

Loctek Visual Technology Corp.

Bluetooth Game Controller

Main Model: PAD038

Serial Model: G1

March 04, 2014




Report No.: 13070035-FCC-H2

(This report supersedes NONE)



Modifications made to the product : None

This Test Report is Issued Under the Authority of:

		
Fly Xu Compliance Engineer	Alex Liu Technical Manager	

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Test result presented in this test report is applicable to the representative sample only.

EMC Test Report
To:FCC 2.1091

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Hong Kong	RF/Wireless ,Telecom
Australia	EMC, RF, Telecom , Safety
Korea	EMI, EMS, RF , Telecom, Safety
Japan	EMI, RF/Wireless, Telecom
Singapore	EMC , RF , Telecom
Europe	EMC, RF, Telecom , Safety

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1 EXECUTIVE SUMMARY & EUT INFORMATION

The purpose of this test programmers was to demonstrate compliance of the Loctek Visual Technology Corp., Bluetooth Game Controller and Model: PAD038 against the current Stipulated Standards. The Bluetooth Game Controller has demonstrated compliance with the FCC 2.1091.

EUT Information

EUT Description : Bluetooth Game Controller

Main Model : PAD038

Serial Model : G1 (the difference between Main Model and Serial Model is only the Model Number)

Antenna Gain : Bluetooth: 0 dBi

Classification Per Stipulated Test Standard : Class B Emission Product Per FCC 2.1091

2 TECHNICAL DETAILS

Purpose	Compliance testing of Bluetooth Game Controller with stipulated standards
Applicant / Client	Loctek Visual Technology Corp. 588# Qihang south road, binhai industrial zone administrative committee, yinzhou district, ningbo, China
Manufacturer	Loctek Visual Technology Corp. 588# Qihang south road, binhai industrial zone administrative committee, yinzhou district, ningbo, China
Laboratory performing the tests	SIEMIC (Shenzhen-China) Laboratories Zone A, Floor 1, Building 2, Wan Ye Long Technology Park, South Side of Zhoushi Road, Bao'an District, Shenzhen, Guangdong, China Tel: +86-0755-2601 4629 / 2601 4953 Fax: +86-0755-2601 4953-810 Email:China@siemic.com
Test report reference number	13070035-FCC-H2
Date EUT received	February 19, 2014
Standard applied	FCC 2.1091
Dates of test (from – to)	March 04, 2014
No of Units	#1
Equipment Category	DSS
Trade Name	Loctek
RF Operating Frequency (ies)	Bluetooth: 2402-2480 MHz
Number of Channels	Bluetooth: 79CH
Modulation	Bluetooth: GFSK& $\pi/4$DQPSK&8DPSK
FCC ID	2ABVPPAD038-G1

3 FCC §2.1091 - Maximum Permissible exposure (MPE)

3.1 Applicable Standard

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
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

3.2 Test Data

Predication of MPE limit at a given distance

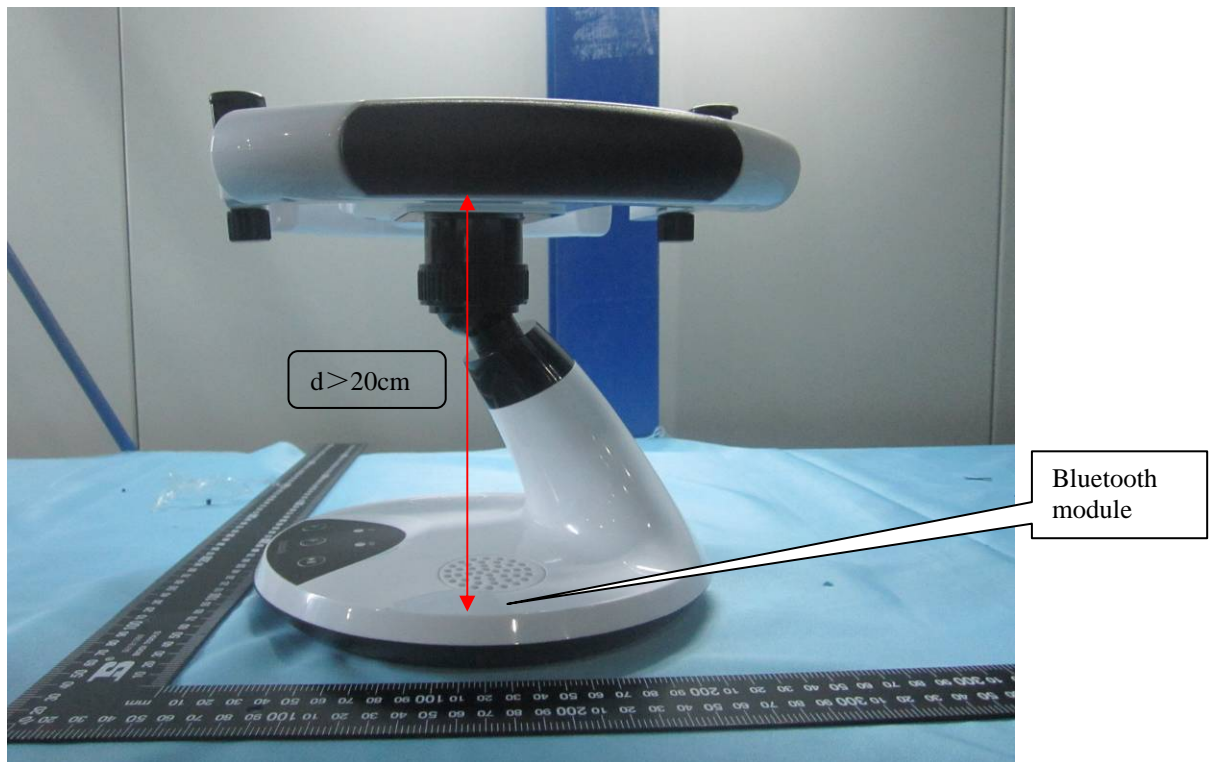
$$S = \frac{PG}{4\pi R^2}$$

Where: S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)



2.4GHz
GFSK

Maximum peak output power at antenna input terminal: 3.115(dBm)
Maximum peak output power at antenna input terminal: 2.049 (mW)

Prediction distance: >20 (cm)
Predication frequency: 2402(MHz)
Antenna Gain (typical): 0 (dBi)

Antenna Gain (typical): 1 (numeric)

The worst case is power density at predication frequency at 20 cm: 0.00041(mW/cm²)

MPE limit for general population exposure at prediction frequency: 1 (mW/cm²)

$0.00041(\text{mW}/\text{cm}^2) < 1 (\text{mW}/\text{cm}^2)$

Result: Pass