

# **RF Exposure Report**

## FCC ID: 2AC23-W79M1510S

FCC 47 CFR Part 15 Subpart C

Class II Change

Product: WIFI Module

Trade Name : GSD

Model Number: W79M1110, W79M1510S

#### **Issued for**

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### **MPE Calculation**

#### 1. Antenna Gain:

PIFA Antenna: 2.4~2.5GHz: 3.0 dBi

#### 2. EUT Operation Condition:

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

#### 3. Exposure Evaluation:

Equation from page 18 of OET Bulletin 65, Edition 97-01 S=(PG)/4πR<sup>2</sup>

Where

- S: power density
- P: power input to the antenna
- **G**: power gain of the antenna in the direction of interest relative to an isotropic radiator.
- **R**: distance to the center of radiation of the antenna

#### 4. Test Result:

2.4G BAND MPE Result							
Mode	N <sub>TX</sub>	Frequency (MHz)	Power (dBm) [P]	ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/cm <sup>2</sup> ) [S]	
802.11b	1	2437	19.68	3.0	20	0.0368	
802.11g	1	2462	15.89	3.0	20	0.0154	
802.11n (HT20)	1	2462	16.28	3.0	20	0.0169	
802.11n (HT40)	1	2462	14.87	3.0	20	0.0121	

Note:

(1) N<sub>TX</sub>= Number of Transmit Antennas

(2) RF Output power specifies that Maximum Conducted Peak Output Power.

#### 5. Conclusion:

#### FCC and IC:

FCC: As specified in Table 1B of 47 CFR 1.1310- Limits for Maximum Permissible Exposure (MPE), IC: As specified in 4.2 RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)

Limits for General Population/ Uncontrolled Exposure

Frequency Range (MHz)	Power density (mW/ cm²)	
300-1,500	F/1500	



1,500-100,000	1.0
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For WLAN 2.4G BAND

MPE limit S: 1 mW/ cm<sup>2</sup>

The MPE is calculated as 0.0368 mW / cm<sup>2</sup> < limit 1 mW / cm<sup>2</sup>. So, RF exposure limit warning or SAR test are not required.

The EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47 CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.

#### Note

For a more detailed features description, please refer to the RF Test Report.