Analysis Report

The equipment under test (EUT) is a Gateway and responsible receive the data from Temperature & Humidity Sensor and upload the server with operation frequency is 906.6MHz. The EUT was powered by AC/DC Adapter (Input: 100-240Vac, 50/60Hz; Output: 5Vdc, 1A). 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: 6.85dBm (Tolerance: +/- 3dB)

The Peak nominal conducted output power specified: 9dBm (Tolerance: +/- 3dB)

According to the KDB 447498:

The worst-case radiated emission for the EUT is 106.3dBμV/m at 3m in the frequency 906.6MHz
= [(FS*D) ^2 / 30] mW-2.15
= 8.92dBm which is within the production variation.

The maximun conducted output power specified is 12dBm = 15.85mW
The source- based time-averaging conducted output power
= 15.85 * Duty cycle mW=0.86 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 = 5.4 / 100 = 5.4%
This requirement is according to KDB 865664 D02