



# PCTEST ENGINEERING LABORATORY, INC.

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## CERTIFICATE OF COMPLIANCE FCC Part 90 Certification

**Applicant Name:**

Digital Receiver Technology, Inc.  
20250 Century Boulevard, Suite 300  
Germantown, MD 20874-1114

**Date of Testing:**

February 24 - March 12, 2009

**Test Site/Location:**

PCTEST Lab, Columbia, MD, USA

**Test Report Serial No.:**

0903310615.DRT

**FCC ID:** TBD

**APPLICANT:** DIGITAL RECEIVER TECHNOLOGY, INC.

**Application Type:** Certification

**FCC Classification:** Amplifier (AMP)

**FCC Rule Part(s):** §2; §90

**EUT Type:** Amplifier

**Model(s):** DRT9955B

**Tx Frequency Range:** 851 - 869MHz

**Max. RF Output Power:** 37.4dBm (5.5W)

**Emission Designator(s):** 17K7D7W

**Mode(s):** 850 Band


**Test Device Serial No.:** identical prototype [S/N: N/A]

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947. Test results reported herein relate only to the item(s) tested.



I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

**Grant Conditions:** Power output listed is conducted.

PCTEST certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862.



  
Randy Ortanez  
President

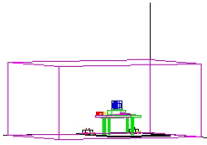


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## MEASUREMENT REPORT

### FCC Part 90

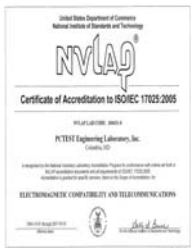
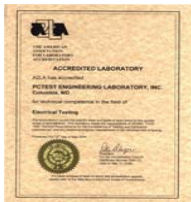


#### §2.1033 General Information



**APPLICANT:** Digital Receiver Technology, Inc.  
**APPLICANT ADDRESS:** 20250 Century Boulevard, Suite 300  
 Germantown, MD 20874-1114  
**TEST SITE:** PCTEST ENGINEERING LABORATORY, INC.  
**TEST SITE ADDRESS:** 6660-B Dobbin Road, Columbia, MD 21045 USA  
**FCC RULE PART(S):** §2; §90  
**BASE MODEL:** DRT9955B  
**FCC ID:** TBD  
**FCC CLASSIFICATION:** Amplifier (AMP)  
**EMISSION DESIGNATOR(S):** 17K7D7W,  
**FREQUENCY TOLERANCE:**  $\pm 0.00025\%$  (2.5 ppm)  
**Test Device Serial No.:** N/A ☐ Production ☒ Pre-Production ☐ Engineering  
**DATE(S) OF TEST:** February 24 - March 12, 2009  
**TEST REPORT S/N:** 0903310615.DRT

#### Test Facility / Accreditations

Measurements were performed at PCTEST Engineering Lab located in Columbia, MD 21045, U.S.A.



- PCTEST facility is an FCC registered (PCTEST Reg. No. 90864) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules and Industry Canada (2451A-1).
- PCTEST Lab is accredited to ISO 17025 by U.S. National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP Lab code: 100431-0) in EMC, FCC and Telecommunications.
- PCTEST Lab is accredited to ISO 17025-2005 by the American Association for Laboratory Accreditation (A2LA) in Specific Absorption Rate (SAR) testing, Hearing Aid Compatibility (HAC) testing, CTIA Test Plans, and wireless testing for FCC and Industry Canada Rules.
- PCTEST Lab is a recognized U.S. Conformity Assessment Body (CAB) in EMC and R&TTE (n.b. 0982) under the U.S.-EU Mutual Recognition Agreement (MRA).
- PCTEST TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC Guide 65 by the American National Standards Institute (ANSI) in all scopes of FCC Rules and Industry Canada Standards (RSS).
- PCTEST facility is an IC registered (2451A-1) test laboratory with the site description on file at Industry Canada.
- PCTEST is a CTIA Authorized Test Laboratory (CATL) for AMPS, CDMA, and EvDO wireless devices and for Over-the-Air (OTA) Antenna Performance testing for AMPS, CDMA, GSM, GPRS, EGPRS, UMTS (W-CDMA), CDMA 1xEVDO, and CDMA 1xRTT.

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## 1.0 INTRODUCTION

### 1.1 Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

### 1.2 Testing Facility

The map below shows the location of the PCTEST LABORATORY, its proximity to the FCC Laboratory, the Columbia vicinity are, the Baltimore-Washington Internt'l (BWI) airport, the city of Baltimore and the Washington, DC area. (See Figure 1-1).

These measurement tests were conducted at the PCTEST Engineering Laboratory, Inc. facility in New Concept Business Park, Guilford Industrial Park, Columbia, Maryland. The site address is 6660-B Dobbin Road, Columbia, MD 21045. The test site is one of the highest points in the Columbia area with an elevation of 390 feet above mean sea level. The site coordinates are 39° 11'15" N latitude and 76° 49'38" W longitude. The facility is 1.5 miles North of the FCC laboratory, and the ambient signal and ambient signal strength are approximately equal to those of the FCC laboratory. There are no FM or TV transmitters within 15 miles of the site. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2003 on January 27, 2006.

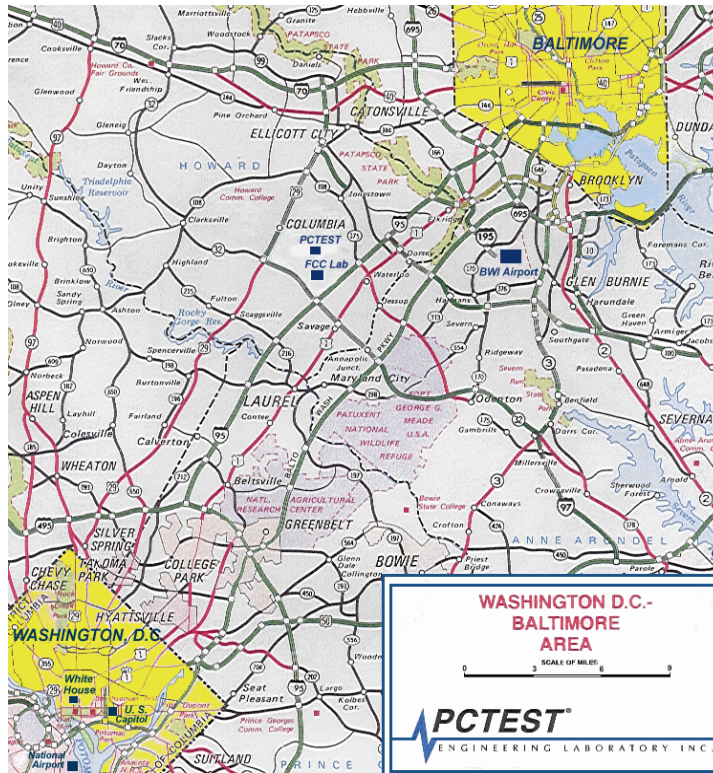


Figure 1-1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area

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## 2.0 PRODUCT INFORMATION

### 2.1 Equipment Description

The Equipment Under Test (EUT) is the **DRT Amplifier FCC ID: TBD**. The EUT consisted of the following component(s):

Trade Name / Base Model	FCC ID	Description
DRT / Model: DRT9955B	TBD	Amplifier

**Table 2-1. EUT Equipment Description**

The DRT9955B is used with the DRT 1201B communication surveyor system. The unit allows for simultaneous dual band operation with two separate Tx inputs. All testing in this report was performed using Tx outputs from a DRT1201B system.

Test data in this report covers the operation of the unit operating in the 851 – 869 MHz 850 Band.

### 2.2 EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and no modifications were made during testing.

### 2.3 Labeling Requirements

Per 2.925

The FCC identifier shall be permanently affixed to the equipment and shall be readily visible to the purchaser at the time of purchase.



Per 15.19; Docket 95-19

In addition to this requirement, a device subject to certification shall be labeled as follows:

*This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.*

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the trade name and FCC ID must be displayed on the device per Section 15.19(b)(2).

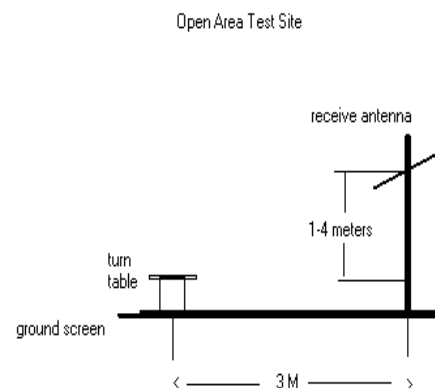
Please see attachment for FCC ID label and label location.

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## 3.0 DESCRIPTION OF TESTS

### 3.1 Measurement Procedure

The radiated spurious measurements were made indoors and validated on an outdoors 3-meter test range (See Figure 3-1). The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. This power level was recorded using a broadband average power meter. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This level is recorded with the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic antenna are taken into consideration.



**Figure 3-1. Diagram of 3-meter outdoor test range**

**Deviation from Measurement Procedure.....None**

### 3.2 Occupied Bandwidth Emission Limits

**§2.1049, §90.209, §90.210(b)**

For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

- (1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.
- (2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB.
- (3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least  $43 + 10 \log (P)$  dB.

Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

The measurement of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

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### 3.3 Spurious and Harmonic Emissions at Antenna Terminal

§2.1051, §90.210

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10<sup>th</sup> harmonic.

### 3.4 Radiated Spurious and Harmonic Emissions

§2.1053, §90.210

Spurious and harmonic radiated emissions are measured outdoors at our 3-meter test range. The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. This level is then measured with a broadband average power meter. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10<sup>th</sup> harmonic. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive average power meter reading. This spurious level is recorded with the power meter. For readings above 1 GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

### 3.5 Frequency Stability / Temperature Variation

§2.1055, §90.213

The frequency stability of the transmitter is measured by:



- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

*Specification – The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5$  ppm) of the center frequency.*

#### Time Period and Procedure:

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a “standby” condition for one minute before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

NOTE: As this device is an amplifier only with no frequency determining circuitry the frequency stability testing was not performed.



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## 4.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST).

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	263-10dB	(DC-18GHz) 10 dB Attenuator	N/A		N/A	N/A
-	No.165	(30MHz - 1000MHz) RG58 Coax Cable	N/A		N/A	N/A
-	No.166	(1000-26500MHz) Microwave RF Cable	N/A		N/A	N/A
-	No.167	(100kHz - 100MHz) RG58 Coax Cable	N/A		N/A	N/A
Agilent	11713A	Attenuation/Switch Driver	12/4/2008	Annual	12/4/2009	3439A02645
Agilent	8449B	(1-26.5GHz) Pre-Amplifier	12/4/2008	Annual	12/4/2009	3008A00985
Agilent	8495A	(0-70dB) DC-4GHz Attenuator	N/A		N/A	N/A
Agilent	85650A	Quasi-Peak Adapter	12/4/2008	Annual	12/4/2009	3303A01872
Agilent	8566B	(100Hz-22GHz) Spectrum Analyzer	12/5/2008	Annual	12/5/2009	3638A08713
Agilent	8591A	(9kHz-1.8GHz) Spectrum Analyzer	8/19/2008	Annual	8/19/2009	3144A02458
Agilent	8648D	(9kHz-4GHz) Signal Generator	10/11/2007	Biennial	10/11/2009	3613A00315
Agilent	8901A	Modulation Analyzer	8/18/2008	Annual	8/18/2009	2432A03467
Agilent	8903B	Audio Analyzer	8/18/2008	Annual	8/18/2009	3011A09025
Agilent	E4432B	ESG-D Series Signal Generator	8/18/2008	Annual	8/18/2009	US40053896
Agilent	E4448A	PSA (3Hz-50GHz) Spectrum Analyzer	12/5/2008	Annual	12/5/2009	US42510244
Agilent	E8267C	Vector Signal Generator	11/15/2007	Biennial	11/15/2009	US42340152
Agilent	N9020A	MXA Signal Analyzer	9/17/2008	Annual	9/17/2009	US46470561
Compliance Design	Roberts	Dipole Set	11/9/2007	Biennial	11/9/2009	146
Compliance Design	Roberts	Dipole Set	11/9/2007	Biennial	11/9/2009	147
Emco	3115	Horn Antenna (1-18GHz)	9/24/2007	Biennial	9/24/2009	9704-5182
Emco	3115	Horn Antenna (1-18GHz)	10/4/2007	Biennial	10/4/2009	9205-3874
Espec	ESX-2CA	Environmental Chamber	4/12/2008	Annual	4/12/2009	17620
Gigatronics	80701A	(0.05-18GHz) Power Sensor	8/18/2008	Annual	8/18/2009	1833460
Gigatronics	8651A	Universal Power Meter	8/18/2008	Annual	8/18/2009	1835299
Gigatronics	8651A	Universal Power Meter	8/18/2008	Annual	8/18/2009	8650319
K & L	11SH10	Band Pass Filter	N/A	Annual	N/A	1300/4000
K & L	11SH10	Band Pass Filter	N/A	Annual	N/A	4000/12000
MiniCircuits	VHF-1300+	High Pass Filter	N/A		N/A	30716
MiniCircuits	VHF-3100+	High Pass Filter	N/A		N/A	30721
Pasternack	PE2208-6	Bidirectional Coupler	N/A		N/A	N/A
Schwarzbeck	UHA9105	Dipole Antenna (400 - 1GHz) Rx	6/19/2007	Biennial	6/18/2009	9105-2404
Schwarzbeck	UHA9105	Dipole Antenna (400 - 1GHz) Tx	6/19/2007	Biennial	6/18/2009	9105-2403
Solar Electronics	8012-50-R-24-BNC	LISN	11/8/2007	Biennial	11/8/2009	310233
Sunol	DRH-118	Horn Antenna (1 - 18GHz)	5/9/2007	Biennial	5/9/2009	A050307

Table 4-1. Test Equipment

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## 5.0 SAMPLE CALCULATIONS

### Emission Designator

**Emission Designator = 250KGXW**

GSM BW = 250 kHz

G = Phase Modulation



X = Cases not otherwise covered

W = Combination (Audio/Data)

### Spurious Radiated Emission - PCS Band

**Example: Channel 512 PCS Mode 2<sup>nd</sup> Harmonic (3700.40 MHz)**

The average receive power meter reading at 3 meters with the EUT on the turntable was -81.0 dBm. The gain of the substituted antenna is 8.1 dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of -81.0 dBm on the power meter. The loss of the cable between the signal generator and the terminals of the substituted antenna is 2.0 dB at 3700.40 MHz. So 6.1 dB is added to the power meter reading of -30.9 dBm yielding -24.80 dBm. The fundamental EIRP was 25.501 dBm so this harmonic was 25.501 dBm - (-24.80) = 50.3 dBc.

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## 6.0 TEST RESULTS

### 6.1 Summary

Company Name: Digital Receiver Technology, Inc.



FCC ID: TBD

FCC Classification: Amplifier (AMP)

Mode(s): 850 Band

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
<b><u>TRANSMITTER MODE (TX)</u></b>					
2.1049, 90.209	Occupied Bandwidth	N/A	CONDUCTED	PASS	Section 7.0
2.1051, 90.210	Band Edge / Conducted Spurious Emissions	< 43 + log <sub>10</sub> (P[Watts]) at Band Edge and for all out-of-band emissions		PASS	Section 7.0
2.1046, 90.635	Transmitter Conducted Output Power	N/A		PASS	Section 6.1
2.1053, 90.210	Undesirable Emissions	< 43 + log <sub>10</sub> (P[Watts]) for all out-of-band emissions	RADIATED	PASS	Section 6.2
2.1055, 90.213	Frequency Stability	851 – 854M < 1 ppm 854 – 869M < 1.5 ppm		N/A	N/A
<b><u>RECEIVER MODE (RX) / DIGITAL EMISSIONS</u></b>					
15.107	AC Conducted Emissions 150kHz – 30MHz	< FCC 15.107 limits	LINE CONDUCTED	PASS	Pt. 15B Test Report
15.109	General Field Strength Limits (Restricted Bands and Radiated Emissions Limits)	< FCC 15.109 limits	RADIATED (30MHz-1GHz) (1-25 GHz)	PASS	Pt. 15B Test Report
<b><u>RF EXPOSURE</u></b>					
2.1091 / 2.1093	MPE Test	1 mW/cm <sup>2</sup> (MPE Limit) @ 20 cm	MPE	PASS	MPE Report

**Table 6-1. Summary of Test Results**

FCC ID: TBD		FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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## 6.1 Conducted Output Power

### §2.1046

The device was tested with the maximum input 850 Band signal provided from the DRT 1201B. The conducted output powers were measured at the amplifier Tx output.

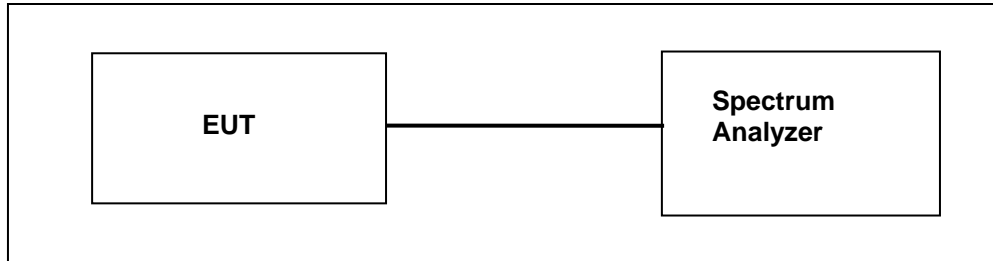


Figure 6-1: Test Setup Diagram

Band	Channel	Conducted Power [dBm]	Conducted Power [Watts]
850 Band	1	37.38	5.47
	743	37.4	5.50
	1439	36.7	4.68

Table 6-2. Maximum Conducted Output Power Table for DRT9955B (850 Band)

## 6.2 850 Band Mode Radiated Measurements

§2.1053, §90.210

### Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 851.04 MHz  
 CHANNEL: 1  
 MODULATION SIGNAL: 850 Band (Internal)  
 DISTANCE: 3 meters  
 LIMIT: -13.00 dBm



FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	MARGIN (dB)
1702.08	-73.21	6.10	-67.11	H	-54.1
2553.12	-69.20	6.58	-62.62	H	-49.6
3404.16	-66.80	6.92	-59.88	H	-46.9
4255.20	-66.10	7.77	-58.33	H	-45.3
5106.24	-63.95	8.32	-55.63	H	-42.6

Table 6-3. Radiated Spurious Data (850 Band Mode – Ch. 1)

#### NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

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## 850 Band Mode Radiated Measurements (Cont'd)

§2.1053, §90.210

### Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 860.29 MHz  
 CHANNEL: 743  
 MODULATION SIGNAL: 850 Band (Internal)  
 DISTANCE: 3 meters  
 LIMIT: -13.00 dBm



FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	MARGIN (dB)
1720.58	-72.49	6.10	-66.40	H	-53.4
2580.86	-69.53	6.58	-62.94	H	-49.9
3441.15	-64.39	6.93	-57.46	H	-44.5
4301.44	-66.30	7.86	-58.44	H	-45.4
5161.73	-61.90	8.32	-53.59	H	-40.6

**Table 6-4. Radiated Spurious Data (850 Band Mode – Ch. 743)**

#### NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

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## 850 Band Mode Radiated Measurements (Cont'd)

§2.1053, §90.210

### Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 868.96 MHz  
 CHANNEL: 1189  
 MODULATION SIGNAL: 850 Band (Internal)  
 DISTANCE: 3 meters  
 LIMIT: -13.00 dBm



FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	MARGIN (dB)
1737.92	-72.13	6.10	-66.03	H	-53.0
2606.88	-68.10	6.59	-61.51	H	-48.5
3475.84	-66.82	6.94	-59.88	H	-46.9
4344.80	-64.90	7.96	-56.94	H	-43.9
5213.76	-64.69	8.31	-56.38	H	-43.4

**Table 6-5. Radiated Spurious Data (850 Band Mode – Ch. 1439)**

#### NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

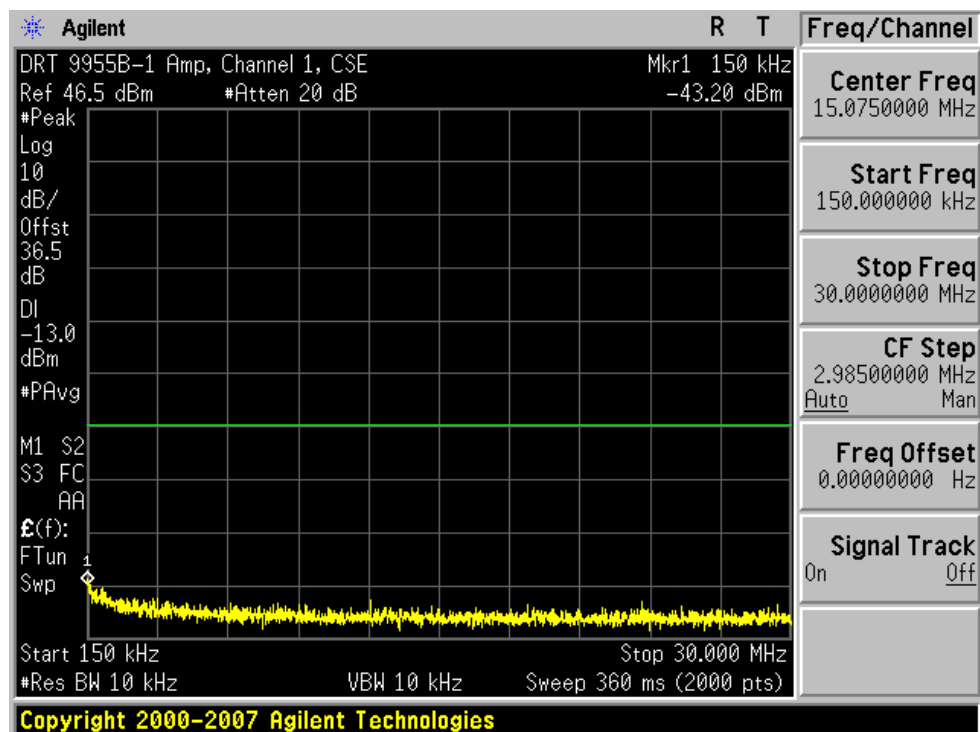
The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. Final power measurements are made with a broadband average power meter. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. This spurious level is recorded using the power meter. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

FCC ID: TBD		FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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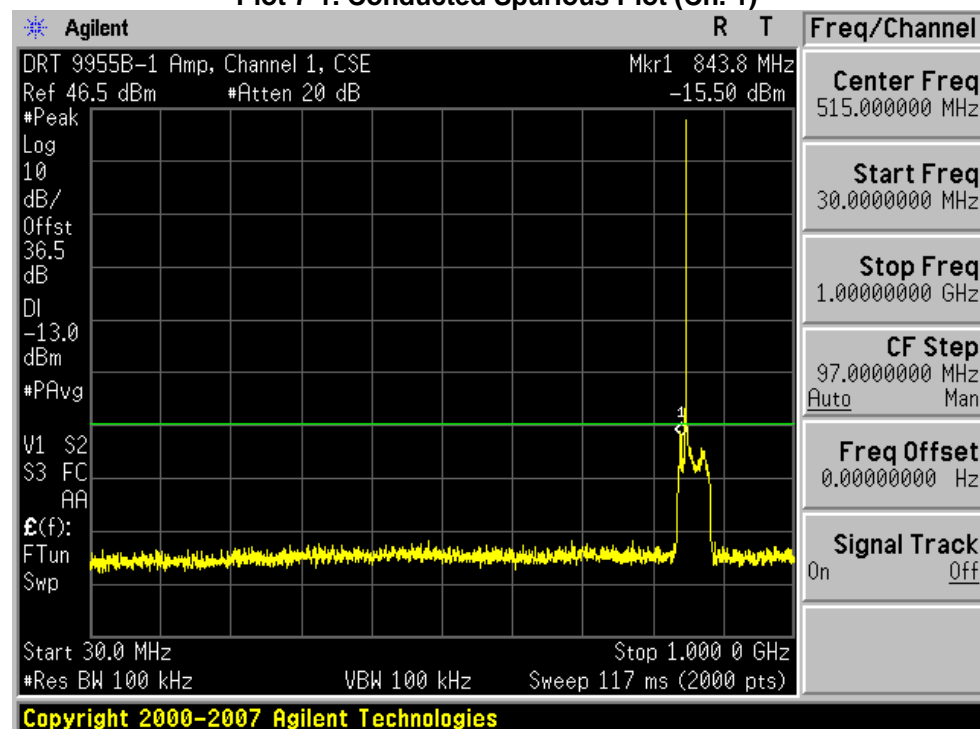


## 7.0 PLOTS OF EMISSIONS

### 7.1 Low Channel (Ch. 1)

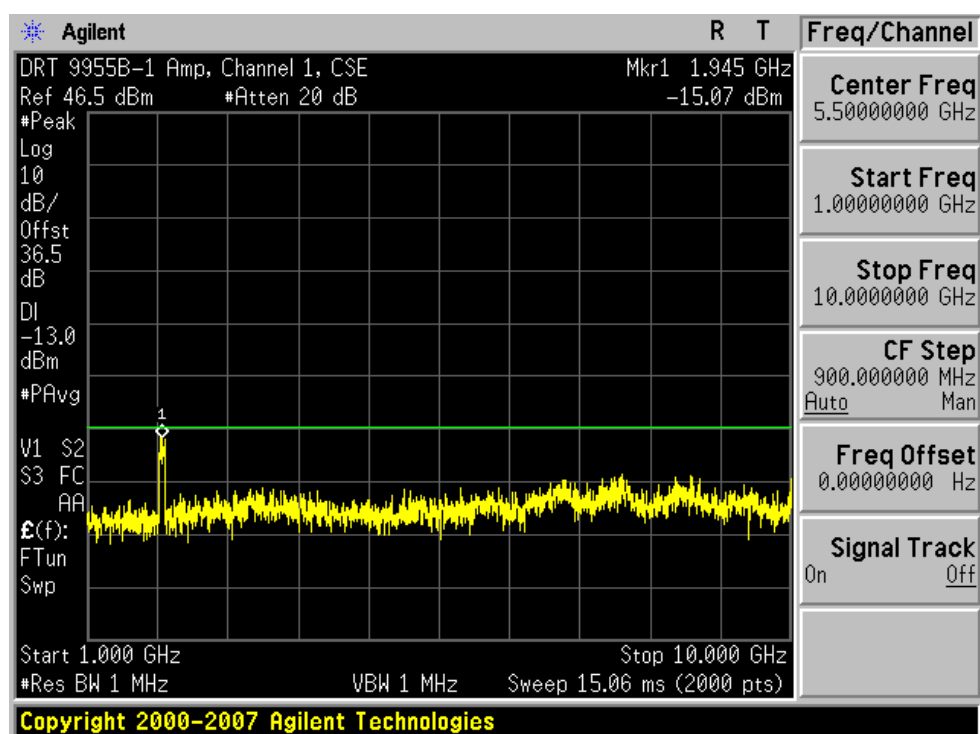


Plot 7-1. Conducted Spurious Plot (Ch. 1)

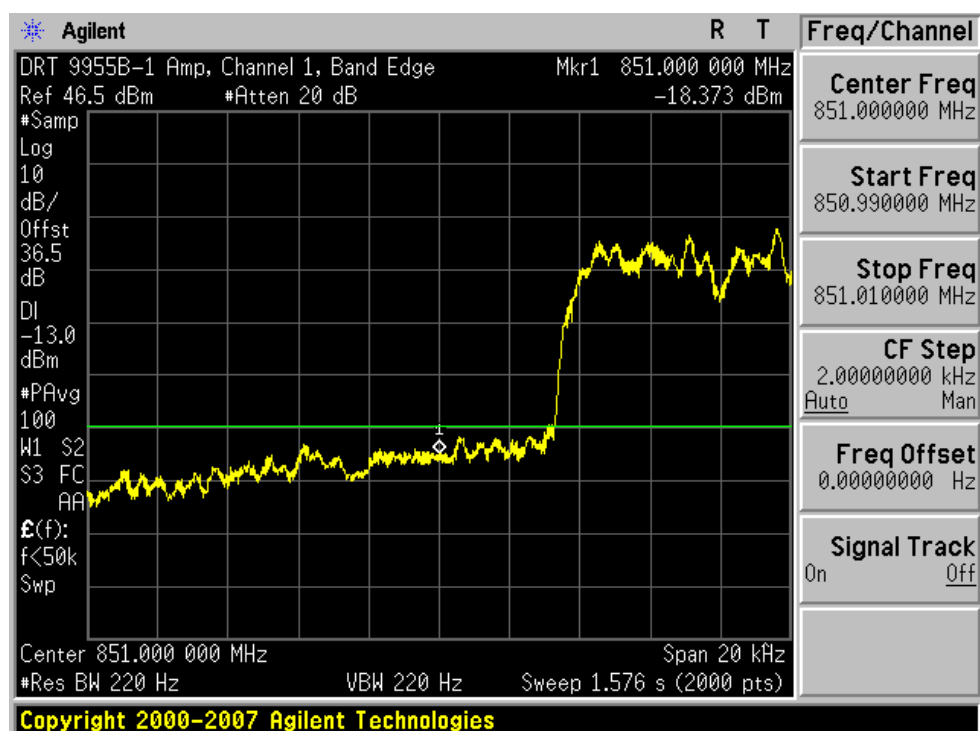


FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
Test Report S/N: 0903310615.DRT	Test Dates: February 24 - March 12, 2009	EUT Type: Amplifier - 850 Band Mode		Page 15 of 26

**Plot 7-2. Conducted Spurious Plot (Ch. 1)**

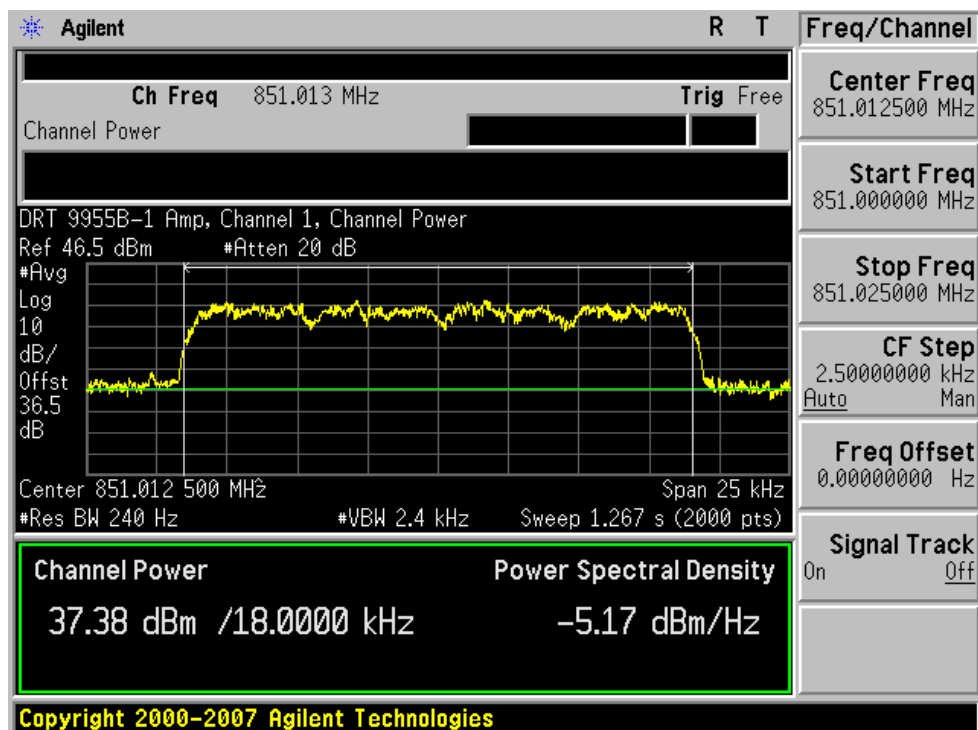


**Plot 7-3. Conducted Spurious Plot (Ch. 1)**

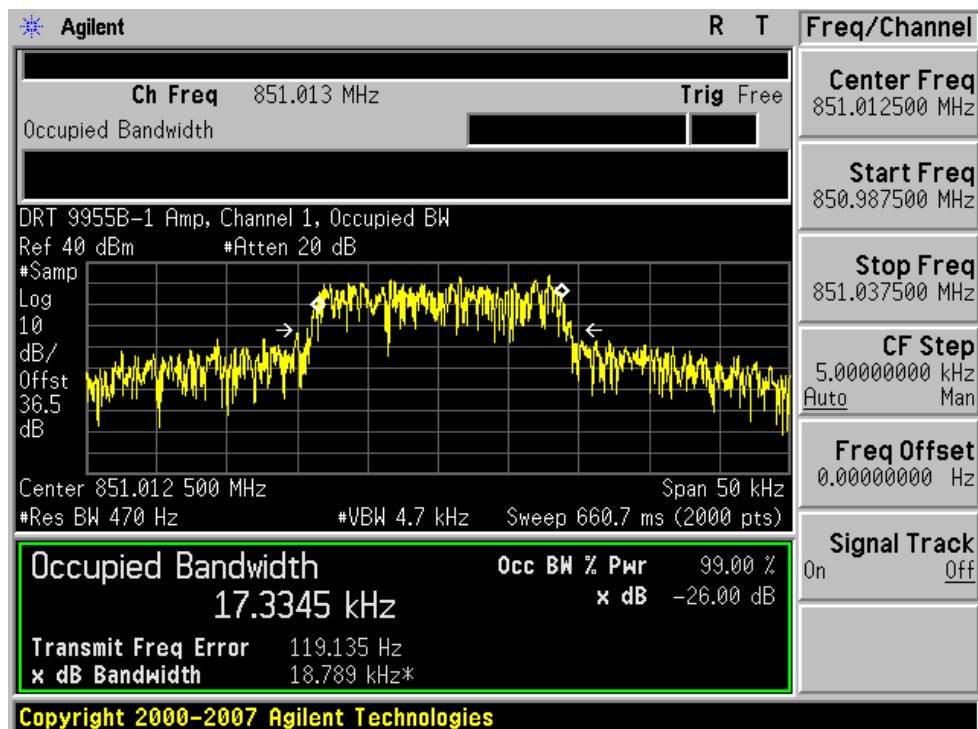


**Plot 7-4. Band Edge Plot (Ch. 1)**

FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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Plot 7-5. Channel Power (Ch. 1)



Plot 7-6. Occupied Bandwidth Plot (Ch. 1)

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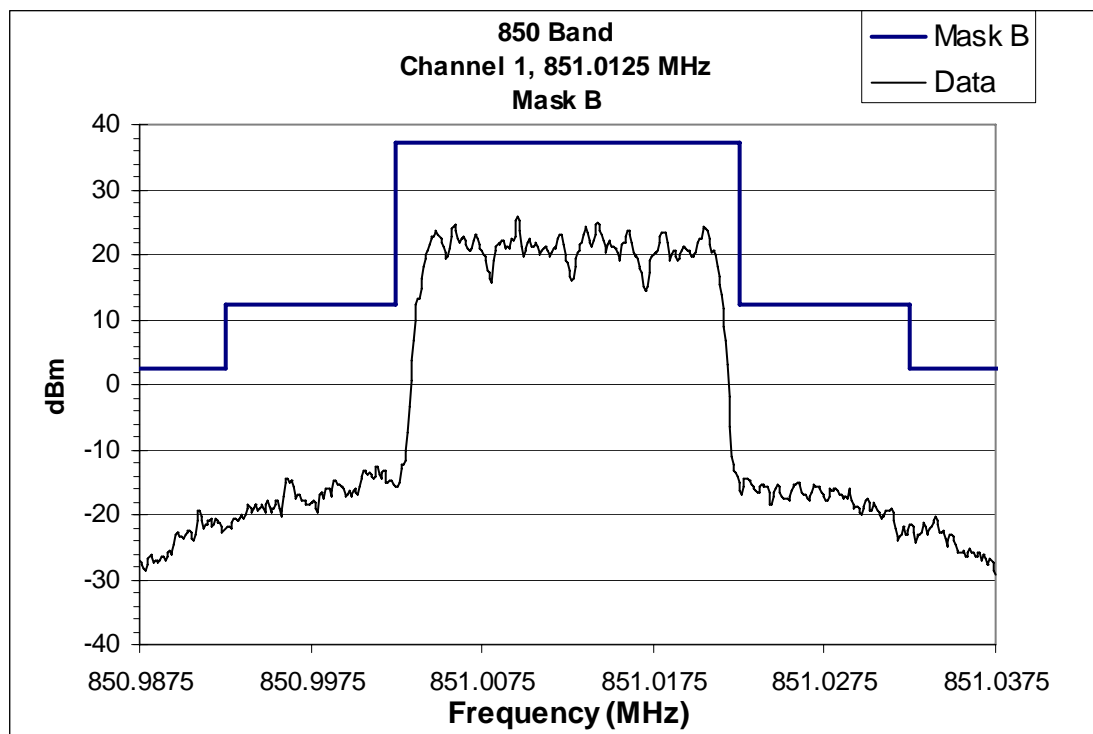
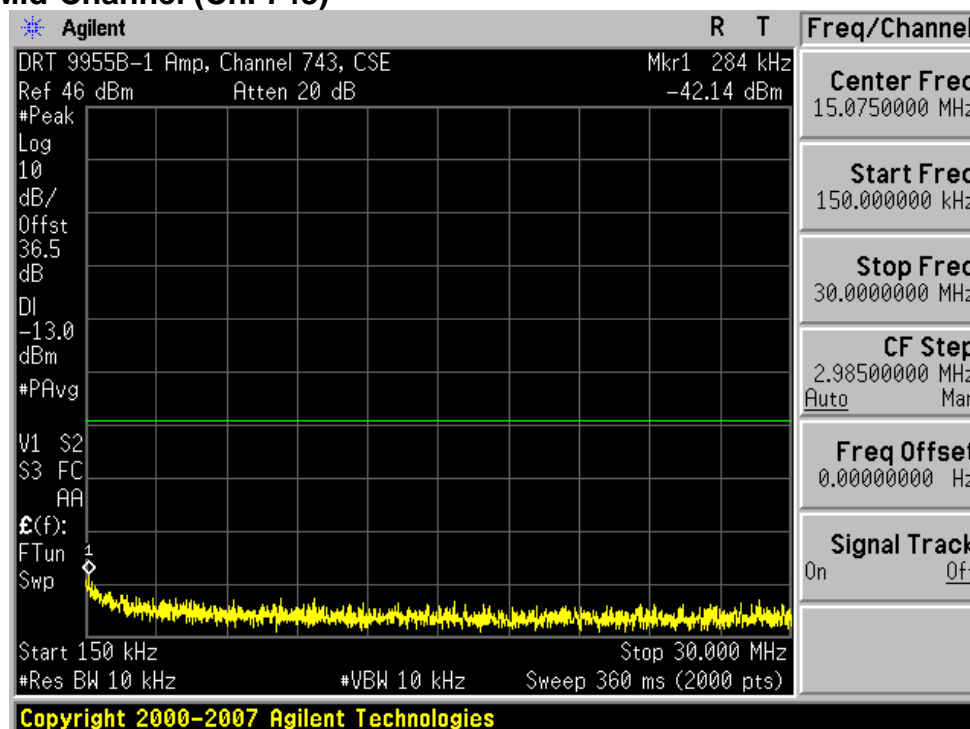


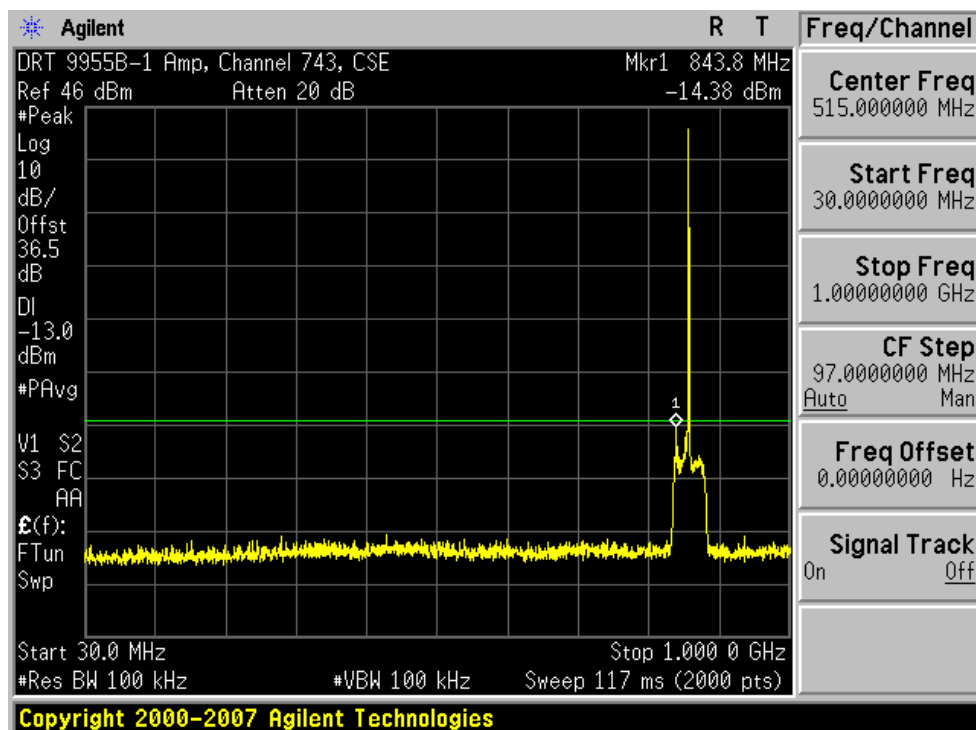
Figure 7-1: 850 Band Emission Mask, Channel 1 (§90.210(b))

## 7.2 Mid-Channel (Ch. 743)

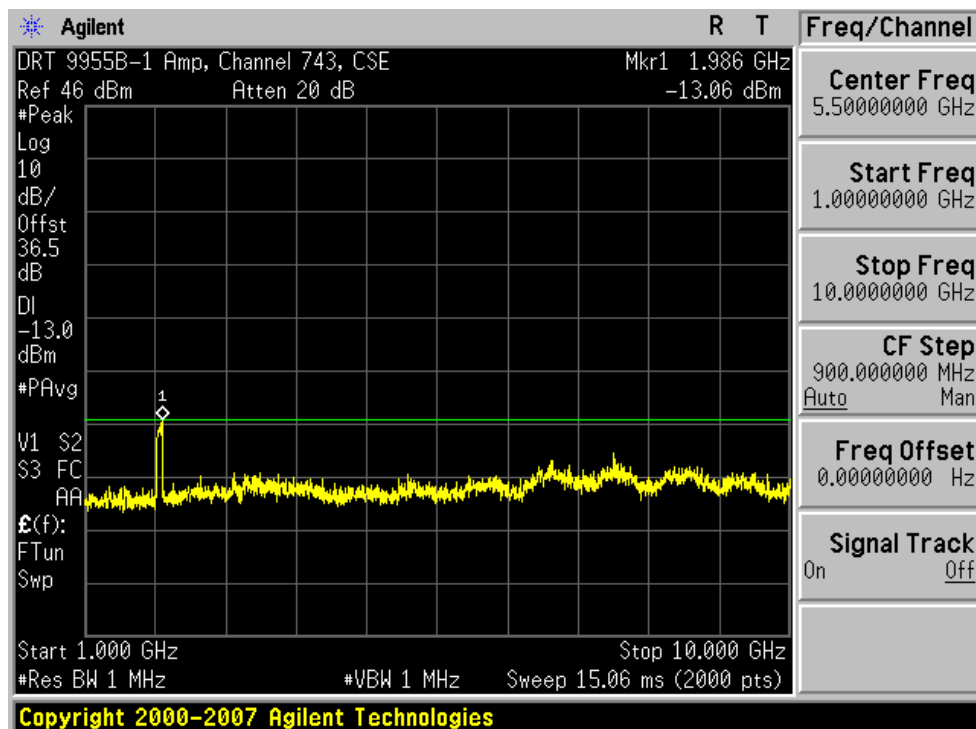


Plot 7-7. Conducted Spurious Plot (Ch. 743)

FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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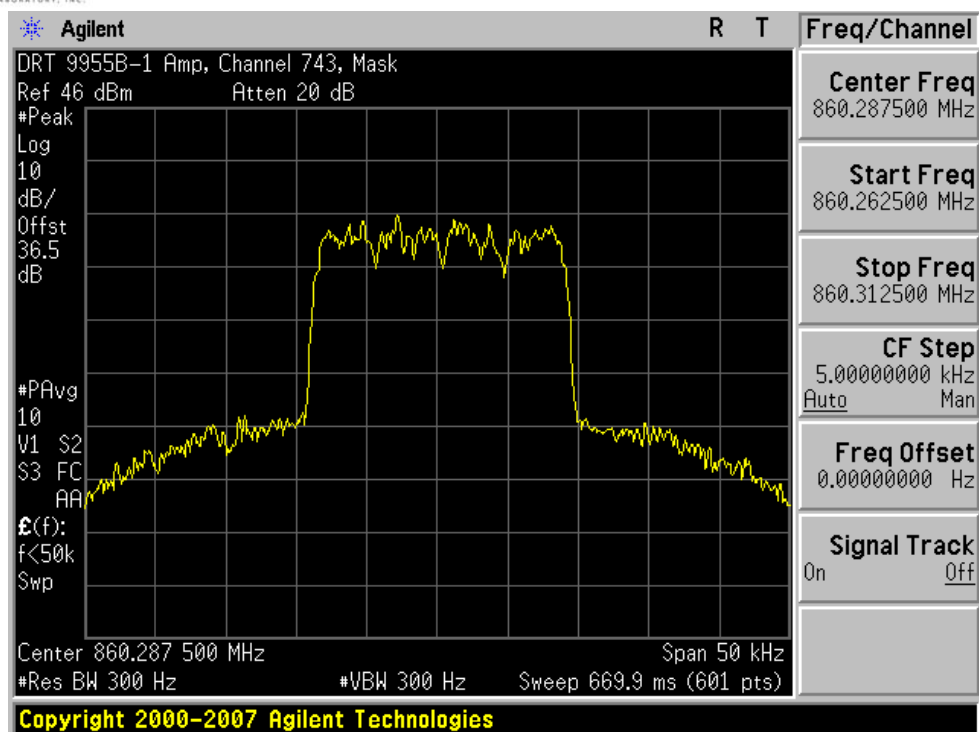


Plot 7-8. Conducted Spurious Plot (Ch. 743)

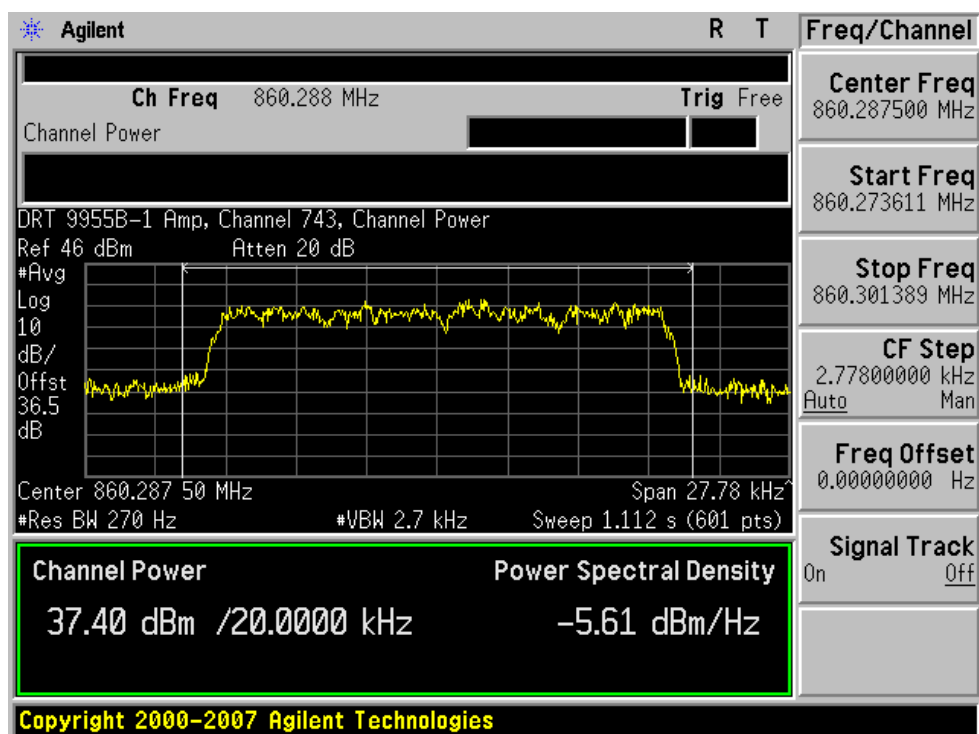


Plot 7-9. Conducted Spurious Plot (Ch. 743)

FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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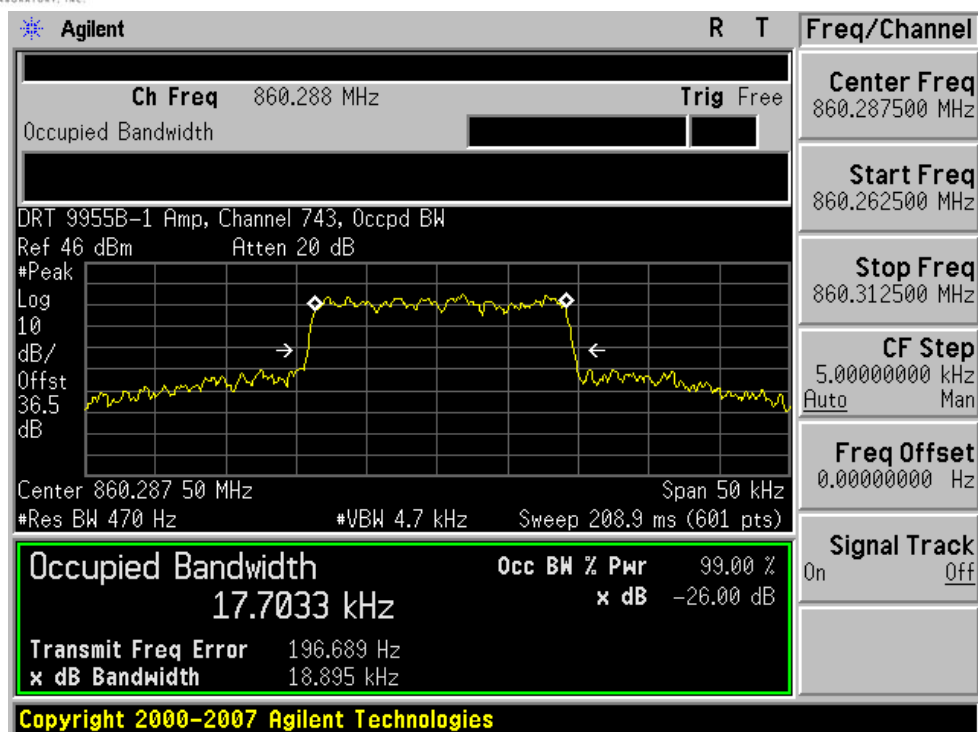
Plot 7-10. Emission Mask Plot (Ch. 743)



Plot 7-11. Channel Power (Ch. 743)

FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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Plot 7-12. Occupied Bandwidth Plot (Ch. 743)

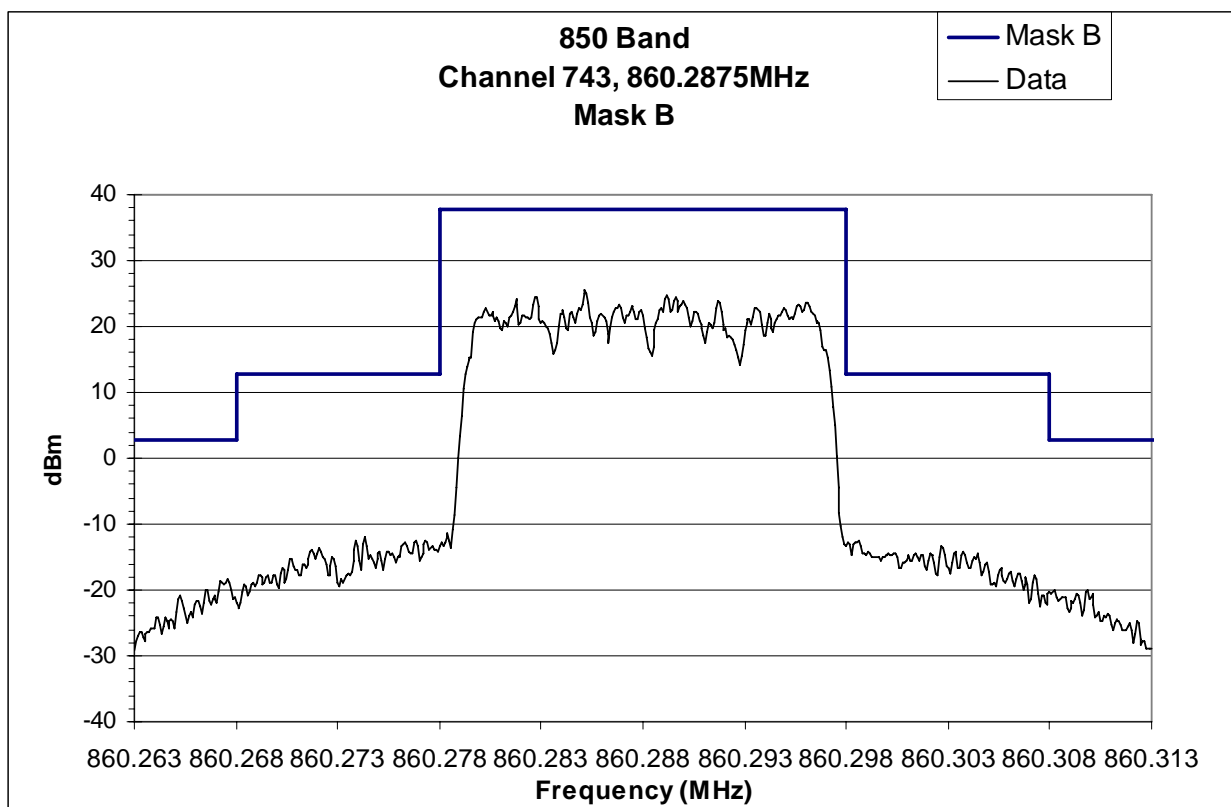
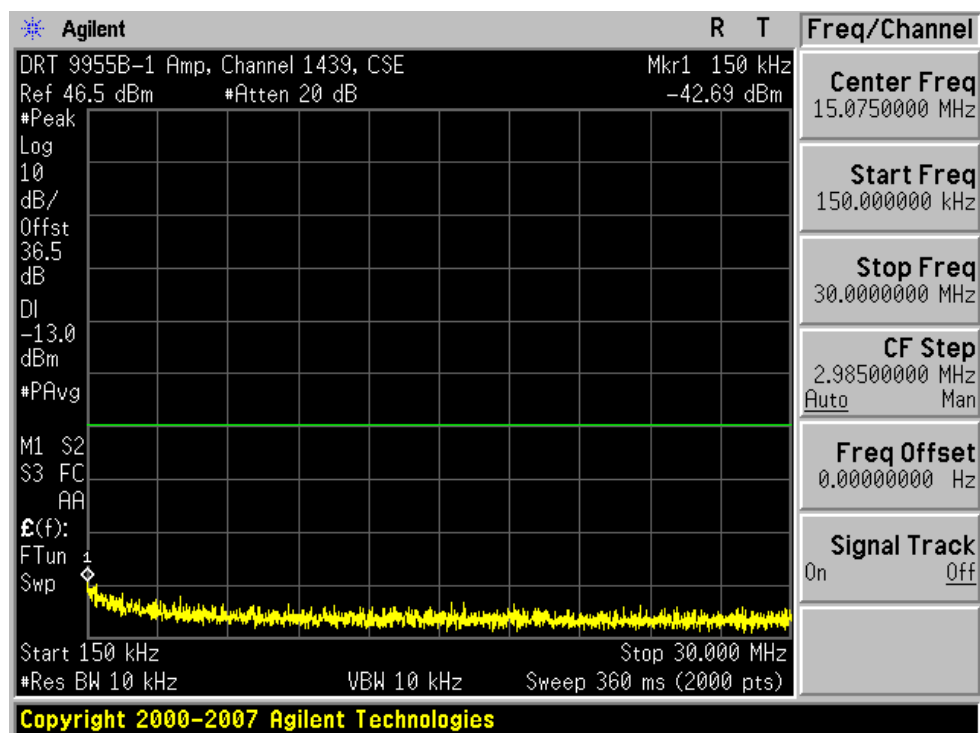


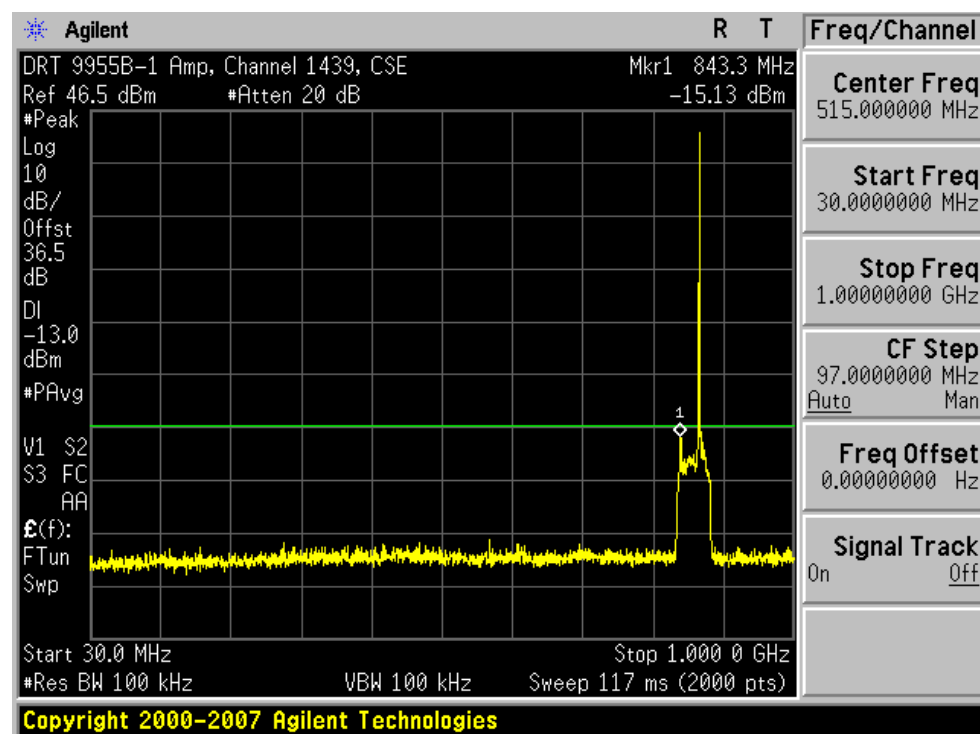
Figure 7-2: 850 Band Emission Mask, Channel 743 (§90.210(b))

FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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### 7.3 High Channel (Ch. 1439)

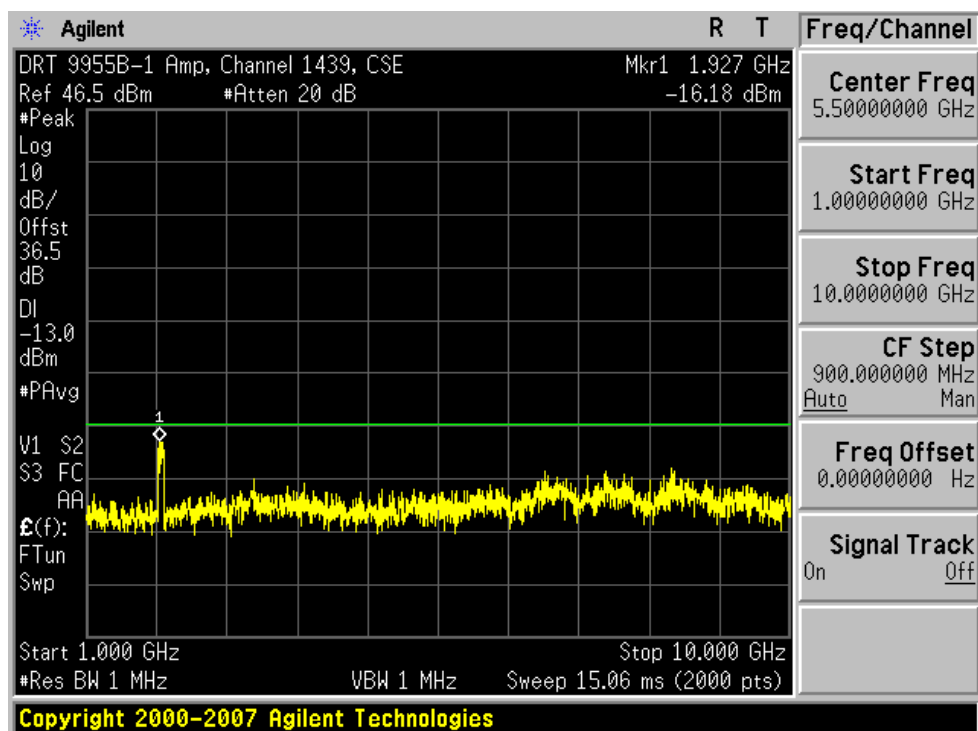


Plot 7-13. Conducted Spurious Plot (Ch. 1439)

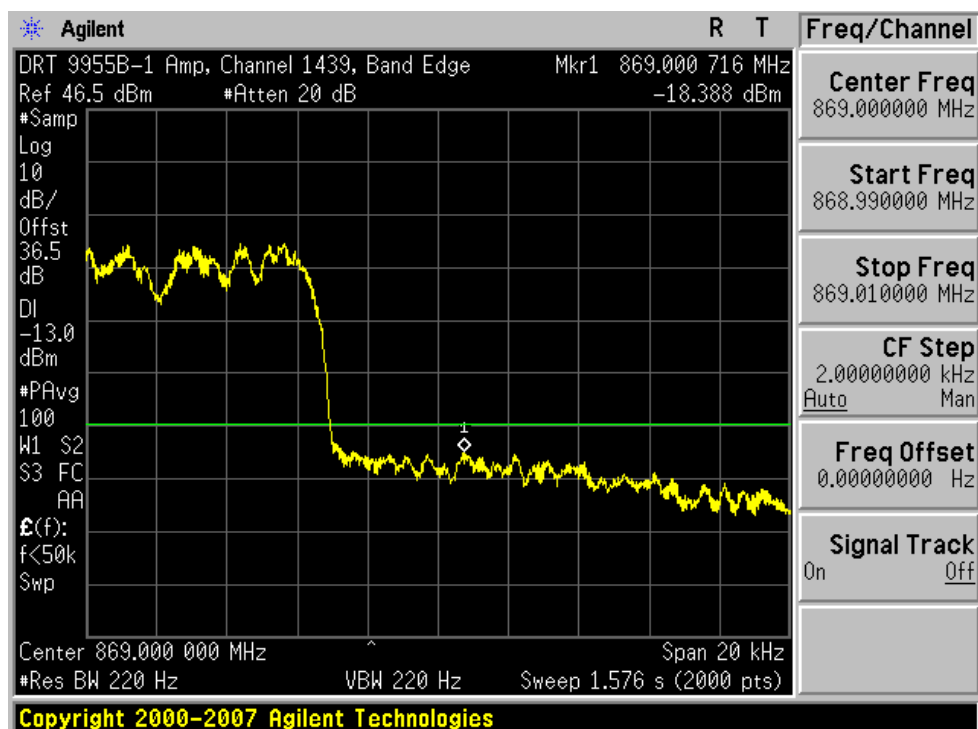


FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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Plot 7-14. Conducted Spurious Plot (Ch. 1439)

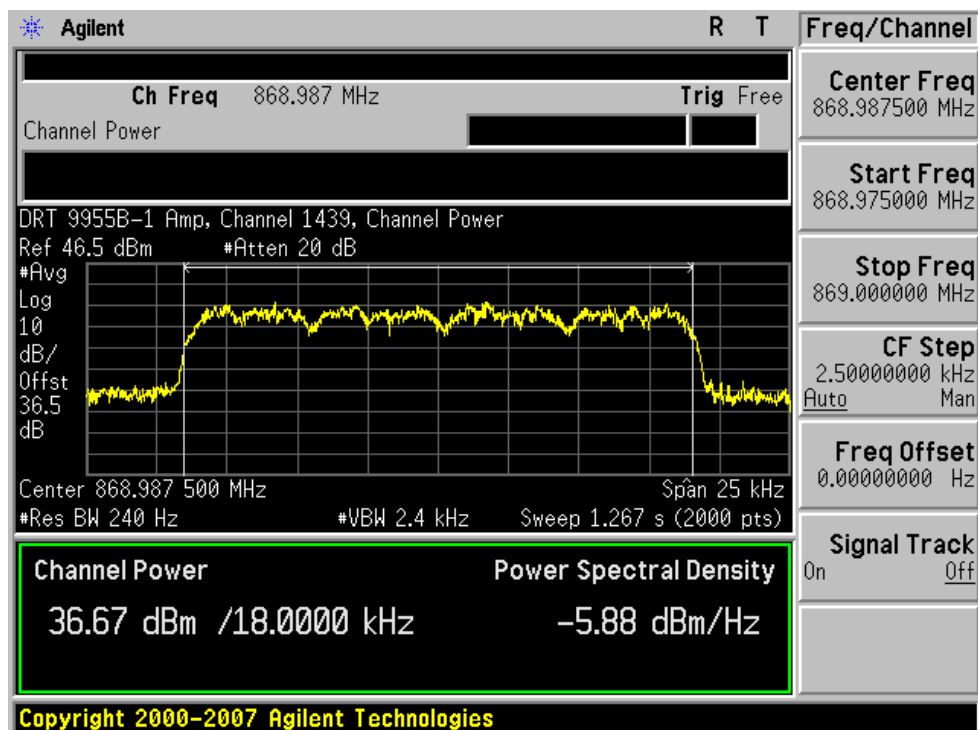


Plot 7-15. Conducted Spurious Plot (Ch. 1439)

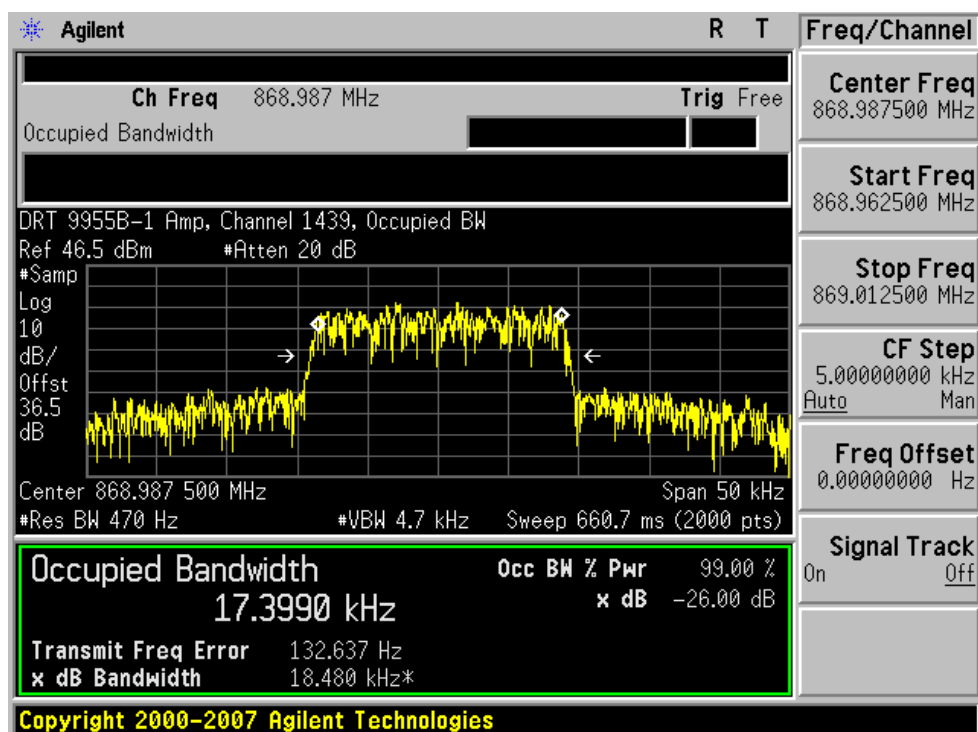


Plot 7-16. Band Edge Plot (Ch. 1439)

FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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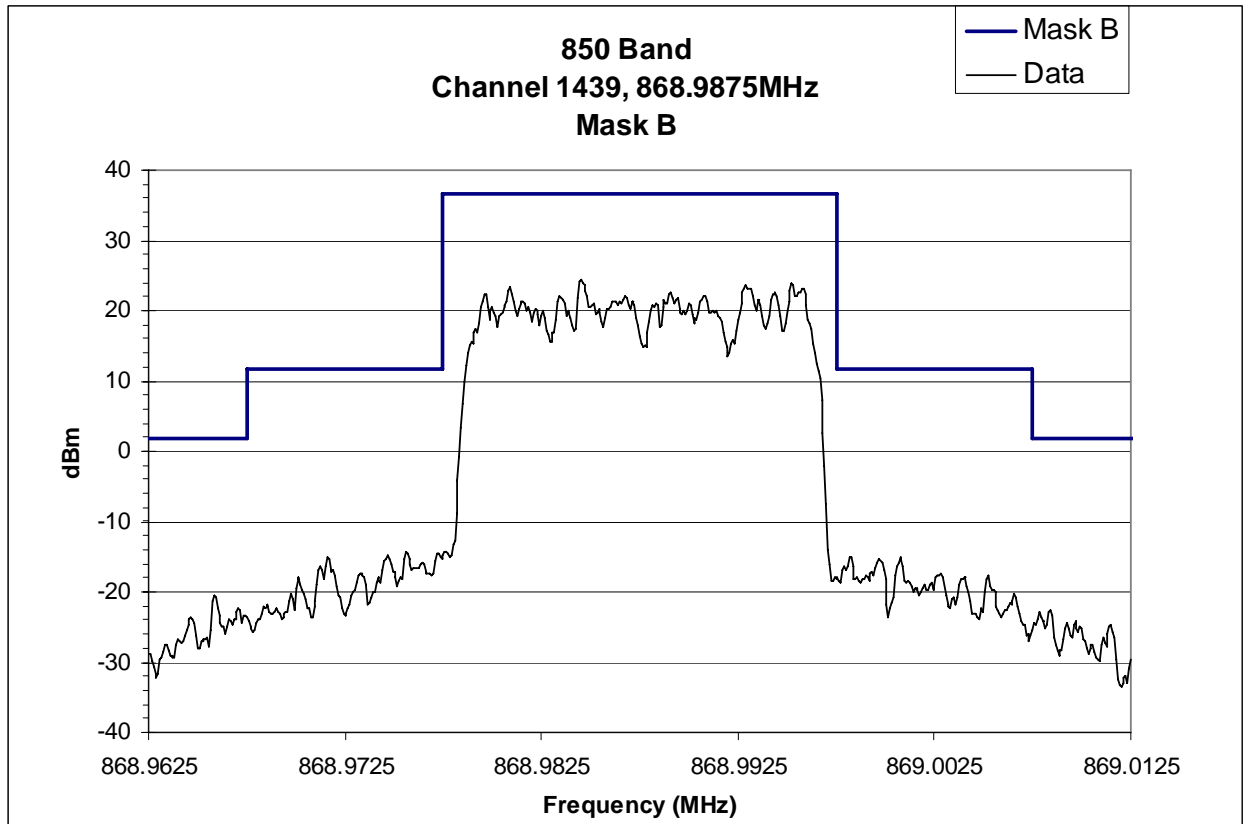


Plot 7-17. Channel Power (Ch. 1439)



Plot 7-18. Occupied Bandwidth Plot (Ch. 1439)

FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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**Figure 7-3: 850 Band Emission Mask, Channel 1439 (§90.210(b))**

FCC ID: TBD	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	<b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
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## 8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **DRT Amplifier FCC ID: TBD** complies with all the requirements of Parts 2 and 90 of the FCC rules.

FCC ID: TBD	 <b>PCTEST</b> ENGINEERING LABORATORY, INC.	FCC Pt. 90 850 Band MEASUREMENT REPORT (CERTIFICATION)	 <b>DRT</b> Digital Receiver Technology, Inc.	Reviewed by: Quality Manager
Test Report S/N: 0903310615.DRT	Test Dates: February 24 - March 12, 2009	EUT Type: Amplifier – 850 Band Mode	Page 26 of 26	