MOTOROLA

Cellular Infrastructure Group

FCC ID: IHET6AP1

SECTION A

Summary of RF Measurements 4812ETL 1.9GHz

APPLICANT: MOTOROLA TRANSCEIVER TYPE: IHET6AP1

Summary of Radiated RF Measurements

Worst Case Radiated RF Spur Levels for SC4812ETL @ 1.9GHz

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**
25	**3862.144**	**H**	**59.08**	**-36.15**	**-47.8**	**-42.25**	**- 13**	**Pass**

Notes:

1. 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 Engineer Date 12/4/00

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FCC ID: IHET6AP1

SECTION C

Spurious & Harmonic Emissions Radiated

APPLICANT: MOTOROLA TRANSCEIVER TYPE: IHET6AP1

Radiated RF Measurements

Worst Case Radiated RF Spur Levels for SC4812ETL @ 1.9GHz

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**
25	**3862.144**	**H**	**59.08**	**-36.15**	**-47.8**	**-42.25**	**- 13**	**Pass**
25	**5791.965**	**H**	**53.31**	**-41.85**	**-53.1**	**-46.45**	**- 13**	**Pass**
1175	**3978.33**	**H**	**56.27**	**-38.96**	**-51.3**	**-45.85**	**- 13**	**Pass**
1175	**3918.82**	**H**	**52.17**	**-43.06**	**-55.6**	**-50.15**	**- 13**	**Pass**
25	**3862.144**	**V**	**55.7**	**-39.53**	**-50.1**	**-44.55**	**- 13**	**Pass**
25	**5791.96**	**V**	**48.57**	**-46.66**	**-59.19**	**-52.54**	**- 13**	**Pass**

Notes:

1. 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 Engineer

12/04/00

Date