

Straubing, December 16, 1999

TEST-REPORT

No. 56305-90734-1

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

Note:

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

Table of Contents

1.	Administrative Data	3
2.	Identification of Test Laboratory	4
3.	Summary of Test Results	5
4.	Operation Mode of EUT	6
5.	Configuration of EUT and Peripheral Devices.....	8
6.	Setup of Host	10
7.	Survey of Additional External Antennae.....	11
8.	Measuring Methods	13
8.1.	Minimum 6 dB Bandwidth (§ 15.247.a2).....	13
8.2.	Maximum Peak Output Power (§ 15.247.b).....	14
8.3.	Peak Power Density (§ 15.247.d).....	14
8.4.	Conducted Emission 0.45 MHz - 30 MHz (§15.207).....	15
8.5.	Radiated Emission 30 MHz - 1 GHz (§15.209, §15.247.c, §15.205.a,b)	17
8.6.	Radiated Emission 1 GHz - 25 GHz (§15.209, §15.247.c, §15.205.a,b)	19
9.	Equipment List	21
10.	Photographs Taken During Testing.....	23
11.	List of Measurements.....	28
12.	Test Results	30

1. Administrative Data

Equipment Under Test (EUT):	LUC PC24E-H-FC
Serial number(s):	99UT11411941 (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:	see "Configuration of EUT and Peripheral Devices" on page 8
FCC-ID:	IMRWLPCE24H
Applicant:	Lucent Technologies Nederland B.V.
(full address)	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:	November 15, 1999
Date of test:	November 16 to December 10, 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 (+49) 0 94 21 / 55 22-0
Fax (+49) 0 94 21 / 55 22-99
eMail: 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 set forth in the Code of Regulations Part 15 Subpart C, Section §15.247 (intentional radiators) of the Federal Communication Commission (FCC)¹.



Johann Roidt
Technical Manager



Rainer Heller
Test Engineer

¹ With operating frequencies selected according to "Operation Mode of EUT" on page 6

4. Operation Mode of EUT

All tests were performed using the "WaveLAN-II Engineering Test Program", Version v01.17c (May 6 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 ²
	Bit rate 2 Mbps	Bit rate 5.5 Mbps	Bit rate 11 Mbps	
2.412	Not used			
2.417	+15	+15	+15	X ³
2.422	+15	+15	+15	X ⁴
2.427	+15	+15	+15	
2.432	+15	+15	+15	
2.437	+15	+15	+15	X
2.442	+15	+15	+15	
2.447	+15	+15	+15	
2.452	+15	+15	+15	X
2.457	Not used			
2.462				

Receive mode (RX):

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

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

² Full testing with bit rate 11 Mbps only

³ Not used with antenna cable no. 011463 (20 ft LMR400)

⁴ Minimum operating frequency used with antenna cable no. 011463 (20 ft LMR400) verified by radiated emission test at band edges

INSTRUCTIONS - TEST PROGRAM

WaveLAN Engineering Test Program, V01.17c, May 6, 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: 2Mbps, 5.5Mbps or 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 parabolic directional-grid antenna AOU24-DI-24 (vertical polarization) connected via 20 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. Additionally for testing radiated emission at band edges (minimum operating frequency) 20 ft antenna cable was replaced by 50 ft antenna cable.

External antenna AOU24-DI-24 was mounted on a metal tripod in 1.5 m height (center).

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

Item	Part no.	Serial no.	Designation	Manufacturer
RF-modem	012372A	99UT11411941	LUC PC24E-H-FC	Lucent
External parabolic antenna	012743	Sample no. 1	AOU24-DI-24 (original designation of manufacturer: 26T2400F)	Conifer
Coaxial antenna cable 3/8", 20 ft	011463	---	--- (cable type LMR400, N connector (male) on each side)	Times Microwave Systems
Coaxial antenna cable 3/8", 50 ft	011000	---	--- (cable type TWB 4001, N connector (male) on each side)	Amphenol
RF-IEEE cable, 50 cm (to be connected to RF-modem)	010777	---	--- (cable type Filotex P - EDE 296769, N connector (male) on antenna side)	Lucent
Lightning arrestor	010997	---	--- (N connector (female) on each side)	Hyperlink
Personal computer	---	17-26190719	Globalyst 550	AT & T
ISA adaptor board	010053	B2-23	ISAPC-B0	Lucent

Table 1: Accessories and host equipment

External antenna AOU24-DI-24 is intended to be connected to EUT using one of four available 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).

For testing cable with minimum attenuation (i.e. maximum effective antenna gain) was selected (i.e. no. 011463) except for radiated emission at band edges (minimum operating frequency) where additional tests were performed with antenna cable no. 011000.

Part number ⁵		Antenna cable length	Cable type ⁶	Antenna gain AOU24-DI-24 [dBi]	Total insertion loss [dB]	Effective antenna gain [dBi]
Std.-N	Rev.-N					
011463	---	20 ft	LMR400	23.5	2.9	20.6
010998	010999	20 ft	LMR200	23.5	4.5	19.0
011000	010317	50 ft	LMR400	23.5	4.5	19.0
011001	011002	75 ft	LMR400	23.5	5.3	18.2

Table 2: Effective gain for external antenna AOU24-DI-24 and different antenna cables

⁵ If noted cables are available with standard N or reverse N connectors

⁶ Cable type TWB 2001 (Amphenol) is identical to LMR200 (Times Microwave Systems) as well as TWB 4001 is the same as LMR400

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.: B2-23
- Monitor Siemens S26361-K203-V311:
 Serial no.: 17569281 FCC-ID: ASIC3X2
- PS/2-keyboard HP C1405A #ABD:
 Serial no.: 3221S30020 FCC-ID⁷: B94VECTRA386S-20
- PS/2-mouse HP C1413A:
 Serial no.: 3227M01197 FCC-ID: B94C1413X
- Parallel printer HP ThinkJet 2225C+:
 Serial no.: 3006S68236 FCC-ID: DSI6XU2225
 with power supply Hayes 52-00008
 Serial no.: 9028A
- Serial printer HP ThinkJet 2225D+:
 Serial no.: 2920S44042 FCC-ID: DSI6XU2225
 with power supply Hayes 52-00008
 Serial no.: 9033A

⁷ FCC-ID of corresponding personal computer

7. Survey of Additional External Antennae

As stated by applicant in table 3 additionally used related external antennae (same type of radiation) are listed with reference to the tested antenna.

External Antenna							Cable assembly				Total loss (dB)	Total Gain	Remarks
P/N	Designator	Model	Manuf	Manuf P/N	Type	Gain (dBi)	P/N Std-N	Rev-N	Cable Type	Length	1)	(dBi)	
LUCENT													
012743	AOU24-DI-24	Parabolic	Conifer	26T2400F	Directional grid	23.5	011463	na	LMR400	20ft	2.9	20.6	
							010998	010999	LMR200	20ft	4.5	19.0	
							011000	010317	LMR400	50ft	4.5	19.0	
							011001	011002	LMR400	75ft	5.3	18.2	
011003 (010191, See note 4)	AOU24-YA-1414	Yagi	Telex	2415LTN	Directional	13.5	011463	na	LMR400	20ft	2.9	10.6	
							010998	010999	LMR200	20ft	4.5	9.0	
							011000	010317	LMR400	50ft	4.5	9.0	
							011001	011002	LMR400	75ft	5.3	8.2	
na							010777	010995	Filotex	50cm	0.9		RF IEEE cable
na							010997	010996	na		0.4		Lightning Protector

Table 3: Survey of Additional External Antennae

NOTES:

1. Total loss LMR cable assy includes LMR cable + Surge Arrestor + RF IEEE cable.
2. Cable type LMR 200 (Times Microwave) identical to TWB2001 (Amphenol) and LMR400 identical to TWB40001 (Amphenol owns Times Microwave).
3. The antenna part numbers shown between brackets refer to the Reversed N connector attached.
4. This part number supersedes pn 011004 as initially assigned. The latter was also used in the different test reports of the Yagi antenna. No functional differences. Just a wrong part number

8. Measuring Methods

8.1. 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

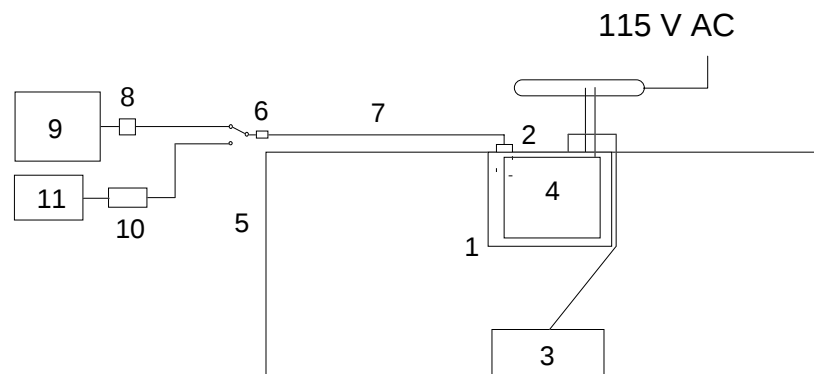


Figure 1: Measurement setup for testing on antenna connector

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

8.2. 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

8.3. 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

8.4. Conducted Emission 0.45 MHz - 30 MHz (§15.207)

Conducted emissions were measured in the frequency range 0.45 MHz to 30 MHz. The bandwidth of the EMI-Receiver was set to 9 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 performed on phase and neutral lines of the power-cords of the tested system. Preliminary scans were taken with the detector-function of the EMI-receiver set to peak to determine the conducted EMI-profile of the EUT. At the final test the cables and equipment were placed and moved within the range of positions likely to find their maximum emissions.

See figure 2 for the measurement setup.

Test equipment used (see equipment list for details):

04, 22, 23, 60, 63

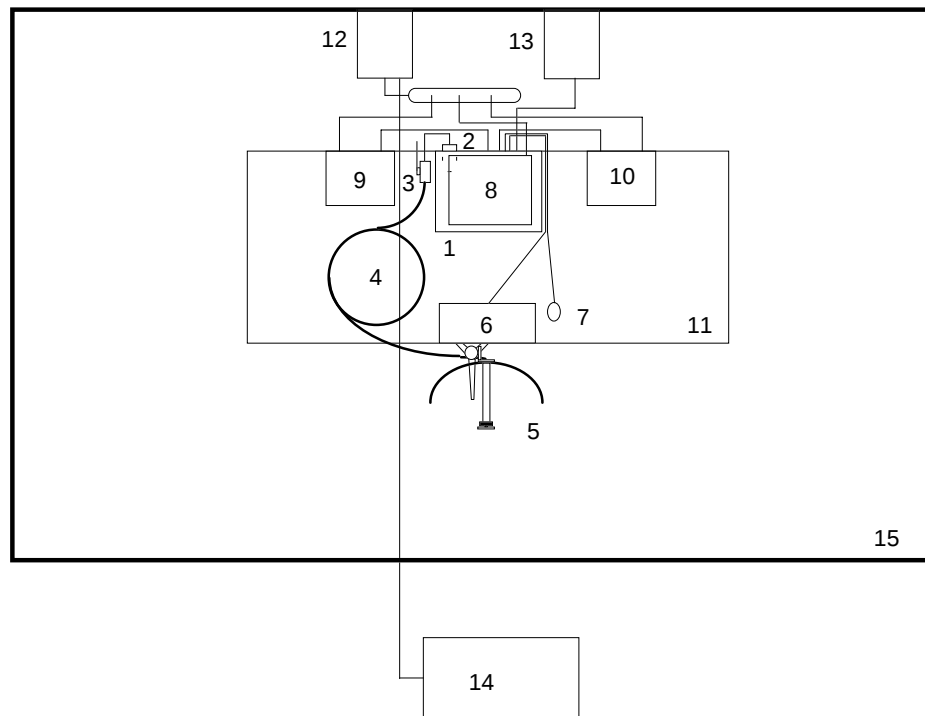


Figure 2: Measurement setup no. 2 for conducted emission test

- | | |
|--|---------------------------------------|
| 1 Personal computer with ISA-card | 12 LISN for EUT |
| 2 RF-modem | 13 LISN for peripheral devices |
| 3 Lightning arrestor with ground connection | 14 Test receiver |
| 4 Antenna cable | 15 Shielded room |
| 5 RF-antenna (2.4 GHz) mounted on metal tripod (grounded) | |
| 6 Keyboard | |
| 7 Mouse | |
| 8 Monitor | |
| 9 Parallel printer | |
| 10 Serial printer | |
| 11 Wooden table | |

8.5. 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 3 for the measurement setup.

Test equipment used (see equipment list for details):

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

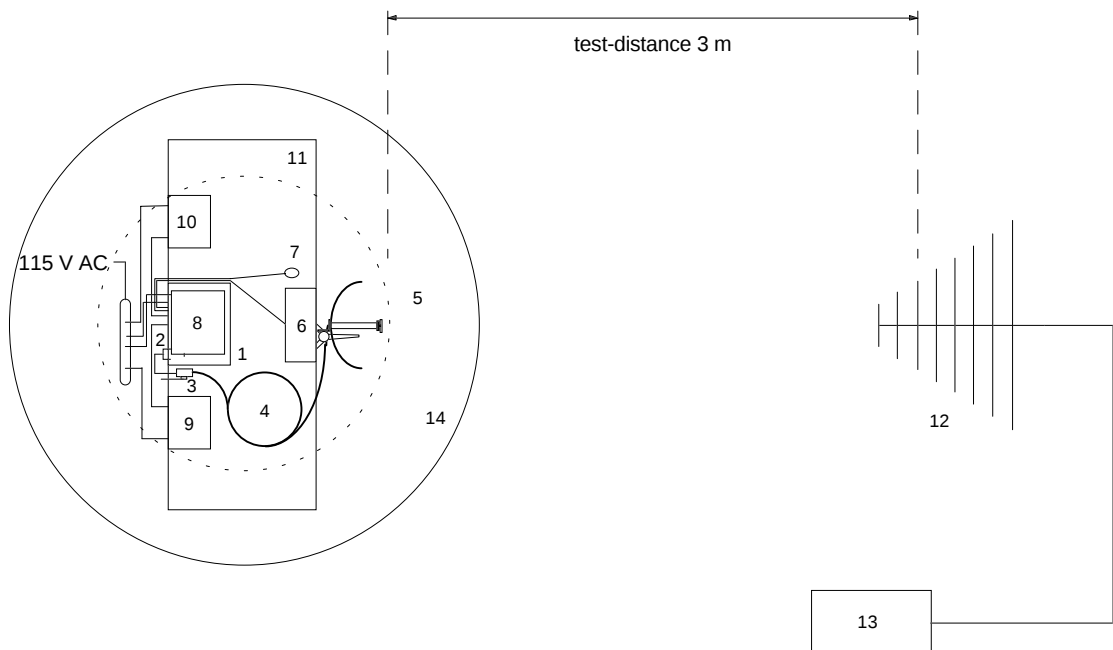


Figure 3: Measurement setup for radiated emission test below 1 GHz

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

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

Radiated emissions were measured in the frequency range 1 GHz to 25 GHz in transmit mode and 1 GHz to 12.5 GHz in receive mode. The resolution bandwidth of the spectrum analyzer was set to 1 MHz. Scans for the whole frequency range were taken with video bandwidth set to 1 MHz to check out the highest peak levels. In case of less margin to average limit additional prescans were made with video bandwidth reduced from 1 MHz to 100 kHz, 30 kHz or 10 kHz. Final measurements were performed at the critical frequencies with video bandwidth of the spectrum analyzer set to 1 kHz (average mode). EUT was rotated all around and receiving antenna was raised and lowered to find the maximum levels of emission. Cables and equipment were placed and moved within the range of position likely to find their maximum emissions.

All tests were performed in a semi-anechoic chamber with a test-distance of 3 meters (except for the frequency range 18 GHz - 25 GHz where test distance was reduced to 1 meter).

To avoid overload in transmit mode no preamplifier was used between 1 GHz and 3.95 GHz. Above 3.95 GHz tests were performed with appropriate preamplifiers (attenuation of operating frequency by horn antenna is sufficient to avoid overload of preamplifier). For receive mode appropriate preamplifiers were used for the whole frequency range. To eliminate variations in amplification of the preamplifiers a signal generator was used for substitution (however, during testing a correction according to the minimum amplification was added).

Substitution was performed in the following steps:

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

See figure 4 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

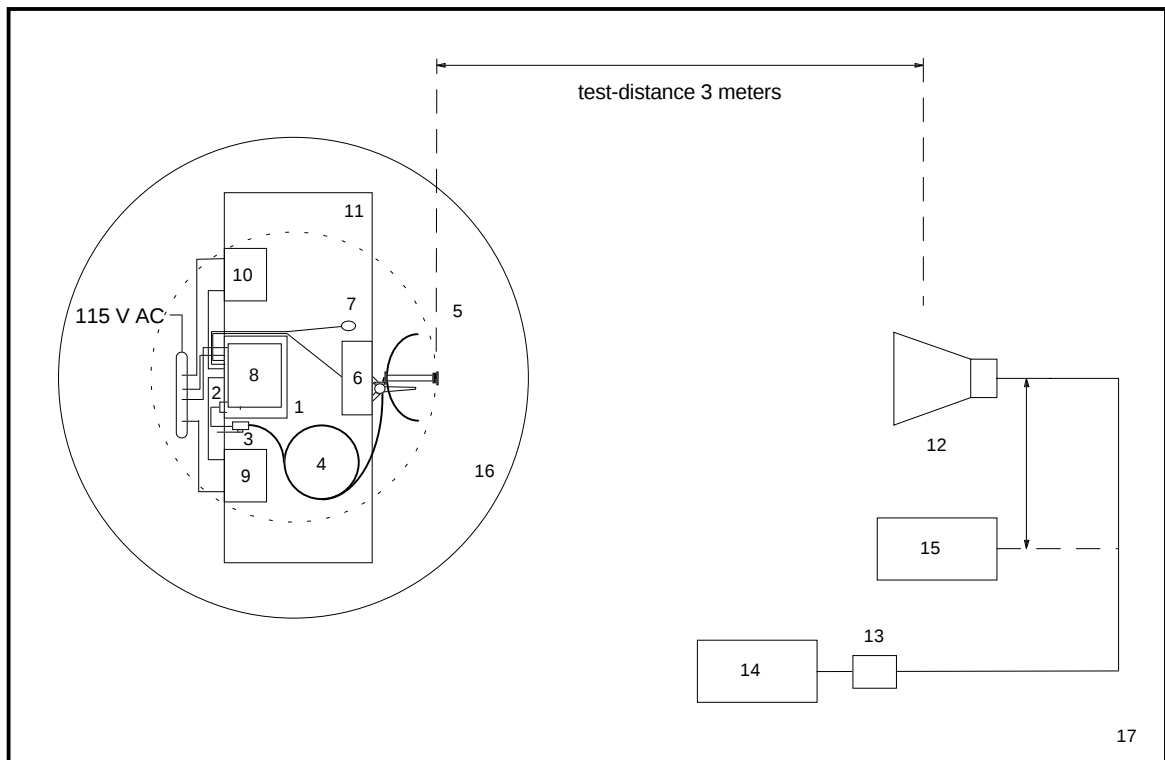


Figure 4: Measurement setup for radiated emission test above 1 GHz

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

9. 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.

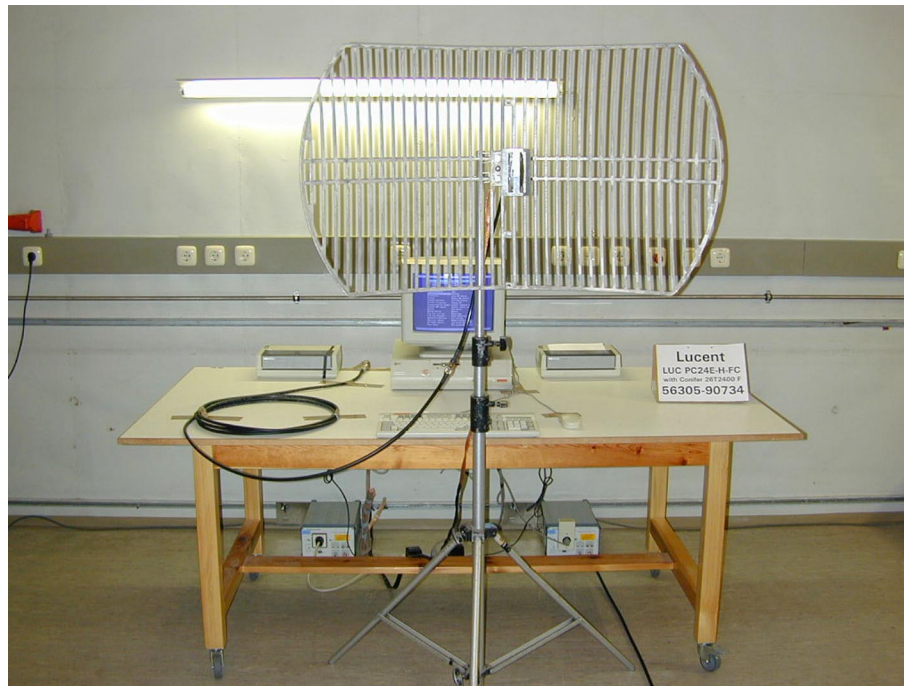
No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	R 3271	05050023	Advantest
02	EMI Test Receiver	ESMI	839379/013 839587/006	Rohde & Schwarz
03	Test Receiver	ESH 3	880112/032	Rohde & Schwarz
04	Test Receiver	ESHS 10	860043/016	Rohde & Schwarz
05	Test Receiver	ESV	881414/009	Rohde & Schwarz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

10. Photographs Taken During Testing

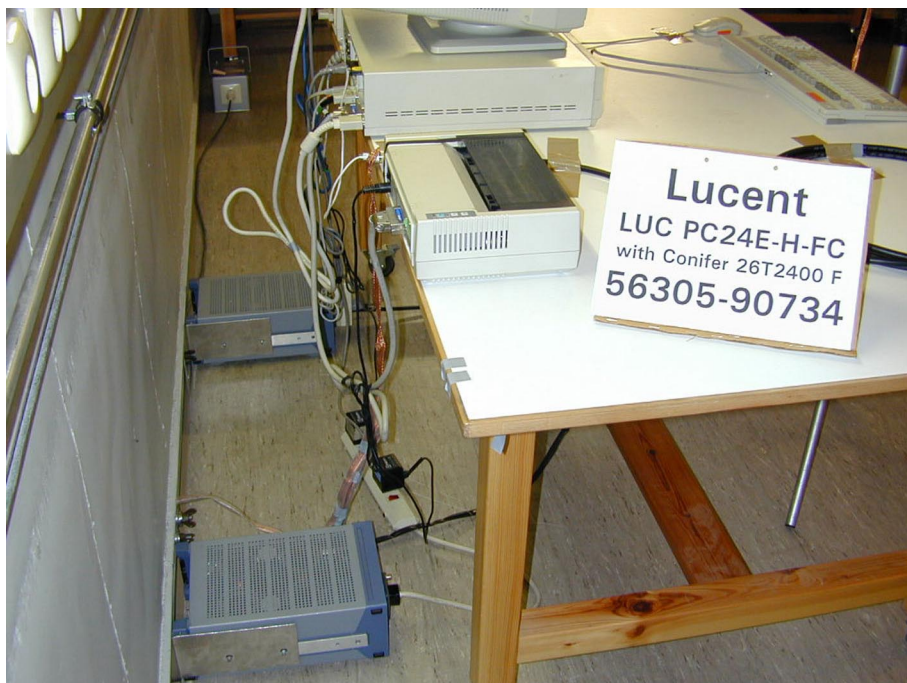
Photo No. 10.1

Test setup for conducted emission test 450 kHz - 30 MHz



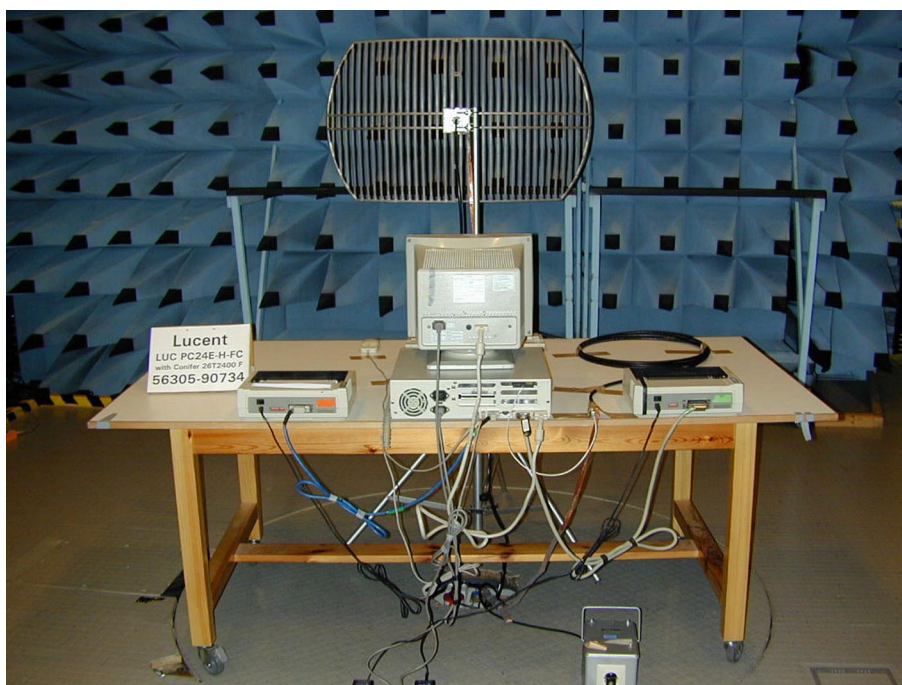
Photos No. 10.2 - 10.3

Test setup for conducted emission test 450 kHz - 30 MHz (continued)



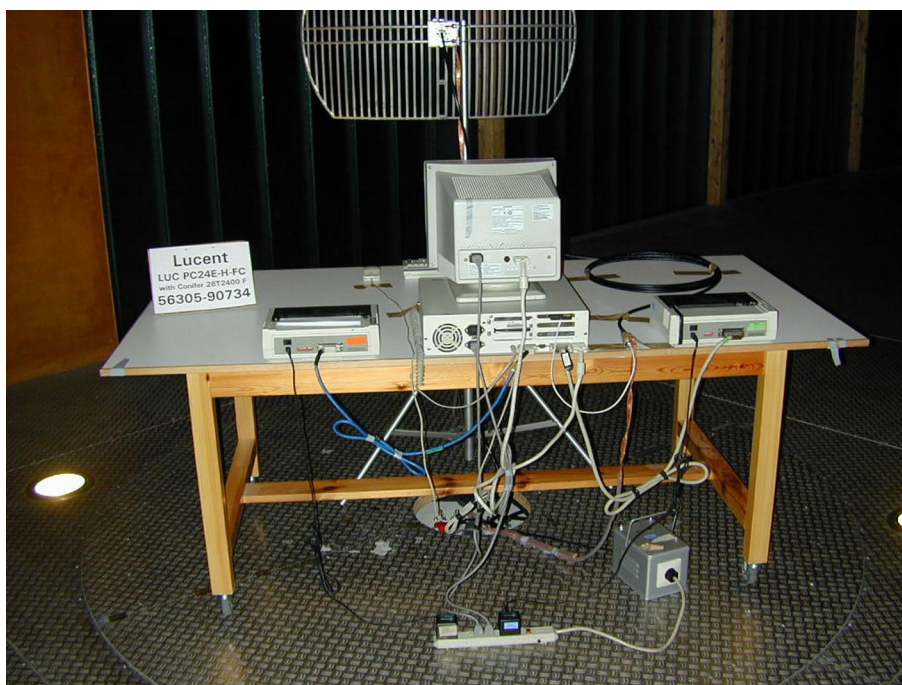
Photos No. 10.4 - 10.5

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



Photos No. 10.6 - 10.7

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



11. List of Measurements

FCC Part 15 Subpart C			
Section(s):	Test	Page	Result
	Transmit mode (TX):	31	
§15.247.a2	Minimum 6 dB bandwidth	32	passed
§15.247.b	Maximum peak output power	40	passed
§15.247.d	Peak power density	49	passed
	Frequency range (conducted)	65	for information only
§15.247.e	Processing gain	---	test performed by applicant
§15.207	Conducted emission test 450 kHz - 30 MHz	73	passed
§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	97	passed
§15.247.c §15.209 §15.205.a,b	Radiated emission test 1 GHz - 25 GHz	121	passed ⁸
	Receive mode (RX):	175	
§15.207	Conducted emission test 450 kHz - 30 MHz	176	passed
§15.209	Radiated emission test 9 kHz - 30 MHz	---	not applicable (acc. to §15.33)
§15.209	Radiated emission test 30 MHz - 1 GHz	184	passed
§15.209	Radiated emission test 1 GHz - 12.5 GHz	192	passed

⁸ With operating frequencies selected according to "Operation Mode of EUT" on page 6

- Note 1:** Conducted and radiated emission tests in transmit mode were performed with bit rate set to 11 Mbps only (standard operation mode; lower bit rates are selected as fall back if environmental conditions do not allow higher rates). Based on conducted emission tests performed on antenna connector called "frequency range" comparing shapes of TX signal with bit rate set to either 5.5 Mbps or 11 Mbps no additional tests were performed with bit rate 5.5 Mbps. However, special care was taken to observe the difference especially in average results of TX fundamental and (even) harmonics when selecting 11 (or 5.5) Mbps on the one hand, and 2 Mbps on the other hand. Therefore additional emission tests at band edges and TX harmonics were performed with 2 Mbps. Having less significant differences in peak results than in average levels only critical harmonics observed with 11 Mbps (i.e. with less than 10 dB margin of peak levels to average limit) had to be retested with bit rate set to 2 Mbps.
- Note 2:** As minimum operating frequency 2.417 GHz was selected for all testing to cover the maximum available frequency range for all antenna cables. However, because of radiated emission at band edges this channel cannot be used with antenna cable 011463 (20 ft LMR400). Therefore additional testing at band edges was performed for this antenna cable with operating frequency set to 2.422 GHz.

12. Test Results

Test results for
Transmit (TX) mode

Minimum bandwidth (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Tested on: antenna connector

Delta f (-6 dB points) = 9.55 MHz

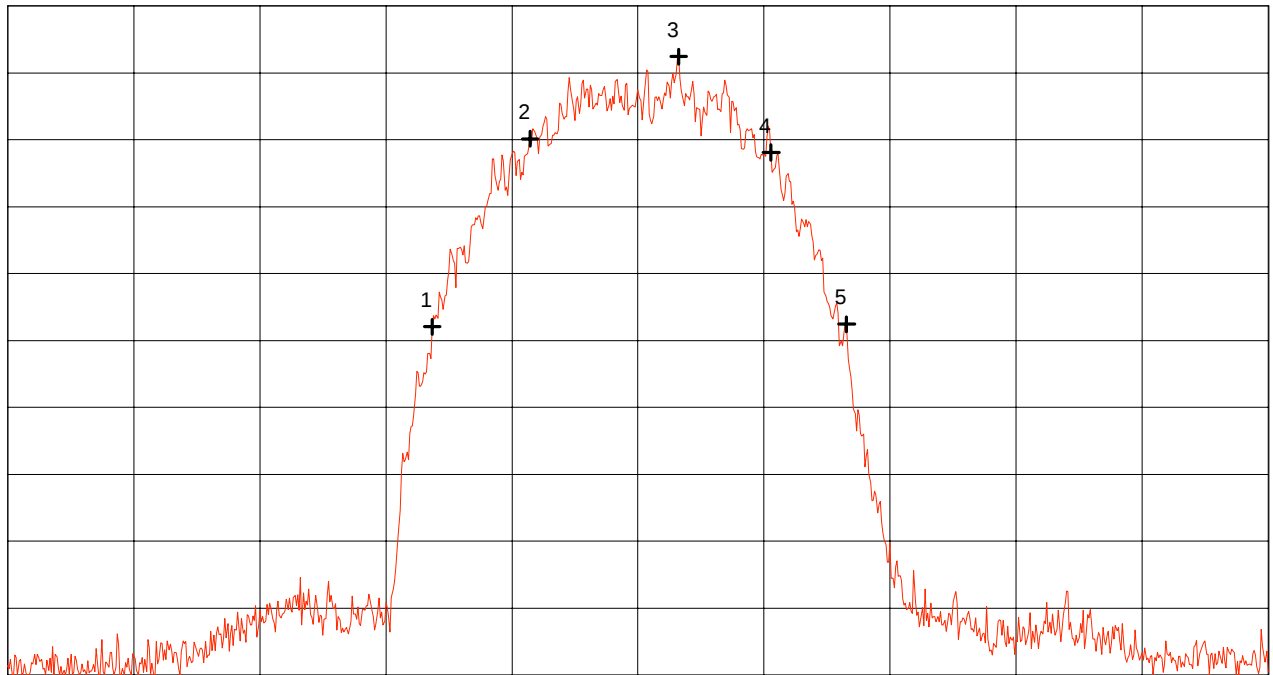
Result: Test passed

Note: -20 dB points for information only!

Ref.Level 10 dBm
5 dB dB/Div.

ATT 35 dB

Ref. Offset 21.1 dB



Start 2.392 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.442 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.408833 GHz	-13.98 dBm
Nr.2	2.412722 GHz	0.08 dBm
Nr.3	2.418611 GHz	6.22 dBm
Nr.4	2.422278 GHz	-0.94 dBm
Nr.5	2.425278 GHz	-13.78 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 32 of 193 Pages

Minimum bandwidth (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.417$ GHz

Tested on: antenna connector

Delta f (-6 dB points) = 9.83 MHz

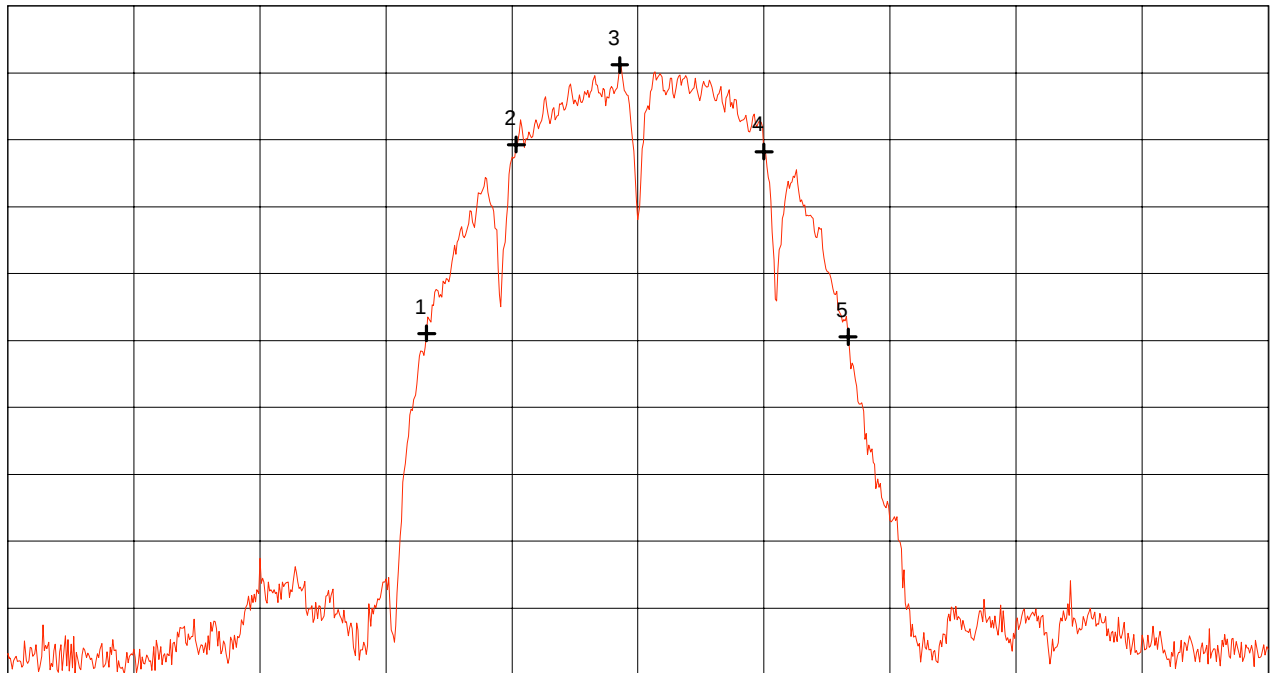
Result: Test passed

Note: -20 dB points for information only!

Ref.Level 10 dBm
5 dB dB/Div.

ATT 35 dB

Ref. Offset 21.1 dB



Start 2.392 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.442 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.408611 GHz	-14.47 dBm
Nr.2	2.412167 GHz	-0.36 dBm
Nr.3	2.416278 GHz	5.59 dBm
Nr.4	2.422000 GHz	-0.88 dBm
Nr.5	2.425333 GHz	-14.73 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 33 of 193 Pages

Minimum bandwidth (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.422$ GHz

Tested on: antenna connector

Delta f (-6 dB points) = 9.55 MHz

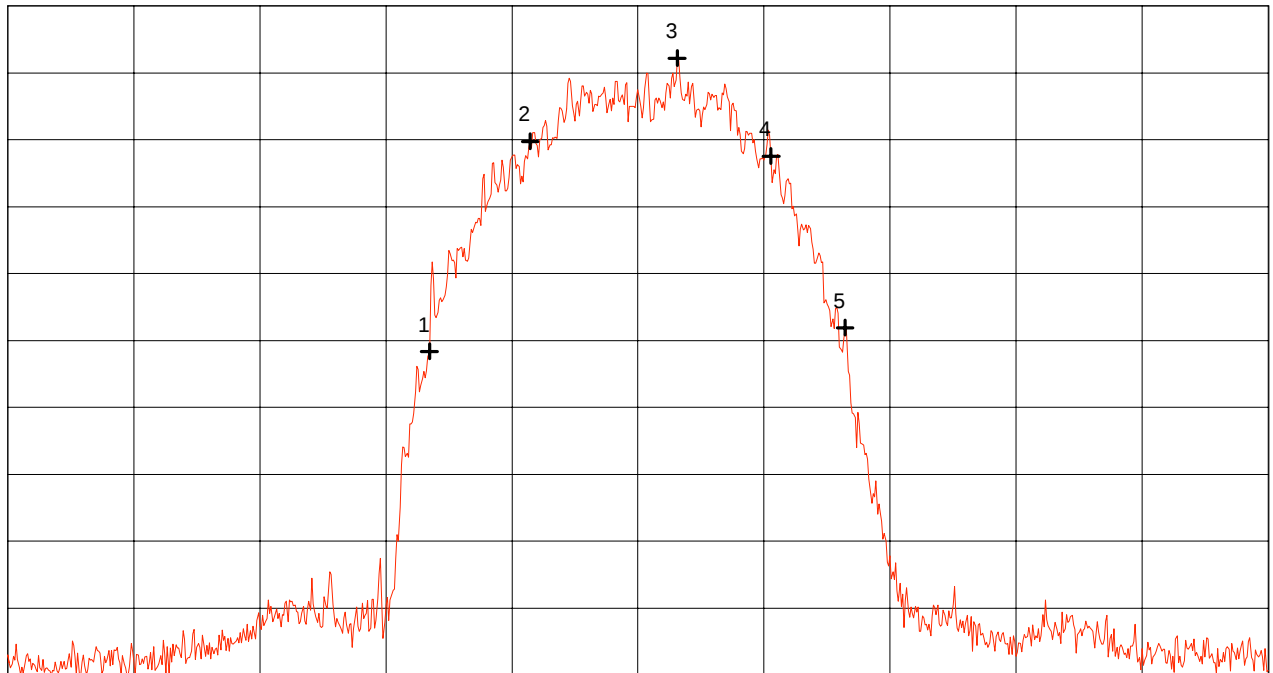
Result: Test passed

Note: -20 dB points for information only!

Ref.Level 10 dBm
5 dB dB/Div.

ATT 35 dB

Ref. Offset 21.1 dB



Start 2.397 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.447 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.413722 GHz	-15.82 dBm
Nr.2	2.417722 GHz	-0.11 dBm
Nr.3	2.423556 GHz	6.11 dBm
Nr.4	2.427278 GHz	-1.22 dBm
Nr.5	2.430222 GHz	-14.04 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 34 of 193 Pages

Minimum bandwidth (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.422$ GHz

Tested on: antenna connector

Delta f (-6 dB points) = 9.88 MHz

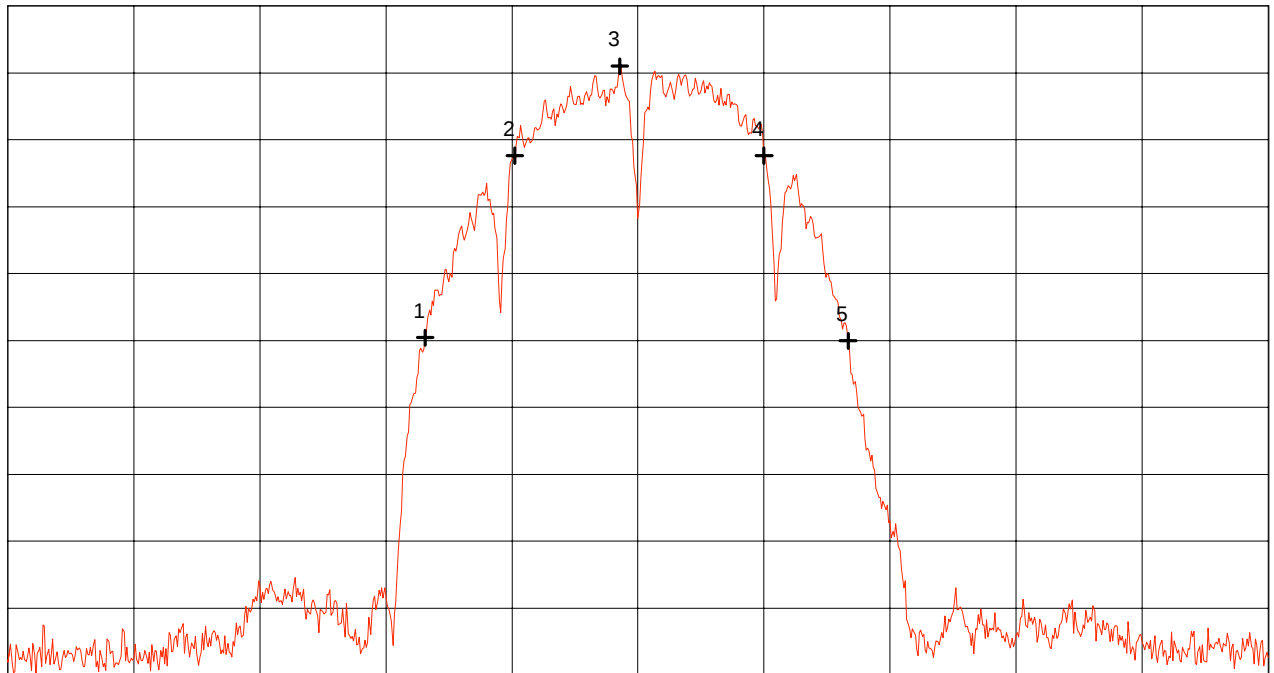
Result: Test passed

Note: -20 dB points for information only!

Ref.Level 10 dBm
5 dB dB/Div.

ATT 35 dB

Ref. Offset 21.1 dB



Start 2.397 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.447 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.413556 GHz	-14.79 dBm
Nr.2	2.417111 GHz	-1.18 dBm
Nr.3	2.421278 GHz	5.50 dBm
Nr.4	2.427000 GHz	-1.18 dBm
Nr.5	2.430333 GHz	-15.03 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 35 of 193 Pages

Minimum bandwidth (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.437$ GHz

Tested on: antenna connector

Delta f (-6 dB points) = 9.55 MHz

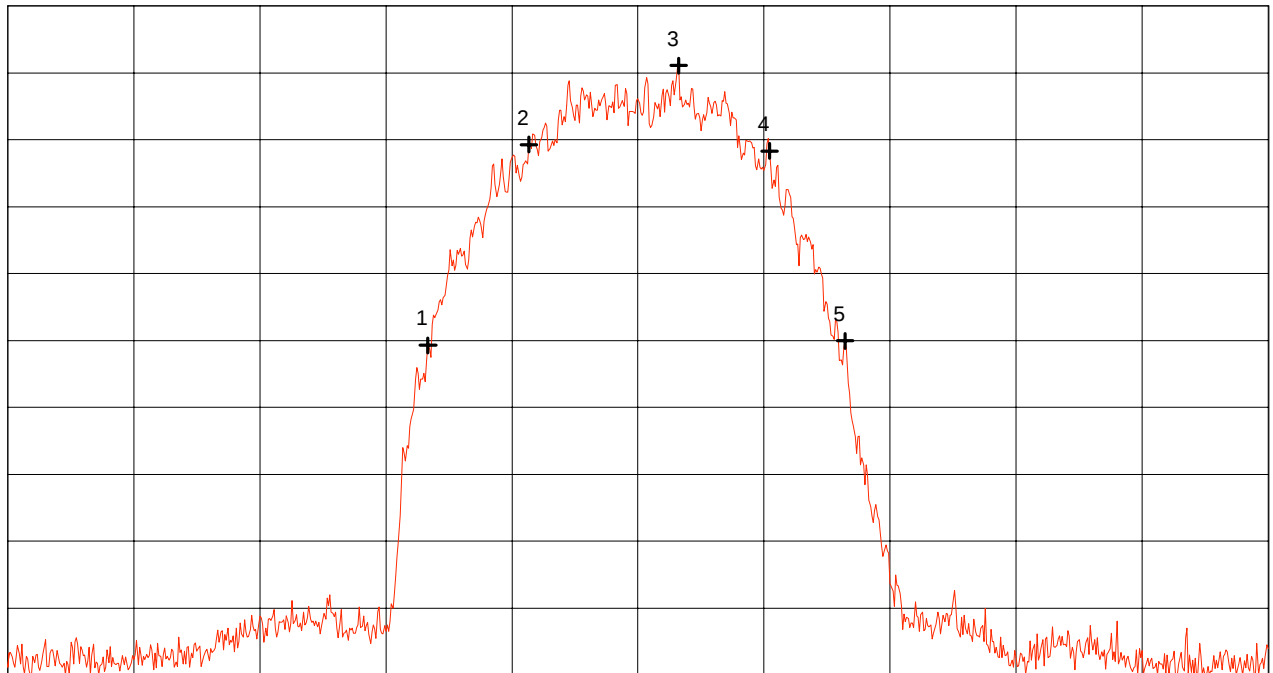
Result: Test passed

Note: -20 dB points for information only!

Ref.Level 10 dBm
5 dB dB/Div.

ATT 35 dB

Ref. Offset 21.1 dB



Start 2.412 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.462 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.428667 GHz	-15.36 dBm
Nr.2	2.432667 GHz	-0.36 dBm
Nr.3	2.438611 GHz	5.55 dBm
Nr.4	2.442222 GHz	-0.84 dBm
Nr.5	2.445222 GHz	-15.02 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 36 of 193 Pages

Minimum bandwidth (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.437$ GHz

Tested on: antenna connector

Delta f (-6 dB points) = 9.88 MHz

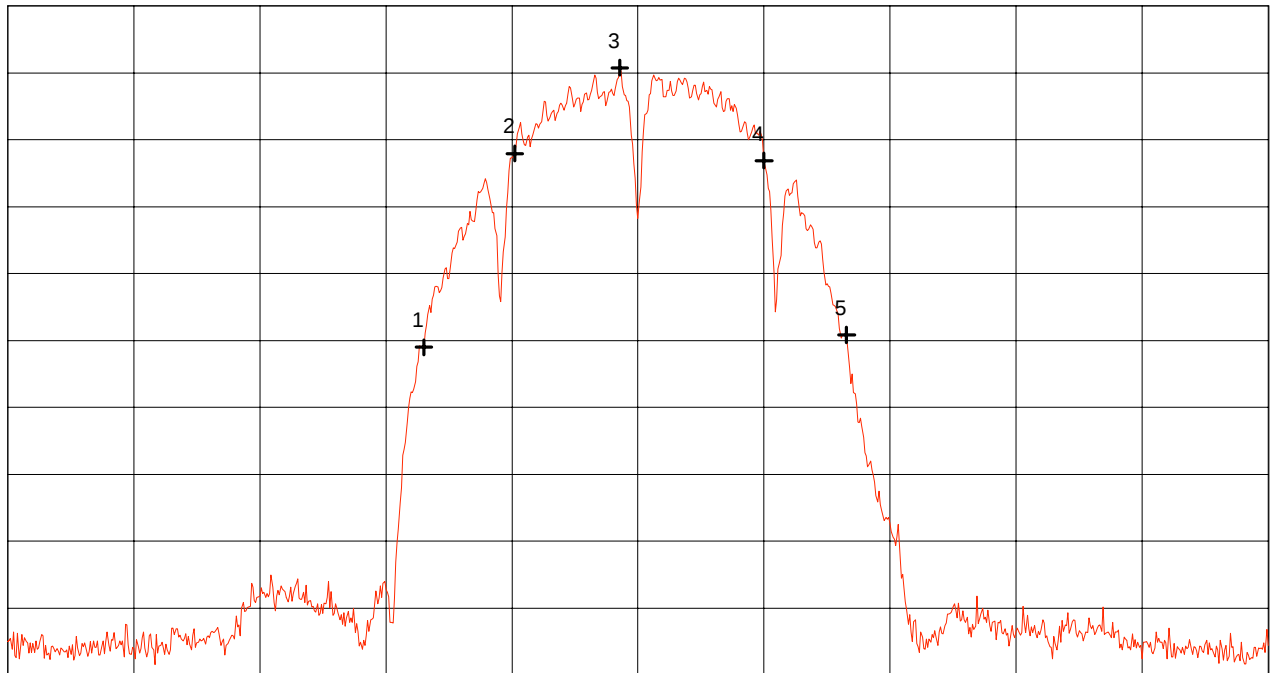
Result: Test passed

Note: -20 dB points for information only!

Ref.Level 10 dBm
5 dB dB/Div.

ATT 35 dB

Ref. Offset 21.1 dB



Start 2.412 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.462 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.428500 GHz	-15.52 dBm
Nr.2	2.432111 GHz	-1.03 dBm
Nr.3	2.436278 GHz	5.38 dBm
Nr.4	2.442000 GHz	-1.56 dBm
Nr.5	2.445278 GHz	-14.58 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 37 of 193 Pages

Minimum bandwidth (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Tested on: antenna connector

Delta f (-6 dB points) = 9.61 MHz

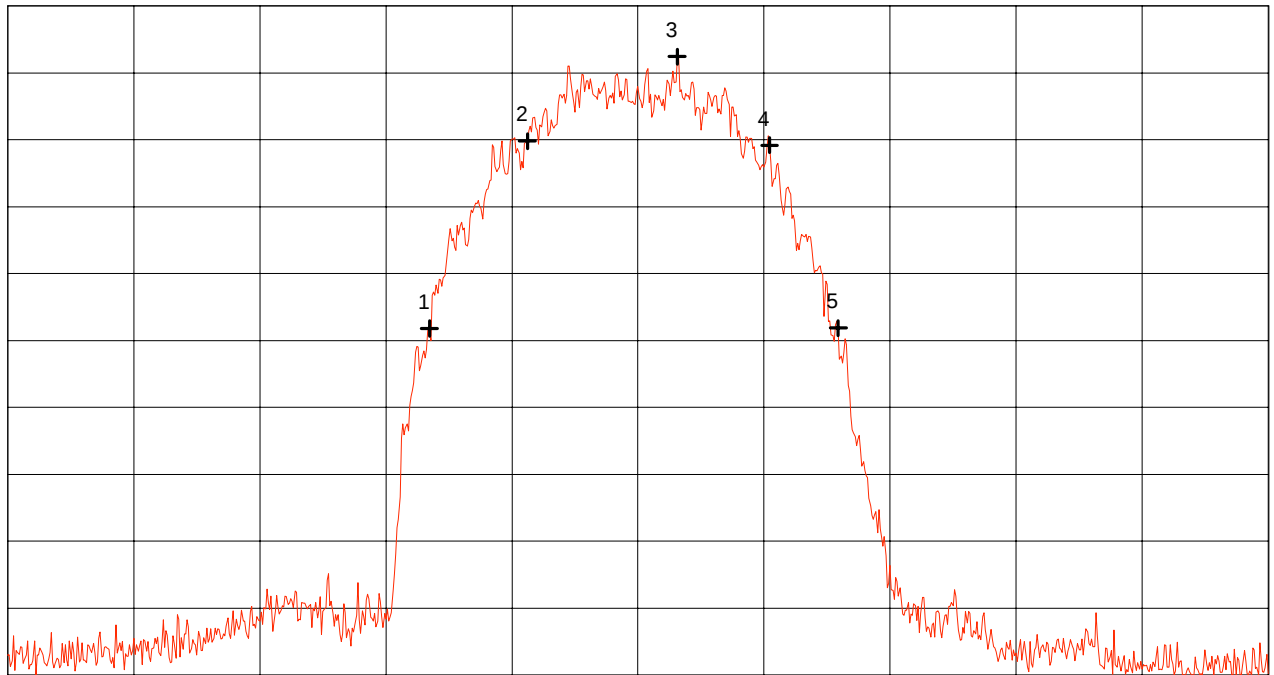
Result: Test passed

Note: -20 dB points for information only!

Ref.Level 10 dBm
5 dB dB/Div.

ATT 35 dB

Ref. Offset 21.1 dB



Start 2.427 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.477 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.443722 GHz	-14.11 dBm
Nr.2	2.447611 GHz	-0.10 dBm
Nr.3	2.453556 GHz	6.22 dBm
Nr.4	2.457222 GHz	-0.41 dBm
Nr.5	2.459944 GHz	-14.08 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 38 of 193 Pages

Minimum bandwidth (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.452$ GHz

Tested on: antenna connector

Delta f (-6 dB points) = 10.00 MHz

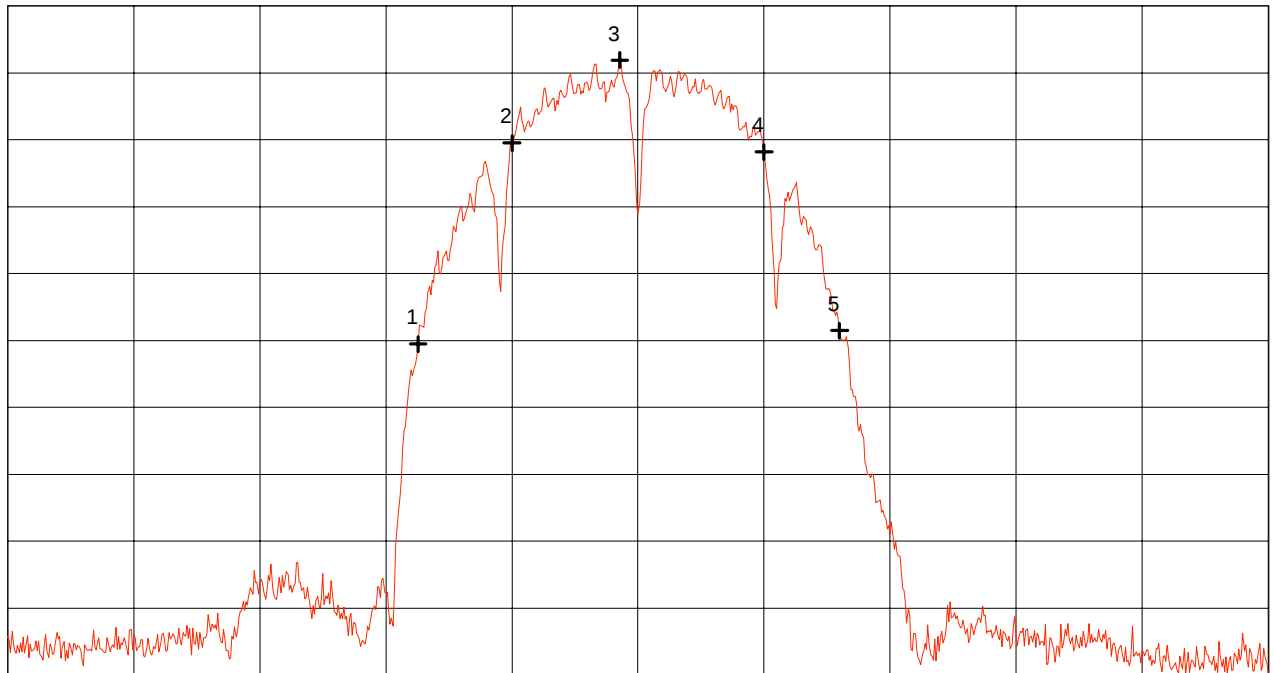
Result: Test passed

Note: -20 dB points for information only!

Ref.Level 10 dBm
5 dB dB/Div.

ATT 35 dB

Ref. Offset 21.1 dB



Start 2.427 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.477 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.443278 GHz	-15.27 dBm
Nr.2	2.447000 GHz	-0.25 dBm
Nr.3	2.451278 GHz	5.95 dBm
Nr.4	2.457000 GHz	-0.91 dBm
Nr.5	2.460000 GHz	-14.27 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 39 of 193 Pages

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

Model: LUC PC24E-H-FC with AOU24-DI-24
 Type: RF-modem with external antenna for wireless LAN
 Serial No.: 99UT11411941 (RF-modem), sample no. 1 (antenna)
 Applicant: Lucent Technologies Nederland B.V.
 Date of test: 11/29/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - 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 Mbps	2.417	14.9	0.5	15.4	See table below
	2.422	14.7	0.5	15.2	
	2.437	14.3	0.5	14.8	
	2.452	14.9	0.5	15.4	
5.5 Mbps	2.417	14.8	0.5	15.3	
	2.422	14.6	0.5	15.1	
	2.437	14.3	0.5	14.8	
	2.452	14.9	0.5	15.4	
11 Mbps	2.417	14.9	0.5	15.4	
	2.422	14.7	0.5	15.2	
	2.437	14.3	0.5	14.8	
	2.452	14.9	0.5	15.4	

Note:

Typical gain of external parabolic antenna AOU24-DI-24 is 23.5 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-DI-24 [dBi]	Total insertion loss [dB]	Effective antenna gain total value [dBi]	exceeding 6 dBi [dB]	Limit [dBm]
20 ft LMR400	23.5	2.9	20.6	14.6	15.4
20 ft LMR200	23.5	4.5	19.0	13.0	17.0
50 ft LMR400	23.5	4.5	19.0	13.0	17.0
75 ft LMR400	23.5	5.3	18.2	12.2	17.8

Result: The limit is kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

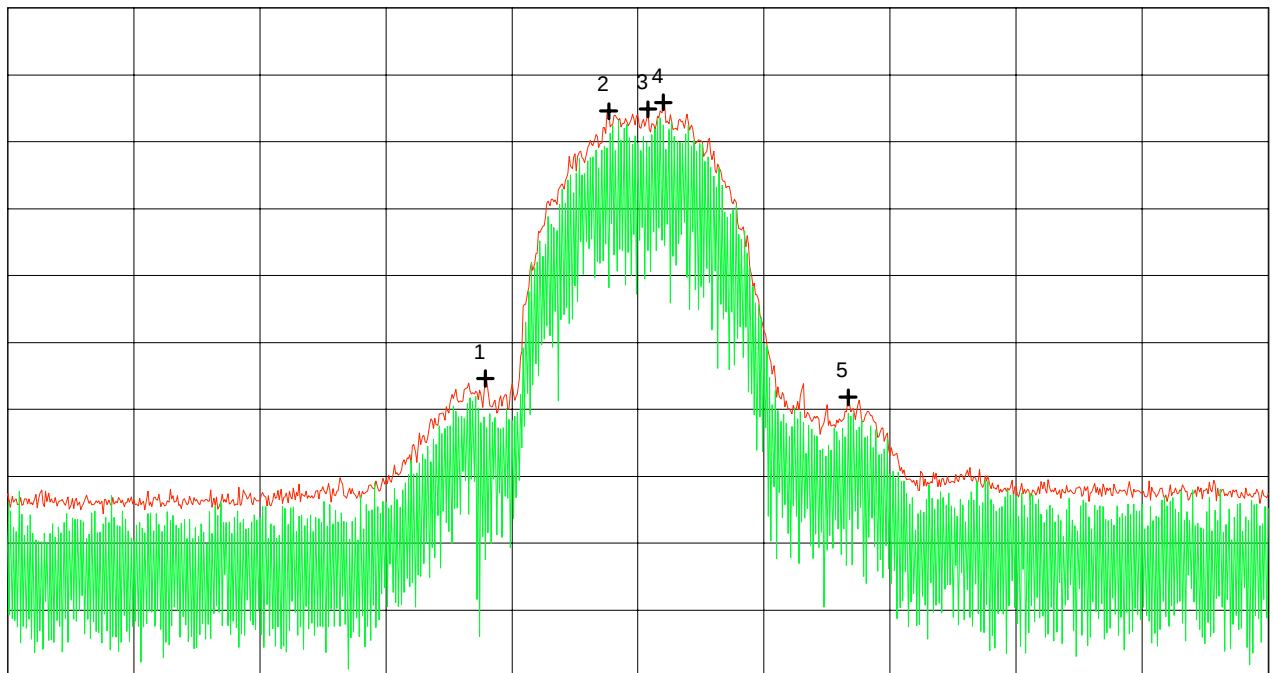
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Tested on: antenna connector

Ref.Level 20 dBm
10 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.367 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.467 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.404889 GHz	-35.38 dBm
Nr.2	2.414667 GHz	4.57 dBm
Nr.3	2.417778 GHz	4.85 dBm
Nr.4	2.419000 GHz	5.89 dBm
Nr.5	2.433667 GHz	-38.19 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 41 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

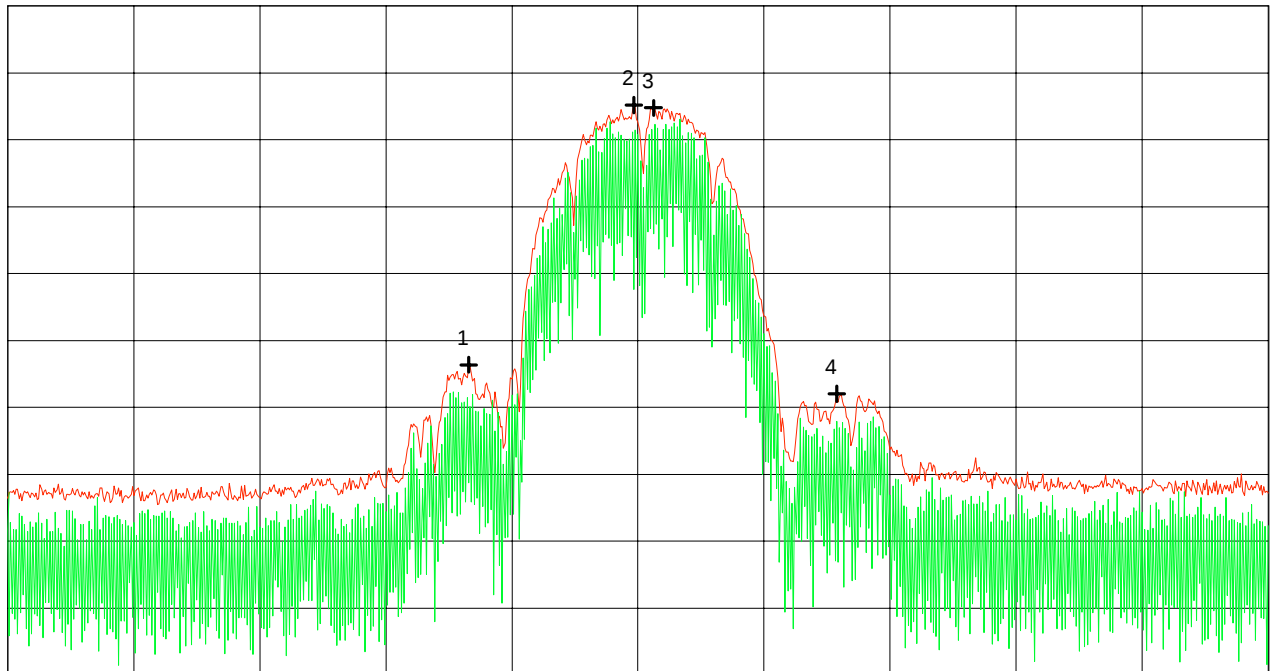
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.417$ GHz

Tested on: antenna connector

Ref.Level 20 dBm
10 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.367 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.467 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.403556 GHz	-33.62 dBm
Nr.2	2.416667 GHz	5.18 dBm
Nr.3	2.418222 GHz	4.75 dBm
Nr.4	2.432778 GHz	-37.97 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 42 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

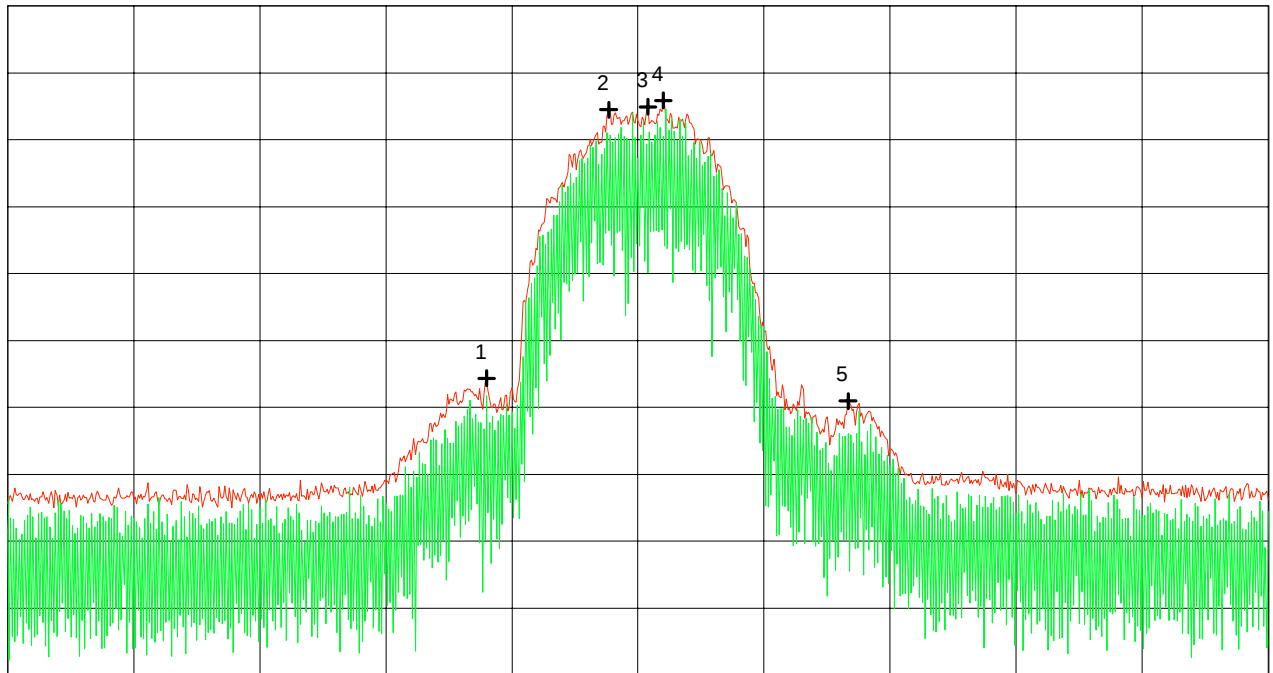
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.422$ GHz

Tested on: antenna connector

Ref.Level 20 dBm
10 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.372 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.472 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.410000 GHz	-35.66 dBm
Nr.2	2.419667 GHz	4.49 dBm
Nr.3	2.422778 GHz	4.92 dBm
Nr.4	2.424000 GHz	5.86 dBm
Nr.5	2.438667 GHz	-39.03 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 43 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

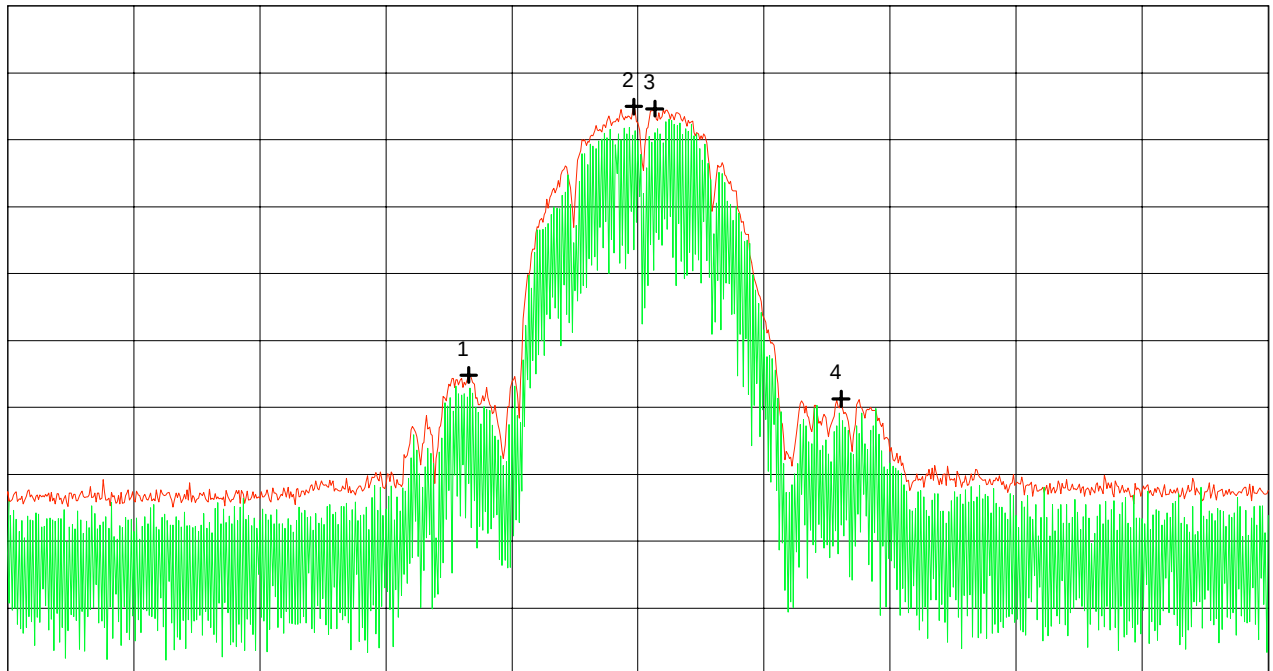
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.422$ GHz

Tested on: antenna connector

Ref.Level 20 dBm
10 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.372 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.472 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.408556 GHz	-35.17 dBm
Nr.2	2.421667 GHz	4.97 dBm
Nr.3	2.423333 GHz	4.64 dBm
Nr.4	2.438111 GHz	-38.73 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 44 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

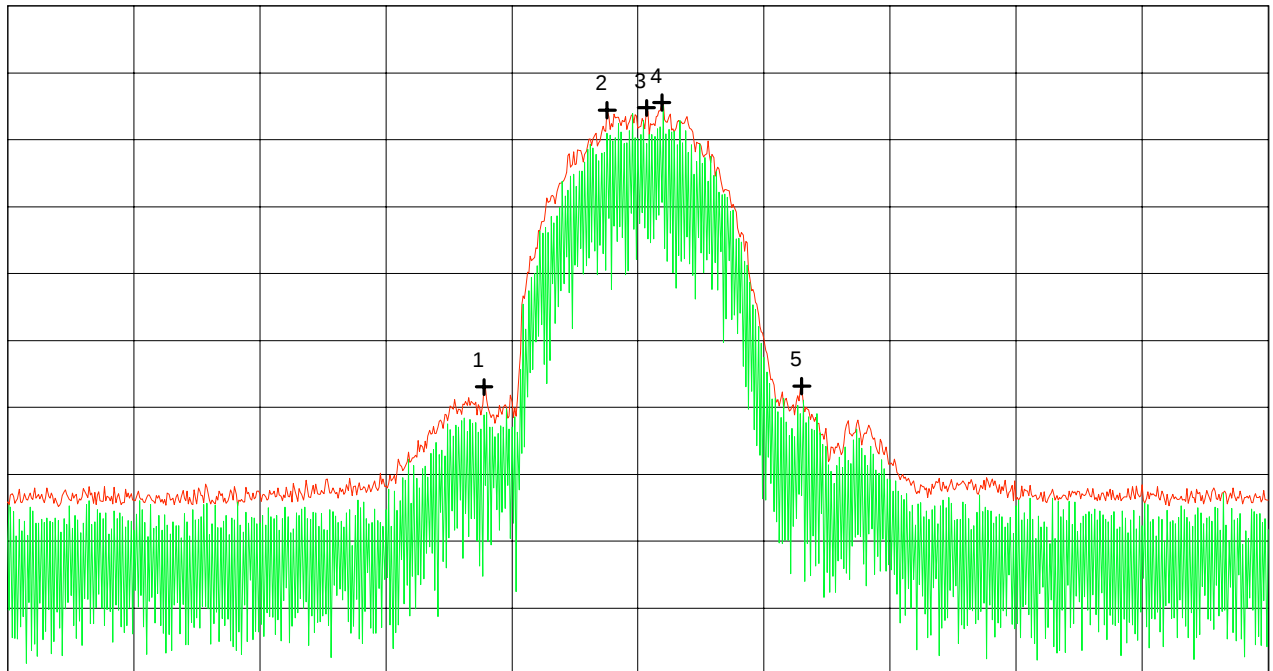
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.437$ GHz

Tested on: antenna connector

Ref.Level 20 dBm
10 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.387 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.487 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.424778 GHz	-36.95 dBm
Nr.2	2.434556 GHz	4.42 dBm
Nr.3	2.437667 GHz	4.75 dBm
Nr.4	2.438889 GHz	5.56 dBm
Nr.5	2.450000 GHz	-36.82 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 45 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

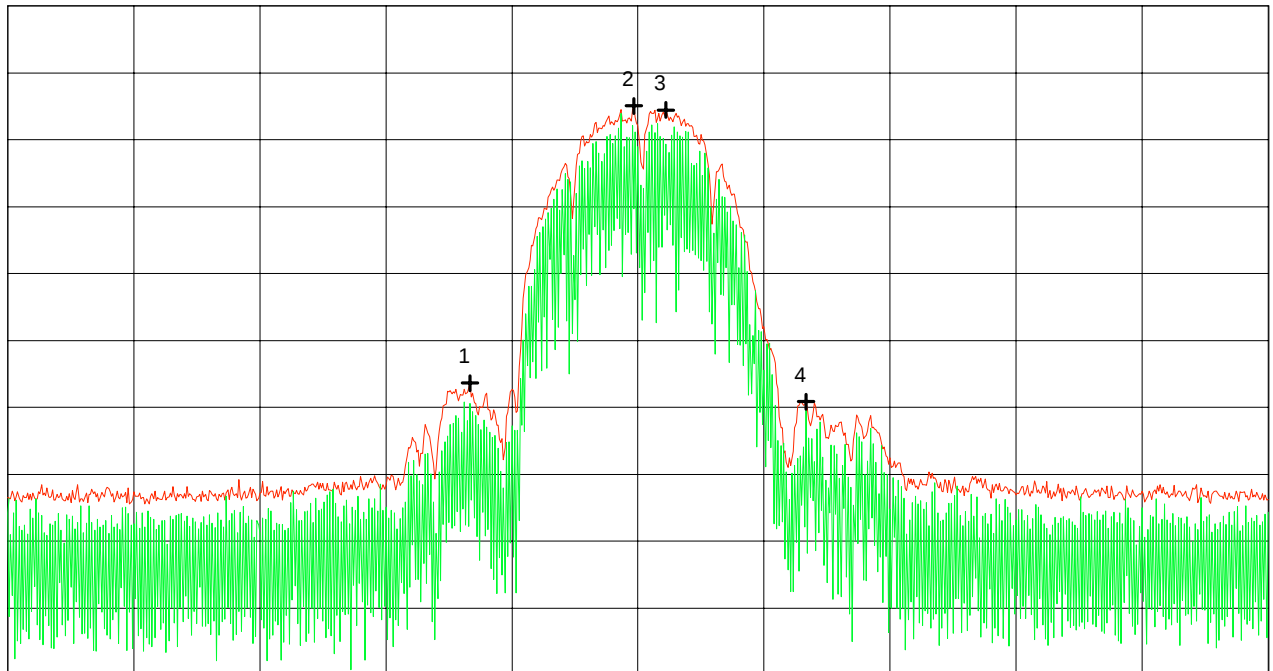
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.437$ GHz

Tested on: antenna connector

Ref.Level 20 dBm
10 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.387 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.487 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.423667 GHz	-36.39 dBm
Nr.2	2.436667 GHz	5.05 dBm
Nr.3	2.439222 GHz	4.44 dBm
Nr.4	2.450333 GHz	-39.13 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 46 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

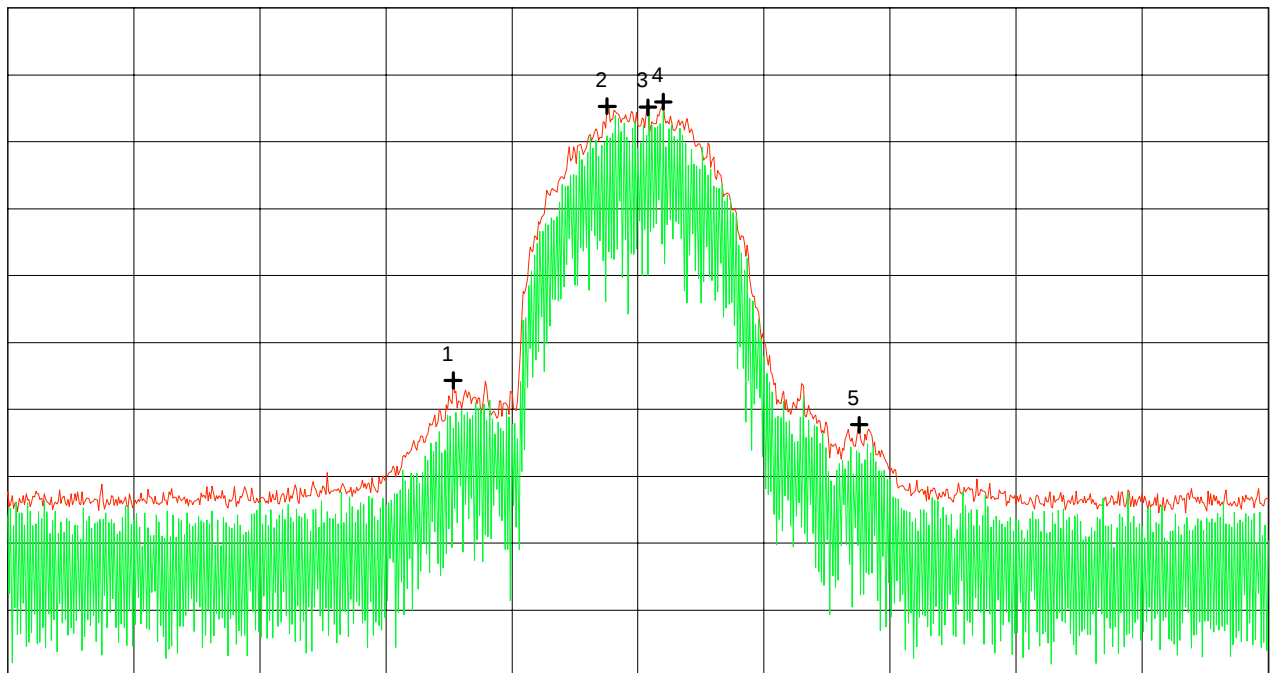
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Tested on: antenna connector

Ref.Level 20 dBm
10 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.402 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.502 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.437333 GHz	-35.68 dBm
Nr.2	2.449556 GHz	5.30 dBm
Nr.3	2.452778 GHz	5.15 dBm
Nr.4	2.454000 GHz	5.96 dBm
Nr.5	2.469556 GHz	-42.31 dBm
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 47 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

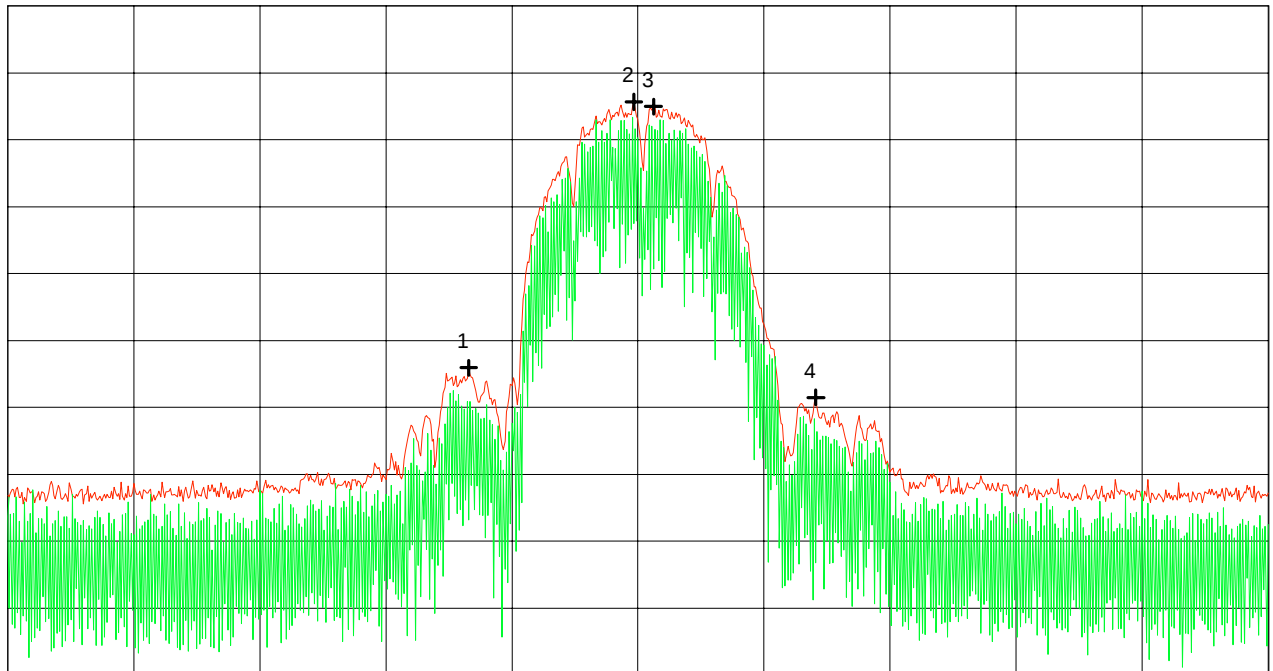
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.452$ GHz

Tested on: antenna connector

Ref.Level 20 dBm
10 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.402 GHz
RBW 100 kHz

VBW 100 kHz

Stop 2.502 GHz
SWP 40 ms

**** Multi Marker ****

Nr.1	2.438556 GHz	-34.08 dBm
Nr.2	2.451667 GHz	5.66 dBm
Nr.3	2.453222 GHz	4.97 dBm
Nr.4	2.466111 GHz	-38.52 dBm
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 48 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

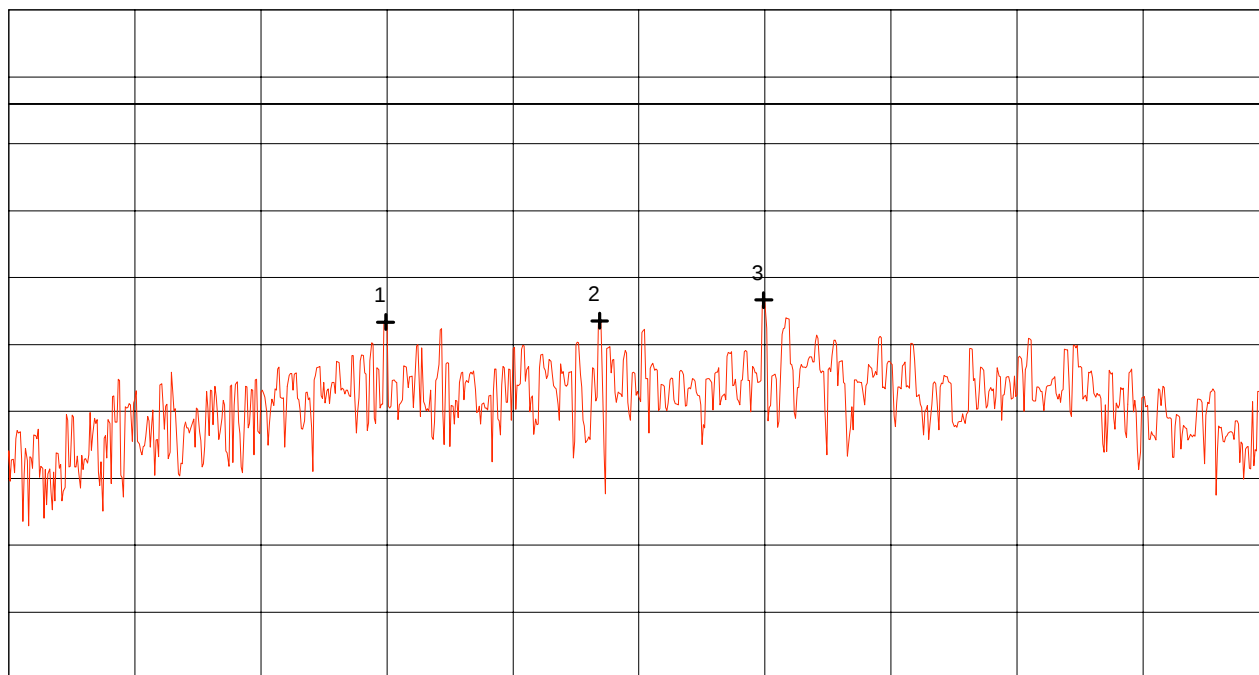
Tested on: antenna connector

Note: Prescan for zooming into maximum!

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.412 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.422 GHz
SWP 3.40 s

**** Multi Marker ****

Nr.1	2.414989 GHz	-8.32 dBm
Nr.2	2.416689 GHz	-8.23 dBm
Nr.3	2.417989 GHz	-6.68 dBm
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 49 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

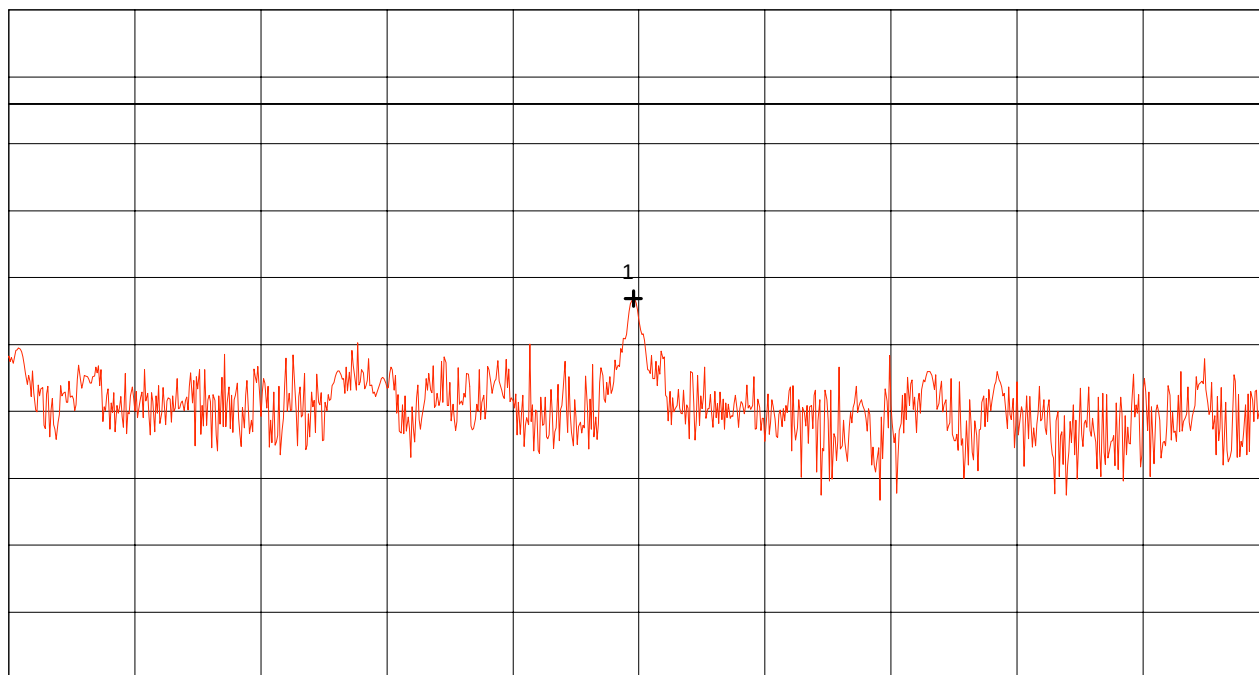
Tested on: antenna connector

Result: Test passed

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.417839 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.418139 GHz
SWP 100 s

**** Multi Marker ****

Nr.1	2.417988 GHz	-6.57 dBm
Nr.2		
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 50 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.417$ GHz

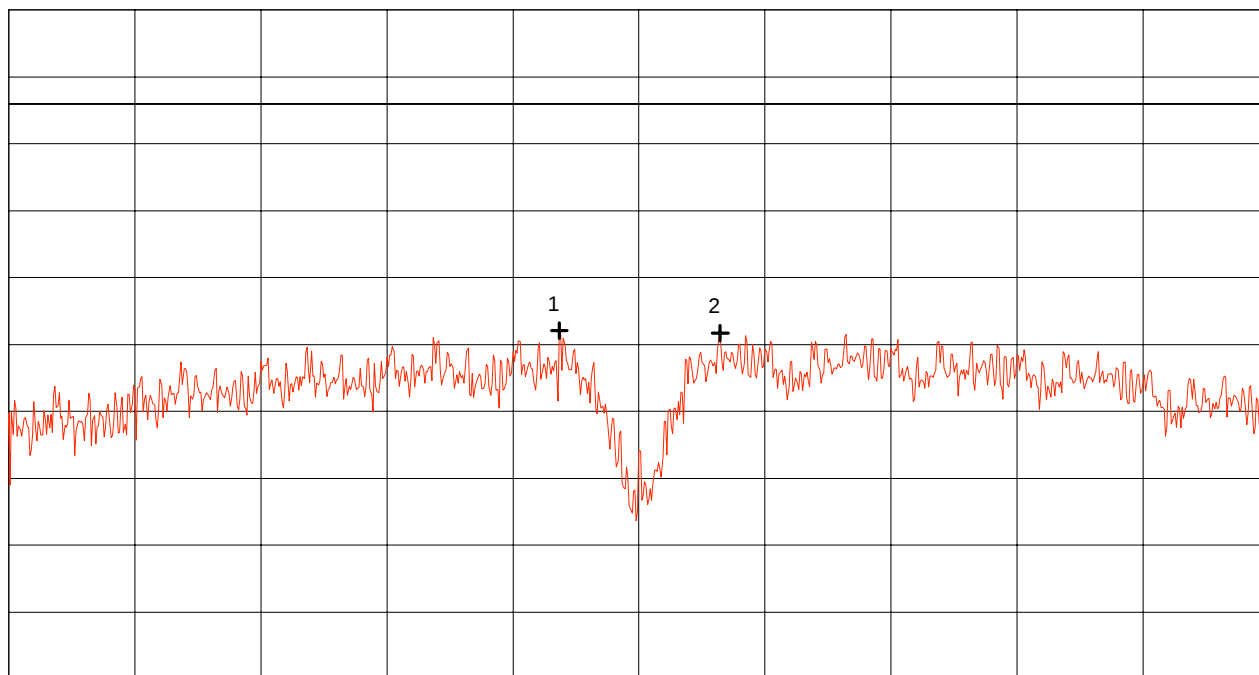
Tested on: antenna connector

Note: Prescan for zooming into maximum!

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.412 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.422 GHz
SWP 3.40 s

**** Multi Marker ****

Nr.1	2.416367 GHz	-8.97 dBm
Nr.2	2.417644 GHz	-9.16 dBm
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 51 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.417$ GHz

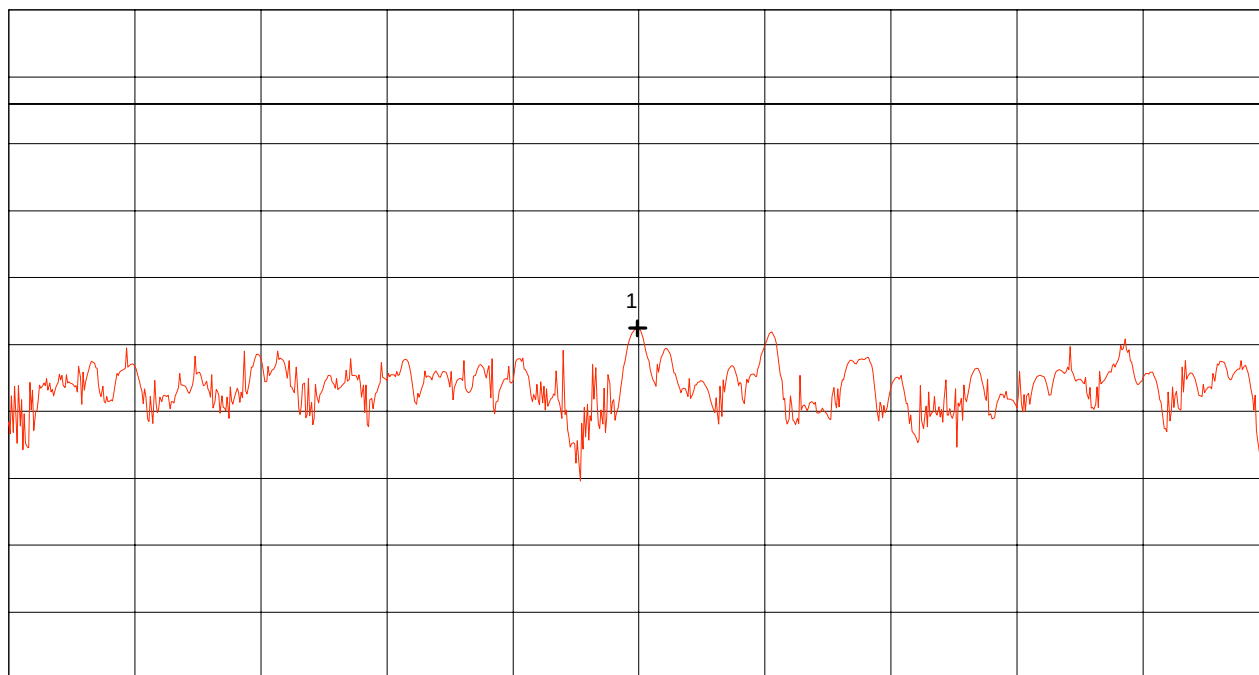
Tested on: antenna connector

Result: Test passed

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.416217 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.416517 GHz
SWP 100 s

**** Multi Marker ****

Nr.1	2.416367 GHz	-8.79 dBm
Nr.2		
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 52 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.422$ GHz

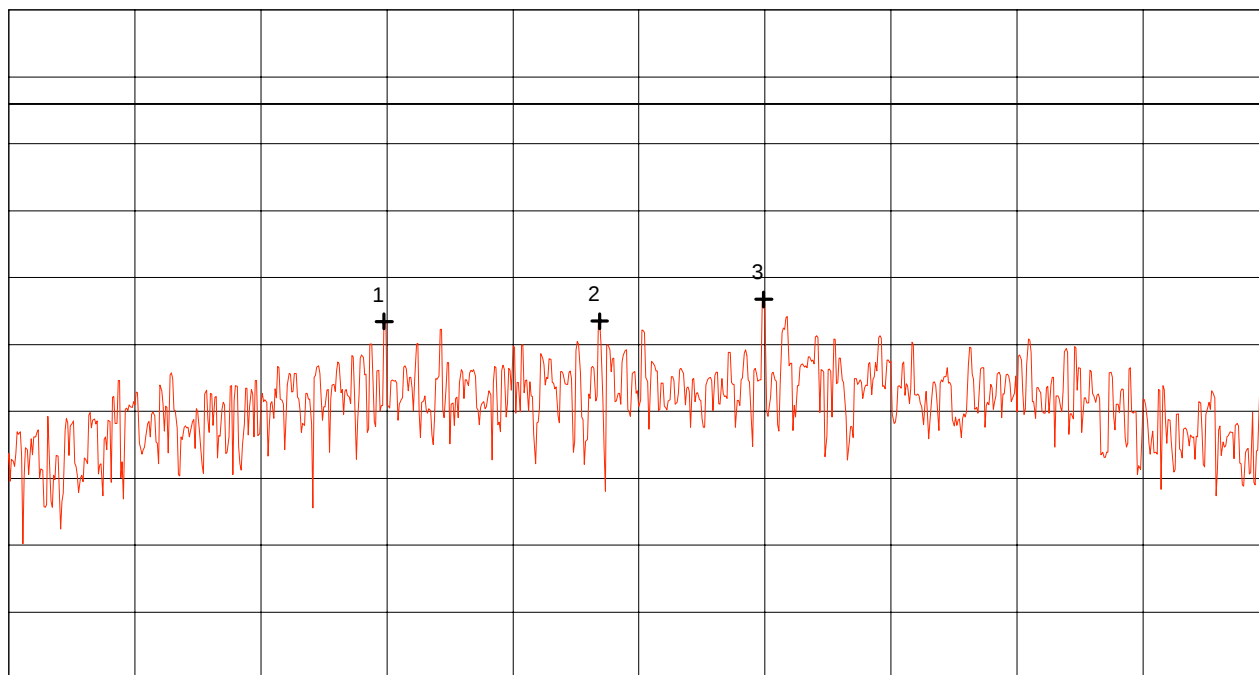
Tested on: antenna connector

Note: Prescan for zooming into maximum!

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.417 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.427 GHz
SWP 3.40 s

**** Multi Marker ****

Nr.1	2.419978 GHz	-8.28 dBm
Nr.2	2.421689 GHz	-8.26 dBm
Nr.3	2.422989 GHz	-6.63 dBm
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 53 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.422$ GHz

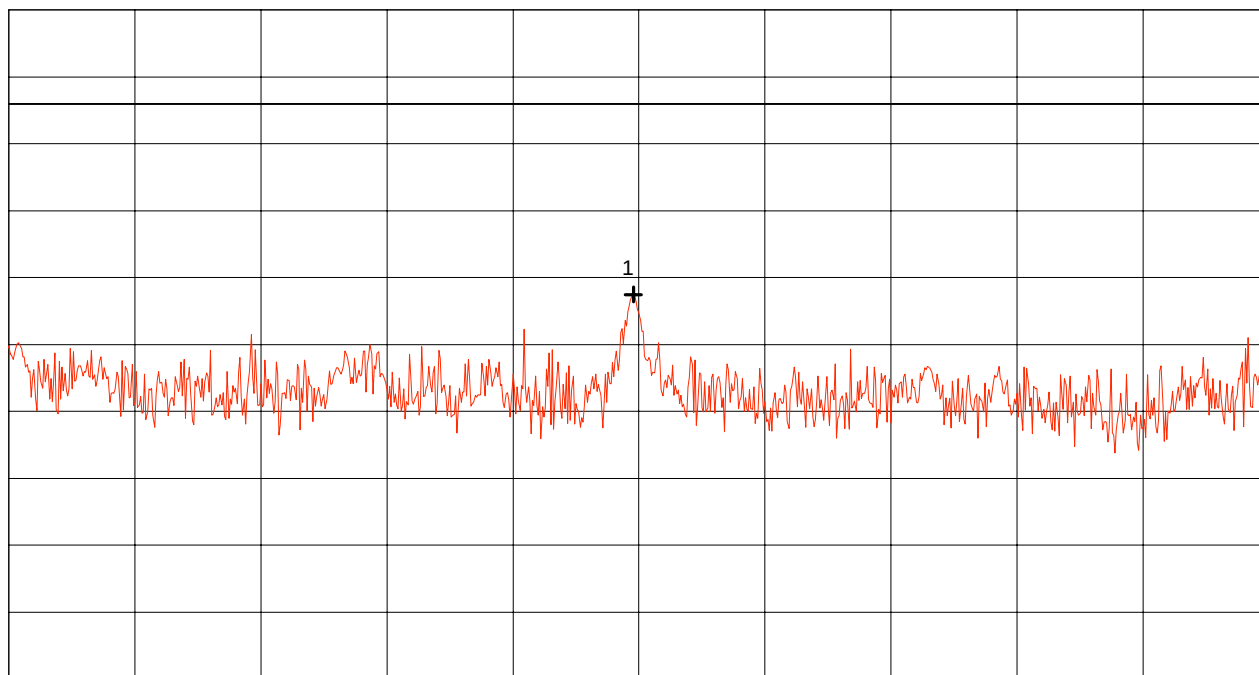
Tested on: antenna connector

Result: Test passed

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.422839 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.423139 GHz
SWP 100 s

**** Multi Marker ****

Nr.1	2.422988 GHz	-6.27 dBm
Nr.2		
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 54 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.422$ GHz

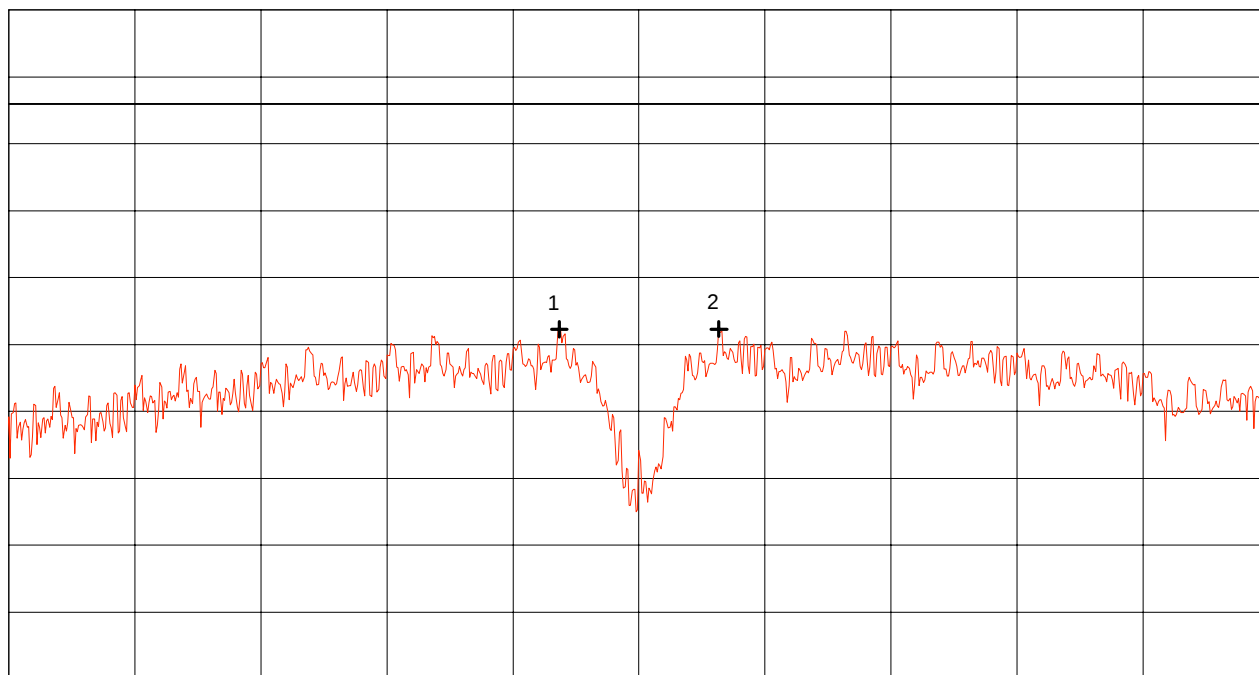
Tested on: antenna connector

Note: Prescan for zooming into maximum!

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.417 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.427 GHz
SWP 3.40 s

**** Multi Marker ****

Nr.1	2.421367 GHz	-8.86 dBm
Nr.2	2.422633 GHz	-8.85 dBm
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 55 of 193 Pages

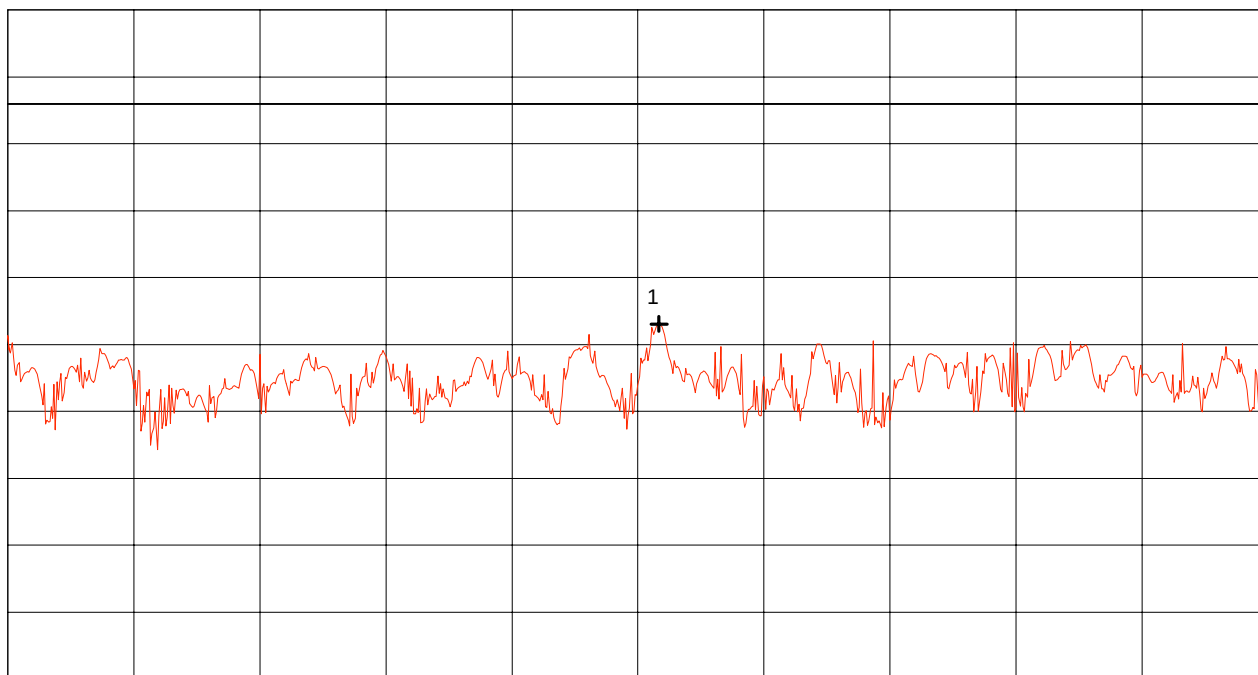
Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC	Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23) - FCC test setup - supply voltage 115 V AC - operating with bit rate 2 Mbps - TX mode with $f = 2.422$ GHz Tested on: antenna connector Result: Test passed
Serial No.: 99UT11411941	
Applicant: Lucent Technologies Nederland B.V.	

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.422483 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.422783 GHz
SWP 100 s

**** Multi Marker ****		

Nr.1	2.422638 GHz	-8.46 dBm
Nr.2		
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by: Rainer Heller	Project-No.: 56305-90734-1
Date: 11/29/1999	Page 56 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.437$ GHz

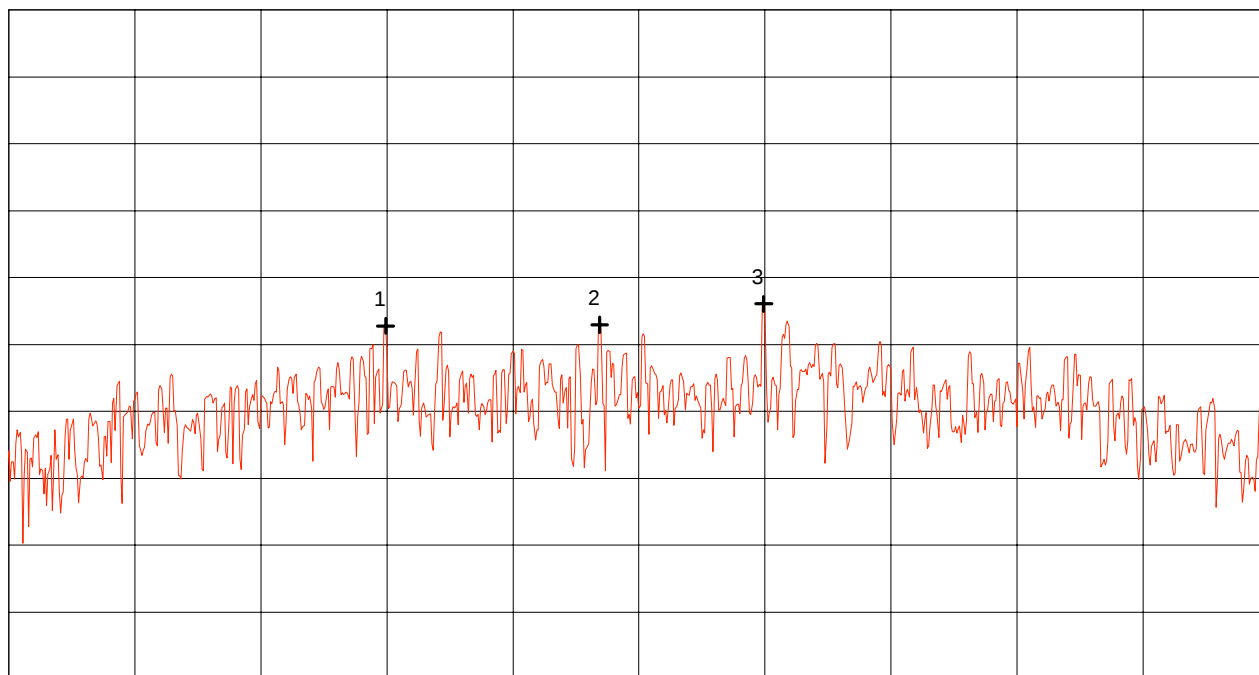
Tested on: antenna connector

Note: Prescan for zooming into maximum!

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.432 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.442 GHz
SWP 3.40 s

**** Multi Marker ****

Nr.1	2.434989 GHz	-8.61 dBm
Nr.2	2.436689 GHz	-8.53 dBm
Nr.3	2.437989 GHz	-6.96 dBm
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 57 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.437$ GHz

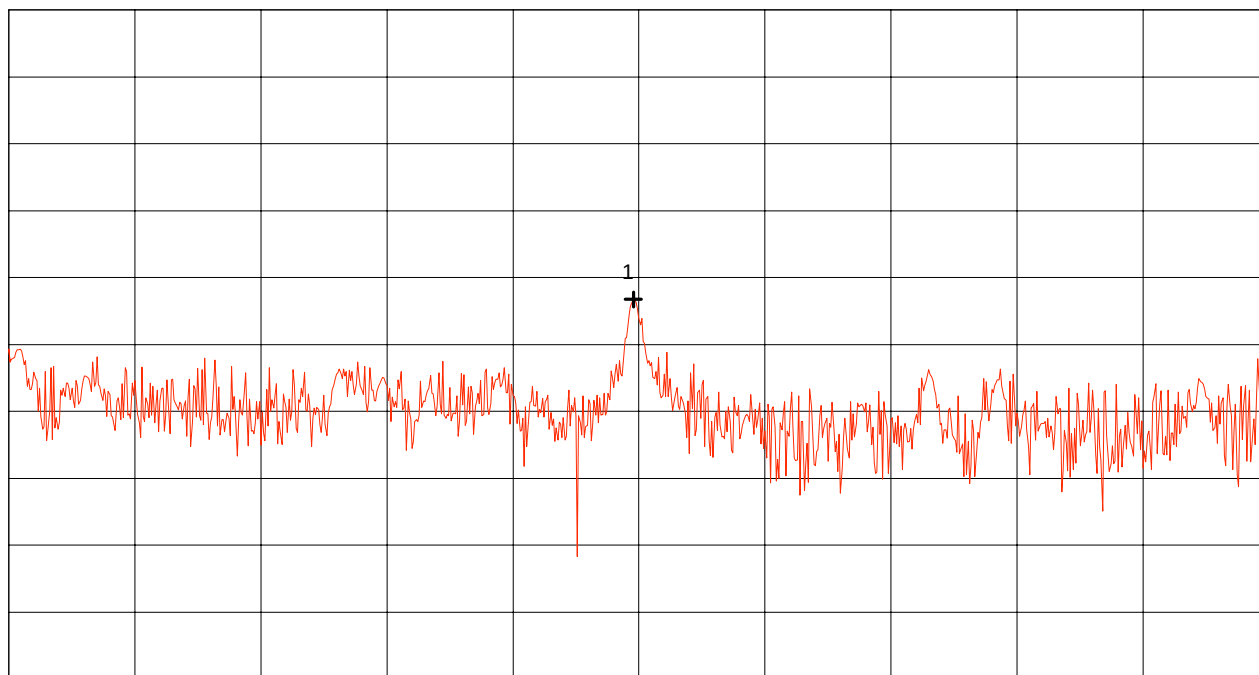
Tested on: antenna connector

Result: Test passed

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.437839 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.438139 GHz
SWP 100 s

**** Multi Marker ****

Nr.1	2.437988 GHz	-6.64 dBm
Nr.2		
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 58 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.437$ GHz

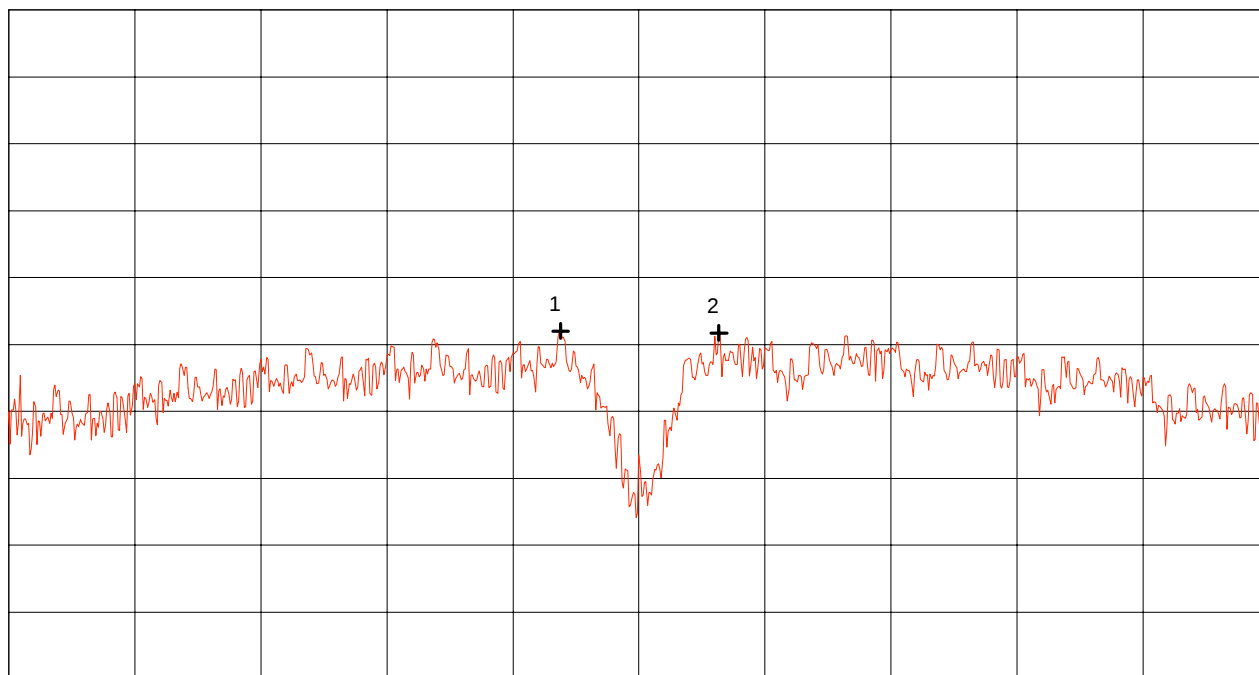
Tested on: antenna connector

Note: Prescan for zooming into maximum!

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.432 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.442 GHz
SWP 3.40 s

**** Multi Marker ****

Nr.1	2.436378 GHz	-8.99 dBm
Nr.2	2.437633 GHz	-9.14 dBm
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 59 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.437$ GHz

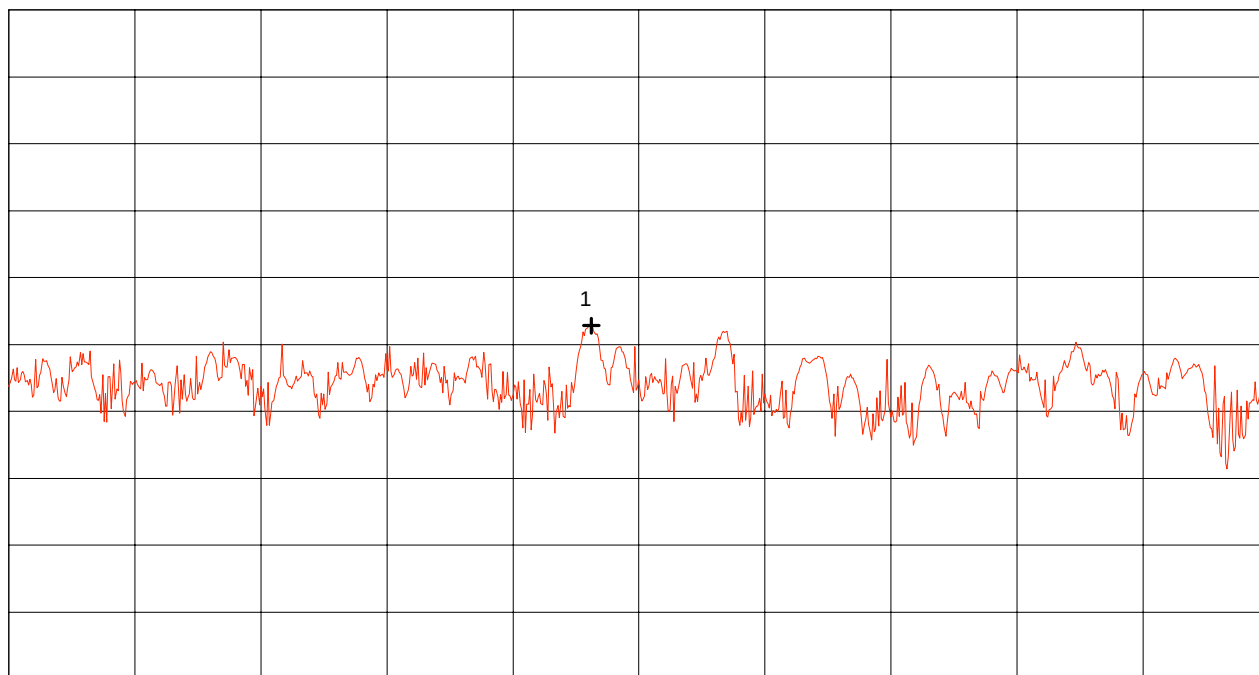
Tested on: antenna connector

Result: Test passed

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.436228 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.436528 GHz
SWP 100 s

**** Multi Marker ****

Nr.1	2.436367 GHz	-8.60 dBm
Nr.2		
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 60 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452 \text{ GHz}$

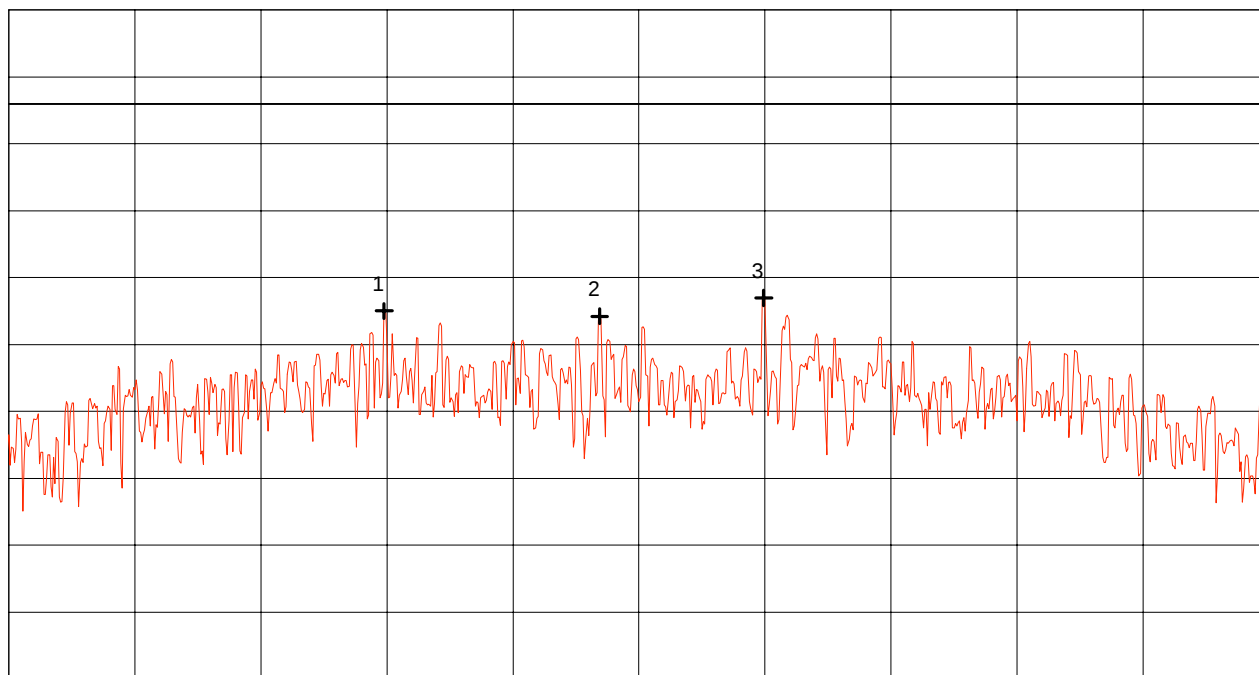
Tested on: antenna connector

Note: Prescan for zooming into maximum!

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.447 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.457 GHz
SWP 3.40 s

**** Multi Marker ****

Nr.1	2.449978 GHz	-7.49 dBm
Nr.2	2.451689 GHz	-7.89 dBm
Nr.3	2.452989 GHz	-6.52 dBm
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 61 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452 \text{ GHz}$

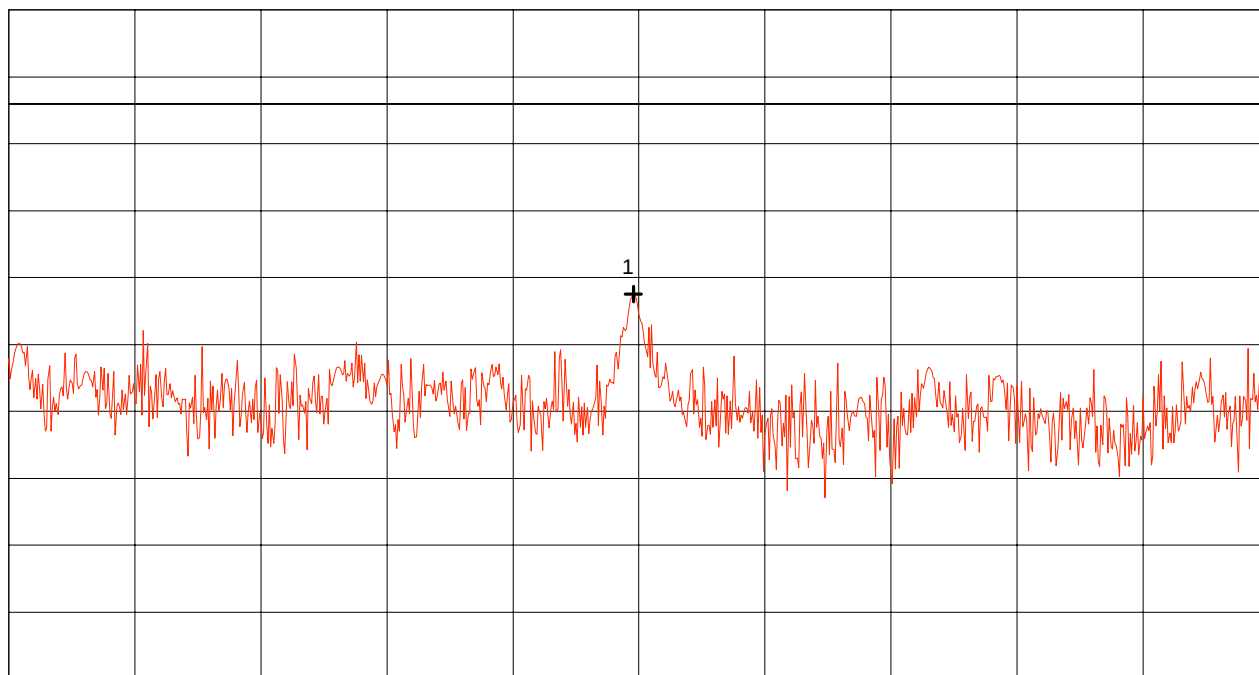
Tested on: antenna connector

Result: Test passed

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.452839 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.453139 GHz
SWP 100 s

**** Multi Marker ****

Nr.1	2.452988 GHz	-6.24 dBm
Nr.2		
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 62 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.452 \text{ GHz}$

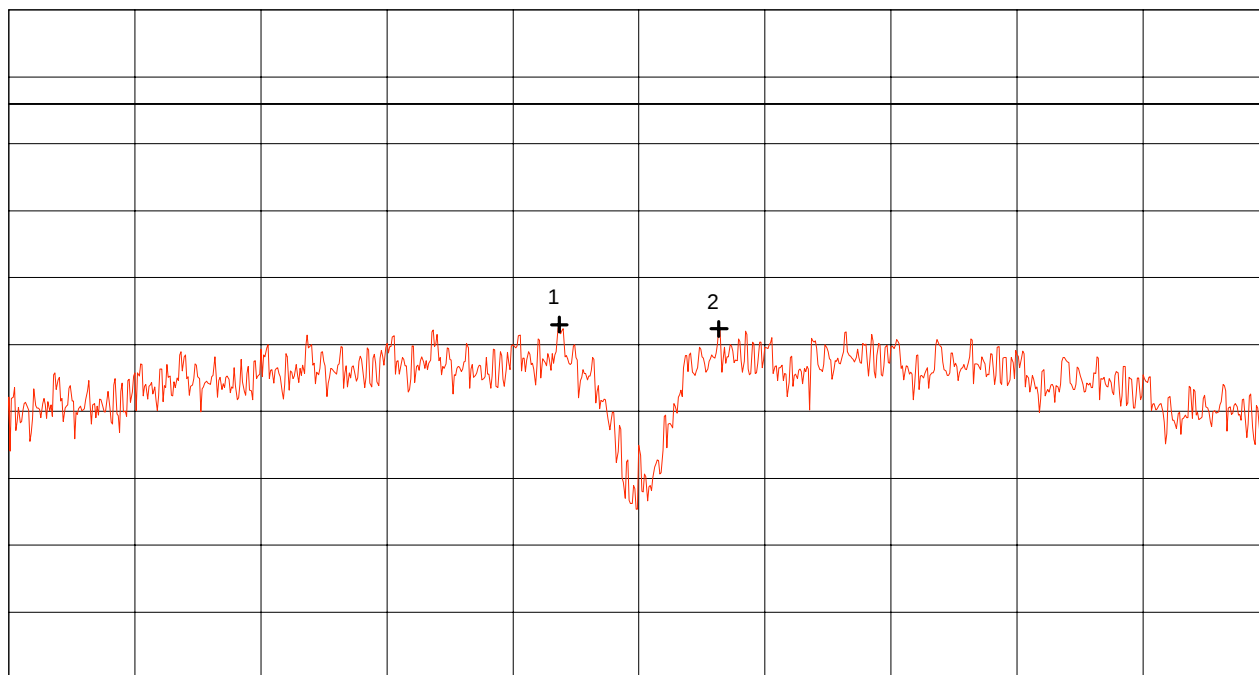
Tested on: antenna connector

Note: Prescan for zooming into maximum!

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.447 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.457 GHz
SWP 3.40 s

**** Multi Marker ****

Nr.1	2.451367 GHz	-8.51 dBm
Nr.2	2.452633 GHz	-8.84 dBm
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 63 of 193 Pages

Peak power density (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- operating with bit rate 2 Mbps
- TX mode with $f = 2.452 \text{ GHz}$

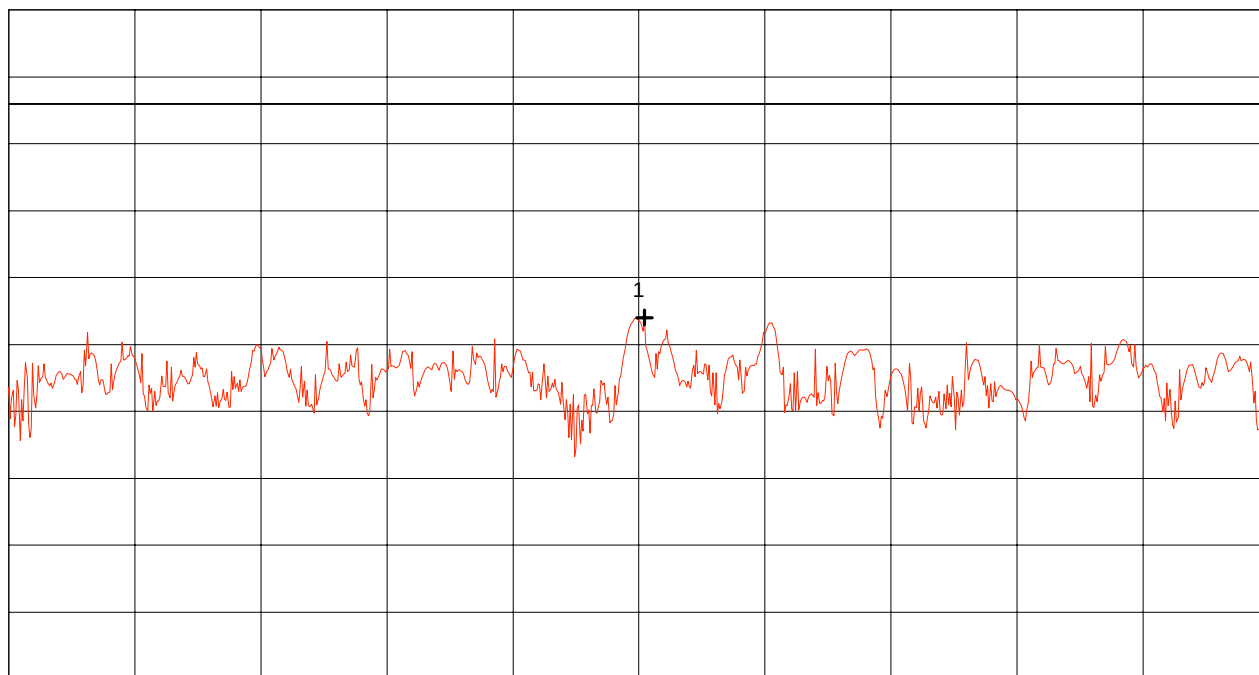
Tested on: antenna connector

Result: Test passed

Ref.Level 15 dBm
5 dB dB/Div.

ATT 15 dB

Ref. Offset 21.1 dB



Start 2.451217 GHz
RBW 3 kHz

VBW 100 kHz

Stop 2.451517 GHz
SWP 100 s

**** Multi Marker ****

Nr.1	2.451368 GHz	-7.99 dBm
Nr.2		
Nr.3		
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
11/29/1999

Project-No.:
56305-90734-1

Page 64 of 193 Pages

Frequency range (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- TX mode with $f = 2.417$ GHz

Tested on: antenna connector

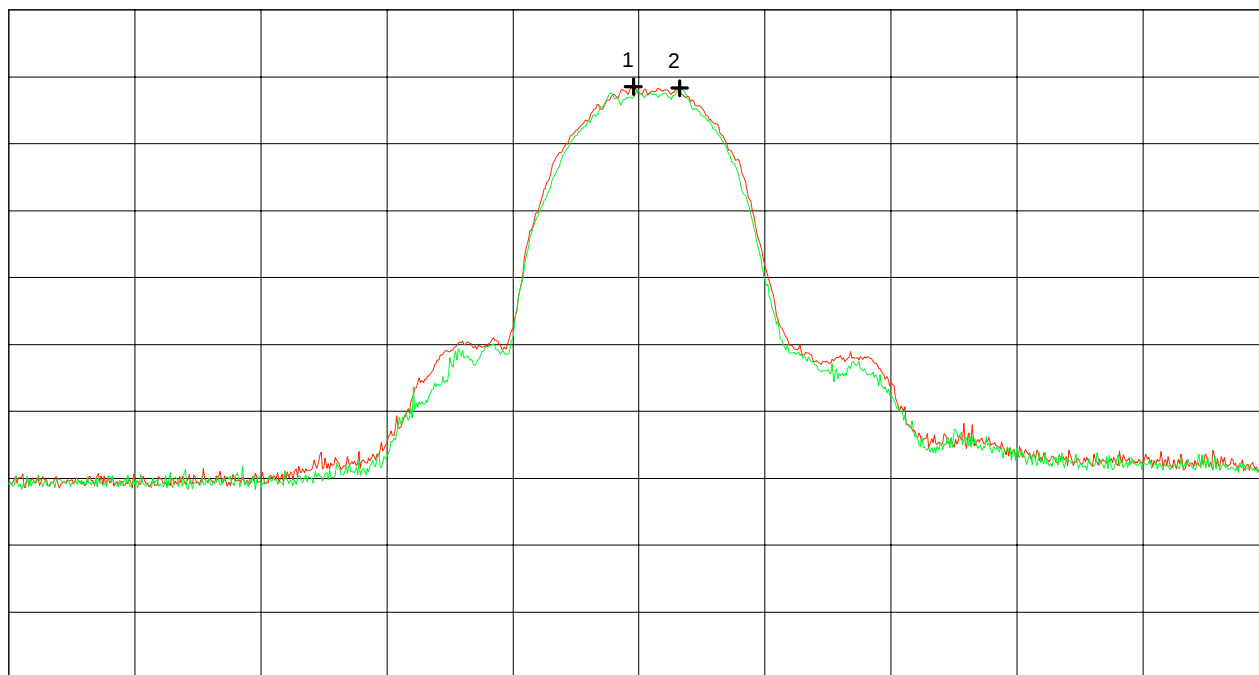
Channel A (red) = operating with bit rate 11 Mbps
Channel B (green) = operating with bit rate 5.5 Mbps

Note:
Prescan (conducted) for selection of worst case bit rate for radiated emission at band edges

Ref.Level 130 dB μ V
10 dB dB/Div.

ATT 15 dB

Ref. Offset 11.1 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.467 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.416556 GHz	118.53 dB μ V	(A)
Nr.2	2.420222 GHz	118.33 dB μ V	(B)
Nr.3			
Nr.4			
Nr.5			
Nr.6			
Nr.7			
Nr.8			

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 65 of 193 Pages

Frequency range (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- TX mode with $f = 2.417$ GHz

Tested on: antenna connector

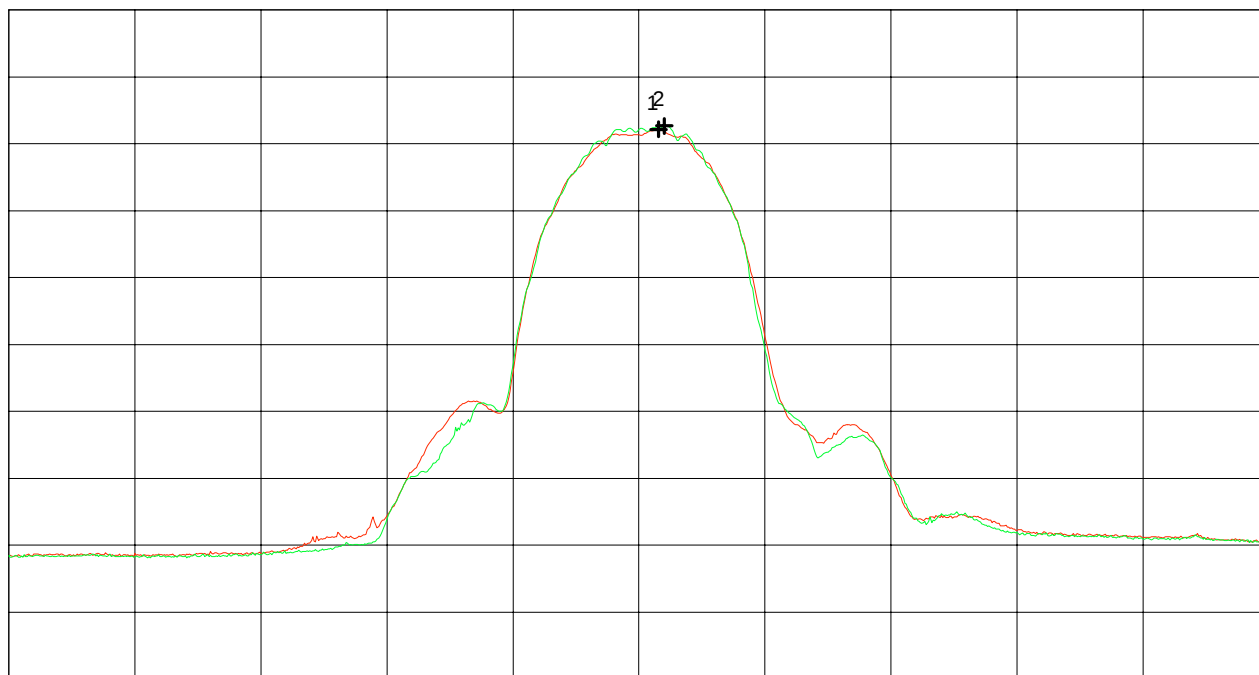
Channel A (red) = operating with bit rate 11 Mbps
Channel B (green) = operating with bit rate 5.5 Mbps

Note:
Prescan (conducted) for selection of worst case bit rate for radiated emission at band edges

Ref.Level 130 dB μ V
10 dB dB/Div.

ATT 15 dB

Ref. Offset 11.1 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.467 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.418556 GHz	112.13 dB μ V	(A)
Nr.2	2.419000 GHz	112.67 dB μ V	(B)
Nr.3			
Nr.4			
Nr.5			
Nr.6			
Nr.7			
Nr.8			

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 66 of 193 Pages

Frequency range (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- TX mode with $f = 2.422 \text{ GHz}$

Tested on: antenna connector

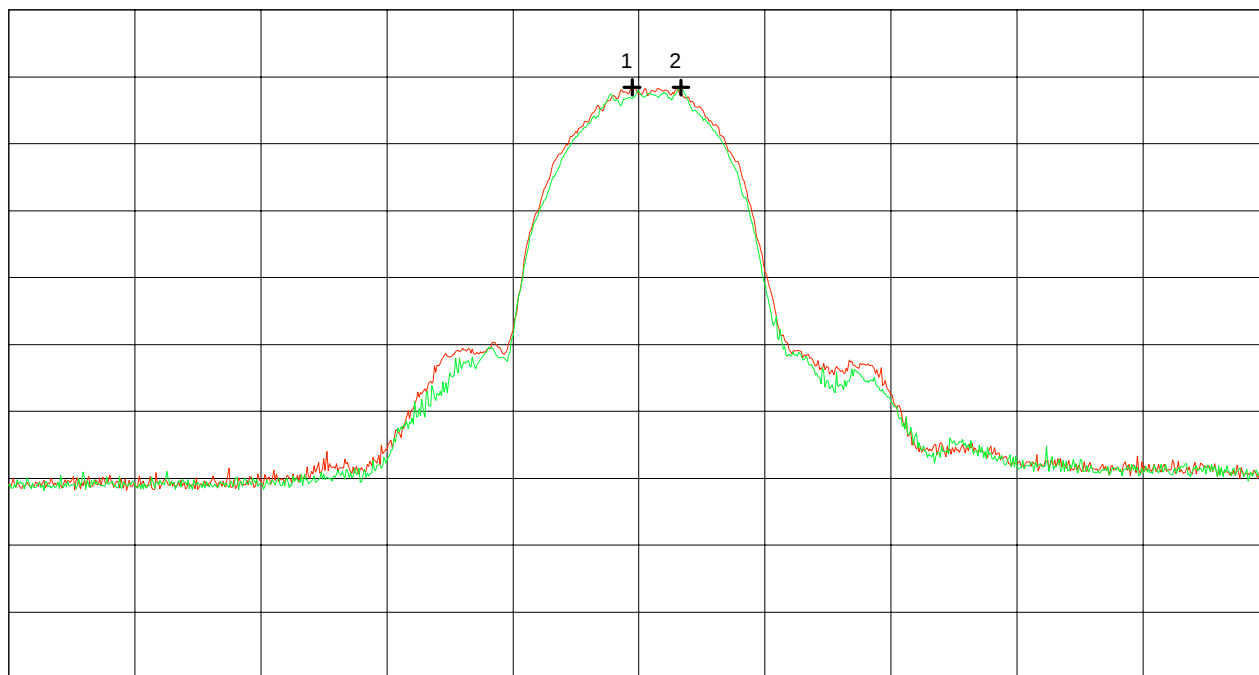
Channel A (red) = operating with bit rate 11 Mbps
Channel B (green) = operating with bit rate 5.5 Mbps

Note:
Prescan (conducted) for selection of worst case bit rate for radiated emission at band edges

Ref.Level 130 dB μ V
10 dB dB/Div.

ATT 15 dB

Ref. Offset 11.1 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.472 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.421444 GHz	118.43 dB μ V	(A)
Nr.2	2.425333 GHz	118.41 dB μ V	(B)
Nr.3			
Nr.4			
Nr.5			
Nr.6			
Nr.7			
Nr.8			

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 67 of 193 Pages

Frequency range (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- TX mode with $f = 2.422 \text{ GHz}$

Tested on: antenna connector

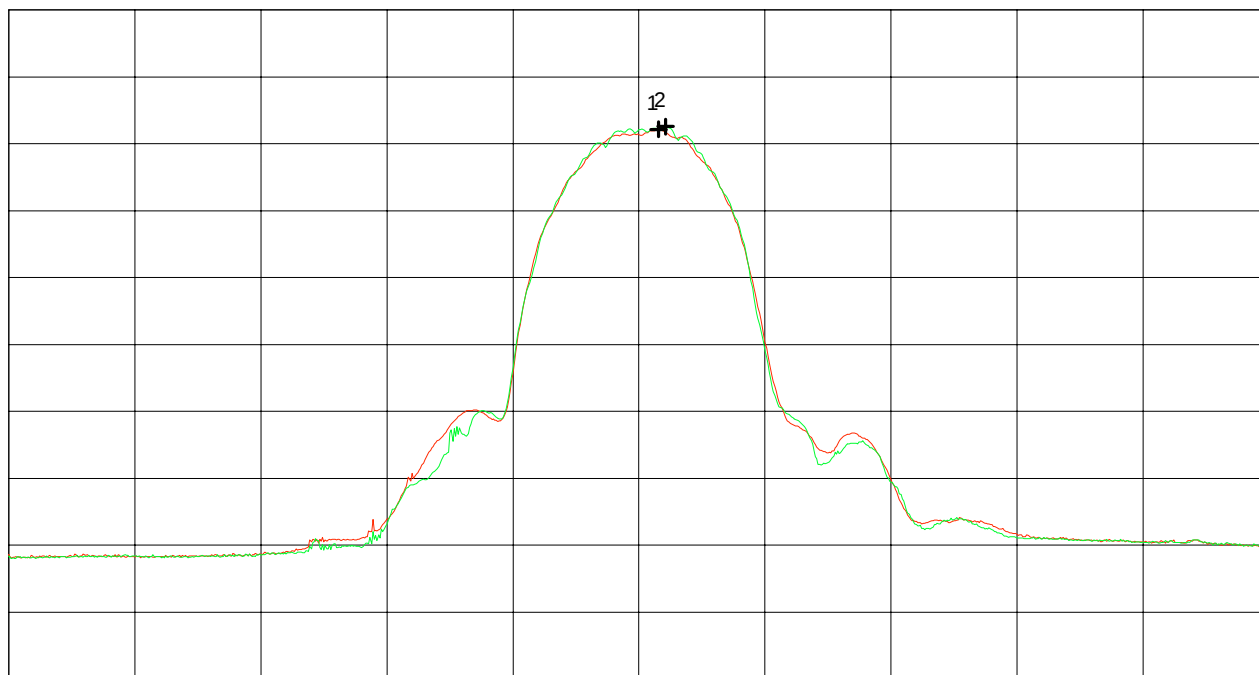
Channel A (red) = operating with bit rate 11 Mbps
Channel B (green) = operating with bit rate 5.5 Mbps

Note:
Prescan (conducted) for selection of worst case bit rate for radiated emission at band edges

Ref.Level 130 dB μ V
10 dB dB/Div.

ATT 15 dB

Ref. Offset 11.1 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.472 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.423556 GHz	112.13 dB μ V	(A)
Nr.2	2.424111 GHz	112.57 dB μ V	(B)
Nr.3			
Nr.4			
Nr.5			
Nr.6			
Nr.7			
Nr.8			

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 68 of 193 Pages

Frequency range (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- TX mode with $f = 2.437$ GHz

Tested on: antenna connector

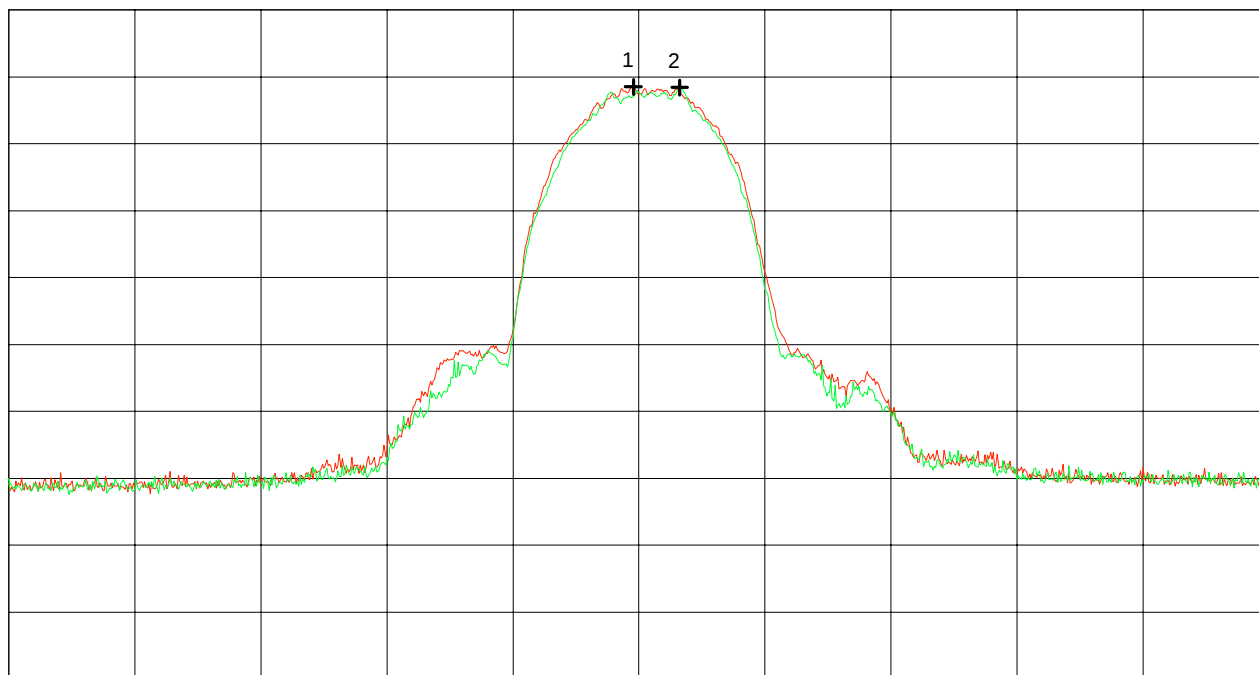
Channel A (red) = operating with bit rate 11 Mbps
Channel B (green) = operating with bit rate 5.5 Mbps

Note:
Prescan (conducted) for selection of worst case bit rate for radiated emission at band edges

Ref.Level 130 dB μ V
10 dB dB/Div.

ATT 15 dB

Ref. Offset 11.1 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.436556 GHz	118.51 dB μ V	(A)
Nr.2	2.440222 GHz	118.41 dB μ V	(B)
Nr.3			
Nr.4			
Nr.5			
Nr.6			
Nr.7			
Nr.8			

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 69 of 193 Pages

Frequency range (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- TX mode with $f = 2.437$ GHz

Tested on: antenna connector

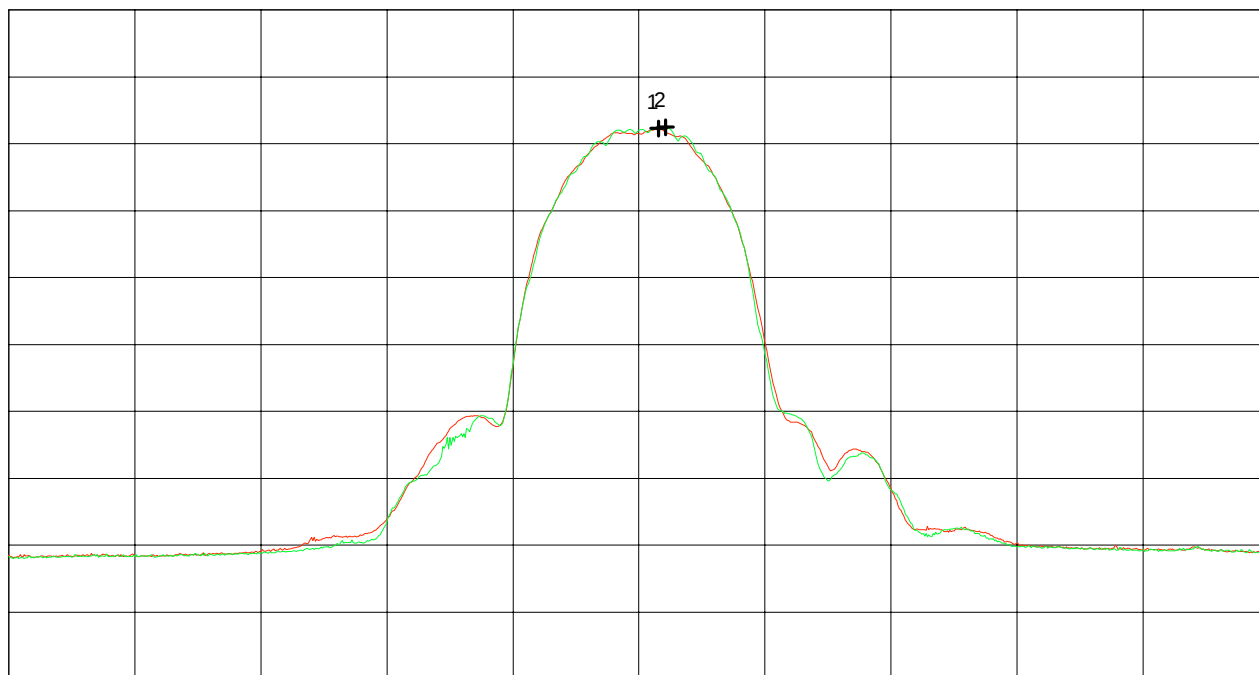
Channel A (red) = operating with bit rate 11 Mbps
Channel B (green) = operating with bit rate 5.5 Mbps

Note:
Prescan (conducted) for selection of worst case bit rate for radiated emission at band edges

Ref.Level 130 dB μ V
10 dB dB/Div.

ATT 15 dB

Ref. Offset 11.1 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.438556 GHz	112.29 dB μ V	(A)
Nr.2	2.439111 GHz	112.49 dB μ V	(B)
Nr.3			
Nr.4			
Nr.5			
Nr.6			
Nr.7			
Nr.8			

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 70 of 193 Pages

Frequency range (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- TX mode with $f = 2.452 \text{ GHz}$

Tested on: antenna connector

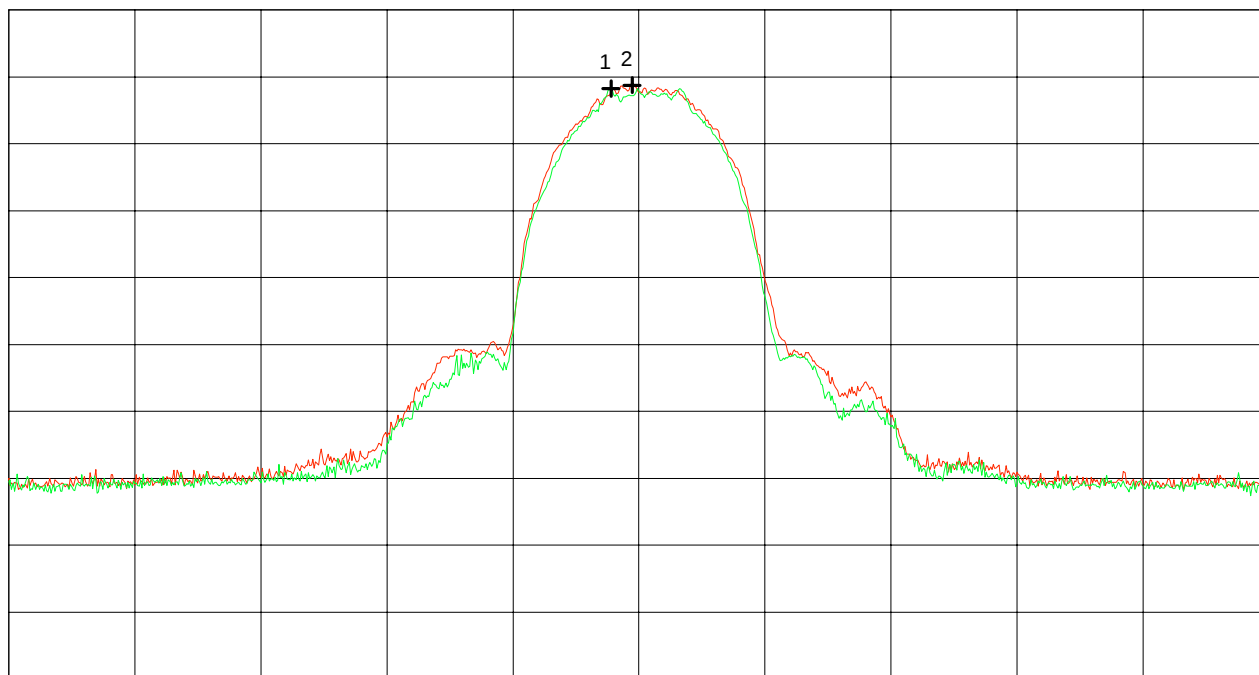
Channel A (red) = operating with bit rate 11 Mbps
Channel B (green) = operating with bit rate 5.5 Mbps

Note:
Prescan (conducted) for selection of worst case bit rate for radiated emission at band edges

Ref.Level 130 dB μ V
10 dB dB/Div.

ATT 15 dB

Ref. Offset 11.1 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.502 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.449778 GHz	118.25 dB μ V	(B)
Nr.2	2.451444 GHz	118.74 dB μ V	(A)
Nr.3			
Nr.4			
Nr.5			
Nr.6			
Nr.7			
Nr.8			

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 71 of 193 Pages

Frequency range (conducted) acc. to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- TX mode with $f = 2.452 \text{ GHz}$

Tested on: antenna connector

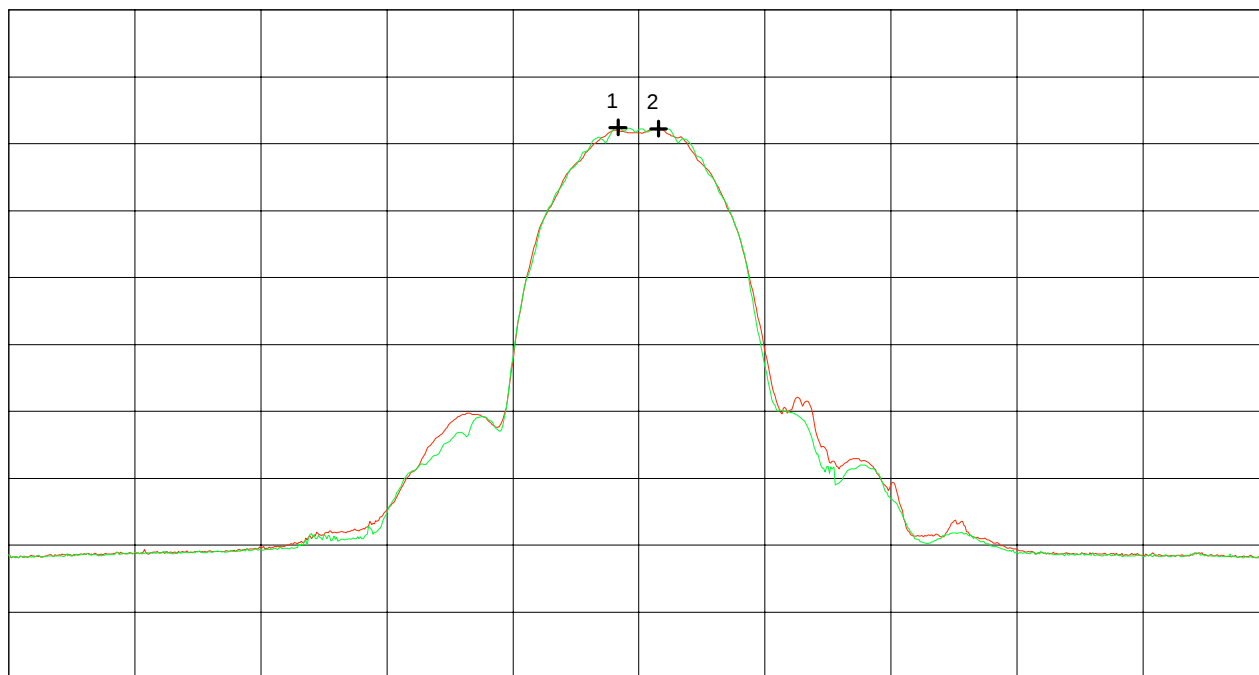
Channel A (red) = operating with bit rate 11 Mbps
Channel B (green) = operating with bit rate 5.5 Mbps

Note:
Prescan (conducted) for selection of worst case bit rate for radiated emission at band edges

Ref.Level 130 dB μ V
10 dB dB/Div.

ATT 15 dB

Ref. Offset 11.1 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.502 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.450333 GHz	112.44 dB μ V	(B)
Nr.2	2.453556 GHz	112.24 dB μ V	(A)
Nr.3			
Nr.4			
Nr.5			
Nr.6			
Nr.7			
Nr.8			

Tested by:
Rainer Heller

Date:
12/03/1999

Project-No.:
56305-90734-1

Page 72 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

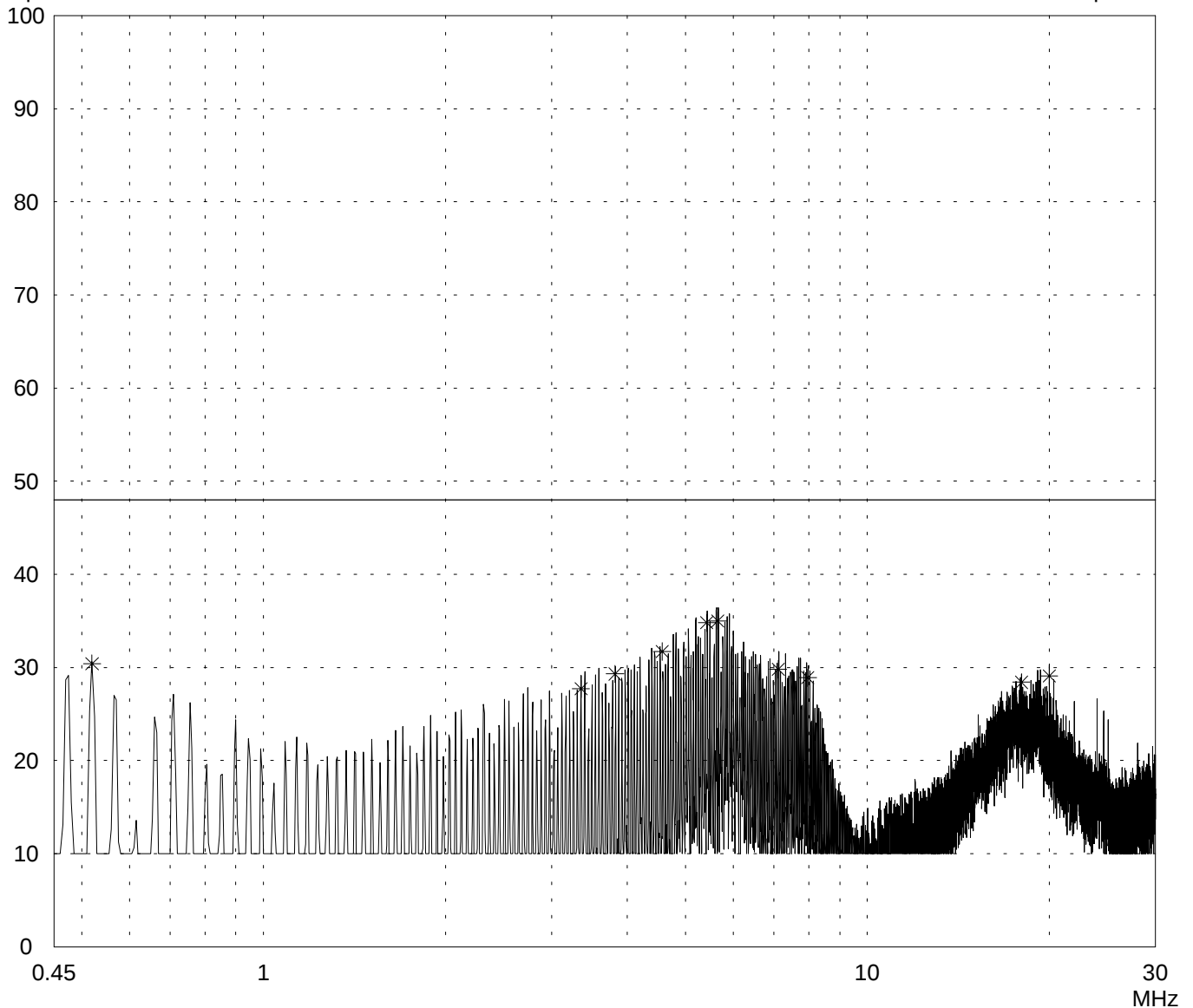
- TX mode with $f = 2.417$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 73 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/10/1999 Operator:
R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
0.520	30.4		30.4	48.0	
3.355	27.7		27.7	48.0	
3.820	29.3		29.3	48.0	
4.573	31.7		31.7	48.0	
5.421	34.8		34.8	48.0	
5.655	35.0		35.0	48.0	
7.117	29.8		29.8	48.0	
7.965	28.9		28.9	48.0	
18.000	28.4		28.4	48.0	
20.005	29.1		29.1	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 74 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/10/1999
Operator: R. Heller

Test performed: automatically
File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

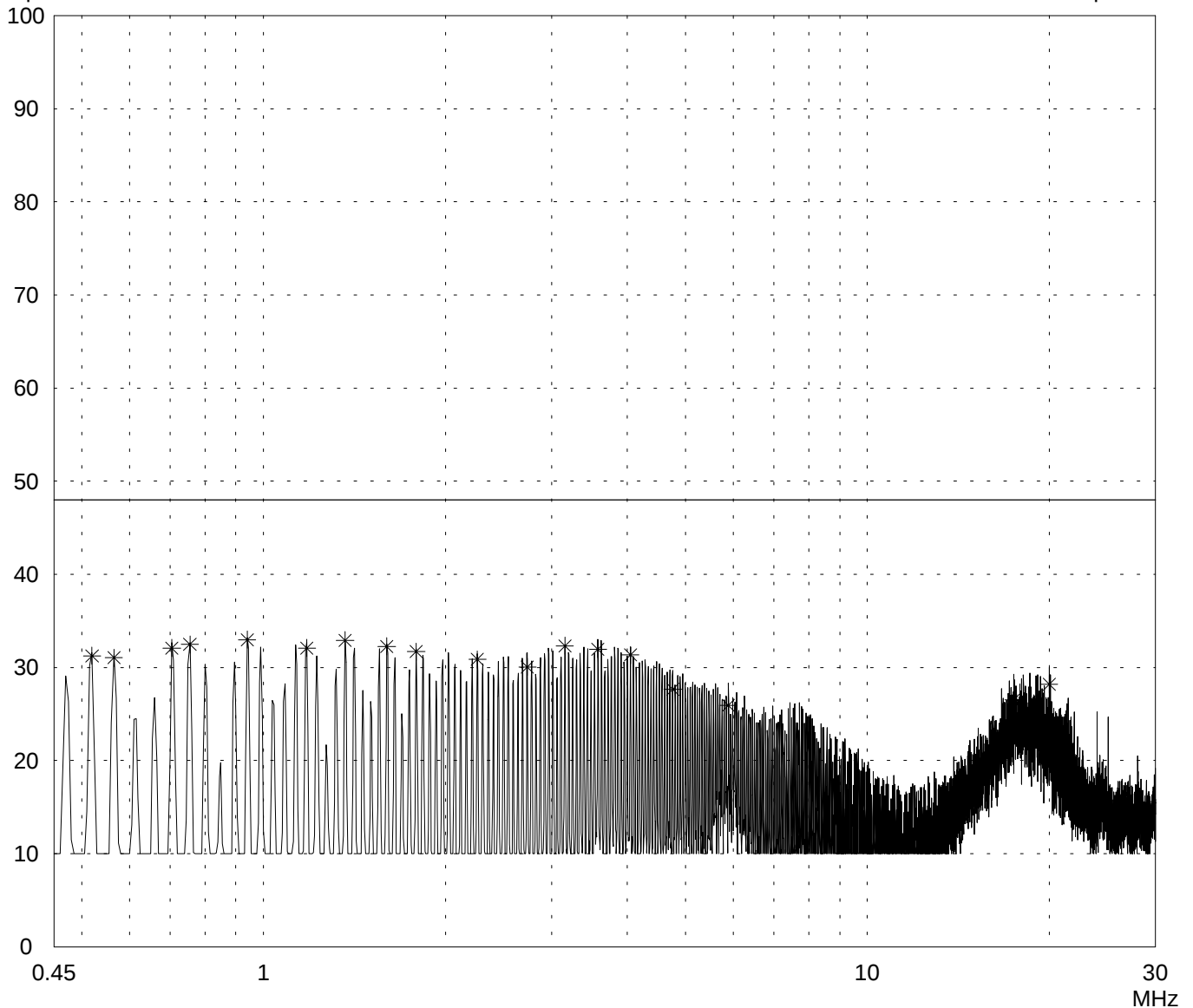
- TX mode with $f = 2.417$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 75 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
0.520	31.2		31.2	48.0	
0.565	31.0		31.0	48.0	
0.705	32.1		32.1	48.0	
0.755	32.5		32.5	48.0	
0.940	33.0		33.0	48.0	
1.180	32.1		32.1	48.0	
1.365	32.9		32.9	48.0	
1.600	32.3		32.3	48.0	
1.790	31.7		31.7	48.0	
2.260	30.9		30.9	48.0	
2.735	30.1		30.1	48.0	
3.155	32.3		32.3	48.0	
3.580	32.0		32.0	48.0	
4.050	31.3		31.3	48.0	
4.760	27.7		27.7	48.0	
5.885	25.9		25.9	48.0	
17.475	26.5		26.5	48.0	
20.005	28.2		28.2	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 76 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase L1

Date of test: 12/10/1999
Operator: R. Heller

Test performed: automatically
File name:

Mode:

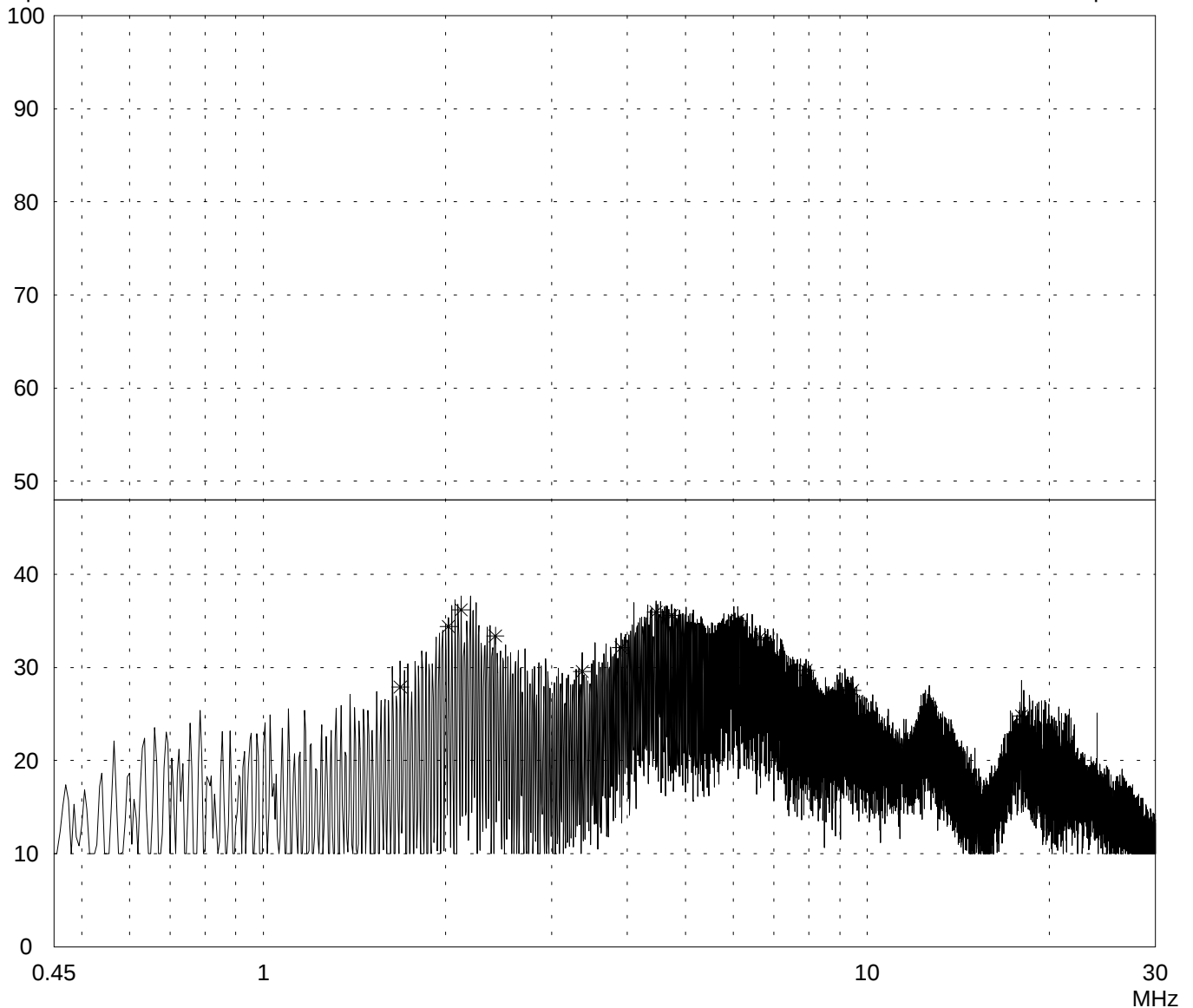
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 77 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
1.685	27.9		27.9	48.0	
2.025	34.4		34.4	48.0	
2.125	36.2		36.2	48.0	
2.420	33.4		33.4	48.0	
3.370	29.6		29.6	48.0	
3.910	32.1		32.1	48.0	
4.470	35.9		35.9	48.0	
4.740	35.6		35.6	48.0	
6.105	35.0		35.0	48.0	
6.645	33.2		33.2	48.0	
7.915	29.7		29.7	48.0	
9.455	27.5		27.5	48.0	
12.655	25.7		25.7	48.0	
18.000	24.8		24.8	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 78 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase N

Date of test: 12/10/1999 Operator: R. Heller

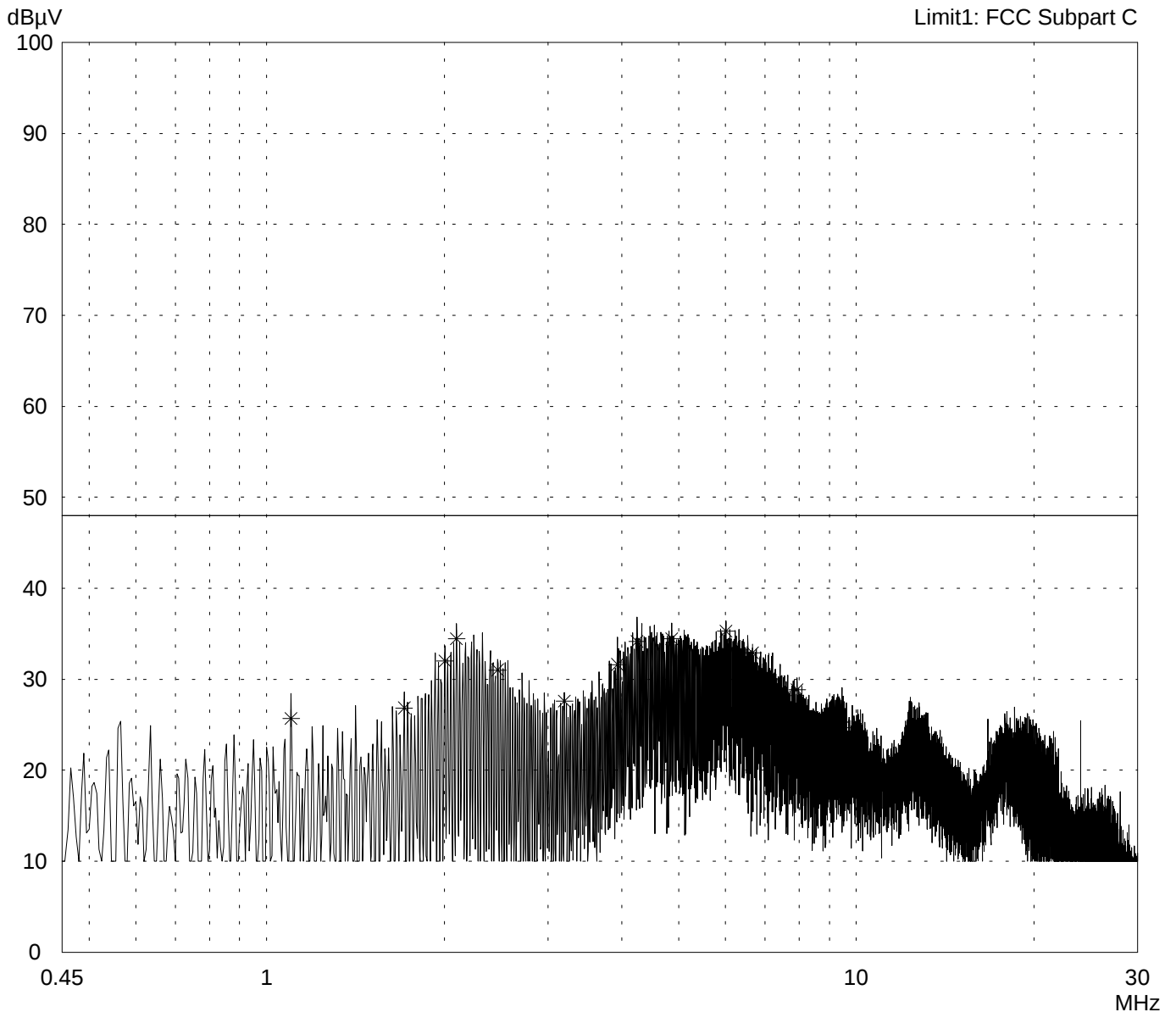
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges



Result:
Limit kept

Project file:
56305-90734-1

Page 79 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz
according 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 (#B2-23) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-DI-24 (vertical) - with 20 ft antenna cable (LMR400) - operating with bit rate 11 Mbps - TX mode with $f = 2.417$ GHz
Serial no.: 99UT11411941	
Applicant: Lucent Technologies Nederland B.V.	
Test site: Shielded room, cabin no. 2	
Tested on: Linecord peripheral devices Phase N	
Date of test: 12/10/1999	
Test performed: automatically	File name:

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

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
1.100	25.7		25.7	48.0	
1.710	26.8		26.8	48.0	
2.005	32.0		32.0	48.0	
2.100	34.5		34.5	48.0	
2.465	31.0		31.0	48.0	
3.200	27.6		27.6	48.0	
3.935	31.6		31.6	48.0	
4.250	34.1		34.1	48.0	
4.860	34.5		34.5	48.0	
6.010	35.3		35.3	48.0	
6.670	32.9		32.9	48.0	
7.940	28.8		28.8	48.0	
9.450	24.7		24.7	48.0	

Result: Limit kept	Project file: 56305-90734-1	Page 80 of 193 Pages
-----------------------	--------------------------------	----------------------

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/10/1999
Operator: R. Heller

Test performed: automatically
File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

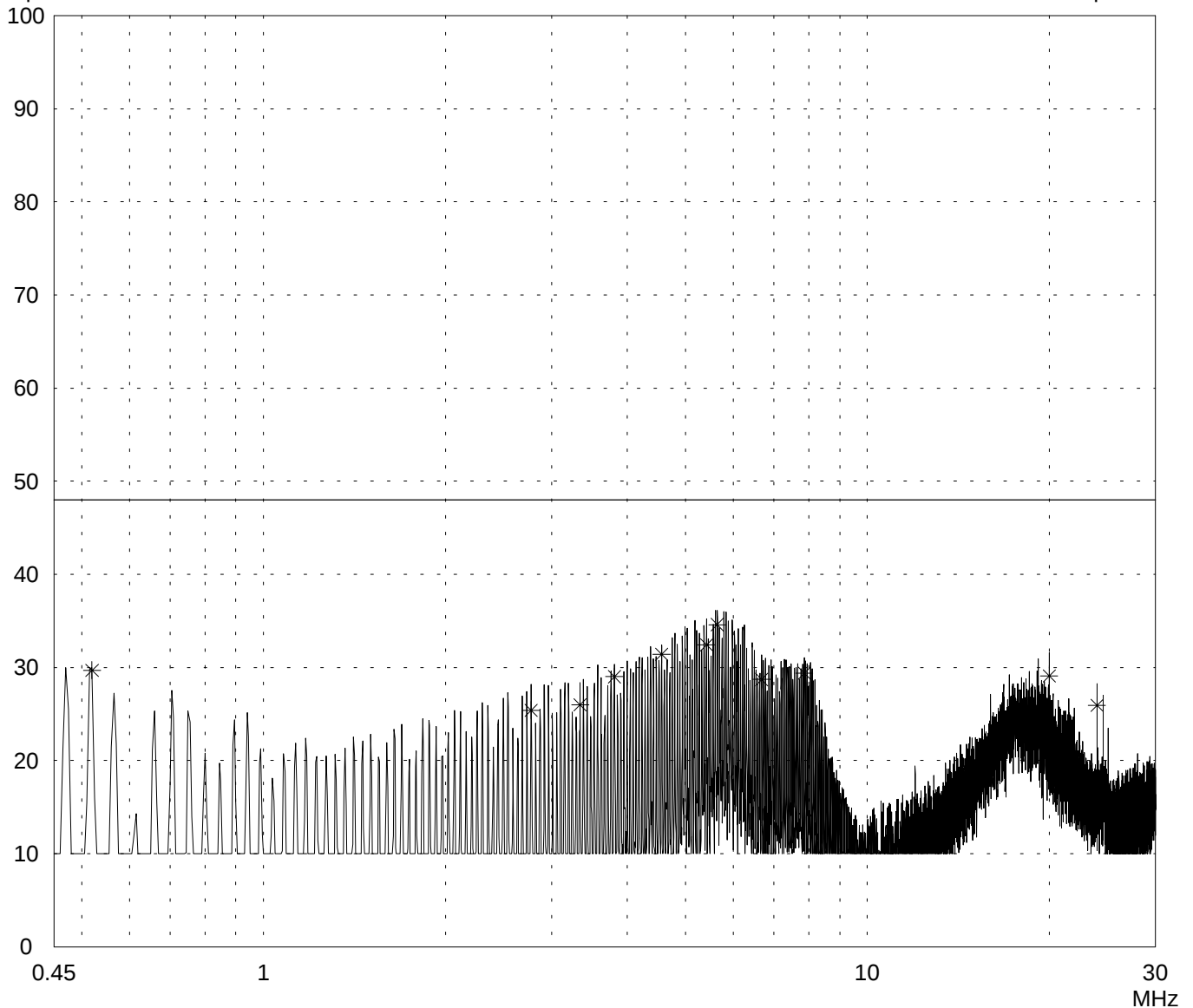
Detector:
Peak / Final Results: QP

Final results:
20 dB Margin

25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 81 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
0.520	29.7		29.7	48.0	
2.775	25.4		25.4	48.0	
3.345	26.0		26.0	48.0	
3.810	29.0		29.0	48.0	
4.565	31.4		31.4	48.0	
5.415	32.4		32.4	48.0	
5.645	34.6		34.6	48.0	
6.685	28.7		28.7	48.0	
7.860	29.4		29.4	48.0	
17.175	24.5		24.5	48.0	
20.005	29.1		29.1	48.0	
24.005	25.9		25.9	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 82 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/10/1999
Operator: R. Heller

Test performed: automatically
File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

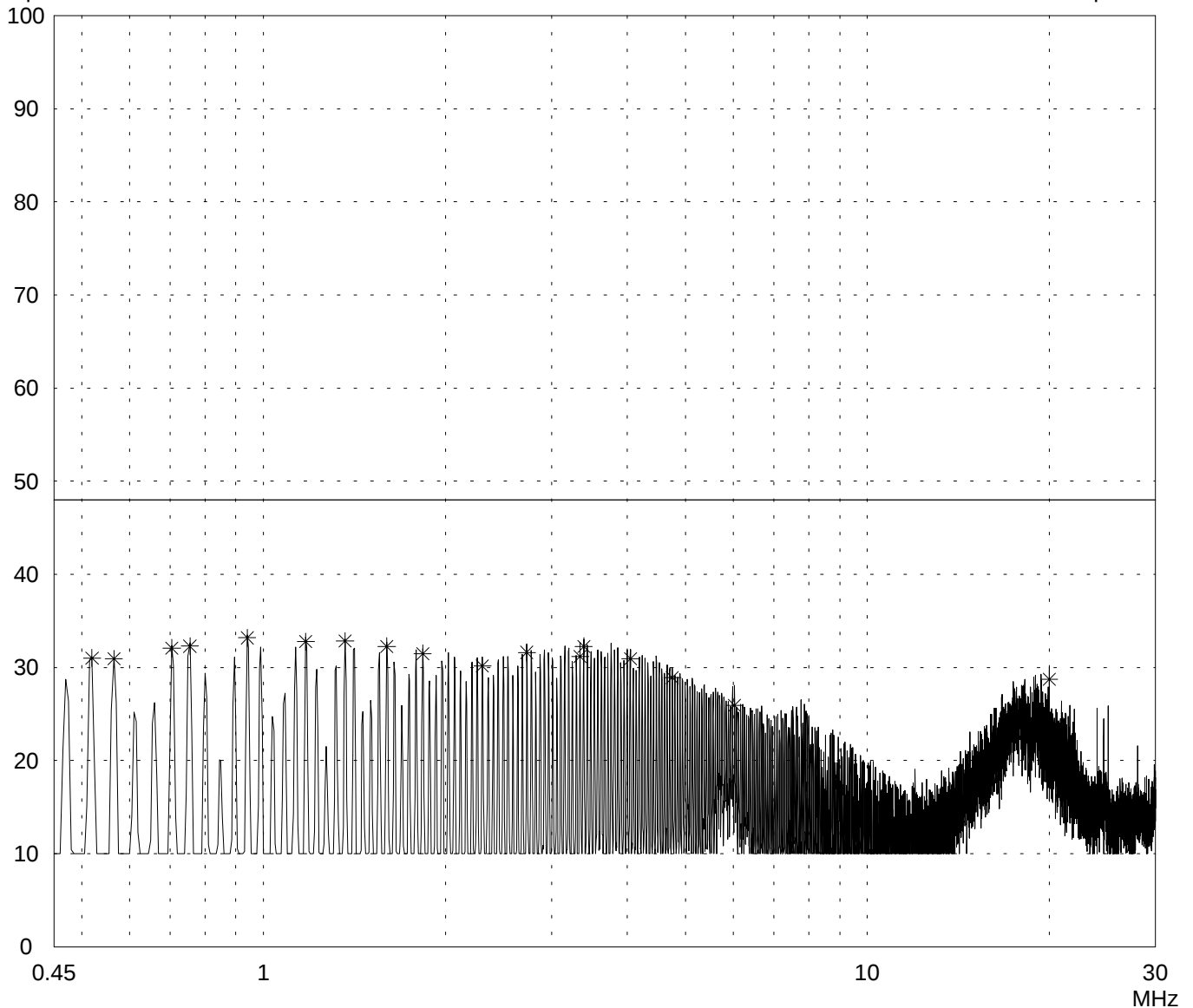
Detector:
Peak / Final Results: QP

Final results:
20 dB Margin

25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 83 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/10/1999
Operator: R. Heller

Test performed: automatically
File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
0.520	31.0		31.0	48.0	
0.565	30.9		30.9	48.0	
0.705	32.1		32.1	48.0	
0.755	32.3		32.3	48.0	
0.940	33.2		33.2	48.0	
1.175	32.8		32.8	48.0	
1.365	32.8		32.8	48.0	
1.600	32.3		32.3	48.0	
1.835	31.5		31.5	48.0	
2.305	30.2		30.2	48.0	
2.730	31.6		31.6	48.0	
3.345	31.1		31.1	48.0	
3.390	32.3		32.3	48.0	
4.050	30.9		30.9	48.0	
4.755	28.9		28.9	48.0	
6.025	25.9		25.9	48.0	
17.460	24.6		24.6	48.0	
20.005	28.8		28.8	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 84 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase L1

Date of test: 12/10/1999 Operator:
R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

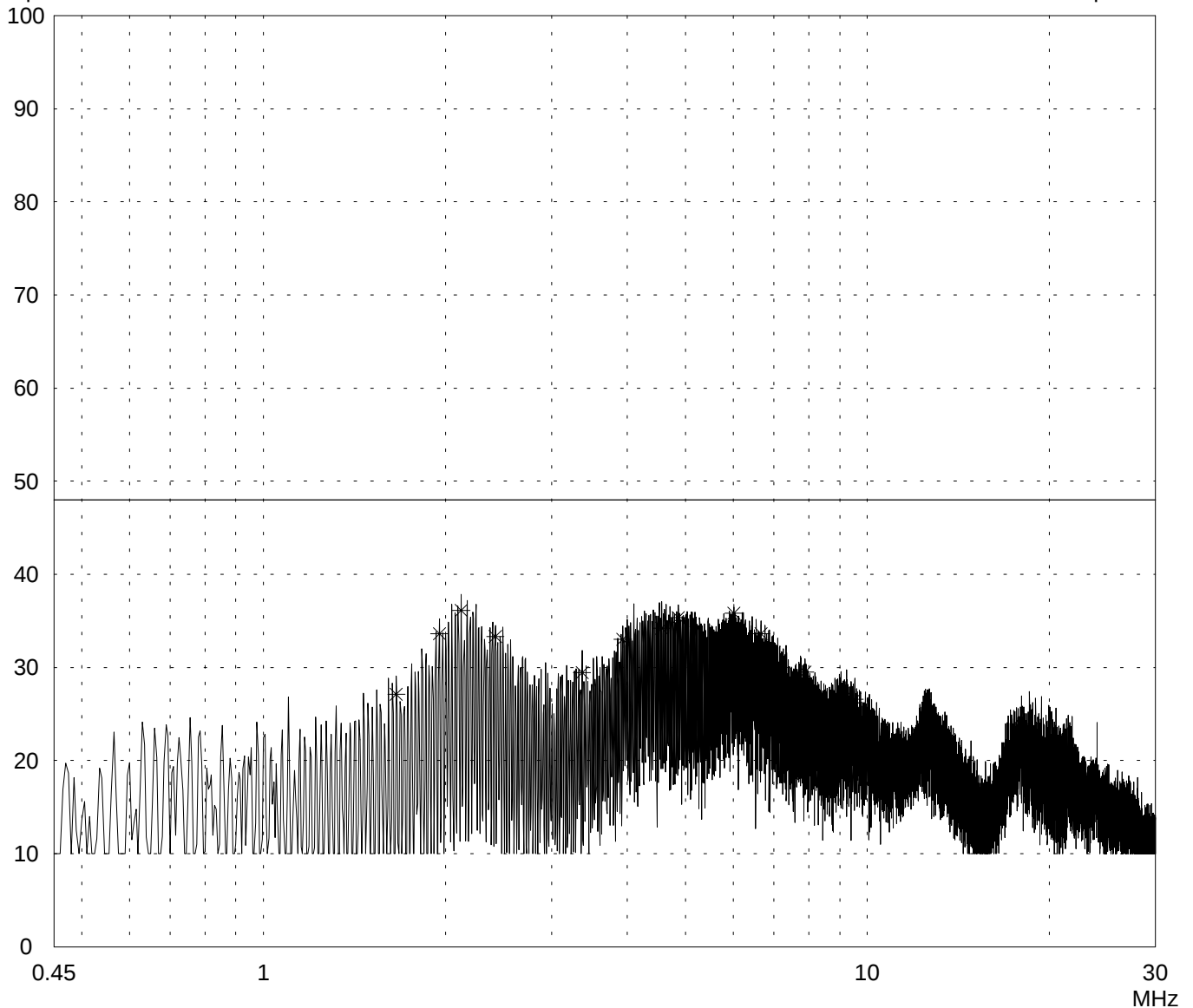
- TX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 85 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according 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 (#B2-23) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-DI-24 (vertical) - with 20 ft antenna cable (LMR400) - operating with bit rate 11 Mbps - TX mode with $f = 2.437$ GHz
Serial no.: 99UT11411941	
Applicant: Lucent Technologies Nederland B.V.	
Test site: Shielded room, cabin no. 2	
Tested on: Linecord peripheral devices Phase L1	
Date of test: 12/10/1999	
Test performed: automatically	File name:

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

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
1.660	27.1		27.1	48.0	
1.955	33.6		33.6	48.0	
2.125	36.1		36.1	48.0	
2.420	33.3		33.3	48.0	
3.370	29.4		29.4	48.0	
3.935	33.0		33.0	48.0	
4.565	34.2		34.2	48.0	
4.860	35.4		35.4	48.0	
6.010	35.9		35.9	48.0	
6.670	33.6		33.6	48.0	
7.890	29.5		29.5	48.0	
9.530	26.6		26.6	48.0	

Result: Limit kept	Project file: 56305-90734-1	Page 86 of 193 Pages
-----------------------	--------------------------------	----------------------

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase N

Date of test: 12/10/1999 Operator: R. Heller

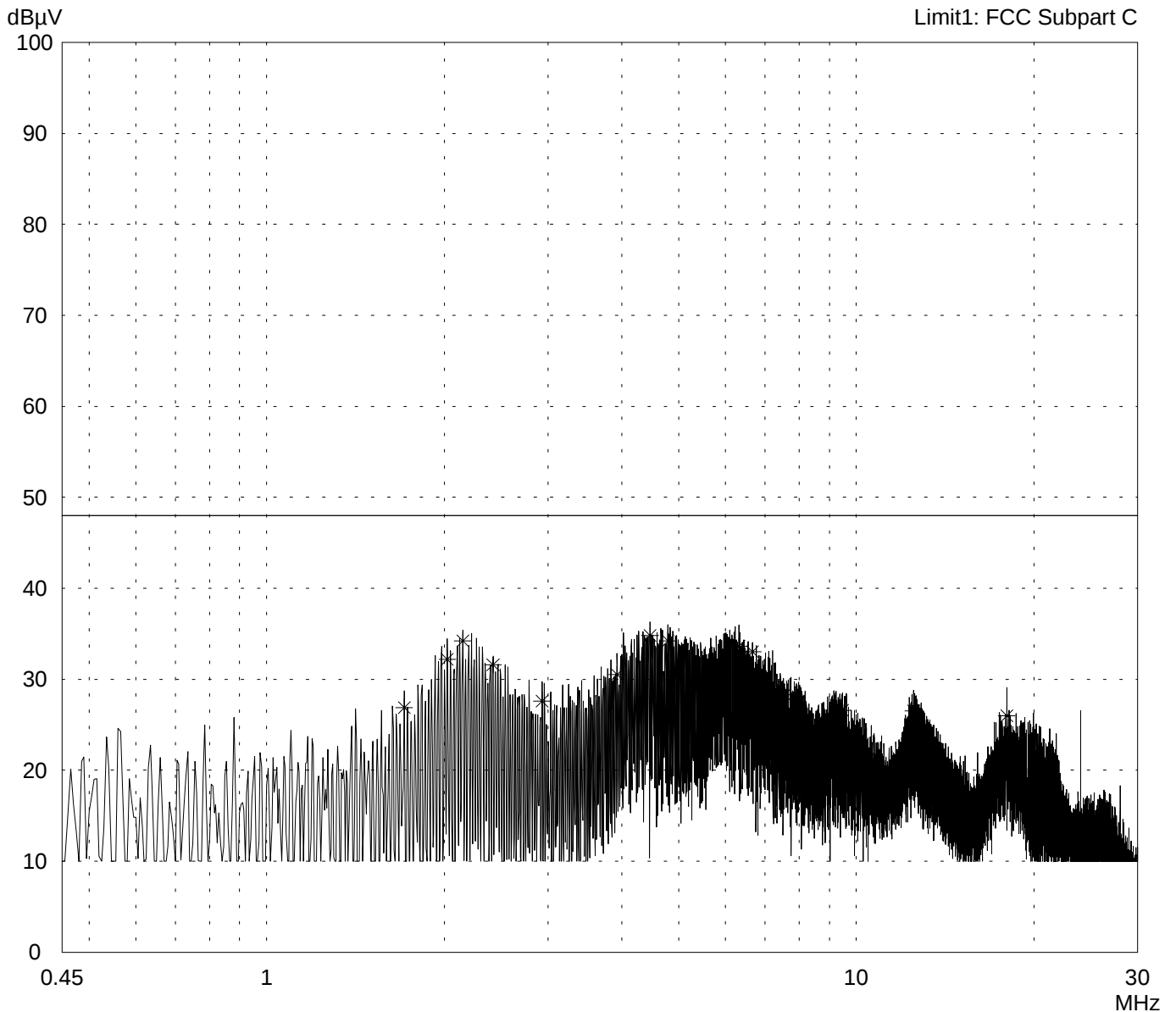
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges



Result:
Limit kept

Project file:
56305-90734-1

Page 87 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase N

Date of test: 12/10/1999 Operator:
R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
1.710	26.9		26.9	48.0	
2.025	32.2		32.2	48.0	
2.150	34.2		34.2	48.0	
2.420	31.6		31.6	48.0	
2.930	27.6		27.6	48.0	
3.930	30.5		30.5	48.0	
4.470	34.8		34.8	48.0	
4.790	34.2		34.2	48.0	
6.325	33.6		33.6	48.0	
6.670	33.0		33.0	48.0	
7.840	28.3		28.3	48.0	
9.480	26.6		26.6	48.0	
12.505	26.5		26.5	48.0	
18.000	26.0		26.0	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 88 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

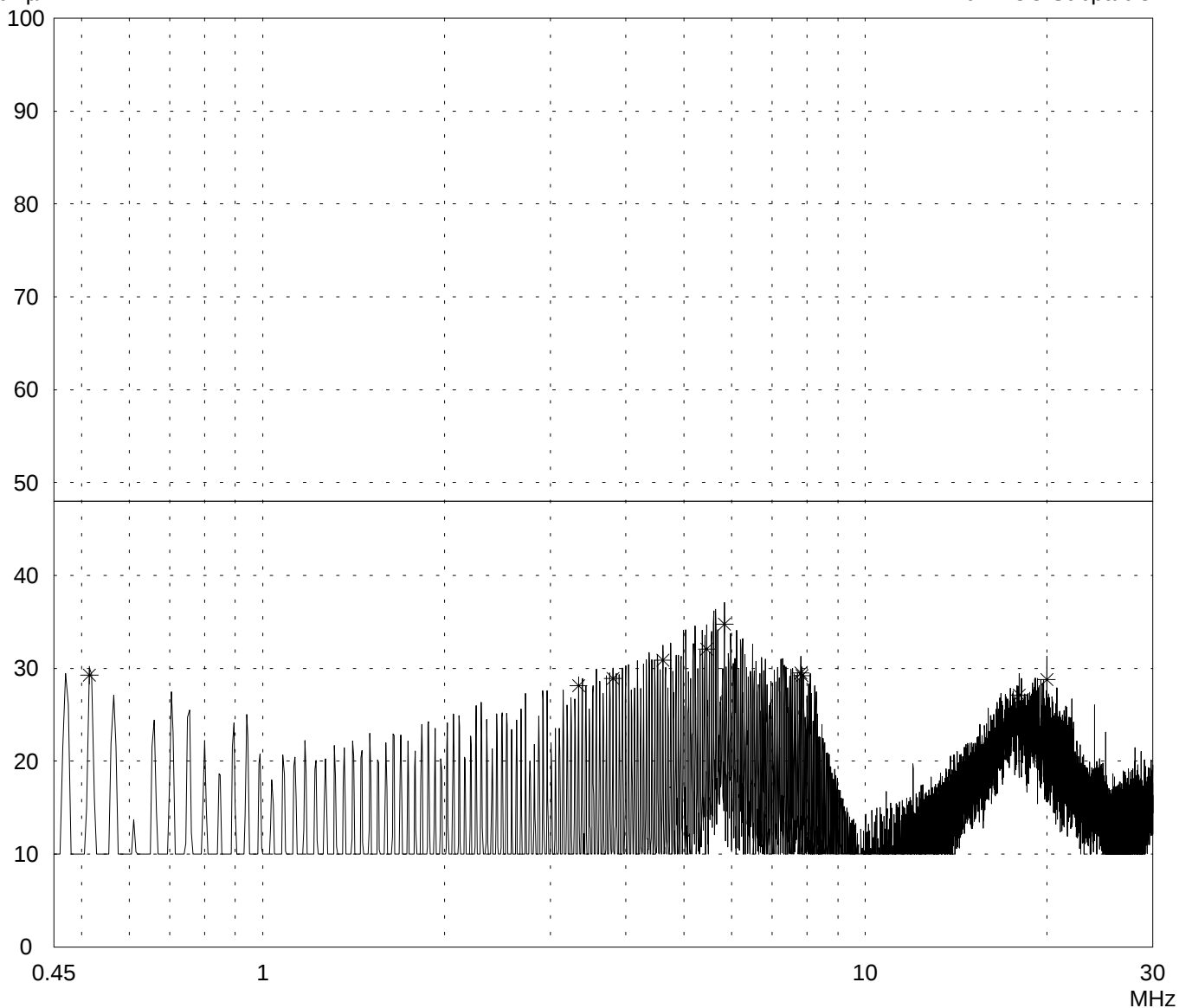
Detector:
Peak / Final Results: QP

Final results:
20 dB Margin

25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 89 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/10/1999 Operator:
R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
0.515	29.3		29.3	48.0	
3.340	28.1		28.1	48.0	
3.810	28.9		28.9	48.0	
4.610	30.9		30.9	48.0	
5.455	32.1		32.1	48.0	
5.835	34.7		34.7	48.0	
7.810	29.5		29.5	48.0	
7.855	29.2		29.2	48.0	
18.005	27.1		27.1	48.0	
20.005	28.8		28.8	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 90 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

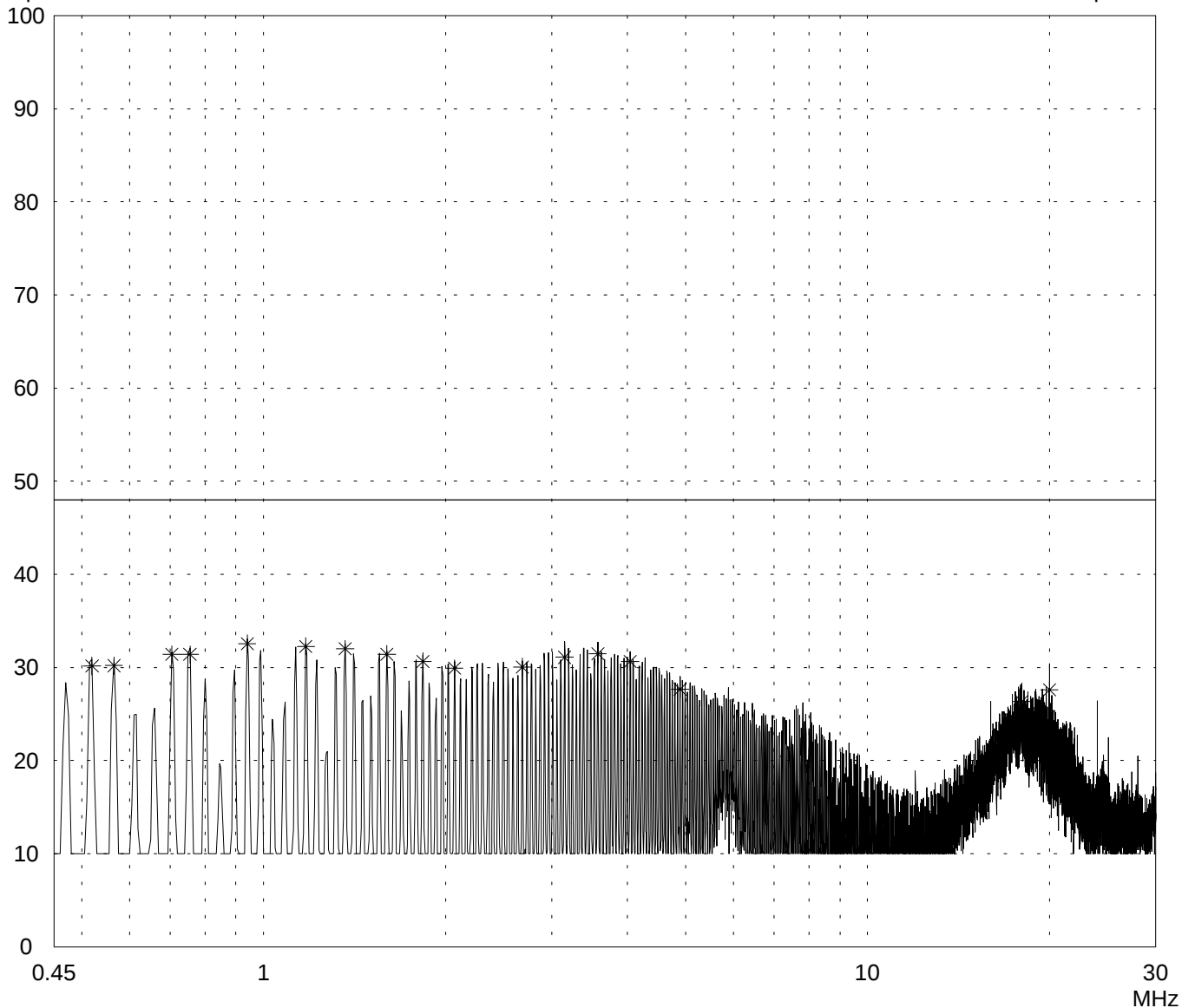
Detector:
Peak / Final Results: QP

Final results:
20 dB Margin

25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 91 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
0.520	30.2		30.2	48.0	
0.565	30.2		30.2	48.0	
0.705	31.4		31.4	48.0	
0.755	31.4		31.4	48.0	
0.940	32.6		32.6	48.0	
1.175	32.3		32.3	48.0	
1.365	32.0		32.0	48.0	
1.600	31.4		31.4	48.0	
1.835	30.7		30.7	48.0	
2.070	29.9		29.9	48.0	
2.680	30.1		30.1	48.0	
3.150	31.1		31.1	48.0	
3.575	31.4		31.4	48.0	
4.045	30.6		30.6	48.0	
4.895	27.7		27.7	48.0	
18.005	26.3		26.3	48.0	
20.005	27.6		27.6	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 92 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

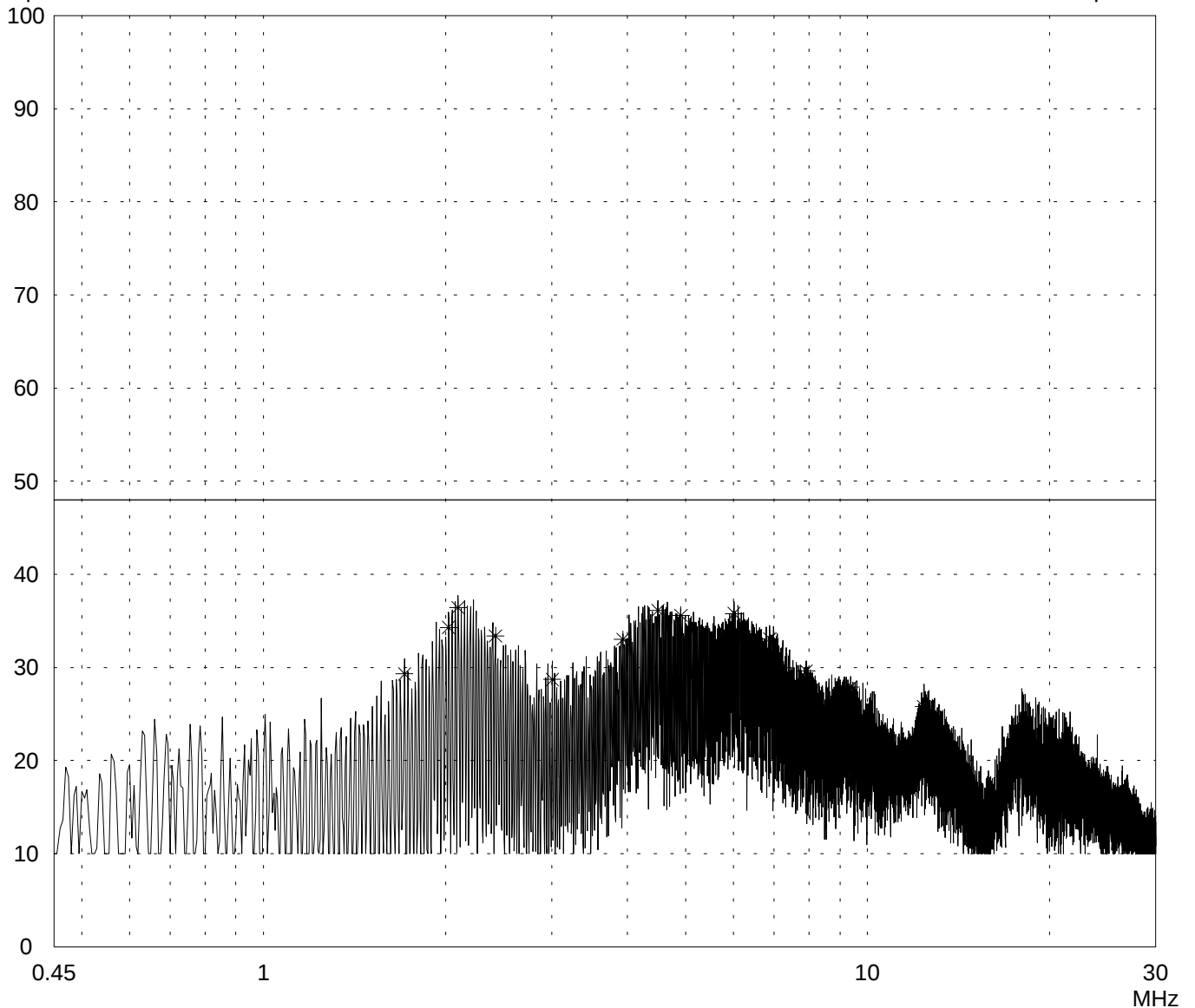
- TX mode with $f = 2.452$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 93 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
1.710	29.3		29.3	48.0	
2.025	34.3		34.3	48.0	
2.100	36.4		36.4	48.0	
2.420	33.4		33.4	48.0	
3.005	28.7		28.7	48.0	
3.935	33.0		33.0	48.0	
4.495	36.1		36.1	48.0	
4.910	35.6		35.6	48.0	
6.010	35.8		35.8	48.0	
6.890	33.1		33.1	48.0	
7.915	29.6		29.6	48.0	
9.380	27.9		27.9	48.0	
12.385	25.8		25.8	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 94 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase N

Date of test: 12/10/1999
Operator: R. Heller

Test performed: automatically
File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

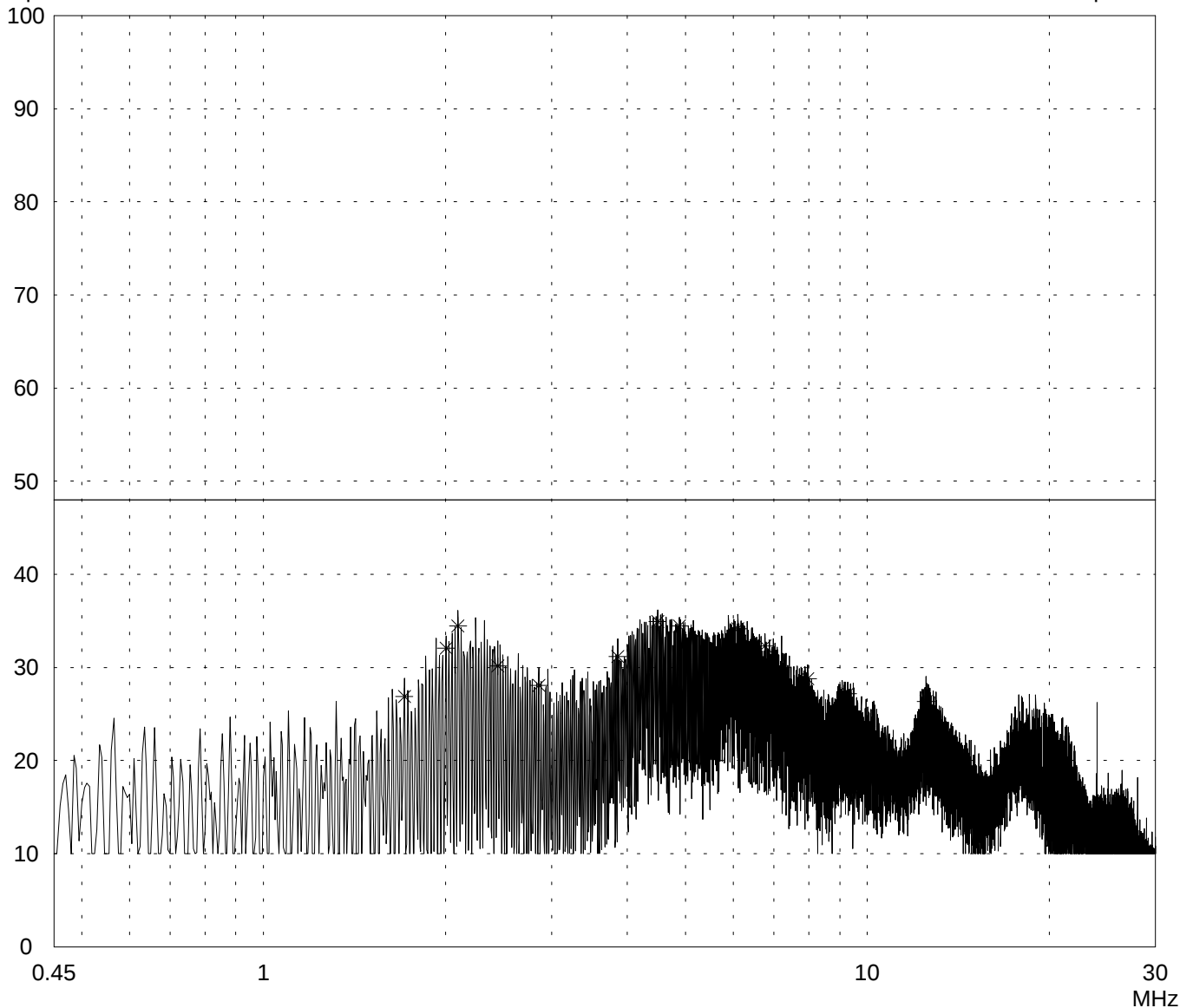
- TX mode with $f = 2.452$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 95 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase N

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
1.710	26.9		26.9	48.0	
2.005	32.1		32.1	48.0	
2.100	34.5		34.5	48.0	
2.445	30.1		30.1	48.0	
2.860	28.1		28.1	48.0	
3.860	31.2		31.2	48.0	
4.495	34.9		34.9	48.0	
4.885	34.5		34.5	48.0	
6.105	34.1		34.1	48.0	
6.765	32.3		32.3	48.0	
7.965	28.8		28.8	48.0	
9.285	27.2		27.2	48.0	
12.505	26.3		26.3	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 96 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator: R. Heller

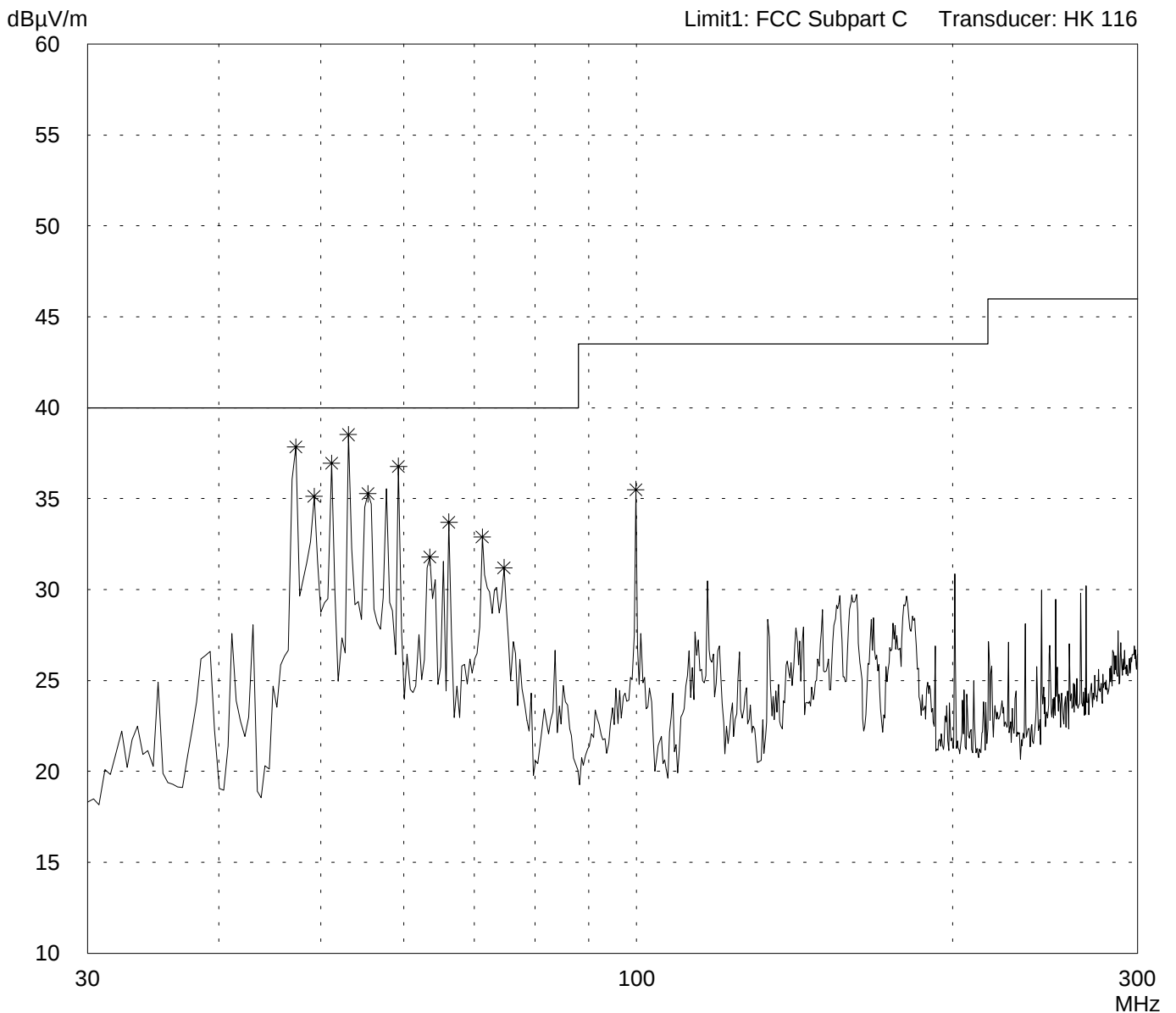
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 97 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator: R. Heller

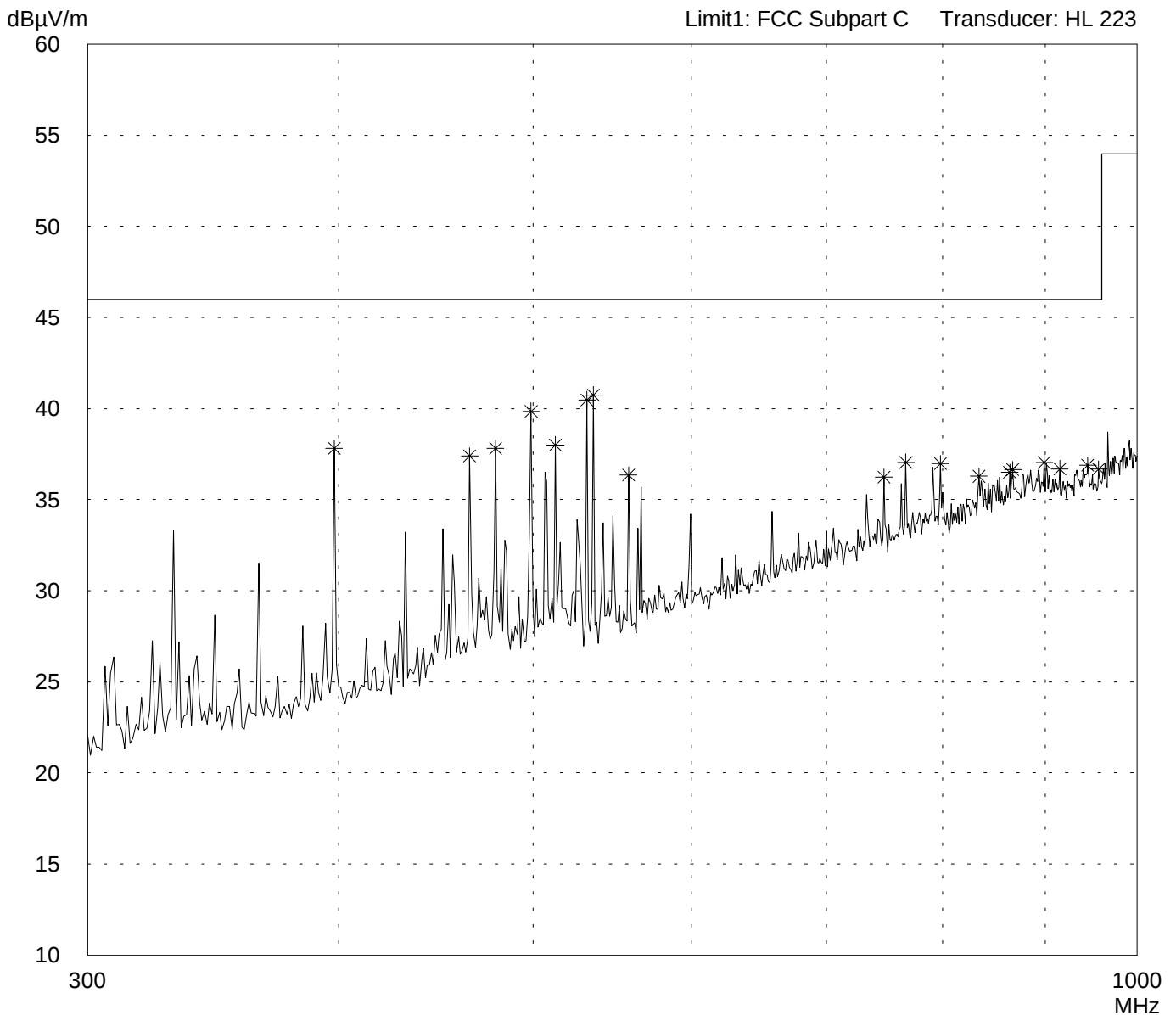
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
-
- operating with bit rate 11 Mbps
-
- TX mode with $f = 2.417$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 98 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 Operator: R. Heller

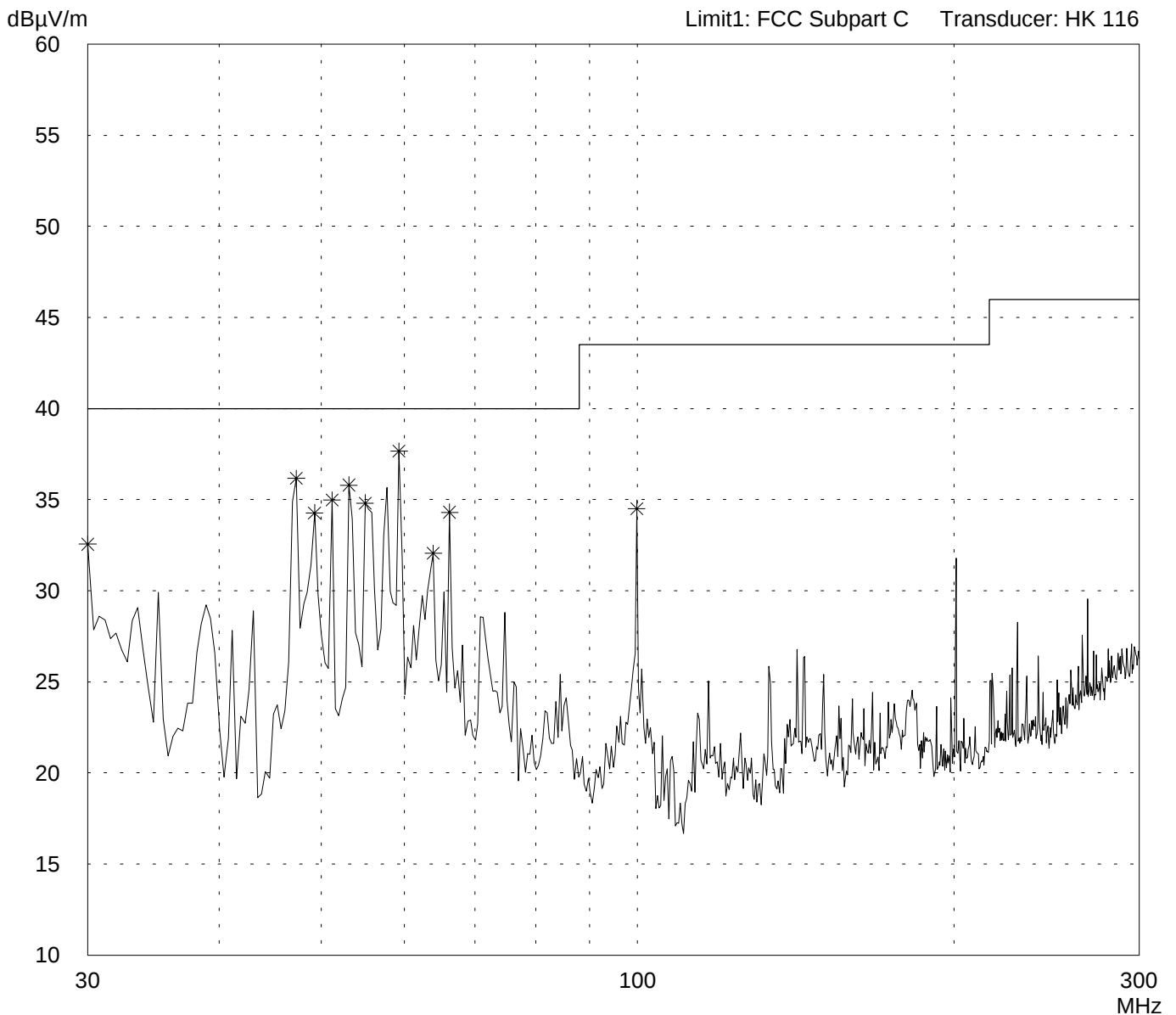
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 99 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 Operator: R. Heller

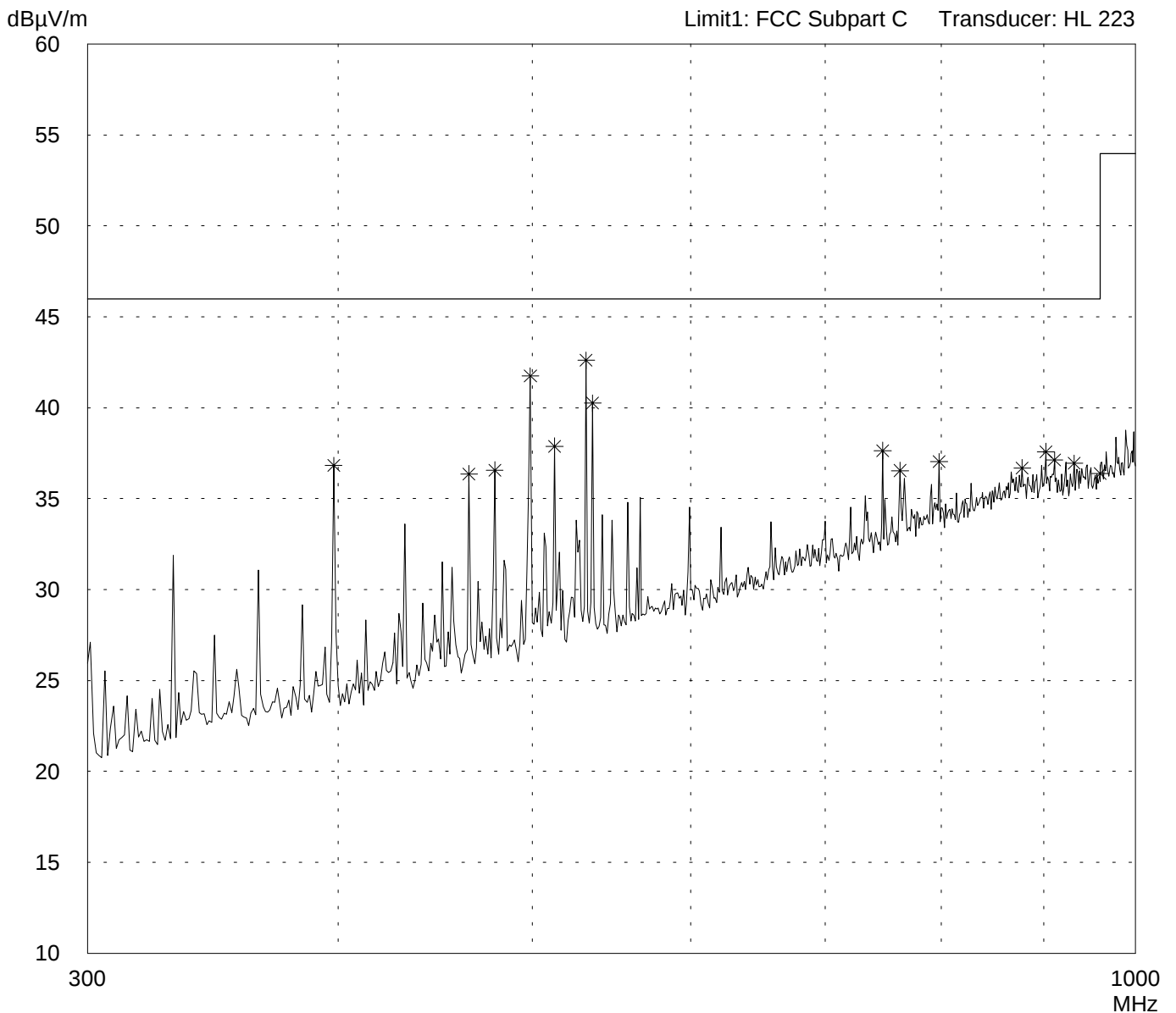
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 100 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator:
R. Heller

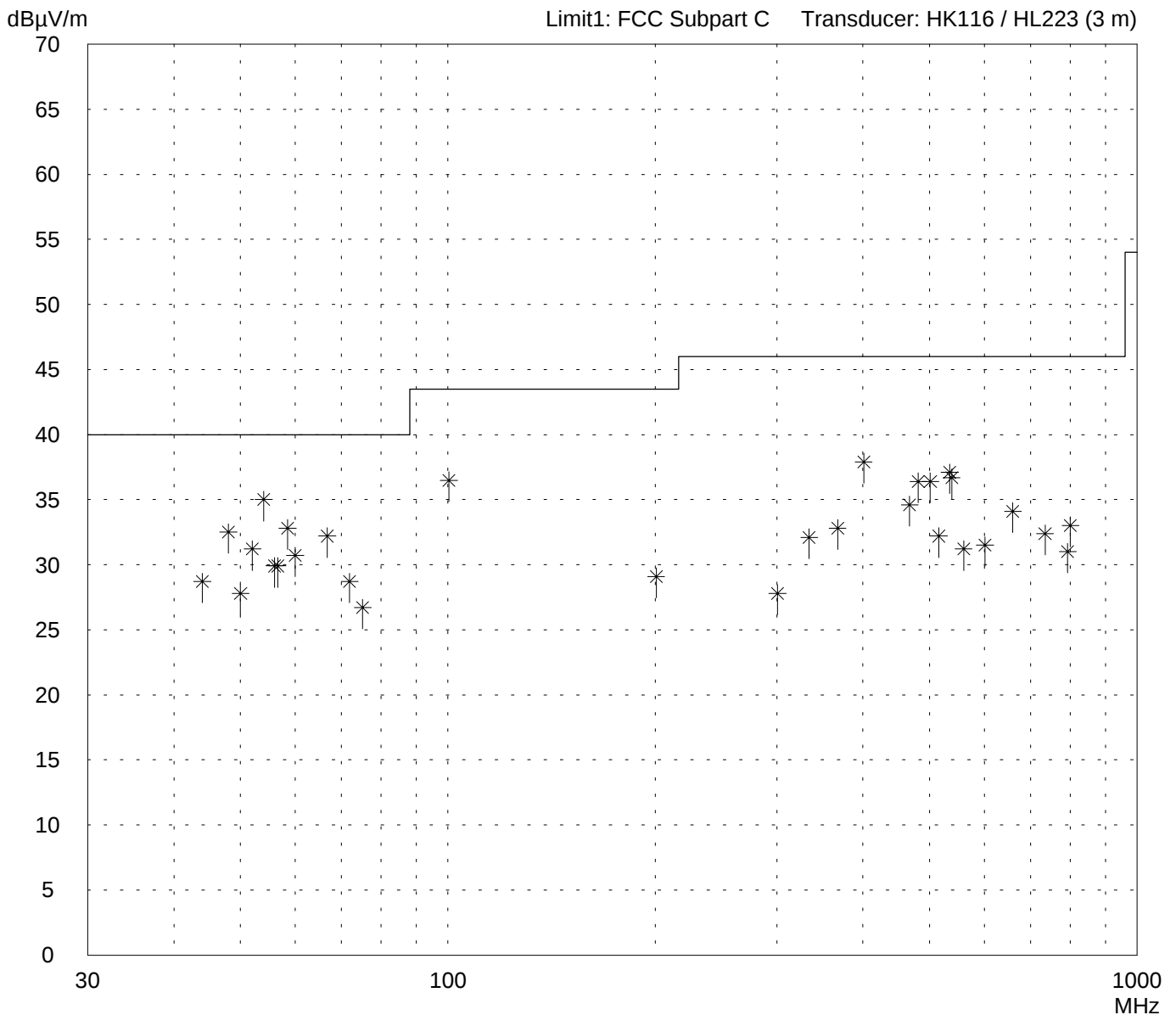
Test performed: by hand File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-90734-1

Page 101 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 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 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.417$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
44.0	17.0	11.7	28.7	40.0	
48.0	21.5	11.0	32.5	40.0	
50.0	17.0	10.8	27.8	40.0	
52.0	20.5	10.7	31.2	40.0	
54.0	24.5	10.5	35.0	40.0	
56.0	19.5	10.4	29.9	40.0	
56.6	19.5	10.4	29.9	40.0	
58.5	22.5	10.3	32.8	40.0	
60.0	20.5	10.2	30.7	40.0	
66.8	22.0	10.2	32.2	40.0	
72.0	18.5	10.2	28.7	40.0	
75.2	16.5	10.2	26.7	40.0	
100.3	25.0	11.5	36.5	43.5	
200.5	12.0	17.1	29.1	43.5	
300.7	11.0	16.8	27.8	46.0	
334.1	14.0	18.1	32.1	46.0	
367.5	13.5	19.3	32.8	46.0	
400.9	17.5	20.4	37.9	46.0	
467.7	12.5	22.1	34.6	46.0	
481.5	14.0	22.4	36.4	46.0	
501.2	13.5	22.9	36.4	46.0	
515.5	9.0	23.2	32.2	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.0	23.7	36.7	46.0	
560.0	7.0	24.2	31.2	46.0	
601.4	6.5	25.0	31.5	46.0	
660.0	7.5	26.6	34.1	46.0	
735.0	4.5	27.9	32.4	46.0	
793.0	2.5	28.5	31.0	46.0	
800.0	4.5	28.5	33.0	46.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 102 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999
Operator: R. Heller

Test performed: by hand
File name:

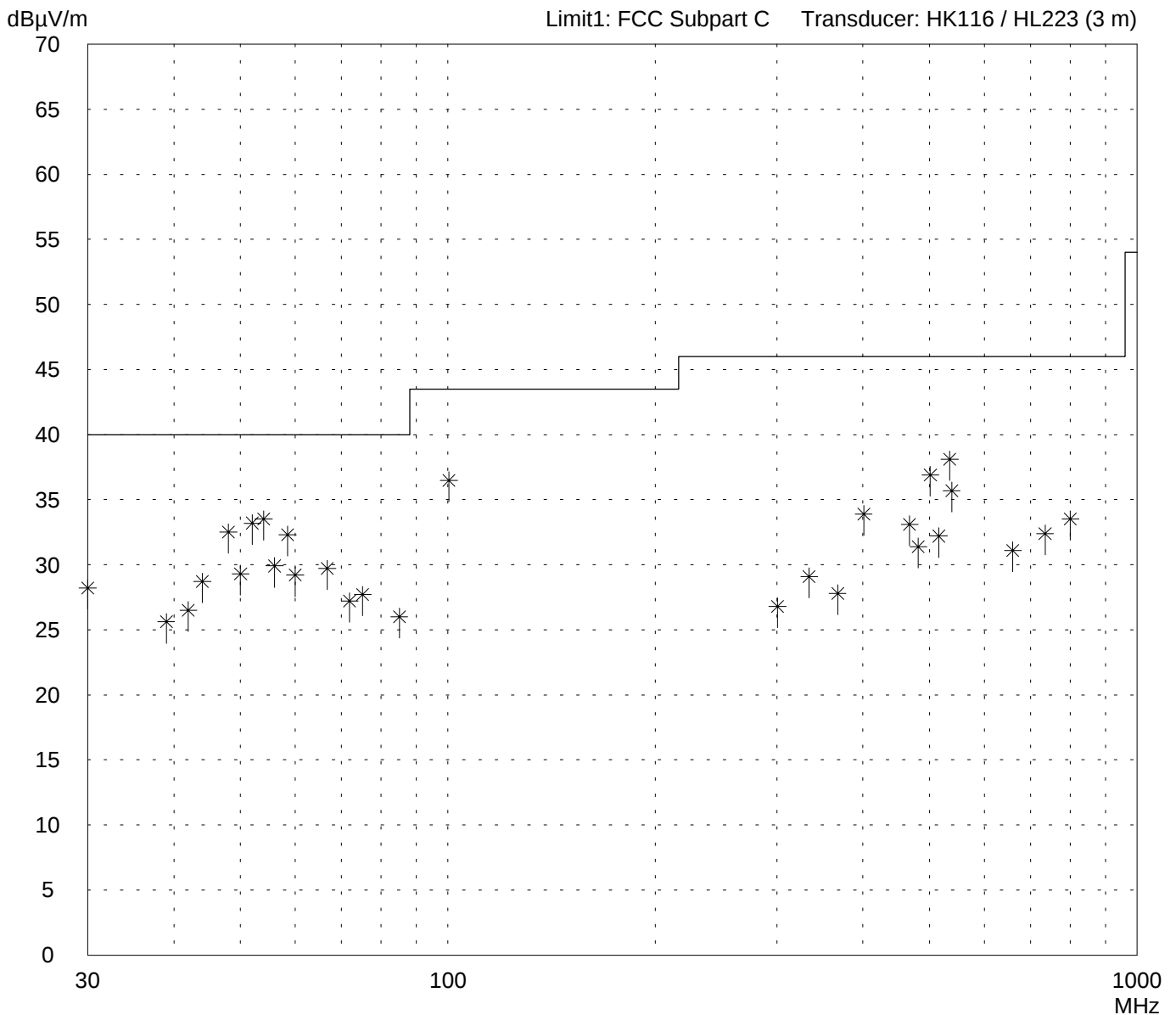
Mode:
- RF-modem PC24E-H-FC mounted in AT & T
Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-90734-1

Page 103 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999
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 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
30.0	13.5	14.7	28.2	40.0	
39.0	13.0	12.6	25.6	40.0	
42.0	14.5	12.0	26.5	40.0	
44.0	17.0	11.7	28.7	40.0	
48.0	21.5	11.0	32.5	40.0	
50.0	18.5	10.8	29.3	40.0	
52.0	22.5	10.7	33.2	40.0	
54.0	23.0	10.5	33.5	40.0	
56.0	19.5	10.4	29.9	40.0	
58.5	22.0	10.3	32.3	40.0	
60.0	19.0	10.2	29.2	40.0	
66.8	19.5	10.2	29.7	40.0	
72.0	17.0	10.2	27.2	40.0	
75.2	17.5	10.2	27.7	40.0	
85.0	15.5	10.5	26.0	40.0	
100.3	25.0	11.5	36.5	43.5	
300.7	10.0	16.8	26.8	46.0	
334.1	11.0	18.1	29.1	46.0	
367.5	8.5	19.3	27.8	46.0	
400.9	13.5	20.4	33.9	46.0	
467.7	11.0	22.1	33.1	46.0	
481.5	9.0	22.4	31.4	46.0	
501.2	14.0	22.9	36.9	46.0	
515.5	9.0	23.2	32.2	46.0	
534.6	14.5	23.6	38.1	46.0	
538.1	12.0	23.7	35.7	46.0	
660.0	4.5	26.6	31.1	46.0	
735.0	4.5	27.9	32.4	46.0	
800.0	5.0	28.5	33.5	46.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 104 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

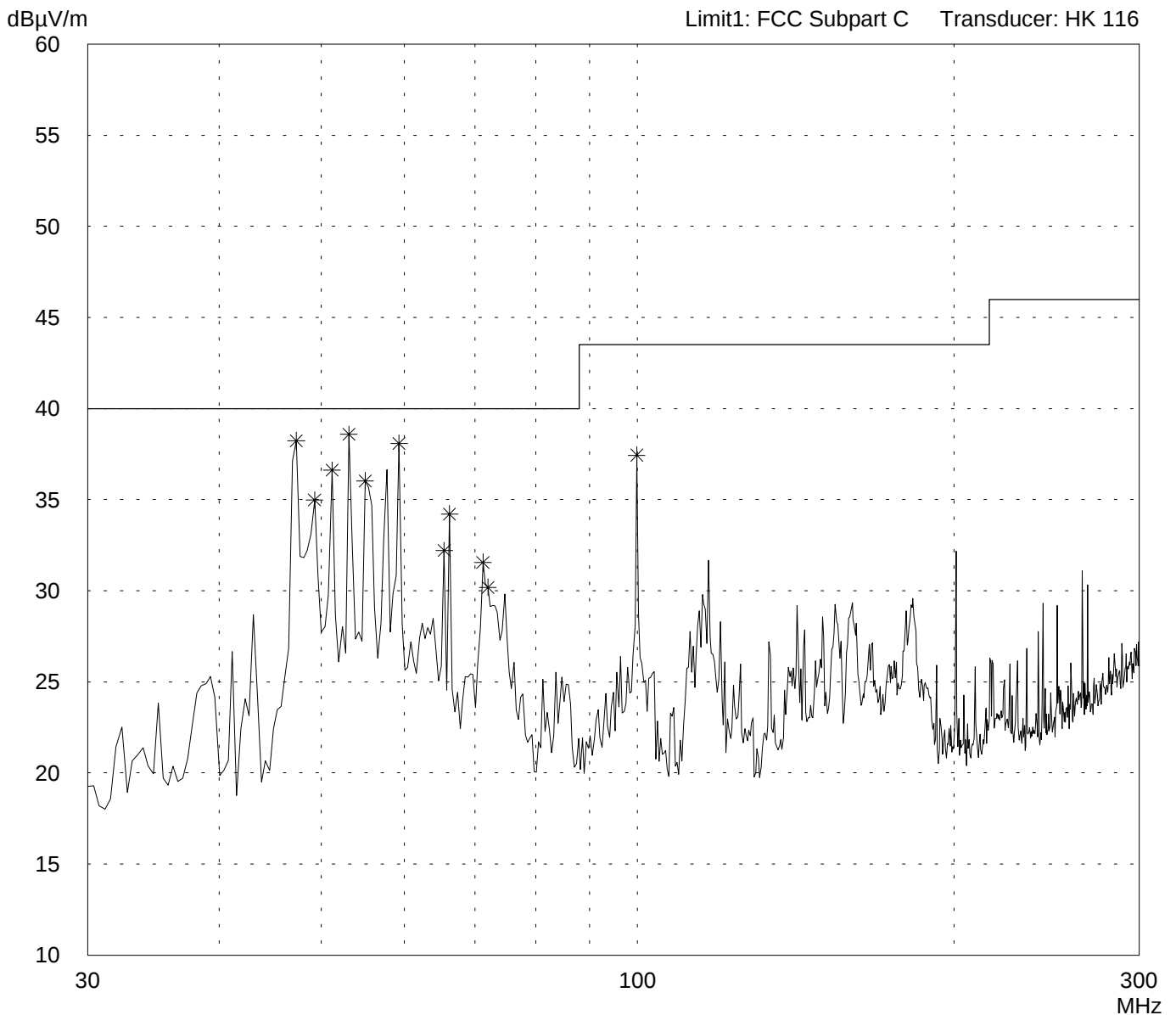
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 105 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999
Operator: R. Heller

Test performed: automatically
File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

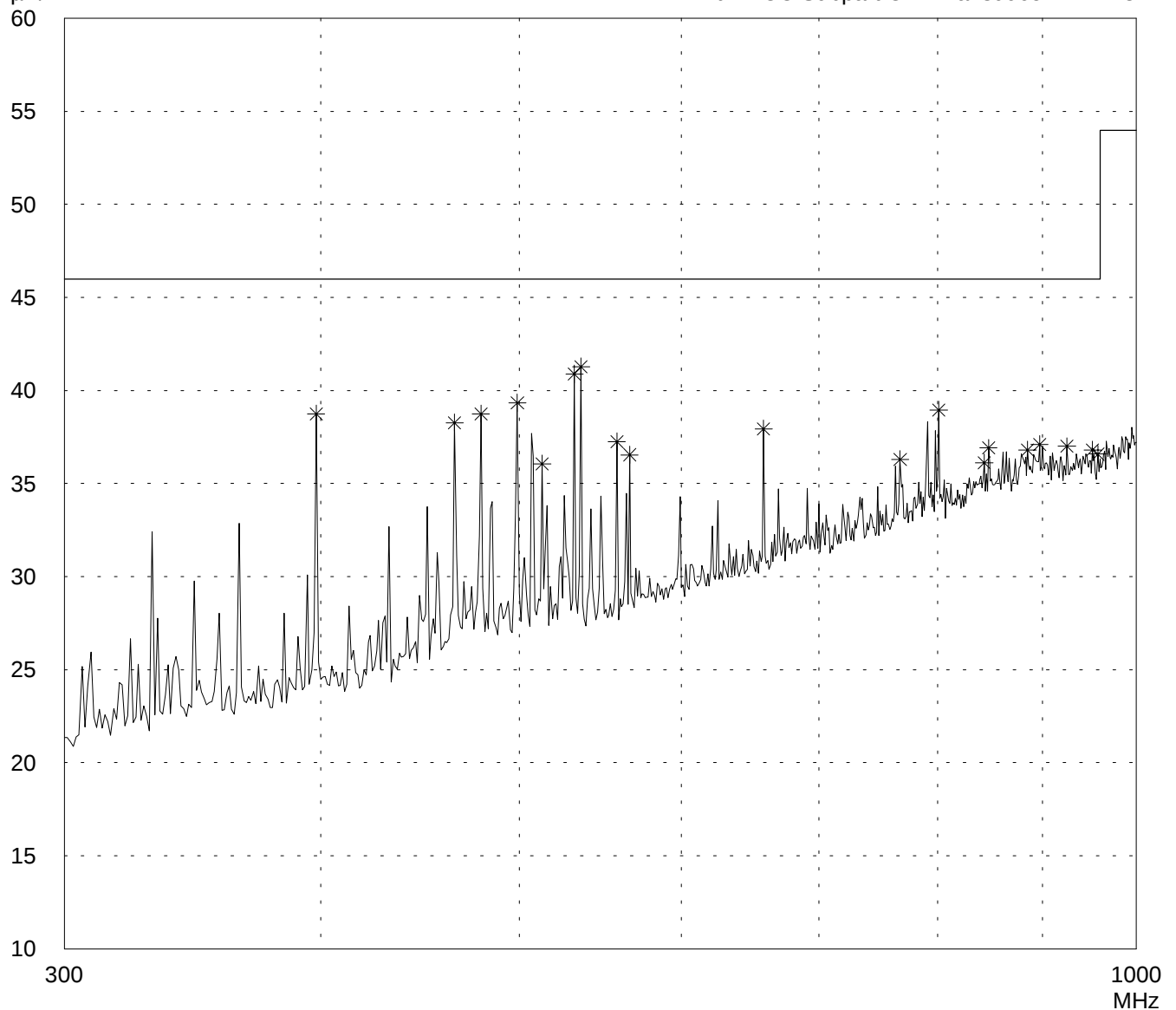
- TX mode with $f = 2.437$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges

dB μ V/m

Limit1: FCC Subpart C Transducer: HL 223



Result:
Prescan

Project file:
56305-90734-1

Page 106 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector:
Peak

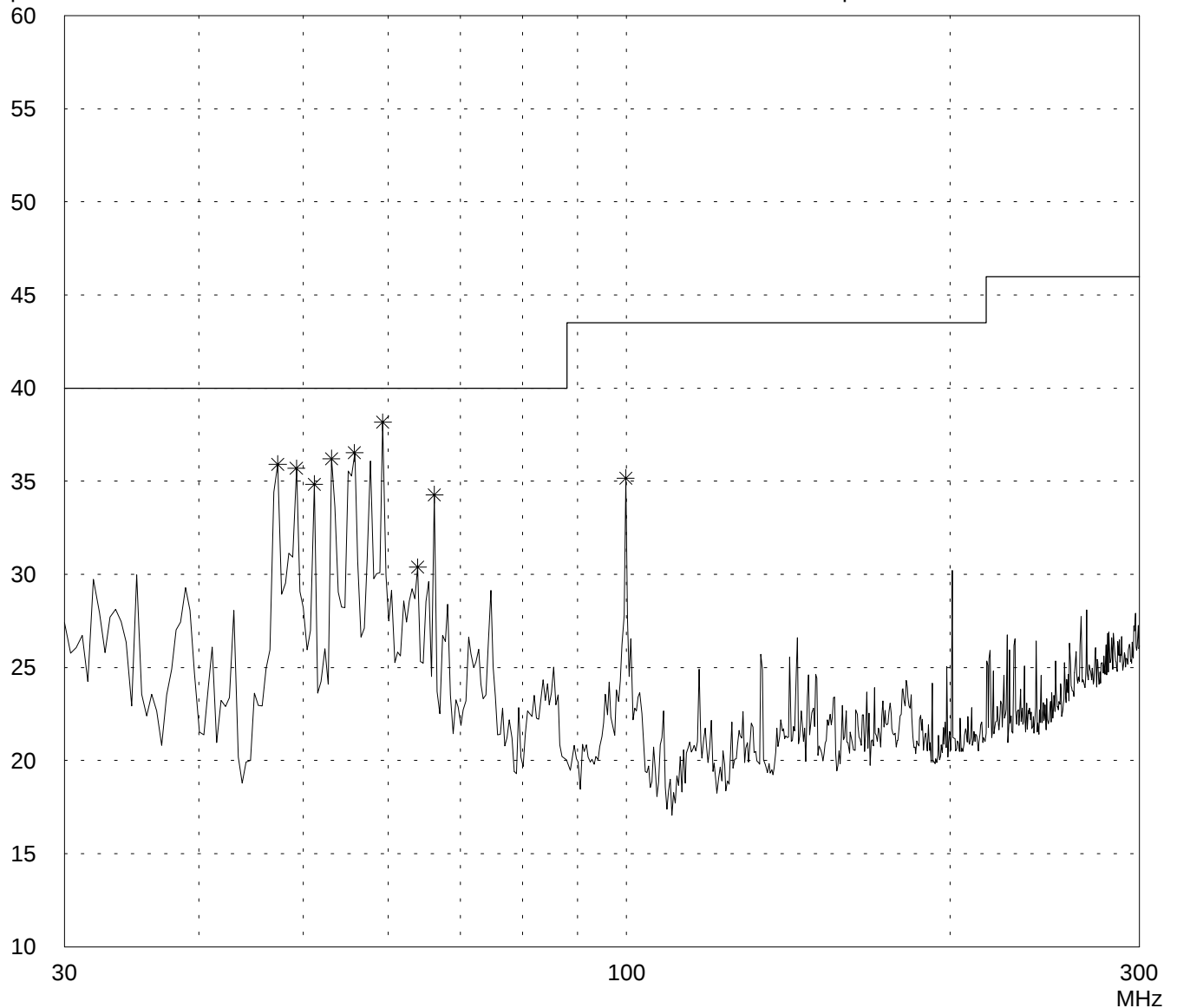
List of values:

10 dB Margin

50 Subranges

dB μ V/m

Limit1: FCC Subpart C Transducer: HK 116



Result:
Prescan

Project file:
56305-90734-1

Page 107 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999
Operator: R. Heller

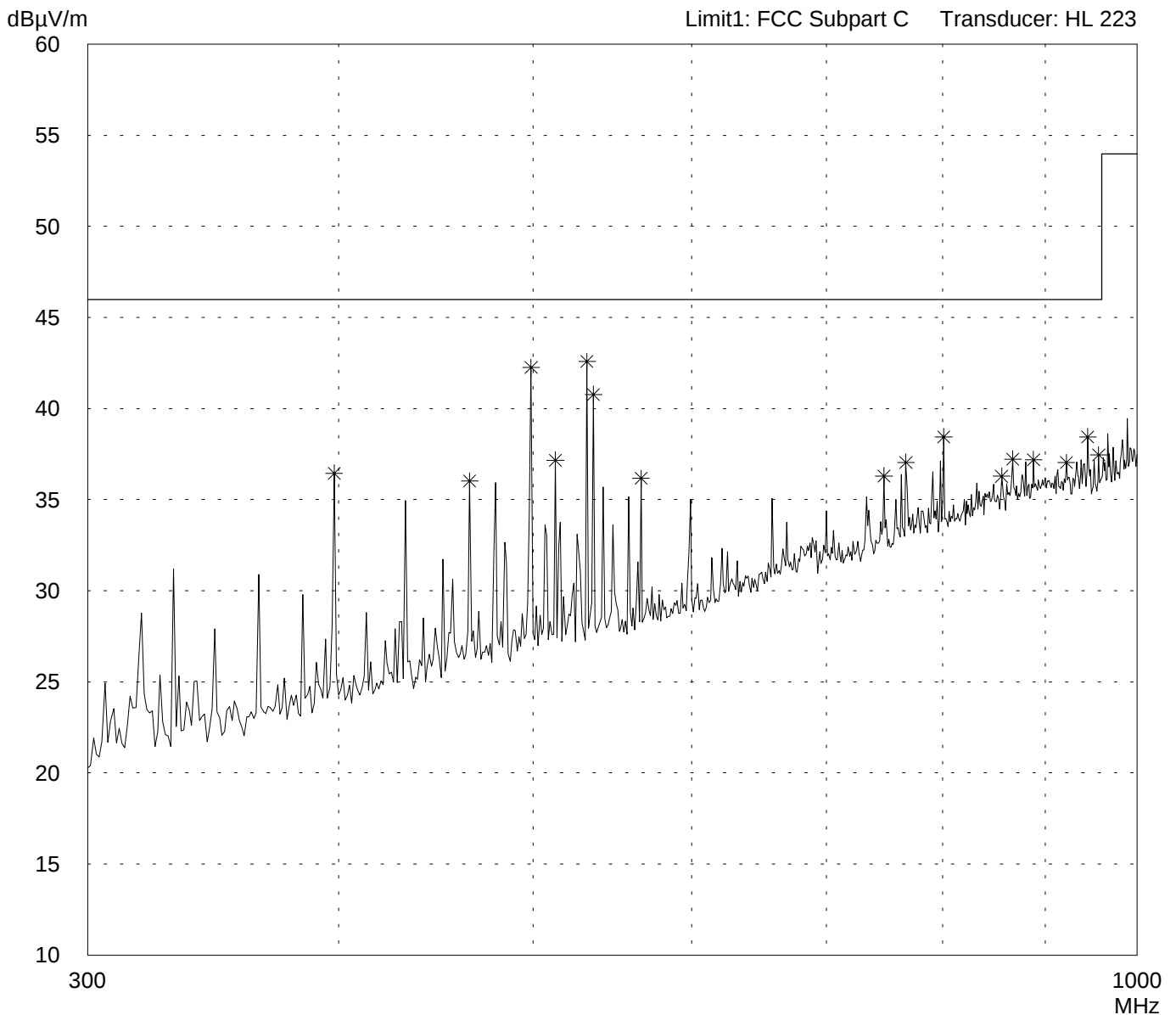
Test performed: automatically
File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.437$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 108 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator:
R. Heller

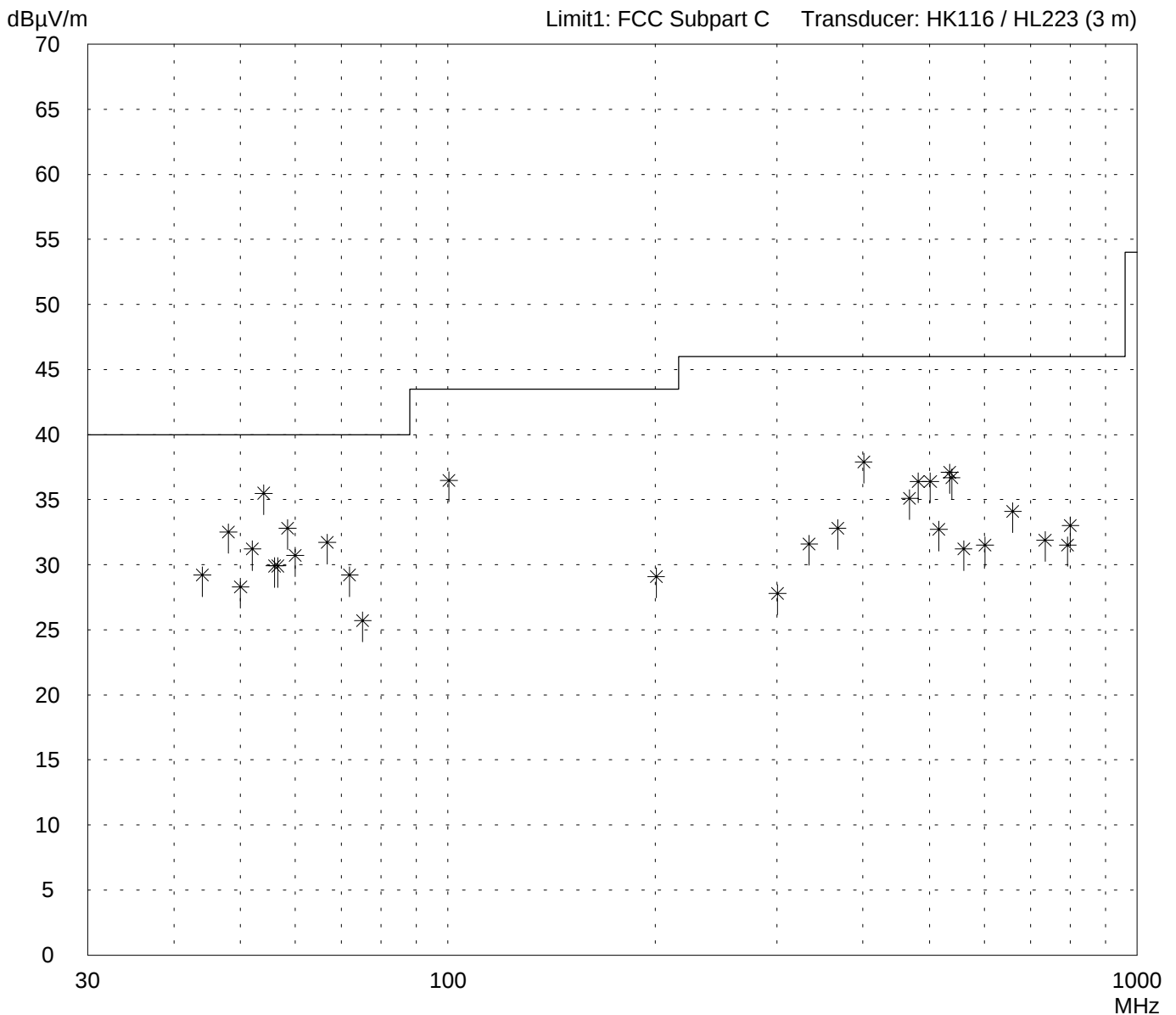
Test performed: by hand File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.437$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-90734-1

Page 109 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 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 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
44.0	17.5	11.7	29.2	40.0	
48.0	21.5	11.0	32.5	40.0	
50.0	17.5	10.8	28.3	40.0	
52.0	20.5	10.7	31.2	40.0	
54.0	25.0	10.5	35.5	40.0	
56.0	19.5	10.4	29.9	40.0	
56.6	19.5	10.4	29.9	40.0	
58.5	22.5	10.3	32.8	40.0	
60.0	20.5	10.2	30.7	40.0	
66.8	21.5	10.2	31.7	40.0	
72.0	19.0	10.2	29.2	40.0	
75.2	15.5	10.2	25.7	40.0	
100.3	25.0	11.5	36.5	43.5	
200.5	12.0	17.1	29.1	43.5	
300.7	11.0	16.8	27.8	46.0	
334.1	13.5	18.1	31.6	46.0	
367.5	13.5	19.3	32.8	46.0	
400.9	17.5	20.4	37.9	46.0	
467.7	13.0	22.1	35.1	46.0	
481.5	14.0	22.4	36.4	46.0	
501.2	13.5	22.9	36.4	46.0	
515.5	9.5	23.2	32.7	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.0	23.7	36.7	46.0	
560.0	7.0	24.2	31.2	46.0	
601.4	6.5	25.0	31.5	46.0	
660.0	7.5	26.6	34.1	46.0	
735.0	4.0	27.9	31.9	46.0	
793.0	3.0	28.5	31.5	46.0	
800.0	4.5	28.5	33.0	46.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 110 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999
Operator: R. Heller

Test performed: by hand
File name:

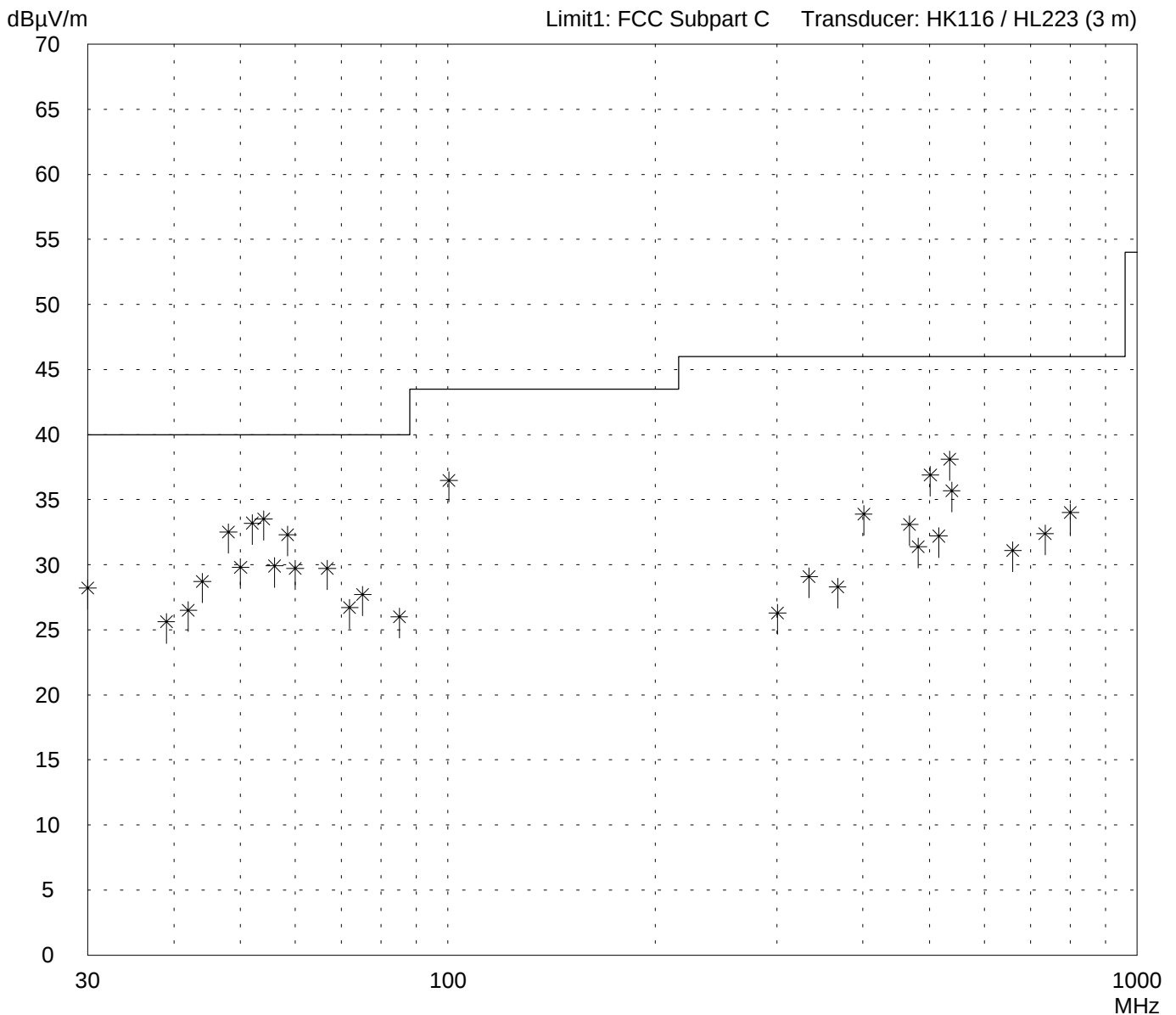
Mode:
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-90734-1

Page 111 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999
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 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
30.0	13.5	14.7	28.2	40.0	
39.0	13.0	12.6	25.6	40.0	
42.0	14.5	12.0	26.5	40.0	
44.0	17.0	11.7	28.7	40.0	
48.0	21.5	11.0	32.5	40.0	
50.0	19.0	10.8	29.8	40.0	
52.0	22.5	10.7	33.2	40.0	
54.0	23.0	10.5	33.5	40.0	
56.0	19.5	10.4	29.9	40.0	
58.5	22.0	10.3	32.3	40.0	
60.0	19.5	10.2	29.7	40.0	
66.8	19.5	10.2	29.7	40.0	
72.0	16.5	10.2	26.7	40.0	
75.2	17.5	10.2	27.7	40.0	
85.0	15.5	10.5	26.0	40.0	
100.3	25.0	11.5	36.5	43.5	
300.7	9.5	16.8	26.3	46.0	
334.1	11.0	18.1	29.1	46.0	
367.5	9.0	19.3	28.3	46.0	
400.9	13.5	20.4	33.9	46.0	
467.7	11.0	22.1	33.1	46.0	
481.5	9.0	22.4	31.4	46.0	
501.2	14.0	22.9	36.9	46.0	
515.5	9.0	23.2	32.2	46.0	
534.6	14.5	23.6	38.1	46.0	
538.1	12.0	23.7	35.7	46.0	
660.0	4.5	26.6	31.1	46.0	
735.0	4.5	27.9	32.4	46.0	
800.0	5.5	28.5	34.0	46.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 112 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator: R. Heller

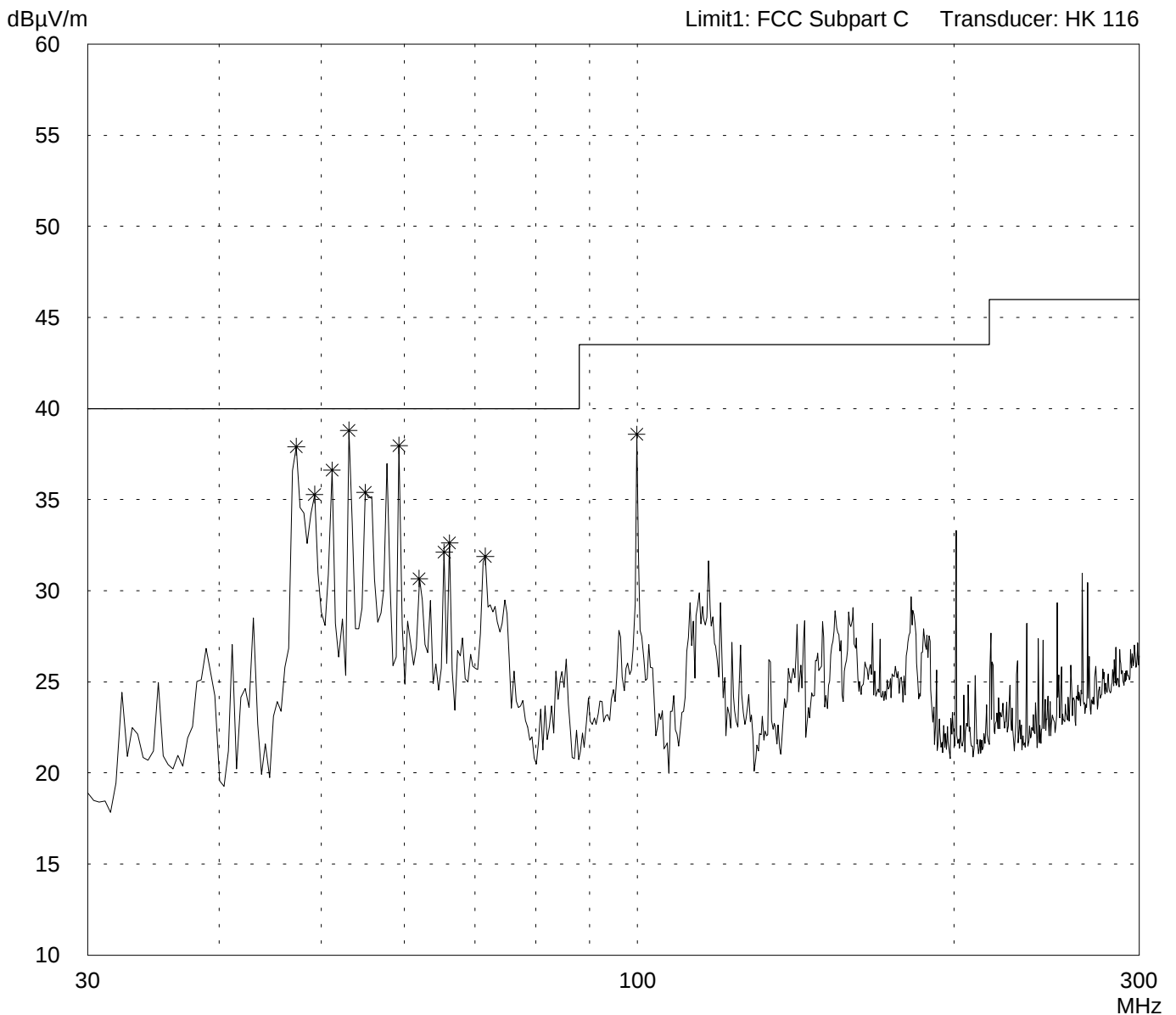
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 113 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator: R. Heller

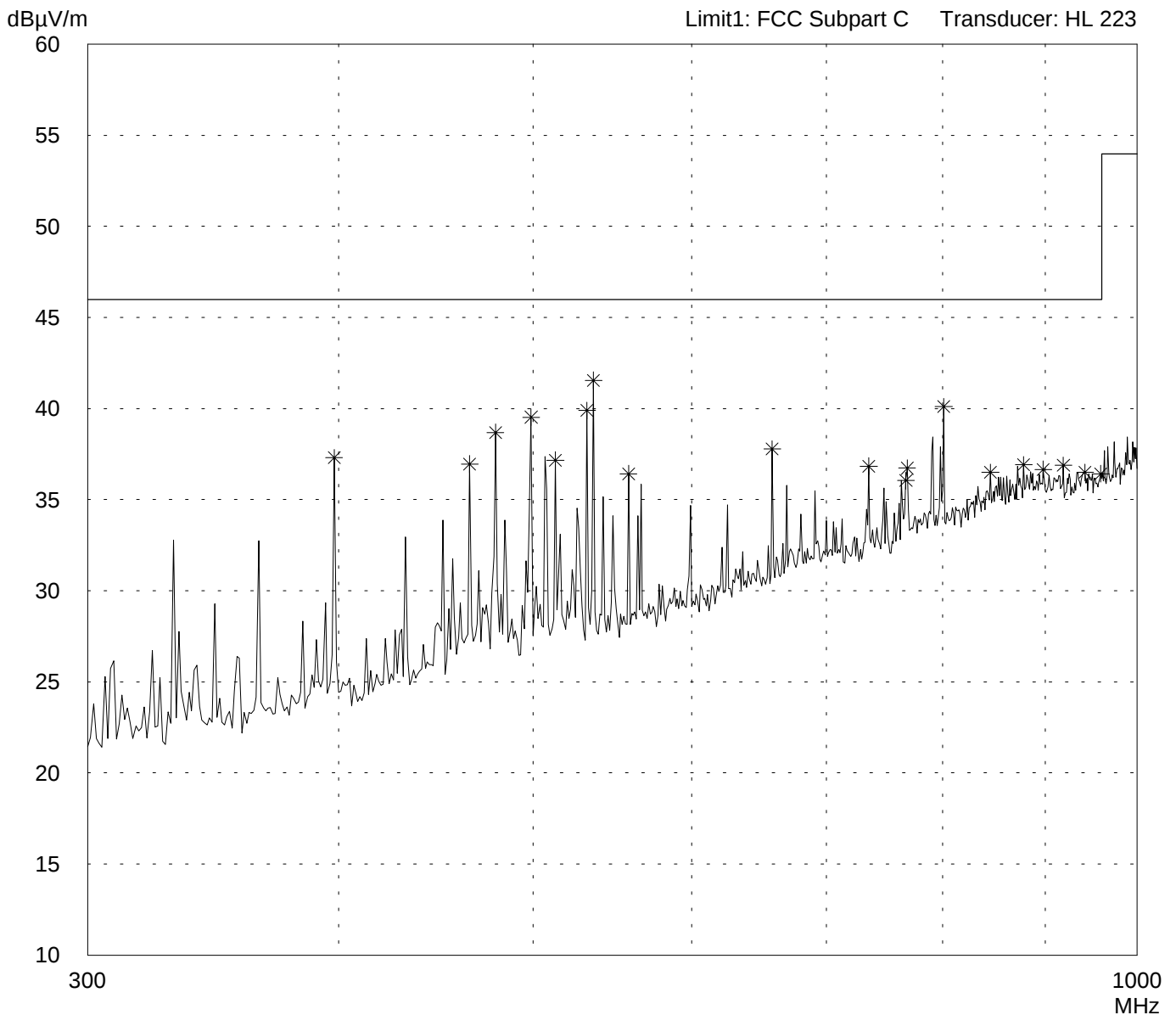
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 114 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 Operator: R. Heller

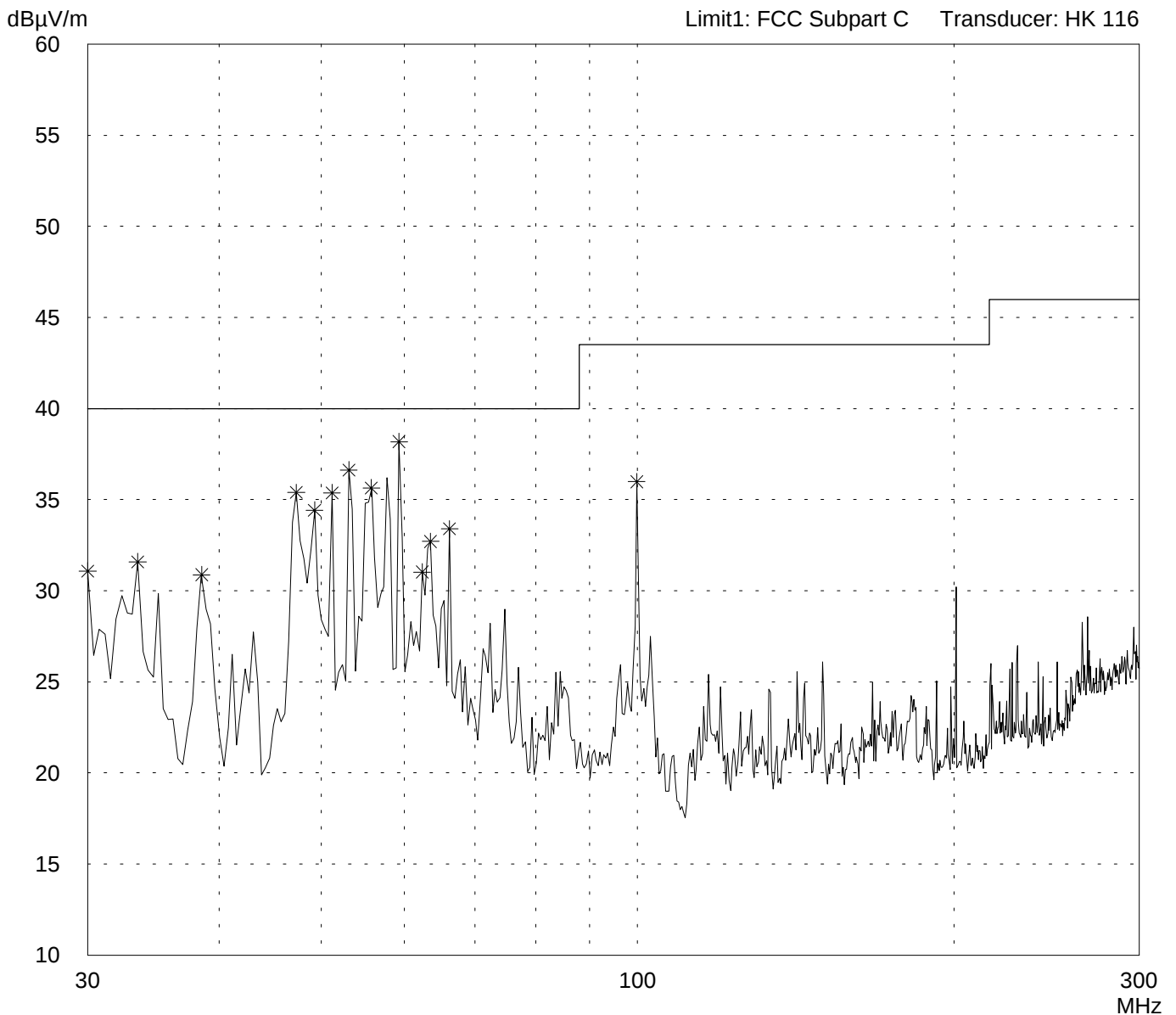
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 115 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 Operator: R. Heller

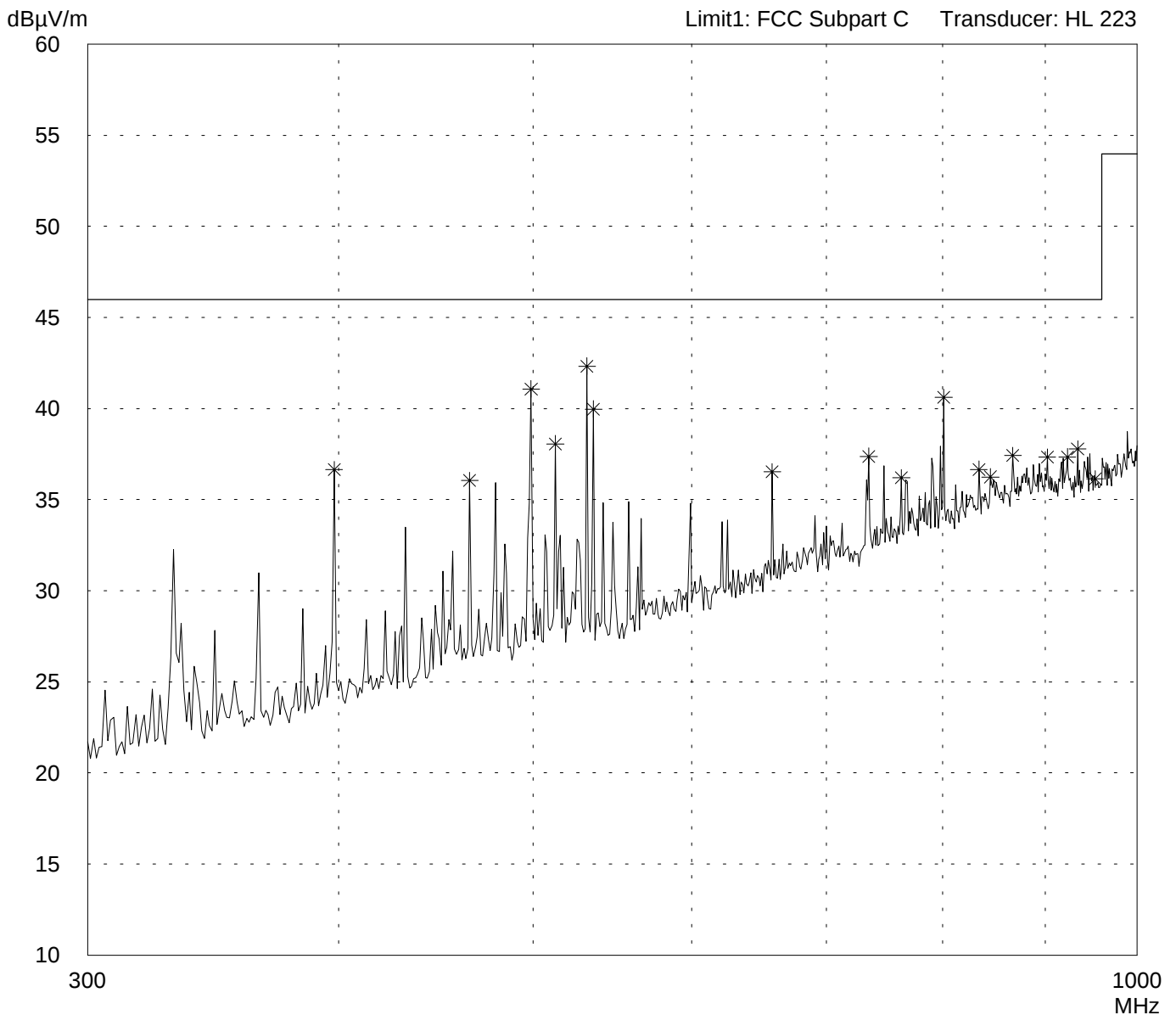
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 116 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999
Operator: R. Heller

Test performed: by hand
File name:

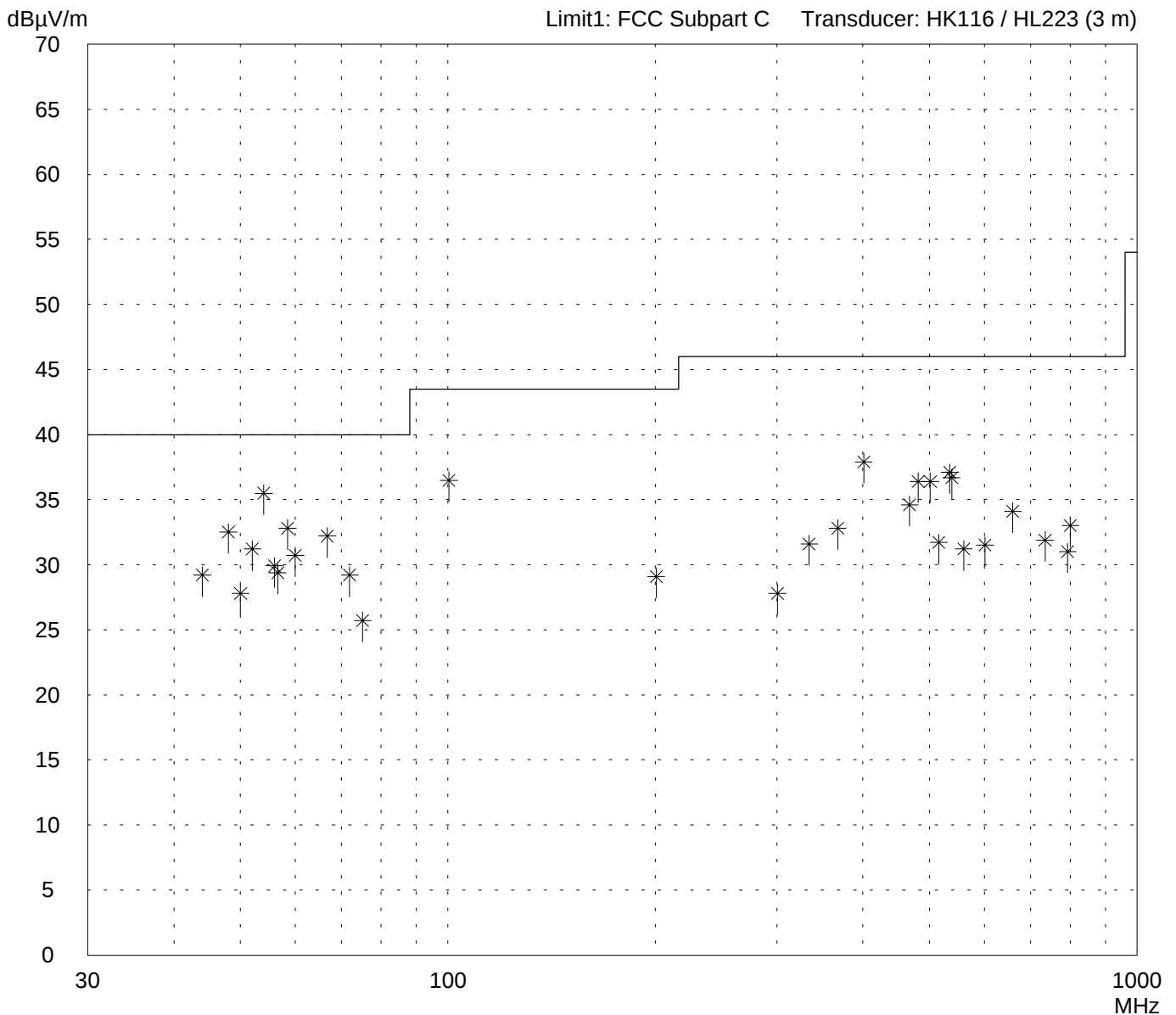
Mode:
- RF-modem PC24E-H-FC mounted in AT & T
Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-90734-1

Page 117 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 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 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- operating with bit rate 11 Mbps
- TX mode with $f = 2.452$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
44.0	17.5	11.7	29.2	40.0	
48.0	21.5	11.0	32.5	40.0	
50.0	17.0	10.8	27.8	40.0	
52.0	20.5	10.7	31.2	40.0	
54.0	25.0	10.5	35.5	40.0	
56.0	19.5	10.4	29.9	40.0	
56.6	19.0	10.4	29.4	40.0	
58.5	22.5	10.3	32.8	40.0	
60.0	20.5	10.2	30.7	40.0	
66.8	22.0	10.2	32.2	40.0	
72.0	19.0	10.2	29.2	40.0	
75.2	15.5	10.2	25.7	40.0	
100.3	25.0	11.5	36.5	43.5	
200.5	12.0	17.1	29.1	43.5	
300.7	11.0	16.8	27.8	46.0	
334.1	13.5	18.1	31.6	46.0	
367.5	13.5	19.3	32.8	46.0	
400.9	17.5	20.4	37.9	46.0	
467.7	12.5	22.1	34.6	46.0	
481.5	14.0	22.4	36.4	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	13.0	23.7	36.7	46.0	
560.0	7.0	24.2	31.2	46.0	
601.4	6.5	25.0	31.5	46.0	
660.0	7.5	26.6	34.1	46.0	
735.0	4.0	27.9	31.9	46.0	
793.0	2.5	28.5	31.0	46.0	
800.0	4.5	28.5	33.0	46.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 118 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999
Operator: R. Heller

Test performed: by hand
File name:

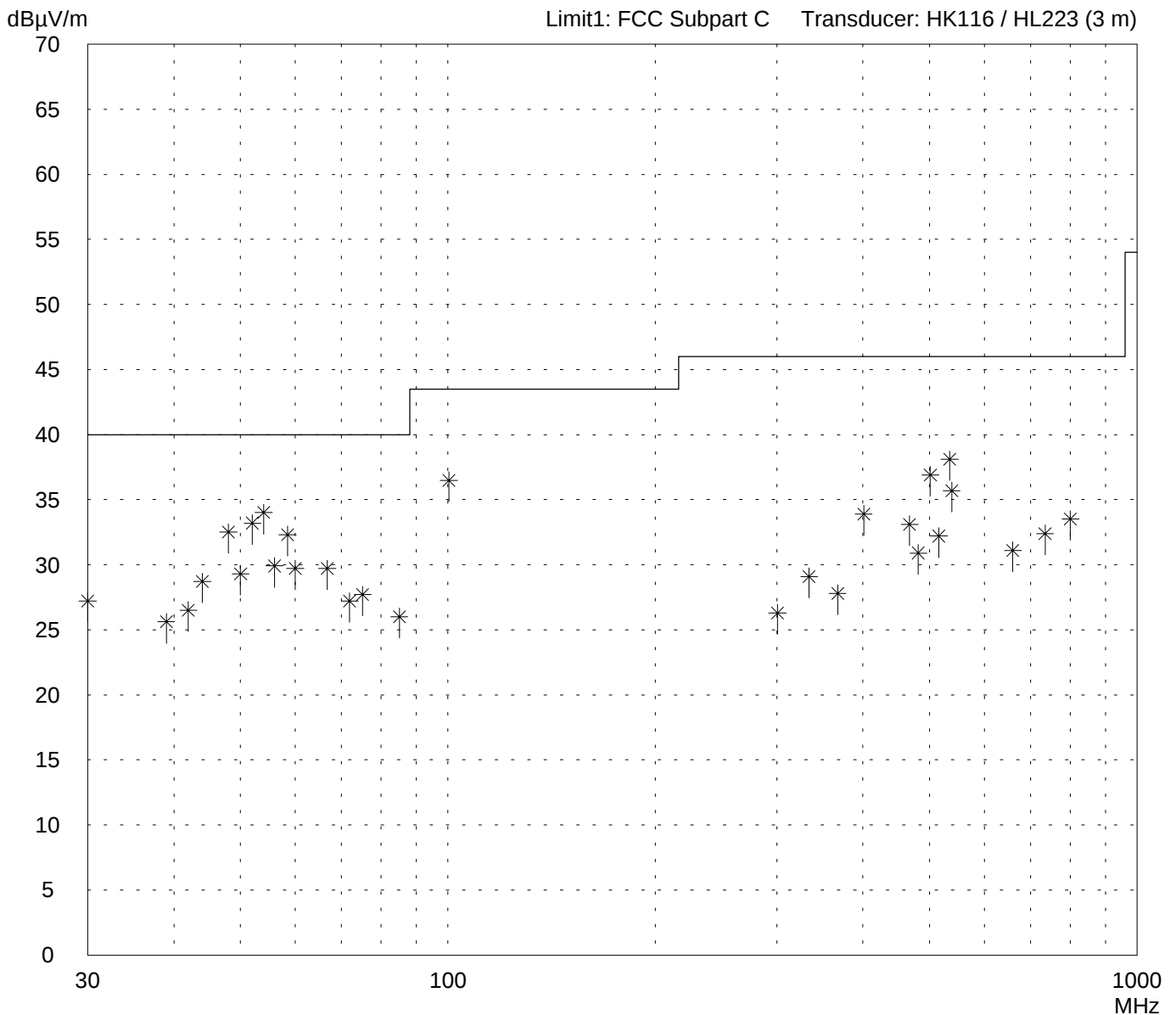
Mode:
- RF-modem PC24E-H-FC mounted in AT & T
Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-90734-1

Page 119 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999
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 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
30.0	12.5	14.7	27.2	40.0	
39.0	13.0	12.6	25.6	40.0	
42.0	14.5	12.0	26.5	40.0	
44.0	17.0	11.7	28.7	40.0	
48.0	21.5	11.0	32.5	40.0	
50.0	18.5	10.8	29.3	40.0	
52.0	22.5	10.7	33.2	40.0	
54.0	23.5	10.5	34.0	40.0	
56.0	19.5	10.4	29.9	40.0	
58.5	22.0	10.3	32.3	40.0	
60.0	19.5	10.2	29.7	40.0	
66.8	19.5	10.2	29.7	40.0	
72.0	17.0	10.2	27.2	40.0	
75.2	17.5	10.2	27.7	40.0	
85.0	15.5	10.5	26.0	40.0	
100.3	25.0	11.5	36.5	43.5	
300.7	9.5	16.8	26.3	46.0	
334.1	11.0	18.1	29.1	46.0	
367.5	8.5	19.3	27.8	46.0	
400.9	13.5	20.4	33.9	46.0	
467.7	11.0	22.1	33.1	46.0	
481.5	8.5	22.4	30.9	46.0	
501.2	14.0	22.9	36.9	46.0	
515.5	9.0	23.2	32.2	46.0	
534.6	14.5	23.6	38.1	46.0	
538.1	12.0	23.7	35.7	46.0	
660.0	4.5	26.6	31.1	46.0	
735.0	4.5	27.9	32.4	46.0	
800.0	5.0	28.5	33.5	46.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 120 of 193 Pages

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.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/08/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

Detector: Peak

- with 50 ft antenna cable (LMR400)

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.3900	vertical	63.6		0.6	20.7	63.6	74
2.3976	vertical	72.0		0.6	20.7	72.0	NRB
2.3997	vertical	79.2		0.6	20.7	79.2	NRB
2.4000	vertical	78.3		0.6	20.7	78.3	OB
2.4164	vertical	122.9		0.6	20.7	122.9	OB
2.4382	vertical	71.3		0.6	20.7	71.3	OB

- with 20 ft antenna cable (LMR400)

2.7695	vertical	51.7		0.6	23.7	51.7	74
4.8409	vertical	41.7	-92.7		27.3	41.6	74
7.2548	vertical	43.2	-93.0		29.9	44.0	74
9.6653	vertical	48.0	-91.6		33.4	48.8	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 122.9 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

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

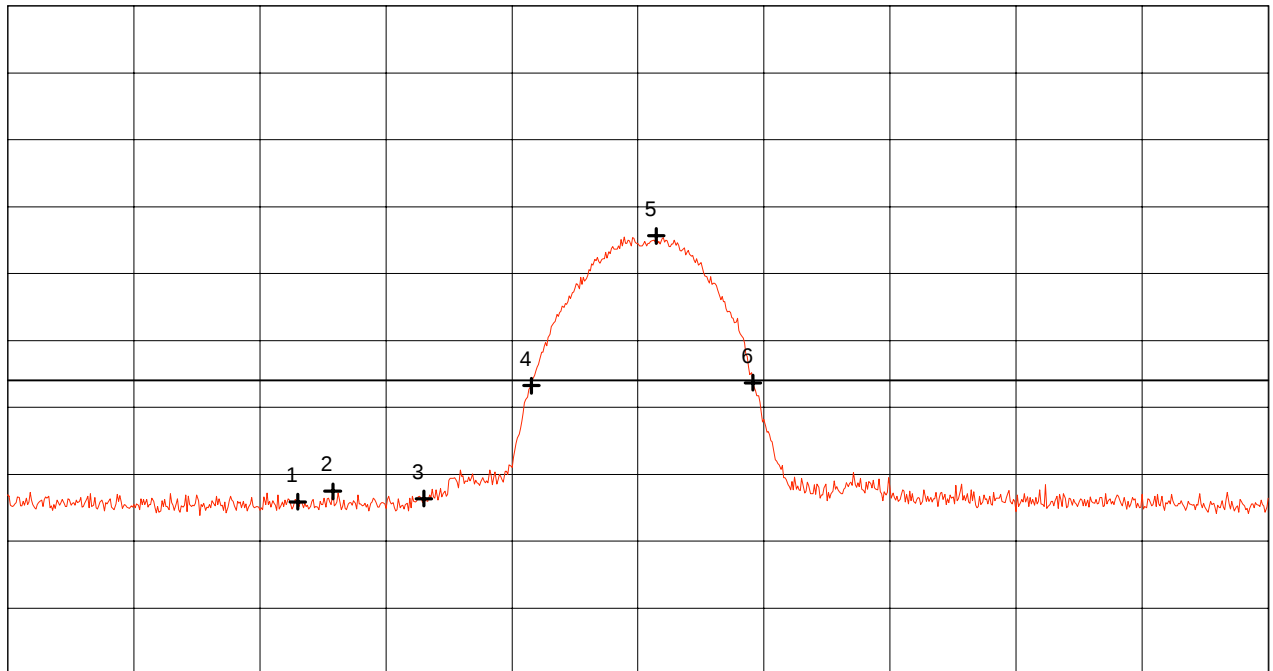
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.467 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	55.89 dB μ V/m
Nr.2	2.392778 GHz	57.47 dB μ V/m
Nr.3	2.400000 GHz	56.35 dB μ V/m
Nr.4	2.408556 GHz	73.26 dB μ V/m
Nr.5	2.418444 GHz	95.61 dB μ V/m
Nr.6	2.426111 GHz	73.69 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 122 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

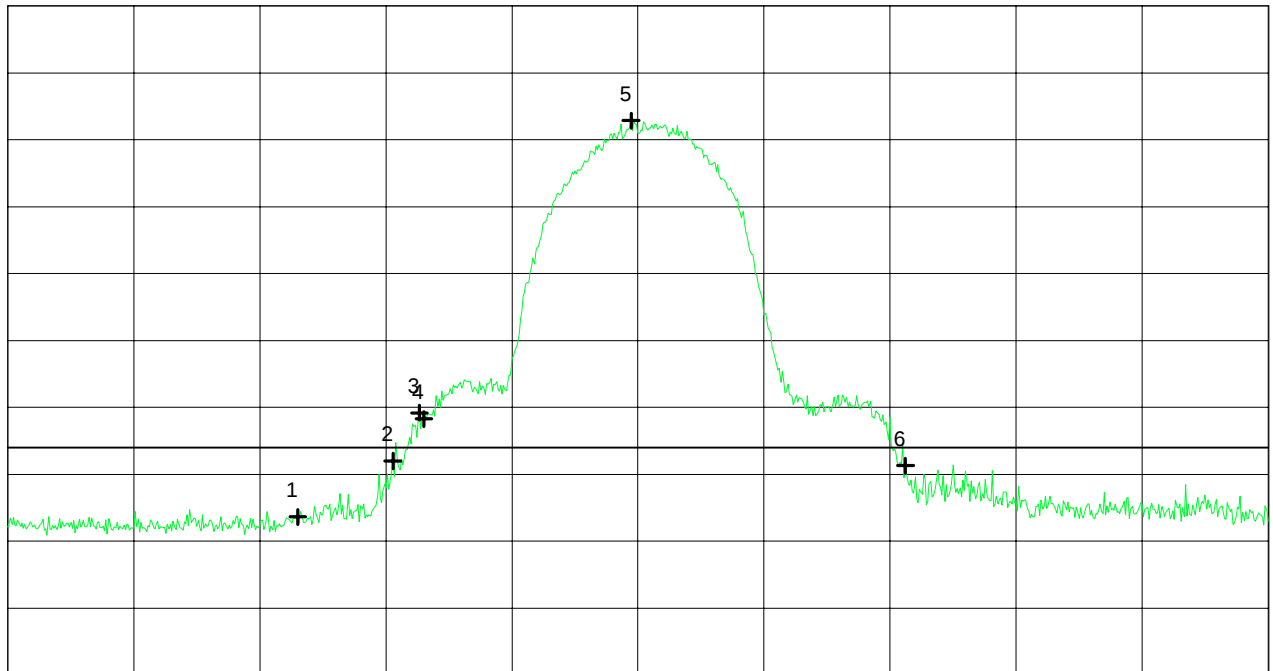
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 140 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.467 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	63.60 dB μ V/m
Nr.2	2.397556 GHz	71.98 dB μ V/m
Nr.3	2.399667 GHz	79.19 dB μ V/m
Nr.4	2.400000 GHz	78.26 dB μ V/m
Nr.5	2.416444 GHz	122.87 dB μ V/m
Nr.6	2.438222 GHz	71.27 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 123 of 193 Pages

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.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/08/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - FCC test setup
 - supply voltage 115 V AC
 - with external antenna AOU24-DI-24

 - operating with bit rate 11 Mbps

 - TX mode with $f = 2.417$ GHz

Detector: Average

 - with 50 ft antenna cable (LMR400)

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	51.6		0.6	20.7	51.6	54
2.3921	vertical	54.0		0.6	20.7	54.0	NRB
2.3991	vertical	66.3		0.6	20.7	66.3	NRB
2.4000	vertical	69.3		0.6	20.7	69.3	NRB
2.4184	vertical	116.4		0.6	20.7	116.4	OB

- with 20 ft antenna cable (LMR400)

2.7695	vertical	< 43.1		0.6	23.7	< 43.1	54
7.2504	vertical	37.8	-98.2		29.9	38.7	54

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
 NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 116.4 dB μ V/m.

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

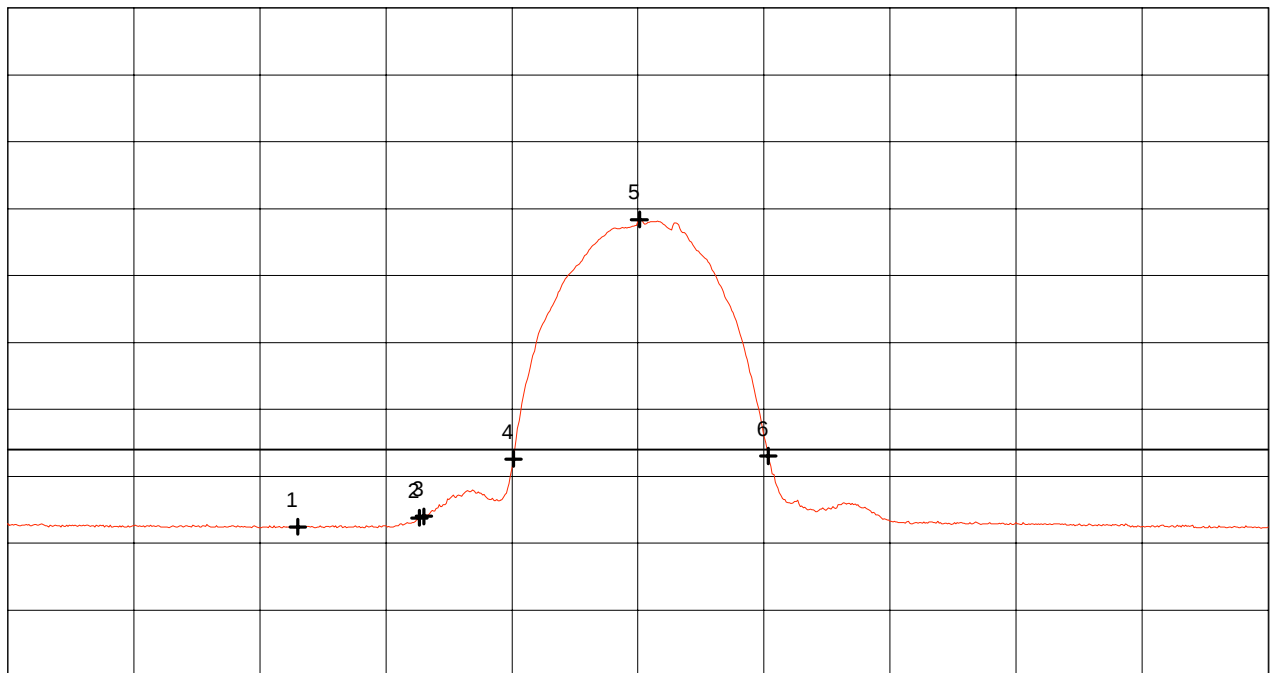
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 120 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.467 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	42.46 dB μ V/m
Nr.2	2.399667 GHz	43.78 dB μ V/m
Nr.3	2.400000 GHz	43.98 dB μ V/m
Nr.4	2.407111 GHz	52.59 dB μ V/m
Nr.5	2.417111 GHz	88.37 dB μ V/m
Nr.6	2.427333 GHz	53.02 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 125 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

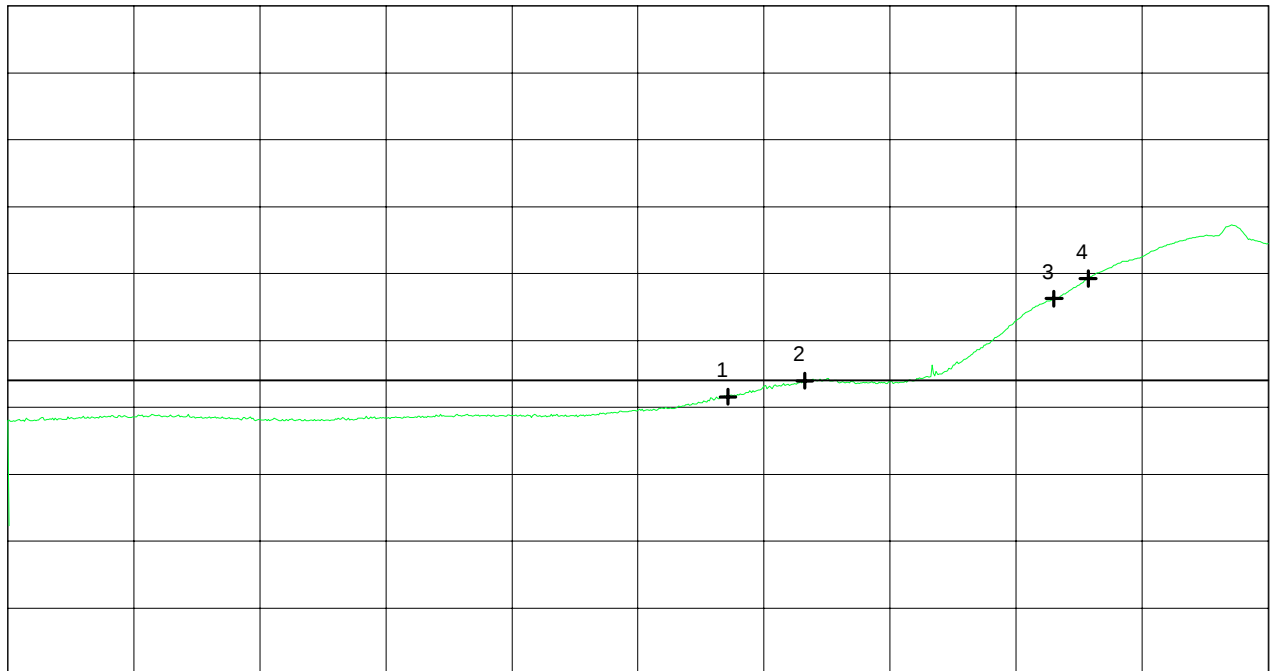
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 110 dB μ V/m
10 dB dB/Div.

ATT 0 dB

Ref. Offset 25.8 dB



Start 2.370 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.405 GHz
SWP 160 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	51.57 dB μ V/m
Nr.2	2.392128 GHz	53.96 dB μ V/m
Nr.3	2.399050 GHz	66.28 dB μ V/m
Nr.4	2.400000 GHz	69.25 dB μ V/m
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 126 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.417$ GHz

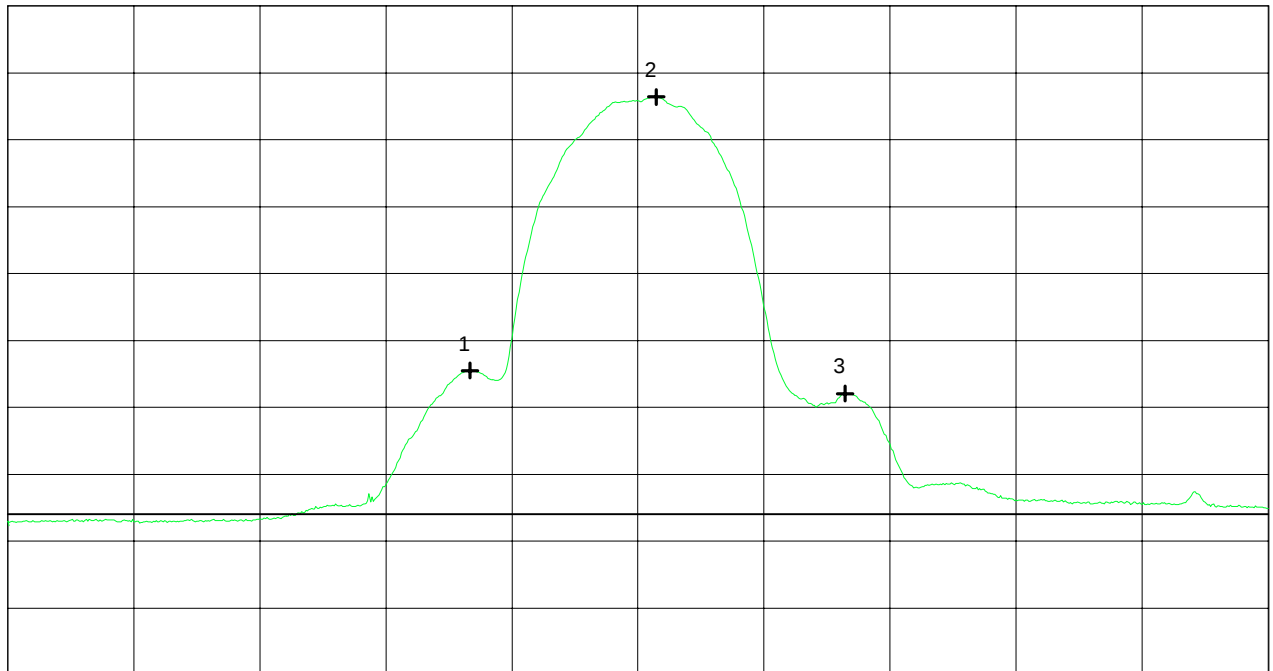
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.467 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.403667 GHz	75.49 dB μ V/m
Nr.2	2.418444 GHz	116.40 dB μ V/m
Nr.3	2.433444 GHz	72.08 dB μ V/m
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 127 of 193 Pages

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/08/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24

- operating with bit rate 2 Mbps

- TX mode with $f = 2.417$ GHz

Detector: Peak

- with 50 ft antenna cable (LMR400)

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.3900	vertical	63.3		0.6	20.7	63.3	74
2.3987	vertical	73.8		0.6	20.7	73.8	NRB
2.3994	vertical	78.2		0.6	20.7	78.2	NRB
2.4000	vertical	77.8		0.6	20.7	77.8	OB
2.4189	vertical	120.5		0.6	20.7	120.5	OB
2.4377	vertical	72.8		0.6	20.7	72.8	OB

- with 20 ft antenna cable (LMR400)

7.2526	vertical	43.8	-92.3		29.9	44.6	74
--------	----------	------	-------	--	------	------	----

Note 1: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 120.5 dBμV/m.

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

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.417$ GHz

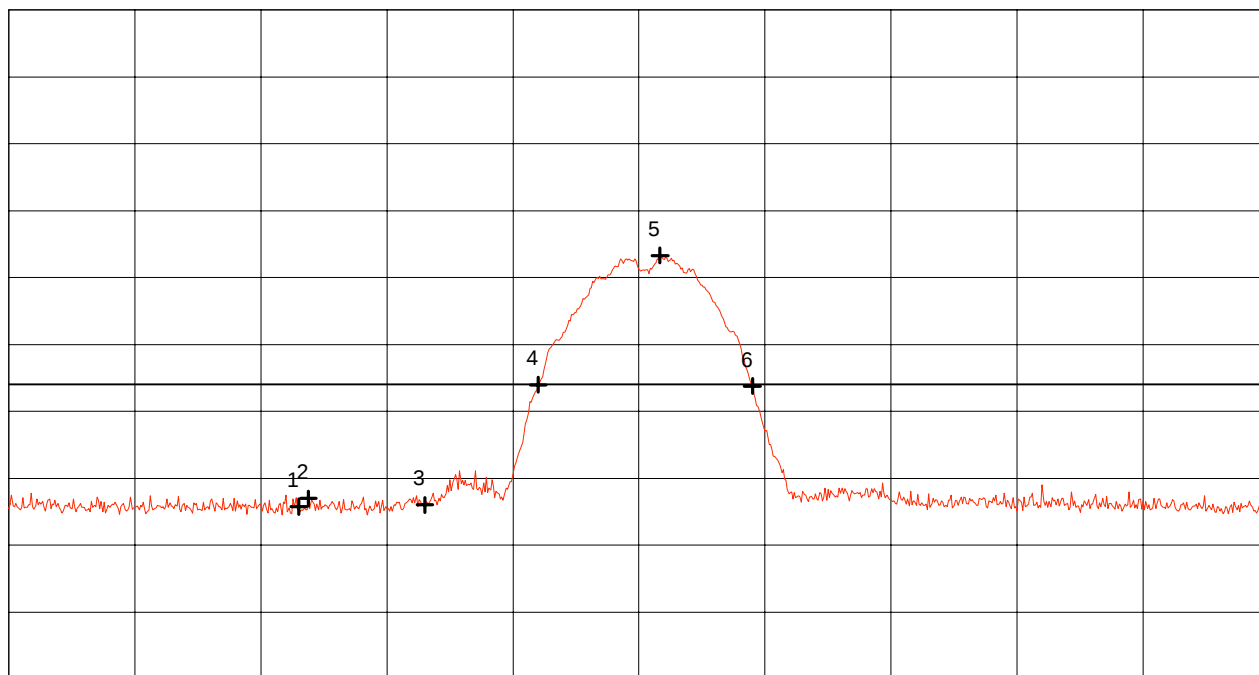
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.467 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	55.76 dB μ V/m
Nr.2	2.390778 GHz	56.98 dB μ V/m
Nr.3	2.400000 GHz	56.02 dB μ V/m
Nr.4	2.409000 GHz	73.97 dB μ V/m
Nr.5	2.418667 GHz	93.30 dB μ V/m
Nr.6	2.426000 GHz	73.77 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 129 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.417$ GHz

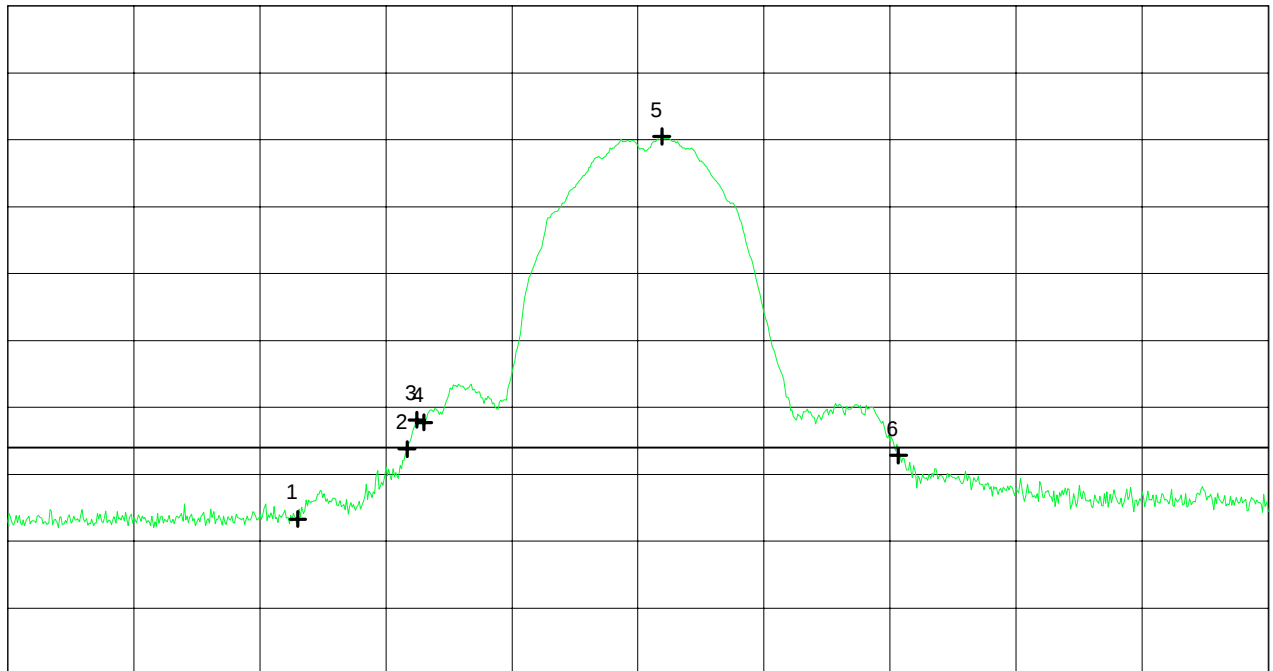
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 140 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.467 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	63.32 dB μ V/m
Nr.2	2.398667 GHz	73.76 dB μ V/m
Nr.3	2.399444 GHz	78.15 dB μ V/m
Nr.4	2.400000 GHz	77.75 dB μ V/m
Nr.5	2.418889 GHz	120.51 dB μ V/m
Nr.6	2.437667 GHz	72.80 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 130 of 193 Pages

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/08/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24

- operating with bit rate 2 Mbps

- TX mode with $f = 2.417$ GHz

Detector: Average

- with 50 ft antenna cable (LMR400)

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.39000	vertical	53.4		0.6	20.7	53.4	54
2.39003	vertical	53.6		0.6	20.7	53.6	NRB
2.39886	vertical	69.8		0.6	20.7	69.8	NRB
2.40000	vertical	70.9		0.6	20.7	70.9	NRB
2.41800	vertical	117.0		0.6	20.7	117.0	OB

- with 20 ft antenna cable (LMR400)

7.25200	vertical	39.1	-96.9		29.9	40.0	54
---------	----------	------	-------	--	------	------	----

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

NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 117.0 dB μ V/m.

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

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.417$ GHz

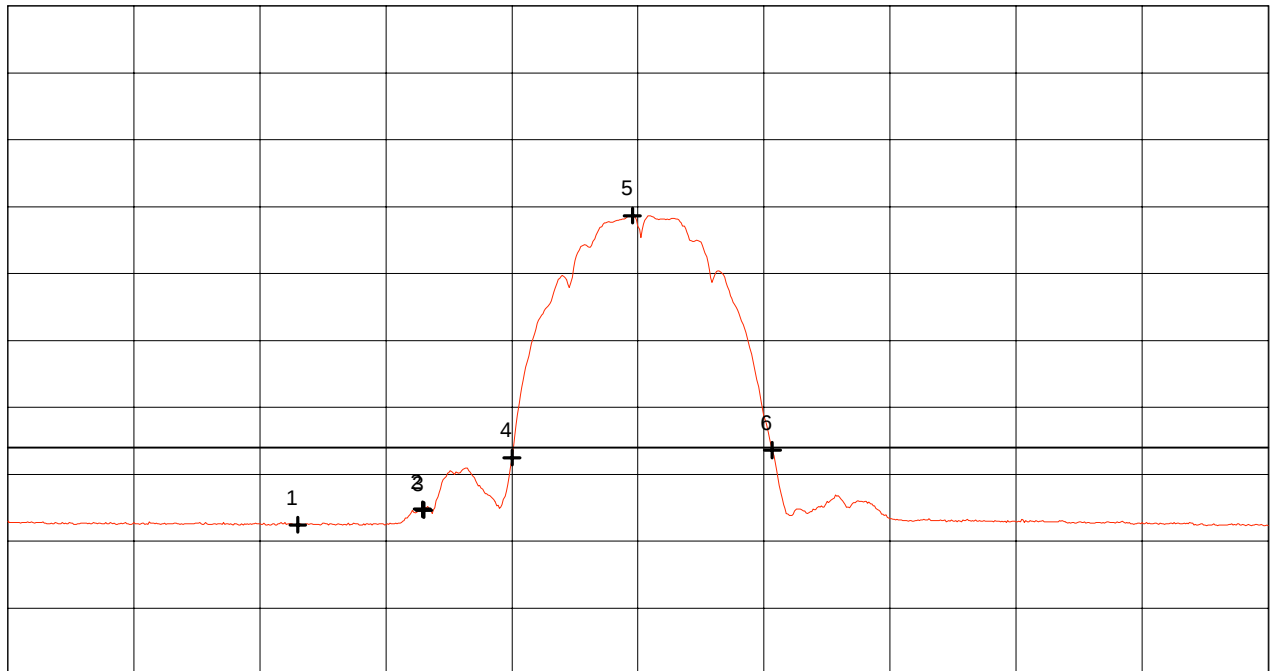
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 120 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.467 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	42.46 dB μ V/m
Nr.2	2.399889 GHz	44.77 dB μ V/m
Nr.3	2.400000 GHz	44.64 dB μ V/m
Nr.4	2.407000 GHz	52.49 dB μ V/m
Nr.5	2.416556 GHz	88.67 dB μ V/m
Nr.6	2.427667 GHz	53.61 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 132 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.417$ GHz

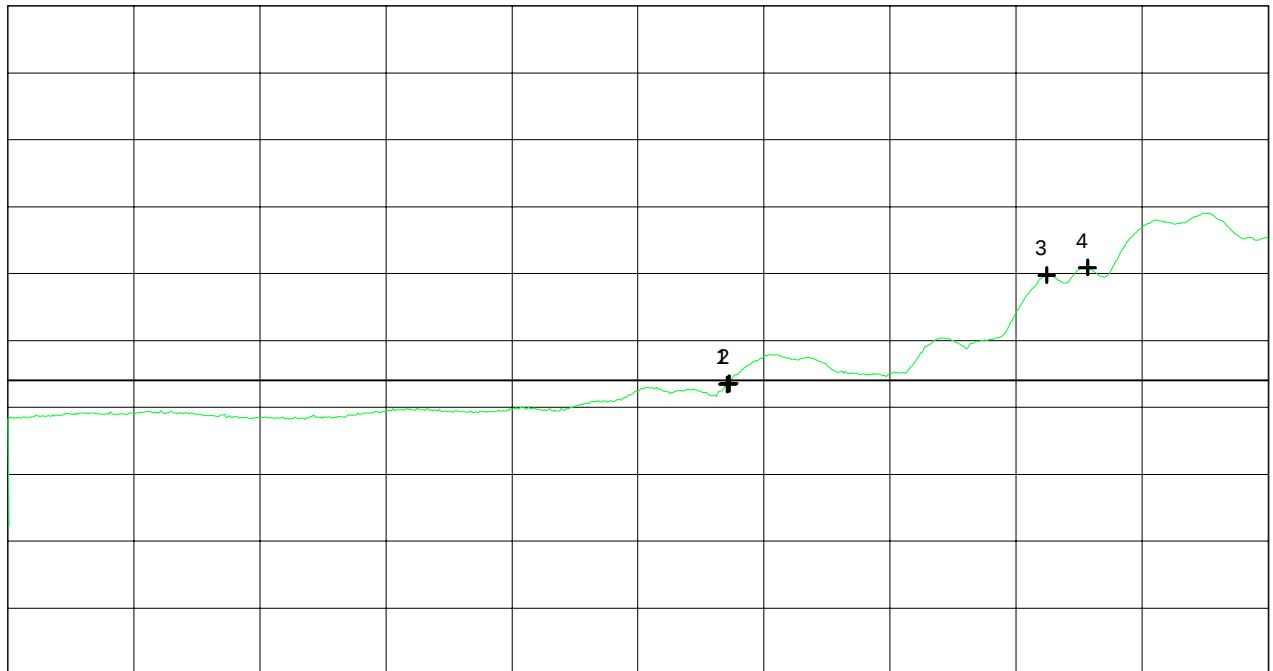
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 110 dB μ V/m
10 dB dB/Div.

ATT 0 dB

Ref. Offset 25.8 dB



Start 2.370 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.405 GHz
SWP 160 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	53.43 dB μ V/m
Nr.2	2.390028 GHz	53.56 dB μ V/m
Nr.3	2.398856 GHz	69.78 dB μ V/m
Nr.4	2.399983 GHz	70.90 dB μ V/m
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 133 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 50 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.417$ GHz

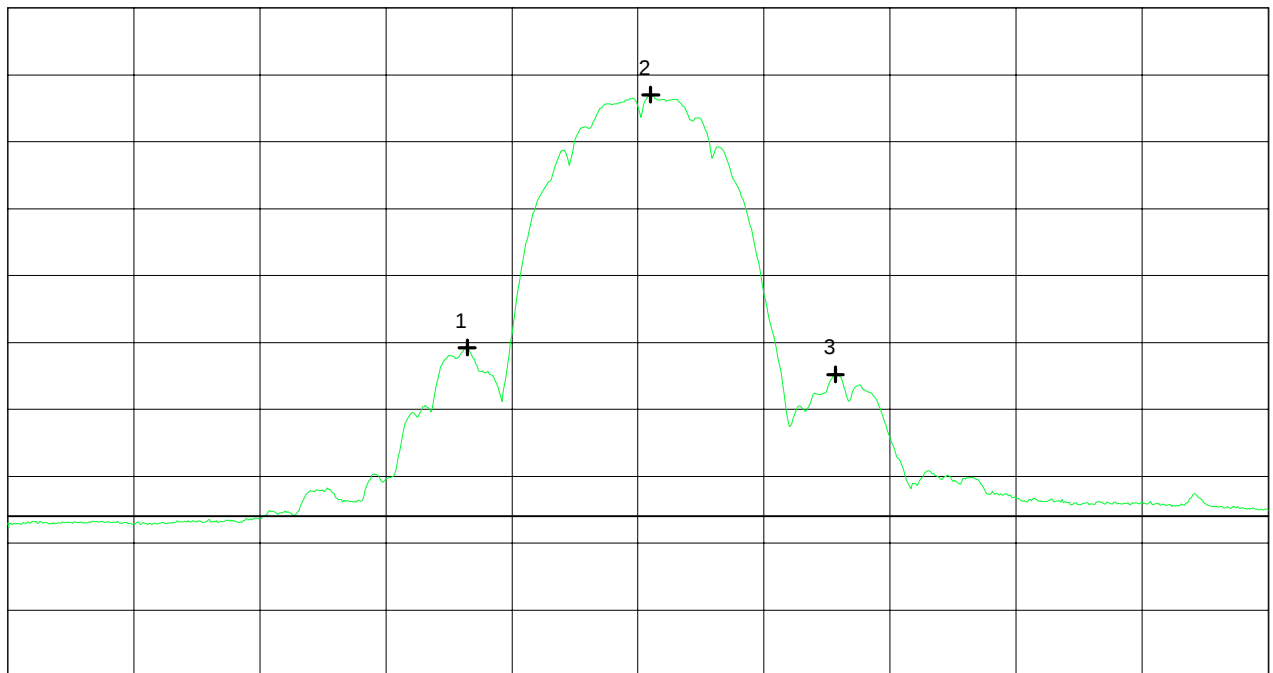
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.367 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.467 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.403444 GHz	79.22 dB μ V/m
Nr.2	2.418000 GHz	117.03 dB μ V/m
Nr.3	2.432667 GHz	75.23 dB μ V/m
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 134 of 193 Pages

Radiated Emission at band edges according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC
 Type: RF-modem for wireless LAN
 Serial No.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/06/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - FCC test setup
 - supply voltage 115 V AC
 - with external antenna AOU24-DI-24
 - with 20 ft antenna cable (LMR400)

 - operating with bit rate 11 Mbps

 - TX mode with $f = 2.422$ 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	64.0		0.6	20.7	64.0	74
2.4000	vertical	66.2		0.6	20.7	66.2	NRB
2.4001	vertical	68.3		0.6	20.7	68.3	NRB
2.4026	vertical	72.5		0.6	20.7	72.5	OB
2.4250	vertical	124.1		0.6	20.7	124.1	OB
2.4433	vertical	73.5		0.6	20.7	73.5	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 124.1 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

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.422$ GHz

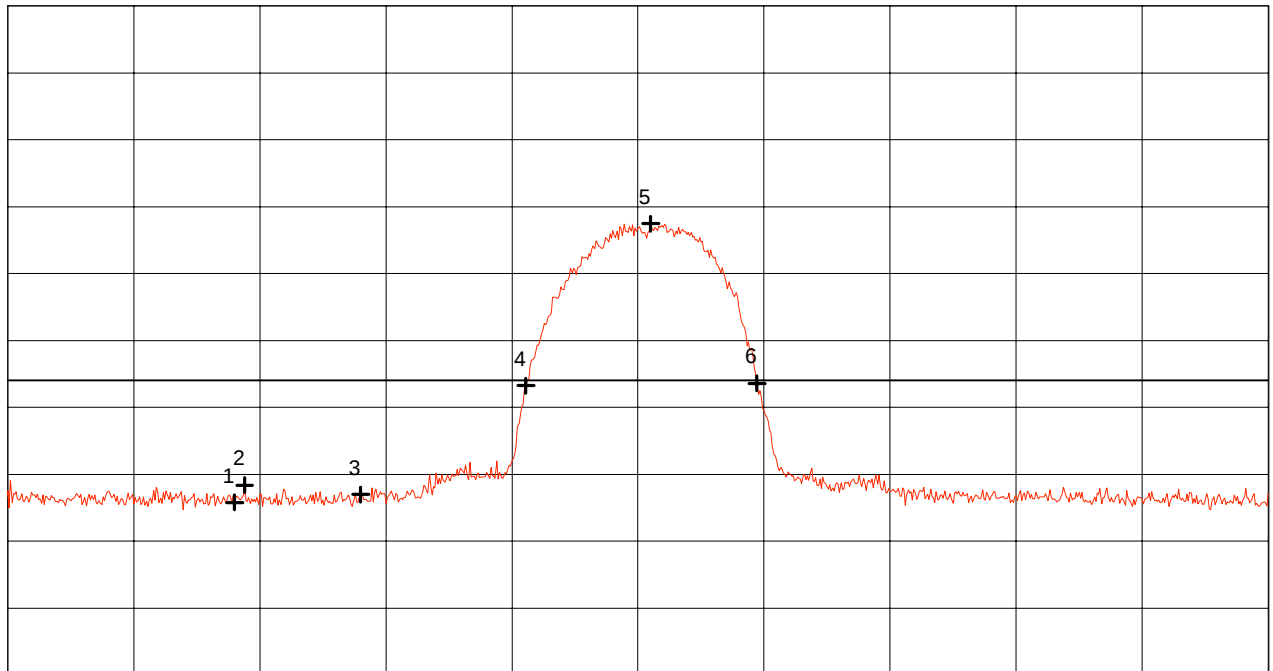
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.472 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	55.77 dB μ V/m
Nr.2	2.390778 GHz	58.38 dB μ V/m
Nr.3	2.400000 GHz	56.99 dB μ V/m
Nr.4	2.413111 GHz	73.24 dB μ V/m
Nr.5	2.423000 GHz	97.46 dB μ V/m
Nr.6	2.431444 GHz	73.59 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 136 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.422$ GHz

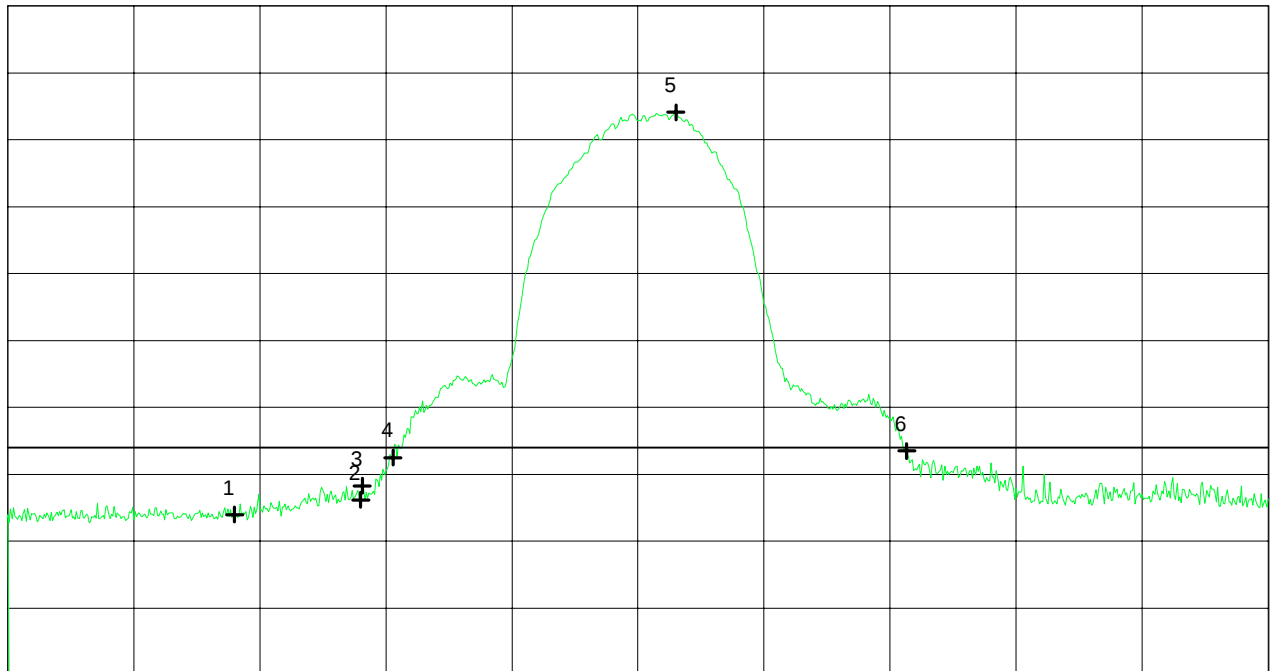
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 140 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.472 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	63.96 dB μ V/m
Nr.2	2.400000 GHz	66.17 dB μ V/m
Nr.3	2.400111 GHz	68.28 dB μ V/m
Nr.4	2.402556 GHz	72.49 dB μ V/m
Nr.5	2.425000 GHz	124.09 dB μ V/m
Nr.6	2.443333 GHz	73.48 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 137 of 193 Pages

Radiated Emission at band edges according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/06/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.422$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.3900	vertical	49.7		0.6	20.7	49.7	54
2.3975	vertical	53.8		0.6	20.7	53.8	NRB
2.3989	vertical	54.3		0.6	20.7	54.3	NRB
2.4000	vertical	54.6		0.6	20.7	54.6	NRB
2.4236	vertical	117.6		0.6	20.7	117.6	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 117.6 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

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.422$ GHz

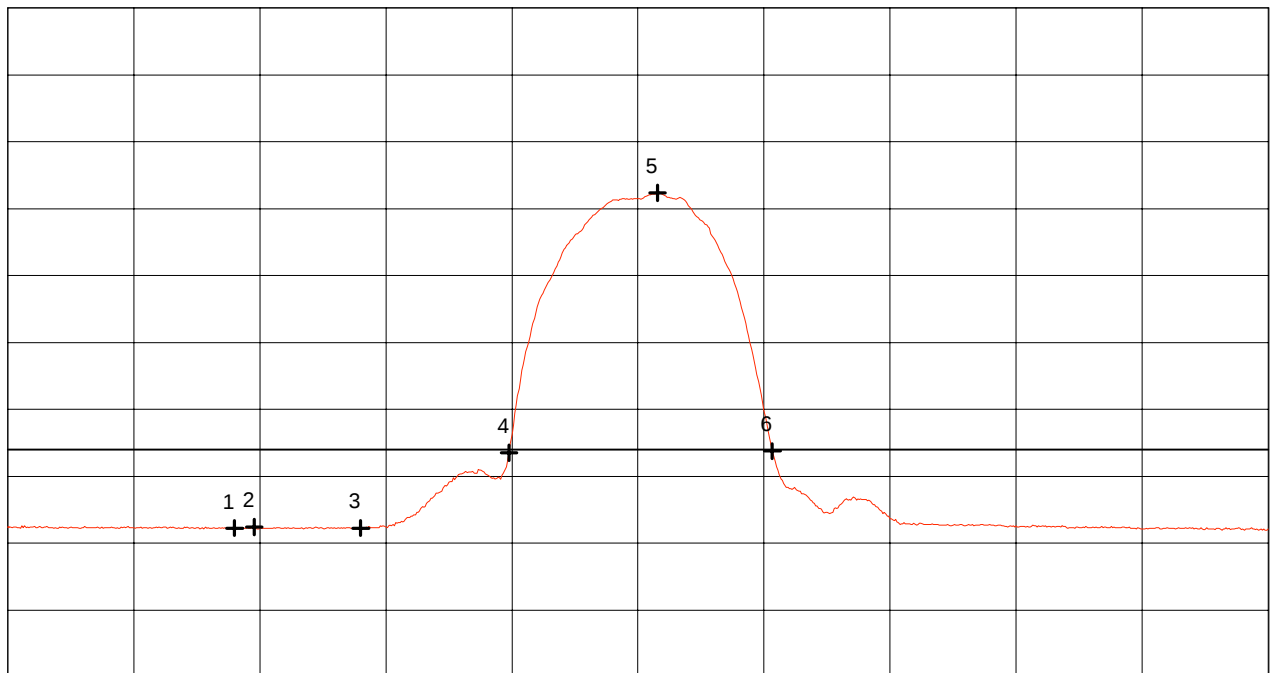
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 120 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.472 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	42.23 dB μ V/m
Nr.2	2.391556 GHz	42.41 dB μ V/m
Nr.3	2.400000 GHz	42.26 dB μ V/m
Nr.4	2.411778 GHz	53.51 dB μ V/m
Nr.5	2.423556 GHz	92.38 dB μ V/m
Nr.6	2.432667 GHz	53.76 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 139 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.422$ GHz

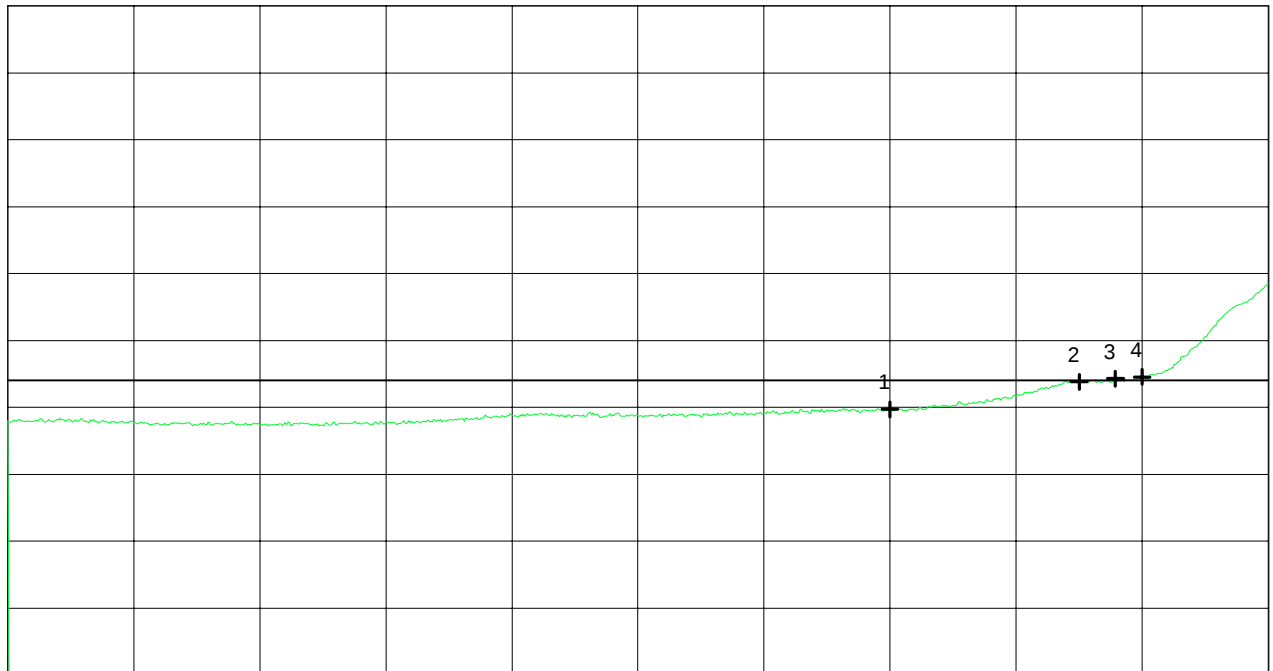
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 110 dB μ V/m
10 dB dB/Div.

ATT 0 dB

Ref. Offset 25.8 dB



Start 2.355 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.405 GHz
SWP 160 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	49.70 dB μ V/m
Nr.2	2.397500 GHz	53.83 dB μ V/m
Nr.3	2.398944 GHz	54.29 dB μ V/m
Nr.4	2.400000 GHz	54.55 dB μ V/m
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 140 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.422$ GHz

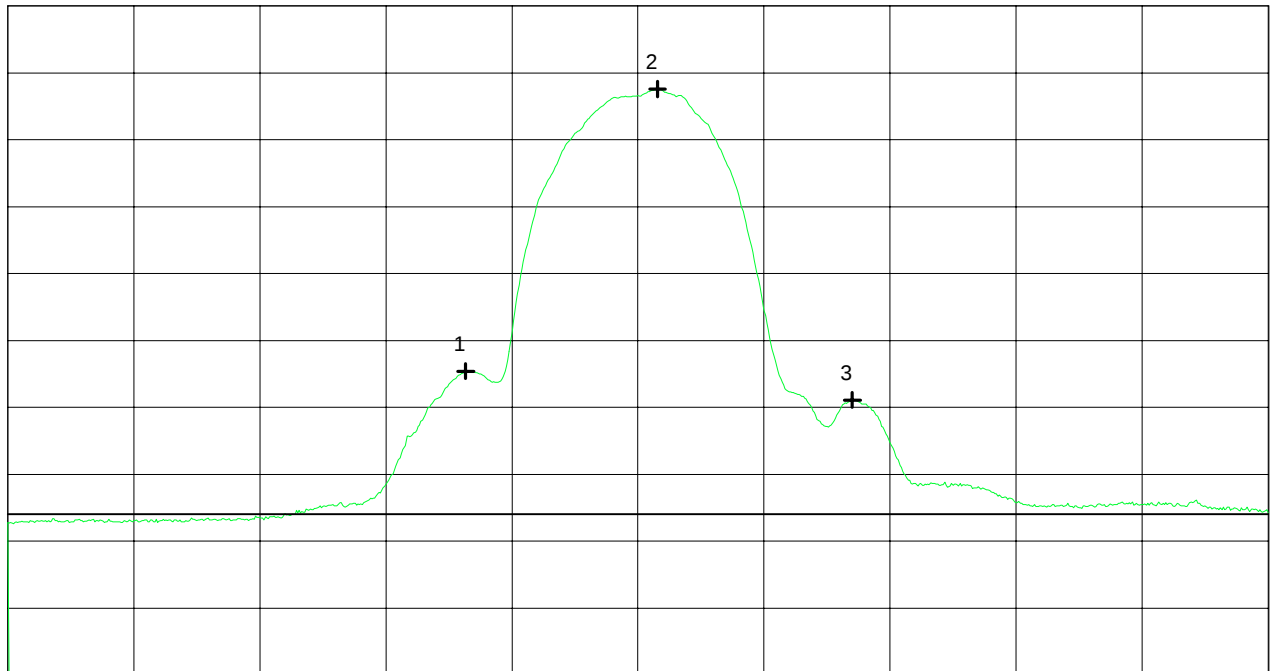
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.472 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.408333 GHz	75.41 dB μ V/m
Nr.2	2.423556 GHz	117.59 dB μ V/m
Nr.3	2.439000 GHz	71.12 dB μ V/m
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 141 of 193 Pages

Radiated Emission at band edges according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC
 Type: RF-modem for wireless LAN
 Serial No.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/06/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - FCC test setup
 - supply voltage 115 V AC
 - with external antenna AOU24-DI-24
 - with 20 ft antenna cable (LMR400)

 - operating with bit rate 2 Mbps

 - TX mode with $f = 2.422$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	63.8		0.6	20.7	63.8	74
2.3966	vertical	67.8		0.6	20.7	67.8	NRB
2.4000	vertical	67.4		0.6	20.7	67.4	NRB
2.4036	vertical	73.5		0.6	20.7	73.5	OB
2.4244	vertical	121.9		0.6	20.7	121.9	OB
2.4427	vertical	73.8		0.6	20.7	73.8	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 121.9 dB μ V/m.

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.422$ GHz

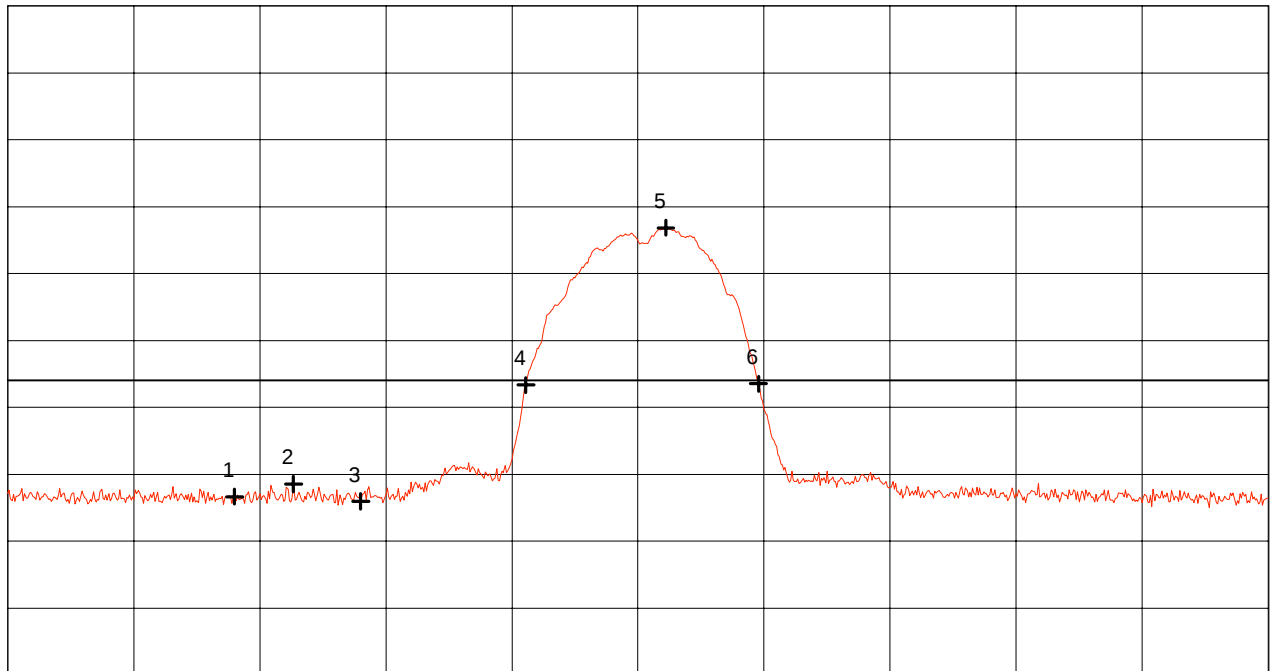
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.472 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	56.66 dB μ V/m
Nr.2	2.394667 GHz	58.53 dB μ V/m
Nr.3	2.400000 GHz	55.94 dB μ V/m
Nr.4	2.413111 GHz	73.36 dB μ V/m
Nr.5	2.424222 GHz	96.83 dB μ V/m
Nr.6	2.431556 GHz	73.54 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 143 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.422$ GHz

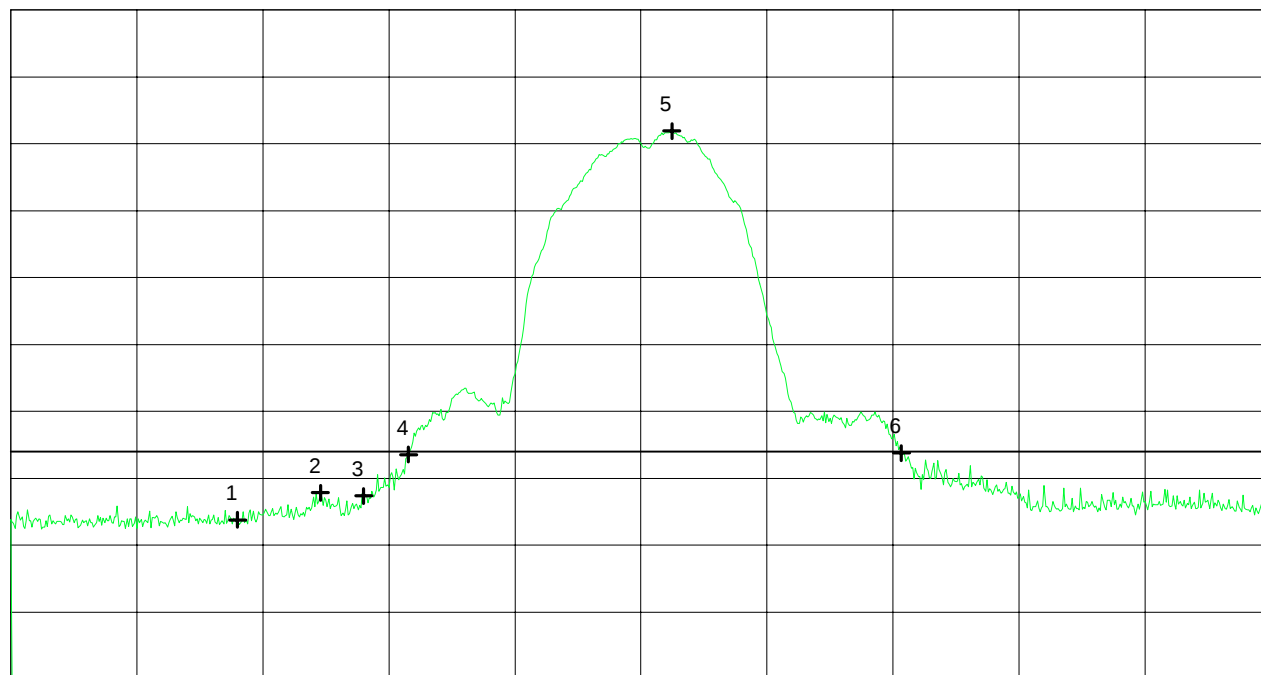
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 140 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.472 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	63.78 dB μ V/m
Nr.2	2.396556 GHz	67.84 dB μ V/m
Nr.3	2.400000 GHz	67.36 dB μ V/m
Nr.4	2.403556 GHz	73.53 dB μ V/m
Nr.5	2.424444 GHz	121.88 dB μ V/m
Nr.6	2.442667 GHz	73.79 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 144 of 193 Pages

Radiated Emission at band edges according to FCC Part 15 Subpart C

Model: LUC PC24E-H-FC
 Type: RF-modem for wireless LAN
 Serial No.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/06/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - FCC test setup
 - supply voltage 115 V AC
 - with external antenna AOU24-DI-24
 - with 20 ft antenna cable (LMR400)

 - operating with bit rate 2 Mbps

 - TX mode with $f = 2.422$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dB μ V]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dB μ V/m]	Limit [dB μ V/m]
2.3900	vertical	49.5		0.6	20.7	49.5	54
2.3952	vertical	53.7		0.6	20.7	53.7	NRB
2.3963	vertical	57.4		0.6	20.7	57.4	NRB
2.4000	vertical	55.7		0.6	20.7	55.7	NRB
2.4249	vertical	118.1		0.6	20.7	118.1	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 118.1 dB μ V/m.

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.422$ GHz

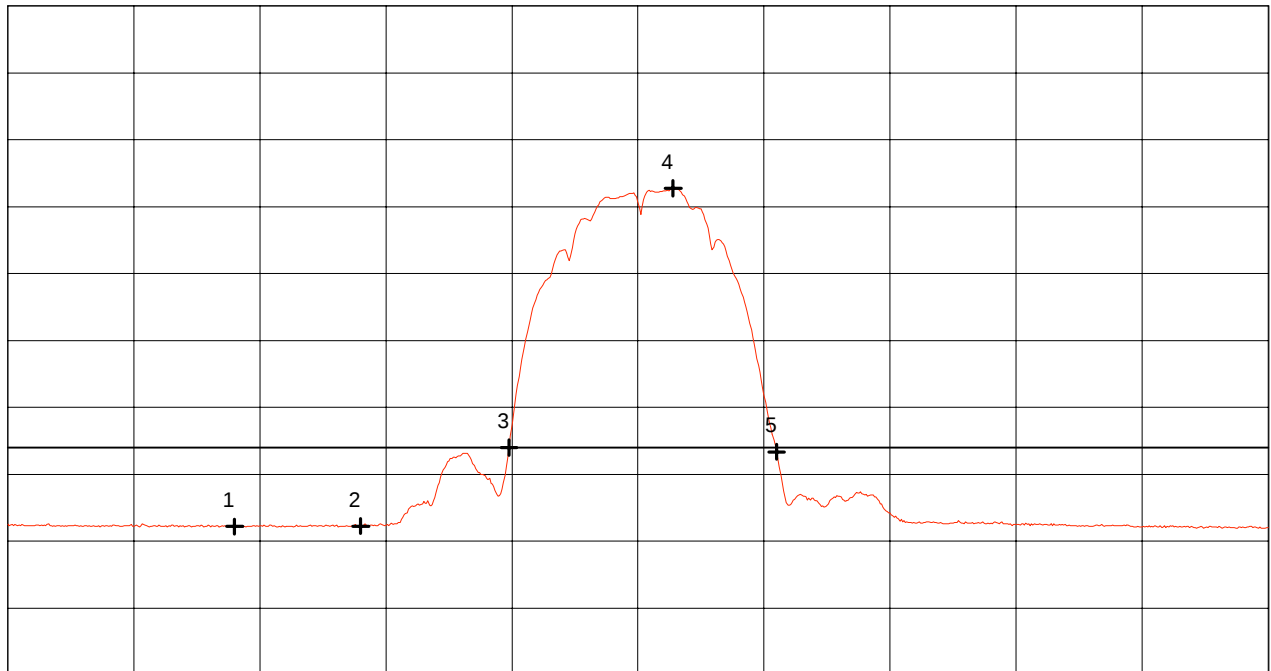
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 120 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.472 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	42.18 dB μ V/m
Nr.2	2.400000 GHz	42.23 dB μ V/m
Nr.3	2.411778 GHz	53.99 dB μ V/m
Nr.4	2.424778 GHz	92.74 dB μ V/m
Nr.5	2.433000 GHz	53.33 dB μ V/m
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 146 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.422$ GHz

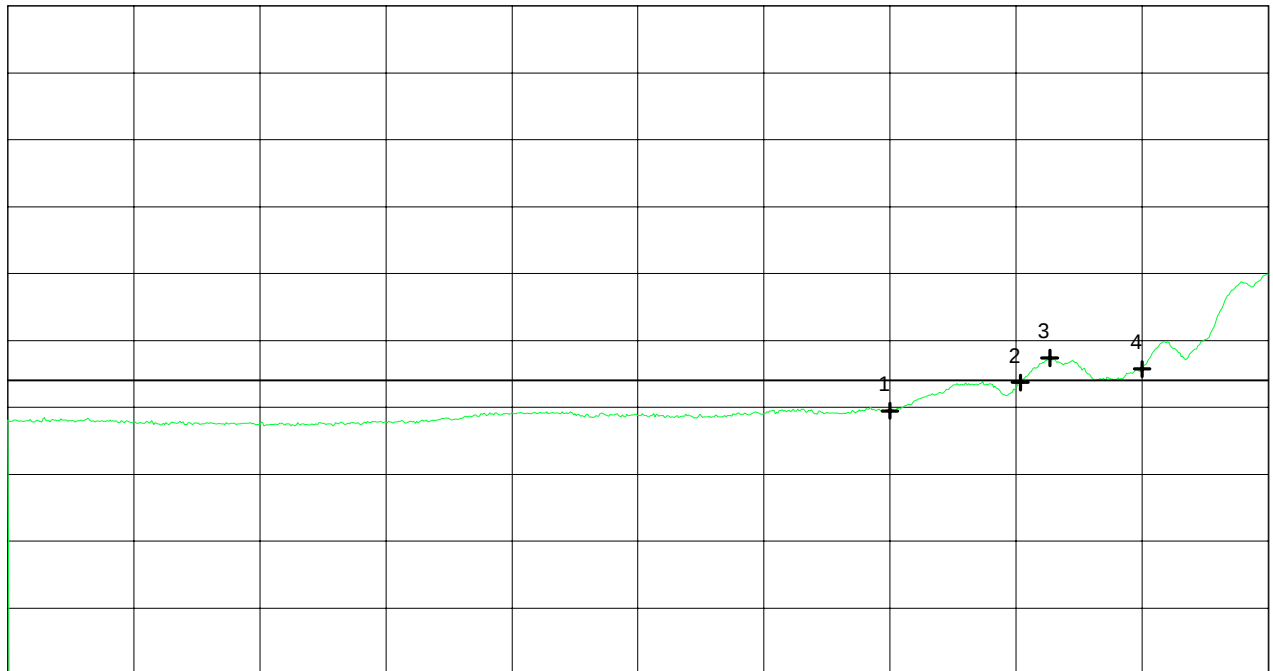
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 110 dB μ V/m
10 dB dB/Div.

ATT 0 dB

Ref. Offset 25.8 dB



Start 2.355 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.405 GHz
SWP 160 ms

**** Multi Marker ****

Nr.1	2.390000 GHz	49.47 dB μ V/m
Nr.2	2.395167 GHz	53.73 dB μ V/m
Nr.3	2.396333 GHz	57.39 dB μ V/m
Nr.4	2.400000 GHz	55.74 dB μ V/m
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 147 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.422$ GHz

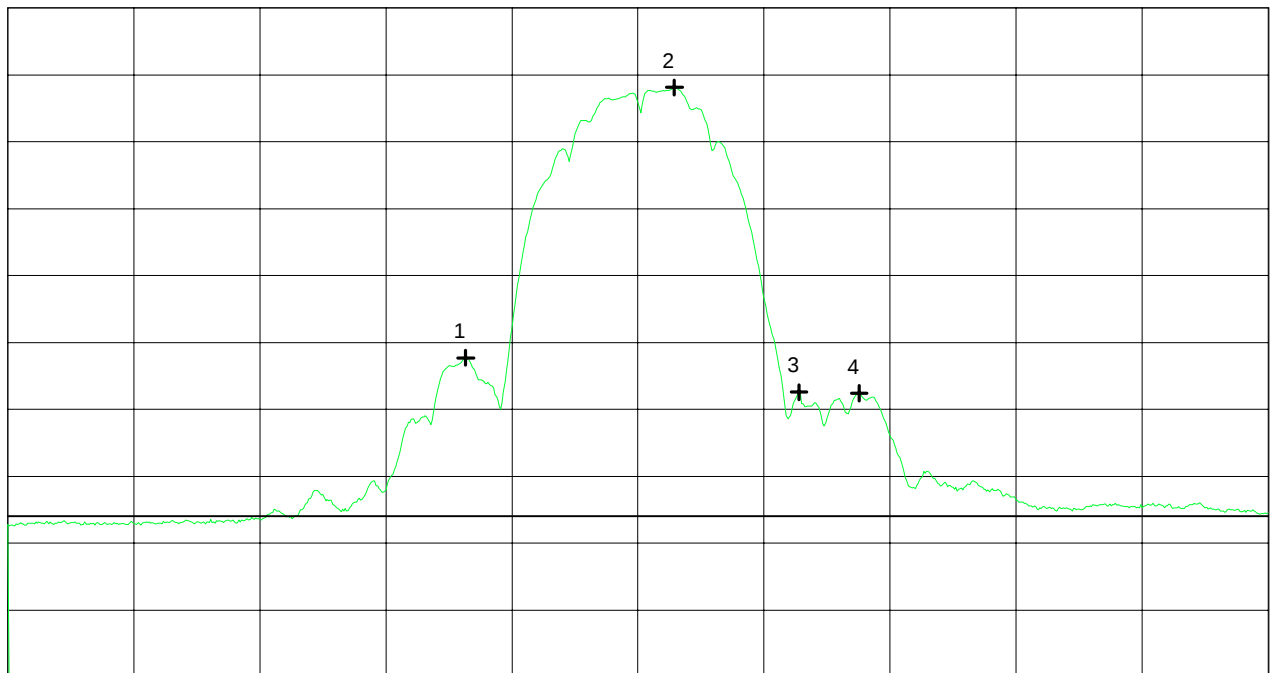
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.372 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.472 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.408333 GHz	77.70 dB μ V/m
Nr.2	2.424889 GHz	118.10 dB μ V/m
Nr.3	2.434778 GHz	72.57 dB μ V/m
Nr.4	2.439556 GHz	72.41 dB μ V/m
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 148 of 193 Pages

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.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/08/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.4180	vertical	73.9		0.6	20.7	73.9	OB
2.4399	vertical	123.5		0.6	20.7	123.5	OB
2.4577	vertical	71.7		0.6	20.7	71.7	OB
2.7875	vertical	52.5		0.7	23.7	52.5	74
4.8810	vertical	39.0	-95.4		27.3	38.9	74
7.3122	vertical	42.1	-94.5		29.9	42.4	74
9.7493	vertical	46.2	-93.5		33.4	46.9	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 123.5 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

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

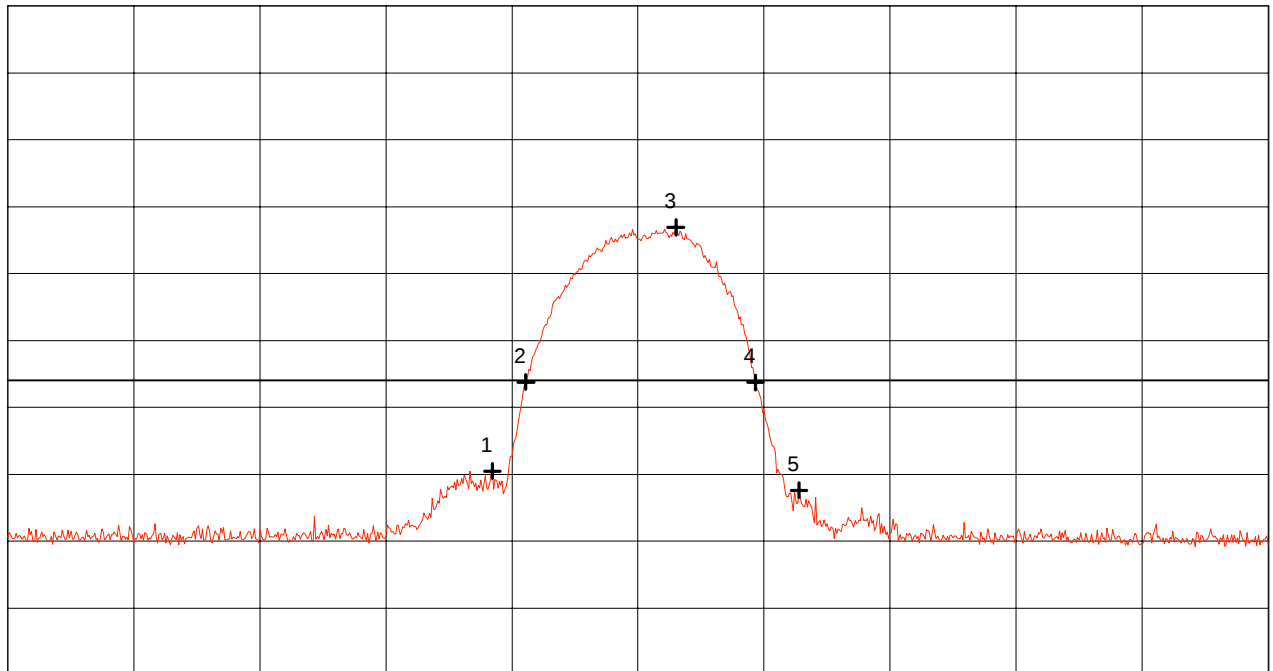
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.425444 GHz	60.46 dB μ V/m
Nr.2	2.428111 GHz	73.77 dB μ V/m
Nr.3	2.440000 GHz	96.90 dB μ V/m
Nr.4	2.446333 GHz	73.74 dB μ V/m
Nr.5	2.449778 GHz	57.59 dB μ V/m
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/08/1999

Project-No.:
56305-90734-1

Page 150 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

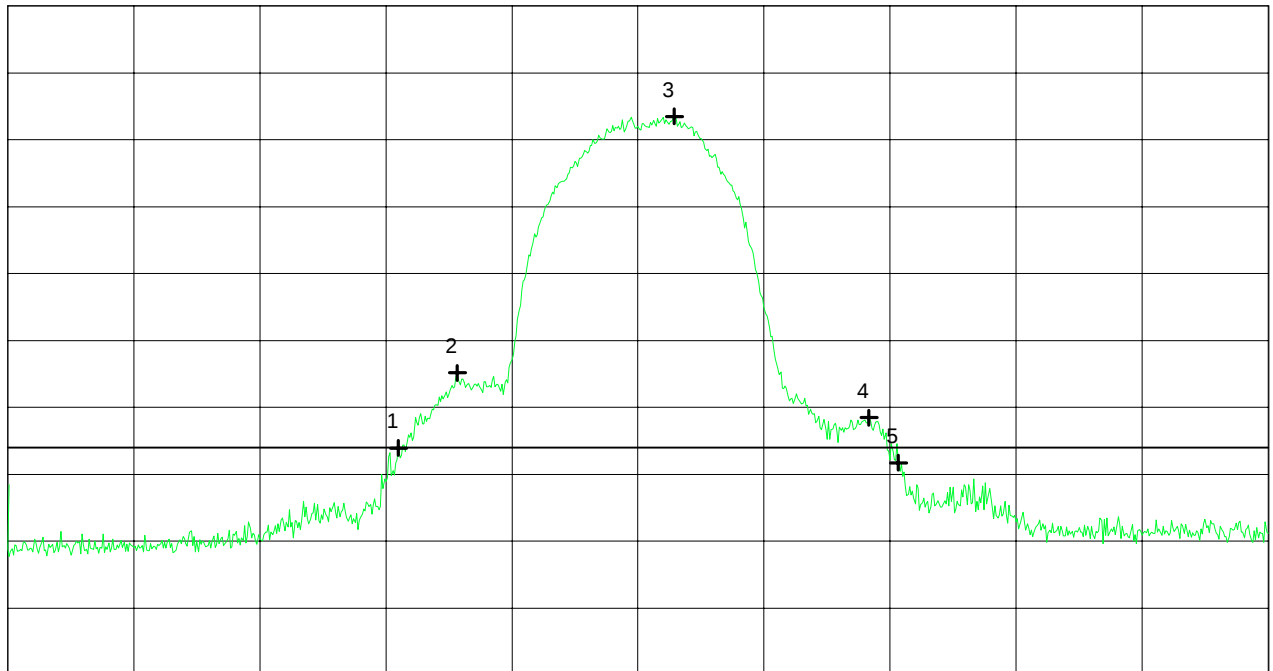
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 140 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.418000 GHz	73.94 dB μ V/m
Nr.2	2.422667 GHz	85.16 dB μ V/m
Nr.3	2.439889 GHz	123.50 dB μ V/m
Nr.4	2.455333 GHz	78.46 dB μ V/m
Nr.5	2.457667 GHz	71.71 dB μ V/m
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/08/1999

Project-No.:
56305-90734-1

Page 151 of 193 Pages

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.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/08/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.4103	vertical	53.9		0.6	20.7	53.9	OB
2.4386	vertical	117.2		0.6	20.7	117.2	OB
2.4669	vertical	53.9		0.6	20.7	53.9	OB
2.7860	vertical	< 41.8		0.7	23.7	< 41.8	54

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 117.2 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

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

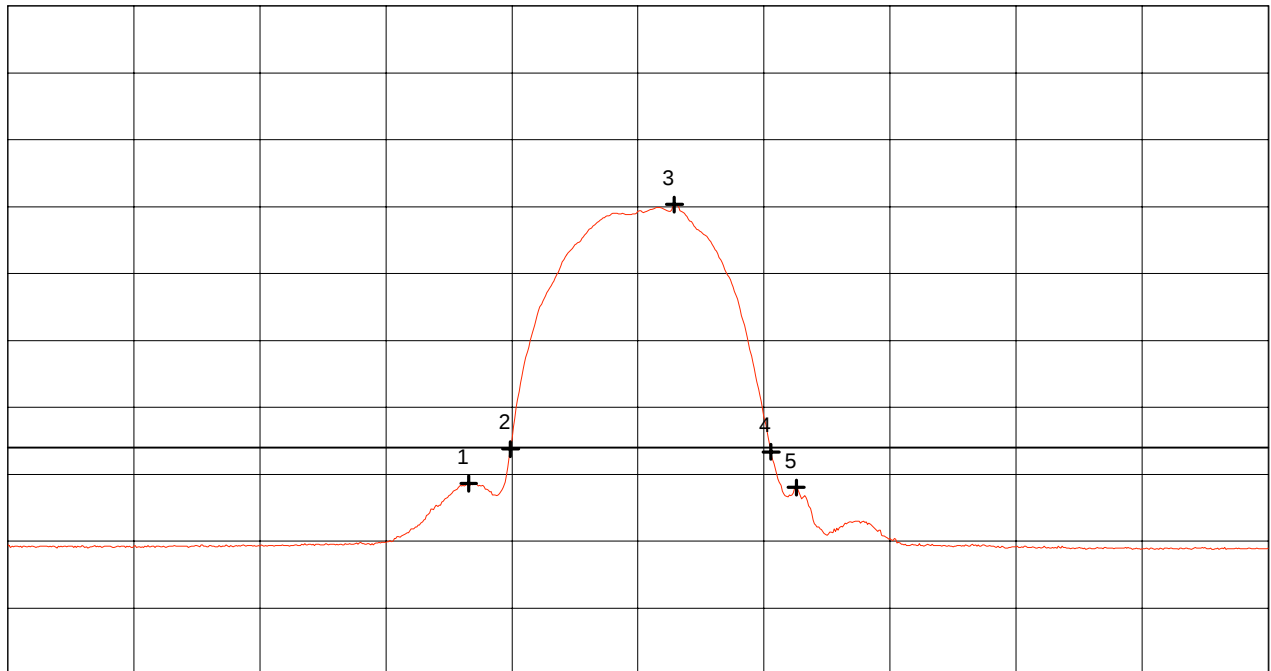
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 120 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.423556 GHz	48.63 dB μ V/m
Nr.2	2.426889 GHz	53.78 dB μ V/m
Nr.3	2.439889 GHz	90.32 dB μ V/m
Nr.4	2.447556 GHz	53.33 dB μ V/m
Nr.5	2.449556 GHz	48.02 dB μ V/m
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/08/1999

Project-No.:
56305-90734-1

Page 153 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.437$ GHz

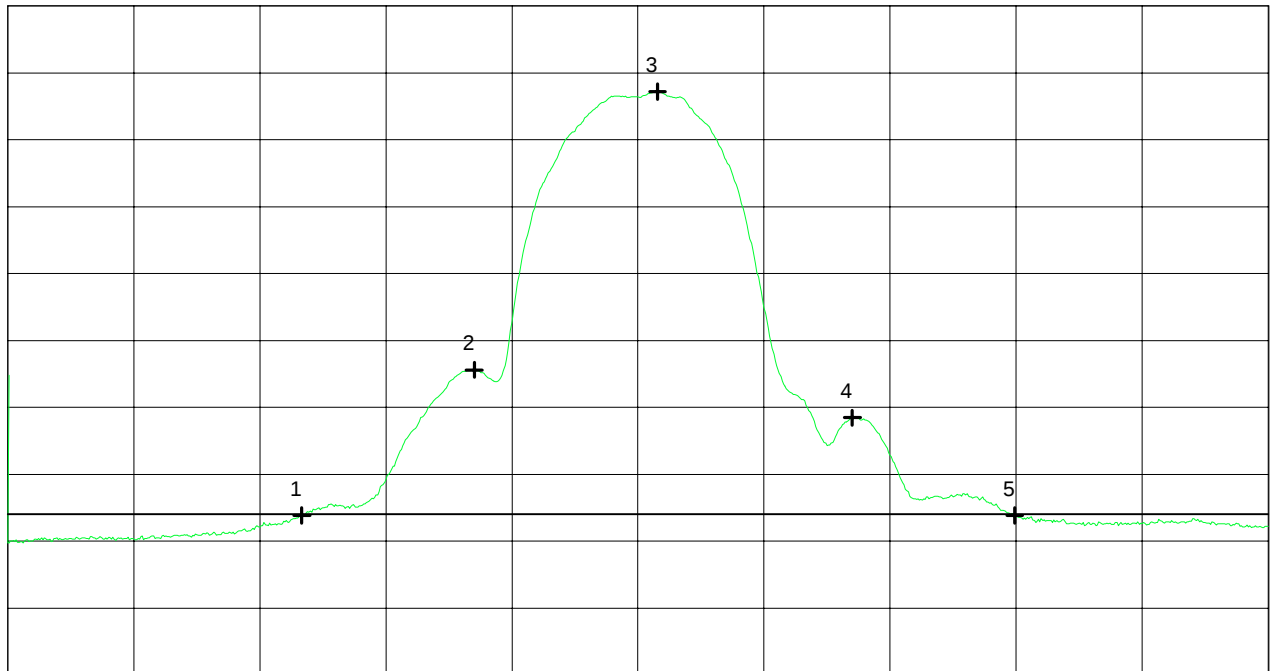
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.410333 GHz	53.85 dB μ V/m
Nr.2	2.424000 GHz	75.59 dB μ V/m
Nr.3	2.438556 GHz	117.21 dB μ V/m
Nr.4	2.454000 GHz	68.45 dB μ V/m
Nr.5	2.466889 GHz	53.85 dB μ V/m
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/08/1999

Project-No.:
56305-90734-1

Page 154 of 193 Pages

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

Model: LUC PC24E-H-FC
 Type: RF-modem for wireless LAN
 Serial No.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/08/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - FCC test setup
 - supply voltage 115 V AC
 - with external antenna AOU24-DI-24
 - with 20 ft antenna cable (LMR400)

 - operating with bit rate 2 Mbps

 - TX mode with $f = 2.437$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.4188	vertical	73.9		0.6	20.7	73.9	OB
2.4390	vertical	121.1		0.6	20.7	121.1	OB
2.4568	vertical	72.9		0.6	20.7	72.9	OB

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

NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 121.7 dBμV/m.

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

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.437$ GHz

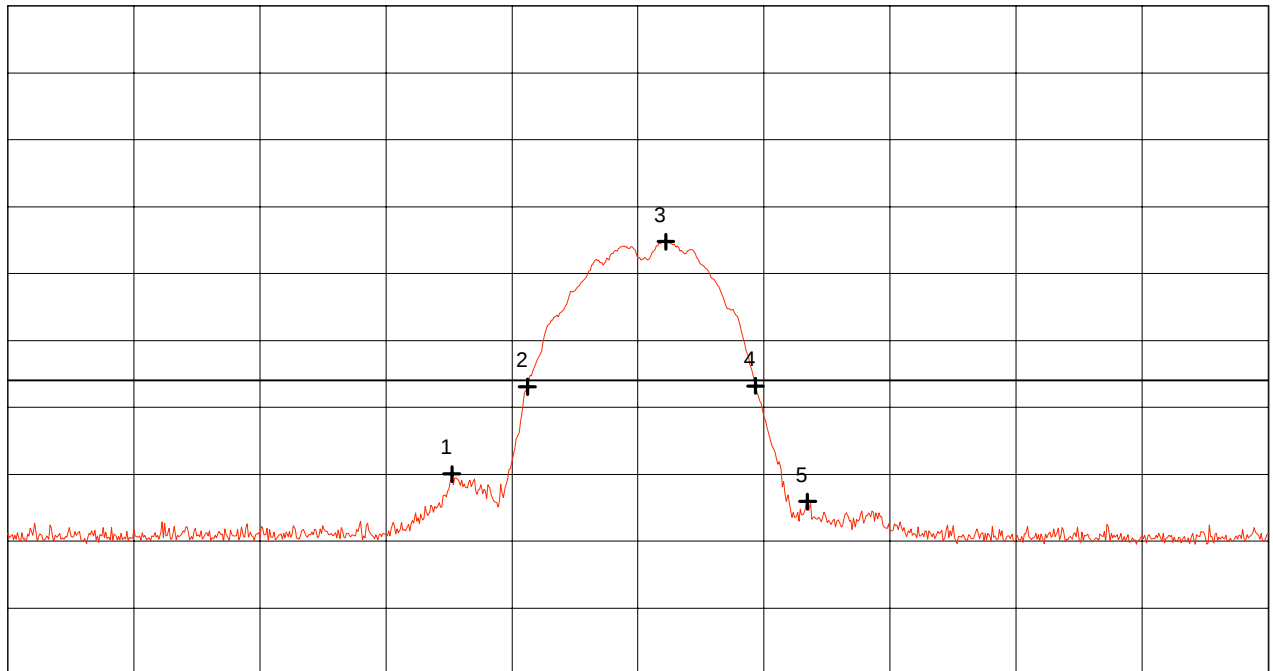
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.422222 GHz	60.03 dB μ V/m
Nr.2	2.428222 GHz	73.08 dB μ V/m
Nr.3	2.439222 GHz	94.77 dB μ V/m
Nr.4	2.446333 GHz	73.21 dB μ V/m
Nr.5	2.450444 GHz	55.92 dB μ V/m
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/08/1999

Project-No.:
56305-90734-1

Page 156 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.437$ GHz

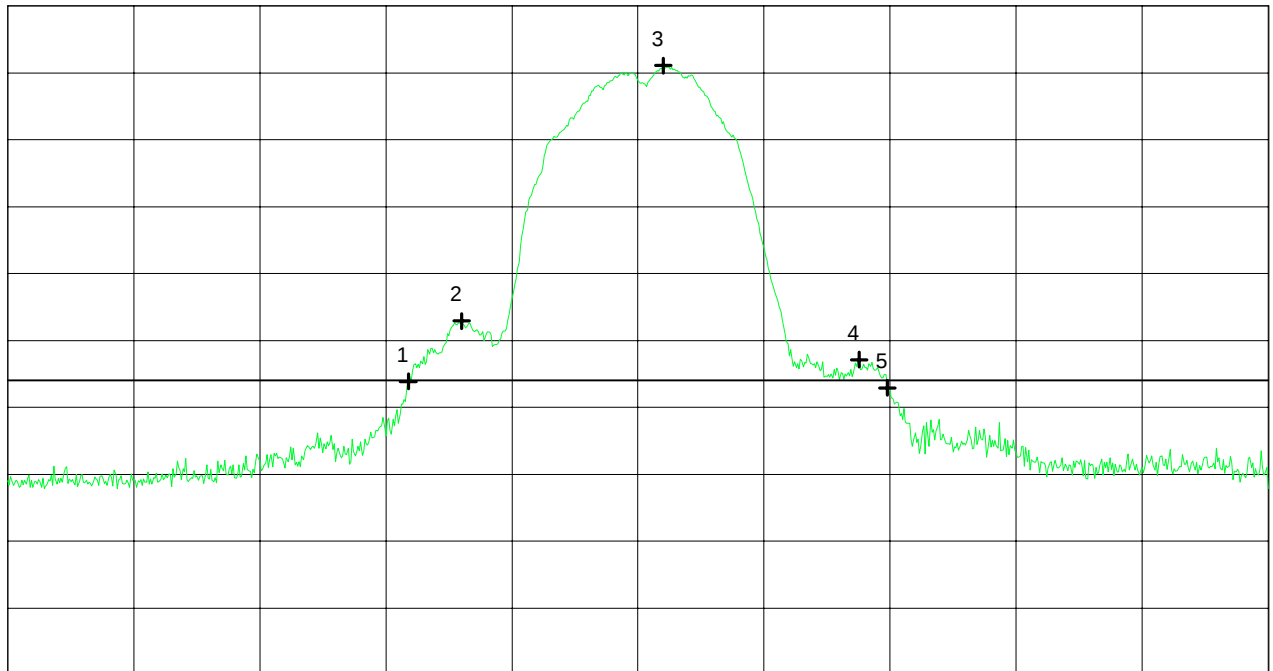
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.418778 GHz	73.86 dB μ V/m
Nr.2	2.423000 GHz	82.90 dB μ V/m
Nr.3	2.439000 GHz	121.07 dB μ V/m
Nr.4	2.454556 GHz	77.11 dB μ V/m
Nr.5	2.456778 GHz	72.92 dB μ V/m
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/08/1999

Project-No.:
56305-90734-1

Page 157 of 193 Pages

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

Model: LUC PC24E-H-FC
 Type: RF-modem for wireless LAN
 Serial No.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/08/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - FCC test setup
 - supply voltage 115 V AC
 - with external antenna AOU24-DI-24
 - with 20 ft antenna cable (LMR400)

 - operating with bit rate 2 Mbps

 - TX mode with $f = 2.437$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.4080	vertical	53.9		0.6	20.7	53.9	OB
2.4398	vertical	117.6		0.6	20.7	117.6	OB
2.4679	vertical	53.9		0.6	20.7	53.9	OB

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

NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 117.6 dBμV/m.

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

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.437$ GHz

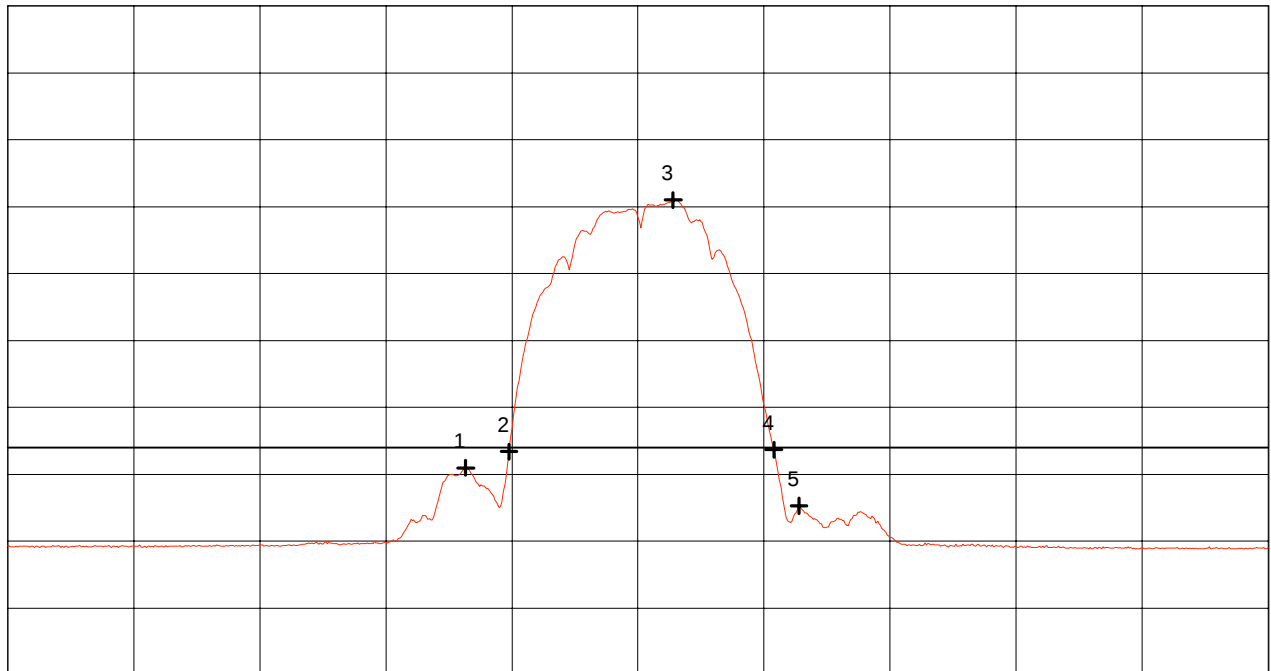
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 120 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.423333 GHz	50.96 dB μ V/m
Nr.2	2.426778 GHz	53.38 dB μ V/m
Nr.3	2.439778 GHz	90.99 dB μ V/m
Nr.4	2.447778 GHz	53.66 dB μ V/m
Nr.5	2.449778 GHz	45.28 dB μ V/m
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/08/1999

Project-No.:
56305-90734-1

Page 159 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.437$ GHz

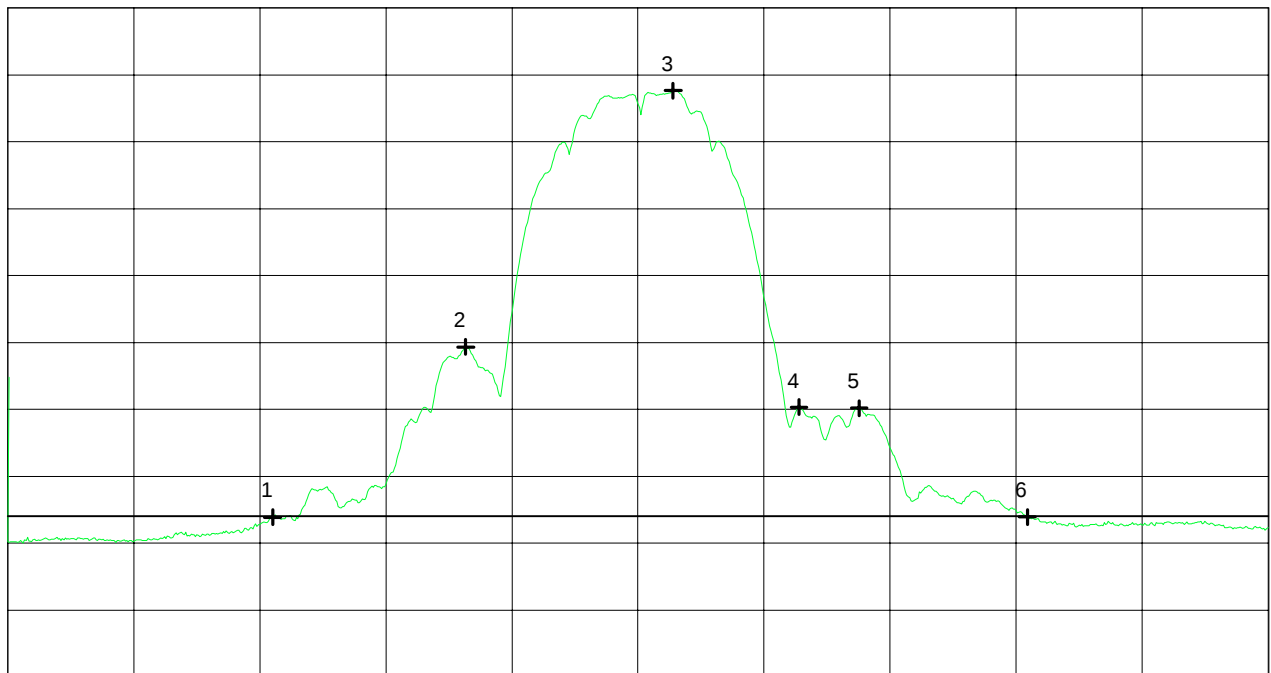
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 21.3 dB



Start 2.387 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.487 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.408000 GHz	53.88 dB μ V/m
Nr.2	2.423333 GHz	79.32 dB μ V/m
Nr.3	2.439778 GHz	117.64 dB μ V/m
Nr.4	2.449778 GHz	70.33 dB μ V/m
Nr.5	2.454556 GHz	70.18 dB μ V/m
Nr.6	2.467889 GHz	53.90 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/08/1999

Project-No.:
56305-90734-1

Page 160 of 193 Pages

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.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/08/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.4329	vertical	74.0		0.6	20.7	74.0	OB
2.4507	vertical	123.7		0.6	20.7	123.7	OB
2.4721	vertical	72.7		0.6	20.7	72.7	OB
2.4835	vertical	64.4		0.6	20.7	64.4	74
2.4864	vertical	66.1		0.6	20.7	66.1	74
2.5000	vertical	62.8		0.6	20.7	62.8	74
4.9106	vertical	41.2	-93.1		27.3	41.2	74
7.3566	vertical	41.7	-94.6		29.9	42.4	74
8.4100	vertical	41.0	-98.8		33.4	41.6	74
9.8100	vertical	48.1	-91.6		33.4	48.9	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 123.7 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

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

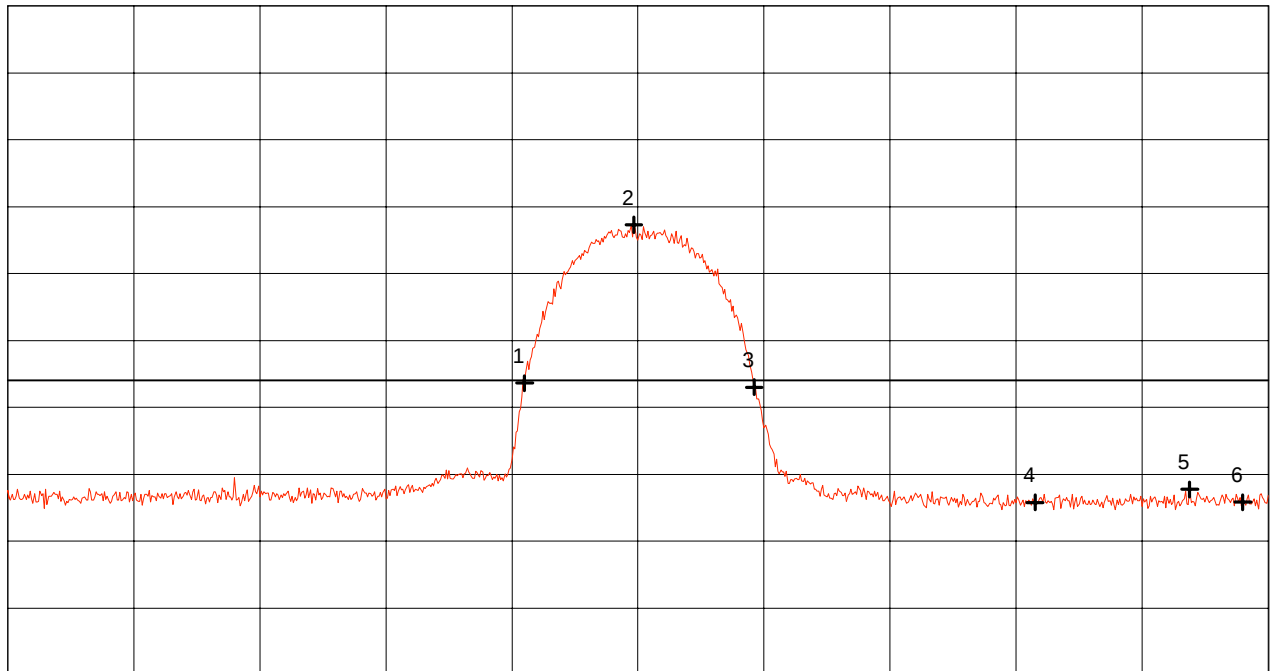
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.502 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.443000 GHz	73.62 dB μ V/m
Nr.2	2.451667 GHz	97.29 dB μ V/m
Nr.3	2.461222 GHz	73.01 dB μ V/m
Nr.4	2.483500 GHz	55.79 dB μ V/m
Nr.5	2.495778 GHz	57.75 dB μ V/m
Nr.6	2.500000 GHz	55.82 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 162 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

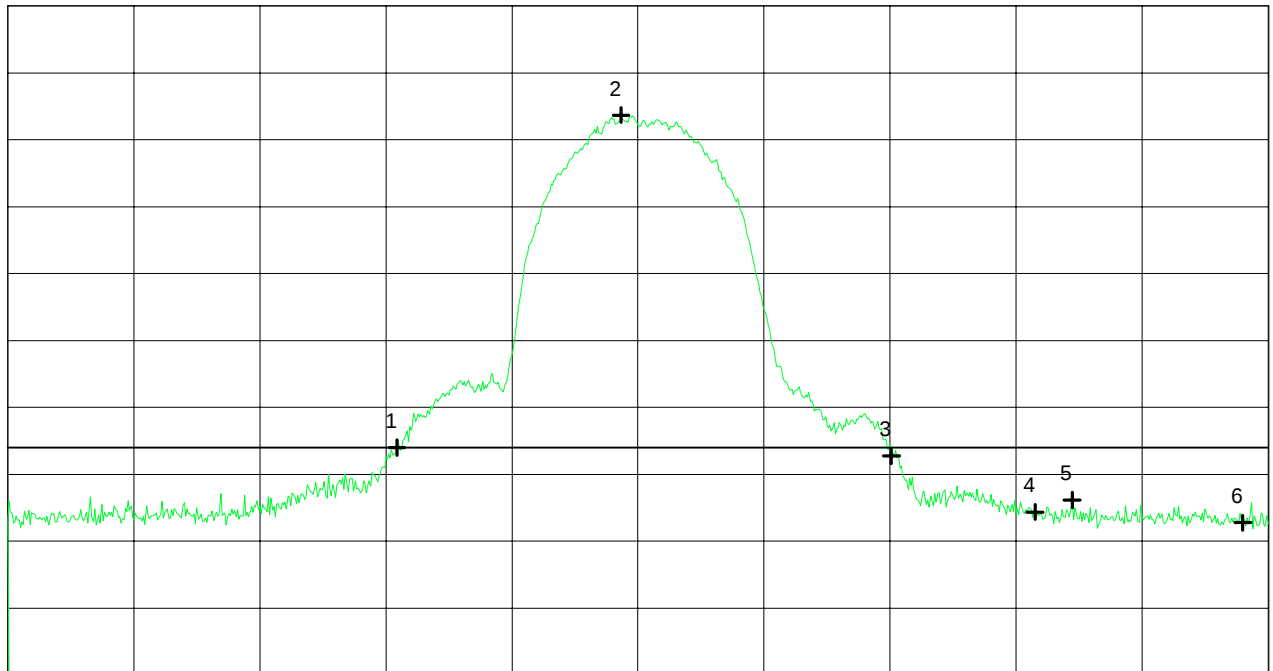
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 140 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.502 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.432889 GHz	73.99 dB μ V/m
Nr.2	2.450667 GHz	123.68 dB μ V/m
Nr.3	2.472111 GHz	72.72 dB μ V/m
Nr.4	2.483500 GHz	64.37 dB μ V/m
Nr.5	2.486444 GHz	66.14 dB μ V/m
Nr.6	2.500000 GHz	62.77 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 163 of 193 Pages

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.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/08/1999
 Operator: R. Heller

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer-reading [dBμV]	Generator-level [dBm]	Cable loss [dB]	Antenna-correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.4500	vertical	117.2		0.6	20.7	117.2	OB
2.4800	vertical	54.0		0.6	20.7	54.0	OB
2.4835	vertical	51.4		0.6	20.7	51.4	54
2.4960	vertical	52.2		0.6	20.7	52.2	54
2.5000	vertical	49.8		0.6	20.7	49.8	54
9.8081	vertical	47.1	-92.5		33.4	48.0	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 117.2 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

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

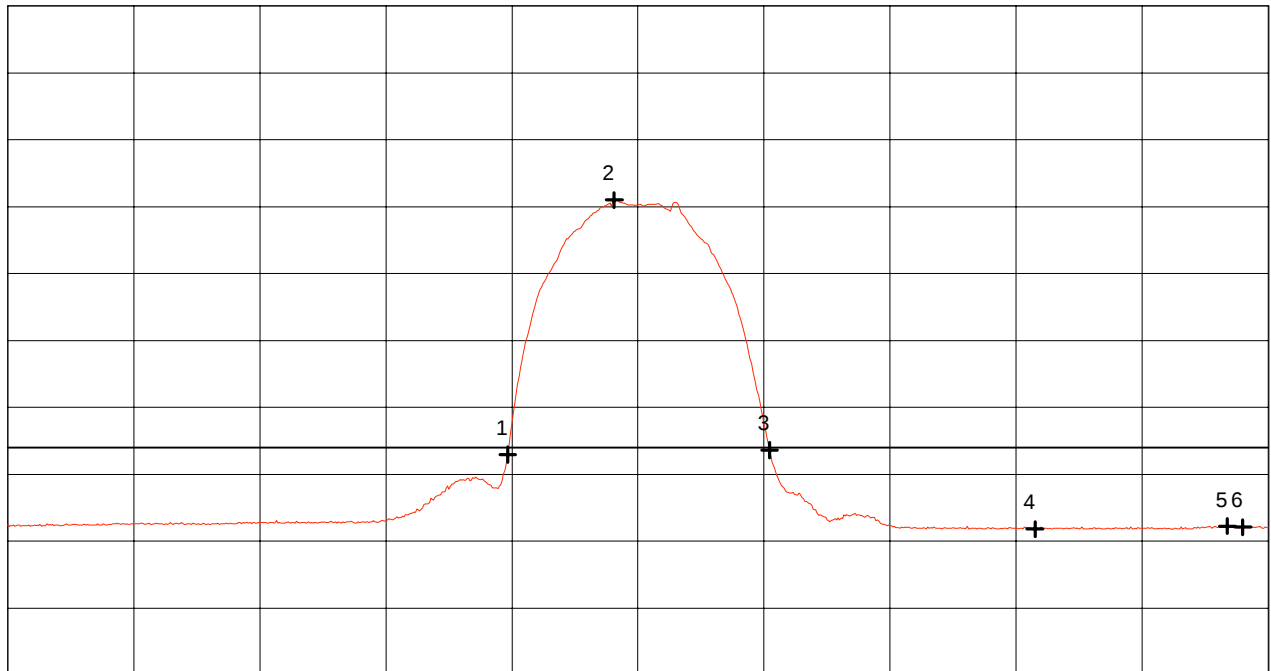
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 120 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.502 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.441667 GHz	52.92 dB μ V/m
Nr.2	2.450111 GHz	90.99 dB μ V/m
Nr.3	2.462444 GHz	53.61 dB μ V/m
Nr.4	2.483500 GHz	41.83 dB μ V/m
Nr.5	2.498778 GHz	42.23 dB μ V/m
Nr.6	2.500000 GHz	42.08 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 165 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

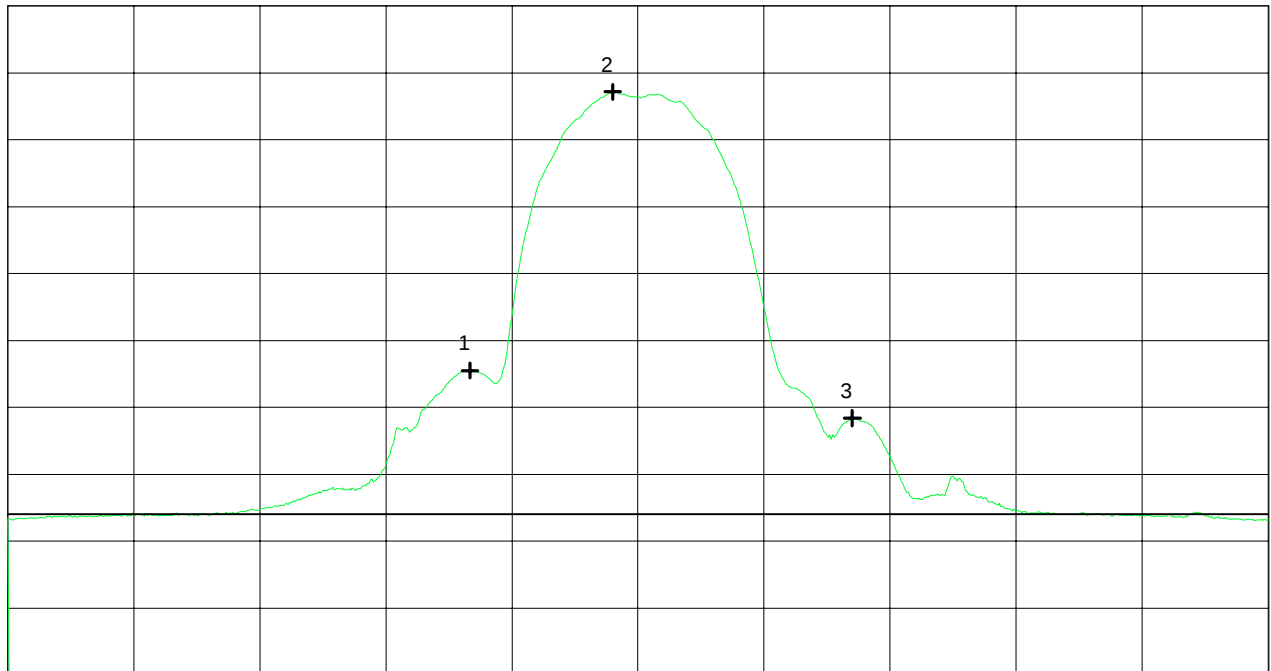
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.502 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.438667 GHz	75.51 dB μ V/m
Nr.2	2.450000 GHz	117.16 dB μ V/m
Nr.3	2.469000 GHz	68.38 dB μ V/m
Nr.4		
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 166 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 11 Mbps

- TX mode with $f = 2.452$ GHz

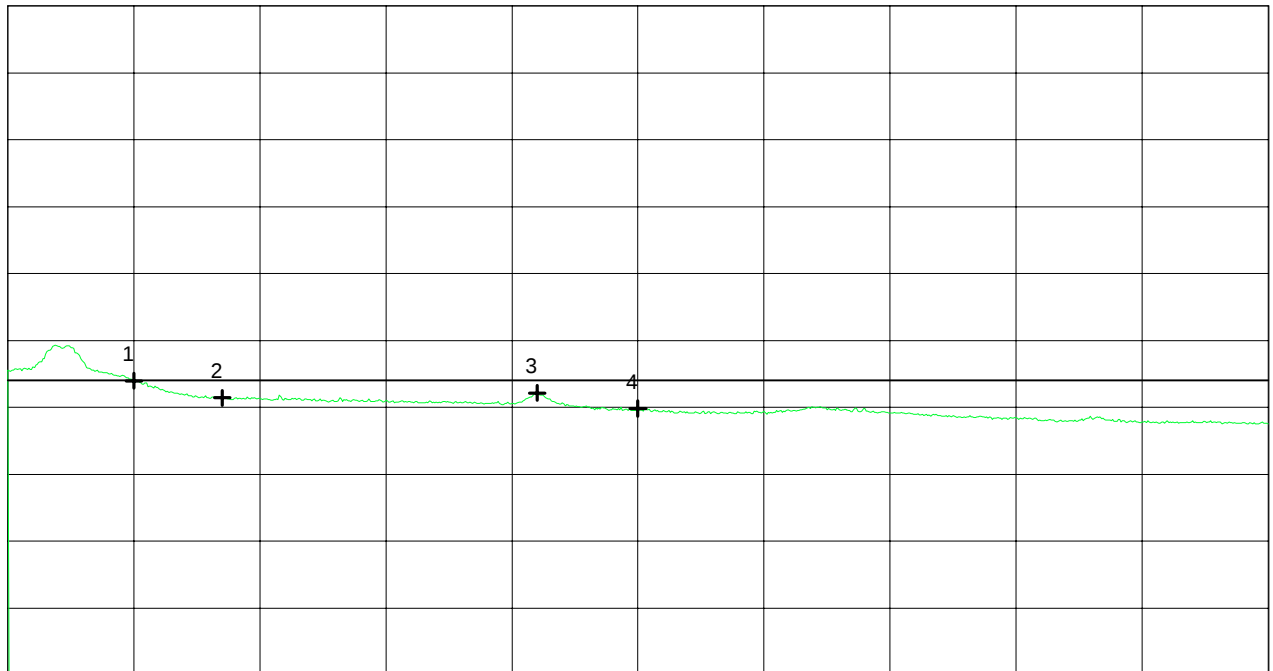
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 110 dB μ V/m
10 dB dB/Div.

ATT 0 dB

Ref. Offset 25.8 dB



Start 2.475 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.525 GHz
SWP 160 ms

**** Multi Marker ****

Nr.1	2.480000 GHz	53.99 dB μ V/m
Nr.2	2.483500 GHz	51.42 dB μ V/m
Nr.3	2.496000 GHz	52.16 dB μ V/m
Nr.4	2.500000 GHz	49.82 dB μ V/m
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 167 of 193 Pages

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/08/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.452$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.4332	vertical	71.6		0.6	20.7	71.6	OB
2.4507	vertical	121.1		0.6	20.7	121.1	OB
2.4717	vertical	73.5		0.6	20.7	73.5	OB
2.4835	vertical	64.4		0.6	20.7	64.4	74
2.4931	vertical	66.6		0.6	20.7	66.6	74
2.5000	vertical	64.6		0.6	20.7	64.6	74
9.8081	vertical	51.0	-88.7		33.4	51.8	74

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

NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 121.1 dBμV/m.

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

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.452 \text{ GHz}$

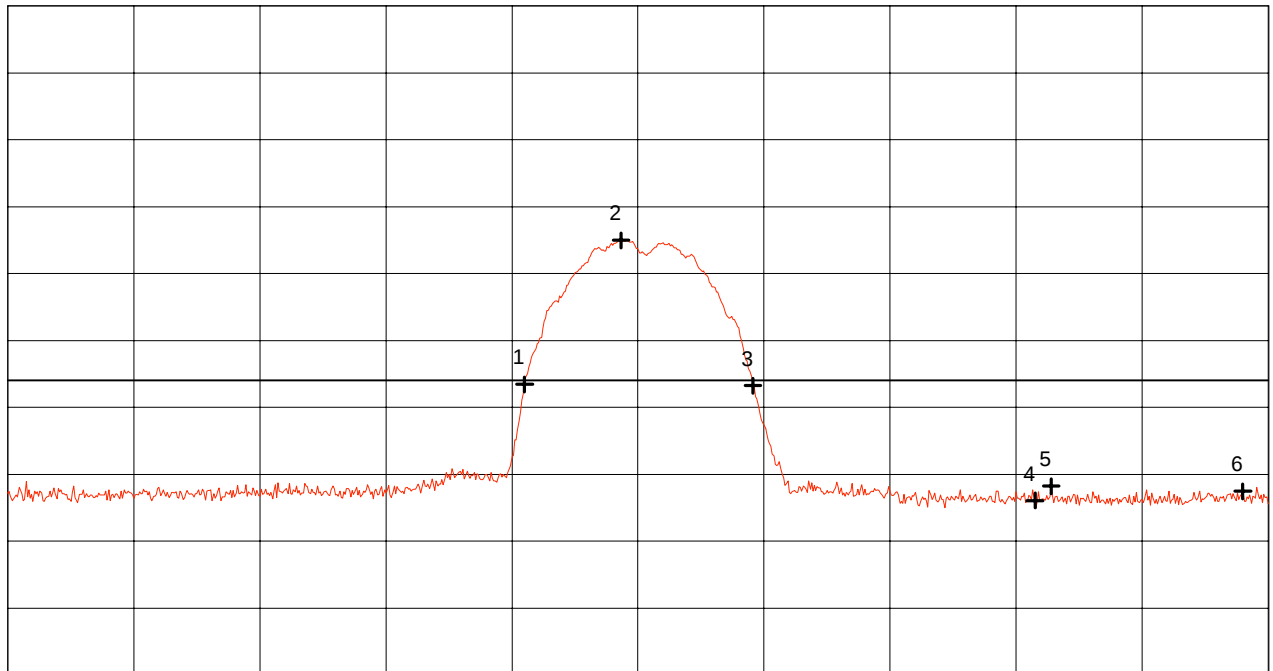
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.502 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.443000 GHz	73.42 dB μ V/m
Nr.2	2.450667 GHz	94.97 dB μ V/m
Nr.3	2.461111 GHz	73.26 dB μ V/m
Nr.4	2.483500 GHz	56.07 dB μ V/m
Nr.5	2.484778 GHz	58.23 dB μ V/m
Nr.6	2.500000 GHz	57.47 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 169 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.452$ GHz

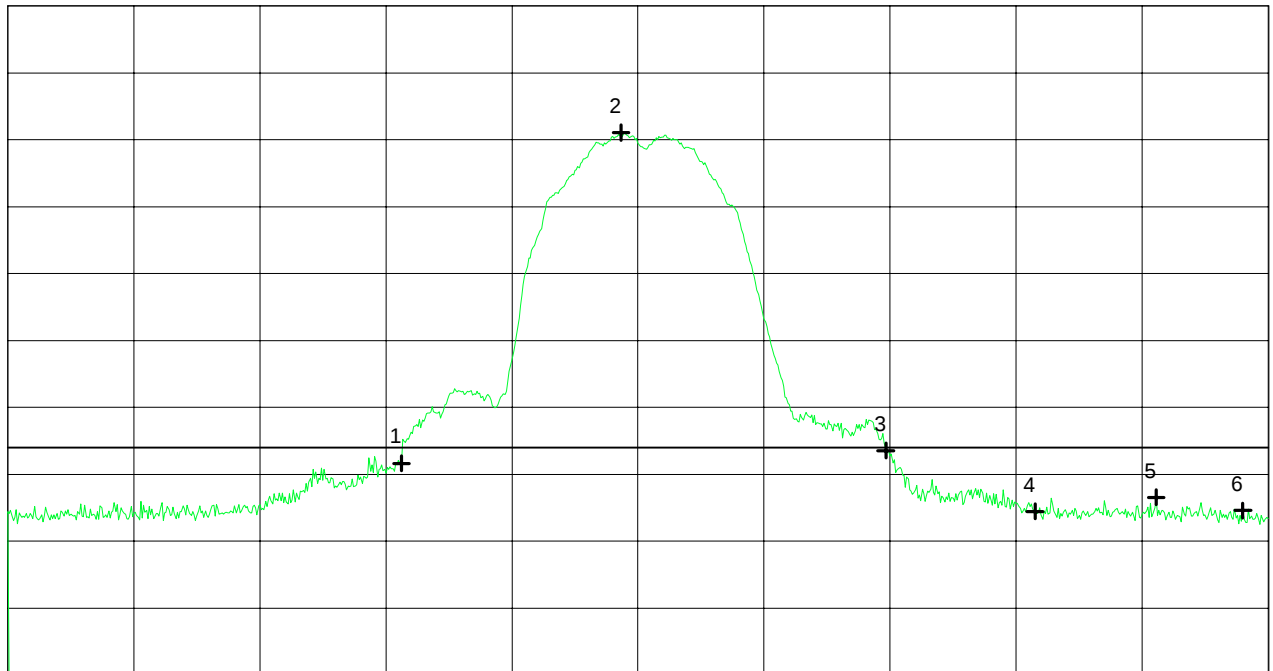
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 140 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 MHz

Stop 2.502 GHz
SWP 20 ms

**** Multi Marker ****

Nr.1	2.433222 GHz	71.63 dB μ V/m
Nr.2	2.450667 GHz	121.07 dB μ V/m
Nr.3	2.471667 GHz	73.53 dB μ V/m
Nr.4	2.483500 GHz	64.44 dB μ V/m
Nr.5	2.493111 GHz	66.55 dB μ V/m
Nr.6	2.500000 GHz	64.57 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 170 of 193 Pages

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

Model: LUC PC24E-H-FC
Type: RF-modem for wireless LAN
Serial No.: 99UT11411941
Applicant: Lucent Technologies Nederland B.V.
Test-site: Semi anechoic room
Test distance: 3 meters
Date of test: 12/08/1999
Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.452$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.4494	vertical	117.4		0.6	20.7	117.4	OB
2.4809	vertical	54.0		0.6	20.7	54.0	OB
2.4835	vertical	51.3		0.6	20.7	51.3	54
2.4961	vertical	51.7		0.6	20.7	51.7	54
2.5000	vertical	49.4		0.6	20.7	49.4	54
9.8081	vertical	49.2	-90.4		33.4	50.0	54

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

NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 117.4 dBμV/m.

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

Result: The limits are kept

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.452$ GHz

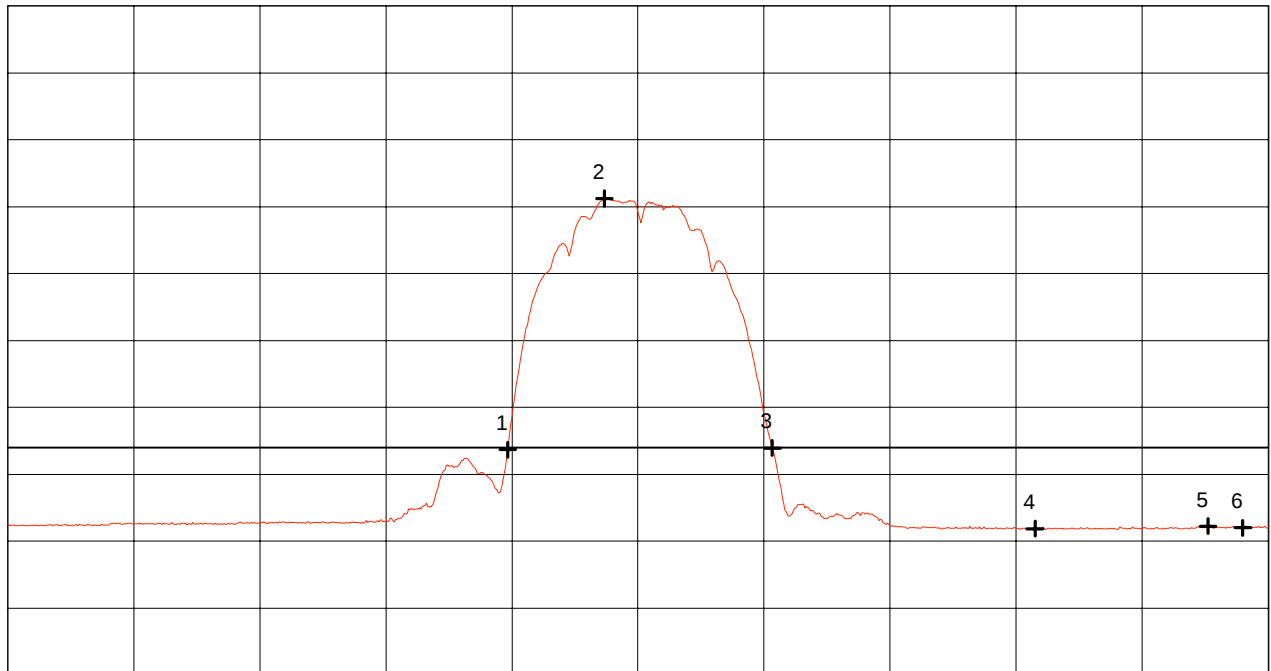
Test distance: 3 meters

Channel A (red) = horizontal polarization

Ref.Level 120 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.502 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.441667 GHz	53.68 dB μ V/m
Nr.2	2.449333 GHz	91.22 dB μ V/m
Nr.3	2.462667 GHz	53.91 dB μ V/m
Nr.4	2.483500 GHz	41.85 dB μ V/m
Nr.5	2.497222 GHz	42.23 dB μ V/m
Nr.6	2.500000 GHz	42.00 dB μ V/m
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 172 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.452$ GHz

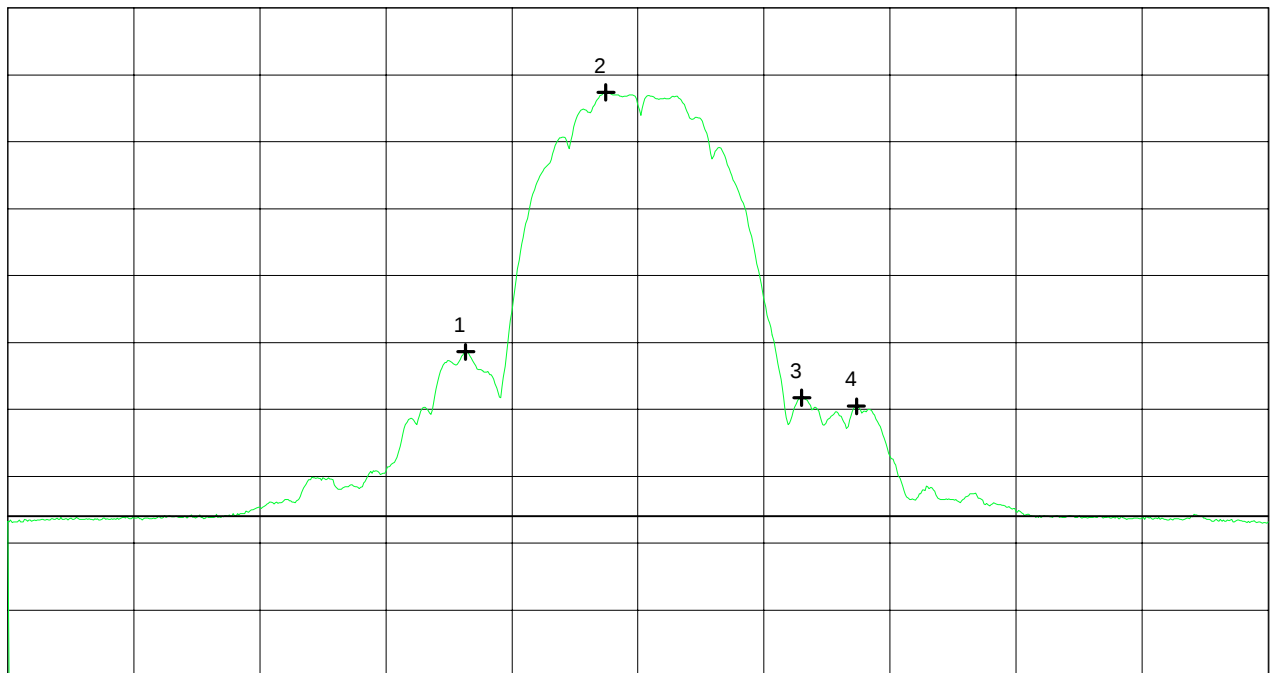
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 130 dB μ V/m
10 dB dB/Div.

ATT 5 dB

Ref. Offset 25.8 dB



Start 2.402 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.502 GHz
SWP 300 ms

**** Multi Marker ****

Nr.1	2.438333 GHz	78.61 dB μ V/m
Nr.2	2.449444 GHz	117.39 dB μ V/m
Nr.3	2.465000 GHz	71.75 dB μ V/m
Nr.4	2.469333 GHz	70.46 dB μ V/m
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 173 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial No.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- operating with bit rate 2 Mbps

- TX mode with $f = 2.452 \text{ GHz}$

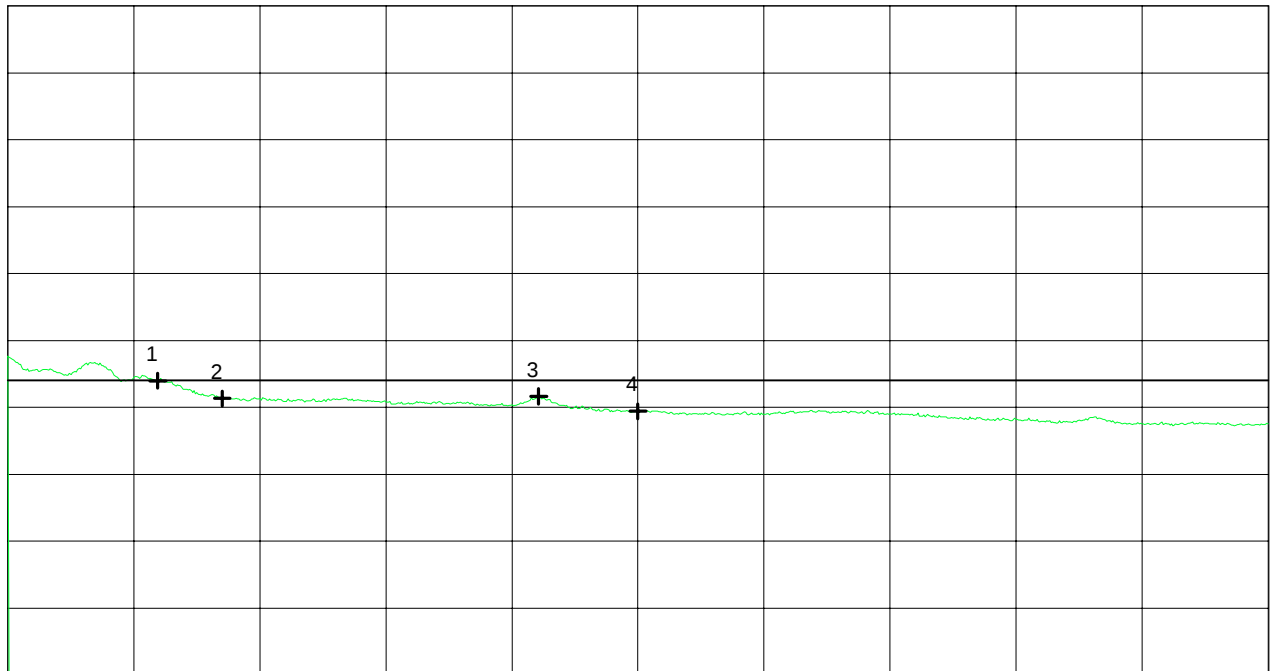
Test distance: 3 meters

Channel B (green) = vertical polarization

Ref.Level 110 dB μ V/m
10 dB dB/Div.

ATT 0 dB

Ref. Offset 25.8 dB



Start 2.475 GHz
RBW 1 MHz

VBW 1 kHz

Stop 2.525 GHz
SWP 160 ms

**** Multi Marker ****

Nr.1	2.480944 GHz	53.99 dB μ V/m
Nr.2	2.483500 GHz	51.32 dB μ V/m
Nr.3	2.496056 GHz	51.65 dB μ V/m
Nr.4	2.500000 GHz	49.42 dB μ V/m
Nr.5		
Nr.6		
Nr.7		
Nr.8		

Tested by:
Rainer Heller

Date:
12/06/1999

Project-No.:
56305-90734-1

Page 174 of 193 Pages

Test results for
Receive (RX) mode

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

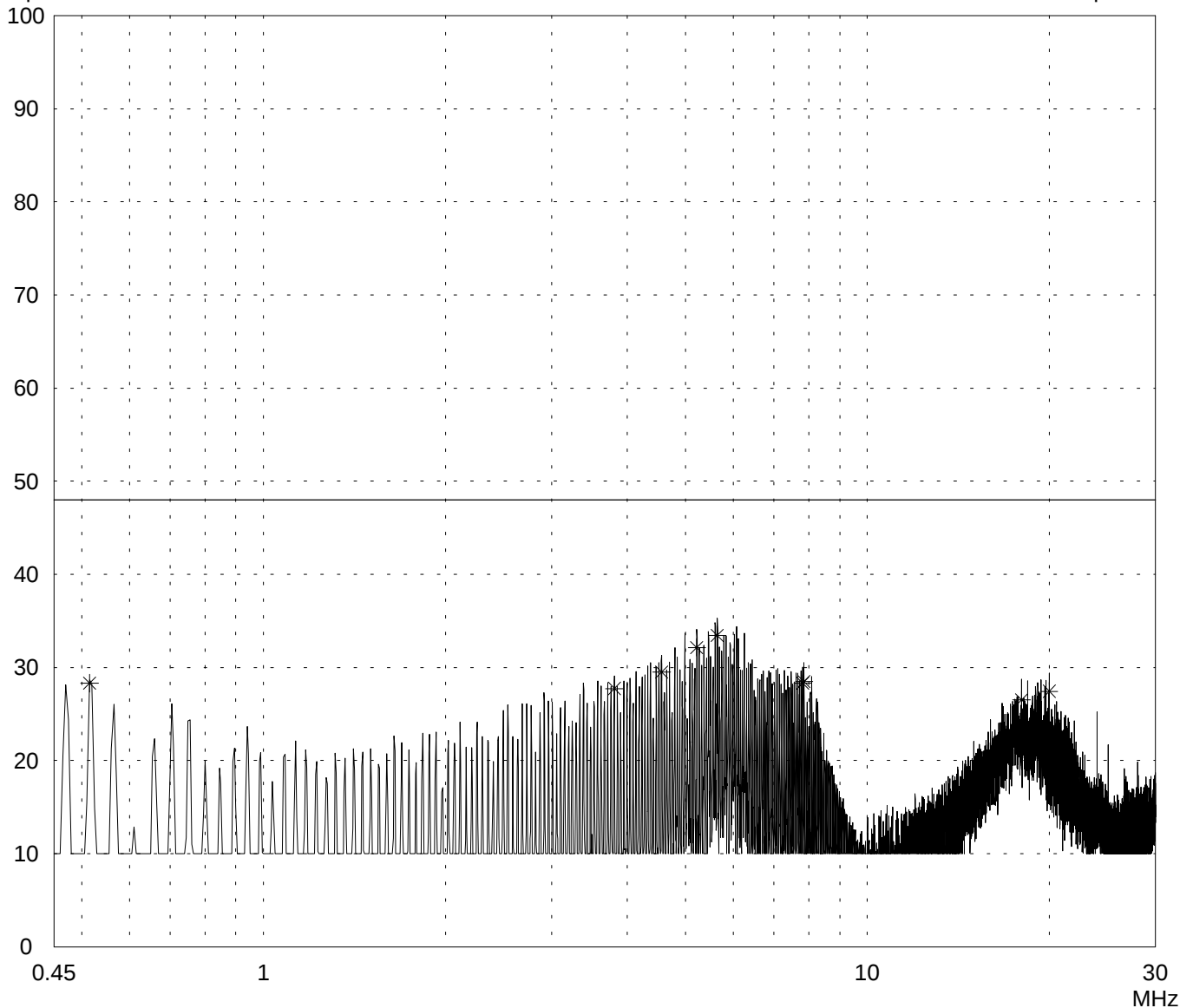
- RX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 176 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz
according 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 (#B2-23) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-DI-24 (vertical) - with 20 ft antenna cable (LMR400) - RX mode with f = 2.437 GHz
Serial no.: 99UT11411941	
Applicant: Lucent Technologies Nederland B.V.	
Test site: Shielded room, cabin no. 2	
Tested on: Linecord personal computer (EUT) Phase L1	
Date of test: 12/10/1999	
Test performed: automatically	File name:

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

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
0.515	28.3		28.3	48.0	
3.810	27.7		27.7	48.0	
4.565	29.5		29.5	48.0	
5.220	32.1		32.1	48.0	
5.645	33.4		33.4	48.0	
7.810	28.3		28.3	48.0	
7.855	28.5		28.5	48.0	
18.005	26.5		26.5	48.0	
20.005	27.4		27.4	48.0	

Result: Limit kept	Project file: 56305-90734-1	Page 177 of 193 Pages
-----------------------	--------------------------------	-----------------------

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/10/1999
Operator: R. Heller

Test performed: automatically
File name:

Mode:

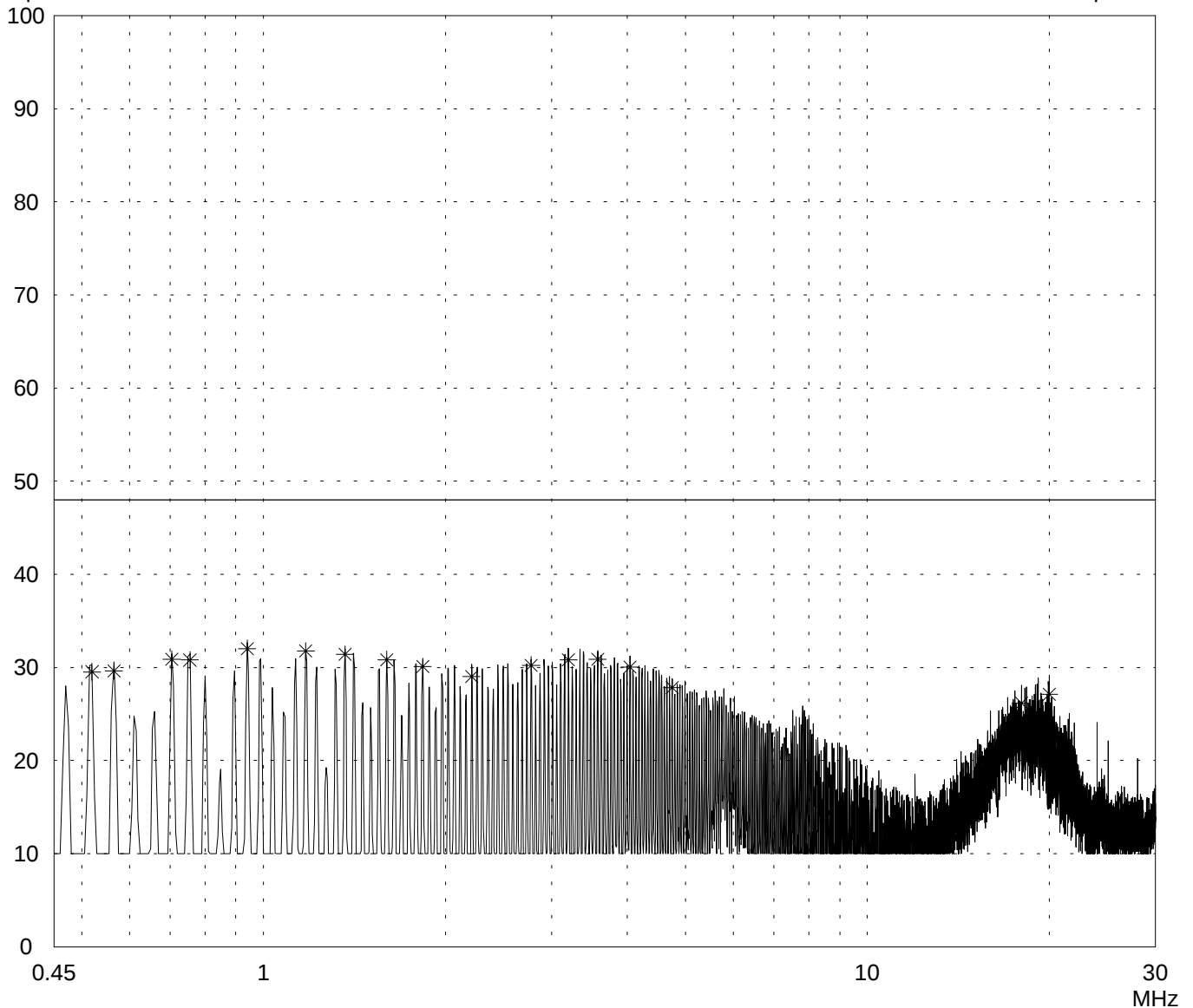
- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
- RX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 178 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord personal computer (EUT)
Phase N

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
0.520	29.5		29.5	48.0	
0.565	29.6		29.6	48.0	
0.705	30.9		30.9	48.0	
0.755	30.8		30.8	48.0	
0.940	32.0		32.0	48.0	
1.175	31.8		31.8	48.0	
1.365	31.4		31.4	48.0	
1.600	30.8		30.8	48.0	
1.835	30.1		30.1	48.0	
2.210	29.1		29.1	48.0	
2.775	30.2		30.2	48.0	
3.200	30.8		30.8	48.0	
3.575	30.9		30.9	48.0	
4.045	30.1		30.1	48.0	
4.750	27.8		27.8	48.0	
18.005	26.2		26.2	48.0	
20.005	27.1		27.1	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 179 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

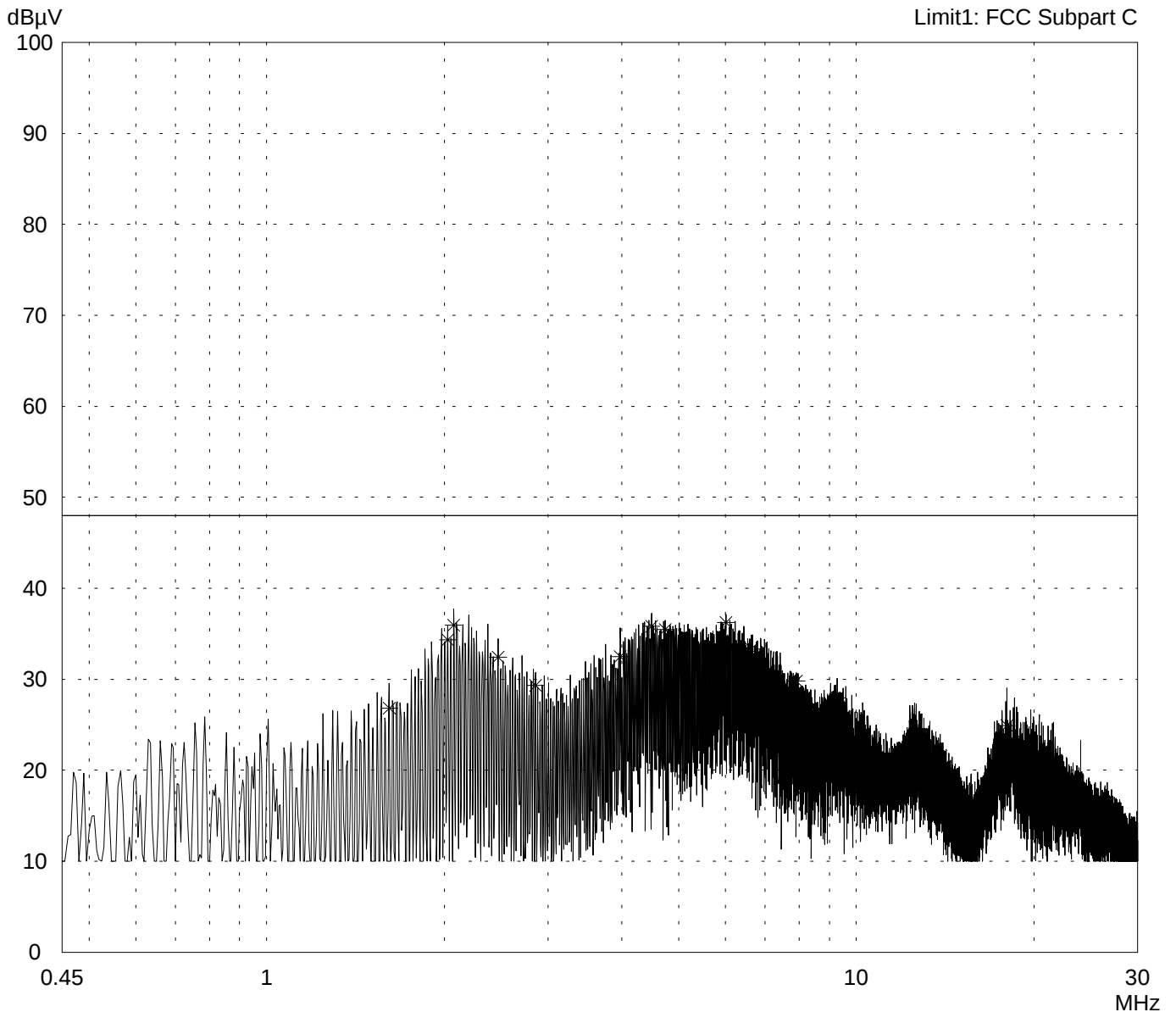
Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges



Result:
Limit kept

Project file:
56305-90734-1

Page 180 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase L1

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
1.615	26.8		26.8	48.0	
2.030	34.3		34.3	48.0	
2.075	35.9		35.9	48.0	
2.470	32.4		32.4	48.0	
2.860	29.3		29.3	48.0	
3.980	32.5		32.5	48.0	
4.495	35.8		35.8	48.0	
4.740	35.5		35.5	48.0	
6.010	36.3		36.3	48.0	
6.645	33.3		33.3	48.0	
7.915	29.8		29.8	48.0	
9.285	28.0		28.0	48.0	
18.000	24.9		24.9	48.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 181 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Shielded room, cabin no. 2

Tested on:
Linecord peripheral devices
Phase N

Date of test: 12/10/1999 Operator: R. Heller

Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

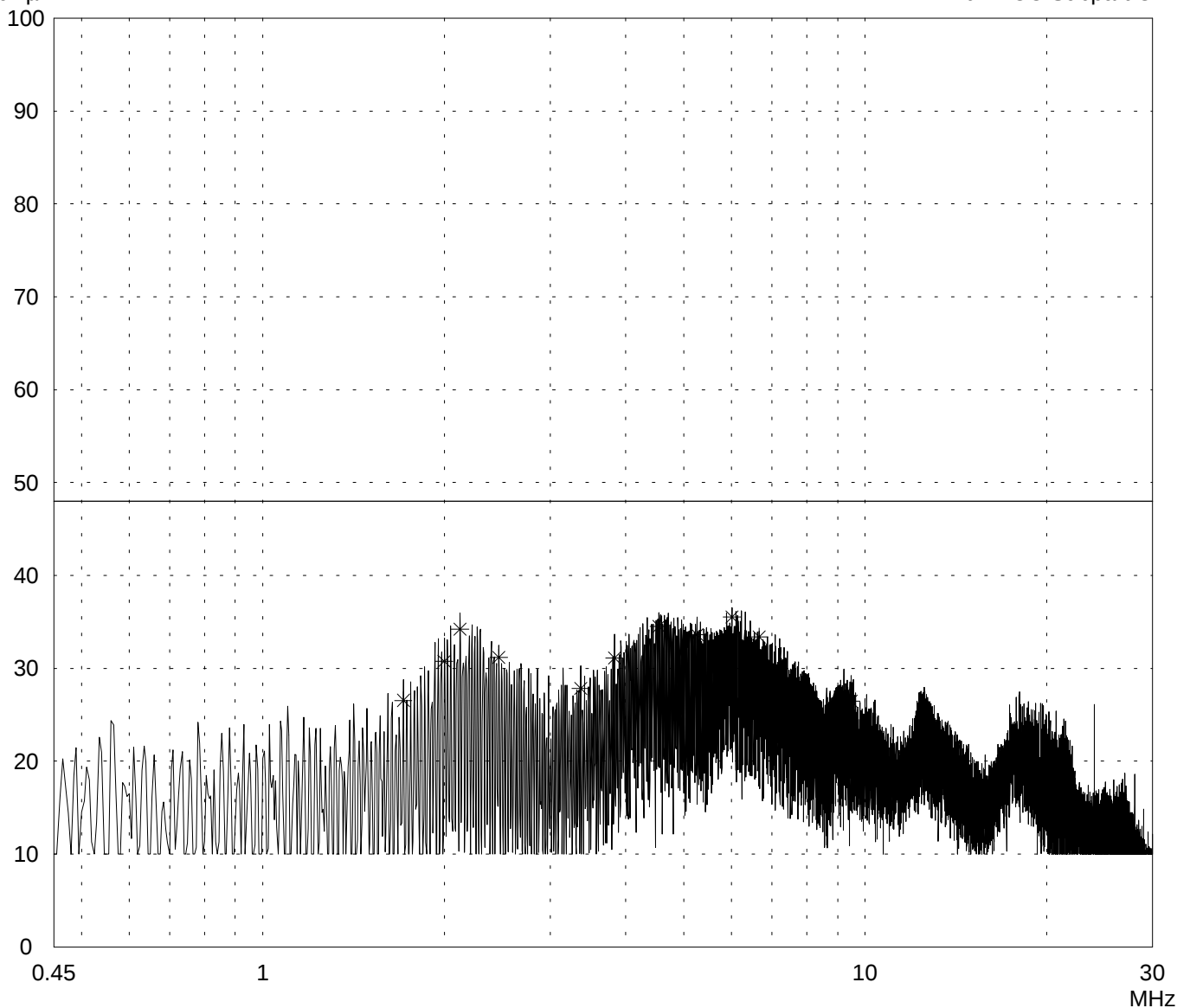
- RX mode with $f = 2.437$ GHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges

dB μ V

Limit1: FCC Subpart C



Result:
Limit kept

Project file:
56305-90734-1

Page 182 of 193 Pages

Conducted Emission Test 450 kHz - 30 MHz
according 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 (#B2-23) - FCC test setup - supply voltage 115 V AC - with external antenna AOU24-DI-24 (vertical) - with 20 ft antenna cable (LMR400) - RX mode with f = 2.437 GHz
Serial no.:	99UT11411941	
Applicant:	Lucent Technologies Nederland B.V.	
Test site:	Shielded room, cabin no. 2	
Tested on:	Linecord peripheral devices Phase N	
Date of test:	Operator:	
12/10/1999	R. Heller	
Test performed:	File name:	
automatically		

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

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV</i>	<i>Limit dBμV</i>	<i>Limit exceeded</i>
1.710	26.6		26.6	48.0	
2.000	30.7		30.7	48.0	
2.125	34.2		34.2	48.0	
2.465	31.2		31.2	48.0	
3.370	27.9		27.9	48.0	
3.835	31.1		31.1	48.0	
4.545	34.5		34.5	48.0	
5.255	33.6		33.6	48.0	
6.010	35.5		35.5	48.0	
6.670	33.4		33.4	48.0	
9.210	27.1		27.1	48.0	
9.480	26.4		26.4	48.0	

Result: Limit kept	Project file: 56305-90734-1	Page 183 of 193 Pages
-----------------------	--------------------------------	-----------------------

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator: R. Heller

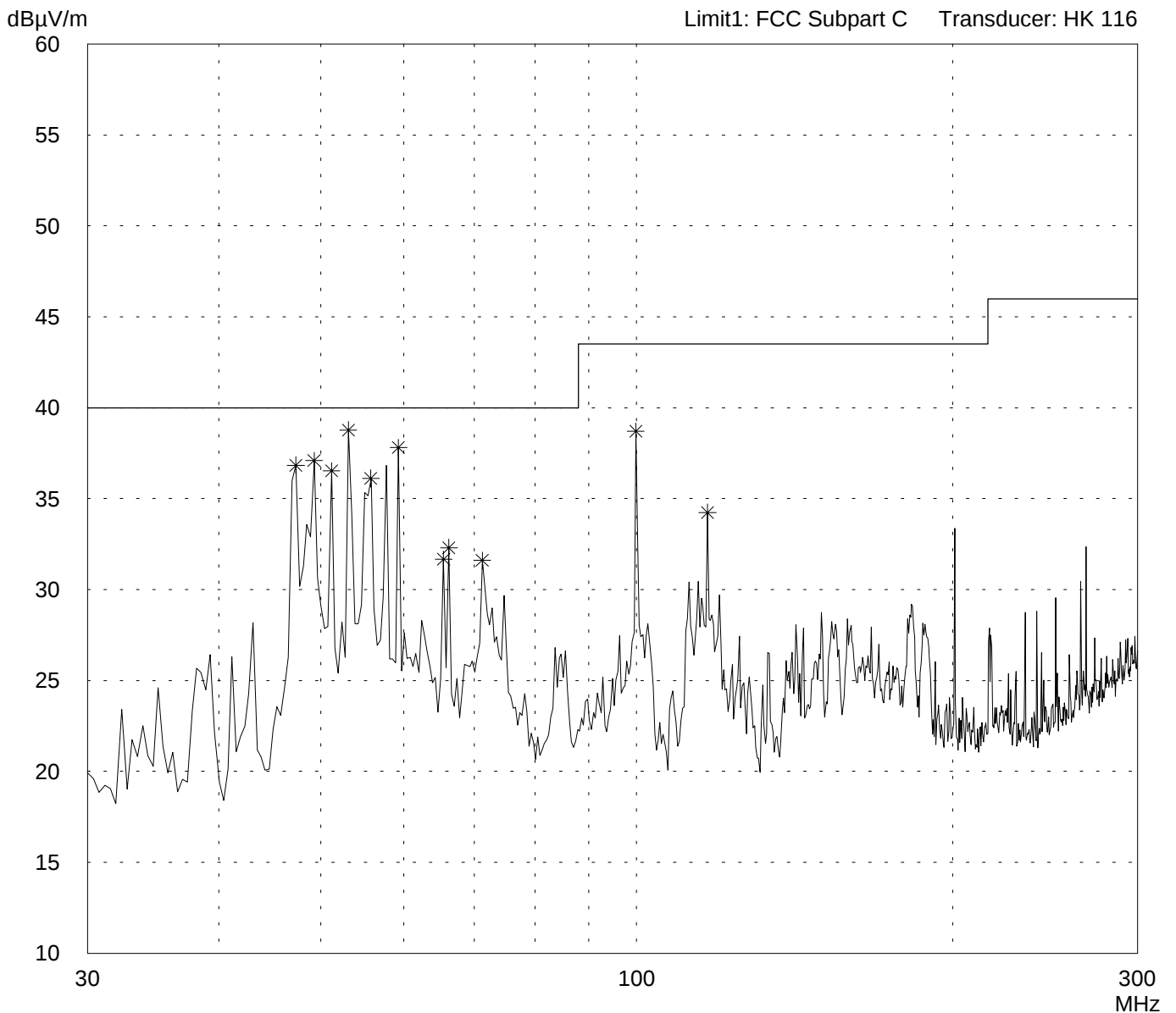
Test performed: automatically File name:

Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)
-
- RX mode with $f = 2.437$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Limit kept

Project file:
56305-90734-1

Page 184 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator: R. Heller

Test performed: automatically File name:

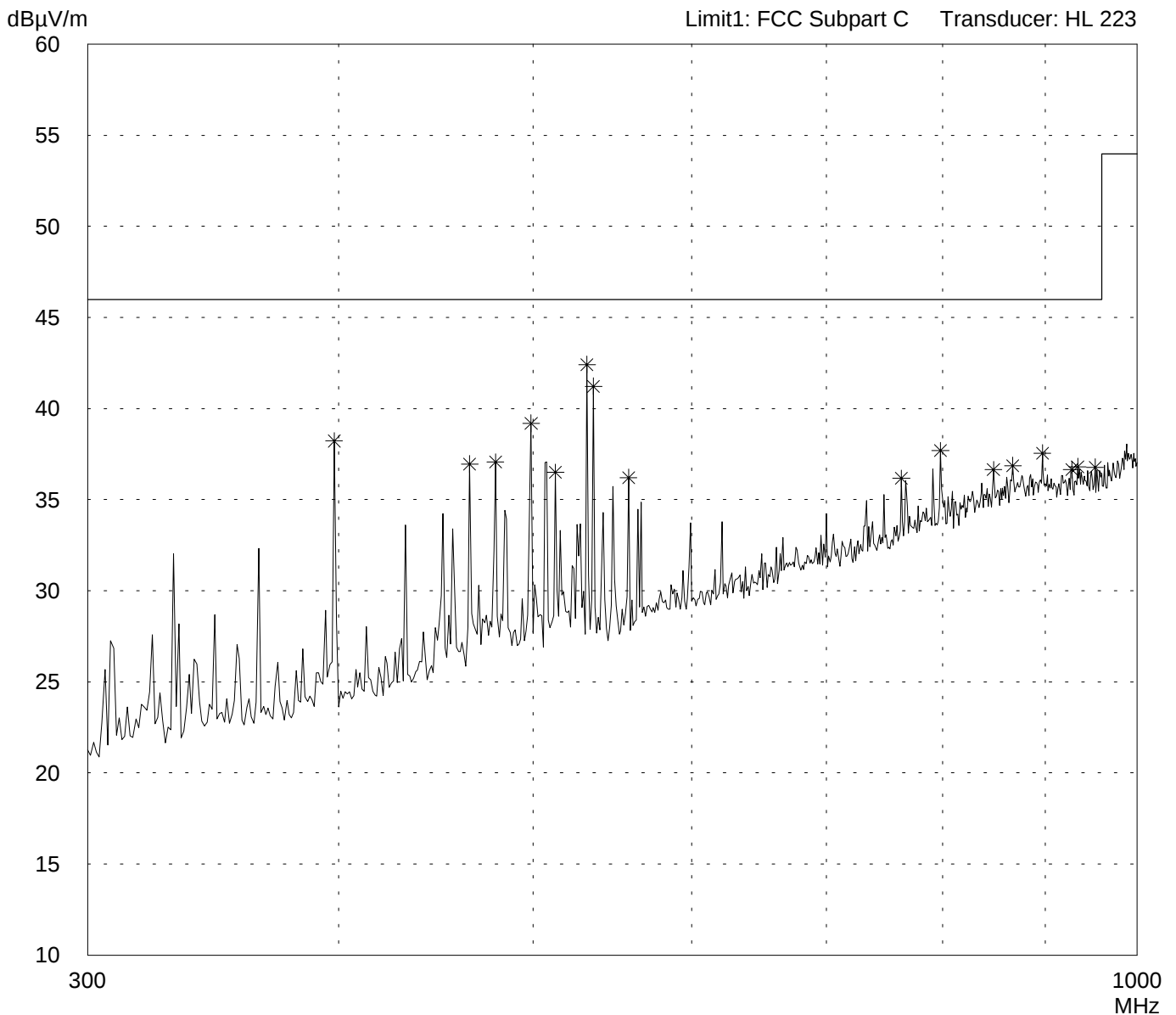
Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 185 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 Operator: R. Heller

Test performed: automatically File name:

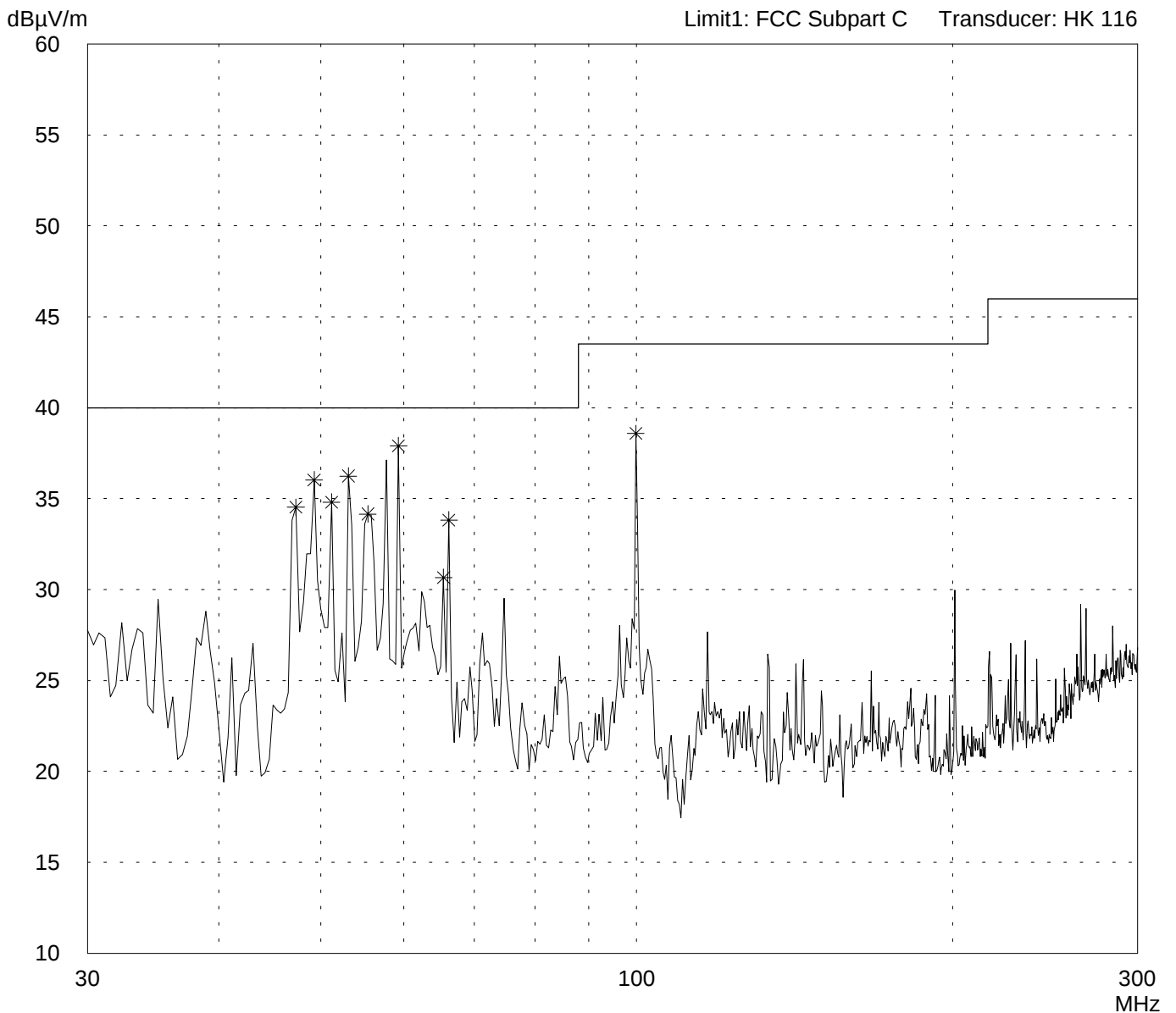
Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 186 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Semi anechoic room, cabin no. 3

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 Operator: R. Heller

Test performed: automatically File name:

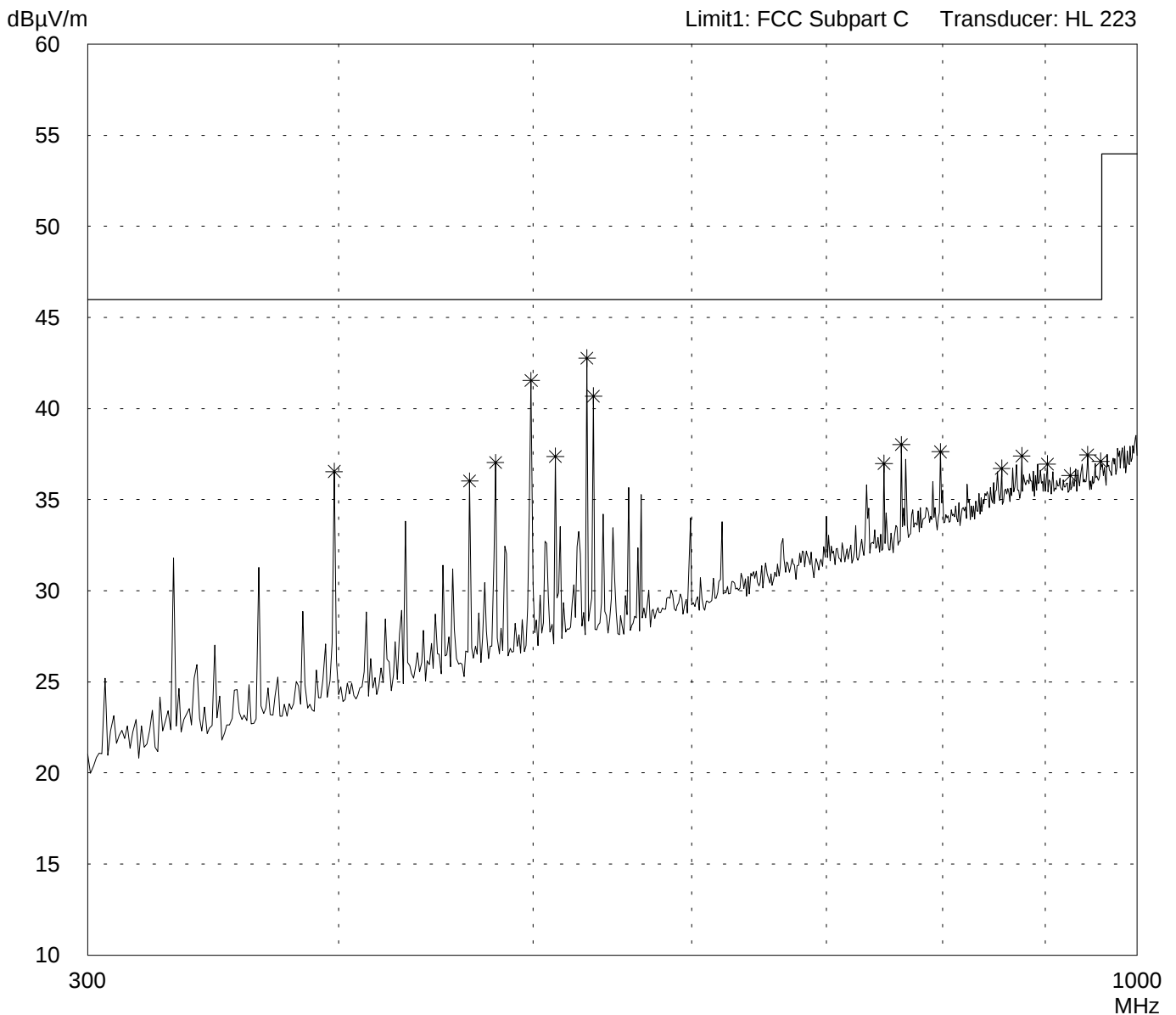
Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

Project file:
56305-90734-1

Page 187 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 Operator:
R. Heller

Test performed: by hand File name:

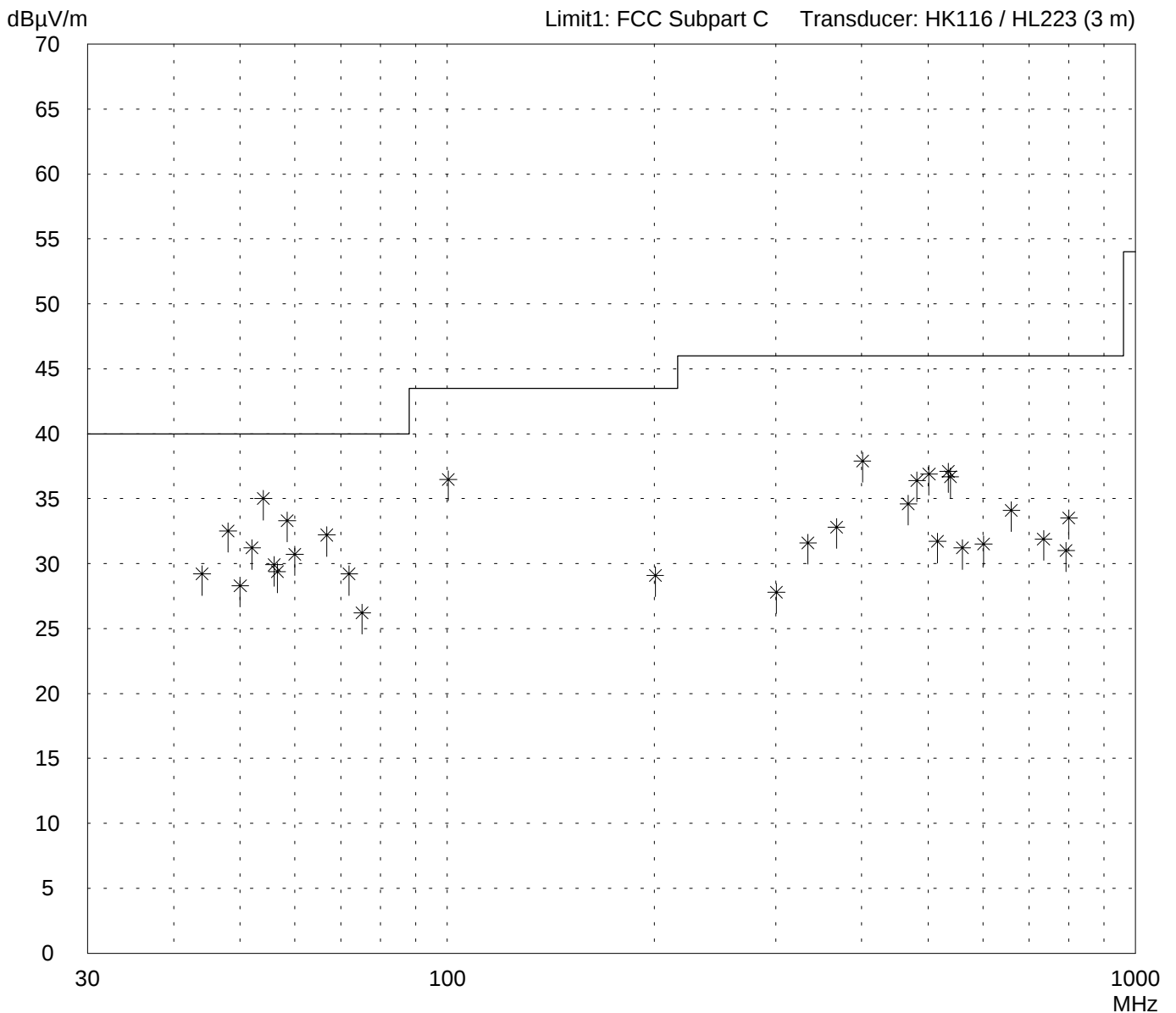
Mode:

- RF-modem PC24E-H-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-90734-1

Page 188 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Horizontal Polarization

Date of test: 12/09/1999 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 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
44.0	17.5	11.7	29.2	40.0	
48.0	21.5	11.0	32.5	40.0	
50.0	17.5	10.8	28.3	40.0	
52.0	20.5	10.7	31.2	40.0	
54.0	24.5	10.5	35.0	40.0	
56.0	19.5	10.4	29.9	40.0	
56.6	19.0	10.4	29.4	40.0	
58.5	23.0	10.3	33.3	40.0	
60.0	20.5	10.2	30.7	40.0	
66.8	22.0	10.2	32.2	40.0	
72.0	19.0	10.2	29.2	40.0	
75.2	16.0	10.2	26.2	40.0	
100.3	25.0	11.5	36.5	43.5	
200.5	12.0	17.1	29.1	43.5	
300.7	11.0	16.8	27.8	46.0	
334.1	13.5	18.1	31.6	46.0	
367.5	13.5	19.3	32.8	46.0	
400.9	17.5	20.4	37.9	46.0	
467.7	12.5	22.1	34.6	46.0	
481.5	14.0	22.4	36.4	46.0	
501.2	14.0	22.9	36.9	46.0	
515.5	8.5	23.2	31.7	46.0	
534.6	13.5	23.6	37.1	46.0	
538.1	13.0	23.7	36.7	46.0	
560.0	7.0	24.2	31.2	46.0	
601.4	6.5	25.0	31.5	46.0	
660.0	7.5	26.6	34.1	46.0	
735.0	4.0	27.9	31.9	46.0	
793.0	2.5	28.5	31.0	46.0	
800.0	5.0	28.5	33.5	46.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 189 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 Operator:
R. Heller

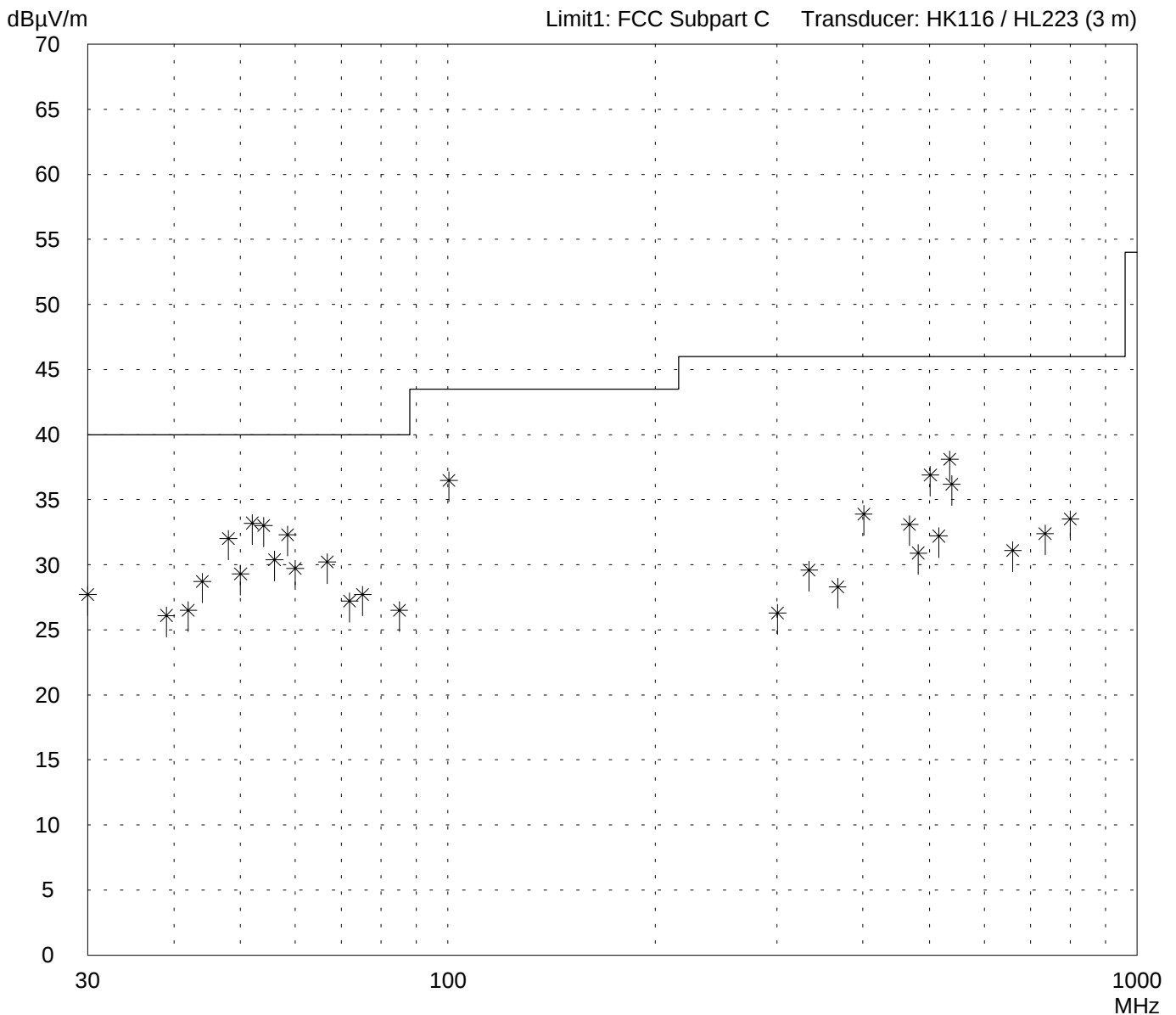
Test performed: by hand File name:

Mode:
- RF-modem PC24E-H-FC mounted in AT & T
Globalyst 550 via ISA card ISAPC-B0 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand



Result:
Limit kept

Project file:
56305-90734-1

Page 190 of 193 Pages

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

Model:
LUC PC24E-H-FC

Serial no.:
99UT11411941

Applicant:
Lucent Technologies Nederland B.V.

Test site:
Open area test-site I

Tested on:
Test distance 3 meters
Vertical Polarization

Date of test: 12/09/1999 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 (#B2-23)
- FCC test setup
- supply voltage 115 V AC
- with external antenna AOU24-DI-24 (vertical)
- with 20 ft antenna cable (LMR400)

- RX mode with $f = 2.437$ GHz

Detector:
Quasi-Peak

List of values:
Selected by hand

Frequency MHz	Reading dB μ V	Correction factor dB	Value dB μ V/m	Limit dB μ V/m	Limit exceeded
30.0	13.0	14.7	27.7	40.0	
39.0	13.5	12.6	26.1	40.0	
42.0	14.5	12.0	26.5	40.0	
44.0	17.0	11.7	28.7	40.0	
48.0	21.0	11.0	32.0	40.0	
50.0	18.5	10.8	29.3	40.0	
52.0	22.5	10.7	33.2	40.0	
54.0	22.5	10.5	33.0	40.0	
56.0	20.0	10.4	30.4	40.0	
58.5	22.0	10.3	32.3	40.0	
60.0	19.5	10.2	29.7	40.0	
66.8	20.0	10.2	30.2	40.0	
72.0	17.0	10.2	27.2	40.0	
75.2	17.5	10.2	27.7	40.0	
85.0	16.0	10.5	26.5	40.0	
100.3	25.0	11.5	36.5	43.5	
300.7	9.5	16.8	26.3	46.0	
334.1	11.5	18.1	29.6	46.0	
367.5	9.0	19.3	28.3	46.0	
400.9	13.5	20.4	33.9	46.0	
467.7	11.0	22.1	33.1	46.0	
481.5	8.5	22.4	30.9	46.0	
501.2	14.0	22.9	36.9	46.0	
515.5	9.0	23.2	32.2	46.0	
534.6	14.5	23.6	38.1	46.0	
538.1	12.5	23.7	36.2	46.0	
660.0	4.5	26.6	31.1	46.0	
735.0	4.5	27.9	32.4	46.0	
800.0	5.0	28.5	33.5	46.0	

Result:
Limit kept

Project file:
56305-90734-1

Page 191 of 193 Pages

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.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/08/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - FCC test setup
 - supply voltage 115 V AC
 - with external antenna AOU24-DI-24
 - with 20 ft antenna cable (LMR400)

 - RX mode with $f = 2.437$ GHz

Detector: Peak

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.0880	vertical	43.7	-93.5		29.4	42.9	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.: 99UT11411941
 Applicant: Lucent Technologies Nederland B.V.
 Test-site: Semi anechoic room
 Test distance: 3 meters
 Date of test: 12/08/1999
 Operator: R. Heller

Mode: - RF-modem PC24E-H-FC mounted in AT & T Globalyst 550
 via ISA card ISAPC-B0 (#B2-23)
 - FCC test setup
 - supply voltage 115 V AC
 - with external antenna AOU24-DI-24
 - with 20 ft antenna cable (LMR400)

 - RX mode with $f = 2.437$ GHz

Detector: Average

Frequency [GHz]	Polarization	Analyzer- reading [dBμV]	Generator- level [dBm]	Cable loss [dB]	Antenna- correction [dB]	Fieldstrength [dBμV/m]	Limit [dBμV/m]
2.0851	vertical	43.0	-94.2		29.4	42.2	54

Result: The limits are kept