

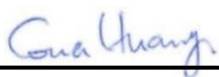
RF EXPOSURE EVALUATION REPORT

FCC ID : U8G-P1AX11
Equipment : PEPWAVE / peplink Wireless Product
Brand Name : PEPWAVE / peplink
Model Name : MAX Transit Pro
MAX Transit Pro LTEA
MAX-TST-PRO-DUO-LTEA-US-T-PRM
MAX-TST-PRO-DUO-LTEA-R-T-PRM
Applicant : PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building, Phase 6,
481 Castle Peak Road, Cheung Sha Wan, Hong Kong
Manufacturer : PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building, Phase 6,
481 Castle Peak Road, Cheung Sha Wan, Hong Kong
Standard : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full



Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date
FA211326	Rev. 01	Initial issue of report	Jun. 24, 2022

**1. Description of Equipment Under Test (EUT)**

Product Feature & Specification	
EUT Type	PEPWAVE / peplink Wireless Product
Brand Name	PEPWAVE / peplink
Model Name	MAX Transit Pro MAX Transit Pro LTEA MAX-TST-PRO-DUO-LTEA-US-T-PRM MAX-TST-PRO-DUO-LTEA-R-T-PRM
FCC ID	U8G-P1AX11
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.8GHz Band: 5725 MHz ~ 5855 MHz
Mode	WLAN: 802.11a/b/g/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/HE20/HE40/HE80
EUT Stage	Identical Prototype
Remark:	
1. The either one WWAN will intergrate into this host, the WWAN information as follow, Sim-Tx ananlys with WWAN as section 4.	
2. When the device operated in AP mode and client mode, that the deivce support different output power, in this report the maximum output power between AP mode and Client mode is used as a conservative assessment.	

Integrated WWAN Module 1	
EUT Type	Radio Module
Brand Name	Sierra
Model Name	EM7411
FCC ID	N7NEM74B
Wireless Technology and Frequency Range	WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3400 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3800 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz
Mode	HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink) LTE: QPSK, 16QAM, 64QAM
Integrated WWAN Module 2	
EUT Type	Radio Module
Brand Name	Sierra
Model Name	EM7511
FCC ID	N7NEM75S
Wireless Technology and Frequency Range	WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz
Mode	RMC 12.2Kbps HSDPA HSUPA LTE: QPSK, 16QAM

Reviewed by: Jason Wang**Report Producer: Carlie Tsai**

2. Maximum RF average output power among production units

<EM7411>

Mode		Maximum Transmit Power Level (dBm)
		Default
WCDMA	Band II	24.00
	Band IV	24.00
	Band V	24.30
LTE	Band 7	23.80
	Band 12	24.00
	Band 13	24.00
	Band 14	24.00
	Band 25	24.00
	Band 26	24.00
	Band 41	23.80
	Band 42	23.80
	Band 43	23.80
	Band 48	23.80
	Band 66	24.00
	Band 71	24.00

<EM7511>

Mode		Maximum Transmit Power Level (dBm)
		Default
WCDMA	Band II	24.00
	Band IV	24.00
	Band V	24.00
LTE	Band 7	23.80
	Band 12	24.00
	Band 13	24.00
	Band 14	24.00
	Band 26	24.00
	Band 30	23.00
	Band 41	23.80
	Band 48	23.00
	Band 66	24.00

<WLAN>

WLAN	Mode	Frequency (MHz)	Ant 1+2 Maximum output power
	WLAN 2.4G	2412~2462	23.96
	WLAN 5.2G	5180~5240	23.51
	WLAN 5.8G	5745~5825	22.04

3. RF Exposure Limit Introduction

According to Part1.1307b, Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by:

$$P_{th} \text{ (mW)} = ERP_{20cm} (d / 20)^x \text{ for distance } d \leq 20cm$$

$$P_{th} \text{ (mW)} = ERP_{20cm} \text{ for distance } 20cm < d \leq 40cm$$

$$x = -\log_{10} \left(\frac{60}{ERP_{20cm} \sqrt{f}} \right)$$

ERP _{20cm} (mW)	0.3 GHz ≤ f < 1.5 GHz:	2040 f
	1.5 GHz ≤ f ≤ 6 GHz:	3060

4. Radio Frequency Radiation Exposure Evaluation

4.1. RF Exposure evaluation

<EM7411>

Band	Antenna Gain (dBi)	Maximum Conducted Power (dBm)	Maximum EIRP (dBm)	Maximum ERP (dBm)	Maximum EIRP (mW)	Maximum ERP (mW)	P _{th}	P _{th} (mW)	Part1.1307 option(b) Threshold (mW)	Part1.1307 option(b) P/Pth
WCDMA Band 2	2.12	24.00	26.12	23.97	409.26	249.46	24.00	251.19	3060.000	0.082
WCDMA Band 4	1.84	24.00	25.84	23.69	383.71	233.88	24.00	251.19	3060.000	0.082
WCDMA Band 5	-1.70	24.30	22.60	20.45	181.97	110.92	24.30	269.15	1680.960	0.160
LTE Band 7	2.95	23.80	26.75	24.60	473.15	288.40	24.60	288.40	3060.000	0.094
LTE Band 12	-1.91	24.00	22.09	19.94	161.81	98.63	24.00	251.19	1425.960	0.176
LTE Band 13	-1.70	24.00	22.30	20.15	169.82	103.51	24.00	251.19	1585.080	0.158
LTE Band 14	-1.70	24.00	22.30	20.15	169.82	103.51	24.00	251.19	1607.520	0.156
LTE Band 25	2.12	24.00	26.12	23.97	409.26	249.46	24.00	251.19	3060.000	0.082
LTE Band 26	-1.70	24.00	22.30	20.15	169.82	103.51	24.00	251.19	1660.560	0.151
LTE Band 41	3.01	23.80	26.81	24.66	479.73	292.42	24.66	292.42	3060.000	0.096
LTE Band 42	1.58	23.80	25.38	23.23	345.14	210.38	23.80	239.88	3060.000	0.078
LTE Band 43	1.51	23.80	25.31	23.16	339.63	207.01	23.80	239.88	3060.000	0.078
LTE Band 48	1.51	23.80	25.31	23.16	339.63	207.01	23.80	239.88	3060.000	0.078
LTE Band 66	1.84	24.00	25.84	23.69	383.71	233.88	24.00	251.19	3060.000	0.082
LTE Band 71	-1.53	24.00	22.47	20.32	176.60	107.65	24.00	251.19	1352.520	0.186

<EM7511>

Band	Antenna Gain (dBi)	Maximum Conducted Power (dBm)	Maximum EIRP (dBm)	Maximum ERP (dBm)	Maximum EIRP (mW)	Maximum ERP (mW)	P _{th}	P _{th} (mW)	Part1.1307 option(b) Threshold (mW)	Part1.1307 option(b) P/Pth
WCDMA Band 2	2.12	24.00	26.12	23.97	409.26	249.46	24.00	251.19	3060.000	0.082
WCDMA Band 4	1.84	24.00	25.84	23.69	383.71	233.88	24.00	251.19	3060.000	0.082
WCDMA Band 5	-1.70	24.00	22.30	20.15	169.82	103.51	24.00	251.19	1680.960	0.149
LTE Band 7	2.95	23.80	26.75	24.60	473.15	288.40	24.60	288.40	3060.000	0.094
LTE Band 12	-1.91	24.00	22.09	19.94	161.81	98.63	24.00	251.19	1425.960	0.176
LTE Band 13	-1.70	24.00	22.30	20.15	169.82	103.51	24.00	251.19	1585.080	0.158
LTE Band 14	-1.70	24.00	22.30	20.15	169.82	103.51	24.00	251.19	1607.520	0.156
LTE Band 26	-1.70	24.00	22.30	20.15	169.82	103.51	24.00	251.19	1660.560	0.151
LTE Band 30	0.27	23.00	23.27	21.12	212.32	129.42	23.00	199.53	3060.000	0.065
LTE Band 41	3.01	23.80	26.81	24.66	479.73	292.42	24.66	292.42	3060.000	0.096
LTE Band 48	1.51	23.00	24.51	22.36	282.49	172.19	23.00	199.53	3060.000	0.065
LTE Band 66	1.84	24.00	25.84	23.69	383.71	233.88	24.00	251.19	3060.000	0.082

<WLAN>

Band	Antenna Gain (dBi)	Maximum Conducted Power (dBm)	Maximum EIRP (dBm)	Maximum ERP (dBm)	Maximum EIRP (mW)	Maximum ERP (mW)	P _{th}	P _{th} (mW)	Part1.1307 option(b) Threshold (mW)	Part1.1307 option(b) P/Pth
WLAN2.4GHz Band	2.44	23.96	26.40	24.25	436.52	266.07	24.25	266.07	3060.000	0.087
WLAN5GHz Band	4.73	23.51	28.24	26.09	666.81	406.44	26.09	406.44	3060.000	0.133

**4.2. Sim-Tx analysis****<EM7411 + WLAN>**

WWAN (EM7411) P/Pth Ratio	WWAN (EM7411) P/Pth Ratio	WLAN P/Pth Ratio	Σ (P/Pth Ratio)
0.186	0.186	0.133	0.505

Note:

1. According part1.1307b, the P/Pth Ratio is using for Sim-Tx analysis, above table was showing WWAN transmitting with WLAN and the summation ratio is smaller than 1.

<EM7511 + WLAN>

WWAN (EM7511) P/Pth Ratio	WWAN (EM7511) P/Pth Ratio	WLAN P/Pth Ratio	Σ (P/Pth Ratio)
0.176	0.176	0.133	0.485

Note:

1. According part1.1307b, the P/Pth Ratio is using for Sim-Tx analysis, above table was showing WWAN transmitting with WLAN and the summation ratio is smaller than 1.

Conclusion:

According to 47 CFR §1.1307, the RF exposure analysis concludes that the RF Exposure is FCC compliant.