





FCC RF Exposure Report

FCC ID : MXF-Q9500WK

Equipment : Wi-Fi AP

Model No. : Q9500WK

Brand Name : Quantum FIBER

Applicant : Gemtek Technology Co., Ltd.

Address : No. 15-1 Zhonghua Road, Hsinchu Industrial

Park, Hukou, Hsinchu, Taiwan, 30352.

Standard : 47 CFR FCC Part 2.1091

Received Date : Jun. 25, 2022

Tested Date : Jun. 28 ~ Jul. 14, 2022

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by: Approved by:

Along Chell // Assistant Manager

Gary Chang / Manager

Report No.: FA263001 Page: 1 of 6



Table of Contents

1	MPE EVALUATION OF MOBILE DEVICES	4
1.1	LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE	
1.2	MPE EVALUATION FORMULA	
1.3	DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE	4
1.4	MEASUREMENT UNCERTAINTY	4
1.5	MPE EVALUATION RESULTS	5
1.6	MPE EVALUATION OF SIMULTANEOUS TRANSMISSION	5
2	TEST LABORATORY INFORMATION	€

Report No.: FA263001

Page : 2 of 6



Release Record

Report No.	Version	Description	Issued Date
FA263001	Rev. 01	Initial issue	Aug. 19, 2022

Report No.: FA263001 Page: 3 of 6



1 MPE EVALUATION OF MOBILE DEVICES

1.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm²)	Averaging Time (minutes)		
300~1500	F/1500	30		
1500~100000	1.0	30		

1.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4*Pi*R^2}$$

Where

Pd= Power density in mW/cm²

Pt= EIRP in mW Pi= 3.1416

R= Measurement distance

1.3 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

1.4 MEASUREMENT UNCERTAINTY

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Parameters	Uncertainty		
Conducted power	±0.808 dB		

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Report No.: FA263001 Page: 4 of 6



1.5 MPE EVALUATION RESULTS

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)	*Ratio	Pass / Fail
Non-beamform	Non-beamforming mode							
2412~2462	27.42	27.5	2.29	20	0.190	1	0.190	Pass
5180~5240	25.52	26.0	2.42	20	0.138	1	0.138	Pass
5745~5825	27.66	28.0	3.22	20	0.263	1	0.263	Pass
2402~2480	9.76	10.0	2.83	20	0.004	1	0.004	Pass
Beamforming mode								
2412~2462	27.35	27.5	2.88	20	0.217	1	0.217	Pass
5180~5240	25.45	25.5	3.17	20	0.146	1	0.146	Pass
5745~5825	27.59	28.0	4.51	20	0.355	1	0.355	Pass

^{*}Ratio = Power density / Limit.

1.6 MPE EVALUATION OF SIMULTANEOUS TRANSMISSION

- Mode 1: WLAN 2.4GHz + WLAN 5GHz Low band + WLAN 5GHz High band
- Mode 2: BT + WLAN 5GHz Low band + WLAN 5GHz High band

Mode	Max Ratio of Each Mode		
Non-beamforming WLAN 2.4GHz	0.190		
Non-beamforming WLAN 5GHz Low	0.138		
Non-beamforming WLAN 5GHz High	0.263		
Beamforming WLAN 2.4GHz	0.217		
Beamforming WLAN 5GHz Low	0.146		
Beamforming WLAN 5GHz High	0.355		
ВТ	0.004		
Non-beamforming Sum - Mode 1	0.591		
Non-beamforming Sum - Mode 2	0.405		
Beamforming Sum - Mode 1	0.718		
Beamforming Sum - Mode 2	0.505		
Limit	1		
Pass / Fail	Pass		

Report No.: FA263001 Page: 5 of 6



2 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou

Tel: 886-2-2601-1640 No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)

Kwei Shan

Tel: 886-3-271-8666
No.3-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)
No.2-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 333, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666 Fax: 886-3-318-0345

Email: ICC_Service@icertifi.com.tw

___END___

Report No.: FA263001 Page: 6 of 6