



RF Exposure Compliance Report

Model : mu-so

Product Type : WIRELESS MUSIC SYSTEM

FCC ID : 2ACURMUSO

IC ID : 12217A-MUSO

Applicant : Naim Audio Ltd

Address : Southampton Road Salisbury Wiltshire SP1 2LN UK

Production Facility : CHIYU ELECTRONICS (SHEN ZHEN) CO.,LTD



Address : No. 101, Chi-Yu Road, Chi-Yu Industrial Zone, Fu-Yong Town, Bao-An Distict, ShenZhen, China

Test Result : COMPLIED



Total pages including Appendices : 3

The test result only corresponds to the tested sample. It is not permitted to copy this report, in part or in full, without the permission of the test laboratory.

Prepared by 	Approved by 
Celia Xiang	Tony Liu



China

RF Exposure Compliance Requirement

1. Standard requirement

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 level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a fixed device whereby a distance of 0.2m normally can be maintained between the user and the device.

(a) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm ²)	Averaging Times E ² , H ² or S (m notes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100000			5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm ²)	Averaging Times E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/500	30
1500-100000			1.0	30

Note: f=frequency in MHz; *Plane-wave equivalent power density

2. MPE Calculation Method

$$E (V/m) = (30 * P * G)^{0.5} / d \quad \text{Power Density: } Pd(W/m^2) = E^2 / 377$$

E=Electric Field (V/m)

P=Peak RF output Power (W)

G=EUT Antenna numeric gain (numeric)

d= Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = (30 * P * G) / (377 * d^2)$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained.

3. Calculated Result and Limit

Continuously transmitting mode.

BT Antenna Gain: 1.64dBi

WIFI Antenna Gain: 2.51dBi

Model	Mode	Channel frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
mu-so	GFSK	2402	3.80	2.40	0.0007	1	Complies
		2441	3.79	2.39	0.0007		
		2480	3.24	2.11	0.0006		
	8DPSK	2402	2.67	1.85	0.0005		
		2441	3.56	2.27	0.0007		
		2480	3.10	2.04	0.0006		
	BLE	2402	2.79	1.90	0.0006		
		2440	2.56	1.80	0.0005		
		2480	2.64	1.84	0.0005		
	802.11b	2412	7.10	5.13	0.0018		
		2437	7.22	5.27	0.0019		
		2472	7.06	5.08	0.0018		
802.11g	2412	-1.02	0.79	0.0003			
	2437	-1.33	0.74	0.0003			
	2472	-1.04	0.79	0.0003			