

SUBMITTED MEASURED DATA AND METHOD OF MEASUREMENT

	MEASUREMENT	EXHIBIT	NUMBER OF PAGES
I	RF Power Output	7A	1
II	Audio Response	7B	2
III	Low Pass Filter Response	7C	2
IV	Modulation Limiting	7D	6
V	Occupied Bandwidth	7E	18
V1	Conducted Spurious Emissions	7F	4
VII	Radiated Spurious Emissions	7G	2
VIII	Frequency Stability		
	A. Temperature	7H	1
	B. Supply Voltage	7I	1
IX	Transient Frequency Behavior	7J	2

RF Power Output - Measured Data

The supply voltage to the transmitter was set to 13.6 volts DC. The RF output power was measured with the indicated voltage and current applied into the final RF amplifying device.

RF POWER OUTPUT 30W, FREQUENCY 450.100 MHz.

Measured RF Output Power: 29.5 WATTS
Measured DC Voltage: 13.42 VOLTS
Measured DC Current: 5.28 AMP
Measured DC Input Power: 70.86 WATTS

RF POWER OUTPUT 30W, FREQUENCY 481.100 MHz.

Measured RF Output Power: 29.5 WATTS
Measured DC Voltage: 13.42 VOLTS
Measured DC Current: 5.11 AMP
Measured DC Input Power: 68.58 WATTS

RF POWER OUTPUT 30W, FREQUENCY 511.900 MHz.

Measured RF Output Power: 29.5 WATTS
Measured DC Voltage: 13.42 VOLTS
Measured DC Current: 5.06 AMP
Measured DC Input Power: 67.91 WATTS

RF POWER OUTPUT 1.2W, FREQUENCY 450.100 MHz.

Measured RF Output Power: 1.17 WATTS
Measured DC Voltage: 13.54 VOLTS
Measured DC Current: 1.1 AMP
Measured DC Input Power: 14.89 WATTS

RF POWER OUTPUT 1.2W, FREQUENCY 481.100 MHz.

Measured RF Output Power: 1.17 WATTS
Measured DC Voltage: 13.54 VOLTS
Measured DC Current: 1.04 AMP
Measured DC Input Power: 14.08 WATTS

RF POWER OUTPUT 1.2W, FREQUENCY 511.900 MHz.

Measured RF Output Power: 1.17 WATTS
Measured DC Voltage: 13.54 VOLTS
Measured DC Current: 0.98 AMP
Measured DC Input Power: 13.27 WATTS

MOTOROLA INC.**TRANSMITTER AUDIO RESPONSE CHARACTERISTIC
MODULATION LEVEL vs. AUDIO FREQUENCY**

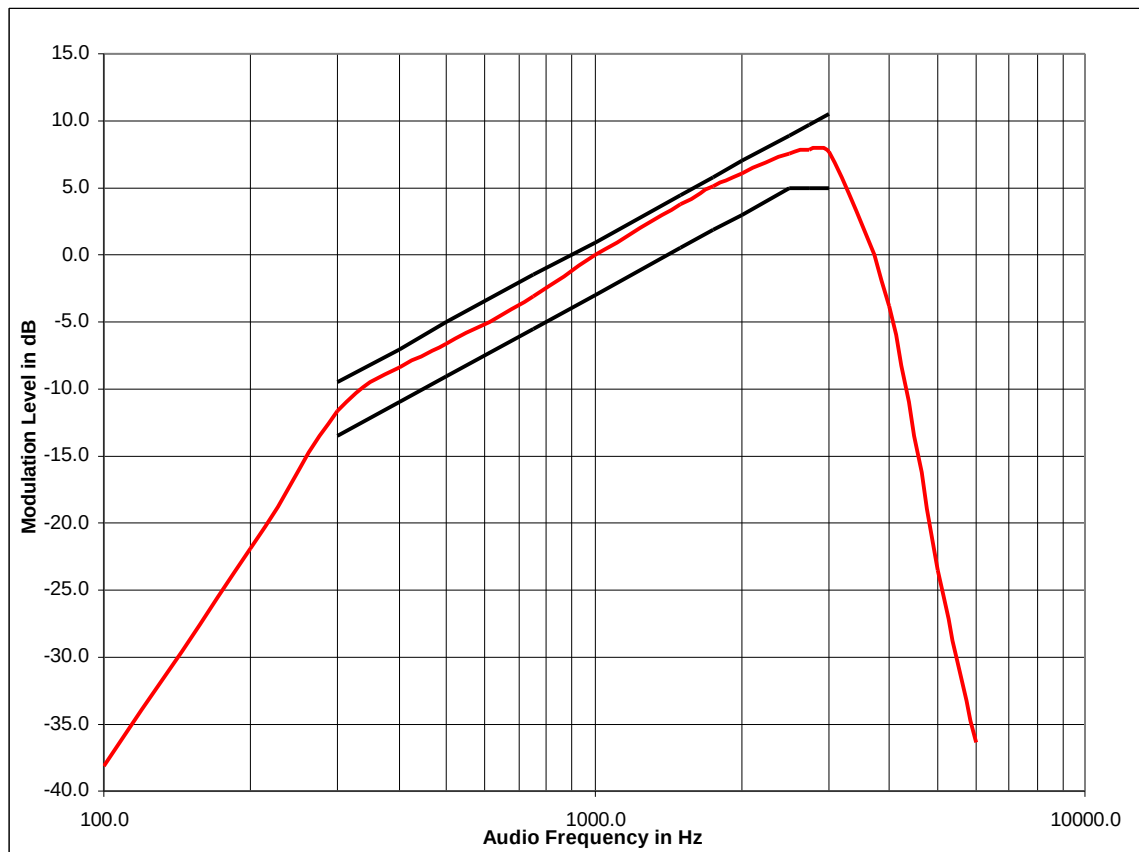
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency: 481.100Mhz

Channel Spacing: 25KHz



MOTOROLA INC.**TRANSMITTER AUDIO RESPONSE CHARACTERISTIC
MODULATION LEVEL vs. AUDIO FREQUENCY**

Xmtr Type : AZ492FT48329

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency: 481.100Mhz

Channel Spacing: 12.5KHz



MOTOROLA INC.**TRANSMITTER
POST - LIMITER ROLL OFF RESPONSE****FILTER OUTPUT vs. AUDIO FREQUENCY**
=====

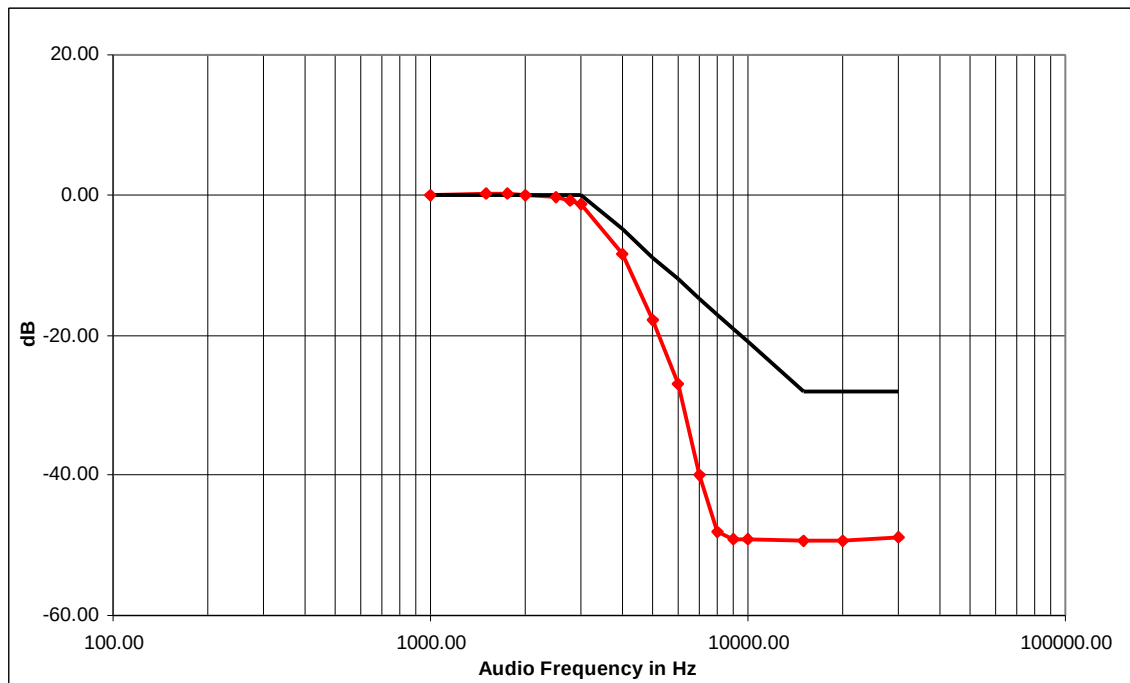
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency : 481.100 MHz

Channel Spacing : 25 kHz

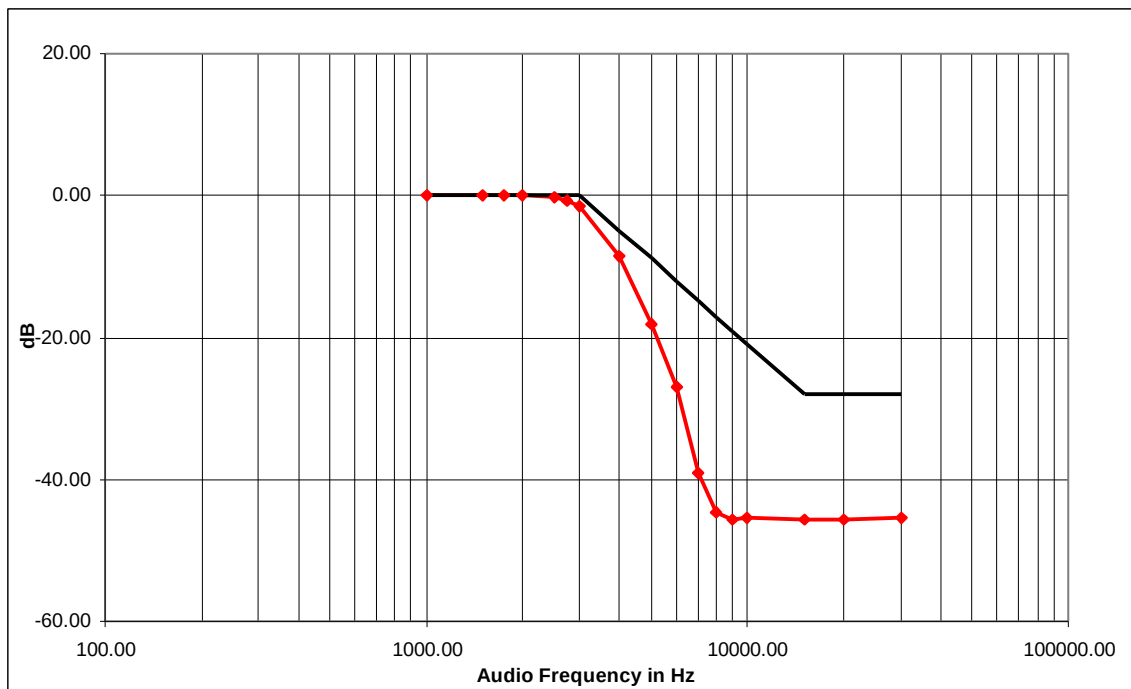


MOTOROLA INC.TRANSMITTER
POST - LIMITER ROLL OFF RESPONSE

FILTER OUTPUT vs. AUDIO FREQUENCY

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF OoiFrequency: 481.100 MHz
Channel Spacing: 12.5 kHz

MOTOROLA INC.

CARRIER SQUELCH
AUDIO INPUT LEVEL vs. DEVIATION

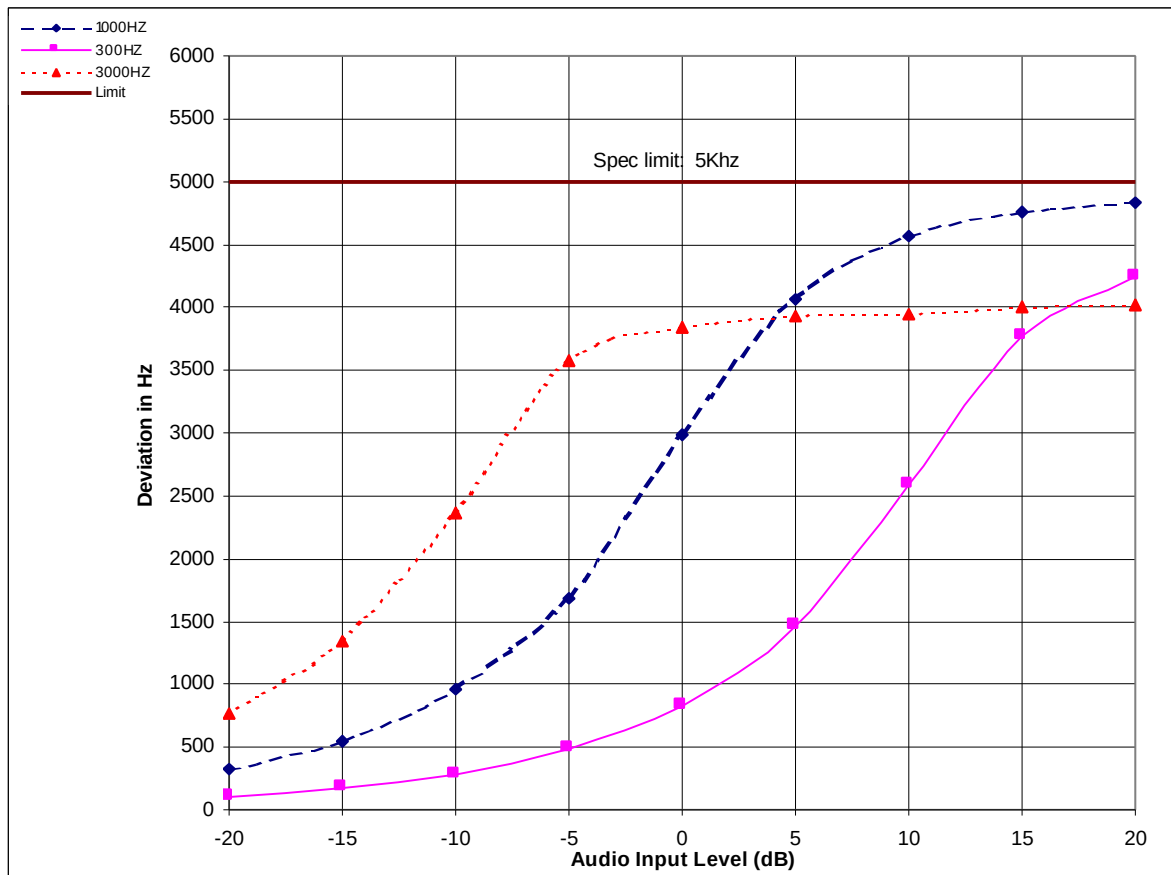
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency : 481.100 MHz

Channel Spacing : 25 kHz



MOTOROLA INC.

TONE WITH "PL"
AUDIO INPUT LEVEL vs. DEVIATION

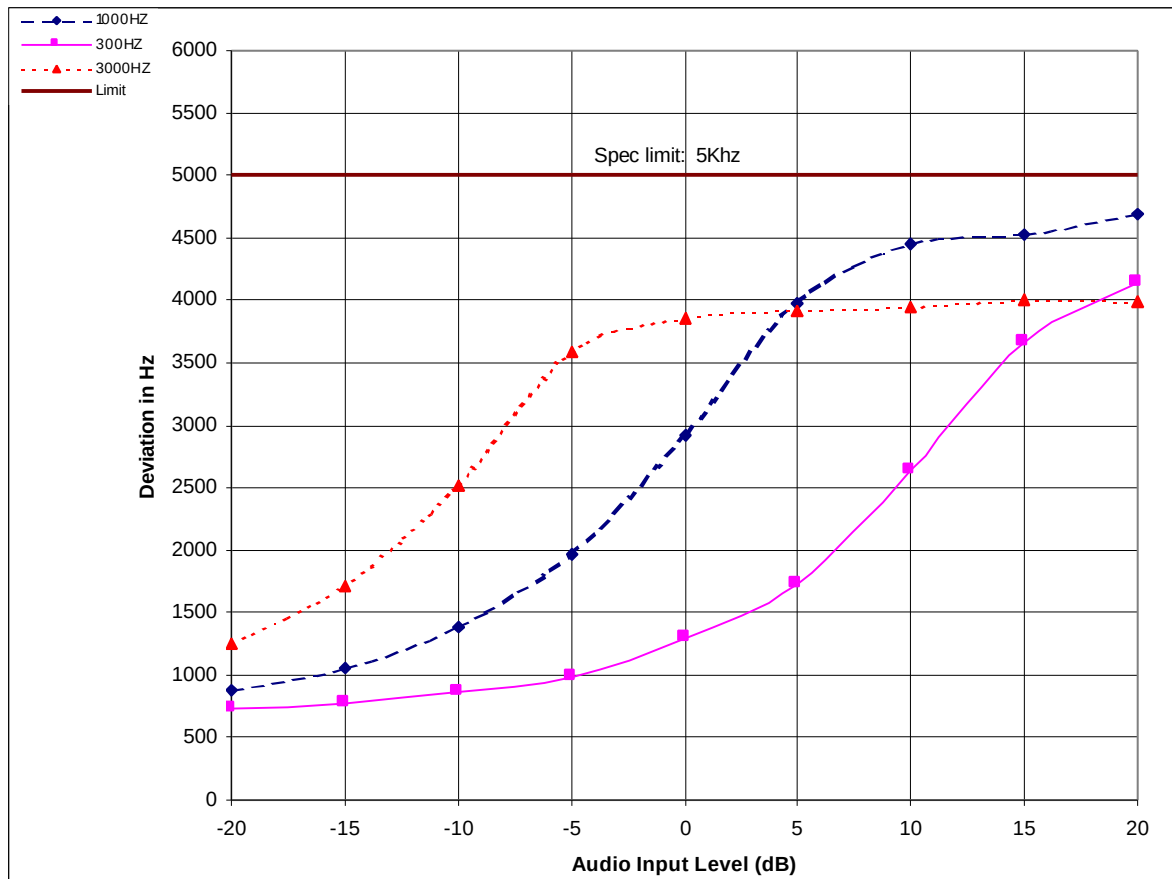
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency : 481.100 MHz

Channel Spacing : 25 kHz



MOTOROLA INC.

TONE WITH "DPL"
AUDIO INPUT LEVEL vs. DEVIATION

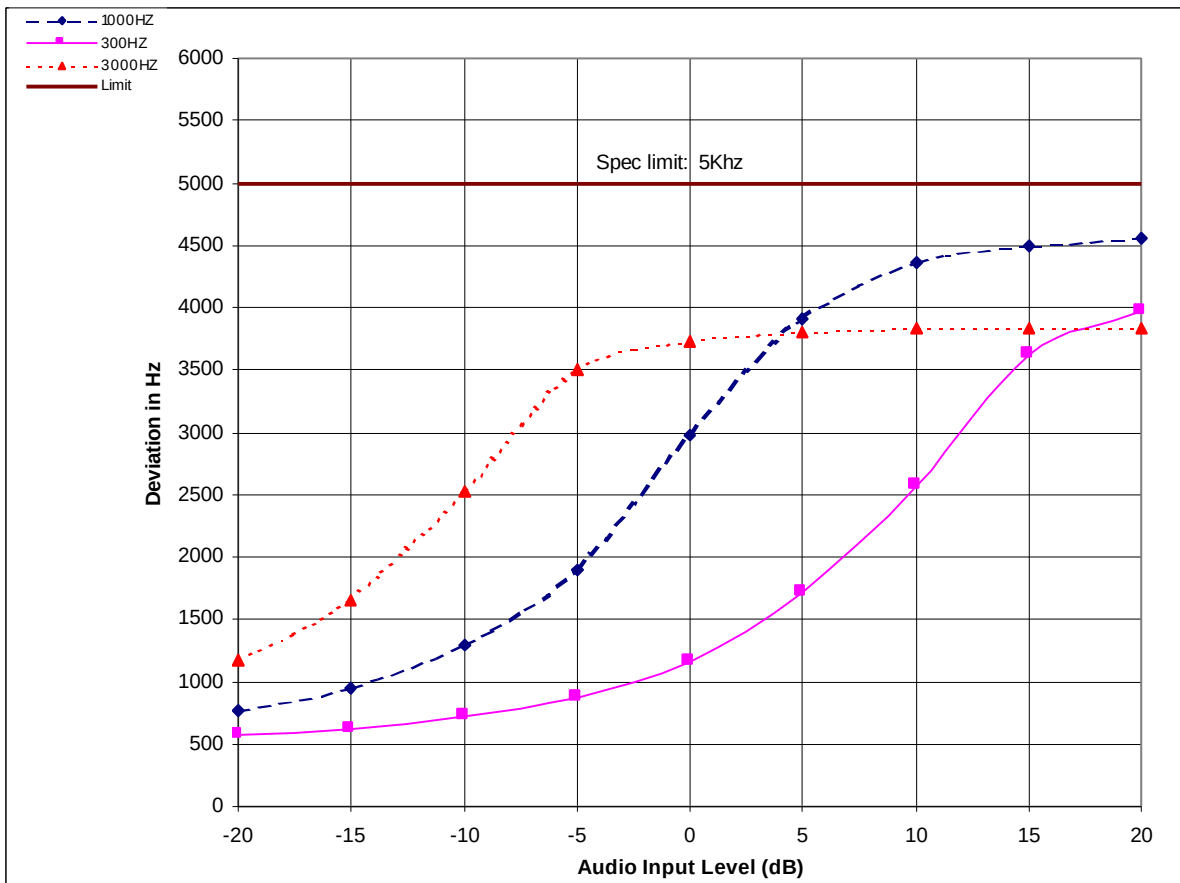
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency : 481.100 MHz

Channel Spacing : 25 kHz



MOTOROLA INC.

CARRIER SQUELCH
AUDIO INPUT LEVEL vs. DEVIATION

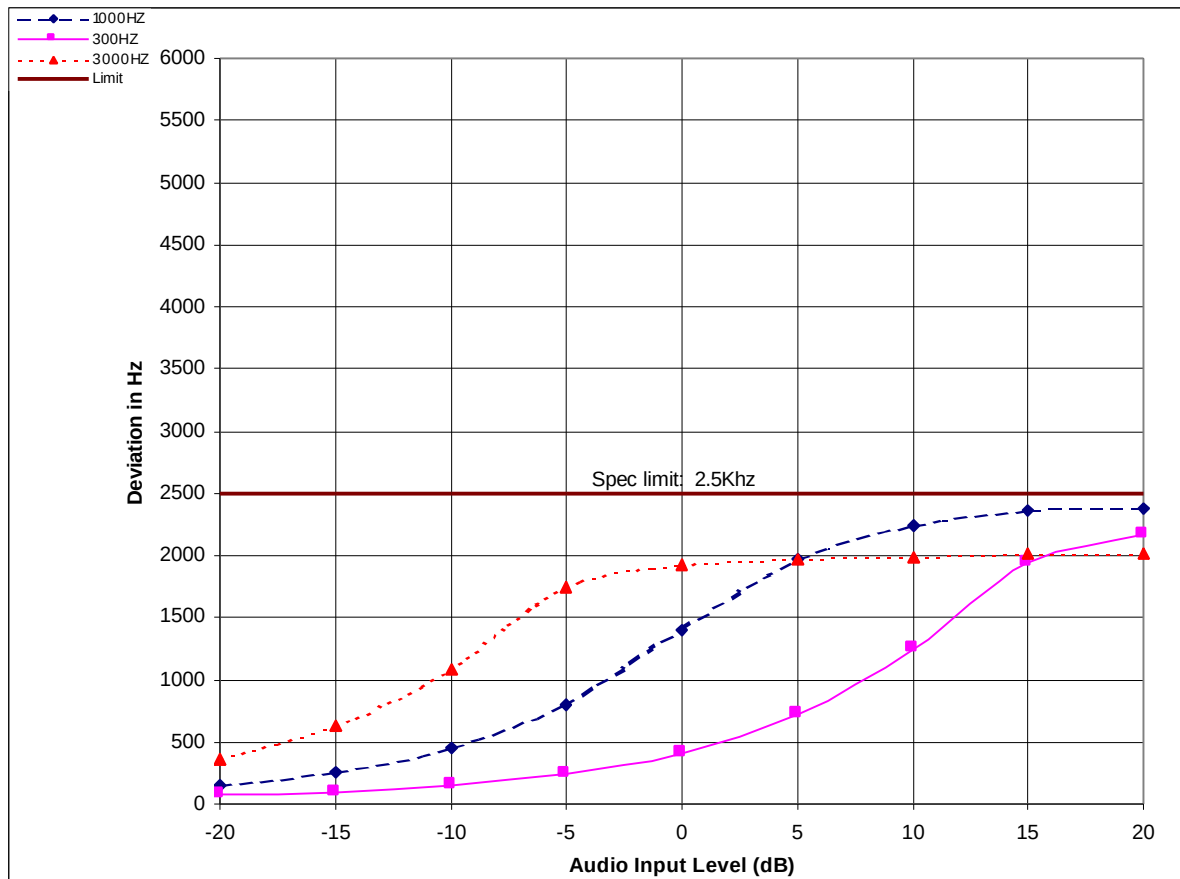
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency : 481.100Mhz

Channel Spacing : 12.5KHz



MOTOROLA INC.

TONE WITH "PL"
AUDIO INPUT LEVEL vs. DEVIATION

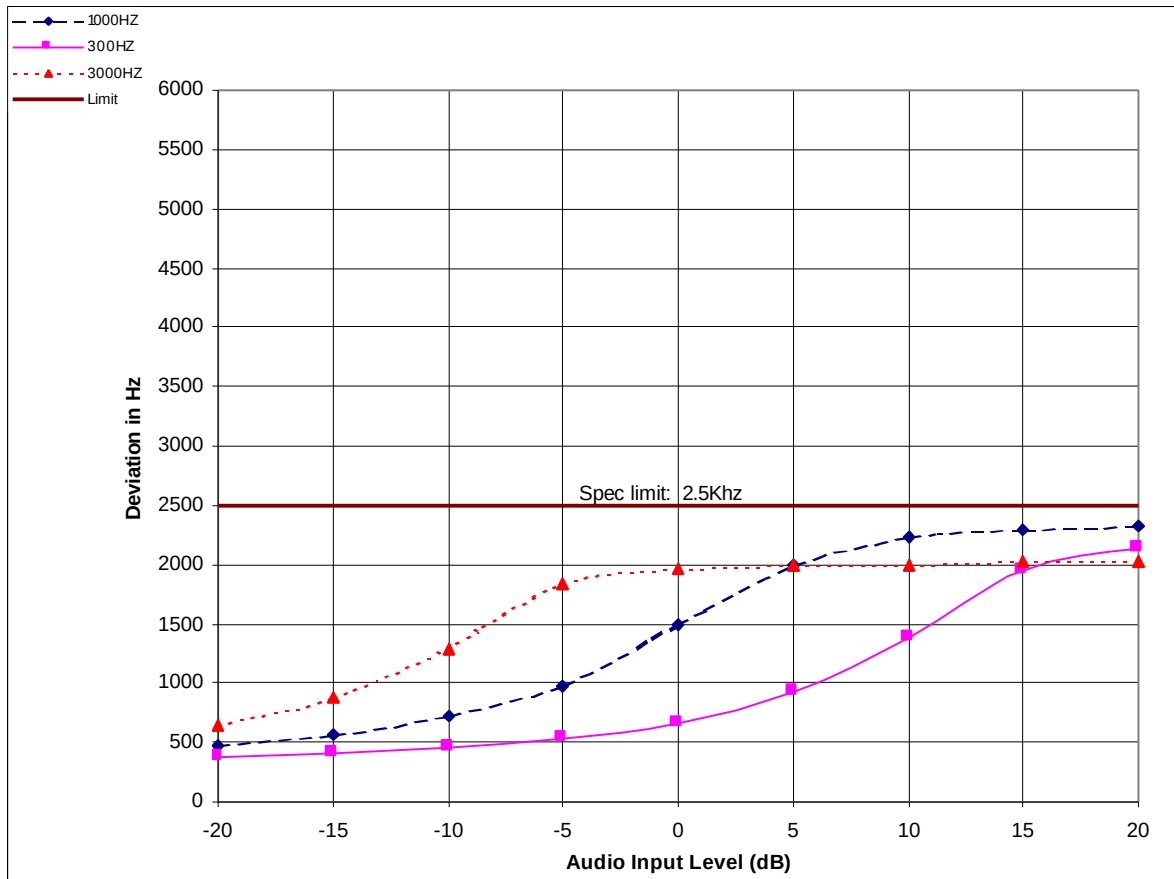
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency : 481.100 MHz

Channel Spacing : 12.5 kHz



MOTOROLA INC.

TONE WITH "DPL"
AUDIO INPUT LEVEL vs. DEVIATION

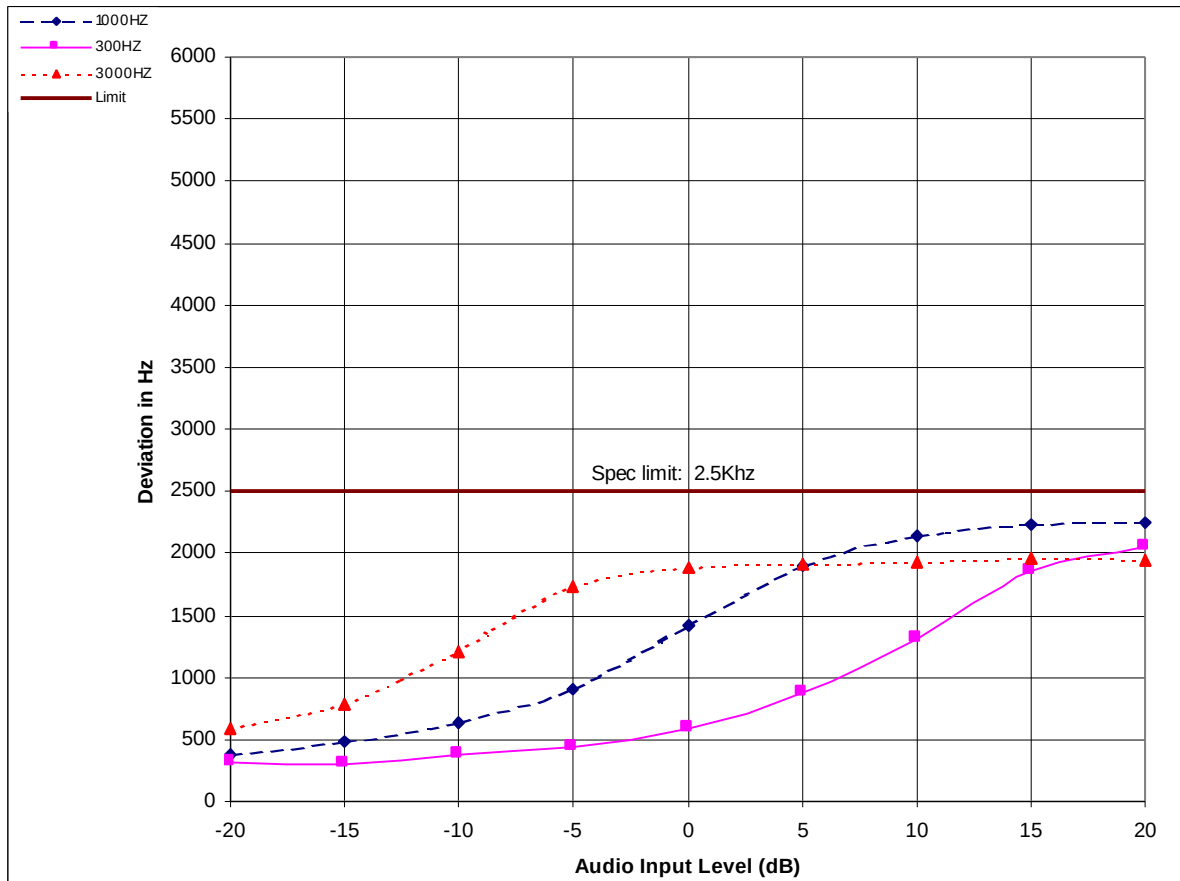
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Frequency : 481.100 MHz

Channel Spacing : 12.5 kHz



MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(2500 HZ AUDIO MODULATION ONLY)**

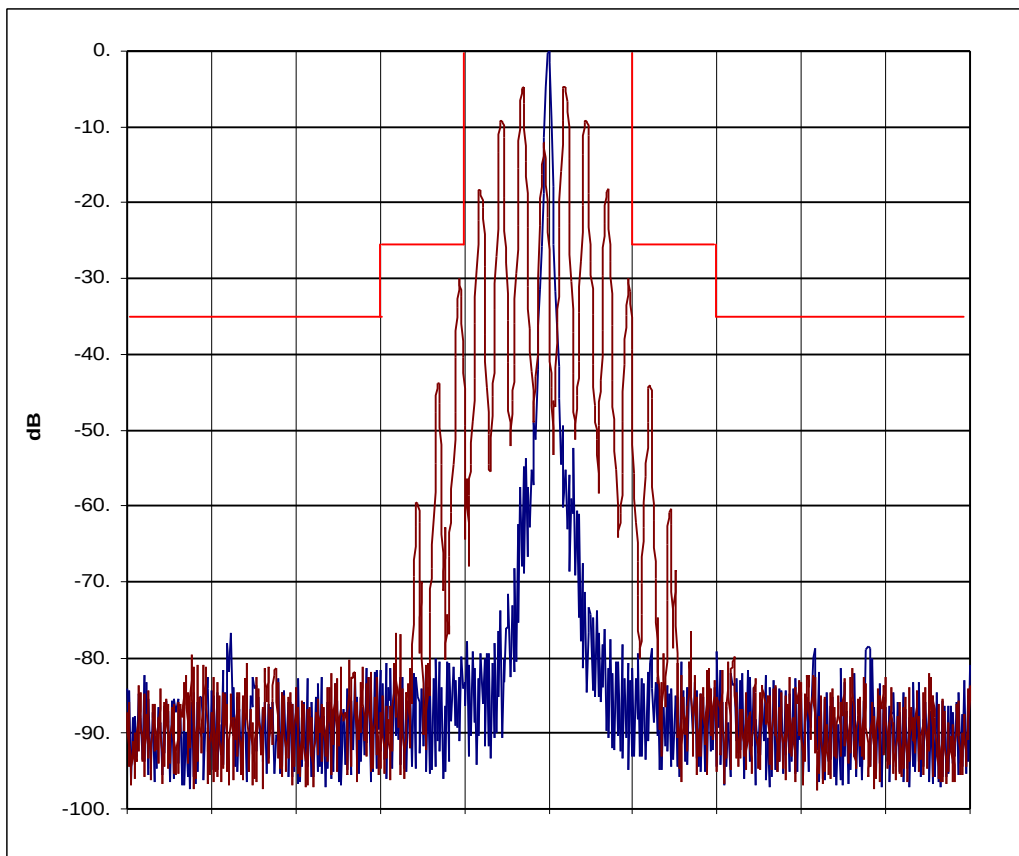
=====

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

25 kHz Channel Spacing



CENTER FREQUENCY(MHz):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(kHz):	300
SPAN(kHz):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(2500 HZ AUDIO & PL TONE MODULATION)**

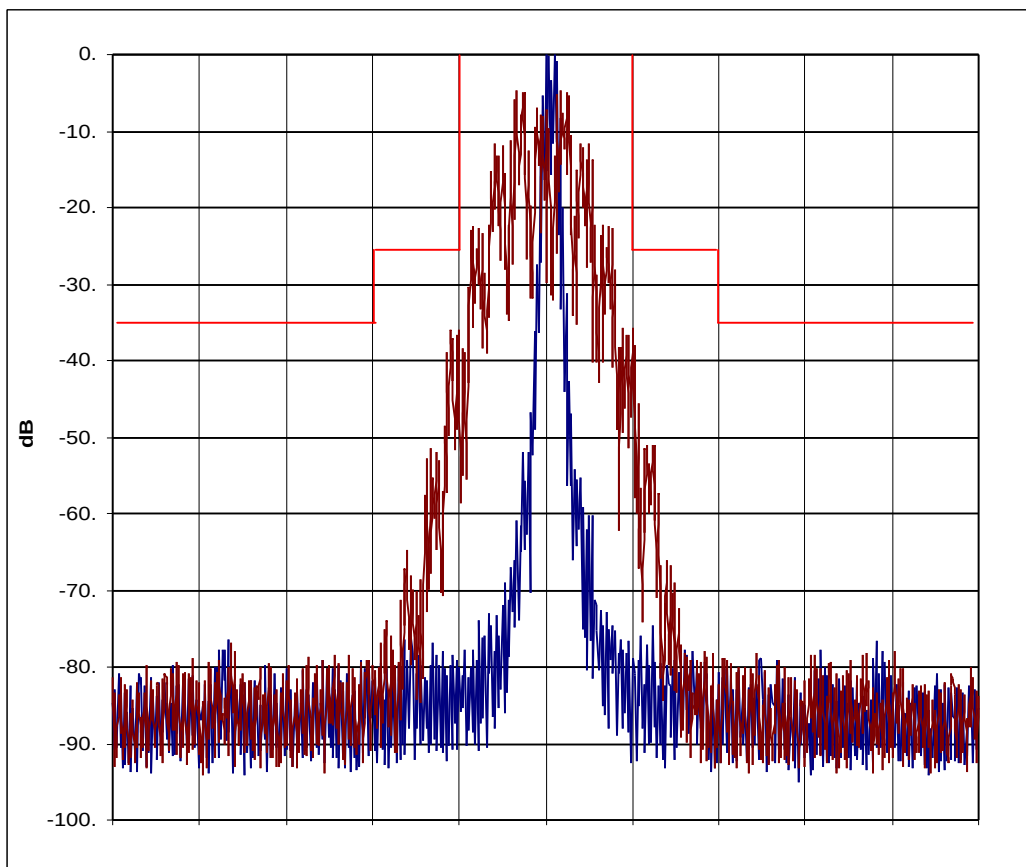
=====

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi.

25 kHz Channel Spacing



CENTER FREQUENCY(MHz):	481.100
RESOLUTION BANDWIDTH(Hz):	300
VIDEO BANDWIDTH(kHz):	300
SPAN(kHz):	100
SWEEP TIME(SEC):	3
SCALE(dB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

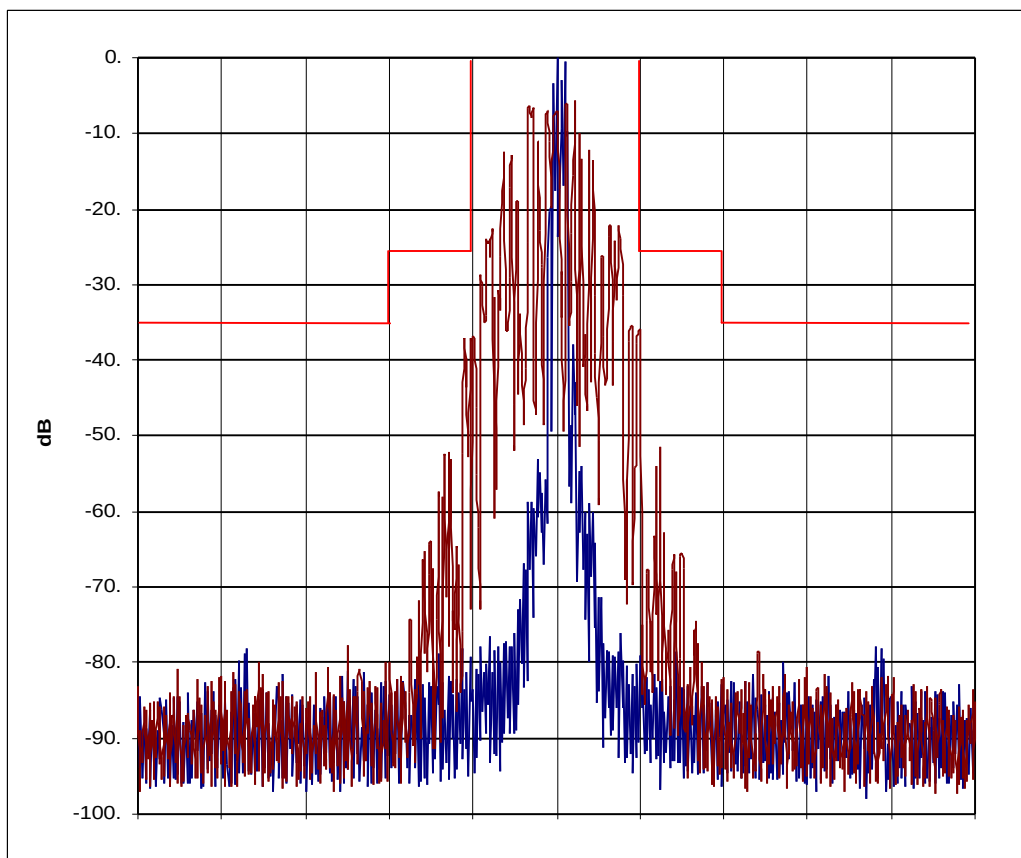
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(2500 HZ AUDIO & DPL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

25Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

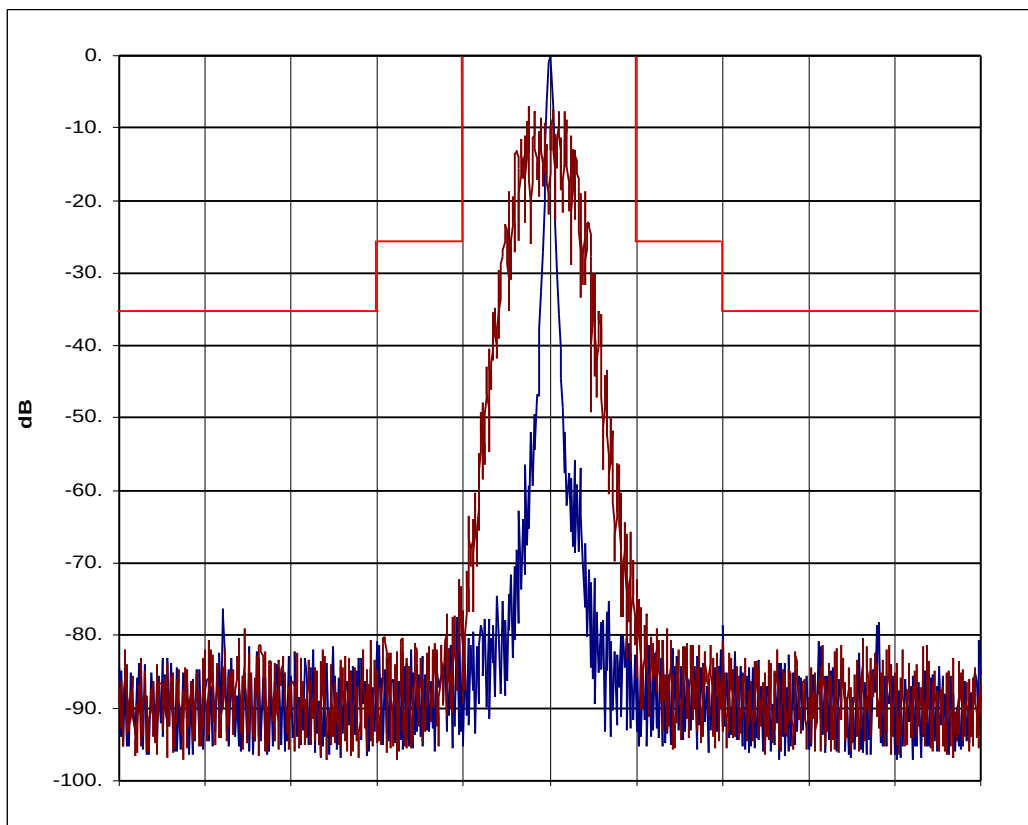
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(DTMF MODULATION ONLY)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

25Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(DTMF MODULATION & PL TONE MODULATION)**

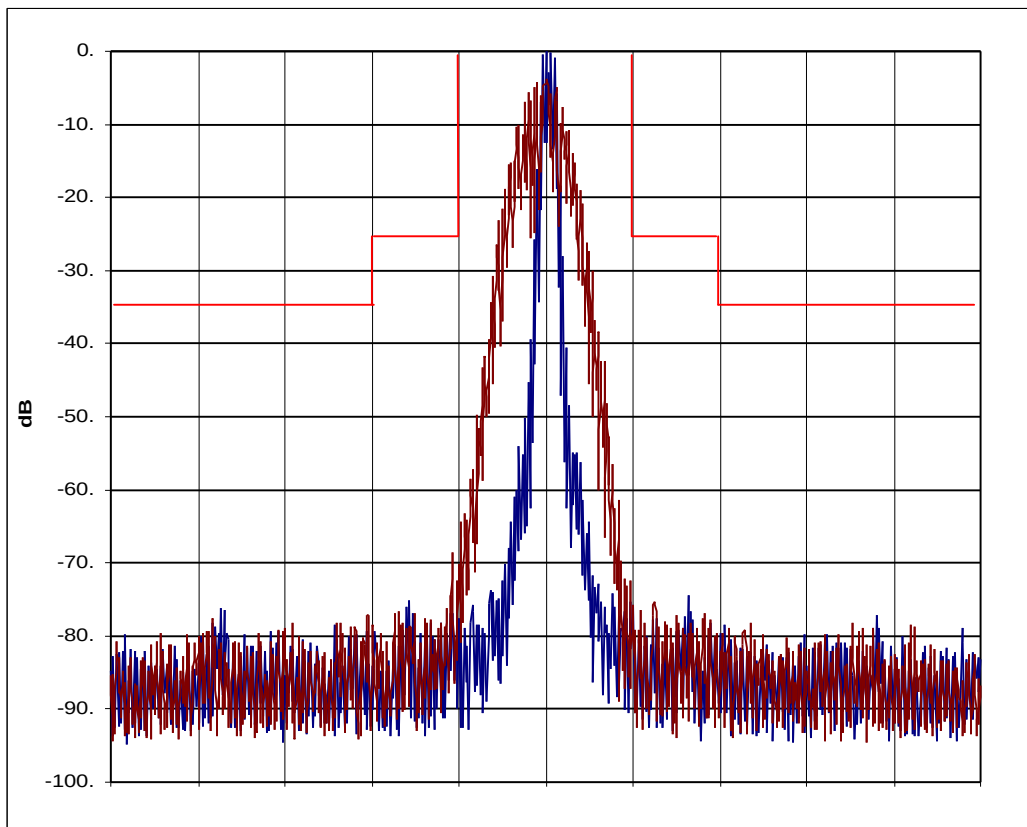
=====

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

25Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

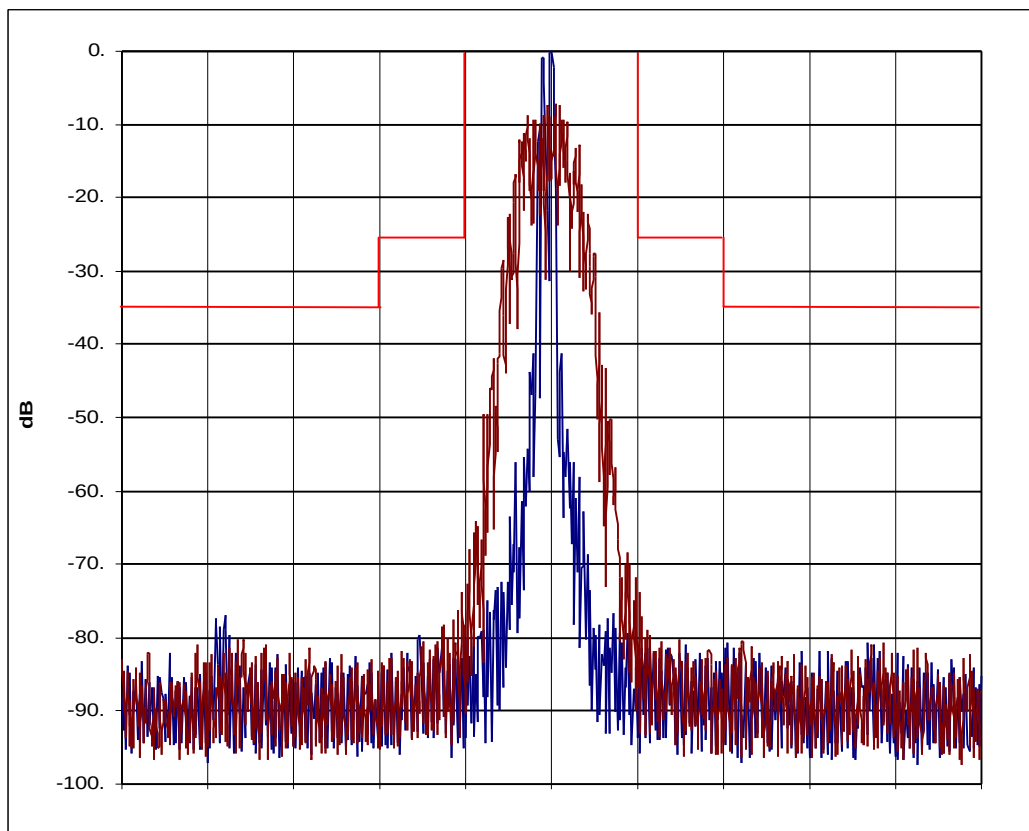
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(DTMF MODULATION & DPL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

25Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(2500 HZ AUDIO MODULATION ONLY)**

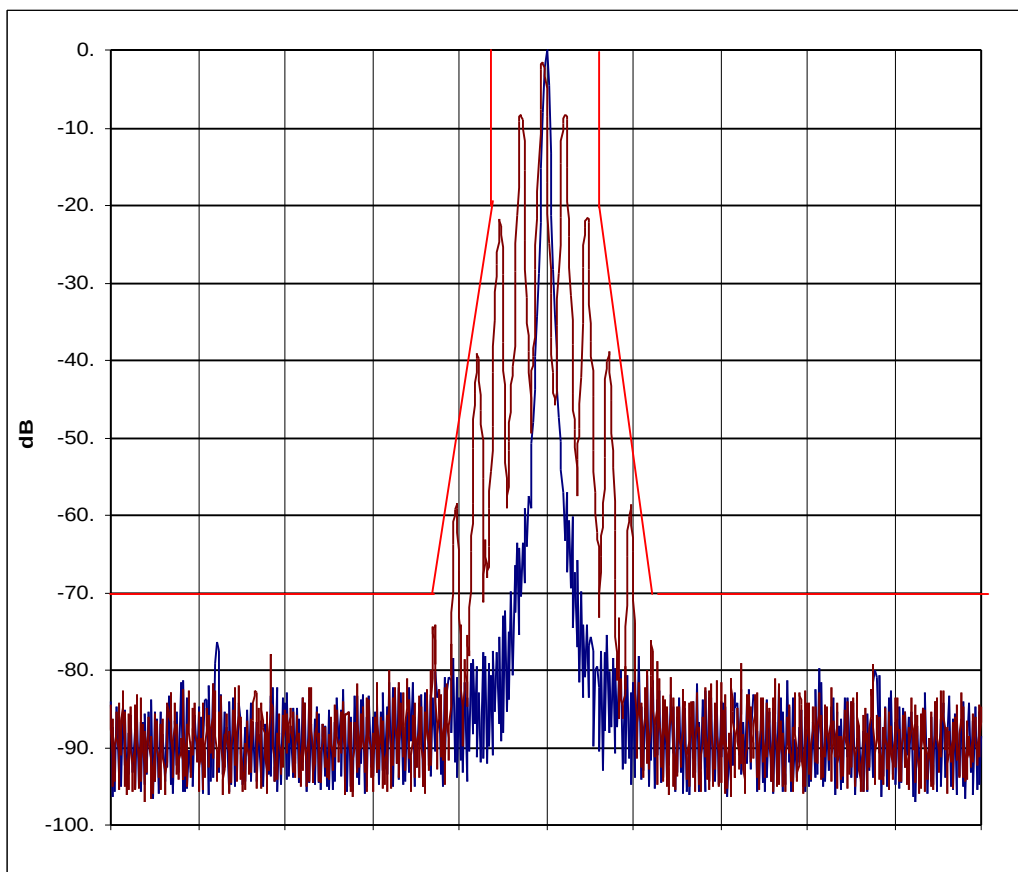
=====

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

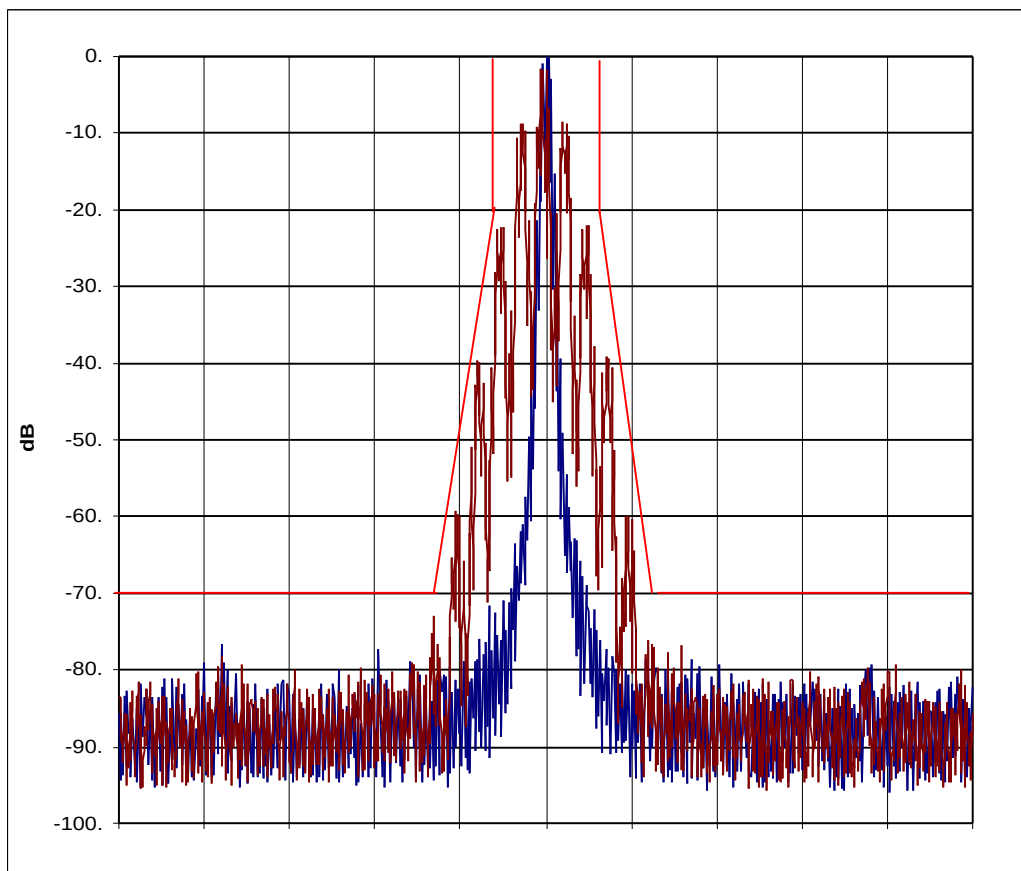
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(2500 HZ AUDIO & PL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

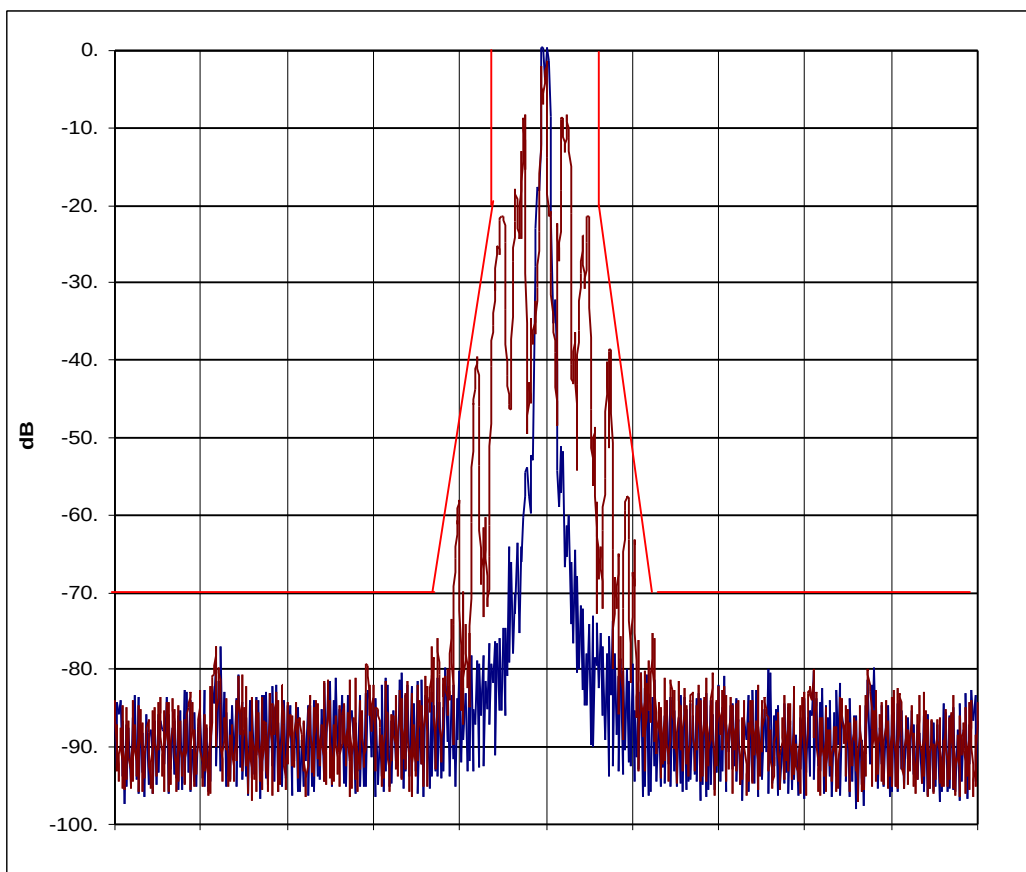
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(2500 HZ AUDIO & DPL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

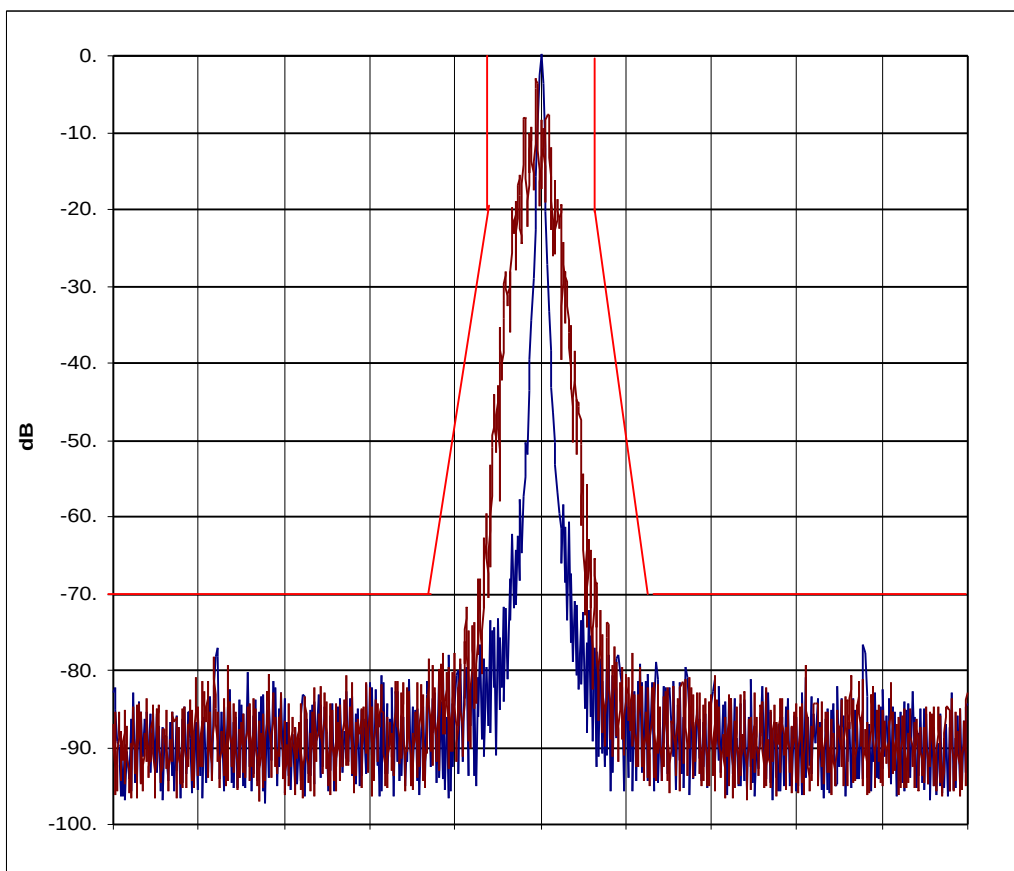
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(DTMF MODULATION ONLY)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

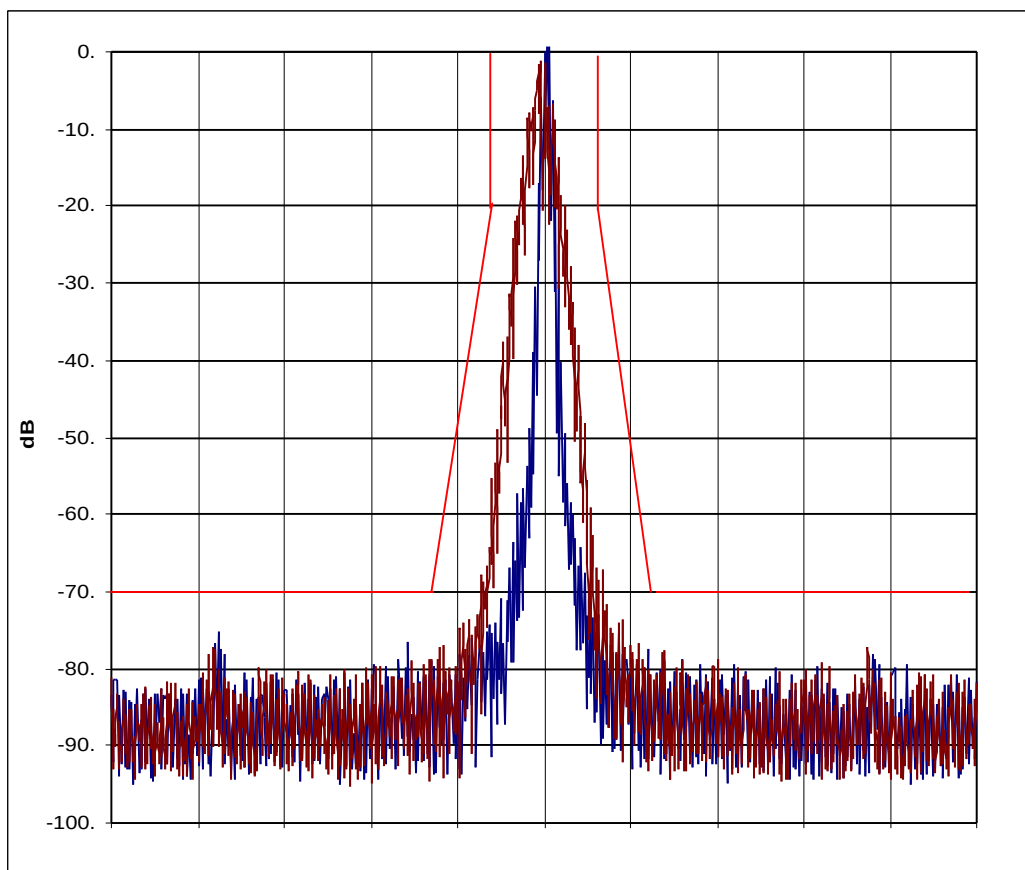
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(DTMF MODULATION & PL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

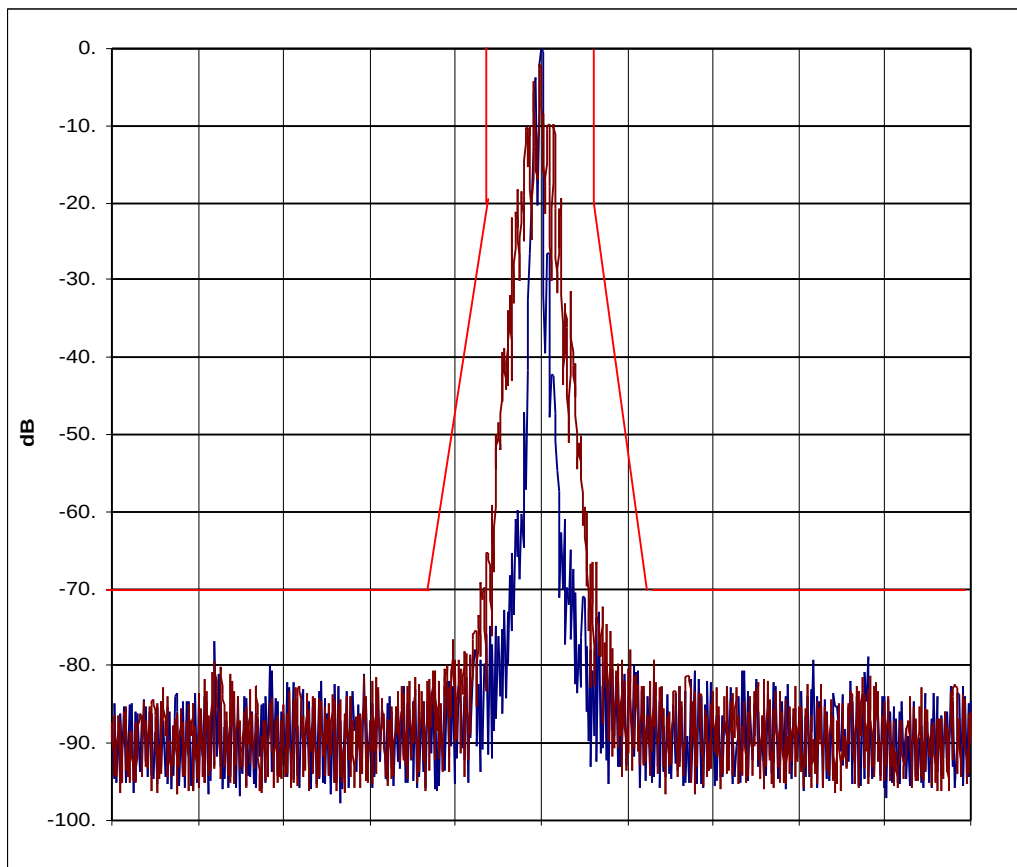
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR VOICE TRANSMISSION
(DTMF MODULATION & DPL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

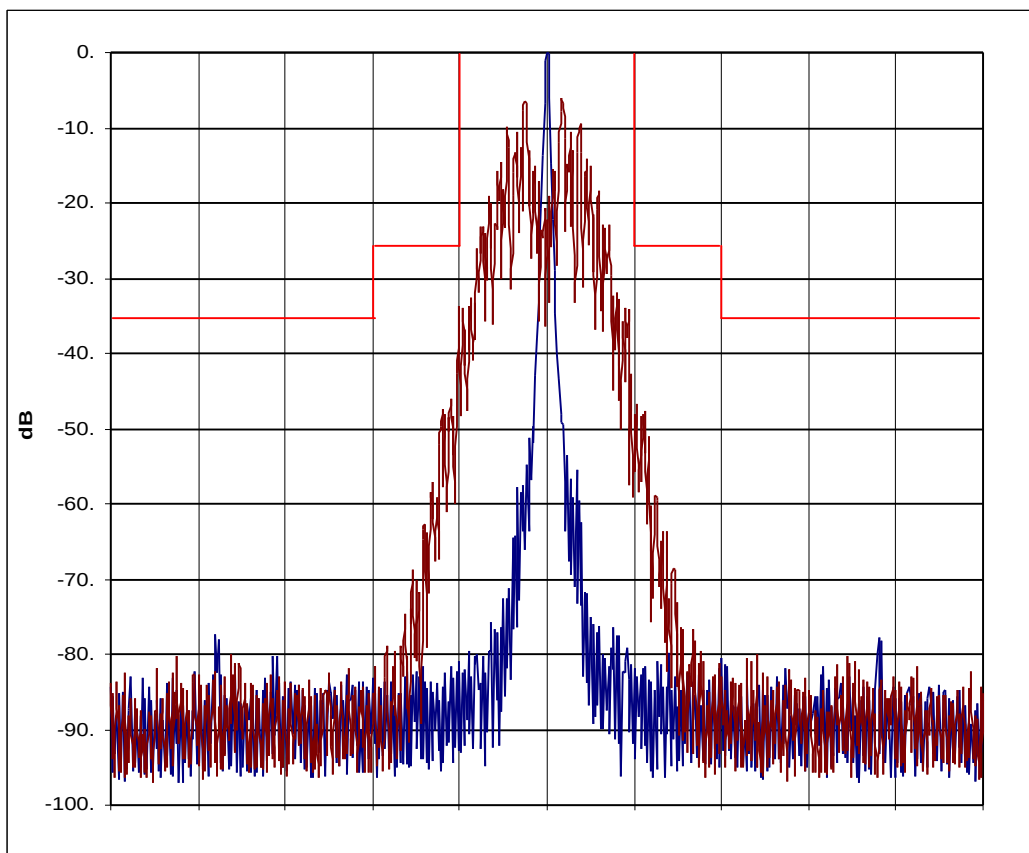
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR DATA TRANSMISSION
(2000/3000 HZ FSK DATA MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

25Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

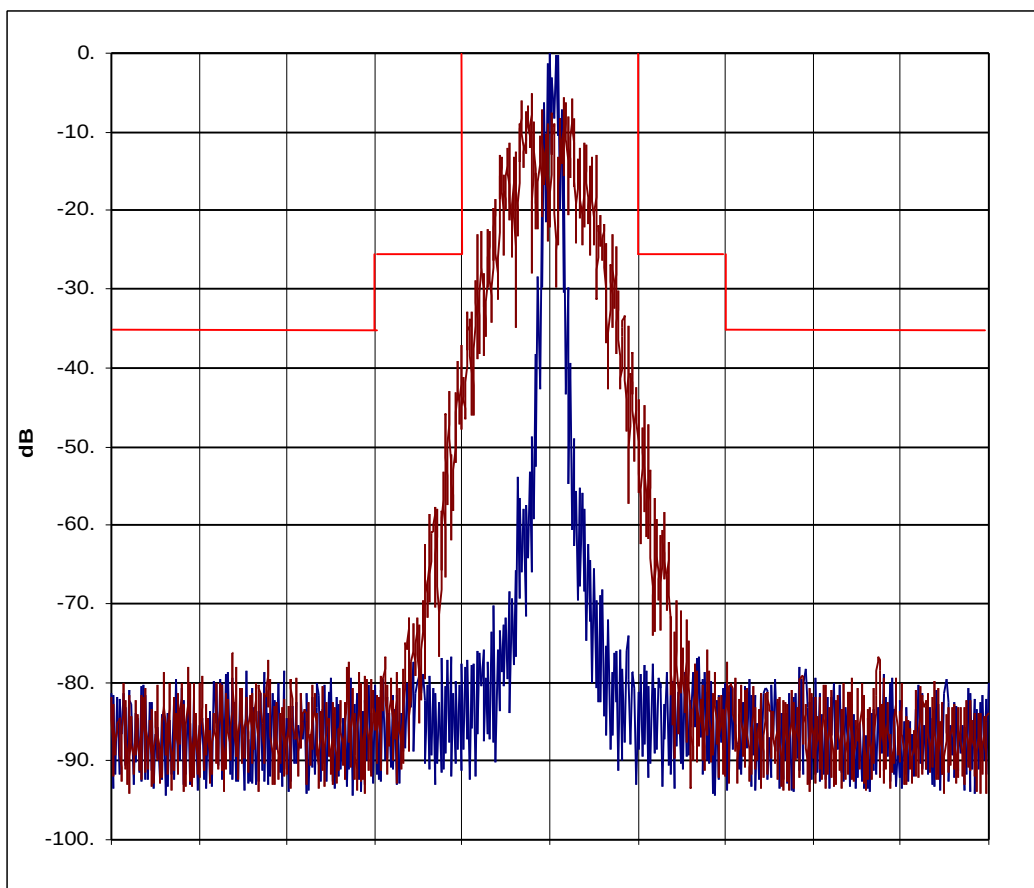
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR DATA TRANSMISSION
(2000/3000 HZ FSK DATA AND PL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

25Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

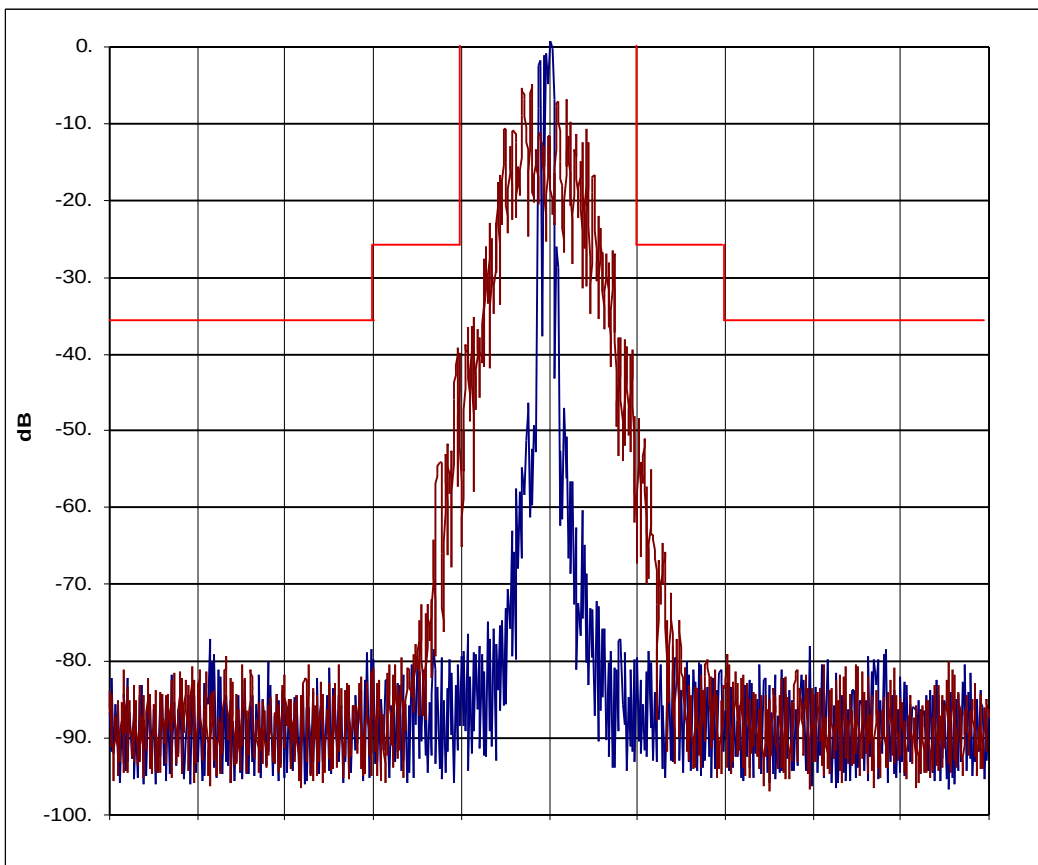
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR DATA TRANSMISSION
(2000/3000 HZ FSK DATA AND DPL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

25Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask B

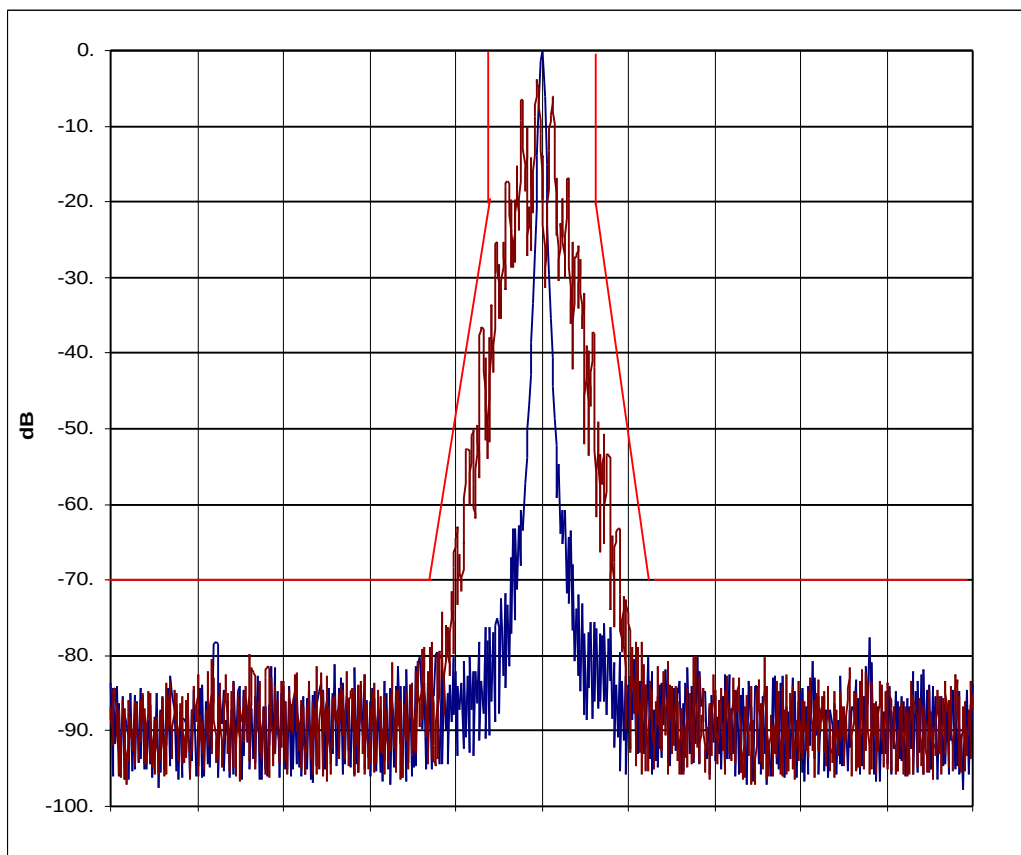
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR DATA TRANSMISSION
(2000/3000 HZ FSK DATA MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

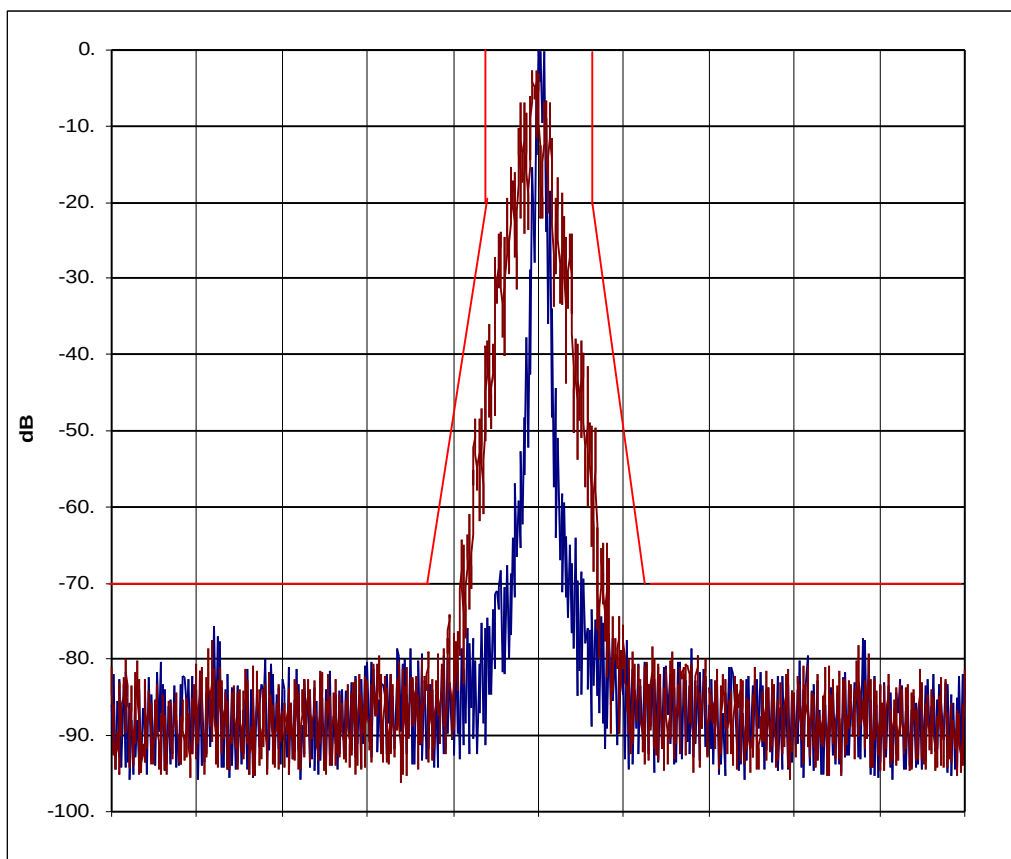
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR DATA TRANSMISSION
(2000/3000 HZ FSK DATA & PL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

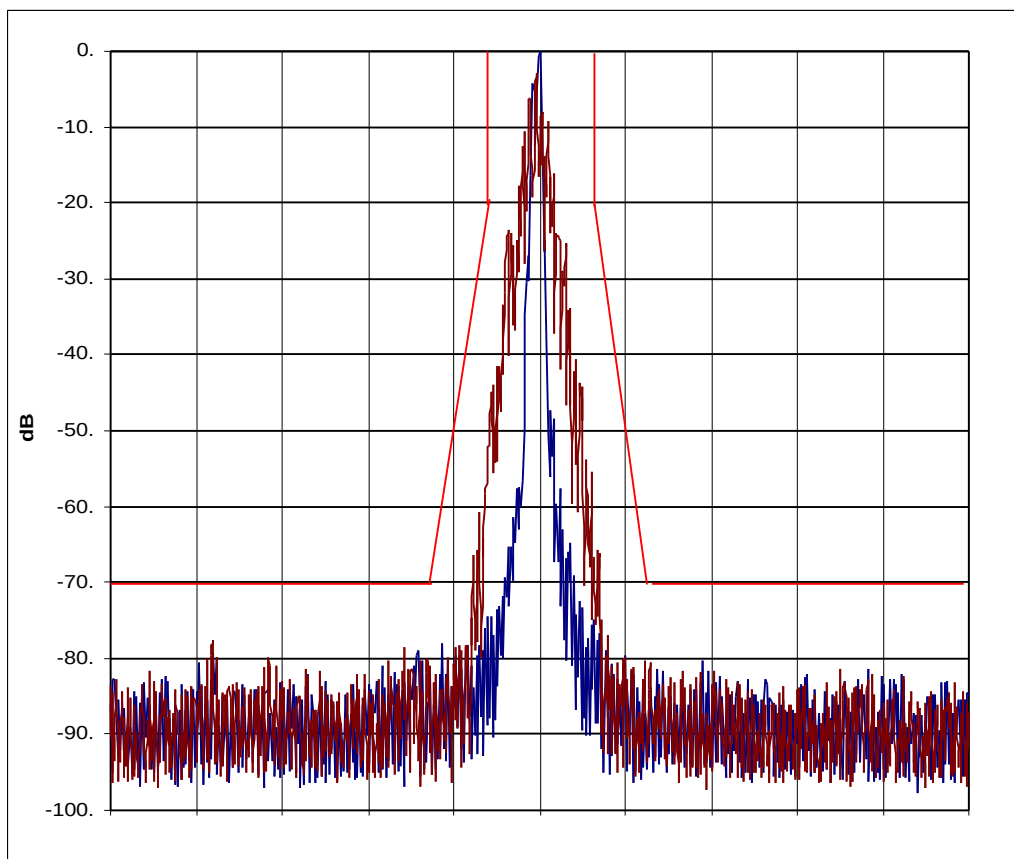
MOTOROLA INC.**OCCUPIED BANDWIDTH FOR DATA TRANSMISSION
(2000/3000 HZ FSK DATA & DPL TONE MODULATION)**

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

12.5Khz Channel Spacing



CENTER FREQUENCY(MHZ):	481.100
RESOLUTION BANDWIDTH(HZ):	300
VIDEO BANDWIDTH(KHZ):	300
SPAN(KHZ):	100
SWEEP TIME(SEC):	3
SCALE(DB/):	10
REF LEVEL(dBm)	6.2
ATTEN (dB)	30

Note: Emission Mask D

MOTOROLA INC.**TRANSMITTER SPURIOUS EMISSION CHARACTERISTIC
CONDUCTED SPURIOUS AND HARMONIC EMISSIONS**

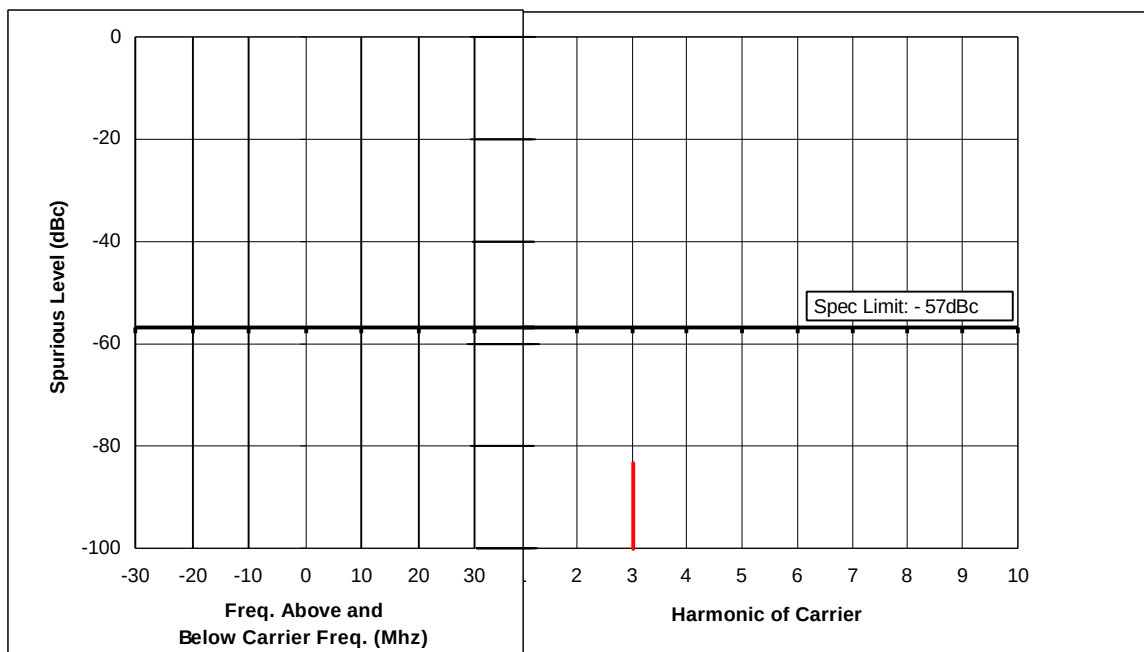
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Power Output : 30W at 481.100Mhz.

Channel Spacing : 25KHz.



Note: Other emissions not reported were more than 35dB below the limit

MOTOROLA INC.

TRANSMITTER SPURIOUS EMISSION CHARACTERISTIC
CONDUCTED SPURIOUS AND HARMONIC EMISSIONS

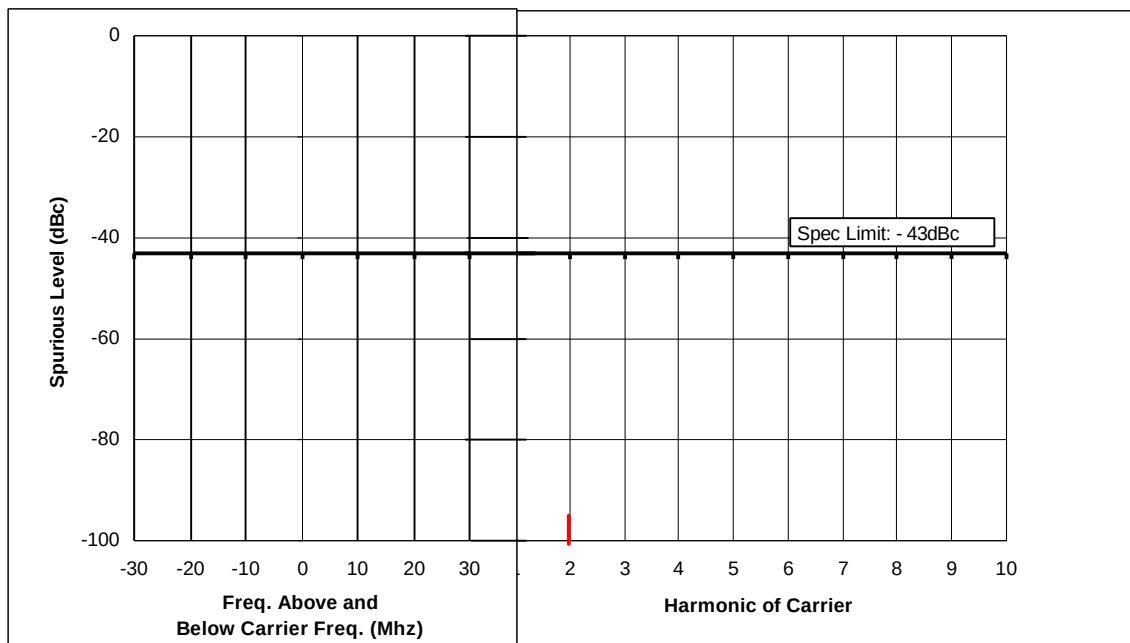
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Power Output : 1W at 481.100Mhz.

Channel Spacing : 25KHz.



Note: Other emissions not reported were more than 50dB below the limit

MOTOROLA INC.**TRANSMITTER SPURIOUS EMISSION CHARACTERISTIC
CONDUCTED SPURIOUS AND HARMONIC EMISSIONS**

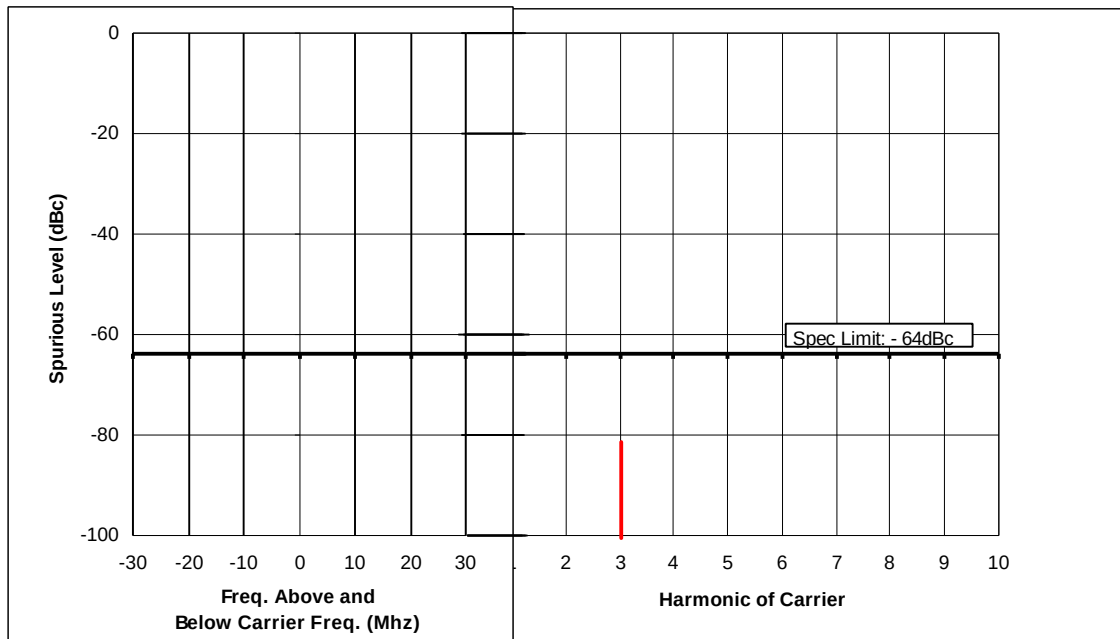
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Power Output : 30W at 481.100Mhz.

Channel Spacing : 12.5KHz.



Note: Other emissions not reported were more than 35dB below the limit

MOTOROLA INC.**TRANSMITTER SPURIOUS EMISSION CHARACTERISTIC
CONDUCTED SPURIOUS AND HARMONIC EMISSIONS**

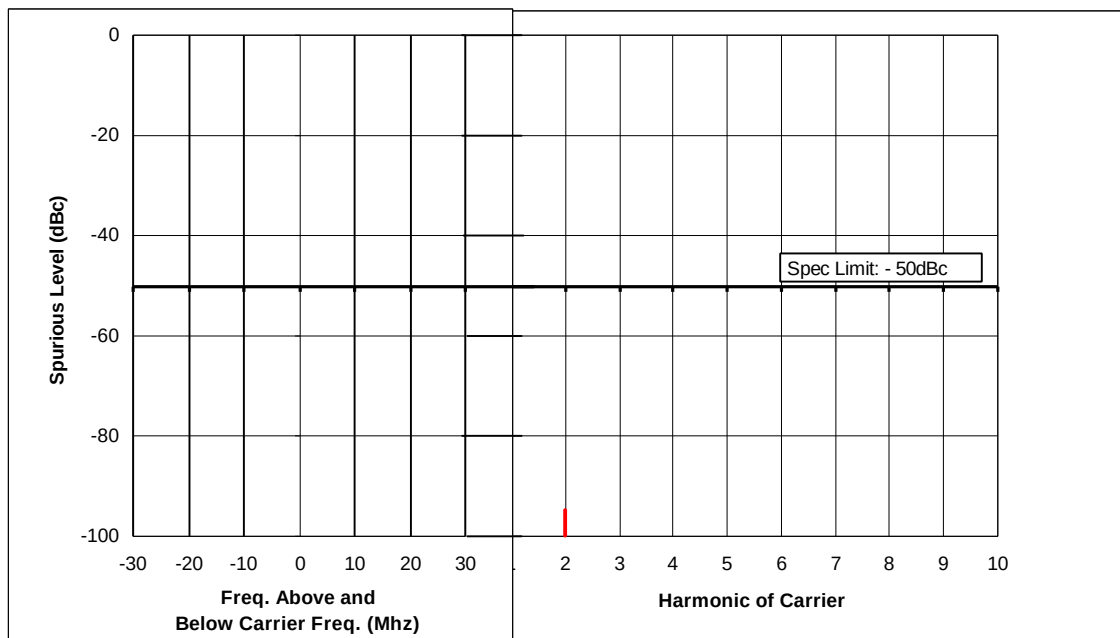
Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

Power Output : 1W at 481.100Mhz.

Channel Spacing : 12.5KHz.



Note: Other emissions not reported were more than 50dB below the limit

MOTOROLA INC.**TRANSMITTER SPURIOUS EMISSION CHARACTERISTIC
RADIATED SPURIOUS AND HARMONIC EMISSIONS**

Xmtr Type : AZ492FT4829

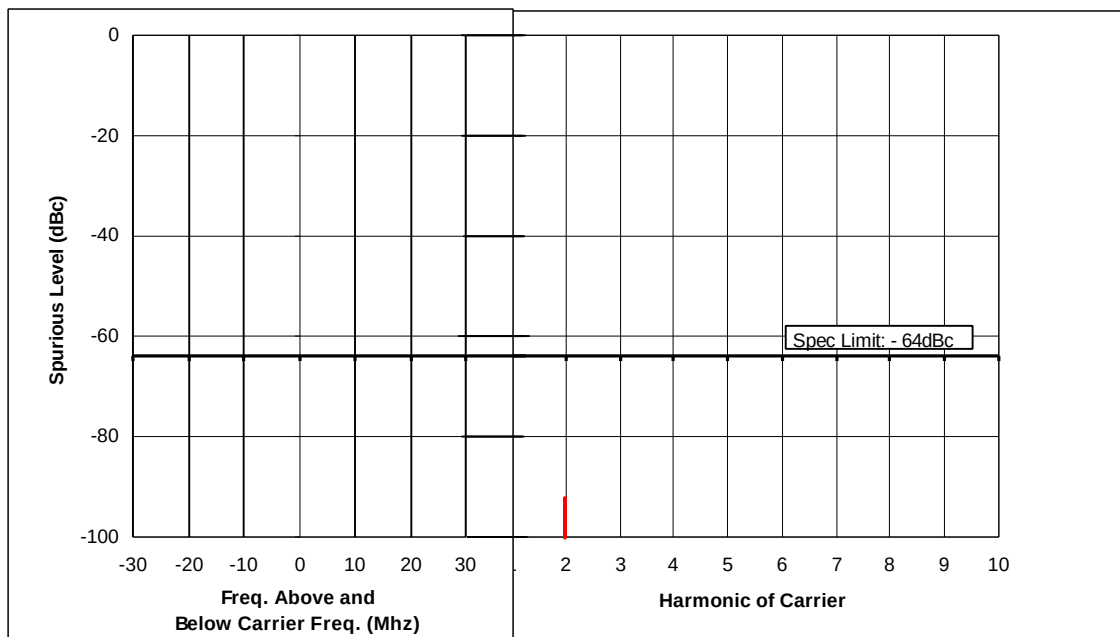
Log Page : ---

Date : 10th August 1999

Signature :-

Power Output : 30W at 481.100Mhz.

Channel Spacing : 12.5KHz.



Note: Other emissions not reported were more than 35dB below the limit.

MOTOROLA INC.**TRANSMITTER SPURIOUS EMISSION CHARACTERISTIC
RADIATED SPURIOUS AND HARMONIC EMISSIONS**

Xmtr Type : AZ492FT4829

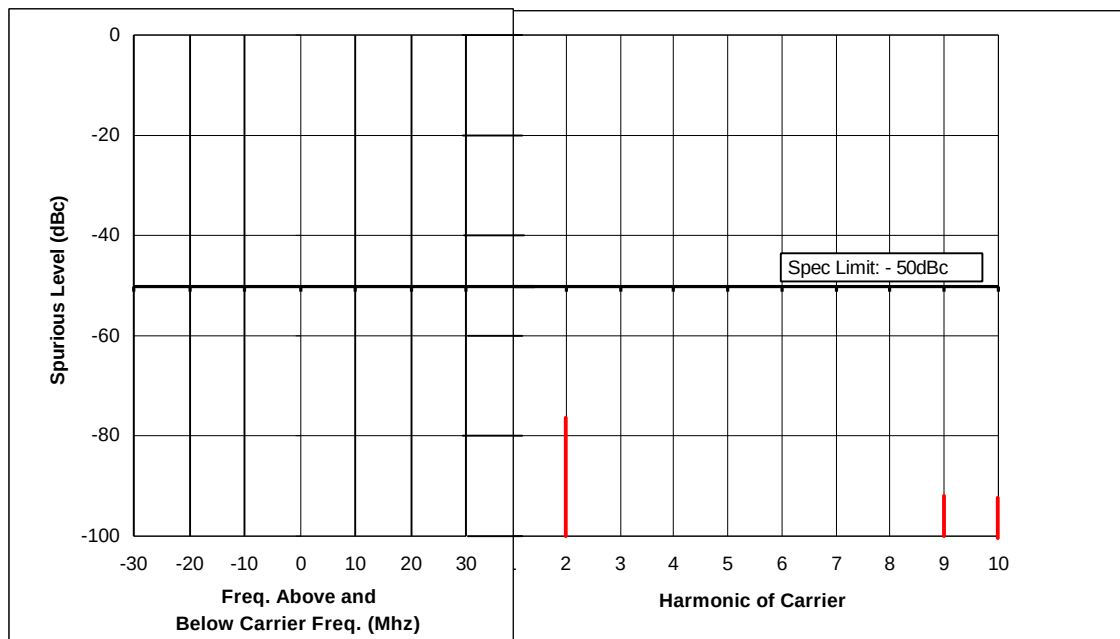
Log Page : ---

Date : 10th August 1999

Signature : -

Power Output : 1W at 481.100Mhz.

Channel Spacing : 12.5KHz.



Note: Other emissions not reported were more than 45dB below the limit

MOTOROLA INC.

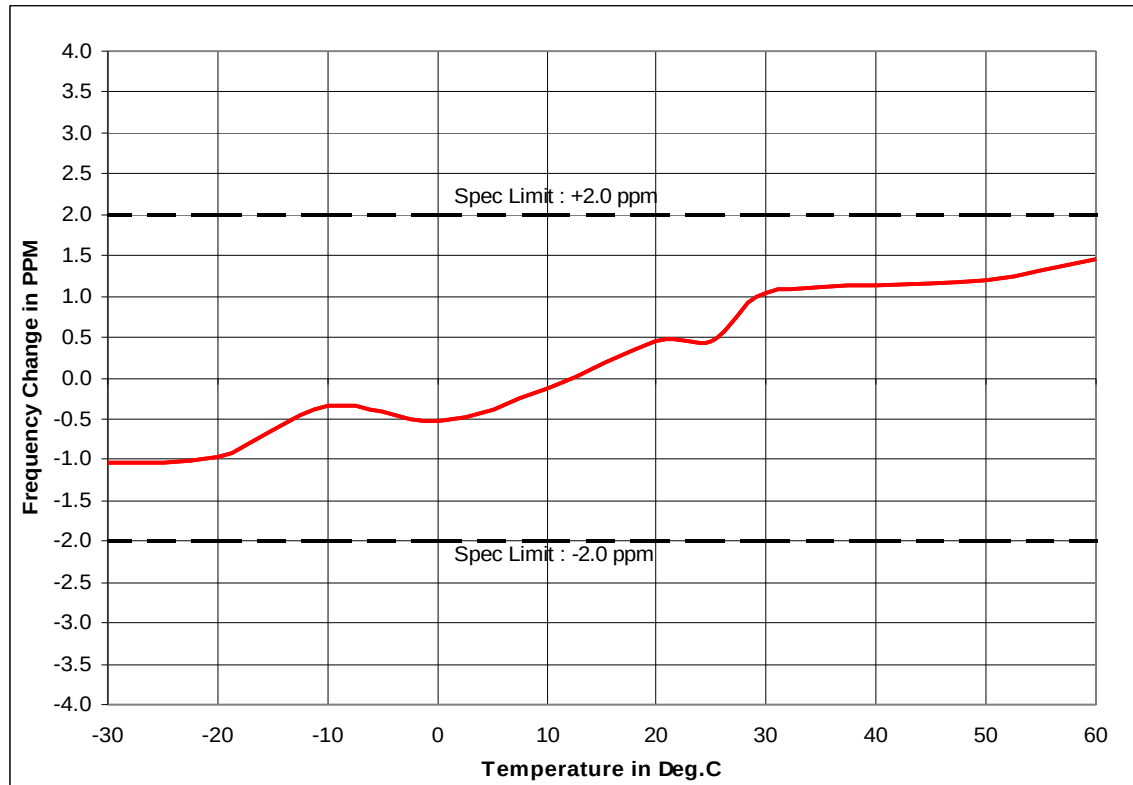
CRYSTAL OSCILLATOR STABILITY CHARACTERISTIC
FREQUENCY vs. TEMPERATURE

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

FREQ : 481.100 MHz.



MOTOROLA INC.

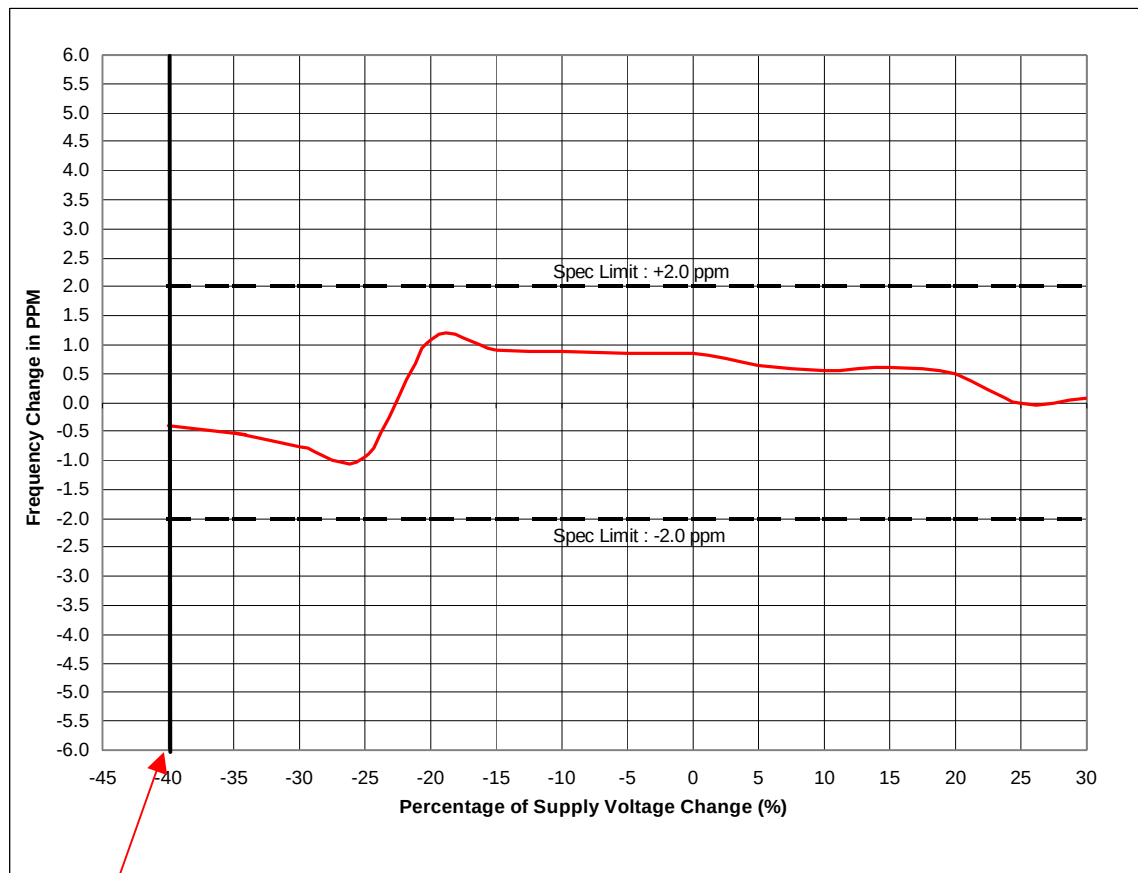
STABILITY CHARACTERISTIC
FREQUENCY vs. VOLTAGE

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999Signature : SF Ooi

FREQ : 481.100MHZ



Minimum supply voltage 8.16V.
Transmitter cannot function below
this point.

MOTOROLA INC.

TRANSIENT FREQUENCY BEHAVIOR

Xmtr Type : AZ492FT4829

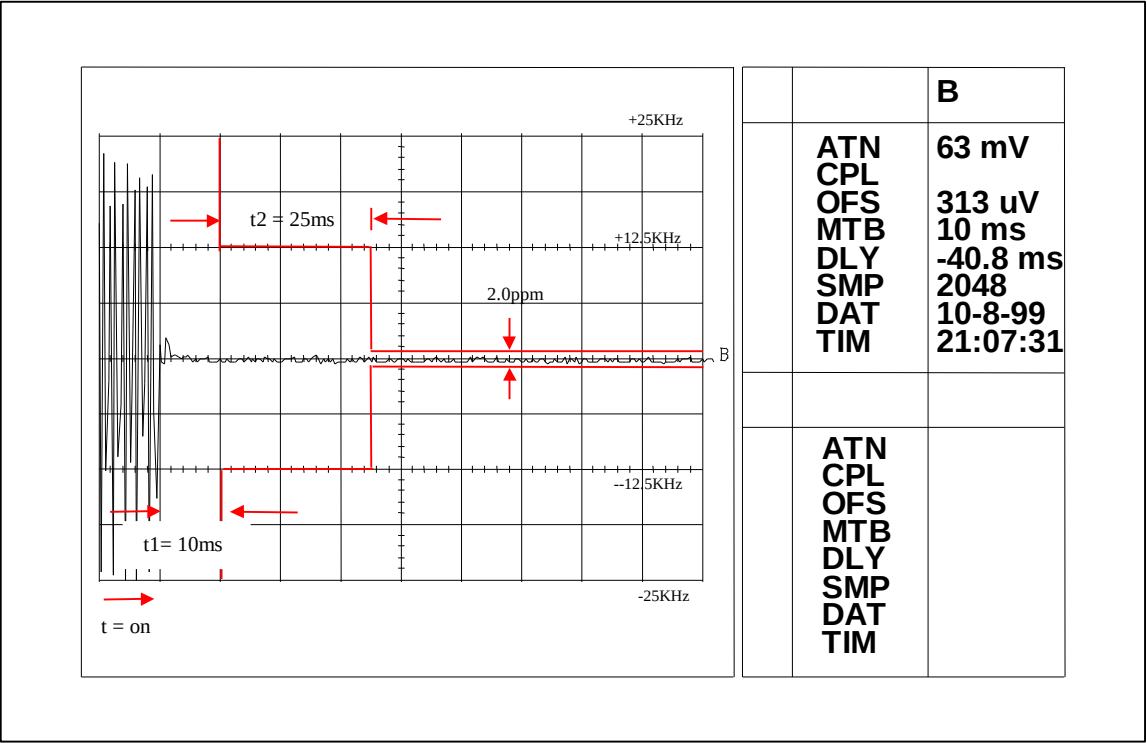
Log Page : ---

Date : 10th August 1999

Signature : SF Ooi

Power : 1W & 30W at 481.100MHz
Channel Spacing : 12.5KHz & 25KHz.

Switch - On Condition



MOTOROLA INC.

TRANSIENT FREQUENCY BEHAVIOR

=====

Xmtr Type : AZ492FT4829

Log Page : ---

Date : 10th August 1999

Signature : SF Ooi

Power : 1W & 30W at 481.100Mhz.
Channel Spacing : 12.5KHz & 25KHz.

Switch - Off Condition

