

Auxiliary Antenna Installation

Washington, DC

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This information is provided toward license application of the installation described in the following Construction Permits: BXP-20000317ABW (WBIG-FM), BXP-20000317ABX (WMZQ-FM), BXP-20000317ABZ (WWDC-FM), BXP-20000317ACB (WASH (FM)) and BXP-20000315ADA (WIHT (FM)), formerly WJMO-FM.

This installation involves use of a single ERI, 6 bay, antenna, model number SHPX-6AC-HW with ½ spacing and factory broadbanding. The antenna was installed as per the description in each stations' respective 301. This antenna serves as a mutually exclusive backup for each station. As such, there is no combiner. The antenna is fed by a wideband, solid state transmitter which allows selection of any one of these five frequencies for operation into the antenna.

This exhibits below complies with special conditions (1) and (2) for WASH, WBIG, WMZQ, WWDC and special condition (3) for WIHT (formerly WJMO-FM), showing before and after antenna parameters and monitor points for antenna array WWRC-AM and demonstrating compliance with the spurious emissions requirements of sections 73.317(b) through 73.317(d). Additionally, license values for each station's TPO are listed.

EXHIBIT 1
WWRC-AM parameters

The following antenna parameters were gathered before installation:
DA-D

Tower	Loop	Dev (%)	Phase	Dev (°)	Base I (A)	Base Ratio	dev (%)
1	1.000	---	0.0	---	10.3	1.00	---
2	0.504	-0.78	+132.5	-0.4	5.3	0.514	+1.2
3	0.415	+0.73	-170.0	-0.4	4.3	0.417	+1.2

Monitor Points:

52°	15 mV/m
198°	25 mV/m
240°	11 mV/m
280°	N/a
325°	16 mV/m

DA-N

Tower	Loop	Dev (%)	Phase	Dev (°)	Base I (A)	Base Ratio	dev (%)
1	1.000	---	0.0	---	11.5	1.00	---
2	.473	-1.25	+155.1	+1.0	5.5	.478	-1.84
3	.396	0.76	-150.0	+1.3	4.7	.409	+3.28

Monitor Points:

52°	2.1 mV/m
198°	67.0 mV/m
240°	N/a
280°	1.2 mV/m
325°	16.5 mV/m

The following parameters were gathered after antenna installation:

DA-D

Tower	Loop	Dev (%)	Phase	Dev (°)	Base I (A)	Base Ratio	dev (%)
1	1.000	---	0.0	---	10.3	1.00	---
2	0.504	-0.78	+132.2	-0.7	5.3	0.514	+1.2
3	0.416	+0.97	-170.1	-0.5	4.3	0.417	+1.2

Monitor Points:

52°	17 mV/m
198°	25 mV/m
240°	13 mV/m
280°	N/a
325°	18 mV/m

DA-N

Tower	Loop	Dev (%)	Phase	Dev (°)	Base I (A)	Base Ratio	dev (%)
1	1.000	---	0.0	---	11.6	1.00	---
2	.473	-1.25	+155.3	+1.2	5.7	.491	+0.82
3	.396	0.76	-149.9	+1.2	4.6	.397	+0.25

Monitor Points:

52°	2.1 mV/m
198°	67.0 mV/m
240°	
280°	1.3 mV/m
325°	16.3 mV/m

EXHIBIT 2
License TPO

Station:	ERP	Ant Input	Ant Pwr Gain	Line ?	TPO
WBIG-FM; BXPB- 20000317ABW	8.5	4.4	1.932	81.9%	5.4
WMZQ-FM; BXP- 20000317ABX	4.2	2.2	1.905	82.0%	2.7
WWDC-FM; BXPB- 20000317ABZ	25	12.9	1.943	81.9%	15.8
WASH-FM; BXPB- 20000317ACB	15.5	8.28	1.873	82.2%	10.1
WIHT-FM; BXPB- 20000315ADA	15.5	8.1	1.919	81.9%	9.9

Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:44

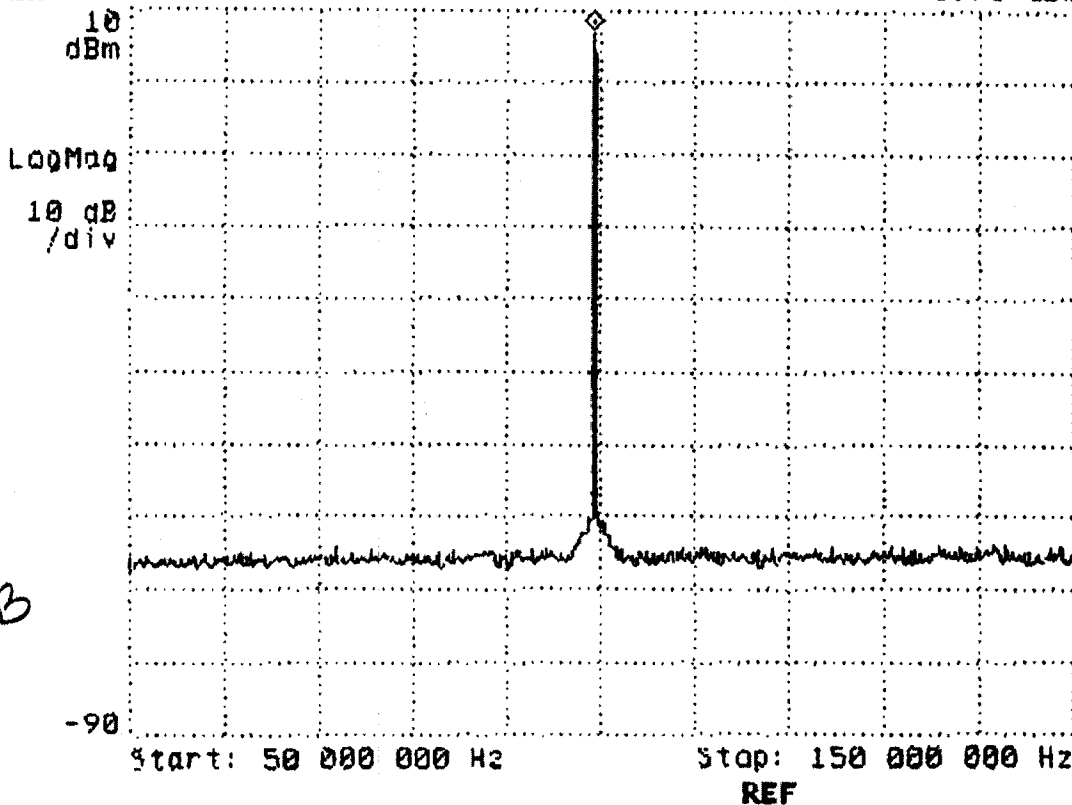
Swp Time: 260.8 msec

A: []

Mkr

99 250 000 Hz

8.70 dBm



Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:44

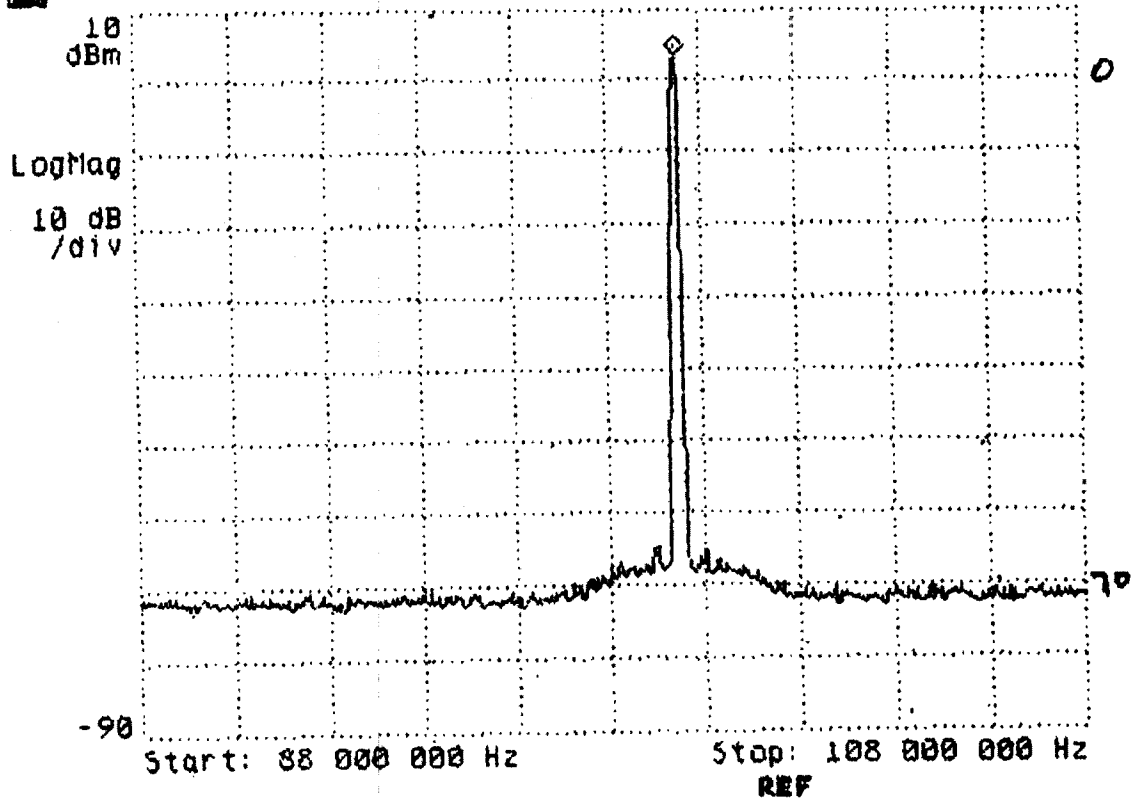
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A: []


Mkr

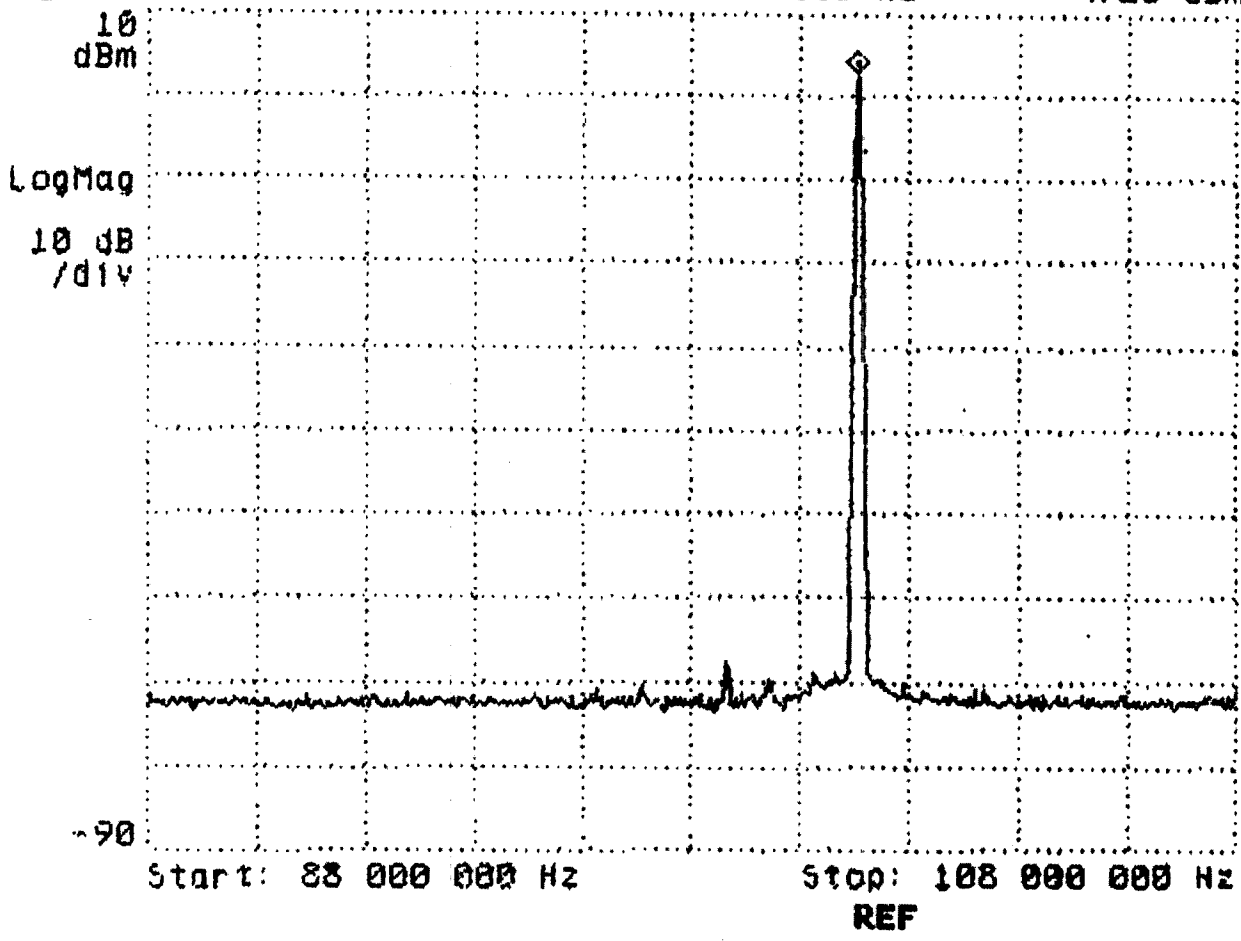
99 500 000 Hz

4.92 dBm



wwDC 10dB

Range: -20 dBm
Res BW: 17 000 Hz VBW: Off
A:  Mkr 101 050 000 Hz 4.26 dBm
9-Sep-1999 22:35
Swp Time: 260.8 msec



WDC 10dB

Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:30

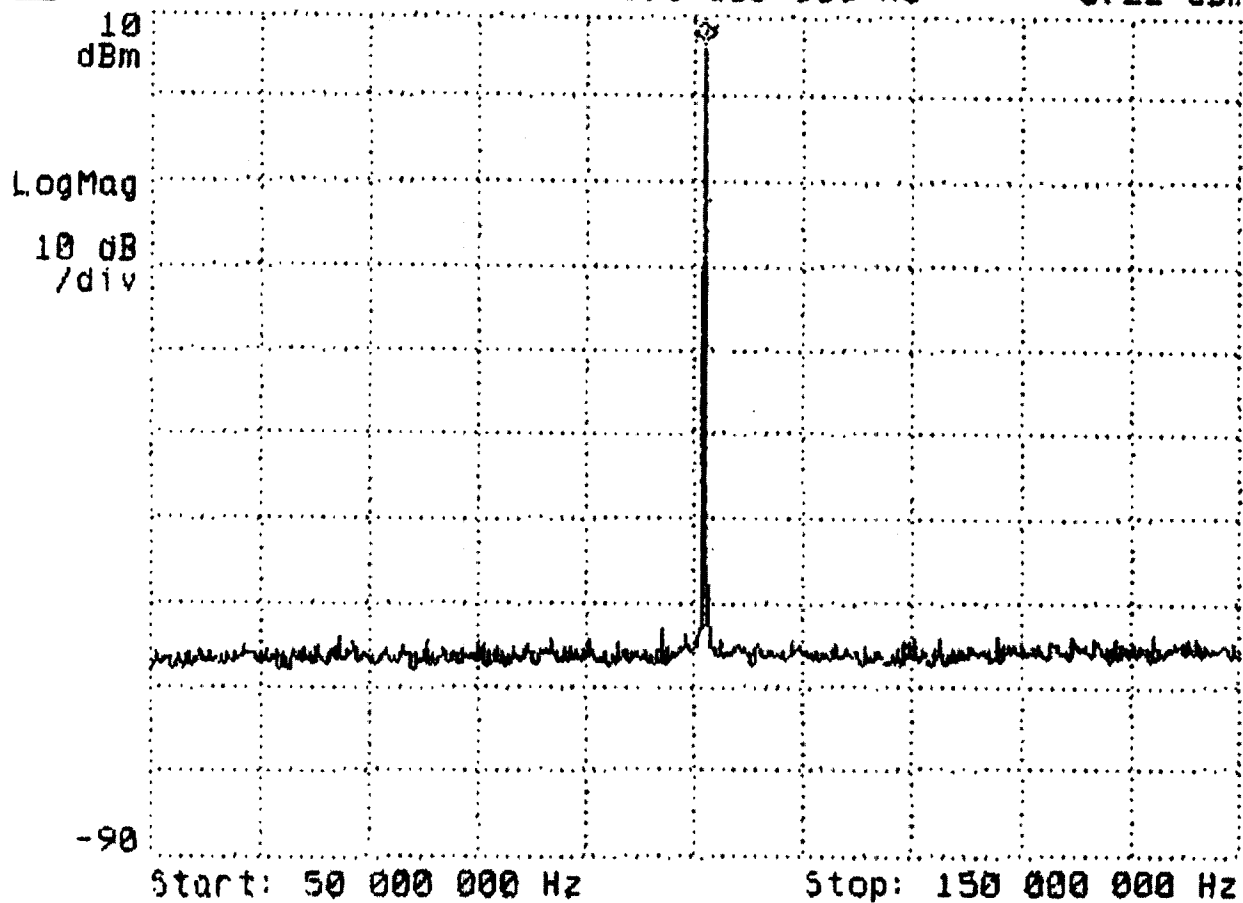
Swp Time: 260.8 msec

A: []

Mkr

101 000 000 Hz

8.22 dBm



WMZQ 108B

Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:40

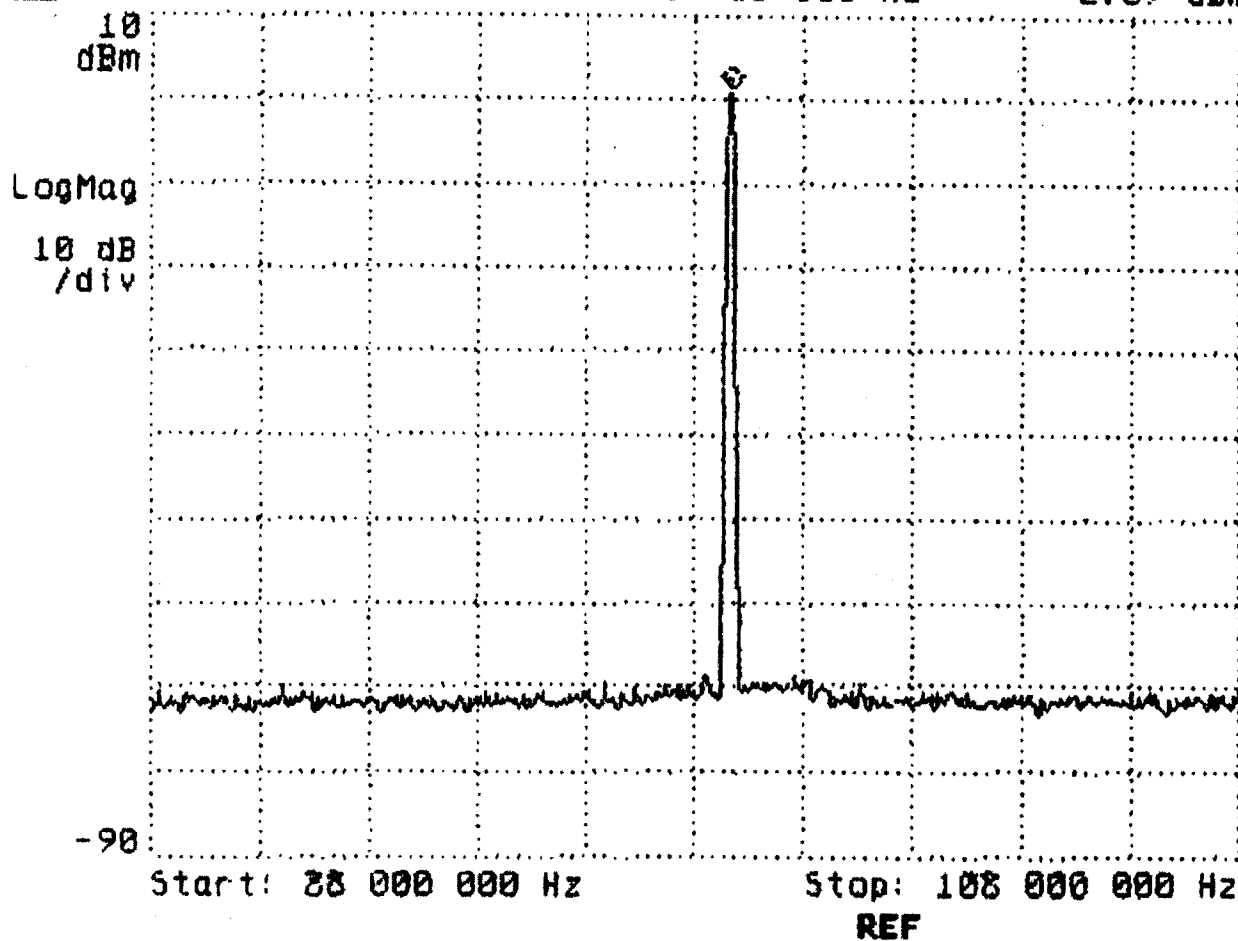
Swp Time: 260.8 msec

A: []

Mkr

98 700 000 Hz

2.69 dBm



WMZQ 10.3

Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:37

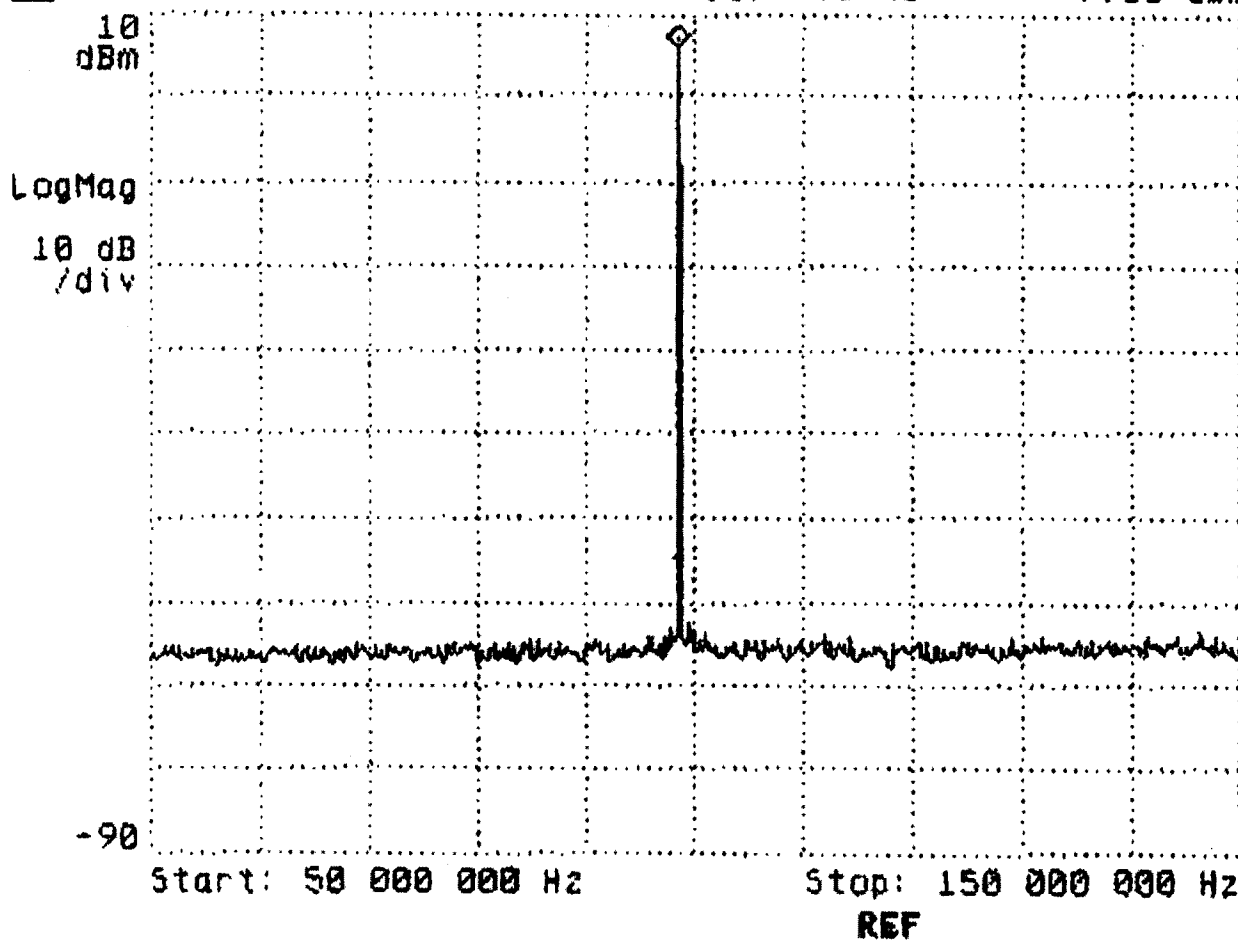
Swp Time: 260.8 mSec

A: 01

Mkr

98 500 000 Hz

7.38 dBm



WASH 10dB

Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:45

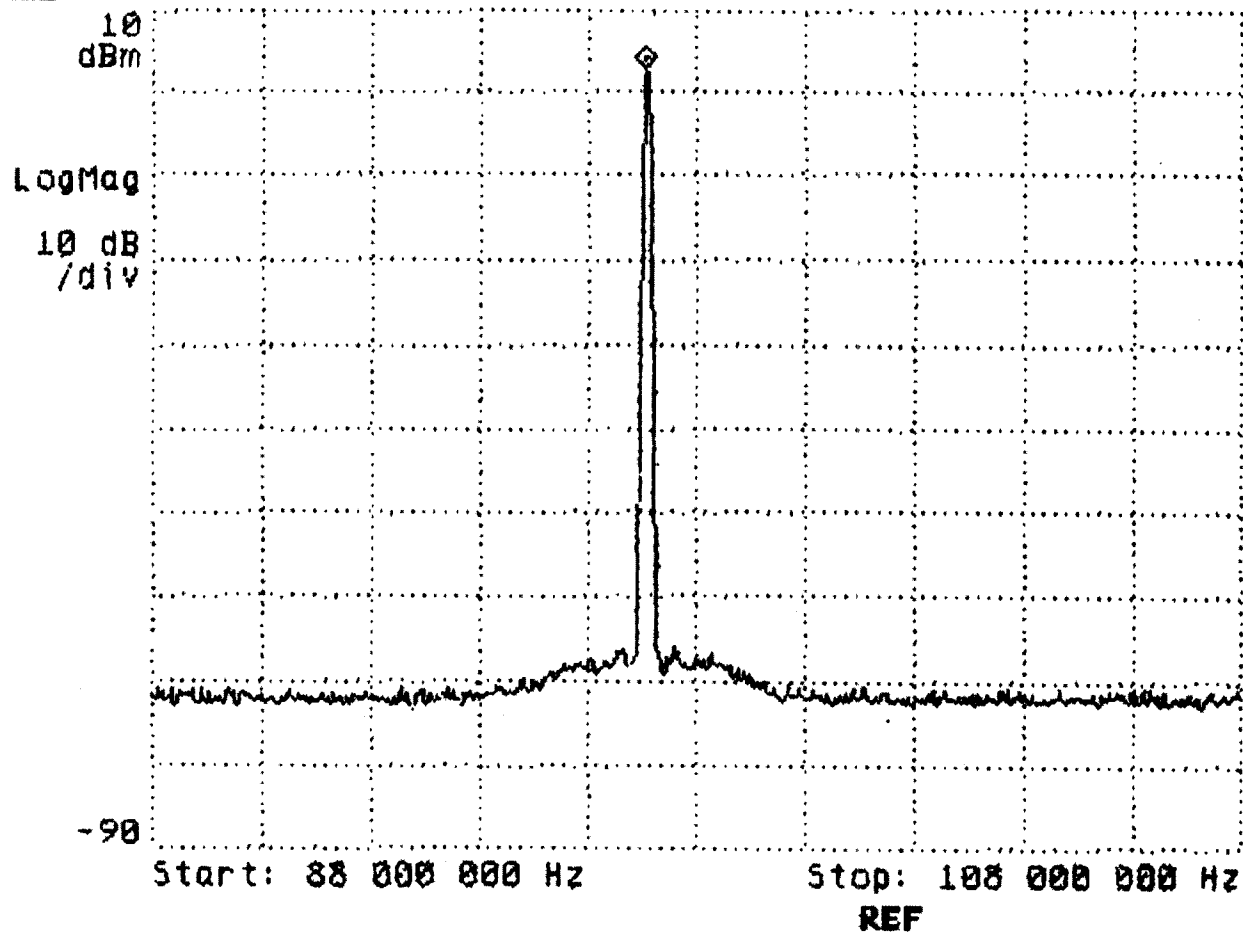
Swp Time: 260.8 msec

A: [1]

Mkr

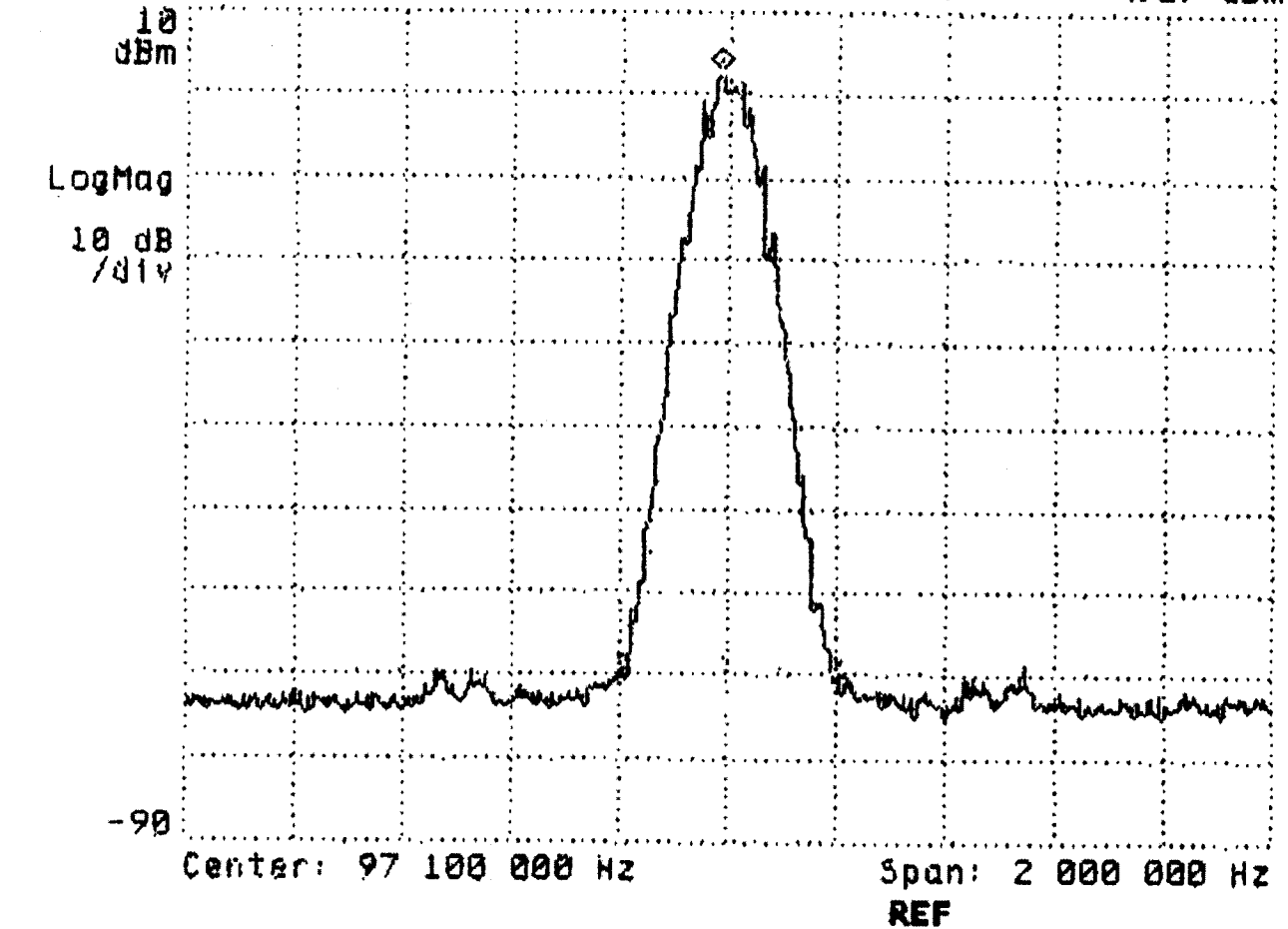
97 050 000 Hz

4.38 dBm



WASH 10 dB

Range: -20 dBm
Res BW: 17 000 Hz
VBW: Off
Mkr
97.085 000 Hz
4.27 dBm
9-Sep-1999 22:48
Swp Time: 260.8 msec



WASH 10 dB

Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:46

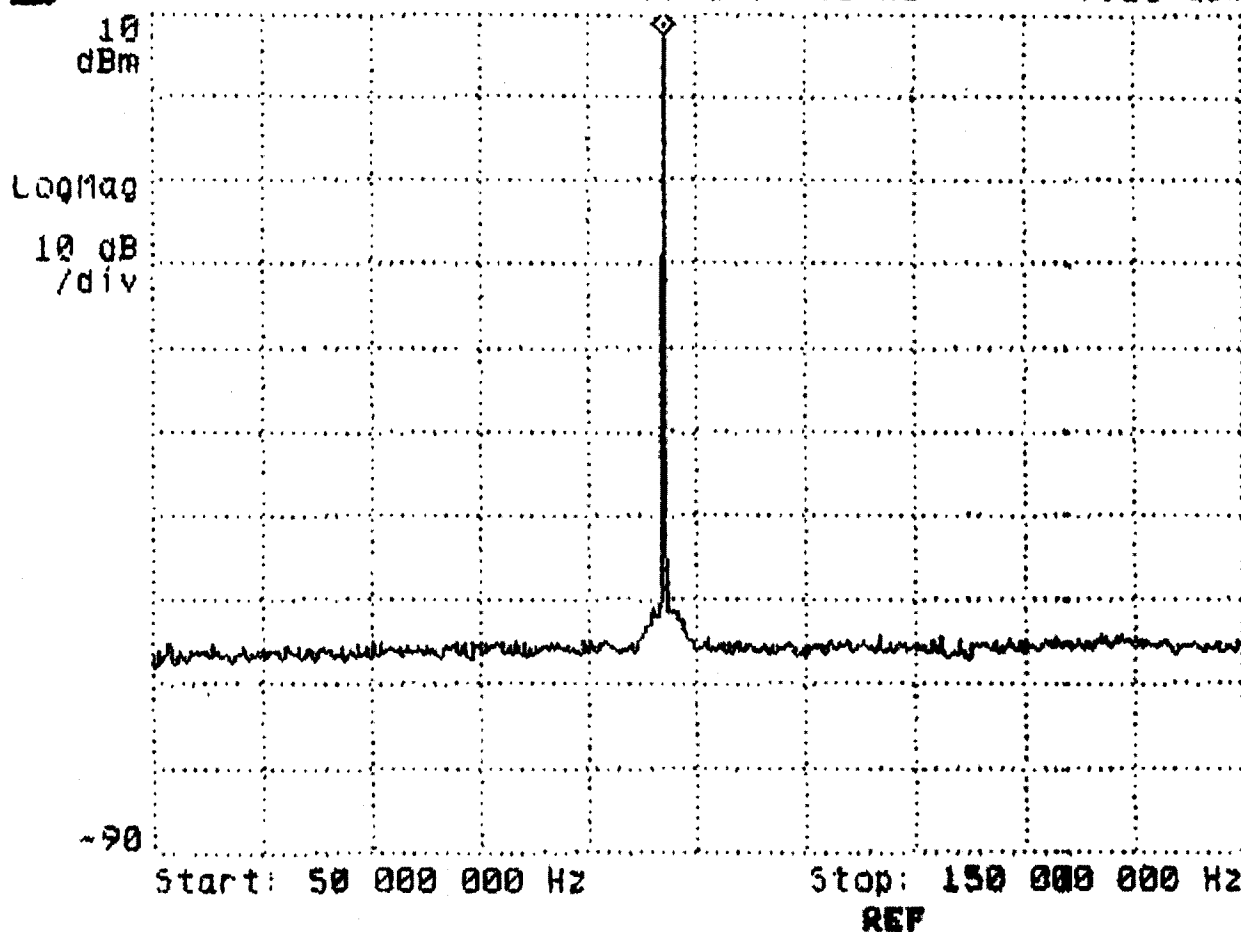
Swp Time: 260.8 mSec

A: 

Mkr

97 000 000 Hz

9.13 dBm



WBIG 108B

Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:41

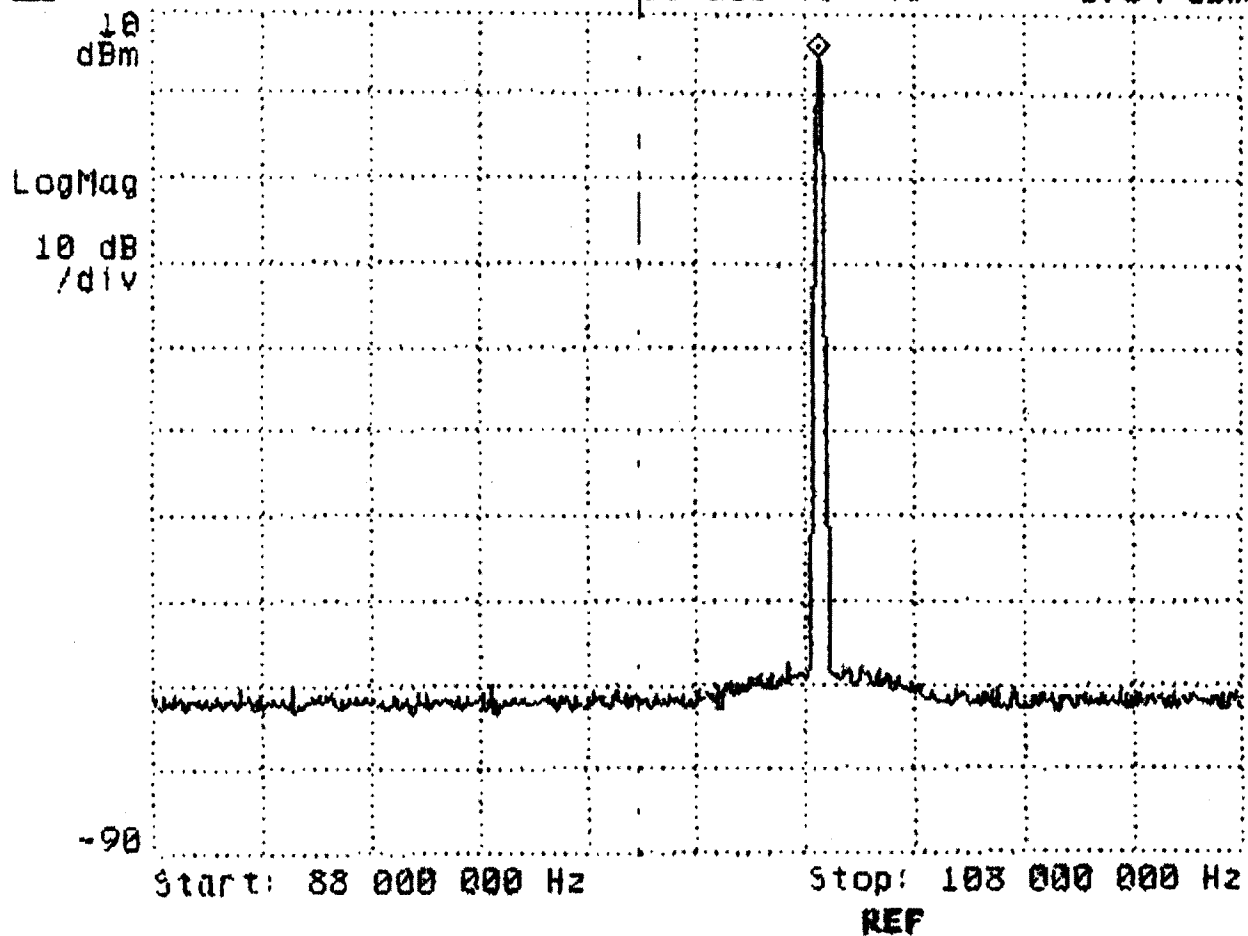
Swp Time: 260.8 mSec

A: 

Mkr

100 250 000 Hz

6.34 dBm



WBIG 10 dB

Range: -20 dBm

Res BW: 17 000 Hz

VBW: Off

9-Sep-1999 22:43

Swp Time: 260.8 mSec

A: 01

Mkr

100 250 000 Hz

9.79 dBm

