



Report No.: T170913N04-MF
Page 1 of 6 Rev. 00
FCC ID: XEG-CD400U

**IEEE C95.1
KDB 447498 D03
47 C.F.R. Part 1, Subpart I, Section 1.1310
47 C.F.R. Part 2, Subpart J, Section 2.1091
TEST REPORT**

RF EXPOSURE REPORT

For

CD PLAYER/TUNER

Model: CD-400U

Data Applies To: N/A

Trade Name: TEAC

Issued to

**TEAC CORPORATION
1-47 Ochiai, Tama-shi, Tokyo 206-8530, Japan**

Issued By

Compliance Certification Services Inc.

Tainan Laboratory

**No.8, Jiucengling, Xinhua Dist., Tainan City
712, Taiwan (R.O.C.)**

TEL: 886-6-580-2201

FAX: 886-6-580-2202

<http://www.ccsrf.com>

E-Mail : service@ccsrf.com

Issued Date: November 21, 2017



Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: T170913N04-MF
Page 2 of 6 Rev. 00
FCC ID: XEG-CD400U

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	November 21, 2017	Initial Issue	ALL	Sunny Chang



TABLE OF CONTENTS

1. LIMIT	4
2. EUT SPECIFICATION	4
3. TEST RESULTS	5
4. MAXIMUM PERMISSIBLE EXPOSURE	6

1. LIMIT

According to §15.247(i), 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 levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this chapter.

2. EUT SPECIFICATION

EUT	CD PLAYER/TUNER		
Model	CD-400U		
RF Module	BRITO	Model:	MD-BLT-BTMC6R24
Frequency band (Operating)	<input type="checkbox"/> 802.11b/g/n HT20: 2.412GHz ~ 2.462GHz 802.11n HT40: 2.422GHz ~ 2.452GHz 802.11a/n HT20: 5.180GHz ~ 5.240GHz / 5.745 ~ 5.825GHz 802.11n HT40: 5.190GHz ~ 5.230GHz / 5.755~ 5.795GHz 802.11ac VHT80: 5.210GHz / 5.775GHz <input checked="" type="checkbox"/> Others		
Device category	<input type="checkbox"/> Portable (<20cm separation) <input checked="" type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others		
Exposure classification	<input type="checkbox"/> Occupational/Controlled exposure ($S = 5\text{mW}/\text{cm}^2$) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure ($S=1\text{mW}/\text{cm}^2$)		
Antenna Specification	Dipole Antenna / Gain: 2.000 dBi (Numeric gain: 1.58) worst		
Maximum Average output power	Bluetooth 3.0: 6.811 dBm (4.798 mW) Bluetooth 4.0: 7.930 dBm (6.209 mW)		
Evaluation applied	<input checked="" type="checkbox"/> MPE Evaluation* <input type="checkbox"/> SAR Evaluation <input type="checkbox"/> N/A		

3. TEST RESULTS

No non-compliance noted.

Calculation

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{377}$

Where E = Field strength in Volts / meter

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{377d^2}$$

Changing to units of mW and cm, using:

$$P \text{ (mW)} = P \text{ (W)} / 1000 \text{ and}$$

$$d \text{ (cm)} = d \text{ (m)} / 100$$

Yields

$$S = \frac{30 \times (P/1000) \times G}{377 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2} \quad \text{Equation 1}$$

Where d = Distance in cm

P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

4. MAXIMUM PERMISSIBLE EXPOSURE

Substituting the MPE safe distance using $d = 20$ cm into Equation 1:

$$S = 0.000199 \times P \times G$$

Where P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

Bluetooth 3.0 mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)	Result
Mid	2441	4.798	1.58	20	0.0015	1	Pass

Bluetooth 4.0 mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)	Result
Mid	2442	6.209	1.58	20	0.0020	1	Pass