

## Operational Description

The EUT is a network video camera equipped with the certificated RF module via PCMCIA interface, except for the antenna that was used for the certification process. The user has to keep at least 20cm separation distance between radiator and the body of the user.

### DSSS Information

The EUT uses Direct Sequence Spread Spectrum method. The data is mixed by pseudorandom code that is an orthogonal code. The mixed data is digital modulated by BPSK and QPSK technique depends on the data rates. The CCK coding is applied for increasing the data rate, and also the processing gain will be increased. The bit rates are 1,2,5.5,11Mbps, the symbol rates are 1,1,1.375,1.375Mbps, and the chip rates are always 11Mbps. So, the Chip/symbol is 11,11,8 and 8 respectively. Although is higher bit rate, the processing gain is lower than 10, but the CCK coding used in higher bit rate will provide 2.2dB coding gain.

### Power source

The EUT is operated by DC 12V power source from the AC/DC adaptor.

### Antenna

The EUT has a unique antenna connector, reverse polarity SMA type. The directional gain of the antenna is maximum 5.47 dBi for model W4E-WO-31 and 3 dBi for model WKE-2460. No external ground is required.