



RF Exposure Evaluation Declaration

Report No.: S20250915537903

Issue Date: 2025-12-03

Applicant: Queclink Wireless Solutions Co., Ltd.
Address: No.30, Lane 500, Xinlong Road, Minhang District, Shanghai,
China, 201101
FCC ID: YQD-GL33CG
Application Type: Certification
Product: GPS Tracker
Model No.: GL33CG
Trade Mark: Queclink
FCC Rule Part(s): CFR 47, FCC Part 2.1091 Radio frequency radiation exposure
evaluation: mobile devices.
Item Receipt date: Sep. 22, 2025
Test Date: Sep. 25 ~ Nov. 17, 2025



扫一扫验真伪

Compiled By

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(Stone Zhang)

Senior Test Engineer

Approved By

Line Chen

(Line Chen)

Engineer Manager



The test results relate only to the samples tested.

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 KDB 558074 D01. Test results reported herein relate only to the item(s) tested.

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The test report must not be used by the client to claim product certifications, approval, or endorsement by NVLAP, NIST or any agency of U.S. Government.

Revision History

Report No.	Version	Description	Issue Date
S20250915537903	Rev. 01	/	2025-12-03

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§2.1033 General Information

Applicant:	Queclink Wireless Solutions Co., Ltd.
Applicant Address:	No.30, Lane 500, Xinlong Road, Minhang District, Shanghai, China, 201101
Manufacturer:	Queclink Wireless Solutions Co., Ltd.
Manufacturer Address:	No.30, Lane 500, Xinlong Road, Minhang District, Shanghai, China, 201101
Factory:	Queclink Wireless Solutions Co., Ltd.
Factory Address:	No.30, Lane 500, Xinlong Road, Minhang District, Shanghai, China, 201101
Test Site:	Fanguang Inspection & Testing Co., Ltd.
LAB ID:	CN5037
LAB registration number:	600222-0
Test Site Address:	No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China
FCC Rule Part(s):	FCC Part 2.1091
FCC ID:	YQD-GL33CG
Test Device Serial No.:	S/N.: / ☐ Production ☒ Pre-Production ☐ Engineering

1. Product Information

1.1. Equipment Description

Product Name:	GPS Tracker
Test Model:	GV850CNA
Trade Mark:	Queclink
Input Voltage Range:	DC 3.7V
Software Version:	1.03
Hardware Version:	GL33CGR01A03V14M128
EUT sample number:	S202509155379-1-1 (Radiated) S202509155379-1-2 (Conducted)

Note: This information is provided by the Customer and its authenticity is the responsibility of the Customer.

1.2. Product Specification Subjective to this Report

Operating Frequency	433.0 ~ 434.9MHz GPRS/EGPRS 850: 824-849 MHz (TX), 869-894 MHz (RX) GPRS/EGPRS 1900: 1850-1910 MHz (TX), 1930-1990MHz (RX) LTE Band 2: 1850-1910 MHz (TX), 1930-1990MHz (RX) LTE Band 4: 1710-1755 MHz (TX), 2110-2155MHz (RX) LTE Band 5: 824-849 MHz (TX), 869-894 MHz (RX) LTE Band 7: 2500-2570 MHz (TX), 2620-2690 MHz (RX)
Number of Channels	433.0 ~ 434.9MHz: 20
Channel Spacing	433.0 ~ 434.9MHz: 100kHz GPRS/EGPRS 850: 200kHz GPRS/EGPRS 1900: 200kHz Band 2: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz Band 4: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz Band 7: 5MHz, 10MHz, 15MHz, 20MHz
Type of modulation	433.0 ~ 434.9MHz: ASK GPRS/EGPRS: GMSK, 8PSK; LTE: QPSK, 16QAM
Antenna Type:	433.0 ~ 434.9MHz: PCB Antenna GPRS/EGPRS: PIFA Antenna LTE: PIFA Antenna
Antenna Gain:	433.0 ~ 434.9MHz: -6.16dBi GPRS/EGPRS/LTE:

	700 ~ 960 MHz 1.32dBi
	1710 ~ 2690 MHz 1.69dBi

Note: The maximum Antenna Gain was declared by the manufacturer.

2. RF Exposure Evaluation

2.1. Limits

According to FCC 1.1310: 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)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

r = distance between observation point and center of the radiator in cm

P_d is the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

For simultaneous transmission exposure cases, calculation formula is:

$$\sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

2.2. Calculation Method

Temperature:	24.6 °C
Relative Humidity:	51 %
ATM Pressure:	101.5 kPa
Test Data:	2025-10-30
Test Engineer:	Stone Zhang

Product	GPS Tracker
Test Item	RF Exposure Evaluation

Mode	Frequency (MHz)	Maximum Conducted Output Power (dBm)	Antenna Gain (dBi)	PG		MPE (mW/cm ²)	MPE Limits (mW/cm ²)
				(dBm)	(mW)		
433.0 ~ 434.9MHz	434.0	-15.92	-6.16	-24.33	0.0036	0.00001	0.29
GPRS 850	824-849	33.39	1.32	32.56	1803.02	0.3587	0.55
GPRS 1900	1850-1910	29.05	1.69	30.74	1185.77	0.2359	1.00
LTE Band 2	1850-1910	26.01	1.69	27.70	588.84	0.1171	1.00
LTE Band 4	1710-1755	25.75	1.69	27.44	554.63	0.1103	1.00
LTE Band 5	824-849	26.24	1.32	25.41	347.54	0.0691	0.55
LTE Band 7	2500-2570	23.95	1.69	25.64	366.44	0.0729	1.00

Remark: 1. MPE use distance is 20cm from manufacturer declaration of user manual.

Remark: 2. Use the maximum gain of all bands when evaluating.

Remark: 3. $E [dB\mu V/m] = EIRP [dBm] + 95.2$, for $d = 3$ m. $G_T (dBd) = G_T (dBi) - 2.15$ dB

Remark: 4. For simultaneous transmission is 33.0 ~ 434.9MHz and GPRS 850 (worst case).

$$\sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} = 0.00003 + 0.2359 = 0.23593 < 1.$$

CONCLUSION:

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

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No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China

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