

Test Report No.:
FCC2021-0032-MPE

Test Report

EUT : **Promethean WIFI Module (Titanium)**
MODEL : **AP-WIFI-BC**
BRAND NAME : **Promethean**
APPLICANT : **Promethean Limited**
Classification Of Test : **N/A**

CVC Testing Technology Co., Ltd.



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Client	Name : Promethean Limited Address : Promethean House, Lower Philips Rd, whitebirk Industrial Estate, Blackburn, Bb1 5th United Kingdom		
Manufacturer	Name : Guangzhou Lango Electronics Technology Co., Ltd. Address : 4/f. NO.136. Gaopu Road. Tianhe District. Guangzhou. 510663. P.R. China		
Equipment Under Test	Name : Promethean WIFI Module (Titanium) Model/Type: AP-WIFI-BC Trade mark : Promethean SerialNO.: N/A Sampe NO.: 3-1		
Date of Receipt	2021.11.08	Date of Testing	2021.11.08 ~ 2021.12.10
Test Specification		Test Result	
FCC Part 2 (Section 2.1091) KDB 447498 D01 IEEE C95.1		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. Issue Date: 2021.12.15		
Tested by: Xu ZhenFei Name Signature	Reviewed by: Liu YongHai Name Signature	Approved by: Chen HuaWen Name Signature	
Other Aspects: NONE.			
Abbreviations: OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			
This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.			



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2021-0032-MPE	Original release	2021.12.15



1. GERTIFICATION

FCC ID	QAM-AP-WIFI-BC
PRODUCT	Promethean WIFI Module (Titanium)
BRAND	Promethean
MODEL	AP-WIFI-BC
ADDITIONAL MODEL	N/A
APPLICANT	Promethean Limited
STANDARDS	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

For trading purposes, the product is available in three different exterior colors

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm



4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Chain 0 Peak Gain (dBi)	Chain 1 Peak Gain (dBi)	Antenna Type
U-NII-2A	4.95	4.95	External Antenna
U-NII-2C	4.95	4.95	External Antenna



6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The measured conducted Average Power

MODE	AVERAGED POWER (DBM)
U-NII-2A	16.46
U-NII-2C	15.92

The tuned conducted Average Power (declared by client)

MODE	FREQUENCY (MHZ)	TARGET POWER (DBM)	TOLERANCE (DBM)	LOWER TOLERANCE (DBM)	UPPER TOLERANCE (DBM)
U-NII-2A	5260 ~ 5320MHz	15	+ -2	13	17
U-NII-2C	5500 ~ 5720MHz	15	+ -2	13	17

FREQUENCY BAND (MHz)	Max power (dBm)	Antenna gain (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
5260 ~ 5320MHz	17	4.95	20	0.031	1
5500 ~ 5720MHz	17	4.95	20	0.031	1

Important

- (1) The test report is valid with the official seal of the laboratory and the signatures of Test engineer, Author and Reviewer simultaneously.
- (2) The test report is invalid if altered.
- (3) Any photocopies or part photocopies in the test report are forbidden without the written permission from the laboratory.
- (4) Objections to the test report must be submitted to the laboratory within 15 days.
- (5) Generally, commission test is responsible for the tested samples only.

Address of the laboratory:

CVC Testing Technology Co., Ltd.

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