

Straubing, October 8, 2001

TEST-REPORT

No. 56305-10552-3

for

PC24E-11-FC/R

RF-modem for wireless LAN

Applicant: Agere Systems Nederland B.V.

Purpose of testing: To show compliance with

FCC Code of Federal Regulations,
Part 15 Subpart C, Section §15.247

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
Serial number(s):	01UT33300016
Type of equipment:	RF-modem using DSSS technology for wireless connection for e.g. portable and mobile computers which have a PC-card-bus (PCMCIA).
Version:	as delivered
Parts/accessories:	see "Configuration of EUT and Peripheral Devices" on page 7
FCC-ID:	IMRWLPCE2411R
Applicant:	Agere Systems Nederland B.V.
(full address)	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:	September 27, 2001
Date of test:	September 27 to October 8, 2001
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

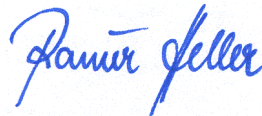
The tested sample (including accessories) complies with the requirements for

- 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 "Client Manager", variant 1, version 1.85.
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 antenna AIN24-OD-03 connected and mounted in PC-card slot of personal computer Dell Dimension 4100 via PCI-adapter Orinoco PCIPC.

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

Item	Model or part no.	Serial no.	Designation	Manufacturer
RF-modem	015124	01UT33300016	PC24E-11-FC/R	Agere
External omni-directional antenna ²	---	Sample no. 1	AIN24-OD-03	Agere
Personal computer	---	CZPN30J	Dimension 4100	Dell
PCI-adapter	015219 Rev. A	22220114103558	PCIPC	Agere

Table 1: EUT and accessories

² Special version of external omni-directional antenna AIN24-OD-0202 with antenna cable shortened to get a nominal antenna gain of 3 dBi

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
- 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-38844-154-5340
- 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.

A spectrum analyzer (set to RBW = 100 kHz, VBW = 100 kHz, span = 100 MHz, sweep = 40 ms) was used to record the shape of the transmit signal.

See figure 1 for the measurement setup.

Test equipment used (see equipment list for details):

02, 08, 09, 18, 67, 68

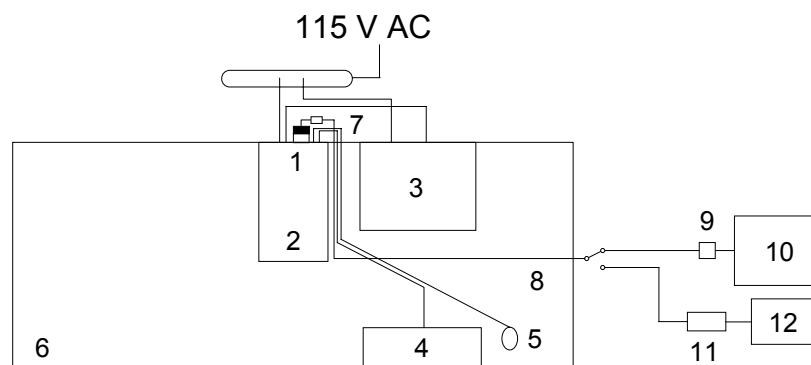


Figure 1: Measurement setup for testing on antenna connector

- | | |
|----------------------------|----------------------|
| 1 RF-modem | 7 DC-block |
| 2 Personal computer (host) | 8 Test cable |
| 3 Monitor | 9 Attenuator |
| 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

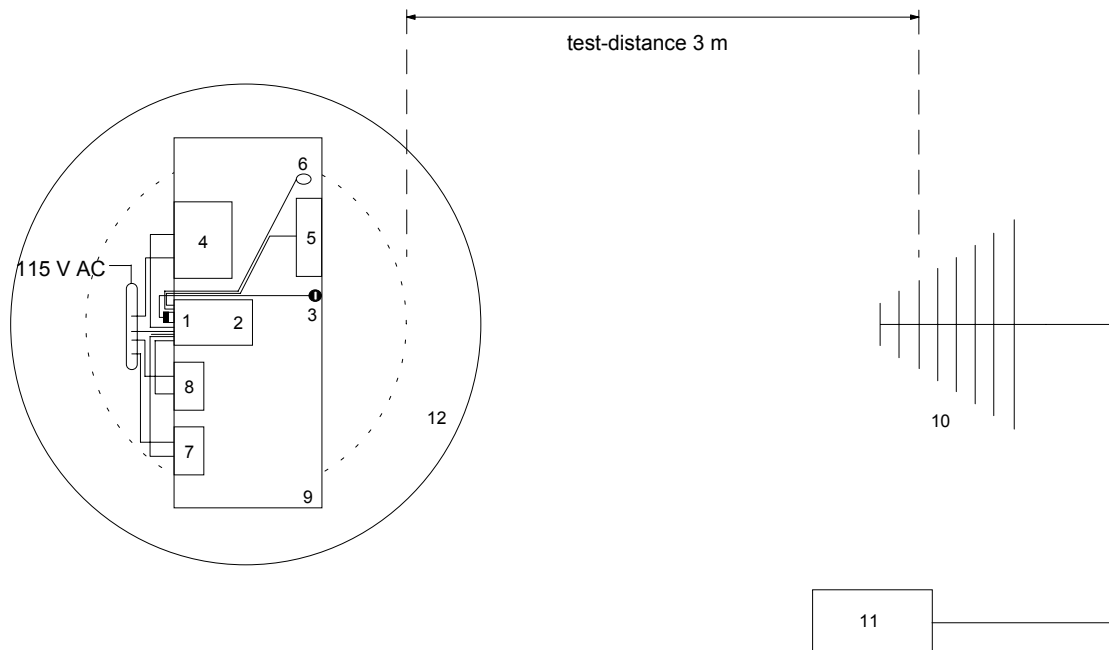


Figure 2: Measurement setup for radiated emission test below 1 GHz

- | | | | |
|---|--------------------------|----|---------------------|
| 1 | RF-modem | 10 | Measurement antenna |
| 2 | Personal computer (host) | 11 | Test receiver |
| 3 | External antenna | 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. To eliminate variations in amplification of the preamplifiers a signal generator was used for substitution (however, during testing a correction according to the minimum amplification was added).

Substitution was performed in the following steps:

- antenna cable was disconnected from receiving antenna and connected to signal generator output
- level of signal generator was increased until the reading value of the analyzer was the same as caused by EUT
- level of signal generator was noted
- final value was calculated by converting the signal generator level to dB μ V/m and adding the antenna correction factor.

See figure 3 for the measurement setup.

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

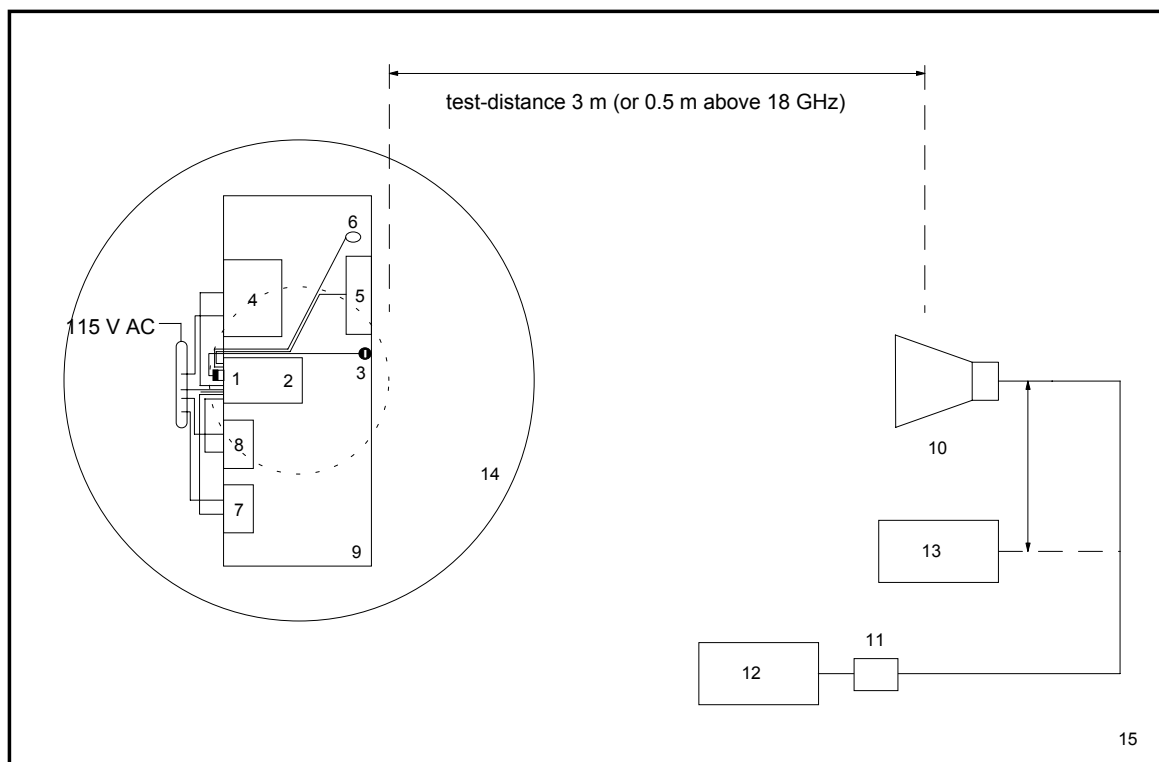


Figure 3: Measurement setup for radiated emission test above 1 GHz

- | | | | |
|----------|--------------------------|-----------|------------------------------|
| 1 | RF-modem | 10 | Measurement antenna |
| 2 | Personal computer (host) | 11 | Preamplifier (if applicable) |
| 3 | External antenna | 12 | Spectrum analyzer |
| 4 | Monitor | 13 | Signal generator |
| 5 | Keyboard | 14 | Turn table |
| 6 | Mouse | 15 | Semi-anechoic room |
| 7 | Parallel printer | | |
| 8 | Serial printer | | |
| 9 | Wooden table | | |

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	ACX/080-3030	32640	CTT
14	Preamplifier	ACO/180-3530	32641	CTT
15	Signal Generator	SMS	872166/039	Rohde & Schwarz
16	Signal Generator	HP 8673 D	2930A00966	Hewlett Packard
17	Waveform Generator	HP 33120 A	US34005375	Hewlett Packard
18	Attenuator 20 dB	4776-20	9503	Narda
19	Attenuator 10 dB	4776-10	9412	Narda
20	Pulse Limiter	ESH 3-Z2	1144	Rohde & Schwarz
21	Pulse Limiter	11947 A	3107A00566	Hewlett Packard
22	V-Network	ESH 3-Z5	862770/018	Rohde & Schwarz
23	V-Network	ESH 3-Z5	894785/005	Rohde & Schwarz
24	V-Network	ESH 3-Z5	830952/025	Rohde & Schwarz
25	V-Network	ESH 3-Z6	830722/010	Rohde & Schwarz
26	V-Network	NSLK 8127	8127152	Schwarzbeck
27	V-Network	NNLA 8119	8119148	Schwarzbeck
28	V-Network	SE 01	01	Senton
29	T-Network	ESH 3-Z4	890602/011	Rohde & Schwarz
30	T-Network	ESH 3-Z4	890602/012	Rohde & Schwarz
31	High Impedance Probe	TK 9416	01	Schwarzbeck
32	High Impedance Probe	TK 9416	02	Schwarzbeck
33	Current Probe	ESH 2-Z1	863366/18	Rohde & Schwarz
34	Current Probe	ESV-Z1	862553/3	Rohde & Schwarz

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

9. Photographs Taken During Testing

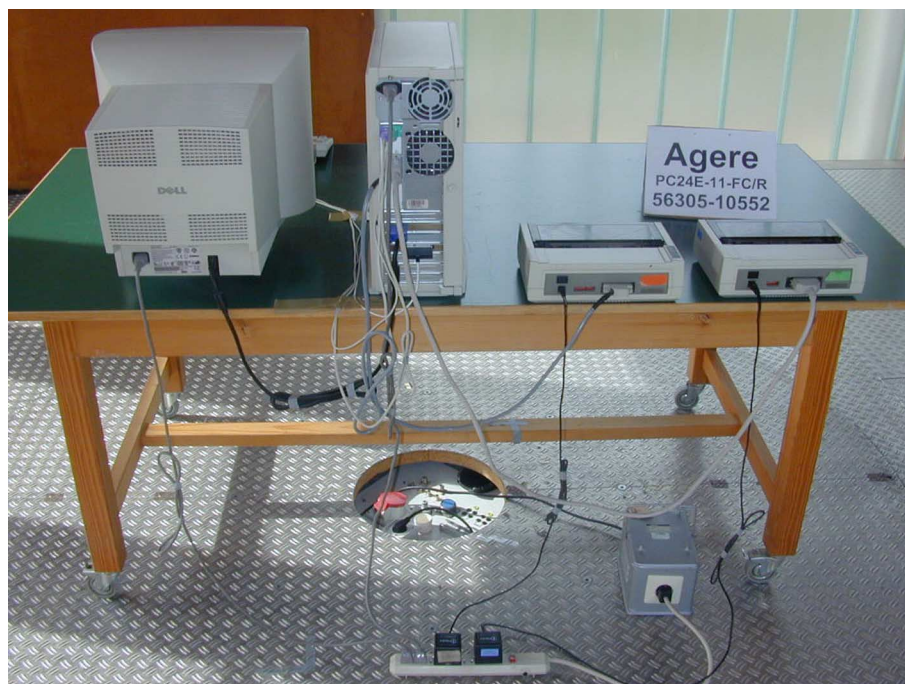
Photos No. 9.1 - 9.2

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



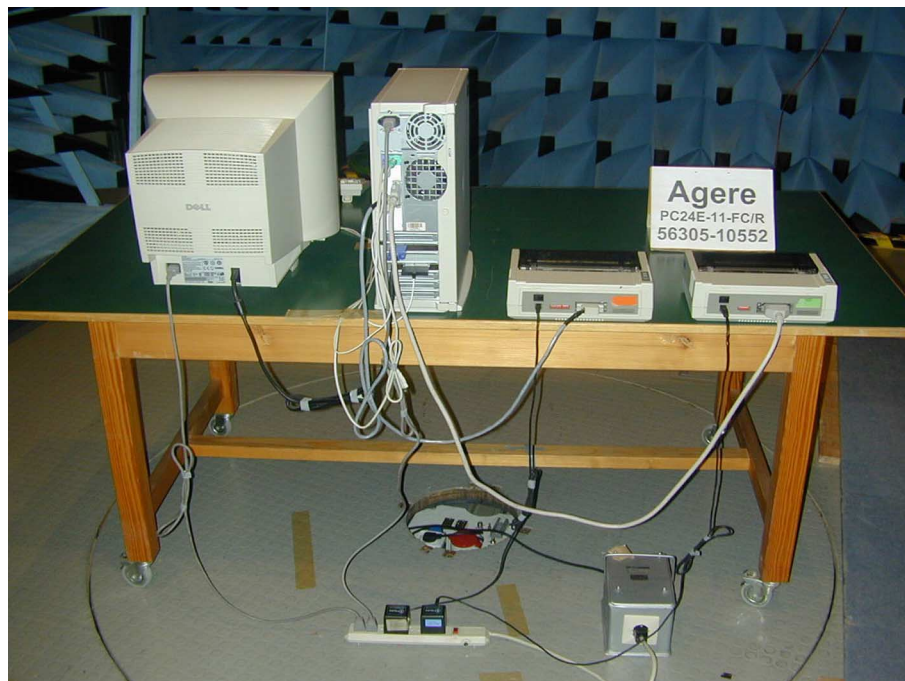
Photos No. 9.3 - 9.4

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



Photos No. 9.5 - 9.6

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



10. List of Measurements

FCC Part 15 Subpart C			
Section(s):	Test	Page	Result
	Transmit mode (TX):	24	
§15.247.a2	Minimum 6 dB bandwidth	---	not performed
§15.247.b	Maximum peak output power	25	passed
§15.247.d	Peak power density	---	not performed
§15.247.e	Processing gain	---	not required acc. to DA 00-2317
§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	26 - 49	passed
§15.247.c §15.209 §15.205.a,b	Radiated emission test 1 GHz - 25 GHz	50 - 85	passed
	Receive mode (RX):	86	
§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	87 - 94	passed
§15.209	Radiated emission test 1 GHz - 12.5 GHz	95 - 96	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.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Date of test: 10/08/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- TX mode

Tested on: Antenna connector

Selected bit rate	Operating frequency [GHz]	Power meter reading [dBm]	Correction- factor [dB]	Output power [dBm]	Limit [dBm]
11 Mbps	2.412	13.4	1.1	14.5	30
	2.442	13.4	1.1	14.5	30
	2.462	13.4	1.1	14.5	30
5.5 Mbps	2.412	13.5	1.1	14.6	30
	2.442	13.4	1.1	14.5	30
	2.462	13.4	1.1	14.5	30
2 Mbps	2.412	13.4	1.1	14.5	30
	2.442	13.3	1.1	14.4	30
	2.462	13.4	1.1	14.5	30

Result: The limit is kept

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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:
09/24/2001

Operator:
R. Heller

Test performed:
automatically

File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector:
Peak

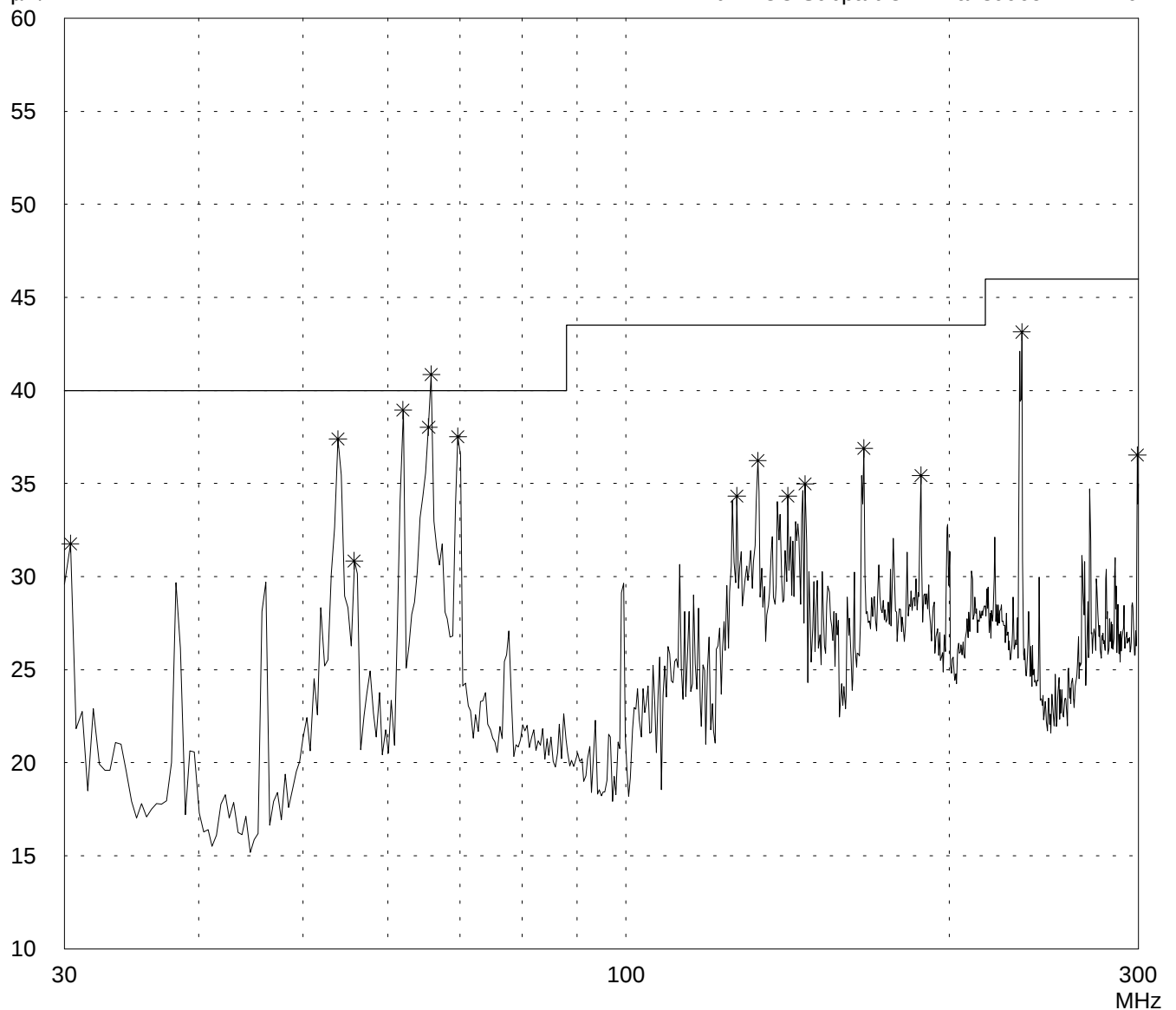
List of values:

10 dB Margin

50 Subranges

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

Limit1: FCC Subpart C Transducer: HK 116



Result:
Prescan

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/24/2001
Operator: R. Heller

Test performed: automatically
File name:

Mode:

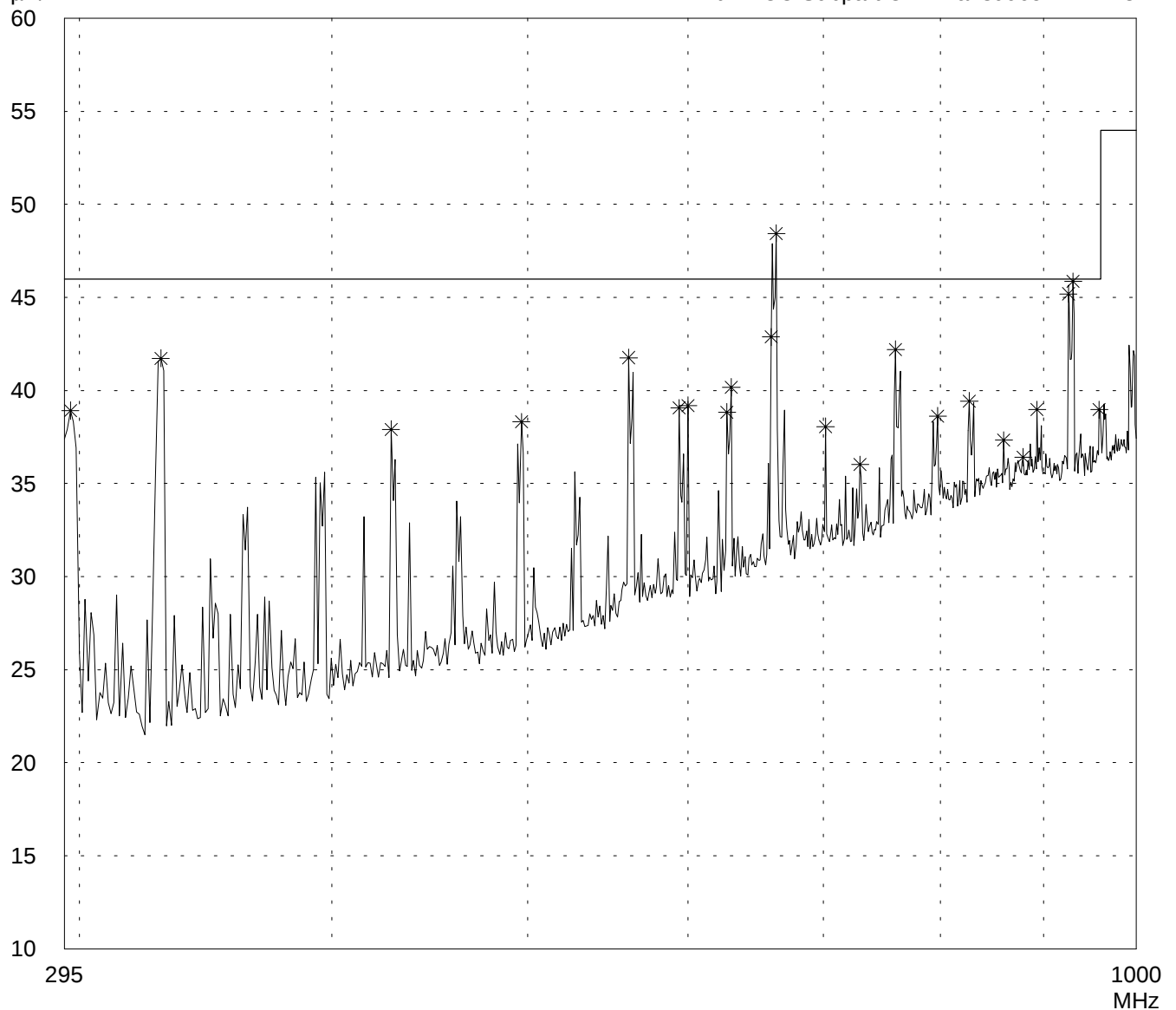
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/24/2001
Operator: R. Heller

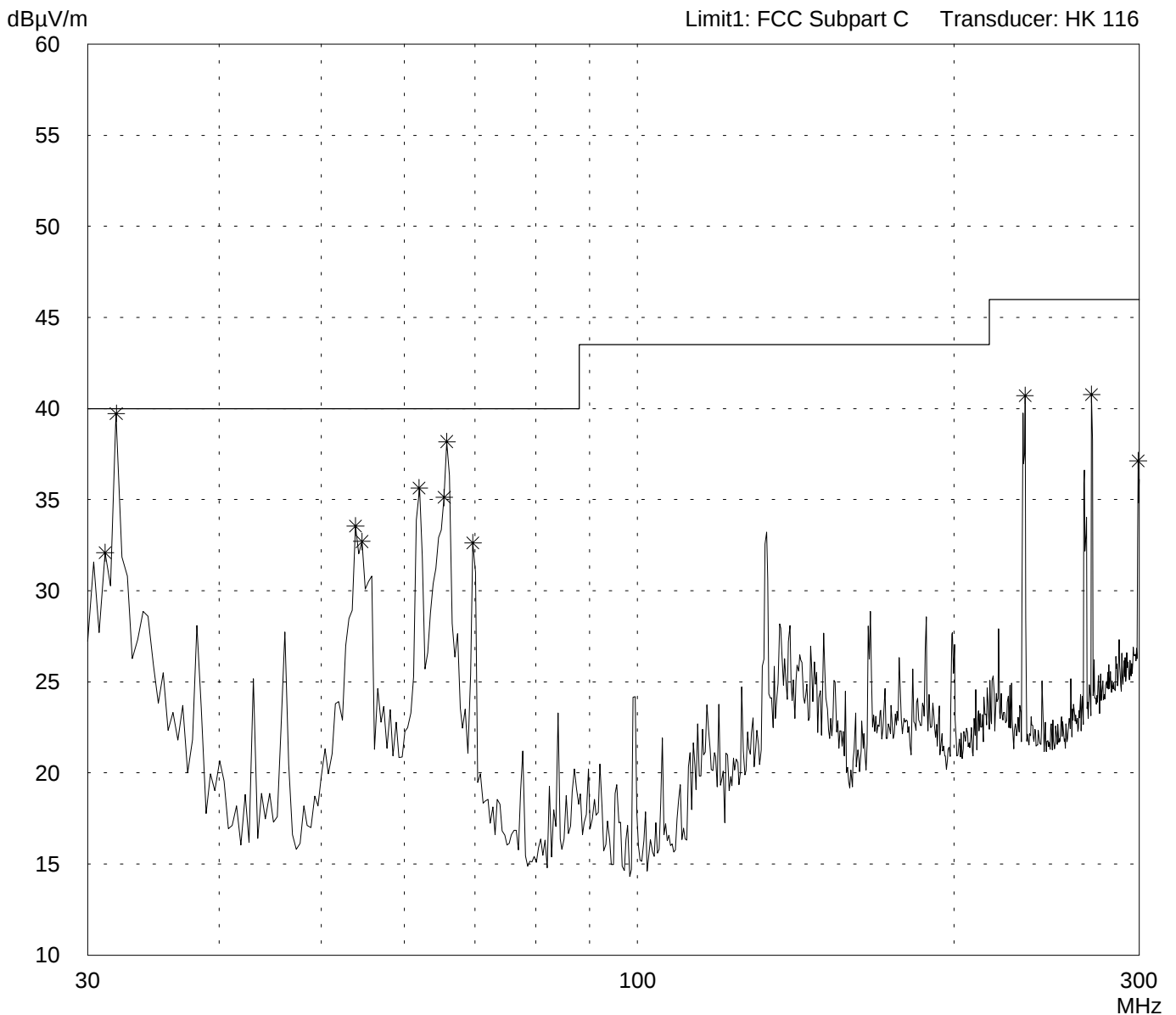
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/24/2001
Operator: R. Heller

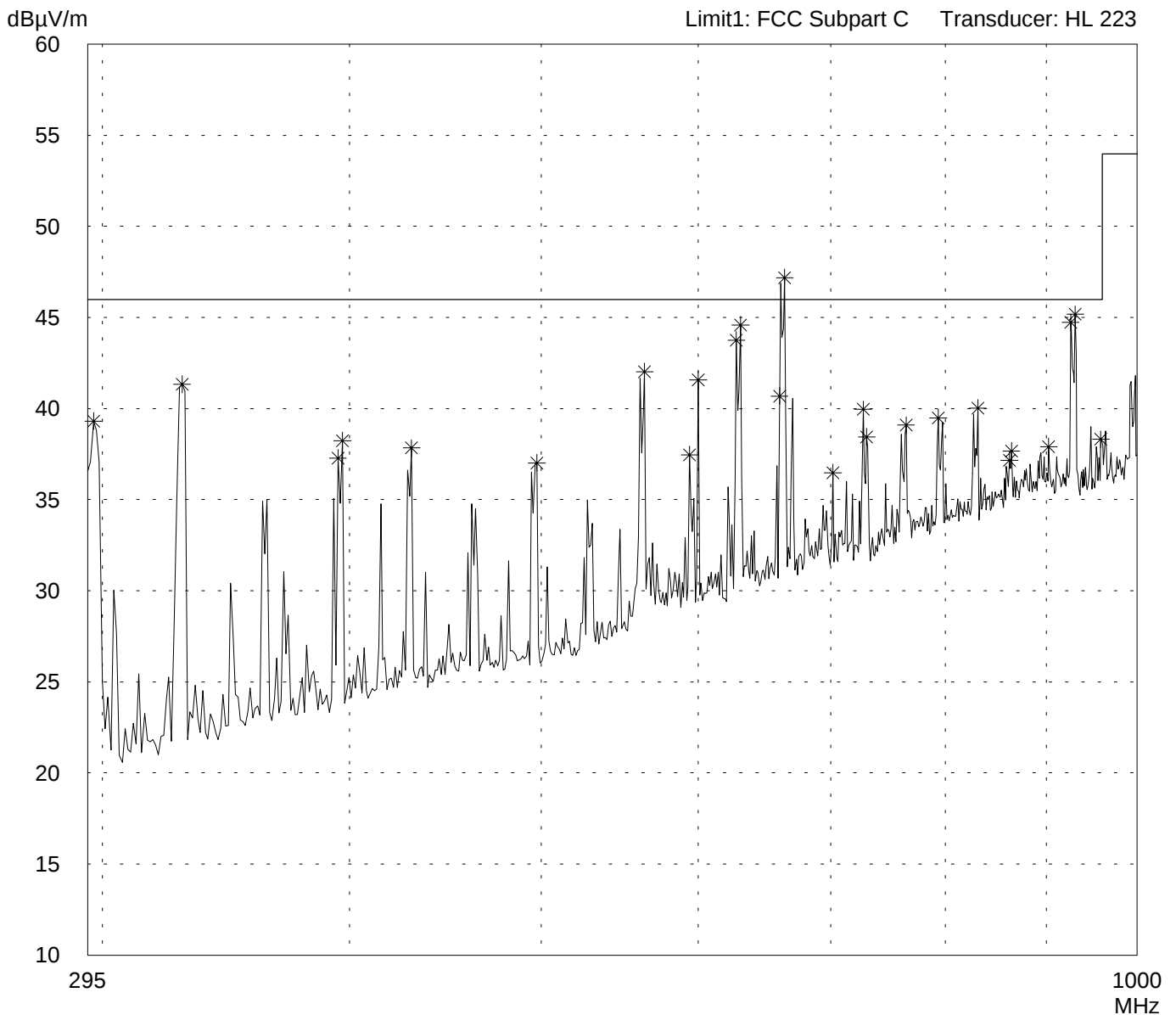
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 10/04/2001
Operator: R. Heller

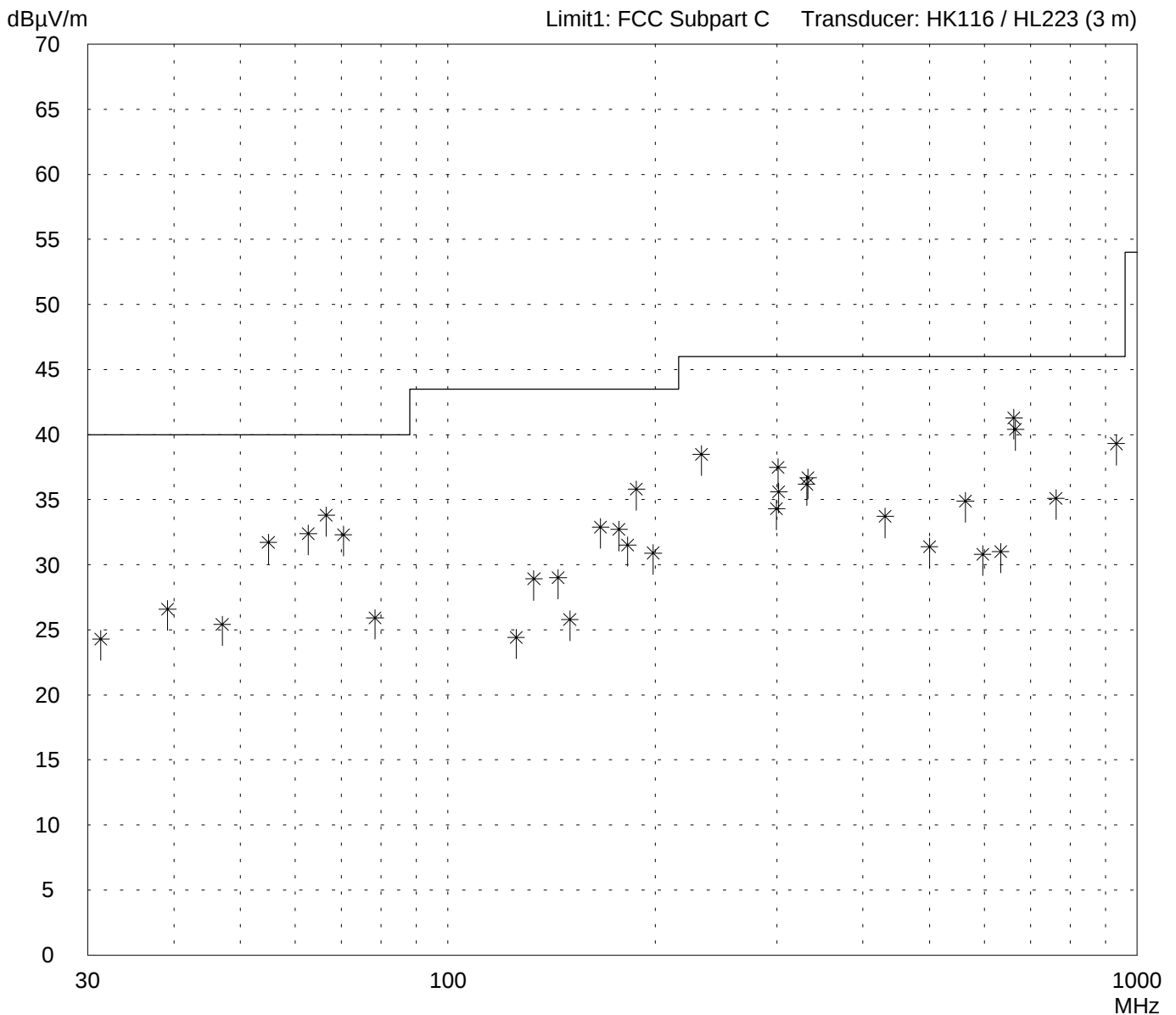
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 10/04/2001
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 PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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>
31.34	9.5	14.8	24.3	40.0	
39.18	13.5	13.1	26.6	40.0	
47.02	13.5	11.9	25.4	40.0	
54.85	20.5	11.2	31.7	40.0	
62.69	21.5	10.9	32.4	40.0	
66.58	23.0	10.8	33.8	40.0	
70.52	21.5	10.8	32.3	40.0	
78.36	15.0	10.9	25.9	40.0	
125.50	9.5	14.9	24.4	43.5	
133.25	13.5	15.4	28.9	43.5	
144.48	13.0	16.0	29.0	43.5	
150.20	9.5	16.3	25.8	43.5	
166.48	16.0	16.9	32.9	43.5	
177.02	15.0	17.7	32.7	43.5	
182.37	13.5	18.0	31.5	43.5	
187.74	17.5	18.3	35.8	43.5	
198.47	12.0	18.9	30.9	43.5	
233.11	18.5	20.0	38.5	46.0	
299.72	9.0	25.3	34.3	46.0	
301.00	18.5	19.0	37.5	46.0	
302.00	16.5	19.1	35.6	46.0	
331.41	16.0	20.2	36.2	46.0	
333.02	16.5	20.2	36.7	46.0	
430.84	10.5	23.2	33.7	46.0	
499.65	6.5	24.9	31.4	46.0	
563.40	8.0	26.9	34.9	46.0	
596.79	3.0	27.8	30.8	46.0	
633.87	2.0	29.0	31.0	46.0	
662.74	11.5	29.8	41.3	46.0	
666.15	10.5	29.9	40.4	46.0	
762.21	3.5	31.6	35.1	46.0	
932.74	5.0	34.3	39.3	46.0	

Result:
Limit kept

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 10/04/2001
Operator: R. Heller

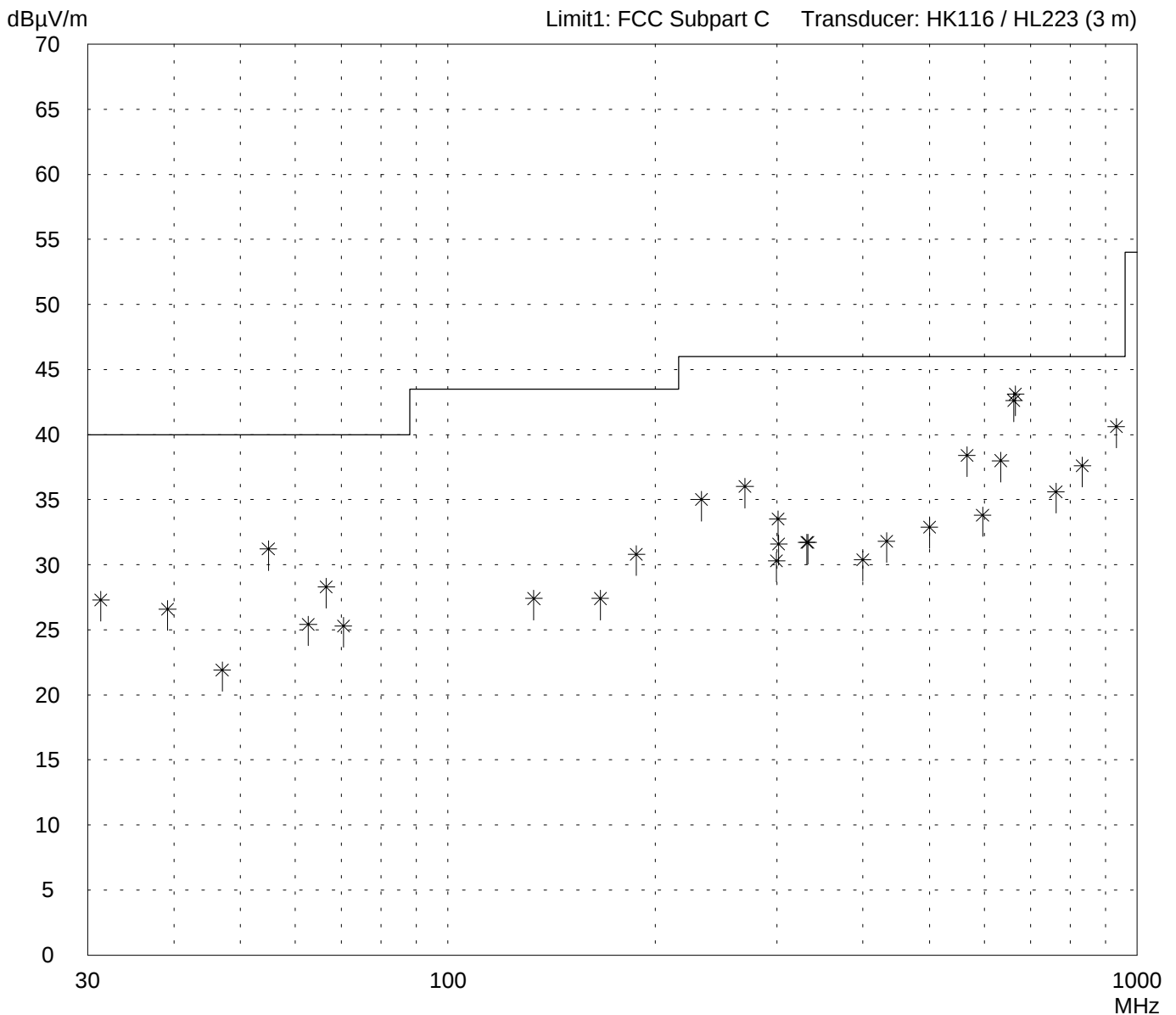
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 10/04/2001
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 PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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>
31.34	12.5	14.8	27.3	40.0	
39.18	13.5	13.1	26.6	40.0	
47.02	10.0	11.9	21.9	40.0	
54.85	20.0	11.2	31.2	40.0	
62.69	14.5	10.9	25.4	40.0	
66.58	17.5	10.8	28.3	40.0	
70.52	14.5	10.8	25.3	40.0	
133.25	12.0	15.4	27.4	43.5	
166.28	10.5	16.9	27.4	43.5	
187.74	12.5	18.3	30.8	43.5	
233.11	15.0	20.0	35.0	46.0	
269.72	13.5	22.5	36.0	46.0	
299.72	5.0	25.3	30.3	46.0	
301.00	14.5	19.0	33.5	46.0	
302.00	12.5	19.1	31.6	46.0	
331.41	11.5	20.2	31.7	46.0	
333.02	11.5	20.2	31.7	46.0	
399.65	8.0	22.4	30.4	46.0	
433.00	8.5	23.3	31.8	46.0	
499.61	8.0	24.9	32.9	46.0	
566.20	11.5	26.9	38.4	46.0	
596.54	6.0	27.8	33.8	46.0	
633.87	9.0	29.0	38.0	46.0	
662.73	12.8	29.8	42.6	46.0	
666.15	13.2	29.9	43.1	46.0	
762.21	4.0	31.6	35.6	46.0	
832.75	5.0	32.6	37.6	46.0	
932.74	6.3	34.3	40.6	46.0	

Result:
Limit kept

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001 Operator:
R. Heller

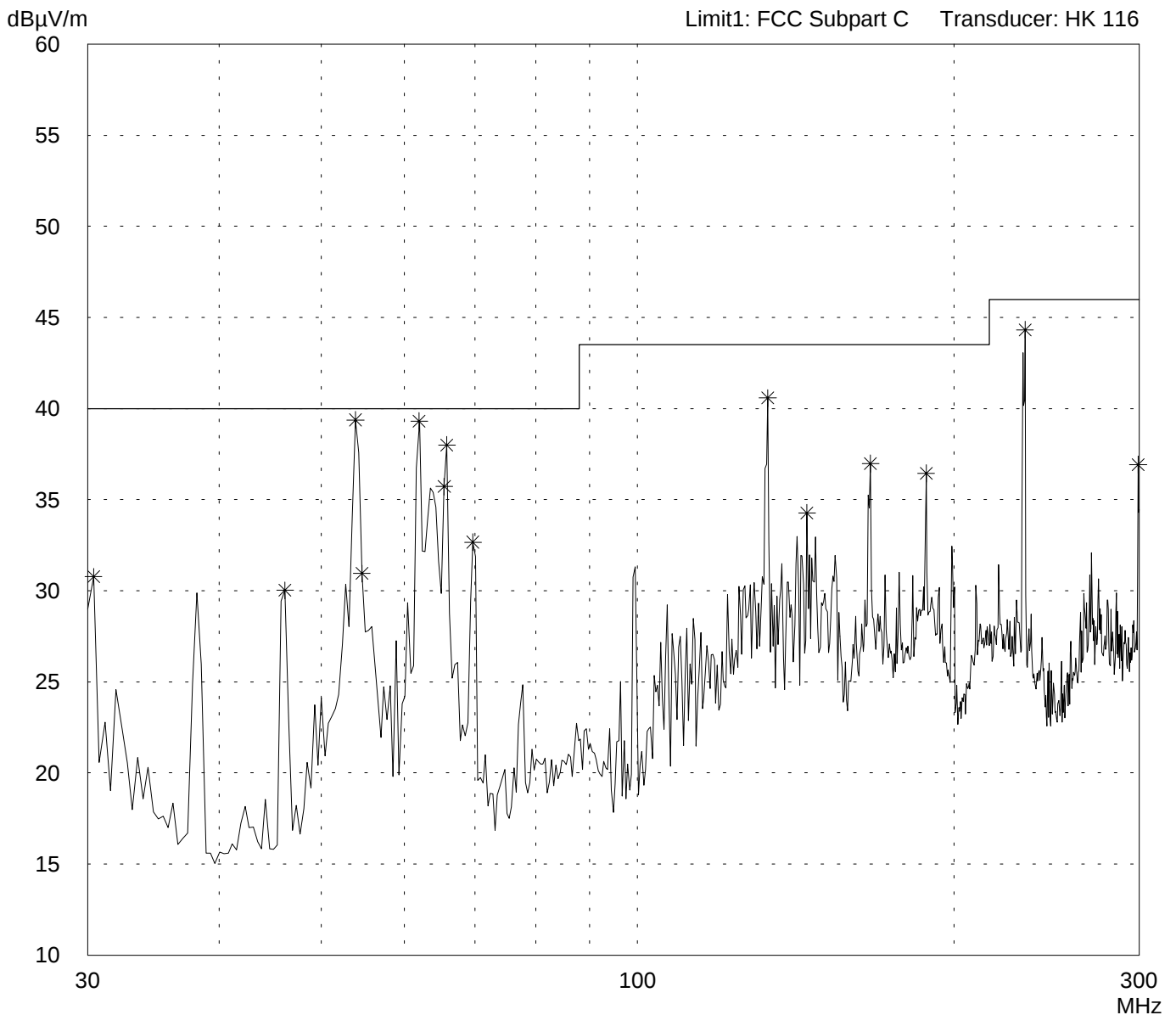
Test performed: automatically File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001 Operator:
R. Heller

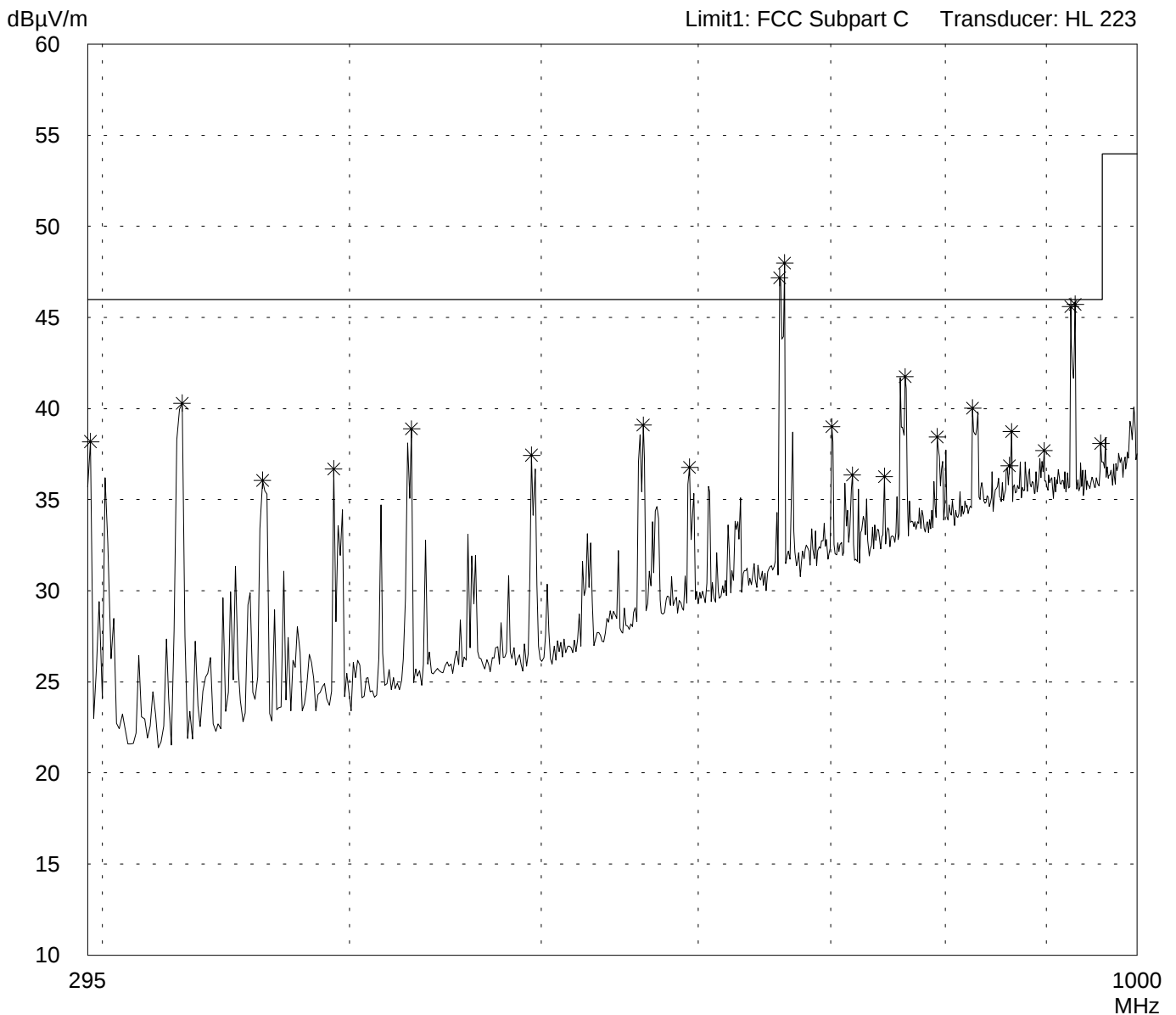
Test performed: automatically File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001
Operator: R. Heller

Test performed: automatically
File name:

Mode:

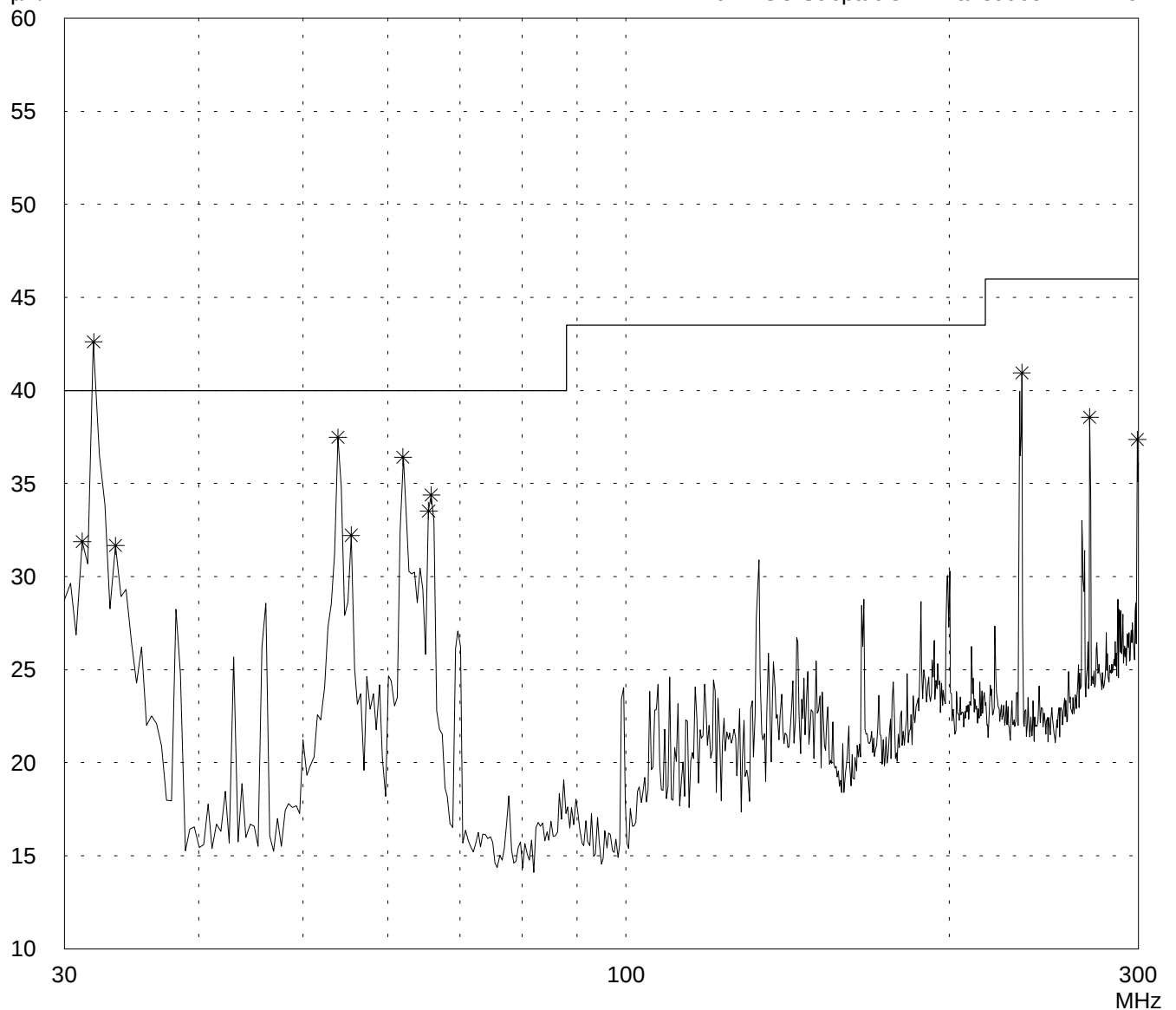
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

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

Limit1: FCC Subpart C Transducer: HK 116



Result:
Prescan

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001
Operator: R. Heller

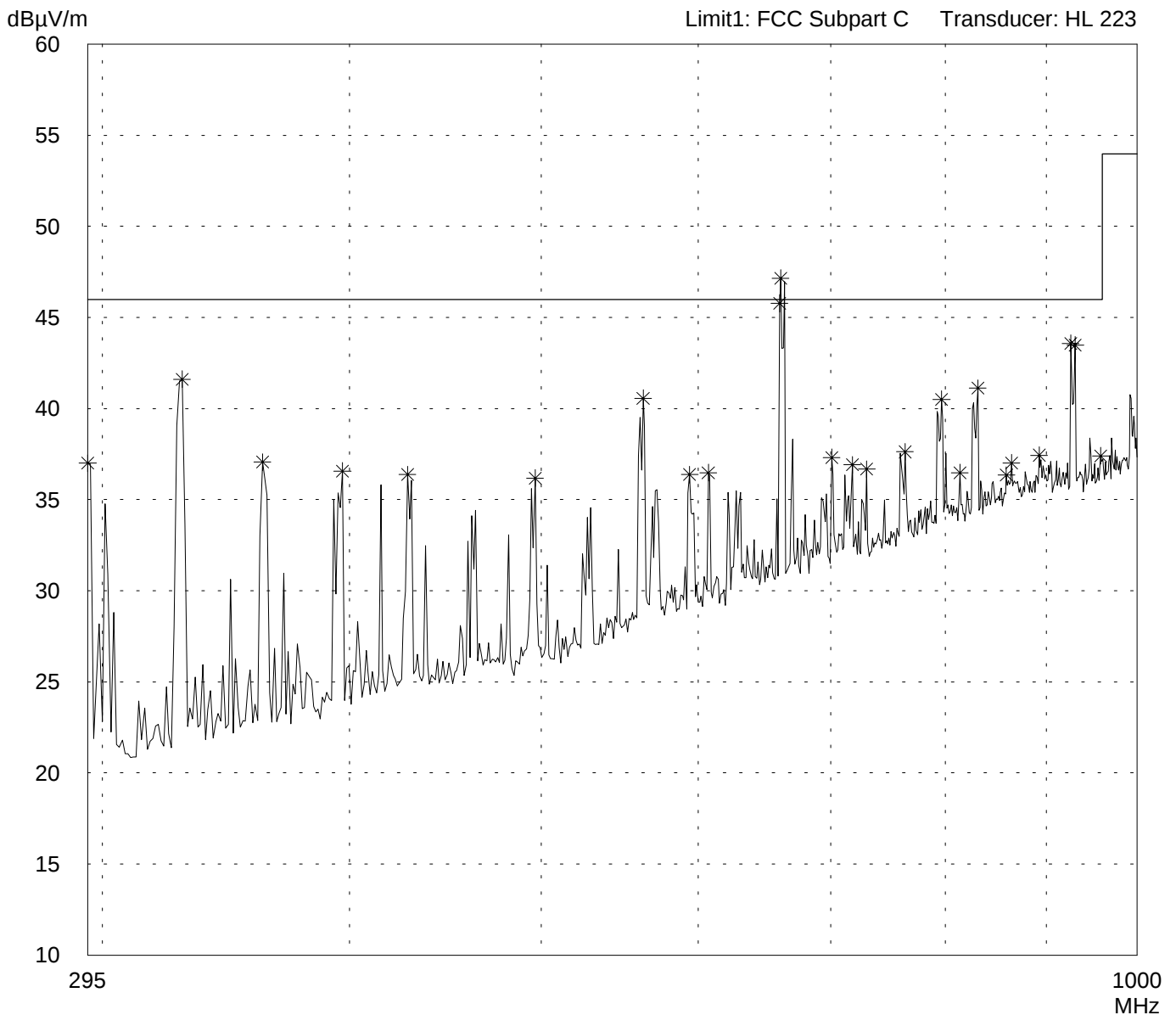
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 10/04/2001
Operator: R. Heller

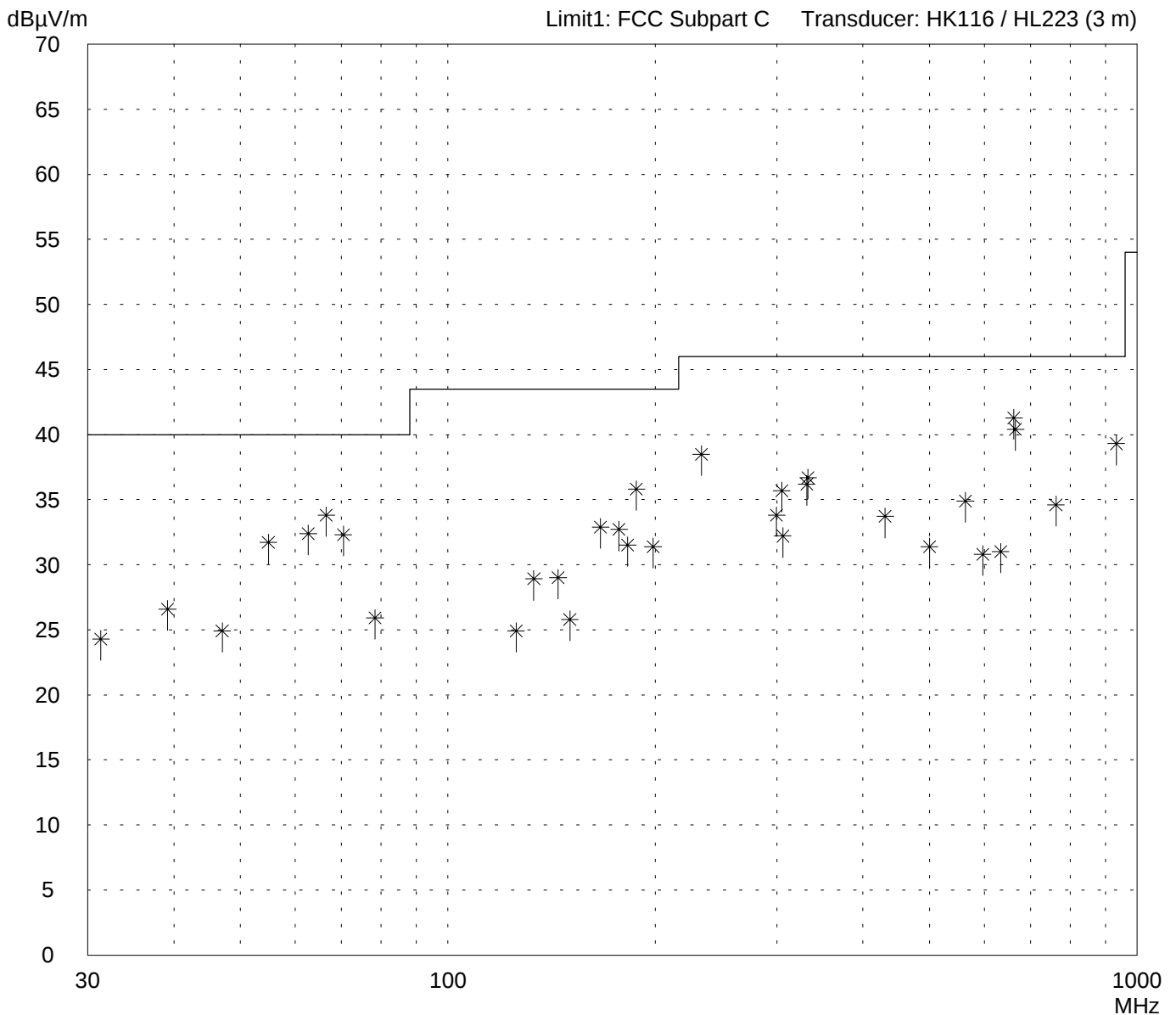
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 10/04/2001
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 PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
31.34	9.5	14.8	24.3	40.0	
39.18	13.5	13.1	26.6	40.0	
47.02	13.0	11.9	24.9	40.0	
54.85	20.5	11.2	31.7	40.0	
62.69	21.5	10.9	32.4	40.0	
66.58	23.0	10.8	33.8	40.0	
70.52	21.5	10.8	32.3	40.0	
78.36	15.0	10.9	25.9	40.0	
125.50	10.0	14.9	24.9	43.5	
133.25	13.5	15.4	28.9	43.5	
144.48	13.0	16.0	29.0	43.5	
150.20	9.5	16.3	25.8	43.5	
166.48	16.0	16.9	32.9	43.5	
177.02	15.0	17.7	32.7	43.5	
182.37	13.5	18.0	31.5	43.5	
187.74	17.5	18.3	35.8	43.5	
198.47	12.5	18.9	31.4	43.5	
233.11	18.5	20.0	38.5	46.0	
299.72	8.5	25.3	33.8	46.0	
305.00	16.5	19.2	35.7	46.0	
306.00	13.0	19.2	32.2	46.0	
331.41	16.0	20.2	36.2	46.0	
333.02	16.5	20.2	36.7	46.0	
430.84	10.5	23.2	33.7	46.0	
499.65	6.5	24.9	31.4	46.0	
563.40	8.0	26.9	34.9	46.0	
596.79	3.0	27.8	30.8	46.0	
633.87	2.0	29.0	31.0	46.0	
662.74	11.5	29.8	41.3	46.0	
666.15	10.5	29.9	40.4	46.0	
762.21	3.0	31.6	34.6	46.0	
932.74	5.0	34.3	39.3	46.0	

Result:
Limit kept

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 10/04/2001
Operator: R. Heller

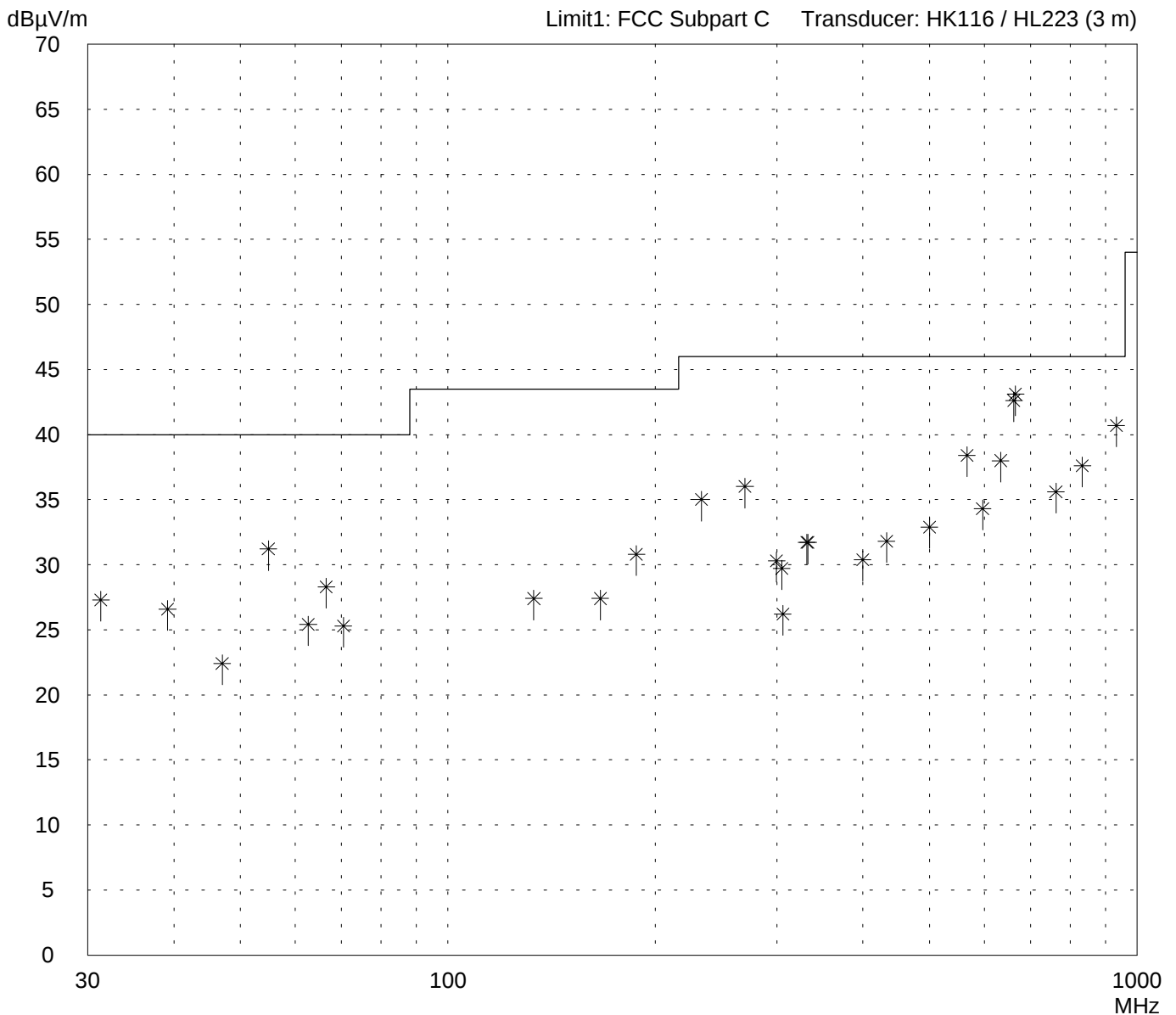
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 10/04/2001
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 PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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>
31.34	12.5	14.8	27.3	40.0	
39.18	13.5	13.1	26.6	40.0	
47.02	10.5	11.9	22.4	40.0	
54.85	20.0	11.2	31.2	40.0	
62.69	14.5	10.9	25.4	40.0	
66.58	17.5	10.8	28.3	40.0	
70.52	14.5	10.8	25.3	40.0	
133.25	12.0	15.4	27.4	43.5	
166.28	10.5	16.9	27.4	43.5	
187.74	12.5	18.3	30.8	43.5	
233.11	15.0	20.0	35.0	46.0	
269.72	13.5	22.5	36.0	46.0	
299.72	5.0	25.3	30.3	46.0	
305.00	10.5	19.2	29.7	46.0	
306.00	7.0	19.2	26.2	46.0	
331.41	11.5	20.2	31.7	46.0	
333.02	11.5	20.2	31.7	46.0	
399.65	8.0	22.4	30.4	46.0	
433.00	8.5	23.3	31.8	46.0	
499.61	8.0	24.9	32.9	46.0	
566.20	11.5	26.9	38.4	46.0	
596.54	6.5	27.8	34.3	46.0	
633.87	9.0	29.0	38.0	46.0	
662.73	12.8	29.8	42.6	46.0	
666.15	13.2	29.9	43.1	46.0	
762.21	4.0	31.6	35.6	46.0	
832.75	5.0	32.6	37.6	46.0	
932.74	6.4	34.3	40.7	46.0	

Result:
Limit kept

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001 Operator: R. Heller

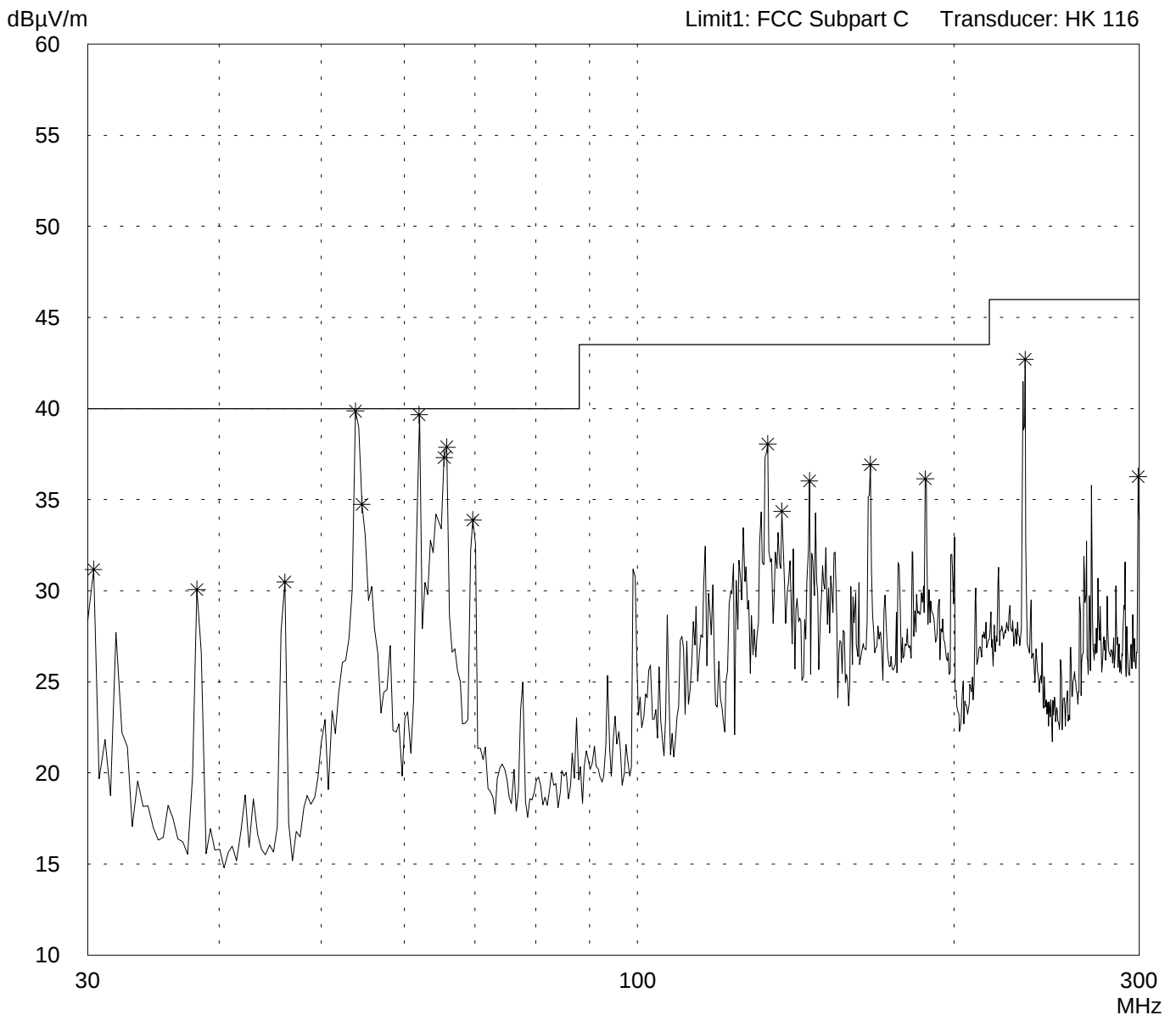
Test performed: automatically File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001
Operator: R. Heller

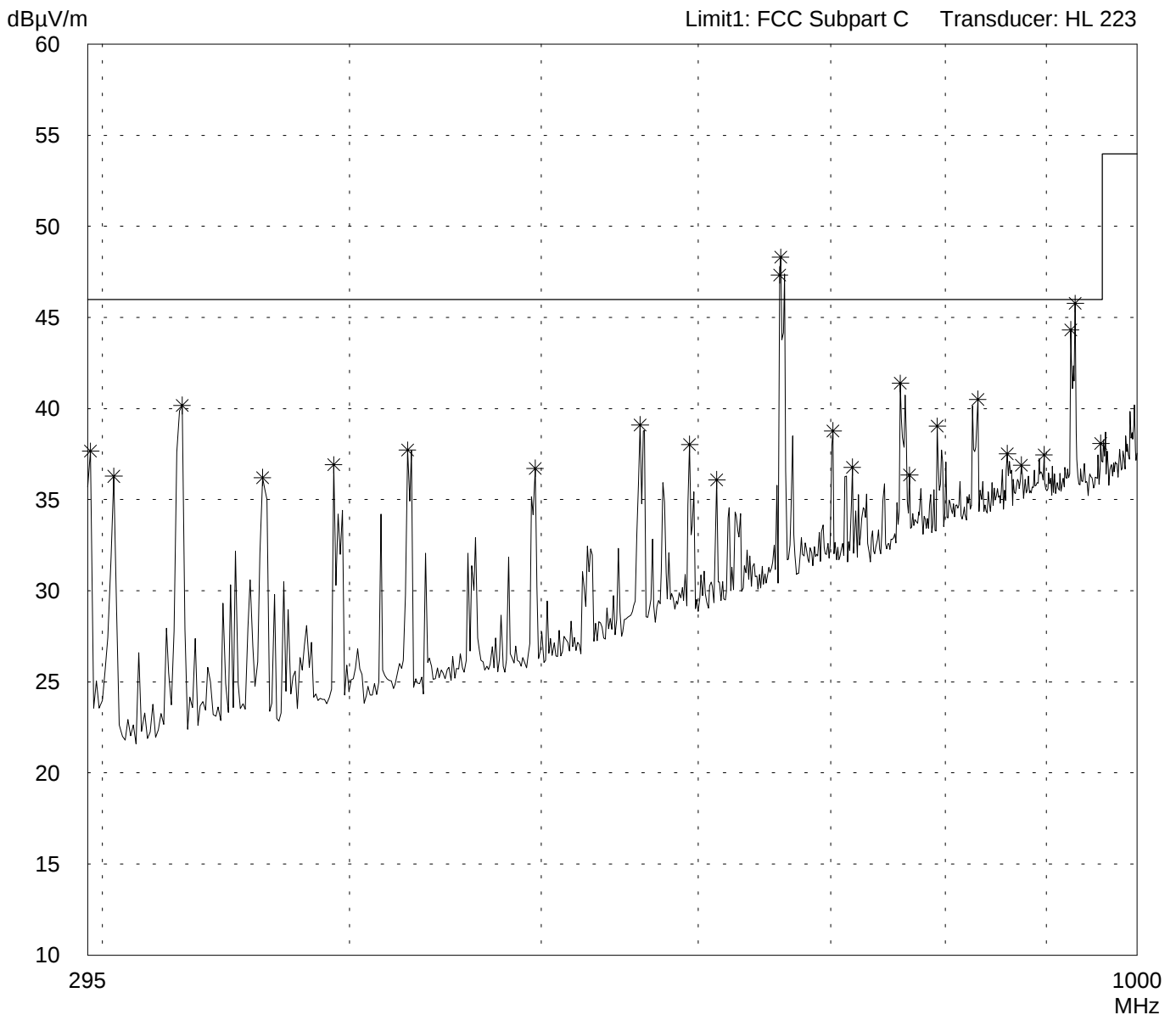
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001
Operator: R. Heller

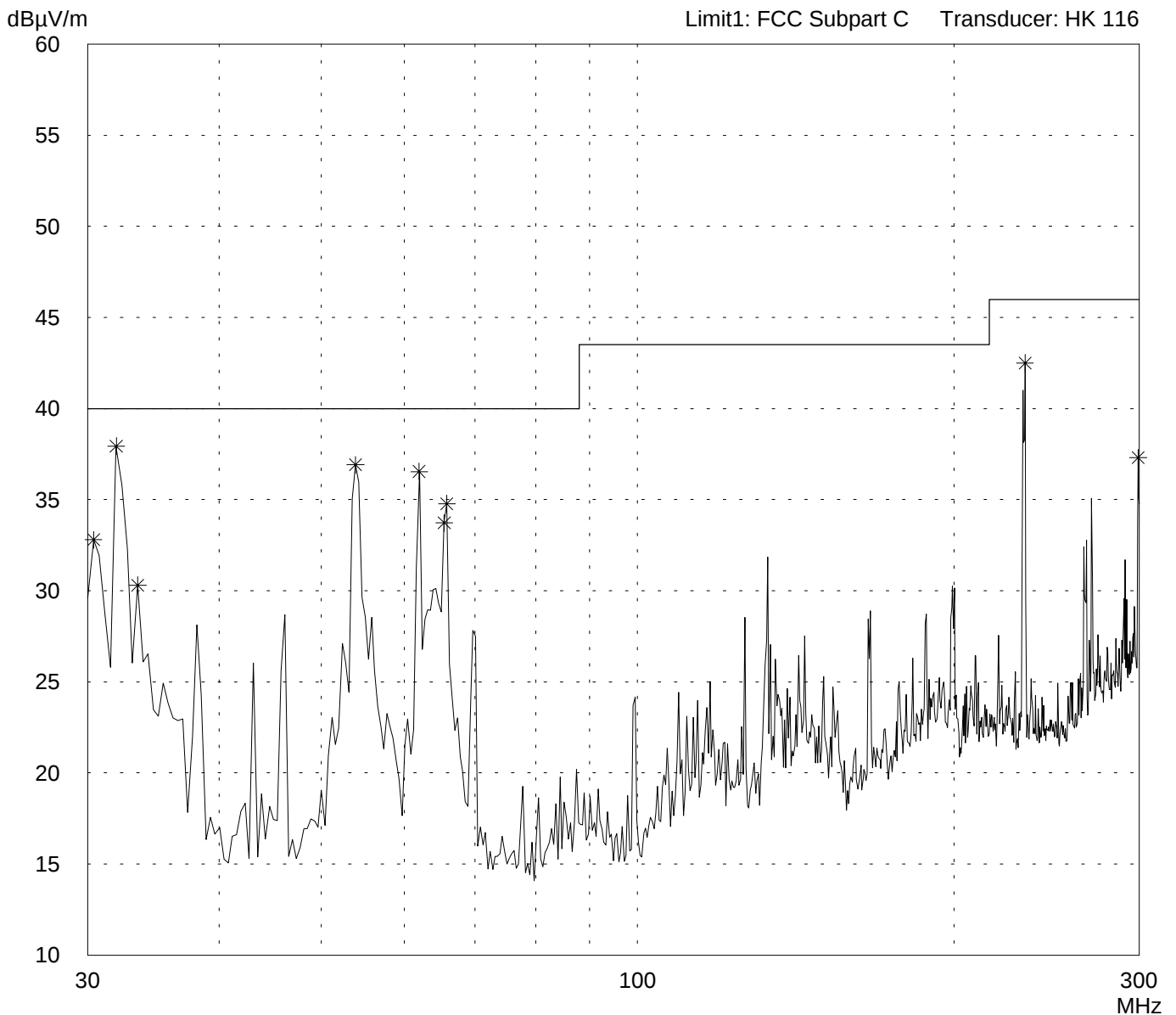
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001
Operator: R. Heller

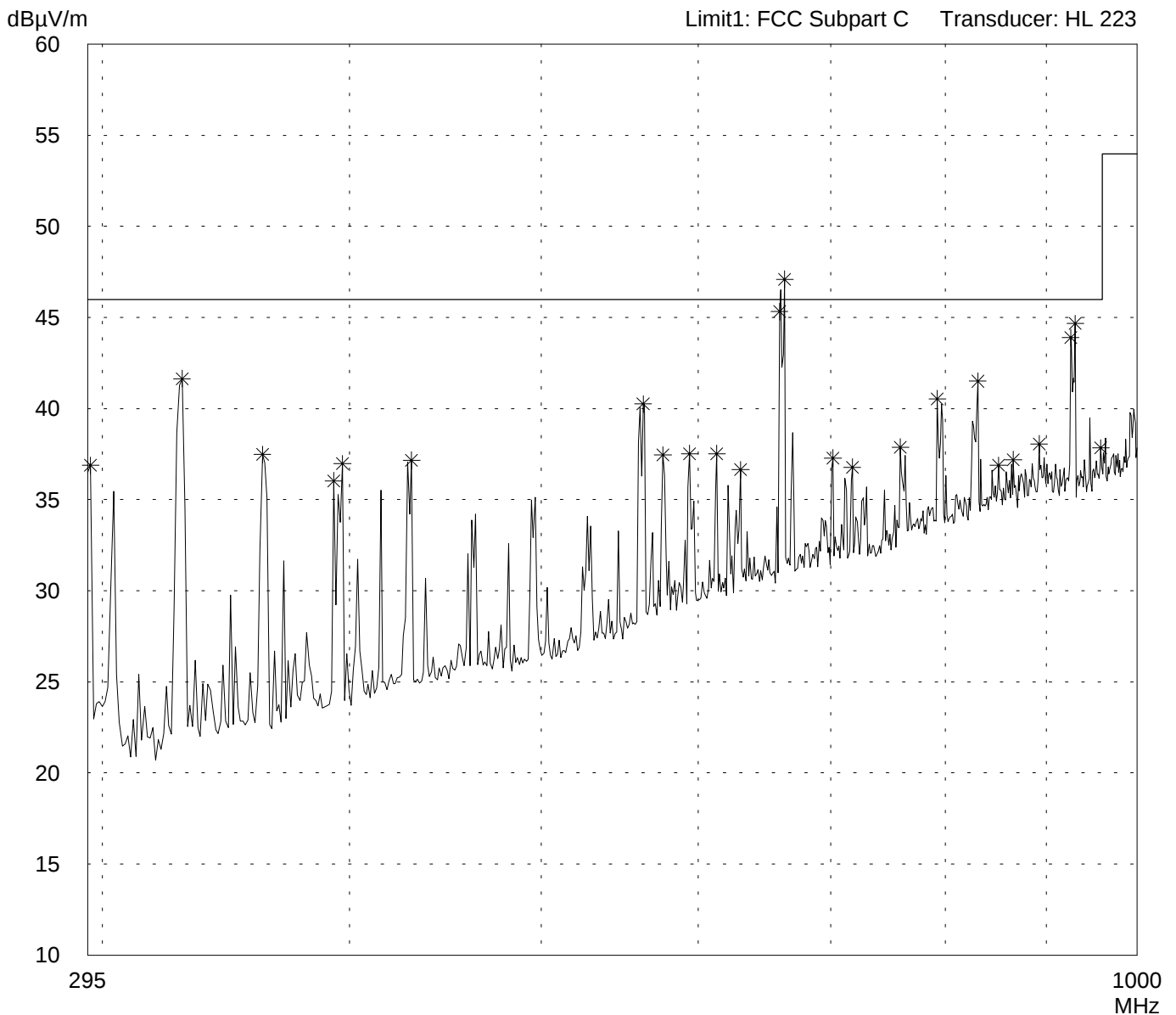
Test performed: automatically
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 10/04/2001
Operator: R. Heller

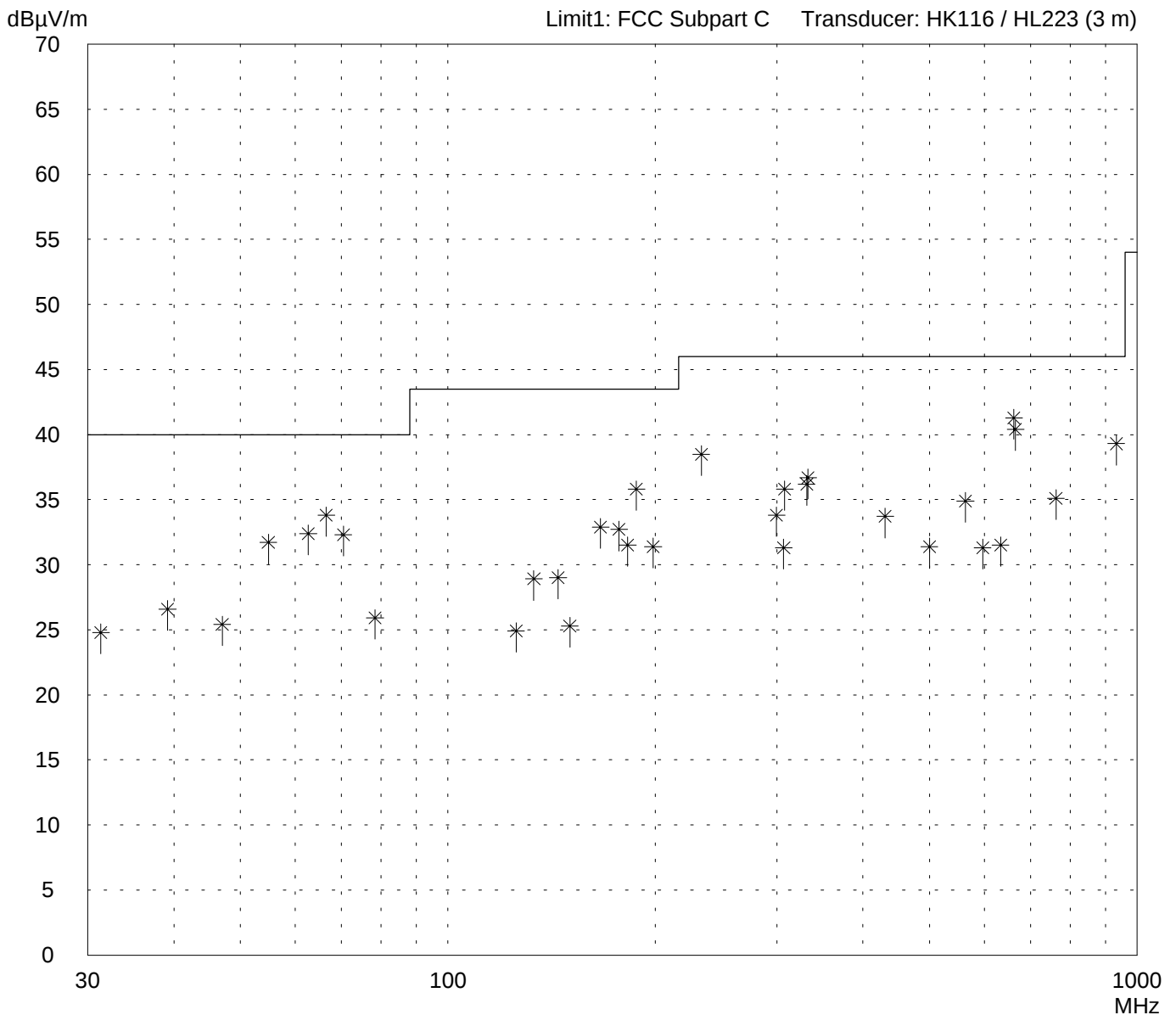
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 10/04/2001
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 PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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
31.34	10.0	14.8	24.8	40.0	
39.18	13.5	13.1	26.6	40.0	
47.02	13.5	11.9	25.4	40.0	
54.85	20.5	11.2	31.7	40.0	
62.69	21.5	10.9	32.4	40.0	
66.58	23.0	10.8	33.8	40.0	
70.52	21.5	10.8	32.3	40.0	
78.36	15.0	10.9	25.9	40.0	
125.50	10.0	14.9	24.9	43.5	
133.25	13.5	15.4	28.9	43.5	
144.48	13.0	16.0	29.0	43.5	
150.20	9.0	16.3	25.3	43.5	
166.48	16.0	16.9	32.9	43.5	
177.02	15.0	17.7	32.7	43.5	
182.37	13.5	18.0	31.5	43.5	
187.74	17.5	18.3	35.8	43.5	
198.47	12.5	18.9	31.4	43.5	
233.11	18.5	20.0	38.5	46.0	
299.72	8.5	25.3	33.8	46.0	
307.00	12.0	19.3	31.3	46.0	
308.00	16.5	19.3	35.8	46.0	
331.41	16.0	20.2	36.2	46.0	
333.02	16.5	20.2	36.7	46.0	
430.84	10.5	23.2	33.7	46.0	
499.65	6.5	24.9	31.4	46.0	
563.40	8.0	26.9	34.9	46.0	
596.79	3.5	27.8	31.3	46.0	
633.87	2.5	29.0	31.5	46.0	
662.74	11.5	29.8	41.3	46.0	
666.15	10.5	29.9	40.4	46.0	
762.21	3.5	31.6	35.1	46.0	
932.74	5.0	34.3	39.3	46.0	

Result:
Limit kept

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 10/04/2001
Operator: R. Heller

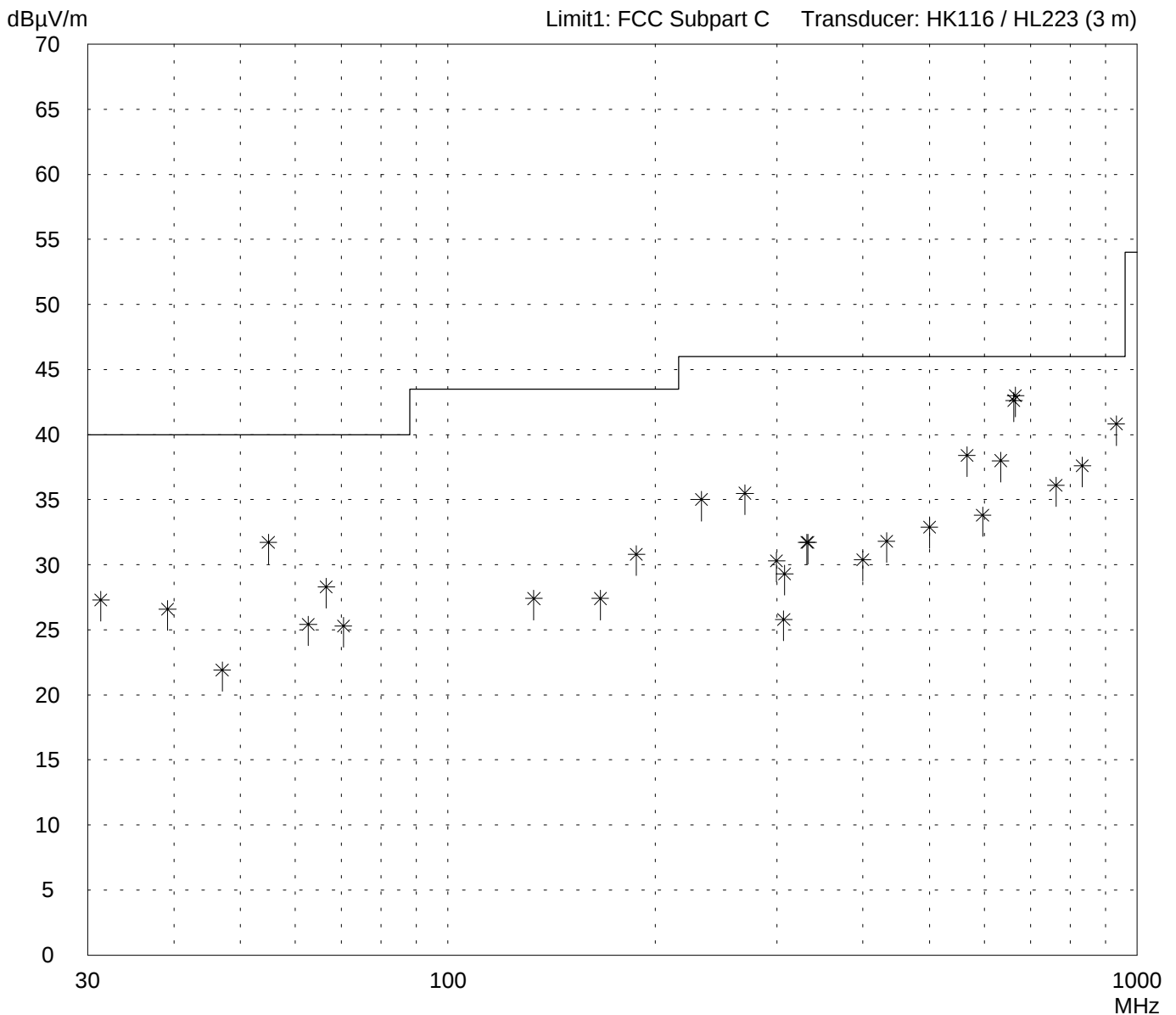
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 10/04/2001
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 PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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>
31.34	12.5	14.8	27.3	40.0	
39.18	13.5	13.1	26.6	40.0	
47.02	10.0	11.9	21.9	40.0	
54.85	20.5	11.2	31.7	40.0	
62.69	14.5	10.9	25.4	40.0	
66.58	17.5	10.8	28.3	40.0	
70.52	14.5	10.8	25.3	40.0	
133.25	12.0	15.4	27.4	43.5	
166.28	10.5	16.9	27.4	43.5	
187.74	12.5	18.3	30.8	43.5	
233.11	15.0	20.0	35.0	46.0	
269.72	13.0	22.5	35.5	46.0	
299.72	5.0	25.3	30.3	46.0	
307.00	6.5	19.3	25.8	46.0	
308.00	10.0	19.3	29.3	46.0	
331.41	11.5	20.2	31.7	46.0	
333.02	11.5	20.2	31.7	46.0	
399.65	8.0	22.4	30.4	46.0	
433.00	8.5	23.3	31.8	46.0	
499.61	8.0	24.9	32.9	46.0	
566.20	11.5	26.9	38.4	46.0	
596.54	6.0	27.8	33.8	46.0	
633.87	9.0	29.0	38.0	46.0	
662.73	12.8	29.8	42.6	46.0	
666.15	13.1	29.9	43.0	46.0	
762.21	4.5	31.6	36.1	46.0	
832.75	5.0	32.6	37.6	46.0	
932.74	6.5	34.3	40.8	46.0	

Result:
Limit kept

Project file:
56305-10552-3

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer-reading [dB μ V]	Generator-reading [dB μ V]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.3337	vertical	55.1		0.5	26.5	55.1	74
2.3900	vertical	60.9		0.6	20.7	60.9	74
2.3982	vertical	73.7		0.6	20.7	73.7	NRB
2.3985	vertical	74.8		0.6	20.7	74.8	NRB
2.4000	vertical	73.9		0.6	20.7	73.9	NRB
2.4127	vertical	109.2		0.6	20.7	109.2	OB
2.4283	vertical	73.2		0.6	20.7	73.2	OB
4.8282	vertical	47.0	64.6		27.3	46.6	74

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 109.2 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

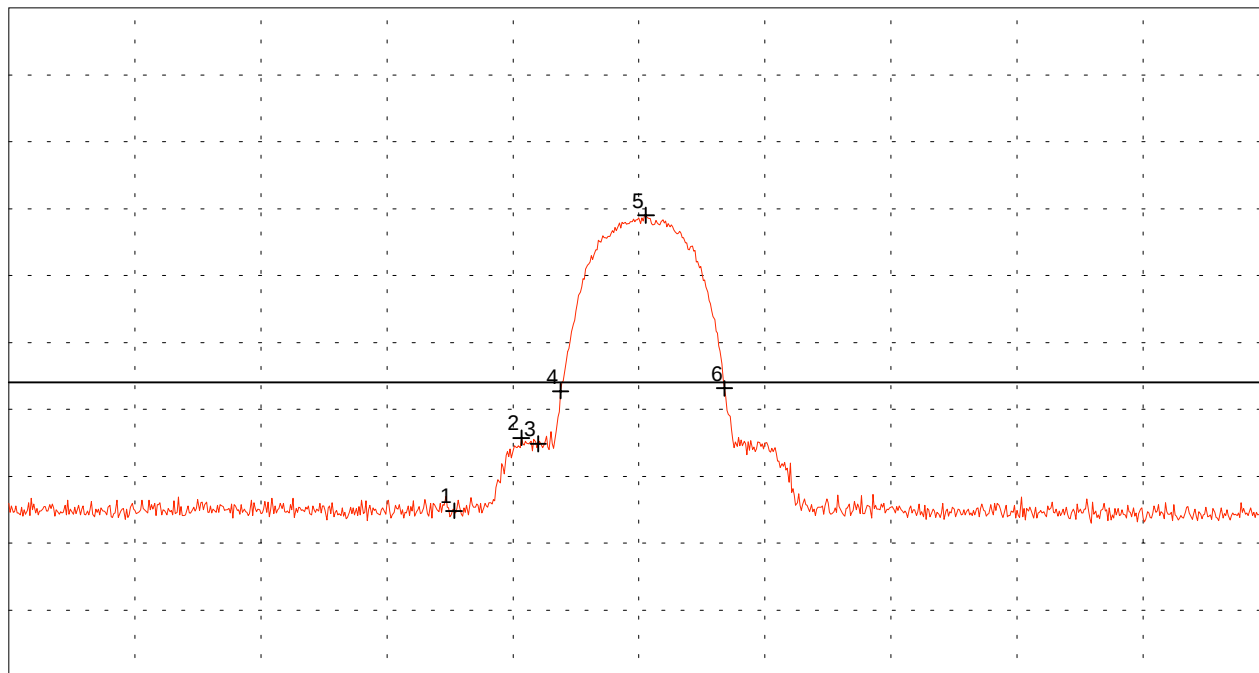
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 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	54.82 dB μ V/m
No. 2	2.398000 GHz	65.72 dB μ V/m
No. 3	2.400000 GHz	64.83 dB μ V/m
No. 4	2.402667 GHz	72.73 dB μ V/m
No. 5	2.412833 GHz	99.03 dB μ V/m
No. 6	2.422167 GHz	73.13 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

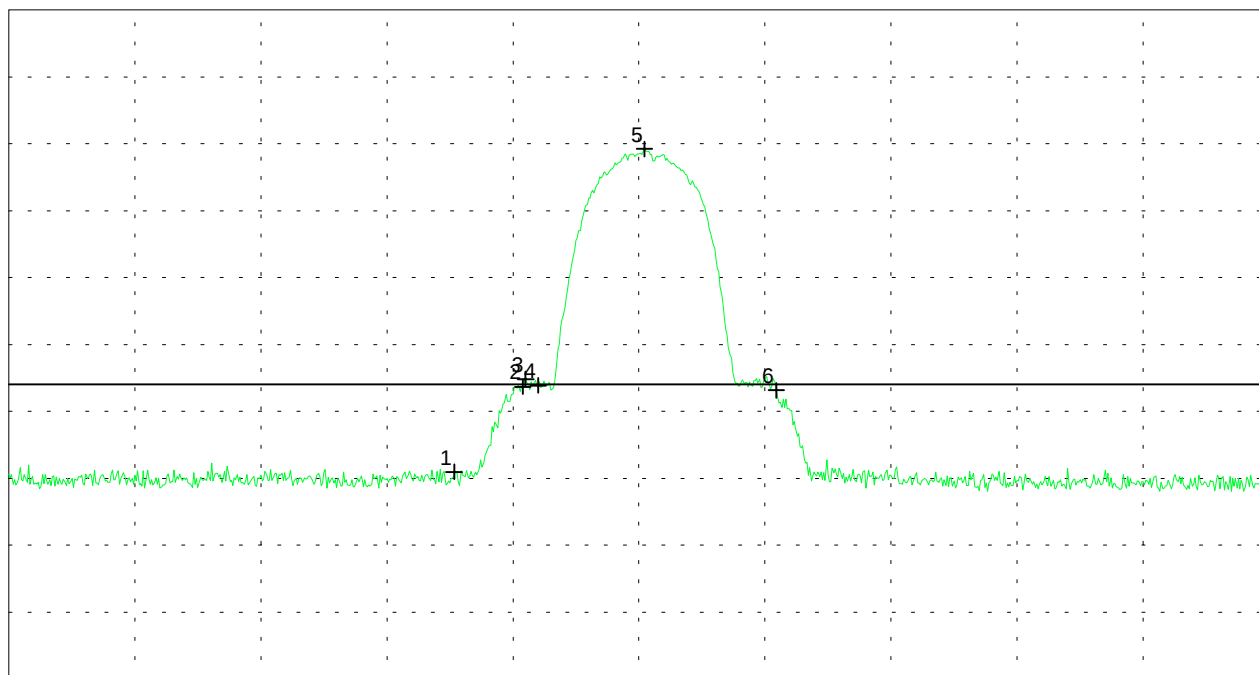
Test distance 3 meters

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	60.94 dB μ V/m
No. 2	2.398167 GHz	73.69 dB μ V/m
No. 3	2.398500 GHz	74.81 dB μ V/m
No. 4	2.400000 GHz	73.87 dB μ V/m
No. 5	2.412667 GHz	109.22 dB μ V/m
No. 6	2.428333 GHz	73.16 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.3282	vertical	< 45.1		0.5	26.5	< 45.1	54
2.3900	vertical	44.1		0.6	20.7	44.1	54
2.3940	vertical	53.3		0.6	20.7	53.3	NRB
2.3993	vertical	65.9		0.6	20.7	65.9	NRB
2.4000	vertical	65.7		0.6	20.7	65.7	NRB
2.4120	vertical	103.1		0.6	20.7	103.1	OB
2.4308	vertical	52.3		0.6	20.7	52.3	OB
4.8241	vertical	41.4	64.4		27.3	41.3	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 103.1 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

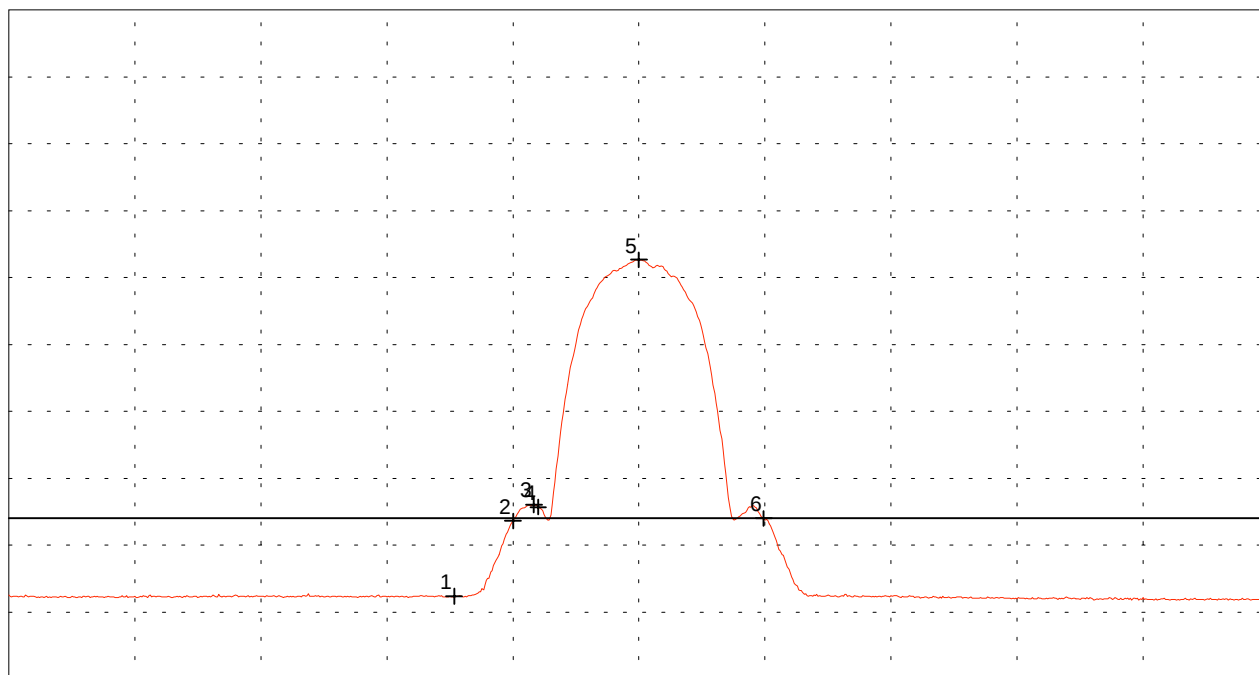
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 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	42.36 dB μ V/m
No. 2	2.397000 GHz	53.63 dB μ V/m
No. 3	2.399500 GHz	56.04 dB μ V/m
No. 4	2.400000 GHz	55.69 dB μ V/m
No. 5	2.412000 GHz	92.66 dB μ V/m
No. 6	2.426833 GHz	53.99 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.412$ GHz

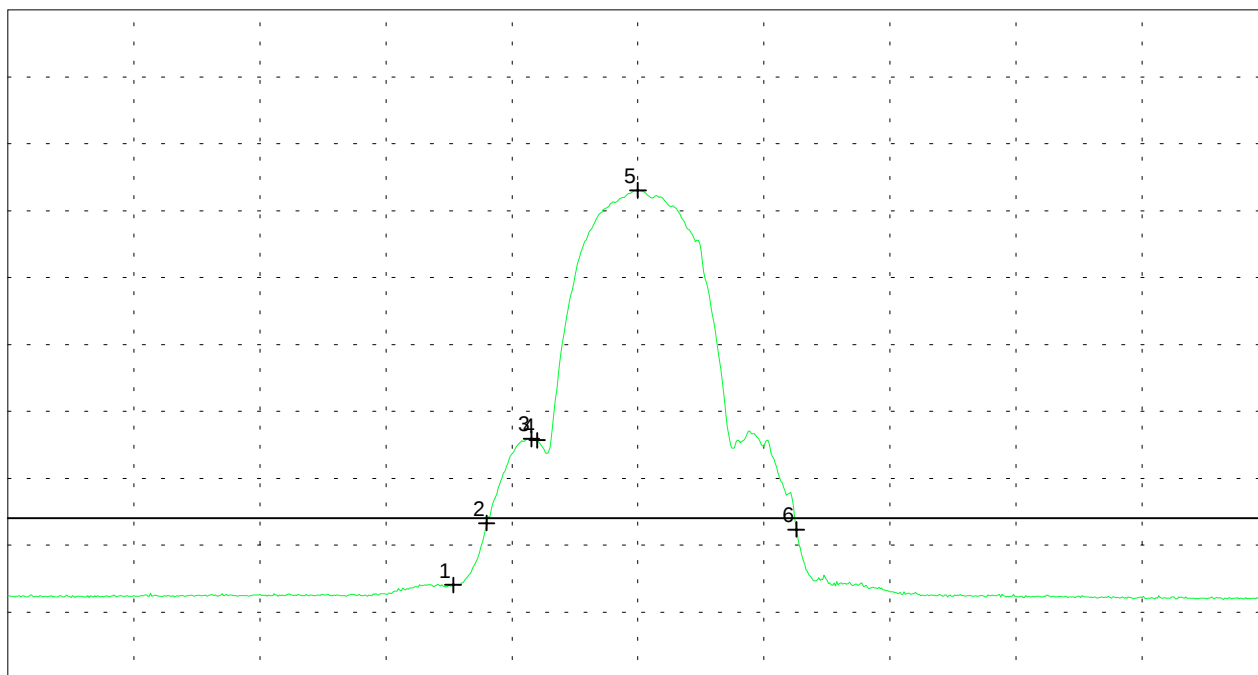
Test distance 3 meters

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 kHz

Stop 2.487 GHz
SWP 460 ms

Multi Marker List

No. 1	2.390000 GHz	44.06 dB μ V/m
No. 2	2.394000 GHz	53.28 dB μ V/m
No. 3	2.399333 GHz	65.90 dB μ V/m
No. 4	2.400000 GHz	65.69 dB μ V/m
No. 5	2.412000 GHz	103.05 dB μ V/m
No. 6	2.430833 GHz	52.34 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 2 Mbps
- TX mode with $f = 2.412$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	60.0		0.6	20.7	60.0	74
2.3975	vertical	73.3		0.6	20.7	73.3	NRB
2.4000	vertical	72.3		0.6	20.7	72.3	NRB
2.4018	vertical	72.8		0.6	20.7	72.8	OB
2.4140	vertical	106.8		0.6	20.7	106.8	OB
2.4277	vertical	73.9		0.6	20.7	73.9	OB
4.8242	vertical	47.8	64.6		27.3	47.5	74

Note 1: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 106.8 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

Serial No.:
01UT33300016

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 PCIPC

- with external antenna AIN24-OD-03

- operating with bit rate 2 Mbps

- TX mode with $f = 2.412$ GHz

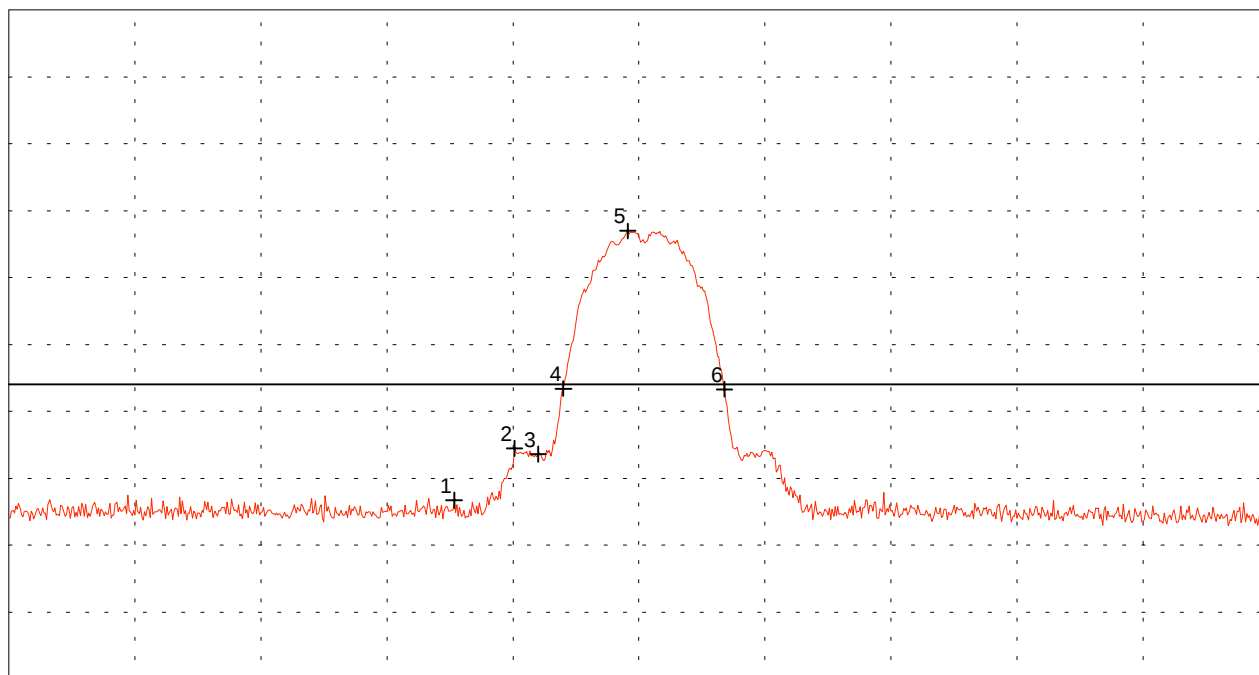
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 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	56.70 dB μ V/m
No. 2	2.397167 GHz	64.47 dB μ V/m
No. 3	2.400000 GHz	63.61 dB μ V/m
No. 4	2.403000 GHz	73.41 dB μ V/m
No. 5	2.410667 GHz	96.98 dB μ V/m
No. 6	2.422167 GHz	73.29 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.412$ GHz

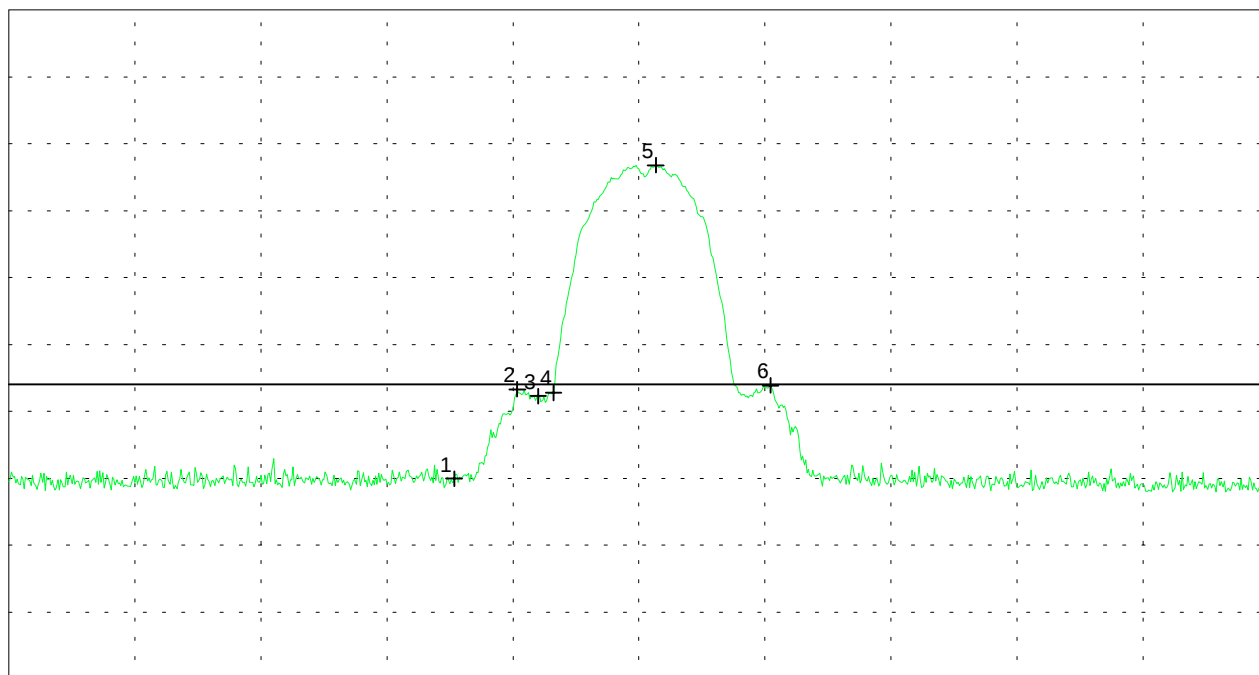
Test distance 3 meters

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	59.95 dB μ V/m
No. 2	2.397500 GHz	73.31 dB μ V/m
No. 3	2.400000 GHz	72.29 dB μ V/m
No. 4	2.401833 GHz	72.78 dB μ V/m
No. 5	2.414000 GHz	106.78 dB μ V/m
No. 6	2.427667 GHz	73.89 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 2 Mbps
- TX mode with $f = 2.412$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	43.5		0.6	20.7	43.5	54
2.3935	vertical	53.6		0.6	20.7	53.6	NRB
2.3983	vertical	68.3		0.6	20.7	68.3	NRB
2.4000	vertical	66.0		0.6	20.7	66.0	NRB
2.4130	vertical	103.6		0.6	20.7	103.6	OB
2.4310	vertical	53.4		0.9	27.3	53.4	OB
4.8241	vertical	41.7	64.4		27.3	41.5	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 103.6 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.412$ GHz

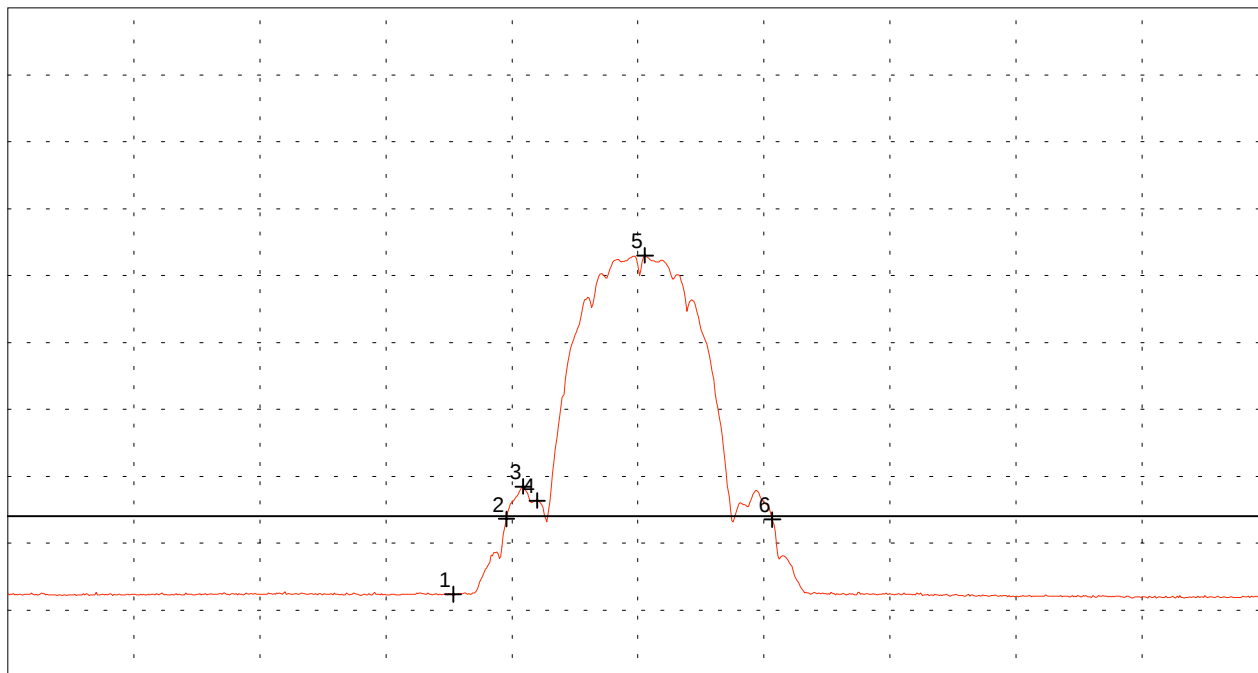
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 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	42.36 dB μ V/m
No. 2	2.396333 GHz	53.63 dB μ V/m
No. 3	2.398333 GHz	58.46 dB μ V/m
No. 4	2.400000 GHz	56.37 dB μ V/m
No. 5	2.412833 GHz	92.99 dB μ V/m
No. 6	2.428000 GHz	53.50 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.412$ GHz

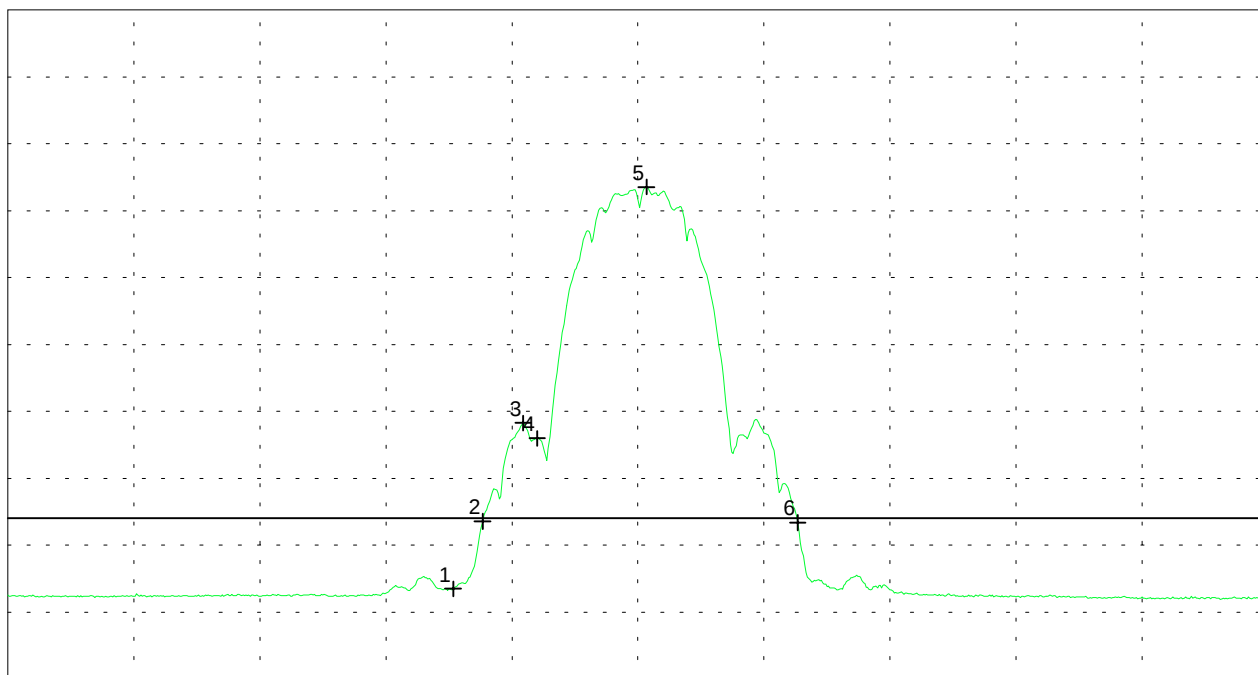
Test distance 3 meters

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 kHz

Stop 2.487 GHz
SWP 460 ms

Multi Marker List

No. 1	2.390000 GHz	43.47 dB μ V/m
No. 2	2.393500 GHz	53.56 dB μ V/m
No. 3	2.398333 GHz	68.26 dB μ V/m
No. 4	2.400000 GHz	65.95 dB μ V/m
No. 5	2.413000 GHz	103.56 dB μ V/m
No. 6	2.431000 GHz	53.35 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.3306	vertical	55.9		0.5	26.5	55.9	74
2.4293	vertical	73.3		0.6	20.7	73.3	OB
2.4427	vertical	110.2		0.6	20.7	110.2	OB
2.4580	vertical	73.3		0.6	20.7	73.3	OB
4.8894	horizontal	44.9	64.4		27.3	44.8	74
7.3305	vertical	40.6	66.7		29.9	40.8	74

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 110.2 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

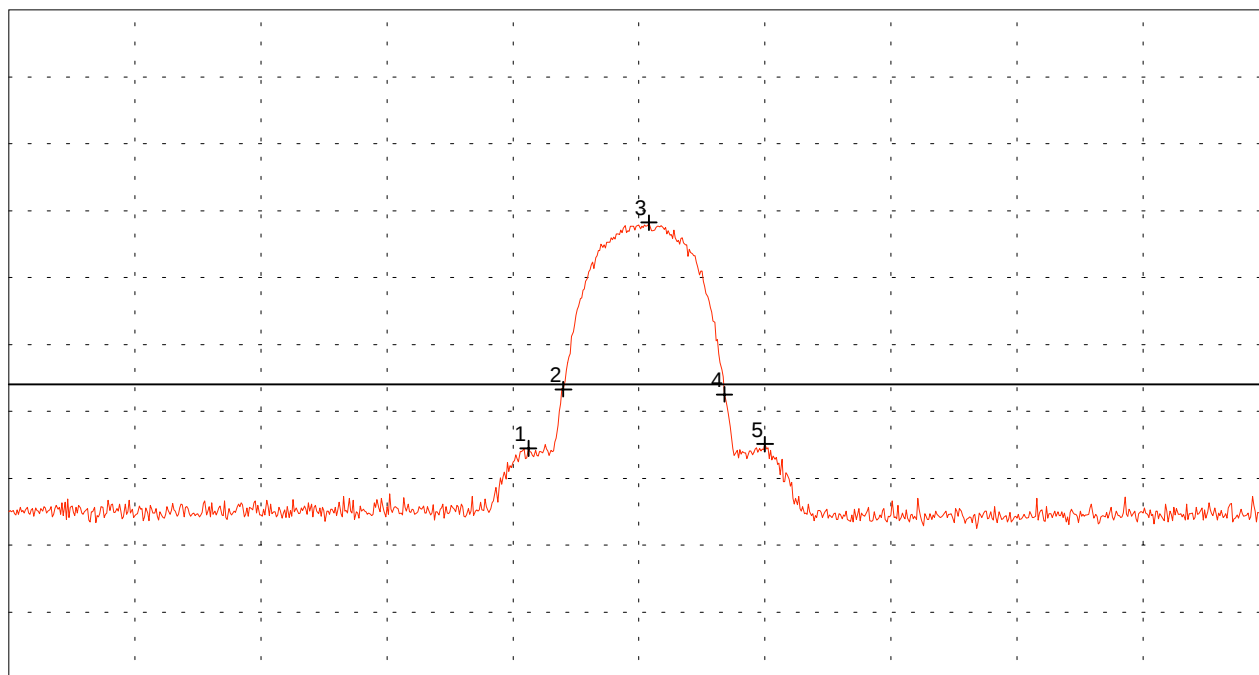
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 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	2.428833 GHz	64.47 dB μ V/m
No. 2	2.433000 GHz	73.31 dB μ V/m
No. 3	2.443167 GHz	98.20 dB μ V/m
No. 4	2.452167 GHz	72.55 dB μ V/m
No. 5	2.457000 GHz	65.11 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

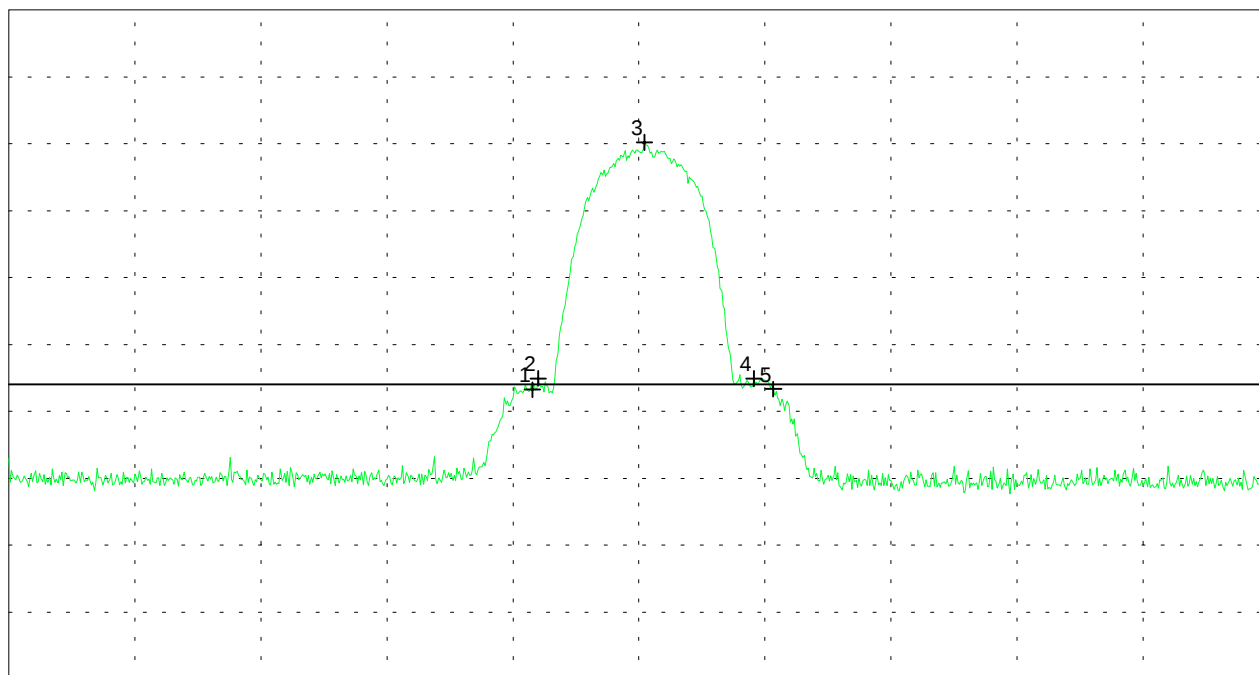
Test distance 3 meters

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	2.429333 GHz	73.26 dB μ V/m
No. 2	2.430000 GHz	74.91 dB μ V/m
No. 3	2.442667 GHz	110.21 dB μ V/m
No. 4	2.455667 GHz	74.88 dB μ V/m
No. 5	2.458000 GHz	73.33 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer-reading [dB μ V]	Generator-reading [dB μ V]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.3337	vertical	< 45.3		0.5	26.5	< 45.3	54
2.4243	vertical	53.7		0.6	20.7	53.7	OB
2.4423	vertical	103.7		0.6	20.7	103.7	OB
2.4605	vertical	53.6		0.6	20.7	53.6	OB
4.8841	vertical	42.7	64.2		27.3	42.8	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 103.7 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

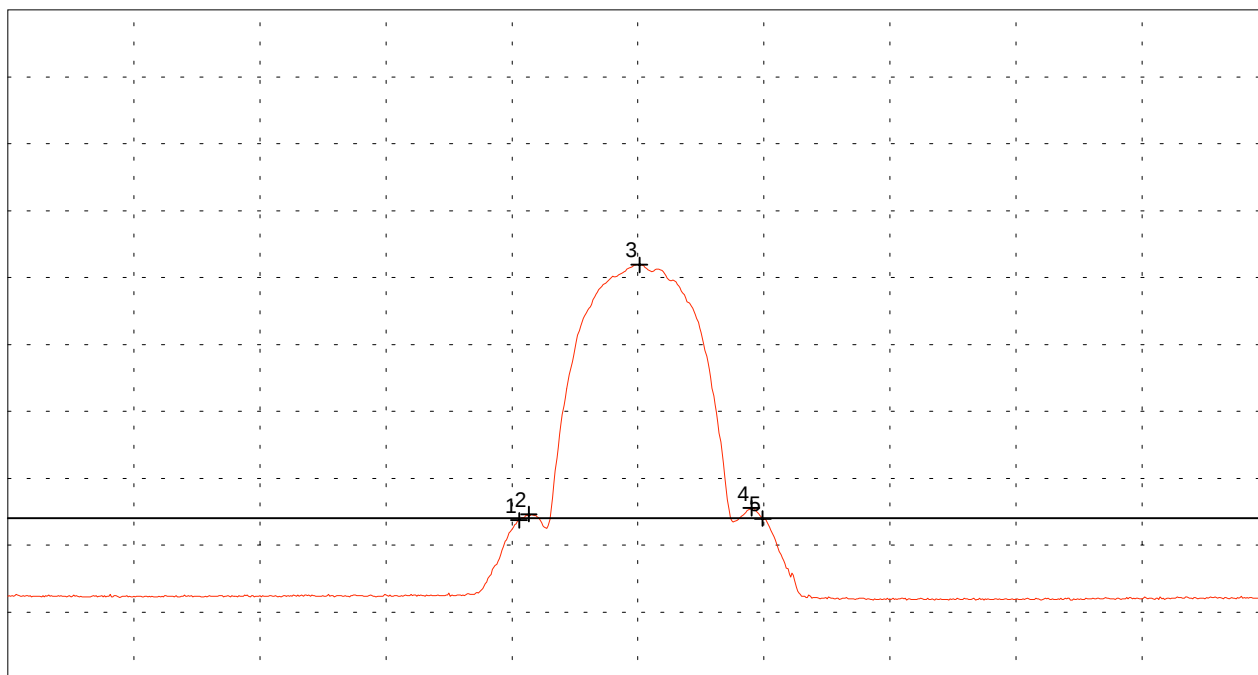
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 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	2.427833 GHz	53.73 dB μ V/m
No. 2	2.429000 GHz	54.62 dB μ V/m
No. 3	2.442167 GHz	91.92 dB μ V/m
No. 4	2.455500 GHz	55.54 dB μ V/m
No. 5	2.456833 GHz	53.96 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.442$ GHz

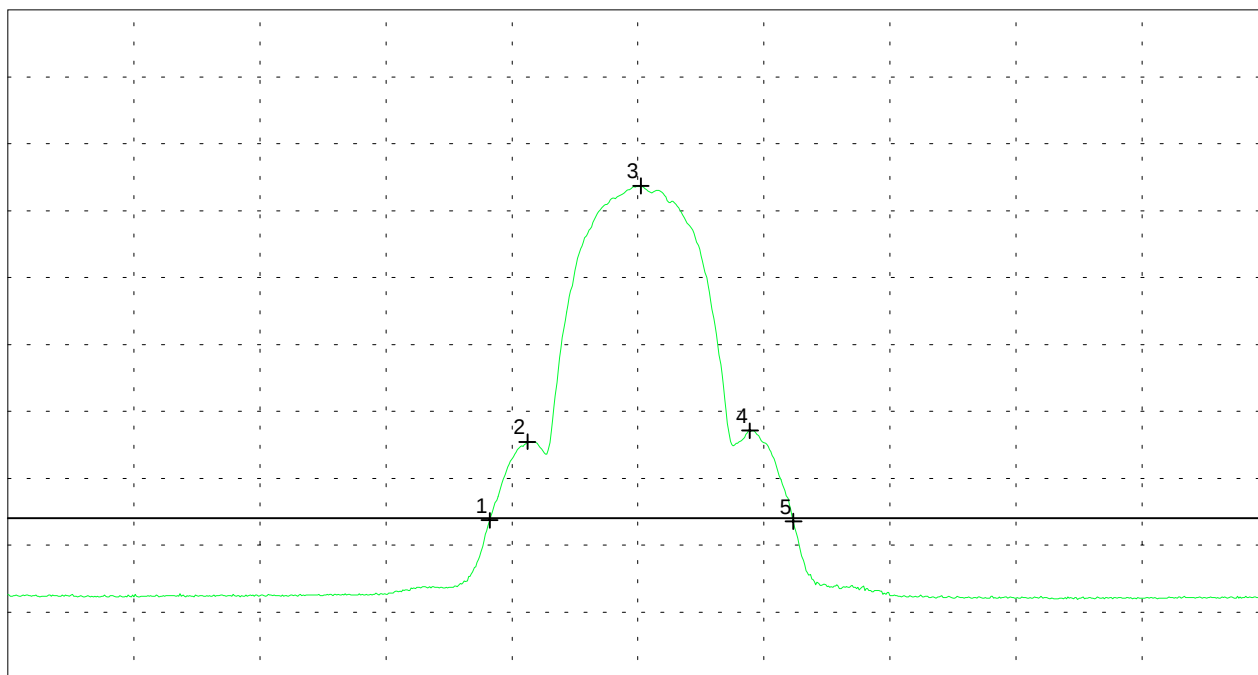
Test distance 3 meters

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 kHz

Stop 2.517 GHz
SWP 460 ms

Multi Marker List

No. 1	2.424333 GHz	53.71 dB μ V/m
No. 2	2.428833 GHz	65.44 dB μ V/m
No. 3	2.442333 GHz	103.71 dB μ V/m
No. 4	2.455333 GHz	67.14 dB μ V/m
No. 5	2.460500 GHz	53.56 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4318	vertical	73.6		0.6	20.7	73.6	OB
2.4438	vertical	107.5		0.6	20.7	107.5	OB
2.4578	vertical	73.9		0.6	20.7	73.9	OB
4.8842	horizontal	46.9	64.4		27.3	46.8	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 107.5 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

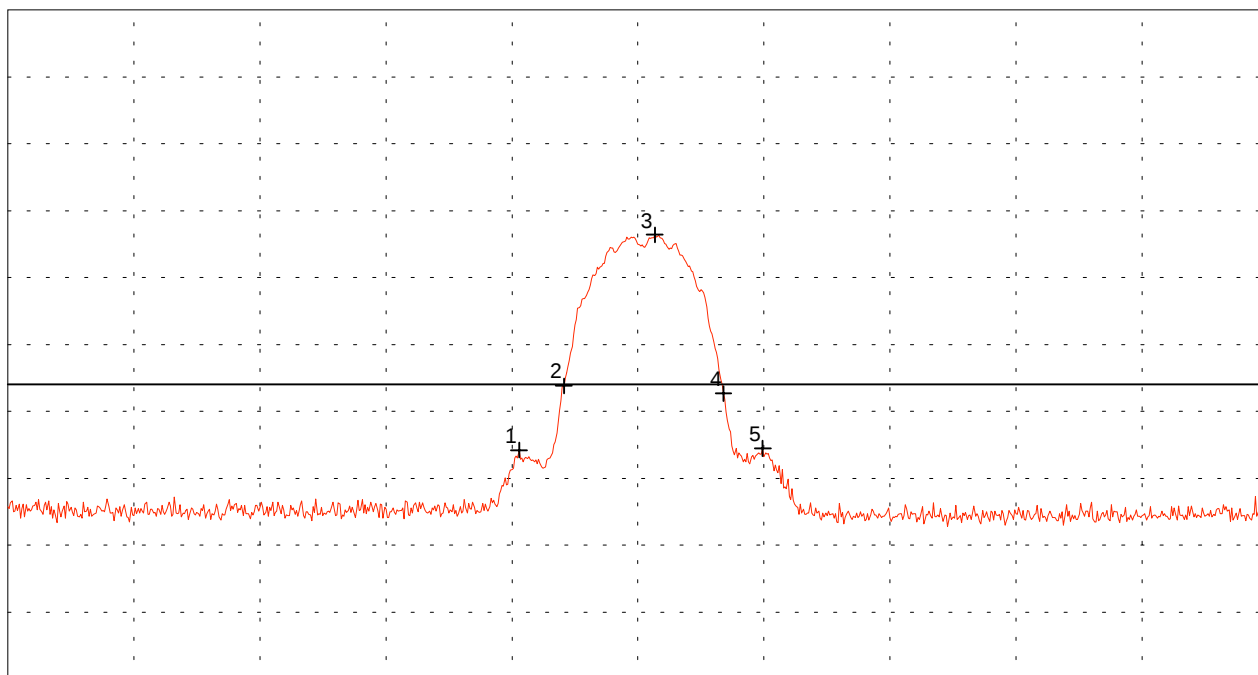
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 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	2.427833 GHz	64.19 dB μ V/m
No. 2	2.433167 GHz	73.84 dB μ V/m
No. 3	2.444000 GHz	96.39 dB μ V/m
No. 4	2.452167 GHz	72.65 dB μ V/m
No. 5	2.456833 GHz	64.47 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

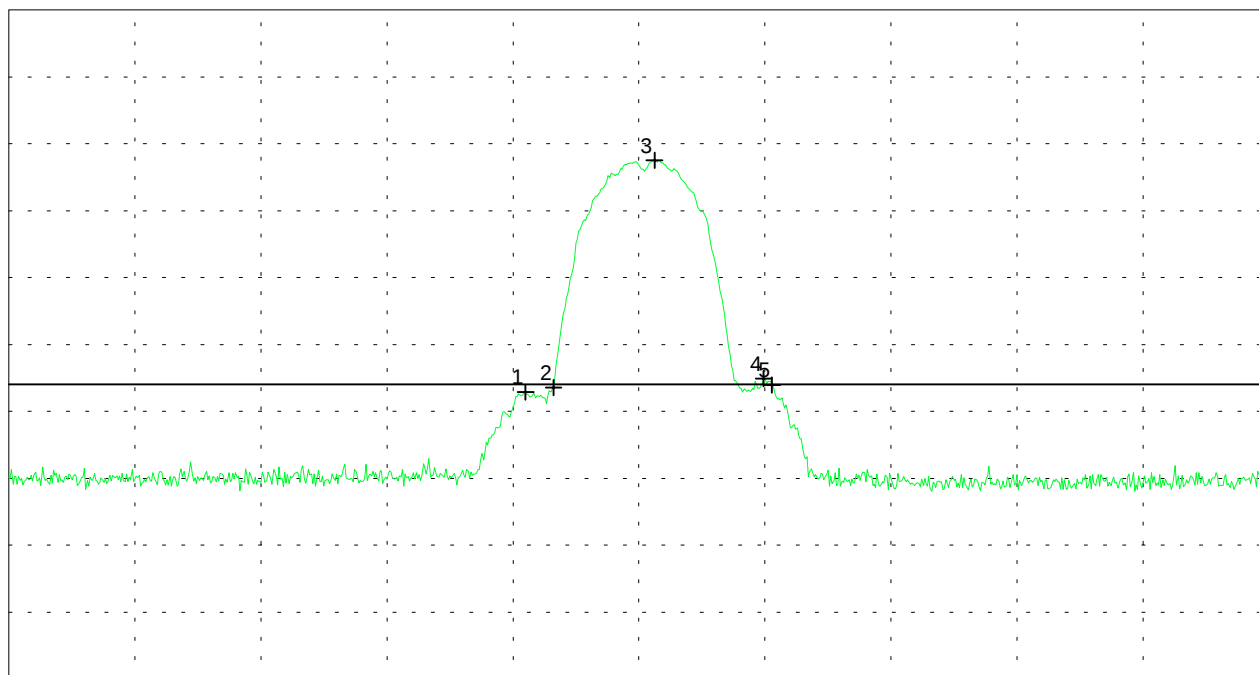
Test distance 3 meters

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	2.428500 GHz	72.88 dB μ V/m
No. 2	2.431833 GHz	73.56 dB μ V/m
No. 3	2.443833 GHz	107.54 dB μ V/m
No. 4	2.456833 GHz	74.88 dB μ V/m
No. 5	2.457833 GHz	73.94 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4235	vertical	53.4		0.6	20.7	53.4	OB
2.4428	vertical	104.1		0.6	20.7	104.1	OB
2.4610	vertical	53.5		0.6	20.7	53.5	OB
4.8840	horizontal	42.6	64.2		27.3	42.7	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 104.1 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

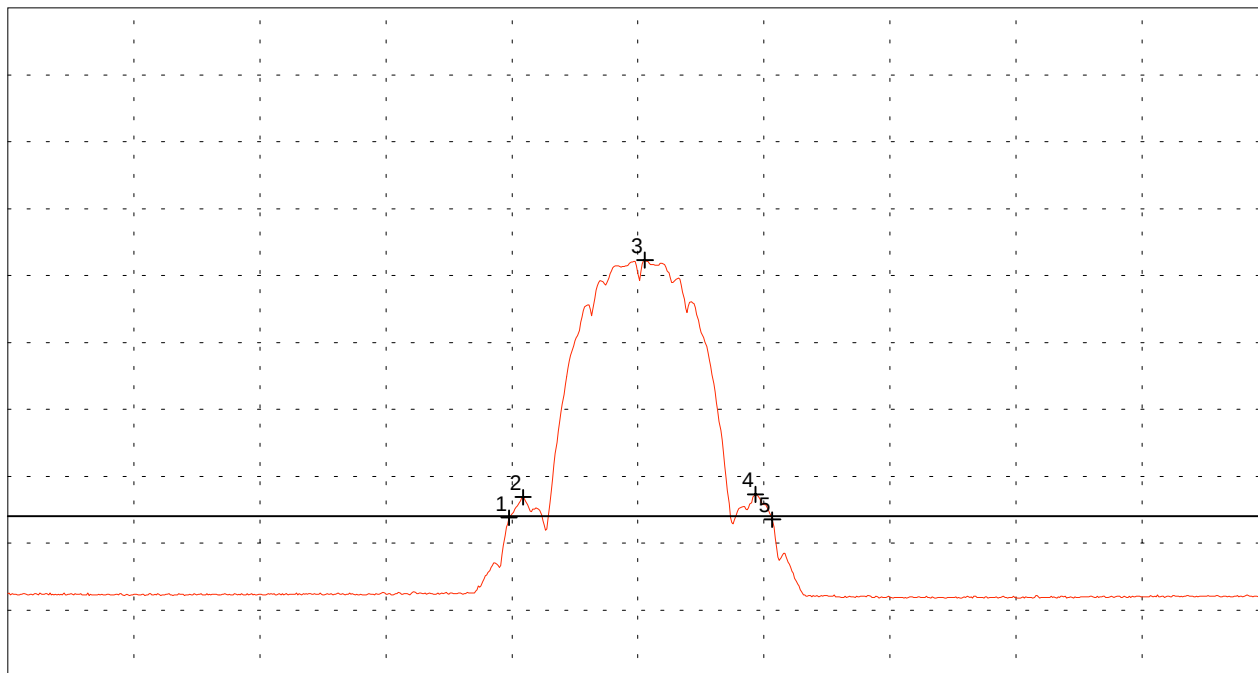
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 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	2.426667 GHz	53.81 dB μ V/m
No. 2	2.428333 GHz	56.86 dB μ V/m
No. 3	2.442833 GHz	92.33 dB μ V/m
No. 4	2.456000 GHz	57.29 dB μ V/m
No. 5	2.458000 GHz	53.53 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.442$ GHz

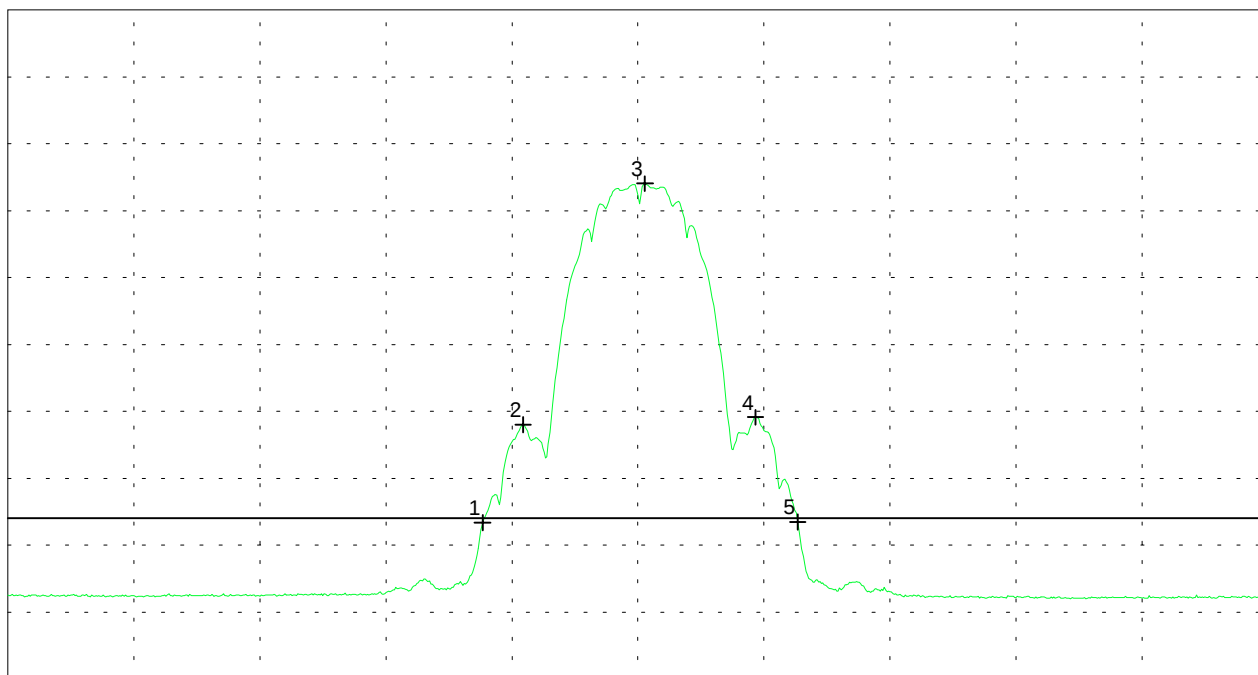
Test distance 3 meters

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 kHz

Stop 2.517 GHz
SWP 460 ms

Multi Marker List

No. 1	2.423500 GHz	53.35 dB μ V/m
No. 2	2.428333 GHz	68.00 dB μ V/m
No. 3	2.442833 GHz	104.06 dB μ V/m
No. 4	2.456000 GHz	69.12 dB μ V/m
No. 5	2.461000 GHz	53.45 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- reading [dBμV]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
1.3298	vertical	55.1		0.5	26.5	55.1	74
2.4473	vertical	72.9		0.6	20.7	72.9	OB
2.4628	vertical	111.1		0.6	20.7	111.1	OB
2.4783	vertical	73.7		0.6	20.7	73.7	OB
2.4835	vertical	60.1		0.6	20.7	60.1	74
2.4890	vertical	62.0		0.6	20.7	62.0	74
2.5000	vertical	59.2		0.6	20.7	59.2	74
2.6030	vertical	45.7		0.6	23.7	45.7	74
4.9296	horizontal	45.7	64.4		27.3	45.6	74
7.3984	vertical	40.9	66.1		30.0	41.8	74

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 111.1 dBμV/m.

Result: The limits are kept

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

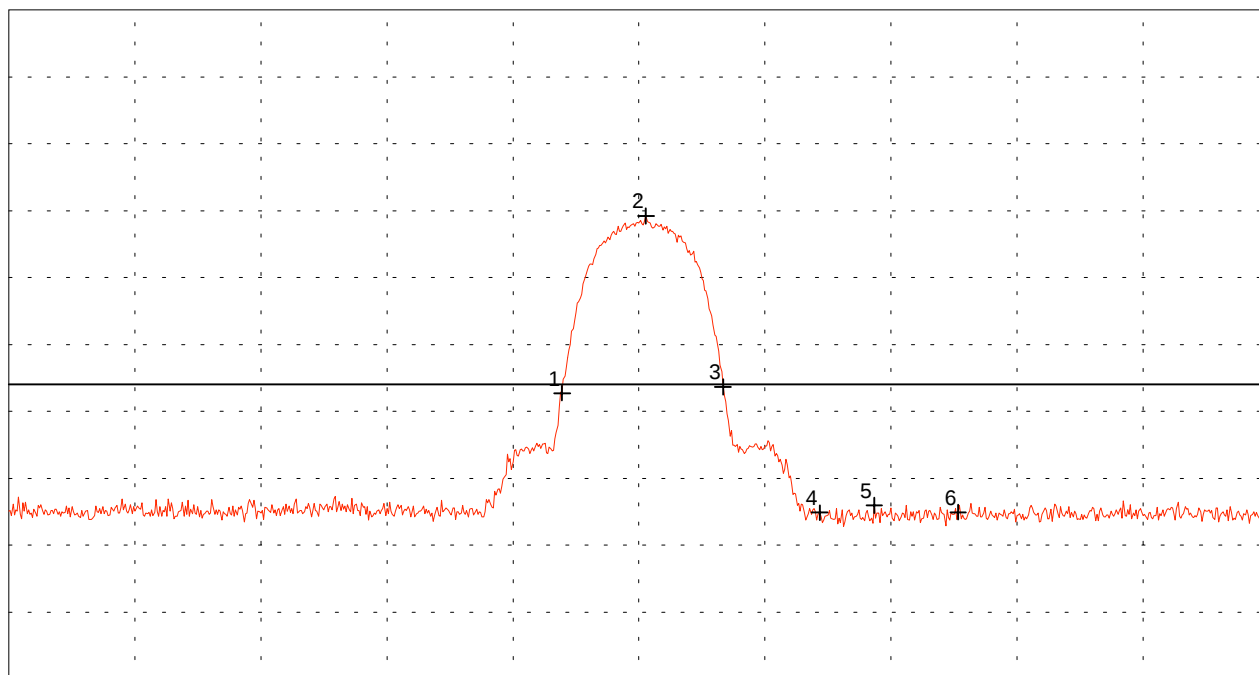
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 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	2.452833 GHz	72.73 dB μ V/m
No. 2	2.462833 GHz	99.21 dB μ V/m
No. 3	2.472000 GHz	73.67 dB μ V/m
No. 4	2.483500 GHz	54.88 dB μ V/m
No. 5	2.490000 GHz	55.94 dB μ V/m
No. 6	2.500000 GHz	54.93 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

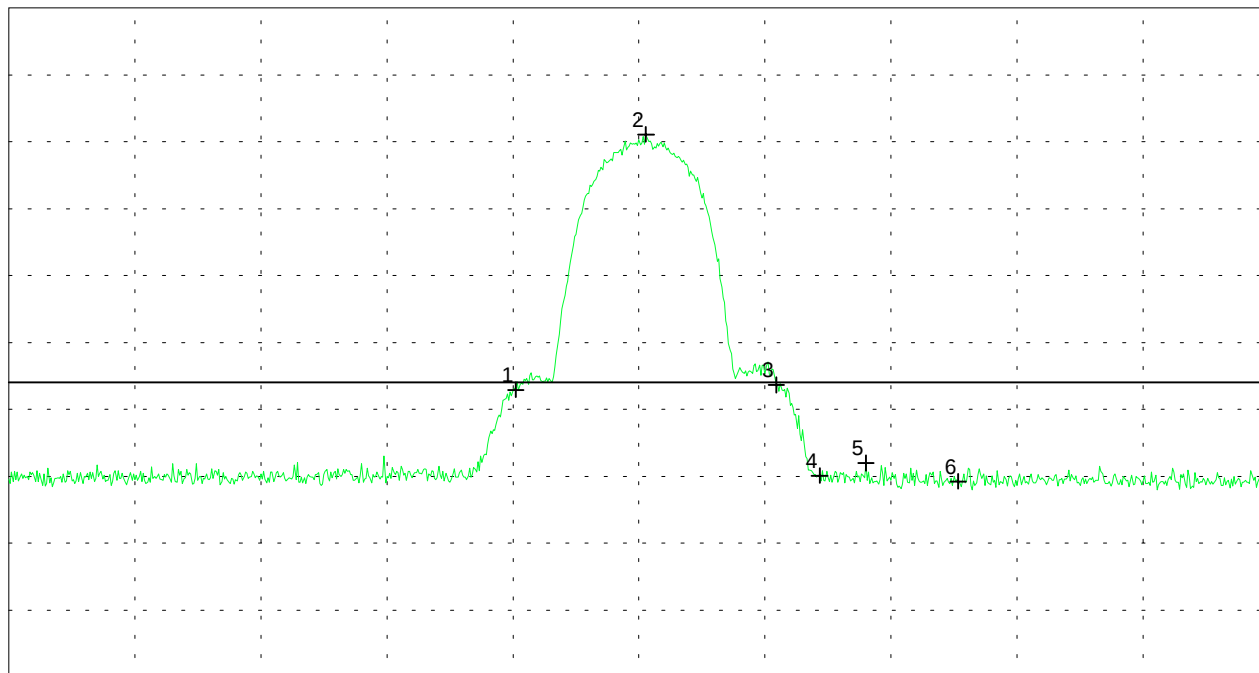
Test distance 3 meters

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	2.447333 GHz	72.93 dB μ V/m
No. 2	2.462833 GHz	111.09 dB μ V/m
No. 3	2.478333 GHz	73.66 dB μ V/m
No. 4	2.483500 GHz	60.10 dB μ V/m
No. 5	2.489000 GHz	61.98 dB μ V/m
No. 6	2.500000 GHz	59.22 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer-reading [dB μ V]	Generator-reading [dB μ V]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.1986	horizontal	39.2		0.5	26.3	39.2	54
1.3274	vertical	< 45.5		0.5	26.5	< 45.5	54
2.4440	vertical	53.6		0.6	20.7	53.6	OB
2.4623	vertical	104.6		0.6	20.7	104.6	OB
2.4810	vertical	53.3		0.6	20.7	53.3	OB
2.4835	vertical	45.0		0.6	20.7	45.0	54
2.4863	vertical	45.2		0.6	20.7	45.2	54
2.5000	vertical	42.2		0.6	20.7	42.2	54
2.6060	vertical	35.4		0.6	23.7	35.4	54
2.6380	vertical	33.9		0.6	23.7	33.9	54
4.9241	vertical	42.7	64.2		27.3	42.8	54
7.3853	vertical	32.6	66.0		30.0	33.5	54

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 104.6 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

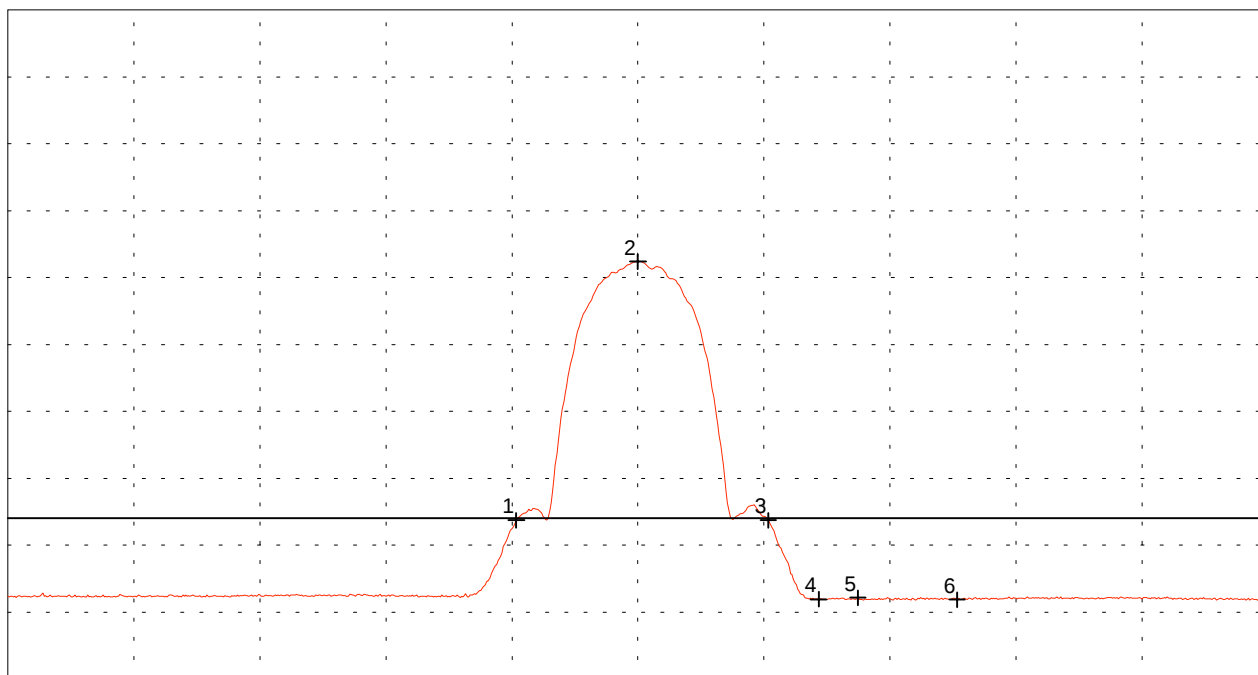
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 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	2.447500 GHz	53.73 dB μ V/m
No. 2	2.462000 GHz	92.38 dB μ V/m
No. 3	2.477500 GHz	53.73 dB μ V/m
No. 4	2.483500 GHz	41.92 dB μ V/m
No. 5	2.488167 GHz	42.15 dB μ V/m
No. 6	2.500000 GHz	41.85 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- TX mode with $f = 2.462$ GHz

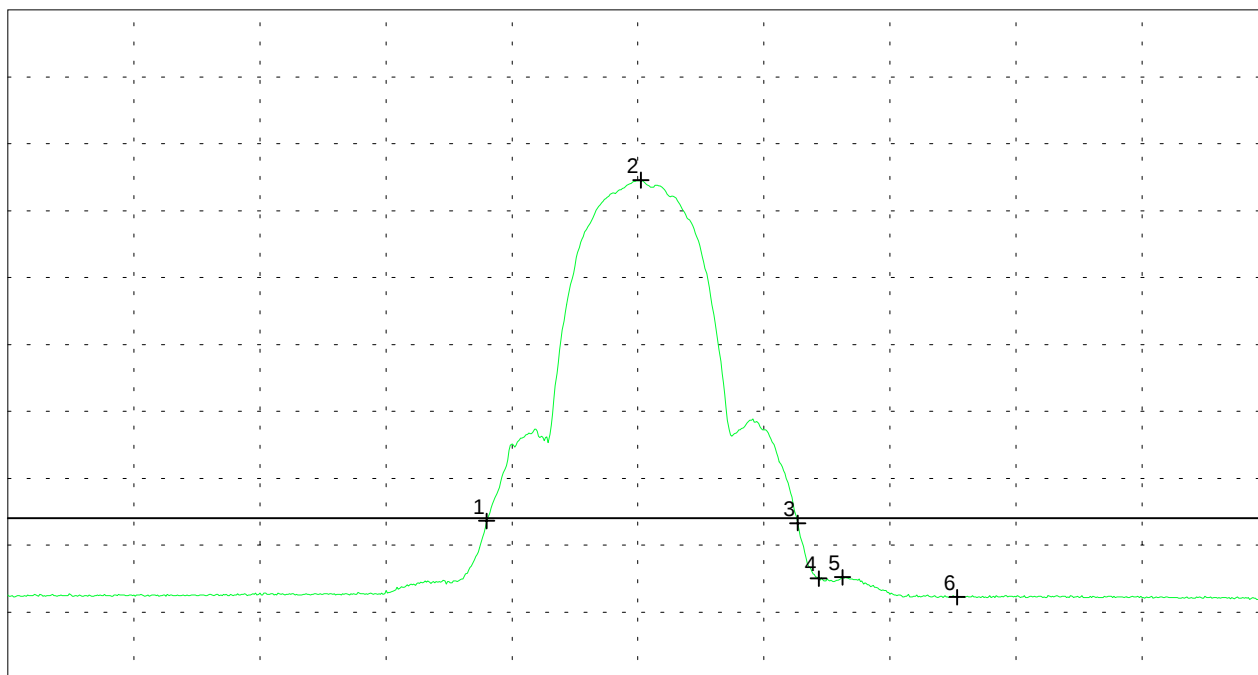
Test distance 3 meters

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 kHz

Stop 2.537 GHz
SWP 460 ms

Multi Marker List

No. 1	2.444000 GHz	53.63 dB μ V/m
No. 2	2.462333 GHz	104.57 dB μ V/m
No. 3	2.481000 GHz	53.30 dB μ V/m
No. 4	2.483500 GHz	45.02 dB μ V/m
No. 5	2.486333 GHz	45.20 dB μ V/m
No. 6	2.500000 GHz	42.23 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 2 Mbps
- TX mode with $f = 2.462$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer-reading [dB μ V]	Generator-reading [dB μ V]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4517	vertical	73.4		0.6	20.7	73.4	OB
2.4638	vertical	108.1		0.6	20.7	108.1	OB
2.4782	vertical	73.9		0.6	20.7	73.9	OB
2.4835	vertical	59.0		0.6	20.7	59.0	74
2.4883	vertical	61.7		0.6	20.7	61.7	74
2.5000	vertical	60.4		0.6	20.7	60.4	74
4.9241	horizontal	48.6	64.4		27.3	48.5	74
7.3877	vertical	42.2	66.1		30.0	43.0	74

Note 1: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).

NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 108.1 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.462$ GHz

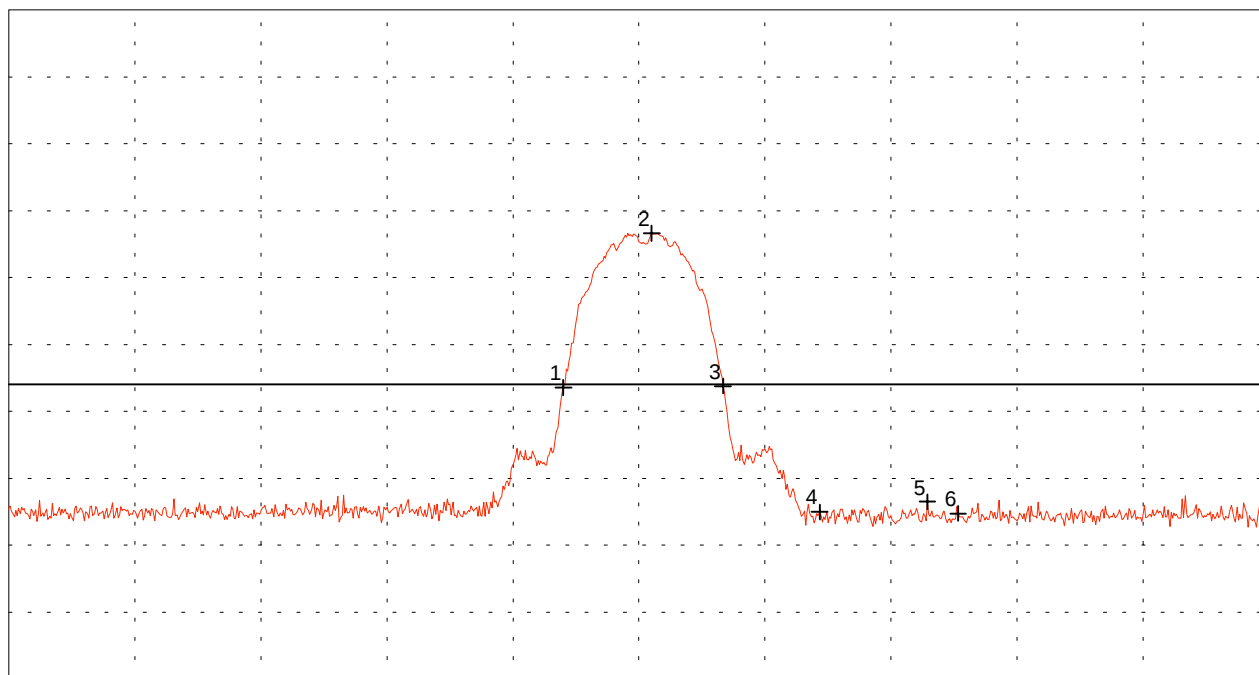
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 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	2.453000 GHz	73.57 dB μ V/m
No. 2	2.463500 GHz	96.62 dB μ V/m
No. 3	2.472000 GHz	73.77 dB μ V/m
No. 4	2.483500 GHz	54.98 dB μ V/m
No. 5	2.496333 GHz	56.50 dB μ V/m
No. 6	2.500000 GHz	54.75 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.462$ GHz

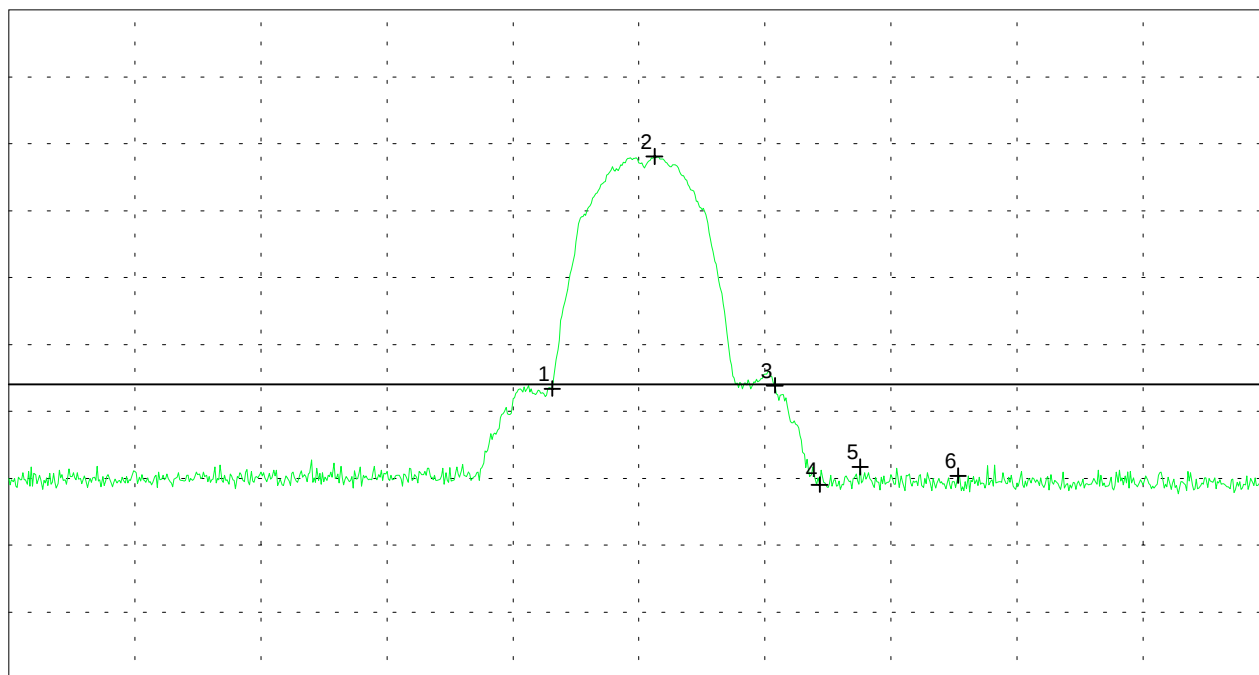
Test distance 3 meters

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	2.451667 GHz	73.38 dB μ V/m
No. 2	2.463833 GHz	108.10 dB μ V/m
No. 3	2.478167 GHz	73.87 dB μ V/m
No. 4	2.483500 GHz	59.04 dB μ V/m
No. 5	2.488333 GHz	61.68 dB μ V/m
No. 6	2.500000 GHz	60.36 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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Radiated Emission 1 GHz - 25 GHz (Additional Test Results) according to FCC Part 15 Subpart C

Model: PC24E-11-FC/R
Type: RF-modem for wireless LAN
Serial No.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adapter Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 2 Mbps
- TX mode with $f = 2.462$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- reading [dB μ V]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.4433	vertical	54.0		0.6	20.7	54.0	OB
2.4628	vertical	104.9		0.6	20.7	104.9	OB
2.4813	vertical	53.2		0.6	20.7	53.2	OB
2.4835	vertical	45.4		0.6	20.7	45.4	54
2.4880	vertical	47.1		0.6	20.7	47.1	54
2.5000	vertical	42.4		0.6	20.7	42.4	54
4.9241	horizontal	44.2	64.2		27.3	44.3	54
7.3868	horizontal	35.0	66.0		30.0	36.0	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 104.9 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

Serial No.:
01UT33300016

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 PCIPC
- with external antenna AIN24-OD-03
- operating with bit rate 2 Mbps
- TX mode with $f = 2.462$ GHz

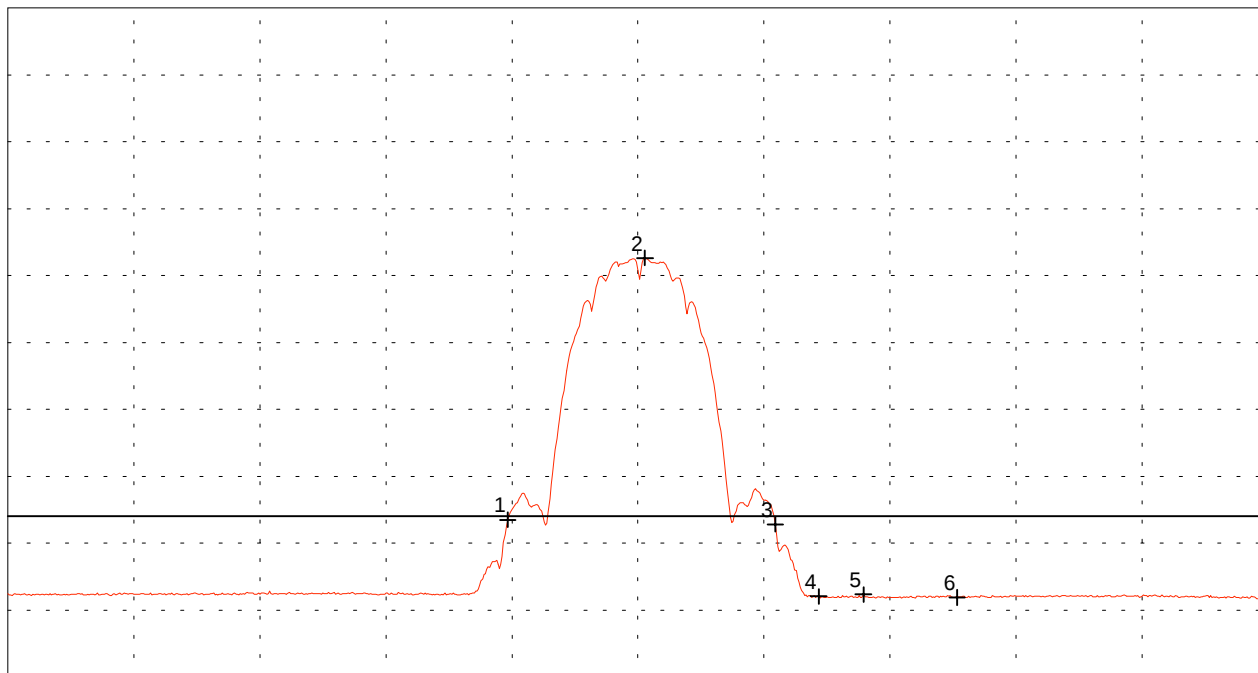
Test distance 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 5 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	2.446500 GHz	53.48 dB μ V/m
No. 2	2.462833 GHz	92.64 dB μ V/m
No. 3	2.478333 GHz	52.82 dB μ V/m
No. 4	2.483500 GHz	42.05 dB μ V/m
No. 5	2.488833 GHz	42.33 dB μ V/m
No. 6	2.500000 GHz	41.87 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial No.:
01UT33300016

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 PCIPC

- with external antenna AIN24-OD-03

- operating with bit rate 2 Mbps

- TX mode with $f = 2.462$ GHz

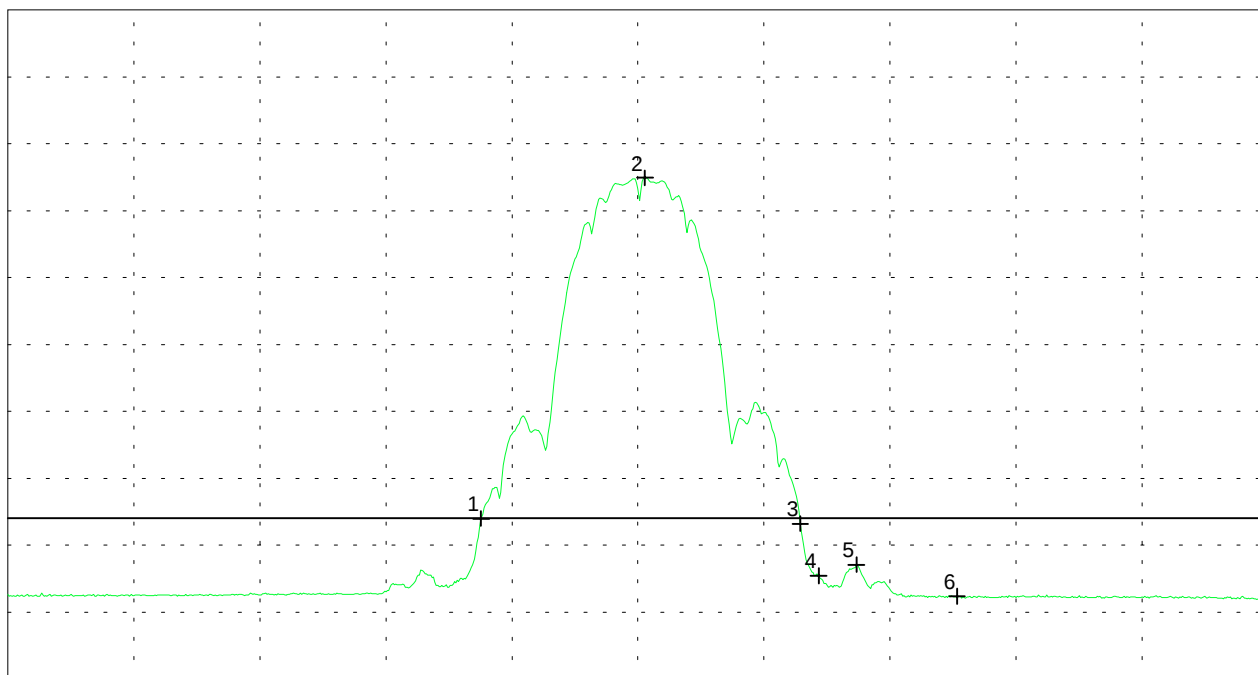
Test distance 3 meters

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 kHz

Stop 2.537 GHz
SWP 460 ms

Multi Marker List

No. 1	2.443333 GHz	53.96 dB μ V/m
No. 2	2.462833 GHz	104.93 dB μ V/m
No. 3	2.481333 GHz	53.22 dB μ V/m
No. 4	2.483500 GHz	45.43 dB μ V/m
No. 5	2.488000 GHz	47.08 dB μ V/m
No. 6	2.500000 GHz	42.36 dB μ V/m

Tested by:
Rainer Heller

Date:
10/04/2001

Project-No.:
56305-10552-3

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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

Serial no.:
01UT33300016

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: 09/27/2001 Operator: R. Heller

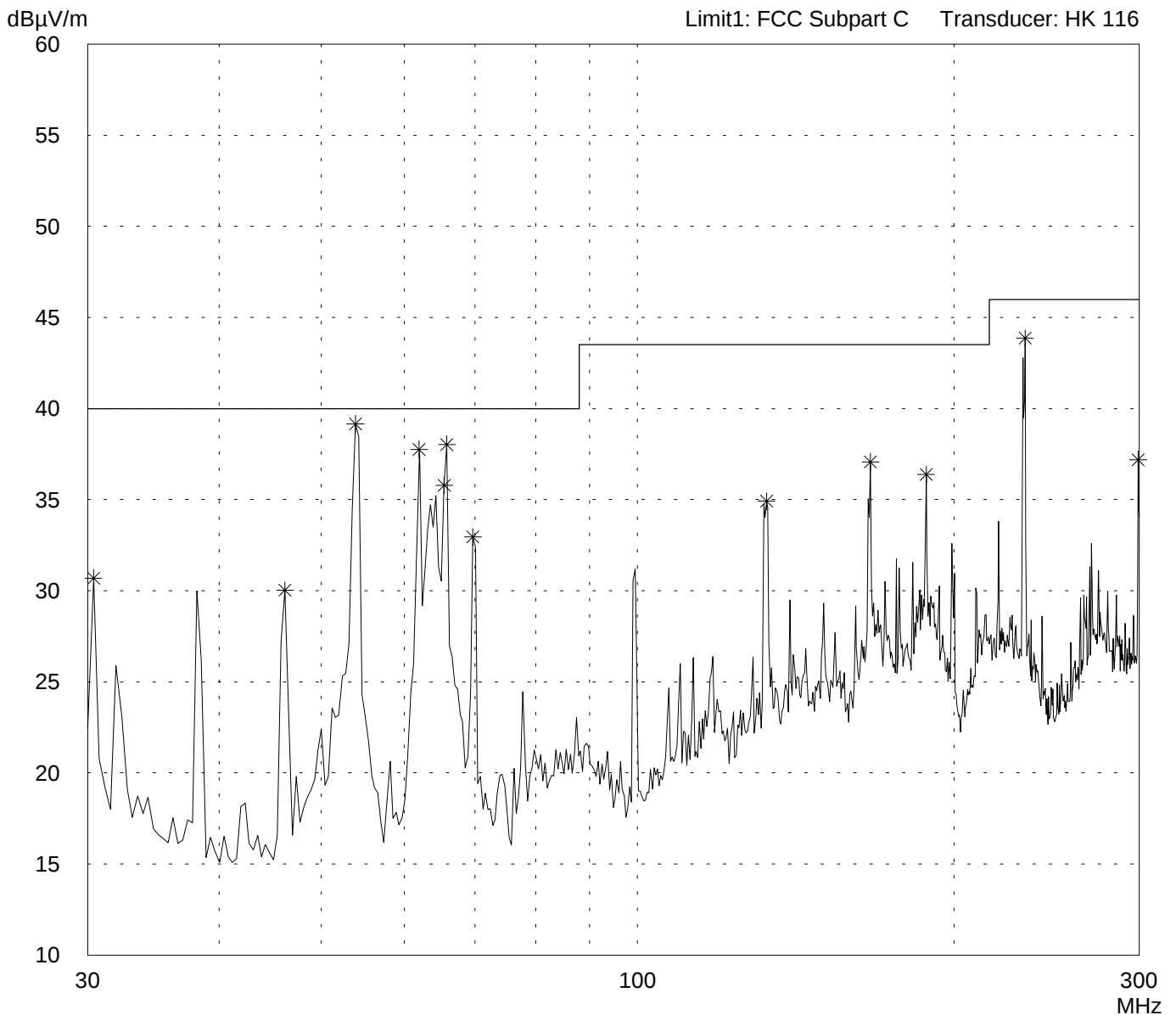
Test performed: automatically File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001 Operator: R. Heller

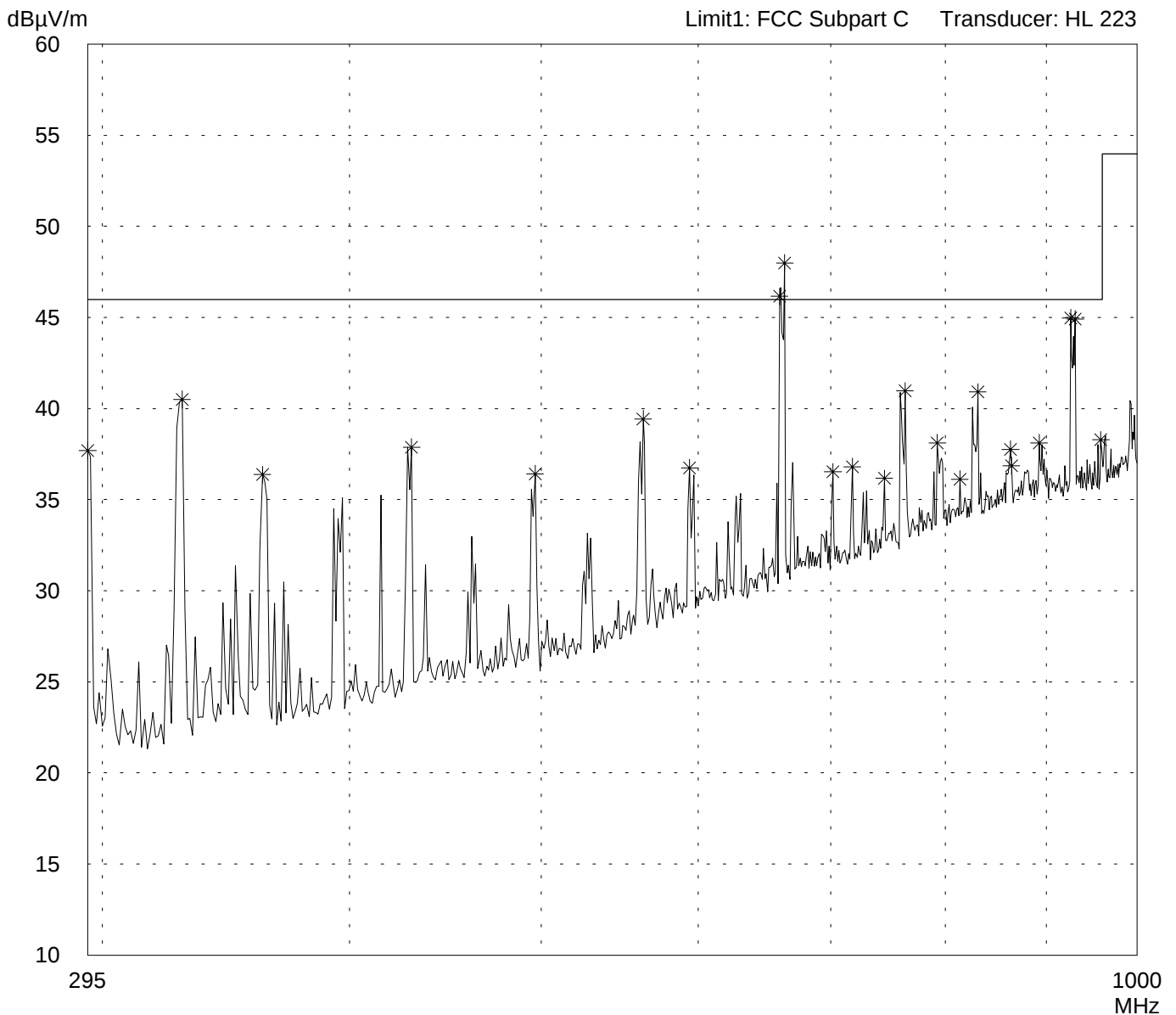
Test performed: automatically File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

Page 88 of 96 Pages

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001
Operator: R. Heller

Test performed: automatically
File name:

Mode:

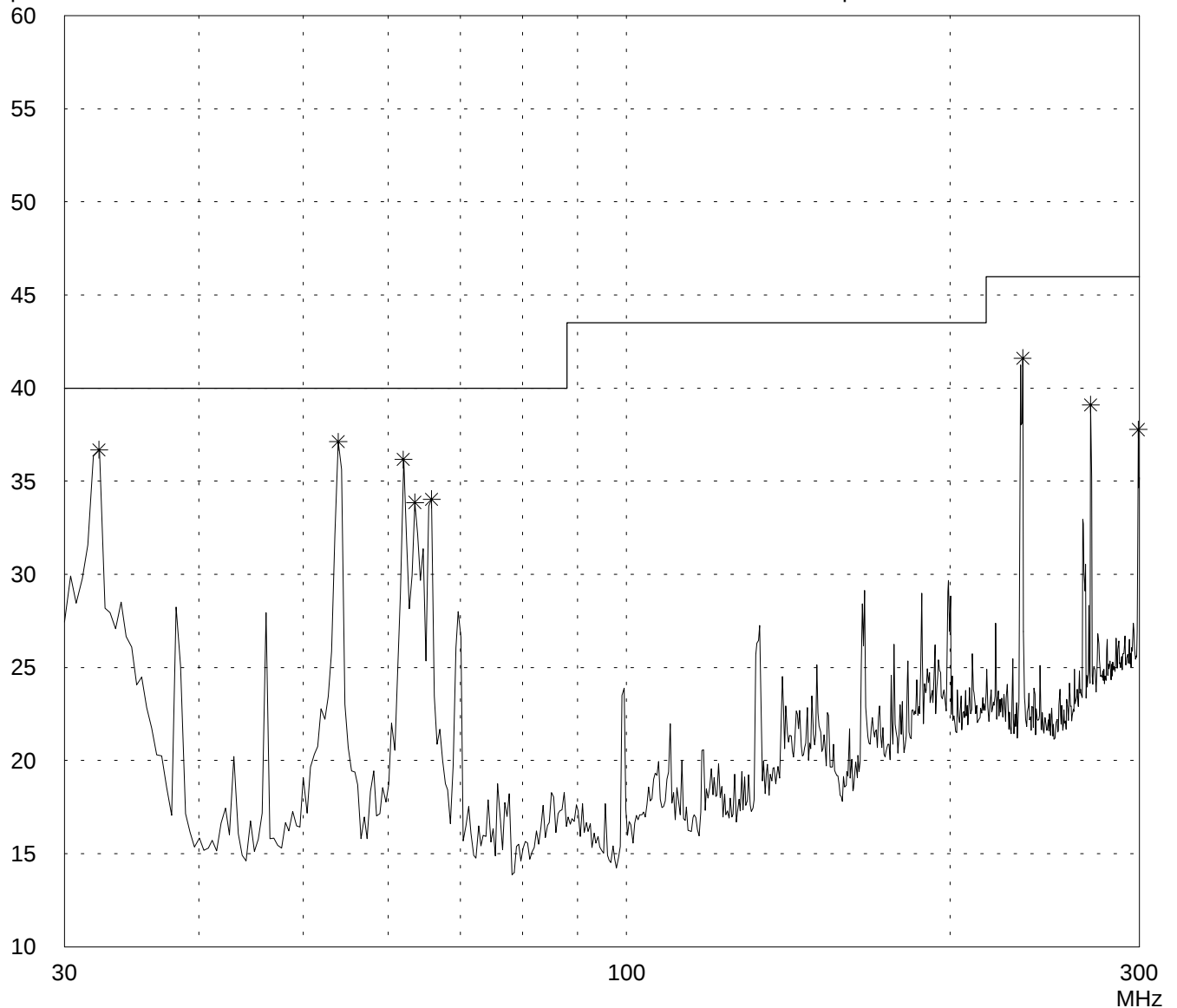
- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

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

Limit1: FCC Subpart C Transducer: HK 116



Result:
Prescan

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

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: 09/27/2001 Operator: R. Heller

Test performed: automatically File name:

Mode:

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

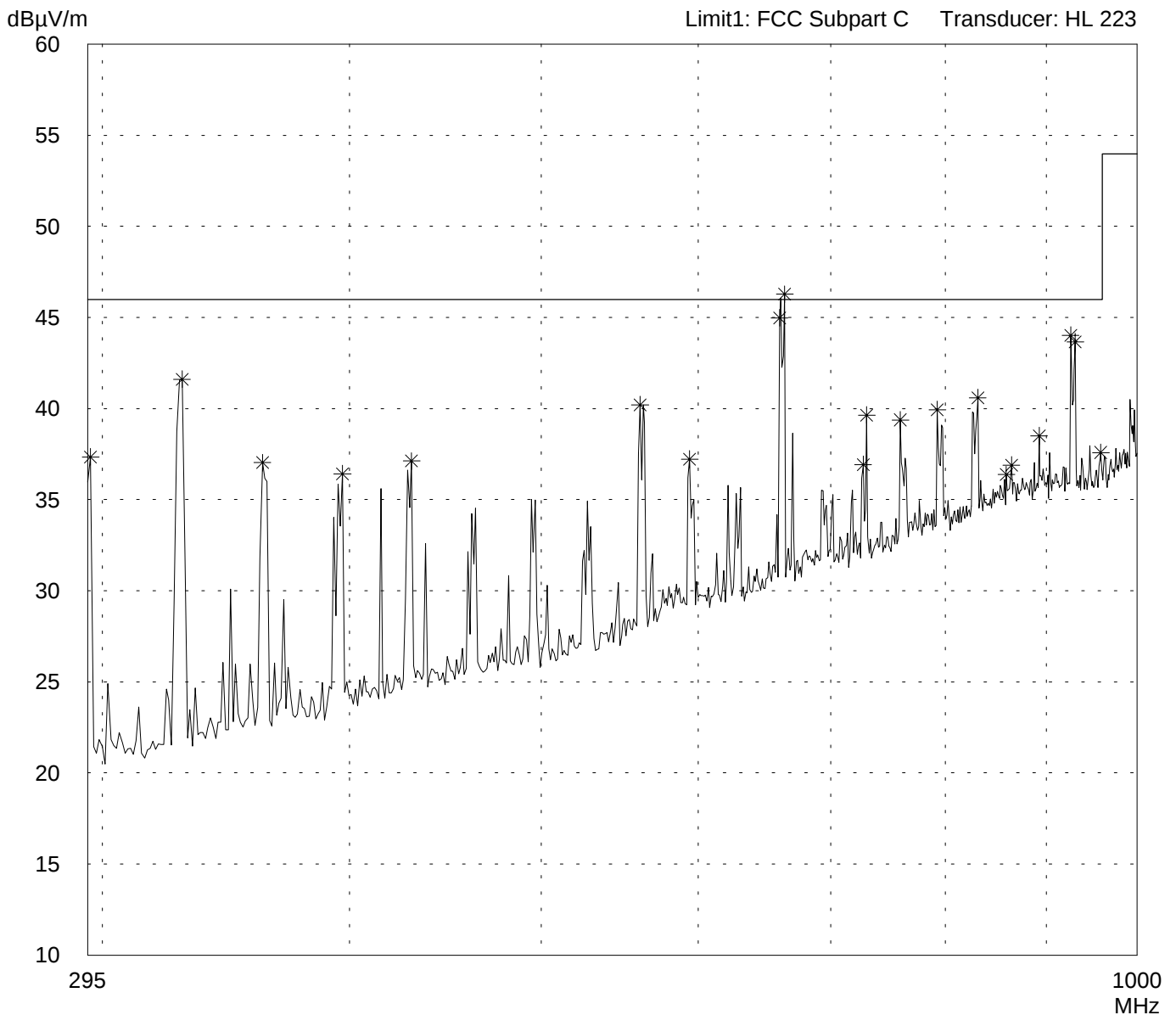
- with external antenna AIN24-OD-03

- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 10/04/2001
Operator: R. Heller

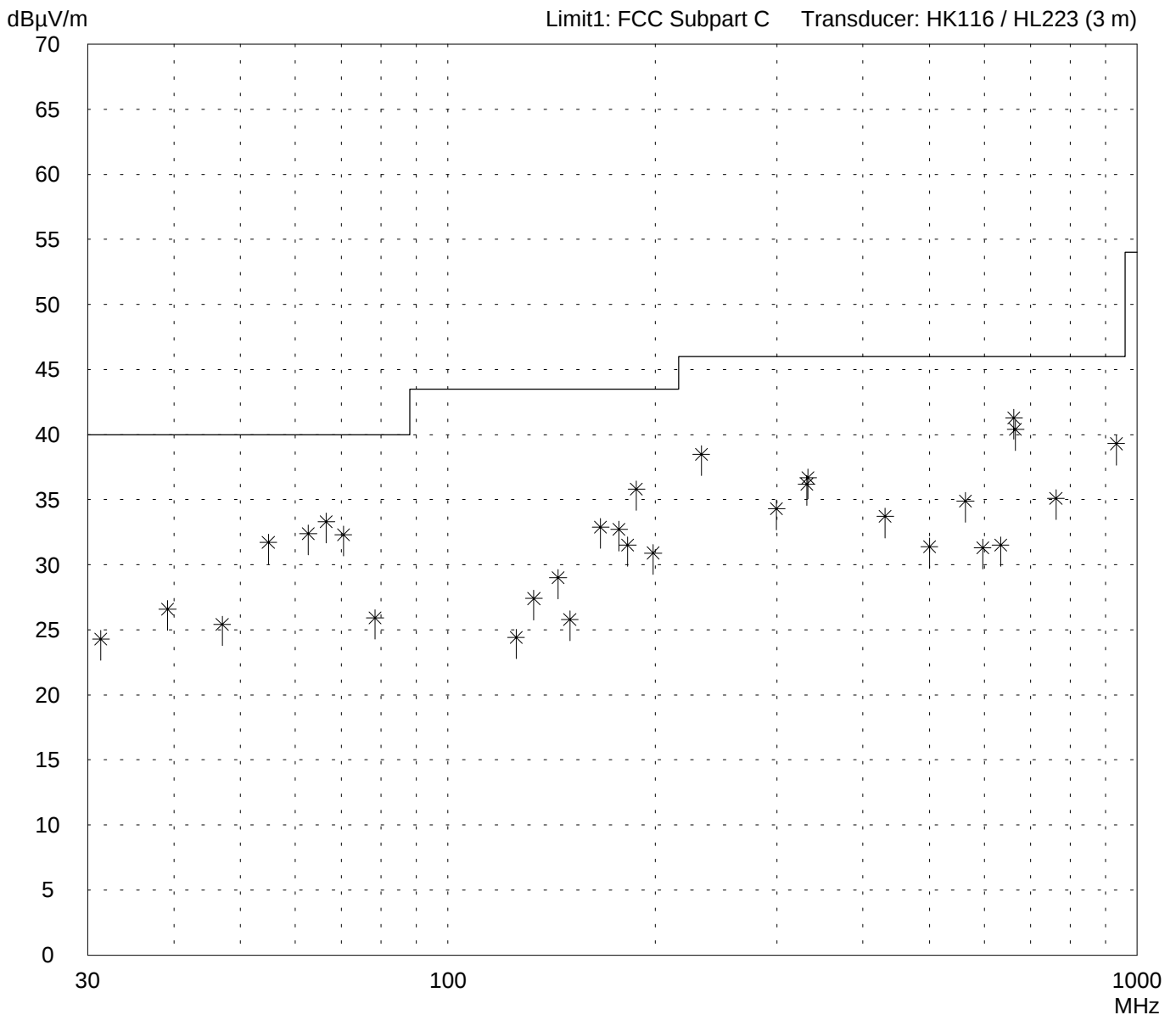
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adapter Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 10/04/2001
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 PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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
31.34	9.5	14.8	24.3	40.0	
39.18	13.5	13.1	26.6	40.0	
47.02	13.5	11.9	25.4	40.0	
54.85	20.5	11.2	31.7	40.0	
62.69	21.5	10.9	32.4	40.0	
66.58	22.5	10.8	33.3	40.0	
70.52	21.5	10.8	32.3	40.0	
78.36	15.0	10.9	25.9	40.0	
125.50	9.5	14.9	24.4	43.5	
133.25	12.0	15.4	27.4	43.5	
144.48	13.0	16.0	29.0	43.5	
150.20	9.5	16.3	25.8	43.5	
166.48	16.0	16.9	32.9	43.5	
177.02	15.0	17.7	32.7	43.5	
182.37	13.5	18.0	31.5	43.5	
187.74	17.5	18.3	35.8	43.5	
198.47	12.0	18.9	30.9	43.5	
233.11	18.5	20.0	38.5	46.0	
299.70	9.0	25.3	34.3	46.0	
331.41	16.0	20.2	36.2	46.0	
333.02	16.5	20.2	36.7	46.0	
430.84	10.5	23.2	33.7	46.0	
499.65	6.5	24.9	31.4	46.0	
563.40	8.0	26.9	34.9	46.0	
596.79	3.5	27.8	31.3	46.0	
633.87	2.5	29.0	31.5	46.0	
662.74	11.5	29.8	41.3	46.0	
666.15	10.5	29.9	40.4	46.0	
762.21	3.5	31.6	35.1	46.0	
932.74	5.0	34.3	39.3	46.0	

Result:
Limit kept

Project file:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 10/04/2001
Operator: R. Heller

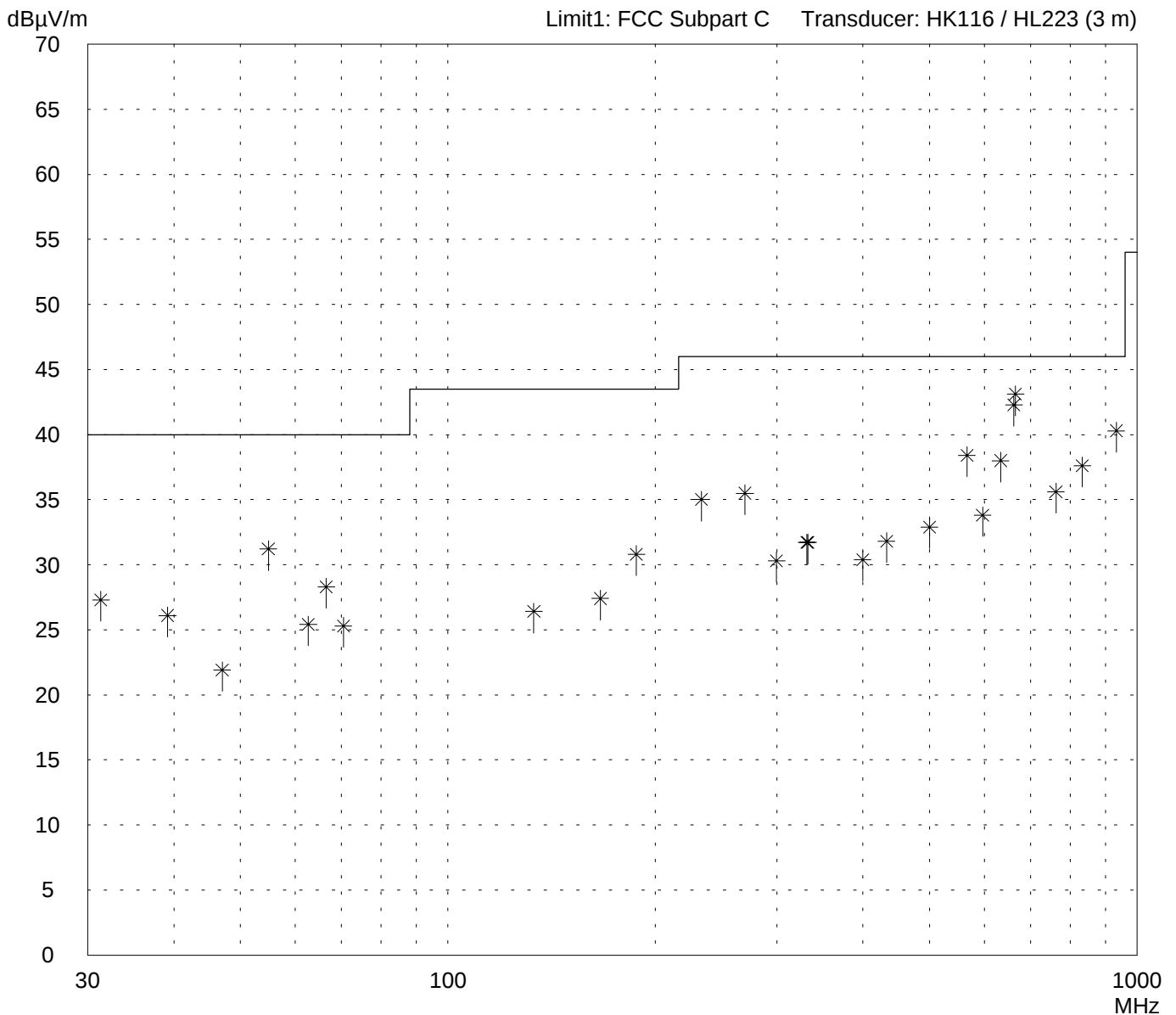
Test performed: by hand
File name:

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100
via PCI-adaptor Orinoco PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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:
56305-10552-3

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

Model:
PC24E-11-FC/R

Serial no.:
01UT33300016

Applicant:
Agere Systems Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 10/04/2001
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 PCIPC
- monitor switched off
- with external antenna AIN24-OD-03
- 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
31.34	12.5	14.8	27.3	40.0	
39.18	13.0	13.1	26.1	40.0	
47.02	10.0	11.9	21.9	40.0	
54.85	20.0	11.2	31.2	40.0	
62.69	14.5	10.9	25.4	40.0	
66.58	17.5	10.8	28.3	40.0	
70.52	14.5	10.8	25.3	40.0	
133.25	11.0	15.4	26.4	43.5	
166.28	10.5	16.9	27.4	43.5	
187.74	12.5	18.3	30.8	43.5	
233.11	15.0	20.0	35.0	46.0	
269.72	13.0	22.5	35.5	46.0	
299.72	5.0	25.3	30.3	46.0	
331.41	11.5	20.2	31.7	46.0	
333.02	11.5	20.2	31.7	46.0	
399.65	8.0	22.4	30.4	46.0	
433.00	8.5	23.3	31.8	46.0	
499.61	8.0	24.9	32.9	46.0	
566.20	11.5	26.9	38.4	46.0	
596.54	6.0	27.8	33.8	46.0	
633.87	9.0	29.0	38.0	46.0	
662.73	12.5	29.8	42.3	46.0	
666.15	13.2	29.9	43.1	46.0	
762.21	4.0	31.6	35.6	46.0	
832.75	5.0	32.6	37.6	46.0	
932.74	6.0	34.3	40.3	46.0	

Result:
Limit kept

Project file:
56305-10552-3

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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.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer-reading [dB μ V]	Generator-reading [dB μ V]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.0693	vertical	45.0	63.1		26.0	44.9	74
1.1956	horizontal	49.9	63.2		26.3	50.0	74
1.3271	vertical	51.3	63.4		26.5	51.3	74
1.6009	vertical	46.0	64.0		27.3	46.3	74
1.8693	horizontal	45.3	65.3		28.5	45.5	74
2.4027	vertical	44.9	67.4		30.3	44.8	74
4.8894	vertical	42.1	64.4		27.3	42.0	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.: 01UT33300016
Applicant: Agere Systems Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 10/04/2001
Operator: R. Heller

Mode:

- FCC test setup
- supply voltage 115 V AC
- RF-modem mounted in Dell Dimension 4100 via PCI-adaptor Orinoco PCIPC
- with external antenna AIN24-OD-3
- operating with bit rate 11 Mbps
- RX mode with $f = 2.442$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer-reading [dB μ V]	Generator-reading [dB μ V]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
1.1952	horizontal	32.3	63.0		26.3	32.5	54
1.3282	vertical	36.7	63.2		26.5	36.9	54
4.8841	vertical	39.8	64.2		27.3	39.9	54

Result: The limits are kept