SENTON

■ EMV-Prüfzentrum ■ EMI/EMC-Testcenter ■

Straubing, January 9, 2003

# T E S T - R E P O R T

## No. 56305-20559-6

## for

## 0111-PC

## RF-modem for wireless LAN

| | |
|---|---|
| Applicant: | Agere Systems Nederland B.V. |
| Purpose of testing: | To show compliance with |
| | FCC Code of Federal Regulations, Part 15 Subpart C, Section §15.247 |
| | RSS 210 Issue 5 (November 2001), Section 6.2.2(o) |

**Table of Contents**

## 1. Administrative Data

| | |
|---|---|
| Equipment Under Test (EUT): | 0111-PC |
| Serial number(s): | 02UT45300010 |
| Type of equipment: | RF-modem using DSSS technology for wireless connection for e.g. portable and mobile computers which have a PC-card-bus (PCMCIA). |
| Version: | as delivered |
| Parts/accessories: | see "Configuration of EUT and Peripheral Devices" on page 7 |
| FCC-ID: | IMRPC2411B |

| | |
|---|---|
| Applicant: | Agere Systems Nederland B.V. |
| (full address) | Zadelstede 1-10<br>NL-3431 JZ Nieuwegein<br>The Netherlands |
| Contract identification: | --- |
| Contact person: | Mr. Wout Kerkhof |
| Manufacturer: | Agere Systems Nederland B.V. |

| | |
|---|---|
| Receipt of EUT: | November 19, 2002 |
| Date of test: | December 16 to 19, 2002 |
| Note: | --- |

| | |
|---|---|
| Responsible for testing: | Rainer Heller |
| Responsible for test report: | Rainer Heller |

## 2. Identification of Test Laboratory

| | | |
|---|---|---|
| Test Laboratory:<br>(full address): | Senton GmbH EMI/EMC Test Center<br>Aeussere Fruehlingstrasse 45<br>D-94315 Straubing<br>Germany | |
| Contact person: | Mr. Johann Roidt | |
| Communication: | Telephone<br>Fax<br>eMail: | (+49) 0 94 21 / 55 22-0<br>(+49) 0 94 21 / 55 22-99<br>Office@senton.de |
| FCC registration number: | 90926 | |
| Industry Canada file number: | IC 3050 | |

## 3. Summary of Test Results

The tested sample (including accessories) complies with the requirements for

- maximum peak output power (§15.247.b / IC RSS-210 sec. 6.2.2(o)(b)),
- conducted emission 150 kHz - 30 MHz (§15.207/ IC RSS-210 sec. 6.6, 7.4) and
- radiated emission (§15.247.c, §15.205.a,b, §15.209/ IC RSS-210 sec. 6.2.2(o)(e1), 6.3, 7.3)

set forth in the Code of Regulations Part 15 Subpart C, section §15.247 (intentional radiators) of the Federal Communication Commission (FCC) and the Radio Standards Specification RSS-210, Issue 5 (November 2001), section 6.2.2(o) of Industry Canada.

Johann Roidt
Technical Manager

Rainer Heller
Test Engineer

## 4. Operation Mode of EUT

All tests were performed using the "Test program for wireless cards V0.47" ("wincert.exe"). According to applicant three different kinds of modulation are used for transmission specified by the appropriate bit rate:

Transmit mode (TX):

| Operating frequency [GHz] | Rated output power (conducted) [dBm] | | | Test performed [1] |
|---|---|---|---|---|
| | Bit rate 2 Mbps | Bit rate 5.5 Mbps | Bit rate 11 Mbps | |
| 2.412 | +15 | +15 | +15 | X |
| 2.417 | +15 | +15 | +15 | |
| 2.422 | +15 | +15 | +15 | |
| 2.427 | +15 | +15 | +15 | |
| 2.432 | +15 | +15 | +15 | |
| 2.437 | +15 | +15 | +15 | |
| 2.442 | +15 | +15 | +15 | X |
| 2.447 | +15 | +15 | +15 | |
| 2.452 | +15 | +15 | +15 | |
| 2.457 | +15 | +15 | +15 | |
| 2.462 | +15 | +15 | +15 | X |

Receive mode (RX):

| Operating frequency [GHz] | Test performed |
|---|---|
| 2.412 | |
| 2.417 | |
| 2.422 | |
| 2.427 | |
| 2.432 | |
| 2.437 | |
| 2.442 | X |
| 2.447 | |
| 2.452 | |
| 2.457 | |
| 2.462 | |

[1] Full testing with bit rate 11 Mbps only

## 5. Configuration of EUT and Peripheral Devices

RF-modem module 0111-PC was tested operating with external antenna WLE-DA connected and mounted in PC-card slot of personal computer Dell Dimension 4100 via PCI-adapter Orinoco PCIPC.

In table 1 used accessories and host equipment are listed (with Agere part numbers).

| Item | Model or part no. | Serial no. | Designation | Manufacturer |
|---|---|---|---|---|
| RF-modem | 023573/A | 02UT45300010 | 0111-PC | Agere |
| External antenna (including fixed antenna cable) | --- | Sample no. 1 | WLE-DA (Specifications: Cable type: RG174 Cable length: 3m Antenna gain[2]: 5 dBi) | Melco |
| Personal computer | --- | CZPN30J | Dimension 4100 | Dell |
| PCI-adapter | 015219 Rev. A (Rev. 1.0) | 22220114103558 | PCIPC | Agere |

Table 1: EUT and accessories

[2] Including cable attenuation

## 6. Setup of Host

### Configuration of cables of host

- Non-shielded power lines for AC-power supply of personal computer and monitor, Kawasaki, 180 cm
- Shielded data cable connected to parallel interface of personal computer, Inmac, 150 cm, Senton inv.-no. 1387
- Shielded data cable connected to serial interface of personal computer, Senton, 170 cm, Senton inv.-no. 1401
- Shielded USB cable connected to USB port no. 2 of personal computer, Berg Electronics, 50 cm

### Configuration of host and peripheral devices

- Personal computer Dell Dimension 4100
  Serial no.: CZPN30J
- PS/2 keyboard Dell SK-8000-2D
  Serial no.: CN-0043CK-38844-154-5637
- PS/2 mouse Microsoft IntelliMouse 1.2A PS/2 Compatible
  Serial no.: 63618-OEM-8720065-9
- Monitor Dell P791 (with fixed video cable)
  Serial no.: GB-049FYF-47604-0C8-D7K9
- Parallel printer HP ThinkJet 2225C+:
  Serial no.: 3106S91193, FCC-ID: DSI6XU2225
  with power supply Hayes 52-00008
  Serial no.: 9028A
- Serial printer HP ThinkJet 2225D+:
  Serial no.: 2920S44042, FCC-ID: DSI6XU2225
  with power supply Hayes 52-00008
  Serial no.: 9033A

## 7. Measuring Methods

## 7.1. Maximum Peak Output Power (CFR47 §15.247.b / IC RSS-210 sec. 6.2.2(o)(b))

The maximum peak output power was measured with a power meter. The appropriate sensors (a thermocouple sensor indicating the RMS power and a peak sensor indicating the peak envelope power PEP) were connected to the antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency.
See figure 1 for the measurement setup.

Test equipment used (see equipment list for details):
02, 08, 09, 19, 57, 68, 70

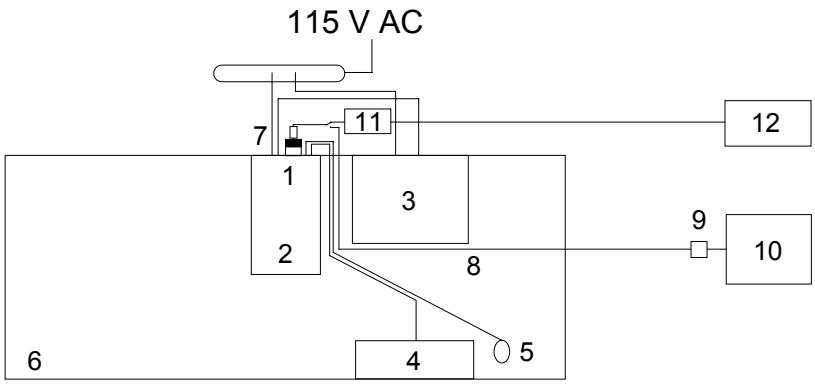



Figure 1: Measurement setup for testing on antenna connector

**1** RF-modem
**2** Personal computer (host)
**3** Monitor
**4** Keyboard
**5** Mouse
**6** Wooden table
**7** DC-block
**8** Test cable
**9** Attenuator (if applicable)
**10** Spectrum analyzer
**11** Power sensor
**12** Power meter

## 7.2. Conducted Emission 0.15 MHz - 30 MHz (CFR47 §15.207 / IC RSS-210 sec. 6.6, 7.4)

Conducted emissions were measured in the frequency range 0.15 MHz to 30 MHz with bandwidth of the EMI-Receiver set to 10 kHz and according to the following procedure: First the whole spectrum of emission caused by equipment under test (EUT) was recorded with detector set to peak. After that all peak levels having less margin than 10 dB to the appropriate lower average limit were re-tested with detector set to quasi-peak. If average limit is kept no additional scan with average detector is necessary. In cases of emission levels between quasi-peak and average limit an additional scan with detector set to average has to be recorded.

Measurements were performed on phase(s) and neutral lines of the power-cords of the tested system. At the final test the cables and equipment were placed and moved within the range of positions likely to find their maximum emissions.
The test setup was made in accordance with ANSI C63.4-1992.

The bandwidth of the EMI-Receiver was set to 9 kHz with detector-function set to CISPR quasi-peak and, if necessary, additionally to average.

See figure 2 for the measurement setup.

Test equipment used (see equipment list for details):
04, 22, 23, 60, 63

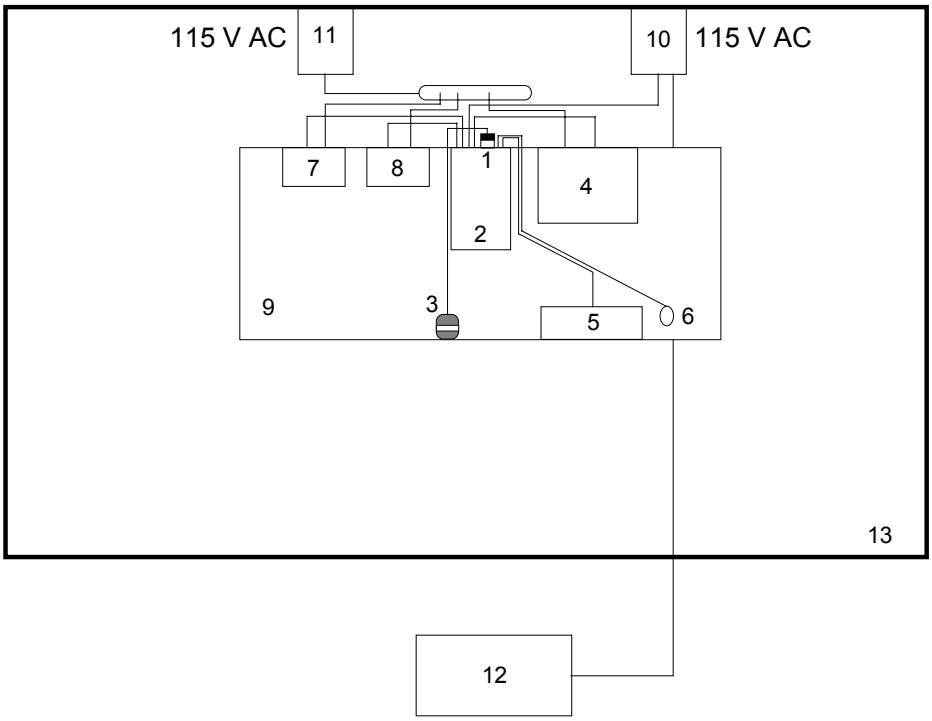



Figure 2: Measurement setup for conducted emission test

**1** RF-modem
**2** Personal computer (host)
**3** External antenna
**4** Monitor
**5** Keyboard
**6** Mouse
**7** Parallel printer
**8** Serial printer
**9** Wooden table
**10** LISN for EUT
**11** LISN for peripheral devices
**12** Test receiver
**13** Shielded room

## 7.3. Radiated Emission 30 MHz - 1 GHz (CFR47 §15.209, §15.247.c, §15.205.a,b / IC RSS-210 sec. 6.2.2(o)(e1), 6.3, 7.3)

Radiated emissions were measured over the frequency range from 30 MHz to 1 GHz. The bandwidth of the EMI-receiver was set to 120 kHz and the detector-function was set to CISPR quasi-peak.
The test setup was made in accordance with ANSI C63.4-1992. Measurements were made in both the horizontal and vertical planes of polarization. Preliminary scans were taken in a semi-anechoic room using a spectrum analyzer with the detector function set to peak. All tests were performed at a test-distance of 3 meters. For final testing an open-area test-site was used. During the tests the EUT was rotated all around and the receiving-antenna was raised and lowered from 1 meter to 4 meters to find the maximum levels of emissions. The cables and equipment were placed and moved within the range of position likely to find their maximum emissions.
See figure 3 for the measurement setup.

Test equipment used (see equipment list for details):
01, 06, 12, 38, 39, 40, 41, 58, 61, 64, 66

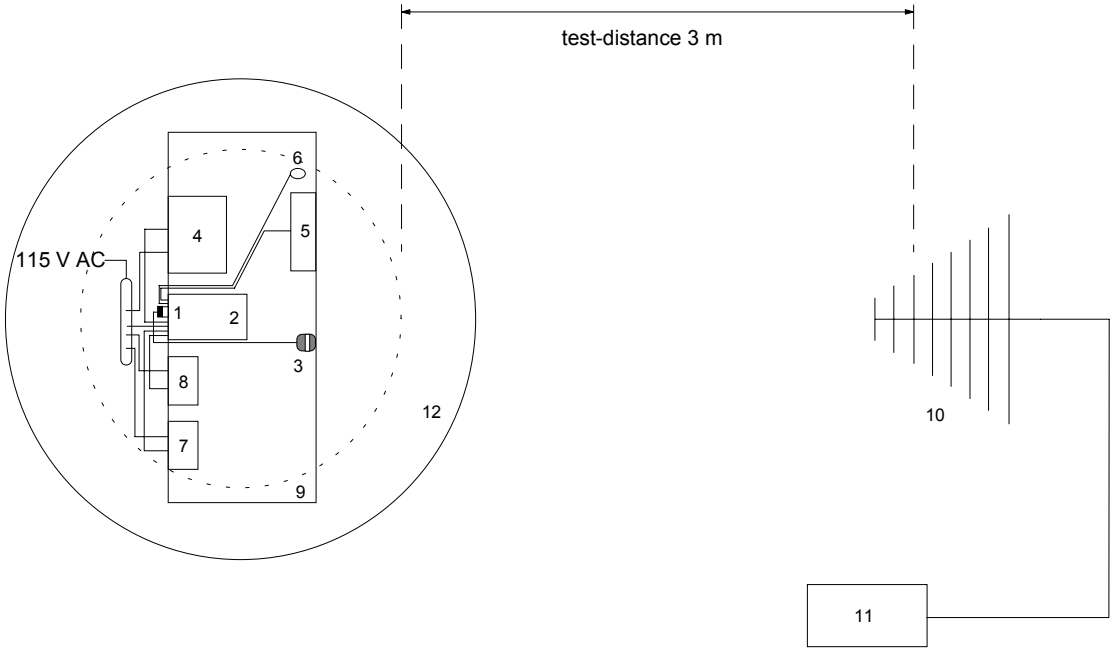



Figure 3: Measurement setup for radiated emission test below 1 GHz

**1** RF-modem
**2** Personal computer (host)
**3** External antenna
**4** Monitor
**5** Keyboard
**6** Mouse
**7** Parallel printer
**8** Serial printer
**9** Wooden table
**10** Measurement antenna
**11** Test receiver
**12** Turn table

## 7.4. Radiated Emission 1 GHz - 25 GHz (CFR47 §15.209, §15.247.c, §15.205.a,b / IC RSS-210 sec. 6.2.2(o)(e1), 6.3, 7.3)

Radiated emissions were measured in the frequency range 1 GHz to 25 GHz in transmit mode and 1 GHz to 12.5 GHz in receive mode. The resolution bandwidth of the spectrum analyzer was set to 1 MHz. Scans for the whole frequency range were taken with video bandwidth set to 1 MHz to check out the highest peak levels. In case of less margin to average limit additional prescans were made with video bandwidth reduced from 1 MHz to 100 kHz, 30 kHz or 10 kHz. Final measurements were performed at the critical frequencies with video bandwidth of the spectrum analyzer set to 1 kHz (average mode). EUT was rotated all around and receiving antenna was raised and lowered to find the maximum levels of emission. Cables and equipment were placed and moved within the range of position likely to find their maximum emissions.
All tests were performed in a semi-anechoic chamber with a test-distance of 3 meters (except for the frequency range 18 GHz - 25 GHz where test distance was reduced to 0.5 meter).
To avoid overload in transmit mode no preamplifier was used between 1 GHz and 3.95 GHz. Above 3.95 GHz tests were performed with appropriate preamplifiers (attenuation of operating frequency by horn antenna is sufficient to avoid overload of preamplifier).
For receive mode appropriate preamplifiers were used for the whole frequency range.

See figure 4 for the measurement setup.

Test equipment used (see equipment list for details):
02, 13, 14, 16, ,42, 43, 44, 45, 46, 47, 48, 49, 57, 64

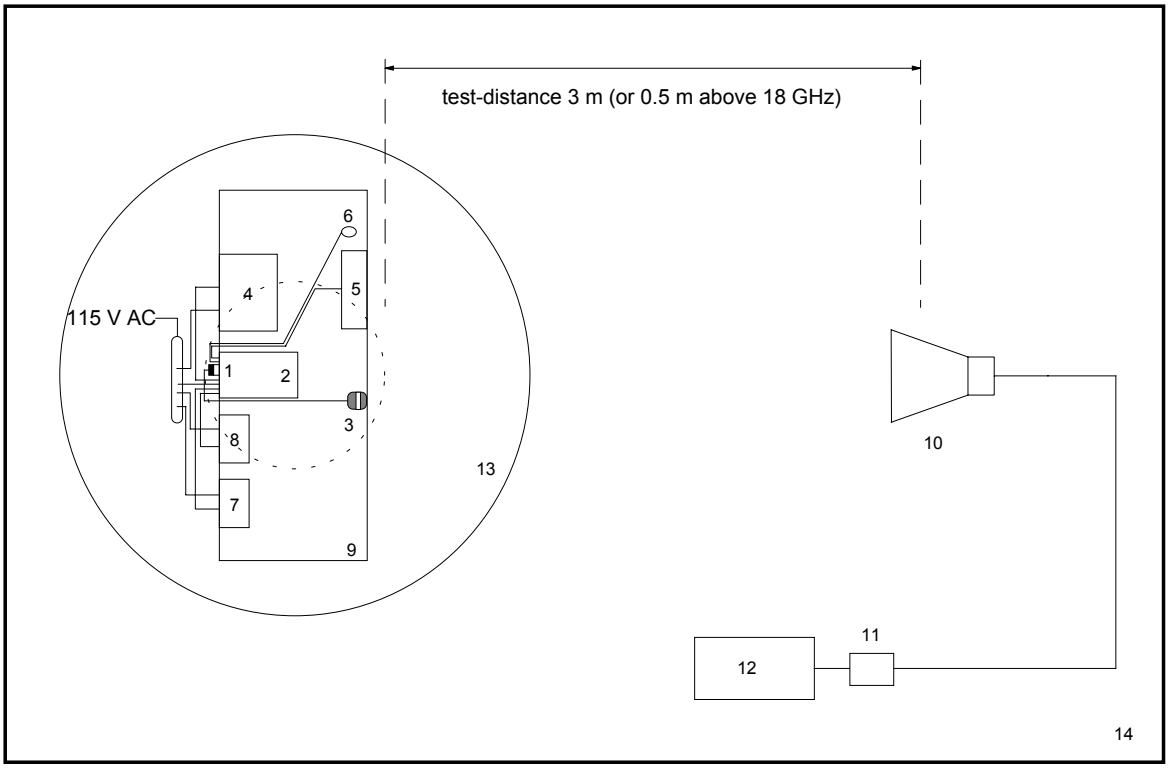



Figure 4: Measurement setup for radiated emission test above 1 GHz

**1** RF-modem
**2** Personal computer (host)
**3** External antenna
**4** Monitor
**5** Keyboard
**6** Mouse
**7** Parallel printer
**8** Serial printer
**9** Wooden table
**10** Measurement antenna
**11** Preamplifier (if applicable)
**12** Spectrum analyzer
**13** Turn table
**14** Semi-anechoic room

## 8. Equipment List

To facilitate reference to test equipment used for related tests, each item of test equipment and ancillaries such as cables are identified (numbered) by the Test Laboratory.

| No. | Type | Model | Serial Number | Manufacturer |
|---|---|---|---|---|
| 01 | Spectrum Analyzer | R 3271 | 05050023 | Advantest |
| 02 | EMI Test Receiver | ESMI | 839379/013<br>839587/006 | Rohde & Schwarz |
| 03 | Test Receiver | ESH 3 | 880112/032 | Rohde & Schwarz |
| 04 | Test Receiver | ESHS 10 | 860043/016 | Rohde & Schwarz |
| 05 | Test Receiver | ESV | 881414/009 | Rohde & Schwarz |
| 06 | Test Receiver | ESVP | 881120/024 | Rohde & Schwarz |
| 07 | Audio Analyzer | UPA | 862954 | Rohde & Schwarz |
| 08 | Power Meter | NRVS | 836856/015 | Rohde & Schwarz |
| 09 | Power Sensor | NRV-Z52 | 837901/030 | Rohde & Schwarz |
| 10 | Power Sensor | NRV-Z4 | 863828/015 | Rohde & Schwarz |
| 11 | Preamplifier | ESV-Z3 | 860907/004 | Rohde & Schwarz |
| 12 | Preamplifier | R14601 | | Advantest |
| 13 | Preamplifier | ACX/080-3030 | 32640 | CTT |
| 14 | Preamplifier | ACO/180-3530 | 32641 | CTT |
| 15 | Signal Generator | SMS | 872166/039 | Rohde & Schwarz |
| 16 | Signal Generator | HP 8673 D | 2930A00966 | Hewlett Packard |
| 17 | Waveform Generator | HP 33120 A | US34005375 | Hewlett Packard |
| 18 | Attenuator 20 dB | 4776-20 | 9503 | Narda |
| 19 | Attenuator 10 dB | 4776-10 | 9412 | Narda |
| 20 | Pulse Limiter | ESH 3-Z2 | 1144 | Rohde & Schwarz |
| 21 | Pulse Limiter | 11947 A | 3107A00566 | Hewlett Packard |
| 22 | V-Network | ESH 3-Z5 | 862770/018 | Rohde & Schwarz |
| 23 | V-Network | ESH 3-Z5 | 894785/005 | Rohde & Schwarz |
| 24 | V-Network | ESH 3-Z5 | 830952/025 | Rohde & Schwarz |
| 25 | V-Network | ESH 3-Z6 | 830722/010 | Rohde & Schwarz |
| 26 | V-Network | NSLK 8127 | 8127152 | Schwarzbeck |
| 27 | V-Network | NNLA 8119 | 8119148 | Schwarzbeck |
| 28 | V-Network | SE 01 | 01 | Senton |
| 29 | T-Network | ESH 3-Z4 | 890602/011 | Rohde & Schwarz |
| 30 | T-Network | ESH 3-Z4 | 890602/012 | Rohde & Schwarz |
| 31 | High Impedance Probe | TK 9416 | 01 | Schwarzbeck |
| 32 | High Impedance Probe | TK 9416 | 02 | Schwarzbeck |
| 33 | Current Probe | ESH 2-Z1 | 863366/18 | Rohde & Schwarz |
| 34 | Current Probe | ESV-Z1 | 862553/3 | Rohde & Schwarz |

| No. | Type | Model | Serial Number | Manufacturer |
|---|---|---|---|---|
| 35 | Absorbing Clamp | MDS 21 | 80911 | Lüthi |
| 36 | Absorbing Clamp | MDS 21 | 79690 | Lüthi |
| 37 | Loop Antenna | HFH2-Z2 | 882964/1 | Rohde & Schwarz |
| 38 | Biconical Antenna | HK 116 | 842204/001 | Rohde & Schwarz |
| 39 | Biconical Antenna | HK 116 | 836239/02 | Rohde & Schwarz |
| 40 | Log. Periodic Antenna | HL 223 | 841516/023 | Rohde & Schwarz |
| 41 | Log. Periodic Antenna | HL 223 | 834408/12 | Rohde & Schwarz |
| 42 | Horn Antenna | 3115 | 9508-4553 | Emco |
| 43 | Horn Antenna | 3160-03 | 9112-1003 | Emco |
| 44 | Horn Antenna | 3160-04 | 9112-1001 | Emco |
| 45 | Horn Antenna | 3160-05 | 9112-1001 | Emco |
| 46 | Horn Antenna | 3160-06 | 9112-1001 | Emco |
| 47 | Horn Antenna | 3160-07 | 9112-1008 | Emco |
| 48 | Horn Antenna | 3160-08 | 9112-1002 | Emco |
| 49 | Horn Antenna | 3160-09 | 9403-1025 | Emco |
| 50 | Digital multimeter | 199 | 463386 | Keithley |
| 51 | DC Power Supply | NGSM 32/10 | 203 | Rohde & Schwarz |
| 52 | DC Power Supply | NGB | 2455 | Rohde & Schwarz |
| 53 | DC Power Supply | NGA | 386 | Rohde & Schwarz |
| 54 | Temperature Test Chamber | HT4010 | 07065550 | Heraeus |
| 55 | Cable | RG214 | 1309 | Senton |
| 56 | Cable | 200CM_001 | 1357 | Rosenberger |
| 57 | Cable | 150CM_001 | 1479 | Rosenberger |
| 58 | Cable Set EG1 | RG214 | 1189 - 1191 | Senton |
| 59 | Cable Set Cabine 1 | RG214 | | Senton |
| 60 | Cable Set Cabine 2 | RG214 | | Senton |
| 61 | Cable Set Cabine 3 | RG214 | | Senton |
| 62 | Shielded Room | No. 1 | 1451 | Senton |
| 63 | Shielded Room | No. 2 | 1452 | Senton |
| 64 | Semi-anechoic Chamber | No. 3 | 1453 | Siemens |
| 65 | Shielded Room | No. 4 | 1454 | Euroshield |
| 66 | Open Area Test Site | EG 1 | | Senton |
| 67 | Cable for Antenna Connector | | | Agere |
| 68 | DC Block 0.01-18GHz | | 8037 | Inmet Corp. |
| 69 | High pass filter | | | Agere |
| 70 | Power Sensor | NRV-Z31 | 836299/012 | Rohde & Schwarz |

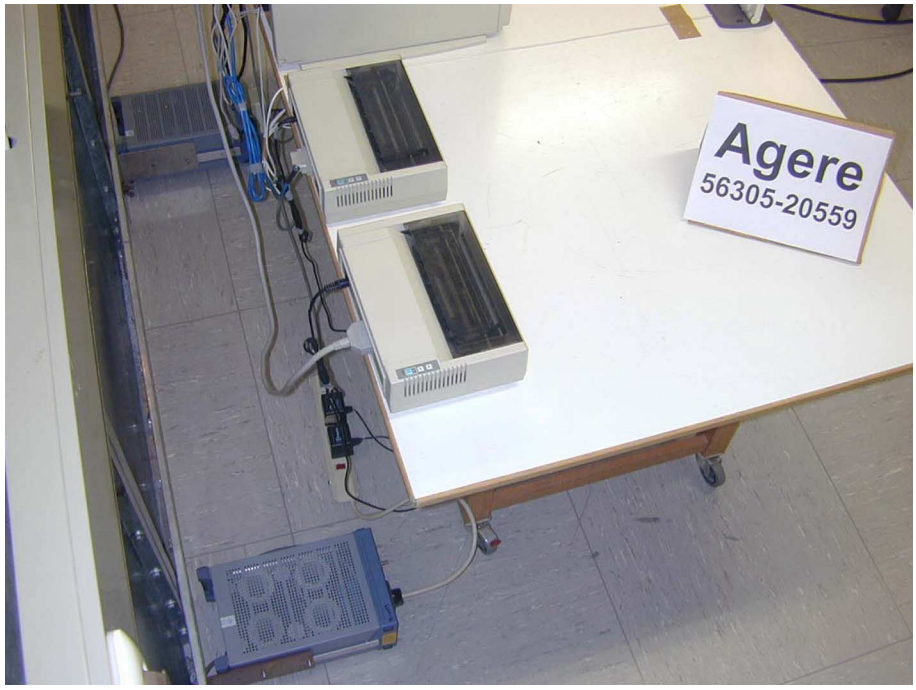
## 9. Photographs Taken During Testing

**Photo No. 9.1**

**Test setup for conducted emission test 150 kHz - 30 MHz**

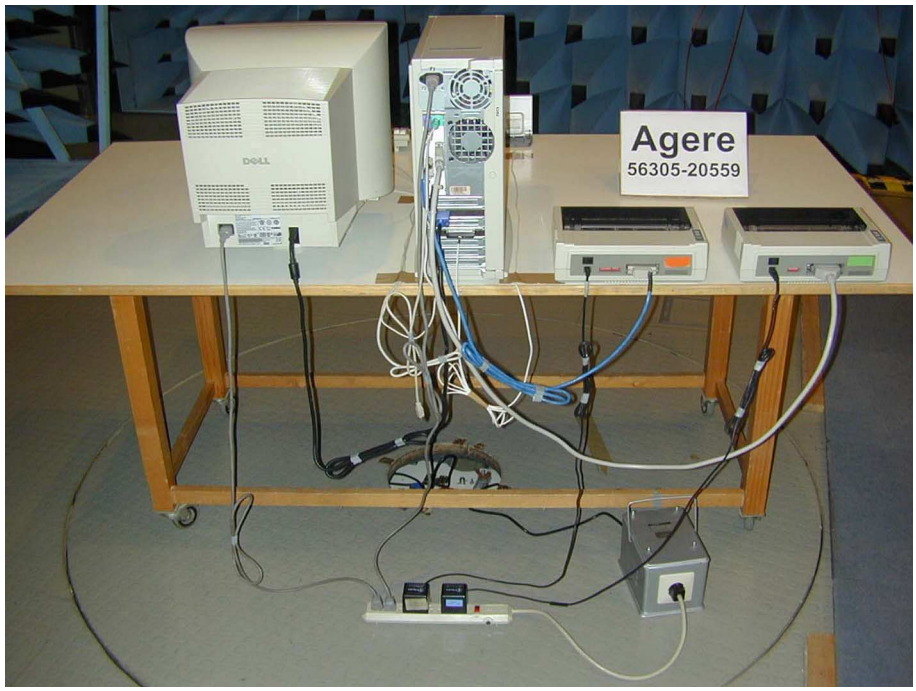
**Photos No. 9.2 - 9.3**

**Test setup for conducted emission test 150 kHz - 30 MHz**
**- continued -**




**Photos No. 9.4 - 9.5**

**Test setup for radiated emission pre-test 30 MHz - 1 GHz (semi anechoic room)**

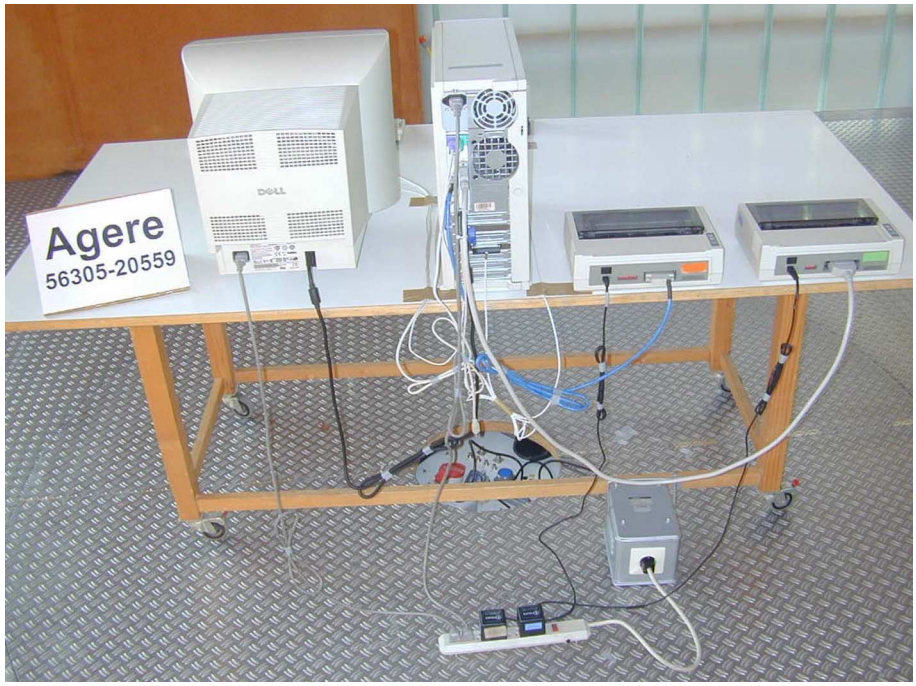



**Photos No. 9.6 - 9.7**

**Test setup for radiated emission pre-test 30 MHz - 1 GHz (semi anechoic room) - continued -**


## Photos No. 9.8 - 9.9

## Test setup for radiated emission final test 30 MHz - 1 GHz (open area test site)

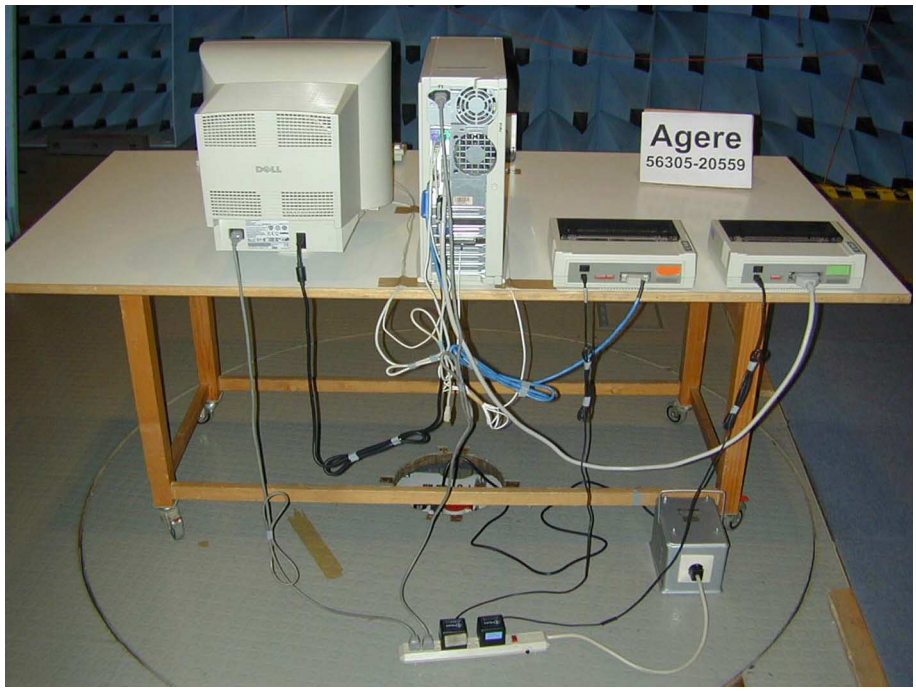



**Photos No. 9.10 - 9.11**

**Test setup for radiated emission final test 30 MHz - 1 GHz (open area test site) - continued -**

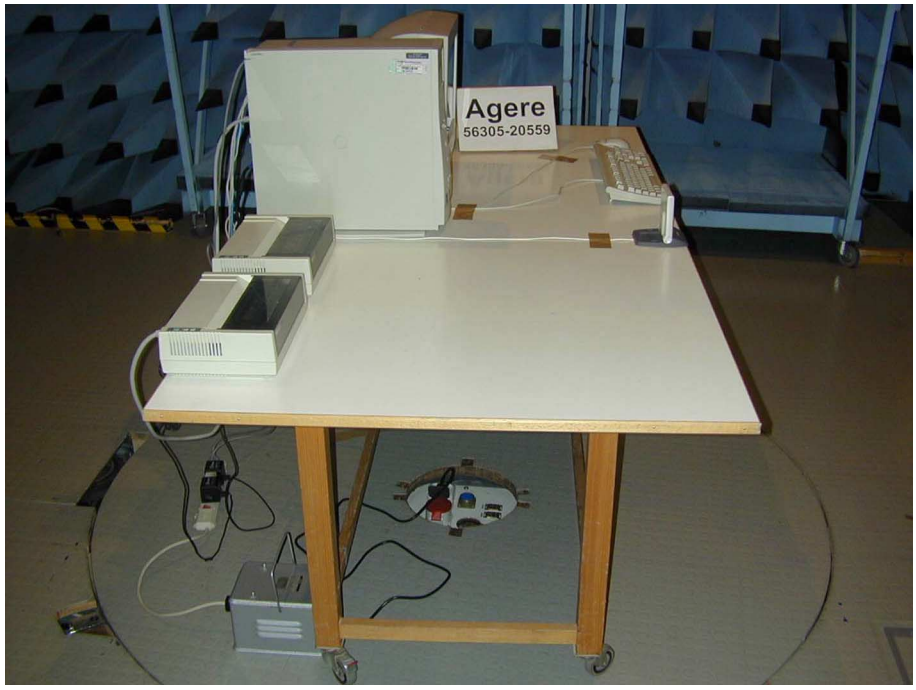

**Photos No. 9.12 - 9.13**

**Test setup for radiated emission test above 1 GHz (semi anechoic room)**

**Photos No. 9.14 - 9.15**

**Test setup for radiated emission test above 1 GHz (semi anechoic room)**
**- continued -**




## 10. Referenced Regulations

All tests were performed with reference to the

Code of Regulations Part 15 (edition August 20, 2002), Subpart C, section §15.247 (intentional radiators) of the Federal Communication Commission (FCC)

and the

Radio Standards Specification RSS-210, Issue 5 (November 2001) of Industry Canada.

## 11. List of Measurements

### Notes

**Note 1:** Maximum peak output power was measured while either using bit rate 2, 5.5 or 11 Mbps. Radiated emission tests in transmit mode were performed with bit rate set to 11 Mbps only.
However, special care was taken to observe the different results of TX fundamental and (even) harmonics when selecting 11 (or 5.5) Mbps on the one hand, and 2 Mbps on the other hand. Therefore additional emission tests at band edges and TX harmonics were performed with 2 Mbps. Only critical harmonics observed with 11 Mbps (i.e. with less than 10 dB margin of peak levels to average limit) were re-tested with bit rate set to 2 Mbps.

## 11.1. List of Measurements according to FCC Part 15 Subpart C

| | | | |
|---|---|---|---|
| **FCC Part 15 Subpart C** | | | |
| | | | |
| **Section(s):** | **Test** | **Page** | **Result** |
| | | | |
| | **Transmit mode (TX):** | 33 | |
| **§15.247.a2** | Minimum 6 dB bandwidth | --- | not performed |
| **§15.247.b** | Maximum peak output power | 34 | passed |
| **§15.247.d** | Peak power density | --- | not performed |
| | Processing gain | --- | not applicable |
| **§15.207** | Conducted emission test<br>150 kHz - 30 MHz | 36 | passed |
| **§15.247.c**<br>**§15.209**<br>**§15.205.a,b** | Radiated emission test<br>9 kHz - 30 MHz | --- | not applicable<br>(acc. to §15.33) |
| **§15.247.c**<br>**§15.209**<br>**§15.205.a,b** | Radiated emission test<br>30 MHz - 1 GHz | 48 | passed |
| **§15.247.c**<br>**§15.209**<br>**§15.205.a,b** | Radiated emission test<br>1 GHz - 25 GHz | 72 | passed |
| | | | |
| | **Receive mode (RX):** | 124 | |
| **§15.207** | Conducted emission test<br>150 kHz - 30 MHz | 125 | passed |
| **§15.209** | Radiated emission test<br>9 kHz - 30 MHz | --- | not applicable<br>(acc. to §15.33) |
| **§15.209** | Radiated emission test<br>30 MHz - 1 GHz | 129 | passed |
| **§15.209** | Radiated emission test<br>1 GHz - 12.5 GHz | 137 | passed |
| | | | |

## 11.2. List of Measurements according to IC RSS-210

| | | | |
|---|---|---|---|
| **IC RSS-210 Issue 5** | | | |
| | | | |
| **Section(s):** | **Test** | **Page** | **Result** |
| | | | |
| | **Transmit mode (TX):** | 33 | |
| | Minimum 6 dB bandwidth | --- | not applicable |
| **6.2.2(o)(b)** | Transmitter output power | 34 | passed |
| **6.2.2(o)(b)** | Transmitter power spectral density | --- | not performed |
| **6.2.2(o)(b)** | Processing gain | --- | performed by applicant |
| **6.6** | Transmitter AC wireline conducted emissions<br>150 kHz - 30 MHz | 36 | passed |
| **6.2.2(o)(e1), 6.3** | Out of band emissions<br>9 kHz - 30 MHz | --- | not applicable |
| **6.2.2(o)(e1), 6.3** | Out of band emissions<br>30 MHz - 1 GHz | 48 | passed |
| **6.2.2(o)(e1), 6.3** | Out of band emissions<br>1 GHz - 25 GHz | 72 | passed |
| | | | |
| | **Receive mode (RX):** | 124 | |
| **7.4** | Receiver AC wireline conducted emissions<br>150 kHz - 30 MHz | 125 | passed |
| **7.3** | Receiver spurious emissions (radiated)<br>9 kHz - 30 MHz | --- | not applicable |
| **7.3** | Receiver spurious emissions (radiated)<br>30 MHz - 1 GHz | 129 | passed |
| **7.3** | Receiver spurious emissions (radiated)<br>1 GHz - 12.5 GHz | 137 | passed |
| | | | |

## 12. Test Results

# Test results for

# Transmit (TX) mode

# Maximum Peak Output Power
# according to FCC Part 15 Subpart C, §15.247b

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Date of test: 12/17/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA

- TX mode

Tested on: Antenna connector

| Selected bit rate | Operating frequency [GHz] | PEP power meter reading [dBm] | Correction-factor [dB] | Output power [dBm] | Limit (see note 1) [dBm] |
|---|---|---|---|---|---|
| 11 Mbps | 2.412 | 5.4 | 11.3 | 16.7 | 30 |
| | 2.442 | 5.4 | 11.3 | 16.7 | 30 |
| | 2.462 | 5.4 | 11.3 | 16.7 | 30 |
| 5.5 Mbps | 2.412 | 4.7 | 11.3 | 16.0 | 30 |
| | 2.442 | 4.8 | 11.3 | 16.1 | 30 |
| | 2.462 | 4.8 | 11.3 | 16.1 | 30 |
| 2 Mbps | 2.412 | 5.4 | 11.3 | 16.7 | 30 |
| | 2.442 | 5.4 | 11.3 | 16.7 | 30 |
| | 2.462 | 5.4 | 11.3 | 16.7 | 30 |

**Note 1:** Total nominal gain of antenna Melco WLE-DA is 5 dBi (including cable loss).
**Note 2:** The correction factor noted above is caused by the attenuation of DC block, adapter cable and 10 dB attenuator
The maximum power values were recorded.
**Note 3:** The duty cycle of the EUT is > 99%

**Result:** The limit is kept

# Maximum Peak Output Power
# according to FCC Part 15 Subpart C, §15.247b

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Date of test: 12/17/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA

- TX mode

Tested on: Antenna connector

| Selected bit rate | Operating frequency [GHz] | RMS power meter reading [dBm] | Correction-factor [dB] | Output power [dBm] | Limit (see note 1) [dBm] |
|---|---|---|---|---|---|
| 11 Mbps | 2.412 | 3.6 | 11.3 | 14.9 | 30 |
| | 2.442 | 3.6 | 11.3 | 14.9 | 30 |
| | 2.462 | 3.6 | 11.3 | 14.9 | 30 |
| 5.5 Mbps | 2.412 | 3.6 | 11.3 | 14.9 | 30 |
| | 2.442 | 3.6 | 11.3 | 14.9 | 30 |
| | 2.462 | 3.6 | 11.3 | 14.9 | 30 |
| 2 Mbps | 2.412 | 3.6 | 11.3 | 14.9 | 30 |
| | 2.442 | 3.6 | 11.3 | 14.9 | 30 |
| | 2.462 | 3.6 | 11.3 | 14.9 | 30 |

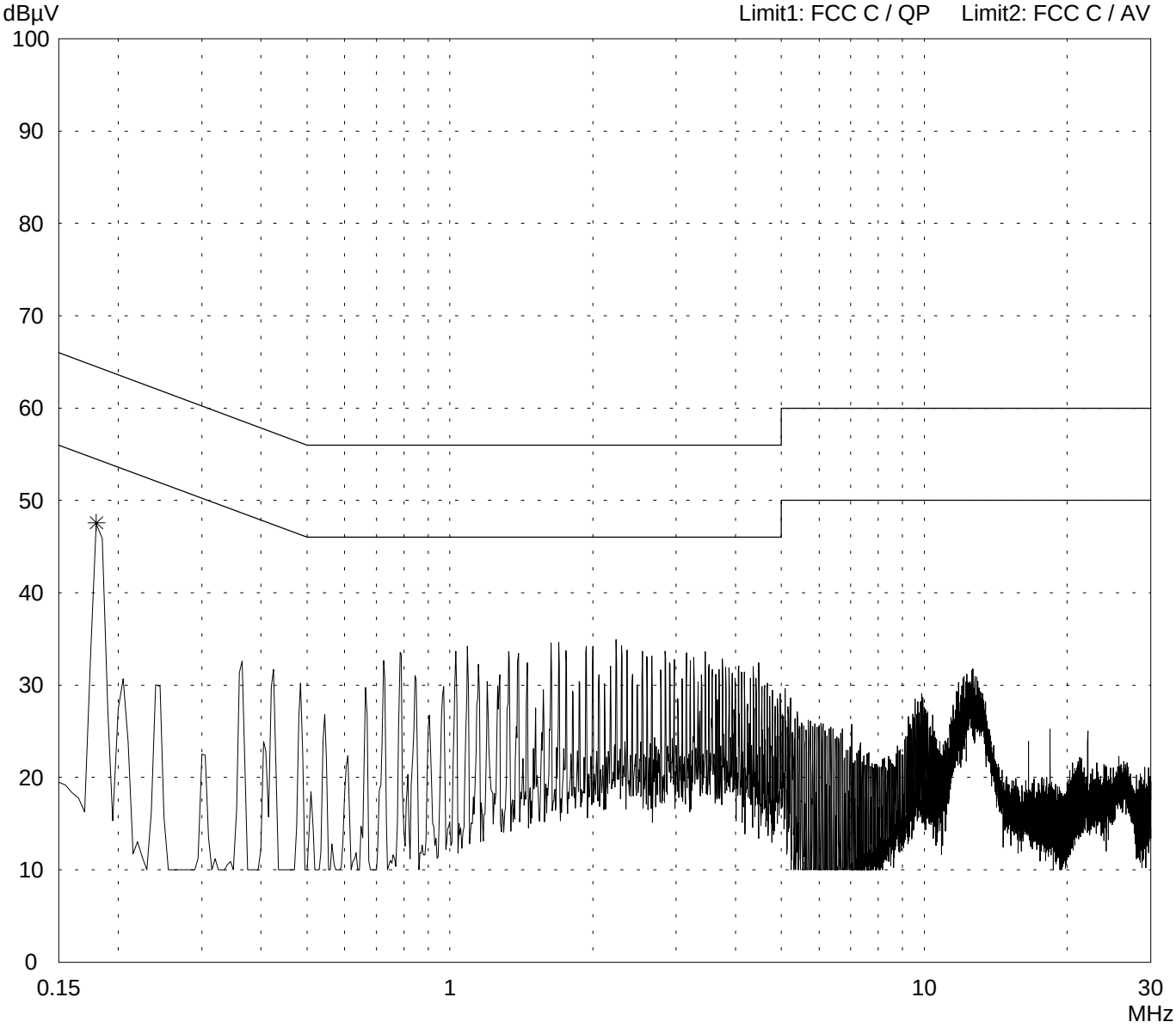
**Note 1:** Total nominal gain of antenna Melco WLE-DA is 5 dBi (including cable loss).
**Note 2:** The correction factor noted above is caused by the attenuation of DC block, adapter cable and 10 dB attenuator
The maximum power values were recorded.
**Note 3:** The duty cycle of the EUT is > 99%

**Result:** The limit is kept

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.412 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Shielded room, cabin no. 2 | |
| Tested on: Linecord personal computer (EUT)<br>Phase L1 | |
| Date of test: 12/19/2002 / Operator: R. Heller | Final result with AV detector:<br>0.180 MHz: 47.5 dBµV |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak / Final Results: QP | Final results: 20 dB Margin — 25 Subranges |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 — Page 36 of 139 Pages |

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/19/2002

Operator: R. Heller

Test performed: automatically

File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Final result with AV detector:
0.180 MHz: 47.5 dBµV

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV* | *Limit dBµV* | *Limit exceeded* |
|---|---|---|---|---|---|
| 0.18 | 47.6 | | 47.6 | 64.5 | |

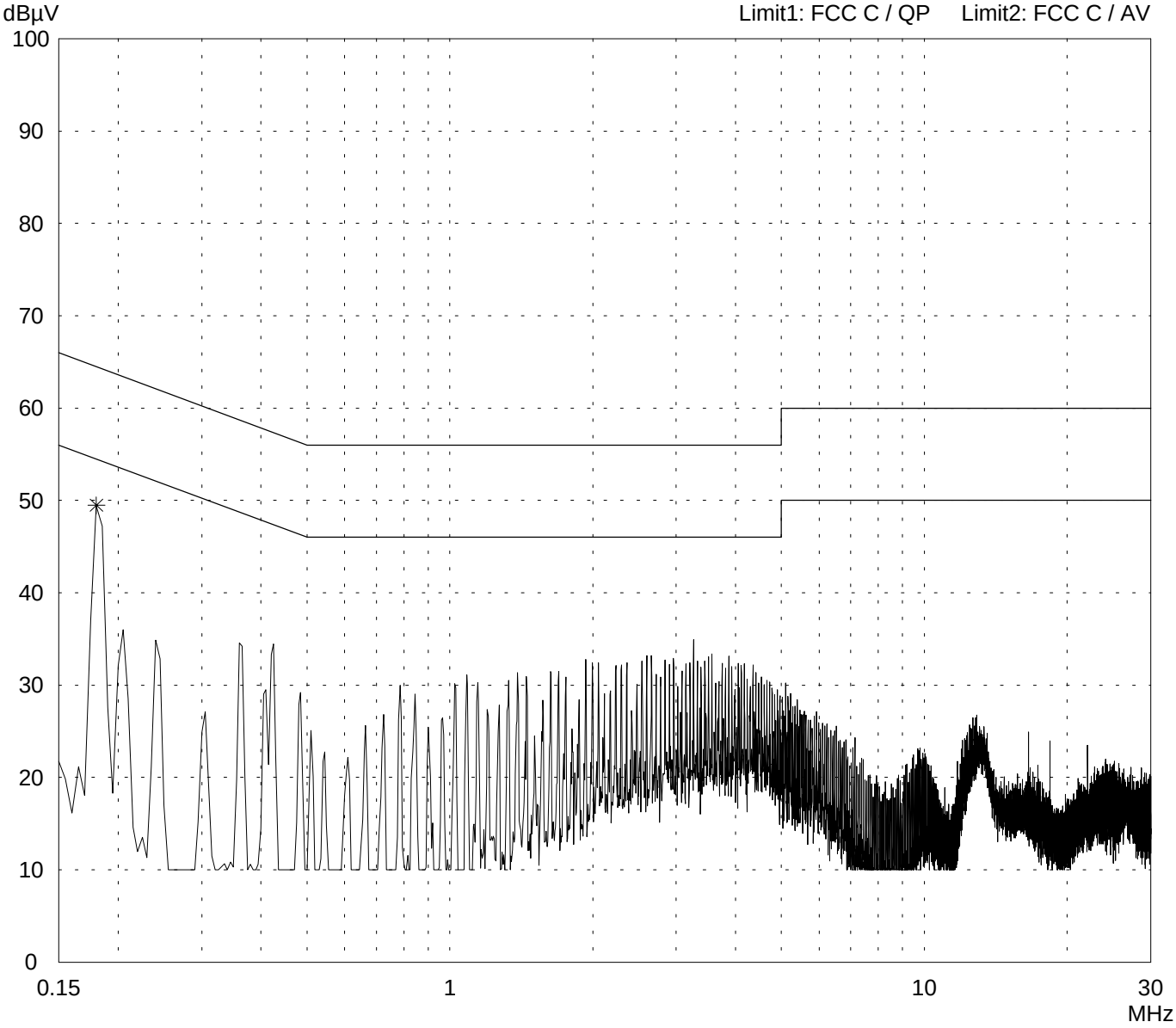
Result:
Limit kept

Project file:
56305-20559-6

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.412 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Shielded room, cabin no. 2 | |
| Tested on: Linecord personal computer (EUT)<br>Phase N | |
| Date of test: 12/19/2002 / Operator: R. Heller | Final result with AV detector:<br>0.180 MHz: 49.3 dBµV |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak / Final Results: QP | Final results: 20 dB Margin — 25 Subranges |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |



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# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/19/2002

Operator: R. Heller

Test performed: automatically

File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Final result with AV detector:
0.180 MHz: 49.3 dBµV

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV* | *Limit dBµV* | *Limit exceeded* |
|---|---|---|---|---|---|
| 0.18 | 49.5 | | 49.5 | 64.5 | |

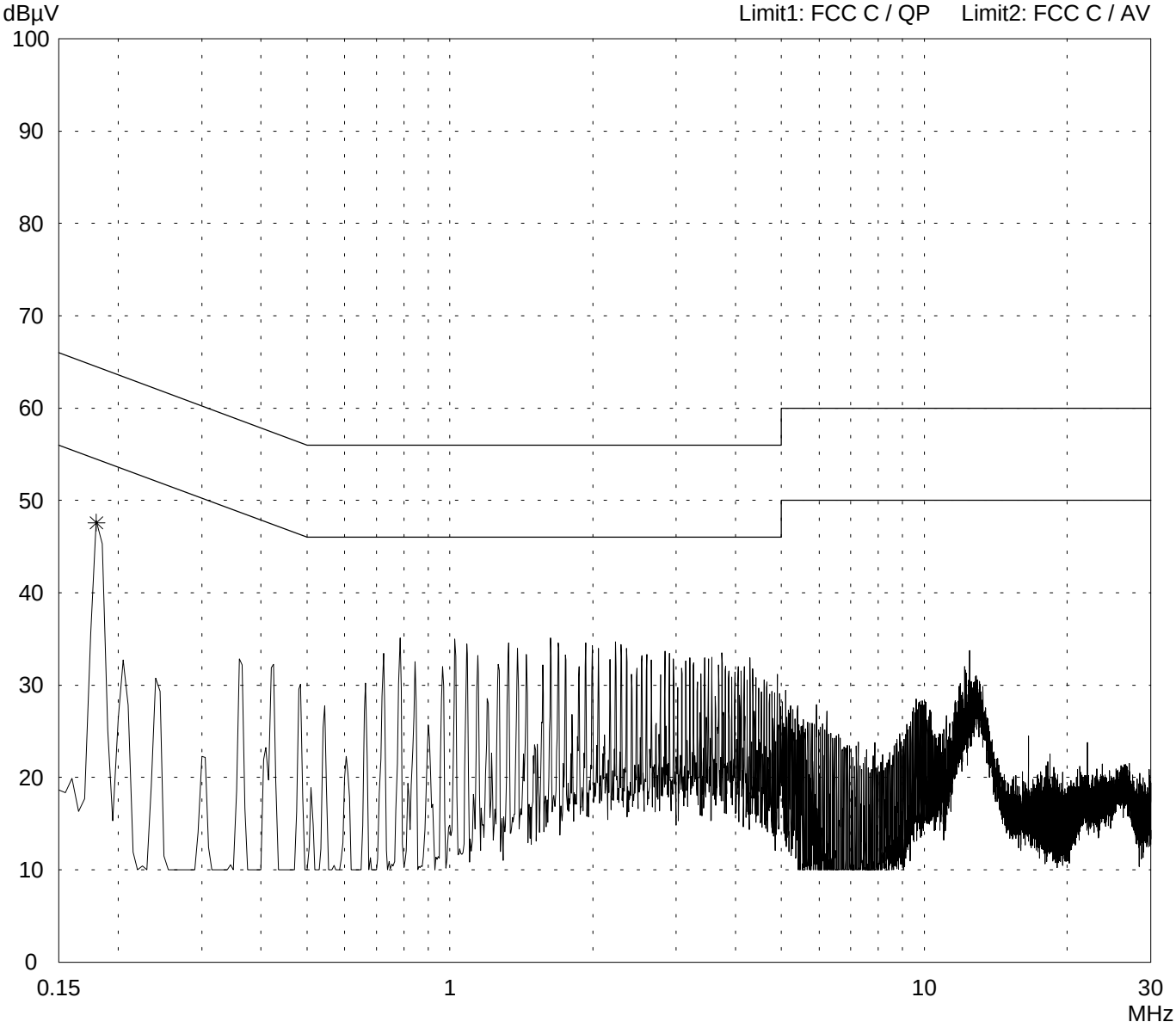
Result:
Limit kept

Project file:
56305-20559-6

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Shielded room, cabin no. 2 | |
| Tested on: Linecord personal computer (EUT)<br>Phase L1 | |
| Date of test: 12/19/2002 / Operator: R. Heller | Final result with AV detector:<br>0.180 MHz: 47.5 dBµV |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak / Final Results: QP | Final results: 20 dB Margin — 25 Subranges |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 — Page 40 of 139 Pages |

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/19/2002

Operator: R. Heller

Test performed: automatically

File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Final result with AV detector:
0.180 MHz: 47.5 dBµV

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV* | *Limit dBµV* | *Limit exceeded* |
|---|---|---|---|---|---|
| 0.18 | 47.6 | | 47.6 | 64.5 | |

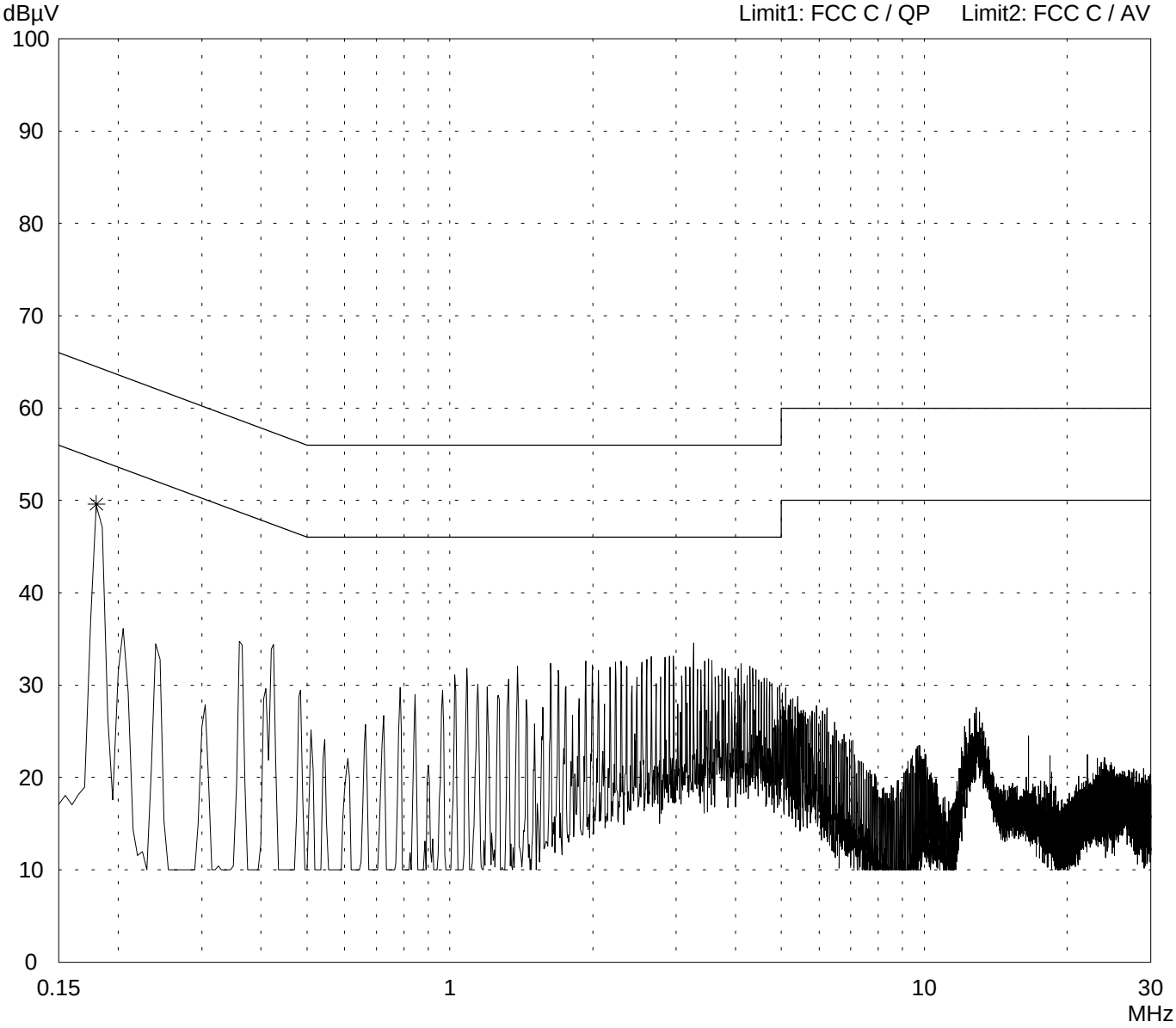
Result:
Limit kept

Project file:
56305-20559-6

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Shielded room, cabin no. 2 | |
| Tested on: Linecord personal computer (EUT)<br>Phase N | |
| Date of test: 12/19/2002 / Operator: R. Heller | Final result with AV detector:<br>0.180 MHz: 49.4 dBµV |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak / Final Results: QP | Final results: 20 dB Margin — 25 Subranges |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 — Page 42 of 139 Pages |

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/19/2002

Operator: R. Heller

Test performed: automatically

File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Final result with AV detector:
0.180 MHz: 49.4 dBµV

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV* | *Limit dBµV* | *Limit exceeded* |
|---|---|---|---|---|---|
| 0.18 | 49.6 | | 49.6 | 64.5 | |

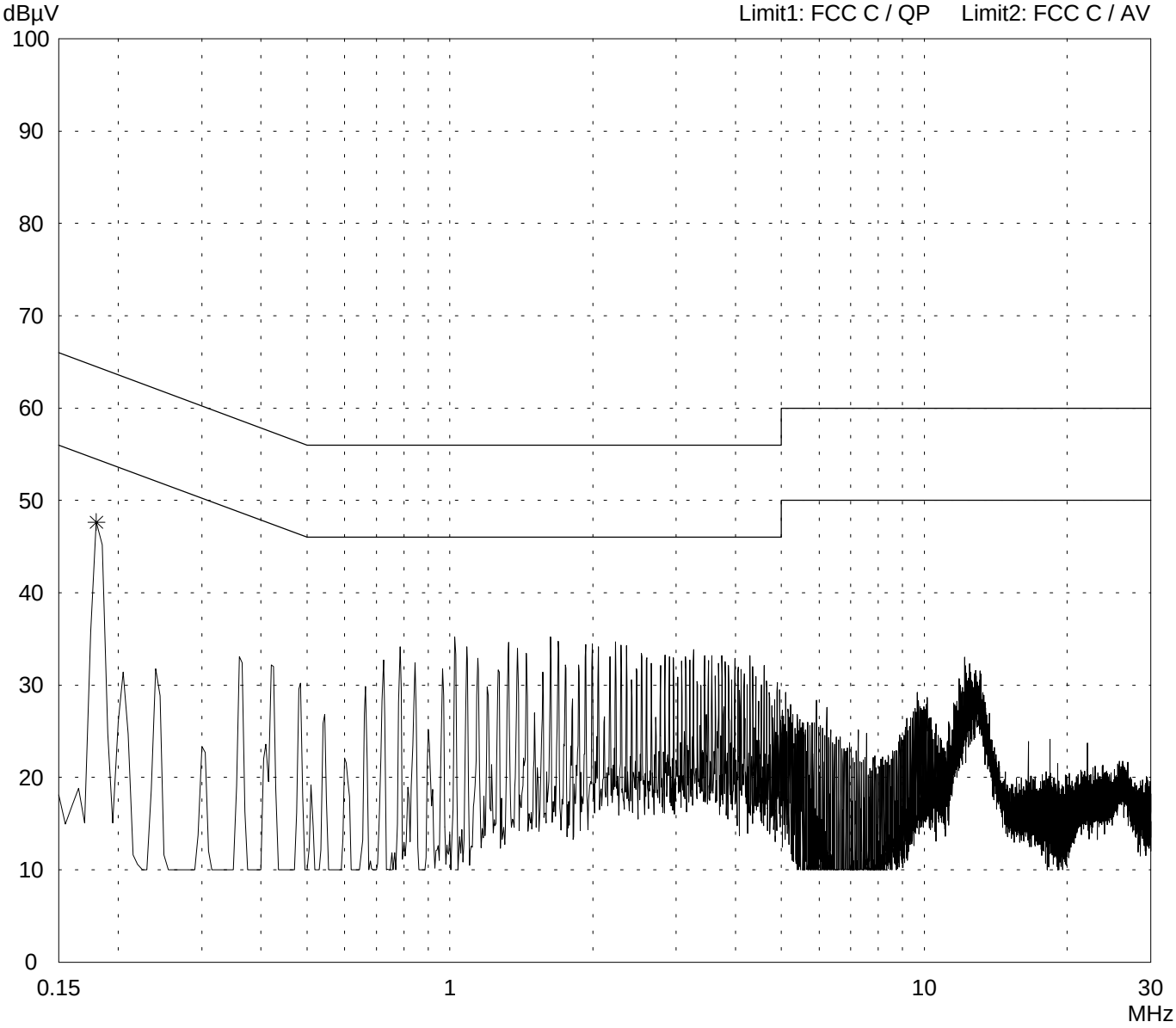
Result:
Limit kept

Project file:
56305-20559-6

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.462 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Shielded room, cabin no. 2 | |
| Tested on: Linecord personal computer (EUT)<br>Phase L1 | |
| Date of test: 12/19/2002 / Operator: R. Heller | Final result with AV detector:<br>0.180 MHz: 47.5 dBµV |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak / Final Results: QP | Final results: 20 dB Margin — 25 Subranges |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 — Page 44 of 139 Pages |

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/19/2002

Operator: R. Heller

Test performed: automatically

File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Final result with AV detector:
0.180 MHz: 47.5 dBµV

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV* | *Limit dBµV* | *Limit exceeded* |
|---|---|---|---|---|---|
| 0.18 | 47.7 | | 47.7 | 64.5 | |

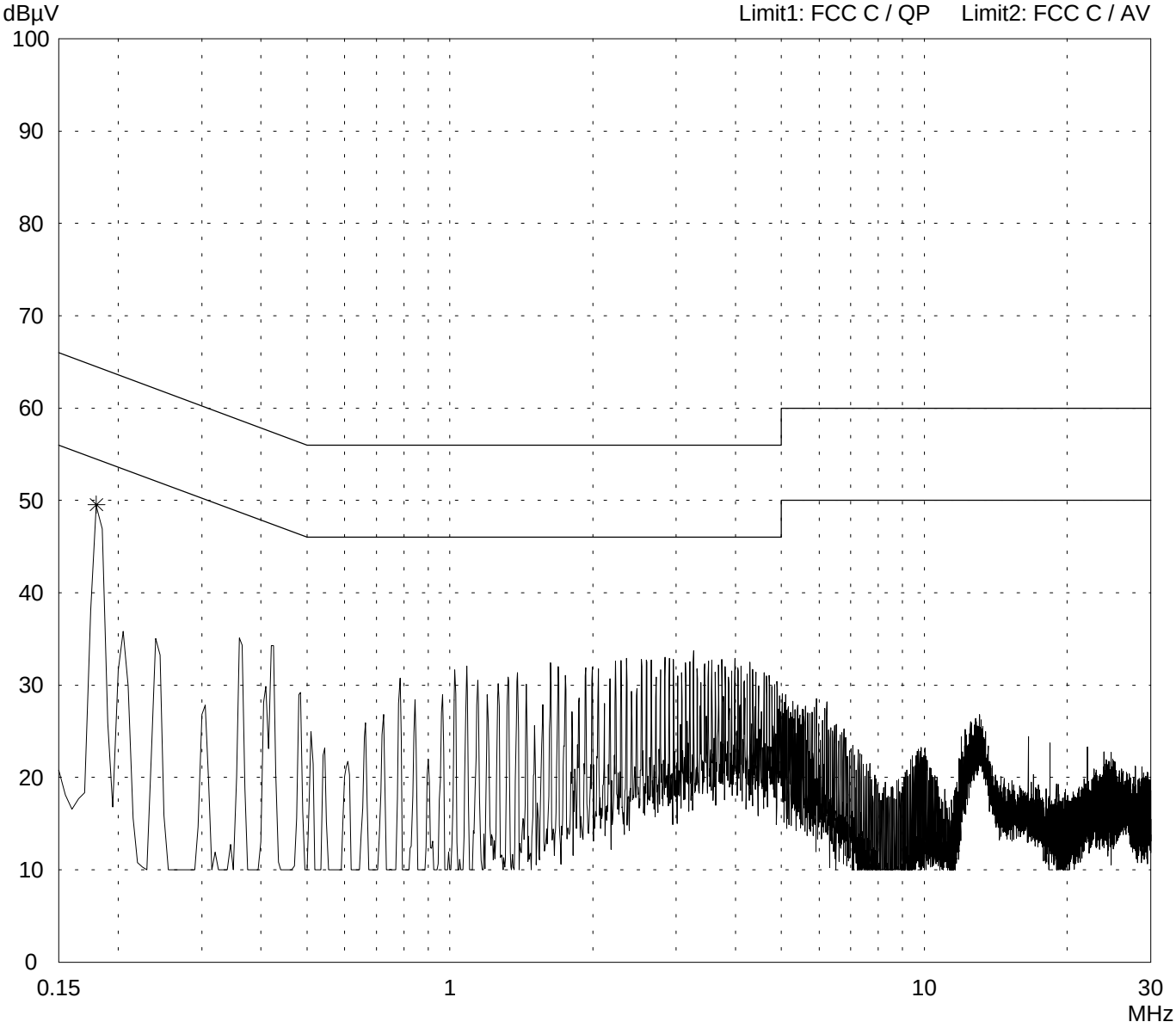
Result:
Limit kept

Project file:
56305-20559-6

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.462 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Shielded room, cabin no. 2 | |
| Tested on: Linecord personal computer (EUT)<br>Phase N | |
| Date of test: 12/19/2002 / Operator: R. Heller | Final result with AV detector:<br>0.180 MHz: 49.4 dBµV |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak / Final Results: QP | Final results: 20 dB Margin — 25 Subranges |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 — Page 46 of 139 Pages |

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/19/2002

Operator: R. Heller

Test performed: automatically

File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Final result with AV detector:
0.180 MHz: 49.4 dBµV

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV* | *Limit dBµV* | *Limit exceeded* |
|---|---|---|---|---|---|
| 0.18 | 49.6 | | 49.6 | 64.5 | |

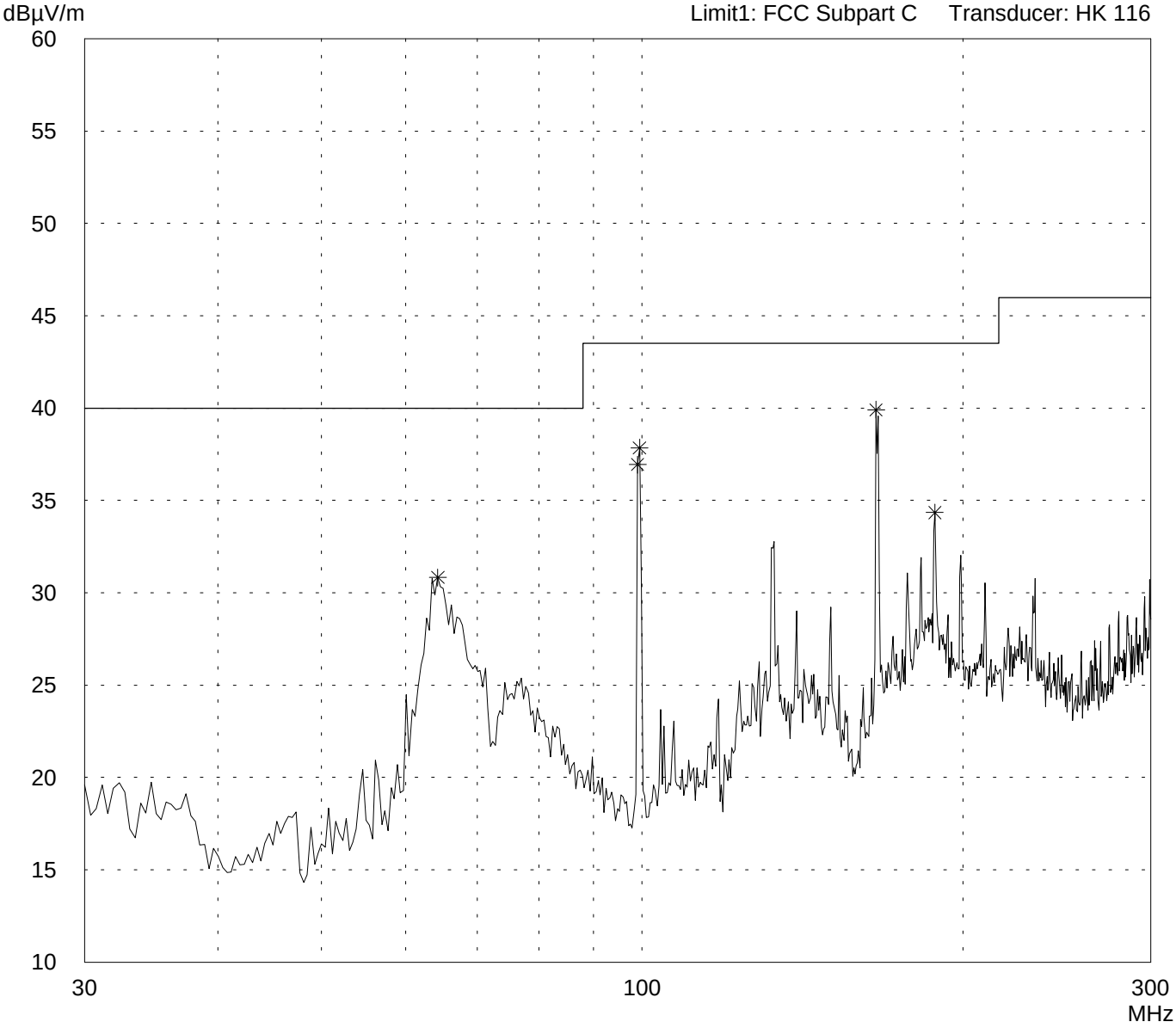
Result:
Limit kept

Project file:
56305-20559-6

# Radiated Emission Test 30 MHz - 300 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.412 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |

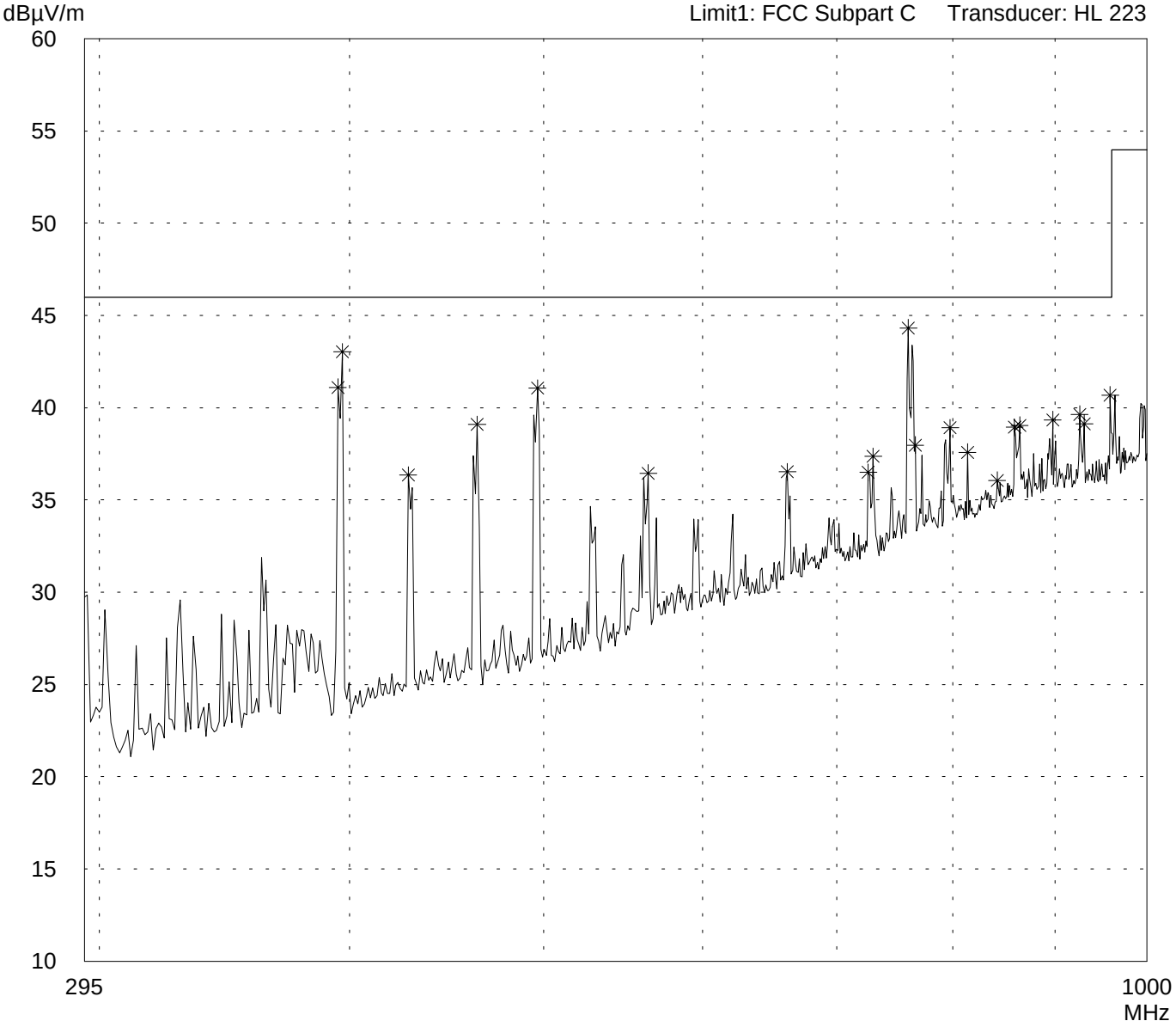



| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |

# Radiated Emission Test 295 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.412 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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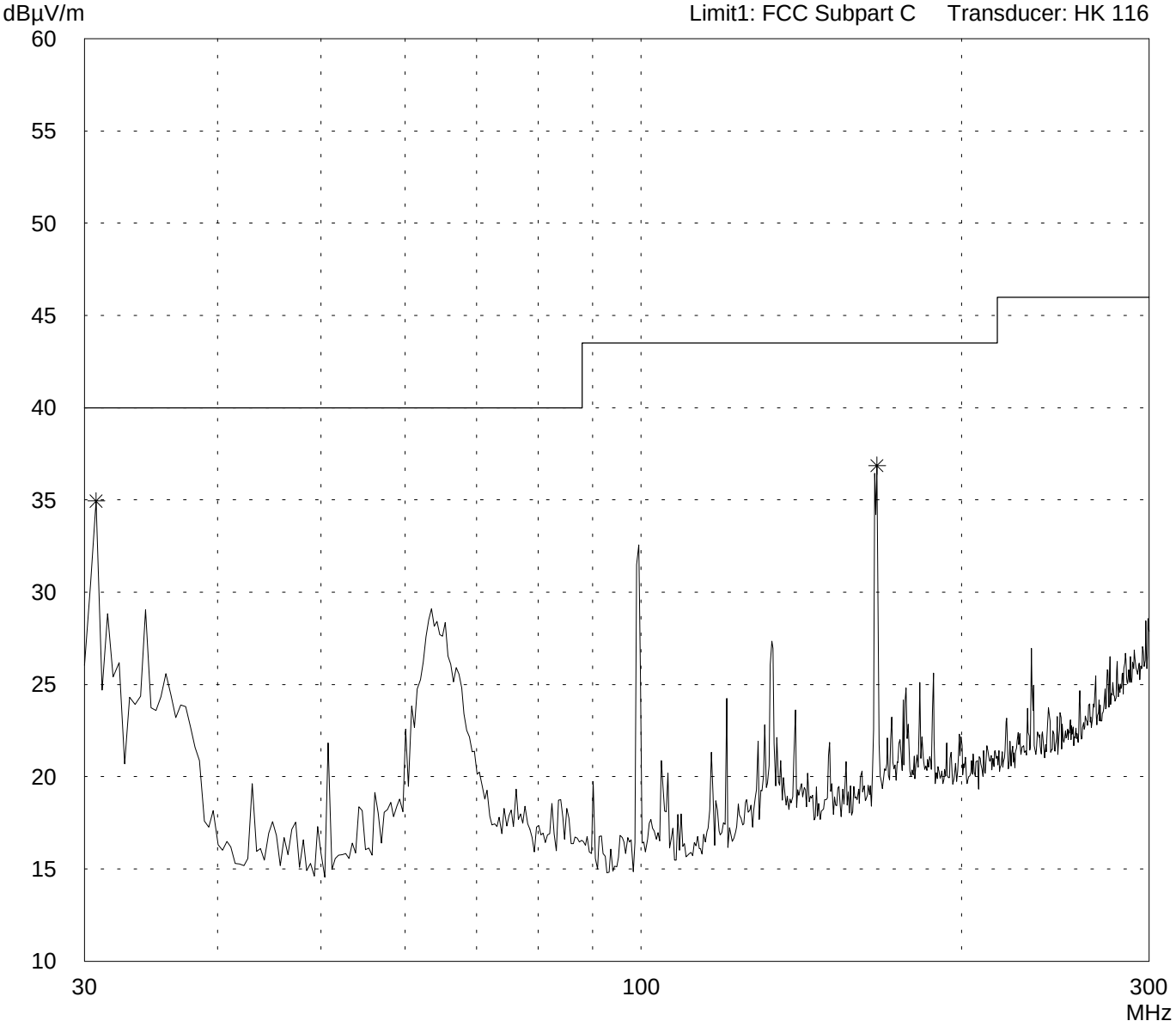
# Radiated Emission Test 30 MHz - 300 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.412 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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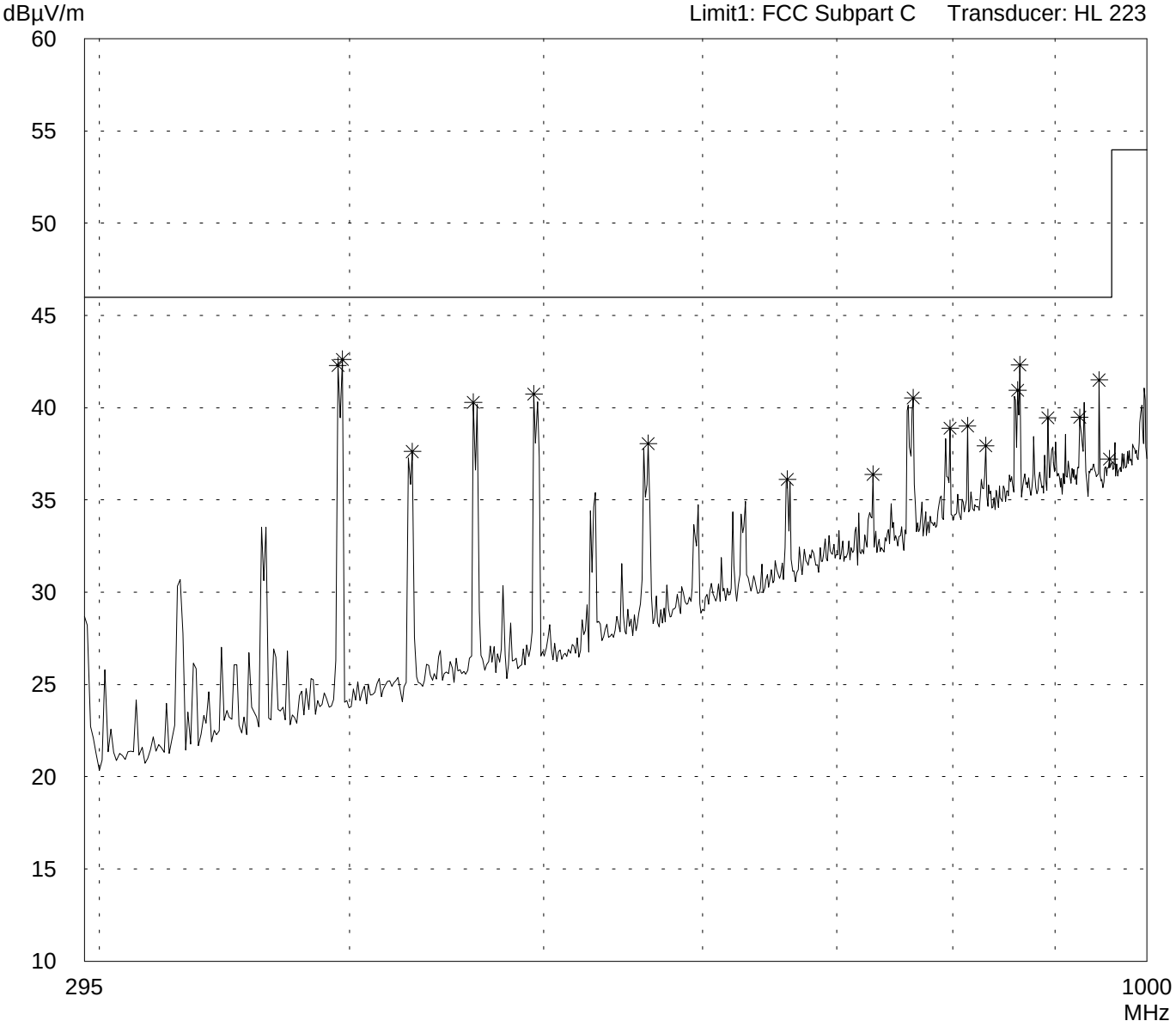
# Radiated Emission Test 295 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.412 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin / 50 Subranges |



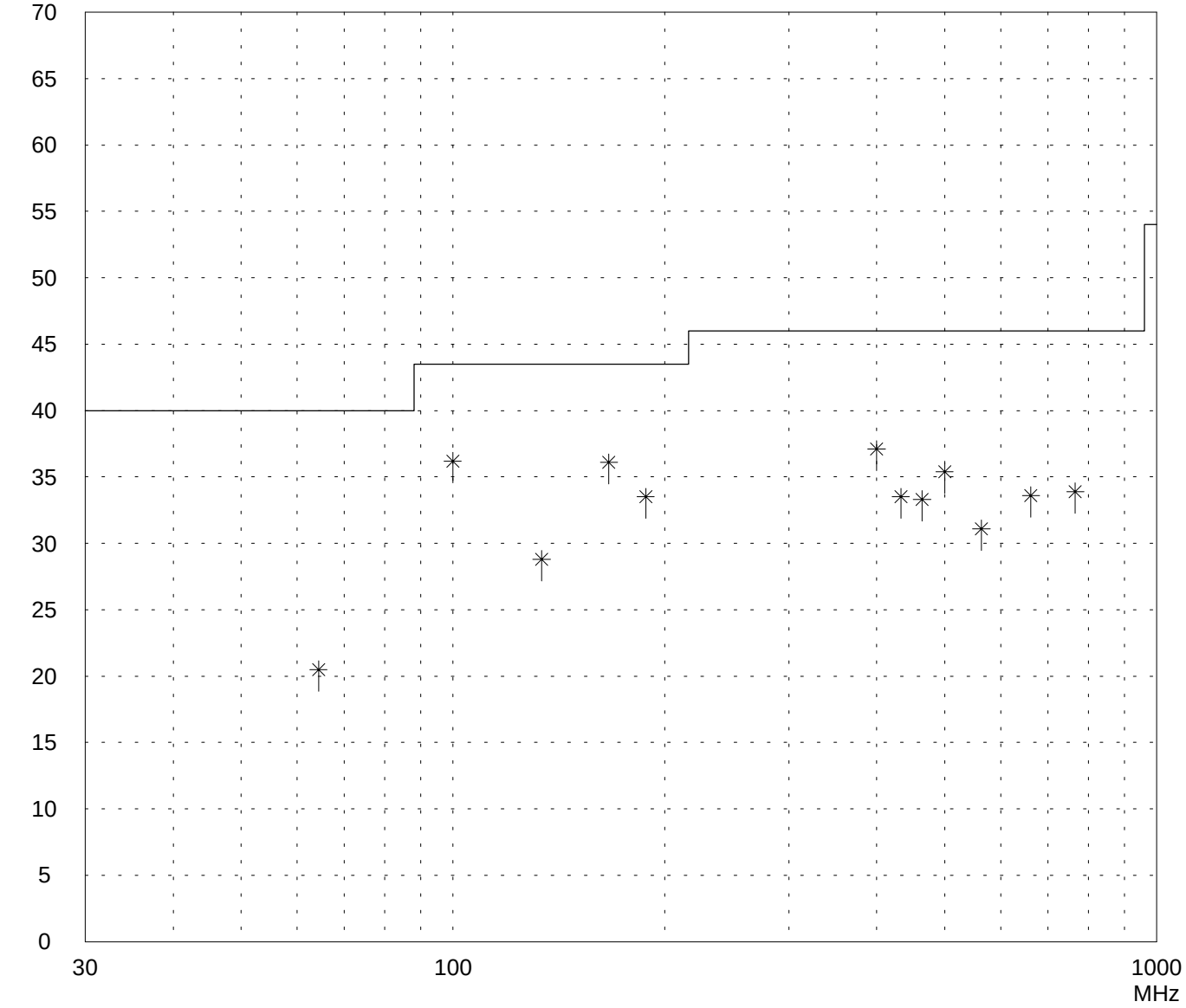

| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.412 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Open area test-site I | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/19/2002 / Operator: R. Heller | |
| Test performed: by hand / File name: | |

| | |
|---|---|
| Detector: Quasi-Peak | List of values: Selected by hand |

dBµV/m  Limit1: FCC Subpart C  Transducer: HK116 / HL223 (3 m)




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/19/2002
Operator: R. Heller

Test performed: by hand
File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC
- monitor switched off

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV/m* | *Limit dBµV/m* | *Limit exceeded* |
|---|---|---|---|---|---|
| 64.40 | 10.7 | 9.8 | 20.5 | 40.0 | |
| 99.88 | 25.5 | 10.7 | 36.2 | 43.5 | |
| 133.56 | 15.5 | 13.3 | 28.8 | 43.5 | |
| 166.48 | 21.6 | 14.5 | 36.1 | 43.5 | |
| 187.38 | 17.6 | 15.9 | 33.5 | 43.5 | |
| 399.68 | 18.4 | 18.7 | 37.1 | 46.0 | |
| 433.00 | 14.0 | 19.5 | 33.5 | 46.0 | |
| 463.97 | 13.2 | 20.1 | 33.3 | 46.0 | |
| 499.58 | 14.7 | 20.7 | 35.4 | 46.0 | |
| 563.40 | 9.4 | 21.7 | 31.1 | 46.0 | |
| 662.78 | 9.9 | 23.7 | 33.6 | 46.0 | |
| 766.13 | 8.9 | 25.0 | 33.9 | 46.0 | |

Result:
Limit kept

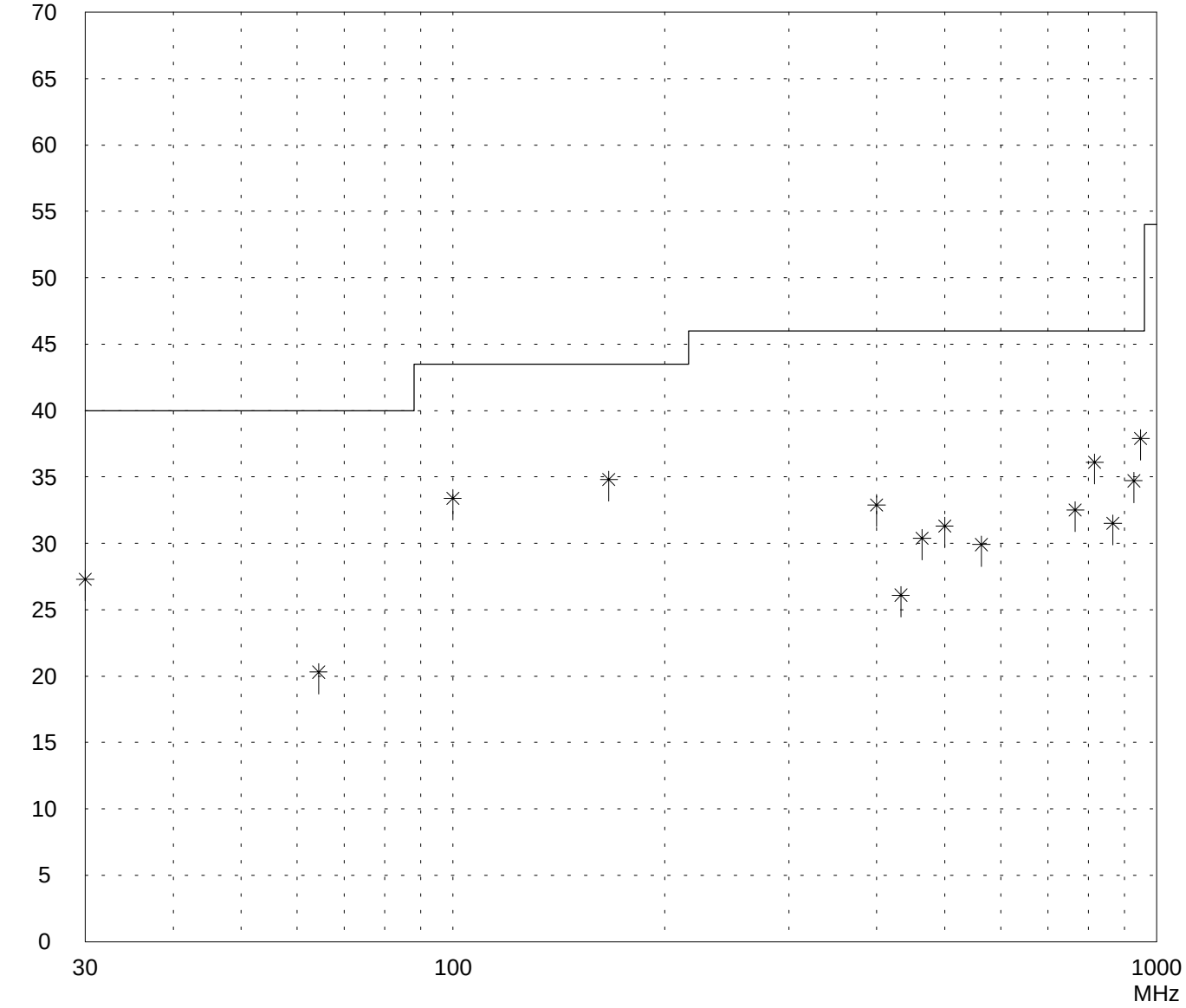
Project file:
56305-20559-6

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.412 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Open area test-site I | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/19/2002 / Operator: R. Heller | |
| Test performed: by hand / File name: | |

| | |
|---|---|
| Detector: Quasi-Peak | List of values: Selected by hand |

dBµV/m  Limit1: FCC Subpart C  Transducer: HK116 / HL223 (3 m)




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/19/2002
Operator: R. Heller

Test performed: by hand
File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC
- monitor switched off

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV/m* | *Limit dBµV/m* | *Limit exceeded* |
|---|---|---|---|---|---|
| 30.00 | 13.0 | 14.3 | 27.3 | 40.0 | |
| 64.40 | 10.5 | 9.8 | 20.3 | 40.0 | |
| 99.88 | 22.7 | 10.7 | 33.4 | 43.5 | |
| 166.52 | 20.3 | 14.5 | 34.8 | 43.5 | |
| 399.68 | 14.2 | 18.7 | 32.9 | 46.0 | |
| 433.00 | 6.6 | 19.5 | 26.1 | 46.0 | |
| 463.97 | 10.3 | 20.1 | 30.4 | 46.0 | |
| 499.58 | 10.6 | 20.7 | 31.3 | 46.0 | |
| 563.40 | 8.2 | 21.7 | 29.9 | 46.0 | |
| 766.10 | 7.5 | 25.0 | 32.5 | 46.0 | |
| 816.11 | 10.2 | 25.9 | 36.1 | 46.0 | |
| 866.06 | 4.3 | 27.2 | 31.5 | 46.0 | |
| 927.84 | 7.3 | 27.4 | 34.7 | 46.0 | |
| 948.96 | 10.5 | 27.4 | 37.9 | 46.0 | |

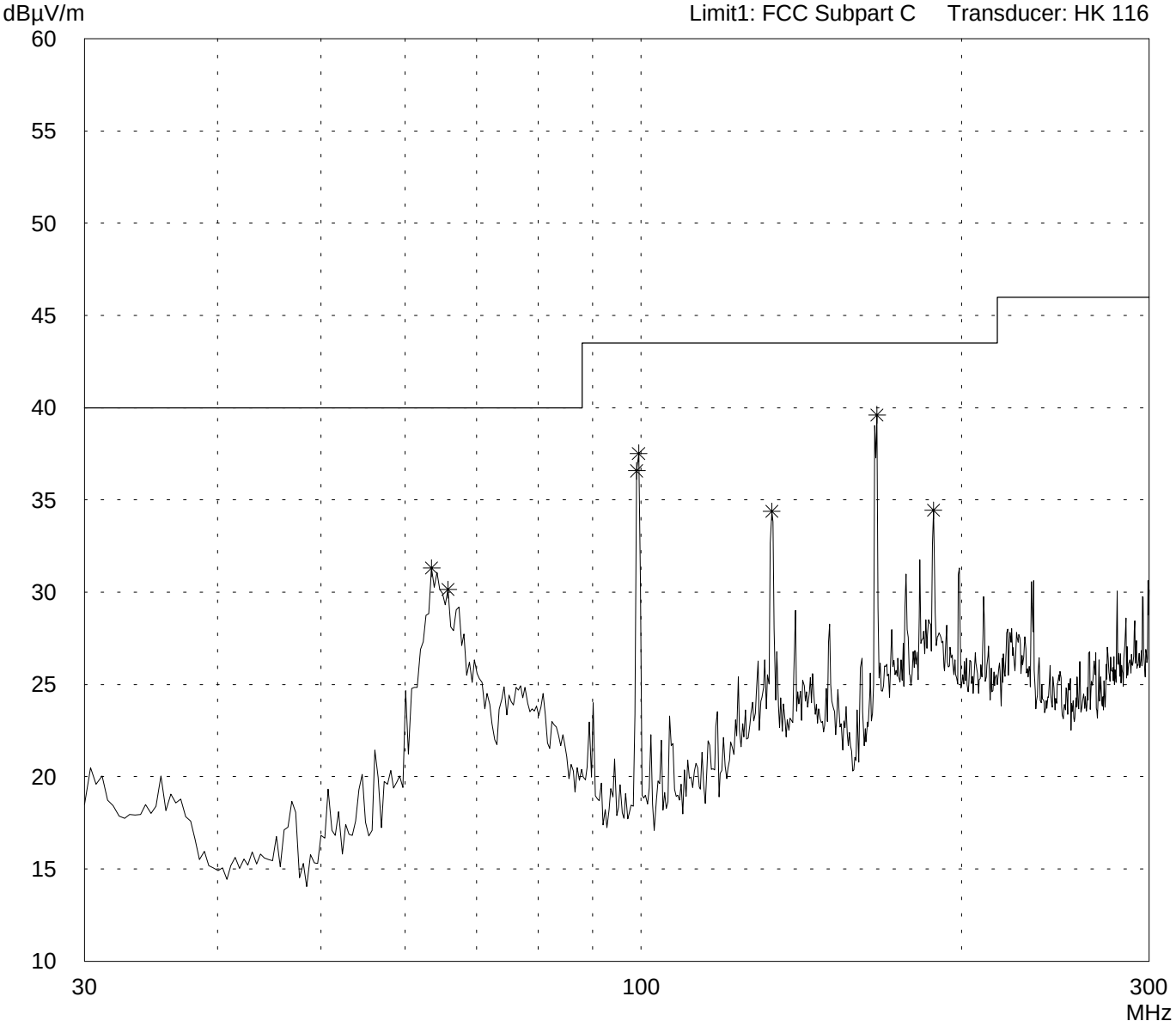
Result:
Limit kept

Project file:
56305-20559-6

# Radiated Emission Test 30 MHz - 300 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |

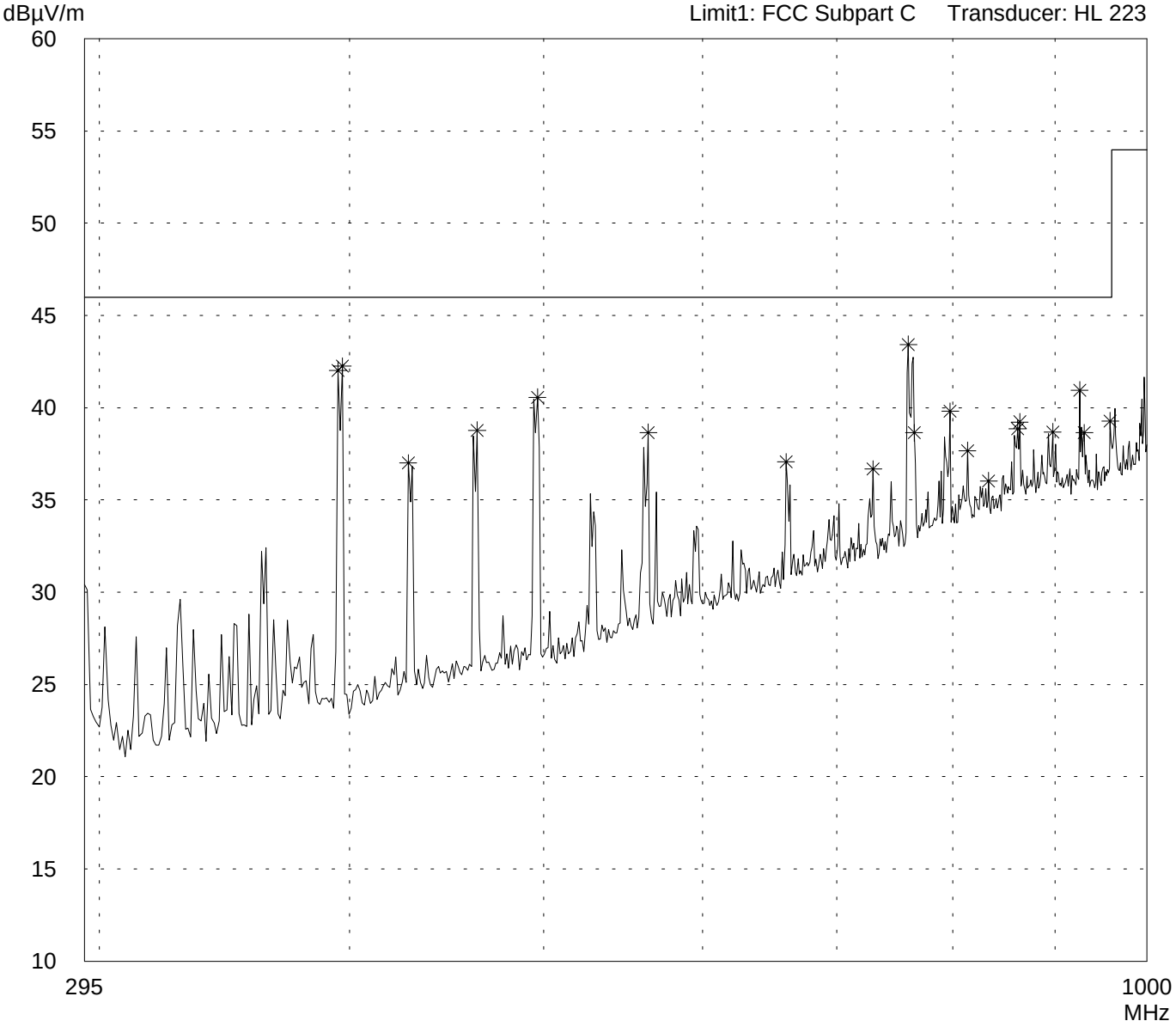



| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |

# Radiated Emission Test 295 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin / 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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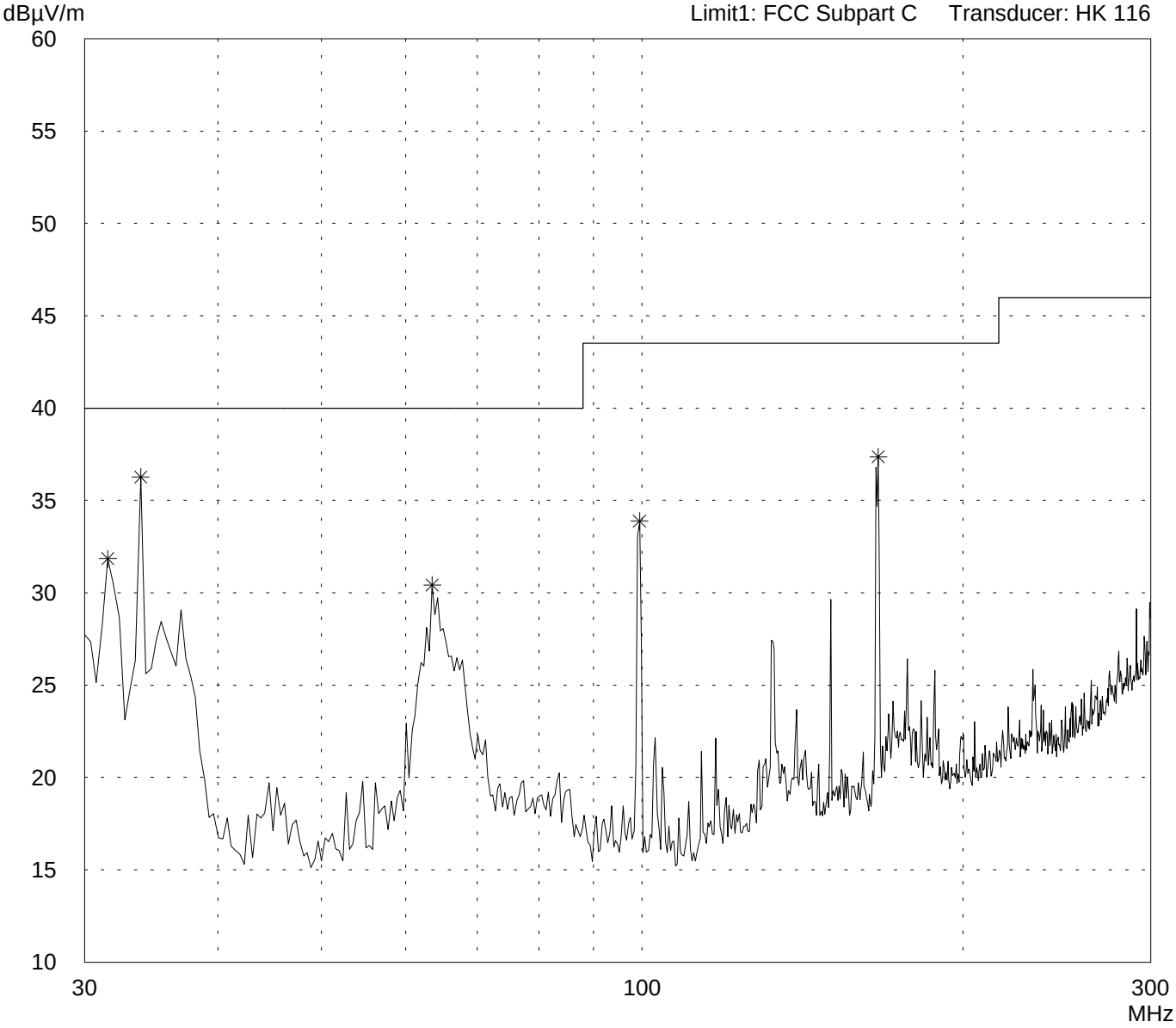
# Radiated Emission Test 30 MHz - 300 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |

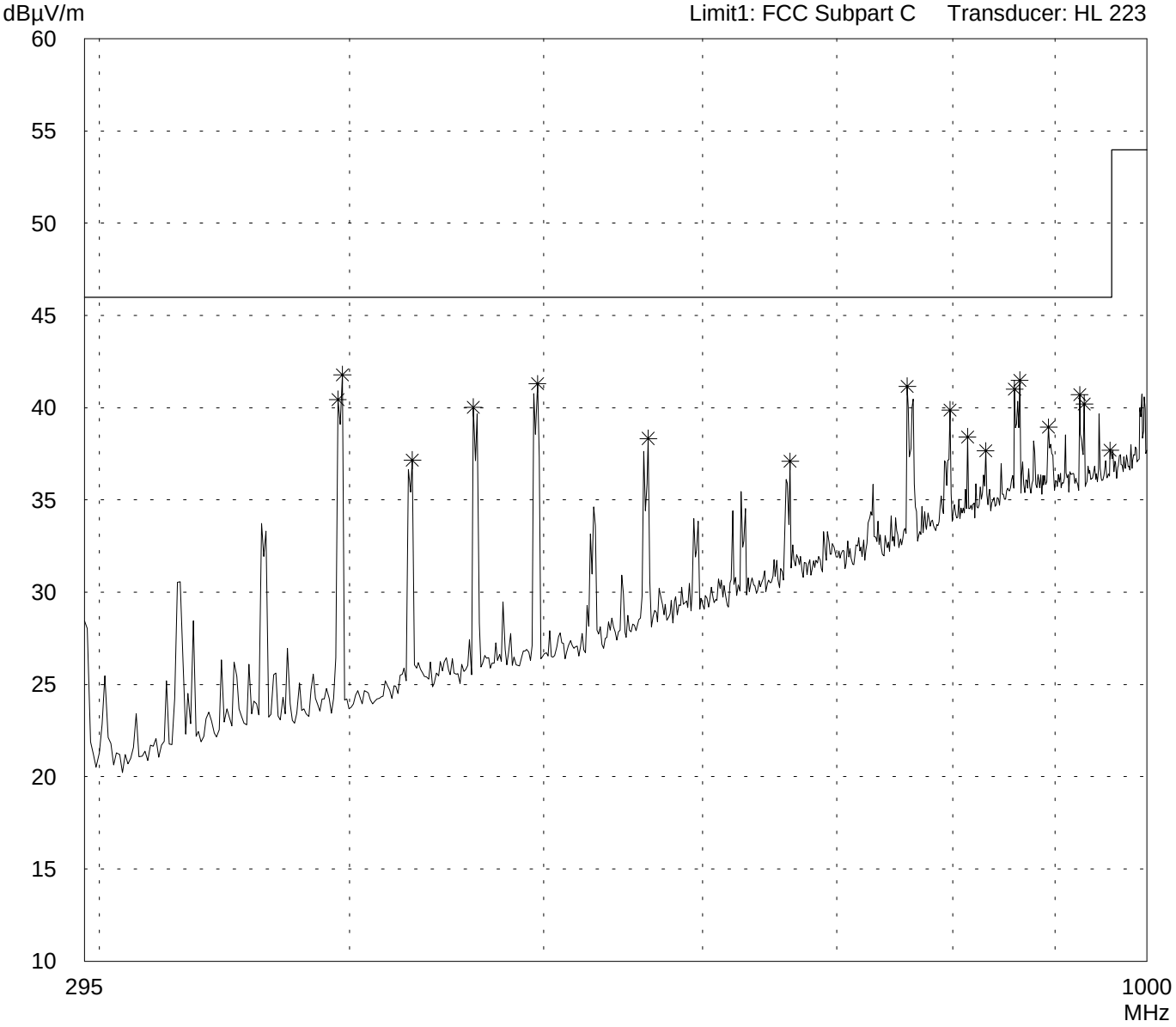



| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |

# Radiated Emission Test 295 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin / 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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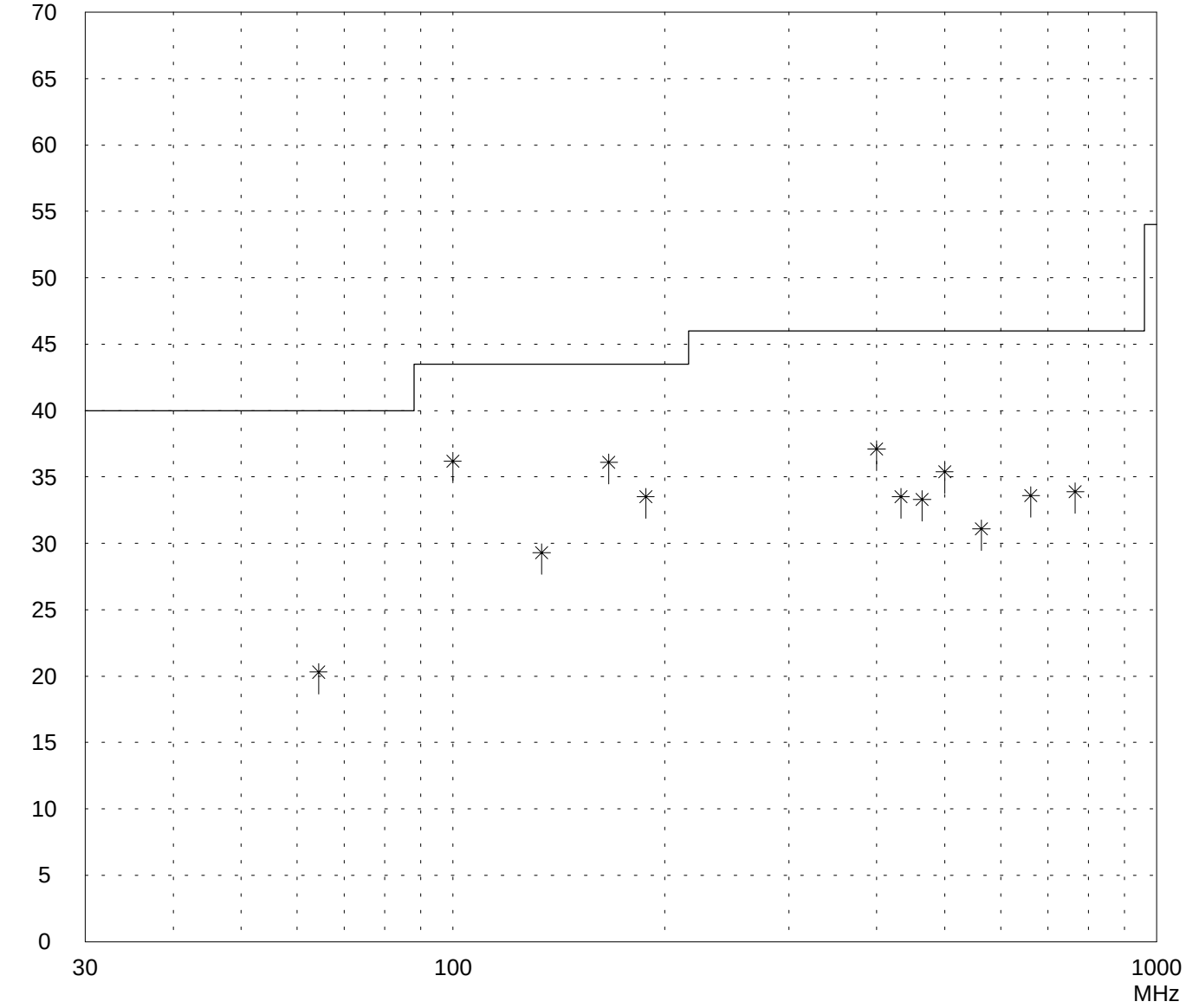
# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Open area test-site I | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/19/2002 / Operator: R. Heller | |
| Test performed: by hand / File name: | |

| | |
|---|---|
| Detector: Quasi-Peak | List of values: Selected by hand |

dBµV/m  Limit1: FCC Subpart C  Transducer: HK116 / HL223 (3 m)




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/19/2002
Operator: R. Heller

Test performed: by hand
File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC
- monitor switched off

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV/m* | *Limit dBµV/m* | *Limit exceeded* |
|---|---|---|---|---|---|
| 64.40 | 10.5 | 9.8 | 20.3 | 40.0 | |
| 99.88 | 25.5 | 10.7 | 36.2 | 43.5 | |
| 133.56 | 16.0 | 13.3 | 29.3 | 43.5 | |
| 166.48 | 21.6 | 14.5 | 36.1 | 43.5 | |
| 187.38 | 17.6 | 15.9 | 33.5 | 43.5 | |
| 399.68 | 18.4 | 18.7 | 37.1 | 46.0 | |
| 433.00 | 14.0 | 19.5 | 33.5 | 46.0 | |
| 463.97 | 13.2 | 20.1 | 33.3 | 46.0 | |
| 499.58 | 14.7 | 20.7 | 35.4 | 46.0 | |
| 563.40 | 9.4 | 21.7 | 31.1 | 46.0 | |
| 662.78 | 9.9 | 23.7 | 33.6 | 46.0 | |
| 766.13 | 8.9 | 25.0 | 33.9 | 46.0 | |

Result:
Limit kept

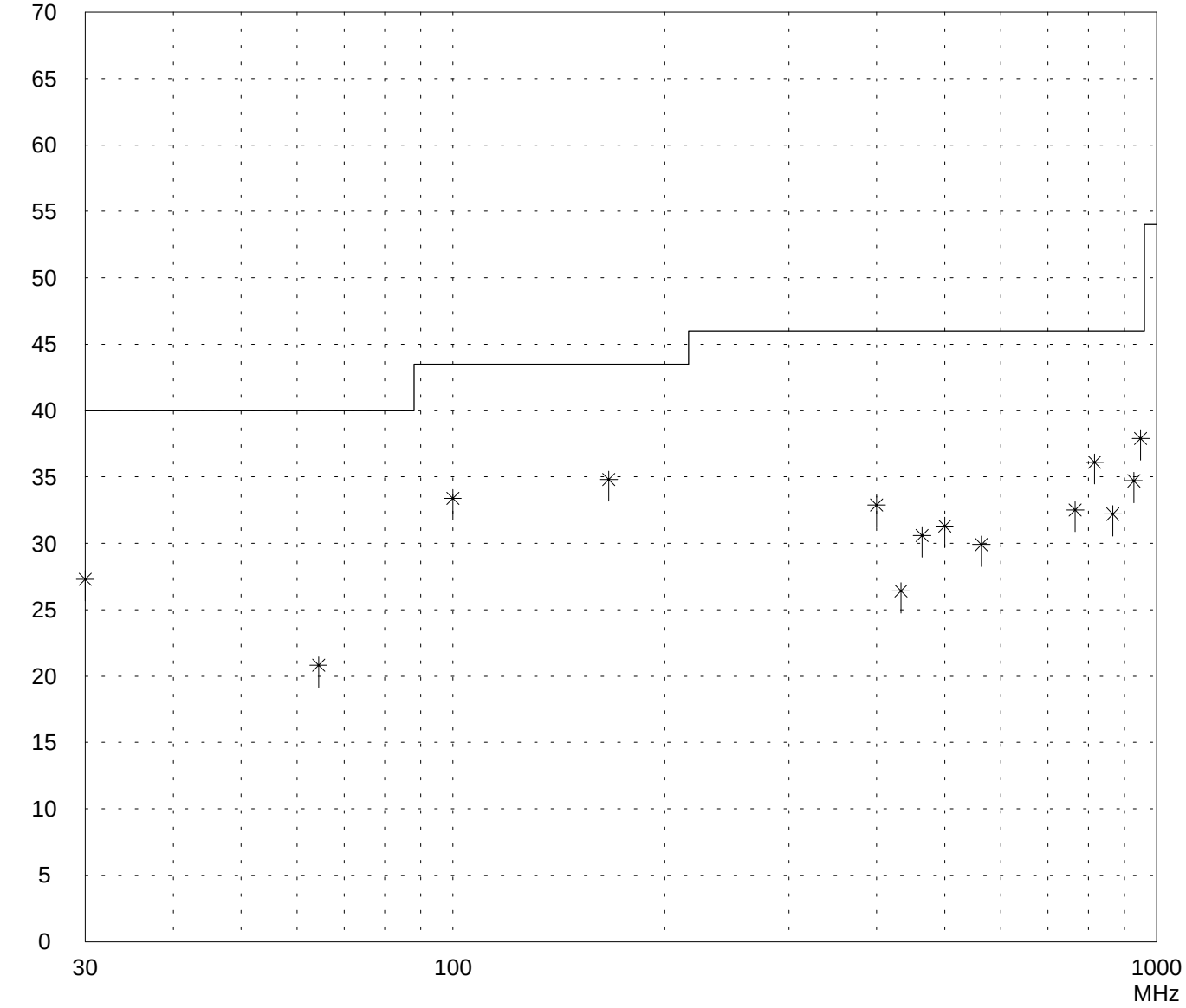
Project file:
56305-20559-6

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Open area test-site I | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/19/2002 / Operator: R. Heller | |
| Test performed: by hand / File name: | |

| | |
|---|---|
| Detector: Quasi-Peak | List of values: Selected by hand |

dBµV/m  Limit1: FCC Subpart C  Transducer: HK116 / HL223 (3 m)




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |



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# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/19/2002

Operator: R. Heller

Test performed: by hand

File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC
- monitor switched off

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV/m* | *Limit dBµV/m* | *Limit exceeded* |
|---|---|---|---|---|---|
| 30.00 | 13.0 | 14.3 | 27.3 | 40.0 | |
| 64.40 | 11.0 | 9.8 | 20.8 | 40.0 | |
| 99.88 | 22.7 | 10.7 | 33.4 | 43.5 | |
| 166.52 | 20.3 | 14.5 | 34.8 | 43.5 | |
| 399.68 | 14.2 | 18.7 | 32.9 | 46.0 | |
| 433.00 | 6.9 | 19.5 | 26.4 | 46.0 | |
| 463.97 | 10.5 | 20.1 | 30.6 | 46.0 | |
| 499.58 | 10.6 | 20.7 | 31.3 | 46.0 | |
| 563.40 | 8.2 | 21.7 | 29.9 | 46.0 | |
| 766.10 | 7.5 | 25.0 | 32.5 | 46.0 | |
| 816.11 | 10.2 | 25.9 | 36.1 | 46.0 | |
| 866.06 | 5.0 | 27.2 | 32.2 | 46.0 | |
| 927.84 | 7.3 | 27.4 | 34.7 | 46.0 | |
| 948.96 | 10.5 | 27.4 | 37.9 | 46.0 | |

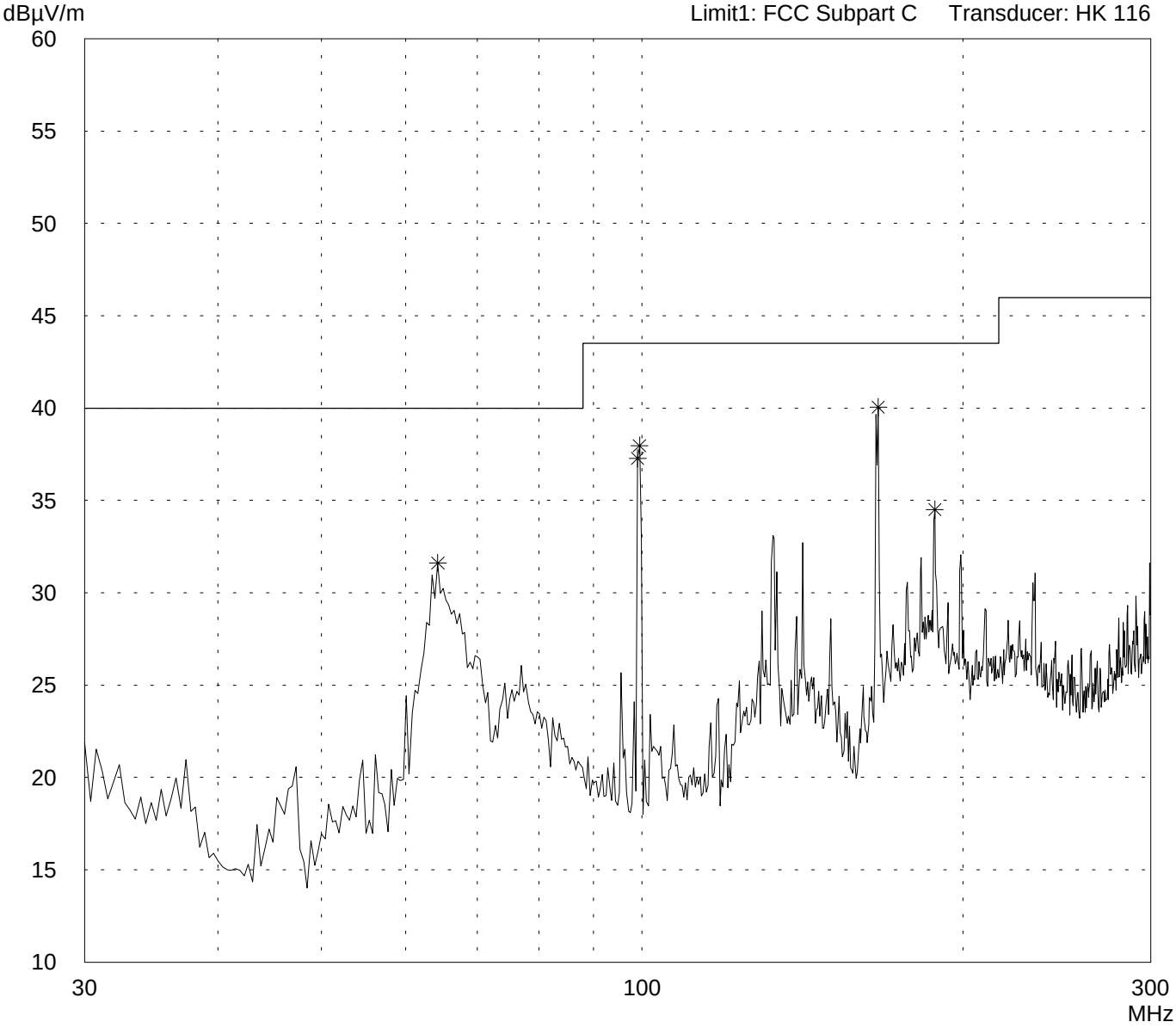
Result:
Limit kept

Project file:
56305-20559-6

# Radiated Emission Test 30 MHz - 300 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.462 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |

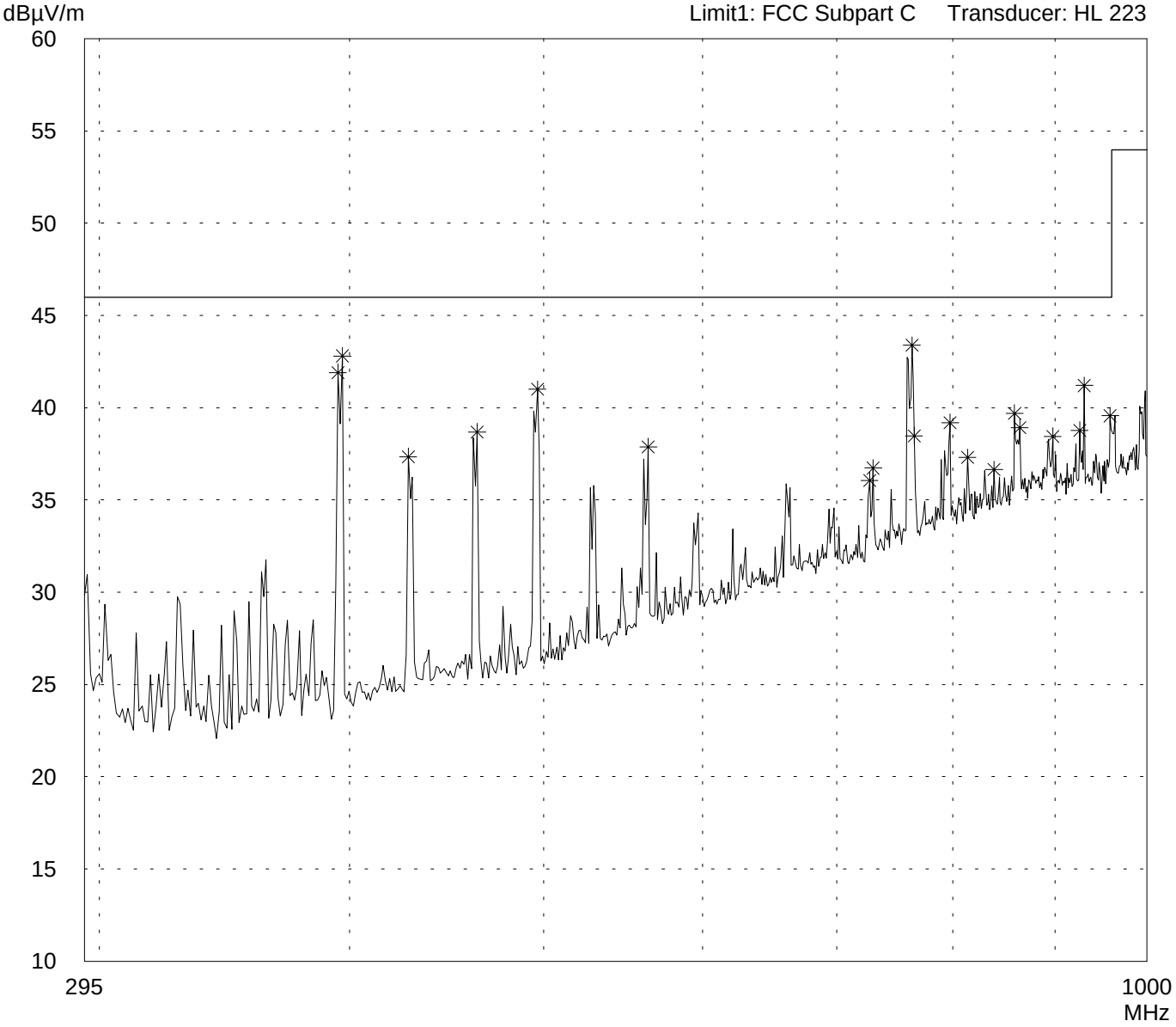



| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |

# Radiated Emission Test 295 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.462 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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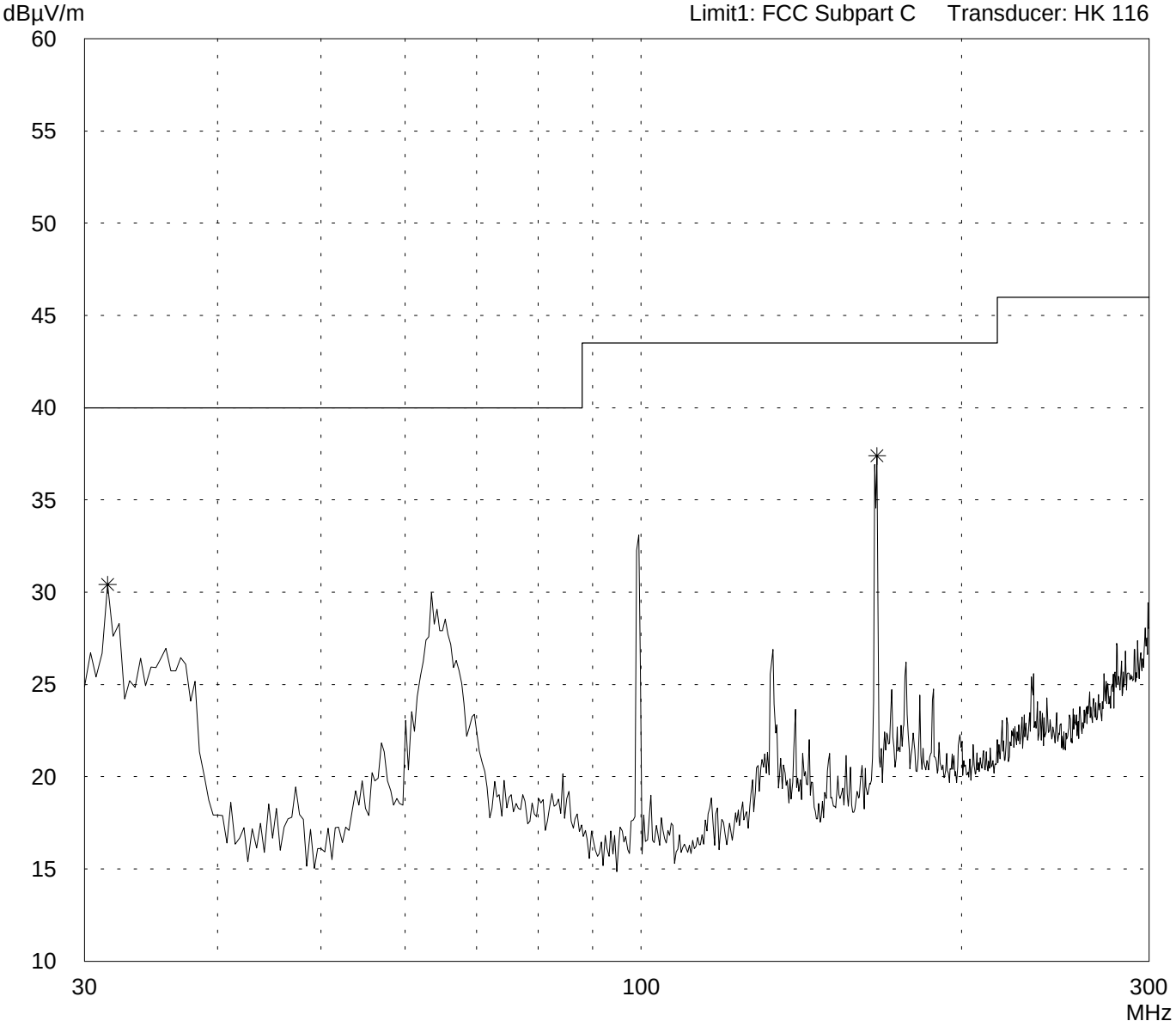
# Radiated Emission Test 30 MHz - 300 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.462 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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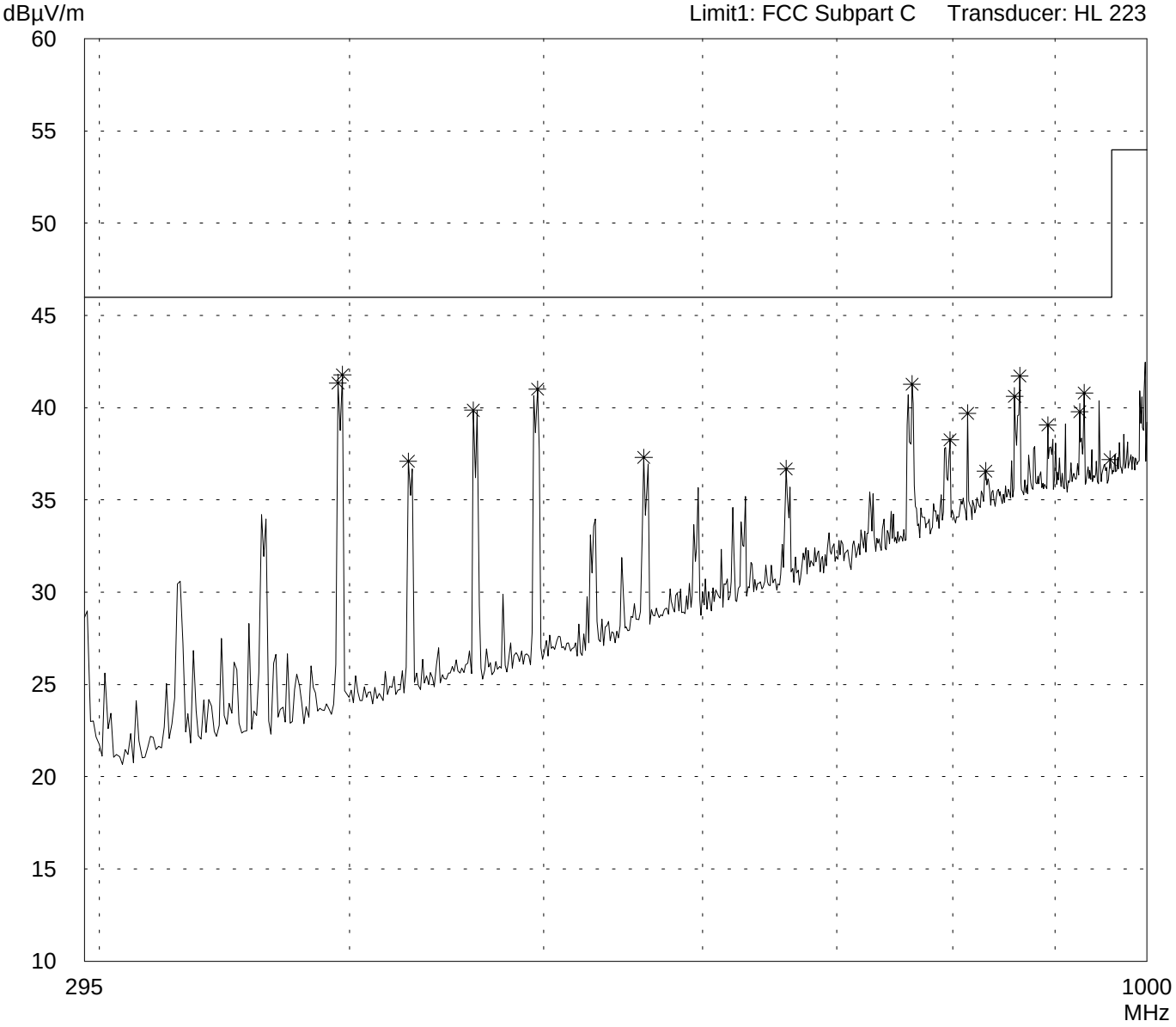
# Radiated Emission Test 295 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.462 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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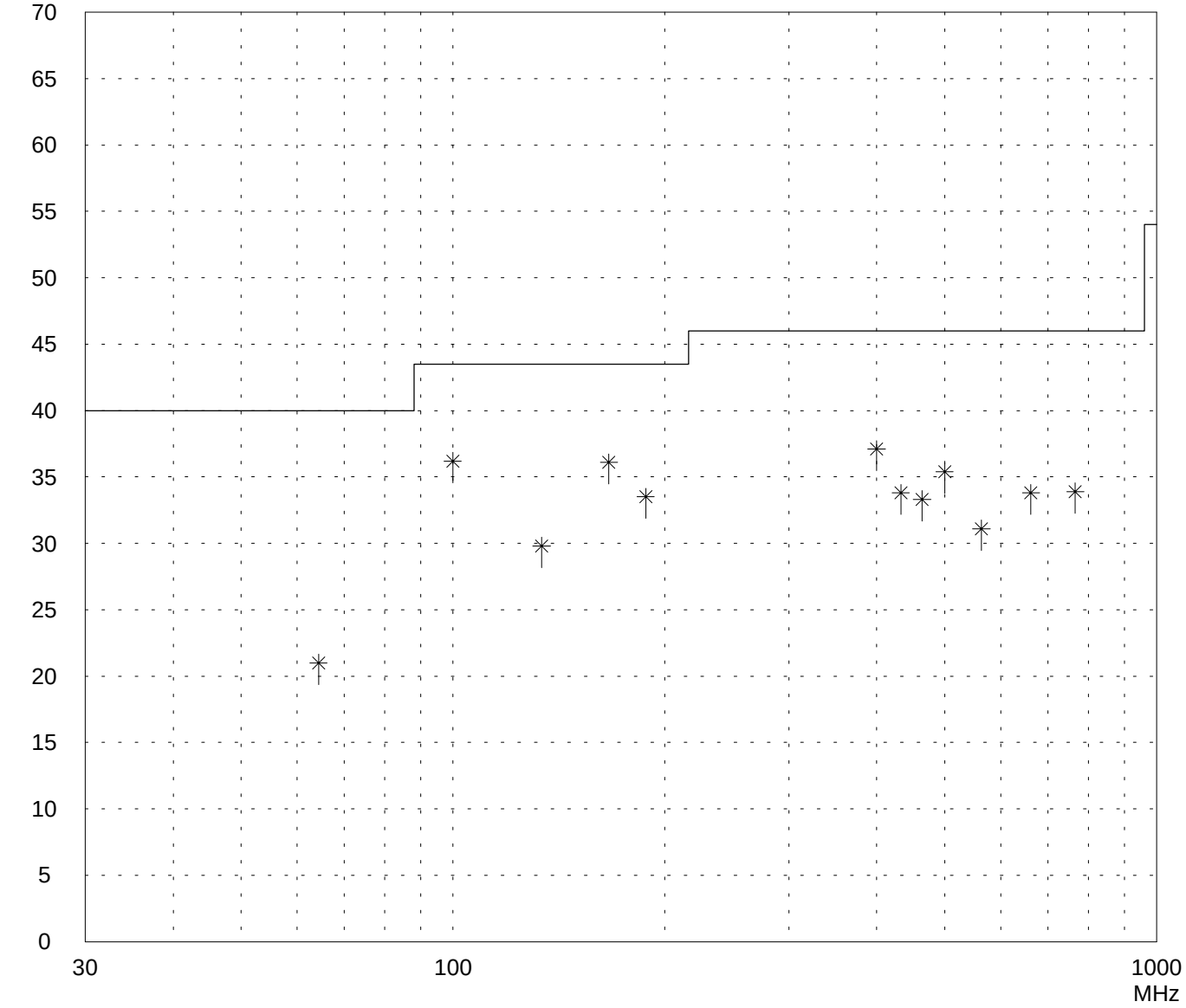
# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.462 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Open area test-site I | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/19/2002 / Operator: R. Heller | |
| Test performed: by hand / File name: | |

| | |
|---|---|
| Detector: Quasi-Peak | List of values: Selected by hand |

dBµV/m  Limit1: FCC Subpart C  Transducer: HK116 / HL223 (3 m)




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/19/2002
Operator: R. Heller

Test performed: by hand
File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC
- monitor switched off

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV/m* | *Limit dBµV/m* | *Limit exceeded* |
|---|---|---|---|---|---|
| 64.40 | 11.2 | 9.8 | 21.0 | 40.0 | |
| 99.88 | 25.5 | 10.7 | 36.2 | 43.5 | |
| 133.56 | 16.5 | 13.3 | 29.8 | 43.5 | |
| 166.48 | 21.6 | 14.5 | 36.1 | 43.5 | |
| 187.38 | 17.6 | 15.9 | 33.5 | 43.5 | |
| 399.68 | 18.4 | 18.7 | 37.1 | 46.0 | |
| 433.00 | 14.3 | 19.5 | 33.8 | 46.0 | |
| 463.97 | 13.2 | 20.1 | 33.3 | 46.0 | |
| 499.58 | 14.7 | 20.7 | 35.4 | 46.0 | |
| 563.40 | 9.4 | 21.7 | 31.1 | 46.0 | |
| 662.78 | 10.1 | 23.7 | 33.8 | 46.0 | |
| 766.13 | 8.9 | 25.0 | 33.9 | 46.0 | |

Result:
Limit kept

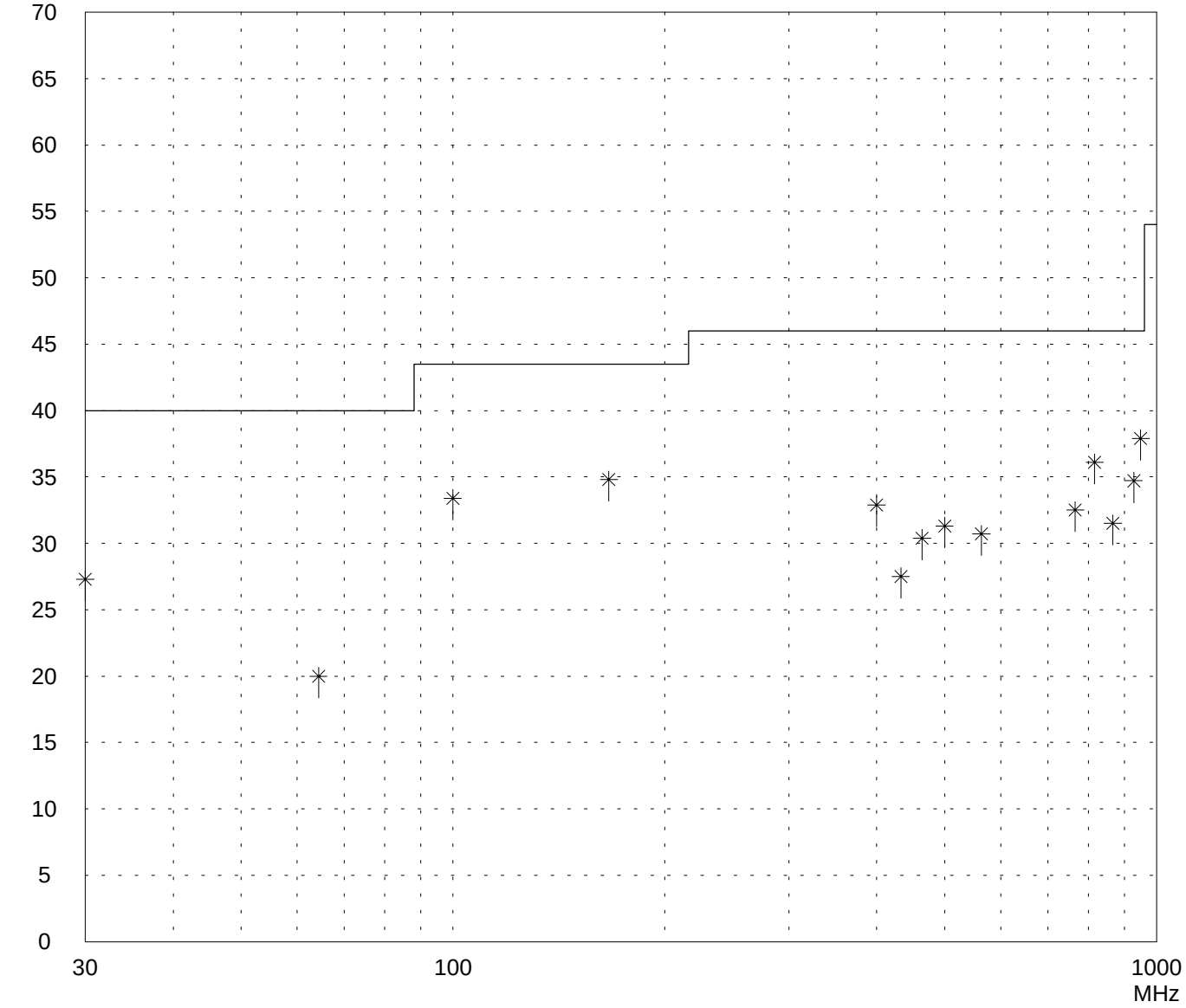
Project file:
56305-20559-6

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- TX mode with f = 2.462 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Open area test-site I | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/19/2002 / Operator: R. Heller | |
| Test performed: by hand / File name: | |

| | |
|---|---|
| Detector: Quasi-Peak | List of values: Selected by hand |

dBµV/m  Limit1: FCC Subpart C  Transducer: HK116 / HL223 (3 m)




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/19/2002
Operator: R. Heller

Test performed: by hand
File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC
- monitor switched off

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV/m* | *Limit dBµV/m* | *Limit exceeded* |
|---|---|---|---|---|---|
| 30.00 | 13.0 | 14.3 | 27.3 | 40.0 | |
| 64.40 | 10.2 | 9.8 | 20.0 | 40.0 | |
| 99.88 | 22.7 | 10.7 | 33.4 | 43.5 | |
| 166.52 | 20.3 | 14.5 | 34.8 | 43.5 | |
| 399.68 | 14.2 | 18.7 | 32.9 | 46.0 | |
| 433.00 | 8.0 | 19.5 | 27.5 | 46.0 | |
| 463.97 | 10.3 | 20.1 | 30.4 | 46.0 | |
| 499.58 | 10.6 | 20.7 | 31.3 | 46.0 | |
| 563.40 | 9.0 | 21.7 | 30.7 | 46.0 | |
| 766.10 | 7.5 | 25.0 | 32.5 | 46.0 | |
| 816.11 | 10.2 | 25.9 | 36.1 | 46.0 | |
| 866.06 | 4.3 | 27.2 | 31.5 | 46.0 | |
| 927.84 | 7.3 | 27.4 | 34.7 | 46.0 | |
| 948.96 | 10.5 | 27.4 | 37.9 | 46.0 | |

Result:
Limit kept

Project file:
56305-20559-6

# Radiated Emission 1 GHz - 25 GHz
# according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Detector: Peak

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 1.0630 | vertical | 21.9 | 0.5 | 26.0 | 48.3 | 74 |
| 1.1633 | horizontal | 20.1 | 0.5 | 26.2 | 46.8 | 74 |
| 1.1991 | vertical | 23.8 | 0.5 | 26.3 | 50.5 | 74 |
| 1.3352 | vertical | 24.1 | 0.5 | 26.5 | 51.1 | 74 |
| 2.3900 | vertical | 32.0 | 0.6 | 20.7 | 53.3 | 74 |
| 2.3993 | vertical | 51.6 | 0.6 | 20.7 | 72.9 | NRB |
| 2.4000 | vertical | 50.8 | 0.6 | 20.7 | 72.2 | NRB |
| 2.4018 | vertical | 50.5 | 0.6 | 20.7 | 71.8 | OB |
| 2.4130 | vertical | 87.0 | 0.6 | 20.7 | 108.3 | OB |
| 2.4233 | vertical | 51.8 | 0.6 | 20.7 | 73.1 | OB |
| 2.7170 | vertical | 19.9 | 0.6 | 23.7 | 44.2 | 74 |
| 4.3701 | horizontal | 9.9 | 0.8 | 27.2 | 38.0 | 74 |
| 4.8303 | horizontal | 16.4 | 0.9 | 27.3 | 44.5 | 74 |
| 7.2313 | horizontal | 7.6 | 1.1 | 29.9 | 38.6 | 74 |

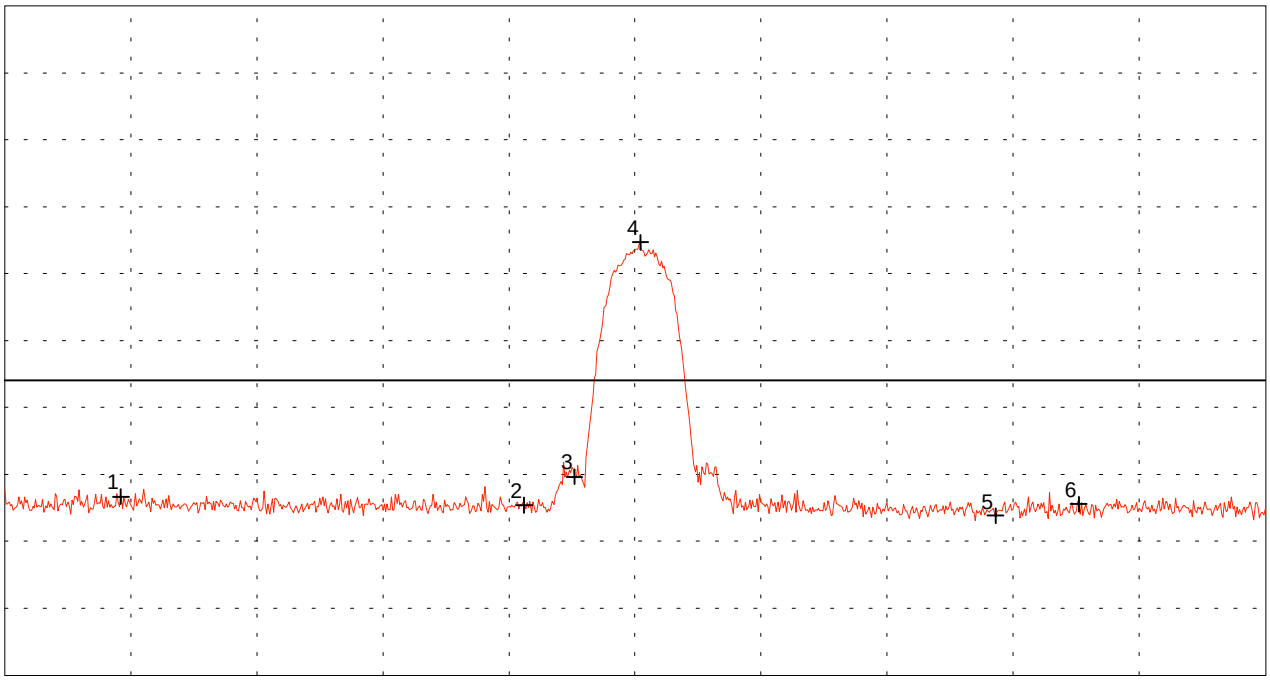
**Note:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 108.3 dBµV/m.

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.287 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

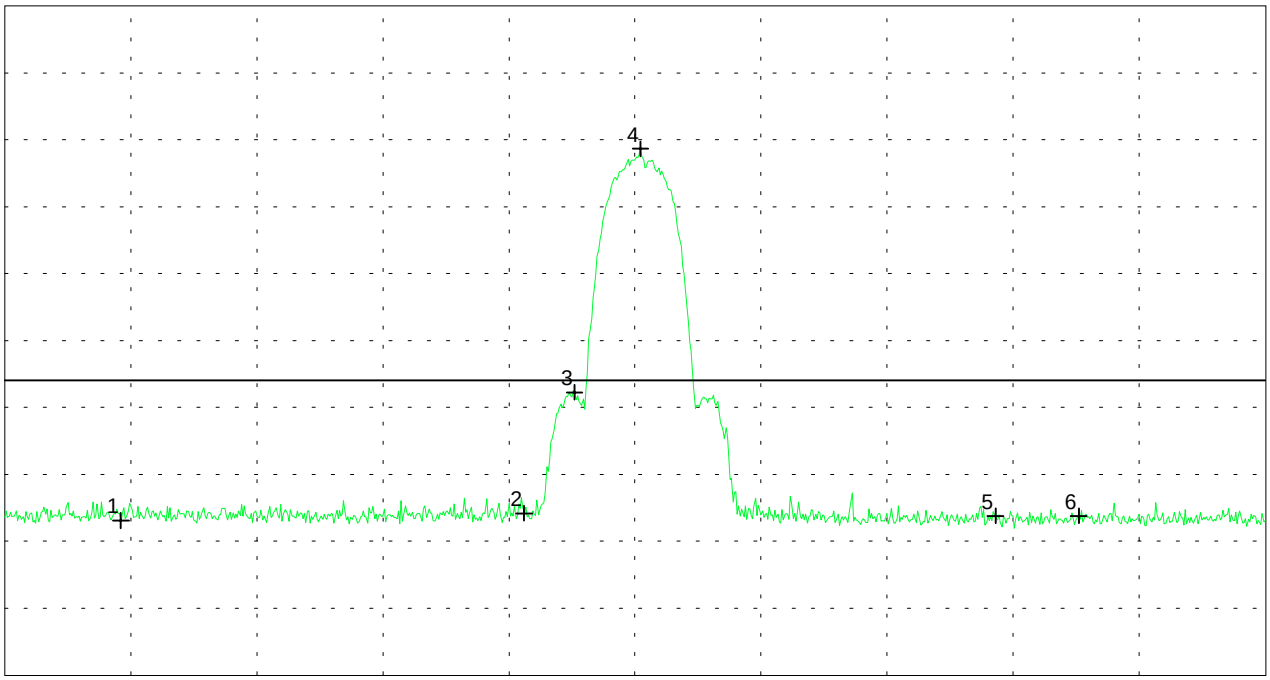
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 56.63 dBµV/m |
| No. 2 | 2.390000 GHz | 55.38 dBµV/m |
| No. 3 | 2.400000 GHz | 59.62 dBµV/m |
| No. 4 | 2.413111 GHz | 94.67 dBµV/m |
| No. 5 | 2.483500 GHz | 53.81 dBµV/m |
| No. 6 | 2.500000 GHz | 55.54 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.287 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

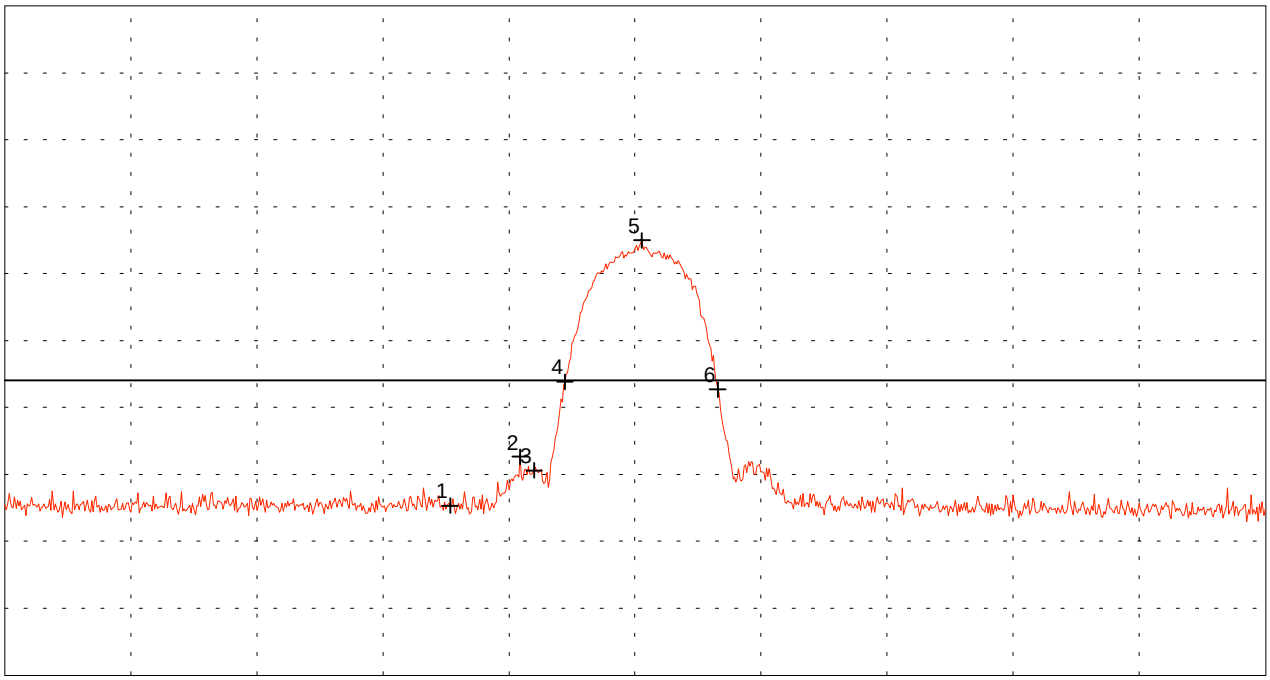
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 53.08 dBµV/m |
| No. 2 | 2.390000 GHz | 54.17 dBµV/m |
| No. 3 | 2.400000 GHz | 72.25 dBµV/m |
| No. 4 | 2.413111 GHz | 108.64 dBµV/m |
| No. 5 | 2.483500 GHz | 53.79 dBµV/m |
| No. 6 | 2.500000 GHz | 53.79 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

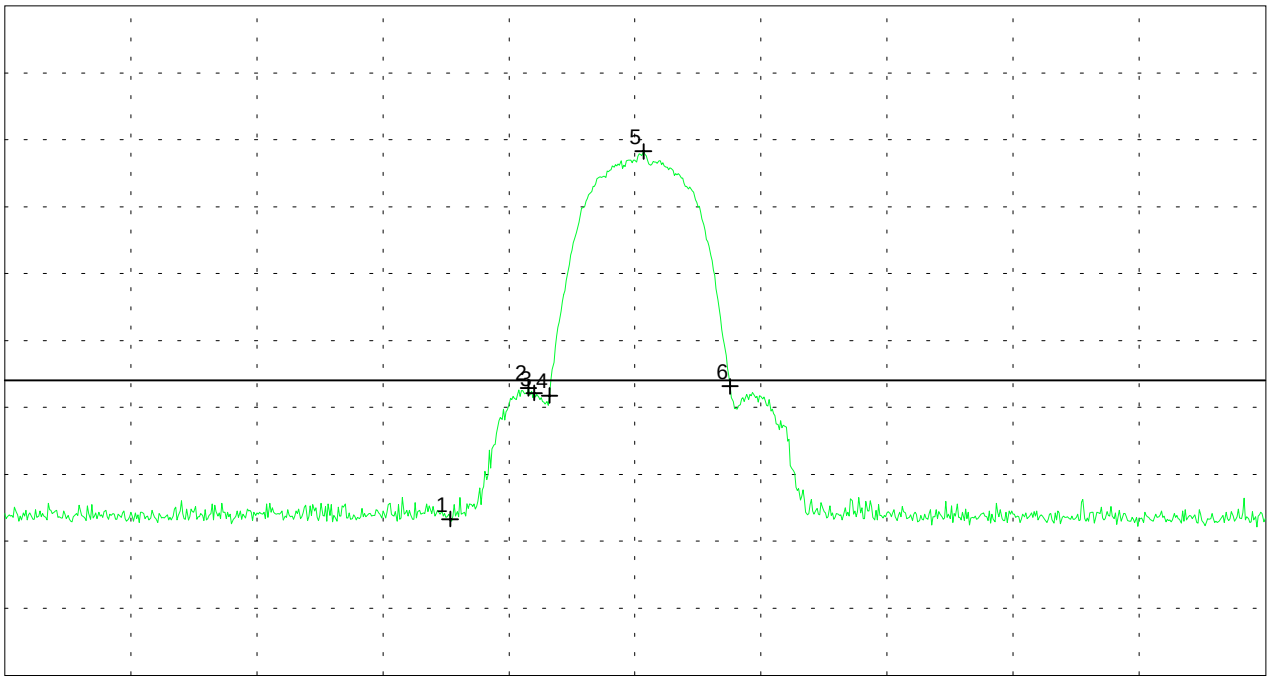
| | | |
|---|---|---|
| No. 1 | 2.390000 GHz | 55.33 dBµV/m |
| No. 2 | 2.398333 GHz | 62.62 dBµV/m |
| No. 3 | 2.400000 GHz | 60.59 dBµV/m |
| No. 4 | 2.403667 GHz | 73.84 dBµV/m |
| No. 5 | 2.412833 GHz | 94.95 dBµV/m |
| No. 6 | 2.421833 GHz | 72.68 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.390000 GHz | 53.28 dBµV/m |
| No. 2 | 2.399333 GHz | 72.88 dBµV/m |
| No. 3 | 2.400000 GHz | 72.15 dBµV/m |
| No. 4 | 2.401833 GHz | 71.77 dBµV/m |
| No. 5 | 2.413000 GHz | 108.28 dBµV/m |
| No. 6 | 2.423333 GHz | 73.14 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz
# according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Detector: Average

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 1.0614 | vertical | < 16.3 | 0.5 | 26.0 | < 42.7 | 54 |
| 1.1623 | horizontal | < 10.4 | 0.5 | 26.2 | < 37.1 | 54 |
| 1.1999 | vertical | < 17.1 | 0.5 | 26.3 | < 43.8 | 54 |
| 1.3337 | vertical | < 17.7 | 0.5 | 26.5 | < 44.7 | 54 |
| 1.5927 | vertical | < 13.3 | 0.5 | 27.2 | < 41.0 | 54 |
| 1.6619 | vertical | < 13.7 | 0.5 | 27.5 | < 41.8 | 54 |
| 2.3900 | vertical | 22.4 | 0.6 | 20.7 | 43.7 | 54 |
| 2.3950 | vertical | 32.5 | 0.6 | 20.7 | 53.8 | NRB |
| 2.3990 | vertical | 43.1 | 0.6 | 20.7 | 64.4 | NRB |
| 2.4000 | vertical | 42.6 | 0.6 | 20.7 | 63.9 | NRB |
| 2.4120 | vertical | 80.5 | 0.6 | 20.7 | 101.8 | OB |
| 2.4295 | vertical | 32.5 | 0.6 | 20.7 | 53.8 | OB |
| 2.7140 | vertical | < 14.3 | 0.6 | 23.7 | < 38.6 | 54 |
| 4.8240 | horizontal | 12.3 | 0.9 | 27.3 | 40.5 | 54 |

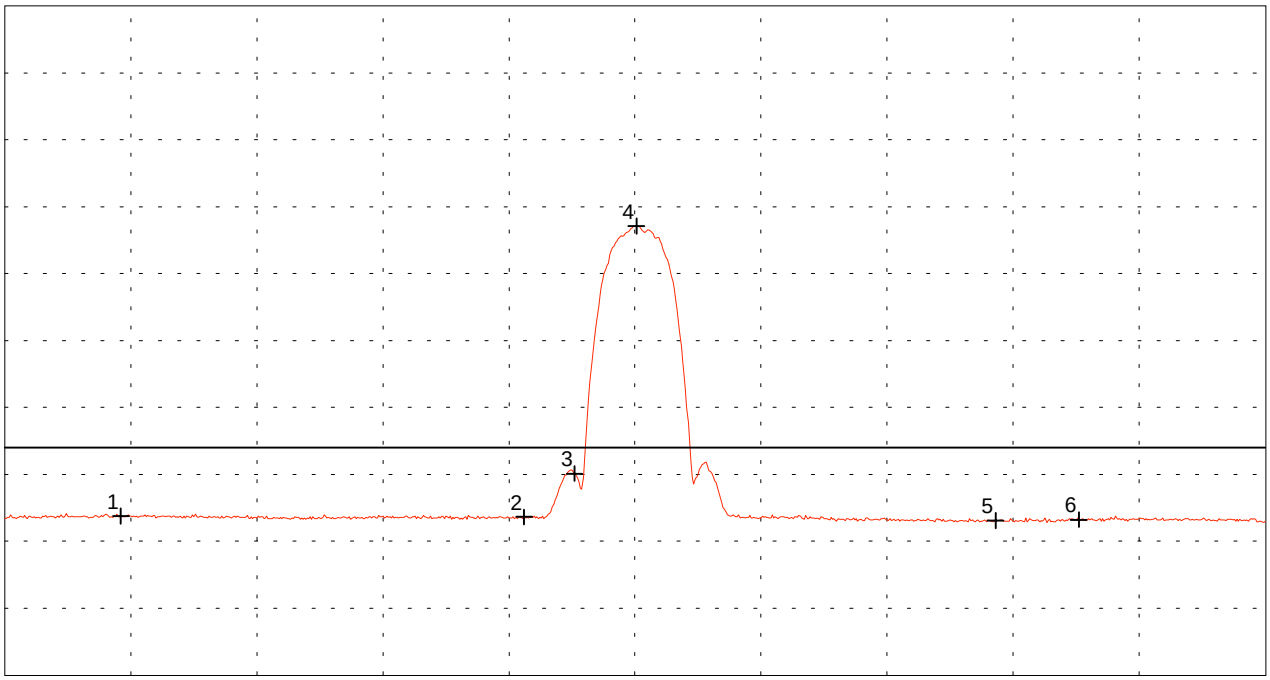
**Note:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 101.8 dBµV/m.

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.287 GHz Stop 2.537 GHz
RBW 1 MHz VBW 3 kHz SWP 260 ms

Multi Marker List

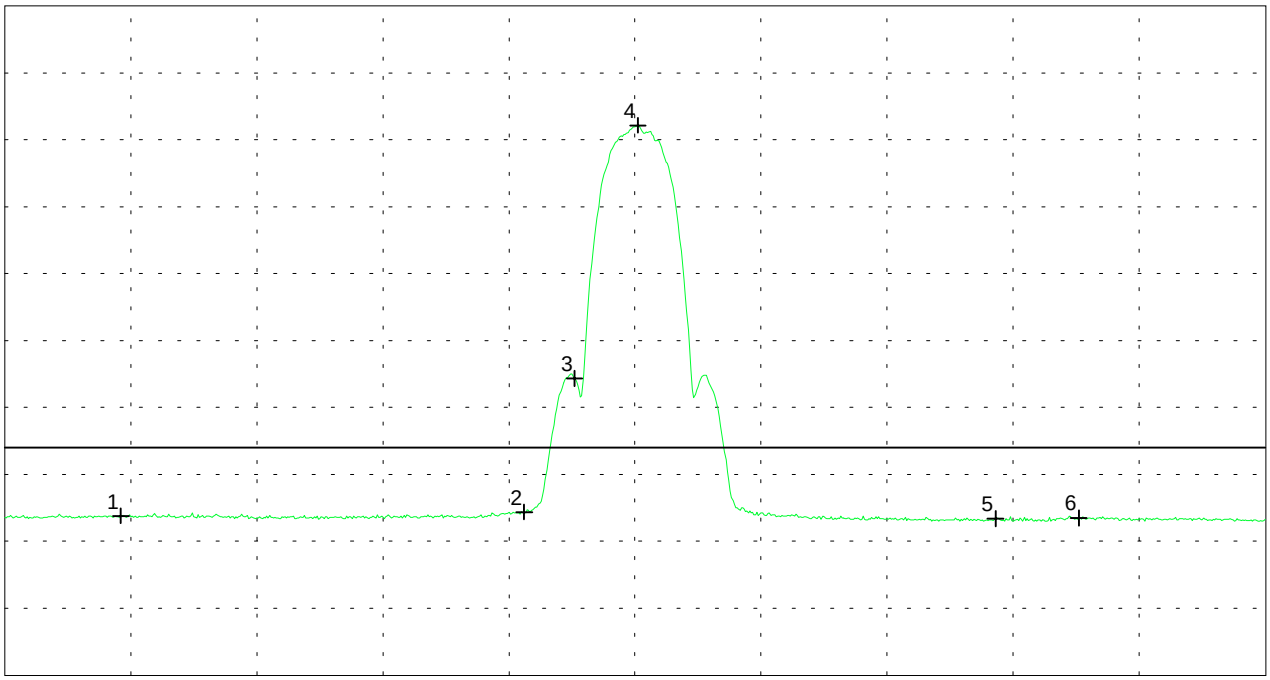
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 43.75 dBµV/m |
| No. 2 | 2.390000 GHz | 43.63 dBµV/m |
| No. 3 | 2.400000 GHz | 50.10 dBµV/m |
| No. 4 | 2.412278 GHz | 87.10 dBµV/m |
| No. 5 | 2.483500 GHz | 43.09 dBµV/m |
| No. 6 | 2.500000 GHz | 43.22 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.287 GHz Stop 2.537 GHz
RBW 1 MHz VBW 3 kHz SWP 260 ms

Multi Marker List

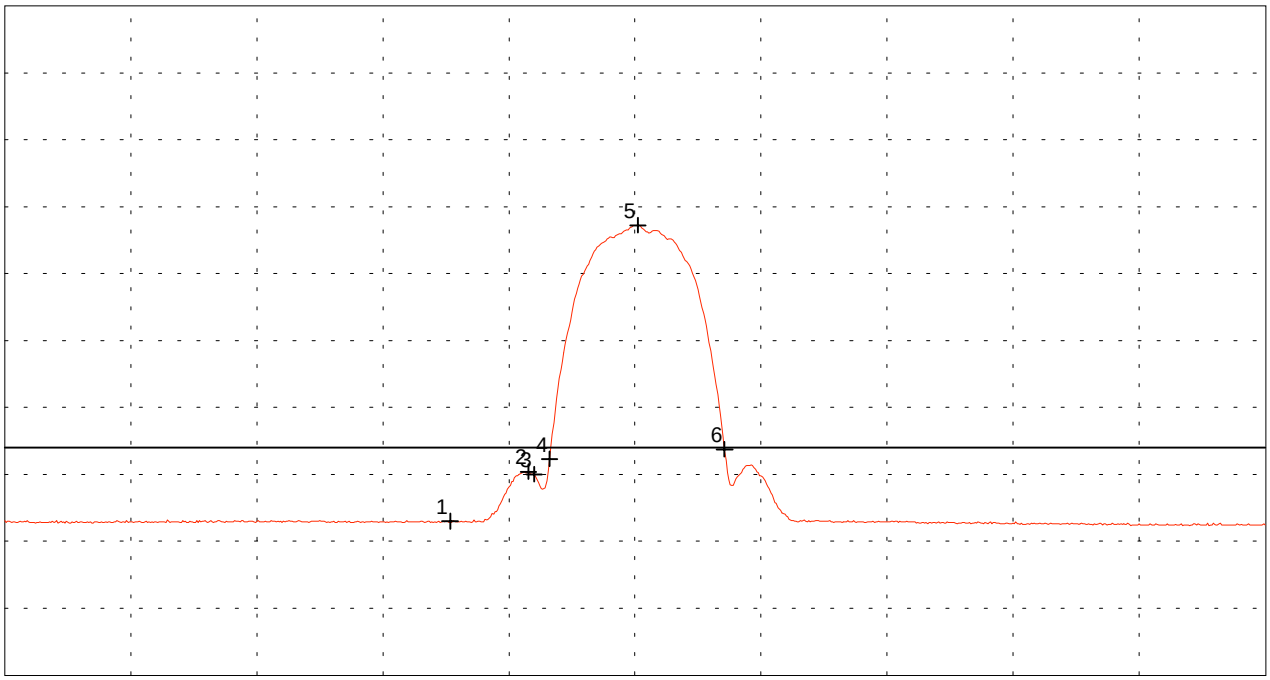
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 43.78 dBµV/m |
| No. 2 | 2.390000 GHz | 44.36 dBµV/m |
| No. 3 | 2.400000 GHz | 64.32 dBµV/m |
| No. 4 | 2.412556 GHz | 102.13 dBµV/m |
| No. 5 | 2.483500 GHz | 43.35 dBµV/m |
| No. 6 | 2.500000 GHz | 43.47 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

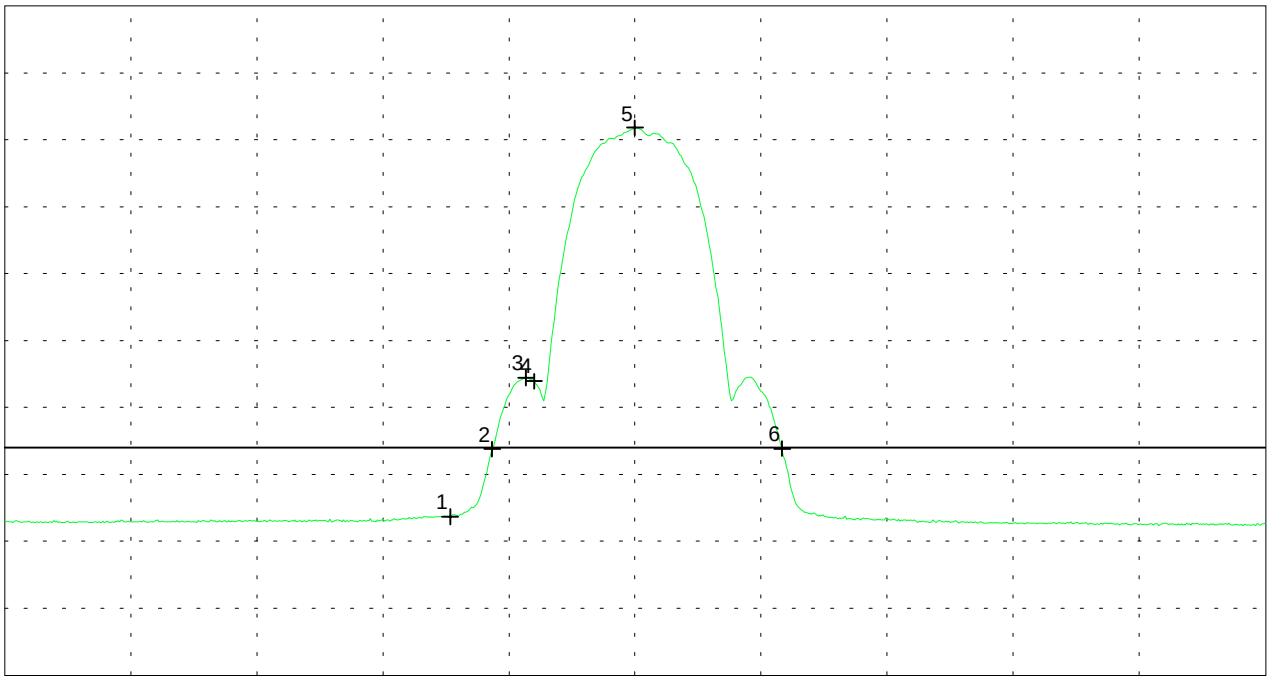
| | | |
|---|---|---|
| No. 1 | 2.390000 GHz | 42.97 dBµV/m |
| No. 2 | 2.399333 GHz | 50.36 dBµV/m |
| No. 3 | 2.400000 GHz | 50.00 dBµV/m |
| No. 4 | 2.401833 GHz | 52.29 dBµV/m |
| No. 5 | 2.412333 GHz | 87.23 dBµV/m |
| No. 6 | 2.422667 GHz | 53.73 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.390000 GHz | 43.65 dBµV/m |
| No. 2 | 2.395000 GHz | 53.76 dBµV/m |
| No. 3 | 2.399000 GHz | 64.40 dBµV/m |
| No. 4 | 2.400000 GHz | 63.92 dBµV/m |
| No. 5 | 2.412000 GHz | 101.80 dBµV/m |
| No. 6 | 2.429500 GHz | 53.83 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 2 Mbps

- TX mode with f = 2.412 GHz

Detector: Peak

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 2.3900 | vertical | 32.4 | 0.6 | 20.7 | 53.7 | 74 |
| 2.3992 | vertical | 50.0 | 0.6 | 20.7 | 71.3 | NRB |
| 2.4000 | vertical | 49.3 | 0.6 | 20.7 | 70.6 | NRB |
| 2.4020 | vertical | 51.9 | 0.6 | 20.7 | 73.2 | OB |
| 2.4113 | vertical | 84.2 | 0.6 | 20.7 | 105.5 | OB |
| 2.4232 | vertical | 52.2 | 0.6 | 20.7 | 73.5 | OB |
| 4.8239 | horizontal | 17.9 | 0.9 | 27.3 | 46.0 | 74 |

**Note 1:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 105.5 dBµV/m.

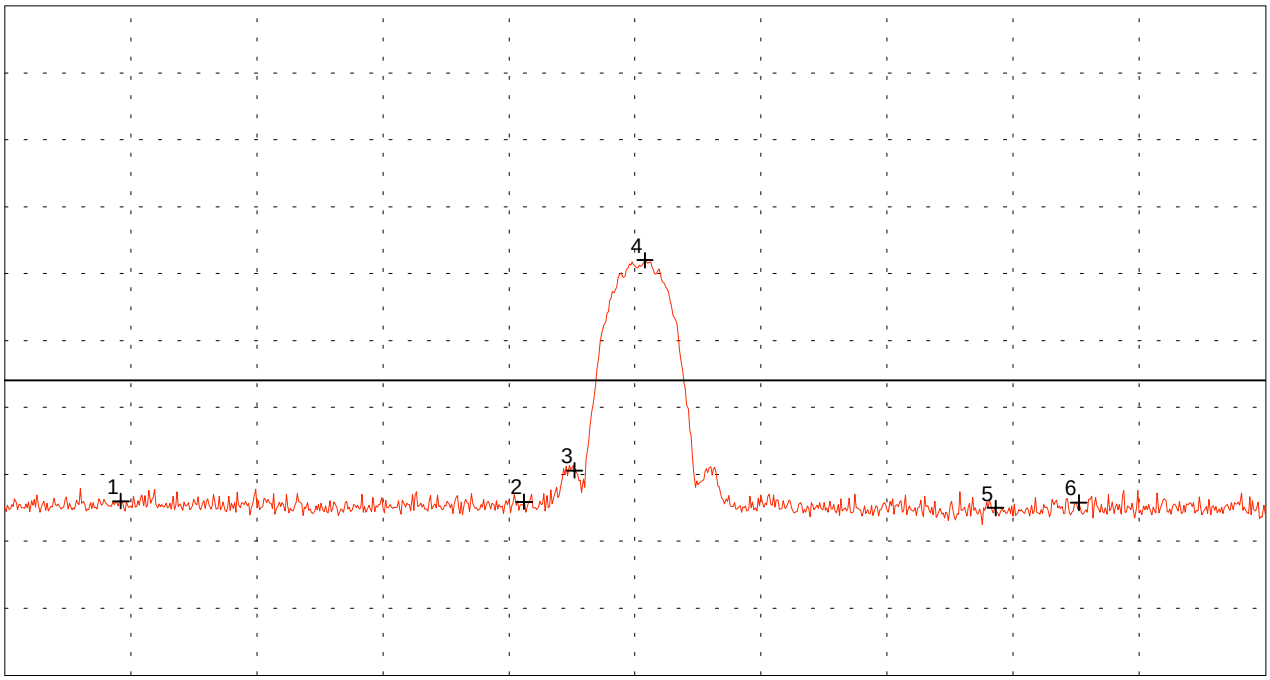
**Note 2:** Extent of testing harmonics with 2 Mbps selected according to results of radiated emission with 11 Mbps (peak)

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.287 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

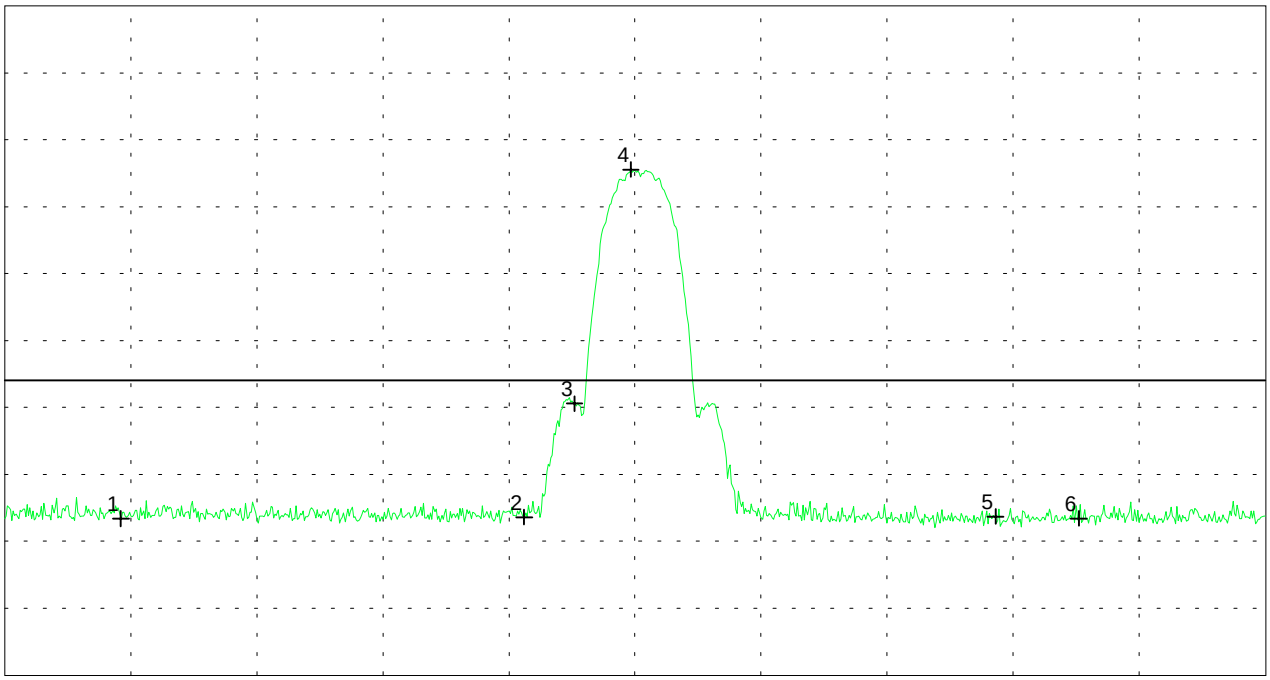
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 55.97 dBµV/m |
| No. 2 | 2.390000 GHz | 55.87 dBµV/m |
| No. 3 | 2.400000 GHz | 60.56 dBµV/m |
| No. 4 | 2.413944 GHz | 92.00 dBµV/m |
| No. 5 | 2.483500 GHz | 54.95 dBµV/m |
| No. 6 | 2.500000 GHz | 55.76 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.287 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 53.36 dBµV/m |
| No. 2 | 2.390000 GHz | 53.58 dBµV/m |
| No. 3 | 2.400000 GHz | 70.55 dBµV/m |
| No. 4 | 2.411167 GHz | 105.56 dBµV/m |
| No. 5 | 2.483500 GHz | 53.69 dBµV/m |
| No. 6 | 2.500000 GHz | 53.41 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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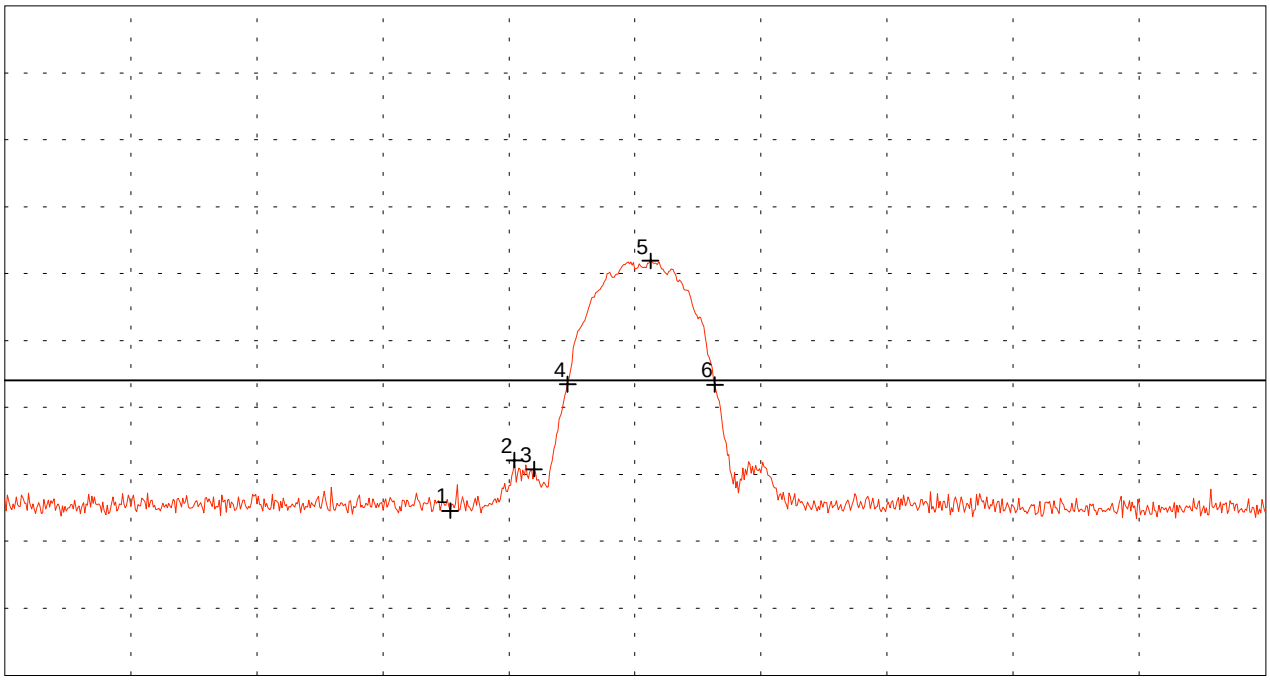
Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.390000 GHz | 54.55 dBµV/m |
| No. 2 | 2.397667 GHz | 62.09 dBµV/m |
| No. 3 | 2.400000 GHz | 60.77 dBµV/m |
| No. 4 | 2.404000 GHz | 73.46 dBµV/m |
| No. 5 | 2.413833 GHz | 91.90 dBµV/m |
| No. 6 | 2.421500 GHz | 73.41 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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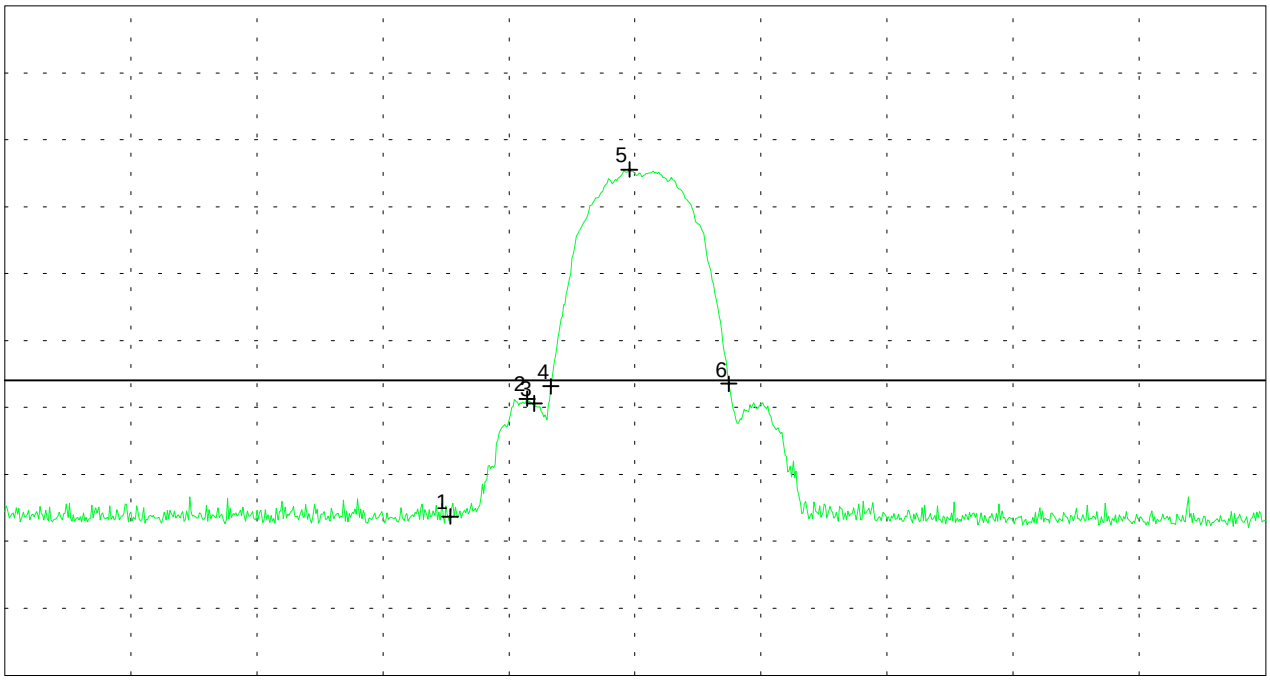
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.390000 GHz | 53.69 dBµV/m |
| No. 2 | 2.399167 GHz | 71.28 dBµV/m |
| No. 3 | 2.400000 GHz | 70.60 dBµV/m |
| No. 4 | 2.402000 GHz | 73.16 dBµV/m |
| No. 5 | 2.411333 GHz | 105.54 dBµV/m |
| No. 6 | 2.423167 GHz | 73.52 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 2 Mbps

- TX mode with f = 2.412 GHz

Detector: Average

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 2.3900 | vertical | 22.5 | 0.6 | 20.7 | 43.8 | 54 |
| 2.3955 | vertical | 31.9 | 0.6 | 20.7 | 53.2 | NRB |
| 2.3985 | vertical | 45.2 | 0.6 | 20.7 | 66.5 | NRB |
| 2.4000 | vertical | 42.7 | 0.6 | 20.7 | 64.0 | NRB |
| 2.4128 | vertical | 80.5 | 0.6 | 20.7 | 101.9 | OB |
| 2.4290 | vertical | 31.9 | 0.6 | 20.7 | 53.2 | OB |
| 4.8241 | horizontal | 13.1 | 0.9 | 27.3 | 41.2 | 54 |

**Note 1:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 101.9 dBµV/m.

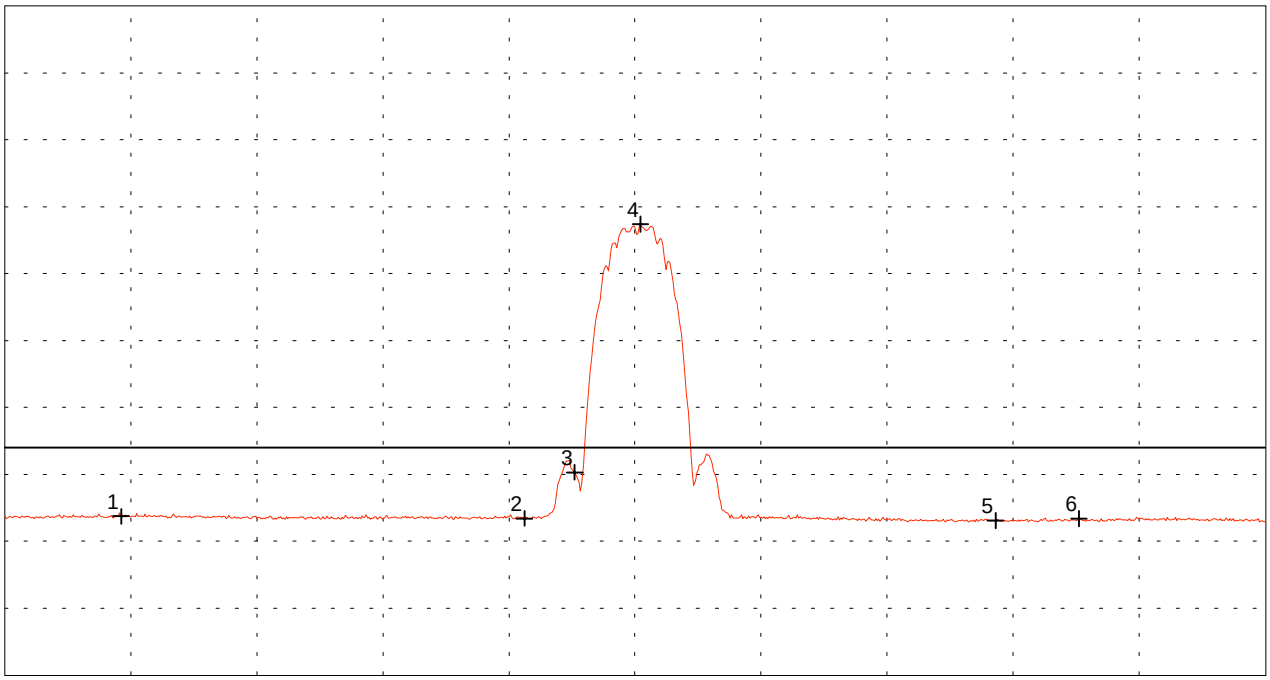
**Note 2:** Extent of testing harmonics with 2 Mbps selected according to results of radiated emission with 11 Mbps (peak)

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.287 GHz Stop 2.537 GHz
RBW 1 MHz VBW 3 kHz SWP 260 ms

Multi Marker List

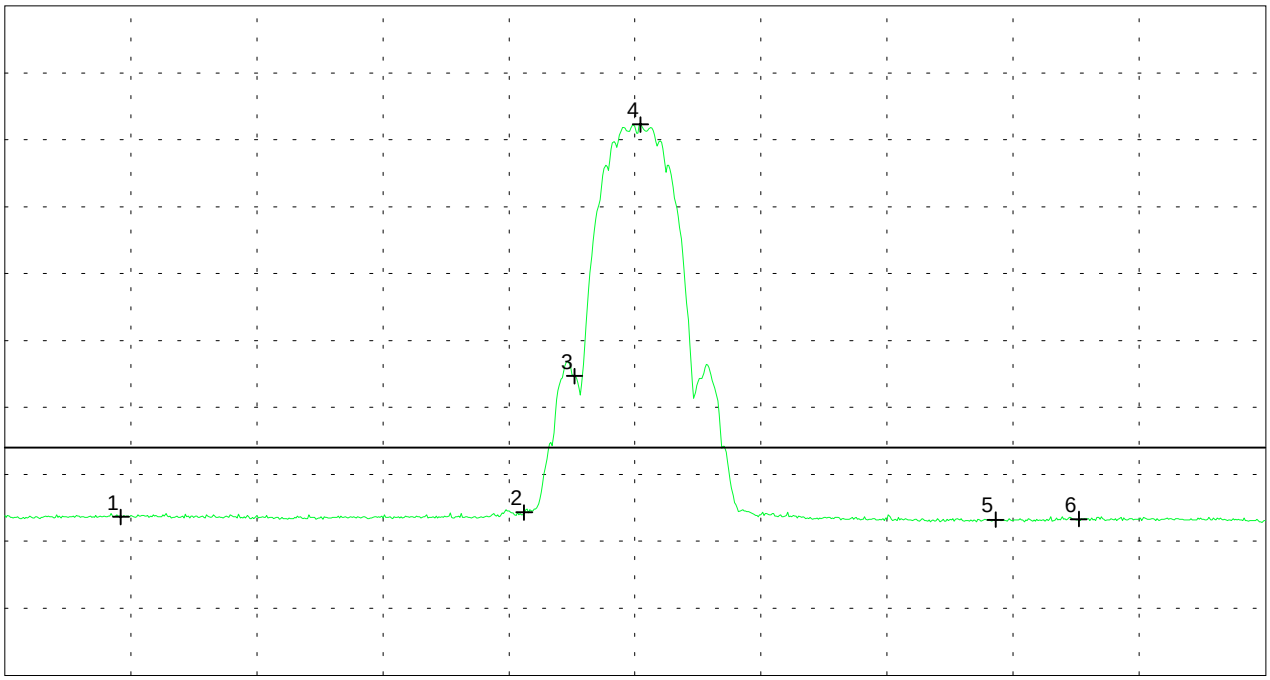
| | | |
|---|---|---|
| No. 1 | 2.310056 GHz | 43.70 dBµV/m |
| No. 2 | 2.390056 GHz | 43.42 dBµV/m |
| No. 3 | 2.400056 GHz | 50.28 dBµV/m |
| No. 4 | 2.413111 GHz | 87.38 dBµV/m |
| No. 5 | 2.483500 GHz | 43.07 dBµV/m |
| No. 6 | 2.500056 GHz | 43.37 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.287 GHz Stop 2.537 GHz
RBW 1 MHz VBW 3 kHz SWP 260 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 43.63 dBµV/m |
| No. 2 | 2.390000 GHz | 44.29 dBµV/m |
| No. 3 | 2.400000 GHz | 64.68 dBµV/m |
| No. 4 | 2.413111 GHz | 102.29 dBµV/m |
| No. 5 | 2.483500 GHz | 43.19 dBµV/m |
| No. 6 | 2.500000 GHz | 43.30 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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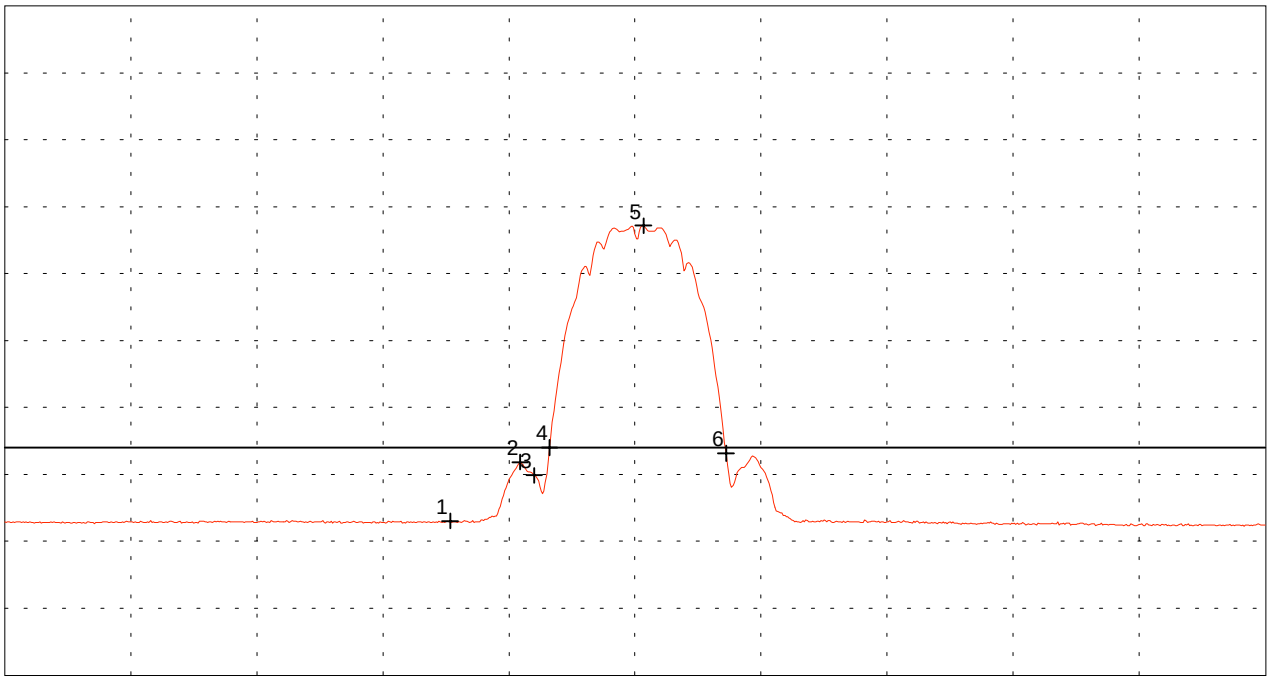
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.390000 GHz | 43.02 dBµV/m |
| No. 2 | 2.398333 GHz | 51.83 dBµV/m |
| No. 3 | 2.400000 GHz | 49.82 dBµV/m |
| No. 4 | 2.401833 GHz | 53.99 dBµV/m |
| No. 5 | 2.413000 GHz | 87.15 dBµV/m |
| No. 6 | 2.422833 GHz | 53.12 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.412 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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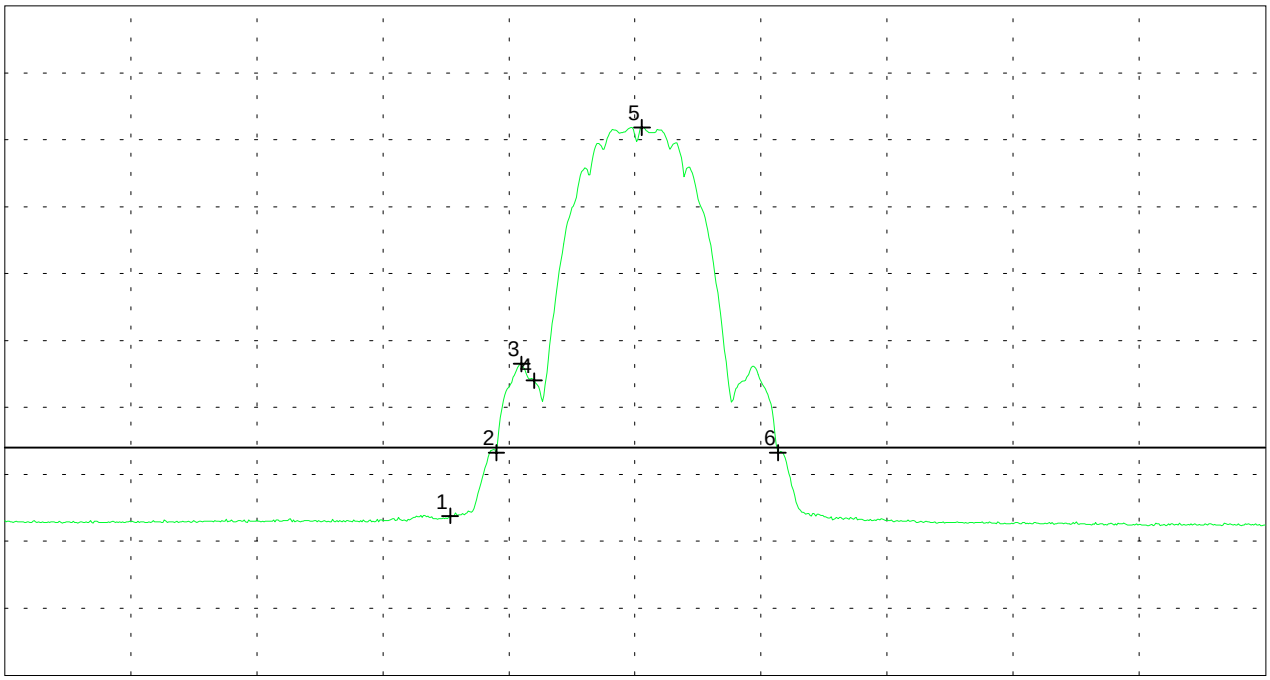
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.390000 GHz | 43.78 dBµV/m |
| No. 2 | 2.395500 GHz | 53.22 dBµV/m |
| No. 3 | 2.398500 GHz | 66.51 dBµV/m |
| No. 4 | 2.400000 GHz | 64.02 dBµV/m |
| No. 5 | 2.412833 GHz | 101.85 dBµV/m |
| No. 6 | 2.429000 GHz | 53.22 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz
# according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Detector: Peak

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 1.0614 | vertical | 22.1 | 0.5 | 26.0 | 48.6 | 74 |
| 1.1631 | horizontal | 18.0 | 0.5 | 26.2 | 44.7 | 74 |
| 1.1983 | vertical | 23.7 | 0.5 | 26.3 | 50.4 | 74 |
| 1.3352 | vertical | 24.3 | 0.5 | 26.5 | 51.3 | 74 |
| 1.5942 | vertical | 21.0 | 0.5 | 27.2 | 48.7 | 74 |
| 2.4292 | vertical | 51.9 | 0.6 | 20.7 | 73.3 | OB |
| 2.4428 | vertical | 87.6 | 0.6 | 20.7 | 108.9 | OB |
| 2.4533 | vertical | 52.4 | 0.6 | 20.7 | 73.7 | OB |
| 2.7290 | vertical | 20.2 | 0.6 | 23.7 | 44.6 | 74 |
| 4.4736 | horizontal | 10.9 | 0.8 | 27.2 | 38.9 | 74 |
| 4.8894 | horizontal | 18.4 | 0.9 | 27.3 | 46.5 | 74 |
| 7.3305 | horizontal | 6.8 | 1.1 | 29.9 | 37.8 | 74 |

**Note:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 108.9 dBµV/m.

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.442 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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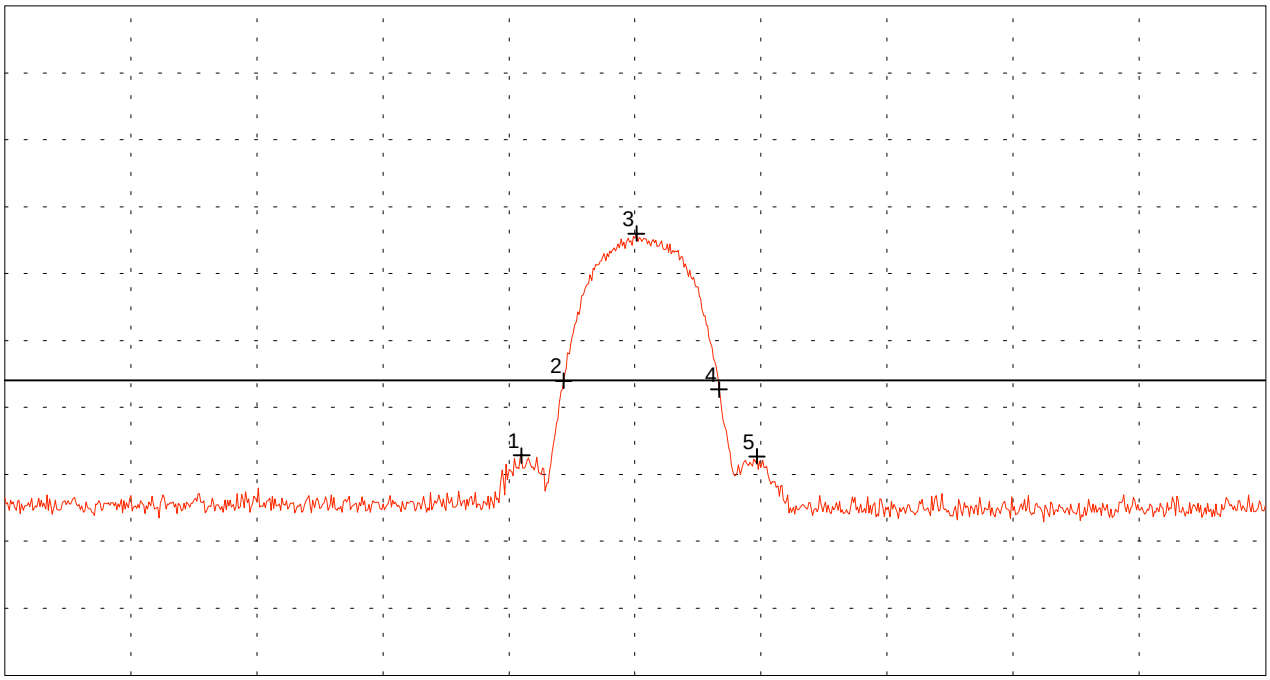
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.367 GHz Stop 2.517 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.428500 GHz | 62.82 dBµV/m |
| No. 2 | 2.433500 GHz | 73.95 dBµV/m |
| No. 3 | 2.442167 GHz | 95.99 dBµV/m |
| No. 4 | 2.452000 GHz | 72.65 dBµV/m |
| No. 5 | 2.456500 GHz | 62.67 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.442 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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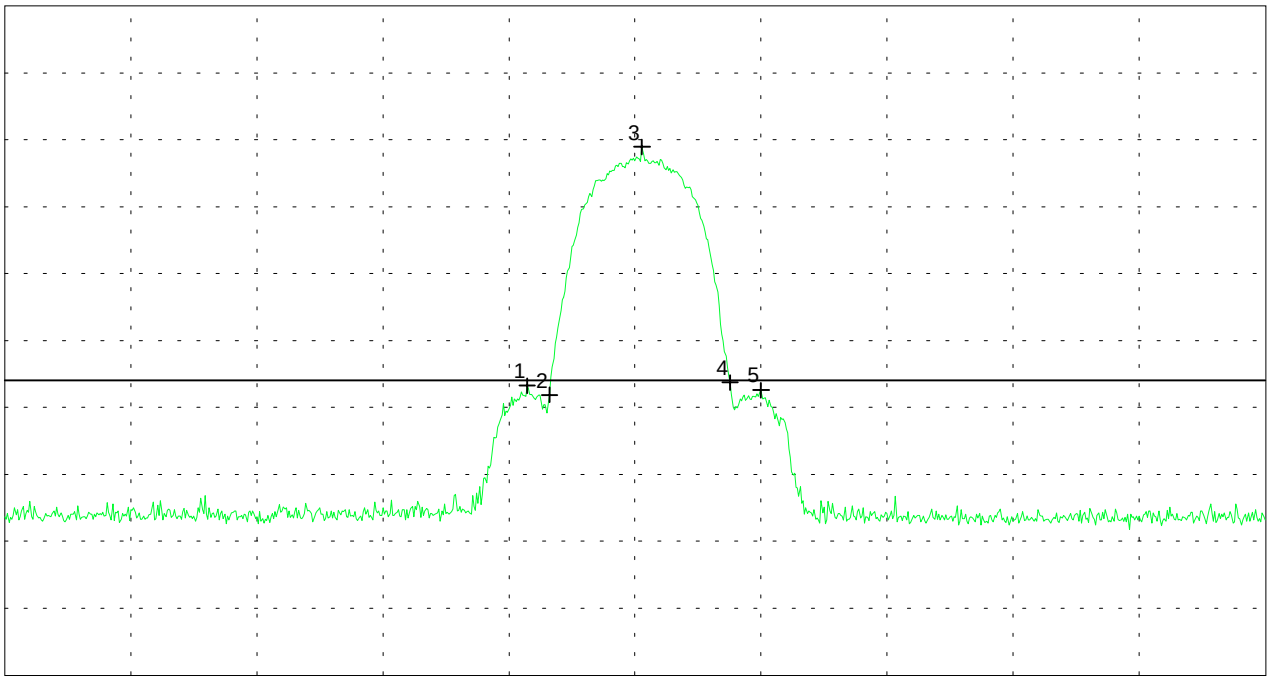
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.367 GHz Stop 2.517 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.429167 GHz | 73.26 dBµV/m |
| No. 2 | 2.431833 GHz | 71.87 dBµV/m |
| No. 3 | 2.442833 GHz | 108.94 dBµV/m |
| No. 4 | 2.453333 GHz | 73.70 dBµV/m |
| No. 5 | 2.457000 GHz | 72.58 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz
# according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Detector: Average

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 1.0614 | vertical | < 16.0 | 0.5 | 26.0 | < 42.4 | 54 |
| 1.1633 | horizontal | < 11.4 | 0.5 | 26.2 | < 38.1 | 54 |
| 1.2007 | vertical | < 17.2 | 0.5 | 26.3 | < 44.0 | 54 |
| 1.3344 | vertical | < 17.4 | 0.5 | 26.5 | < 44.4 | 54 |
| 1.5934 | vertical | < 12.9 | 0.5 | 27.2 | < 40.6 | 54 |
| 1.6619 | vertical | < 14.6 | 0.5 | 27.5 | < 42.6 | 54 |
| 2.4252 | vertical | 32.6 | 0.6 | 20.7 | 54.0 | OB |
| 2.4420 | vertical | 80.5 | 0.6 | 20.7 | 101.8 | OB |
| 2.4595 | vertical | 32.5 | 0.6 | 20.7 | 53.8 | OB |
| 2.7305 | vertical | < 14.1 | 0.6 | 23.7 | < 38.4 | 54 |
| 4.8841 | horizontal | 12.9 | 0.9 | 27.3 | 41.1 | 54 |

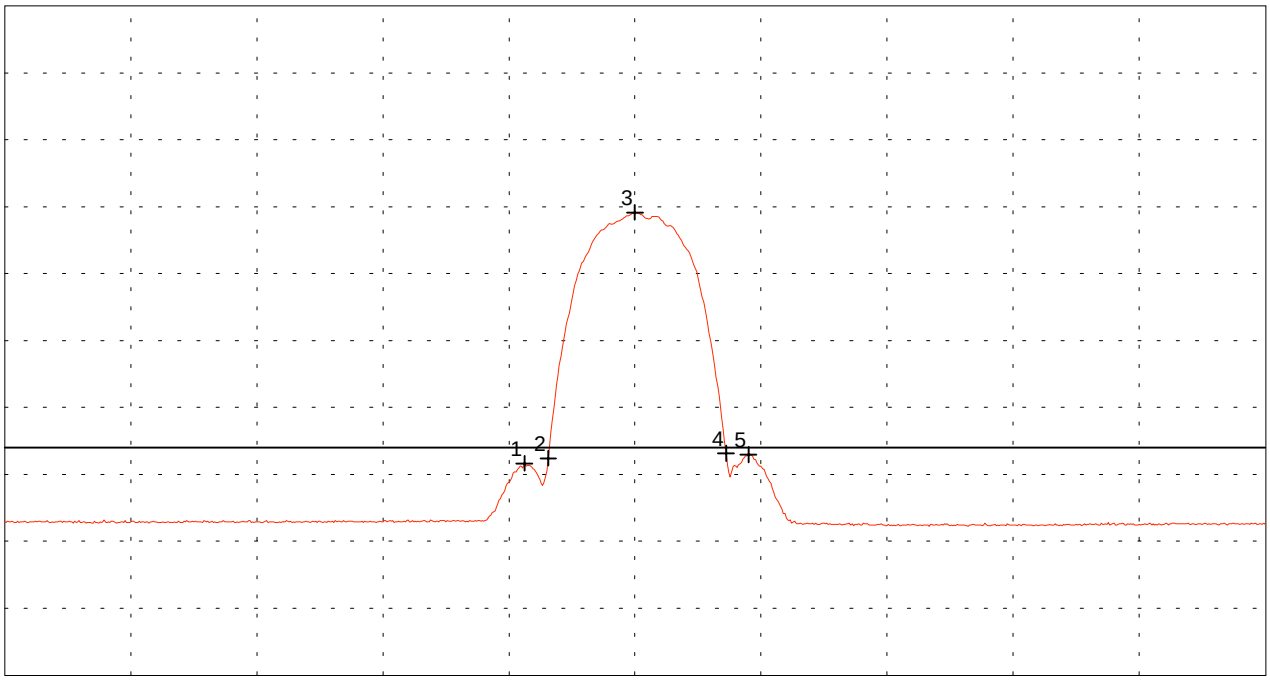
**Note:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 101.8 dBµV/m.

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.442 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.367 GHz Stop 2.517 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.428833 GHz | 51.63 dBµV/m |
| No. 2 | 2.431667 GHz | 52.41 dBµV/m |
| No. 3 | 2.442000 GHz | 89.13 dBµV/m |
| No. 4 | 2.452833 GHz | 53.12 dBµV/m |
| No. 5 | 2.455500 GHz | 52.92 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.442 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
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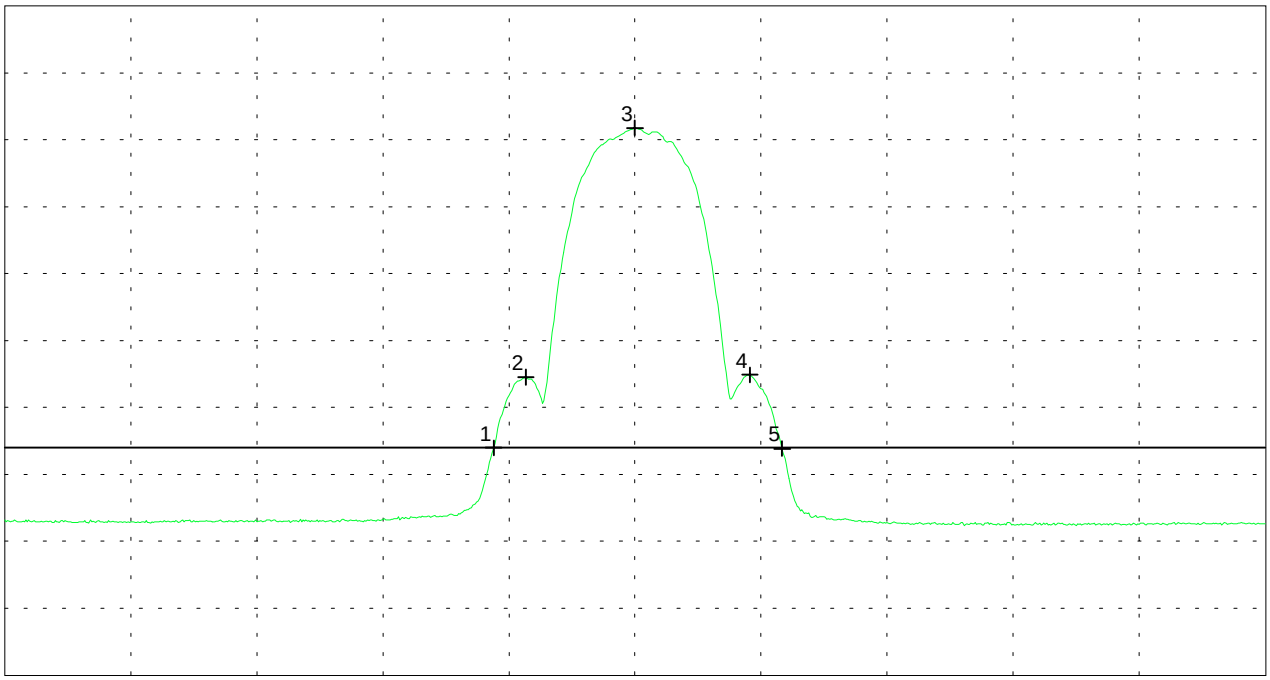
Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.367 GHz Stop 2.517 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.425167 GHz | 53.96 dBµV/m |
| No. 2 | 2.429000 GHz | 64.50 dBµV/m |
| No. 3 | 2.442000 GHz | 101.78 dBµV/m |
| No. 4 | 2.455667 GHz | 64.86 dBµV/m |
| No. 5 | 2.459500 GHz | 53.83 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 2 Mbps

- TX mode with f = 2.442 GHz

Detector: Peak

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 2.4320 | vertical | 52.1 | 0.6 | 20.7 | 73.4 | OB |
| 2.4445 | vertical | 84.1 | 0.6 | 20.7 | 105.5 | OB |
| 2.4532 | vertical | 52.3 | 0.6 | 20.7 | 73.6 | OB |
| 4.8841 | horizontal | 21.3 | 0.9 | 27.3 | 49.5 | 74 |

**Note 1:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 105.5 dBµV/m.

**Note 2:** Extent of testing harmonics with 2 Mbps selected according to results of radiated emission with 11 Mbps (peak)

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.442 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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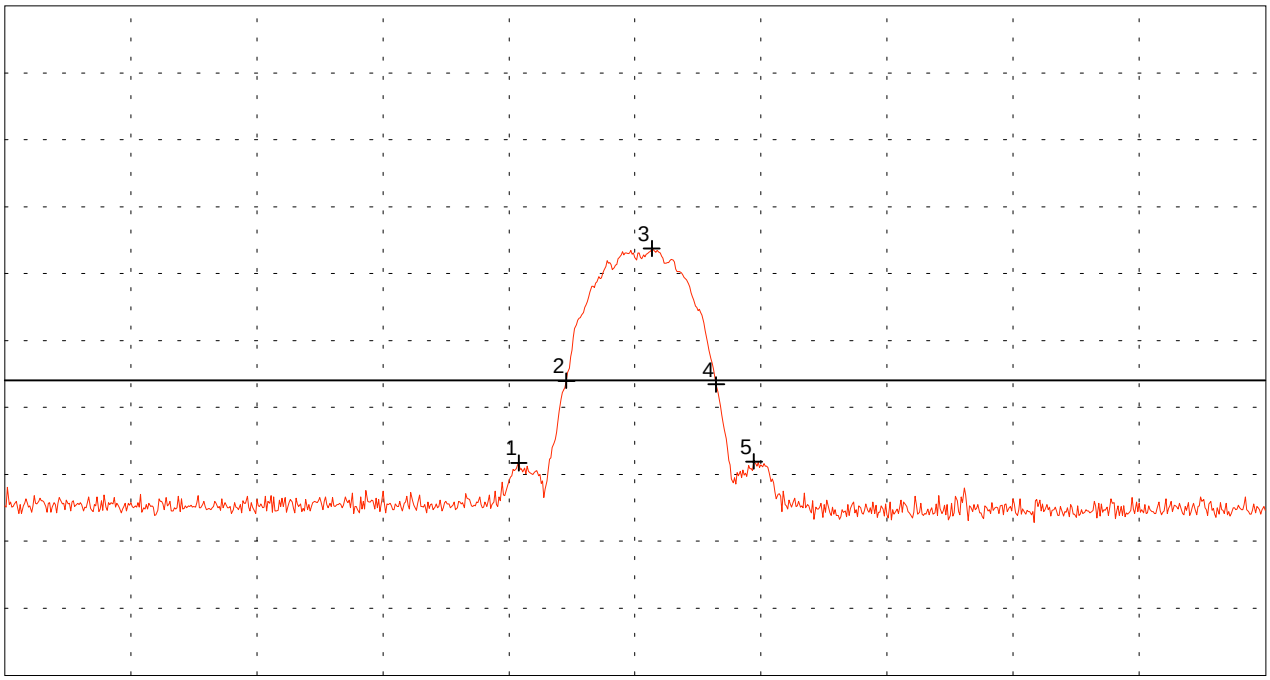
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.367 GHz Stop 2.517 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.428167 GHz | 61.68 dBµV/m |
| No. 2 | 2.433833 GHz | 73.95 dBµV/m |
| No. 3 | 2.444000 GHz | 93.75 dBµV/m |
| No. 4 | 2.451667 GHz | 73.44 dBµV/m |
| No. 5 | 2.456167 GHz | 61.93 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.442 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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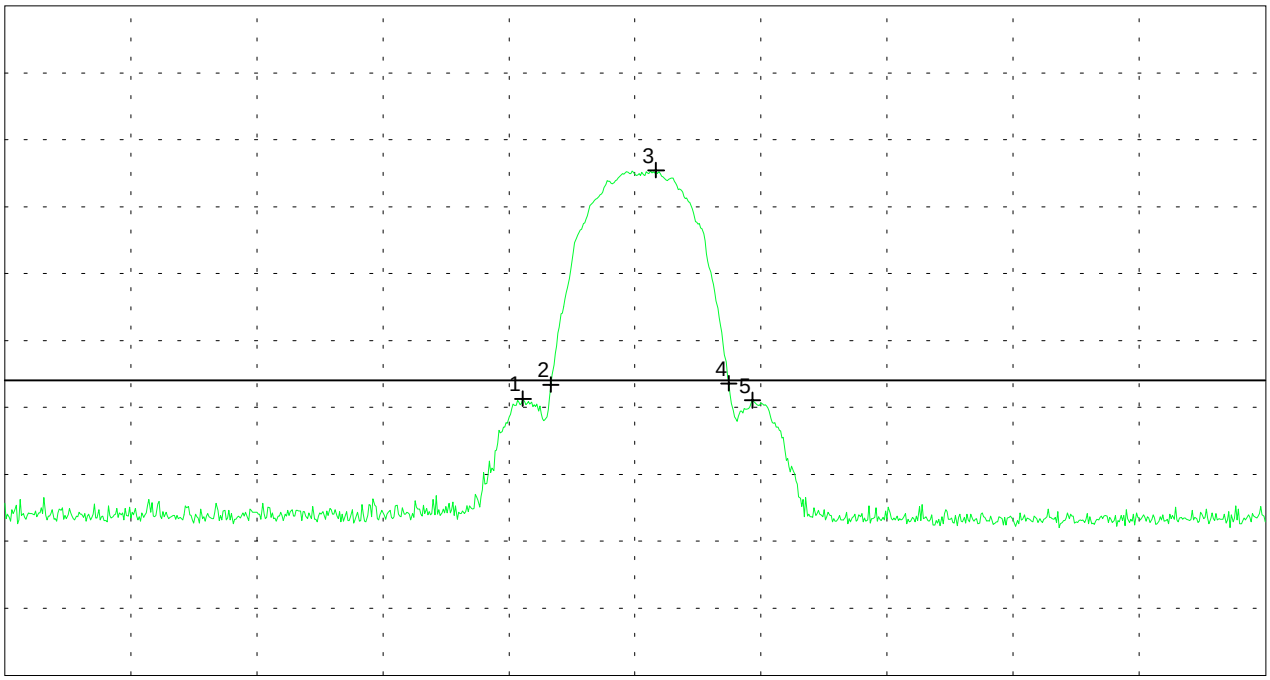
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.367 GHz Stop 2.517 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.428667 GHz | 71.28 dBµV/m |
| No. 2 | 2.432000 GHz | 73.39 dBµV/m |
| No. 3 | 2.444500 GHz | 105.46 dBµV/m |
| No. 4 | 2.453167 GHz | 73.59 dBµV/m |
| No. 5 | 2.456000 GHz | 71.05 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 2 Mbps

- TX mode with f = 2.442 GHz

Detector: Average

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 2.4255 | vertical | 31.9 | 0.6 | 20.7 | 53.2 | OB |
| 2.4428 | vertical | 80.7 | 0.6 | 20.7 | 102.1 | OB |
| 2.4598 | vertical | 32.3 | 0.6 | 20.7 | 53.7 | OB |
| 4.8842 | horizontal | 16.6 | 0.9 | 27.3 | 44.8 | 54 |

**Note 1:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 102.1 dBµV/m.

**Note 2:** Extent of testing harmonics with 2 Mbps selected according to results of radiated emission with 11 Mbps (peak)

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.442 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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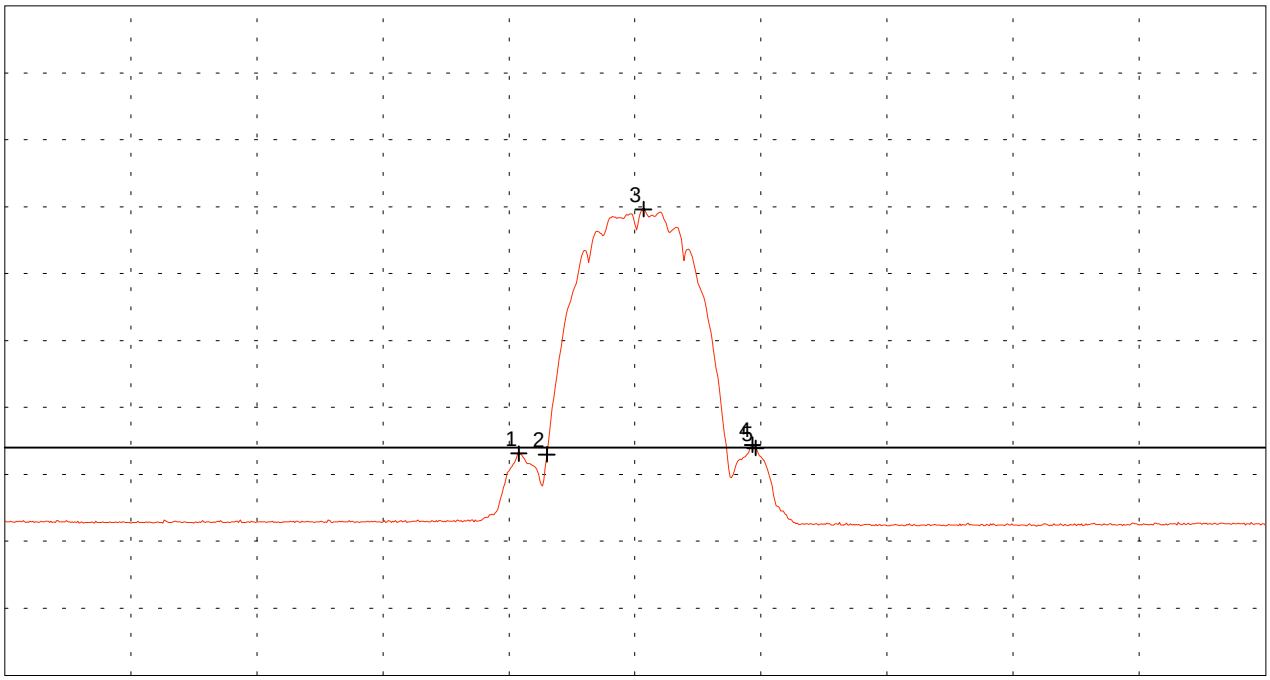
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.367 GHz Stop 2.517 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

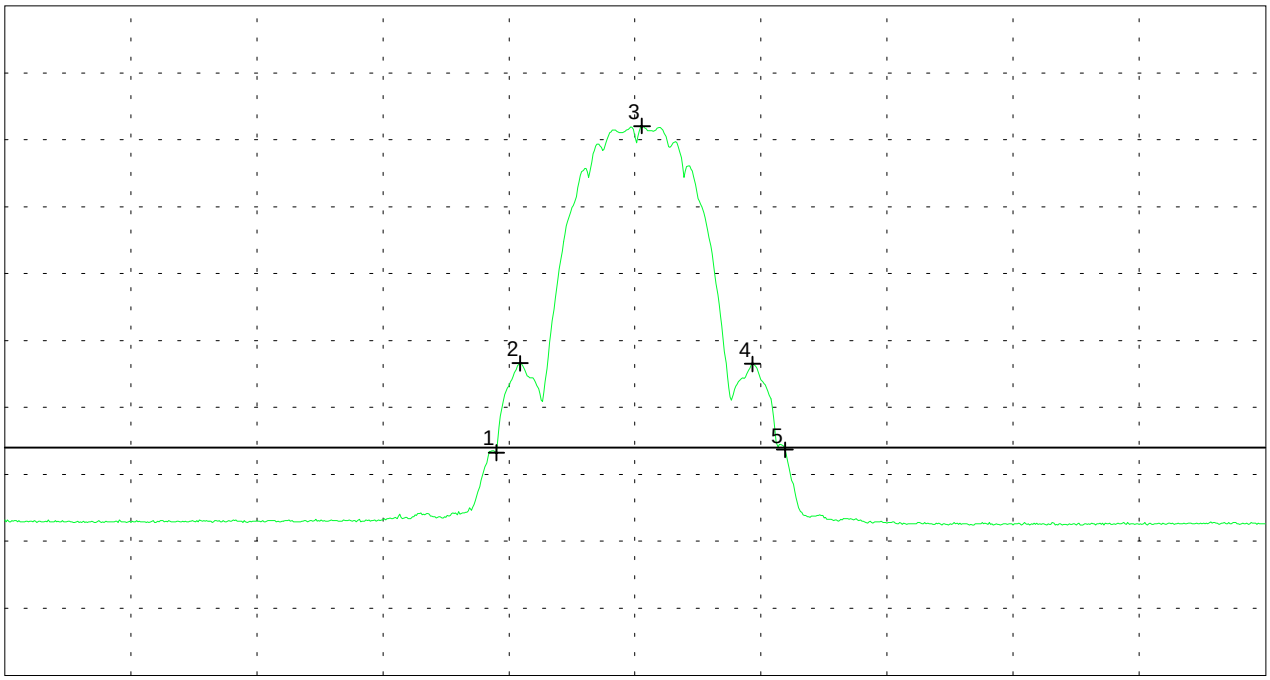
| | | |
|---|---|---|
| No. 1 | 2.428167 GHz | 53.07 dBµV/m |
| No. 2 | 2.431500 GHz | 52.95 dBµV/m |
| No. 3 | 2.443000 GHz | 89.59 dBµV/m |
| No. 4 | 2.456000 GHz | 54.42 dBµV/m |
| No. 5 | 2.456333 GHz | 53.94 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.442 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.367 GHz Stop 2.517 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.425500 GHz | 53.22 dBµV/m |
| No. 2 | 2.428333 GHz | 66.58 dBµV/m |
| No. 3 | 2.442833 GHz | 102.06 dBµV/m |
| No. 4 | 2.456000 GHz | 66.48 dBµV/m |
| No. 5 | 2.459833 GHz | 53.66 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz
# according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Detector: Peak

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 1.0638 | vertical | 23.1 | 0.5 | 26.0 | 49.5 | 74 |
| 1.1952 | vertical | 23.7 | 0.5 | 26.3 | 50.4 | 74 |
| 1.3352 | vertical | 24.0 | 0.5 | 26.5 | 50.9 | 74 |
| 1.5973 | vertical | 20.2 | 0.5 | 27.2 | 48.0 | 74 |
| 2.4518 | vertical | 50.3 | 0.6 | 20.7 | 71.6 | OB |
| 2.4628 | vertical | 87.1 | 0.6 | 20.7 | 108.5 | OB |
| 2.4733 | vertical | 51.7 | 0.6 | 20.7 | 73.0 | OB |
| 2.4835 | vertical | 33.1 | 0.6 | 20.7 | 54.4 | 74 |
| 2.4885 | vertical | 34.5 | 0.6 | 20.7 | 55.8 | 74 |
| 2.5000 | vertical | 31.8 | 0.6 | 20.7 | 53.1 | 74 |
| 2.7530 | vertical | 20.7 | 0.6 | 23.7 | 45.0 | 74 |
| 3.9901 | horizontal | 9.9 | 0.8 | 27.2 | 37.9 | 74 |
| 4.9296 | horizontal | 18.3 | 0.9 | 27.3 | 46.5 | 74 |
| 7.3906 | horizontal | 8.4 | 1.1 | 30.0 | 39.4 | 74 |

**Note:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 108.5 dBµV/m.

**Result:** The limits are kept

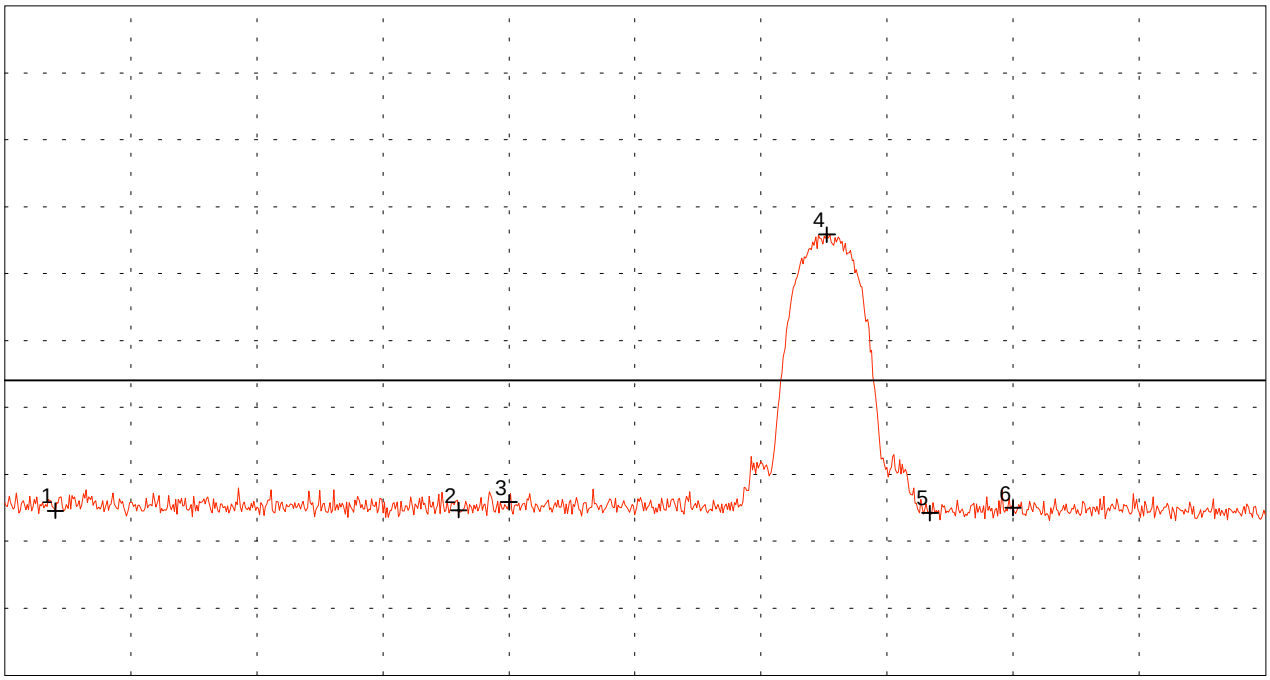
# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 130 dBµV/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB




Start 2.300 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.550 GHz
SWP 20 ms

Multi Marker List

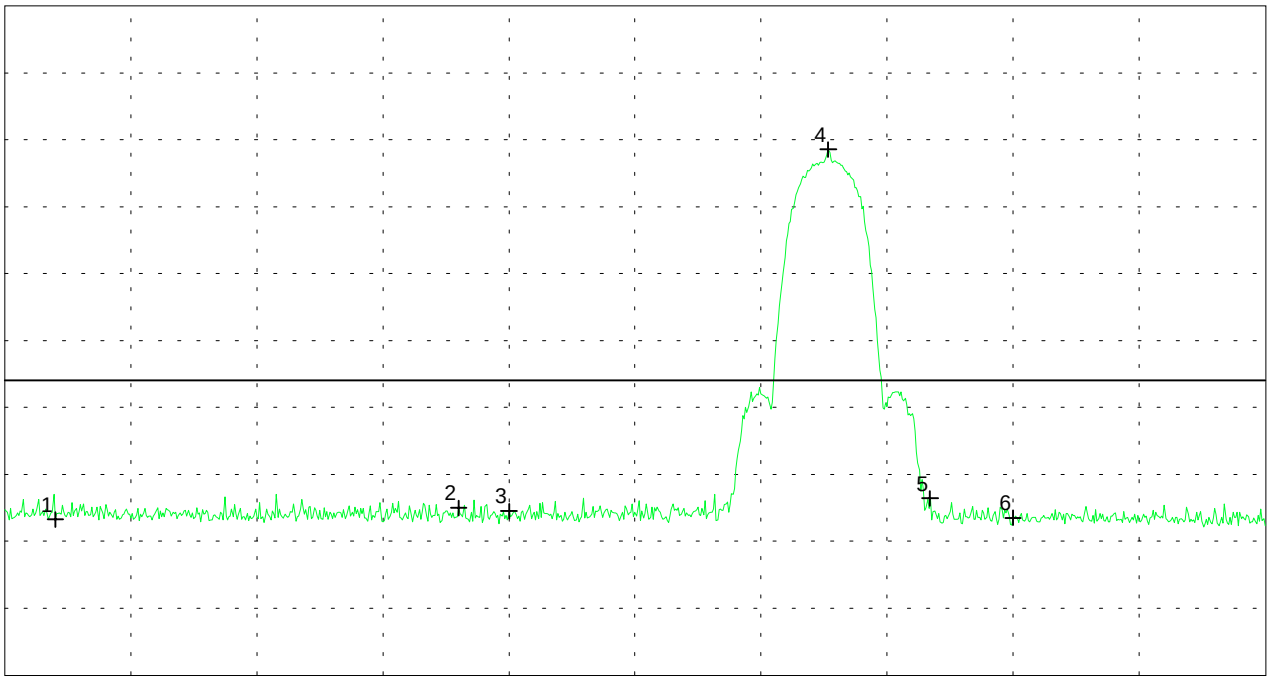
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 54.55 dBµV/m |
| No. 2 | 2.390000 GHz | 54.62 dBµV/m |
| No. 3 | 2.400000 GHz | 55.82 dBµV/m |
| No. 4 | 2.463056 GHz | 95.84 dBµV/m |
| No. 5 | 2.483500 GHz | 54.22 dBµV/m |
| No. 6 | 2.500000 GHz | 54.95 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.300 GHz Stop 2.550 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 53.23 dBµV/m |
| No. 2 | 2.390000 GHz | 54.98 dBµV/m |
| No. 3 | 2.400000 GHz | 54.50 dBµV/m |
| No. 4 | 2.463333 GHz | 108.54 dBµV/m |
| No. 5 | 2.483500 GHz | 56.38 dBµV/m |
| No. 6 | 2.500000 GHz | 53.48 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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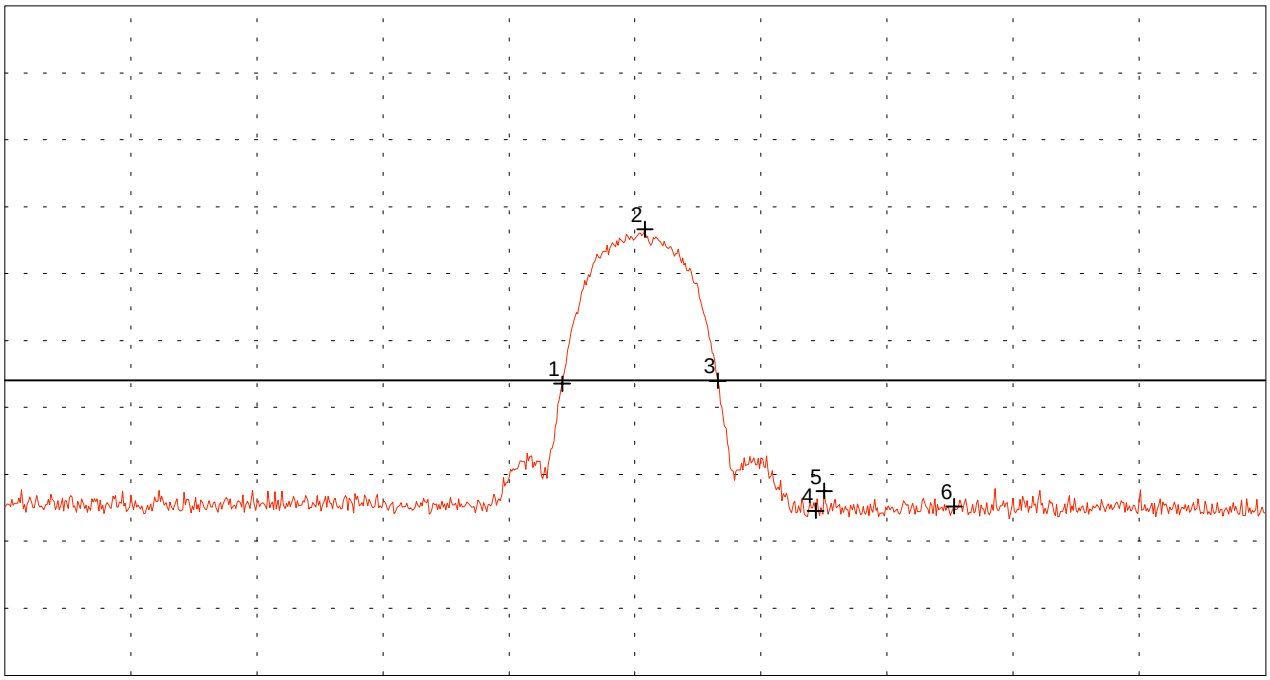
Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.387 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.453333 GHz | 73.54 dBµV/m |
| No. 2 | 2.463167 GHz | 96.62 dBµV/m |
| No. 3 | 2.471833 GHz | 73.95 dBµV/m |
| No. 4 | 2.483500 GHz | 54.55 dBµV/m |
| No. 5 | 2.484500 GHz | 57.49 dBµV/m |
| No. 6 | 2.500000 GHz | 55.23 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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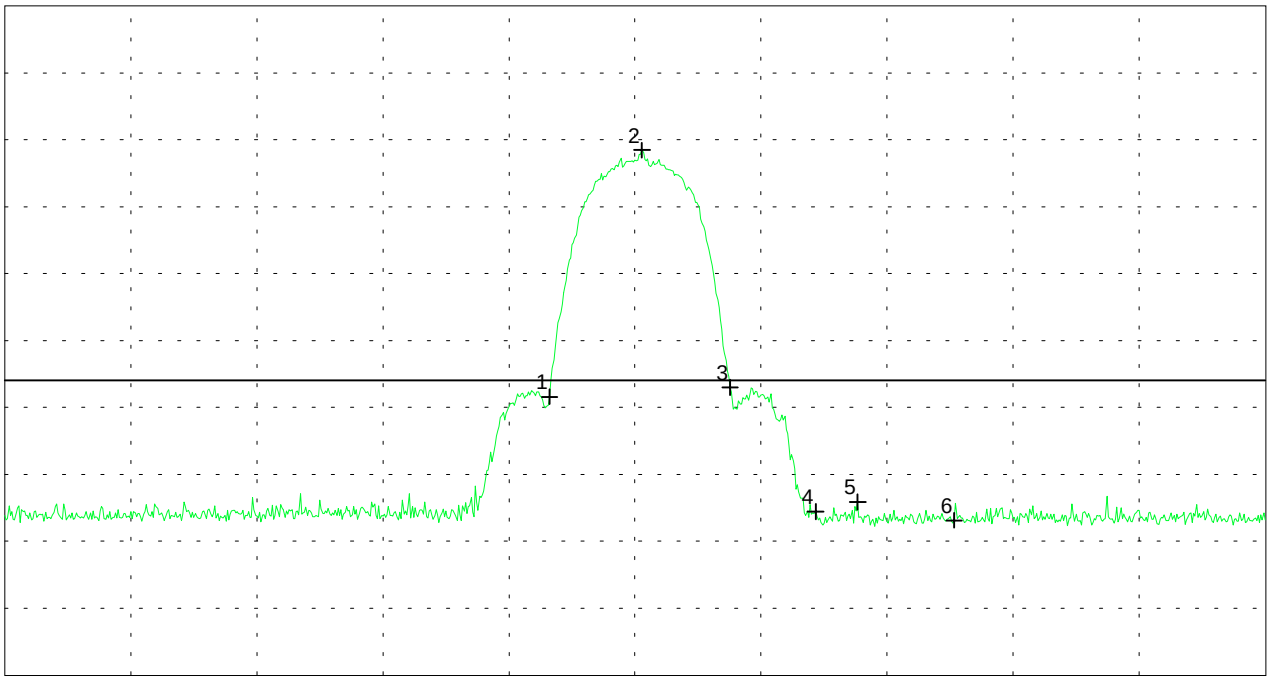
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.387 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.451833 GHz | 71.59 dBµV/m |
| No. 2 | 2.462833 GHz | 108.46 dBµV/m |
| No. 3 | 2.473333 GHz | 72.98 dBµV/m |
| No. 4 | 2.483500 GHz | 54.42 dBµV/m |
| No. 5 | 2.488500 GHz | 55.84 dBµV/m |
| No. 6 | 2.500000 GHz | 53.10 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz
# according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Detector: Average

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 1.0614 | vertical | < 15.8 | 0.5 | 26.0 | < 42.3 | 54 |
| 1.1944 | vertical | < 17.4 | 0.5 | 26.2 | < 44.1 | 54 |
| 1.3337 | vertical | < 17.5 | 0.5 | 26.5 | < 44.5 | 54 |
| 1.5934 | vertical | < 12.9 | 0.5 | 27.2 | < 40.6 | 54 |
| 1.6619 | vertical | < 14.1 | 0.5 | 27.5 | < 42.2 | 54 |
| 2.4452 | vertical | 32.4 | 0.6 | 20.7 | 53.7 | OB |
| 2.4620 | vertical | 80.6 | 0.6 | 20.7 | 101.9 | OB |
| 2.4797 | vertical | 32.5 | 0.6 | 20.7 | 53.8 | OB |
| 2.4835 | vertical | 22.2 | 0.6 | 20.7 | 43.5 | 54 |
| 2.4860 | vertical | 22.3 | 0.6 | 20.7 | 43.6 | 54 |
| 2.5000 | vertical | 21.2 | 0.6 | 20.7 | 42.6 | 54 |
| 2.7515 | vertical | < 14.4 | 0.6 | 23.7 | < 38.7 | 54 |
| 4.9241 | horizontal | 14.2 | 0.9 | 27.3 | 42.4 | 54 |

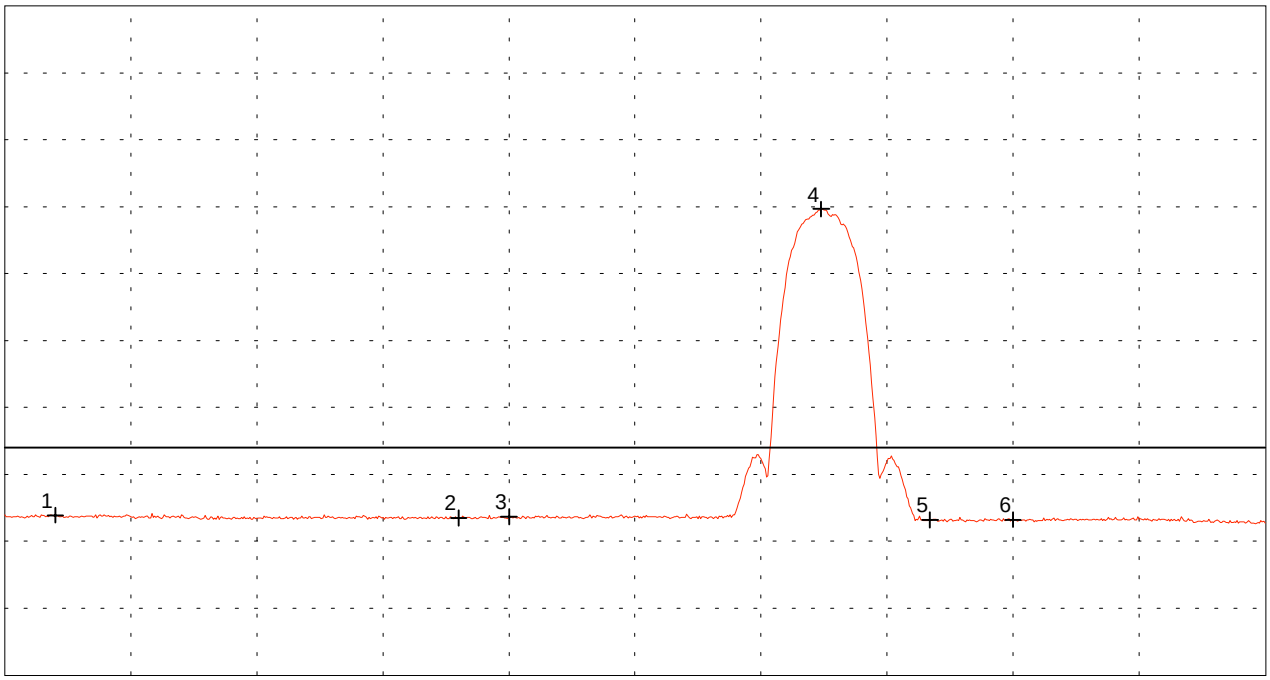
**Note:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 101.9 dBµV/m.

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.300 GHz Stop 2.550 GHz
RBW 1 MHz VBW 3 kHz SWP 260 ms

Multi Marker List

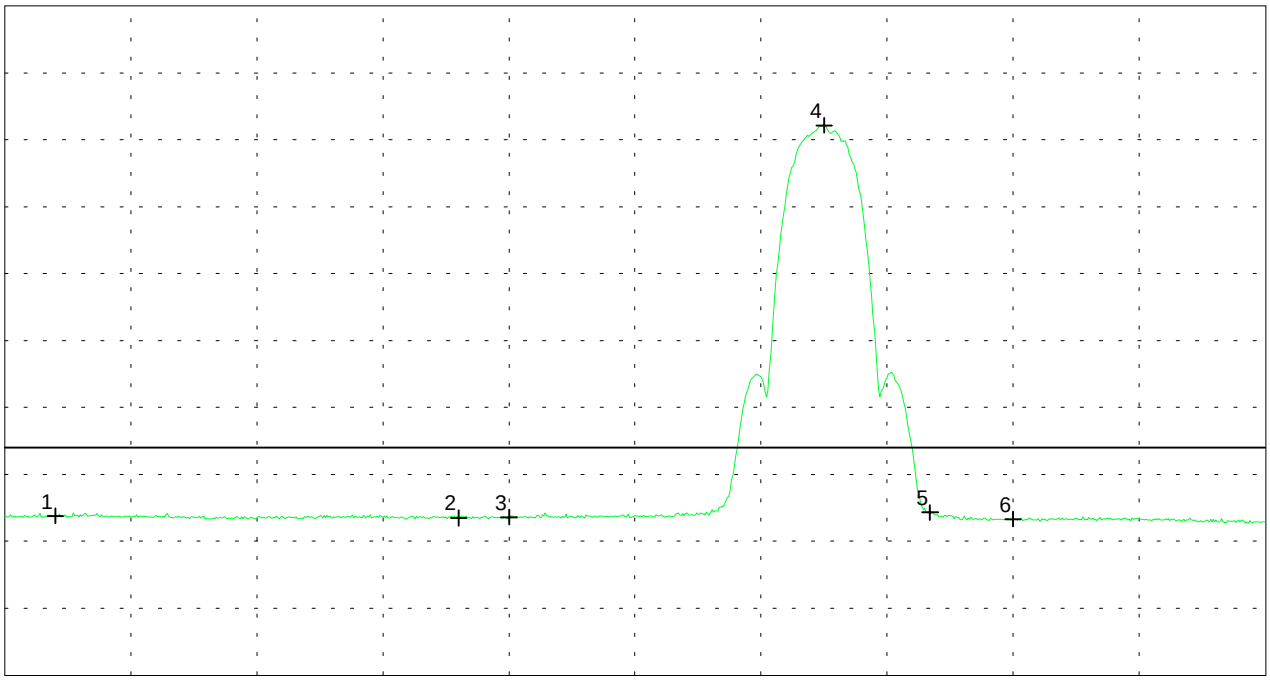
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 43.88 dBµV/m |
| No. 2 | 2.390000 GHz | 43.47 dBµV/m |
| No. 3 | 2.400000 GHz | 43.65 dBµV/m |
| No. 4 | 2.461944 GHz | 89.66 dBµV/m |
| No. 5 | 2.483500 GHz | 43.17 dBµV/m |
| No. 6 | 2.500000 GHz | 43.19 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.300 GHz Stop 2.550 GHz
RBW 1 MHz VBW 3 kHz SWP 260 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 43.78 dBµV/m |
| No. 2 | 2.390000 GHz | 43.45 dBµV/m |
| No. 3 | 2.400000 GHz | 43.58 dBµV/m |
| No. 4 | 2.462500 GHz | 102.13 dBµV/m |
| No. 5 | 2.483500 GHz | 44.29 dBµV/m |
| No. 6 | 2.500000 GHz | 43.30 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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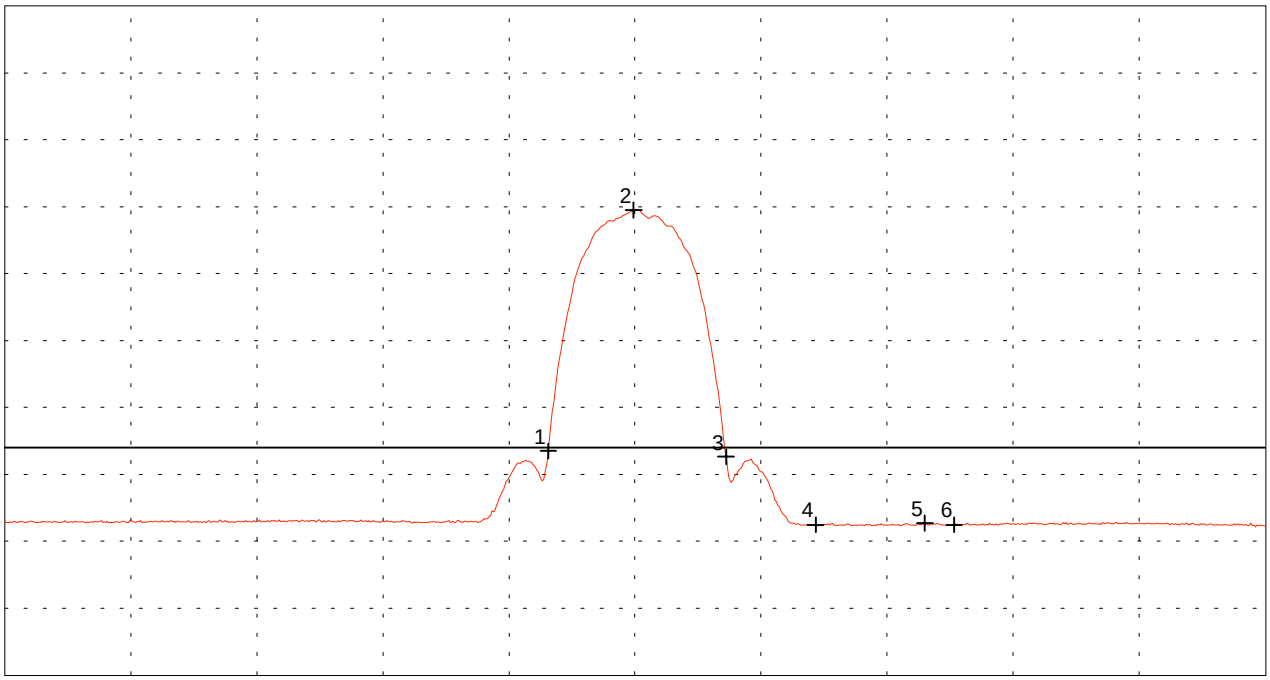
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.387 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.451667 GHz | 53.48 dBµV/m |
| No. 2 | 2.461833 GHz | 89.49 dBµV/m |
| No. 3 | 2.472833 GHz | 52.62 dBµV/m |
| No. 4 | 2.483500 GHz | 42.43 dBµV/m |
| No. 5 | 2.496500 GHz | 42.69 dBµV/m |
| No. 6 | 2.500000 GHz | 42.46 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
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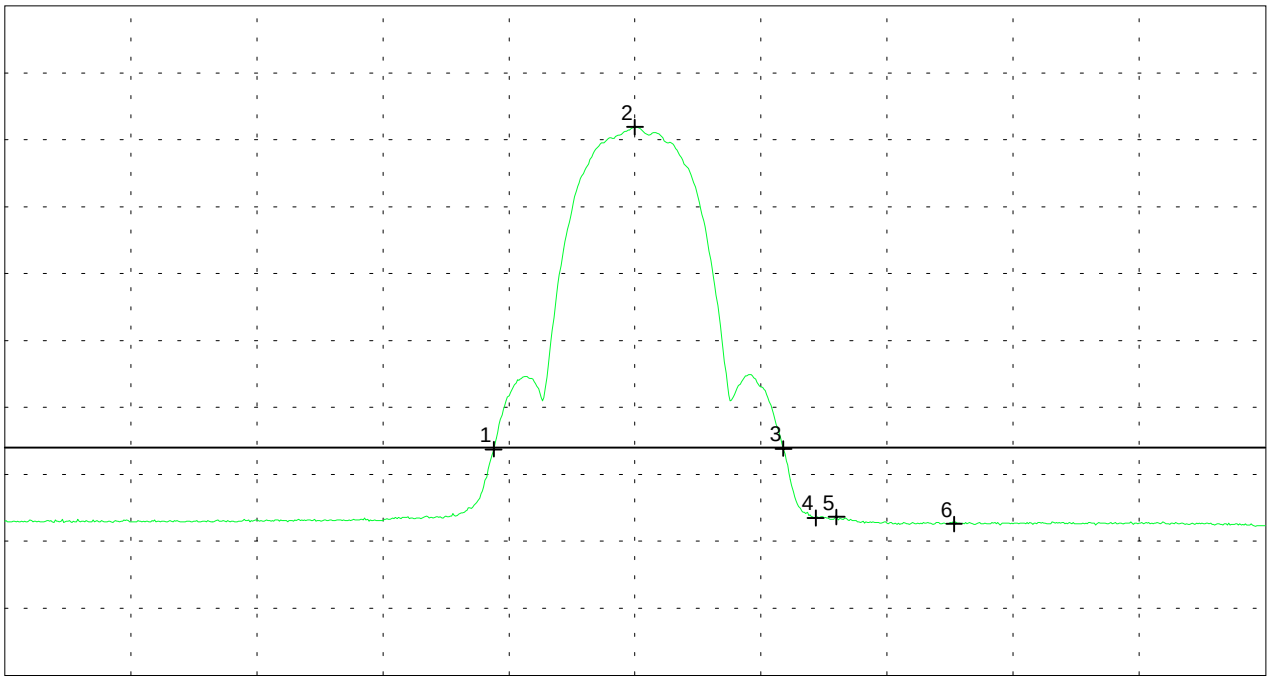
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.387 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.445167 GHz | 53.71 dBµV/m |
| No. 2 | 2.462000 GHz | 101.88 dBµV/m |
| No. 3 | 2.479667 GHz | 53.83 dBµV/m |
| No. 4 | 2.483500 GHz | 43.47 dBµV/m |
| No. 5 | 2.486000 GHz | 43.60 dBµV/m |
| No. 6 | 2.500000 GHz | 42.56 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 | |

# Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 2 Mbps

- TX mode with f = 2.462 GHz

Detector: Peak

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 2.4520 | vertical | 51.8 | 0.6 | 20.7 | 73.1 | OB |
| 2.4617 | vertical | 84.0 | 0.6 | 20.7 | 105.4 | OB |
| 2.4732 | vertical | 52.0 | 0.6 | 20.7 | 73.3 | OB |
| 2.4835 | vertical | 31.9 | 0.6 | 20.7 | 53.2 | 74 |
| 2.4837 | vertical | 34.1 | 0.6 | 20.7 | 55.5 | 74 |
| 2.5000 | vertical | 32.1 | 0.6 | 20.7 | 53.4 | 74 |
| 4.9241 | horizontal | 21.1 | 0.9 | 27.3 | 49.3 | 74 |

**Note 1:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 105.4 dBµV/m.

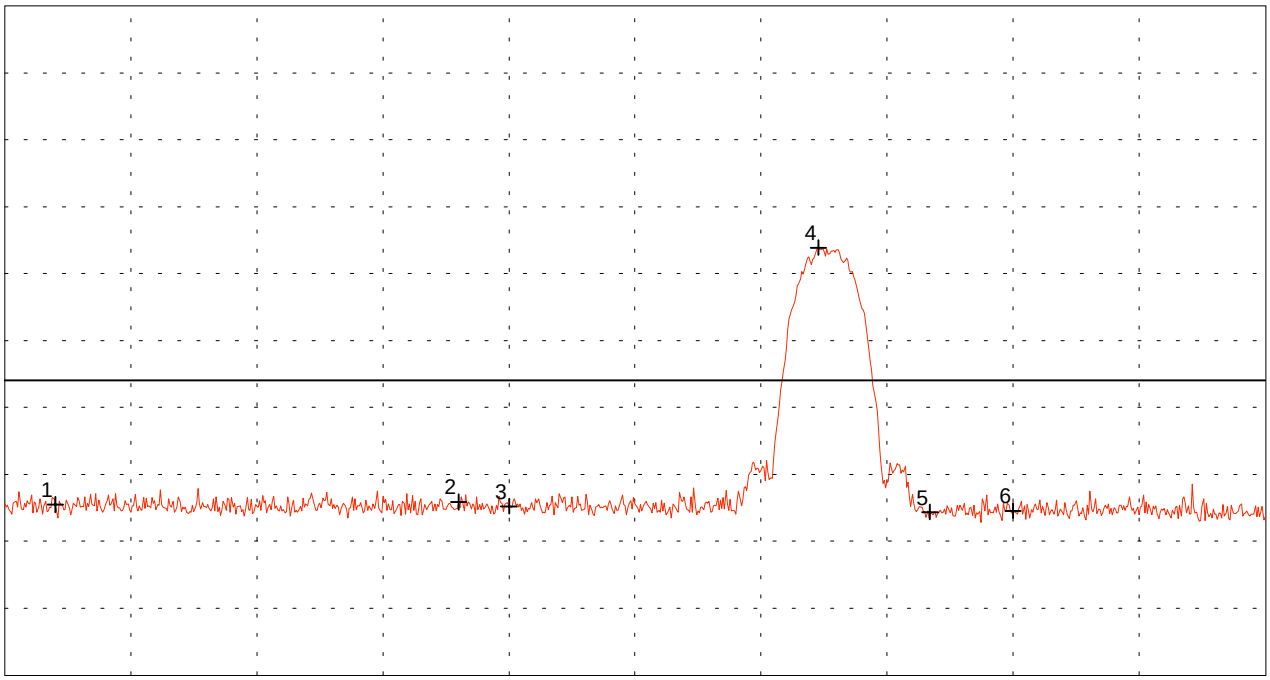
**Note 2:** Extent of testing harmonics with 2 Mbps selected according to results of radiated emission with 11 Mbps (peak)

**Result:** The limits are kept

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.300 GHz Stop 2.550 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

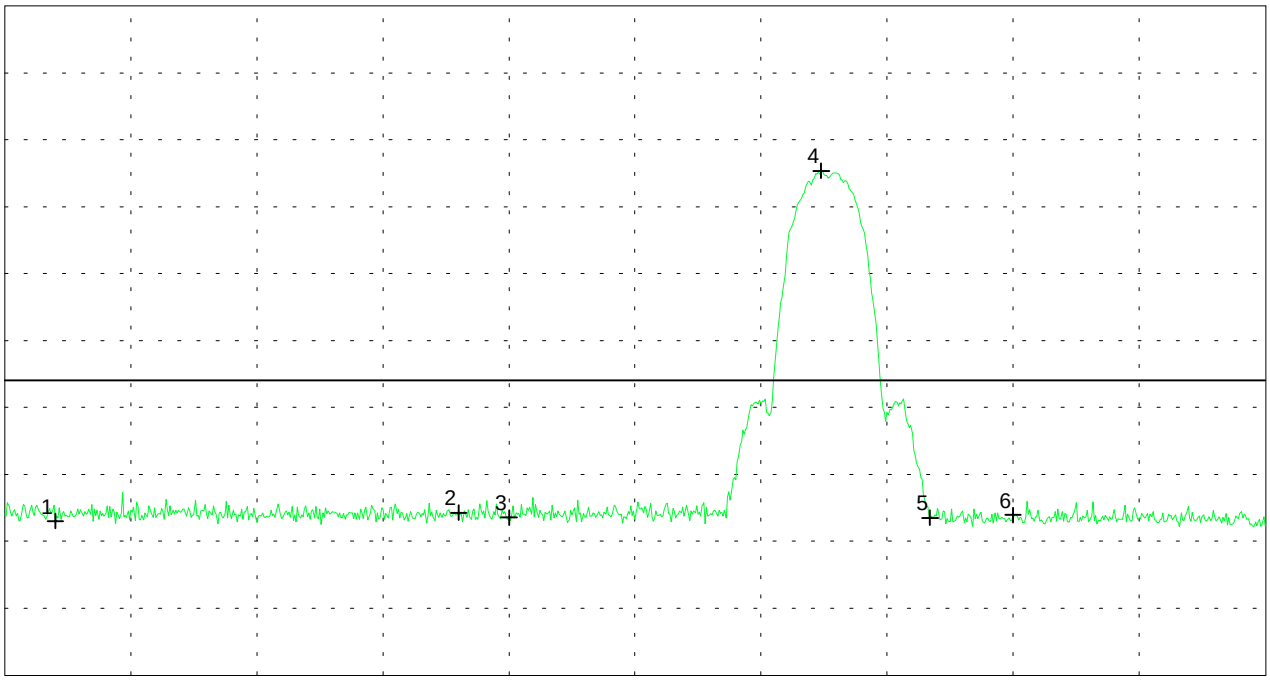
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 55.46 dBµV/m |
| No. 2 | 2.390000 GHz | 55.84 dBµV/m |
| No. 3 | 2.400000 GHz | 55.21 dBµV/m |
| No. 4 | 2.461389 GHz | 93.88 dBµV/m |
| No. 5 | 2.483500 GHz | 54.37 dBµV/m |
| No. 6 | 2.500000 GHz | 54.55 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.300 GHz Stop 2.550 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 53.00 dBµV/m |
| No. 2 | 2.390000 GHz | 54.27 dBµV/m |
| No. 3 | 2.400000 GHz | 53.53 dBµV/m |
| No. 4 | 2.461944 GHz | 105.36 dBµV/m |
| No. 5 | 2.483500 GHz | 53.48 dBµV/m |
| No. 6 | 2.500000 GHz | 53.91 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
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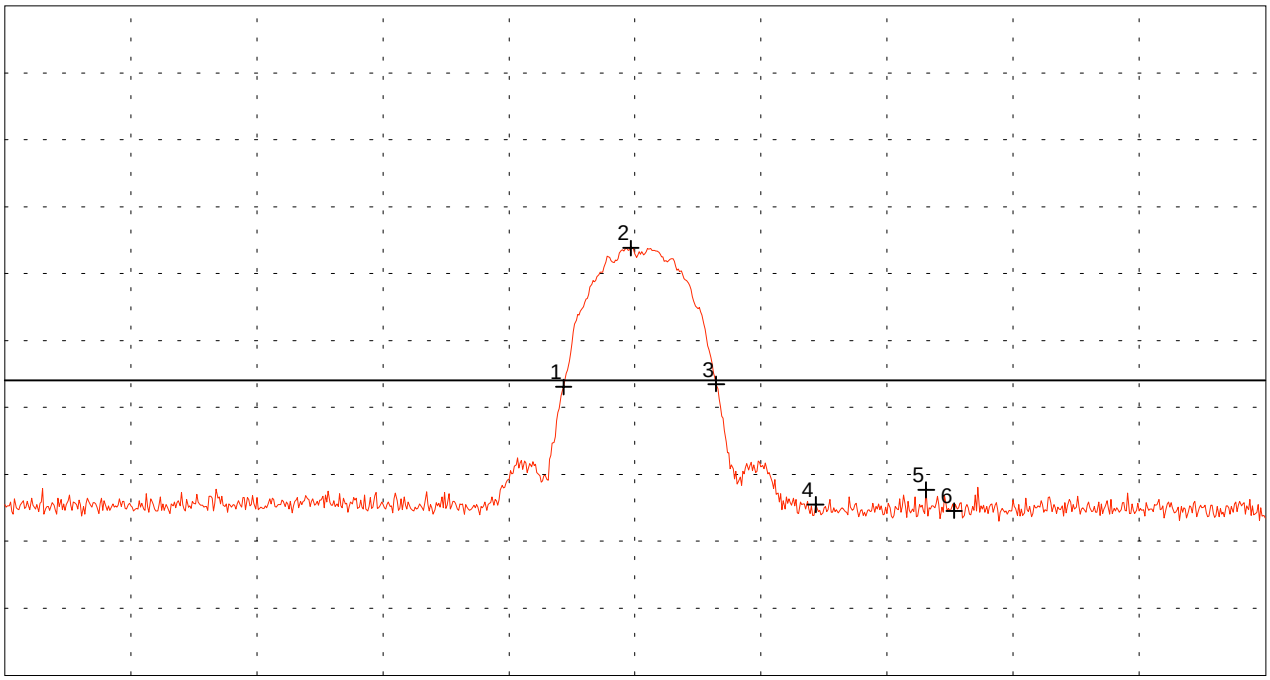
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.387 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

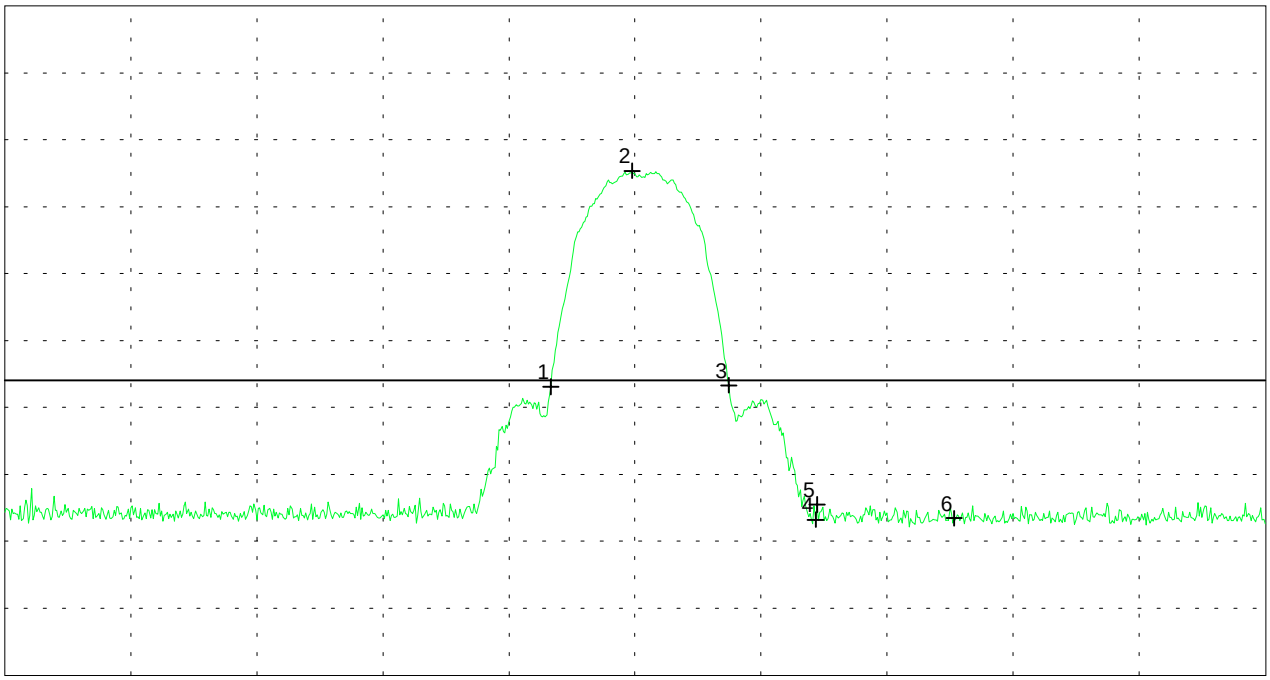
| | | |
|---|---|---|
| No. 1 | 2.453500 GHz | 73.06 dBµV/m |
| No. 2 | 2.461500 GHz | 93.83 dBµV/m |
| No. 3 | 2.471667 GHz | 73.49 dBµV/m |
| No. 4 | 2.483500 GHz | 55.48 dBµV/m |
| No. 5 | 2.496667 GHz | 57.67 dBµV/m |
| No. 6 | 2.500000 GHz | 54.55 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| | |
| | |
| | |

Ref.Level 130 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.387 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 MHz SWP 20 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.452000 GHz | 73.09 dBµV/m |
| No. 2 | 2.461667 GHz | 105.36 dBµV/m |
| No. 3 | 2.473167 GHz | 73.31 dBµV/m |
| No. 4 | 2.483500 GHz | 53.18 dBµV/m |
| No. 5 | 2.483667 GHz | 55.46 dBµV/m |
| No. 6 | 2.500000 GHz | 53.43 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C (§15.247.c, §15.209, §15.205.a,b)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 2 Mbps

- TX mode with f = 2.462 GHz

Detector: Average

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 2.4455 | vertical | 31.9 | 0.6 | 20.7 | 53.2 | OB |
| 2.4628 | vertical | 80.8 | 0.6 | 20.7 | 102.1 | OB |
| 2.4800 | vertical | 32.6 | 0.6 | 20.7 | 53.9 | OB |
| 2.4835 | vertical | 22.4 | 0.6 | 20.7 | 43.7 | 54 |
| 2.4878 | vertical | 22.5 | 0.6 | 20.7 | 43.8 | 54 |
| 2.5000 | vertical | 21.3 | 0.6 | 20.7 | 42.7 | 54 |
| 4.9241 | horizontal | 18.1 | 0.9 | 27.3 | 46.3 | 54 |

**Note 1:** OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 102.1 dBµV/m.

**Note 2:** Extent of testing harmonics with 2 Mbps selected according to results of radiated emission with 11 Mbps (peak)

**Result:** The limits are kept

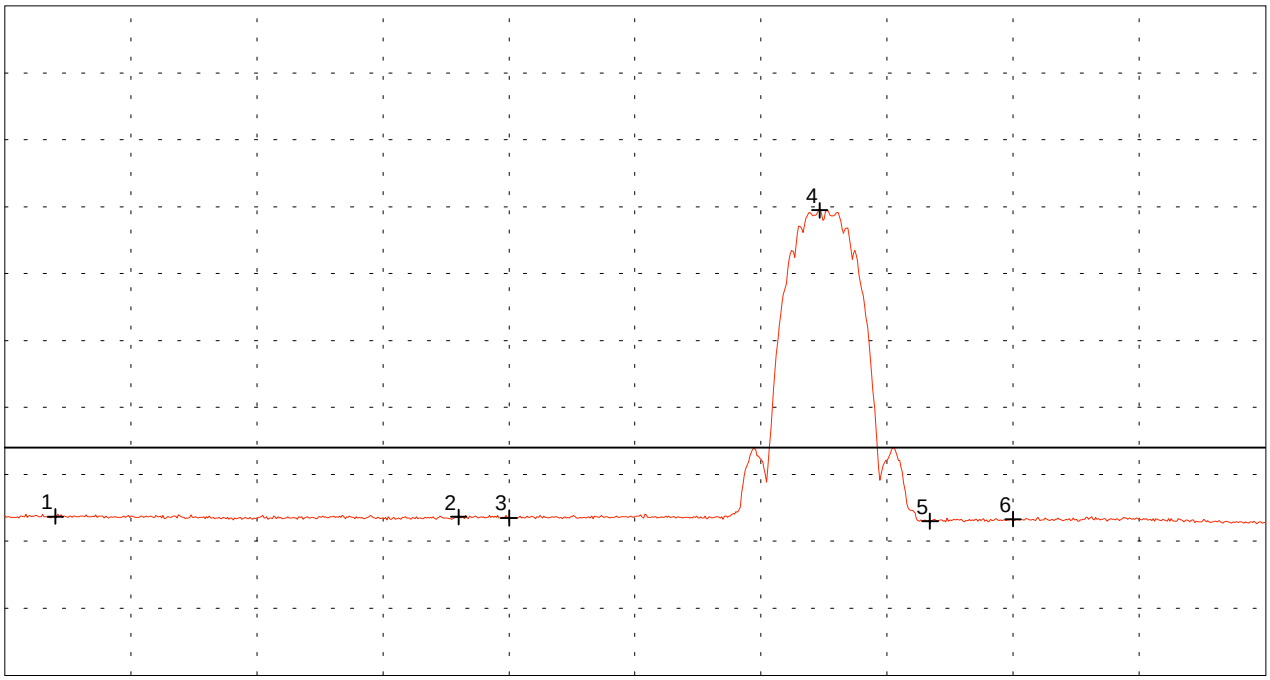
# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 120 dBµV/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB




Start 2.300 GHz
RBW 1 MHz

VBW 3 kHz

Stop 2.550 GHz
SWP 260 ms

Multi Marker List

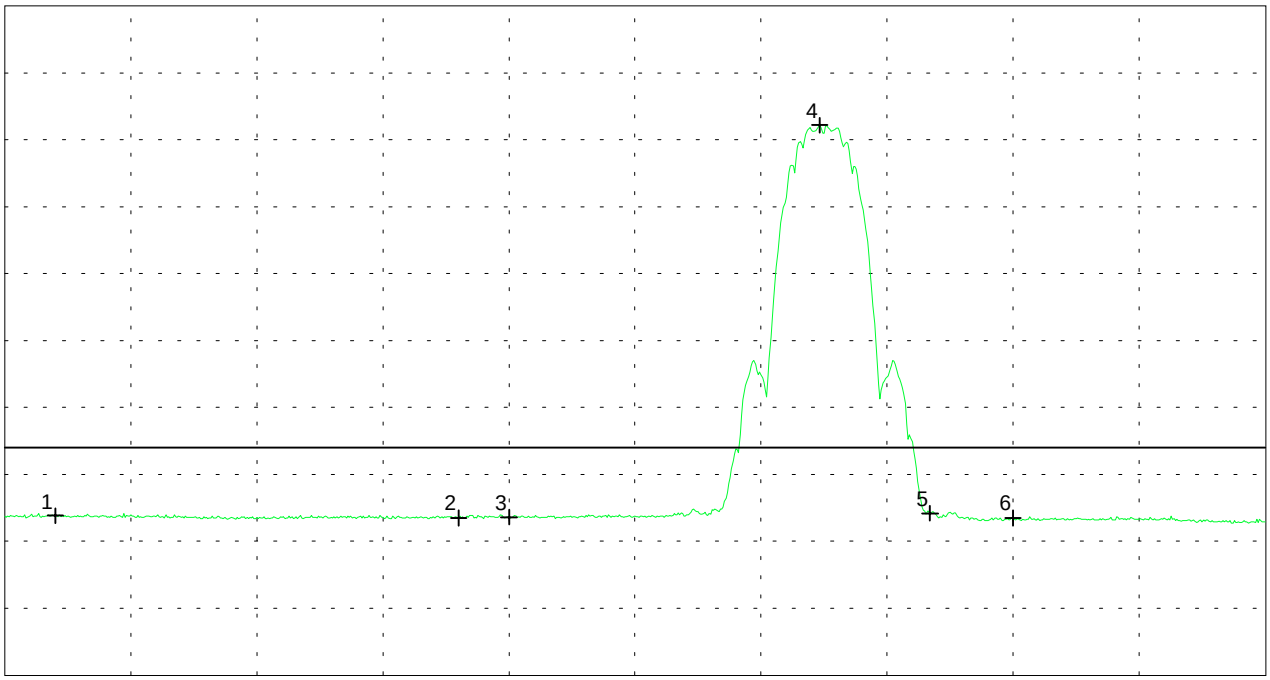
| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 43.68 dBµV/m |
| No. 2 | 2.390000 GHz | 43.60 dBµV/m |
| No. 3 | 2.400000 GHz | 43.47 dBµV/m |
| No. 4 | 2.461667 GHz | 89.46 dBµV/m |
| No. 5 | 2.483500 GHz | 42.97 dBµV/m |
| No. 6 | 2.500000 GHz | 43.32 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
| | |
| Overview scan checking restricted bands around operation band (acc. to §15.205) | |
| | |
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.300 GHz Stop 2.550 GHz
RBW 1 MHz VBW 3 kHz SWP 260 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.310000 GHz | 43.80 dBµV/m |
| No. 2 | 2.390000 GHz | 43.47 dBµV/m |
| No. 3 | 2.400000 GHz | 43.58 dBµV/m |
| No. 4 | 2.461667 GHz | 102.18 dBµV/m |
| No. 5 | 2.483500 GHz | 44.16 dBµV/m |
| No. 6 | 2.500000 GHz | 43.45 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel A (red) = horizontal polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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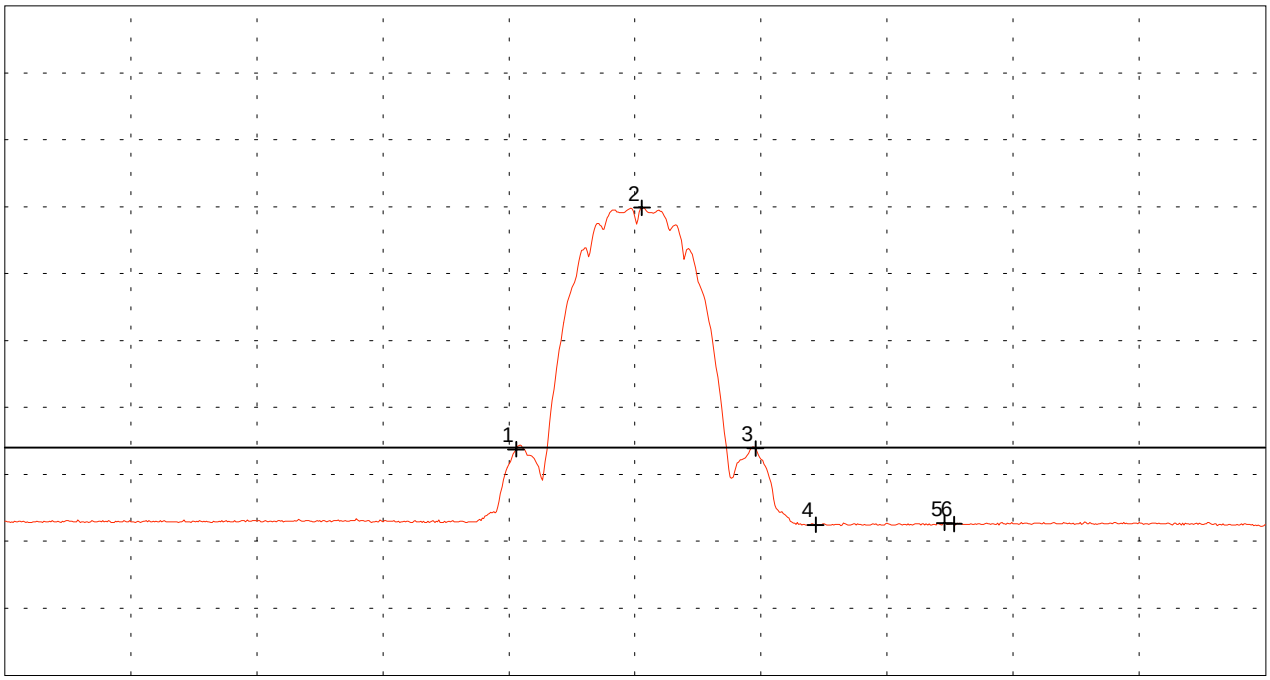
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.387 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.447833 GHz | 53.73 dBµV/m |
| No. 2 | 2.462833 GHz | 89.84 dBµV/m |
| No. 3 | 2.476333 GHz | 53.86 dBµV/m |
| No. 4 | 2.483500 GHz | 42.46 dBµV/m |
| No. 5 | 2.498833 GHz | 42.71 dBµV/m |
| No. 6 | 2.500000 GHz | 42.58 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 | |

# Radiated Emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

| | |
|---|---|
| Model:<br>0111-PC | Mode:<br>- FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 2 Mbps<br>- TX mode with f = 2.462 GHz<br><br>Test distance 3 meters<br><br>Channel B (green) = vertical polarization |
| Serial No.:<br>02UT45300010 | |
| Applicant:<br>Agere Systems Nederland B.V. | |
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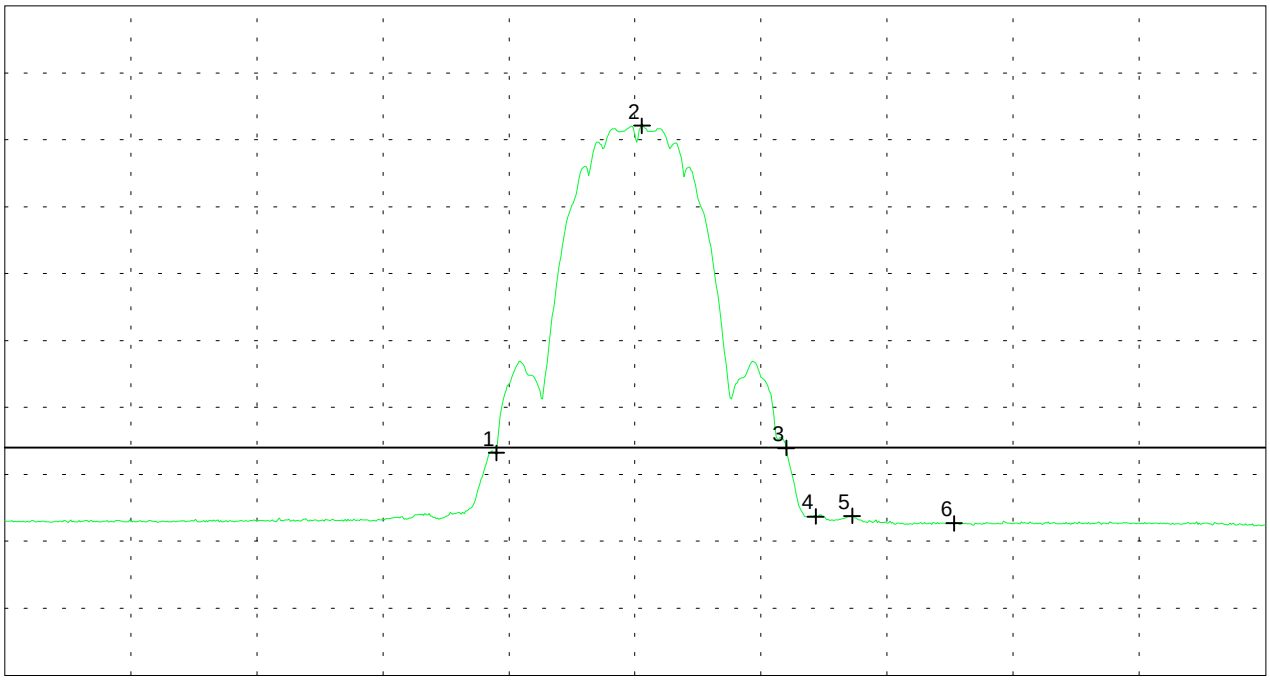
| | |

Ref.Level 120 dBµV/m ATT 5 dB Ref. Offset 21.3 dB
10 dB/Div.




Start 2.387 GHz Stop 2.537 GHz
RBW 1 MHz VBW 1 kHz SWP 460 ms

Multi Marker List

| | | |
|---|---|---|
| No. 1 | 2.445500 GHz | 53.20 dBµV/m |
| No. 2 | 2.462833 GHz | 102.08 dBµV/m |
| No. 3 | 2.480000 GHz | 53.94 dBµV/m |
| No. 4 | 2.483500 GHz | 43.68 dBµV/m |
| No. 5 | 2.487833 GHz | 43.78 dBµV/m |
| No. 6 | 2.500000 GHz | 42.66 dBµV/m |

| | |
|---|---|
| Tested by:<br>Rainer Heller | Project-No.:<br>56305-20559-6 |
| Date:<br>12/16/2002 |  |

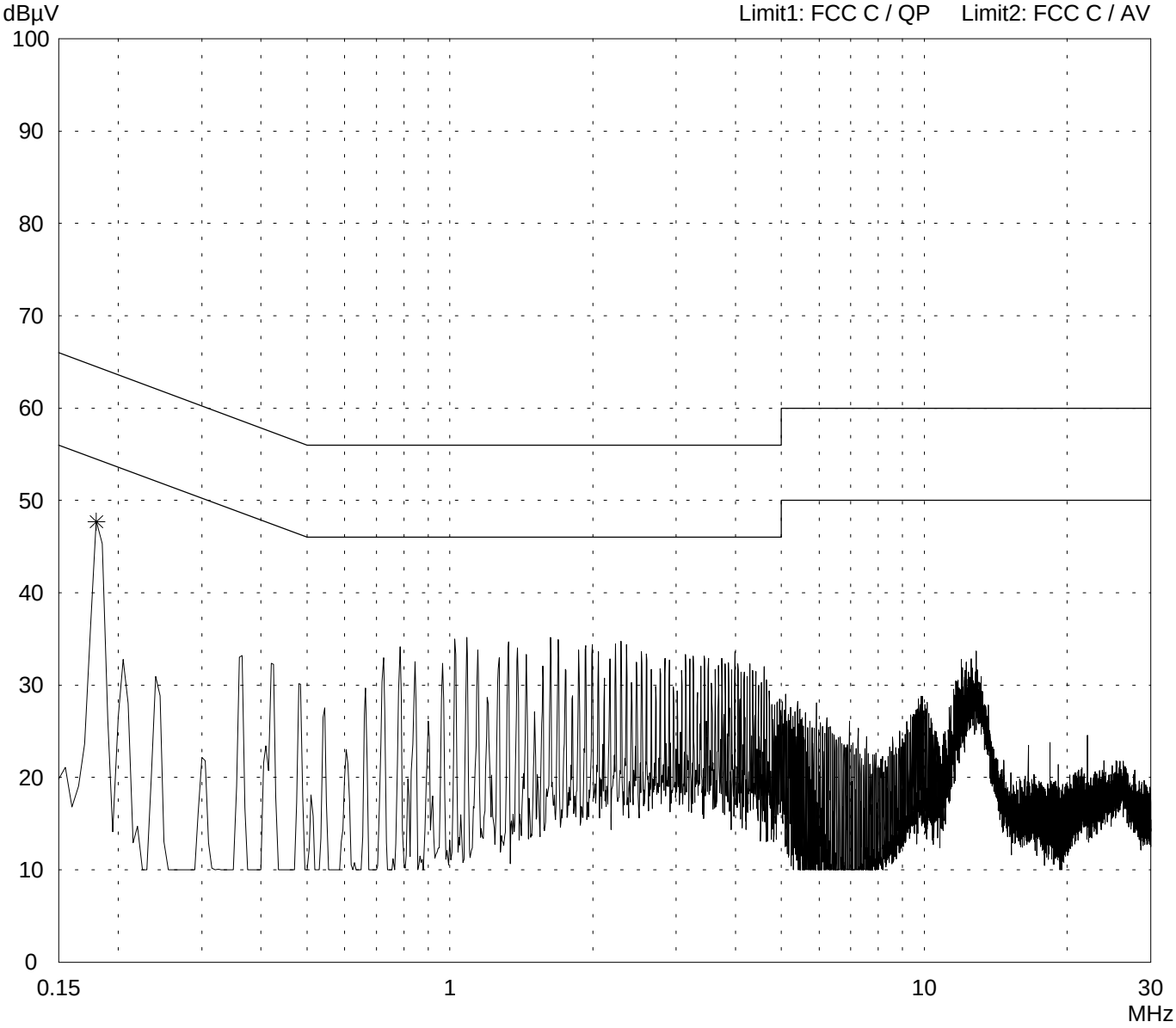
# Test results for

# Receive (RX) mode

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- RX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Shielded room, cabin no. 2 | |
| Tested on: Linecord personal computer (EUT) Phase L1 | |
| Date of test: 12/19/2002 / Operator: R. Heller | Final result with AV detector:<br>0.180 MHz: 47.5 dBµV |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak / Final Results: QP | Final results: 20 dB Margin — 25 Subranges |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |



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# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/19/2002
Operator: R. Heller

Test performed: automatically
File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- RX mode with f = 2.442 GHz

Final result with AV detector:
0.180 MHz: 47.5 dBµV

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV* | *Limit dBµV* | *Limit exceeded* |
|---|---|---|---|---|---|
| 0.18 | 47.7 | | 47.7 | 64.5 | |

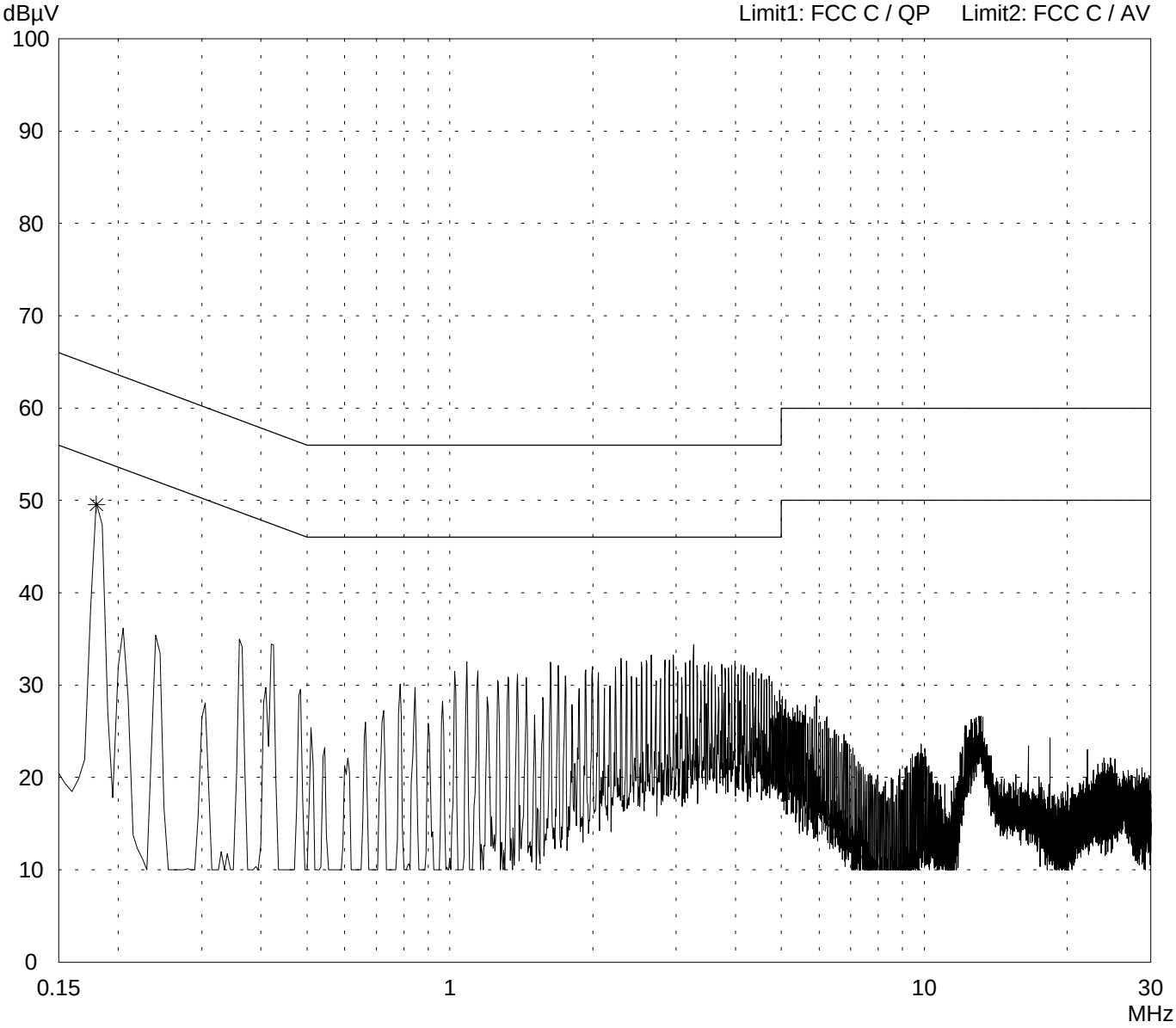
Result:
Limit kept

Project file:
56305-20559-6

# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- RX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Shielded room, cabin no. 2 | |
| Tested on: Linecord personal computer (EUT)<br>Phase N | |
| Date of test: 12/19/2002 / Operator: R. Heller | Final result with AV detector:<br>0.180 MHz: 49.4 dBµV |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak / Final Results: QP | Final results: 20 dB Margin — 25 Subranges |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |



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# Conducted Emission Test 150 kHz - 30 MHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/19/2002

Operator: R. Heller

Test performed: automatically

File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- RX mode with f = 2.442 GHz

Final result with AV detector:
0.180 MHz: 49.4 dBµV

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV* | *Limit dBµV* | *Limit exceeded* |
|---|---|---|---|---|---|
| 0.18 | 49.6 | | 49.6 | 64.5 | |

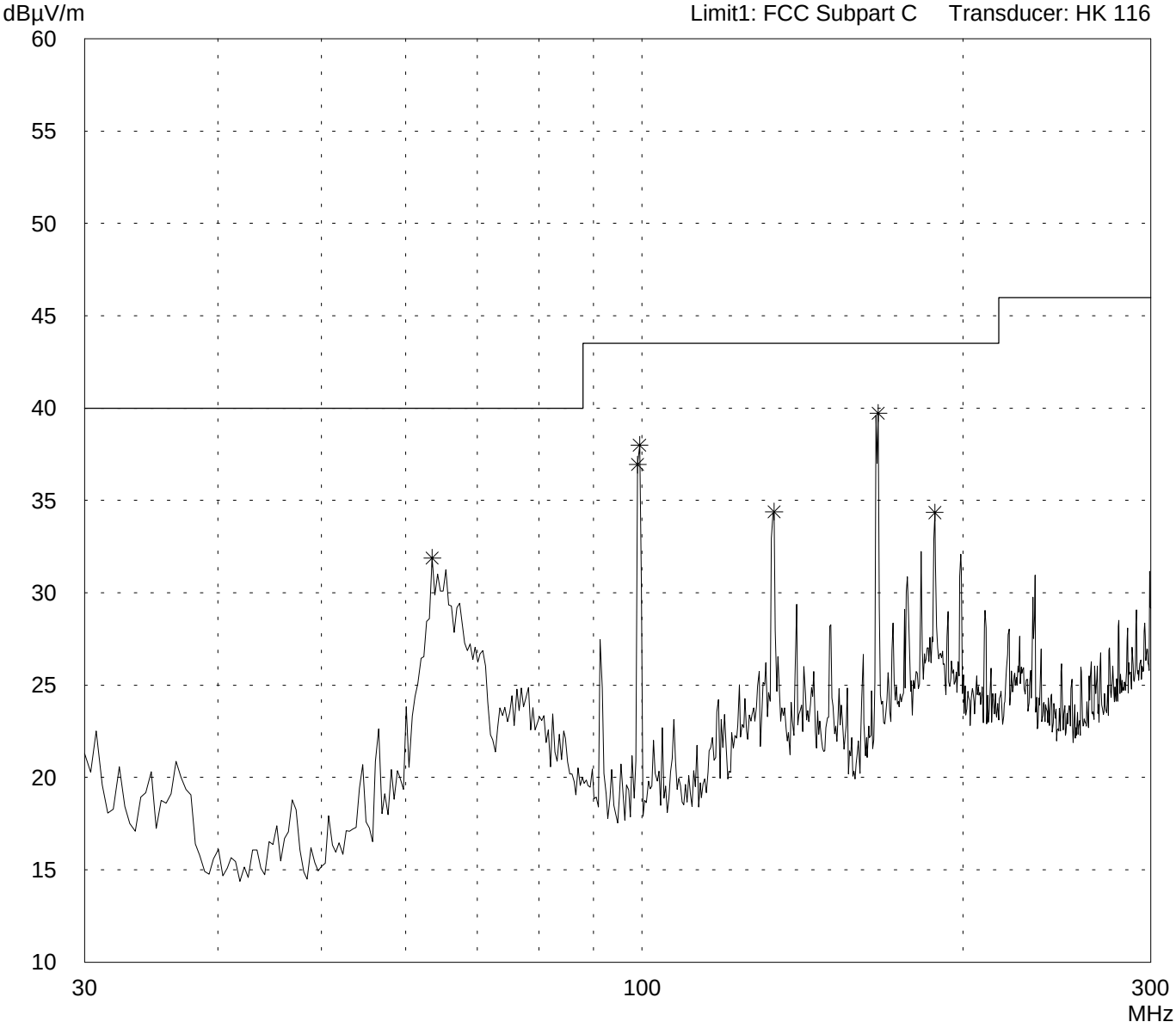
Result:
Limit kept

Project file:
56305-20559-6

# Radiated Emission Test 30 MHz - 300 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- RX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin / 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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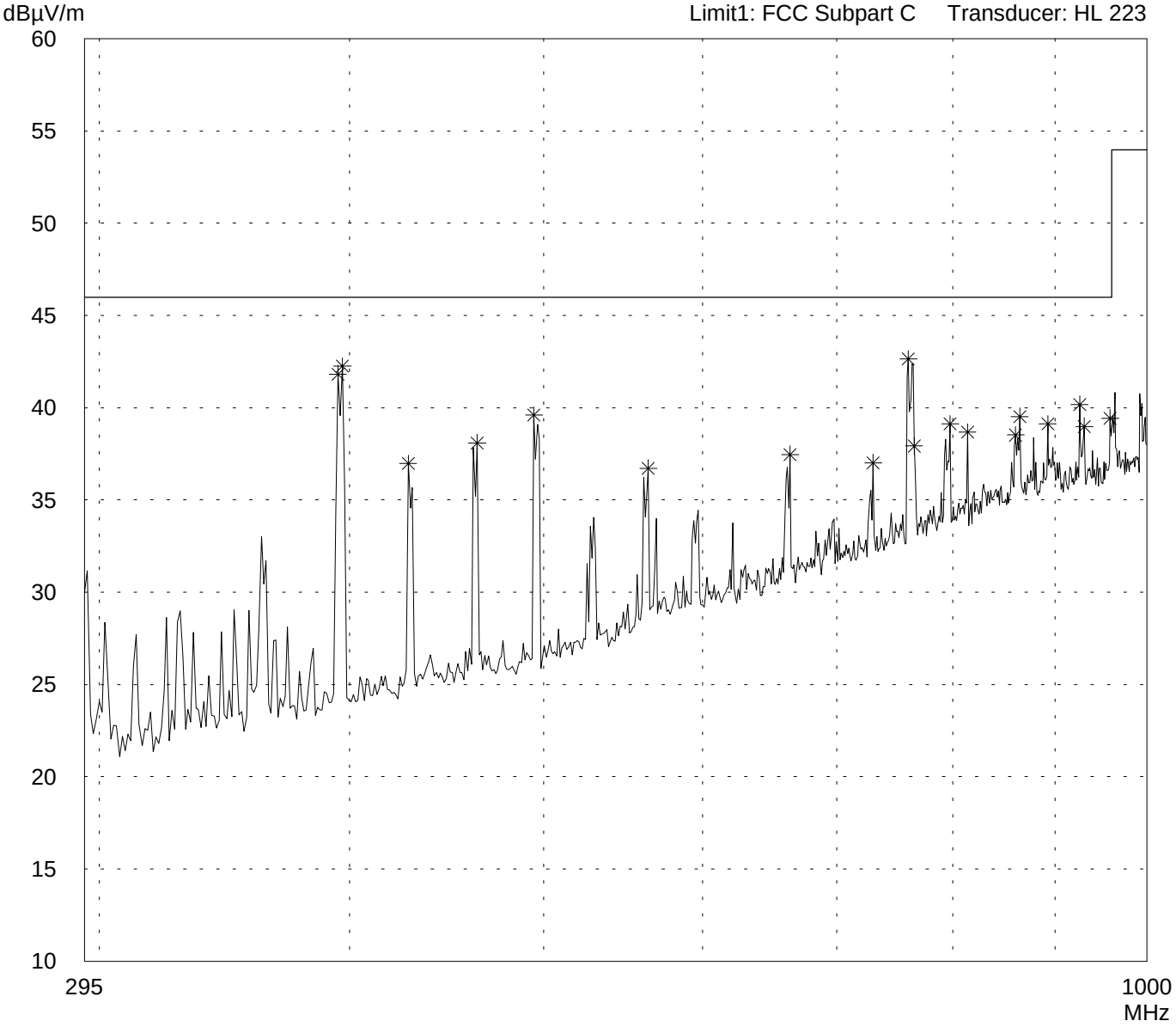
# Radiated Emission Test 295 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- RX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin / 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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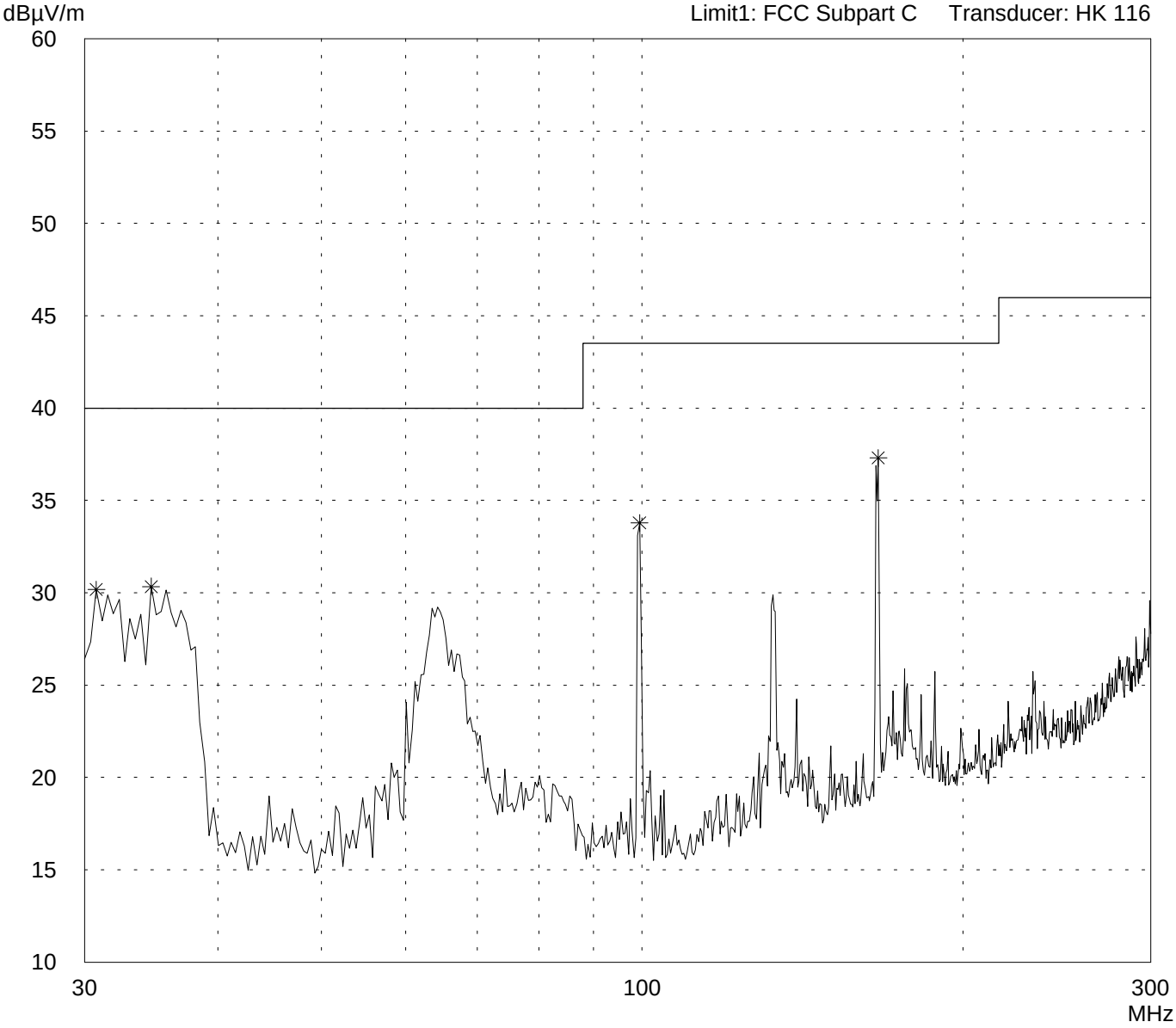
# Radiated Emission Test 30 MHz - 300 MHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- RX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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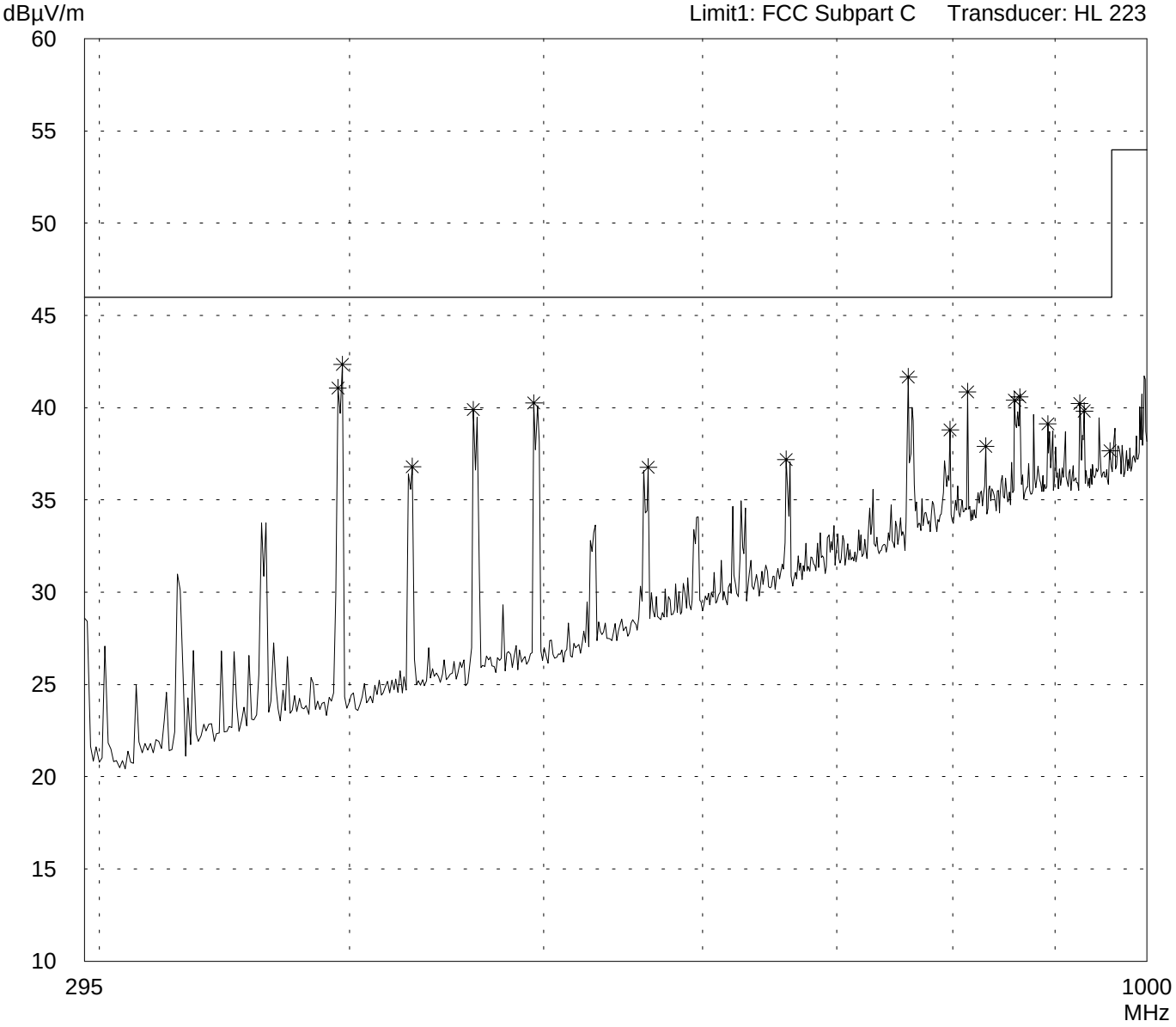
# Radiated Emission Test 295 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- RX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Semi anechoic room, cabin no. 3 | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/12/2002 / Operator: R. Heller | |
| Test performed: automatically / File name: | |

| | |
|---|---|
| Detector: Peak | List of values: 10 dB Margin / 50 Subranges |




| | |
|---|---|
| Result: Prescan | Project file: 56305-20559-6 |



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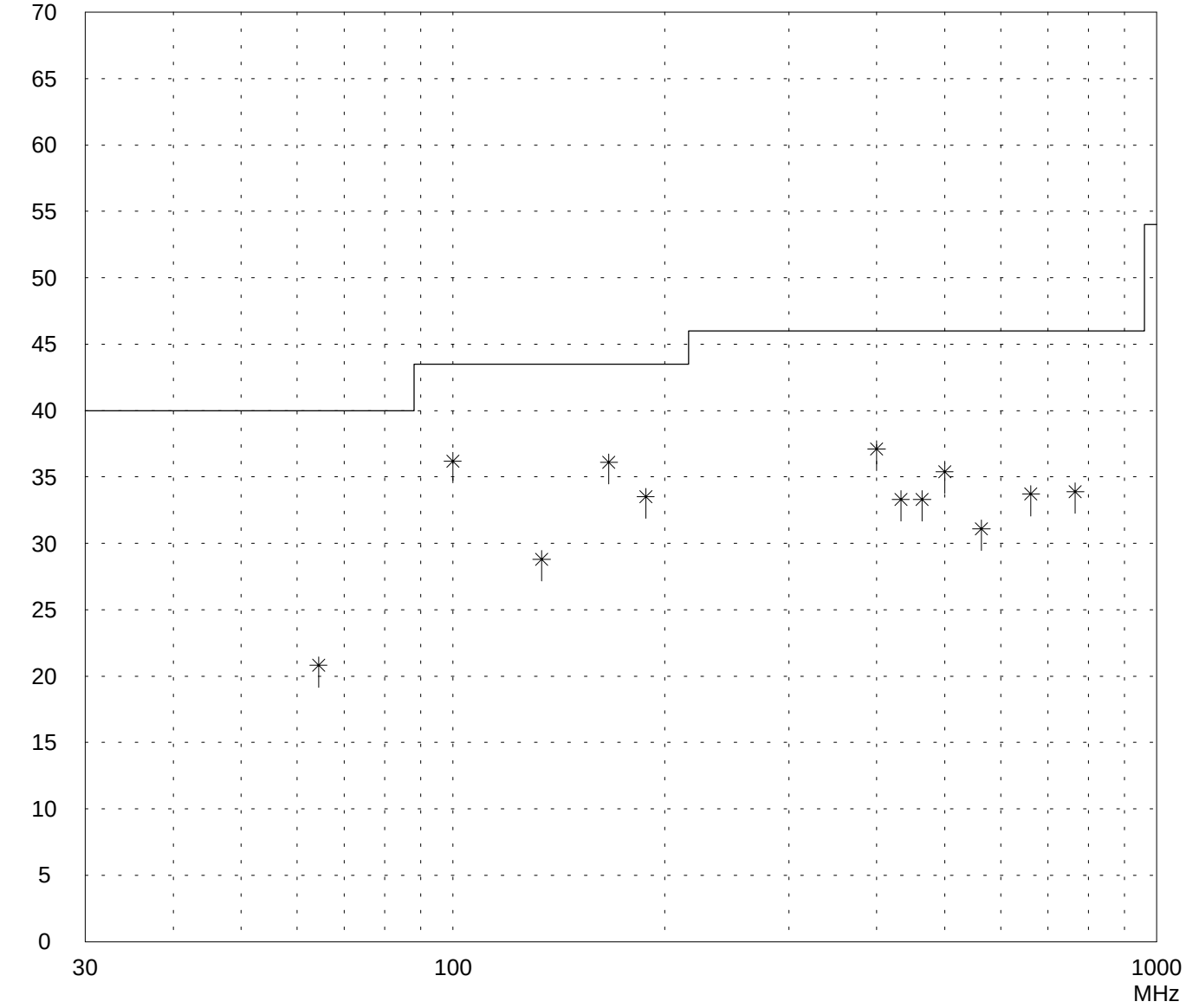
# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- RX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Open area test-site I | |
| Tested on: Test distance 3 meters<br>Horizontal Polarization | |
| Date of test: 12/19/2002 / Operator: R. Heller | |
| Test performed: by hand / File name: | |

| | |
|---|---|
| Detector: Quasi-Peak | List of values: Selected by hand |

dBµV/m  Limit1: FCC Subpart C  Transducer: HK116 / HL223 (3 m)




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |

# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/19/2002
Operator: R. Heller

Test performed: by hand
File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC
- monitor switched off

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- RX mode with f = 2.442 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV/m* | *Limit dBµV/m* | *Limit exceeded* |
|---|---|---|---|---|---|
| 64.40 | 11.0 | 9.8 | 20.8 | 40.0 | |
| 99.88 | 25.5 | 10.7 | 36.2 | 43.5 | |
| 133.56 | 15.5 | 13.3 | 28.8 | 43.5 | |
| 166.48 | 21.6 | 14.5 | 36.1 | 43.5 | |
| 187.38 | 17.6 | 15.9 | 33.5 | 43.5 | |
| 399.68 | 18.4 | 18.7 | 37.1 | 46.0 | |
| 433.00 | 13.8 | 19.5 | 33.3 | 46.0 | |
| 463.97 | 13.2 | 20.1 | 33.3 | 46.0 | |
| 499.58 | 14.7 | 20.7 | 35.4 | 46.0 | |
| 563.40 | 9.4 | 21.7 | 31.1 | 46.0 | |
| 662.78 | 10.0 | 23.7 | 33.7 | 46.0 | |
| 766.13 | 8.9 | 25.0 | 33.9 | 46.0 | |

Result:
Limit kept

Project file:
56305-20559-6



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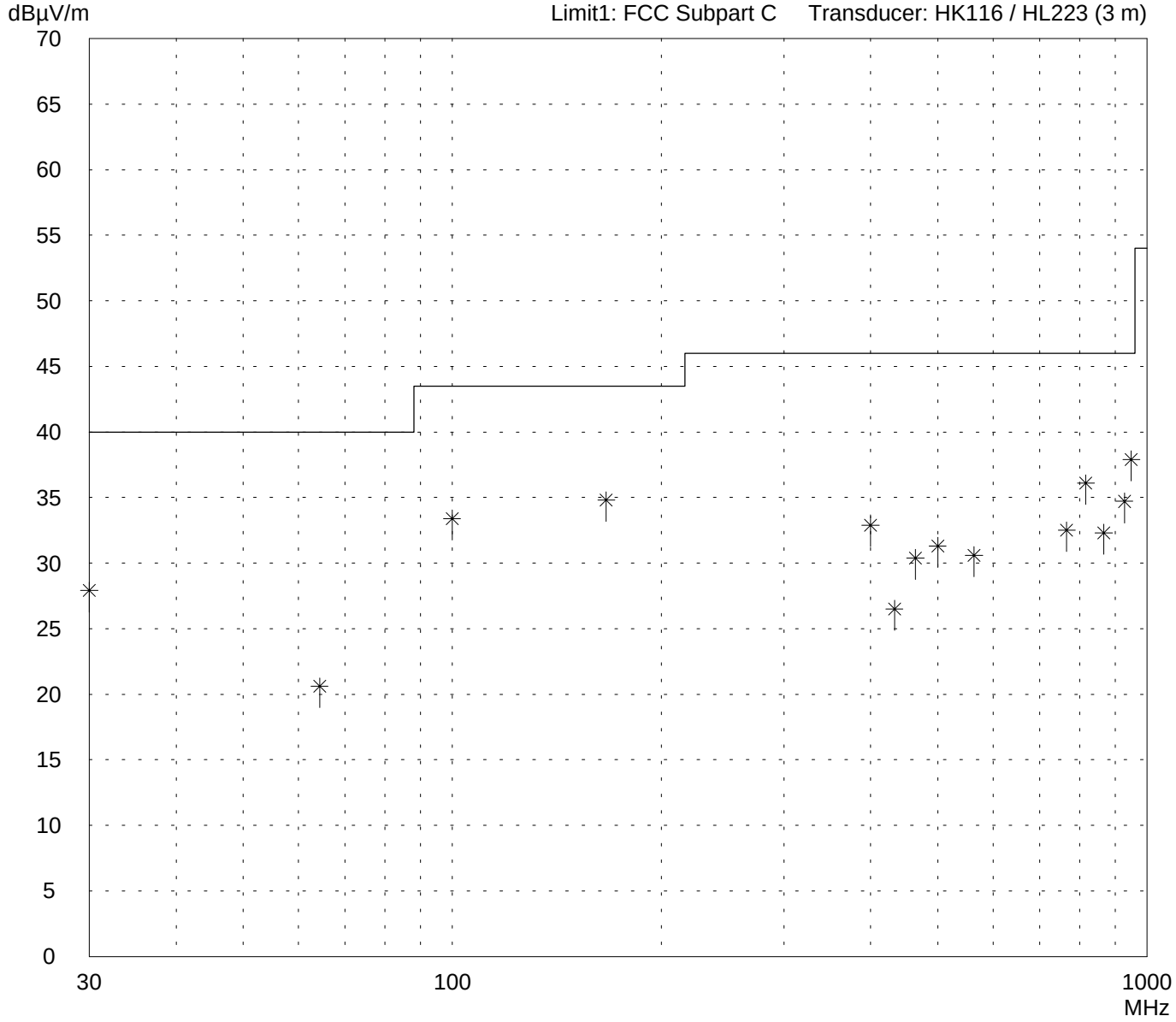
# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

| | |
|---|---|
| Model: 0111-PC | Mode: |
| Serial no.: 02UT45300010 | - FCC test setup<br>- supply voltage 115 V AC<br>- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC<br>- monitor switched off<br><br>- with external antenna Melco WLE-DA standing on table in vertical position<br><br>- operating with bit rate 11 Mbps<br><br>- RX mode with f = 2.442 GHz |
| Applicant: Agere Systems Nederland B.V. | |
| Test site: Open area test-site I | |
| Tested on: Test distance 3 meters<br>Vertical Polarization | |
| Date of test: 12/19/2002 / Operator: R. Heller | |
| Test performed: by hand / File name: | |

| | |
|---|---|
| Detector: Quasi-Peak | List of values: Selected by hand |




| | |
|---|---|
| Result: Limit kept | Project file: 56305-20559-6 |



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# Radiated Emission Test 30 MHz - 1 GHz
# according to FCC Part 15 Subpart C

Model:
0111-PC

Serial no.:
02UT45300010

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/19/2002
Operator: R. Heller

Test performed: by hand
File name:

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC
- monitor switched off

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- RX mode with f = 2.442 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

| *Frequency MHz* | *Reading dBµV* | *Correction factor dB* | *Value dBµV/m* | *Limit dBµV/m* | *Limit exceeded* |
|---|---|---|---|---|---|
| 30.00 | 13.6 | 14.3 | 27.9 | 40.0 | |
| 64.40 | 10.8 | 9.8 | 20.6 | 40.0 | |
| 99.88 | 22.7 | 10.7 | 33.4 | 43.5 | |
| 166.52 | 20.3 | 14.5 | 34.8 | 43.5 | |
| 399.68 | 14.2 | 18.7 | 32.9 | 46.0 | |
| 433.00 | 7.0 | 19.5 | 26.5 | 46.0 | |
| 463.97 | 10.3 | 20.1 | 30.4 | 46.0 | |
| 499.58 | 10.6 | 20.7 | 31.3 | 46.0 | |
| 563.40 | 8.9 | 21.7 | 30.6 | 46.0 | |
| 766.10 | 7.5 | 25.0 | 32.5 | 46.0 | |
| 816.11 | 10.2 | 25.9 | 36.1 | 46.0 | |
| 866.06 | 5.1 | 27.2 | 32.3 | 46.0 | |
| 927.84 | 7.3 | 27.4 | 34.7 | 46.0 | |
| 948.96 | 10.5 | 27.4 | 37.9 | 46.0 | |

Result:
Limit kept

Project file:
56305-20559-6

# Radiated Emission 1 GHz - 12.5 GHz
# according to FCC Part 15 Subpart C (§15.209)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- RX mode with f = 2.442 GHz

Detector: Peak

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 1.0018 | vertical | 15.6 | 0.5 | 25.9 | 42.0 | 74 |
| 1.0658 | vertical | 19.7 | 0.5 | 26.0 | 46.2 | 74 |
| 1.1956 | vertical | 20.6 | 0.5 | 26.3 | 47.3 | 74 |
| 1.3342 | vertical | 23.2 | 0.5 | 26.5 | 50.2 | 74 |
| 1.5938 | vertical | 16.4 | 0.5 | 27.2 | 44.2 | 74 |
| 2.2587 | vertical | 15.7 | 0.6 | 29.6 | 45.9 | 74 |
| 2.7845 | vertical | 14.8 | 0.7 | 23.7 | 39.2 | 74 |
| 3.9859 | vertical | 11.2 | 0.8 | 27.2 | 39.2 | 74 |
| 4.8894 | vertical | 15.2 | 0.9 | 27.3 | 43.4 | 74 |

**Result:** The limits are kept

# Radiated Emission 1 GHz - 12.5 GHz
# according to FCC Part 15 Subpart C (§15.209)

Model: 0111-PC
Type: RF-modem for wireless LAN
Serial No.: 02UT45300010
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/16/2002
Operator: R. Heller

Mode:
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter PCIPC

- with external antenna Melco WLE-DA standing on table in vertical position

- operating with bit rate 11 Mbps

- RX mode with f = 2.442 GHz

Detector: Average

| Frequency [GHz] | Polarization | Analyzer-reading [dBµV] | Cable loss [dB] | Antenna-correction [dB] | Fieldstrength [dBµV/m] | Limit [dBµV/m] |
|---|---|---|---|---|---|---|
| 1.0000 | vertical | < 8.7 | 0.5 | 25.9 | < 35.0 | 54 |
| 1.0604 | vertical | < 14.0 | 0.5 | 26.0 | < 40.5 | 54 |
| 1.1956 | vertical | < 14.6 | 0.5 | 26.3 | < 41.3 | 54 |
| 1.3342 | vertical | < 15.4 | 0.5 | 26.5 | < 42.4 | 54 |
| 1.5938 | vertical | < 9.8 | 0.5 | 27.2 | < 37.5 | 54 |
| 1.6631 | vertical | < 11.4 | 0.5 | 27.6 | < 39.5 | 54 |
| 2.2551 | vertical | < 5.8 | 0.6 | 29.6 | < 35.9 | 54 |
| 2.7980 | vertical | < 5.6 | 0.7 | 23.7 | < 29.9 | 54 |
| 4.8841 | vertical | 13.0 | 0.9 | 27.3 | 41.2 | 54 |

**Result:** The limits are kept

## 13. Additional Information supplementary to the Test Report

| Item | Description | Collected in |
|---|---|---|
| 1 | Photographs of EUT and Host | Annex A |
| 2 | Photographs Taken During Testing | Annex B |