

FCC RF Exposure

EUT Description: Wireless Dual-band USB Adapter

Model No.: NCU-L1300

FCC ID: X4YLN13AC

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 ≤ 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 ≤ 7.5 for 10 - g extremity SAR,

Where:

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

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

	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit	SAR Test Exclusion
2.4G WIFI	7.32	7 ± 1	8/ 6.31	5	1.96	3.0	Pass
5.2G WIFI	6.76	6 ± 1	7/ 5.01	5	2.28	3.0	Pass
5.8G WIFI	7.26	6.5 ± 1	7.5/5.62	5	2.69	3.0	Pass
Note: PK Output power = conducted power. Conducted power see the test report HK2105141499-1E/2E/3E . 2.4G WIFI Gantenna gain=2dBi, 5G WIFI Gantenna gain=2dBi							

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 2.69 which is ≤ 3 , RF Exposure testing is not required.

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

f(GHz) is the RF channel transmit frequency in GHz

Distance = 5mm

Note: the device could not transmit simultaneously in 2.4G and 5G.