

Straubing, February 22, 1999

TEST-REPORT

No. 56305-90067-1

for

PC24E-T-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.



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1. Administrative Data

Equipment Under Test (EUT):	PC24E-T-FC
Serial number(s):	84490006 (RF-modem)
	Sample no. 1 (external antennae)
Type of equipment:	RF-modem using DSSS technology for wireless connection for e.g. portable and mobile computers which have a PCMCIA-bus.
Parts/accessories:	 RF-modem PC24E-T-FC, part no. 010842/A external YAGI antenna AOU24-YA-1414, Telex, part no. 011004 external omni-directional antenna AOU24-OD-
	 77, Maxrad, part no. 011006 external omni-directional antenna AOU24-OD- 55, Larsen, part no. 010993
	(for additional information see "Configuration of EUT and Peripheral Devices" on page 8)
FCC-ID:	IMRWLPC24
Applicant:	Lucent Technologies Nederland B.V.
Applicant: (full address)	Zadelstede 1-10
	Zadelstede 1-10 NL-3431 JZ Nieuwegein
(full address)	Zadelstede 1-10 NL-3431 JZ Nieuwegein
(full address) Contract identification:	Zadelstede 1-10 NL-3431 JZ Nieuwegein The Netherlands
(full address) Contract identification: Contact person:	Zadelstede 1-10 NL-3431 JZ Nieuwegein The Netherlands Mr. Wout Kerkhof
(full address) Contract identification: Contact person: Manufacturer:	Zadelstede 1-10 NL-3431 JZ Nieuwegein The Netherlands Mr. Wout Kerkhof Lucent Technologies Nederland B.V.
(full address) Contract identification: Contact person: Manufacturer: Receipt of EUT:	Zadelstede 1-10 NL-3431 JZ Nieuwegein The Netherlands Mr. Wout Kerkhof Lucent Technologies Nederland B.V. December 9, 1998 December 10, 1998 (conducted)
(full address) Contract identification: Contact person: Manufacturer: Receipt of EUT: Date of test:	Zadelstede 1-10 NL-3431 JZ Nieuwegein The Netherlands Mr. Wout Kerkhof Lucent Technologies Nederland B.V. December 9, 1998 December 10, 1998 (conducted)



2. Identification of Test Laboratory

Test Laboratory: (full address):	Senton GmbH EMI/EMC Test Center Aeussere Fruehlingstrasse 45 D-94315 Straubing Germany		
Contact person:	Mr. Johann Roidt		
Communication:	Telephone Fax eMail:	(+49) 0 94 21 / 55 22-0 (+49) 0 94 21 / 55 22-99 Office@senton.de	
FCC file number: Industry Canada file number:	31040/SIT 1300F2 mber: IC 3050		



3. Summary of Test Results

The tested samples (including accessories) comply with the requirements for

- minimum 6 dB bandwidth (§15.247.a2),
- maximum peak output power (§15.247.b),
- average power density (§15.247.d) and
- radiated emission above 1 GHz (§15.247.c, §15.205.a,b, §15.209)

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

In addition to items listed above the tested sample in combination with external YAGI antenna AOU24-YA-1414 (setup no. 1) complies with the requirements for radiated emission in the frequency range 30 MHz to 1 GHz (§15.247.c, §15.205.a,b, §15.209)¹.

Johann Roidt Technical Manager

Samer feller

Rainer Heller Test Engineer

¹ According to applicant no tests below 1 GHz were performed for remaining two combinations (setups no. 2 and 3)



4. Operation Mode of EUT

All tests were performed using the "WaveLAN-II Engineering Test Program", Version v01.12 (Nov 13 1998). According to applicant three different kinds of modulation are used for transmission specified by the appropriate bit rate:

Operating frequency	Rated output power (conducted) [dBm]			Test performed ²
[GHz]	Bit rate 2 MBit	Bit rate 2 MBit Bit rate 5 MBit Bit rate 8 MBit		
2.412	+15	+12	+12	Х
2.417	+15	+12	+12	
2.422	+15	+12	+12	
2.427	+15	+12	+12	
2.432	+15	+12	+12	
2.437	+15	+12	+12	
2.442	+15	+12	+12	Х
2.447	+15	+12	+12	
2.452	+15	+12	+12	
2.457	+15	+12	+12	
2.462	+15	+12	+12	Х

Transmit mode (TX):

Receive mode (RX):

Operating frequency	Test performed
[GHz]	
2.412	
2.417	
2.422	
2.427	
2.432	
2.437	
2.442	Х
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 2 MBit only



INSTRUCTIONS - TEST PROGRAM

WaveLAN II Engineering Test Program, V01.12, Nov 13 1998

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 (See list. Do not select channel "0")
- RESULTS appear
- ESC (back to MAIN MENU)

TX MODE

- SELECT TX CONTINUOUS ON from MAIN MENU and ENTER, SET BIT RATE parameters to 2, 5 or 8 MBit 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

Three configurations were tested:

Setup No. 1:

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

Setup No. 2:

RF-modem module PC24E-T-FC operating with omni-directional antenna AOU24-OD-77 connected via 50 ft antenna cable, lightning arrestor and RF-IEEE cable and mounted in PCMCIA slot of personal computer AT & T Globalyst 550 via ISA adaptor board ISAPC-B0

Setup No. 3:

RF-modem module PC24E-T-FC operating with omni-directional antenna AOU24-OD-55 connected via 2.5 m antenna cable TBD and mounted in PCMCIA slot of personal computer AT & T Globalyst 550 via ISA adaptor board ISAPC-B0

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

In combination with external antennae AOU24-YA-1414 and AOU24-OD-77 (setups no. 1 and 2) EUT is intended to be used with three versions of antenna cables. Depending on antenna cable the effective antenna gain is calculated by subtracting the appropriate total insertion loss including attenuation caused by RF-IEEE cable and lightning arrestor from the typical gain of appropriate external antenna (see tables 2 and 3).

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



Item	Part no.	Serial no.	Designation	Manufacturer
RF-modem	010842/A	84490006	PC24E-T-FC	Lucent
External YAGI antenna	011004	Sample no. 1	AOU24-YA-1414	Telex
External omni- directional antenna	011006	Sample no. 1	AOU24-OD-77	Maxrad
External omni- directional antenna	010993	Sample no. 1	AOU24-OD-55	Larsen
Coaxial antenna cable 3/8", 50 ft	010317		 (cable type TWB 4001, N connector (male) on each side)	Amphenol
RF-IEEE cable, 50 cm (to be connected to RF- modem)	010995		 (cable type Filotex P - EDE 296769, N connector (male) on antenna side	Lucent
Antenna cable, 2.5 m (to be connected to RF- modem)	TBD		 (cable type Filotex P - EDE 296769, N connector (male) on antenna side)	Lucent
Lightning arrestor	010997			Hyperlink
Personal computer		17-26190719	Globalyst 550	AT & T
ISA adaptor board	010053	B2-8	ISAPC-B0	Lucent

Table 1: Accessories and host equipment

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

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

Part number	Antenna cable length	Туре	Antenna gain AOU24-OD-77 [dBi]	Total insertion loss [dB]	Effective antenna gain [dBi]
010999	20 ft	LMR200	7.0	4.5	2.5
010317	50 ft	LMR400	7.0	4.5	2.5
011002	75 ft	LMR400	7.0	5.3	1.7

Table 3: Effective gain for external antenna AOU24-OD-77 and different antenna cables



6. Setup of Host

Configuration of cables of host

- Unshielded power lines for AC-power supply of personal computer and monitor, Kawasaki, 180 cm
- Shielded video cable 3138 118 73410 connected to video interface of personal computer, AWM, 170 cm, Senton inv.-no. 1455
- 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 5 Serial no.: 17-26190719 Lucent ISA-card ISAPC-B0: Serial no.: B2-8		CTD3246
	Monitor Siemens S26361-K203-V311: Serial no.: 17569281 PS/2-keyboard HP C1405A #ABD:	FCC-ID:	ASIC3X2
	Serial no.: 3221S30020 PS/2-mouse HP C1413A:	FCC-ID ³ :	B94VECTRA386S-20
	Serial no.: 3227M01197	FCC-ID:	B94C1413X
•	Parallel printer HP ThinkJet 2225C+: Serial no.: 3106S91193 with power supply Hayes 52-00008	FCC-ID:	DSI6XU2225
•	Serial no.: 9028A Serial printer HP ThinkJet 2225D+: Serial no.: 2920S44042 with power supply Hayes 52-00008 Serial no.: 9033A	FCC-ID:	DSI6XU2225

³ FCC-ID of corresponding personal computer



7. Measuring Methods

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

The minimum 6 dB bandwidth was measured with a spectrum analyzer connected to the antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency.

The spectrum analyzer was set to:

RBW = 100 kHz, VBW = 100 kHz, span = 50 MHz, sweep = 20 msSee figure 1 for the measurement setup.

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

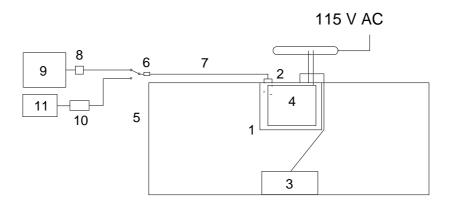


Figure 1: Measurement setup for testing on antenna connector

- 1 Personal computer with ISA-card
- 2 RF-modem
- 3 Keyboard
- 4 Monitor
- 5 Wooden table

- 6 DC-block
- 7 Adapter cable
- 8 Attenuator
- 9 Spectrum analyzer
- 10 Power sensor
- 11 Power meter



7.2. Maximum Peak Output Power (§ 15.247.b)

The maximum peak output power was measured with a power meter connected to the antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate center frequency. A spectrum analyzer (set to RBW = 100 kHz, VBW = 100 kHz, span = 100 MHz, sweep = 40 ms) was used to record the shape of the transmit signal. See figure 1 for the measurement setup.

Test equipment used (see equipment list for details): 02, 08, 09, 18, 67, 68

7.3. Average Power Density (§ 15.247.d)

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

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



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

Radiated emissions were measured over the frequency range from 30 MHz to 1 GHz. The bandwidth of the EMI-receiver was set to 120 kHz and the detector-function was set to CISPR quasi-peak.

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

See figure 2 for the measurement setup.

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



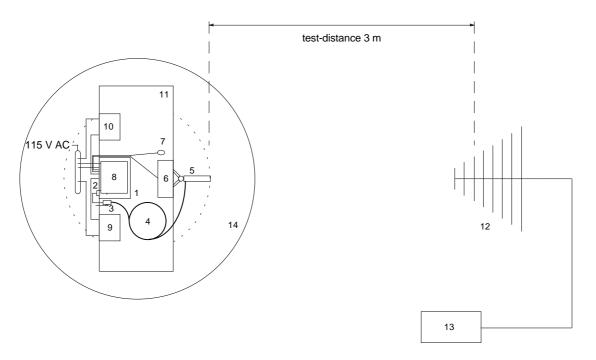


Figure 2: Measurement setup no. 1 for radiated emission test below 1 GHz

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

- 12 Measurement antenna
- 13 Test receiver
- 14 Turn table



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

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

All tests were performed in a semi-anechoic chamber with a test-distance of 3 meters (except for the frequency range 18 GHz - 25 GHz where test distance was reduced to 0.5 meter).

To avoid overload in transmit mode no preamplifier was used between 1 GHz and 3.95 GHz. Above 3.95 GHz tests were performed with appropriate preamplifiers (attenuation of operating frequency by horn antenna is sufficient to avoid overload of preamplifier).

For receive mode appropriate preamplifiers were used for the whole frequency range.

To eliminate variations in amplification of the preamplifiers a signal generator was used for substitution (however, during testing a correction according to the minimum amplification was added).

Substitution was performed in the following steps:

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

See figures 3 and 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



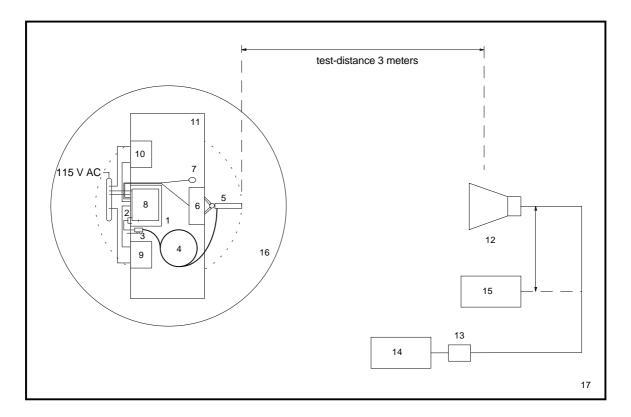


Figure 3: Measurement setup no. 1 for radiated emission test above 1 GHz

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

- 12 Measurement antenna
- **13** Preamplifier (if applicable)
- 14 Spectrum analyzer
- **15** Signal generator
- 16 Turn table
- 17 Semi-anechoic room



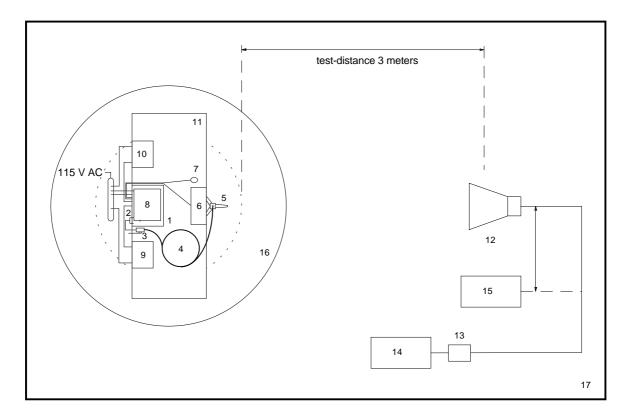


Figure 4: Measurement setup no. 2 for radiated emission test above 1 GHz

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

- 12 Measurement antenna
- **13** Preamplifier (if applicable)
- 14 Spectrum analyzer
- **15** Signal generator
- 16 Turn table
- 17 Semi-anechoic room



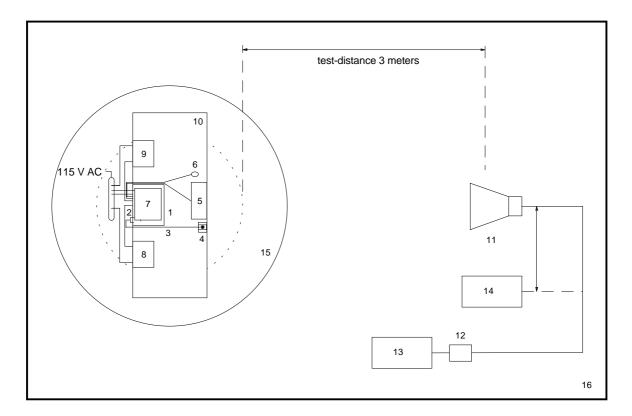


Figure 5: Measurement setup no. 3 for radiated emission test above 1 GHz

- **1** Personal computer with ISA-card
- 2 RF-modem
- 3 Antenna cable
- 4 RF-antenna (2.4 GHz) mounted on wooden pedestal
- 5 Keyboard
- 6 Mouse
- 7 Monitor
- 8 Parallel printer
- 9 Serial printer
- 10 Wooden table

- 11 Measurement antenna
- **12** Preamplifier (if applicable)
- **13** Spectrum analyzer
- 14 Signal generator
- 15 Turn table
- 16 Semi-anechoic room



8. Equipment List

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

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



9. Photographs Taken During Testing

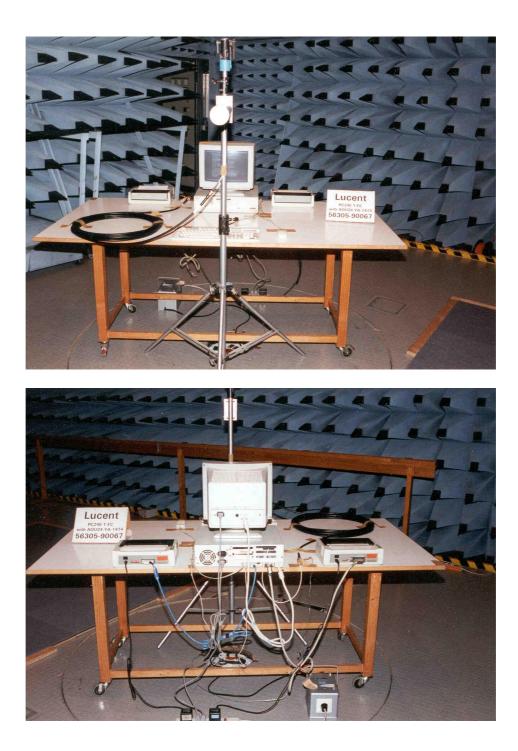


9.1. Photographs Of Test Setup No. 1



Photos No. 9.1.1 - 9.1.2

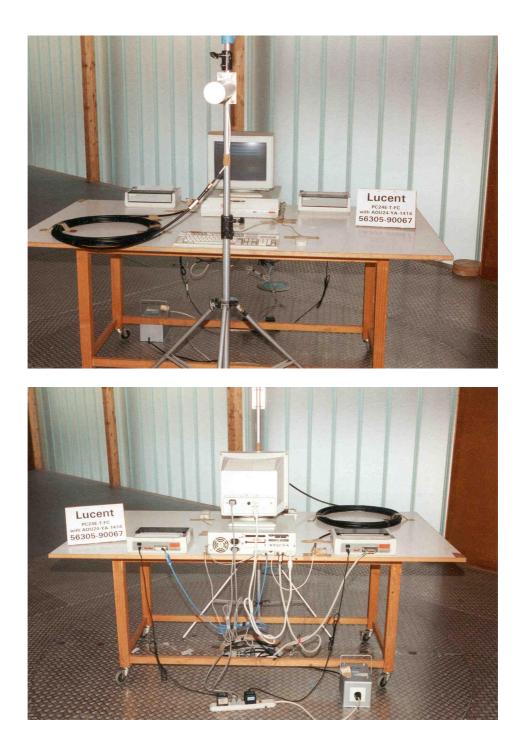
Test setup no. 1 for radiated emission pre-test 30 MHz - 1 GHz (semi anechoic room)





Photos No. 9.1.3 - 9.1.4

Test setup no. 1 for radiated emission final test 30 MHz - 1 GHz (open area test site)





Photos No. 9.1.5 - 9.1.6

Lucent Lucent 56305-900 1-35

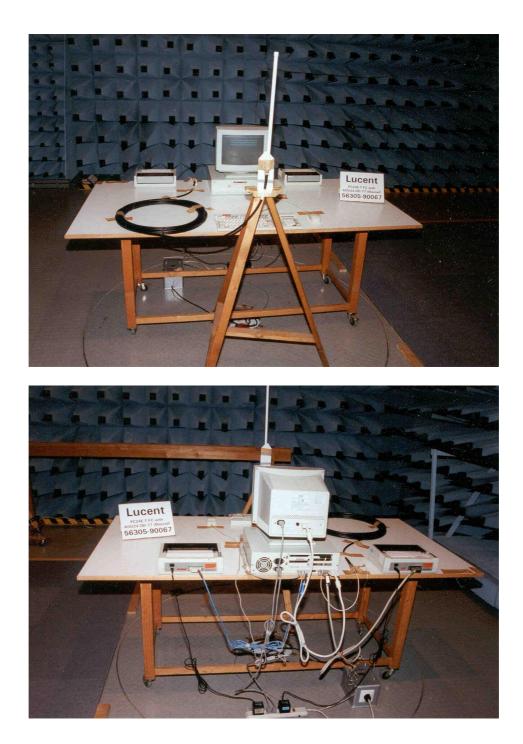
Test setup no. 1 for radiated emission test above 1 GHz



9.2. Photographs Of Test Setup No. 2



Photos No. 9.3.1 - 9.3.2



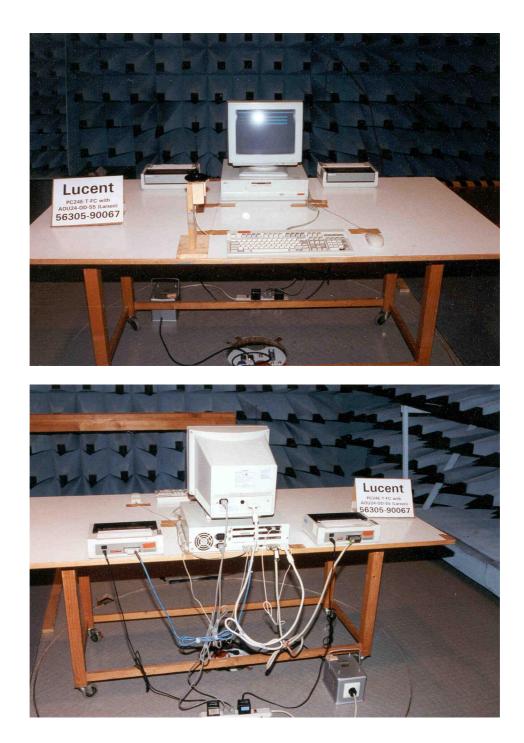
Test setup no. 2 for radiated emission test above 1 GHz



9.3. Photographs Of Test Setup No. 3



Photos No. 9.3.1 - 9.3.2



Test setup no. 3 for radiated emission test above 1 GHz



10. List of Measurements



FCC Part 15 S	ubpart C		
Section(s):	Test	Page	Result
	Transmit mode (TX):	35	
§15.247.a2	Minimum 6 dB bandwidth	note 1	passed
§15.247.b	Maximum peak output power	36	passed
§15.247.d	Average power density	note 1	passed
§15.247.e	Processing gain		test performed by applicant
§15.207	Conducted emission test 450 kHz - 30 MHz		not performed (note 2)
§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	37	passed
§15.247.c §15.209 §15.205.a,b	Radiated emission test 1 GHz - 25 GHz	61	passed
	Receive mode (RX):	109	
§15.207	Conducted emission test 450 kHz - 30 MHz		not performed (note 2)
§15.209 Radiated emission test 9 kHz - 30 MHz			not applicable (acc. to §15.33)
§15.209	Radiated emission test 30 MHz - 1 GHz	110	passed
§15.209	Radiated emission test 1 GHz - 12.5 GHz	118	passed

- Note 1: See Senton test report no. 56305-81078-1 for RF-modem PC24E-OO-ET-T (identical with PC24E-T-FC)
- **Note 2:** According to applicant only radiated emission tests were performed
- **Note 3:** Except for radiated emission at band edges radiated emission tests in transmit mode were performed with bit rate set to 2 MBit only (maximum output power).

FCC-ID: IMRWLPC24



(note 2)

not applicable

(acc. to §15.33)

not performed

(note 2)

passed

not performed

(note 2) not applicable

(acc. to §15.33) not performed

(note 2)

passed

122

170

171

FCC Part 15 S	ubpart C		
Section(s):	Test	Page	Result
	Transmit mode (TX):	120	
§15.247.a2	Minimum 6 dB bandwidth	note 1	passed
§15.247.b	Maximum peak output power	121	passed
§15.247.d	Average power density	note 1	passed
§15.247.e	Processing gain		test performed by applicant
§15.207	Conducted emission test		not performed

10.2. List of Measurements for Setup No. 2

450 kHz - 30 MHz

9 kHz - 30 MHz

30 MHz - 1 GHz

1 GHz - 25 GHz

Radiated emission test

Radiated emission test

Radiated emission test

Receive mode (RX):

450 kHz - 30 MHz

9 kHz - 30 MHz

30 MHz - 1 GHz

1 GHz - 12.5 GHz

Conducted emission test

Radiated emission test

Radiated emission test

Radiated emission test

Note 1: See Senton test report no. 56305-81078-1 for RF-modem PC24E-OO-ET-T
(identical with PC24E-T-FC)

- Note 2: According to applicant only radiated emission above 1 GHz was tested
- Note 3: Except for radiated emission at band edges radiated emission tests in transmit mode were performed with bit rate set to 2 MBit only (maximum output power).

FCC-ID: IMRWLPC24

§15.247.c

§15.247.c

§15.205.a,b §15.247.c

§15.209

§15.209 §15.205.a,b

§15.207

§15.209

§15.209

§15.209

§15.209 §15.205.a,b



ECC Dort 15 S	ubport C		
FCC Part 15 S			
Section(s):	Test	Page	Result
	Transmit mode (TX):	173	
§15.247.a2	Minimum 6 dB bandwidth	note 1	passed
§15.247.b	Maximum peak output power	174	passed
§15.247.d	Average power density	note 1	passed
§15.247.e	Processing gain		test performed by applicant
§15.207 Conducted emission test 450 kHz - 30 MHz			not performed (note 2)
§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 Radiated emission test §15.209 30 MHz - 1 GHz §15.205.a,b 30 MHz - 1 GHz			not performed (note 2)
§15.247.c §15.209 §15.205.a,b	Radiated emission test 1 GHz - 25 GHz	175	passed
	Receive mode (RX):	223	
§15.207	Conducted emission test 450 kHz - 30 MHz		not performed (note 2)
§15.209 Radiated emission test 9 kHz - 30 MHz			not applicable (acc. to §15.33
§15.209 Radiated emission test 30 MHz - 1 GHz			not performed (note 2)
§15.209	Radiated emission test 1 GHz - 12.5 GHz	224	passed

- Note 1: See Senton test report no. 56305-81078-1 for RF-modem PC24E-OO-ET-T (identical with PC24E-T-FC)
- Note 2: According to applicant only radiated emission above 1 GHz was tested
- **Note 3:** Except for radiated emission at band edges radiated emission tests in transmit mode were performed with bit rate set to 2 MBit only (maximum output power).

FCC-ID: IMRWLPC24



11. Test Results



Test results for setup no. 1

Transmit (TX) mode



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

Model:	PC24E-T-FC with AOU24-YA-1414
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Date of test:	12/10/1998
Operator:	R. Heller
Mode:	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550

ode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- TX mode

Tested on:

Antenna connector

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

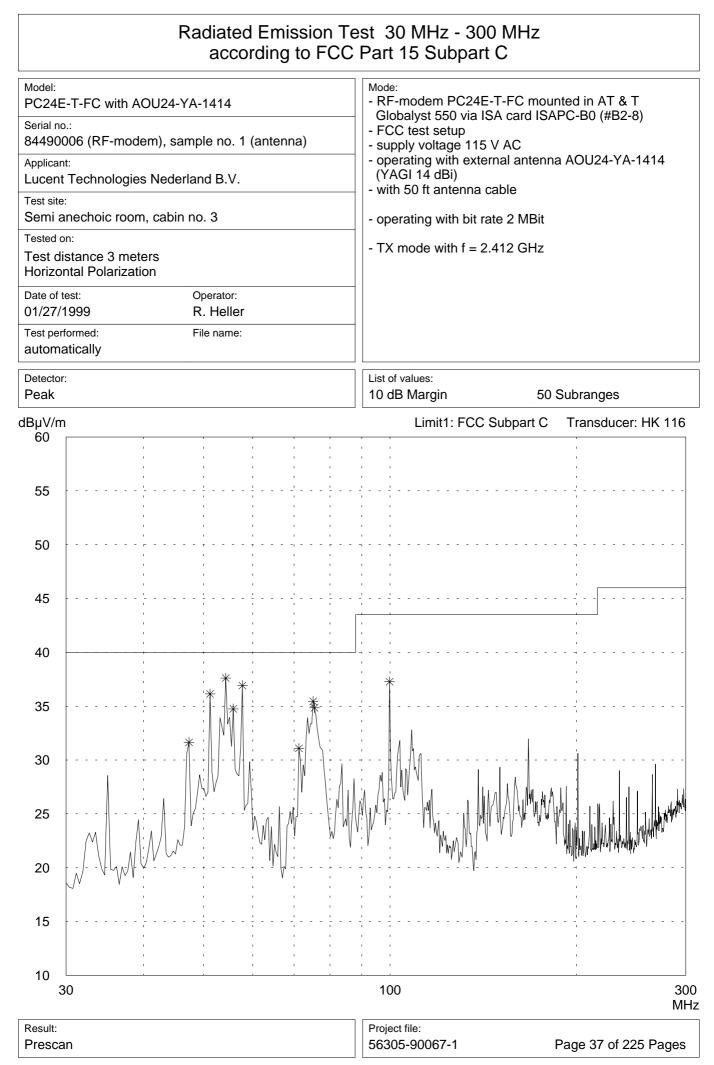
Note:

Typical gain of external YAGI antenna AOU24-YA-1414 is 13.5 dBi. Depending on antenna cable the effective antenna gain is calculated by subtracting the appropriate total insertion loss including attenuation caused by pigtail cable and lightning arrestor.

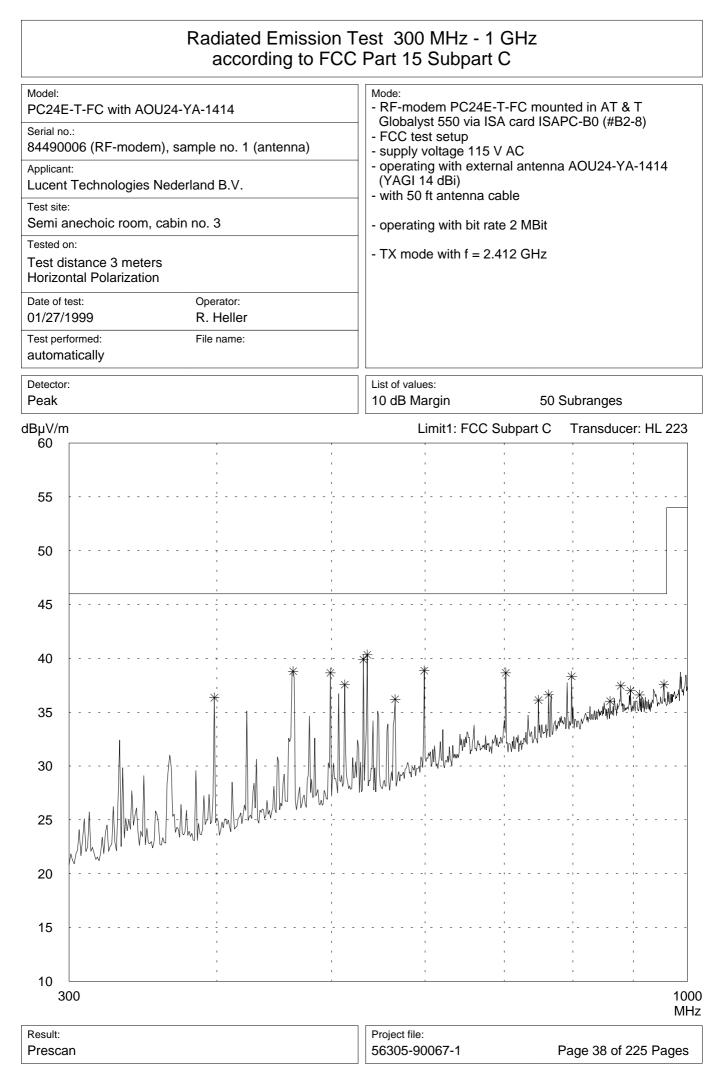
Limit of 30 dBm is reduced by the amount of the effective antenna gain exceeding 6 dBi.

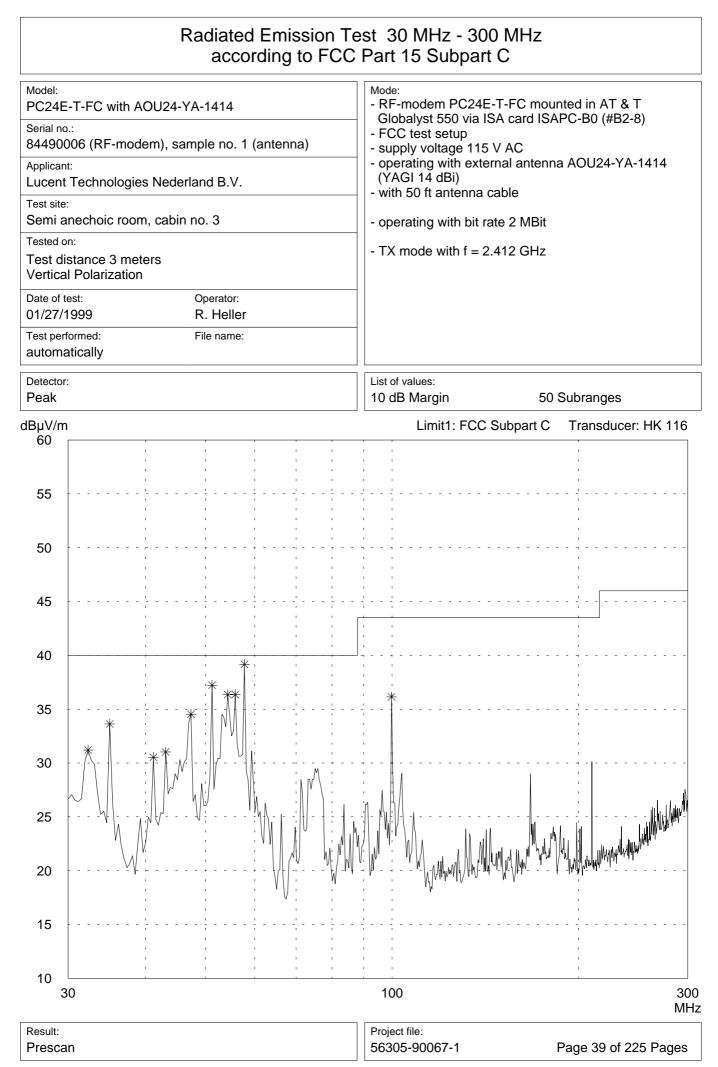
Antenna cable	Antenna gain	Total insertion	Effective antenna gain		Limit
	AOU24-YA-1414	loss	total value	exceeding 6 dBi	
	[dBi]	[dB]	[dBi]	[dB]	[dBm]
20 ft	13.5	4.5	9.0	3.0	27.0
50 ft	13.5	4.5	9.0	3.0	27.0
75 ft	13.5	5.3	8.2	2.2	27.8

Result: The limits are kept

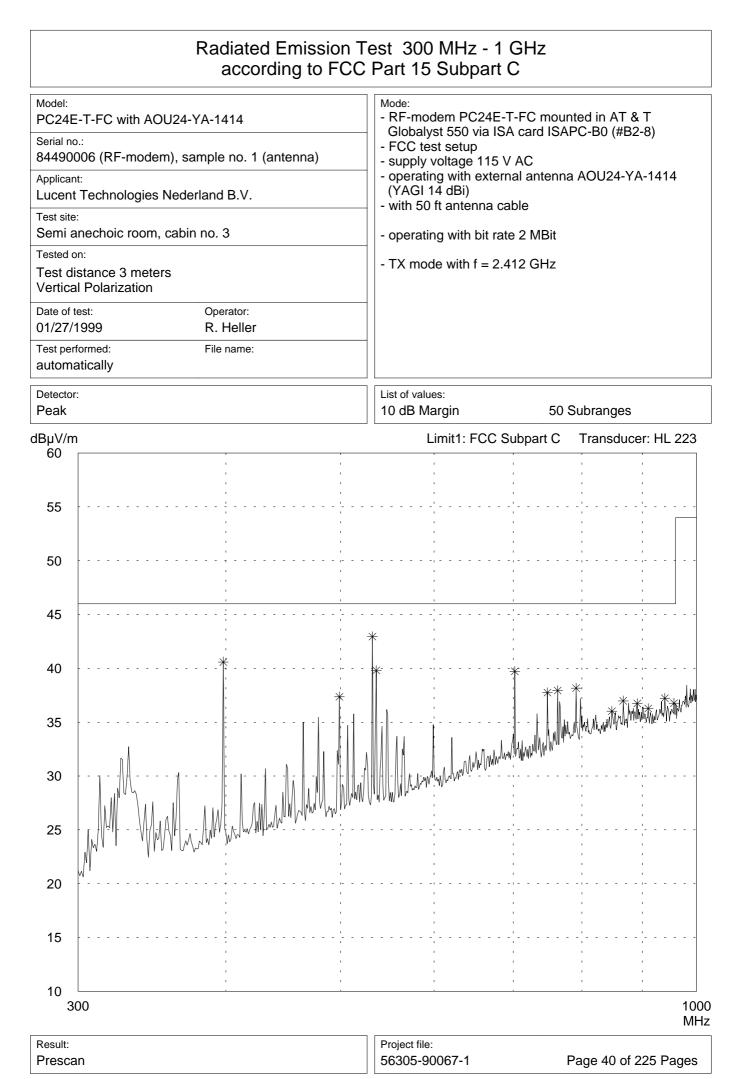


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Model: PC24E-T-FC with AOU24-YA-1414 Serial no.: 84490006 (RF-modem), sample no. 1 (antenna)				Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC								
Applicar	^{nt:} t Techno	ogies	Neder	land	B.V.			(YA	erating with e GI 14 dBi) n 50 ft anten		ntenna AOU2	24-YA-1414
Test site	est site: Open area test-site I											
Tested of								 operating with bit rate 2 MBit TX mode with f = 2.412 GHz 				
	istance 3 ntal Pola											
Date of				Oper				Note Leve		Hz was n	neasured in s	emi
D2/02/1999 R. Heller Test performed: File name: by hand File name:					hoic room (d							
Detector Quasi-				-					values: cted by hanc	1		
BµV/n							Limi		C Subpart C		ducer: HK116	6 / HL223 (3 m)
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5		, J		· · ·		 	1 1 1		, J ,	1 .1 1	· · · · · · · · · · · · · · · · · · ·	
0	30			, i		<u> </u>	00					10
Result: Limit k							-	Projec	et file: 15-90067-1			M 1 of 225 Pages

Applicant: Lucent Technologies N Test site: Open area test-site I Tested on: Test distance 3 meters Horizontal Polarization Date of test:), sample no. 1 (antenna) ederland B.V.	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable - operating with bit rate 2 MBit - TX mode with f = 2.412 GHz Note: Level at 100.3 MHz was measured in semi
02/02/1999 Test performed: by hand	R. Heller File name:	anechoic room (cabin no. 3)
Detector: Quasi-Peak		List of values: Selected by hand

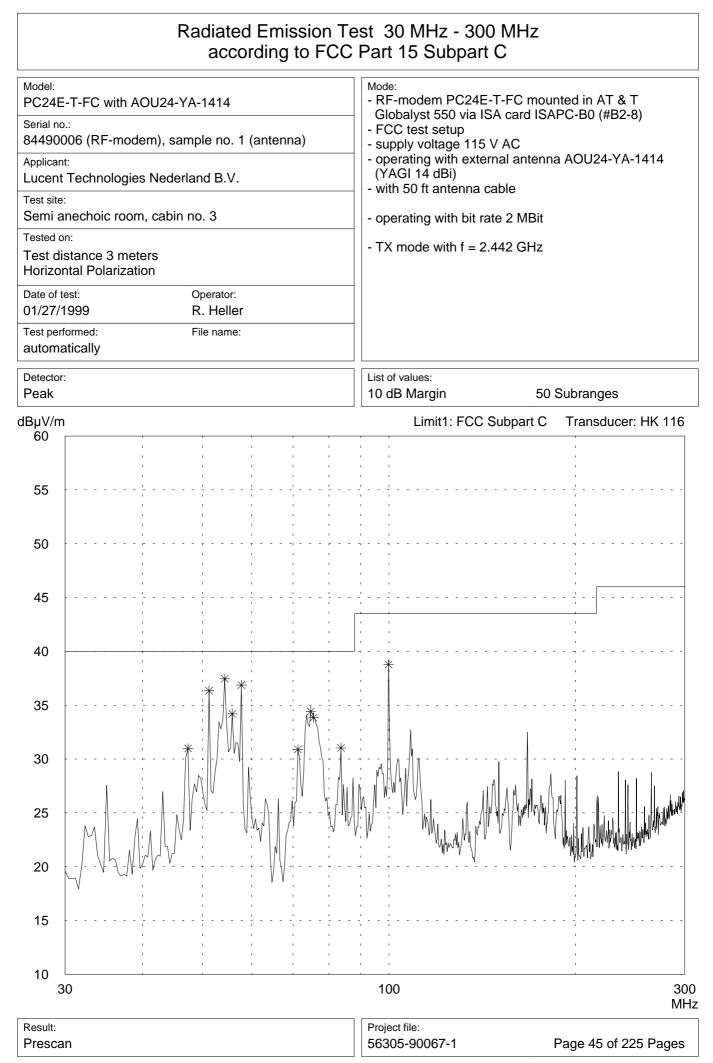
Frequency MHz	Reading dBµV	Correction factor dB	Value dBµV/m	Limit dBµV/m	Limit exceeded
$\begin{array}{c} 48.0\\ 52.0\\ 56.0\\ 58.5\\ 60.0\\ 72.0\\ 75.2\\ 84.0\\ 100.3\\ 167.1\\ 200.5\\ 300.7\\ 334.1\\ 400.9\\ 467.7\\ 481.5\\ 501.2\\ 509.8\\ 515.5\\ 534.6\\ 538.1\\ 601.4\\ 704.0\\ 750.0\\ 768.5\\ 800.0\\ \end{array}$	$\begin{array}{c} 16.0\\ 19.5\\ 18.0\\ 23.5\\ 16.0\\ 16.5\\ 17.5\\ 17.0\\ 25.0\\ 18.5\\ 12.0\\ 11.0\\ 14.0\\ 15.5\\ 10.5\\ 10.0\\ 12.0\\ 7.5\\ 10.0\\ 14.5\\ 11.5\\ 9.5\\ 7.5\\ 4.5\\ 4.0\\ 3.5\end{array}$	$ \begin{array}{c} 11.0\\ 10.7\\ 10.4\\ 10.3\\ 10.2\\ 10.2\\ 10.2\\ 10.4\\ 11.5\\ 15.8\\ 17.1\\ 16.8\\ 18.1\\ 20.4\\ 22.1\\ 22.4\\ 22.9\\ 23.1\\ 23.2\\ 23.6\\ 23.7\\ 25.0\\ 27.7\\ 28.1\\ 28.2\\ 28.5 \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 43.5\\ 43.5\\ 43.5\\ 43.5\\ 43.5\\ 46.0\\ 40.0\\$	
Result: Limit kept			roject file: 6305-90067-1	Page	42 of 225 Pages

Radiated Emiss according to I						
Model: PC24E-T-FC with AOU24-YA-1414 Serial no.:	Globalyst	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)				
84490006 (RF-modem), sample no. 1 (antenna)		ltage 115 V AC				
Applicant: Lucent Technologies Nederland B.V.	(YAGI 14	i with external ant dBi) antenna cable	enna AOU24-YA-14 ²	14		
Test site: Open area test-site I	- operating	with bit rate 2 M	Bit			
Tested on: Test distance 3 meters Vertical Polarization		with f = 2.412 GI				
Date of test:Operator:02/02/1999R. Heller						
Test performed: File name: by hand						
Detector: Quasi-Peak	List of values Selected b					
dBµV/m 70	Limit1: FCC Sub	part C Transdu	icer: HK116 / HL223	(3 m)		
65				· · ·		
60						
55	· · · · · · · · · · · · · · · · · · ·			, , , , , ,		
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45				·		
40 40			***			
35		*	* * * *			
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25						
20				'		
15						
10	· · · · · · · · · · · · · · · · · · ·					
5						
0 <u>30</u> 100		<u>`</u> `		 1000 MHz		
Result: Limit kept	Project file: 56305-900)67-1	Page 43 of 225 F			

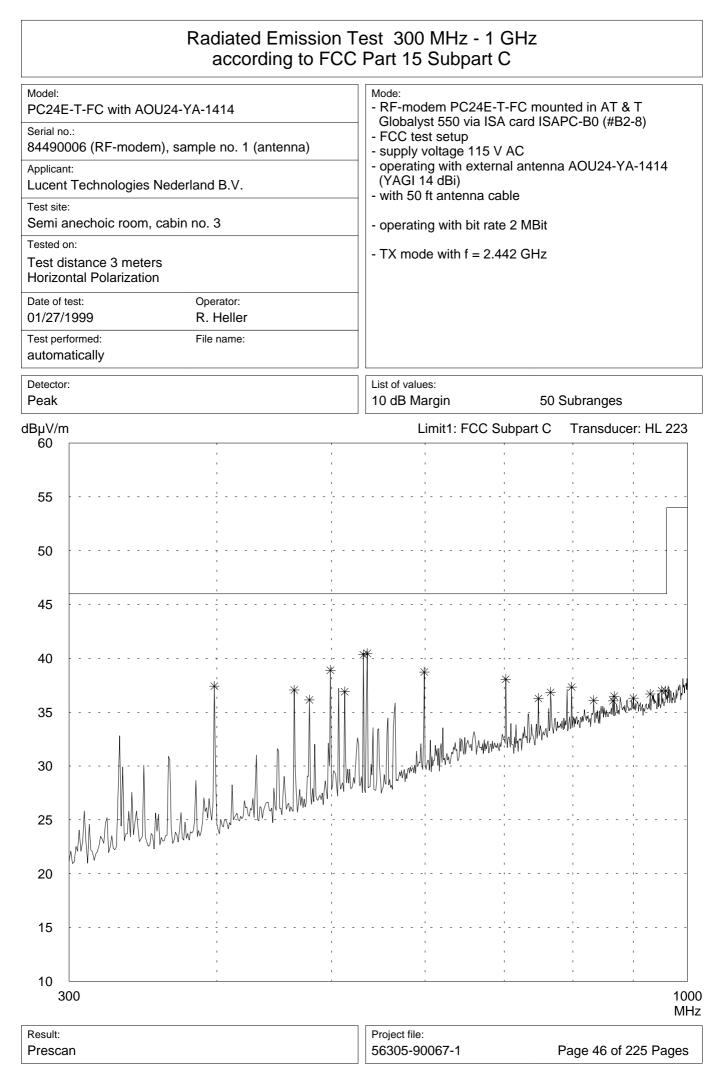
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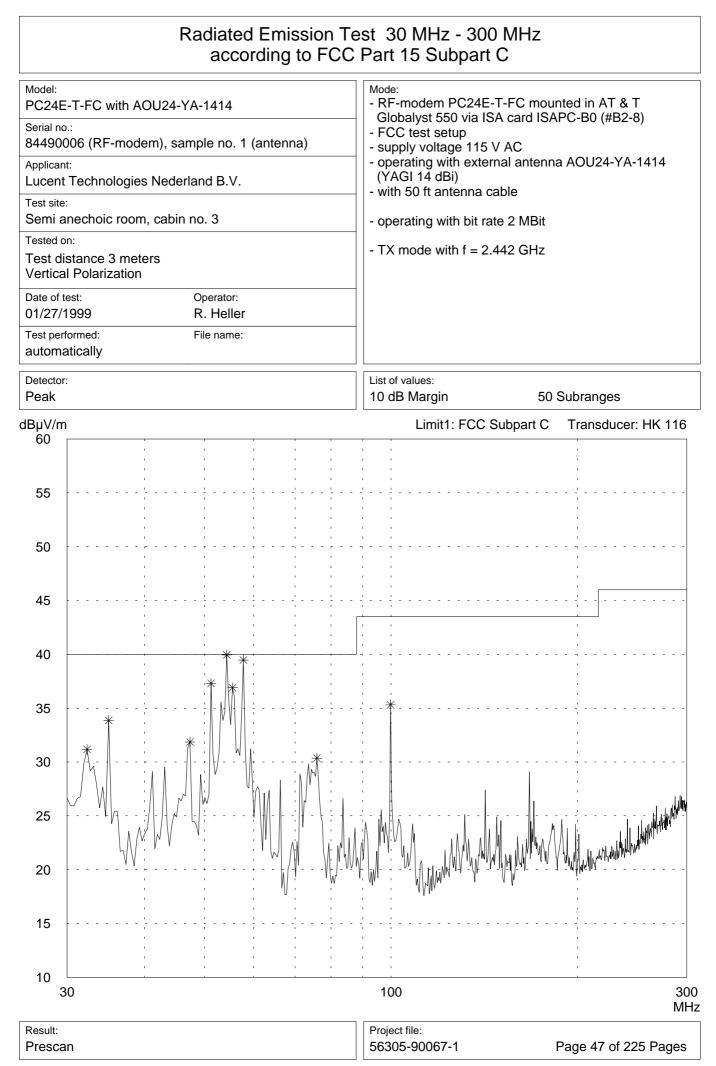
Model: PC24E-T-FC with AOU24-YA-1414 Serial no.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V. Test site: Open area test-site I Tested on: Test distance 3 meters Vertical Polarization Operator: 02/02/1999 R. Heller Test performed: File name: by hand File name:	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable - operating with bit rate 2 MBit - TX mode with f = 2.412 GHz
Detector:	List of values:
Quasi-Peak	Selected by hand

Frequency MHz	Reading dBµV	Correction factor dB	Value dBµV/m	Limit dBµV/m	Limit exceeded
$\begin{array}{c} 36.0 \\ 42.0 \\ 48.0 \\ 52.0 \\ 56.0 \\ 56.6 \\ 58.5 \\ 60.0 \\ 64.0 \\ 66.8 \\ 75.2 \\ 83.5 \\ 84.0 \\ 85.0 \\ 100.3 \\ 167.1 \\ 300.7 \\ 334.1 \\ 400.9 \\ 501.2 \\ 515.5 \\ 534.6 \\ 538.1 \\ 601.4 \\ 704.0 \\ 750.0 \\ 768.5 \\ 793.1 \end{array}$	$\begin{array}{c} 17.0\\ 16.0\\ 18.5\\ 19.5\\ 20.0\\ 19.5\\ 26.0\\ 16.5\\ 16.0\\ 19.5\\ 17.5\\ 17.5\\ 17.5\\ 17.5\\ 17.0\\ 18.0\\ 25.5\\ 12.0\\ 10.5\\ 11.0\\ 14.0\\ 9.5\\ 7.5\\ 13.5\\ 12.0\\ 7.0\\ 7.0\\ 4.5\\ 5.0\\ 2.5\end{array}$	$\begin{array}{c} 13.3\\ 12.0\\ 11.0\\ 10.7\\ 10.4\\ 10.4\\ 10.4\\ 10.2\\ 10.2\\ 10.2\\ 10.2\\ 10.2\\ 10.2\\ 10.4\\ 10.4\\ 10.5\\ 11.5\\ 15.8\\ 16.8\\ 18.1\\ 20.4\\ 22.9\\ 23.2\\ 23.6\\ 23.7\\ 25.0\\ 27.7\\ 28.1\\ 28.2\\ 28.5\end{array}$	30.3 28.0 29.5 30.2 30.4 29.9 36.3 26.7 26.2 29.7 27.7 27.9 27.4 28.5 37.0 27.8 27.3 29.1 34.4 30.7 37.1 35.7 32.0 34.7 32.6 33.2 31.0	$\begin{array}{c} 40.0 \\ 46.0 \\ 40.0 \\ 40$	
Result: Limit kept			roject file: 6305-90067-1	Page	44 of 225 Pages

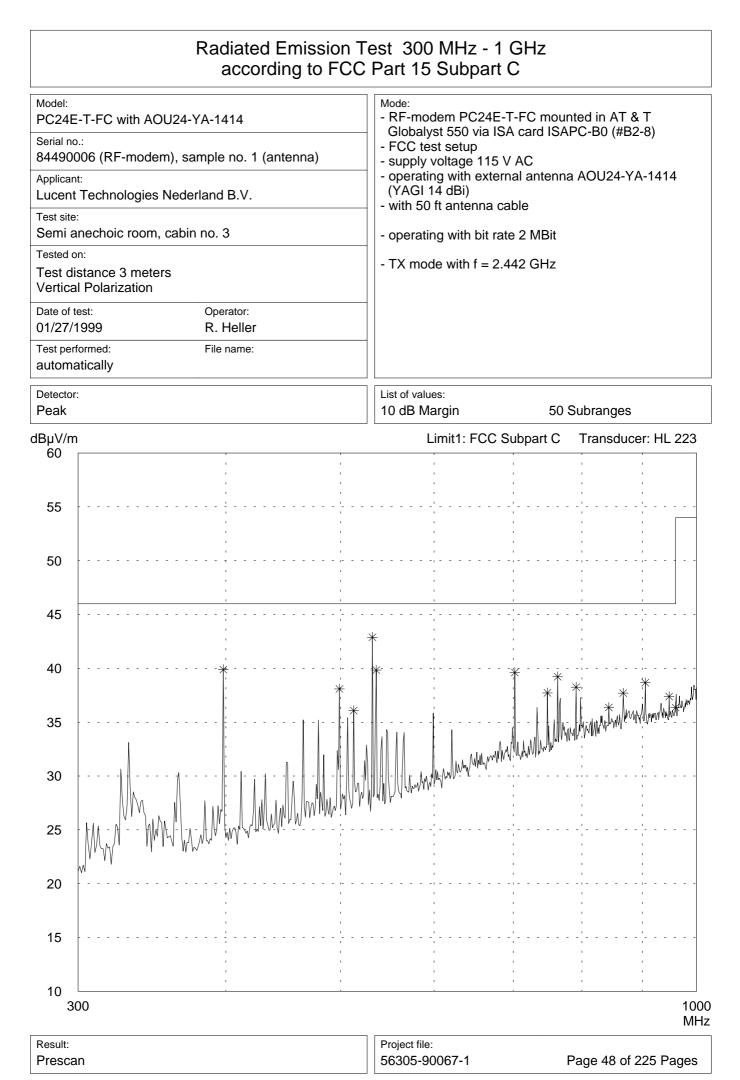


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Model: PC24E-T-FC with AOI Serial no.: 84490006 (RF-moden	U24-YA-1414 n), sample no. 1 (antenna)	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC			
Applicant: Lucent Technologies I	Nederland B.V.	- operating with e (YAGI 14 dBi) - with 50 ft anten	external antenna AOU24-YA-1414		
^{Test site:} Open area test-site I		- operating with t			
Tested on: Test distance 3 meter Horizontal Polarizatior		- TX mode with f = 2.442 GHz			
Date of test: 02/02/1999	Operator: R. Heller		Hz was measured in semi		
Test performed:	File name:	anechoic room (cabin no. 3)		
Detector: Quasi-Peak		List of values: Selected by hand	d		
BµV/m		Limit1: FCC Subpart C			
65					
60	· · · · · · · · · · · · · · · · · · ·	,			
55		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
50	· · · · · · · · · · · · · · · · · · ·				
45	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · ·			
40	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
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10					
5		, , , , , , , , , , , , , , , , , , , ,			
0 30	100		100 MH		
Result: Limit kept		Project file: 56305-90067-1	Page 49 of 225 Pages		

Model: PC24E-T-FC with AOU2 Serial no.: 84490006 (RF-modem), Applicant: Lucent Technologies New Test site: Open area test-site I Tested on: Test distance 3 meters Horizontal Polarization Date of test:	sample no. 1 (antenna)	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable - operating with bit rate 2 MBit - TX mode with f = 2.442 GHz Note:
02/02/1999	R. Heller	Level at 100.3 MHz was measured in semi anechoic room (cabin no. 3)
Test performed: by hand	File name:	
Detector: Quasi-Peak		List of values: Selected by hand

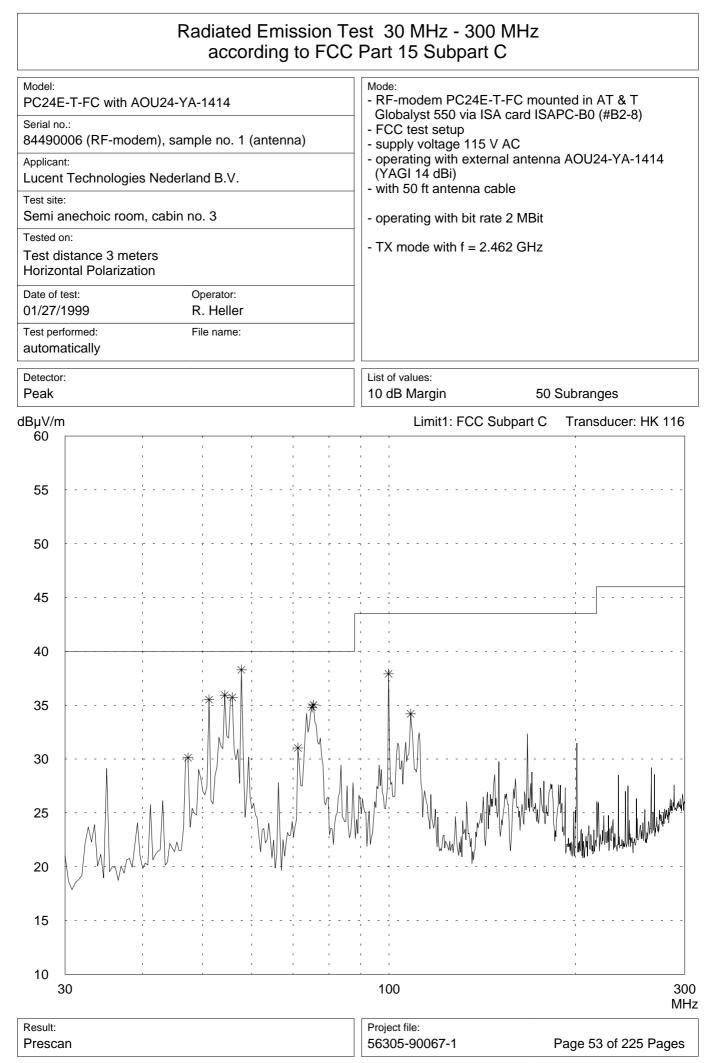
Frequency MHz	Reading dBµV	Correction factor dB	Value dBµV/m	Limit dBµV/m	Limit exceeded
$\begin{array}{c} 48.0\\ 52.0\\ 56.0\\ 58.5\\ 60.0\\ 72.0\\ 75.2\\ 84.0\\ 100.3\\ 167.1\\ 200.5\\ 300.7\\ 334.1\\ 400.9\\ 467.7\\ 481.5\\ 501.2\\ 509.8\\ 515.5\\ 534.6\\ 538.1\\ 601.4\\ 704.0\\ 750.0\\ 768.5\\ 800.0\\ \end{array}$	$ \begin{array}{c} 15.0\\ 19.5\\ 18.0\\ 23.5\\ 16.0\\ 16.0\\ 17.5\\ 17.0\\ 25.0\\ 18.5\\ 12.5\\ 11.0\\ 14.0\\ 15.5\\ 10.5\\ 9.5\\ 12.0\\ 7.0\\ 10.0\\ 14.5\\ 11.5\\ 9.0\\ 7.5\\ 4.5\\ 4.0\\ 3.5\end{array} $	$ \begin{array}{c} 11.0\\ 10.7\\ 10.4\\ 10.3\\ 10.2\\ 10.2\\ 10.2\\ 10.4\\ 11.5\\ 15.8\\ 17.1\\ 16.8\\ 18.1\\ 20.4\\ 22.1\\ 22.4\\ 22.9\\ 23.1\\ 23.2\\ 23.6\\ 23.7\\ 25.0\\ 27.7\\ 28.1\\ 28.2\\ 28.5 \end{array} $	$\begin{array}{c} 26.0\\ 30.2\\ 28.4\\ 33.8\\ 26.2\\ 26.2\\ 27.7\\ 27.4\\ 36.5\\ 34.3\\ 29.6\\ 27.8\\ 32.1\\ 35.9\\ 32.6\\ 31.9\\ 32.6\\ 31.9\\ 34.9\\ 30.1\\ 33.2\\ 38.1\\ 35.2\\ 34.0\\ 35.2\\ 32.6\\ 32.2\\ 32.0\\ \end{array}$	$\begin{array}{c} 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 43.5\\ 43.5\\ 43.5\\ 43.5\\ 46.0\\ 40.0\\$	
Result: Limit kept		11	oject file: 6305-90067-1	Page	50 of 225 Pages

	on Test_30 MHz - 1 GHz CC Part 15 Subpart C				
Model: PC24E-T-FC with AOU24-YA-1414	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)				
Serial no.: 84490006 (RF-modem), sample no. 1 (antenna)	 FCC test setup supply voltage 115 V AC 				
Applicant: Lucent Technologies Nederland B.V.	 operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable 				
Test site: Open area test-site I	- operating with bit rate 2 MBit				
Tested on: Test distance 3 meters Vertical Polarization	- TX mode with f = 2.442 GHz				
Date of test:Operator:02/02/1999R. Heller					
Test performed: File name: by hand					
Detector: Quasi-Peak	List of values: Selected by hand				
dBμV/m l 70	Limit1: FCC Subpart C Transducer: HK116 / HL223 (3 m	n)			
65		-			
60		-			
55		-			
50		-			
45		-			
40		-			
35		-			
30 ******	* * * * * * * * * * * * * * * * * * *	-			
25		-			
20		-			
15		-			
10		-			
5		-			
0 30 100		00			
Result: Limit kept	Project file: 56305-90067-1 Page 51 of 225 Page	ИН:			

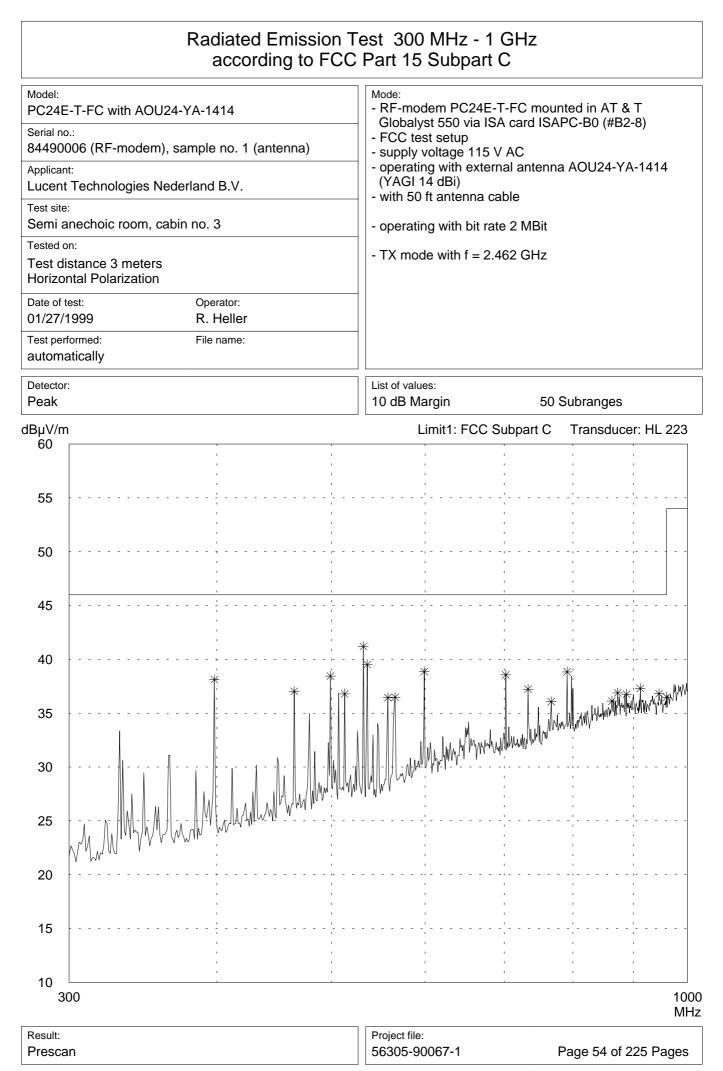
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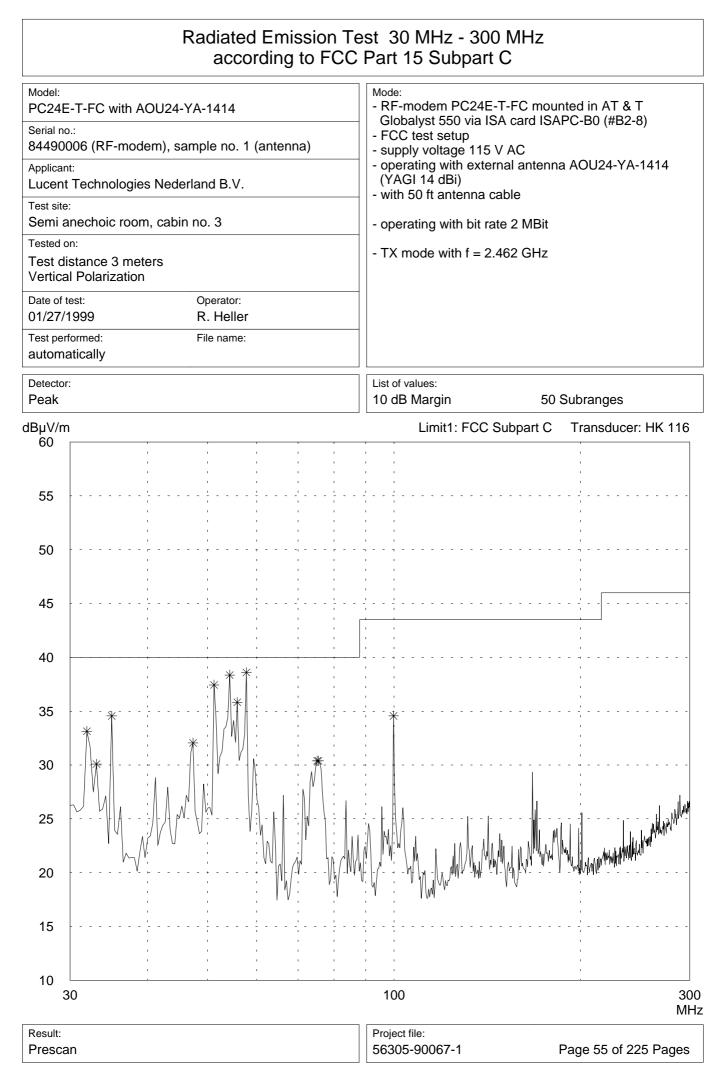
Model: PC24E-T-FC with AOU24-YA-1414 Serial no.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V. Test site: Open area test-site I Test distance 3 meters Vertical Polarization Date of test: Operator: 02/02/1999 R. Heller Test performed: File name: by hand File name:	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable - operating with bit rate 2 MBit - TX mode with f = 2.442 GHz
Detector:	List of values:
Quasi-Peak	Selected by hand

					
Frequency MHz	Reading dBµV	Correction factor dB	Value dBµV/m	Limit dBµV/m	Limit exceeded
36.0 42.0 48.0 52.0 56.0 56.6 58.5 60.0 64.0 66.8 75.2 83.5 84.0 85.0 100.3 167.1 300.7 334.1 400.9 501.2 515.5 534.6 538.1 601.4 704.0 750.0 768.5 793.1	$\begin{array}{c} 17.0\\ 15.5\\ 18.5\\ 19.5\\ 20.5\\ 19.5\\ 26.0\\ 16.5\\ 16.0\\ 19.0\\ 17.5\\ 17.5\\ 17.5\\ 17.5\\ 17.0\\ 18.0\\ 25.5\\ 11.5\\ 10.5\\ 10.5\\ 14.0\\ 9.5\\ 7.0\\ 13.5\\ 12.0\\ 6.5\\ 7.0\\ 4.5\\ 5.0\\ 3.0\end{array}$	$\begin{array}{c} 13.3 \\ 12.0 \\ 11.0 \\ 10.7 \\ 10.4 \\ 10.4 \\ 10.3 \\ 10.2 \\ 10.2 \\ 10.2 \\ 10.2 \\ 10.2 \\ 10.4 \\ 10.4 \\ 10.5 \\ 11.5 \\ 15.8 \\ 16.8 \\ 18.1 \\ 20.4 \\ 22.9 \\ 23.2 \\ 23.6 \\ 23.7 \\ 25.0 \\ 27.7 \\ 28.1 \\ 28.2 \\ 28.5 \end{array}$	30.3 27.5 29.5 30.9 29.9 36.3 26.7 26.2 29.2 27.7 27.9 27.4 28.5 37.0 27.3 27.3 27.3 27.3 27.3 27.3 27.3 27.3 27.3 37.0 27.3 27.3 27.3 27.3 27.3 27.3 27.3 27.3 27.3 30.2 37.1 35.7 31.5 34.7 32.6 33.2 31.5	$\begin{array}{c} 40.0\\ 46.0\\ 40.0\\$	
Result: Limit kept		I I	Project file: 56305-90067-1	Page	52 of 225 Pages

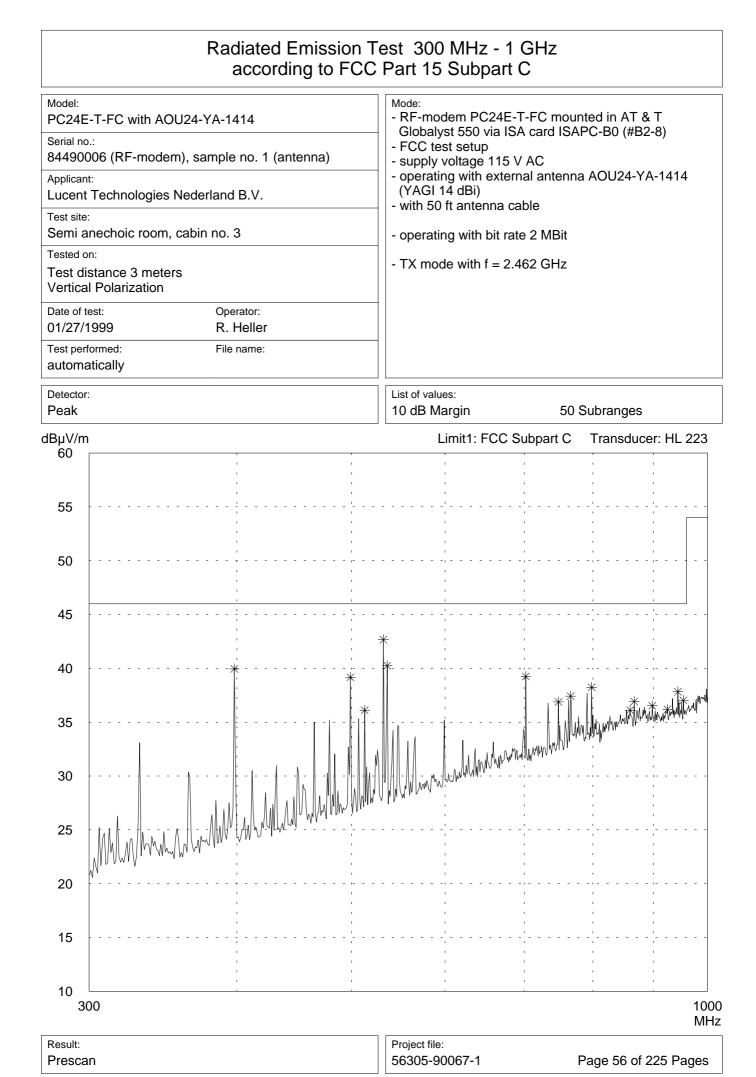


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Model: PC24E-T-FC with AOU24-YA-1414 Serial no.: 84490006 (RF-modem), sample no. 1 (a	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC						
Applicant: Lucent Technologies Nederland B.V.		- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)					
Test site: Open area test-site I Tested on: Test distance 3 meters Horizontal Polarization Date of test: 02/02/1999 R. Heller Test performed: by hand		 with 50 ft antenna cable operating with bit rate 2 MBit TX mode with f = 2.462 GHz 					
		anechoic room (cabin no. 3)					
		Detector: Quasi-Peak		List of values: Selected by han	d		
BμV/m 70	Limi	t1: FCC Subpart C	Transd	ucer: HK116	/ HL223 (3 m)		
65			· · · · · ·	· · ·			
60	, , , , , , , , , , , , , , , , , , , ,		· · · ·	· · ·			
55	·		· · · · · · · ·		· · · ·		
50							
45							
40	*		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
35 30 * *	· -	*	*	***	*		
25	, , , , , , , , , , , , , , , , , , , ,	*	*				
20	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
15	, , ,			, , , , , , , , , , , , , , , , , , ,			
10	1 1 1 1 1	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·			
5	, , , , , , , , , , , , , , , , , , , ,		· · · · · · · · · · · · · · · · · · ·				
0 30	100			· · ·			
Result: Limit kept		Project file: 56305-90067-1		Page 57	of 225 Pages		

Model: PC24E-T-FC with AOU Serial no.: 84490006 (RF-modem Applicant: Lucent Technologies N Test site: Open area test-site I Tested on: Test distance 3 meters Horizontal Polarization Date of test: 02/02/1999), sample no. 1 (antenna) ederland B.V.	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable - operating with bit rate 2 MBit - TX mode with f = 2.462 GHz Note: Level at 100.3 MHz was measured in semi
Test performed: by hand	File name:	anechoic room (cabin no. 3)
Detector: Quasi-Peak		List of values: Selected by hand

Frequency MHz	Reading dBµV	Correction factor dB	Value dBµV/m	Limit dBµV/m	Limit exceeded
$\begin{array}{c} 48.0\\ 52.0\\ 56.0\\ 58.5\\ 60.0\\ 72.0\\ 75.2\\ 84.0\\ 100.3\\ 167.1\\ 200.5\\ 300.7\\ 334.1\\ 400.9\\ 467.7\\ 481.5\\ 501.2\\ 509.8\\ 515.5\\ 534.6\\ 538.1\\ 601.4\\ 704.0\\ 750.0\\ 768.5\\ 800.0\\ \end{array}$	$\begin{array}{c} 15.5\\ 19.5\\ 19.5\\ 18.0\\ 23.5\\ 16.0\\ 16.5\\ 17.5\\ 17.0\\ 25.0\\ 18.5\\ 12.5\\ 10.5\\ 14.5\\ 15.5\\ 10.5\\ 9.5\\ 12.0\\ 8.0\\ 9.5\\ 12.0\\ 8.0\\ 9.5\\ 14.5\\ 11.5\\ 9.0\\ 7.5\\ 4.5\\ 4.0\\ 3.5\end{array}$	$ \begin{array}{c} 11.0\\ 10.7\\ 10.4\\ 10.3\\ 10.2\\ 10.2\\ 10.2\\ 10.4\\ 11.5\\ 15.8\\ 17.1\\ 16.8\\ 18.1\\ 20.4\\ 22.1\\ 22.4\\ 22.9\\ 23.1\\ 23.2\\ 23.6\\ 23.7\\ 25.0\\ 27.7\\ 28.1\\ 28.2\\ 28.5 \end{array} $	$\begin{array}{c} 26.5\\ 30.2\\ 28.4\\ 33.8\\ 26.2\\ 26.7\\ 27.7\\ 27.4\\ 36.5\\ 34.3\\ 29.6\\ 27.3\\ 32.6\\ 35.9\\ 32.6\\ 35.9\\ 32.6\\ 31.9\\ 34.9\\ 31.1\\ 32.7\\ 38.1\\ 35.2\\ 34.0\\ 35.2\\ 32.6\\ 32.2\\ 32.0\\ \end{array}$	$\begin{array}{c} 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 43.5\\ 43.5\\ 43.5\\ 43.5\\ 43.5\\ 46.0\\ 40.0\\$	
Result: Limit kept		11	oject file: 6305-90067-1	Page	58 of 225 Pages

	on Test_30 MHz - 1 GHz CC Part 15 Subpart C				
Model: PC24E-T-FC with AOU24-YA-1414	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC				
Serial no.: 84490006 (RF-modem), sample no. 1 (antenna)					
Applicant: Lucent Technologies Nederland B.V.	 operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable 				
Test site: Open area test-site I	- operating with bit rate 2 MBit				
Tested on: Test distance 3 meters Vertical Polarization	- TX mode with f = 2.462 GHz				
Date of test:Operator:02/02/1999R. Heller					
Test performed: File name: by hand					
Detector: Quasi-Peak	List of values: Selected by hand				
dBμV/m 70	Limit1: FCC Subpart C Transducer: HK116 / HL223 (3 m				
65					
60					
55					
50					
45					
40					
35	·····*···*···*···*				
30 ************	* * *				
25	* * * *				
20					
15					
10					
5					
0 <u>30 100</u>	10				
Result: Limit kept	M Project file: 56305-90067-1 Page 59 of 225 Page:				

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Model: PC24E-T-FC with AOU24-YA-1414 Serial no.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V. Test site: Open area test-site I Tested on: Test distance 3 meters Vertical Polarization Operator: 02/02/1999 R. Heller Test performed: File name: by hand File name:	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable - operating with bit rate 2 MBit - TX mode with f = 2.462 GHz
Detector:	List of values:
Quasi-Peak	Selected by hand

Frequency MHz	Reading dBµV	Correction factor dB	Value dBµV/m	Limit dBµV/m	Limit exceeded
$\begin{array}{c} 36.0 \\ 42.0 \\ 48.0 \\ 52.0 \\ 56.0 \\ 56.6 \\ 58.5 \\ 60.0 \\ 64.0 \\ 66.8 \\ 75.2 \\ 83.5 \\ 84.0 \\ 85.0 \\ 100.3 \\ 167.1 \\ 300.7 \\ 334.1 \\ 400.9 \\ 501.2 \\ 515.5 \\ 534.6 \\ 538.1 \\ 601.4 \\ 704.0 \\ 750.0 \\ 768.5 \\ 793.1 \end{array}$	$\begin{array}{c} 17.0\\ 16.0\\ 18.5\\ 19.5\\ 20.5\\ 20.0\\ 25.5\\ 16.5\\ 16.0\\ 19.0\\ 18.0\\ 17.5\\ 17.0\\ 17.5\\ 25.5\\ 11.5\\ 10.5\\ 11.0\\ 14.0\\ 9.5\\ 8.0\\ 13.5\\ 12.0\\ 6.5\\ 7.5\\ 4.5\\ 5.0\\ 3.0\end{array}$	$\begin{array}{c} 13.3\\ 12.0\\ 11.0\\ 10.7\\ 10.4\\ 10.4\\ 10.3\\ 10.2\\ 10.2\\ 10.2\\ 10.2\\ 10.2\\ 10.4\\ 10.4\\ 10.5\\ 11.5\\ 15.8\\ 16.8\\ 18.1\\ 20.4\\ 22.9\\ 23.2\\ 23.6\\ 23.7\\ 25.0\\ 27.7\\ 28.1\\ 28.2\\ 28.5\end{array}$	30.3 28.0 29.5 30.2 30.9 30.4 35.8 26.7 26.2 29.2 28.2 27.9 27.4 28.0 37.0 27.3 27.3 29.1 34.4 32.4 31.2 37.1 35.7 31.5 35.2 32.6 33.2 31.5	$\begin{array}{c} 40.0\\ 46.0\\ 40.0\\$	
Result: Limit kept			roject file: 6305-90067-1	Page	60 of 225 Pages



Model:	PC24E-T-FC with AOU24-YA-1414
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	01/28/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.412 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.3900	vertical	59.6		0.6	20.7	59.6	74
2.3970	vertical	73.5		0.6	20.7	73.5	NRB
2.3975	vertical	76.0		0.6	20.7	76.0	NRB
2.4000	vertical	74.2		0.6	20.7	74.2	NRB
2.4108	vertical	112.7		0.6	20.7	112.7	OB
2.4297	vertical	73.7		0.6	20.7	73.7	OB
4.8303	vertical	39.8	-94.8		27.3	39.5	74
7.2417	vertical	40.9	-94.8		29.9	42.1	NRB
8.2513	vertical	43.1	-96.6		33.4	43.8	74
9.6467	vertical	44.5	-95.0		33.4	45.4	NRB

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter). NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 112.7 dBµV/m.

Result: The limits are kept

Model: PC24E-T-FC with AOU24-YA-1414						
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup 					
Applicant: Lucent Technologies Nederland B.V.	 supply voltage 115 V AC operating with external antenna AOU24-YA-1414 					
	(YAGI 14 dBi) - with 50 ft antenna cable					
	- operating with bit rate 2 MBit					
	- TX mode with f = 2.412 GHz Test distance: 3 meters					
	Polarization: horizontal					
	· · · · · · · · · · · · · · · · · · ·					
Ref.Level 110 dBµV/m 10 dB dB/Div.	ATT 10 dB Ref. Offset 21.3 dB					
	ATT 10 dB Ref. Offset 21.3 dB					
	ATT 10 dB Ref. Offset 21.3 dB					
10 dB dB/Div.	ATT 10 dB Ref. Offset 21.3 dB					
10 dB dB/Div.	ATT 10 dB Ref. Offset 21.3 dB					
10 dB dB/Div.						
10 dB dB/Div.						

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Start 2.337 GH RBW 1 MHz	lz		VBW 1 MHz		Stop 2. SWP 2	.487 GHz 0 ms
		**** Mu	ti Marker ****		-	
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7	2.399333 GHz 2.404333 GHz 2.410833 GHz 2.421333 GHz 2.429333 GHz	73.64 dE 93.78 dE 73.29 dE	3μV/m 3μV/m 3μV/m		
Tested by: Rainer Helle	Nr.8 r		Project-No.: 56305-90067-1			
Date: 01/28/1999				Page	of	pages

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Model: PC24E-T-FC with AO	U24-YA-1414		Mode:					
Serial No.: 84490006 (RF-moder	Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)			 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup 				
Applicant: Lucent Technologies I	Nederland B.V.		- supply	voltage 11	5 V AC ernal anten	ina AOU24	-YA-1414	
······································			(YAGI 1					
			- operati	ng with bit	rate 2 MBit			
			- TX mo	de with f =	2.412 GHz			
		· · · · · · · · · · · · · · · · · · ·	Test dist	ance: 3 m	eters			
			Polarizat	tion: vertica	al ·	ş · ·		
Ref.Level 120 dBµV/m 10 dB dB/Div.			ATT 5 dB	······································	-	Ref. Offs	set 21.3 dB	
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all the second	MANALAN MANA AND					· · · · ·	1	
	·							
Start 2.337 GHz RBW 1 MHz			VBW 1 MH		L	Stop 2.48 SWP 20 (

**** Multi Marker **** Nr.1 2.390000 GHz 59.62 dBµV/m Nr.2 2.397000 GHz 73.51 dBµV/m Nr.3 2.397500 GHz 76.00 dBµV/m Nr.4 2.400000 GHz 74.19 dBµV/m Nr.5 2.410833 GHz 112.69 dBµV/m Nr.6 2.429667 GHz 73.69 dBµV/m Nr.7 Nr.8 Tested by: Project-No.: **Rainer Heller** 56305-90067-1 Date: Page of pages 01/28/1999



Model:	PC24E-T-FC with AOU24-YA-1414
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	01/28/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.412 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.3900	vertical	48.2		0.6	20.7	48.2	54
2.3930	vertical	53.4		0.6	20.7	53.4	NRB
2.3983	vertical	70.5		0.6	20.7	70.5	NRB
2.4000	vertical	67.8		0.6	20.7	67.8	NRB
2.4097	vertical	108.5		0.6	20.7	108.5	OB
2.4322	vertical	53.5		0.6	20.7	53.5	OB
4.8241	vertical	30.8	-103.6		27.3	30.7	54

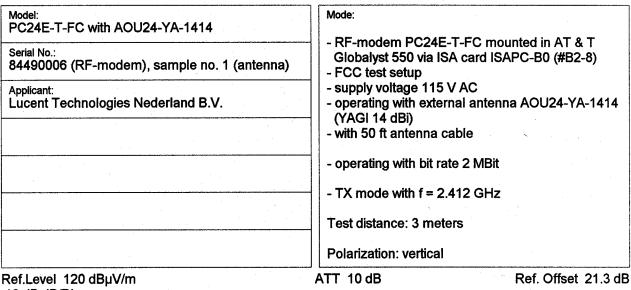
Note:OB means "operation band" (2400 - 2483.5 MHz); in this case
limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB
below maximum in-band-power equivalent to 108.5 dBµV/m.

Result: The limits are kept

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Model: PC24E-T	-FC with A	OU24-YA-1	414		Mode:	dom BC2		unted in AT	9 т	
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)					 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) 					
Applicant: Lucent Technologies Nederland B.V.										
					- with 50		a cable			
					- operatir	ng with bi	t rate 2 MBit		-	
					- TX moo	de with f =	= 2.412 GHz			
				· · ·	Test dist	ance: 3 n	neters		· · · · · · · · · · · · · · · · · · ·	
		· .			Polarizat	ion: horiz	ontal	5 · ·	·	
Ref.Level 10 dB dB/	110 dBµV/ /Div.	m			ATT 10 dE	3	· · · · ·	Ref. Offse	et 21.3 dB	
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tart 2.337	' GHz		1	L	4 <u></u>			Stop 2.48	37 GHz

RBW 1 MHz			VBW 100 Hz	SWP 4.60 s
		**** Multi N	Marker ****	
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.390000 GHz 2.398333 GHz 2.400000 GHz 2.402333 GHz 2.409667 GHz 2.422667 GHz	42.74 dBμV/m 51.63 dBμV/m 48.45 dBμV/m 53.56 dBμV/m 88.73 dBμV/m 53.96 dBμV/m	
Tested by: Rainer Heller			Project-No.: 56305-90067-1	· .
Date:			Page	of pages



10 dB dB/Div.

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tart 2.337	GHz	 				 Stop 2.48	37 GHz

SWP 4.60 s **RBW 1 MHz VBW 100 Hz** **** Multi Marker **** 2.390000 GHz 48.17 dBµV/m Nr.1 53.35 dBµV/m Nr.2 2.393000 GHz 2.398333 GHz 70.49 dBµV/m Nr.3 2.400000 GHz 67.77 dBµV/m Nr.4 2.409667 GHz Nr.5 108.45 dBµV/m 2.432167 GHz 53.45 dBµV/m Nr.6 **Nr.7** Nr.8 Project-No.: Tested by: 56305-90067-1 **Rainer Heller** Date: Page of pages 01/28/1999



Model:	PC24E-T-FC with AOU24-YA-1414
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	01/28/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.442 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4272	vertical	73.4		0.6	20.7	73.4	OB
2.4445	vertical	113.2		0.6	20.7	113.2	OB
2.4543	vertical	73.7		0.6	20.7	73.7	OB
4.8894	vertical	45.3	-89.2		27.3	45.1	74
6.2704	vertical	40.6	-95.5		29.9	41.5	NRB
7.3331	vertical	45.2	-91.5		29.9	45.5	74
8.3680	vertical	43.2	-96.7		33.4	43.7	74
9.7680	horizontal	45.1	-94.9		33.4	45.5	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 113.2 dBμV/m.

Result: The limits are kept

L	to an and the second		*****							
Model: PC24E-T-	FC with A	OU24-YA-	1414		Mode:					
Serial No.: 84490006	(RF-mod	em), samı	ole no. 1 (an	ntenna)	 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup 					
Applicant: Lucent Te	chnologie	s Nederlaı	nd B.V.		 supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable 					
					 - operating with bit rate 2 MBit - TX mode with f = 2.442 GHz Test distance: 3 meters 					
					Polarization: horizontal					
Ref.Level 10 dB dB/		'n			ATT 10 d	IB		Ref. Of	fset 21.3 dB	
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							۵. 			
				2	4					
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						-		· · · · · · · · ·		
Start 2.367		<u> </u>	<u></u>	<u> </u>				Stop 2.5	017 GHz	
RBW 1 MH	Z ·				VBW 1 M	Hz		SWP 20	ms	
					Marker ***	• * ·				
Nr.1 2.428000 GHz Nr.2 2.434000 GHz Nr.3 2.444500 GHz Nr.4 2.451500 GHz Nr.5 2.451500 GHz				60.84 dBj 73.06 dBj 94.06 dBj 73.34 dBj	uV/m uV/m					
	Ν	lr.6 lr.7 lr.8								
Tested by: Rainer He	ller				Project-No					

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Date:

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Model: PC24E-T-FC with AOU24	I-YA-1414	Mode:					
Serial No.: 84490006 (RF-modem),	sample no. 1 (antenna)	 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 					
Applicant: Lucent Technologies Nec	lerland B.V.						
		(YAGI 14 dBi) - with 50 ft antenna cable					
		- operating with bit ra					
		- TX mode with f = 2.442 GHz Test distance: 3 meters					
		Polarization: vertical					
Ref.Level 120 dBµV/m 10 dB dB/Div.		ATT 10 dB	Ref. Offset 21.3 dB				
		3 vt					
	12	45					
mannenderman	andmanuhmadid	Montershows	motor duarney would have the management				
Start 2.367 GHz RBW 1 MHz		VBW 1 MHz	Stop 2.517 GHz SWP 20 ms				
	**** Multi M	Marker ****					
Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.427167 GHz 2.428000 GHz 2.444500 GHz 2.454333 GHz 2.457167 GHz	73.38 dBμV/r 74.40 dBμV/r 113.20 dBμV/r 73.69 dBμV/r 73.26 dBμV/r	n n n				
Tested by: Rainer Heller		Project-No.: 56305-90067-1					
Date: 01/28/1999			Page of pages				



Model:	PC24E-T-FC with AOU24-YA-1414
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	01/28/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.442 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4237	vertical	54.0		0.6	20.7	54.0	OB
2.4428	vertical	109.5		0.6	20.7	109.5	OB
2.4617	vertical	53.9		0.6	20.7	53.9	OB
4.8840	vertical	40.7	-93.5		27.3	40.8	54
7.3292	vertical	38.9	-97.7		29.9	39.2	54
9.7682	horizontal	43.0	-96.8		33.4	43.6	54

Note:OB means "operation band" (2400 - 2483.5 MHz); in this case
limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB
below maximum in-band-power equivalent to 109.5 dBµV/m.

Result: The limits are kept

Model: PC24E-T-FC with AOU24-YA-1414	Mode:	
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	- RF-modem PC24E-T-FC mour Globalyst 550 via ISA card ISAF - FCC test setup	
Applicant:	- supply voltage 115 V AC	
Lucent Technologies Nederland B.V.	- operating with external antenna	AOU24-YA-1414
	(YAGI 14 dBi)	
	- with 50 ft antenna cable	
	- operating with bit rate 2 MBit	
	- TX mode with f = 2.442 GHz	
	- 1/ 1100e with 1 = 2.442 GHZ	
	Test distance: 3 meters	
	Polarization: horizontal	
Ref.Level 110 dBµV/m 10 dB dB/Div.	ATT 10 dB	Ref. Offset 21.3 dB

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tart 2.367	' GHz	1		· · · · · · · · · · · · · · · · · · ·		 Stop 2.51	7 GHz

RBW 1 MHz

VBW 100 Hz

Stop 2.517 GHz SWP 4.60 s

		**** Multi M	Marker ****
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.428667 GHz 2.432167 GHz 2.445000 GHz 2.452667 GHz	47.56 dBμV/m 53.20 dBμV/m 89.21 dBμV/m 53.43 dBμV/m
Tested by: Rainer Heller			Project-No.: 56305-90067-1
Date: 01/28/1999			Page of pages

			· · · · · · · · · · · · · · · · · · ·	******************				
Model: PC24E-T-FC with AOU24-YA-		Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)						
Serial No.: 84490006 (RF-modem), samp	itenna)							
Applicant: Lucent Technologies Nederlar								
,			 - with 50 ft antenna cable - operating with bit rate 2 MBit - TX mode with f = 2.442 GHz 					
				tance: 3 me				
		······		tion: vertica				
Ref.Level 120 dBµV/m 10 dB dB/Div.			ATT 10 di	B		Ref. Offs	set 21.3 dB	
			}					
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		$t_{\rm s}$	4 / *	h				
	1/			ha				
						-		
Start 2.367 GHz RBW 1 MHz	VBW 100	Hz	Stop 2.517 GHz SWP 4.60 s					
		**** Multi M	larker ***'	ŧ				
Nr.1 Nr.2		67 GHz 333 GHz		- 53.96 dBµ∨ 68.00 dBµ∨				
Nr.3	109.47 dBμV/m 63.33 dBμV/m 53.86 dBμV/m							
Nr.4 Nr.5								
Nr.6 Nr.7 Nr.8				·				
Tested by:			Project-No					
Rainer Heller	56305-90067-1							

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

Model:	PC24E-T-FC with AOU24-YA-1414
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	01/28/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.462 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4473	vertical	73.6		0.6	20.7	73.6	OB
2.4608	vertical	113.5		0.6	20.7	113.5	OB
2.4743	vertical	73.2		0.6	20.7	73.2	OB
2.4835	vertical	64.8		0.6	20.7	64.8	74
2.4862	vertical	64.9		0.6	20.7	64.9	74
2.5000	vertical	62.9		0.6	20.7	62.9	74
4.9296	vertical	48.1	-86.3		27.3	48.0	74
7.3906	vertical	42.8	-93.3		30.0	43.7	74
8.4473	vertical	45.1	-95.1		33.4	45.3	74
9.8473	vertical	45.6	-94.1		33.4	46.3	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 113.5 dBµV/m.

Result: The limits are kept

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

Model: PC24E-T-FC	with AOU24-'	YA-1414	·· .	Mode:	dem PC24	E-T-FC m	nounted in AT & T
Serial No.: 84490006 (RF	tenna)	Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup					
Applicant: Lucent Techn	ologies Nede	rland B.V.					nna AOU24-YA-1414
					ft antenna	cable	
				- operatii	ng with bit	rate 2 MB	it
	······································			- TX mod	de with f =	2.462 GH	Z
				Test dist	ance: 3 me	eters	
				Polarizat	tion: horizo	ntal	
Ref.Level 110 10 dB dB/Div.	dBµV/m		-	ATT 10 dE	3		Ref. Offset 21.3 dB
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						-			

Start 2.387 GHz RBW 1 MHz

VBW 1 MHz

Stop 2.537 GHz SWP 20 ms

		**** Multi M	Marker ****	
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.453833 GHz 2.464500 GHz 2.471167 GHz 2.483500 GHz 2.486833 GHz 2.500000 GHz	73.29 dBμV/m 94.85 dBμV/m 73.67 dBμV/m 55.54 dBμV/m 58.02 dBμV/m 56.68 dBμV/m	
Tested by: Rainer Heller			Project-No.: 56305-90067-1	
Date: 01/28/1999		· · · ·	Page o	of pages

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

	·						
Model: PC24E-T-FC with AOU24-1	(A-1414	- · ·	Mode:				
Serial No.: 84490006 (RF-modem), sa	mple no. 1 (an	itenna)	Global	dem PC24E yst 550 via IS est setup			
Applicant: Lucent Technologies Nede	rland B.V.	5	- supply - operati	voltage 115	V AC rnal anter	nna AOU	J24-YA-1414
	And Madarda da ang ang ang ang ang ang ang ang ang an	·····		14 dBi)) ft antenna c	able		
				ing with bit ra	`		
				de with f = 2 tance: 3 met		2	
		÷	Polariza	tion: vertical			
Ref.Level 120 dBµV/m 10 dB dB/Div.			ATT 10 d	В	· ·	Ref. C	Offset 21.3 dB
		2 الحر					
					····		
		· · · · · · · · · · · · · · · · · · ·	3				
mulaturellander	manutant			MA 5	6 WMMambu	mmultiple	howman
					1944 (1944)		
					-		
					· -		
Start 2.387 GHz RBW 1 MHz			VBW 1 MH	łz		Stop 2 SWP 2	2.537 GHz 20 ms
	4	**** Multi I	Marker ****	•			
Nr.1	2.4473	333 GHz		- 73.56 dBµV/⊧	m		
Nr.2 Nr.3		33 GHz 33 GHz		13.45 dBµV/i			
Nr.4		500 GHz		73.15 dBµV/i 64.75 dBµV/i			
Nr.5		67 GHz	e	64.93 dBµV/i	m		
Nr.6 Nr.7 Nr.8	2.5000)00 GHz	e	52.92 dBµV/⊧	m		
Tested by:			Project-No				
Rainer Heller			56305-9	0067-1	· · · · · · · · · · · · · · · · · · ·		
Date: 01/28/1999					Page	of	pages



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

Model:	PC24E-T-FC with AOU24-YA-1414
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	01/28/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.462 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4433	vertical	53.7		0.6	20.7	53.7	OB
2.4595	vertical	109.8		0.6	20.7	109.8	OB
2.4812	vertical	53.8		0.6	20.7	53.8	OB
2.4835	vertical	49.1		0.6	20.7	49.1	54
2.4853	vertical	49.7		0.6	20.7	49.7	54
2.5000	vertical	45.2		0.6	20.7	45.2	54
4.9244	vertical	45.9	-88.3		27.3	46.0	54
8.4402	vertical	42.2	-97.9		33.4	42.5	54
9.8482	vertical	43.9	-96.2		33.4	44.2	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 109.8 dBµV/m.

Result: The limits are kept

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

Model: PC24E-T-FC with Serial No.: 84490006 (RF-m			enna)		st 550 via		ounted in A SAPC-B0 (#	
Applicant: Lucent Technolo	gies Nederlan	d B.V.	•••••	- operatii			nna AOU24	-YA-1414
				(YAGI 1 - with 50	ft antenna	cable		n
						rate 2 MBit		
					ance: 3 m	2.462 GHz eters	-	
			-		tion: horizo			
Ref.Level 110 dB 10 dB dB/Div.	µV/m	· · · · · · · · · · · · · · · · · · ·		ATT 10 dE	3		Ref. Off	set 21.3 d
	· · ·		· · ·					
				2				
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				S				
			1	3				
			\sim		4	5		
tart 2.387 GHz RW 1 MHz				VBW 100	Hz		Stop 2.5 SWP 4.6	

		**** Multi M	Marker ****				
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.452000 GHz 2.462833 GHz 2.472500 GHz 2.483500 GHz 2.500000 GHz	52.31 dBμV/m 89.82 dBμV/m 53.83 dBμV/m 42.36 dBμV/m 42.41 dBμV/m				
Tested by: Rainer Heller			Project-No.: 56305-90067-1				
Date: 01/28/1999			Page	of pages			

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

Model: PC24E-T-FC with AOU24-YA-1414	Mode:
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
	- with 50 ft antenna cable
	- operating with bit rate 2 MBit
	- TX mode with f = 2.462 GHz
	Test distance: 3 meters
	Polarization: vertical
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 10 dB Ref. Offset 21.3 dB
2	

art 2.387 GHz 3W 1 MHz	e 4		·	VBW 100 H	Ηz		Stop 2.53 SWP 4.60	67 GHz D s
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·····								

**** Multi Marker ****

	Nr.1	2.443333 GHz	53.68 dBµV/m	
	Nr.2	2.459500 GHz	109.77 dBµV/m	
	Nr.3	2.481167 GHz	53.76 dBµV/m	
	Nr.4	2.483500 GHz	49.11 dBµV/m	
	Nr.5	2.485333 GHz	49.72 dBµV/m	
	Nr.6	2.500000 GHz	45.17 dBµV/m	
	Nr.7			
	Nr.8			
Tested by:			Project-No.:	
Rainer Heller			56305-90067-1	
Date:	· · · ·			**************************************
01/28/1999			Page	of pages



Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-YA-1414 RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 01/28/1999 R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable operating with bit rate 5 MBit TX mode with f = 2.412 GHz
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

·									
Model: PC24E·	-T-FC with /	40U24-YA	-1414		Mode:			Ÿ	
Serial No. 844900		dem), sam	ple no. 1 (an	tenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup				
Applicant Lucent	Applicant: Lucent Technologies Nederland B.V.					y voltage 11 ting with exte		na AOU24-	YA-1414
						14 dBi) 0 ft antenna	cable		
· · · · ·					- opera	ting with bit	rate 5 MBit	•	
					- TX m	ode with f =	2.412 GHz		
					Test dis	stance: 3 me	eters		X
					Polariza	ation: horizo	ntal	, 	
Ref.Leve	el 110 dBµ\ B/Div.	//m		r -	ATT 10 c	JB		Ref. Offs	et 21.3 dB
				5	; t m.				
		*****		4	6				
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				· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·
Start 2.3	37 GHz							Stop 2.48	7 GHz
RBW 1 N					VBW 1 M	Hz	• •• ····	SWP 20 1	
		•		**** Multi I	Marker **	**			
£		Nr.1		000 GHz		 56.04 dBµ∖			
		Nr.2 Nr.3		33 GHz 00 GHz		63.51 dBµ\ 64.80 dBµ\	//m //m		
		Nr.4 Nr.5		33 GHz 67 GHz		73.57 dBµ\ 93.35 dBµ\	//m		
		Nr.6		67 GHz		73.64 dBµ\			
		Nr.7 Nr.8							
Tested by	-				Project-N				
Rainer	Heller				56305-	90067-1			
Date: 01/28/1	1999					· · · ·	Page	of	pages

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Model: PC24E-T-FC	with AOL	J24-YA-1	414		Mode:		• • • • • • • • • • • • • • • • • • •	t	
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V.					 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) 				
					- operati	ng with bit	rate 5 MBit		-
					- TX mod	de with f =	2.412 GHz		
	····				Test dist	ance: 3 me	eters		
	·····				Polarizat	tion: vertica	1 1		
Ref.Level 120 10 dB dB/Div.) dBµV/m				ATT 10 dE	3		Ref. Offs	et 21.3 dB
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						· · ·			

Start 2.337 GHz RBW 1 MHz

VBW 1 MHz

Stop 2.487 GHz SWP 20 ms

		**** Multi	Marker ****
·	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.390000 GHz 2.395000 GHz 2.399333 GHz 2.400000 GHz 2.411167 GHz 2.430833 GHz	64.34 dBμV/m 73.31 dBμV/m 81.31 dBμV/m 81.79 dBμV/m 112.29 dBμV/m 73.89 dBμV/m
Tested by: Rainer Heller			Project-No.: 56305-90067-1
Date: 01/28/1999			Page of pages

Model: PC24E-T-FC	with AOU24-YA-	1414		Mode:						
Serial No.: 84490006 (R	Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)					 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup 				
Applicant: Lucent Techi	nologies Nederlan	ıd B.V.		- supply - operat	voltage 11		nna AOU24	I-YA-1414		
	:			- with 50	14 dBi)) ft antenna	cable				
					ing with bit $de with f =$					
					tance: 3 m		2			
				Polariza	ntion: horizo	ontal				
Ref.Level 110 10 dB dB/Div.		÷		ATT 10 d	В		Ref. Off	set 21.3 dB		
			5	-						
				M						
			3	6						
		1 	+		<u></u>		+			
								-		
	-									
Start 2.337 GH RBW 1 MHz	łz		· .	VBW 100 Hz Stop 2.487 GHz VBW 100 Hz SWP 4.60 s						
		- 	**** Multi (Marker ***	*					
Nr.1 2.390000 GHz Nr.2 2.399667 GHz Nr.3 2.400000 GHz Nr.4 2.402500 GHz Nr.5 2.411167 GHz Nr.6 2.422167 GHz Nr.7 Nr.7				 42.66 dBμ\ 44.87 dBμ\ 44.87 dBμ\ 53.96 dBμ\ 53.96 dBμ\ 53.12 dBμ\	//m //m //m					
Tested by:	Nr.8		· · · · · · · · · · · · · · · · · · ·	Project-No				-		
Rainer Helle	r			56305-9	10067-1					

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01/28/1999

Model: PC24E-T-FC with AOU24-YA-1414	Mode:
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable
	- operating with bit rate 5 MBit
	- TX mode with f = 2.412 GHz
	Test distance: 3 meters
	Polarization: vertical
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 10 dB Ref. Offset 21.3 dB

tart 2.33 BW 1 M				VBW 100 I	Ηz	Stop 2.48 SWP 4.60	97 GHz D s
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		**** Multi M	Marker ****		
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.390000 GHz 2.396000 GHz 2.398667 GHz 2.400000 GHz 2.409667 GHz 2.431333 GHz	46.90 dBμV/m 53.15 dBμV/m 59.29 dBμV/m 59.06 dBμV/m 104.87 dBμV/m 53.96 dBμV/m		
Tested by: Rainer Heller	od else en met en de en fait de un famil		Project-No.: 56305-90067-1		
Date: 01/28/1999	****		Page	of	pages



Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-YA-1414 RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 01/28/1999 R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable operating with bit rate 5 MBit TX mode with f = 2.442 GHz
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

Model: PC24E-T-FC with AOU	124-YA-1414		Mode:				
Serial No.: 84490006 (RF-modem), sample no. 1 (a	ntenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup				
Applicant: Lucent Technologies N	lederland B.V.		- supply voltage	ge 115 V AC th external anten	na AOU24-YA-14	14	
		r. r.	- with 50 ft an				
				th bit rate 5 MBit th f = 2.442 GHz			
			Test distance			-	
Ref.Level 110 dBµV/m			Polarization: I	norizontal	Ref. Offset 21.3	2 dB	
10 dB dB/Div.					Rei. Oliset 21.	JUD	
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and the internet and the second second			· * WW	Manhaman Marina	mannannannan	·····	
		· · ·		,			
Start 2.367 GHz RBW 1 MHz			VBW 1 MHz	I	Stop 2.517 GHz SWP 20 ms	 _	
	and a share the second	**** Multi N	Narker ****				
Nr.1 Nr.2 Nr.3 Nr.4 Nr.4	2 2.443 3 2.451 4	333 GHz 667 GHz 333 GHz	73.77 93.78	dBµV/m dBµV/m dBµV/m			
Nr.6 Nr.7 Nr.8) 7					-	
Tested by: Rainer Heller			Project-No.: 56305-90067	-1			
Date: 01/28/1999	••••••••••••••••••••••••••••••••••••••			Page	of pages		

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Model: PC24E-T-FC with AOU24-YA	\-141 4	Mode:				
Serial No.: 84490006 (RF-modem), san	nple no. 1 (antenna)	Global	odem PC24 yst 550 via l est setup			
Applicant: Lucent Technologies Nederla	and B.V.		voltage 11 ing with exte 14 dBi)		nna AOU24	I-YA-1414
		- with 50) ft antenna			
		, i i i i i i i i i i i i i i i i i i i	ing with bit i de with f = :			
			tance: 3 me		•	
		Polariza	tion: vertica	I		
Ref.Level 120 dBµV/m 10 dB dB/Div.	С	ATT 10 dl	В		Ref. Off	set 21.3 dB
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				• · · · · · · · · · · · · · · · · · · ·		
Start 2.367 GHz				·	Stop 2.5	17 GHz
RBW 1 MHz		VBW 1 MH	łz		SWP 20	
	**** Multi I	Marker ***	F			
Nr.1 Nr.2 Nr.3 Nr.4	2.426000 GHz 2.430500 GHz 2.441500 GHz 2.454833 GHz	11 11 8	74.22 dBμV 82.02 dBμV 12.97 dBμV 80.16 dBμV	//m //m //m	·	-
Nr.5 Nr.6 Nr.7	2.459667 GHz		73.99 dBµ∨	/m		ŗ

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Tested by:	Project-No.:			
Rainer Heller	56305-90067-1			
Date:				
01/28/1999		Page	of	pages

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Nr.8

Model: PC24E-1	Γ-FC with A	AOU24-YA-1	414		Mode:		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)				- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)							
Applicant: Lucent T						 FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable 					
		· · · ·				ng with bit r le with f = 2					
						ance: 3 me ion: horizo					
Ref.Level 10 dB dB	110 dBµ∖ /Div	//m			ATT 10 dE			Ref. Of	fset 21.3 dB		
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		·				- 					
						-					
Start 2.36 RBW 1 M				· · ·	VBW 100 H	Hz		Stop 2.5 SWP 4.	517 GHz 60 s		
			- - -	**** Multi	Marker ****						
	, ,	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.441	333 GHz 167 GHz 167 GHz	8	52.79 dBµ\ 36.47 dBµ\ 53.94 dBµ\	//m				
Tested by: Rainer H					Project-No. 56305-9			· · · · · · · · · · · · · · · · · · ·			
Date:	· · ·								·····		

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of

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Model: PC24E-T-FC with AOU24-YA-1414	Mode:
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup
Applicant:	- supply voltage 115 V AC
Lucent Technologies Nederland B.V.	- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
	- with 50 ft antenna cable
······································	- operating with bit rate 5 MBit
	- TX mode with f = 2.442 GHz
an a	Test distance: 3 meters
	Polarization: vertical
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 10 dB Ref. Offset 21.3 dB

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Ni Ni Ni Ni Ni Ni Ni		**** Multi I	**** Multi Marker ****				
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.426500 GHz 2.430000 GHz 2.441333 GHz 2.454667 GHz 2.460500 GHz	53.53 dBμV/m 56.40 dBμV/m 106.02 dBμV/m 59.09 dBμV/m 53.76 dBμV/m				
Tested by: Rainer Heller			Project-No.: 56305-90067-1	·····			
Date: 01/28/1999			Page	e of pages			



Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-YA-1414 RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 01/28/1999 R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable operating with bit rate 5 MBit TX mode with f = 2.462 GHz
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

	And the second sec						
Model: PC24E-T-FC with AOU24-YA-1	1414	Mode:	,				
Serial No.: 84490006 (RF-modem), samp	le no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup					
Applicant: Lucent Technologies Nederlan	d B.V.	- supply voltage 1 - operating with ex		na AOU2	4-YA-1414		
		(YAGI 14 dBi) - with 50 ft antenn	a cable				
		- operating with bit	rate 5 MBit				
		- TX mode with f =					
		Polarization: horiz					
Ref.Level 110 dBµV/m		ATT 10 dB		Ref. Of	fset 21.3 dB		
10 dB dB/Div.		· · · · · · · · · · · · · · · · · · ·		T			
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			-				
			-				
Start 2.387 GHz RBW 1 MHz		VBW 1 MHz		Stop 2.537 GHz SWP 20 ms			
	**** Multi I	Marker ****					
Nr.1	2.454167 GHz	 73.95 dΒμ	\//m				
Nr.2	2.464833 GHz 2.471167 GHz	94.67 dBµ	V/m				
Nr.3 Nr:4	73.18 dBµ 55.92 dBµ		4.4 2				
Nr.5	57.87 dBµ	V/m					
Nr.6 Nr.7	2.500000 GHz	54.32 dBµ	V/m				
Nr.8							
Tested by:		Project-No.:					
Rainer Heller		56305-90067-1					
Date: 01/28/1999			Page	of	pages		

L						
Model: PC24E-T-FC with AOU24-YA-	1414	Mode:				
Serial No.: 84490006 (RF-modem), samp	ole no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup				
Applicant: Lucent Technologies Nederlar	nd B.V.	- supply voltage 115 V A - operating with external	C antenna AOU24-YA-1414			
	de ,	(YAGI 14 dBi) - with 50 ft antenna cabl	e			
		- operating with bit rate 5 - TX mode with f = 2.462				
		Test distance: 3 meters	2 GHZ			
		Polarization: vertical				
Ref.Level 120 dBµV/m 10 dB dB/Div.	· · · · · · · · · · · · · · · · · · ·	ATT 10 dB	Ref. Offset 21.3 dB			
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			· · · · · · · · · · · · · · · · · · ·			
Start 2.387 GHz RBW 1 MHz		VBW 1 MHz	Stop 2.537 GHz SWP 20 ms			
			SWF 201115			
Nr.1	2.446000 GHz	Marker **** 73.36 dBµV/m				
Nr.2	2.460000 GHz	112.69 dBµV/m				
Nr.3	2.477667 GHz	73.20 dBµV/m				
Nr.4	2.483500 GHz	63.48 dBµV/m				
Nr.5	2.486000 GHz	65.71 dBµV/m				
Nr.6 Nr.7	2.500000 GHz	62.72 dBµV/m				
Nr.8						
Tested by:		Project-No.:				
Rainer Heller Date:		56305-90067-1				

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Model: PC24E-T-FC with AOU24-YA-141 Serial No.: 84490006 (RF-modem), sample I		, Global	odem PC24E yst 550 via IS			
Applicant: Lucent Technologies Nederland E		- supply - operation (YAGI	est setup voltage 115 ing with exter 14 dBi)) ft antenna c	nal anten	na AOU24-	YA-1414
		TX mo	ing with bit ra de with f = 2. tance: 3 mete	462 GHz		
Ref.Level 110 dBµV/m 10 dB dB/Div.	:	ATT 10 d	tion: horizon B	tal	Ref. Offs	et 21.3 dB
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		2				
						Pd
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			4	5		

RBW 1 MHz			SWP 4.60 s		
		**** Multi I	Marker ****		
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.452333 GHz 2.461500 GHz 2.472000 GHz 2.483500 GHz 2.500000 GHz	53.61 dBμV/m 86.06 dBμV/m 53.38 dBμV/m 42.33 dBμV/m 42.41 dBμV/m		
Tested by: Rainer Heller			Project-No.: 56305-90067-1		
Date: 01/28/1999			Page	of pages	

Model: PC24E-T-FC with AOU24-YA-1414 Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)				Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup					
Applicant: Lucent Te	echnologie	s Nederlan	d B.V.		- supply - operati (YAGI	voltage 11	ernal anteni	na AOU24	-YA-1414
						ing with bit i de with f = 2			
	unter and an in the state of the	·				tance: 3 me			
					Polariza	tion: vertica			
Ref.Level 10 dB dB/	120 dBµV/ Div.	m	1		ATT 10 dl	В		Ref. Offs	set 21.3 dB
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art 2.387 GHz BW 1 MHz		l	VBW 100	Hz		Stop 2.53 SWP 4.60	
		**** Mu	lti Marker ***	• * •			
	Nr.1 2.446333 Nr.2 2.459667 Nr.3 2.476167						
			Z	53.96 dBµV	'/m		
	Nr.4	2.483500 GH	Z	46.95 dBµV	/m		

Nr.8		· · · · · · · · · · · · · · · · · · ·		
Tested by: Rainer Heller	Project-No.: 56305-90067-1			
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47.03 dBµV/m

45.20 dBµV/m

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2.485167 GHz

2.500000 GHz

Nr.5

Nr.6 Nr.7



Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-YA-1414 RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 01/28/1999 R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable operating with bit rate 8 MBit TX mode with f = 2.412 GHz
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

Model: PC24E-T-I	FC with A	OU24-YA-	1414		Mode:	ł				
Serial No.: 84490006	Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)				 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) 					
Applicant: Lucent Technologies Nederland B.V.										
						i0 ft antenna	cable			
					- opera	ting with bit	rate 8 MBi	t		
			······································		- TX m	ode with f =	2.412 GH	Z		
		<u></u>	······		Test di	stance: 3 m	eters			
					J [ation: horizo	ontal			
Ref.Level 1 10 dB dB/D		/m	<u></u>		ATT 10 0	dB	X.	Ref. C	Offset 21.3 dB	
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hamparalling	And us should do	hide i a	1 1		\\	mand way it is	1.1.1.1.A			
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				<u> </u>						
Start 2.337 (1		<u> </u>	Stop 2	.487 GHz	
RBW 1 MHz			19.1.1.1.1		VBW 1 M	Hz		SWP 2		
				**** Multi	Marker **	**			· · ·	
		lr.1		000 GHz		55.36 dBµ∖		,		
Nr.2 2.398667 GHz Nr.3 2.400000 GHz Nr.4 2.404000 GHz Nr.5 2.414667 GHz					62.37 dBµ∖ 62.37 dBµ∖					
					73.13 dBµ∖ 93.55 dBµ∖		÷			
Nr.6 2.421167 GHz				73.74 dBµV						
		lr.7 Ir.8								
Tested by:		· · ·			Project-N		in the second			
Rainer Hell	ler				56305-9	90067-1	·····	·		
01/28/1999)				1		Page	of	pages	

			·····				
Model: PC24E-T-FC with AOU24-YA-1414		Mode:					
Serial No.: 84490006 (RF-modem), sample no. 1 (antenn	na)	 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 					
Applicant: Lucent Technologies Nederland B.V.							
		(YAGI - with 50	14 dBi) ft antenna	cable			
	·	- operati	ng with bit	rate 8 MBit	t		
			de with f = :		: ,		
			tion: vertica				
Ref.Level 120 dBµV/m 10 dB dB/Div.		ATT 10 dl		· · · · · · · · · · · · · · · · · · ·	Ref. Off	set 21.3 dB	
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Start 2.337 GHz	I	<u></u>	L	L	Stop 2.48		
RBW 1 MHz		VBW 1 MH	łz		SWP 20		
r							
****	Multi N	larker ***	-				
Nr.1 2.390000			63.43 dBµ∖				
Nr.2 2.396833 (73.89 dBµ∖				
Nr.3 2.398833 (Nr.4 2.40000 (79.27 dBµ∖ 79.68 dBµ∖				
Nr.5 2.40000 Nr.5			/ 9.00 dBµ∿ 12.16 dBµ∖			-	
Nr.6 2.429500 (73.53 dBµ∖				
Nr.7							
Nr.8							
		Draigat Ma	•	· · · · · · · · · · · · · · · · · · ·			
Tested by: Rainer Heller		Project-No 56305-9					
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Date: 01/28/1999				Page	of	pages	

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Model: PC24E-T-FC with AOU24-YA-1414		Mode:	20045			AT 0 T	
Serial No.: 84490006 (RF-modem), sample no. 1 (a	antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup					
Applicant: Lucent Technologies Nederland B.V.		- supply v - operatin	oltage 115 g with exter	V AC rnal anten	na AOU	24-YA-1414	
		(YAGI 14 - with 50 f	4 dBi) ft antenna c	cable			
		- operatin	g with bit ra	ate 8 MBit			
			e with $f = 2$				
			ince: 3 met on: horizon	r			
Ref.Level 110 dBµV/m 10 dB dB/Div.	,	ATT 10 dB			Ref. C	offset 21.3 dB	
			. <u></u>				
	5	~					
	4	6					
1	3						
Start 2.337 GHz RBW 1 MHz	I	VBW 100 H	lz		Stop 2 SWP 4	.487 GHz I.60 s	
	**** Multi M	Marker ****	· · · · · · · · · · · · · · · · · · ·	2			
	00000 GHz	4	2.71 dBµV/	/m			
Nr.3 2.40	99833 GHz 00000 GHz	4	4.69 dBµV/ 4.54 dBµV/	/m			
)2500 GHz 1167 GHz		3.71 dBµV/ 4.79 dBµV/				
Nr.6 2.42 Nr.7 Nr.8	22000 GHz	5	3.73 dBµV/	/m			
Tested by: Rainer Heller		Project-No.: 56305-90					
Date: 01/28/1999				Page	of	pages	

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Model: PC24E	-T-FC with A	OU24-YA-	1414		Mode:					
Serial No 844900	.:)06 (RF-mod	lem), samp	ole no. 1 (ar	ntenna)	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup 					
Applicant Lucent	: Technologie	es Nederlar	nd B.V.		- supply - operati (YAGI	voltage 11 ing with ext 14 dBi)	ernal anten	na AOU24	-YA-1414	
) ft antenna	rate 8 MBit			
							2.412 GHz	<i>t</i>		
			· · · · · ·			ance: 3 me				
					Polariza	tion: vertica	1. 1			
Ref.Leve 10 dB dI	el 120 dBµV B/Div.	/m			ATT 10 dl	B	· · · · · · · · · · · · · · · · · · ·	Ref. Offs	set 21.3 dE	
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VBW 100 Hz

Project-No.:

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46.59 dBµV/m

53.25 dBµV/m

58.20 dBµV/m

58.76 dBµV/m

53.93 dBµV/m

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105.74 dBµV/m

**** Multi Marker ****

2.390000 GHz

2.396167 GHz

2.399333 GHz

2.400000 GHz

2.411500 GHz

2.431000 GHz

Stop 2.487 GHz

SWP 4.60 s

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Start 2.337 GHz

Nr.1

Nr.2

Nr.3

Nr.4

Nr.5

Nr.6

Nr.7 Nr.8

RBW 1 MHz

Tested by:

Date:

Rainer Heller

01/28/1999



Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-YA-1414 RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 01/28/1999 R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable operating with bit rate 8 MBit TX mode with f = 2.442 GHz
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

Model: PC24E-T-FC with AOU24-YA-	1414	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup						
Serial No.: 84490006 (RF-modem), samp	le no. 1 (antenna)							
Applicant: Lucent Technologies Nederlar	ld B.V.	 - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable 						
		- operating with	n bit rate 8 MBit					
	······	- TX mode with	n f = 2.442 GHz					
	· · · · · · · · · · · · · · · · · · ·	Test distance:	3 meters					
		Polarization: h	orizontal					
Ref.Level 110 dBµV/m 10 dB dB/Div.		ATT 10 dB		Ref. Offs	et 21.3 dB			
		2						

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r .					· · · · · · · · · · · · · · · · · · ·				
tart 2.367		<u> </u>		L		•	1	Stop 2.51	7 GHz

RBW 1 MHz VBW 1 MHz SWP 20 ms **** Multi Marker **** 2.434000 GHz 73.24 dBµV/m Nr.1 94.54 dBµV/m Nr.2 2.444667 GHz Nr.3 2.451333 GHz 73.59 dBµV/m Nr.4 Nr.5 Nr.6 Nr.7 Nr.8 Tested by: Project-No.: 56305-90067-1 **Rainer Heller** Date: of Page pages 01/28/1999

h								
Model: PC24E-T-FC with AOU24-Y	A-1414	Mode:	· ·					
Serial No.: 84490006 (RF-modem), sai	mple no. 1 (antenna)	Globalyst 550 via I	 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 					
Applicant: Lucent Technologies Neder	land B V	- supply voltage 115						
		(YAGI 14 dBi) - with 50 ft antenna						
		operating with bit r	ate 8 MBit					
		- TX mode with f = 2	2.442 GHz					
		Test distance: 3 me	ters					
	· · ·	Polarization: vertica	l					
Ref.Level 120 dBµV/m 10 dB dB/Div.		ATT 10 dB	Ref. Offset 21.3 dB					
		3	,					
	N N							
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· · · · · · · · · · · · · · · · · · ·								
			·					
Start 2.367 GHz RBW 1 MHz		VBW 1 MHz	Stop 2.517 GHz SWP 20 ms					
	**** Mul	ti Marker ****						
Nr.1	 2.427167 GHz	 73.76 dΒμV	/m					
Nr.2 Nr.3	2.431000 GHz 2.444667 GHz	78.61 dBµV	//m					
Nr.4 Nr.5	2.454833 GHz 2.458167 GHz	78.00 dBµV	/m					
Nr.6	2.430107 GHZ	73.89 dBµV	/ጠ					
Nr.7 Nr.8								
Tested by:		Project-No.:						
Rainer Heller Date:		56305-90067-1						
01/28/1999		3	Page of pages					

L	- · · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·				
Model: PC24E-T-FC with	AOU24-YA-1	414		Mode:				
Serial No.: 84490006 (RF-m	odem), samp	le no. 1 (ar	ntenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup				
Applicant: Lucent Technologies Nederland B.V.				 supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable 				
						it rate 8 MBi = 2.442 GH		
		i			stance: 3 n			
				Polariz	ation: horiz	ontal		
Ref.Level 110 dBµ 10 dB dB/Div.	IV/m			ATT 10 0	dB	÷	Ref. Offse	ət 21.3 dB
				2				
			1	3				
			<u></u>	–				
Start 2.367 GHz RBW 1 MHz				VBW 100	Hz		Stop 2.517 SWP 4.60	' GHz s
			**** Multi l	Marker **	**			
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5	2.4430	333 GHz 000 GHz 167 GHz		52.18 dBµ 85.37 dBµ 52.41 dBµ	ıV/m		
	Nr.6 Nr.7 Nr.8							
Tested by: Rainer Heller				Project-N 56305-	o.: 90067-1			
Date [.]								

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01/28/1999

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			· · · · · · · · · · · · · · · · · · ·							
Model: PC24E-T-F	C with AOU	24-YA-1414		Mode:			-	×		
Serial No.: 84490006 ((RF-modem)	ntenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup							
Applicant: Lucent Tec	Applicant: Lucent Technologies Nederland B.V.				- Supply voltage 115 V AC - operating with external antenna AOU24-YA-1414					
		4		(YAGI '			l •			
				- operati	ng with bit	rate 8 MBi	t			
				- TX mo	de with f =	2.442 GHz	2			
		· · ·		Test dist	tance: 3 m	eters				
				Polariza	tion: vertic	al				
Ref.Level 12 10 dB dB/Di				ATT 10 dl	B		Ref. C	offset 21.3 dB		
		· · · · · · · · · · · · · · · · · · ·								
					-					
			2	4	5					
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		· · · · ·								
Start 2.367 C RBW 1 MHz				VBW 100	Hz	- I	Stop 2 SWP 4	.517 GHz I.60 s		
			**** Multi I	Marker ***	а. •					
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7	2.430 2.441 2.454	7000 GHz 0167 GHz 1167 GHz 4667 GHz 0500 GHz	1	- 53.60 dBµ 55.89 dBµ 05.56 dBµ 58.71 dBµ 53.96 dBµ	:V/m :V/m :V/m				
	Nr.8							-		
Tested by: Rainer Hell	er			Project-No 56305-9						
Date: 01/28/1999)				*	Page	of	pages		



Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-YA-1414 RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 01/28/1999 R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable operating with bit rate 8 MBit TX mode with f = 2.462 GHz
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

Model: PC24E	-T-FC with AOU	24-YA-1414	· · · · · · · · · · · · · · · · · · ·	Mode:		-				
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V.				 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 						
			- 							
	el 110 dBµV/m			ATT 10 dB Ref. Offset 21.3 dE						
10 dB dI	B/Div.				·					
										
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		· ·								
Start 2 20										
	Start 2.387 GHz RBW 1 MHz			VBW 1 MHz SWP 20 ms						
		***	* Multi I	Marker ****						
	Nr.1	2.453833		 73.03 dΒμ\	//m					
	Nr.2 Nr.3	2.464667 2.471167		94.97 dBµ∖ 73.44 dBµ∖						
	Nr.4	2.483500		73.44 dBµ∿ 54.52 dBµ∖						
Nr.5 2.491000 GHz Nr.6 2.500000 GHz				57.49 dBµ∖						
	Nr.6 Nr.7	2.500000	GHZ	55.56 dBµ∖	/m					
	Nr.8			·						
Tested by				Project-No.:						
Date:	Rainer Heller			56305-90067-1						
Date: 01/28/1999					Page	of	pages			

Model: PC24E-T-FC with AOU24-Y/	A-1414		Mode:					
Serial No.: 84490006 (RF-modem), san	Global	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)						
Applicant: Lucent Technologies Nederl	 FCC test setup supply voltage 115 V AC operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) 							
	· · ·			ft antenna	cable			
	· · · · · · · · · · · ·		- operating with bit rate 8 MBit					
			- TX mo	- TX mode with f = 2.462 GHz				
			Test distance: 3 meters					
]	tion: vertica	l			
Ref.Level 120 dBµV/m 10 dB dB/Div.			ATT 10 dl	В		Ref. Offs	et 21.3 dB	
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Start 2.387 GHz RBW 1 MHz			VBW 1 MH	łz		Stop 2.53 SWP 20 r		
		**** Multi	Marker ****	•				
Nr.1 Nr.2		667 GHz 667 GHz	1	73.46 dBµV 12.92 dBµV	//m			
Nr.3	2.4760	000 GHz 500 GHz	7	73.94 dBµV	//m			
Nr.4 Nr.5	62.95 dBμV/m 65.26 dBμV/m							
Nr.6 Nr.7		167 GHz)00 GHz		62.01 dBμV				
Nr.8								
Tested by:	······································		Project-No.	•			· · · · · · · · · · · · · · · · · · ·	
Rainer Heller			56305-9	0067-1				
Date:			 					

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01/28/1999

Model: PC24E-T-FC with AOU24-YA-1414	Mode:	
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	 RF-modem PC24E-T-FC mo Globalyst 550 via ISA card IS/ FCC test setup 	
Applicant: Lucent Technologies Nederland B.V.	 supply voltage 115 V AC operating with external anteni (YAGI 14 dBi) with 50 ft antenna cable 	na AOU24-YA-1414
	- operating with bit rate 8 MBit	
	- TX mode with f = 2.462 GHz	
	Test distance: 3 meters	
	Polarization: horizontal	
Ref.Level 110 dBµV/m	ATT 10 dB	Ref. Offset 21.3 dB

Ref.Level 110 dBµV/m 10 dB dB/Div.

Start 2.387 GHz RBW 1 MHz		VBW 100 I	Ηz		Stop 2.53 SWP 4.60	7 GHz) s	
			Ĺ	4	5		
		1	3				
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		/			· · · · · · · · · · · · · · · · · · ·		
			₩.				
			2				

**** Multi Marker ****

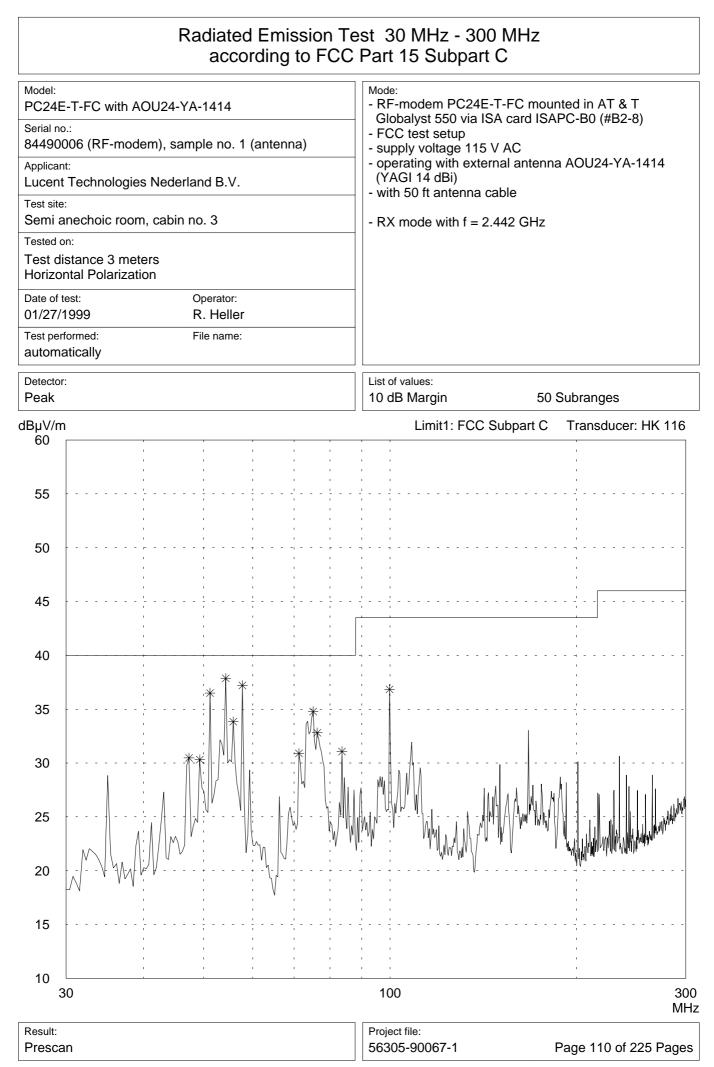
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.452333 GHz 2.463167 GHz 2.472000 GHz 2.483500 GHz 2.500000 GHz	53.33 dBμV/m 87.86 dBμV/m 53.00 dBμV/m 42.36 dBμV/m 42.43 dBμV/m		
Tested by: Rainer Heller		2	Project-No.: 56305-90067-1		
Date: 01/28/1999			Page	of	pages

Model: PC24E-T-FC with AOU24-YA-	1414		PC24E-T-FC m				
Serial No.: 84490006 (RF-modem), samp	le no. 1 (antenna)	Globalyst 55	50 via ISA card IS tup	5APC-B0 (i	#B2-8)		
Applicant: Lucent Technologies Nederlar	nd B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-YA-1414					
		(YAGI 14 dE - with 50 ft an	tenna cable				
		 operating with bit rate 8 MBit TX mode with f = 2.462 GHz 					
		Test distance	: 3 meters				
		Polarization:	vertical	•			
Ref.Level 120 dBµV/m 10 dB dB/Div.		ATT 10 dB		Ref. Of	fset 21.3 dB		
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		····· · ····					
Start 2.387 GHz RBW 1 MHz		VBW 100 Hz		Stop 2.537 GHz SWP 4.60 s			
	**** Multi	Marker ****					
Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.446667 GHz 2.459833 GHz 2.476000 GHz 2.483500 GHz 2.484833 GHz 2.500000 GHz	105.50 53.90 46.90 47.00	3 dBµV/m 5 dBµV/m 3 dBµV/m 3 dBµV/m 5 dBµV/m 2 dBµV/m				
Tested by: Rainer Heller		Project-No.: 56305-90067	7-1		,		
Date: 01/28/1999			Page	of	pages		

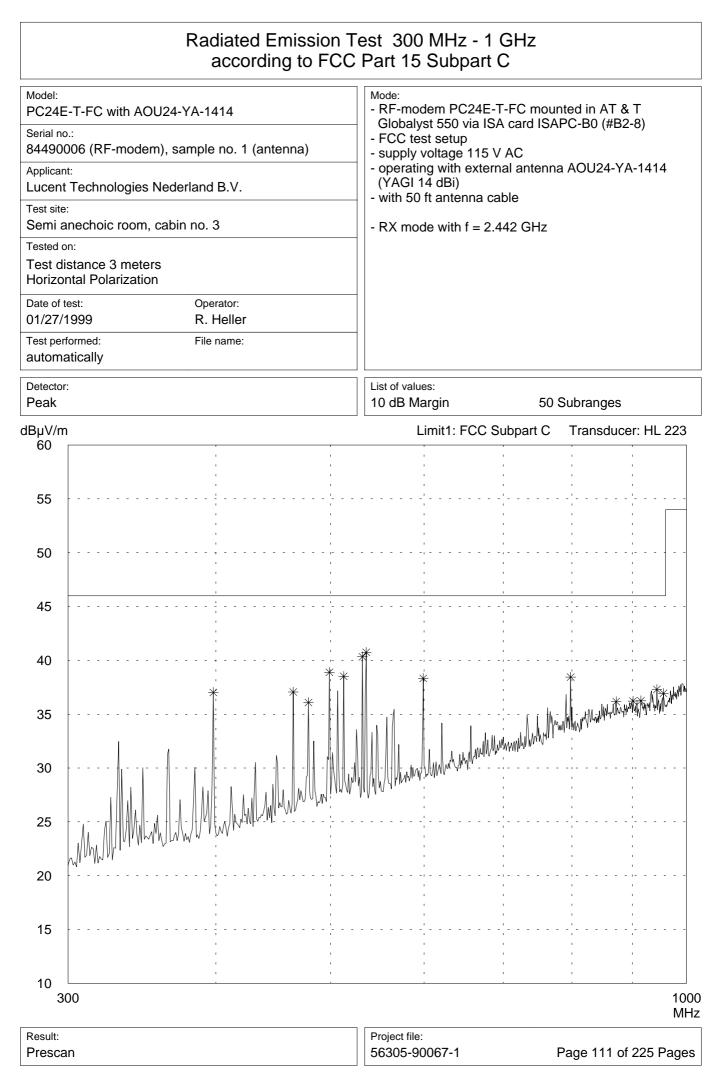


Test results for setup no. 1

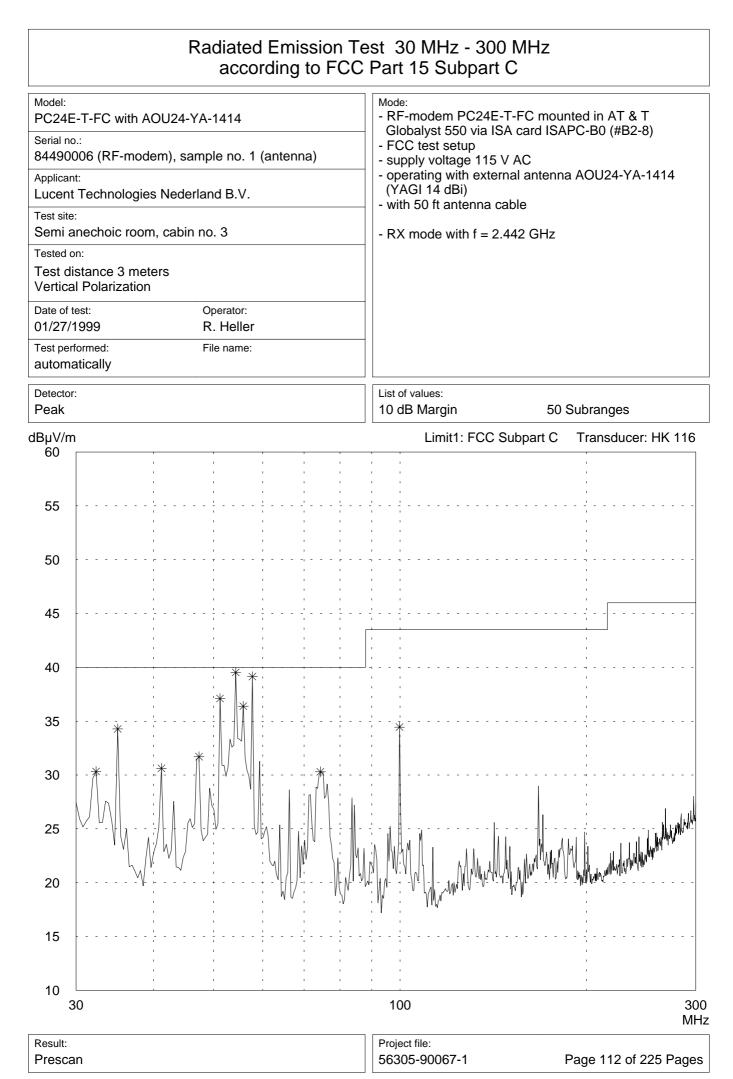
Receive (RX) mode



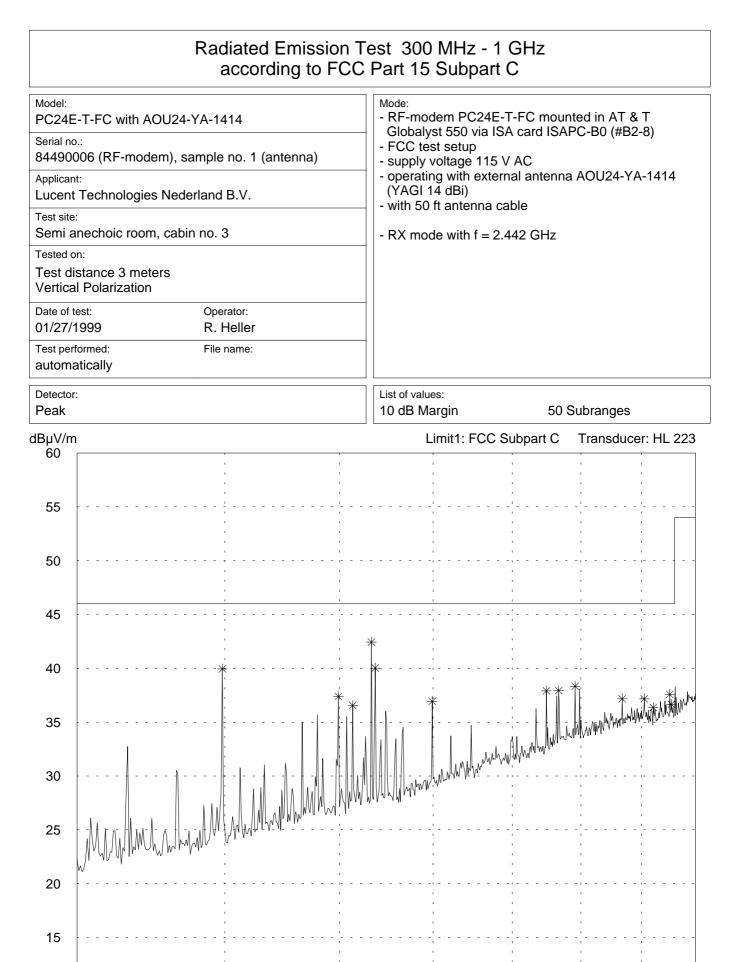
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Project file:

56305-90067-1

1000 MHz

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10

Result:

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

Model: PC24E-T Serial no.: 84490000						(ant	enna)	Glo - FC - Sup	-modem F balyst 550 C test set ply voltag) via l up je 115	SA car 5 V AC	d ISAI	PC-B	0 (#B	2-8)	4
	Lucent Technologies Nederland B.V.						 operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) with 50 ft antenna cable 									
Test site: Open are	ea test-	site I							mode wit			GHz				
Tested on: Test dista Horizonta	ance 3	meter						Note					ed in	semi		
Date of test 02/02/199				Oper R. H	ator: Ieller				hoic room							
Test perform					name:											
Detector: Quasi-Pe	eak								values: cted by ha	and						
dBµV/m 70 ┌─							Lim	it1: FC	C Subpart	С	Transc	lucer:	HK11	6/H	L223 (3 m)
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0 30					· ·	1	00						•	•		 100 MH
Result: Limit kep	t							Projec	ct file: 5-90067-	1		F	Page	114 c	of 225	

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

Model: PC24E-T-FC with AOU24-YA-1414 Serial no.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V. Test site: Open area test-site I Tested on: Test distance 3 meters Horizontal Polarization Date of test: 02/02/1999 R. Heller Test performed: by hand	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable - RX mode with f = 2.442 GHz Note: Level at 100.3 MHz was measured in semi anechoic room (cabin no. 3)
Detector:	List of values:
Quasi-Peak	Selected by hand

Frequency MHz	Reading dBμV	Correction factor dB	Value dBµV/m	Limit dBµV/m	Limit exceeded						
48.0 52.0 56.0 58.5 60.0 72.0 75.2 84.0 100.3 167.1 200.5 300.7 334.1 400.9 467.7 481.5 501.2 509.8 515.5 534.6 538.1 601.4 750.0 768.5 800.0	$\begin{array}{c} 15.5\\ 19.5\\ 19.5\\ 18.0\\ 23.5\\ 16.0\\ 16.5\\ 17.5\\ 17.0\\ 25.0\\ 18.5\\ 12.5\\ 11.5\\ 14.5\\ 16.0\\ 10.5\\ 10.0\\ 12.0\\ 7.5\\ 10.0\\ 12.0\\ 7.5\\ 10.0\\ 14.5\\ 11.5\\ 9.0\\ 4.5\\ 4.0\\ 3.5\end{array}$	$ \begin{array}{c} 11.0\\ 10.7\\ 10.4\\ 10.3\\ 10.2\\ 10.2\\ 10.2\\ 10.4\\ 11.5\\ 15.8\\ 17.1\\ 16.8\\ 18.1\\ 20.4\\ 22.1\\ 22.4\\ 22.9\\ 23.1\\ 23.2\\ 23.6\\ 23.7\\ 25.0\\ 28.1\\ 28.2\\ 28.5 \end{array} $	$\begin{array}{c} 26.5\\ 30.2\\ 28.4\\ 33.8\\ 26.2\\ 26.7\\ 27.7\\ 27.4\\ 36.5\\ 34.3\\ 29.6\\ 28.3\\ 32.6\\ 36.4\\ 32.6\\ 32.4\\ 34.9\\ 30.6\\ 33.2\\ 38.1\\ 35.2\\ 34.0\\ 32.6\\ 32.2\\ 34.0\\ 32.6\\ 32.2\\ 32.0\\ \end{array}$	$\begin{array}{c} 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 40.0\\ 43.5\\ 43.5\\ 43.5\\ 43.5\\ 46.0\\ 40.0\\$							
Result: Limit kept			oject file: 5305-90067-1	Page	115 of 225 Pages						

								MHz - 1 Subpart					
Model: PC24E Serial n	E-T-FC with	AOU24	4-YA-14	14			Globalys	em PC24E- st 550 via IS					
84490	34490006 (RF-modem), sample no. 1 (antenna)					- FCC test setup - supply voltage 115 V AC							
Applicar Lucen	^{nt:} t Technolog	jies Neo	derland	B.V.			(YAGI 14	g with exter 4 dBi) t antenna c		nna AOU	24-YA-	1414	
Test site	_{e:} area test-si	te I						e with $f = 2$.		7			
Tested of Test d		neters											
Date of 02/02/			Oper	ator: leller									
	rformed:			name:									
Detecto Quasi-							List of values						
dBµV/n 70	n					Limit	1: FCC Sub	opart C T	ransduc	er: HK11	6 / HL2	23 (3	m)
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Result:]	Project file:						MH
Limit k	kept						56305-90	067-1		Page 2	16 of 2	225 P	ages

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

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

Model: PC24E-T-FC with AOU24-YA-1414 Serial no.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V. Test site: Open area test-site I Tested on: Test distance 3 meters Vertical Polarization Date of test: 02/02/1999 R. Heller Test performed: by hand	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-YA-1414 (YAGI 14 dBi) - with 50 ft antenna cable - RX mode with f = 2.442 GHz
Detector:	List of values:
Quasi-Peak	Selected by hand

			-		
Frequency MHz	Reading dBµV	Correction factor dB	Value dBµV/m	Limit dBµV/m	Limit exceeded
36.0 42.0 48.0 52.0 56.0 56.6 58.5 60.0 64.0 66.8 75.2 83.5 84.0 85.0 100.3 167.1 300.7 334.1 400.9 501.2 515.5 534.6 538.1 601.4 750.0 768.5 793.1	$\begin{array}{c} 17.0\\ 16.5\\ 18.5\\ 19.5\\ 20.0\\ 19.5\\ 26.0\\ 16.5\\ 16.0\\ 19.0\\ 18.0\\ 17.5\\ 17.0\\ 18.0\\ 25.5\\ 11.5\\ 10.5\\ 11.5\\ 10.5\\ 11.5\\ 14.0\\ 9.5\\ 7.5\\ 13.5\\ 12.0\\ 6.5\\ 4.5\\ 5.0\\ 2.5\end{array}$	13.3 12.0 11.0 10.7 10.4 10.4 10.3 10.2 10.2 10.2 10.2 10.2 10.2 10.4 10.4 10.4 10.5 11.5 15.8 16.8 18.1 20.4 22.9 23.2 23.6 23.7 25.0 28.1 28.2 28.5	30.3 28.5 29.5 30.2 30.4 29.9 36.3 26.7 26.2 29.2 28.2 27.9 27.4 28.5 37.0 27.3 27.3 29.6 34.4 30.7 37.1 35.7 31.5 32.6 33.2 31.0	$\begin{array}{c} 40.0\\ 46.0\\ 40.0\\$	
Result:Project file:.imit kept56305-90067-1Page 117 of 225 Pages					



Model: Type: Serial No.:	PC24E-T-FC with AOU24-YA-1414 RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	01/28/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
- with 50 ft antenna cable
- RX mode with f = 2.442 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
6.2730	vertical	42.5	-93.5		29.9	43.4	74
8.3680	vertical	43.7	-96.2		33.4	44.2	74



Model:	PC24E-T-FC with AOU24-YA-1414
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	01/28/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-YA-1414 (YAGI 14 dBi)
- with 50 ft antenna cable
- RX mode with f = 2.442 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
6.2702	vertical	39.2	-96.7		29.9	40.3	54
8.3603	vertical	38.5	-101.3		33.4	39.1	54



Test results for setup no. 2

Transmit (TX) mode



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

Model:	PC24E-T-FC with AOU24-OD-77 (Maxrad)
Type:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Date of test:	12/10/1998
Operator:	R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup

- supply voltage 115 V AC
- TX mode

Tested on:

Antenna connector

Selected	Operating	Power meter	Correction-	Output	Limit
bit rate	frequency	reading	factor	power	
	[GHz]	[dBm]	[dB]	[dBm]	[dBm]
	2.412	14.3	0.5	14.8	30
2 MBit	2.442	14.6	0.5	15.1	30
	2.462	14.4	0.5	14.9	30
	2.412	11.0	0.5	11.5	30
5 MBit	2.442	11.3	0.5	11.8	30
	2.462	11.1	0.5	11.6	30
	2.412	11.1	0.5	11.6	30
8 MBit	2.442	11.4	0.5	11.9	30
	2.462	11.2	0.5	11.7	30

Note:

Typical gain of external omni-directional antenna AOU24-OD-77 is 7 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	Total insertion	Effective antenna gain		Limit
	AOU24-OD-77	loss	total value	exceeding 6 dBi	
	[dBi]	[dB]	[dBi]	[dB]	[dBm]
20 ft	7.0	4.5	2.5	0.0	30.0
50 ft	7.0	4.5	2.5	0.0	30.0
75 ft	7.0	5.3	1.7	0.0	30.0

Result: The limit is kept



Model:	PC24E-T-FC with AOU24-OD-77 (Maxrad)
Туре:	RF-modem with external antenna for wireless LAN
Serial No .:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/08/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

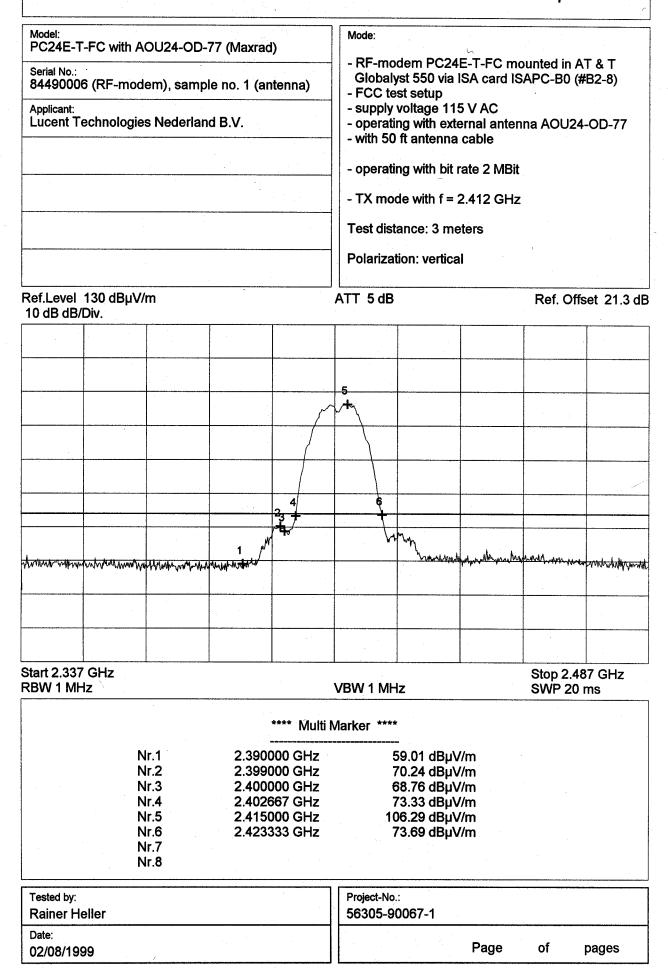
- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-77
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.412 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.3900	vertical	59.0		0.6	20.7	59.0	74
2.3990	vertical	70.2		0.6	20.7	70.2	NRB
2.4000	vertical	68.8		0.6	20.7	68.8	NRB
2.4027	vertical	73.3		0.6	20.7	73.3	OB
2.4150	vertical	106.3		0.6	20.7	106.3	OB
2.4233	vertical	73.7		0.6	20.7	73.7	OB
4.7079	vertical	40.5	-94.1		27.3	40.2	74
7.2417	vertical	41.1	-94.6		29.9	42.3	NRB
9.6467	vertical	43.2	-96.4		33.4	44.1	NRB
12.0780	vertical	44.2	-96.7		33.6	44.0	74

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter). NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 106.3 dBµV/m.

Model: PC24E-T-FC with AOU24-	OD-77 (Maxrad)	Mode:				
Serial No.: 84490006 (RF-modem), sa	ample no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup				
Applicant: Lucent Technologies Nede	erland B.V.	- supply voltage 1 - operating with ex - with 50 ft antenna	15 V AC ternal anter	nna AOU	24-0D-77	
	·	- operating with bit		t		
		- TX mode with f =				
		Test distance: 3 [°] m	eters			
		Polarization: horizo	ontal			
Ref.Level 100 dBµV/m 5 dB dB/Div.		ATT 5 dB		Ref. C	Offset 21.3 dB	
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	23					
Monutermetermetermeter	Muniter Martin	White Marken Marking Mar	www.white	homitinh	manumunu	
Start 2.337 GHz RBW 1 MHz		VBW 1 MHz	1		.487 GHz	
	**** Multi	Marker ****				
Nr.1	2.390000 GHz	52.24 dBµ				
Nr.2 Nr.3	2.398167 GHz 2.400000 GHz	56.05 dBµ 55.54 dBµ	V/m			
Nr.4 Nr.5	2.404667 GHz 2.411000 GHz	73.27 dBµ 90.48 dBµ	V/m			
Nr.6 Nr.7 Nr.8	2.420833 GHz	73.80 dBµ	V/m			
Tested by:		Project-No.:				
Rainer Heller		56305-90067-1				
Date: 02/08/1999			Page	of	pages	





Model: Type: Serial No.:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/08/1999
Operator:	R. Heller

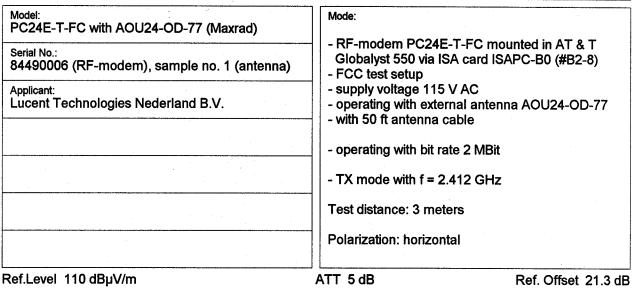
Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-77
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.412 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.3900	vertical	43.3		0.6	20.7	43.3	54
2.3937	vertical	53.0		0.6	20.7	53.0	NRB
2.3983	vertical	64.9		0.6	20.7	64.9	NRB
2.4000	vertical	62.0		0.6	20.7	62.0	NRB
2.4150	vertical	102.2		0.6	20.7	102.2	OB
2.4307	vertical	53.5		0.6	20.7	53.5	OB
12.0612	vertical	37.9	-102.7		33.6	37.9	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 102.2 dBµV/m.

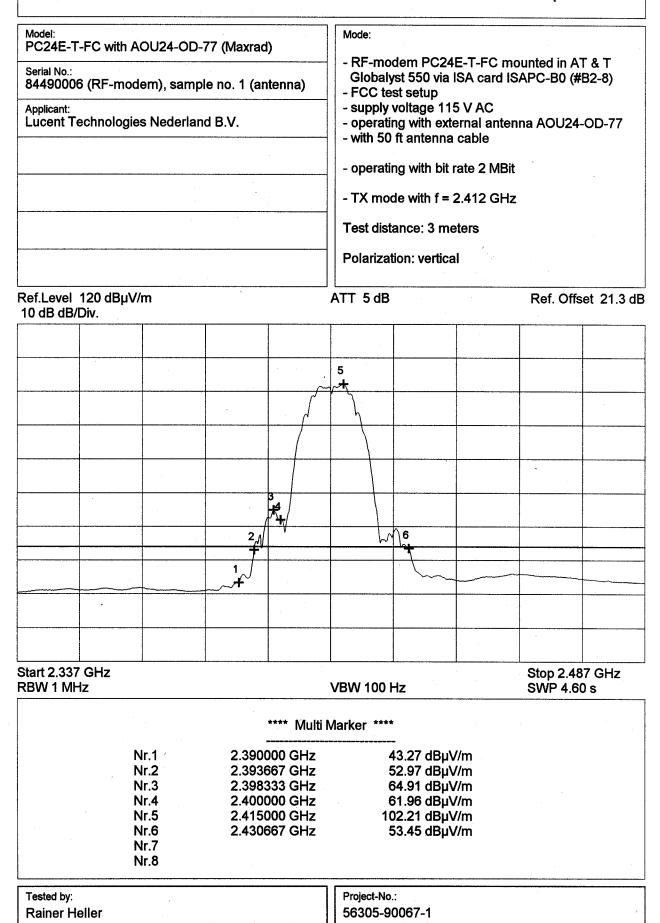


10 dB dB/Div.

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

**** Multi Marker ****

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	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.390000 GHz 2.398333 GHz 2.400000 GHz 2.402667 GHz 2.409333 GHz 2.422167 GHz	37.41 dBμV/m 47.57 dBμV/m 44.12 dBμV/m 52.27 dBμV/m 85.74 dBμV/m 53.61 dBμV/m	
Tested by: Rainer Heller			Project-No.: 56305-90067-1	
Date: 02/08/1999		n 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999	Page	of pages



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Model: Type: Serial No.:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/08/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-77
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.442 GHz

Detector: Peak

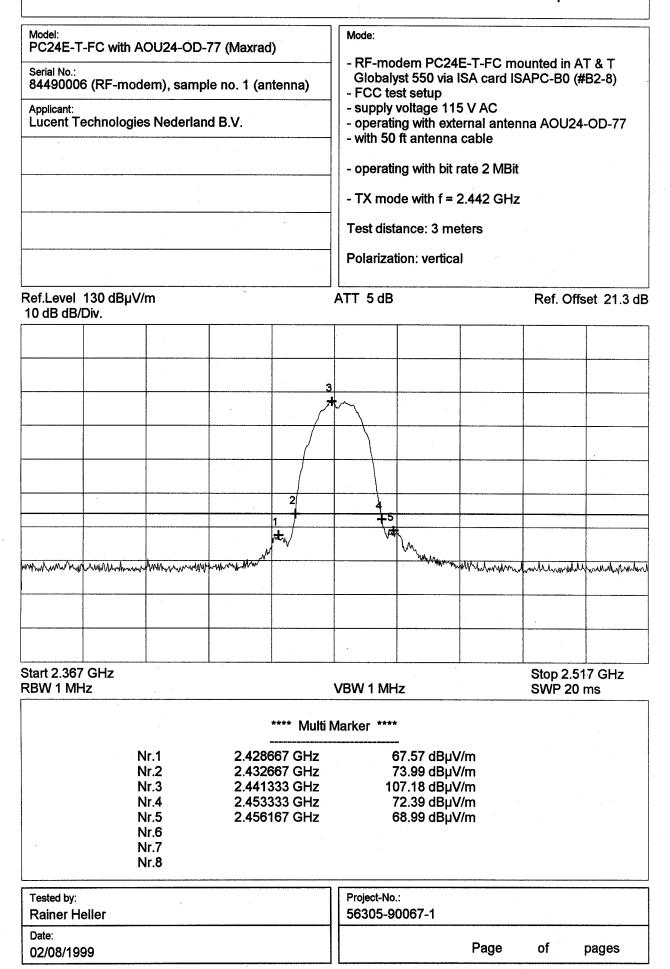
		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4327	vertical	74.0		0.6	20.7	74.0	OB
2.4413	vertical	107.2		0.6	20.7	107.2	OB
2.4533	vertical	72.4		0.6	20.7	72.4	OB
4.8894	vertical	44.1	-90.3		27.3	44.0	74
7.3305	vertical	45.3	-91.4		29.9	45.5	74
9.7680	vertical	42.4	-97.6		33.4	42.8	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 107.2 dBμV/m.

2

Model: PC24E-1	-FC with A	OU24-OD-7	77 (Maxrao	d)	Mode:					
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)				ntenna)	 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup 					
Applicant: Lucent T	echnologie	s Nederlan	d B.V.		- supply - opera	y voltage 11 ting with ext 0 ft antenna	ternal anter	ina AOU	24-OD-77	
	· .					ting with bit				
			-			ode with f =				
					Test dis	stance: 3 m	eters			
					Polariza	ation: horizo	ontal			
Ref.Level 5 dB dB/D	100 dBµV/ Div.	/m			ATT 5 dE	B		Ref. O	ffset 21.3 dB	
				2	1/mm					
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Start 2.367 RBW 1 M	7 GHz			· · · · ·	VBW 1 M		1	· • • • • • • • • • • • • • • • • • • •	517 GHz	
				**** Multi I	Marker **	**				
	1 1	Vr.1 Vr.2 Vr.3 Vr.4	2.441	500 GHz 167 GHz 167 GHz		 72.99 dBμ\ 91.32 dBμ\ 72.99 dBμ\	V/m			
	ר ר ר	Nr.5 Nr.6 Nr.7 Nr.8		2						
Tested by: Rainer H	eller	••••••••••••••••••••••••••••••••••••••	<u>, , , , , , , , , , , , , , , , , , , </u>		Project-N 56305-	lo.: 90067-1			· · · · · · · · · · · · · · · · · · ·	
Date: 02/08/19	99						Page	of	pages	

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Model: Type:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/08/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-77
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.442 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4260	vertical	53.3		0.6	20.7	53.3	OB
2.4448	vertical	102.4		0.6	20.7	102.4	OB
2.4605	vertical	53.7		0.6	20.7	53.7	OB
4.8839	vertical	40.0	-94.2		27.3	40.1	54
7.3272	vertical	41.3	-95.3		29.9	41.6	54

Note:OB means "operation band" (2400 - 2483.5 MHz); in this case
limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB
below maximum in-band-power equivalent to 102.4 dBµV/m.

2

			······				
Model: PC24E-T-FC with AOU24-OE)-77 (Maxrad)	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-OD-77 - with 50 ft antenna cable					
Serial No.: 84490006 (RF-modem), sam	ple no. 1 (antenna)						
Applicant: Lucent Technologies Nederla	Ind B.V.						
		- operating with bit r					
		- TX mode with f = 2					
· · · · · · · · · · · · · · · · · · ·		Test distance: 3 me	ters				
		Polarization: horizo	ntal				
Ref.Level 110 dBµV/m 10 dB dB/Div.	······································	ATT 5 dB	Ref. Offset 21.3 dB				
	چ م	1					
	2						
		5					
Start 2.367 GHz RBW 1 MHz		VBW 100 Hz	Stop 2.517 GHz SWP 4.60 s				
	**** Multi	Marker ****					
Nr.1 Nr.2	2.428333 GHz 2.432667 GHz	42.90 dBμV 53.69 dBμV					
Nr.3 Nr.4	2.441333 GHz 2.452000 GHz	85.94 dBµV 53.72 dBµV	//m				
Nr.5 Nr.6	2.455833 GHz	44.98 dBµV					
Nr.7 Nr.8							
Tested by:		Project-No.:					
Rainer Heller		56305-90067-1					

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Model: PC24E-T-FC with AOU24-C	D-77 (Maxrad)	Mode:					
Serial No.: 84490006 (RF-modem), sa	mple no. 1 (an	itenna)	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-OD-77 with 50 ft antenna cable 					
Applicant: Lucent Technologies Neder	land B.V.							
				ing with bit rate		-		
			- TX mo	de with f = 2.44	2 GHz			
	1. 1 1. 1 1. 1 1. 1 1. 1 1. 1 1. 1 1.			ance: 3 meters				
			Polariza	tion: vertical				
Ref.Level 120 dBµV/m 10 dB dB/Div.	v		ATT 5 dB		Ref. Offset	21.3 dB		
	ì							
			3 ∕*					
		/	h					
				, , , , , , , , , , , , , , , , , , ,				
		2	4	5				
	/	<u> </u>						
				m				
Start 2.367 GHz RBW 1 MHz			VBW 100 I	Hz	Stop 2.517 SWP 4.60 s			
		**** Multi N	/larker ****	k				
Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.4283 2.4448 2.4548	000 GHz 333 GHz 333 GHz 333 GHz 500 GHz	10 10	- 53.33 dBµV/m 58.96 dBµV/m 02.36 dBµV/m 60.46 dBµV/m 53.73 dBµV/m				
Tested by: Rainer Heller			Project-No 56305-9					
Date:	<u></u>	11. 11.		······	· · · · · · · · · · · · · · · · · · ·			

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02/08/1999

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Model:	PC24E-T-FC with AOU24-OD-77 (Maxrad)
Туре:	RF-modem with external antenna for wireless LAN
Serial No .:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/08/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-77
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.462 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4523	vertical	73.0		0.6	20.7	73.0	OB
2.4648	vertical	107.4		0.6	20.7	107.4	OB
2.4732	vertical	73.6		0.6	20.7	73.6	OB
2.4835	vertical	57.5		0.6	20.7	57.5	74
2.4860	vertical	60.5		0.6	20.7	60.5	74
2.5000	vertical	56.6		0.6	20.7	56.6	74
4.9296	vertical	46.3	-88.1		27.3	46.2	74
7.3906	vertical	42.4	-93.7		30.0	43.3	74
9.8473	vertical	43.1	-96.7		33.4	43.8	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 107.4 dBμV/m.

Model:					Mode:					
Serial No.:		OU24-OD-		-	Global	odem PC24 lyst 550 via				
Applicant:	·	ern), samp	·	ilenna)	 FCC test setup supply voltage 115 V AC operating with external antenna AOU24-OD-77 					
	eonnoiogie		u D.v.		- with 50) ft antenna	cable		4-0D-77	
				-denotion -	- operat	ing with bit	rate 2 MBit	:		
					- TX mo	ode with f =	2.462 GHz	2		
					Test dis	tance: 3 m	eters			
			· · · · · · · · · · · · · · · · · · ·		Polariza	ation: horizo	ntal			
Ref.Level 5 dB dB/E	100 dBµV Div.	/m	×		ATT 5 dB	}		Ref. Of	fset 21.3 dE	
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Start 2.387 RBW 1 Mi					VBW 1 MI	Hz		Stop 2.5 SWP 20	37 GHz ms	
				**** Multi I	Marker ***	*	-			
	١	Nr.1	2.4541	67 GHz		 73.52 dBµ\	//m			
		Nr.2 Nr.3		333 GHz 000 GHz		91.22 dBµ\ 72.78 dBµ\			 	
	1	Nr.4 Nr.5	2.4835	500 GHz 000 GHz		52.67 dBµ\ 54.07 dBµ\	//m			
	ז ז	Vr.6 Vr.7 Vr.8		000 GHz		52.32 dBµ\				
[۲ 	vi .U	· · · · · · · · · · · · · · · · · · ·				·			
Tested by: Rainer H	eller	· · ·			Project-No 56305-9					
Date: 02/08/19	99						Page	of	pages	

Model: PC24E-T-FC with AOU24-OD-77 (Maxrad)	Mode:
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup
Applicant: Lucent Technologies Nederland B.V.	 supply voltage 115 V AC operating with external antenna AOU24-OD-77 with 50 ft antenna cable
	- operating with bit rate 2 MBit
	- TX mode with f = 2.462 GHz
	Test distance: 3 meters
	Polarization: vertical
Ref.Level 130 dBµV/m	ATT 5 dB Ref. Offset 21.3 dB

Ref.Level 130 dBµV/m 10 dB dB/Div.

' GHz								
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**** Multi Marker ****

	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.452333 GHz 2.464833 GHz 2.473167 GHz 2.483500 GHz 2.486000 GHz 2.500000 GHz	72.95 dBμV/m 107.44 dBμV/m 73.59 dBμV/m 57.46 dBμV/m 60.46 dBμV/m 56.55 dBμV/m		
Tested by: Rainer Heller	· · · · · · · · · · · · · · · · · · ·		Project-No.: 56305-90067-1		
Date: 02/08/1999			Page	of	pages



Model:	PC24E-T-FC with AOU24-OD-77 (Maxrad)
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/08/1999
Operator:	R. Heller

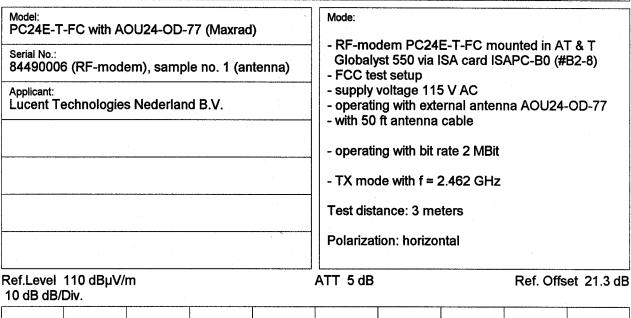
Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-77
- with 50 ft antenna cable
- operating with bit rate 2 MBit
- TX mode with f = 2.462 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4457	vertical	53.3		0.6	20.7	53.3	OB
2.4647	vertical	102.9		0.6	20.7	102.9	OB
2.4782	vertical	52.5		0.6	20.7	52.5	OB
2.4835	vertical	45.0		0.6	20.7	45.0	54
2.4848	vertical	45.0		0.6	20.7	45.0	54
2.5000	vertical	40.1		0.6	20.7	40.1	54
4.9242	vertical	43.5	-90.7		27.3	43.6	54

Note:OB means "operation band" (2400 - 2483.5 MHz); in this case
limit is 1 W (measured conducted with power meter).
NRB means "non restricted band"; in this case limit is 20 dB
below maximum in-band-power equivalent to 102.9 dBµV/m.



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		X						
Start 2.387 G RBW 1 MHz	Hz		L, `	VBW 100 F	Ηz	L	Stop 2.53 SWP 4.60	7 GHz) s

**** Multi Marker **** 53.18 dBµV/m Nr.1 2.452167 GHz 2.465000 GHz 85.56 dBµV/m Nr.2 Nr.3 2.472167 GHz 53.94 dBµV/m Nr.4 2.474667 GHz 43.41 dBµV/m 2.483500 GHz Nr.5 37.23 dBµV/m 2.500000 GHz 37.18 dBµV/m Nr.6 Nr.7 Nr.8 Tested by: Project-No.: **Rainer Heller** 56305-90067-1 Date: Page of pages 02/08/1999

Model: PC24E-7	Γ-FC with /	AOU24-OD	-77 (Maxrad	0	Mode:						
Serial No.:		····	ole no. 1 (an		- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup						
Applicant: Lucent T	echnologi	es Nederla	nd B.V.		 supply voltage 115 V AC operating with external antenna AOU24-OD-77 with 50 ft antenna cable 						
						ting with bit r		•			
						bde with $f = 2$					
					Test dis	tance: 3 me	ters				
				n an	Polariza	ation: vertica	l		, ,		
Ref.Level 10 dB dB	120 dBµ∖ /Div.	//m	<i>и</i>		ATT 5 dE	8		Ref. Off	set 21.3 dB		
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Start 2.38 RBW 1 MI		_ I			VBW 100	Hz		Stop 2.5 SWP 4.6	37 GHz 0 s		
				**** Multi	Marker ***	*		·			
		Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.4646 2.478 2.4835 2.4845	667 GHz 667 GHz 167 GHz 500 GHz 333 GHz 000 GHz	1	 53.28 dBμV 02.92 dBμV 52.46 dBμV 45.00 dBμV 45.00 dBμV 45.00 dBμV	/m /m /m				
Tested by: Rainer H	leller				Project-No 56305-9						
Date:											

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of

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02/08/1999



Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/08/1999 R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-OD-77 with 50 ft antenna cable operating with bit rate 5 MBit TX mode with f = 2.412 GHz
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

									-		
Model: PC24E-T-FC with AOU24-OD-77 (Maxrad) Serial No.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V.					Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-OD-77						
					- operati) ft antenna ng with bit i de with f = 2	rate 5 MBit				
					Test dist	ance: 3 me	eters				
					Polariza	tion: horizo	ntal	•			
Ref.Level 5 dB dB/D	100 dBµV/ Div.	'n		_	ATT 5 dB			Ref. Offs	et 21.3 dB		
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Start 2.33 RBW 1 MI					VBW 1 MHz SWP 20 ms						
				**** Multi I	Marker ***	•					
	N N N N	lr.1 lr.2 lr.3 lr.4 lr.5	2.399 2.400 2.405 2.414	000 GHz 500 GHz 000 GHz 167 GHz 833 GHz	52.29 dBμV/m 58.59 dBμV/m 59.88 dBμV/m 73.82 dBμV/m 88.37 dBμV/m						
		lr.6 lr.7	2.420	667 GHz	• . • • •	72.68 dBµ∖	//m				

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Tested by:	Project-No.:			
Rainer Heller	56305-90067-1			
Date:				
02/08/1999		Page	of	pages

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Nr.8

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Serial No.: 84490006 Applicant:	i (RF-mod	OU24-OD- em), sampl s Nederlan	le no. 1 (an		Mode: * - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-OD-77 - with 50 ft antenna cable - operating with bit rate 5 MBit - TX mode with f = 2.412 GHz Test distance: 3 meters						
		*******	· · · · · · · · · · · · · · · · · · ·		Polariza	ation: vert	ical				
						·		. '			
Ref.Level 1 10 dB dB/D		'n			ATT 5 dE	3		Ref. Offs	set 21.3 dB		
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Start 2.337								Stop 2 49	7 04-
								Stop 2.48	GHZ
RBW 1 MH	47				VBW 1 MH	7		SWP 20 1	ne
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**** Multi Marker **** Nr.1 2.390000 GHz 60.92 dBµV/m Nr.2 2.399667 GHz 75.98 dBµV/m Nr.3 2.400000 GHz 76.64 dBµV/m Nr.4 2.414833 GHz 105.71 dBµV/m Nr.5 2.426167 GHz 72.95 dBµV/m Nr.6 **Nr.7** Nr.8 Project-No.: Tested by: **Rainer Heller** 56305-90067-1 Date: Page of pages 02/08/1999

L	- 1 · 1 · .									
Model: PC24E-T	-FC with A	0U24-0D-	77 (Maxrad	i)	· 、	Mode:		· · · · · · · · · · · · · · · · · · ·	······································	<u> </u>
Serial No.: 84490006	ን (RF-mod	em), samp	le no. 1 (ar	ntenna	a)	Globa		ia ISA card	nounted in ISAPC-B0	
Applicant: Lucent Te	echnologie	s Nederlan	d B.V.			- suppl	ly voltage	115 V AC external ant	enna AOU2	4-0D-77
,								pit rate 5 ME	Bit	
						- TX m	ode with f	= 2.412 Gł	łz	
							stance: 3			
						Polariz	ation: hori	izontal		
Ref.Level 5 dB dB/D		ו		-		ATT 5 d	B		Ref. Of	ffset 21.3 dB
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Start 2.337 RBW 1 MH						VBW 100) Hz		Stop 2.4 SWP 4.	487 GHz 60 s
				**** N	Multi N	/larker *'	***			
	N	lr.1 lr.2 lr.3	2.390 2.398 2.400	667 G	Hz		37.44 dB 39.37 dB 39.06 dB	3µV/m		
	N	ir.4 ir.5	2.402 2.409	833 G 500 G	Hz Hz		52.78 dE 81.39 dE	βμV/m βμV/m		
	N	lr.6 lr.7 lr.8	2.4218	833 G	Hz	•	53.26 dB	βµV/m		
Tested by: Rainer He	allor					Project-1	No.: -90067-1			
Rainer He	51161	<u></u>				00000	-9000/-1	·····		

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Model: PC24E-T-FC with AOU24-OD-77 (Maxrad)	Mode:						
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	 - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup 						
Applicant: Lucent Technologies Nederland B.V.	 supply voltage 115 V AC operating with external antenna AOU24-OD-77 with 50 ft antenna cable 						
	- operating with bit rate 5 MBit						
	- TX mode with f = 2.412 GHz						
	Test distance: 3 meters						
	Polarization: vertical						
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB						

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tart 2.337	7 GHz						Stop 2.48	7 GHz

SWP 4.60 s **RBW 1 MHz VBW 100 Hz** **** Multi Marker **** Nr.1 2.390000 GHz 41.75 dBµV/m Nr.2 2.398333 GHz 53.63 dBµV/m Nr.3 2.400000 GHz 52.79 dBµV/m 2.401333 GHz Nr.4 52.82 dBµV/m 2.409167 GHz Nr.5 98.93 dBµV/m 2.423500 GHz Nr.6 53.71 dBµV/m **Nr.7** Nr.8 Tested by: Project-No.: **Rainer Heller** 56305-90067-1 Date:

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02/08/1999



Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/08/1999 R. Heller
Mode:	 RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) FCC test setup supply voltage 115 V AC operating with external antenna AOU24-OD-77 with 50 ft antenna cable operating with bit rate 5 MBit TX mode with f = 2.442 GHz
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

	······											
Model: PC24E-T-FC wit	h AOU24-OD-	77 (Maxrad	l)	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup								
Serial No.: 84490006 (RF-n	nodem), samp	le no. 1 (ar	itenna)									
Applicant: Lucent Technolo	Applicant: Lucent Technologies Nederland B.V.					- supply voltage 115 V AC - operating with external antenna AOU24-OD-77						
			-	- with 50 ft antenna cable - operating with bit rate 5 MBit								
	<u> </u>				ode with f =			· .				
	ĩ			Test dis	stance: 3 me	eters						
			· · · · · · · · · · · · · · · · · · ·	Polariza	ation: horizo	ntal						
Ref.Level 100 dB 5 dB dB/Div.	μV/m			ATT 5 dE	3		Ref. O	ffset 21.3 dB				
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mannaman	nonputantin	mannon			Myrryman	mannulul	Amphania	Nymmuhuhuhuhu				
Start 2.367 GHz RBW 1 MHz			I	VBW 1 M		L	1	517 GHz				
			**** Multi I	Marker ***	t fr							
	Nr.1		167 GHz	. ``	 73.62 dBµ\							
	Nr.2 Nr.3 Nr.4		167 GHz 833 GHz		88.91 dBµ\ 73.77 dBµ\			-				
	Nr.5 Nr.6											
	Nr.7 Nr.8											
Tested by: Rainer Heller				Project-No 56305-9								
Date: 02/08/1999						Page	of	pages				

Model: PC24E-T-FC with AOU24-OD-77 (Maxrad) Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	Mode: - RF-modem PC24E-T-FC mounter Globalyst 550 via ISA card ISAPC - FCC test setup	
Applicant: Lucent Technologies Nederland B.V.	 supply voltage 115 V AC operating with external antenna A with 50 ft antenna cable operating with bit rate 5 MBit 	OU24-OD-77
	- TX mode with f = 2.442 GHz Test distance: 3 meters	
Ref.Level 130 dBµV/m	ATT 5 dB	ef. Offset 21.3 dB

10 dB dB/Div.

tart 2.367 BW 1 MH		L		L	VBW 1 MH	-	L	Stop 2.51 SWP 20	17 GHz
	a. a. 1994 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$						* / · · · · · · · · · · · · · · · · · ·	alama () () () () () () () () () () () () ()	Hartella, is a lite
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		**** Multi I	Marker ****		
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.430333 GHz 2.430500 GHz 2.444833 GHz 2.455167 GHz 2.455833 GHz	72.78 dBµV/m 74.22 dBµV/m 106.22 dBµV/m 74.73 dBµV/m 73.87 dBµV/m		
Tested by: Rainer Heller			Project-No.: 56305-90067-1		
Date: 02/08/1999	· · · ·	λ	Page	of	pages

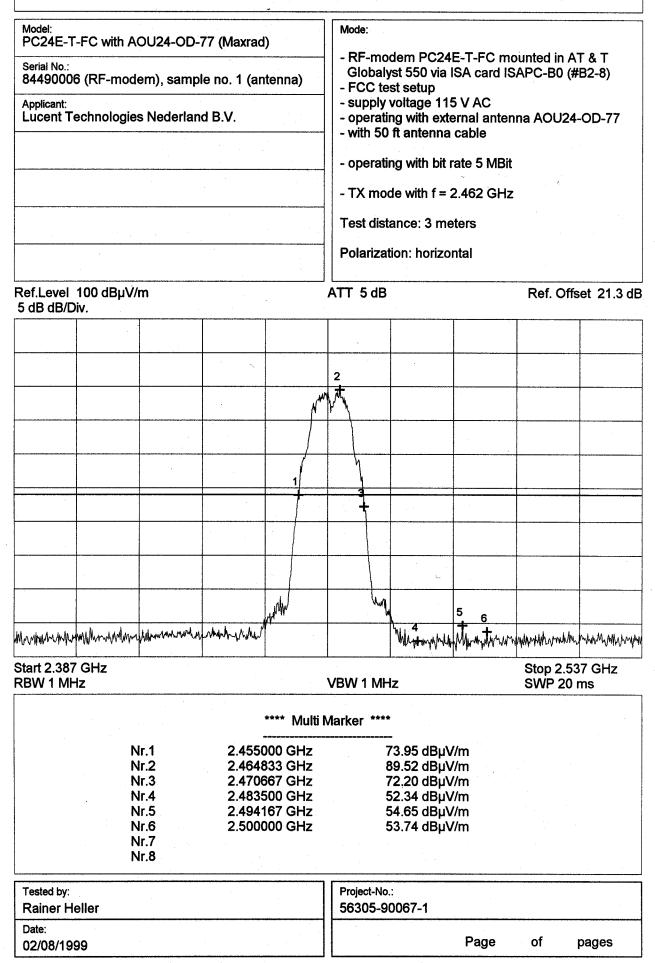
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Model: PC24E-T-FC	with A	OU24-OD-7	77 (Maxrac	I)	Mode:						
Serial No.: 84490006 (R	F-mod	em), sampl	e no. 1 (ar	ntenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup						
Applicant: Lucent Techi	Applicant: Lucent Technologies Nederland B.V.				- supply - operati	 - supply voltage 115 V AC - operating with external antenna AOU24-OD-77 - with 50 ft antenna cable 					
					- operati	ng with bil	t rate 5 MBil	t			
					- TX mo	de with f =	• 2.442 GHz	2			
						tance: 3 m					
					Polariza	tion: horiz	ontal				
Ref.Level 85 c 5 dB dB/Div.	lBµV/m	1			ATT 5 dB			Ref. C	Offset 21.3 dB		
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Start 2.367 GH RBW 1 MHz	IZ				VBW 100 I	Hz		Stop 2 SWP 4	2.517 GHz 4.60 s		
				**** Multi I	Marker ***'	•					
		Ir.1 Ir.2 Ir.3 Ir.4 Ir.5 Ir.6 Ir.7 Ir.8	2.441 2.451	333 GHz 333 GHz 567 GHz 567 GHz	8 !	- 52.93 dBµ 81.93 dBµ 53.36 dBµ 41.30 dBµ	V/m V/m				
Tested by: Rainer Heller	•				Project-No 56305-9						
Date: 02/08/1999							Page	of	pages		

Model: PC24E-T-FC wi	th AOU24-OD-	77 (Maxrac	l)	Mode:	·····	- Mittan				
Serial No.: 84490006 (RF-r				Globaly	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup					
Applicant: Lucent Technol	 - FCC test setup - supply voltage 115 V AC - operating with external antenna AOU24-OD-77 - with 50 ft antenna cable 									
					ng with bit		t			
					de with f =					
				Test dist	ance: 3 m	eters				
······				Polarizat	tion: vertica	ai				
Ref.Level 120 dE 10 dB dB/Div.	βµV/m			ATT 5 dB	•• •• •• ••		Ref. O	ffset 21.3 dB		
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	2									
Start 2.367 GHz RBW 1 MHz				VBW 100 I	Hz		Stop 2. SWP 4	517 GHz .60 s		
			**** Multi	Marker ****	r			· .		
-	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.431 2.444 2.454	000 GHz 333 GHz 667 GHz 667 GHz 500 GHz	t t	- 48.96 dBµ\ 52.72 dBµ\ 98.40 dBµ\ 54.75 dBµ\ 53.35 dBµ\	//m //m //m				
Tested by:	······			Project-No						
Rainer Heller	. <u></u>			56305-9	0067-1	- 				
02/08/1999						Page	of	pages		



# Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/08/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-77</li> <li>with 50 ft antenna cable</li> <li>operating with bit rate 5 MBit</li> <li>TX mode with f = 2.462 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept



L			· · · ·								
Model: PC24E-1	Γ-FC with A	OU24-OD-7	7 (Maxrad	l)	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup						
Serial No.: 8449000	06 (RF-mod	dem), sample	e no. 1 (an	itenna)							
Applicant: Lucent Technologies Nederland B.V.					- supply voltage 115 V AC - operating with external antenna AOU24-OD-77						
						- with 50 ft antenna cable - operating with bit rate 5 MBit					
	-				- TX mode with $f = 2.462 \text{ GHz}$						
					Test dis	tance: 3 me	ters				
					Polariza	tion: vertica	I	· ·	÷.,		
Ref.Level 10 dB dB	130 dBµV /Div.	//m	<u> </u>		ATT 5 dB	,		Ref. Offs	et 21.3 dB		
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						<					
Start 2.38 RBW 1 M				· · · · · · · · · · · · · · · · · · ·	VBW 1 MH	lz.		Stop 2.53 SWP 20 r			
				**** Multi	Marker ***	*					
		Nr.1 Nr.2		000 GHz 167 GHz		- 73.36 dBμV 06.19 dBμV					
		Nr.3		167 GHz		73.16 dBμV					
		Nr.4	2.483	500 GHz		58.53 dBµV	/m				
		Nr.5		167 GHz		61.35 dBµV					
		Nr.6 Nr.7	2.5000	000 GHz		59.04 dBµV	/m				
		Nr.8							1. 		
									-		

Tested by: Rainer Heller	Project-No.: 56305-90067-1			
Date: 02/08/1999		Page	of	pages

Model:				Mode:				**************************************			
PC24E-T-FC with	AOU24-OD-	77 (Maxrad	J)								
Serial No.: 84490006 (RF-mo	Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)					<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> </ul>					
Applicant: Lucent Technolog	jies Nederlar	nd B.V.		- supply voltage 115 V AC - operating with external antenna AOU24-OD-77 - with 50 ft antenna cable							
						t rate 5 MBi	t i				
					-	2.462 GHz					
				Test dis	tance: 3 m	neters					
				Polariza	ation: horiz	ontal					
Ref.Level 85 dBµV 5 dB dB/Div.	//m			ATT 5 dB	3		Ref. (	Offset 21.3 dB			
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			, may		4	5					
Start 2.387 GHz RBW 1 MHz	•			VBW 100	Hz		Stop 2.537 GHz SWP 4.60 s				
			**** Multi N	Marker ***	*						
	Nr.1 Nr.2		000 GHz 333 GHz		 53.99 dBµ 82.08 dBµ						
	Nr.3 Nr.4	2.4716	667 GHz		52.42 dBµ	V/m					
Nr.4 2.483500 GHz Nr.5 2.500000 GHz Nr.6				36.90 dBµV/m 37.13 dBµV/m							
	Nr.ð Nr.7 Nr.8										
Tested by: Rainer Heller				Project-No 56305-9							
Date: 02/08/1999						Page	of	pages			

Model: PC24E-T-FC with AOU24-OD-77 (Maxrad)	Mode:
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-OD-77 - with 50 ft antenna cable
	- operating with bit rate 5 MBit
	- TX mode with f = 2.462 GHz
	Test distance: 3 meters
	Polarization: vertical
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 d

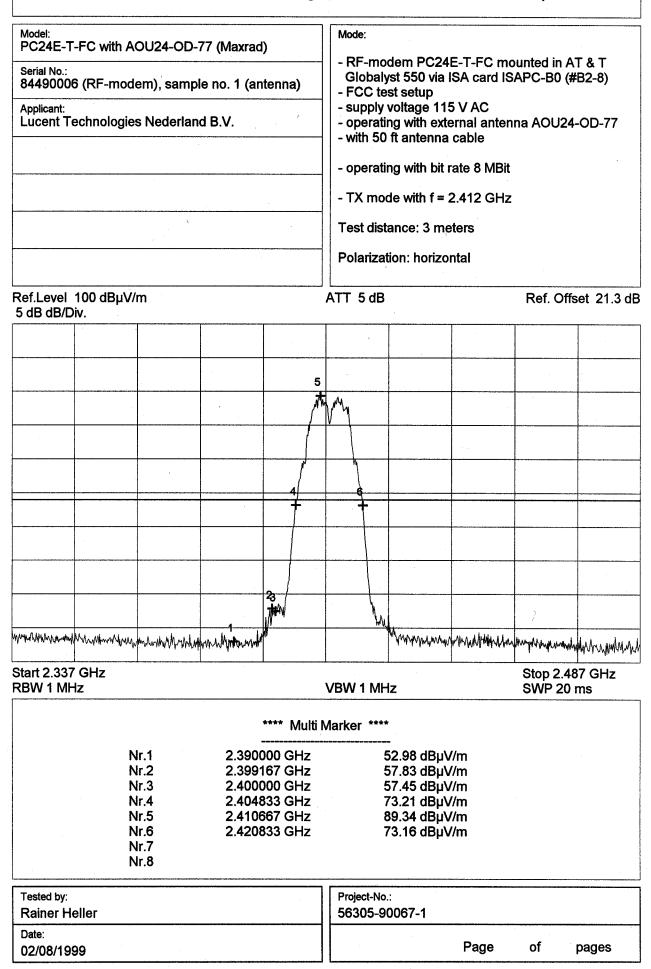
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art 2.387 GHz						Stop 2.53	7 GHz

**RBW 1 MHz** VBW 100 Hz SWP 4.60 s **** Multi Marker **** Nr.1 2.451167 GHz 52.79 dBµV/m 2.464667 GHz Nr.2 99.03 dBµV/m Nr.3 2.473500 GHz 53.53 dBuV/m Nr.4 2.474667 GHz 53.73 dBµV/m Nr.5 2.483500 GHz 41.70 dBµV/m Nr.6 2.500000 GHz 40.22 dBµV/m Nr.7 Nr.8 Tested by: Project-No.: **Rainer Heller** 56305-90067-1 Date: 02/08/1999 Page of pages



# Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/08/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-77</li> <li>with 50 ft antenna cable</li> <li>operating with bit rate 8 MBit</li> <li>TX mode with f = 2.412 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept



Model: PC24E-T-FC with AOU24-OD-77 (Maxrad)				Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup				
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V.								
			- supply voltage 115 V AC - operating with external antenna AOU24-OD-77					
				- with 50 ft antenna cable - operating with bit rate 8 MBit				
				- TX mo	ode with f = 2.4	12 GH	Z	
				Test dis	stance: 3 mete	rs		
			· · · · · · · · · · · · · · · · · · ·	Polariza	ation: vertical			
Ref.Level 130 dBµ\ 10 dB dB/Div.	v/m			ATT 5 dE	3		Ref. Off	set 21.3 dE
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	to a contraction with the	which we are						an a such a mutadin
Start 2.337 GHz RBW 1 MHz				VBW 1 M	Hz		Stop 2.4 SWP 20	87 GHz ms
			**** Multi	Marker ***	**			
	Nr.1 Nr.2		000 GHz 000 GHz		57.79 dBµV/n			
	Nr.3	2.399 ⁻	167 GHz		73.23 dBµV/n 74.02 dBµV/n	ו	,	
	Nr.4 Nr.5		000 GHz 833 GHz		73.82 dBµV/n 06.27 dBµV/n			
	Nr.6 Nr.7 Nr.8		500 GHz		73.49 dBµV/n			

Tested by: Rainer Heller	Project-No.: 56305-90067-1		·····	
Date: 02/08/1999		Page	of	pages

Model: PC24E-T-FC v	with AOL	J24-OD-7	77 (Maxrao	t)	Mode:	tom BC24			<u> </u>	
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V.					<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-77</li> </ul>					
			· · · · ·			-	ate 8 MBit 2.412 GHz			
					Test dista	ance: 3 me	ters			
		, 		:	Polarizat	ion: horizo	ntal			
Ref.Level 85 dE 5 dB dB/Div.	3µV/m		<u></u>		ATT 5 dB	- 		Ref. Offs	set 21.3 dB	
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Start 2.337 GHz RBW 1 MHz	:				VBW 100 F	łz	······································	Stop 2.48 SWP 4.6		
				**** Multi M	Marker ****					
Nr.1         2.390000 GHz           Nr.2         2.398500 GHz           Nr.3         2.400000 GHz           Nr.4         2.402833 GHz           Nr.5         2.413167 GHz			37.49 dBμV/m 39.22 dBμV/m 39.12 dBμV/m 53.44 dBμV/m 81.98 dBμV/m							
	Nr.6 Nr.7 Nr.8	,	2.421	667 GHz		3.26 dBµ∨				
Tested by: Rainer Heller					Project-No. 56305-90					
Date: 02/08/1999							Page	of	pages	

Model: PC24E-T-FC with AOU24-OD-77 (Maxrad)							
^{Serial No.:} 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> </ul>						
Applicant: Lucent Technologies Nederland B.V.	<ul> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-77</li> <li>- with 50 ft antenna cable</li> </ul>						
	- operating with bit rate 8 MBit						
	- TX mode with f = 2.412 GHz						
	Test distance: 3 meters						
	Polarization: vertical						
Ref.Level 120 dBμV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB						
	5						

5	
234 6	·
art 2.337 GHz Stop	2.487 GHz
W 1 MHz VBW 100 Hz SWP	4.60 s
**** Multi Marker ****	
Nr.1 2.390000 GHz 41.54 dBμV/m	ſ
Nr.2 2.398167 GHz 52.11 dBµV/m	
Nr.3 2.400000 GHz 52.41 dBμV/m	
Nr.4 2.401333 GHz 53.45 dBµV/m	
Nr.5 2.414167 GHz 98.07 dBµV/m	
Nr.6 2.423500 GHz 53.68 dBµV/m	
Nr.7	
Nir 9	
Nr.8	

Tested by: Rainer Heller	Project-No.: 56305-90067-1			
Date: 02/08/1999		Page	of	pages



# Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/08/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-77</li> <li>with 50 ft antenna cable</li> <li>operating with bit rate 8 MBit</li> <li>TX mode with f = 2.442 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

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Model: PC24E-T	-FC with A	OU24-OD-7	77 (Maxrad	)	Mode:							
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V.					Globaly	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup						
					- supply - operati	voltage 11 ng with exte	ernal anten	na AOU24-	OD-77			
			ø			ft antenna ng with bit i						
			11-111-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	· .	- TX mo	de with f = :	2.442 GHz					
					Test dist	ance: 3 me	ters					
					Polariza	tion: horizo	ntal					
Ref.Level 5 dB dB/D	100 dBµV/ )iv.	m	· · · ·		ATT 5 dB		÷ .	Ref. Offs	et 21.3 dE			
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Start 2.367	I	anda Ma adada adada a kara	i vann ver			- ABANAN ANNAM	mmmmmm	۲۰۰۳ Stop 2.51				
RBW 1 MH					VBW 1 MH	<b> z</b> \		SWP 20 r				
				**** Mult	i Marker ****	, -						
	N N	lr.1 lr.2 lr.3 lr.4	2.445	167 GHz 500 GHz 333 GHz	8	- 73.93 dBµ∨ 39.77 dBµ∨ 73.70 dBµ∨	//m					
	N	lr.5 lr.6										

Nr.8	·		-
Tested by: Rainer Heller	Project-No.: 56305-90067-1		· · ·
Date: 02/08/1999	Page	of	pages

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Nr.7

Model: PC24E-T-FC with AOU24-OD-77 (Maxrad)	Mode:	
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>RF-modem PC24E-T-FC model</li> <li>Globalyst 550 via ISA card IS</li> <li>FCC test setup</li> </ul>	
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external anten - with 50 ft antenna cable	na AOU24-OD-77
·	operating with bit rate 8 MBit	
	- TX mode with f = 2.442 GHz	
	Test distance: 3 meters	
	Polarization: vertical	
Ref.Level 130 dBµV/m	ATT 5 dB	Ref. Offset 21.3 dB

Ref.Level 130 dBµV/m 10 dB dB/Div.

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

			**** Multi	Marker ****		
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8		2.430833 GHz 2.432500 GHz 2.444833 GHz 2.453000 GHz 2.455167 GHz	71.18 dBμV/m 73.08 dBμV/m 106.98 dBμV/m 72.90 dBμV/m 72.55 dBμV/m		
Tested by: Rainer Heller			· · · ·	Project-No.: 56305-90067-1		
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Model: PC24E-T-FC with AOU24-OD-77 (Maxrad)	Mode:
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> </ul>
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-OD-77 - with 50 ft antenna cable
	- operating with bit rate 8 MBit
	- TX mode with $f = 2.442 \text{ GHz}$
	Test distance: 3 meters
	Polarization: horizontal
Ref.Level 85 dBµV/m 5 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB
2 db db/blv.	t
j j	
	4
Start 2.367 GHz RBW 1 MHz	Stop 2.517 GHz           VBW 100 Hz         SWP 4.60 s
**** Mult	ti Marker ****
Nr.1 2.433000 GHz	
Nr.2         2.439167 GHz           Nr.3         2.451667 GHz           Nr.4         2.454667 GHz           Nr.5         Nr.6           Nr.7         Nr.8	52.88 dBµV/m
Tested by: Rainer Heller	Project-No.: 56305-90067-1
Date: 02/08/1999	Page of pages

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Model: PC24E-	T-FC with /	AOU24-OD	-77 (Maxrad	)	Mode:					
Serial No.: 8449000		dem), samp	ole no. 1 (an	itenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>					
Applicant: Lucent 7	Fechnologi	es Nederlar	nd B.V.		- operat	<ul> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-77</li> <li>- with 50 ft antenna cable</li> </ul>				
							it rate 8 M = 2.442 Gi			
						tance: 3 r ition: verti				
		· · ·			FUIdIIZa	luon. veru	Cal			
Ref.Level 10 dB dB	120 dBµ∖ 8/Div.	//m			ATT 5 dB	• • • • • • • • • • • • • • • • • • •		Ref. Of	ffset 21.3 dB	
			· · · · · · · · · · · · · · · · · · ·		3	\				
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Start 2.36 RBW 1 M			1		VBW 100	Hz		Stop 2.5 SWP 4.	517 GHz 60 s	
				**** Multi I	Marker ***	*				
		Nr.1	2.4301	167 GHz		 48.76 dBj	uV/m			
-		Nr.2 Nr.3		333 GHz 333 GHz		52.39 dB 99.11 dB				
		Nr.4	2.4535	500 GHz	:	53.30 dB	uV/m			
-		Nr.5 Nr.6	2.4546	67 GHz		53.86 dB	uV/m			
		Nr.7 Nr.8								
Tested by:					Project-No	).:			······································	
Rainer H					56305-9	0067-1				

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# Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/08/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-77</li> <li>with 50 ft antenna cable</li> <li>operating with bit rate 8 MBit</li> <li>TX mode with f = 2.462 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

L					·····			· · · · · · · · · · · · · · · · · · ·			
Model: PC24E-T	-FC with A	OU24-OD-	77 (Maxrad	)		Mode:			· · · · · · · · · · · · · · · · · · ·		· .
Serial No.:		em), sampl			a)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-77</li> <li>- with 50 ft antenna cable</li> </ul>					
Applicant: Lucent T	echnologie	s Nederlan	d B.V.								
		÷ .		-	1				rate 8 MBit		
			-			- TX	mo	de with f =	2.462 GHz		
						Test	dist	ance: 3 me	eters		
						Polar	iza	tion: horizo	ntal		
Ref.Level 5 dB dB/D	100 dBµV/ iv.	m			<b>-</b>	ATT 5	dB	-		Ref. Offs	et 21.3 dB
							-				
					E	2					
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Start 2.387 RBW 1 MH	' GHz					VBW 1	MH	1		Stop 2.53 SWP 20	7 GHz
				****		/arker	****	•	- 	0111 201	
	Ν	lr.1	2.4546					- 73.21 dBµ\	//m		
	N	lr.2 Ir.3	2.4643 2.4708	333 G	Hz		1	90.15 dBµ\ 72.86 dBµ\	//m		
		ir.4 ir.5	2.4835 2.4960					52.93 dBµ\ 53.10 dBµ\			
	N	lr.6 ir.7 ir.8	2.5000					52.44 dBµ\			
Tested by:			· · · · · · · · · · · · · · · · · · ·			Project				······	
Rainer H	eller					5630	5-9	0067-1			

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Model: PC24E-T-FC with AOU24-C	D-77 (Maxrad	I)	Mode:				
Serial No.: 84490006 (RF-modem), sa	mple no. 1 (ar	itenna)	1	dem PC24 /st 550 via st setup			
Applicant: Lucent Technologies Neder	land B.V.		- supply - operati	voltage 11 ng with ext	ernal antei	nna AOU2	4-0D-77
				ft antenna			
				ng with bit de with f =			
· · · · · · · · · · · · · · · · · · ·				ance: 3 me		-	
			Polarizat	tion: vertica	al		
Ref.Level 130 dBµV/m			ATT 5 dB			Ref. Of	ffset 21.3 dB
10 dB dB/Div.							
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white and the month and the second	Manuman			My 5	6 Marina and a second	mologentino	mm.m.
Start 2.387 GHz RBW 1 MHz			VBW 1 MH	İz		Stop 2. SWP 20	537 GHz 0 ms
		**** Multi I	Marker ****	•			
Nr.1		 333 GHz		- 73.51 dBµ\			
Nr.2 Nr.3		833 GHz 667 GHz		)7.21 dBµ\ 73.97 dBµ\			
Nr.4	2.4750	000 GHz	7	72.04 dBµ\	//m		
Nr.5 Nr.6		500 GHz 000 GHz		58.12 dBµ\ 57.21 dBµ\			
Nr.7 Nr.8							
Tested by:			Project-No.				i
Rainer Heller Date:			56305-9	000/-1			
02/08/1999					Page	of	pages

			· · · · · ·	· .	·····				
Model: PC24E-T-FC w	ith AOU24-0	D-77 (Maxrao	d)	Mode:					
Serial No.: 84490006 (RF-	-modem), sar	mple no. 1 (ai	ntenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-77</li> <li>- with 50 ft antenna cable</li> </ul>					
Applicant: Lucent Techno	logies Neder	land B.V.							
			· ·	- opera	ting with b	it rate 8 MBi	t.		
				- TX me	ode with f	= 2.462 GHz	2		
					stance: 3 i				
				Polariza	ation: hori	zontal			
Ref.Level 85 dB 5 dB dB/Div.	βµV/m			ATT 5 dE	3		Ref. Offs	set 21.3 dB	
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						5			
					4				
Start 2.387 GHz RBW 1 MHz			······································	VBW 100	Hz		Stop 2.53 SWP 4.6		
			**** Multi	Marker **	**				
	Nr.1 Nr.2		500 GHz		 53.77 dB 81.80 dB	μV/m u)//m			
	Nr.3 Nr.4	2.471	667 GHz 500 GHz		53.77 dB 37.11 dB	μV/m			
	Nr.5 Nr.6		000 GHz		37.21 dB				
	Nr.7 Nr.8								
Tested by: Rainer Heller				Project-N	lo.: 90067-1				
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Date:

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Model: PC24E-T-FC with AOU24-OD-77 (Maxrad)	Mode:	•
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>RF-modem PC24E-T-FC mo</li> <li>Globalyst 550 via ISA card IS</li> <li>FCC test setup</li> </ul>	
Applicant: Lucent Technologies Nederland B.V.	<ul> <li>supply voltage 115 V AC</li> <li>operating with external anten</li> <li>with 50 ft antenna cable</li> </ul>	na AOU24-OD-77
	operating with bit rate 8 MBit	
	TX mode with f = 2.462 GHz	
	Test distance: 3 meters	
·	Polarization: vertical	
Ref.Level 120 dBµV/m	ATT 5 dB	Ref. Offset 21.3 dB

Ref.Level 120 dBµV/m 10 dB dB/Div.

				3	~~_45	6		· · · · · · · · · · · · · · · · · · ·
					~45 	6		
		 			45	6 +		
Start 2.387 RBW 1 MF	GHz		<u>.</u>	VBW 100 I	L		Stop 2.5 SWP 4.6	⊥ 37 GHz

#### **** Multi Marker **** Nr.1 2.451333 GHz 53.71 dBµV/m Nr.2 2.459333 GHz 99.01 dBµV/m Nr.3 53.20 dBµV/m 2.473500 GHz Nr.4 2.483500 GHz 41.39 dBµV/m Nr.5 2.485167 GHz 41.34 dBµV/m Nr.6 2.500000 GHz 39.92 dBµV/m Nr.7 Nr.8 Project-No.: Tested by: 56305-90067-1 **Rainer Heller** Date: Page of pages 02/08/1999



Test results for setup no. 2

Receive (RX) mode



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

Model: Type:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/08/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-77
- with 50 ft antenna cable
- RX mode with f = 2.442 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.095	horizontal	44.5	-92.9		29.4	43.5	74

**Result:** The limits are kept



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

Model: Type: Serial No.: Applicant:	PC24E-T-FC with AOU24-OD-77 (Maxrad) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/08/1999
Operator:	R. Heller
•	

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-77
- with 50 ft antenna cable
- RX mode with f = 2.442 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.0901	horizontal	39.5	-97.7		29.4	38.7	54

**Result:** The limits are kept



Test results for setup no. 3

Transmit (TX) mode



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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Date of test:	12/10/1998
Operator:	R. Heller
Mode:	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>

- supply voltage 115 V AC
- TX mode

Tested on:

Antenna connector

Selected	Operating	Power meter	Correction-	Output	Limit
bit rate	frequency	reading	factor	power	
	[GHz]	[dBm]	[dB]	[dBm]	[dBm]
	2.412	14.3	0.5	14.8	30
2 MBit	2.442	14.6	0.5	15.1	30
	2.462	14.4	0.5	14.9	30
	2.412	11.0	0.5	11.5	30
5 MBit	2.442	11.3	0.5	11.8	30
	2.462	11.1	0.5	11.6	30
	2.412	11.1	0.5	11.6	30
8 MBit	2.442	11.4	0.5	11.9	30
	2.462	11.2	0.5	11.7	30

#### Note:

Typical gain of external omni-directional antenna AOU24-OD-55 is 5 dBi. Effective antenna gain is calculated by subtracting the insertion loss of 2.5 m antenna cable TBD. Limit of 30 dBm is reduced by the amount of the effective antenna gain exceeding 6 dBi.

Antenna cable	Antenna gain	Total insertion	Effective antenna gain		Limit
	AOU24-OD-55	loss	total value	exceeding 6 dBi	
	[dBi]	[dB]	[dBi]	[dB]	[dBm]
2.5 m (TBD)	5.0	3.3	1.7	0.0	30.0

Result: The limit is kept



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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Туре:	RF-modem with external antenna for wireless LAN
Serial No .:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/11/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-55
- with 2.5 m antenna cable TBD
- operating with bit rate 2 MBit
- TX mode with f = 2.412 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.3900	vertical	60.0		0.6	20.7	60.0	74
2.3985	vertical	71.7		0.6	20.7	71.7	NRB
2.4000	vertical	69.4		0.6	20.7	69.4	NRB
2.4023	vertical	73.4		0.6	20.7	73.4	NRB
2.4145	vertical	107.9		0.6	20.7	107.9	OB
2.4235	vertical	73.9		0.6	20.7	73.9	OB
2.7650	vertical	43.1	-88.4		23.7	42.3	74
4.8303	vertical	40.6	-94.0		27.3	40.3	74
7.2391	vertical	43.5	-92.2		29.9	44.7	NRB
8.2493	vertical	41.2	-98.5		33.4	41.9	74
9.6467	horizontal	45.4	-94.1		33.4	46.3	NRB
12.0780	vertical	44.1	-96.7		33.6	43.9	74

Note: OB means "operation band" (2400 - 2483.5 MHz); in this case limit is 1 W (measured conducted with power meter). NRB means "non restricted band"; in this case limit is 20 dB below maximum in-band-power equivalent to 112.7 dBµV/m.

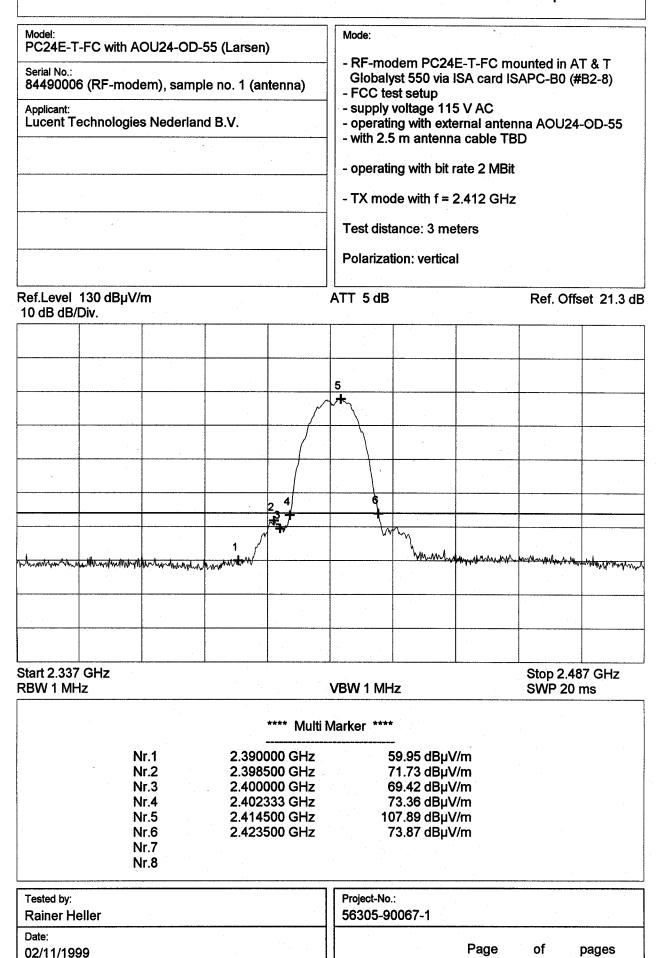
**Result:** The limits are kept

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

							· · · · · · · · · · · · · · · · · · ·		
Model: PC24E-	T-FC with /	OU24-OD-5	5 (Larsen	)	Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup				
Serial No.: 8449000		dem), sample	e no. 1 (ar	itenna)					
Applicant: Lucent	Applicant: Lucent Technologies Nederland B.V.				- supply - operat	voltage 11 ting with ext	ernal antei	nna AOU24-	-OD-55
						.5 m antenr			
						ting with bit			
						ode with f =		2	
						stance: 3 m			
					Polariza	ation: horizo	ontai	· · ·	
Ref.Level 10 dB dB	120 dBµ∖ β/Div.	//m			ATT 5 dE	3		Ref. Offs	et 21.3 dB
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multiplice	nythinnin	munmum	Minster			What	when the most of the man	month marine	monument
				- 					
Start 2.33 RBW 1 M					VBW 1 M	Hz		Stop 2.48 SWP 20 r	
				**** Multi I	Marker ***	**	· · ·	· · · · · · · · · · · · · · · · · · ·	
		Nr.1	2.3900	000 GHz		 51.19 dBµ\	//m		
Nr.22.397667 GHzNr.32.400000 GHzNr.42.403833 GHzNr.52.414500 GHz		60.79 dBµV/m 58.08 dBµV/m							
			73.62 dBµ\	//m		-			
		Nr.6		667 GHz		95.89 dBµ\ 73.46 dBµ\			
		Nr.7 Nr.8							
Tested by:					Project-No	o :			

Rainer Heller	56305-90067-1	
Date:		
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Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C





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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Туре:	RF-modem with external antenna for wireless LAN
Serial No .:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/11/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-55
- with 2.5 m antenna cable TBD
- operating with bit rate 2 MBit
- TX mode with f = 2.412 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.3900	vertical	44.4		0.6	20.7	44.4	54
2.3937	vertical	53.5		0.6	20.7	53.5	NRB
2.3983	vertical	66.2		0.6	20.7	66.2	NRB
2.4000	vertical	63.8		0.6	20.7	63.8	NRB
2.4112	vertical	104.3		0.6	20.7	104.3	OB
2.4310	vertical	53.8		0.6	20.7	53.8	OB
9.6482	horizontal	40.5	-98.8		33.4	41.6	NRB
12.0612	vertical	38.1	-102.5		33.6	38.1	54

Note:OB means "operation band" (2400 - 2483.5 MHz); in this case<br/>limit is 1 W (measured conducted with power meter).<br/>NRB means "non restricted band"; in this case limit is 20 dB<br/>below maximum in-band-power equivalent to 104.3 dBμV/m.

**Result:** The limits are kept

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

Model: PC24E-T-FC with AOU24-OD-55 (Larsen)	Mode:					
Serial No.: 84490006 (RF-modem), sample no. 1 (antenn	<ul> <li>a)</li> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>					
Applicant: Lucent Technologies Nederland B.V.	<ul> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> </ul>					
	- operating with bit rate 2 MBit					
	- TX mode with f = 2.412 GHz					
	Test distance: 3 meters					
	Polarization: horizontal					
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB					

art 2.337 BW 1 MH			VBW 100 Hz				Stop 2.487 GHz SWP 4.60 s		
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**** Multi Marker **** 2.390000 GHz 39.39 dBµV/m Nr.1 53.10 dBµV/m Nr.2 2.398333 GHz Nr.3 2.400000 GHz 50.18 dBµV/m Nr.4 2.402000 GHz 53.56 dBµV/m Nr.5 2.414833 GHz 90.60 dBµV/m Nr.6 2.423167 GHz 53.76 dBµV/m Nr.7 Nr.8 Tested by: Project-No.: **Rainer Heller** 56305-90067-1 Date: Page of pages 02/11/1999

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

Model: PC24E-T-	-FC with AOU24-0	OD-55 (Larsen		Mode:	** · · · · · · · · · · · · · · · · · ·				
Serial No.:	(RF-modem), sa	•		<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-55</li> <li>- with 2.5 m antenna cable TBD</li> </ul>					
Applicant: Lucent Te	echnologies Nede	rland B.V.							
					ing with bit de with f =				
				Test dist	tance: 3 m	eters	с. С. 1	1. S.	
			<del>1997 9. 9. 8 20</del>	Polariza	tion: vertic	al			
Ref.Level 1 10 dB dB/D	120 dBµV/m Div.			ATT 5 dB			Ref. Off	set 21.3 dB	
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			<u>ب</u>	5 <b>*</b> ~~	-		· ·		
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		1,~~+			the				
Start 2.337 RBW 1 MHz		VBW 100 Hz			Stop 2.487 GHz SWP 4.60 s				
			**** Multi	Marker ****					
	Nr.1 2.39000 Nr.2 2.39366 Nr.3 2.39833 Nr.4 2.40000 Nr.5 2.41116			44.39 dBμV/m 53.53 dBμV/m 66.23 dBμV/m 63.79 dBμV/m 104.34 dBμV/m				·	

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2.431000 GHz

53.78 dBµV/m

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Nr.6

Nr.7 Nr.8

Tested by:

Date:

**Rainer Heller** 

02/11/1999



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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/11/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-55
- with 2.5 m antenna cable TBD
- operating with bit rate 2 MBit
- TX mode with f = 2.442 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4325	vertical	73.5		0.6	20.7	73.5	OB
2.4450	vertical	107.4		0.6	20.7	107.4	OB
2.4535	vertical	72.4		0.6	20.7	72.4	OB
4.8894	vertical	38.0	-96.4		27.3	37.9	74
7.3305	vertical	46.5	-90.2		29.9	46.7	74
9.7680	horizontal	43.1	-96.9		33.4	43.5	NRB
12.2273	horizontal	42.9	-97.2		33.6	43.4	74

Note:OB means "operation band" (2400 - 2483.5 MHz); in this case<br/>limit is 1 W (measured conducted with power meter).<br/>NRB means "non restricted band"; in this case limit is 20 dB<br/>below maximum in-band-power equivalent to 107.4 dBμV/m.

**Result:** The limits are kept

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

	·····	·			· · · · · · · · · · · · · · · · · · ·			
Model: PC24E-T-FC with	AOU24-OD-	55 (Larsen)	)	Mode:	dam DOO45	τ Γο		- 0 -=
Serial No.: 84490006 (RF-m	itenna)	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> </ul>						
Applicant: Lucent Technolog	gies Nederlan	d B.V.		- operati - with 2.5	voltage 115 ng with exter 5 m antenna ng with bit ra	nal antenn cable TBD	a AOU24-	OD-55
-	* 1999 - Alton - Kan ^{ta} rana -			- TX mo	de with f = 2.	442 GHz		
		····			ance: 3 mete			
				Polariza	tion: horizon	al		
Ref.Level 120 dBµ 10 dB dB/Div.	ıV/m			ATT 5 dB			Ref. Offs	et 21.3 dB
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Start 2.367 GHz RBW 1 MHz	engennet ennement - or other er enn		J	VBW 1 MH	łz		Stop 2.51 SWP 20 n	
			**** Multi I	Marker ****	•			
	Nr.1 Nr.2 Nr.3	2.4338	667 GHz 333 GHz 500 GHz	-	- 59.52 dBµV/ı 73.08 dBµV/ı 95.40 dBµV/ı	m		

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2.451667 GHz

2.455833 GHz

Nr.4 Nr.5

Nr.6 Nr.7 Nr.8

Tested by:

Date:

**Rainer Heller** 

02/11/1999

73.24 dBµV/m

56.98 dBµV/m

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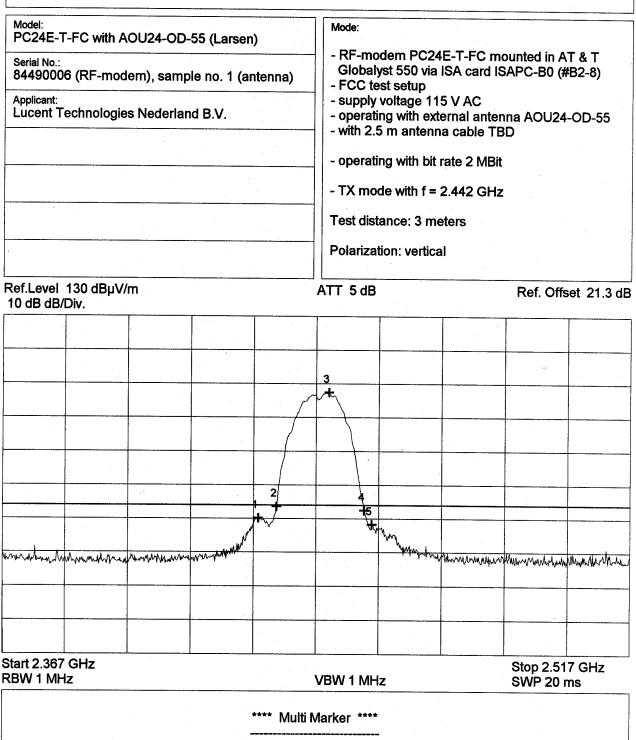
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### Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C



	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.428167 GHz 2.432500 GHz 2.445000 GHz 2.453500 GHz 2.455333 GHz	70.11 dBμV/m 73.54 dBμV/m 107.36 dBμV/m 72.42 dBμV/m 68.26 dBμV/m
Tested by: Rainer Heller			Project-No.: 56305-90067-1
Date: 02/11/1999		1	Page of pages



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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Type:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/11/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-55
- with 2.5 m antenna cable TBD
- operating with bit rate 2 MBit
- TX mode with f = 2.442 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4245	vertical	53.4		0.6	20.7	53.4	OB
2.4450	vertical	104.0		0.6	20.7	104.0	OB
2.4605	vertical	53.9		0.6	20.7	53.9	OB
7.3271	vertical	43.2	-93.4		29.9	43.5	54

Note:OB means "operation band" (2400 - 2483.5 MHz); in this case<br/>limit is 1 W (measured conducted with power meter).<br/>NRB means "non restricted band"; in this case limit is 20 dB<br/>below maximum in-band-power equivalent to 104.0 dBμV/m.

**Result:** The limits are kept

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

Model: PC24E-	T-FC with	AOU24-OD-5	55 (Larsen	)	Mode:		· · · ·			
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)					- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup					
Applicant: Lucent	Technologi	es Nederland	d B.V.		- supply - operat	voltage 11	I5 V AC ternal ante na cable TI	nna AOU2 BD	24-OD-55	
						-	rate 2 MBi			
		·····.	· · · · ·				2.442 GH	Z		
			· · ·			tance: 3 m tion: horizo				
	· · · ·	-			FUIdHZd					
Ref.Level 10 dB dE	l 120 dBµ\ 3/Div.	//m			ATT 5 dB			Ref. O	ffset 21.3 dB	
					3 / <b>+</b>					
				1 2	4					
			لم .	*/	- h	5 ••••				
				4 						
Start 2.36 RBW 1 M		<u></u>		J	VBW 100	Hz		Stop 2. SWP 4	517 GHz .60 s	
				**** Multi l	Marker ***	*				
Nr.1         2.428333 GHz           Nr.2         2.432000 GHz           Nr.3         2.445000 GHz           Nr.4         2.453000 GHz           Nr.5         2.457333 GHz           Nr.6         Nr.7           Nr.8         Nr.8						 52.26 dBµ 53.15 dBµ 91.11 dBµ 53.50 dBµ 46.27 dBµ	V/m V/m V/m			
Tested by Rainer I					Project-No 56305-9					
Date: 02/11/1	999						Page	of	pages	

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02/11/1999

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

Model: PC24E-T-FC with AOU24-OD-55 (Larsen)	Mode:
^{Serial No.:} 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>
Applicant: Lucent Technologies Nederland B.V.	<ul> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> </ul>
	- operating with bit rate 2 MBit
	- TX mode with f = 2.442 GHz
-	Test distance: 3 meters         Polarization: vertical
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB
	3 ~~~~

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**** N

Start 2.367 GHz

**RBW 1 MHz** 

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#### **** Multi Marker ****

VBW 100 Hz

	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.424500 GHz 2.428333 GHz 2.445000 GHz 2.456000 GHz 2.460500 GHz	53.43 dBμV/m 65.62 dBμV/m 104.04 dBμV/m 58.51 dBμV/m 53.89 dBμV/m
Tested by: Rainer Heller			Project-No.: 56305-90067-1
Date: 02/11/1999	<u></u>		Page of pages

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4 ***\5

Stop 2.517 GHz SWP 4.60 s



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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/11/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-55
- with 2.5 m antenna cable TBD
- operating with bit rate 2 MBit
- TX mode with f = 2.462 GHz

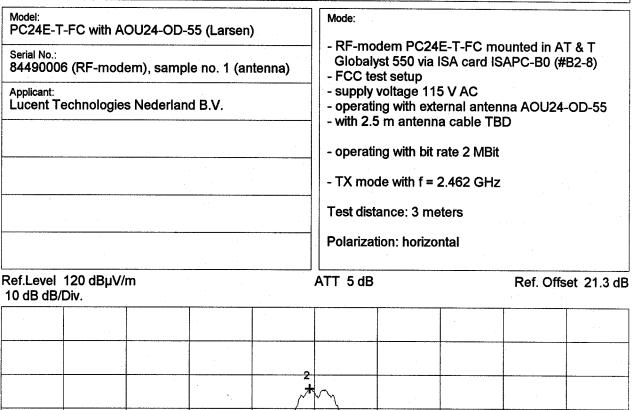
Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4523	vertical	73.5		0.6	20.7	73.5	OB
2.4608	vertical	107.9		0.6	20.7	107.9	OB
2.4733	vertical	73.5		0.6	20.7	73.5	OB
2.4835	vertical	59.6		0.6	20.7	59.6	74
2.4850	vertical	60.7		0.6	20.7	60.7	74
2.5000	vertical	57.1		0.6	20.7	57.1	74
4.9296	vertical	40.7	-93.7		27.3	40.6	74
7.3906	vertical	45.9	-90.2		30.0	46.7	74
8.4473	vertical	43.8	-96.4		33.4	44.0	74
9.8473	vertical	42.9	-96.8		33.4	43.7	NRB
12.3300	horizontal	43.3	-97.5		33.6	43.1	74

Note:OB means "operation band" (2400 - 2483.5 MHz); in this case<br/>limit is 1 W (measured conducted with power meter).<br/>NRB means "non restricted band"; in this case limit is 20 dB<br/>below maximum in-band-power equivalent to 107.9 dBμV/m.

**Result:** The limits are kept

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



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tart 2.387	' GHz	l	<u> </u>	L	<u>I</u>	1	L	Stop 2.53	7 GHz

**RBW 1 MHz** SWP 20 ms VBW 1 MHz **** Multi Marker **** 2.453500 GHz 73.57 dBµV/m Nr.1 95.89 dBµV/m Nr.2 2.460833 GHz 2.471333 GHz 73.95 dBµV/m Nr.3 2.483500 GHz 50.46 dBµV/m Nr.4 2.486667 GHz 52.34 dBµV/m Nr.5 2.500000 GHz 50.36 dBµV/m Nr.6 Nr.7 Nr.8 Project-No .: Tested by: **Rainer Heller** 56305-90067-1 Date: Page of pages 02/11/1999

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

Model: PC24E-T-FC wit	th AOU24-OD-	55 (Larsen	)	Mode:							
Serial No.: 84490006 (RF-n	nodem), samp	le no. 1 (ar	itenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup							
Applicant: Lucent Technolo	Applicant: Lucent Technologies Nederland B.V.					<ul> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> </ul>					
						rate 2 MBi					
· · ·	······				de with $f =$						
					tance: 3 m		-				
				Polariza	ntion: vertica	al					
Ref.Level 130 dB 10 dB dB/Div.	μV/m			ATT 5 dB	}	<u></u>	Ref. (	Offset 21.3 dB			
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		-				_					
Start 2.387 GHz RBW 1 MHz		1	I	VBW 1 MH	Ηz	L.,	Stop 2 SWP 2	2.537 GHz 20 ms			
			**** Multi l	Marker ***	*						
	Nr.1		333 GHz		 73.51 dBµ∖ 07.00 dBµ∖						
	Nr.2 Nr.3 Nr.4	2.4733	833 GHz 333 GHz 500 GHz		07.89 dBµ\ 73.46 dBµ\ 50.62 dBµ\	//m					
	Nr.5 Nr.6	2.4850	000 GHz 000 GHz 000 GHz	1	59.62 dBµ\ 60.66 dBµ\ 57.06 dBµ\	//m					
	Nr.7 Nr.8	2.000									
Tested by: Rainer Heller				Project-No 56305-9							
Date: 02/11/1999						Page	of	pages			

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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/11/1999
Operator:	R. Heller

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-55
- with 2.5 m antenna cable TBD
- operating with bit rate 2 MBit
- TX mode with f = 2.462 GHz

Detector: Average

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.4443	vertical	53.4		0.6	20.7	53.4	OB
2.4610	vertical	104.6		0.6	20.7	104.6	OB
2.4782	vertical	53.3		0.6	20.7	53.3	OB
2.4835	vertical	45.5		0.6	20.7	45.5	54
2.4847	vertical	45.7		0.6	20.7	45.7	54
2.5000	vertical	39.6		0.6	20.7	39.6	54
7.3871	vertical	43.1	-92.9		30.0	44.0	54

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

**Result:** The limits are kept

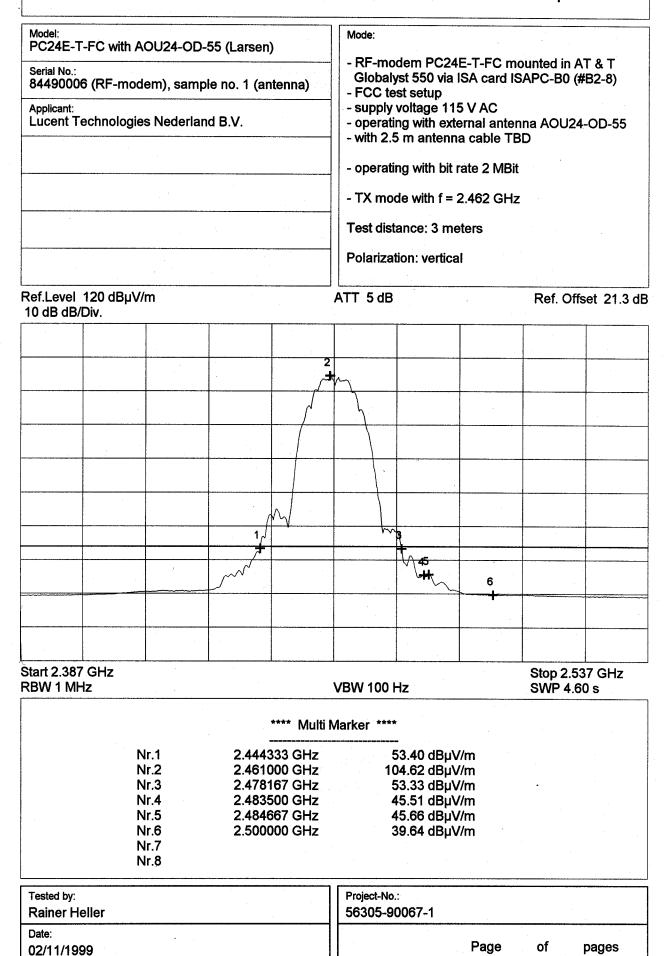
Radiated emission 1 GHz - 25 GHz acc. to FCC Part 15 Subpart C

Model: PC24E-T-FC wi		55 (Loroon)	Mode:							
Serial No.:		le no. 1 (antenna)	Globalyst 550	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)						
Applicant: Lucent Technol	ogies Nederlan	d B.V.	<ul> <li>- supply voltag</li> <li>- operating with</li> </ul>	<ul> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> </ul>						
			- with 2.5 m an							
			- TX mode with							
			Test distance:	3 meters						
	1		Polarization: h	orizontal		<i>,</i>				
Ref.Level 120 dE 10 dB dB/Div.	3μV/m	· · · · · · · · · · · · · · · · · · ·	ATT 5 dB		Ref. C	Offset 21.3 dB				
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			ž.							
			3							
			45	6						
		· · · · · · · · · · · · · · · · · · ·								
Start 2.387 GHz RBW 1 MHz		·	VBW 100 Hz	· · ·	Stop 2 SWP 4	.537 GHz 4.60 s				
		**** Multi	Marker ****							
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.451667 GHz 2.459500 GHz 2.473000 GHz 2.483500 GHz 2.484833 GHz 2.500000 GHz	91.19 ( 52.87 ( 39.26 ( 39.31 (	dBµV/m dBµV/m dBµV/m dBµV/m dBµV/m dBµV/m	•					
Tested by: Rainer Heller		· · · · · · · · · · · · · · · · · · ·	Project-No.: 56305-90067-	1						
Date: 02/11/1999				Page	of	pages				

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





## Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-55 (Larsen) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/11/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> <li>operating with bit rate 5 MBit</li> <li>TX mode with f = 2.412 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

L								
Model: PC24E-T-FC with AOU24-OD-	55 (Larsen)	Mode:						
Serial No.: 84490006 (RF-modem), samp	le no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup						
Applicant: Lucent Technologies Nederlan	d B.V.	- supply voltage 115 \ - operating with extern	- supply voltage 115 V AC - operating with external antenna AOU24-OD-55 - with 2.5 m antenna cable TBD					
		- operating with bit rat	e 5 MBit					
		- TX mode with f = 2.4						
		Test distance: 3 mete	rs					
		Polarization: horizonta	al					
Ref.Level 120 dBµV/m 10 dB dB/Div.		ATT 5 dB	Ref. Offset 21.3 dB					
		5 1 1 1 1						
	4/							
	23 Notes	M						
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j								
· · ·								
Start 2.337 GHz RBW 1 MHz	· · · ·	VBW 1 MHz	Stop 2.487 GHz SWP 20 ms					
	**** Multi	Marker ****						
Nr.1 Nr.2 Nr.3	2.390000 GHz 2.399000 GHz 2.400000 GHz	51.42 dBμV/m 64.60 dBμV/m 65.52 dBμV/m						
Nr.4 Nr.5	2.403833 GHz 2.414167 GHz	73.57 dBμV/m 95.00 dBμV/m						
Nr.6 Nr.7 Nr.8	2.421500 GHz	73.49 dBµV/m						
Tested by:		Project-No.:						
Rainer Heller		56305-90067-1						
Date:								

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Model: PC24E-T-FC with	AOU24-OD-5	5 (Larsen)		Mode:							
Serial No.: 84490006 (RF-m		· · · · · · · · · · · · · · · · · · ·	<b>)</b>	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>							
Applicant: Lucent Technolog	Applicant: Lucent Technologies Nederland B.V.					- supply voltage 115 V AC - operating with external antenna AOU24-OD-55					
				- with 2.	5 m antenn	a cable T	BD				
					ing with bit						
					de with f = : tance: 3 me		Z				
				Polariza	tion: vertica	I					
Ref.Level 130 dBµ 10 dB dB/Div.	JV/m			ATT 5 dB			Ref. Off	set 21.3 dB			
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Start 2.337 GHz RBW 1 MHz			١	/BW 1 M⊦	łz	-	Stop 2.4 SWP 20	87 GHz ms			
		**** N	lulti N	larker ***	÷						
	Nr.1 Nr.2	2.390000 GI 2.397333 GI			- 63.56 dBµ\ 73.84 dBµ\			·			
	Nr.3	2.399500 GI	Ηz	-	76.48 dBµ∖	//m	•				
	Nr.4 Nr.5	2.400000 GI 2.414000 GI			76.89 dBµ∖ 06.83 dBµ∖						
	Nr.6 Nr.7 Nr.8	2.427500 Gł	Ηz		73.99 dBµV	//m					
Tested by:				Project-No	.:						
Rainer Heller	-, - <u>.</u>		]	56305-9							
Date:			1								

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Model: PC24E-T-F0	C with A	OU24-OD-5	5 (Larsen	)	Mode:				······································		
Serial No.: 84490006 (I	RF-mod	em), sample	e no. 1 (ar	ntenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup						
Applicant: Lucent Tech	nologie	s Nederland	B.V.		- supply - operat	voltage 11 ing with ext 5 m antenn	ernal anter	nna AOU	24-OD-55		
						ing with bit					
					- TX mo	de with f =	2.412 GHz	:			
					Test dis	tance: 3 me	eters				
					Polariza	ition: horizo	ntal				
Ref.Level 12 10 dB dB/Div		/m			ATT 5 dB			Ref. C	Offset 21.3 dB		
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Start 2.337 G	Hz		ngan ta shintarana shi ta						.487 GHz		
RBW 1 MHz					VBW 100	Hz		SWP 4	4.60 s		
		a. a	0.000		Marker ***	* 	11				
	N N	Nr.1 Nr.2 Nr.3 Nr.4	2.398 2.400	000 GHz 667 GHz 000 GHz 167 GHz		39.18 dBµ\ 43.42 dBµ\ 43.27 dBµ\ 52.21 dBµ\	//m //m		· · ·		
	ר ה ר	Nr.5 Nr.6 Nr.7 Nr.8	2.412	833 GHz 500 GHz		52.21 dBμ 86.95 dBμ 52.72 dBμ\	//m				
Tested by: Rainer Helle	er				Project-No 56305-9				· · · · · · · · · · · · · · · · · · ·		
Date: 02/11/1999	_						Page	of	pages		

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Model: PC24E-T-FC v	Model: PC24E-T-FC with AOU24-OD-55 (Larsen)						Mode:				
Serial No.: 84490006 (RF	-mode	m), sampl	e no. 1 (an	tenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>						
Applicant: Lucent Techno	Applicant: Lucent Technologies Nederland B.V.					- supply voltage 115 V AC - operating with external antenna AOU24-OD-55 - with 2.5 m antenna cable TBD					
				·		ing with bit r	•				
		<u></u>				ode with f = 2					
	n de la constance de la constance de la			· · · · · · · · · · · · · · · · · · ·		tance: 3 me ition: vertical					
	· .	· · ·							C		
Ref.Level 120 d 10 dB dB/Div.	dBµV/m	ן			ATT 5 dB	• •		Ref. O	offset 21.3 dE		
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Start 2.337 GHz RBW 1 MHz				-	VBW 100	Hz	· · · · · · · · · · · · · · · · · · ·	Stop 2. SWP 4	.487 GHz .60 s		
				**** Multi	Marker ***	*					
	Nr Nr Nr Nr Nr Nr	.2 .3 .4 .5 .6 .7	2.3976 2.3983 2.4000 2.4146	000 GHz 667 GHz 333 GHz 000 GHz 667 GHz 667 GHz		 42.28 dBµV 53.53 dBµV 54.93 dBµV 53.94 dBµV 99.85 dBµV 53.89 dBµV	/m /m /m				
Tested by: Rainer Heller	·····				Project-No 56305-9						

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Date:

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# Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-55 (Larsen) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/11/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> <li>operating with bit rate 5 MBit</li> <li>TX mode with f = 2.442 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

L										
Model: PC24E-T-FC w	ith AOU24-OD	-55 (Larsen)	)	Mode:						
Serial No.: 84490006 (RF-	modem), samı	ple no. 1 (an	tenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-55</li> <li>- with 2.5 m antenna cable TBD</li> </ul>						
Applicant: Lucent Technol	ogies Nederla	nd B.V.								
						rate 5 MBi				
					-	2.442 GH				
· · · · · · · · · · · · · · · · · · ·				Test dist	tance: 3 m	eters				
				Polariza	tion: horizo	ontal	ί.			
Ref.Level 120 dl 10 dB dB/Div.	BµV/m	<del>V.,.,1.,</del>		ATT 5 dB		<u>.</u>	Ref. C	Offset 21.3 dB		
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				3 						
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Mary Market Market Market	Market	MARK CAME A			- multiplet		the man have	ydramhaan allan an a		
	······	· .								
					<u> </u>					
Start 2.367 GHz RBW 1 MHz	1		L	VBW 1 MH	lz	1	Stop 2 SWP 2	2.517 GHz 20 ms		
			**** Multi I	Marker ***	•					
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.4341 2.4446 2.4515	167 GHz 167 GHz 367 GHz 300 GHz 333 GHz		- 65.69 dBµ' 73.62 dBµ' 95.30 dBµ' 73.84 dBµ' 65.77 dBµ'	V/m V/m V/m				
Tested by: Rainer Heller				Project-No 56305-9		· · · · · · · · · · · · · · · · · · ·				
Date: 02/11/1999				·····	<del></del>	Page	of	pages		

Model:	· · · · · · · · · · · · · · · · · · ·	Mode:					
PC24E-T-FC with AOU24-OD-55 (	(Larsen)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-55</li> <li>- with 2.5 m antenna cable TBD</li> </ul>					
Serial No.: 84490006 (RF-modem), sample n	o. 1 (antenna)						
Applicant: Lucent Technologies Nederland B	.V.						
		- operating with bit					
	· · ·	- TX mode with f =	2.442 GHz				
· · · · · · · · · · · · · · · · · · ·		Test distance: 3 m	eters				
		Polarization: vertic	al				
Ref.Level 130 dBµV/m 10 dB dB/Div.		ATT 5 dB	Ref. Of	fset 21.3 dB			
		2 .t.					
		M I	· · · · · · · · · · · · · · · · · · ·				
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white white the second and the second	· · · · · · · · · · · · · · · · · · ·	1W	MmhMhhannin	www.www.www.			
Start 2.367 GHz RBW 1 MHz		VBW 1 MHz	Stop 2.5 SWP 20				
	**** Multi f	Marker ****					
Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7	2.427000 GHz 2.444667 GHz 2.457167 GHz	72.72 dBμ 106.40 dBμ 73.77 dBμ	V/m				
Nr.8		· · · · · · · · · · · · · · · · · · ·					
Tested by: Rainer Heller		Project-No.: 56305-90067-1					
Date: 02/11/1999			Page of	pages			

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	ז 7 7 7 7	Vr.1 Vr.2 Vr.3 Vr.4 Vr.5 Vr.6 Vr.7 Vr.8	2.432 2.4448 2.4525	**** Multi 333 GHz 167 GHz 333 GHz 500 GHz 567 GHz	5 8 5	- 52.82 dBµV 52.81 dBµV 57.18 dBµV 52.72 dBµV 14.24 dBµV	//m //m //m	1			
Start 2.367 RBW 1 MH:					VBW 100 H	-lz		Stop 2.51 SWP 4.6			
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					3						
Ref.Level 10 dB dB/[		//m			ATT 5 dB			Ref. Offs	set 21.3 dE		
· · ·					Polariza	tion: horizo	ntal				
					Test dist	ance: 3 me	eters				
						de with $f = 2$					
	, on no rogi				-   - with 2.	5 m antenn	a cable TE	BD	-00-55		
Applicant:		es Nederlar		<b>,</b>	- FCC te	est setup voltage 11 ng with exte	5 V AC				
Serial No.: 84490006						- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)					
Modei: PC24E-T-	-FC with A	\0U24-0D-	-55 (Larsen	1)	Mode:						

Tested by:	Project-No.:
Rainer Heller	56305-90067-1
Date:	
02/11/1999	Page of pages

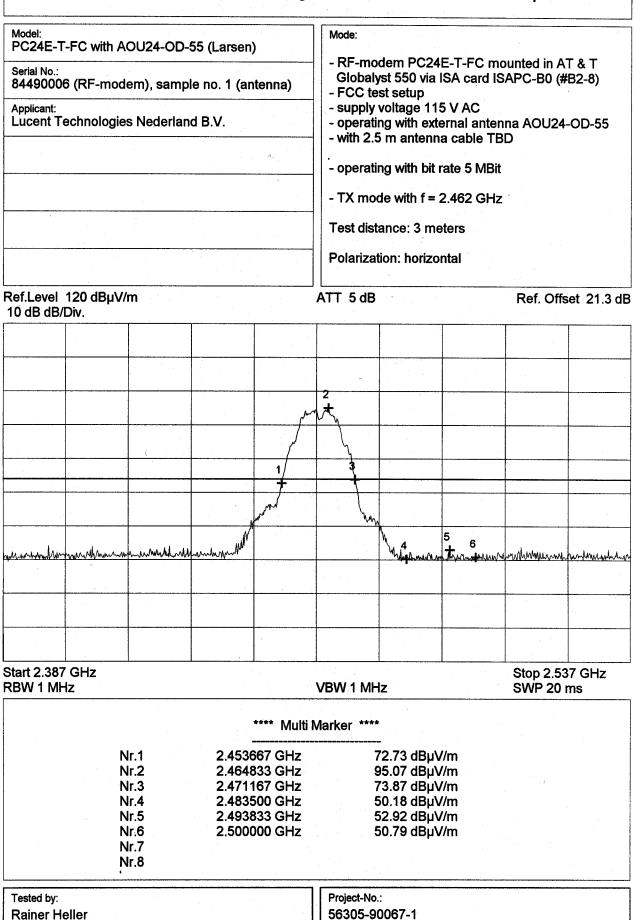
Model: PC24E-T-FC v	vith AOU24-OD-	55 (Larsen	)	Mode:				
Serial No.: 84490006 (RF	Global	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>						
Applicant: Lucent Techno	ologies Nederlan	d B.V.		- supply - operati	voltage 1	15 V AC ternal anter na cable TE		24-OD-55
						t rate 5 MBil		
				- TX mo	de with f =	2.442 GHz	Z	
				Test dist	tance: 3 m	neters		
			,	Polariza	tion: vertic	al		
Ref.Level 120 of 10 dB dB/Div.	lBµV/m	-		ATT 5 dB			Ref. C	Offset 21.3 dB
				3			-	
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		,	1 2) */	4	- 5 			
: 								
		- -						
Start 2.367 GHz RBW 1 MHz			an ta Marina da Santa	VBW 100	Hz		Stop 2 SWP 4	2.517 GHz 4.60 s
			**** Multi	Marker ***	*			
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.431 2.4428 2.4558	167 GHz 167 GHz 333 GHz 500 GHz 500 GHz	1(	52.95 dBµ 53.30 dBµ 00.66 dBµ 53.63 dBµ 50.71 dBµ	IV/m IV/m IV/m		2
Tested by: Rainer Heller				Project-No 56305-9				
Date: 02/11/1999						Page	of	pages

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# Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-55 (Larsen) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/11/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> <li>operating with bit rate 5 MBit</li> <li>TX mode with f = 2.462 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept



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of

pages

**Rainer Heller** 

02/11/1999

Date:

L								
Model: PC24E-T-FC with	AOU24-OD	-55 (Larsen	i)	Mode:				
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)				<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>				
Applicant: Lucent Technolog	ies Nederlaı	nd B.V.	· · · ·	- supply - operati	voltage 11 ng with ext	ernal ante	nna AOU24	1-0D-55
					5 m antenn			
				- operati	ng with bit	rate 5 MBi	t	
				- TX mo	de with f = :	2.462 GH	Z	
				Test dist	ance: 3 me	eters		
			······································	Polarizat	tion: vertica	ll .	,	
Ref.Level 130 dBµ\ 10 dB dB/Div.	V/m			ATT 5 dB	•	· .	Ref. Off	set 21.3 dB
				2				
			pm -	M				
	6.2							
			<u>                                      </u>					
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		a well with the			₩4 5 ₩ <b>4</b>	6		
norman managed with	www.han	WWWW			- markeye	mm with m	mound	had more wade
Start 2.387 GHz RBW 1 MHz				VBW 1 MH	Iz		Stop 2.5 SWP 20	37 GHz ms
			**** Multi	Marker ****	,			
•	Nr.1 Nr.2		833 GHz 667 GHz		- 71.99 dBµ∖			
		)6.68 dBµ∖ 73.74 dBµ∖						
	e	61.88 dBµ∖	//m					
Nr.5 2.486167 GHz Nr.6 2.500000 GHz					δ2.67 dBμ∖ 58.40 dBμ∖			
	Nr.7 Nr.8							
Toolod by:				Brata et Al-	•		·····	
Tested by: Rainer Heller				Project-No. 56305-90				

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Date:

02/11/1999

Model: PC24E-T-FC with AOU24-OD-55 (Larsen)	Mode:				
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>				
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-OD-55 - with 2.5 m antenna cable TBD				
	- operating with bit rate 5 MBit				
	- TX mode with f = 2.462 GHz				
	Test distance: 3 meters				
	Polarization: horizontal				
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB				
	2				
ſ					

Start 2.387 RBW 1 MH				VBW 100 H	Ηz		Stop 2.53 SWP 4.60	7 GHz ) s
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			<u> </u> .					

		**** Multi I	Narker ****	
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.452000 GHz 2.459500 GHz 2.472167 GHz 2.474500 GHz 2.483500 GHz 2.500000 GHz	52.49 dBμV/m 87.25 dBμV/m 53.63 dBμV/m 42.97 dBμV/m 38.83 dBμV/m 38.75 dBμV/m	
Tested by: Rainer Heller			Project-No.: 56305-90067-1	· · · · · · · · · · · · · · · · · · ·
Date: 02/11/1999		ann an an an Ann an an Ann	Page o	f pages

Model: PC24E-T-FC with AOU24-OD-55 (Larsen)	Mode:
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> </ul>
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-OD-55 - with 2.5 m antenna cable TBD
	- operating with bit rate 5 MBit
	- TX mode with f = 2.462 GHz
	Test distance: 3 meters
	Polarization: vertical
Ref.Level 120 dBµV/m	ATT 5 dB Ref. Offset 21.3 dB

Ref.Level 120 dBµV/m 10 dB dB/Div.

tart 2.387 GHz BW 1 MHz		VBW 100 H	Ηz		Stop 2.53 SWP 4.6	37 GHz 0 s
			45 ++	6		
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#### **** Multi Marker ****

		و الله شار كم حد ذير حو حو خو كه الله بين هو				
	Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.448000 GHz 2.459500 GHz 2.473500 GHz 2.483500 GHz 2.485000 GHz 2.500000 GHz	53.50 dBμV/m 100.15 dBμV/m 53.12 dBμV/m 41.77 dBμV/m 41.65 dBμV/m 39.61 dBμV/m			
Tested by: Rainer Heller			Project-No.: 56305-90067-1			
Date: 02/11/1999			Pa	age	of	pages



## Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-55 (Larsen) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/11/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> <li>operating with bit rate 8 MBit</li> <li>TX mode with f = 2.412 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

· · · · · · · · · · · · · · · · · · ·							
Model: PC24E-T-FC with AOU24-OD-5	5 (Larsen)	Mode:					
Serial No.: 84490006 (RF-modem), sample	e no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup					
Applicant: Lucent Technologies Nederland	IB.V.	- supply volta	age 115 V AC vith external ante	enna AOU24-OD-55			
-			antenna cable T				
			vith bit rate 8 MB vith f = 2.412 GF				
	i	Test distance	e: 3 meters				
		Polarization:	horizontal				
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 5 dB		Ref. Offset 21.3 dB				
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	, I						
Start 2.337 GHz RBW 1 MHz	· ·	VBW 1 MHz	-	Stop 2.487 GHz SWP 20 ms			
	**** Multi	Marker ****					
Nr.1 Nr.2 Nr.3 Nr.4 Nr.5 Nr.6 Nr.7 Nr.8	2.390000 GHz 2.399167 GHz 2.400000 GHz 2.403667 GHz 2.414167 GHz 2.421500 GHz	63.1 63.6 73.4 96.0	0 dBµV/m 8 dBµV/m 9 dBµV/m 4 dBµV/m 1 dBµV/m 5 dBµV/m				
Tested by: Rainer Heller		Project-No.: 56305-9006	7-1				
Date [·]				845 844 - 1490 - 1, - 1			

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02/11/1999

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Model: PC24E-T-FC with AOU24-OD-55 (Larsen)	Mode:						
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-55</li> <li>- with 2.5 m antenna cable TBD</li> </ul>						
Applicant: Lucent Technologies Nederland B.V.							
	operating with bit rate 8 MBit						
	- TX mode with f = 2.412 GHz						
	Test distance: 3 meters						
	Polarization: vertical						
Ref.Level 130 dBµV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB						
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	6						
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un apply my how the way way was the	When you and the second s						

VBW 1 MHz

Project-No.:

56305-90067-1

60.23 dBµV/m

73.08 dBµV/m

75.49 dBµV/m

74.45 dBµV/m

108.02 dBµV/m

73.89 dBµV/m

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of

pages

**** Multi Marker ****

2.390000 GHz

2.398167 GHz

2.398833 GHz

2.400000 GHz

2.414667 GHz

2.425667 GHz

Stop 2.487 GHz

SWP 20 ms

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Start 2.337 GHz

Nr.1

Nr.2

Nr.3

Nr.4

Nr.5

Nr.6

Nr.7 Nr.8

**RBW 1 MHz** 

Tested by: Rainer Heller

02/11/1999

Date:

Model: PC24E-T-FC with AOU24-OD-55 (Larsen)	
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-OD-55 - with 2.5 m antenna cable TBD
	- operating with bit rate 8 MBit
	- TX mode with f = 2.412 GHz
	Test distance: 3 meters
	Polarization: horizontal
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB

BW 1 MHz				VBW 100 I	Ηz		Stop 2.48 SWP 4.60	Ds
art 2.337 GHz	l	<b>_</b>	• · · ·	<b>.</b>		<u> </u>	Stop 2.48	7 GHz
			12					
		++		<u>`</u>				
		1	23 • <b>H</b>					
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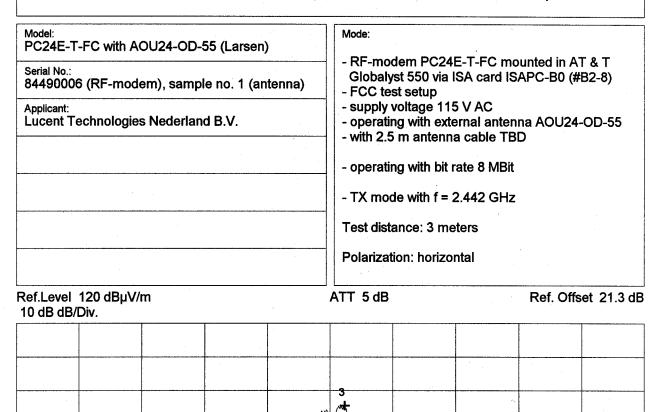
#### 2.390000 GHz Nr.1 39.11 dBµV/m Nr.2 2.398667 GHz 43.04 dBµV/m Nr.3 2.400000 GHz 43.37 dBµV/m Nr.4 2.402167 GHz 52.23 dBµV/m Nr.5 2.409167 GHz 87.46 dBµV/m Nr.6 2.422333 GHz 53.22 dBµV/m Nr.7 Nr.8 Tested by: Project-No .: 56305-90067-1 **Rainer Heller** Date: of Page pages 02/11/1999

			1							
Model: PC24E-T-FC wit	th AOU24-OD-	55 (Larsen	)	Mode:			<u> </u>			
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)				<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T</li> <li>Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> </ul>						
Applicant: Lucent Technol	Applicant: Lucent Technologies Nederland B.V.			- supply v - operatin	voltage 115 ng with exter m antenna	rnal ante	nna AOU	124-OD-55		
					ng with bit ra					
					le with f = 2					
				Test dista	ance: 3 met	ers				
				Polarizati	ion: vertical					
Ref.Level 120 dE 10 dB dB/Div.	}μV/m			ATT 5 dB	<u>.</u>		Ref. C	Offset 21.3 dB		
			ļ	5 <del>•</del>		<u></u>				
			ļ/*							
			24							
			24 //	¥	200					
Start 2.337 GHz							Stop 2			
RBW 1 MHz				VBW 100 F	łz		Stop 2 SWP 4	2.487 GHz 4.60 s		
			**** Multi	Marker ****						
	Nr.1 Nr.2		000 GHz 667 GHz		1.77 dBµV/ 3.56 dBµV/					
•	Nr.3 Nr.4	2.401	000 GHz 000 GHz	.5	3.78 dBµV/ 3.63 dBµV/	m				
	Nr.5 Nr.6 Nr.7 Nr.8		167 GHz 000 GHz		0.25 dBµV/ 3.71 dBµV/					
Tested by: Rainer Heller		-		Project-No.: 56305-90						
Date: 02/11/1999						Page	of	pages		



# Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-55 (Larsen) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/11/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> <li>operating with bit rate 8 MBit</li> <li>TX mode with f = 2.442 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept



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VBW 1 MHz

Project-No.: 56305-90067-1

**** Multi Marker ****

mili

month

63.94 dBµV/m

73.03 dBµV/m

95.51 dBµV/m 73.13 dBµV/m

63.08 dBµV/m

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Munum

Stop 2.517 GHz

SWP 20 ms

1

2.430500 GHz

2.433833 GHz

2.445500 GHz

2.451500 GHz

2.454833 GHz

water marken marken water and

Nr.1

Nr.2

Nr.3

Nr.4

Nr.5

Nr.6 Nr.7 Nr.8

here month when and when where

Start 2.367 GHz

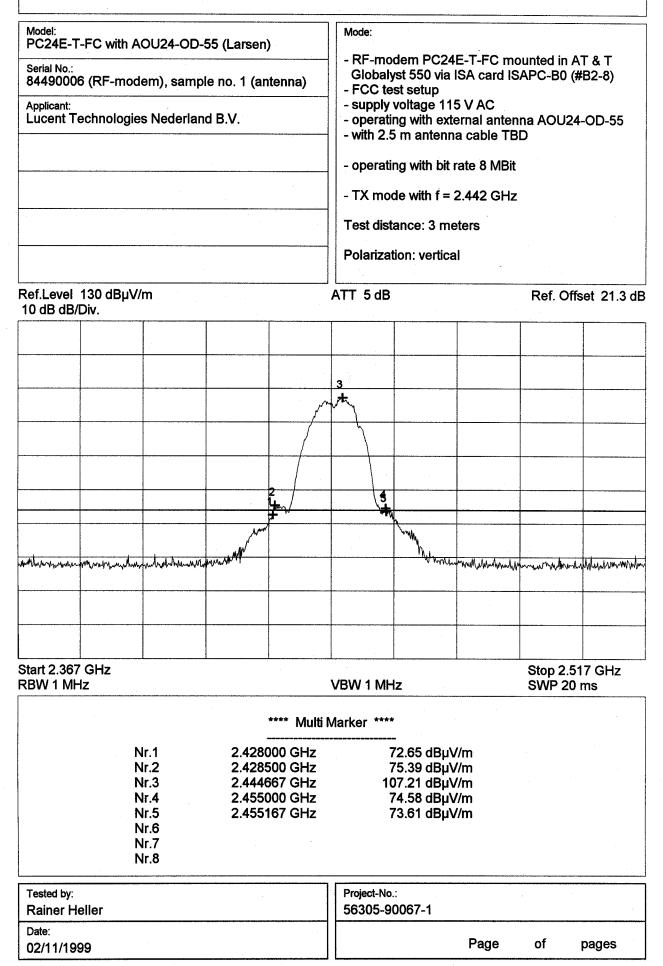
**RBW 1 MHz** 

Tested by:

Date:

**Rainer Heller** 

02/11/1999



Model: PC24E-T-FC with AOU24-OD-55 (Larsen)	
^{Serial No.:} 84490006 (RF-modem), sample no. 1 (antenna)	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8) - FCC test setup
Applicant: Lucent Technologies Nederland B.V.	- supply voltage 115 V AC - operating with external antenna AOU24-OD-55 - with 2.5 m antenna cable TBD
· · · · · · · · · · · · · · · · · · ·	- operating with bit rate 8 MBit
	- TX mode with f = 2.442 GHz
	Test distance: 3 meters
	Polarization: horizontal
Ref.Level 120 dBµV/m 10 dB dB/Div.	ATT 5 dB Ref. Offset 21.3 dB

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				1	5 +	_			
Start 2.367	' GHz	<u> </u>	<u> </u>			l		Stop 2.51	7 GHz

SWP 4.60 s **RBW 1 MHz VBW 100 Hz** **** Multi Marker **** Nr.1 2.429833 GHz 42.86 dBµV/m Nr.2 2.432167 GHz 52.29 dBµV/m 2.441167 GHz Nr.3 87.89 dBµV/m Nr.4 2.452333 GHz 53.33 dBµV/m 2.455000 GHz Nr.5 43.75 dBµV/m Nr.6 Nr.7 Nr.8 Project-No.: Tested by: 56305-90067-1 **Rainer Heller** Date:

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02/11/1999

Model: PC24E-T-FC with AOU24-OD-55 (Larsen) Serial No.: 84490006 (RF-modem), sample no. 1 (antenna) Applicant: Lucent Technologies Nederland B.V.					Mode:         - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)         - FCC test setup         - supply voltage 115 V AC         - operating with external antenna AOU24-OD-55         - with 2.5 m antenna cable TBD         - operating with bit rate 8 MBit         - TX mode with f = 2.442 GHz         Test distance: 3 meters         Polarization: vertical					
Ref.Level 10 dB dB	120 dBµV/ /Div.	m			ATT 5 dB			Ref. Offs	set 21.3 dB	
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Start 2.36 RBW 1 MI					VBW 100 I	-Iz		Stop 2.5 ⁷ SWP 4.6	17 GHz 0 s	
				**** Multi 1	Marker ****					
		lr.1 lr.2 lr.3 lr.4 lr.5 lr.6 lr.7	2.4311 2.4441 2.4556	000 GHz 67 GHz 67 GHz 67 GHz 67 GHz 67 GHz	5 5 10 5	- 52.16 dBµ\ 53.78 dBµ\ 00.05 dBµ\ 53.25 dBµ\ 52.77 dBµ\	//m //m //m			

Tested by: Rainer Heller	Project-No.: 56305-90067-1		(
Date:			
02/11/1999	Page	of	pages

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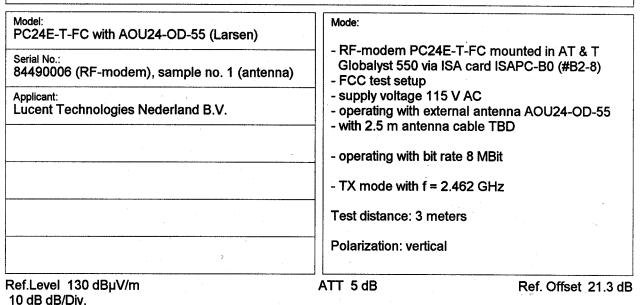
Nr.8



# Radiated Emission At Band Edges according to FCC Part 15 Subpart C

Model: Type: Serial No.: Applicant: Test-site: Test distance: Date of test: Operator:	PC24E-T-FC with AOU24-OD-55 (Larsen) RF-modem with external antenna for wireless LAN 84490006 (RF-modem), sample no. 1 (antenna) Lucent Technologies Nederland B.V. Semi anechoic room 3 meters 02/11/1999 R. Heller
Mode:	<ul> <li>RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>FCC test setup</li> <li>supply voltage 115 V AC</li> <li>operating with external antenna AOU24-OD-55</li> <li>with 2.5 m antenna cable TBD</li> <li>operating with bit rate 8 MBit</li> <li>TX mode with f = 2.462 GHz</li> </ul>
Note:	Settings and correction factors are identical to operation mode with bit rate 2 MBit. For details see attached test records.
Result:	The limits are kept

•		· · · · · · · · · · · · · · · · · · ·						
Model: PC24E-T-FC with A	OU24-OD-	55 (Larsen)	)	Mode:				
Serial No.: 84490006 (RF-mod	lem), samp	le no. 1 (an	tenna)	<ul> <li>- RF-modem PC24E-T-FC mounted in AT &amp; T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)</li> <li>- FCC test setup</li> <li>- supply voltage 115 V AC</li> <li>- operating with external antenna AOU24-OD-55</li> </ul>				
Applicant: Lucent Technologie	es Nederlan	id B.V.						
						ina cable TE		
				- operat	ting with bi	t rate 8 MBit		
			4,4 <del>4</del> ,-1,-1,-1,-1,	- TX mo	ode with f	= 2.462 GHz	2	
				Test dis	stance: 3 n	neters	•	
	<u> </u>	· · · · · · · · · · · · · · · · · · ·	. <u></u>	Polariza	ation: horiz	contal		
Ref.Level 120 dBµV 10 dB dB/Div.	/m	· · · · · · · · · · · · · · · · · · ·		ATT 5 dE	3		Ref. C	Offset 21.3 dB
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Start 2.387 GHz	<u> </u>	L	·	<u> </u>			Stop 2	.537 GHz
RBW 1 MHz				VBW 1 M	Hz		SWP2	20 ms
			**** Multi	Marker **'	**			
	Nr.1		67 GHz		73.74 dB			
	Nr.2 Nr.3		67 GHz 67 GHz		96.04 dB 73.64 dB			
	Nr.4 Nr.5		500 GHz 500 GHz		50.89 dB 52.16 dB			
1	Nr.6		00 GHz		49.90 dB			
	Nr.7 Nr.8							
Tested by:				Project-N		••••••••••••••••••••••••••••••••••••••		
Rainer Heller				56305-9	90067-1			
Date: 02/11/1999						Page	of	pages



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**RBW 1 MHz** VBW 1 MHz SWP 20 ms **** Multi Marker **** Nr.1 2.448167 GHz 73.49 dBµV/m 2.464667 GHz 107.31 dBµV/m Nr.2 2.473167 GHz 73.79 dBµV/m Nr.3 59.52 dBµV/m 2.483500 GHz Nr.4 59.29 dBµV/m Nr.5 2.499500 GHz 2.500000 GHz 56.22 dBµV/m Nr.6 Nr.7 Nr.8 Project-No.: Tested by: **Rainer Heller** 56305-90067-1 Date: Page of pages 02/11/1999

Serial No.: 84490006 (R Applicant:	with AOU24-OD F-modem), sam	ple no. 1 (ai		Mode:         - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)         - FCC test setup         - supply voltage 115 V AC         - operating with external antenna AOU24-OD-55         - with 2.5 m antenna cable TBD         - operating with bit rate 8 MBit         - TX mode with f = 2.462 GHz         Test distance: 3 meters         Polarization: horizontal				
Ref.Level 120 10 dB dB/Div.				ATT 5 dB			Ref. Offs	set 21.3 dB
		·						
	· · · · · · · · · · · · · · · · · · ·		2					
			4	$\sim$				
				3				
				4	5	6	-	
· · · · · · · · · · · · · · · · · · ·								
Start 2.387 GH RBW 1 MHz	łz		· · · · · · · · · · · · · · · · · · ·	VBW 100 H	Ηz		Stop 2.53 SWP 4.6	
	Nr.1	2.452	**** Multi I 	Marker **** 5	1.83 dBµ'	V/m		

Nr.7 Nr.8				
Tested by: Rainer Heller	Project-No.: 56305-90067-1			
Date: 02/11/1999		Page	of	pages

87.05 dBµV/m

52.74 dBµV/m

43.14 dBµV/m

38.83 dBµV/m

38.88 dBµV/m

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2.461000 GHz

2.472167 GHz

2.474667 GHz

2.483500 GHz

2.500000 GHz

Nr.2

Nr.3

Nr.4

Nr.5

Nr.6

Model: PC24E-T-FC with AOU24-OD-55 (Larsen)	Mode:	
Serial No.: 84490006 (RF-modem), sample no. 1 (antenna)	<ul> <li>RF-modem PC24E-T-FC</li> <li>Globalyst 550 via ISA can</li> <li>FCC test setup</li> </ul>	
Applicant: Lucent Technologies Nederland B.V.	<ul> <li>supply voltage 115 V AC</li> <li>operating with external ar</li> <li>with 2.5 m antenna cable</li> </ul>	
	operating with bit rate 8 M	1Bit
	- TX mode with f = 2.462 G	GHz
	Test distance: 3 meters	
	Polarization: vertical	
Ref.Level 120 dBµV/m	ATT 5 dB	Ref. Offset 21.3 dB

Ref.Level 120 dBµV/m 10 dB dB/Div.

art 2.387 GHz					Stop 2.53 SWP 4.6	37 GHz
			45	6		
	p.+					
	1]	3				
	 2					

#### **** Multi Marker ****

	Nr.1 Nr.2 Nr.3 Nr.5 Nr.6 Nr.7 Nr.8	2.450833 GHz 2.461000 GHz 2.473667 GHz 2.483500 GHz 2.485833 GHz 2.500000 GHz	53.45 dBμV/m 100.13 dBμV/m 53.73 dBμV/m 41.65 dBμV/m 41.59 dBμV/m 39.72 dBμV/m		
Tested by: Rainer Heller			Project-No.: 56305-90067-1		
Date: 02/11/1999			Page	of	pages



Test results for setup no. 3

Receive (RX) mode



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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Type:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/11/1999
Operator:	R. Heller
Mode:	- RF-modem PC24E-T-FC mounted in AT & T Globalyst 550

- via ISA card ISAPC-B0 (#B2-8)
- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-55
- with 2.5 m antenna cable TBD
- RX mode with f = 2.442 GHz

Detector: Peak

		Analyzer-	Generator-	Cable	Antenna-		
Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
2.095	horizontal	40.6	-96.8		29.4	39.5	74

**Result:** The limits are kept



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

Model:	PC24E-T-FC with AOU24-OD-55 (Larsen)
Туре:	RF-modem with external antenna for wireless LAN
Serial No.:	84490006 (RF-modem), sample no. 1 (antenna)
Applicant:	Lucent Technologies Nederland B.V.
Test-site:	Semi anechoic room
Test distance:	3 meters
Date of test:	02/11/1999
Operator:	R. Heller
Maday	DE modern DC24E T EC mounted in AT 8 T Clobely at EE0

Mode: - RF-modem PC24E-T-FC mounted in AT & T Globalyst 550 via ISA card ISAPC-B0 (#B2-8)

- FCC test setup
- supply voltage 115 V AC
- operating with external antenna AOU24-OD-55
- with 2.5 m antenna cable TBD
- RX mode with f = 2.442 GHz

Detector: Average

Γ			Analyzer-	Generator-	Cable	Antenna-		
	Frequency	Polarization	reading	level	loss	correction	Fieldstrength	Limit
	[GHz]		[dBµV]	[dBm]	[dB]	[dB]	[dBµV/m]	[dBµV/m]
	1.0 - 12.4	Margin of peak values to average limit > 10 dB				3	54	
	12.4 - 12.5	Ν	Margin of average values to average limit > 15 dB					

**Result:** The limits are kept