

CONDUCTED POWER OF THE FUNDAMENTAL WAVE MEASURED
ON THE ANTENNA TERMINALS

■ - Test not applicable

Testlocation :

- o - Shielded room no. 1
- o - Shielded room no. 2
- o - Shielded room no. 3
- o - Shielded room no. 4
- o - Shielded room no. 5
- o - Shielded room no. 6
- o - Shielded room no. 7
- o - Anechoic chamber
- o - Full compact chamber
- o - Climatic test chamber VLK

For TEST EQUIPMENT USED please refer to ATTACHMENT B: _____

Description of Measurement

The conducted power of the fundamental wave measured on the antenna terminals in a climatic test chamber. The antenna jack was connected to the input of a communication test receiver. The internal batteries have been removed also and a variable DC power supply was used instead. The measurements have been made with the EUT unmodulated. During the test the supply voltage and the temperature were varied and applied simultaneously. The lower supply voltage was given by the manufacturer. In case the equipment was switching off before, the switch off voltage was used instead.

Testresult

The requirements are

O - MET

O - NOT MET

Frequency range of equipment								
Temperature/°C	DC supply voltage/V	Power/dBm	Power/dBm	Power/dBm	Power/dBm	Power/dBm	Power/dBm	Power/dBm
-30								
-20								
-10								
0								
+10								
+20								
+30								
+40								
+50								

Remarks: NOT APPLICABLE

EQUIPMENT UNDER TEST

Operation - mode of the EUT.:

The equipment under test was operated during the measurement under following conditions:

- o - Standby
- o - Testprogram (H - Pattern)
- o - Testprogram (color bar)
- o - Testprogram (customer specific)
- - Transmit frequency 315 MHz

- o - _____
- o - _____
- o - _____

Configuration of the equipment under test:

Following periphery devices and interface cables were connected during the measurement:

- | | |
|-----------|--------------|
| o - _____ | Type : _____ |
| o - _____ | Type : _____ |
| o - _____ | Type : _____ |
| o - _____ | Type : _____ |
| o - _____ | Type : _____ |
| o - _____ | Type : _____ |

o - unshielded power cable

o - unshielded cables

o - shielded cables MPS.No.:

o - customer specific cables (wireless microphone)

- o - _____
- o - _____

SUMMARY**GENERAL REMARKS:**

The product 5WK4 8028 has been tested on the following frequency:
TX-Mode: 315 MHz

The unit measurements meets also the bandwidth requirements.
787 KHz allowed, <100 KHz measured. JTS 12/15/99

FINAL JUDGEMENT:

The requirements according to the technical regulations and tested operation modes are

- - met.
- - not met.

The equipment under test

- - **Fulfills** the general approval requirements cited on page 3.
- - **Does not** fulfill the general approval requirements cited on page 3.

Date of receipt of test sample : accdg. to storage record

Testing Start Date : October 22, 1999

Testing End Date : October 23, 1999

- MIKES PRODUCT SERVICE GmbH -

Test-engineer

i.v. Günter Mikes

Günter Mikes
Dipl.-Ing. (FH)

Klaus Gegenfurtner

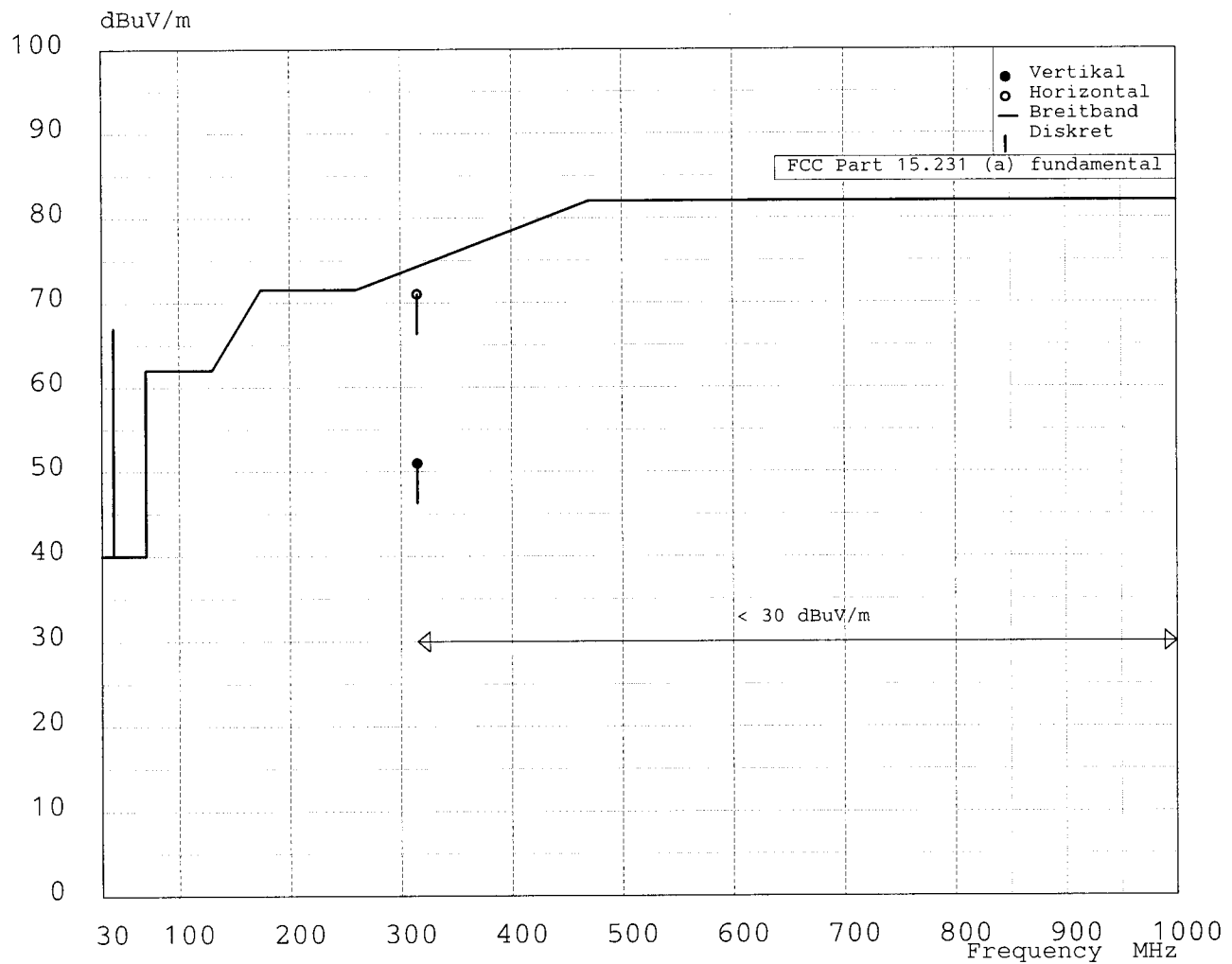
Klaus Gegenfurtner
Dipl. Ing. (FH)

Radiation-Test

accdg. FCC Part 15

Typ: 5Wk4 8028
Manufacturer: Siemens AG
Client: Siemens AG
Regulation: FCC PART 15.231
Order No.: T13826-1-16KG
Operation Mode: Transmit
Remarks: The limits are met

Testdistance: 3m
Testreceiver: ESVP
Antenna: BBA - UHALP
Testengineer: K. Gegenfurtner
Date: 11-11-1999



11.11.99
K. Gegenfurtner

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Result	Frequency [MHz]	Reading [dBuV/m]	Korr [dB]	Final [dBuV/m]	Limit [dBuV/m]	DLimit [dB]	Polarisation	Noise
	315.03	50.30	20.69	70.99	74.25	3.26	Horizontal	Diskret
	315.03	30.30	20.69	50.99	74.25	23.26	Vertikal	Diskret

11.11.99

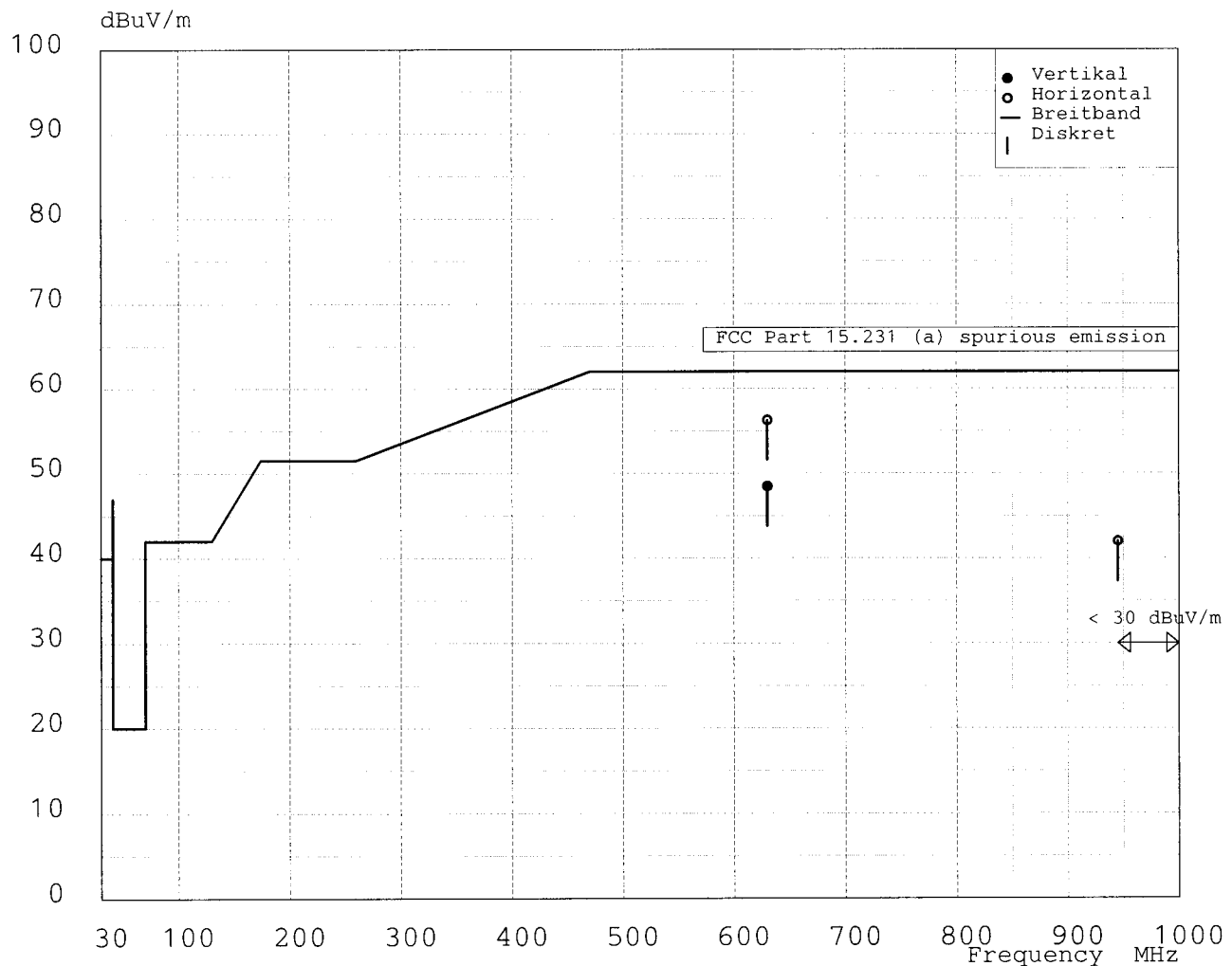


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FCC ID K R 5 5 W K 4 8 0 2 8



Radiation-Test

accdg.FCC Part 15

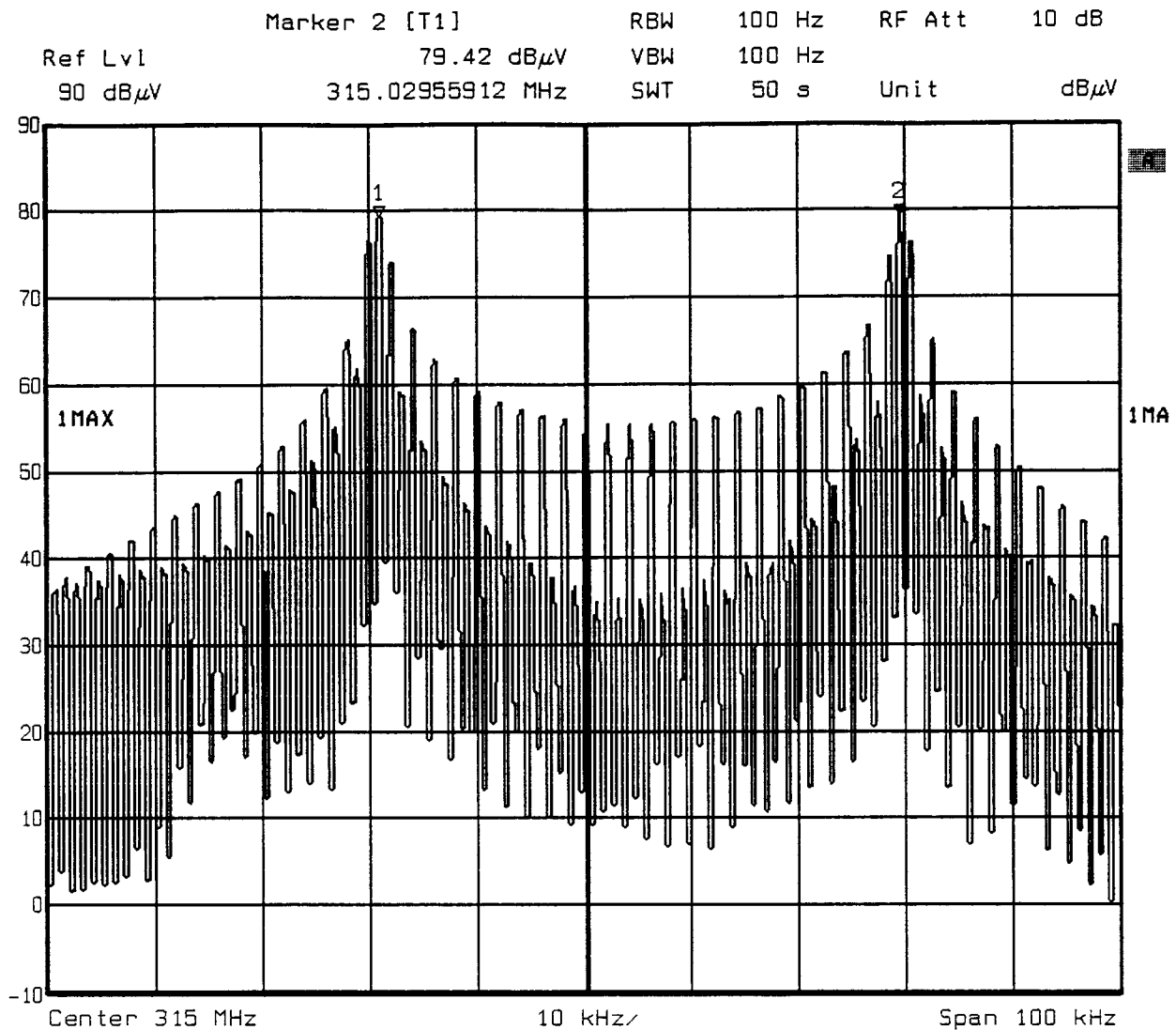
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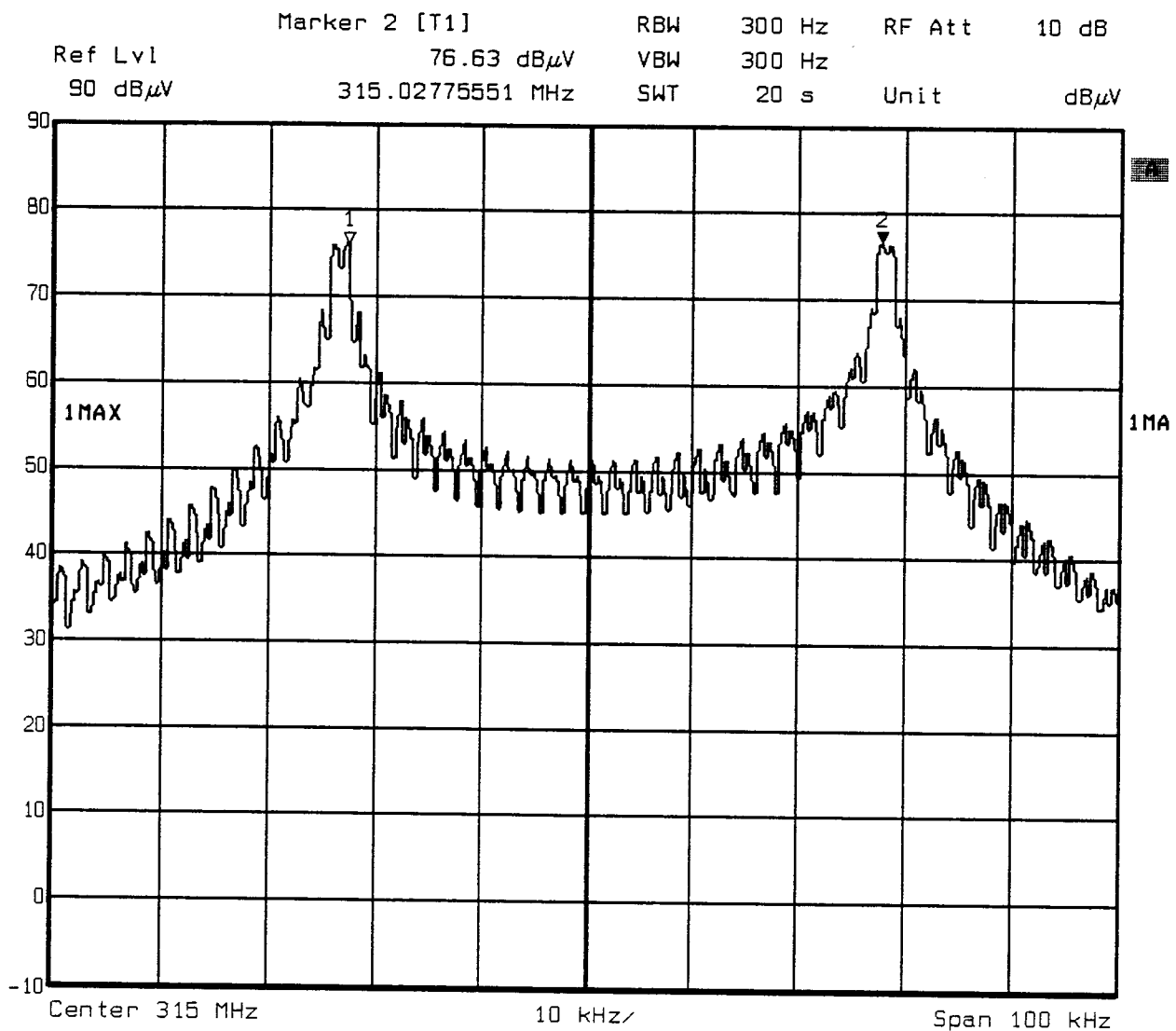
Result	Frequency [MHz]	Reading [dBuV/m]	Korr [dB]	Final [dBuV/m]	Limit [dBuV/m]	DLimit [dB]	Polarisation	Noise
	630.06	20.70	27.78	48.48	62.00	13.52	Vertikal	Diskret
	630.06	28.50	27.78	56.28	62.00	5.72	Horizontal	Diskret
	945.09	5.20	36.80	42.00	62.00	20.00	Horizontal	Diskret

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A handwritten signature in black ink, appearing to be 'K. Gegenfurtner'.

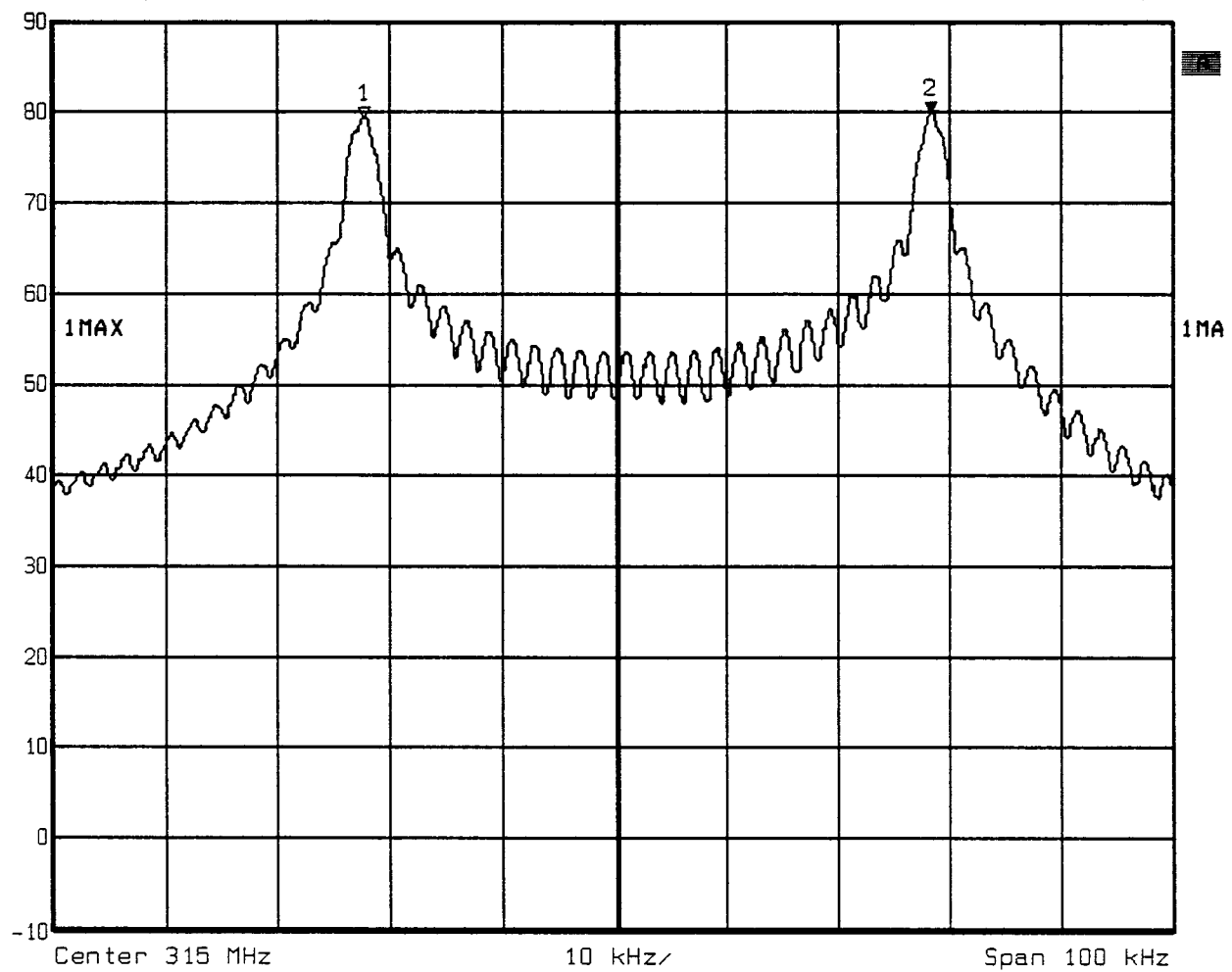


Date: 5.JUL.1999 11:21:28

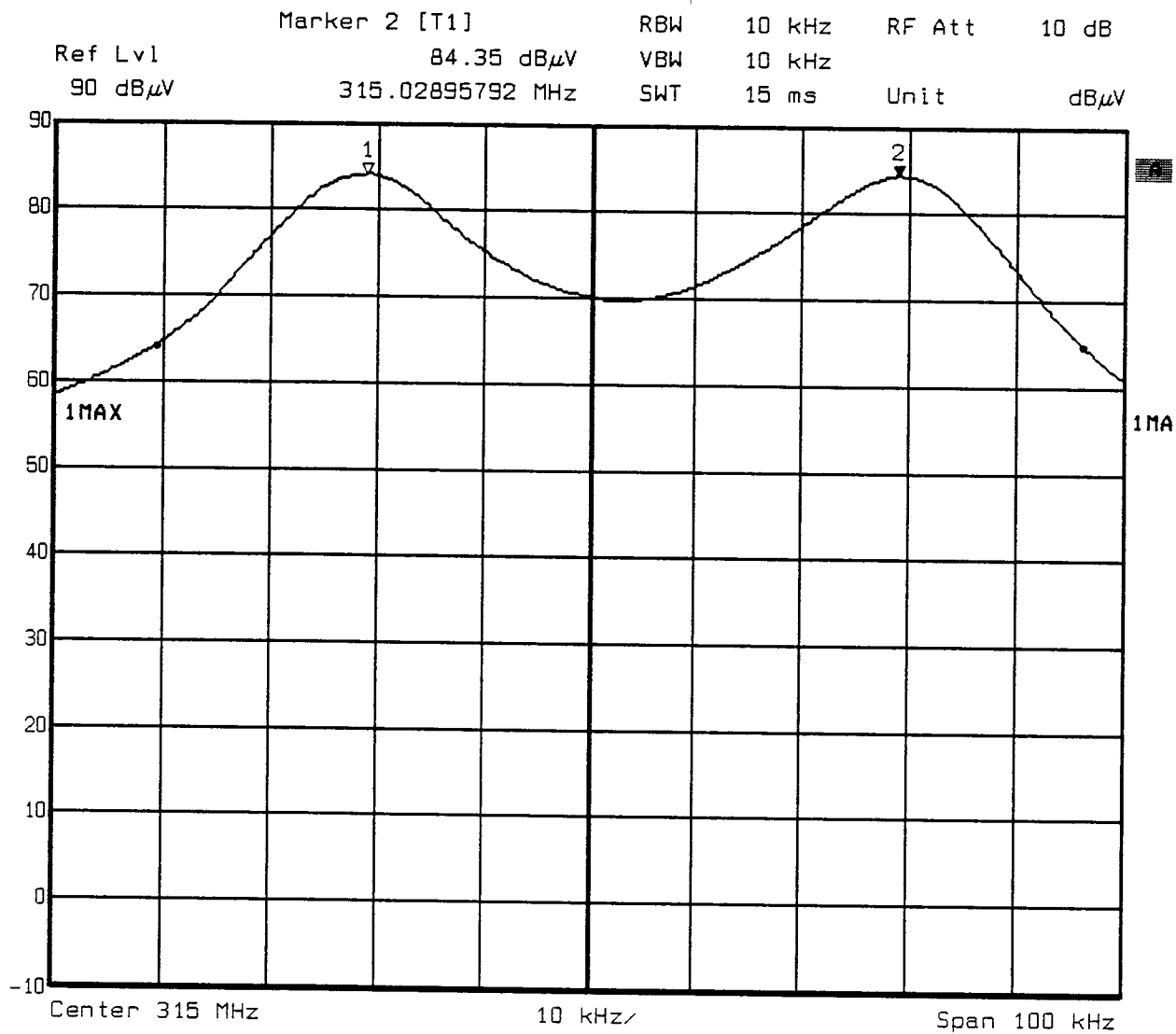


Date: 5.JUL.1999 11:47:59

Marker 2 [T1] RBW 1 kHz RF Att 10 dB
 Ref Lvl 79.82 dB μ V VBW 1 kHz
 90 dB μ V 315.02835671 MHz SWT 20 s Unit dB μ V



Date: 5.JUL.1999 11:42:11



Date: 5.JUL.1999 11:38:33

Attachment : B**List of Test Equipment**

All test instruments used, in addition to the test accessories, are calibrated and verified regularly.

Test Report No: T 13826-1-16 KG

Beginning of Testing: 22-Oktober-1999

Test ID	Model Type	Kind of Equipment	Manufacturer	Equipment No.
CPR2	UHALP-9108A	Antenna	Schwarzbeck G.	04-07/62-97-009
	ESVP	Test Receiver	Rohde & Schwarz	04-07/63-89-008
MB	433 MHz-Antenna	Rod Antenna	MIKES PRODUCT SERVICE	04-07/62-97-002
	FSEM 30	Spectrum Analyser	Rohde & Schwarz	04-07/74-97-001
SER2	BBA-9106	Antenna	Schwarzbeck G.	04-07/62-86-072
	UHALP-9108A	Antenna	Schwarzbeck G.	04-07/62-97-009
	ESVP	Test Receiver	Rohde & Schwarz	04-07/63-89-008
SER3	Sucoflex 104, SMA	RF-cable 2 m	Huber+Suhner	04-07/60-97-485
	Sucoflex 104, N	RF-cable 3 m	Huber+Suhner	04-07/60-97-492
	Model 3115	Hornantenna	EMCO Elektronik GmbH	04-07/62-96-458
	AWT-4534	Microwave-Amplifier	TransTech Hochfrequenztechn	04-07/66-90-217
	FSEM 30	Spectrum Analyser	Rohde & Schwarz	04-07/74-97-001

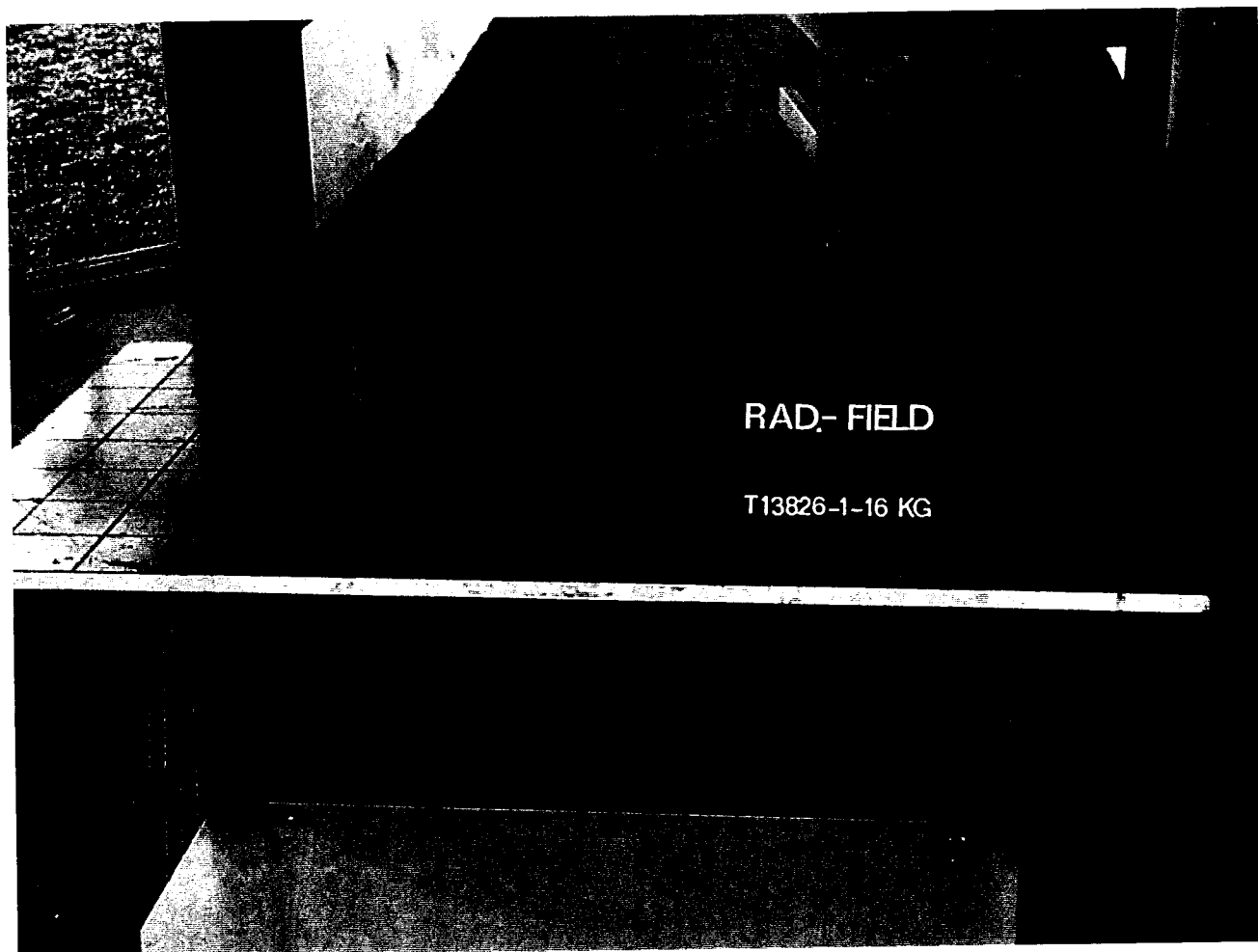
FCC ID: KR55WK48028

Test-Setup:
Radiated Emission 30 MHz - 1000 MHz (front view)



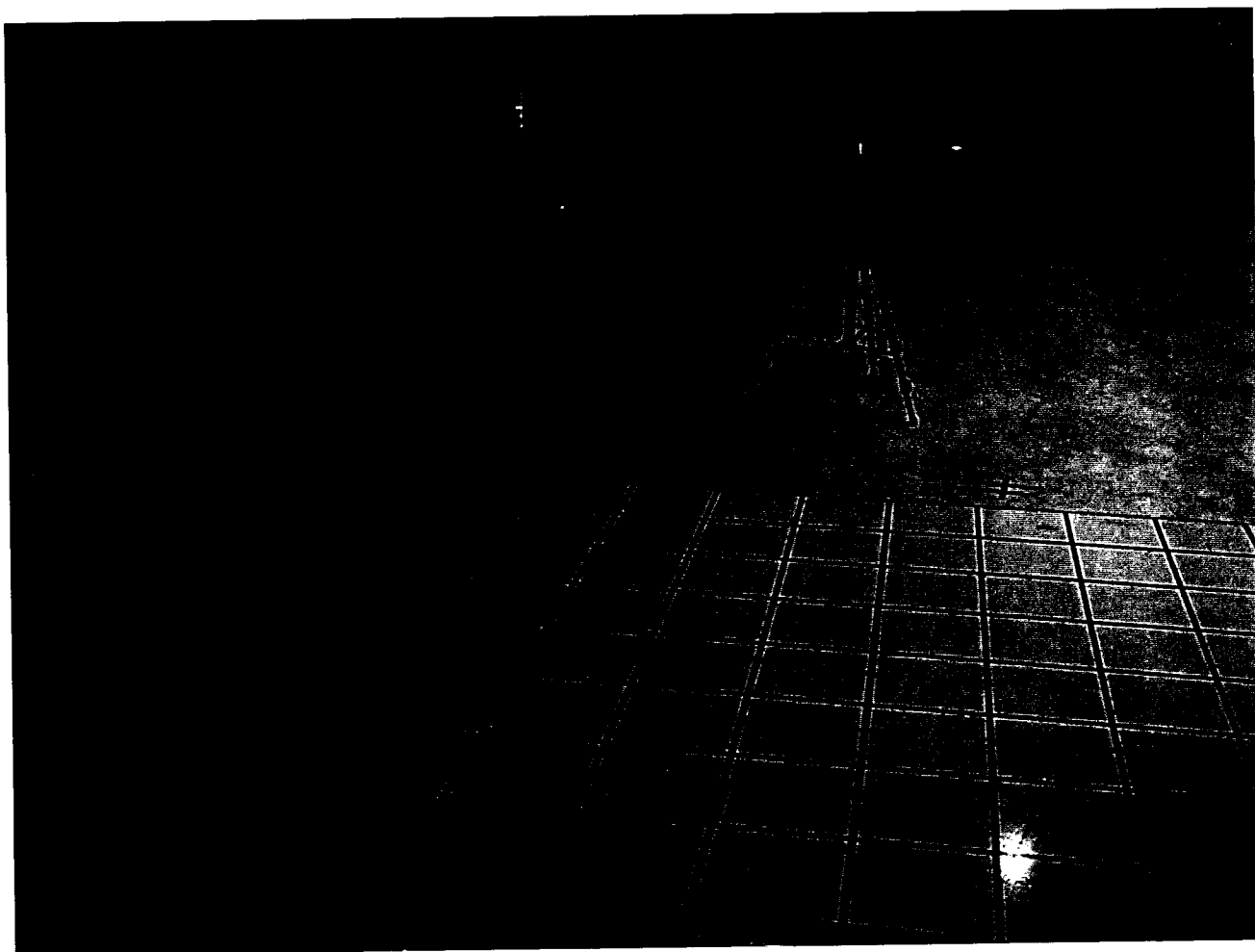
FCC ID: KR55WK48028

Test-Setup:
Radiated Emission 30 MHz - 1000 MHz (back view)



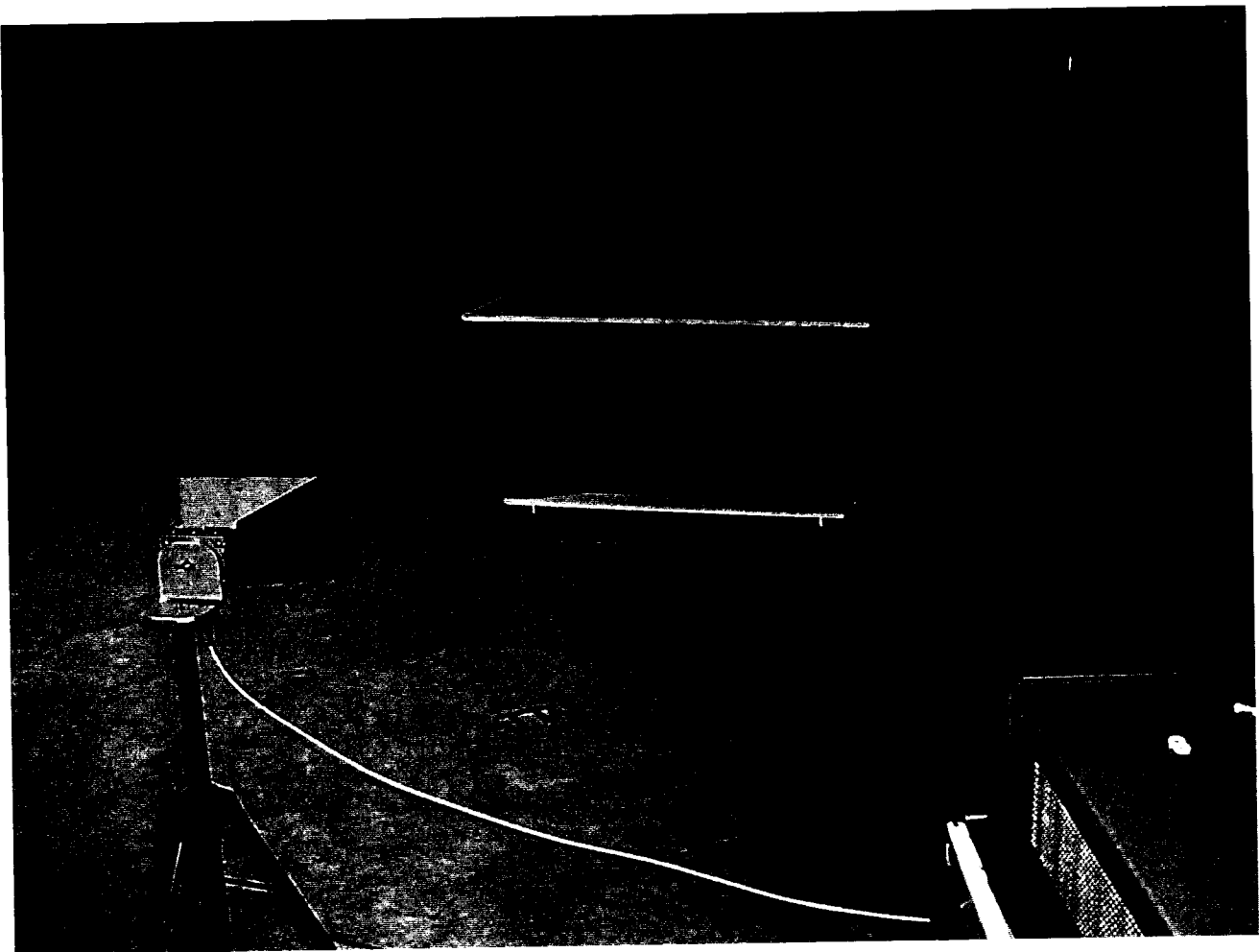
FCC ID: KR55WK48028

Test-Setup:
Radiated emission 1 GHz - 18 GHz (front view)



FCC ID: KR55WK48028

Test-Setup:
Radiated emission 1 GHz - 18 GHz (back view)



CONSTRUCTIONAL DATAFORM FOR TESTING OF RADIO EQUIPMENT

Licence holder:	Siemens AG		
Address:	P.O. Box 10 09 55, D-93009 Regensburg		
Manufacturer:	Siemens AG Automotive Systems		
Address:	Siemensstrasse 12, D-93055 Regensburg		
Type:	RF transmitter		
Model:	5WK4 8028		
Serial-No.:		Protection class:	

Application for getting

☒ national approval in the following countries: USA/Canada

☐ EC-type examination

Additional informations to the above named model:

Antenna: transmitter:	Type: Integral		
	Length/size: 15cm		
receiver:	Type:		
	Length/size:		
Power supply of the transmitter: Type:	Batteries, 2xCR2025	nominal voltage:	6 V
		lowest voltage:	5.5 V
		highest voltage:	6.2 V
Power supply of the receiver: Type:	nominal voltage:		V

Ancillary equipment:

Description: _____	Type: _____	Serial-no.: _____
Description: _____	Type: _____	Serial-no.: _____
Description: _____	Type: _____	Serial-no.: _____

Extreme temperature range in which the approval test should be performed:

☒ Category I: General (-20°C to +55°C) ☐ Category II: Portable (-10°C to +55°C)

☐ Category III: Equipment for normal indoor use (0°C to +55°C)

Connectable cables:

Name of the cable	Digital	Length/m	shielded
	☐ yes ☐ no		☐ yes ☐ no
	☐ yes ☐ no		☐ yes ☐ no
	☐ yes ☐ no		☐ yes ☐ no
	☐ yes ☐ no		☐ yes ☐ no
	☐ yes ☐ no		☐ yes ☐ no

☐ If applicable, if necessary complete overleaf

Type designation: 5WK4 8028			
Name and type designation of individual units comprising the radio equipment:			
Type of equipment:			
☐ Radiotelephone equipment	☒ Remote-control equipment	☐ Radiomaritime equipment	☐ LPD
☐ One-way radiotelephone equipment	☐ Inductive loop system	☐ Inland waterways equipment	☐ RLAN
☐ Personal paging system	☐ Radio-relay system	☐ Radionavigation equipm.	☐
☐ Satellite earth station	☐ CB radiotelephone equipment	☐ Antenna	☐
☐ Data transmission equipment	☐ Movement detector	☐ Aeronautical equipment	☐
Technical characteristics:			
	Transmitter-receiver	Transmitter	Receiver
Frequency range		315 MHz $\pm$ 200 kHz	
Maximum no. of channels		1	
Channel spacing		Not applicable	
Class of emission (type of modulation)		F2D	
Maximum RF output power		-10 dBm	
Maximum effective radiated power (ERP)		< 10mW	
Output power variable		Not applicable	
Channel switching frequency range		Not applicable	
Method of frequency generation	☐ Synthesizer ☐ Crystal ☒ Other SAW		
Frequency generation TX			
Frequency generation RX			
IF	1st IF	2nd IF	3rd IF
Integral selective calling			
Audio-frequency interface level at external data socket			
Modes of operation	☐ Duplex mode ☐ Semi-duplex mode ☒ Simplex mode		
Power source	☐ Mains ☐ Vehicle-regulated ☒ Integral Batteries		
Antenna socket	☐ BNC ☐ TNC ☐ N ☐ M ☐ UHF ☐ Adapter ☒ None ☐		
Type approval specifications: FCC Part 15.231 RSS 210			

Declarations:

We declare that the above information are correct and the named model was supplied with the maximum configuration to the accredited test laboratory.

Regensburg, 18.6.99

SIEMENS Aktiengesellschaft
Bereich Automobiltechnik
Postfach 10 09 55
93009 Regensburg

18th June 1999

Seal and signature of applicant