



RF EXPOSURE REPORT

FCC Per 47 CFR 2.1093(d)

Report Reference No.....: TRE1311003102 R/C:15457

FCC ID.....: L5CR094G0

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Date of issue.....: Nov 13, 2013

Testing Laboratory Name: Shenzhen Huatongwei International Inspection Co., Ltd

Address.....: Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China

Applicant's name.....: Ansen Electronics Company

Address.....: Unit 1401B-1405A Telecom Tower, Wharf T&T Square, 123 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong

Test specification:

Standard: FCC Per 47 CFR 2.1093(d)

TRF Originator.....: Shenzhen Huatongwei International Inspection CO., Ltd

Master TRF.....: Dated 2006-06

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Test item description: Bluetooth Candle Light Speaker

Trade Mark: /

Manufacturer: Ansen Electronics Company

Model/Type reference.....: R094-0

Listed Models: 09223,09224,09225,09226

Operation Frequency.....: From 2402MHz to 2480MHz

Modulation Type: GFSK, $\pi/4$ DQPSK, 8DPSK

Rating: DC 3.7V from battery /DC 5.0V from USB

Result.....: Positive

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Equipment under Test : Bluetooth Candle Light Speaker

Model /Type : R094-0

Listed Models : 09223,09224,09225,09226

Applicant : **Ansen Electronics Company**

Address : Unit 1401B-1405A Telecom Tower,Wharf T&T Square, 123 Hoi Bun Road, Kwun Tong,Kowloon,Hong Kong

Manufacturer : **Ansen Electronics Company !!**

Address : Chen Tung Industrial Zone,Ning Tau Administrative District,Qiao Tau Zhen,Dongguan,Guangdong

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. SUMMARY

1.1. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer

○ - supplied by the lab

○	Power Cable	Length (m) :	/
		Shield :	/
		Detachable :	/
○	Multimeter	Manufacturer :	/
		Model No. :	/

1.2. NOTE

- The EUT is a Bluetooth Candle Light Speaker with Bluetooth function, The functions of the EUT listed as below:

	Test Standards	Reference Report
Bluetooth	FCC Part 15 Subpart C	TRE1311003101
MPE REPORT	FCC Per 47 CFR 2.1093(d)	TRE1311003102

- The frequency bands used in this EUT are listed as follows:

Frequency Band(MHz)	2400-2483.5	5150-5350	5470-5725	5725-5850
EUT	√	—	—	—

2. TEST ENVIRONMENT

2.1. Address of the test laboratory

Shenzhen Huatongwei International Inspection Co., Ltd
Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China
Phone: 86-755-26715686 Fax: 86-755-26748089

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 (2009) and CISPR Publication 22.

2.2. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	<u>15-35 ° C</u>
Humidity:	<u>30-60 %</u>
Atmospheric pressure:	<u>950-1050mbar</u>

2.3. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.57 dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

3. Method of measurement

3.1. Applicable Standard

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §RSS-102, Devices that have a radiating element normally operating at separation distances greater than 20 cm between the user and the device shall undergo an RF exposure evaluation. SAR evaluation may be performed in lieu of an RF exposure evaluation for devices operating below 6 GHz with a separation distance of greater than 20 cm between the user and the device.

According to §1.1310,KDB447498 and §2.1093 RF exposure is required.

OET Bulletin 65 Supplement C [June 2001]: Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields

3.2. Limit

According to KDB447498 D01 General RF Exposure Guidance v05r01 Appendix A:SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm, Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

3.3. RF Exposure

TEST RESULTS

From the peak EUT RF output power and power drift from Tune-up Procedure provide by manufacturer as following states:

Manufacturing tolerance

GFSK			
Test Channel	Channel 00	Channel 39	Channel 78
Target (dBm)	-1.00	-1.00	-1.00
Tolerance $\pm$ (dB)	1.00	1.00	1.00
8DPSK			
Target (dBm)	-2.00	-2.00	-2.00
Tolerance $\pm$ (dB)	1.00	1.00	1.00
$\pi/4$ DQPSK			
Target (dBm)	-2.00	-2.00	-2.00
Tolerance $\pm$ (dB)	1.00	1.00	1.00

For GFSK

Test Frequency (MHz)	Output Power (dBm)	Output Power including Power Drift (dBm)	Output Power including Power Drift (mW)	SAR Test Exclusion Threshold (mW)	Verdict
2402	-0.81	0.00	1.0000	10.00	PASS
2441	-1.02	0.00	1.0000	10.00	PASS
2480	-0.90	0.00	1.0000	10.00	PASS

For 8DPSK

Test Frequency (MHz)	Output Power (dBm)	Output Power including Power Drift (dBm)	Output Power including Power Drift (mW)	SAR Test Exclusion Threshold (mW)	Verdict
2402	-1.39	-1.00	0.7943	10.00	PASS
2441	-1.54	-1.00	0.7943	10.00	PASS
2480	-1.82	-1.00	0.7943	10.00	PASS

For $\pi/4$ DQPSK

Test Frequency (MHz)	Output Power (dBm)	Output Power including Power Drift (dBm)	Output Power including Power Drift (mW)	SAR Test Exclusion Threshold (mW)	Verdict
2402	-1.27	-1.00	0.7943	10.00	PASS
2441	-1.48	-1.00	0.7943	10.00	PASS
2480	-1.82	-1.00	0.7943	10.00	PASS

4. Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v05r01.

.....**End of Report**.....