

# Analysis Report

The equipment under test (EUT) was a 915MHz wireless self-emptying rain collector for measuring rainfall and temperature. The wireless rain collector sensor is fully assembled and calibrated for easy installation. It works together with a Display Main Unit which can remember the data for monitoring and analyzing the weather status. The EUT transmits data by a low power radio frequency to the Display Main Unit up to 150m away.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 93.8dBμV/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 96.8dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 1.436\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 1.436mW.

The SAR Exclusion Threshold Level:

=  $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

=  $3.0 \cdot 5 / \sqrt{0.915} \text{ mW}$

= 15.68 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.