

# Radiofrequency Radiation Exposure Evaluation

This exposure evaluation is intended for **FCC ID: O4GT3**

According to KDB 447498 D01v06 section 4.3.1, For frequencies between 100 MHz to 6GHz and test separation distances  $\leq 50$  mm, the Numeric threshold is determined as:

Step a)

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR

>> The fundamental frequency of the EUT is 2457MHz,  
the test separation distance is  $\leq 50$ mm.  
(Manufacturer specified the separation distance is: 20mm)  
(5mm is the worst case according to the KDB)

Step b)

>> Numeric threshold (2457MHz),  $\text{mW} / 5\text{mm} \cdot \sqrt{2.457\text{GHz}} \leq 3.0$   
Numeric threshold (2457MHz)  $\leq 9.569\text{mW}$

Power calculation (According to C63.10 chapter 9.5)

	Value	Unit
Field Strength Measured (E)	91.48	dB $\mu$ V/m
Measurement Distance (D)	3	m
Equivalent Isotropically Radiated Power (E.I.R.P in dBm)	-3.68	dBm
Equivalent Isotropically Radiated Power (E.I.R.P in mW)	0.429	mW

Remark:  $\text{EIRP} = E + 20\log(D) - 104.7$

(EIRP is in dBm, E is in dB $\mu$ V/m, D is in metres)

## The Power according to the RF Report No: 60.790.23.096.01R02

>> The power (calculated power + tune up tolerance) of EUT at 2457MHz is: 0.429mW  
Which is smaller than the Numeric threshold.  
Therefore, the device is exempt from stand-alone SAR test requirements.

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