

Akkreditiertes Prüflaboratorium

**DAR-Registriernummer:
TTI-P-G 166/98-00 vom 18.09.98**

**Test report no.: 2_0769-A/98
FCC Rule 15.231 / 15.209
Funkgong 369**

1.2 Testing laboratory

CETECOM ICT Services GmbH

66117 Saarbrücken

Untertürkheimer Straße 6 - 10

Deutschland

Telefon : +49 681 598 - 9000

Telefax : +49 681 598 - 9075

E-mail : Harro.Ames@ICT.CETECOM.DE

Internet :

Accredited testing laboratory**DAR-registration number : TTI-P-G-166/98-00 vom 16.03.98****1.3 Details of applicant****Name** : A.Grothe & Söhne GmbH & Co. KG**Street** : Löhestrasse 22**City** : D-53773 HENNEF**Country** : Germany**Telephone** : +49(0)2242 8890 171**Telefax** : +49(0)2242 8890 103**Contact** : Herr W.Böser**Telephone** : +49(0) 2242 8890 171**1.4 Application details****Date of receipt of application** : 08.01.99**Date of receipt of test item** : 08.01.99**Date of test** : 08.01.99**1.5 Test item****Type of equipment** : wireless door bell**Type designation** : Funkgong 369**Manufacturer** :**Street** :**City** :**Country** :**Serial number** : --**Additional informations:** :**Frequency** : 315,0 MHz / 100A1D**Channel separation:** >25 kHz**Number of channels** : 1**Antenna** : integral antenna**Power supply** : TX: 9V DC battery RX: 4,5V DC battery**Unmodulated carrier** : not possible**1.6 Test standards: FCC Rule Part 15.231 and 15.209**

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.

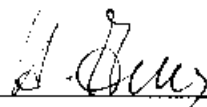
Technical responsibility for area of testing :

18.02.99 RSC 8414 H.Ames

Date

Section

Name



Signature

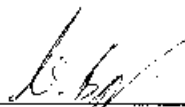
Technical responsibility for area of testing :

18.02.99 RSC8411 M.Berg

Date

Section

Name



Signature

2.2 Testreport

TEST REPORT

FCC Rule Part 15.231

FCC Rule Part 15.209

Testreport no. : 2_0769-A/98

Equipment under test : Funkgong 369

Ambient temperature : 21°C

Relative humidity : 54%

TRANSMITTER FREQUENCY ERRORPower level at which the measurement has been performed 2160 $\mu\text{V/m}$ at 3m measuring distance

TEST CONDITIONS		FREQUENCY ERROR (kHz)		
Frequency (MHz)		315,00 MHz		
T_{nom} (21)°C	V_{nom} (9.0)V	-27,4		
T_{min} (-20)°C	V_{min} (7.65)V	-71,5		
	V_{max} (9.0)V	-71,0		
T_{max} (+55)°C	V_{min} (7.65)V	-23,4		
	V_{max} (9.0)V	-23,1		
Maximum freq. error (kHz)		-71,5		
Measurement uncertainty		$\pm 1 \times 10^{-7}$		

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

01 , 02 , 05

Equipment under test : Funkgong 369

Ambient temperature : 21°C

Relative humidity : 54%

FIELD STRENGTH OF FUNDAMENTIAL

SUBCLAUSE § 15.235 a)

Polarisation of the measurements for the larger power level.: vertical
Measurement distance 3 m

TEST CONDITIONS		FIELD STRENGTH ($\mu\text{V/m}$)		
Frequency (MHz)		315,00		
T_{nom} (21) °C	V_{nom} (9.0) V	2160		
Maximum deviation from output power under extreme test conditions (dBc)		2,5		
Measurement uncertainty		$\pm 3\text{dB}$		

LIMIT

SUBCLAUSE § 15.235 a)

For normal test conditions

Frequency range	Field strength of fundamental ($\mu\text{V/m}$)
260 - 470 MHz	3750 - 12500
315 MHz	~6000

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

17 - 24

Equipment under test : Funkgong 369

Ambient temperature : 21°C

Relative humidity : 54%

EMISSIONS RADIATED OUTSIDE OF THE SPECIFIED FREQUENCY BANDS

(up to 10 kHz above and below the band edge) SUBCLAUSE §15.235 b)

Transmitter operating

Modulated/~~Unmodulated~~*

*(Delete whichever is inappropriate)

Measurement distance see table

SPURIOUS EMISSIONS LEVEL (µV/m)								
315,00 MHz								
f (MHz)	Detector	Level (µV/m)	f (MHz)	Detector	Level (µV/m)	f (MHz)	Detector	Level (µV/m)
no	peak's	found						
Measurement uncertainty			± 3dB					

Limits

SUBCLAUSE § 15.235 / § 15.209

Frequency range	Field strength
216 - 960 MHz	26 dbc or 200 µV/m

Frequency (MHz)	Field strength (µV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

17 - 24

Equipment under test : Funkgong 369

Ambient temperature : 21°C

Relative humidity : 54%

TRANSMITTER SPURIOUS EMISSIONS**SUBCLAUSE § 15.235 b)**

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

Measurement distance 3 m

FIELD STRENGTH OF HARMONICS								
315,00 MHz								
f (MHz)	Detector	Level (µV/m)	f (MHz)	Detector	Level (µV/m)	f (MHz)	Detector	Level (µV/m)
629,968	Peak	384		Peak				
945,937	Peak	380		Peak				
1259,80	Peak	202		Peak				
	Peak			Peak				
	Peak			Peak				
	Peak			Peak				
	Peak			Peak				
	Peak			Peak				
	Peak			Peak				
	Peak			Peak				
	Peak			Peak				
Measurement uncertainty			± 3dB					

LIMIT**SUBCLAUSE § 15.209**

Frequency (MHz)	Field strength (µV/m)	Measurement distance (m)
216 - 960	10% of 6000µV/m in this case 600µV/m	3

REFERENCE NUMBER(S) OF TEST EQUIPMENT USED

(for reference numbers see test equipment listing)

