

Analysis Report

For Standalone SAR test exclusion consideration, when the corresponding SAR Exclusion Threshold requirement in KDB 447498 is satisfied, standalone SAR evaluation for general population exposure conditions, by measurement or numerical simulation is not required.

The SAR Exclusion Thresholds are determined as follow,

For frequency range of 100MHz to 6GHz and test separation distance $\leq 50\text{mm}$,

$$\text{SAR exclusion threshold} = (3.0 \times TD) / \sqrt{F(\text{GHz})}$$

For frequency range of 1500MHz to 6GHz and test separation distance $> 50\text{mm}$,

$$\text{SAR exclusion threshold} = [(3.0 \times 50) / \sqrt{F(\text{GHz})}] + (TD - 50) \times 10$$

where TD = closest distance between the antenna and outer housing

$F(\text{GHz})$ = operating frequency

Exposure Position	Antenna to enclosure (outer housing) distance	Calculated SAR Exclusion Threshold	Maximum Time-averaged Power (WiFi Operation)	Maximum Power (Bluetooth Operation)	SAR Exclusion Result
Front	130.2 mm	897.6 mW	14dBm = 25.12mW	97.2 dBuV/m = 1.6 mW	Excluded
Top	52.26 mm	118.2 mW			Excluded
Left	35.7 mm	68.3 mW			Excluded
Right	131.6 mm	911.6 mW			Excluded
Bottom	234.9 mm	1944.6 mW			Excluded
Back	81.6 mm	411.6 mW			Excluded

From the above antenna to enclosure (outer housing) distance and maximum time-averaged output power, SAR evaluations are not required for both standalone WiFi and Bluetooth operation.

Since the tested model will not operate WIFI and Bluetooth simultaneously, simultaneous transmission analysis is not required.