PCTEST Engineering Laboratory, Inc.

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www.pctestlab.com

CERTIFICATE OF COMPLIANCE
FCC Part 22 Certification-Amendment

Benq Corporation
157 Shan-Ying Road Kweishan
Taoyuan 333, TAIWAN, R.O.C.
Atn: Mr. George Chiou
Technical Manager

Dates of Tests: July 26, 2002
Test Report S/N: 22.220726007.JVP
Test Site: PCTEST Lab, Columbia, MD USA

FCC ID	**JVPH0622**
APPLICANT	**BENQ Corporation**

Classification:	**Non-Broadcast Transmitter held to ear (TNE)**
FCC Rule Part(s):	**§22(H), §22.901(d), §2**
EUT Type:	**Dual-Mode Cellular Phone (AMPS/CDMA)**
Trade Name/Model(s):	***BENQ ACTON***
Tx Frequency Range:	**824.04 ~ 848.97MHz (AMPS) / 824.70 ~ 848.31 MHz (CDMA)**
Rx Frequency Range:	**869.04 ~ 893.31MHz (AMPS) / 869.70 ~ 893.31 MHz (CDMA)**
Max. RF Output Power:	**0.338W ERP AMPS (25.283 dBm) /** **0.277W ERP CDMA (24.423 dBm)**
Max. SAR Measurement:	**1.4395 mW/g AMPS Brain SAR; 1.1917 mW/g CDMA Brain SAR** **0.8122 mW/g AMPS Body SAR; 0.7064 mW/g CDMA Body SAR**
Frequency Tolerance:	**0.00025% (2.5 ppm)**
Emission Designators:	**1M25F9W**

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.

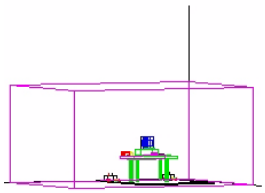
I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking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

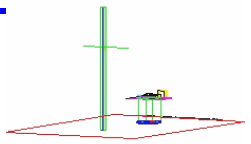
PCTEST certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862.

Randy Ortanez
President

2002 PCTEST Engineering Lab., Inc.

MEASUREMENT REPORT





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.

§2.1033 General Information

Applicant:	**Benq Corporation**
Address:	**157 Shan-Ying Road Kweishan**
	Taoyuan 33, TAIWAN, R.O.C.
Attention	**Mr. George Chiou**
	Technical Manager

- FCC ID: **JVPH0622**
- Trade Name(s): ***BENQ***
- Model(s): ***ACTON***
- Quantity: Quantity production is planned
- Emission Designator: 40K0F8W, 40K0F1D, 1M25F9W
- Tx Freq. Range: 824.04 – 848.97 MHz (AMPS) / 824.70 ~ 848.31 (CDMA)
  Rx Freq. Range: 869.04 – 893.31 MHz (AMPS) / 869.70 ~ 893.31 (CDMA)
- Equipment Class: Non-Broadcast Transmitter Held to Ear (TNE)
- Equipment Type: Dual-Mode Cellular Phone
- Modulation(s): AMPS / CDMA
- Frequency Tolerance: ± 0.00025% (2.5 ppm)
- Max. RF Output Power: 0.338W ERP AMPS (25.283 dBm) / 0.277W ERP CDMA (24.423dBm)
- Max. SAR Measurement: 1.4395 mW/g AMPS Brain SAR; 1.1917 mW/g CDMA Brain SAR; 0.8122 mW/g AMPS Body SAR; 0.7064 mW/g CDMA Body SAR
- FCC Rule Part(s): §22(H), §22.901(d), §2
- Battery Pack: 3.7 VDC
- Dates of Tests: July 26, 2002
- Place of Tests: PCTEST Lab, Columbia, MD U.S.A.
- Report Serial No.: 22.220726007.JVP

NVLAP Lab Code 100431-0

5.1 Test Data

5.2 Effective Radiated Power Output

A. POWER: **Low (Analog Mode)**

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)
824.04	-36.300	H	0.003	4.973
836.49	-36.520	H	0.003	4.909
848.97	-36.300	H	0.003	5.285

B. POWER: **High (Analog Mode)**

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)	BATTERY
824.04	-16.300	H	0.31425	24.973	Standard
836.49	-16.520	H	0.30966	24.909	Standard
848.97	-16.300	H	0.33767	25.285	Standard

Note: Standard batteries are the only options for this phone

NOTES:

Effective Radiated Power Output Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

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. 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. The conducted power at the terminals of the dipole is measured. The ERP is recorded.

5.1 Test Data

5.3 Effective Radiated Power Output

A. POWER: **High (CDMA Mode)**

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)	BATTERY
824.70	-16.900	V	0.27307	24.363	Standard
835.89	-17.300	V	0.25899	24.133	Standard
848.31	-17.150	V	0.27687	24.423	Standard

Note: Standard batteries are the only options for this phone

NOTES:

Effective Radiated Power Output Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

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. 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. The conducted power at the terminals of the dipole is measured. The ERP is recorded.

6.1 Test Data

6.2 AMPS Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 824.04 MHz
CHANNEL: 0991 (Low)
MEASURED OUTPUT POWER: 25.283 dBm = 0.338 W
MODULATION SIGNAL: FM (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 $\log_{10}$ (W) = 38.28 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1648.08	-51.98	6.10	-45.88	H	71.2
2472.12	-56.68	6.70	-49.98	H	75.3
3296.16	-62.48	6.80	-55.68	H	81.0
4120.20	-62.28	6.50	-55.78	H	81.1
4944.24	-75.38	7.00	-68.38	H	93.7

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

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. 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 spurious level is recorded. 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.

6.1 Test Data (Continued)

6.3 AMPS Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 836.49 MHz
CHANNEL: 0383 (Mid)
MEASURED OUTPUT POWER: 25.283 dBm = 0.338 W
MODULATION SIGNAL: FM (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 $\log_{10}$ (W) = 38.28 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1672.98	-53.48	6.10	-47.38	V	72.7
2509.47	-59.08	6.70	-52.38	V	77.7
3345.96	-67.48	6.80	-60.68	V	86.0
4182.45	-71.68	6.50	-65.18	V	90.5
5018.94	-78.88	7.00	-71.88	V	97.2

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

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. 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 spurious level is recorded. 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.

6.1 Test Data (Continued)

6.4 AMPS Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 848.97 MHz
CHANNEL: 0799 (High)
MEASURED OUTPUT POWER: 25.283 dBm = 0.338 W
MODULATION SIGNAL: FM (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 $\log_{10}$ (W) = 38.28 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1697.94	-50.08	6.10	-43.98	V	69.3
2546.91	-49.38	6.70	-42.68	V	68.0
3395.88	-60.28	6.80	-53.48	V	78.8
4244.85	-60.78	6.50	-54.28	V	79.6
5093.82	-75.18	7.00	-68.18	V	93.5

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

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. 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 spurious level is recorded. 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.

6.1 Test Data (Continued)

6.5 CELLULAR CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 824.70 MHz
CHANNEL: 1013 (Low)
MEASURED OUTPUT POWER: 24.423 dBm = 0.277 W
MODULATION SIGNAL: CDMA (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 $\log_{10}$ (W) = 37.42 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1649.40	-50.98	6.10	-44.88	V	69.3
2474.10	-53.28	6.70	-46.58	V	71.0
3298.80	-62.08	6.80	-55.28	V	79.7
4123.50	-66.58	6.50	-60.08	V	84.5

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

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. 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 spurious level is recorded. 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.

6.1 Test Data (Continued)

6.6 CELLULAR CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 835.89 MHz
CHANNEL: 0363 (Mid)
MEASURED OUTPUT POWER: 24.423 dBm = 0.277 W
MODULATION SIGNAL: CDMA (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 $\log_{10}$ (W) = 37.42 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1671.78	-53.78	6.10	-47.68	V	72.1
2507.67	-60.08	6.70	-53.38	V	77.8
3343.56	-64.48	6.80	-57.68	V	82.1
4179.45	-71.78	6.50	-65.28	V	89.7

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:
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. 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 spurious level is recorded. 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.

6.1 Test Data (Continued)

6.7 CELLULAR CDMA Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 848.31 MHz
CHANNEL: 0777 (High)
MEASURED OUTPUT POWER: 24.423 dBm = 0.277 W
MODULATION SIGNAL: CDMA (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 $\log_{10}$ (W) = 37.42 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1696.62	-48.68	6.10	-42.58	V	67.0
2544.93	-54.78	6.70	-48.08	V	72.5
3393.24	-60.83	6.80	-54.03	V	78.4
4241.55	-71.68	6.50	-65.18	V	89.6

NOTES:

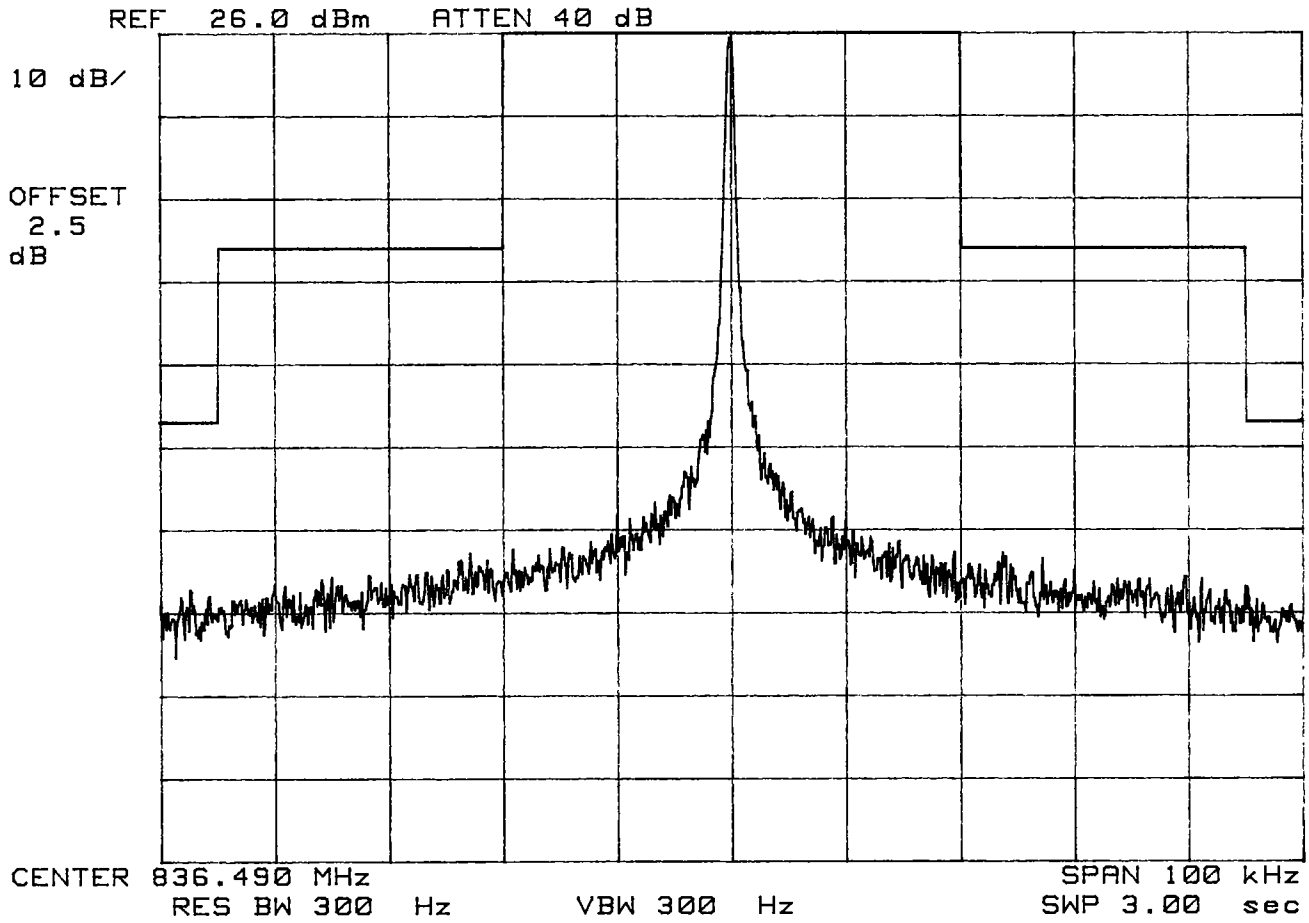
Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:
The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. 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 spurious level is recorded. 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.

PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:JVPH0622
BENQ
DUAL-MODE PHONE
AMPS CHANNEL 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:Unmodulated Signal

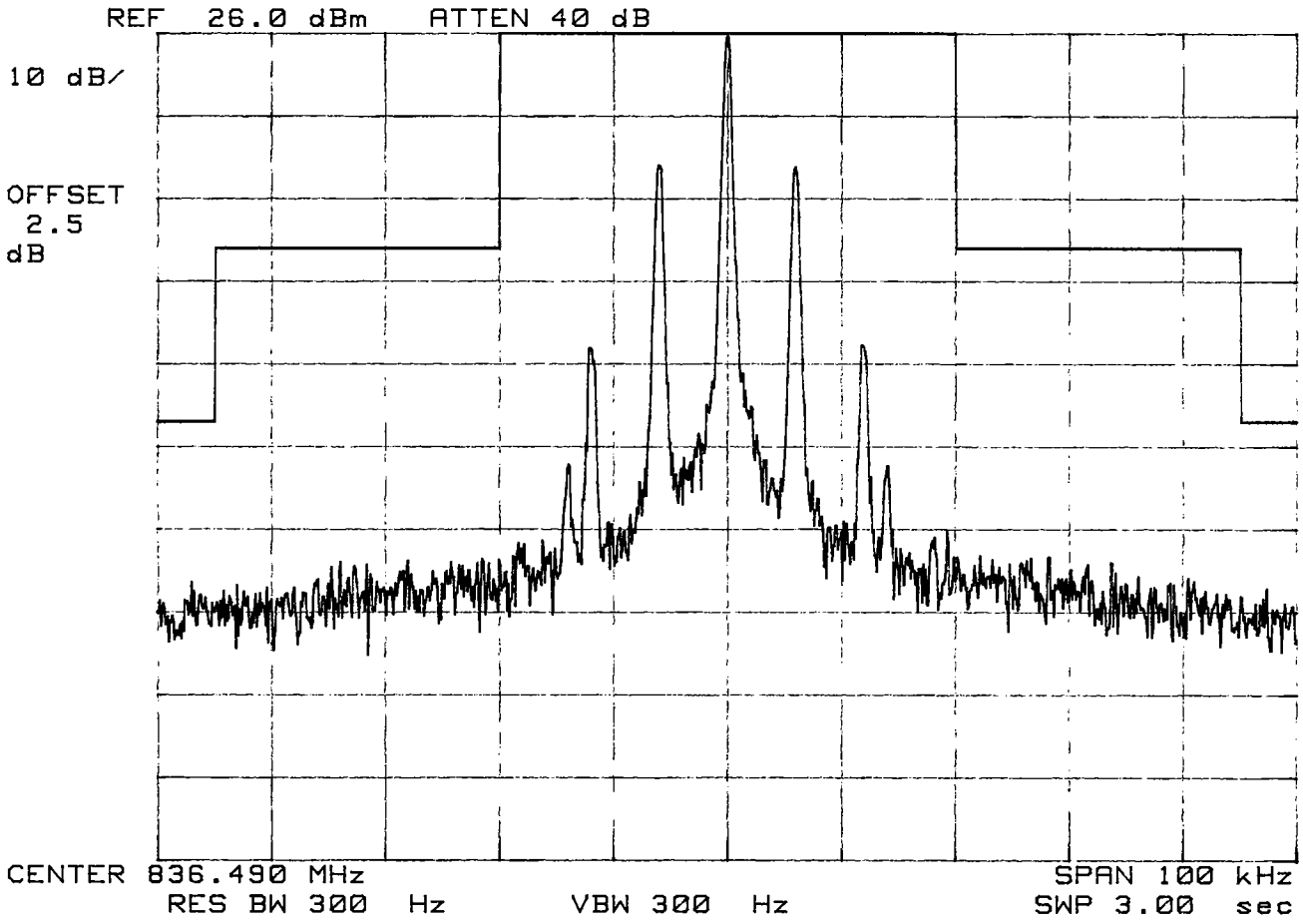


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:JVPH0622
BENQ
DUAL-MODE PHONE
AMPS CHANNEL 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:SAT

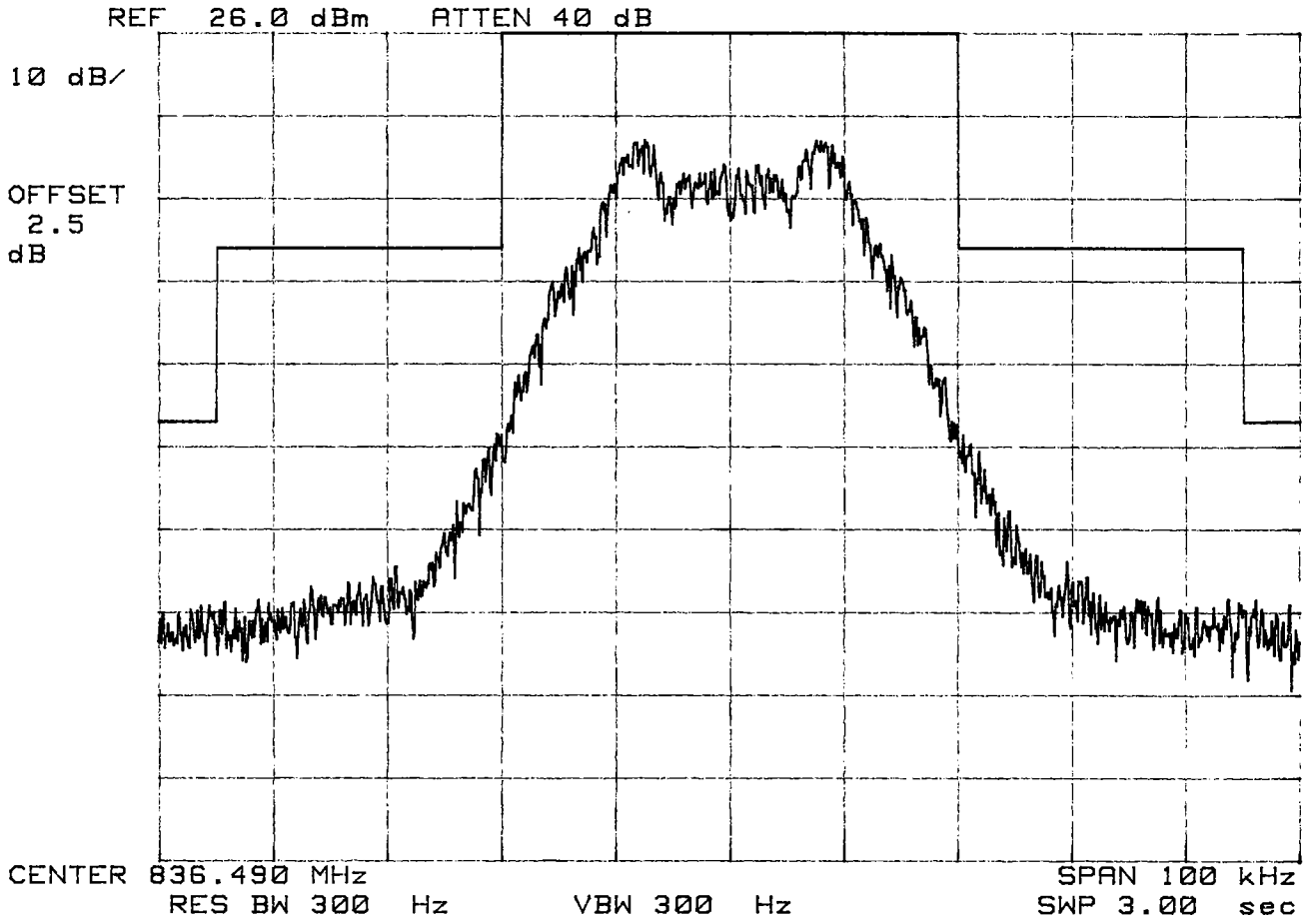


PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:JVPH0622
BENQ
DUAL-MODE PHONE
AMPS CHANNEL 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:SAT + DTMF



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:JVPH0622
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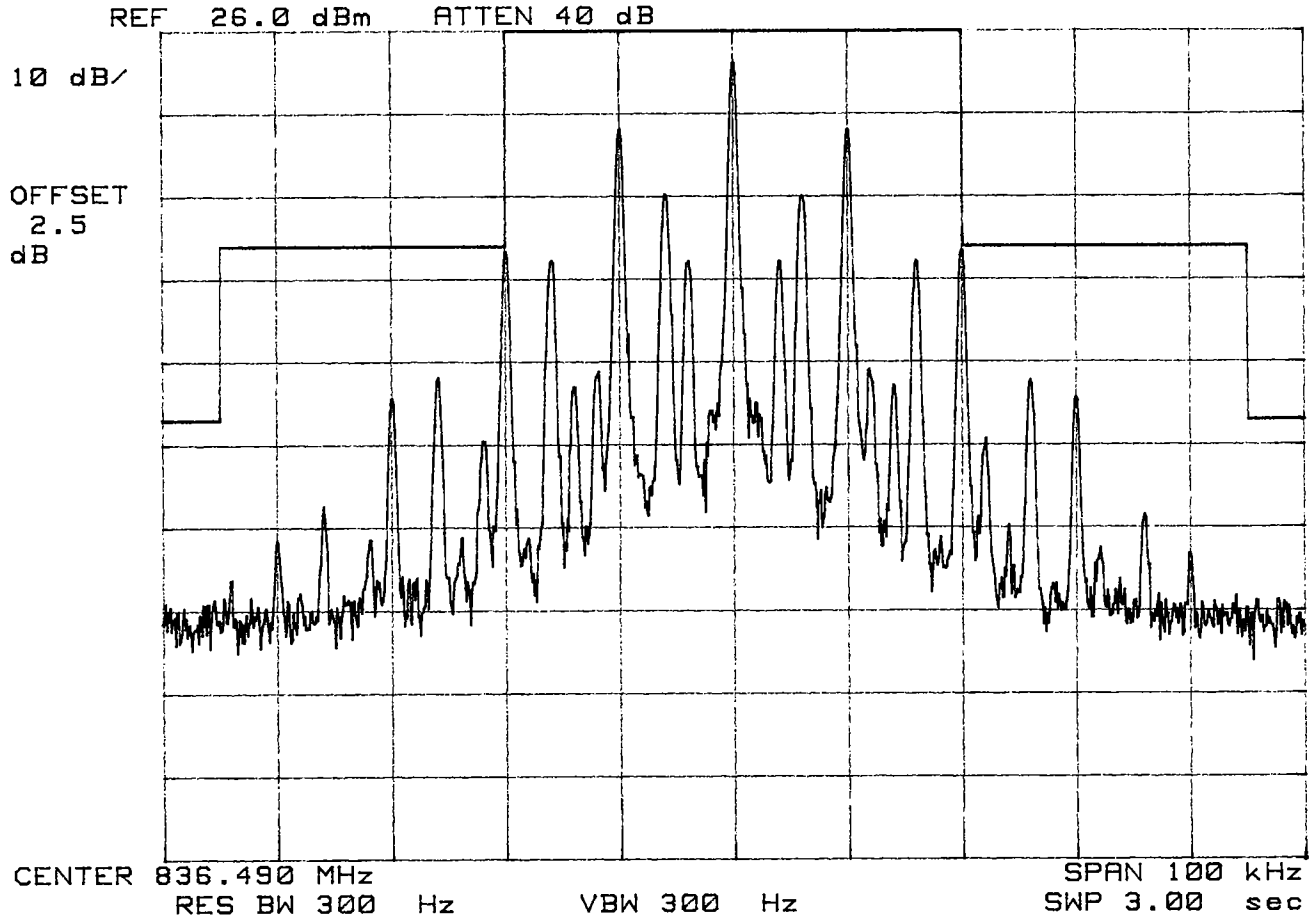
DUAL-MODE PHONE
AMPS CHANNEL 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:SAT + ST



PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:JVPH0622
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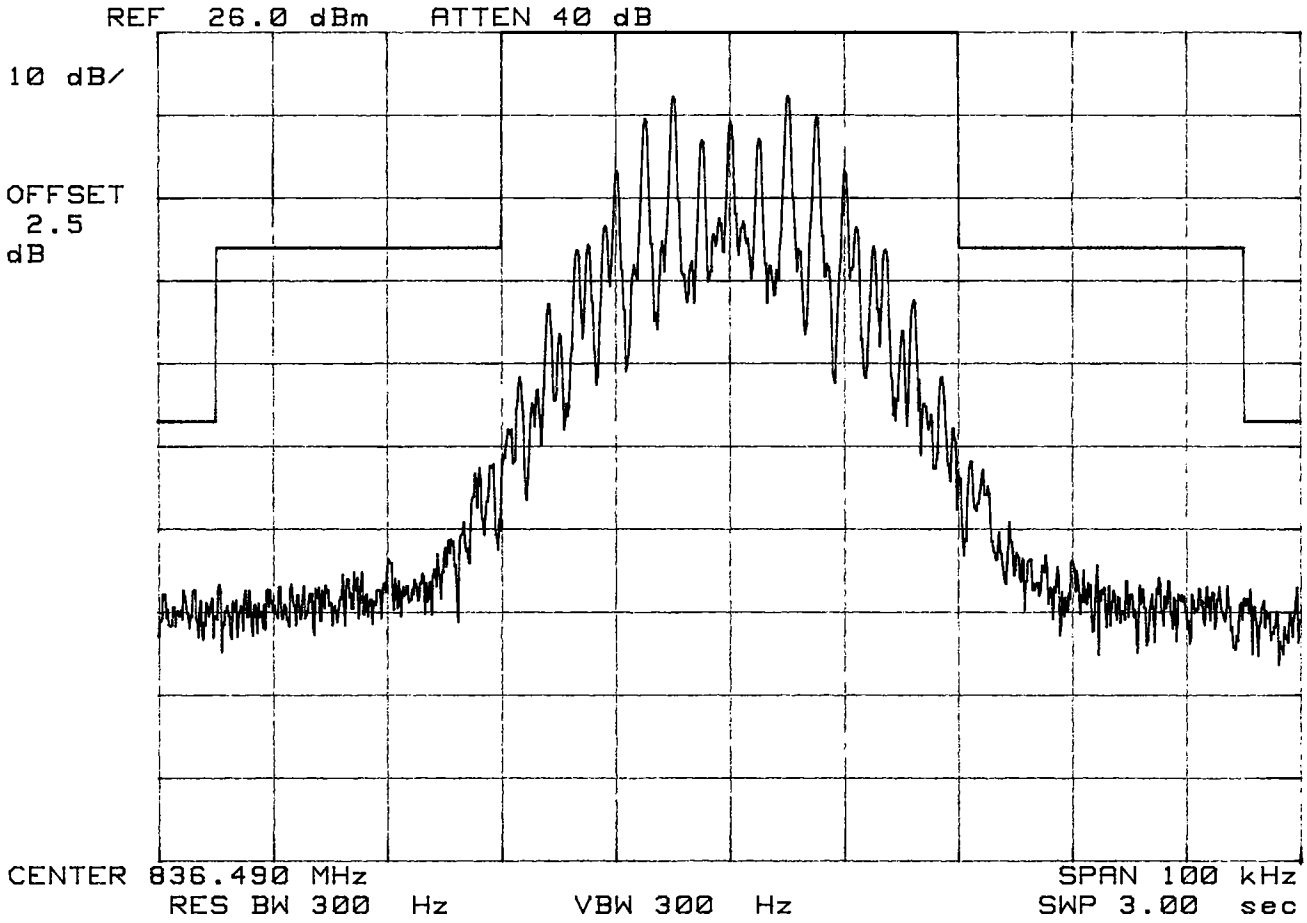
DUAL-MODE PHONE
AMPS CHANNEL 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:SAT + Voice



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SPECTRUM ANALYZER PRESENTATION

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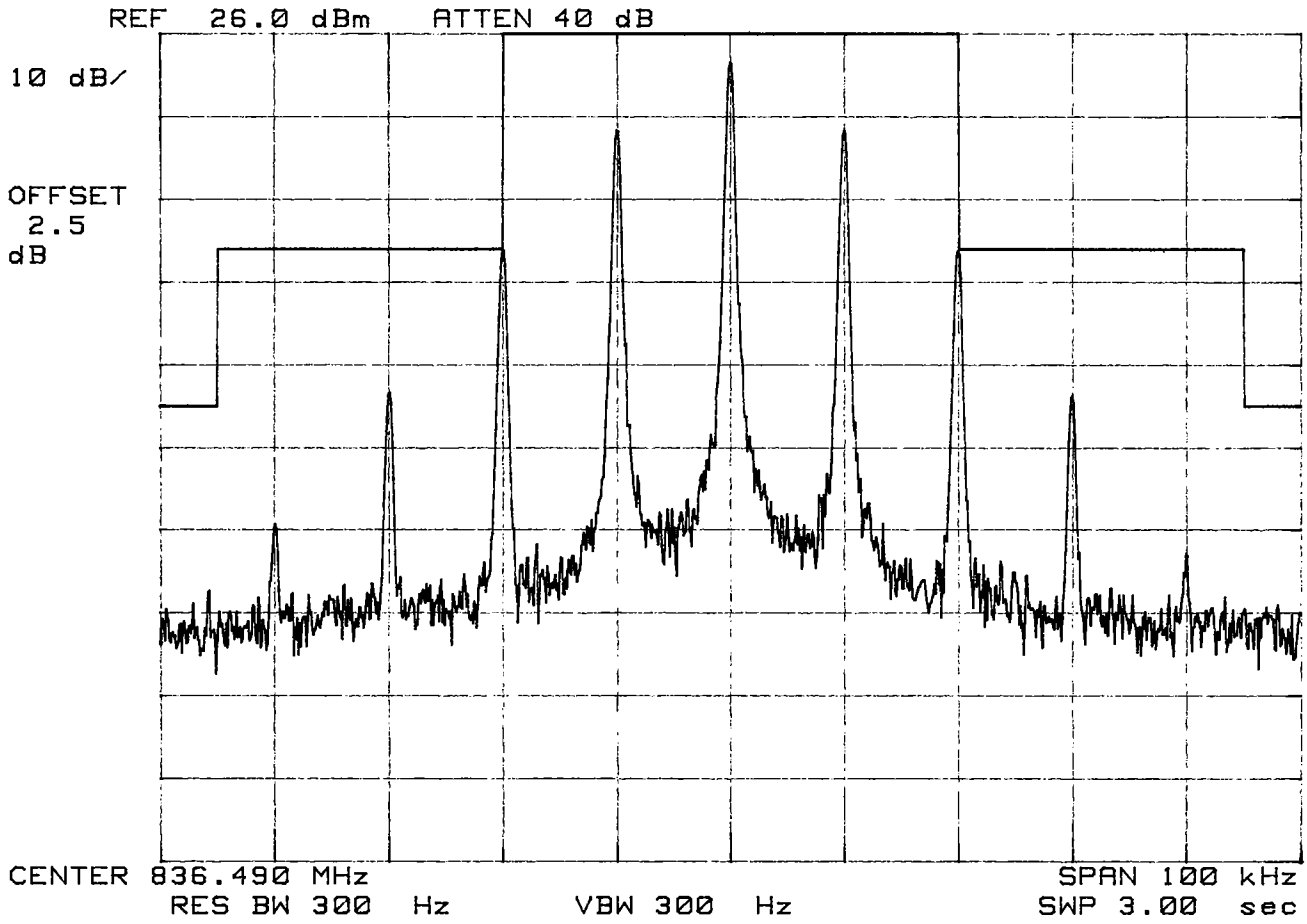
DUAL-MODE PHONE
AMPS CHANNEL 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:ST



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SPECTRUM ANALYZER PRESENTATION

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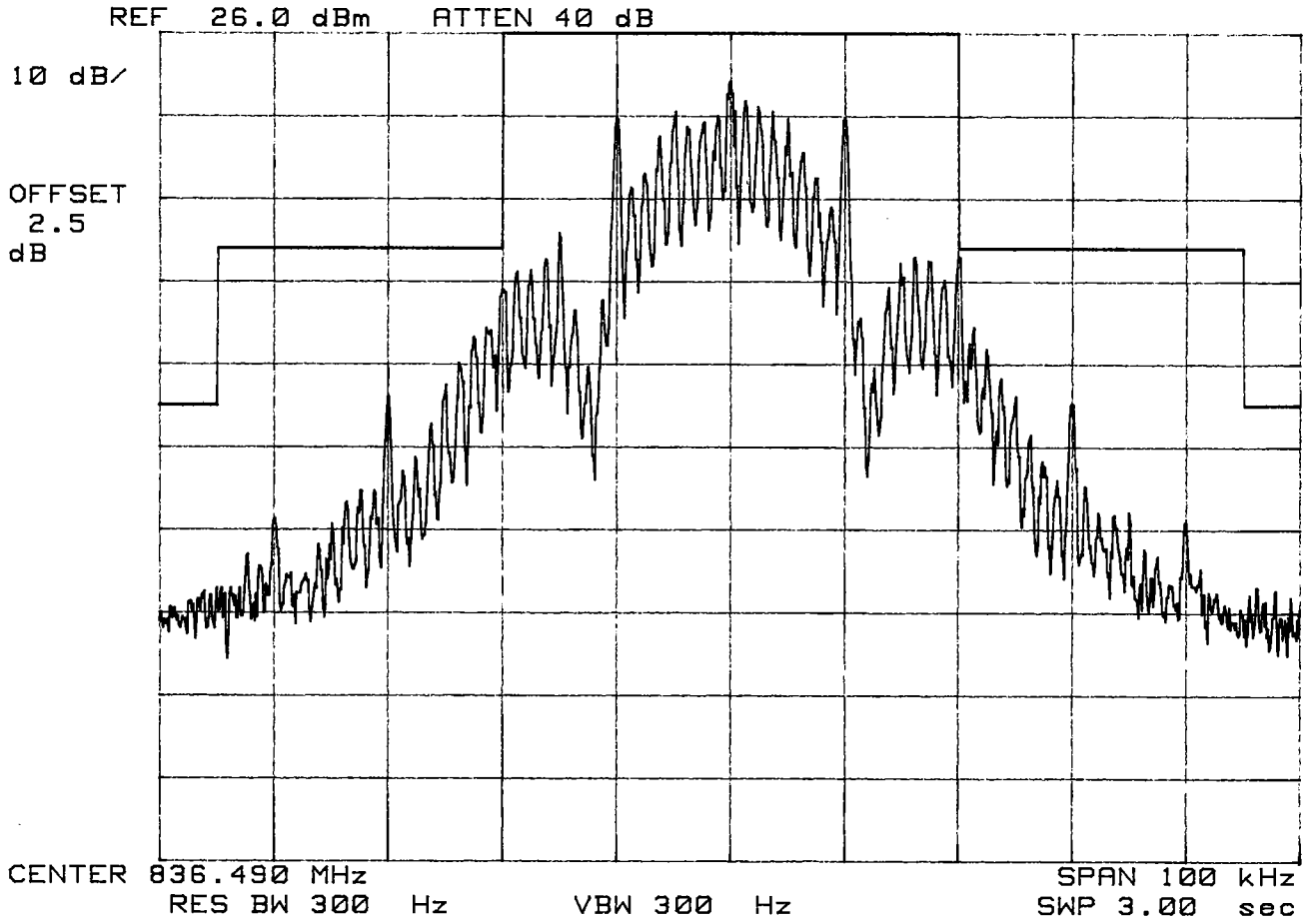
BENQ
DUAL-MODE PHONE
AMPS CHANNEL 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:Wide Band Data

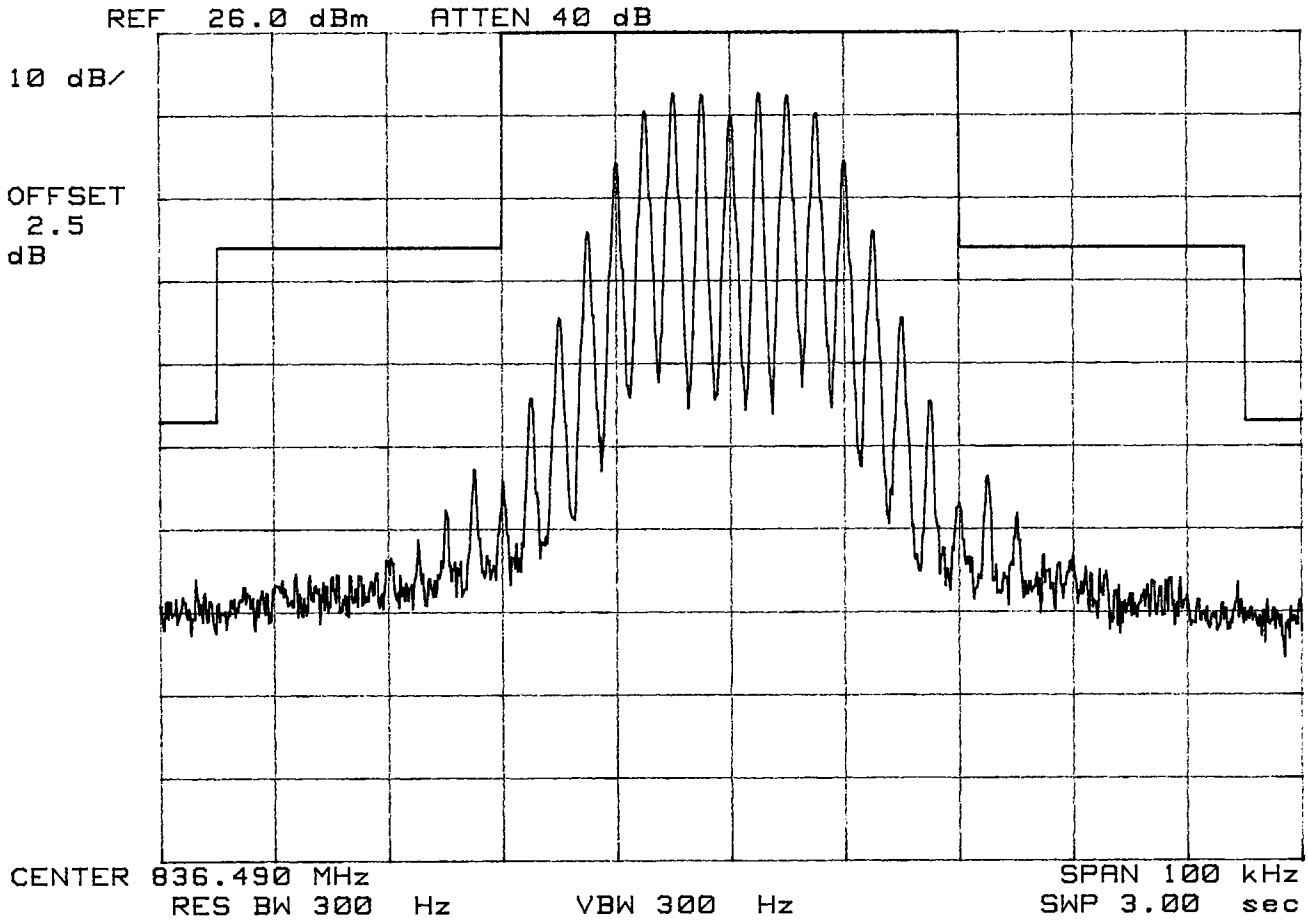


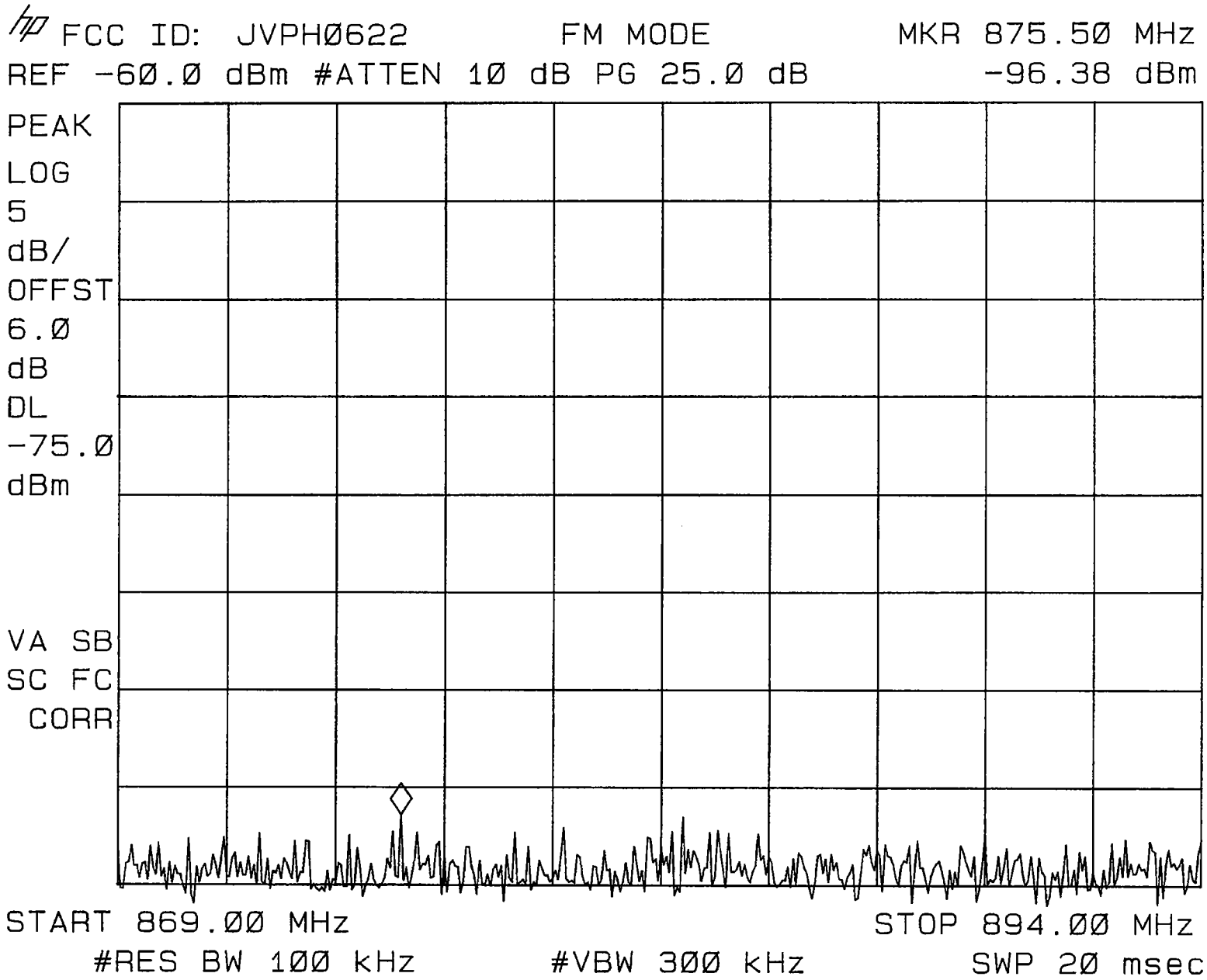
PCTEST Engineering Lab.

SPECTRUM ANALYZER PRESENTATION

FCC ID:JVPH0622
BENQ
DUAL-MODE PHONE
AMPS CHANNEL 383
Operating Frequency: 836.490 MHz
Output Power : 26.0 dBm

Test Mode:Voice

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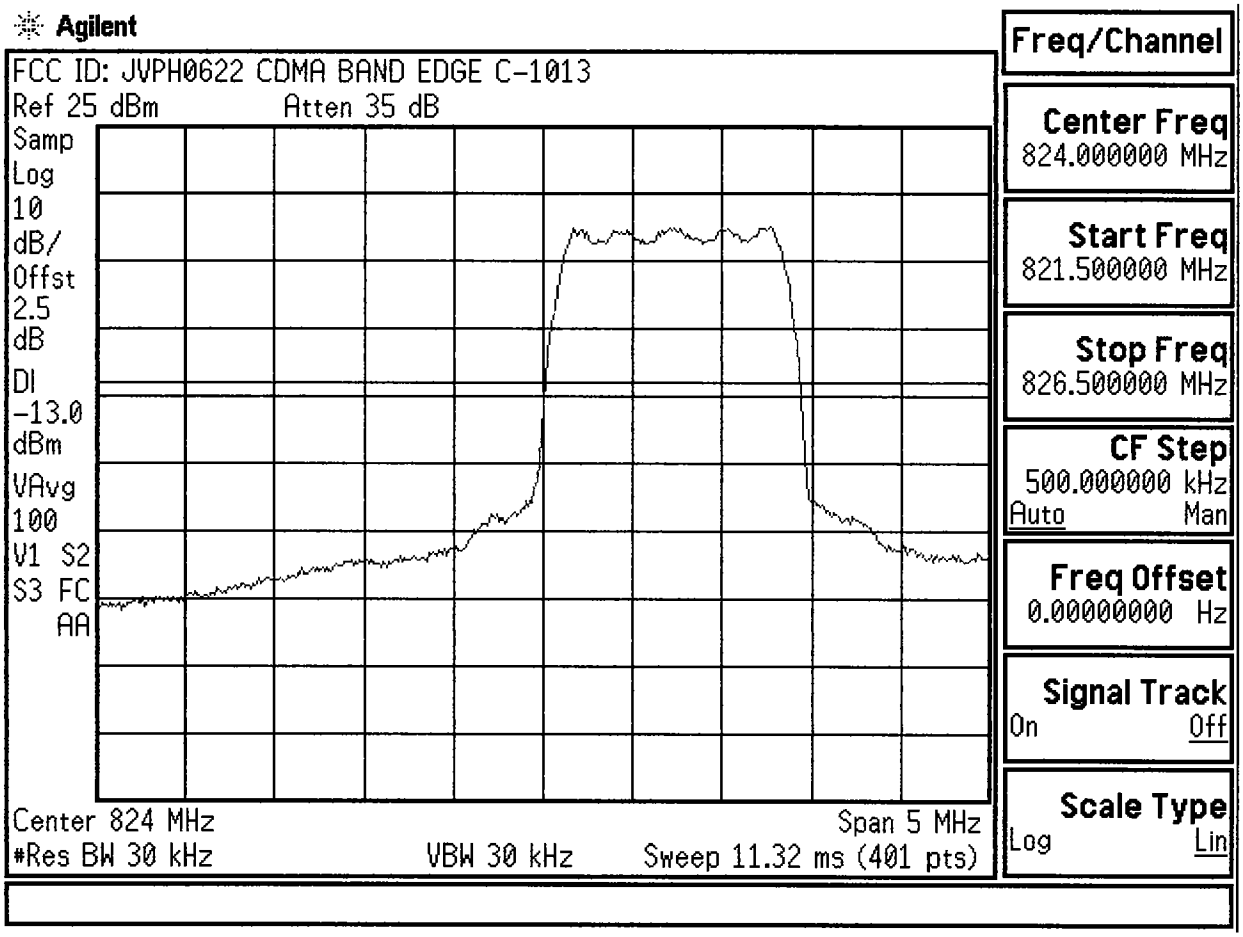
-96.38 dBm
PEAK
LOG
5
dB/
OFFST
6.0
dB
DL
-75.0
dBm
VA SB
SC FC
CORR
START 869.00 MHz
STOP 894.00 MHz
#RES BW 100 kHz
#VBW 300 kHz
SWP 20 msec


Agilent
FCC ID: JVPH0622 CDMA BAND EDGE C-1013
Ref 25 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.5
dB
Dl
-13.0
dBm
VAvg
100
V1 S2
S3 FC
AA
Center 824 MHz
#Res BW 30 kHz
VBW 30 kHz
Span 5 MHz
Sweep 11.32 ms (401 pts)
Freq/Channel
Center Freq
824.000000 MHz
Start Freq
821.500000 MHz
Stop Freq
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Auto
Man
Freq Offset
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Signal Track
On
Off
Scale Type
Log
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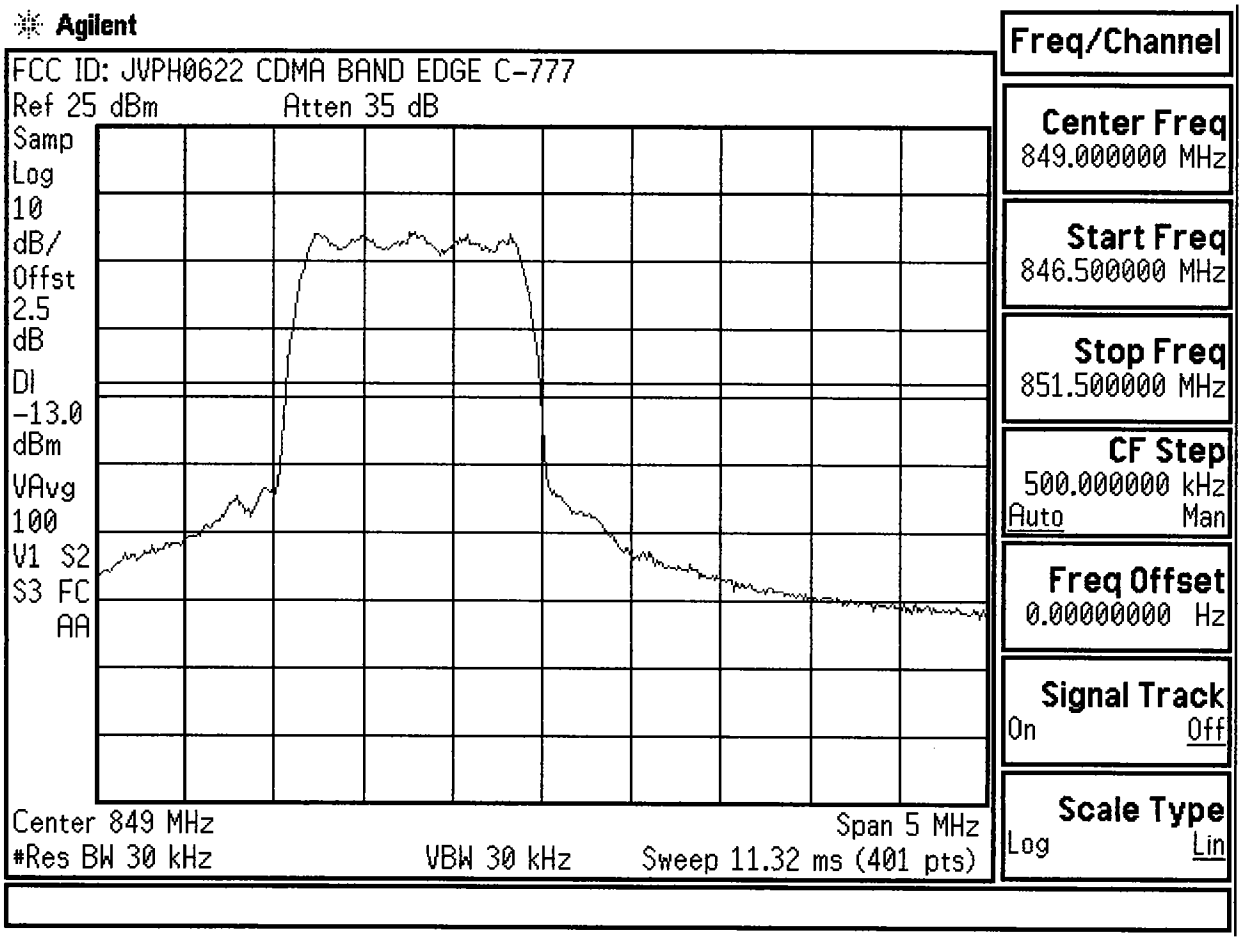
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Ref 25 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.5
dB
Dl
-13.0
dBm
VAvg
100
V1 S2
S3 FC
AA
Center 849 MHz
#Res BW 30 kHz
VBW 30 kHz
Span 5 MHz
Sweep 11.32 ms (401 pts)
Freq/Channel
Center Freq
849.000000 MHz
Start Freq
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Freq Offset
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Signal Track
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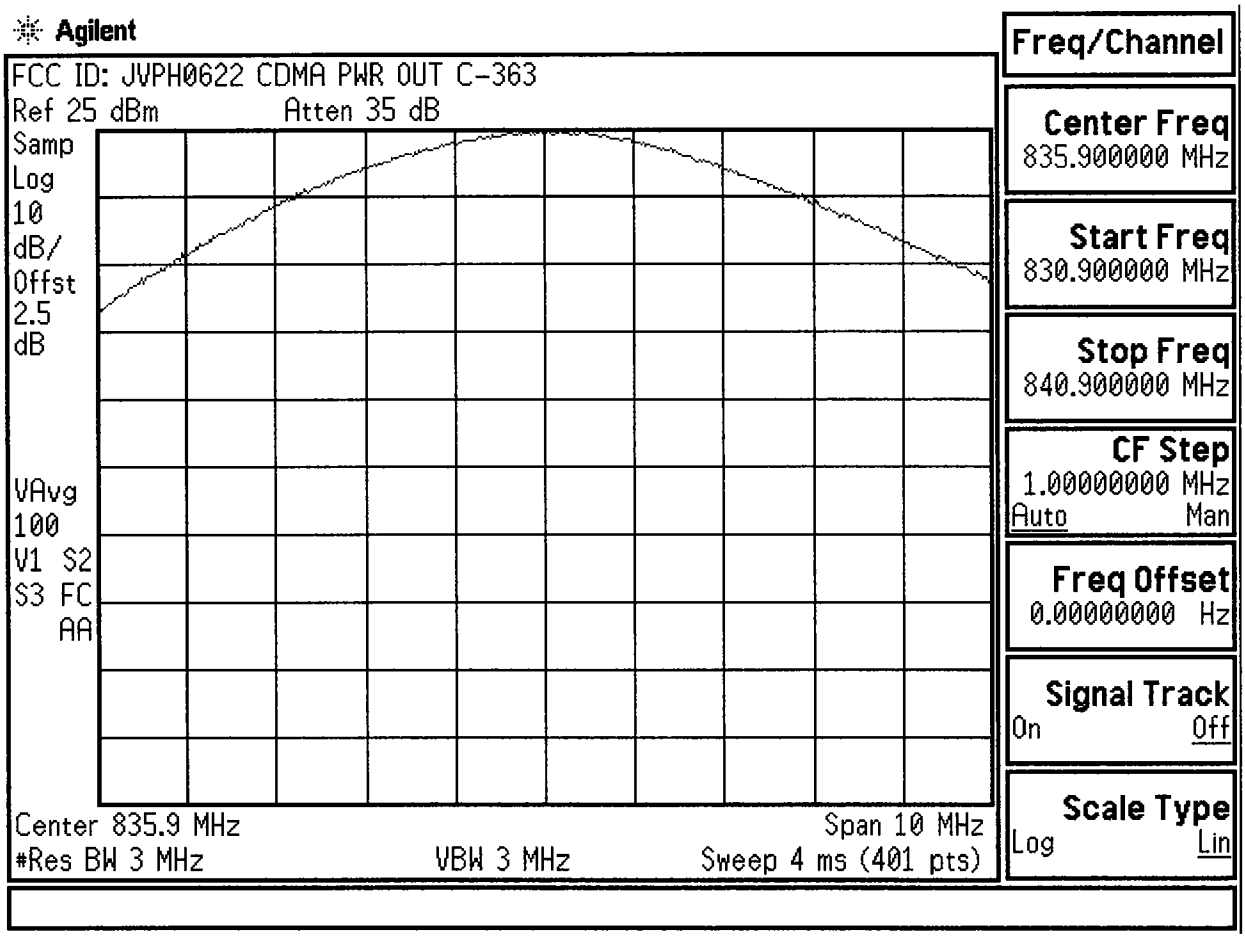
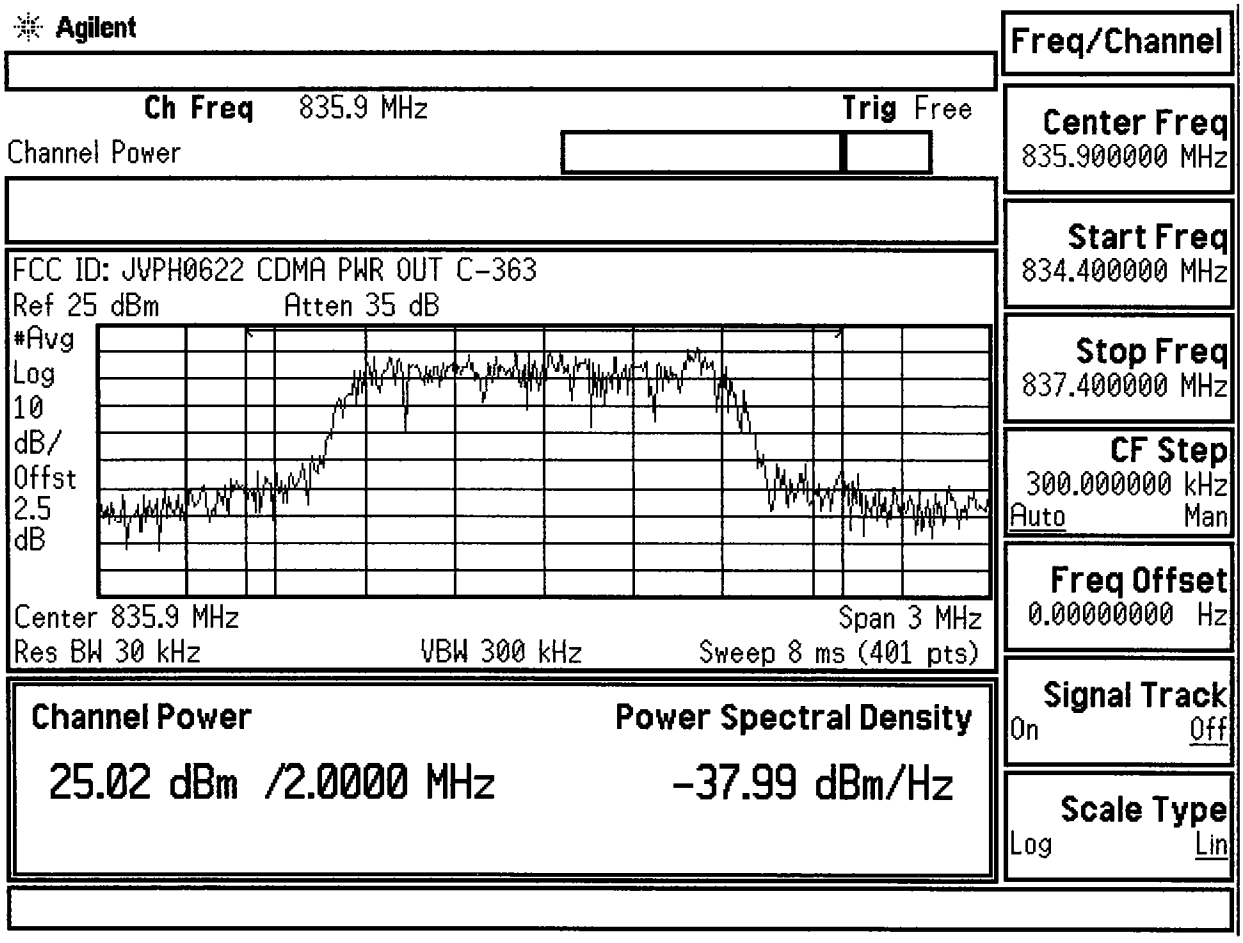
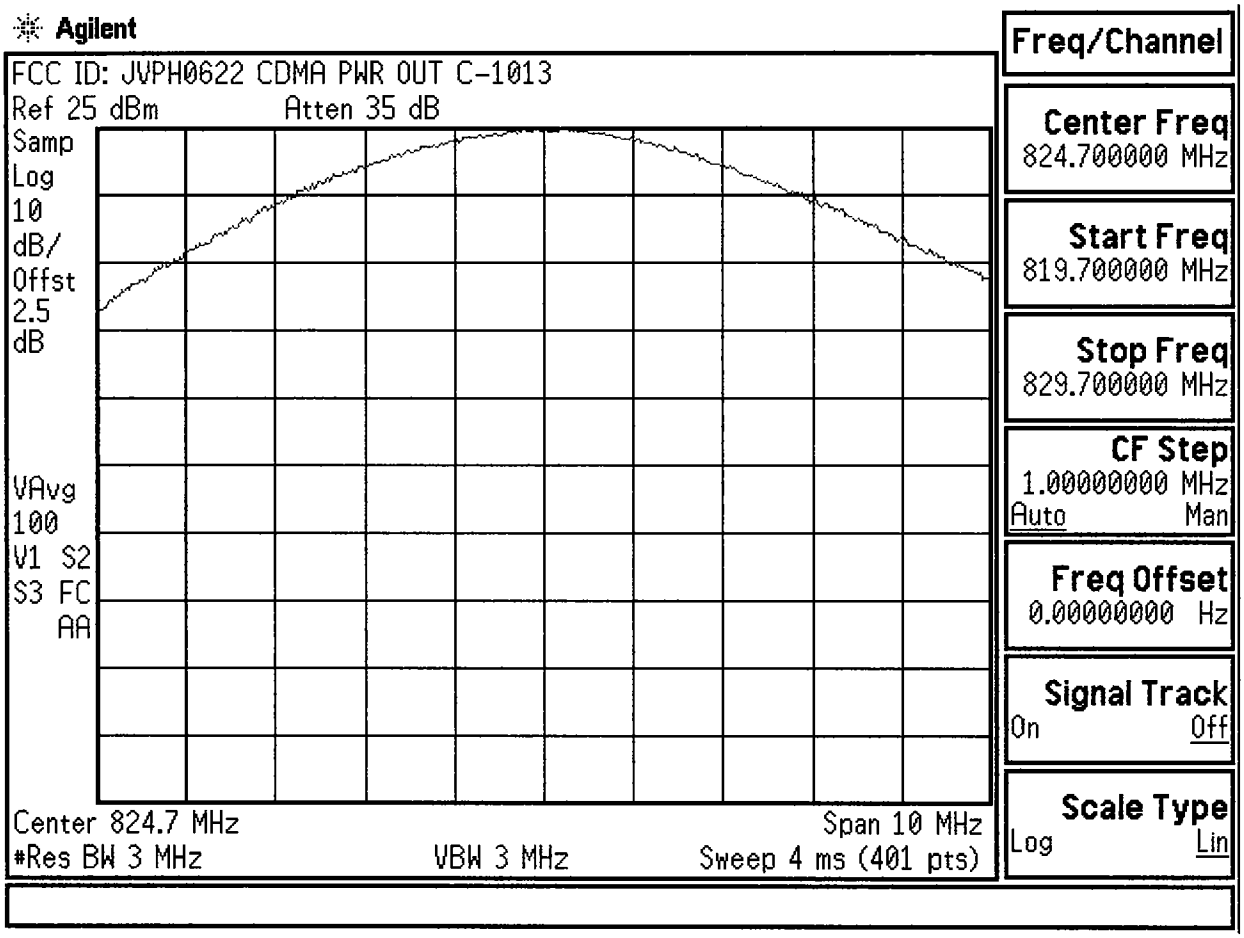
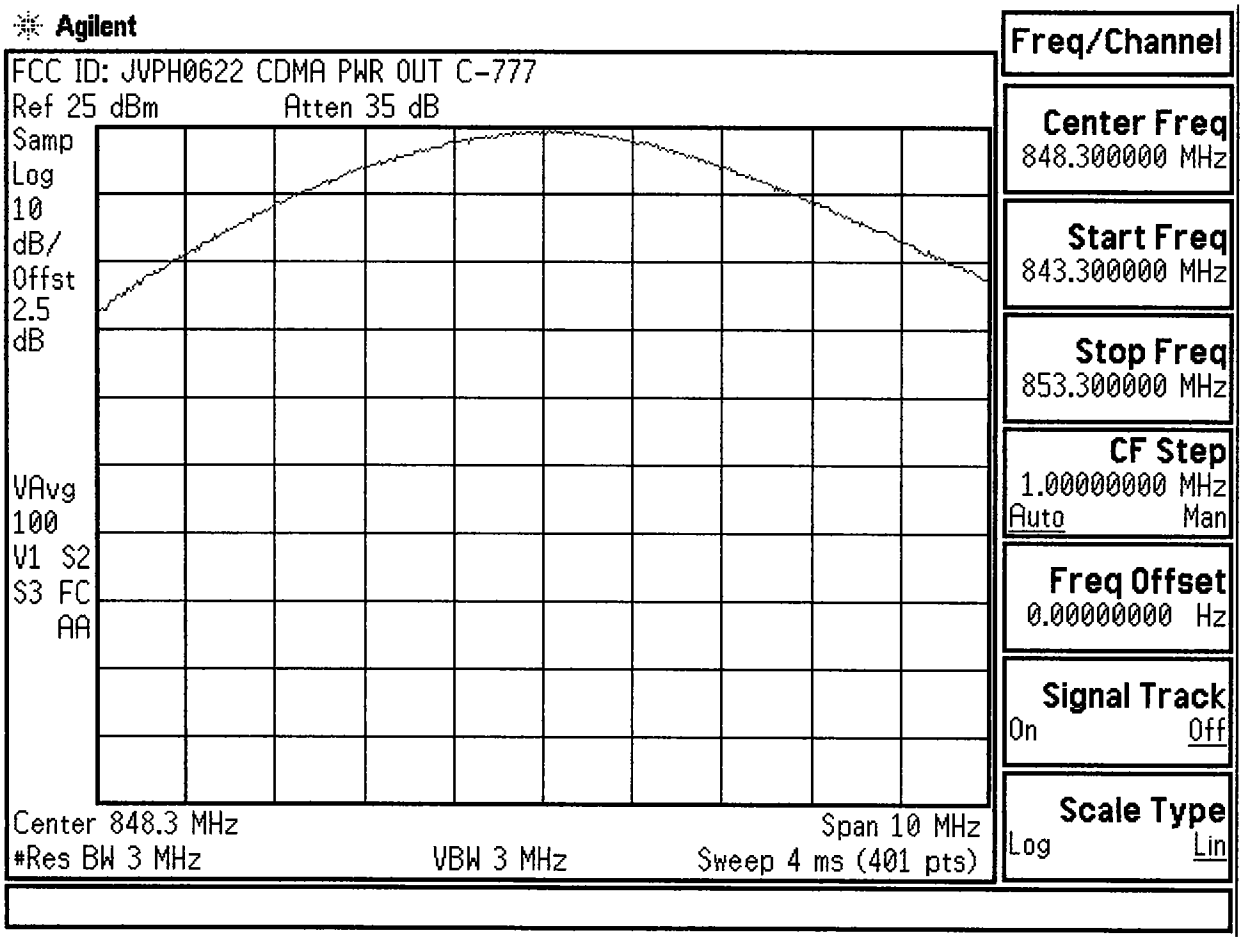
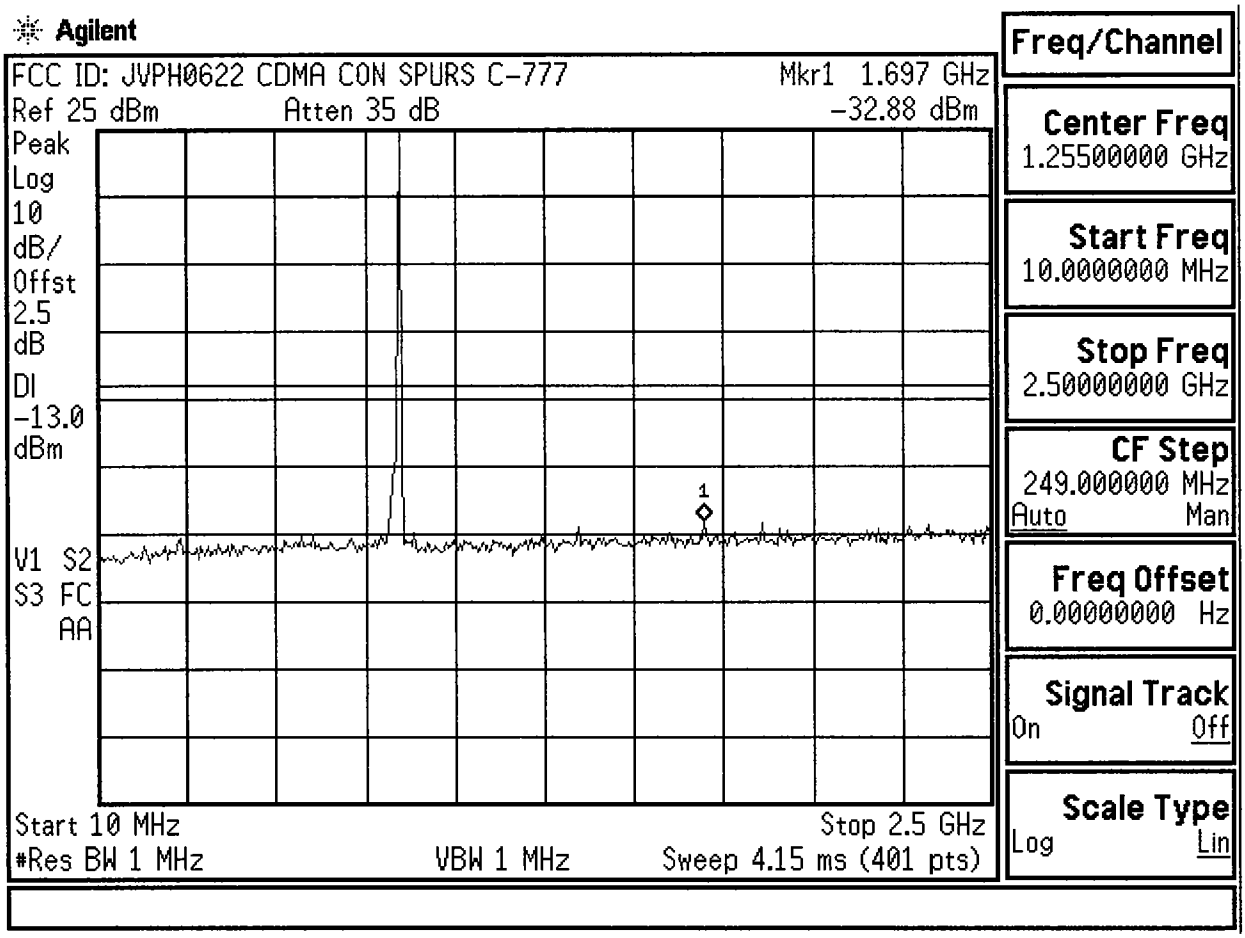
Scale Type
Log
Lin

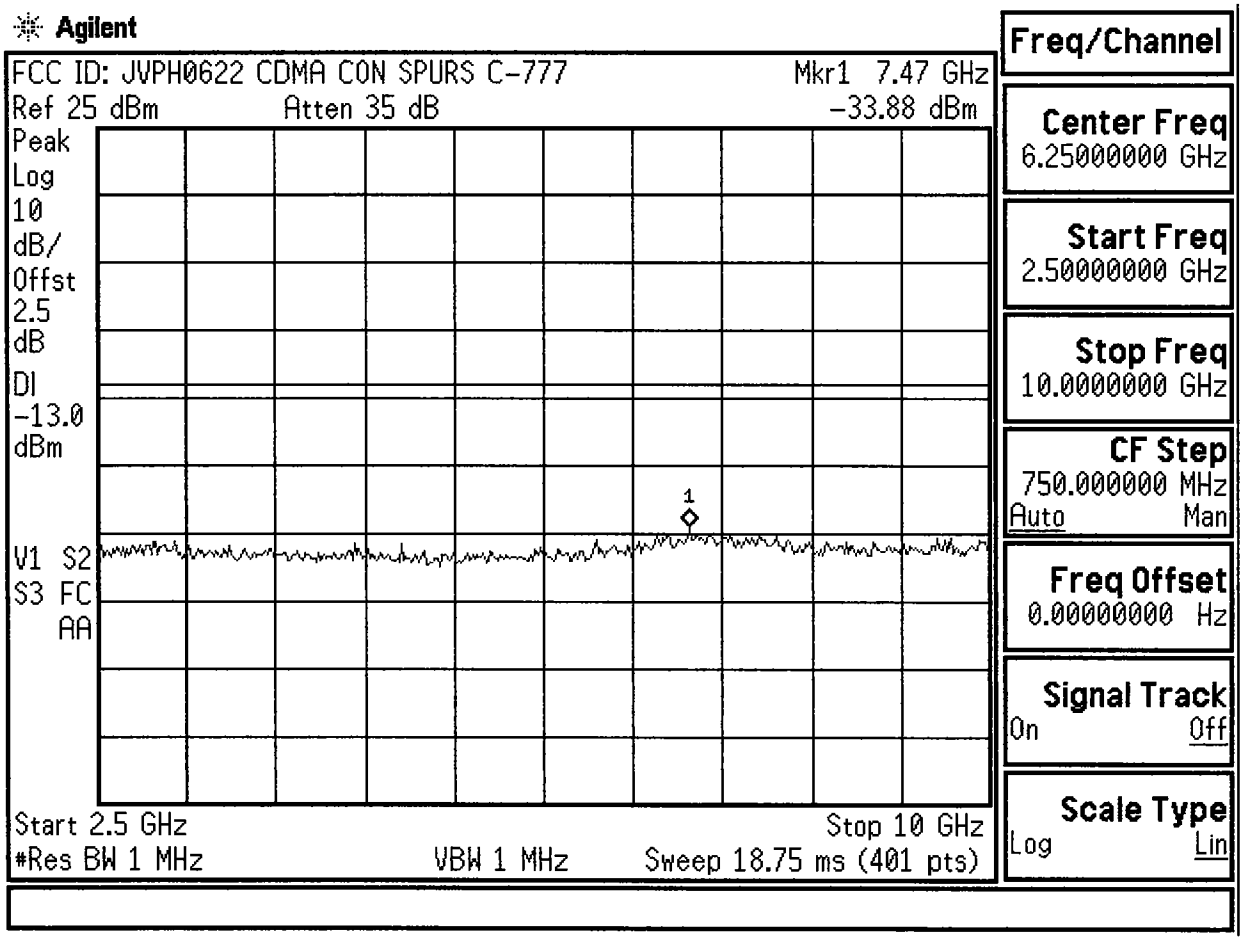

Agilent
FCC ID: JVPH0622 CDMA PWR OUT C-363
Ref 25 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.5
dB
VAvg
100
V1 S2
S3 FC
AA
Center 835.9 MHz
Span 10 MHz
#Res BW 3 MHz
VBW 3 MHz
Sweep 4 ms (401 pts)
Freq/Channel
Center Freq
835.900000 MHz
Start Freq
830.900000 MHz
Stop Freq
840.900000 MHz
CF Step
1.00000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

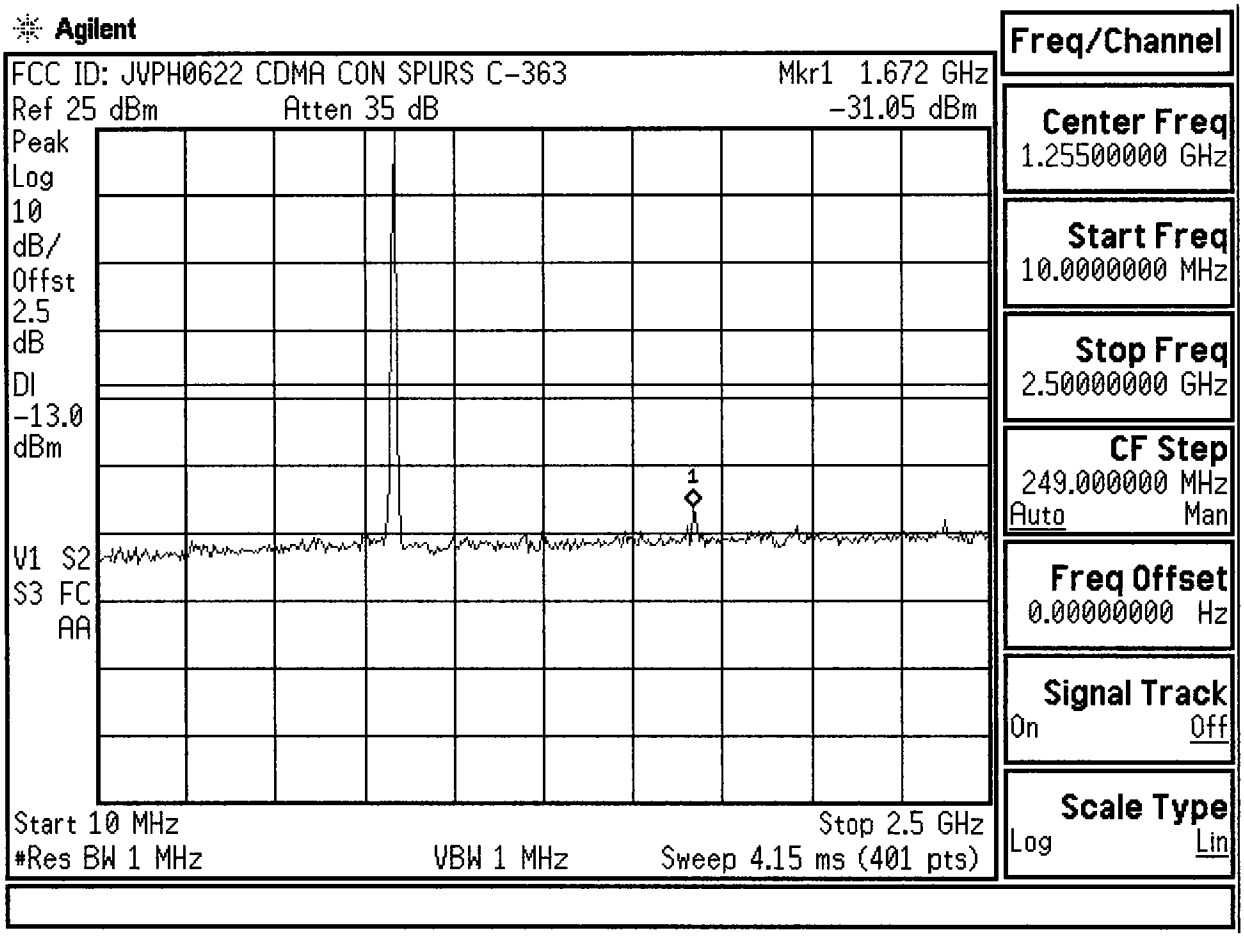

Agilent
Ch Freq 835.9 MHz
Trig Free
Channel Power
FCC ID: JVPH0622 CDMA PWR OUT C-363
Ref 25 dBm
Atten 35 dB
#Avg
Log
10
dB/
Offst
2.5
dB
Center 835.9 MHz
Span 3 MHz
Res BW 30 kHz
VBW 300 kHz
Sweep 8 ms (401 pts)
Channel Power
25.02 dBm /2.0000 MHz
Power Spectral Density
-37.99 dBm/Hz
Freq/Channel
Center Freq
835.900000 MHz
Start Freq
834.400000 MHz
Stop Freq
837.400000 MHz
CF Step
300.000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

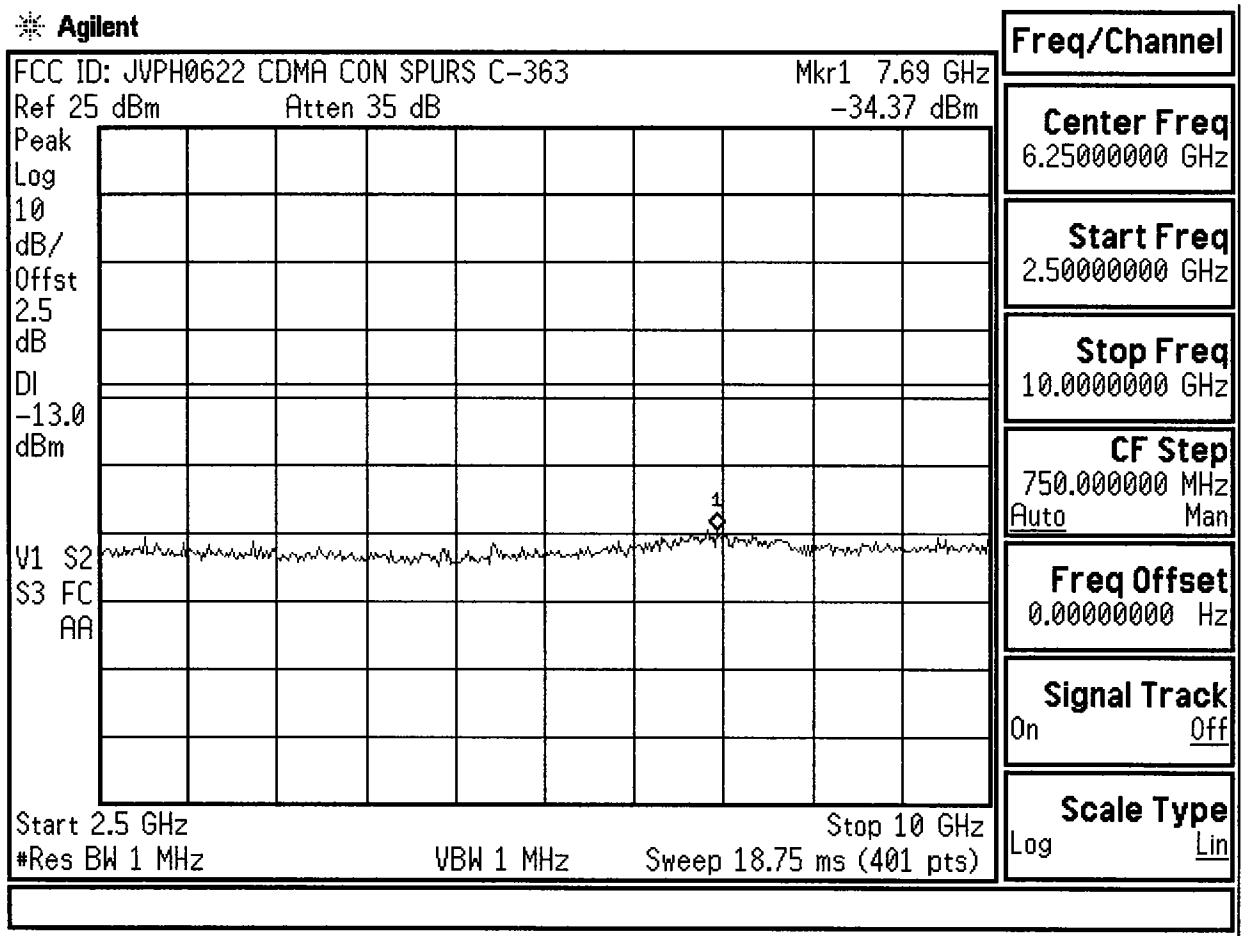

Agilent
FCC ID: JVPH0622 CDMA PWR OUT C-1013
Ref 25 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.5
dB
VAvg
100
V1 S2
S3 FC
AA
Center 824.7 MHz
#Res BW 3 MHz
VBW 3 MHz
Span 10 MHz
Sweep 4 ms (401 pts)
Freq/Channel
Center Freq
824.700000 MHz
Start Freq
819.700000 MHz
Stop Freq
829.700000 MHz
CF Step
1.000000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

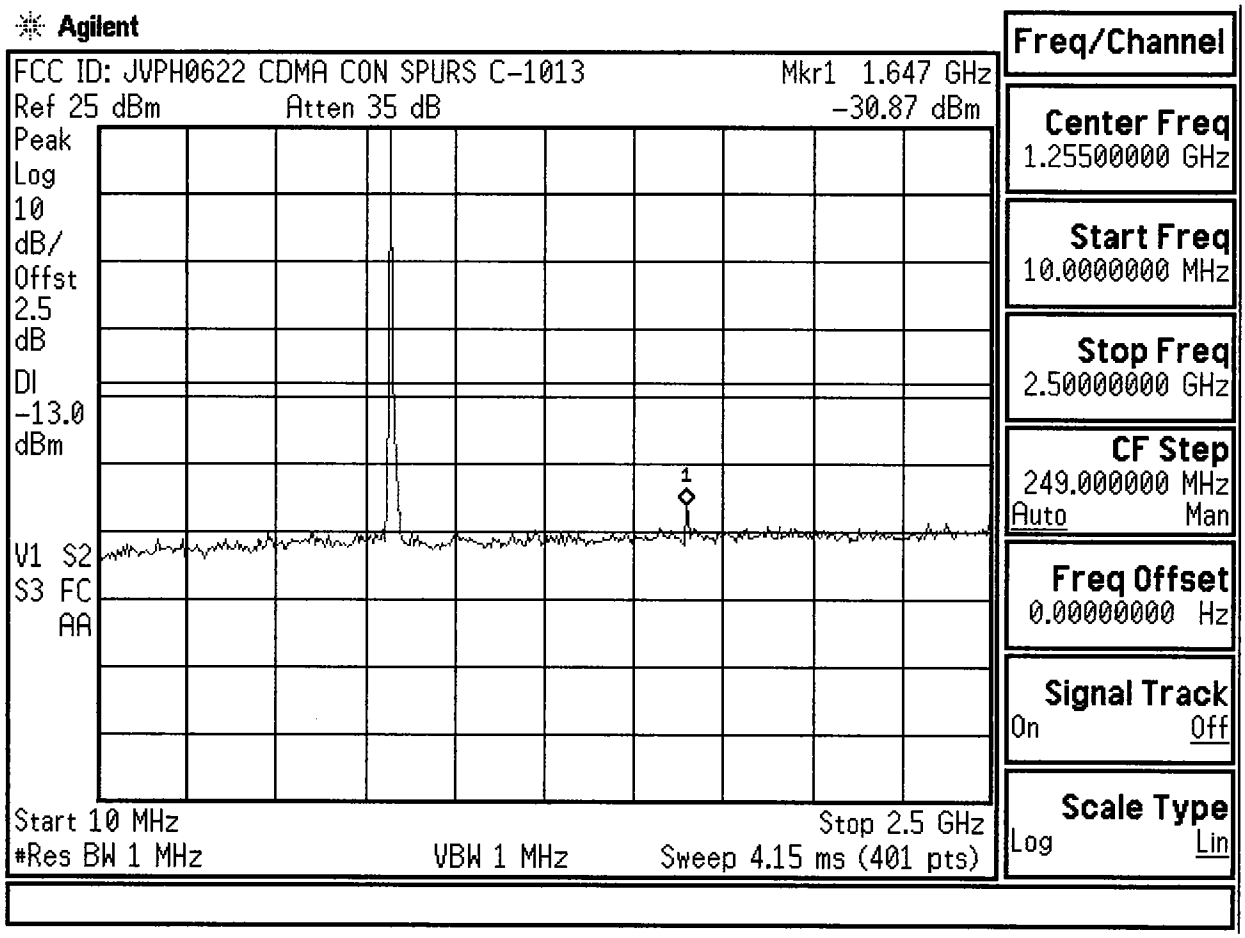

Agilent
FCC ID: JVPH0622 CDMA PWR OUT C-777
Ref 25 dBm
Atten 35 dB
Samp
Log
10
dB/
Offst
2.5
dB
VAvg
100
V1 S2
S3 FC
AA
Center 848.3 MHz
#Res BW 3 MHz
VBW 3 MHz
Span 10 MHz
Sweep 4 ms (401 pts)
Freq/Channel
Center Freq
848.300000 MHz
Start Freq
843.300000 MHz
Stop Freq
853.300000 MHz
CF Step
1.000000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

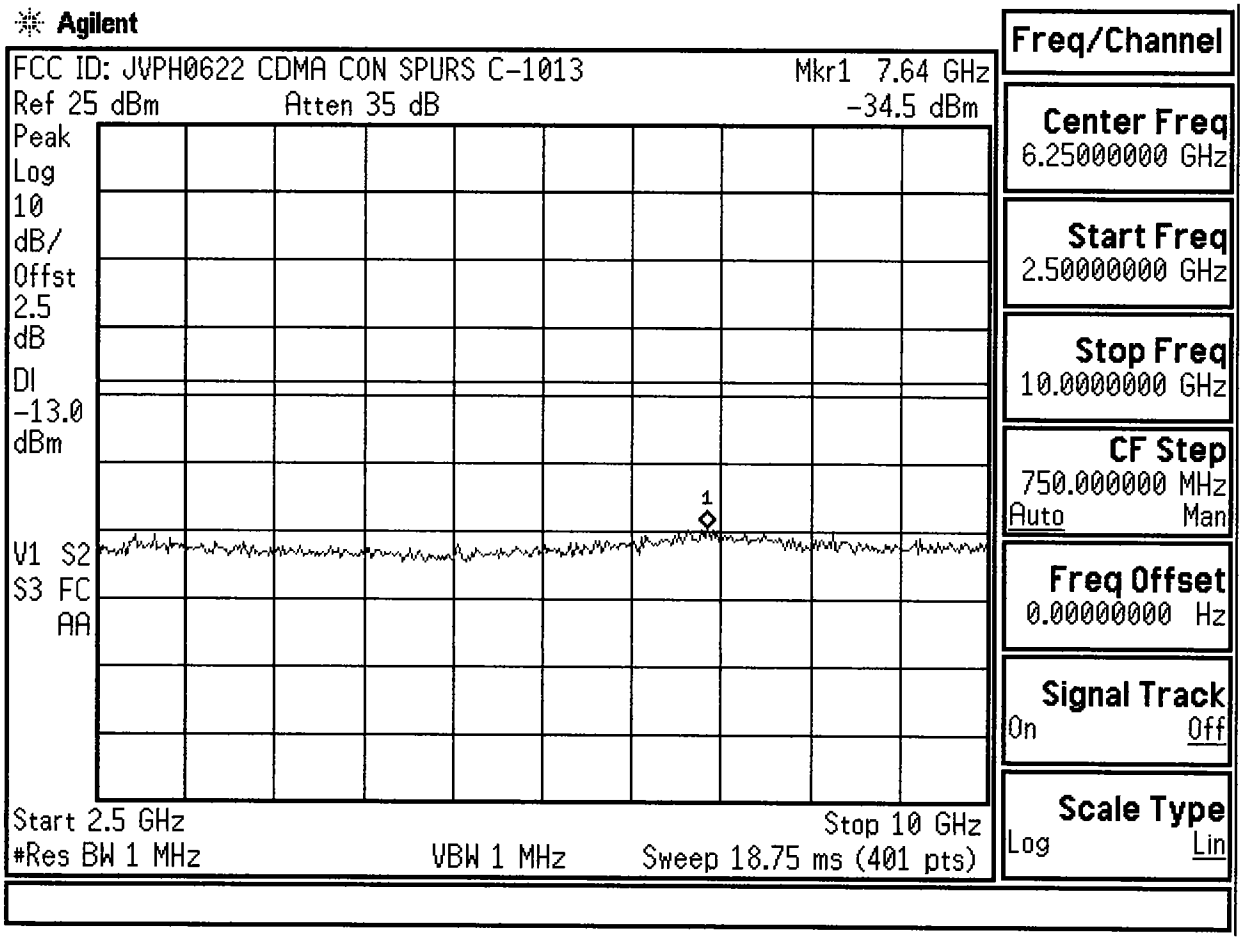

Agilent
FCC ID: JVPH0622 CDMA CON SPURS C-777
Mkr1 1.697 GHz
Ref 25 dBm
Atten 35 dB
-32.88 dBm
Peak
Log
10
dB/
Offst
2.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin


Agilent
FCC ID: JVPH0622 CDMA CON SPURS C-777
Mkr1 7.47 GHz
Ref 25 dBm
Atten 35 dB
-33.88 dBm
Peak
Log
10
dB/
Offst
2.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (401 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin


Agilent
FCC ID: JVPH0622 CDMA CON SPURS C-363
Mkr1 1.672 GHz
Ref 25 dBm
Atten 35 dB
-31.05 dBm
Peak
Log
10
dB/
Offst
2.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
Stop 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin


Agilent
FCC ID: JVPH0622 CDMA CON SPURS C-363
Mkr1 7.69 GHz
Ref 25 dBm
Atten 35 dB
-34.37 dBm
Peak
Log
10
dB/
Offst
2.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
Stop 10 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 18.75 ms (401 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin


Agilent
FCC ID: JVPH0622 CDMA CON SPURS C-1013
Mkr1 1.647 GHz
Ref 25 dBm
Atten 35 dB
-30.87 dBm
Peak
Log
10
dB/
Offst
2.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 10 MHz
#Res BW 1 MHz
VBW 1 MHz
Stop 2.5 GHz
Sweep 4.15 ms (401 pts)
Freq/Channel
Center Freq
1.25500000 GHz
Start Freq
10.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
249.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin


Agilent
FCC ID: JVPH0622 CDMA CON SPURS C-1013
Mkr1 7.64 GHz
Ref 25 dBm
Atten 35 dB
-34.5 dBm
Peak
Log
10
dB/
Offst
2.5
dB
Dl
-13.0
dBm
V1 S2
S3 FC
AA
Start 2.5 GHz
#Res BW 1 MHz
VBW 1 MHz
Stop 10 GHz
Sweep 18.75 ms (401 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Scale Type
Log
Lin

PCTEST Engineering Laboratory, Inc.
6660-B Dobbin Road • Columbia, MD 21045 • U.S.A.
TEL (410) 290-6652 • FAX (410) 290-6654
http://www.pctestlab.com

CERTIFICATE OF COMPLIANCE (SAR EVALUATION)

Benq Corporation
157 Shan-Ying Road Kweishan
Taoyuan 333
TAIWAN, R.O.C.
Attn: Mr. George Chiou
Technical Manager

Dates of Tests: Jan. 9-10, 2002
Test Report S/N: SAR.220110006.JVP
Test Site: PCTEST Lab, Columbia, MD USA

FCC ID	**JVPH0622**
APPLICANT	**Benq Corporation**

EUT Type:	**Dual-Mode Cellular Phone (AMPS/CDMA)**
Tx Frequency:	**824.04 – 848.97 MHz (AMPS) / 824.70 – 848.31 MHz (CDMA)**
Rx Frequency:	**869.04 – 893.97 MHz (AMPS) / 869.70 – 893.31 MHz (CDMA)**
Max. RF Output Power:	**0.424W ERP AMPS (26.273 dBm)** **0.344W ERP CDMA (25.373 dBm)**
Trade Name/Model(s):	***BENQ ACTON***
FCC Classification:	**Non-Broadcast Transmitter Held to Ear (TNE)**
Application Type:	**Certification**
FCC Rule Part(s):	**§2.1093; ET Docket 96.326**
Maximum SAR:	**1.4395 W/kg AMPS Brain SAR; 0.8122 W/kg AMPS Body SAR;** **1.1917 W/kg CDMA Brain SAR; 0.7064 W/kg CDMA Body SAR;**

This wireless portable device has been shown to be compliant for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE Std. C95.1-1992 and has been tested in accordance with the measurement procedures specified in ANSI/IEEE Std. C95.3-1992. (See Test Report)

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.

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

SAR.220110006.JVP

NVLAP LAB CODE 100431-0

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SAR MEASUREMENT REPORT

1.1 SCOPE

Environmental evaluation measurements of specific absorption rate[1] (SAR) distributions in simulated human tissues exposed to radiofrequency (RF) radiation from wireless portable devices for compliance with the rules and regulations of the U.S. Federal Communications Commission (FCC).[2]

Applicant Name:	**Benq Corporation**
Address:	**157 Shan-Ying Road Kweishan**
	Taoyuan 333
	TAIWAN, R.O.C.
Attention:	**Mr. George Chiou**
	Technical Manager

EUT Type:	Dual-Mode Cellular Phone (AMPS/CDMA)
Trade Name:	***BENQ***
Model(s):	***ACTON***
FCC IDENTIFIER:	**JVPH0622**
Tx Frequency:	824.04 – 848.97 MHz (AMPS)
	824.70 – 848.31 MHz (CDMA)
Rx Frequency:	869.04 – 893.97 MHz (AMPS)
	869.70 – 893.31 MHz (CDMA)
Application Type:	Certification
FCC Classification:	Non-Broadcast Transmitter Held to Ear (TNE)
FCC Rule Part(s):	§ 2.1093, Docket 96-326
Modulation(s):	AMPS/CDMA
Max RF. Output Power:	0.338W ERP AMPS (25.283 dBm)
	0.277W ERP CDMA (24.423 dBm)
Date(s) of Tests:	Jan. 9-10, 2002
Place of Tests:	PCTEST Engineering Lab.
	Columbia, MD, U.S.A.
Report Serial No.:	SAR.220110006.JVP

Fig. 1
SAR Test Setup

NVLAP Lab Code 100431-0

[1] *Specific Absorption Rate (SAR) is a measure of the rate of energy absorption due to exposure to an RF transmitting source (wireless portable device).*

[2] *IEEE/ANSI Std. C95.1-1992 limits are used to determine compliance with FCC ET-Docket 93-62.*