

# FCC RF EXPOSURE REPORT

## FCC ID: 2AG7CBELL9

Project No.	:	2012H015
Equipment	:	Wireless DoorBell
Brand Name	:	N/A
Test Model	:	Bell 9S
Series Model	:	MI-CW024-101W,MIC-CW024-101W,Bell12S,GNC-CW025-101, GN-CW025-101
Applicant	:	Hangzhou Meari Technology Co., Ltd.
Address	:	Room 604-605,Building 1,No.768 Jianghong Road, Changhe street,Binjiang District,Hangzhou,Zhejiang,China
Manufacturer	:	Hangzhou Meari Technology Co., Ltd.
Address	:	No. 91 Chutian Road, Xixing Street, Binjiang District, Hangzhou, Zhejiang,China
Factory		Hangzhou Meari Technology Co., Ltd.
Address		No. 91 Chutian Road, Xixing Street, Binjiang District, Hangzhou, Zhejiang,China
Date of Receipt	:	Nov. 03, 2020 Dec. 22, 2020
Date of Test	:	Nov. 03, 2020~Dec. 28, 2020 Dec. 22, 2020~Jan. 11, 2021
Issued Date	:	Jan. 20, 2021
Report Version	:	R01
Test Sample	:	Engineering Sample No.: SH2020121138, SH2020121140 SH2020110266-6, SH2020110266, SH2020110266-4, SH2020110266-6
Standard(s)	:	FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Maker Qi

Prepared by : Maker Qi

Ryan. Wang

Approved by : Ryan Wang



Certificate # 5123.03

Add: No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210,China TEL: +86-021-61765666 Web: www.newbtl.com



## **REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	The hardware of this device are identical to the build-in antenna type of the implementation in FCC ID: 2AG7CBELL5. The product change items are changed the capacitance and resistor positions of the module. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device.	Jan. 18, 2021
R01	Add the parameter change of capacitance: Original: 1*50V 470uF + 2* 3.3V 2.7F; New: 1*50V 470uF + 2* 3.3V 10F	Jan. 20, 2021



## **1. MPE CALCULATION METHOD**

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

- S = power density
- P = power input to the antenna
- G = power gain of the antenna in the direction of interest relative to an isotropic radiator R = distance to the center of radiation of the antenna

Table for Filed Antenna

For 2.4G:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	FPC	N/A	3

#### For 915MHz:

- 22							
	Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
	1	N/A	N/A	FPC	N/A	2	

Note:

The antenna gain is provided by the manufacturer.



## 2. TEST RESULTS

#### For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3	1.9953	25	316.2278	0.125525	1	Complies

#### For 915MHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2	1.5849	-5.12	0.3076	0.000097	0.61	Complies

#### For the max simultaneous transmission MPE:

#### 2.4G+915MHz

Power Density (S)	Power Density (S)		Limit of Power	
(mW/cm2)	(mW/cm2)	Total	Density (S)	Test Result
2.4GHz	915MHz		(mW/cm2)	
0.125525	0.000097	0.0158	1	Complies

#### Note: The calculated distance is 20 cm.

Output power including tune up tolerance. For 915MHz:

- 1. Limit of Power Density=f/1500. f= frequency in MHz. \* = Plane-wave equivalent power density. 2. Total=  $(0.125525 / 1)^2 + (0.000097 / 0.61)^2 = 0.0158$ 3. For d=3m

EIRP(dBm)=E(dBµV / m)-95.2 EIRP = output power + G (Ant Gain) EIRP=92.08-95.2=-3.12 Output power=-3.12-2=-5.12

#### **End of Test Report**