

RF Exposure Report

FCC ID: 2AKVKDS-809

1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

Equipment	Star Wars death star Magnetic levitation
Model Name	DS-809
Additional Model Number(s)	N/A
Model Difference	N/A
Frequency Range	Bluetooth V3.0: 2402~2480 MHz
Number of Channel:	79 Channels
Modulation Type	Bluetooth: GFSK/ π /4-DQPSK/8-DPSK
RF Output Power	GFSK: 4.040 dBm π /4-DQPSK: 3.900 dBm 8-DPSK: 3.771 dBm
Antenna Type	PCB Antenna (Gain: 2dBi)
Power Source	DC Powered by host system or Battery or Adapter .
Power Rating	DC 5V from USB interference. DC 3.7V from 1000mAh Battery. Adapter: Input: AC 100-240V, 50/60Hz Output: DC 12V, 1.5A
Remark	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 ≤ 50 mm are determined by:

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

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 7.5.0$ 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 ± 1	5	3.162	0.980	3.0
2441	3.958	4 ± 1	5	3.162	0.988	3.0
2480	3.817	4 ± 1	5	3.162	0.996	3.0
π /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 ± 1	5	3.162	0.980	3.0
2441	3.900	4 ± 1	5	3.162	0.988	3.0
2480	3.793	4 ± 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 ± 1	5	3.162	0.980	3.0
2441	3.629	4 ± 1	5	3.162	0.988	3.0
2480	3.548	4 ± 1	5	3.162	0.996	3.0

So standalone SAR measurements are not required.

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