SENTON

■ EMV-Prüfzentrum ■ EMI/EMC-Testcenter ■

Straubing, April 27, 1999

T E S T - R E P O R T

No. 56305-90204-3

for

LUC PC24E-H-FC

RF-modem for wireless LAN

Applicant:	Lucent Technologies Nederland B.V.
Purpose of testing:	To show compliance with FCC Code of Federal Regulations, Part 15 Subpart C, Section §15.247

Table of Contents

1. Administrative Data

Equipment Under Test (EUT):	LUC PC24E-H-FC
Serial number(s):	90990005 (RF-modem) Sample no. 1 (external antenna)
Type of equipment:	RF-modem using DSSS technology for wireless connection for e.g. portable and mobile computers which have a PCMCIA-bus.
Parts/accessories:	• RF-modem LUC PC24E-H-FC, part no. 011438 • external YAGI antenna AOU24-YA-1414, Telex, part no. 011004 • coaxial antenna cable 3/8", 50 ft, part no. 010317 • Hyperlink lightning arrestor, part no. 010997 • RF-IEEE cable, 50 cm, part no. 010995 (for additional information see "Configuration of EUT and Peripheral Devices" on page 8)
FCC-ID:	IMRWLPCE24H

Applicant: (full address)	Lucent Technologies Nederland B.V. Zadelstede 1-10 NL-3431 JZ Nieuwegein The Netherlands
Contract identification:	---
Contact person:	Mr. Wout Kerkhof
Manufacturer:	Lucent Technologies Nederland B.V.

Receipt of EUT:	March 16, 1999
Date of test:	April 16 to 26, 1999
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 Fax eMail:	(+49) 0 94 21 / 55 22-0 (+49) 0 94 21 / 55 22-99 Office@senton.de
FCC file number:	31040/SIT 1300F2	
Industry Canada file number:	IC 3050	

3. Summary of Test Results

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

- minimum 6 dB bandwidth (§15.247.a2),
- maximum peak output power (§15.247.b),
- average power density (§15.247.d) and
- radiated emission 30 MHz to 25 GHz (§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 "WaveLAN-II Engineering Test Program", Version v01.15b (Feb 24 1999). 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	

Note: See next page for instructions supplied by applicant to achieve required operation mode.

[1] Full testing with bit rate 11 Mbps only

INSTRUCTIONS - TEST PROGRAM

WaveLAN Engineering Test Program, V01.15b, Mar 15, 1999

SETUP

- INSERT Modem
- INSERT Test Program disk
- SWITCH ON PC
- GO TO A:\
- TYPE **Cert_eng**
- **MAIN MENU** appears
- SELECT **INITIALISE** and ENTER
- INITIALISE appears for a short time, green power LED is on
- Program returns automatically to **MAIN MENU**

CHANNEL SELECTION

- SELECT **SET CHANNEL** from MAIN MENU and ENTER
- SELECT channel and ENTER
- RESULTS appear
- ESC (back to **MAIN MENU**)

TX MODE

- SELECT **TX CONTINUOUS ON** from MAIN MENU and ENTER,
- SET **BIT RATE** parameters: 2=2Mbps; 3=5.5Mbps; 5=11Mbps and ENTER
  (Modem transmits spectrum with specified bit rate on selected channel. Both LEDs are on. Check by spectrum analyzer)
- To stop transmission SELECT **RX CONTINUOUS ON / STOP** and ENTER
- To restart transmission SELECT **TX CONTINUOUS ON** and ENTER two times
- NOTE: Before changing the channel number **INITIALISE** has to be selected first. For further details see Channel Selection above.

RX MODE

- SELECT **RX CONTINUOUS ON / STOP** from MAIN MENU and ENTER
- NOTE: Before changing the channel number **INITIALISE** has to be selected first. For further details see Channel Selection above.

CHANNEL LIST

Channel ID	FCC (MHz)
01	**2412**
02	2417
03	2422
04	2427
05	2432
06	2437
07	**2442**
08	2447
09	2452
10	2457
11	**2462**

5. Configuration of EUT and Peripheral Devices

RF-modem module LUC PC24E-H-FC was tested operating with YAGI antenna AOU24-YA-1414 connected via 50 ft antenna cable, lightning arrestor and RF-IEEE cable and mounted in PCMCIA slot of personal computer AT & T Globalyst 550 via ISA adaptor board ISAPC-B0

External antenna AOU24-YA-1414 was mounted on a metal tripod in 1.5 m height.

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

Item	Part no.	Serial no.	Designation	Manufacturer
RF-modem	011438	90990005	LUC PC24E-H-FC	Lucent
External YAGI antenna	011004	Sample no. 1	AOU24-YA-1414	Telex
Coaxial antenna cable 3/8", 50 ft	010317	---	--- (cable type TWB 4001, N connector (male) on each side)	Amphenol
RF-IEEE cable, 50 cm (to be connected to RF-modem)	010995	---	--- (cable type Filotex P - EDE 296769, N connector (male) on antenna side	Lucent
Lightning arrestor	010997	---	---	Hyperlink
Personal computer	---	17-26190719	Globalyst 550	AT & T
ISA adaptor board	010053	B2-8	ISAPC-B0	Lucent

Table 1: Accessories and host equipment

In combination with external antenna AOU24-YA-1414 EUT is intended to be used with three versions of antenna cables. Depending on antenna cable the effective antenna gain is calculated by subtracting the appropriate total insertion loss including attenuation caused by RF-IEEE cable and lightning arrestor from the typical gain of external antenna (see table 2).

To combine maximum effective antenna gain with maximum length (with priority to gain) 50 ft cable was selected for testing.

Part number	Antenna cable length	Type	Antenna gain AOU24-YA-1414 [dBi]	Total insertion loss [dB]	Effective antenna gain [dBi]
010999	20 ft	LMR200	13.5	4.5	9.0
010317	50 ft	LMR400	13.5	4.5	9.0
011002	75 ft	LMR400	13.5	5.3	8.2

Table 2: Effective gain for external antenna AOU24-YA-1414 and different antenna cables

6. Setup of Host

Configuration of cables of host

- Unshielded power lines for AC-power supply of personal computer and monitor, Kawasaki, 180 cm
- Shielded video cable E101344 Style 2990 VW-1 connected to video interface of personal computer, AWM, 170 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, 220 cm, Senton inv.-no. 1401

Configuration of host and peripheral devices

- Personal computer AT & T Globalyst 550:
  Serial no.: 17-26190719 FCC-ID: CTD3246
- Lucent ISA-card ISAPC-B0:
  Serial no.: B2-8
- Monitor Siemens S26361-K203-V311:
  Serial no.: 17569281 FCC-ID: ASIC3X2
- PS/2-keyboard HP C1405A #ABD:
  Serial no.: 3221S30020 FCC-ID[2]: B94VECTRA386S-20
- PS/2-mouse HP C1413A:
  Serial no.: 3227M01197 FCC-ID: B94C1413X
- 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

[2] FCC-ID of corresponding personal computer

7. Measuring Methods

7.1. Minimum 6 dB Bandwidth (§ 15.247.a2)

The minimum 6 dB bandwidth was measured with a spectrum analyzer connected to the antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency.
The spectrum analyzer was set to:
RBW = 100 kHz, VBW = 100 kHz, span = 50 MHz, sweep = 20 ms
See figure 1 for the measurement setup.

Test equipment used (see equipment list for details):
02, 18, 57, 67, 68

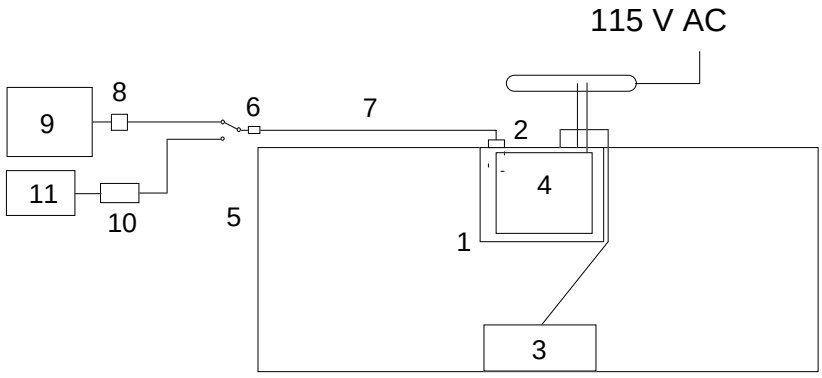


Figure 1: Measurement setup for testing on antenna connector

1 Personal computer with ISA-card
2 RF-modem
3 Keyboard
4 Monitor
5 Wooden table
6 DC-block
7 Adapter cable
8 Attenuator
9 Spectrum analyzer
10 Power sensor
11 Power meter

7.2. 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

7.3. Peak Power Density (§ 15.247.d)

The peak power density was measured with a spectrum analyzer connected to the antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency.
The spectrum analyzer was set to max hold with
RBW = 3 kHz, VBW = 100 kHz, span = 300 kHz, sweep = 100 s
See figure 1 for the measurement setup.

Test equipment used (see equipment list for details):
02, 18, 57, 67, 68

7.4. 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

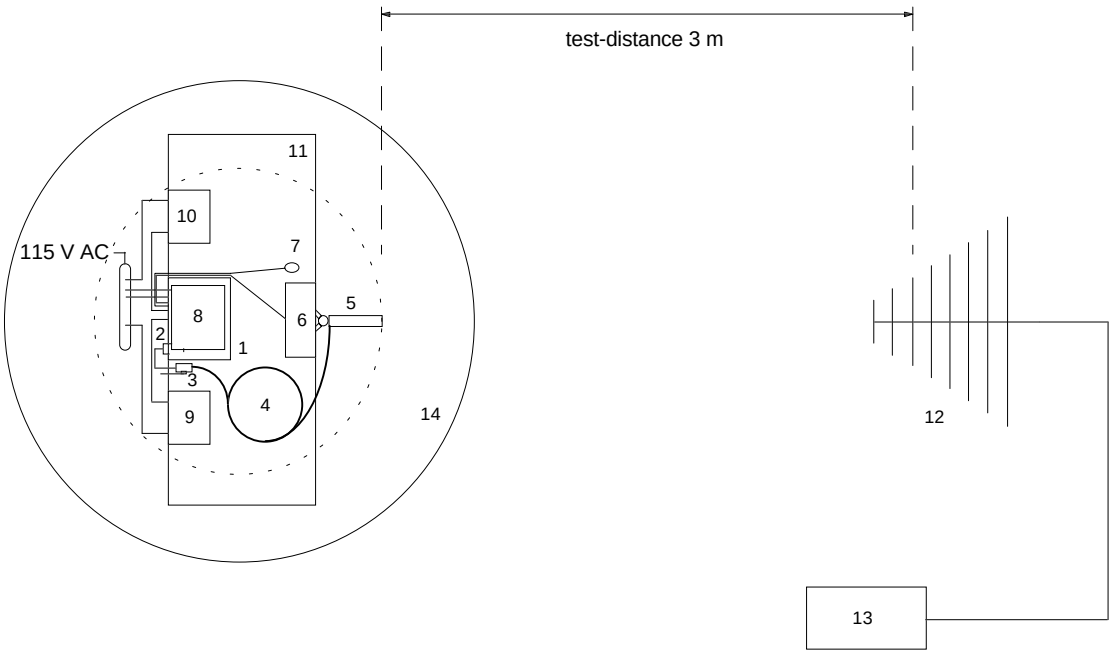


Figure 2: Measurement setup for radiated emission test below 1 GHz

1 Personal computer with ISA-card
2 RF-modem
3 Lightning arrestor with ground connection
4 Antenna cable
5 RF-antenna (2.4 GHz) mounted on metal tripod
6 Keyboard
7 Mouse
8 Monitor
9 Parallel printer
10 Serial printer
11 Wooden table
12 Measurement antenna
13 Test receiver
14 Turn table

7.5. 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 100 Hz (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 dBµV/m and adding the antenna correction factor.

See figure 3 for the measurement setups.

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

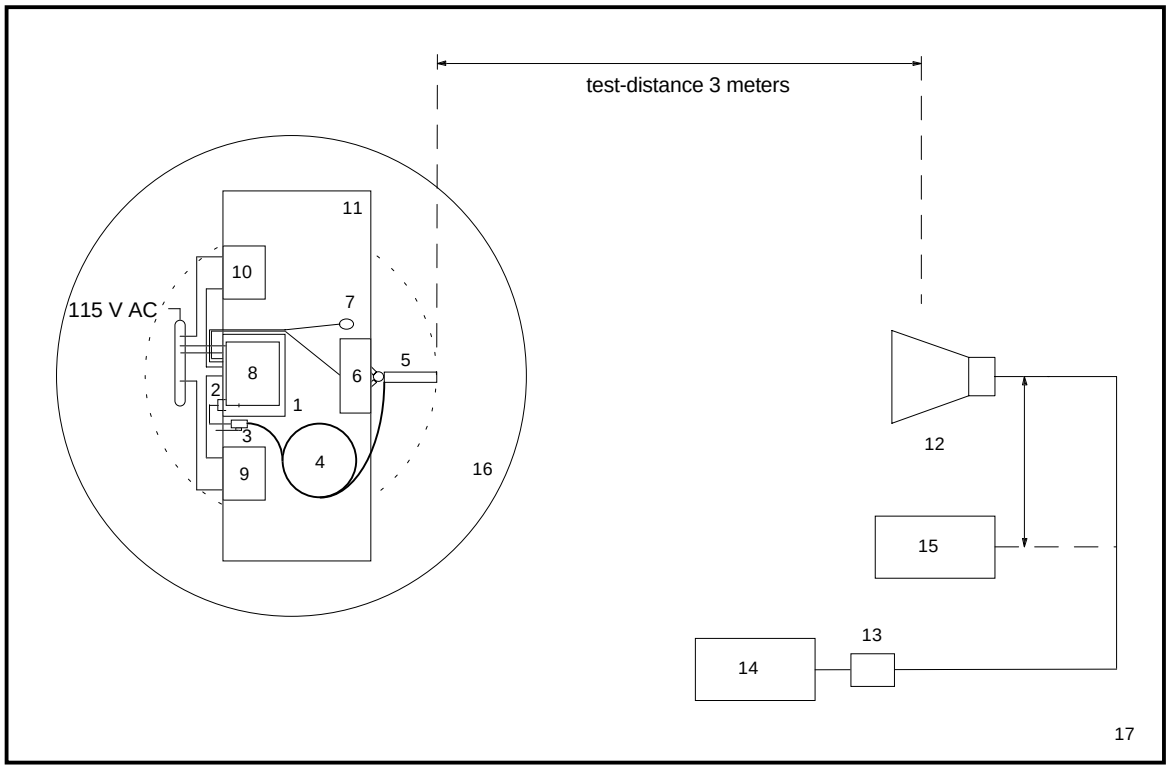


Figure 3: Measurement setup radiated emission test above 1 GHz

1 Personal computer with ISA-card
2 RF-modem
3 Lightning arrestor with ground connection
4 Antenna cable
5 RF-antenna (2.4 GHz) mounted on metal tripod
6 Keyboard
7 Mouse
8 Monitor
9 Parallel printer
10 Serial printer
11 Wooden table
12 Measurement antenna
13 Preamplifier (if applicable)
14 Spectrum analyzer
15 Signal generator
16 Turn table
17 Semi-anechoic room

8. Equipment List

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

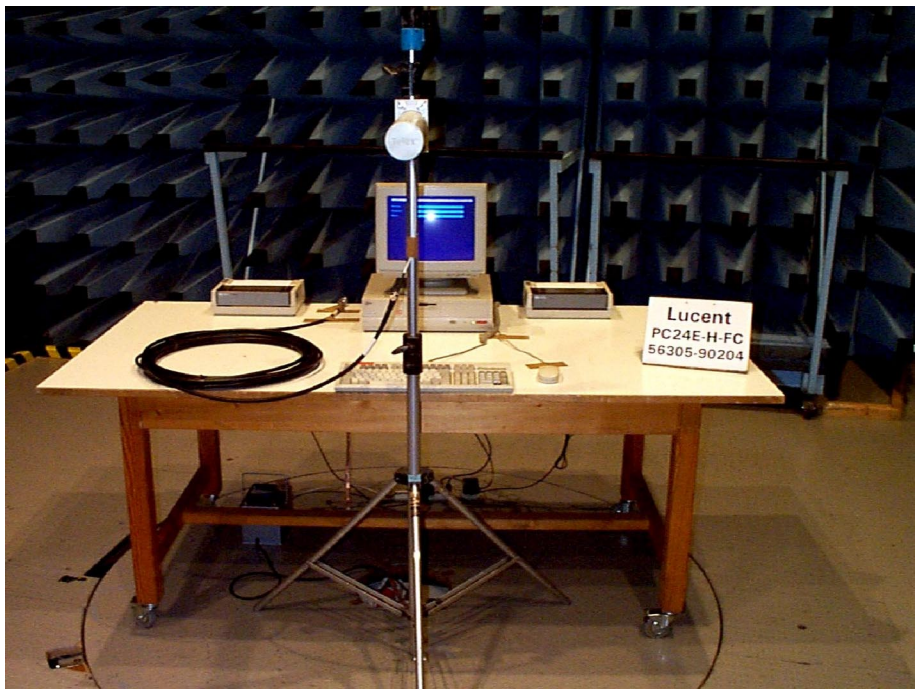
No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	R 3271	05050023	Advantest
02	EMI Test Receiver	ESMI	839379/013 839587/006	Rohde & Schwarz
03	Test Receiver	ESH 3	880112/032	Rohde & Schwarz
04	Test Receiver	ESHS 10	860043/016	Rohde & Schwarz
05	Test Receiver	ESV	881414/009	Rohde & Schwarz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

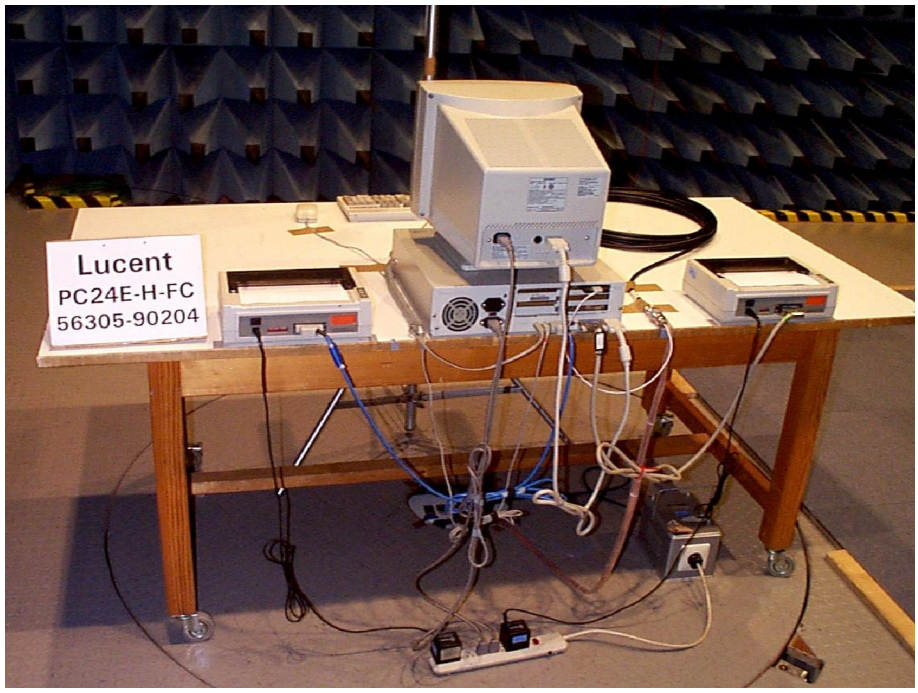
No.	Type	Model	Serial Number	Manufacturer
35	Absorbing Clamp	MDS 21	80911	Lüthi
36	Absorbing Clamp	MDS 21	79690	Lüthi
37	Loop Antenna	HFH2-Z2	882964/1	Rohde & Schwarz
38	Biconical Antenna	HK 116	842204/001	Rohde & Schwarz
39	Biconical Antenna	HK 116	836239/02	Rohde & Schwarz
40	Log. Periodic Antenna	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			Lucent Technologies
68	DC Block 0.01-18GHz		8037	Inmet Corp.
69	High pass filter			Lucent Technologies

9. Photographs Taken During Testing

Photos No. 9.1 - 9.2

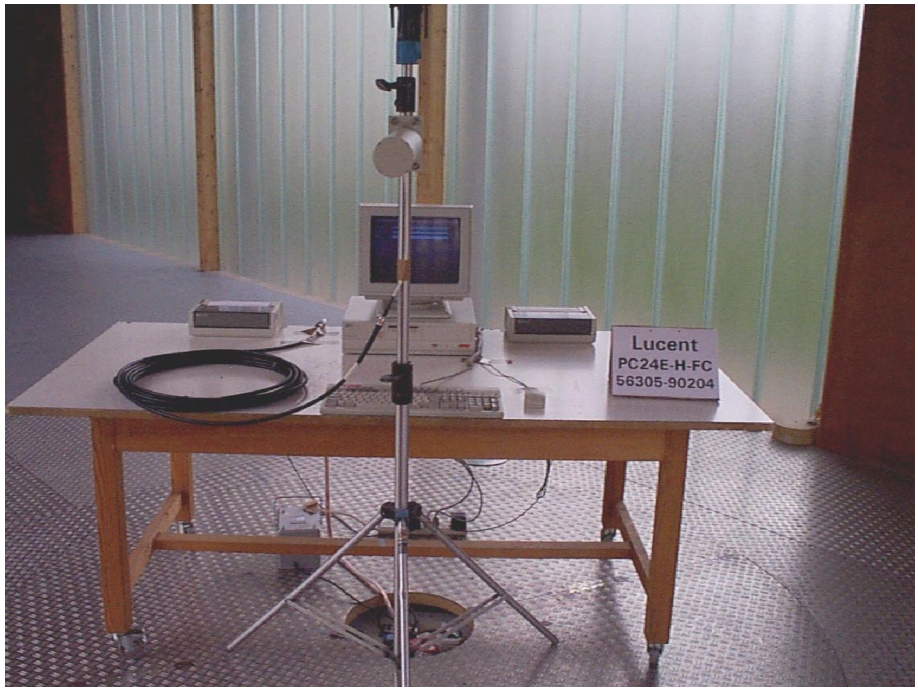
Test setup for radiated emission pre-test 30 MHz - 1 GHz (semi anechoic room)

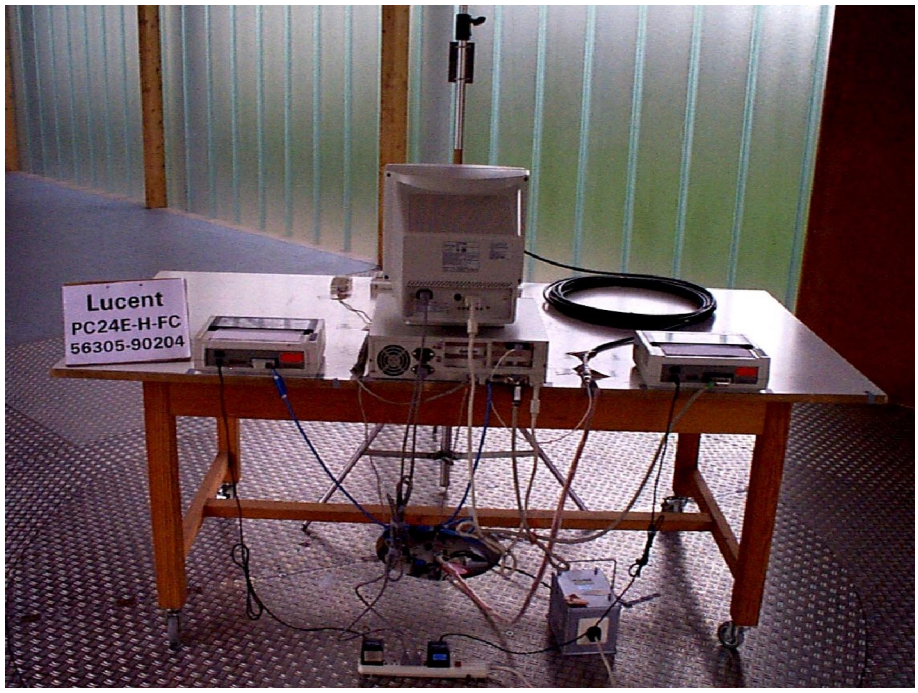




Photos No. 9.3 - 9.4

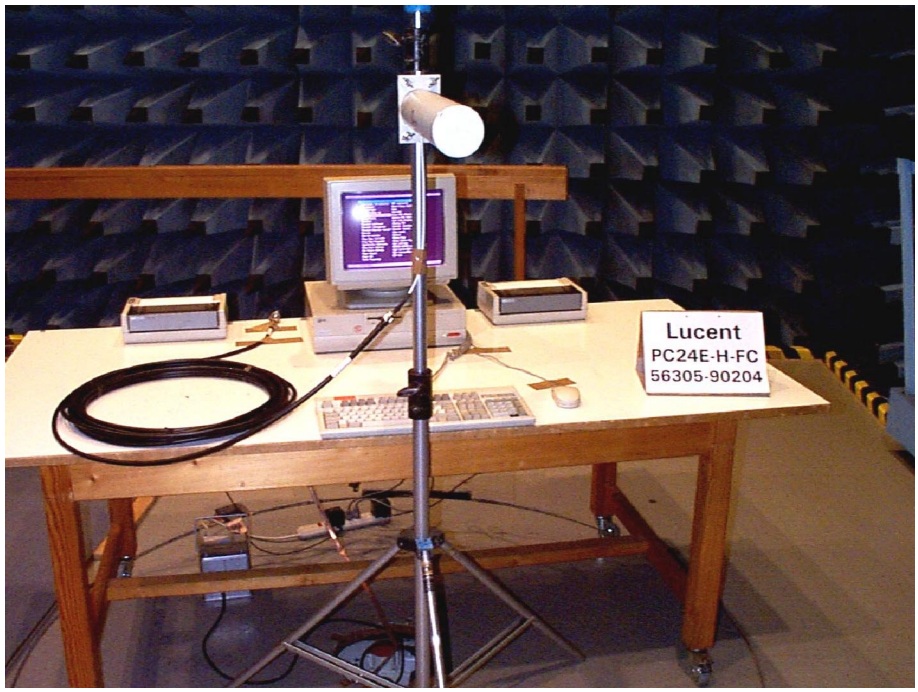
Test setup for radiated emission final test 30 MHz - 1 GHz (open area test site)





Photos No. 9.5 - 9.6

Test setup for radiated emission test above 1 GHz



10. List of Measurements

FCC Part 15 Subpart C			
Section(s):	**Test**	**Page**	**Result**
	Transmit mode (TX):	25	
§15.247.a2	Minimum 6 dB bandwidth	note 1	passed
§15.247.b	Maximum peak output power	26	passed
§15.247.d	Peak power density	note 1	passed
§15.247.e	Processing gain	---	test performed by applicant
	Frequency range (conducted)	note 1	for information only
§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	36	passed
§15.247.c **§15.209** **§15.205.a,b**	Radiated emission test 1 GHz - 25 GHz	60	passed
	Receive mode (RX):	80	
§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	81	passed
§15.209	Radiated emission test 1 GHz - 12.5 GHz	89	passed

Note 1: See Senton test report no. 56305-90204-1.
Note 2: Radiated emission tests in transmit mode were performed with bit rate set to 11 Mbps only. Additional conducted emission tests (called "frequency range") were performed to show that there is no significant difference in the shape of the transmitting signal when either using bit rate 2, 5.5 or 11 Mbps.

11. Test Results

Test results for

Transmit (TX) mode

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

Model: LUC PC24E-H-FC with AOU24-YA-1414 (Telex)
Type: RF-modem with external antenna for wireless LAN
Serial No.: 90890026 (RF-modem), sample no. 1 (antenna)
Applicant: Lucent Technologies Nederland B.V.
Date of test: 04/22/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC

- TX mode

Tested on: Antenna connector

Selected bit rate	Operating frequency [GHz]	Power meter reading [dBm]	Correction-factor [dB]	Output power [dBm]	Limit [dBm]
2 MBit	2.412	14.3	0.5	14.8	See table below
	2.442	14.6	0.5	15.1	
	2.462	14.4	0.5	14.9	
5.5 MBit	2.412	11.0	0.5	11.5	
	2.442	11.3	0.5	11.8	
	2.462	11.1	0.5	11.6	
11 MBit	2.412	11.1	0.5	11.6	
	2.442	11.4	0.5	11.9	
	2.462	11.2	0.5	11.7	

Note:
Typical gain of external YAGI-antenna AOU24-YA-1414 is 13.5 dBi. Depending on antenna cable the effective antenna gain is calculated by subtracting the appropriate total insertion loss including attenuation caused by RF-IEEE cable and lightning arrestor.
Limit of 30 dBm is reduced by the amount of the effective antenna gain exceeding 6 dBi.

Antenna cable	Antenna gain AOU24-YA-1414 [dBi]	Total insertion loss [dB]	Effective antenna gain		Limit [dBm]
			total value [dBi]	exceeding 6 dBi [dB]	
20 ft	13.5	4.5	9.0	3.0	27.0
50 ft	13.5	4.5	9.0	3.0	27.0
75 ft	13.5	5.3	8.2	2.2	27.8

Result: The limit is kept

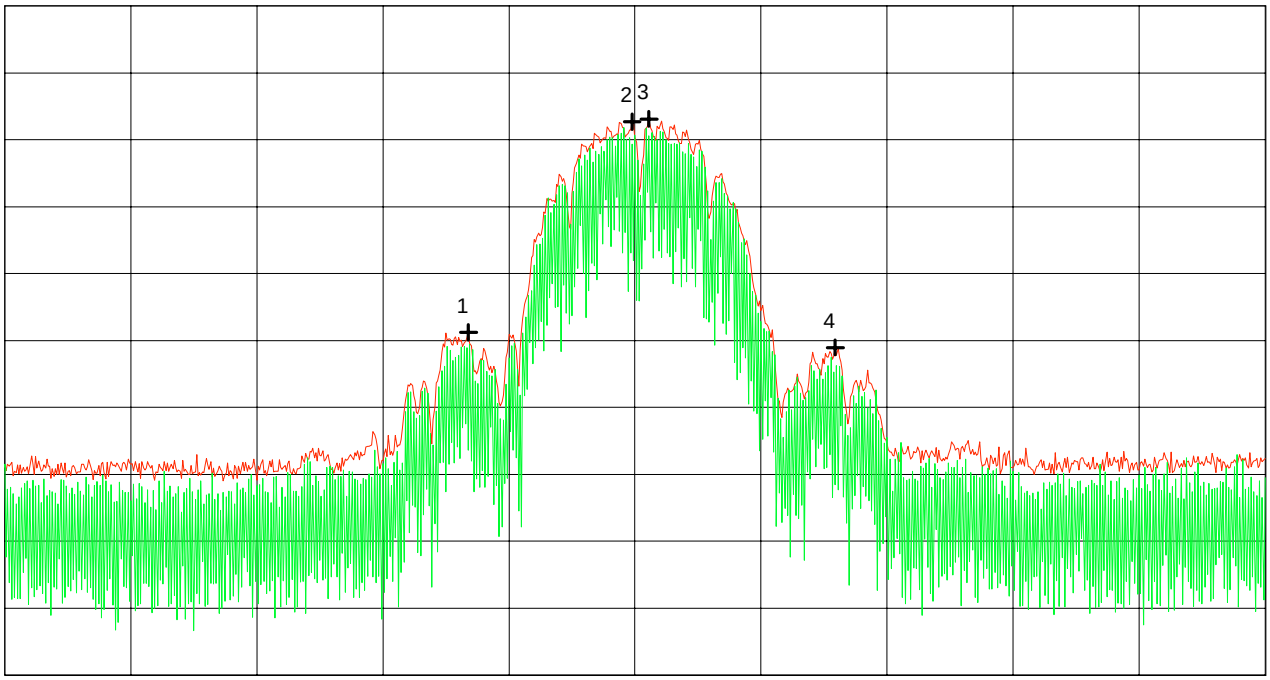
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 2 Mbps - TX mode with f = 2.412 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.362 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.462 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.398778 GHz	-28.78 dBm
Nr.2	2.411778 GHz	2.69 dBm
Nr.3	2.413111 GHz	3.12 dBm
Nr.4	2.427889 GHz	-31.06 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

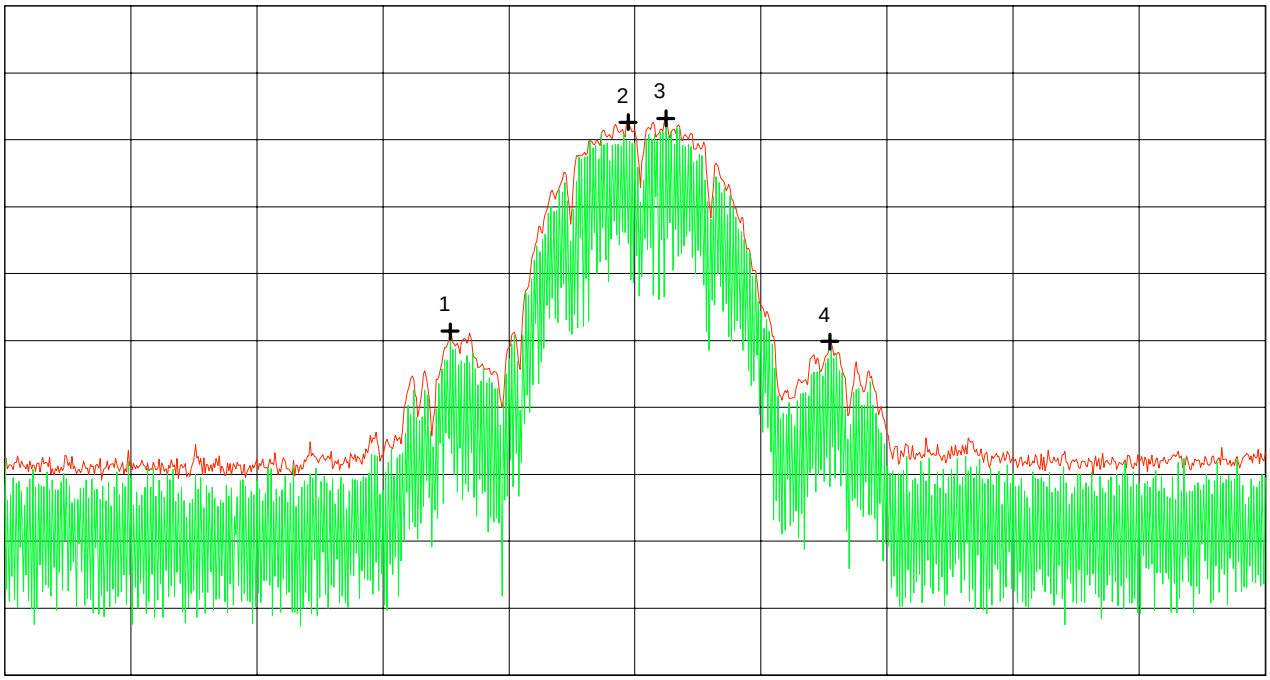
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 5.5 Mbps - TX mode with f = 2.412 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.362 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.462 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.397333 GHz	-28.62 dBm
Nr.2	2.411444 GHz	2.61 dBm
Nr.3	2.414444 GHz	3.22 dBm
Nr.4	2.427444 GHz	-30.15 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

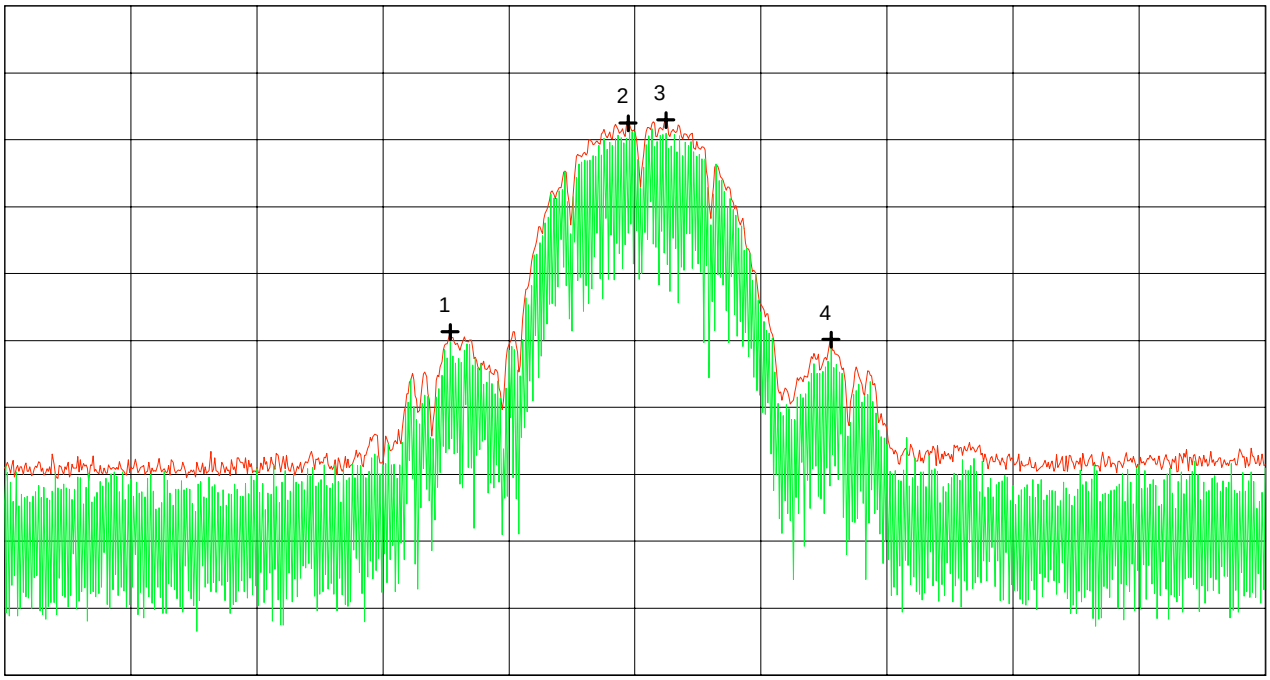
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 11 Mbps - TX mode with f = 2.412 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.362 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.462 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.397333 GHz	-28.73 dBm
Nr.2	2.411444 GHz	2.48 dBm
Nr.3	2.414444 GHz	2.97 dBm
Nr.4	2.427556 GHz	-29.87 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

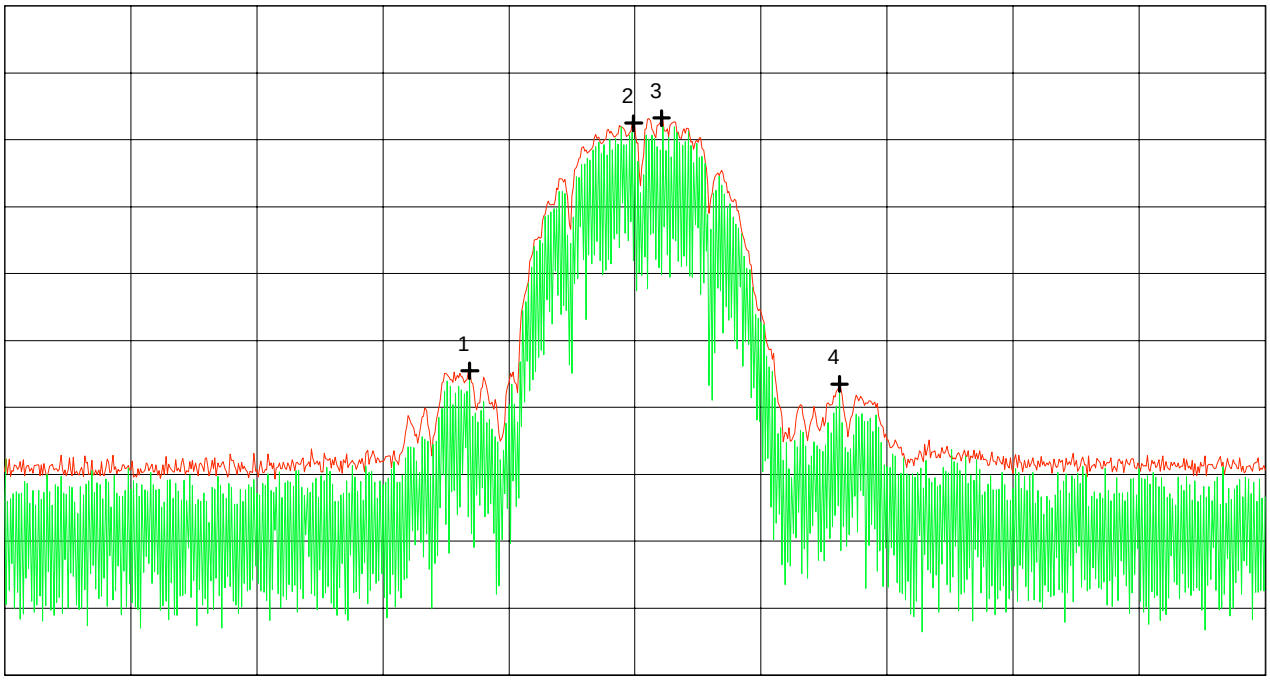
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 2 Mbps - TX mode with f = 2.442 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.392 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.492 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.428889 GHz	-34.54 dBm
Nr.2	2.441889 GHz	2.48 dBm
Nr.3	2.444111 GHz	3.25 dBm
Nr.4	2.458222 GHz	-36.50 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

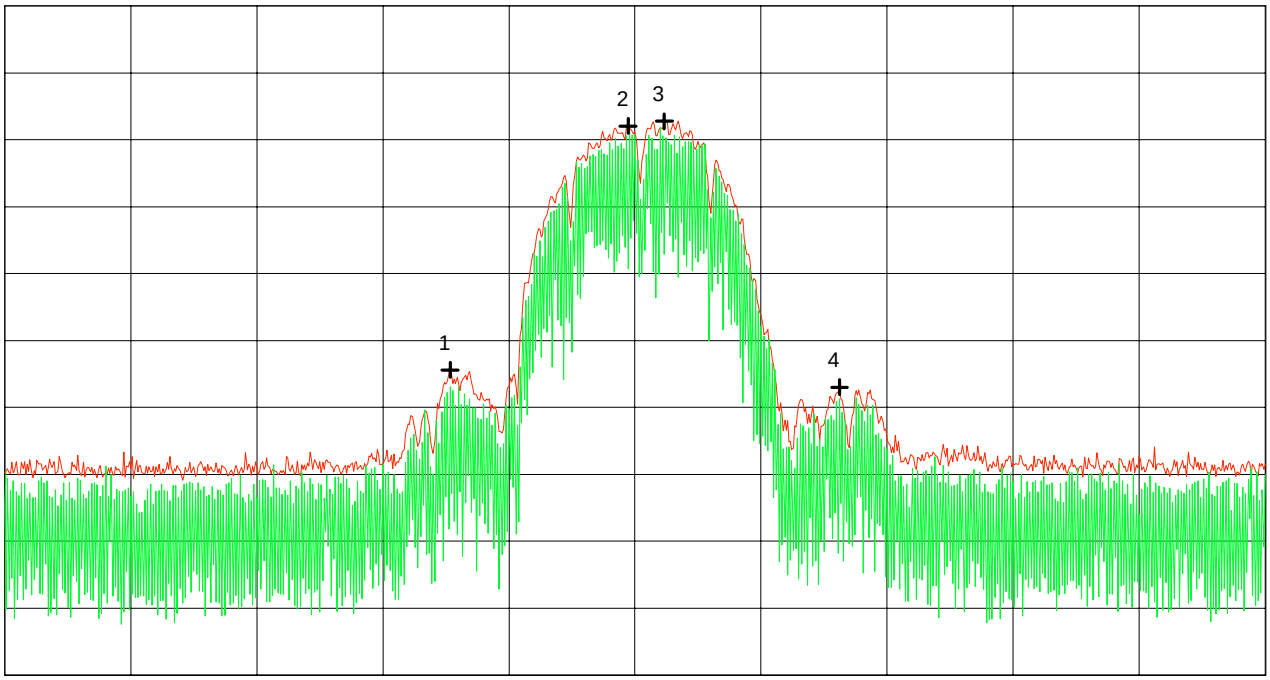
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 5.5 Mbps - TX mode with f = 2.442 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.392 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.492 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.427333 GHz	-34.41 dBm
Nr.2	2.441444 GHz	2.05 dBm
Nr.3	2.444333 GHz	2.76 dBm
Nr.4	2.458222 GHz	-36.98 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

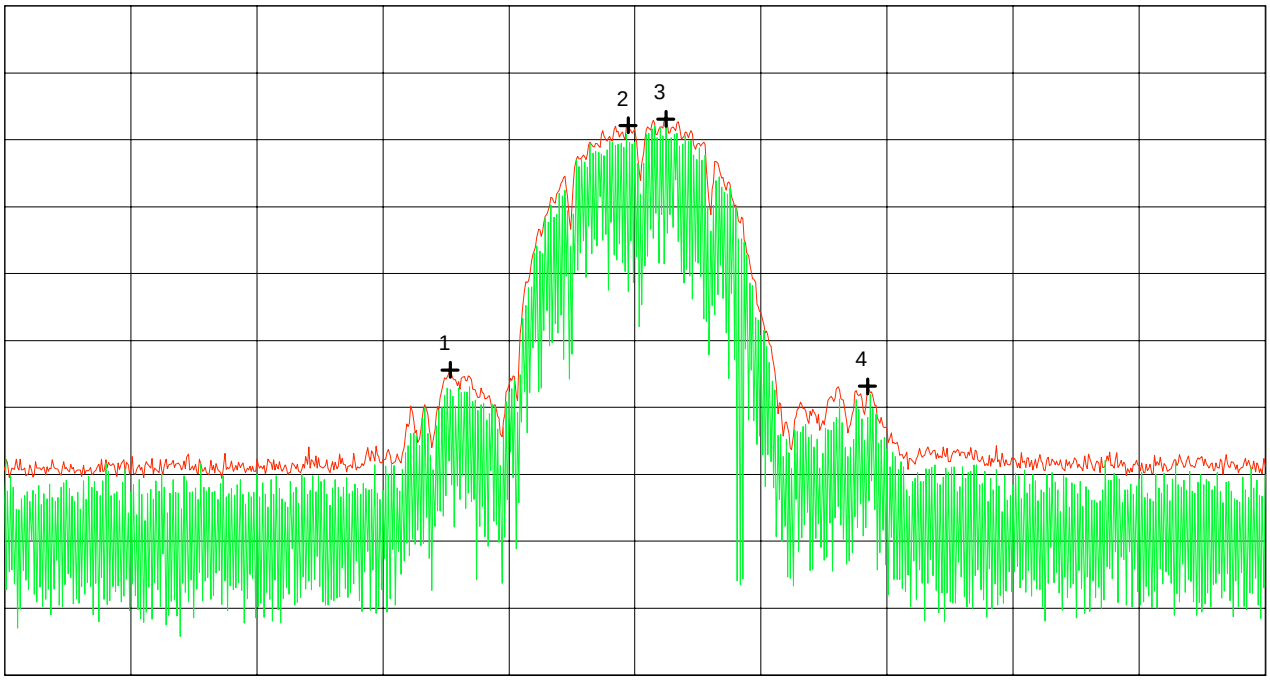
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 11 Mbps - TX mode with f = 2.442 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.392 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.492 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.427333 GHz	-34.39 dBm
Nr.2	2.441444 GHz	2.13 dBm
Nr.3	2.444444 GHz	3.09 dBm
Nr.4	2.460444 GHz	-36.88 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

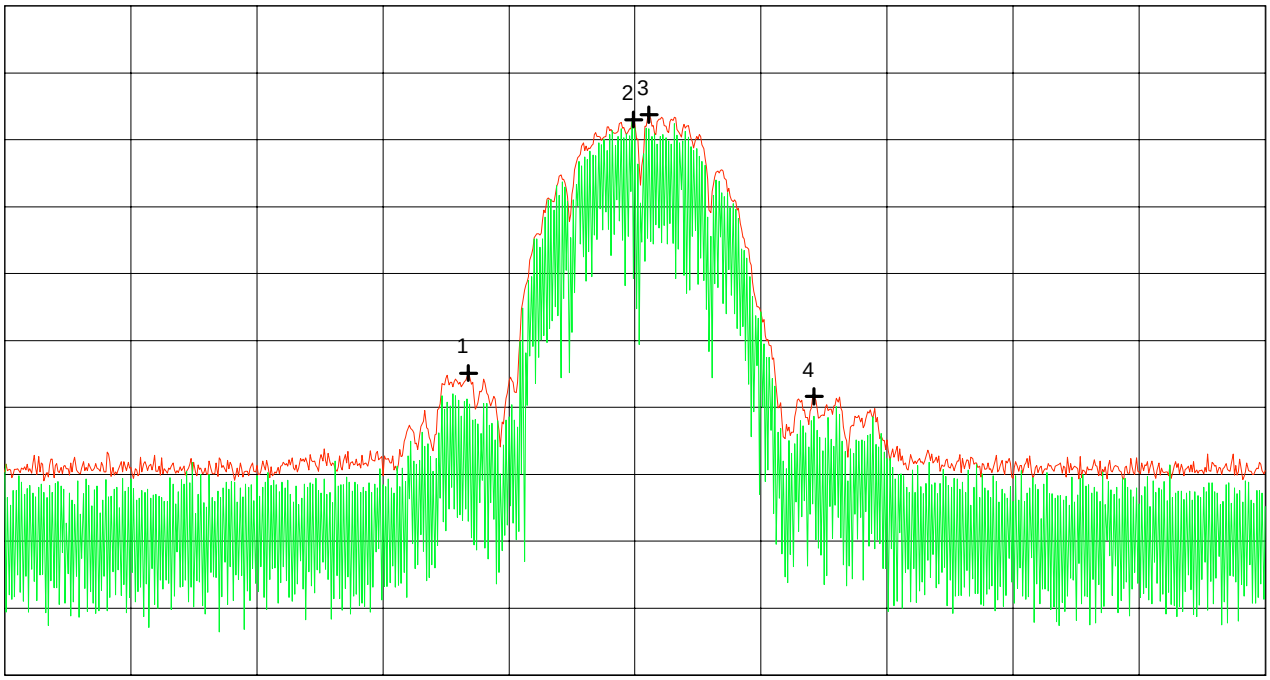
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 2 Mbps - TX mode with f = 2.462 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.412 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.512 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.448778 GHz	-34.87 dBm
Nr.2	2.461889 GHz	2.99 dBm
Nr.3	2.463111 GHz	3.75 dBm
Nr.4	2.476222 GHz	-38.35 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

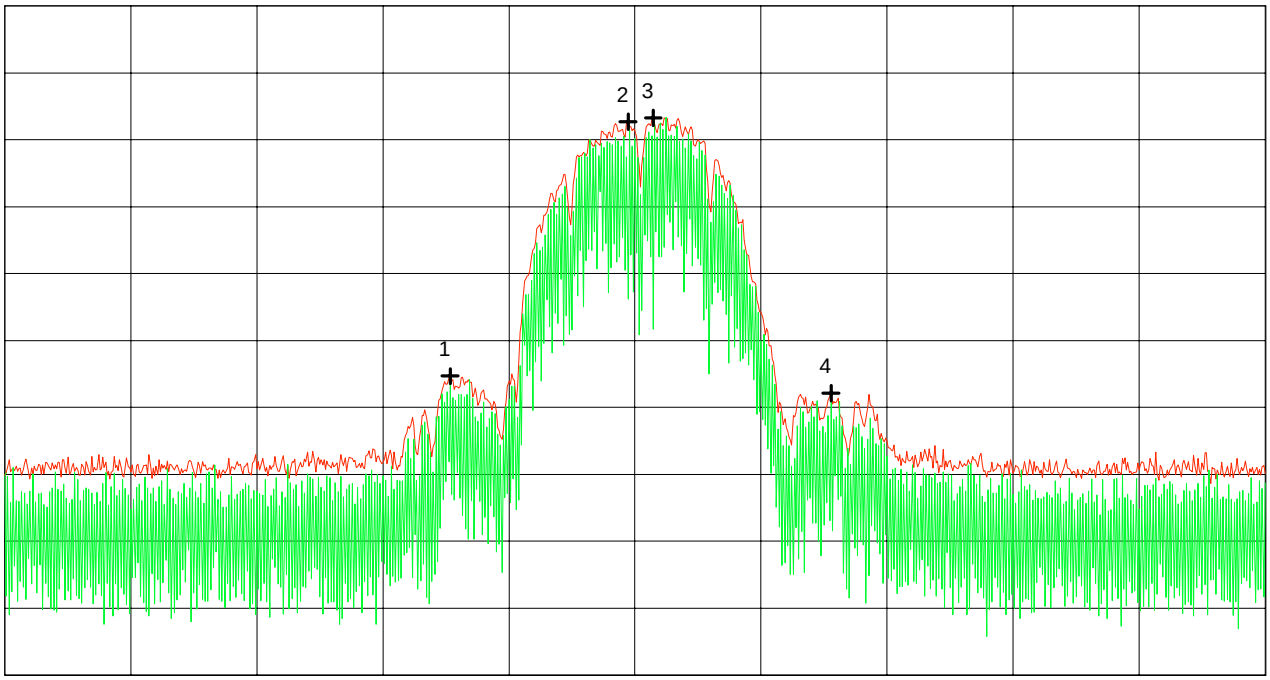
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 5.5 Mbps - TX mode with f = 2.462 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.412 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.512 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.447333 GHz	-35.33 dBm
Nr.2	2.461444 GHz	2.69 dBm
Nr.3	2.463444 GHz	3.27 dBm
Nr.4	2.477556 GHz	-37.87 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

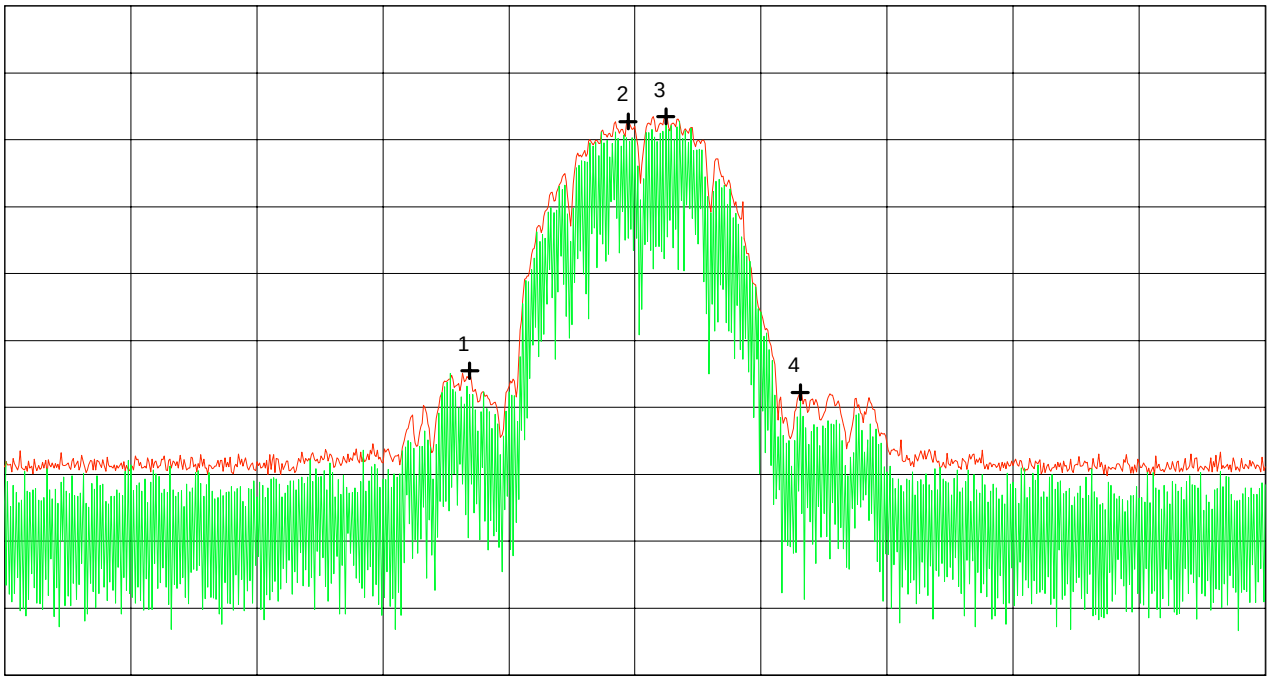
Maximum peak output power (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with bit rate 11 Mbps - TX mode with f = 2.462 GHz Tested on: antenna connector
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 20 dBm
10 dB dB/Div.

ATT 20 dB

Ref. Offset 21.1 dB



Start 2.412 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.512 GHz
SWP 40 ms

**** Multi Marker ****

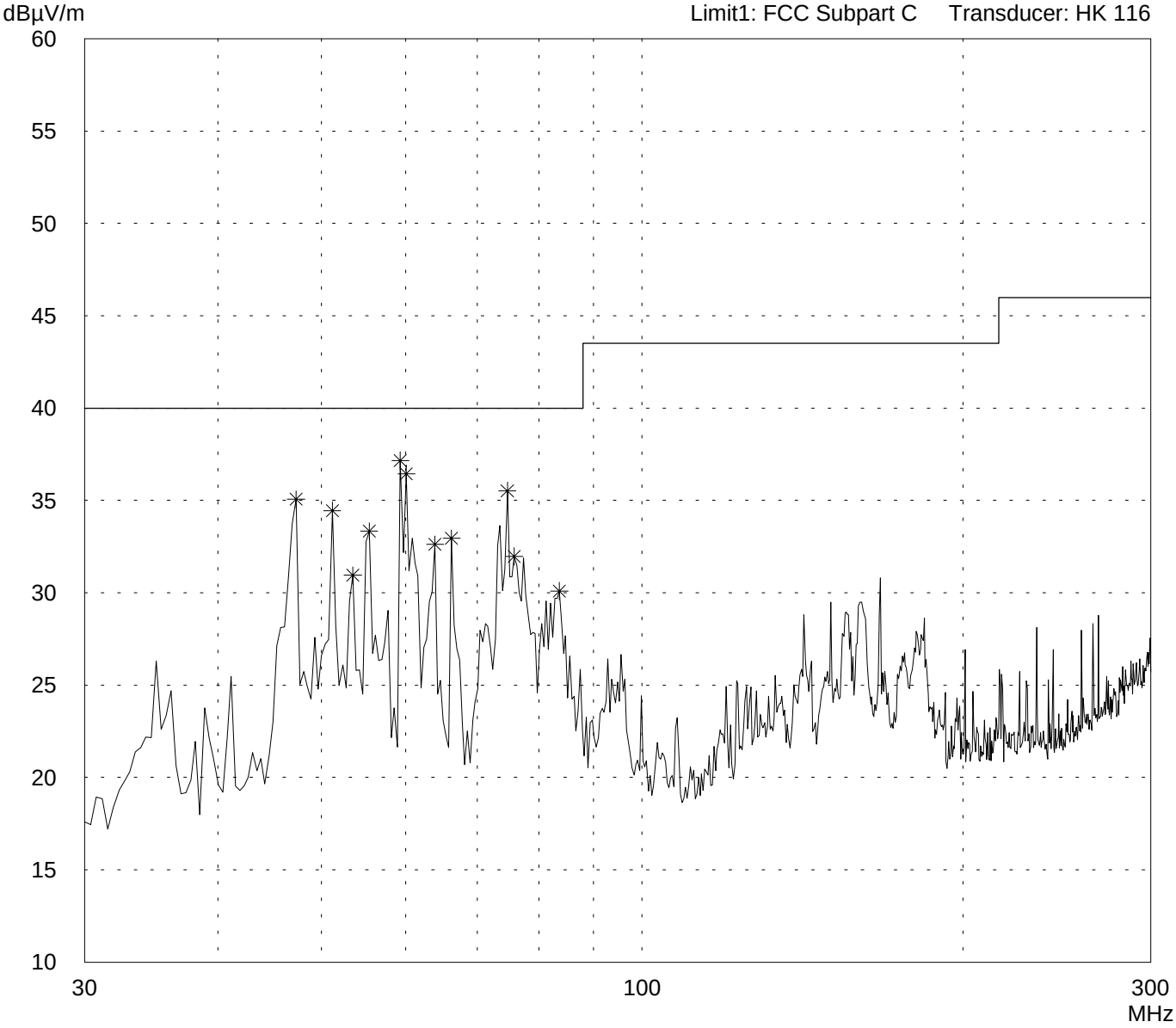
Nr.1	2.448889 GHz	-34.54 dBm
Nr.2	2.461444 GHz	2.74 dBm
Nr.3	2.464444 GHz	3.47 dBm
Nr.4	2.475111 GHz	-37.74 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/21/1999	

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- 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: 56305-90204-3

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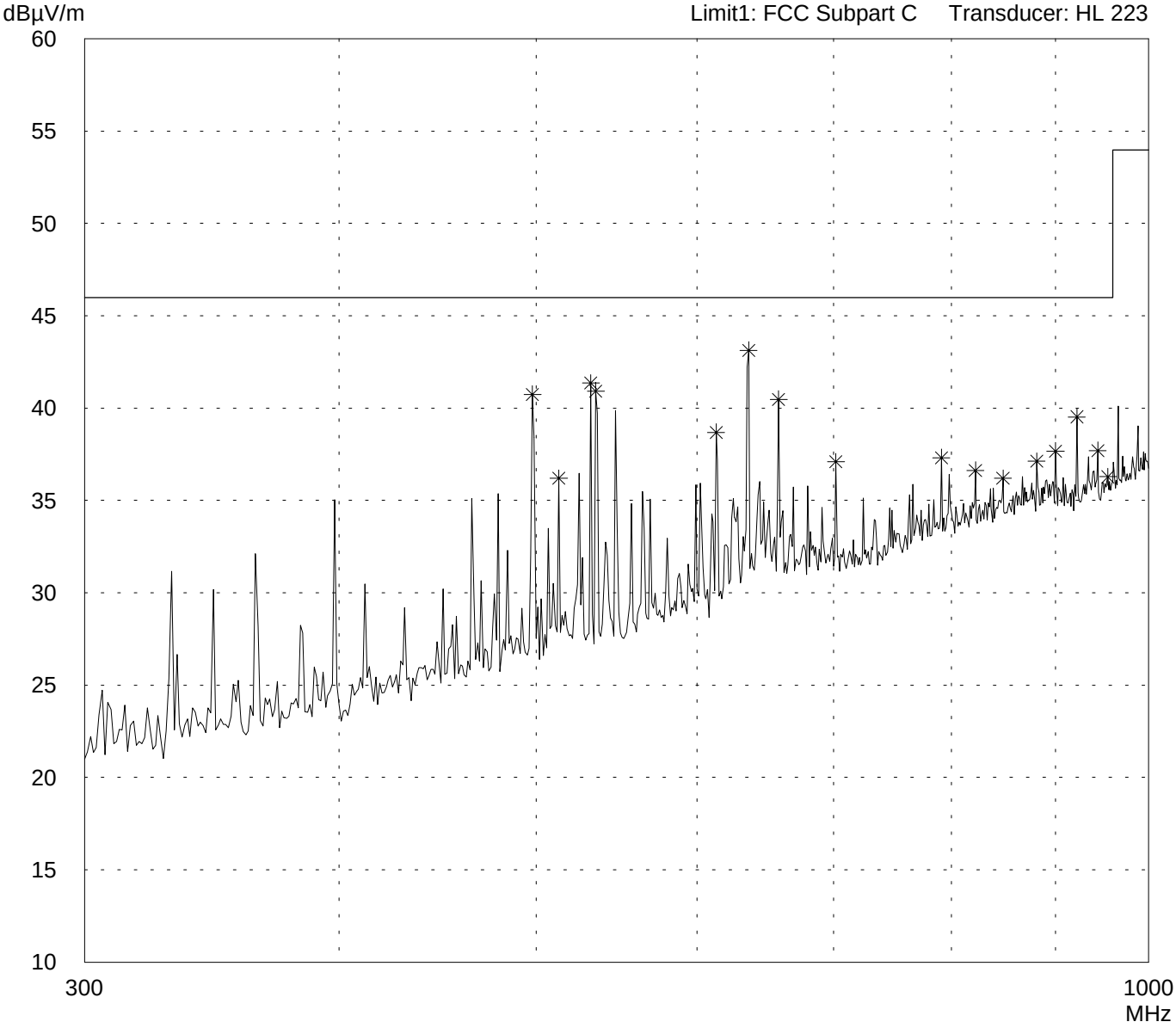
Radiated Emission Test 300 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- 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: 56305-90204-3

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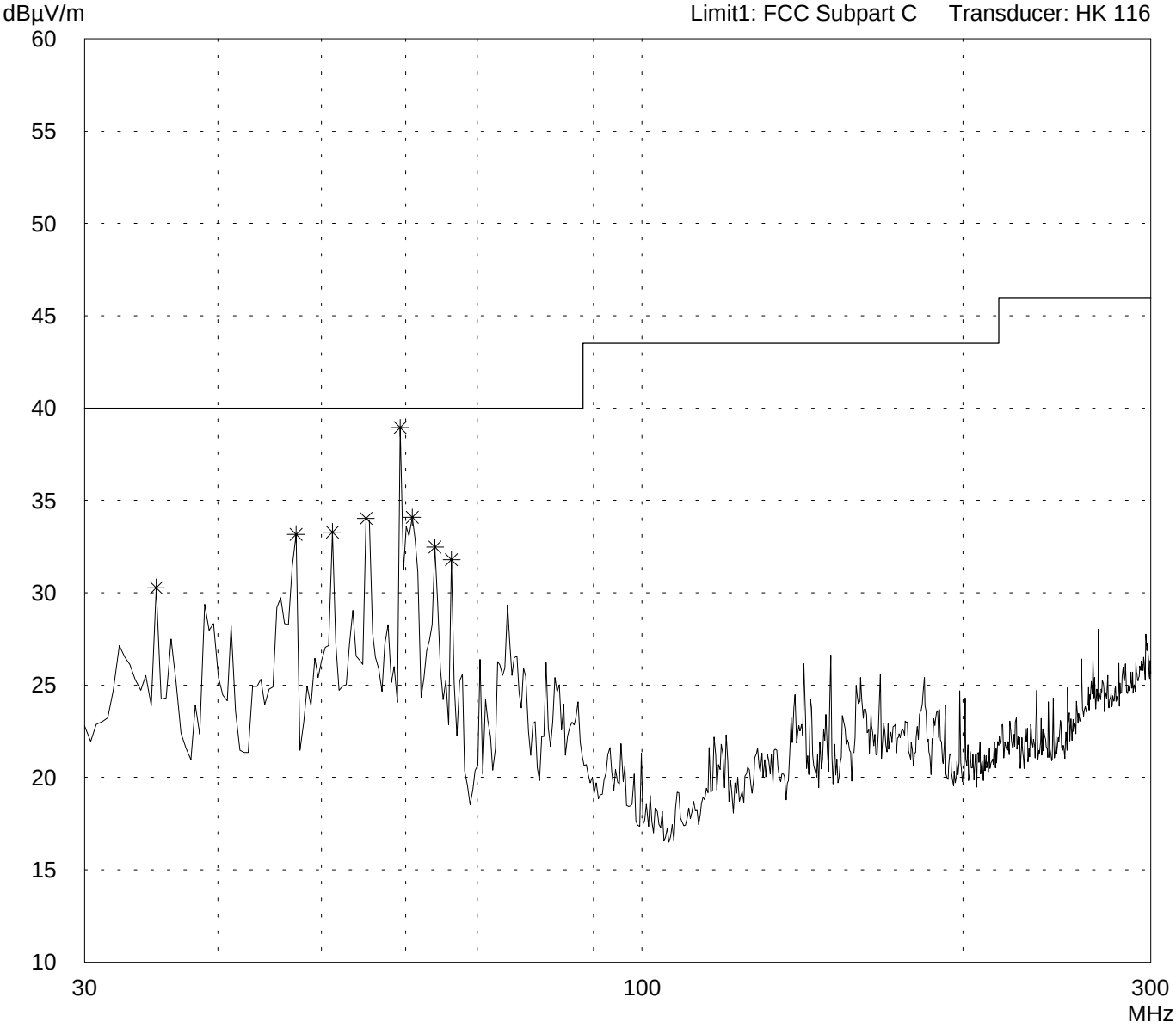
Radiated Emission Test 30 MHz - 300 MHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- operating with bit rate 11 Mbps
	- TX mode with f = 2.412 GHz

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



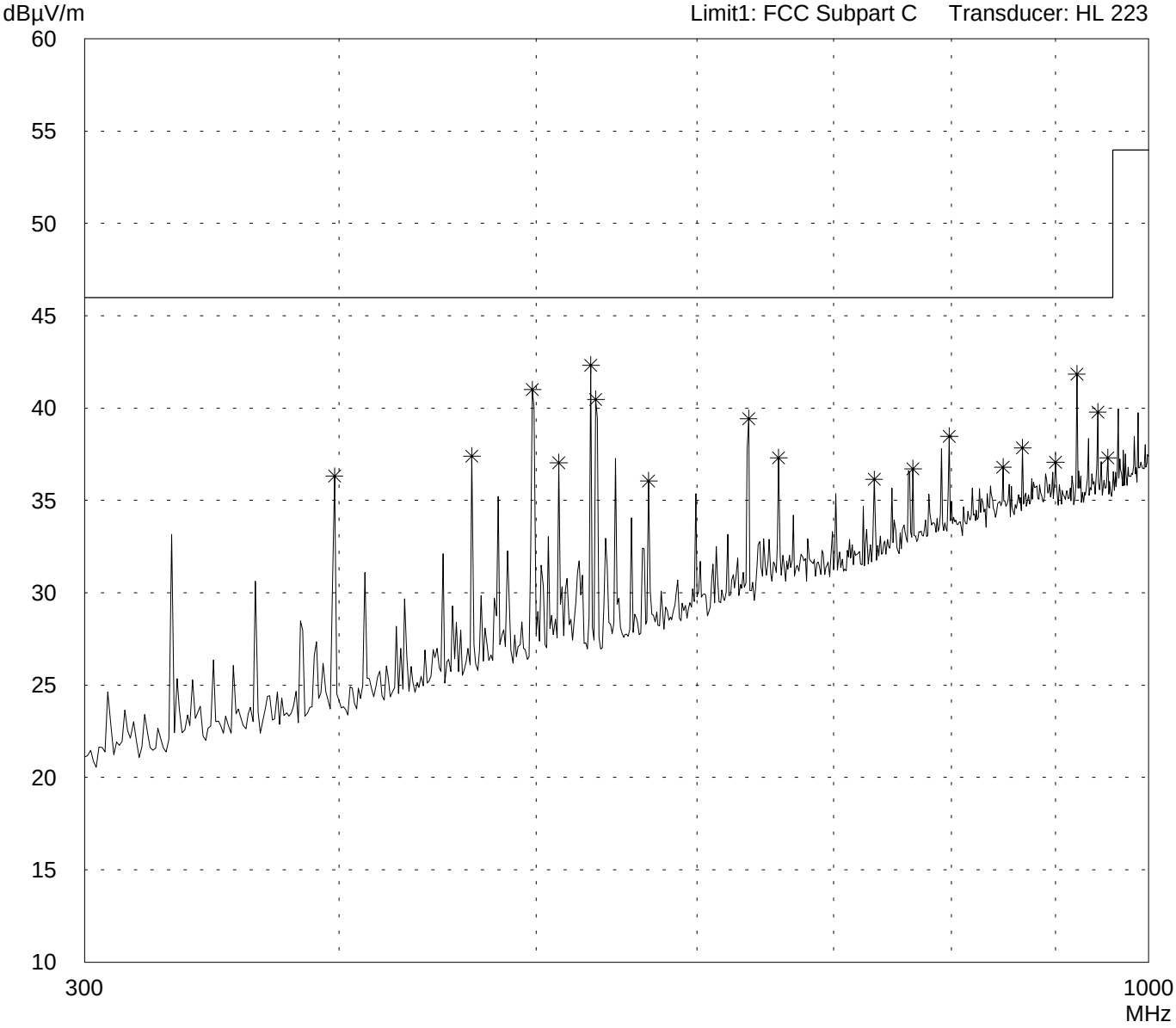
Result: Prescan	Project file: 56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

Radiated Emission Test 300 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- 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: 56305-90204-3

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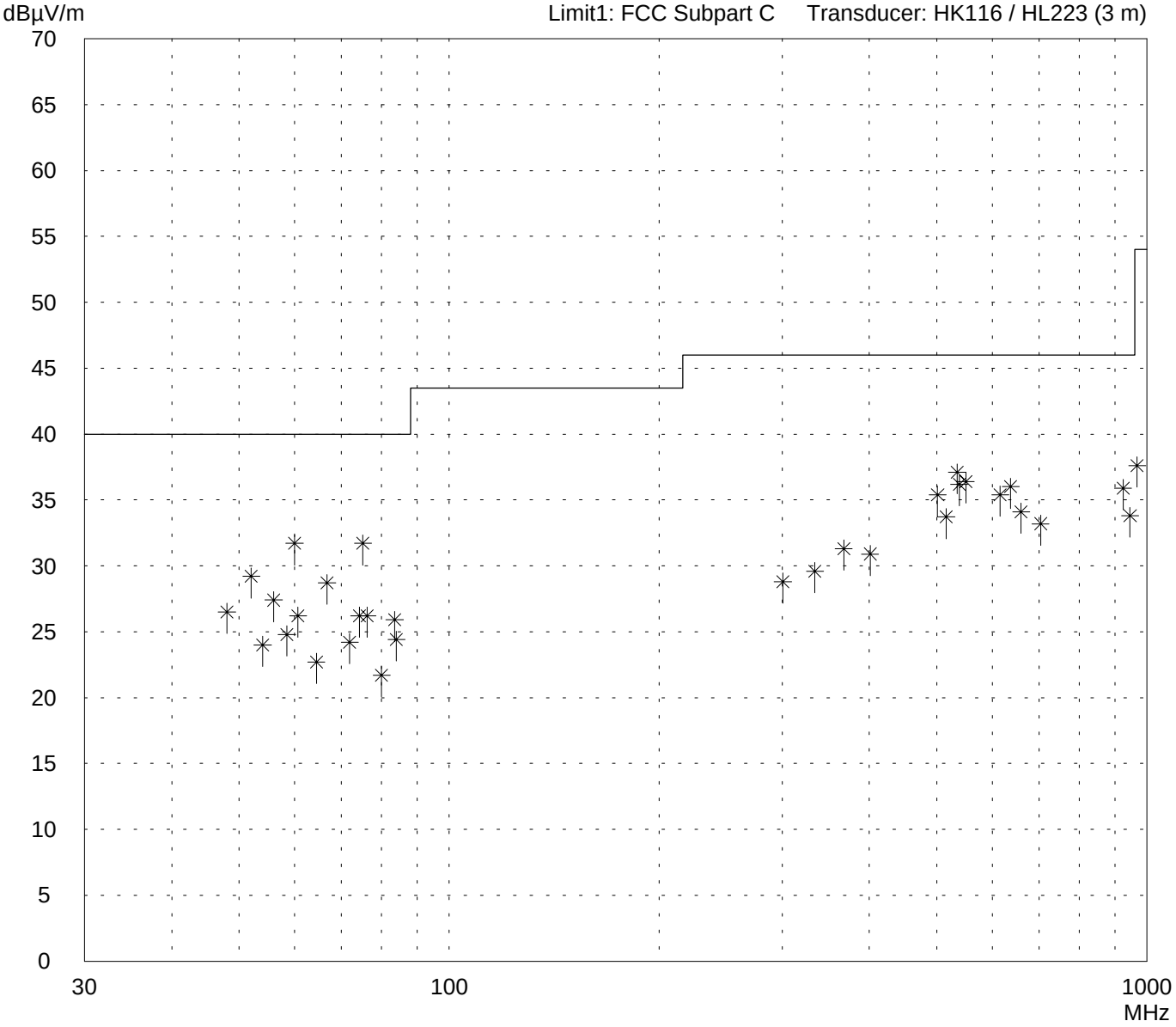
Radiated Emission Test 30 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Open area test-site I	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/19/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: by hand / File name:	- 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: 56305-90204-3

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

Model:
LUC PC24E-H-FC

Serial no.:
90990005

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 04/19/1999

Operator: R. Heller

Test performed: by hand

File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	*Reading dBµV*	*Correction factor dB*	*Value dBµV/m*	*Limit dBµV/m*	*Limit exceeded*
48.0	15.5	11.0	26.5	40.0	
52.0	18.5	10.7	29.2	40.0	
54.0	13.5	10.5	24.0	40.0	
56.0	17.0	10.4	27.4	40.0	
58.5	14.5	10.3	24.8	40.0	
60.0	21.5	10.2	31.7	40.0	
60.7	16.0	10.2	26.2	40.0	
64.5	12.5	10.2	22.7	40.0	
66.8	18.5	10.2	28.7	40.0	
72.0	14.0	10.2	24.2	40.0	
74.3	16.0	10.2	26.2	40.0	
75.2	21.5	10.2	31.7	40.0	
76.3	16.0	10.2	26.2	40.0	
80.0	11.5	10.2	21.7	40.0	
83.5	15.5	10.4	25.9	40.0	
84.0	14.0	10.4	24.4	40.0	
300.7	12.0	16.8	28.8	46.0	
334.1	11.5	18.1	29.6	46.0	
367.5	12.0	19.3	31.3	46.0	
400.9	10.5	20.4	30.9	46.0	
501.2	12.5	22.9	35.4	46.0	
515.5	10.5	23.2	33.7	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	12.5	23.7	36.2	46.0	
550.0	12.5	23.9	36.4	46.0	
616.0	10.0	25.4	35.4	46.0	
638.0	10.0	26.0	36.0	46.0	
660.0	7.5	26.6	34.1	46.0	
704.0	5.5	27.7	33.2	46.0	
924.0	5.0	30.9	35.9	46.0	
946.0	2.5	31.3	33.8	46.0	
968.0	6.0	31.6	37.6	54.0	

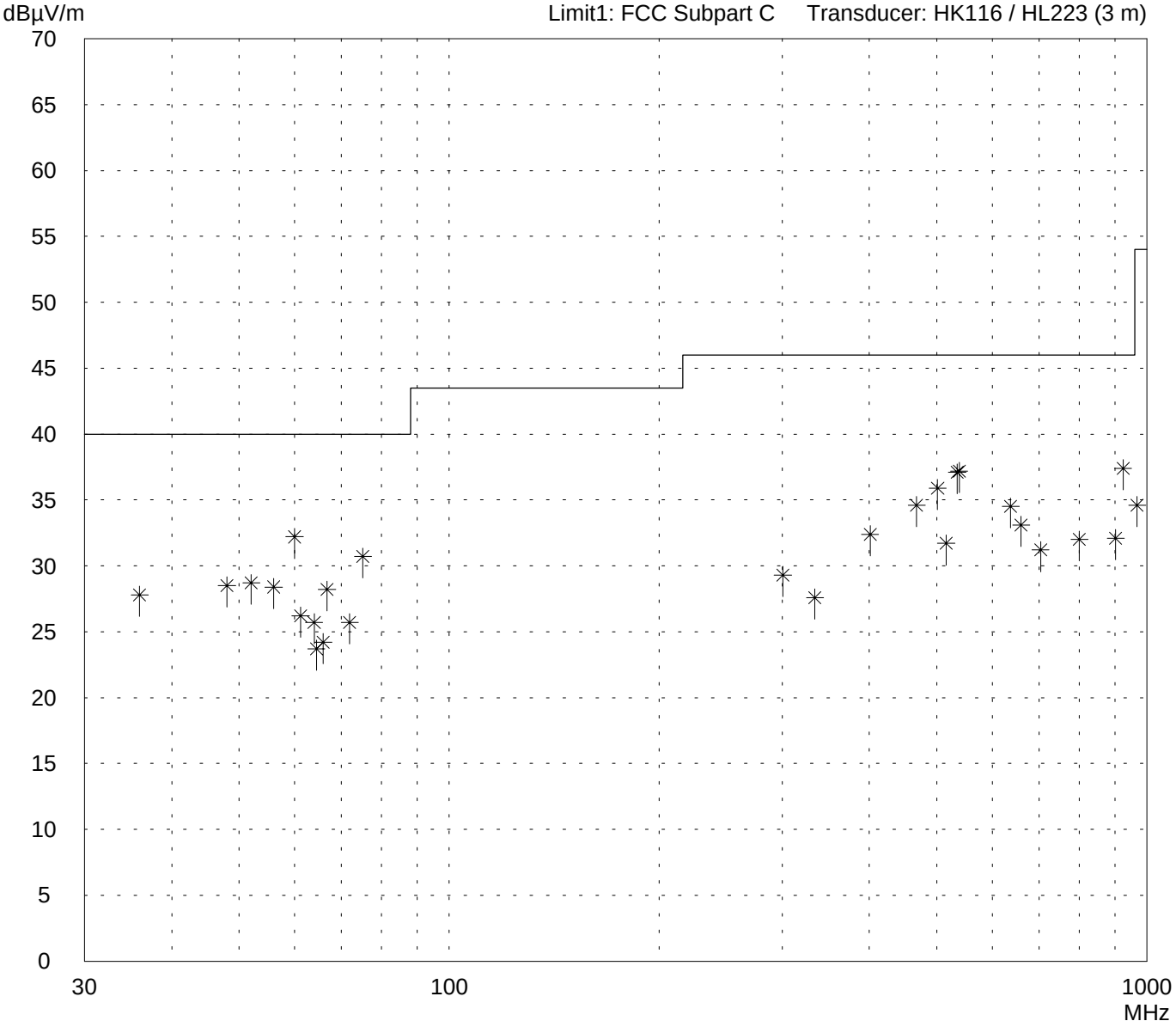
Result:
Limit kept

Project file:
56305-90204-3

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Open area test-site I	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/19/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: by hand / File name:	- 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: 56305-90204-3

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

Model:
LUC PC24E-H-FC

Serial no.:
90990005

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 04/19/1999

Operator: R. Heller

Test performed: by hand

File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	*Reading dBµV*	*Correction factor dB*	*Value dBµV/m*	*Limit dBµV/m*	*Limit exceeded*
36.0	14.5	13.3	27.8	40.0	
48.0	17.5	11.0	28.5	40.0	
52.0	18.0	10.7	28.7	40.0	
56.0	18.0	10.4	28.4	40.0	
60.0	22.0	10.2	32.2	40.0	
61.2	16.0	10.2	26.2	40.0	
64.0	15.5	10.2	25.7	40.0	
64.5	13.5	10.2	23.7	40.0	
66.0	14.0	10.2	24.2	40.0	
66.8	18.0	10.2	28.2	40.0	
72.0	15.5	10.2	25.7	40.0	
75.2	20.5	10.2	30.7	40.0	
300.7	12.5	16.8	29.3	46.0	
334.1	9.5	18.1	27.6	46.0	
400.9	12.0	20.4	32.4	46.0	
467.7	12.5	22.1	34.6	46.0	
501.2	13.0	22.9	35.9	46.0	
515.5	8.5	23.2	31.7	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.5	23.7	37.2	46.0	
638.0	8.5	26.0	34.5	46.0	
660.0	6.5	26.6	33.1	46.0	
704.0	3.5	27.7	31.2	46.0	
800.0	3.5	28.5	32.0	46.0	
902.0	1.5	30.6	32.1	46.0	
924.0	6.5	30.9	37.4	46.0	
968.0	3.0	31.6	34.6	54.0	

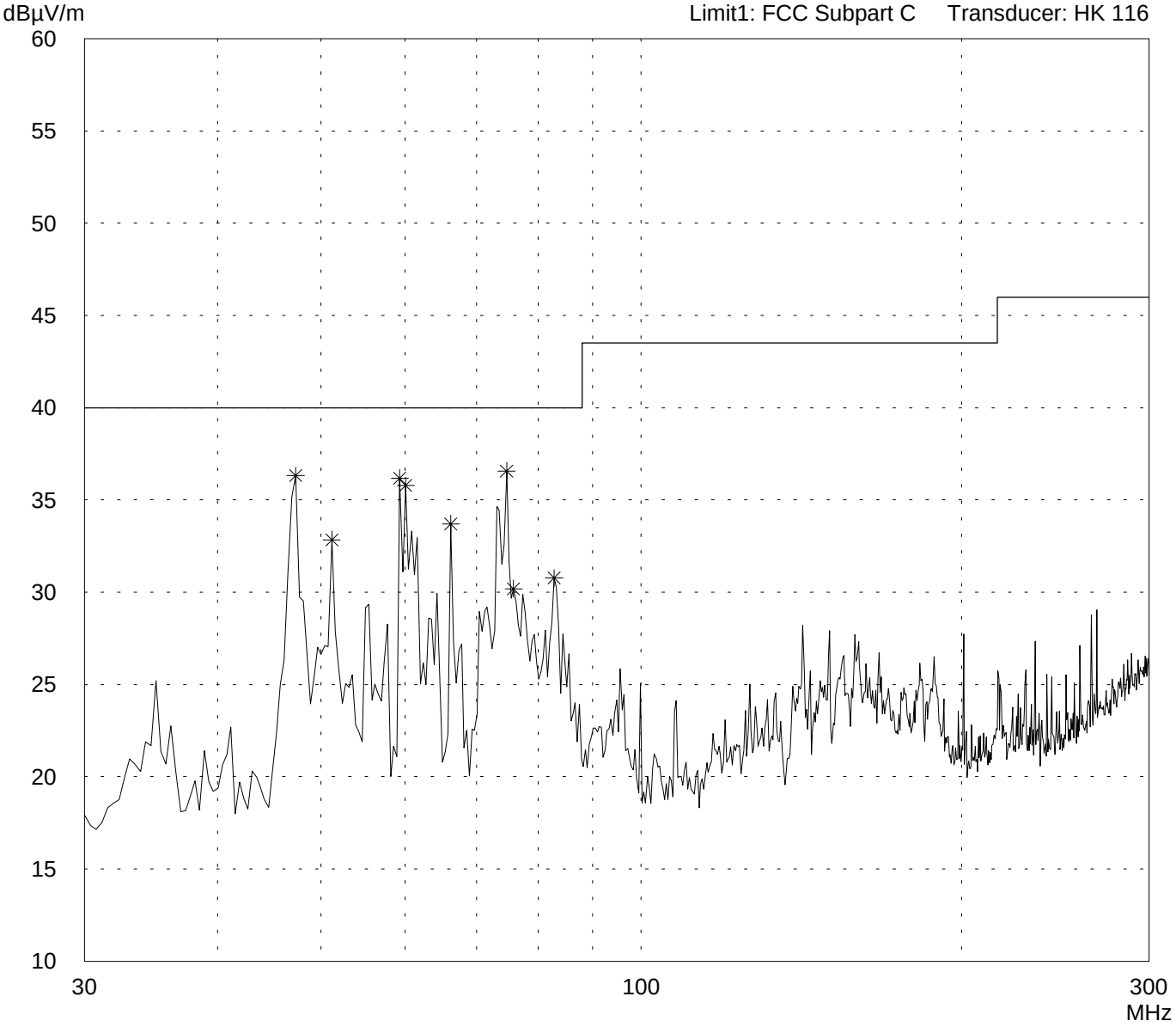
Result:
Limit kept

Project file:
56305-90204-3

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- operating with bit rate 11 Mbps
	- TX mode with f = 2.442 GHz

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

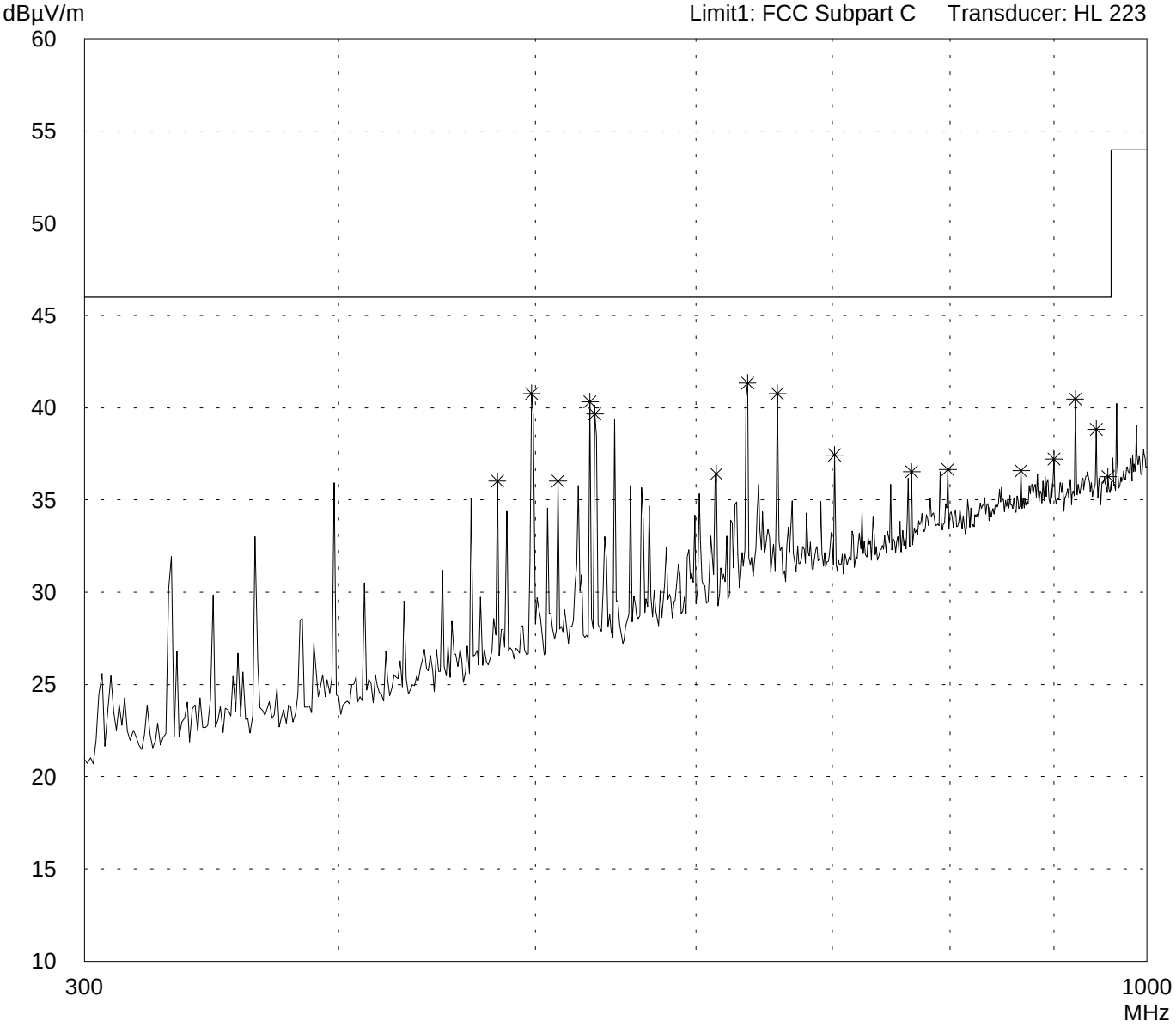


Result: Prescan	Project file: 56305-90204-3

Radiated Emission Test 300 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- 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: 56305-90204-3

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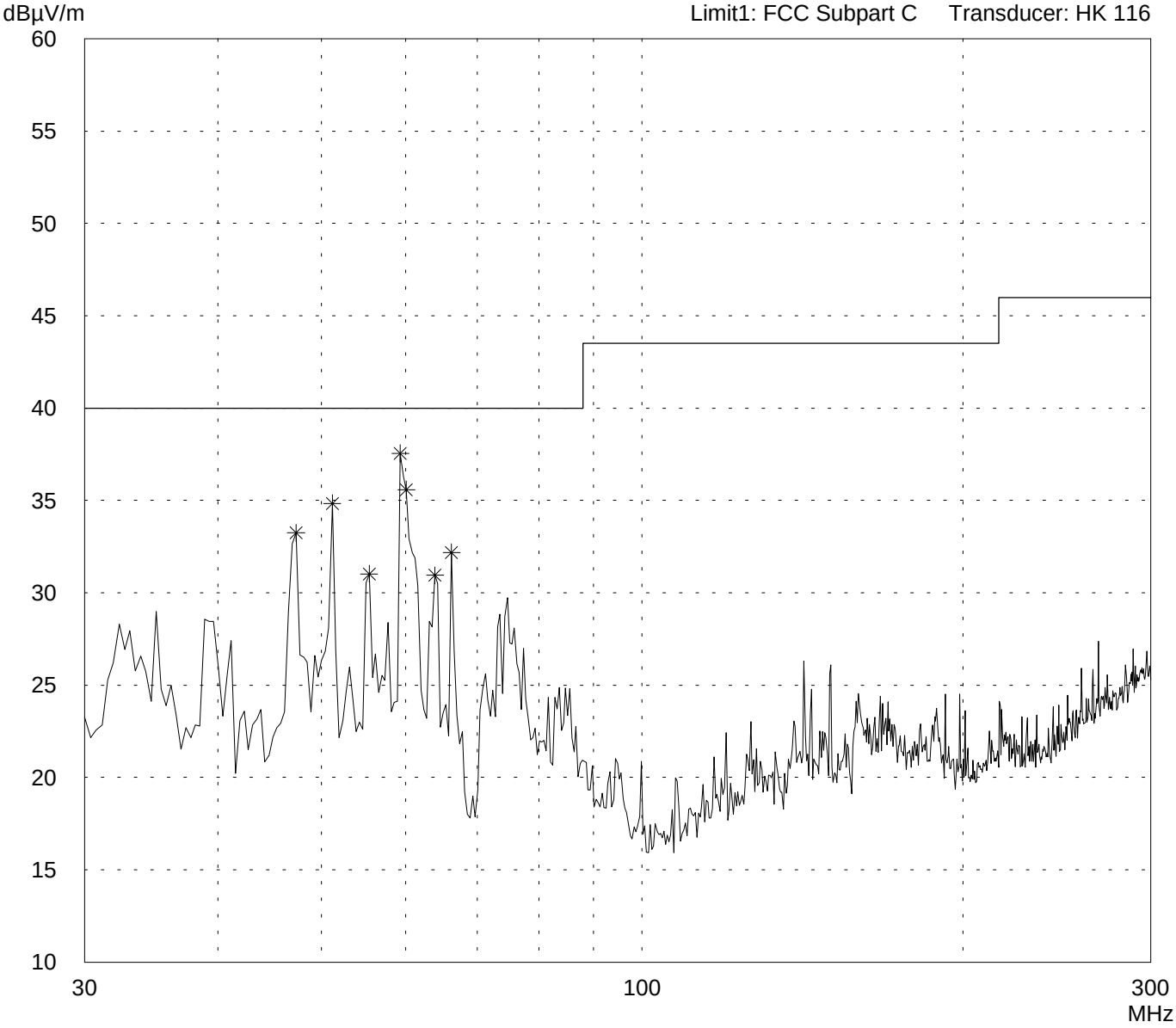
Radiated Emission Test 30 MHz - 300 MHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- 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: 56305-90204-3

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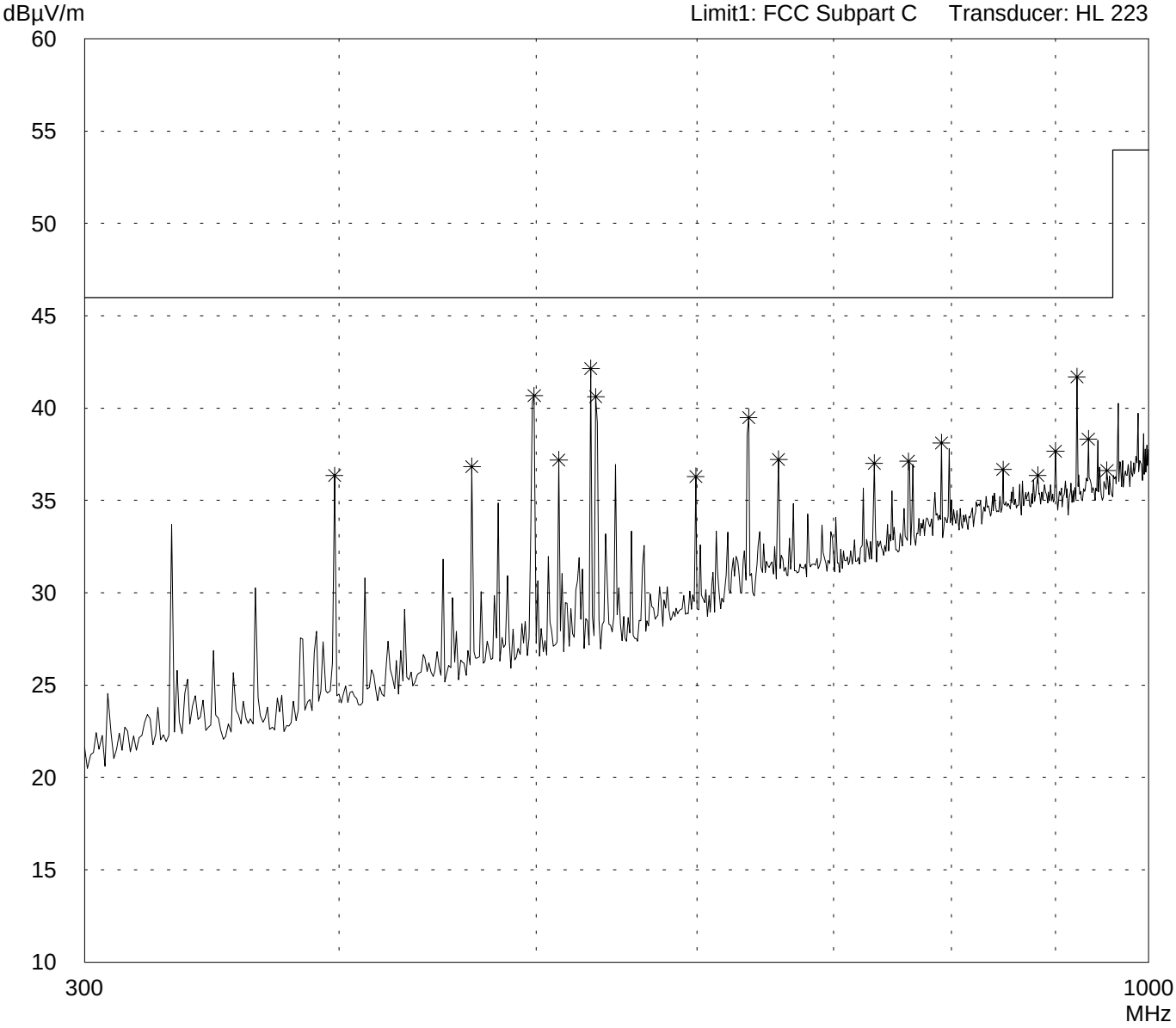
Radiated Emission Test 300 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- operating with bit rate 11 Mbps
	- TX mode with f = 2.442 GHz

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



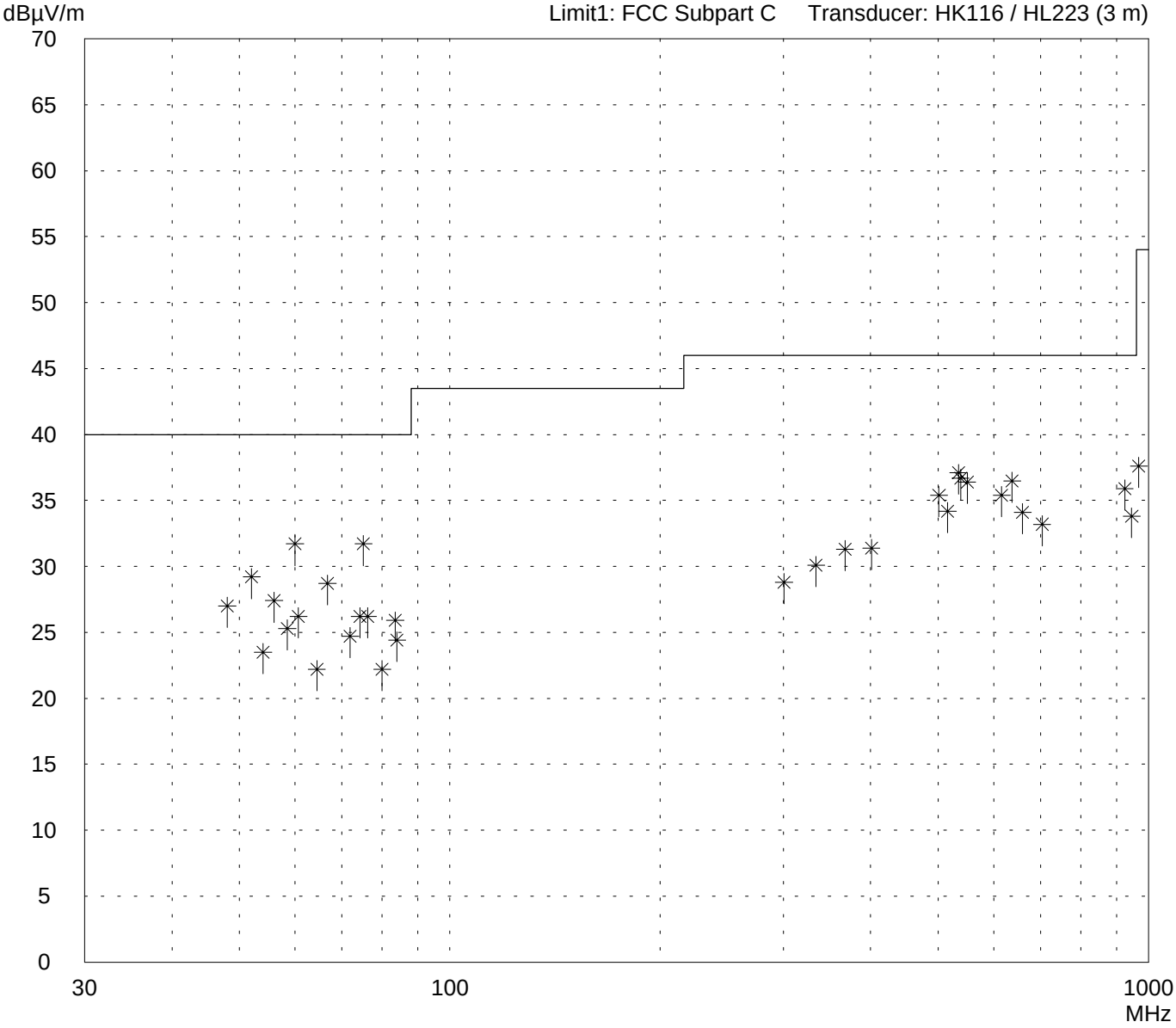
Result: Prescan	Project file: 56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Open area test-site I	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/19/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: by hand / File name:	- 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: 56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

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

Model:
LUC PC24E-H-FC

Serial no.:
90990005

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 04/19/1999

Operator: R. Heller

Test performed: by hand

File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	*Reading dBµV*	*Correction factor dB*	*Value dBµV/m*	*Limit dBµV/m*	*Limit exceeded*
48.0	16.0	11.0	27.0	40.0	
52.0	18.5	10.7	29.2	40.0	
54.0	13.0	10.5	23.5	40.0	
56.0	17.0	10.4	27.4	40.0	
58.5	15.0	10.3	25.3	40.0	
60.0	21.5	10.2	31.7	40.0	
60.7	16.0	10.2	26.2	40.0	
64.5	12.0	10.2	22.2	40.0	
66.8	18.5	10.2	28.7	40.0	
72.0	14.5	10.2	24.7	40.0	
74.3	16.0	10.2	26.2	40.0	
75.2	21.5	10.2	31.7	40.0	
76.3	16.0	10.2	26.2	40.0	
80.0	12.0	10.2	22.2	40.0	
83.5	15.5	10.4	25.9	40.0	
84.0	14.0	10.4	24.4	40.0	
300.7	12.0	16.8	28.8	46.0	
334.1	12.0	18.1	30.1	46.0	
367.5	12.0	19.3	31.3	46.0	
400.9	11.0	20.4	31.4	46.0	
501.2	12.5	22.9	35.4	46.0	
515.5	11.0	23.2	34.2	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.0	23.7	36.7	46.0	
550.0	12.5	23.9	36.4	46.0	
616.0	10.0	25.4	35.4	46.0	
638.0	10.5	26.0	36.5	46.0	
660.0	7.5	26.6	34.1	46.0	
704.0	5.5	27.7	33.2	46.0	
924.0	5.0	30.9	35.9	46.0	
946.0	2.5	31.3	33.8	46.0	
968.0	6.0	31.6	37.6	54.0	

Result:
Limit kept

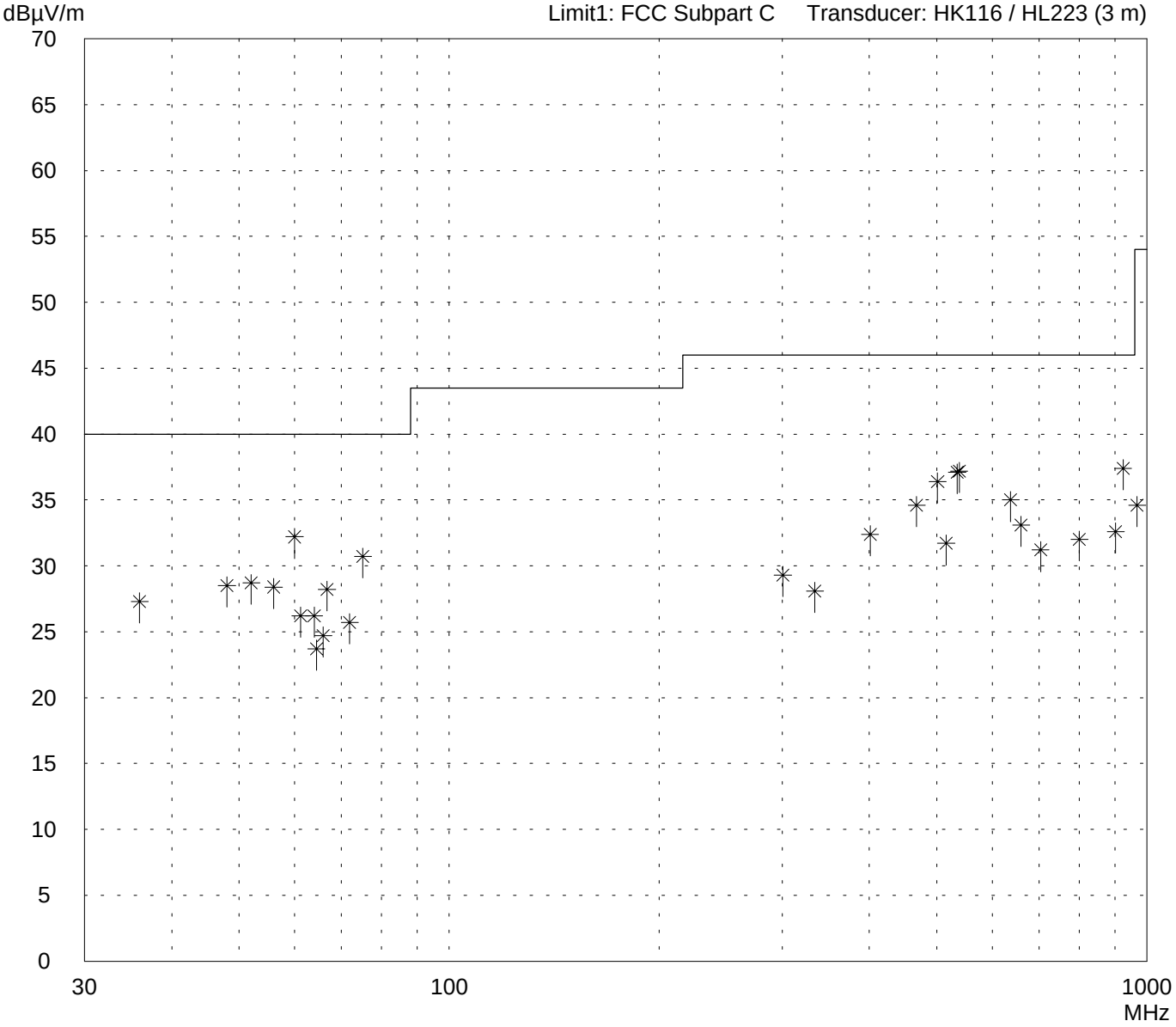
Project file:
56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Open area test-site I	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/19/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: by hand / File name:	- 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: 56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

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

Model:
LUC PC24E-H-FC

Serial no.:
90990005

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 04/19/1999

Operator: R. Heller

Test performed: by hand

File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	*Reading dBµV*	*Correction factor dB*	*Value dBµV/m*	*Limit dBµV/m*	*Limit exceeded*
36.0	14.0	13.3	27.3	40.0	
48.0	17.5	11.0	28.5	40.0	
52.0	18.0	10.7	28.7	40.0	
56.0	18.0	10.4	28.4	40.0	
60.0	22.0	10.2	32.2	40.0	
61.2	16.0	10.2	26.2	40.0	
64.0	16.0	10.2	26.2	40.0	
64.5	13.5	10.2	23.7	40.0	
66.0	14.5	10.2	24.7	40.0	
66.8	18.0	10.2	28.2	40.0	
72.0	15.5	10.2	25.7	40.0	
75.2	20.5	10.2	30.7	40.0	
300.7	12.5	16.8	29.3	46.0	
334.1	10.0	18.1	28.1	46.0	
400.9	12.0	20.4	32.4	46.0	
467.7	12.5	22.1	34.6	46.0	
501.2	13.5	22.9	36.4	46.0	
515.5	8.5	23.2	31.7	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.5	23.7	37.2	46.0	
638.0	9.0	26.0	35.0	46.0	
660.0	6.5	26.6	33.1	46.0	
704.0	3.5	27.7	31.2	46.0	
800.0	3.5	28.5	32.0	46.0	
902.0	2.0	30.6	32.6	46.0	
924.0	6.5	30.9	37.4	46.0	
968.0	3.0	31.6	34.6	54.0	

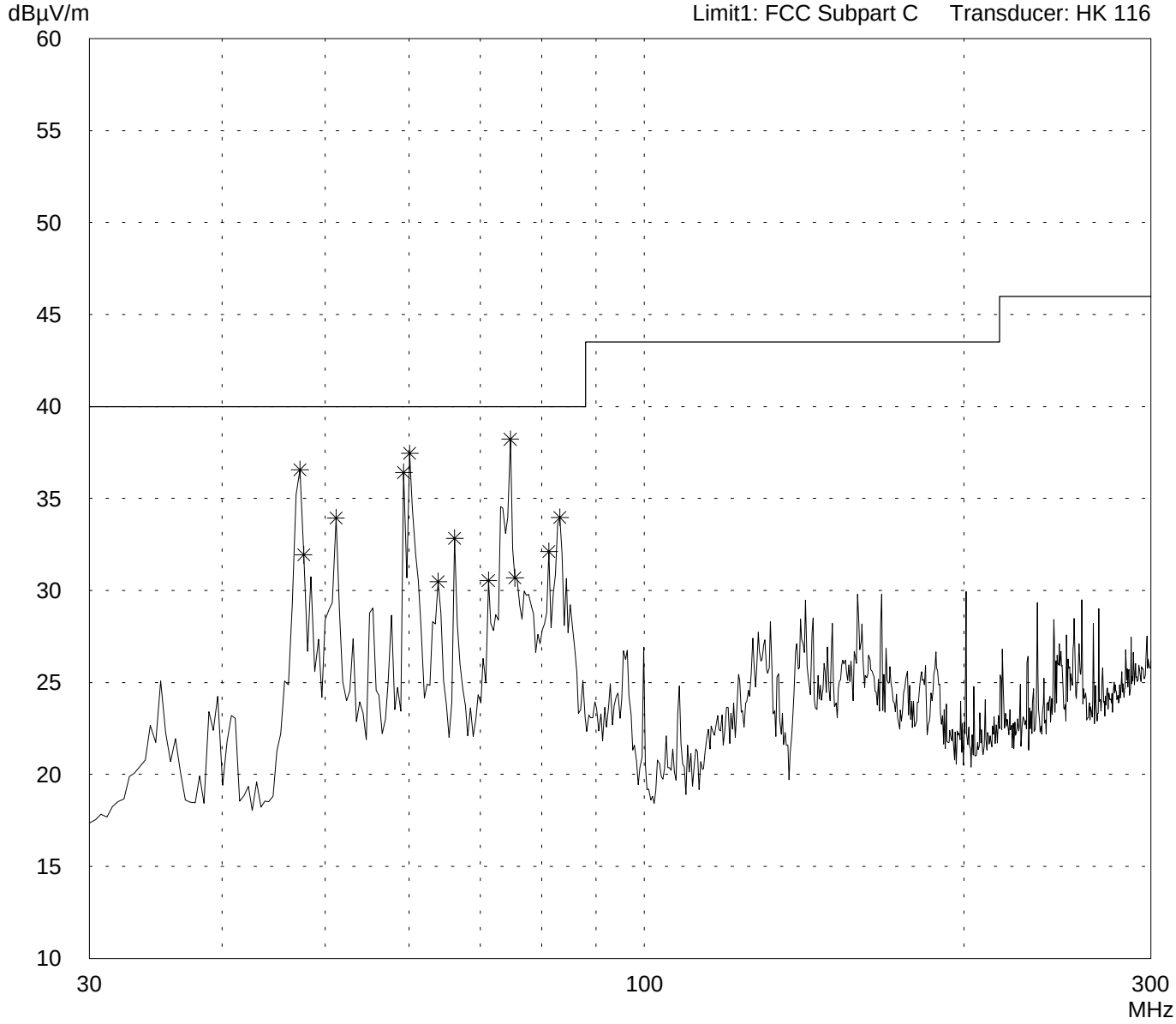
Result:
Limit kept

Project file:
56305-90204-3

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- 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: 56305-90204-3

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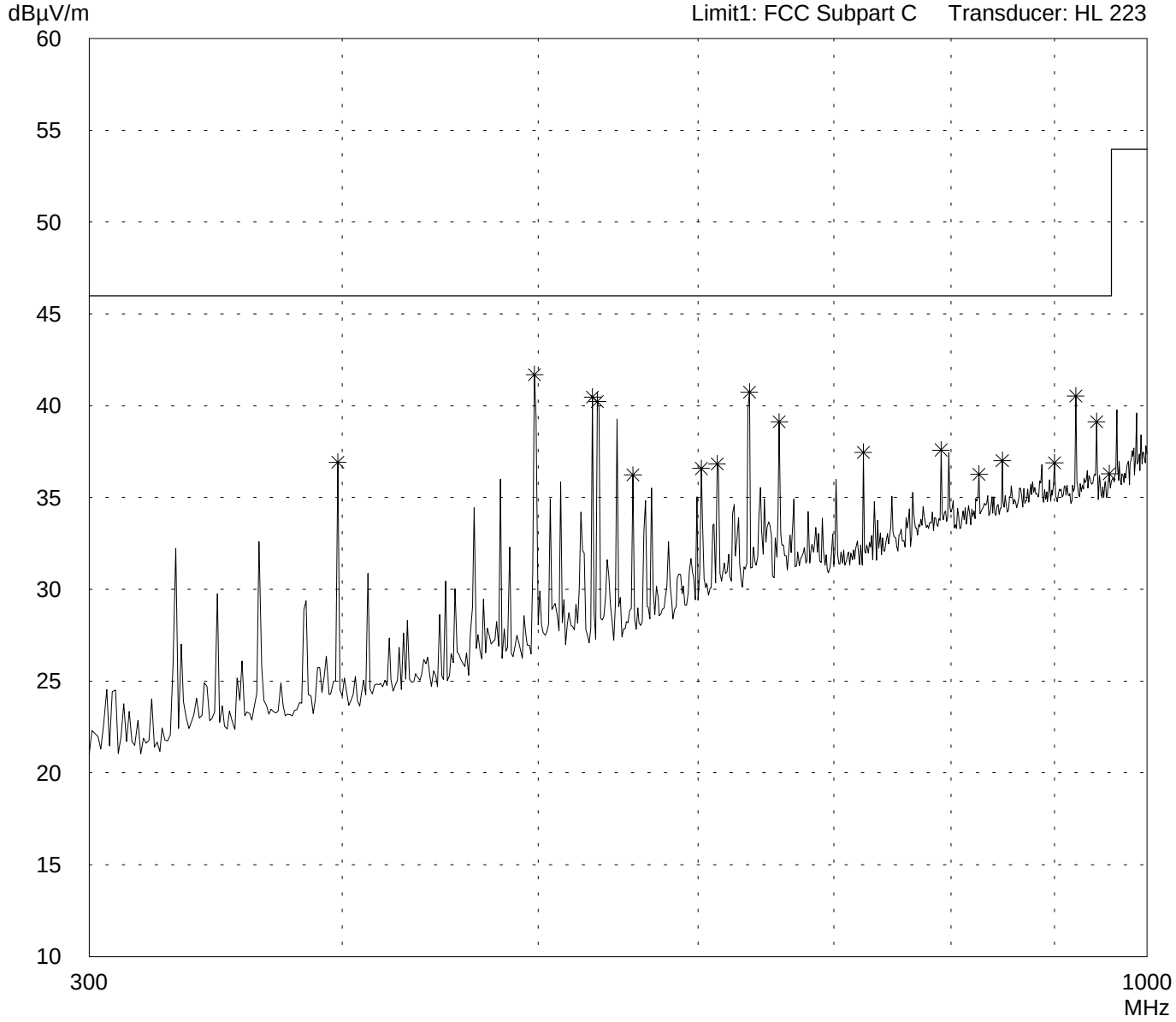
Radiated Emission Test 300 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- 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: 56305-90204-3

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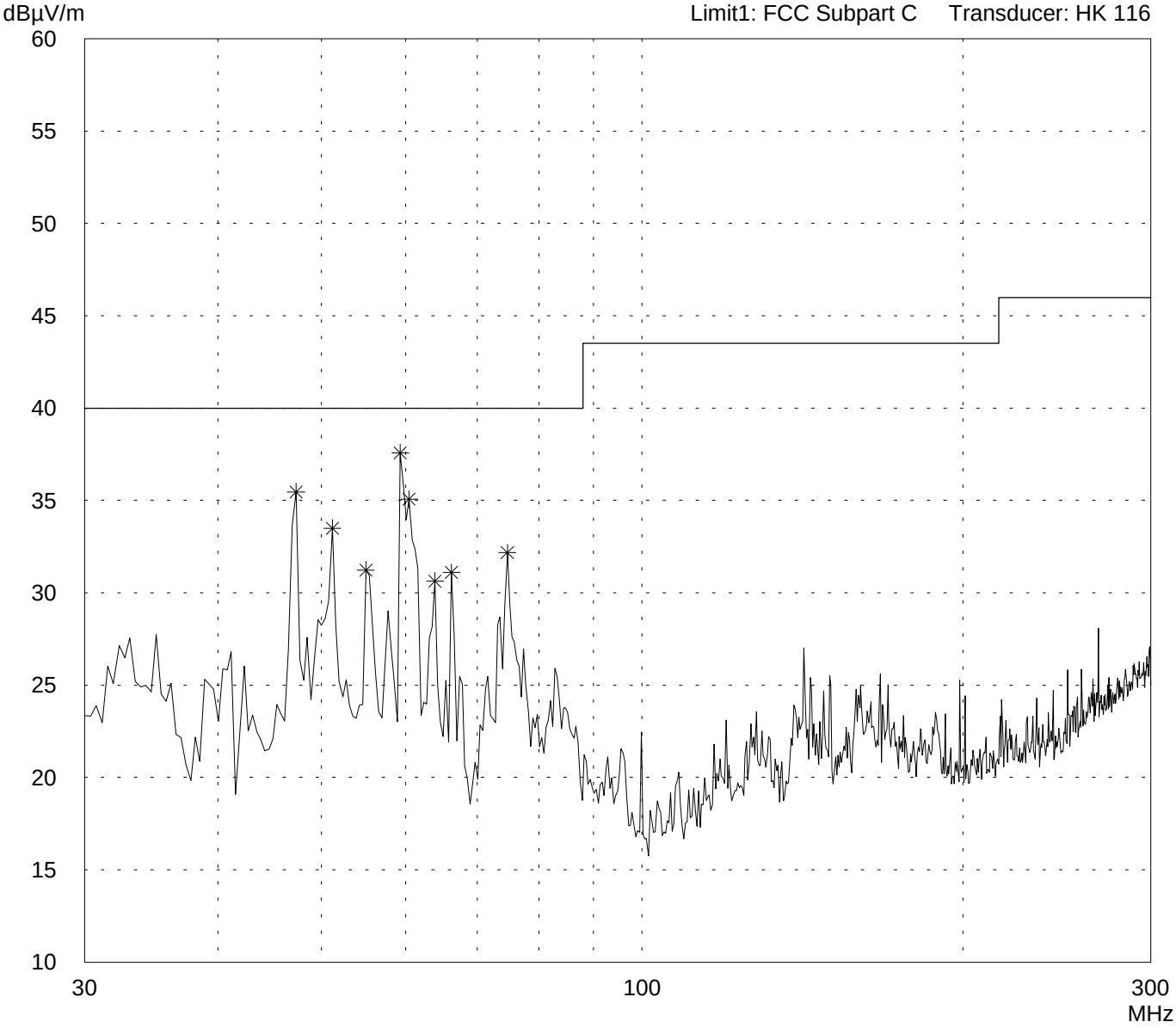
Radiated Emission Test 30 MHz - 300 MHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- operating with bit rate 11 Mbps
	- TX mode with f = 2.462 GHz

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



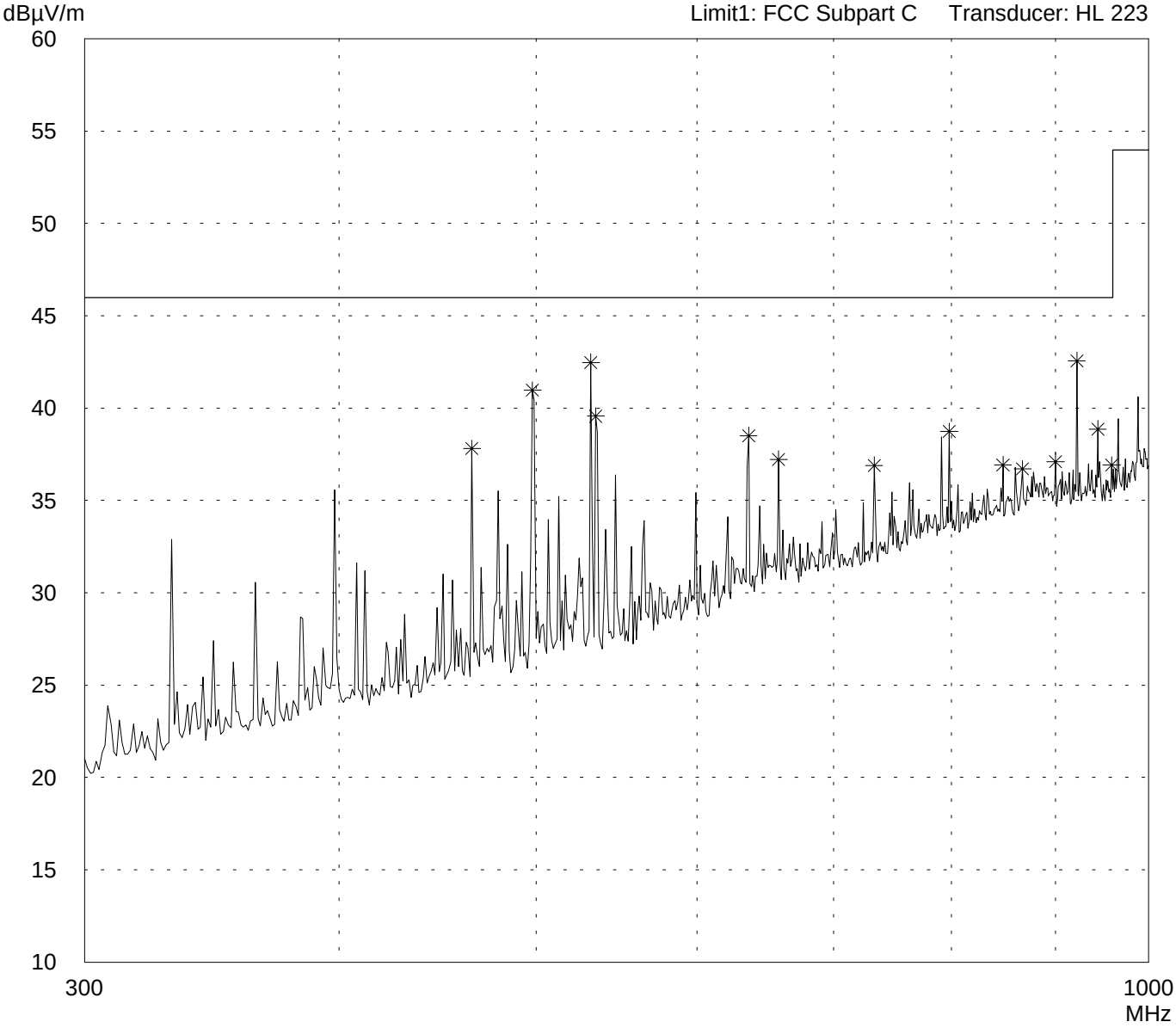
Result: Prescan	Project file: 56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

Radiated Emission Test 300 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- operating with bit rate 11 Mbps
	- TX mode with f = 2.462 GHz

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



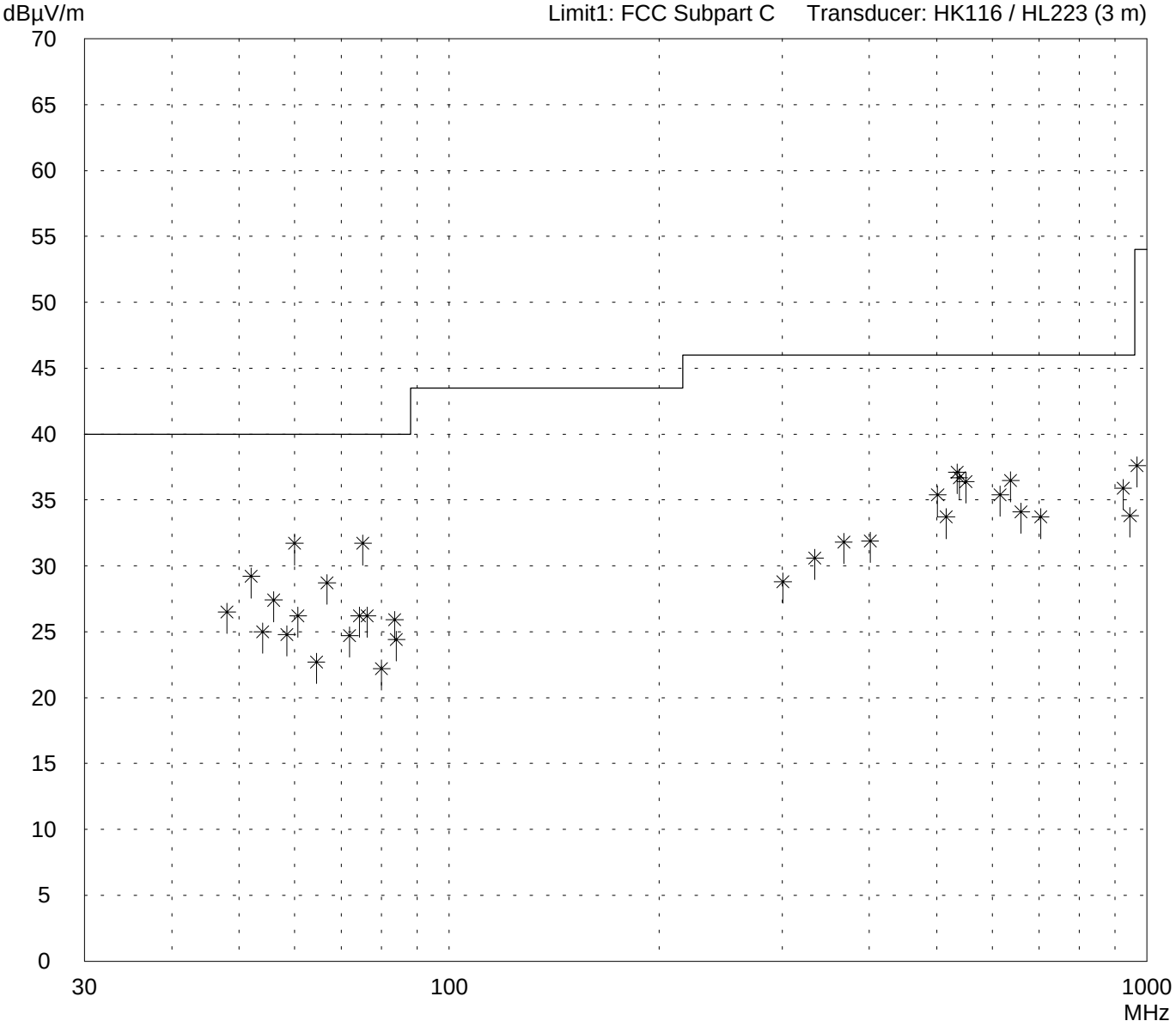
Result: Prescan	Project file: 56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Open area test-site I	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/19/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: by hand / File name:	- 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: 56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

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

Model:
LUC PC24E-H-FC

Serial no.:
90990005

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 04/19/1999

Operator: R. Heller

Test performed: by hand

File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	*Reading dBµV*	*Correction factor dB*	*Value dBµV/m*	*Limit dBµV/m*	*Limit exceeded*
48.0	15.5	11.0	26.5	40.0	
52.0	18.5	10.7	29.2	40.0	
54.0	14.5	10.5	25.0	40.0	
56.0	17.0	10.4	27.4	40.0	
58.5	14.5	10.3	24.8	40.0	
60.0	21.5	10.2	31.7	40.0	
60.7	16.0	10.2	26.2	40.0	
64.5	12.5	10.2	22.7	40.0	
66.8	18.5	10.2	28.7	40.0	
72.0	14.5	10.2	24.7	40.0	
74.3	16.0	10.2	26.2	40.0	
75.2	21.5	10.2	31.7	40.0	
76.3	16.0	10.2	26.2	40.0	
80.0	12.0	10.2	22.2	40.0	
83.5	15.5	10.4	25.9	40.0	
84.0	14.0	10.4	24.4	40.0	
300.7	12.0	16.8	28.8	46.0	
334.1	12.5	18.1	30.6	46.0	
367.5	12.5	19.3	31.8	46.0	
400.9	11.5	20.4	31.9	46.0	
501.2	12.5	22.9	35.4	46.0	
515.5	10.5	23.2	33.7	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.0	23.7	36.7	46.0	
550.0	12.5	23.9	36.4	46.0	
616.0	10.0	25.4	35.4	46.0	
638.0	10.5	26.0	36.5	46.0	
660.0	7.5	26.6	34.1	46.0	
704.0	6.0	27.7	33.7	46.0	
924.0	5.0	30.9	35.9	46.0	
946.0	2.5	31.3	33.8	46.0	
968.0	6.0	31.6	37.6	54.0	

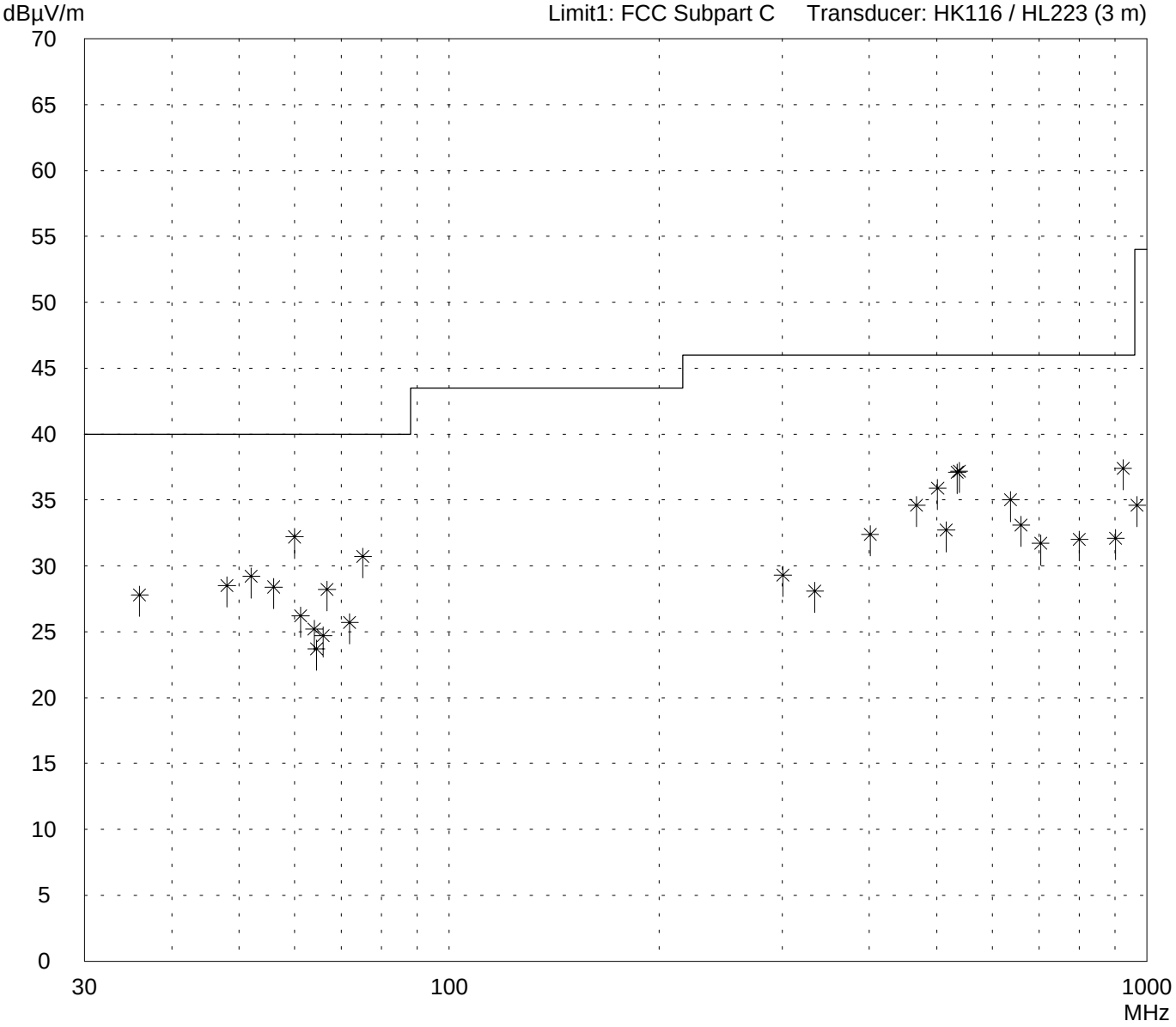
Result:
Limit kept

Project file:
56305-90204-3

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Open area test-site I	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/19/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: by hand / File name:	- 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: 56305-90204-3

Senton GmbH / EMI/EMC Laboratories / Aeussere Fruehlingsstrasse 45 / D-94315 Straubing / Tel. +49 9421 55220

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

Model:
LUC PC24E-H-FC

Serial no.:
90990005

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 04/19/1999

Operator: R. Heller

Test performed: by hand

File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	*Reading dBµV*	*Correction factor dB*	*Value dBµV/m*	*Limit dBµV/m*	*Limit exceeded*
36.0	14.5	13.3	27.8	40.0	
48.0	17.5	11.0	28.5	40.0	
52.0	18.5	10.7	29.2	40.0	
56.0	18.0	10.4	28.4	40.0	
60.0	22.0	10.2	32.2	40.0	
61.2	16.0	10.2	26.2	40.0	
64.0	15.0	10.2	25.2	40.0	
64.5	13.5	10.2	23.7	40.0	
66.0	14.5	10.2	24.7	40.0	
66.8	18.0	10.2	28.2	40.0	
72.0	15.5	10.2	25.7	40.0	
75.2	20.5	10.2	30.7	40.0	
300.7	12.5	16.8	29.3	46.0	
334.1	10.0	18.1	28.1	46.0	
400.9	12.0	20.4	32.4	46.0	
467.7	12.5	22.1	34.6	46.0	
501.2	13.0	22.9	35.9	46.0	
515.5	9.5	23.2	32.7	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.5	23.7	37.2	46.0	
638.0	9.0	26.0	35.0	46.0	
660.0	6.5	26.6	33.1	46.0	
704.0	4.0	27.7	31.7	46.0	
800.0	3.5	28.5	32.0	46.0	
902.0	1.5	30.6	32.1	46.0	
924.0	6.5	30.9	37.4	46.0	
968.0	3.0	31.6	34.6	54.0	

Result:
Limit kept

Project file:
56305-90204-3

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 90990005
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 04/26/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer-reading [dBµV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBµV/m]	Limit [dBµV/m]
2.3900	vertical	60.3		0.6	20.7	60.3	74
2.3943	vertical	73.8		0.6	20.7	73.8	NRB
2.3980	vertical	79.7		0.6	20.7	79.7	NRB
2.4000	vertical	76.9		0.6	20.7	76.9	NRB
2.4117	vertical	111.1		0.6	20.7	111.1	OB
2.4310	vertical	73.8		0.6	20.7	73.8	OB
4.8303	vertical	40.7	-93.9		27.3	40.4	74
7.2412	vertical	39.3	-96.4		29.9	40.5	NRB
9.6467	horizontal	42.5	-97.0		33.4	43.4	NRB

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

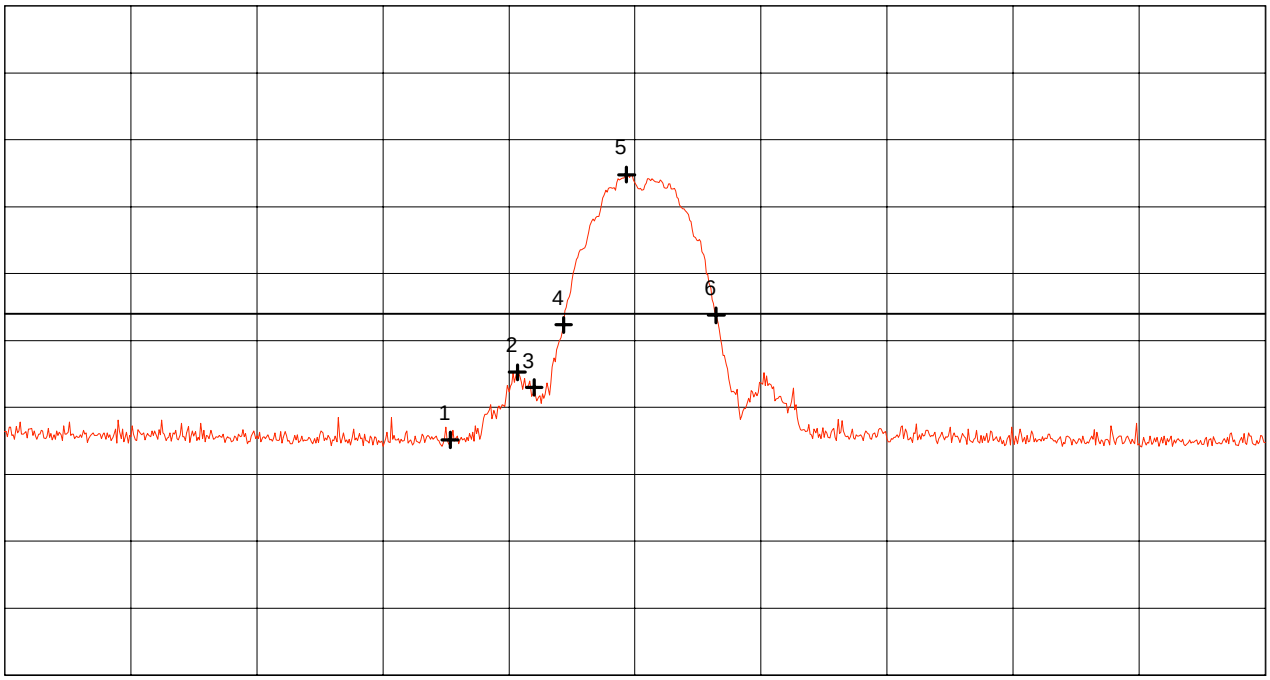
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.412 GHz Test distance: 3 meters Channel A (red) = horizontal polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 120 dBµV/m
10 dB dB/Div.

ATT 10 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 ****

Nr.1	2.390000 GHz	55.13 dBµV/m
Nr.2	2.398000 GHz	65.26 dBµV/m
Nr.3	2.400000 GHz	62.97 dBµV/m
Nr.4	2.403500 GHz	72.34 dBµV/m
Nr.5	2.411000 GHz	94.79 dBµV/m
Nr.6	2.421667 GHz	73.77 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

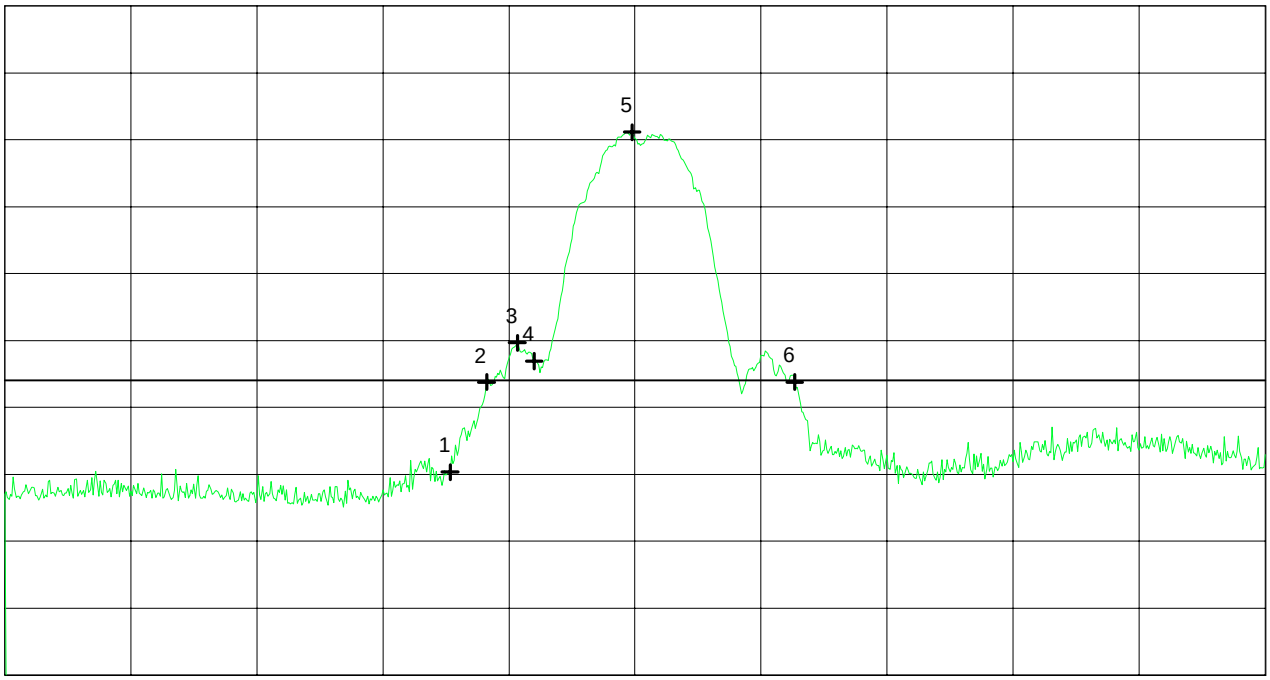
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.412 GHz Test distance: 3 meters Channel B (green) = vertical polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 130 dBµV/m
10 dB dB/Div.

ATT 10 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 ****

Nr.1	2.390000 GHz	60.33 dBµV/m
Nr.2	2.394333 GHz	73.77 dBµV/m
Nr.3	2.398000 GHz	79.66 dBµV/m
Nr.4	2.400000 GHz	76.91 dBµV/m
Nr.5	2.411667 GHz	111.12 dBµV/m
Nr.6	2.431000 GHz	73.79 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 90990005
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 04/26/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.412 GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer-reading [dBµV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBµV/m]	Limit [dBµV/m]
2.3862	vertical	52.6		0.6	20.7	52.6	54
2.3876	vertical	52.3		0.6	20.7	52.3	54
2.3900	vertical	51.8		0.6	20.7	51.8	54
2.3902	vertical	54.0		0.6	20.7	54.0	NRB
2.3985	vertical	76.4		0.6	20.7	76.4	NRB
2.4000	vertical	71.8		0.6	20.7	71.8	NRB
2.4113	vertical	108.1		0.6	20.7	108.1	OB
2.4388	vertical	53.4		0.6	20.7	53.4	OB

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 108.1 dBµV/m.

Result: The limits are kept

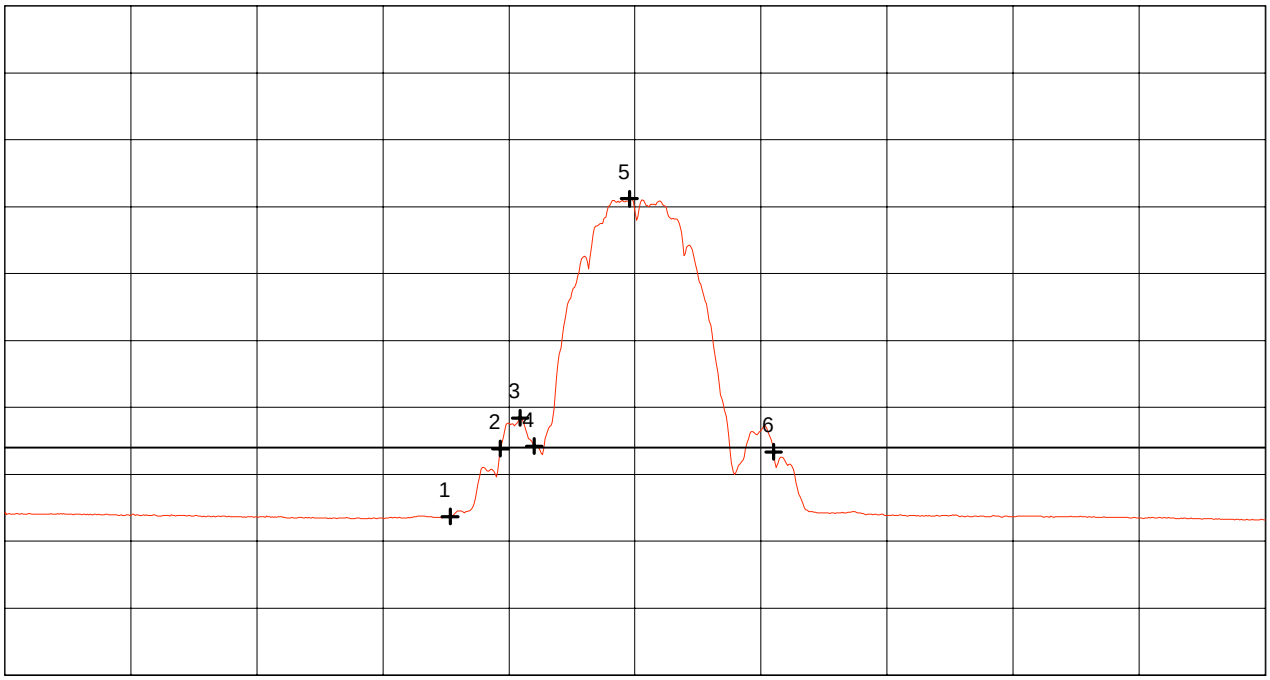
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.412 GHz Test distance: 3 meters Channel A (red) = horizontal polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 120 dBµV/m
10 dB dB/Div.

ATT 10 dB

Ref. Offset 21.3 dB



Start 2.337 GHz
RBW 1 MHz

VBW 100 Hz

Stop 2.487 GHz
SWP 4.60 s

**** Multi Marker ****

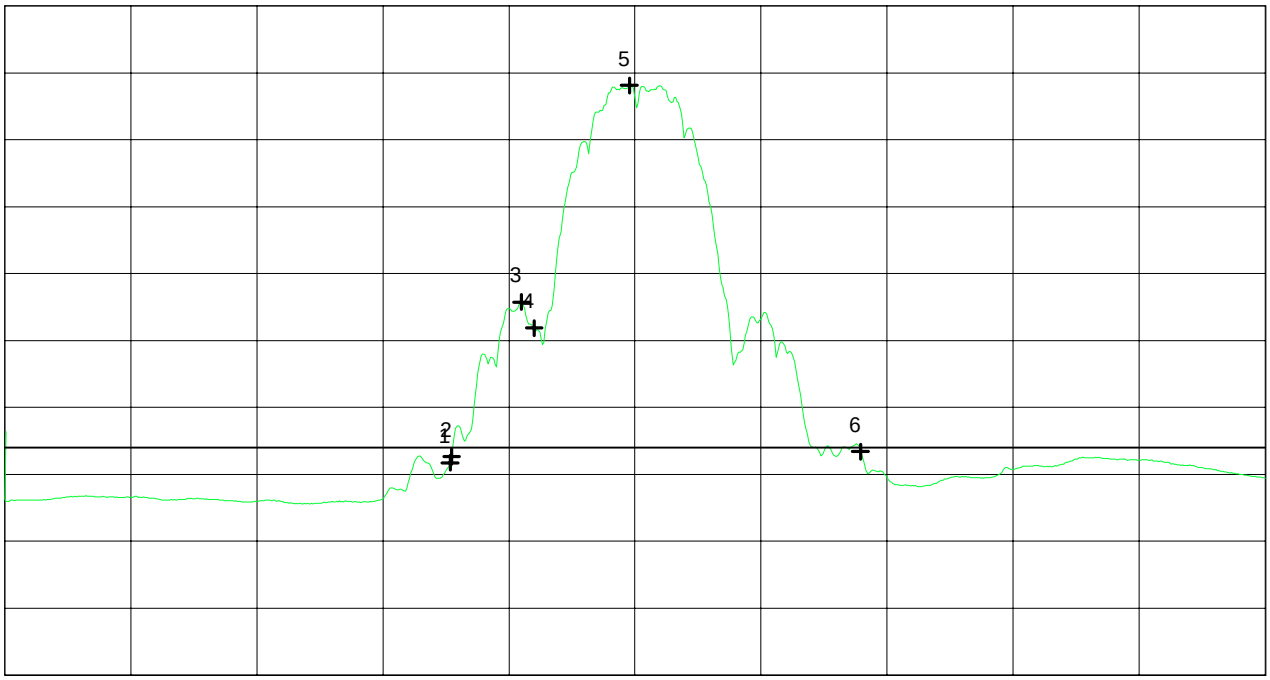
Nr.1	2.390000 GHz	43.67 dBµV/m
Nr.2	2.396000 GHz	53.83 dBµV/m
Nr.3	2.398333 GHz	58.43 dBµV/m
Nr.4	2.400000 GHz	54.19 dBµV/m
Nr.5	2.411333 GHz	91.19 dBµV/m
Nr.6	2.428500 GHz	53.35 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

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

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.412 GHz Test distance: 3 meters Channel B (green) = vertical polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

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



Start 2.337 GHz Stop 2.487 GHz
RBW 1 MHz VBW 100 Hz SWP 4.60 s

**** Multi Marker ****

Nr.1	2.390000 GHz	51.72 dBµV/m
Nr.2	2.390167 GHz	52.64 dBµV/m
Nr.3	2.398500 GHz	75.75 dBµV/m
Nr.4	2.400000 GHz	71.84 dBµV/m
Nr.5	2.411333 GHz	108.10 dBµV/m
Nr.6	2.438833 GHz	53.37 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

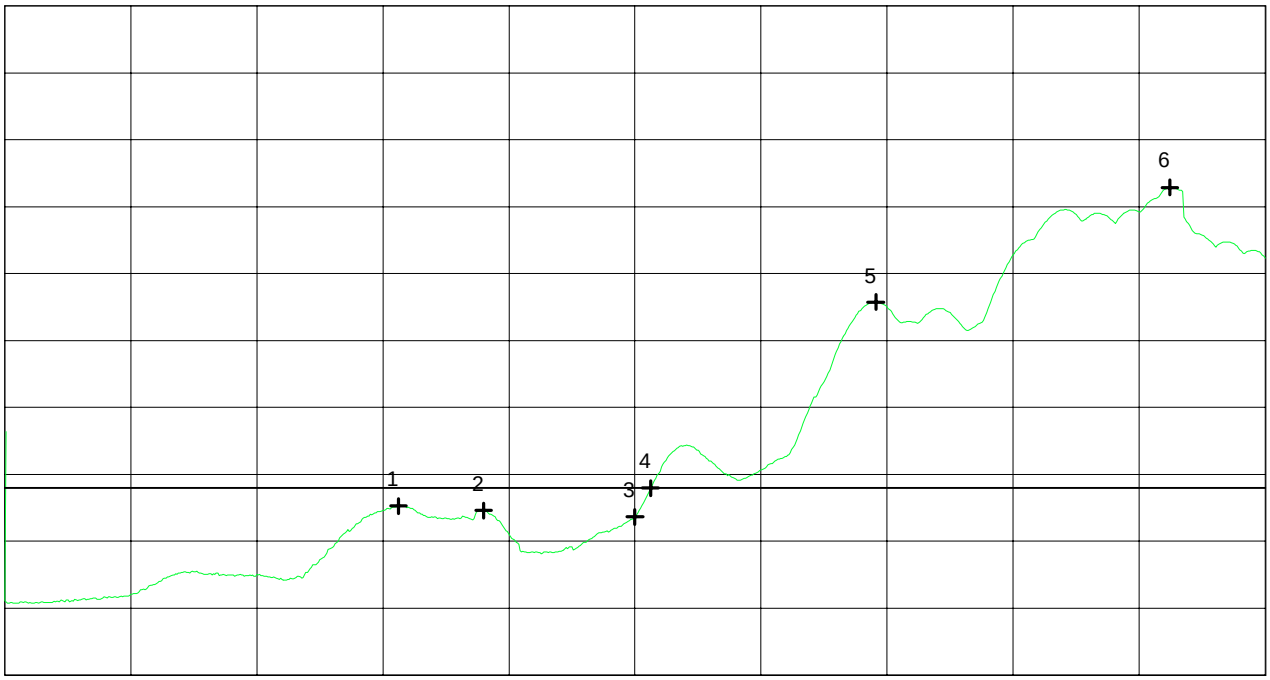
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.412 GHz Test distance: 3 meters Channel B (green) = vertical polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 90 dBµV/m
5 dB dB/Div.

ATT 10 dB

Ref. Offset 21.3 dB



Start 2.380 GHz
RBW 1 MHz

VBW 100 Hz

Stop 2.400 GHz
SWP 1.50 s

**** Multi Marker ****

Nr.1	2.386244 GHz	52.62 dBµV/m
Nr.2	2.387600 GHz	52.29 dBµV/m
Nr.3	2.390000 GHz	51.81 dBµV/m
Nr.4	2.390244 GHz	53.97 dBµV/m
Nr.5	2.393822 GHz	67.86 dBµV/m
Nr.6	2.398489 GHz	76.44 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 90990005
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 04/26/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer-reading [dBµV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBµV/m]	Limit [dBµV/m]
2.4273	vertical	73.9		0.6	20.7	73.9	OB
2.4442	vertical	111.4		0.6	20.7	111.4	OB
2.4538	vertical	73.6		0.6	20.7	73.6	OB
4.8894	vertical	40.5	-93.9		27.3	40.4	74
7.3331	horizontal	40.4	-96.3		29.9	40.6	74
9.7680	horizontal	43.0	-97.0		33.4	43.4	NRB

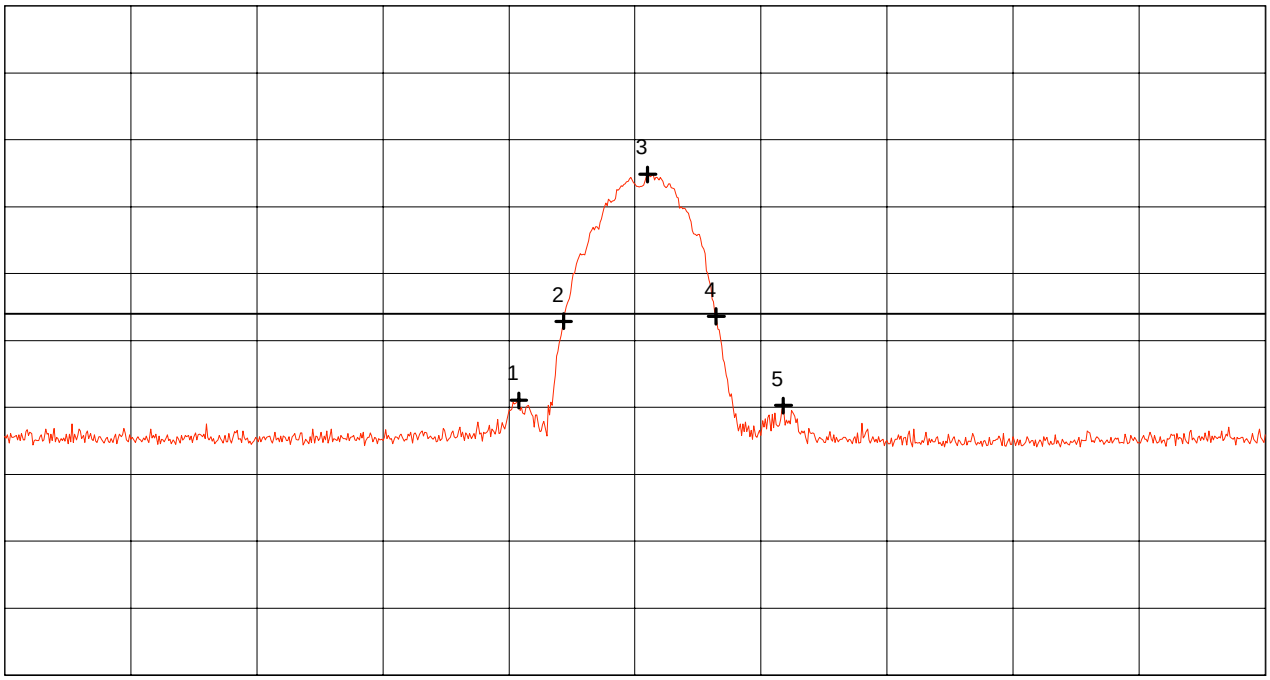
Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 111.4 dBµV/m.

Result: The limits are kept

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

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.442 GHz Test distance: 3 meters Channel A (red) = horizontal polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

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



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

**** Multi Marker ****

Nr.1	2.428167 GHz	61.04 dBµV/m
Nr.2	2.433500 GHz	72.85 dBµV/m
Nr.3	2.443500 GHz	94.82 dBµV/m
Nr.4	2.451667 GHz	73.61 dBµV/m
Nr.5	2.459667 GHz	60.26 dBµV/m
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

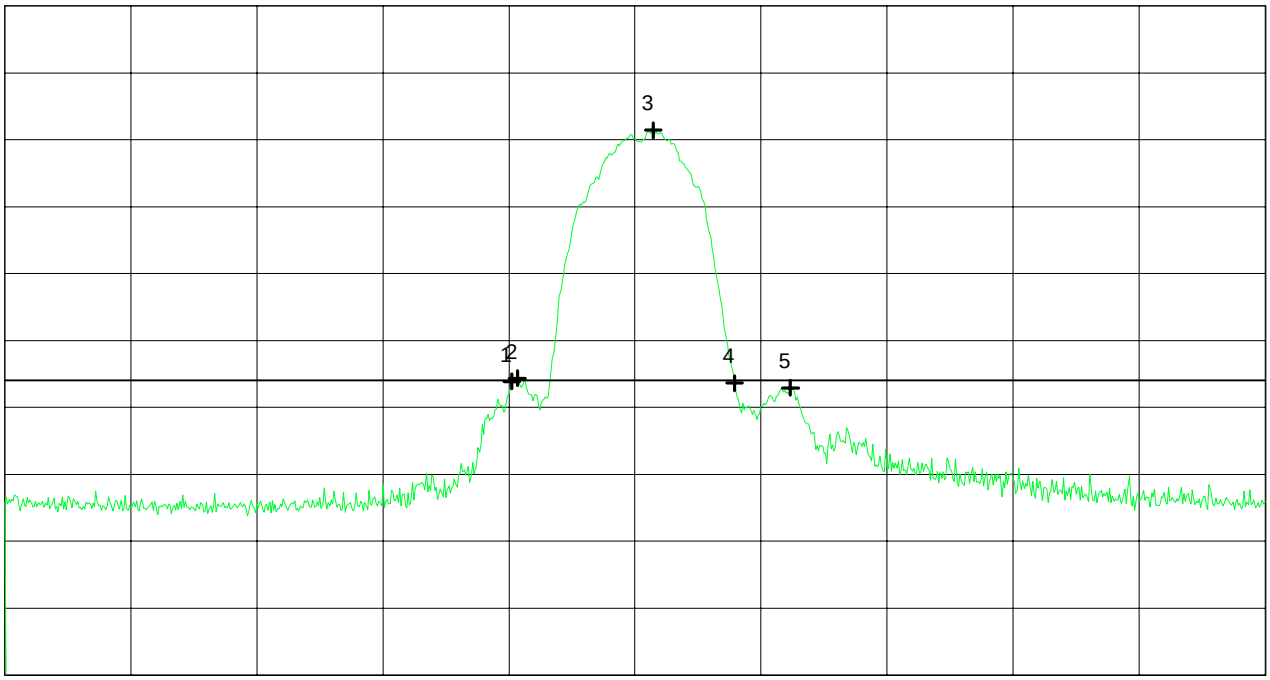
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.442 GHz Test distance: 3 meters Channel B (green) = vertical polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 130 dBµV/m
10 dB dB/Div.

ATT 10 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 ****

Nr.1	2.427333 GHz	73.87 dBµV/m
Nr.2	2.428000 GHz	74.35 dBµV/m
Nr.3	2.444167 GHz	111.42 dBµV/m
Nr.4	2.453833 GHz	73.64 dBµV/m
Nr.5	2.460500 GHz	72.90 dBµV/m
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 90990005
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 04/26/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.442 GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer-reading [dBµV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBµV/m]	Limit [dBµV/m]
2.4228	vertical	53.2		0.6	20.7	53.2	OB
2.4428	vertical	108.6		0.6	20.7	108.6	OB
2.4670	vertical	54.0		0.6	20.7	54.0	OB

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 108.6 dBµV/m.

Result: The limits are kept

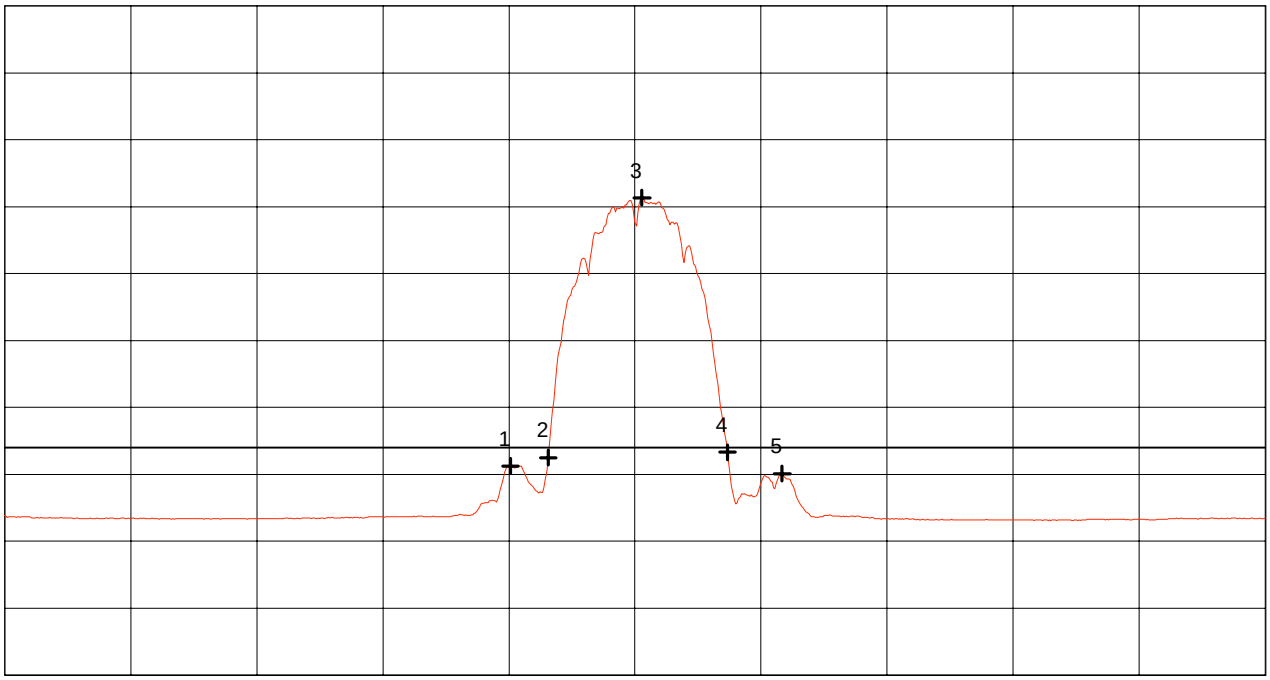
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.442 GHz Test distance: 3 meters Channel A (red) = horizontal polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 120 dBµV/m
10 dB dB/Div.

ATT 10 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 100 Hz

Stop 2.517 GHz
SWP 4.60 s

**** Multi Marker ****

Nr.1	2.427167 GHz	51.24 dBµV/m
Nr.2	2.431667 GHz	52.51 dBµV/m
Nr.3	2.442833 GHz	91.34 dBµV/m
Nr.4	2.453000 GHz	53.30 dBµV/m
Nr.5	2.459500 GHz	50.10 dBµV/m
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

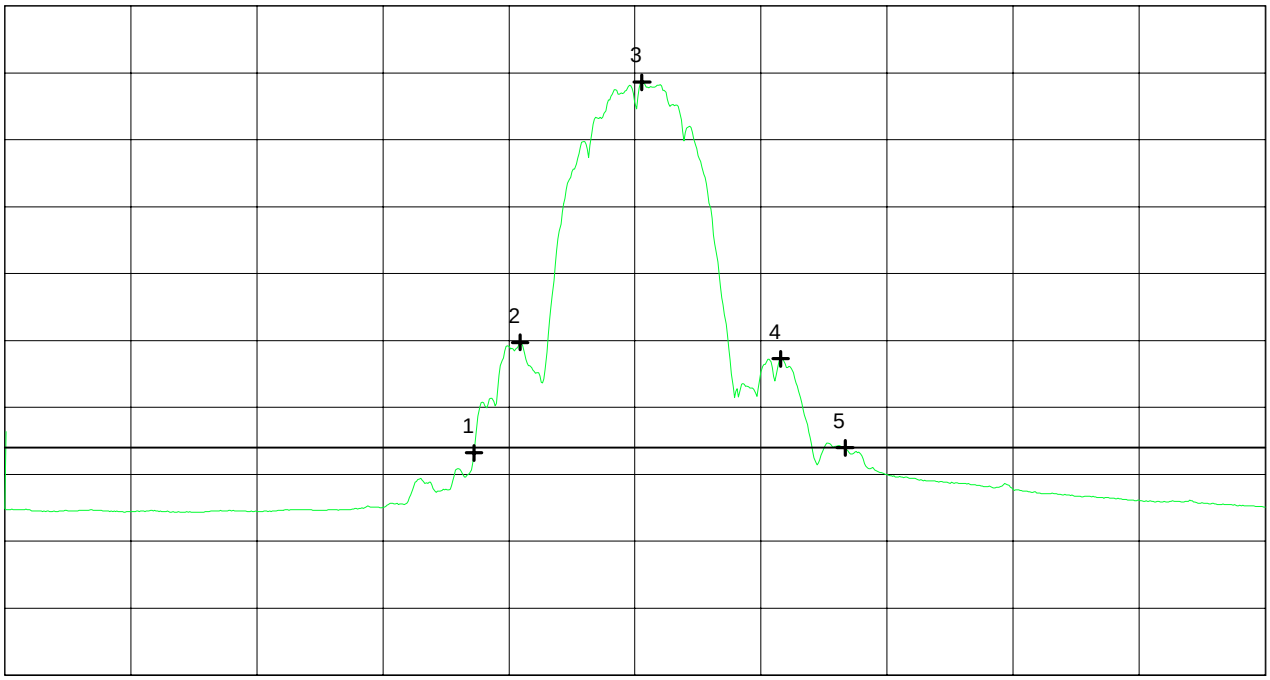
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.442 GHz Test distance: 3 meters Channel B (green) = vertical polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 120 dBµV/m
10 dB dB/Div.

ATT 10 dB

Ref. Offset 21.3 dB



Start 2.367 GHz
RBW 1 MHz

VBW 100 Hz

Stop 2.517 GHz
SWP 4.60 s

**** Multi Marker ****

Nr.1	2.422833 GHz	53.17 dBµV/m
Nr.2	2.428333 GHz	69.70 dBµV/m
Nr.3	2.442833 GHz	108.61 dBµV/m
Nr.4	2.459333 GHz	67.27 dBµV/m
Nr.5	2.467000 GHz	53.96 dBµV/m
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 90990005
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 04/26/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer-reading [dBµV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBµV/m]	Limit [dBµV/m]
2.4520	vertical	72.8		0.6	20.7	72.8	OB
2.4652	vertical	112.4		0.6	20.7	112.4	OB
2.4757	vertical	73.9		0.6	20.7	73.9	OB
2.4835	vertical	61.7		0.6	20.7	61.7	74
2.4860	vertical	62.4		0.6	20.7	62.4	74
2.5000	vertical	55.6		0.6	20.7	55.6	74
4.9296	vertical	45.1	-89.3		27.3	45.0	74
7.3932	vertical	40.1	-96.1		30.0	40.9	74
9.8473	horizontal	44.0	-95.7		33.4	44.7	NRB

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 112.4 dBµV/m.

Result: The limits are kept

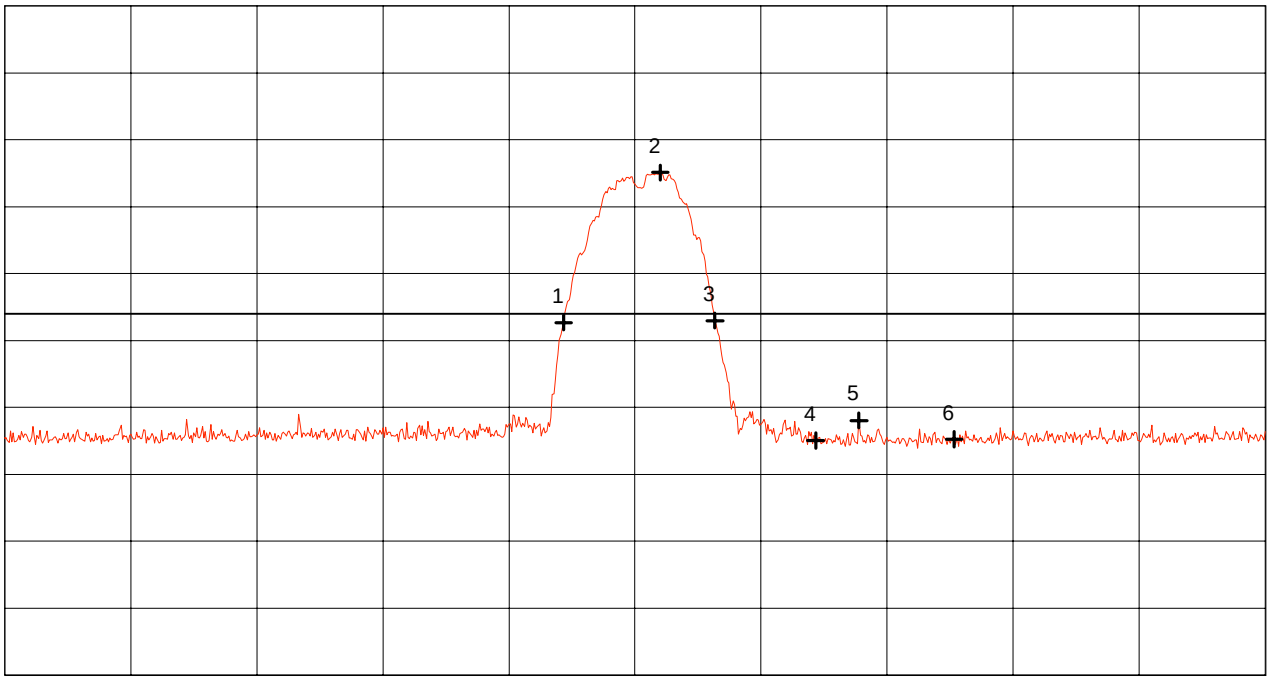
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.462 GHz Test distance: 3 meters Channel A (red) = horizontal polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 120 dBµV/m
10 dB dB/Div.

ATT 10 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 ****

Nr.1	2.453500 GHz	72.67 dBµV/m
Nr.2	2.465000 GHz	95.10 dBµV/m
Nr.3	2.471500 GHz	72.95 dBµV/m
Nr.4	2.483500 GHz	55.05 dBµV/m
Nr.5	2.488667 GHz	58.05 dBµV/m
Nr.6	2.500000 GHz	55.23 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

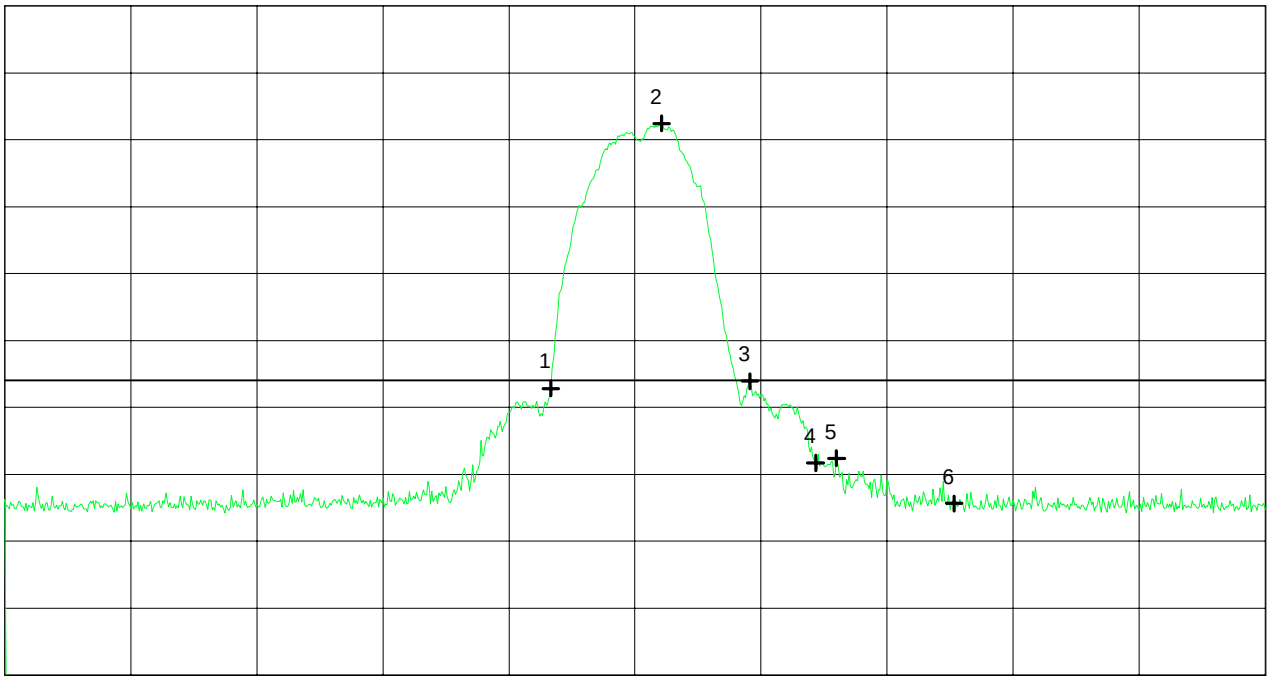
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.462 GHz Test distance: 3 meters Channel B (green) = vertical polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 130 dBµV/m
10 dB dB/Div.

ATT 10 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 ****

Nr.1	2.452000 GHz	72.83 dBµV/m
Nr.2	2.465167 GHz	112.44 dBµV/m
Nr.3	2.475667 GHz	73.92 dBµV/m
Nr.4	2.483500 GHz	61.68 dBµV/m
Nr.5	2.486000 GHz	62.39 dBµV/m
Nr.6	2.500000 GHz	55.63 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 90990005
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 04/26/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- operating with bit rate 11 Mbps

- TX mode with f = 2.462 GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer-reading [dBµV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBµV/m]	Limit [dBµV/m]
2.4432	vertical	53.7		0.6	20.7	53.7	OB
2.4648	vertical	109.7		0.6	20.7	109.7	OB
2.4824	vertical	54.0		0.6	20.7	54.0	OB
2.4835	vertical	49.8		0.6	20.7	49.8	54
2.4848	vertical	51.9		0.6	20.7	51.9	54
2.4884	vertical	49.0		0.6	20.7	49.0	54
2.5000	vertical	45.1		0.6	20.7	45.1	54
4.9241	vertical	42.6	-91.6		27.3	42.7	54
9.8480	horizontal	42.8	-96.7		33.4	43.7	NRB

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 109.7 dBµV/m.

Result: The limits are kept

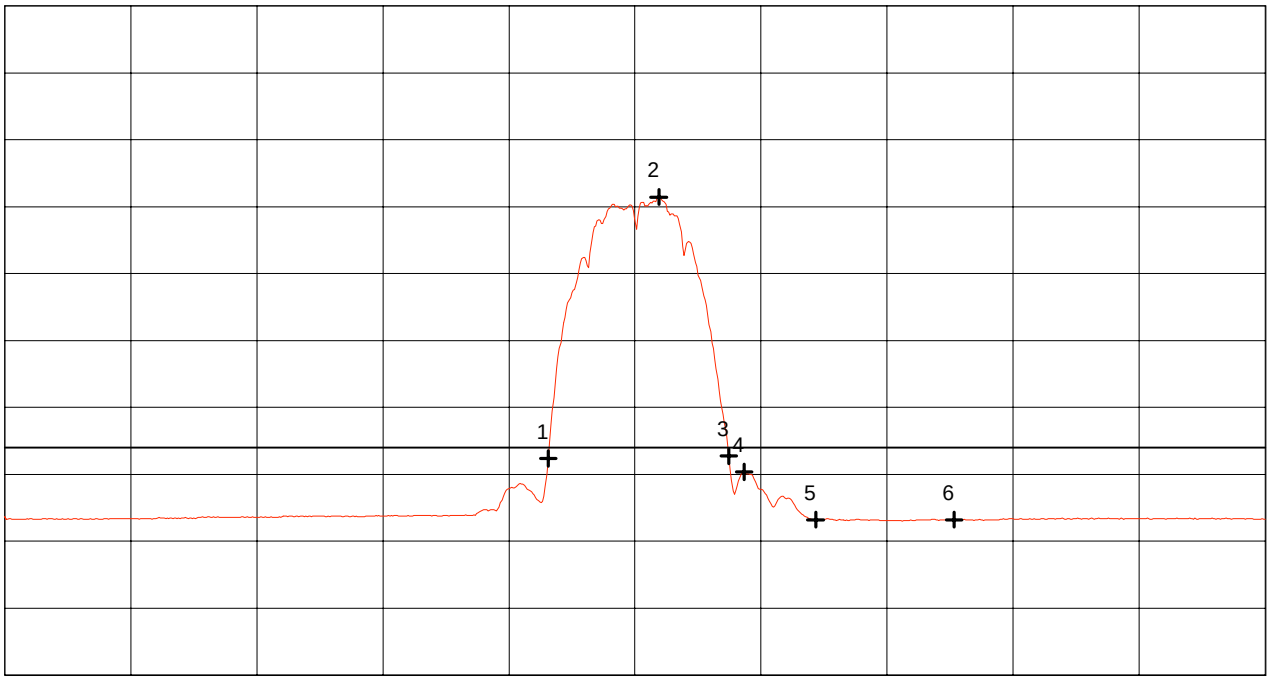
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.462 GHz Test distance: 3 meters Channel A (red) = horizontal polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 120 dBµV/m
10 dB dB/Div.

ATT 10 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 100 Hz

Stop 2.537 GHz
SWP 4.60 s

**** Multi Marker ****

Nr.1	2.451667 GHz	52.36 dBµV/m
Nr.2	2.464833 GHz	91.44 dBµV/m
Nr.3	2.473167 GHz	52.71 dBµV/m
Nr.4	2.475000 GHz	50.35 dBµV/m
Nr.5	2.483500 GHz	43.19 dBµV/m
Nr.6	2.500000 GHz	43.22 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

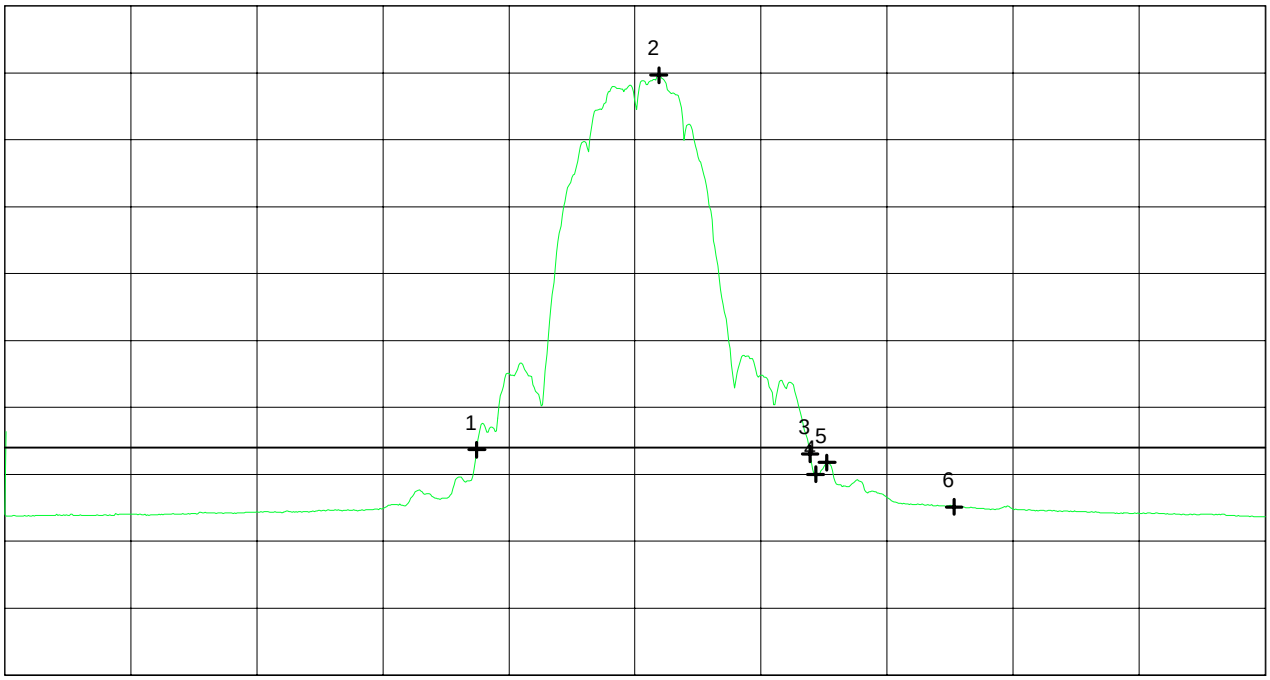
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.462 GHz Test distance: 3 meters Channel B (green) = vertical polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 120 dBµV/m
10 dB dB/Div.

ATT 10 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 100 Hz

Stop 2.537 GHz
SWP 4.60 s

**** Multi Marker ****

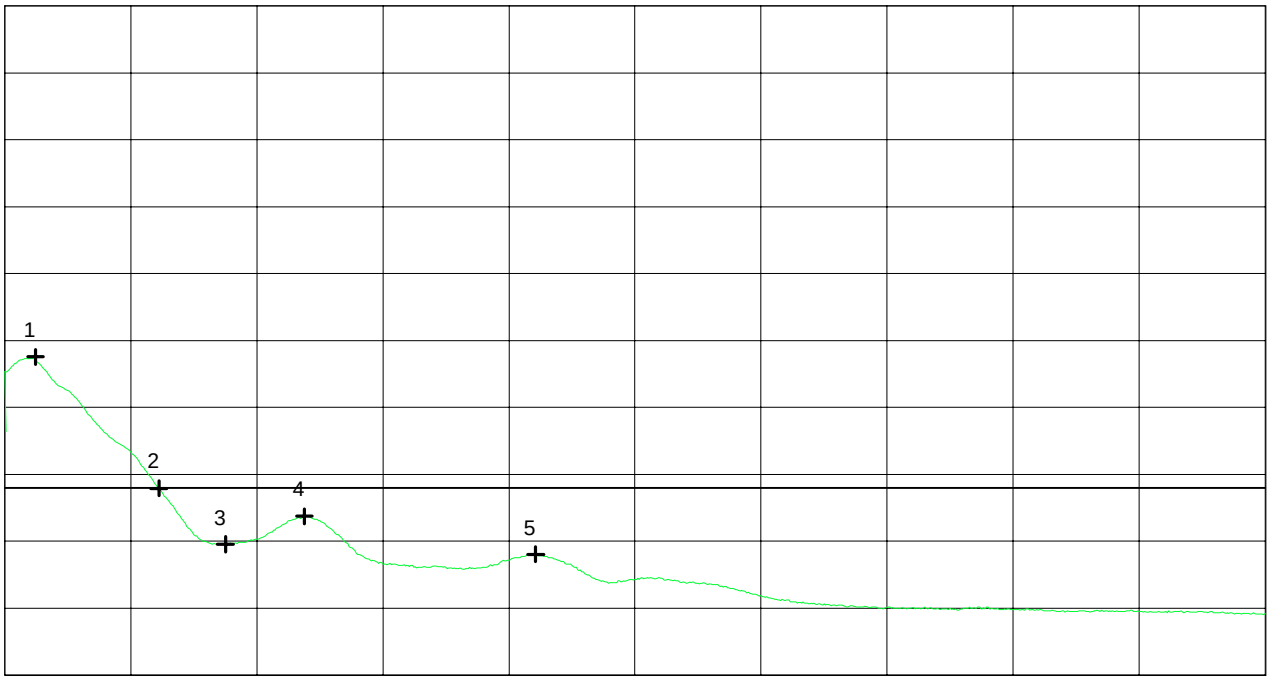
Nr.1	2.443167 GHz	53.65 dBµV/m
Nr.2	2.464833 GHz	109.65 dBµV/m
Nr.3	2.482833 GHz	53.02 dBµV/m
Nr.4	2.483500 GHz	50.00 dBµV/m
Nr.5	2.484833 GHz	51.75 dBµV/m
Nr.6	2.500000 GHz	45.12 dBµV/m
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

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

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-YA-1414 (Telex) - with 50 ft antenna cable - operating with bit rate 11 Mbps - TX mode with f = 2.462 GHz Test distance: 3 meters Channel B (green) = vertical polarization
Serial No.: 90990005	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 90 dBµV/m ATT 10 dB Ref. Offset 21.3 dB
5 dB dB/Div.



Start 2.480 GHz Stop 2.500 GHz
RBW 1 MHz VBW 100 Hz SWP 1.50 s

**** Multi Marker ****

Nr.1	2.480489 GHz	63.77 dBµV/m
Nr.2	2.482444 GHz	53.95 dBµV/m
Nr.3	2.483500 GHz	49.76 dBµV/m
Nr.4	2.484756 GHz	51.86 dBµV/m
Nr.5	2.488422 GHz	49.02 dBµV/m
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90204-3
Date: 04/26/1999	

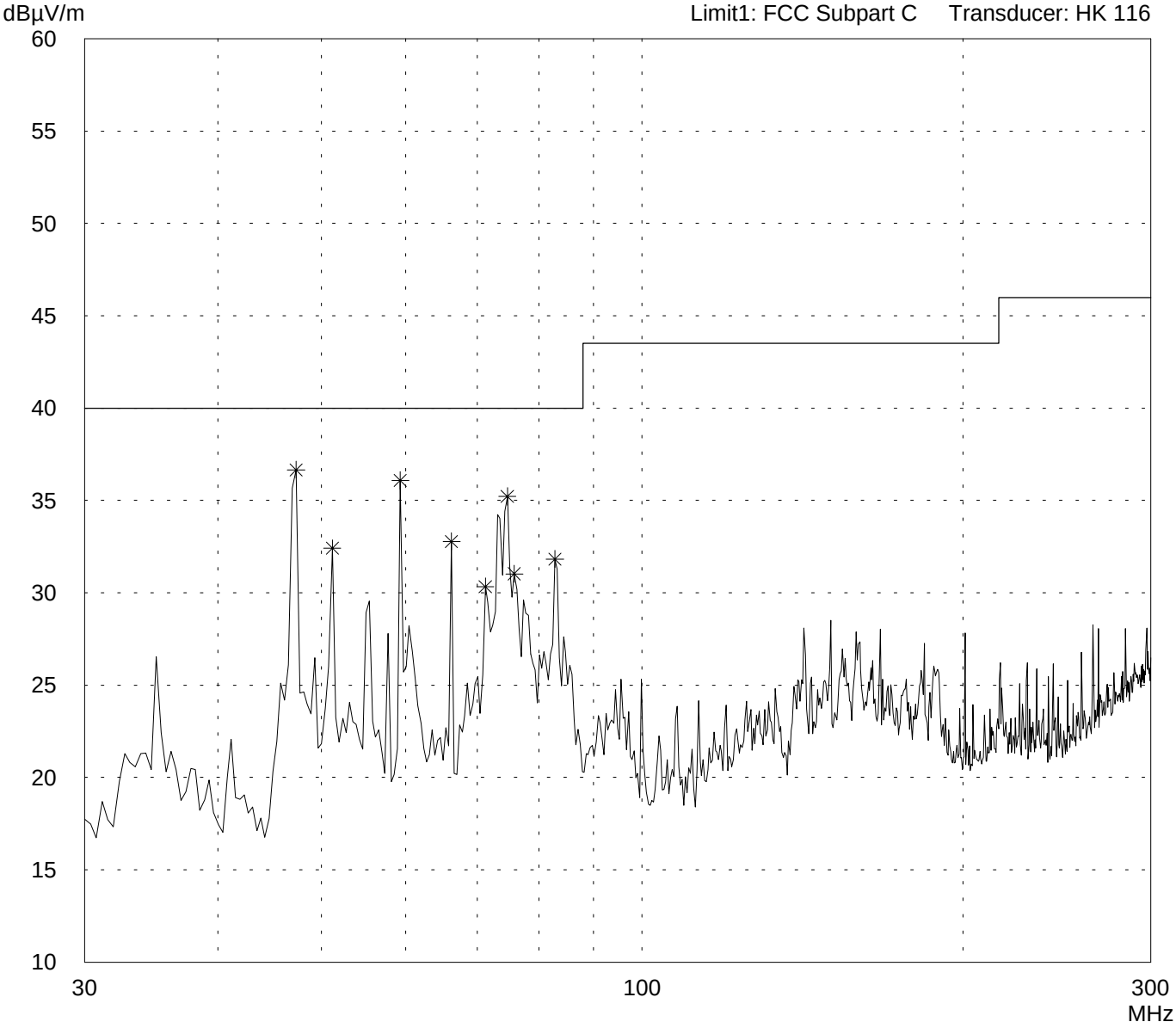
Test results for

Receive (RX) mode

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- RX mode with f = 2.442 GHz

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



Result: Prescan	Project file: 56305-90204-3

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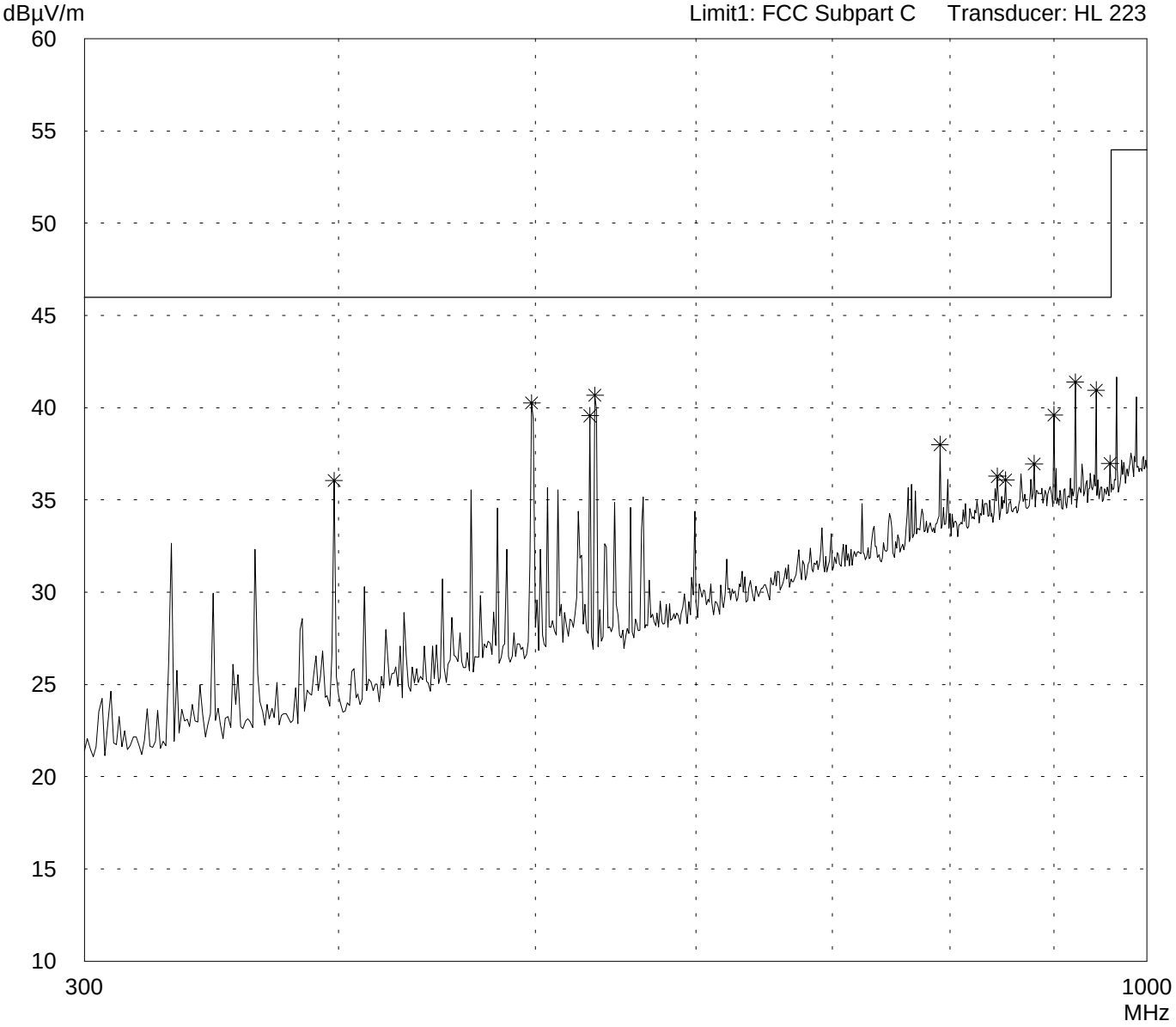
Radiated Emission Test 300 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- RX mode with f = 2.442 GHz

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



Result: Prescan	Project file: 56305-90204-3

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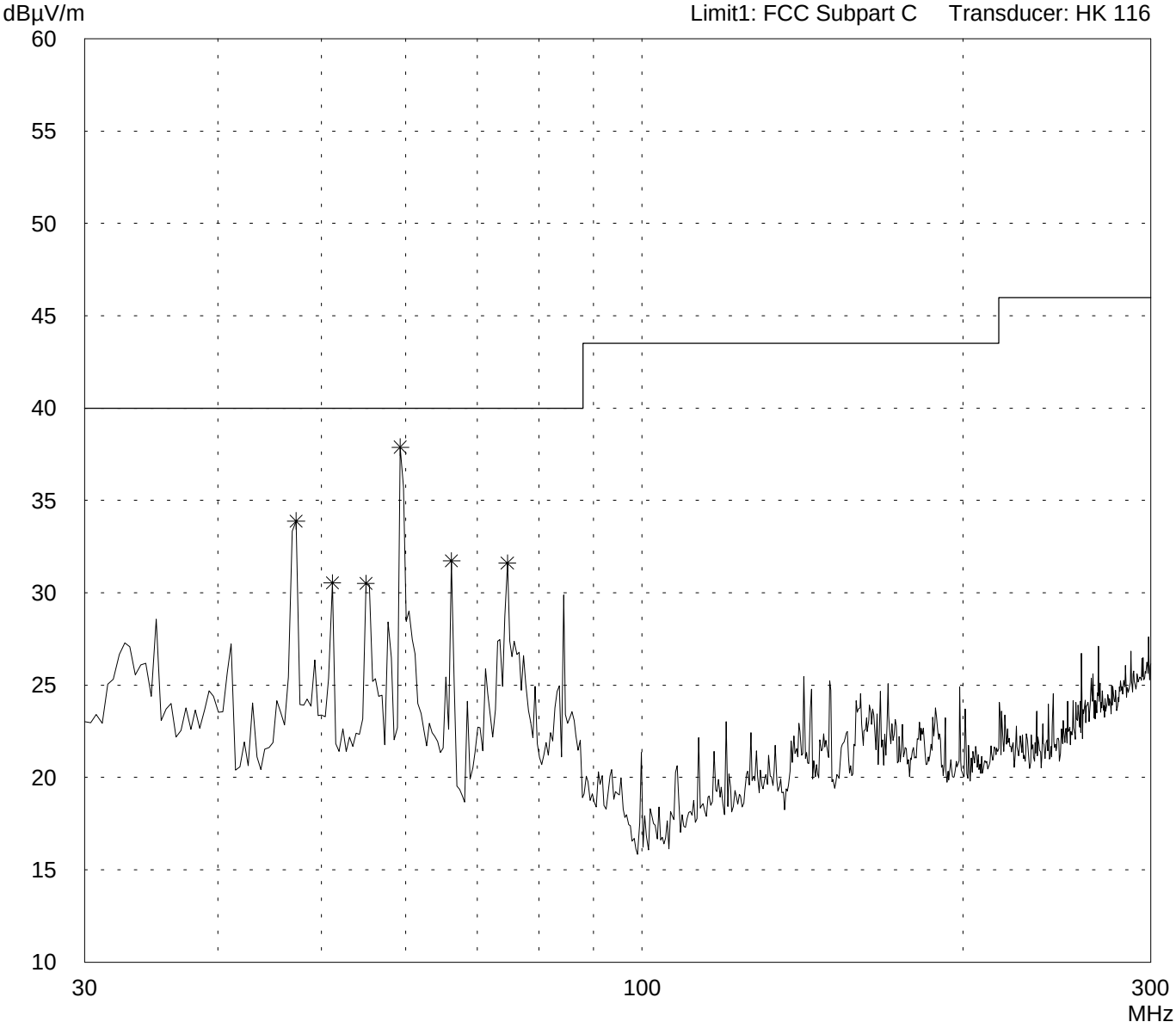
Radiated Emission Test 30 MHz - 300 MHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- RX mode with f = 2.442 GHz

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



Result: Prescan	Project file: 56305-90204-3

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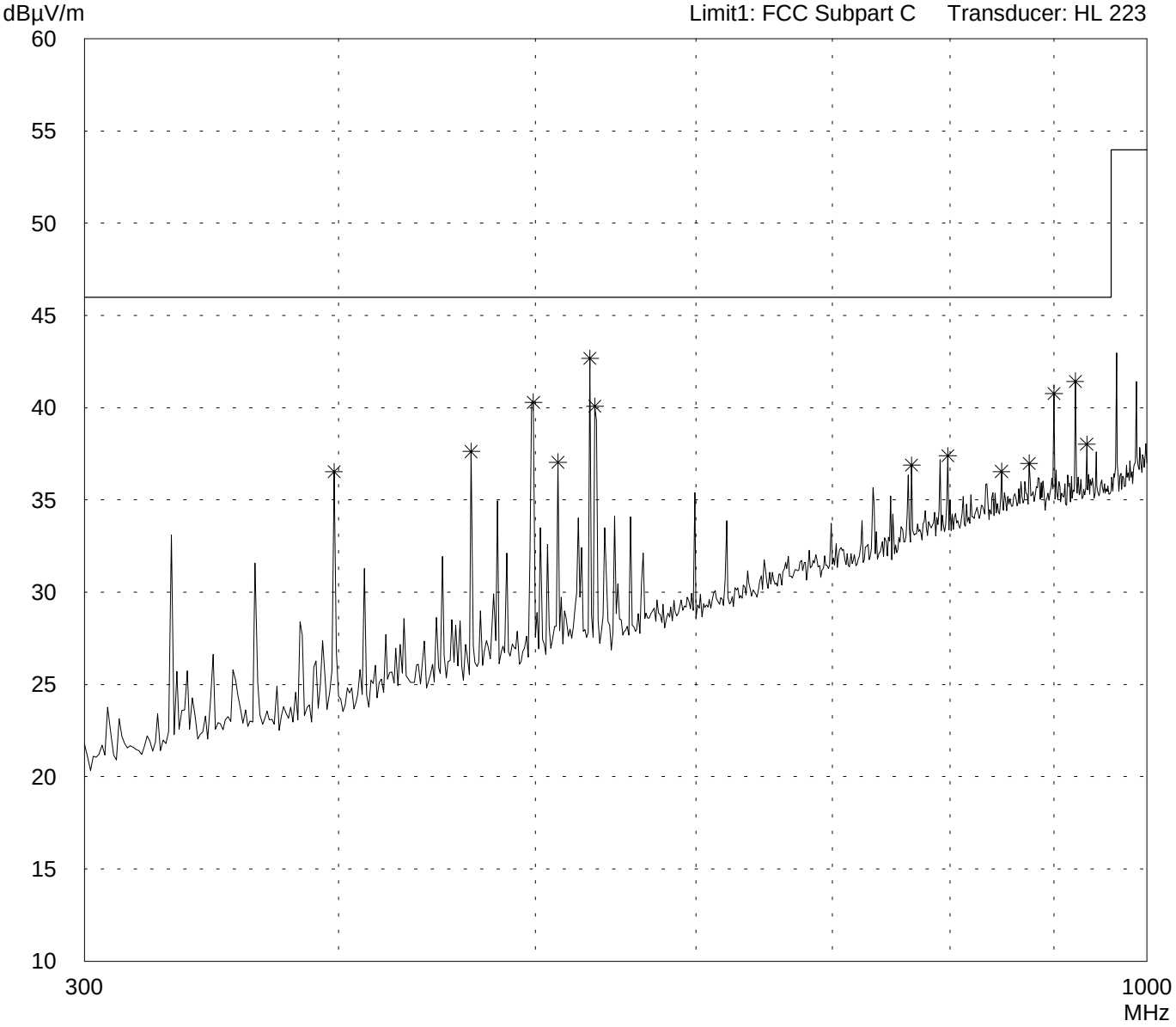
Radiated Emission Test 300 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Semi anechoic room, cabin no. 3	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/16/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: automatically / File name:	- RX mode with f = 2.442 GHz

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



Result: Prescan	Project file: 56305-90204-3

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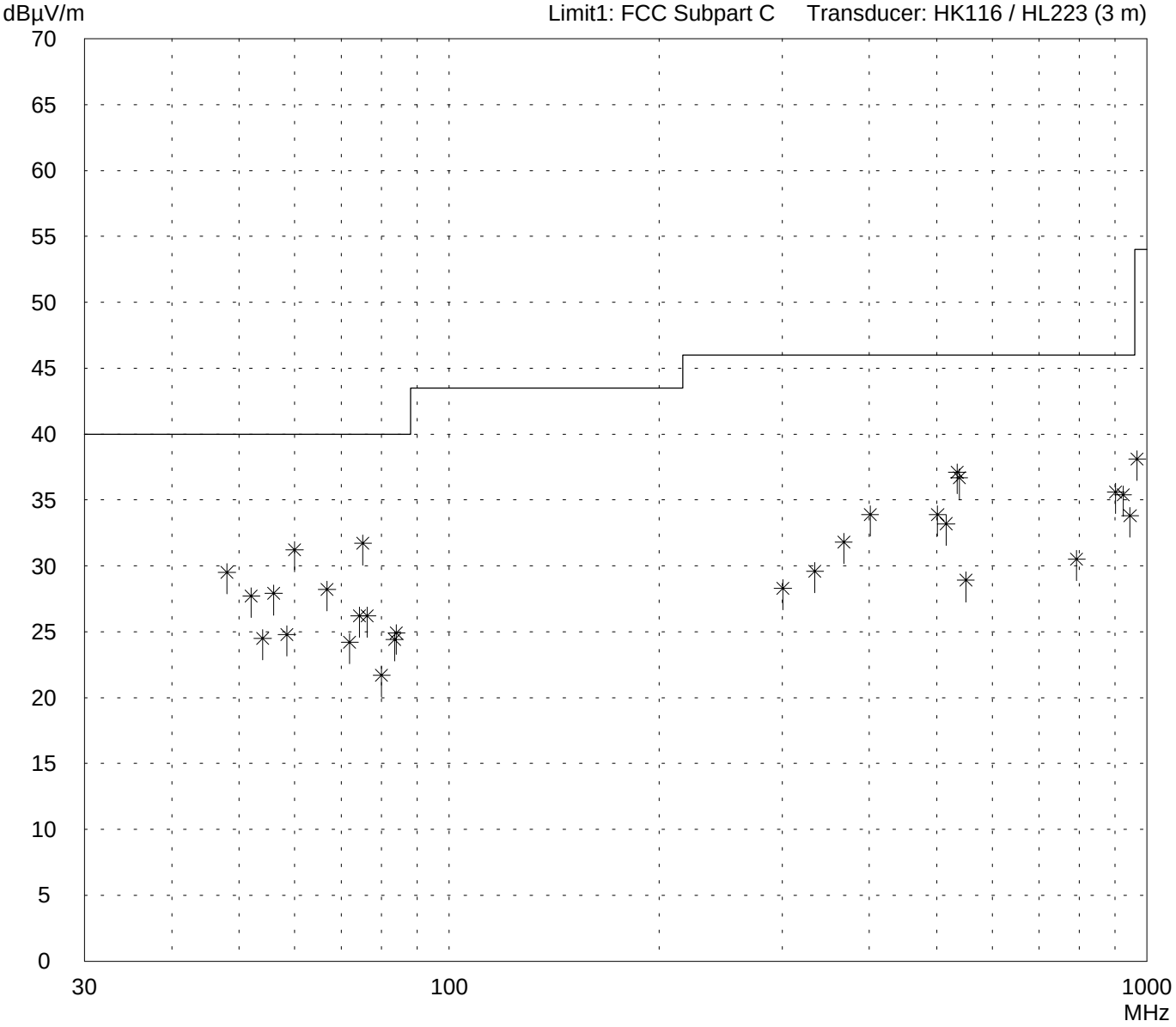
Radiated Emission Test 30 MHz - 1 GHz
according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Open area test-site I	- supply voltage 115 V AC
Tested on: Test distance 3 meters Horizontal Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/19/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: by hand / File name:	- RX mode with f = 2.442 GHz

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



Result: Limit kept	Project file: 56305-90204-3

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

Model:
LUC PC24E-H-FC

Serial no.:
90990005

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 04/19/1999
Operator: R. Heller

Test performed: by hand
File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- RX mode with f = 2.442 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	*Reading dBµV*	*Correction factor dB*	*Value dBµV/m*	*Limit dBµV/m*	*Limit exceeded*
48.0	18.5	11.0	29.5	40.0	
52.0	17.0	10.7	27.7	40.0	
54.0	14.0	10.5	24.5	40.0	
56.0	17.5	10.4	27.9	40.0	
58.5	14.5	10.3	24.8	40.0	
60.0	21.0	10.2	31.2	40.0	
66.8	18.0	10.2	28.2	40.0	
72.0	14.0	10.2	24.2	40.0	
74.3	16.0	10.2	26.2	40.0	
75.2	21.5	10.2	31.7	40.0	
76.3	16.0	10.2	26.2	40.0	
80.0	11.5	10.2	21.7	40.0	
83.5	14.0	10.4	24.4	40.0	
84.0	14.5	10.4	24.9	40.0	
300.7	11.5	16.8	28.3	46.0	
334.1	11.5	18.1	29.6	46.0	
367.5	12.5	19.3	31.8	46.0	
400.9	13.5	20.4	33.9	46.0	
501.2	11.0	22.9	33.9	46.0	
515.5	10.0	23.2	33.2	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.0	23.7	36.7	46.0	
550.0	5.0	23.9	28.9	46.0	
793.0	2.0	28.5	30.5	46.0	
902.0	5.0	30.6	35.6	46.0	
924.0	4.5	30.9	35.4	46.0	
946.0	2.5	31.3	33.8	46.0	
968.0	6.5	31.6	38.1	54.0	

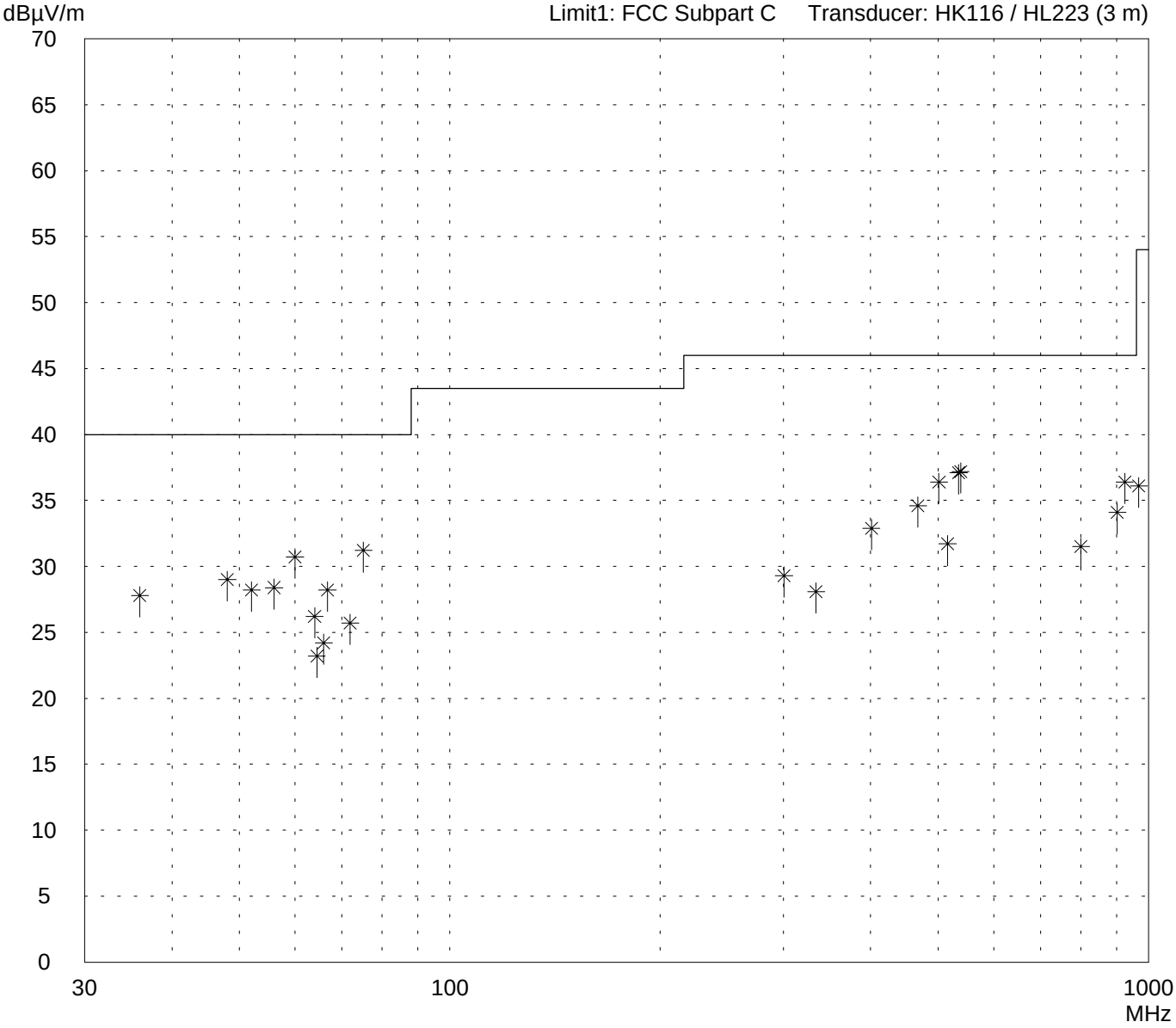
Result:
Limit kept

Project file:
56305-90204-3

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

Model: LUC PC24E-H-FC	Mode:
Serial no.: 90990005	- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
Applicant: Lucent Technologies Nederland B.V.	- FCC test setup
Test site: Open area test-site I	- supply voltage 115 V AC
Tested on: Test distance 3 meters Vertical Polarization	- with external antenna AOU24-YA-1414 (Telex)
Date of test: 04/19/1999 / Operator: R. Heller	- with 50 ft antenna cable
Test performed: by hand / File name:	- RX mode with f = 2.442 GHz

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



Result: Limit kept	Project file: 56305-90204-3

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

Model:
LUC PC24E-H-FC

Serial no.:
90990005

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 04/19/1999

Operator: R. Heller

Test performed: by hand

File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- RX mode with f = 2.442 GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	*Reading dBµV*	*Correction factor dB*	*Value dBµV/m*	*Limit dBµV/m*	*Limit exceeded*
36.0	14.5	13.3	27.8	40.0	
48.0	18.0	11.0	29.0	40.0	
52.0	17.5	10.7	28.2	40.0	
56.0	18.0	10.4	28.4	40.0	
60.0	20.5	10.2	30.7	40.0	
64.0	16.0	10.2	26.2	40.0	
64.5	13.0	10.2	23.2	40.0	
66.0	14.0	10.2	24.2	40.0	
66.8	18.0	10.2	28.2	40.0	
72.0	15.5	10.2	25.7	40.0	
75.2	21.0	10.2	31.2	40.0	
300.7	12.5	16.8	29.3	46.0	
334.1	10.0	18.1	28.1	46.0	
400.9	12.5	20.4	32.9	46.0	
467.7	12.5	22.1	34.6	46.0	
501.2	13.5	22.9	36.4	46.0	
515.5	8.5	23.2	31.7	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.5	23.7	37.2	46.0	
800.0	3.0	28.5	31.5	46.0	
902.0	3.5	30.6	34.1	46.0	
924.0	5.5	30.9	36.4	46.0	
968.0	4.5	31.6	36.1	54.0	

Result:
Limit kept

Project file:
56305-90204-3

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 90990005
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 04/26/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- RX mode with f = 2.442 GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer-reading [dBµV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBµV/m]	Limit [dBµV/m]
2.0953	horizontal	39.8	-97.6		29.4	38.8	74

Result: The limits are kept

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 90990005
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 04/26/1999
Operator: R. Heller

Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-YA-1414 (Telex)
- with 50 ft antenna cable

- RX mode with f = 2.442 GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer-reading [dBµV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBµV/m]	Limit [dBµV/m]
1.000 - 12.400	Margin of peak values to average limit > 10 dB						54
12.400 - 12.500	Margin of average values to average limit > 15 dB						54

Result: The limits are kept