



Report No.: T180522N07-MF

Page: 1 / 6
Rev.: 00

**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

DIRECT DRIVE TURNTABLE

Model: TT

Data Applies To: N/A

Trade Name: CAMBRIDGE AUDIO

Issued to

**Audio Partnership PLC
Gallery Court, Hankey Place, London, SE1 4BB, United
Kingdom**

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: July 05, 2018

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部分複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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.: T180522N07-MF

Page: 2 / 6
Rev.: 00

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	July 05, 2018	Initial Issue	ALL	Gina Lin



Report No.: T180522N07-MF

Page: 3 / 6
Rev.: 00

TABLE OF CONTENTS

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

Report No.: T180522N07-MF

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	DIRECT DRIVE TURNTABLE		
Model	TT		
RF Module	CSR	Model:	BM875
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 = 5mW/cm ²) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure (S=1mW/cm ²)		
Antenna Specification	Dipole Antenna / Gain: 1.24 dBi (Numeric gain: 1.33) worst		
Maximum Average output power	Bluetooth 3.0:	0.45 dBm	(1.109 mW)
	Bluetooth 4.0:	3.94 dBm	(2.479 mW)
Max tune up Power	Bluetooth 3.0:	0.55 dBm	(1.135 mW)
	Bluetooth 4.0:	4.04 dBm	(2.535 mW)
Evaluation applied	<input checked="" type="checkbox"/> MPE Evaluation* <input type="checkbox"/> SAR Evaluation <input type="checkbox"/> N/A		

Report No.: T180522N07-MF

3. TEST RESULTS

No non-compliance noted.

Calculation

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

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



Report No.: T180522N07-MF

Page: 6 / 6
Rev.: 00

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	1.135	1.33	20	0.0003	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
High	2480	2.535	1.33	20	0.0007	1	Pass