



FCC RADIO EXPOSURE TEST REPORT

FCC ID : 2ALCB-HG-W-B03-0001

Equipment : Smart Speakerphone

Brand Name : InnoMedia

Model Name : ABCDEF (Refer to 1.2 for more details)

Applicant : INNOMEDIA TECHNOLOGY INC
3RD FL HSINCHU SCIENCE-BASED INDUSTRIAL PARK
3 INDUSTRIAL E RD IX HSINCHU 300 TAIWAN

Manufacturer : LUEN HUEI ELECTRONICS CO.,LTD
17 Kuang Fu Rd.,Hsinchu Industrial,Park Hsinchu Hsien
303,Taiwan

Standard : 47 CFR Part 2.1091

The product was received on Dec. 25, 2018, and testing was started from Jan. 24, 2019 and completed on Feb. 12, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 2.1091 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.


Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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Report Template No.: CB Ver1.0



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Exposure evaluation	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Sandy Chuang



1 General Description

1.1 EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
2.4GHz WLAN	2400-2483.5	2412-2462	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM)
5GHz WLAN	5150-5250 5250-5350 5470-5725 5725-5850	5180-5240 5260-5320 5500-5720 5745-5825	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)



1.2 Table for Multiple Listing

The model names: ABCDEF are defined as below information:

- ✓ A : Two letter Series identifier
- ✓ B : Number 0~9 and 4 digit is optional
- ✓ C : Use G (Google) or A (Amazon) or other letters for designation letter from A~Z for another customer offering
- ✓ D: - or empty
- ✓ E : 1 or empty
- ✓ F : W or empty

Character	Number	Description
A	HG	Home Gateway Series Identifier for marketing needs
	SP	Smart Phone Series Identifier for marketing needs
	BT	BuddyTalk Series Identifier for marketing needs
	SC	SmartCommunicator Series Identifier for marketing needs
B	0~9	This can be changed with Software configuration
C	G (Google)	Optional designation letter from A~Z for another customer offering, marketing needs
	A (Amazon)	
	other letters	
D	-	a field separator
	empty	No separator
E	1	1 port FXS
	empty	No FXS port
F	W	Wifi used
	empty	Without Wifi used

From the above models, model: HG8328-1W was selected as representative model for the test and its data was recorded in this report.



1.3 Testing Location

Testing Location		
<input type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-327-0973
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Method

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$



2.3 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)
2.4G;D1D	2.00	20.72	22.72	0.50	23.22	0.20989	20	0.04176	1.00000
5.2G;D1D	3.00	19.98	22.98	0.50	23.48	0.22284	20	0.04433	1.00000
5.3G;D1D	3.00	18.95	21.95	0.50	22.45	0.17579	20	0.03497	1.00000
5.6G;D1D	3.00	18.71	21.71	0.50	22.21	0.16634	20	0.03309	1.00000
5.8G;D1D	3.00	16.02	19.02	0.50	19.52	0.08954	20	0.01781	1.00000

Note: The above information was declared by manufacturer.

————THE END————