

# 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

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

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

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

## 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 ( $\pi/4$ -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.**

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