

Results:

Figure 4 displays the graph made showing the audio frequency response of the modulator. The frequency generator was set to 1 kHz and injected into the audio input port of the EUT. The amplitude was adjusted to obtain 50% modulation at 1000 Hz. This level was then taken as the 0-dB reference. The frequency of the generator was then varied and the output level recorded while holding the input levels constant.

Audio Frequency (Hz)	Response normalized to 1KHz (12.5)	Response normalized to 1kHz (25)
100	-20	-20
200	-14.0	-14.5
300	-10.0	-10.0
400	-8.0	-8.0
500	-6.0	-6.0
600	-5.0	-4.5
700	-3.0	-3.0
800	-1.5	-2.0
900	-1.0	-1.0
1000	0.0	0.0
1200	2.0	2.0
1500	4.0	3.5
1800	5.0	5.0
2000	6.0	5.5
2500	6.0	5.0
3000	6.0	4.0
5000	-50	-50

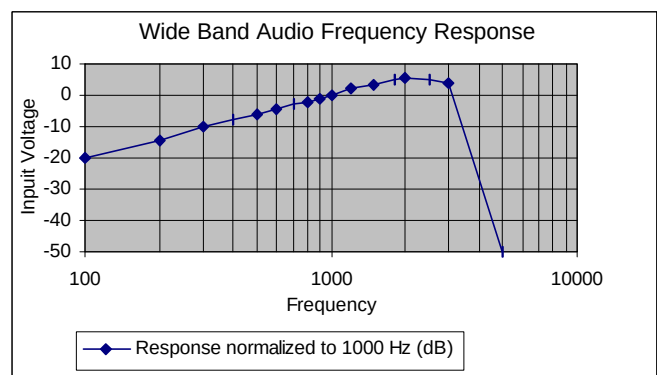
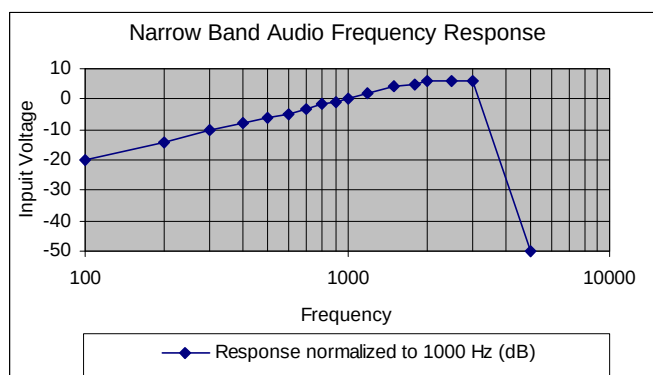


Figure 4: Audio Response Characteristics.

Figure 5 shows the deviation response for each of three frequencies while the input voltage was varied. The frequency is held constant and the frequency deviation is read from the deviation meter.

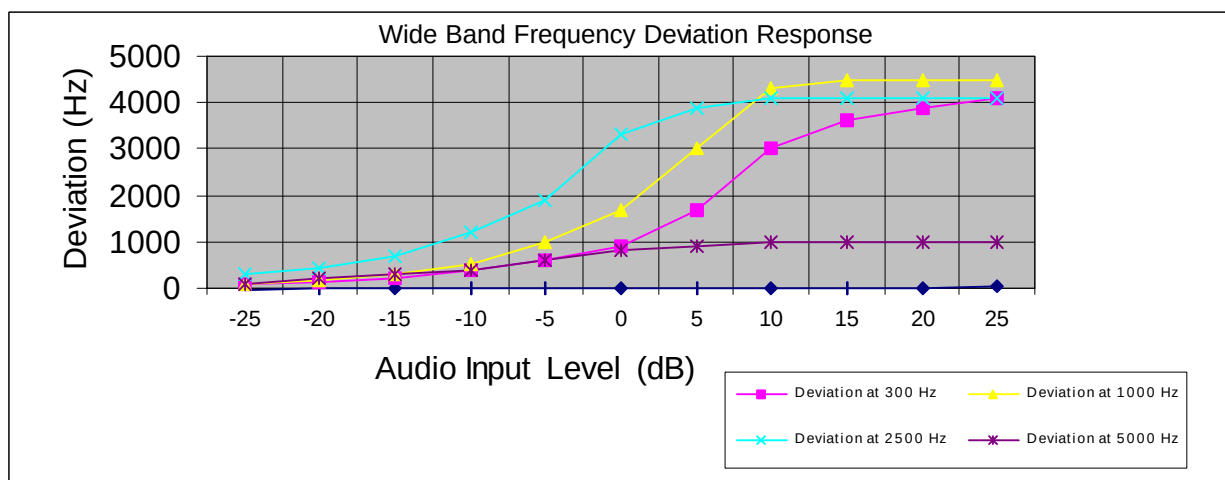
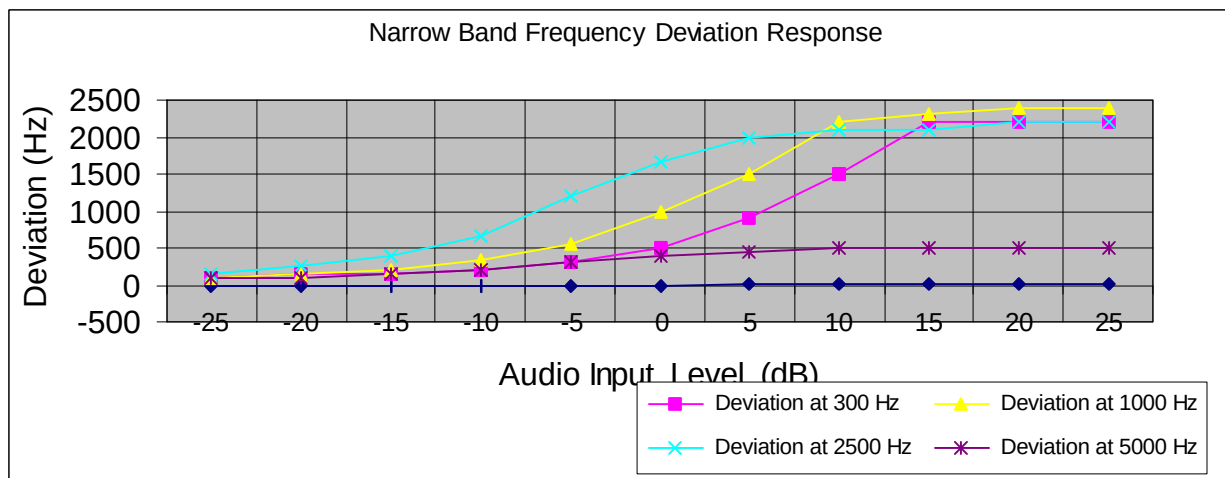


Figure 5: Deviation Characteristics.