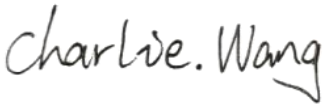
RF MPE Report

Applicant:	NETPRISMA INC.
Address:	1301 6TH AVE, SEATTLE, WA, 98101-2304, UNITED STATES
Product:	LTE Cat 4 module
Model No.:	LUH33-WWD, LUH33-WWA
Brand Name:	Vrileg
FCC ID:	2BEY3LUH33WWDA
Standards:	47 CFR Part 2.1091 FCC KDB 447498 D01 v06
Report No.:	PD20250015-R3B
Issue Date:	2025/02/26
Test Result:	PASS *

* **Testing performed at Hefei Panwin Technology Co., Ltd. on the above equipment indicates the product meets the requirements of the relevant standards.**



Reviewed By: Charlie Wang **Approved By:** Alec Yang

Hefei Panwin Technology Co., Ltd.

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Revision History

Report No.	Version	Description	Issue Date	Note
PD20250015-R3B	01	Initial Report	2025/02/26	Valid

Remark 1:

• The samples tested have been evaluated in accordance with 47 CFR Part 2.1091 and FCC KDB 447498 D01 v06, and have been proven to meet the applicable limit requirements.

Remark 2: Model LUH33-WWD and Model LUH33-WWA both use Qualcomm 9207 chipset, share the same chipset baseline and same hardware. The only differences between the two models are as follows:

Module	LUH33-WWD	LUH33-WWA
With or without Voice	Data only	Data + Voice

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1 General Information

1.1 Notes of the Test Report

This report is invalid without signature of auditor and approver or with any alterations. The report shall not be partially reproduced without written approval of the testing company. Entrusted test results are only responsible for incoming samples. If there is any objection to the testing report, it shall be raised to the testing company within 15 days from the date of receiving the report. In the test results, "NA" means "not applicable", and the test items marked with "Δ" are subcontracted projects.

1.2 Testing Laboratory

Company Name	Hefei Panwin Technology Co., Ltd.
Address	Floor 1, Zone E, Plant 2#, Mingzhu Industrial Park, No.106 Chuangxin Avenue, High-tech Zone, Hefei City, Anhui Province,China
Telephone	+86-0551-63811775
Post Code	230031

2 General Description of Equipment under Test

2.1 Details of Application

Applicant	NETPRISMA INC.
Applicant Address	1301 6TH AVE, SEATTLE, WA, 98101-2304, UNITED STATES
Manufacturer	NETPRISMA INC.
Manufacturer Address	1301 6TH AVE, SEATTLE, WA, 98101-2304, UNITED STATES

2.2 Details of EUT

Product	LTE Cat 4 module
Model	LUH33-WWD, LUH33-WWA
Hardware Version	R1.0
Software Version	LUH33WWDBL0701, LUH33WWABL0701
Antenna Type	☑ External ☐ Integrated
Note: The declared of product specification for EUT and/or Antenna presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.	

3 Test Condition

3.1 Laboratory Environment

Temperature	Min.= 20℃, Max.=30℃
Relative Humidity	Min.= 25%, Max.=75%
Ground System Resistance	< 1 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

4 Maximum Permissible Exposure (MPE)

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Table 1 to § 1.1310(e)(1)—Limits for Maximum Permissible Exposure (MPE)				
Frequency Range (MHz)	**Electric field strength (V/m)**	**Magnetic field strength (A/m)**	**Power density (mW/cm^2)**	**Averaging time (minutes)**
(i) Limits for Occupational/Controlled Exposure				
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
300–1,500	--	--	f/300	<6
1,500–100,000	--	--	5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
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
300–1,500	--	--	f/1500	<30
1,500–100,000	--	--	1.0	<30
f = frequency in MHz. * = Plane-wave equivalent power density.				

The transmitter is using external antennas that operate at 20 cm or more from nearby persons.The maximum permitted level is calculated using the general equation:

$$S = PG/ 4\pi R^2$$

Where:

S = power density (in appropriate units, e.g. Wm^2)

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

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 (appropriate units, e.g., m)

Solve S, the power density at 20 cm is shown in Appendix A, so the limit is kept.

-------- THE END --------

ANNEX A: RF Exposure Evaluation

Maximum Measured Conducted Output Power and Antenna Gain

Band	Burst Turn up Power(dBm)	Division Factors (dB)	Time-Averaged Tune up Power (dBm)
GSM850	35.00	-9.03	25.97
GSM1900	32.00	-9.03	22.97
Remark: To average the power, the division factor is as follows, 1Txslot = 1 transmit time slot out of 8 time slots => conducted power divided by (1/8) => -9.03 dB			

Band	TX Freq. (MHz)	Maximum conducted output power (dBm)	Maximum Antenna Gain (dBi)
GSM 850	824 to 849	25.97	2.13
GSM 1900	1850 to 1910	22.97	1.59
WCDMA Band II	1850 to 1910	25.00	1.59
WCDMA Band IV	1710 to 1755	25.00	2.00
WCDMA Band V	824 to 849	25.00	2.13
LTE Band 2	1850 to 1910	25.00	1.59
LTE Band 4	1710 to 1755	25.00	2.00
LTE Band 5	824 to 849	25.00	2.13
LTE Band 7	2500 to 2570	25.00	3.00
LTE Band 12	699 to 716	25.00	3.26
LTE Band 13	777 to 787	25.00	4.45
LTE Band 25	1850 to 1915	25.00	1.59
LTE Band 26	814 to 849	25.00	2.53
LTE Band 38	2570 to 2620	25.00	2.06
LTE Band 41	2496 to 2690	25.00	3.00
LTE Band 66	1710 to 1780	25.00	2.00

Test Results of Maximum Permissible Exposure

Band	Frequency (MHz)	Maximum Power (dBm)	Antenna Gain (dBi)	FCC ERP/EIRP Limit(W)	FCC MPE Result (mW/cm^2)	MPE Limit (mW/cm^2)	Ant Gain to Meet FCC MPE limit (dBi)	Ant Gain to Meet FCC ERP/EIRP limit (dBi)	Max Gain Allowed (dBi)
GSM 850	824.0	25.97	2.13	7.000	0.1284	0.5493	8.4	12.5	8.4
GSM 1900	1850.0	22.97	1.59	2.000	0.0568	1.0000	14.0	10.0	10.0
WCDMA Band II	1850.0	25.00	1.59	2.000	0.0907	1.0000	12.0	8.0	8.0
WCDMA Band IV	1710.0	25.00	2.00	1.000	0.0997	1.0000	12.0	5.0	5.0
WCDMA Band V	824.0	25.00	2.13	7.000	0.1027	0.5493	9.4	13.5	9.4
LTE Band 2	1850.0	25.00	1.59	2.000	0.0907	1.0000	12.0	8.0	8.0
LTE Band 4	1710.0	25.00	2.00	1.000	0.0997	1.0000	12.0	5.0	5.0
LTE Band 5	824.0	25.00	2.13	7.000	0.1027	0.5493	9.4	13.5	9.4
LTE Band 7	2500.0	25.00	3.00	2.000	0.1255	1.0000	12.0	8.0	8.0
LTE Band 12	699.0	25.00	3.26	3.000	0.1333	0.4660	8.7	9.8	8.7
LTE Band 13	777.0	25.00	4.45	3.000	0.1753	0.5180	9.2	9.8	9.2
LTE Band 25	1850.0	25.00	1.59	2.000	0.0907	1.0000	12.0	8.0	8.0
LTE Band 26	814.0	25.00	2.53	7.000	0.1126	0.5427	9.4	13.5	9.4
LTE Band 38	2570.0	25.00	2.06	2.000	0.1011	1.0000	12.0	8.0	8.0
LTE Band 41	2496.0	25.00	3.00	2.000	0.1255	1.0000	12.0	8.0	8.0
LTE Band 66	1710.0	25.00	2.00	1.000	0.0997	1.0000	12.0	5.0	5.0

Note 1: For mobile or fixed location transmitters, minimum separation distance is 20cm, even if calculations indicate EMF distance is less.

Note 2: For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band.

Note 3: Chose the maximum RF output tune up power of all antennas among same frequency WWAN bands and the maximum antenna gain to perform MPE calculation conservatively.

ANNEX B: The EUT Appearance

The EUT Appearance (internal and external photographs) are submitted separately.