

FCC RF Exposure

EUT Description: X-85 True wireless BT earbuds

Model No.: X-85, XT2

FCC ID: 2BN79-X-85

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:
$$\left[\frac{\text{max power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0$$
 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-on power in mW

D = Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power (dBm/mW)	Min test separation distance (mm)	Result	Limit	SAR Test Exclusion
2480	7.06	7 ± 1	8/6.310	5	1.987	3.0	Pass
Note: PK Output power = conducted power. Conducted power see the test report HK2502210688-E , antenna gain = 1.7dBi							

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

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

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

Distance = 5mm