

## RF Exposure Report

**Report No.:** MCAAGC-WTW-P23110065

**IC:** 28904-NOTE32WL

**Test Model:** NOTE-LWUS

**Received Date:** Nov. 02, 2023

**Test Date:** Dec. 01 ~ Dec. 20, 2023

**Issued Date:** Oct. 29, 2024

**Applicant:** Blues Inc.

**Address:** 50 Harbor St Manchester, MA, 01944-1425 United States.

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Test Location :** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
33383, TAIWAN

**ISED# / CAB Identifier:** 7450F / TW2021



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### Release Control Record

Issue No.	Description	Date Issued
MCAAGC-WTW-P23110065	Original release	Oct. 29, 2024

## 1 Certificate of Conformity

**Product:** Notecard

**Brand:** Blues Inc.

**Test Model:** NOTE-LWUS

**Sample Status:** Engineering sample

**Applicant:** Blues Inc.

**Test Date:** Dec. 01 ~ Dec. 20, 2023

**Standards:** RSS-102 Issue 5 (March 19, 2015), Amendment 1 (February 2, 2021)

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

**Prepared by :**



Polly Chien / Specialist

**Date:**

Oct. 29, 2024

**Approved by :**



Jeremy Lin / Project Engineer

**Date:**

Oct. 29, 2024

## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

Per RSS-102 issue 5, section 2.5.2 as reproduced below:

#### 2.5.2 Exemption from Routine Evaluation Limits – RF Exposure Evaluation

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than  $22.48/f^{0.5}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than  $1.31 \times 10^{-2} f^{0.6834}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.

Frequency Range (MHz)	Electric Field Strength (V/m rms)	Magnetic Field Strength (A/m rms)	Power Density (W/m <sup>2</sup> )	Reference Period (minutes)
Limits For General Population / Uncontrolled Exposure				
0.003-10 <sup>21</sup>	83	90	-	Instantaneous*
0.1-10	-	$0.73/f$	-	6**
1.1-10	$87/f^{0.5}$	-	-	6**
10-20	27.46	0.0728	2	6
20-48	$58.07/f^{0.25}$	$0.1540/f^{0.25}$	$8.944/f^{0.5}$	6
48-300	22.06	0.05852	1.291	6
300-6000	$3.142 f^{0.3417}$	$0.008335 f^{0.3417}$	$0.02619 f^{0.6834}$	6
6000-15000	61.4	0.163	10	6
15000-150000	61.4	0.163	10	$616000/f^{1.2}$
150000-300000	$0.158 f^{0.5}$	$4.21 \times 10^{-4} f^{0.5}$	$6.67 \times 10^{-5} f$	$616000/f^{1.2}$
<b>Note:</b> $f$ is frequency in MHz. *Based on nerve stimulation (NS). ** Based on specific absorption rate (SAR).				

## 2.2 MPE Calculation Formula

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in  $W/m^2$

$P_{out}$  = output power to antenna in W

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$r$  = distance between observation point and center of the radiator in m

## 2.3 Classification

The antenna of this product, under normal use condition, is greater than 0.20m away from the body of the user. So, this device is classified as Mobile Device.

## 2.4 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Radiated Electric field (dBuV/m) @3m	Radiated Electric field (dBuV/m) @0.2m	EIRP Power (dBm)	Power Density ( $W/m^2$ )	Limit ( $W/m^2$ )
902.3~914.9	93.8	117.32	-1.43	0.0014	2.754

Note:

1.  $93.8 + 20\log(3/0.2) = 117.32\text{dBuV/m}$ .
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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