



RF Exposure Evaluation Declaration

FCC ID: 2AO9UBTVI3SE

APPLICANT: LD Eufonico LLC

Application Type: Certification


Product: Smart TV Box

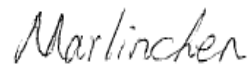
Model No.: BTVi3S

Serial Model Name: BTVi3SE (With Clock)

Brand Name: LD

FCC Classification: Digital Transmission System (DTS)

Reviewed By : 
(Kevin Guo)

Approved By : 
(Marlin Chen)



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

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Revision History

Report No.	Version	Description	Issue Date	Note
1801RSU028-U2	Rev. 01	Initial report	03-21-2018	Valid

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name	Smart TV Box
Model No.	BTVi3S
Serial Model Name	BTVi3SE (With Clock)
Brand Name	LD
Work Voltage	AC 120V/60Hz
WiFi Specification	802.11 b/g/n
Components	
Adapter	M/N: BX-0502000 INPUT: 100-240V ~ 50/60Hz, 0.8A OUTPUT: 5Vdc, 2 A

1.2. Description of Available Antennas

Antenna Type	Frequency Band (GHz)	T _x Paths	Maximum Peak Antenna Gain (dBi)
PIFA Antenna	2412 - 2462	1	3.83

2. RF Exposure Evaluation

2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

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)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

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

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

P_d is the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

2.2. Test Result of RF Exposure Evaluation

Product	Smart TV Box
Test Item	RF Exposure Evaluation

Test Mode	Frequency Band (MHz)	Maximum Out power (dBm)	Maximum EIRP (dBm)	Power Density at R = 20 cm (mW/cm ²)	Limit (mW/cm ²)
802.11b/g/n	2412 ~ 2462	19.13	22.96	0.0393	1

CONCULISON:

The max Power Density at R (20 cm) = 0.0393mW/cm² < 1 mW/cm² for 2.4G WLAN.

Therefore, the Min Safety Distance is 20cm.

_____ The End _____