Analysis Report

The equipment under test (EUT) is a 915MHz transmitter (i.e. Sensor) for a weather station system. The sensor is operating at 915MHz and it sends the data to the main console (corresponding receiver unit) for measurement. The EUT is powered by 3 x AA batteries (4.5VDC).

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 93.5dBμV/m at 3m
Maximum allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 96.5dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 1.34mW

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;

Conducted Power = 1.34mW.

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 above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.