

Test Report

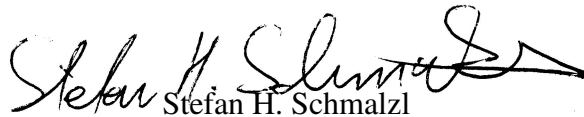
Conducted Output Power GSM 1900

SIEMENS SL65

Report no: SL65_Power_PCS_conducted
Issue date: May 27, 2004

Test Site

SIEMENS ICM MP PD HW1 MCH2
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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. The output power was measured at the internal RF connector (Impedance 50 Ohm) of the SIEMENS SL65 which is also used for production tests. The MS is connected to an appropriate load in terms of the input port of measurement equipment used, we report hereby the values for highest power setting (Power Level 0).

2 Results

Device	Average Power during burst at internal RF connector, Mobile commanded to PCL0		
	ARFCN 512 1850.2 MHz	ARFCN 661 1880.0 MHz	ARFCN 810 1909.8 MHz
Siemens SL65 "SAR SAMPLE" IMEI: 004999.00.2790946	29.1 dBm	29.2 dBm	29.2 dBm
Siemens SL65 "SAR SAMPLE BACKUP" IMEI: 004999.00.2790904	29.2 dBm	29.3 dBm	29.2 dBm
Siemens SL65 "RADIATED TEST SAMPLE" IMEI: 004999.00.2790086	29.2 dBm	29.2 dBm	29.0 dBm
Siemens SL65 "RADIATED TEST SAMPLE BACKUP" IMEI: 004999.00.2790912	29.1 dBm	29.2 dBm	29.1 dBm
Siemens SL65 "CONDUCTED TEST SAMPLE" IMEI: 004999.00.2790995	29.3 dBm	29.3 dBm	29.3 dBm
Siemens SL65 "CONDUCTED TEST SAMPLE BACKUP" IMEI: 004999.00.2790920	29.3 dBm	29.3 dBm	29.2 dBm

Tab. 2: Results of power measurements at internal RF connector for Siemens SL65

3 Minutes of Test

3.1 Description of Device under Test

Siemens Mobile Phone: SL65
Supported Standards: GSM900, GSM1800, GSM1900
Frequency range GSM 1900: 1850-1990 MHz
Vbat: 3.8 volt
Temperature: 25 Cels.

3.2 Measurement Set Up

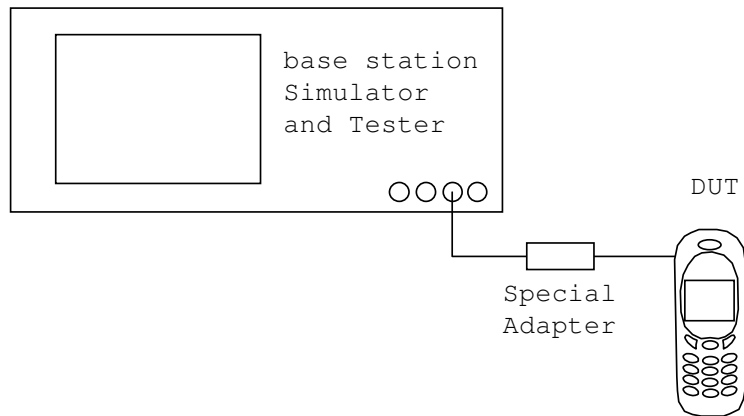
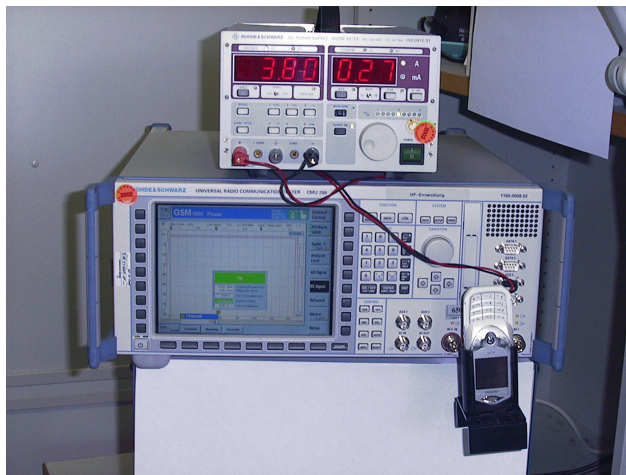


Fig. 1: Block diagram of set up for conducted power measurement

3.3 Measurement Set Up Picture



3.4 Equipment Calibration Certificate

**ROHDE & SCHWARZ****Kalibrierschein**
Calibration Certificate**Nummer** 10-300052303
Number

Gegenstand <i>Item</i>	GG CMU200 UNIV.RADIOCOMM.
Hersteller <i>Manufacturer</i>	ROHDE & SCHWARZ
Typ <i>Type</i>	CMU200
Material Nr. <i>Material No.</i>	1100.0008.02
Serial Nr. <i>Serial No.</i>	837587/0008
Auftraggeber <i>Customer</i>	Siemens AG ICM CD Warenannahme Haidenauplatz 2-3 81667 München DE
Bestellung Nr. <i>Order No.</i>	.
Ort u. Datum d. Kalibrierung <i>Place and date of calibration</i>	Werk München, 2003-12-10
Umfang der Kalibrierung <i>Scope of calibration</i>	Standard Calibration
Eingangsprüfung <i>Performance on receipt</i>	Defective
Kalibrierergebnis <i>Result of calibration</i>	Measurement results within specifications
Umfang des Kalibrierscheins <i>Extent of the certificate</i>	2 pages 50 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.


RefNo. 10-300052303
Cal 2003-12-10 Customized Due Date

Ausstellungsdatum
Date of issue

2003-12-10

Laborleitung
*Head of laboratory*i.V. 
Courage**Bearbeiter**
*Person responsible*i. 
Dieter Reichel

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ROHDE & SCHWARZ GmbH & Co KG · Mühldorferstraße 15 · D-81671 München, Federal Republic of Germany · Telefon (089) 41 29-0 · Telefax (089) 41 29-32 7

Type
Item CMU200
GG CMU200 UNIV.RADIOCOMM.Serial No. 837587/0008
Material No. 1100.0008.02
Cal. Date 2003-12-10

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Calibration Certificate No.

10-300052303

Kalibrieranweisung 1100.0008.01-T-01.00
Calibration instructionEingangsdatum 2003-11-27
Date of receiptUmgebungstemperatur $(23^{+3}_{-3})^{\circ}\text{C}$
Ambient temperatureRelative Luftfeuchte 20%-60%
Relative humidity

Verwendete Gebrauchsnormale (mit signifikantem Einfluß auf die Genauigkeit) Working Standards used (having a significant effect on the accuracy)				
Gegenstand Item	Typ Type	Serial Nr. Serial No.	Kalibrierschein Nr. Certificate No.	Kalibr. bis Cal. due
Signal Analyzer 20Hz..26,5GHz	FSIQ26	832910/0002	0039-DKD-K-16101-11	2004-11-30
Modular Frequency System	MFS	6509/001	00001 DKD-K-19401 03-02	2006-02-28
Power Sensor N; 50 Ohm	NRV-Z4	832596/0018	0029 DKD-K-16101 03-11	2004-11-30
Thermal Power Sensor 50 Ohm	NRV-Z51	832642/0019	0028 DKD-K-16101 03-11	2004-11-30
Dual Channel Power Meter	NRVD	833696/0047	168651	2004-11-30
RF Step Attenuator 139 dB	RSG	832402/0009	0048 DKD-K-16101 01-10	2004-10-31

Anmerkungen
Notes

Die Seriennummernformate 837587/0008 und 837587/008 sind gleichgestellt.

Installed Options are included in calibration. Depending on installed options, numbers of pages of the record are not consecutive.