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# **RF Exposure Evaluation Declaration**

Report No.: S20210812863801E11
Report Version: V01
Issue Date: 10-08-2021

**Applicant:** Xi'an NovaStar Tech Co., Ltd.

Address: 101 Block D-F, 01 Square, Xi'an Software Park, No.72,

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FCC ID: 2AG8JT60

**Application Type:** Certification

**Product:** Taurus-MediaPlayer

Model No.: T60

FCC Classification: Digital Transmission System (DTS)

FCC Rule Part(s): Part 15 Subpart C (15.247)

Test Procedure(s): ANSI C63.10-2013, KDB 558074 D01v05r02

**Test Date:** Sept 02 ~ Sept 26, 2021

Compiled By

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Approved By

(Kerry Zhou)

Engineer Manager

The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 558074 D01. Test results reported herein relate only to the item(s) tested.

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The test report must not be used by the client to claim product certifications, approval, or endorsement by NVLAP, NIST or any agency of U.S. Government.

Page Number: 1 of 5



# **Revision History**

Report No.	Version	Description	Issue Date
S20210812863801E11	Rev. 01	1	10-08-2021



## 1. PRODUCT INFORMATION

## 1.1. Equipment Description

Product Name:	Taurus-MediaPlayer	
Model Name:	Т60	
Additional Model:	T30,T50,T60-X,T30-X,T50-X (X=blank, 0-9 or A-Z for different sale area,no	
	impact on EMC & Safety)	
Input Voltage Range:	DC 5V	
Wi-Fi Specification:	802.11b/g/n-HT20	
Antenna Type:	External Rod Antenna	
Antenna Gain:	5.03dBi	



## 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	Electric Field	Magnetic Field	Power Density	Average Time	
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm <sup>2</sup> )	(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:  $Pd = (Pout*G)/(4*pi*r^2)$ 

Where

Pd = power density in mW/cm<sup>2</sup>

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

Pd is the limit of MPE, 1mW/cm<sup>2</sup>. 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	Taurus-MediaPlayer
Test Item	RF Exposure Evaluation

Test Mode	Frequency Band	Maximum PK	Power Density at	Limit	
	(MHz)	Output Power	R = 20 cm	(mW/cm <sup>2</sup> )	
		(dBm)	(mW/cm <sup>2</sup> )		
802.11b/g/n	2412 ~ 2462	14.86	0.0194	1	
Note: Pd = (Pout*G)/(4*pi*r2)=(10 <sup>(14.89+5.03)/10</sup> )/(4*3.1416*20²)=0.0194mW/cm²					

#### **CONCULISON:**

The Max Power Density at R (20 cm) = 0.0194mW/cm<sup>2</sup> < 1mW/cm<sup>2</sup>. So the EUT complies with the requirement.