**APPLICANT: MOTOROLA** 

**TRANSCEIVER TYPE: IHET5BQ1** 

### SC4812ET @ 800 MHz CDMA BTS

### SUMMARY TEST REPORT

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- The results and data presented herein are based on tests conducted at an ISO Guide 25 Accredited Test Laboratory. (Ref: File MC1281, UL Project No. O1NK32843 EMC Test Report). All details related to test equipment, calibration, environmental conditions are in the referenced report.
- 2. Results listed apply only to the SC4812ET CDMA BTS.

Engineer: Terry Schwenk e/zg or Signature? Date



FCC ID: IHET5BQ1

# **SECTION A**

# SUMMARY OF RF MEASUREMENTS

APPLICANT: MOTOROLA

#### TRANSCEIVER TYPE: IHET5BQ1

### Summary of Radiated RF Measurements

#### Worst Case Radiated RF Spur Level for SC4812ET @ 800 MHz

Radiated Data		Substituted Power				Spec	Result	
TX Channel	Spurious Frequency (MHz)	Antenna Polarity	Measured Radiated Field Strength (dBuV/M)	Measured Radiated Field Strength (dBm) (Note 1)	TX Antenna Terminal Voltage (dBm) (Note 2)	EDRP (dBm) (Note 3)	FCC Part 24 MAX LIMIT (dBm)	Pass⁄ Fail
777	1786.341	Н	46.07	-49.158	-57.72	-52.67	- 13	Pass

Notes:

- Converting dBuV/M to dBm at 3 meters (dBuV/M) +9.542-104.77dB=dBm Converting dBuV/M to dBm at 10 meters (dBuV/M) +20 -104.77dB=dBm
- 2. The same horn antenna and measurement system was used for EUT scan and during substitution method. After maximizing the receive antenna and adjusting signal generator power level to measure the same emission level with the spectrum analyzer as with the EUT. Signal generator output level was recorded for each of the spurious frequencies. Test cable was then disconnected from the transmit horn and was connected to the input of the S/A measuring the voltage at the terminals of the antenna.
- 3. This value was obtained by converting the Equivalent Isotropic Radiated Power (EIRP) to ideal half-wave dipole reference power (Equivalent Di-Pole Radiated Power EDRP) per (TIA-603, 2.2.12.2(i)(m)

8/13/01

Radiated Éngineer Terry Schwenk

Date

## Summary of Conducted RF Measurements

SC4812ET@ 800MHz

#### FCC Part 22

CHANNEL	FREQUENCY (MHz)	SPUR LEVEL MEASURED (dBµV)	SPUR LEVEL MEASURED (dBm)	FCC MAX LIMIT dBm	PASS/FAIL
777	6952.559	83.83	-23.17	-13	PASS

Engineer: Date

Terry Schwenk

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## **SECTION B**

## Summary of Modulation Characteristics

CHANNEL	TUNE FREQUENCY (MHz)	RHO measured	RHO specifications	Pass/Fail
1013	869.70	0.982	>0.912	Pass
777	893.31	0.9825	>0.912	Pass

#### SC4812ET @800MHz worst cases

The BTS was configured for maximum power out of 46.0 dBm and minimum power out of 23.0 dBm respectively. The output power was set respectively to 40.0 Watts or 200 mWatts using an HP437B power meter.

8/14/01 Engineer:

Terry Schwenk