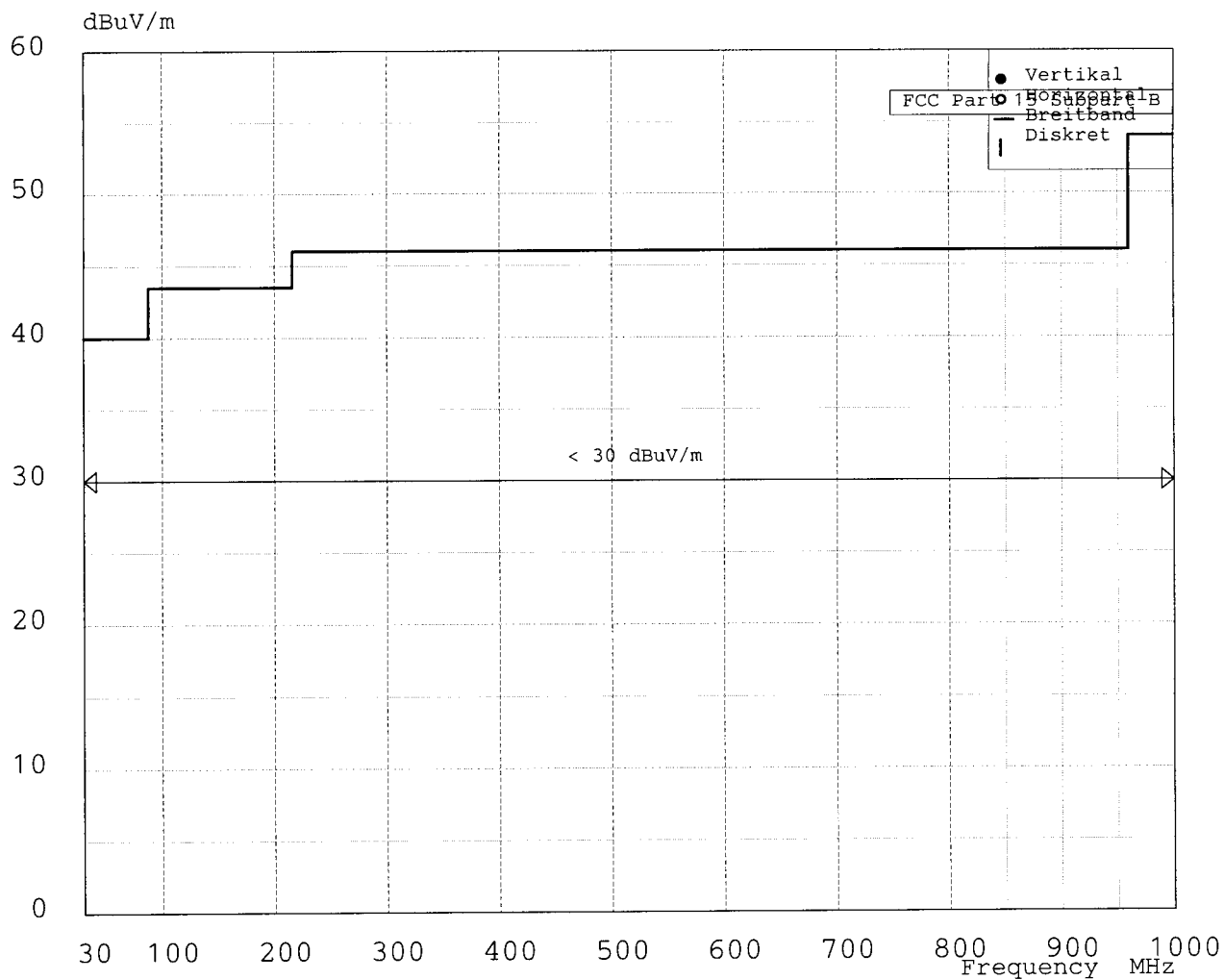


Radiation-Test

accdg.FCC Part 15

Typ: 5WK4 291	Testdistance: 3m
Manufacturer: Siemens S.A.	Testreceiver: ESVP
Client: Siemens AG	Antenna: UHALP, BBA
Regulation: FCC PART 15.209	Testengineer: Klaus Gegenfurtner
Order No.: T1917-1-03KG	Date: 09-09-1999
Operation Mode: Transmit on 125.3 kHz, 127.3 kHz and 133.7 kHz	
Remarks: The limits are met	



Radiation-Test

accdg.FCC Part 15

Typ: 5WK4 291
Manufacturer: Siemens S.A.
Client: Siemens AG
Regulation: FCC PART 15.209
Order No.: T1917-1-03KG
Operation Mode: Transmit on 125.3 kHz, 127.3 kHz and 133.7 kHz
Remarks: The limits are met

Testdistance: 3m
Testreceiver: ESVP
Antenna: UHALP, BBA
Testengineer: Klaus Gegenfurtner
Date: 09-09-1999

Result	Frequency [MHz]	Level [dBuV/m]	Limit [dBuV/m]	DLimit [dBuV]	Polarisation	Noise
--------	--------------------	-------------------	-------------------	------------------	--------------	-------

Bandwith plot



Ref Lvl
0 dBm

Marker 1 [T1]

-3.38 dBm

125.35070140 kHz

RBW

100 Hz

RF Att

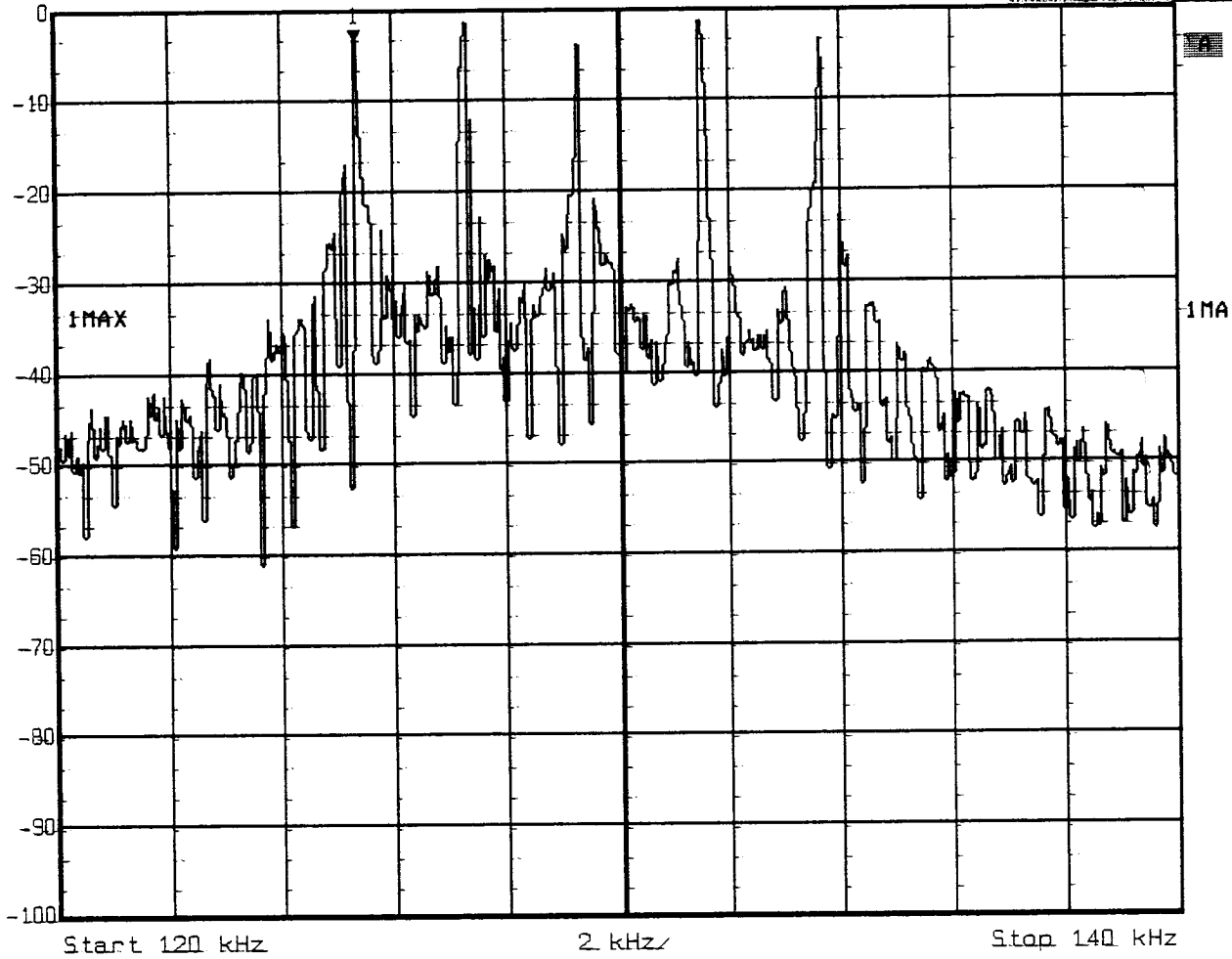
VBW

100 Hz

SWT

10 s

Unit



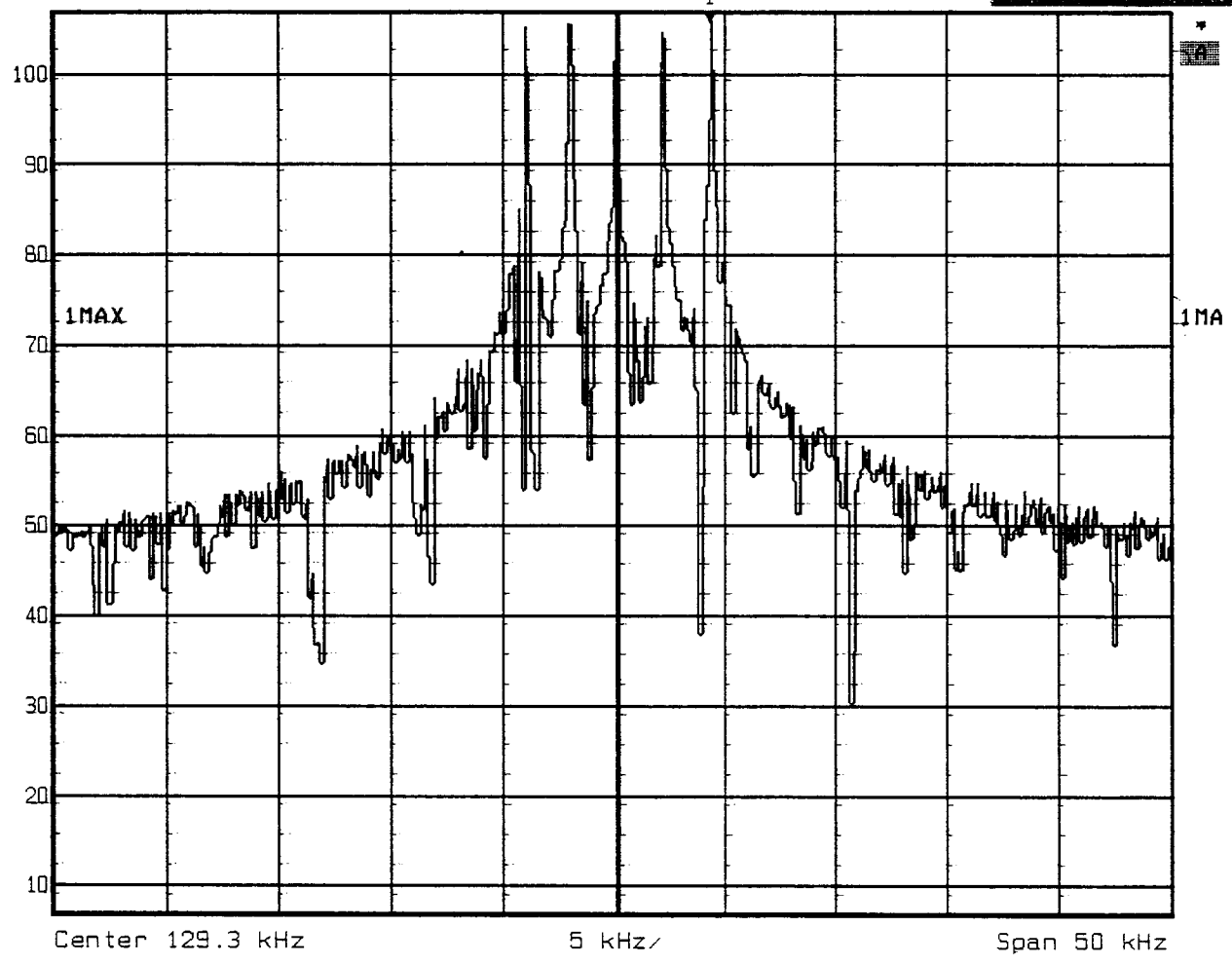
Date: 19.APR.1999 15:44:30

Bandwidth Plot

100 10 7 R55 WK4297



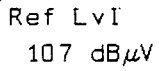
Marker 1 [T1]
Ref Lvl 105.77 dB μ V
107 dB μ V
RBW 100 Hz
VBW 100 Hz
SWT 25 s
Unit



Date: 19 APR 1999 16:01:34

A40P A7

100-108855 WK429



RF Att

Unit

SWT 250 ms

Unit

The image shows a spectral plot on a grid. The vertical axis (y-axis) is labeled from 10 to 100 in increments of 10. The horizontal axis (x-axis) has labels: 'Center 129.3 kHz', '10 kHz', and 'Span 100 kHz'. A signal trace is plotted, showing a central peak that reaches a maximum value of 100. The signal is labeled '1 MAX' on the left and '1 MA' on the right. The trace shows a noisy baseline that rises to a peak and then falls back to the baseline level.

Date: 19.APR.1999 16:20:14

A5 of A7

955 WK429

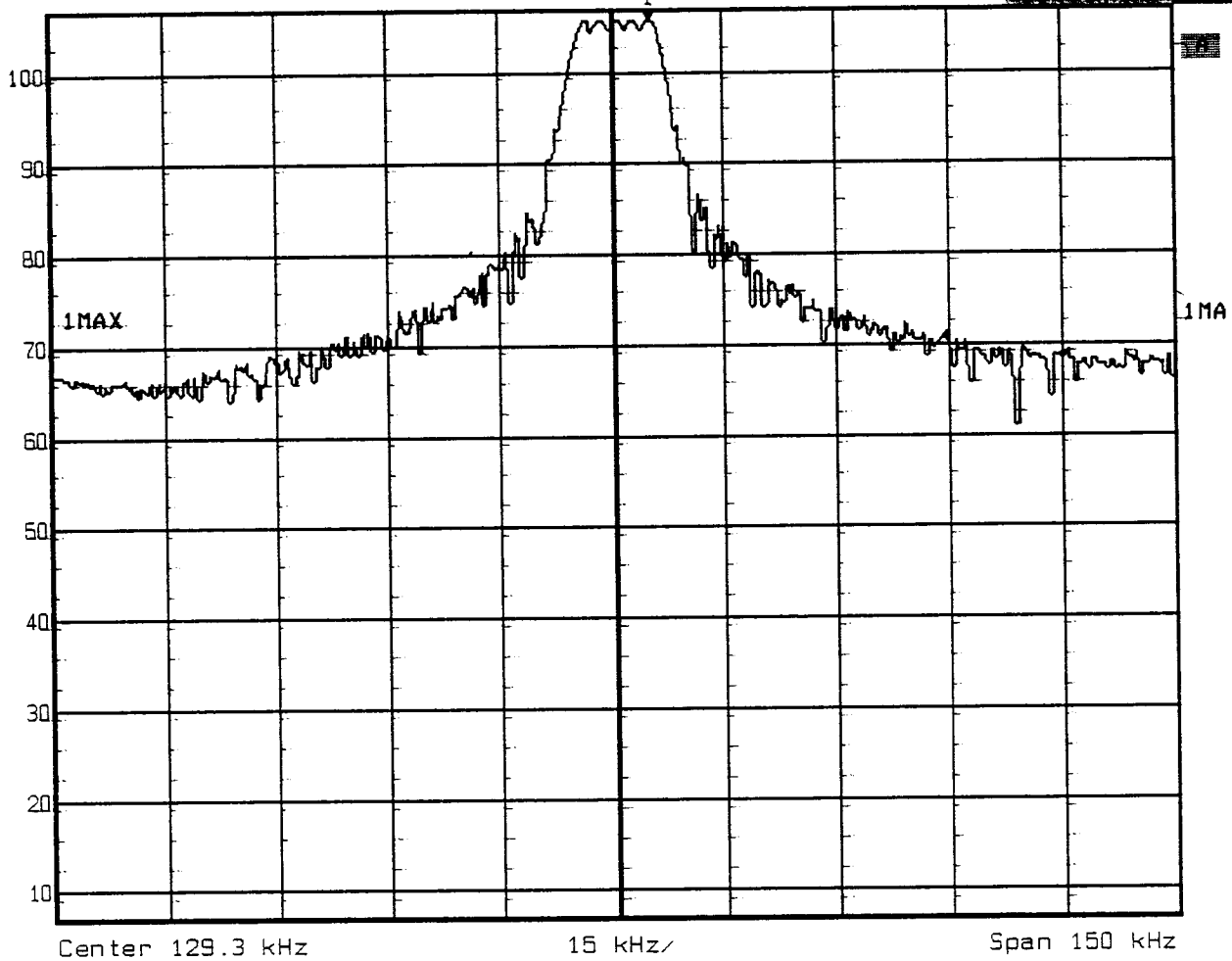
955 WK429



Ref Lvl
107 dB μ V

Marker 1 [T1]
105.75 dB μ V
134.56052104 kHz

RBW	3 kHz	RF Att
VBW	3 kHz	
SWT	50 ms	Unit



Date: 19.APR.1999 16:37:18

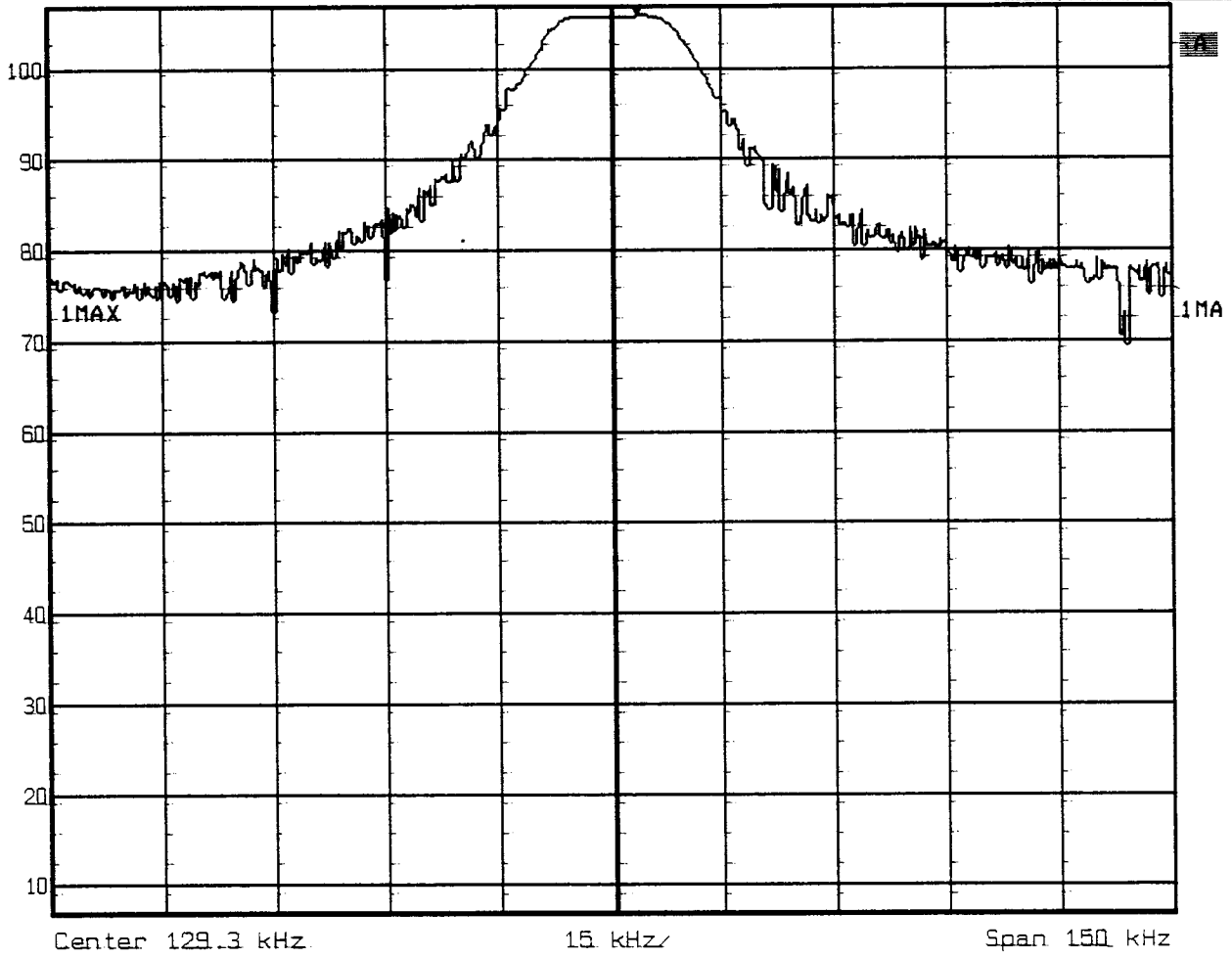
AC of A7

Bandwidth Plot

Model ID: 4855 WK4291



Marker 1 [T1] RBW 10 kHz RF Att
 Ref Lvl 105.78 dB μ V VBW 10 kHz
 107 dB μ V 133.05751503 kHz SWT 15 ms Unit



Date: 19.APR.1999 16:30:07

ATTACHMENT: B**List Of Test Equipment**

All used test instruments as well as the test accessories are calibrated and verified regularly.

Test Report No: T 15917-1-03 KG

Begin of Testing: 16.04.1999

Test ID	Model Type	Kind of equipment	Manufacturer	Equipment No.
CPR1	FMZB 1516	Antenna	Schwarzbeck G.	04-07/62-90-018
	ESHS-30	Test Receiver	Rohde & Schwarz	04-07/63-92-045
MB	FMZB 1516	Antenna	Schwarzbeck G.	04-07/62-90-018
	FSEM - 30	Spectrum Analyser	Rohde & Schwarz	04-07/74-97-001
SER1	FMZB 1516	Antenna	Schwarzbeck G.	04-07/62-90-018
	ESHS-30	Test Receiver	Rohde & Schwarz	04-07/63-92-045
SER2	UHALP-9107	Antenna	Schwarzbeck G.	04-07/62-83-010
	BBA-9106	Antenna	Schwarzbeck G.	04-07/62-92-048
	ESVP	Test Receiver	Rohde & Schwarz	04-07/63-89-008

FCC ID: KR55WK4291

Test-Setup:
Magnetic field 9kHz - 30 MHz (front view)



FCC ID: KR55WK4291

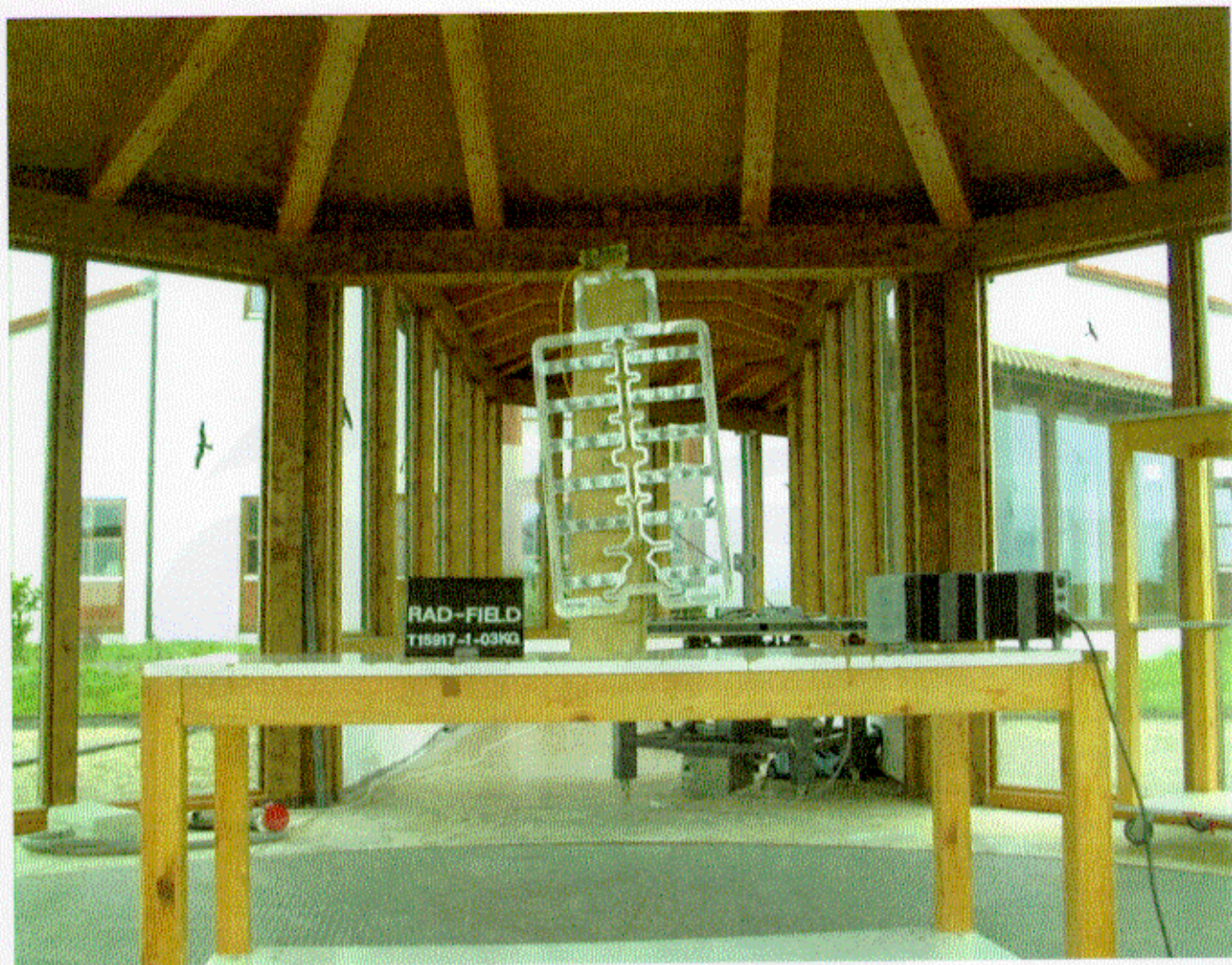
Test-Setup:
Magnetic Field 9 kHz - 30 MHz (back view)



FCC ID: KR55WK4291

Test-Setup:

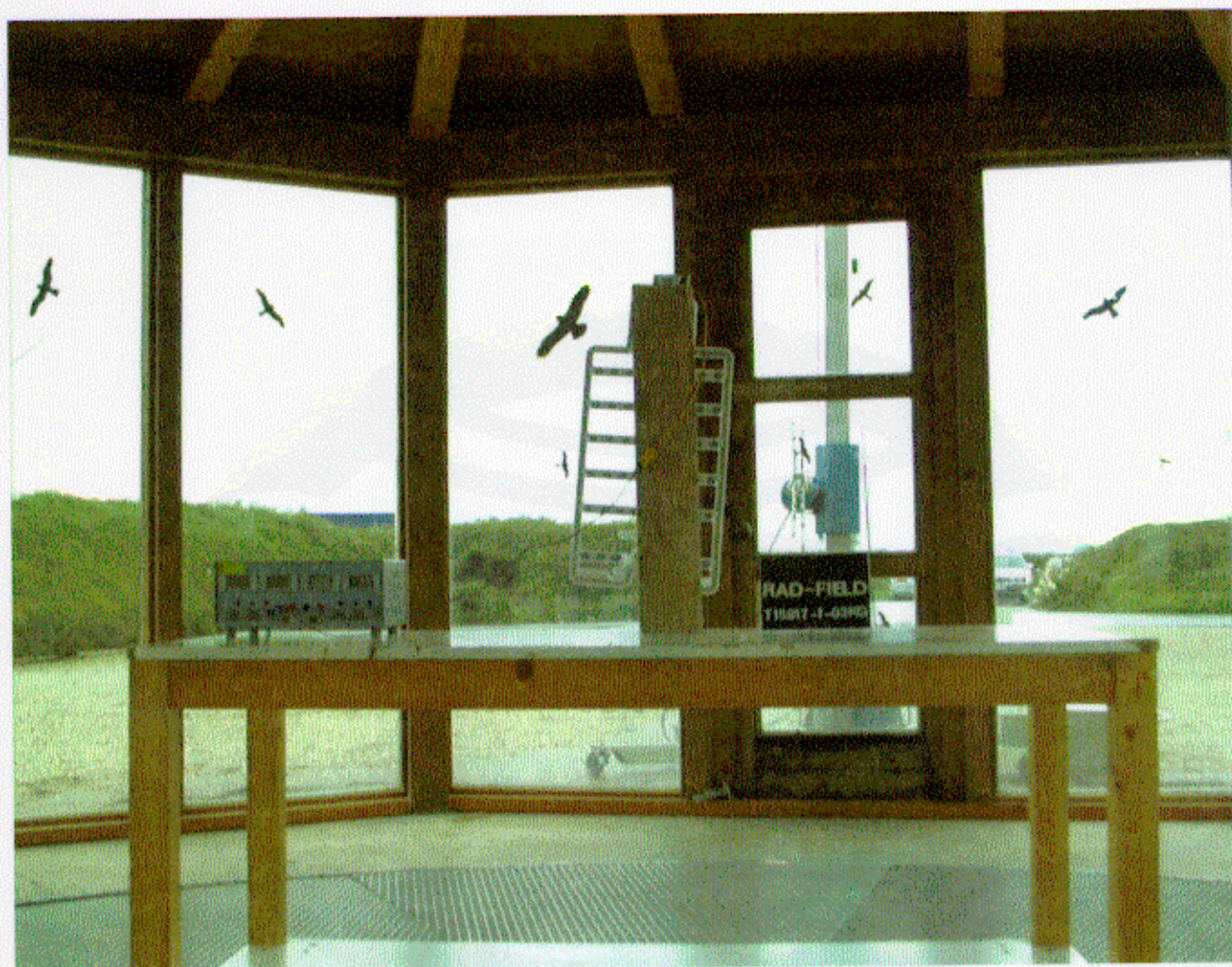
Radiated emission 30 MHz - 1000 MHz (front view)



FCC ID: KR55WK4291

Test-Setup:

Radiated emission 30 MHz - 1000 MHz (back view)



CONSTRUCTIONAL DATAFORM FOR TESTING OF RADIO EQUIPMENT

Licence holder:	Siemens AG		
Address:	AT SE SC1 CA13, Wernerwerkstraße 2, D-93049 Regensburg		
Manufacturer:	Siemens Automotive S.A.		
Address:	AT SE SC F4, Avenue de Mirail, B-P 1149, F-31069 Toulouse, France		
Type:	CPOD/PPD		
Model:	5WK4 291		
Serial-No.:		Protection class:	

Application for getting

- ☒ national approval
☐ EC-type examination

Additional informations to the above named model:

Antenna: transmitter:	Type: Loop			
	Length/size: 0.2 m ²			
	receiver:	Type: loop		
		Length/size: 2x0.1 m ²		
Power supply of the transmitter: Type:	Battery	nominal voltage:	13.5	V
		lowest voltage:	10.0	V
		highest voltage:	16.0	V
	Power supply of the receiver: Type:	Battery	nominal voltage:	13.5

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
Wire harness:	☐ yes ☐ no		☐ yes ☐ no
Serial data (white)	☒ yes ☐ no		☐ yes ☒ no
Ground (brown)	☐ yes ☒ no		☐ yes ☒ no
Ubatt, switched	☐ yes ☒ no		☐ yes ☒ no
	☐ yes ☐ no		☐ yes ☐ no

O If applicable, if necessary complete overleaf

Page D1

Applicant: _____ Model-name: _____



Type designation: 5WK4 291			
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	125kHz – 133 kHz		
Maximum no. of channels	5		
Channel spacing	no		
Class of emission (type of modulation)	PON		
Maximum RF output power			
Maximum effective radiated power (ERP)	20 dBuA/m		
Output power variable	no		
Channel switching frequency range	125 kHz – 133 kHz		
Method of frequency generation	☐ Synthesizer ☐ Crystal ☒ Other Ceramic resonator		
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		
Antenna socket	☐ BNC ☐ TNC ☐ N ☐ M ☐ UHF ☐ Adapter ☒ None ☐ ☐		
Type approval specifications: ETS 300 330, EN 300 330 FCC part 15, RSS 210			

O If applicable, if necessary complete overleaf

Page D 2

Applicant: _____ Model-name: _____



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, date 26.2.99
place of issue

R. Schmid
Seal and signature of applicant