

FCC RF Exposure Report

FCC ID : 2AAS9-MO10
Equipment : Wi-Fi 6 AX6600 Tri-Radio Outdoor Mesh Router
Model No. : MO10
Brand Name : PRISM
Applicant : Browan Communications Incorporation
Address : No.15-1, Zhonghua Rd., Hsinchu Industrial Park, Hukou Hsinchu Hsien Taiwan 303
Standard : 47 CFR FCC Part 2.1091
Received Date : Oct. 12, 2021
Tested Date : Oct. 15 ~ Nov. 23, 2021

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 may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:



Along Chen / Assistant Manager

Approved by:



Gary Chang / Manager



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Release Record

Report No.	Version	Description	Issued Date
FA1O1201-01	Rev. 01	Initial issue	Dec. 21, 2021

1 MPE EVALUATION OF MOBILE DEVICES

1.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm ²)	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.

1.5 MPE EVALUATION RESULTS

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	*Ratio	Pass / Fail
Non-beamforming mode								
2412~2462 ^{Note1}	28.11	28.5	7.4	31	0.322	1	0.322	Pass
5180~5240 ^{Note1}	16.14	16.5	5.3	31	0.013	1	0.013	Pass
5745~5825 ^{Note1}	28.62	29.0	6.8	31	0.315	1	0.315	Pass
5260~5320	17.15	17.5	5.6	31	0.017	1	0.017	Pass
5500~5700	23.51	24.0	5.7	31	0.077	1	0.077	Pass
Beamforming mode								
2412~2462 ^{Note1}	22.00	22.0	9.56	31	0.119	1	0.119	Pass
5180~5240 ^{Note1}	13.03	13.5	7.82	31	0.011	1	0.011	Pass
5745~5825 ^{Note1}	22.49	22.5	11.76	31	0.221	1	0.221	Pass
5260~5320	14.11	14.5	8.41	31	0.016	1	0.016	Pass
5500~5700	17.49	17.5	11.40	31	0.064	1	0.064	Pass

*Ratio = Power density / Limit.

Note:

1. Test results of these frequency bands are leveraged from original MPE report, report no. FA1O1201.

2.

For 2412-2462 MHz:

Directional gain = $10 \times \log((10^{5.6/20} + 10^{7.4/20})^2 / 2) = 9.56$ dBi.

For 5150~5250MHz:

Directional gain = $10 \times \log((10^{4.3/20} + 10^{5.3/20})^2 / 2) = 7.82$ dBi.

For 5725~5850MHz:

Directional gain = $10 \times \log((10^{4.9/20} + 10^{6.8/20} + 10^{4.8/20} + 10^{6.3/20})^2 / 4) = 11.76$ dBi.

For 5250-5350MHz:

Directional gain = $10 \times \log((10^{5.2/20} + 10^{5.6/20})^2 / 2) = 8.41$ dBi.

For 5470-5725MHz:

Directional gain = $10 \times \log((10^{5.3/20} + 10^{5.1/20} + 10^{5.4/20} + 10^{5.7/20})^2 / 4) = 11.40$ dBi.

1.6 MPE EVALUATION OF SIMULTANEOUS TRANSMISSION

Non-beamforming mode

Mode	Max Ratio of Each Mode
2.4GHz Radio 3	0.322
5GHz Radio 1	0.017
5GHz Radio 2	0.315
Sum	0.654
Limit	1
Pass / Fail	Pass

Beamforming mode

Mode	Max Ratio of Each Mode
2.4GHz Radio 3	0.119
5GHz Radio 1	0.016
5GHz Radio 2	0.221
Sum	0.356
Limit	1
Pass / Fail	Pass

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

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Kwei Shan

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

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