

FCC ID: A3LEJFT810

1. Standalone SAR test exclusion threshold

Per FCC KDB 447498 D01v05r02, the SAR exclusion threshold for distances < 50 mm is defined by the following equation:

$$\frac{\text{Max Power of Channel (mW)}}{\text{Test Separation Distance (mm)}} * \sqrt{\text{Frequency (GHz)}} \leq 3.0$$

Frequency = 2 480 MHz

Test. Separation Distances = 5 mm

Maximum Tune-up Tolerances = 6 dBm

Bluetooth Mode Calculation value: $4 \text{ (mW)} / 5 \text{ (mm)} \times \sqrt{2.480} = 1.26$

So, Calculation value ≤ 3.0

Bluetooth Mode Conclusion: Standalone SAR is not required

2. Simultaneous transmission SAR test exclusion threshold

2.1 Estimated SAR Evaluation Analysis

When standalone SAR is not required to be measured per FCC KDB 447498 D01v05r02 4.3.2.2), the following equation must be used to estimate the standalone 1g SAR for simultaneous transmission involving that transmitter.

$$\text{Estimated SAR} = \frac{\sqrt{f(\text{GHz})}}{7.5} * \frac{\text{(Max Power of channel, mW)}}{\text{Min. Separation Distance, mm}}$$

Mode	Frequency	Maximum Allowed Power	Separation Distance	Estimated SAR
	[MHz]	[mW]	[mm]	[W/kg]
Bluetooth	2480	4	5	0.168

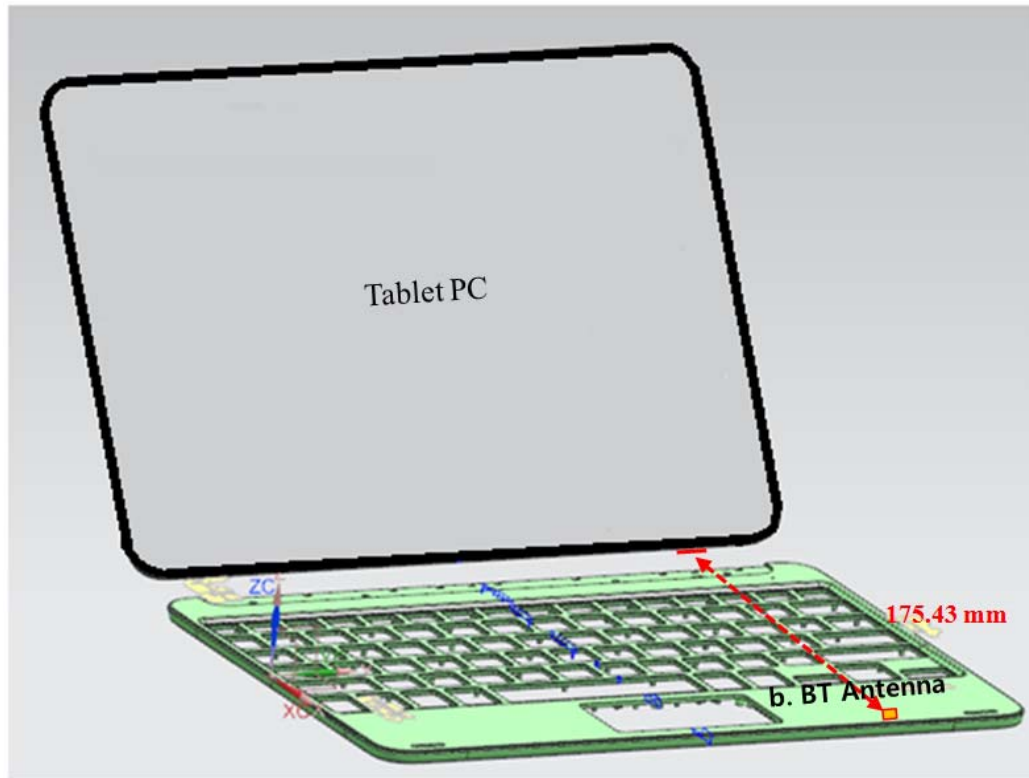
2.2 SPLSR Evaluation Analysis

EUT Pair		Worst case 1g SAR (W/kg)	Estimated 1g SAR (W/kg)	1g SAR Sum (W/kg)	Separation Distance (mm)	SPLS Ratio	SPLS Ratio Limit
"a"	"b"	a	b	a + b	Worst D _{a-b}	$(a+b)^{1.5} / D_{a-b}$	≤ 0.04
Tablet PC	Keyboard B.T	1.6	0.168	1.768	175.43	0.01	

2.3 Simultaneous Transmission conclusion

The above numerical summed SAR results and SPLSR analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB publication 447498 D01 v05r02.

2.4 Simultaneous Transmission Separation Distances



Worst distances of Tablet PC and Keyboard Antenna