PCTEST Engineering Laboratory, Inc.

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CERTIFICATE OF COMPLIANCE (Type Acceptance)

Samsung Electronics Co., Ltd.
416 Maetun-3 Dong, Paldal-Ku
Suwon City, Kyungki-Do 441-742, KOREA
Attention: D. H. KIM, General Manager

Dates of Tests: May 20-22, 1998
Test Report S/N: 24/22.980520366.A3L
Test Site: PCTEST Lab, Columbia MD

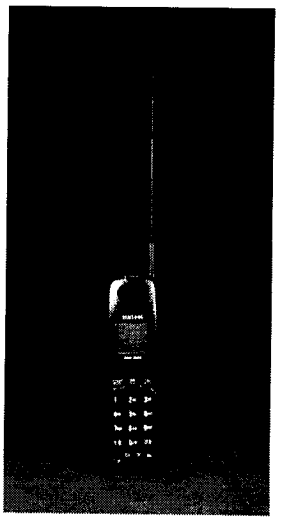
FCC ID	A3LSCH1500
APPLICANT	SAMSUNG ELECTRONICS CO., LTD.

Classification:	Licensed Portable Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§§§24(E), 22(H), 2.983, 2.987
EUT Type:	Dual Band Analog/PCS Phone (AMPS/CDMA)
Trade Name/Model(s):	*SAMSUNG SCH-1510, SPRINT*
Tx Frequency Range:	1851.25MHz – 1908.75MHz (CDMA) 824.04MHz – 848.97MHZ (AMPS)
Max Output Power:	0.6 W (AMPS) / 0.2 W (CDMA)
Amendment:	1. Changed PCS Amplifier (Transmitter) from RI21007 to RI21108U 2. Added Saw filter on amplifier circuit of receiver

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947 with the following remarks (Note Codes):

** (BC) The output power is continuously variable from the value listed in this entry to 5%-10% of the value listed.*

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.



PCTEST certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a)

Randy Ortanez
President & Chief Engineer

NVLAP®
LAB CODE 100431-0

Test Data

§ 24.232(b) Equivalent Isotropically Radiated Power (E.I.R.P.)

The RF output power is measured via HP436A Power Meter and Sensor.

Supply Voltage: 7.2 VDC

Modulation: CDMA

Channel No.	Nominal FREQ. (MHz)	Measured Power Output (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)
0025	1851.25	21.1	+ 1.8	22.9	0.19498
0600	1880.00	21.5	+ 2.2	23.7	0.23442
1175	1908.75	20.5	+ 2.0	22.5	0.17783

Mobile / portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications

Test Data

Radiated Measurements

§ 2.993 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 1851.25 MHz
CHANNEL: 025 (Low)
MEASURED OUTPUT POWER: 23.00 dBm = 0.20 W
MODULATION SIGNAL: CDMA (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 log10 (W) = 36.01 dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	EIRP (dBm)	(dBc)
3702.50	-88.5	44.4	V	1396.4	-34.48	57.5
5553.75	-94.0	49.7	V	1364.6	-34.68	57.7
7405.00	-101.6	53.7	V	901.6	-38.28	61.3
9256.25	< -130					
11107.50	< -130					

NOTES:

1. The bandwidth is set per §24.238 (RBW = 1MHz, VBW = 1MHz).
2. The spectrum was checked from 25 MHz up to the 10th harmonic.
3. All emissions not listed were found to be more than 20dB below the limit.
4. < -130dBm is below the floor of the spectrum analyzer.
5. The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
6. The EUT is placed 3m. away from the receiving antenna and the EIRP is calculated using the formula:

EIRP (dBm) $= 10 \text{ Log}_{10} (((r(mV/m)/1 \times 10^6)^2 / 49.2/1 \times 10^{-3})$
EIRP (dBm) $= 10 \text{ Log}_{10} [(3 \times FS/1 \times 10^6)^2 / (49.2) \times 1000]$
EIRP (Watts) $= \{(3 \times FS)/1 \times 10^6\}^2 / 49.2$

Test Data

Radiated Measurements

§ 2.993 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 1880.00 MHz
CHANNEL: 600 (Middle)
MEASURED OUTPUT POWER: 23.00 dBm = 0.20 W
MODULATION SIGNAL: CDMA (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 log10 (W) = 36.01 dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	EIRP (dBm)	(dBc)
3760.00	-87.0	44.7	V	1717.9	-32.68	55.7
5640.00	-93.8	49.9	V	1428.9	-34.28	57.3
7520.00	-100.0	54.0	V	1122.0	-36.38	59.4
9400.00	< -130					
11280.00	< -130					

NOTES:

1. The bandwidth is set per §24.238 (RBW = 1MHz, VBW = 1MHz).
2. The spectrum was checked from 25 MHz up to the 10th harmonic.
3. All emissions not listed were found to be more than 20dB below the limit.
4. < -130dBm is below the floor of the spectrum analyzer.
5. The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
6. The EUT is placed 3m. away from the receiving antenna and the EIRP is calculated using the formula:

EIRP (dBm) $= 10 \text{ Log}_{10} (((r(mV/m)/1 \times 10^6)^2 / 49.2/1 \times 10^{-3})$
EIRP (dBm) $= 10 \text{ Log}_{10} [(3 \times FS/1 \times 10^6)^2 / (49.2) \times 1000]$
EIRP (Watts) $= \{(3 \times FS)/1 \times 10^6\}^2 / 49.2$

Test Data

Radiated Measurements

§ 2.993 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 1908.75 MHz
CHANNEL: 1175 (High)
MEASURED OUTPUT POWER: 23.00 dBm = 0.20 W
MODULATION SIGNAL: CDMA (Internal)
DISTANCE: 3 meters
LIMIT: 43 + 10 log10 (W) = 36.01 dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	EIRP (dBm)	(dBc)
3817.50	-88.0	45.0	V	1584.9	-33.38	56.4
5726.25	-95.5	50.1	V	1202.3	-35.78	58.8
7635.00	-103.8	54.2	V	741.3	-39.98	63.0
9543.75	< -130					
11452.50	< -130					

NOTES:

1. The bandwidth is set per §24.238 (RBW = 1MHz, VBW = 1MHz).
2. The spectrum was checked from 25 MHz up to the 10th harmonic.
3. All emissions not listed were found to be more than 20dB below the limit.
4. < -130dBm is below the floor of the spectrum analyzer.
5. The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
6. The EUT is placed 3m. away from the receiving antenna and the EIRP is calculated using the formula:

EIRP (dBm) $= 10 \text{ Log}_{10} (((r(mV/m)/1 \times 10^{6})^2 / 49.2/1 \times 10^{-3})$
EIRP (dBm) $= 10 \text{ Log}_{10} [(3 \times FS/1 \times 10^{6})^2 / (49.2) \times 1000]$
EIRP (Watts) $= \{(3 \times FS)/1 \times 10^{6}\}^2 / 49.2$