

# FCC RF Exposure

EUT Description: usb wifi adapter

Model No.: H108, H108Plus, H108Pro, M-1200FR, M-1200NR

FCC ID: 2A47H-H108

## 1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 The 1 - g and 10 - g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max power of channel, including tune - up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1 - g SAR and  $\leq 7.5$  for 10 - g extremity SAR,

Where:

Result =  $P/D^2 \cdot \sqrt{F}$

F = the RF channel transmit frequency in GHz

P = Maximum turn - up power in mw

D = Min. test separation distance in mm

## 2. Test Result of RF Exposure Evaluation

BT/WIFI

| Frequency (MHz)       | Output power (dBm) | Tune Up Power (dBm) | Max Tune Up power dBm/mW | Min test separation distance mm | Result | Limit (mW/cm <sup>2</sup> ) | SAR Test Exclusion |
|-----------------------|--------------------|---------------------|--------------------------|---------------------------------|--------|-----------------------------|--------------------|
| 2.4G WIFI Ant. 1 2437 | 5.99               | 5 ± 1               | 6/3.98                   | 5                               | 1.243  | 3.0                         | Pass               |
| 2.4G WIFI Ant. 2 2462 | 5.95               | 5 ± 1               | 6/3.98                   | 5                               | 1.249  | 3.0                         | Pass               |
| MIMO 2462             | 8.65               | 8 ± 1               | 9/7.94                   | 5                               | 2.492  | 3.0                         | Pass               |
| 5.2G WIFI Ant. 1 5200 | 4.68               | 4 ± 1               | 5/3.16                   | 5                               | 1.441  | 3.0                         | Pass               |
| 5.2G WIFI Ant. 2 5240 | 4.95               | 4 ± 1               | 5/3.16                   | 5                               | 1.447  | 3.0                         | Pass               |
| MIMO 5240             | 7.67               | 7 ± 1               | 8/6.31                   | 5                               | 2.889  | 3.0                         | Pass               |
| 5.8G WIFI Ant. 1 5745 | 3.86               | 3 ± 1               | 4/2.51                   | 5                               | 1.203  | 3.0                         | Pass               |
| 5.8G WIFI Ant. 2 5745 | 3.96               | 3 ± 1               | 4/2.51                   | 5                               | 1.203  | 3.0                         | Pass               |
| MIMO 5745             | 6.70               | 6 ± 1               | 7/5.01                   | 5                               | 2.402  | 3.0                         | Pass               |

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2202170428-1E/2E/3E**, antenna gain=3.5Bi

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 2.889 which is  $\leq 3$ , RF Exposure testing is not required.

Note: Exclusion Thresholds Results=[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [  $\sqrt{f_{\text{(GHz)}}}$ ]

$f_{\text{(GHz)}}$  is the RF channel transmit frequency in GHz

Distance=5mm