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**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**

RF EXPOSURE REPORT

For

Prof. 2-deck DJ media player and Mixer

Model: PRIME 2

Data Applies To: N/A

Trade Name: DENON DJ

Issued to

**inMusic Brands, Inc.
200 Scenic View Drive, Cumberland, RI 02864, U.S.A.**

Issued By

**Compliance Certification Services Inc.
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City 24891, Taiwan. (R.O.C.)**

Issued Date: May 16, 2019

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.
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REVISION HISTORY

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	May 16, 2019	Initial Issue	ALL	Angel Cheng



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1. TEST RESULT CERTIFICATION

We hereby certify that:

The equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirement of the applicable standards. The test record, data evaluation and Equipment under Test (EUT) configurations represented herein are true and accurate accounts of the measurement of the sample's RF characteristics under the conditions specified in this report.

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
IEEE C95.1 2005 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	No non-compliance noted
Statements of Conformity	
Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.	

Approved by:

Kevin Tsai
Deputy Manager
Compliance Certification Services Inc.

Reporter:

Angel Cheng
Report coordinator
Compliance Certification Services Inc.

2. 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.

3. EUT SPECIFICATION

EUT	Prof. 2-deck DJ media player and Mixer		
Model	PRIME 2		
Brand	DENON DJ		
RF Module	SMSC	Model:	AP6335
Frequency band (Operating)	☒ IEEE 802.11b/g, 802.11n HT20: 2412MHz~2462MHz ☒ Bluetooth 4.0: 2402MHz~2480MHz		
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation) ☐ Others		
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm ²) ☒ General Population/Uncontrolled exposure (S=1mW/cm ²)		
Antenna Specification	PCB Antenna / Gain: 4.600 dBi (Numeric gain: 2.88) worst		
Maximum Average output power	IEEE 802.11b Mode :	12.710 dBm	(18.664 mW)
	IEEE 802.11g Mode :	11.640 dBm	(14.588 mW)
	IEEE 802.11n HT20 Mode :	11.620 dBm	(14.521 mW)
	Bluetooth 4.0 Mode :	2.500 dBm	(1.778 mW)
Maximum Tune up Power	IEEE 802.11b Mode :	13.000 dBm	(19.953 mW)
	IEEE 802.11g Mode :	12.000 dBm	(15.849 mW)
	IEEE 802.11n HT20 Mode :	12.000 dBm	(15.849 mW)
	Bluetooth 4.0 Mode :	2.500 dBm	(1.778 mW)
Evaluation applied	☒ MPE Evaluation* ☐ SAR Evaluation ☐ N/A		
Reported Date	May 16, 2019		

4. 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:

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

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

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

Where d = Distance in cm

P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

5. 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

IEEE 802.11b Mode :

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)	Result
High	2462	19.953	2.88	20	0.0115	1	Pass

IEEE 802.11g Mode :

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)	Result
High	2462	15.849	2.88	20	0.0091	1	Pass

IEEE 802.11n HT 20 Mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)	Result
High	2462	15.849	2.88	20	0.0091	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	1.778	2.88	20	0.0010	1	Pass