

CFR 47 FCC PART 15 SUBPART C(DTS)

TEST REPORT

For

module

MODEL NUMBER: H258A-S

REPORT NUMBER: E04A24030791F00401

ISSUE DATE: May 13, 2024

FCC ID: 2AATL-H258AS

Prepared for

FN-LINK TECHNOLOGY LIMITED

No.8, Litong Road, Liuyang Economic & Technical Development Zone, Changsha, Hunan, China

Prepared by

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This report is based on a single evaluation of the submitted sample(s) of the above mentioned Product, it does not imply an assessment of the production of the products. This report shall not be reproduced, except in full, without the written approval of Guangdong Global Testing Technology Co., Ltd.

TRF No.: 04-E001-0B Web: www.gtggroup.com

TRF Originator: GTG E-mail: info@gtggroup.com TRF Date: 2023-12-13 Tel.: 86-400 755 8988

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	May 13, 2024	Initial Issue	

Summary of Test Results

Test Item	Clause	Limit/Requirement	Result
Antenna Requirement	N/A	FCC Part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	ANSI C63.10-2013, Clause 6.2	FCC Part 15.207	N/A
Conducted Output Power	ANSI C63.10-2013, Clause 11.9.1.3	FCC Part 15.247 (b)(3)	Pass
6dB Bandwidth	ANSI C63.10-2013, Clause 11.8.1	FCC Part 15.247 (a)(2)	Pass
Power Spectral Density	ANSI C63.10-2013, Clause 11.10.2	FCC Part 15.247 (e)	Pass
Conducted Band edge and spurious emission	ANSI C63.10-2013, Clause 11.11	FCC Part 15.247(d)	Pass
Radiated Band edge and Spurious Emission	ANSI C63.10-2013, Clause 11.11 & Clause 11.12	FCC Part 15.205/15.209	Pass
Duty Cycle	ANSI C63.10-2013, Clause 11.6	None; for reporting purposes only.	Pass

Note:

1. N/A: In this whole report not applicable.

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

*The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART C(DTS)> when <Accuracy Method> decision rule is applied.

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	FN-LINK TECHNOLOGY LIMITED
Address:	No.8, Litong Road, Liuyang Economic & Technical Development
	Zone, Changsha, Hunan, China

Manufacturer Information

Company Name:	FN-LINK TECHNOLOGY LIMITED
Address:	No.8, Litong Road, Liuyang Economic & Technical Development
	Zone, Changsha, Hunan, China

EUT Information

Product Description: Model:	module H258A-S
Series Model:	N/A
Brand:	FN-LINK
Sample Received Date:	Mar. 30, 2024
Sample Status:	Normal
Sample ID:	A24030791 001
Date of Tested:	Mar. 30, 2024 to May 13, 2024

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART C(DTS)	Pass

Prepared By:

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Checked By:

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Alan He Laboratory Leader



2. TEST METHODOLOGY

All tests were performed in accordance with the standard CFR 47 FCC PART 15 SUBPART C(DTS)

3. FACILITIES AND ACCREDITATION

A2LA (Certificate No.: 6947.01)
Guangdong Global Testing Technology Co., Ltd.
has been assessed and proved to be in compliance with A2LA.
FCC (FCC Designation No.: CN1343)
Guangdong Global Testing Technology Co., Ltd.
has been recognized to perform compliance testing on equipment
subject to Supplier's Declaration of Conformity (SDoC) and
Certification rules
ISED (Company No.: 30714)
Guangdong Global Testing Technology Co., Ltd.
has been registered and fully described in a report filed with ISED.
The Company Number is 30714 and the test lab Conformity
Assessment Body Identifier (CABID) is CN0148.

Note: All tests measurement facilities use to collect the measurement data are located at Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People's Republic of China, 523808

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

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

k	Uncertainty
1.96	±9.2 PPM
1.96	±9.2 PPM
1.96	±9.2 PPM
1.96	±0.57%
1.96	±1.5 dB
1.96	±1.9 dB
1.96	9 kHz-30 MHz: ± 0.95 dB 30 MHz-1 GHz: ± 1.5 dB 1GHz-12.75GHz: ± 1.8 dB 12.75 GHz-26.5 GHz: ± 2.1dB
	1.96 1.96 1.96 1.96 1.96 1.96

95% confidence level using a coverage factor of k=1.96.

Test Item	Measurement Frequency Range	К	U(dB)
Conducted emissions from the AC mains power ports (AMN)	150 kHz ~ 30 MHz	2	3.37
Radiated emissions	9 kHz ~ 30 MHz	2	4.16
Radiated emissions	30 MHz ~ 1 GHz	2	3.79
Radiated emissions	1 GHz ~ 18 GHz	2	5.62
Radiated emissions	18 GHz ~ 40 GHz	2	5.54
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.			

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name		module
Model		H258A-S
Series Model		N/A
Model Difference		N/A.
Hardware Version		V2.0
Software Version		L.FWB.23Q1.0000.00.r3295
Ratings		Input: 3.3VDC
Power Supply	DC	3.3V

Frequency Band:	2400 MHz to 2483.5 MHz
Frequency Range:	2402 MHz to 2480 MHz
Bluetooth Version:	Bluetooth 5.0
Bluetooth Mode:	Bluetooth LE/2LE
Type of Modulation:	GFSK,2GFSK
Number of Channels:	40
Channel Separation:	2 MHz
Maximum Peak Power:	5.87 dBm
Antenna Type:	External Antenna
Antenna Gain:	2.98 dBi
Normal Test Voltage:	3.3 Vdc
EUT Test software:	Terminal
Note:	The Antenna Gain was provided by customer, and this information may affect the validity of the results, customer should be responsible for this.

5.2. 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	/	/

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Test Mode	Frequency (MHz)	Channel Number	Maximum Peak Output Power (dBm)	Maximum EIRP (dBm)
LE 1M	2402 ~ 2480	0-39[40]	5.87	/
LE 2M	2402 ~ 2480	0-39[40]	5.56	/

5.3. MAXIMUM PEAK OUTPUT POWER

5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency	
LE 1Mbps	CH 0(Low Channel), CH 19(MID Channel), CH 39(High Channel)	2402 MHz, 2440 MHz, 2480 MHz	
LE 2Mbps	CH 0(Low Channel), CH 19(MID Channel), CH 39(High Channel)	2402 MHz, 2440 MHz, 2480 MHz	

5.5. THE WORSE CASE POWER SETTING PARAMETER

The	The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band						
Test Softwar	e Version	Terminal					
Modulation	Transmit	Te	Test Software setting value				
Туре	Antenna Number	CH 0	CH 19	CH 39			
GFSK(1Mbps)	1	default	default	default			
GFSK(2Mbps)	1	default	default	default			

5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2402-2480	External	2.98

Test Mode	Transmit and Receive Mode	Description
LE 1Mbps	⊠1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.
LE 2Mbps	⊠1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.
Note:		

5.7. SUPPORT UNITS FOR SYSTEM TEST

The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	PC	Lenovo	B4650-D002	M90601U3	GTG Support
E-2	Test board	FN-LINK	H258A-S	N/A	FN-LINK

The following cables were used to form a representative test configuration during the tests.

Item	Type of cable	Shielded Type	Ferrite Core	Length
C-1	Dupont cable	Unshielded	without ferrite	0.3 m

5.8. SETUP DIAGRAM

Radiated emissions:



6. MEASURING EQUIPMENT AND SOFTWARE USED

	Test Equipment of Conducted RF								
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date				
Spectrum Analyzer	Rohde & Schwarz	FSV40	102257	2023/09/18	2024/09/17				
Spectrum Analyzer	KEYSIGHT	N9020A	MY51285127	2023/09/18	2024/09/17				
EXG Analog Signal Generator	KEYSIGHT	N5173B	MY61253075	2023/09/18	2024/09/17				
Vector Signal Generator	Rohde & Schwarz	SMM100A	101899	2023/09/18	2024/09/17				
RF Control box	MWRF-test	MW100-RFCB	MW220926GTG	2023/09/18	2024/09/17				
Wideband Radio Communication Tester	Rohde & Schwarz	CMW270	102792	2023/09/18	2024/09/17				
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	103235	2023/09/18	2024/09/17				
temperature humidity chamber	Espec	SH-241	SH-241-2014	2023/09/18	2024/09/17				
RF Test Software	MWRF-test	MTS8310E (Ver. V2/0)	N/A	N/A	N/A				

	Test Equipment of Radiated emissions below 1GHz							
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date			
3m Semi-anechoic Chamber	ETS	9m*6m*6m	Q2146	2022/08/30	2025/08/29			
EMI Test Receiver	Rohde & Schwarz	ESCI3	101409	2023/09/18	2024/09/17			
Spectrum Analyzer	KEYSIGHT	N9020A	MY51283932	2023/09/18	2024/09/17			
Pre-Amplifier	HzEMC	HPA-9K0130	HYPA21001	2023/09/18	2024/09/17			
Biconilog Antenna	Schwarzbeck	VULB 9168	01315	2022/10/10	2025/10/09			
Biconilog Antenna	ETS	3142E	00243646	2022/03/23	2025/03/22			
Loop Antenna	ETS	6502	243668	2022/03/30	2025/03/29			
Test Software	Farad	EZ-EMC (Ver.FA-03A2 RE)	N/A	N/A	N/A			

Test Equipment of Radiated emissions above 1GHz								
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date			
3m Semi-anechoic Chamber	ETS	9m*6m*6m	Q2149	2022/08/30	2025/08/29			
Spectrum Analyzer	Rohde & Schwarz	FSV40	101413	2023/09/18	2024/09/17			
Spectrum Analyzer	KEYSIGHT	N9020A	MY51283932	2023/09/18	2024/09/17			
Pre-Amplifier	A-INFO	HPA-1G1850	HYPA21003	2023/09/18	2024/09/17			
Horn antenna	A-INFO	3117	246069	2022/03/11	2025/03/10			
Pre-Amplifier	ZKJC	HPA-184057	HYPA21004	2023/09/18	2024/09/17			

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Horn antenna	ZKJC	3116C	246265	2022/03/29	2025/03/28
Test Software	Farad	EZ-EMC (Ver.FA-03A2	N/A	N/A	N/A
Test Soltwale	Falau	RE+)	N/A	N/A	IN/A

	Test Equipment of Conducted emissions				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Shielded Room	CHENG YU	8m*5m*4m	N/A	2022/10/29	2025/10/28
EMI Test Receiver	Rohde & Schwarz	ESR3	102647	2023/09/18	2024/09/17
LISN/AMN	Rohde & Schwarz	ENV216	102843	2023/09/18	2024/09/17
NNLK 8129 RC	Schwarzbeck	NNLK 8129 RC	5046	2023/09/18	2024/09/17
Test Software	Farad	EZ-EMC (Ver. EMC-con-3A1 1+)	N/A	N/A	N/A

7. ANTENNA PORT TEST RESULTS

7.1. CONDUCTED OUTPUT POWER

<u>LIMITS</u>

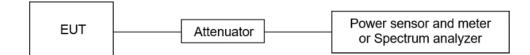
CFR 47 FCC Part15 (15.247) Subpart C			
Section Test Item Limit Frequency Range (MHz)			
CFR 47 FCC 15.247(b)(3)	Peak Conduct Output Power	1 watt or 30 dBm	2400-2483.5

TEST PROCEDURE

Connect the EUT to a low loss RF cable from the antenna port to the power sensor (video bandwidth is greater than the occupied bandwidth).

Measure peak emission level, the indicated level is the peak output power, after any corrections for external attenuators and cables.

TEST SETUP



TEST ENVIRONMENT

Temperature	21.4 ℃	Relative Humidity	52%
Atmosphere Pressure	100kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.2. 6DB BANDWIDTH

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section Test Item Limit Frequency Range (MHz)			
CFR 47 FCC 15.247(a)(2)	6 dB Bandwidth	≥ 500 kHz	2400-2483.5

TEST PROCEDURE

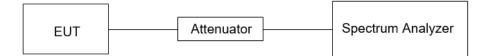
Refer to ANSI C63.10-2013 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
	For 6 dB Bandwidth: Enough to capture all products of the modulation carrier emission
Detector	Peak
RBW	For 6 dB Bandwidth: 100 kHz
VBW	For 6 dB Bandwidth: ≥3 × RBW
Trace	Max hold
Sweep	Auto couple

a) 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 relative to the maximum level measured in the fundamental emission.

TEST SETUP



TEST ENVIRONMENT

Temperature	21.4 ℃	Relative Humidity	52%
Atmosphere Pressure	100kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.3. POWER SPECTRAL DENSITY

LIMITS

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

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.10.

Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	PEAK
RBW	3 kHz ≤ RBW ≤ 100 kHz
VBW	≥3 × 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.

TEST SETUP



TEST ENVIRONMENT

Temperature	21.4 ℃	Relative Humidity	52%
Atmosphere Pressure	100kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.4. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

<u>LIMITS</u>

CFR 47 FCC Part15 (15.247) Subpart C		
Section Test Item Limit		
CFR 47 FCC §15.247 (d) Conducted Bandedge and Spurious Emissions		at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.11 and 11.13.

Connect the EUT to the spectrum analyser and use the following settings for reference level measurement:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

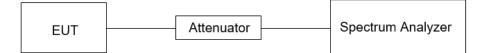
Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level.

Change the settings for emission level measurement:

Shan	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
measurement points	≥span/RBW
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11.

TEST SETUP



TEST ENVIRONMENT

Temperature	21.4 ℃	Relative Humidity	52%
Atmosphere Pressure	100kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.5. DUTY CYCLE

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.6 Zero – Span Spectrum Analyzer method.

TEST SETUP



TEST ENVIRONMENT

Temperature	21.4 ℃	Relative Humidity	52%
Atmosphere Pressure	100kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

8. RADIATED TEST RESULTS

LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz					
Frequency Range (MHz)	uency Range Field Strength Limit (MHz) (uV/m) at 3 m		Field Strength Limit (dBuV/m) at 3 m		
	, , , , , , , , , , , , , , , , , , ,	Quasi-Peak			
30 - 88	100	40			
88 - 216	150	43.5			
216 - 960	200	46			
Above 960	500	54			
Above 1000	500	Peak	Average		
	500	74	54		

FCC Emissions radiated outside of the specified frequency bands below 30 MHz					
Frequency (MHz) Field strength (microvolts/meter) Measurement distance (meters)					
0.009-0.490	2400/F(kHz)	300			
0.490-1.705	24000/F(kHz)	30			
1.705-30.0	30				

FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7- <mark>1</mark> 56.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. ²Above 38.6c

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TEST PROCEDURE

Below 30 MHz

The setting of the spectrum analyser

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode remeasured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω . For example, the measurement frequency X KHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Above 1G

RBW	1 MHz
IV BW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

The setting of the spectrum analyser

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.6.

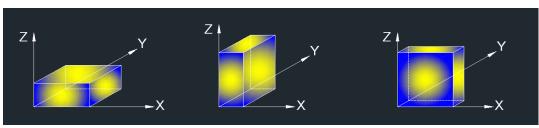
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 1.5 m above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

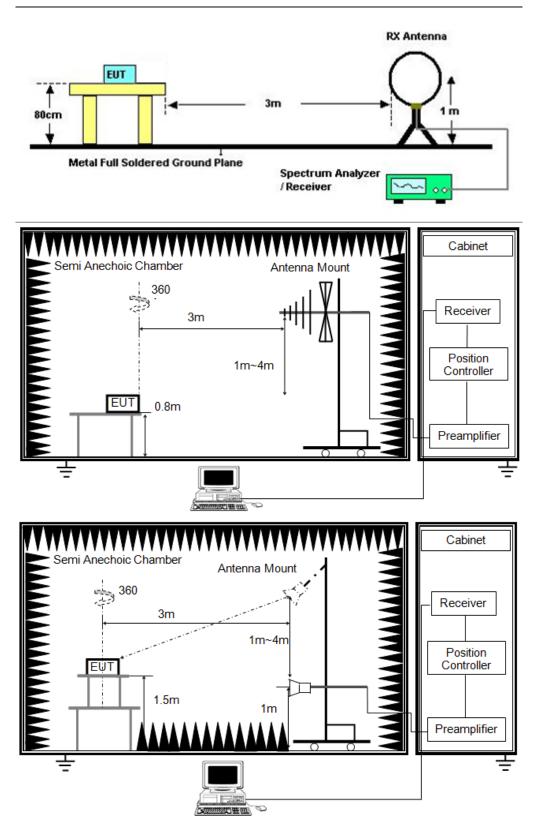
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1.ON TIME AND DUTY CYCLE.



X axis, Y axis, Z axis positions:

Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

TEST SETUP



TEST ENVIRONMENT

Temperature	24.3 ℃	Relative Humidity	54%
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TRF No.: 04-E001-0B

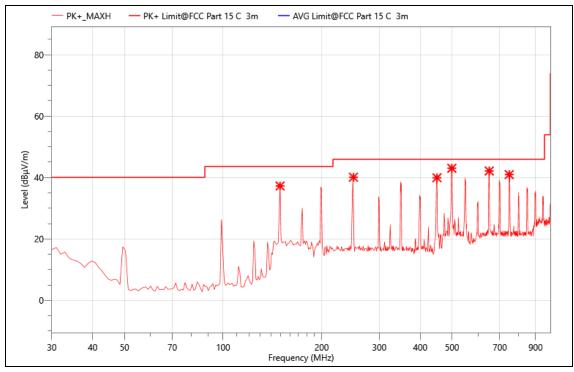
Atmosphere Pressure	101kPa	

TEST RESULTS

8.1. RADIATED BAND EDGE AND SPURIOUS EMISSION

30MHz to 1GHz The worst result as bellow:

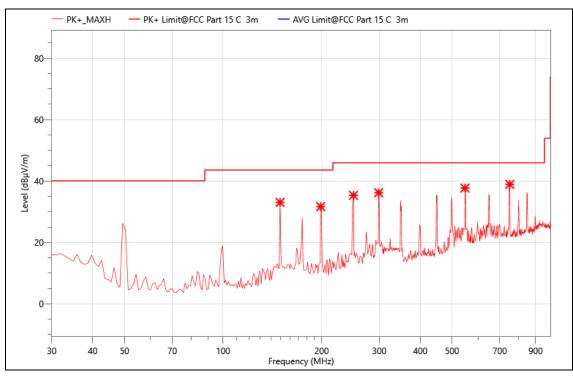
Mode:	BLE1M-2402
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/17
T/A/P	24.3℃/54%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	149.310	60.10	-22.86	37.24	43.50	6.26	PK+	V
2	250.190	59.17	-19.07	40.10	46.00	5.90	PK+	V
3	450.010	53.88	-13.95	39.93	46.00	6.07	PK+	V
4	499.480	55.17	-12.15	43.02	46.00	2.98	PK+	V
5	649.830	50.62	-8.48	42.14	46.00	3.86	PK+	V
6	747.800	48.14	-7.18	40.96	46.00	5.04	PK+	V

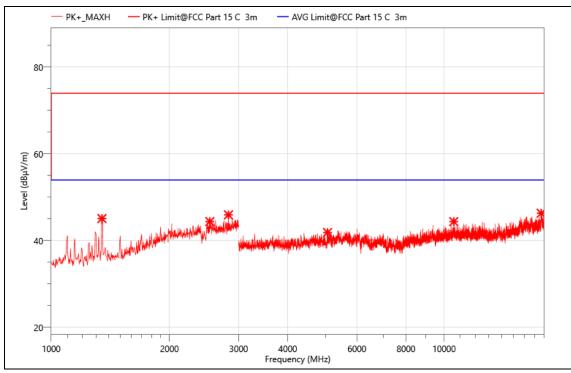
Mode:	BLE1M-2402
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/17
T/A/P	24.3°C/54%/101Kpa



No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	149.310	55.91	-22.86	33.05	43.50	10.45	PK+	Н
2	198.780	53.83	-22.17	31.66	43.50	11.84	PK+	Н
3	250.190	54.41	-19.07	35.34	46.00	10.66	PK+	Н
4	298.690	55.09	-18.91	36.18	46.00	9.82	PK+	Н
5	547.980	47.52	-9.82	37.70	46.00	8.30	PK+	Н
6	750.710	46.16	-7.23	38.93	46.00	7.07	PK+	Н

Above 1GHz The worst result as bellow:

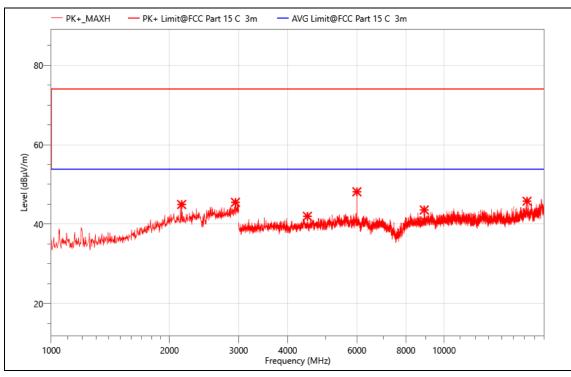
Mode:	BLE1M-2480
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3°C/54%/101Kpa



Critical_Freqs

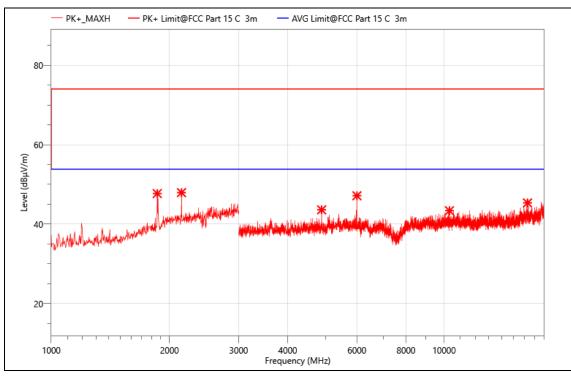
No.	Freq.	Reading	Corr.	Meas.	Limit	Margin	Det.	Pol.
	(MHz)	(dBµV)	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)	Det.	P01.
1	1346.000	58.97	-13.86	45.11	74.00	28.89	PK+	Н
2	2534.000	52.97	-8.56	44.41	74.00	29.59	PK+	Н
3	2826.000	53.82	-7.87	45.95	74.00	28.05	PK+	Н
4	5050.500	52.59	-10.7	41.89	74.00	32.11	PK+	Н
5	10584.000	49.64	-5.24	44.40	74.00	29.60	PK+	Н
6	17667.000	46.12	0.21	46.33	74.00	27.67	PK+	Н

Mode:	BLE1M-2480
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3℃/54%/101Kpa



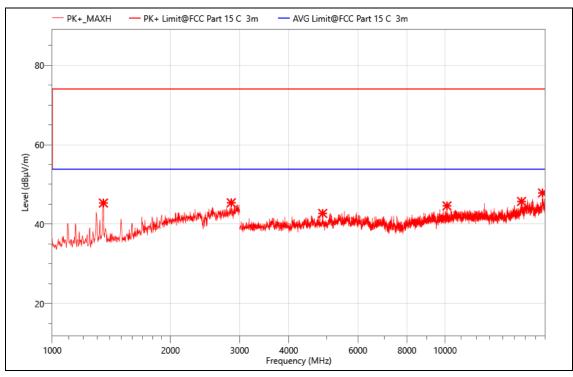
No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2148.000	53.99	-9.05	44.94	74.00	29.06	PK+	V
2	2944.000	52.94	-7.46	45.48	74.00	28.52	PK+	V
3	4489.500	53.92	-11.96	41.96	74.00	32.04	PK+	V
4	6000.000	57.01	-8.87	48.14	74.00	25.86	PK+	V
5	8904.000	51.36	-7.81	43.55	74.00	30.45	PK+	V
6	16263.000	46.69	-0.93	45.76	74.00	28.24	PK+	V

Mode:	BLE1M-2440
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3°C/54%/101Kpa



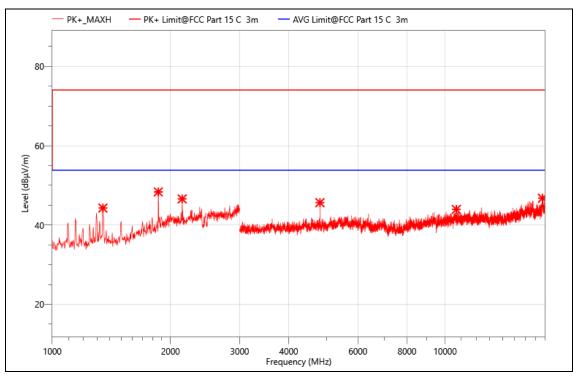
No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	1862.000	58.11	-10.41	47.70	74.00	26.30	PK+	V
2	2146.000	56.98	-9.05	47.93	74.00	26.07	PK+	V
3	4879.500	54.73	-11.14	43.59	74.00	30.41	PK+	V
4	6000.000	56.01	-8.87	47.14	74.00	26.86	PK+	V
5	10320.000	49.10	-5.72	43.38	74.00	30.62	PK+	V
6	16309.500	47.33	-1.99	45.34	74.00	28.66	PK+	V

Mode:	BLE1M-2440
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3°C/54%/101Kpa



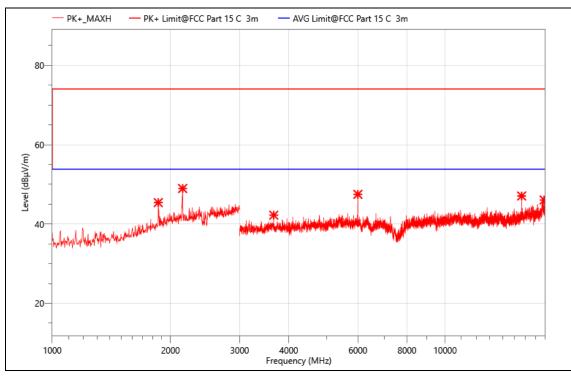
No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	1350.000	59.08	-13.77	45.31	74.00	28.69	PK+	Н
2	2856.000	53.59	-8.22	45.37	74.00	28.63	PK+	Н
3	4881.000	53.83	-11.14	42.69	74.00	31.31	PK+	Н
4	10111.500	51.09	-6.5	44.59	74.00	29.41	PK+	Н
5	15657.000	47.79	-2.09	45.70	74.00	28.30	PK+	Н
6	17703.000	47.73	0.11	47.84	74.00	26.16	PK+	Н

Mode:	BLE1M-2402
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3℃/54%/101Kpa



No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	1346.000	58.15	-13.86	44.29	74.00	29.71	PK+	Н
2	1862.000	58.76	-10.41	48.35	74.00	25.65	PK+	Н
3	2142.000	55.64	-9.05	46.59	74.00	27.41	PK+	Н
4	4803.000	56.98	-11.34	45.64	74.00	28.36	PK+	Н
5	10680.000	48.94	-4.99	43.95	74.00	30.05	PK+	Н
6	17695.500	46.56	0.21	46.77	74.00	27.23	PK+	Н

Mode:	BLE1M-2402
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3°C/54%/101Kpa



No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	1862.000	55.82	-10.41	45.41	74.00	28.59	PK+	V
2	2148.000	58.02	-9.05	48.97	74.00	25.03	PK+	V
3	3663.000	55.63	-13.39	42.24	74.00	31.76	PK+	V
4	5998.500	56.37	-8.88	47.49	74.00	26.51	PK+	V
5	15663.000	49.22	-2.14	47.08	74.00	26.92	PK+	V
6	17871.000	45.61	0.45	46.06	74.00	27.94	PK+	V

Note: [Margin=Limit-Meas.]; [Meas.=Reading+Corr.]

Note:

1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

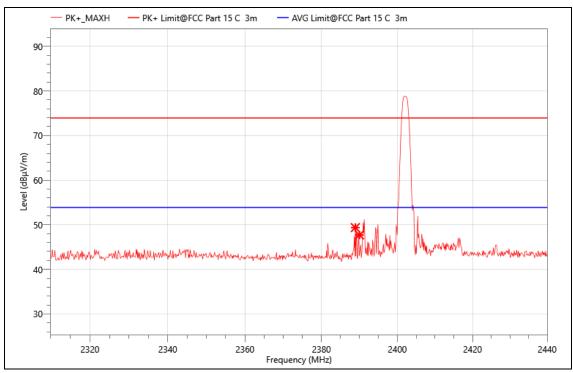
3. Peak: Peak detector.

4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

For the frequency above 18 GHz, a pre-scan was performed, and the result was 20 dB lower than the limit line, the test data was not shown in the report.

Band Edge The worst result as bellow:

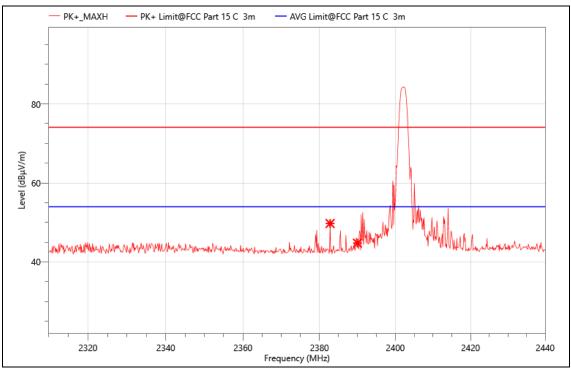
Mode:	BLE1M-2402
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3℃/54%/101Kpa



Critical_Freqs

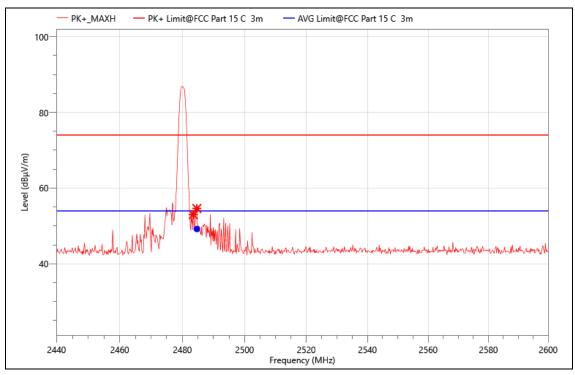
No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2388.910	26.67	22.7	49.37	74.00	24.63	PK+	Н
2	2390.000	25.00	22.72	47.72	74.00	26.28	PK+	Н

Mode:	BLE1M-2402
Power:	AC 120V/60Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3℃/54%/101Kpa



No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2382.800	27.17	22.58	49.75	74.00	24.25	PK+	V
2	2390.000	22.05	22.72	44.77	74.00	29.23	PK+	V

Mode:	BLE1M-2480
Power:	AC 230V/50Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3℃/54%/101Kpa

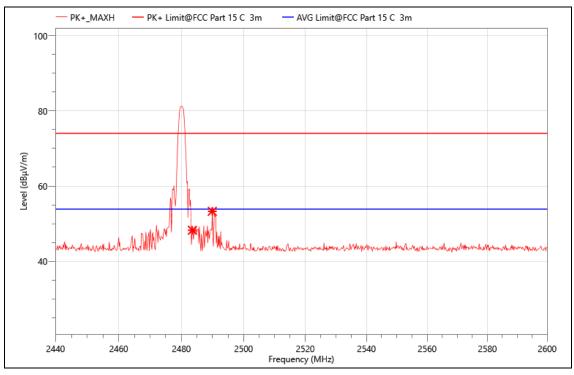


No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2483.500	29.84	23.15	52.99	74.00	21.01	PK+	V
2	2484.640	31.44	23.15	54.59	74.00	19.41	PK+	V

Final_Result

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.	Verdict
1	2484.640	26.04	23.15	49.19	53.90	4.71	AVG	V	PASS

Mode:	BLE1M-2480
Power:	AC 230V/50Hz
TE:	Berny
Date	2024/4/18
T/A/P	24.3℃/54%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2483.500	25.11	23.15	48.26	74.00	25.74	PK+	Н
2	2489.920	30.17	23.13	53.30	74.00	20.70	PK+	Н

Note: [Margin=Limit-Meas.]; [Meas.=Reading+Corr.]

9. ANTENNA REQUIREMENT

REQUIREMENT

Please refer 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.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

Pass.

10. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

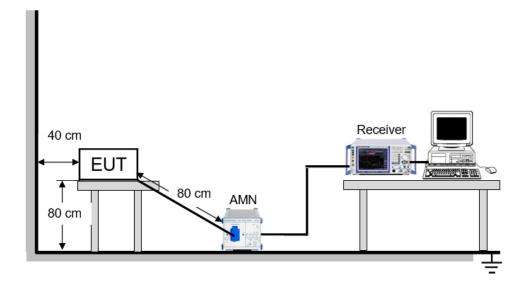
FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST PROCEDURE

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP



TEST ENVIRONMENT

Temperature	°C	Relative Humidity	%
Atmosphere Pressure	kPa		

TEST RESULTS

N/A.

TRF No.: 04-E001-0B

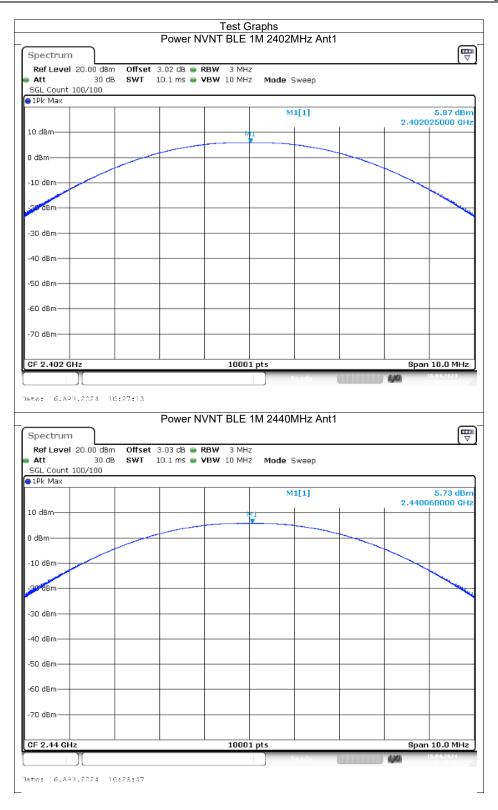
11. TEST DATA - Appendix A

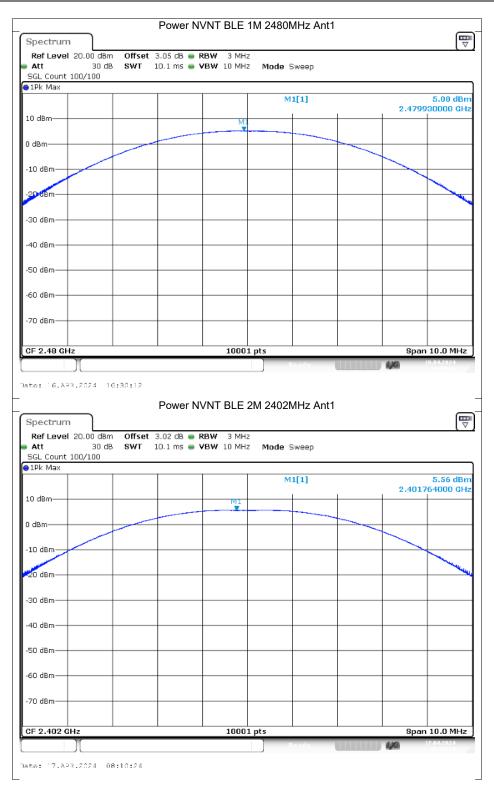
Duty Cycle

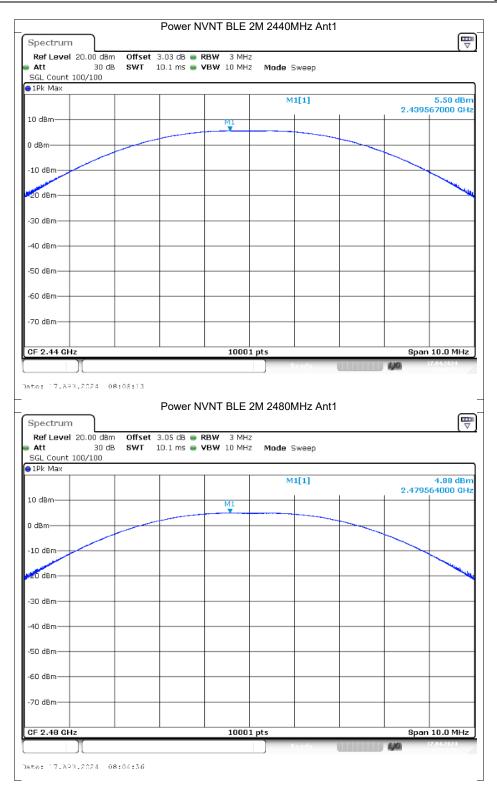
Condition	Mode	Frequency (MHz)	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)	Final settingFor VBW (kHz)
NVNT	BLE 1M	2402	Ant1	0.38	1	38	4.2	2.61	1
NVNT	BLE 1M	2440	Ant1	0.38	1	38	4.2	2.61	1
NVNT	BLE 1M	2480	Ant1	0.38	1	38	4.2	2.61	1
NVNT	BLE 2M	2402	Ant1	0.2	1	20	6.99	5.12	1
NVNT	BLE 2M	2440	Ant1	0.2	1	20	6.99	5.12	1
NVNT	BLE 2M	2480	Ant1	0.2	1	20	6.99	5.1	1

Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	5.87	0	5.87	30	Pass
NVNT	BLE 1M	2440	Ant1	5.73	0	5.73	30	Pass
NVNT	BLE 1M	2480	Ant1	5.08	0	5.08	30	Pass
NVNT	BLE 2M	2402	Ant1	5.56	0	5.56	30	Pass
NVNT	BLE 2M	2440	Ant1	5.5	0	5.5	30	Pass
NVNT	BLE 2M	2480	Ant1	4.88	0	4.88	30	Pass

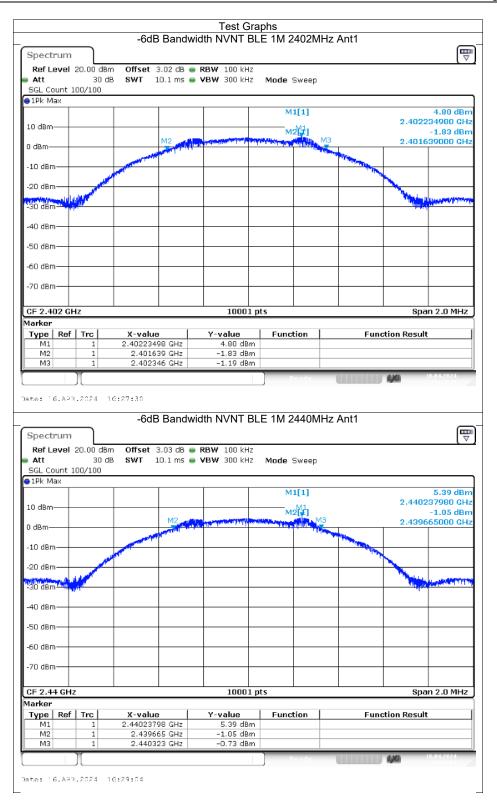


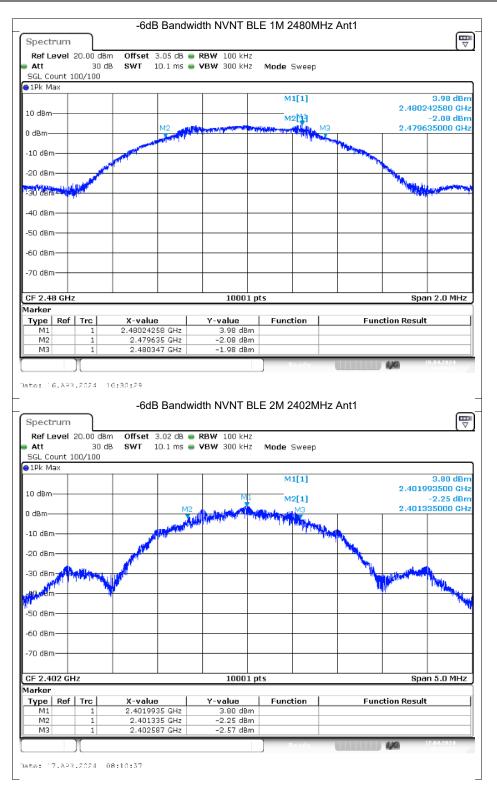


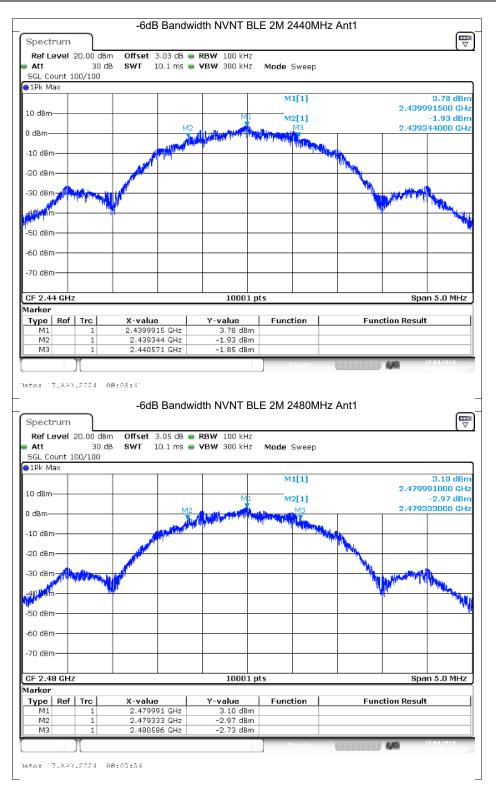


•••-						
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.71	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.66	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.71	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.25	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.23	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.25	0.5	Pass

-6dB Bandwidth

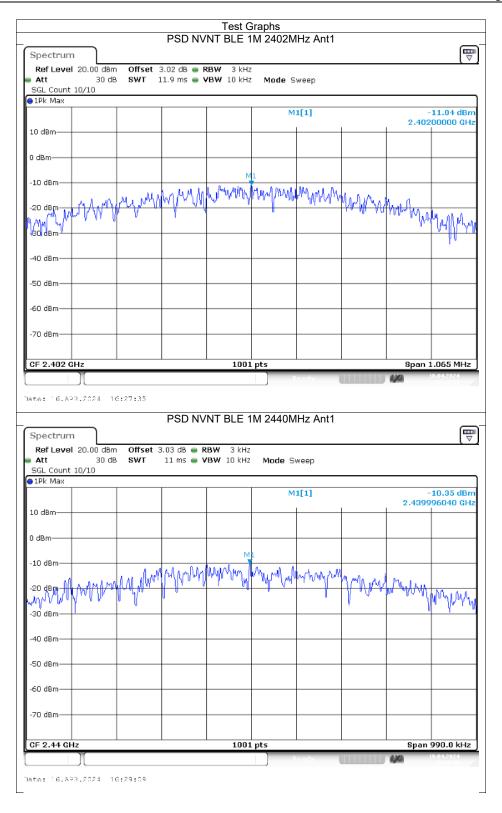


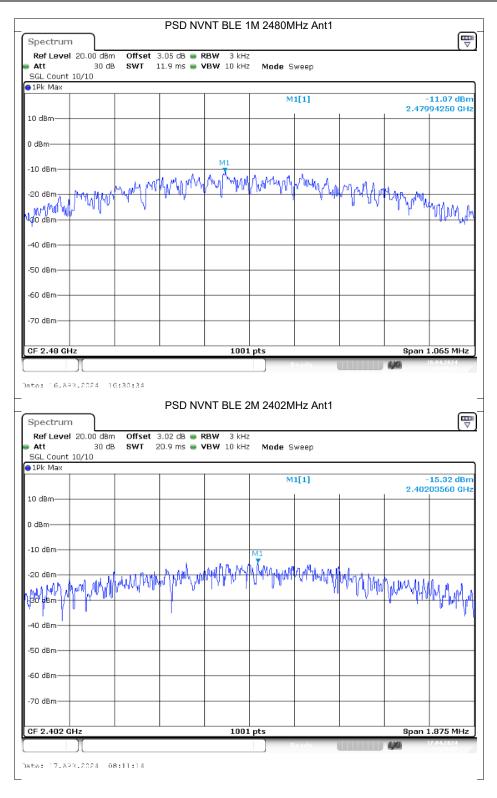


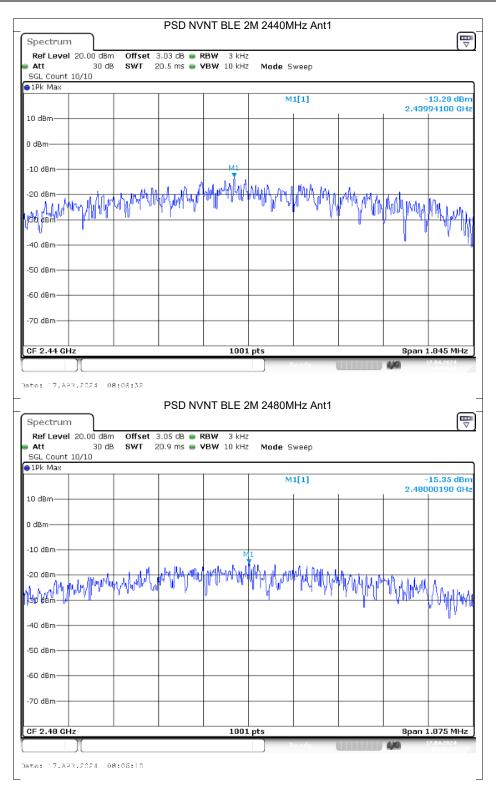


Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-11.04	0	-11.04	8	Pass
NVNT	BLE 1M	2440	Ant1	-10.35	0	-10.35	8	Pass
NVNT	BLE 1M	2480	Ant1	-11.07	0	-11.07	8	Pass
NVNT	BLE 2M	2402	Ant1	-15.32	0	-15.32	8	Pass
NVNT	BLE 2M	2440	Ant1	-13.28	0	-13.28	8	Pass
NVNT	BLE 2M	2480	Ant1	-15.35	0	-15.35	8	Pass







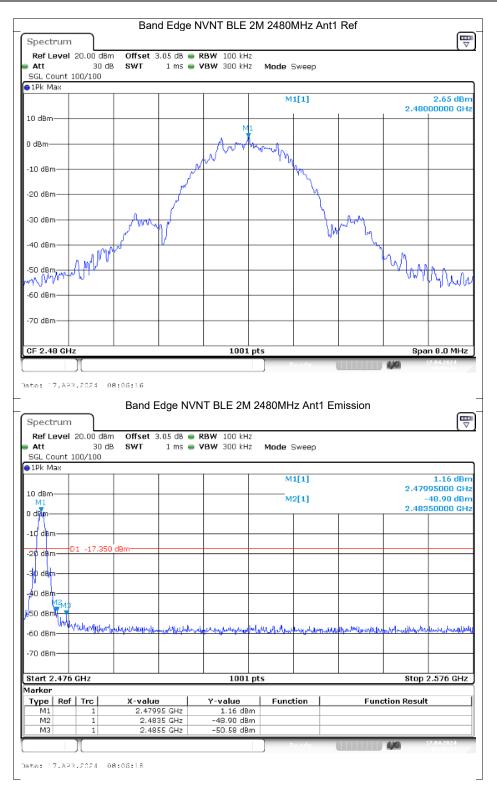
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Band	Edge					
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-53.85	-20	Pass
NVNT	BLE 1M	2480	Ant1	-54.4	-20	Pass
NVNT	BLE 2M	2402	Ant1	-32.74	-20	Pass
NVNT	BLE 2M	2480	Ant1	-51.55	-20	Pass

	Band Edd	Test Grant Test Grant Test Grant Test Grant Test Test Test Test Test Test Test Tes	M 2402MHz An	t1 Ref	
Spectrum	24.14 243				P
Ref Level 20.00 d	IBm Offset 3.02 dB	RBW 100 kHz			[\
Att 30		VBW 300 kHz	Mode Sweep		
SGL Count 100/100					
			M1[1]		4.55 dBr
10 40			1		2.40207990 GH
10 dBm		M1	1		
0 dBm		- North	Y		
			γ		
-10 dBm			<u> </u>		
-20 dBm			1		
-30 dBm		M	- M		
		/			
-40 dBm			\	<u>n</u>	
ji,	walnes woll .		1	Mughan	
Zo de to to to to to to	AND WITH THE			where the	home who
-60 dBm					
-70 dBm					
CF 2.402 GHz		1001 p	ots		Span 8.0 MHz
		NVNT BLE 1M	2402MHz Ant1	Emission	
	Band Edge N	RBW 100 kHz	Poole 2402MHz Ant1	Emission	
Spectrum Ref Level 20.00 d Att 30	Band Edge N		2402MHz Ant1 Mode Sweep	Emission	(E
Spectrum Ref Level 20.00 d Att 30 SGL Count 100/100	Band Edge N	● RBW 100 kHz		Emission	(E
Spectrum Ref Level 20.00 d Att 30 SGL Count 100/100	Band Edge N	● RBW 100 kHz		Emission	(\
Spectrum Ref Level 20.00 d Att 30 SGL Count 100/100)1Pk Max	Band Edge N	● RBW 100 kHz	Mode Sweep	Emission	4.87 dBr 2.40225000,CH
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 9 1Pk Max 10 dBm	Band Edge N	● RBW 100 kHz	Mode Sweep	Emission	4.87 dBr 2.40225000 GH -49.82 ^M Br
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 9 1Pk Max 10 dBm	Band Edge N	● RBW 100 kHz	Mode Sweep	Emission	4.87 dBr 2.40225000 GH -49.82 ^M Br
Spectrum Ref Level 20.00 d Att 30 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm	Band Edge N	● RBW 100 kHz	Mode Sweep	Emission	4.87 dBr 2.40225000 GH -49.82 ^M Br
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 1Pk Max 10 dBm -10 dBm D1 -15.4	Band Edge N	● RBW 100 kHz	Mode Sweep	Emission	4.87 dBr 2.40225000 GH -49.82 ^M Br
Spectrum Ref Level 20.00 d Att 30 SGL Count 100/100 104 Max 10 dBm 0 dBm -10 dBm -10 dBm -10 dBm -10 dBm	Band Edge N	● RBW 100 kHz	Mode Sweep	Emission	4.87 dBr 2.40225000 GH -49.82 ^M Br
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm	Band Edge N	● RBW 100 kHz	Mode Sweep	Emission	4.87 dBr 2.40225000 GH -49.82 ^{MB}
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm	Band Edge N	● RBW 100 kHz	Mode Sweep	Emission	4.87 dBr 2.40225000 GH -49.82 dBr 2.40000000 GH
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 d	Band Edge N Bm Offset 3.02 dB dB SWT 1 ms	RBW 100 kHz VBW 300 kHz	Mode Sweep		4.97 dBr 2.40225000 GH -49.82 ^M Br 2.40000000 CH
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 d	Band Edge N Bm Offset 3.02 dB dB SWT 1 ms	RBW 100 kHz VBW 300 kHz	Mode Sweep		4.97 dBr 2.40225000 GH -49.82 ^M Br 2.40000000 CH
Spectrum Ref Level 20.00 d Att 30 SGL Count 100/100 IPk Max 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm	Band Edge N	RBW 100 kHz VBW 300 kHz	Mode Sweep		4.97 dBr 2.40225000 GH -49.82 ^M Br 2.40000000 CH
Spectrum Ref Level 20.00 d Att 30 SGL Count 100/100 1Pk Max 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm	Band Edge N Bm Offset 3.02 dB dB SWT 1 ms	RBW 100 kHz VBW 300 kHz	Mode Sweep		4.97 dBr 2.40225000 GH -49.82 ^M Br 2.40000000 CH
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -50 dBm -50 dBm -70 dBm	Band Edge N Bm Offset 3.02 dB dB SWT 1 ms	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1] M2[1] 		4.97 dBr 2.40225000 CH -49.92 ¹ 4Br 2.400000007 SH
Spectrum Ref Level 20.00 c Att 30 SGL Count 100/100 100/100 IPk Max 10 dBm 10 dBm 0 -10 dBm 01 -15.4 -20 dBm	Band Edge N Bm Offset 3.02 dB dB SWT 1 ms	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1] M2[1] 		4.97 dBr 2.40225000 CH -49.92 ¹ 4Br 2.400000007 SH
Att 30 SGL Count 100/100 IPk Max 10 10 dBm 0 -10 dBm 0 -10 dBm 0 -20 dBm 0 -30 dBm 0 -30 dBm 0 -70 dBm 0 -70 dBm 0 Start 2.306 GHz Marker Type Ref	Band Edge N Bm Offset 3.02 dB dB SWT 1 ms	RBW 100 kHz VBW 300 kHz ////////////////////////////////	Mode Sweep M1[1] M2[1] M2[1] M3000000000000000000000000000000000000	Andreas hereiter für för	
Spectrum Ref Level 20.00 d Att 30 SGL Count 100/100 IPK Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm -70 dBm -70 dBm	Band Edge N	RBW 100 kHz VBW 300 kHz	Mode Sweep	Andreas hereiter für för	4.87 dBr 2.40225000 GH 2.40000000 GH 2.40000000 GH M3M2 M3M2 M3M2 M3M2 M3M2 M3M2 M3M2 M3M
Spectrum	Band Edge N Bm Offset 3.02 dB dB SWT 1 ms 47 dBm 47 dBm 47 dBm 49 54 54 54 54 54 54 5 5 5 5 5 5 5 5 5	RBW 100 kHz VBW 300 kHz ////////////////////////////////	Mode Sweep M1[1] M2[1] M2[1] Image: State Stat	Andreas person of the first of	4.87 dBr 2.40225000 GH 2.40000000 GH 2.40000000 GH M3M2 M3M2 M3M2 M3M2 M3M2 M3M2 M3M2 M3M

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Spectrum Ref Level 20.00	dBm Offset	3.05 dB 👄	RBW 100 kHz					_ ⊽
Att 3 SGL Count 100/10	0 dB SWT 0	1 ms 👄	VBW 300 kHz	Mode	Sweep			
1Pk Max								
				м	1[1]		2.48	3.61 dBr 022380 GH
10 dBm				M1				-
0 dBm			M	<u> </u>				
			1	\sum				
-10 dBm				<u> </u>				
-20 dBm				{				
		~		1	m			
-30 dBm			1		Ĭ.			
-40 dBm		L (IV			- V A			
FO JP-	in p. M. M.	NV .			W	MA NO		
-40 dBm -50 dBm WMW WM	1. Million P. V.					Marria	Marine	mm
-60 dBm								
-70 dBm								
CF 2.48 GHz			1001	pts			Spa	⊥ an 8.0 MHz
Spectrum	Band		NT BLE 1M		Iz Ant1 Ei	mission		T T
Spectrum Ref Level 20.00 Att 3	Band dBm Offset 0 dB SWT	3.05 dB 👄	NT BLE 1M RBW 100 kHz VBW 300 kHz			mission		(T
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10	Band dBm Offset 0 dB SWT	3.05 dB 👄	RBW 100 kHz	Mode	Sweep	mission		2.60.400
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max	Band dBm Offset 0 dB SWT	3.05 dB 👄	RBW 100 kHz	Mode	Sweep 1[1]	mission		0 25000 G H
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm	Band dBm Offset 0 dB SWT	3.05 dB 👄	RBW 100 kHz	Mode	Sweep	mission		025000 GH -53.94 dBi
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm	Band dBm Offset 0 dB SWT	3.05 dB 👄	RBW 100 kHz	Mode s	Sweep 1[1]	mission		025000 GH -53.94 dBi
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm -10 dBm -10 dBm	Band dBm Offset 0 dB SWT	3.05 dB 👄	RBW 100 kHz	Mode s	Sweep 1[1]			025000 GH -53.94 dBr
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm 10 dBm 10 dBm 10 dBm	Band dBm Offset SwT 0	3.05 dB 👄	RBW 100 kHz	Mode s	Sweep 1[1]			025000 GH -53.94 dBi
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -10 dBm	Band dBm Offset SwT 0	3.05 dB 👄	RBW 100 kHz	Mode s	Sweep 1[1]			025000 GH -53.94 dBi
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm 10 dBm 10 dBm 20 dBm 20 dBm 40 dBm	Band dBm Offset SwT 0	3.05 dB 👄	RBW 100 kHz	Mode s	Sweep 1[1]			025000 GH -53.94 dBr
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm	Band dBm Offset 0 dB SwT 0 .390 dBm	3.05 dB • 1 ms •	RBW 100 kHz	Mode : M M	Sweep 1[1] 2[1]		2.48	025000 GH -53.94 dBi 350000 GH
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm 10 dBm	Band dBm Offset 0 dB SwT 0 .390 dBm	3.05 dB • 1 ms •	RBW 100 kHz	Mode : M M	Sweep 1[1] 2[1]		2.48	025000 GH -53.94 dBr 350000 GH
Spectrum Ref Level 20.00 Att 3 SGL count 100/10 1Pk Max 10 dBm 10 dBm 20 dBm 40 dBm 40 dBm 50 dBM 50 dBm 50 dBm	Band dBm Offset 0 dB SwT 0 .390 dBm	3.05 dB • 1 ms •	RBW 100 kHz	Mode : M M	Sweep 1[1] 2[1]		2.48	025000 GH -53.94 dBi 350000 GH
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm -70 dBm	Band dBm Offset 0 dB SwT 0 .390 dBm	3.05 dB • 1 ms •	RBW 100 kHz	Mode : M M	Sweep 1[1] 2[1]		2.48	025000 GH -53.94 dB 350000 GH
Att 3 SGL Count 100/10 1Pk Max 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -70 dBm -70 dBm -70 dBm -70 dBm	Band dBm Offset 0 dB SwT 0 .390 dBm	3.05 dB • 1 ms •	RBW 100 kHz	Mode : M M	Sweep 1[1] 2[1]		2.48	2.576 GHz
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 1Pk Max 10 dBm -0 dBm -10 dBm -20 dBm -30 dBm	Band	3.05 dB 1 ms 1 m	RBW 100 kHz VBW 300 kHz	Mode : 	Sweep 1[1] 2[1]		2.48:	225000 GH -53.94 dB 350000 GH
Spectrum Ref Level 20.00 Att 3 SGL Count 100/10 IPK Max 10 gBm 10 gBm 10 gBm 20 gBm 20 gBm 20 gBm 20 gBm 350 gBm 40 gBm	Band dBm Offset 0 dB SwT 0 .390 dBm .390 dBm .390 dBm .390 dBm	3.05 dB • 1 ms • 1 ms • 1	RBW 100 kHz VBW 300 kHz	M 	Sweep 1[1] 2[1]		2.48:	225000 GH -53.94 dB 350000 GH

	Band	Edge N	VNT BLE 2	2M 2402MI	Hz Ant1	Ref		
Ref Level 20.00 dB	m Offset 3.	02 dB 🖷 R	BW 100 kHz					₹
Att 30 c SGL Count 100/100	db SWT	1 ms 🖷 V	BW 300 kHz	Mode Sw	eep			
IPk Max								
				M1[:	1]		2,402	2.46 dBm 03200 GHz
10 dBm			M:	1				
0 dBm			Man	t the second				
		٨.,	\mathcal{N}^{\vee}	"W	<u>^</u>			
-10 dBm		10			1			
-20 dBm		لم ا			7			
-30 dBm	Ang					m.		
-40 dBm	1 million	Ŵ			٩V	° Ψ _η		
- MAN	W ^M					U	Mulle	
50 dBmAAAWM							Marth	WW Mm
-60 dBm								
-70 dBm								
CF 2.402 GHz			1001	pts			Spa	n 8.0 MHz
				Rea	dy L		4,40	17.04.2024
Spectrum	Band Ed	dge NVN	T BLE 2M	2402MHz	Ant1 En	nission		e
Spectrum Ref Level 20.00 dB • Att 30 d SGL Count 100/100	m Offset 3.	02 dB 🖷 R	T BLE 2M			nission		₽
Ref Level 20.00 dB	m Offset 3.	02 dB 🖷 R	BW 100 kHz	Mode Sw	еер	nission		(▽)
Ref Level 20.00 dB Att 30 o SGL Count 100/100 @ 1Pk Max	m Offset 3.	02 dB 🖷 R	BW 100 kHz		еер	nission	2,402	.79 dBm 1.5000 GHz
Ref Level 20.00 dB Att 30 d SGL Count 100/100 PIPk Max 10 dBm	m Offset 3.	02 dB 🖷 R	BW 100 kHz	Mode Sw	eep 1]	nission	-	(⊽) 1.79 dBm
Ref Level 20.00 dB Att 30 d SGL Count 100/100 In dBm 0 dBm	m Offset 3.	02 dB 🖷 R	BW 100 kHz	Mode Sw	eep 1]	nission	-	1.79 dBm 15000 GHz 30.28 _M ₽m
Ref Level 20.00 dB Att 30 d SGL Count 100/100 P1Pk Max 10 dBm 0 dBm	om Offset 3. dB SWT	02 dB 🖷 R	BW 100 kHz	Mode Sw	eep 1]	nission	-	1.79 dBm 15000 GHz 30.28 _M ₽m
Ref Level 20.00 dB Att 30 d SGL Count 100/100 IN Max 10 dBm 0 dBm -10 dBm -20 dBm	om Offset 3. dB SWT	02 dB 🖷 R	BW 100 kHz	Mode Sw	eep 1]	nission	-	1.79 dBm 15000 GHz 30.28µdBm
Ref Level 20.00 dB Att 30 d SGL Count 100/100 IN Max 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	om Offset 3. dB SWT	02 dB 🖷 R	BW 100 kHz	Mode Sw	eep 1]	nission	-	1.79 dBm 15000 GHz 30.29µd₽m 00000 GHz
Ref Level 20.00 dB Att 30 d SGL Count 100/100 ID dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Sm Offset 3. JB SWT	02 dB • R 1 ms • V	BW 100 kHz BW 300 kHz	Mode Sw M1[: M2[:	eep 1] 1]		2.400	1.79 dBm 15000 GHz 30.28,dBm 00000GHz M2
Ref Level 20.00 dB Att 30 d SGL Count 100/100 ID dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Sm Offset 3. JB SWT	02 dB • R 1 ms • V	BW 100 kHz BW 300 kHz	Mode Sw M1[: M2[:	eep 1] 1]		2.400	1.79 dBm 15000 GHz 30.28,dBm 00000GHz M2
Ref Level 20.00 dB Att 30 d SGL Count 100/100 ID dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Sm Offset 3. JB SWT	02 dB • R 1 ms • V	BW 100 kHz BW 300 kHz	Mode Sw M1[: M2[:	eep 1] 1]		2.400	1.79 dBm 15000 GHz 30.28,49m 00000GHz M2
Ref Level 20.00 dB Att 30 d SGL Count 100/100 ID dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm	Sm Offset 3. JB SWT	02 dB • R 1 ms • V	BW 100 kHz BW 300 kHz	Mode Sw M1[: M2[: 	eep 1] 1]		- 2.400 	1.79 dBm 15000 GHz 30.29,dBm 00000 GHz M2 M2 M2
Ref Level 20.00 dB Att 30 d SGL Count 100/100 ID dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm	Sm Offset 3. JB SWT	02 dB • R 1 ms • V	BW 100 kHz BW 300 kHz	Mode Sw M1[: M2[: 	eep 1] 1]		- 2.400 	1.79 dBm 15000 GHz 30.28,dBm 00000GHz M2
Ref Level 20.00 dB Att 30 d SGL Count 100/100 ID dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -70 dBm -70 dBm -70 dBm	Sm Offset 3. JB SWT	02 dB • R • V	BW 100 kHz BW 300 kHz	Mode Sw M1[: M2[: M2[: M2[: M2[: M2]	eep 1] 1]	յուրյություններություններ	- 2.400 	1.79 dBm 15000 GHz 30.28µPm 00000 GHz M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2
Ref Level 20.00 dB Att 30 d SGL Count 100/100 IN Max 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm<	M Offset 3. B SWT	02 dB • R 1 ms • V	BW 100 kHz BW 300 kHz 100 kHz	Mode Sw M1[: M2[: M2[: M2[: M2[:	eep 1] 1]	յուրյություններություններ	2.400 دور المراجع الم	1.79 dBm 15000 GHz 30.28µPm 00000 GHz M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2
Ref Level 20.00 dB Att 30 d SGL Count 100/100 IN Max 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -50 dBm -50 dBm Start 2.306 GHz Marker Type Ref Type Ref	Sim Offset 3. dB SWT La dBm La dBm	02 dB • R 1 ms • V	BW 100 kHz BW 300 kHz 100 kHz 1001	Mode Sw M1[: M2[: M2[: M2[: M2[:	eep 1] 1]	յուրյություններություններ	2.400 دور المراجع الم	1.79 dBm 15000 GHz 30.28,42m 00000,GHz M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2 M2
Ref Level 20.00 dB Att 30 d SGL Count 100/100 IN Max 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm<	M Offset 3. B SWT Linking Apple of the second sec	02 dB • R 1 ms • V	BW 100 kHz BW 300 kHz 100 kHz	Mode Sw M1[: M2[: M2[: M2[: M2[:	eep 1] 1]	յուրյություններություններ	2.400 دور المراجع الم	1.79 dBm 15000 GHz 30.28µPm 00000 GHz



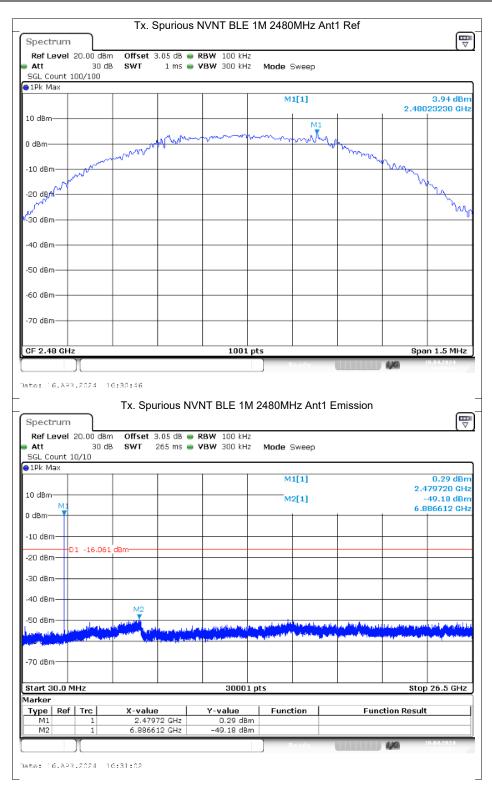
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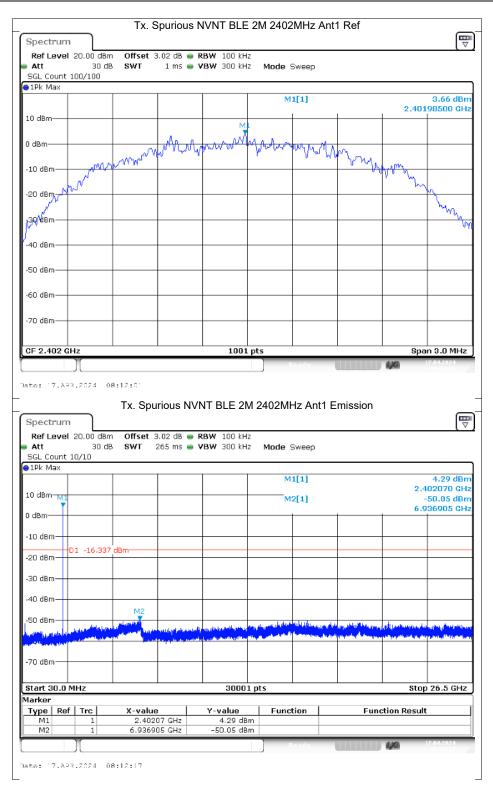
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-54.42	-20	Pass
NVNT	BLE 1M	2440	Ant1	-54.12	-20	Pass
NVNT	BLE 1M	2480	Ant1	-53.12	-20	Pass
NVNT	BLE 2M	2402	Ant1	-53.71	-20	Pass
NVNT	BLE 2M	2440	Ant1	-53.09	-20	Pass
NVNT	BLE 2M	2480	Ant1	-52.31	-20	Pass

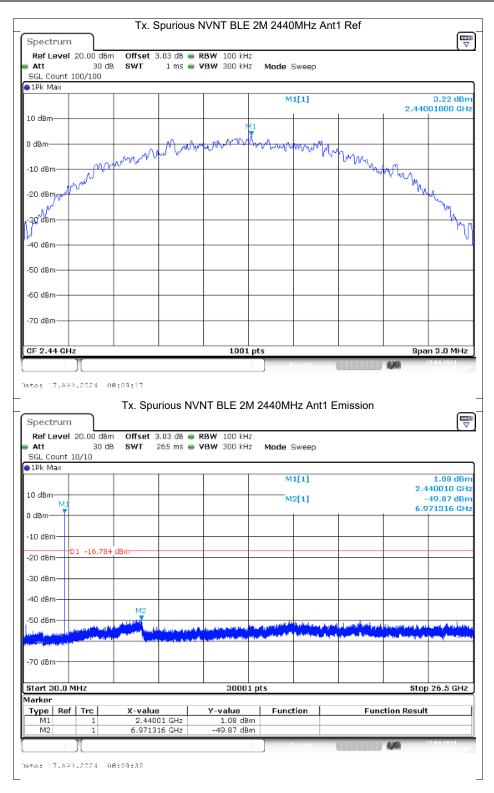
Conducted RF Spurious Emission

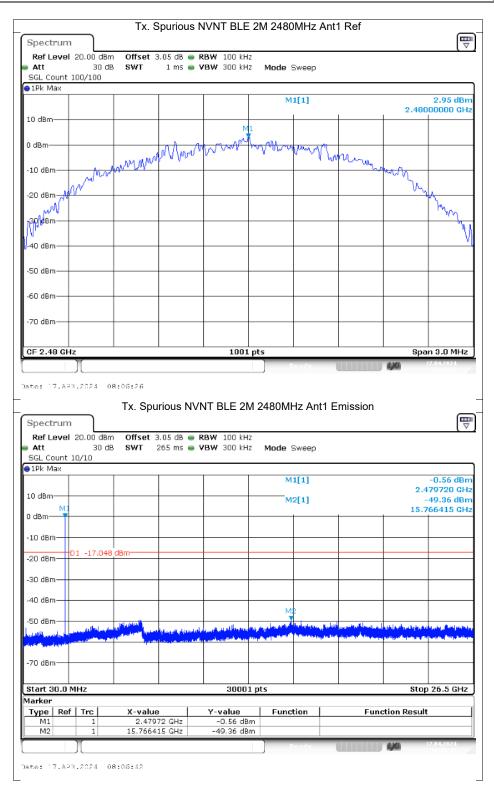
	Tx.	Spurious N	Test G	1M 2402	2MHz Ant	1 Ref		
Spectrum)					-		ſ
Ref Level 20.0		3.02 dB 👄 F			_			
SGL Count 100/1		1 ms 🖷 🔪	YBW 300 KH2	2 Mode 9	sweep			
●1Pk Max								
				м	1[1]		2.40	4.78 dB 223830 GI
10 dBm					M1		1	+
		manym	m	ᠬᢇᢇᠬᢧᠬᢦᢦ	www			
0 dBm	mount	W P				annon	-	
-10 dBm	v~~						annor	
								m
-20 dBm								- Mono
130 dBm								
-40 dBm								
-50 dBm								
-60 dBm								
-70 dBm								
				-				
CF 2.402 GHz			1001	pts	_		spa	an 1.5 MH
		ourious NVI	NT BLE 1M	л 2402MI	Hz Ant1 E	mission		F
ste: 16.3PR.200 Spectrum Ref Level 20.0	Tx. Sp				Hz Ant1 E	mission		ſ
Spectrum Ref Level 20.0	Tx. Sp 0 dBm Offset 30 dB SwT		RBW 100 kH2	2		mission		[
Spectrum Ref Level 20.0 Att SGL Count 10/10	Tx. Sp 0 dBm Offset 30 dB SwT	: 3.02 dB 👄 F	RBW 100 kH2	2		mission		ſ
Spectrum Ref Level 20.0	Tx. Sp 0 dBm Offset 30 dB SwT	: 3.02 dB 👄 F	RBW 100 kH2	2 2 Mode 9		mission		3.38 dE
Spectrum Ref Level 20.0 Att SGL Count 10/10	Tx. Sp 0 dBm Offset 30 dB SwT	: 3.02 dB 👄 F	RBW 100 kH2	2 Mode s	Sweep	mission		3.38 dE 402070 G
Spectrum Ref Level 20.0 Att SGL Count 10/10 1Pk Max	Tx. Sp 0 dBm Offset 30 dB SwT	: 3.02 dB 👄 F	RBW 100 kH2	2 Mode s	Sweep 1[1]	mission		3.38 dE 402070 G -49.64 dE
Spectrum Ref Level 20.0 Att SGL Count 10/10 1Pk Max 10 dBm M1 0 dBm	Tx. Sp 0 dBm Offset 30 dB SwT	: 3.02 dB 👄 F	RBW 100 kH2	2 Mode s	Sweep 1[1]	mission		3.38 dE 402070 G -49.64 dE
Spectrum Ref Level 20.0 Att SGL Count 10/10 1Pk Max 10 dBm 10 dBm -10 dBm	Tx. Sp 0 dBm Offset 30 dB SwT	: 3.02 dB 👄 F	RBW 100 kH2	2 Mode s	Sweep 1[1]			3.38 dE 402070 G -49.64 dE
Spectrum Ref Level 20.0 Att SGL Count 10/10 1Pk Max 10 dBm 10 dBm -10 dBm	Tx. Sp 0 dBm Offset 30 dB SWT	: 3.02 dB 👄 F	RBW 100 kH2	2 Mode s	Sweep 1[1]			3.38 dE 402070 G -49.64 dE
Spectrum Ref Level 20.0 Att SGL Count 10/10 PIPk Max 10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -10 dBm	Tx. Sp 0 dBm Offset 30 dB SWT	: 3.02 dB 👄 F	RBW 100 kH2	2 Mode s	Sweep 1[1]			3.38 dE 402070 G -49.64 dE
Spectrum Ref Level 20.0 Att SGL Count 10/10 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm	Tx. Sp 0 dBm Offset 30 dB SWT	: 3.02 dB 👄 F	RBW 100 kH2	2 Mode s	Sweep 1[1]			3.38 dE 402070 G -49.64 dE
Spectrum Ref Level 20.0 Att SGL Count 10/10 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -40 dBm	Tx. Sp 0 dBm Offset 30 dB SWT	: 3.02 dB 👄 F	RBW 100 kH2	2 Mode s	Sweep 1[1]			3.38 dE 402070 G -49.64 dE
Spectrum Ref Level 20.0 Att SGL Count 10/10 IPk Max 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm -30 dBm -40 dBm -50 dBm -5	Tx. Sp 0 dBm Offset 30 dB SWT	3.02 dB • F 265 ms • V	RBW 100 kH; VBW 300 kH;	2 Mode s	Sweep 1[1] 2[1]		6.4	3.39 dE 402070 G -49.64 dE 813379 G
Spectrum Ref Level 20.0 Att SGL Count 10/10 IPk Max 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm -30 dBm -40 dBm -50 dBm -5	Tx. Sp 0 dBm Offset 30 dB SWT 5.223 dBm	3.02 dB • F 265 ms • V	RBW 100 kH; VBW 300 kH;	2 Mode s	Sweep 1[1] 2[1]		6.4	3.39 dE 402070 G -49.64 dE 813379 G
Spectrum Ref Level 20.0 Att SGL Count 10/10 IPk Max 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm -30 dBm -40 dBm -50 dBm -5	Tx. Sp 0 dBm Offset 30 dB SWT 5.223 dBm	3.02 dB • F 265 ms • V	RBW 100 kH; VBW 300 kH;	2 Mode s	Sweep 1[1] 2[1]		6.4	3.39 dE 102070 G -49.64 dE 813379 G
Spectrum Ref Level 20.0 Att SGL Count 10/10 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm	Tx. Sp 0 dBm Offset 30 dB SWT 5.223 dBm	3.02 dB • F 265 ms • V	RBW 100 kH; VBW 300 kH;	2 Mode s	Sweep 1[1] 2[1]		6.4	3.39 dE 402070 G -49.64 dE 813379 G
Spectrum Ref Level 20.0 Att SGL Count 10/10 IPk Max 10 dBm 0 dBm 10 dBm 10 dBm10 dBm20 dBm30 dBm50 dBm70 dBm Start 30.0 MHz	Tx. Sp 0 dBm Offset 30 dB SWT 5.223 dBm	3.02 dB • F 265 ms • V	RBW 100 kH; VBW 300 kH;	2 Mode s	Sweep 1[1] 2[1]		6.1	3.39 dE 402070 G -49.64 dE 813379 G
Spectrum Ref Level 20.0 Att SGL Count 10/10 IPk Max 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -70 dBm -70 dBm Start 30.0 MHz Marker	Tx. Sp 0 dBm Offset 30 dB SWT 5.223 dBm 5.223 dBm	3.02 dB • V	RBW 100 kH2 VBW 300 kH2	2 Mode s	Sweep 1[1] 2[1]		6.1	3.38 dE 102070 G 49.64 dE 813379 G
Spectrum Ref Level 20.0 Att SGL Count 10/10 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm -	Tx. Sp 0 dBm Offset 30 dB SWT 5 5.223 dBm 5.223 dBm 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	3.02 dB • • • • 265 ms • •	RBW 100 kH2 VBW 300 kH2 VBW 3	2 Mode : M M M L pts Func m	Sweep 1[1] 2[1]		6.1	3.38 dE 102070 G 49.64 dE 813379 G
Spectrum Ref Level 20.0 Att SGL Count 10/10 1Pk Max 10 dBm -10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -40 dBm -50 dBm -70 dBm -	Tx. Sp 0 dBm Offset 30 dB SWT 5 5.223 dBm 5.223 dBm 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	3.02 dB • • • •	RBW 100 kH; VBW 300 kH; VBW 3	2 Mode : M M M L pts Func m	Sweep 1[1] 2[1]		6.1	3.38 dE 102070 G 49.64 dE 813379 G

	Tx. Spuri	ous NVNT BLE	1M 2440MHz	Ant1 Ref		_
Spectrum						l (P
Ref Level 20.00 dBm	n Offset 3.03 d	IB 👄 RBW 100 kH:	2			
Att 30 dB		ns 👄 VBW 300 kH:				
SGL Count 100/100						
1Pk Max						
			M1[1]			4.63 dB
10 dBm					2.440)23830 GF
IO GDIII			M			
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m	Lun .				Mar and	
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te: 16.8PR.2024 1		s NVNT BLE 1M	Pendy A 2440MHz An	t1 Emission	600	16:29:14
spectrum	Tx. Spurious			t1 Emission	6,00	Ę
Spectrum Ref Level 20.00 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2	t1 Emission	104	Ę
Spectrum Ref Level 20.00 dBm Att 30 dE	Tx. Spurious		2	t1 Emission		[¤
Spectrum Ref Level 20.00 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2	t1 Emission		Ę
Spectrum Ref Level 20.00 dBm Att 30 dB SGL Count 10/10	Tx. Spurious	IB 👄 RBW 100 kH:	2	t1 Emission		
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 91Pk Max	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB
Spectrum Ref Level 20.00 dBm Att 30 dB SGL Count 10/10	Tx. Spurious	IB 👄 RBW 100 kH:	z z <b>Mode</b> Sweep	t1 Emission		3.60 dB 140010 GF -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 91Pk Max	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 1Pk Max 10 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 11Pk Max 10 dBm 10 dBm 10 dBm 10 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 10 dBm 10 dBm 10 dBm D1 -15.369	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dB SGL Count 10/10 10 dBm 0 dBm 10 dBm D1 -15.369	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 01Pk Max 10 dBm 10 dBm D1 -15.369 20 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 01Pk Max 10 dBm 10 dBm D1 -15.369 20 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 1Pk Max 10 dBm 10 dBm 10 dBm 20 dBm 20 dBm 30 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 01Pk Max 10 dBm 10 dBm 10 dBm D1 -15.369 20 dBm 40 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep	t1 Emission		3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 01Pk Max 10 dBm 10 dBm 10 dBm D1 -15.369 20 dBm 40 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep M1[1] M2[1]		6.5	3.60 dB 140010 GI -49.49 dB
Spectrum Ref Level 20.00 dBm Att 30 dE SGL Count 10/10 01Pk Max 10 dBm 10 dBm 10 dBm D1 -15.369 20 dBm 40 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 Mode Sweep M1[1] M2[1]		6.5	3.60 dB 140010 GI -49.49 dB
Spectrum  Ref Level 20.00 dBm  SGL Count 10/10  PIPk Max  10 dBm  10 dBm  10 dBm  20 dBm  30 dBm  30 dBm  40 dBm  50 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 2 Mode Sweep M1[1] M2[1]		6.5	3.60 dB 140010 GI -49.49 dB
Spectrum  Ref Level 20.00 dBm  SGL Count 10/10  PIPk Max  10 dBm  10 dBm  10 dBm  20 dBm  30 dBm  30 dBm  40 dBm  50 dBm	Tx. Spurious	IB 👄 RBW 100 kH:	2 2 Mode Sweep M1[1] M2[1]		6.5	3.60 dB 140010 GI -49.49 dB
Spectrum  Ref Level 20.00 dBm  Att 30 dB  SGL Count 10/10  IPk Max  10 dBm  10 dBm  10 dBm  10 dBm  20 dBm  -10	Tx. Spurious	IB 👄 RBW 100 kH:	2 2 Mode Sweep M1[1] M2[1]		6.5	3.60 dB 140010 GI -49.49 dB
Spectrum  Ref Level 20.00 dBm  Att 30 dE  SGL Count 10/10  IPk Max  10 dBm  10 dBm  10 dBm  10 dBm  20 dBm  30 dBm  40 dBm  40 dBm  40 dBm  50 dBm  40 dBm  50	Tx. Spurious	B RBW 100 kH	2 2 Mode Sweep M1[1] M2[1]		6.5	3.60 dB
Spectrum  Ref Level 20.00 dBm  SGL Count 10/10  IPk Max  0 dBm  10 dBm  10 dBm  20 dBm  40 dBm  -10 dB	Tx. Spurious	IB 👄 RBW 100 kH:	2 2 Mode Sweep M1[1] M2[1]		6.5	3.60 dB 140010 Gi 49.49 dB 331025 Gi
Spectrum         Ref Level 20.00 dBm         Att       30 dE         SGL Count 10/10         IPK Max         10 dBm         10 dBm         -10 dBm         -20 dBm         -30 dBm         -30 dBm         -70 dBm         -70 dBm         -70 dBm         Start 30.0 MHz	Tx. Spurious	B • RBW 100 kH s • VBW 300 kH 	2 Mode Sweep M1[1] M2[1]		6.5	3.60 dB 140010 G -49.49 dB 331025 G 331025 G
Spectrum  Ref Level 20.00 dBm  SGL Count 10/10  IPk Max  0 dBm  10 dBm  10 dBm  20 dBm  40 dBm  -10 dB	Tx. Spurious	IB  RBW 100 kH3 S VBW 300 kH3 S S RBW 300 kH3 S RBW 100 kH3 S RBW 300 kH	2 Mode Sweep M1[1] M2[1] M2[1] Lpts Function		6.5	3.60 dB 140010 G -49.49 dB 331025 G 331025 G
Spectrum  Ref Level 20.00 dBm  Att 30 dB  SGL Count 10/10  PIPk Max  10 dBm  10 dBm  10 dBm  10 dBm  50 dBm  70 dBm  7	Tx. Spurious	B RBW 100 kH S VBW 300 kH S 300 kH	2 2 Mode Sweep  M1[1]  M2[1]  M2[1]  L pts  Function  m		6.5	3.60 dB 140010 G -49.49 dB 331025 G 331025 G
Spectrum       30 dB         Att       30 dE         SGL Count 10/10       91Pk Max         10 dBm       10         10 dBm       0         -10 dBm       01 -15.369         -20 dBm       01 -15.369         -30 dBm       01 -15.369         -20 dBm       01 -15.369         -20 dBm       01 -15.369         -30 dBm       01 -15.369         -20 dBm	Tx. Spurious	B RBW 100 kH S VBW 300 kH S 300 kH	2 2 Mode Sweep  M1[1]  M2[1]  M2[1]  L pts  Function  m		6.5	3.60 dB 140010 Gł 49.49 dB 31025 Gł 31025 Gł 226.5 Gł 1 10.042024

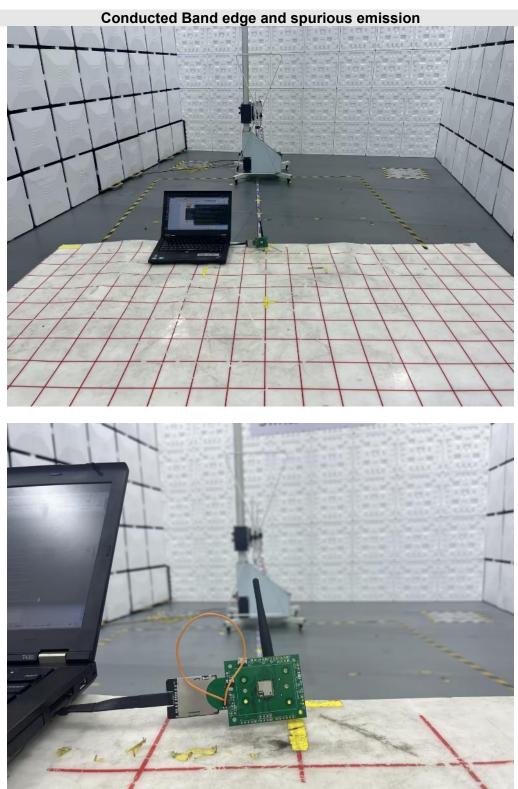


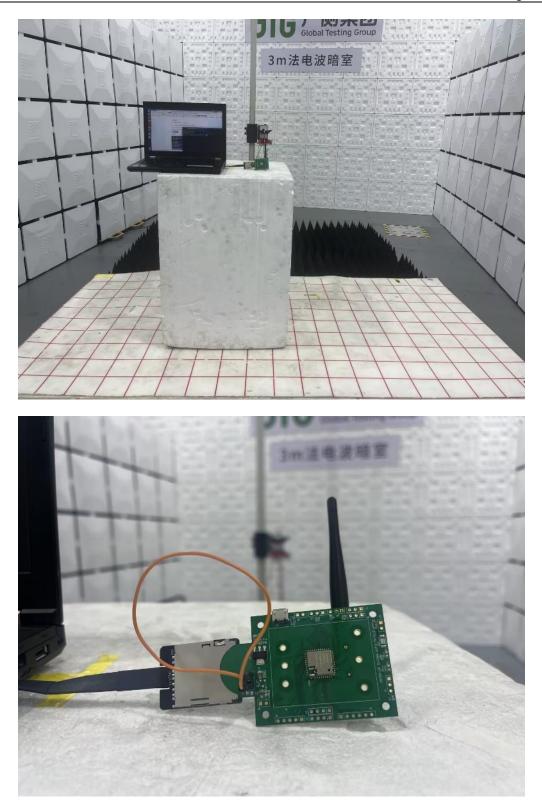


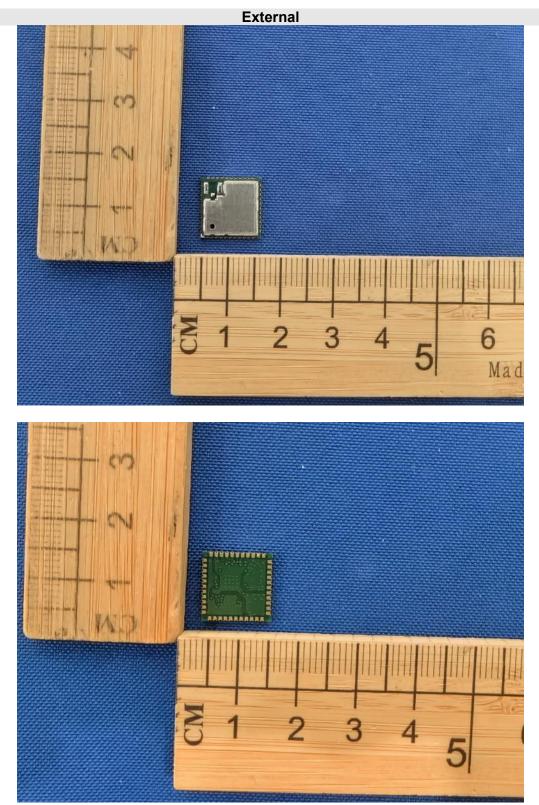




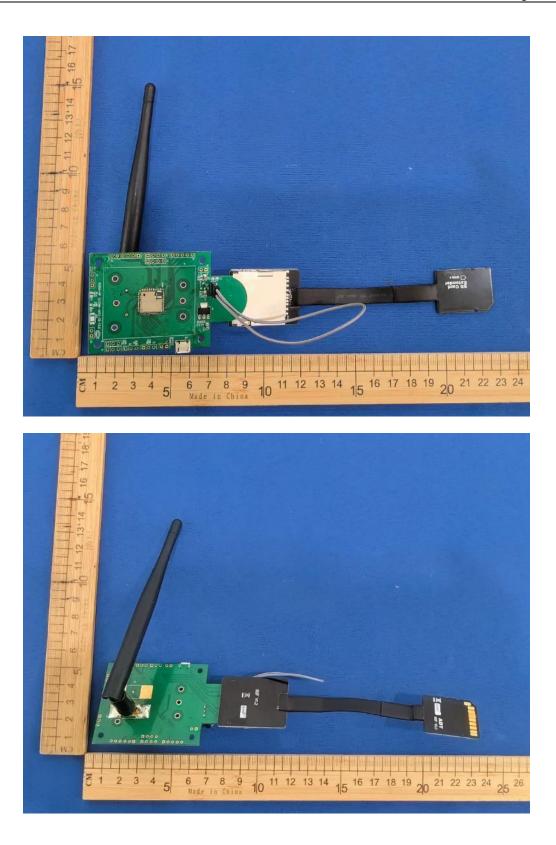
### **APPENDIX: PHOTOGRAPHS OF TEST CONFIGURATION**



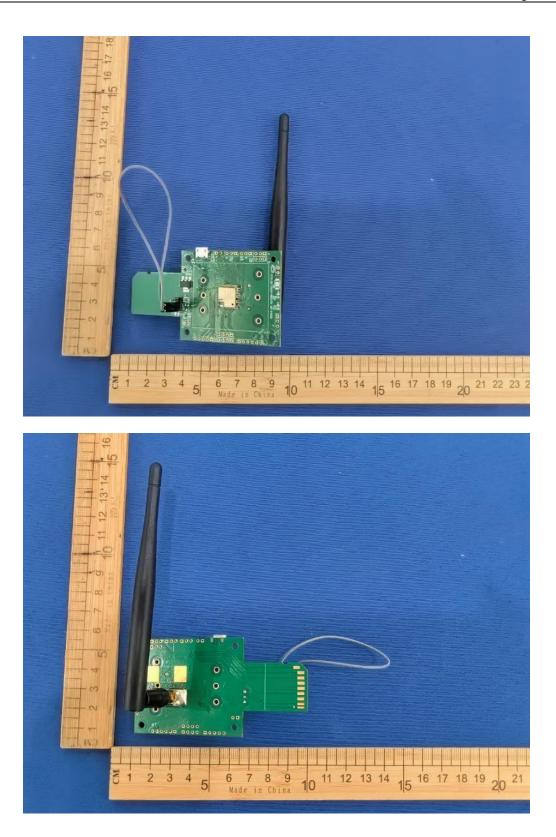


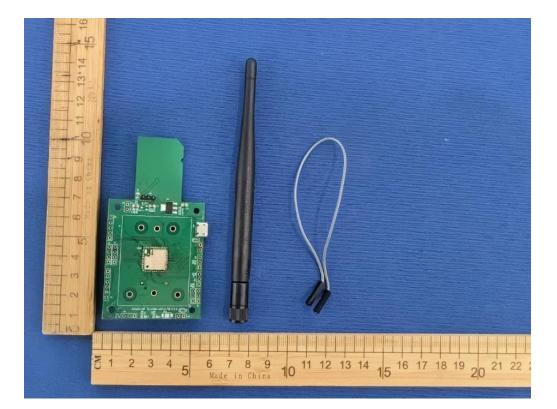


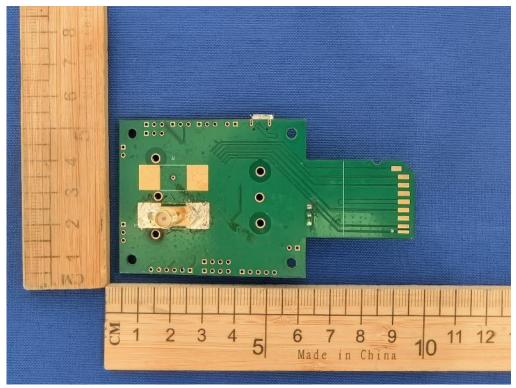
## **APPENDIX: PHOTOGRAPHS OF THE EUT**

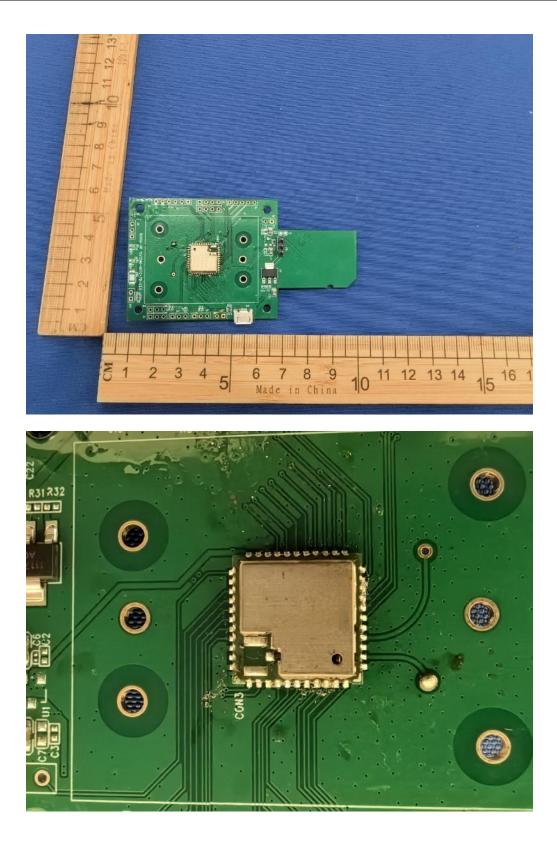


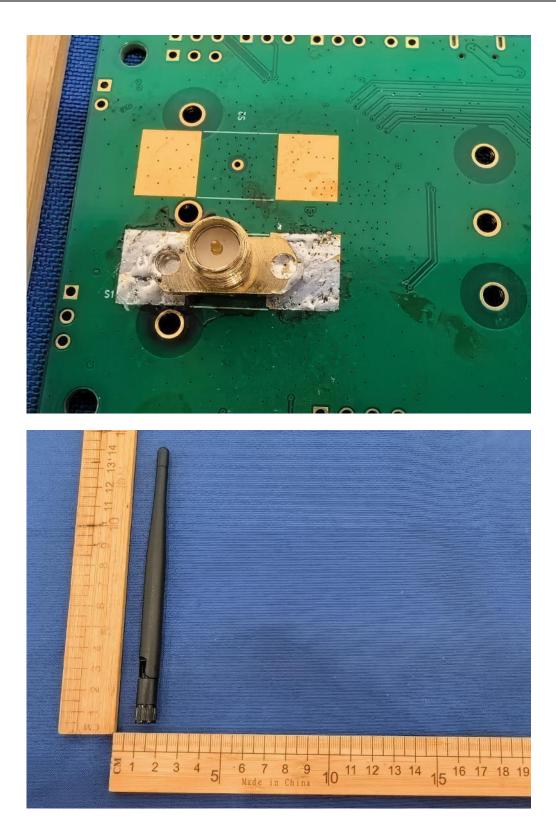




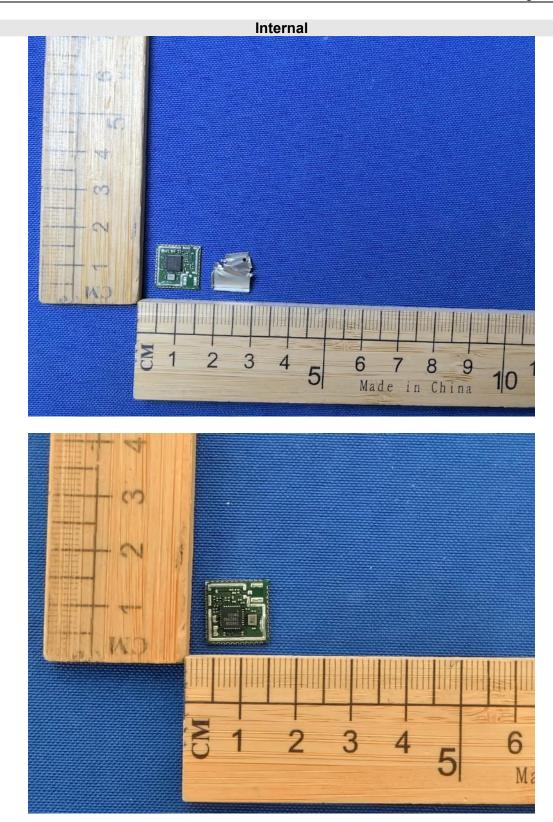


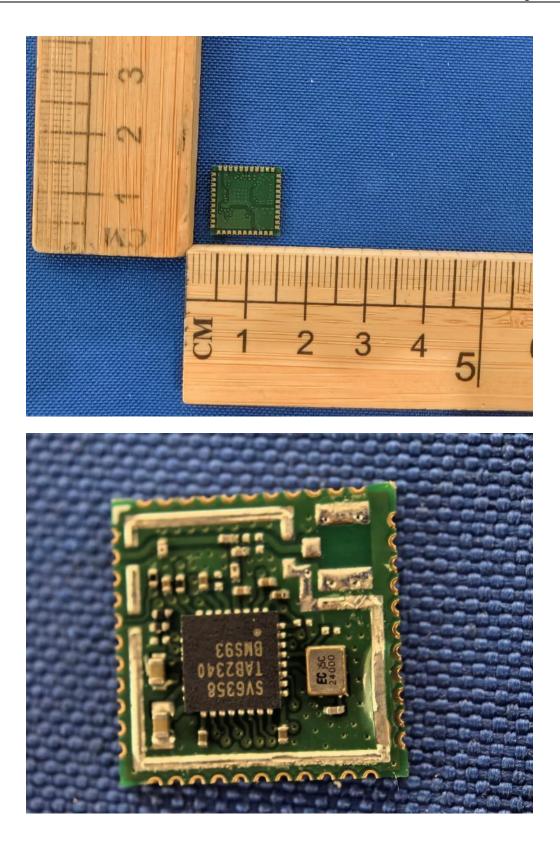












### **END OF REPORT**