RF Exposure Evaluation Report

Report No.:	JYTSZ-R12-2400255
Applicant:	PEEQ LLC
Address of Applicant:	215 S Broadway Unit 253 Salem, NH 03079, USA
Equipment Under Test (EUT)	
Product Name:	GPS tracker
Model No.:	POM1
Trade mark:	N/A
FCC ID:	2BE9Z-POM1
Applicable standards:	FCC CFR Title 47 Part 2 (§2.1091)
Date of sample receipt:	12 Mar., 2024
Date of Test:	13 Mar., to 25 Mar., 2024
Date of report issue:	26 Mar., 2024
Test Result:	PASS

Project by:	Project Engineer	***Date:***	*26 Mar., 2024*
Reviewed by:	Senior Engineer	***Date:***	*26 Mar., 2024*
Approved by:	Manager	***Date:***	*26 Mar., 2024*

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

1 Version

Version No.	Date	Description
00	*26 Mar., 2024*	*Original*

2 Contents

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3 General Information

3.1 Client Information

Applicant:	PEEQ LLC
Address:	215 S Broadway Unit 253 Salem, NH 03079, USA
Manufacturer:	PEEQ LLC
Address:	215 S Broadway Unit 253 Salem, NH 03079, USA
Factory:	KONKA Smart Technology Co.,Ltd.
Address:	No.12, West Section of Gangyuan Road, Guoxing Avenue, Lingang Economic Development ZoneYibin, Sicuan, P.R.CHINA

3.2 General Description of E.U.T.

Product Name:	GPS tracker
Model No.:	POM1
Operation Frequency:	GSM850: 824.2 MHz - 848.8 MHz PCS1900: 1850.2 MHz - 1909.8 MHz LTE band 2: 1850 MHz - 1910 MHz LTE band 4: 1710 MHz - 1755 MHz LTE band 5: 824 MHz - 849 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 66: 1710 MHz - 1780 MHz LTE band 85: 698 MHz - 716 MHz
Modulation technology:	QPSK, 16QAM
Antenna Type:	Internal Antenna
Antenna gain:	GSM 850: -0.2 dBi; PCS1900: 0.8 dBi
	LTE band 2: 0.8 dBi; LTE band 4: 1.52 dBi; LTE band 5: -0.2 dBi
	LTE band 12: -3.11 dBi; LTE band 13: -0.28 dBi; LTE band 14: -0.28 dBi
	LTE band 25: 0.8dBi; LTE band 26: -0.2 dBi; LTE band 66: 1.52 dBi
	LTE band 85:-3.11 dBi
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

3.3 Operating Modes

Operating mode	Detail description
GSM mode	Keep the EUT in continuously transmitting in GSM850/ PCS1900 mode
LTE mode	Keep the EUT in continuously transmitting in LTE Band2/4/5/12/13/14/25/26/66/85 mode

3.4 Additions to, deviations, or exclusions from the method

No

3.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

3.6 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.
Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info-JYTee@lets.com, Website: http://jyt.lets.com

4 Technical Requirements Specification

4.1 Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
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) 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
300–1500			f/1500	30
1500–100,000			1.0	30

4.2 Test Procedure

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

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

R = distance to the centre of radiation of the antenna

4.3 Result

Band	Maximum Output power (dBm)	Maximum Output power (mW)	Antenna Gain (dBi)	Antenna Gain (numeric)	Distance (cm)	Result (mW/cm^2)	Limits for General Population/ Uncontrolled Exposure (mW/cm^2)
GSM							
GSM850	25.97	395.3666	-0.2	0.95	20.00	0.075	0.55
PCS1900	22.97	198.1527	0.8	1.20	20.00	0.047	1.0
LTE							
Band 2	22.0	158.4893	0.8	1.20	20.00	0.038	1.0
Band 4	22.0	158.4893	1.52	1.42	20.00	0.045	1.0
Band 5	22.0	158.4893	-0.2	0.95	20.00	0.030	0.55
Band 12	22.0	158.4893	-3.11	0.49	20.00	0.015	0.47
Band 13	22.0	158.4893	-0.28	0.94	20.00	0.030	0.52
Band 14	22.0	158.4893	-0.28	0.94	20.00	0.030	
Band 25	22.0	158.4893	0.8	1.20	20.00	0.038	1.0
Band 26(Part 22H)	22.0	158.4893	-0.2	0.95	20.00	0.030	0.54
Band 26(Part 90S)	22.0	158.4893	-0.2	0.95	20.00	0.030	0.54
Band 66	22.0	158.4893	1.52	1.42	20.00	0.045	1.0
Band 85	22.0	158.4893	-3.11	0.49	20.00	0.015	0.47

1. Note: Just the worst case mode was shown in report.
2. The GSM and LTE maximum output power reference report: R1907A0446-R1V1, R1907A0446-R2, R1907A0446-R2 & R1907A0446-R1V1 & R1907A0446-R3V1 & R1907A0446-R7 & R1907A0446-R8 & R1907A0446-R11, FCC ID: XMR201910BG95M3, which is issued by TA Technology (Shanghai) Co., Ltd.

4.4 Conclusion

The device is exempt from the SAR test and satisfies RF exposure evaluation.

------End of report------