Analysis Report

The SR1000 is a wireless repeater, which receives air specific wireless coded signal, and then through the power amplifier transmit this coded radio signal out to prolong the transmission distance. Wireless accessories need to be paired with the SR1000, SR1000 after receipt of this accessory wireless coded signal will be transmitted.

The equipment under test (EUT) is a wireless transmitter operating at 915MHz.

Modulation Type: ASK

Antenna Type: Integral antenna

Antenna Gain: 3dBi

The nominal conducted output power specified: -7dBm (Tolerance: +/- 3dB)

The nominal radiated output power (ERP) specified: -6.15dBm (Tolerance: +/- 3dB)

According to the KDB 447498:

The maximum tested radiated emission (ERP) for the EUT is 91.3dBμV/m

at 3m in the frequency 915MHz

= [(FS*D) ^2 / 30] mW -2.15dB

= -6.08dBm which is within the production variation.

The maximun conducted output power specified is -4.0dBm = 0.40mW

The source- based time-averaging conducted output power

= 0.40* Duty cycle mW < 0.40 mW (Duty Cycle < 100%)

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 * 5 / sqrt (0.915) mW

= 15.7 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.