



# Standalone SAR test exclusion considerations: KS-W100S

Date: September 14, 2018

RF feature	Mode	Transmitting Frequency(MHz)	Test separation distance (mm)	ANT Gain (dBi)	Max. power with tune-up tolerance (dBm) <sup>Note1</sup>	Max. power with tune-up tolerance (mW)	Power thresholds	SAR test exclusion thresholds
2.4G WLAN	802.11b	2472.00	5.0	-2.09	9.50	8.9125	2.80	3.00
2.4G WLAN	802.11g	2472.00	5.0	-2.09	9.50	8.9125	2.80	3.00
2.4G WLAN	802.11n(HT20)	2472.00	5.0	-2.09	9.50	8.9125	2.80	3.00
2.4G WLAN	802.11n(HT40)	2472.00	5.0	-2.09	9.50	8.9125	2.80	3.00
2.4G Bluetooth	EDR	2480.00	5.0	-2.09	6.00	3.9811	1.25	3.00

Note1. Please refer to the operation description for Max.tune-up power.

### KDB 447498 D01 clause 4.3.1 Step 1) SAR test exclusion thresholds for 100MHz to 6GHz at test separationn distances ≤ 50 mm

[ ( max. power of channel, including tune-up tolerance, mW ) / ( min. test separation distance, mm ) ] · [ √f(GHz) ] ≤ 3.0 for 1g SAR and ≤ 7.5 for 10g extremity SAR

#### Sample Calculation

$$= [ ( 8.9125\text{mW} / 5\text{mm} ) ] \times [ \sqrt{2.472\text{GHz}} ] = 2.8$$

Note. The calculation result was rounded to two decimal place for comparison.

**Conclusion : SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required**