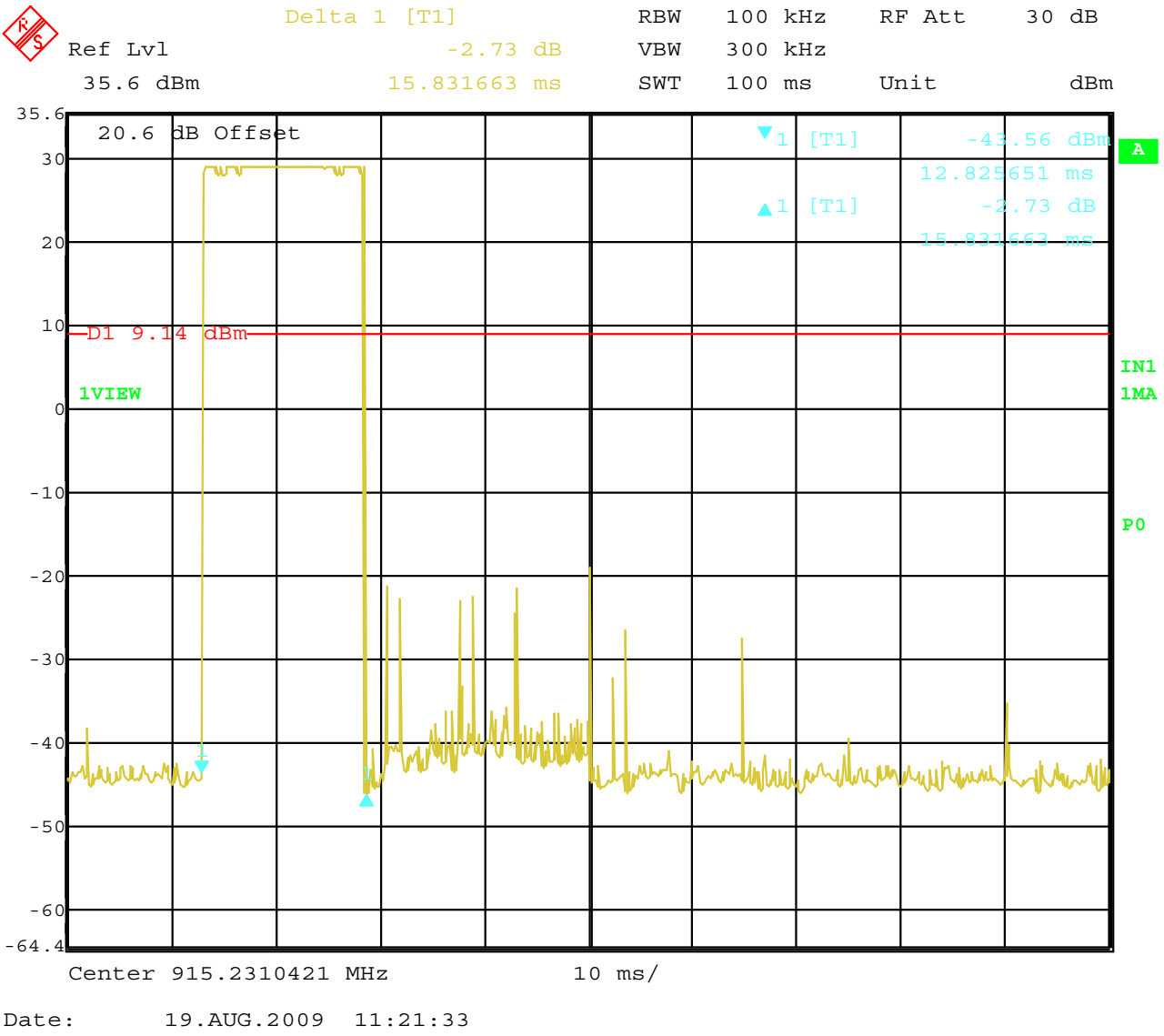
Channel Frequency Separation Test – Plot #1



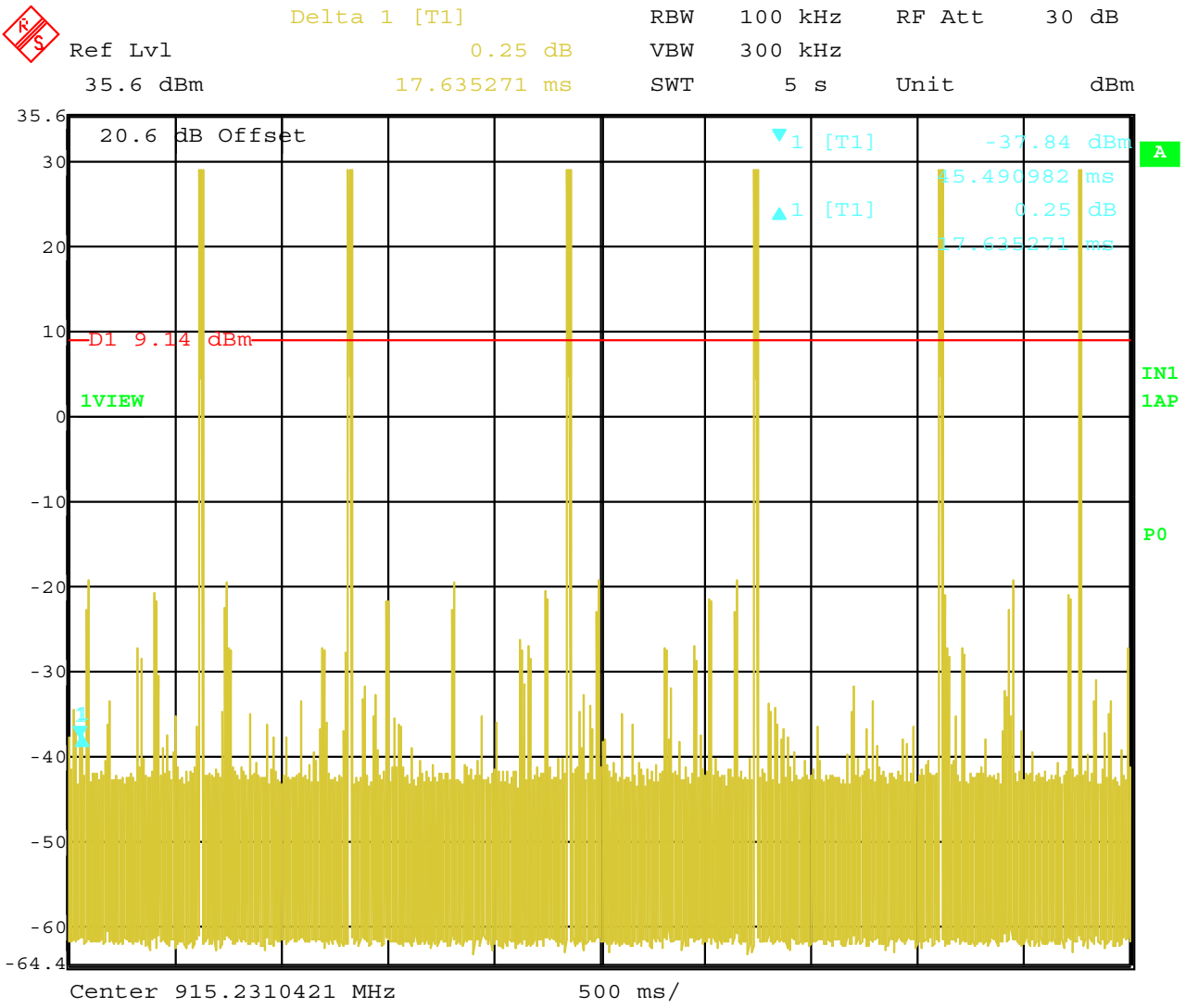
Channel Frequency Separation Test – Plot #2

AVERAGE TIME OF OCCUPANCY

DATA SHEETS



Time of One Pulse = 15.831663 mS

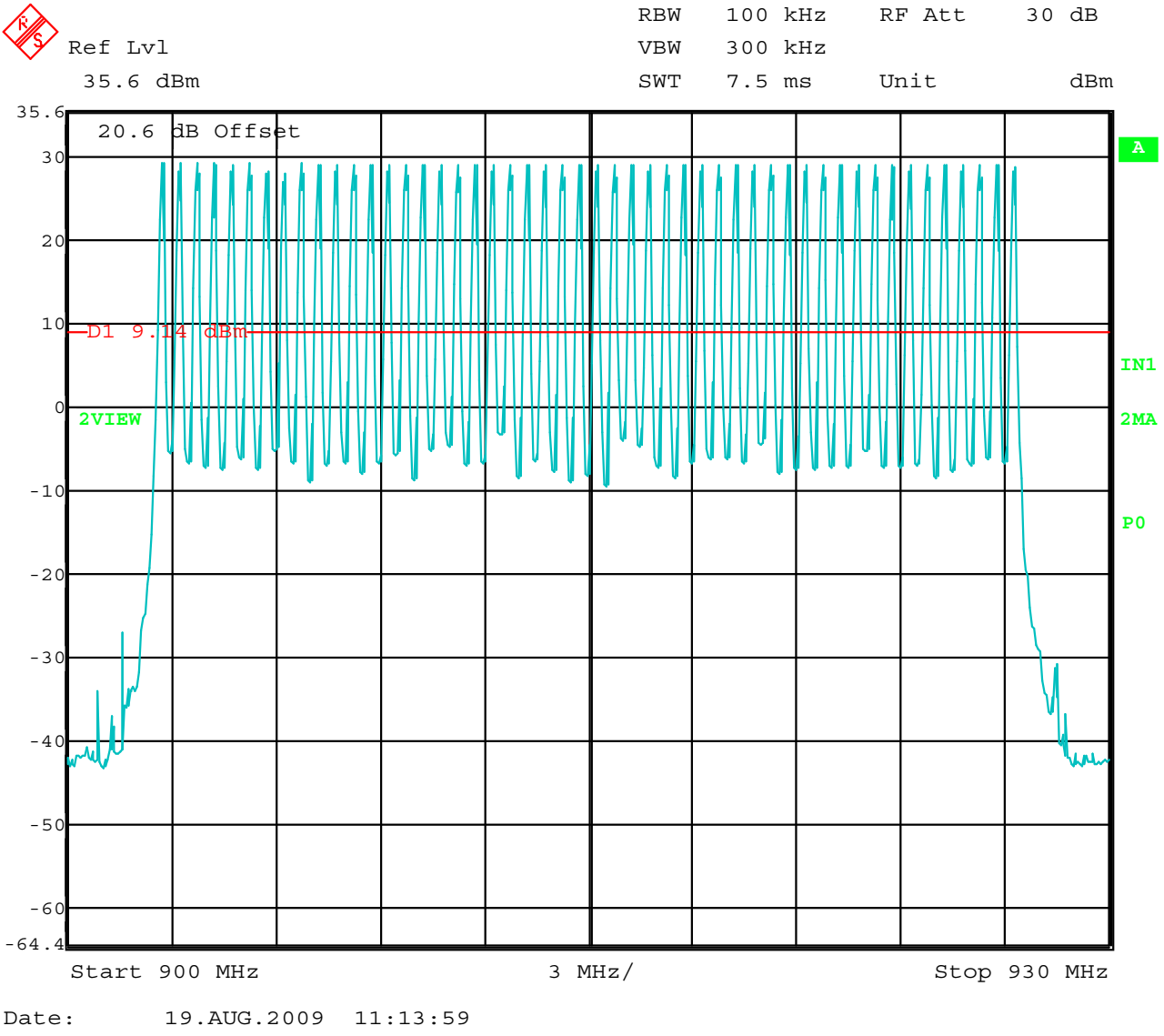


Date: 19.AUG.2009 11:32:35

Number of Pulses in 5 Seconds = 6
Total Number of Pulses in 20 Seconds = 24
Time of Occupancy = 15.831663 mS * 24 = 379.959912 mS
Limit = 400 mS in a 20 Second Period

NUMBER OF HOPPING FREQUENCIES

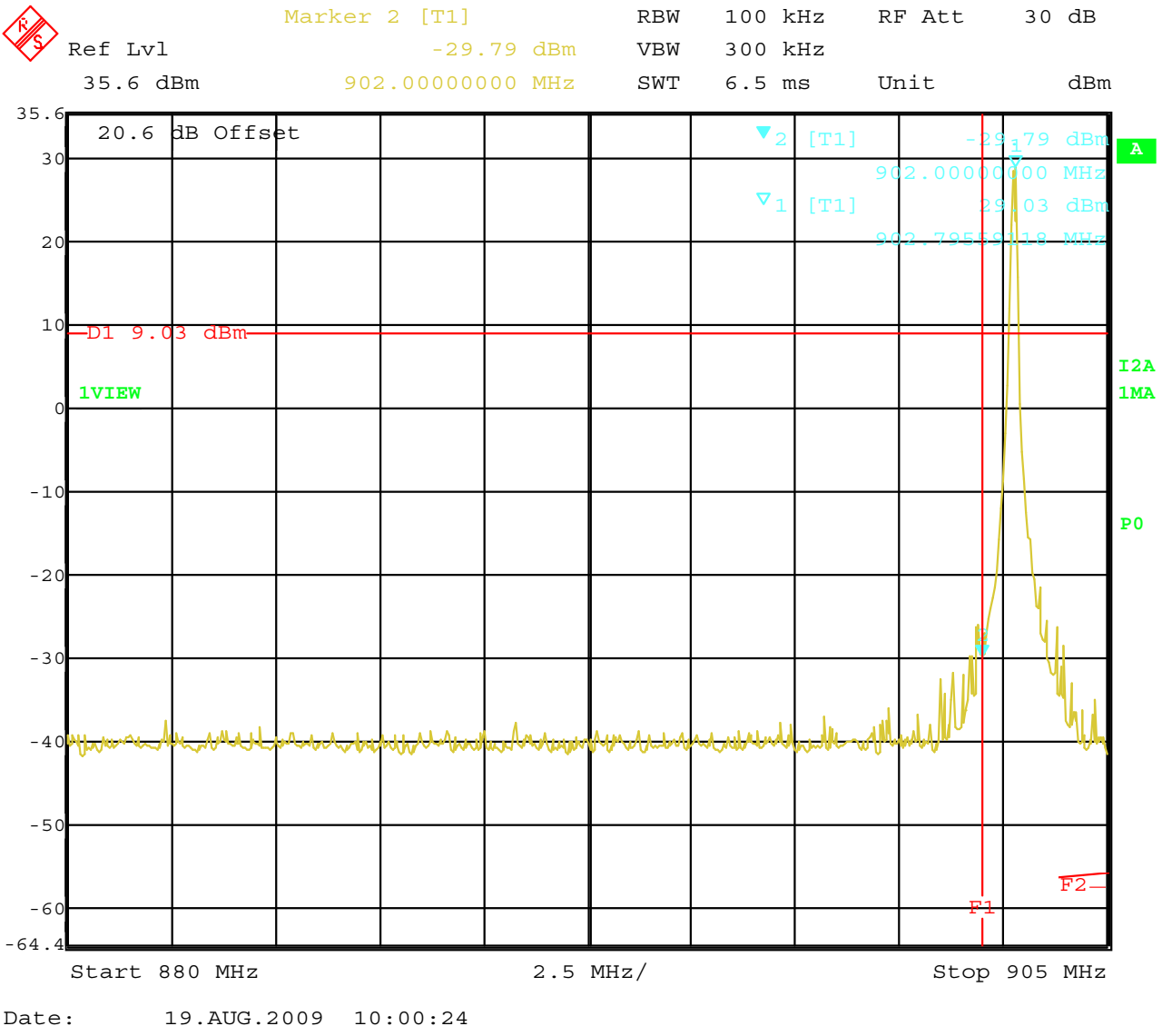
DATA SHEET



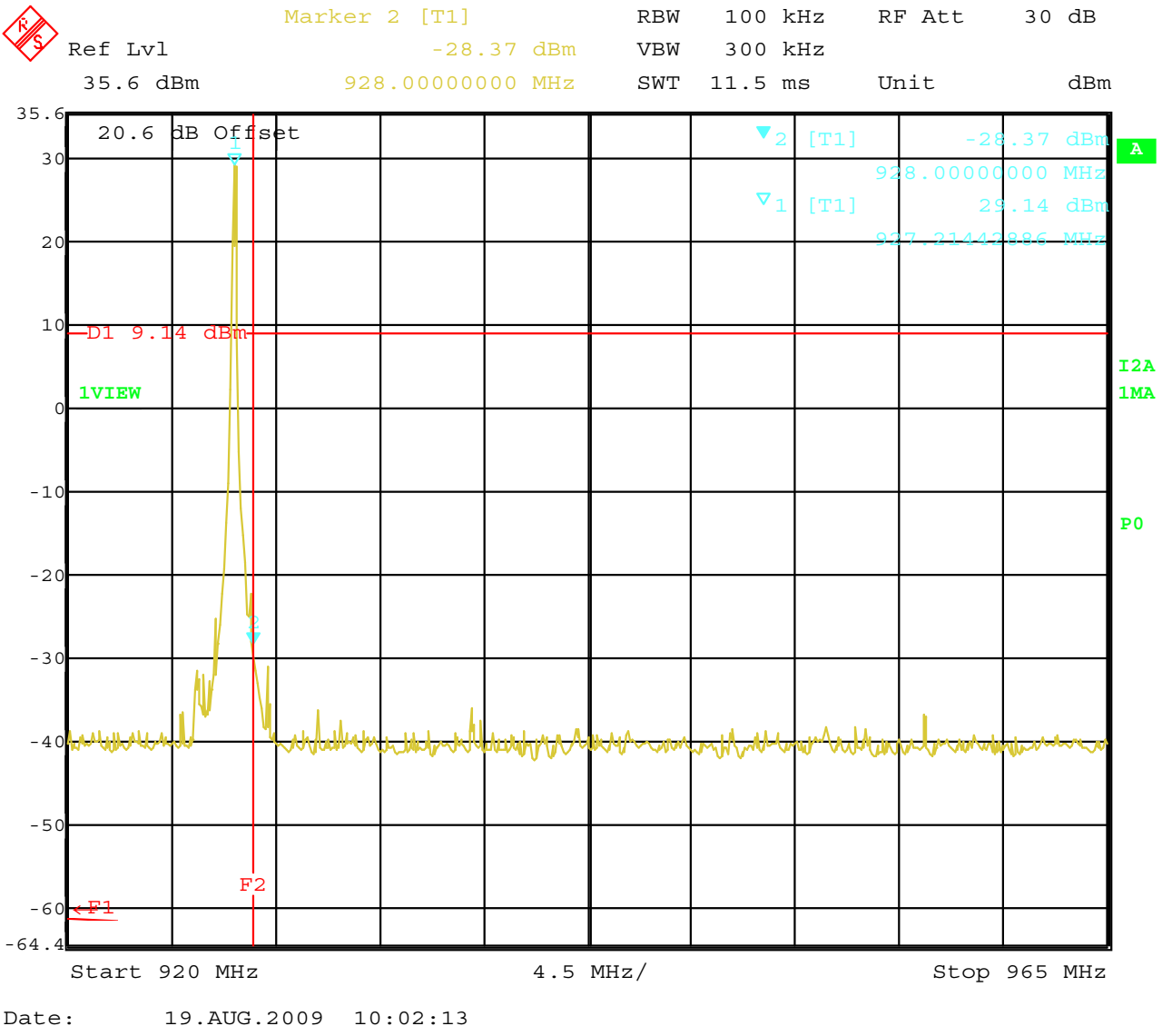
Number of Frequencies (50 Total)

BAND EDGES

DATA SHEETS



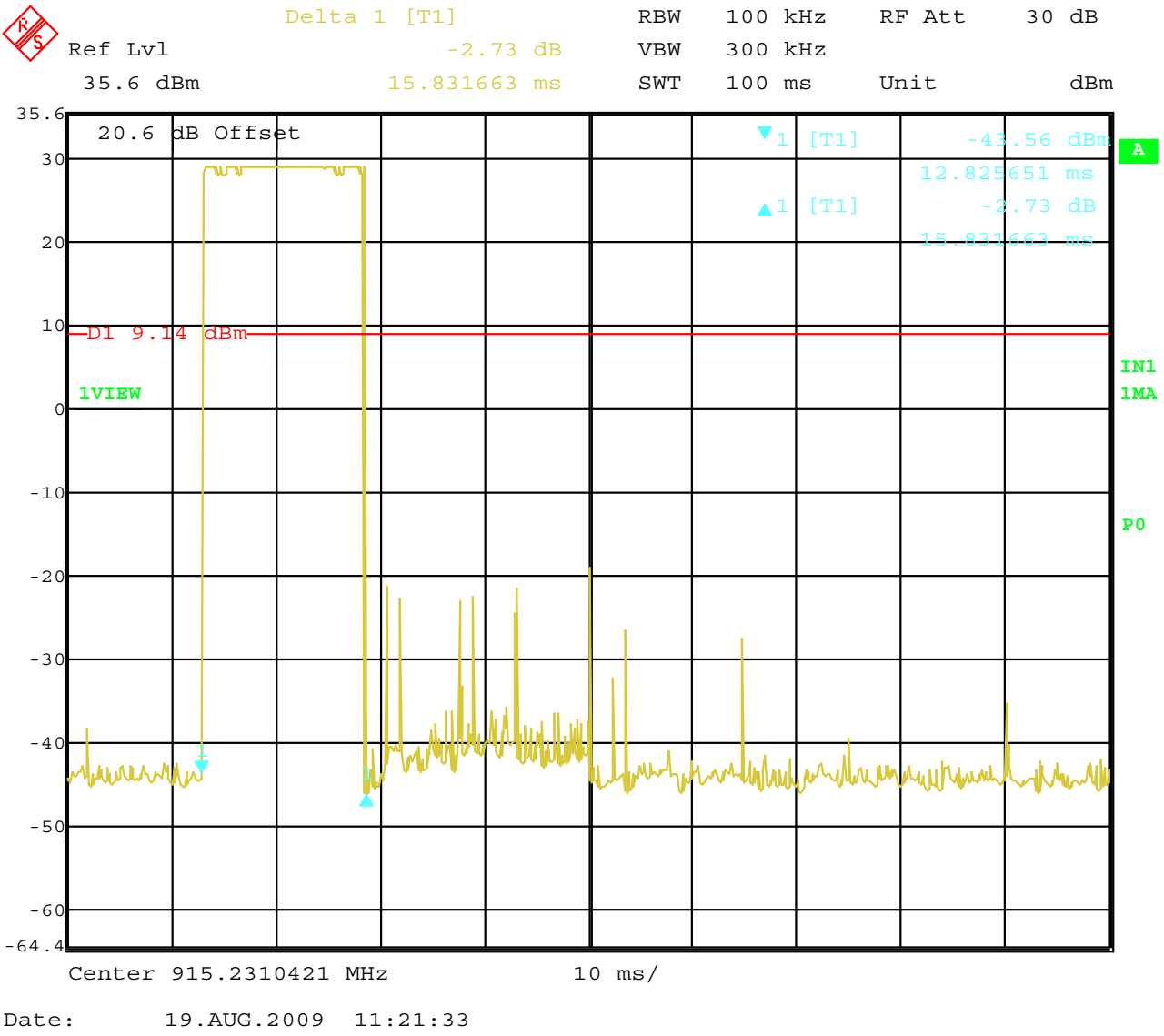
Band Edge – Low Channel



Band Edge – High Channel

DUTY CYCLE INFORMATION

DATA SHEETS



Time of 1 Pulse = 15.831663 mS
Number of Pulses in 100 mS =1
Total Duty Cycle: 15.831663 %