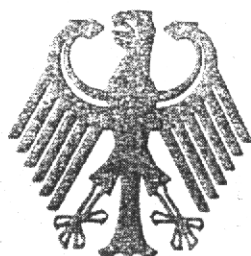


B Z T



Prüfbericht
(Test Report)

Testreport no.: 523-13g/00203/97
I-ETS 300 220
EMERGENCY

**BUNDESAMT FÜR POST
UND
TELEKOMMUNIKATION**

Briefadresse:
Postfach 10 04 43
D-66004 Saarbrücken

Hausadresse:
Talsirabe 34-42
D-66119 Saarbrücken

Akkreditiertes Prüflaboratorium

DAR-Registriernummer:

TTI-P-G-066/94-40 vom 02.12.96

Testreport no.: 523-13g/00203/97

I-ETS 300 220

EMERGENCY

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1 General information

1.1 Notes

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the Bundesamt für Post und Telekommunikation.

1.2 Testing laboratory

Bundesamt für Post und Telekommunikation

Postfach 10 04 43, 66004 Saarbrücken

Talstraße 34-42 , 66119 Saarbrücken

Deutschland

Telephone: + 49 681 598 - 0

Telefax : + 49 681 598 - 1600

E-mail : poststelle@bapt.de

Internet : http://www.bapt.de

Accredited testing laboratory

DAR-registration number : TTI-P-G-066/94-40 vom 02.12.96

1.3 Details of applicant

Name : BREITLING S.A.

Street : P.O. Box 1132

City : CH-2540 Grenchen

Country : Swiss

Telephone : +41 32 654 54 54

Telefax : +41 32 654 54 08

Contact : Mr. J. P. Giradin ; Mr. O. Desjeux

Telephone: +41 32 654 54 41

1.4 Application details

Date of receipt of application : 28.10.97

Date of receipt of test item : 16.12.97

Date of test : 16.12.97

1.5 Test item

Type of equipment : Multifunction watch equipped with a miniature transmitter to locate people in distress

Type designation : BREITLING EMERGENCY E56121

Manufacturer : applicant

Street :

City :

Country :

Serial number : 4207

Additional informations: :

Frequency : 121,500 MHz / 70K0A3X

Channel separation: >25 kHz

Number of channels : 1

Antenna : Wire antenna 43cm / counterpoise 58cm

Power supply : 6V DC Lithium

Type of equipment : Category II , Class III b

Unmodulated carrier : not possible

1.6 Test standards

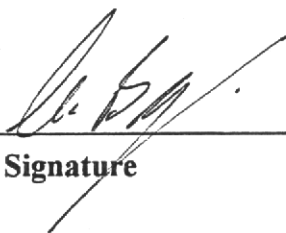
I-ETS 300 220 (Issue : October 1993)

2 Technical test**2.1 Summary of test results**

No deviations from the technical specification(s) were ascertained in the course of the tests performed.

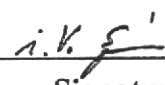
Tester :

16.12.97	523-13g	Berg
Date	Section	Name


Signature

Technical responsibility for area of testing :

16.12.97	523-6	Weyrich
Date	Section	Name


Signature

2.2 Testreport

TEST REPORT

I-ETS 300 220

Testreport no: 523-13g/00203/97

TEST REPORT REFERENCE**LIST OF MEASUREMENTS**

The list of measurements called for in I-ETS 300 220 is given below.

SUBCLAUSE	PARAMETER TO BE MEASURED	PAGE
	Transmitter parameters	
7.1	Frequency error	7
7.3	Effective radiated power - Maximum	8
7.6	Range of modulation bandwidth - Wideband only	9
7.7.3	Spurious emissions radiated- Transmitter operating	10
8.1	Spurious radiations - Radiated	11
	Test equipment listing	12
	Photographs of the equipment	14

Equipment under test : BREITLING EMERGENCY

Ambient temperature : 23°C

Relative humidity : 38%

TRANSMITTER FREQUENCY ERROR

SUBCLAUSE 7.1

Power level at which the measurement has been performed: 35,48 mW

measurement not applicable : Frequency separation >25 kHz

TEST CONDITIONS		FREQUENCY ERROR (kHz)		
		CH 1		
$T_{nom}(23)^{\circ}C$	$V_{nom}(6,0)V$	+1,65		
$T_{min}(-10)^{\circ}C$	$V_{min}(5,1)V$	+1,28		
	$V_{max}(6,0)V$	1,50		
$T_{max}(+55)^{\circ}C$	$V_{min}(5,1)V$	+0,45		
	$V_{max}(6,0)V$	+0,65		
Maximum freq. error (kHz)		+1,65		
Measurement uncertainty		$\pm 1 \times 10^{-7}$		

portable station

LIMIT

SUBCLAUSE 7.1.3

Frequency separation (kHz)	Frequency error limit (kHz)				
	<47 MHz	47 to 137 MHz	> 137 to 300 MHz	> 300 to 500 MHz	> 500 to 1000 MHz
10/12,5	$\pm 0,60$	$\pm 1,00$	$\pm 1,00(b)$ $\pm 1,50(m)$ $\pm 2,00(p)$	$\pm 1,00(b)$ $\pm 1,50(m)$ $\pm 2,50(p)$	Not applicable
20/25	$\pm 0,60$	$\pm 1,35$	$\pm 2,00$	$\pm 2,00(b\ m)$ $\pm 2,50(p)$	$\pm 2,50(b\ m)$ $\pm 3,00(p)$
b = Fixed station; m = mobile station; p = portable station					

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

01, 02, 05

Equipment under test : BREITLING EMERGENCY

Ambient temperature : 23°C

Relative humidity : 38%

EFFECTIVE RADIATED POWER
SUBCLAUSE 7.3.1

Rated output power level (maximum) : 35 mW

Polarisation of the measurements for the larger power level .: vertical

TEST CONDITIONS		TRANSMITTER POWER (mW)		
		CH 1		
$T_{nom}(23)^{\circ}C$	$V_{nom}(6,0)V$	35,48		
Maximum deviation from output power under extreme test conditions (dBc)		2,2		
Measurement uncertainty		±3dB		

LIMIT
SUBCLAUSE 7.3.3

For normal test conditions

Class	Frequency range MHz	Power level radiated mW
I	25 to 1000	10
II	300 to 1000	25
III	25 to 1000	100
IV	300 to 1000	500

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

Equipment under test : BREITLING EMERGENCY

Ambient temperature : 23°C

Relative humidity : 38%

RANGE OF MODULATION BANDWIDTH FOR WIDEBAND EQUIPMENT (>25 kHz)
SUBCLAUSE 7.6

Where FL Lowest frequency at the appropriate spurious emission level

FH Highest frequency at the appropriate spurious emission level

Band edge limits:	FLM = Lowest FL (measured)	121,46752 MHz
and	FHM = Highest FH (measured)	121,53336 MHz

Spurious Emission Limits (Transmitter Operating) SUBCLAUSE 7.7.5 TABLE 10

47 MHz to 74 MHz 87,5 to 118 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies ≤ 1000 MHz	Frequencies > 1000 MHz
4,0 nW	250 nW	1,00 μW

Equipment under test : BREITLING EMERGENCY

Ambient temperature : 23°C

Relative humidity : 38%

TRANSMITTER SPURIOUS EMISSIONS RADIATED

SUBCLAUSE 7.7.3.1 &

Power level at which the measurement has been performed : 35,48 mW

7.7.4.1

Transmitter operating

Modulated/~~Unmodulated~~*
*(Delete whichever is inappropriate)

SPURIOUS EMISSIONS LEVEL (nW)								
CH 1								
f (MHz)	Band- width (kHz)	Level (nW)	f (MHz)	Band- width (kHz)	Level (nW)	f (MHz)	Band- width (kHz)	Level (nW)
364,50	100	6,3						
607,51	100	0,2						
1093,5	1000	0,1						
1458,0	1000	0,3						
1944,0	1000	0,4						
2065,5	1000	0,8						
2673,0	1000	6,1						
2916,0	1000	1,1						
Measurement uncertainty			± 3dB					

Bandwidth (kHz); this refers to the bandwidth of the measurement receiver

Limits

SUBCLAUSE 7.7.5 TABLE 10

47 MHz to 74 MHz 87,5 to 118 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies ≤ 1000 MHz	Frequencies > 1000 MHz
4,0 nW	250 nW	1,00 µW