

FCC RF Exposure

EUT Description: Portable BT Speaker system

Model No.: Spark8UNeon, BOOM8, Spark8GNeon, Spark8ONeon, BOOMPACK8, SPARK8

FCC ID: 2A3KG-SPARK8

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

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

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit (mW/cm ²)	SAR Test Exclusion
EDR:2402	-6.649	-6 ± -5	-5/0.32	5	0.099	3.0	Pass

Note:

PK Output power = conducted power.

Conducted power see the test report **HK2109133461-E**, antenna gain = 0dBi

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

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

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

Distance = 5mm