

RF EXPOSURE Test Report

Product: WIFI6+BTDM5.4 module

Trade Mark: N/A

Model Number: SY155S

FCC ID: 2BS8J-SY155S

Prepared for

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Prepared by

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TEST RESULT CERTIFICATION

Applicant's Name : Hangzhou Vision Link Intelligence Technology Co., Ltd
Room 117, No. 68 Shengtao Shanyun, Xingzhou Garden,
Address : Wenxin Subdistrict, West Lake District, Hangzhou City, Zhejiang
Province, China

Manufacturer's Name : Hangzhou Vision Link Intelligence Technology Co., Ltd
Room 117, No. 68 Shengtao Shanyun, Xingzhou Garden,
Address : Wenxin Subdistrict, West Lake District, Hangzhou City, Zhejiang
Province, China

Product description

Product name : WIFI6+BTDM5.4 module

Model Number : SY155S

Standards : FCC CFR 47 PART 1 , 1.1310

Test procedure : KDB 447498 D01 General RF Exposure Guidance v06

This device described above has been tested by Shenzhen HongBiao Certification& Testing Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.

Date of Test :

Date (s) of performance of tests : Nov. 21, 2025~Jan. 04, 2026

Test Result..... : **Pass**

Testing Engineer :

Zoe Su

(Z o e S u)

Technical Manager :

Ming Liu

(M i n g L i u)

Authorized Signatory :

Leo Su

(L e o S u)

[illegible]

1 General Description

1.1 Description of EUT

Product name:	WIFI6+BTDM5.4 module
Model name:	SY155S
Series Model:	N/A
Different of series model:	N/A
Operation frequency:	BLE: 2402-2480MHz BR&EDR: 2402-2480MHz WIFI 2.4GHz: IEEE 802.11b/g/n/ax 20: 2412-2462MHz IEEE 802.11n/ax 40: 2422-2452MHz WIFI 5GHz: U-NII-1: 5180 MHz to 5240 MHz U-NII-2A: 5260 MHz to 5320 MHz U-NII-2C: 5500 MHz to 5700 MHz U-NII-3: 5745 MHz to 5825 MHz
Modulation type:	BLE: GFSK BR&EDR: GFSK, $\pi/4$ -DQPSK, 8DPSK WIFI 2.4GHz: IEEE 802.11b: DSSS (CCK,DQPSK,DBPSK) IEEE 802.11g/n(HT20/HT40): OFDM (BPSK, OPSK, 16QAM, 64QAM) IEEE 802.11ax(HE20 and HE40): OFDM (BPSK, QPSK,16QAM, 64QAM, 256QAM,1024-QAM) WIFI 5GHz: 802.11a/n/ac:OFDM(BPSK,QPSK,16QAM,64QAM, 256QAM)IEEE 802.11ax: OFDM (BPSK, QPSK,16QAM, 64QAM, 256QAM,1024-QAM)
Bit Rate of transmitter:	BLE: 1Mbps, 2Mbps BR&EDR: 1Mbps, 2Mbps, 3Mbps WIFI 2.4GHz: IEEE 802.11b: 1/2/5.5/11Mbps IEEE 802.11g: 6/9/12/18/24/36/48/54Mbps IEEE 802.11n(20MHz): MCS0-7, up to 150Mbps IEEE 802.11n(40MHz): MCS0-7, up to 300Mbps 802.11ax (20MHz): VMCS0-8, up to 143.4Mbps 802.11ax (40MHz): VMCS0-10, up to 286.8Mbps WIFI 5GHz: 802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n (20MHz): MCS0-7, up to 150Mbps 802.11n (40MHz): MCS0-7, up to 300Mbps 802.11ac (20MHz): MCS0-8, up to 86.7Mbps 802.11ac (40MHz): MCS0-9, up to 200Mbps 802.11ax (20MHz): VMCS0-8, up to 143.4Mbps 802.11ax (40MHz): VMCS0-10, up to 286.8Mbps

Antenna type:	External Antenna
Antenna gain:	BLE: 2.4dBi BR&EDR: 2.4dBi WIFI 2.4GHz: 2.4dBi WIFI 5GHz: 2.48dBi
Max. output power:	BLE: 1.81dBm BR&EDR: 1.36dBm WIFI 2.4GHz: 17.5dBm WIFI 5GHz: U-NII-1: 11.2dBm U-NII-2A: 11.27dBm U-NII-2C: 12.46dBm U-NII-3: 14.94dBm
Hardware version:	V20
Software version:	10.12.72
Battery:	N/A
Power supply:	Input: DC 3.3V, 0.5A
Adapter information:	N/A

1.2 Test Mode

Pretest Test Mode	Description of Mode
1	TX Mode
2	/
3	/

1.3 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Ancillary Equipment

Equipment	Model	S/N	Manufacturer
/	/	/	/

2 Test Facilities and Accreditations

2.1 Test Laboratory

Test Site	Shenzhen HongBiao Certification& Testing Co., Ltd
Test Site Location	Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China
Telephone:	(86-755) 2998 9321
Fax:	(86-755) 2998 5110
FCC Registration No.:	CN1341
A2LA Certificate No.:	6765.01

2.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15°C~35°C
Relative Humidity:	20%~75%
Air Pressure:	98kPa~101kPa

2.3 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

Measurement Frequency Range	U, (dB)	Note
RF frequency	2×10^{-5}	
RF power, conducted	± 0.57 dB	
Temperature	± 1 degree	
Humidity	± 5 %	

2.4 Test Software

Software name	Manufacturer	Model	Version
RF Test System	MWRF	MTS 8310	V2.0.0.0

3 RF Exposure

3.1 Standalone SAR test exclusion considerations

3.1.1. Limit

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).

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

MPE Calculation Method

Friis transmission 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 = Numeric gain of the antenna relative to isotropic antenna

π = 3.1415926

R = distance between observation point and center of the radiator in cm(20cm)

P_d the limit of MPE, 1mW/cm².

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

3.1.2. Test Result

BLE:

Operation Frequency: 2402-2480MHz

Antenna Type: External Antenna

Antenna gain: 2.4dBi

Power density limited: 1mW/ cm²

BR&EDR:

Operation Frequency: 2402-2480MHz

Antenna Type: External Antenna

Antenna gain: 2.4dBi

Power density limited: 1mW/ cm²

WIFI 2.4GHz:

Operation Frequency: IEEE 802.11b/g/n/ax 20: 2412-2462MHz

IEEE 802.11n/ax 40: 2422-2452MHz

Antenna Type: External Antenna

Antenna gain: 2.4dBi

Power density limited: 1mW/ cm²

WIFI 5GHz:

Operation Frequency:

U-NII-1: 5180 MHz to 5240 MHz

U-NII-2A: 5260 MHz to 5320 MHz

U-NII-2C: 5500 MHz to 5700 MHz

U-NII-3: 5745 MHz to 5825 MHz

Antenna Type: External Antenna;

Antenna gain: 2.48dBi

R=20cm

mW=10^{^(dBi/10)}

BLE: Antenna gain Numeric=10^{^(dBi/10)}=10^{^(2.4/10)}=1.74

BR&EDR: Antenna gain Numeric=10^{^(dBi/10)}=10^{^(2.4/10)}=1.74

WIFI 2.4G: Antenna gain Numeric=10^{^(dBi/10)}=10^{^(2.4/10)}=1.74

WIFI 5G: Antenna gain Numeric=10^{^(dBi/10)}=10^{^(2.48/10)}=1.77

BLE(Worst):

Chann el Freq. (MHz)	modulation	conduct ed power	Tune-u p power (dBm)	Max		Antenna		Evaluation result	Power density Limits
		(dBm)		tune-up power		Gain		(mW/cm2)	(mW/cm2)
				(dBm)	(mW)	(dBi)	Nu meric		
2480	GFSK(1M)	1.81	1±1	2	1.585	2.4	1.74	0.0005	1

BR+EDR(Worst):

Chann el Freq. (MHz)	modulation	conduct ed power	Tune-u p power (dBm)	Max		Antenna		Evaluation result	Power density Limits
		(dBm)		tune-up power		Gain		(mW/cm2)	(mW/cm2)
				(dBm)	(mW)	(dBi)	Nu meric		
2480	GFSK	1.36	1±1	2	1.585	2.4	1.74	0.0005	1

WiFi 2.4GHz(Worst):

Channel Freq. (MHz)	modulation	conducted power	Tune-up power	Max		Antenna		Evaluation result at 20cm	Power density Limits
		(dBm)	(dBm)	tune-up power		Gain		Power density(mW/cm2)	(mW/cm2)
				(dBm)	(mW)	(dBi)	Numeric		
2437	802.11b	17.5	17±1	18	63.096	2.4	1.74	0.0218	1

WiFi 5GHz(Worst):

Frequency (MHz)	Modulation	conducted power	Tune-up power	Max		Antenna		Evaluation result at 20cm	Power density Limits
		(dBm)	(dBm)	tune-up power		Gain		Power density(mW/cm ²)	(mW/cm ²)
				(dBm)	(mW)	(dBi)	Numeric		
5785	11a	14.94	15±1	16	39.811	2.48	1.77	0.0140	1

Conclusion:

NO	Maximum MPE Value				Limits (mW/cm ²)
	BLE (mW/cm ²)	BR&EDR (mW/cm ²)	WIFI 2.4GHz (mW/cm ²)	WIFI 5GHz (mW/cm ²)	
1	0.0005	0.0005	0.0218	0.0140	1

Simultaneous transmit:

NO	Configurations	Maximum MPE Value					Limits
		BLE	BR&EDR	WIFI 2.4GHz	WIFI 5GHz	Transmit simultaneously	
1	BLE + BR&EDR + WIFI 2.4GHz + WIFI 5GHz	0.0005	0.0005	0.0218	0.0140	0.0368	1

Note:

According to KDB 447498 D01 General RF Exposure Guidance v06, at the transmit simultaneously calculation method is as follows:

Transmit simultaneously MPE = Σ of MPE ratios

MPE ratios = Field strengths or power density / MPE limit at the test frequency

For the max result: $0.0368 \leq 1.0$ SAR, No SAR is required.

***** END OF REPORT *****