



FCC ID: 2AP3Y-RBY31012018  
Report No.: T180420W02-MF



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**IEEE C95.1 2005  
KDB 447498 D03  
47 C.F.R. Part 1, Subpart I, Section 1.1310  
47 C.F.R. Part 2, Subpart J, Section 2.1091**

## **RF EXPOSURE REPORT**

**For**

**Baby Monitoring device**

**Model: RYBBY01**

**Trade Name: raybaby**

*Issued to*

**RIOT SOLUTIONS, INC  
2711 Centerville Road, Suite 400, Wilmington,  
New Castle County, Delaware 19808, USA**

*Issued by*

**Compliance Certification Services Inc.  
Wugu Laboratory  
No.11, Wugong 6th Rd., Wugu Dist.,  
New Taipei City 24891, Taiwan. (R.O.C.)  
Issued Date: June 25, 2018**

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.  
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部分複製。

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### Revision History

| Rev. | Issue Date    | Revisions                   | Effect Page   | Revised By   |
|------|---------------|-----------------------------|---------------|--------------|
| 00   | June 25, 2018 | Initial Issue               | ALL           | Allison Chen |
| 01   | July 23, 2018 | 1. Added evaluation of UWB. | P.5, P.7, P.8 | Allison Chen |



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## 1. TEST RESULT CERTIFICATION

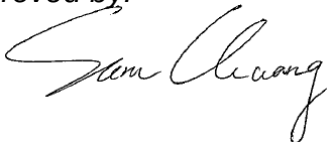
### We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10: 2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

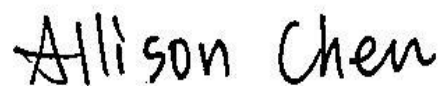
| APPLICABLE STANDARDS                                                                                                            |                         |
|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| STANDARD                                                                                                                        | TEST RESULT             |
| IEEE C95.1 2005<br>KDB 447498 D03<br>47 C.F.R. Part 1, Subpart I, Section 1.1310<br>47 C.F.R. Part 2, Subpart J, Section 2.1091 | No non-compliance noted |

Approved by:



Sam Chuang  
 Manager  
 Compliance Certification Services Inc.

Reporter:



Allison Chen  
 Report coordinator  
 Compliance Certification Services Inc.



## 4. TEST RESULTS

No non-compliance noted.

### Calculation

Given  $E = \frac{\sqrt{30 \times P \times G}}{d}$  &  $S = \frac{E^2}{377}$

Where  $E$  = Field strength in Volts / meter

$P$  = Power in Watts

$G$  = Numeric antenna gain

$d$  = Distance in meters

$S$  = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

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

Changing to units of mW and cm, using:

$$P \text{ (mW)} = P \text{ (W)} / 1000 \text{ and}$$

$$d \text{ (cm)} = d \text{ (m)} / 100$$

Yields

$$S = \frac{30 \times (P/1000) \times G}{377 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2} \quad \text{Equation 1}$$

Where  $d$  = Distance in cm

$P$  = Power in mW

$G$  = Numeric antenna gain

$S$  = Power density in mW / cm<sup>2</sup>

## 5. MAXIMUM PERMISSIBLE EXPOSURE

Substituting the MPE safe distance using  $d = 20$  cm into Equation 1:

$$S = 0.000199 \times P \times G$$

Where  $P$  = Power in mW

$G$  = Numeric antenna gain

$S$  = Power density in mW / cm<sup>2</sup>

### IEEE 802.11b mode:

| Ch. | Frq.(MHz) | P (mW) | Gain (num.) | D (cm) | Power density in mW / cm <sup>2</sup> | Limit (mW/cm <sup>2</sup> ) |
|-----|-----------|--------|-------------|--------|---------------------------------------|-----------------------------|
| 11  | 2462      | 39.811 | 1.26        | 20     | 0.0100                                | 1.000                       |

### IEEE 802.11g mode:

| Ch. | Frq.(MHz) | P (mW) | Gain (num.) | D (cm) | Power density in mW / cm <sup>2</sup> | Limit (mW/cm <sup>2</sup> ) |
|-----|-----------|--------|-------------|--------|---------------------------------------|-----------------------------|
| 6   | 2437      | 25.119 | 1.26        | 20     | 0.0063                                | 1.000                       |

### IEEE 802.11n HT20 mode:

| Ch. | Frq.(MHz) | P (mW) | Gain (num.) | D (cm) | Power density in mW / cm <sup>2</sup> | Limit (mW/cm <sup>2</sup> ) |
|-----|-----------|--------|-------------|--------|---------------------------------------|-----------------------------|
| 1   | 2412      | 25.119 | 1.26        | 20     | 0.0063                                | 1.000                       |

### UWB:

| Ch. | Frq.(MHz) | P (mW) | Gain (num.) | D (cm) | Power density in mW / cm <sup>2</sup> | Limit (mW/cm <sup>2</sup> ) |
|-----|-----------|--------|-------------|--------|---------------------------------------|-----------------------------|
| 1   | 7250      | 0.001  | 3.95        | 20     | 0.000001                              | 1.000                       |



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### **Simultaneously MPE**

Simultaneously MPE = MPE1/Limit1 + MPE2/Limit2

### **WiFi + UWB**

Simultaneously MPE = ( 0.0100 mW/cm<sup>2</sup> /1 ) + ( 0.000001 mW/cm<sup>2</sup> /1 ) = 0.010001