March 31, 2000

Frank Coperich
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Correspondence Reference Number : 12977

From : Leon Kogan, JMR Electronics Inc.

Applicant : Listen Technologies Corporation
FCC ID: OMD800-216
731 Confirmation Number : EA96002

Dear Mr. Coperich:

Below you will find the information that was requested in your letter on March 23, 2000. All items concur with the numbered questions in your past e-mail.

ITEM 2:

: Please list actual ERP on FCC Form 731 and provide a justification for this value

For determination of the ERP the field strength produced by LT800 unit with its supplied antennas – Rubber Ducky antenna and external Ground-plane antenna, was re-measured for 1K Standard channel and 2K extra band channel. Then by substitution method the ERP was determined. For substitution method "Tunable Dipole Antenna, model # FCC3" with RG-58U cable, L=7.8 m and "HP 8648A Signal Generator" were used.

1. The following are the results of the actual field strength readings **with Rubber Ducky antenna**

	The field strength Peak value
Standard channel 1K	89.39 dbuV
Extra band channel 2K	89.23 dBuV

1.1. The following are the results of the actual HP8648A Signal generator readings to produce the same field strength readings as in the table above.

	HP8648A readings	**The field strength, Peak value**
Standard channel 1K	88.01 dBuV / -18.99 dBm	89.39 dBuV
Extra band channel 2K	87.85 dBuV / -19.15 dBm	89.23 dBuV

2. The following are the results of the actual field strength readings **with Ground-plane antenna**

	The field strength Peak value
Standard channel 1K	110.9 dbuV
Extra band channel 2K	110.6 dBuV

2.1. The following are the results of the actual HP8648A Signal generator readings to produce the same field strength readings as in the table above.

	HP8648A Readings	**The field strength, Peak value**
Standard channel 1K	109.5 dBuV / 2.5 dBm	110.9 dBuV
Extra band channel 2K	109.2 dBuV / 2.2 dBm	110.6 dBuV

3. The equation for ERP determination is

ERP = P + G – L where

P is a power into dipole (reading of the HP8648A);
G is the relative gain of the half-wave dipole antenna which is equal 2.68 dB ;
L is the losses of the RG-58U cable which is equal 1.3 dB.

The following are the results of the ERP for LT-800 with **Rubber Ducky antenna** :

	ERP value
Standard channel 1K	0.0173 mW / -17.61 dBm
Extra band channel 2K	0.0167 mW / -17.77 dBm

The following are the results of the ERP for LT-800 with **Ground-plane antenna** :

	ERP value
Standard channel 1K	2.455 mW / 3.9 dBm
Extra band channel 2K	2.291 mW / 3.6 dBm

ITEM 3:

: Please provide modulation limiting data, which would be plots of the transmitter deviation as a function of input level – done at several frequencies over the audio modulating range.

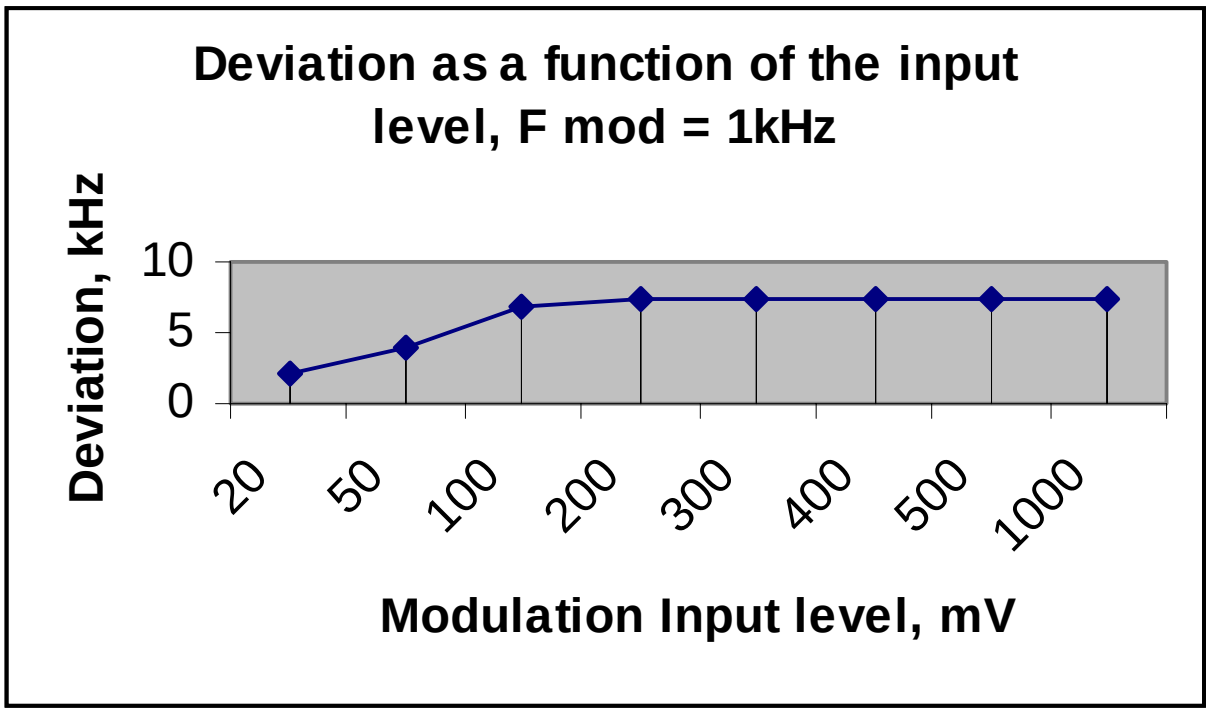
The following are a series of data/plots showing the system deviation as the input level of the modulation frequency changes.

MODULATION CHARACTERISTICS were tested on the Standard band channel 1K for modulation frequencies 1kHz, 3kHz, 5kHz and Extra band channel 2K for modulation frequencies 1kHz, 3kHz, 5kHz, 7kHz and 9kHz..

1.0 Channel 1K, Fc = 216.512624 MHz, RBW = 3 kHz

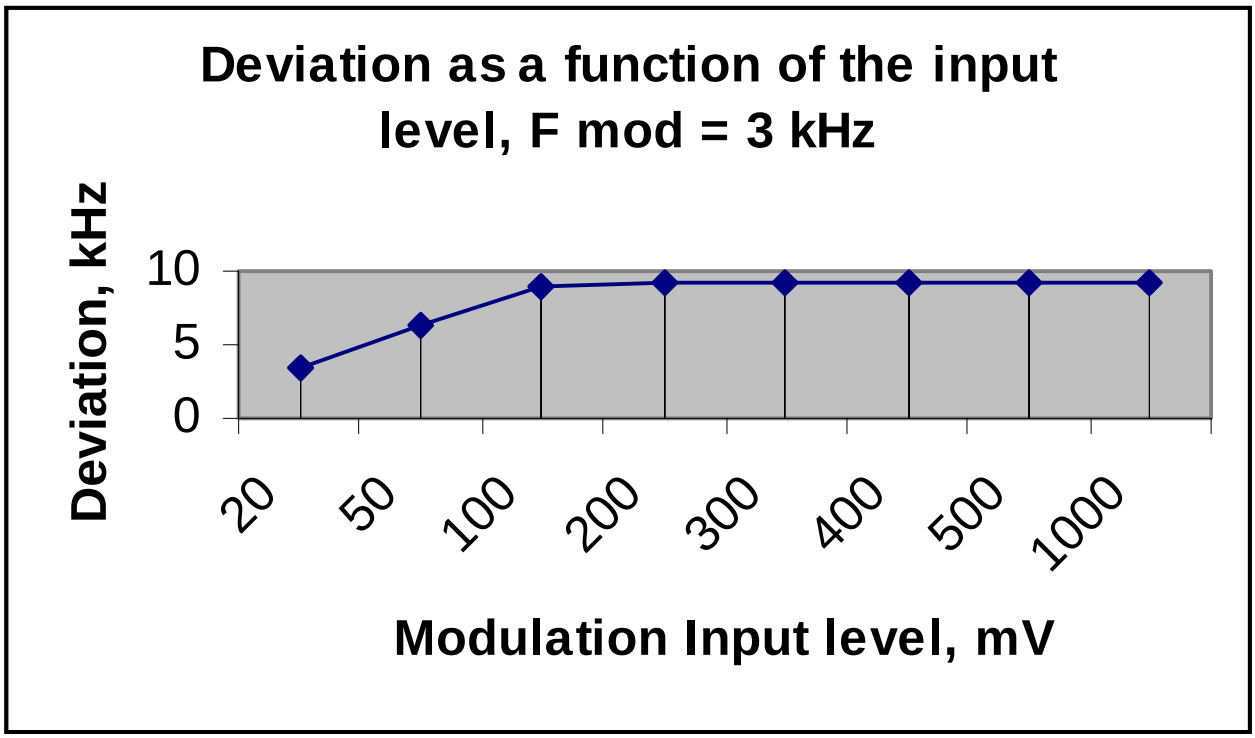
1.1 F mod = 1 kHz

The modulation Amplitude **mV**	**Tx frequency F_{99}** **At 99% level Of Fc peak** **MHz**	**Deviation** **Fc – F_{99}** **kHz**	**The modulation Frequency** **F mod** **kHz**
20	216.510432	2.192	1
50	216.508688	3.936	1
100	216.505872	6.752	1
200	216.505376	7.248	1
300	216.505376	7.248	1
400	216.505376	7.248	1
500	216.505376	7.248	1
1000	216.505376	7.248	1



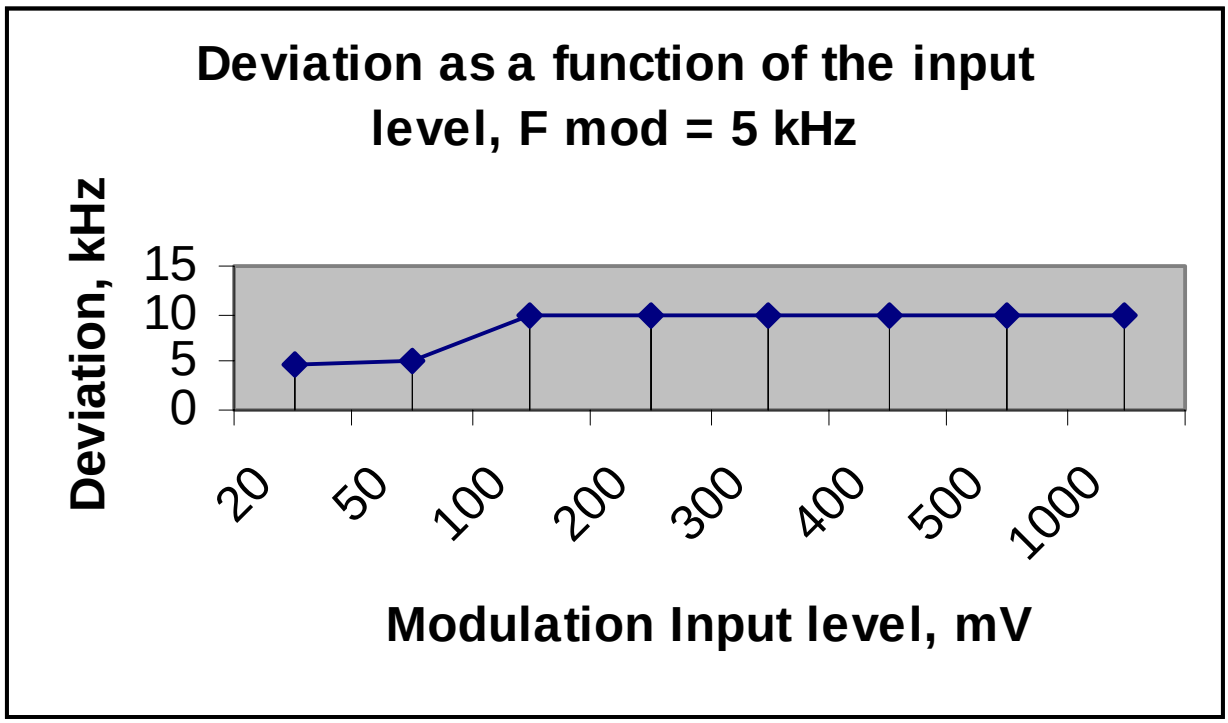
1.2 F mod = 3 kHz

The modulation Amplitude mV	Tx frequency F_{99} at 99% level of Fc peak MHz	Deviation Fc – F_{99} kHz	The modulation Frequency kHz
20	216.509312	3.312	3
50	216.506432	6.192	3
100	216.503624	9.000	3
200	216.503440	9.184	3
300	216.503440	9.184	3
400	216.503504	9.120	3
500	216.503504	9.120	3
1000	216.503504	9.120	3



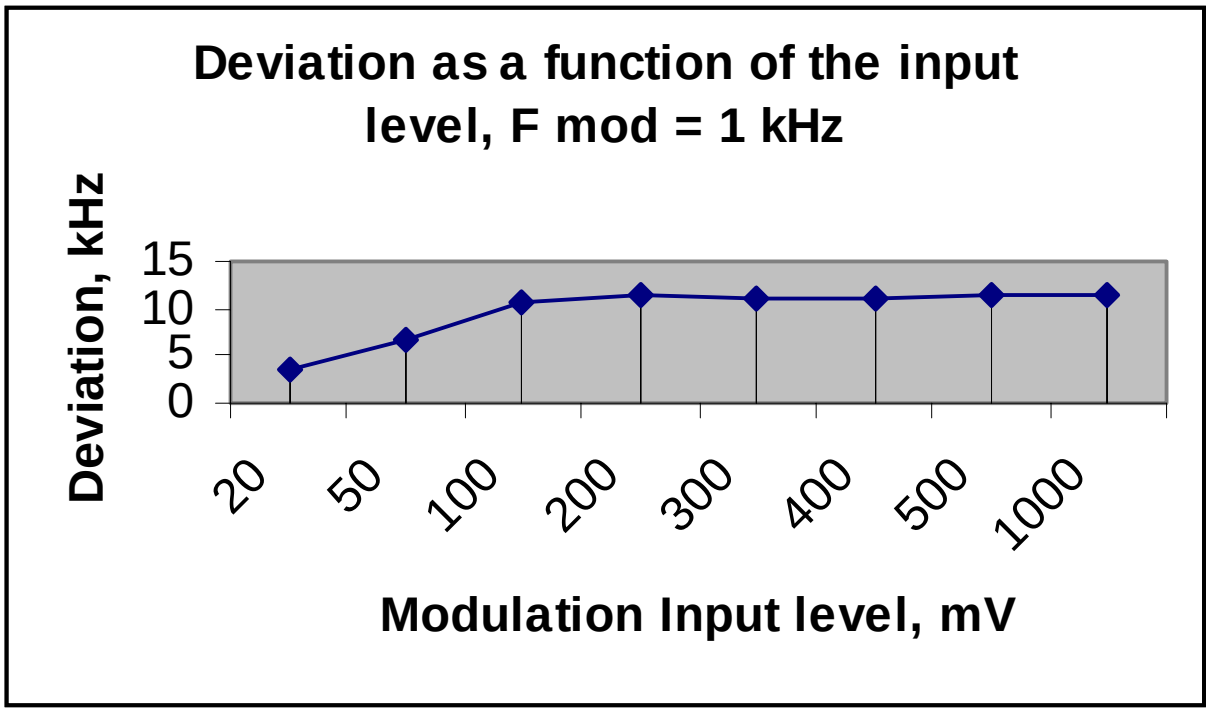
1.3 F mod = 5 kHz

The modulation Amplitude MV	Tx frequency F_{99} at 99% level of Fc peak MHz	Deviation Fc – F_{99} KHz	The modulation Frequency kHz
20	216.507744	4.880	5
50	216.507616	5.008	5
100	216.502560	10.064	5
200	216.502560	10.064	5
300	216.502560	10.064	5
400	216.502560	10.064	5
500	216.502560	10.064	5
1000	216.502560	10.064	5



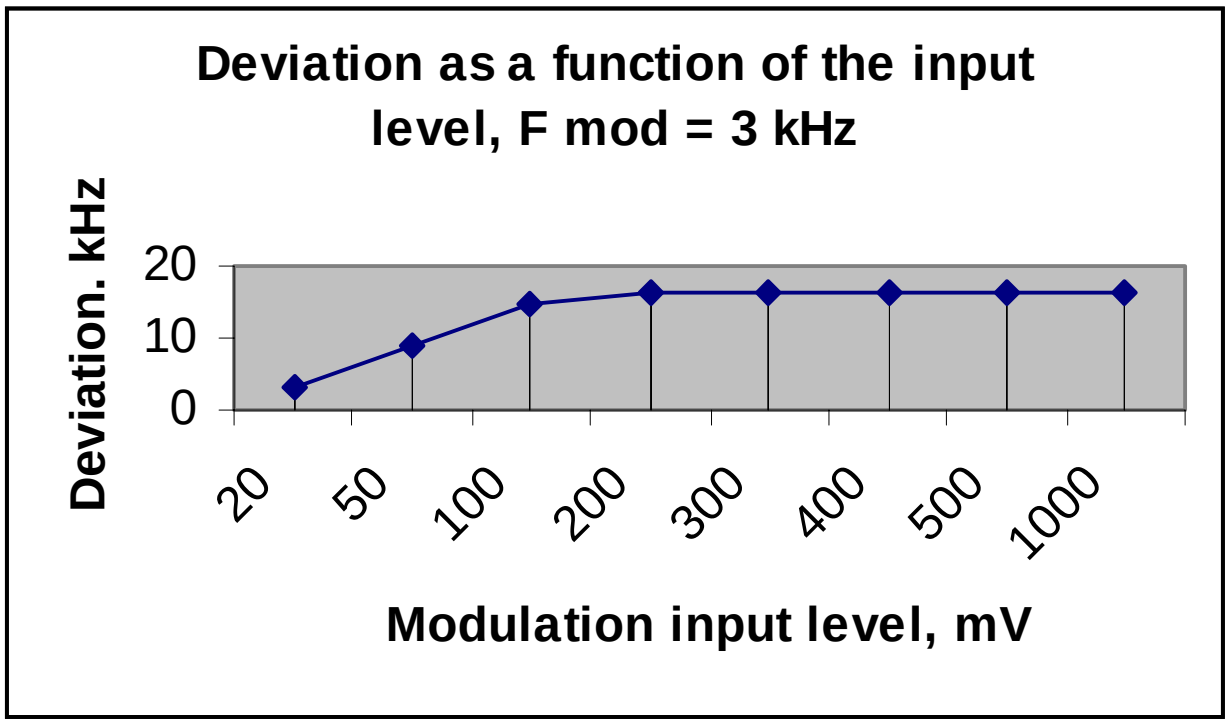
2.0 Channel 2K, Fc = 216.524492 MHz, RBW = 3 kHz
2.1 F mod = 1 kHz

The modulation Amplitude mV	Tx frequency F_{99} at 99% level of Fc peak MHz	Deviation Fc – F_{99} kHz	The modulation Frequency kHz
20	216.520292	3.504	1
50	216.517740	6.752	1
100	216.513684	10.808	1
200	216.513116	11.376	1
300	216.513428	11.064	1
400	216.513372	11.120	1
500	216.513180	11.312	1
1000	216.513684	11.376	1



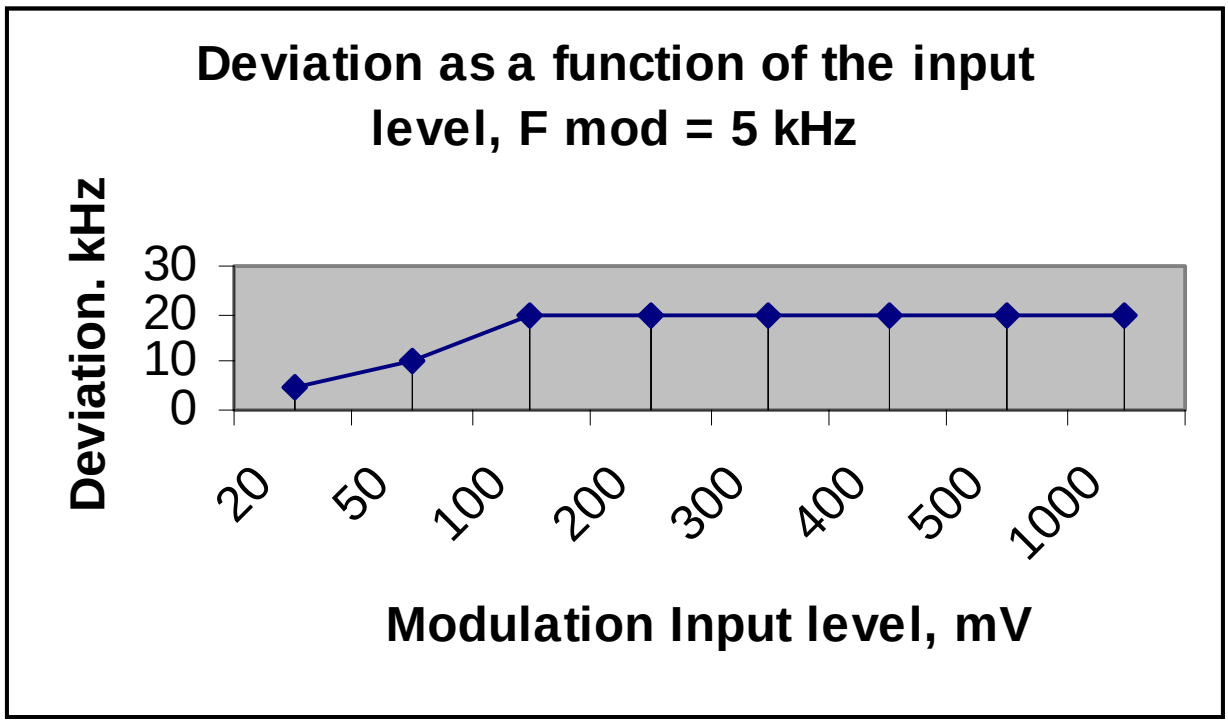
2.2 F mod = 3 kHz

The modulation Amplitude mV	Tx frequency F_{99} at 99% level of Fc peak MHz	Deviation Fc – F_{99} kHz	The modulation Frequency kHz
20	216.521180	3.312	3
50	216.515556	8.936	3
100	216.509684	14.808	3
200	216.508300	16.192	3
300	216.508244	16.248	3
400	216.508244	16.248	3
500	216.508116	16.376	3
1000	216.508116	16.376	3



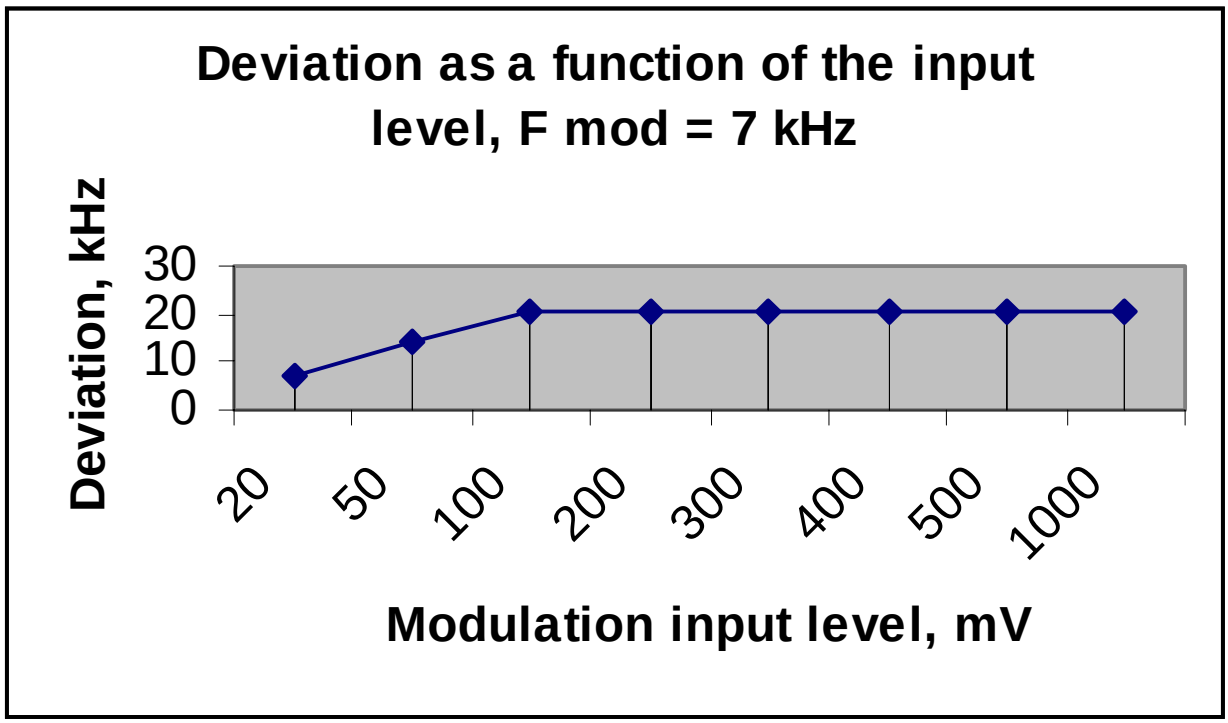
2.3 F mod = 5 kHz

The modulation Amplitude mV	Tx frequency F_{99} at 99% level of Fc peak MHz	Deviation Fc – F_{99} KHz	The modulation Frequency kHz
20	216.519492	5.000	5
50	216.514556	9.936	5
100	216.504616	19.880	5
200	216.504524	19.968	5
300	216.504524	19.968	5
400	216.504524	19.968	5
500	216.504524	19.968	5
1000	216.504524	19.968	5



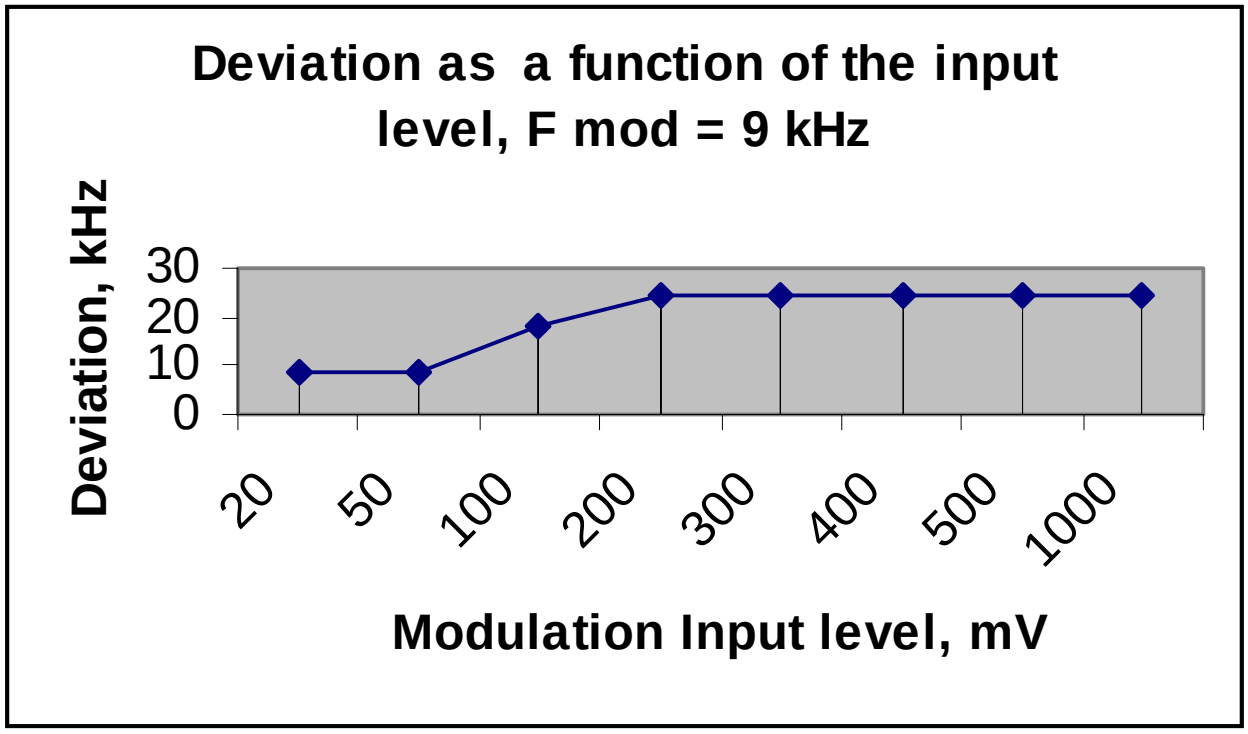
2.4 F mod = 7 kHz

The modulation Amplitude MV	Tx frequency F_{99} at 99% level of Fc peak MHz	Deviation Fc – F_{99} KHz	The modulation Frequency kHz
20	216.517556	6.936	7
50	216.510620	13.872	7
100	216.503676	20.816	7
200	216.503588	20.904	7
300	216.503684	20.808	7
400	216.503676	20.816	7
500	216.503588	20.904	7
1000	216.503588	20.904	7



2.5 F mod = 9 kHz

The modulation Amplitude mV	Tx frequency F_{99} at 99% level of Fc peak MHz	Deviation Fc – F_{99} KHz	The modulation Frequency kHz
20	216.515588	8.904	9
50	216.515492	9.000	9
100	216.506512	17.980	9
200	216.500396	24.096	9
300	216.500396	24.096	9
400	216.500396	24.096	9
500	216.500396	24.096	9
1000	216.500396	24.096	9



I hope these answers are sufficient. If there are any further questions, please feel free to email me or call me back .

Sincerely,

Leon Kogan

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