

Test Report

Conducted Output Power GSM 850, GSM 1900

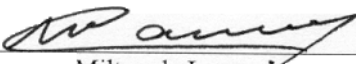
SIEMENS M56

Report no:
Issue date: July 14, 2003

Test Site

SIEMENS ICM MP SAN
Information and Communication Mobile LLC
16745 West Bernardo Drive
Suite 400
San Diego, CA 92127-1903, U.S.A
Tel.: 858-521-3382
Fax.: 858-521-3106

Engineer


Milton de Leon

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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 feature a special 50 Ohm RF connector suitable for such measurement. Using a special adapter and connecting to an appropriate load in terms of the input port of measurement equipment used, we report hereby the values for highest power setting.

2 Results

2.1 GSM 850 Band

Device	Average Power during burst at connector		
	ARFCN 128 824.2 MHz	ARFCN 190 836.6 MHz	ARFCN 251 848.8 MHz
Siemens M56, "SAR #1" IMEI: 1002000244835	+32.2 dBm	+32.1 dBm	+31.9 dBm
Siemens M56, "SAR #2" IMEI: 1002000244843	+32.3 dBm	+32.1 dBm	+31.9 dBm
Siemens M56, "Emission #1" IMEI: 1002000247408	+32.3 dBm	+32.1 dBm	+31.9 dBm
Siemens M56, "Emission #2" IMEI: 1002000247408	+32.3 dBm	+32.1 dBm	+32.0 dBm

Tab. 1: Results of power measurements at connector for Siemens M56

2.2 GSM 1900 Band

Device	Average Power during burst at connector		
	ARFCN 512 1850.2 MHz	ARFCN 661 1880.0 MHz	ARFCN 810 1909.8 MHz
Siemens M56, "SAR #1" IMEI: 1002000244835	+29.4 dBm	+29.1 dBm	+28.8 dBm
Siemens M56, "SAR #2" IMEI: 1002000244843	+29.4 dBm	+29.1 dBm	+28.8 dBm
Siemens M56, "FCC #1" IMEI: 1002000247549	+29.6 dBm	+29.4 dBm	+29.1 dBm
Siemens M56, "FCC #2" IMEI: 1002000247408	+29.6 dBm	+29.4 dBm	+29.1 dBm

Tab. 2: Results of power measurements at connector for Siemens M56

3 Minutes of Test

3.1 Description of Device under Test

Siemens Mobile Phone: M56
Frequency range GSM 850: 824-849 MHz
Frequency range GSM 1900: 1850-1990 MHz
Siemens part number: S30880-S5350-*
FCC ID: PWX-M56
IC ID: 267E-M56
Vbat: 3.8 volt
Temperature: 25 Cels.

3.2 Measurement Set Up

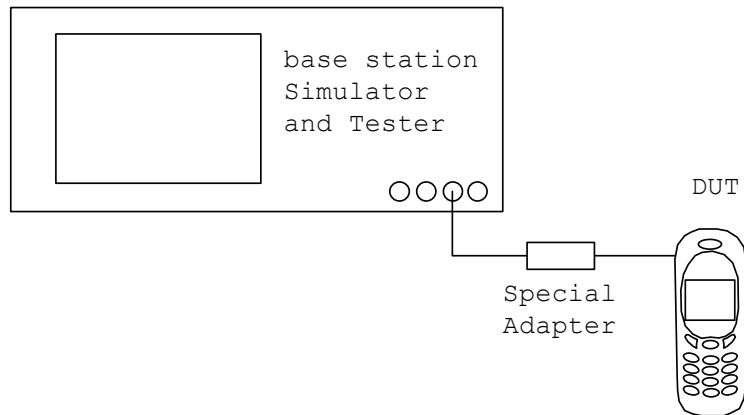


Fig. 1: Block diagram of set up for conducted power measurement

Note:

Units for SAR were selected at Siemens AAL, using as base station simulator CMU 200 serial No.:837983/005

Units for Emissions were selected at Siemens SD, using as base station simulator CMU 200 serial No.:100150



TEKTRONIX INC
Washington D.C. Depot
700 Professional Drive
Suite A
Gaithersburg, MD 20879
1-800-833-9200
301-926-4329 Fax

Certificate of Traceable Calibration

Certificate #: 466951-1-CMU200-100150-1
PO#/Contract#: 41S0239797
Customer: SIEMENS INFORMATION & COMMUNICATION
SUTTE 400
16745 W BERNARDO DR
SAN DIEGO, CA 92127-1903
United States

Contact: PETER NEVERMANN
Model: CMU200
Description: CMU200; RADIOCOMMUNICATION PLATFORM,R&S,1100.0008.02
Manufacturer: ROHDE AND SCHWARZ
Serial: 100150
Asset: -
Site of Calibration: SERVICE CENTER
Calibration Interval Source: TEKTRONIX RECOMMENDED
Customer's Equipment Location: -

Cal Date: 23-Jul-2002
Due Date: 23-Jul-2003
Temperature: 74 °F
Humidity: 49 %
Calibration Interval: 365 DAYS

Tektronix certifies that the performance of the above instrument has been verified using test equipment of known accuracy which are traceable to the U.S. National Institute of Standards and Technology (NIST). The policies and procedures at this facility are based on ANSI/NC SL Z540-1-1994 (ISO Guide 25). This certificate shall not be reproduced except in full, without the written approval of the calibration facility.

INSTRUMENT CONDITION:

Received: IN TOLERANCE

Returned: IN TOLERANCE

Certificate of Traceable Calibration

Certificate #: 466951-1-CMU200-100150-1

CALIBRATION PROCEDURE:

ORIGINAL EQUIPMENT MANUFACTURER'S SOFTWARE - MANUFACTURER'S SPECIFICATION
PROCEDURE REVISION LEVEL : ACS100(#2) CMU200 VER1.7C

CALIBRATION EQUIPMENT USED:

Model Type	Serial Number	Manufacturer	Cal Date	Due Date
SYSTEM2000	686	DATUM	30-Mar-2001	30-Mar-2009
PSIQ26	835111/002	ROHDE AND SCHWARZ	17-Dec-2001	11-Jan-2003
NRV-Z51	DE14701	ROHDE AND SCHWARZ	09-Oct-2001	09-Oct-2002
NRVD	DE14703	ROHDE AND SCHWARZ	05-Mar-2002	05-Mar-2003
NRVZ4	DE14718	ROHDE AND SCHWARZ	14-Nov-2001	14-Nov-2002
RSG	846318/012	ROHDE AND SCHWARZ	07-Dec-2001	07-Dec-2002
SMHU58	DE15239	ROHDE AND SCHWARZ	20-Jun-2002	20-Jun-2003
SMIQ06B	833720/007	ROHDE AND SCHWARZ	05-Apr-2002	05-Apr-2003
SPR101	884590/006	ROHDE AND SCHWARZ	21-Apr-2002	21-Apr-2003
UPL	100342	ROHDE AND SCHWARZ	13-Feb-2002	13-Feb-2003
URE3	843197/031	ROHDE AND SCHWARZ	07-Dec-2001	07-Dec-2002
ZRC	844426/004	ROHDE AND SCHWARZ	25-Jun-2002	25-Jun-2003

Issued By:

Service Manager:  BARRY FLEMING

Calibrated By: MICHAEL DOTTELLIS

Date Issued: 23-Jul-2002

Date Printed: 23-Jul-2002



Kalibreringscertifikat Certificate of Calibration

Certifikat nr.: 2003-6957
Certificate no.

Side: 1 Af 26
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Kunde: Siemens Mobile Phones A/S
Client: Siemens kaj 1
9400 Nørresundby

Udstyr: ROHDE & SCHWARZ
Equipment: UNIVERSAL RADIO COMM. TESTER
CMU200

Kundes Inst.nr.: 508-0178
Equipment no.

Serie nr.: 837983/005
Serial no.

Modtaget: 13 mar 03
Received

Kalibreret: 17 mar 03
Calibrated:

Procedure: A1020702-11429
Procedure

Udført af: Claus Stenberg Hansen
Performed by

Bemærkninger: Kalibreringen er udført i henhold til DANAK akkreditering nr 291 som
Remarks: beskrevet i den anførte kalibreringsprocedure.

Instrumentet overholder anførte specifikationer med følgende bemærkninger:

- Målinger mærket med *) er ikke omfattet af akkreditering.
- Kalibrering er udført 'on site' hos kunde.

Måleresultater er gengivet i:

- Annex A - Test Report (Efter justering).
- Annex B - Incoming Test Report (Før justering).

Godkendt den: 10 apr 03
Approved

Af:  **Carl Aage Dahl Winther**
By **Carl Aage Dahl Winther**
Kalibreringschef

Digitally signed by
Carl Aage Dahl
Winther
DN: cn=Carl Aage
Dahl/Winther, o=RSK
Date: 2003.04.10
12:56:09 +0100

Prøvningsrapporten må kun gengives i uddrag, hvis rapporten er offentlig tilgængelig, eller Rohde & Schwarz Danmark A/S har godkendt uddraget. Kalibreringsresultaterne gælder alene for de kalibrerede emner.

The Test Report may only be issued in parts if the complete Report is accessible to the public, or if Rohde & Schwarz Danmark A/S has approved the issued part. The Calibration Results are only valid for the calibrated items.

Laboratorie: Rohde & Schwarz Danmark A/S, Ejby Industrivej 40, 2600 Glostrup, A/S reg.: 185 377