

Test Report

Conducted Output power GSM 900 / 1800 / 1900



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Test Sites: COM MP PD ST2 KLF
Development Center Kamp-Lintfort
Phone: +49 28 42/95 54 67
Fax: +49 28 42/95 47 17

Andreas Zimmer
RF Test Engineer, System Test

Michael Niedrholz
Subproject leader RF

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1 Objective and Method

FCC approval for mobile phones requires reporting output power at RF output terminal pursuant to title 47 CFR part 2.1046. SIEMENS devices use special test fixtures with 50 Ohm connection suitable for such measurements. Using a special adapter and connecting the phone to an appropriate load in terms of the input port of the measurement equipment used, we hereby report the values for highest power setting.

2 Results

2.1 GSM 900

Device	Average Power during burst at connector		
	Ch. 975 880.2 MHz	Ch. 63 902.6 MHz	Ch. 124 914.8 MHz
Siemens SP65, "SAR Sample 1" IMEI: 353910 00 944973 0	31.8	31.9	31.6
Siemens SP65, "SAR Sample 2" IMEI: 353910 00 944788 2	31.8	31.9	31.6
Siemens SP65, "x Sample 1" IMEI: 353910 00 944930 0	31.8	31.8	31.6
Siemens SP65, "x Sample 2" IMEI: 353910 00 944949 0	31.8	31.8	31.6

Table 1: Results of power measurements at connector in the GSM 900 Band

2.2 GSM 1800

Device	Average Power during burst at connector		
	Ch. 512 1710.2 MHz	Ch. 698 1747.4 MHz	Ch. 885 1784.8 MHz
Siemens SP65, "SAR Sample 1" IMEI: 353910 00 944973 0	29.4	29.4	29.1
Siemens SP65, "SAR Sample 2" IMEI: 353910 00 944788 2	29.4	29.4	29.1
Siemens SP65, "x Sample 1" IMEI: 353910 00 944930 0	29.4	29.3	29.0
Siemens SP65, "x Sample 2" IMEI: 353910 00 944949 0	29.4	29.3	29.0

Table 2: Results of power measurements at connector in the GSM 1800 Band

2.3 GSM 1900

Device	Average Power during burst at connector		
	Ch. 512 1850.2 MHz	Ch. 661 1880.0 MHz	Ch. 810 1909.8 MHz
Siemens SP65, "SAR Sample 1" IMEI: 353910 00 944973 0	29.2	29.1	29.1
Siemens SP65, "SAR Sample 2" IMEI: 353910 00 944788 2	29.2	29.0	29.0
Siemens SP65, "x Sample 1" IMEI: 353910 00 944930 0	29.1	28.9	29.0
Siemens SP65, "x Sample 2" IMEI: 353910 00 944949 0	29.2	29.0	28.9

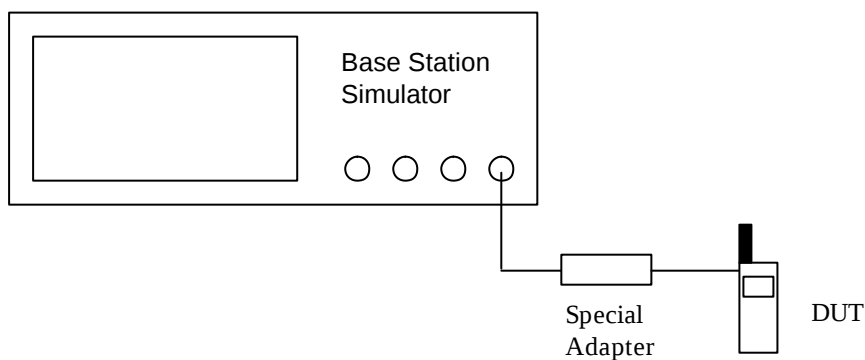
Table 3: Results of power measurements at connector in the GSM 1900 Band

3 Minutes of Test

3.1 Description of device under test

Mobile Phone:	Siemens SP65
Frequency Range GSM 900 :	880 – 915 MHz
Frequency Range GSM 1800:	1710 – 1785 MHz
Frequency Range GSM 1900:	1850 – 1990 MHz
Siemens Part Number:	S30880-S7450-****-*
FCC ID	PWX-SP65

3.2 Measurement Set-up



Base Station Simulator:	CMU 200
Serial Number:	103958
Software Version:	Base 3.52 / GSM 3.52

Figure 1: Block Diagram of set-up for conducted power measurement

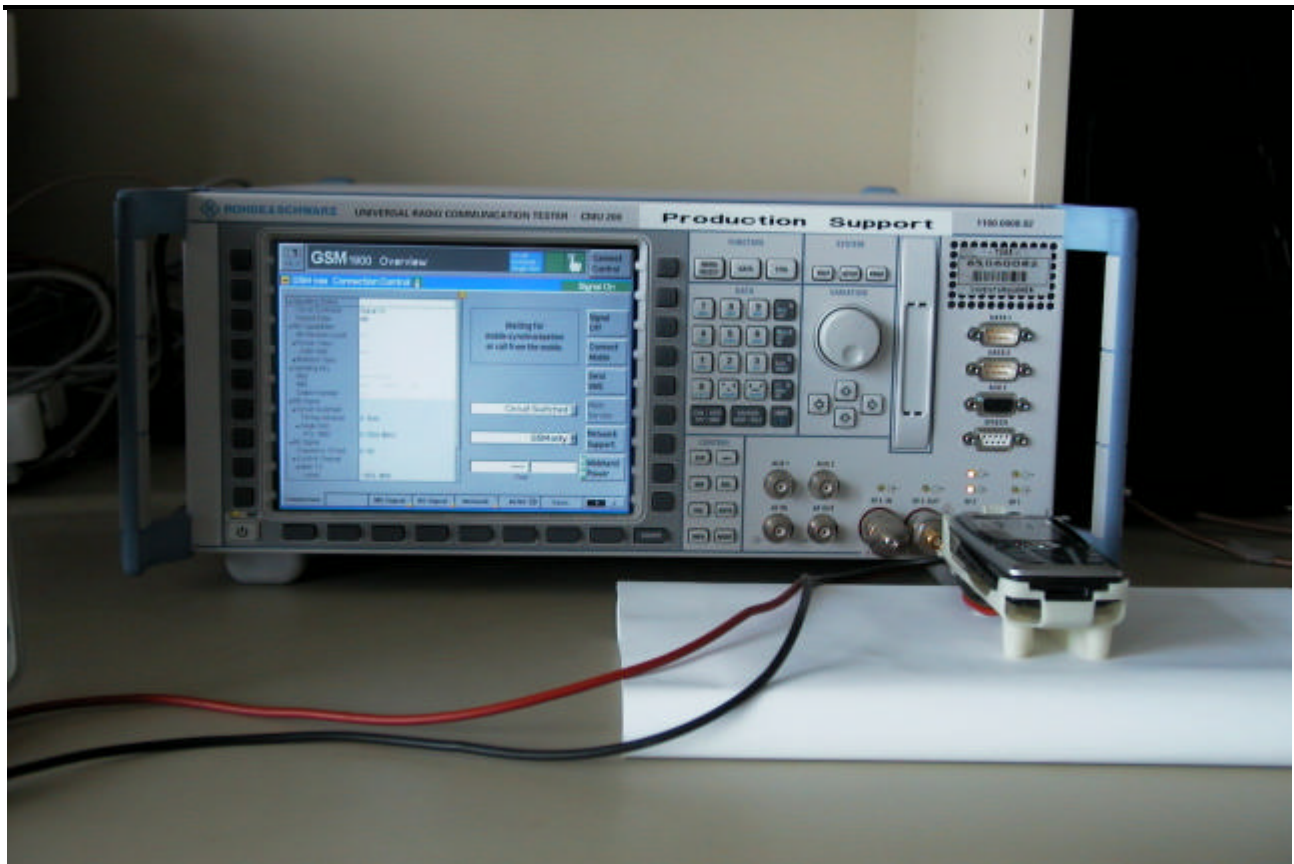


Figure 2: Set-up for conducted power measurement

4 Calibration Certificate

65060082

**ROHDE & SCHWARZ**

Messgerätebau GmbH

Kalibrierschein Calibration Certificate

Nummer 20-118064
 Number

Gegenstand
Item UNIVERSAL RADIO COMMUNICATION
TESTER

Hersteller
Manufacturer ROHDE & SCHWARZ

Typ
Type CMU200

Material Nr.
Material No. 1100.0008K02

Serial Nr.
Serial No. 103611

Auftraggeber
Customer

Bestellung Nr.
Order No.

Ort u. Datum d. Kalibrierung
Place and date of calibration Memmingen, 2003-09-05

Umfang der Kalibrierung
Scope of calibration Standard Calibration

Eingangsprüfung
Performance on receipt

Kalibrierergebnisse
Result of calibration Measurement results within
specifications

Umfang des Kalibrierscheins
Extent of the certificate 3 pages
102 pages test report

Dieser Kalibrierschein dokumentiert, daß der genannte Gegenstand nach festgelegten Vorgaben geprüft und gemessen wurde. Die Meßwerte lagen im Regelfall mit einer Wahrscheinlichkeit von annähernd 95 % im zugeordneten Werteintervall (Erweiterte Meßunsicherheit mit $k = 2$). Die Kalibrierung erfolgte mit Meßmitteln und Normen, die direkt oder indirekt durch Ableitung mittels anerkannter Kalibriertechniken rückgeführt sind auf Normale der PTB/DKD oder anderer nationaler/internationaler Standards zur Darstellung der physikalischen Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI). Wenn keine Normale existieren, erfolgt die Rückführung auf Bezugsnormale der R&S-Laboratorien. Grundsätze und Verfahren der Kalibrierung entsprechen IEC/ISO 17025. Das Bestätigungssystem für die verwendeten Meßmittel entspricht DIN ISO 10012-1. Das angewandte Qualitätsmanagement-System ist zertifiziert nach DIN EN ISO 9001. Dieser Kalibrierschein darf nur vollständig und unverändert weiterverbreitet werden. Kalibrierscheine ohne Signifizierungen sind ungültig. Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.

This calibration certificate documents, that the named item is tested and measured against defined specifications. Measurement results are located usually in the corresponding interval with a probability of approx. 95 % (coverage factor $k = 2$). Calibration is performed with test equipment and standards directly or indirectly traceable by means of approved calibration techniques to the PTB/DKD or other national/international standards, which realize the physical units of measurement according to the International System of Units (SI). In all cases where no national standards are available, measurements are referenced to standards of the R&S laboratories. Principles and methods of calibration correspond with IEC/ISO 17025. The metrological confirmation system for the measuring equipment used is in compliance with DIN ISO 10012-1. The applied quality system is certified to DIN EN ISO 9001. This calibration certificate may not be reproduced other than in full. Calibration certificates without signatures are not valid. The user is obliged to have the item recalibrated at appropriate intervals.

ROHDE & SCHWARZ
 RefNo: 20-118064
 CA
 2003-09-05

Ausstellungsdatum
Date of issue

2003-09-05

Laborleitung
Head of laboratory

Bearbeiter
Person responsible

Martin Schneider

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Rohde & Schwarz Messgerätebau GmbH Postfach 1052 D-87700 Memmingen Riedbachstraße 66 D-87700 Memmingen
 Telefon national: 06331/103-0; international: 0049 6331/103-0; Fax: 06331/103-124
 Geschäftsführer: Dipl.-Ing. Diethelm Winkler, Ing. Friedrich Schwarz, Aufsichtsratsvorsitzender: Ing. (grad.) Heinz Ewald
 Sitz der Gesellschaft: München • Registereintrag: Amtsgericht München HRB 1055

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