Certification Radio test report

According to the standard:
CFR 47 FCC PART 15

Equipment under test:
Parrot BLUEGRASS

FCC ID: 2AG6ICHIMERA

Company:
PARROT DRONES

Distribution: Mr EL HANBALI **(Company:** PARROT DRONES)

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DESIGNATION OF PRODUCT:	**Parrot BLUEGRASS**
Serial number (S/N):	DV04
Reference / model (P/N):	CHIMERA
Software version:	RF software
MANUFACTURER:	PARROT DRONES

COMPANY SUBMITTING THE PRODUCT:

Company:	PARROT DRONES
Address:	174 QUA DE JEMMAPES 7501 PARIS FRANCE
Responsible:	Mr EL HANBALI

TESTING LOCATION:	EMITECH ANGERS laboratory at JUIGNE SUR LOIRE (49) FRANCE FCC Accredited under US-EU MRA Designation Number: FR0009 Test Firm Registration Number: 873677
TESTED BY:	T. LEDRESSEUR ***VISA:***
WRITTEN BY:	T. LEDRESSEUR

CONTENTS

1. INTRODUCTION

This report presents the results of radio test carried out on the following radio equipment: **Parrot BLUEGRASS**, in accordance with normative reference.

The product integrates a WLAN radio part, 2.4GHz and 5 GHz .
The report concern only the calcul of MPE

2. PRODUCT DESCRIPTION

UNII band

Class:	B
Utilization:	Residential
Antenna type and gain:	2 integral identical antennas 2.8 dBi for U-NII-1 band and 4.2 dBi for U-NII-3 band
Operating frequency range:	From 5150 MHz to 5250 MHz band U-NII-1 From 5725 MHz to 5850 MHz band U-NII-3
Number of channels:	4 for band 5150MHz to 5250 MHz 5 for band 5725MHz to 5850 MHz
Channel spacing:	20 MHz
Modulation:	OFDM: BPSK OFDM: 64-QAM
Power source:	14.8Vdc by internal battery The battery is rechargeable outside the product.
Mode tested:	802.11 a 802.11 n
Data rate:	For 802.11a: 6Mbit/s For 802.11n: MCS0

Channel tested:

Band U-NII-1:	Chanel 36, 5180 MHz Chanel 40, 5200 MHz Chanel 48, 5240 MHz
Band U-NII-3:	Chanel 149, 5745 MHz Chanel 157, 5785 MHz Chanel 165, 5825 MHz

Power level, frequency range and channels characteristics are not user adjustable.
The details pictures of the product and the circuit boards are joined with this file.

Band 2.4 GHz

Class:	B
Utilization:	Residential
Antenna type and gain:	(3.8 dBi) 2 integral identical antennas
Operating frequency range:	From 2400 MHz to 2483.5MHz
Number of channels:	11
Channel spacing:	5 MHz
Modulation:	DBPSK OFDM: BPSK OFDM: 64-QAM
Power source:	14.8Vdc by internal battery The battery is rechargeable outside the product.
Mode tested:	802.11 b 802.11 g 802.11 n
Data rate:	For 802.11b: 1Mbit/s For 802.11g: 6Mbit/s For 802.11n: MCS0
Channel tested:	Channel 1: 2412 MHz Channel 6: 2437 MHz Channel 11: 2462 MHz

3. NORMATIVE REFERENCE

The standards and testing methods related throughout this report are those listed below.
They are applied on the whole test report even though the extensions (version, date and amendment) are not repeated.

CFR 47 FCC Part 15 (2017)	Radio Frequency Devices
ANSI C63.10	2013 Procedures for ComplianceTesting of Unlicensed Wireless Devices.
789033 D02 General UNII Test Procedures New Rules v01r04	Guidelines for compliances testing of unlicensed national information infrastructure (U-NII) devices pat 15, subpart E
662911 D01 Multiple Transmitter Output V02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band
447498 D01 General RF Exposure Guidance v06	RF Exposure procedures and equipment authorization policies for mobile and portable equipment

4. RF EXPOSURE

For 5 GHz

Maximum conducted measured power = 18.24 dBm at 5825 MHz
With *Gain = 4.2dBi*
EIRP= 22.44 dBm

In accordance with KDB 447498 D01 General RF Exposure Guidance v06:

$PSD= EIRP/(4*\pi*R^{2)}$

⇨ *175.39/(4*π*(20 cm)²)=* **0.0349 *mW/cm² (limit = 1 mW/cm² above 1500 MHz)***

The equipment fulfils the requirements on power density for general population/uncontrolled exposure and therefore fulfils the requirements of 47 CFR §1.1310.

For 2.4 GHz

Maximum conducted measured power = 25.57dBm at 2462 MHz
With *Gain = 3.8dBi*
EIRP= 29.37dBm

In accordance with KDB 447498 D01 General RF Exposure Guidance v06:

$PSD= EIRP/(4*\pi*R^{2)}$

⇨ *864.97 /(4*π*(20 cm)²)=* **0.172 *mW/cm² (limit = 1 mW/cm² above 1500 MHz)***

The equipment fulfils the requirements on power density for general population/uncontrolled exposure and therefore fulfils the requirements of 47 CFR §1.1310.