



Rf Exposure Module TM2400A

FCC ID SJ7TM2400A

02/17/2022 / V1.5

Mobile Devices / Fixed Devices

MPE evaluation Part 1.1310

$$\begin{aligned}
 \text{Power Density} &= \frac{\text{Conducted_Power}_{mW} * \text{Duty_Cycle}}{4\pi * (20 \text{ cm})^2} \\
 &= \frac{20 \text{ mW} * 19 \%}{4\pi * (20 \text{ cm})^2} \\
 &= 0.000755986 \text{ mW/cm}^2
 \end{aligned}$$

The worst case calculated maximum power density at 20 cm is less than the Limit at 2.4 GHz of 1 mW/cm^2

Portable Devices

SAR Test Exclusion 447498 D01 General RF Exposure Guidance v06

KDB 447498 4.3.1a) [(max.power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] * $[\sqrt{f_{\text{GHz}}}]$

$$\begin{aligned}
 &= \frac{\text{max power of channel, including tune – up tolerance, mW}_{mW} * \sqrt{f_{\text{GHz_upper}}}}{\text{min. test separation distance, mm}} \\
 &= \frac{3.79 \text{ mW} * \sqrt{2.475}}{5 \text{ mm}} = 1.19
 \end{aligned}$$

KDB 447498 4.3.1			Test exclusion threshold		1-g	10-g
		P[mW]				
P_conducted [dBm]	12					
Tolerance	1					
	13	20.0				
Duty Cycle worst case [%]	19.0%	3,79				
Distance [mm]	5					
f_bottom [GHz]			2.415	1.18	≤ 3	7.5
f_upper [GHz]			2.475	1.19	≤ 3	7.5