

Straubing, February 14, 2002

TEST-REPORT

No. 56305-20086-3

for

**PC24E-11-FC/R with Telex 2.4 GHz WLAN Directional Antenna
RF-modem for wireless LAN with external antenna**

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

Note:

The test data of this report relate only to the individual item which has been tested. This report shall not be reproduced except in full extent without the written approval of the testing laboratory.

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1. Administrative Data

Equipment Under Test (EUT):	PC24E-11-FC/R with Telex 2.4 GHz WLAN Directional Antenna	
Serial number(s):	01UT50300000 1202	(RF-modem) (external antenna)
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) with external antenna.	
Version:	RF-modem and external antenna as delivered, PCI-adapter with two additional springs mounted on printed board improving contact of PC-card to bracket (for details see "Photographs of EUT and Host" collected in Annex A)	
Parts/accessories:	see "Configuration of EUT and Peripheral Devices" on page 7	
FCC-ID:	IMRWLPCE2411R	
Applicant: (full address)	Agere Systems Nederland B.V. Zadelstede 1-10 NL-3431 JZ Nieuwegein The Netherlands	
Contract identification:	---	
Contact person:	Mr. Wout Kerkhof	
Manufacturer:	Agere Systems Nederland B.V.	
Receipt of EUT:	January 14, 2002	
Date of test:	February 7 to 13, 2002	
Note:	---	
Responsible for testing:	Rainer Heller	
Responsible for test report:	Rainer Heller	

2. Identification of Test Laboratory

Test Laboratory:
(full address): Senton GmbH EMI/EMC Test Center
Aeussere Fruehlingstrasse 45
D-94315 Straubing
Germany

Contact person: Mr. Johann Roidt
Communication: Telephone (+49) 0 94 21 / 55 22-0
Fax (+49) 0 94 21 / 55 22-99
eMail: 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) and
- radiated emission (§15.247.c, §15.205.a,b, §15.209)

set forth in the Code of Regulations Part 15 Subpart C, Section §15.247 (intentional radiators) of the Federal Communication Commission (FCC).



Johann Roidt
Technical Manager



Rainer Heller
Test Engineer

4. Operation Mode of EUT

All tests were performed using the utility "WaveLAN-II Certification Test Program", Version v02.24Beta (Oct 22 2001). 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 PC24E-11-FC/R was tested operating with external directional antenna Telex 2.4 GHz WLAN connected and mounted in PC-card slot of personal computer Dell Dimension 4100 via PCI-adapter Orinoco PCI-33W. External antenna was mounted on left side of PC using appropriate clamp (for details see "Photographs Taken During Testing" starting on page 17).

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	018982/B	01UT50300000	PC24E-11-FC/R	Agere
External directional antenna	2417NL (order no.)	1202	Telex 2.4 GHz WLAN	Telex
Personal computer	---	CZPN30J	Dimension 4100	Dell
PCI-adapter	020202/A	21790001	PCI-33W	Agere

Table 1: EUT and accessories

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 (§ 15.247.b)

The maximum peak output power was measured with a power meter 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, 18, 67, 68

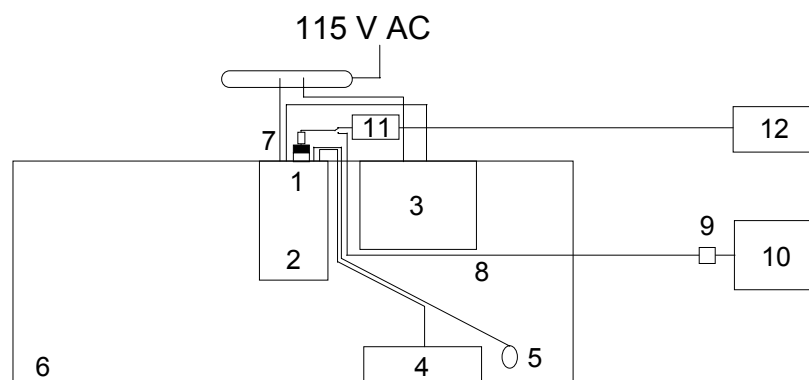


Figure 1: Measurement setup for testing on antenna connector

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

7.2. Radiated Emission 30 MHz - 1 GHz (§15.209, §15.247.c, §15.205.a,b)

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 2 for the measurement setup.

Test equipment used (see equipment list for details):

01, 06, 12, 38, 39, 40, 41, 58, 61, 64, 66

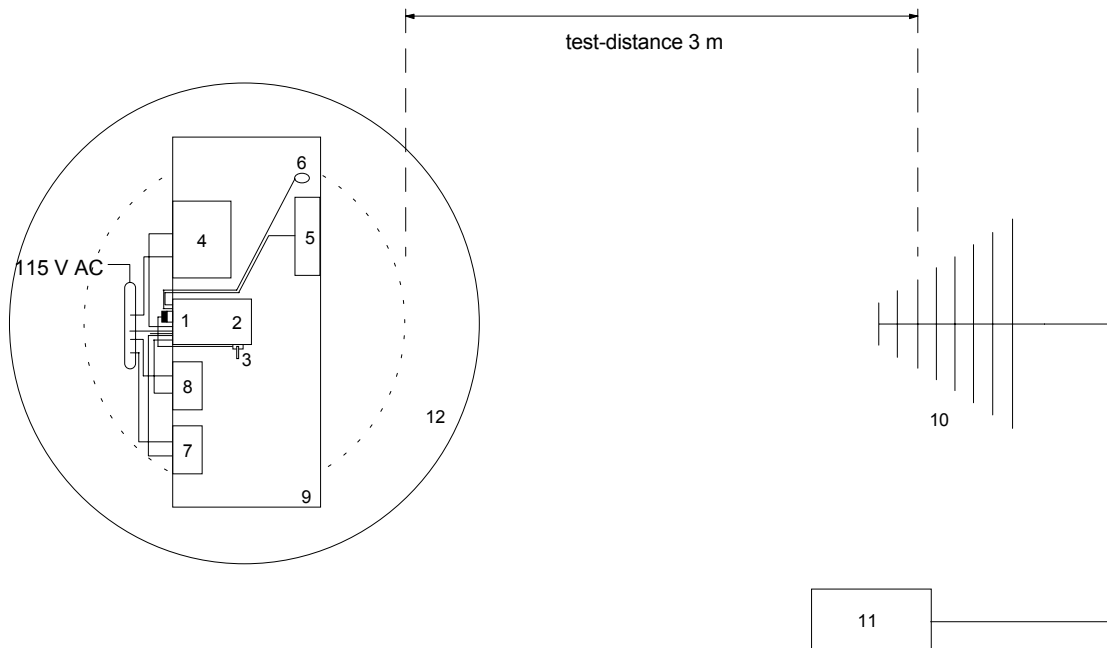


Figure 2: Measurement setup for radiated emission test below 1 GHz

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

7.3. Radiated Emission 1 GHz - 25 GHz (§15.209, §15.247.c, §15.205.a,b)

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 3 for the measurement setup.

Test equipment used (see equipment list for details):

02, 13, 14, ,42, 43, 44, 45, 46, 47, 48, 49, 57, 64

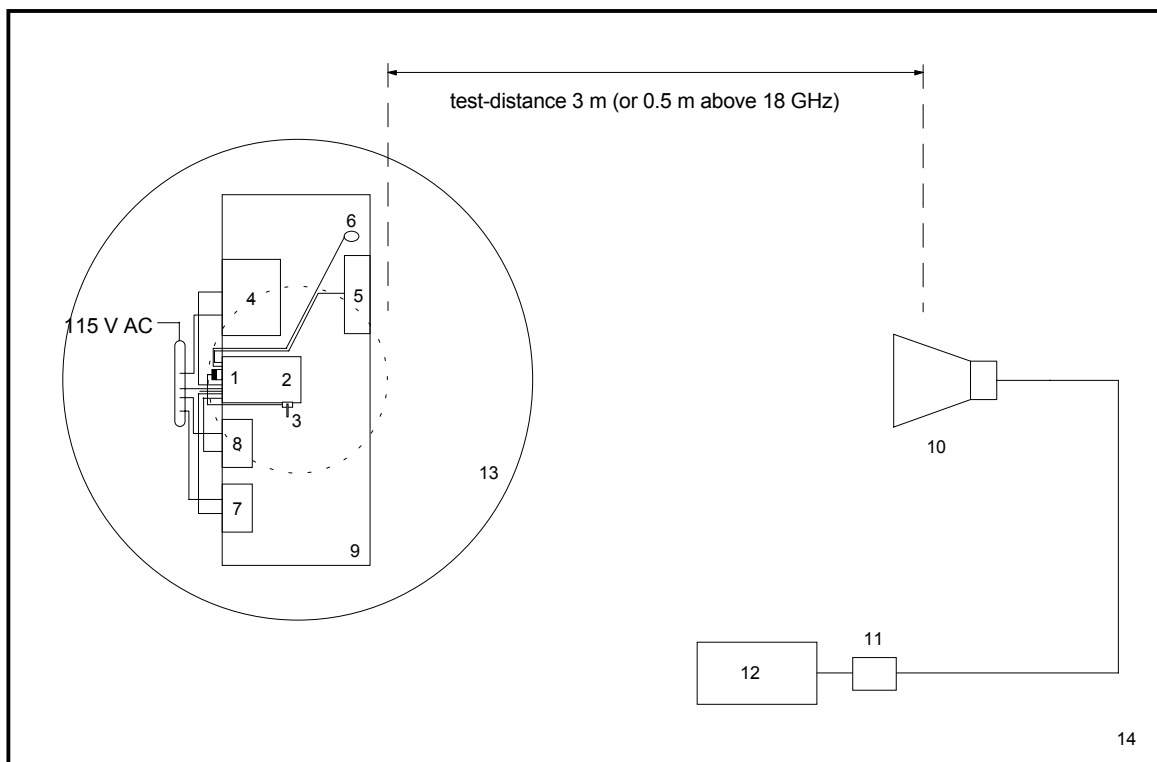


Figure 3: Measurement setup for radiated emission test above 1 GHz

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

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.

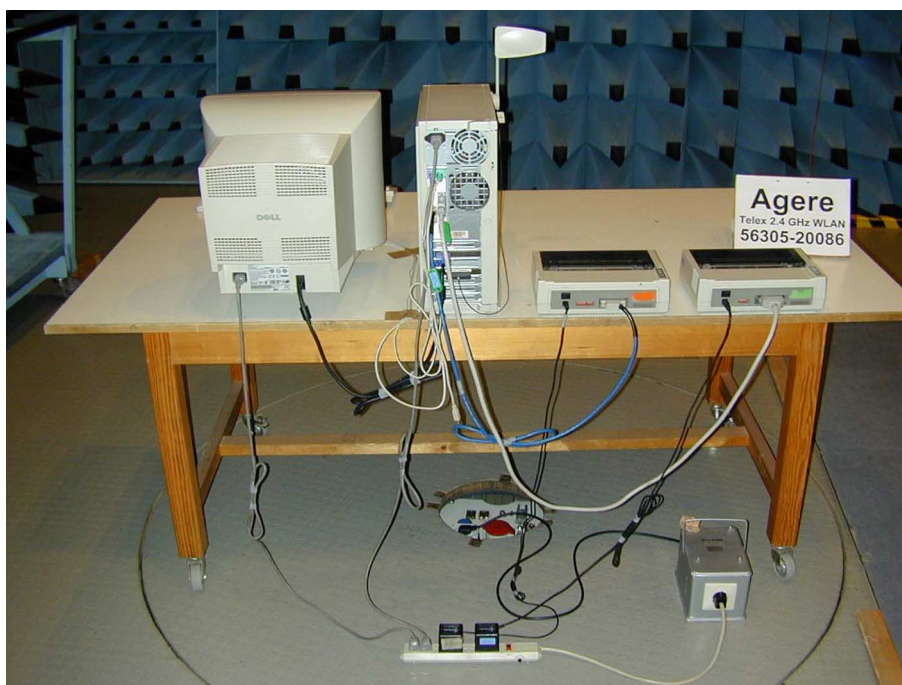
No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	R 3271	05050023	Advantest
02	EMI Test Receiver	ESMI	839379/013 839587/006	Rohde & Schwarz
03	Test Receiver	ESH 3	880112/032	Rohde & Schwarz
04	Test Receiver	ESHS 10	860043/016	Rohde & Schwarz
05	Test Receiver	ESV	881414/009	Rohde & Schwarz
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	AFS3-00100800-32-LN	847743	Miteq
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	1480	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

9. Photographs Taken During Testing

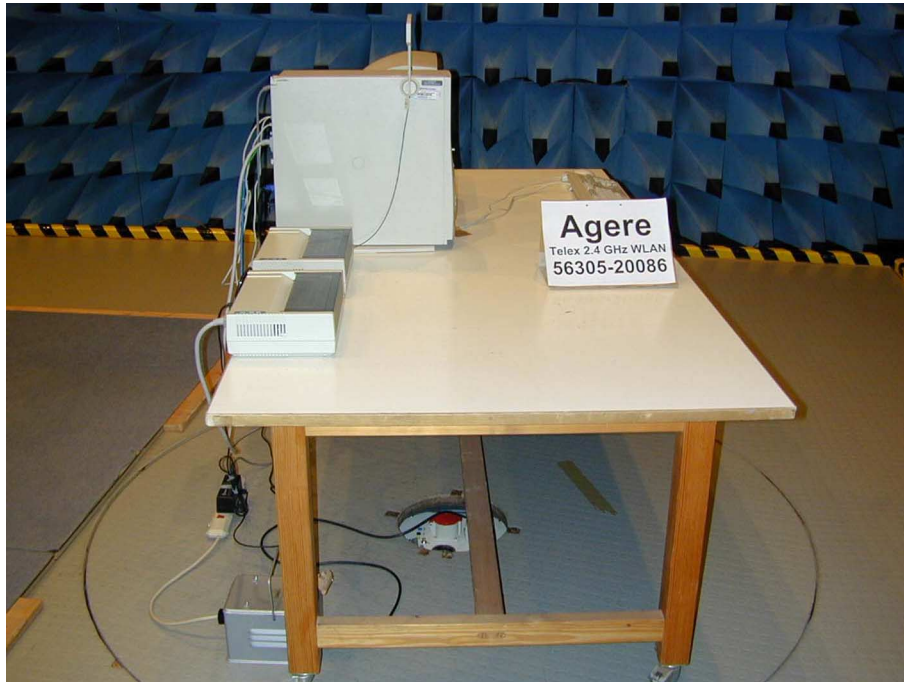
Photos No. 9.1 - 9.2

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



Photos No. 9.3 - 9.4

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



Photos No. 9.5 - 9.6

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



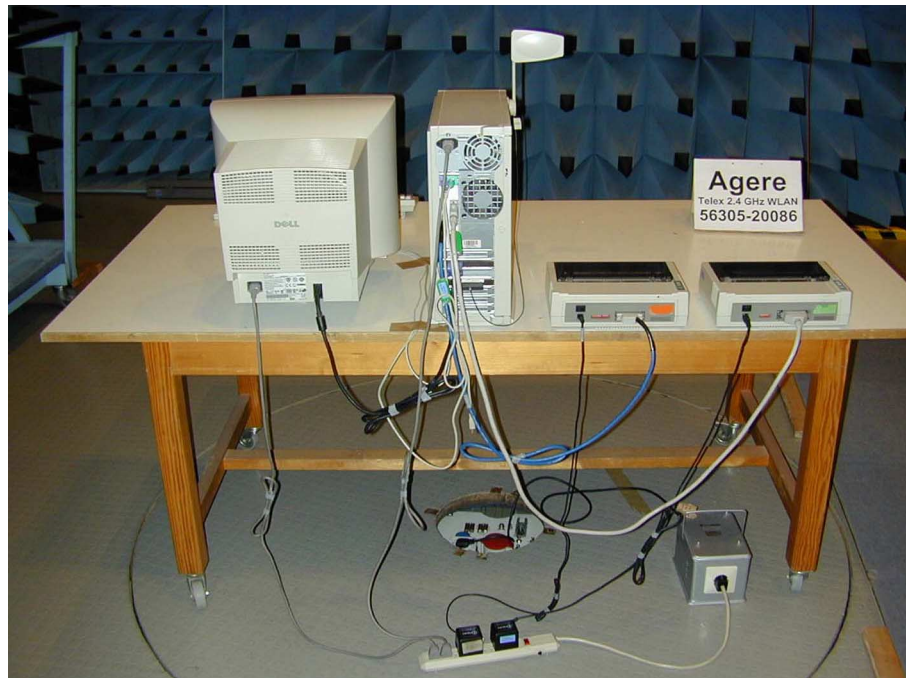
Photos No. 9.7 - 9.8

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



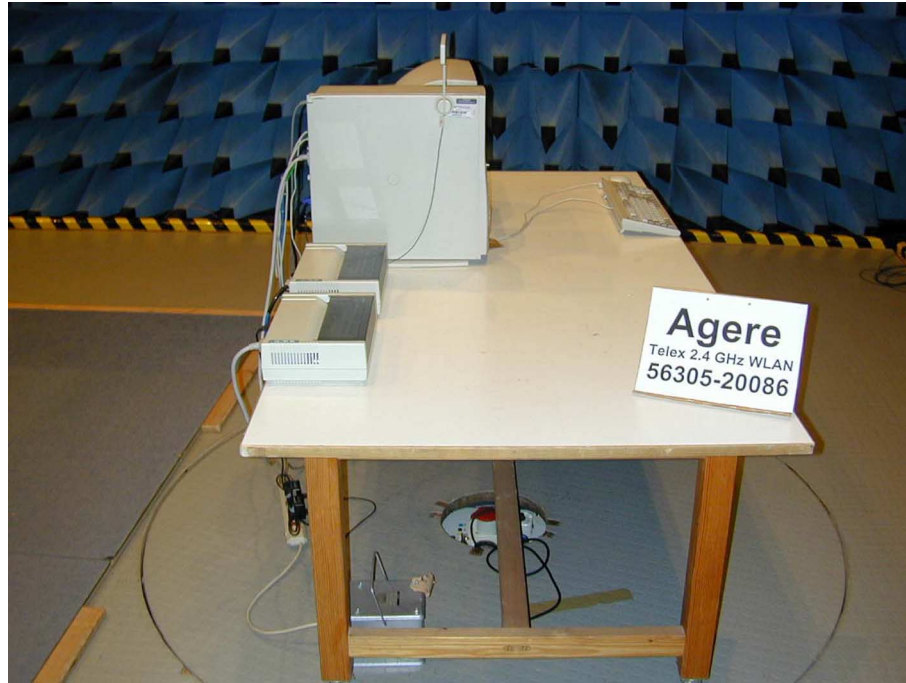
Photos No. 9.9 - 9.10

Test setup for radiated emission test above 1 GHz



Photos No. 9.11 - 9.12

Test setup for radiated emission test above 1 GHz - continued



10. List of Measurements

FCC Part 15 Subpart C			
Section(s):	Test	Page	Result
	Transmit mode (TX):	27	
§15.247.a2	Minimum 6 dB bandwidth	---	not performed
§15.247.b	Maximum peak output power	28	passed
§15.247.d	Peak power density	---	not performed
§15.247.e	Processing gain	---	performed by applicant
§15.207	Conducted emission test 450 kHz - 30 MHz	---	not performed
§15.247.c §15.209 §15.205.a,b	Radiated emission test 9 kHz - 30 MHz	---	not applicable (acc. to §15.33)
§15.247.c §15.209 §15.205.a,b	Radiated emission test 30 MHz - 1 GHz	29 - 52	passed
§15.247.c §15.209 §15.205.a,b	Radiated emission test 1 GHz - 25 GHz	53 - 104	passed
	Receive mode (RX):	105	
§15.207	Conducted emission test 450 kHz - 30 MHz	---	not performed
§15.209	Radiated emission test 9 kHz - 30 MHz	---	not applicable (acc. to §15.33)
§15.209	Radiated emission test 30 MHz - 1 GHz	106 - 113	passed
§15.209	Radiated emission test 1 GHz - 12.5 GHz	114 - 115	passed

Note 1: Extent of testing was defined by applicant.

Note 2: 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 difference especially in average 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.

Having less significant differences in peak results than in average levels only critical harmonics observed with 11 Mbps (i.e. with less than 10 dB margin of peak levels to average limit) had to be retested with bit rate set to 2 Mbps.

11. Test Results

Test results for
Transmit (TX) mode

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT50300000
Applicant: Agere Systems Nederland B.V.
Date of test: 02/13/2002
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- TX mode

Tested on: Antenna connector

Selected bit rate	Operating frequency [GHz]	Power meter reading [dBm]	Correction-factor [dB]	Output power [dBm]	Limit (see note 1) [dBm]
11 Mbps	2.412	15.0	0.2	15.2	29.5
	2.442	14.9	0.2	15.1	29.5
	2.462	14.9	0.2	15.1	29.5
5.5 Mbps	2.412	15.0	0.2	15.2	29.5
	2.442	14.9	0.2	15.1	29.5
	2.462	14.9	0.2	15.1	29.5
2 Mbps	2.412	15.0	0.2	15.2	29.5
	2.442	14.9	0.2	15.1	29.5
	2.462	14.9	0.2	15.1	29.5

Note 1: Total nominal gain of Telex 2.4 GHz WLAN directional antenna is 6.5 dBi (including cable loss). Limit of 30 dBm is reduced by the amount of the effective antenna gain exceeding 6 dBi.

Note 2: The correction factor noted above is caused by the attenuation of the DC block. The maximum power values were recorded.

Note 3: The duty cycle of the EUT is > 99%

Result: The limit is kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/11/2002
Operator: R. Heller

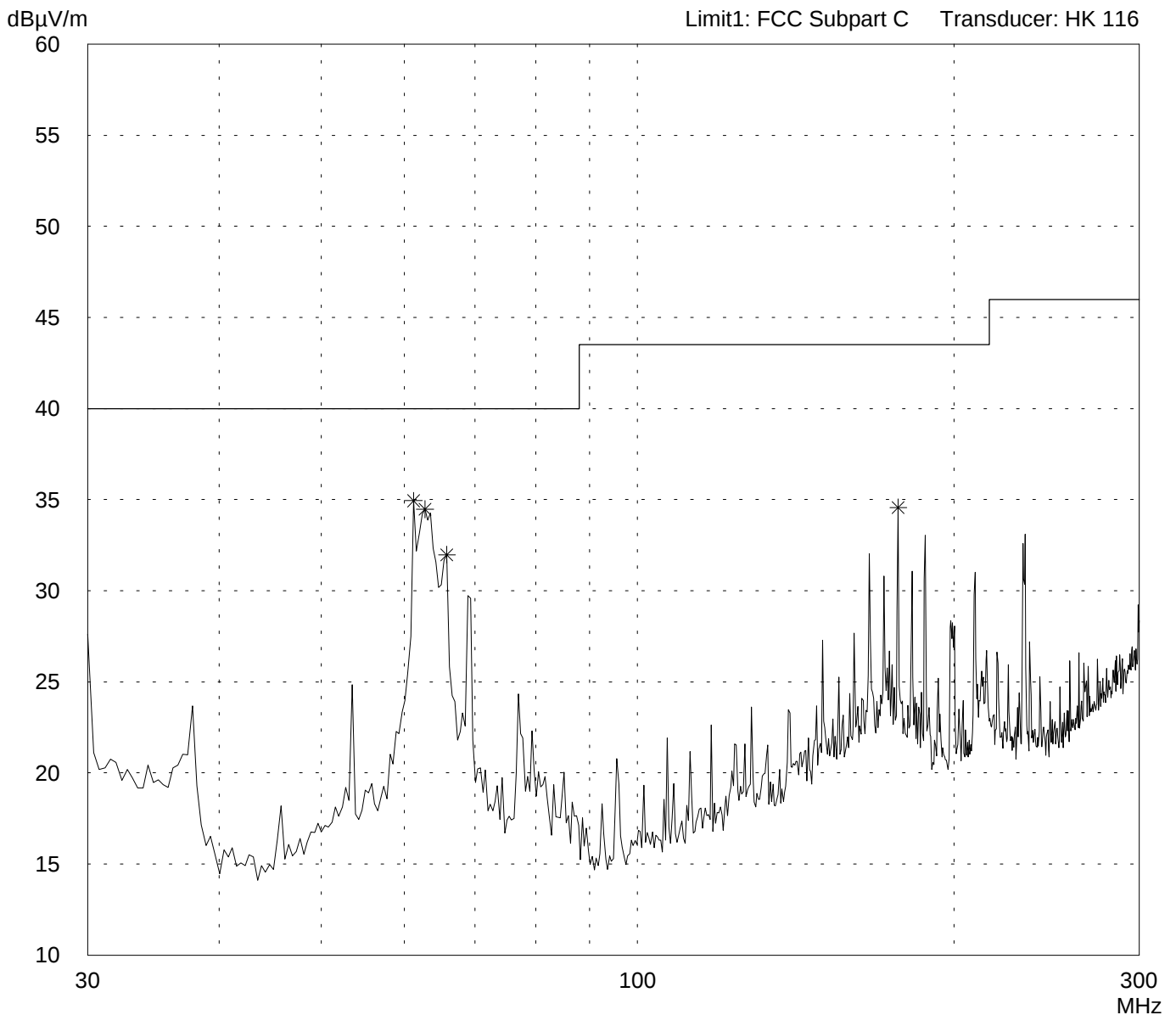
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/11/2002
Operator: R. Heller

Test performed: automatically
File name:

Mode:

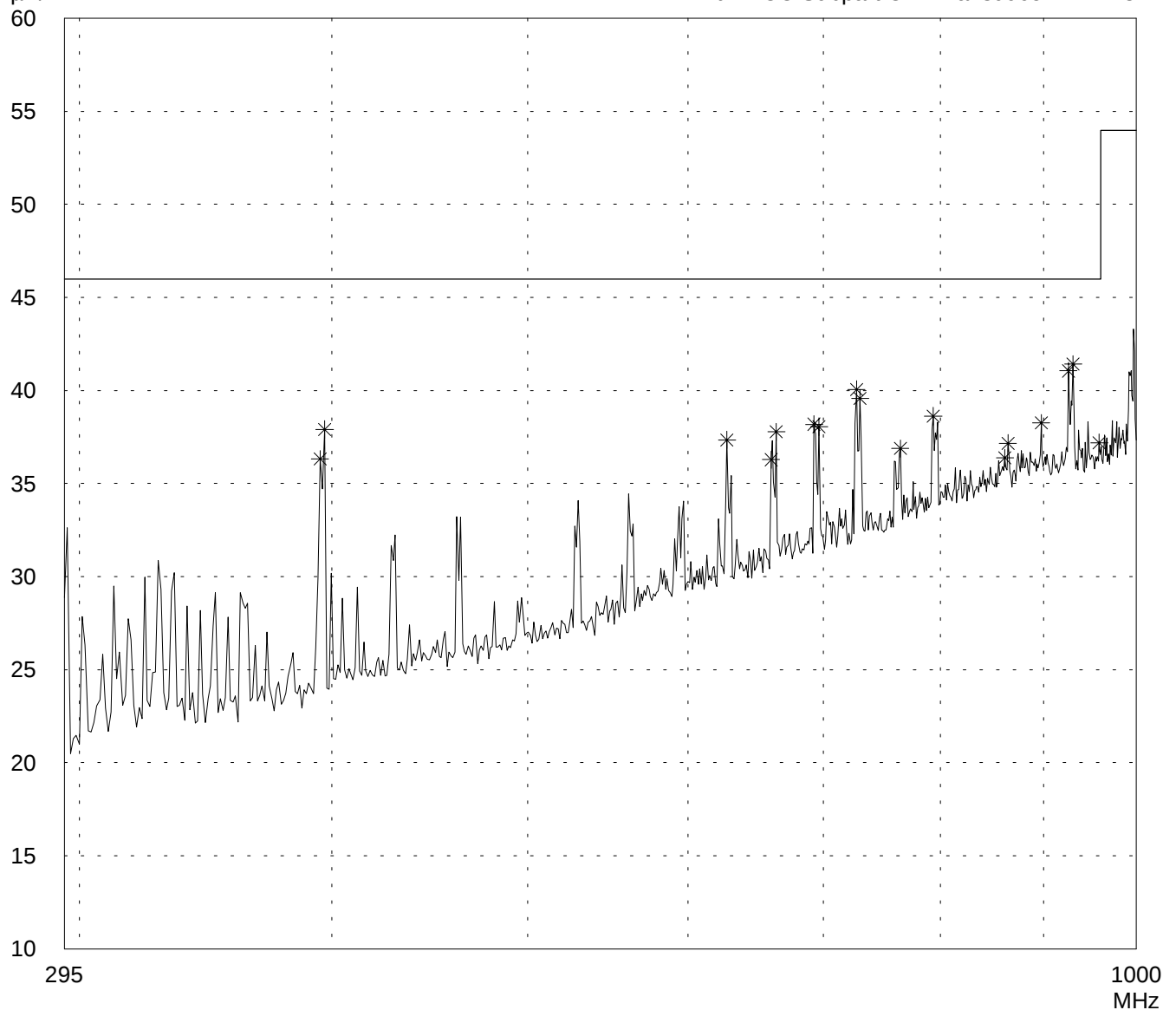
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

$\text{dB}\mu\text{V/m}$

Limit1: FCC Subpart C Transducer: HL 223



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/11/2002
Operator: R. Heller

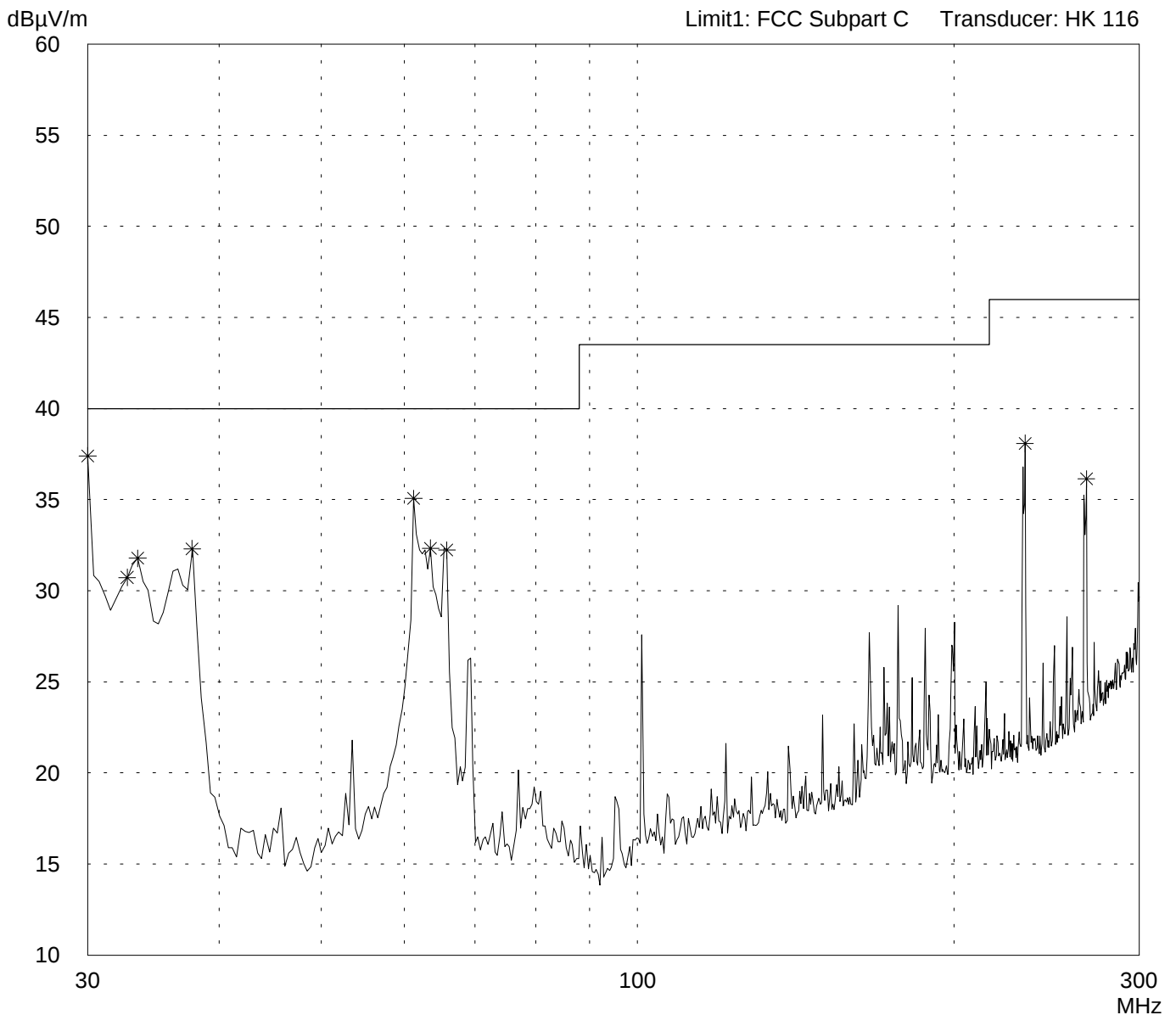
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/11/2002
Operator: R. Heller

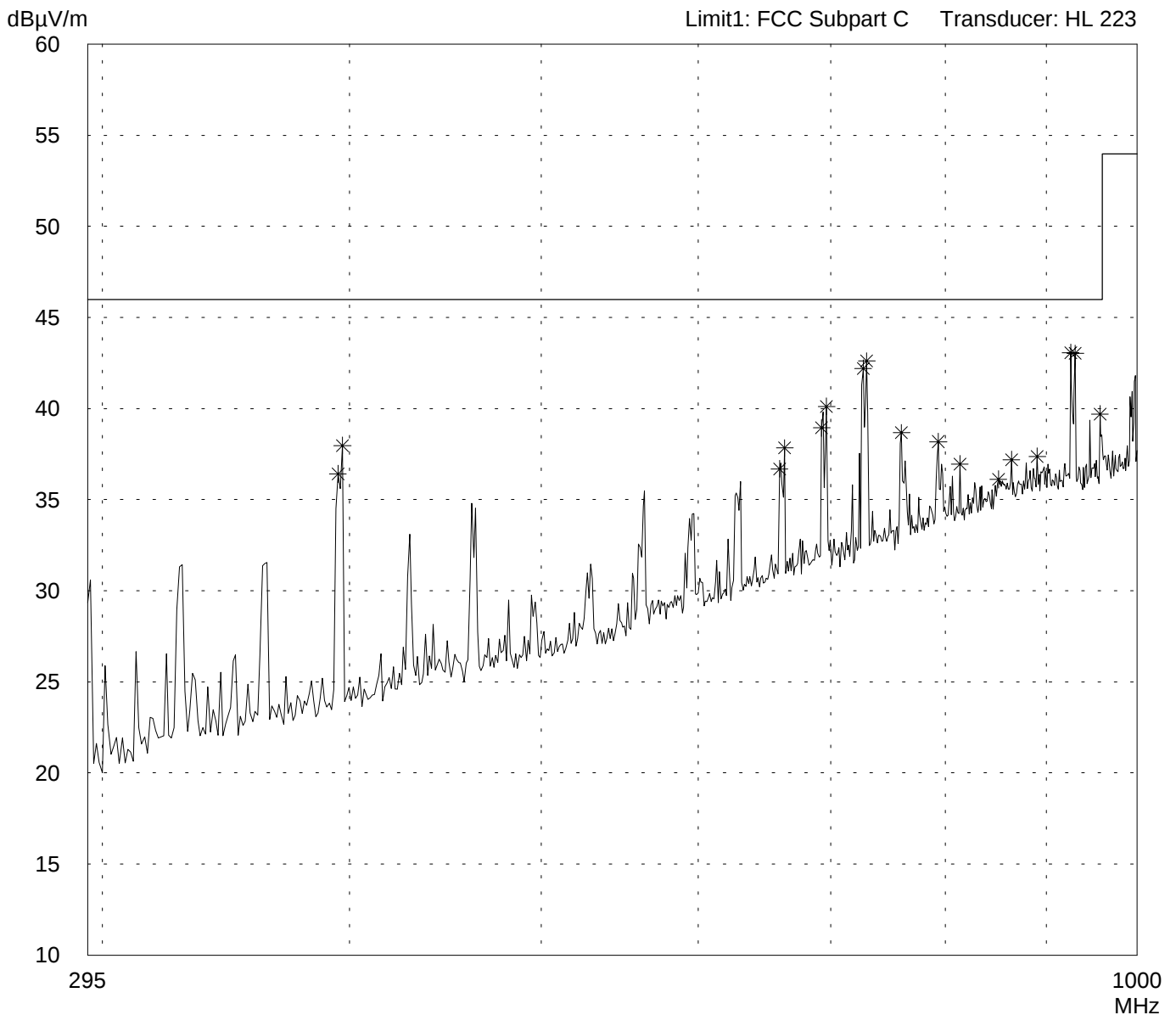
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/12/2002
Operator: R. Heller

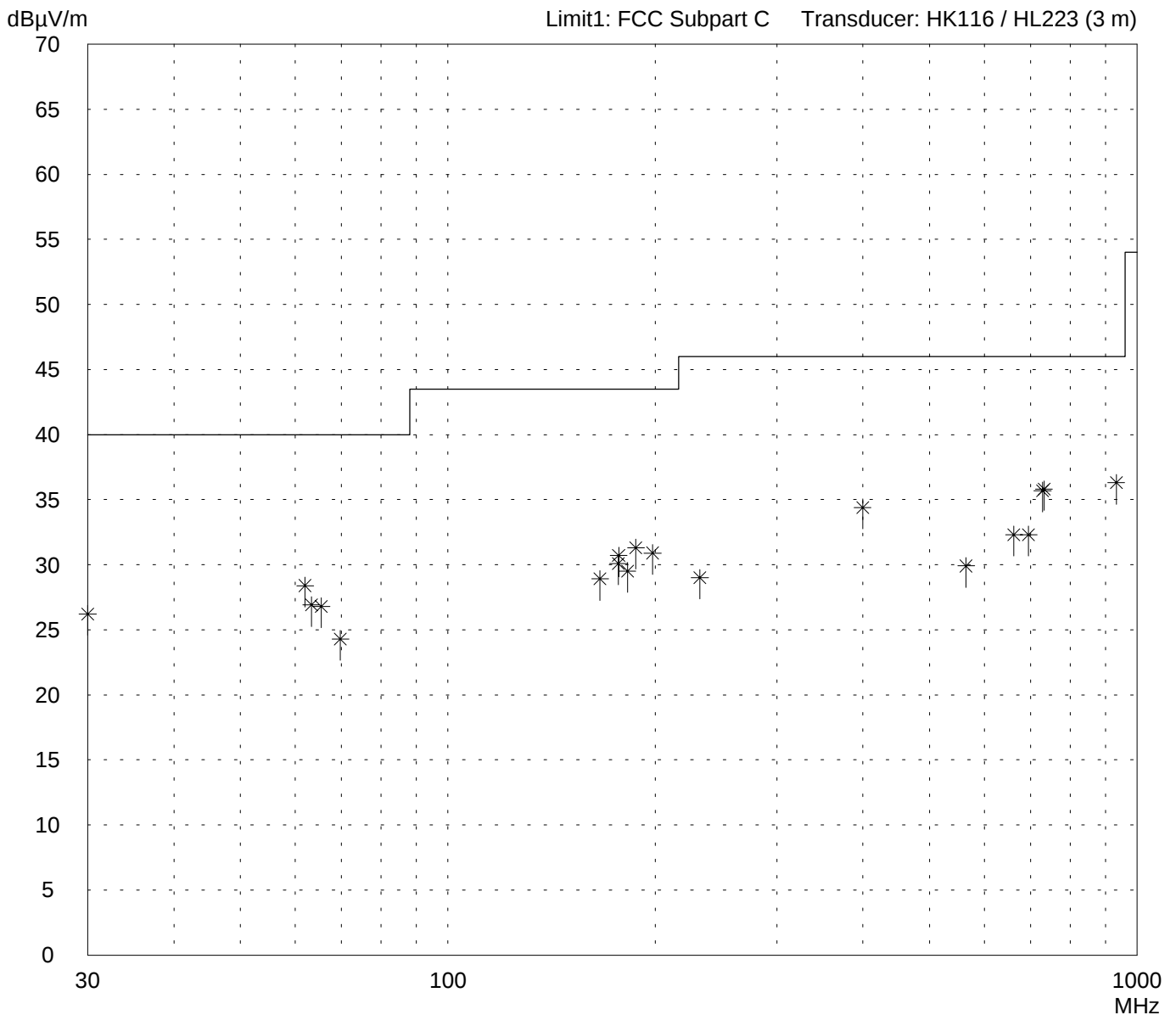
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/12/2002
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 Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412 \text{ GHz}$

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
30.00	11.0	15.2	26.2	40.0	
62.04	17.5	10.9	28.4	40.0	
63.34	16.0	10.9	26.9	40.0	
65.49	16.0	10.8	26.8	40.0	
69.83	13.5	10.8	24.3	40.0	
166.14	12.0	16.9	28.9	43.5	
176.68	12.5	17.6	30.1	43.5	
176.87	13.0	17.7	30.7	43.5	
182.04	11.5	18.0	29.5	43.5	
187.40	13.0	18.3	31.3	43.5	
198.11	12.0	18.9	30.9	43.5	
232.03	9.0	20.0	29.0	46.0	
399.63	12.0	22.4	34.4	46.0	
564.74	3.0	26.9	29.9	46.0	
662.67	2.5	29.8	32.3	46.0	
695.79	1.5	30.8	32.3	46.0	
729.08	4.5	31.2	35.7	46.0	
732.97	4.5	31.3	35.8	46.0	
932.78	2.0	34.3	36.3	46.0	

Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/12/2002
Operator: R. Heller

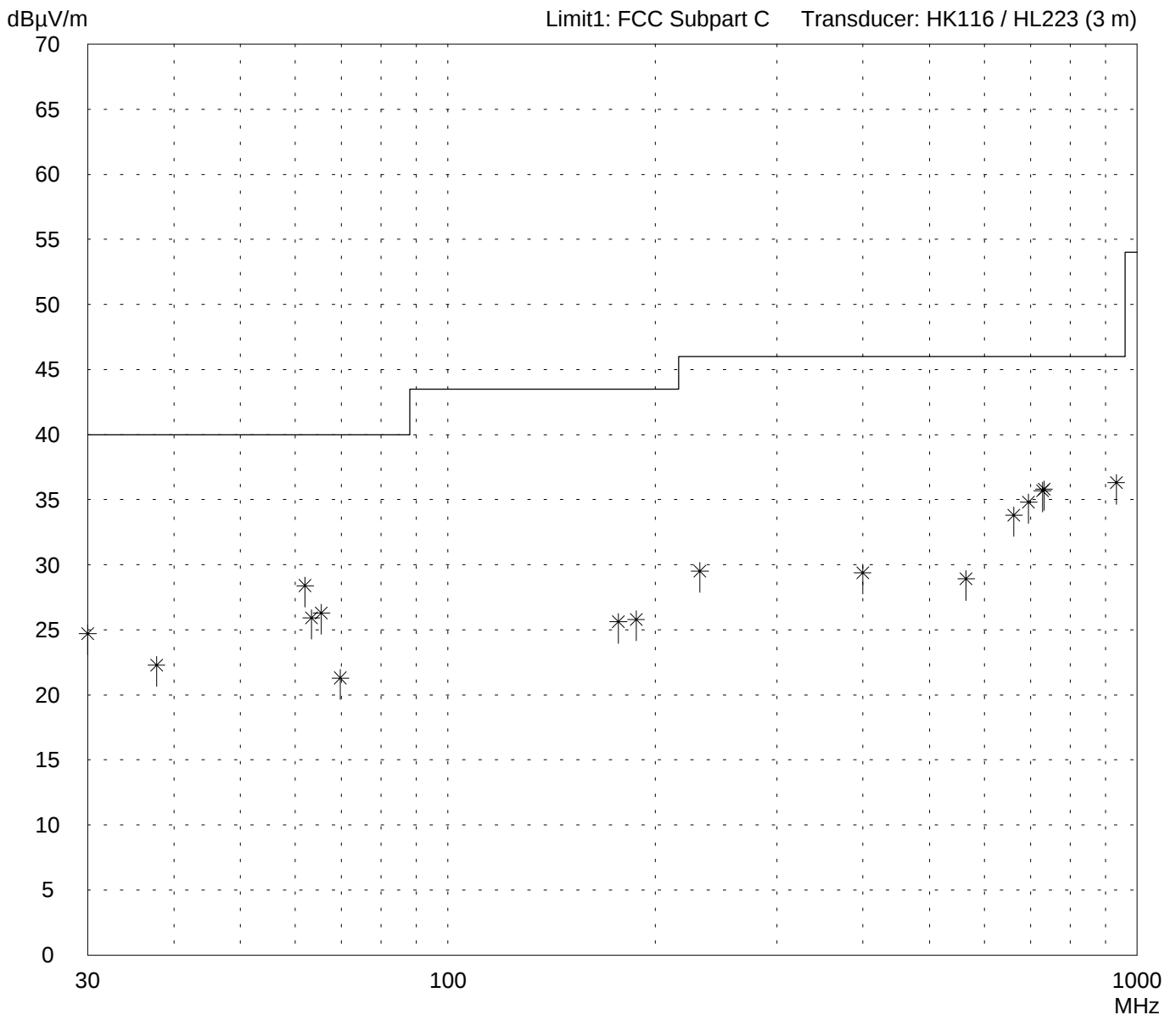
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/12/2002
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 Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
30.00	9.5	15.2	24.7	40.0	
37.76	9.0	13.3	22.3	40.0	
62.06	17.5	10.9	28.4	40.0	
63.34	15.0	10.9	25.9	40.0	
65.49	15.5	10.8	26.3	40.0	
69.81	10.5	10.8	21.3	40.0	
176.73	8.0	17.6	25.6	43.5	
187.45	7.5	18.3	25.8	43.5	
232.03	9.5	20.0	29.5	46.0	
399.63	7.0	22.4	29.4	46.0	
564.74	2.0	26.9	28.9	46.0	
662.67	4.0	29.8	33.8	46.0	
695.79	4.0	30.8	34.8	46.0	
729.08	4.5	31.2	35.7	46.0	
732.97	4.5	31.3	35.8	46.0	
932.78	2.0	34.3	36.3	46.0	

Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/11/2002
Operator: R. Heller

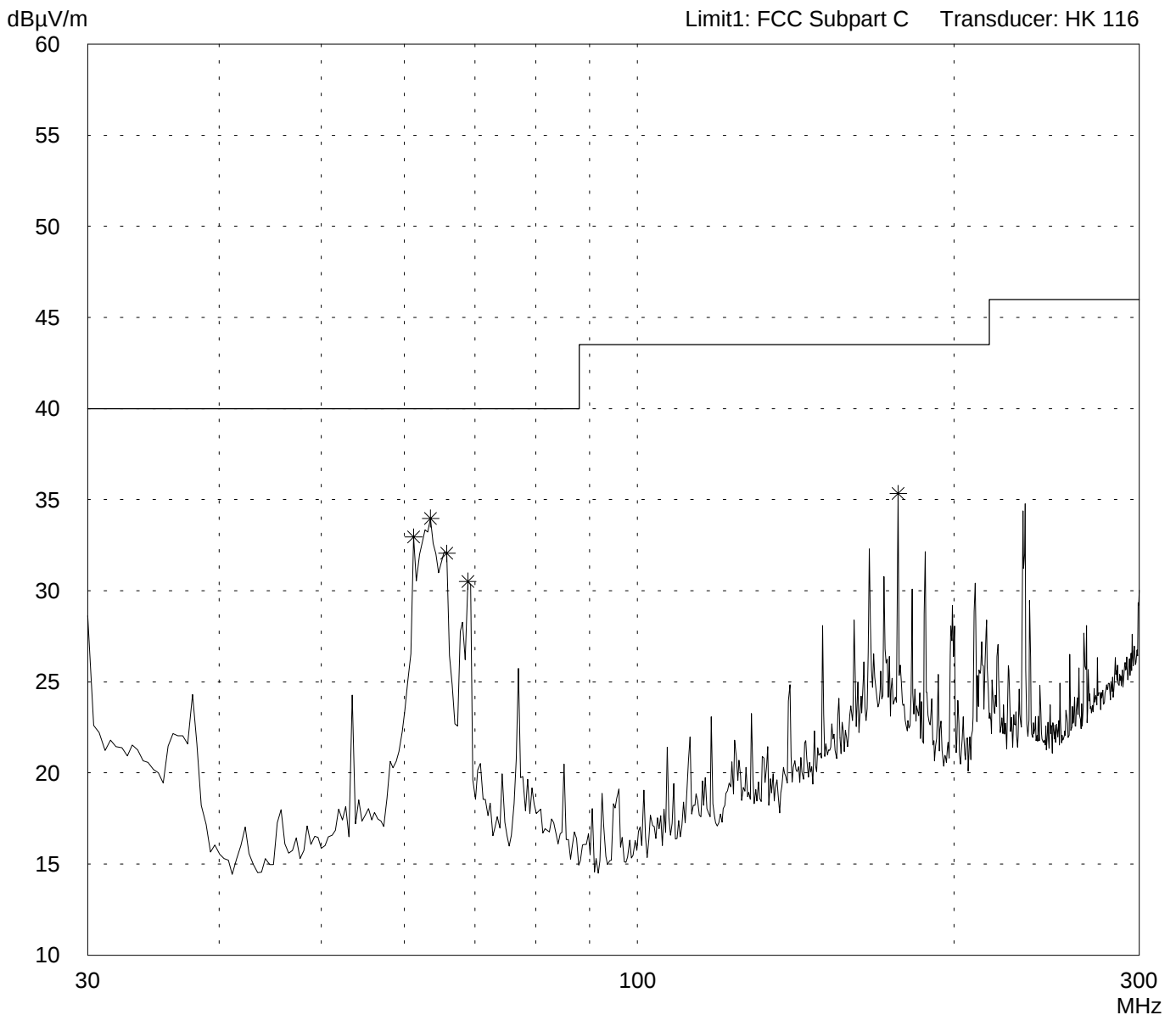
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/11/2002
Operator: R. Heller

Test performed: automatically
File name:

Mode:

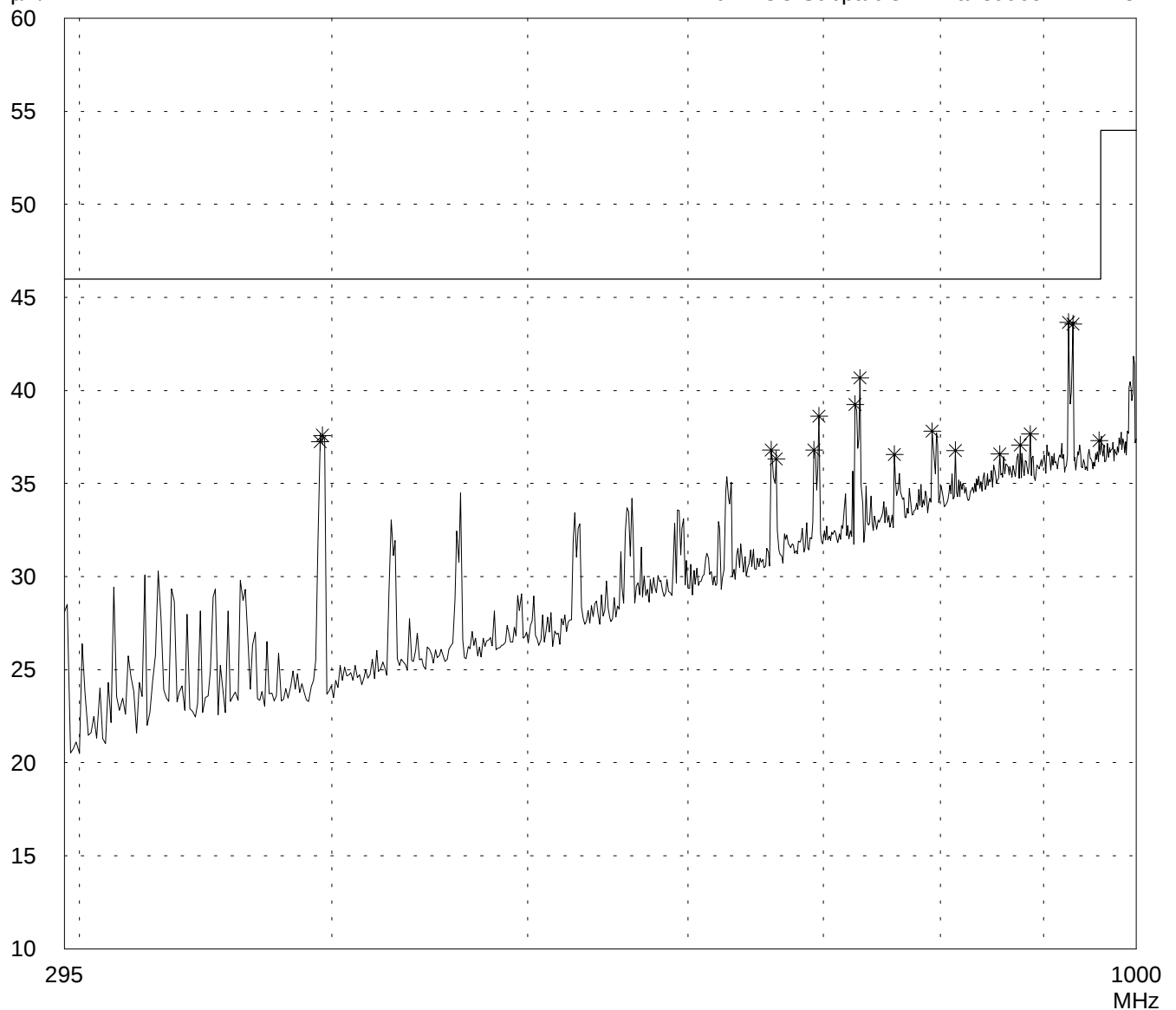
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

dB μ V/m

Limit1: FCC Subpart C Transducer: HL 223



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/11/2002
Operator: R. Heller

Test performed: automatically
File name:

Mode:

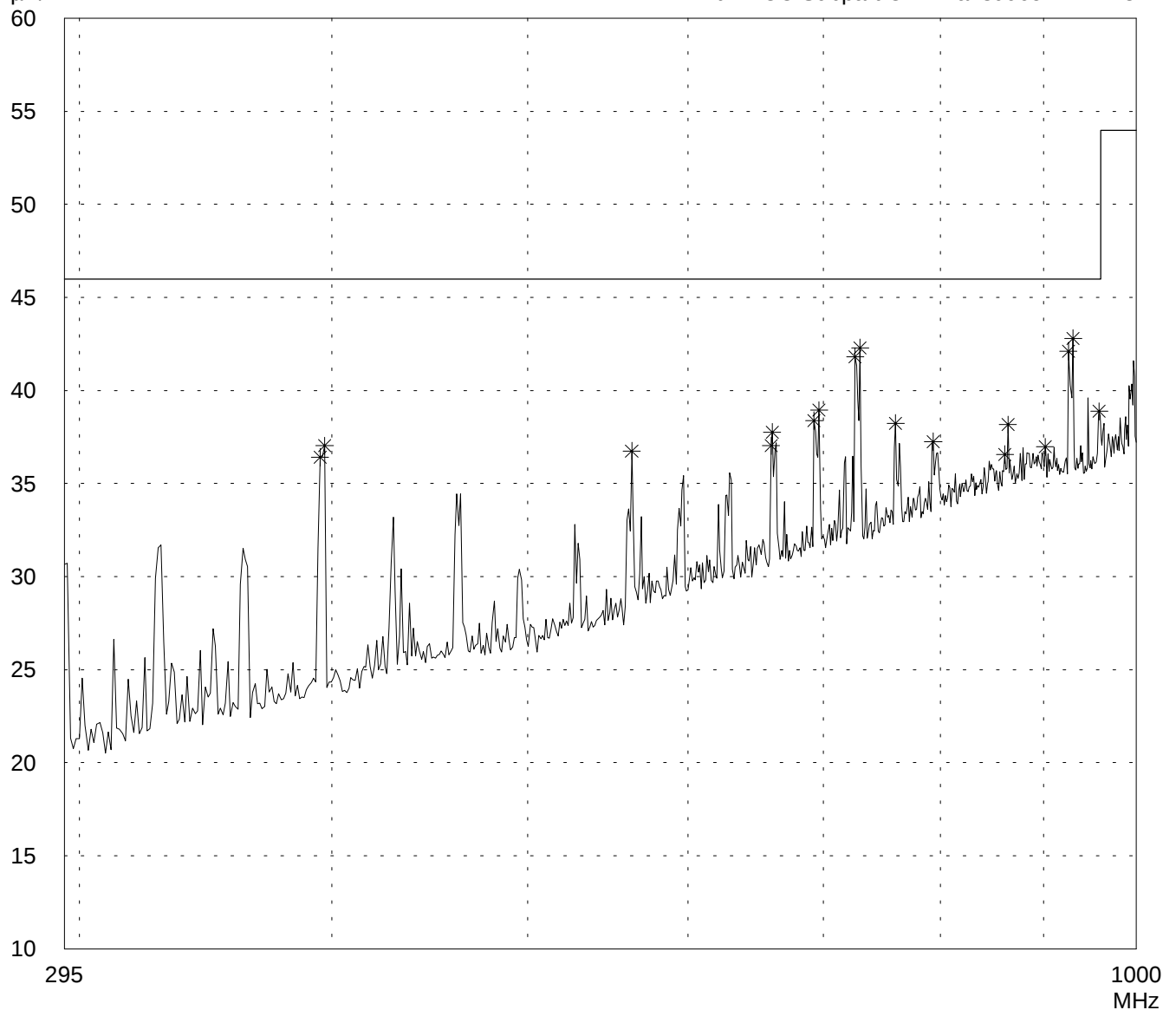
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

$\text{dB}\mu\text{V/m}$

Limit1: FCC Subpart C Transducer: HL 223



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/11/2002
Operator: R. Heller

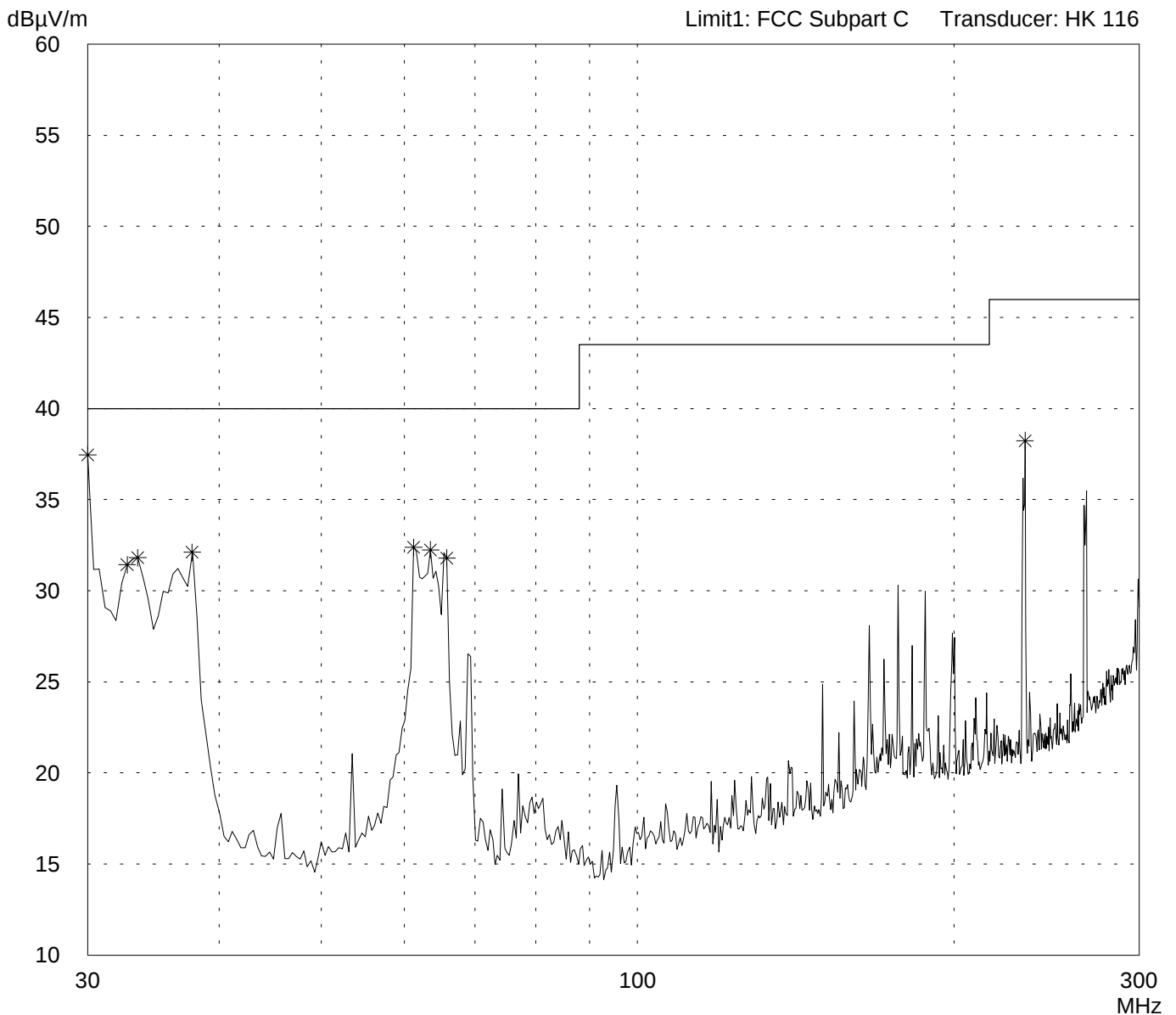
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/12/2002
Operator: R. Heller

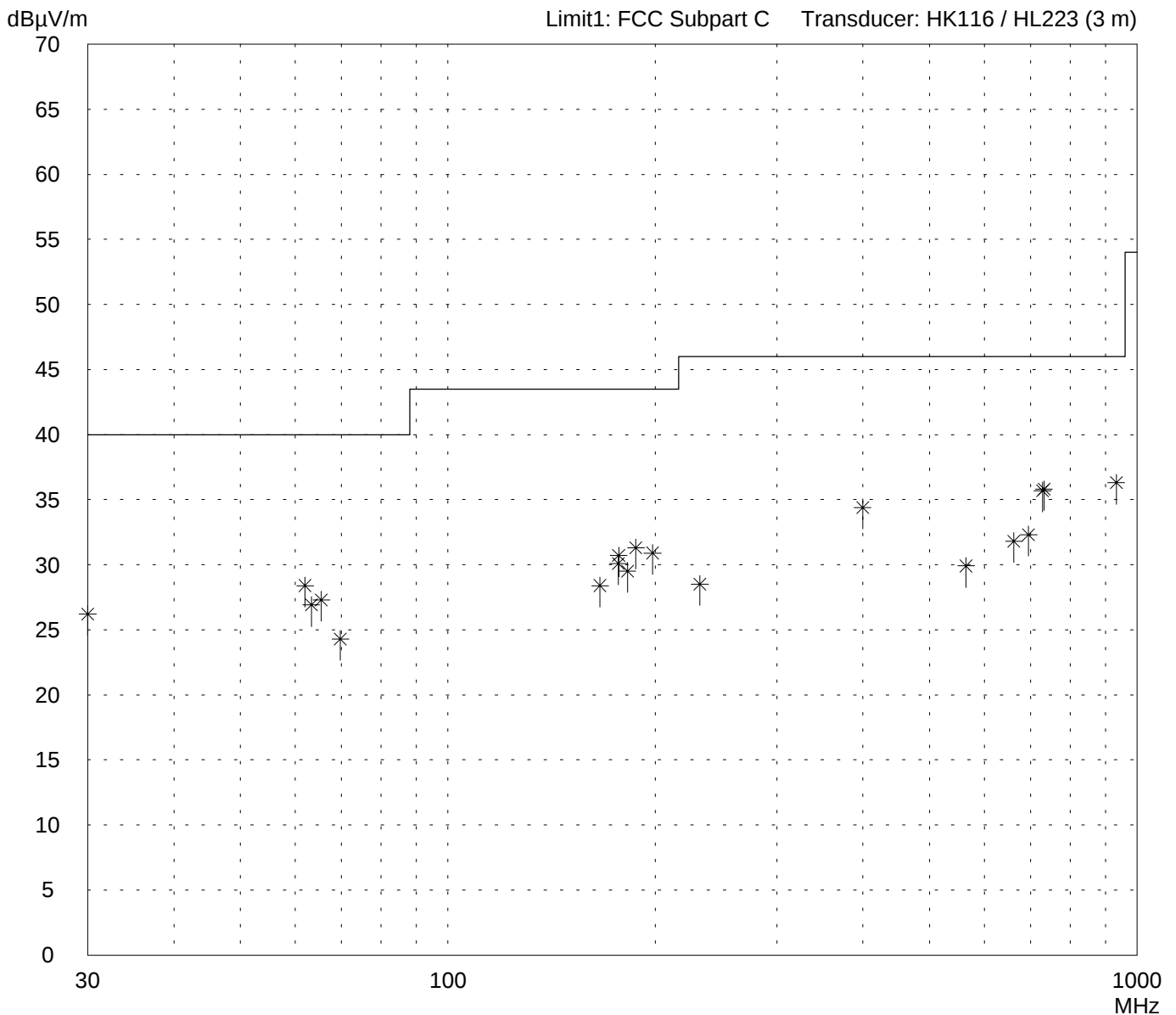
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/12/2002
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 Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
30.00	11.0	15.2	26.2	40.0	
62.04	17.5	10.9	28.4	40.0	
63.34	16.0	10.9	26.9	40.0	
65.49	16.5	10.8	27.3	40.0	
69.83	13.5	10.8	24.3	40.0	
166.14	11.5	16.9	28.4	43.5	
176.68	12.5	17.6	30.1	43.5	
176.87	13.0	17.7	30.7	43.5	
182.04	11.5	18.0	29.5	43.5	
187.40	13.0	18.3	31.3	43.5	
198.11	12.0	18.9	30.9	43.5	
232.03	8.5	20.0	28.5	46.0	
399.63	12.0	22.4	34.4	46.0	
564.74	3.0	26.9	29.9	46.0	
662.67	2.0	29.8	31.8	46.0	
695.79	1.5	30.8	32.3	46.0	
729.08	4.5	31.2	35.7	46.0	
732.97	4.5	31.3	35.8	46.0	
932.78	2.0	34.3	36.3	46.0	

Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/12/2002
Operator: R. Heller

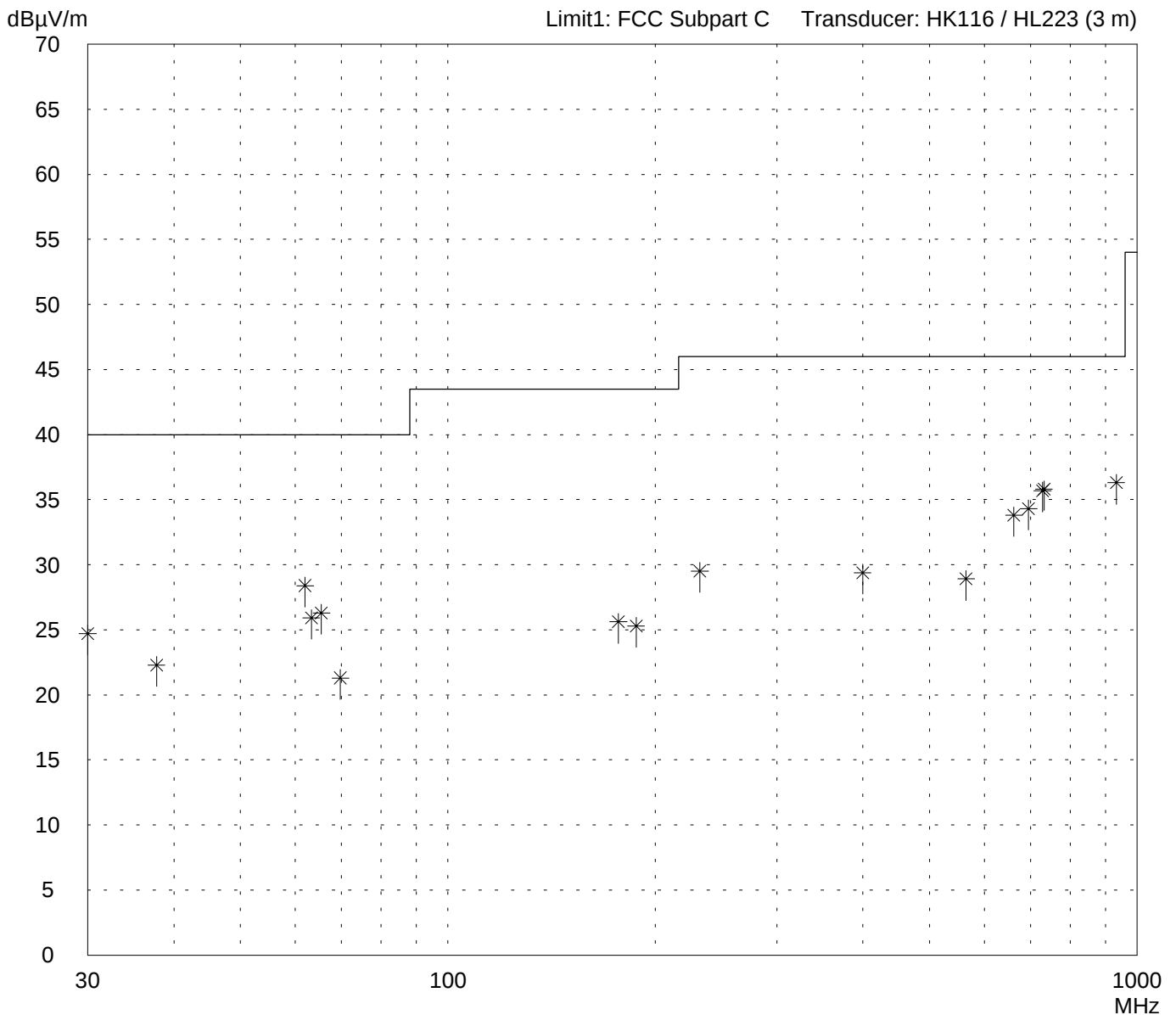
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/12/2002
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-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
30.00	9.5	15.2	24.7	40.0	
37.76	9.0	13.3	22.3	40.0	
62.06	17.5	10.9	28.4	40.0	
63.34	15.0	10.9	25.9	40.0	
65.49	15.5	10.8	26.3	40.0	
69.81	10.5	10.8	21.3	40.0	
176.73	8.0	17.6	25.6	43.5	
187.45	7.0	18.3	25.3	43.5	
232.03	9.5	20.0	29.5	46.0	
399.63	7.0	22.4	29.4	46.0	
564.74	2.0	26.9	28.9	46.0	
662.67	4.0	29.8	33.8	46.0	
695.79	3.5	30.8	34.3	46.0	
729.08	4.5	31.2	35.7	46.0	
732.97	4.5	31.3	35.8	46.0	
932.78	2.0	34.3	36.3	46.0	

Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/11/2002
Operator: R. Heller

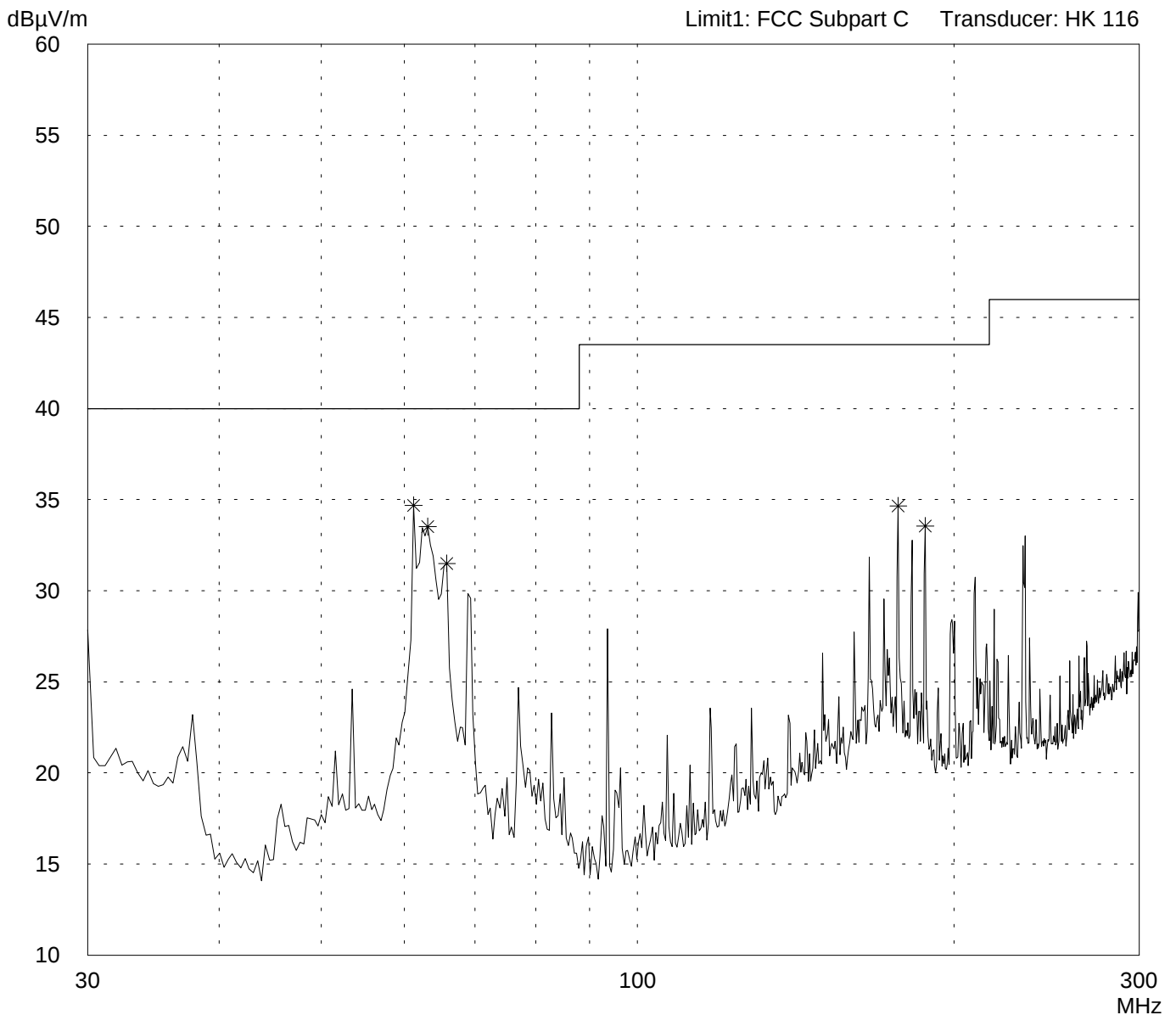
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/11/2002
Operator: R. Heller

Test performed: automatically
File name:

Mode:

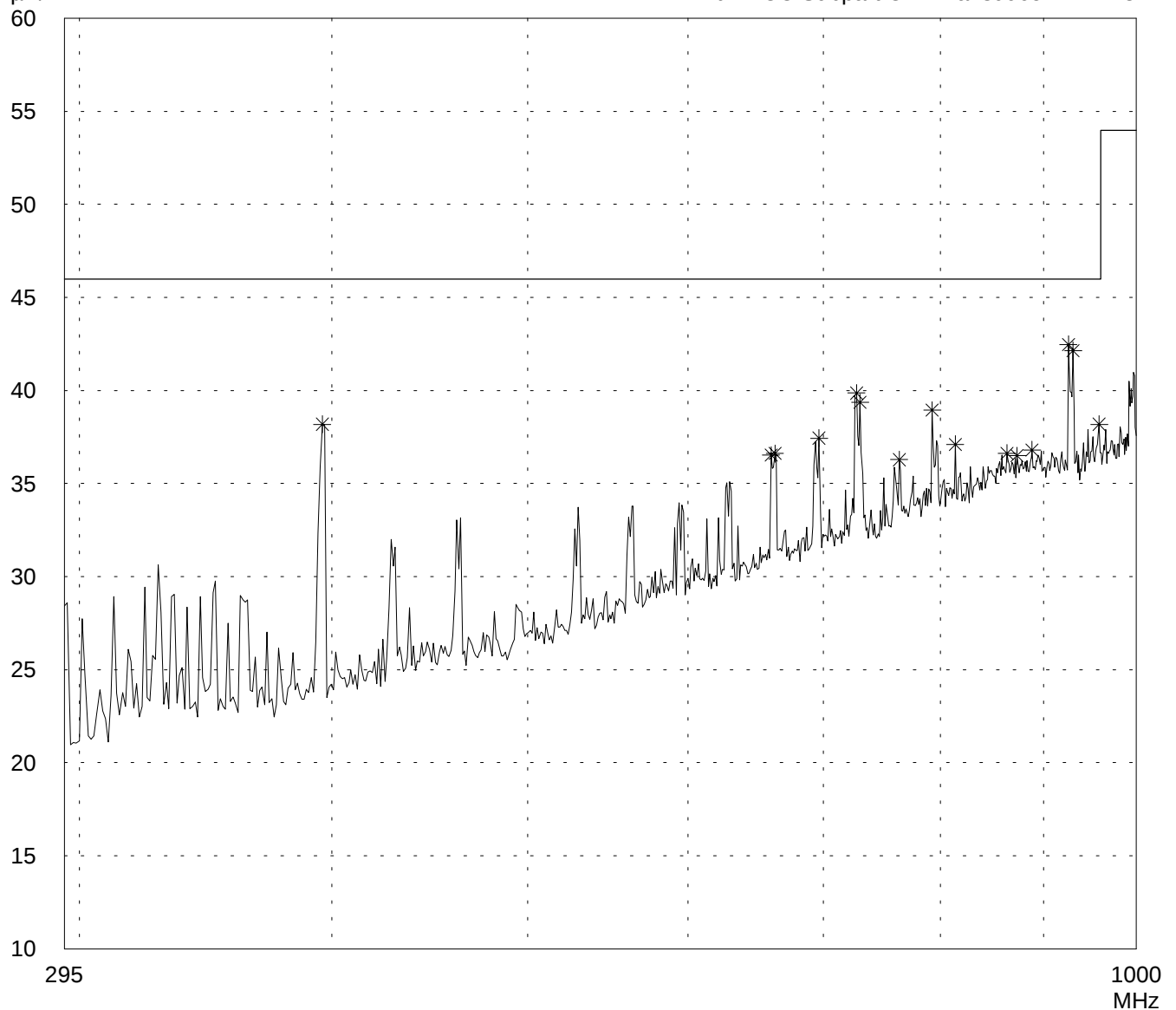
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

dB μ V/m

Limit1: FCC Subpart C Transducer: HL 223



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/11/2002
Operator: R. Heller

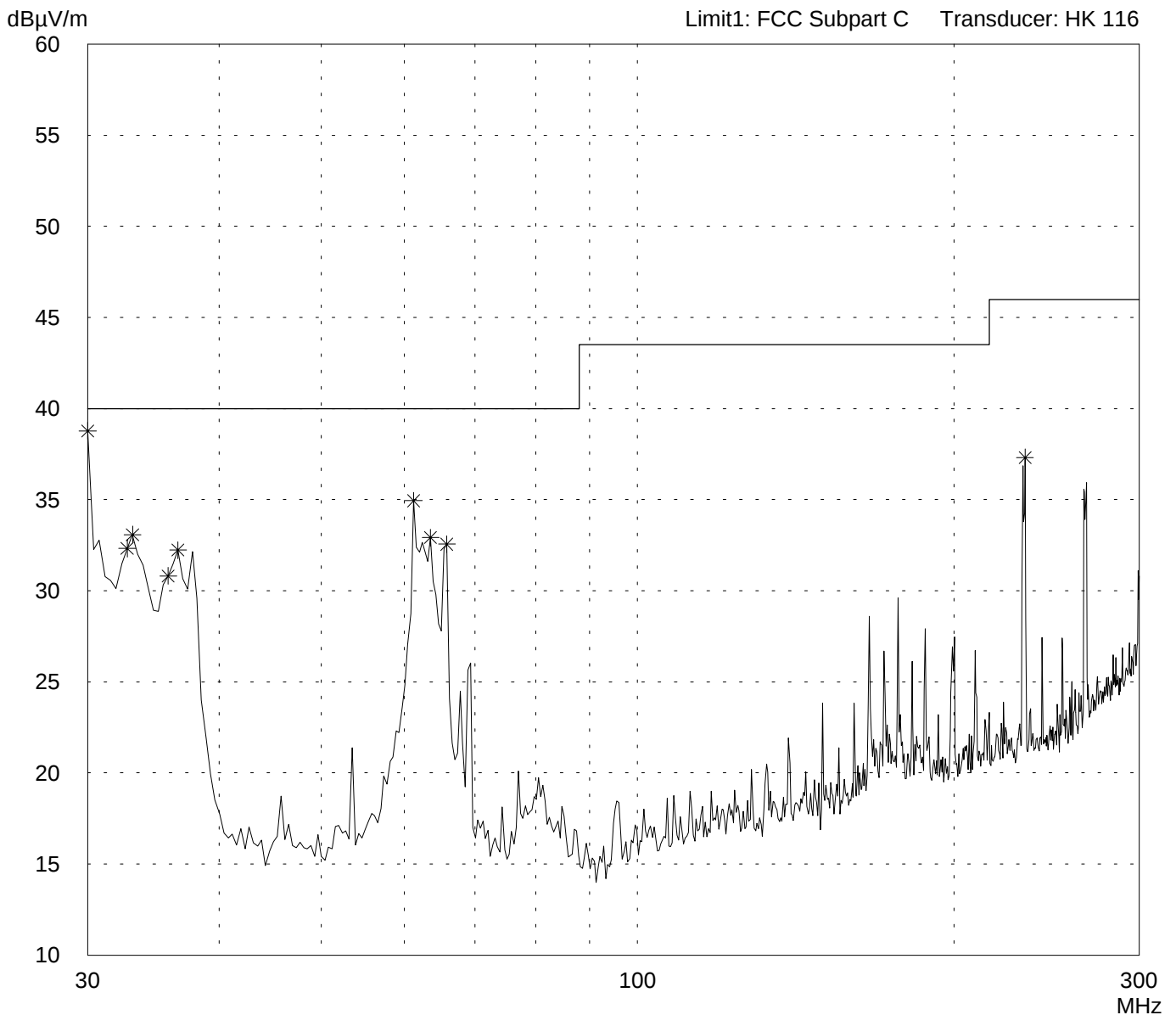
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/11/2002
Operator: R. Heller

Test performed: automatically
File name:

Mode:

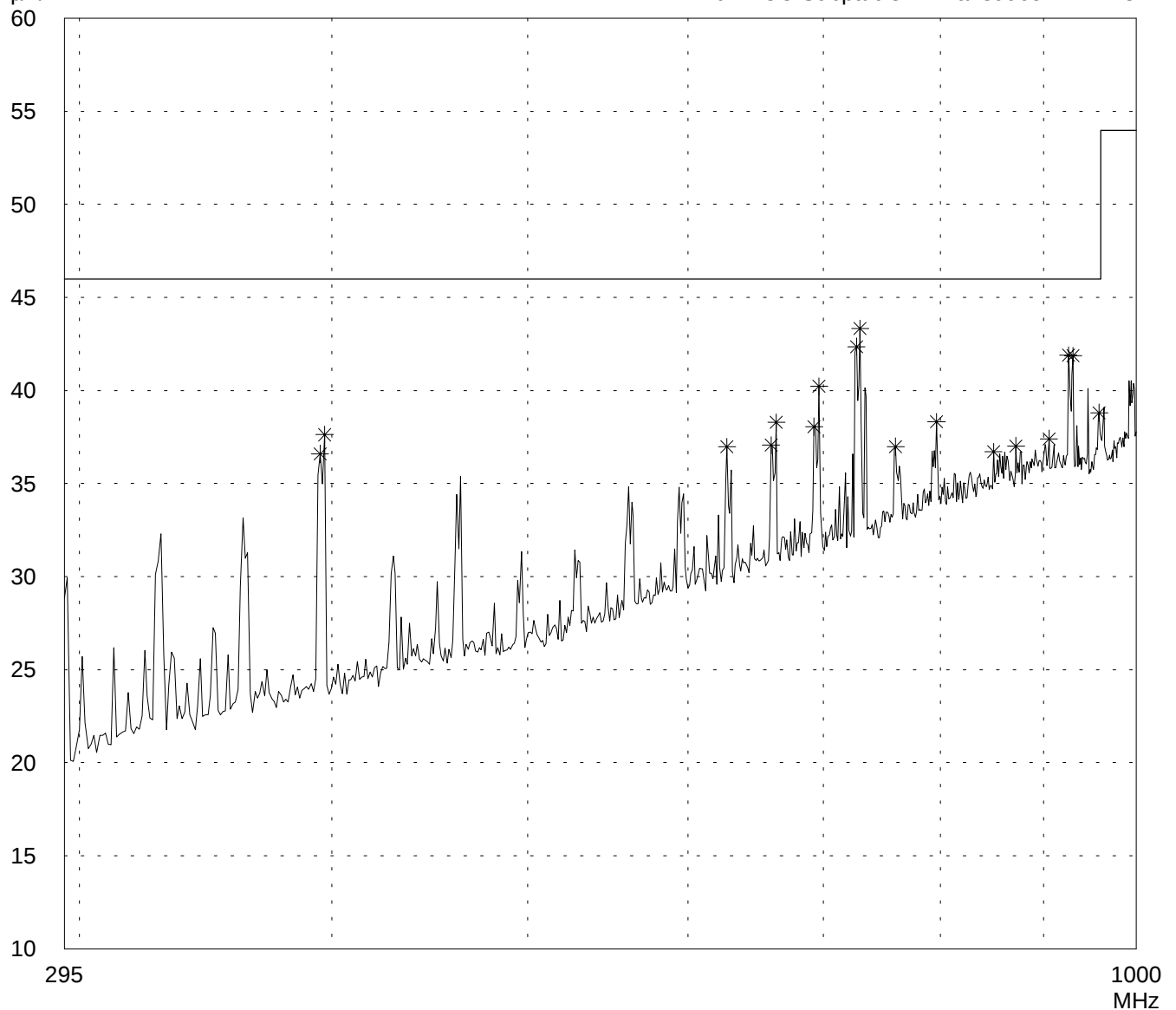
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

$\text{dB}\mu\text{V/m}$

Limit1: FCC Subpart C Transducer: HL 223



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/12/2002
Operator: R. Heller

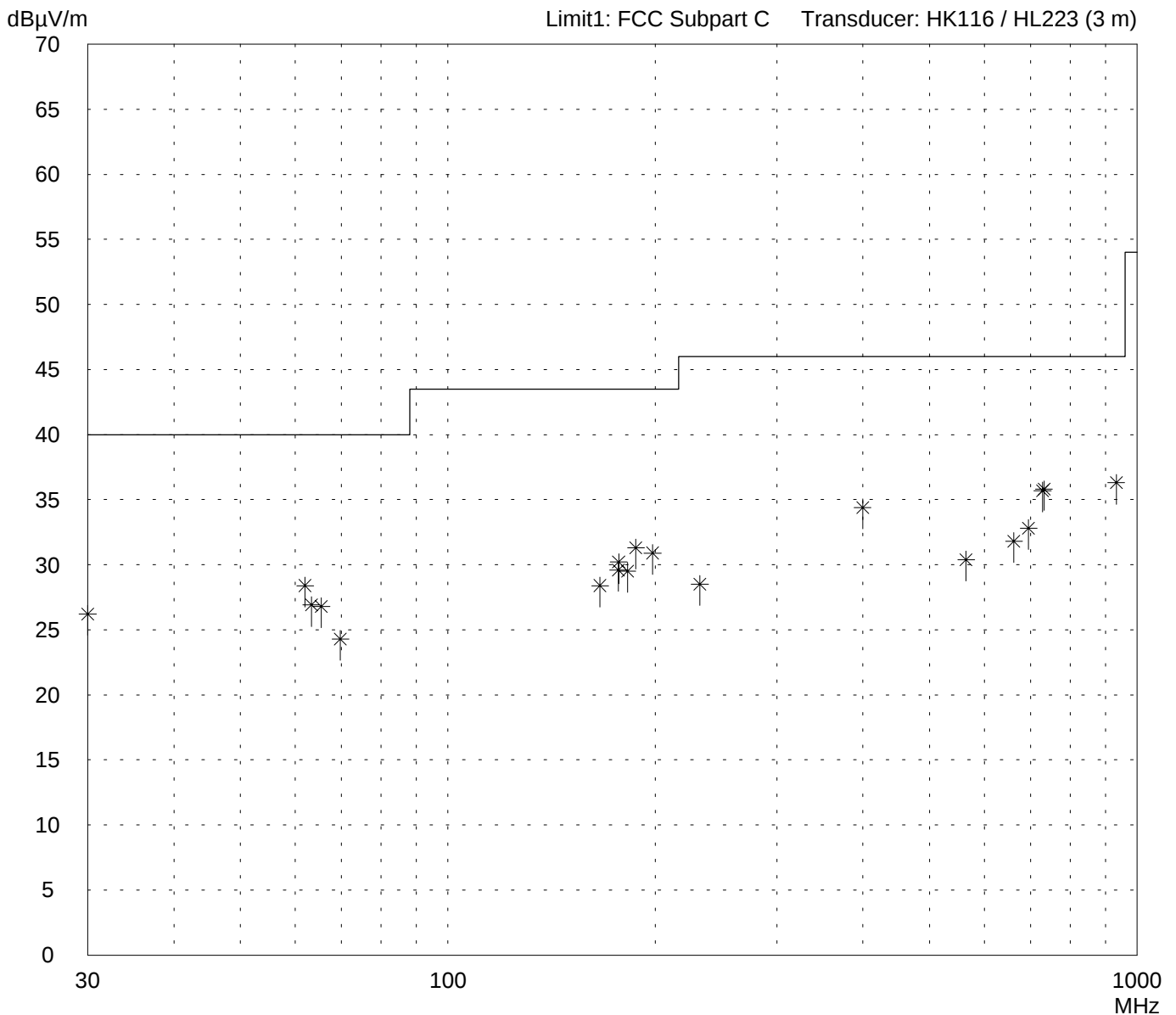
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/12/2002
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 Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- 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 dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
30.00	11.0	15.2	26.2	40.0	
62.04	17.5	10.9	28.4	40.0	
63.34	16.0	10.9	26.9	40.0	
65.49	16.0	10.8	26.8	40.0	
69.83	13.5	10.8	24.3	40.0	
166.14	11.5	16.9	28.4	43.5	
176.68	12.0	17.6	29.6	43.5	
176.87	12.5	17.7	30.2	43.5	
182.04	11.5	18.0	29.5	43.5	
187.40	13.0	18.3	31.3	43.5	
198.11	12.0	18.9	30.9	43.5	
232.03	8.5	20.0	28.5	46.0	
399.63	12.0	22.4	34.4	46.0	
564.74	3.5	26.9	30.4	46.0	
662.67	2.0	29.8	31.8	46.0	
695.79	2.0	30.8	32.8	46.0	
729.08	4.5	31.2	35.7	46.0	
732.97	4.5	31.3	35.8	46.0	
932.78	2.0	34.3	36.3	46.0	

Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/12/2002
Operator: R. Heller

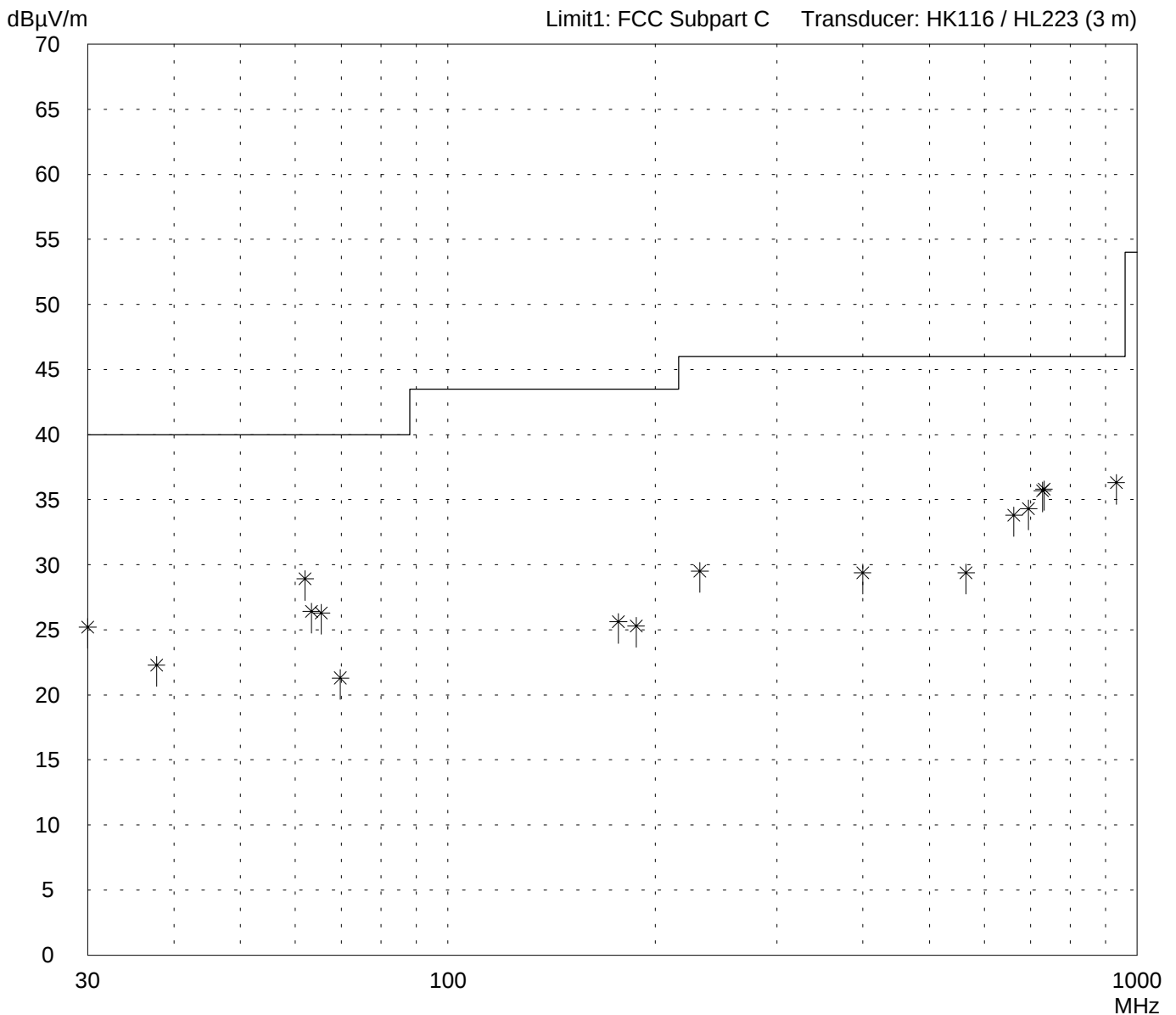
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/12/2002
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 Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
30.00	10.0	15.2	25.2	40.0	
37.76	9.0	13.3	22.3	40.0	
62.06	18.0	10.9	28.9	40.0	
63.34	15.5	10.9	26.4	40.0	
65.49	15.5	10.8	26.3	40.0	
69.81	10.5	10.8	21.3	40.0	
176.73	8.0	17.6	25.6	43.5	
187.45	7.0	18.3	25.3	43.5	
232.03	9.5	20.0	29.5	46.0	
399.63	7.0	22.4	29.4	46.0	
564.74	2.5	26.9	29.4	46.0	
662.67	4.0	29.8	33.8	46.0	
695.79	3.5	30.8	34.3	46.0	
729.08	4.5	31.2	35.7	46.0	
732.97	4.5	31.3	35.8	46.0	
932.78	2.0	34.3	36.3	46.0	

Result:
Limit kept

Project file:
56305-20086-3

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT50300000
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 02/07/2002
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer-reading [dB μ V]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	37.3	0.6	20.7	58.6	74
2.3958	vertical	52.7	0.6	20.7	74.0	NRB
2.3997	vertical	56.8	0.6	20.7	78.1	NRB
2.4000	vertical	57.3	0.6	20.7	78.6	NRB
2.4127	vertical	91.9	0.6	20.7	113.3	OB
2.4290	vertical	52.2	0.6	20.7	73.5	OB
2.7950	vertical	20.8	0.7	23.7	45.2	74
3.0620	horizontal	19.9	0.7	23.7	44.2	74
3.5690	horizontal	19.8	0.7	23.8	44.3	74
4.8303	vertical	25.5	0.9	27.3	53.7	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 113.3 dB μ V/m.

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.412$ GHz

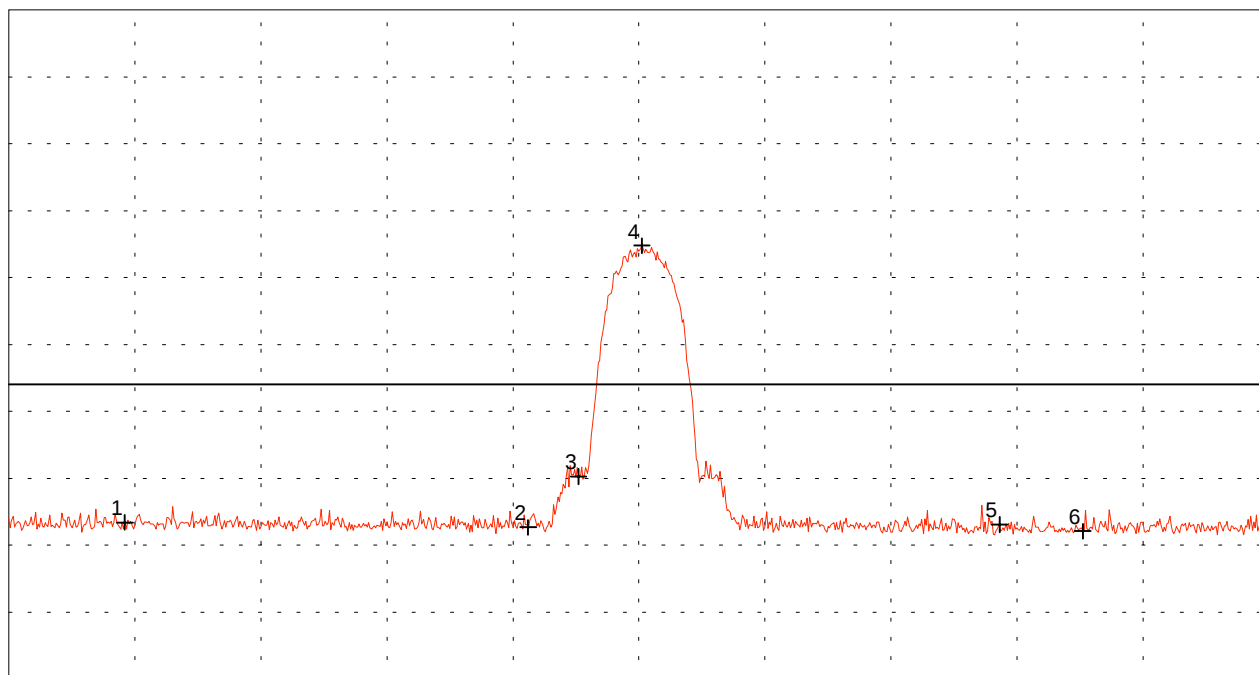
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.287 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz
SWP 20 ms

Multi Marker List

No. 1	2.310000 GHz	53.38 dB μ V/m
No. 2	2.390000 GHz	52.67 dB μ V/m
No. 3	2.400000 GHz	60.26 dB μ V/m
No. 4	2.412556 GHz	94.77 dB μ V/m
No. 5	2.483500 GHz	53.08 dB μ V/m
No. 6	2.500000 GHz	52.09 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.412$ GHz

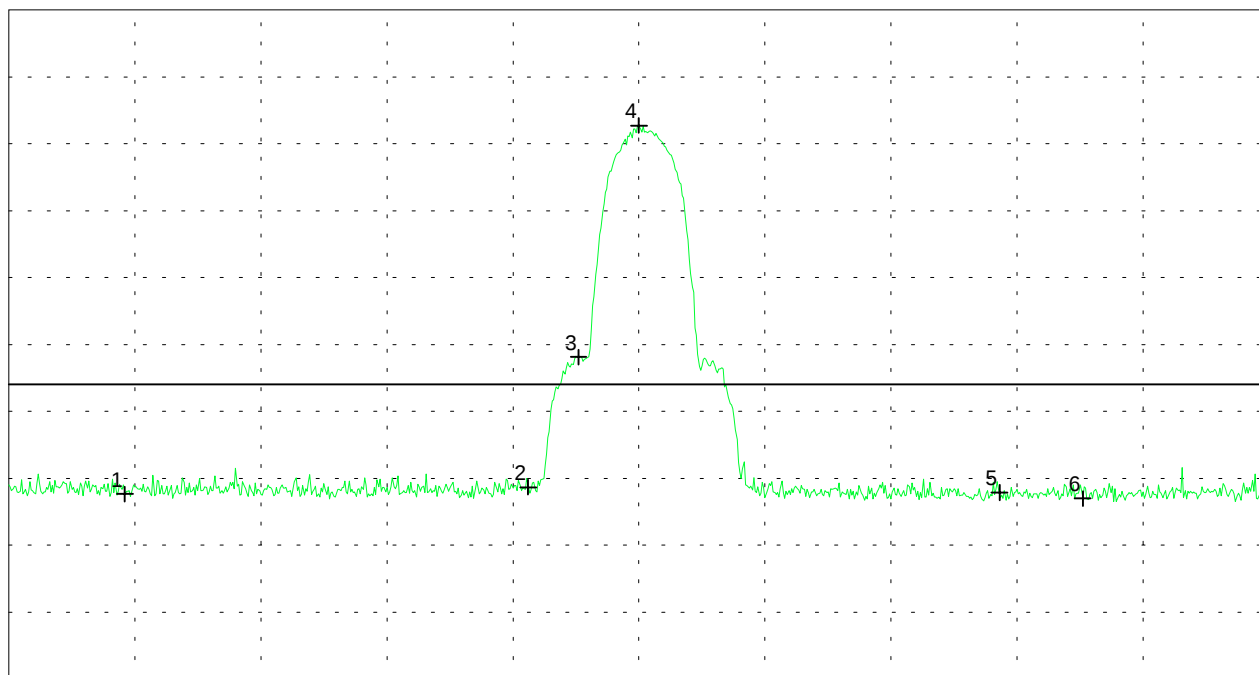
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.287 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz
SWP 20 ms

Multi Marker List

No. 1	2.310000 GHz	57.63 dB μ V/m
No. 2	2.390000 GHz	58.68 dB μ V/m
No. 3	2.400000 GHz	78.13 dB μ V/m
No. 4	2.412000 GHz	112.74 dB μ V/m
No. 5	2.483500 GHz	57.86 dB μ V/m
No. 6	2.500000 GHz	56.97 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

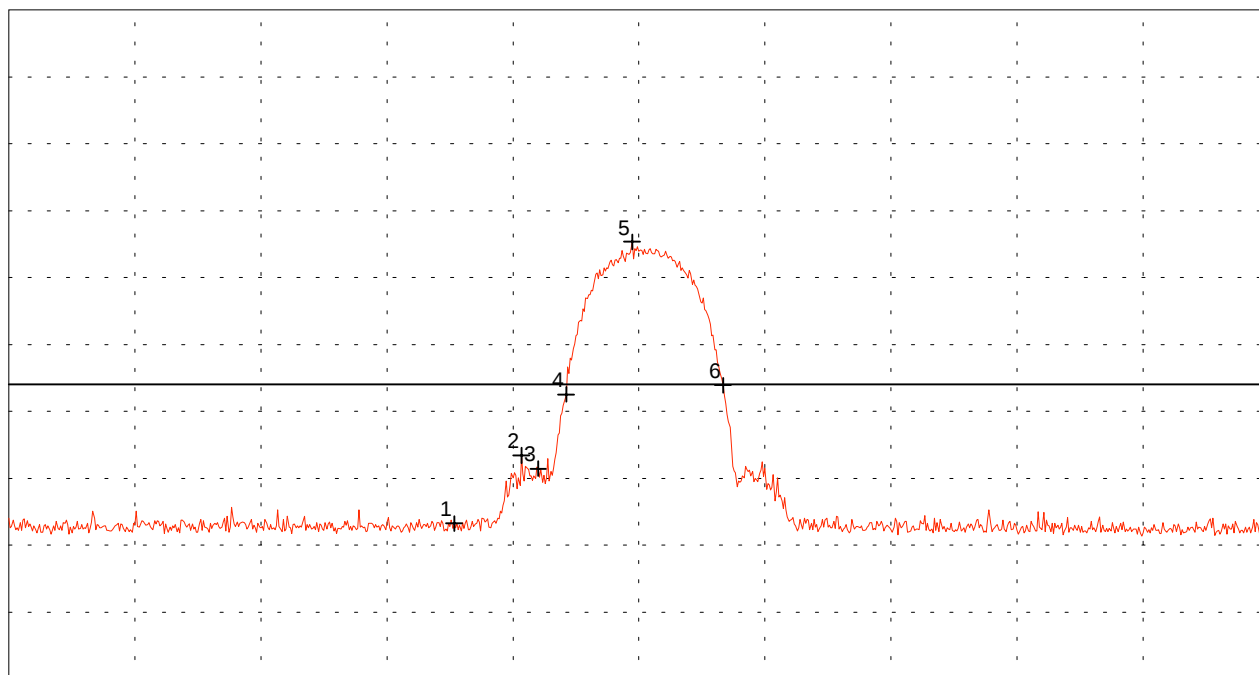
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

Multi Marker List

No. 1	2.390000 GHz	53.25 dB μ V/m
No. 2	2.398000 GHz	63.41 dB μ V/m
No. 3	2.400000 GHz	61.43 dB μ V/m
No. 4	2.403333 GHz	72.55 dB μ V/m
No. 5	2.411167 GHz	95.36 dB μ V/m
No. 6	2.422000 GHz	73.90 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.412$ GHz

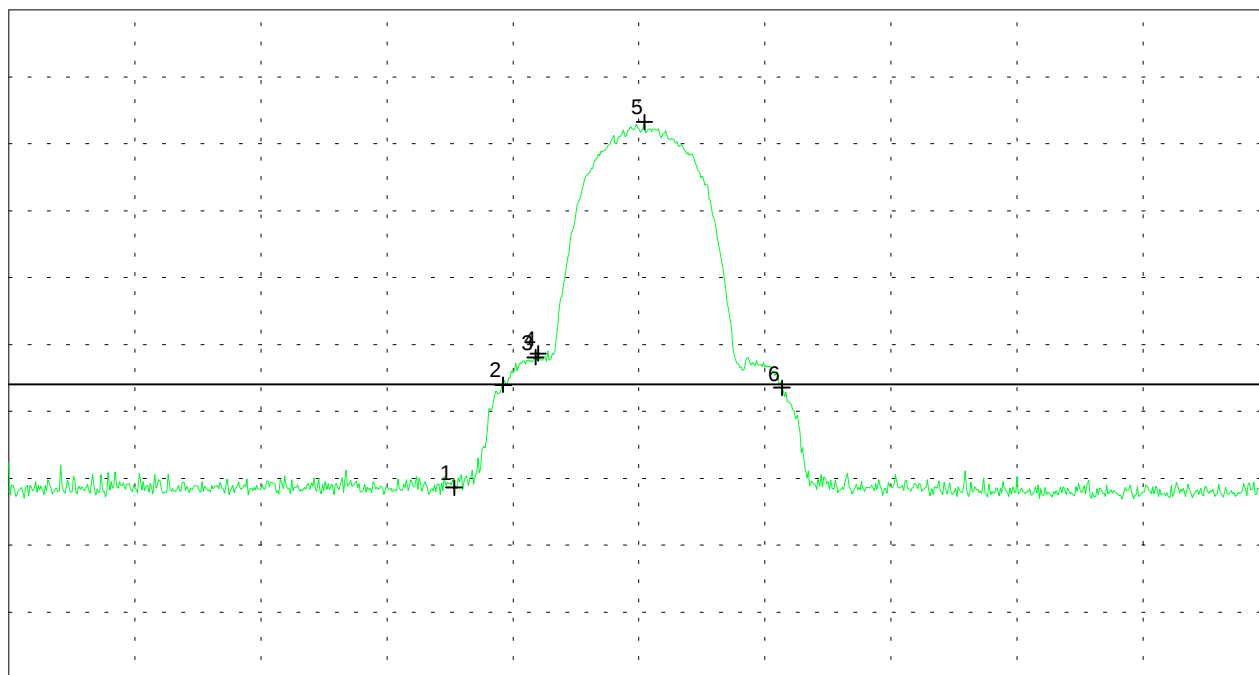
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

Multi Marker List

No. 1	2.390000 GHz	58.60 dB μ V/m
No. 2	2.395833 GHz	73.96 dB μ V/m
No. 3	2.399667 GHz	78.10 dB μ V/m
No. 4	2.400000 GHz	78.64 dB μ V/m
No. 5	2.412667 GHz	113.25 dB μ V/m
No. 6	2.429000 GHz	73.53 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT50300000
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 02/07/2002
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	24.2	0.6	20.7	45.5	54
2.3933	vertical	32.6	0.6	20.7	53.9	NRB
2.3992	vertical	48.9	0.6	20.7	70.2	NRB
2.4000	vertical	48.3	0.6	20.7	69.6	NRB
2.4128	vertical	84.6	0.6	20.7	105.9	OB
2.4305	vertical	32.6	0.6	20.7	53.9	OB
2.7965	vertical	13.4	0.7	23.7	37.8	54
3.0665	vertical	10.3	0.7	23.7	34.7	54
3.6020	vertical	10.9	0.7	23.8	35.4	54
4.8241	horizontal	18.9	0.9	27.3	47.0	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 105.9 dB μ V/m.

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.412$ GHz

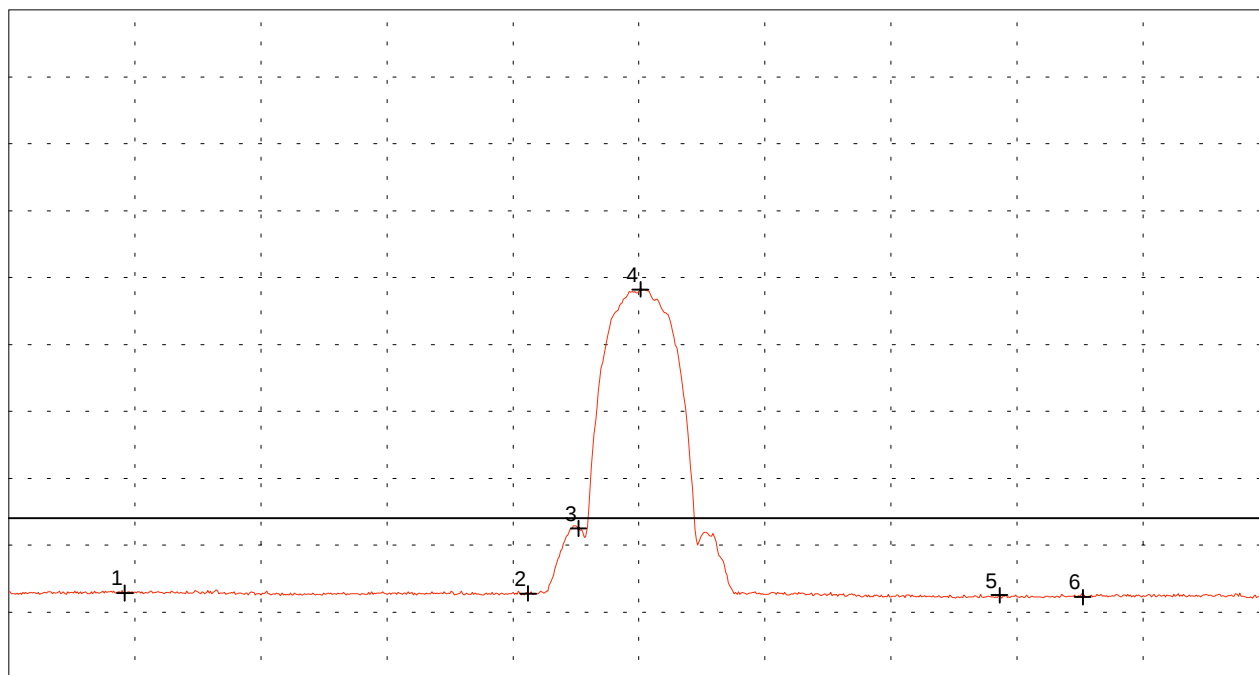
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.287 GHz
RBW 1 MHz

VBW 3 kHz

Stop 2.537 GHz
SWP 260 ms

Multi Marker List

No. 1	2.310000 GHz	42.82 dB μ V/m
No. 2	2.390000 GHz	42.79 dB μ V/m
No. 3	2.400000 GHz	52.49 dB μ V/m
No. 4	2.412278 GHz	88.25 dB μ V/m
No. 5	2.483500 GHz	42.51 dB μ V/m
No. 6	2.500000 GHz	42.26 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.412$ GHz

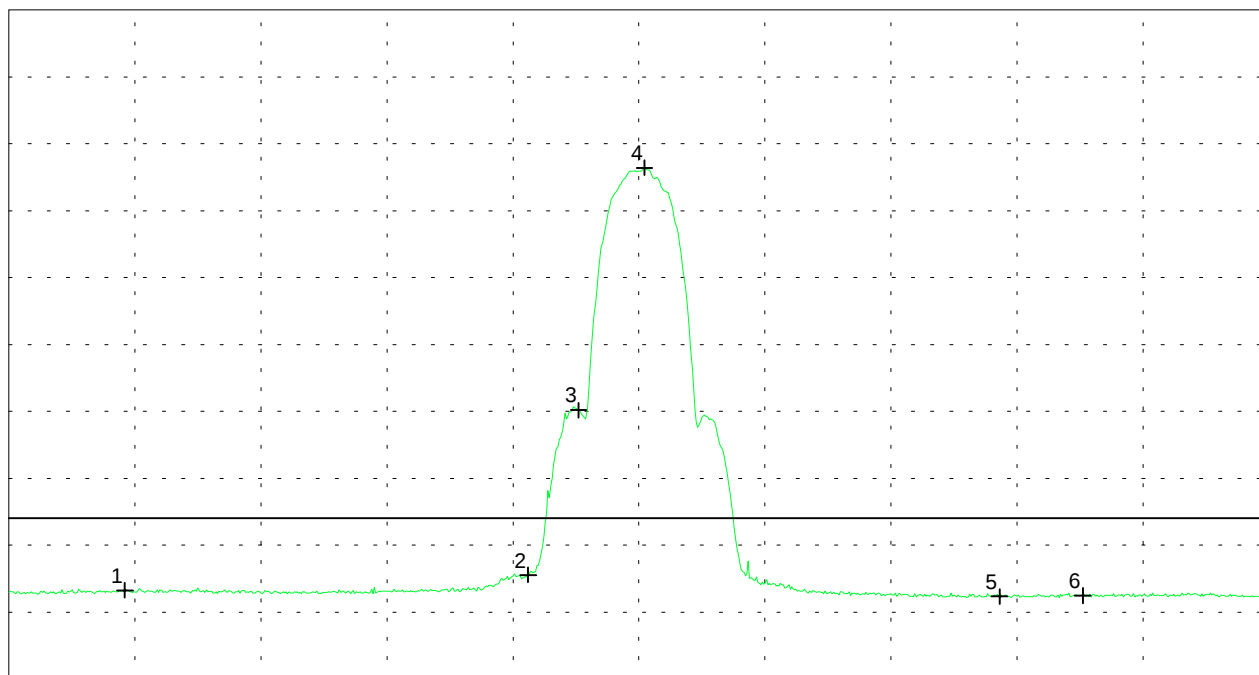
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.287 GHz
RBW 1 MHz

VBW 3 kHz

Stop 2.537 GHz
SWP 260 ms

Multi Marker List

No. 1	2.310000 GHz	43.27 dB μ V/m
No. 2	2.390000 GHz	45.53 dB μ V/m
No. 3	2.400000 GHz	70.19 dB μ V/m
No. 4	2.413111 GHz	106.40 dB μ V/m
No. 5	2.483500 GHz	42.33 dB μ V/m
No. 6	2.500000 GHz	42.46 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.412$ GHz

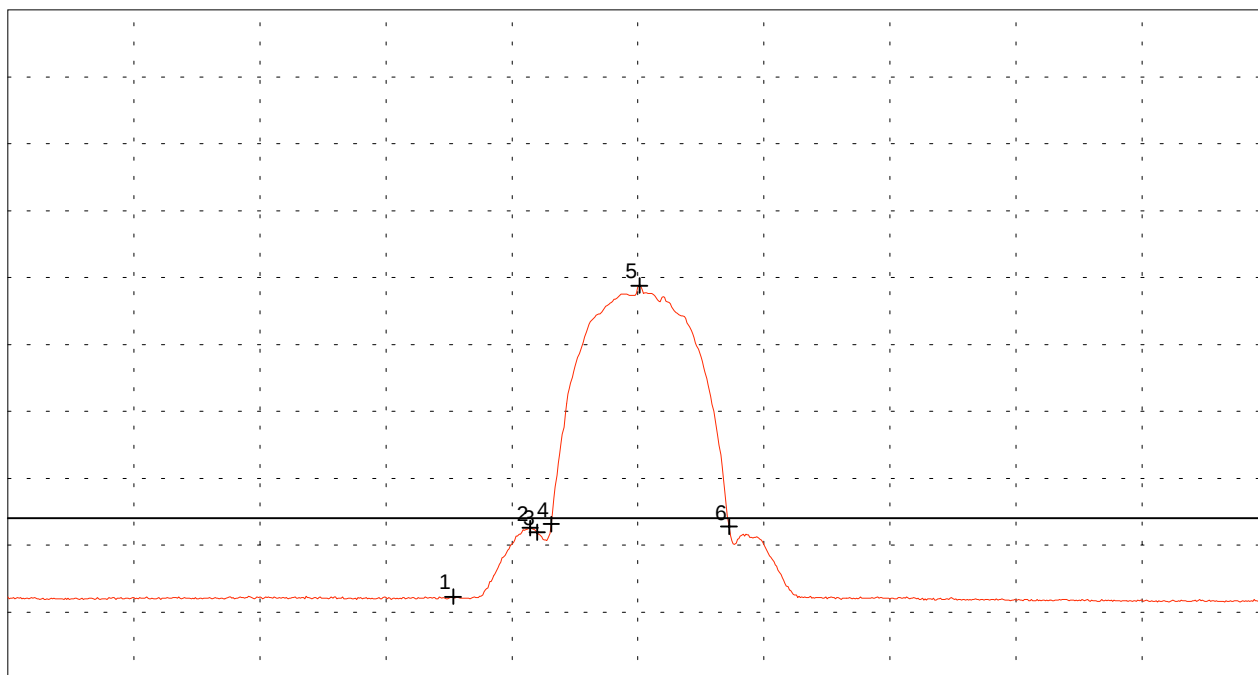
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 460 ms

Multi Marker List

No. 1	2.390000 GHz	42.31 dB μ V/m
No. 2	2.399167 GHz	52.57 dB μ V/m
No. 3	2.400000 GHz	51.93 dB μ V/m
No. 4	2.401667 GHz	53.13 dB μ V/m
No. 5	2.412167 GHz	88.80 dB μ V/m
No. 6	2.422833 GHz	52.75 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.412$ GHz

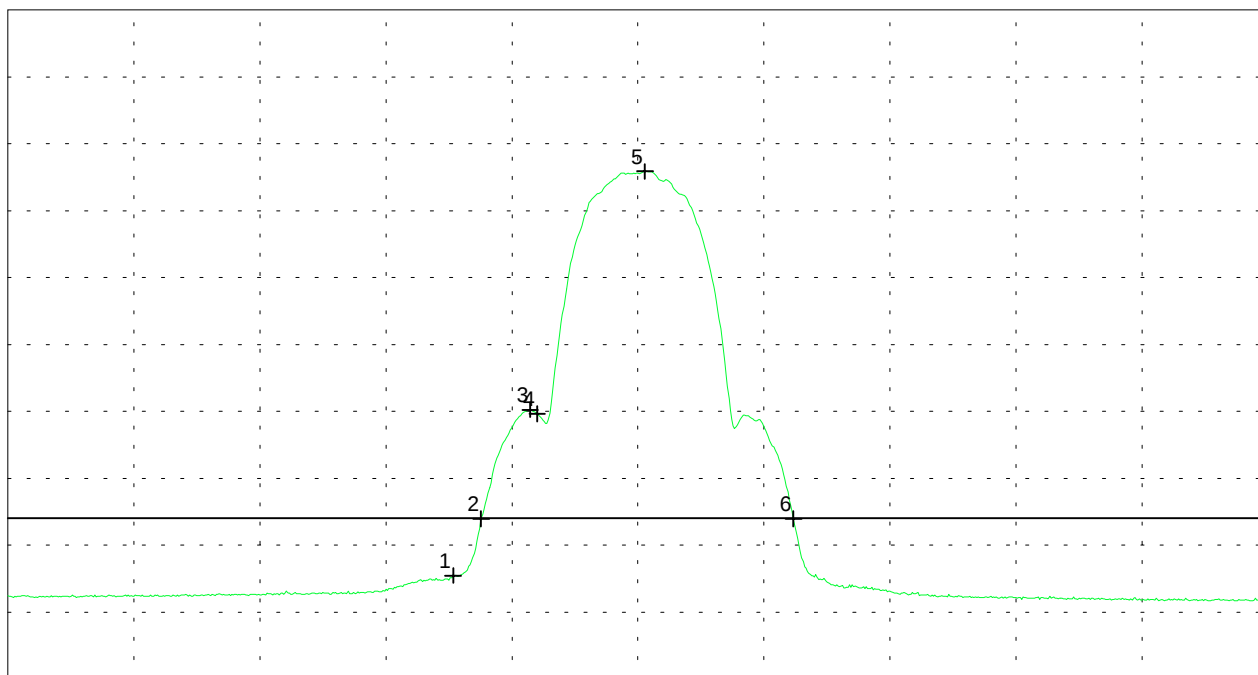
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 460 ms

Multi Marker List

No. 1	2.390000 GHz	45.46 dB μ V/m
No. 2	2.393333 GHz	53.94 dB μ V/m
No. 3	2.399167 GHz	70.24 dB μ V/m
No. 4	2.400000 GHz	69.63 dB μ V/m
No. 5	2.412833 GHz	105.87 dB μ V/m
No. 6	2.430500 GHz	53.94 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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**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: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT50300000
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 02/07/2002
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
mounted on left side of PC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.412$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	37.5	0.6	20.7	58.8	74
2.3962	vertical	52.6	0.6	20.7	73.9	NRB
2.3977	vertical	55.7	0.6	20.7	77.0	NRB
2.4000	vertical	54.8	0.6	20.7	76.2	OB
2.4113	vertical	89.5	0.6	20.7	110.8	OB
2.4283	vertical	52.1	0.6	20.7	73.4	OB
4.8241	vertical	28.4	0.9	27.3	56.6	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 110.8 dB μ V/m.

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

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

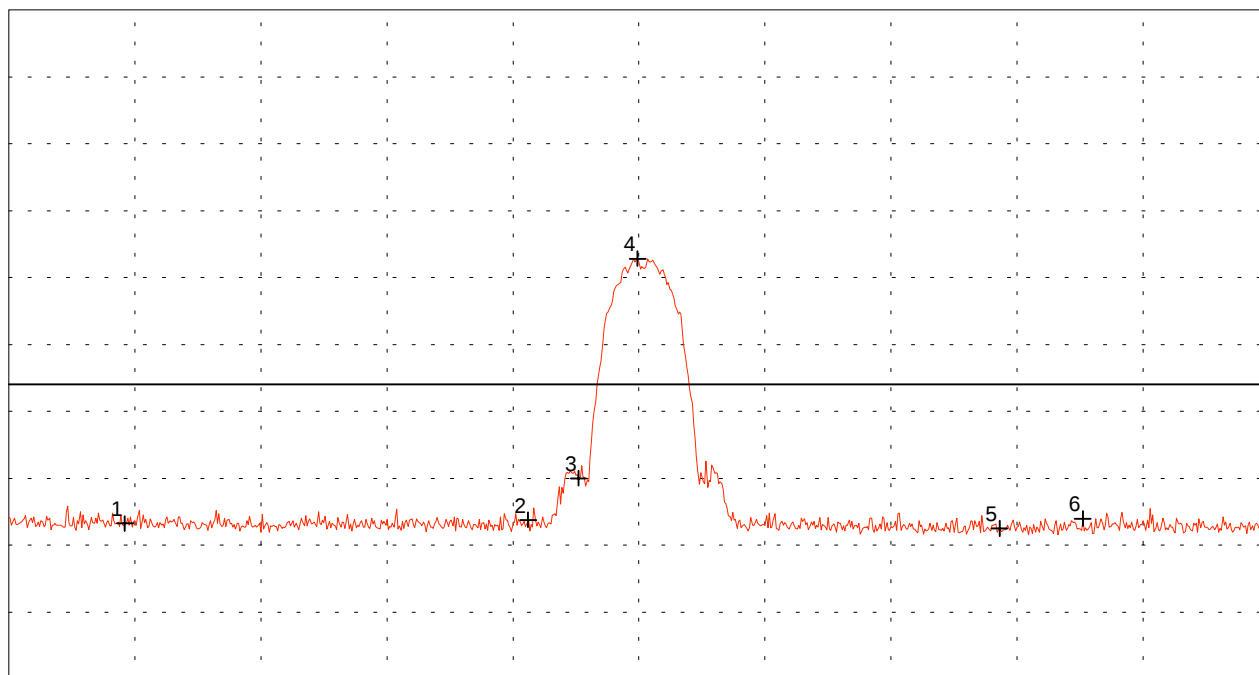
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.287 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz
SWP 20 ms

Multi Marker List

No. 1	2.310000 GHz	53.25 dB μ V/m
No. 2	2.390000 GHz	53.79 dB μ V/m
No. 3	2.400000 GHz	60.01 dB μ V/m
No. 4	2.411722 GHz	92.82 dB μ V/m
No. 5	2.483500 GHz	52.49 dB μ V/m
No. 6	2.500000 GHz	53.96 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

Page 64 of 116 Pages

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

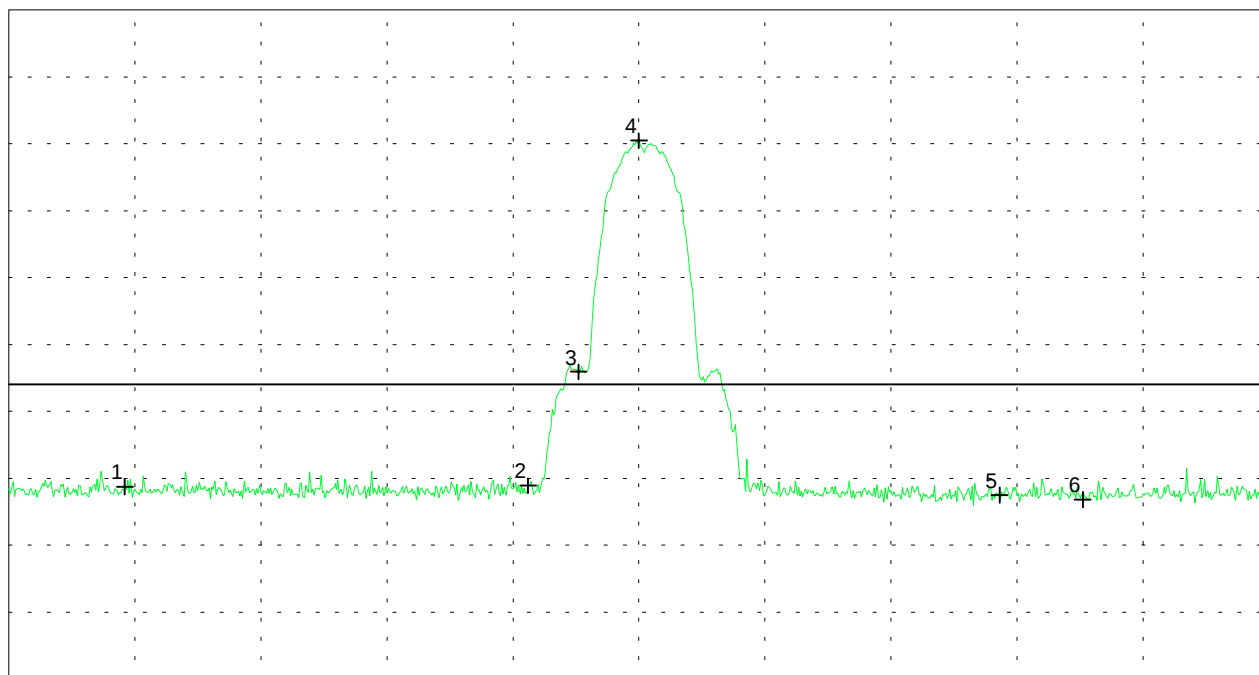
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.287 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz
SWP 20 ms

Multi Marker List

No. 1	2.310000 GHz	58.73 dB μ V/m
No. 2	2.390000 GHz	58.90 dB μ V/m
No. 3	2.400000 GHz	75.92 dB μ V/m
No. 4	2.412000 GHz	110.48 dB μ V/m
No. 5	2.483500 GHz	57.48 dB μ V/m
No. 6	2.500000 GHz	56.82 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

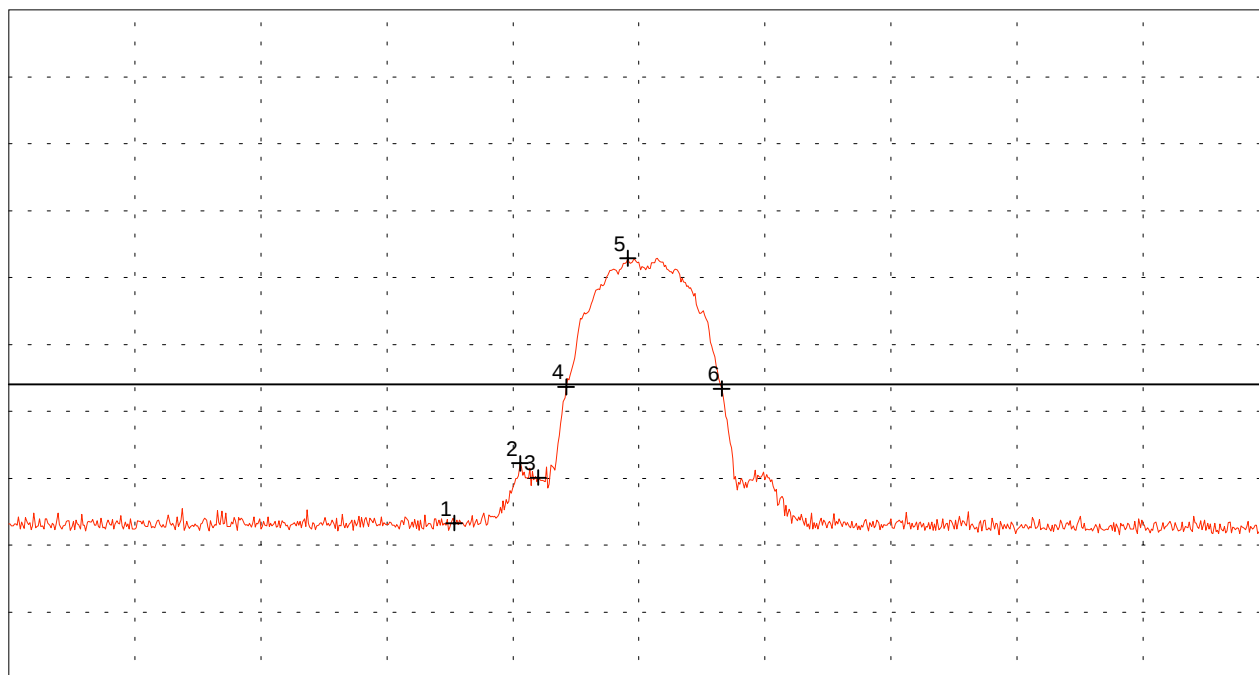
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

Multi Marker List

No. 1	2.390000 GHz	53.28 dB μ V/m
No. 2	2.397833 GHz	62.22 dB μ V/m
No. 3	2.400000 GHz	60.08 dB μ V/m
No. 4	2.403333 GHz	73.67 dB μ V/m
No. 5	2.410667 GHz	92.89 dB μ V/m
No. 6	2.421833 GHz	73.39 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

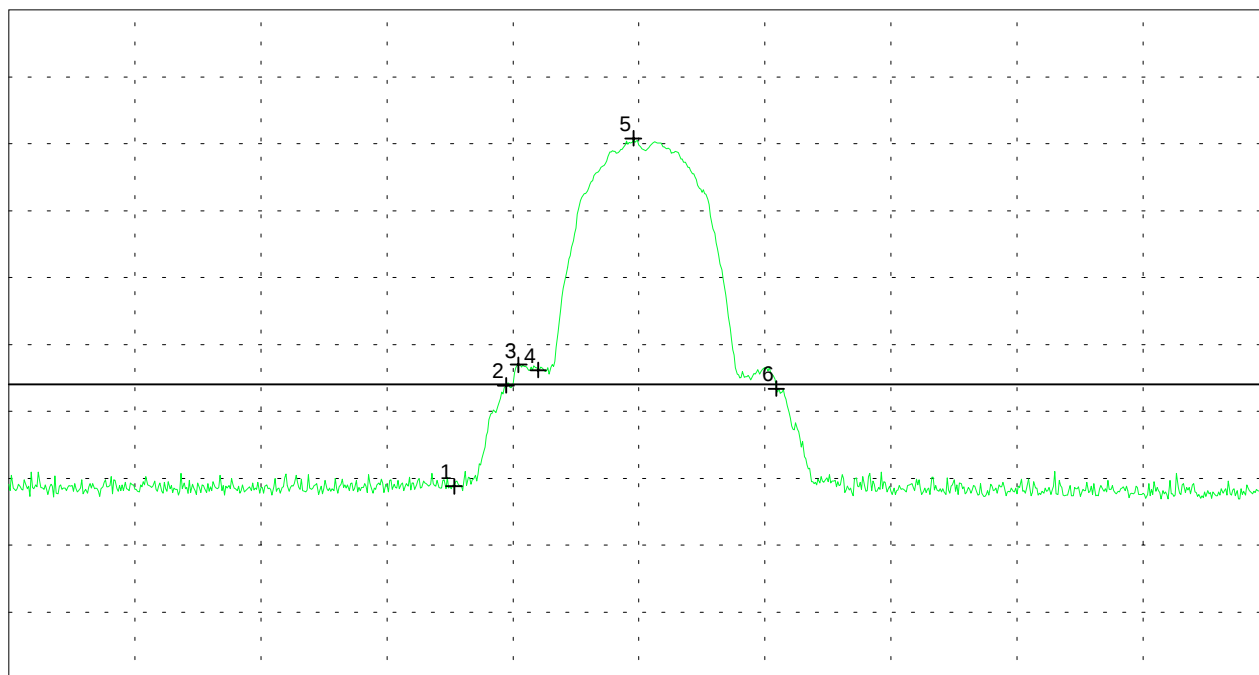
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

Multi Marker List

No. 1	2.390000 GHz	58.80 dB μ V/m
No. 2	2.396167 GHz	73.86 dB μ V/m
No. 3	2.397667 GHz	76.98 dB μ V/m
No. 4	2.400000 GHz	76.15 dB μ V/m
No. 5	2.411333 GHz	110.83 dB μ V/m
No. 6	2.428333 GHz	73.40 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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**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: PC24E-11-FC/R
 Type: RF-modem for wireless LAN
 Serial No.: 01UT50300000
 Applicant: Agere Systems Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 02/07/2002
 Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
 mounted on left side of PC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.412$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	23.9	0.6	20.7	45.2	54
2.3928	vertical	31.7	0.6	20.7	53.0	NRB
2.3985	vertical	51.1	0.6	20.7	72.4	NRB
2.4000	vertical	49.1	0.6	20.7	70.4	NRB
2.4117	vertical	85.3	0.6	20.7	106.6	OB
2.4312	vertical	32.6	0.6	20.7	54.0	OB
4.8238	vertical	22.5	0.9	27.3	50.6	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 106.6 dB μ V/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:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

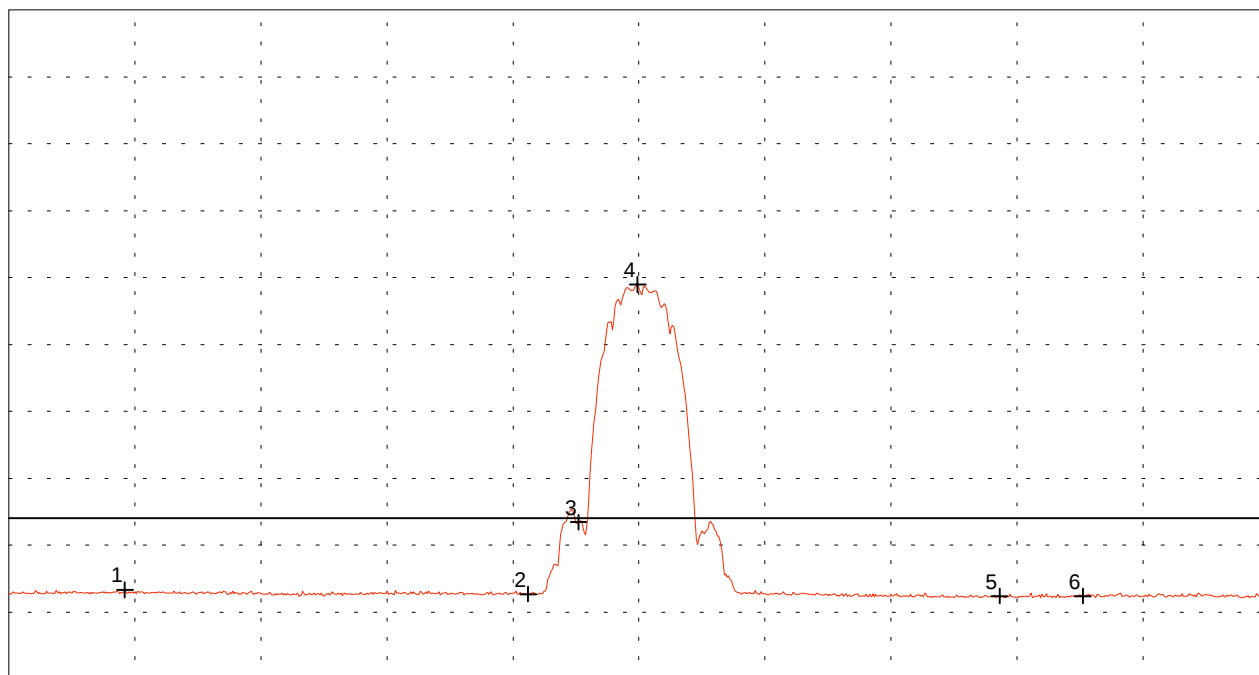
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.287 GHz
RBW 1 MHz

VBW 3 kHz

Stop 2.537 GHz
SWP 260 ms

Multi Marker List

No. 1	2.310000 GHz	43.30 dB μ V/m
No. 2	2.390000 GHz	42.69 dB μ V/m
No. 3	2.400000 GHz	53.43 dB μ V/m
No. 4	2.411722 GHz	88.98 dB μ V/m
No. 5	2.483500 GHz	42.39 dB μ V/m
No. 6	2.500000 GHz	42.41 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

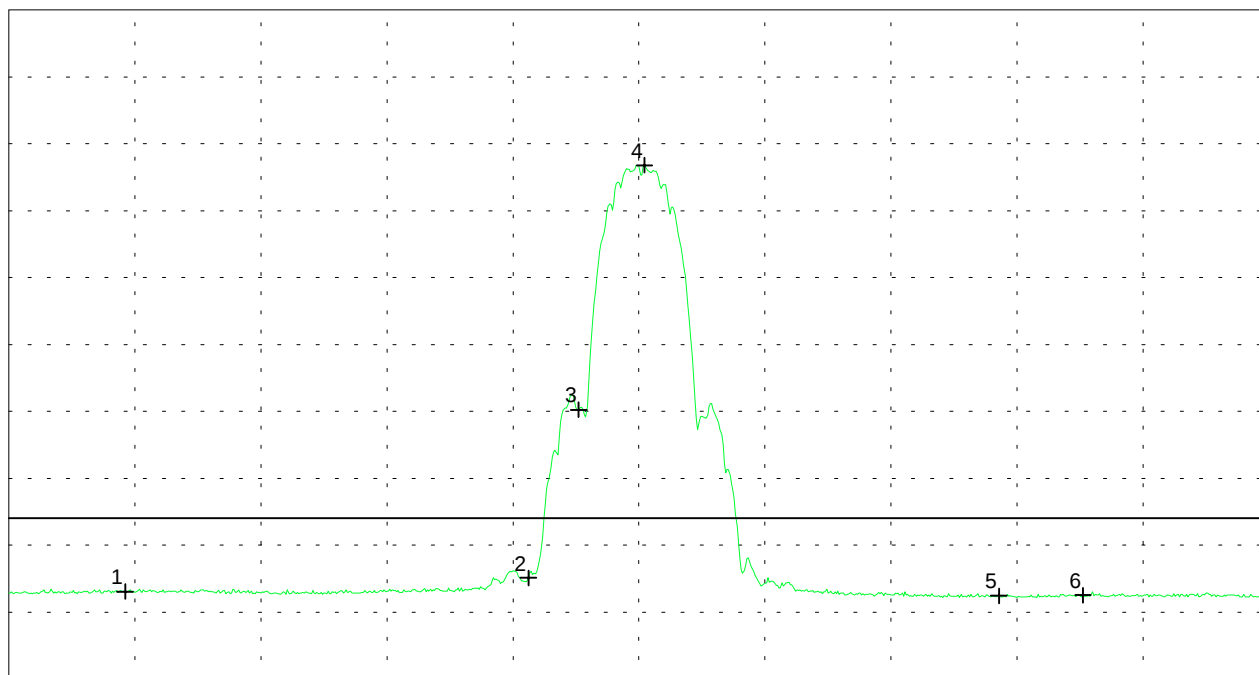
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.287 GHz
RBW 1 MHz

VBW 3 kHz

Stop 2.537 GHz
SWP 260 ms

Multi Marker List

No. 1	2.310056 GHz	43.05 dB μ V/m
No. 2	2.390056 GHz	45.10 dB μ V/m
No. 3	2.400056 GHz	70.24 dB μ V/m
No. 4	2.413111 GHz	106.78 dB μ V/m
No. 5	2.483389 GHz	42.44 dB μ V/m
No. 6	2.500056 GHz	42.51 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

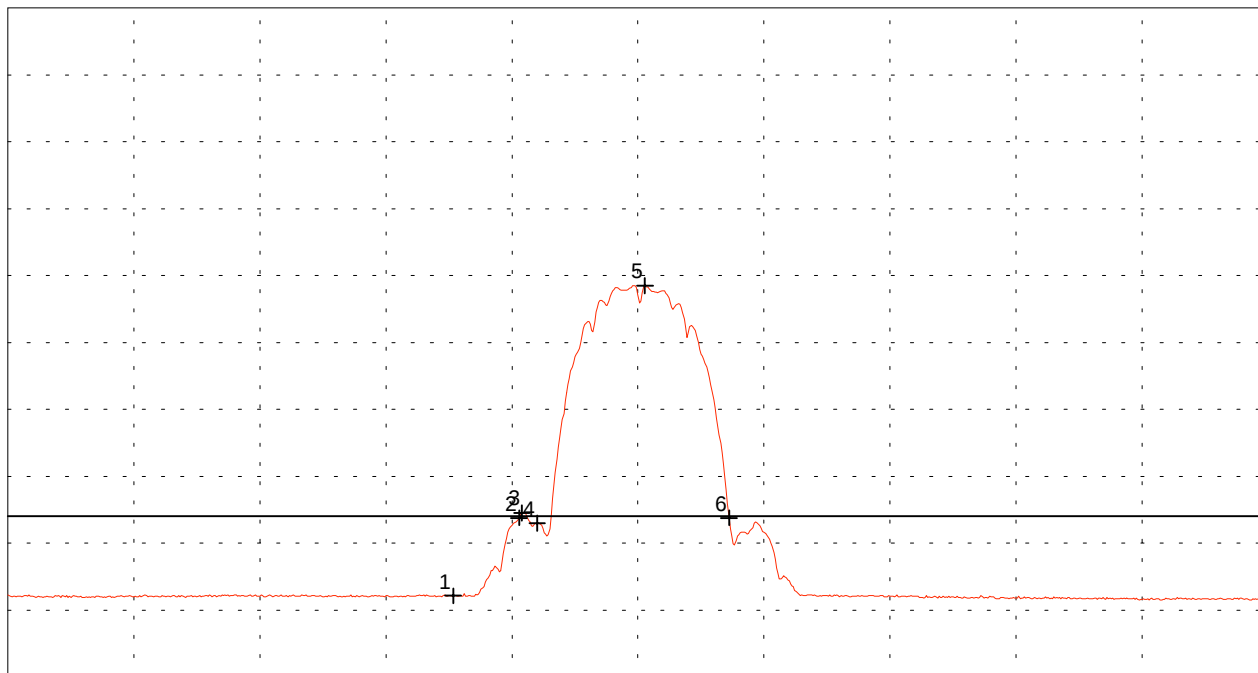
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 460 ms

Multi Marker List

No. 1	2.390000 GHz	42.13 dB μ V/m
No. 2	2.397833 GHz	53.76 dB μ V/m
No. 3	2.398167 GHz	54.52 dB μ V/m
No. 4	2.400000 GHz	52.97 dB μ V/m
No. 5	2.412833 GHz	88.50 dB μ V/m
No. 6	2.422833 GHz	53.79 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

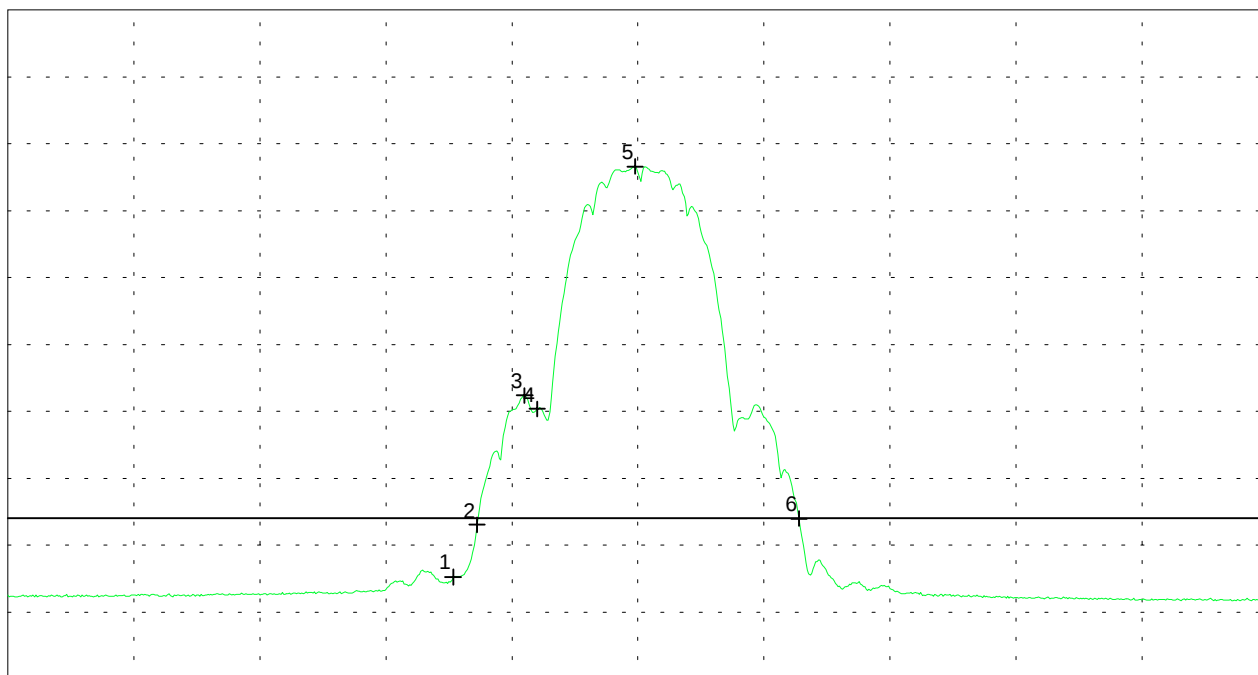
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 460 ms

Multi Marker List

No. 1	2.390000 GHz	45.23 dB μ V/m
No. 2	2.392833 GHz	53.03 dB μ V/m
No. 3	2.398500 GHz	72.38 dB μ V/m
No. 4	2.400000 GHz	70.37 dB μ V/m
No. 5	2.411667 GHz	106.61 dB μ V/m
No. 6	2.431167 GHz	53.96 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model: PC24E-11-FC/R
 Type: RF-modem for wireless LAN
 Serial No.: 01UT50300000
 Applicant: Agere Systems Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 02/07/2002
 Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
 via PCI-adapter Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
 mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4263	vertical	52.1	0.6	20.7	73.4	OB
2.4417	vertical	91.5	0.6	20.7	112.8	OB
2.4590	vertical	52.4	0.6	20.7	73.7	OB
2.7860	vertical	20.9	0.7	23.7	45.2	74
3.0590	horizontal	19.9	0.7	23.7	44.3	74
3.4730	vertical	19.8	0.7	23.8	44.3	74
4.8894	vertical	25.8	0.9	27.3	54.0	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 112.8 dB μ V/m.

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

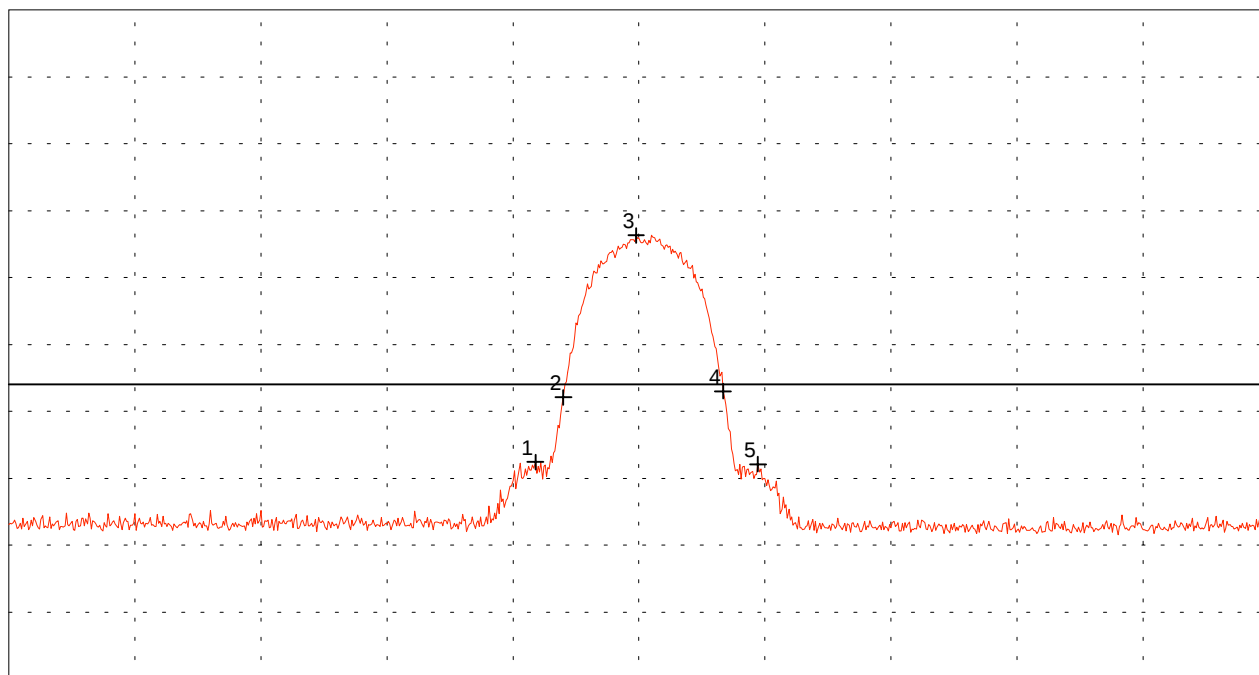
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.517 GHz
SWP 20 ms

Multi Marker List

No. 1	2.429667 GHz	62.42 dB μ V/m
No. 2	2.433000 GHz	72.10 dB μ V/m
No. 3	2.441667 GHz	96.32 dB μ V/m
No. 4	2.452000 GHz	73.01 dB μ V/m
No. 5	2.456167 GHz	62.09 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

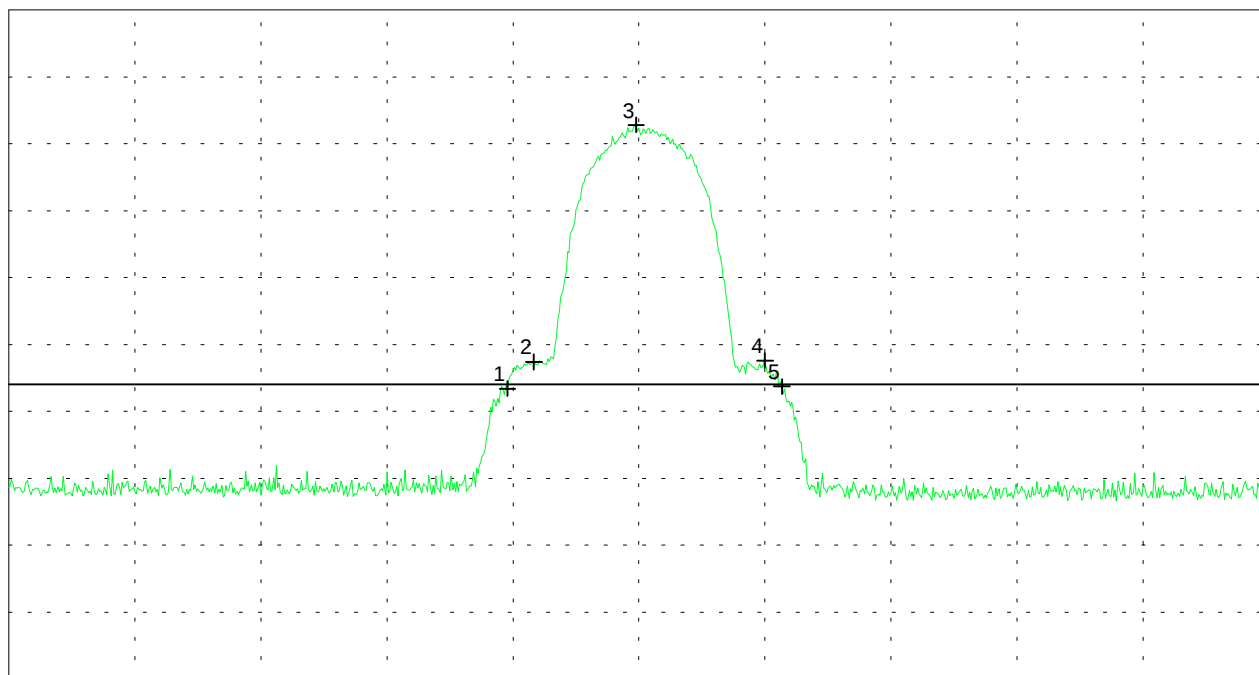
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.517 GHz
SWP 20 ms

Multi Marker List

No. 1	2.426333 GHz	73.40 dB μ V/m
No. 2	2.429500 GHz	77.37 dB μ V/m
No. 3	2.441667 GHz	112.82 dB μ V/m
No. 4	2.457000 GHz	77.59 dB μ V/m
No. 5	2.459000 GHz	73.73 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model: PC24E-11-FC/R
 Type: RF-modem for wireless LAN
 Serial No.: 01UT50300000
 Applicant: Agere Systems Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 02/07/2002
 Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
 mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4235	vertical	32.4	0.6	20.7	53.8	54
2.4428	vertical	84.9	0.6	20.7	106.2	OB
2.4605	vertical	32.1	0.6	20.7	53.4	OB
2.6630	vertical	10.8	0.6	23.7	35.2	OB
2.7845	vertical	12.0	0.7	23.7	36.3	54
3.0665	vertical	11.2	0.7	23.7	35.6	54
4.8841	vertical	22.4	0.9	27.3	50.6	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 106.2 dB μ V/m.

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

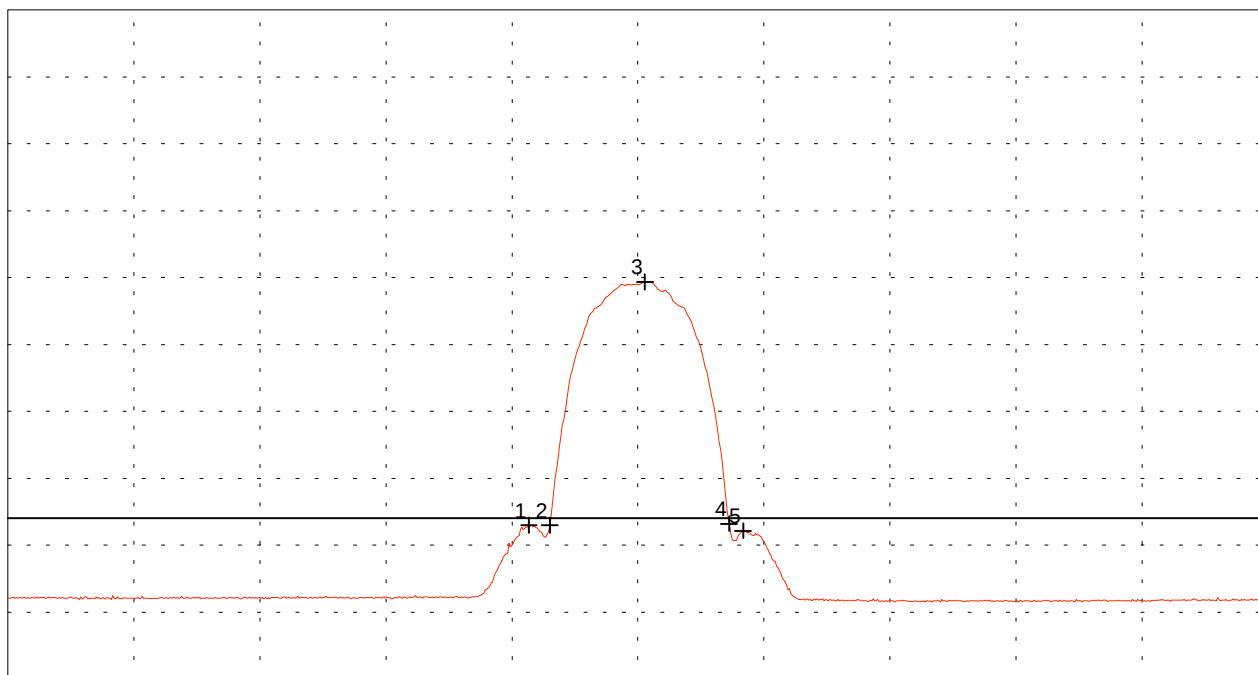
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.517 GHz
SWP 460 ms

Multi Marker List

No. 1	2.429000 GHz	52.97 dB μ V/m
No. 2	2.431500 GHz	52.97 dB μ V/m
No. 3	2.442833 GHz	89.36 dB μ V/m
No. 4	2.452833 GHz	53.18 dB μ V/m
No. 5	2.454500 GHz	52.16 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

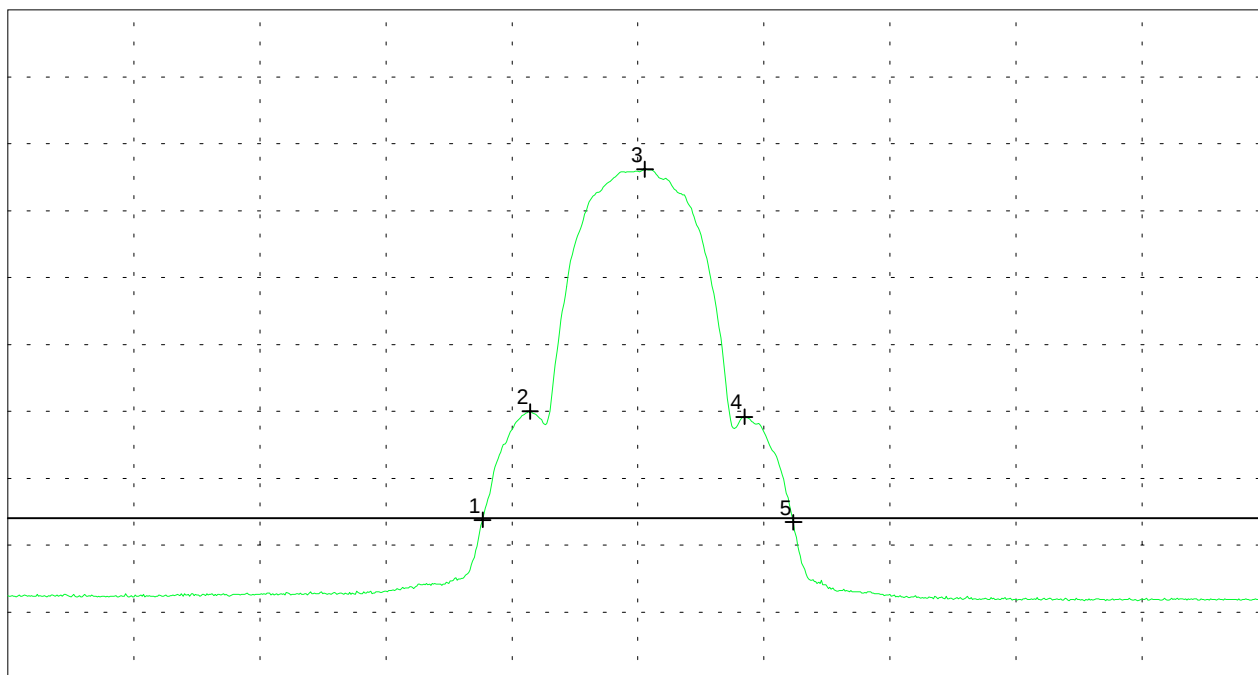
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.517 GHz
SWP 460 ms

Multi Marker List

No. 1	2.423500 GHz	53.76 dB μ V/m
No. 2	2.429167 GHz	70.01 dB μ V/m
No. 3	2.442833 GHz	106.20 dB μ V/m
No. 4	2.454667 GHz	69.20 dB μ V/m
No. 5	2.460500 GHz	53.43 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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**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: PC24E-11-FC/R
 Type: RF-modem for wireless LAN
 Serial No.: 01UT50300000
 Applicant: Agere Systems Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 02/07/2002
 Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
 via PCI-adapter Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
 mounted on left side of PC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4270	vertical	52.4	0.6	20.7	73.8	OB
2.4418	vertical	88.8	0.6	20.7	110.1	OB
2.4582	vertical	52.0	0.6	20.7	73.3	OB
4.8841	vertical	27.4	0.9	27.3	55.6	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 110.1 dB μ V/m.

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

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.442$ GHz

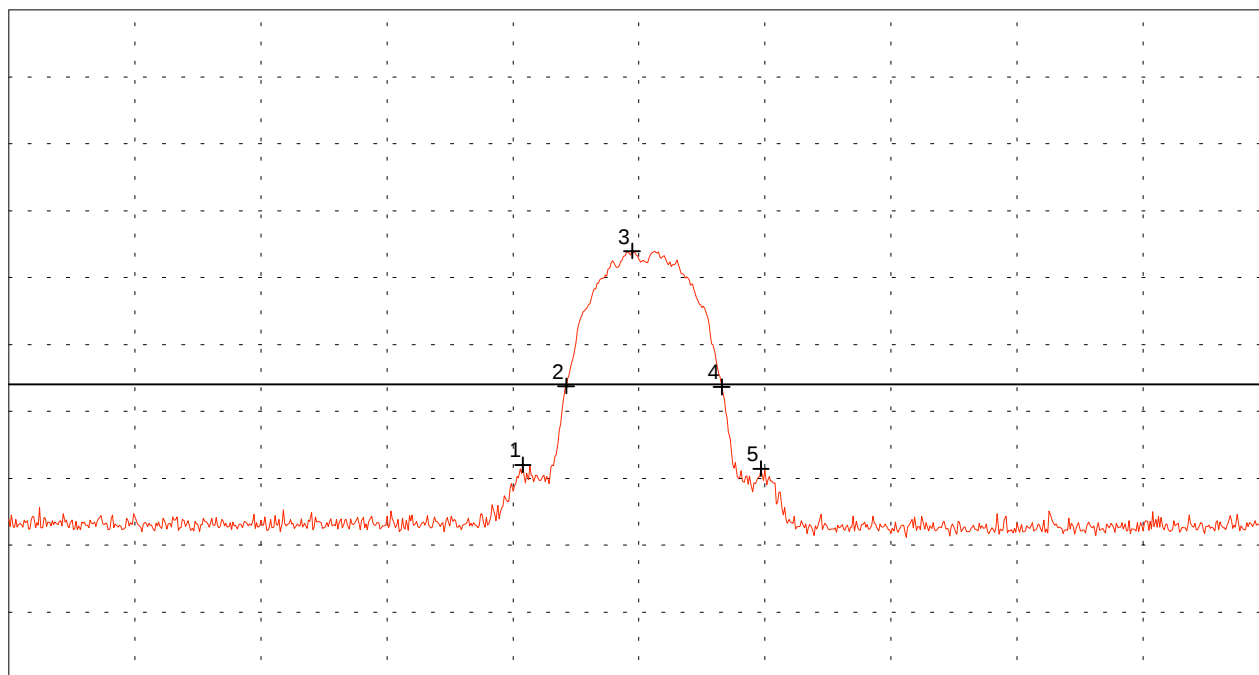
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.517 GHz
SWP 20 ms

Multi Marker List

No. 1	2.428167 GHz	61.99 dB μ V/m
No. 2	2.433333 GHz	73.77 dB μ V/m
No. 3	2.441167 GHz	93.96 dB μ V/m
No. 4	2.451833 GHz	73.67 dB μ V/m
No. 5	2.456500 GHz	61.41 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.442$ GHz

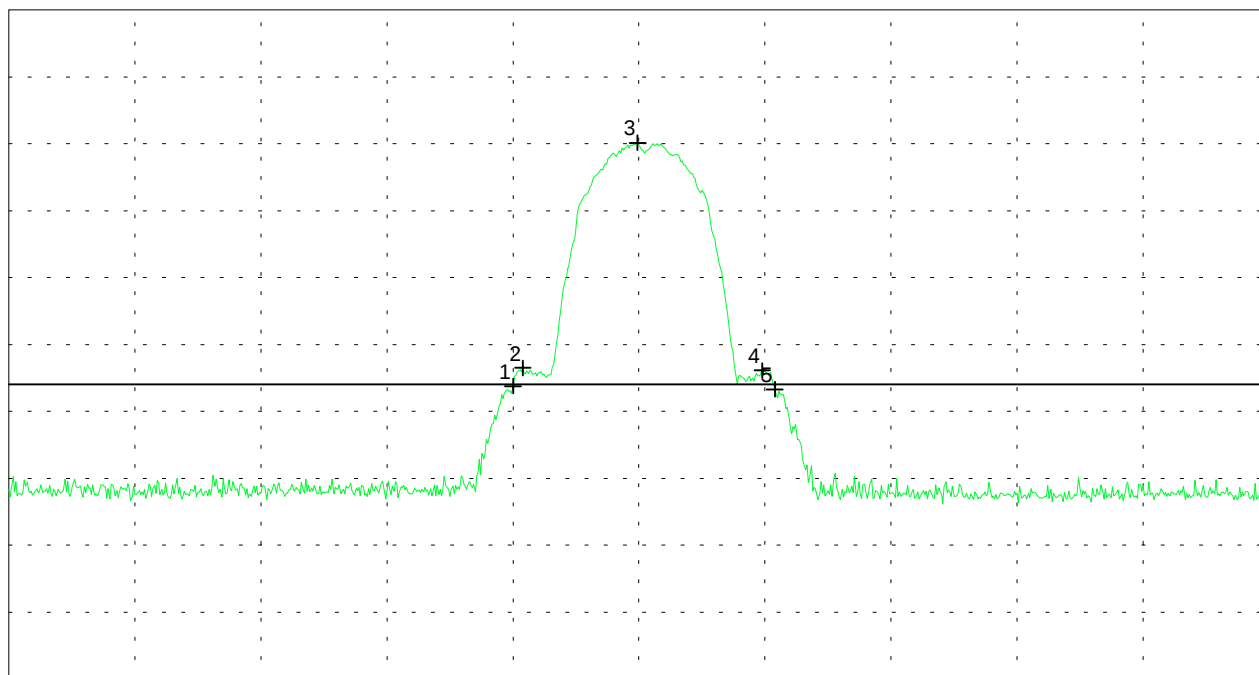
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.517 GHz
SWP 20 ms

Multi Marker List

No. 1	2.427000 GHz	73.76 dB μ V/m
No. 2	2.428167 GHz	76.48 dB μ V/m
No. 3	2.441833 GHz	110.12 dB μ V/m
No. 4	2.456667 GHz	76.12 dB μ V/m
No. 5	2.458167 GHz	73.30 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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**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: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT50300000
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 02/07/2002
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
mounted on left side of PC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4228	vertical	31.6	0.6	20.7	52.9	OB
2.4428	vertical	85.6	0.6	20.7	106.9	OB
2.4610	vertical	32.7	0.6	20.7	54.0	OB
4.8841	vertical	23.0	0.9	27.3	51.2	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 106.9 dB μ V/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:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

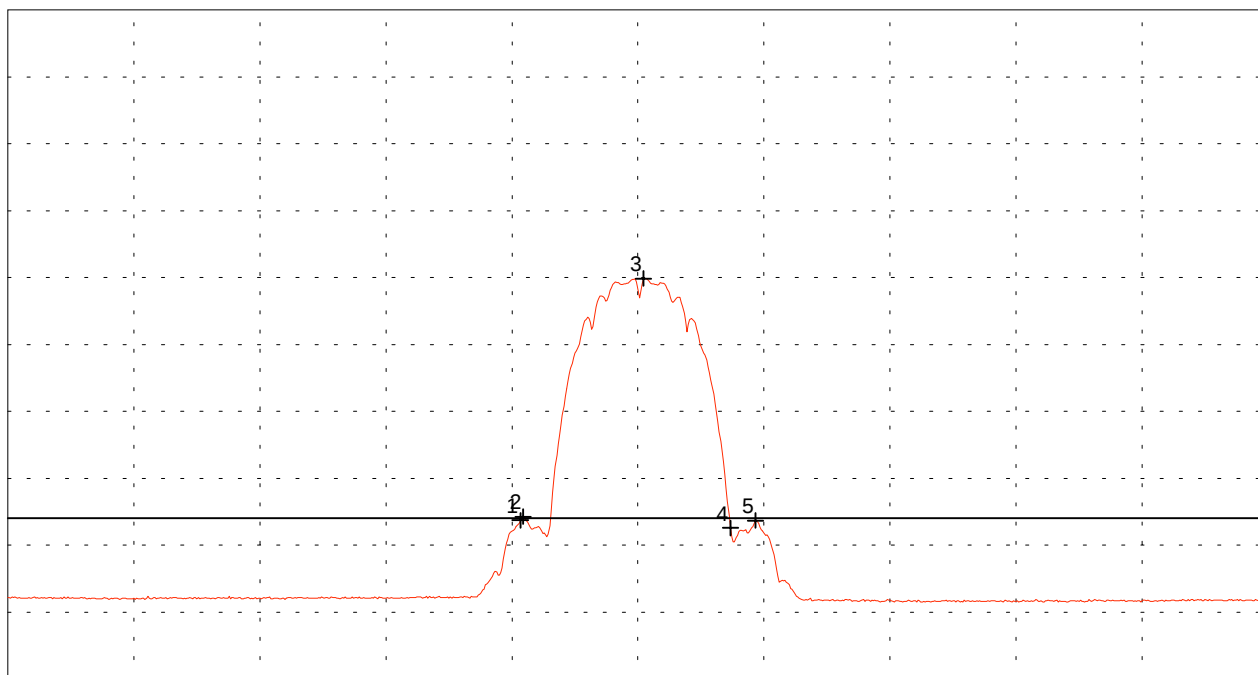
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.517 GHz
SWP 460 ms

Multi Marker List

No. 1	2.428000 GHz	53.71 dB μ V/m
No. 2	2.428333 GHz	54.24 dB μ V/m
No. 3	2.442667 GHz	89.85 dB μ V/m
No. 4	2.453000 GHz	52.57 dB μ V/m
No. 5	2.456000 GHz	53.69 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.442$ GHz

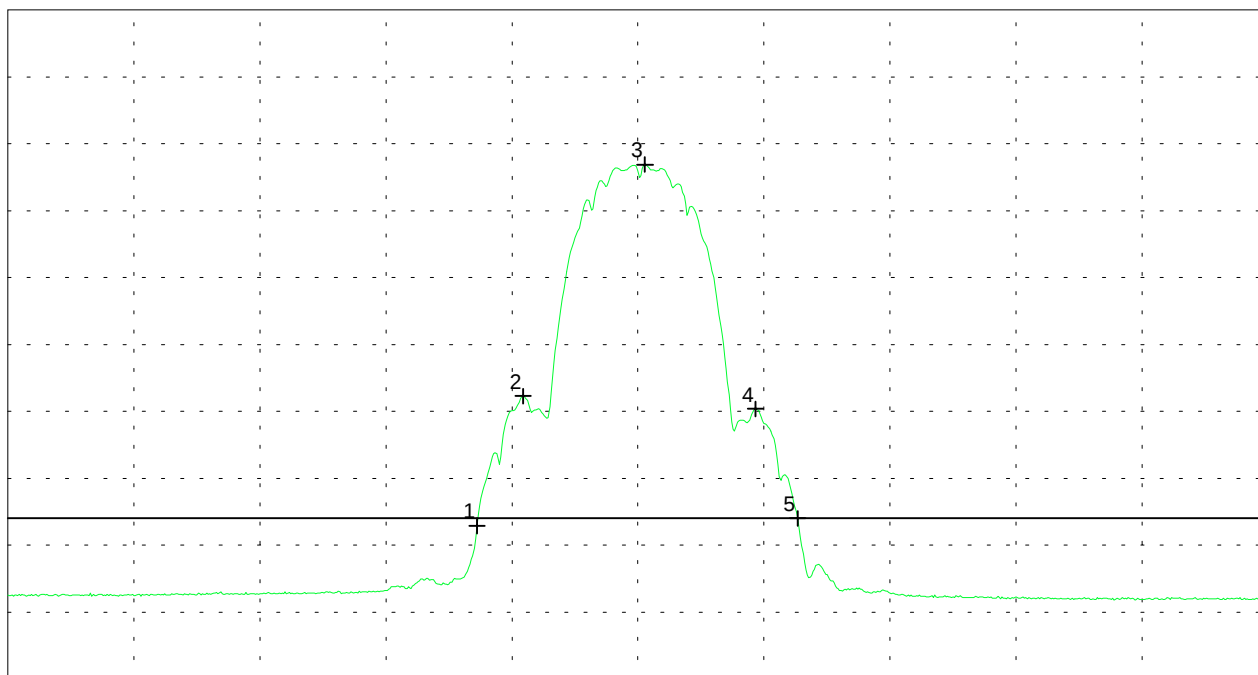
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.517 GHz
SWP 460 ms

Multi Marker List

No. 1	2.422833 GHz	52.87 dB μ V/m
No. 2	2.428333 GHz	72.27 dB μ V/m
No. 3	2.442833 GHz	106.91 dB μ V/m
No. 4	2.456000 GHz	70.37 dB μ V/m
No. 5	2.461000 GHz	53.99 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model: PC24E-11-FC/R
 Type: RF-modem for wireless LAN
 Serial No.: 01UT50300000
 Applicant: Agere Systems Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 02/07/2002
 Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
 mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4460	vertical	52.2	0.6	20.7	73.5	OB
2.4617	vertical	90.9	0.6	20.7	112.3	OB
2.4788	vertical	52.7	0.6	20.7	74.0	OB
2.4835	vertical	36.5	0.6	20.7	57.8	74
2.4980	vertical	39.1	0.6	20.7	60.4	74
2.5000	vertical	35.6	0.6	20.7	57.0	74
2.7935	vertical	21.2	0.7	23.7	45.6	74
3.1925	vertical	20.7	0.7	23.7	45.1	74
3.4535	vertical	19.9	0.7	23.8	44.4	74
4.9296	vertical	23.7	0.9	27.3	51.9	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 112.3 dB μ V/m.

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.462$ GHz

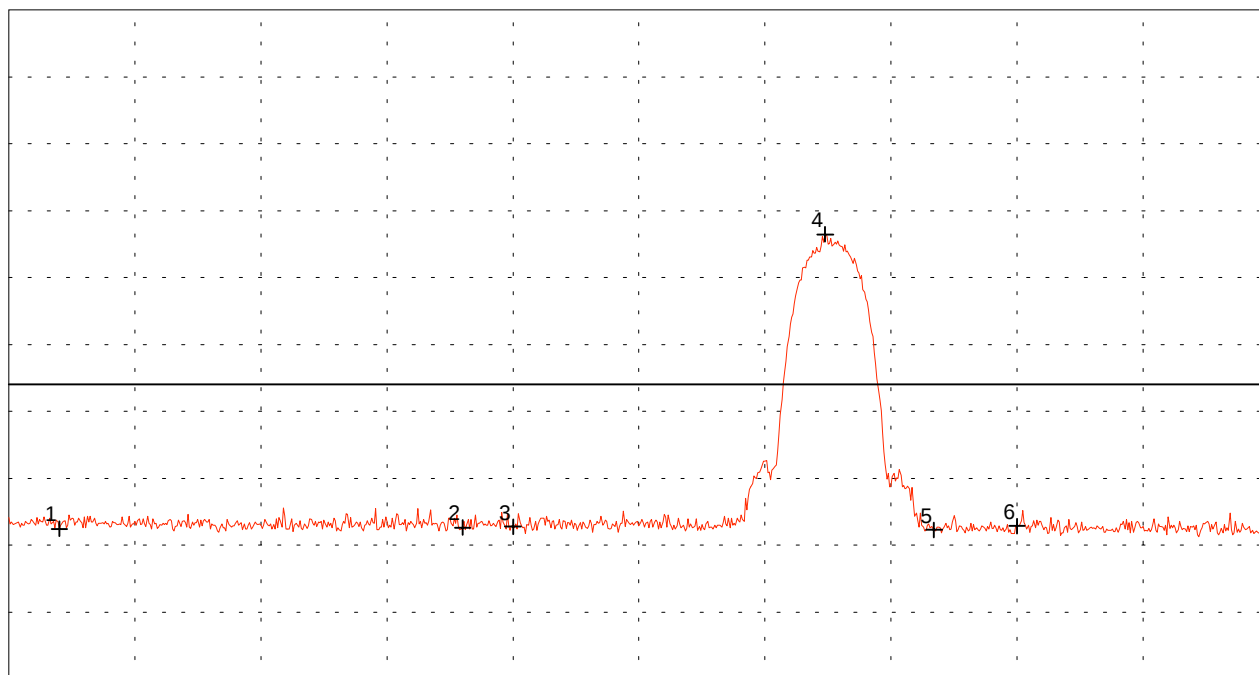
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 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	52.42 dB μ V/m
No. 2	2.390000 GHz	52.62 dB μ V/m
No. 3	2.400000 GHz	52.77 dB μ V/m
No. 4	2.461944 GHz	96.45 dB μ V/m
No. 5	2.483500 GHz	52.29 dB μ V/m
No. 6	2.500000 GHz	52.85 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.462$ GHz

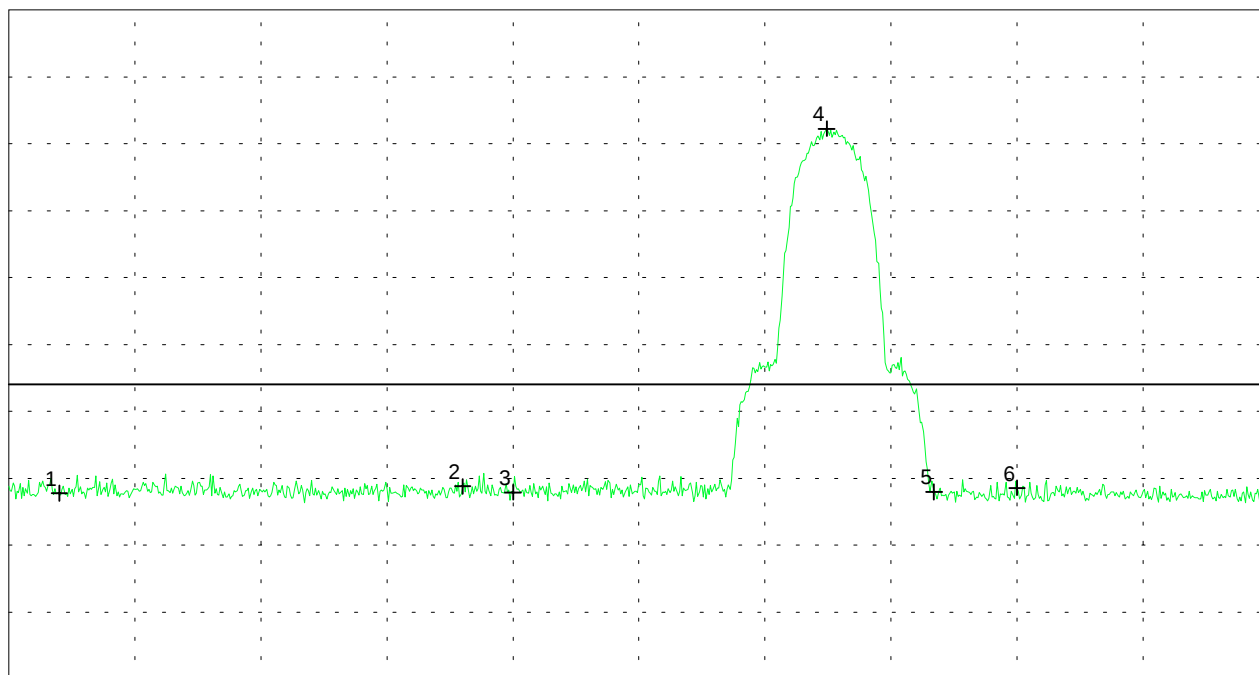
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/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	57.76 dB μ V/m
No. 2	2.390000 GHz	58.80 dB μ V/m
No. 3	2.400000 GHz	57.89 dB μ V/m
No. 4	2.462222 GHz	112.23 dB μ V/m
No. 5	2.483500 GHz	57.96 dB μ V/m
No. 6	2.500000 GHz	58.55 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.462$ GHz

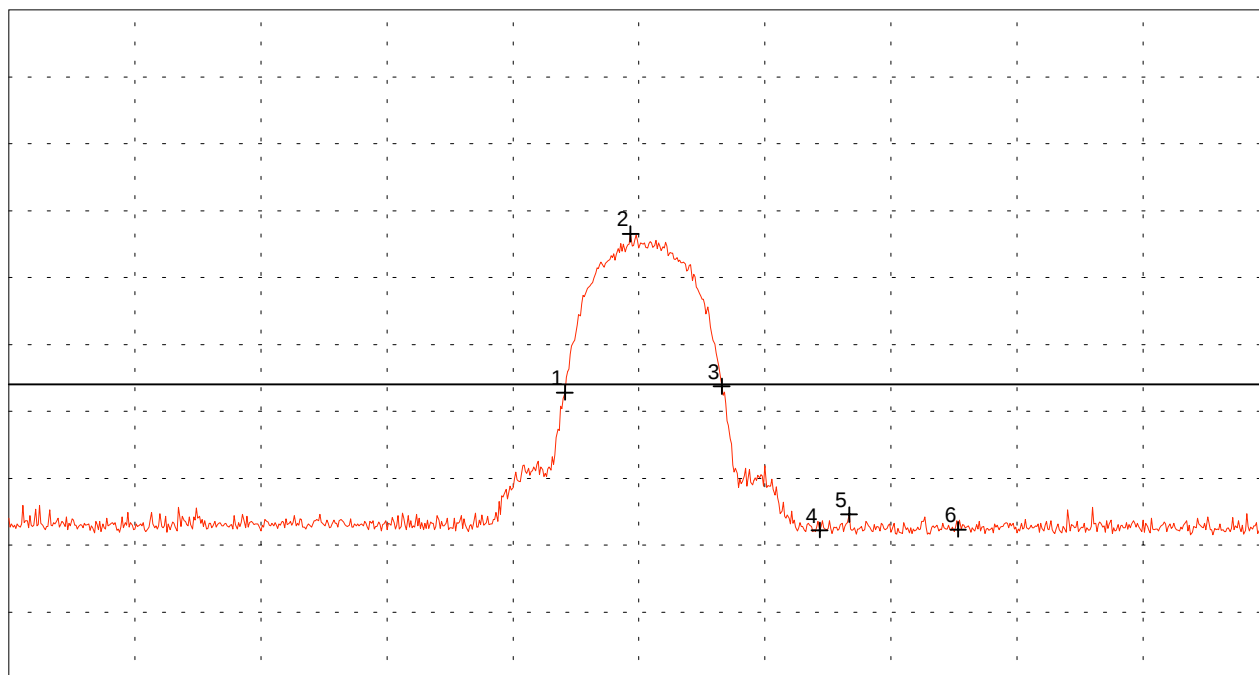
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz
SWP 20 ms

Multi Marker List

No. 1	2.453167 GHz	72.83 dB μ V/m
No. 2	2.461000 GHz	96.52 dB μ V/m
No. 3	2.471833 GHz	73.75 dB μ V/m
No. 4	2.483500 GHz	52.26 dB μ V/m
No. 5	2.487000 GHz	54.60 dB μ V/m
No. 6	2.500000 GHz	52.34 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

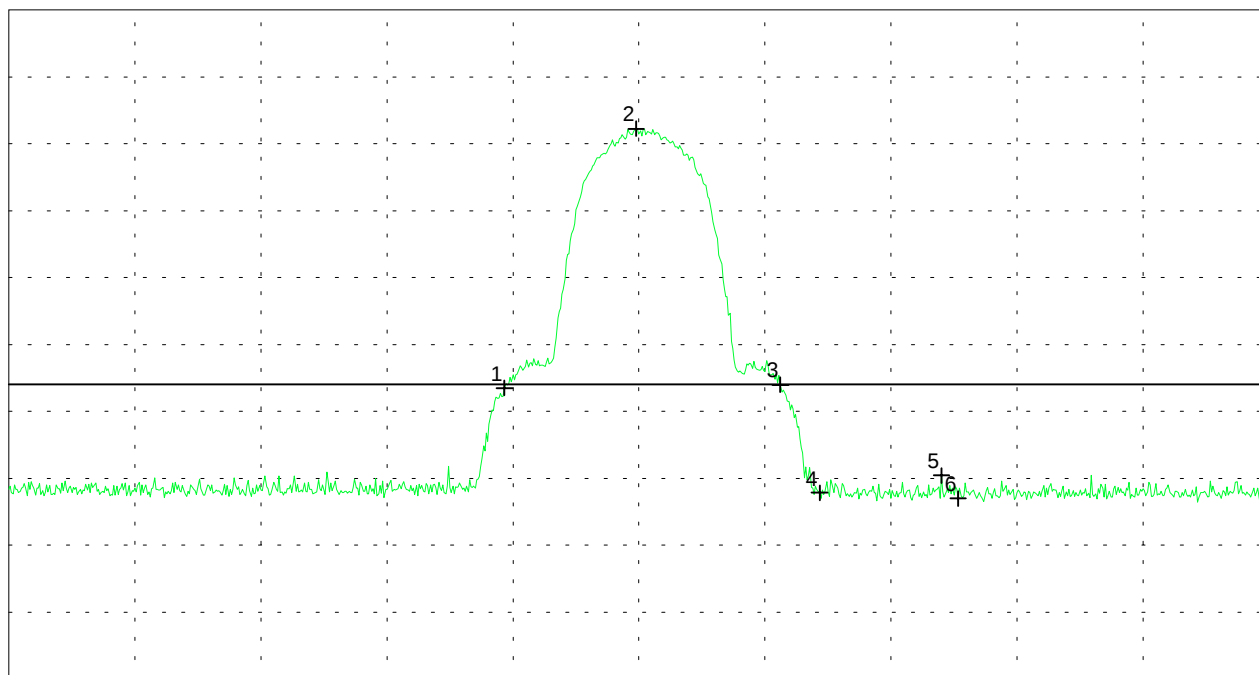
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz
SWP 20 ms

Multi Marker List

No. 1	2.446000 GHz	73.51 dB μ V/m
No. 2	2.461667 GHz	112.26 dB μ V/m
No. 3	2.478833 GHz	73.99 dB μ V/m
No. 4	2.483500 GHz	57.81 dB μ V/m
No. 5	2.498000 GHz	60.43 dB μ V/m
No. 6	2.500000 GHz	56.97 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model: PC24E-11-FC/R
 Type: RF-modem for wireless LAN
 Serial No.: 01UT50300000
 Applicant: Agere Systems Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 02/07/2002
 Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
 mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4437	vertical	32.5	0.6	20.7	53.9	OB
2.4630	vertical	84.7	0.6	20.7	106.0	OB
2.4805	vertical	32.2	0.6	20.7	53.5	OB
2.4835	vertical	22.9	0.6	20.7	44.2	54
2.4845	vertical	22.4	0.6	20.7	43.7	54
2.5000	vertical	20.8	0.6	20.7	42.1	54
2.7845	vertical	12.2	0.7	23.7	36.6	54
3.1835	vertical	11.0	0.7	23.7	35.4	54
3.4655	vertical	11.4	0.7	23.8	35.9	54
4.9242	vertical	22.8	0.9	27.3	51.0	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 106.0 dB μ V/m.

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 11 Mbps

- TX mode with $f = 2.462$ GHz

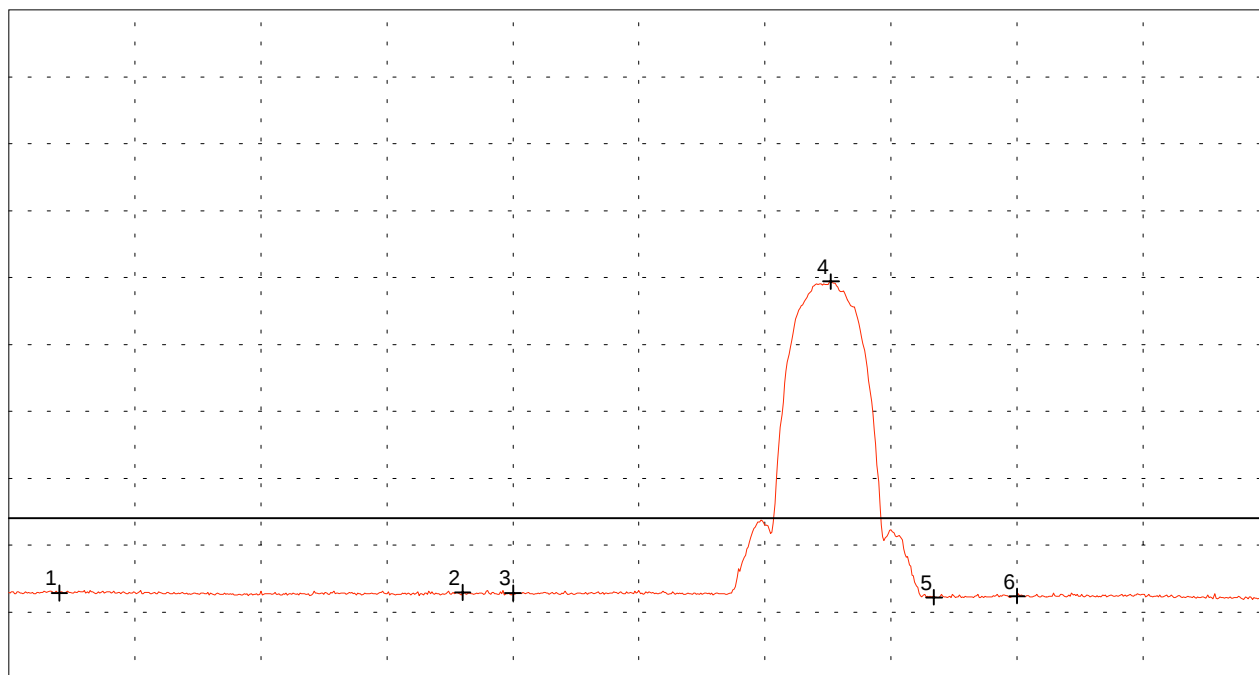
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 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	42.82 dB μ V/m
No. 2	2.390000 GHz	42.92 dB μ V/m
No. 3	2.400000 GHz	42.82 dB μ V/m
No. 4	2.463056 GHz	89.41 dB μ V/m
No. 5	2.483500 GHz	42.18 dB μ V/m
No. 6	2.500000 GHz	42.41 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

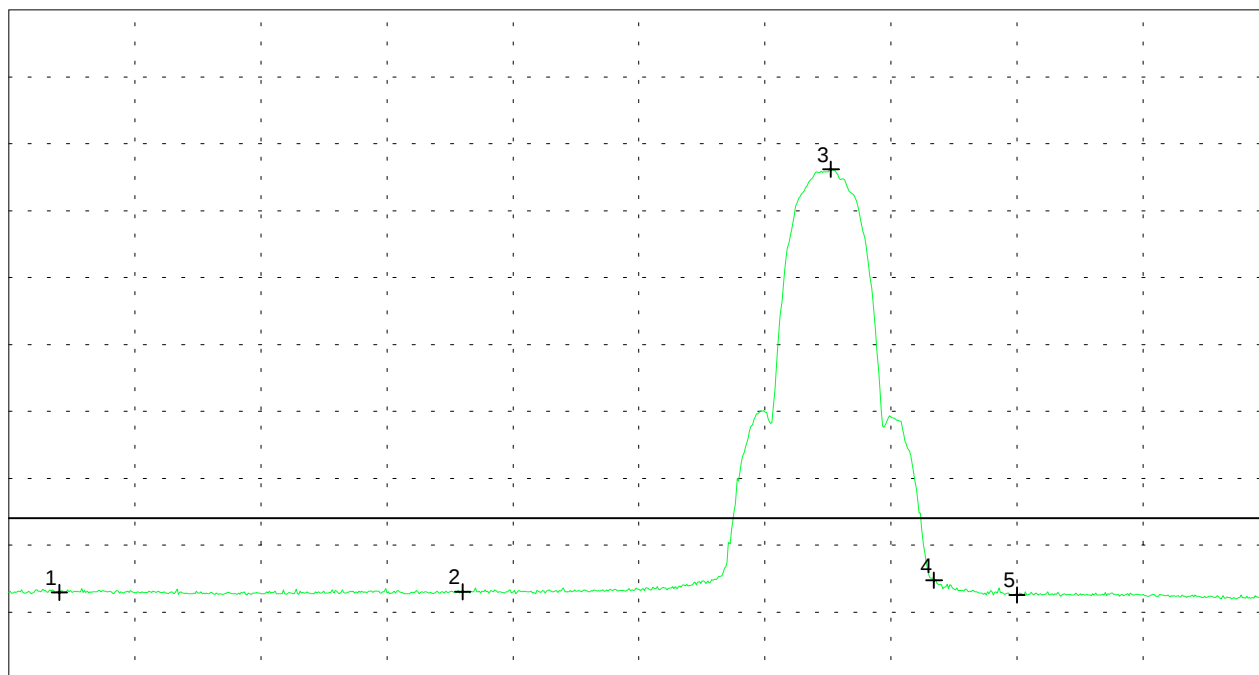
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 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	42.92 dB μ V/m
No. 2	2.390000 GHz	43.02 dB μ V/m
No. 3	2.463056 GHz	106.20 dB μ V/m
No. 4	2.483500 GHz	44.75 dB μ V/m
No. 5	2.500000 GHz	42.54 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

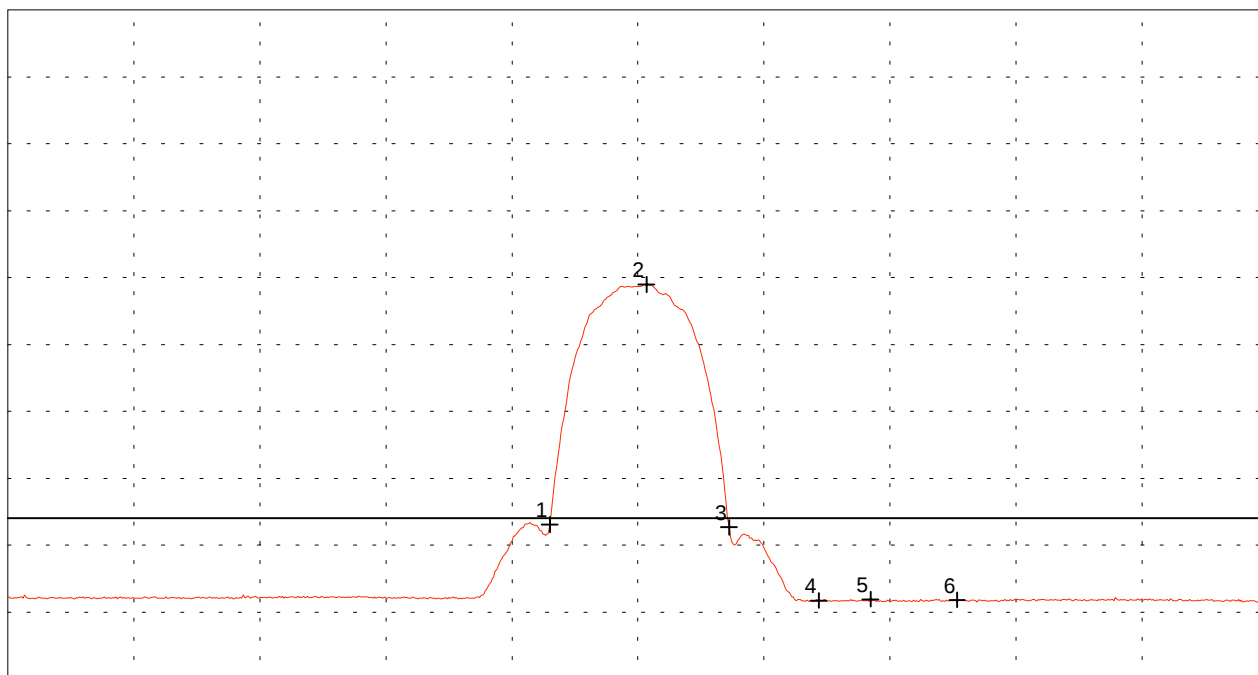
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.537 GHz
SWP 460 ms

Multi Marker List

No. 1	2.451500 GHz	53.08 dB μ V/m
No. 2	2.463000 GHz	88.98 dB μ V/m
No. 3	2.472833 GHz	52.67 dB μ V/m
No. 4	2.483500 GHz	41.73 dB μ V/m
No. 5	2.489667 GHz	41.93 dB μ V/m
No. 6	2.500000 GHz	41.80 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

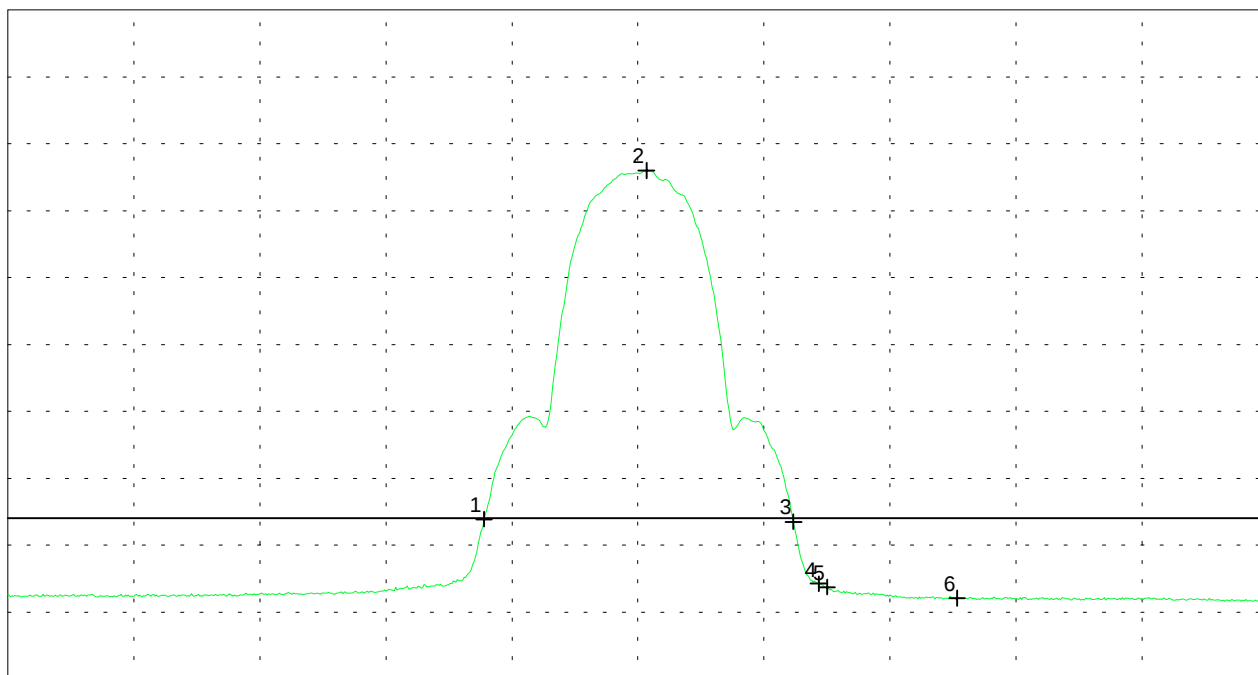
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.537 GHz
SWP 460 ms

Multi Marker List

No. 1	2.443667 GHz	53.86 dB μ V/m
No. 2	2.463000 GHz	106.00 dB μ V/m
No. 3	2.480500 GHz	53.48 dB μ V/m
No. 4	2.483500 GHz	44.24 dB μ V/m
No. 5	2.484500 GHz	43.73 dB μ V/m
No. 6	2.500000 GHz	42.08 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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**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: PC24E-11-FC/R
 Type: RF-modem for wireless LAN
 Serial No.: 01UT50300000
 Applicant: Agere Systems Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 02/07/2002
 Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
 via PCI-adapter Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
 mounted on left side of PC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.462$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4470	vertical	52.0	0.6	20.7	73.3	OB
2.4638	vertical	88.6	0.6	20.7	109.9	OB
2.4782	vertical	52.3	0.6	20.7	73.6	OB
2.4835	vertical	37.0	0.6	20.7	58.3	74
2.4943	vertical	38.4	0.6	20.7	59.7	74
2.5000	vertical	35.6	0.6	20.7	57.0	74
4.9241	vertical	26.2	0.9	27.3	54.4	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 109.9 dB μ V/m.

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

Result: The limits are kept

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.462$ GHz

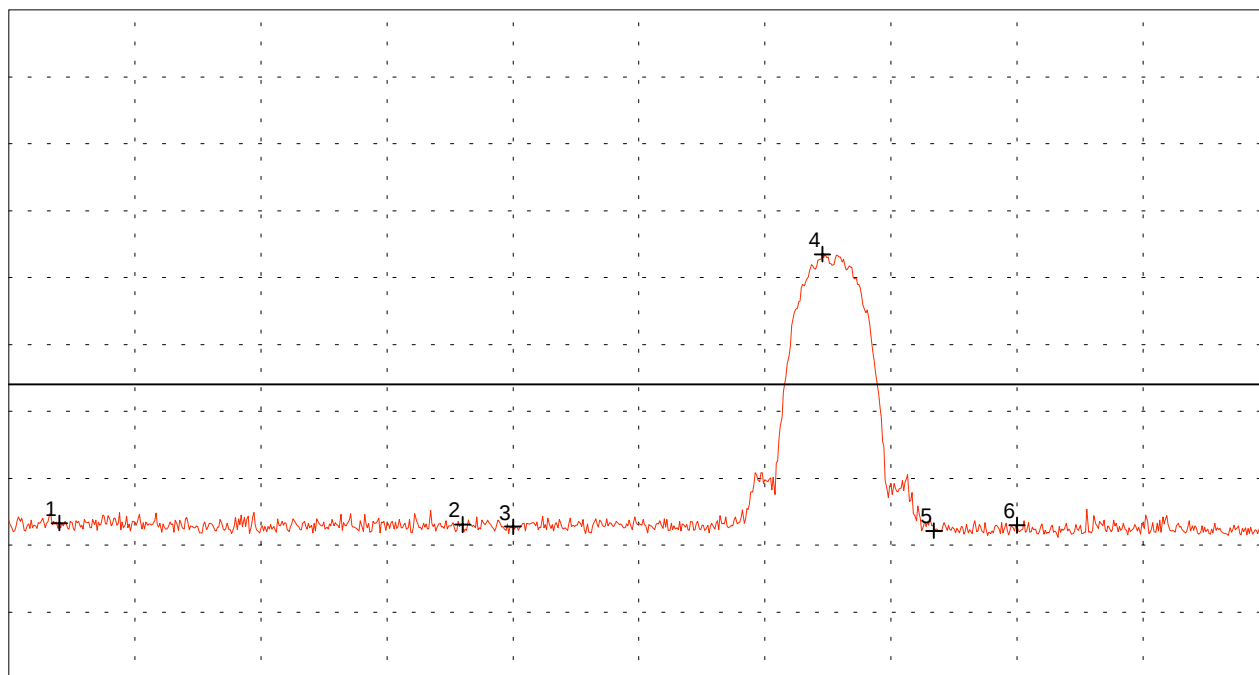
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 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	53.28 dB μ V/m
No. 2	2.390000 GHz	53.08 dB μ V/m
No. 3	2.400000 GHz	52.75 dB μ V/m
No. 4	2.461389 GHz	93.50 dB μ V/m
No. 5	2.483500 GHz	52.16 dB μ V/m
No. 6	2.500000 GHz	52.97 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.462$ GHz

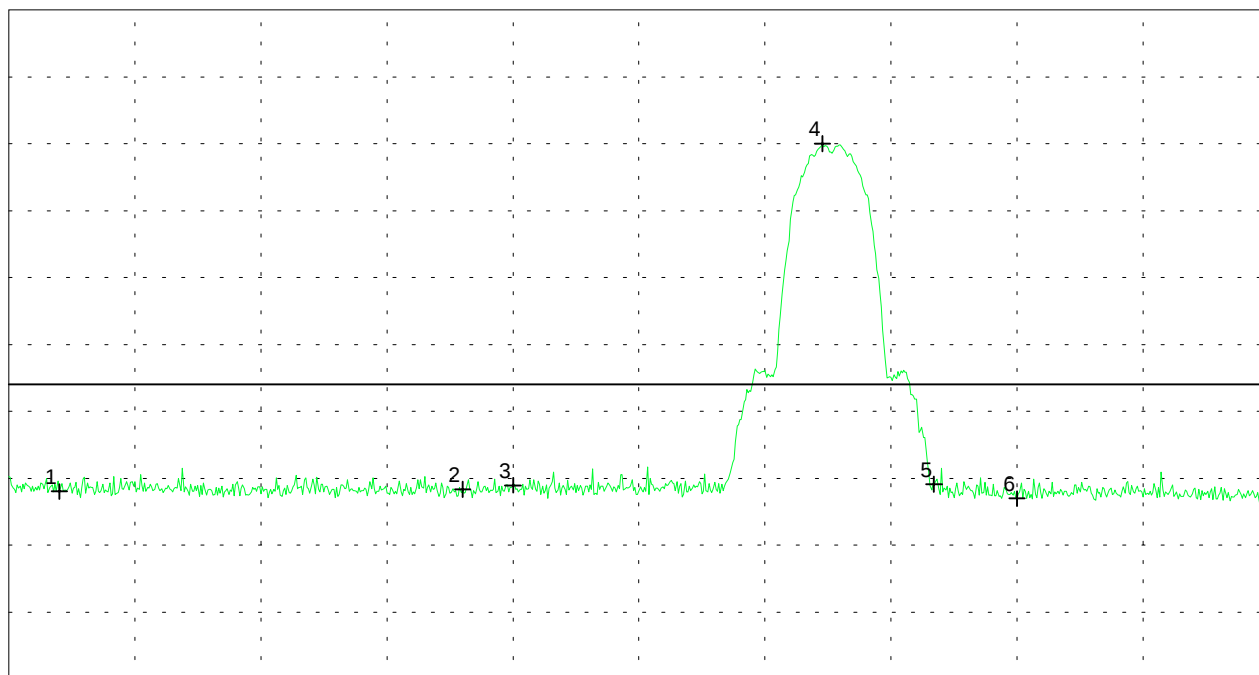
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/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	58.02 dB μ V/m
No. 2	2.390000 GHz	58.35 dB μ V/m
No. 3	2.400000 GHz	58.93 dB μ V/m
No. 4	2.461389 GHz	110.02 dB μ V/m
No. 5	2.483500 GHz	59.11 dB μ V/m
No. 6	2.500000 GHz	56.95 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.462$ GHz

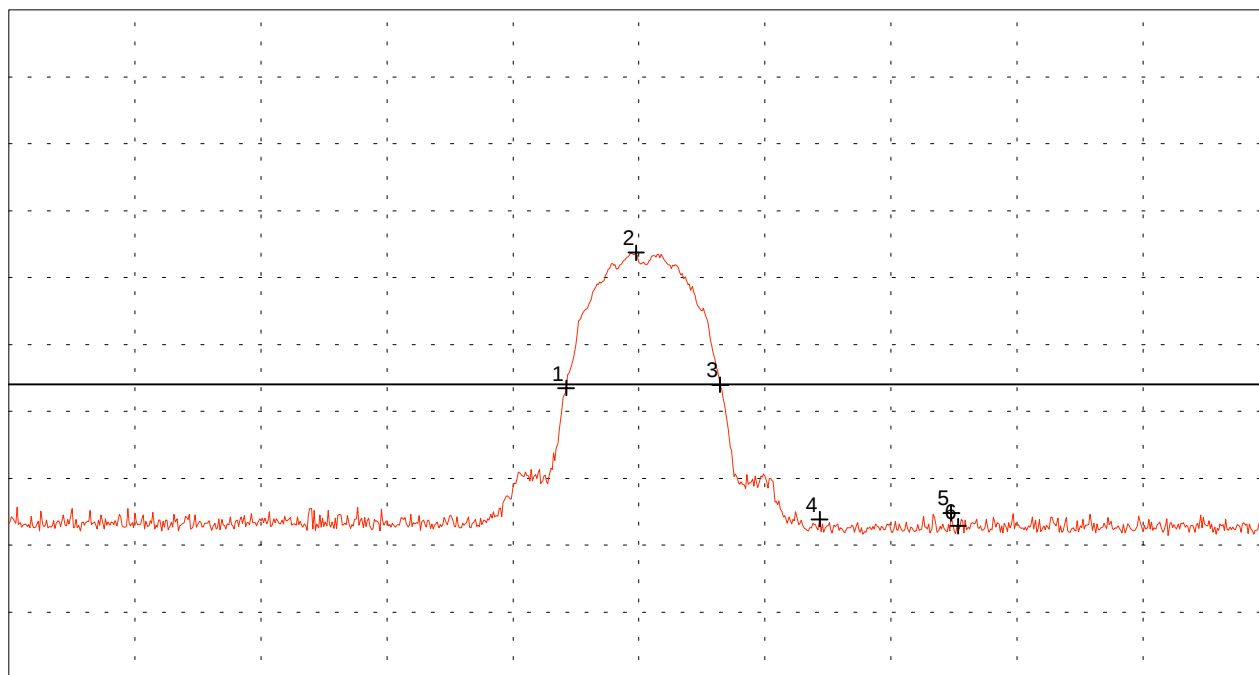
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz
SWP 20 ms

Multi Marker List

No. 1	2.453333 GHz	73.49 dB μ V/m
No. 2	2.461667 GHz	93.73 dB μ V/m
No. 3	2.471667 GHz	73.98 dB μ V/m
No. 4	2.483500 GHz	53.89 dB μ V/m
No. 5	2.499167 GHz	54.80 dB μ V/m
No. 6	2.500000 GHz	52.85 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.462$ GHz

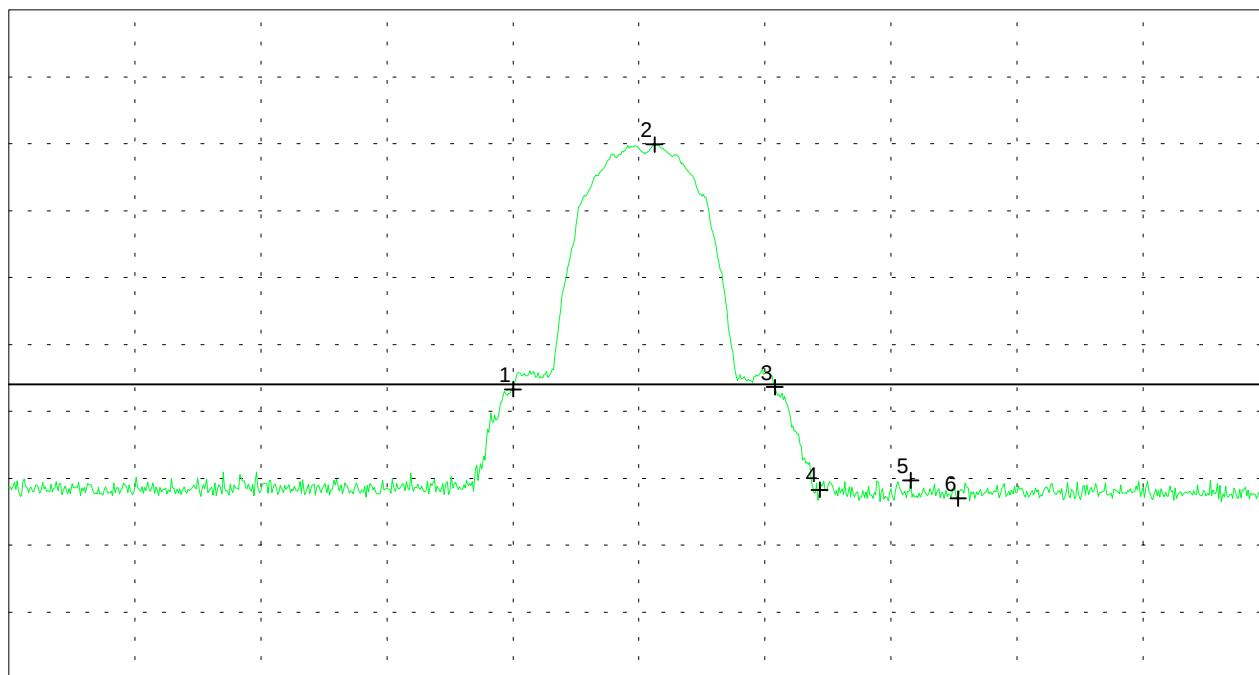
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz
SWP 20 ms

Multi Marker List

No. 1	2.447000 GHz	73.30 dB μ V/m
No. 2	2.463833 GHz	109.89 dB μ V/m
No. 3	2.478167 GHz	73.61 dB μ V/m
No. 4	2.483500 GHz	58.27 dB μ V/m
No. 5	2.494333 GHz	59.67 dB μ V/m
No. 6	2.500000 GHz	56.97 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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**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: PC24E-11-FC/R
 Type: RF-modem for wireless LAN
 Serial No.: 01UT50300000
 Applicant: Agere Systems Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 02/07/2002
 Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
 via PCI-adapter Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
 mounted on left side of PC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.462$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4430	vertical	32.1	0.6	20.7	53.5	OB
2.4628	vertical	85.2	0.6	20.7	106.5	OB
2.4812	vertical	32.4	0.6	20.7	53.8	OB
2.4835	vertical	25.6	0.6	20.7	46.9	54
2.4882	vertical	22.0	0.6	20.7	43.3	54
2.5000	vertical	21.0	0.6	20.7	42.3	54
4.9239	vertical	23.8	0.9	27.3	52.0	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 106.5 dB μ V/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:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.462$ GHz

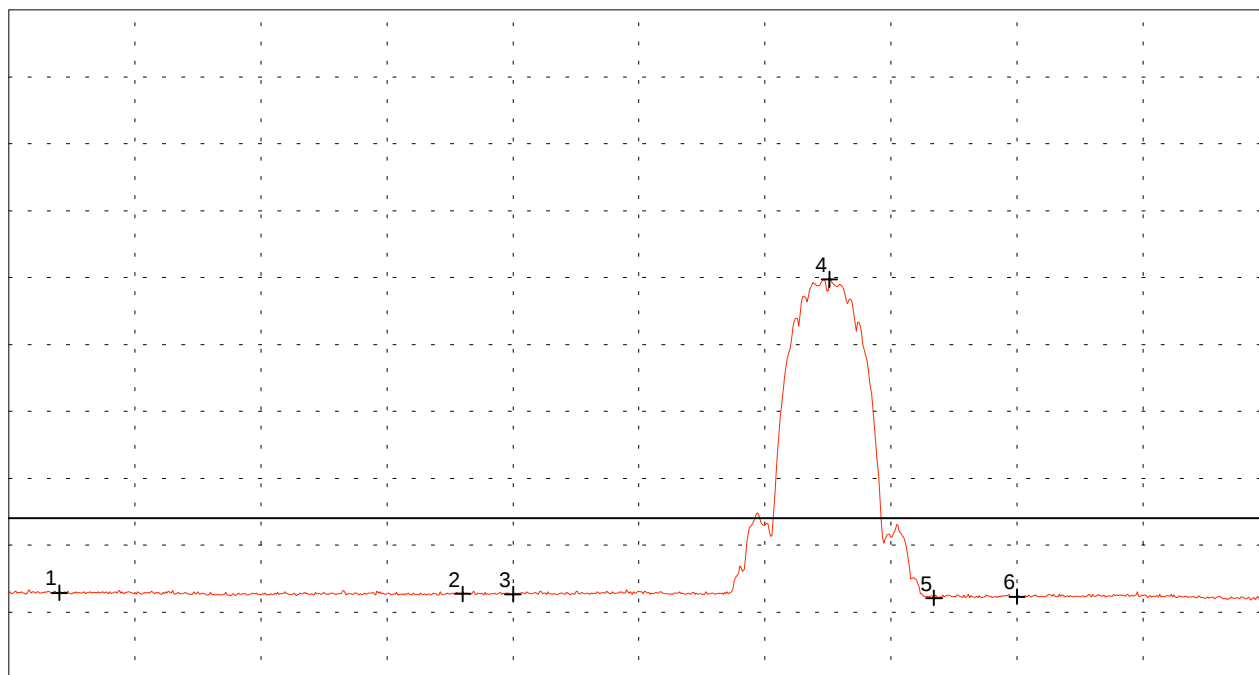
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 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	42.87 dB μ V/m
No. 2	2.390000 GHz	42.72 dB μ V/m
No. 3	2.400000 GHz	42.69 dB μ V/m
No. 4	2.462778 GHz	89.74 dB μ V/m
No. 5	2.483500 GHz	42.11 dB μ V/m
No. 6	2.500000 GHz	42.31 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Overview scan checking restricted bands
around operation band (acc. to §15.205)

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.462$ GHz

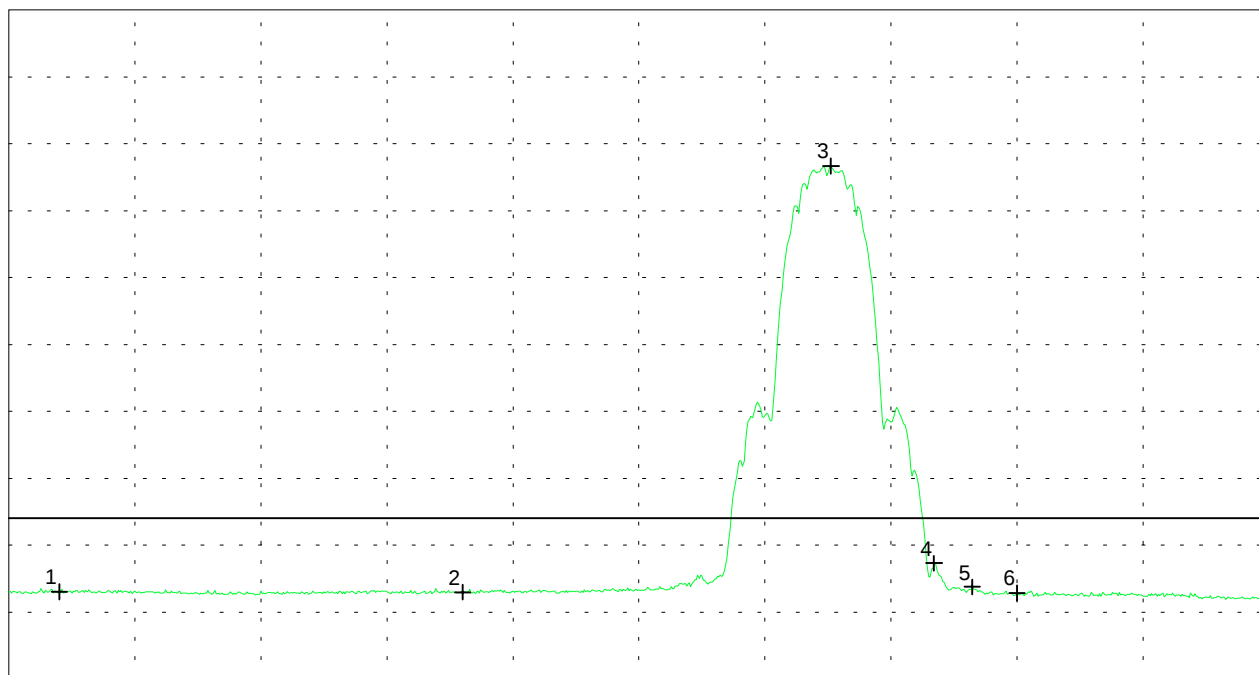
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 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	43.02 dB μ V/m
No. 2	2.390000 GHz	42.97 dB μ V/m
No. 3	2.463056 GHz	106.68 dB μ V/m
No. 4	2.483500 GHz	47.29 dB μ V/m
No. 5	2.491111 GHz	43.76 dB μ V/m
No. 6	2.500000 GHz	42.82 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.462$ GHz

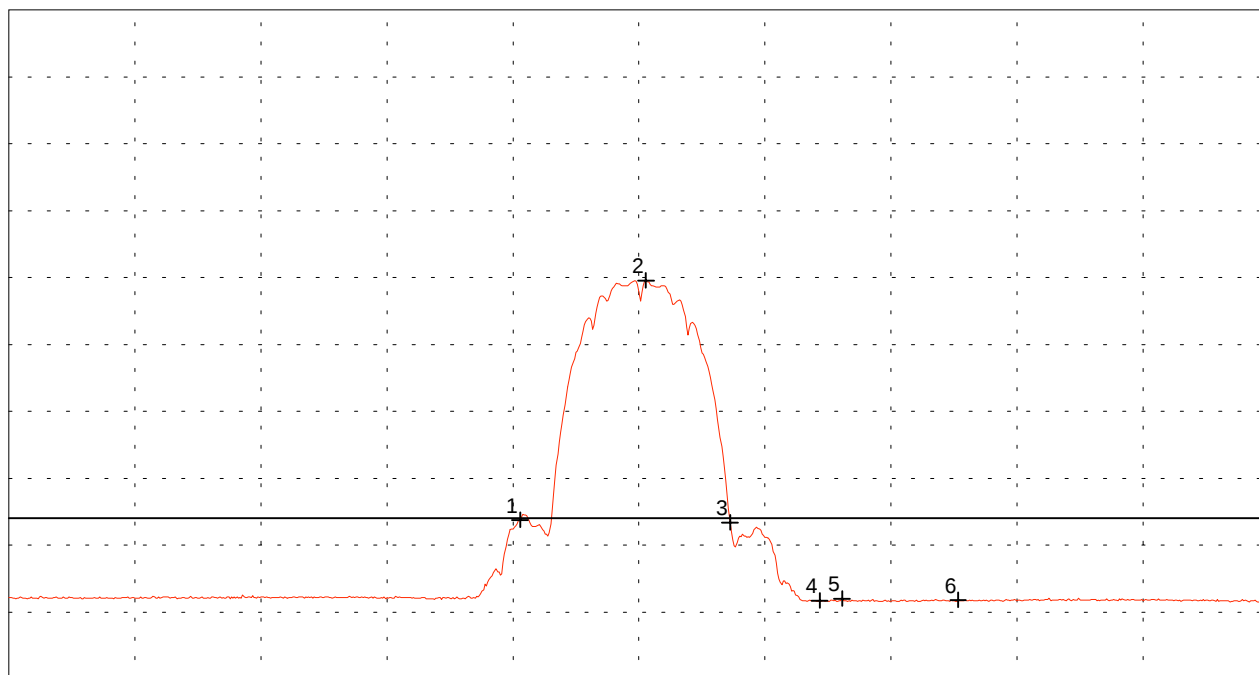
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.537 GHz
SWP 460 ms

Multi Marker List

No. 1	2.447833 GHz	53.79 dB μ V/m
No. 2	2.462833 GHz	89.57 dB μ V/m
No. 3	2.472833 GHz	53.41 dB μ V/m
No. 4	2.483500 GHz	41.73 dB μ V/m
No. 5	2.486167 GHz	42.00 dB μ V/m
No. 6	2.500000 GHz	41.80 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial No.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC

- operating with bit rate 2 Mbps

- TX mode with $f = 2.462$ GHz

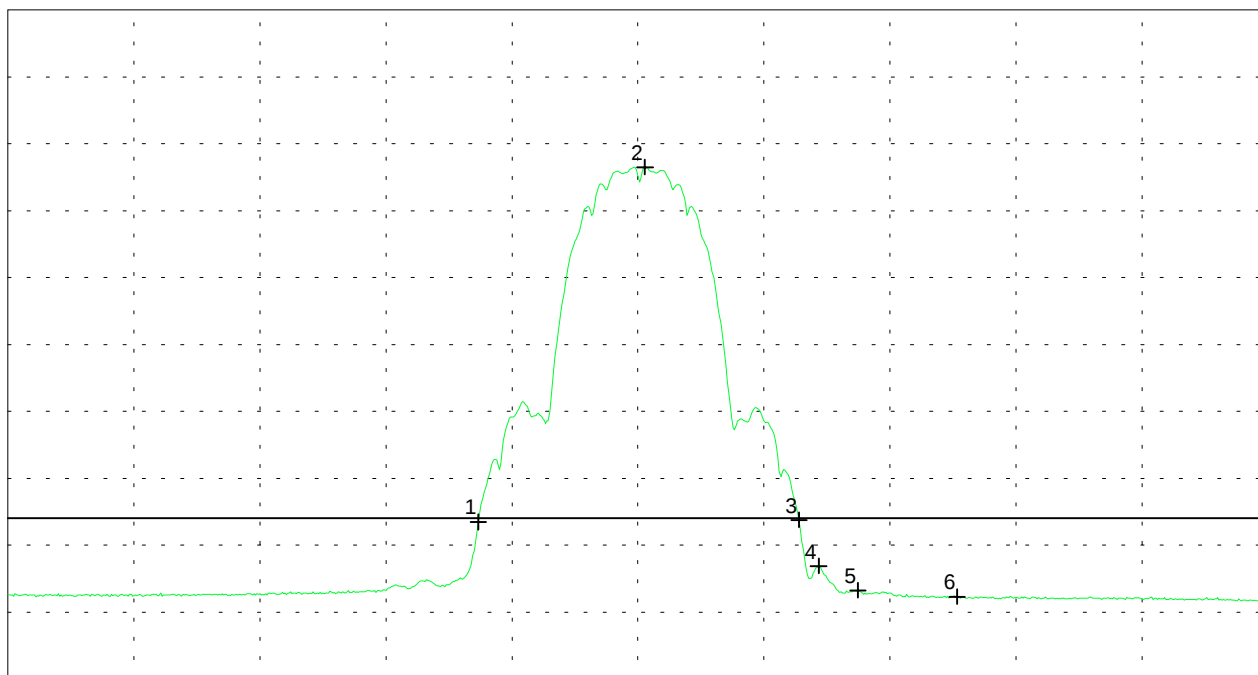
Test distance 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 0 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.537 GHz
SWP 460 ms

Multi Marker List

No. 1	2.443000 GHz	53.46 dB μ V/m
No. 2	2.462833 GHz	106.53 dB μ V/m
No. 3	2.481167 GHz	53.76 dB μ V/m
No. 4	2.483500 GHz	46.88 dB μ V/m
No. 5	2.488167 GHz	43.27 dB μ V/m
No. 6	2.500000 GHz	42.28 dB μ V/m

Tested by:
Rainer Heller

Date:
02/07/2002

Project-No.:
56305-20086-3

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Test results for
Receive (RX) mode

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/11/2002
Operator: R. Heller

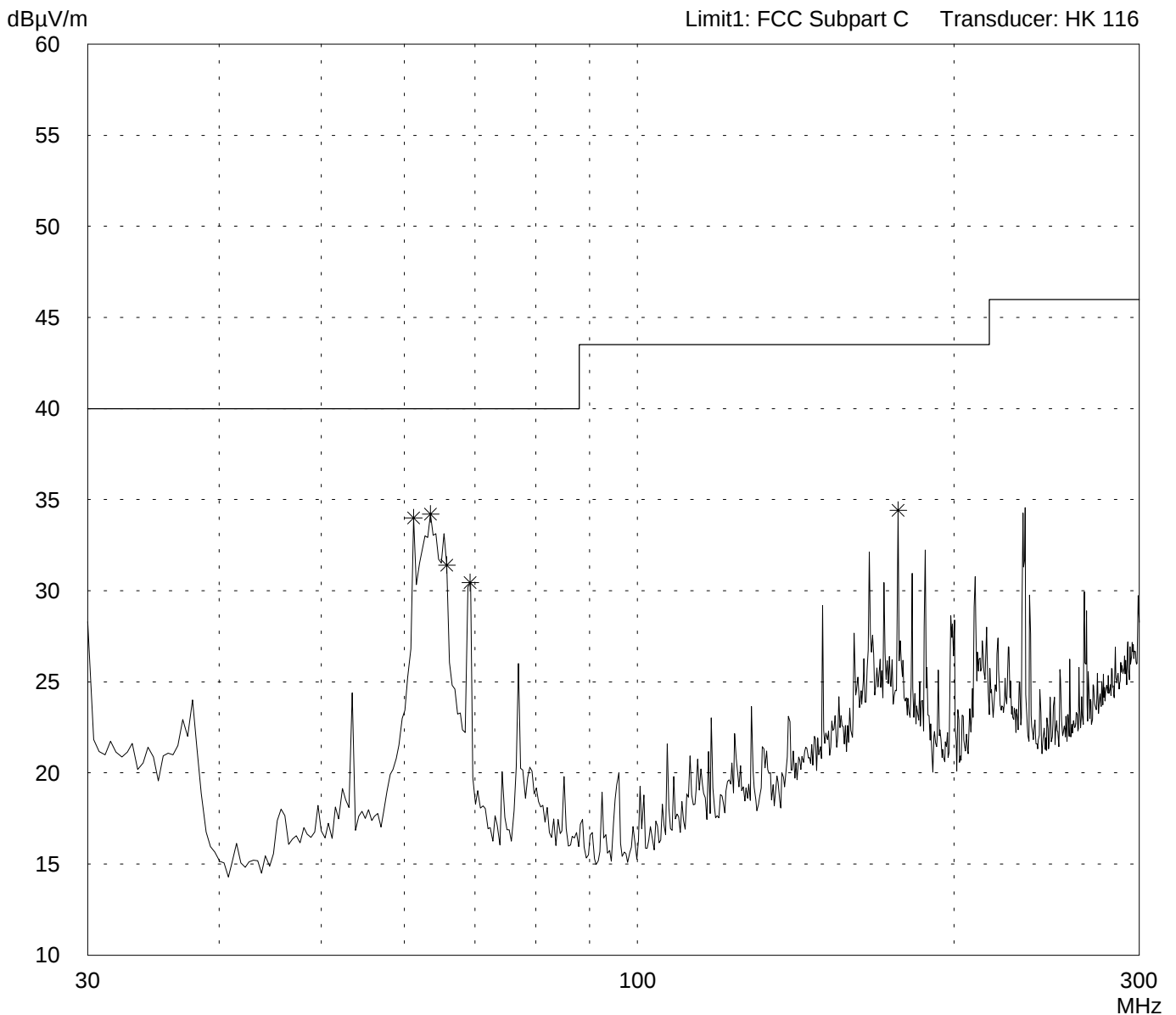
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/11/2002
Operator: R. Heller

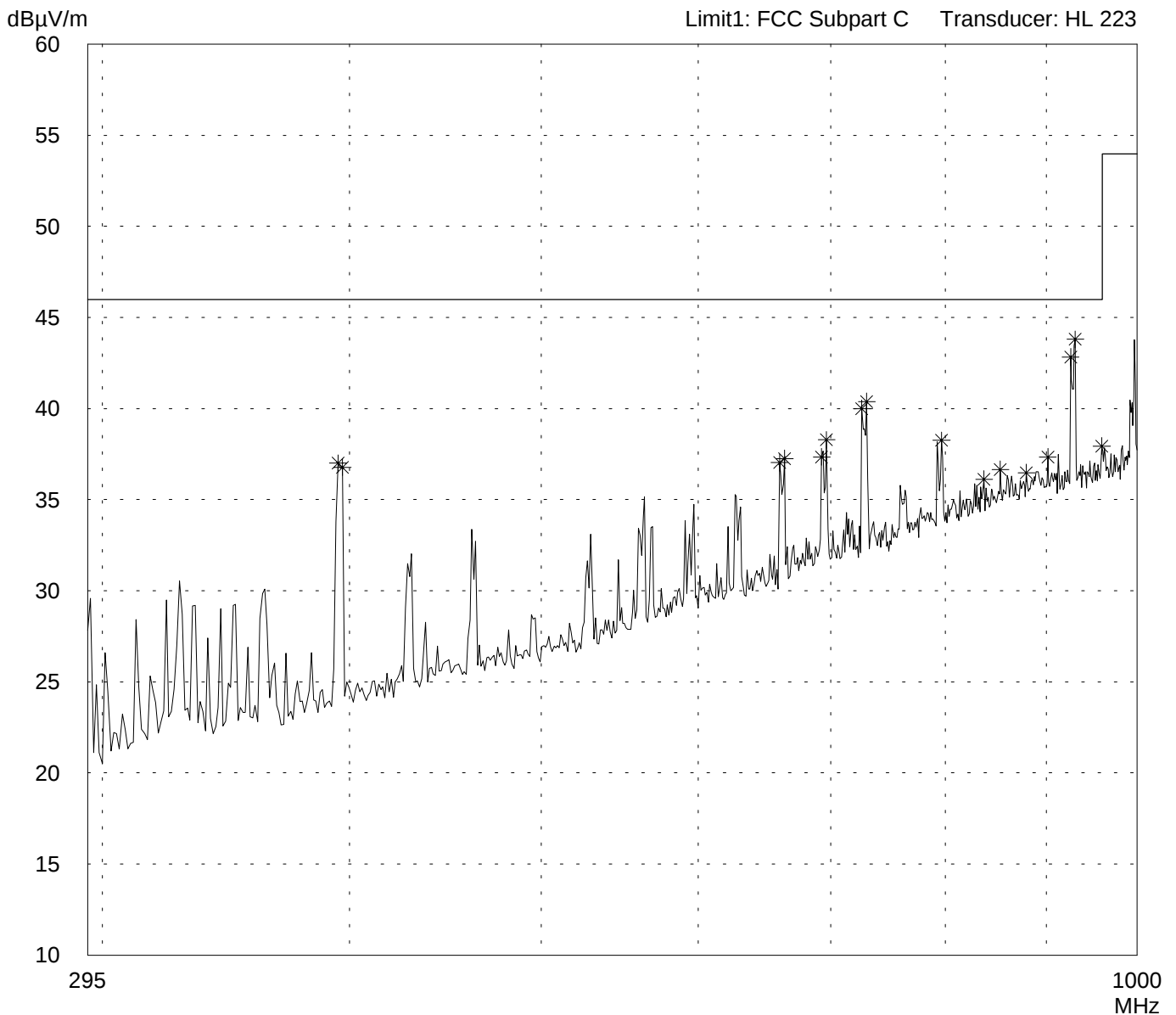
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/11/2002
Operator: R. Heller

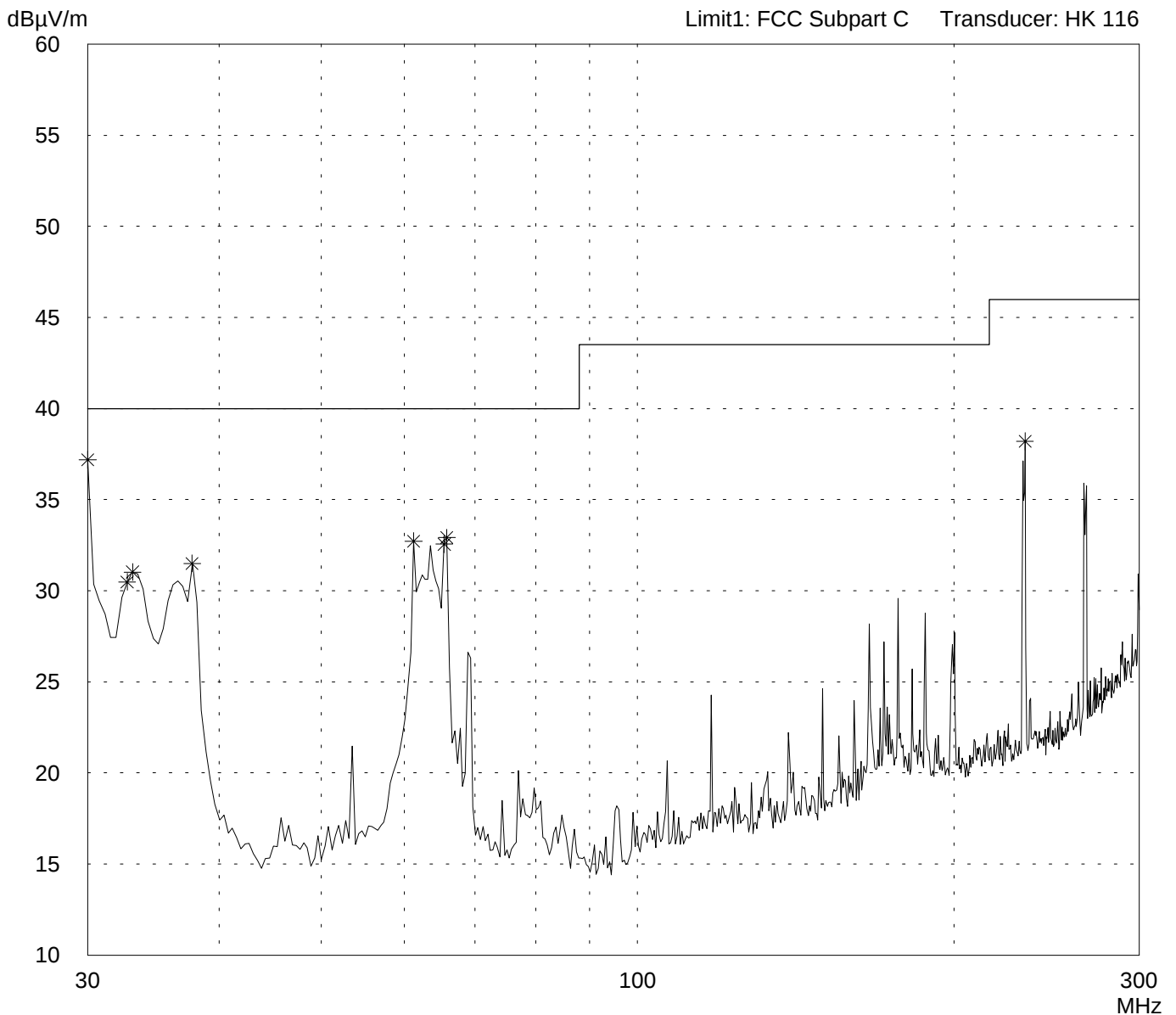
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/11/2002
Operator: R. Heller

Test performed: automatically
File name:

Mode:

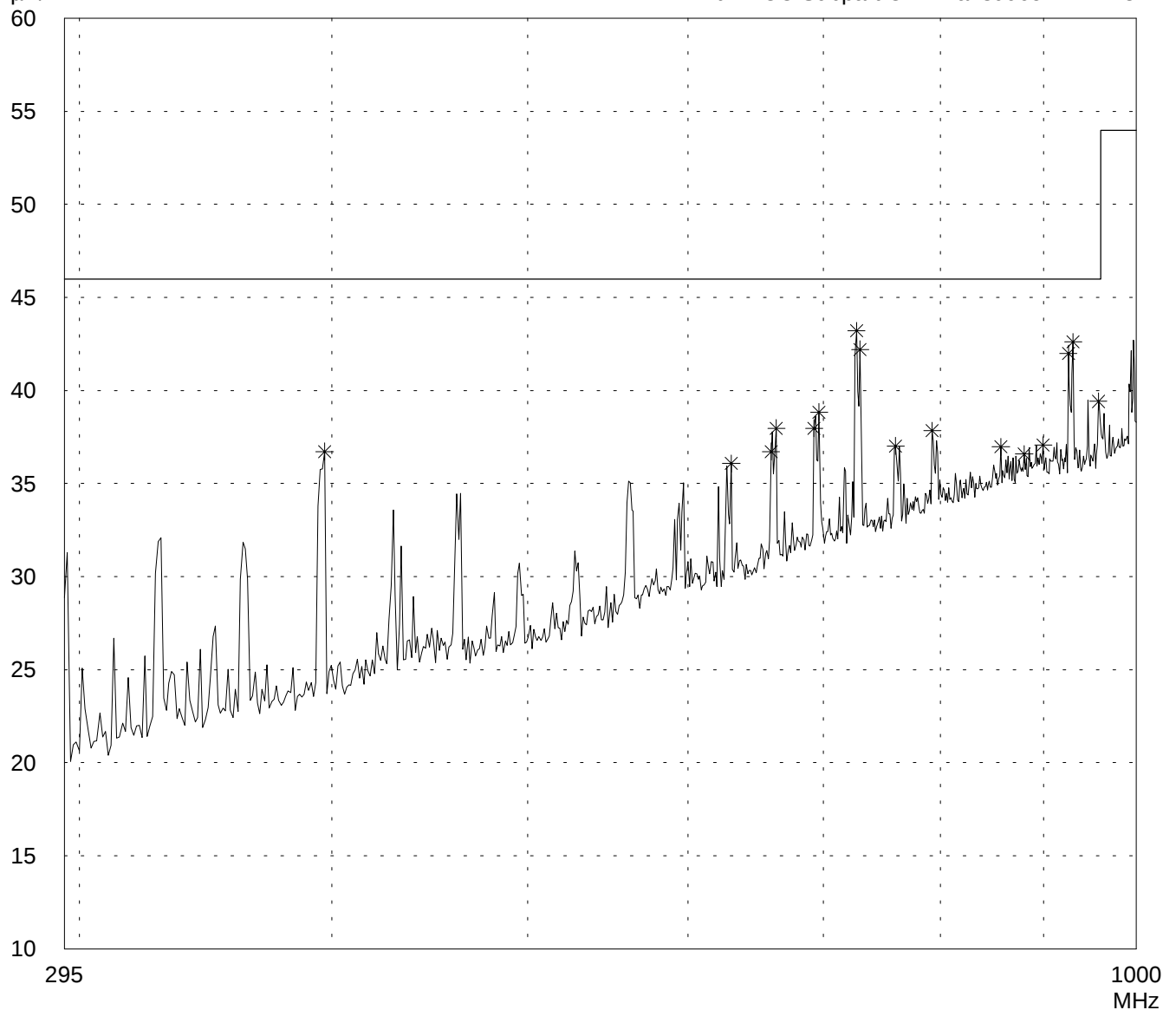
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

$\text{dB}\mu\text{V/m}$

Limit1: FCC Subpart C Transducer: HL 223



Result:
Prescan

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/12/2002
Operator: R. Heller

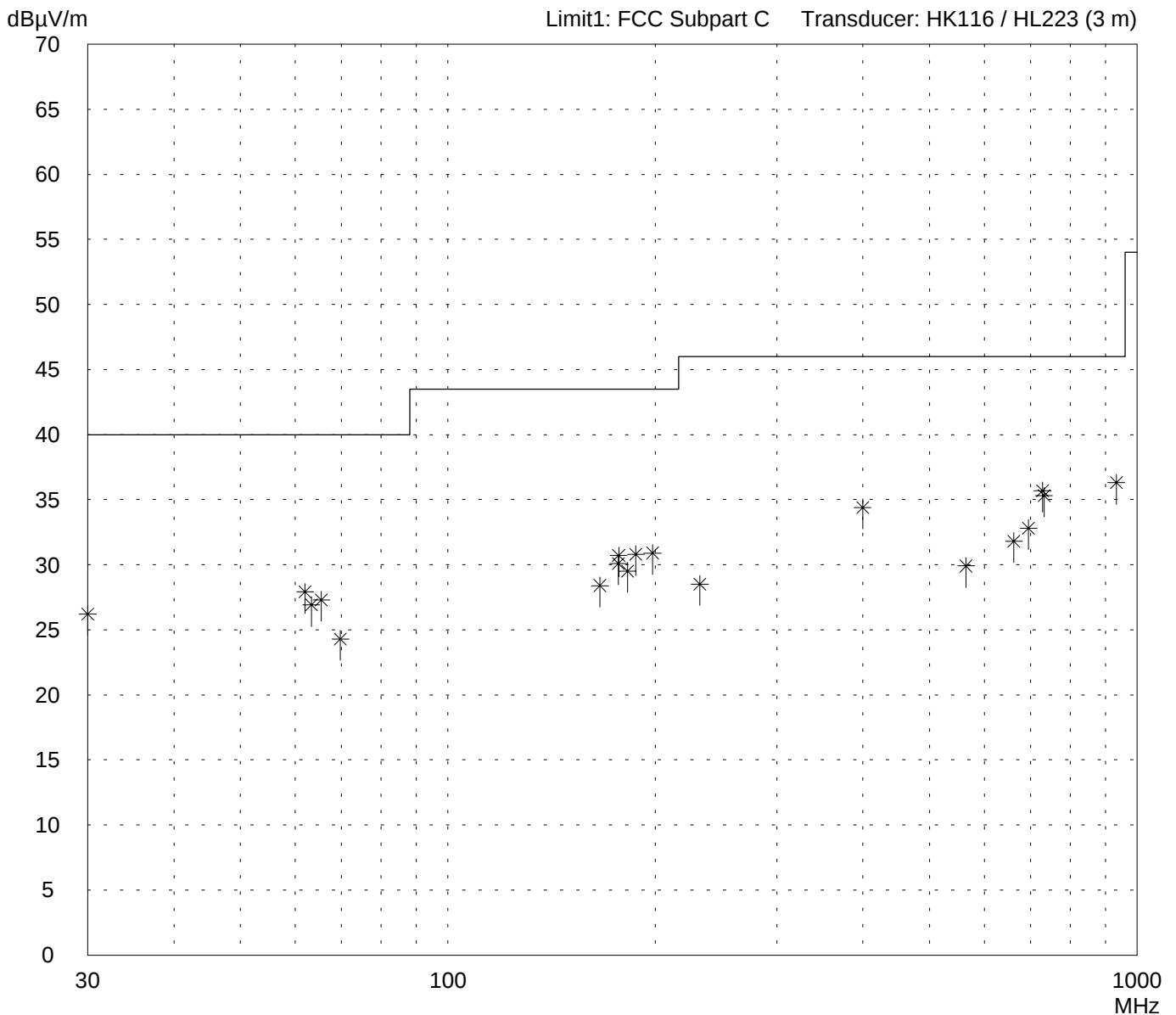
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional
antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 02/12/2002
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 Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- 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 dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
30.00	11.0	15.2	26.2	40.0	
62.04	17.0	10.9	27.9	40.0	
63.34	16.0	10.9	26.9	40.0	
65.49	16.5	10.8	27.3	40.0	
69.83	13.5	10.8	24.3	40.0	
166.14	11.5	16.9	28.4	43.5	
176.68	12.5	17.6	30.1	43.5	
176.87	13.0	17.7	30.7	43.5	
182.04	11.5	18.0	29.5	43.5	
187.40	12.5	18.3	30.8	43.5	
198.11	12.0	18.9	30.9	43.5	
232.03	8.5	20.0	28.5	46.0	
399.63	12.0	22.4	34.4	46.0	
564.74	3.0	26.9	29.9	46.0	
662.67	2.0	29.8	31.8	46.0	
695.79	2.0	30.8	32.8	46.0	
729.08	4.5	31.2	35.7	46.0	
732.97	4.0	31.3	35.3	46.0	
932.78	2.0	34.3	36.3	46.0	

Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/12/2002
Operator: R. Heller

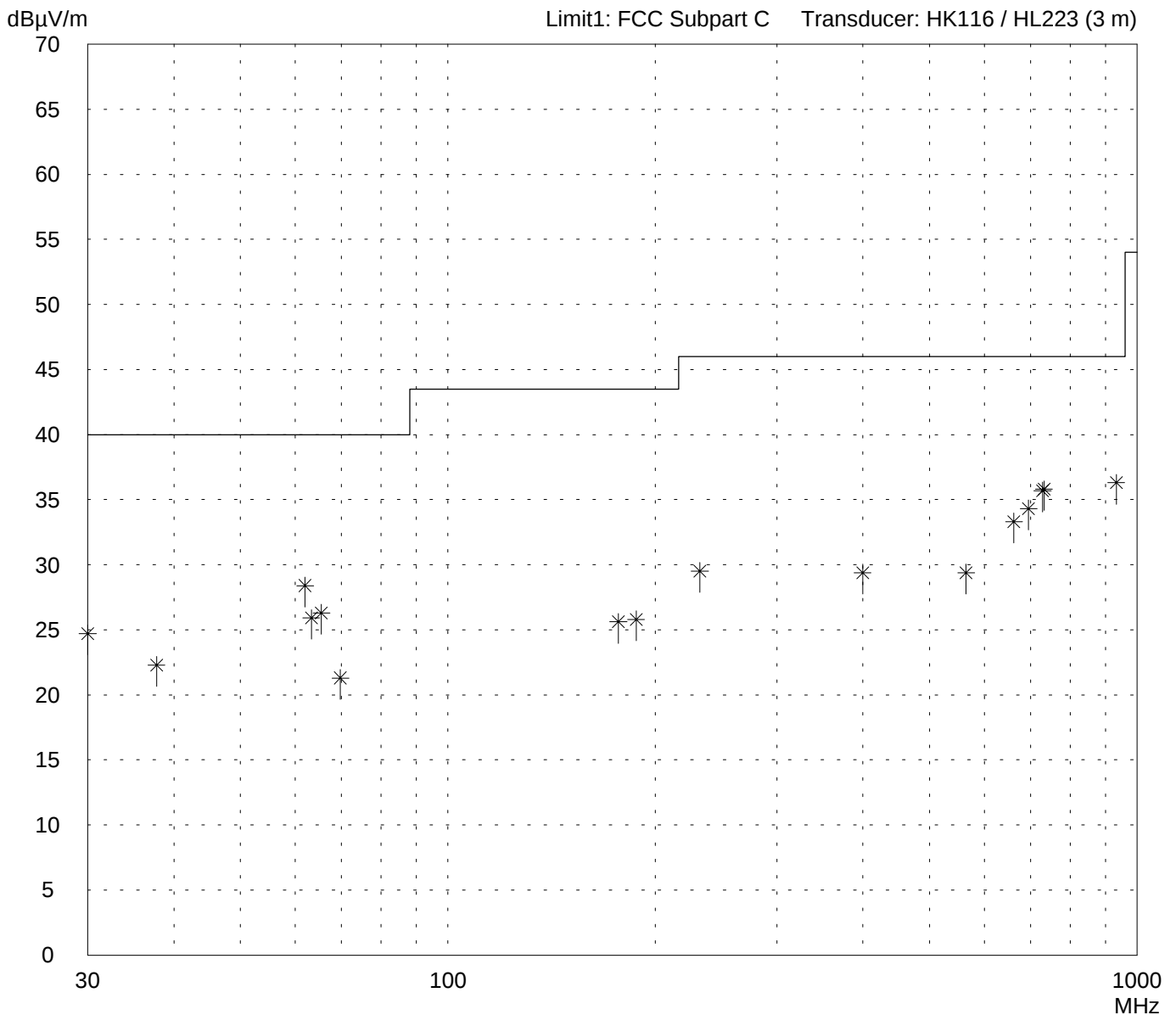
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-20086-3

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

Model:
PC24E-11-FC/R with Telex 2.4 GHz WLAN

Serial no.:
01UT50300000 / 1202

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 02/12/2002
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 Orinoco PCI-33W
- monitor switched off
- with external Telex 2.4 GHz WLAN directional antenna mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
30.00	9.5	15.2	24.7	40.0	
37.76	9.0	13.3	22.3	40.0	
62.06	17.5	10.9	28.4	40.0	
63.34	15.0	10.9	25.9	40.0	
65.49	15.5	10.8	26.3	40.0	
69.81	10.5	10.8	21.3	40.0	
176.73	8.0	17.6	25.6	43.5	
187.45	7.5	18.3	25.8	43.5	
232.03	9.5	20.0	29.5	46.0	
399.63	7.0	22.4	29.4	46.0	
564.74	2.5	26.9	29.4	46.0	
662.67	3.5	29.8	33.3	46.0	
695.79	3.5	30.8	34.3	46.0	
729.08	4.5	31.2	35.7	46.0	
732.97	4.5	31.3	35.8	46.0	
932.78	2.0	34.3	36.3	46.0	

Result:
Limit kept

Project file:
56305-20086-3

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Radiated Emission 1 GHz - 12.5 GHz according to FCC Part 15 Subpart C

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT50300000
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 02/07/2002
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.3342	vertical	18.7	0.5	26.5	45.7	74
1.7271	vertical	17.4	0.5	27.8	45.7	74
2.1342	vertical	14.2	0.6	29.3	44.1	74
2.2676	vertical	14.7	0.6	29.6	44.9	74
2.3973	vertical	14.9	0.6	29.8	45.3	74
2.5342	vertical	14.4	0.6	30.6	45.7	74
4.8894	vertical	19.1	0.9	27.3	47.3	74

Result: The limits are kept

Radiated Emission 1 GHz - 12.5 GHz according to FCC Part 15 Subpart C

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT50300000
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 02/07/2002
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCI-33W
- with external Telex 2.4 GHz WLAN directional antenna
mounted on left side of PC
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.3307	vertical	< 15.1	0.5	26.5	< 42.1	54
1.7271	vertical	< 8.4	0.5	27.8	< 36.8	54
2.5218	vertical	< 3.7	0.6	30.6	< 34.9	54
4.8841	vertical	18.3	0.9	27.3	46.5	54

Result: The limits are kept

12. 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