

The following information is being provided to show compliance with the bandedge restricted band for the high channel.

The outcome of these tests yielded the following margins:

For Peak Measurements

- 1) For 64 kbps data rate: 11.7 dB margin
- 2) For 128 kbps data rate: 16.3 dB margin
- 3) For 256 kbps data rate: 13.8 dB margin
- 4) For 384 kbps data rate: 10.8 dB margin
- 5) For 512 kbps data rate: 10.9 dB margin

For Average Measurements

- 1) For 64 kbps data rate: 3.0 dB margin
- 2) For 128 kbps data rate: 7.2 dB margin
- 3) For 256 kbps data rate: 11.7 dB margin
- 4) For 384 kbps data rate: 4.6 dB margin
- 5) For 512 kbps data rate: 2.3 dB margin

I am presenting the data in support for the “worse case” margin for the high channel for the 512 kbps data rate:

For the peak measurement, the following calculation applies:

antilog $((-17.0 \text{ dBm} + 30.9 \text{ dB} + 4.0 \text{ dB} + 107 - 61.9 \text{ dB})/20) = 1412.5 \text{ uV/m}$
where

Received peak power (RBW=VBW= 1 MHz) of the fundamental at 3 meters test distance as given in Figure 1 with no filter or preamp = -17 dBm

Antenna Factor = 30.9 dB

Cable Loss = 4.0 dB

Δ from antenna conducted reading between Fundamental and highest point in restricted band region (using RBW = 100kHz, VBW = 1 MHz) – See Figure 2 = 61.9 dB

This method yields a higher reading since additional correction could be made for conversion of radiated reading from 1 MHz to 100 kHz RBW.

Figure 1

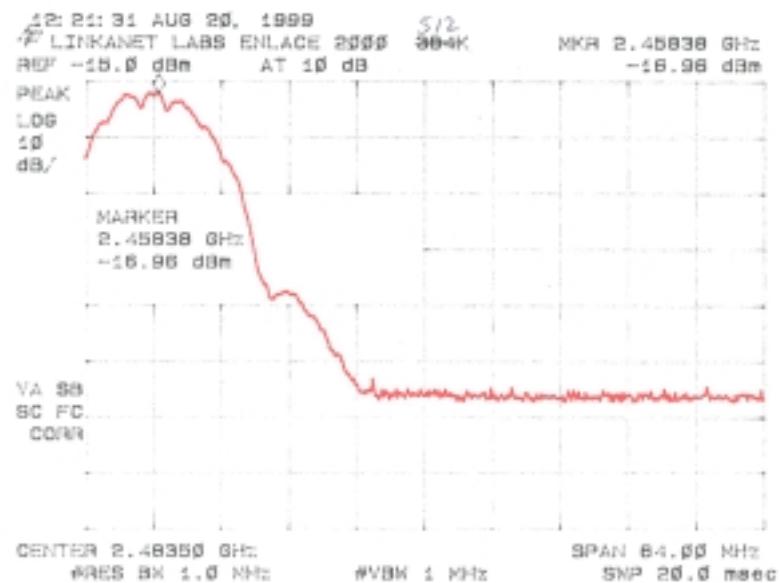
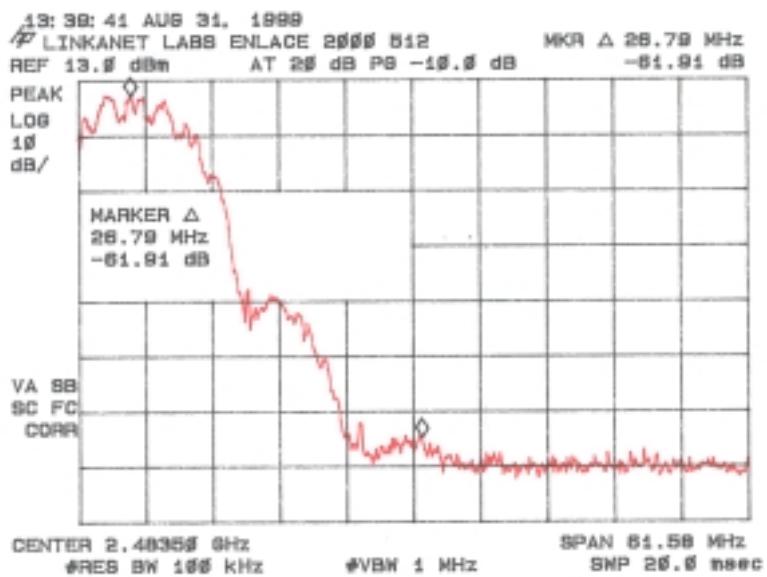


Figure 2



For the average measurement, the following calculation applies:

$$\text{antilog}((-20.5 \text{ dBm} + 30.9 \text{ dB} + 4.0 \text{ dB} - 7.7 + 107 - 62.1 \text{ dB})/20) = 380.2 \text{ uV/m}$$

where

Received peak power (RBW= 1 MHz, VBW = 10 Hz) of the fundamental at 3 meters test distance as given in Figure 3 with no filter or preamp = -20.5 dBm

Antenna Factor = 30.9 dB

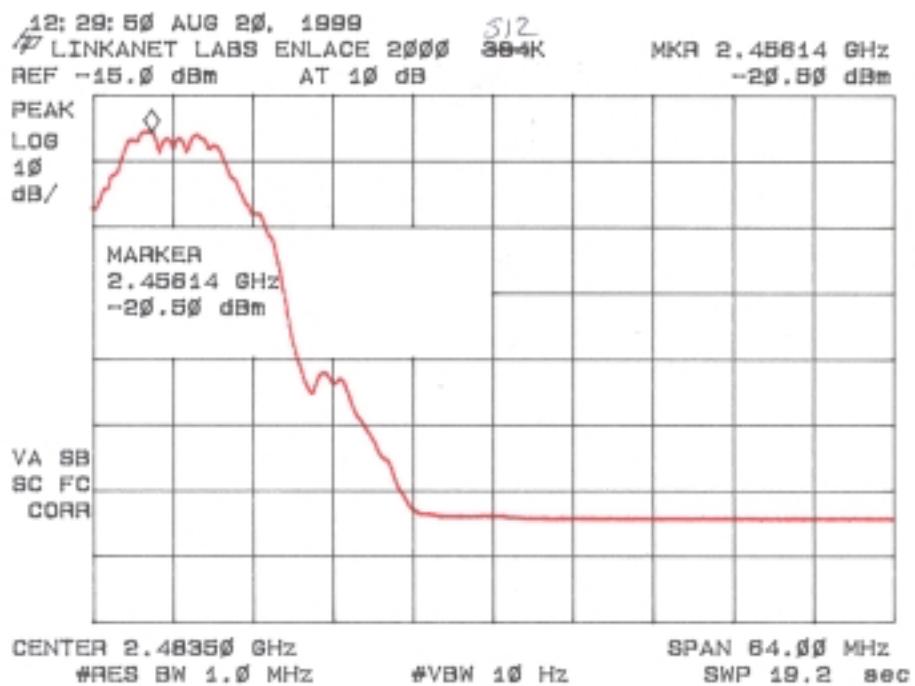
Cable Loss = 4.0 dB

Duty Cycle Correction (See Test Report Section 2.10) = 7.7 dB

Δ from antenna conducted reading between Fundamental and highest point in restricted band region (using RBW = 100kHz, VBW = 10 Hz) – See Figures 4 = 62.1 dB

This method yields a higher reading since additional correction could be made for conversion of radiated reading from 1 MHz to 100 kHz RBW.

Figure 3



Figures 4

