



# FCC PART 15.247

# TEST REPORT

For

# Fujian LANDI Commercial Equipment Co., Ltd.

Building 17, Section A, Software Park, No. 89 Software Road, Gulou District, Fuzhou Municipality, Fujian Province, China

### FCC ID: 2AG6N-SNM927WF4MG

<b>Report Type:</b> Class II Permissive Change Report		<b>Product Name:</b> Smart Module
Report Number:	_2407W89602E-	-RF-01
Report Date:	2024-09-20	
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### **REPORT REVISION HISTORY**

Number of Revisions	Report No.	Version	Issue Date	Description
0	2407W89602E-RF-01	R1V1	2024-09-20	Class II Permissive Change Report

### **GENERAL INFORMATION**

Product Name:	Smart Module
Tested Model:	SNM927
★Power Supply:	DC 3.8V
Maximum Output Power:	14.06dBm
RF Function:	Classic BT
Operating Band/Frequency:	2402-2480 MHz
Channel Number:	79
Channel Separation:	1 MHz
Modulation Type:	GFSK, π/4-DQPSK, 8DPSK
Antenna Type:	FPC Antenna
★Maximum Antenna Gain:	0.84 dBi
EUT Received Status:	Good
Note:	

#### **Product Description for Equipment under Test (EUT)**

1. The Maximum Antenna Gain was declared by manufacturer.

2. The power supply by user manual.

3. All measurement and test data in this report was gathered from production sample serial number:

2M7D-1 (Assigned by the BACL(Xiamen). The EUT supplied by the applicant was received on 2024-08-09)

#### **Objective**

This test report is prepared for Fujian LANDI Commercial Equipment Co., Ltd. in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions rules.

The tests were performed in order to determine Compliance with FCC Part 15, Subpart C, section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

#### **Test Methodology**

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and 558074 D01 15.247 Meas Guidance v05r02.

#### **Test Facility**

The Test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on the Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

#### Measurement Uncertainty

Item	Ulab	
AC Power Lines Conducted Emissions	150kHz-30MHz	2.33 dB
	9kHz-30MHz	2.59 dB
	30MHz~1GHz	4.79 dB
Radiated emission	1GHz~6GHz	4.6 dB
	6GHz~18GHz	5.43 dB
	18GHz~26.5GHz	5.37 dB
Occupied Bandwidth		0.10MHz
Transmitter Conducted Power		0.624 dB
Temperature		1℃
Humidity		5%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

### SYSTEM TEST CONFIGURATION

#### **Test Mode and Voltage**

The system was configured for testing in a typical mode (as normally used by a typical user).			
Test mode:	Test mode 1: Transmitting		
Test voltage:	Test mode 1: AC 120V/60Hz		
Remark:	During all emission tests, the EUT was configured to measure its highest possible emission level and the worst case's test data was presented in this test report.		

### **Description of Test Configuration**

Channel list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	40	2442
1	2403		
•••		78	2480
39	2441	/	/

EUT was tested with Channel 0, 39 and 78.

#### ★EUT Exercise Software

BT test in the engineer mode.

RF Test Tool: QRCT4

Tast Modes	Power Level Setting			
i est wioues	Low Channel	Middle Channel	High Channel	
GFSK	Default	Default	Default	
π/4-DQPSK	Default	Default	Default	
8DPSK	Default	Default	Default	

Note: The power level was declared by the applicant.

#### **Special Accessories**

No special accessory.

#### **Equipment Modifications**

No modification was made to the EUT tested.

#### **Support Equipment List and Details**

Manufacturer	Description	Model	Serial Number
LITEON	AC ADAPTER	PA-1650-90	NSW26604

#### External I/O Cable

Cable Description	Length (m)	From Port	То
POWER CABLE	1.2	EUT	ADAPTER
POWER CABLE	1.0	ADPTER	SOCKET

#### **Block Diagram of Test Setup**

Conducted Emission:





FCC Part 15.247

### SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result	Remark
§15.203	Antenna Requirement	Compliant	
§15.207(a)	AC Line Conducted Emissions	Compliant	
§15.205, §15.209 & §15.247(d)	Radiated Emissions	Compliant	
§15.247(a)(1)	20 dB Emission Bandwidth	-	See Note 2
§15.247(a)(1)	Channel Separation Test	-	See Note 2
§15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	-	See Note 2
§15.247(a)(1)(iii)	Quantity of hopping channel Test	-	See Note 2
§15.247(b)(1)	Peak Output Power Measurement	Reporting	
§15.247(d)	Band edges	-	See Note 2

Note 1:

This is Class II permissive change application based on the Change ID device, model: SNM927, FCC ID: 2AG6N-SNM927WF4MG. The Change ID device based on the original device, model: SNM927, FCC ID: 2APJ4-SNM927, which was tested by Sporton International Inc. (Kunshan). The change between the original equipment and the current equipment is stated and guaranteed by the applicant, as following:

1. Change the antenna.

Per Spot check with RF output power, the RF parameters are identical with the original device. Therefore, Radiated Spurious Emissions was tested based on the change.

#### Note 2:

Please refer to Report No: FR462035A

The Bay Area Compliance Laboratories Corp. (Xiamen) is responsible for all the information provided in this report, except when information is provided by the customer as identified in this report.

### **TEST EQUIPMENT LIST**

Test Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date		
Conducted Emission Test							
EMI Test Receiver	Rohde & Schwarz	ESR	103105	2024/03/29	2025/03/28		
LISN	Rohde & Schwarz	ENV216	100129	2024/03/29	2025/03/28		
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	0357.8810.54	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC001	2024/03/29	2025/03/28		
Test Software	Audix	E3	18621a	N/A	N/A		
	Radiate	ed Emissions Below 10	GHz				
EMI Test Receiver	Rohde & Schwarz	ESR	103103	2024/03/29	2025/03/28		
Loop Antenna	Rohde & Schwarz	HFH2-Z2	830749/001	2023/07/27	2026/07/26		
Antenna	Sunol Sciences	JB6	A122022-5	2023/07/27	2026/07/26		
Amplifier	Sonoma	310B	120903	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC002	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH460B-N-2M	CC006	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH460B-N-12M	CC007	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	HFH2-CC	335.3609	2024/03/29	2025/03/28		
Test Software	Audix	E3	18621a	N/A	N/A		
	Radiate	ed Emission Above 1 (	GHz				
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102051	2024/03/29	2025/03/28		
Filter Switch Unit	Decentest	DT7220FSU	DS79904	2024/02/23	2025/02/22		
Multiplex Switch Test Control Set	Decentest	DT7220SCU	DS79901	2024/02/23	2025/02/22		
Double Ridge Guide Horn Antenna	A.H.Systems	SAS-571	1980	2023/07/28	2026/07/27		
Preamplifier	A.H.Systems	PAM-0118P	489	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH800A-N-6M	CC003	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH800A-N-1M	CC005	2024/03/29	2025/03/28		
Horn Antenna	EMCO	3116	9407-2232	2023/07/31	2026/07/30		
Preamplifier	A.H.Systems	PAM-1840	200	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH360A-2.92-3M	CC008	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH360A-2.92-1M	CC009	2024/03/29	2025/03/28		
Test Software	Audix	E3	18621a	N/A	N/A		
	I	RF Conducted Test					
Spectrum Analyzer	Rohde & Schwarz	FSU	100405	2024/03/29	2025/03/28		
Coaxial Cable	N/A	N/A	N/A	2024/03/29	2025/03/28		

**Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Xiamen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

### FCC §15.203 – ANTENNA REQUIREMENT

#### Applicable Standard

According to FCC § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.
- c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### Antenna Connector Construction

The EUT has one FPC antenna for Bluetooth, which was permanently attached and the antenna gain is 0.84 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

#### **Result: Compliance**

### FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

#### **Applicable Standard**

FCC §15.207(a)

#### **Test System Setup**



The measurement procedure of EUT setup is according with ANSI C63.10-2020. The related limit was specified in FCC Part 15.207.

#### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	VBW	Detector
150 kHz – 30 MHz	9 kHz	30 kHz	QP/AV

#### **Test Procedure**

ANSI C63.10-2020 clause 6.2

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

If the maximum peak value of the emissions is below the average limit, the QP value and average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

FCC Part 15.247

#### Level & Margin Calculation

The Level is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB) Level (dB $\mu$ V) = Reading (dB $\mu$ V) + Factor (dB)

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dB $\mu$ V) – Level (dB $\mu$ V)

#### **Test Data**

Temperature:	21.8°C
<b>Relative Humidity:</b>	56%
ATM Pressure:	100.1kPa
Test Date:	2024-09-05
Test Engineer:	Toby Chen

#### EUT operation mode: Transmitting in the high channel of EDR (8DPSK) mode (worst case)

Date: 2024-09-05 Level (dBuV) 80 67.5 FCC Part15 Conduction(QP) 55.0 FCC Part15 Conduction(AV) 42.5 30.0 17.5 Peak 5.0 Average -7.5 الأبل أناقص المانا -20 0.15 0.2 0.5 1 2 5 10 20 30 Frequency (MHz) Trace: 1 Freq Reading Factor Result Limit Margin Phase Remark MHz dBuV dB dBuV dBuV dB 46.97 0.25 -16.2121.03 4.82 51.79 Line Average 0.25 -1.77 21.03 19.26 61.79 42.53 Line QP 0.40 -13.63 20.55 6.92 47.95 41.03 Line Average 0.40 5.35 20.55 25.90 57.95 32.05 Line QP 0.71 -1.25 20.61 19.36 46.00 26.64 Line Average 0.71 4.62 20.61 25.23 56.00 30.77 Line QP 1.47 -1.23 20.84 19.61 46.00 26.39 Line Average 1.47 7.58 20.84 28.42 56.00 27.58 Line QP 3.18 -16.7320.98 4.25 46.00 41.75 Line Average -2.15 20.98 56.00 Line 3.18 18.83 37.17 QP -16.79Line 13.25 21.04 4.25 50.00 45.75 Average 13.25 -2.28 21.04 18.76 60.00 41.24 Line QP



Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Toby Chen Power Source: AC 120V/60Hz Project No.: 2407W89602E-RF Test Mode: BT 3DH5 2480MHz Tx EUT Model: SNM927 Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Toby Chen Power Source: AC 120V/60Hz



### FCC §15.205, §15.209 & §15.247(d) – RADIATED EMISSIONS

#### **Applicable Standard**

FCC §15.205; §15.209; §15.247(d)

#### **Test System Setup**

#### 9 kHz-30MHz





#### Below 1 GHz:



FCC Part 15.247

#### Above 1GHz (1GHz~18GHz)



The radiated emission tests were performed in the 3 meters, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209 and FCC 15.247 limits.

Note: For Radiated test 18-25GHz, which was performed at 1.5 meters distance, according to C63.10, the test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3 meters to 1.5 meters.

Distance extrapolation Factor =20 log (specific distance [3m]/test distance [1.5m]) dB= 6.0 dB.

EMI Test Receiver

#### **EMI Test Receiver Setup**

The system was investigated from 9 kHz to 25 GHz.

During the radiated emission test, the EMI test receiver Setup was set with the following configurations:

Frequency Range	RBW	VBW	IF B/W	Measurement
9 kHz – 150 kHz	200Hz	1 kHz	/	РК
	/	/	200Hz	QP/AV
150 kHz – 30 MHz	10 kHz	30 kHz	/	РК
	/	/	9kHz	QP/AV
30 MHz – 1000 MHz	100 kHz	300 kHz	/	РК
	/	/	120kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	РК
	1 MHz	/	10Hz	AV

#### **Test Procedure**

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

For each measurement antenna alignment, the EUT shall be rotated through  $0^{\circ}$  to  $360^{\circ}$  on a turntable. The report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground parallel) unless the margin is greater than 20 dB, then the following statement shall be made: "all emissions were greater than 20 dB below the limit."

If the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 10 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

All emissions under the average limit and under the noise floor have not recorded in the report.

#### Level & Margin Calculation

The Level is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Factor (dB/m) =Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB) Level (dB $\mu$ V/m) = Reading (dB $\mu$ V) + Factor (dB/m)

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dB $\mu$ V/m) –Level (dB $\mu$ V/m)

FCC Part 15.247

#### **Test Data**

Please refer to the below table and plots. After pre-scan in the X, Y and Z axes of orientation, the worst case is **Z** axes, test data is below:

Frequency Range:	Below 1 GHz	Above 1 GHz
Temperature:	21.3°C	21.3°C~23.6°C
Relative Humidity:	51 %	51 %~56 %
ATM Pressure:	101.1kPa	100.1kPa ~101.1kPa
Test Date:	2024-08-10	2024-08-10~2024-09-19
Test Engineer:	Wlif Wu	Wlif Wu

#### 1) 9 kHz ~30MHz

*EUT operation mode: Transmitting in EDR middle channel (*π/4-DQPSK) (worst case)

Pre-scan in parallel, ground-parallel and perpendicular of orientation of loop antenna, the amplitude of spurious emissions attenuated is more than 20 dB below the permissible value, which is not required to be report.

#### 2) 30MHz-1GHz (worst case)

After pre-scan GFSK,  $\pi/4$ -DQPSK, 8DPSK mode, the worst case is EDR 3DH5 2480MHz

```
Project No.: 2407W89602E-RF
Test Mode: EDR 3DH5 2480MHz
EUT Model: SNM927
Test distance: 3m
```



Project No.: 2407W89602E-RF Test Mode: EDR 3DH5 2480MHz EUT Model: SNM927 Test distance: 3m



#### 3) 1 GHz-3 GHz (worst case)

After pre-scan GFSK,  $\pi/4$ -DQPSK, 8DPSK modes, the worst case is EDR 3DH5.

Project No.:2407W89602E-RF Test Mode: EDR 3DH5 2402MHz EUT Model:SNM927 Test distance: 3m



Project No.:2407W89602E-RF Test Mode: EDR 3DH5 2402MHz EUT Model:SNM927 Test distance: 3m



Project No.:2407W89602E-RF Test Mode: EDR 3DH5 2441MHz EUT Model:SNM927 Test distance: 3m



Project No.:2407W89602E-RF Test Mode: EDR 3DH5 2441MHz EUT Model:SNM927 Test distance: 3m



Project No.:2407W89602E-RF Test Mode: EDR 3DH5 2480MHz EUT Model:SNM927 Test distance: 3m



Project No.:2407W89602E-RF Test Mode: EDR 3DH5 2480MHz EUT Model:SNM927 Test distance: 3m



#### 4) 3 GHz-18 GHz (worst case)

After pre-scan GFSK,  $\pi/4$ -DQPSK, 8DPSK modes, the worst case is EDR 3DH5

Project No.: 2407W89602E-RF Test Mode: EDR 3DH5 2402MHz EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: EDR 3DH5 2402MHz EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: EDR 3DH5 2441MHz EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: EDR 3DH5 2441MHz EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: EDR 3DH5 2480MHz EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: EDR 3DH5 2480MHz EUT Model: SNM927 Test distance: 3m

Level (dBuV/m) Date: 2024-09-19							
87.5	Test	with 3G Higl	n pass				
75.0	filter		1		FCC_	art 15C REAbov	e 1GHz_PK
62.5				e	500	part 15C PE Abou	
50.0	1					NAIL DC RE_ADOV	
37.5		~~~	Î				
25.0							
12.5							
0						15000	
3000	6	000.	9000. Frea	120 uency (MHz)	000.	15000.	18000
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Freq	Reading	Factor	Result	Limit	Margin	Polarity	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	-	
1960.00	40.46	2.86	43.32	74.00	30.68	vertical	Peak
7440.00	40.53	10.40	50.93	74.00	23.07	vertical	Peak
321.50	28.79	11.40	40.19	54.00	13.81	vertical	Average
321.50	43.04	11.40	54.44	74.00	19.56	vertical	Peak
1891.90	27.92	13.45	41.37	54.00	12.63	vertical	Average
L891.90	42.06	13.45	55.51	74.00	18.49	vertical	Peak
3364.10	26.87	15.79	42.66	54.00	11.34	vertical	Average
3364.10	42.57	15.79	58.36	74.00	15.64	vertical	Peak
7920.10	28.29	16.86	45.15	54.00	8.85	vertical	Average
7920.10	45.20	16.86	62.06	74.00	11.94	vertical	Peak

#### 5) 18 GHz - 25 GHz (worst case)

After pre-scan GFSK,  $\pi/4$ -DQPSK, 8DPSK modes, the worst case is EDR 3DH5 2480MHz

Project No.: 2407W89602E-RF Test Mode: BT 3DH5 2480 EUT Model: SNM927 Test distance: 1.5m



Project No.: 2407W89602E-RF Test Mode: BT 3DH5 2480 EUT Model: SNM927 Test distance: 1.5m



#### **Restricted Bands Emissions:**

*Pre-Scan with GFSK,*  $\pi/4$ *-DQPSK, 8DPSK modes of operation in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation is recoreded* 

Note:

Factor (dB/m) =Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB) Level (dB $\mu$ V/m) = Reading (dB $\mu$ V) + Factor (dB/m) Margin (dB) = Limit (dB $\mu$ V/m) -Level (dB $\mu$ V/m)

Project No.: 2407W89602E-RF Test Mode: 2DH5-2402 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 2DH5-2402 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 2DH5-2480 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 2DH5-2480 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 3DH5-2402 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 3DH5-2402 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 3DH5-2480 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 3DH5-2480 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 1DH5-2402 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 1DH5-2402 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 1DH5-2480 EUT Model: SNM927 Test distance: 3m



Project No.: 2407W89602E-RF Test Mode: 1DH5-2480 EUT Model: SNM927 Test distance: 3m



# FCC §15.247(b) (1) –SPOT CHECK PEAK OUTPUT POWER MEASUREMENT

#### **Applicable Standard**

According to §15.247(b) (1), for frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

#### **EUT Setup**



#### **Test Procedure**

a. Use the following spectrum analyzer settings:

- 1) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- 2) RBW > 20 dB bandwidth of the emission being measured.
- 3) VBW  $\geq$  RBW.
- 4) Sweep: Auto.
- 5) Detector function: Peak.
- 6) Trace: Max hold.
- b. Allow trace to stabilize.

c. Use the marker-to-peak function to set the marker to the peak of the emission.

- d. The indicated level is the peak output power, after any corrections for external attenuators and cables.
- e. A plot of the test results and setup description shall be included in the test report.

#### **Test Data**

Test Mode:	rest Mode: Transmitting		Tes	Test Engineer: Ash L		Ash Lin	
Test Date:	<b>Test Date:</b> 2024-09-13		Tes	Test Voltage: DC 3.8V			
Test Result:	Compliance		En	vironment:	Temp.: 24.7 Humi.: 54% Atm.:100.2	<sup>7°</sup> C 5 kPa	
Test Modes		Test Frequency (MHz)		Peak Conducted Output Power (dBm)		Limits (dBm)	
BDR Mode (GFSK)		2480(DH5)		13.48		21	
EDR Mode ( $\pi$ /4-DQPSK)		2480(2DH5)	14.0		6	21	
EDR Mode (8DPSK)		2480(3DH5)	14.0		0	21	

#### BDR(GFSK): 2480MHz



ProjectNo.:2407W89602E-RF Tester:Ash Lin Date: 13.SEP.2024 16:50:34

#### **EDR(** π /4-DQPSK): 2480MHz



ProjectNo.:2407W89602E-RF Tester:Ash Lin

Date: 13.SEP.2024 16:56:28

#### EDR(8DPSK): 2480MHz



ProjectNo.:2407W89602E-RF Tester:Ash Lin Date: 13.SEP.2024 17:07:05

### **EUT PHOTOGRAPHS**

Please refer to the attachment 2407W89602E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2407W89602E-RF-INP EUT INTERNAL PHOTOGRAPHS.

Bay Area Compliance Laboratories Corp. (Xiamen)

### **TEST SETUP PHOTOGRAPHS**

Please refer to the attachment 2407W89602E-RF-TSP\_TEST SETUP PHOTOGRAPHS.

### Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk " $\star$ ".

2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.

3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.

4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95.45% confidence interval.

5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).

6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.

#### \*\*\*\*\* END OF REPORT \*\*\*\*\*