



Report No.: PTC22062705902E-FC03

FCC TEST REPORT

FCC ID: 2A8KS-GS1

Product	:	Indoor Garden
Model Name	:	GS1 Max, GS1 Plus, GS1 Basic
Brand	:	N/A
Report No.	:	PTC22062705902E-FC03
Prepared for		
Justsmart Innovation Inc.		
6545 Market Ave. North, STE 100, North Canton , OH 44721		
Prepared by		
Precise Testing & Certification Co., Ltd.		
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China.		



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TEST RESULT CERTIFICATION

Applicant's name : Justsmart Innovation Inc.

Address : 6545 Market Ave. North, STE 100, North Canton , OH 44721

Manufacture's name : KENNEDE ELECTRONICS MFG CO.,LTD.

Address : No.21 Jintong Road,Tangxia Town,Pengjiang District,Jiangmen City,Guangdong Province,China.

Product name : Indoor Garden

Model name : GS1 Max, GS1 Plus, GS1 Basic

Test procedure : FCC CFR47 Part 1.1307(b)(1)

Test Date : Aug. 01, 2022 to Aug. 29, 2022

Date of Issue : Sep. 19, 2022

Test Result : PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink that reads "Simon Pu".

Simon Pu / Engineer

Technical Manager:

A handwritten signature in black ink that appears to read "Ronnie Liu".

Ronnie Liu / Manager



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2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	15.247 (i)	PASS
Remark:		
N/A: Not Applicable		



3 General Information

3.1 General Description of E.U.T.

Product Name	:	Indoor Garden
Model Name	:	GS1 Max, GS1 Plus, GS1 Basic
Specification	:	802.11b/g/n HT20
Operation Frequency	:	2412-2462MHz for 802.11b/g/ n(HT20) 2402-2480MHz
Number of Channel	:	11 channels for 802.11b/g/ n(HT20) 40 channels For DTS
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
Antenna installation	:	PCB antenna
Antenna Gain	:	2.5 dBi
Power supply	:	Adapter: DZ072ADL240300F Input: 100-240V~50/60Hz 1.5A Output: DC 24.0V=3.0A 72W
Hardware Version	:	V1.0.0
Software Version	:	V2.5.2



4 RF Exposure

Test Requirement : 15.247 (i)

Evaluation Method : FCC Part 2.1091

4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	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

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density



4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$P_d = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm ²)	Limit of Power Density (mW/cm ²)	Result
2412(802.11b)	1.79	20.54	20.54 ± 1	142.560759	0.050767	1	PASS
2402(BLE)	1.79	-0.84	-0.84 ± 1	1.037528	0.000369	1	PASS

*****THE END REPORT*****