

# ***RF Exposure Report***

## ***FCC ID: 2AKVKDS-809***

### **1. GENERAL INFORMATION**

#### **1.1 GENERAL DESCRIPTION OF EUT**

<b>Equipment</b>	Star Wars death star Magnetic levitation
<b>Model Name</b>	DS-809
<b>Additional Model Number(s)</b>	N/A
<b>Model Difference</b>	N/A
<b>Frequency Range</b>	Bluetooth V3.0: 2402~2480 MHz
<b>Number of Channel:</b>	79 Channels
<b>Modulation Type</b>	Bluetooth: GFSK/ $\pi$ /4-DQPSK/8-DPSK
<b>RF Output Power</b>	GFSK: 4.040 dBm $\pi$ /4-DQPSK: 3.900 dBm 8-DPSK: 3.771 dBm
<b>Antenna Type</b>	PCB Antenna (Gain: 2dBi)
<b>Power Source</b>	DC Powered by host system or Battery or Adapter .
<b>Power Rating</b>	DC 5V from USB interference. DC 3.7V from 1000mAh Battery. Adapter: Input: AC 100-240V, 50/60Hz Output: DC 12V, 1.5A
<b>Remark</b>	More details EUT technical specifications, please refer to the User's Manual.

## 2. RF EXPOSURE INFORMATION

### SAR Test Exclusion Calculations

#### 2.1 FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

##### (1) Clause 4.3: General SAR test reduction and exclusion guidance

##### Sub clause 4.31: Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distances  $\leq 50$  mm are determined by:

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

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 7.5.0$  for 10-g SAR

#### 2.2

##### Calculation:

Bluetooth Mode						
GFSK(1Mbps)						
Frequency (MHz)	Conducte d Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2402	4.040	4 $\pm$ 1	5	3.162	0.980	3.0
2441	3.958	4 $\pm$ 1	5	3.162	0.988	3.0
2480	3.817	4 $\pm$ 1	5	3.162	0.996	3.0
$\pi$ /4-DQPSK(2Mbps)						
Frequency (MHz)	Conducte d Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2402	3.475	4 $\pm$ 1	5	3.162	0.980	3.0
2441	3.900	4 $\pm$ 1	5	3.162	0.988	3.0
2480	3.793	4 $\pm$ 1	5	3.162	0.996	3.0
8-DPSK(3Mbps)						
Frequency (MHz)	Conducte d Power (dBm)	Turn-up Power Tolerance (dB)	MAX Power of Turn-up Tolerance (dbm)	TX Power (mW)	Calculation Value	Threshold Value
2402	3.771	4 $\pm$ 1	5	3.162	0.980	3.0
2441	3.629	4 $\pm$ 1	5	3.162	0.988	3.0
2480	3.548	4 $\pm$ 1	5	3.162	0.996	3.0

So standalone SAR measurements are not required.

\*\*\*\*\*END OF REPORT\*\*\*\*\*