

Project Number: 99ME45100
File Number: NC3932
Model: FFPA-8689-60
FCC ID: MCD FFPA8689-60

Issue Date: December 14, 1999

Underwriters Laboratories Inc.
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Melville, New York 11747-3081
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**Report of Measurements
of Electromagnetic Compatibility Testing**

Test Report File No. : **NC3932** Date of issue: December 14, 1999
Applicant : Microwave Power Devices
Model / Serial No. : FFPA-8689-60
Product Type : Amplifiers
Power Supply : -48Vdc
Manufacturer : Same as Applicant
License holder : Same as Applicant
Address : 49 Wireless Blvd.
 : Hauppauge, NY 11788
Test Result : ☒ **Positive** ☐ **Negative**
Test Project Number : 99ME45100
References(s)

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1.0 GENERAL - Product Description

The unit under test is a high power cellular amplifier. The unit can be operated as a stand-alone device or installed in a distribution rack that allows for multiple amplifiers to be installed for greater power.

The unit under test has a maximum output power of 60 watts.

1.1 Device Configuration During Test

The unit under test was configured and operated by the manufacturer throughout the tests. The unit was configured to produce a maximum output for all signaling techniques. The following is a list of available signaling techniques:

CW, TDMA, CDMA, 2 FSK, and modulated CW

Comparison of Amplifier Output to Amplifier Input for Distortion

The amplifier was tested as a stand-alone device, was injected with a CW signal at the fundamental frequency. The input was adjusted to produce maximum output power (60W). Prior to injecting the signal into the amplifier, the input was examined and printed for comparison purposes. The signal was then injected into the amplifier and the output was analyzed to detect any distortion produced by the amplifier.

The amplifier was injected with a CW signal modulated with 1-kHz with a deviation of 5kHz at the fundamental frequency. The input was adjusted to produce maximum output power (60W). Prior to injecting the signal into the amplifier, the input was examined and printed for comparison purposes. The signal was then injected into the amplifier and the output was analyzed to detect any distortion produced by the amplifier.

The amplifier was injected with a CDMA signal at the fundamental frequency. The input was adjusted to produce maximum output power (60W). Prior to injecting the signal into the amplifier, the input was examined and printed for comparison purposes. The signal was then injected into the amplifier and the output was analyzed to detect any distortion produced by the amplifier.

The amplifier was injected with a TDMA signal at the fundamental frequency. The input was adjusted to produce maximum output power (60W). Prior to injecting the signal into the amplifier, the input was examined and printed for comparison purposes. The signal was then injected into the amplifier and the output was analyzed to detect any distortion produced by the amplifier.

The amplifier was injected with a AMPS signal at the fundamental frequency. The input was adjusted to produce maximum output power (60W). Prior to injecting the signal into the amplifier, the input was examined and printed for comparison purposes. The signal was then injected into the amplifier and the output was analyzed to detect any distortion produced by the amplifier.

The amplifier was injected with a 2FSK signal at the fundamental frequency. The input was adjusted to produce maximum output power (60W). Prior to injecting the signal into the amplifier, the input was examined and printed for comparison purposes. The signal was then injected into the amplifier and the output was analyzed to detect any distortion produced by the amplifier.

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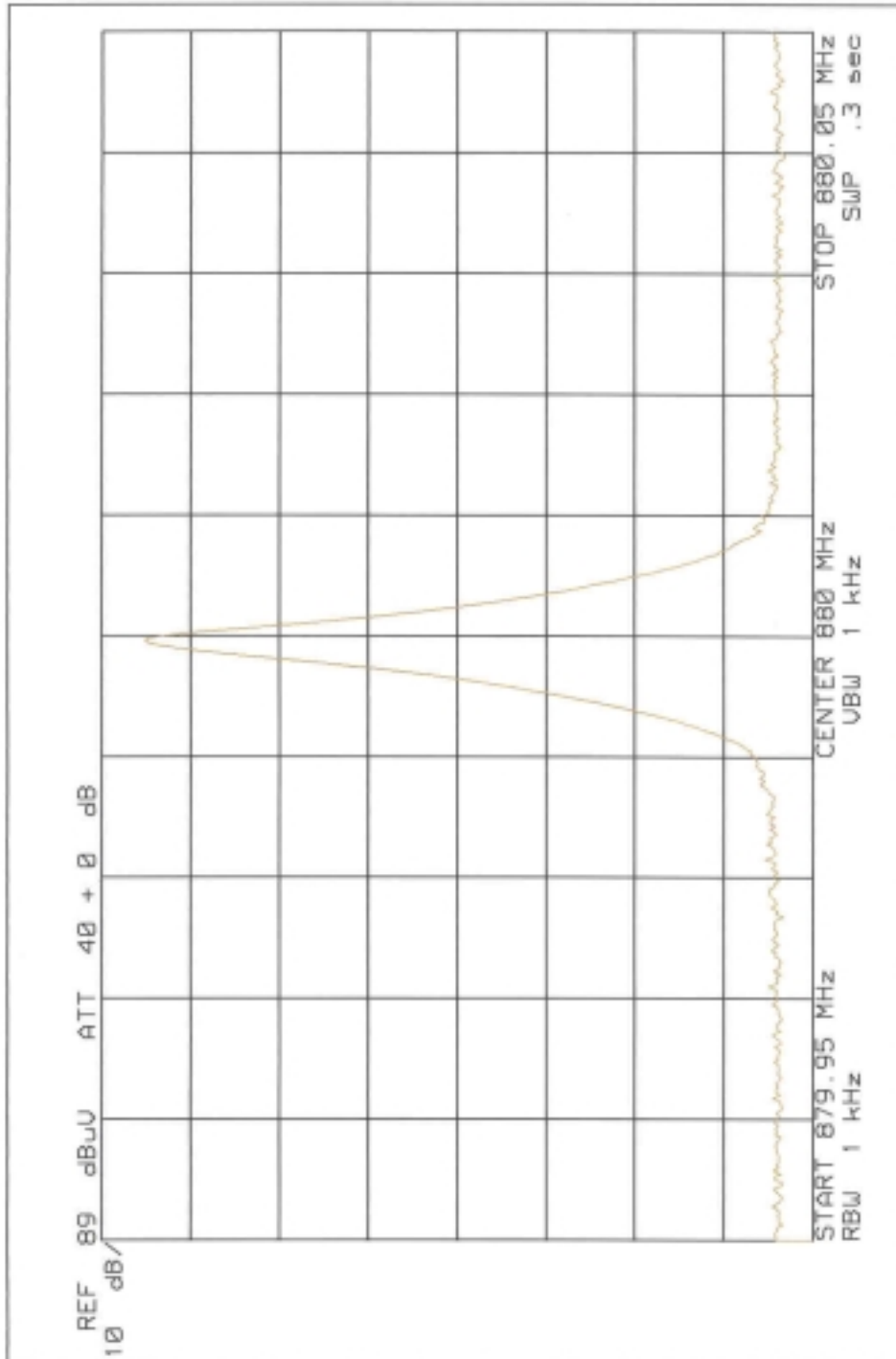
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Test Results

No significant distortion was detected using any of the modulation techniques described above.

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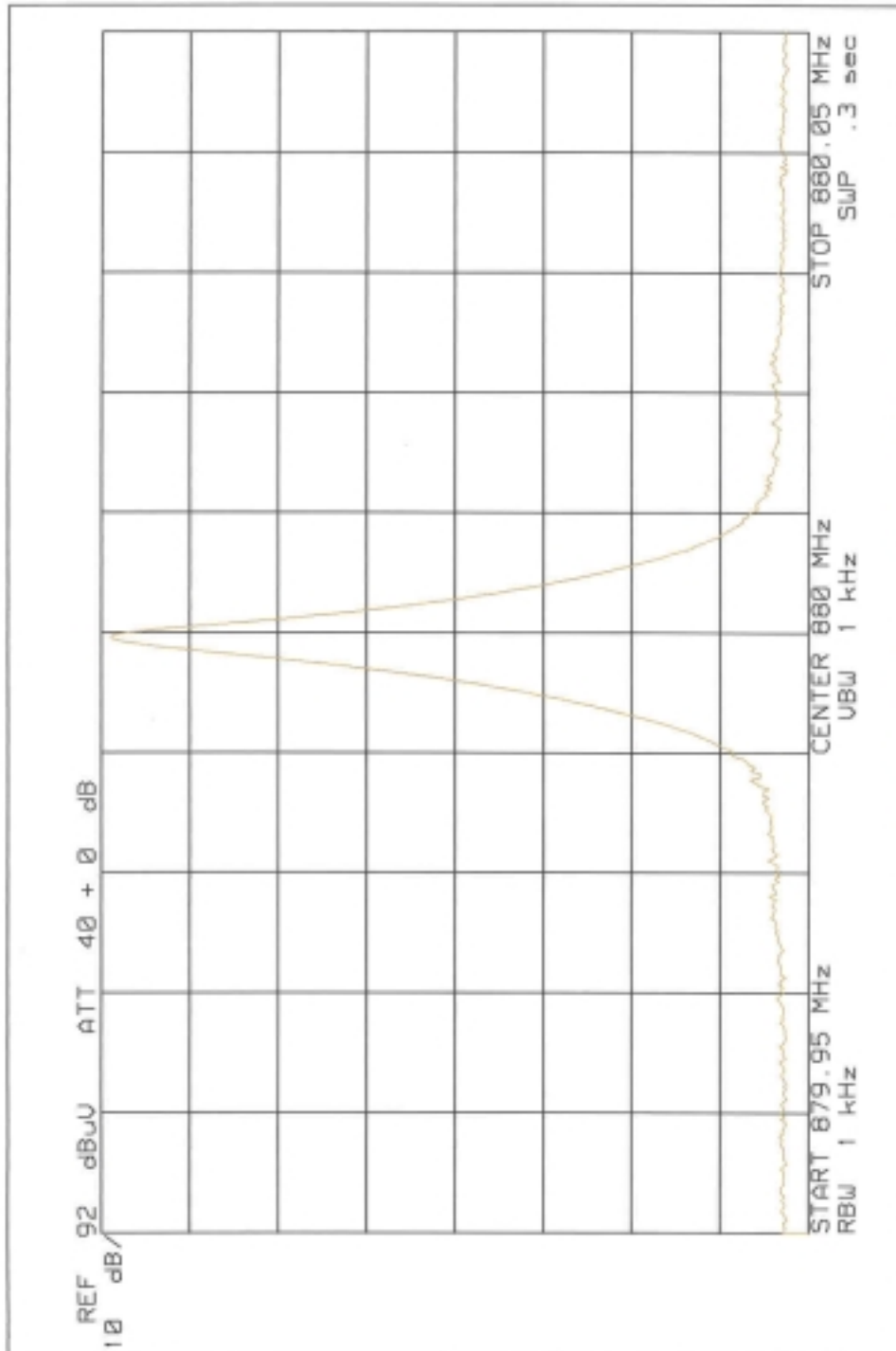


Observations/Comments: CW INPUT

Tested By: WJS/WJA 10/28/99

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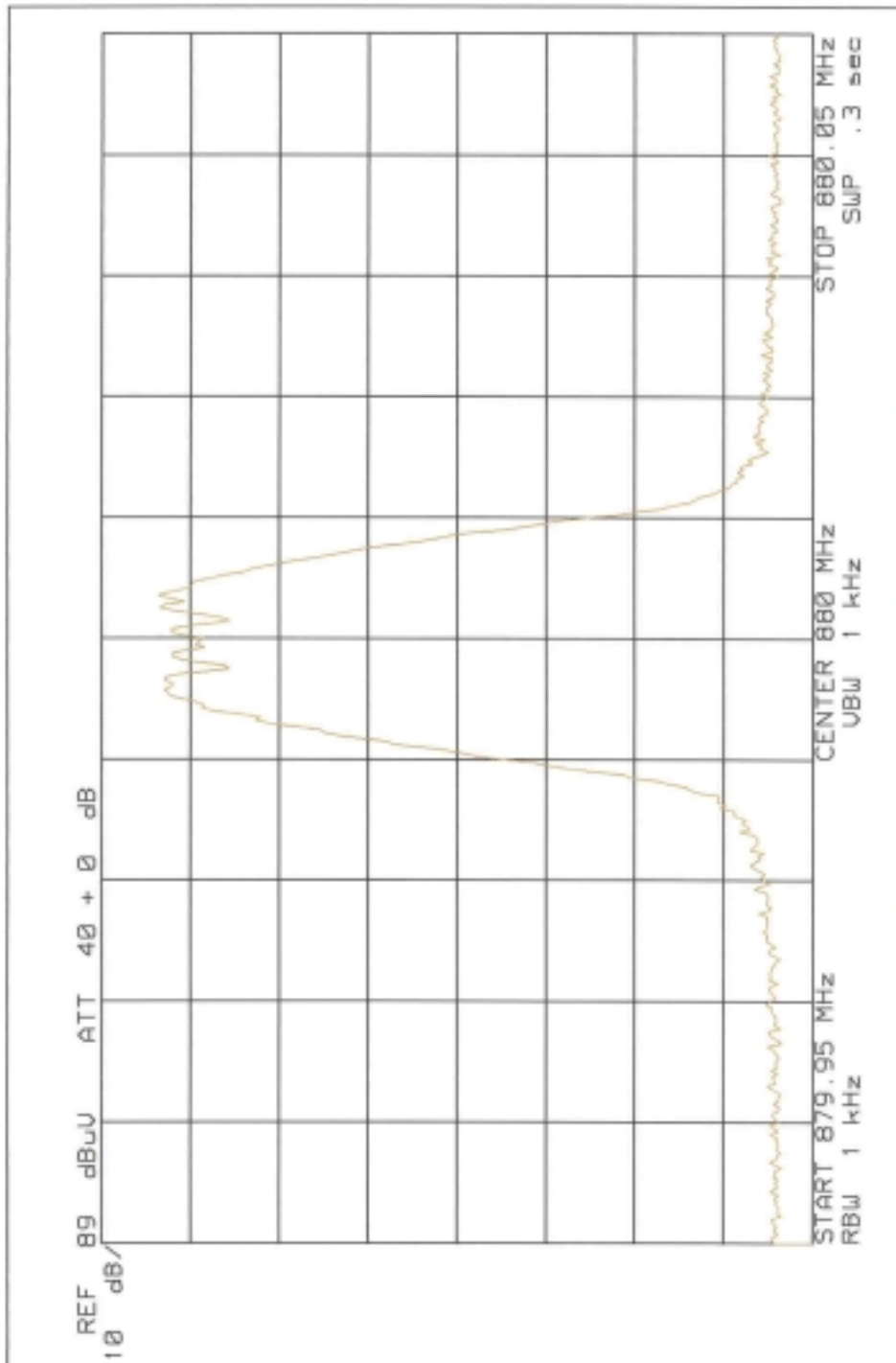


Observations/Comments: CW OUT PUT FFPA 8689-60

Tested By: W.D. Wick 10/28/99

Project Number: 99ME45100
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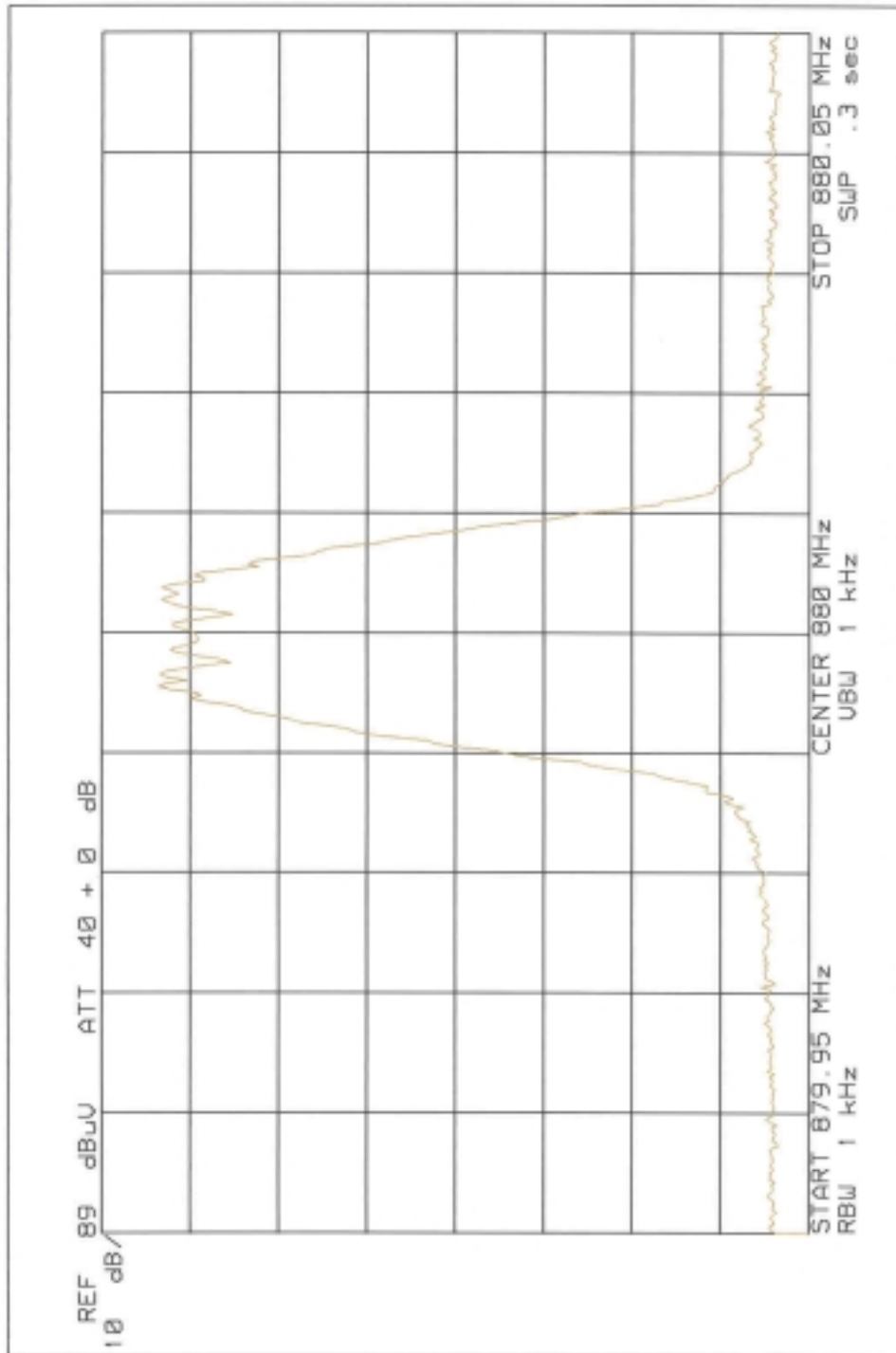


Observations/Comments: Single Tone FM, 1 kHz 5 kHz Deviation Input

Tested By: W.D. Webb 10/28/99

Project Number: 99ME45100
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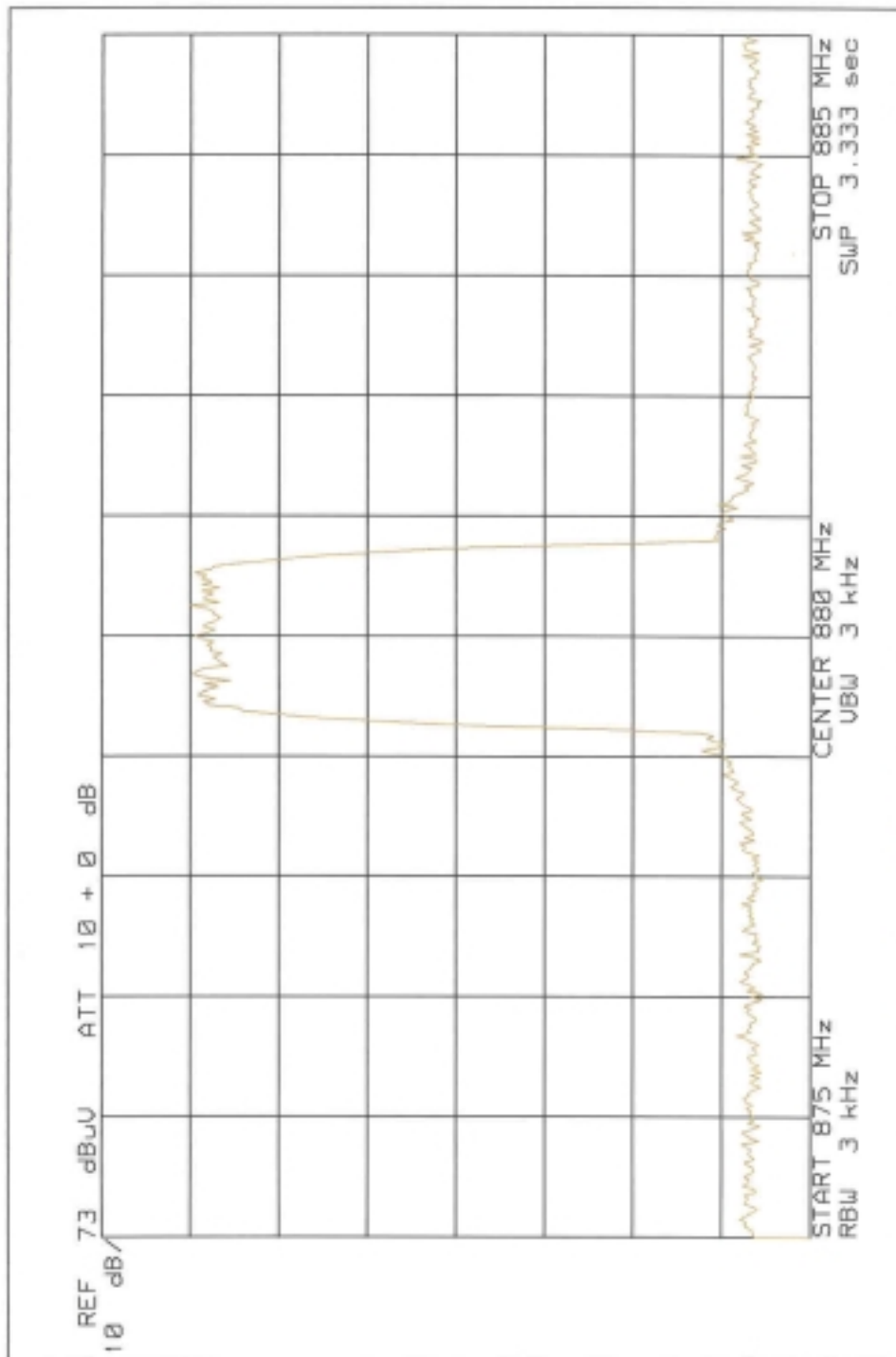


Observations/Comments: Single Tone FM, 1 kHz, 5 kHz Deviation OUT PUT FFPA 8689-60

Tested By: David Wade 1/28/99

Project Number: 99ME45100
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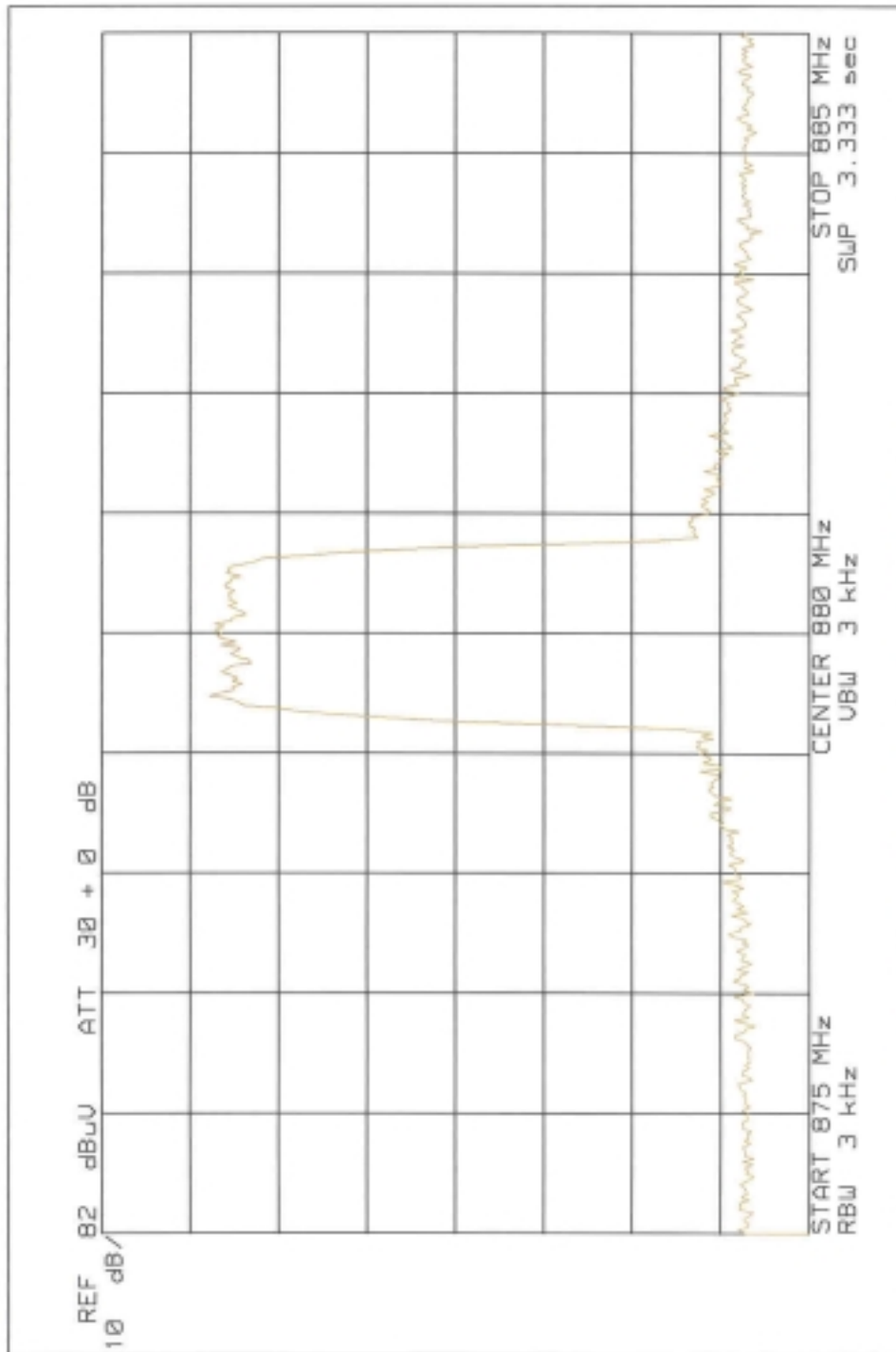


Observations/Comments: CDA INPUT

Tested By: WTO/Don 10/28/99

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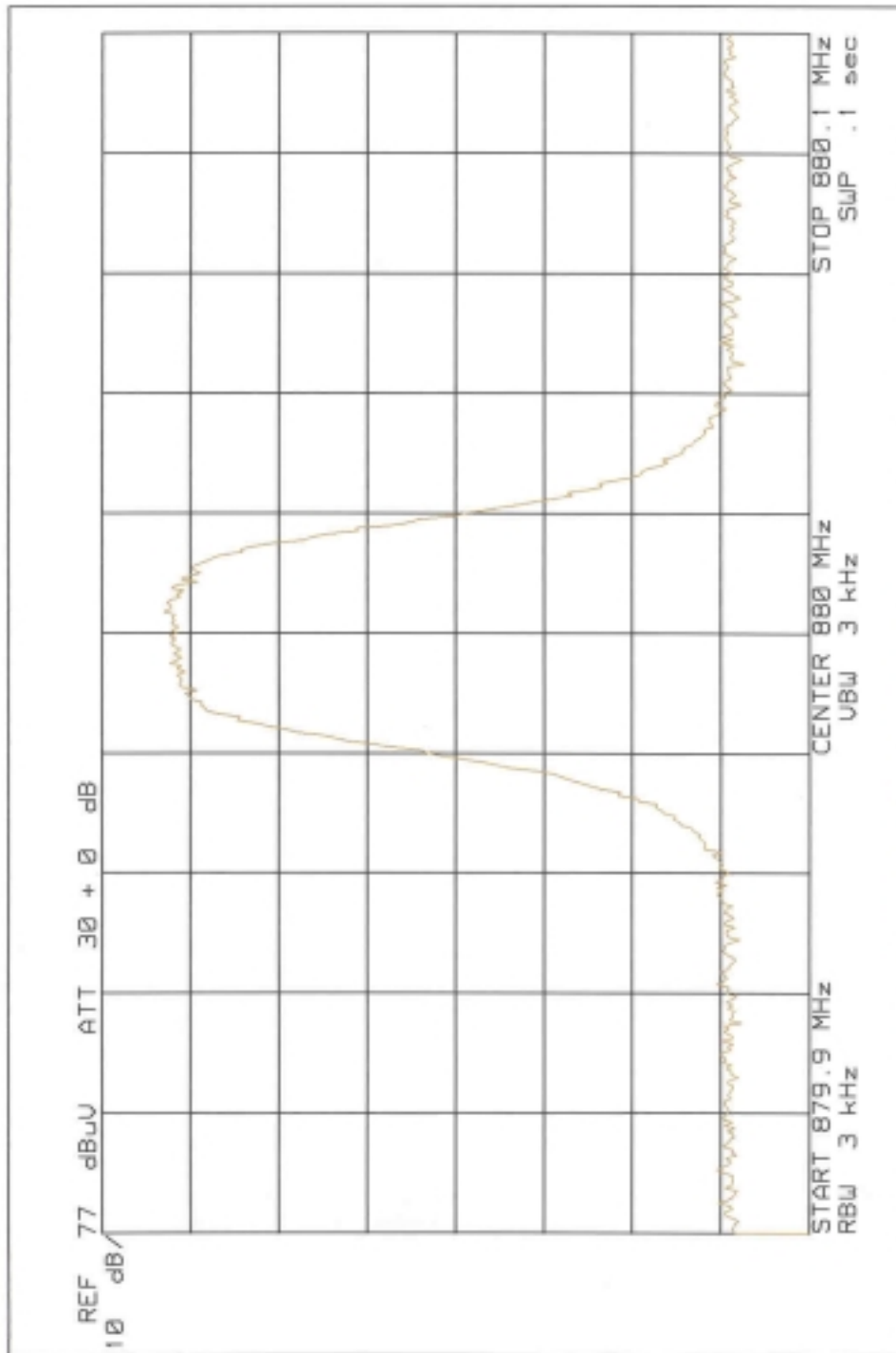


Observations/Comments: C DMA OUT PUT FFPA 8689-60

Tested By: 20-2001 10/28/99

Project Number: 99ME45100
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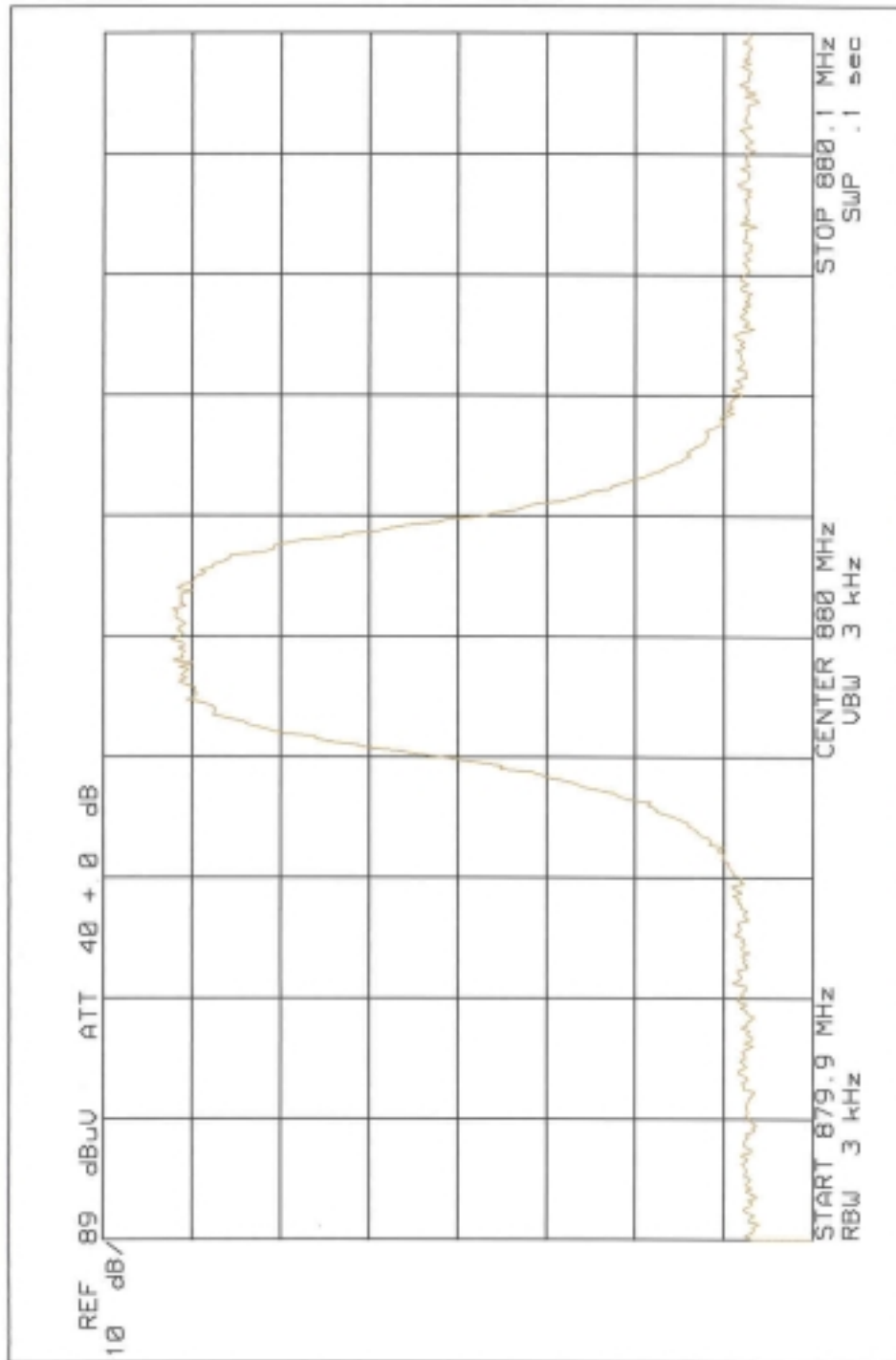


Observations/Comments: Single Tone T0 mA INPUT

Tested By: WSD Wood 10/28/99

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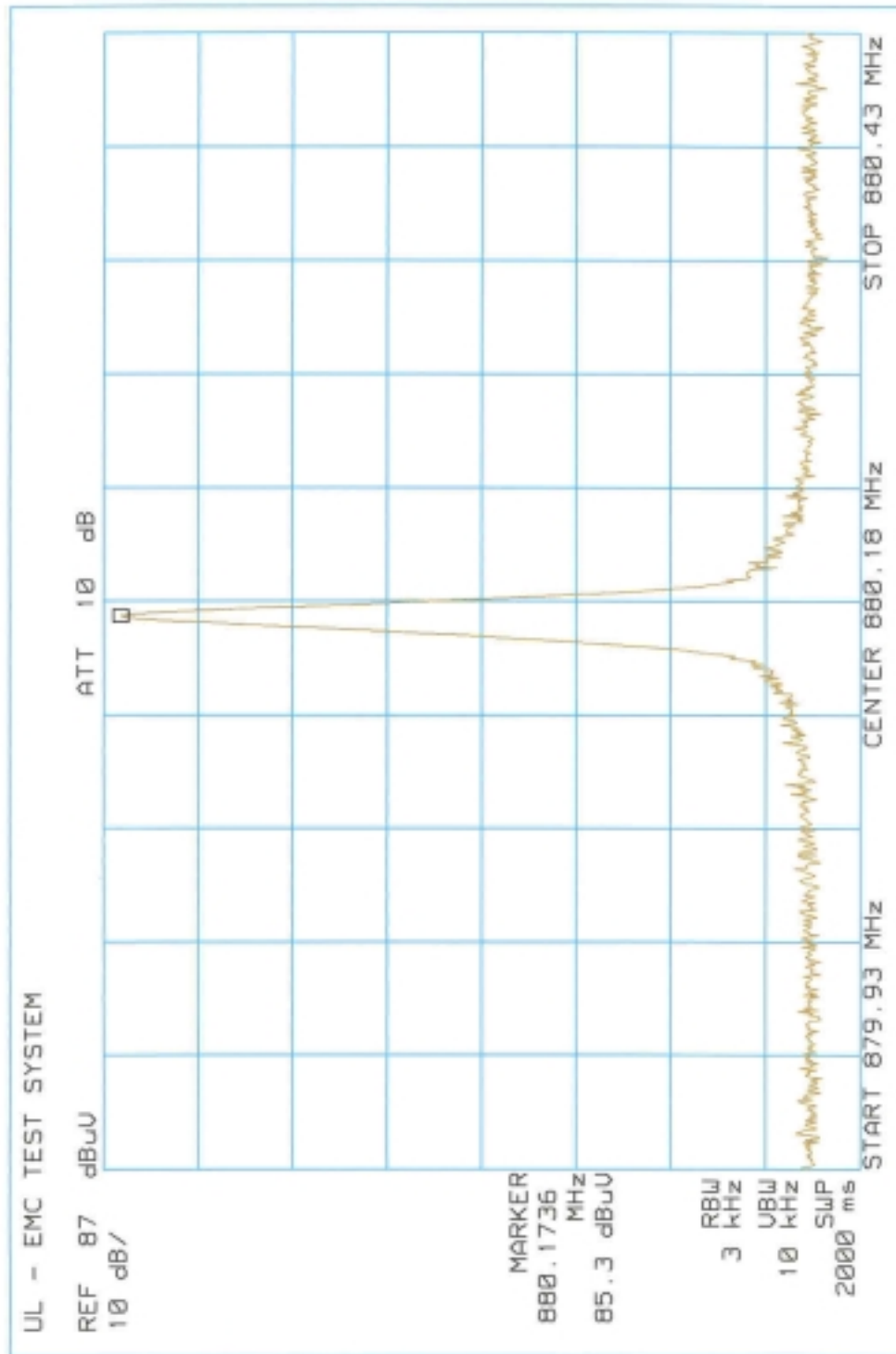


Observations/Comments: Single Tone TDMA Output FFPA 8689-60

Tested By: WDR WDR 10/28/99

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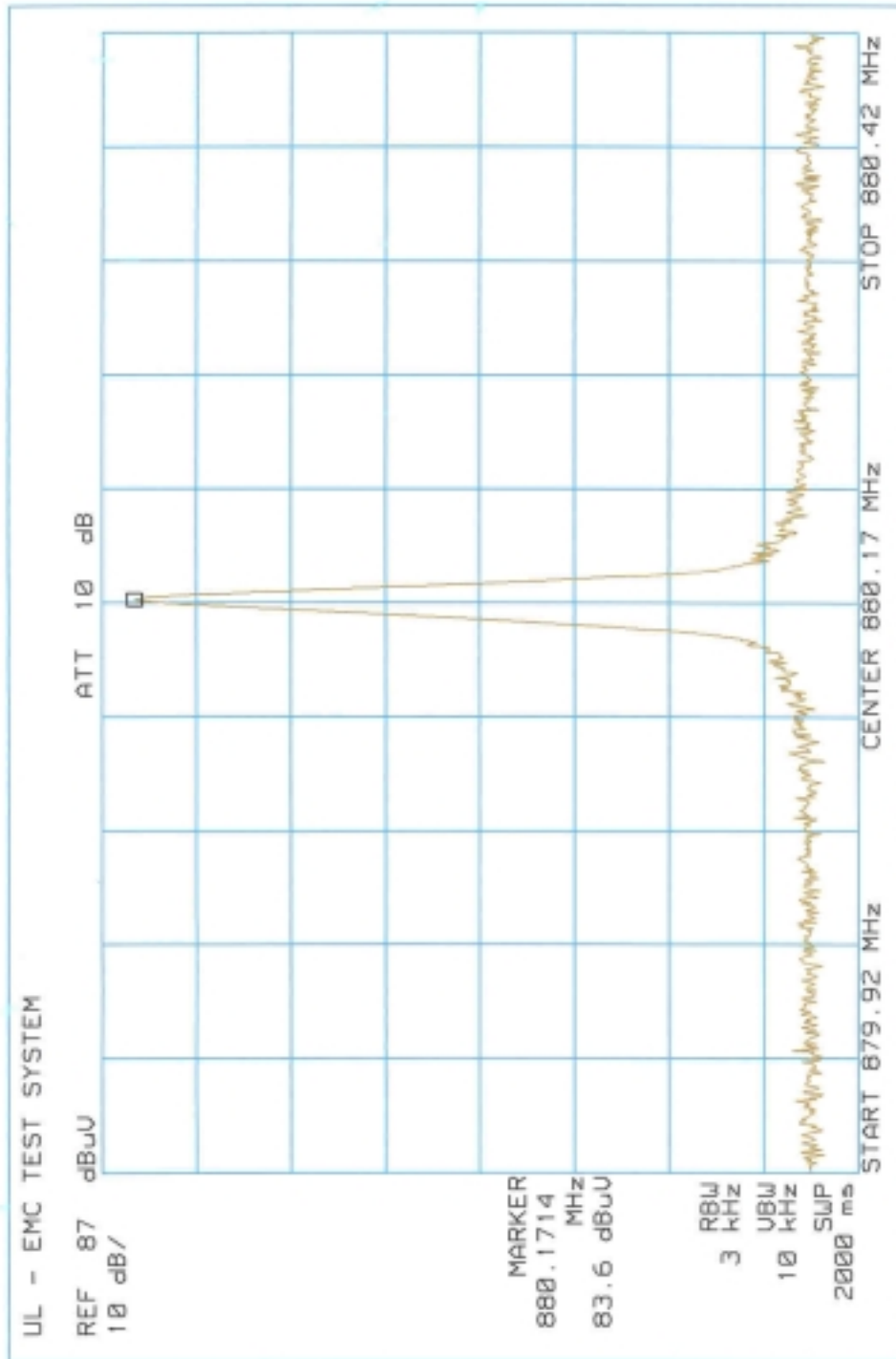


Observations/Comments: SINGLE TONE AMP'S INPUT
FFPA-8689-60 FFPA-8689-120

Tested By: _____

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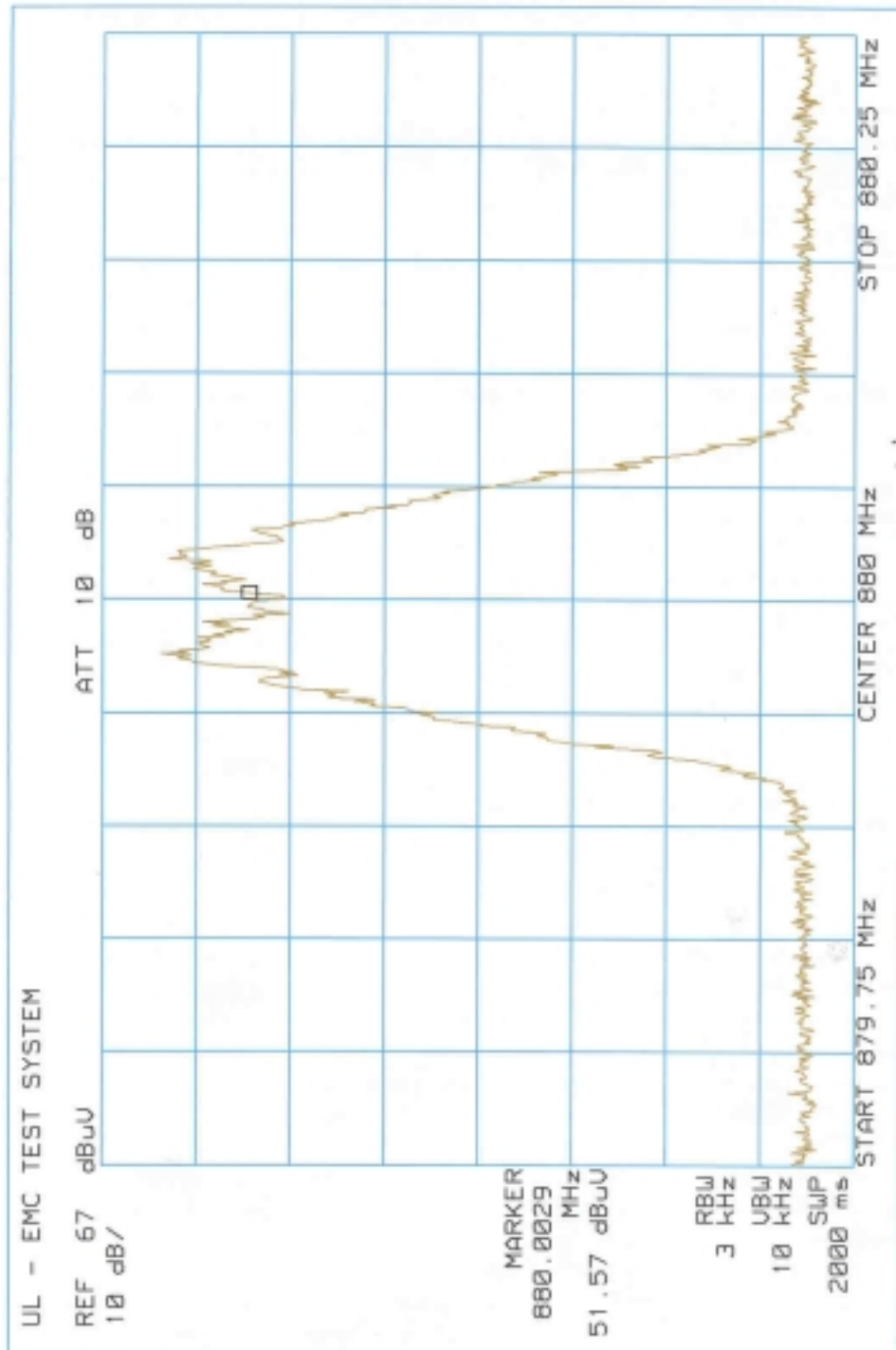


Observations/Comments: SINGLE TONE AMPS OUTPUT OUT OF AMPLIFIER
FFPA-8689-60

Tested By: Bruno Papach 10/4/99

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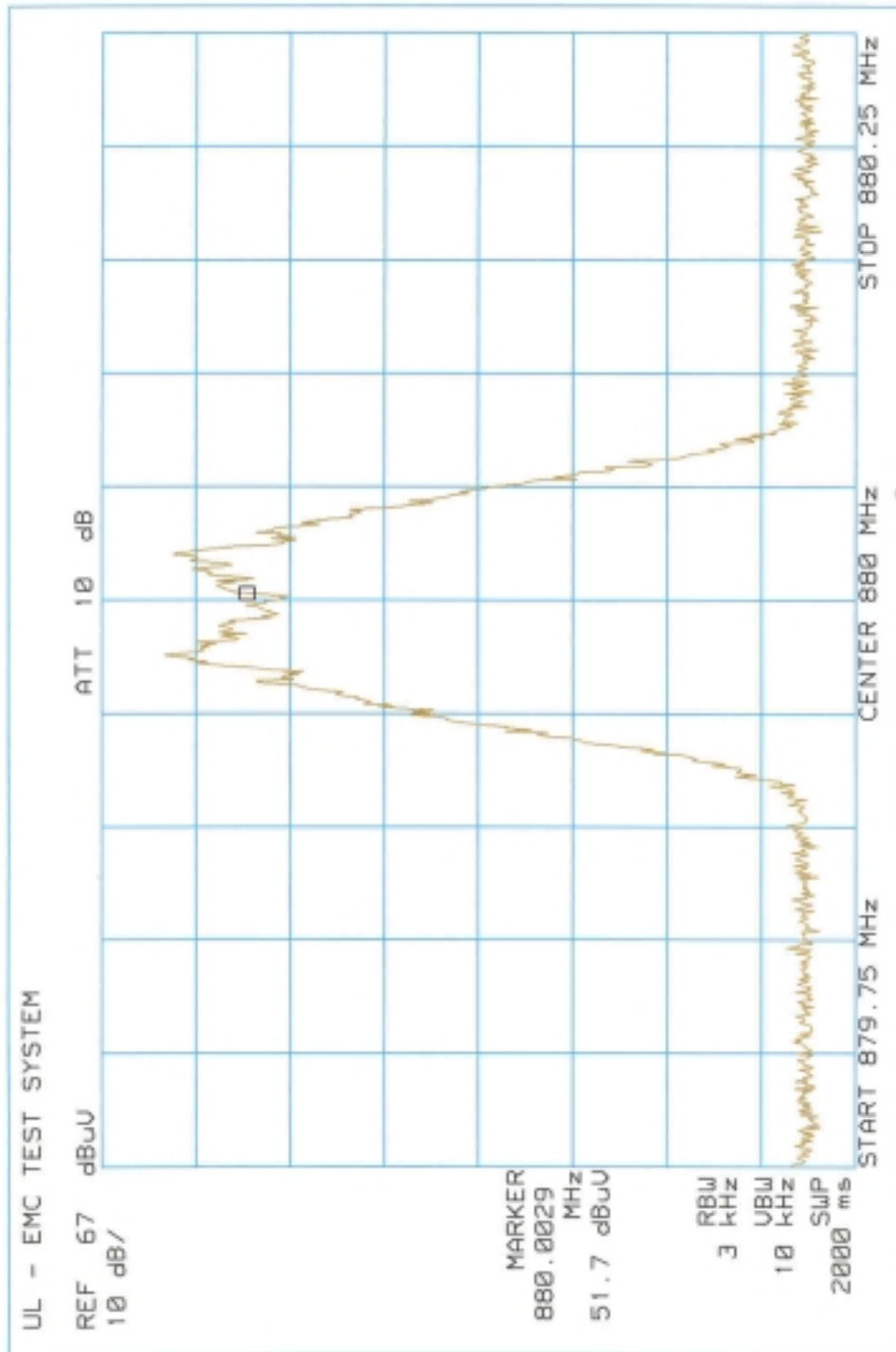


Observations/Comments: Single Tone ZFSK input both Amplifiers
FFPA-8869-60 and FFPA-8869-120

Tested By: Ben Lopez 10/4/99

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Observations/Comments: Single Tone 2 FSK repeat Amplifier
FFPA-8869-60

Tested By: Bennilapochi 10/4/99