



TEST REPORT

Applicant : IGEN Tech Co., Ltd.
Address : Building H4, China IoT International Innovation Park, No. 6, Jingxian Road, Wuxi, Jiangsu, P. R.
Manufacturer : IGEN Tech Co., Ltd.
Address : Building H4, China IoT International Innovation Park, No. 6, Jingxian Road, Wuxi, Jiangsu, P. R.
Product Name : Stick Logger(WiFi)
Model Number : LSW-6, LSW-6-C, LSW-6-S, LSW-6A
Trademark : /
Date of Receipt : Jun. 18, 2026
Test Date : Jun. 18, 2026 to Jun. 26, 2026
Date of Report : Jun. 26, 2026

Test Result : This device described above has been tested by BKC, and the test results show that the equipment under test (EUT) is in compliance with the Article 2 Paragraph 1 of Item 19 requirements. And it is applicable only to the tested sample identified in the report.

Test Procedure Used:

Standards : Article 2 Paragraph 1 of Item 19
MIC Notice No.88 Appendix No.43

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1. General Information

1.1. Description of Device (EUT)

EUT Name : Stick Logger(WiFi)

Model No. : LSW-6, LSW-6-C, LSW-6-S, LSW-6A

Model Difference : The product is different for model name .The mains test model is LSW-6

Power supply : Rating(s): 5-12V=== 2W

Adapter : N/A

Operation frequency : 802.11b/g/n HT20: 2412-2472MHz
802.11n HT40: 2422-2462MHz

Rated output power: : 802.11b/g/n HT20: 1 mW/MHz
802.11n HT40: 1 mW/MHz

Modulation : 802.11b: DSSS(CCK, DQPSK, DBPSK);
802.11g: OFDM(BPSK, QPSK, 16QAM, 64QAM);
802.11n(HT20 and HT40): OFDM (BPSK, QPSK, 16QAM, 64QAM)

Antenna Type : PCB Antenna, Maximum Gain is 2.73dBi

Intend use environment : Residential, commercial and light industrial environment

Adapter Information : N/A

Hardware version : V1.0

Software version : V1.0.0

1.2. Channel List

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2412	2	2417	3	2422	4	2427
5	2432	6	2437	7	2442	8	2447
9	2452	10	2457	11	2462	12	2467
13	2472						

1.3. Summary of test result

RF PART		
Test Items	Test Requirement	Result
Antenna Power	Article 2 Paragraph 1 of Item 19	PASS
Tolerances for Antenna Power	Article 2 Paragraph 1 of Item 19	PASS
Frequency Tolerance	Article 2 Paragraph 1 of Item 19	PASS
Transmission Rate	Article 2 Paragraph 1 of Item 19	N/A
Occupied Frequency Bandwidth	Article 2 Paragraph 1 of Item 19	PASS
Spread Bandwidth	Article 2 Paragraph 1 of Item 19	N/A
Spread factor	Article 2 Paragraph 1 of Item 19	N/A
Number of Carriers	Article 2 Paragraph 1 of Item 19	N/A
Dwell Time	Article 2 Paragraph 1 of Item 19	N/A
Spurious emission intensity	Article 2 Paragraph 1 of Item 19	PASS
Half-power beam width	Article 2 Paragraph 1 of Item 19	Note1
Secondary Radiated Emissions	Article 2 Paragraph 1 of Item 19	PASS
Interference prevention function	Article 2 Paragraph 1 of Item 19	PASS
Carrier Sensing Function (1)	Article 2 Paragraph 1 of Item 19	Not applicable (See Note 2)
Carrier Sensing Function (2)	Article 2 Paragraph 1 of Item 19	PASS (See Note 3)
EIRP	Article 2 Paragraph 1 of Item 19	PASS

Remark:
N/A is an abbreviation for Not Applicable.
Note1 means the Max EIRP Power(2.31dBm/MHz) is less than 12.14dBm/MHz and 9.13dBm/MHz, the test is not applicable.
Note2 Not apply to this device, since EIRP does not require compensation through Antenna Power.
Note3 Apply for 802.11n40 which the Occupied bandwidth within 26MHz-40MHz

1.4. Test mode

The special RF test software was used to control EUT work in Continuous WIFI TX mode, and select test channel, wireless mode, Normal mode

Test mode	Low channel	Middle channel	High channel
Transmitting(802.11b/g/n20)	2412MHz	2442MHz	2472MHz
Transmitting(802.11n40)	2422MHz	2442MHz	2462MHz
Receiving(802.11b/g/n20)	2412MHz	2442MHz	2472MHz
Receiving(802.11n40)	2422MHz	2442MHz	2462MHz

Note:

1.5. Test Conditions

Supply Voltage			
	Input Voltage (Vac)	Voltage at the input of the RF Circuit (Vdc)	Tolerance (%)
Normal	12	3.3	
+10%	13.2	3.3	0
-10%	10.8	3.3	0
Others			
Temperature (° C)		21.4	
Relative humidity		51%.	
ATM Pressure:		1019 mbar	
Note 1: When the input voltage is reduced or increased by 10%, the regulator voltage changes of less than 1%. So the following test items are conducted in the normal voltage.			

1.6. Measurement Uncertainty (95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for radio frequency	1×10^{-9}	
Uncertainty for conducted RF Power	0.65dB	
Uncertainty for temperature	0.6°C	
Uncertainty for humidity	1%	

1.7. Special Accessories and Auxiliary Equipment

Description	Manufacturer	Model No.	Hardware Version	Software Version
/	/	/	/	/

1.8. Test Facility

Site Description		
EMC Lab 1	:	The Laboratory has been assessed and proved to be in compliance with CNAS/CL01 The Certificate Registration Number is L10574.
Name of Firm	:	Shenzhen BKC Testing Co., Ltd.
Site Location	:	Room103, 1/F, Huaya Building, Huaya Industrial Park, Yousong Community, Longhua Subdistrict, Longhua District, Shenzhen, Guangdong, China

1.9. Test Equipment

RF Test Site

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Date	Calibrated until
1	Spectrum	Agilent	N9020A	MY50510311	Mar. 11. 2026	Mar. 10. 2027
2	Vector source	Agilent	N5182A	MY47420223	Mar. 11. 2026	Mar. 10. 2027
3	All instrument	Rohde & Schwarz	CMW 500	101131	Mar. 11. 2026	Mar. 10. 2027
4	control unit	MW	MW100-RFCB	MW200411BK-34	/	Mar. 10. 2027
5	RF Testing software	MW	MTS 8310	/	/	/
6	Spectrum analyzer	R&S	FSP40	200061	Mar. 11. 2026	Mar. 10. 2027

Note: The attenuator and power meter are already included in the control unit.

Antenna calibration: Shenzhen Academy of Metrology & Quality Inspection;

Other: HUAJUE MEDICAL TESTING AND METROLOGY (SHENZHEN) CO. LTD.;

Remark:

Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

Test software

Software name	RF Testing software
Software version	2.0.0.0
Software name	RE EMI Testing software
Software version	EMEC-03A2 RE+

Remark:

(a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.

(b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992).

(c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

(d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to (C) From JRL Article 24-2, paragraph 4, Item 2

(e) All calibration information is from Huajue Medical Testing and Metrology (Shenzhen) Co.,Ltd.

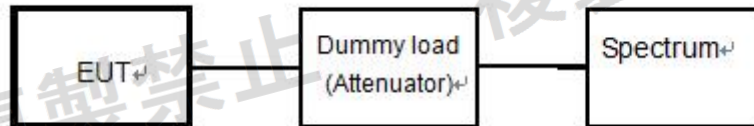
2. Frequency Tolerance

2.1. Limit

According to Radio Law of Japan item 19 of Article 2 Paragraph 1, Clause 3.2 (4), the Tolerance of frequency: $\pm 50 \times 10^{-6}$.

Limit
50ppm

2.2. Test Setup



2.3. Test Procedure

1. In the case of unmodulated signal (continuous or continuous burst), measure the frequency directly by a Spectrum.
2. Set RBW = 10 kHz, video bandwidth (VBW) = RBW.
3. SPAN = 1 MHz
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.

2.4. Test Result

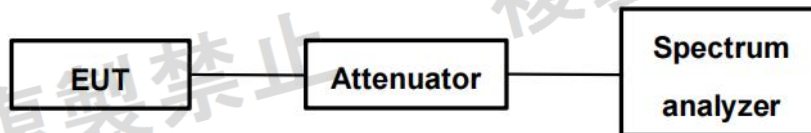
Please see the attachment for data.

3. Antenna Power Error Measurement

3.1. Limit

Item	Limits
Antenna Power Density	10mW/Mhz(Occupied Bandwidth: within 26MHz) 5mW/Mhz(Occupied Bandwidth: 26 - 40MHz)
EIRP Power	12.14-22.14dBm/MHz(Occupied Bandwidth: within 26MHz) 9.13 - 19.13dBm/MHz(Occupied Bandwidth: 26 - 40MHz)
Antenna Power Error	+20% No lower limit

3.2. Test Setup



3.3. Test Procedure

Connect the UUT to the spectrum analyzer and use the following settings:

Center Frequency: The center frequency of the UUT test channel

RBW: 1MHz

VBW: 1MHz

Span: Wide enough to cover the total power envelope of the signal of the UUT

Detector: P

Trance Mode: Max Hold

Find the Peak value for the power envelope and record the frequency.

Step 2

Change the spectrum analyzer and use the following settings:

Center Frequency: Record frequency of step 1.

RBW: 1MHz

VBW: 1MHz

Span: 0Hz

Sweep time: 50ms

Detector: RMS

Trance Mode: Single

Capture the burst signal power and record it.

EIRP=Antenna power+gain

3.4. Test Result

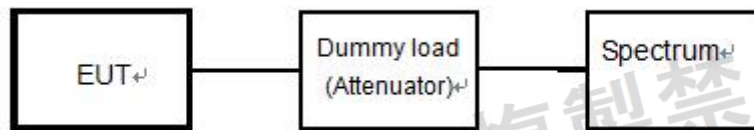
Please see the attachment for data.

4. Occupied Bandwidth(99%)&Spread Bandwidth(90%)

4.1. Limit

Item	Limits
Occupied Band Width(99%):	within 26MHz(802.11b/g/n20) 26 - 40MHz(802.11n40)

4.2. Test Setup



4.3. Test Procedure

1. Setting of SA is following as: RB: 300KHz / VB:300KHz / SPAN: 40MHz / AT: 30dB Ref:

22.5dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold

2. EUT have transmitted the maximum modulation signal and fixed channelize (For DSSS or OFDM Device) or continuous maximum power of hopping mode(For FHSS Device).

SA set to 99% of occupied bandwidth to measure occupied bandwidth. The limit is less than 26MHz(For DSSS, OFDM Device or Other Digital methods) or 83.5MHz(For FHSS Device), for the 40MHz system, shall be 26-40Mhz

4.4. Test Result

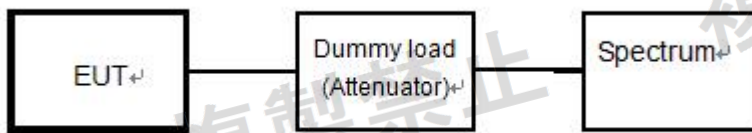
Please see the attachment for data.

5. Unwanted Emission Intensity Measurement

5.1. Limit

Item	Limit
TX Spurious Emission	30MHz - 2387MHz; 2.5 μ W/MHz or less
	2387MHz – 2400MHz; 25 μ W/MHz or less
	2483.5MHz – 2496.5MHz; 25 μ W/MHz or less
	2496.5MHz – 12.5GHz; 2.5 μ W/MHz or less

5.2. Test setup



5.3. Test Procedure

- EUT have transmitted the maximum modulation signal and fixed channelize.
- Setting of SA is following as: Below 1GHz RB:1000KHz / VB:1000KHz
Above 1GHz RB:1MHz / VB:1MHz / AT: 10dB Ref: 0dBm / Sweep time: Auto
Sweep Mode: Continuous sweep / Detect mode: Positive peak
Trace mode: Max hold
- Setting of SA is following as 30MHz and stop frequency 1000MHz Then to mark peak reading value + cable loss shall be less than 2.5 μ W/MHz.
- Setting of SA is following as 1000MHz and stop frequency 2387MHz Then to mark peak reading value + cable loss shall be less than 2.5 μ W/MHz.
- SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 μ W/MHz.
- SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz Then to mark peak reading value + cable loss shall be less than 25 μ W/MHz
- SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5 μ W/MHz
- If the Result_Value is over the requirement, take total sum of 1MHz band centered at the spur frequency like ACLP measurement as Result_Value.

5.4. Test Result

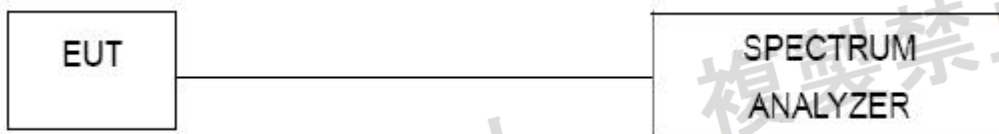
Please see the attachment for data.

6. Secondary Radiated Emissions

6.1. Limit

Item	Limit
RX Spurious Emission	$\leq 4 \text{ nW}$ (Below 1GHz)
	$\leq 20 \text{ nW}$ (Above 1GHz)

6.2. Test Setup



6.3. Test Procedure

1. EUT have the continuous reception mode and fixed only one channelize.
2. Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
3. SA set RB: 100kHz and VB: 100kHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW
4. SA set RB: 1MHz and VB: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 12500MHz. Search to mark peak reading value + cable loss shall be less than 20nW
5. If power level of lower emissions are more than 1/10 of limit (.0.4nW for $f < 1\text{GHz}$, 2nW for $f \geq 1\text{GHz}$), all those are to be indicated in the 2nd and 3rd lines. If others are 1/10 or less more of the limit, no necessary to be indicated.

6.4. Test Result

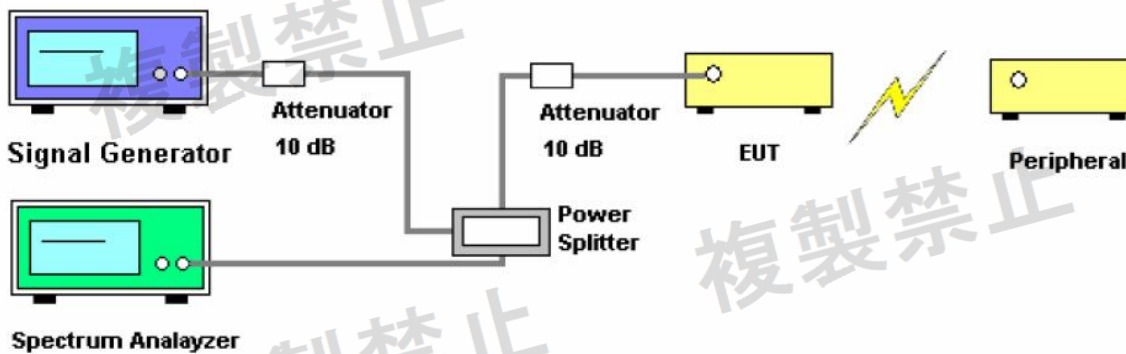
Please see the attachment for data.

7. Carrier Sensing Function

7.1. Limit

EUT stop RF transmission signal after carrier inject to EUT

7.2. Test Setup



7.3. Test Procedure

1. SG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SG and power level is $(on\ 22.79 + G - 20 \cdot \log(f) \text{ dBm})$ (G is the antenna gain, f is the test frequency).
2. turn off the RF signal of the SG.
3. EUT have transmitted the maximum modulation signal and fixed channelize.
4. Setting of SA :RBW/VBW=1MHz/1MHz, Span=50MHz, Sweep time=auto, Sweep mode=continuous, Detect mode=positive peak, SG RF signal on.
6. EUT shall be stop the transmitted any signal and SG RF signal off, the EUT will be continuous transmitted signal.

7.4. Test Result

The EUT cannot transmit radio when the field strength at maximal gain direction of receiving antenna power is over 100mV/m; and EUT can start to transmit after carrier sensing.

Note: Radio interference prevention capability was conformed

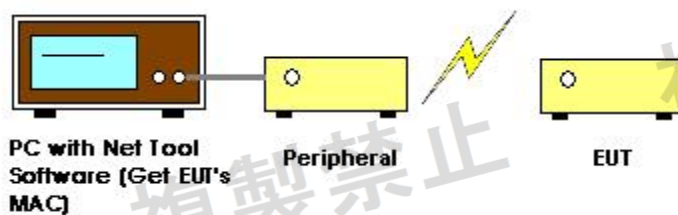
Type	Test channel	Result
802.11n(HT40)	CH _{L40}	Good
	CH _{H40}	

8. Interference prevention function

8.1. Limit

Item	Limits
Identification code	≥ 48 bits

8.2. Test Setup



8.3. Test Procedure

- In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes from EUT. b. Check the transmitted identification codes with the demodulator.
- In the case of receiving the identification code: a. Transmit the predetermined identification codes from the counterpart. b. Check if communication is normal. c. Transmit the signals other than predetermined ID codes from the counterpart. d. Check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

8.4. Test Result

The detected ID of the device is below:

18:FA:29:E9:26:F4

Test result: The device meet the requirements
PASS

9. Test Photographs

Reference to EUT photo attachment for details.

10. Photos of the EUT

Reference to EUT photo attachment for details.