NOKIA

10/23/2003

Question #1

Pk Trace + Pathloss = EIRP or EDRP

Question #2

With the phone transmitting at max power, the emission is maximized and the maximum reading recorded on the spectrum analyzer. The phone is replaced with a substitution antenna (double-ridge horn). The substitution antenna is fed with a signal generator and tuned to the particular spurious frequency. The test antenna is raised and lowered to obtain a maximum reading on the spectrum analyzer. The level of the signal generator output is then adjusted until the previously recorded maximum reading for the phone is obtained.

The power into the reference antenna is measured. The power is corrected for the gain of the substitution antenna relative to a half-wave dipole.

For EIRP:
Radiated Spurious Emissions = (Power into Antenna dBm) + (Antenna Gain dBi)

For EDRP
Radiated Spurious Emissions = (Power into Antenna dBm) + (Antenna Gain dBi –Correction Factor 2.15dB)