***Conducted noise according to:***

***EN 55022 class B***

| | |
|---|---|
| EUT: | Keyboard KBPC M2 (K278) |
| Manufacturer: | Siemens AG |
| Operating Condition: | scr. "H"; 1024X768/85Hz; HD+CD+KB-Test |
| Test Site: | Siemens AG Augsburg SK1 |
| Operator: | R. Schaufler |
| Comment: | Monitor MCM1705 power supply from PC |
| Comment: | Maus (lange Leitung) |
| Start of Test: | 23.02.99 / 08:41:05 |

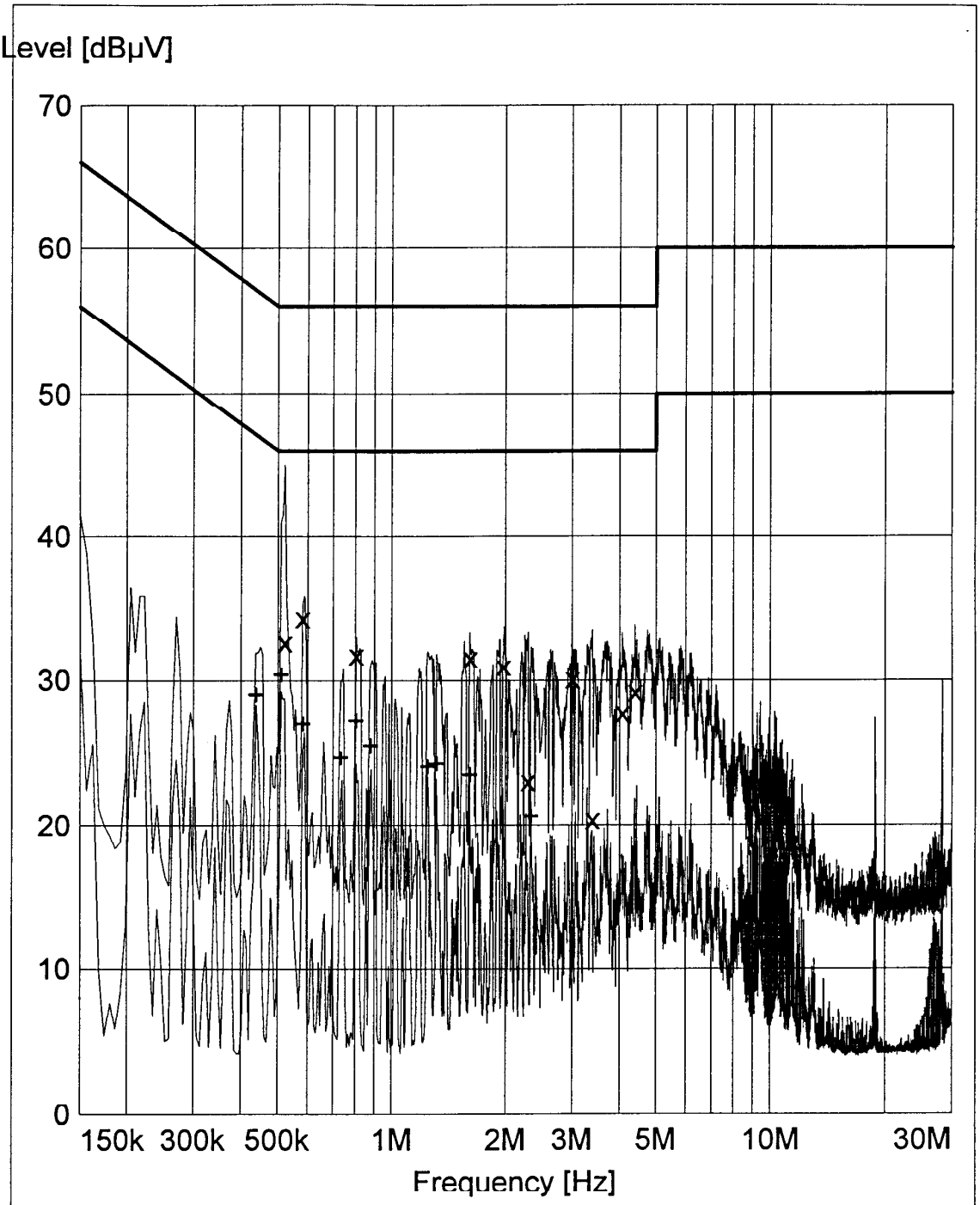
***SCAN TABLE: "Volt_015-30MHZ"***

Unit: dBµV

| | Detector: | Mode: |
|---|---|---|
| Curve 1: | MaxPeak | MaxHold |
| Curve 2: | Average | MaxHold |

Subrange 1:

| | | | |
|---|---|---|---|
| Start Frequency: | 150.0 kHz | Step Size: | 6.0 kHz |
| Stop Frequency: | 30.0 MHz | | |
| Measure Time: | 10.0 ms | | |
| IF Bandwidth: | 10 kHz | | |
| Receiver: | ESHS | Transducer: | ESH2-Z5 |
| Signal Path: | None | System Transducer: | None |
| Meas. Mode: | Lin | Add. Transd. 1: | ESH3-Z2 |
| Tracking Gen.: | -- | Add. Transd. 2: | None |
| Input: | -- | Add. Transd. 3: | None |
| Preamplifier: | Off | Demodulation: | A3 |
| RF Att.: | 0 dB | Volume: | -- |
| Ref. Level: | -- | Squelch: | -- |
| Min. RF Att.: | 10 dB | Option: | None |
| IF Att.: | LowNoise | | |
| Autorange: | On | | |
| Curve 1: | On | Repetition: | 0 |
| Curve 2: | On | Stop Mark: | Off |




x x MES Quasi Peak
+ + MES Average
MES Preview Peak
MES Preview AV
LIM EN 55022/B V QP
LIM EN 55022/B V AV

***MEASUREMENT RESULT: "Quasi Peak"***

23.02.99 08:26

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Line | PE |
|---|---|---|---|---|---|---|
| 0.522000 | 32.70 | 10.0 | 56.0 | 23.2 | N | GND |
| 0.582000 | 34.40 | 10.0 | 56.0 | 21.6 | N | GND |
| 0.804000 | 31.80 | 10.0 | 56.0 | 24.1 | N | GND |
| 1.608000 | 31.60 | 10.0 | 56.0 | 24.3 | N | GND |
| 1.968000 | 31.00 | 10.0 | 56.0 | 24.9 | N | GND |
| 2.298000 | 23.00 | 10.0 | 56.0 | 32.9 | N | GND |
| 3.006000 | 30.10 | 10.0 | 56.0 | 25.8 | N | GND |
| 3.396000 | 20.40 | 10.0 | 56.0 | 35.5 | L1 | GND |
| 4.068000 | 27.80 | 10.0 | 56.0 | 28.1 | N | GND |
| 4.398000 | 29.20 | 10.0 | 56.0 | 26.7 | N | GND |

***MEASUREMENT RESULT: "Average"***

23.02.99 08:26

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Line | PE |
|---|---|---|---|---|---|---|
| 0.438000 | 29.00 | 10.0 | 47.0 | 18.0 | N | GND |
| 0.510000 | 30.40 | 10.0 | 46.0 | 15.5 | N | GND |
| 0.582000 | 27.00 | 10.0 | 46.0 | 18.9 | N | GND |
| 0.732000 | 24.60 | 10.0 | 46.0 | 21.3 | N | GND |
| 0.804000 | 27.20 | 10.0 | 46.0 | 18.7 | N | GND |
| 0.876000 | 25.50 | 10.0 | 46.0 | 20.4 | N | GND |
| 1.242000 | 24.00 | 10.0 | 46.0 | 21.9 | N | GND |
| 1.314000 | 24.20 | 10.0 | 46.0 | 21.7 | N | GND |
| 1.608000 | 23.40 | 10.0 | 46.0 | 22.5 | N | GND |
| 2.334000 | 20.60 | 10.0 | 46.0 | 25.4 | N | GND |

*Conducted noise according to:*

*EN 55022 class B*

| | |
|---|---|
| EUT: | Keyboard KBPC M2 (K278) |
| Manufacturer: | Siemens AG |
| Operating Condition: | scr. "H"; 1024X768/85Hz; HD+CD+KB-Test |
| Test Site: | Siemens AG Augsburg SK1 |
| Operator: | R. Schaufler |
| Comment: | Monitor MCM1705 power supply extern |
| Comment: | Maus (lange Leitung) |
| Start of Test: | 23.02.99 / 08:42:37 |

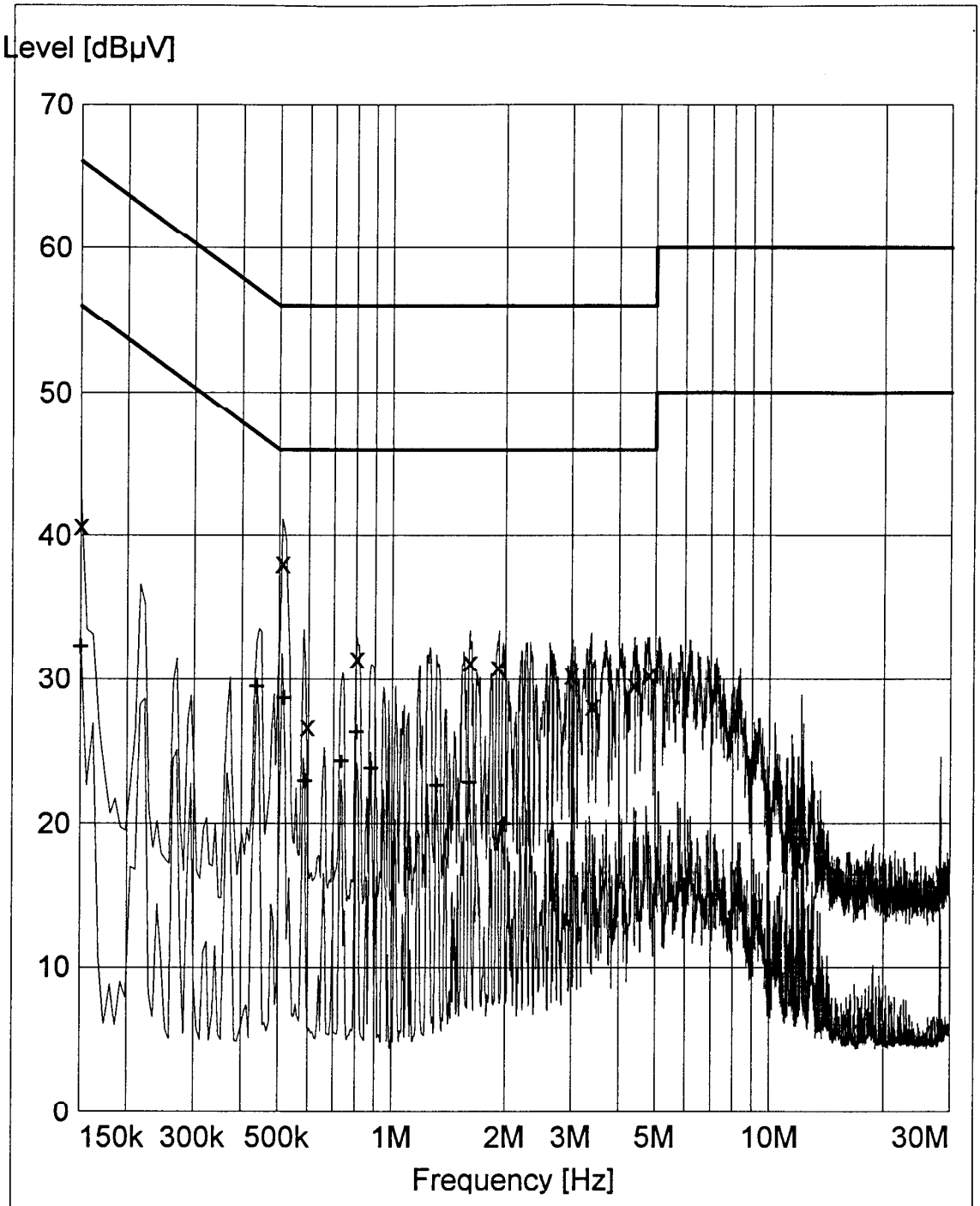
*SCAN TABLE: "Volt_015-30MHZ"*

Unit: dBµV

| | Detector: | Mode: |
|---|---|---|
| Curve 1: | MaxPeak | MaxHold |
| Curve 2: | Average | MaxHold |

Subrange 1:

| | | | |
|---|---|---|---|
| Start Frequency: | 150.0 kHz | Step Size: | 6.0 kHz |
| Stop Frequency: | 30.0 MHz | | |
| Measure Time: | 10.0 ms | | |
| IF Bandwidth: | 10 kHz | | |
| Receiver: | ESHS | Transducer: | ESH2-Z5 |
| Signal Path: | None | System Transducer: | None |
| Meas. Mode: | Lin | Add. Transd. 1: | ESH3-Z2 |
| Tracking Gen.: | -- | Add. Transd. 2: | None |
| Input: | -- | Add. Transd. 3: | None |
| Preamplifier: | Off | Demodulation: | A3 |
| RF Att.: | 0 dB | Volume: | -- |
| Ref. Level: | -- | Squelch: | -- |
| Min. RF Att.: | 10 dB | Option: | None |
| IF Att.: | LowNoise | | |
| Autorange: | On | | |
| Curve 1: | On | Repetition: | 0 |
| Curve 2: | On | Stop Mark: | Off |




x x MES Quasi Peak
+ + MES Average
—— MES Preview Peak
—— MES Preview AV
—— LIM EN 55022/B V QP
—— LIM EN 55022/B V AV

***MEASUREMENT RESULT: "Quasi Peak"***

23.02.99 08:55

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Line | PE |
|---|---|---|---|---|---|---|
| 0.150000 | 40.70 | 10.0 | 66.0 | 25.2 | L1 | GND |
| 0.510000 | 38.20 | 10.0 | 56.0 | 17.7 | L1 | GND |
| 0.594000 | 26.80 | 10.0 | 56.0 | 29.1 | N | GND |
| 0.804000 | 31.50 | 10.0 | 56.0 | 24.4 | N | GND |
| 1.602000 | 31.20 | 10.0 | 56.0 | 24.8 | N | GND |
| 1.908000 | 30.90 | 10.0 | 56.0 | 25.0 | N | GND |
| 3.000000 | 30.30 | 10.0 | 56.0 | 25.6 | N | GND |
| 3.396000 | 28.20 | 10.0 | 56.0 | 27.8 | N | GND |
| 4.392000 | 29.60 | 10.0 | 56.0 | 26.3 | N | GND |
| 4.800000 | 30.30 | 10.0 | 56.0 | 25.6 | N | GND |

***MEASUREMENT RESULT: "Average"***

23.02.99 08:55

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Line | PE |
|---|---|---|---|---|---|---|
| 0.150000 | 32.30 | 10.0 | 56.0 | 23.6 | N | GND |
| 0.438000 | 29.50 | 10.0 | 47.0 | 17.5 | N | GND |
| 0.516000 | 28.70 | 10.0 | 46.0 | 17.2 | N | GND |
| 0.588000 | 22.90 | 10.0 | 46.0 | 23.0 | N | GND |
| 0.732000 | 24.30 | 10.0 | 46.0 | 21.6 | N | GND |
| 0.804000 | 26.40 | 10.0 | 46.0 | 19.5 | N | GND |
| 0.876000 | 23.80 | 10.0 | 46.0 | 22.2 | N | GND |
| 1.314000 | 22.60 | 10.0 | 46.0 | 23.3 | N | GND |
| 1.602000 | 22.80 | 10.0 | 46.0 | 23.1 | N | GND |
| 1.980000 | 20.00 | 10.0 | 46.0 | 25.9 | N | GND |

***Radiated emission according to:***

***to EN55022 class B***

| | |
|---|---|
| EUT: | Keyboard KBPC M2 (K278) |
| Manufacturer: | Siemens AG |
| Operating Condition: | Scr-"H", 1024x768x85Hz, HD-CD-Audio-Test |
| Test Site: | SNI-Augsburg (Semi-anechoic chamber 10m) |
| Operator: | R. Schaufler |
| Configuration: | fully configured, with Monitor MCM 1705 NTD |
| Comment: | |
| Start of Test: | 02.03.99 / 14:39:20 |

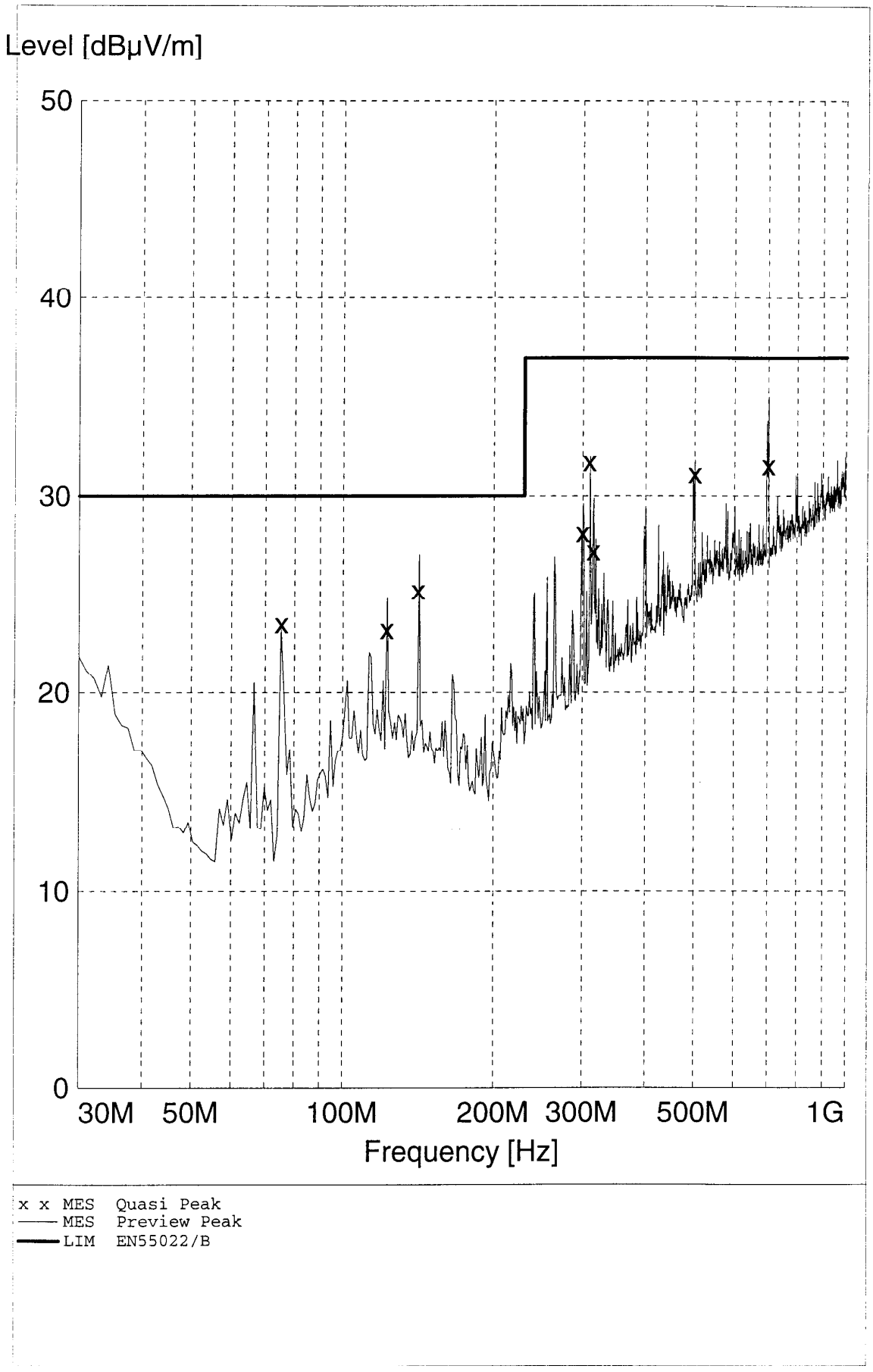
***SCAN TABLE: "10m/30-1000"***

Short Description: 10m Field Strength
Unit: dBµV/m

| | Detector: | Mode: |
|---|---|---|
| Curve 1: | MaxPeak | ClearWrite |

Subrange 1:

| | | | |
|---|---|---|---|
| Start Frequency: | 30.0 MHz | Step Size: | 30.0 kHz |
| Stop Frequency: | 1.0 GHz | | |
| Measure Time: | 10.0 ms | | |
| IF Bandwidth: | 120 kHz | | |
| Receiver: | ESXI | Transducer: | CBL6112 cal. 9/95 |
| Signal Path: | 2DC-CP1X1 | System Transducer: | RFin2-CP1/X1 |
| Meas. Mode: | Lin | Add. Transd. 1: | cable30-1000 |
| Tracking Gen.: | Off | Add. Transd. 2: | None |
| Input: | 2DC | Add. Transd. 3: | None |
| Preamplifier: | 10 dB | Demodulation: | AM |
| RF Att.: | Coupled | Volume: | 70 % |
| Ref. Level: | -60.0 dBm | Squelch: | -- |
| Min. RF Att.: | 0 dB | Option: | None |
| IF Att.: | -- | | |
| Autorange: | On | | |
| Curve 1: | On | Repetition: | Single |
| | | Stop Mark: | Off |
| | | Stop Message: | Off |
| | | Stop Message: | |


Level [dBµV/m]
50
40
30
20
10
0
30M
50M
100M
200M
300M
500M
1G
Frequency [Hz]
x x MES Quasi Peak
MES Preview Peak
LIM EN55022/B

***MEASUREMENT RESULT: "Quasi Peak"***

02.03.99 15:55

| Frequency MHz | Level dBµV/m | Transd dB | Limit dBµV/m | Margin dB | Height cm | Azimuth deg | Polarisation |
|---|---|---|---|---|---|---|---|
| 75.360000 | 23.50 | 7.9 | 30.0 | 6.4 | 160.0 | 150.00 | VERTICAL |
| 122.430000 | 23.20 | 13.0 | 30.0 | 6.7 | 160.0 | 29.00 | VERTICAL |
| 141.270000 | 25.20 | 12.4 | 30.0 | 4.7 | 340.0 | 59.00 | HORIZONTAL |
| 300.120000 | 28.10 | 15.4 | 37.0 | 8.9 | 220.0 | 150.00 | HORIZONTAL |
| 309.570000 | 31.70 | 15.7 | 37.0 | 5.2 | 220.0 | 59.00 | HORIZONTAL |
| 315.000000 | 27.20 | 15.8 | 37.0 | 9.7 | 160.0 | 239.00 | HORIZONTAL |
| 500.250000 | 31.10 | 19.7 | 37.0 | 5.8 | 160.0 | 210.00 | HORIZONTAL |
| 700.320000 | 31.50 | 21.7 | 37.0 | 5.4 | 160.0 | 90.00 | VERTICAL |