RF Exposure evaluation

Product Name：Remote Control
Model Number: 596000098001
FCCID: 2ACSF596000098001

According to 447498 D01 General RF Exposure Guidance v05

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation

distances≤ 50 mm are determined by:

[(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, 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

$eirp = pt \times gt = (E \times d)^2/30$

Where:

Pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, --- $10^{(dBuV/m)/20}/10^6$

d = measurement distance in meters (m) --- 3m

So $Pt = (E \times d)^2/30 \times gt$

Maximum Field strength: 596000098001: 88.847 dBuV/m @3m --Channel 1:2410MHz

Refer to 708881474502-00 FCC Part 15C 15.249 Test Report page 11.

Ant gain = 0dBi; so Ant numeric gain=1

So, for 596000098001, Pt= $\{[(10^{(88.847/20)}/10^6) \times 3]^2/30 \times 1\} \times 1000mW = 0.23$ mW

$(0.23 \text{ mW}/5mm) \times \sqrt{2.473} = 2.288 < 3$

Then SAR evaluation is not required