ATTACHMENT K – OPERATIONAL DESCRIPTION

Operational Description

FCC ID:AEZSCP-62H

Model: SCP-6200

SANYO SCP-6200 is a Dual-Band Analog/PCS digital phone. It is designed to comply with Part 15 and Part 24 of the CFR.

TX Frequencies: 824.04	-	848.97(AMPS)	/	1851.25MHz	-	1908.75MHz(PCS CDMA)
RX Frequencies: 869.04	-	893.97(AMPS)	/	1931.25MHz	-	1988.75MHz(PCS CDMA)

Max. Conducted Output Power : +24.3dBm (0.27W) AMPS / +22.2dBm (0.17W) PCS CDMA

Battery voltage: 3.7V Nominal, 3.4 Min., V Li-ion (Supplied with phone)

Frequency Stabilization

A voltage controlled temperature compensated crystal oscillator (VCTCXO) is utilized as a frequency reference for all of the transceiver local oscillators. This crystal oscillator is specified to a frequency stability of +/- 2.5ppm over temperature and voltage variations. The synthesizer lock status is constantly monitored by the microprocessor and transmission is disabled whenever an out of lock condition is detected. The mobile is locked to the base station during operation. The mobile receiver constantly monitors the received signal from the base station and makes necessary frequency adjustments on the VCTCXO to correct any frequency errors between the mobile and he base station.

Suppression of Spurious Radiation

Spurious and harmonic suppression is achieved by proper design with various filters and sufficient use of EMI shields. Rigorous testing at the factory ensures continuous compliance.

Limiting Power

Each mobile is individually calibrated at the factory to ensure Max. conducted power of no more than +22.2dBm for PCS CDMA and +24.3dBm for AMPS by employing a proper frequency and temperature compensation schemes for both the TX and RX automatic gain control (AGC) amplifiers. There are also hardware circuitries to monitor TX power and software reset limits to limit maximum TX power.

Limiting Modulation

The audio input is sampled, digitally limited, and then filtered to amplitude and frequency limit the signal applied to the modulator. The device supports AMPS standards and ANSI J-STD-008 for CDMA operation. The device has an operating temperature range of –30 to +60C. The functions include Compandor, PLL lock detector for received SAT, filtering of received data, and audio signal filtering for signals.