

RF Exposure Evaluation

FCC ID: 2AJWO-TOKK

1. Client Information

Applicant : Pred Technologies USA, Inc.
Address : 7855 Fay Avenue, Suite 310 La Jolla, California 92037 USA
Manufacturer : Sunstar Digi Co., Ltd.
Address : 2-3 Floor F Building, Guanlong 1st Industrial Zone, Xili Town, Nanshan District, Shenzhen, Guangdong, China

2. General Description of EUT

EUT Name	:	TOKK SMART SPEAKER PHONE	
Models No.	:	001, 002, 003, 004, 005, 006, 007	
Brand Name	:	TOKK	
Model Difference	:	All models are identical in the same PCB layout, interior structure and electrical circuits, The only difference is model name for commercial purpose.	
Product Description	:	Operation Frequency:	Bluetooth 4.2: 2402~2480 MHz
	:	Number of Channel:	Bluetooth: 79 Channels See Note 2
	:	Max Peak Output Power:	Bluetooth: -1.372 dBm(GFSK)
	:	Antenna Gain:	1.3 dBi PCB Antenna
	:	Modulation Type:	GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)
Power Supply	:	DC power by USB cable. DC power by Li-ion battery.	
Power Rating	:	DC 5V by USB Cable. DC 3.7V by 180mAh Li-ion Battery.	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

Note:

More test information about the EUT please refer to the RF Test Report.

SAR Test Exclusion Calculations

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 distance ≤ 5 mm are determined by:

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

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

2.

Calculation:

Test separation: 5mm					
Bluetooth Mode (GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-1.372	±0.5	0.818	0.254	3.0
2.441	-2.383	±0.5	0.648	0.203	3.0
2.480	-3.398	±0.5	0.513	0.162	3.0
Bluetooth Mode (π /4-DQPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-5.424	±0.5	0.322	0.100	3.0
2.441	-5.340	±0.5	0.328	0.103	3.0
2.480	-5.190	±0.5	0.340	0.107	3.0
Bluetooth Mode (8-DPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-5.426	±0.5	0.322	0.100	3.0
2.441	-5.346	±0.5	0.328	0.102	3.0
2.480	-5.240	±0.5	0.336	0.106	3.0

So standalone SAR measurements are not required.

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