

FCC AND ISCED CERTIFICATION TEST REPORT

Applicant:	EXPRESS LUCK INDUSTRIAL(SHENZHEN) LIMITED
Address:	Floor1, Workshop1, No.88, South Baotong Road, Xikeng Community Yuanshan Street, Longgang District, Shenzhen, Guangdong, China
Manufacturer:	EXPRESS LUCK INDUSTRIAL(SHENZHEN) LIMITED
Address:	Floor1, Workshop1, No.88, South Baotong Road, Xikeng Community Yuanshan Street, Longgang District, Shenzhen, Guangdong, China
Product Description:	wifi module
Brand Name:	N/A
Tested Model:	EL.AI8800D40-CWFT
FCC ID:	2AWY6-EA8800D40CT
IC:	26332-EA8800D40CT
Report No.:	JCF260617061-007
Received Date:	Jun. 17, 2026
Tested Date:	Jun. 17, 2026 - Oct. 09, 2026
Issued Date:	Oct. 09, 2026
Test Standards:	FCC Rules and Regulations Part 15 Subpart C, RSS-247 Issue 4 July 2025
Test Procedure:	ANSI C63.10-2020+Cor.1-2023+C63.10a-2024, 558074 D01 15.247 Meas Guidance v05r02, 662911 D01 Multiple Transmitter Output v02r01, RSS-Gen Issue 5 A2, Feb. 2021
Test Result:	Pass

Prepared By:

Kennys Zhang/Engineer **Date:** Oct. 09, 2026

Reviewed By:

Roger Li/Engineer **Date:** Oct. 09, 2026

Approved By:

Talent Zhang/Engineer **Date:** Oct. 09, 2026

Note: The test results in this report apply exclusively to the tested model / sample. Without written approval of Guangzhou Jingce Testing Technology Co., Ltd. the test report shall not be reproduced except in full.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
---	/	Oct. 09, 2026	Original Report	/

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1. Test Report Declare

Applicant:	EXPRESS LUCK INDUSTRIAL(SHENZHEN) LIMITED
Address:	Floor1, Workshop1, No.88, South Baotong Road, Xikeng Community Yuanshan Street, Longgang District, Shenzhen, Guangdong, China
Manufacturer:	EXPRESS LUCK INDUSTRIAL(SHENZHEN) LIMITED
Address:	Floor1, Workshop1, No.88, South Baotong Road, Xikeng Community Yuanshan Street, Longgang District, Shenzhen, Guangdong, China
Product Name:	wifi module
Brand Name:	N/A
Model Name:	EL.AI8800D40-CWFT
Difference Description:	N/A

We Declare:

The equipment described above is tested by Guangzhou Jingce Testing Technology Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangzhou Jingce Testing Technology Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests except as provided information by clients.

2. Summary of Test Results

Summary of Test Results			
Clause	Test Items	FCC/ISED Rules	Test Results
1	6 dB Bandwidth and 99 % Occupied Bandwidth	FCC Part 15.247 (a) (2) RSS-247 Clause 6.3.1 (a) ISED RSS-Gen Clause 6.7	Pass
2	Peak Conducted Output Power	FCC Part 15.247 (b) (3) RSS-247 Clause 6.3.2	Pass
3	Power Spectral Density	FCC Part 15.247 (e) RSS-247 Clause 6.3.1 (b)	Pass
4	Conducted Bandedge and Spurious Emission	FCC Part 15.247 (d) RSS-247 Clause 6.6	Pass
5	Radiated Bandedge and Spurious Emission	FCC Part 15.247 (d) FCC Part 15.209 FCC Part 15.205 RSS-247 Clause 6.6 RSS-GEN Clause 8.9	Pass
6	Conducted Emission Test For AC Power Port	FCC Part 15.207 RSS-GEN Clause 8.8	Pass
7	Antenna Requirement	FCC Part 15.203 RSS-GEN Clause 6.8	Pass
Note: This report was tested strictly in accordance with the standards, without any additions, deviations or omissions to the standard content.			

3. Test Laboratory

Guangzhou Jingce Testing Technology Co., Ltd.

Add.: No.10, Hefeng No.1 street, Huangpu District, Guangzhou, Guangdong, People's Republic of China

Association for Laboratory Accreditation(A2LA). Certificate Number: 6594.03

FCC Designation Number: CN1381. Test Firm Registration Number: 486550

IC Test Firm Registration Number: 31808

Conformity Assessment Body identifier: CN0173

4. Equipment Under Test

4.1. Description of EUT

EUT Name:	wifi module
Model Number:	EL.AI8800D40-CWFT
EUT Function Description:	Please refer to user manual of this device
Power Supply:	DC 3.3V $\pm$ 0.3
Sample No.:	260617061-01-01
Hardware Version:	N/A
Software Version:	N/A
Radio Specification:	Bluetooth V5.4
Operation Frequency:	2402 MHz - 2480 MHz
Modulation:	GFSK
Data Rate:	1Mbps, 2Mbps
Antenna Type:	Steel Sheet Antenna, MAX. Gain: 3.99 dBi

Note 1: EUT is the ab. of equipment under test.

Note 2: The antenna gain is declared by the customer and the laboratory is not responsible for the accuracy of the antenna gain.

4.2. Channel List

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	11	2424	22	2446	33	2468
1	2404	12	2426	23	2448	34	2470
2	2406	13	2428	24	2450	35	2472
3	2408	14	2430	25	2452	36	2474
4	2410	15	2432	26	2454	37	2476
5	2412	16	2434	27	2456	38	2478
6	2414	17	2436	28	2458	39	2480
7	2416	18	2438	29	2460	/	/
8	2418	19	2440	30	2462	/	/
9	2420	20	2442	31	2464	/	/
10	2422	21	2444	32	2468	/	/

4.3. Test Channel Configuration

Tested mode, channel, information		
Mode	Channel	Frequency (MHz)
GFSK	LCH:CH0	2402
	MCH:CH19	2440
	HCH:CH39	2480

4.4. Test environment conditions

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

Temperature range:	21-25 °C
Humidity range:	40-75%
Pressure range:	86-106 kPa

4.5. The Worse Case Power Setting Parameter

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band				
Test Software		Vmware		
Modulation Type	Transmit Antenna Number	Test Software Setting Value		
		CH 00	CH 19	CH 39
GFSK 1M	1	Default	Default	Default
GFSK 2M	1	Default	Default	Default

4.6. Description of Available Antennas

Test Mode	Transmit and Receive Mode	Description
GFSK	☒ 1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.

5. Description of Test Setup

5.1. Accessory

Description of Accessories	Manufacturer	Model Number	Description	Remark
N/A	N/A	N/A	N/A	N/A

5.2. Support Equipment

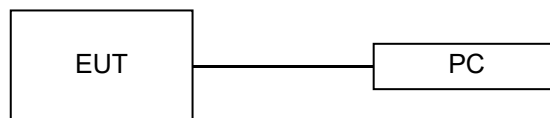
Equipment	Brand Name	Model Name	P/N
PC	Lenovo	T480	/

5.3. Test Setup

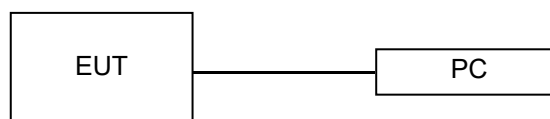
The EUT can work in Fixed Frequency mode.

5.4. Setup Diagram for Tests

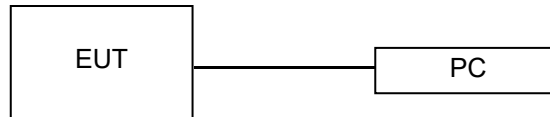
RF Connect Test:



Radiated Emission Test:



AC Power Line Conducted Emissions Test:



6. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
AC Power Conduction emission	1.37 dB
All Radiated emissions	5.4dB
Conducted emissions	3.09 dB
Occupied Channel Bandwidth	1.1%
Conducted Output power	0.82dB
Power Spectral Density	0.82dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of $k = 2$.

7. Measuring Instrument and Software Used

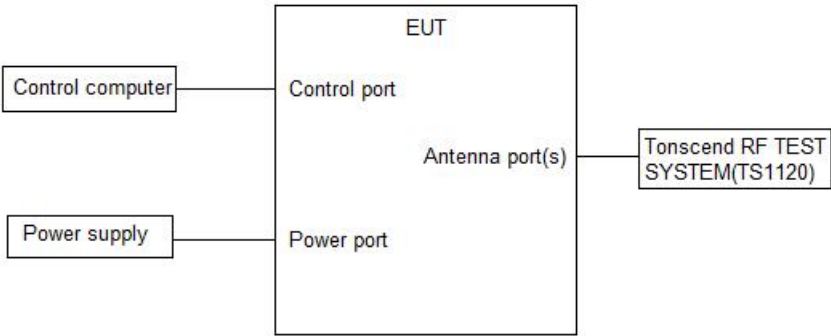
TS Test System						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
☒	Spectrum Analyzer	Keysight	N9030B	MY56320512	Jul. 31, 2025	Jul. 30, 2026
☒	Spectrum Analyzer	Keysight	N9030B	MY56320512	Jun. 23, 2026	Jun. 22, 2027
☒	Vector Signal Generator	Keysight	N5182B	MY57300334	Jul. 31, 2025	Jul. 30, 2026
☒	Vector Signal Generator	Keysight	N5182B	MY57300334	Jun. 23, 2026	Jun. 22, 2027
☒	Signal Generator	Keysight	N5171B	MY57280639	Jul. 31, 2025	Jul. 30, 2026
☒	Signal Generator	Keysight	N5171B	MY57280639	Jun. 23, 2026	Jun. 22, 2027
☒	DC POWER	Keysight	E342A	MY59020356	Jul. 31, 2025	Jul. 30, 2026
☒	DC POWER	Keysight	E342A	MY59020356	Jun. 24, 2026	Jun. 23, 2027
☒	Incubator thermometer	GWS	EL-02JA	21107288	Jul. 31, 2025	Jul. 30, 2026
☒	Incubator thermometer	GWS	EL-02JA	21107288	Jun. 23, 2026	Jun. 22, 2027
☒	Control unit(Power sensor)	Tonscend	JS0806-2	/	Jul. 31, 2025	Jul. 30, 2026
☒	Control unit(Power sensor)	Tonscend	JS0806-2	/	Jun. 24, 2026	Jun. 23, 2027
☒	Spectrum Analyzer	Keysight	N9020B	MY60112811	Jul. 31, 2025	Jul. 30, 2026
☒	Spectrum Analyzer	Keysight	N9020B	MY60112811	Jun. 23, 2026	Jun. 22, 2027
☒	Signal Generator	Keysight	N5173B	MY62220145	Jul. 31, 2025	Jul. 30, 2026
☒	Signal	Keysight	N5173B	MY62220145	Jun. 23, 2026	Jun. 22, 2027

	Generator					
☑	Vector Signal Generator	Keysight	N5182B	MY61252859	Jul. 31, 2025	Jul. 30, 2026
☑	Vector Signal Generator	Keysight	N5182B	MY61252859	Jun. 23, 2026	Jun. 22, 2027
☑	DC POWER	Keysight	E3642A	MY40005294	Jul. 31, 2025	Jul. 30, 2026
☑	DC POWER	Keysight	E3642A	MY40005294	Jun. 24, 2026	Jun. 23, 2027
☑	Control unit(Power sensor)	Tonscend	JS0806-2	24F80620865	Aug. 01, 2025	Jul. 31, 2026
☑	Control unit(Power sensor)	Tonscend	JS0806-2	24F80620865	Jun. 25, 2026	Jun. 24, 2027
Software						
Used	Description	Manufacturer	Name		Version	
☑	Test software	Tonscend	JS1120-3		V3.3.10	
RSE Test System						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
☑	EMI Receiver	R&S	ESR26	101424	Nov. 25, 2025	Nov. 24, 2026
☑	Hybrid Antenna	Schwarzbeck	VULB9163	01361	May. 26, 2026	May. 25, 2027
☑	Horn Antenna 1	Schwarzbeck	BBHA 9120 D	02910	Aug. 31, 2025	Aug. 30, 2026
☑	Horn Antenna 1	Schwarzbeck	BBHA 9120 D	02910	Jul. 17, 2026	Jul. 16, 2027
☑	Horn Antenna 2	ETS	BBHA 9170	1090	Aug. 31, 2025	Aug. 30, 2026
☑	Horn Antenna 2	ETS	BBHA 9170	1090	Jul. 17, 2026	Jul. 16, 2027
☑	loop-antenna	Schwarzbeck	FMZB 1513-60	00030	Jan. 11, 2026	Jan. 10, 2027
☑	Test path	/	Path2: WIFI-2.4G 1-3GHz	/	Jul. 31, 2025	Jul. 30, 2026
☑	Test path	/	Path2: WIFI-2.4G 1-3GHz	/	Jun. 24, 2026	Jun. 23, 2027
☑	Test path	/	Path7: ALL PASS 1-18GHz	/	Jul. 31, 2025	Jul. 30, 2026
☑	Test path	/	Path7: ALL PASS 1-18GHz	/	Jun. 24, 2026	Jun. 23, 2027
☑	Test path	/	Path9: 3GHz High PASS 3-18GHz	/	Jul. 31, 2025	Jul. 30, 2026
☑	Test path	/	Path9: 3GHz High PASS 3-18GHz	/	Jun. 24, 2026	Jun. 23, 2027
☑	Test path	/	Path16: 30MHz-1GHz ALL PASS NO AMP	/	Jul. 31, 2025	Jul. 30, 2026
☑	Test path	/	Path16: 30MHz-1GHz ALL PASS NO AMP	/	Jun. 24, 2026	Jun. 23, 2027
☑	Signal Pre-Amplifier	ETS	3116C-PA	00217677	Jul. 31, 2025	Jul. 30, 2026
☑	Signal Pre-Amplifier	ETS	3116C-PA	00217677	Jul. 17, 2026	Jul. 16, 2027

☒	3m Fully-anechoic Chamber	YIHENG	9m*6m*6m	001	Sep. 05, 2023	Sep. 04, 2026
☒	3m Fully-anechoic Chamber	YIHENG	9m*6m*6m	001	Aug. 14, 2026	Aug. 13, 2029
Software						
Used	Description	Manufacturer	Name		Version	
☒	Test software	Tonscend	TS+		V5.0.0.0	
Conducted Emission Test For AC Power Port						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
☒	LISN	R&S	ENV216	102509	Aug. 01, 2025	Jul. 31, 2026
☒	LISN	R&S	ENV216	102509	Jun. 23, 2026	Jun. 22, 2027
☒	EMI Receiver	R&S	ESR	102154	Aug. 01, 2025	Jul. 31, 2026
☒	EMI Receiver	R&S	ESR	102154	Jun. 10, 2026	Jun. 09, 2027
Software						
Used	Description	Manufacturer	Name		Version	
☒	Test software	EZ	EZ-EMC		EMEC-3A1	
Other Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
☒	Temperature & Humidity	Temperature	HTC-1	/	Sep. 20, 2025	Sep. 21, 2026
☒	Temperature & Humidity	Temperature	HTC-1	/	Sep. 01, 2026	Aug. 31, 2027

8. On Time and Duty Cycle

8.1. Block diagram of test setup



Note: The EUT is connected to the Control unit, and then the signal is transmitted through internal circuits to the Spectrum Analyzer.

8.2. Limits

None; for reporting purposes only

8.3. Procedure

KDB 558074 Zero-Span Spectrum Analyzer Method

8.4. Results

Test Mode	Ant.	Freq. (MHz)	ON Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Factor(dB)
BLE_1M	Ant1	2402	2.12	2.50	84.80	0.72
		2440	2.12	2.50	84.80	0.72
		2480	2.13	2.50	85.20	0.70
BLE_2M	Ant1	2402	1.07	1.88	56.91	2.45
		2440	1.07	1.88	56.91	2.45
		2480	1.07	1.88	56.91	2.45

Note1: Duty Cycle Correction Factor = 10log(1/x).

Note2: Offset=cable loss + Test system insertion loss

Where: x is Duty Cycle(Linear)

Where: T is On Time (transmit duration)

If that calculated VBW is not available on the analyzer, then the next higher value should be used.

8.5. Original test data





9. 6 dB DTS Bandwidth and 99 % Bandwidth

9.1. Block diagram of test setup

Same as section 8.1

9.2. Limits

CFR 47FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2) ISED RSS-247 5.2 (a)	6 dB Bandwidth	≥ 500 kHz	2400-2483.5
ISED RSS-Gen Clause 6.7	99 % Occupied Bandwidth	For reporting purposes only.	2400-2483.5

9.3. Test Procedure

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth : 100 kHz For 99 % Occupied Bandwidth : 1 % to 5 % of the occupied bandwidth
VBW	For 6 dB Bandwidth : $\geq 3 \times$ RBW For 99 % Occupied Bandwidth : $\geq 3 \times$ RBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB/99 % relative to the maximum level measured in the fundamental emission.

9.4. Results

Test Mode	Ant.	Freq. (MHz)	DTS BW (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
BLE_1M	Ant1	2402	0.696	2401.624	2402.320	0.5	PASS
		2440	0.668	2439.644	2440.312	0.5	PASS
		2480	0.696	2479.636	2480.332	0.5	PASS
BLE_2M	Ant1	2402	1.308	2401.308	2402.616	0.5	PASS
		2440	1.240	2439.332	2440.572	0.5	PASS
		2480	1.152	2479.416	2480.568	0.5	PASS

Note: Offset=cable loss + Test system insertion loss

Test Mode	Antenna	Frequency (MHz)	OCB (MHz)	FL(MHz)	FH(MHz)	Limit(MHz)	Verdict
BLE_1M	Ant1	2402	1.0224	2401.4762	2402.4986	---	---
		2440	1.0189	2439.4816	2440.5005	---	---
		2480	1.0200	2479.4778	2480.4978	---	---
BLE_2M	Ant1	2402	2.0561	2400.9792	2403.0353	---	---
		2440	2.0600	2438.9747	2441.0347	---	---
		2480	2.0477	2478.9779	2481.0256	---	---

Note: Offset=cable loss + Test system insertion loss

9.5. Original test data

6 dB bandwidth:





BLE 2M Ant1 2440



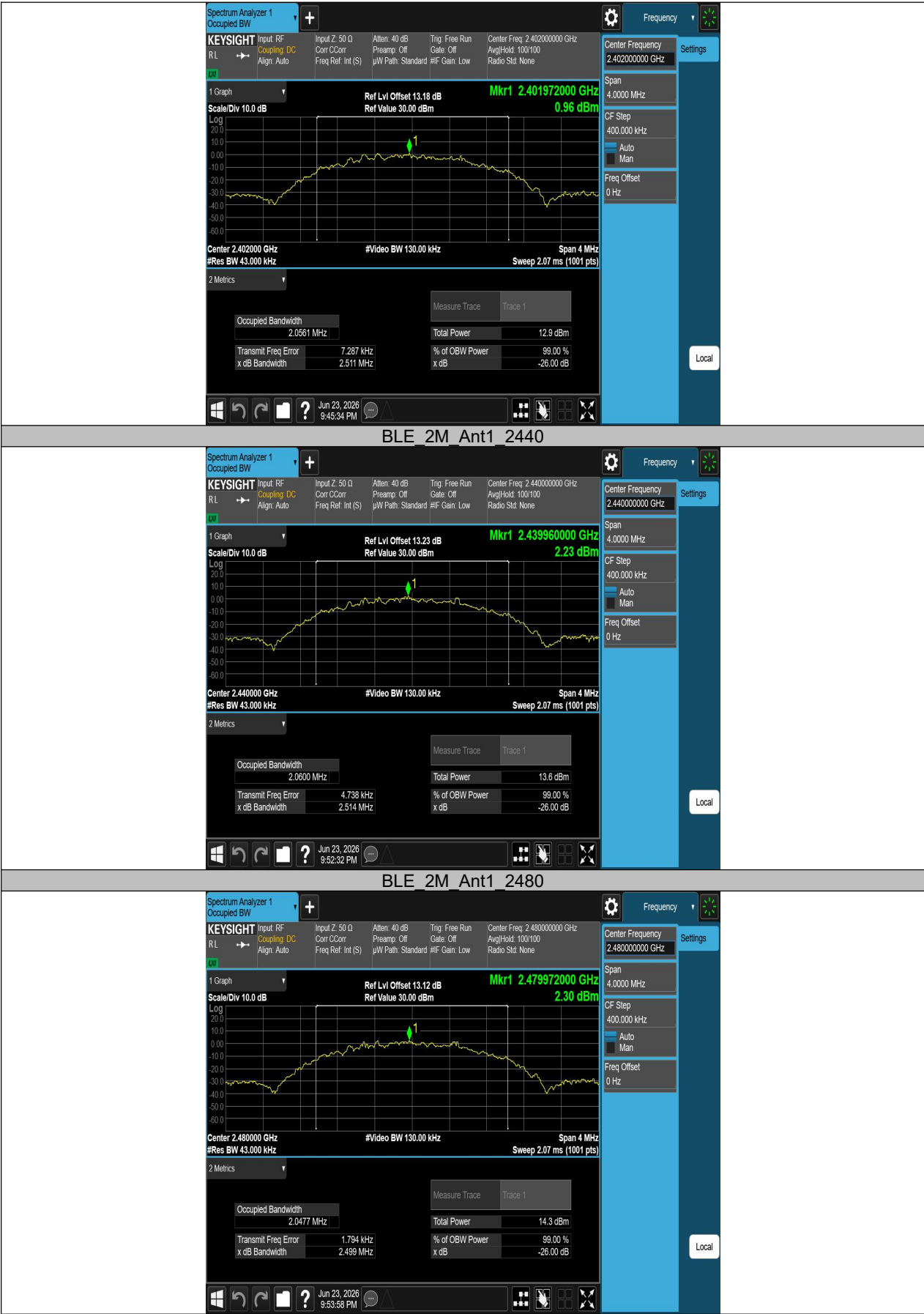
BLE 2M Ant1 2480



99% bandwidth

BLE 1M Ant1 2402





10. Peak Conducted Output Power

10.1. Block diagram of test setup

Same as section 8.1

10.2. Limits

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3) ISED RSS-247 5.4 (d)	Peak Output Power	1 watt or 30 dBm	2400 - 2483.5

10.3. Test Procedure

Connect EUT's antenna output to spectrum analyzer by RF cable.

99% Bandwidth set the spectrum analyzer as follows:

RBW:	30 kHz
VBW:	100 kHz
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

6 dB Bandwidth set the spectrum analyzer as follows:

RBW:	100 kHz
VBW:	300 kHz
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

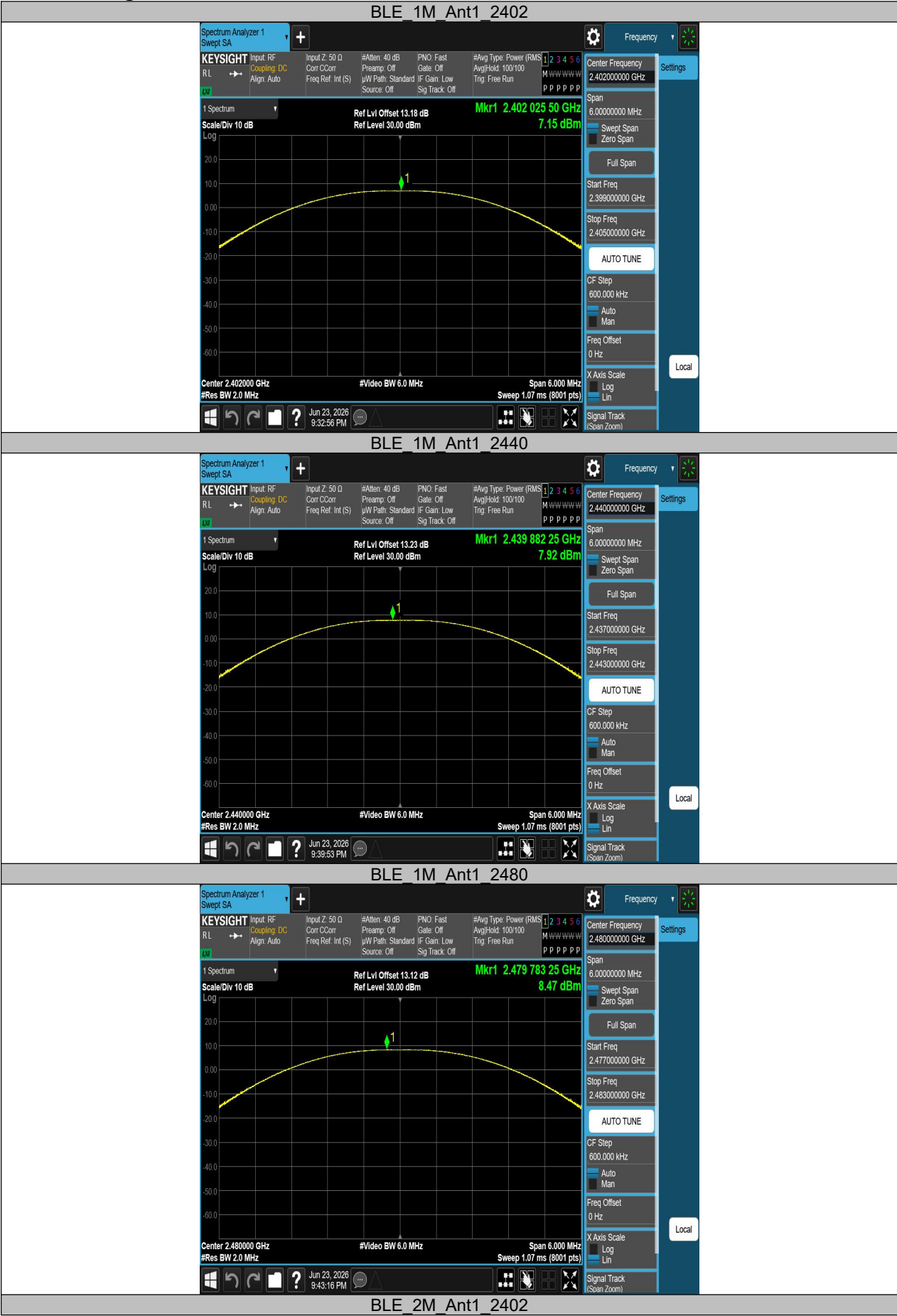
Allow the trace to stabilize, measure the 6 dB and 99% bandwidth of signal.

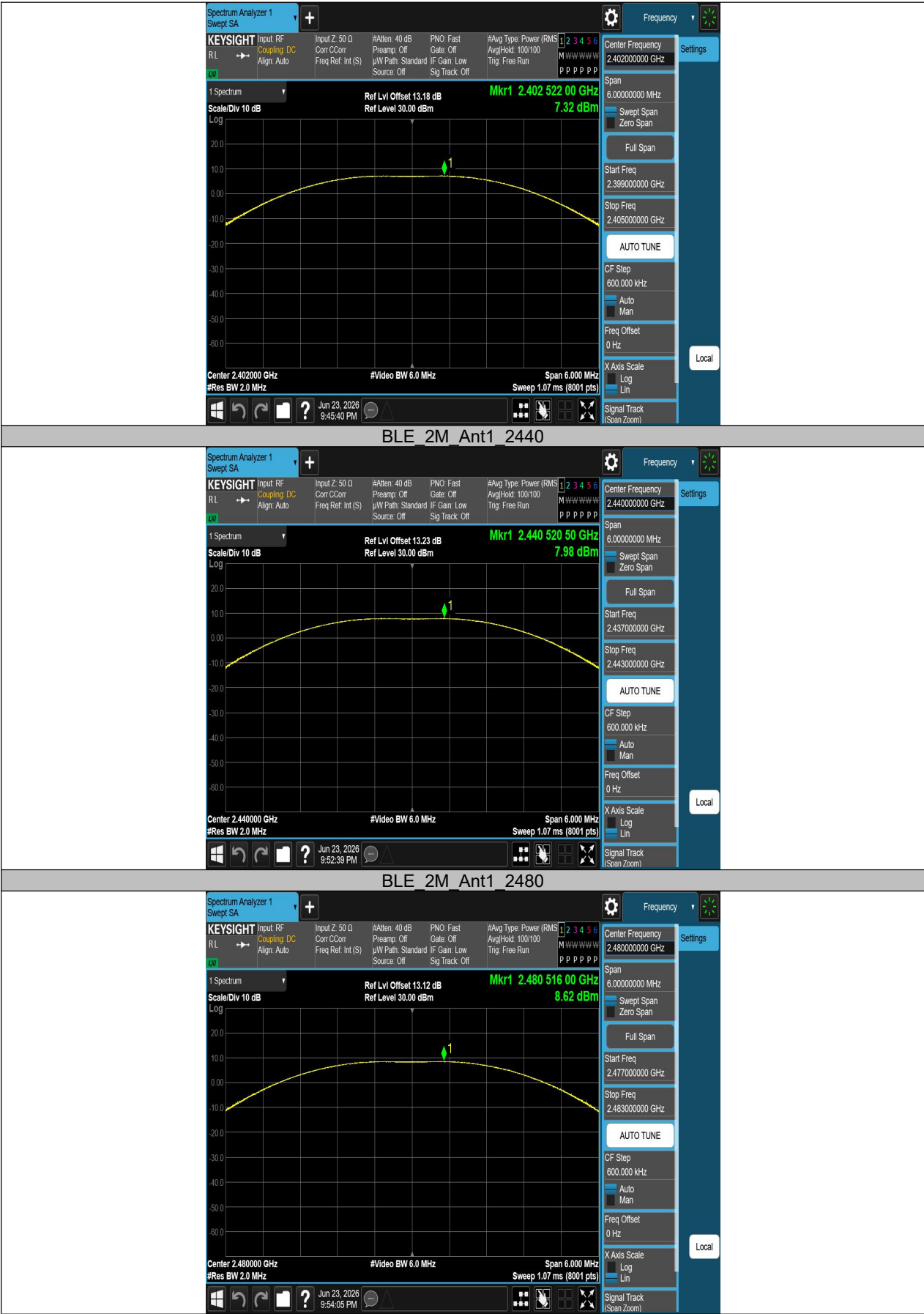
10.4. Results

Test Mode	Ant.	Freq (MHz)	Conducted Peak Power (dBm)	Conducted Limit (dBm)	Gain(dBm)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
BLE_1M	Ant1	2402	7.15	≤30	3.99	11.14	≤36	PASS
		2440	7.92	≤30	3.99	11.91	≤36	PASS
		2480	8.47	≤30	3.99	12.46	≤36	PASS
BLE_2M	Ant1	2402	7.33	≤30	3.99	11.32	≤36	PASS
		2440	7.98	≤30	3.99	11.97	≤36	PASS
		2480	8.62	≤30	3.99	12.61	≤36	PASS

Note: The EIRP = Peak Power + Ant. Gain

10.5. Original test data





11. Power Spectral Density

11.1. Block diagram of test setup

Same as section 8.1

11.2. Limits

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e) ISED RSS-247 5.2 (b)	Power Spectral Density	8 dBm in any 3 kHz band	2400 - 2483.5

11.3. Test Procedure

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

11.4. Results

Test Mode	Ant.	Freq. (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
BLE_1M	Ant1	2402	-10.31	≤ 8.00	PASS
		2440	-9.30	≤ 8.00	PASS
		2480	-8.63	≤ 8.00	PASS
BLE_2M	Ant1	2402	-12.61	≤ 8.00	PASS
		2440	-11.86	≤ 8.00	PASS
		2480	-11.33	≤ 8.00	PASS

Note: Offset=cable loss + Test system insertion loss