Analysis Report

The equipment under test (EUT) is a Temperature & Humidity Sensor with operation frequency is 906.6MHz. The EUT was powered by 3Vdc (2 x 1.5Vdc AAA Batteries). For more detail information pls. refer to the user manual.

Modulation Type: 2-GFSK
Antenna Type: Integral antenna
Antenna Gain: 0dBi
The Peak nominal radiated emission power (e.r.p) specified: 4.35dBm (Tolerance: +/- 3dB)

The Peak nominal conducted output power specified: 6.5dBm (Tolerance: +/- 3dB)

According to the KDB 447498:

The worst-case radiated emission for the EUT is 103.9dBμV/m at 3m in the frequency 906.6MHz
= [(FS*D) ^2 / 30] mW-2.15
= 6.52dBm which is within the production variation.

The maximun conducted output power specified is 9.5dBm = 8.91mW
The source- based time-averaging conducted output power
= 8.9 * Duty cycle mW= 0.48 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (0.9066) mW
= 15.75 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.

Transmitter Duty Cycle Calculation

Duty cycle = 6.72 / 100 = 6.72%
This requirement is according to KDB 865664 D02