# **MPE** Test Report

Report No.: AGC00589170601FH07

FCC ID : 2AEOCPC201

PRODUCT

**DESIGNATION** 

: President Electronics USA

**BRAND NAME** : PRESIDENT

**TEST MODEL** : ANDY USA

**CLIENT** : President Electronics USA

**DATE OF ISSUE** : Jun, 11,2017

**STANDARD(S)** : CFR 47 Part 2.1091

**REPORT VERSION**: V1.0

Attestation of Globa Compliance (Shenzhen) Co., Ltd

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## **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jun, 11,2017	Valid	Original Report

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#### 1. TEST RESULT CERTIFICATION

Applicant:	President Electronics USA			
	1007 Collier Center Way, Naples, Florida 34110, USA			
Manufacturer:	GROUPE PRESIDENT ELECTRONICS			
wanuracturer:	ROUTE DE SETE, BP100, 34540 BALARUC-LES-BAINS, FRANCE			
Product Designation:	CB RADIO			
Brand Name:	PRESIDENT			
Test Model	ANDY USA			
Date of Test:	Jun.08, 2017 to Jun, 11,2017			

We Dongguan Precise Testing Service Co., Ltd. for compliance with the requirements set forth in the CFR 47 Part 2.1091. The results of testing in this report apply to the product/system which was tested only.

Tested by Steven Zhou

Steven Zhou(Zhou Pengyun) Jun, 11,2017

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Reviewed by

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Bart Xie(Xie Xiaobin) Jun, 11,2017

Approved by

Solger Zhang(Zhang Hongyi)

Authorized Officer

Jun, 11,2017

#### 2. TECHNICAL INFORMATION

Note: the following data is based on the information by the applicant.

#### **EUT DESCRIPTION**

The EUT is a CB RADIO designed for voice communication. It is designed by way of utilizing the AM modulation achieves the system operating.

A major technical description of EUT is described as following:

Operation Frequency	26.965 MHz -27.405 MHz		
Modulation	AM		
Antenna Designation	Detachable Antenna		
Output power	4W		
Antenna type	External antenna		
Antenna gain	0dBi		
Power Supply	DC12V/24V		

#### 3. RF EXPOSURE MEASUREMENT

#### 3.1 INTRODUCTION

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

The 1992 ANSI/IEEE standard (See Listed limit table) specifies a minimum separation distance of 20 cm for performing reliable field measurements to determine adherence to MPE limits.

If the minimum separation distance between a transmitter and nearby persons is more than 20 cm under normal operating conditions, compliance with MPE limits may be determined at such distance from the transmitter. When applicable, operation instructions and prominent warning labels may be used to alert the exposed persons to maintain a specified distance from the transmitter or to limit their exposure durations and usage conditions to ensure compliance.

## 3.2 FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

#### LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (Minutes)
0.3 1.34	614	1.63	(100)*	30
1.34 30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30 300	27.5	0.073	0.2	30
300 1500			f/1500	30
1500 100,000			1.0	30

#### \*Note:

- 1. f= Frequency in MHz \* Plane-wave Equivalent Power Density
- 2. The averaging time for General Population/Uncontrolled exposure to fixed transmitters is not applicable for mobile and portable transmitters. See 47 CFR §§2.1091 and 2.1093 on source-based time-averaging requirement for mobile and portable transmitters.

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#### 4. CLASSIFICATION OF THE ASSESSMENT METHODS

According to user manual, The antenna of the product, under normal use condition is at least 25.76 cm away from the body of the user. Warning statement to the user for keeping at least 25.76 cm separation distance and the prohibition of operating to a person has been printed on the user's manual. So, this product under normal use is located on electromagnetic far field between the human body.

 $S=PG/4\pi R^2$ 

Where:

S=power density

P=power input to 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

#### 5. EUT OPERATION CONDITION

Make the EUT to transmit at lowest, middle and highest channel individually.

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#### **6. TEST RESULTS**

Note: report the worst result in this part

Antenna Gain=0dBi (Numeric 1.0), π=3.141, Duty cycle=50%

Frequency	Output Power	Output Power	Correct Power	Power Density	Power Density Limit	Result
MHz	dBm	mW	mW	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	Pass/Fail
27.405	36.02	4000	2000	0.2399	0.24	Pass

**Note:** The output power is refer to AGC00589170601FE10. Correct Power=Output Power\*Duty cycle.

According to the user manual, the minimum separate distance which used for MPE calculate is 25.76cm.