RF Exposure Report

Report No.:	SA170317E04 R1
FCC ID:	QXP-NV516
Test Model:	X3
Received Date:	Mar. 17, 2017
Test Date:	May 17, 2017
Issued Date:	June 16, 2017
Applicant:	FlightScope (Pty) Ltd
Address:	10 Elektron Road, Technopark, Stellenbosch, 7500 South Africa
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
SA170317E04	Original release.	June 14, 2017
SA170317E04 R1	Revised Applicant and Address	June 16, 2017

1 Certificate of Conformity

Product:	FlightSCope Golf Simulator
Brand:	FlightScope
Test Model:	X3
Sample Status:	ENGINEERING SAMPLE
Applicant:	FlightScope (Pty) Ltd
Test Date:	May 17, 2017
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 : _____ , **Date:** June 16, 2017

Midoli Peng / Specialist

Approved by : _____ , **Date:** June 16, 2017

May Chen / Manager

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^2)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	…	…	f/1500	30
1500-100,000	…	…	1.0	30

f = Frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = 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 25cm 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:

Antenna Gain (dBi)	Antenna Type	Connector Type	Frequency range (GHz to GHz)
17	Microstripline	NA	10.5~10.55

2.5 Calculation Result of Maximum Conducted Power

For GFSK

Frequency (MHz)	Field Strength of Fundamental (dBuV/m)	Pout EIRP (dBm)	Pout EIRP (mW)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
10500~10550	114.7	19.47	88.512	25	0.01127	1

Note: Pout EIRP (dBm) = Field Strength of Fundamental (dBuV/m) - 95.23 (dB)

For WIFI dongle

Frequency (MHz)	Max Power* (mW)	Antenna Gain* (dBi)	Distance (cm)	Source-Based Time-Averaged Power Density (mW/cm^2)	Limit (mW/cm^2)
2412~2462	1000	6	25	0.50688	1

Note: * the worst condition was representive for calculation.

Conclusion:

The formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

GFSK + WLAN = 0.01127/1 +0.50688/1 = 0.51815

Therefore the maximum calculations of above situations are less than the "1" limit.

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