

## RF Exposure Report

**Report No.:** SA160727E13

**FCC ID:** O5P-AN-N20-01

**Test Model:** AN-N20-01

**Received Date:** July 27, 2016

**Test Date:** Aug. 02, 2016

**Issued Date:** Mar. 06, 2017

**Applicant:** VIVOTEK INC.

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R.O.C.

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory

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### Release Control Record

Issue No.	Description	Date Issued
SA160727E13	Original release.	Mar. 06, 2017

## 1 Certificate of Conformity

**Product:** Wireless Router

**Brand:** VIVOTEK

**Test Model:** AN-N20-01

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** VIVOTEK INC.

**Test Date:** Aug. 02, 2016

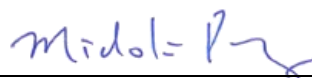
**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

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 EMC characteristics under the conditions specified in this report.


**Prepared by :**

  
Midoli Peng / Specialist

**Date:**

Mar. 06, 2017

**Approved by :**

  
May Chen / Manager

**Date:**

Mar. 06, 2017

## 2 RF Exposure

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

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

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

where

$P_d$  = power density in mW/cm<sup>2</sup>

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

G = gain of antenna in linear scale

$\pi$  = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

So, this device is classified as **Mobile Device**.

### 2.4 Antenna Gain

The antennas provided to the EUT, please refer to the following table:

Ant. No	Transmitter Circuit	Antenna Net Gain (dBi)	Antenna Type	Connector Type	Frequency range (GHz to GHz)	Cable Length (mm)
1	Chain (0)	5	Dipole	none	2.4~2.4835	60
2	Chain (1)	5	Dipole	none	2.4~2.4835	145

## 2.5 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	352.136	8.01	20	0.44304	1

NOTE:

Directional gain = 5dBi + 10log(2) = 8.01dBi

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