



Test Report No:
2470952R-RFUSV17S-A

RF EXPOSURE EVALUATION DECLARATION

Product Name	Peplink Pepwave Wireless Product
Brand Name	 PEPWAVE
Model No.	B One 5G B-ONE-5GN-T-PRM B One Plus B-ONE-PLUS-LTE-US-T-PRM
FCC ID	U8G-P1AX23
Applicant's Name / Address	PISMO LABS TECHNOLOGY LIMITED A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Hong Kong
Manufacturer's Name	PISMO LABS TECHNOLOGY LIMITED
Test Method Requested, Standard	FCC CFR Title 47 Part 2.1091 Radiofrequency radiation exposure evaluation: mobile devices.
Verdict Summary	IN COMPLIANCE
Documented by April Chen	
Tested by Bill Lin	
Approved by Steven Tsai	
Date of Receipt	2024/07/31
Date of Issue	2024/10/07
Report Version	V1.0

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Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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General Conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	2024/10/07

1. General Information

1.1. EUT Description

Product Name	Peplink Pepwave Wireless Product
Brand Name	 PEPWAVE
Model No.	B One 5G B-ONE-5GN-T-PRM B One Plus B-ONE-PLUS-LTE-US-T-PRM

Note: For more detailed information please refer to report No.: 2470952R-RFUSV01S-A, 2470952R-RFUSV01S-B and 2470952R-RFUSV03S-A.

1.2. Testing Location Information

USA	FCC Designation Number: TW0033
Canada	CAB Identifier Number: TW3023 / Company Number: 26930

Site Description	Accredited by TAF
	Accredited Number: 3023

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
	Linkou Laboratory
Address	No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C.
Performed Location	No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C.
Phone Number	+886-3-275-7255
Fax Number	+886-3-327-8031

2. RF Exposure Evaluation

2.1. Test Limit

(A) Test Limit for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	*(100)	<6
3.0-30	1842/f	4.89/f	*(900/f ²)	<6
30-300	61.4	0.163	1.0	<6
300-1500	-	-	f/300	<6
1500-100,000	-	-	5	<6

(B) Test Limit for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f ²)	<30
30-300	27.5	0.073	0.2	<30
300-1500	-	-	f/1500	<30
1500-100,000	-	-	1.0	<30

Note: f = frequency in MHz; *Plane-wave equivalent power density

Power Density (S) is calculated by the following formula:

$$S = (P \cdot G) / 4\pi R^2$$

where:

S = power density (in appropriate units, e.g. mW/ cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

π = 3.1416

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

2.2. Test Result of RF Exposure Evaluation

Band	E.I.R.P (dBm)	E.I.R.P (mW)	Power Density at R = 20 cm (mW/cm ²)	Limit (mW/cm ²)
Bluetooth LE	10.980	12.531	0.0025	1.000
WiFi 2.4G	29.640	920.450	0.1831	1.000
WiFi 5G U-NII-1	31.420	1386.756	0.2759	1.000
WiFi 5G U-NII-3	29.950	988.553	0.197	1.000
WCDMA Band 2	28.91	778.037	0.155	1.000
WCDMA Band 4	28.87	770.903	0.153	1.000
WCDMA Band 5	27.79	601.174	0.120	0.549
LTE B2/CA_2C	28.91	778.037	0.155	1.000
LTE B4	28.87	770.903	0.153	1.000
LTE B5/CA_5B	27.79	601.174	0.120	0.549
LTE B7/CA_7C	27.43	553.350	0.110	1.000
LTE B12	28.24	666.807	0.133	0.466
LTE B13	28.49	706.318	0.141	0.518
LTE B14	28.49	706.318	0.141	0.525
LTE B17	28.24	666.807	0.133	0.469
LTE B25	28.91	778.037	0.155	1.000
LTE B26(814-824)	27.79	601.174	0.120	0.543
LTE B26(824-849)	27.79	601.174	0.120	0.549
LTE B30	22.76	188.799	0.038	1.000
LTE B38/CA_38C	30.43	1104.079	0.220	1.000
LTE B41/CA_41C	30.64	1158.777	0.231	1.000
LTE B42/42C(3450-3550)	22.22	166.725	0.033	1.000
LTE B43(3700-3800)	22.36	172.187	0.034	1.000
LTE B48/CA_48C	19.47	88.512	0.018	1.000
LTE B66	28.87	770.903	0.153	1.000
LTE B71	28.33	680.769	0.135	0.442
5G NR n2	28.91	778.037	0.155	1.000
5G NR n5	27.79	601.174	0.120	0.549
5G NR n7	27.43	553.350	0.110	1.000
5G NR n12	28.24	666.807	0.133	0.466
5G NR n13	28.49	706.318	0.141	0.518
5G NR n14	28.49	706.318	0.141	0.525
5G NR n25	28.91	778.037	0.155	1.000
5G NR n26(814-824)	27.79	601.174	0.120	0.543

Band	E.I.R.P (dBm)	E.I.R.P (mW)	Power Density at R = 20 cm (mW/cm ²)	Limit (mW/cm ²)
5G NR n26(824-849)	27.79	601.174	0.120	0.549
5G NR n30	22.76	188.799	0.038	1.000
5G NR n38	30.43	1104.079	0.220	1.000
5G NR n41	30.64	1158.777	0.231	1.000
5G NR n48	19.47	88.512	0.018	1.000
5G NR n66	28.87	770.903	0.153	1.000
5G NR n70	28.87	770.903	0.153	1.000
5G NR n71	28.33	680.769	0.135	0.442
5G NR n77	22.47	176.604	0.035	1.000
5G NR n78	22.47	176.604	0.035	1.000

Note: This report is for C2PC and refers to the test data from the original report number:

2360237R-RFUSV17S-A, and the differences from the original test report are as follows:

(1) Adding FTDI components addition.

(2) Added new e-SIM (M/N: MFXS-M006B-MFOCMW).

Co-location
Conclusion: The formula of calculated the MPE is: $CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$ CPD = Calculation power density LPD = Limit of power density WiFi 2.4 GHz function + WiFi 5 GHz function + Bluetooth LE + WWAN module : WCDMA function = $0.183 + 0.276 + 0.002 + 0.218 = 0.679$, therefore the maximum calculations of above situations are less than the "1" limit. WiFi 2.4 GHz function + WiFi 5 GHz function + Bluetooth LE + WWAN module : LTE function = $0.183 + 0.276 + 0.002 + 0.306 = 0.767$, therefore the maximum calculations of above situations are less than the "1" limit. WiFi 2.4 GHz function + WiFi 5 GHz function + Bluetooth LE + WWAN module : 5G NR function = $0.183 + 0.276 + 0.002 + 0.306 = 0.767$, therefore the maximum calculations of above situations are less than the "1" limit.

Results	PASS
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