

RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	Bluetooth wireless earphone
Model Name	SS-TW003W, QIEP-6/1682
FCC ID	2AOKX-SS-TW003W

2. EVALUATION METHOD

According to 447498 D01 General RF Exposure Guidance v05

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

Power and distance are rounded to the nearest mW and mm before calculation

3. CALCULATION

Measurement Data

GFSK mode				
Frequency (GHz)	Peak Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
2402	-6.628	-7.0 $\pm$ 1	-6.0	0.251
2441	-6.324	-7.0 $\pm$ 1	-6.0	0.251
2480	-7.154	-8.0 $\pm$ 1	-7.0	0.200
$\pi/4$ DQPSK mode				
Frequency (GHz)	Peak Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
2402	-5.854	-6.5 $\pm$ 1	-5.5	0.281
2441	-5.549	-6.0 $\pm$ 1	-5.0	0.316
2480	-6.409	-7.0 $\pm$ 1	-6.0	0.251

Worst case: $\Pi/4$ DQPSK						
Frequency (GHz)	Maximum Peak Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
2402	-5.854	-6.5 $\pm$ 1	-5.5	0.281	0.09	3.0
2441	-5.549	-6.0 $\pm$ 1	-5.0	0.316	0.10	
2480	-6.409	-7.0 $\pm$ 1	-6.0	0.251	0.08	

4. CONCLUSION

The SAR evaluation is not required.