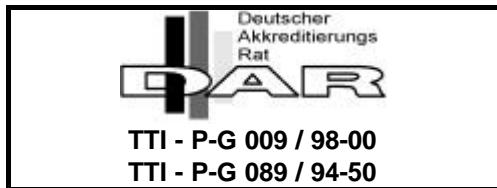


FCC ID: E9MSO40



EMISSION -- TEST REPORT

Testreport file no. : **T 20989-1-00 NF** Date : Sept. 11, 2001
of issue

Model : SO40 (WMS 40)

Type : Wireless Microphone System, Snap On

Applicant : AKG Acoustics, U.S.

Manufacturer : Vtech Communications Ltd.

Licence holder : AKG Acoustics U.S.

Address : 914 Airpark Center Dr.

Nashville, TN 37217, U.S.A.

Test result accrdg. to the
regulation(s) at page 3

:

POSITIV

This testreport with appendix consists of 44 pages.
The testresult only responds to the tested sample. It is not allowed to copy
this report even partly without the allowance of the testlaboratory.

DIRECTORY

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TEST REGULATIONS

The tests were performed according to following regulations :

- - EN 50081-1 / 2.1991
- - EN 50081-2 / 7.1993

- - EN 55011 / 3.1991
- - EN 55014 / 4.1993
- - EN 55014 / A2:1990
- - EN 55014 / 5.1995
- - EN 55015 / A1:1990
- - EN 55015 / 12.1993
- - EN 55022 / 5.1995
- - prEN 55103-1 / 3.1995
- - prEN 50121-3-2 / 3.1995
- - EN 60601-1-2 / 4.1994
- - VCCI
- - 47 CFR Part 74 Subpart H (74.861)

| | |
|--------------------------------------|-------------|
| ○ - Group 1 | ○ - Group 2 |
| ○ - class A | ○ - class B |
| ○ - Household appliances and similar | |
| ○ - tools | |
| ○ - Semiconductor devices | |
| Category: | |
| ○ - class A | ○ - class B |
| ○ - class 1 | ○ - class 2 |

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ADDRESS OF THE TEST LABORATORY

- - MIKES BABT PRODUCT SERVICE GmbH
Ohmstrasse 2-4
D - 94342 Strasskirchen
- - _____

ENVIRONMENTAL CONDITIONS

Temperature: _____ 15-35 ° C
Humidity: _____ 45-60 %
Atmospheric pressure: _____ 860-1060 mbar

POWER SUPPLY SYSTEM UTILIZED

Power supply system : Internal battery DC 1.5 V

STATEMENT OF MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities that can account for a nominal measurement error of ± 4 dB. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

SHORT DESCRIPTION OF THE EQUIPMENT UNDER TEST (EUT)

The snap on transmitter SO 40 can be attached to hand-held microphones with adequate connectors and is used for e.g. in concerts, theaters and tv or radio studios to transmit audio signals to a receiver. The transmitter is processing the input signal which is given by a hand-held microphone, modulating it on a carrier (frequency modulation) and amplifying it. This signal will be feeded through filters to the antenna and then radiated. The snap on transmitters exist in 3 different version: US54 (710.4 MHz) / US58 (734.6) and KR4 (750.9 MHz).

Number of received/tested samples: 3 / 1

DEFINITIONS FOR SYMBOLS USED IN THIS TEST REPORT

- - Black box indicates that the listed condition, standard or equipment is applicable for this Report.
- - Blank box indicates that the listed condition, standard or equipment was not applicable for this Report.

FCC ID: E9MSO40

M E A S U R E M E N T P R O T O C O L F O R F C C , V C C I
A N D A U S T E L

Test Methodology

Conducted and radiated emission testing is performed according to the procedures in International Special Committee on Radio Interference (CISPR) Publication 22 (1993), European Standard EN 55022 and Australian Standard AS 3548 (which are based on CISPR 22).

The Japanese standard, "Voluntary Control Council for Interference (VCCI) by Data Processing Equipment and Electronic Office Machines, Technical Requirements" is technically equivalent to CISPR 22 (1993). For official compliance, a conformance report must be sent to and accepted by the VCCI.

In compliance with FCC Docket 92-152, "Harmonization of Rules for Digital Devices Incorporate International Standards", testing for FCC compliance may be done following the ANSI C63.4-1992 procedures and using the FCC limits or the CISPR 22 Limits.

Measurement Error

The test system for conducted emissions is defined as the LISN, tuned receiver and coaxial cable. The test system for spurious emissions is defined as the antenna, the pre-amplifier, the tuned receiver and the coaxial cable. These test systems have an expected error of ± 3 dB. The equipment comprising the test systems are calibrated on an annual basis.

Justification

The Equipment Under Test (EUT) is configured in a typical user arrangement in accordance with the manufacturer's instructions. A cable is connected to each available port and either terminated with a peripheral into its characteristic impedance or left unterminated. When appropriate, the cables are manually manipulated with respect to each other to obtain maximum emissions from the unit.

General Standard Information

The test methods used comply with CISPR Publication 22 (1993), EN 55022 (1987) and AS 3548 (1992) - "Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment" and with ANSI C63.4-1992 - "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz."

For detailed description of each measurement please refer to section testresults.

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DISCOVERY OF WORST CASE MEASUREMENT CONDITION:

The model SO40 consists of 3 different versions (each working on a fixed frequency) US54, US58, and KR4. The 3 versions are technically identical except the following items:

- 3 different operating frequencies
- PCB. The boards are similar with differences only in the output filter. The filters on the PCB have the same configuration but have different combinations of resistors, coils and capacitors. For more detailed information, please see technical documentation set. Due to the different output filter, the PCB's have different names.

To find out the worst case channel for the complete measurement the following tests have been performed:

- Measurement of the radiated fieldstrength at the operating frequency of the 3 versions. This measurement have been performed in order to find out the transmitter with the maximum fieldstrength.
- Measurement of the radiated spurious emissions of the 3 versions. This measurement have been performed in order to find out the maximum spurious emissions of the transmmitter.
- Measurement of the modulation limiting data of the 3 versions. This measurement has been performed in order to find out, whether the modulation limiting data have different results at the different operating frequencies .
- Checking the occupied bandwidth with the maximum input level for the snap on transmitter on each version of the snap on transmitter at the operating frequency.

SUMMARIZING:

- => maximum fieldstrength: (difference US58-KR4: 1.2 dB)
- => maximum spurious emission: (difference KR4-US58: 9.1 dB)
- => modulation limiting data: no essential differences on the 3 versions
- => occupied bandwidth: no essential differences on the 3 versions

Based on this testresults, the measurements have been performed completely on the version: KR4. This testresults are documented in the following sections of the testreport.

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TESTRESULT

CONDUCTED EMISSIONS - 10/150 kHz - 30 MHz

■ - Test not applicable

Testlocation :

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

For TEST EQUIPMENT USED please refer to ATTACHMENT B:

Description of Measurement

The final level, expressed in dB μ V, is arrived at by taking the reading directly from the EMI receiver. This level is compared directly to the FCC Limit or to the CISPR limit, which is equivalent to the Australian AS 3548 limit.

To convert between dB μ V and μ V, the following conversions apply:

$$\text{dB}\mu\text{V} = 20(\log \mu\text{V})$$

$$\mu\text{V} = \text{Inverse log}(\text{dB}\mu\text{V}/20)$$

Conducted emissions on the 50 Hz and/or 60 Hz power interface of the EUT are measured in the frequency range of 150 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth and quasipeak detection, and a Line Impedance Stabilization Network (LISN), with $50\Omega/50 \mu\text{H}$ (CISPR 16) characteristics. Table top equipment is placed on a non-conducting table 80 centimeters above the floor and is positioned 40 centimeters from the vertical ground plane (wall) of the screen room. If the minimum passing margin appears to be less than 20 dB with a peak mode measurement, the emissions are remeasured using a tuned receiver with quasipeak and average detection and recorded on the data sheets.

Testresult

The requirements are

O - MET

O - NOT MET

Min. limit margin _____ dB at _____ MHz

Max. limit exceeding _____ dB at _____ MHz

Remarks: _____ EUT is not having a mains connection. Operated by a internal
_____ battery.

SPURIOUS EMISSION

Spurious emissions from the EUT are measured in the frequency range of 30 to 10 times the highest used frequency using a tuned receiver and appropriate broadband linearly polarized antennas. Measurements between 30 MHz and 1000 MHz are made with 120 kHz/6 dB bandwidth and quasipeak detection and measurements above 1000 MHz are made with a 1 MHz/6 dB bandwidth and peak detection, remeasurement of results which may be critical will be repeated in average mode. Table top equipment is placed on a 1.0 x 1.5 meter non-conducting table 80 centimeters above the ground plane. Floor standing equipment is placed directly on the turntable/ground plane. Interface cables that are closer than 40 centimeters to the ground plane are bundled in the center in a serpentine fashion so they are at least 40 centimeters from the ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screen room located outside the

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test area. The antenna was positioned 3, 10 or 30 meters horizontally from the EUT. To locate maximum emissions from the test sample the antenna is varied in height from 1 to 4 meters, measurement scans are made with both horizontal and vertical antenna polarizations and the EUT are rotated 360 degrees.

SPURIOUS EMISSION (MAGNETIC FIELD) 10 kHz - 30 MHz

■ - Test not applicable

- o - in a shielded room
- o - at a non - reflecting open-site

and

- o - in a testdistance of 3 meters.
- o - in a testdistance of 30 meters.

For TEST EQUIPMENT USED please refer to ATTACHMENT B:

Description of Measurement

The final level, expressed in dB μ V/m, is arrived at by taking the reading from the EMI receiver (Level dB μ V) and adding the antenna correction factor and cable loss factor (Factor dB) to it. This result then has to be compared with the relevant FCC limit.

Example:

| Frequency (MHz) | Level (dB μ V) | + | Factor (dB) | = | Level (dB μ V/m) | Limit (dB μ V/m) | = | Delta (dB) |
|--------------------|-----------------------|---|----------------|---|-------------------------|-------------------------|---|---------------|
| 1.705 | 5 | + | 20 | = | 25 | 30 | = | 5 |

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Testresult

The requirements are

- MET - NOT MET

Min. limit margin

_____ dB at _____ MHz

Max. limit exceeding

_____ dB at _____ MHz

Remarks: Not applicable.

SPURIOUS EMISSIONS (electric field) 30 MHz - 1000 MHz

- Test not applicable

- Open-site 1
- Open-site 2
- 3 meters
- 10 meters
- 30 meters

For TEST EQUIPMENT USED please refer to ATTACHMENT B: SER2

Description of Measurement

The final level, expressed in dB μ V/m, is arrived by taking the reading from the EMI receiver (Level dB μ V) and adding the correction factors and cable loss factor (Factor dB) to it. This is done automatically in the EMI receiver, where the correction factors are stored. This result then has the FCC or CISPR limit subtracted from it to provide the Delta which gives the tabular data as shown in the data sheets at page 24 - 25. The CISPR 22 limit is equivalent to the Australian AS 3548 limit.

Example:

| Frequency (MHz) | Level (dB μ V) | + | Factor (dB) | = | Level (dB μ V/m) | Limit (dB μ V/m) | (dB) | = | Delta |
|--------------------|-----------------------|---|----------------|---|-------------------------|-------------------------|------|---|-------|
| 719 | 75 | + | 32.6 | = | 107.6 | 110 | | = | -2.4 |

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Testresult

The requirements are

■ - MET

O - NOT MET

Min. limit margin

> 45 dB at 30-1000 MHz

Max. limit exceeding

_____ dB at _____ MHz

Remarks: The emissions have to be att. $43 + 10 \log(P \text{ in W})$ below the carrier.

$P_{\text{max. KR4}} = 3.6 \text{ mW} \rightarrow 18.6 \text{ dB att. Max. field strength in}$

OATS: 84.4 dB μ V/m. For plot see page A1-A2.

SPURIOUS EMISSION 1 GHz - 18 GHz

- - Test not applicable

Testlocation :

- o - Open-site 1
- o - Open-site 2
- - Anechoic chamber
- o - Full compact chamber

- o - 1 meters
- - 3 meters
- o - 10 meters

For TEST EQUIPMENT USED please refer to ATTACHMENT B: SER3

Description of Measurement

The final level, expressed in dB_{uV/m}, is arrived by taking the reading from the Spectруmanalyzer in dB_{uV} and adding the correction factors of the test setup incl. cables.

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Example of the correction value at 1.8236 GHz

| Level reading at 1.5 GHz | correction EMCO 3115 | correction Amplifier AWT 8035 + cable | Correction Factor (summarized) | corrected level |
|--------------------------------|-------------------------|---------------------------------------------|--------------------------------------|--------------------|
| 56 dB μ V | +25.7 | -41.7 | -16 | 40 dB μ V |

Testresult

The requirements are

■ - MET

○ - NOT MET

Min. limit margin 24.4 dB at 1.497 GHz

Max. limit exceeding dB at GHz

Remarks: The limits are met. The measurement has been performed in Peak-mode.

Testresult in detail:

| Frequency GHz | L: Peak dB μ V | L: AV dB μ V | Correct. | L: Peak dB μ V/m | L: AV dB μ V/m | Limit dB μ V/m |
|------------------|-----------------------|---------------------|----------|-------------------------|-----------------------|-----------------------|
| 1.497 | 75.6 | -- | -15.1 | 60.5 | -- | 84.4 |
| 1.876 | 54.9 | -- | -12.8 | 42.1 | -- | 84.4 |
| 2.255 | 68.2 | -- | -11.1 | 57.1 | -- | 84.4 |
| 2.627 | 56.0 | -- | -10.3 | 45.7 | -- | 84.4 |
| 2.991 | 52.0 | -- | -9.7 | 42.3 | -- | 84.4 |
| 3.756 | 64.0 | -- | -6.8 | 57.2 | -- | 84.4 |
| 4.505 | 50.3 | -- | +0.1 | 50.4 | -- | 84.4 |
| 5.258 | 50.2 | -- | -0.2 | 50.0 | -- | 84.4 |

CONDUCTED POWER OF THE FUNDAMENTAL WAVE MEASURED
ON THE ANTENNA TERMINALS

- Test not applicable

Testlocation :

- Shielded room no. 1
- Shielded room no. 2
- Shielded room no. 3
- Shielded room no. 4
- Shielded room no. 5
- Shielded room no. 6
- Shielded room no. 7
- Anechoic chamber
- Full compact chamber
- 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 | | Power/dBm | Power/dBm | Power/dBm | Power/dBm | Power/dBm | Power/dBm |
|------------------------------|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Tempera-ture/°C | DC supply voltage/V | | | | | | |
| -30 | | | | | | | |
| -20 | | | | | | | |
| -10 | | | | | | | |
| 0 | | | | | | | |
| +10 | | | | | | | |
| +20 | | | | | | | |
| +30 | | | | | | | |
| +40 | | | | | | | |
| +50 | | | | | | | |

Remarks:

MODULATION LIMITING DATA

- Test not applicable

Testlocation :

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

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- - Climatic test chamber VLK

For TEST EQUIPMENT USED please refer to ATTACHMENT B: MLD

Description of Measurement

The modulation limiting data were measured on the antenna terminals for EUT's with external connector. Other EUT's are tested via an adequate coupling device with antenna jack. The antenna jack was connected to the input of a communication test receiver. The internal batteries of the EUT, have been removed also and an external DC power supply was used instead. The data have been taken by feeding the connectors used for connecting the microphone with different audio frequencies. These frequencies are generated in the communication test receiver. The level was varied in 10 dB steps from 20 dB_uV to the maximum audio input level specified by the manufacturer. The frequency deviation at this levels have been recorded.

PFD: Positive frequency deviation

NFD: Negative frequency deviation

For the occupied bandwidth plot the value of 50 % of the maximum frequency deviation was calculated. The level on the audio input was increased until this 50 % frequency deviation was achieved. To this level 16 dB have been added and a plot was made as described in the next chapter under section occupied bandwidth.

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Testresult

The requirements are

■ - MET

○ - NOT MET

EUT: SO 40 Version: KR54 working on 750.9 MHz

| Input audio level/dB μ V | $f_{mod} = 50$ Hz | | $f_{mod} = 7.5$ kHz | | $f_{mod} = 15$ kHz | |
|------------------------------|-------------------|---------|---------------------|---------|--------------------|---------|
| | PFD/kHz | NFD/kHz | PFD/kHz | NFD/kHz | PFD/kHz | NFD/kHz |
| 30 | 0.130 | 0.130 | 0.550 | 0.550 | 0.650 | 0.640 |
| 40 | 0.165 | 0.165 | 0.800 | 0.790 | 1.250 | 1.260 |
| 50 | 0.530 | 0.490 | 1.230 | 1.230 | 2.250 | 2.240 |
| 60 | 0.730 | 0.790 | 2.040 | 2.020 | 3.900 | 3.880 |
| 70 | 1.320 | 1.310 | 3.530 | 3.490 | 6.890 | 6.860 |
| 80 | 2.290 | 2.280 | 6.230 | 6.130 | 12.100 | 11.900 |
| 90 | 4.100 | 4.080 | 11.100 | 10.700 | 21.600 | 21.300 |
| 100 | 7.210 | 7.200 | 19.800 | 19.100 | 37.600 | 36.800 |
| 110 | 13.200 | 12.700 | 33.900 | 32.900 | 39.900 | 39.200 |
| 120 | 23.300 | 22.900 | 41.100 | 39.100 | 39.900 | 39.100 |
| 125 | 29.100 | 28.700 | 31.100 | 39.200 | 39.700 | 38.600 |
| 130 | 32.000 | 33.000 | 35.700 | 43.000 | 32.500 | 35.500 |
| 133 | 32.500 | 34.600 | 34.400 | 35.000 | 20.300 | 20.400 |

Remarks: The limit of ± 75 kHz is kept.

(PFD=Positive frequency deviation; NFD=Negative Frequency deviation)

Judging the requirements of the emission mask with the data from the modulation limiting data:

KR 4 working on 750.9 MHz:

Max. measured frequency deviation: ± 43 kHz

50% of the maximum deviation: ± 21.5 kHz

Audio input level (ail) to get ± 21.5 kHz: $L = 101.5$ dB μ V

$L + 16$ dB μ V = 117.5 dB μ V => Level for testing the occupied bandwidth

Occupied bandwidth:

| version of EUT | KR4 | | KR4 | | KR4 | |
|------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|------------------------------|-------------------------|
| audio test level | $L = 117.5$ dB μ V/1kHz | | $L = 117.5$ dB μ V/7.5kHz | | $L = 117.5$ dB μ V/15kHz | |
| shape of emission mask | $\pm 50-100\%$ [dB] | $\pm 100-250\%$ [dB] | $\pm 50-100\%$ [dB] | $\pm 100-250\%$ [dB] | $\pm 50-100\%$ [dB] | $\pm 100-250\%$ [dB] |
| min. limit margin/dB | > 5 | > 10 | > 5 | > 10 | > 5 | > 10 |

Remarks: The limit is kept. For plot see pages A9-A14.

FREQUENCY ERROR

- Test not applicable

Testlocation :

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

For TEST EQUIPMENT USED please refer to ATTACHMENT B: FE

Description of Measurement

The frequency error was measured on the antenna terminals for EUT's with external connector. Other EUT's are tested via an adequate coupling device with antenna jack 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. The frequency error is defined as the deviation of the transmitting frequency from the nominal frequency.

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Testresult:

The requirements are

■ - MET

○ - NOT MET

| Frequency range of equipment | | KR4 | | | | | |
|------------------------------|------------------------|------------------------|---------------------|------------------------|------------------------|------------------------|------------------------|
| Tempera- ture/°C | DC supply voltage/V | Frequency error/kHz | Frequency error/kHz | Frequency error/kHz | Frequency error/kHz | Frequency error/kHz | Frequency error/kHz |
| -30 | 1.5 | 12.15 | 750.91215 | | | | |
| | 1.2 | 11.40 | 750.91140 | | | | |
| -20 | 1.5 | 13.30 | 750.91330 | | | | |
| | 1.2 | 12.59 | 750.91259 | | | | |
| -10 | 1.5 | 12.82 | 750.91282 | | | | |
| | 1.2 | 12.12 | 750.91212 | | | | |
| 0 | 1.5 | 10.45 | 750.91045 | | | | |
| | 1.2 | 9.75 | 750.90975 | | | | |
| +10 | 1.5 | 7.44 | 750.90744 | | | | |
| | 1.2 | 6.75 | 750.90675 | | | | |
| +20 | 1.5 | 3.25 | 750.90325 | | | | |
| | 1.2 | 2.79 | 750.90279 | | | | |
| +30 | 1.5 | -0.76 | 750.89924 | | | | |
| | 1.2 | -1.23 | 750.89877 | | | | |
| +40 | 1.5 | -4.46 | 750.89554 | | | | |
| | 1.2 | -4.90 | 750.89510 | | | | |
| +50 | 1.5 | -7.88 | 750.89212 | | | | |
| | 1.2 | -8.22 | 750.89178 | | | | |

Remarks: The most strict limit for this frequency range is: 37.54 kHz
(0.005% of 750.9 MHz)

KEEPING THE REQUIREMENTS OF THE EMISSION MASK

○ - Test not applicable

Testlocation :

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

For TEST EQUIPMENT USED please refer to ATTACHMENT B: EM

FCC ID: E9MSO40

Description of Measurement

The requirements of the emission mask were measured with different input signals on the antenna terminals for EUT's with external connector. Other EUT's are tested via an adequate coupling device with antenna jack. The antenna jack was connected to the input of a spectrum analyzer. The spectrum analyzer was set up as following:

- video and resolution bandwidth: 10 kHz
- attenuation: automatic, low noise
- center frequency: nominal transmit frequency
- frequency span: 500 kHz

The reference level was set to the maximum value of the unmodulated carrier. The internal batteries have been removed also and a variable DC power supply was used instead. The measurements have been made with a modulation frequency and voltage accdg. to the specification of the manufacturer. The audio frequency was provided by a communication test receiver. 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

■ - MET

○ - NOT MET

The **requirements** are as following:

Attenuation on any frequencies removed from the transmit frequency between 50 and 100 % of the authorized bandwidth: at least 25 dB
 between 100 and 250 % of the authorized bandwidth: at least 35 dB
 more than 250 % of the authorized bandwidth: see spurious emissions

The following table is showing the minimal margin to the required attenuations:

| Frequency range of equipment | | KR4 | | CH | | CH | |
|------------------------------|---------------------|---------------|----------------|---------------|----------------|---------------|----------------|
| input modulation | DC supply voltage/V | ±50-100% [dB] | ±100-250% [dB] | ±50-100% [dB] | ±100-250% [dB] | ±50-100% [dB] | ±100-250% [dB] |
| 1 kHz | 2.2 | > 5 | > 10 | | | | |
| | 3.0 | > 5 | > 10 | | | | |
| 15 kHz | 2.2 | > 5 | > 10 | | | | |
| | 3.0 | > 5 | > 10 | | | | |
| 20 kHz | 2.2 | > 5 | > 10 | | | | |
| | 3.0 | > 5 | > 10 | | | | |
| 50 mV | 2.2 | > 5 | > 10 | | | | |
| | 3.0 | > 5 | > 10 | | | | |
| 50 mV | 2.2 | > 5 | > 10 | | | | |
| | 3.0 | > 5 | > 10 | | | | |
| 20 kHz | 2.2 | > 5 | > 10 | | | | |
| | 3.0 | > 5 | > 10 | | | | |

Remarks: The limit is kept. The attenuation is related to the unmodulated carrier. For plot see page A2-A14.

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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 (unmodulated for radiated measurements and frequency error)
- - Transmit (modulated for bandwidth under extreme conditions measurements)
- o -

Configuration of the equipment under test: see appendix

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

- o - Hand Held Microphone _____ Type : D 880S, AKG
- o - _____ Type : _____
- o - unshielded power cable
- o - unshielded cables
- o - shielded cables MPS.No. :
- o - customer specific cables
- - no cables _____
- o - _____

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S U M M A R Y

GENERAL REMARKS:

The product SO40, version KR4 has been tested on the following frequency:
KR4 : 750.9 MHz

This channel was defined as the worst condition channel of all 3 versions:
US54 (710.4 MHz)
US58 (734.6 MHz)
KR4 (750.9 MHz)

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 : August 13, 2001

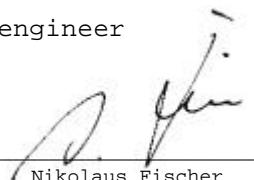
Testing End Date : August 31, 2001

- MIKES BABT PRODUCT SERVICE GmbH -

Test-engineer



Günter Mikes
Dipl.-Ing.(FH)



Nikolaus Fischer

Radiation-Test

FCC ID: E9MSO40

accdg. 74.861

Typ: SO 40

Manufacturer: AKG

Client: AKG

Regulation: FCC Part 74.861

Order No.: T 20989-1-00

Operation Mode: TX-Mode

Remarks:

Testdistance: 3 m

Testreceiver: ESVP

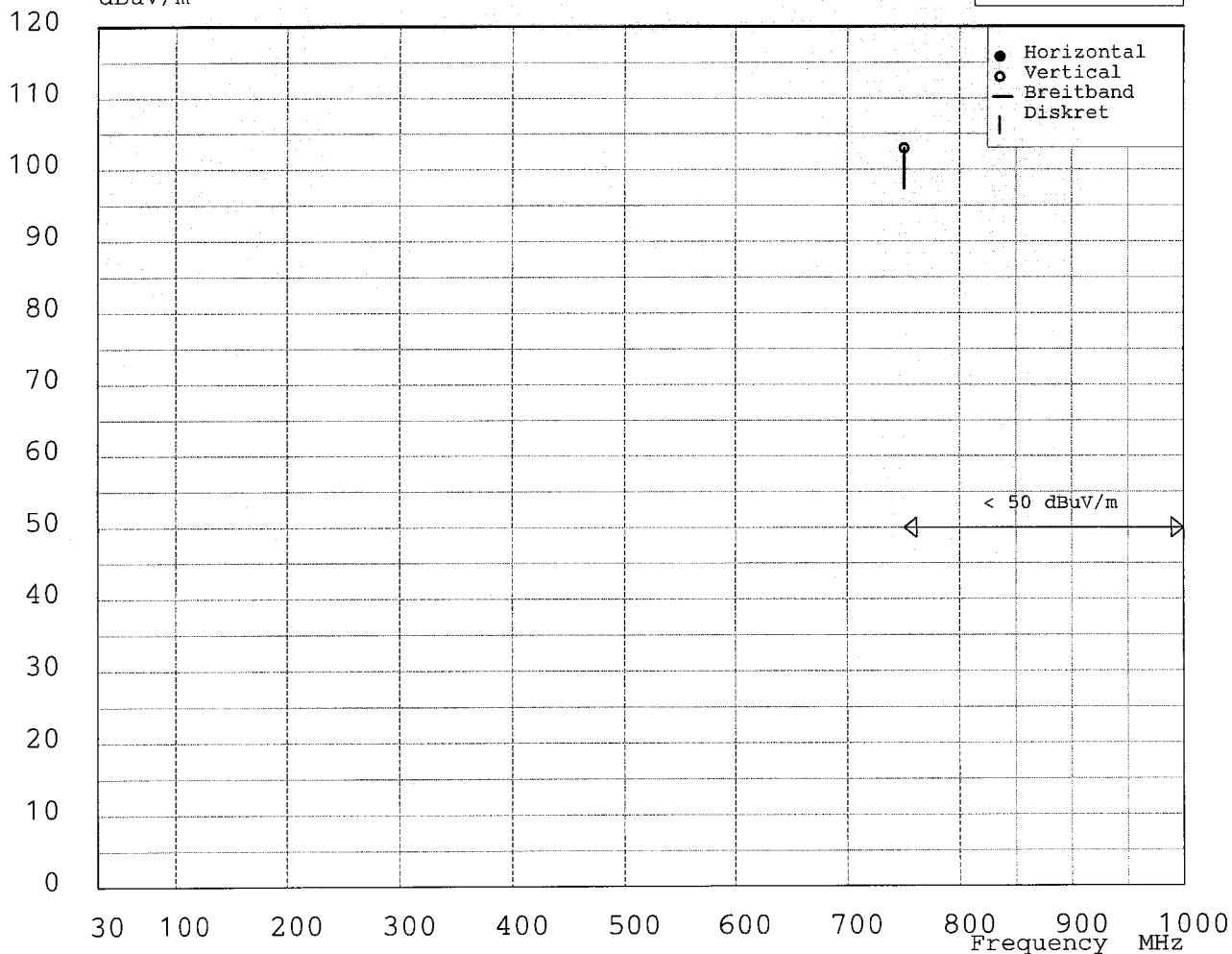
Antenna: VULB

Testengineer: N.Fischer

Date: 10.9.2001

dBuV/m

FCC Part 74.861



Radiation-Test

FCC ID: E9MSO40

accdg. 74.861

Typ: SO 40
 Manufacturer: AKG
 Client: AKG
 Regulation: FCC Part 74.861
 Order No.: T 20989-1-00
 Operation Mode: TX-Mode
 Remarks:

Testdistance: 3 m
 Testreceiver: ESVF
 Antenna: VULB
 Testengineer: N.Fischer
 Date: 10.9.2001

| Result | Frequency [MHz] | Reading [dBuV/m] | Korr [dB] | Final [dBuV/m] | Limit [dBuV/m] | DLimit [dB] | Polarisation | Noise |
|--------|--------------------|---------------------|--------------|-------------------|-------------------|----------------|--------------|---------|
| | 750.90 | 70.87 | 32.13 | 103.00 | 120.00 | 17.00 | Vertical | Diskret |

Calculation of the max. power based on the fieldstrength measured in a distance of 3m.

SO 40, Version KR4

Fieldstrength E (LOG) = 103.0 dB μ V/m
 Fieldstrength E (LIN) = 0.141 V/m

$$P = (E \times D)^2 / 49.5$$

$$P = (0.141 \text{ V/m} \times 3\text{m})^2 / 49.5 = 0.0036 \text{ W} = 3.6 \text{ mW}$$

FCC ID: E9MSO40

Tue 2001 Aug 28 14:36

REF 0.0 dBm

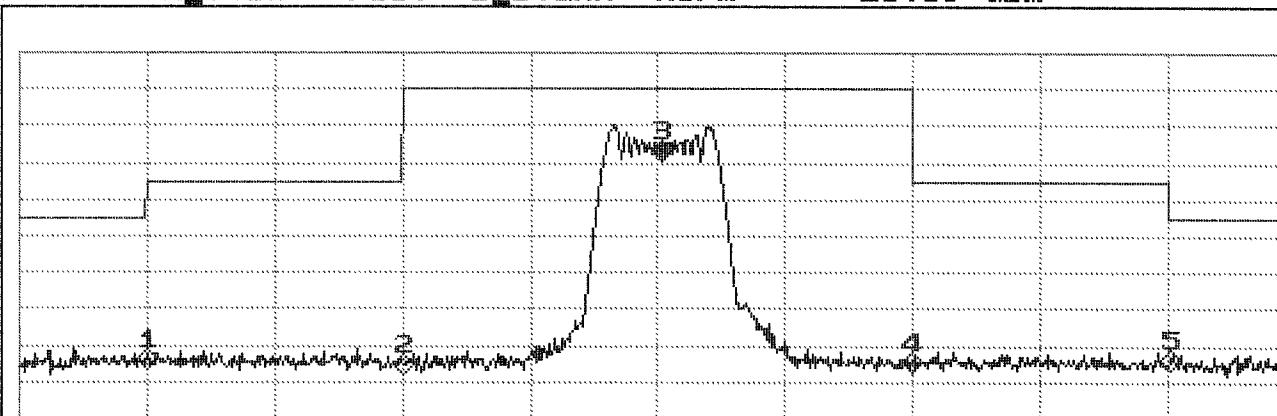
10dB/

A_View

Posi

B_Blank

Norm

MKR 750.9015 MHz
-26.65 dBm

CENTER 750.9000 MHz

*RBW 1 kHz

VBW 1 kHz

SWP 1.0 s

SPAN 500.0 kHz

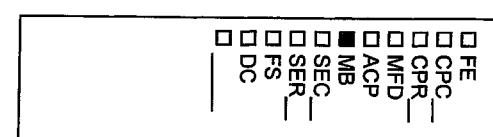
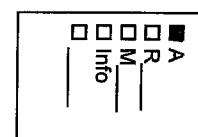
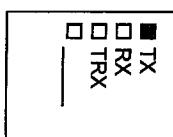
*ATT 10dB

Multi Marker List

| | | |
|-----|--------------|------------|
| 1: | 750.7000 MHz | -84.06 dBm |
| 2: | 750.8005 MHz | -85.08 dBm |
| 3: | 750.9015 MHz | -26.65 dBm |
| 4: | 751.0000 MHz | -84.60 dBm |
| 5: | 751.1010 MHz | -84.05 dBm |
| 6: | | |
| 7: | | |
| 8: | | |
| 9: | | |
| 10: | | |
| 4: | | |

| | | | | | |
|----------------------|------------------|-------|--------|-------|-------|
| Auftragsnr.: T 20989 | | | | | |
| Kunde: | AKG | | | | |
| Gerät: | W13, SNAP ON | | | | |
| Modell: | SO48 | | | | |
| Ser.Nr.: | 118-KR4 | | | | |
| Norm: | FCC, SUBPART H | | | | |
| Unterpunkt: | 74.861 | | | | |
| Messung: | OC, BANDWIDTH | | | | |
| Bemerkung: | +20°C 11.5 V DC | | | | |
| All: | 1kHz, 117.5 dBmV | | | | |
| Frequ. | Ablw. | Pol. | Korr.F | Erg. | Limit |
| (MHz) | (dBm) | (v,h) | (dB) | (dBm) | (dBm) |

A3/A14



Tue 2001 Aug 28 14:46

REF 0.0 dBm

10dBV

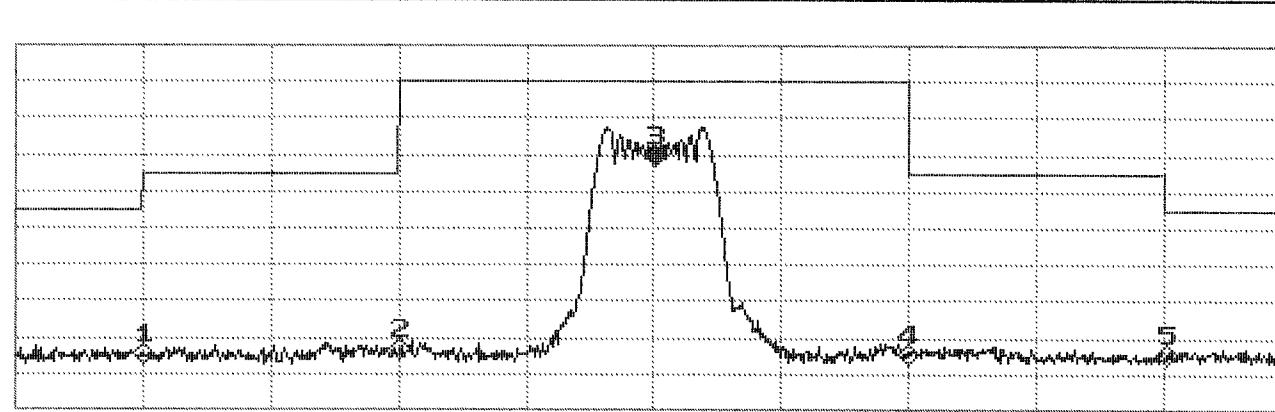
A View

Page 5

B Blank

Morgan

MKR 750.9005 MHz
-30.01 dBm



CENTER 750,9000 MHz

2000-1 kHz

VRW 1 kHz

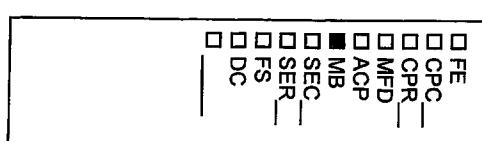
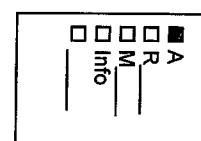
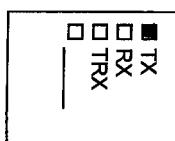
SWP 1.0 S

SPAN 500.0 kHz

*ATT 10dB

Multi Marker List

| | | | | |
|-----|----------|-----|--------|-----|
| 1: | 750.7000 | MHz | -84.28 | dBm |
| 2: | 750.8005 | MHz | -83.29 | dBm |
| 3: | 750.9005 | MHz | -30.01 | dBm |
| 4: | 751.0000 | MHz | -84.74 | dBm |
| 5: | 751.1010 | MHz | -84.59 | dBm |
| 6: | | | | |
| 7: | | | | |
| 8: | | | | |
| 9: | | | | |
| 10: | | | | |
| 11: | | | | |



RFF 0.0 dBm

10dB

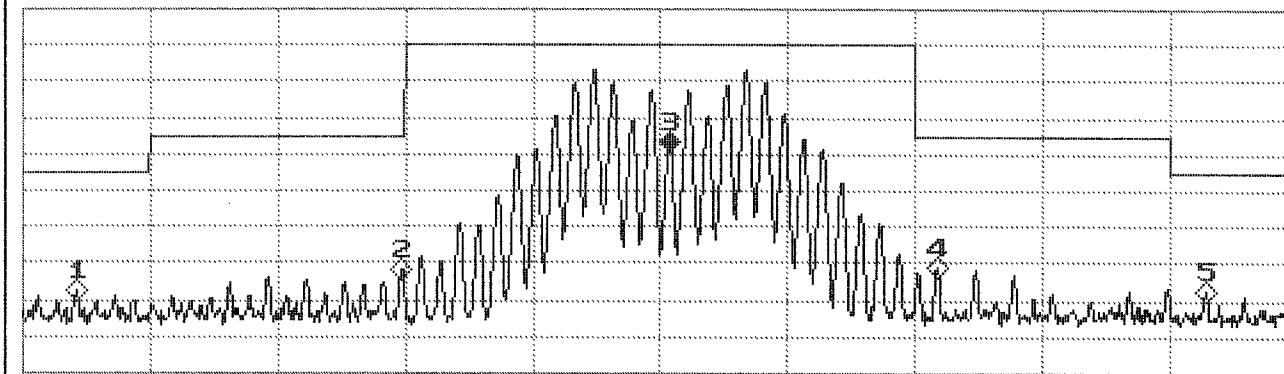
A. Vizcaino

Posisi R R

Lank Norm

MKR 750.9040 MHz
-36.35 dBm

36 35 dBm



CENTER 750.9000 MHz

SRRW 1 kHz

VRW 1 kHz

SWP 1.0 S

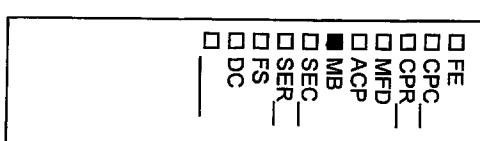
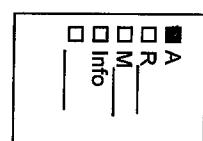
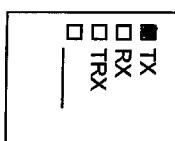
SPAN 500.0 kHz

*RBW 1 kHz VBW 1 kHz SWP 1.0 s *ATT 10dB

Multi Marker List

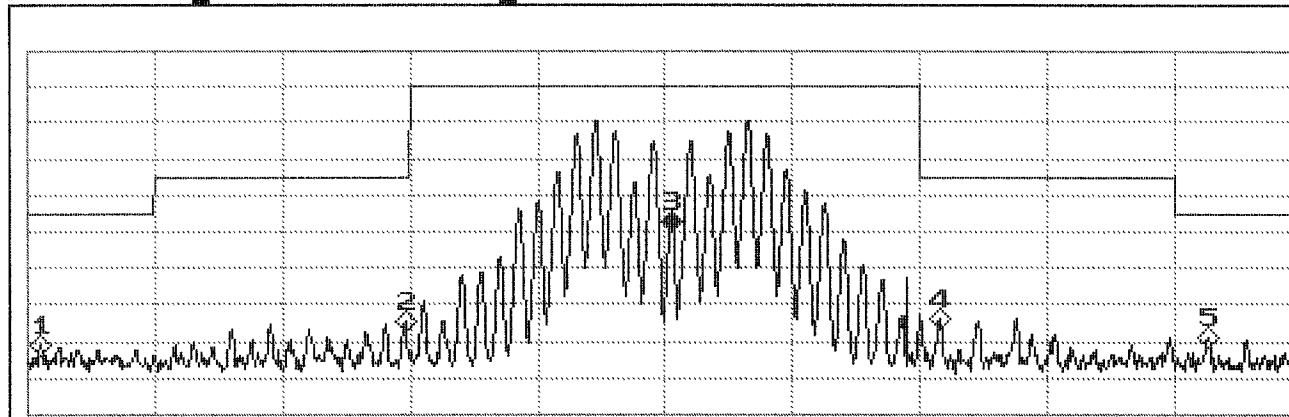
| | | | | |
|-----|----------|-----|--------|-----|
| 1: | 750.6710 | MHz | -77.53 | dBm |
| 2: | 750.7985 | MHz | -71.52 | dBm |
| 3: | 750.9040 | MHz | -36.35 | dBm |
| 4: | 751.0090 | MHz | -71.28 | dBm |
| 5: | 751.1135 | MHz | -77.69 | dBm |
| 6: | | | | |
| 7: | | | | |
| 8: | | | | |
| 9: | | | | |
| 10: | | | | |
| 4: | | | | |

AS/A74



Wed 2001 Aug 29 08:53

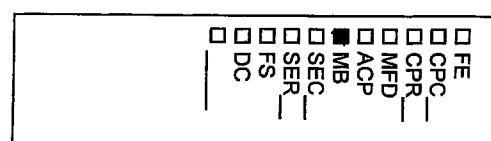
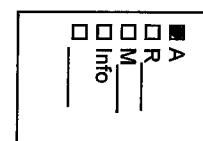
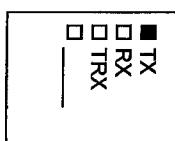
REF 0.0 dBm MKR 750.9025 MHz
10dB/ A_View Posi B_Blank Norm -47.30 dBm



CENTER 750.9000 MHz SPAN 500.0 kHz
*RBW 1 kHz VBW 1 kHz SWP 1.0 s *ATT 10dB

Multi Marker List

| | | | | |
|-----|----------|-----|--------|-----|
| 1: | 750.6555 | MHz | -81.12 | dBm |
| 2: | 750.7980 | MHz | -74.98 | dBm |
| 3: | 750.9025 | MHz | -47.30 | dBm |
| 4: | 751.0080 | MHz | -74.13 | dBm |
| 5: | 751.1130 | MHz | -78.96 | dBm |
| 6: | | | | |
| 7: | | | | |
| 8: | | | | |
| 9: | | | | |
| 10: | | | | |
| 11: | | | | |



RFF 0.0 dBm

10dBV

A View

Posi

B Blank

Norm

HKR 750,9035 MHz

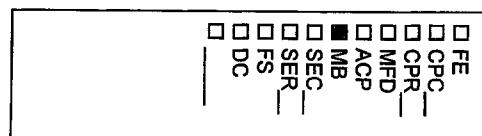
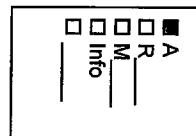
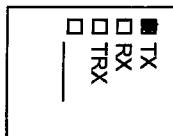
-28, -19 dBm

REF 0.0 dBm MKR 750.9035 MHz
10dB/ A_View Posi B_Blank Norm -28.19 dBm

CENTER 750.9000 MHz SPAN 500.0 kHz
*RBW 1 kHz VBW 1 kHz SWP 1.0 s *ATT 10dB

Multi Marker List

| | | |
|-----|--------------|------------|
| 1: | 750.6785 MHz | -68.91 dBm |
| 2: | 750.7985 MHz | -57.44 dBm |
| 3: | 750.9035 MHz | -28.19 dBm |
| 4: | 751.0290 MHz | -59.95 dBm |
| 5: | 751.1135 MHz | -67.46 dBm |
| 6: | | |
| 7: | | |
| 8: | | |
| 9: | | |
| 10: | | |
| 4: | | |



REF 0.0 dBm

10dB

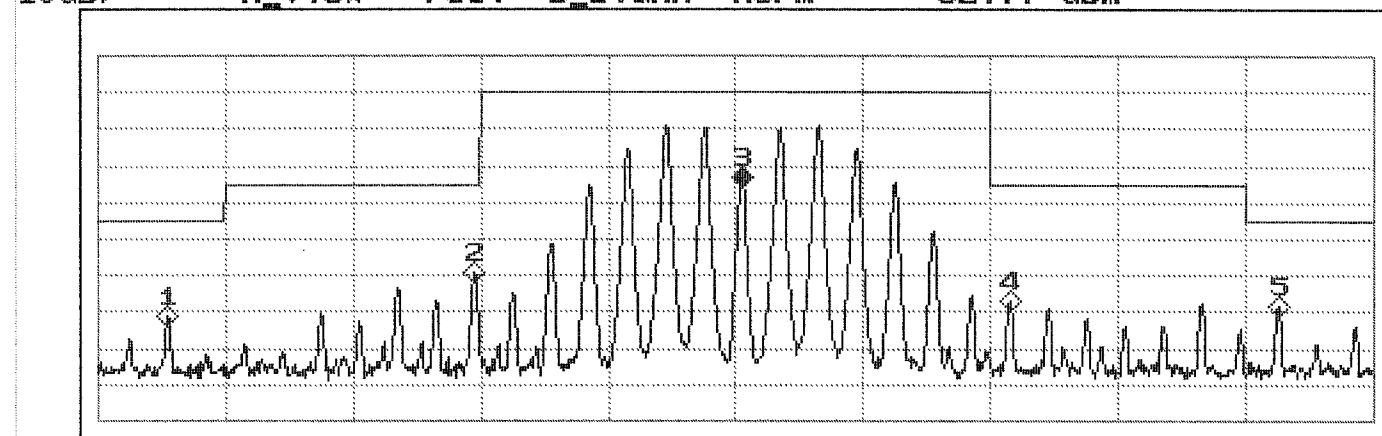
A. Viav

Posit. B E

Lank Norm

MKR 750.9025 MHz
-32.77 dBm

-32.77 dBm



CENTER 750.9000 MHz

3884 1 kHz

VBW 1 kHz

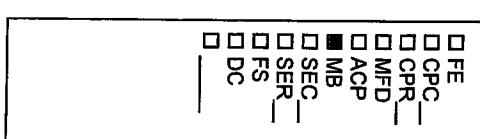
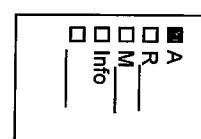
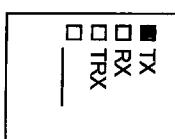
SWP 1.0 S

SPAN 500.0 kHz

*ATT 10dB

Multi Marker List

| | | | | |
|-----|----------|-----|--------|-----|
| 1: | 750.6775 | MHz | -71.31 | dBm |
| 2: | 750.7975 | MHz | -59.46 | dBm |
| 3: | 750.9025 | MHz | -32.77 | dBm |
| 4: | 751.0075 | MHz | -67.02 | dBm |
| 5: | 751.1125 | MHz | -68.63 | dBm |
| 6: | | | | |
| 7: | | | | |
| 8: | | | | |
| 9: | | | | |
| 10: | | | | |
| 4: | | | | |



REF 0.0 dBm

10dB/s

818 View

Posit

B. Blank

Norm

WKR 750.9035 MHz

-11.24 dBm

Ser.Nr.: 128-484

Norm: EEC 500

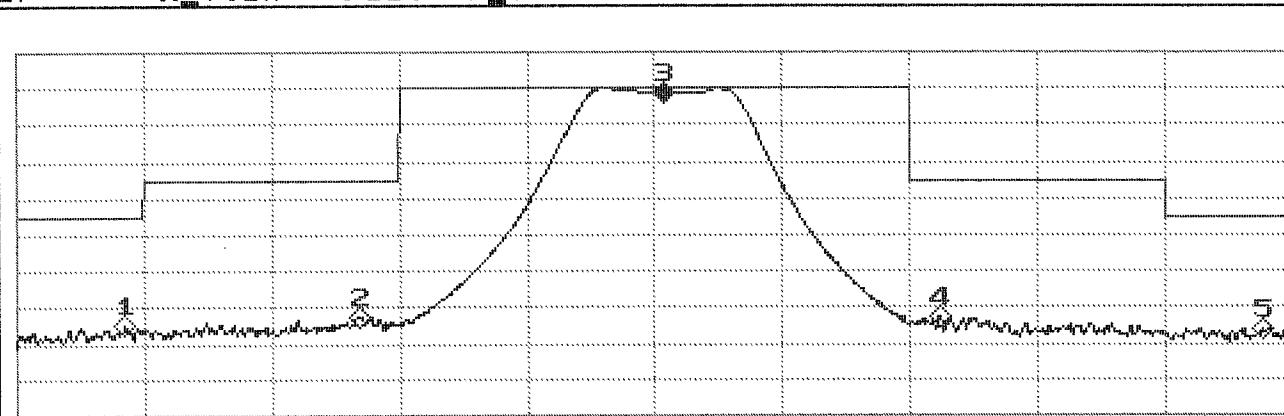
Unterpunkt: 74.86.1

Messung: 67

Bemerkung: $+20^{\circ}\text{C}$ / $+20^{\circ}\text{C}$

Al's 1200

Frequ. Ablw. Pol. Korrf. F Erg.



CENTER 750.9000 MHz

BBW 10 kHz

VBW 10 kHz

SWP 20 ms

SPAN 500.0 kHz

*ATT 10dB

Multi Marker List

| | | | | |
|-----|----------|-----|--------|-----|
| 1: | 750.6925 | MHz | -74.86 | dBm |
| 2: | 750.7840 | MHz | -72.36 | dBm |
| 3: | 750.9035 | MHz | -11.24 | dBm |
| 4: | 751.0115 | MHz | -72.40 | dBm |
| 5: | 751.1375 | MHz | -76.11 | dBm |
| 6: | | | | |
| 7: | | | | |
| 8: | | | | |
| 9: | | | | |
| 10: | | | | |
| A: | | | | |

- A
- R
- M
- Info

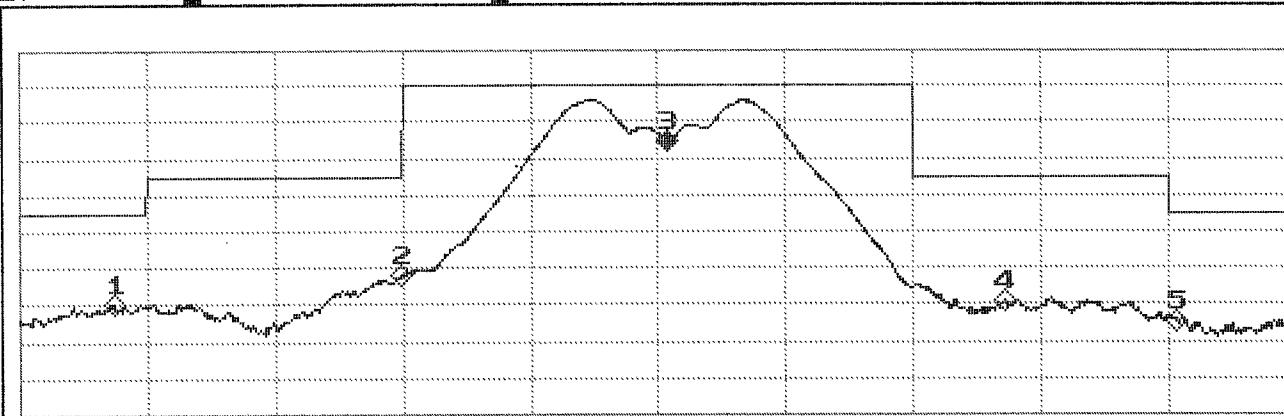
FE CPC MFD ACP
MB SEC SER FS DC

REF 0.0 dBm
10dB/

Posi B. Blank Norm

MKR 750.9035 MHz
-25.03 dBm

25.03 dBm



CENTER 750.9000 MHz

280V 10 kHz

VBW 10 kHz

SWP 20 ms

SPAN 500.0 kHz

1:
2:
3:
4:
5:
6:
7:
8:
9:
10:
A:

750.6870 MHz
750.7995 MHz
750.9035 MHz
751.0355 MHz
751.1025 MHz

-69.88 dBm
-62.31 dBm
-25.03 dBm
-69.27 dBm
-74.40 dBm

Multi Marker List

A small icon consisting of a vertical line with a horizontal bar extending from its top, and a 2x2 grid of four squares to its right, with the bottom-right square filled black.

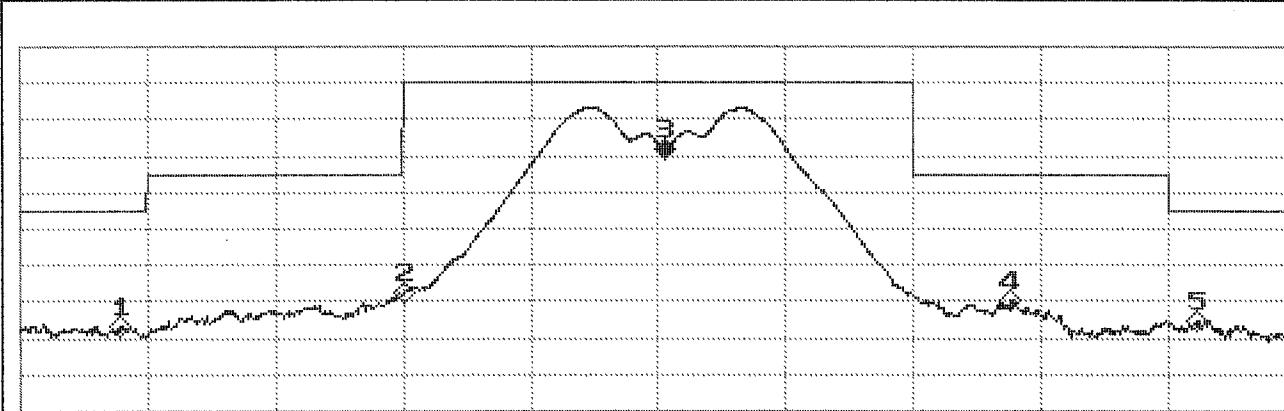
□ FE
□ CPC
□ CPR
□ MFD
□ ACP
■ MB
□ SEC
□ SER
□ FS
□ DC

REF 0.0 dBm
10dB/

MKR 750.9030 MHz
-27.90 dBm

27.90 dBm

REF 0.0 dBm 10dB/ A View Posi B Blank Norm



CENTER 750.9000 MHz

带宽 10 kHz

VBW 10 kHz

SHP 20 ms

SPAN 500.0 kHz

*RBW 10 kHz VBW 10 kHz SWP 20 ms *ATT 10dB

Multi Marker List

| | | | | |
|-----|----------|-----|--------|-----|
| 1: | 750.6895 | MHz | -76.61 | dBm |
| 2: | 750.8000 | MHz | -67.91 | dBm |
| 3: | 750.9030 | MHz | -27.90 | dBm |
| 4: | 751.0380 | MHz | -69.75 | dBm |
| 5: | 751.1110 | MHz | -75.56 | dBm |
| 6: | | | | |
| 7: | | | | |
| 8: | | | | |
| 9: | | | | |
| 10: | | | | |
| 4: | | | | |

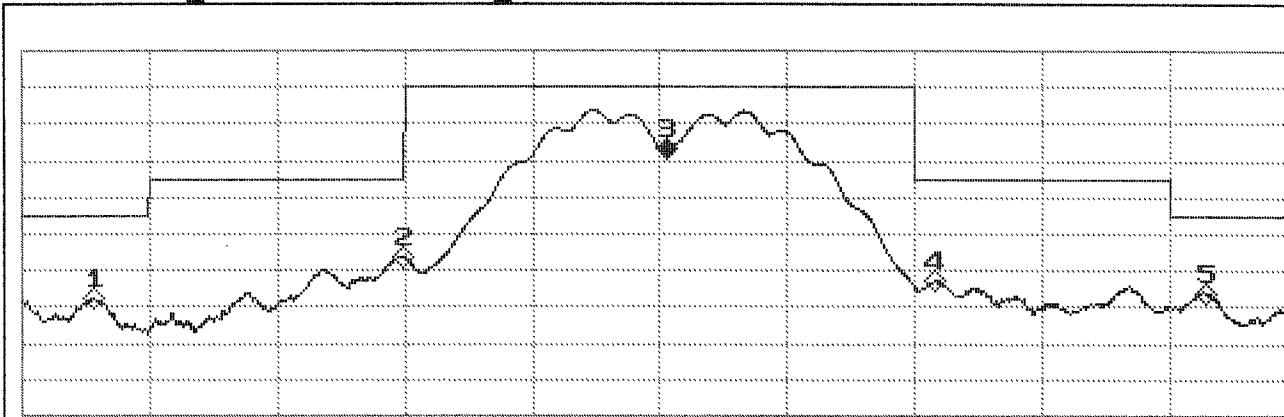
A12/A14

■ TX
□ RX
□ TRX
□ —

- FE
- CPC
- CPR
- MFD
- ACP
- MB
- SEC
- SER
- FS
- DC
-

REF 0.0 dBm
10dB/

Wed 2001 Aug 29 13:19



CENTER 750.9000 MHz

SPAN 500.0 kHz

*RRW 10 kHz

WAV 10 kHz

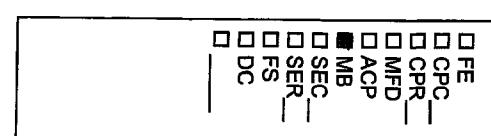
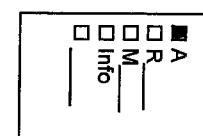
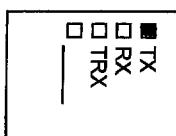
SHP 20 ms

WATT 10dB

Multi Marker List

| | | | | |
|-----|----------|-----|--------|-----|
| 1: | 750.6785 | MHz | -67.63 | dBm |
| 2: | 750.7995 | MHz | -56.69 | dBm |
| 3: | 750.9030 | MHz | -26.51 | dBm |
| 4: | 751.0080 | MHz | -63.02 | dBm |
| 5: | 751.1140 | MHz | -66.31 | dBm |
| 6: | | | | |
| 7: | | | | |
| 8: | | | | |
| 9: | | | | |
| 10: | | | | |
| 4: | | | | |

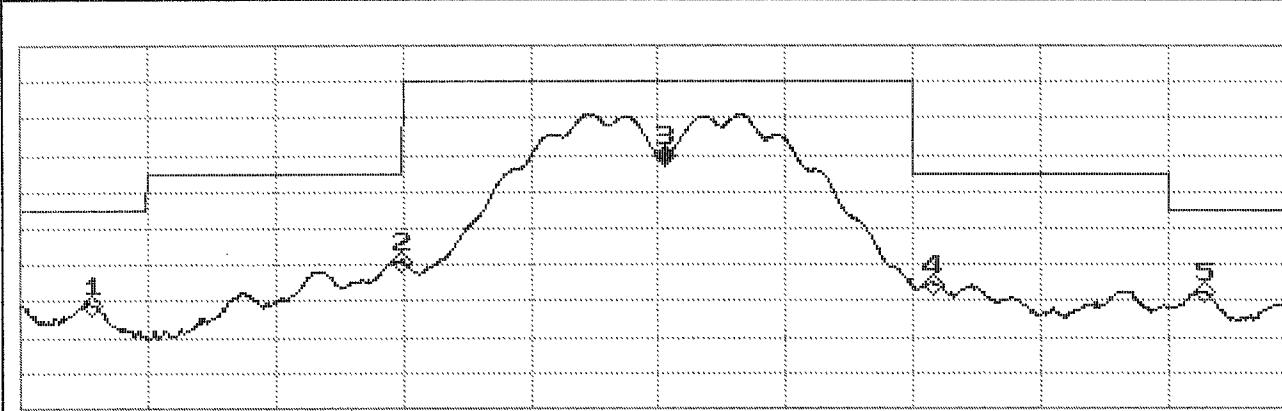
A13/A14



FCC ID: E9MSO40

Wed 2001 Aug 29 13:26

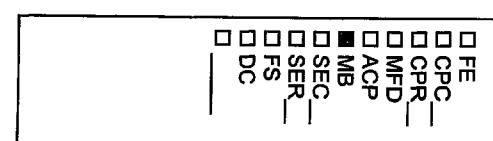
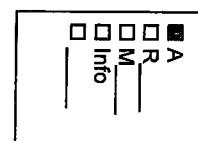
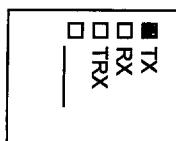
REF 0.0 dBm MKR 750.9025 MHz
10dB/ A_View Pos i B_Blank Norm -30.16 dBm



CENTER 750.9000 MHz SPAN 500.0 kHz
 *RBW 10 kHz VBW 10 kHz SWP 20 ms *ATT 10dB

Multi Marker List

| | | | | |
|-----|----------|-----|--------|-----|
| 1: | 750.6785 | MHz | -70.91 | dBm |
| 2: | 750.7995 | MHz | -59.03 | dBm |
| 3: | 750.9025 | MHz | -30.16 | dBm |
| 4: | 751.0080 | MHz | -65.15 | dBm |
| 5: | 751.1140 | MHz | -67.72 | dBm |
| 6: | | | | |
| 7: | | | | |
| 8: | | | | |
| 9: | | | | |
| 10: | | | | |
| 4: | | | | |



Attachment : B

List of Test Equipment

FCC ID: E9MSO40

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

Test Report No: T 20989-1-00 NF

Beginning of Testing: 13-August-2001

| Test ID | Model Type | Kind of Equipment | Manufacturer | Equipment No. |
|---------|--------------|------------------------|-------------------------|-----------------|
| CPR2 | HCC | Controller Ant.-Mast | Rohde & Schwarz München | 04-07/59-97-001 |
| | RG 214 U | Antenna cable 2 m | Huber+Suhner | 04-07/60-89-463 |
| | HF 7/8 inch | Antenna cable 13 m | Huber+Suhner | 04-07/60-99-001 |
| | HF 7/8 inch | Antenna cable 20 m | Huber+Suhner | 04-07/60-99-002 |
| | HF 7/8 inch | Antenna cable 40 m | Huber+Suhner | 04-07/60-99-003 |
| | KR - 200 | Coax Antenna Switch | Rosenberger HF-Technik | 04-07/60-99-004 |
| | VULB - 9165 | Super-Broadband-Anten | Schwarzbeck G. | 04-07/62-00-001 |
| | ESVP | Test Receiver | Rohde & Schwarz München | 04-07/63-89-008 |
| | ESVP-EZM | Spectrum Monitor | Rohde & Schwarz München | 04-07/74-86-016 |
| | Antennenmast | Antenna mast | Rohde & Schwarz München | 04-07/92-97-001 |
| EM | LMV-1817 | Noise meter | Leader | 04-07/31-86-025 |
| | SINOISE-1 | Sinusgenerator | Fischer Metallbau | 04-07/48-95-277 |
| | CCIR-559 | Filter | Ing.-Büro Rohrbacher | 04-07/60-96-364 |
| | UHF | Telescopic Rod Antenna | Conrad Elektronic GmbH | 04-07/62-01-008 |
| | UHF | Telescopic Rod Antenna | Conrad Elektronic GmbH | 04-07/62-01-009 |
| | CMS-54 | Com. Receiver | Rohde & Schwarz München | 04-07/63-94-052 |
| | R 3162 | Spectrum Analyzer | Advantest | 04-07/74-00-001 |
| FE | R 3162 | Spectrum Analyzer | Advantest | 04-07/74-00-001 |
| | VLK 04/300 | Climatic chamber | Heraeus -Vötsch GmbH | 04-10/90-89-001 |
| MLD | LMV-1817 | Noise meter | Leader | 04-07/31-86-025 |
| | SINOISE-1 | Sinusgenerator | Fischer Metallbau | 04-07/48-95-277 |
| | CCIR-559 | Filter | Ing.-Büro Rohrbacher | 04-07/60-96-364 |
| | UHF | Telescopic Rod Antenna | Conrad Elektronic GmbH | 04-07/62-01-008 |
| | UHF | Telescopic Rod Antenna | Conrad Elektronic GmbH | 04-07/62-01-009 |
| | CMS-54 | Com. Receiver | Rohde & Schwarz München | 04-07/63-94-052 |
| | R 3162 | Spectrum Analyzer | Advantest | 04-07/74-00-001 |
| SER2 | HCC | Controller Ant.-Mast | Rohde & Schwarz München | 04-07/59-97-001 |
| | RG 214 U | Antenna cable 2 m | Huber+Suhner | 04-07/60-89-463 |
| | HF 7/8 inch | Antenna cable 13 m | Huber+Suhner | 04-07/60-99-001 |
| | HF 7/8 inch | Antenna cable 20 m | Huber+Suhner | 04-07/60-99-002 |
| | HF 7/8 inch | Antenna cable 40 m | Huber+Suhner | 04-07/60-99-003 |

Test Report No: **T 20989-1-00 NF**

 Beginning of Testing: **13-August-2001**

 FCC ID: **E9MSO40**

| Test ID | Model Type | Kind of Equipment | Manufacturer | Equipment No. |
|---------|-------------------|-----------------------|-----------------------------|-----------------|
| SER2 | KR - 200 | Coax Antenna Switch | Rosenberger HF-Technik | 04-07/60-99-004 |
| | VULB - 9165 | Super-Broadband-Anten | Schwarzbeck G. | 04-07/62-00-001 |
| | ESVP | Test Receiver | Rohde & Schwarz München | 04-07/63-89-008 |
| | ESVP-EZM | Spectrum Monitor | Rohde & Schwarz München | 04-07/74-86-016 |
| | Antennenmast | Antenna mast | Rohde & Schwarz München | 04-07/92-97-001 |
| 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 |
| | AMF-4B-040130-25P | Microwave-Amplifier | TransTech Hochfrequenztechn | 04-07/66-97-001 |
| | FSEM 30 | Spectrum Analyser | Rohde & Schwarz München | 04-07/74-97-001 |

CONSTRUCTIONAL DATAFORM FOR TESTING OF RADIO EQUIPMENT

| | | | |
|-----------------|-------------------------------------------------------------------------------------|-------------------|--|
| Licence holder: | AKG Acoustics, U.S. | | |
| Address: | 914 Airpark Center Dr., Nashville, TN 37217, U.S.A. | | |
| Manufacturer: | Vtech Communications Ltd | | |
| Address: | Vtech Science Park, Xia Ling Bei Management Zone, Liabou, Dongguan Guangdong 523411 | | |
| Type: | SO40 | | |
| Model: | | | |
| Serial-No.: | | Protection class: | |

Additional informations to the above named model:

| | | | |
|--------------------------------------------------------------------|---------------------------------------------------------|--|---------------------------------------------------------|
| Antenna: transmitter: receiver: | Type: dipole | | |
| | Length/size: consists of SO40 and plugged in microphone | | |
| | Type: | | |
| Power supply of the transmitter: | | | Length/size: |
| Type: | | | 1 AAA Cell or NiCd nominal voltage: 1.5 V |
| | | | lowest voltage: 1.05 V |
| | | | highest voltage: 1.6 V |
| | | | current consumption ~75mA@1.2V |
| Power supply of the receiver: | | | nominal voltage: V |
| Type: | | | current consumption A |

Ancillary equipment:

| | | | | | |
|--------------|-----------------------|-------|-----------|-------------|--|
| Description: | Microphone to plug on | Type: | e.g. D880 | 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 |
|-------------------|----------------------------------------------------|----------|----------------------------------------------------|
| | <input type="radio"/> yes <input type="radio"/> no | | <input type="radio"/> yes <input type="radio"/> no |
| | <input type="radio"/> yes <input type="radio"/> no | | <input type="radio"/> yes <input type="radio"/> no |
| | <input type="radio"/> yes <input type="radio"/> no | | <input type="radio"/> yes <input type="radio"/> no |
| | <input type="radio"/> yes <input type="radio"/> no | | <input type="radio"/> yes <input type="radio"/> no |
| | <input type="radio"/> yes <input type="radio"/> no | | <input type="radio"/> yes <input type="radio"/> no |

 If applicable, if necessary complete overleaf

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Applicant: AKG Model-name: SO40

| | | | |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|
| Type designation: SO40 | | | |
| Name and type designation of individual units comprising the radio equipment: | | | |
| Type of equipment: | | | |
| <input type="checkbox"/> Radiotelephone equipment | <input type="checkbox"/> Remote-control equipment | <input type="checkbox"/> Radiomaritime equipment | <input type="checkbox"/> LPD |
| <input type="checkbox"/> One-way radiotelephone equipment | <input type="checkbox"/> Inductive loop system | <input type="checkbox"/> Inland waterways equipment | <input type="checkbox"/> RLAN |
| <input type="checkbox"/> Personal paging system | <input type="checkbox"/> Radio-relay system | <input type="checkbox"/> Radionavigation equipm. | <input checked="" type="checkbox"/> wireless microphone |
| <input type="checkbox"/> Satellite earth station | <input type="checkbox"/> CB radiotelephone equipment | <input type="checkbox"/> Antenna | <input type="checkbox"/> |
| <input type="checkbox"/> Data transmission equipment | <input type="checkbox"/> Movement detector | <input type="checkbox"/> Aeronautical equipment | <input type="checkbox"/> |
| Technical characteristics: | | | |
| | Transmitter-receiver | Transmitter | Receiver |
| Frequency range | | 710.4..750.9MHz FCC (710.4..864.375 Europe) | |
| Maximum no. of channels | | | |
| Channel spacing | | 200k | |
| Class of emission (type of modulation) | | 200KF3E | |
| Maximum RF output power | | | |
| Maximum effective radiated power (ERP) | | 4mW+3dB | |
| Output power variable | | no | |
| Channel switching frequency range | | 1 channel | |
| Method of frequency generation | <input type="checkbox"/> Synthesizer | <input checked="" type="checkbox"/> Crystal | <input type="checkbox"/> Other |
| Frequency generation TX | Crystal/ multiplier | | |
| Frequency generation RX | | | |
| IF | 1st IF | 2nd IF | 3rd IF |
| Integral selective calling | no | | |
| Audio-frequency interface level at external data socket | 1.2Vrms for 60% of maximum deviation at 1kHz; impedance 220kOhm audio bandwidth 50Hz-15kHz | | |
| Modes of operation | <input type="checkbox"/> Duplex mode | <input type="checkbox"/> Semi-duplex mode | <input checked="" type="checkbox"/> Simplex mode |
| Power source | <input type="checkbox"/> Mains | <input type="checkbox"/> Vehicle-regulated | <input checked="" type="checkbox"/> Integral |
| Antenna socket | <input type="checkbox"/> BNC | <input type="checkbox"/> TNC | <input type="checkbox"/> N |
| | <input type="checkbox"/> M | <input type="checkbox"/> UHF | <input type="checkbox"/> Adapter |
| | <input checked="" type="checkbox"/> None | | |
| Test specifications: FCC Part 74, Part 90.265 | | | |

O If applicable, if necessary complete overleaf

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FCC ID: E9MSO40

Declarations:

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

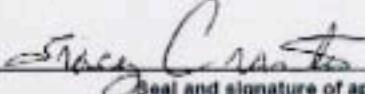
Nashville,

13.9.01

place of issue

date

Seal and signature of applicant



issued: Peter Tiefenthaler Tracy Carter
Vice President, Market Development
AKG Acoustics, U.S.

O If applicable, if necessary complete overleaf

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