

RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	UHF Wireless Microphone System
Model Name	UwMic9 TX-XLR9
FCC ID	2ARN3-UWMIC9XLR9

2. EVALUATION METHOD

According to 447498 D01 General RF Exposure Guidance v06

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

Wireless microphones:

Group A

$$P_i = 3.786 \text{ dBm} = 2.391 \text{ mW}$$

The result for RF exposure evaluation $\text{SAR} = (2.391 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{0.55351}(\text{GHz})] = 0.354 < 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

Group B

$$P_i = 3.989 \text{ dBm} = 2.506 \text{ mW}$$

The result for RF exposure evaluation $\text{SAR} = (2.506 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{0.59546}(\text{GHz})] = 0.386 < 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

4. CONCLUSION

The SAR evaluation is not required.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15 days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

