MPE TEST REPORT

Applicant	:	SKYTECH USA LLC.
Address of Applicant	:	INCORP SERVICES, INC. 3458 LAKESHORE DRIVE TALLAHASSEE, FL 32312 US
Product Name	:	ALL IN ONE
Brand Name	:	STGsivir & STGSivir
Model Name	:	SIV0223
Sample Acquisition Method	:	Sent by Client
Sample No.	:	E23100101-02#01
FCC ID	:	2BGCASIV0223
Standard	:	FCC Part 2.1091
Date of Receipt	:	2023-11-03
Date of Test	:	2023-11-17~ 2024-06-27
Date of Issue	:	2024-06-28

Remark:

This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

Prepared by: Erik. Yang (Erik Yang) Reviewed by: Jennifer zhou (Jennifer Zhou) Approved by: Echo Mu (Authorized signatory: Echo Mu)

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Contents

1 General Information

1.1 Testing Laboratory

Company Name	ICAS Testing Technology Service (Shanghai) Co., Ltd.
Address	No.1298, Pingan Road, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

1.2 Environmental conditions

Temperature (°C)	18-25
Humidity (%RH)	40-65
Barometric Pressure (mbar)	960-1060
Ambient noise & Reflection（W/kg）	< 0.012

1.3 Details of Application

Applicant Company Name	SKYTECH USA LLC.
Address	INCORP SERVICES, INC. 3458 LAKESHORE DRIVE TALLAHASSEE, FL 32312 US
Contact Person	yan.shi
Telephone	001-647-8892-868
Email	yan.shi@astsys.com
Manufacturer Company Name	SKYTECH USA LLC.
Address	INCORP SERVICES, INC. 3458 LAKESHORE DRIVE TALLAHASSEE, FL 32312 US
Factory Company Name	SKYTECH USA LLC.
Address	INCORP SERVICES, INC. 3458 LAKESHORE DRIVE TALLAHASSEE, FL 32312 US

1.4 Details of EUT

Product Name	ALL IN ONE	
Brand Name	STGsivir & STGSivir	
Test Model Name	SIV0223	
FCC ID	2BGCASIV0223	
Mode of Operation	WLAN 802.11b/g/n(HT20/40) for 2.4GHz WLAN 802.11a/n(HT20/HT40)/ac(VHT20/VHT40/VHT80) for 5GHz Bluetooth dual mode	
Frequency Range	Band	Frequency (MHz)
	802.11b/g/n(HT20/HT40)	2400~2483.5

	802.11a/n(20M/40M)/ac(20M/40M/80M)	5150~5250
		5725~5850
	Bluetooth	2400~2483.5
Modulation Type	DSSS/OFDM for WLAN 2.4GHz and OFDM for WLAN 5GHz GFSK/8DPSK/Π/4DQPSK for Bluetooth	
Antenna Type	Internal Antenna	
Antenna Gain	WLAN 2.4GHz: 1.97dBi WLAN 5GHz: 2.45dBi Bluetooth: 1.97dBi	
Hardware version	1.2	
Software version	2024.10.139.200_Drv_3.00.0044.L	

2 Maximum Permissible Exposure (MPE)

2.1 Limits

According to FCC Part 1.1307, systems operating under the provisions of this section shall be operated in a manner the ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidelines.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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 Exposure				
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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			1.0	30

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

2.2 Assessment methods

Calculation Formula from FCC OET 65:

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

Where:

S = Power Density (mW/cm2)

P = Input Power of the Antenna (mW)

G = Antenna Gain Relative to an Isotropic Antenna

R = Distance from the Antenna to the Point of Investigation (cm)

2.3 Test Result

Operation Mode	Frequency Range (MHz)	Max Conducted Power (dBm)	Antenna Gain (dBi)	Max EIRP (mW)	Power Density at R = 20 cm (mW/cm^2)	Limit (mW/cm^2)
WLAN 2.4GHz	2400~2483.5	13.15	1.97	32.508730	0.006467	1.0
BR/EDR	2400~2483.5	10.42	1.97	17.338040	0.003449	1.0
BLE	2400~2483.5	7.66	1.97	9.183326	0.001827	1.0
WLAN 5GHz	5150~5250	12.73	2.45	32.960971	0.006557	1.0
	5725~5850	13.55		39.810717	0.007920	1.0

Note(s):

1. For 300 – 1,500MHz: Power Density limit is f/1500 mW/cm2
2. For 1,500 – 100,000MHz: Power Density limit is 1.0 mW/cm^2
3. The device can not transmit with WIFI and BT simultaneously, In addition, the chain interface of 2.4Gwifi and 5Gwifi cannot be transmitted simultaneously, so MPE is not evaluated in this configuration.

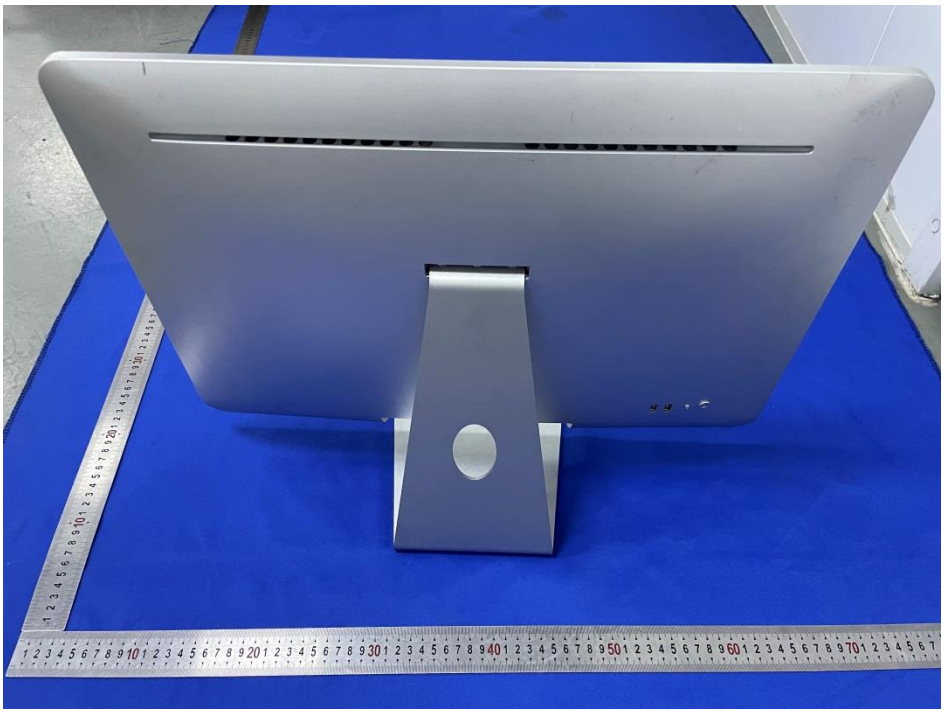
2.4 Conclusion

The Power Density at the position which is 20 cm far from the EUT is smaller than the General Population/Uncontrolled Exposure limit.

3 Appendixes

3.1 Sample Photograph

Front of the sample



Rear of the sample

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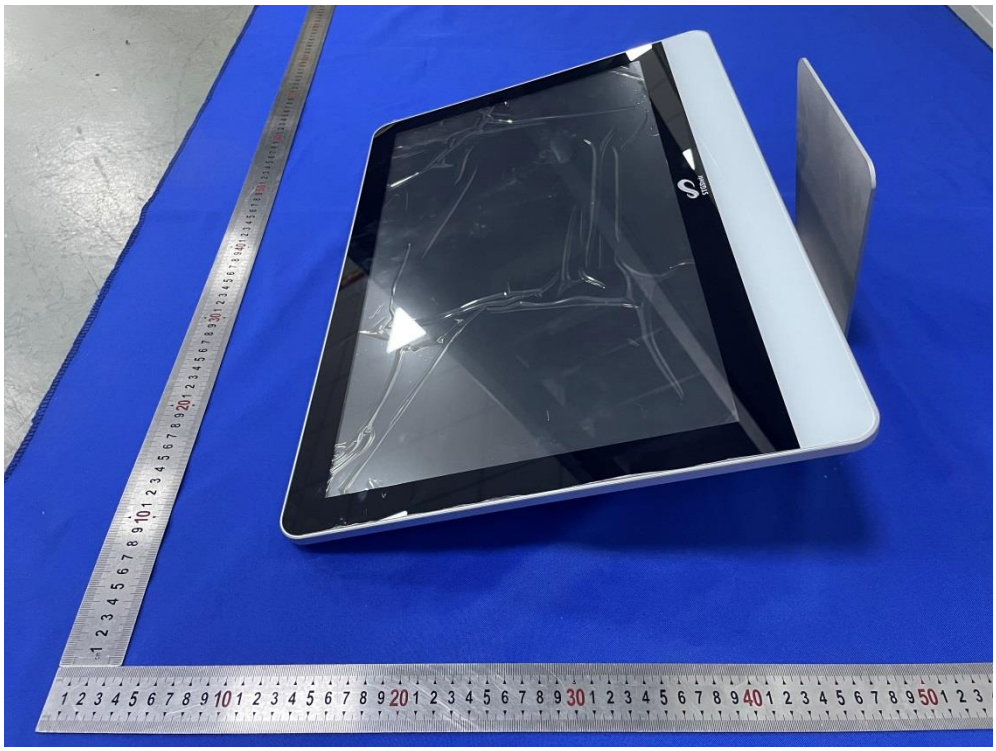
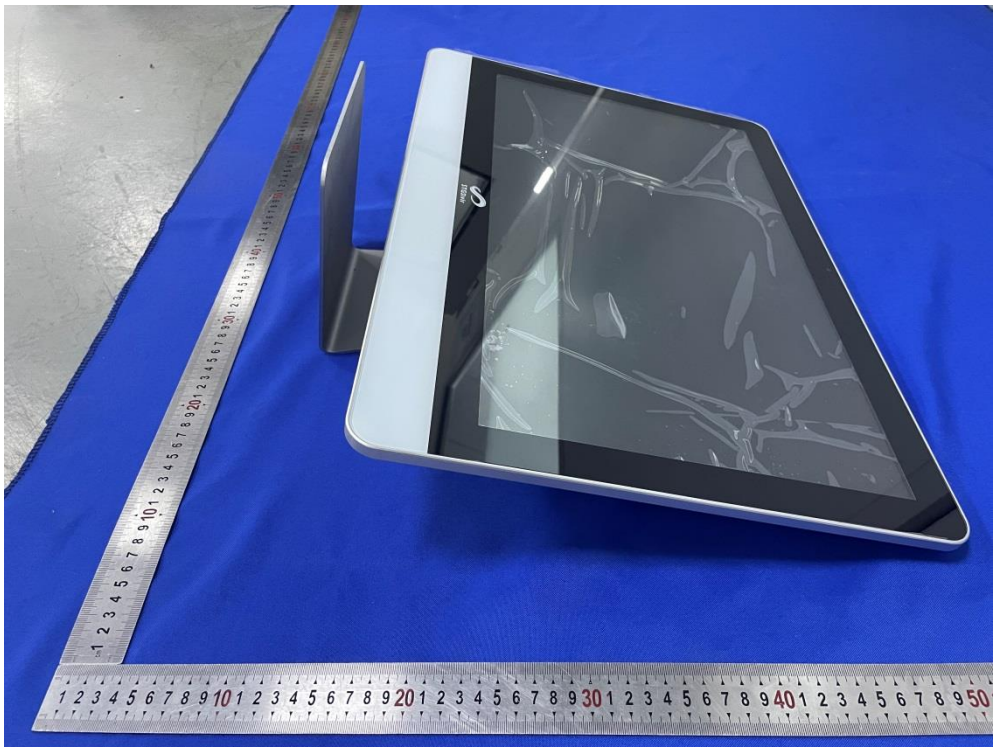
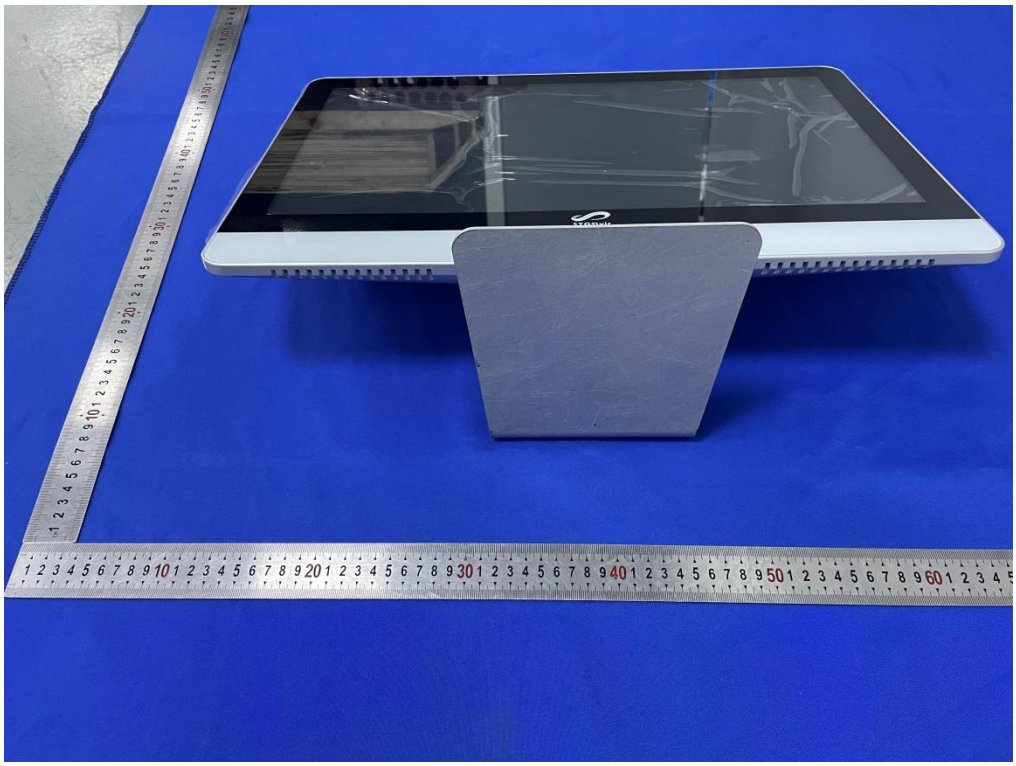


Left of the sample



Right of the sample

Top of the sample



Bottom of the sample

End of the report