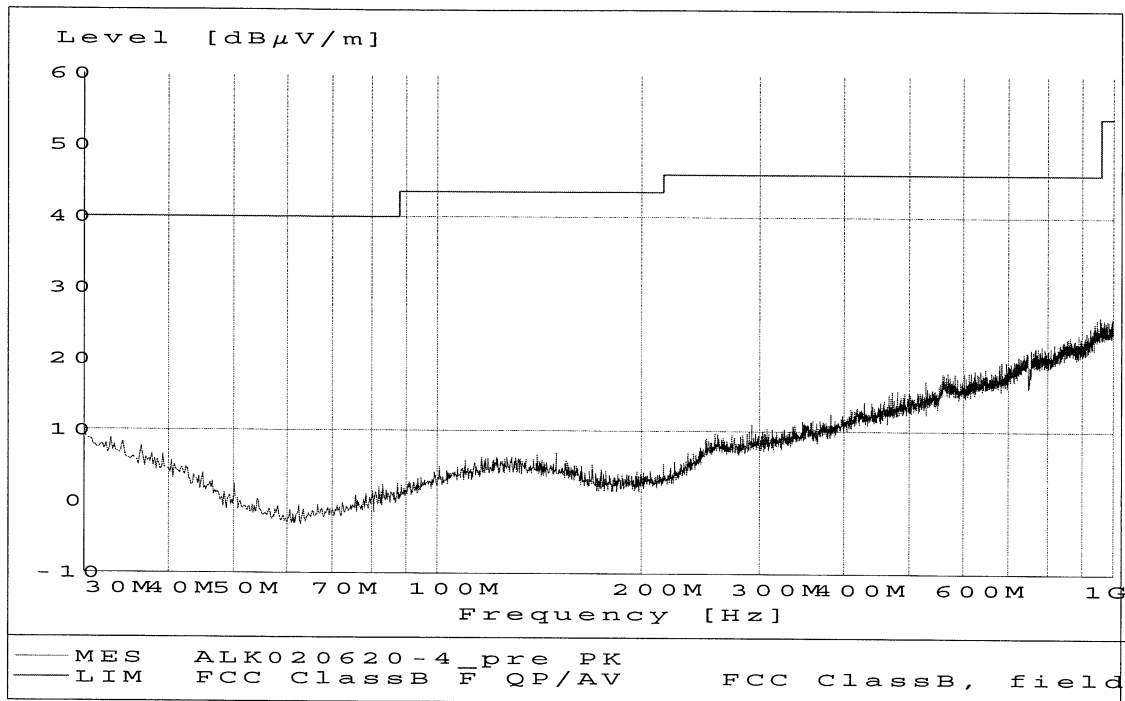


## 12.4 Test protocol

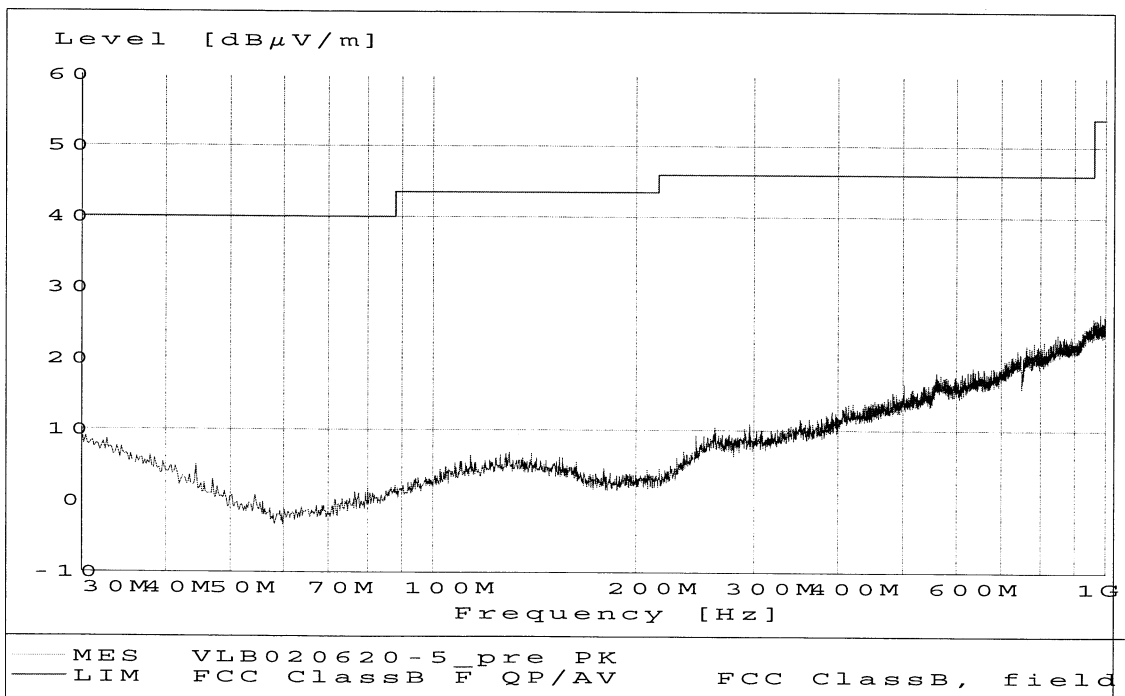
### 12.4.1 Semi-anechoic shielded chamber

Date of test: June 20, 2002

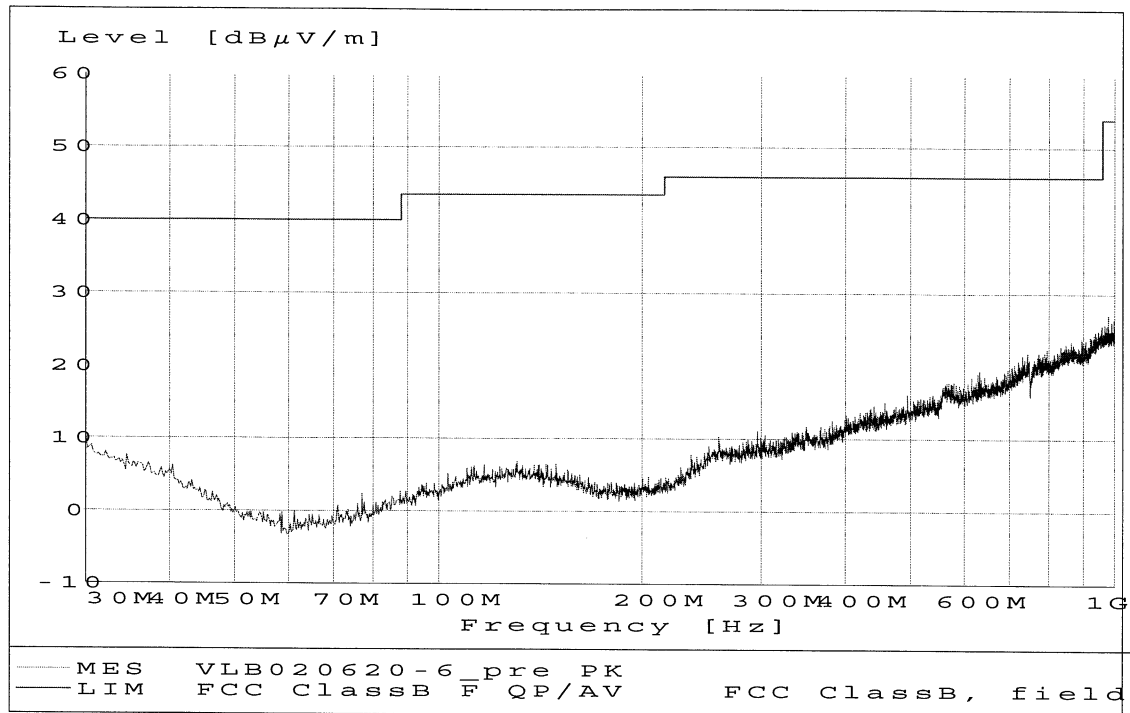
30 – 1000 MHz, max peak at a distance of 3 m on the lower TX channel



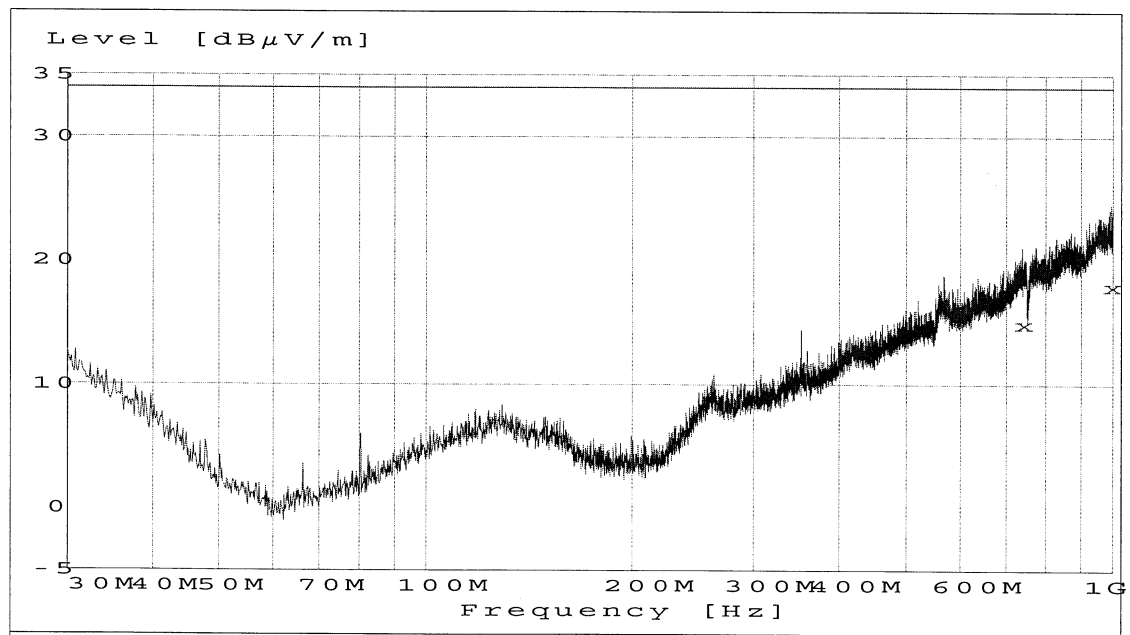
30 – 1000 MHz, max peak at a distance of 3 m on the middle TX channel



30 – 1000 MHz, max peak at a distance of 3 m on the upper TX channel



30 – 1000 MHz, max peak at a distance of 10 m in the stand by mode



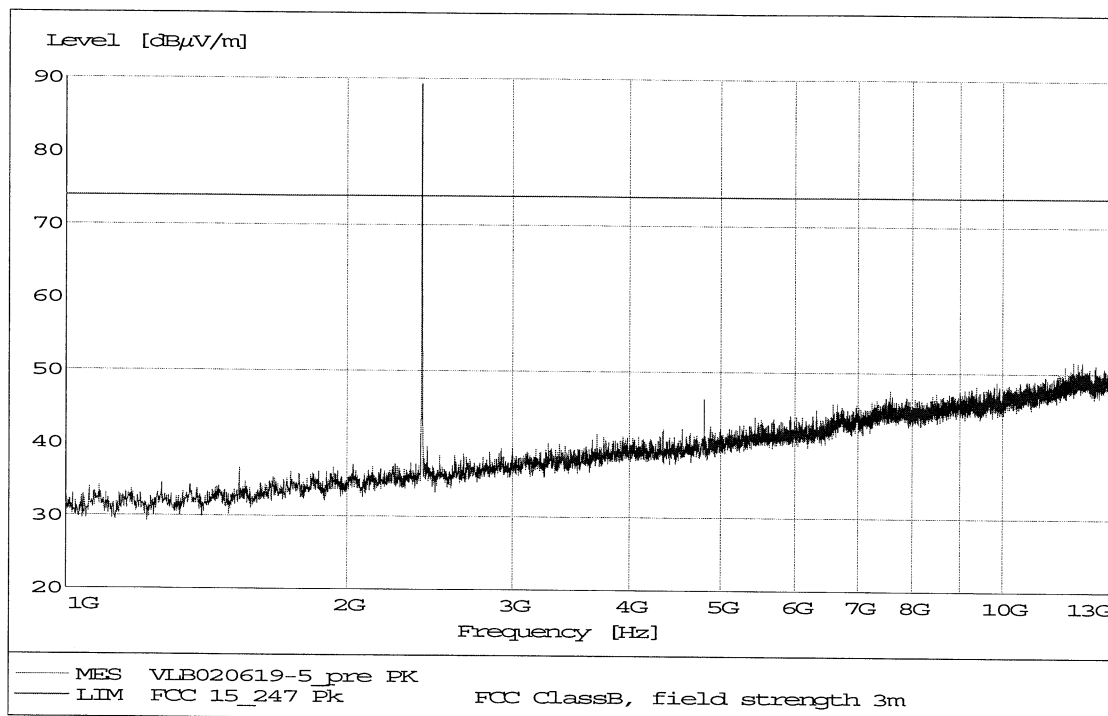
FCC limit lines in stand by mode at a distance of 10m:

|             |           |
|-------------|-----------|
| 30-88 MHz   | 30 dBμV/m |
| 88-216 MHz  | 34 dBμV/m |
| 216-960 MHz | 36 dBμV/m |
| 960 MHz -   | 44 dBμV/m |

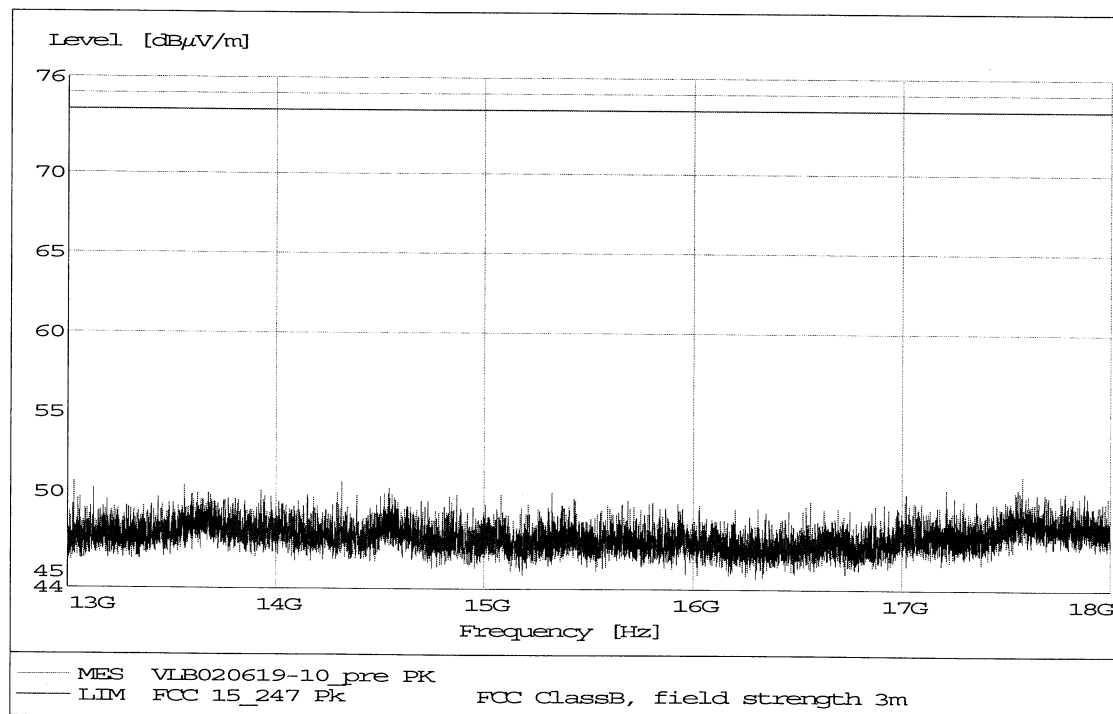
#### 12.4.2 Bluetooth anechoic shielded chamber

Date of test: June 19, 2002

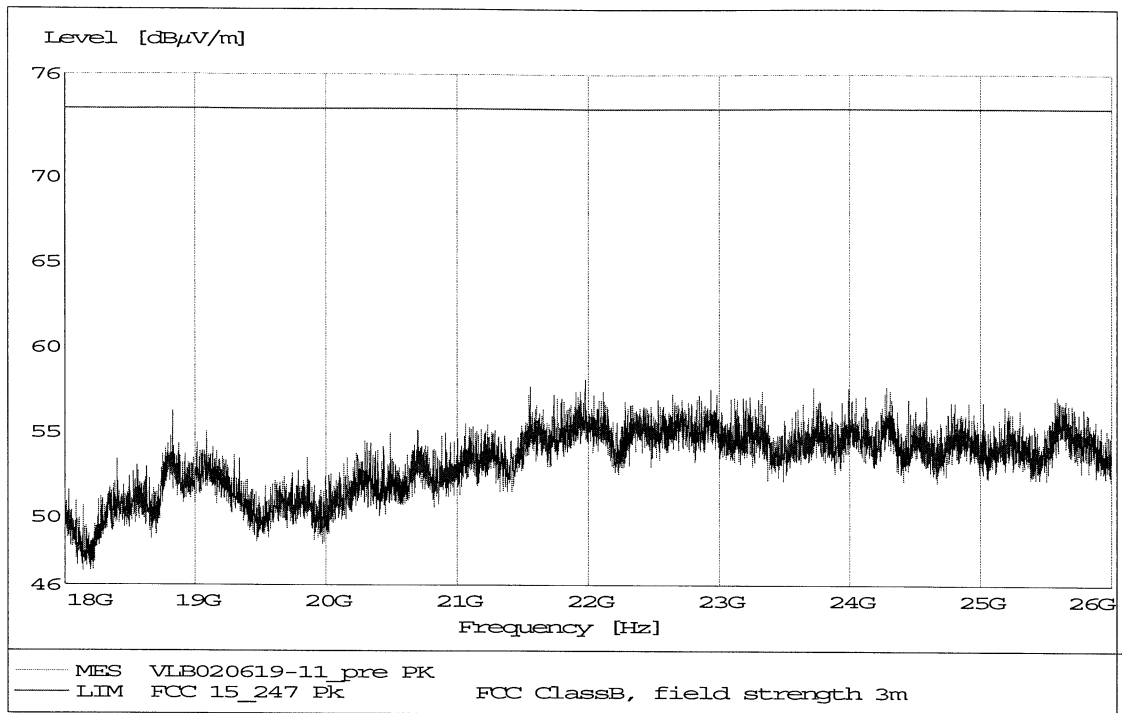
1 – 13 GHz, peak detection at a distance of 3 m; TX mode, lower channel



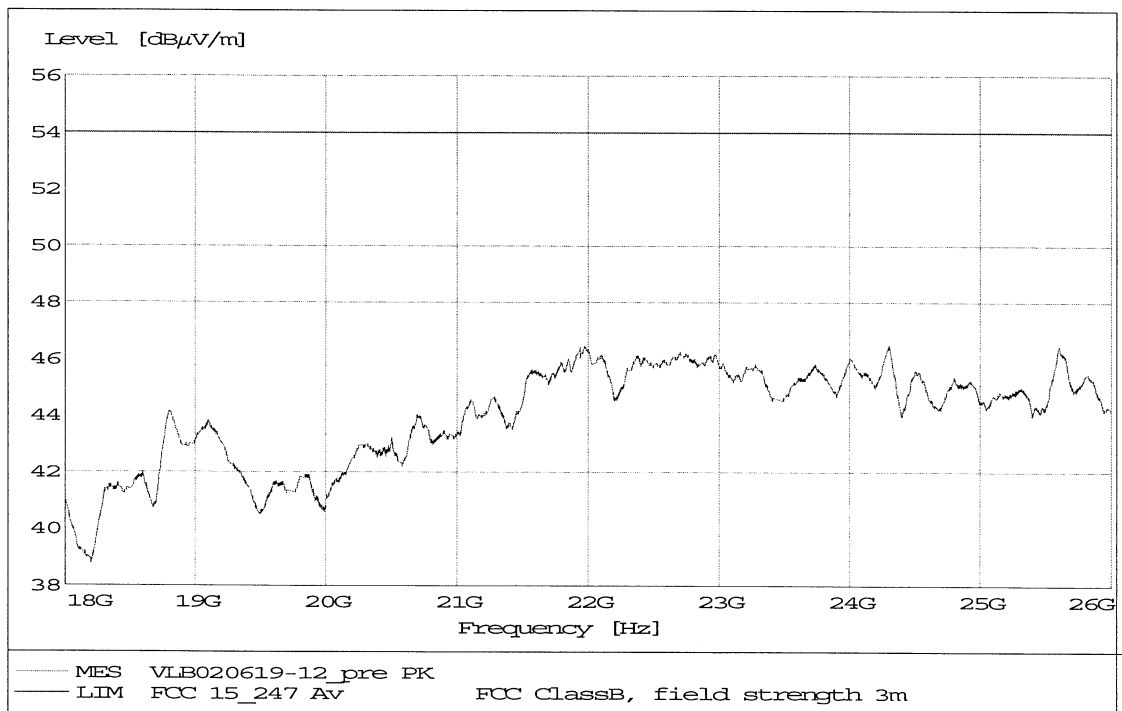
13 – 18 GHz, peak detection at a distance of 3 m; TX mode, lower channel



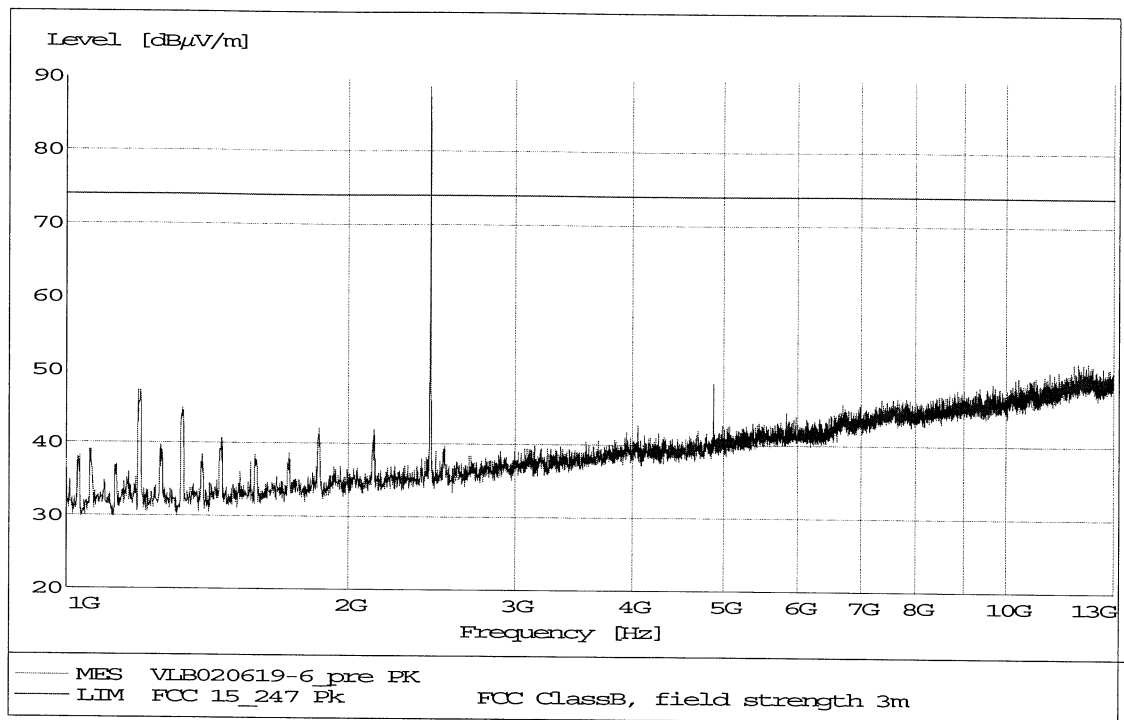
18 – 26 GHz, peak detection at a distance of 3 m; TX mode, lower channel



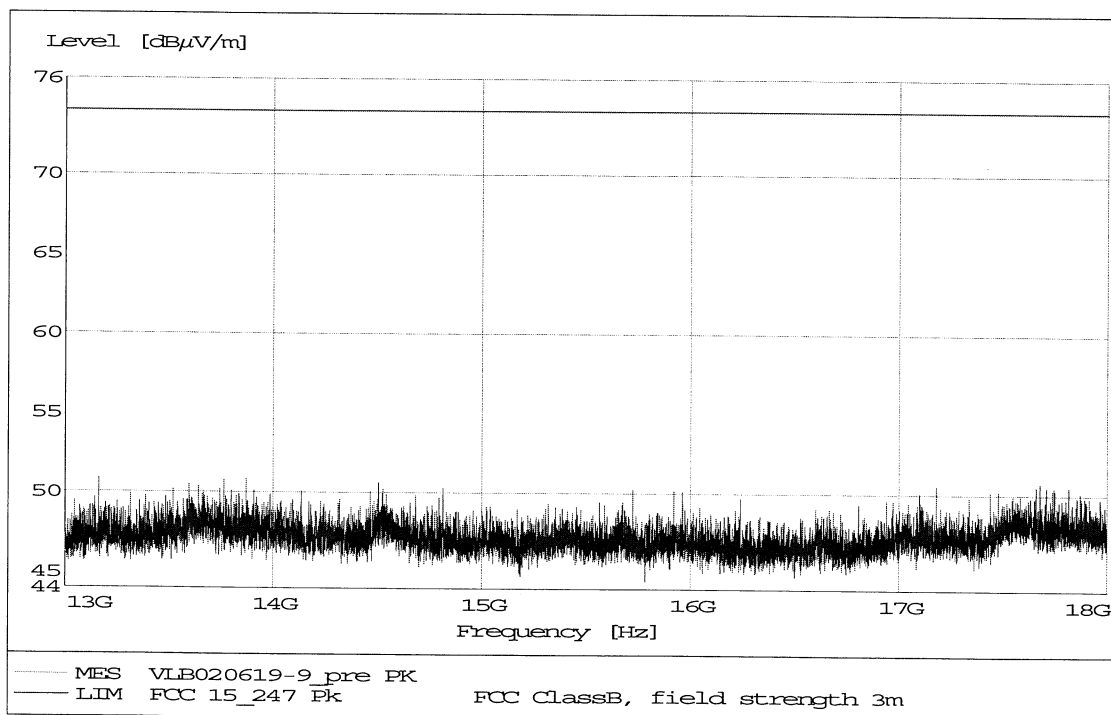
18 – 26 GHz, average detection at a distance of 3 m; TX mode, lower channel



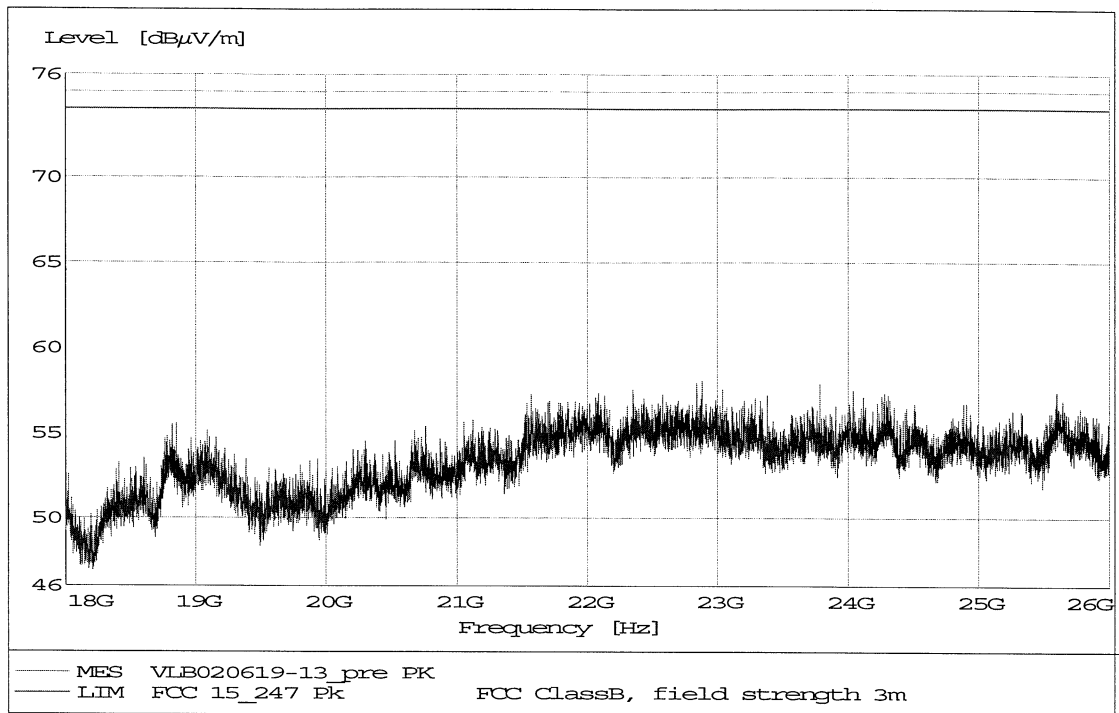
1 – 13 GHz, peak detection at a distance of 3 m; TX mode, middle channel



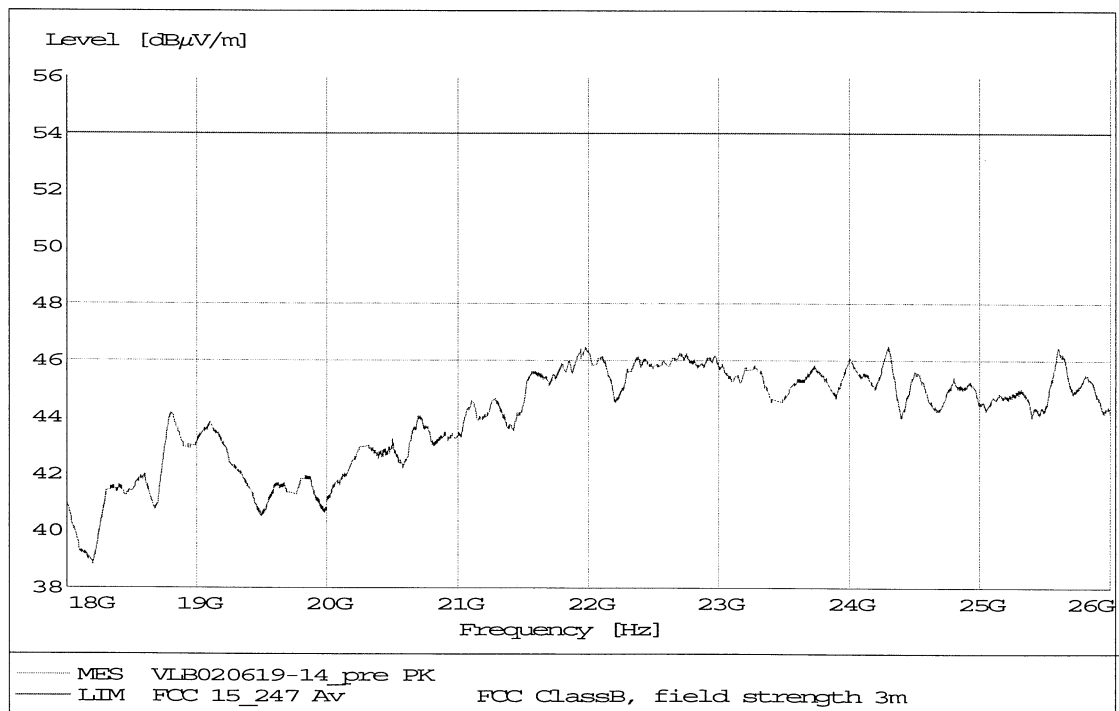
13 – 18 GHz, peak detection at a distance of 3 m; TX mode, middle channel



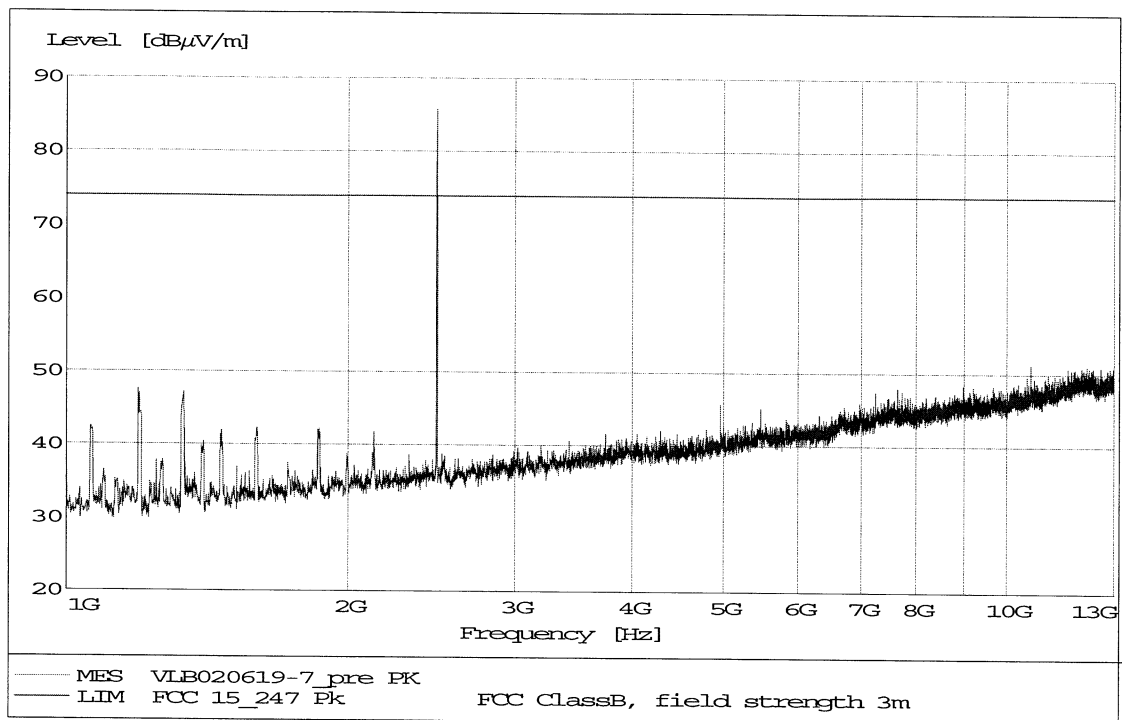
18 – 26 GHz, peak detection at a distance of 3 m; TX mode, middle channel



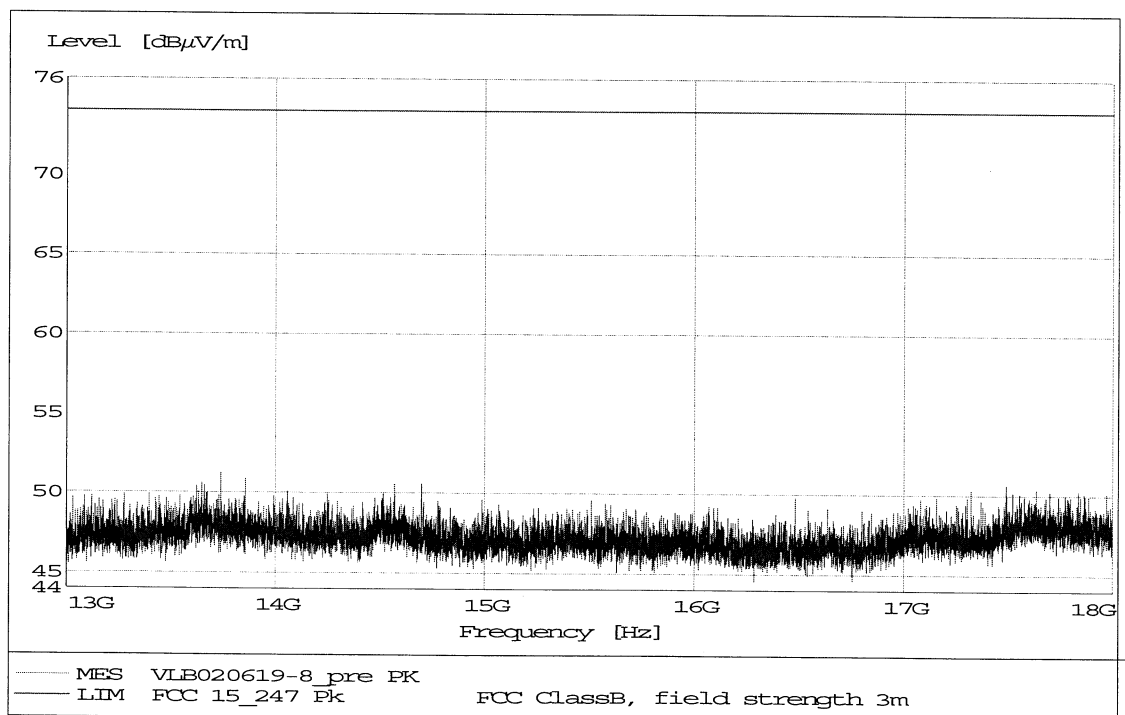
18 – 26 GHz, average detection at a distance of 3 m; TX mode, middle channel



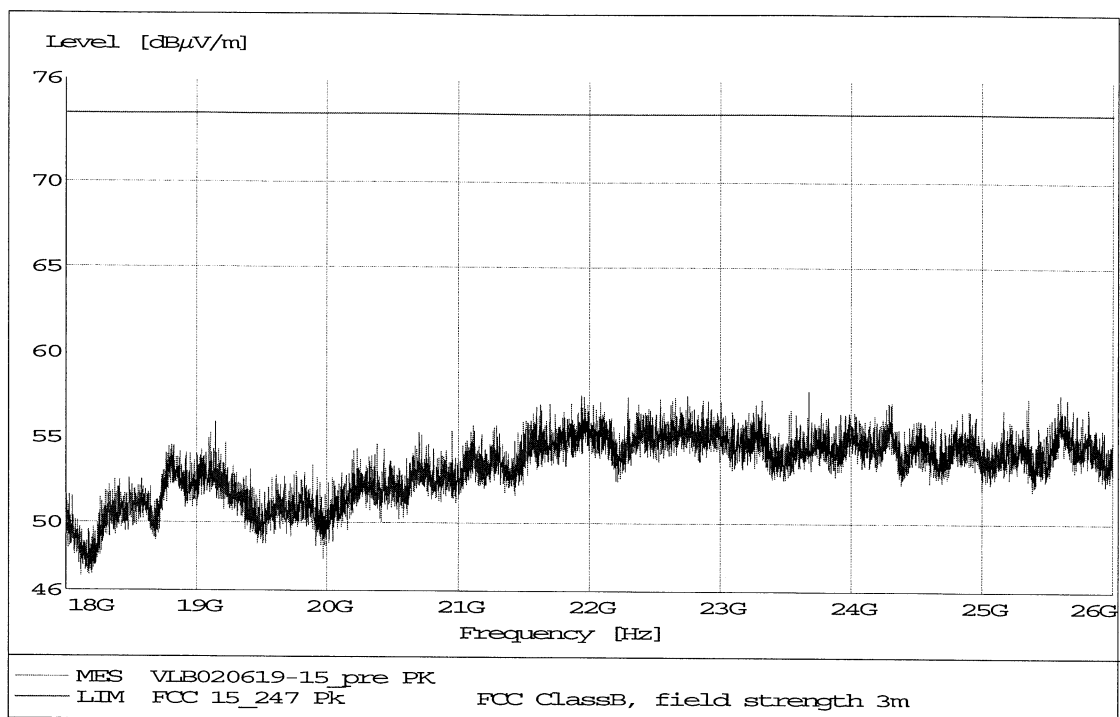
1 – 13 GHz, peak detection at a distance of 3 m; TX mode, upper channel



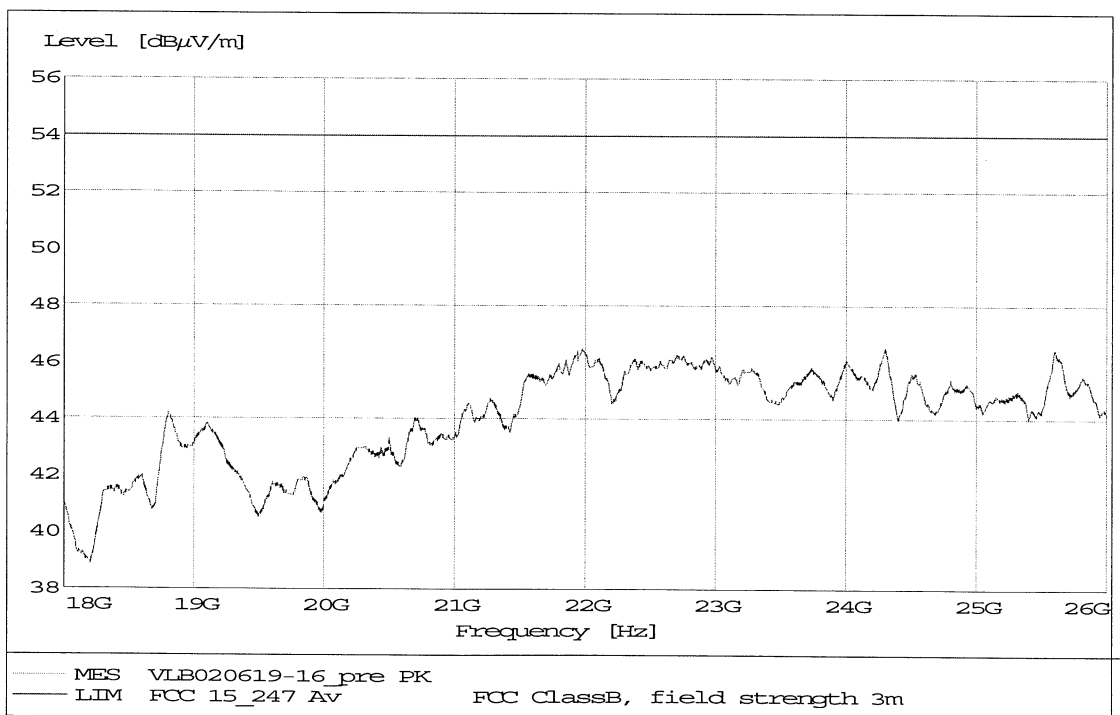
13 – 18 GHz, peak detection at a distance of 3 m; TX mode, upper channel



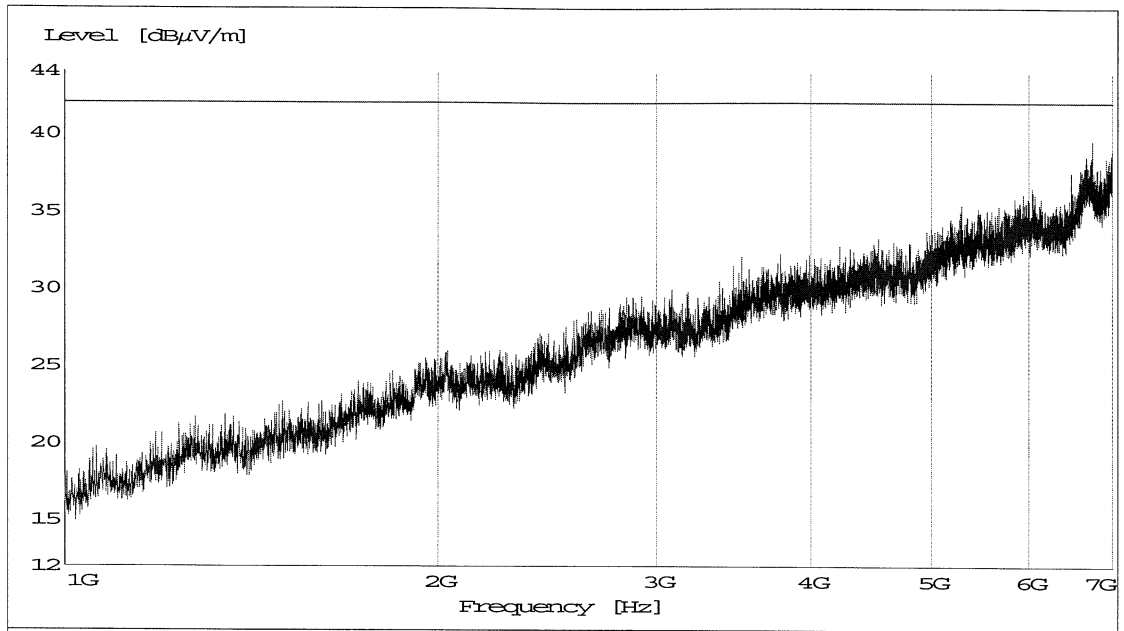
18 – 26 GHz, peak detection at a distance of 3 m; TX mode, upper channel



18 – 26 GHz, average detection at a distance of 3 m; TX mode, upper channel

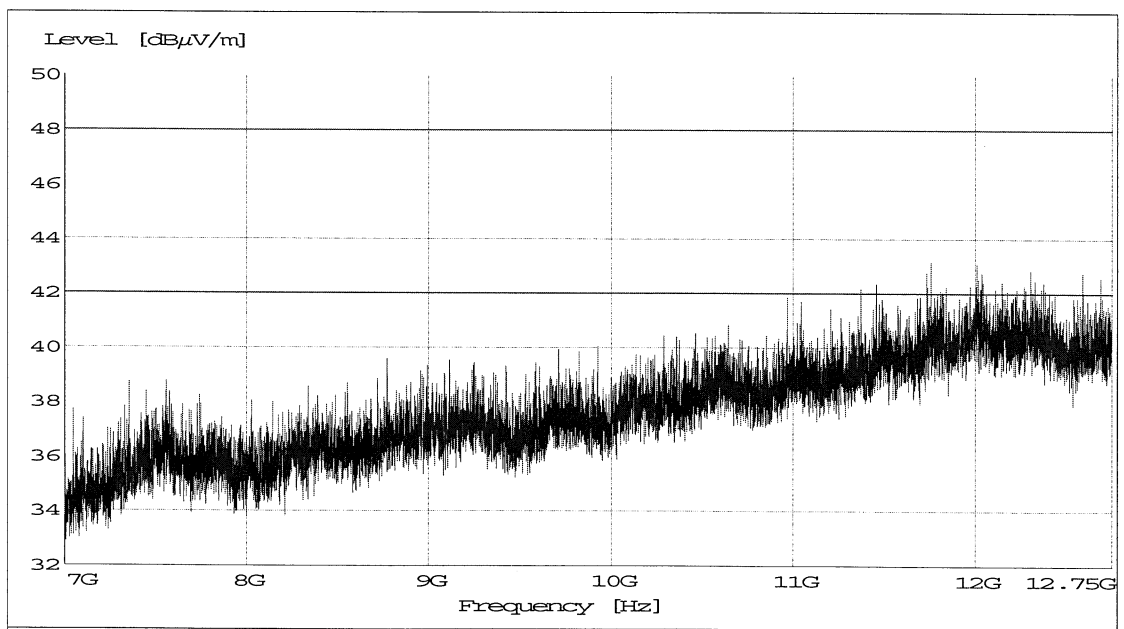


1000 – 7000 MHz, max peak at a distance of 3 m in the stand by mode



FCC limit line in standby mode, 54dBμV/m.

7000 – 12750 MHz, max peak at a distance of 3 m in the stand by mode



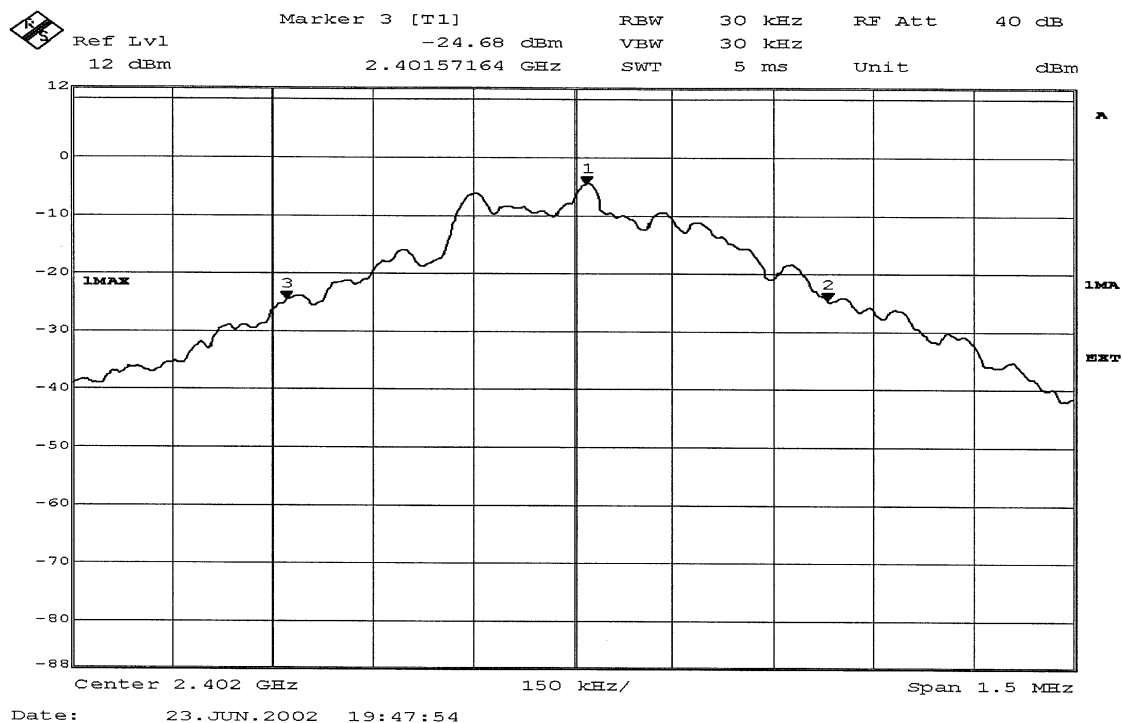
FCC limit line in standby mode, 54dBμV/m.

| Field strength of spurious emissions |              |                  |                   |                  |                   |      |
|--------------------------------------|--------------|------------------|-------------------|------------------|-------------------|------|
| Frequency<br>[MHz]                   | RBW<br>[kHz] | Measured level   |                   | Limit            |                   | Note |
|                                      |              | Peak<br>[dBμV/m] | QP/AV<br>[dBμV/m] | Peak<br>[dBμV/m] | QP/AV<br>[dBμV/m] |      |
| 30 – 88                              | 120          | < 10             | -                 | -                | 40                |      |
| 88 – 216                             | 120          | < 8              | -                 | -                | 43,5              |      |
| 216 – 960                            | 120          | < 25             | -                 | -                | 46                |      |
| 1061                                 | 1000         | 42,5             | -                 | 74               | 54                |      |
| 1191                                 | 1000         | 47,6             | -                 | 74               | 54                |      |
| 1333                                 | 1000         | 47,2             | -                 | 74               | 54                |      |
| 1463                                 | 1000         | 41,9             | -                 | 74               | 54                |      |
| 1596                                 | 1000         | 42,3             | -                 | 74               | 54                |      |
| 1861                                 | 1000         | 42,2             | -                 | 74               | 54                |      |
| 2130                                 | 1000         | 41,9             | -                 | 74               | 54                |      |
| 4883                                 | 1000         | 48,5             | -                 | 74               | 54                |      |
| 5000 – 18000                         | 1000         | < 52             | -                 | 74               | 54                |      |
| 18000 – 26000                        | 1000         | < 58             | < 47              | 74               | 54                |      |

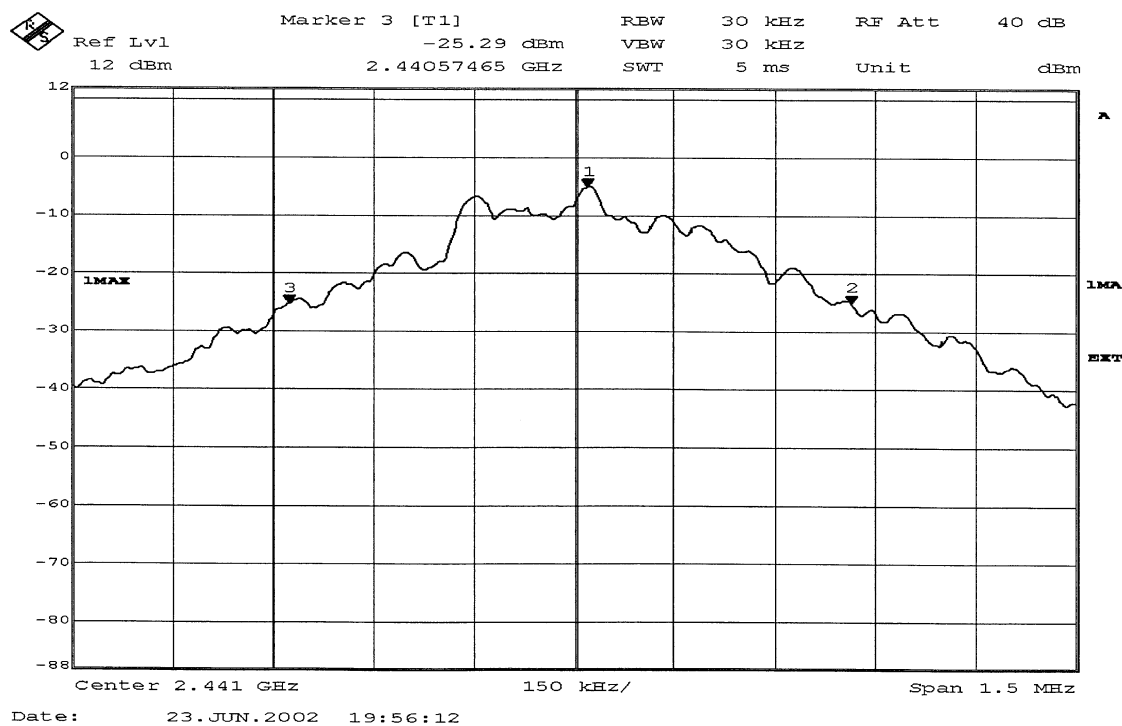
Fulfil requirements: Yes

# APPENDIX I – MEASUREMENT PLOTS

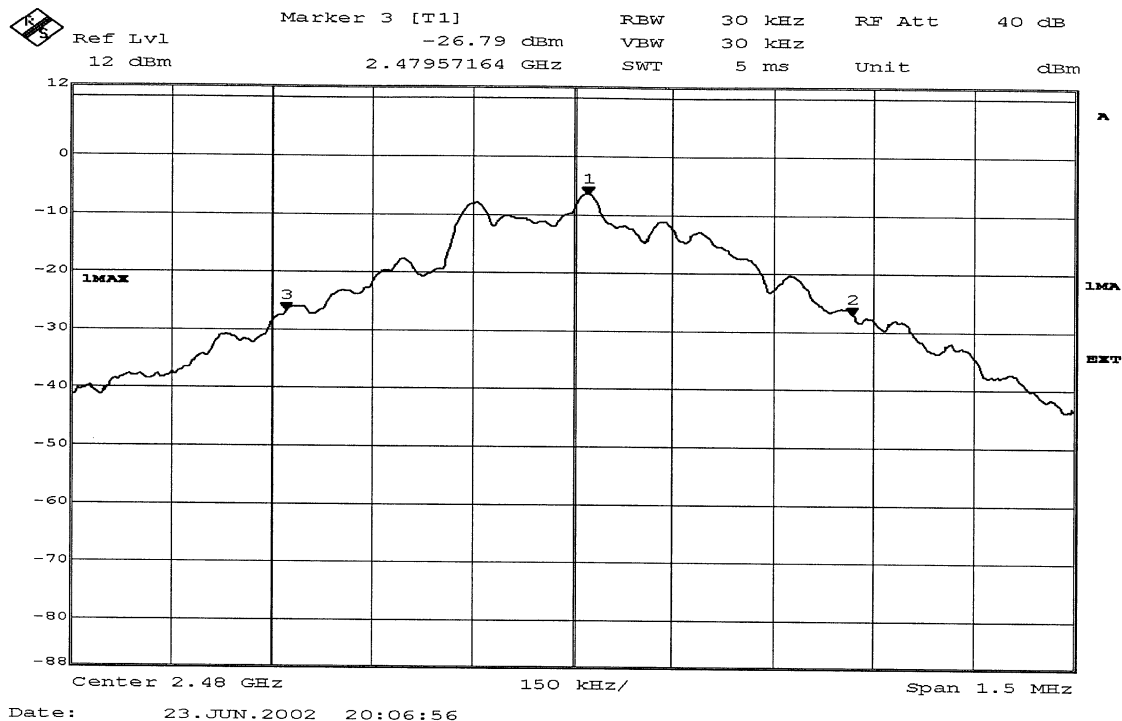
TX Output Spectrum – 20 dB Bandwidth, lower channel



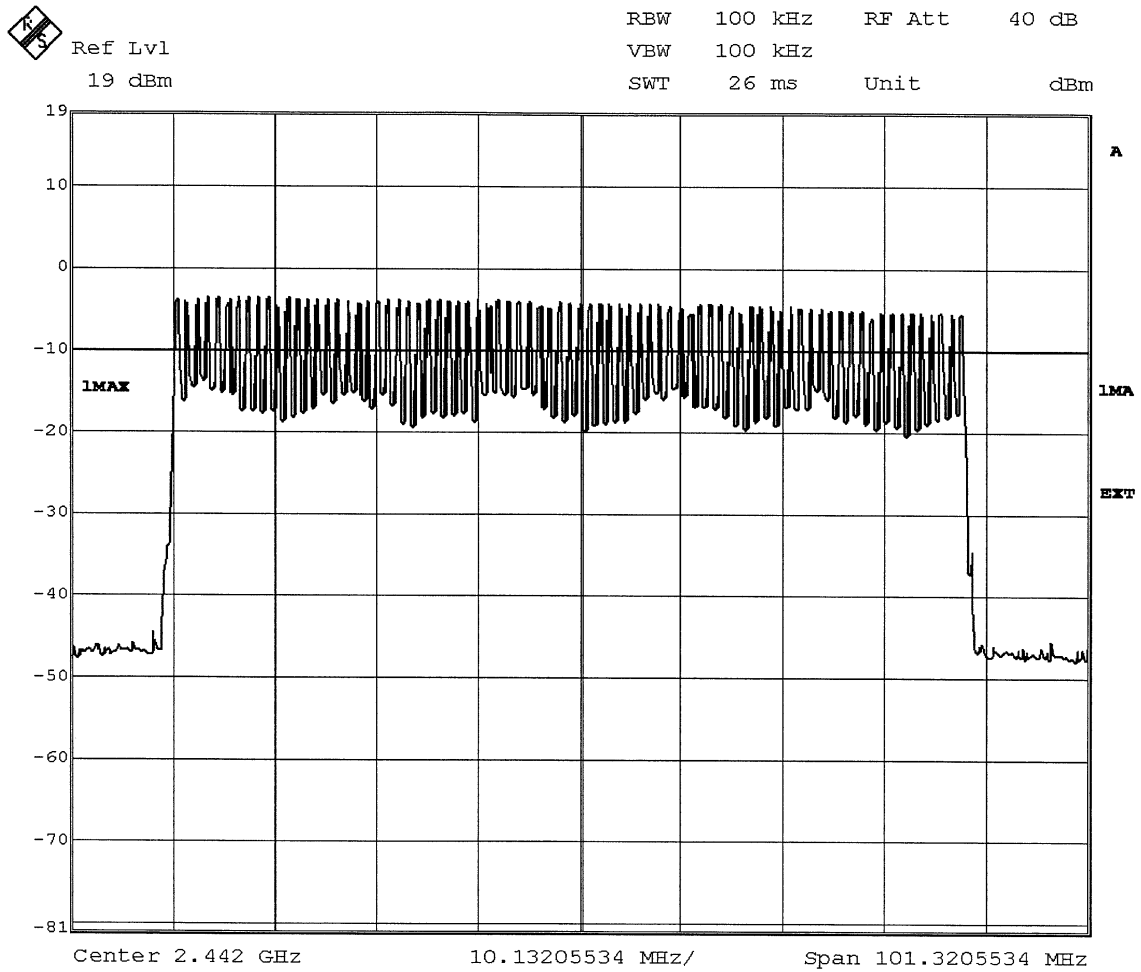
TX Output Spectrum – 20 dB Bandwidth, middle channel



TX Output Spectrum – 20 dB Bandwidth, upper channel

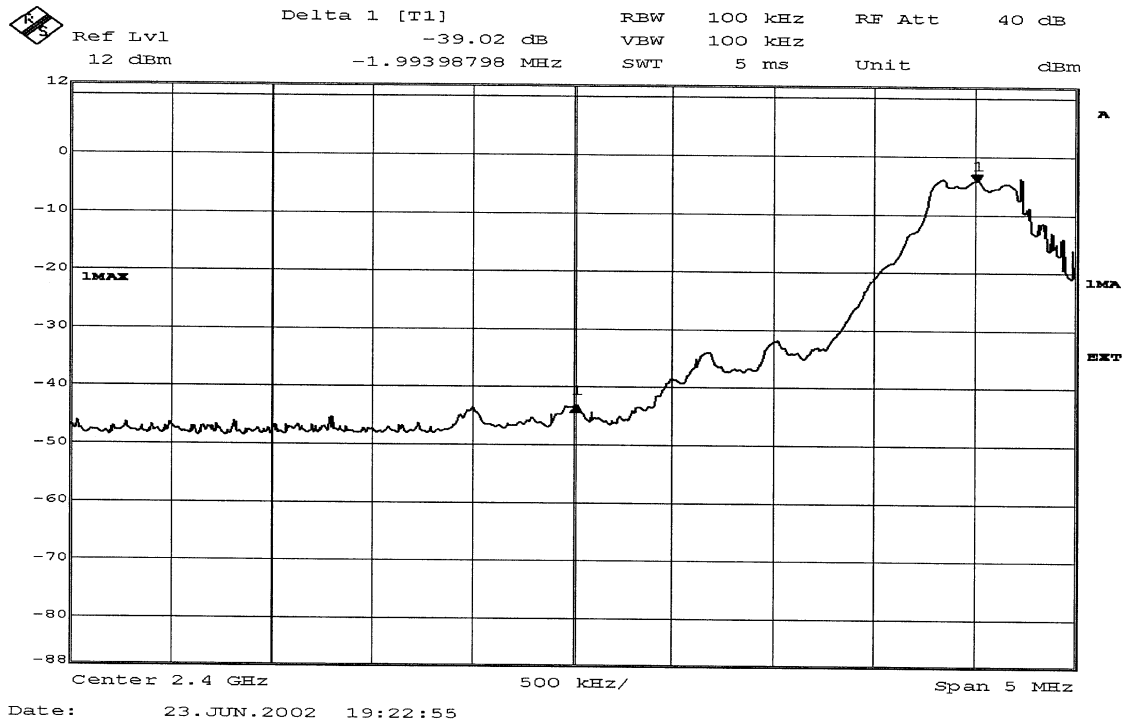


Number of Hopping Channels (79)

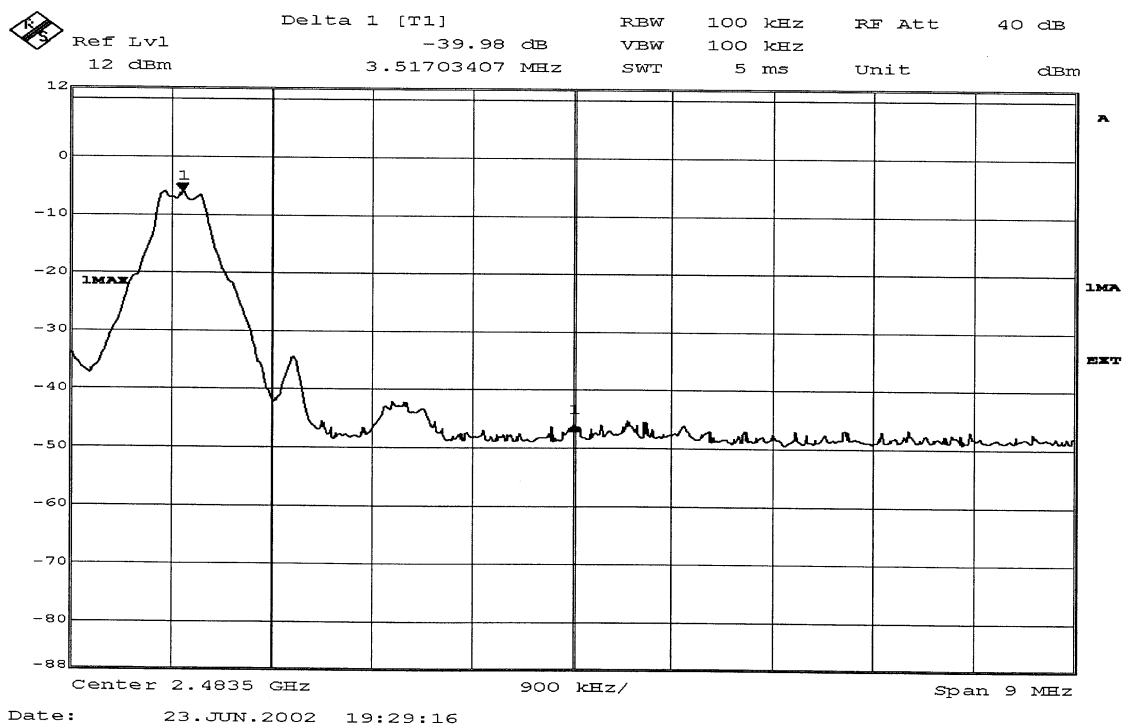


Date: 26.JUN.2002 17:18:57

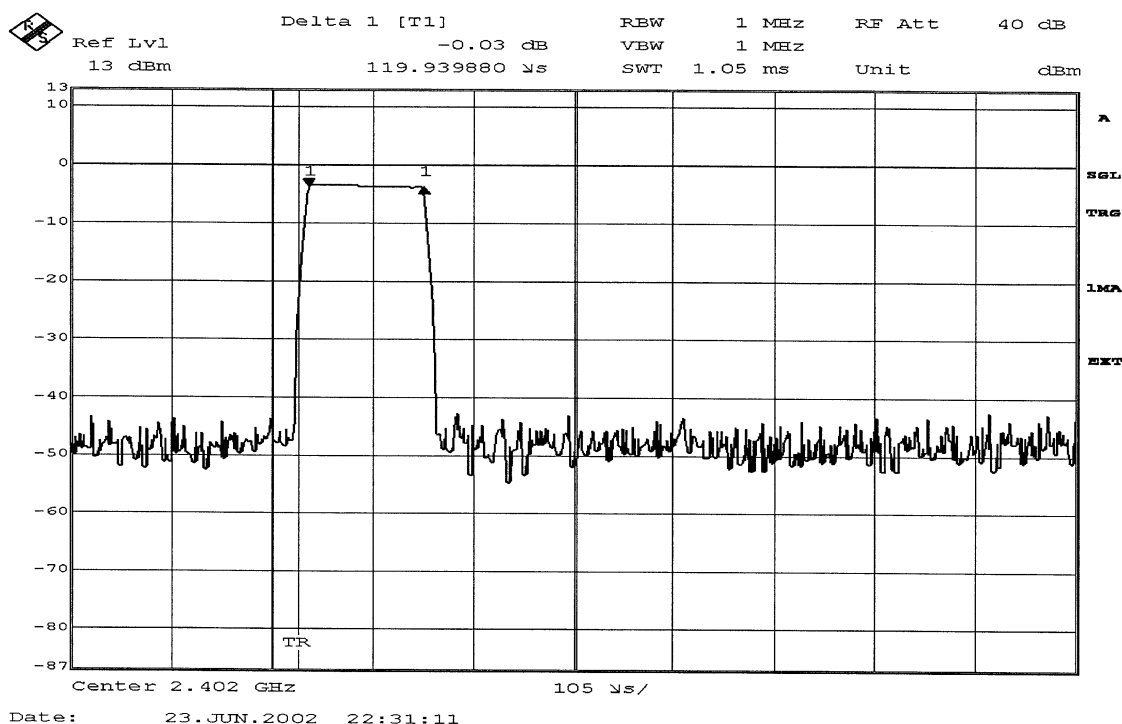
Band Edge Compliance at 2400 MHz



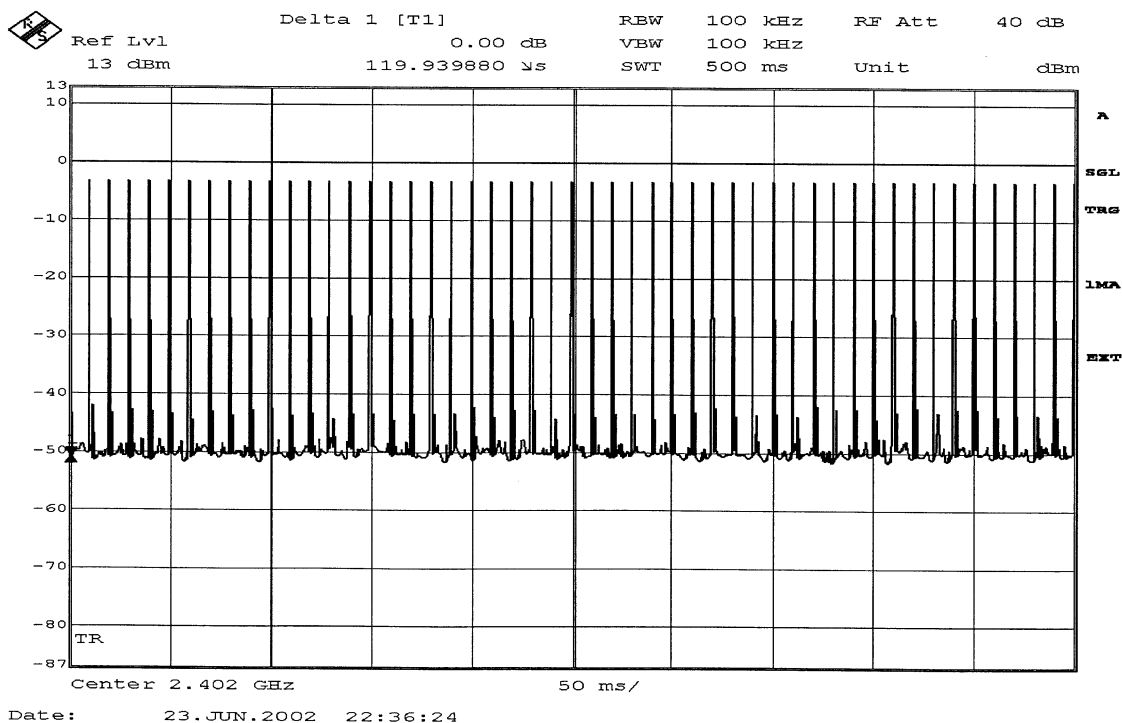
Band Edge Compliance at 2483,5 MHz



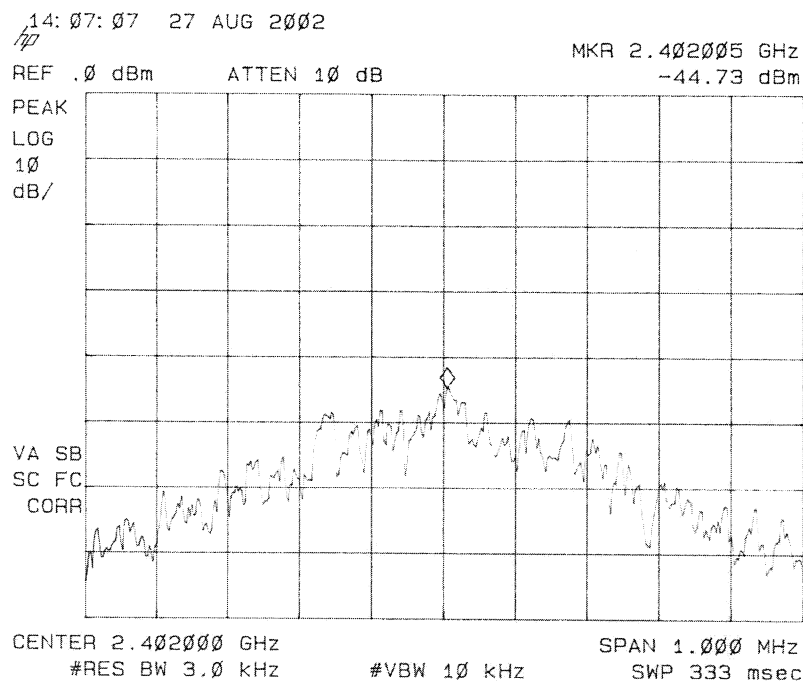
Time of Occupancy (dwell time), channel 1 – determination of T



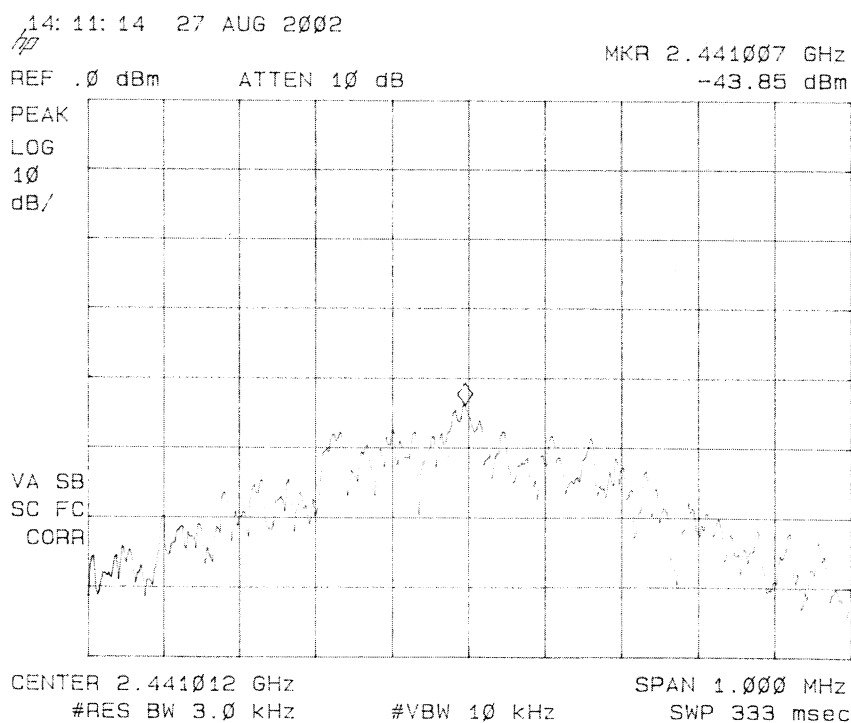
Time of Occupancy (dwell time), channel 1 – determination of n



Peak Power Density – lowest frequency (2402 MHz)



Peak Power Density – middle frequency (2441 MHz)



Peak Power Density – highest frequency (2480 MHz)

