

# RF Exposure Evaluation declaration

Product Name : Mophie powerblu

Model No. : Powerblu

FCC ID. : OIC-POWERBLU12

Applicant: mophie, LLC

Address: 2850 Red Hill Ave Suite 128 Santa Ana,

California United States, CA92750

Date of Receipt : 2012/07/25

Date of Declaration: 2012/08/23

Report No. : 127473R-RF-US-Exp

Report Version : V1.0



## 1. RF Exposure Evaluation

#### 1.1. Limits

According to 1.1307(b)(1), system operating under the previsions of this section shall be operated in manner that ensure that the public is not exposed is not exposed to radio frequency energy level in excess of the Commission's guideline.

No Evaluation required for output power as below thresholds: f = GHz, d = Distance (between radiated device and the body)

When d < 2.5cm, Output Power = (60/f) mW

Ex: f = 2.4GHz, Output Power = (60/2.4) = 25mW (13.98dBm)

When  $d \ge 2.5$ cm, and < 20cm, Output Power = (120/f) mW

Ex: f = 2.4GHz, Output Power = (120/2.4) = 50mW (16.99 dBm)

#### 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.



## 1.3. Test Result of RF Exposure Evaluation

Product	Mophie powerblu
Test Mode	Transmit
Test Condition	RF Exposure Evaluation

#### **Antenna Gain**

Antenna Gain: The maximum Gain measured in fully anechoic chamber is –0.17dBi or 0.96 in linear scale.

# Output Power into Antenna GFSK

Channel	Channel Frequency (MHz)	Output Power to Antenna (mW)	Output Power threshold (mW) (d < 2.5cm)
00	2402.00	0.8472	24.979
39	2441.00	1.3366	24.580
78	2480.00	1.0233	24.194

#### π/4-DQPSK

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Channel	Channel Frequency (MHz)	Output Power to Antenna (mW)	Output Power threshold (mW) (d < 2.5cm)		
00	2402.00	0.9750	24.979		
39	2441.00	1.0740	24.580		
78	2480.00	0.8166	24.194		

#### 8DPSK

Channel	Channel Frequency (MHz)	Output Power to Antenna (mW)	Output Power threshold (mW) (d < 2.5cm)
00	2402.00	1.0233	24.979
39	2441.00	1.1220	24.580
78	2480.00	0.8590	24.194

#### **Conclusion:**

No SAR evaluation required, since transmitter output power is below threshold.