SAR Exclusion

FCC ID: LF5TM91

KDB 447498 was used as the guidance.

SAR test exclusion considerations

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)]

≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, 30 where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

EUT: TM91

Frequency Range: 402-405 MHz

EIRP: -27.28 dBm

Maximum Peak Antenna Gain: -8.94dBi

Frequency Range: 2402-2480 MHz

Conducted Power: -1.25 dBm

Maximum Antenna Gain: 1 dBi

The EUT will only be used a separation of 5 mm or lesser between the antenna and body of the SAR Exclusion calculation for this exposure is show below.

Estimated SAR at the Specific separation

CH Freq (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Tune-Up Tolerance	Tolerance Max Power (dBm)	Tolerance Max Power (mw)	SAR test exclusion calculation value	Limit (mW)	Pass/Fail
402.15	-18.34	-8.94	±1dB	-17.34	0.018	0.002283	≤ 3.0 for 1-g SAR	Pass
2402	-1.25	1	±1dB	-0.25	0.94	0.29137	≤ 3.0 for 1-g SAR	Pass

RF Exposure Compliance Issue

Therefore, EUT is not required the SAR Evaluation.

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