

JXB24X4P-08T

Antenna Emissions MASK

Band 24,250 to 25,250 MHz

Plots 1 – 2 for 4X Data Rates

Plots 3 – 4 for 8X Data Rates

**Emission Limitations Analysis CFR 47 part 101.111 (4)i,ii,iii**

**For 50% to 50% +500KHz**

$$A = 50 + .06(F - 5 \times B) + 10 \times \log(N) \text{ decibels}$$

$$B = 40 \text{ MHz}, N = 2$$

**For 50% +500KHz to edge of DEMS Band (24.25 GHz to 25.25 GHz)**

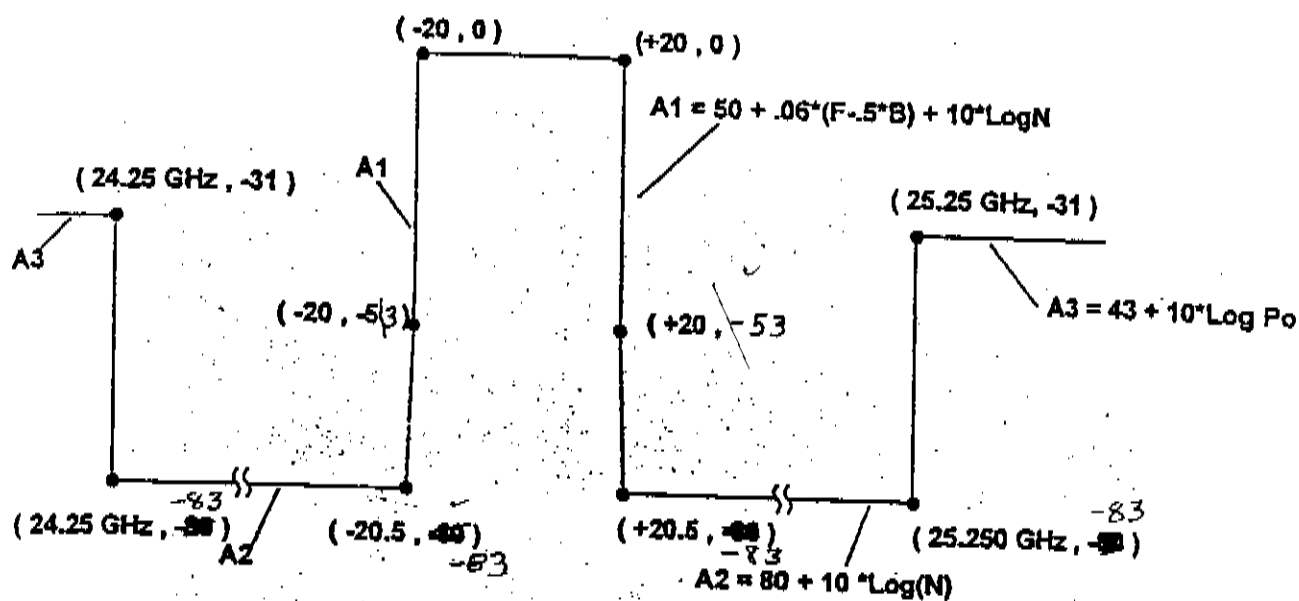
$$A = 80 + 10 \times \log(N) \text{ decibels} = 83 \text{ dBc} \quad (\text{Must not be less than } 80 \text{ dBc})$$

**For outside the DEMS Band**

$$A = 43 + 10 \times \log(\text{Means Transmitter Power})$$

$$\text{Means Transmitter Power} = .063 \text{ Watts}$$

$$\therefore A = 43 - 12 = 31 \text{ dBc for frequencies outside the band between } 24.25 \text{ GHz and } 25.25 \text{ GHz}$$



XP4 24 GHz DEMS MASK JXB24X4P-o8T CFR 47, Part 101.111

Power = .063 Watts

$N = \# \text{ of Sub Channels} = 2$

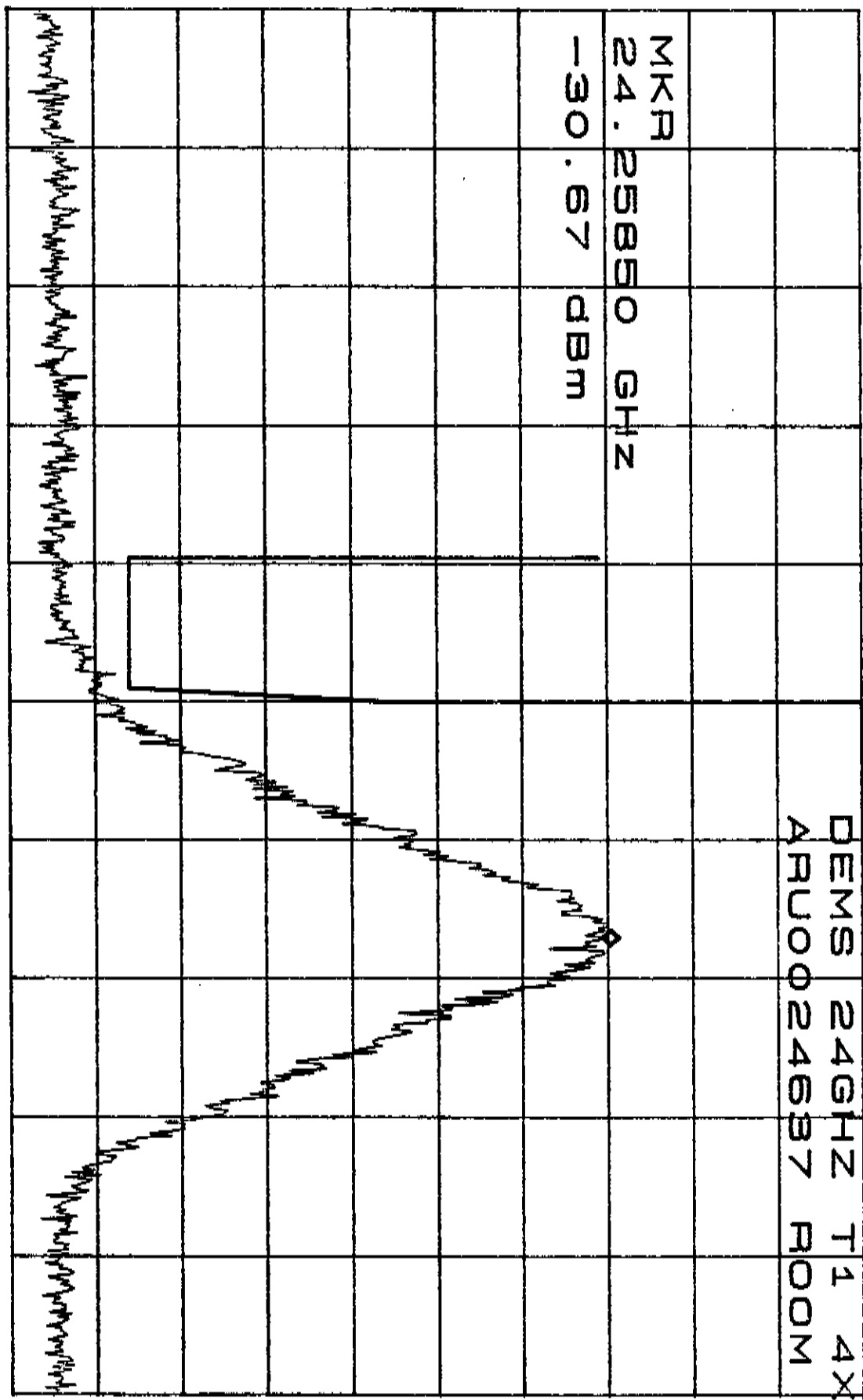
$F = \text{Difference Frequency}$

$B = \text{Bandwidth of DEMS Channel} = 40 \text{ MHz}$

$A = \text{Attenuation Below Means Power}$

ATTEN 10dB    VAVG 0    MKR -30.67dBm  
 FL 0dBm    10dB/    24.25850GHz

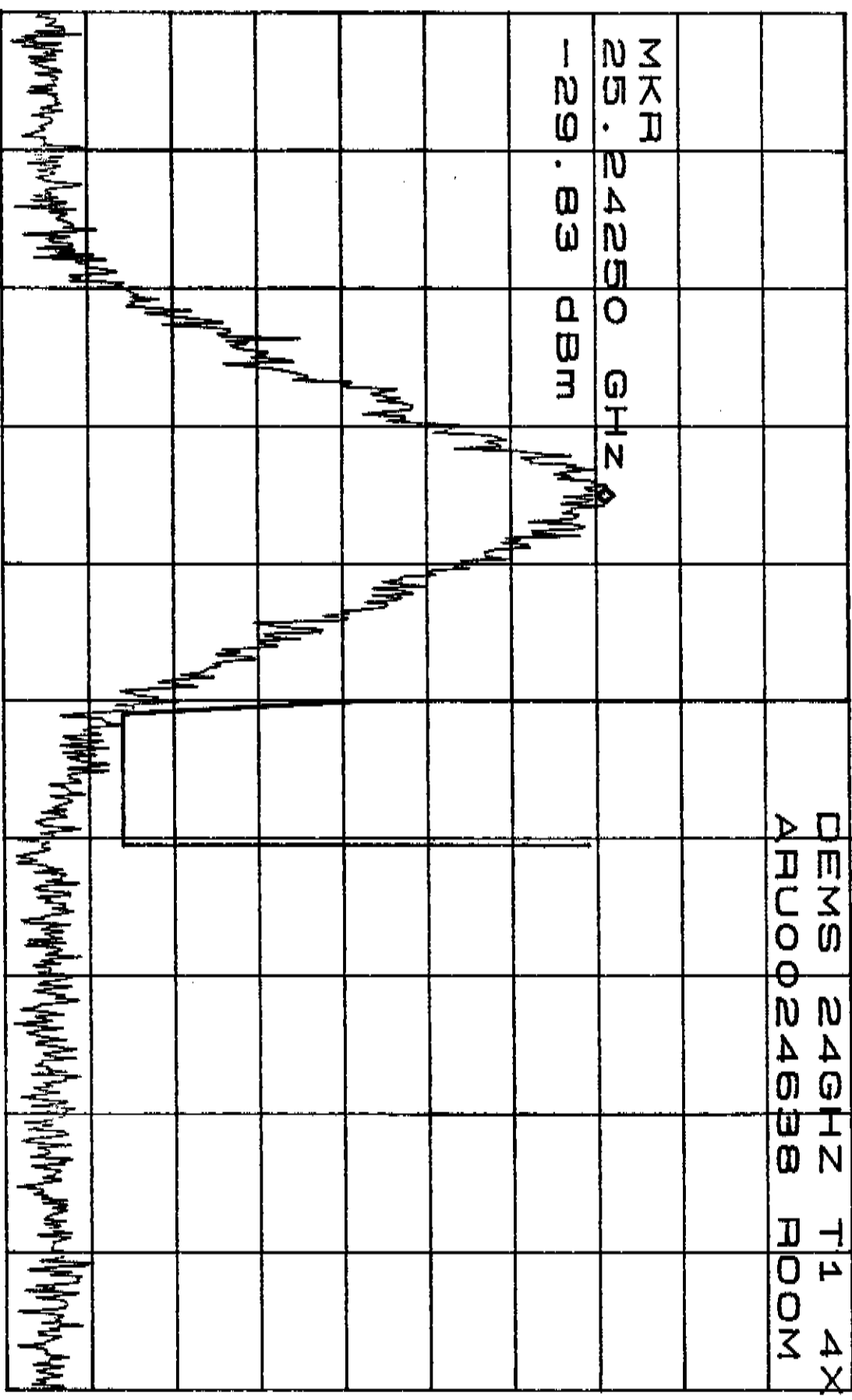
DEMS 24GHz T1 4X  
 ARU0024687 ROOM



CENTER 24.25000GHz    SPAN 50.00MHz  
 \*RBW 3.0kHz    \*VBW 10kHz    SWP 14.0sec

Plot #1

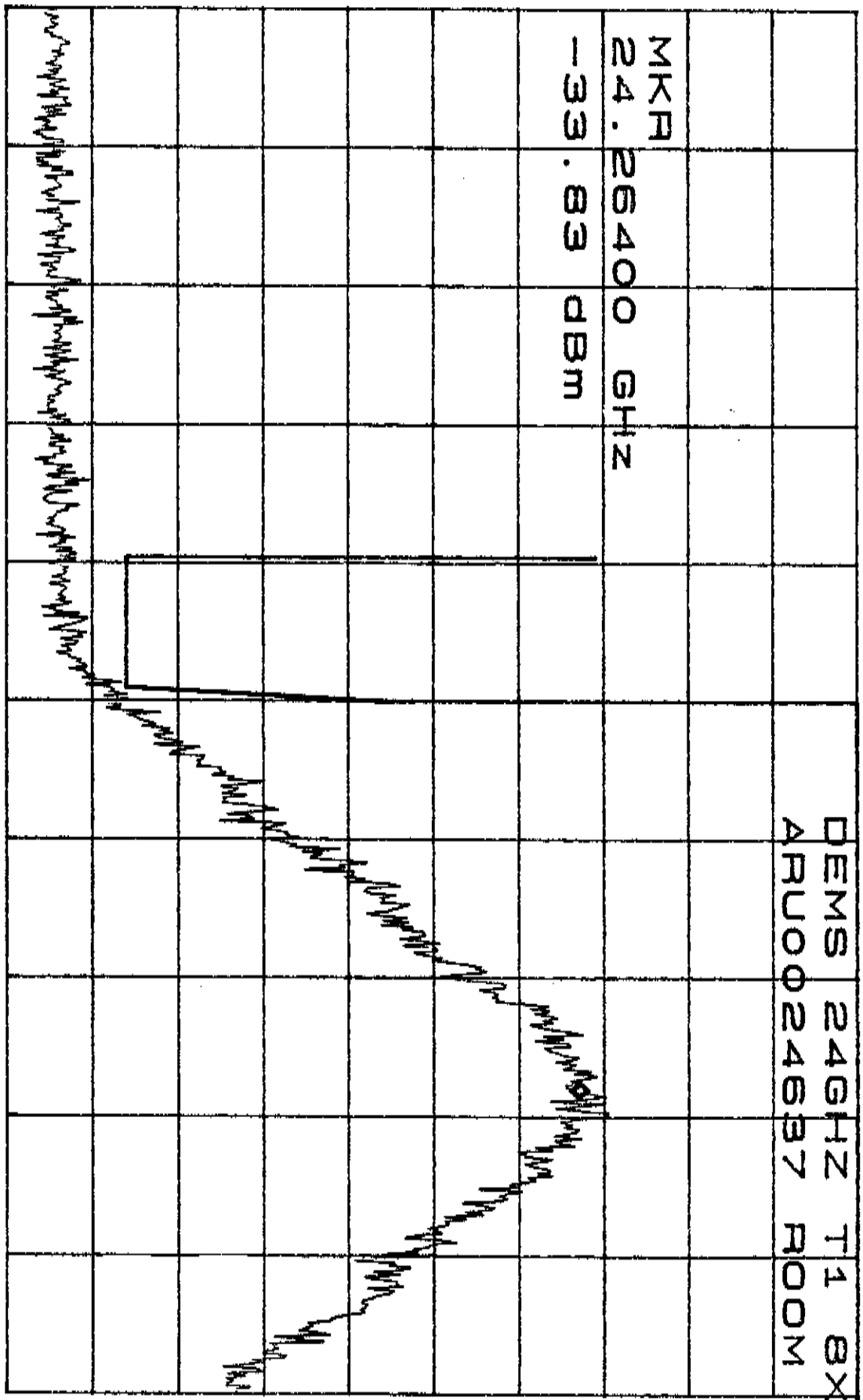
ATTEN 10dB      VAVG 4      MKR -29.83dBm  
 RL 0dBm      10dB/      25.24250GHZ



CENTER 25.25000GHZ      SPAN 50.00MHZ  
 \*RBW 3.0KHZ      \*VBW 10KHZ      SWP 14.0sec

PLOT #2

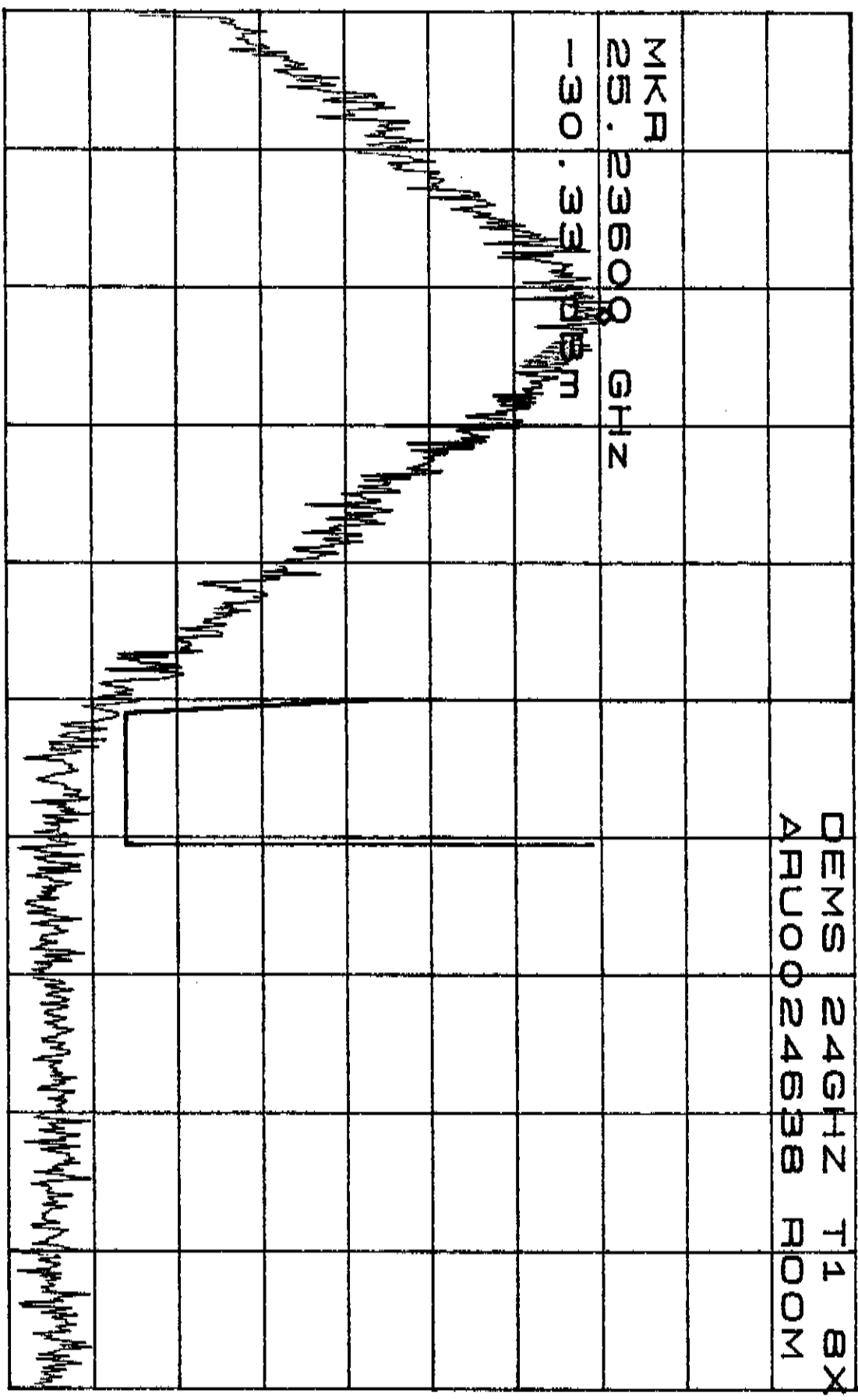
ATTEN 10dB      VAVG 8      MKF -33.83dBm  
 RL 0dBm      10dB/      24.26400GHZ



CENTER 24.25000GHZ      SPAN 50.00MHZ  
 \*RBW 3.0KHZ      \*VBW 10KHZ      SWP 14.0Sec

ATTEN 10dB      VAVG 4      MKR -30.33dBm  
 RL 0dBm      10dB/      25.23600GHz

DEMS 24GHz T1 BX  
 ARU0024638 ROOM



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CENTER 25.25000GHz      SPAN 50.00MHz  
 \*RBW 3.0kHz      \*VBW 10kHz      SWP 14.0sec

Plot #4