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Radio Test Report

FCC Part 27
757 MHz to 758 MHz and
787 MHz to 788 MHz

Model: XETA7-M2

FCC ID:	PEJ-9382009
COMPANY:	Xetawave LLC 258 S. Taylor Avenue Louisville, CO 80027
TEST SITE(S):	National Technical Systems - Silicon Valley 41039 Boyce Road. Fremont, CA. 94538-2435
REPORT DATE:	December 15, 2016
REISSUE DATE:	January 5, 2017
FINAL TEST DATES:	December 5, 7, 8 and 9, 2016
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PROGRAM MGR / TECHNICAL REVIEWER:	QUALITY ASSURANCE DELEGATE / FINAL REPORT PREPARER:
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REVISION HISTORY

Rev#	Date	Comments	Modified By
-	December 15, 2016	First release	
1	January 5, 2017	Notes added to the measurements and the typos corrected.	Deniz Demirci

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SCOPE

Tests have been performed on the Xetawave LLC model XETA7-M2, pursuant to the relevant requirements of the following standard(s) in order to obtain device certification against the regulatory requirements of the Federal Communications Commission.

- CFR 47 Part 27 Subpart C (Operation in 746 - 758 MHz and 776 – 788 MHz Bands)

Conducted and radiated emissions data has been collected, reduced, and analyzed within this report in accordance with measurement guidelines set forth in the following reference standards and as outlined in National Technical Systems - Silicon Valley test procedures:

ANSI TIA-603-D: 2010
ANSI C63.4: 2014
FCC KDB 971168 Licensed Digital Transmitters

Every practical effort was made to perform an impartial test using appropriate test equipment of known calibration. All pertinent factors have been applied to reach the determination of compliance.

The test results recorded herein are based on a single type test of the Xetawave LLC model XETA7-M2 and therefore apply only to the tested sample. The sample was selected and prepared by Sandee Malang of Xetawave LLC.

OBJECTIVE

The primary objective of the manufacturer is compliance with the regulations outlined in the previous section.

Prior to marketing in the USA, the device requires certification. Prior to marketing in Canada, Class I transmitters, receivers and transceivers require certification.

Certification is a procedure where the manufacturer submits test data and technical information to a certification body and receives a certificate or grant of equipment authorization upon successful completion of the certification body's review of the submitted documents. Once the equipment authorization has been obtained, the label indicating compliance must be attached to all identical units, which are subsequently manufactured.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product which may result in increased emissions should be checked to ensure compliance has been maintained (i.e., printed circuit board layout changes, different line filter, different power supply, harnessing or I/O cable changes, etc.).

Testing was performed only on model XETA7-M2.

STATEMENT OF COMPLIANCE

The tested sample of Xetawave LLC model XETA7-M2 complied with the requirements of the standards and frequency bands declared in the scope of this test report.

Maintenance of compliance is the responsibility of the manufacturer. Any modifications to the product should be assessed to determine their potential impact on the compliance status of the device with respect to the standards detailed in this test report.

DEVIATIONS FROM THE STANDARDS

No deviations were made from the published requirements listed in the scope of this report.

TEST RESULTS

FCC Part 27

FCC	Description	Measured	Limit	Result
Transmitter Modulation, output power and other characteristics				
§2.1033 (c) (5) §27.5 (i) (2)	Frequency range(s)	757 - 758 MHz 787 - 788 MHz	757 - 758 MHz 787 - 788 MHz	Pass
§2.1033 (c) (4) §2.1047	Modulation Type	MSK, QPSK, 8PSK, 16QAM and 32QAM	Any allowed	Pass
§2.1033 (c) (6) §2.1033 (c) (7) §2.1046 §27.50(b)	Transmit power ERP. (Max 11 dBi antenna gain) §27.50(b)(1)	85.1 Watts ERP	757 - 758 MHz 1000 Watts ERP	Pass
	Transmit power ERP. (Max 6 dBi antenna gain) §27.50(b)(9)	26.9 Watts ERP	787 - 788 MHz 30 Watts ERP	Pass
§2.1049 §27.53	Occupied Bandwidth	See Run #3	Remain in Block	Pass
Transmitter spurious emissions				
§2.1051 §2.1053 §2.1057 §27.53(c)(1) §27.53(c)(2) §27.53(f)	At the antenna terminals	-23.0 dBm @ 785.863 MHz	-13 dBm	Pass/ -10.0 dB
	Field strength	-33.6 dBm EIRP@ 6060.08 MHz	-13 dBm	Pass/ -20.6 dB
	Field strength at 1559 – 1610 MHz (With max gain of 11 dBi antenna)	-44.2 dBm EIRP @ 1575.05 MHz	-40 dBm/MHz EIRP	Pass/ -4.2 dB
Other details				
§2.1055 §27.54	Frequency stability	859 Hz (1.1 ppm)	Remain in block	Pass
§2.1051 §2.1053 §2.1057	Nominal conducted RF power	40 dBm, for all channel spacing and modulations.		
§2.1093	RF Exposure	Refer to separate exhibit.		
§2.1033 (c) (8)	Final radio frequency amplifying circuit's dc voltages and currents for normal operation over the power range	Refer to operational description.		

EXTREME CONDITIONS

Frequency stability is determined over extremes of temperature and voltage. The extremes of voltage were 85 to 115 percent of the nominal value.

The extremes of temperature were -40°C to +80°C which fulfills with FCC §2.1055(a)(1) requirement.

MEASUREMENT UNCERTAINTIES

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2) and were calculated in accordance with NAMAS document NIS 81 and M3003.

Measurement Type	Measurement Unit	Frequency Range	Expanded Uncertainty
RF frequency	Hz	25 to 7,000 MHz	1.7×10^{-7}
RF power, conducted	dBm	25 to 7,000 MHz	± 0.52 dB
Conducted emission of transmitter	dBm	25 to 40,000 MHz	± 0.7 dB
Conducted emission of receiver	dBm	25 to 40,000 MHz	± 0.7 dB
Radiated emission (substitution method)	dBm	25 to 40,000 MHz	± 2.5 dB
Radiated emission (field strength)	dBµV/m	25 to 1,000 MHz 1 to 40 GHz	± 3.6 dB ± 6.0 dB

EQUIPMENT UNDER TEST (EUT) DETAILS

GENERAL

The Xetawave LLC model XETA7-M2 is a radio module which is designed to be used for licensed radio operations for private data transmission networking or telemetry. Since the EUT would be placed on a tabletop during operation, the EUT was treated as tabletop equipment during testing to simulate the worst case user environment. The electrical rating of the EUT is 12 Volts DC, 3 Amps.

The sample was received on December 5, 2016 and tested on December 5, 7, 8 and 9, 2016. The EUT consisted of the following component(s):

Company	Model	Description	Serial Number	FCC ID
XetaWave	XETA7-M2	Radio Module	-	PEJ-9382009

OTHER EUT DETAILS

The highest internal source of the EUT is defined as the highest frequency generated or used within the EUT or on which the EUT operates or tunes. In some cases, the highest internal source determines the frequency range of test for radiated emissions. The highest internal source of the EUT was declared as: 1103 MHz (1st LO).

757 - 758 MHz band of operations;
EUT transmits 12.5 kHz, 25 kHz, 50 kHz, 100 kHz, 200 kHz and 250 kHz channels with MSK, FSK, QPSK, 8PSK, 16QAM and 32QAM modulations.

787 - 788 MHz band of operations;
EUT transmits 12.5 kHz, 25 kHz, 50 kHz, 100 kHz, 200 kHz and 250 kHz channels with MSK, FSK, QPSK, 8PSK, 16QAM and 32QAM modulations.

ENCLOSURE

The EUT does not have an enclosure. The radio module dimensions are 55 mm x 55 mm x 12 mm.

MODIFICATIONS

No modifications were made to the EUT during the time the product was at National Technical Systems - Silicon Valley.

SUPPORT EQUIPMENT

The following equipment was used as support equipment for testing:

Company	Model	Description	Serial Number	FCC ID
Larsen	YA5740W	740 - 806 MHz Yagi Antenna	-	-
Xetawave	-	Host unit enclosure as heat sink.		
HP	6024A	AC/DC power supply	Asset# 3004	-

The following equipment was used as remote support equipment for emissions testing:

Company	Model	Description	Serial Number	FCC ID
HP	Pavilion dv7	Laptop	-	-

Note: The computer was used to configure the radio via serial port. It was not connected during the radiated emission tests.

EUT INTERFACE PORTS

The I/O cabling configuration during testing was as follows:

Port	Connected To	Cable(s)		
		Description	Shielded or Unshielded	Length(m)
DC power	AC/DC power supply	DC power cable	Unshielded.	1

EUT OPERATION

During emissions testing the EUT was transmitting with the rated RF power in each required modulation types and data rates.

TESTING

GENERAL INFORMATION

Antenna port measurements were taken at the National Technical Systems - Silicon Valley test site located at 41039 Boyce Road, Fremont, CA 94538-2435.

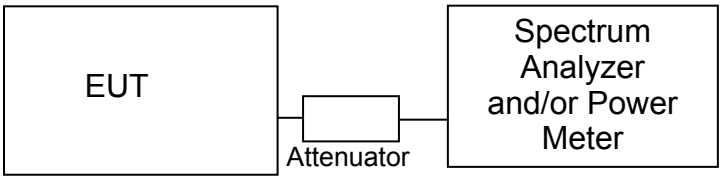
Radiated spurious emissions measurements were taken at the National Technical Systems - Silicon Valley Anechoic Chambers listed below. The sites conform to the requirements of ANSI C63.4: 2014 *American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz* and CISPR 16-1-4:2007 - *Specification for radio disturbance and immunity measuring apparatus and methods Part 1-4: Radio disturbance and immunity measuring apparatus Ancillary equipment Radiated disturbances*. They are on file with the FCC and Innovation Science and Economic Development Canada.

Site	Designation / Registration Numbers		Location
	FCC	Canada	
Chamber 5	US0027	IC 2845B-5	41039 Boyce Road Fremont, CA 94538-2435

Considerable engineering effort has been expended to ensure that the facilities conform to all pertinent requirements.

RF PORT MEASUREMENT PROCEDURES

Conducted measurements are performed with the EUT's rf input/output connected to the input of a spectrum analyzer, power meter or modulation analyzer. When required an attenuator, filter and/or dc block is placed between the EUT and the spectrum analyzer to avoid overloading the front end of the measurement device. Measurements are corrected for the insertion loss of the attenuators and cables inserted between the rf port of the EUT and the measurement equipment.



Test Configuration for Antenna Port Measurements

OUTPUT POWER

Output power is measured using a power meter and a peak power sensor head as required by the relevant rule part(s).

Power measurements made directly on the rf power port are, when appropriate, converted to an ERP by adding the gain of the highest gain antenna that can be used with the device under test, as specified by the manufacturer.

BANDWIDTH MEASUREMENTS

The 6dB, 20dB and/or 26dB signal bandwidth is measured in using the bandwidths recommended by ANSI C63.4. When required, the 99% bandwidth is measured using the methods detailed in RSS-GEN. The measurement bandwidth is set to be at least 1% of the instrument's frequency span.

CONDUCTED SPURIOUS EMISSIONS

Initial scans are made using a peak detector (RBW ≤ VBW) and using scan rates to ensure that the EUT transmits before the sweep moves out of each resolution bandwidth (for transmit mode measurements). For transmitter measurements the appropriate detector is used when making measurements for licensed devices.

FREQUENCY STABILITY

The EUT is placed inside a temperature chamber with all support and test equipment located outside of the chamber. The temperature is varied across the specified frequency range in 10 degree increments with frequency measurements made at each temperature step. The EUT is allowed enough time to stabilize at each temperature variation.

The spectrum analyzer is configured to give a 5- or 6-digit display for the marker-frequency function. The device is set to transmit an unmodulated signal. The frequency drift is also determined by finding a 99% power BW point on the signal.

RADIATED EMISSIONS MEASUREMENTS

Transmitter radiated spurious emissions are initially measured as a field strength. The EIRP or ERP limit as specified in the relevant rule part(s) is converted to a field strength at the test distance and the emissions from the EUT are then compared to that limit. Emissions within 20 dB of this limit are the subjected to a substitution measurement.

All radiated emissions measurements are performed in two phases. A preliminary scan of emissions is conducted in either an anechoic chamber or on an OATS during which all significant EUT frequencies are identified with the system in a nominal configuration. At least two scans are performed across the complete frequency range of interest and at each operating frequency identified in the reference standard. One or more of these is with the antenna polarized vertically while the one or more of these is with the antenna polarized horizontally. Initial scans are made using a peak detector (RBW ≤ VBW) and using scan rates to ensure that the EUT transmits before the sweep moves out of each resolution bandwidth (for transmit mode).

During the preliminary scans, the EUT is rotated through 360°, the antenna height is varied and cable positions are varied to determine the highest emission relative to the limit. For transmitter spurious emissions, where the limit is expressed as an effective radiated power, the EIRP or ERP is converted to a field strength limit.

Final measurements are made in a semi-anechoic chamber at the significant frequencies observed during the preliminary scan(s) using the same process of rotating the EUT and raising/lowering the measurement antenna to find the highest level of the emission. The field strength is recorded and, for receiver spurious emissions, compared to the field strength limit. For the final measurement the appropriate detectors (average, peak, normal, sample, quasi-peak) are used.

For transmitter spurious emissions, the radiated power of all emissions within 20 dB of the calculated field strength limit are determined using a substitution measurement. The substitution measurement is made by replacing the EUT with an antenna of known gain (typically a dipole antenna or a double-ridged horn antenna), connected to a signal source. The output power of the signal generator is adjusted until the maximum field strength from the substitution antenna is similar to the field strength recorded from the EUT. The ERP of the EUT is then calculated.

INSTRUMENTATION

An EMI receiver as specified in CISPR 16-1-1 is used for radiated emissions measurements. The receivers used can measure over the frequency range of 9 kHz up to 7000 MHz. These receivers allow both ease of measurement and high accuracy to be achieved. The receivers have Peak, Average, and CISPR (Quasi-peak) detectors built into their design so no external adapters are necessary.

For measurements above the frequency range of the receivers and for all conducted measurements a spectrum analyzer is utilized because it provides visibility of the entire spectrum along with the precision and versatility required to support engineering analysis.

Measurement bandwidths for the test instruments are set in accordance with the requirements of the standards referenced in this document.

Software control is used to correct the measurements for transducer factors (e.g. antenna) and the insertion loss of cables, attenuators and other series elements to obtain the final measurement value. This provides faster, more accurate readings by performing the conversions described under Sample Calculations within the Test Procedures section of this report. Results are exported in a graphic and/or tabular format, as appropriate.

FILTERS/ATTENUATORS

External filters and precision attenuators are often connected between the EUT antenna port or receiving antenna and the test receiver. This eliminates saturation effects and non-linear operation due to high amplitude transient events.

ANTENNAS

A combination of biconical, log periodic or bi-log antennas are used to cover the range from 30 MHz to 1000 MHz. Broadband antennas or tuned dipole antennas are used over the entire 25 to 1000 MHz frequency range as the reference antenna for substitution measurements.

Above 1000 MHz, a dual-ridge guide horn antenna or octave horn antenna are used as reference and measurement antennas.

The antenna calibration factors are included in site factors that are programmed into the test receivers and instrument control software when measuring the radiated field strength.

ANTENNA MAST AND EQUIPMENT TURNTABLE

The antennas used to measure the radiated electric field strength are mounted on a non-conductive antenna mast equipped with a motor-drive to vary the antenna height.

Table mounted devices are placed on a non-conductive table at a height of 80 centimeters above the floor. Floor mounted equipment is placed on the ground plane if the device is normally used on a conductive floor or separated from the ground plane by insulating material from 3 to 12 mm if the device is normally used on a non-conductive floor. The EUT is positioned on a motorized turntable to allow it to be rotated during testing to determine the angel with the highest level of emissions.

SAMPLE CALCULATIONS

SAMPLE CALCULATIONS - CONDUCTED SPURIOUS EMISSIONS

Measurements are compared directly to the conducted emissions specification limit (decibel form). The calculation is as follows:

$$R_r - S = M$$

where:

R_r = Measured value in dBm
S = Specification Limit in dBm
M = Margin to Specification in ± dB

SAMPLE CALCULATIONS –RADIATED FIELD STRENGTH

Measurements of radiated field strength are compared directly to the specification limit (decibel form). The receiver and/or control software corrects for cable loss, preamplifier gain, and antenna factor. The calculations are in the reverse direction of the actual signal flow, thus cable loss is added and the amplifier gain is subtracted. The Antenna Factor converts the voltage at the antenna coaxial connector to the field strength at the antenna elements.

A distance factor is sued when measurements are made at a test distance that is different to the specified limit distance by using the following formula:

$$F_d = 20*LOG_{10} (D_m/D_s)$$

where:

F_d = Distance Factor in dB
D_m = Measurement Distance in meters
D_s = Specification Distance in meters

For electric field measurements below 30MHz the extrapolation factor is either determined by making measurements at multiple distances or a theoretical value is calculated using the formula:

$$F_d = 40*LOG_{10} (D_m/D_s)$$

The margin of a given emission peak relative to the limit is calculated as follows:

$$R_c = R_r + F_d$$

and

$$M = R_c - L_s$$

where:

R_r = Receiver Reading in dBµV/m
F_d = Distance Factor in dB
R_c = Corrected Reading in dBµV/m
L_s = Specification Limit in dBµV/m
M = Margin in dB Relative to Spec

SAMPLE CALCULATIONS –RADIATED POWER

The ERP/EIRP limits for transmitter spurious measurements are converted to a field strength in free space using the following formula:

$$E = \frac{\sqrt{30\ P\ G}}{d}$$

where:

E = Field Strength in V/m
P = Power in Watts
G = Gain of isotropic antenna (numeric gain) = 1
D = measurement distance in meters

The field strength limit is then converted to decibel form (dBµV/m) and the margin of a given emission peak relative to the limit is calculated (refer to *SAMPLE CALCULATIONS –RADIATED FIELD STRENGTH*).

When substitution measurements are required (all signals with less than 20dB of margin relative to the calculated field strength limit) the EIRP of the spurious emission is calculated using:

$$P_{EUT} = P_S - (E_S - E_{EUT})$$

and

$$P_S = G + P_{in}$$

where:

P_S = effective isotropic radiated power of the substitution antenna (dBm)
P_{in} = power input to the substitution antenna (dBm)
G = gain of the substitution antenna (dBi)
E_S = field strength the substitution antenna (dBm) at EIRP P_S
E_{EUT} = field strength measured from the EUT

Where necessary the effective isotropic radiated power is converted to effective radiated power by subtracting the gain of a dipole (2.1 dBi) from the EIRP value.

Appendix A Test Equipment Calibration Data

Manufacturer	Description	Model	Asset #	Calibrated	Cal Due
Antenna port measurements, 05-Dec-16					
NTS	NTS Capture Analyzer Software (rev 3.8)	N/A	0		N/A
Rohde & Schwarz	Peak Power Sensor 100 uW - 2 Watts (w/ 20 dB pad, SN BJ5155)	NRV-Z32	1536	3/10/2016	3/10/2017
Agilent Technologies	3Hz -44GHz PSA Spectrum Analyzer	E4446A	2796	5/6/2016	5/6/2017
Rohde & Schwarz	Power Meter, Dual Channel	NRVD	3268	4/22/2016	2/22/2017
Antenna port measurements and frequency stability, 06-Dec-16					
NTS	NTS EMI Software (rev 2.10)	N/A	0		N/A
NTS	NTS Capture Analyzer Software (rev 3.8)	N/A	0		N/A
Fluke	Multimeter, True RMS	111	1480	3/28/2016	3/28/2017
Rohde & Schwarz	Peak Power Sensor 100 uW - 2 Watts (w/ 20 dB pad, SN BJ5155)	NRV-Z32	1536	3/10/2016	3/10/2017
Agilent Technologies	3Hz -44GHz PSA Spectrum Analyzer	E4446A	2796	5/6/2016	5/6/2017
Rohde & Schwarz	Power Meter, Dual Channel	NRVD	3268	4/22/2016	2/22/2017
Antenna port measurements and frequency stability, 07-Dec-16					
NTS	NTS EMI Software (rev 2.10)	N/A	0		N/A
NTS	NTS Capture Analyzer Software (rev 3.8)	N/A	0		N/A
Fluke	Multimeter, True RMS	111	1480	3/28/2016	3/28/2017
Rohde & Schwarz	Peak Power Sensor 100 uW - 2 Watts (w/ 20 dB pad, SN BJ5155)	NRV-Z32	1536	3/10/2016	3/10/2017
Watlow	Temp Chamber (w/ F4 Watlow Controller)	F4	2170	7/8/2016	7/8/2017
Agilent Technologies	3Hz -44GHz PSA Spectrum Analyzer	E4446A	2796	5/6/2016	5/6/2017
Rohde & Schwarz	Power Meter, Dual Channel	NRVD	3268	4/22/2016	2/22/2017
Radiated Emissions, 30 - 1,000 MHz, 08-Dec-16					
NTS	NTS EMI Software (rev 2.10)	N/A	0		N/A
Rohde & Schwarz	EMI Test Receiver, 20 Hz-7 GHz	ESIB7	1538	12/19/2015	12/19/2016
Sunol Sciences	Biconilog, 30-3000 MHz	JB3	1657	7/27/2016	7/27/2018
Radiated Emissions, 1,000 - 12,000 MHz And Substitution Measurements, 08-Dec-16					
Hewlett Packard	Microwave Preamplifier, 1-26.5GHz	8449B	785	10/5/2016	10/5/2017
EMCO	Antenna, Horn, 1-18 GHz (SA40-Blu)	3115	1386	10/13/2016	10/13/2018
Hewlett Packard	Spectrum Analyzer (SA40) Blue 9 kHz - 40 GHz	8564E (84125C)	1393	3/28/2016	3/28/2017
Rohde & Schwarz	Peak Power Sensor 100 uW - 2 Watts (w/ 20 dB pad, SN BJ5155)	NRV-Z32	1536	3/10/2016	3/10/2017
Hewlett Packard	High Pass filter, 1.5 GHz (Purple System)	P/N 84300-80037	1769	9/9/2016	9/9/2017

Manufacturer	Description	Model	Asset #	Calibrated	Cal Due
Agilent Technologies	PSA, Spectrum Analyzer, (installed options, 111, 115, 123, 1DS, B7J, HYX,	E4446A	2139	6/24/2016	6/24/2017
EMCO	Antenna, Horn, 1-18 GHz	3115	2870	8/31/2015	8/31/2017
Rohde & Schwarz	Power Meter, Dual Channel	NRVD	3268	4/22/2016	2/22/2017
Frequency stability, 09-Dec-16					
NTS	NTS Capture Analyzer Software (rev 3.8)	N/A	0		N/A
Fluke	Multimeter, True RMS	111	1480	3/28/2016	3/28/2017
Rohde & Schwarz	Peak Power Sensor 100 uW - 2 Watts (w/ 20 dB pad, SN BJ5155)	NRV-Z32	1536	3/10/2016	3/10/2017
Watlow	Temp Chamber (w/ F4 Watlow Controller)	F4	2170	7/8/2016	7/8/2017
Agilent Technologies	3Hz -44GHz PSA Spectrum Analyzer	E4446A	2796	5/6/2016	5/6/2017
Rohde & Schwarz	Power Meter, Dual Channel	NRVD	3268	4/22/2016	2/22/2017

Appendix B Test Data

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Client:	Xetawave LLC	Job Number:	JD103419
Product	Xeta7	T-Log Number:	T103448
System Configuration:	-	Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Emissions Standard(s):	FCC Part 27	Class:	A
Immunity Standard(s):	-	Environment:	-

EMC Test Data

For The

Xetawave LLC

Product

Xeta7

Date of Last Test: 12/12/2016

Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

FCC Part 27

Power, Occupied Bandwidth, Frequency Stability and Spurious Emissions

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

With the exception of the radiated spurious emissions tests, all measurements are made with the EUT's rf port connected to the measurement instrument via an attenuator or dc-block if necessary. All amplitude measurements are adjusted to account for the attenuation between EUT and measuring instrument. For frequency stability measurements the EUT was place inside an environmental chamber.

Radiated measurements are made with the EUT located on a non-conductive table, 3m from the measurement antenna.

Ambient Conditions:

Temperature: 20-22 °C

Rel. Humidity: 30-35 %

Summary of Results

Run #	Spacing	Data Rate	Test Performed	Limit	Pass / Fail	Result / Margin
1	-	-	Output Power	757 - 758 MHz 1000 W e.r.p. 787 - 788 MHz 30 W e.r.p.	Pass	757 - 758 MHz 85.1 W e.r.p. 787 - 788 MHz 26.9 W e.r.p.
2	-	-	Band Edge / Block Edge	- 13 dBm	Pass	Within the band/block
3	-	-	99 % or Occupied Bandwidth	-	-	See result table below.
4	-	-	Spurious Emissions (conducted)	- 13 dBm / -46 dBm	Pass	-23 dBm @ 785.863 MHz (-10 dB)
5	-	-	Spurious emissions (radiated)	- 13 dBm e.r.p. 1559-1610 MHz -40 dBm/MHz e.i.r.p.	Pass	-44.2 dBm e.i.r.p. @ 1575.05 MHz (-4.2 dB)
6	-	-	Frequency Stability	Emissions must be within the band	Pass	99% BW emisisons within the band. Max. 859 Hz (1.1 ppm)

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Run #1: Output Power

27.50(11) (b)

Date of Test: 12/5/2016 Config. Used: 1

Test Engineer: Rafael Valeras Config Change: None

Test Location: FT Lab #4b EUT Voltage: 12 Vdc

Cable/Splitter Loss: 3.6 dB Attenuator: 20.0 dB Total Loss: 23.6 dB

Cable/Splitter ID(s): 1455 Attenuator IDs: #1878

Run #1a: Output power at 757-758 MHz band

Power setting	Frequency (MHz)	Modulation	Channel plan	Output Power (dBm) [1]	Output Power W	Ant. Gain (dBi)	Result	ERP (dBm)[3]	ERP W
	757.5	MSK	12.5 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	QPSK	12.5 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	8PSK	12.5 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	16QAM	12.5 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	32QAM	12.5 kHz	40.2	10.47	11.0	Pass	49.1	81.283
	757.5	MSK	25.0 kHz	40.2	10.47	11.0	Pass	49.1	81.283
	757.5	QPSK	25.0 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	8PSK	25.0 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	16QAM	25.0 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	32QAM	25.0 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	MSK	50.0 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	QPSK	50.0 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	8PSK	50.0 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	16QAM	50.0 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	32QAM	50.0 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	MSK	100 kHz	40.2	10.47	11.0	Pass	49.1	81.283
	757.5	QPSK	100 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	8PSK	100 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	16QAM	100 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	32QAM	100 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	MSK	200 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	QPSK	200 kHz	40.0	10.00	11.0	Pass	48.9	77.625
	757.5	8PSK	200 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	16QAM	200 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	32QAM	200 kHz	40.2	10.47	11.0	Pass	49.1	81.283
	757.5	MSK	250 kHz	40.4	10.96	11.0	Pass	49.3	85.114
	757.5	QPSK	250 kHz	40.2	10.47	11.0	Pass	49.1	81.283
	757.5	8PSK	250 kHz	40.3	10.72	11.0	Pass	49.2	83.176
	757.5	16QAM	250 kHz	40.1	10.23	11.0	Pass	49.0	79.433
	757.5	32QAM	250 kHz	40.2	10.47	11.0	Pass	49.1	81.283

Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Run #1b: Output power at 787-788 MHz band.

Power setting	Frequency (MHz)	Modulation	Channel plan	Output Power (dBm) [1]	Output Power W	Ant. Gain (dBi)	Result	ERP (dBm) [3]	ERP W
	787.5	MSK	12.5 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	QPSK	12.5 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	8PSK	12.5 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	16QAM	12.5 kHz	40.0	10.00	6.0	Pass	43.9	24.547
	787.5	32QAM	12.5 kHz	40.0	10.00	6.0	Pass	43.9	24.547
	787.5	MSK	25.0 kHz	40.0	10.00	6.0	Pass	43.9	24.547
	787.5	QPSK	25.0 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	8PSK	25.0 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	16QAM	25.0 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	32QAM	25.0 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	MSK	50.0 kHz	40.0	10.00	6.0	Pass	43.9	24.547
	787.5	QPSK	50.0 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	8PSK	50.0 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	16QAM	50.0 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	32QAM	50.0 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	MSK	100 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	QPSK	100 kHz	40.0	10.00	6.0	Pass	43.9	24.547
	787.5	8PSK	100 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	16QAM	100 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	32QAM	100 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	MSK	200 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	QPSK	200 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	8PSK	200 kHz	40.4	10.96	6.0	Pass	44.3	26.915
	787.5	16QAM	200 kHz	40.3	10.72	6.0	Pass	44.2	26.303
	787.5	32QAM	200 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	MSK	250 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	QPSK	250 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	8PSK	250 kHz	40.1	10.23	6.0	Pass	44.0	25.119
	787.5	16QAM	250 kHz	40.2	10.47	6.0	Pass	44.1	25.704
	787.5	32QAM	250 kHz	40.3	10.72	6.0	Pass	44.2	26.303

Note 1:	Output power measured using a peak power meter
Note 2:	Power setting - the software power setting used during testing, included for reference only.
Note 3:	Transmit power (erp) = Output Power (dBm) + Ant. Gain (dBi) - 2.1

Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Run #2: Band edge/Block edge

On any frequency outside the 746-758 MHz and 776-788 MHz bands, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB (-13 dBm)

Compliance with this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed

Date of Test: 12/5/2016
Test Engineer: Rafael Valeras
Test Location: FT Lab #4b

Config. Used: 1
Config Change: None
EUT Voltage: 12 Vdc

Run #2a: Block edge at 757 MHz

Power setting	Data rate	Channel plan	Modulation	Channel Frequency (MHz)	Measured dBm	Limit dBm	Result Pass/Fail
	10 kbps	12.5 kHz	MSK	757.031250	-13.3	-13.00	Pass
	23 kbps	12.5 kHz	QPSK	757.031250	-14.4	-13.00	Pass
	34 kbps	12.5 kHz	8PSK	757.031250	-13.7	-13.00	Pass
	45 kbps	12.5 kHz	16QAM	757.031250	-15.5	-13.00	Pass
	57 kbps	12.5 kHz	32QAM	757.031250	-14.8	-13.00	Pass
	19 kbps	25.0 kHz	MSK	757.050000	-19.1	-13.00	Pass
	36 kbps	25.0 kHz	QPSK	757.050000	-17.5	-13.00	Pass
	52 kbps	25.0 kHz	8PSK	757.050000	-17.9	-13.00	Pass
	70 kbps	25.0 kHz	16QAM	757.050000	-19.6	-13.00	Pass
	87 kbps	25.0 kHz	32QAM	757.050000	-20.1	-13.00	Pass
	39 kbps	50.0 kHz	MSK	757.093750	-23.8	-13.00	Pass
	71 kbps	50.0 kHz	QPSK	757.093750	-18.4	-13.00	Pass
	101 kbps	50.0 kHz	8PSK	757.093750	-20.8	-13.00	Pass
	137 kbps	50.0 kHz	16QAM	757.093750	-20.8	-13.00	Pass
	175 kbps	50.0 kHz	32QAM	757.093750	-19.8	-13.00	Pass
	76 kbps	100 kHz	MSK	757.125000	-24.0	-13.00	Pass
	160 kbps	100 kHz	QPSK	757.125000	-14.6	-13.00	Pass
	240 kbps	100 kHz	8PSK	757.125000	-14.7	-13.00	Pass
	320 kbps	100 kHz	16QAM	757.125000	-14.9	-13.00	Pass
	400 kbps	100 kHz	32QAM	757.125000	-14.0	-13.00	Pass

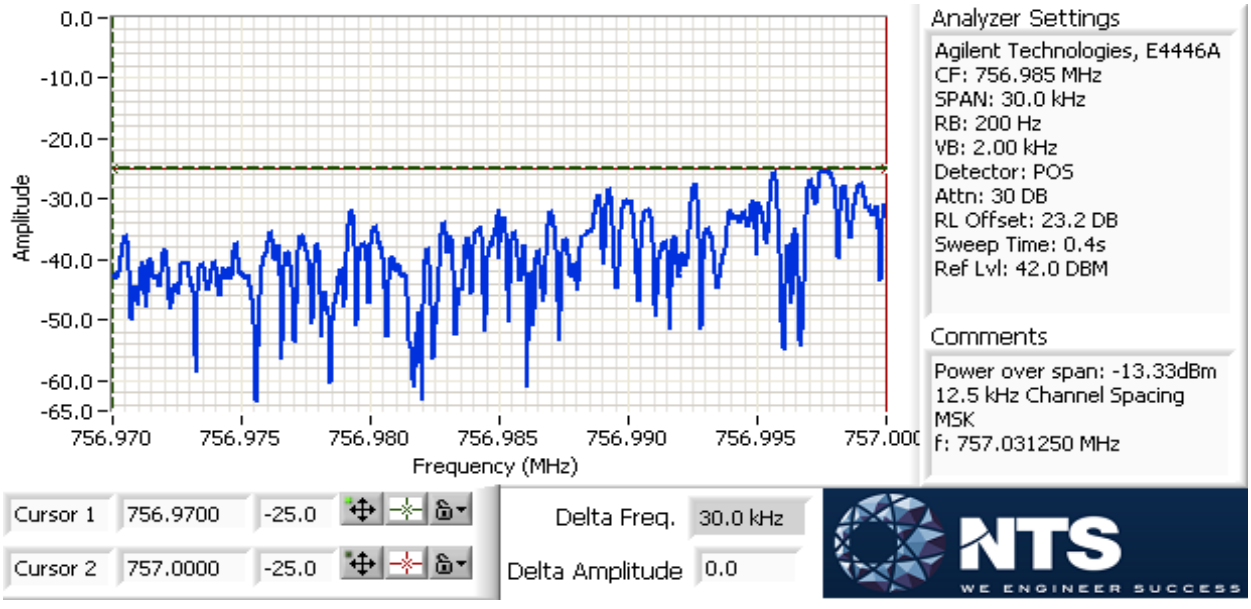
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

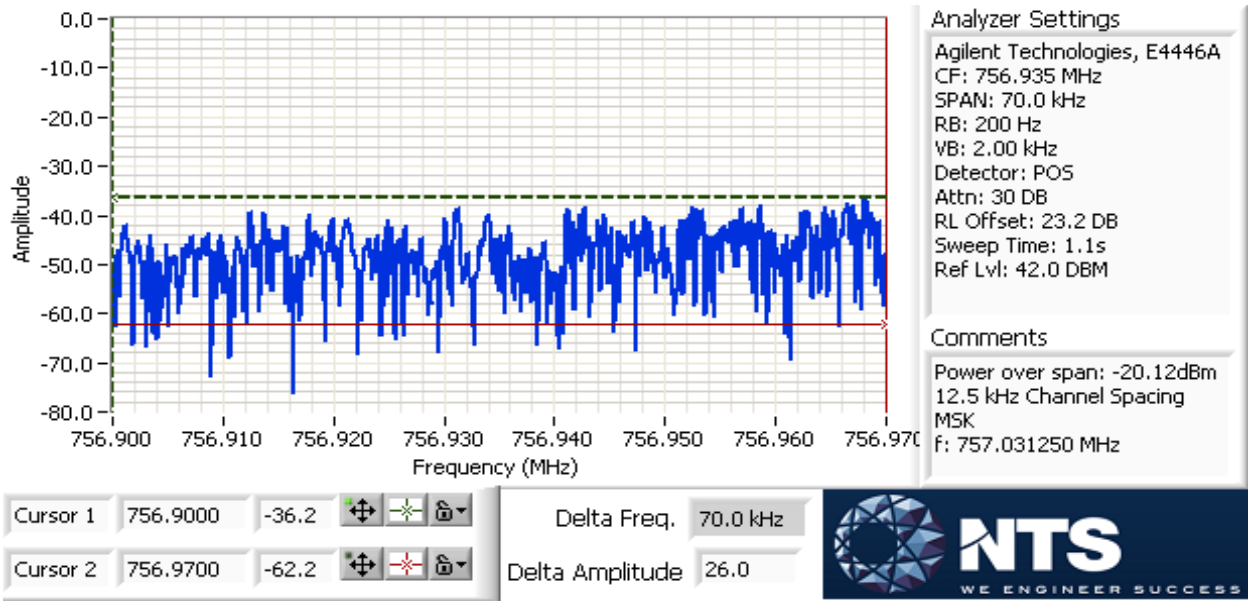
Run #2a: Block edge at 757 MHz

Power setting	Data rate	Channel plan	Modulation	Channel Frequency (MHz)	Measured dBm	Limit dBm	Result Pass/Fail
	153 kbps	200 kHz	MSK	757.237500	-33.3	-13.00	Pass
	320 kbps	200 kHz	QPSK	757.237500	-16.0	-13.00	Pass
	480 kbps	200 kHz	8PSK	757.237500	-14.6	-13.00	Pass
	640 kbps	200 kHz	16QAM	757.237500	-15.1	-13.00	Pass
	800 kbps	200 kHz	32QAM	757.237500	-16.4	-13.00	Pass
	194 kbps	250 kHz	MSK	757.300000	-35.0	-13.00	Pass
	403 kbps	250 kHz	QPSK	757.300000	-17.1	-13.00	Pass
	605 kbps	250 kHz	8PSK	757.300000	-16.8	-13.00	Pass
	806 kbps	250 kHz	16QAM	757.300000	-17.2	-13.00	Pass
	1008 kbps	250 kHz	32QAM	757.300000	-16.3	-13.00	Pass

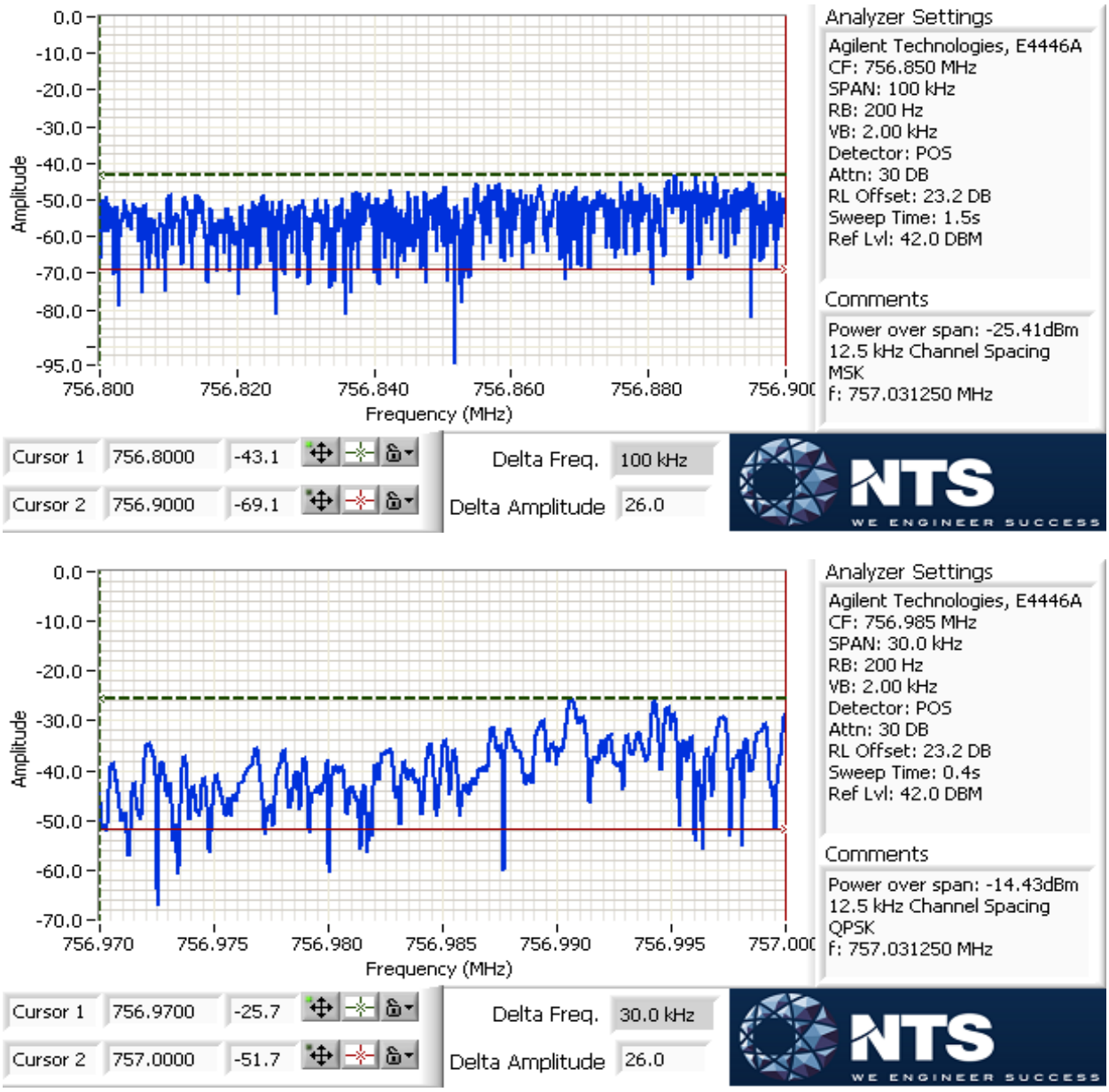
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 757 MHz, 12.5 kHz channel spacing

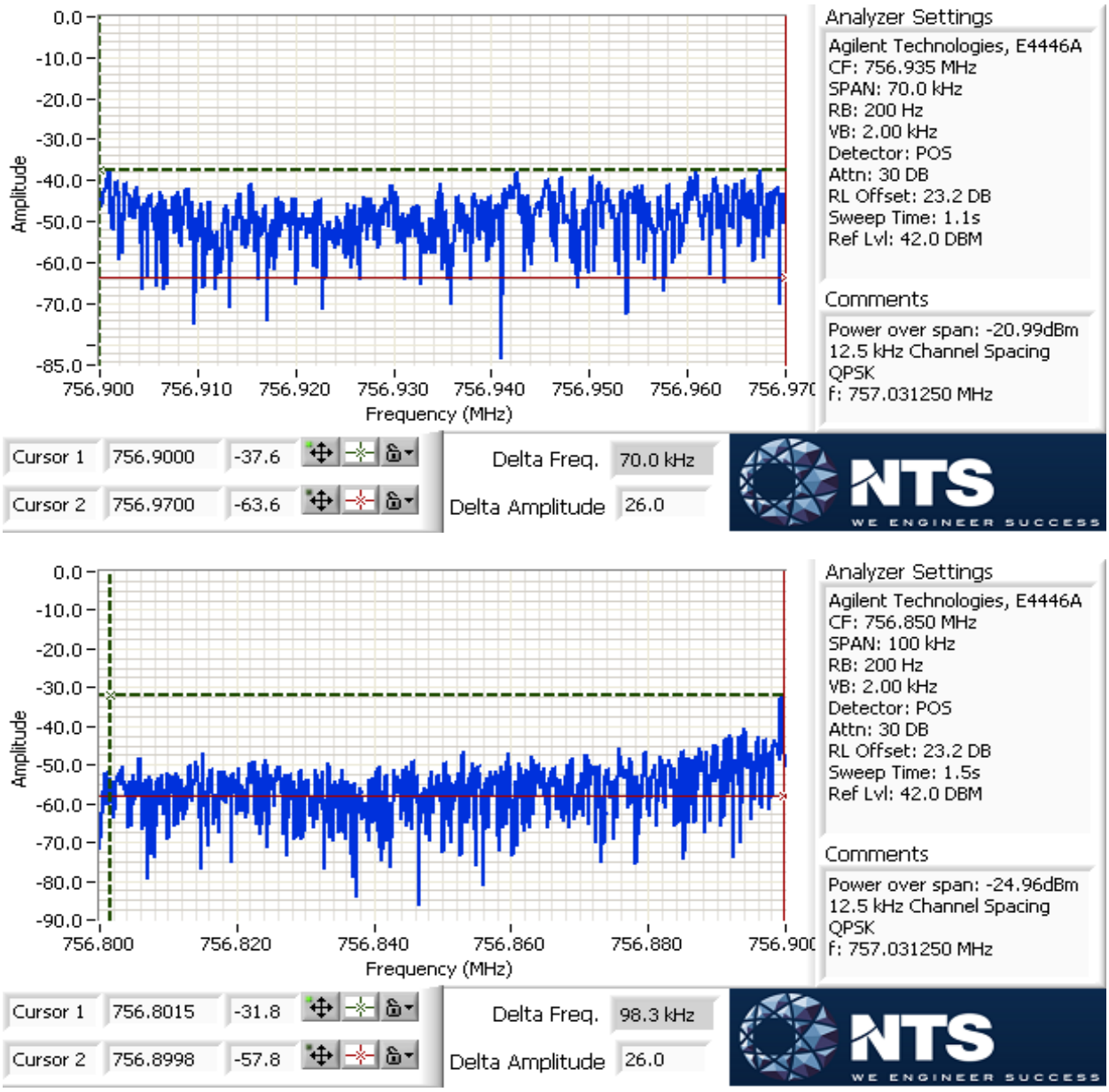




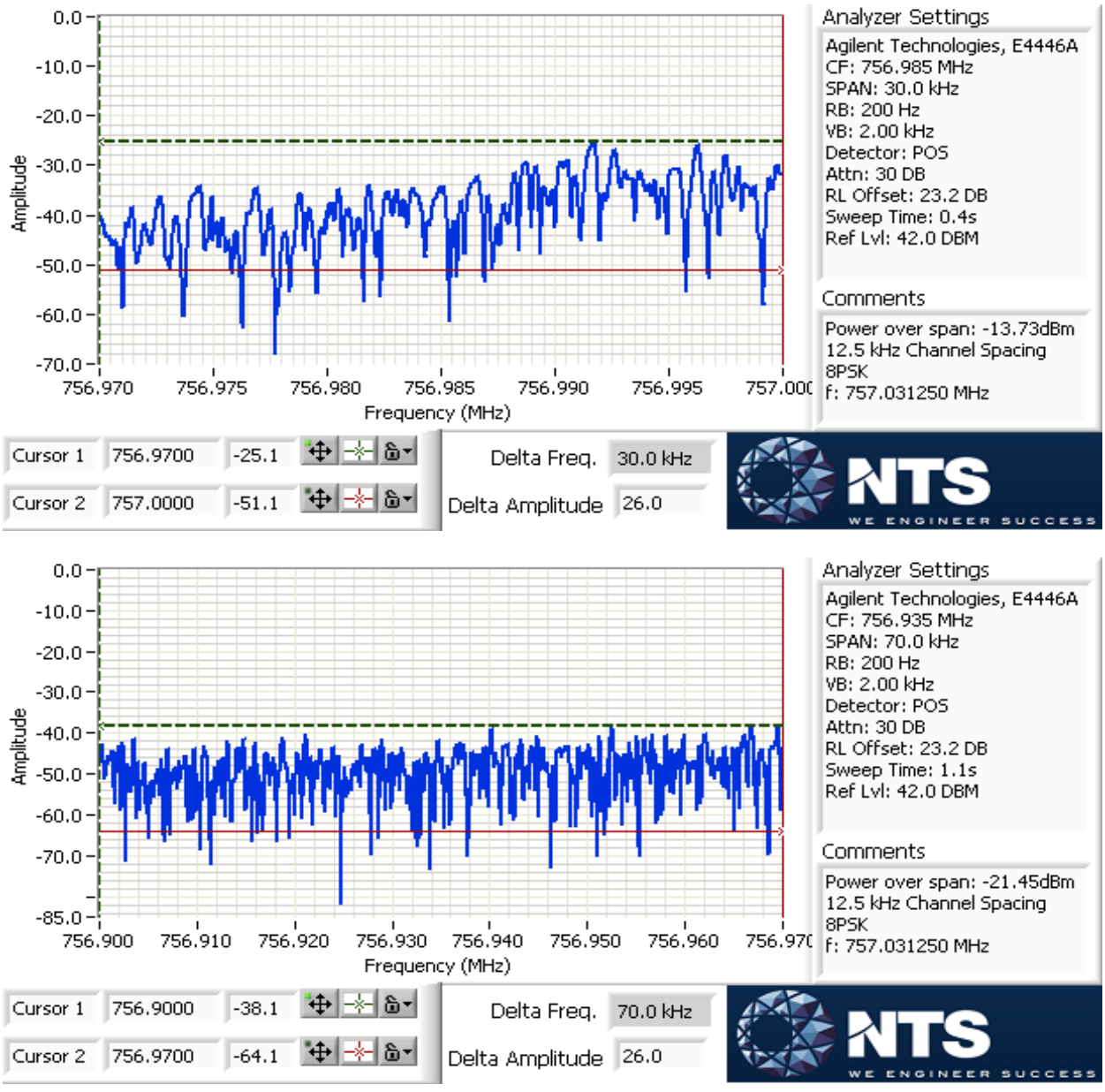
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



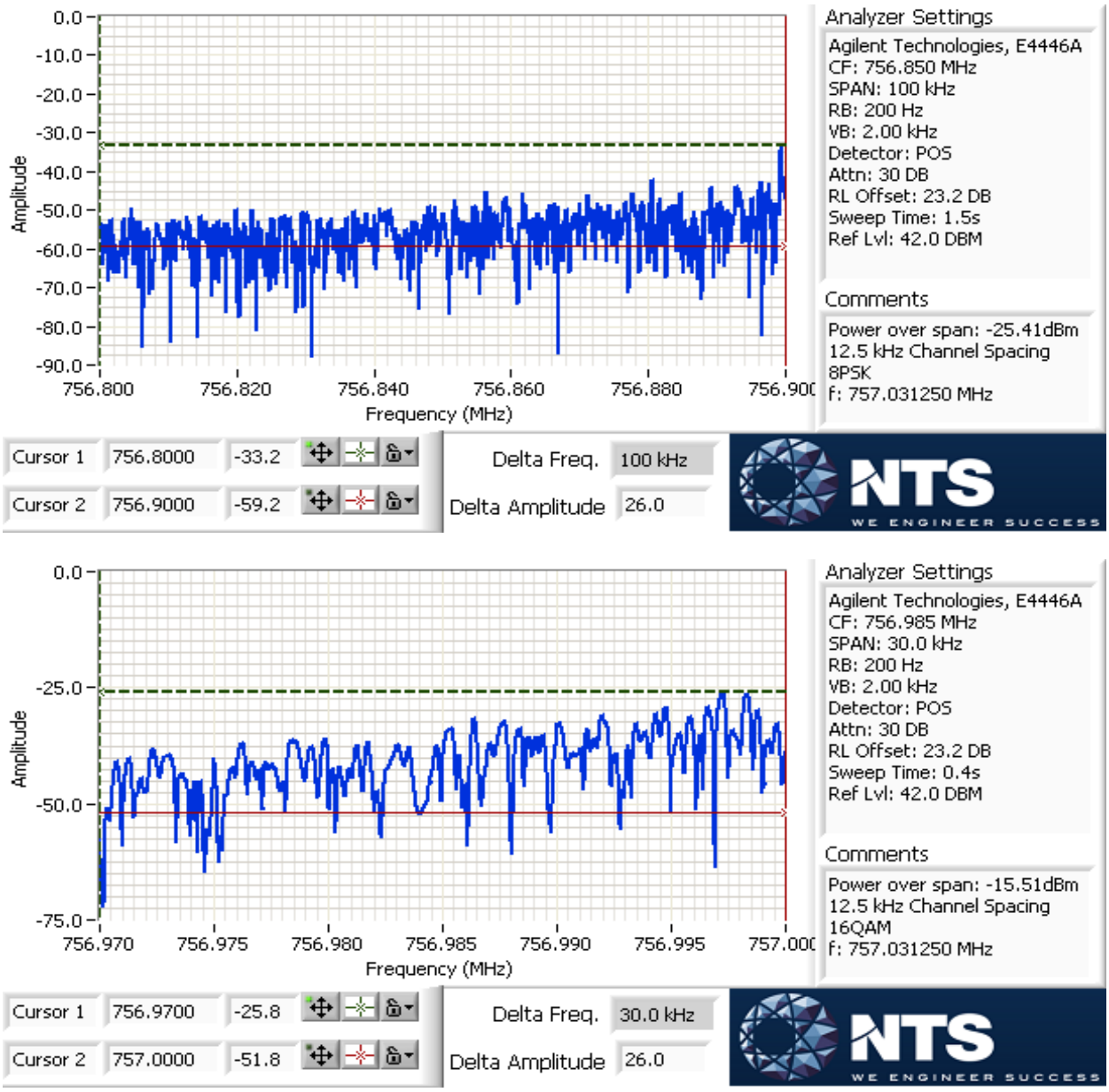
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



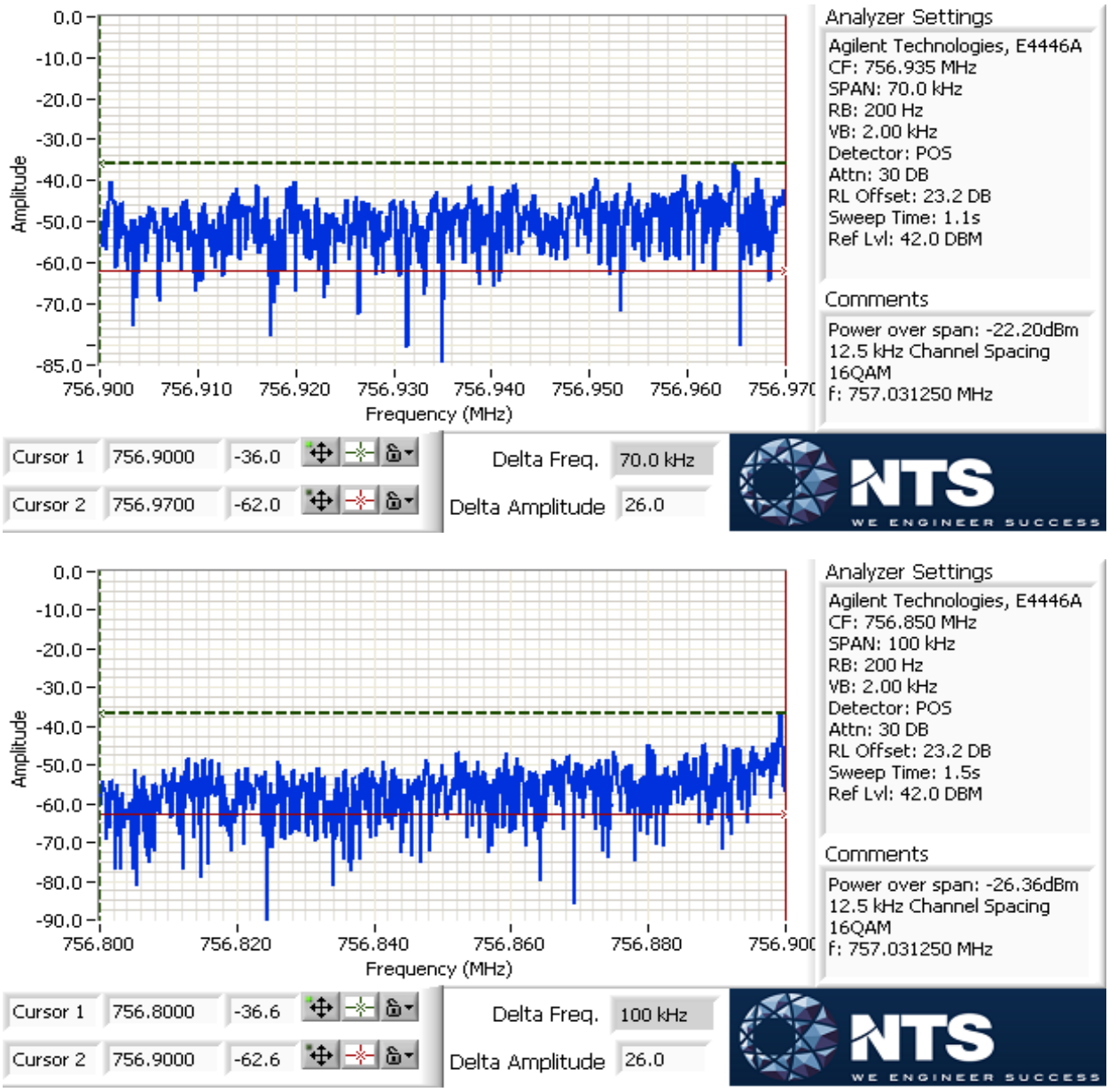
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



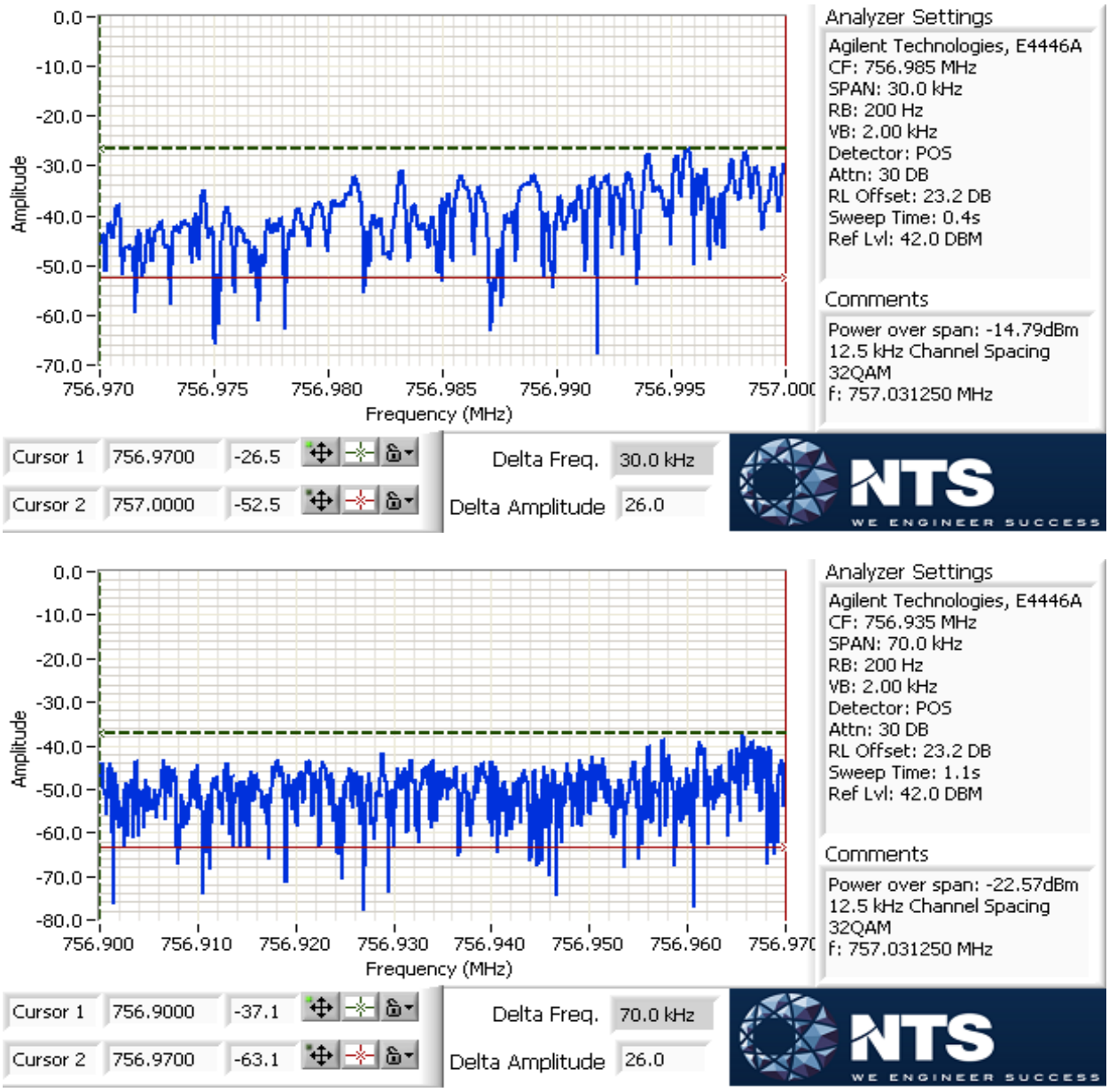
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



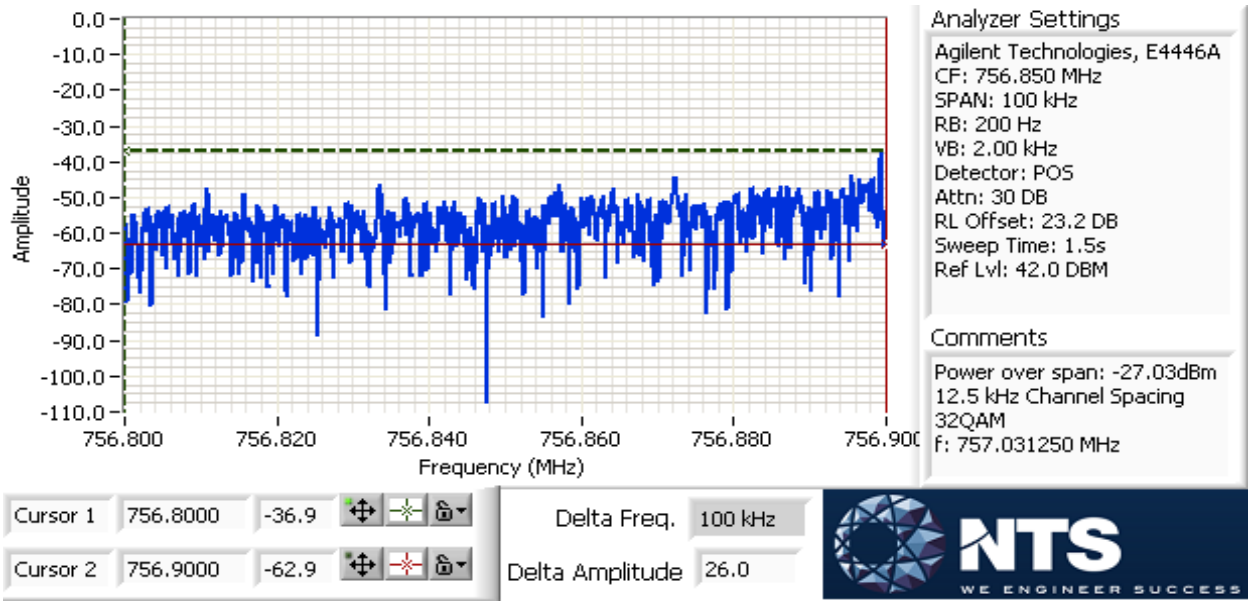
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

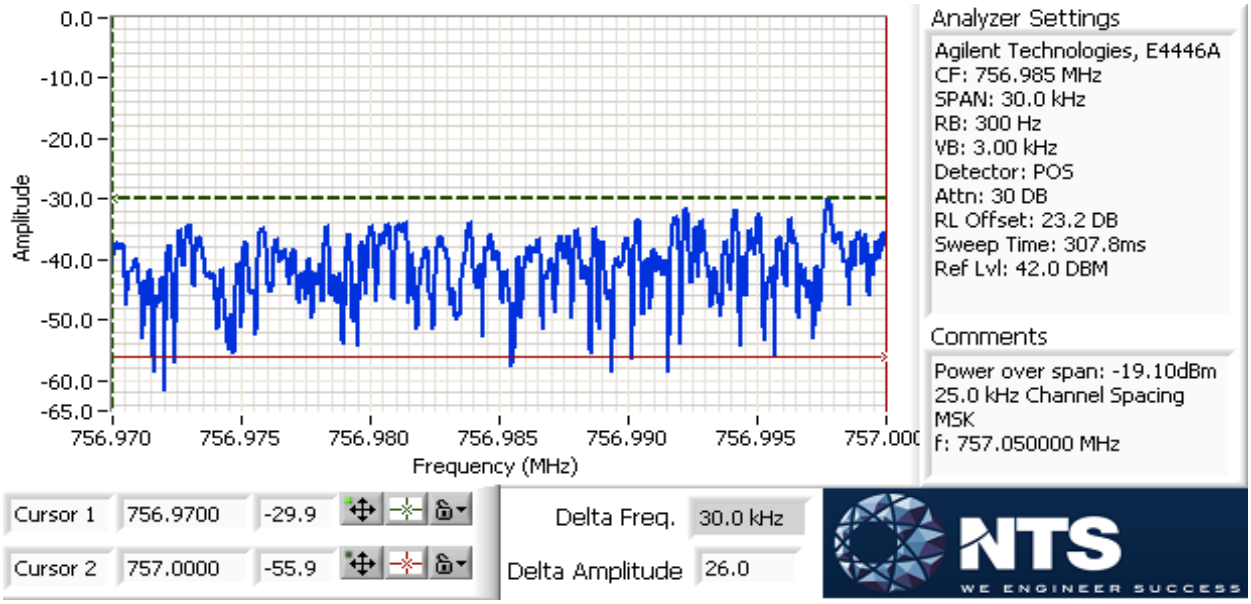


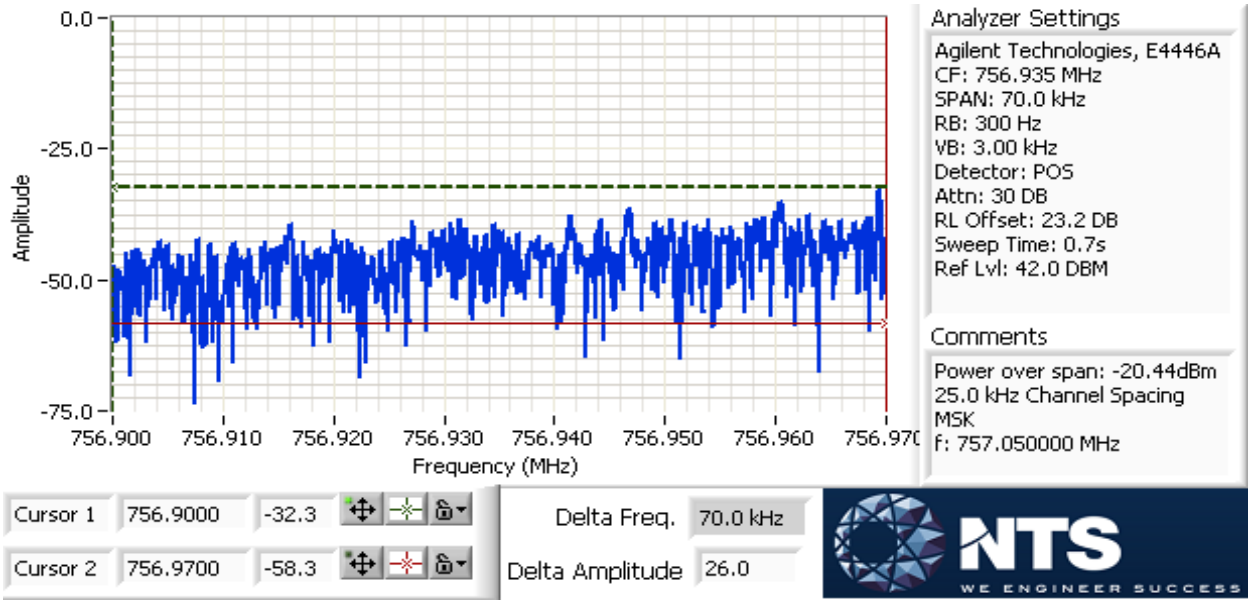
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



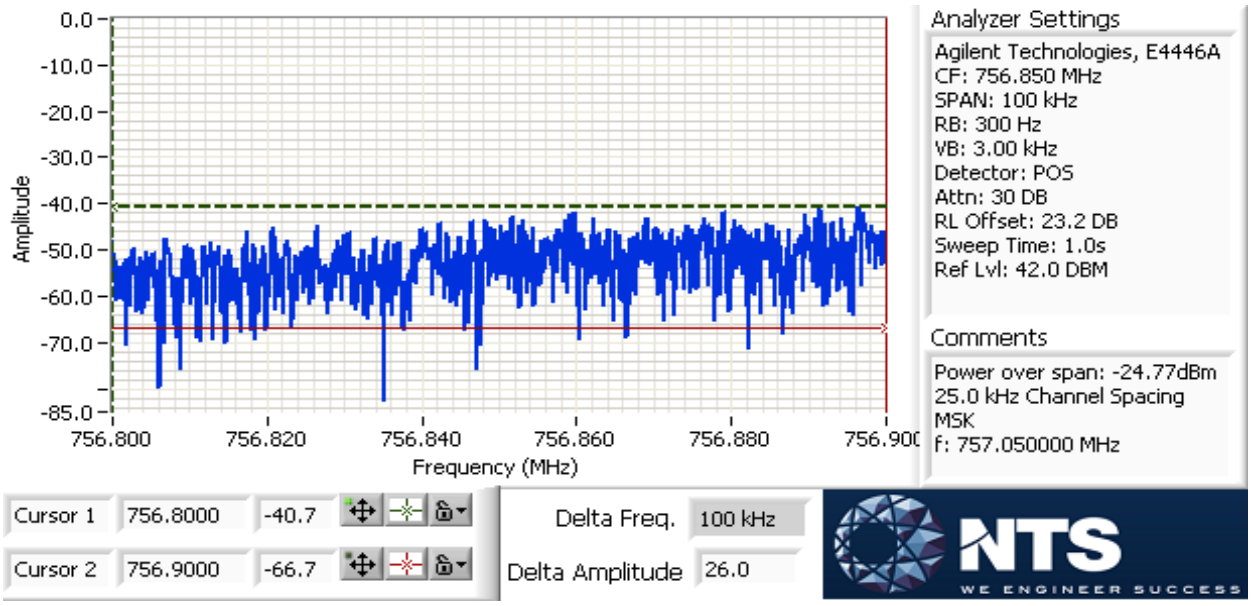
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

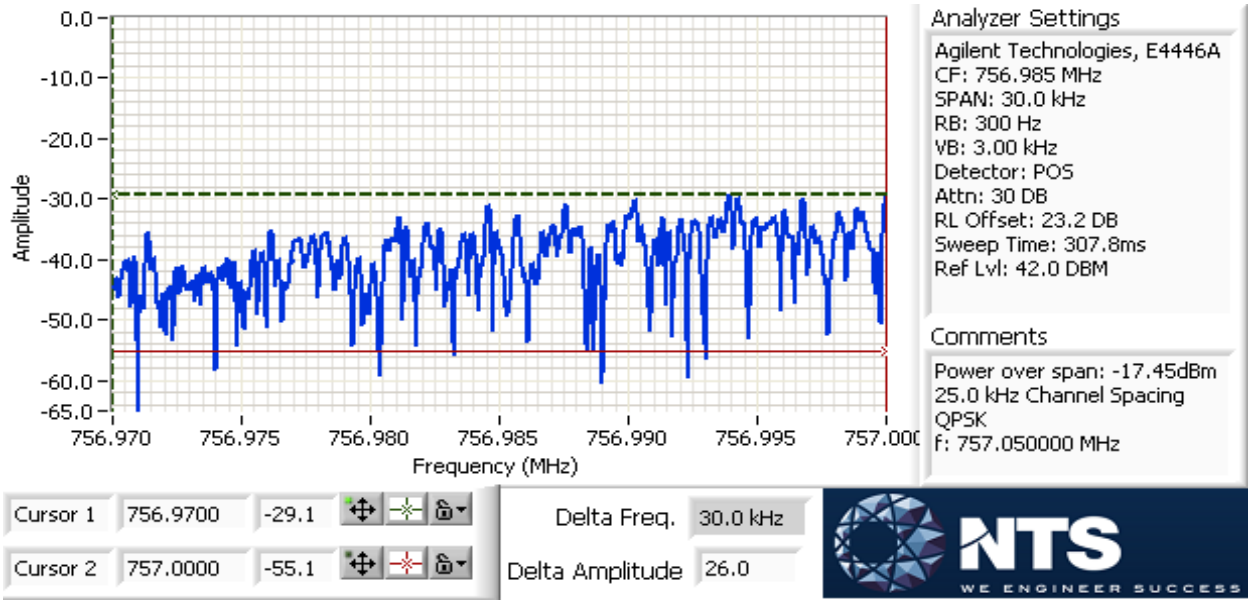
Block edge at 757 MHz, 25 kHz channel spacing



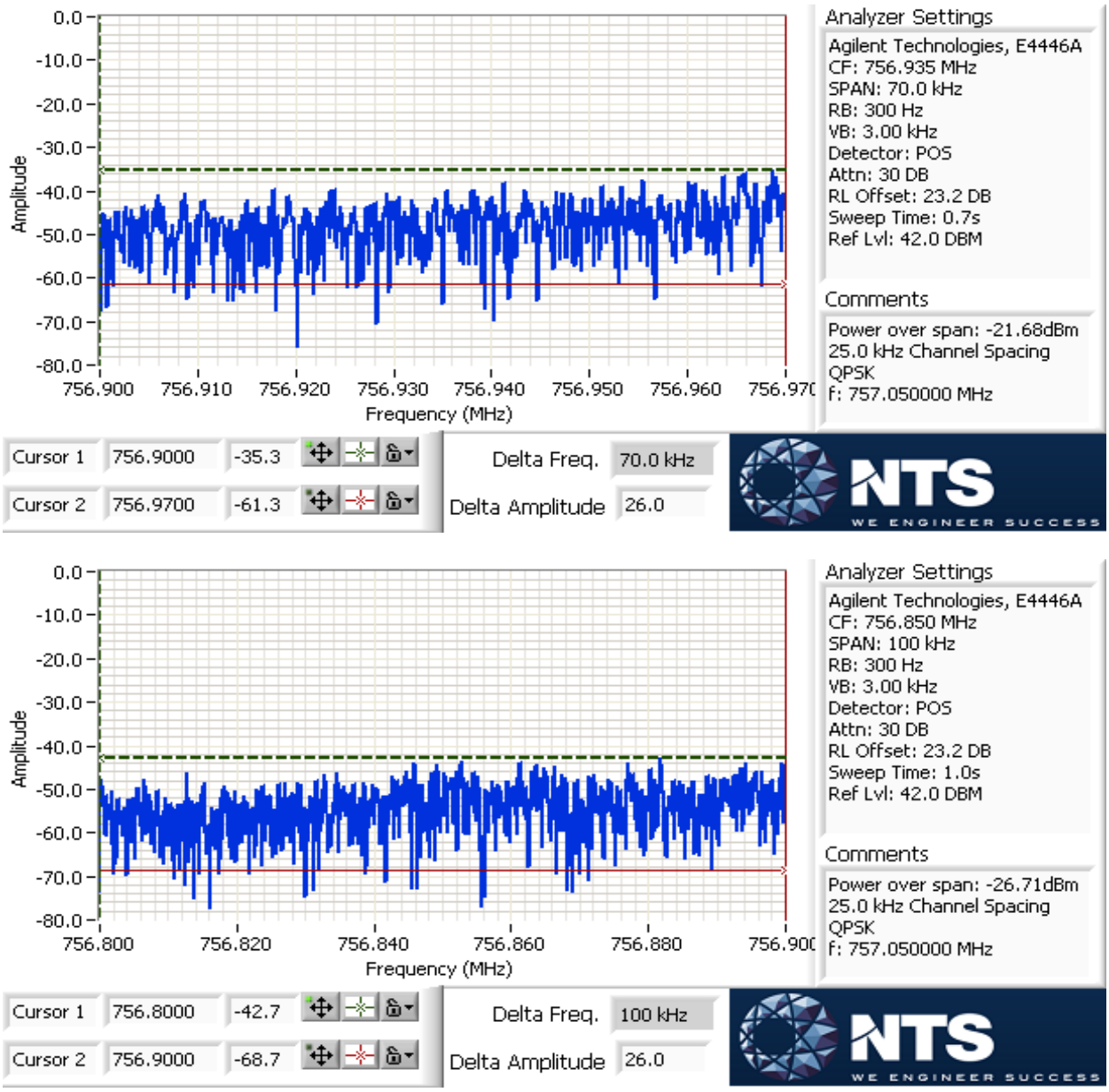


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

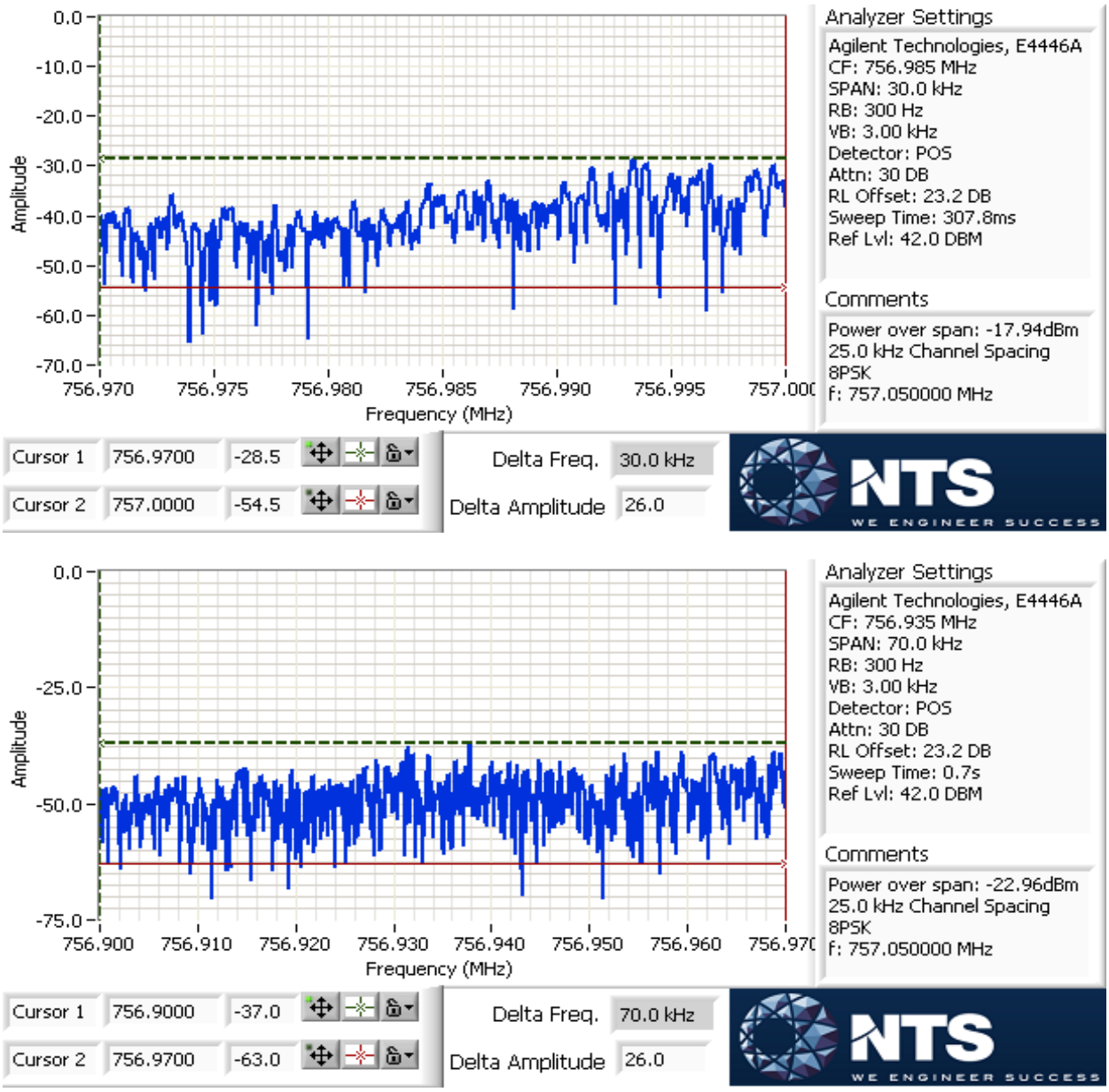




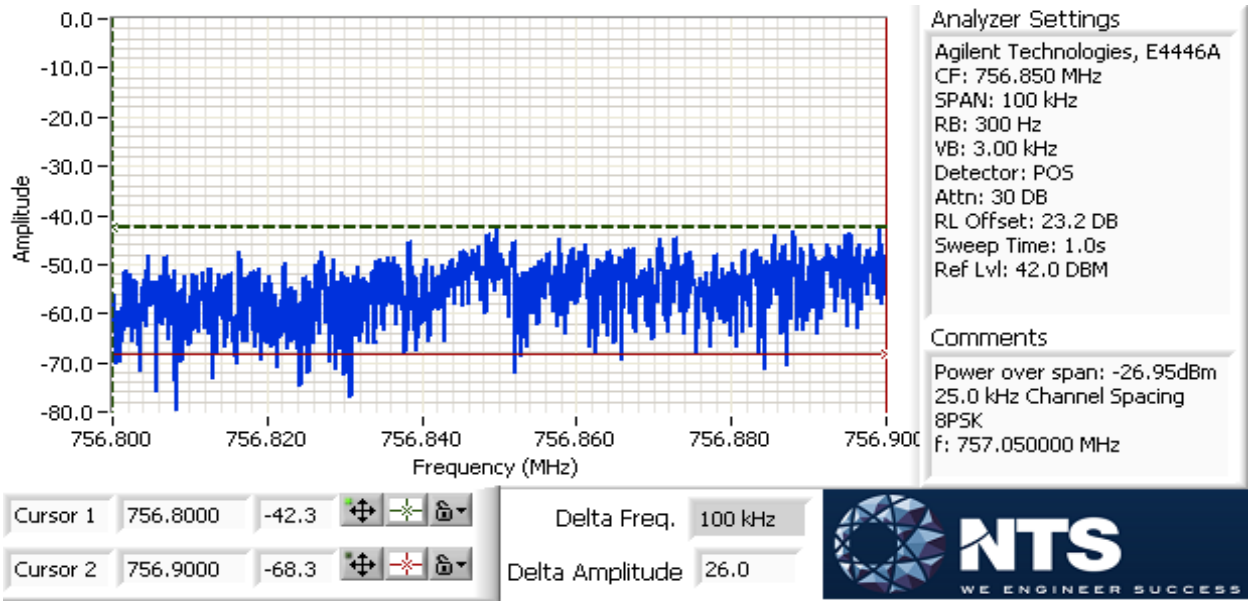
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

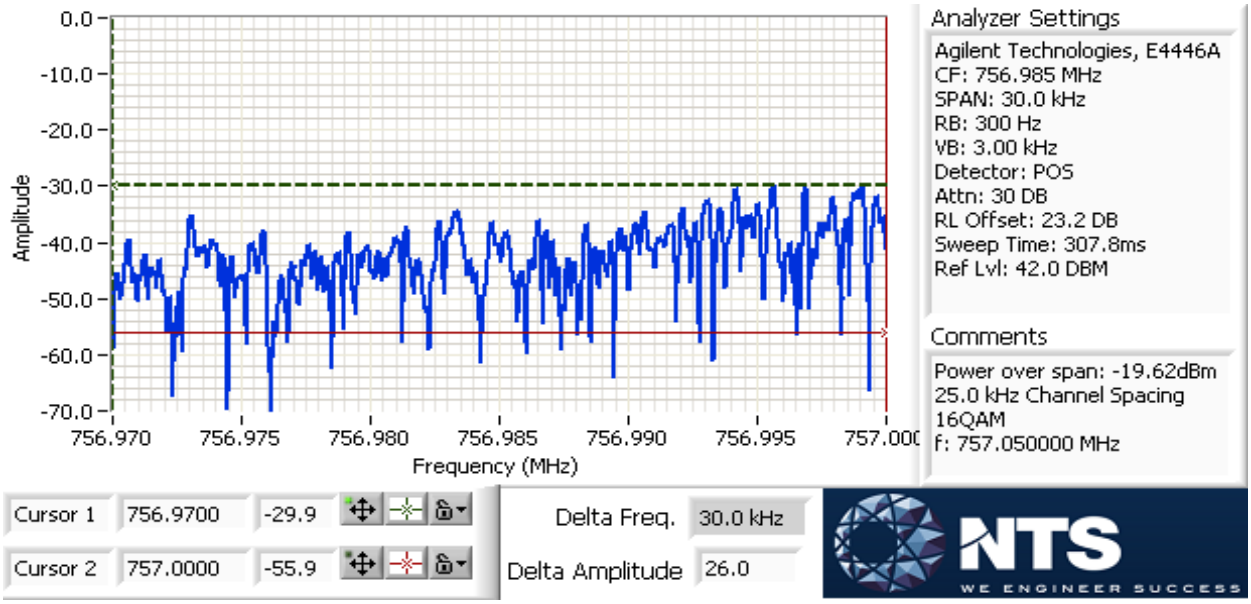


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

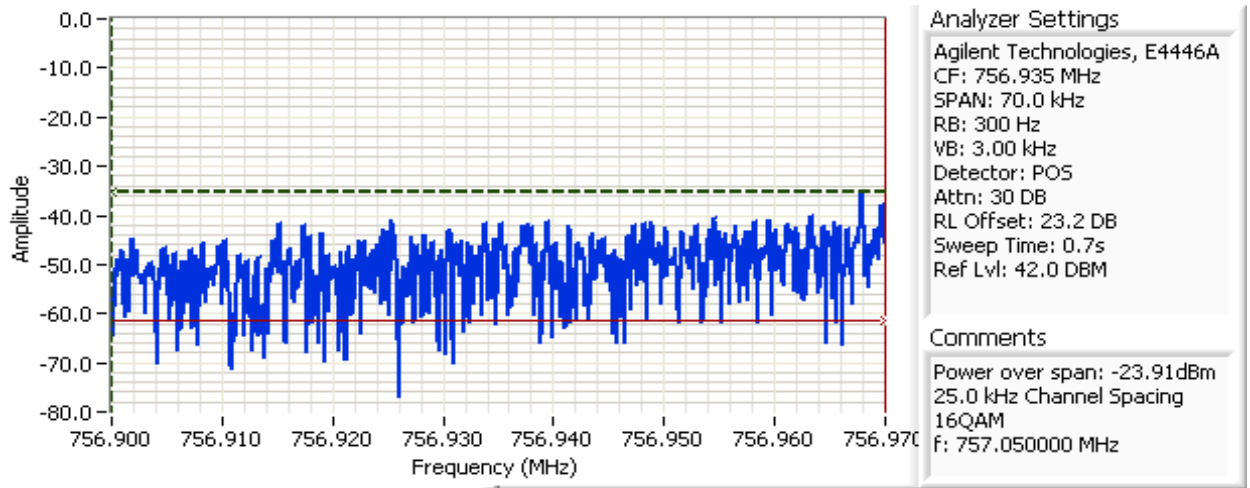


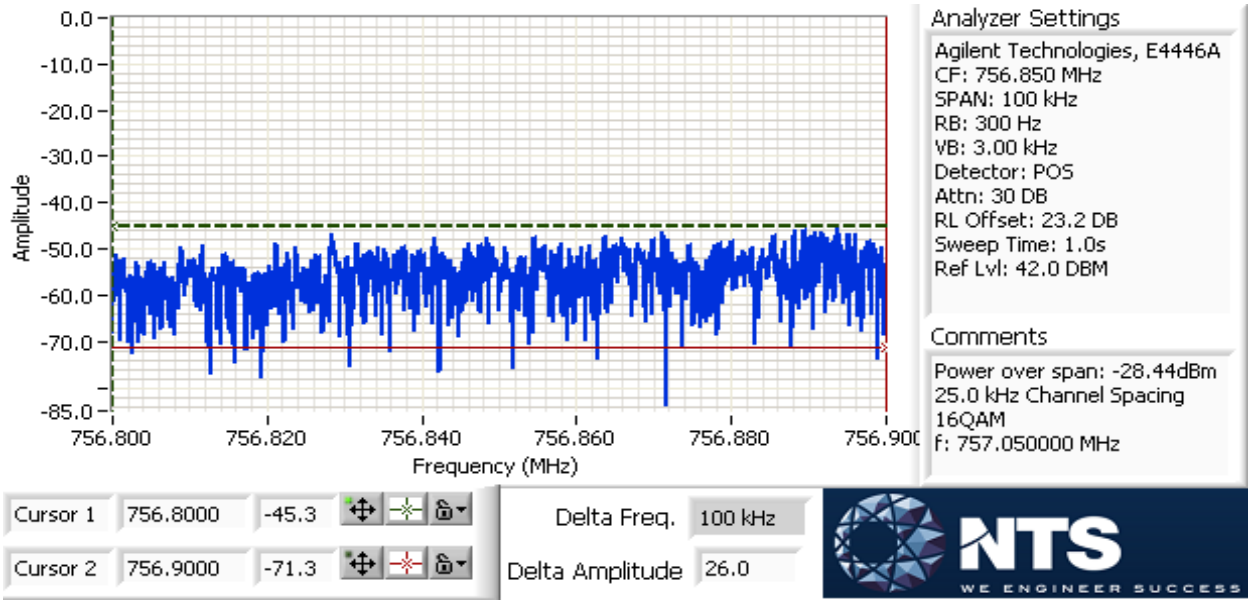
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



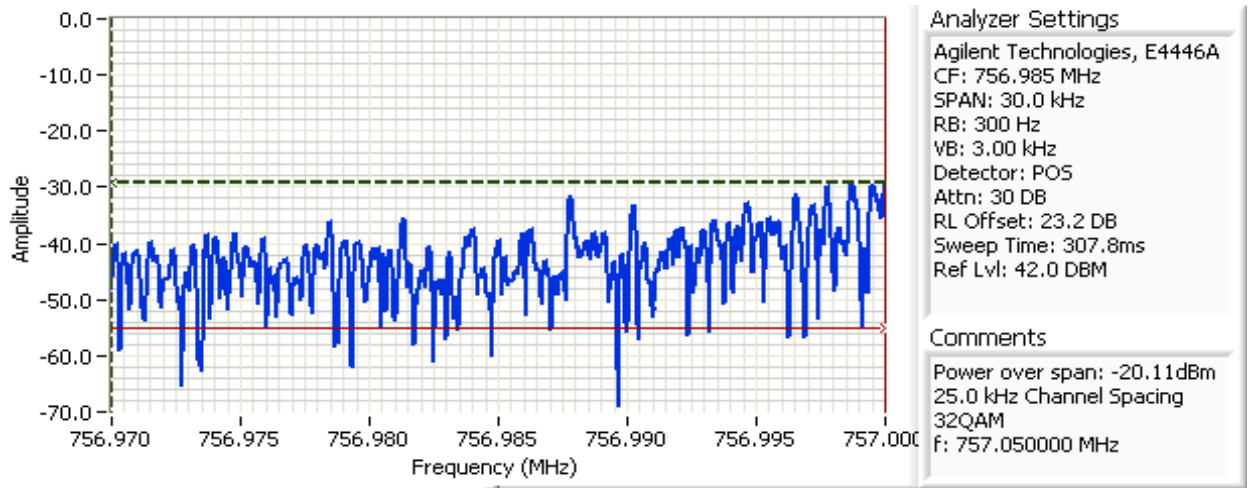


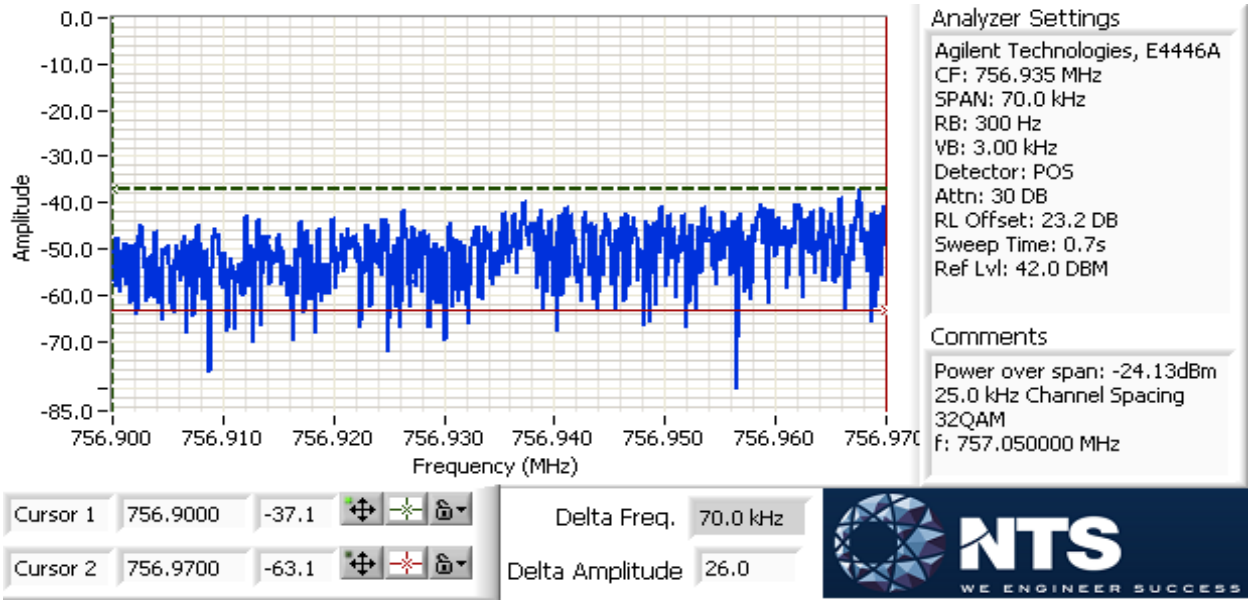
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
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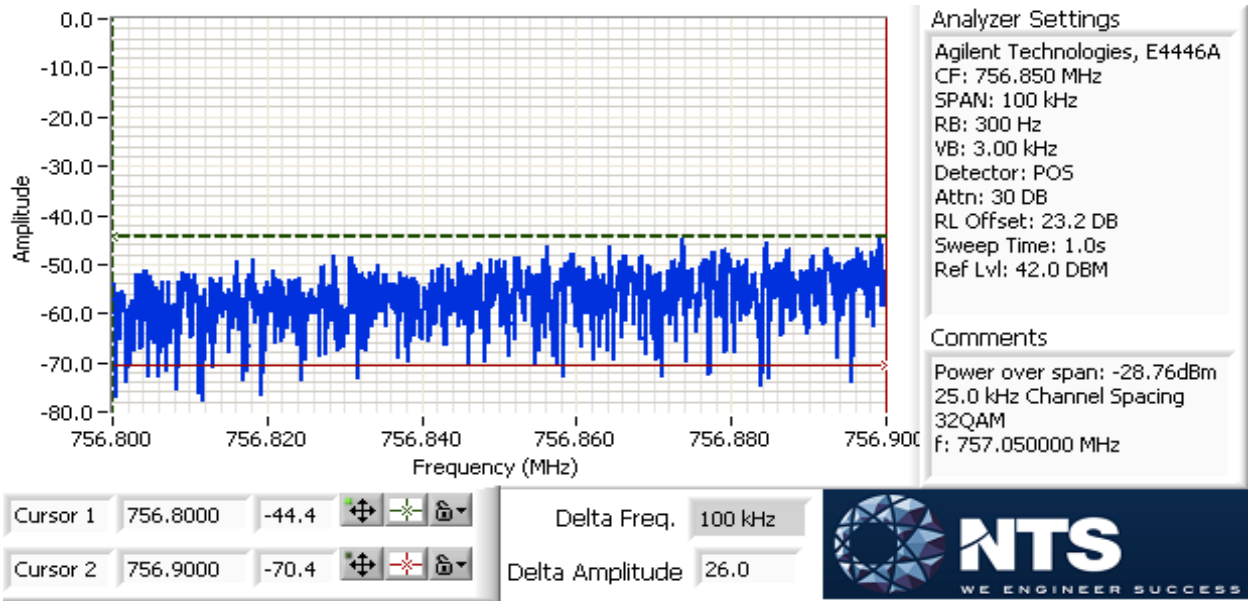
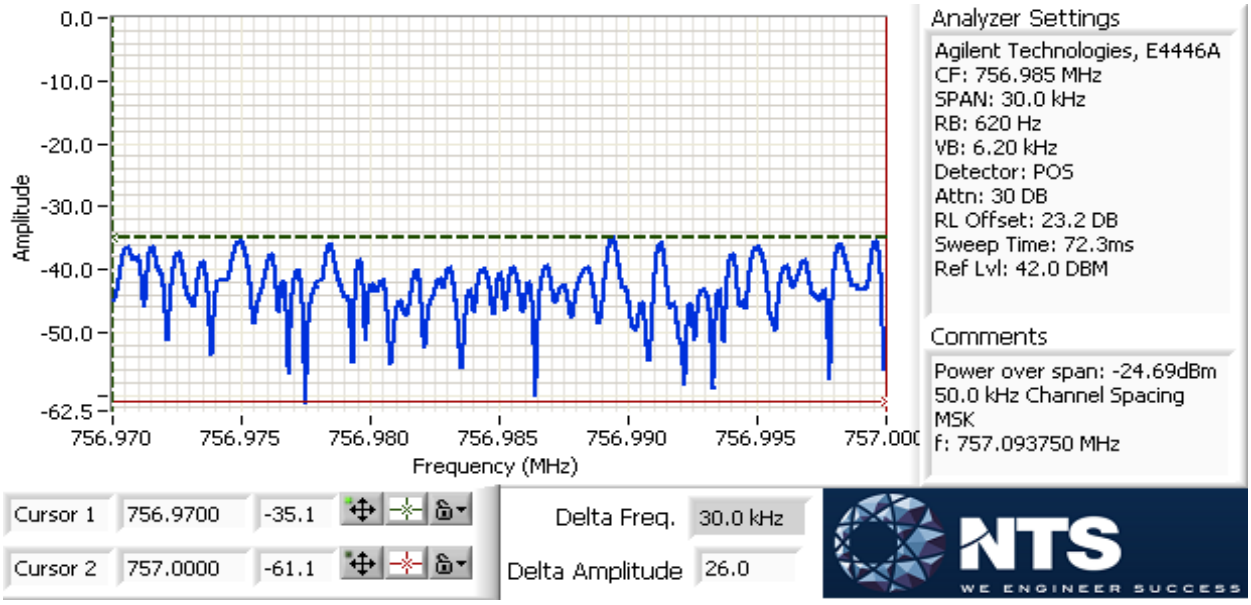
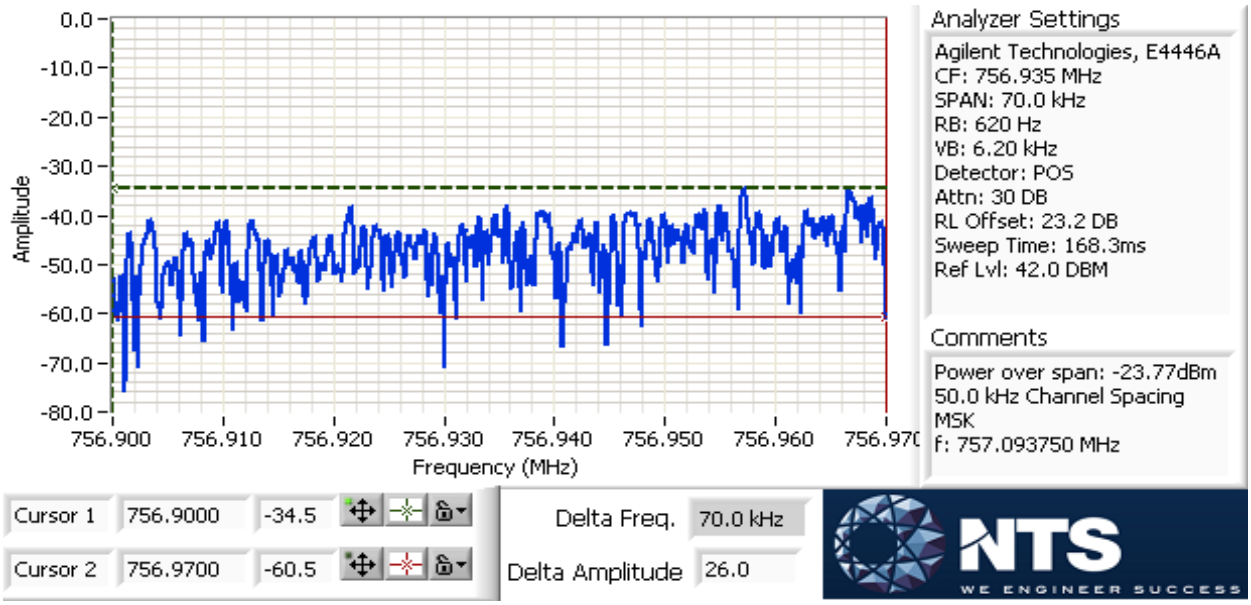


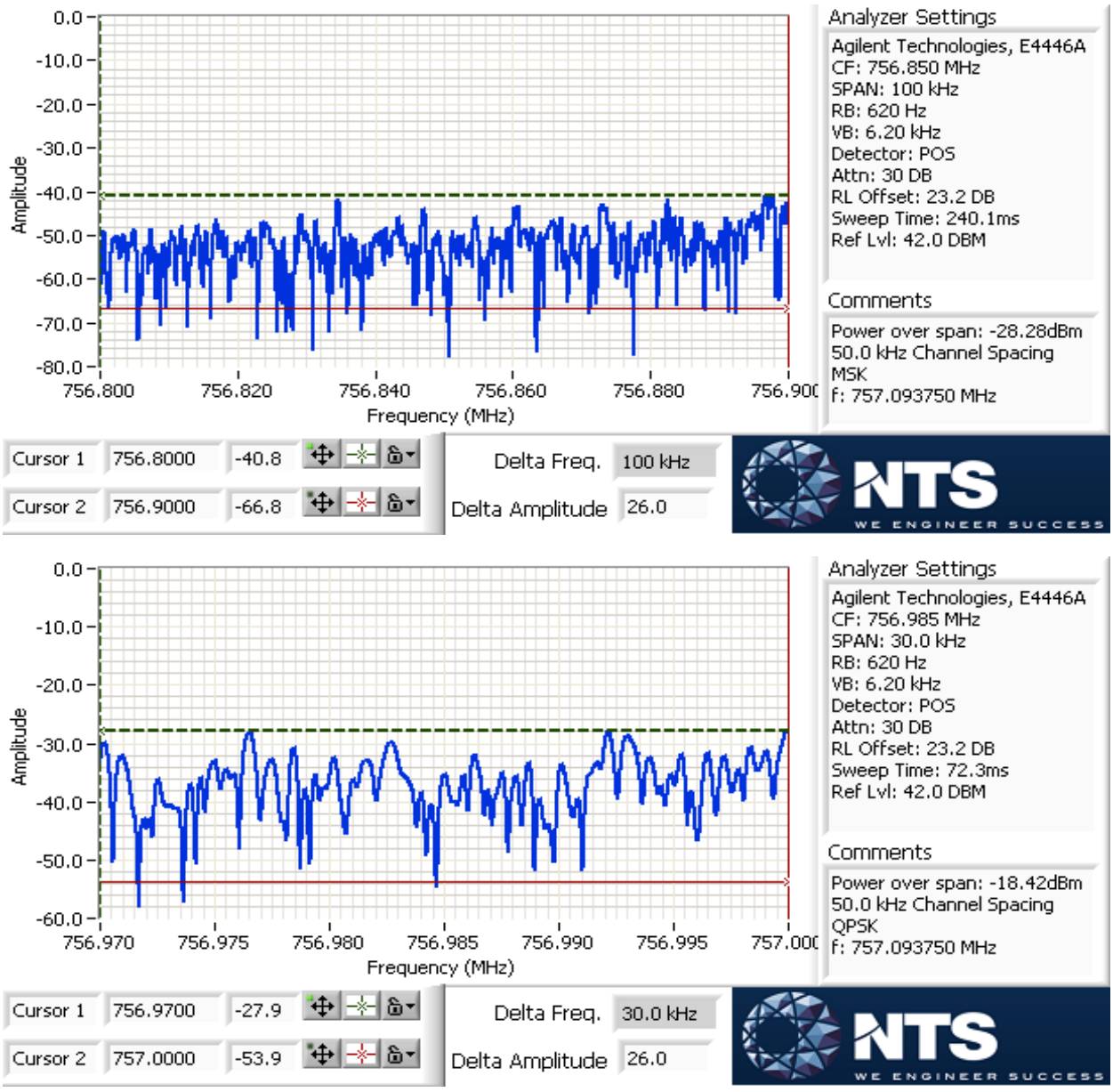
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 757 MHz, 50 kHz channel spacing

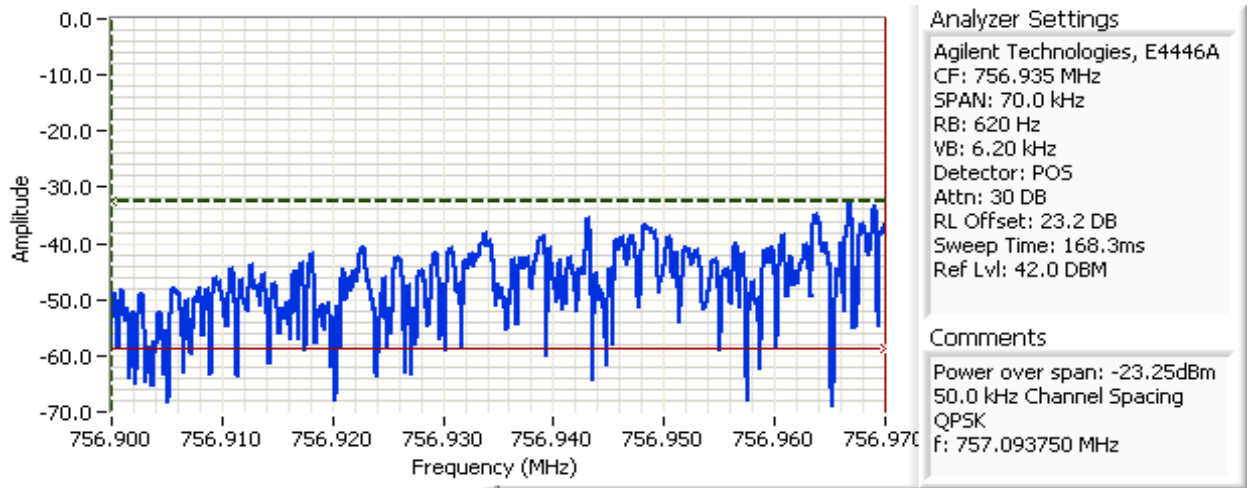


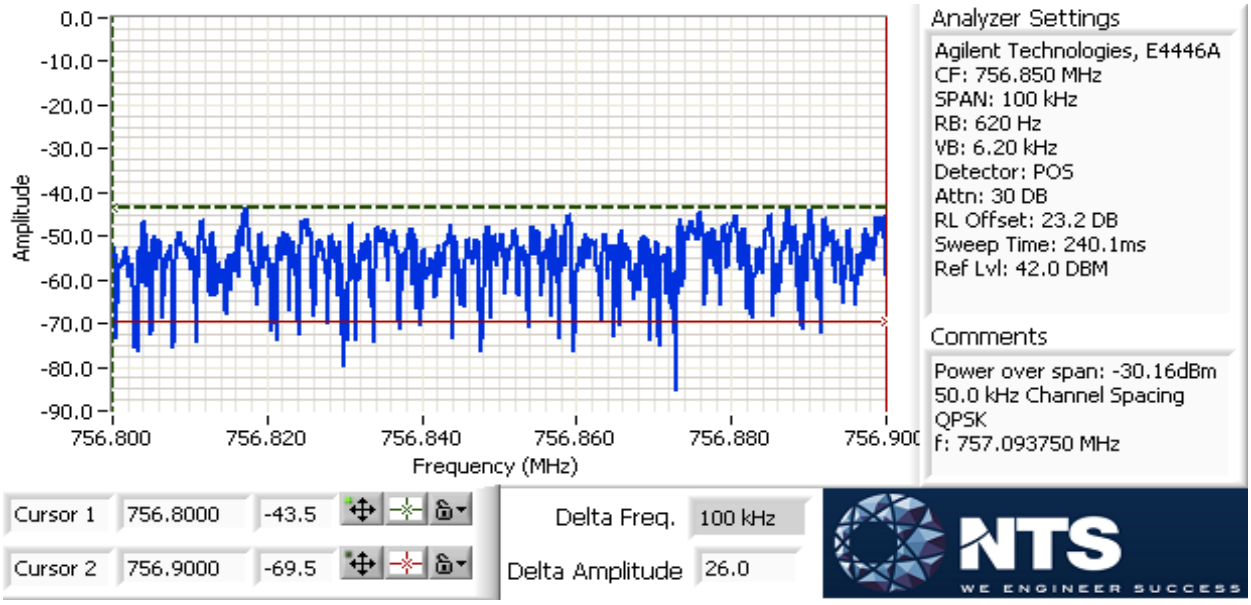


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

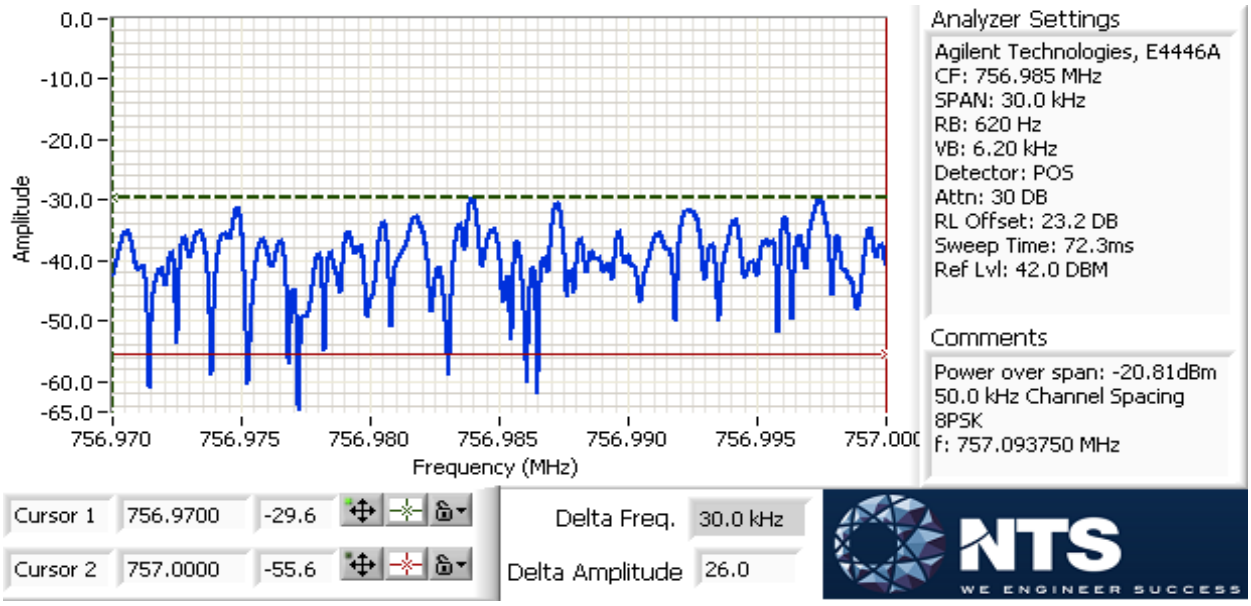


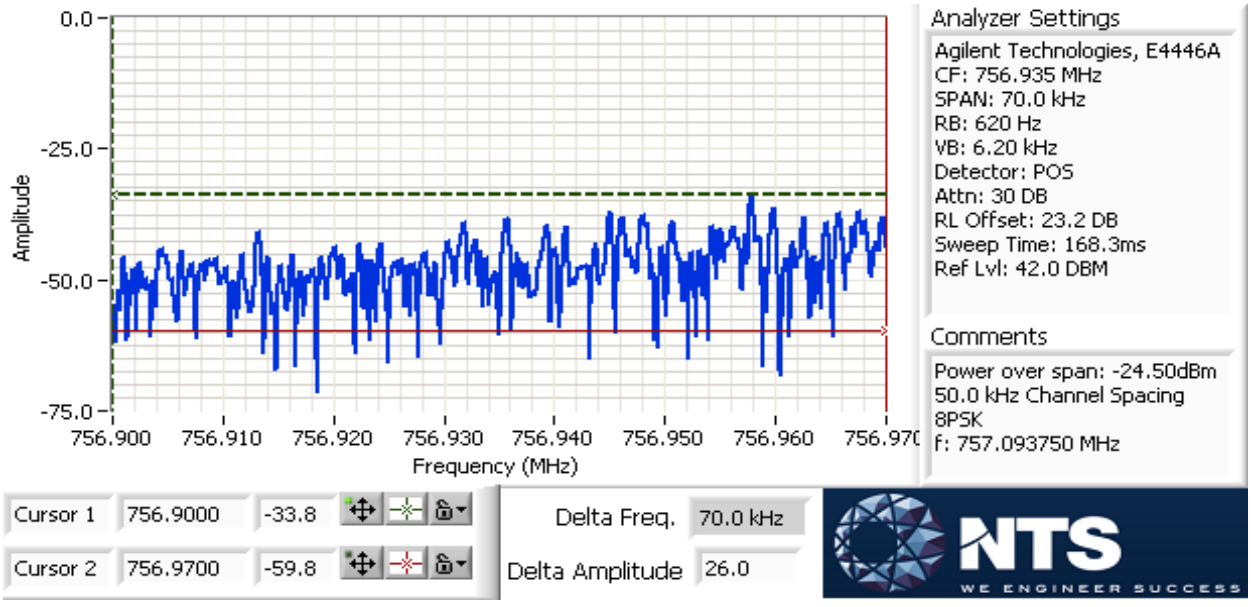
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



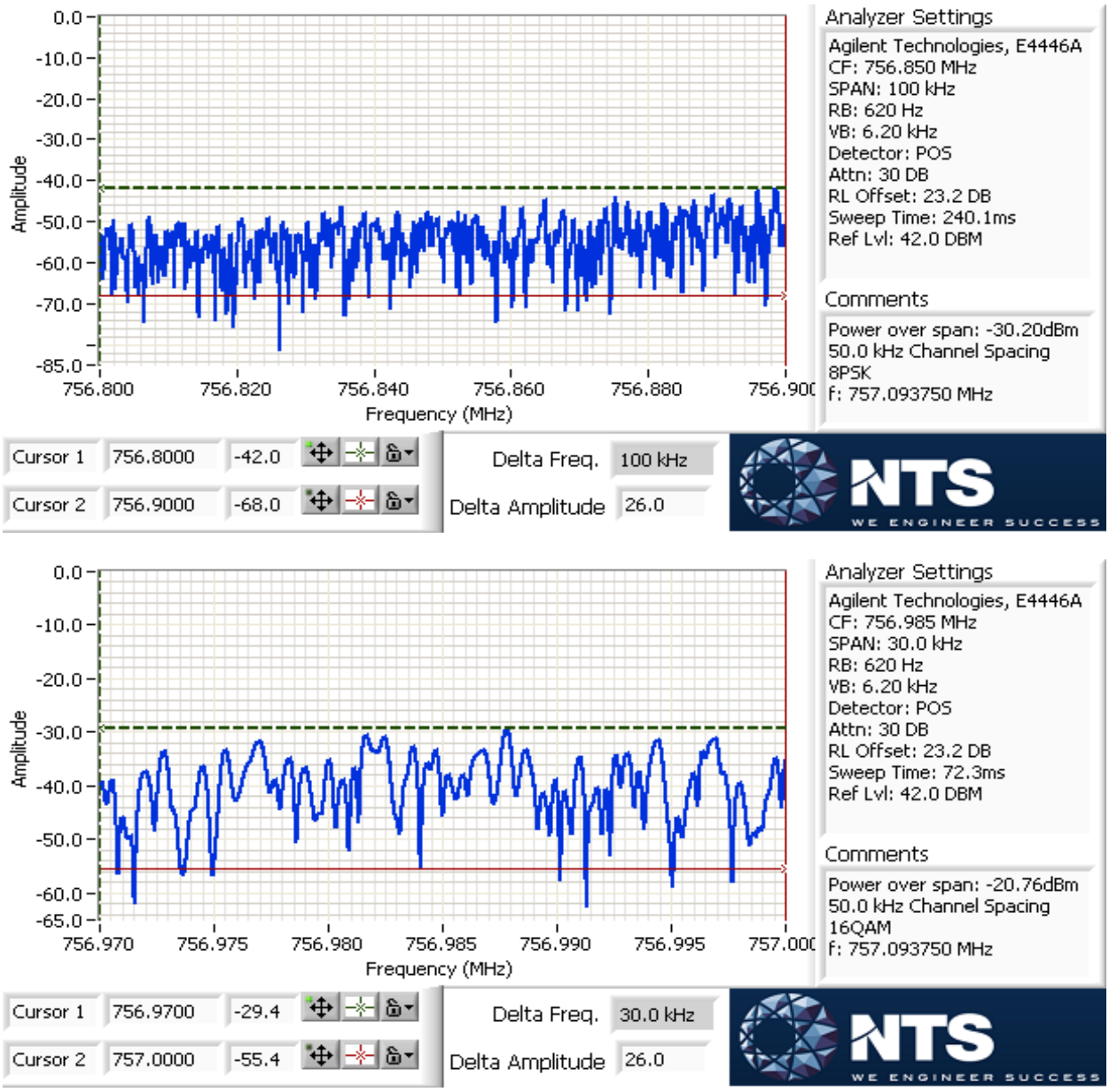


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

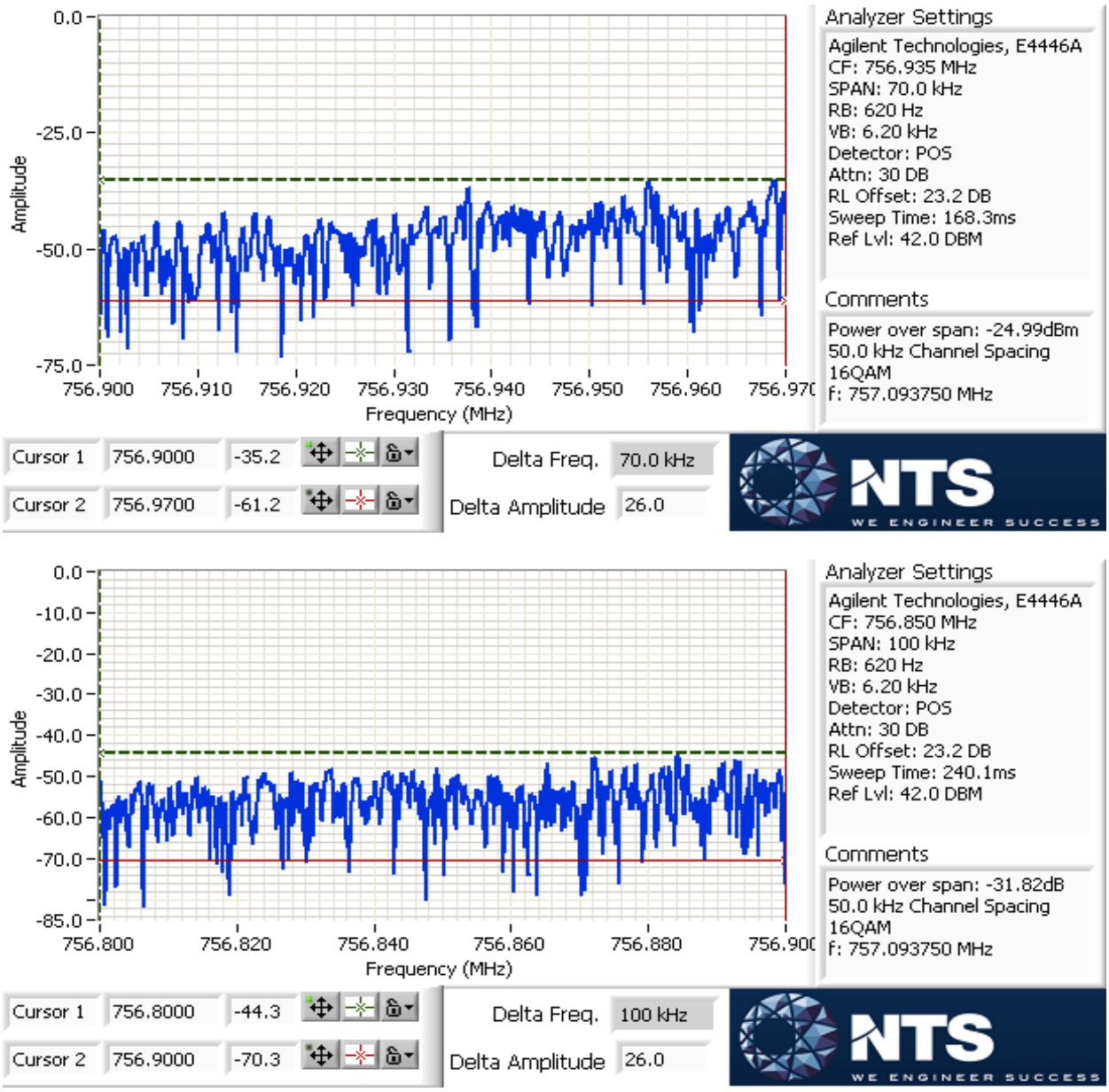




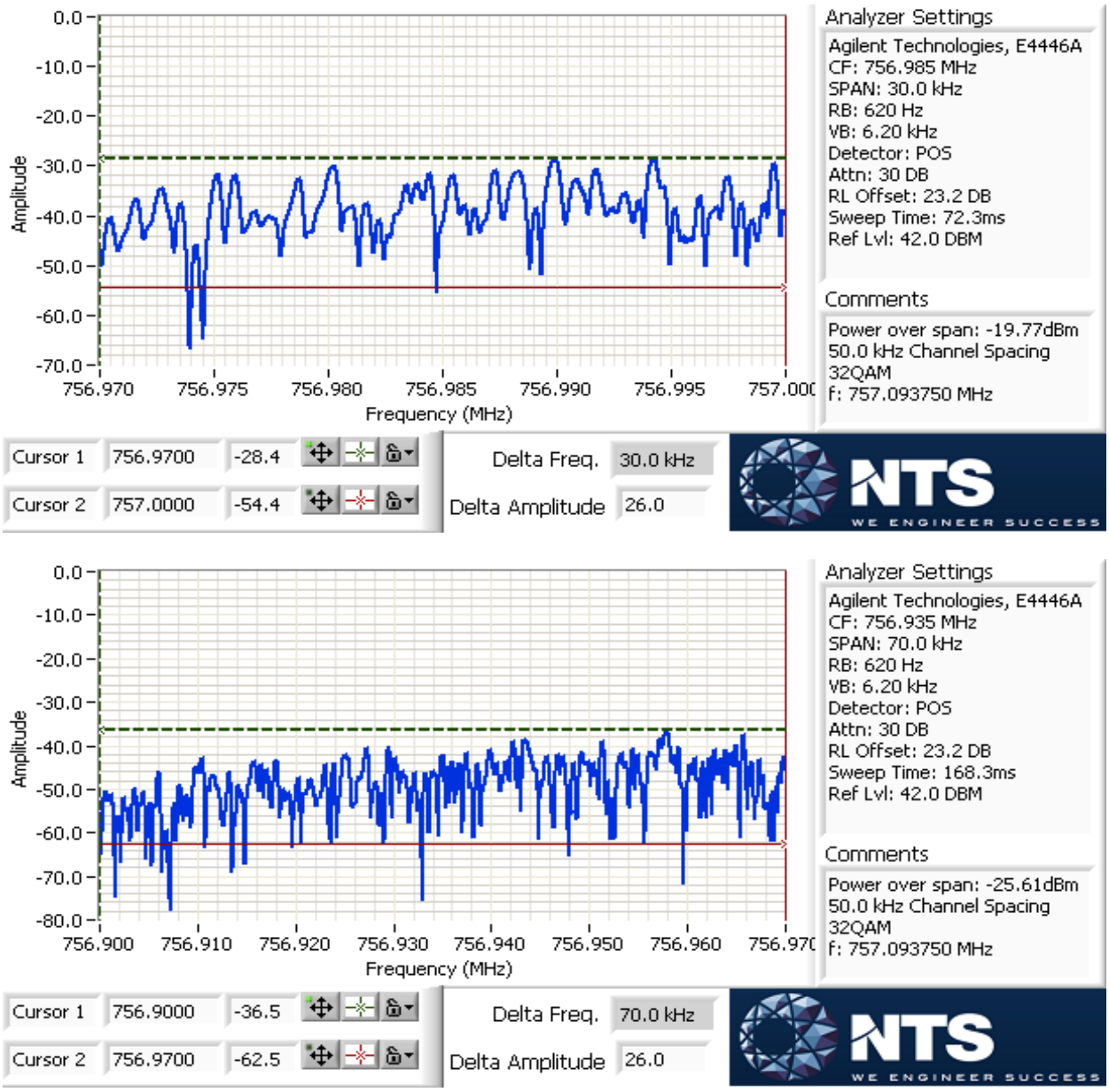
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



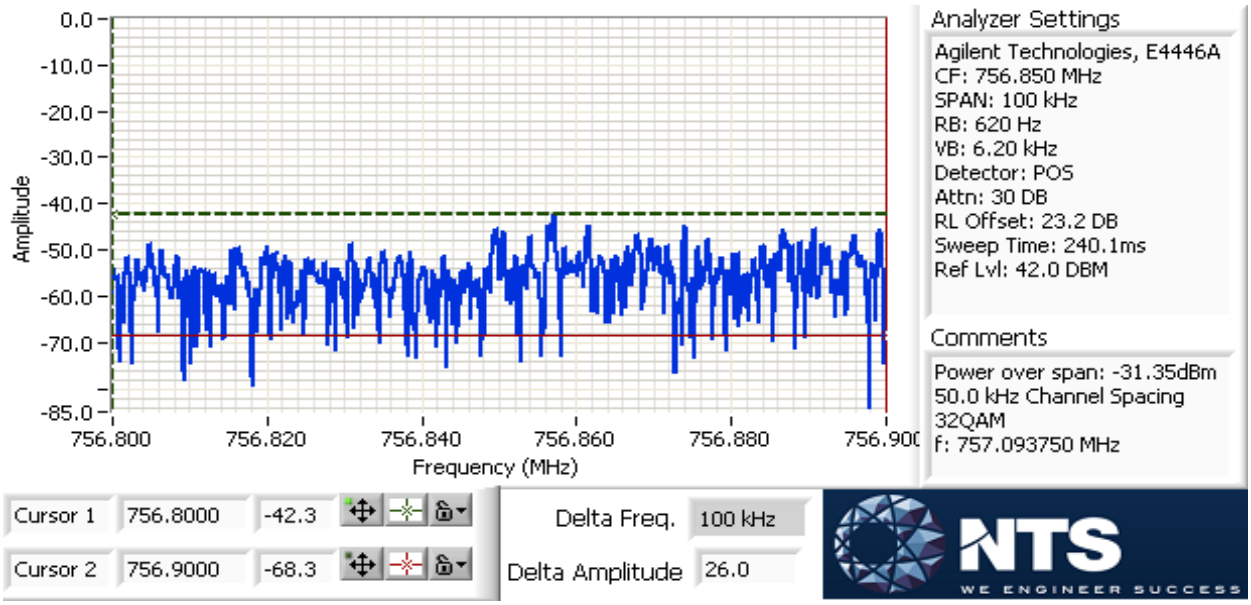
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

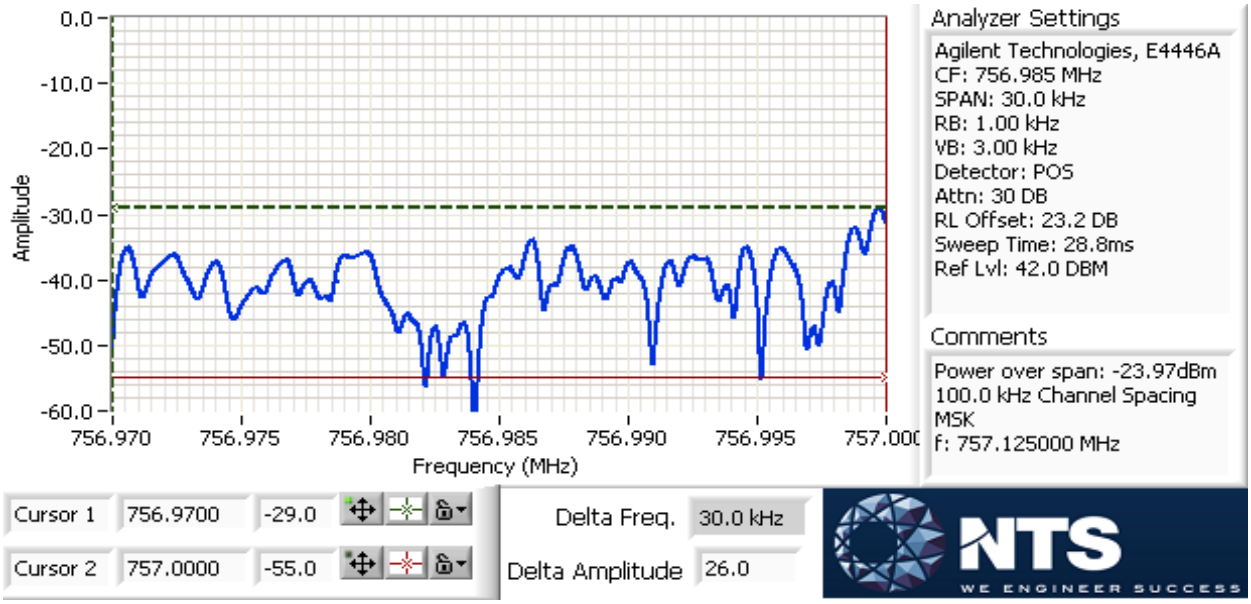


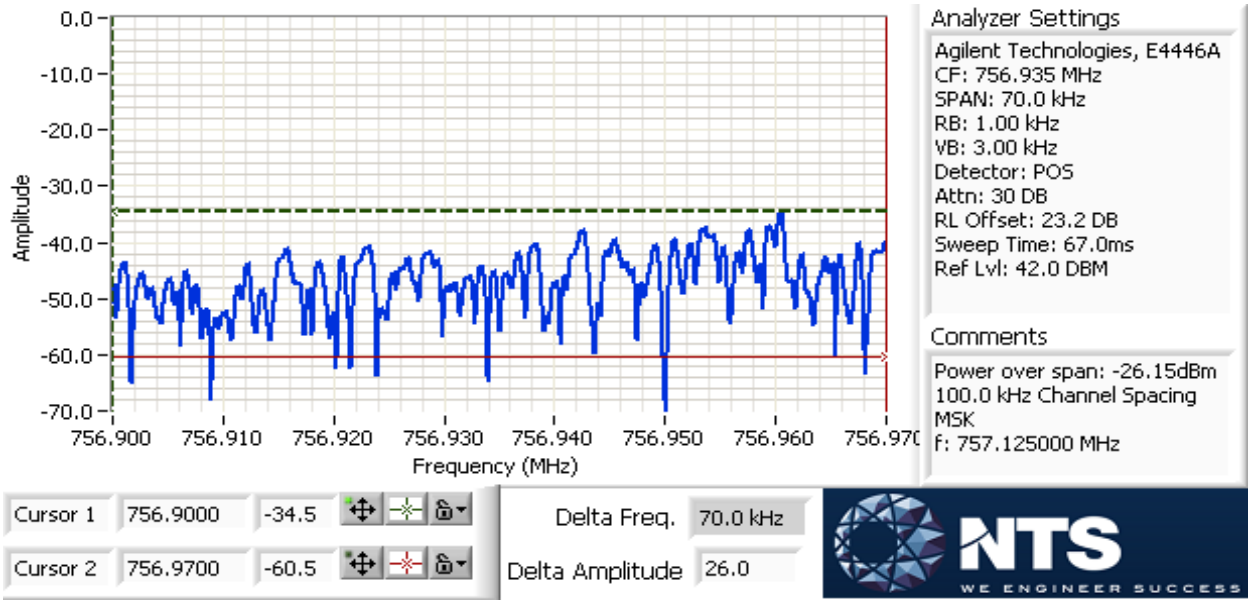
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



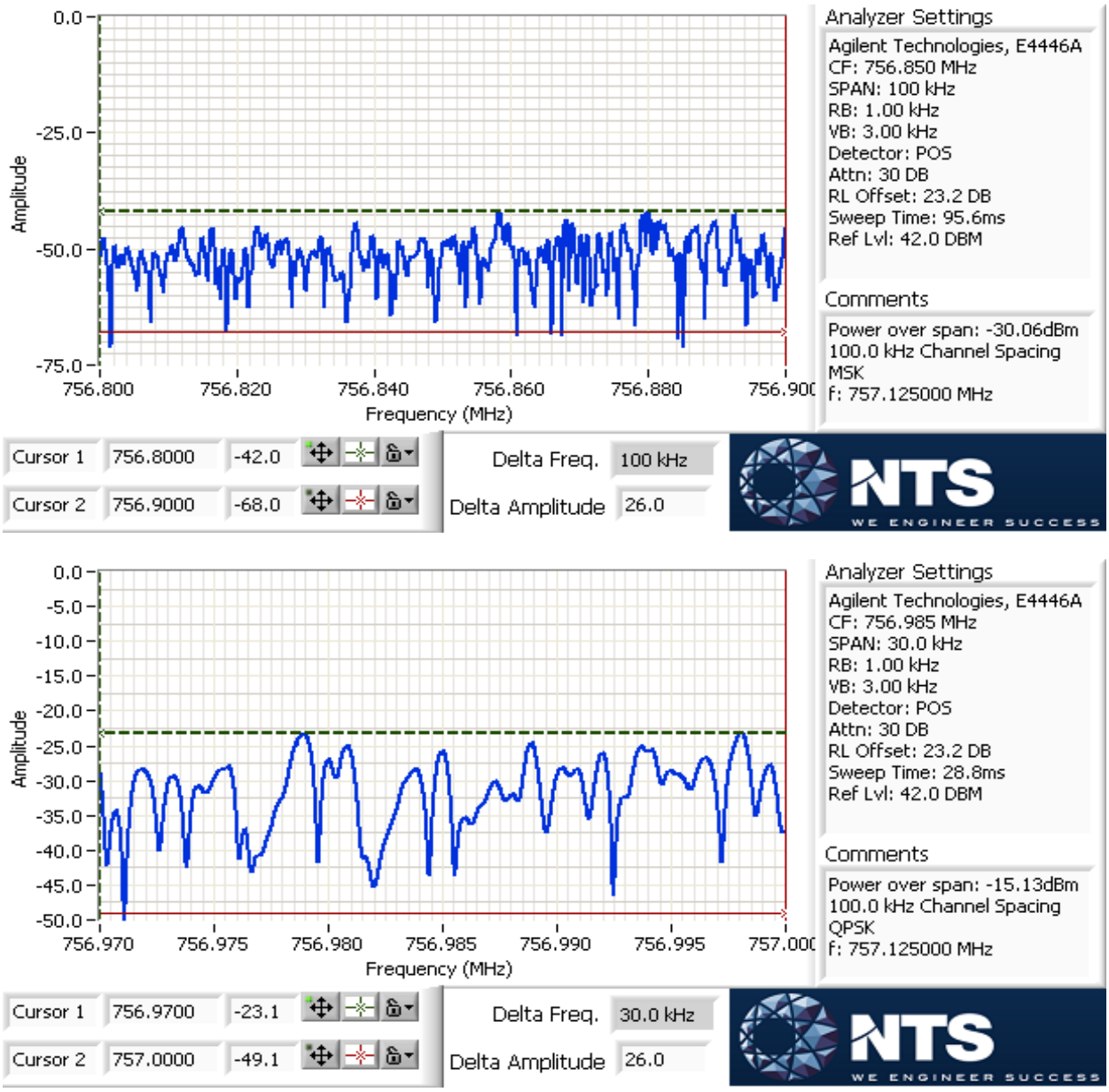
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 757 MHz, 100 kHz channel spacing

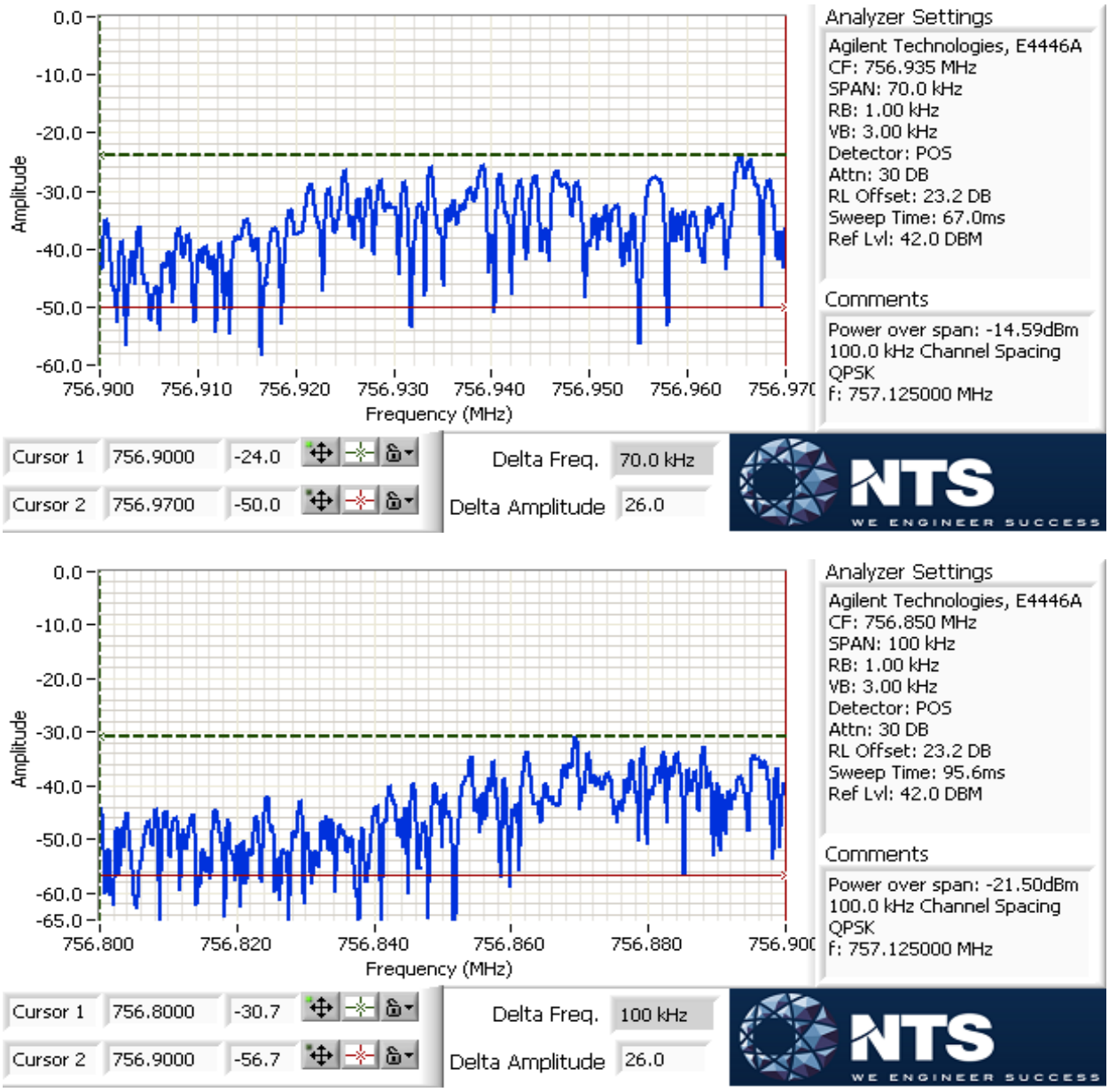




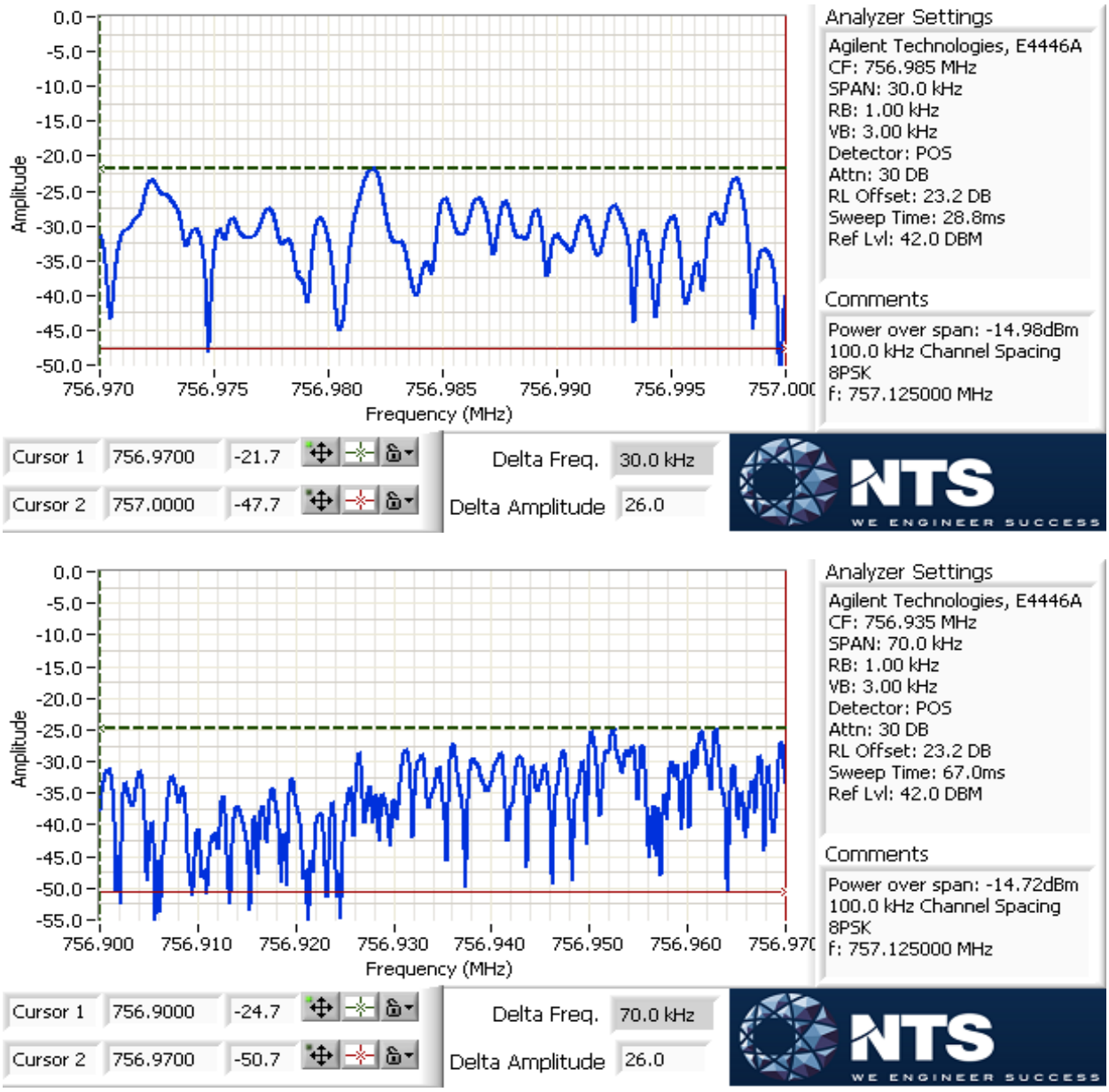
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



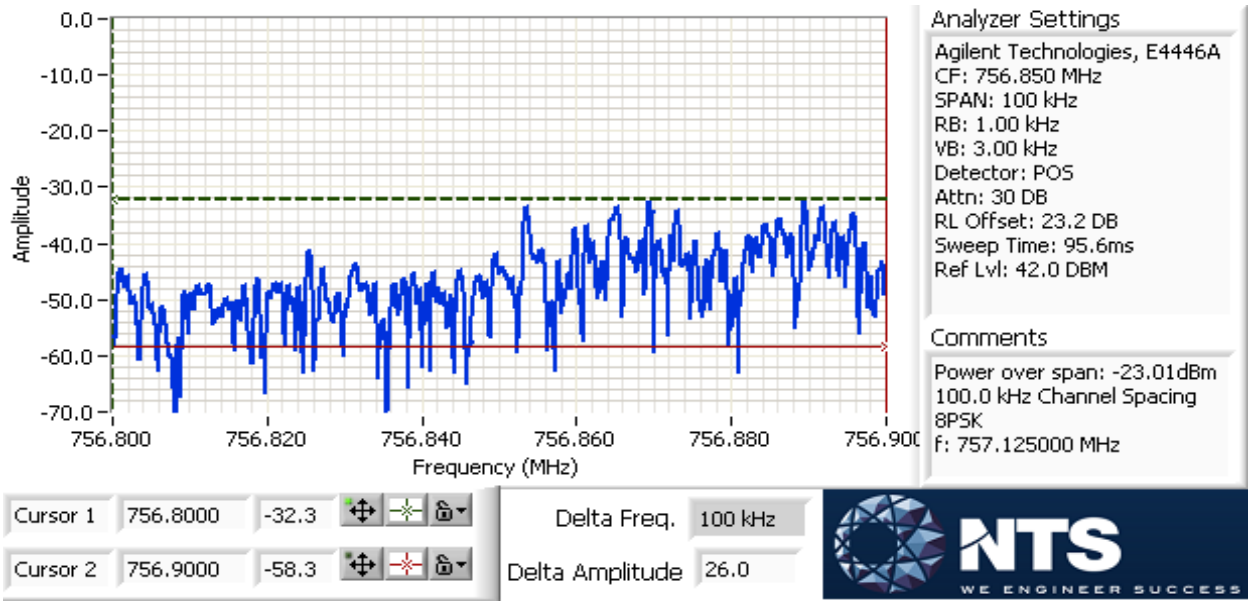
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

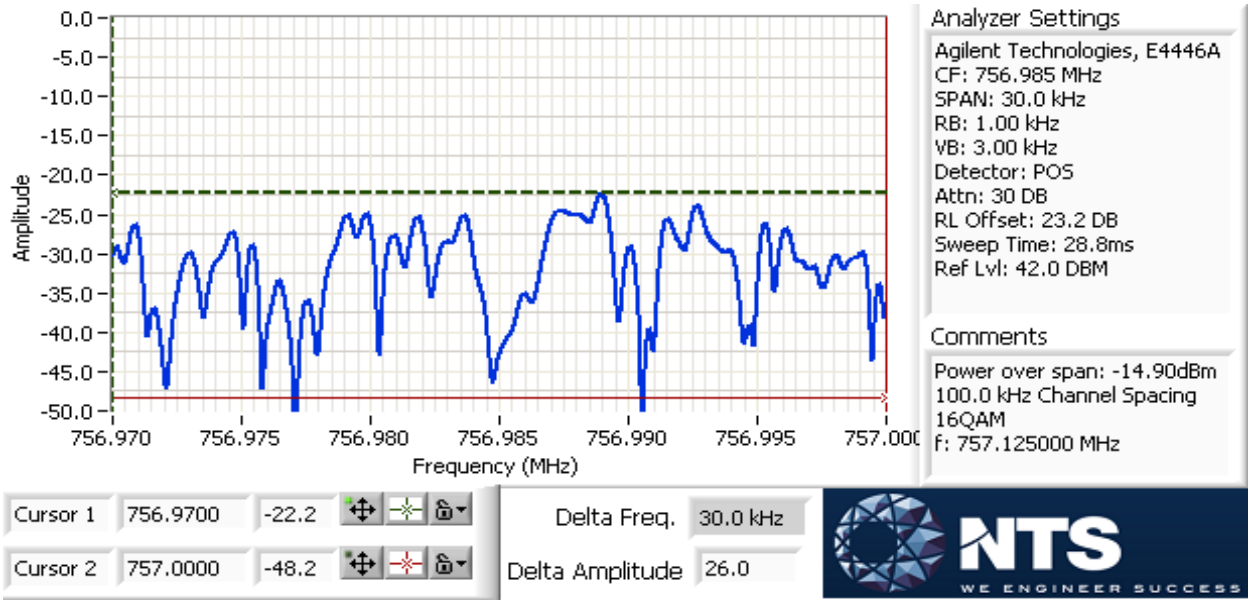


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

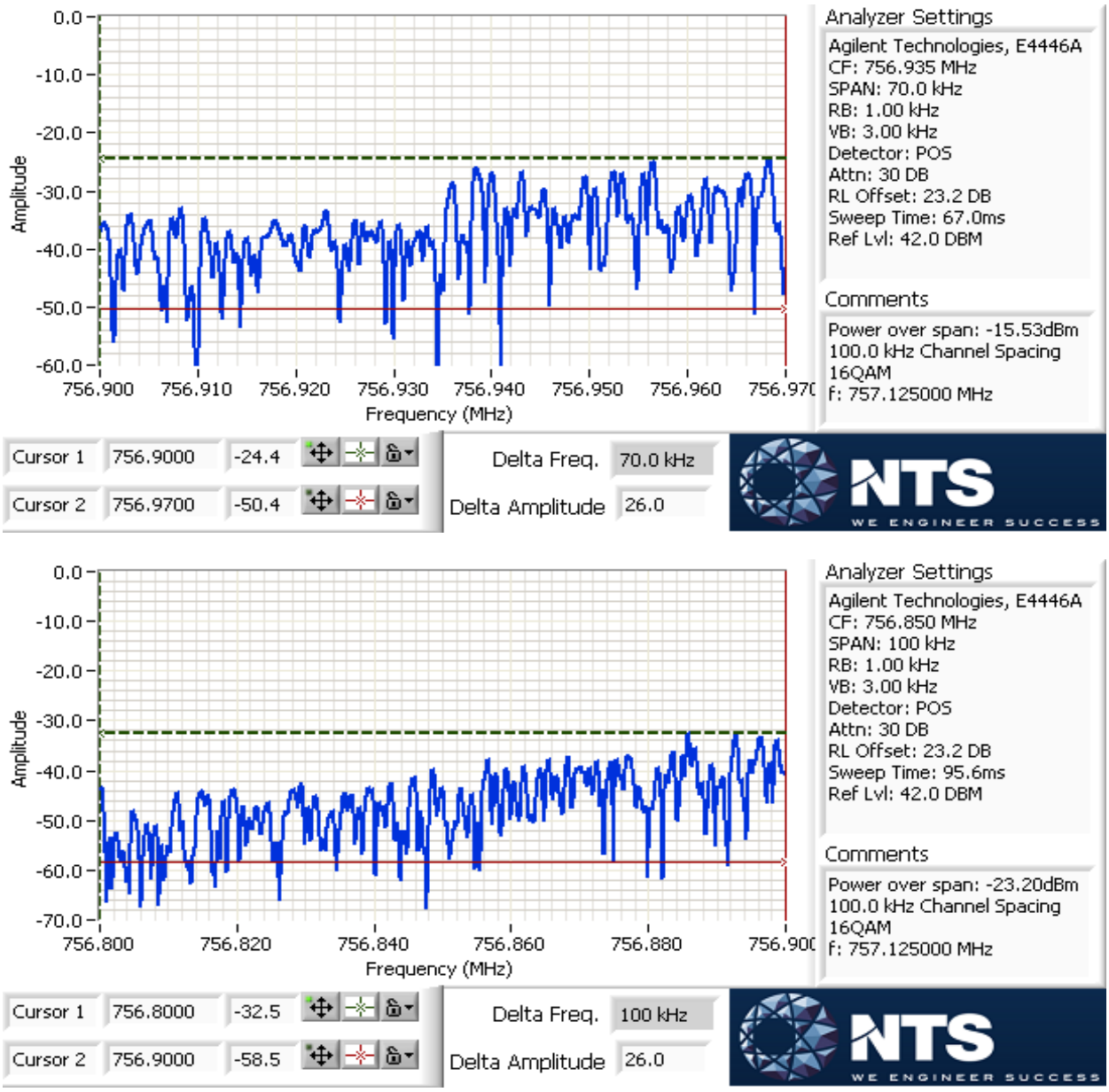


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

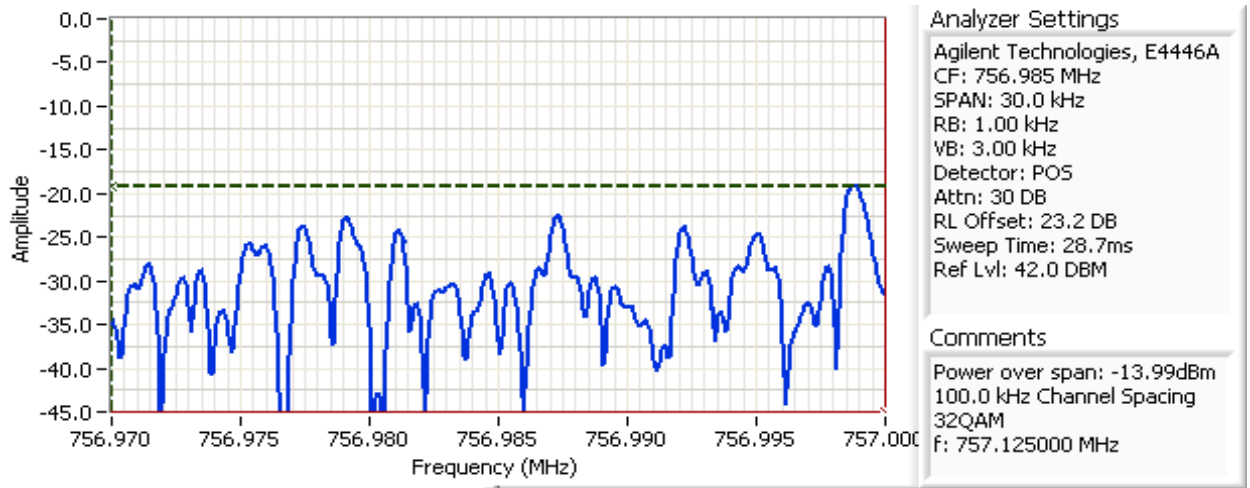


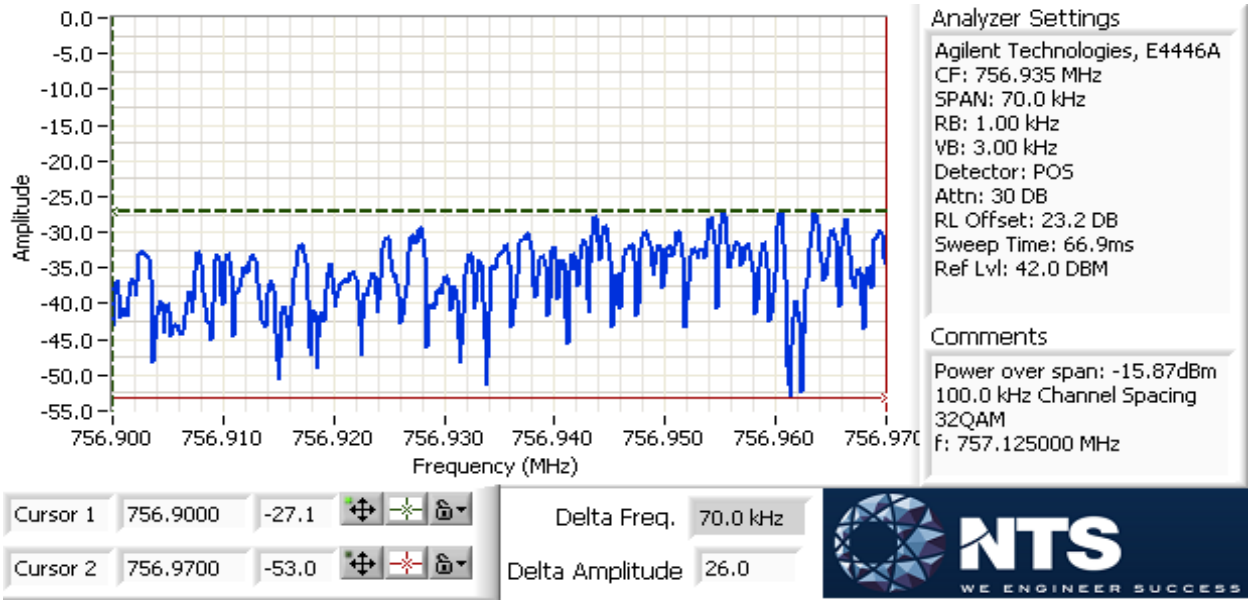


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

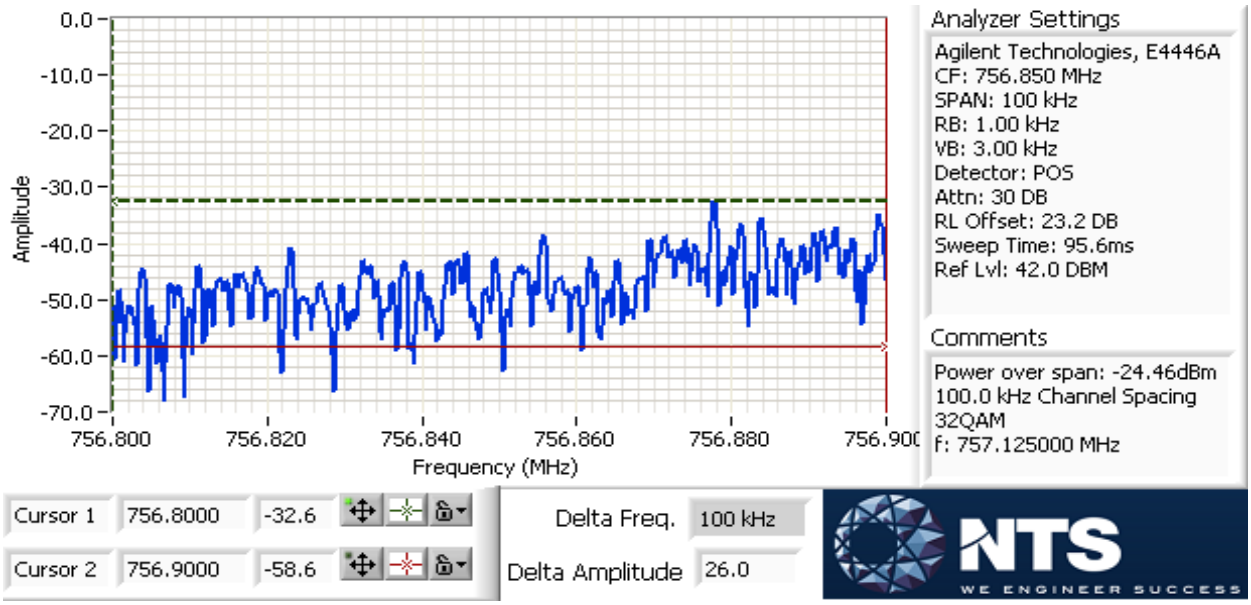


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



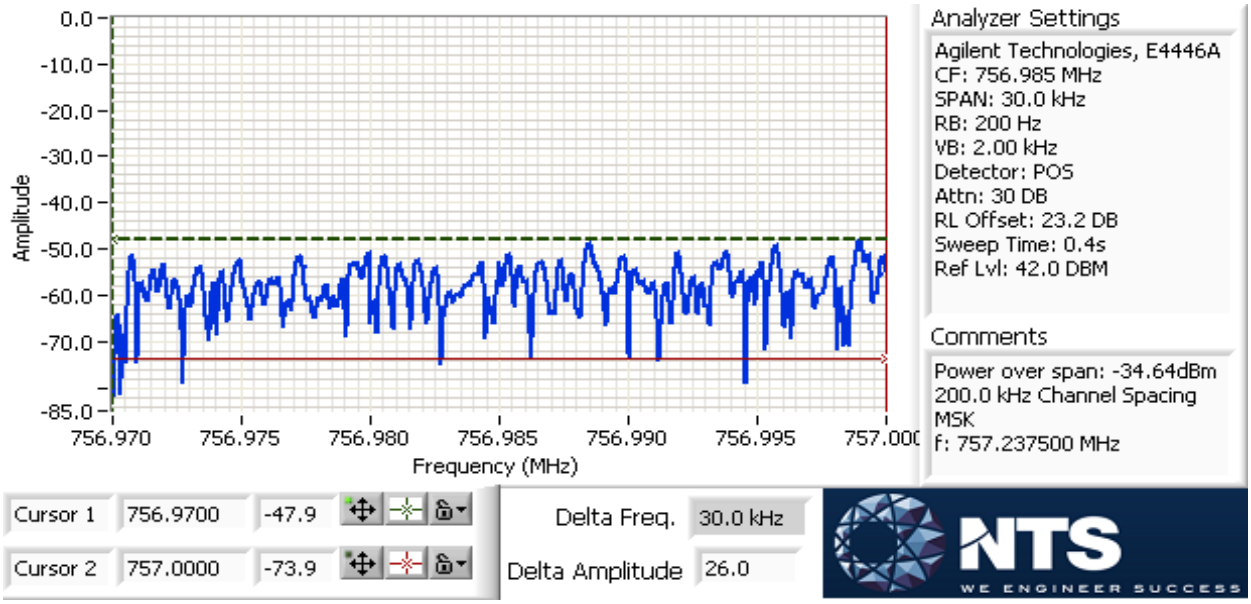


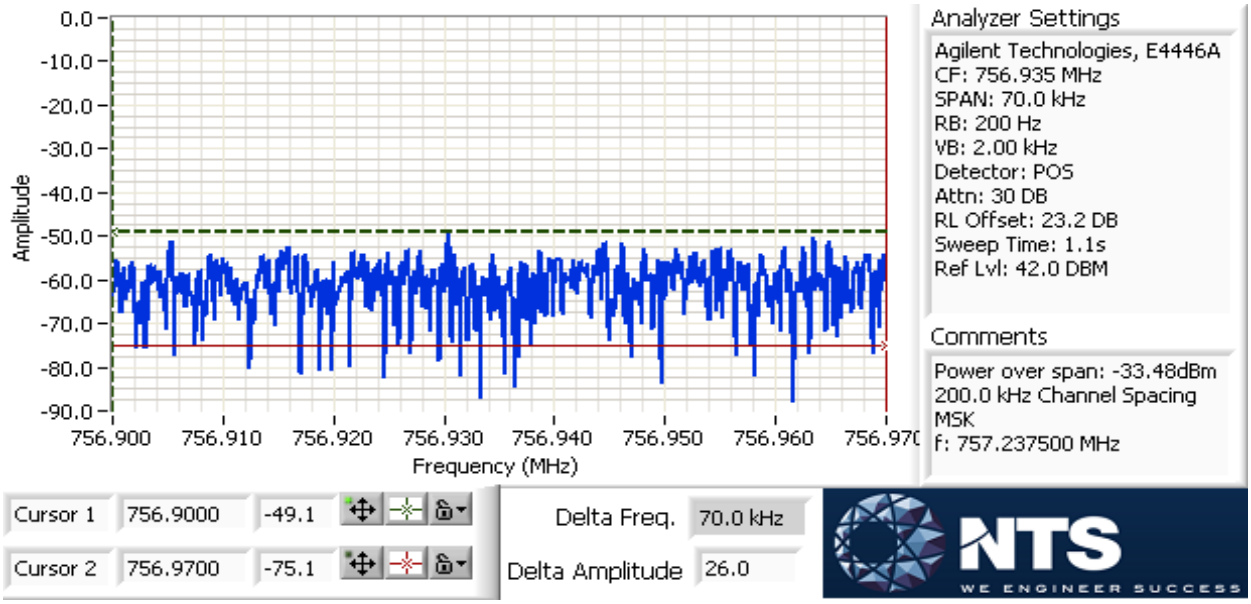
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



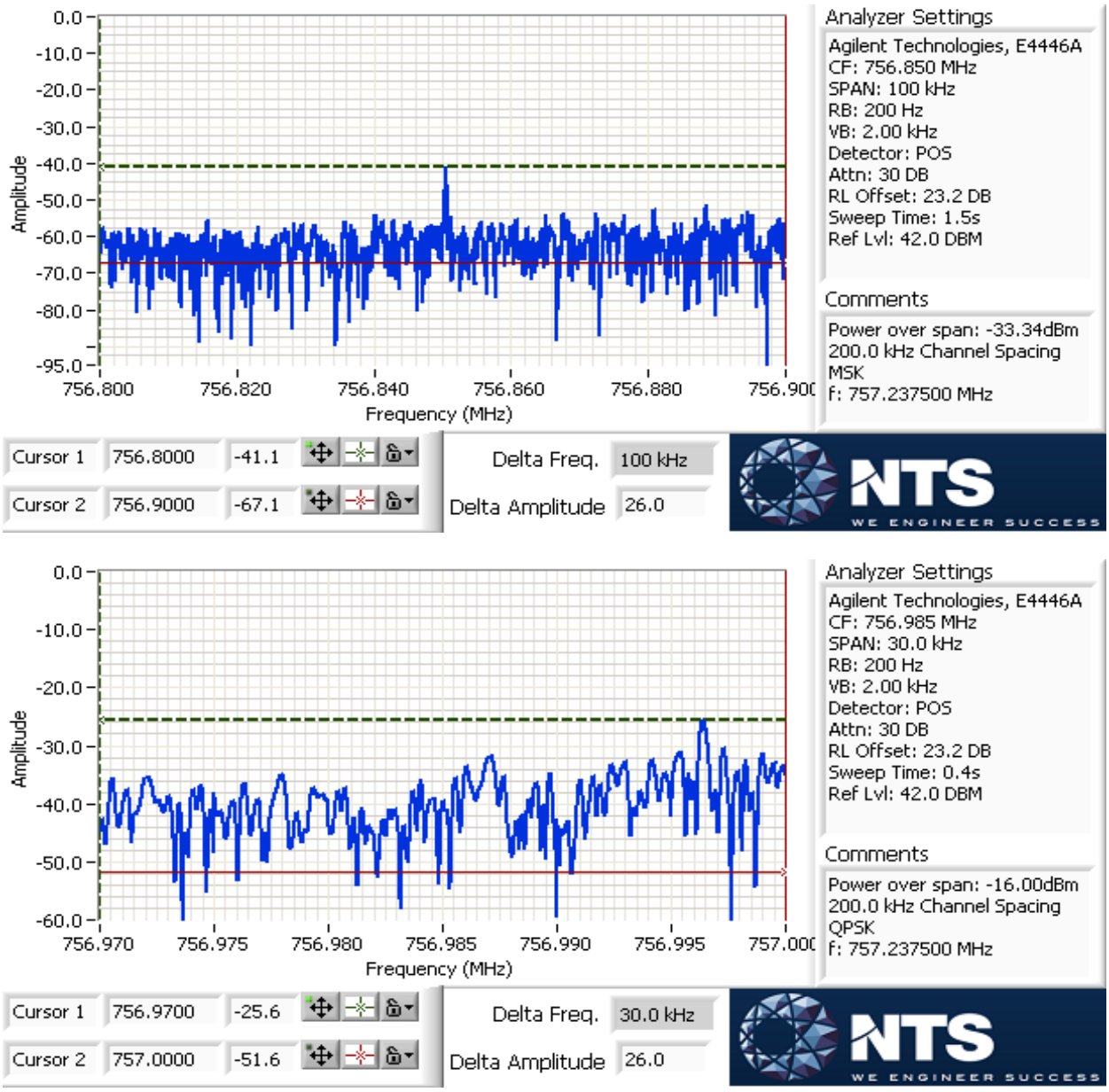
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 757 MHz, 200 kHz channel spacing

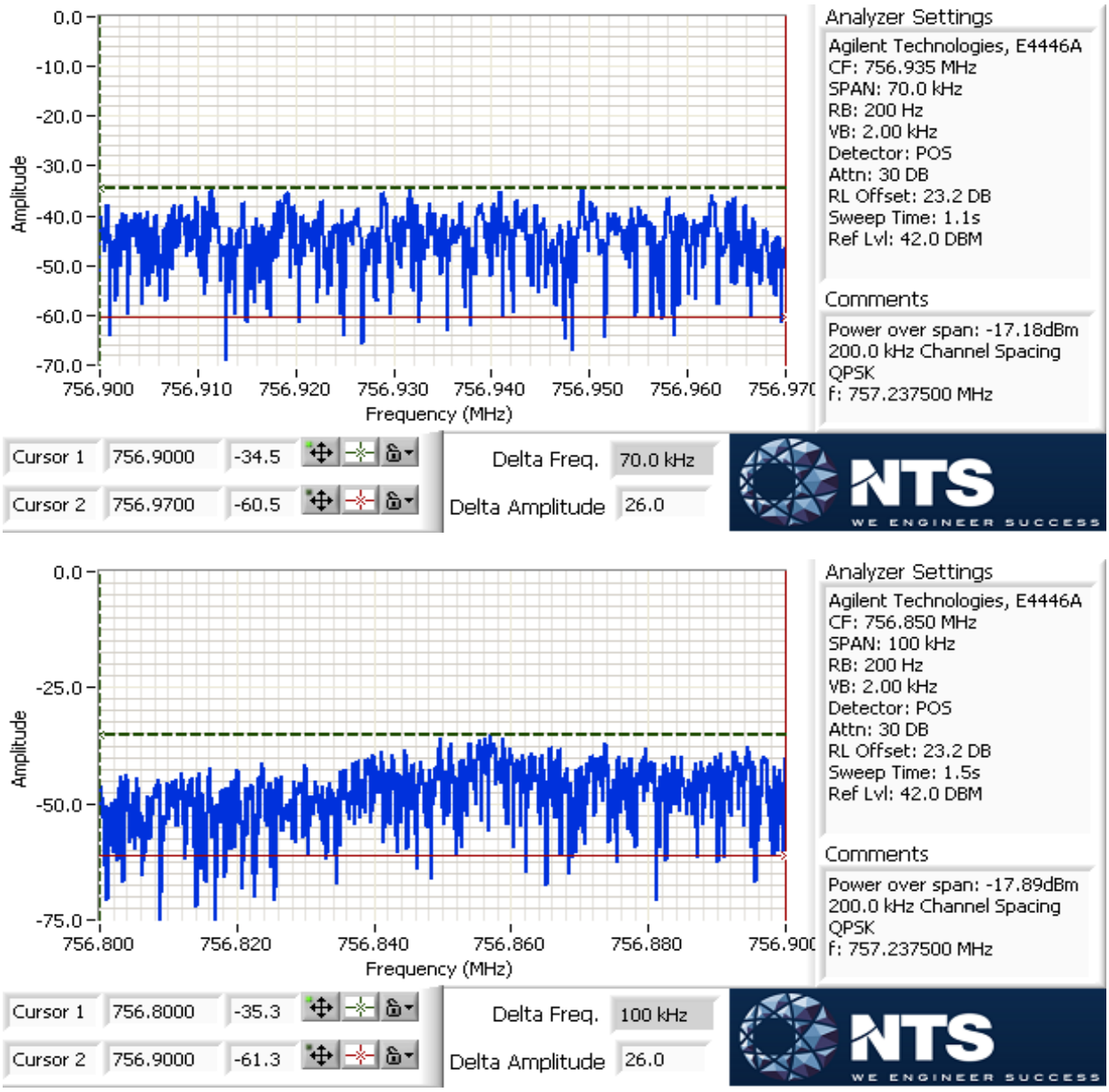




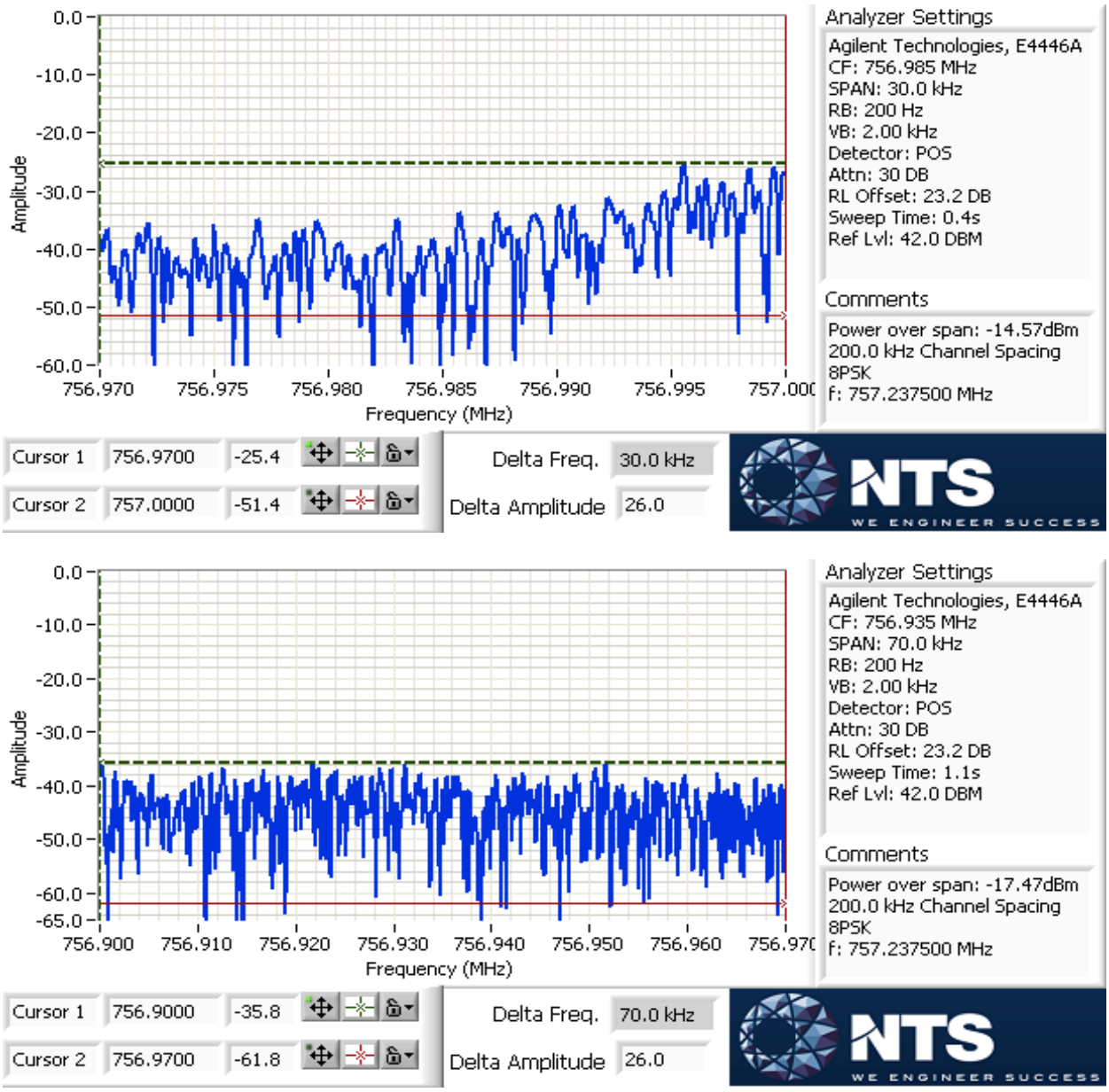
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



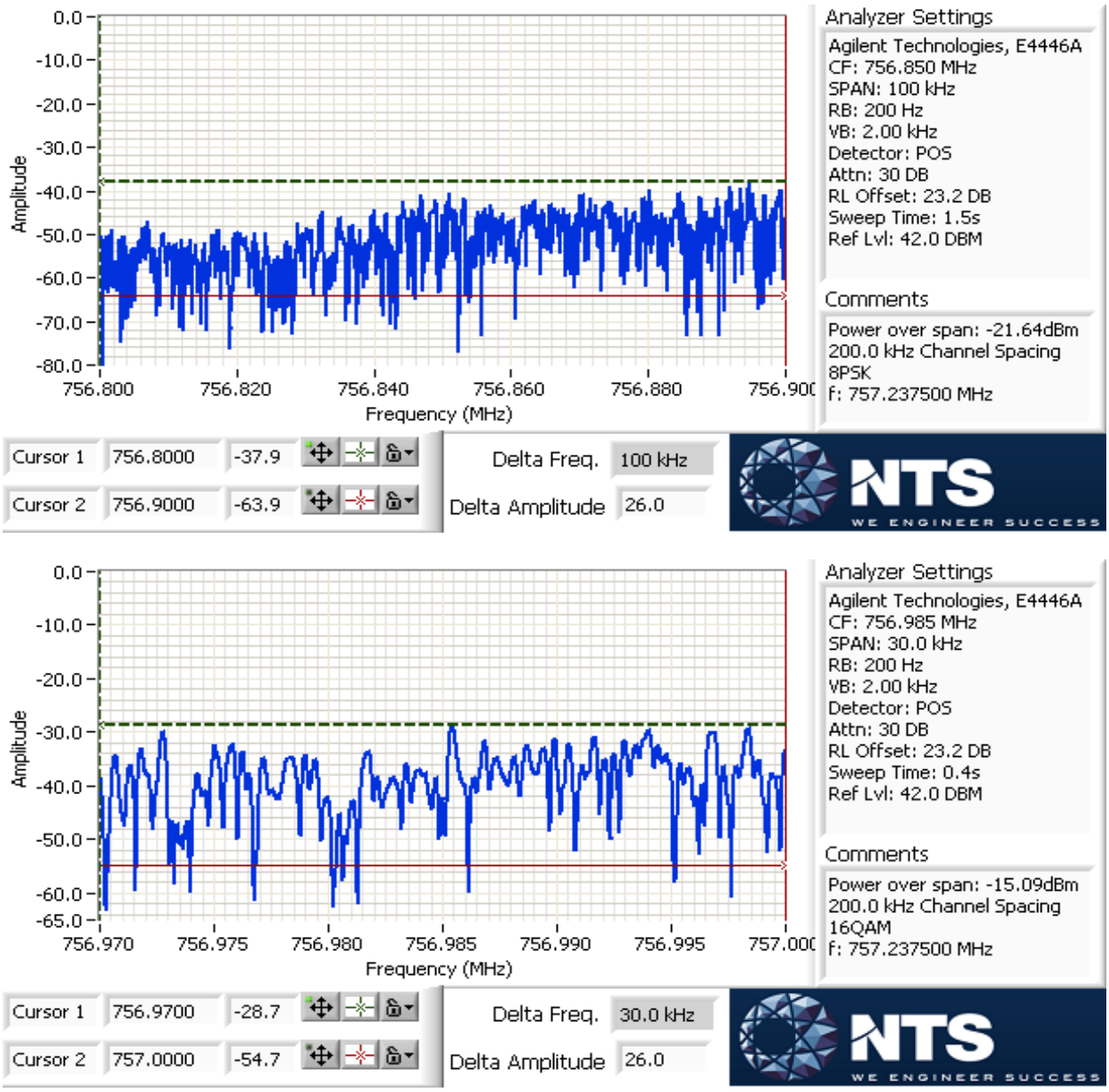
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



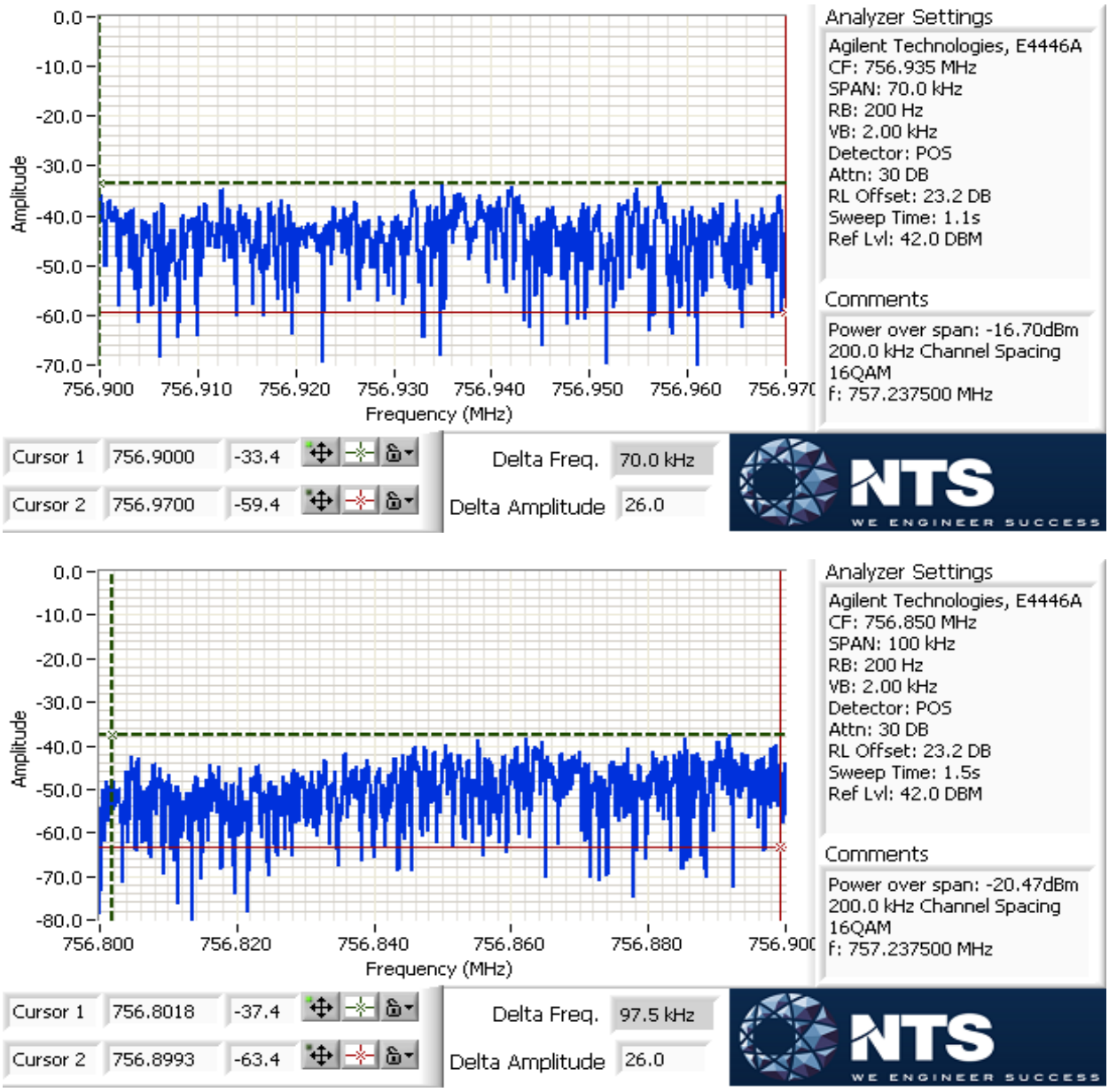
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



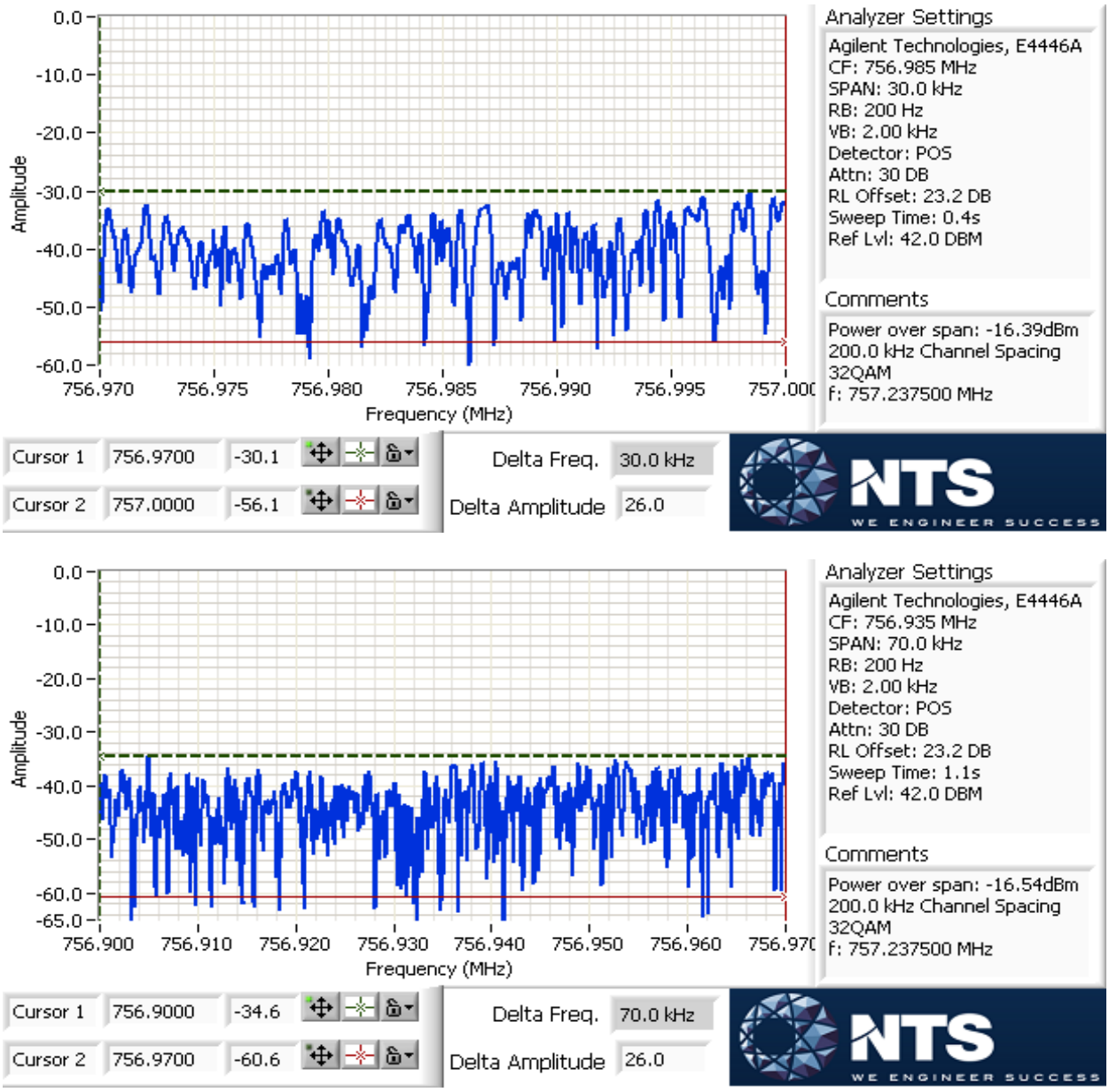
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



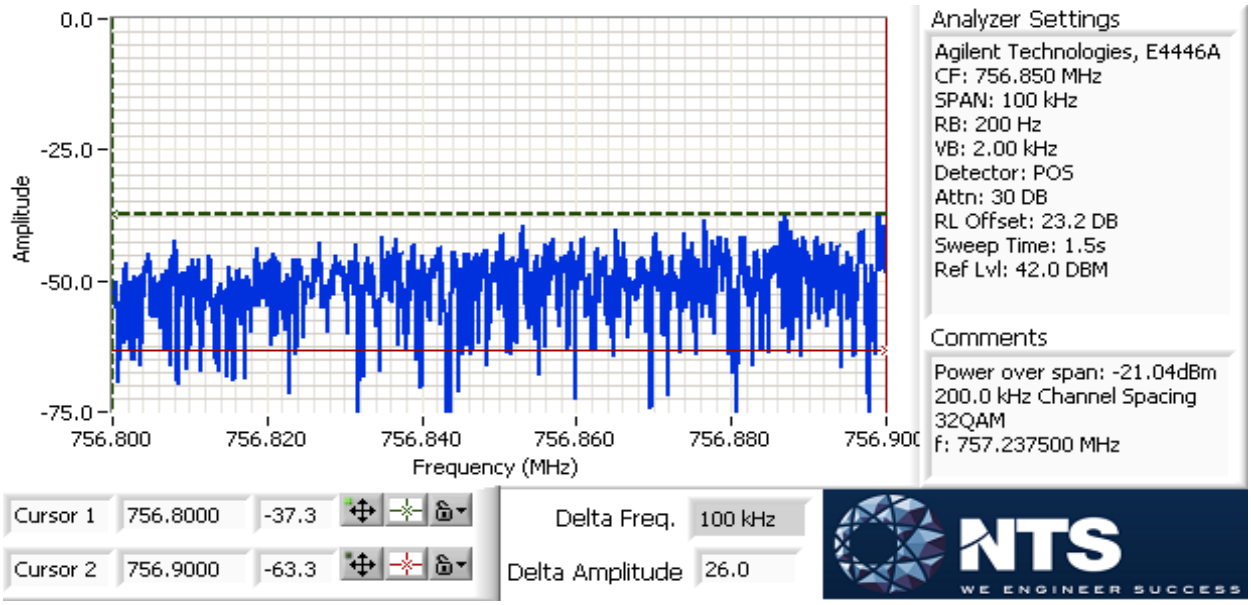
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

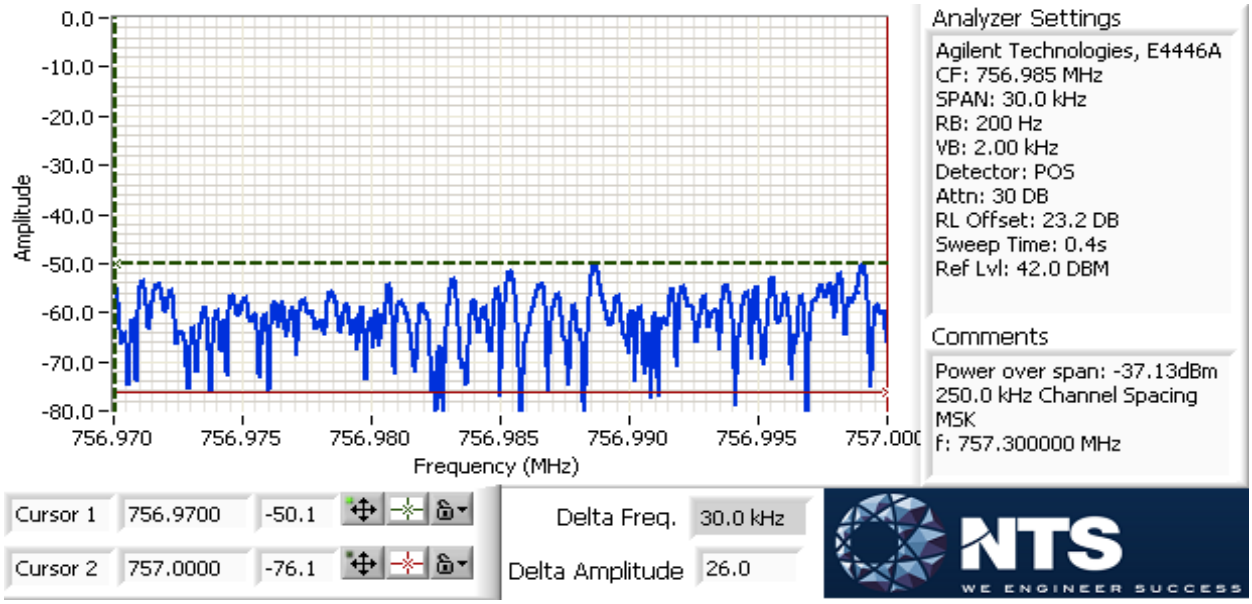


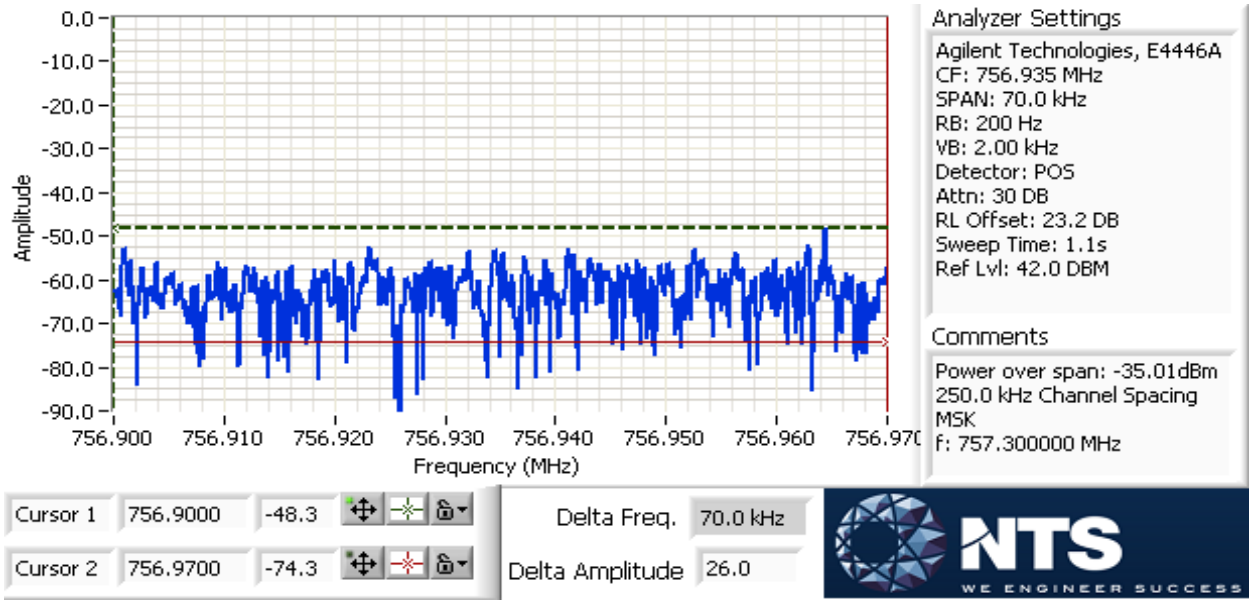
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



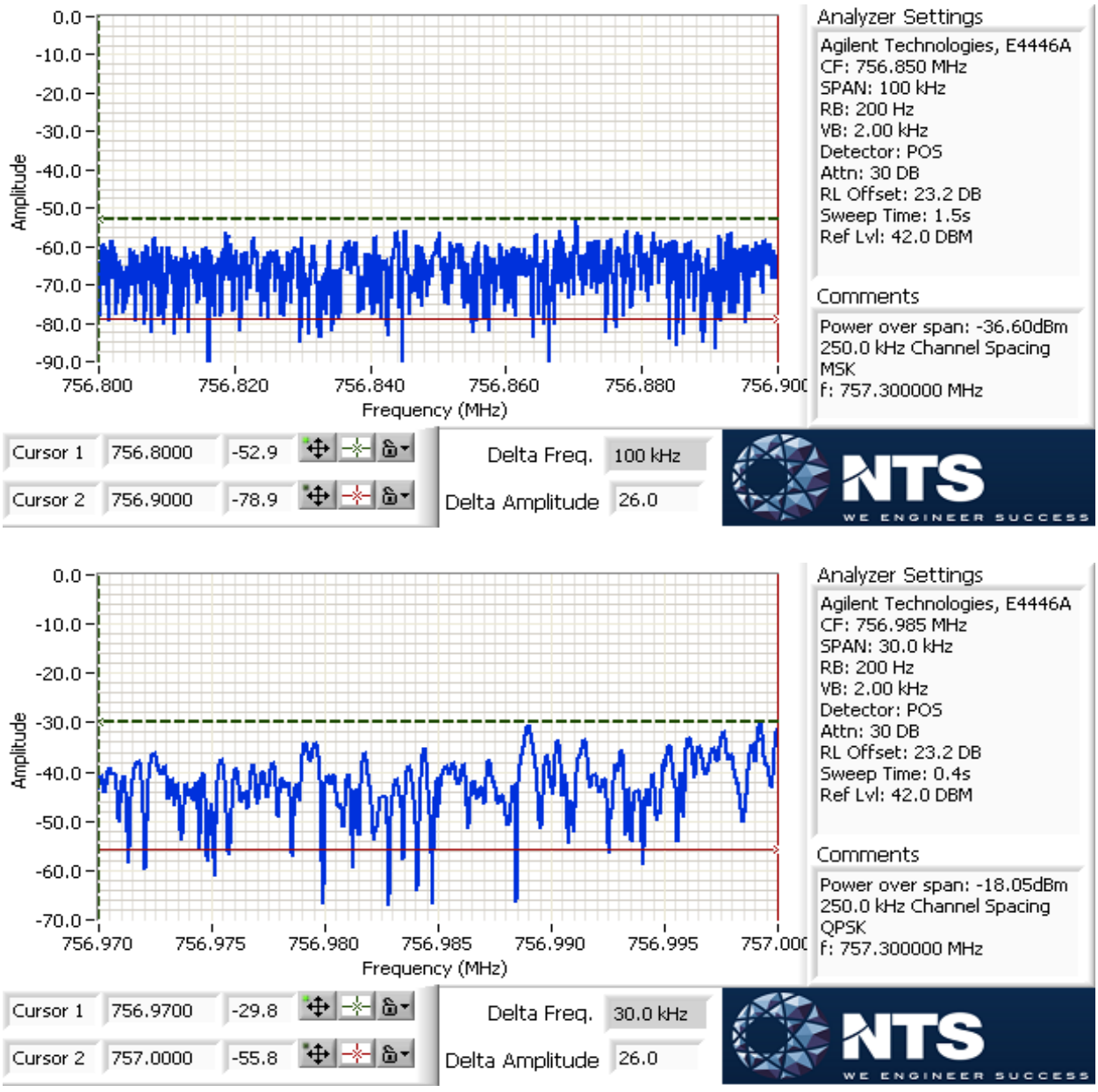
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 757 MHz, 250 kHz channel spacing

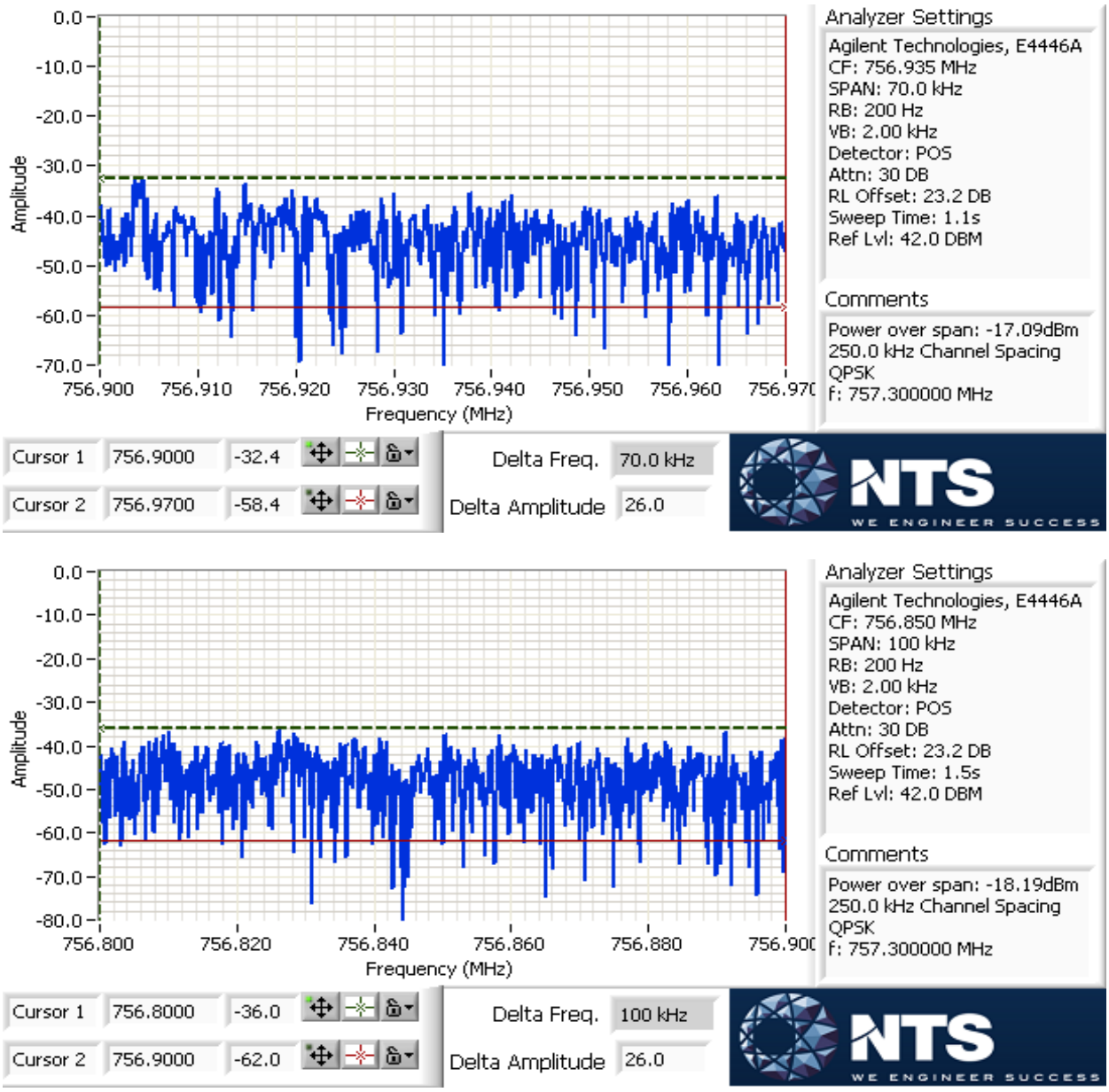




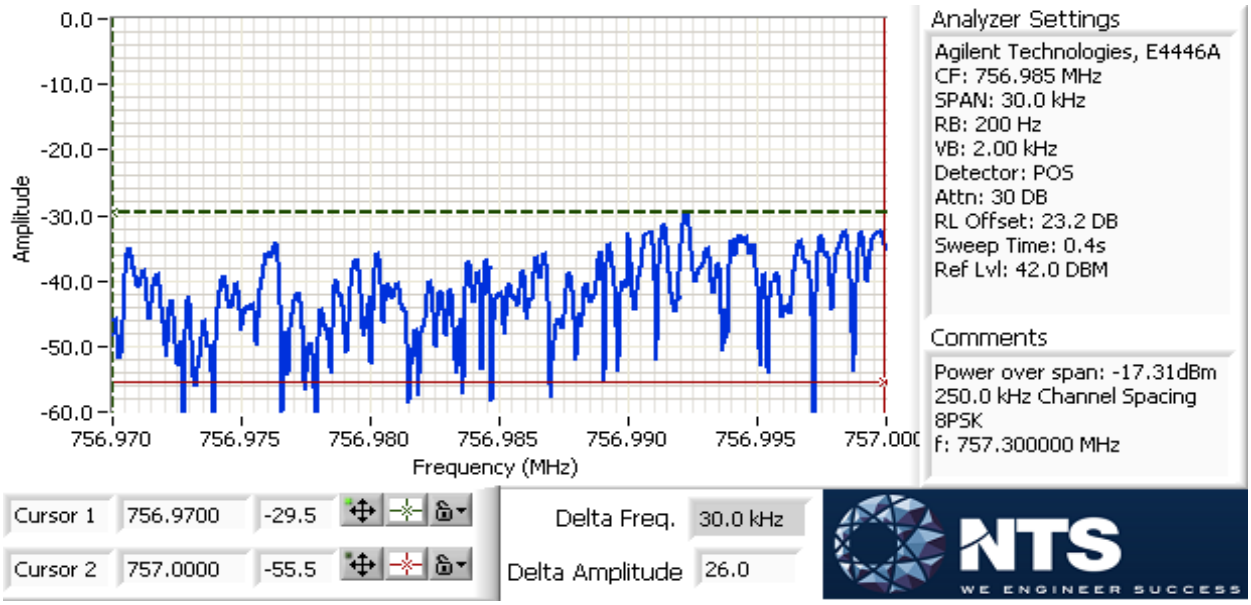
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

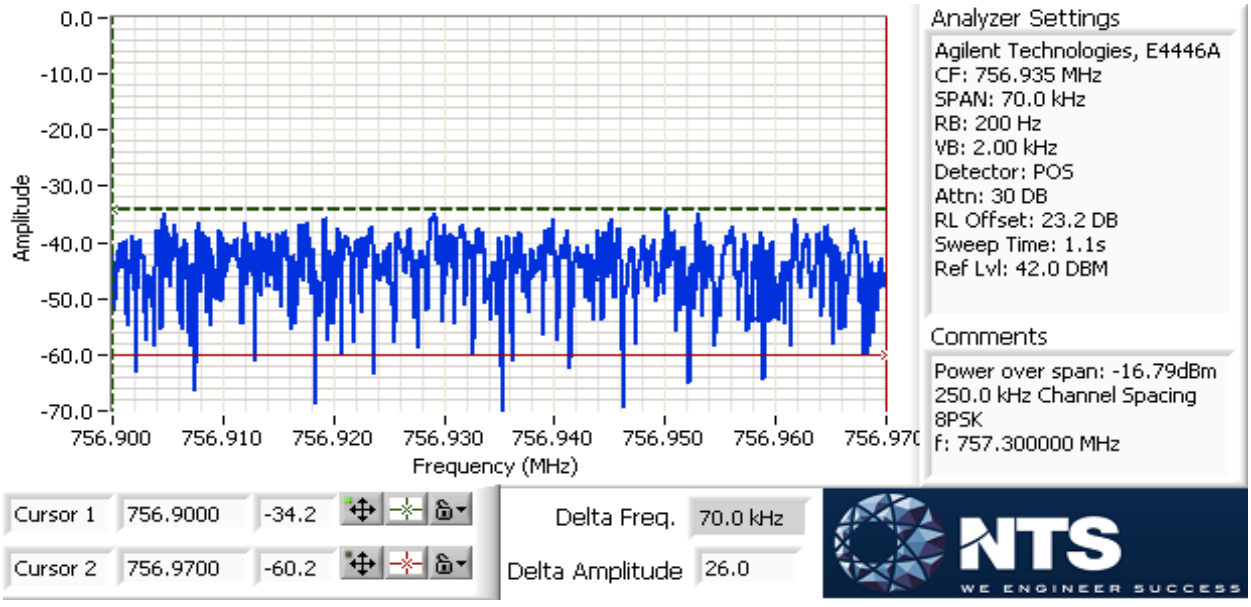


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

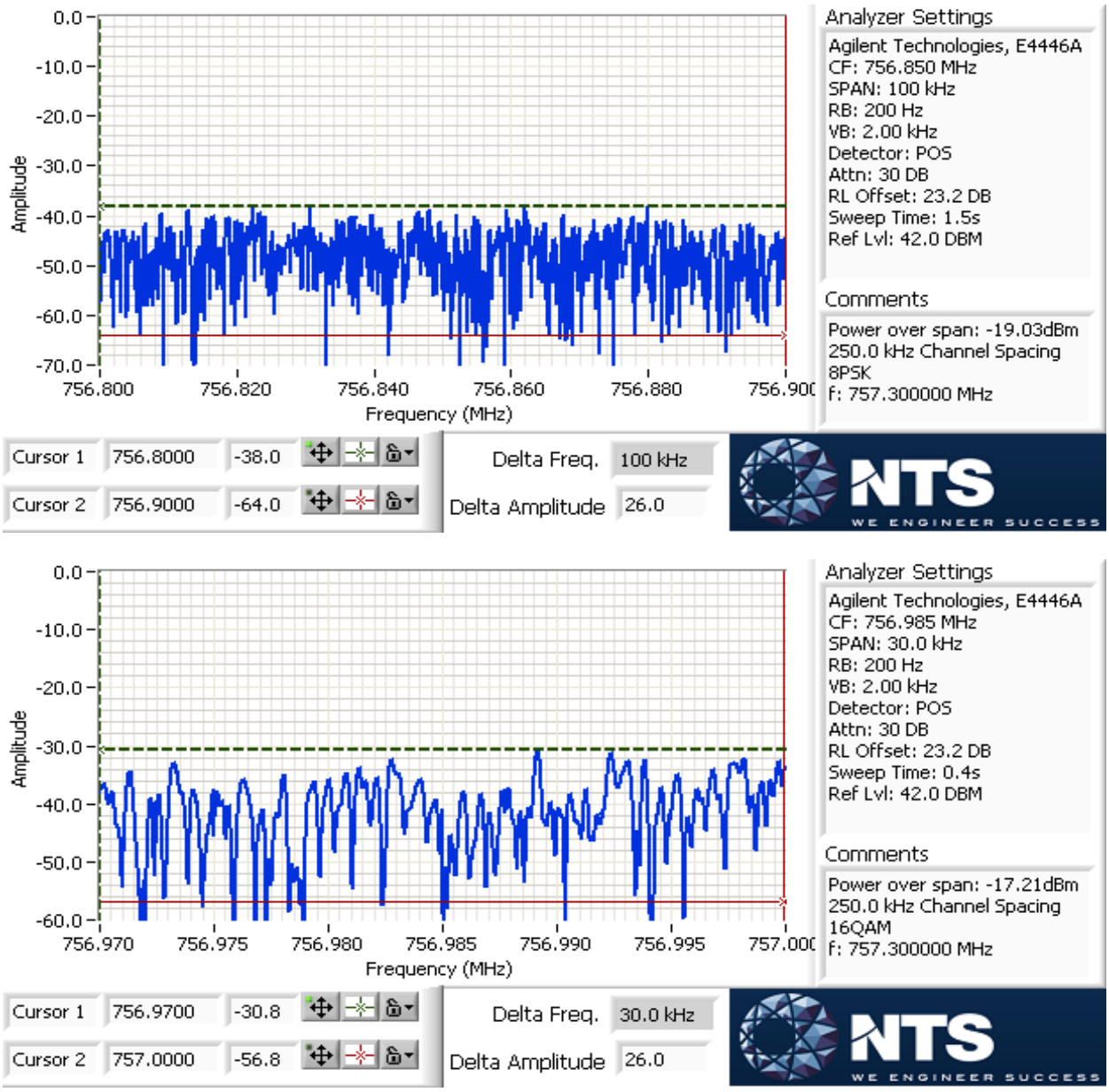


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

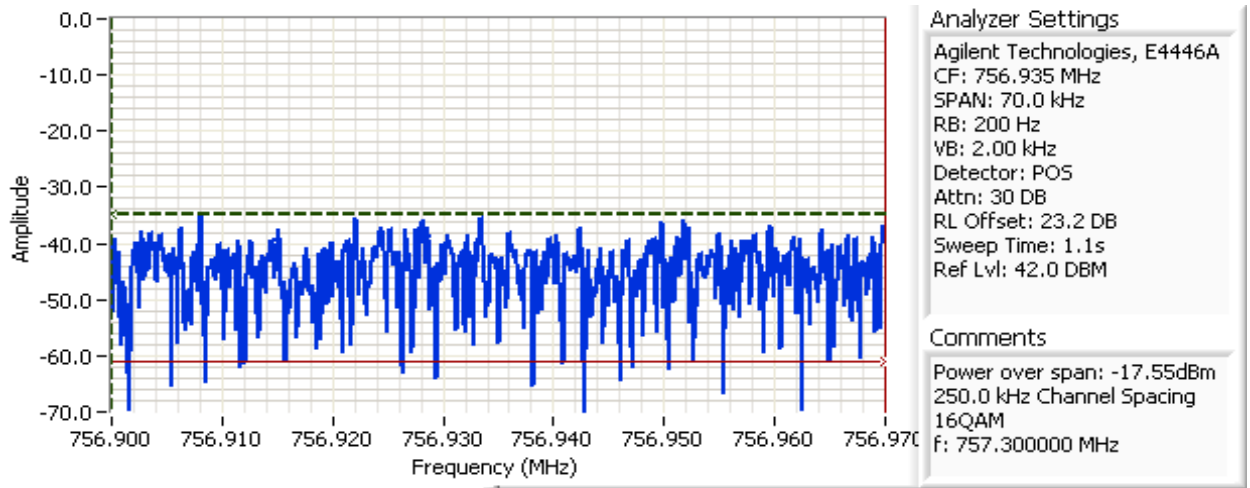


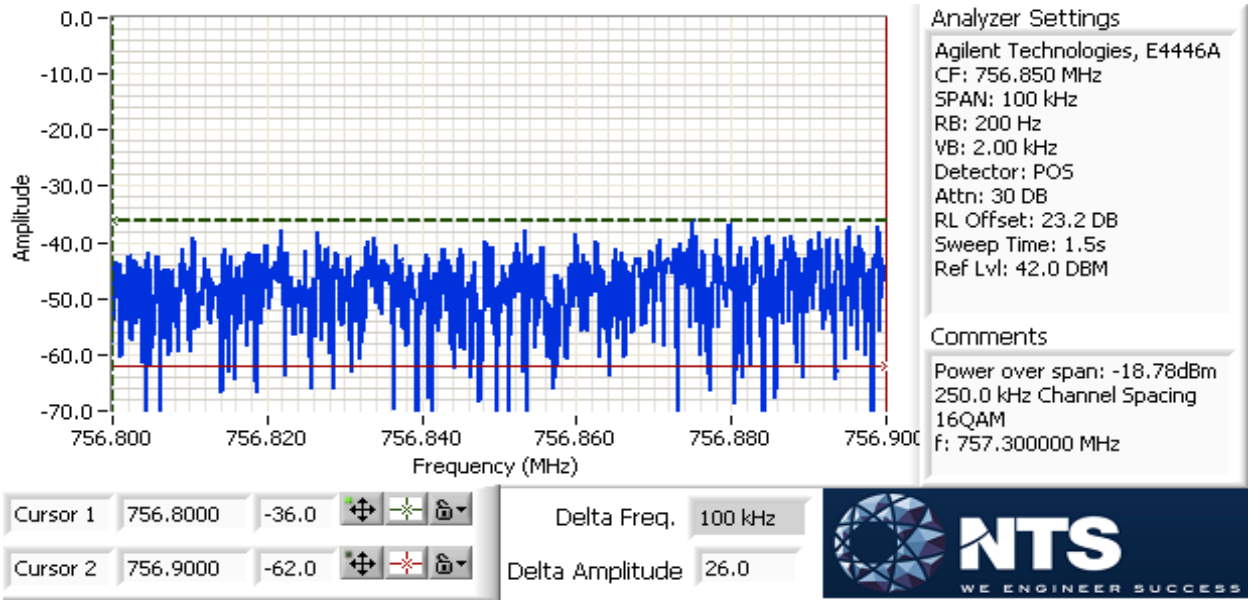


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

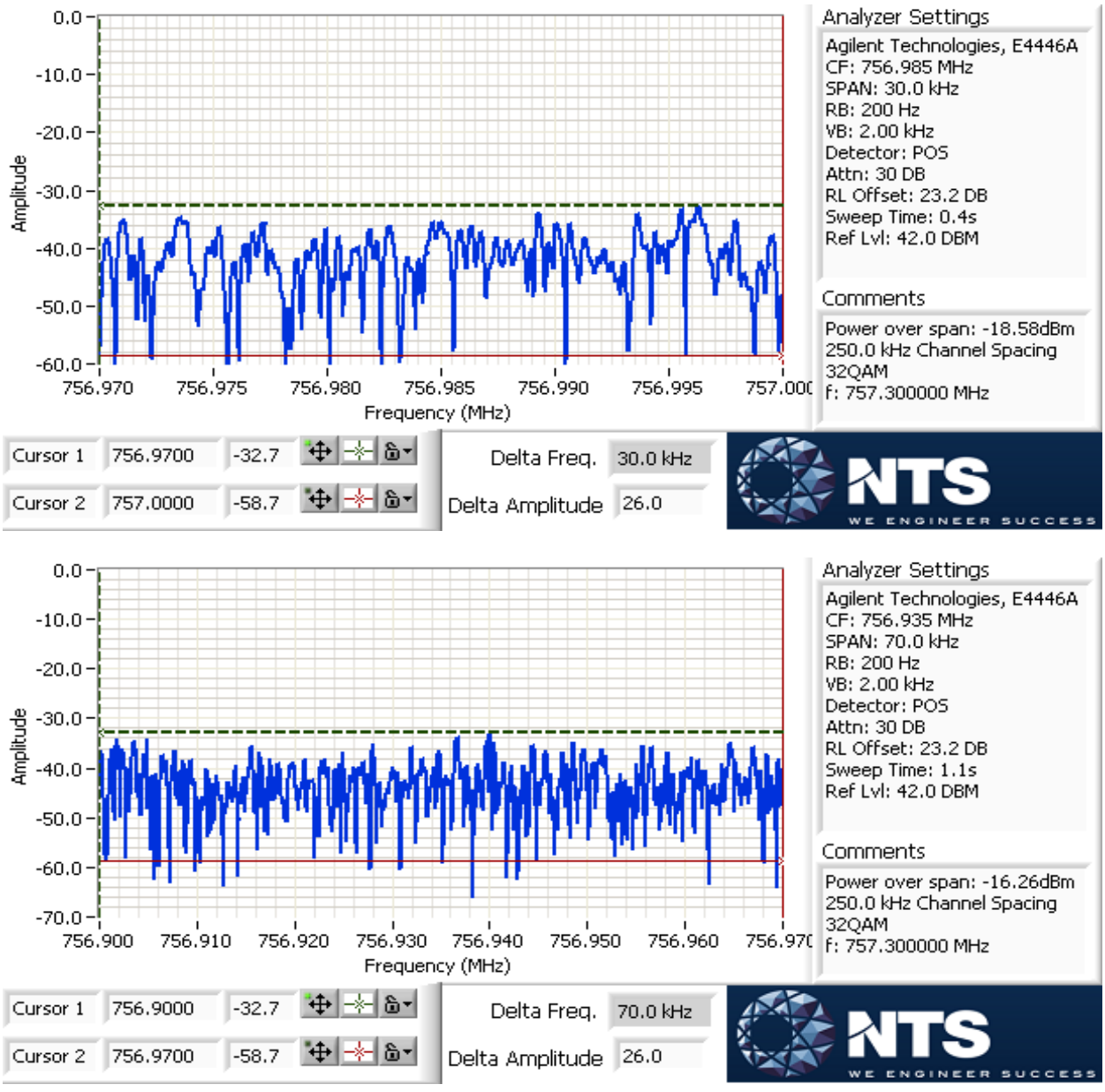


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

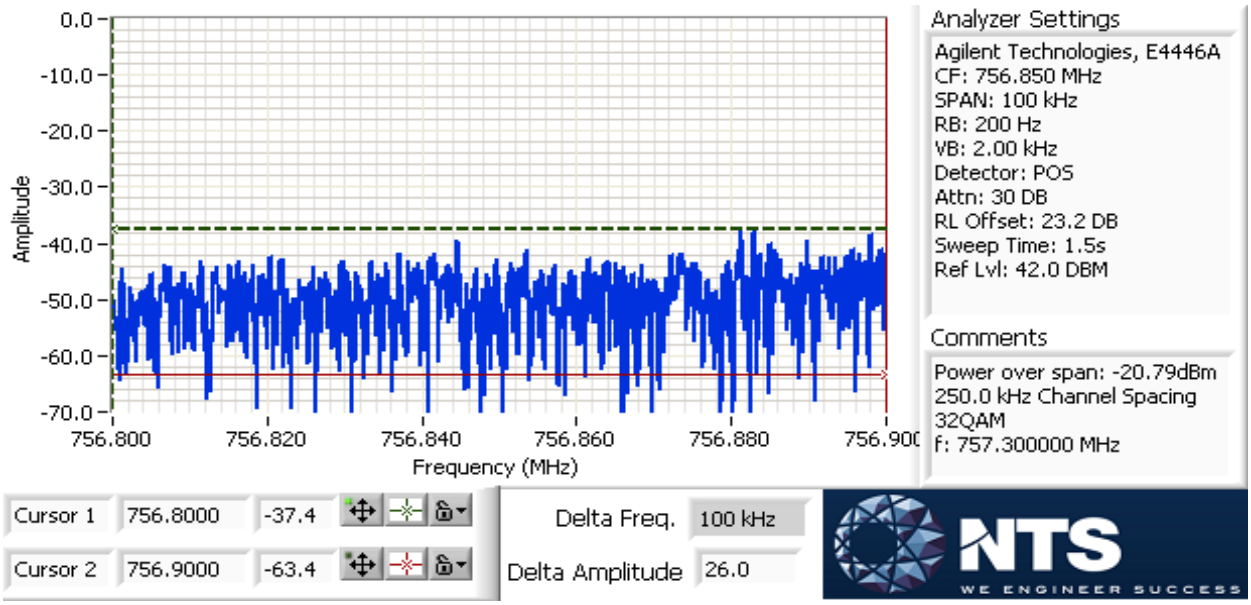




Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



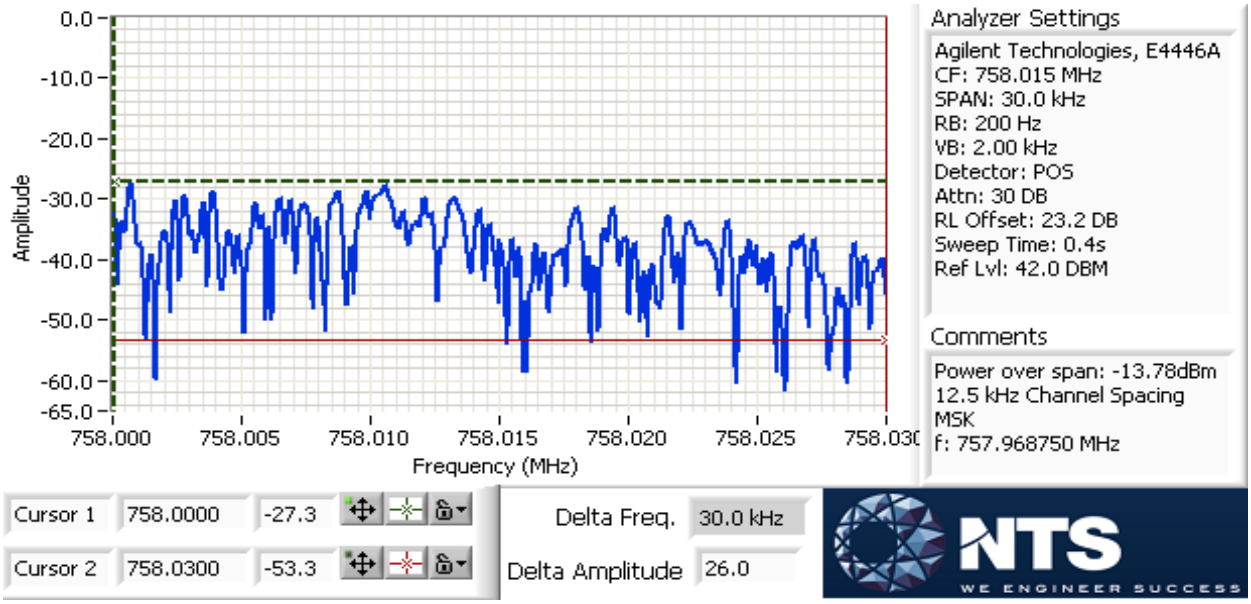
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

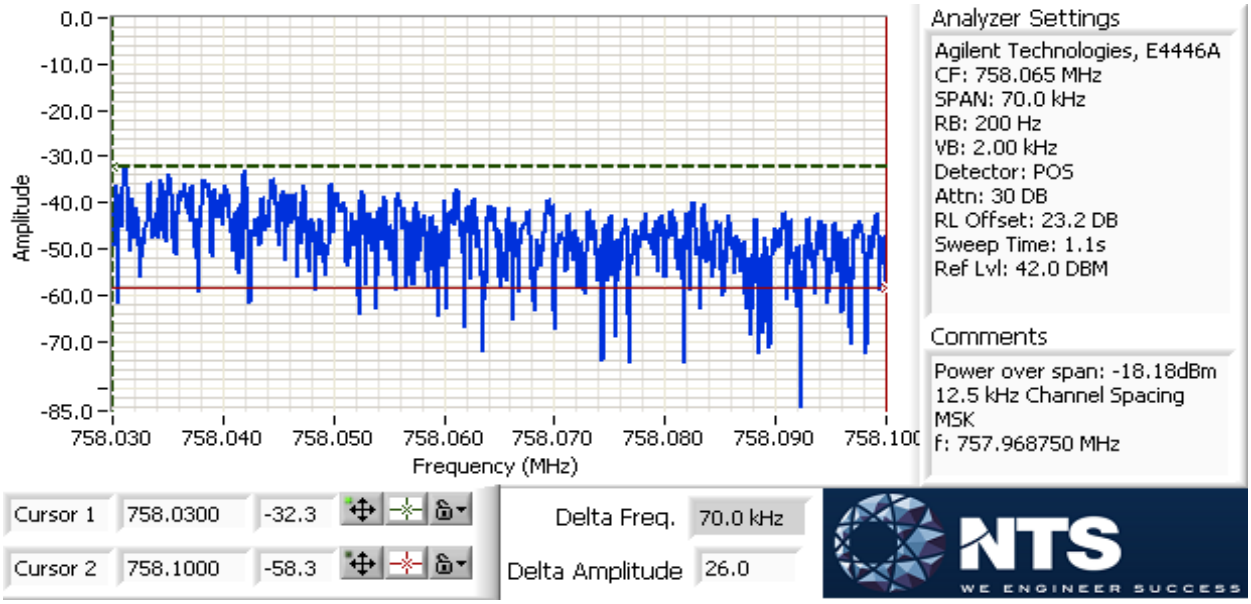
Run #2b: Band edge at 758 MHz

Power setting	Data rate	Channel plan	Modulation	Channel Frequency (MHz)	Measured dBm	Limit dBm	Result Pass/Fail
	10 kbps	12.5 kHz	MSK	757.968750	-13.8	-13.00	Pass
	23 kbps	12.5 kHz	QPSK	757.968750	-14.6	-13.00	Pass
	34 kbps	12.5 kHz	8PSK	757.968750	-14.2	-13.00	Pass
	45 kbps	12.5 kHz	16QAM	757.968750	-15.6	-13.00	Pass
	57 kbps	12.5 kHz	32QAM	757.968750	-14.7	-13.00	Pass
	19 kbps	25.0 kHz	MSK	757.950000	-18.9	-13.00	Pass
	36 kbps	25.0 kHz	QPSK	757.950000	-15.6	-13.00	Pass
	52 kbps	25.0 kHz	8PSK	757.950000	-16.9	-13.00	Pass
	70 kbps	25.0 kHz	16QAM	757.950000	-18.1	-13.00	Pass
	87 kbps	25.0 kHz	32QAM	757.950000	-18.1	-13.00	Pass
	39 kbps	50.0 kHz	MSK	757.906250	-23.8	-13.00	Pass
	71 kbps	50.0 kHz	QPSK	757.906250	-16.5	-13.00	Pass
	101 kbps	50.0 kHz	8PSK	757.906250	-17.5	-13.00	Pass
	137 kbps	50.0 kHz	16QAM	757.906250	-19.6	-13.00	Pass
	175 kbps	50.0 kHz	32QAM	757.906250	-18.8	-13.00	Pass
	76 kbps	100 kHz	MSK	757.875000	-25.9	-13.00	Pass
	160 kbps	100 kHz	QPSK	757.875000	-14.7	-13.00	Pass
	240 kbps	100 kHz	8PSK	757.875000	-15.1	-13.00	Pass
	320 kbps	100 kHz	16QAM	757.875000	-14.7	-13.00	Pass
	400 kbps	100 kHz	32QAM	757.875000	-13.6	-13.00	Pass
	153 kbps	200 kHz	MSK	757.762500	-29.8	-13.00	Pass
	320 kbps	200 kHz	QPSK	757.762500	-13.6	-13.00	Pass
	480 kbps	200 kHz	8PSK	757.762500	-14.4	-13.00	Pass
	640 kbps	200 kHz	16QAM	757.762500	-13.1	-13.00	Pass
	800 kbps	200 kHz	32QAM	757.762500	-14.6	-13.00	Pass
	194 kbps	250 kHz	MSK	757.700000	-31.0	-13.00	Pass
	403 kbps	250 kHz	QPSK	757.700000	-16.2	-13.00	Pass
	605 kbps	250 kHz	8PSK	757.700000	-15.8	-13.00	Pass
	806 kbps	250 kHz	16QAM	757.700000	-15.7	-13.00	Pass
	1008 kbps	250 kHz	32QAM	757.700000	-16.1	-13.00	Pass

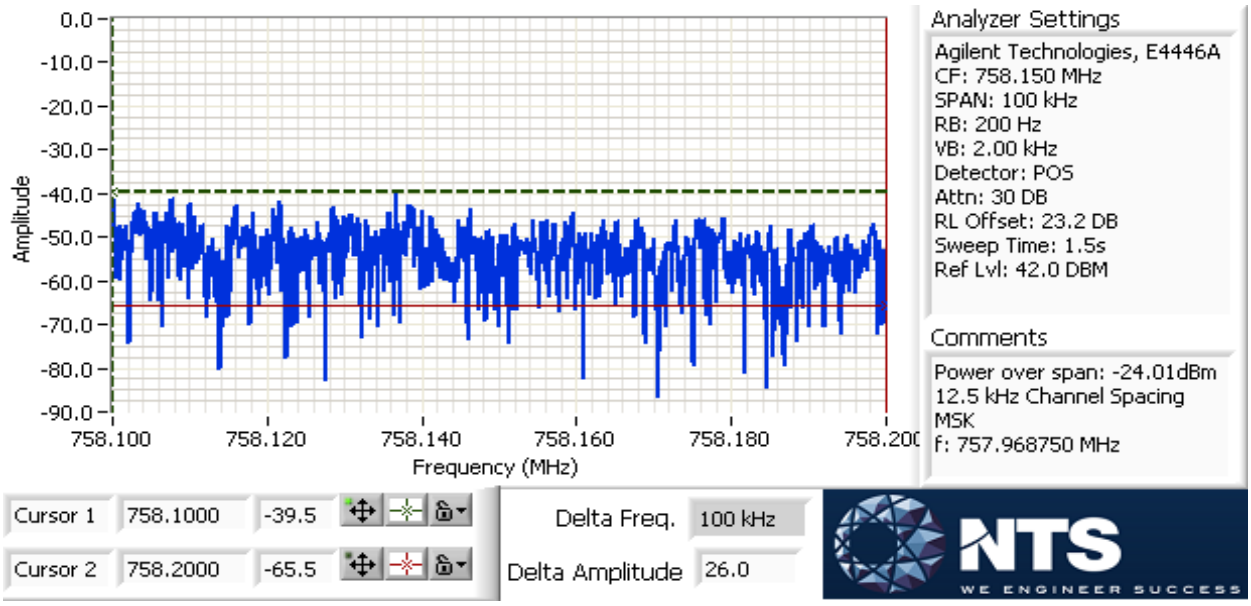
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

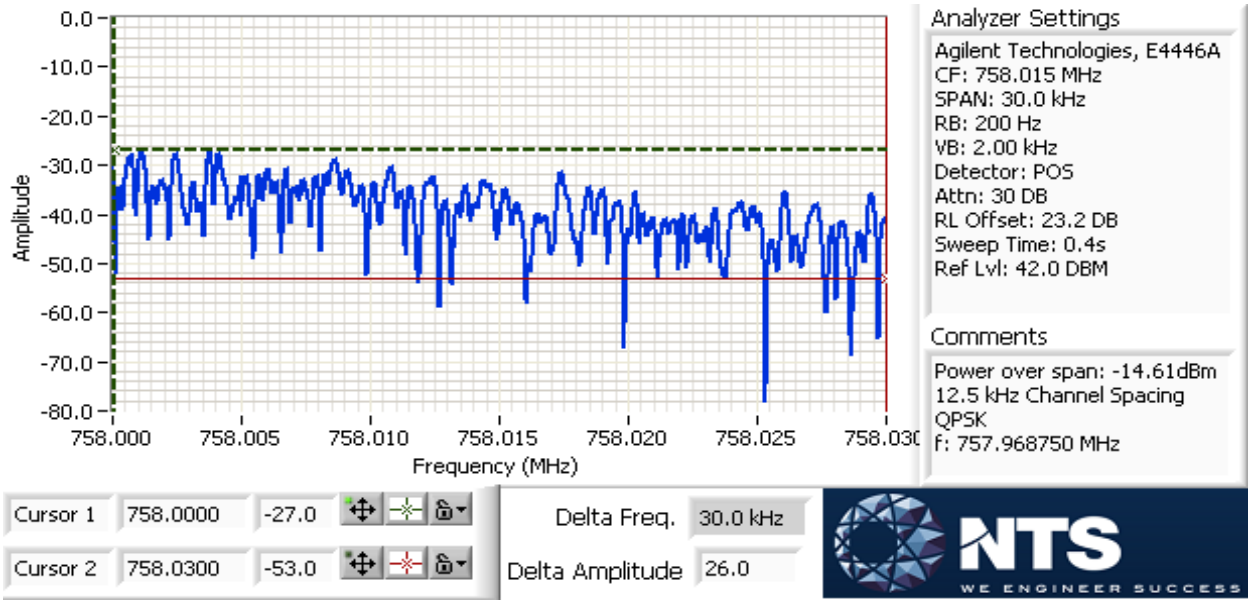
Block edge at 758 MHz, 12.5 kHz channel spacing



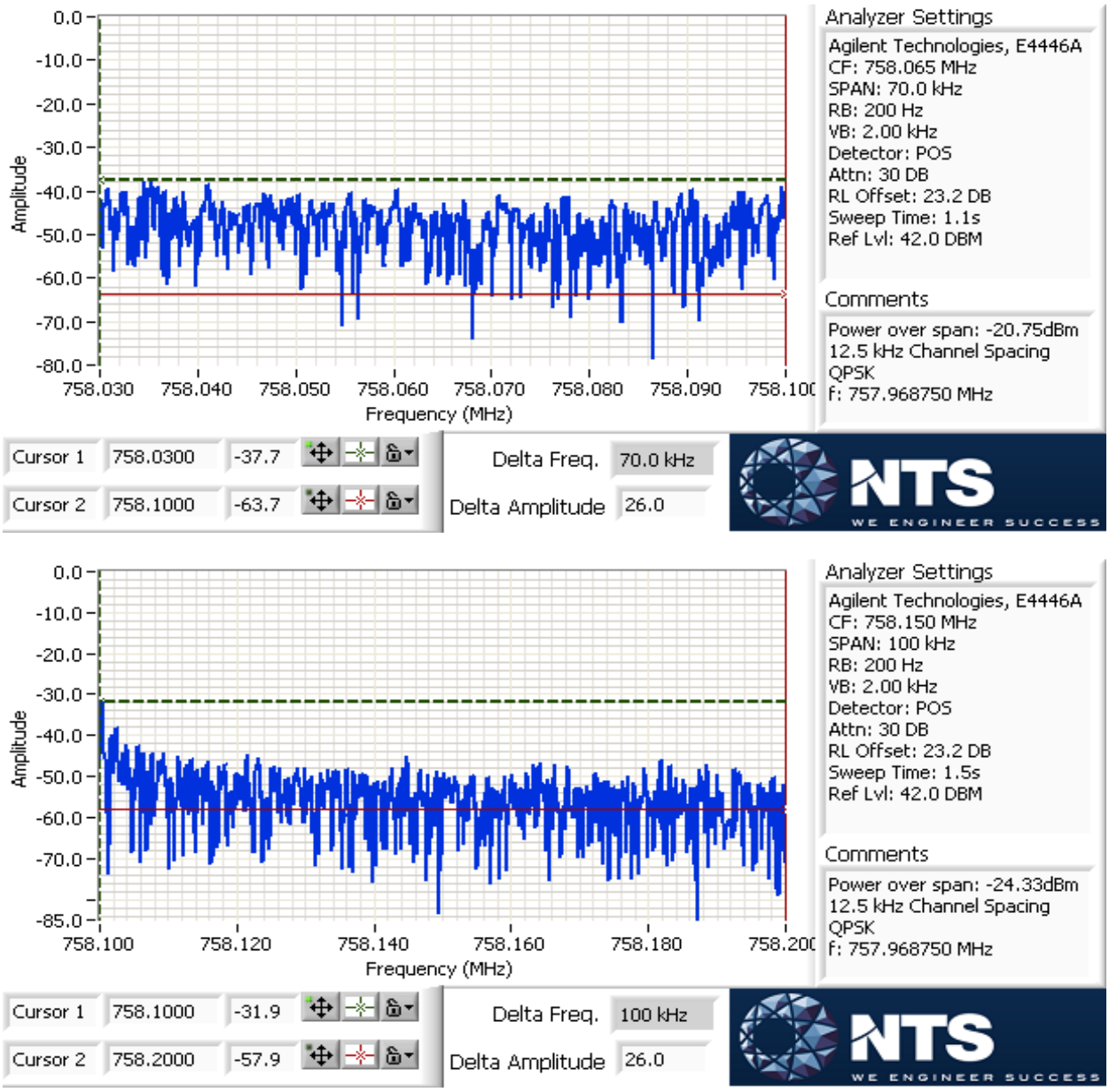


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

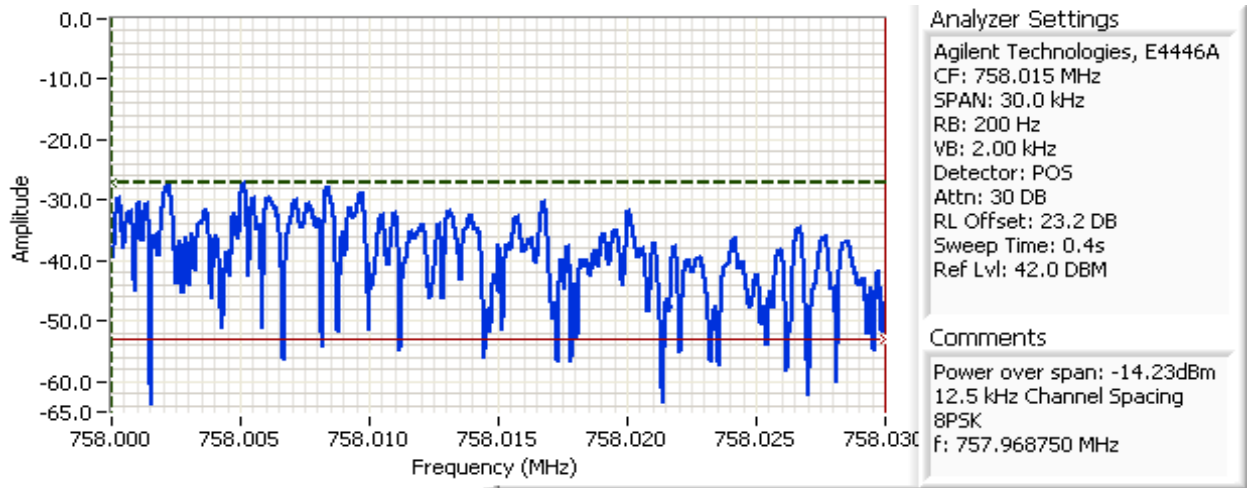


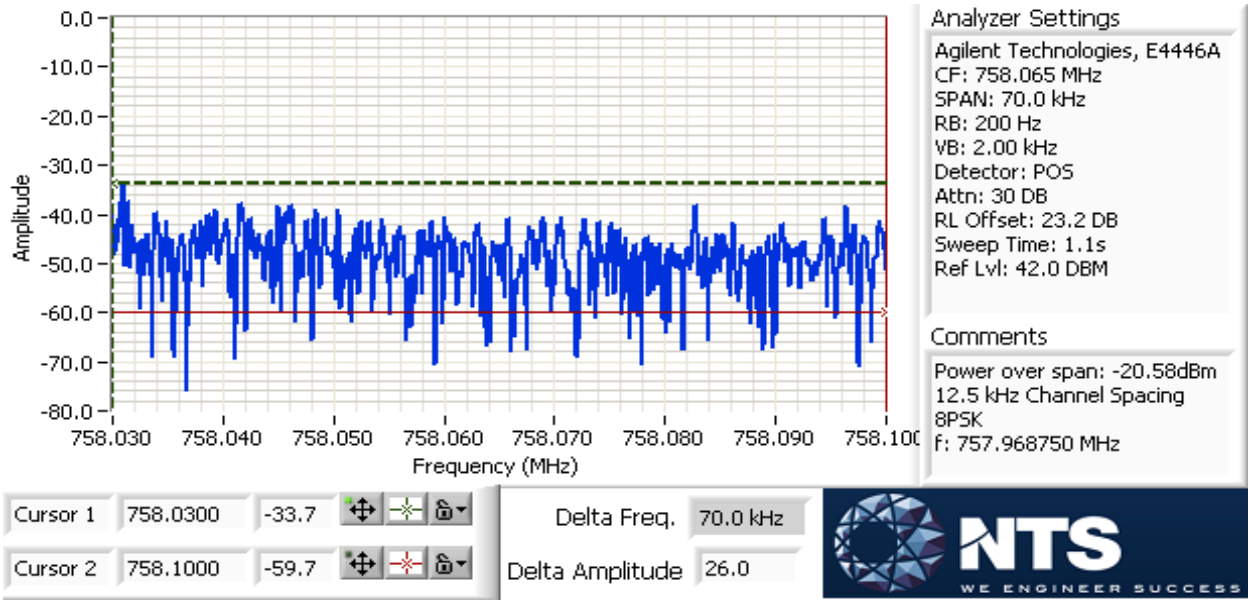


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

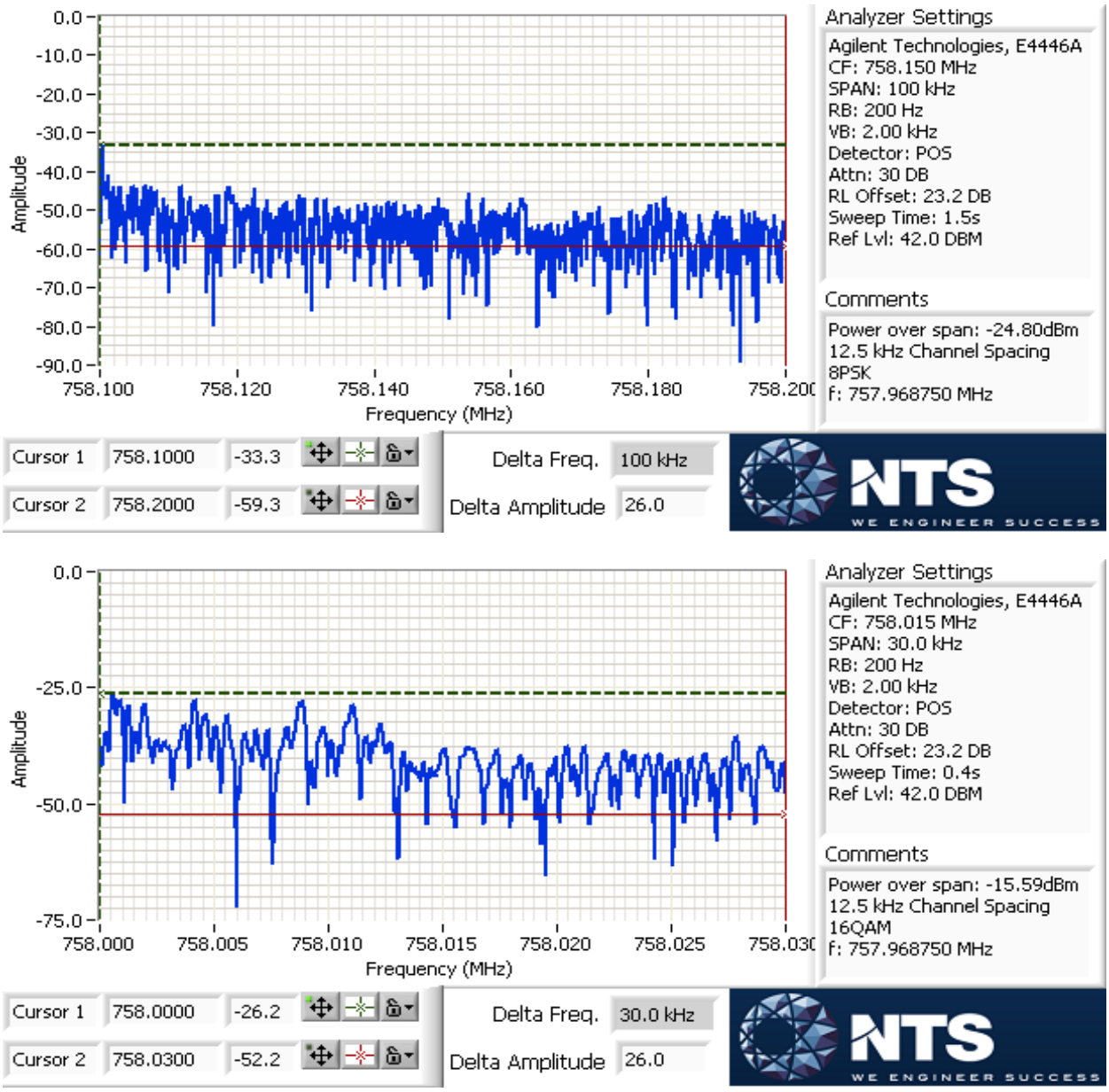


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

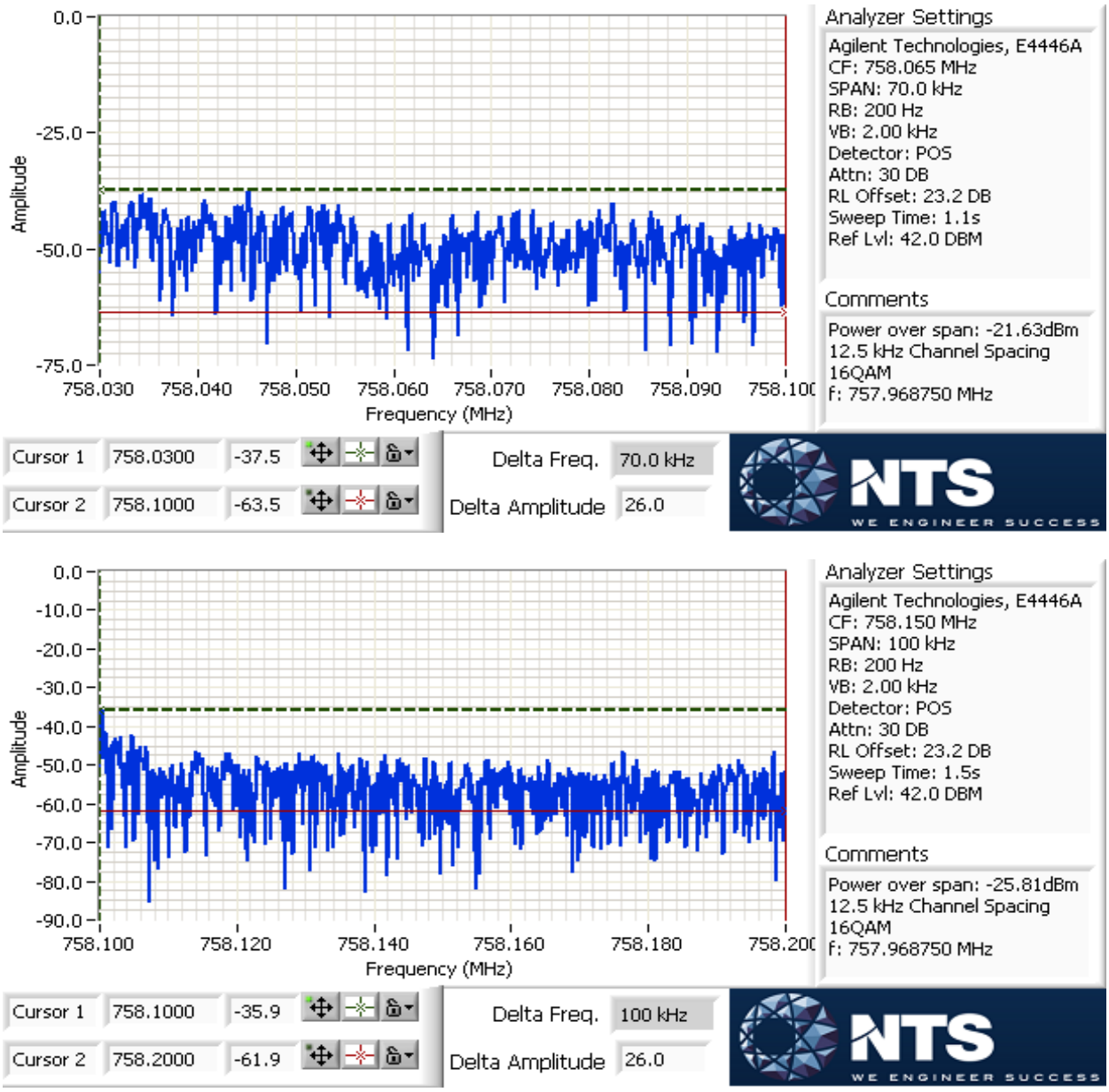




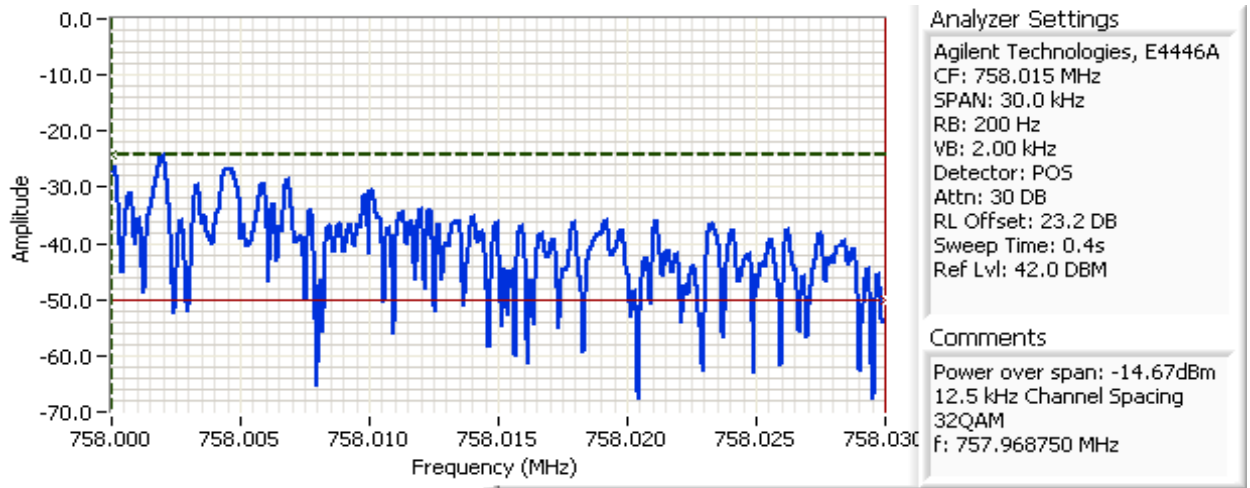
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

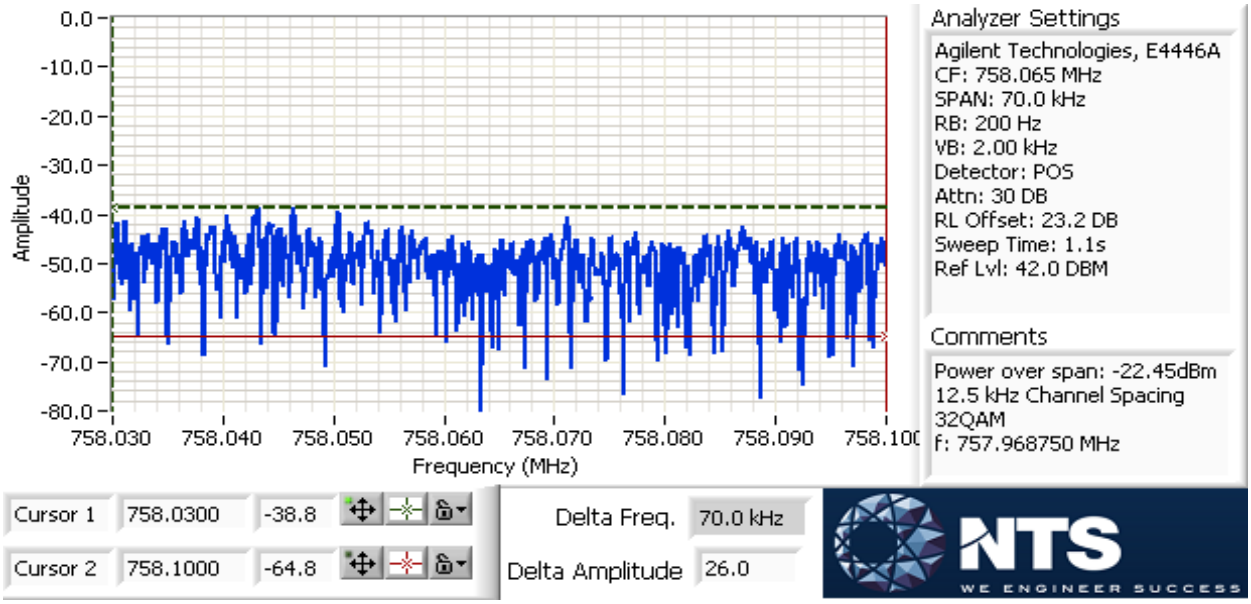


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

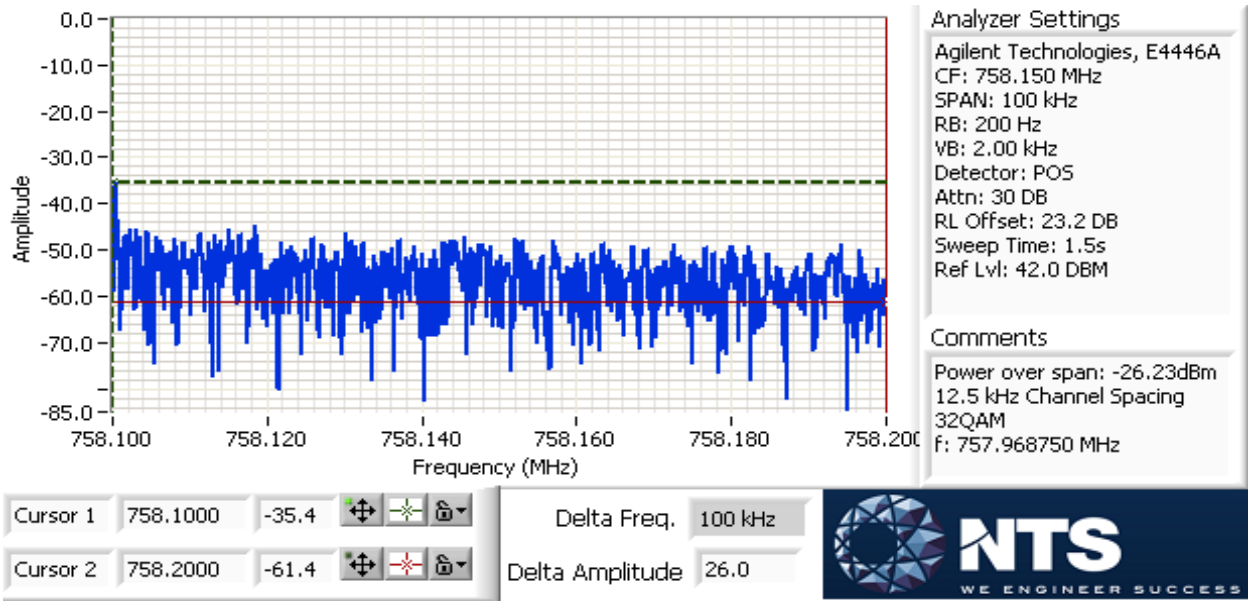


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



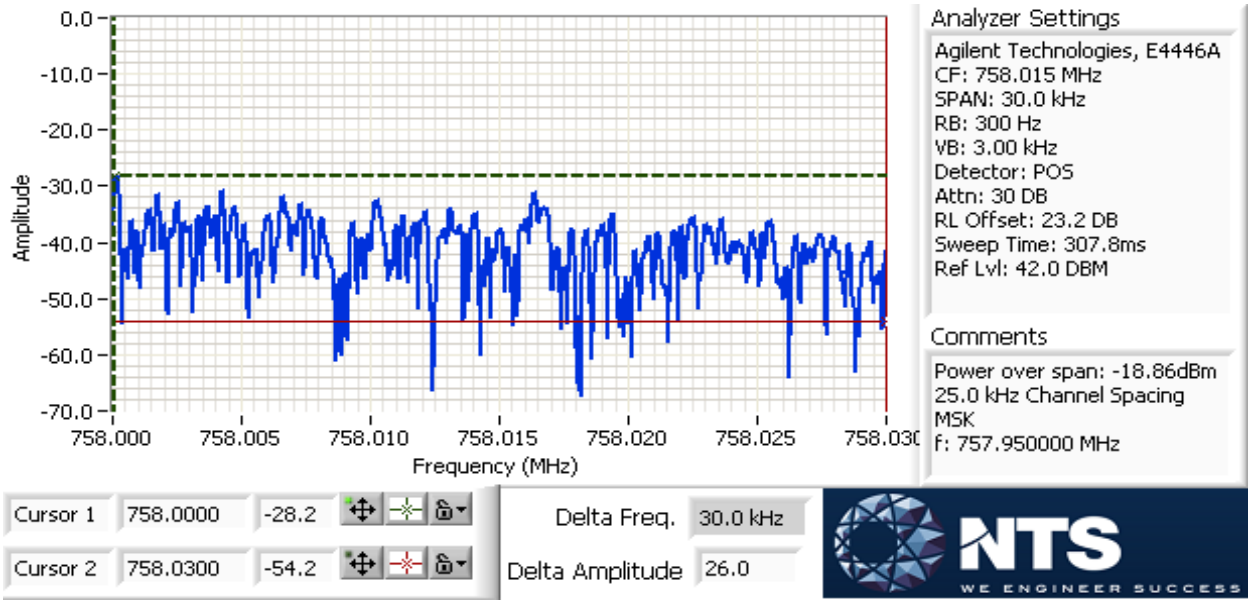


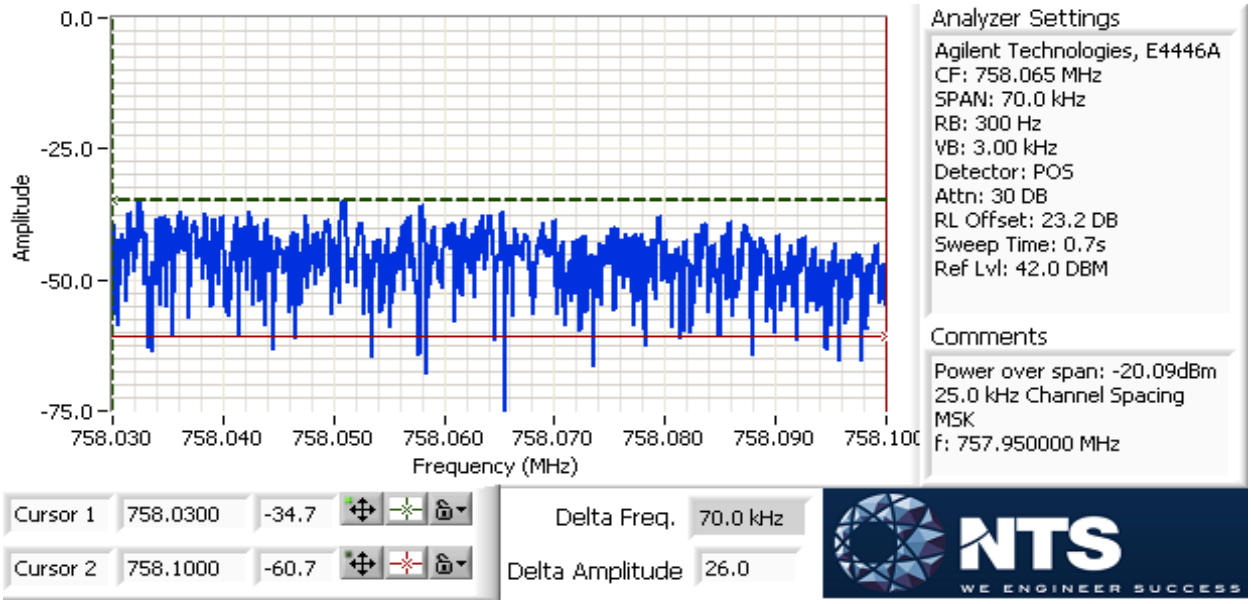
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



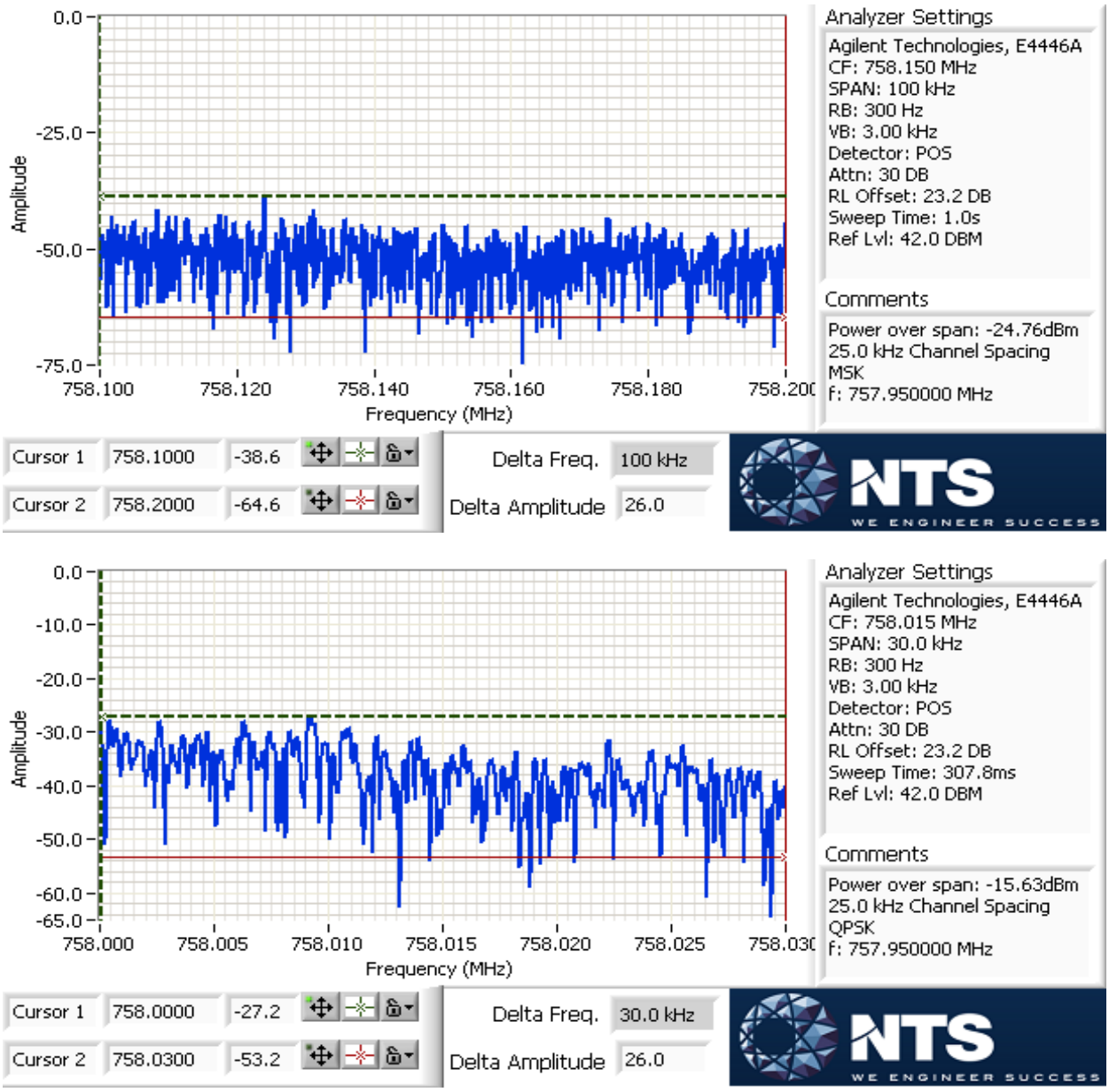
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 758 MHz, 25 kHz channel spacing

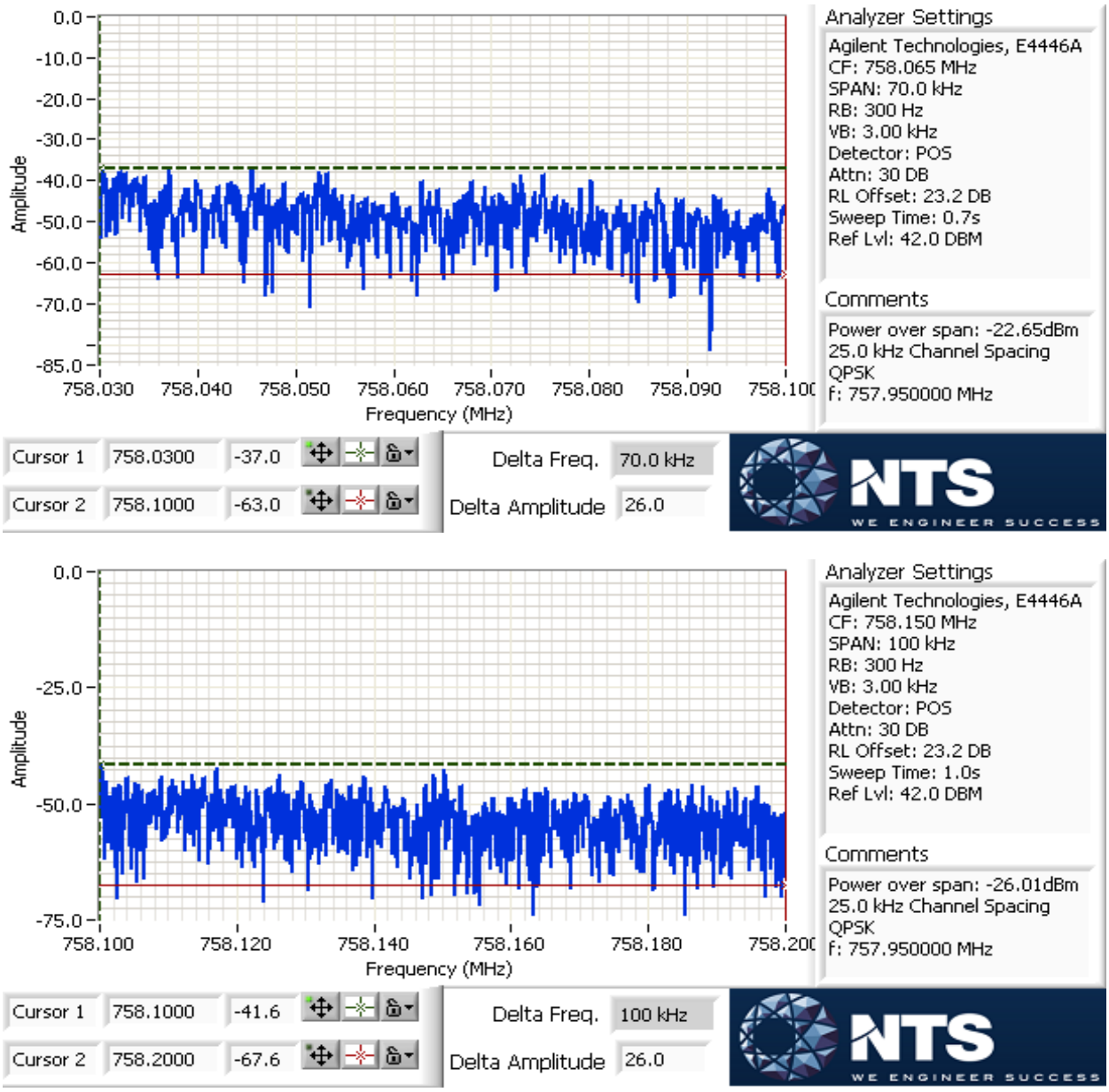




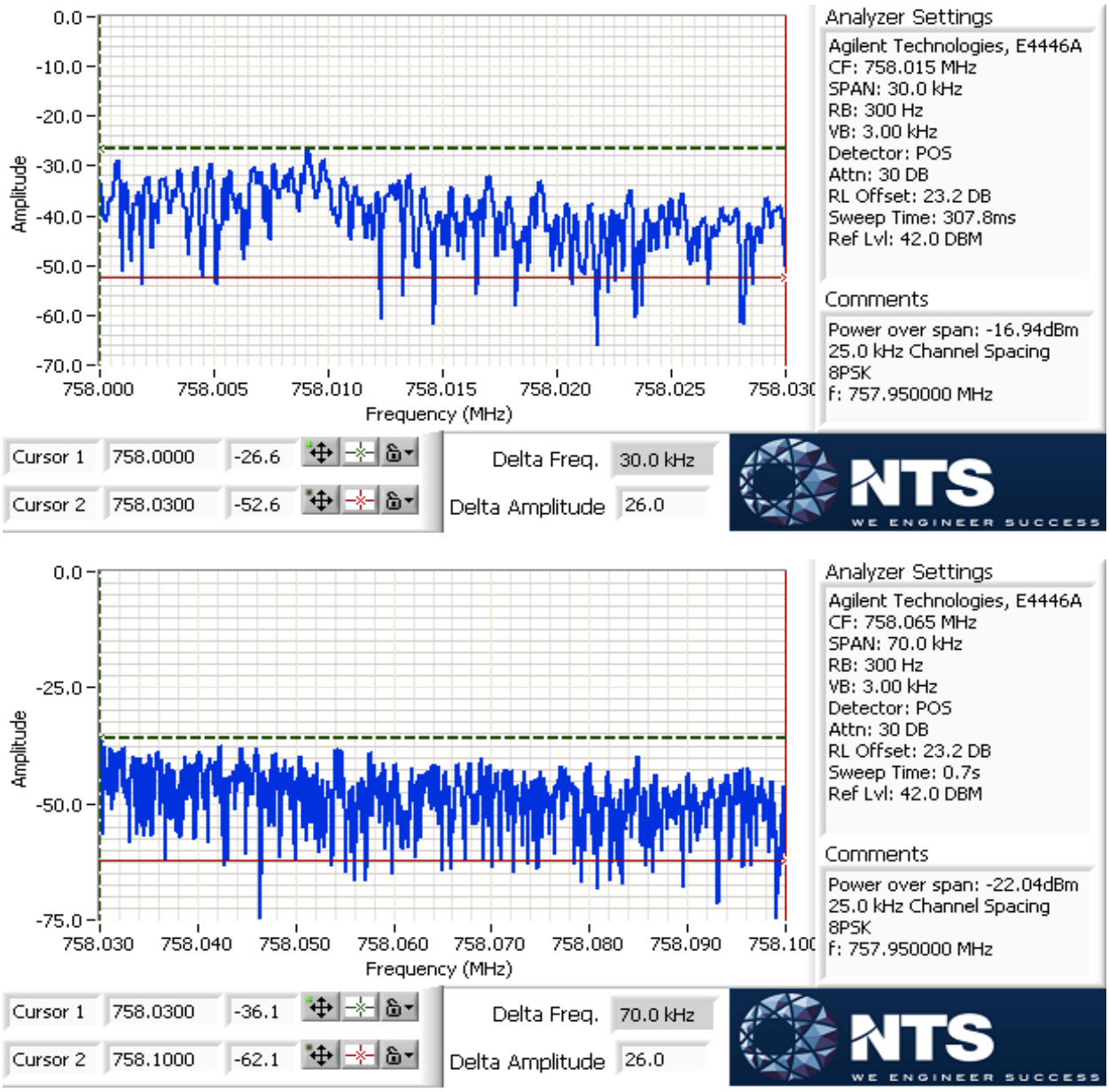
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



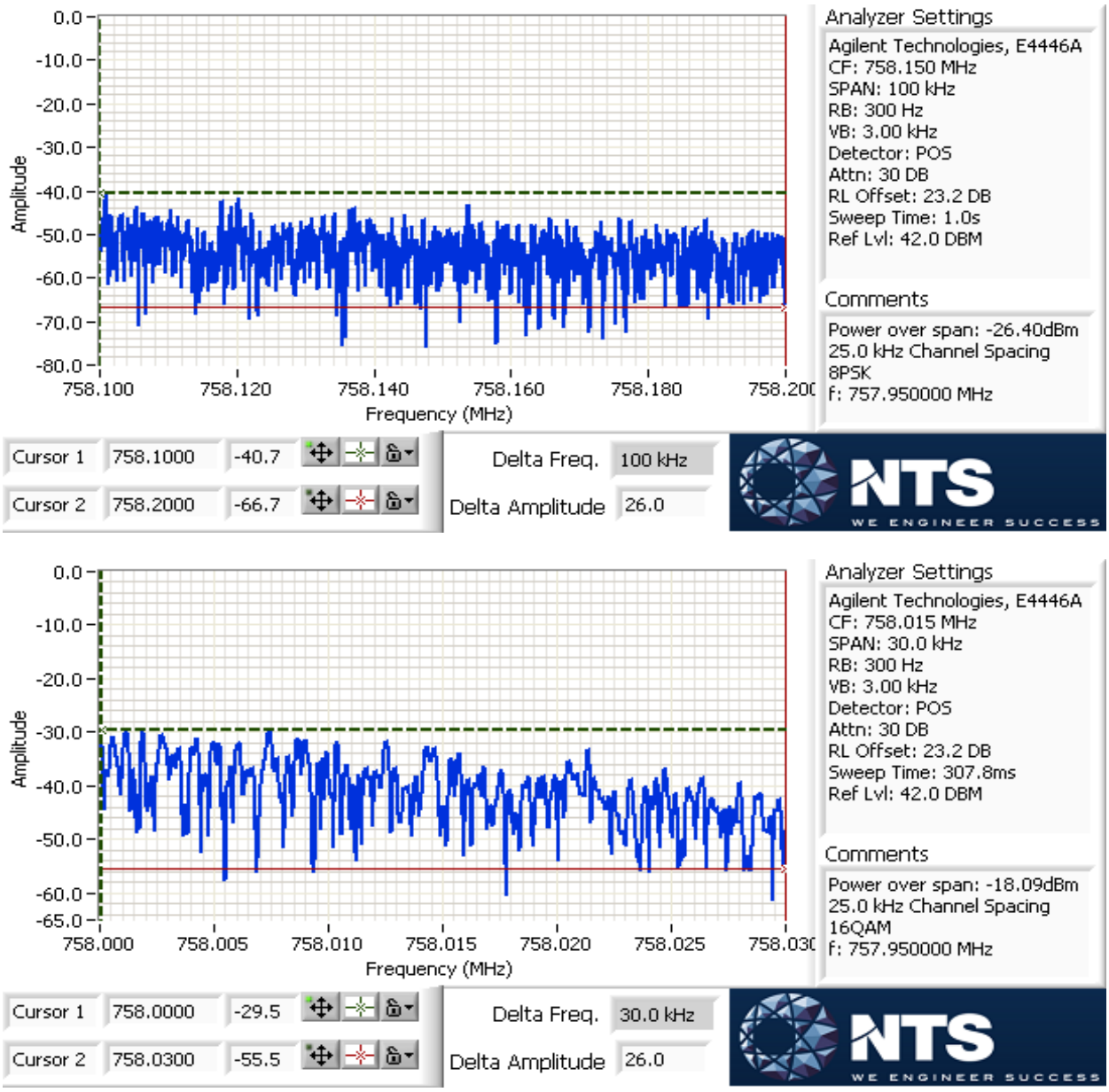
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



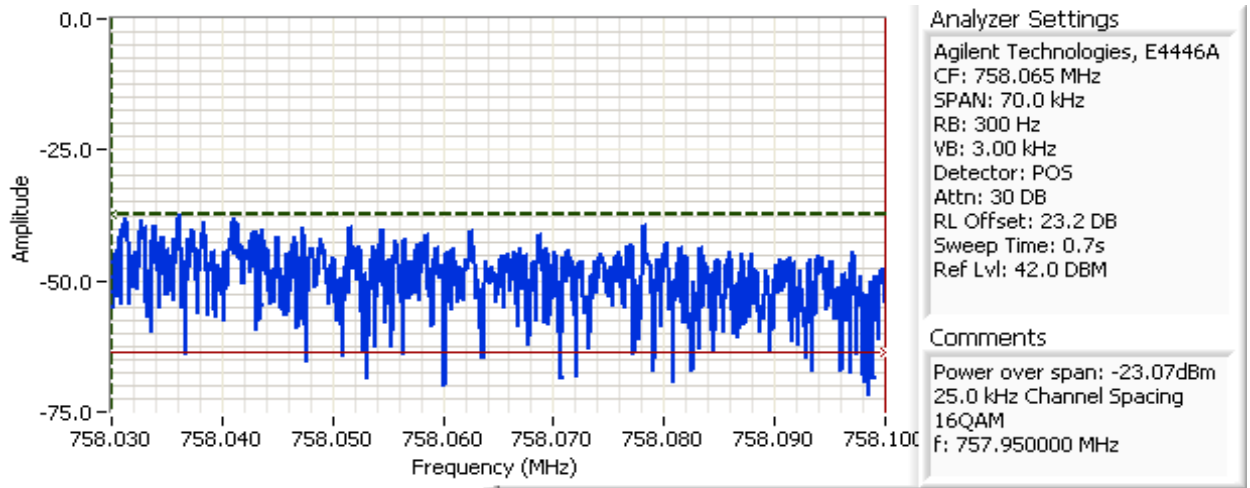
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

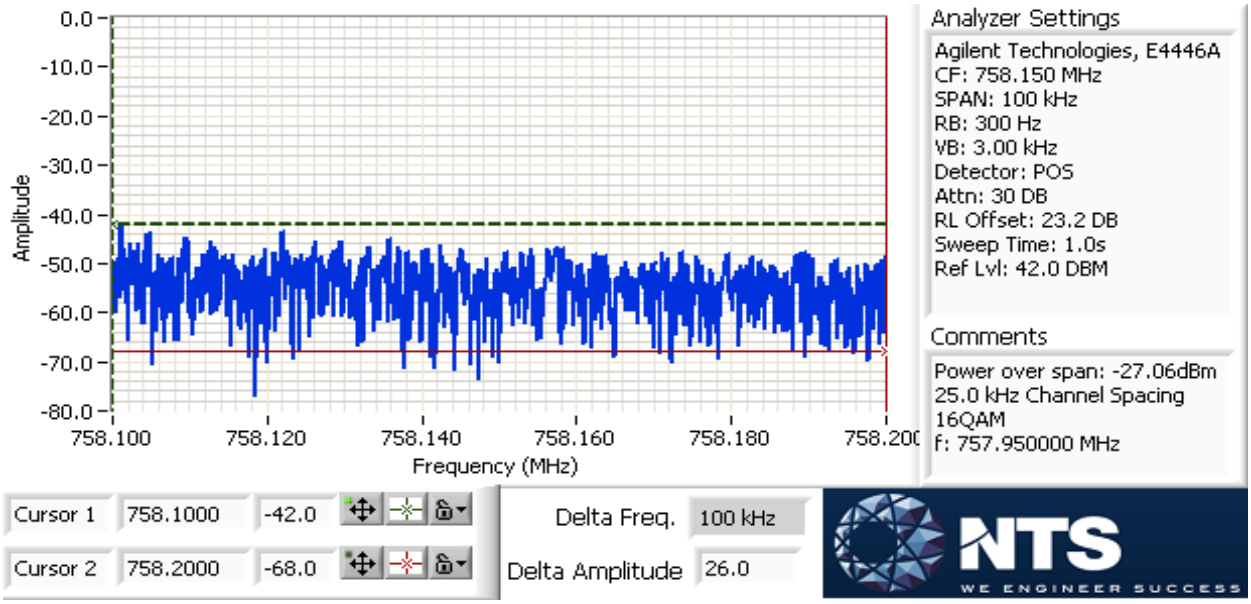


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

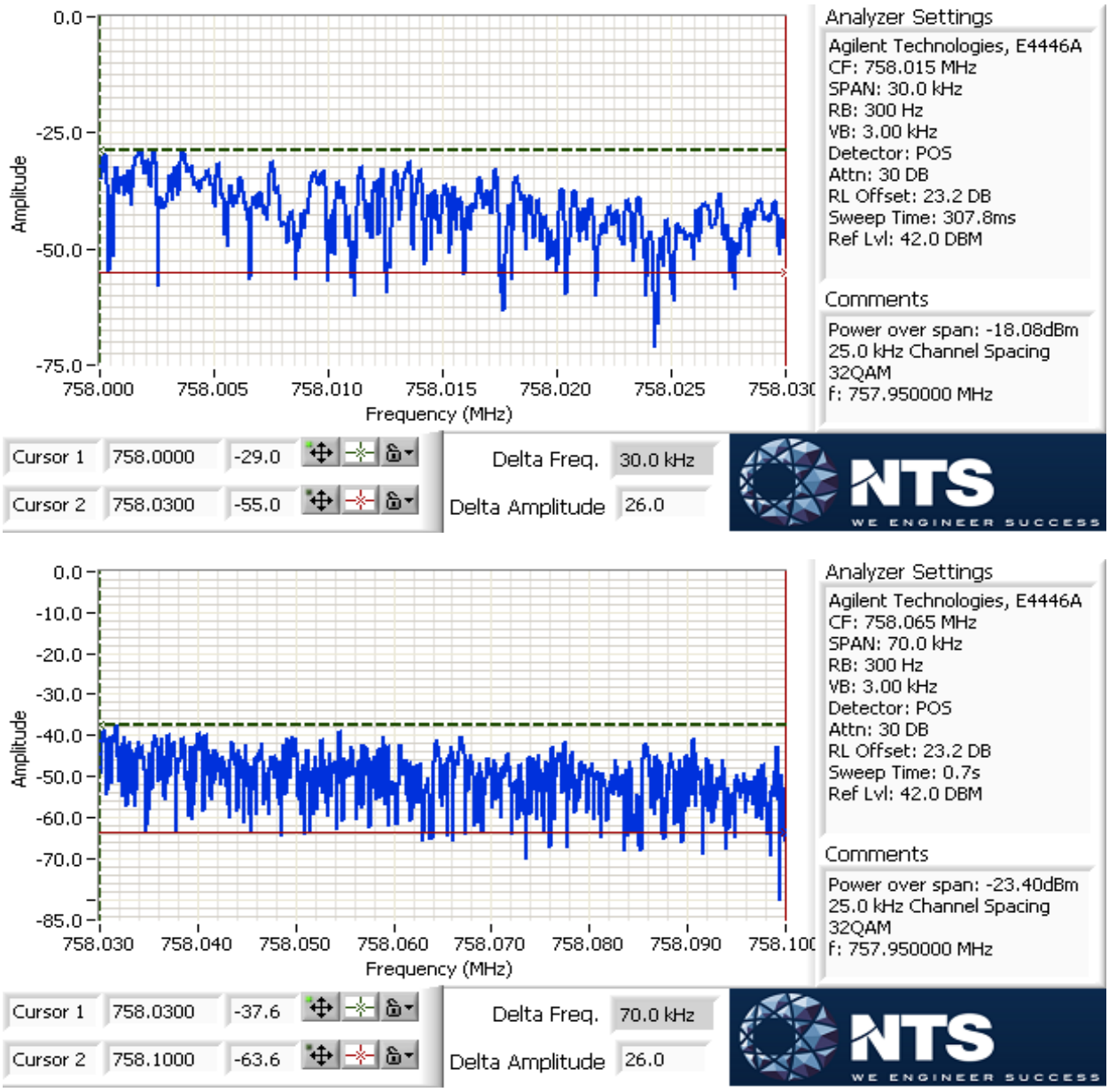


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

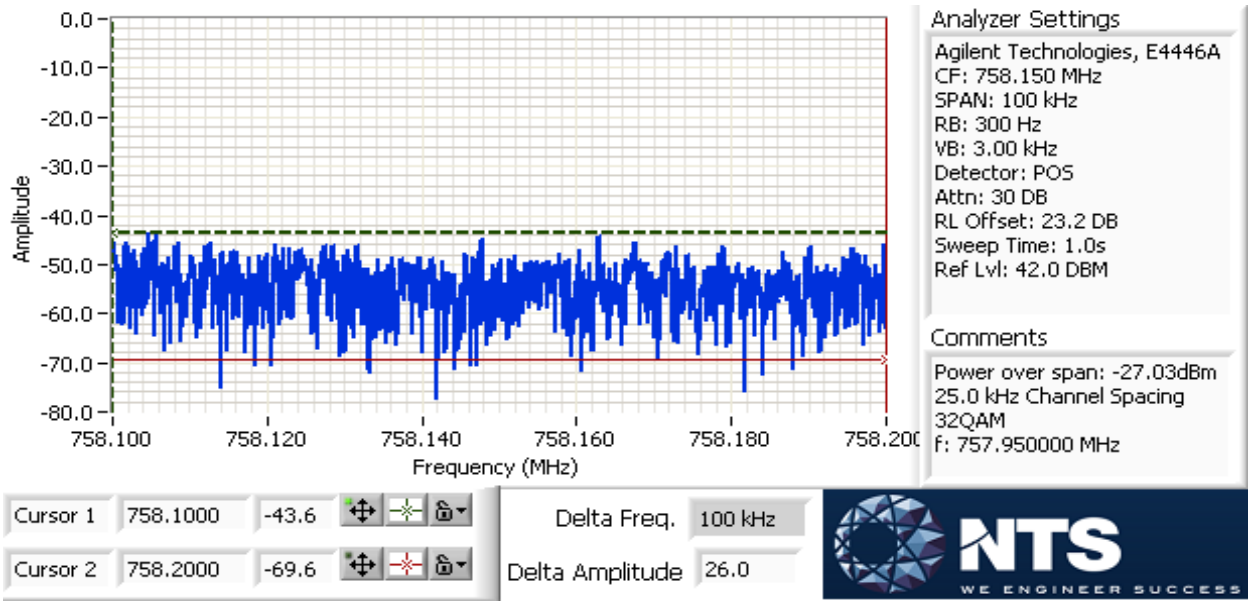




Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

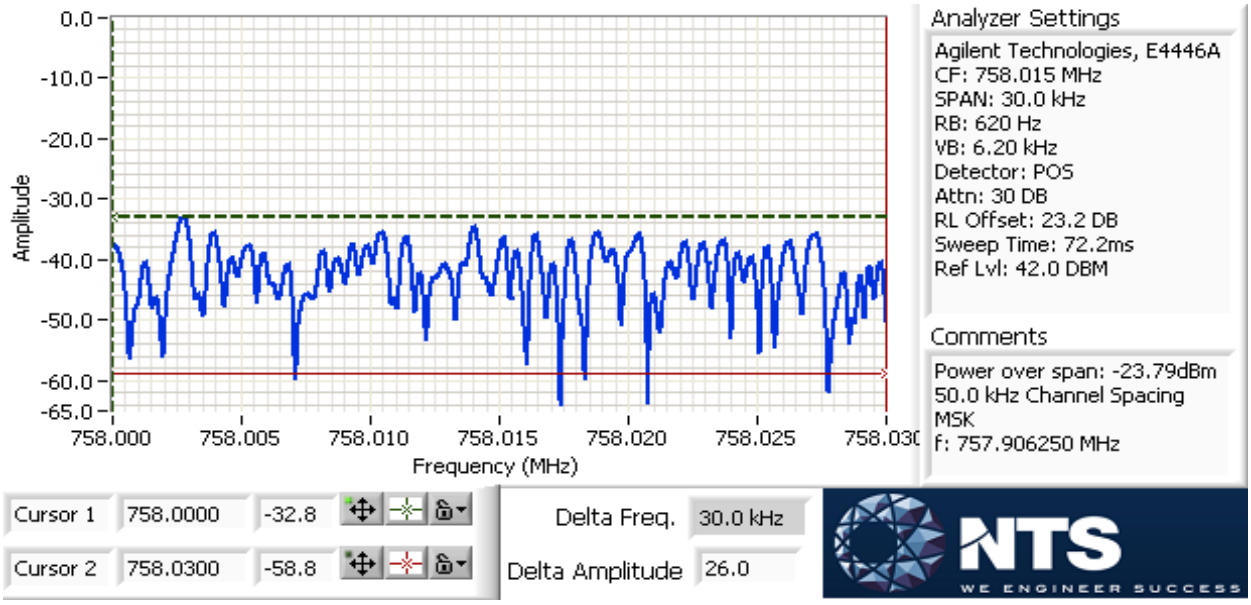


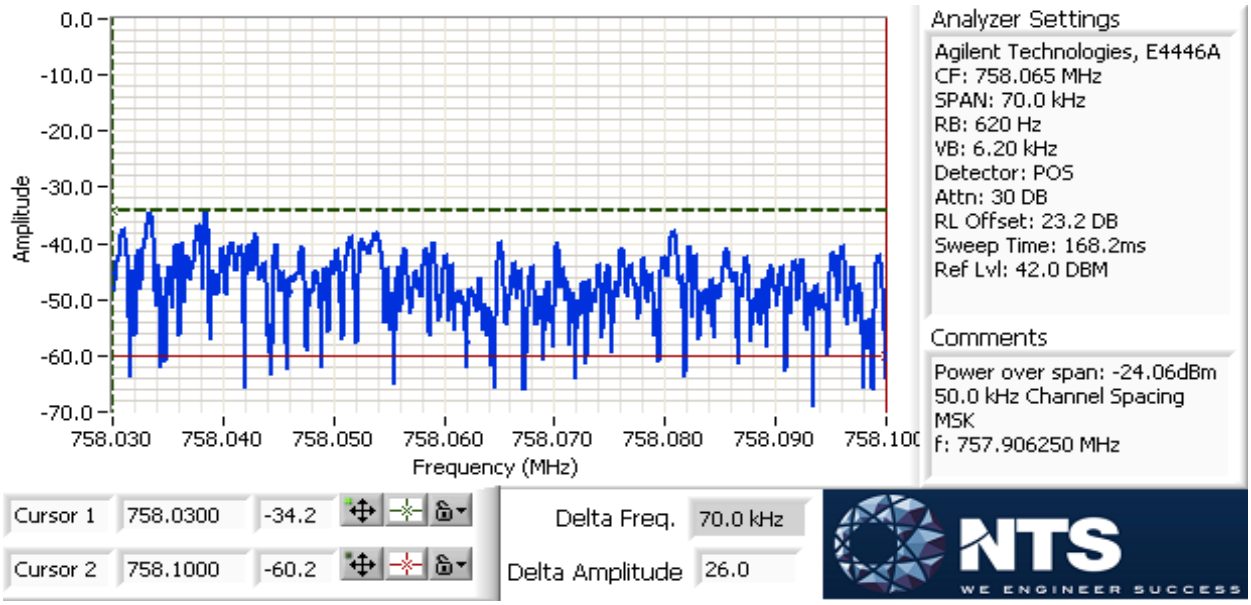
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



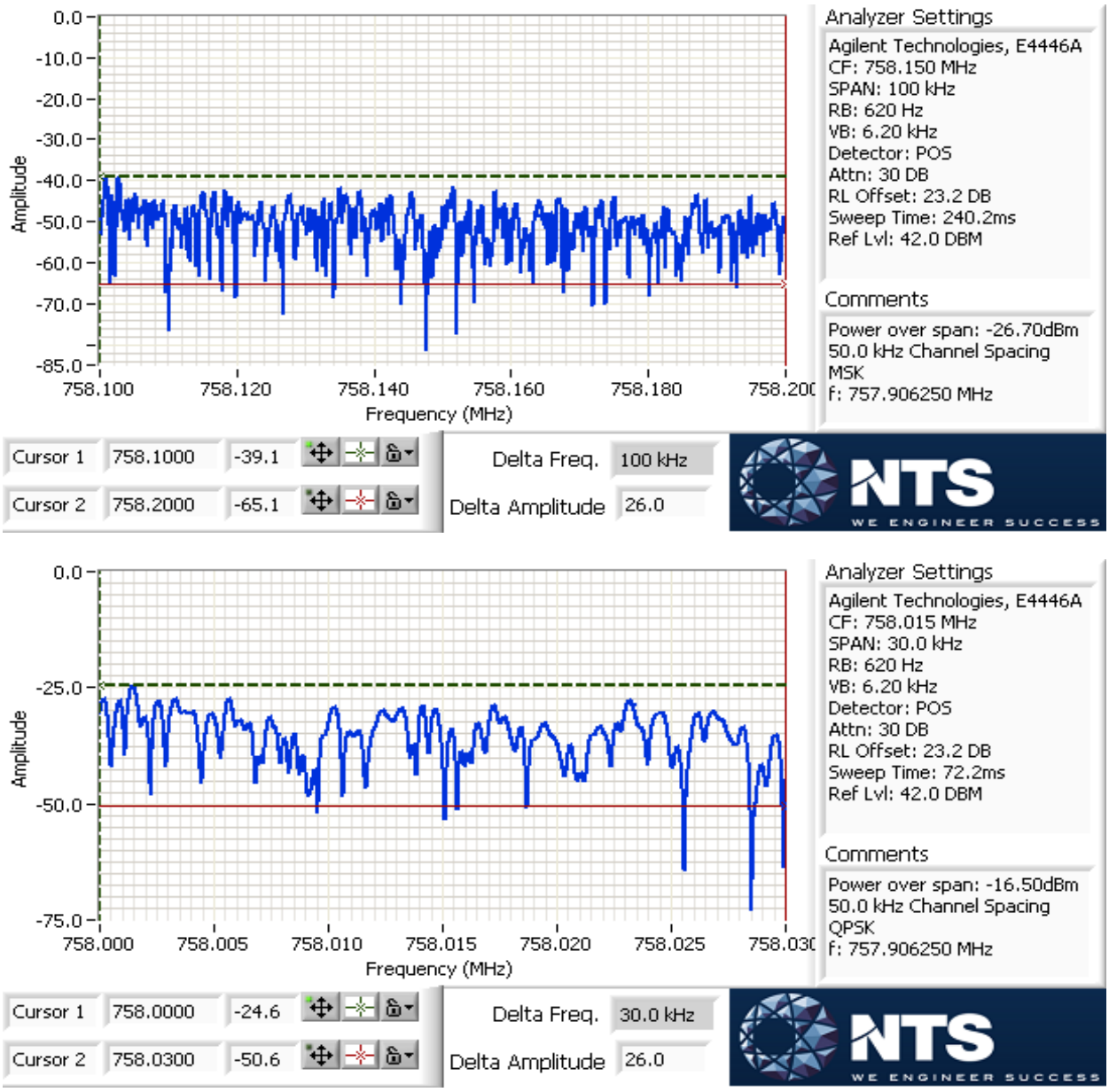
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 758 MHz, 50 kHz channel spacing

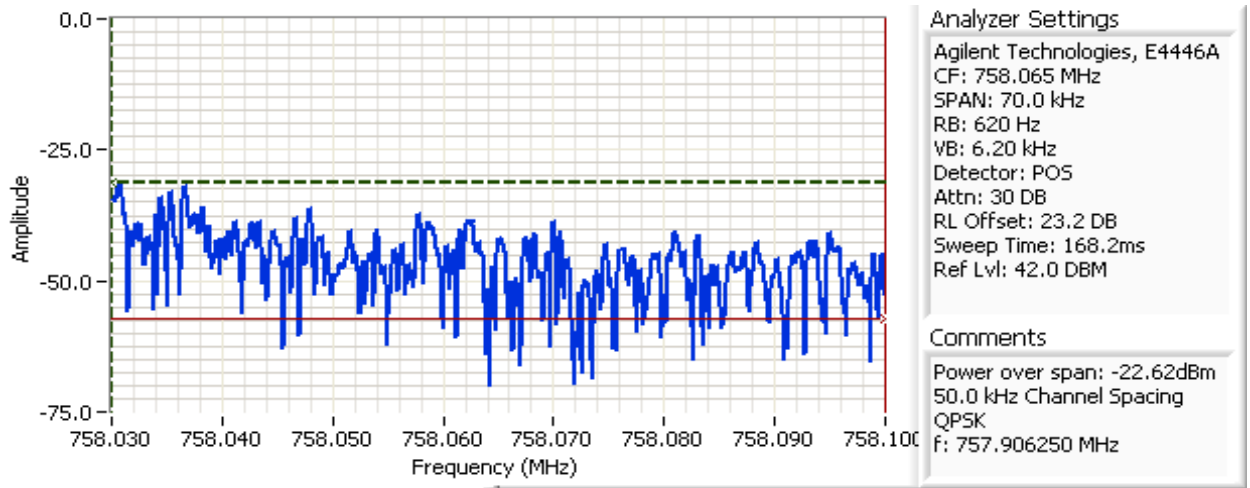


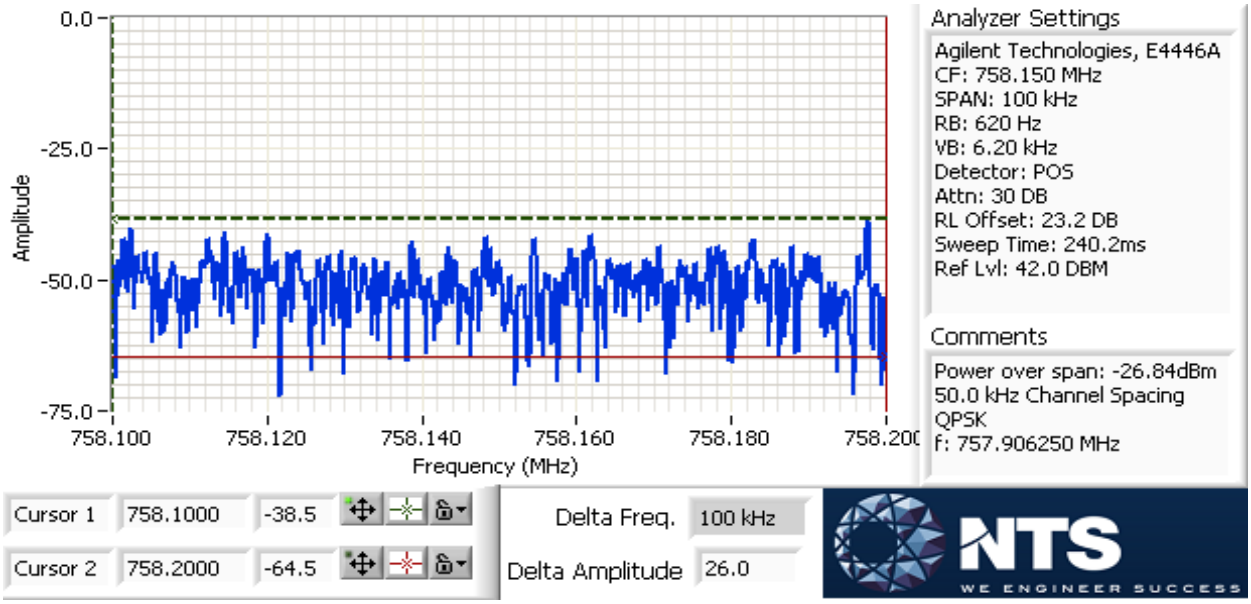


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

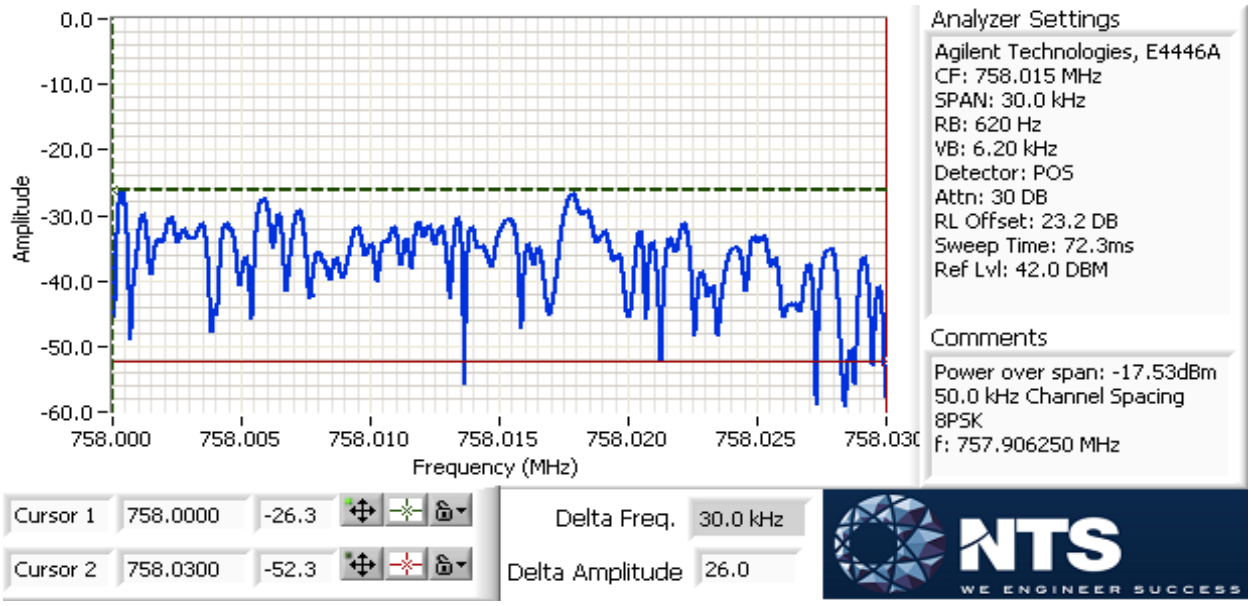


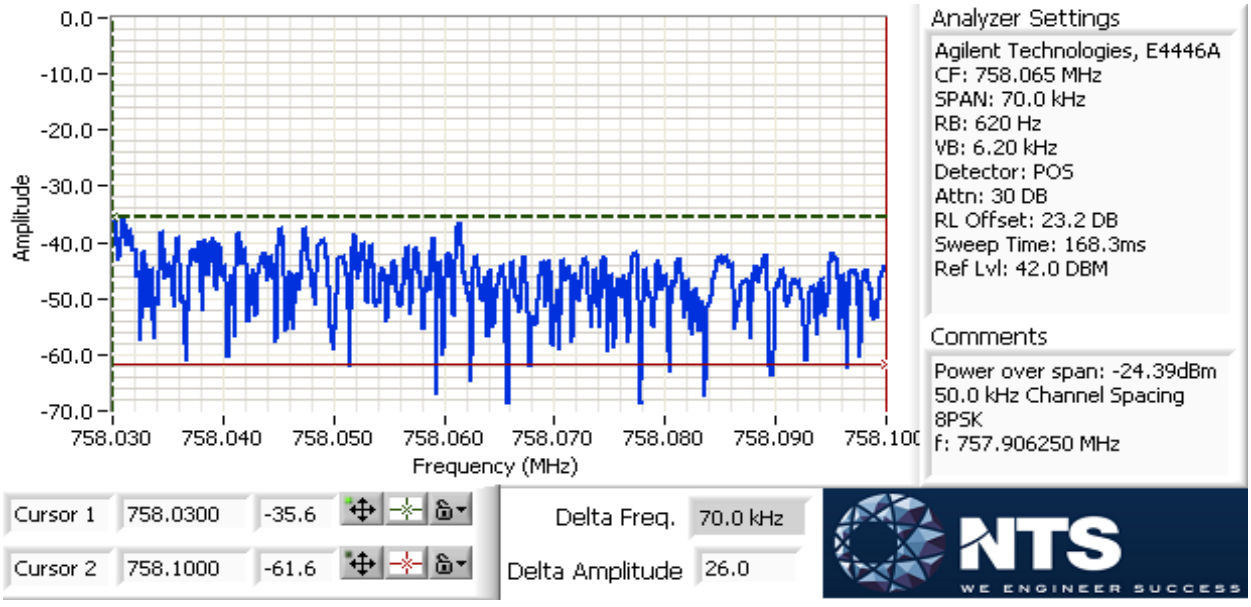
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



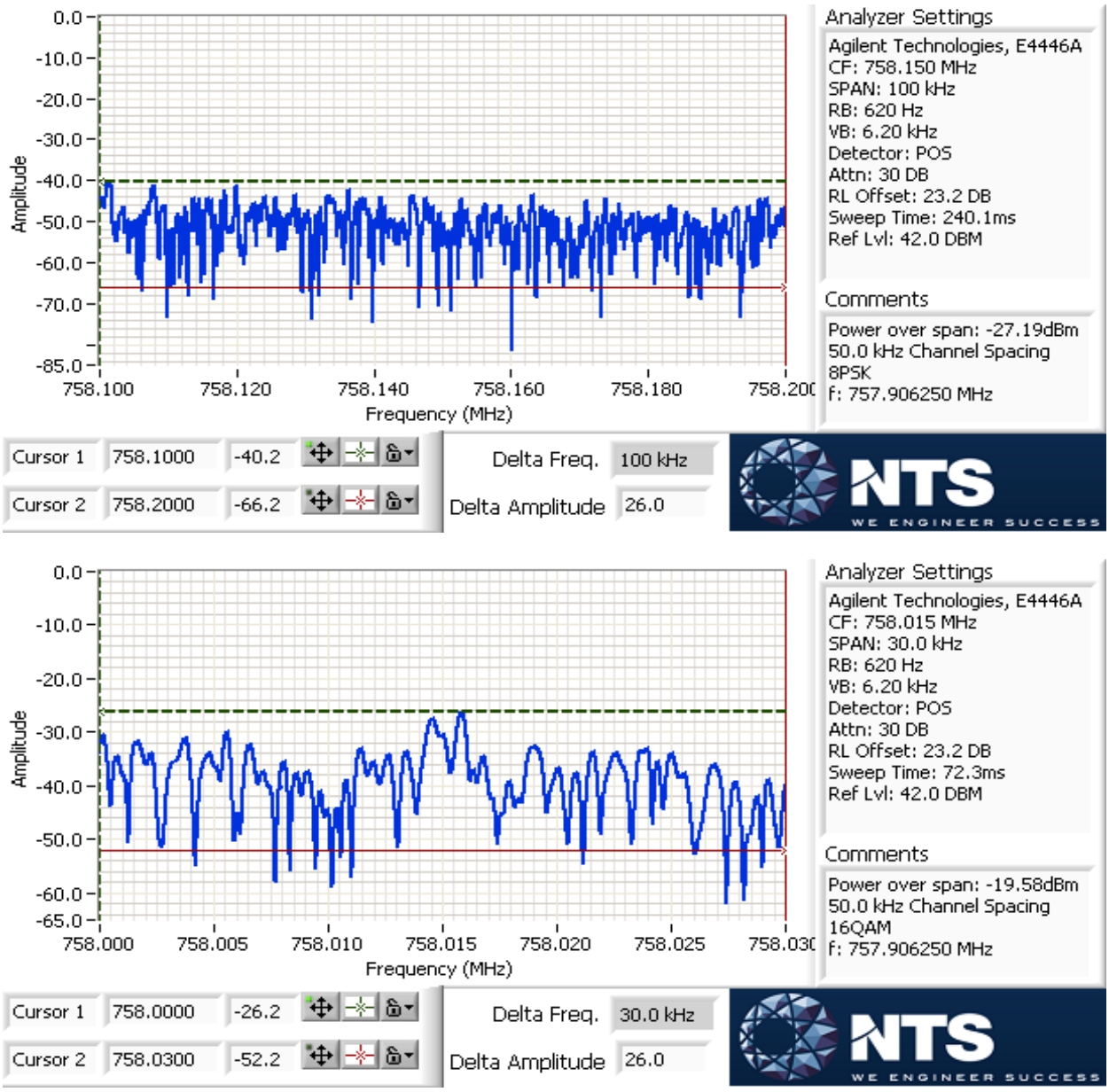


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

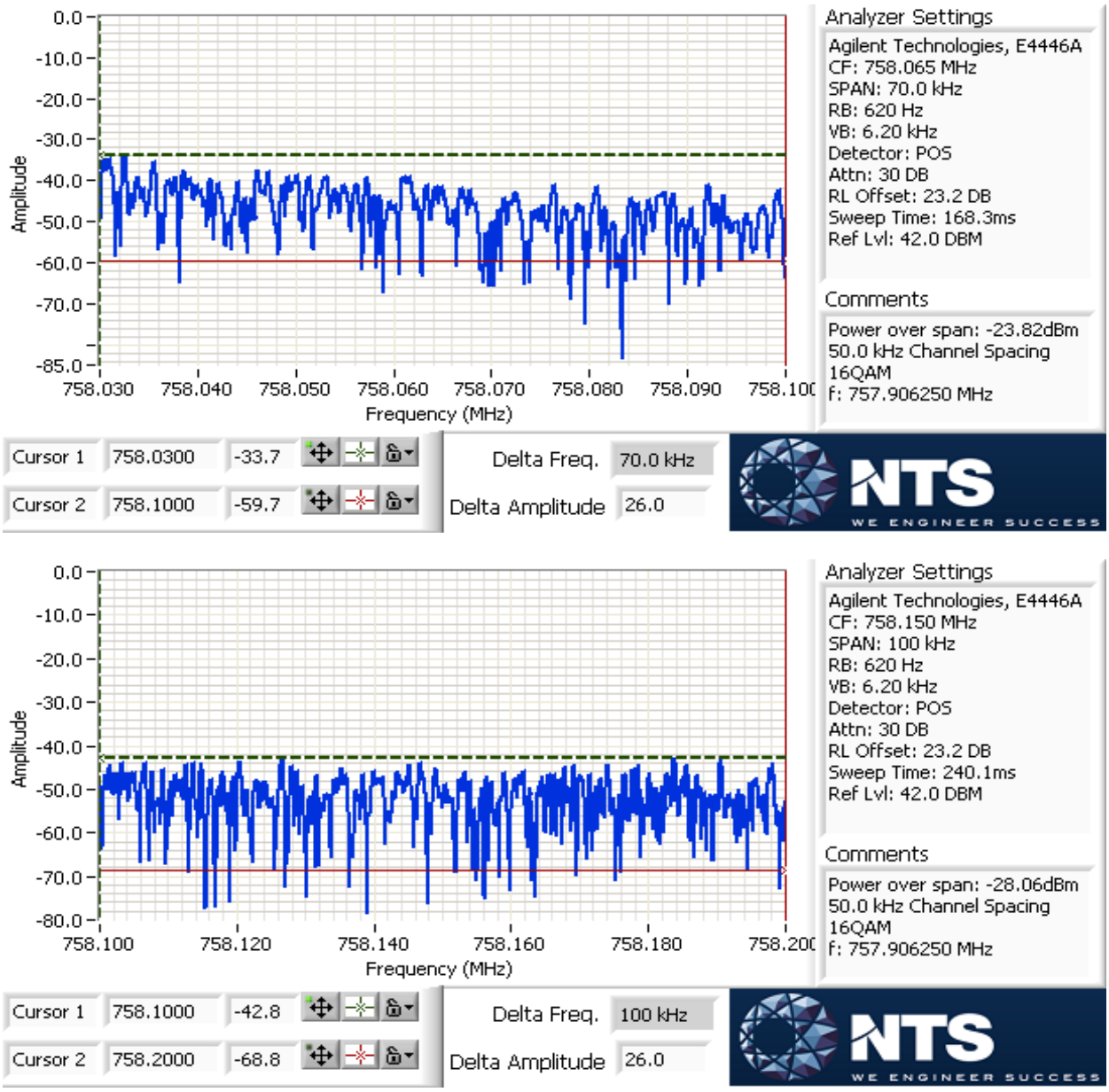




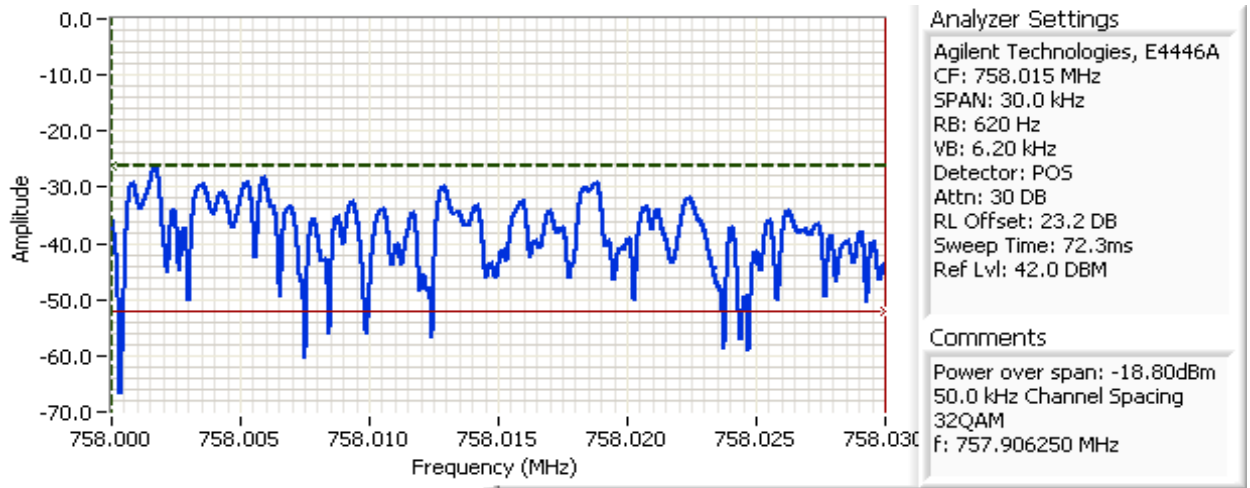
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

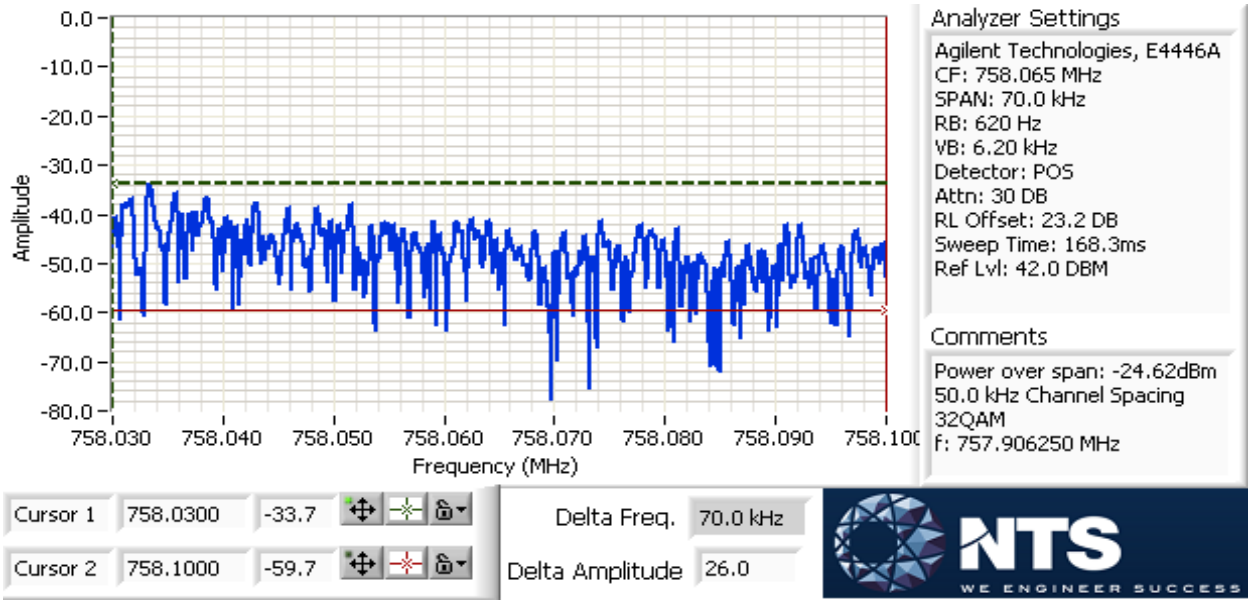


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

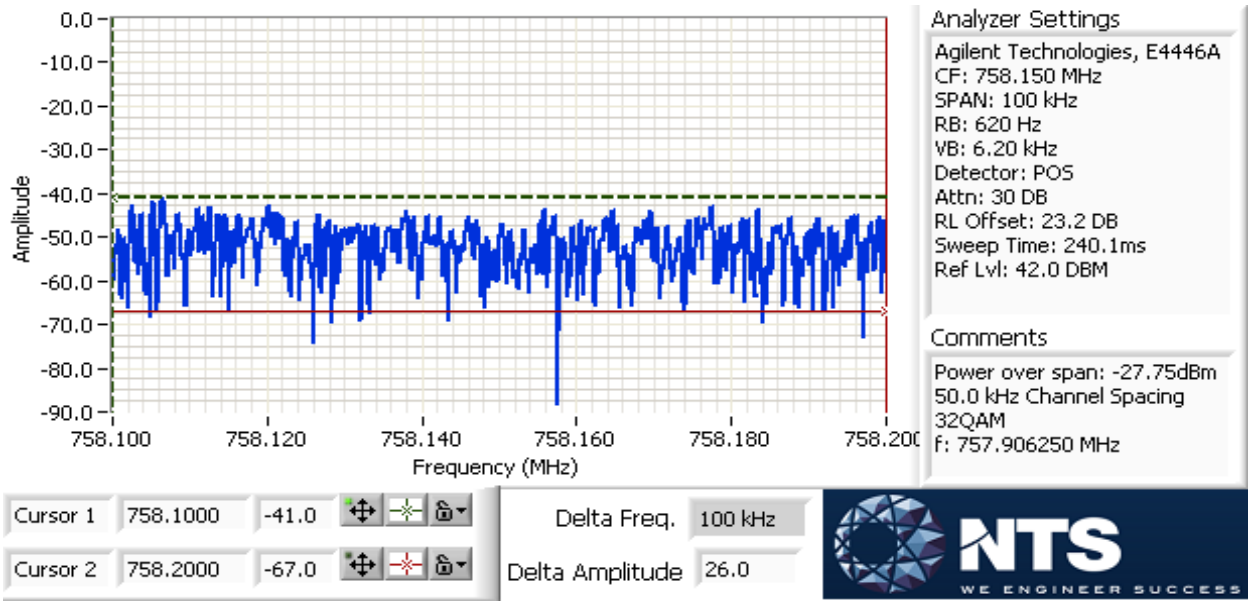


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



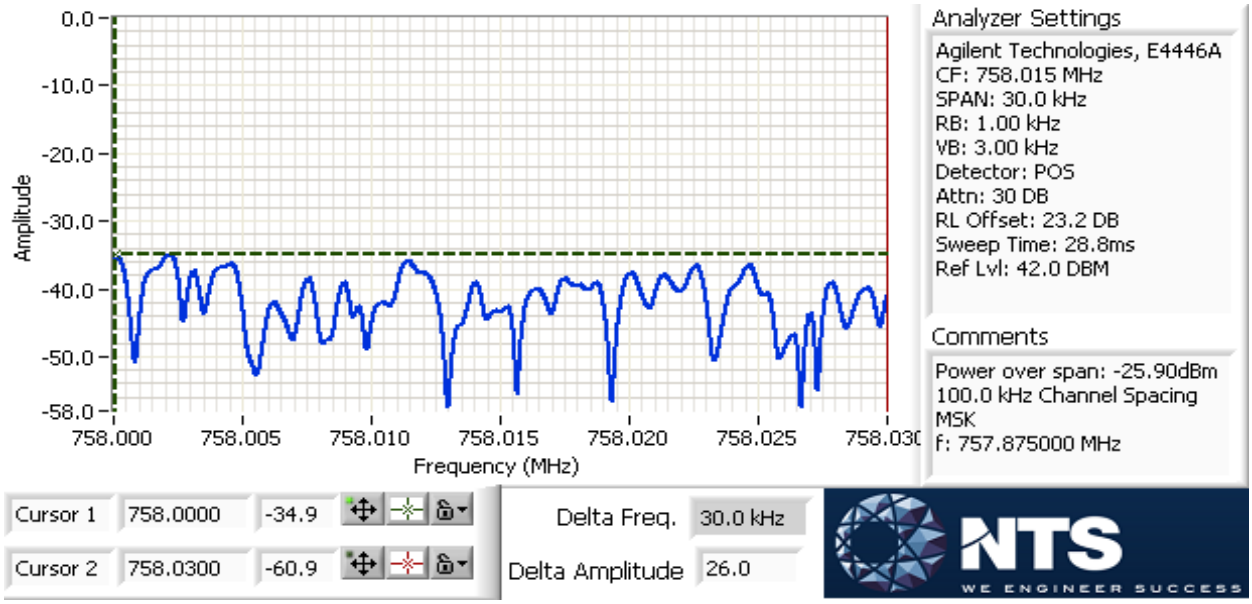


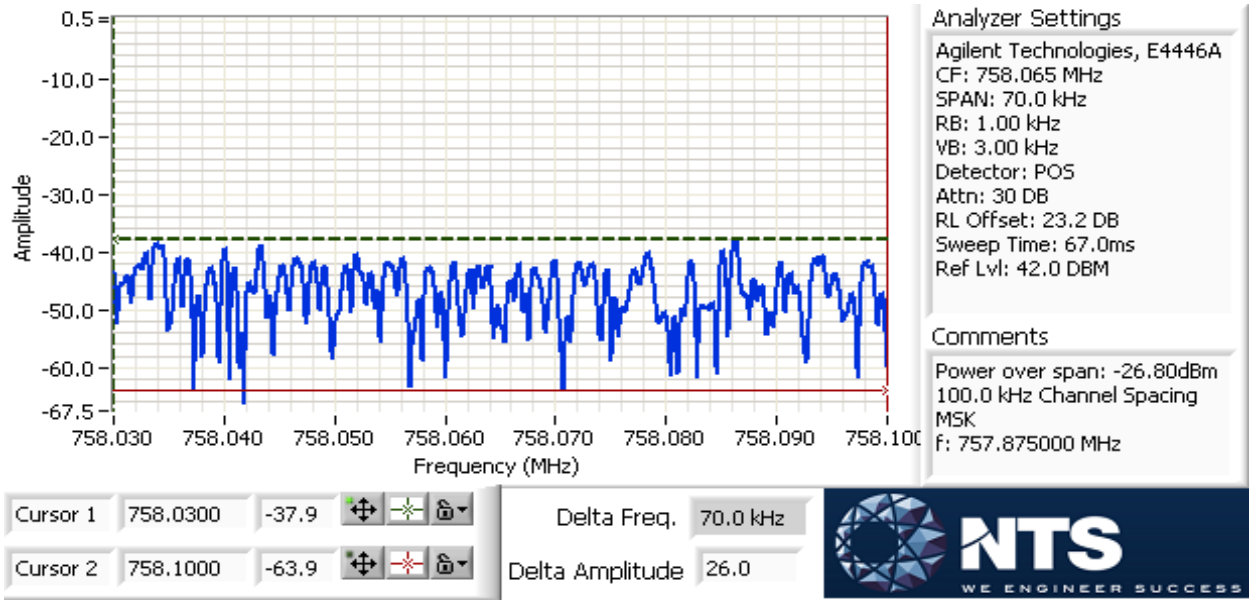
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



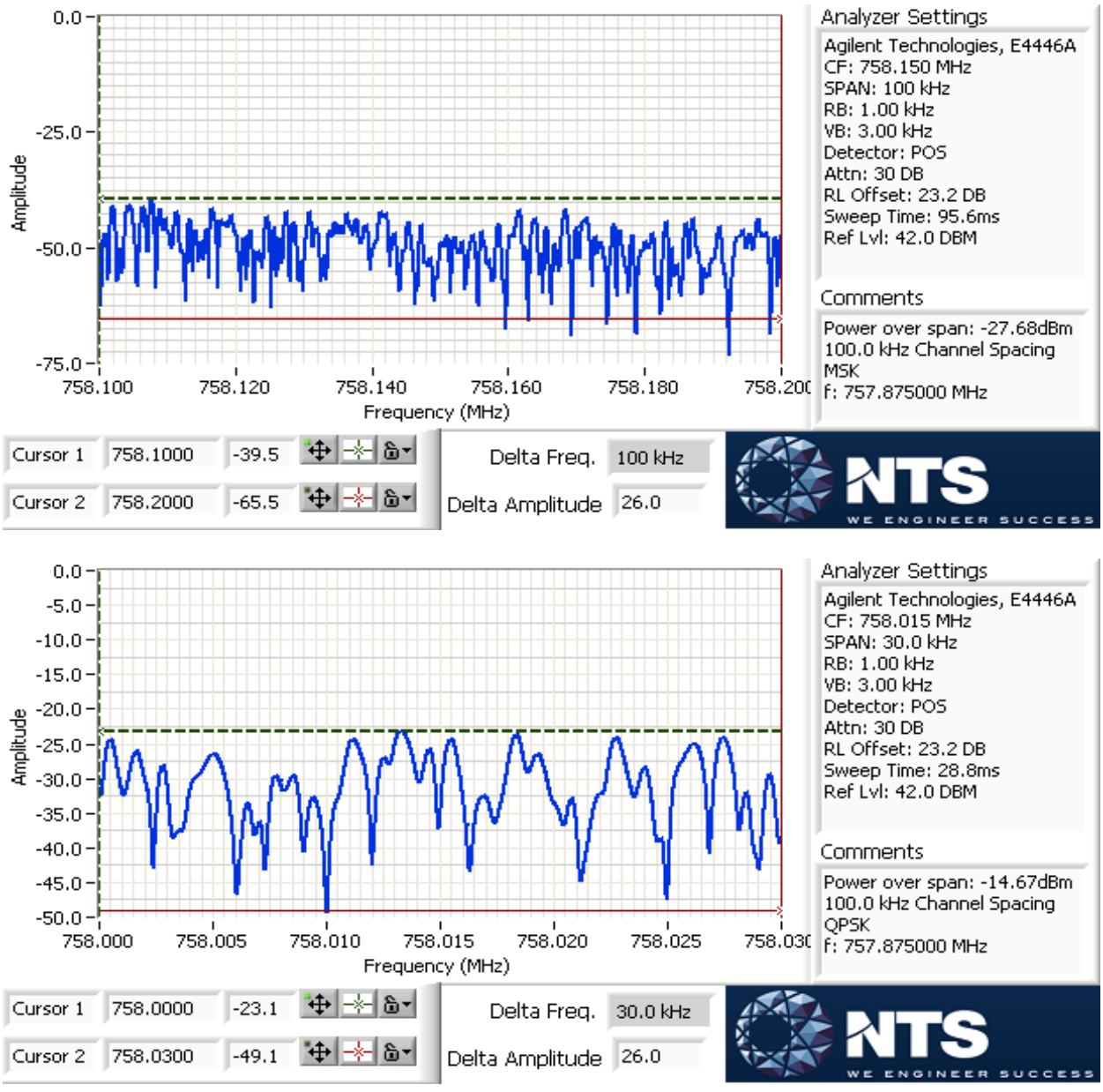
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 758 MHz, 100 kHz channel spacing





Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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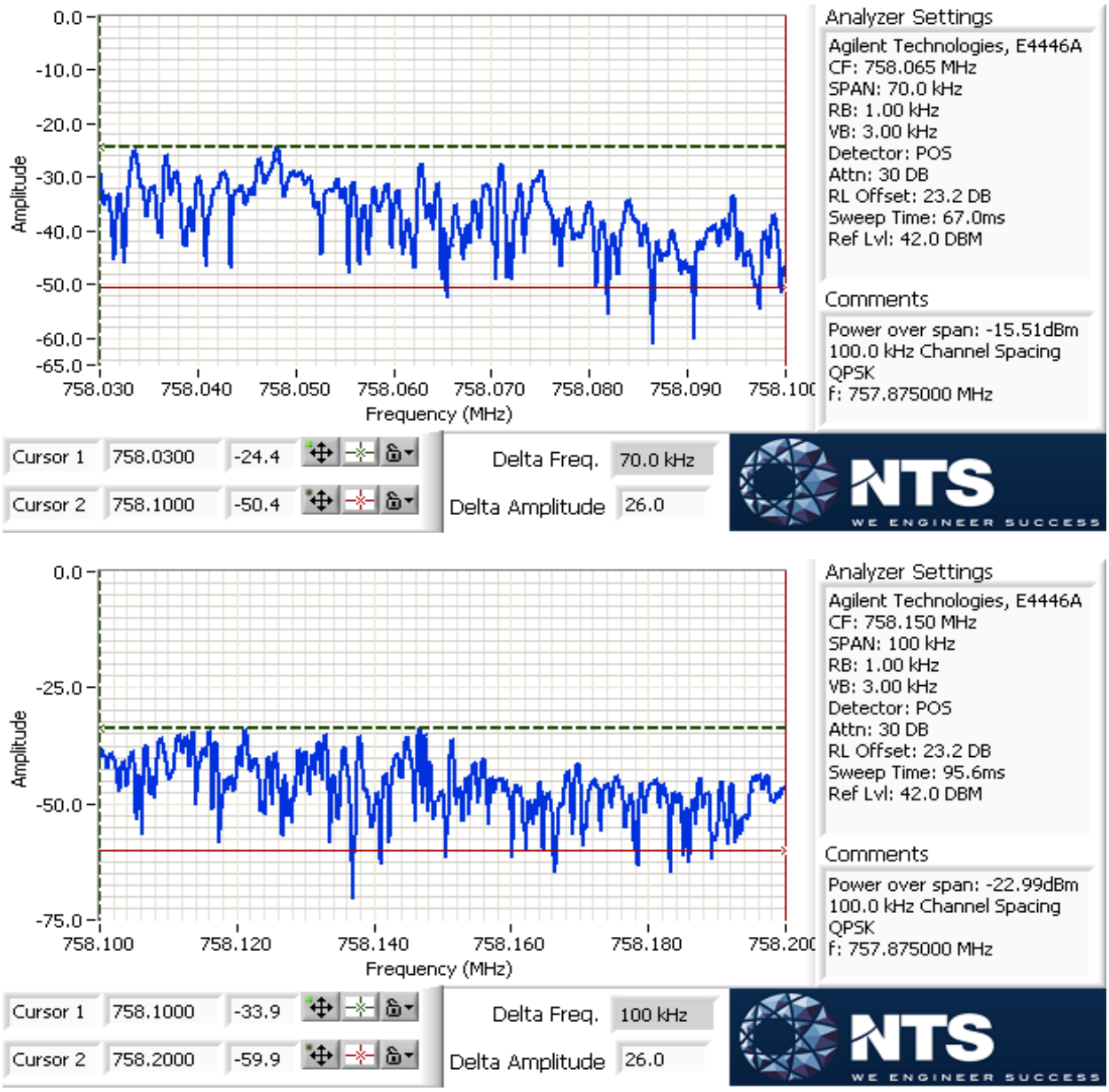
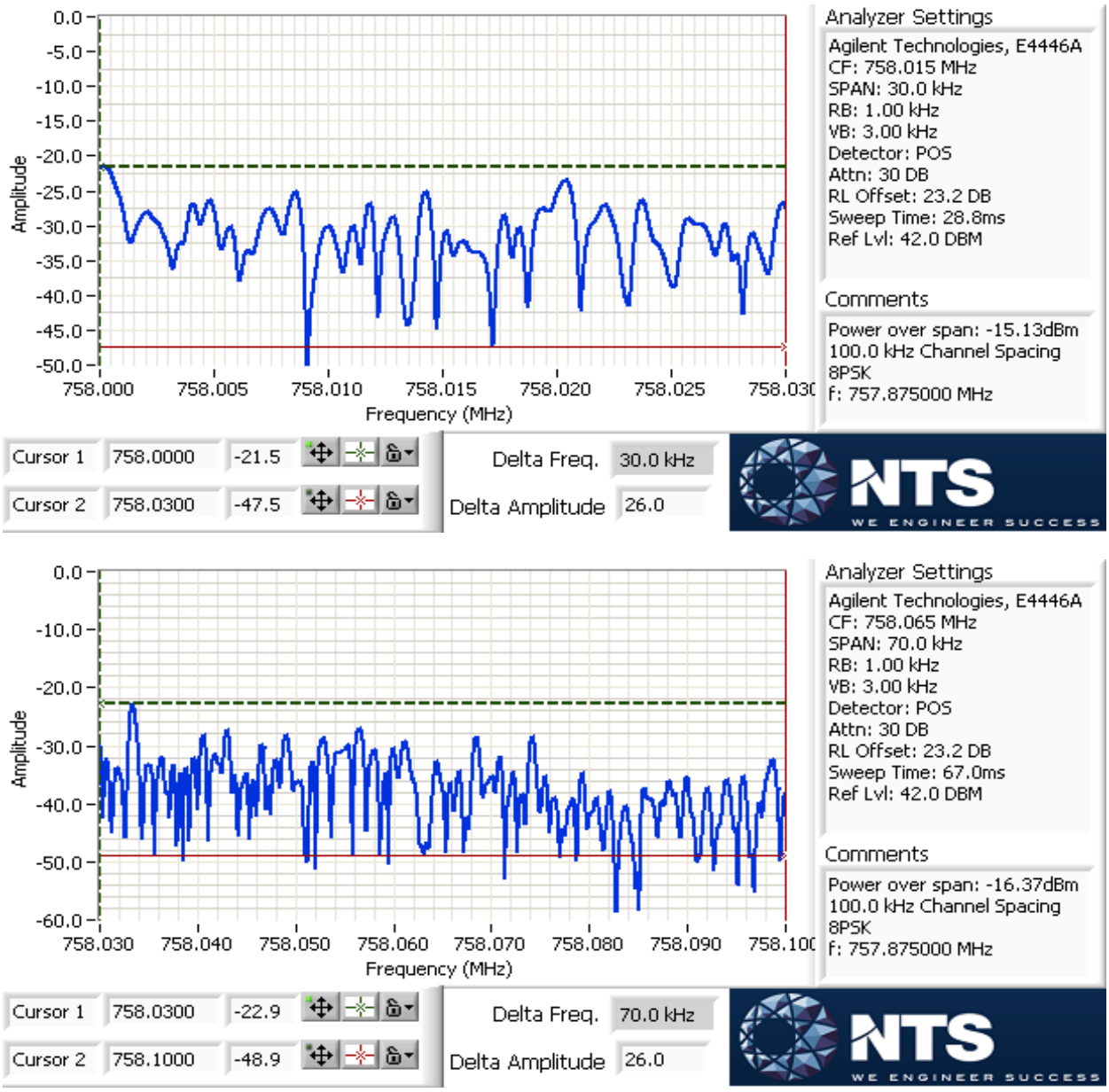
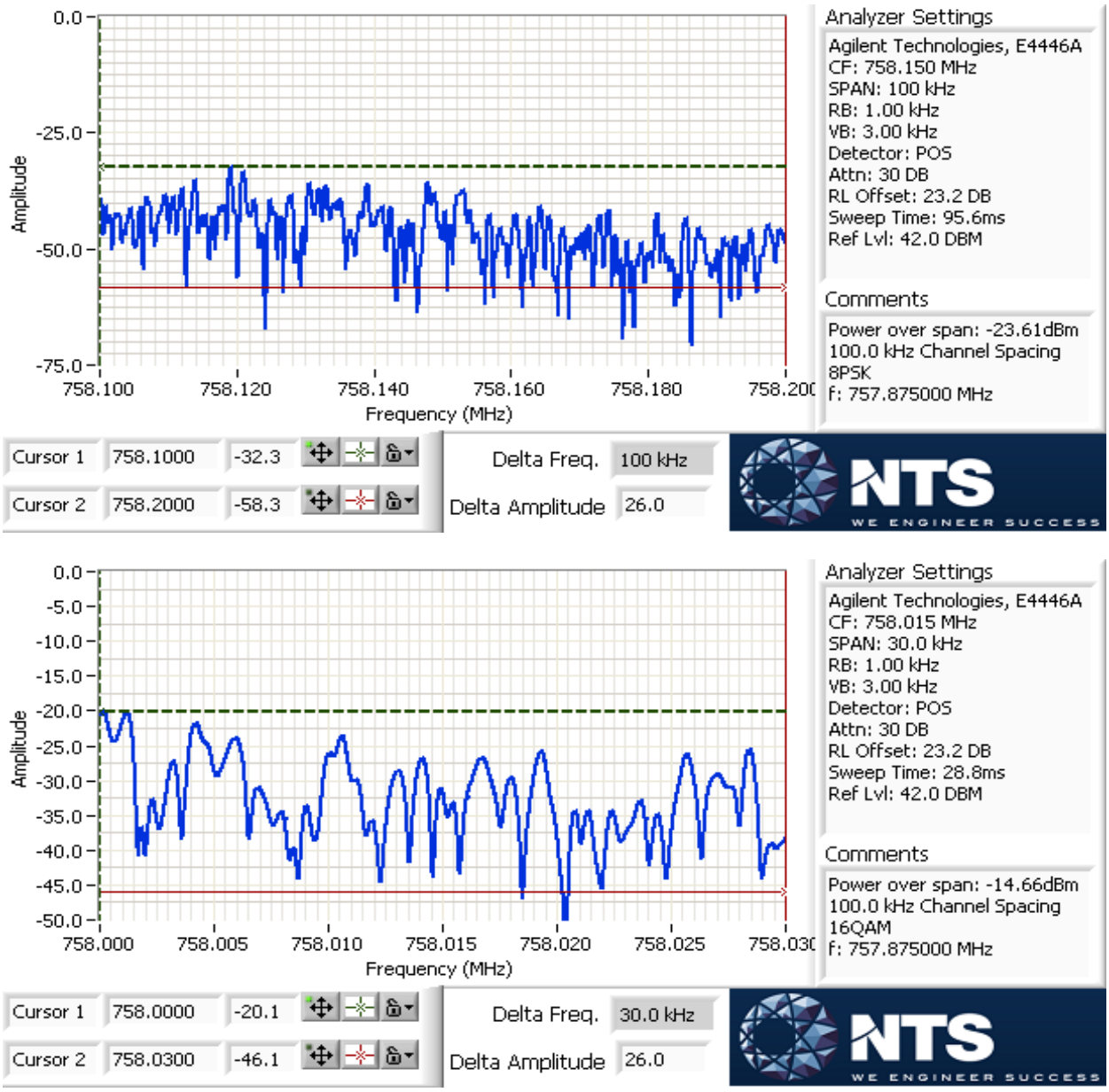
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



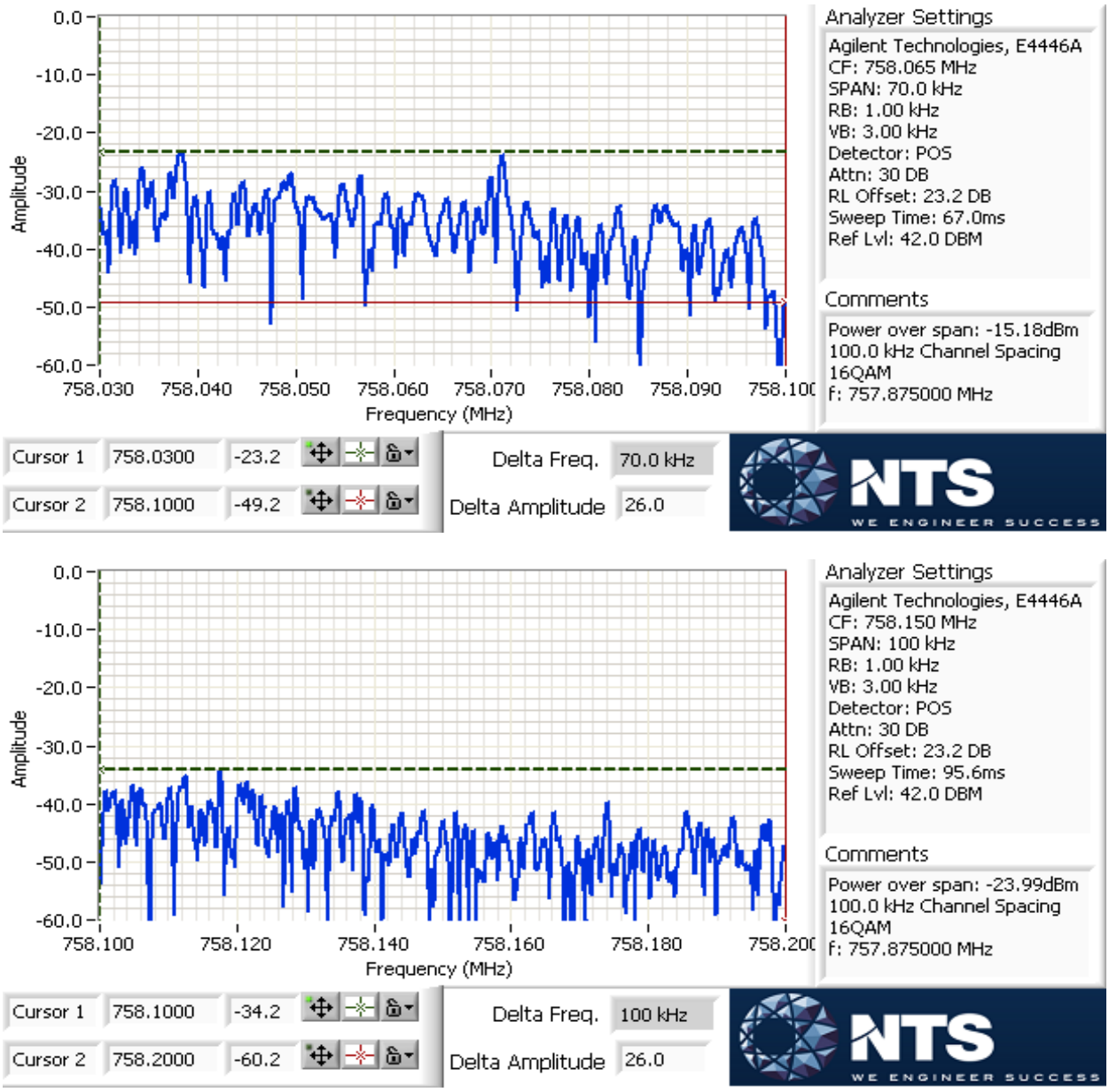
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



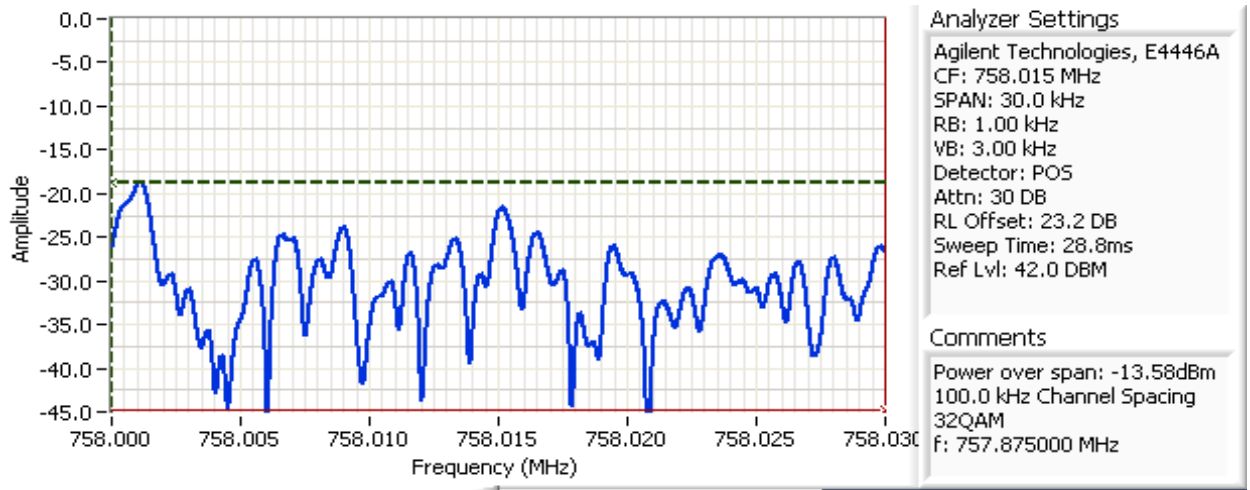
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

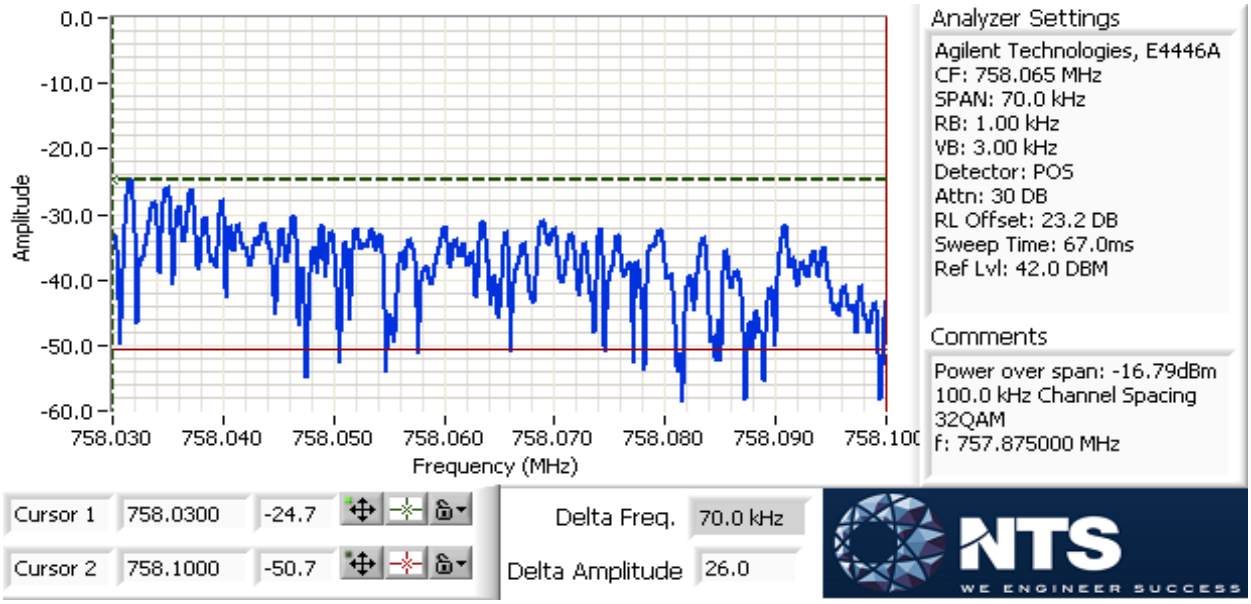


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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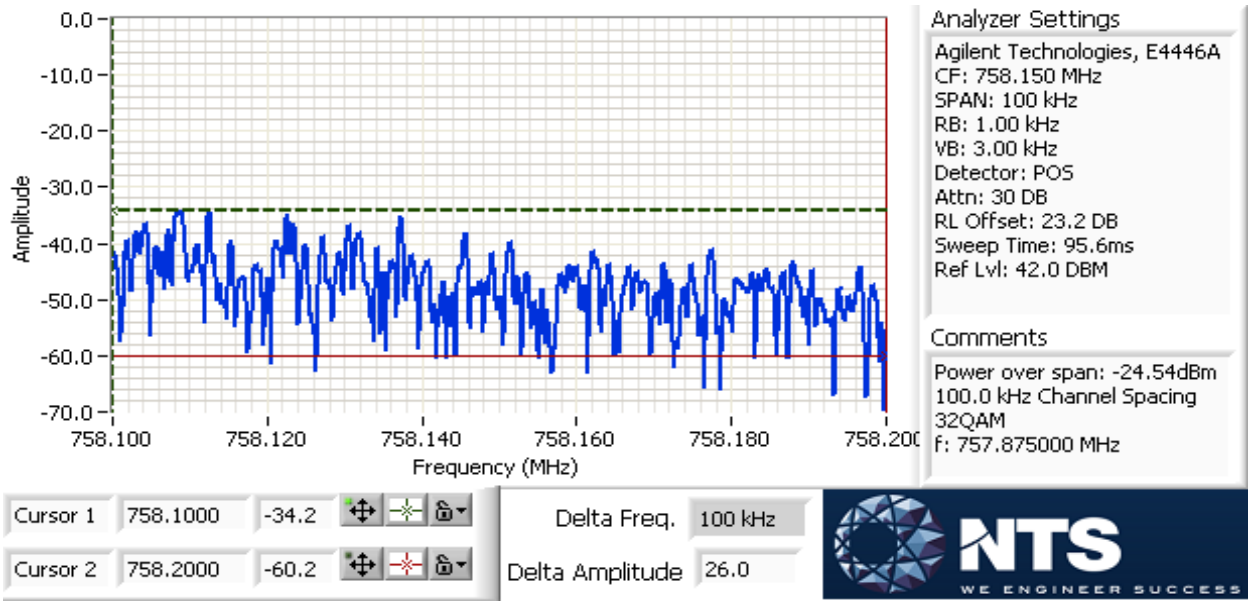
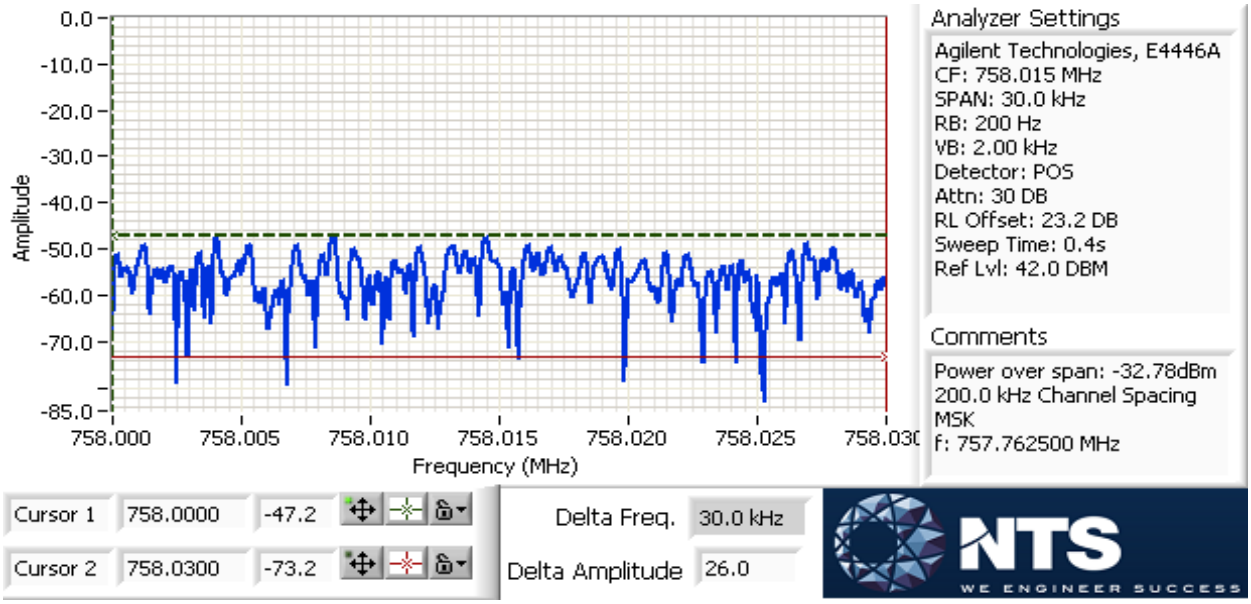
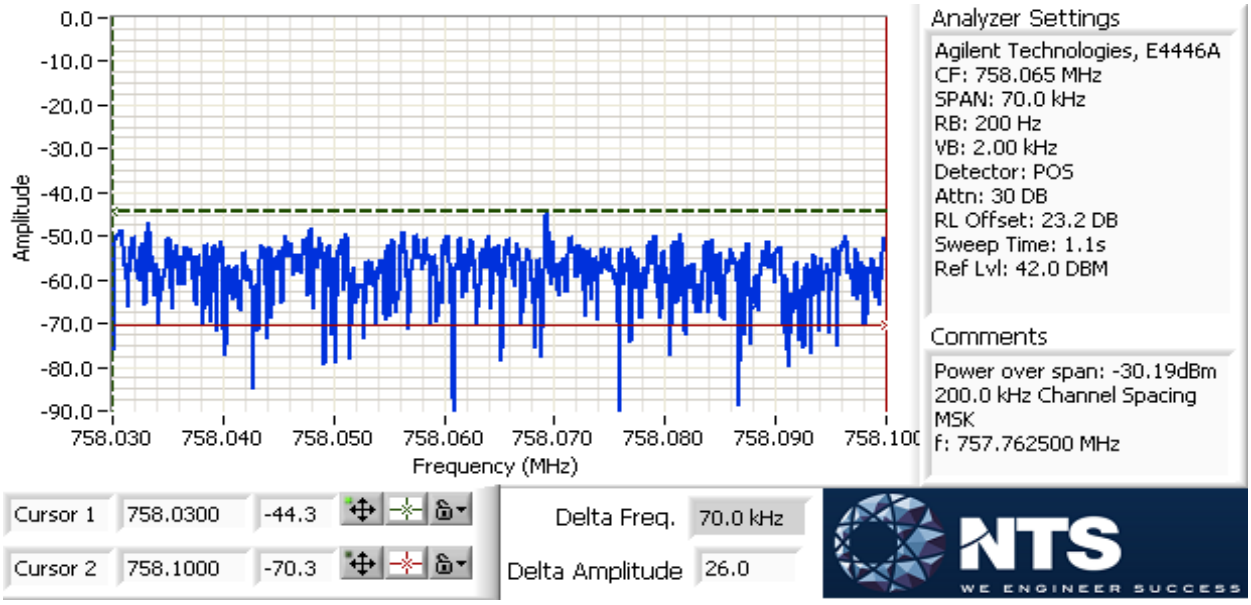
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 758 MHz, 200 kHz channel spacing





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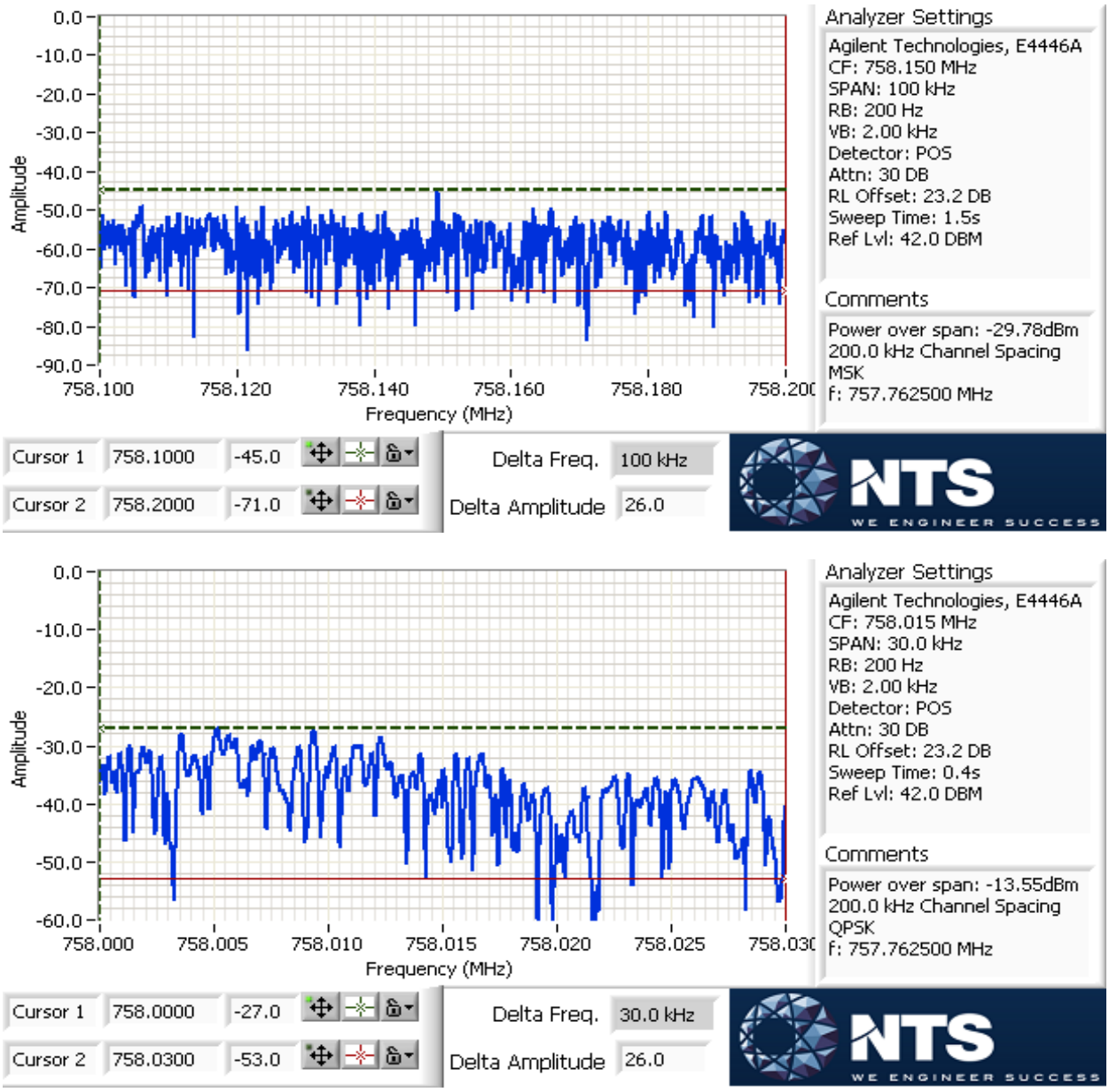
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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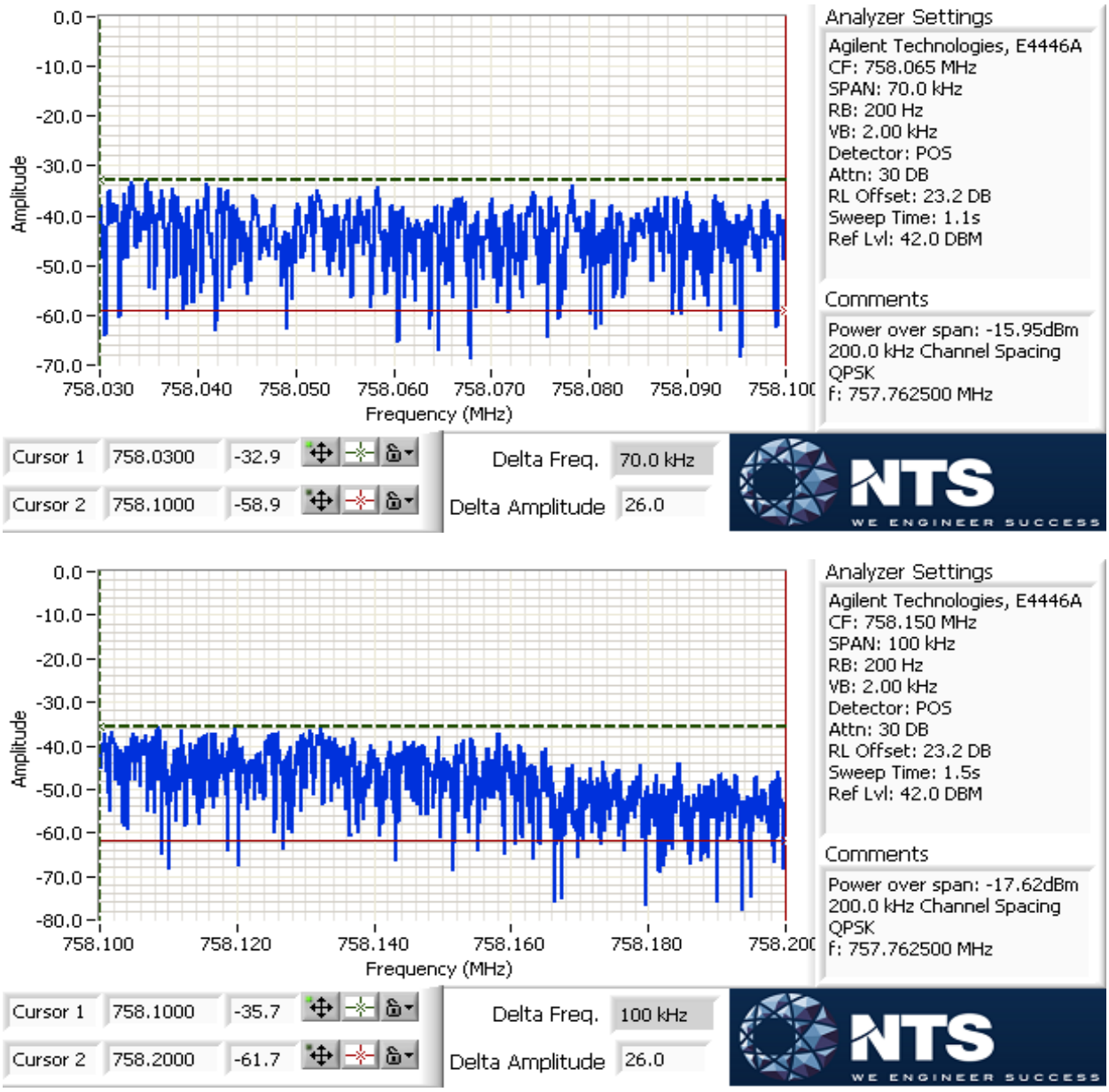
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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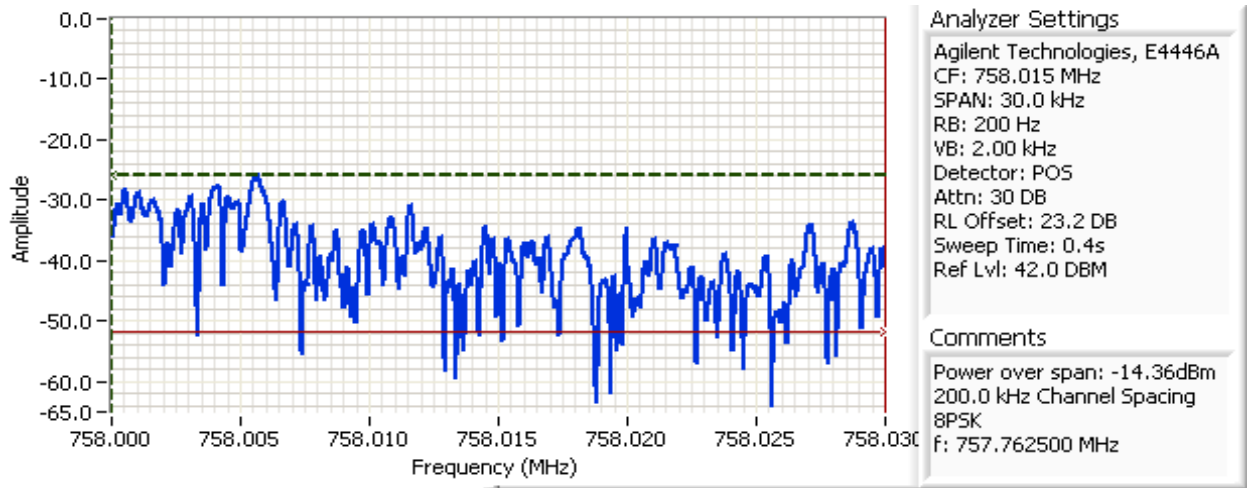
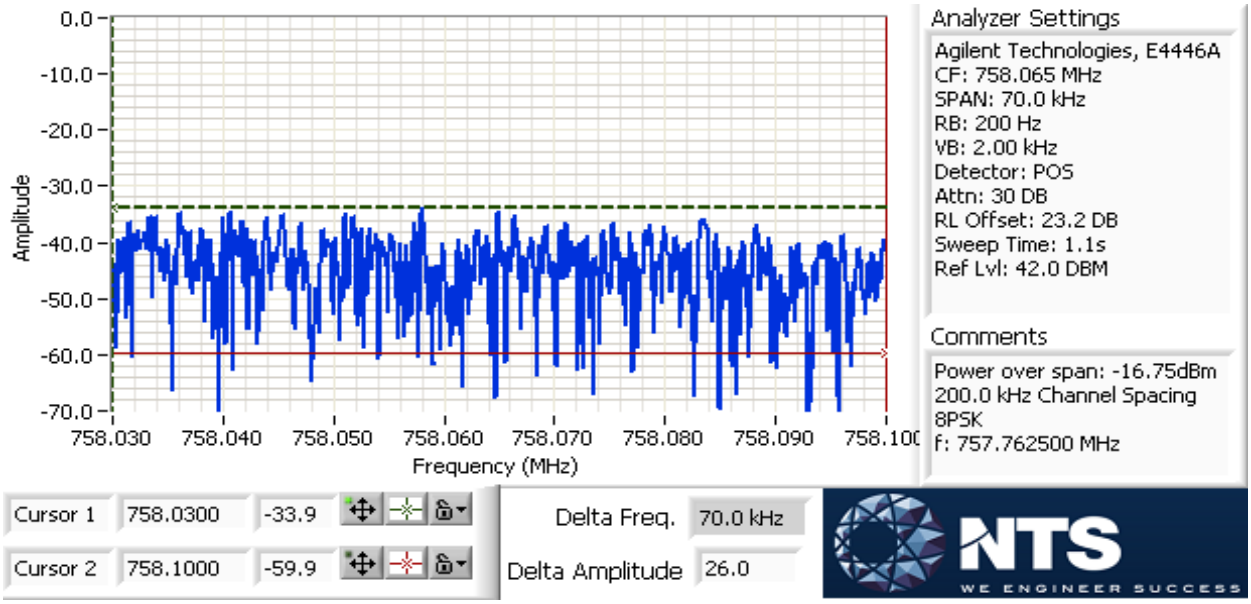
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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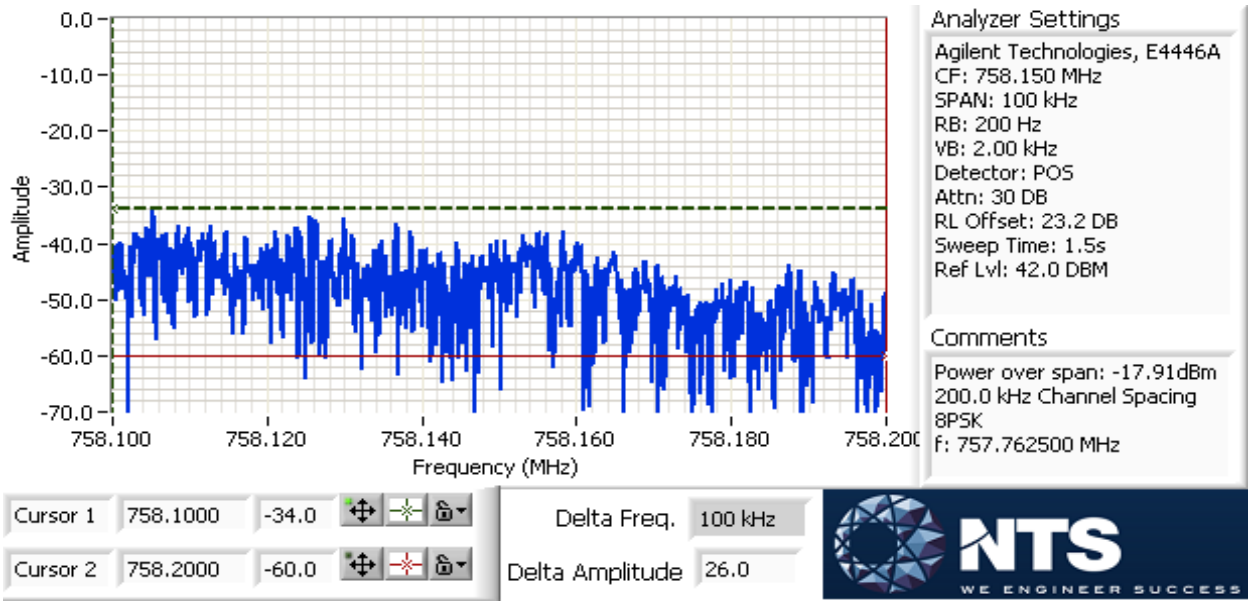
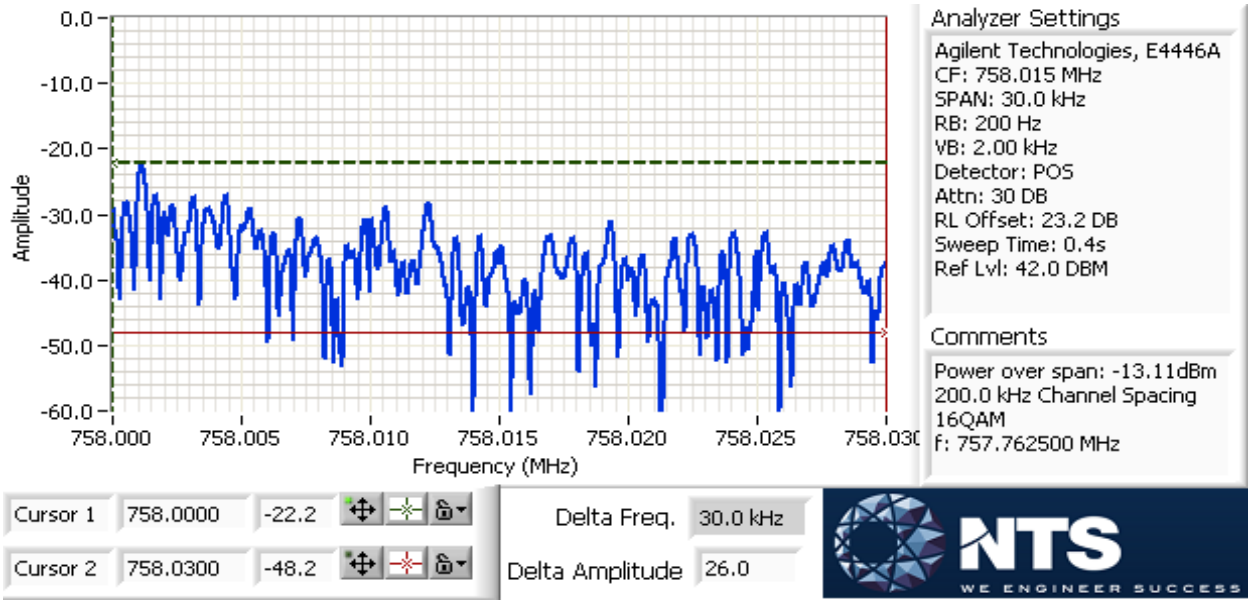
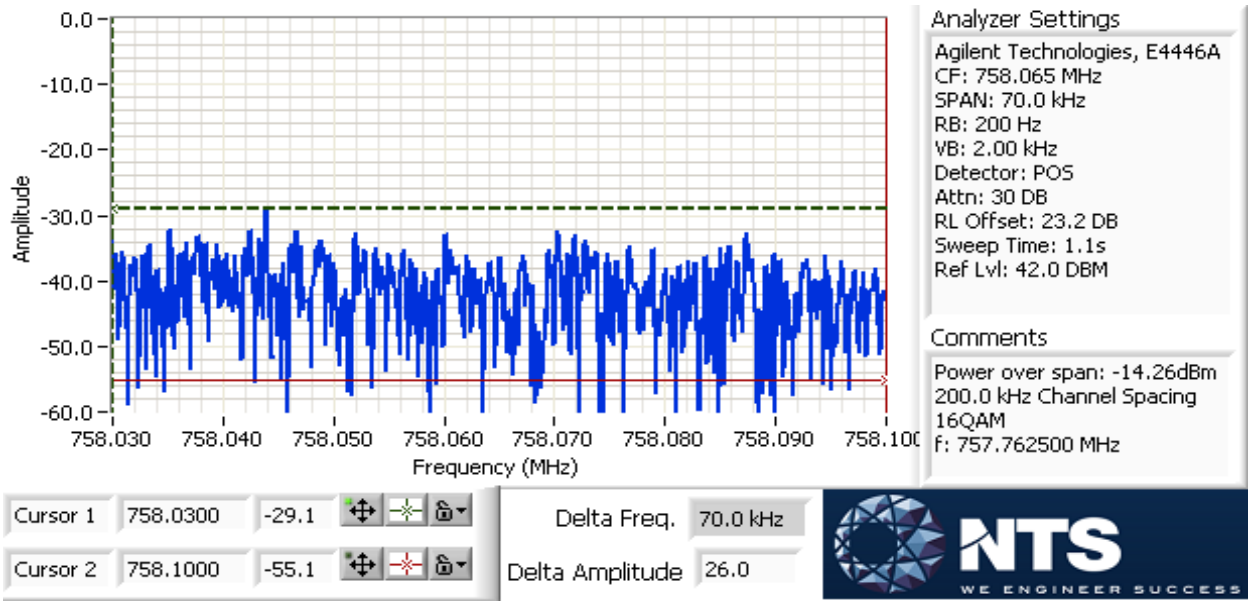
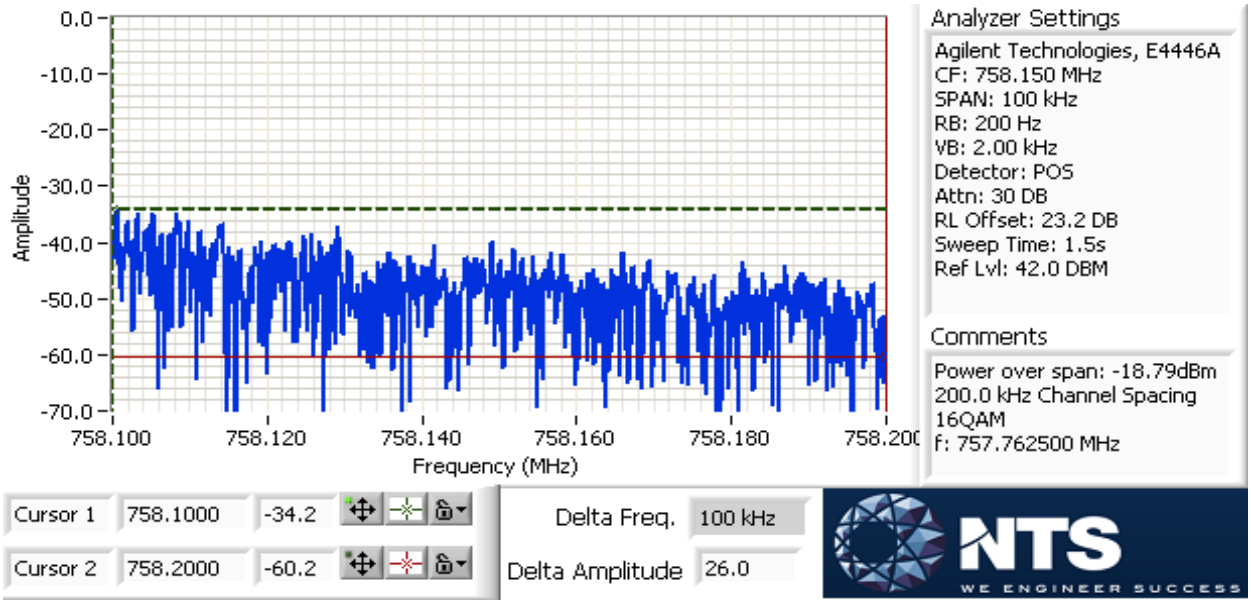
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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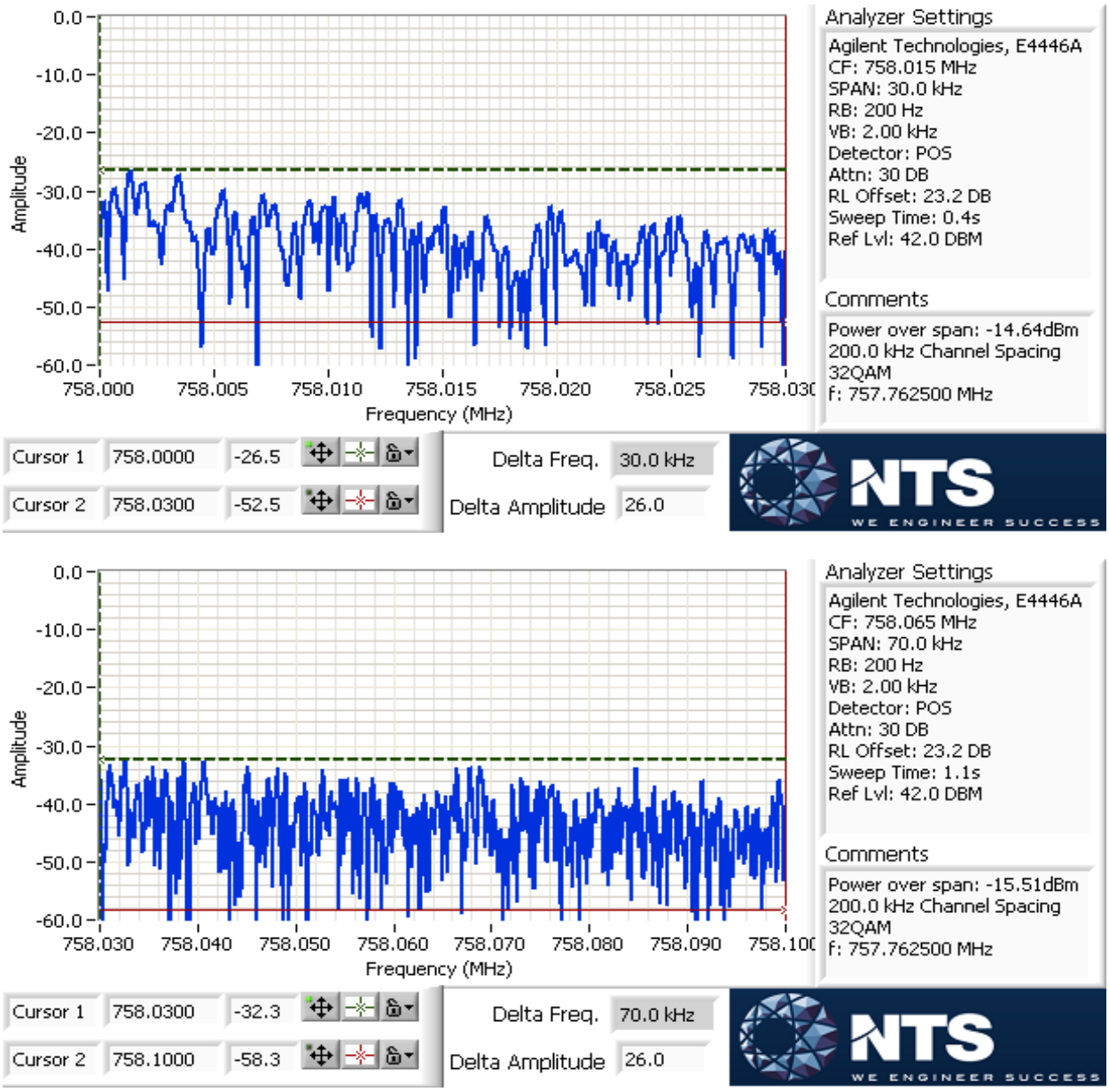
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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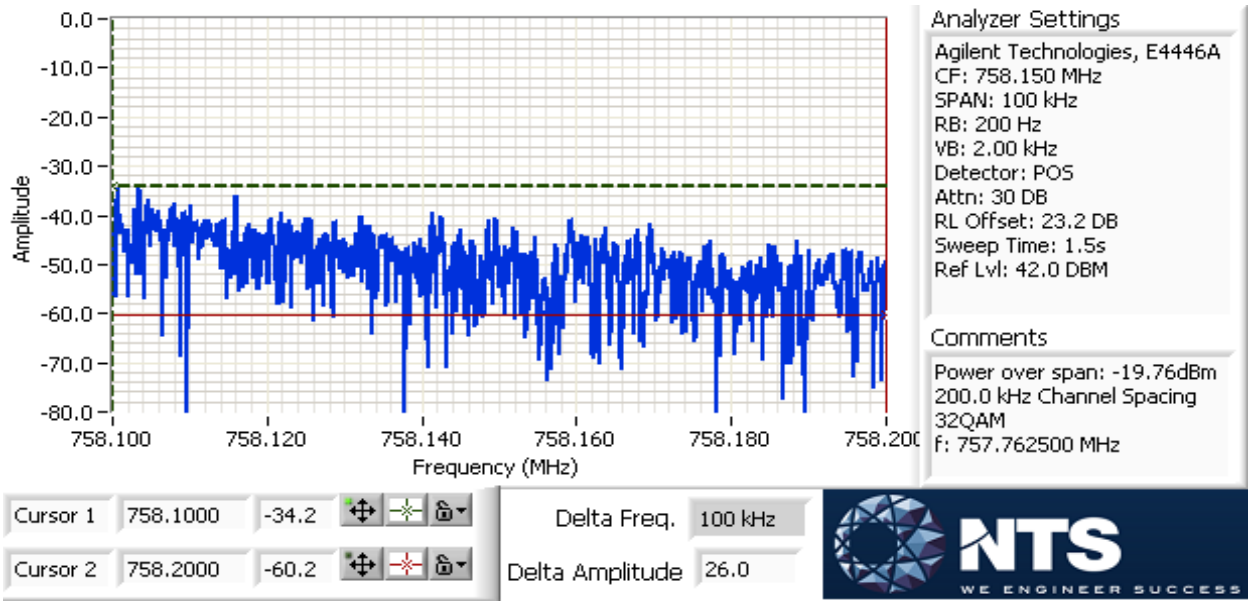
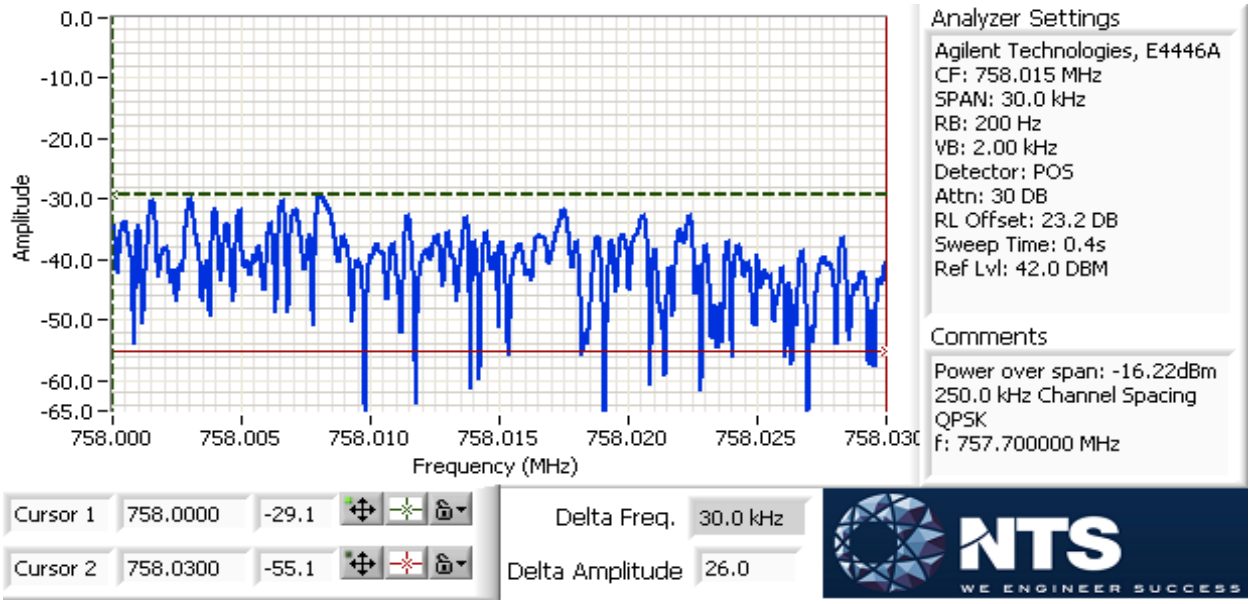
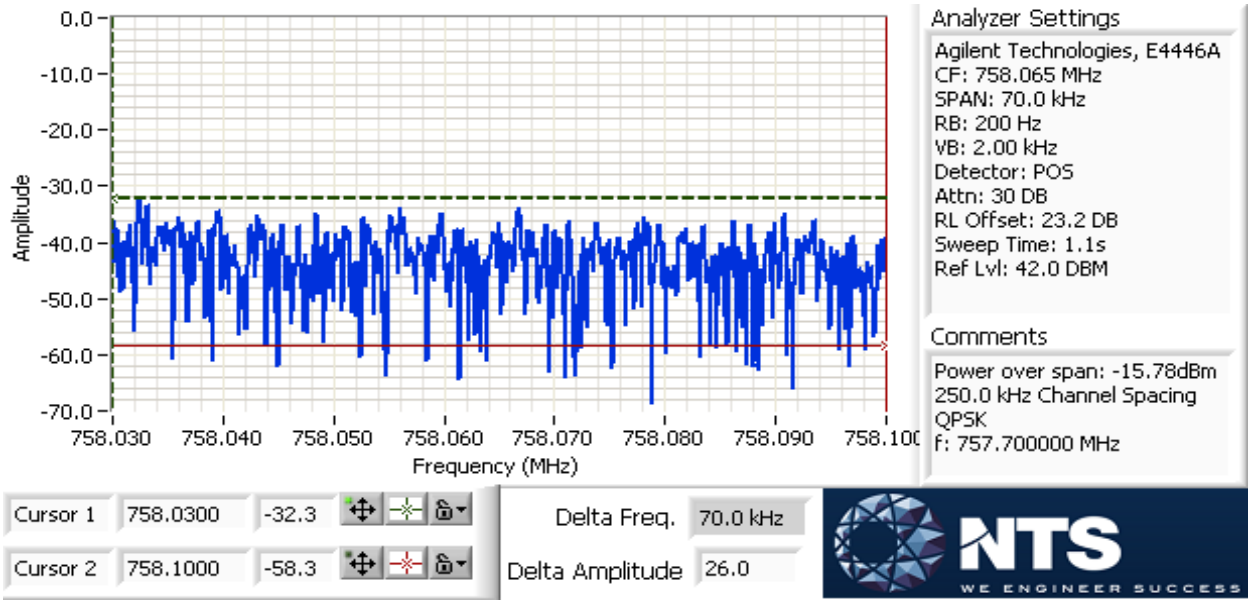
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 758 MHz, 250 kHz channel spacing





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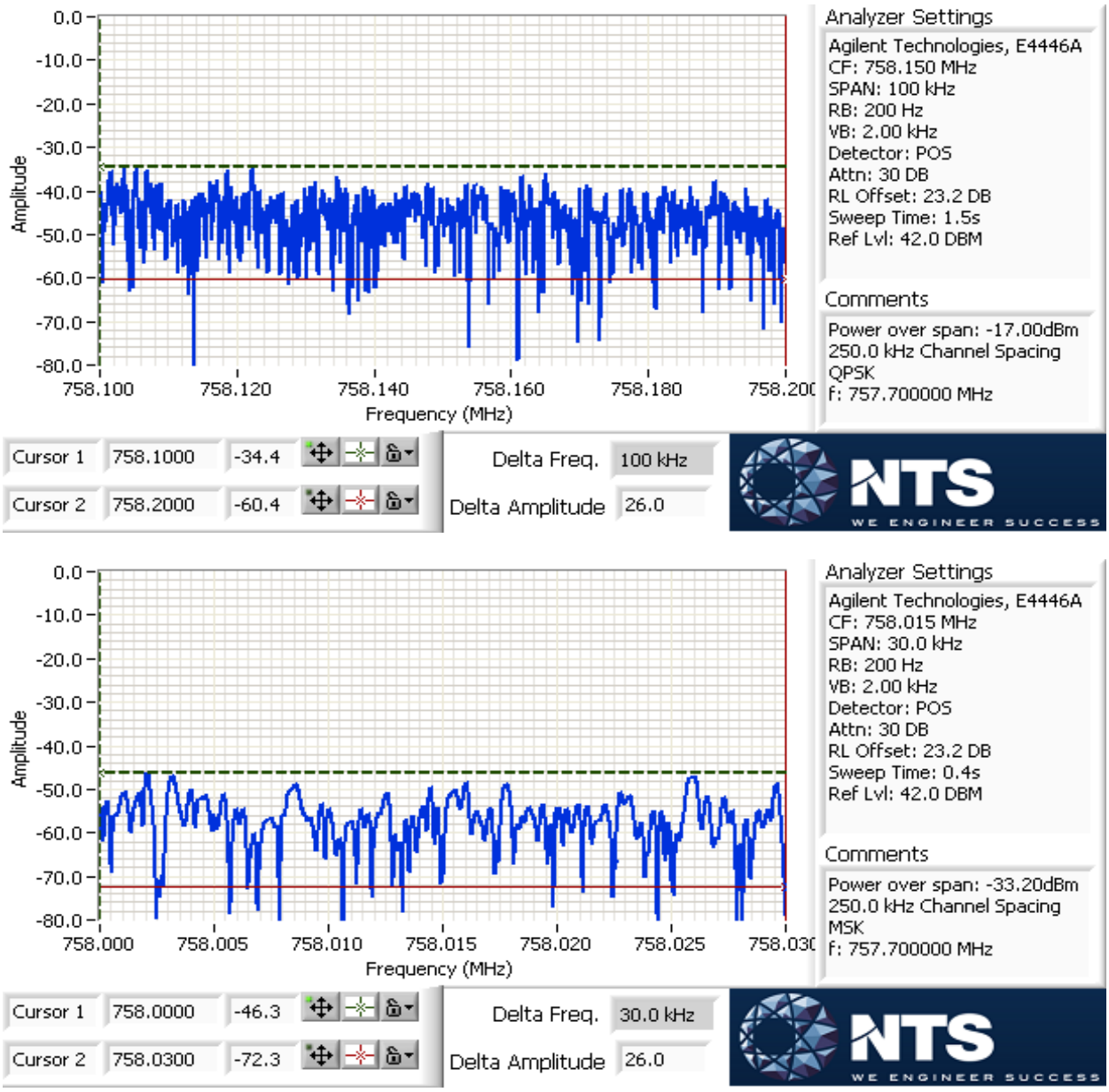
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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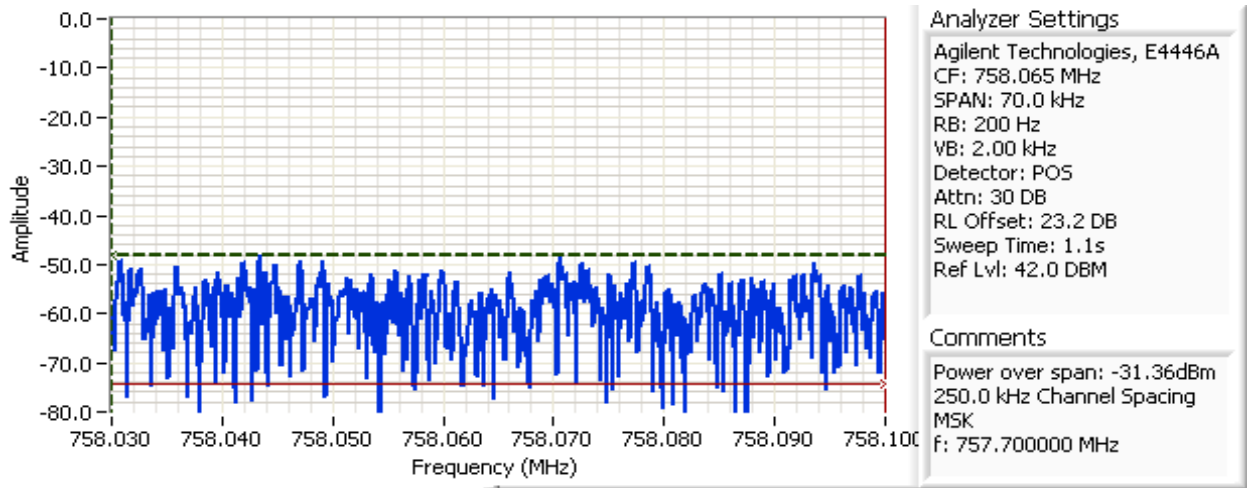
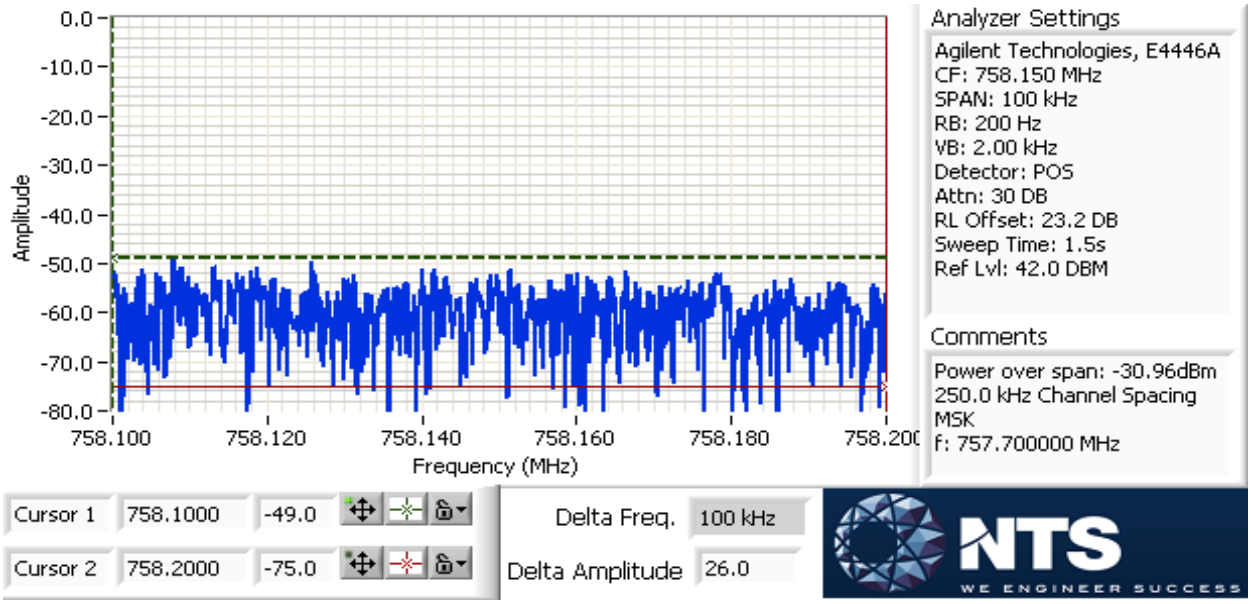
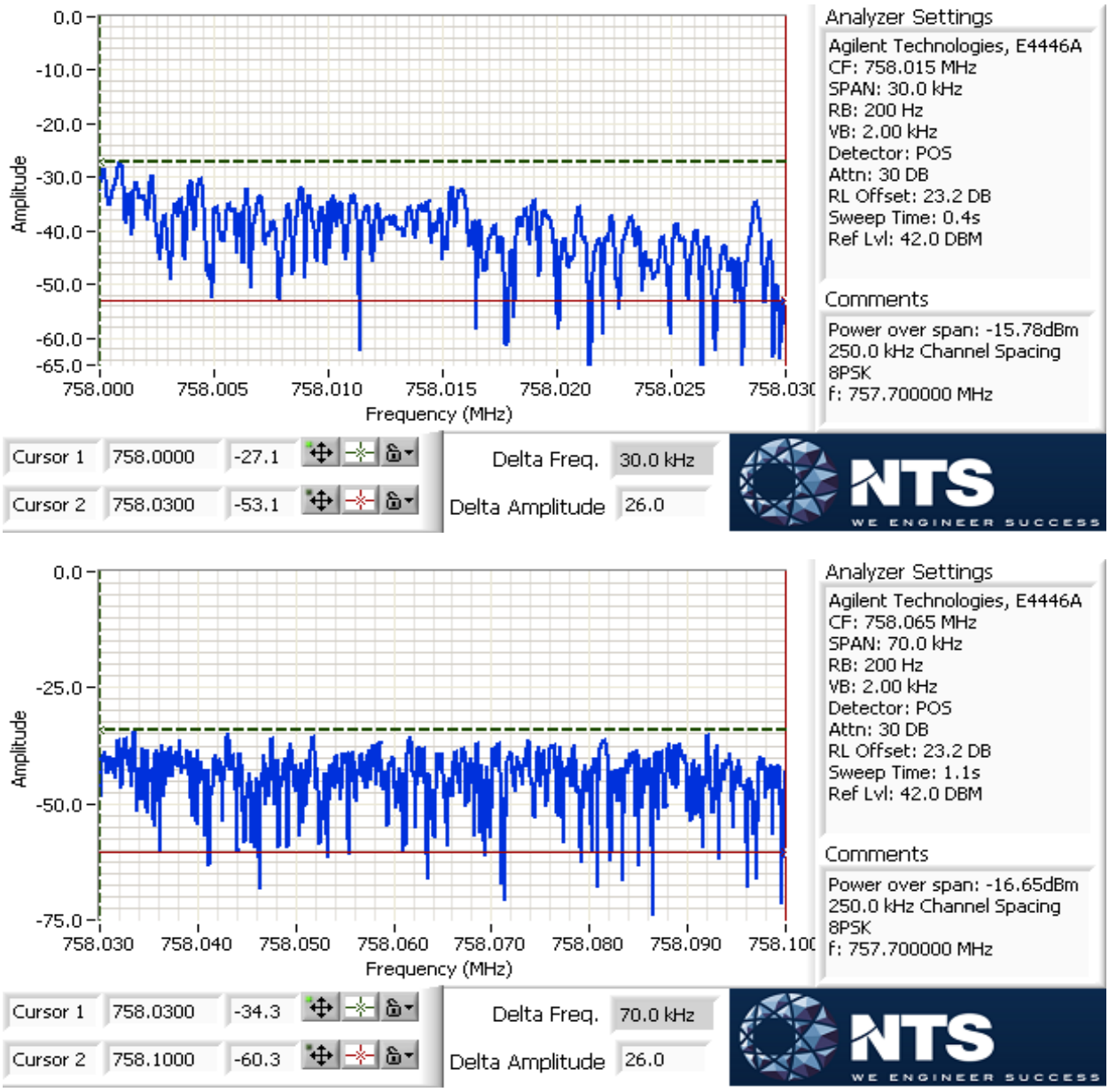
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

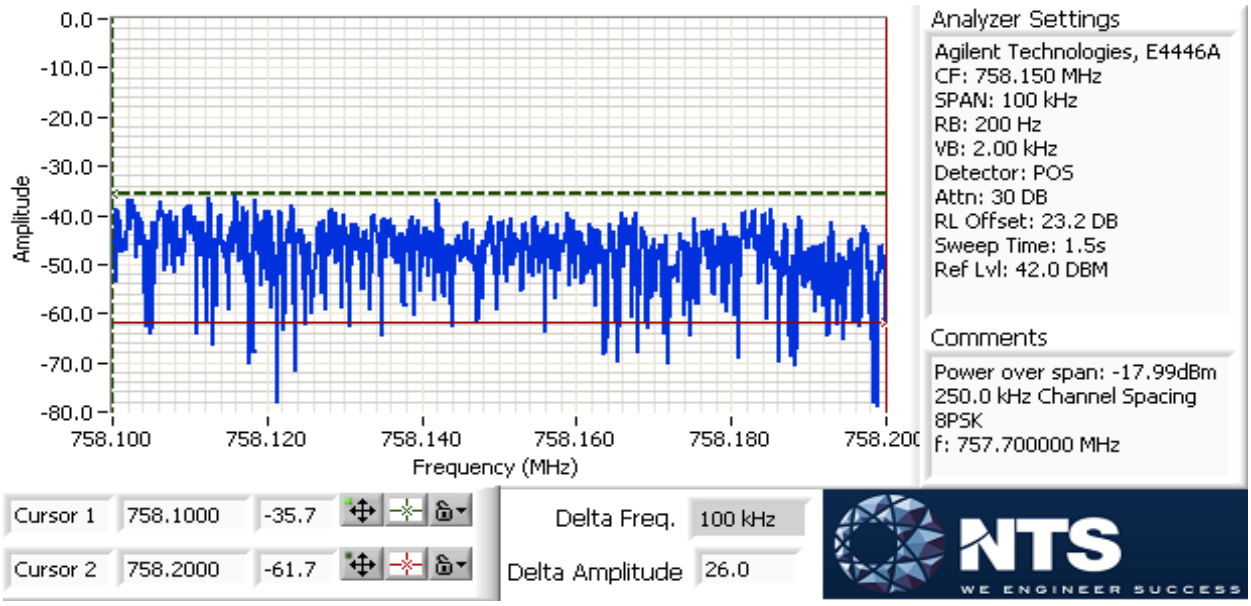


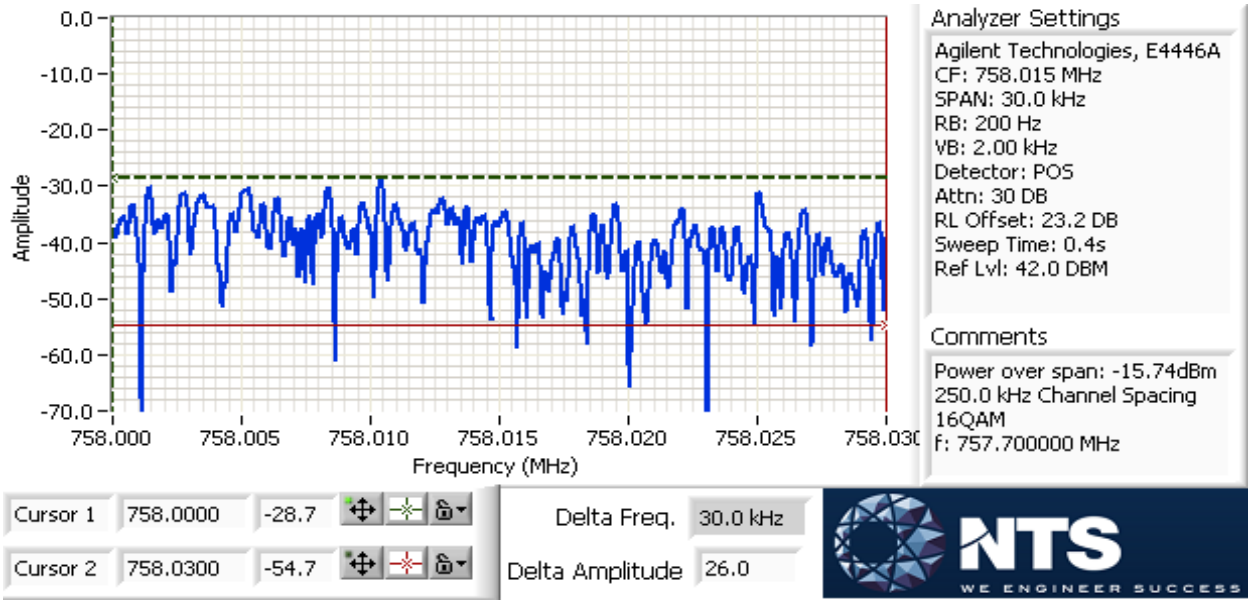


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

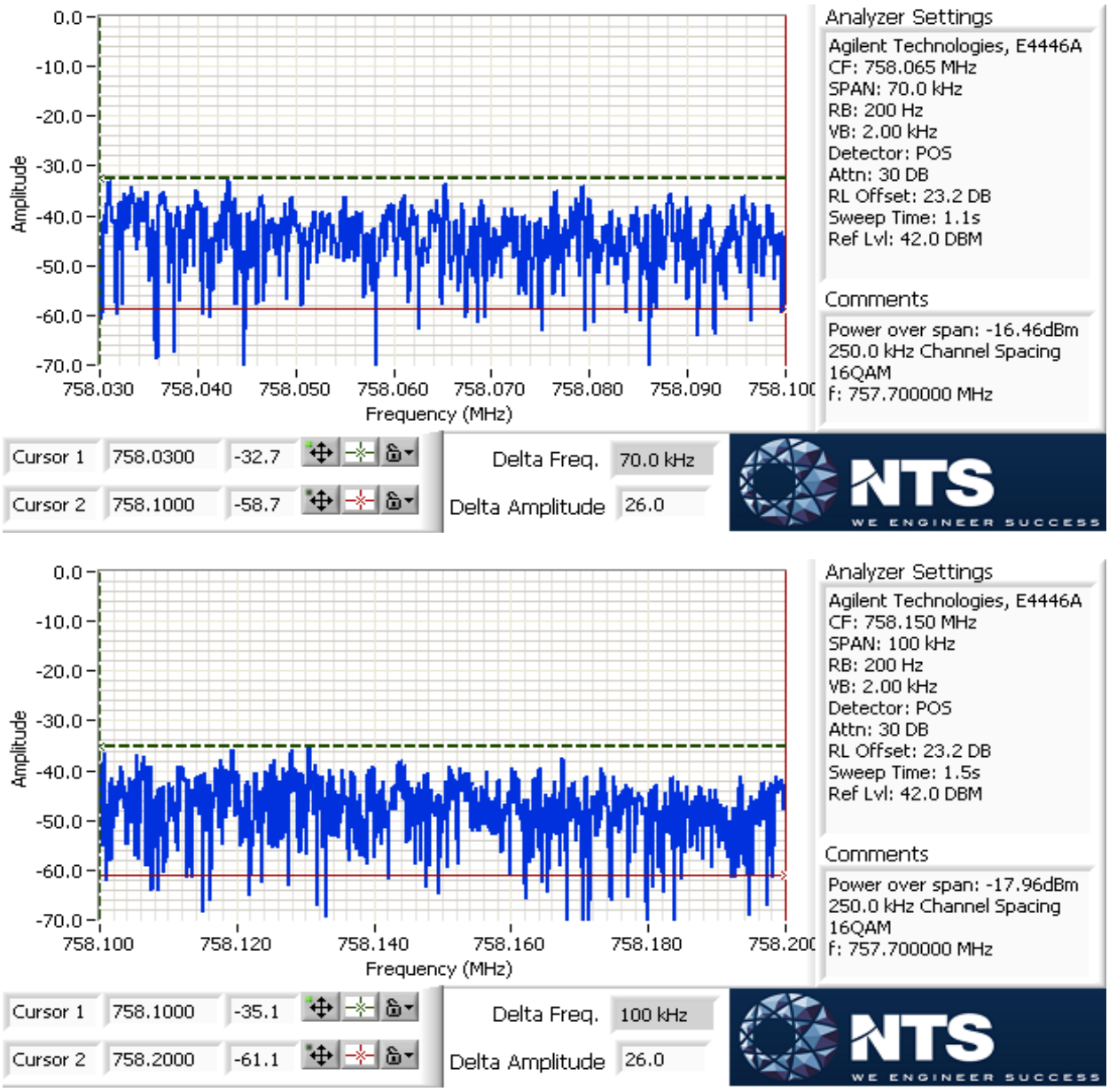


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

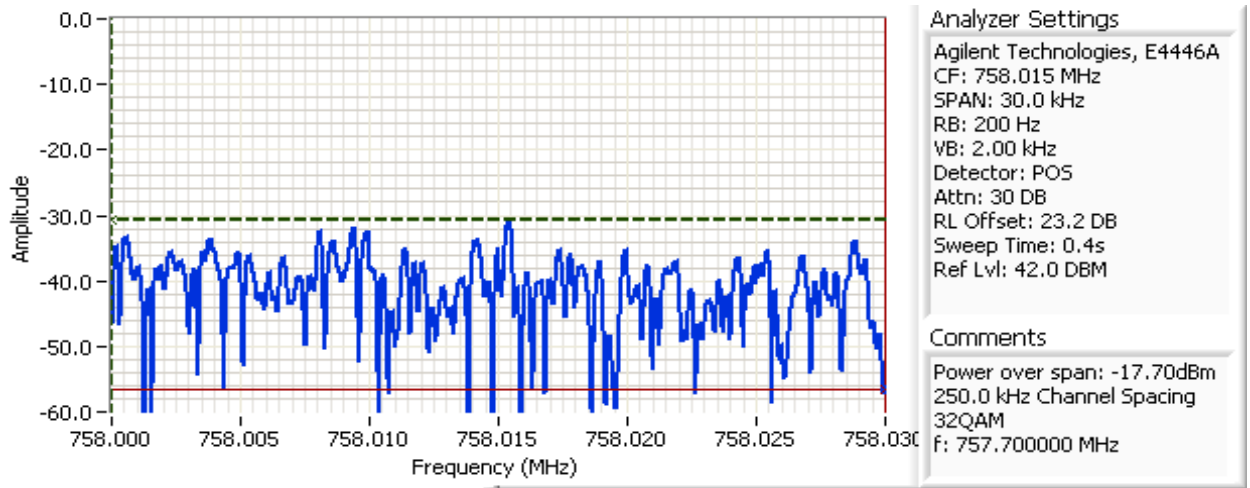


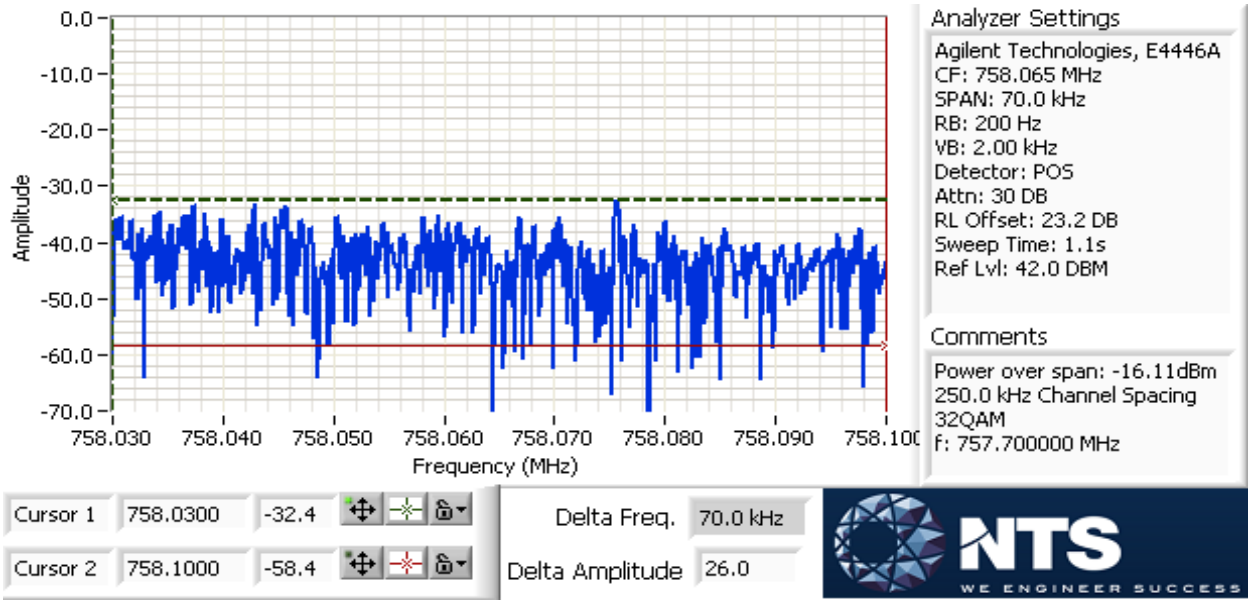


Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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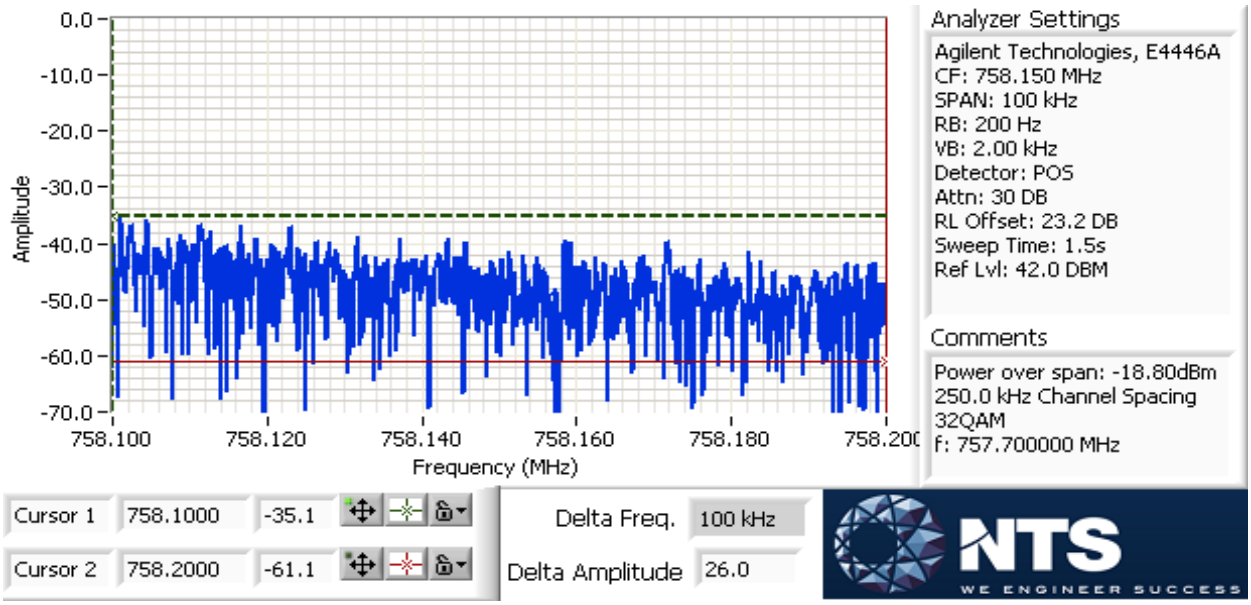
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



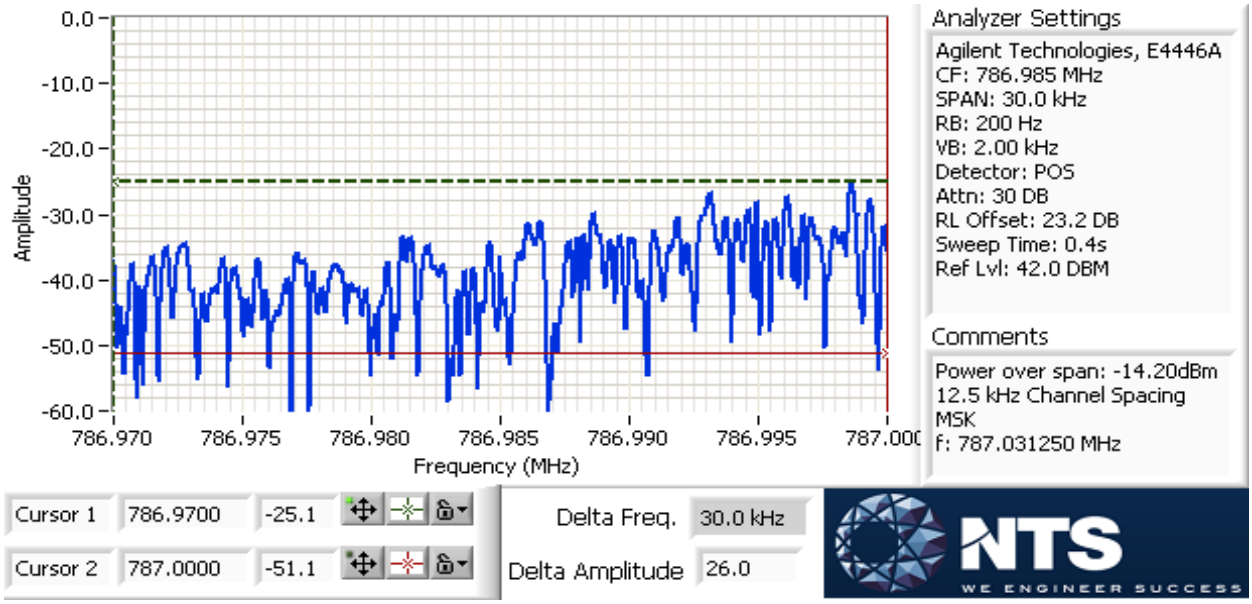
Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

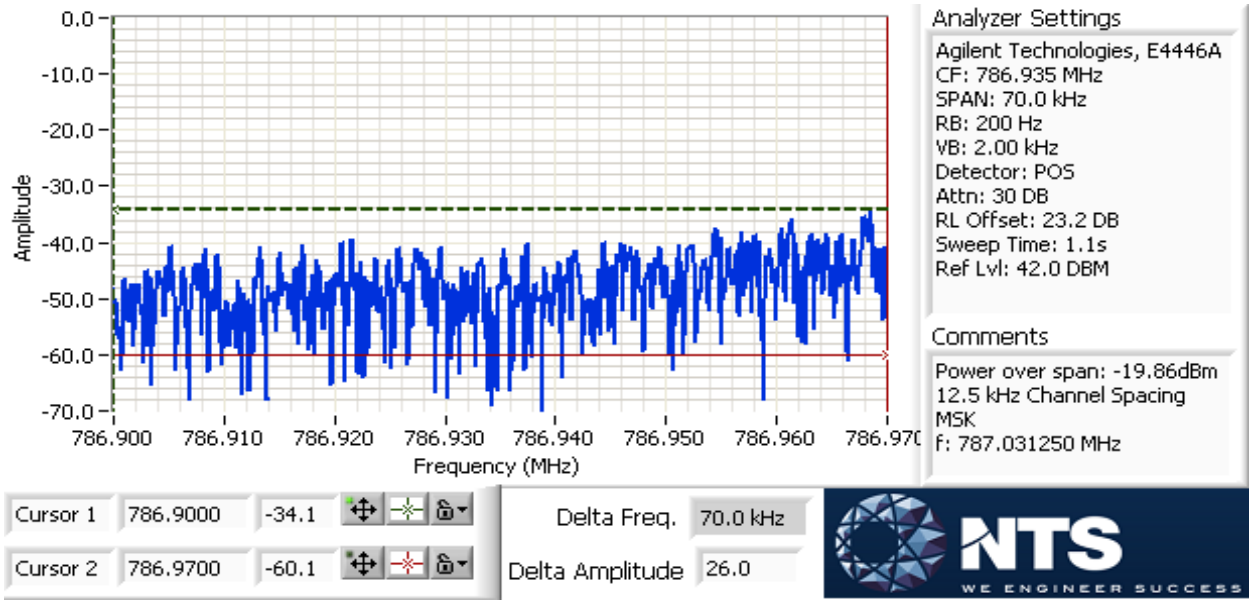
Run #2c: Block edge at 787 MHz

Power setting	Data rate	Channel plan	Modulation	Channel Frequency (MHz)	Measured dBm	Limit dBm	Result Pass/Fail
	10 kbps	12.5 kHz	MSK	787.031250	-14.2	-13.00	Pass
	23 kbps	12.5 kHz	QPSK	787.031250	-15.3	-13.00	Pass
	34 kbps	12.5 kHz	8PSK	787.031250	-14.7	-13.00	Pass
	45 kbps	12.5 kHz	16QAM	787.031250	-15.3	-13.00	Pass
	57 kbps	12.5 kHz	32QAM	787.031250	-15.7	-13.00	Pass
	19 kbps	25.0 kHz	MSK	787.050000	-20.5	-13.00	Pass
	36 kbps	25.0 kHz	QPSK	787.050000	-18.4	-13.00	Pass
	52 kbps	25.0 kHz	8PSK	787.050000	-18.3	-13.00	Pass
	70 kbps	25.0 kHz	16QAM	787.050000	-19.9	-13.00	Pass
	87 kbps	25.0 kHz	32QAM	787.050000	-19.7	-13.00	Pass
	39 kbps	50.0 kHz	MSK	787.093750	-25.5	-13.00	Pass
	71 kbps	50.0 kHz	QPSK	787.093750	-16.3	-13.00	Pass
	101 kbps	50.0 kHz	8PSK	787.093750	-20.7	-13.00	Pass
	137 kbps	50.0 kHz	16QAM	787.093750	-19.8	-13.00	Pass
	175 kbps	50.0 kHz	32QAM	787.093750	-19.2	-13.00	Pass
	76 kbps	100 kHz	MSK	787.125000	-27.5	-13.00	Pass
	160 kbps	100 kHz	QPSK	787.125000	-13.9	-13.00	Pass
	240 kbps	100 kHz	8PSK	787.125000	-13.4	-13.00	Pass
	320 kbps	100 kHz	16QAM	787.125000	-14.0	-13.00	Pass
	400 kbps	100 kHz	32QAM	787.125000	-13.7	-13.00	Pass
	153 kbps	200 kHz	MSK	787.237500	-32.3	-13.00	Pass
	320 kbps	200 kHz	QPSK	787.237500	-16.4	-13.00	Pass
	480 kbps	200 kHz	8PSK	787.237500	-17.1	-13.00	Pass
	640 kbps	200 kHz	16QAM	787.237500	-16.7	-13.00	Pass
	800 kbps	200 kHz	32QAM	787.237500	-16.6	-13.00	Pass
	194 kbps	250 kHz	MSK	787.300000	-35.8	-13.00	Pass
	403 kbps	250 kHz	QPSK	787.300000	-16.7	-13.00	Pass
	605 kbps	250 kHz	8PSK	787.300000	-16.2	-13.00	Pass
	806 kbps	250 kHz	16QAM	787.300000	-18.0	-13.00	Pass
	1008 kbps	250 kHz	32QAM	787.300000	-18.9	-13.00	Pass

Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 787 MHz, 12.5 kHz channel spacing





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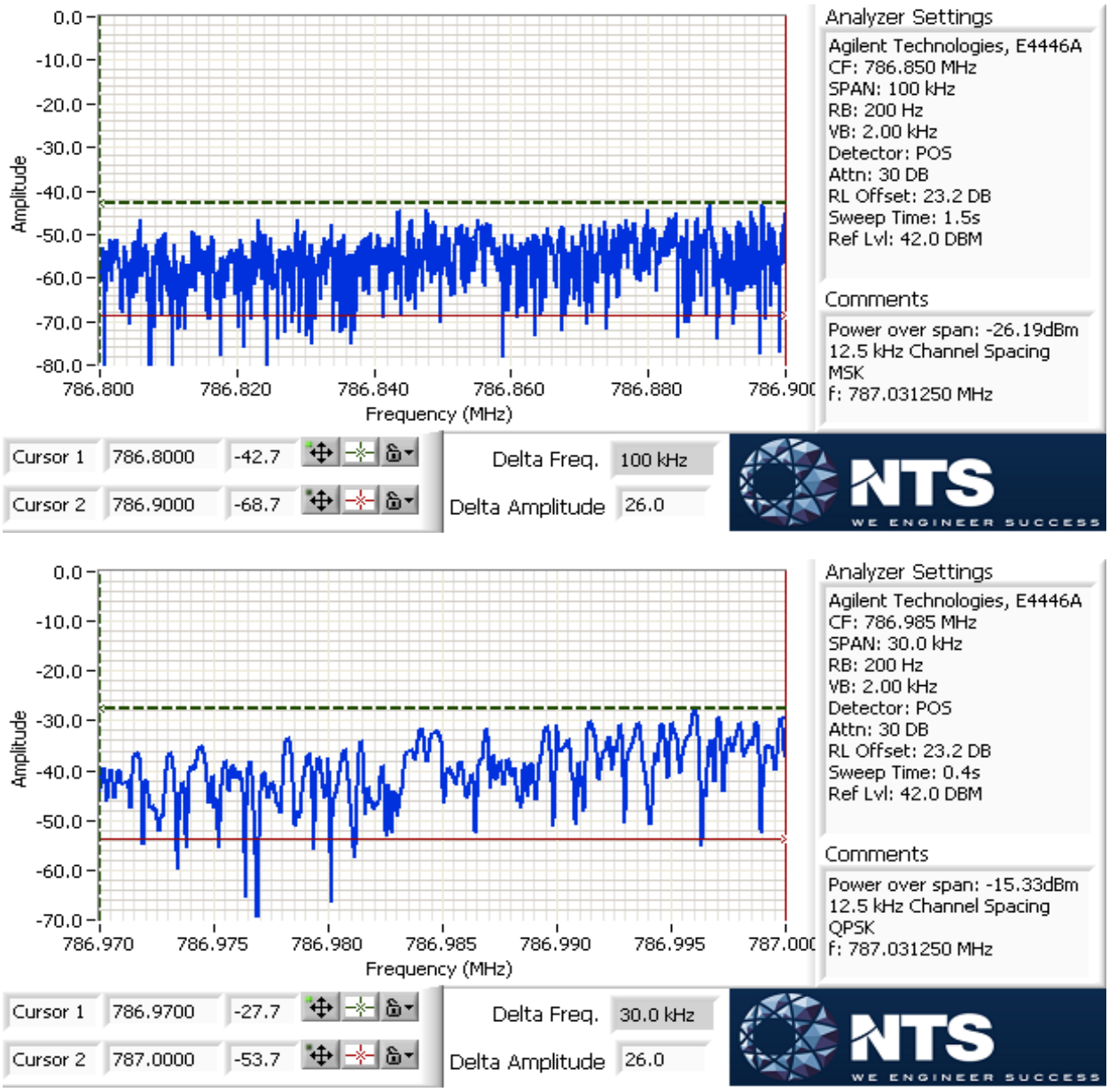
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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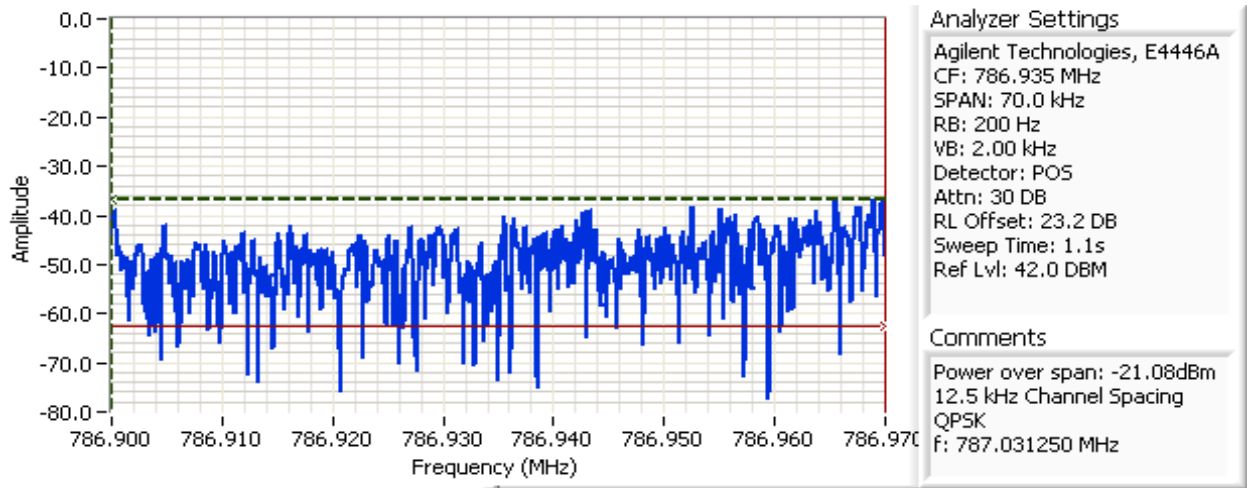
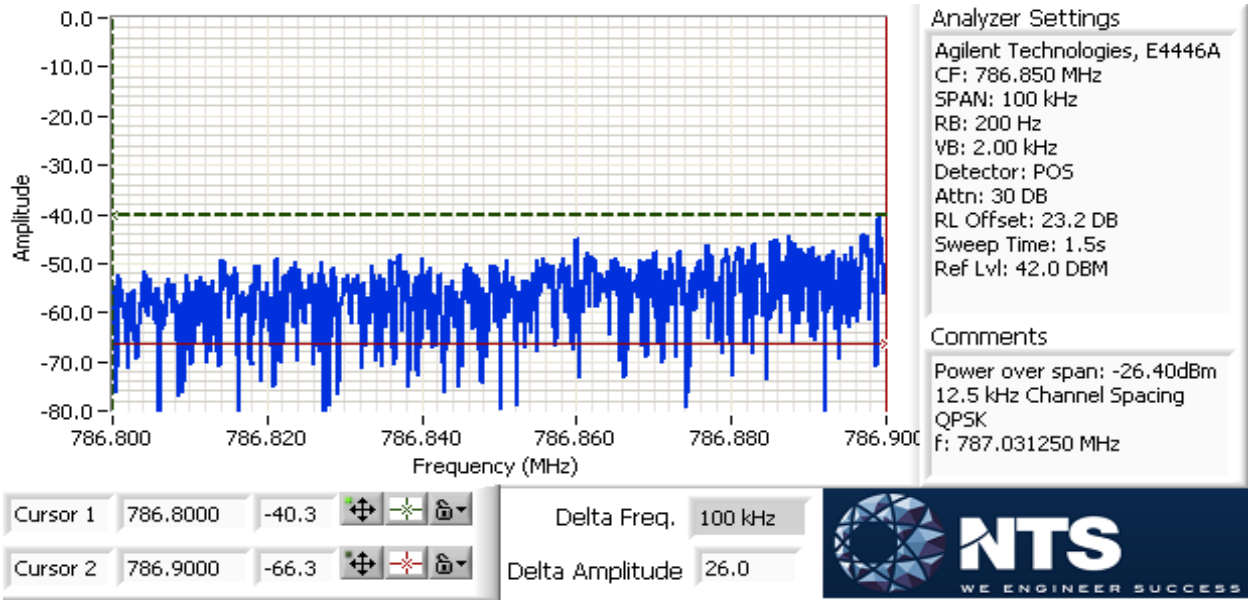
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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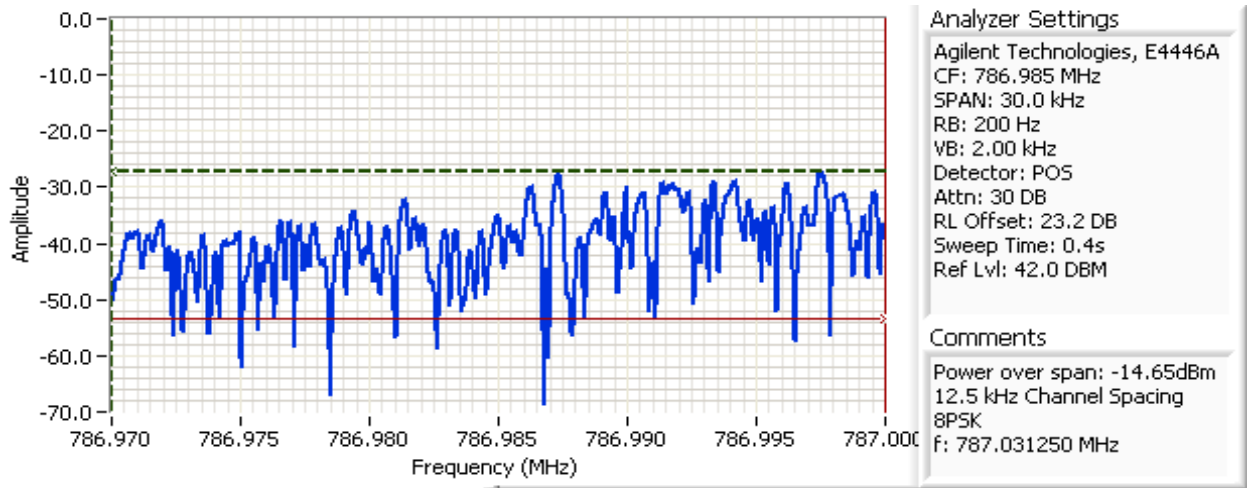
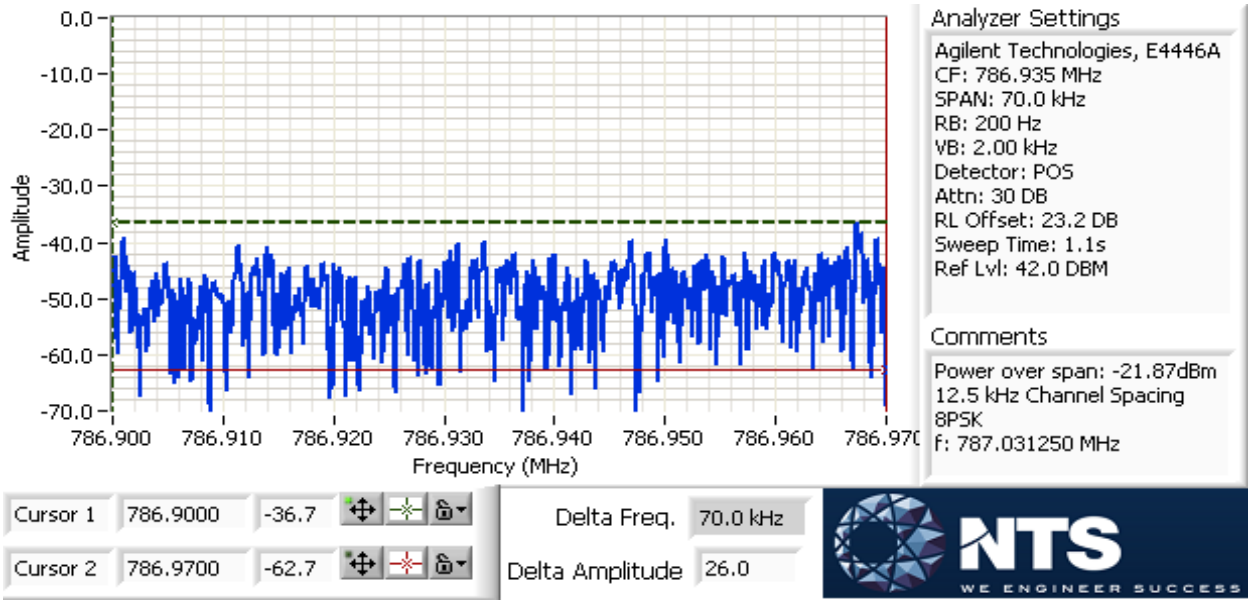
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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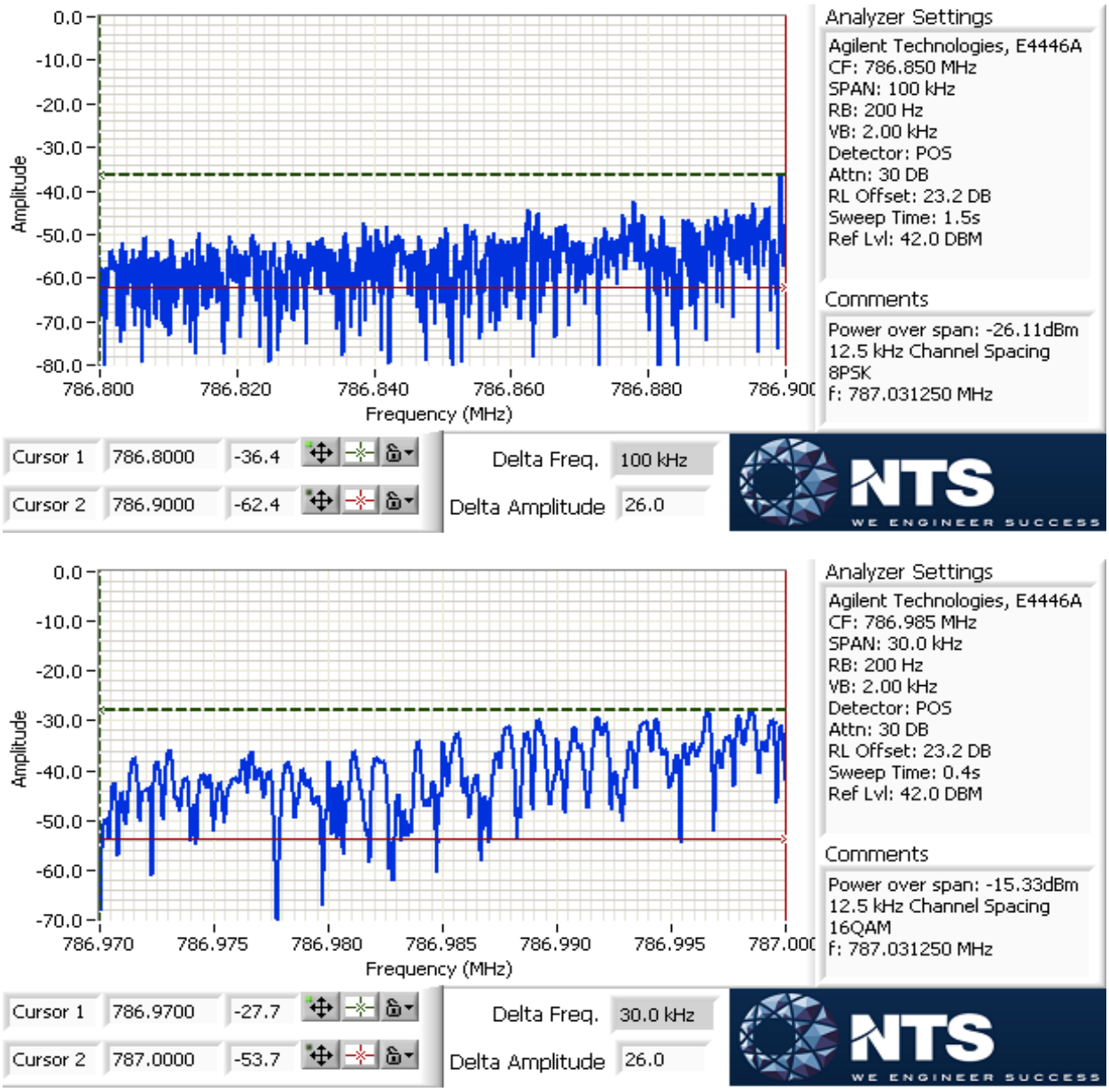
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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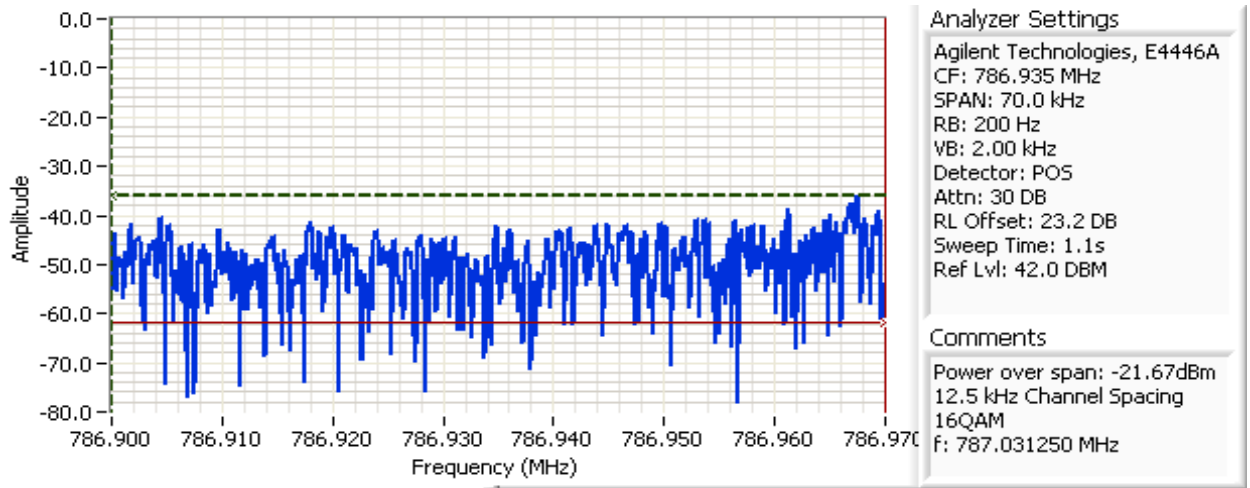
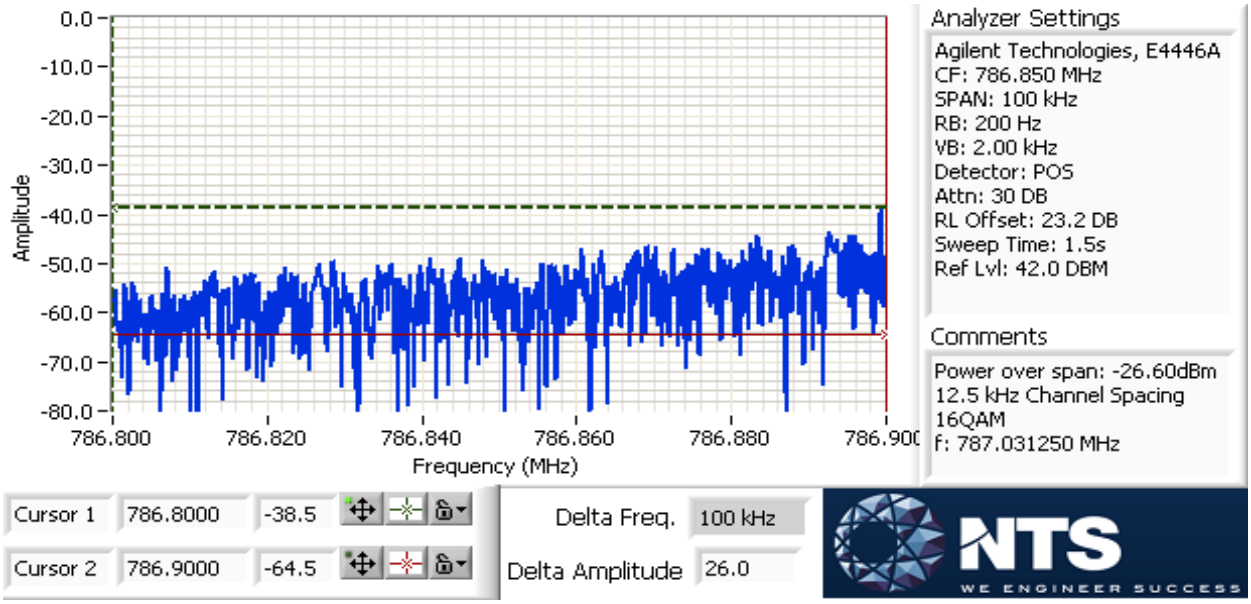
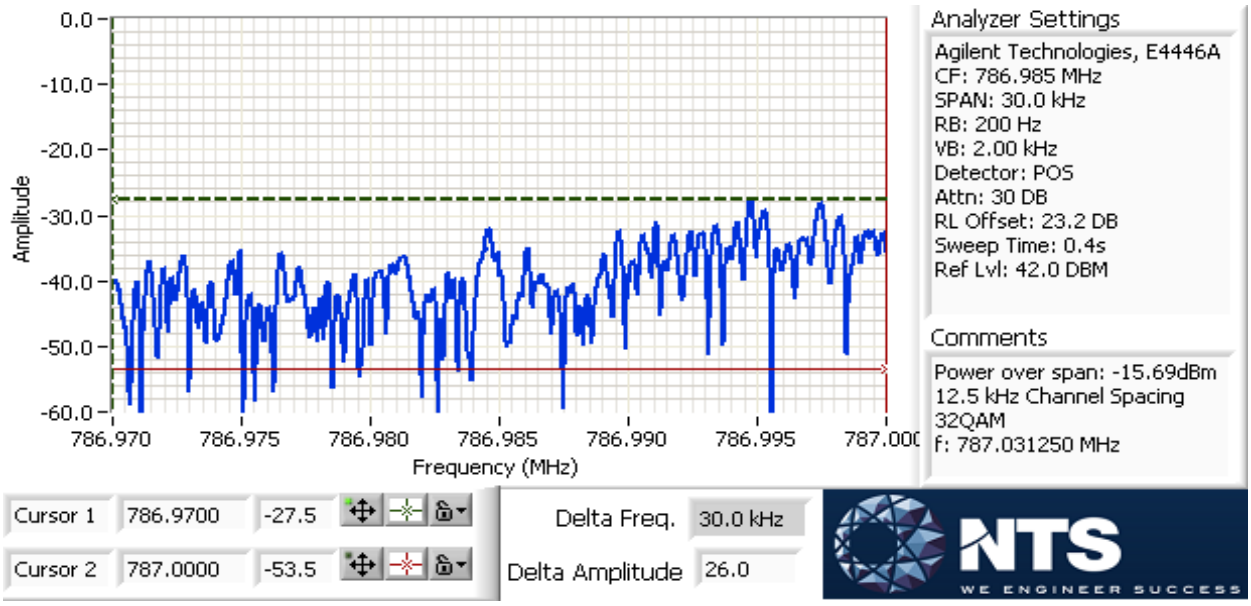
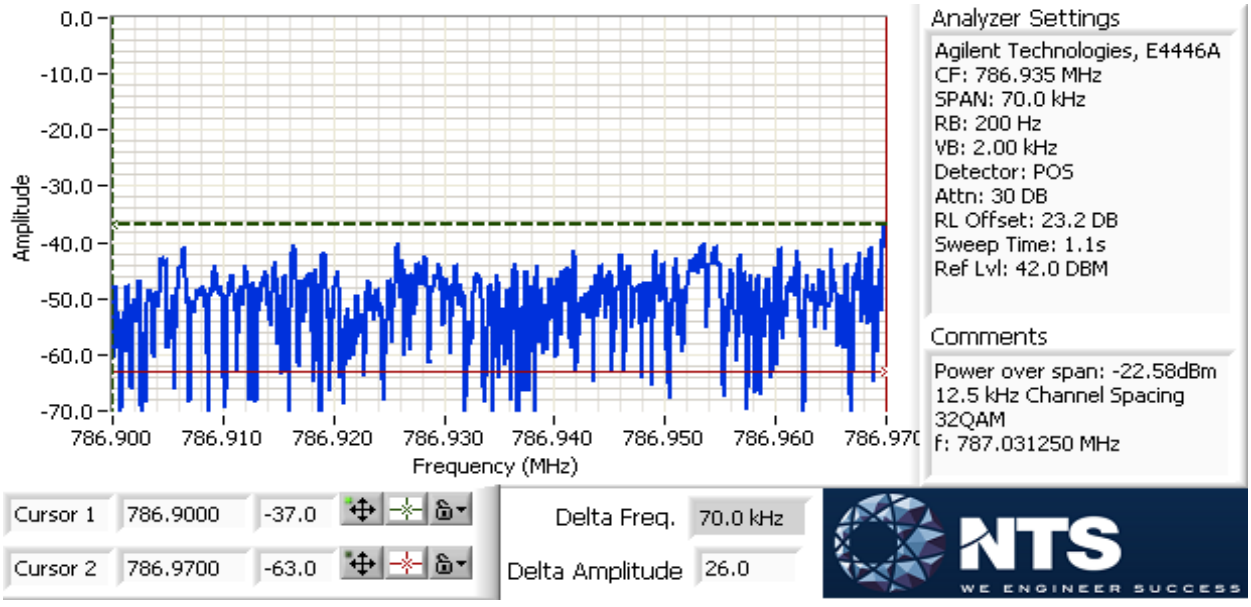
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





Client:	Xetawave LLC	Job Number:	JD103419
Model:	Xeta7	T-Log Number:	T103448
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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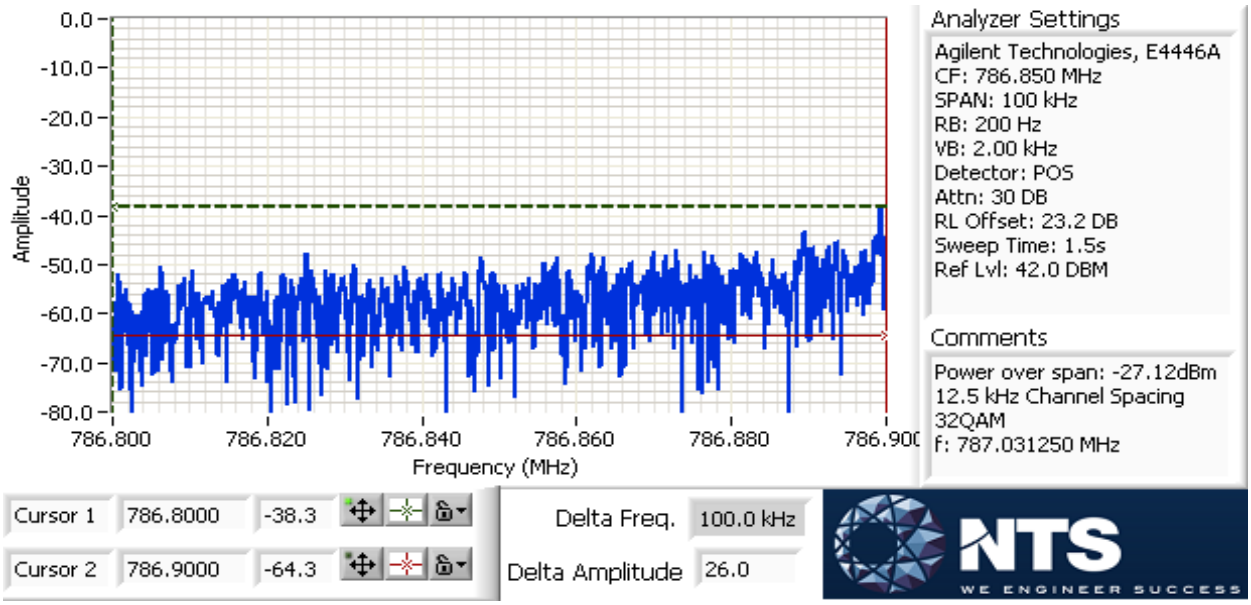
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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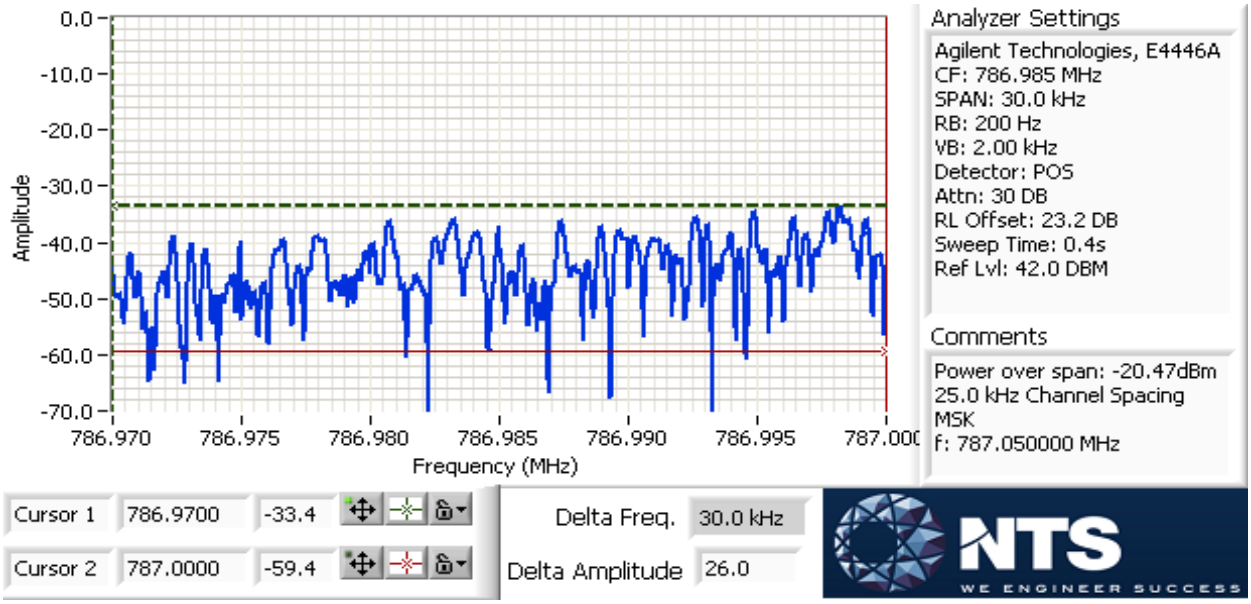
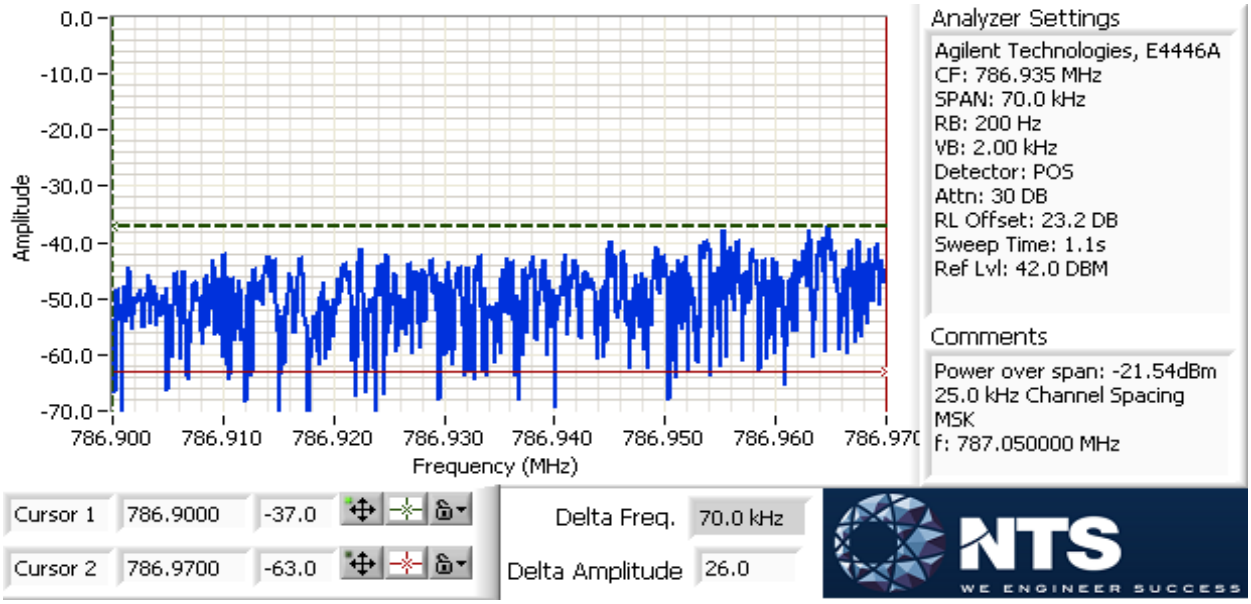
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 787 MHz, 25 kHz channel spacing





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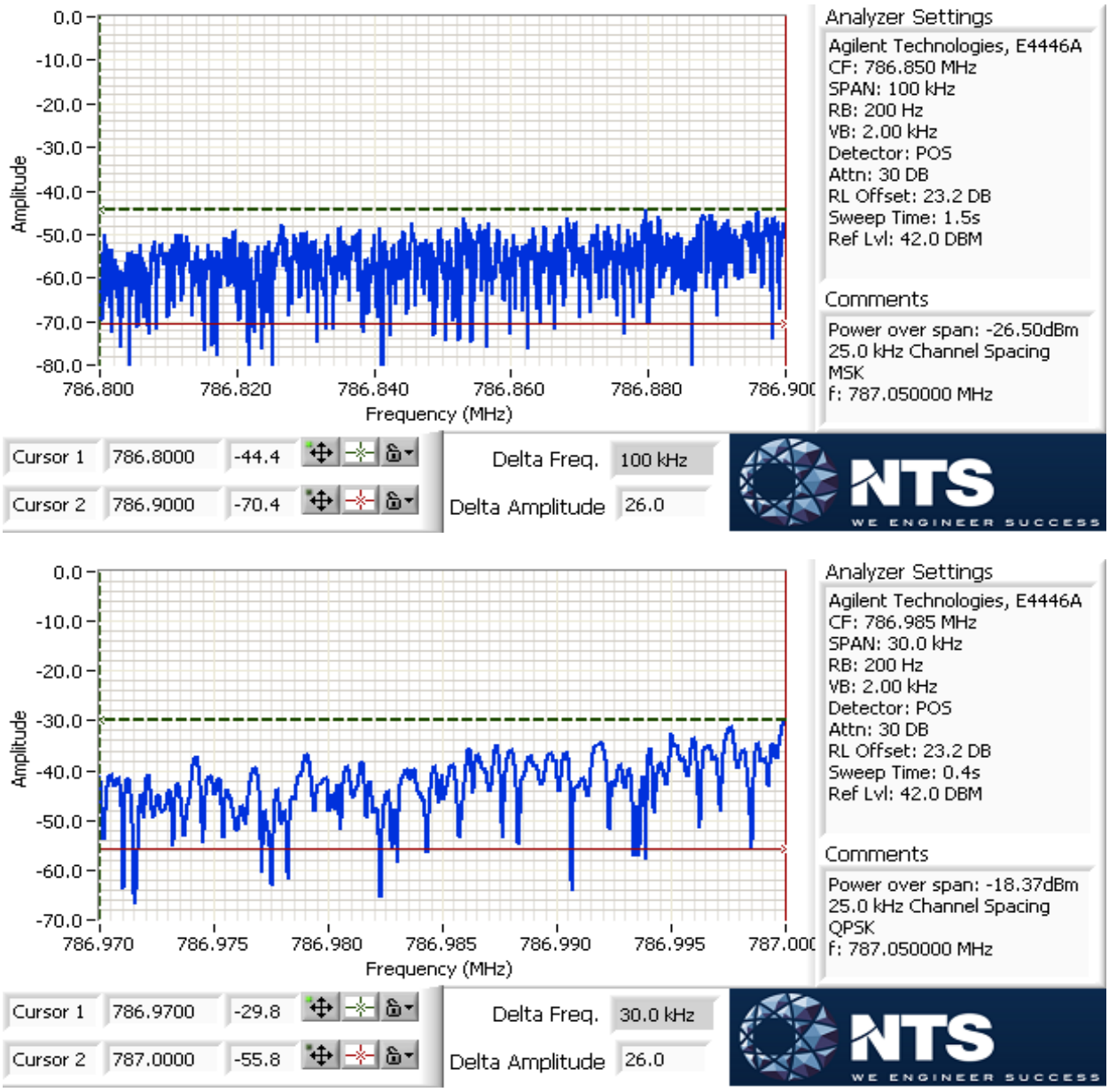
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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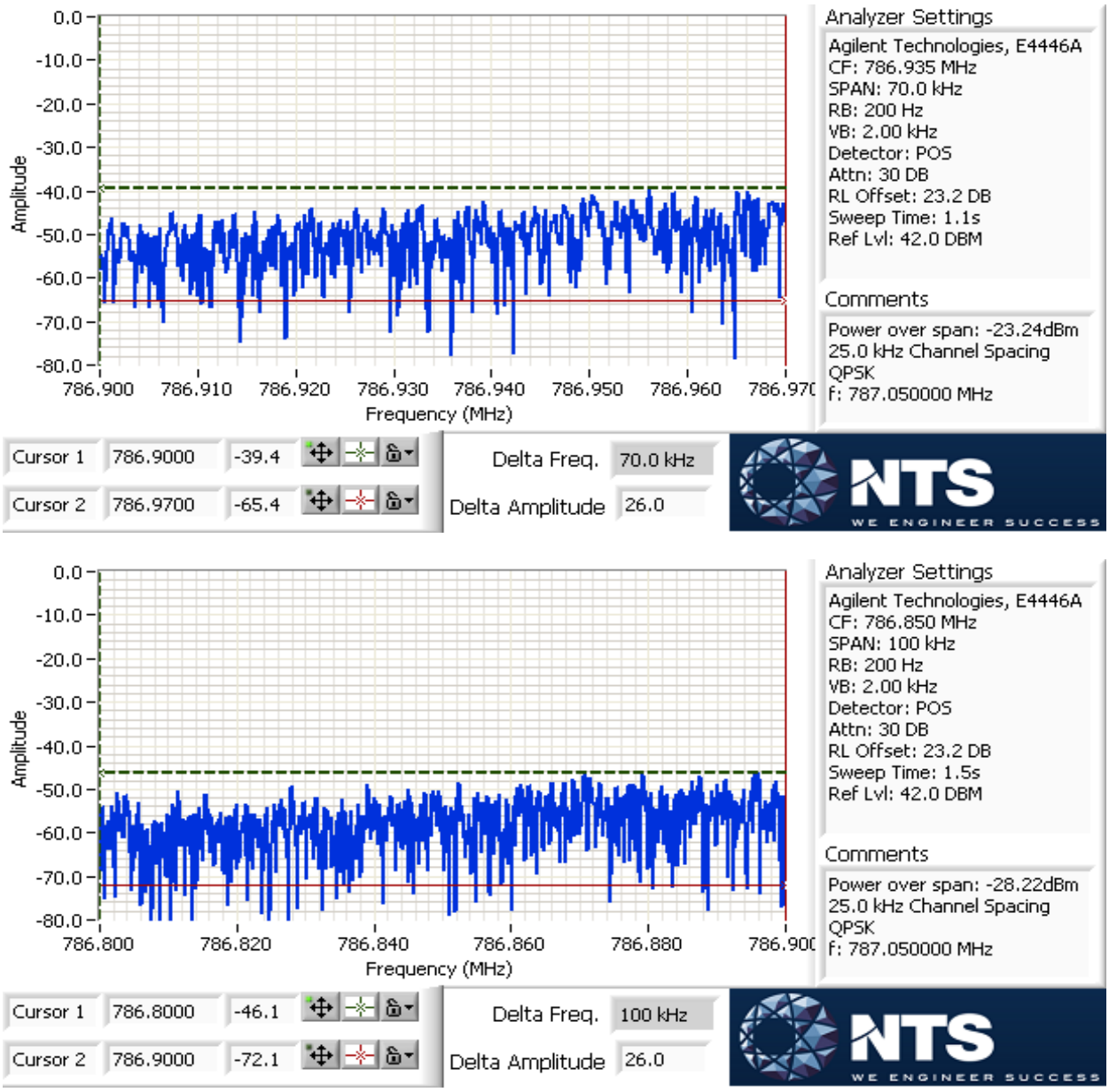
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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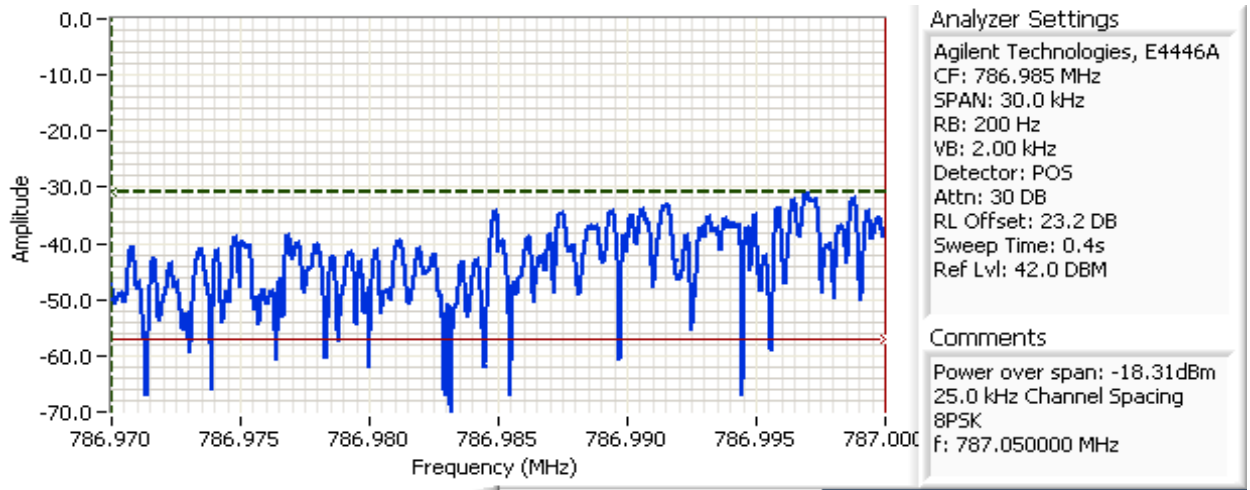
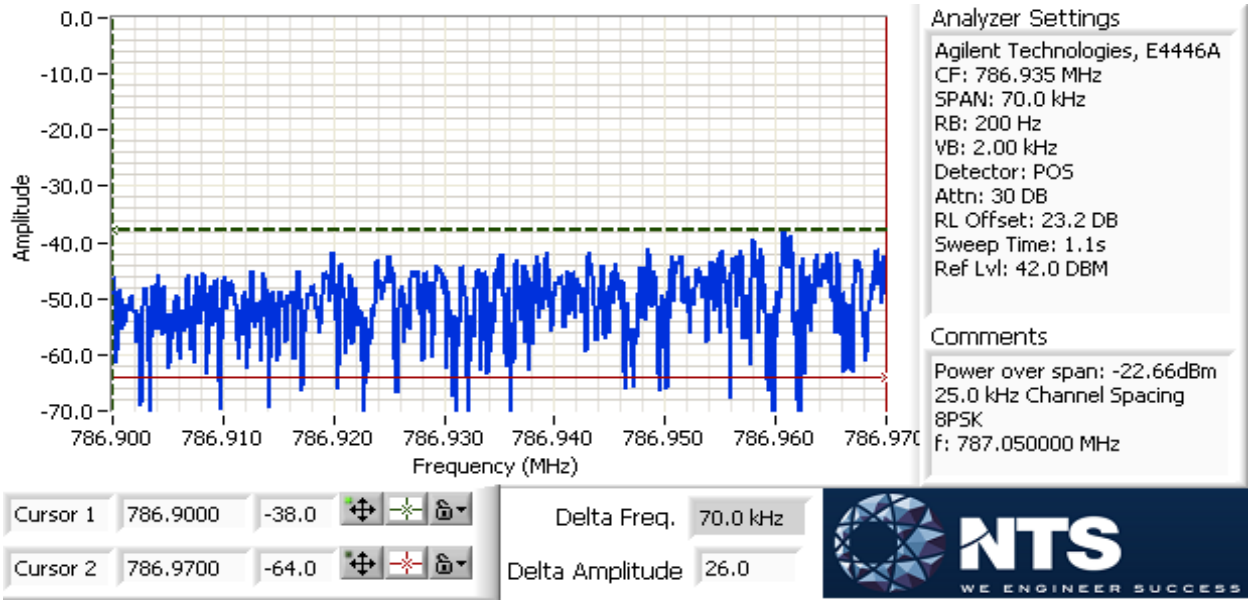
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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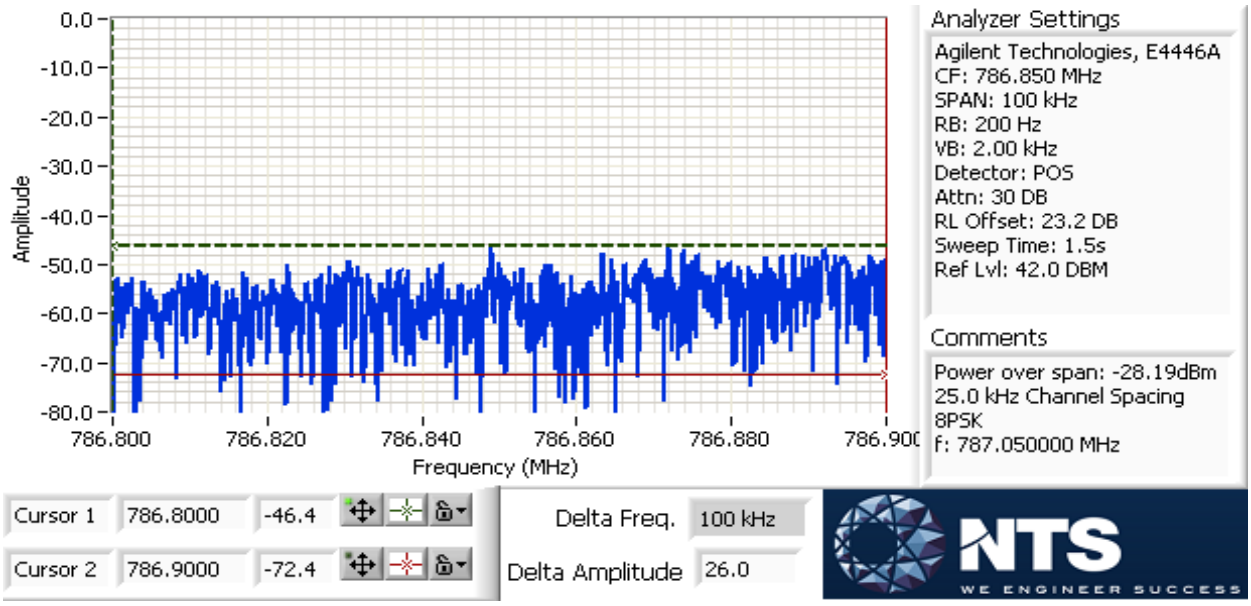
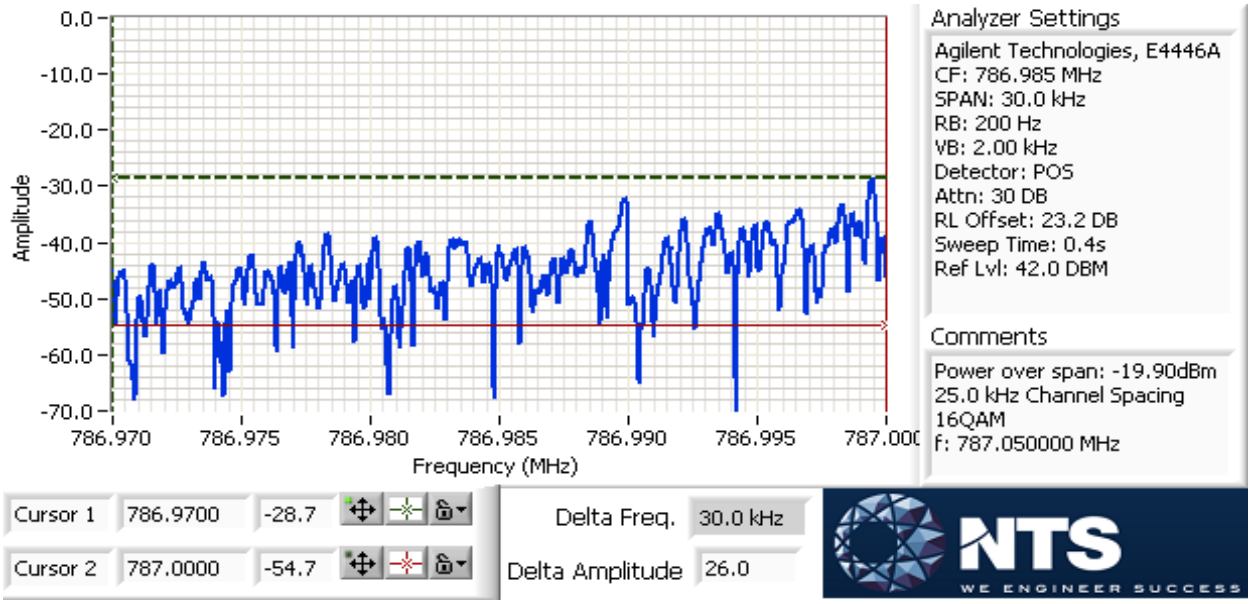
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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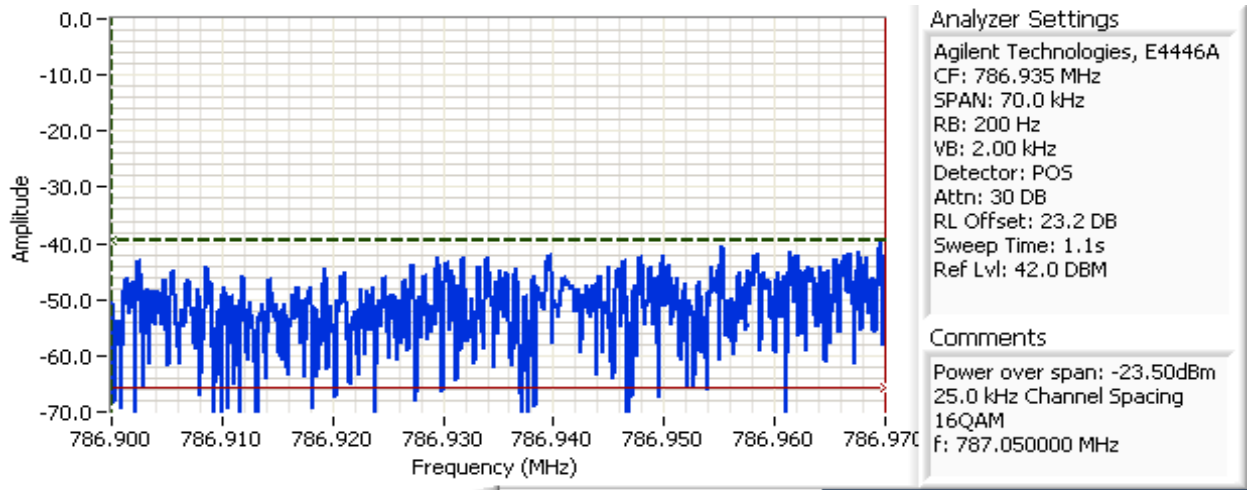
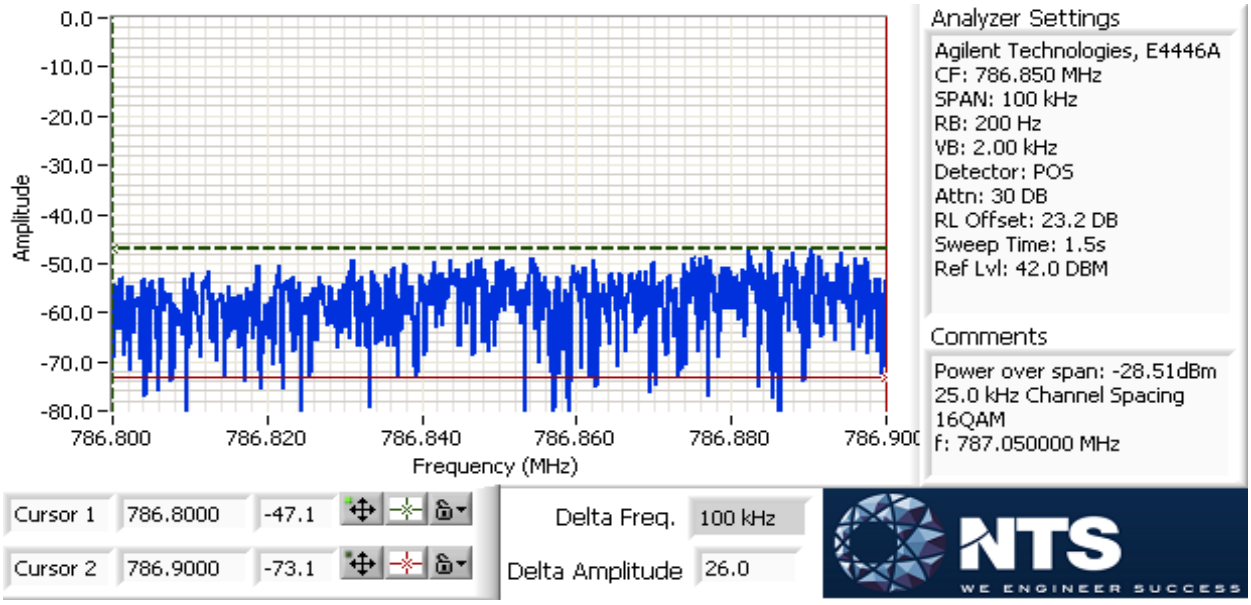
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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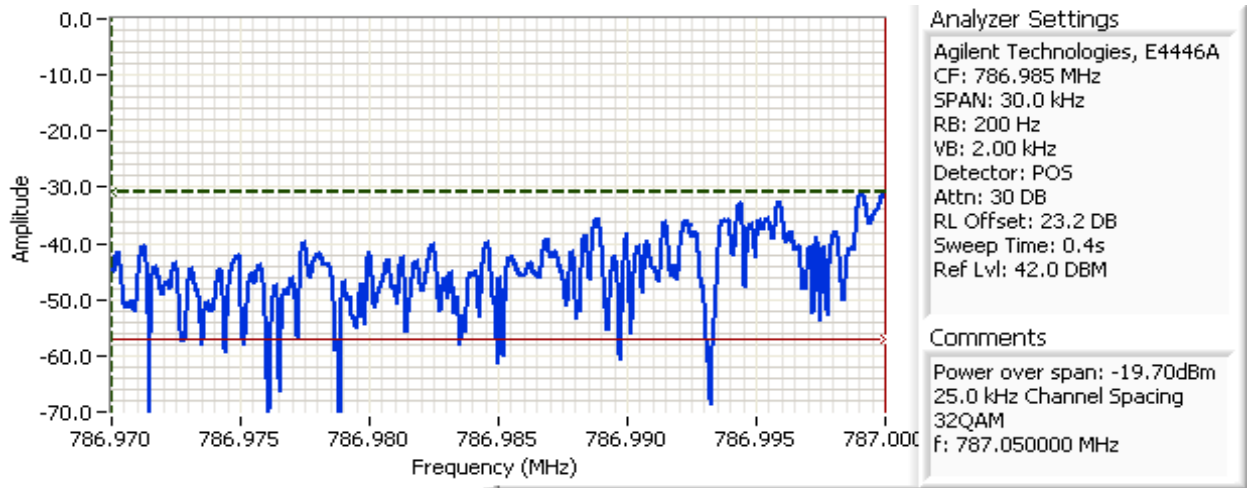
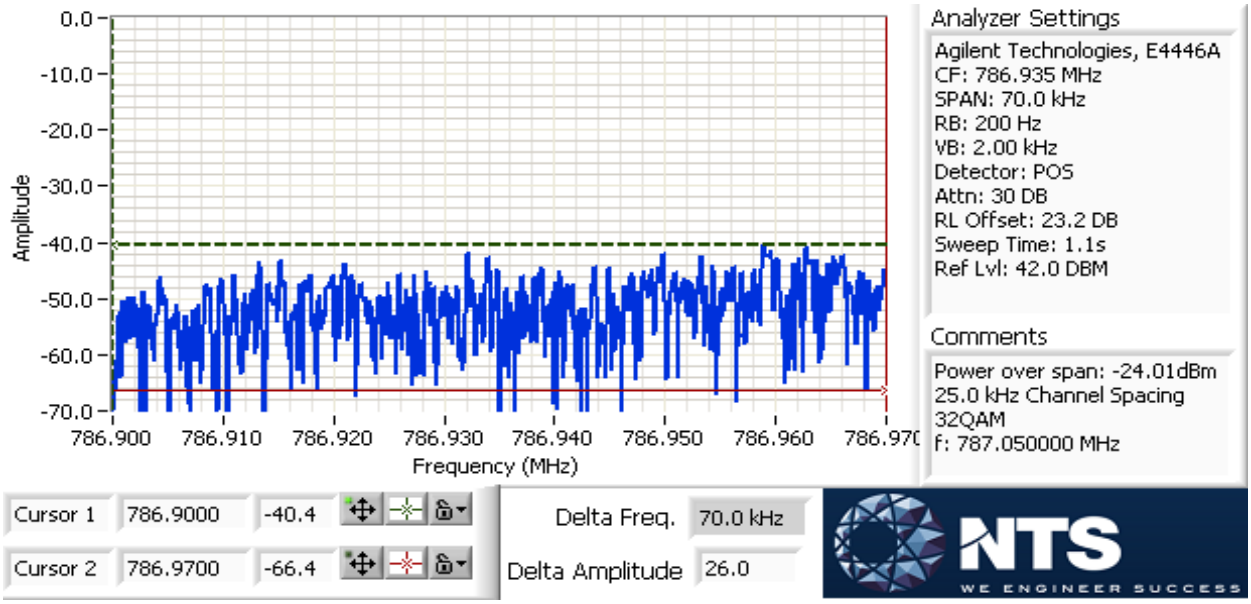
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A





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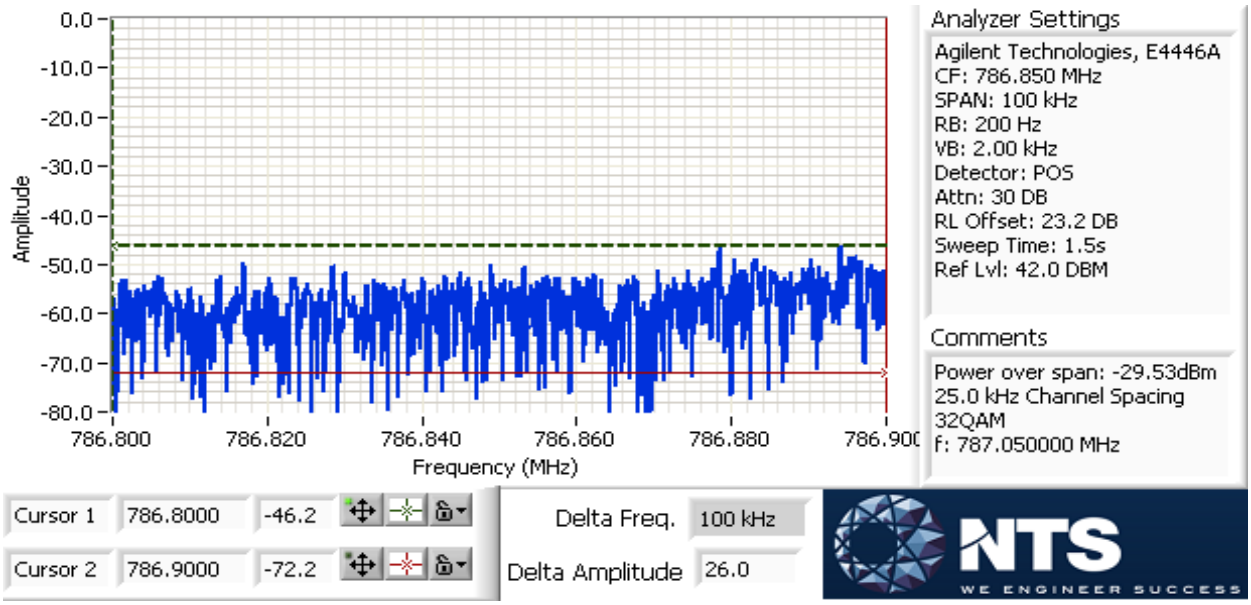
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A



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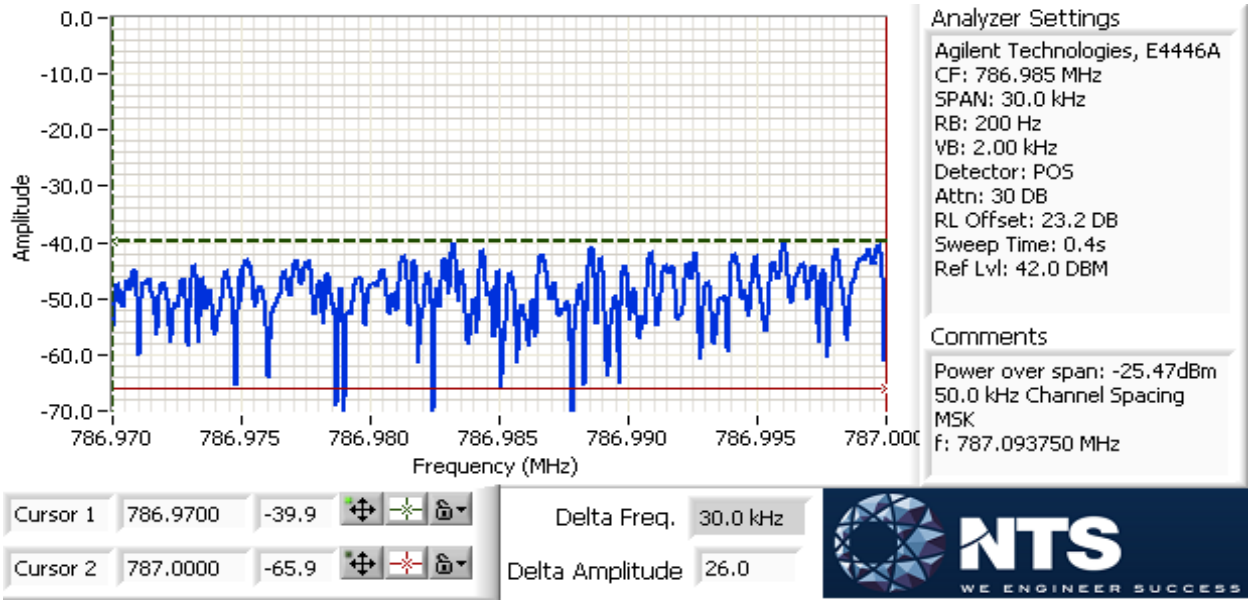
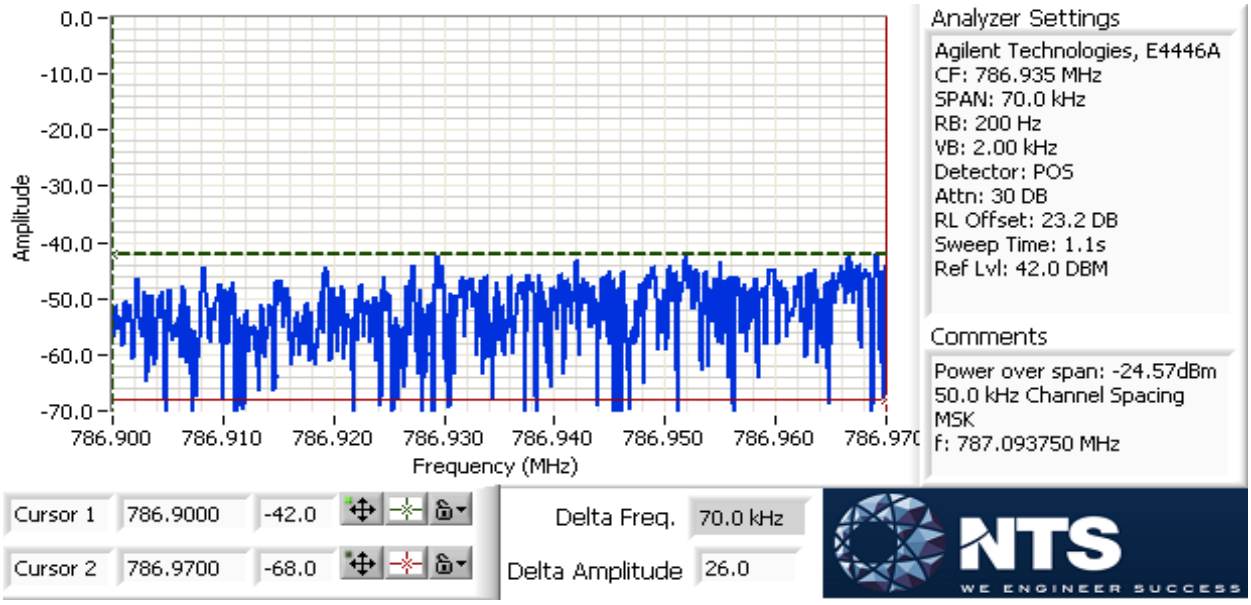
		Project Manager:	Christine Krebill
Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A

Block edge at 787 MHz, 50 kHz channel spacing





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Contact:	Sandee Malang	Project Coordinator:	-
Standard:	FCC Part 27	Class:	N/A