

FCC RF EXPOSURE REPORT

FCC ID: 2A33X-QYXPRO

Project No. : 2409C081
System Name : QYX Pro
Brand Name : Qianxun SI
System Model Name : QYX Pro
Equipment : Automated Steering System
Test Model : QYX Pro receiver
Series Model : N/A
Applicant : Qianxun Spatial Intelligence(Zhejiang) Inc.
Address : No.1,Building12,Area C,Deqing Geographic Info Town,Wuyang Street,Deqing County,Huzhou City,Zhejiang Province,China
Manufacturer : Qianxun Spatial Intelligence(Zhejiang) Inc.
Address : No.1,Building12,Area C,Deqing Geographic Info Town,Wuyang Street,Deqing County,Huzhou City,Zhejiang Province,China
Date of Receipt : Sep. 24, 2024
Date of Test : Sep. 25, 2024 ~ Nov. 09, 2024
Issued Date : Dec. 10, 2024
Report Version : R01
Test Sample : Engineering Sample No.: DG2024092420
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091 & KDB 447498 D01 v06

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Prepared by

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2409C081	R00	Original Report.	Dec. 02, 2024	Invalid
BTL-FCCP-2-2409C081	R01	Modified the comments.	Dec. 10, 2024	Valid

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

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

2. ANTENNA SPECIFICATION

For 2.4GHz:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	Shanghai Saintenna Wireless Technology Co., Ltd.	QX-A960	PIFA	N/A	2

For WCDMA/LTE:

Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	Note
Shanghai Saintenna Wireless Technology Co., Ltd.	QX-A960	PIFA	N/A	2	LTE Band 2
					LTE Band 5
					LTE Band 4
					LTE Band 7
					LTE Band 12
					LTE Band 13
					LTE Band 25
					LTE Band 26 (824-849MHz)
					LTE Band 38
					LTE Band 41 (2496-2690MHz)
					LTE Band 41 (2555-2655 MHz)
					LTE Band 66

Note: The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Tune up Power (dBm)	Max. Tune up Power (dBm)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2	1.5849	27	501.1872	0.15811	1	Complies

For LTE:

Band	Frequency (MHz)	Max. Tune up Power (dBm)	Antenna Gain (dBi)	Antenna Gain (linear)	Output Power to Antenna	Power Density (mW/cm ²)	Power Density Limit (mW/cm ²)	Test Result
Band 2	1850.7	27	2	1.5849	794.33	0.1580	1.0000	Complies
Band 4	1710.7	27	2	1.5849	794.33	0.1580	1.0000	Complies
Band 5	824.7	27	2	1.5849	794.33	0.1581	0.5498	Complies
Band 7	2502.5	27	2	1.5849	794.33	0.1580	1.0000	Complies
Band 12	699.7	27	2	1.5849	794.33	0.1581	0.4665	Complies
Band 13	779.5	27	2	1.5849	794.33	0.1580	0.5197	Complies
Band 25	1850.7	27	2	1.5849	794.33	0.1580	1.0000	Complies
Band 26 (824-849 MHz)	824.7	27	2	1.5849	794.33	0.1581	0.5498	Complies
Band 38	2572.5	27	2	1.5849	794.33	0.1580	1.0000	Complies
Band 41 (2496-2690 MHz)	2498.5	27	2	1.5849	794.33	0.1580	1.0000	Complies
Band 41 (2555-2655 MHz)	2557.5	27	2	1.5849	794.33	0.1580	1.0000	Complies
Band 66	1710.7	27	2	1.5849	794.33	0.1580	1.0000	Complies

For the max simultaneous transmission MPE:

Ratio		Total	Limit of Ratio	Test Result
2.4GHz	LTE			
0.15811	0.3389	0.4970	1	Complies

Note:

- (1) Ratio=Power Density (S_{inc})(W/m²)/Limit of Power Density (S_{inc})(W/m²)
- (2) The evaluated distance is 20cm

End of Test Report