APPLICANT: MOTOROLA

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

Signature!

Date



FCC ID: IHET5BQ1

SECTION A

SUMMARY OF RF MEASUREMENTS

Summary of Radiated RF Measurements

Worst Case Radiated RF Spur Level for SC4812ET @ 800 MHz

| | Radiated Data | ı | 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)

Radiated Éngineer Terry Schwenk Date

APPLICANT: MOTOROLA

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 |

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SECTION B

Summary of Modulation Characteristics

SC4812ET @800MHz worst cases

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

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.

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