

CFR 47 FCC PART 15 SUBPART C(DTS)

TEST REPORT

For

MiTag

MODEL NUMBER: HD-P16, HD-P16-1, HD-P16-2, HD-P16-3, HD-P16-6, HD-P16-8, HD-P16-10, HD-P16-A, HD-P16-B, HD-P16-C, HD-P16-D, HD-P16-E, HD-P16-F, HD-P16-L, HD-P16-P, HD-P16-S, HD-P16-T, HD-P16-W, HD-P16-X, HD-P16-Y, HD-P16-Z

REPORT NUMBER: E01A23020796F00401

ISSUE DATE: March 7, 2023

FCC ID:2AIAOHD-P16

Prepared for

SHENZHEN HALI-POWER INDUSTRIAL CO.,LTD. 1/F, Building C, DaKan Science And Technology Park, Xili, Nanshan, Shenzhen, China

Prepared by

Dong Guan Anci Electronic Technology Co., Ltd.

1-2 Floor, Building A, No.11, Headquarters 2 Road, Songshan, Lake Hitech Industrial Development Zone, Dongguan City, Guangdong Pr., China.

This report shall not be reproduced, except in full, without the written approval of Dong Guan Anci Electronic Technology Co., Ltd.

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	March 7, 2023	Initial Issue	Duke

Summary of Test Results					
Test Item Clause Limit/Requirement					
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 (NOTE 1, 2)		
Conducted Output Power	ANSI C63.10-2013, Clause 11.9.1.3	FCC Part 15.247 (b)(3)	Pass		
6dB Bandwidth and 99% Occupied 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.

2. This test is only applicable for devices which can be charged or powered by AC power cable.

*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.

CONTENTS

1.	ATTESTATION OF TEST RESULTS	5
2.	TEST METHODOLOGY	6
3.	FACILITIES AND ACCREDITATION	6
4.	CALIBRATION AND UNCERTAINTY	7
4	4.1. MEASURING INSTRUMENT CALIBRATION	7
4	4.2. MEASUREMENT UNCERTAINTY	7
5.	EQUIPMENT UNDER TEST	8
5	5.1. DESCRIPTION OF EUT	8
5	5.2. CHANNEL LIST	8
5	5.3. MAXIMUM AVERAGE EIRP	9
5	5.4. TEST CHANNEL CONFIGURATION	9
5	5.5. THE WORSE CASE POWER SETTING PARAMETER	9
5	5.6. DESCRIPTION OF AVAILABLE ANTENNAS	9
5	5.7. SUPPORT UNITS FOR SYSTEM TEST	9
_		
5	5.8. SETUP DIAGRAM	10
5 6.	5.8. SETUP DIAGRAM	_
-		11
6. 7.	MEASURING EQUIPMENT AND SOFTWARE USED	11
6. 7. 7	MEASURING EQUIPMENT AND SOFTWARE USED	11 12 12
6. 7. 7	MEASURING EQUIPMENT AND SOFTWARE USED ANTENNA PORT TEST RESULTS	11 12
6. 7. 7 7 7	MEASURING EQUIPMENT AND SOFTWARE USED	11 12 12 13 14 15
6. 7. 7 7 7 7	MEASURING EQUIPMENT AND SOFTWARE USED ANTENNA PORT TEST RESULTS	11 12 12 13 14 15
6. 7. 7 7 7 7 7	MEASURING EQUIPMENT AND SOFTWARE USED	11 12 12 13 14 15 17
6. 7. 7 7 7 7 8.	MEASURING EQUIPMENT AND SOFTWARE USED	11 12 12 13 14 15 17 18
6. 7. 7 7 7 7 8.	MEASURING EQUIPMENT AND SOFTWARE USED. ANTENNA PORT TEST RESULTS 7.1. Conducted Output Power. 7.2. 6dB Bandwidth. 7.3. Power Spectral Density. 7.4. Conducted Band edge and spurious emission 7.5. Duty Cycle RADIATED TEST RESULTS ANTENNA REQUIREMENT	11 12 12 13 13 14 15 17 18 18
 6. 7. 7 7 7 8. 9. 10. 	MEASURING EQUIPMENT AND SOFTWARE USED. ANTENNA PORT TEST RESULTS 7.1. Conducted Output Power. 7.2. 6dB Bandwidth. 7.3. Power Spectral Density. 7.4. Conducted Band edge and spurious emission 7.5. Duty Cycle RADIATED TEST RESULTS ANTENNA REQUIREMENT	11 12 12 12 13 14 14 15 17 18 18 18

1. ATTESTATION OF TEST RESULTS

Applicant Information

Applicant information Company Name: Address:	SHENZHEN HALI-POWER INDUSTRIAL CO.,LTD. 1/F, Building C, DaKan Science And Technology Park, Xili, Nanshan, Shenzhen, China
Manufacturer Information	
Company Name:	SHENZHEN HALI-POWER INDUSTRIAL CO., LTD.
Address:	1/F, Building C, DaKan Science And Technology Park, Xili, Nanshan, Shenzhen, China
EUT Information	
EUT Name:	MiTag
Model:	HD-P16
Serial model:	HD-P16-1, HD-P16-2, HD-P16-3, HD-P16-6, HD-P16-8, HD-P16-10, HD-P16-A, HD-P16-B, HD-P16-C, HD-P16-D, HD-P16-E, HD-P16-F, HD-P16-L, HD-P16-P, HD-P16-S, HD-P16-T, HD-P16-W, HD-P16-X, HD-P16-Y, HD-P16-Z
Model difference:	All models are the same except the leather case color and model
Brand:	MiLi
Sample Received Date:	February 24, 2023
Sample Status:	Normal
Sample ID:	A23020796 007
Date of Tested:	March 1, 2023 to March 7, 2023

APPLICABLE STANDARDS

STANDARD TEST RESULTS

CFR 47 FCC PART 15 SUBPART C(DTS)

Pass

Prepared By:

Duke Project Engineer

Approved By:

an

Tiger Laboratory Supervisor

Checked By:

50N

Dyson Project Engineer

2. TEST METHODOLOGY

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

3. FACILITIES AND ACCREDITATION

Site Description	
Name of Firm	
Site Location	

- : Dong Guan Anci Electronic Technology Co., Ltd.
- : 1-2 Floor, Building A, No.11, Headquarters 2 Road, Songshan, Lake Hi-tech Industrial Development Zone, Dongguan City,evelopment Zone, Dongguan City, Guangdong Pr., China.

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:

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

Test Item	Measurement Frequency Range	к	U(dB)
Conducted emissions from the AC mains power ports	0.009 MHz ~ 0.15 MHz	2	4.00
Conducted emissions from the AC mains power ports	0.15 MHz ~ 30 MHz	2	3.62
Radiated emissions	9kHz ~ 30MHz	2	2.20
Radiated emissions	30 MHz ~ 1 GHz	2	3.16
Radiated emissions	1 GHz ~ 18 GHz	2	5.64

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		MiTag
Model		HD-P16
EUT Classification		Class B
Internal Frequency		2500MHz
Ratings		Battery 3V
Power Supply	Battery	3V

Frequency Band:	2400 MHz to 2483.5 MHz
Frequency Range:	2402 MHz to 2480 MHz
Bluetooth Version:	5.2
Bluetooth Mode:	LE
Type of Modulation:	GFSK
Number of Channels:	40
Channel Separation:	2 MHz
Maximum Peak Power:	-2.05 dBm
Antenna Type:	PCB antenna
Antenna Gain:	1.08 dBi
EUT Test software:	Lekit_200927.exe

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	/	/

5.3. MAXIMUM AVERAGE EIRP

Test Mode	Frequency (MHz)	Channel Number	Maximum Peak Output Power (dBm)	Maximum EIRP (dBm)
LE 1M	2402 ~ 2480	0-39[40]	-2.05	-0.97

5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
LE 1M	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 Software Version Lekit_200927.exe						
Modulation Antenna	Transmit	Test Software setting value				
	Antenna Number	CH 0	CH 19	CH 39		
GFSK(1Mbps)	1	default	default	default		

5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2402-2480	PCB	1.08

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

5.7. SUPPORT UNITS FOR SYSTEM TEST

The EUT has been tested as an independent unit

Equipment	Manufacturer	Model No.
PC	Lenovo	T430

5.8. SETUP DIAGRAM

EUT

TRF No.: 01-R005-3A

6. MEASURING EQUIPMENT AND SOFTWARE USED

Test Equipment of Radiated emissions below 1GHz							
Equipment	Equipment Manufacturer Model No. Serial No. Last Cal. Due Date						
Spectrum Analyzer	Rohde & Schwarz	FSV40	US4024062 3	2022-10-29	2023-10-28		
RF Test Software	MWRF-test	MTS 8310	N/A	N/A	N/A		
Radio Frequency control box	MWRF-test	MW200- RFCB	MW220111 ANCI	2022-05-13	2023-05-12		
Radio Frequency control box	MWRF-test	MW200- RFCB 2#	/	2022-05-13	2023-05-12		

Test Equipment of Radiated emissions below 1GHz						
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date	
EMI Test Receiver	ROHDE&SCH WARZ	ESCI	100302	2022/5/13	2023/5/12	
Bilog Antenna	Schwarzbeck	VULB9163	VULB9163- 1290	2022/12/12	2023/12/11	
RF Cable	ZKJC	ZT06S-NJ- NJ-11M	19060398	2022/5/13	2023/5/12	
RF Cable	ZKJC	ZT06S-NJ- NJ-0.5M	19060400	2022/5/13	2023/5/12	
RF Cable	ZKJC	ZT06S-NJ- NJ-2.5M	19060404	2022/5/13	2023/5/12	
EMI Test Receiver	ROHDE&SCH WARZ	ESPI7	100502	2022/10/8	2023/10/7	
3m Semi- anechoic Chamber	Keysight	9m*6m*6m	N/A	2021/11/13	2024/11/12	

Test Equipment of Radiated emissions above 1GHz						
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date	
Low noise Amplifiers	A-INFO	LA1018N400 9	J101313052 4001	2022/5/13	2023/5/12	
Horn antenna	A-INFO	LB-10180-SF	J203109061 2123	2022/5/15	2023/5/14	
RF Cable	ZKJC	ZT26-NJ-NJ- 11M	19060401	2022/5/13	2023/5/12	
RF Cable	ZKJC	ZT26-NJ-NJ- 2.5M	19060402	2022/5/13	2023/5/12	
RF Cable	ZKJC	ZT26-NJ-NJ- 0.5M	19060403	2022/5/13	2023/5/12	
Spectrum Analyzer	Rohde & Schwarz	FSV40	US40240623	2022-10-29	2023-10-28	
3m Semi- anechoic Chamber	Keysight	9m*6m*6m	N/A	2021/11/13	2024/11/12	
Test Software	Farad	EZ-EMC (Ver.FA-03A2 RE)	N/A	N/A	N/A	

TRF No.: 01-R005-3A

Global Testing , Great Quality.

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 ENVIRONMENT

Temperature	24°C	Relative Humidity	50%
Atmosphere Pressure	101kPa		

TEST RESULTS

7.2. 6DB BANDWIDTH

<u>LIMITS</u>

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) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) 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 ENVIRONMENT

Temperature	24 °C	Relative Humidity	50%
Atmosphere Pressure	101kPa		

TEST RESULTS

7.3. POWER SPECTRAL DENSITY

<u>LIMITS</u>

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 ENVIRONMENT

Temperature	24 °C	Relative Humidity	50%
Atmosphere Pressure	101kPa		

TEST RESULTS

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:

5040	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 ENVIRONMENT

Temperature	24 °C	Relative Humidity	55%
Atmosphere Pressure	101kPa		

TEST RESULTS

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 ENVIRONMENT

Temperature	24 ℃	Relative Humidity	50%
Atmosphere Pressure	101kPa		

TEST RESULTS

8. RADIATED TEST RESULTS

<u>LIMITS</u>

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)	Field Strength Limit (uV/m) at 3 m	Field Stren (dBuV/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
Above 1000	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	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	156.7-156.9	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

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

The setting of the spectrum analyser

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

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

TRF No.: 01-R005-3A

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.

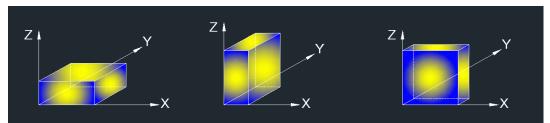
3. The EUT was placed on a turntable with 1.5 m above ground.

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.

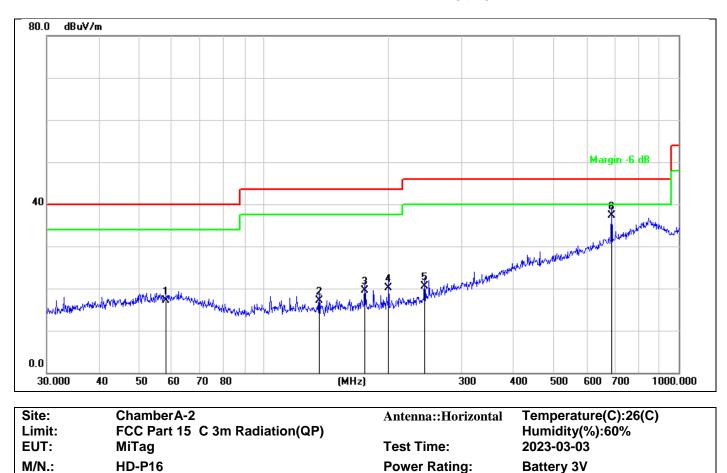
TEST ENVIRONMENT

Temperature	24 ℃	Relative Humidity	50%
Atmosphere Pressure	101kPa		

TEST RESULTS

Radiated Spurious Emission :

The data of the mode (GFSK 2402MHz) are recorded in the following pages.



No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure- ment(dBuV)	Limit (dBuV)	Over (dB)	Detector	Comment
1	46.0164	25.43	-10.11	15.32	40.00	-24.68	QP	
2	56.7917	25.19	-9.14	16.05	40.00	-23.95	QP	
3 *	68.3908	26.34	-10.13	16.21	40.00	-23.79	QP	
4	112.9196	26.06	-11.79	14.27	43.50	-29.23	QP	
5	199.9856	25.81	-11.29	14.52	43.50	-28.98	QP	
6	280.0237	25.52	-8.01	17.51	46.00	-28.49	QP	

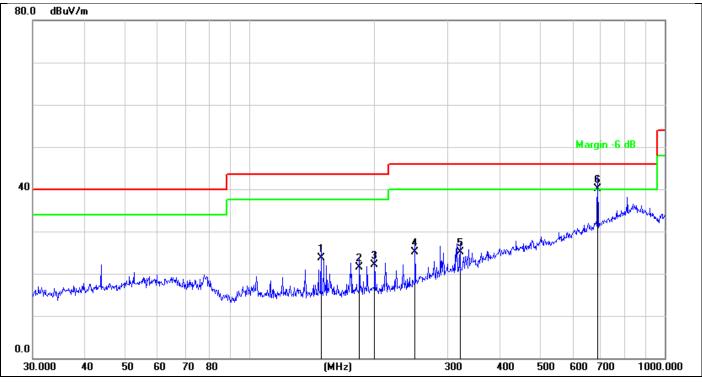
Test Engineer:

Mode:

Note:

TX2402

Sunshine



Site:	ChamberA-2	Antenna::Vertical	Temperature(C):26(C)	
Limit:	FCC Part 15 C 3m Radiation(QP)		Humidity(%):60%	
EUT:	MiTag	Test Time:	2023-03-03	
M/N.:	HD-P16	Power Rating:	Battery 3V	
Mode:	TX2402	Test Engineer:	Sunshine	
Note:		-		

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure- ment(dBuV)	Limit (dBuV)	Over (dB)	Detector	Comment
1	148.4410	35.08	-11.33	23.75	43.50	-19.75	QP	
2	183.8440	32.70	-11.10	21.60	43.50	-21.90	QP	
3	199.9856	33.44	-11.29	22.15	43.50	-21.35	QP	
4	250.3012	34.23	-9.17	25.06	46.00	-20.94	QP	
5	321.0608	31.74	-6.54	25.20	46.00	-20.80	QP	
6 *	689.5644	36.89	3.26	40.15	46.00	-5.85	QP	

Above 1000MHz~10th Harmonics:

Operation Mode:	TX Mode (CH00: 2402MHz)	Test Date :	2023-03-03
Frequency Range:	1-25GHz	Temperature :	25 ℃
Test Result:	PASS	Humidity :	58 %
Measured Distance:	3m	Test By:	Best

Freq.	Ant. Pol.	Reading Level(dBuV/m)		Correct Factor	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
(MHz)	H/V	PK	AV	dB	PK	AV	PK	AV	PK	AV
4804	V	94.02	74.48	-32.3	62.32	42.18	74	54	-11.68	-11.82
7206	V	96.34	76.56	-37.2	59.14	39.36	74	54	-14.86	-14.64
9608	V	98.12	77.97	-39.8	58.32	38.17	74	54	-15.68	-15.83
12010	V	96.82	76.64	-40.5	56.32	36.14	74	54	-17.68	-17.86
14412	V	97.17	77.95	-41.7	55.47	36.25	74	54	-18.53	-17.75
16814	V	95.39	76.41	-40	55.39	36.41	74	54	-18.61	-17.59
4804	H	93.62	74.34	-31.6	62.02	42.74	74	54	-11.98	-11.26
7206	H	95.63	75.75	-35.5	60.13	40.25	74	54	-13.87	-13.75
9608	H	97.62	78.42	-38.3	59.32	40.12	74	54	-14.68	-13.88
12010	Н	95.14	75.25	-39	56.14	36.25	74	54	-17.86	-17.75
14412	Н	97.41	78.47	-42	55.41	36.47	74	54	-18.59	-17.53
16814	Н	94.66	75.55	-39.3	55.36	36.25	74	54	-18.64	-17.75

Other harmonics emissions are lower than 20dB below the allowable limit.

Note: (1) All Readings are Peak Value and AV.

- (2) Emission Level= Reading Level+ Probe Factor +Cable Loss.
- (3) The average measurement was not performed when the peak measured data under the limit of average detection.
 - (4) Measuring frequencies from 1GHz to 25GHz.

Operation Mode:	TX Mode (CH19: 2440MHz)	Test Date :	2023-03-03
Frequency Range:	1-25GHz	Temperature :	25 ℃
Test Result:	PASS	Humidity :	58 %
Measured Distance:	3m	Test By:	Best

Freq.	Ant. Pol.		ReadingCorrectEmissionLimitvel(dBuV/m)FactorLevel(dBuV/m)3m(dBuV/m)		Margin(dB)					
(MHz)	H/V	PK	AV	dB	PK	AV	PK	AV	PK	AV
4880	V	95.57	75.58	-32.3	63.27	43.28	74	54	-10.73	-10.72
7320	V	97.22	77.45	-37.2	60.02	40.25	74	54	-13.98	-13.75
9760	V	98.12	79.03	-39.8	58.32	39.23	74	54	-15.68	-14.77
12200	V	96.82	77.72	-40.5	56.32	37.22	74	54	-17.68	-16.78
14640	V	96.14	77.14	-41	55.14	36.14	74	54	-18.86	-17.86
17080	V	95.46	76.57	-41.1	54.36	35.47	74	54	-19.64	-18.53
4880	Η	94.38	75.12	-31.6	62.78	43.52	74	54	-11.22	-10.48
7320	Η	95.64	76	-35.5	60.14	40.5	74	54	-13.86	-13.5
9760	Н	96.49	77.71	-38.3	58.19	39.41	74	54	-15.81	-14.59
12200	Н	95.5	76.52	-39	56.5	37.52	74	54	-17.5	-16.48
14640	Η	97.17	78.44	-42	55.17	36.44	74	54	-18.83	-17.56
17080	Н	96.82	77.64	-41.5	55.32	36.14	74	54	-18.68	-17.86

Other harmonics emissions are lower than 20dB below the allowable limit.

Note: (1) All Readings are Peak Value and AV.

- (2) Emission Level= Reading Level+ Probe Factor +Cable Loss.
- (3) The average measurement was not performed when the peak measured data under the limit of average detection.
 - (4) Measuring frequencies from 1GHz to 25GHz.

X Mode (CH39: 2480MHz)	Test Date :	2023-03-03
-25GHz	Temperature :	25 ℃
PASS	Humidity :	58 %
m	Test By:	Best
, ,	-25GHz ASS	-25GHz Temperature : ASS Humidity :

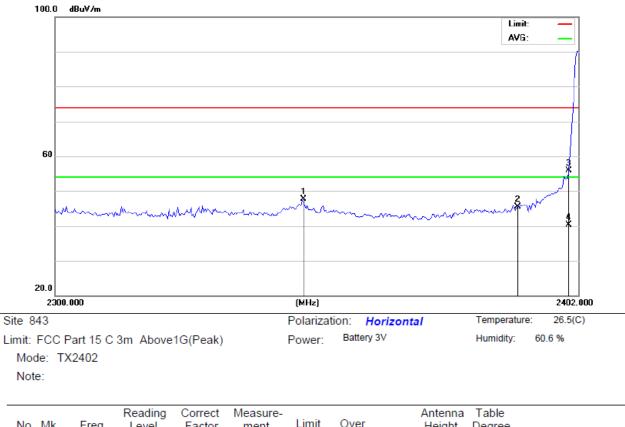
Freq.	Ant. Pol.	Rea Level(d	ding BuV/m)	Correct Factor	Emission Level(dBuV/m)				in(dB)	
(MHz)	H/V	PK	AV	dB	PK	AV	PK	AV	PK	AV
4960	V	94.48	75.56	-32.3	62.18	43.26	74	54	-11.82	-10.74
7440	V	97.22	77.39	-37.2	60.02	40.19	74	54	-13.98	-13.81
9920	V	98.43	77.82	-39.8	58.63	38.02	74	54	-15.37	-15.98
12400	V	96.82	78.46	-40.5	56.32	37.96	74	54	-17.68	-16.04
14880	V	96.41	77.47	-41	55.41	36.47	74	54	-18.59	-17.53
17360	V	96.39	77.35	-41.1	55.29	36.25	74	54	-18.71	-17.75
4960	Н	94.18	74.6	-31.6	62.58	43	74	54	-11.42	-11
7440	H	95.73	75.75	-35.5	60.23	40.25	74	54	-13.77	-13.75
9920	H	96.77	77.63	-38.3	58.47	39.33	74	54	-15.53	-14.67
12400	Н	95.32	76.52	-39	56.32	37.52	74	54	-17.68	-16.48
14880	Н	97.36	78.14	-42	55.36	36.14	74	54	-18.64	-17.86
17360	Н	96.64	77.52	-41.5	55.14	36.02	74	54	-18.86	-17.98

Other harmonics emissions are lower than 20dB below the allowable limit.

Note: (1) All Readings are Peak Value and AV.

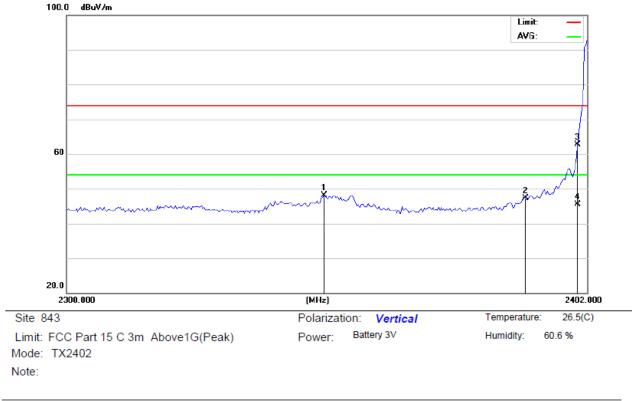
- (2) Emission Level= Reading Level+ Probe Factor +Cable Loss.
- (3) The average measurement was not performed when the peak measured data under the limit of average detection.
 - (4) Measuring frequencies from 1GHz to 25GHz.

Band edge:



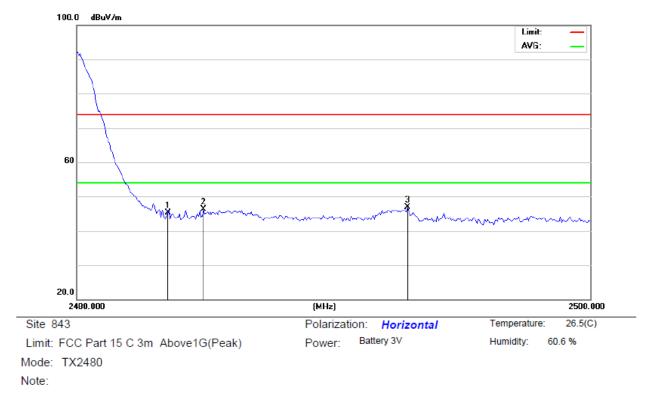
No. I	Mk.	Freq.	Level		ment	Limit	Over		Height	Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1	23	347.898	52.84	-5.11	47.73	74.00	-26.27	peak			
2	23	390.000	50.24	-4.82	45.42	74.00	-28.58	peak			
3	24	400.000	60.70	-4.75	55.95	74.00	-18.05	peak			
4	* 24	400.000	45.02	-4.75	40.27	54.00	-13.73	AVG			

*:Maximum data x:Over limit !:over margin



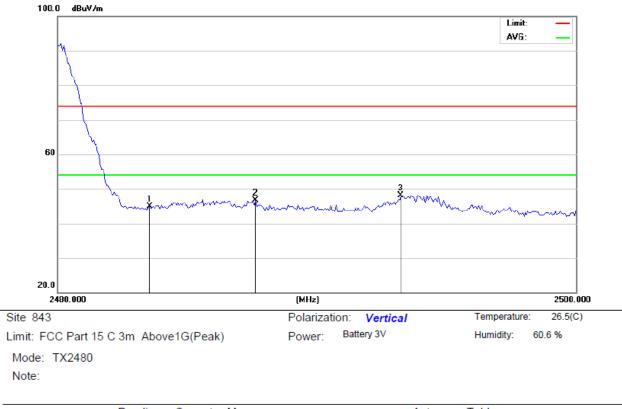
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		2349.937	53.15	-5.09	48.06	74.00	-25.94	peak			
2		2390.000	52.18	-4.82	47.36	74.00	-26.64	peak			
3		2400.000	67.50	-4.75	62.75	74.00	-11.25	peak			
4	*	2400.000	50.25	-4.75	45.50	54.00	-8.50	AVG			

*:Maximum data x:Over limit !:over margin



No.	Mk	. Freq.			Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		2483.500	49.55	-4.19	45.36	74.00	-28.64	peak			
2		2484.935	50.44	-4.18	46.26	74.00	-27.74	peak			
3	*	2492.882	51.08	-4.14	46.94	74.00	-27.06	peak			

*:Maximum data x:Over limit !:over margin



No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		2483.500	49.14	-4.19	44.95	74.00	-29.05	peak			
2		2487.631	50.85	-4.16	46.69	74.00	-27.31	peak			
3	*	2493.282	52.23	-4.14	48.09	74.00	-25.91	peak			

*:Maximum data x:Over limit !:over margin

9. ANTENNA REQUIREMENT

REQUIREMENT

The EUT'S antenna is met the requirement of FCC part 15C section 15.203 and 15.247.

FCC part 15C section 15.247 requirements:

Systems operating in the 2402-2480MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

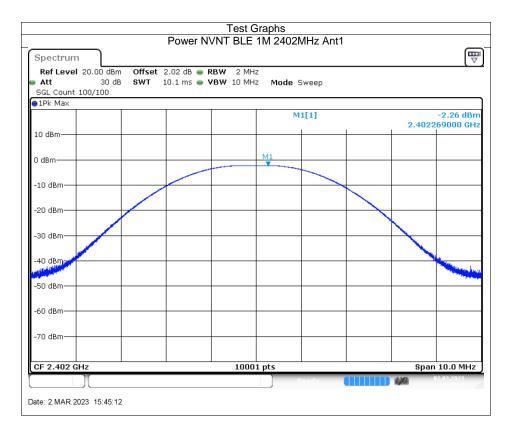
DESCRIPTION

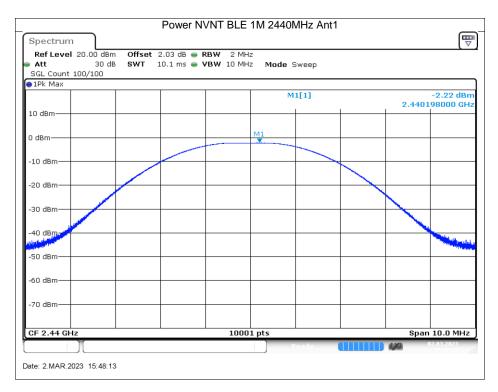
Pass

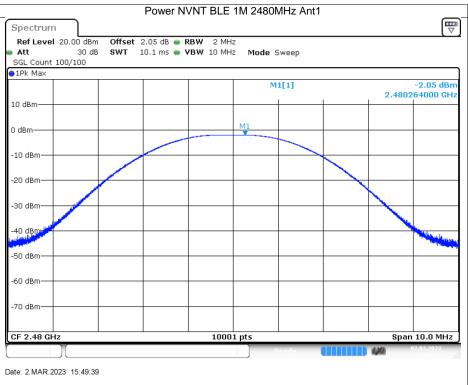
10. TEST DATA

Conducted Output Power

Mode	Frequency (MHz)	Āntenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
BLE	2402	Ant1	-2.26	0	-2.26	30	Pass
1M							_
BLE	2440	Ant1	-2.22	0	-2.22	30	Pass
1M							
BLE	2480	Ant1	-2.05	0	-2.05	30	Pass
1M							

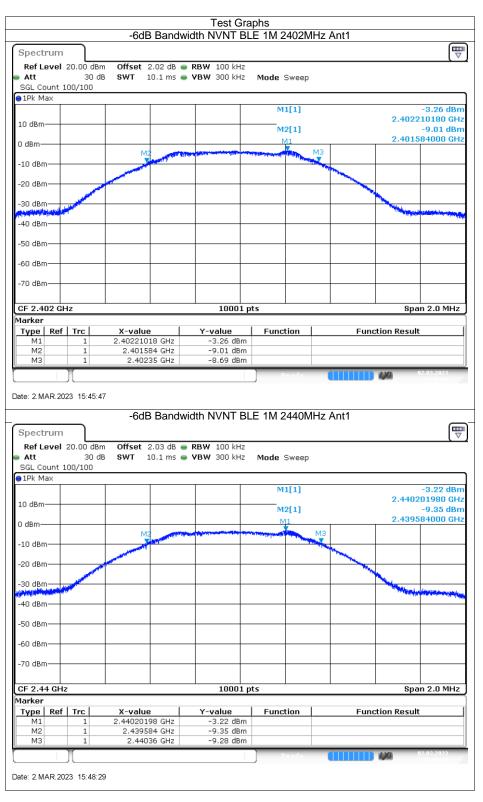


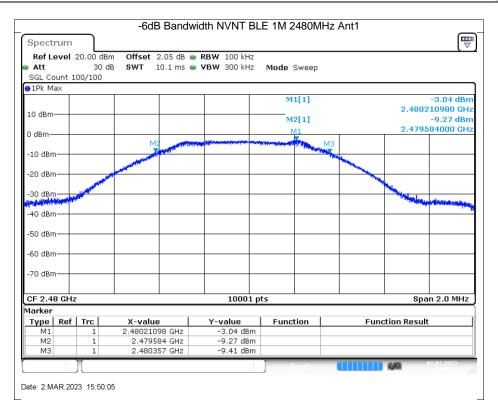




-6dB Bandwidth

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
BLE 1M	2402	Ant1	0.766	0.5	Pass
BLE 1M	2440	Ant1	0.775	0.5	Pass
BLE 1M	2480	Ant1	0.773	0.5	Pass



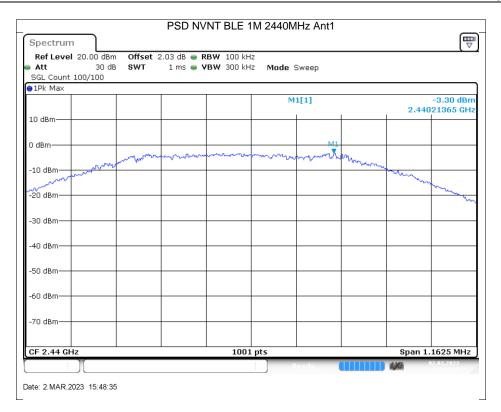


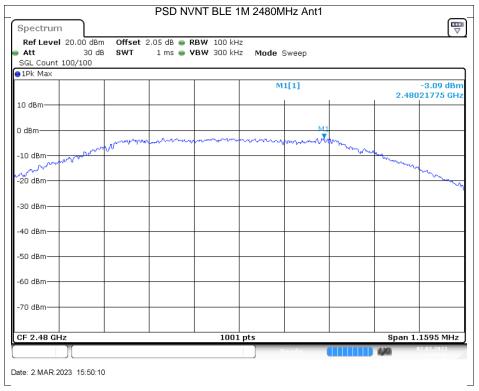
TRF No.: 01-R005-3A

	or opeou		isity				
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
BLE 1M	2402	Ant1	-3.34	0	-3.34	8	Pass
BLE 1M	2440	Ant1	-3.3	0	-3.3	8	Pass
BLE 1M	2480	Ant1	-3.09	0	-3.09	8	Pass

Power Spectral Density

Spectrum Offset 2.02 dB RBW 100 k Att 30 dB SWT 1 ms VBW 300 k GGL Count 100/100 1	Hz Mode Sweep	[5
Att 30 dB SWT 1 ms VBW 300 k SGL Count 100/100 1	Hz Mode Sweep	
SGL Count 100/100 1Pk Max		
1Pk Max	1	
	M1[1]	-3.34 dBi
0 dBm		2.40220660 GH
dBm	M1	
and the second s	monorth	N8
10 dBm		man and a second
and the second		manne
20 dBm		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
30 dBm		
40 dBm		
50 dBm		
60 dBm		
70 dBm		
F 2.402 GHz 100	1 pts	Span 1.149 MHz
八	Ready	102.133/2028

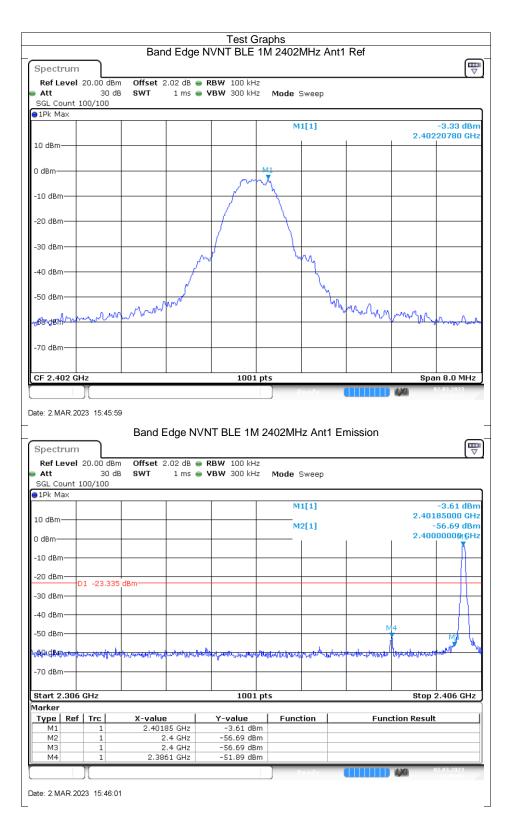




TRF No.: 01-R005-3A

Band Edge

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	Ant1	-48.56	-20	Pass
BLE 1M	2480	Ant1	-48.16	-20	Pass



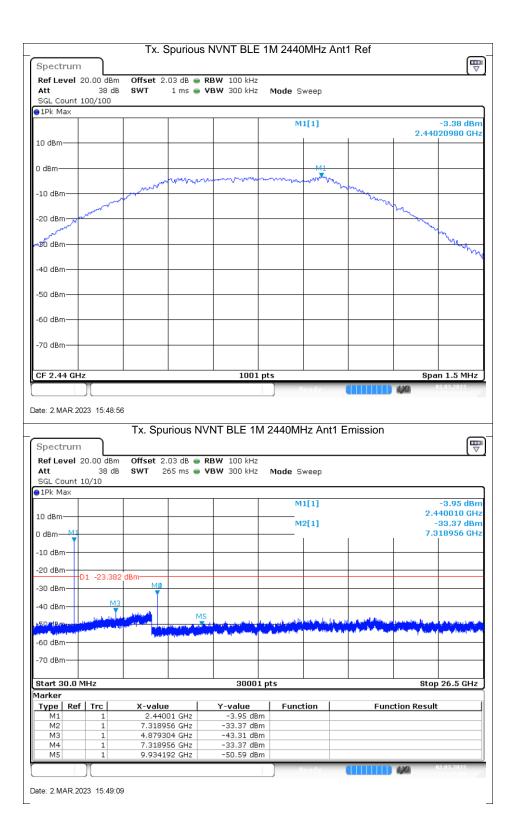
			la Lago I	IVNT BLE	1111 2400				G
Spectru									L T
Ref Lev Att	el 20.00 di 30			RBW 100 kH VBW 300 kH		Sweep			
SGL Cour	nt 100/100								
JIPK Max					м	1[1]			-3.04 dB
								2.479	96000 GH
10 dBm—									
0 dBm				M					
o abiii				m	w				
-10 dBm—					<u> </u>				
-20 dBm—	+			1					
-30 dBm—			J	Ŷ		m			
-40 dBm—			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			<u>\</u>			
-50 dBm—			m M			- w			
And	umara	monument	ru				mun	mannen	A
-60 dBm									CO-MANN
-70 dBm—									
-70 aBm—									
CF 2.48 (SHz			1001	. pts			Spa	n 8.0 MHz
Spectru		Band B		NT BLE 1M		Iz Ant1	Emission		
Spectru Ref Lev Att	m el 20.00 di 30	Band B	2.05 dB 👄 I	NT BLE 1M RBW 100 KH VBW 300 KH	z		Emission		
Spectru Ref Lev Att SGL Cour	m	Band B	2.05 dB 👄 I	RBW 100 kH	z		Emission		Ē
Spectru Ref Lev Att SGL Cour	m el 20.00 di 30	Band B	2.05 dB 👄 I	RBW 100 kH	z z Mode :	Sweep	Emission		
Spectru Ref Lev Att SGL Cour 1Pk Max	m el 20.00 di 30	Band B	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission		-3.08 dBi 75000 GH
Spectru Ref Lev Att SGL Cour 1Pk Max	m el 20.00 di 30	Band B	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour 1Pk Max	m el 20.00 di 30	Band B	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour 1Pk Max 10 dBm	m el 20.00 di 30	Band B	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour 1Pk Max 10 dBm- 0 dbm- -10 dBm-	m el 20.00 di 30 ht 100/100	Band B Bm Offset : dB SWT	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour IPk Max 10 dBm- 0 dBm- -10 dBm- -20 cBm-	m el 20.00 di 30	Band B Bm Offset : dB SWT	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi 50000 GH
Spectru Ref Lev Att SGL Cour 1Pk Max 10 dBm— 0 dBm— -10 dBm— -20 cBm—	m el 20.00 di 30 ht 100/100	Band B Bm Offset : dB SWT	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour IPk Max 10 dBm- 0 dBm- -10 dBm- -20 cBm-	m el 20.00 di 30 ht 100/100	Band B Bm Offset : dB SWT	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour 1Pk Max 10 dBm— 0 dBm— -10 dBm— -20 cBm—	m el 20.00 di 30 ht 100/100	Band B Bm Offset : dB SWT 40 dBm	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour 10 dBm	mel 20.00 dl 30 30 it 100/100	Band B Bm Offset : dB SWT 40 dBm 40 dBm	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1] 2[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour 1Pk Max 10 dBm 10 dBm -10 dBm -20 cBm -30 cBm -30 cBm -50 dBm -50	mel 20.00 dl 30 30 it 100/100	Band B Bm Offset : dB SWT 40 dBm	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1]	Emission	-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour 10 dBm	mel 20.00 dl 30 30 it 100/100	Band B Bm Offset : dB SWT 40 dBm 40 dBm	2.05 dB 👄 I	RBW 100 kH	z z Mode : M	Sweep 1[1] 2[1]		-	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev Att SGL Cour 1Pk Max 10 dBm 10 dBm -10 dBm -20 cBm -30 cBm -30 cBm -50 dBm -50	m el 20.00 dl 30 it 100/100	Band B Bm Offset : dB SWT 40 dBm 40 dBm	2.05 dB 👄 I	RBW 100 kH	z Mode : Mode : M	Sweep 1[1] 2[1]	Emission	2.483	-3.08 dBi 75000 GH 59.00 dBi
Spectru Ref Lev SGL Cour SGL Cour 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -50 dBm- -70 dBm- -70 dBm- Start 2.4 Varker	mel 20.00 dl 30 30 it 100/100 D1 -23.0	Band B Bm Offset : dB SWT 40 dBm	2.05 dB • 1 1 ms • 1	RBW 100 kH	z Mode : m m m	Sweep 1[1] 2[1]	feren galanta and a state of the state of th	2.483	-3.08 dBi 75000 GF 59.00 dBi 50000 GF
Spectru Ref Lev Att SGL Cour 1Pk Max 10 dBm 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm -70 dBm Start 2.4 Varker Type R	m	Band B Bm Offset : dB SWT 40 dBm 40 dBm	2.05 dB 1 ms '	RBW 100 kH VBW 300 kH	Z Mode : Mode : M M M M M M M M M M M M M M M M M M M	Sweep 1[1] 2[1]	feren galanta and a state of the state of th	2.483	-3.08 dBi 75000 GF 59.00 dBi 50000 GF
Spectru Ref Lev SGL Cour SGL Cour 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -50 dBm- -70 dBm- -70 dBm- Start 2.4 Varker	mel 20.00 dl 30 30 it 100/100 D1 -23.0	Band B Bm Offset : dB SWT 40 dBm 40 dBm M4 M4 M2 X-value 2.479	2.05 dB • 1 1 ms • 1	RBW 100 kH	z Mode : M M M M M M M M M M M M M M M M M M M	Sweep 1[1] 2[1]	feren galanta and a state of the state of th	2.483	-3.08 dBi 75000 GF 59.00 dBi 50000 GF
Spectru Ref Lev Att SGL Cour 1Pk Max 10 dBm- 0 dbm- -10 dBm- -20 dBm- -20 dBm- -30 dBm- -50 dBm- -70 dBm	m el 20.00 dl 30 tt 100/100 D1 -23.0 D1 -23.0 V -4vgraftly F6 GHz ef Trc 1 1 1	Band B Bm Offset : dB SWT 40 dBm 40 d	2.05 dB 1 ms 1 ms 1 ms 1 ms 1 ms 2 1 ms 1	RBW 100 kH VBW 300 kH	2 Z Mode : M M M M M M M Z Z M M Z M Z M M M M M	Sweep 1[1] 2[1]	feren galanta and a state of the state of th	2.483	-3.08 dBi 75000 GF 59.00 dBi 50000 GF
Spectru Ref Lev SGL Cour 1Pk Max 10 dBm	m el 20.00 di 30 ti 100/100 D1 -23.0 D1 -23.0 C6 GHz ef Trc 1 1	Band B Bm Offset : dB SWT 40 dBm 40 d	2.05 dB • 1 1 ms • 1 ms • 1 1 ms • 1 ms • 1 ms • 1 ms • 1 ms • 1 ms • 1 ms	RBW 100 kH VBW 300 kH 100 1001 Y-value -3.08 dB -59.00 dB	2 Z Mode : M M M M M M M Z Z M M Z M Z M M M M M	Sweep 1[1] 2[1]	feren galater yang cater, ang	2.483	-3.08 dBi 75000 GF 59.00 dBi 50000 GF

Conducted RF Spurious Emission

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	Ant1	-26.37	-20	Pass
BLE 1M	2440	Ant1	-29.98	-20	Pass
BLE 1M	2480	Ant1	-33.6	-20	Pass

	-	<u> </u>	Test Gra				
	Tx.	Spurious	NVNT BLE 1	M 2402MHz A	nt1 Ref		_
Spectrum							
Ref Level 20.00 dB	m Offset 2	2.02 dB 😑 R	BW 100 kHz				
Att 38			' BW 300 kHz	Mode Sweep			
SGL Count 100/100							
1Pk Max							
				M1[1]			-3.46 dBr 21580 GH
LO dBm						2.402	21300 GH
) dBm				M1			
		manne	mmm	mmonth			
10 dBm				U	"han -		
10 ubiii _/	www				www.		
20 dBm						m	
20 ubili						m	
30 dBm						Ì	Yn.
an an							WWW CO
40 d0-							
40 dBm							
50 dBm							
60 dBm							
70 dBm			+ +				
F 2.402 GHz			1001 p	ts		Snar	1 1.5 MHz
		urious NV	NT BLE 1M	2402MHz Ant	1 Emission		œ
Spectrum	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz		1 Emission		
Spectrum Ref Level 20.00 dB Att 38	Tx. Spo m Offset 2	2.02 dB 👄 R		2402MHz Ant Mode Sweep	1 Emission		Ţ
Spectrum Ref Level 20.00 dt Att 38 SGL Count 10/10	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz		1 Emission		(The second seco
Spectrum Ref Level 20.00 dt Att 38 SGL Count 10/10	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission		
SGL Count 10/10 1Pk Max	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission		-4.64 dBr
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 htpk Max	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission	2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 dE Att 38 SGL Count 10/10 11Pk Max	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission	2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 11Pk Max 10 dBm 41 0 dBm 41	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission	2.4	-4.64 dBr 02070 GH
Spectrum Ref Level 20.00 db Att 38 SGL Count 10/10 11Pk Max 10 dBm 10 10 dBm 10 10 dBm 10 10 dBm 10	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission	2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 1Pk Max 0 dBm 0 dBm 10 dBm 20 dBm 20 dBm	Tx. Spo m Offset 2	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission	2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 dE Att 38 SGL Count 10/10 101Pk Max .0 dBm .0 dBm .10 dBm .20 dBm .20 dBm .20 dBm	Tx. Spi	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission	2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 dE Att 38 SGL Count 10/10 1Pk Max 0 dBm 0 dBm 10 dBm 20 dBm 20 dBm 01 -23,4 30 dBm	Tx. Spi	2.02 dB 👄 R	BW 100 kHz	Mode Sweep	1 Emission	2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 dB Att 38 SGL Count 10/10 1Pk Max 0 dBm 0 dBm 10 dBm 20 dBm 20 dBm 40 dBm	Tx. Spi	2.02 dB 👄 R	BW 100 kHz	Mode Sweep M1[1] M2[1] 		2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 dB Att 38 SGL Count 10/10 1Pk Max 0 dBm 0 dBm 10 dBm 20 dBm 20 dBm 40 dBm	Tx. Spi	2.02 dB R R	BW 100 kHz	Mode Sweep M1[1] M2[1] 	1 Emission	2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 1Pk Max 0 dBm 10 dBm 20 dBm 20 dBm 91 -23.4 30 dBm 40 dBm	Tx. Spi	2.02 dB R R	BW 100 kHz	Mode Sweep M1[1] M2[1] 		2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 dE Att 38 SGL Count 10/10 1Pk Max 0 dBm 0 dBm 10 dBm 20 dBm 20 dBm 40 dBm 50/dBm 50/dBm 60 dBm	Tx. Spi	2.02 dB R R	BW 100 kHz	Mode Sweep M1[1] M2[1] 		2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 dE Att 38 SGL Count 10/10 11Pk Max 10 dBm 0 dBm 10 dBm 20 dBm 20 dBm 9 dBm 40 dBm 50/dBm 60 dBm	Tx. Spi	2.02 dB R R	BW 100 kHz	Mode Sweep M1[1] M2[1] 		2.4	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 db Att 38 SGL Count 10/10 1Pk Max 0 dBm 10 dBm 20 dBm 20 dBm 90 dBm 10 dBm 50 dBm 50 dBm 60 dBm 70 dBm	Tx. Spi	2.02 dB R R	BW 100 kHz BW 300 kHz	Mode Sweep		2.44 7.21	-4.64 dBr 02070 GH 29.83 dBr 06017 GH
Spectrum Ref Level 20.00 dB Att 38 SGL Court 10/10 11Pk Max 10 dBm 0 dBm 10 dBm 20 dBm 20 dBm 40 dBm 50/dBm 50/dBm 70 dBm 70 dBm 30 dBm	Tx. Spi	2.02 dB R R	BW 100 kHz	Mode Sweep		2.44 7.21	-4.64 dBr 02070 GH 29.83 dBr 06017 GH
Spectrum Ref Level 20.00 dk Att 38 SGL Count 10/10 11Pk Max 10 dBm 0 dBm 10 dBm 20 dBm 0 dBm 10 dBm 20 dBm 0 dBm 10 dBm 20 dBm 0 dBm 70 dBm 70 dBm 30 dBm 70 dBm 31 dBm 32 dBm 33 dBm	Tx. Spi	2.02 dB R R	BW 100 kHz /BW 300 kHz	Mode Sweep M1[1]N2[1]		2.44 	-4.64 dBr 02070 GH 29.83 dBr 06017 GH
Spectrum Ref Level 20.00 dk Att 38 SGL Count 10/10 11Pk Max 10 dBm 0 dBm 10 dBm 20 dBm 0 dBm 10 dBm 20 dBm 0 dBm 10 dBm 20 dBm 0 dBm 70 dBm 70 dBm 30 dBm 70 dBm 31 dBm 32 dBm 33 dBm	Tx. Spi	2.02 dB R R	BW 100 kHz BW 300 kHz	Mode Sweep		2.44 7.21	-4.64 dBr 02070 GH 29.83 dBr
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 10Pk Max 10 dBm 10 dBm 20 dBm 10 dBm 20 dBm 40 dBm 50 dBm 70 dBm 70 dBm 70 dBm 31 dBm 60 dBm 70 dBm 70 dBm 81 art 30.0 MHz Iarker Type Ref M1 1 M2 1	Tx. Spi	2.02 dB R R S S S S S S S S S S S S S	BW 100 kHz BW 300 kHz BW 300 kHz BW 300 kHz BW 100 kHz BW 300	Mode Sweep		2.44 	-4.64 dBr 02070 GH 29.83 dBr 06017 GH
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 01Pk Max 10 dBm 10 dBm 10 dBm 20 dBm 10 dBm 20 dBm 40 dBm 50/d8m 70 dBm 70 dBm 70 dBm 310 dBm 50/d8m 50/d8m 70 dBm 70 dBm 31 dBm 32 dBm 33 dBm 40 dBm 50/d8m 50/d8m 70 dBm 31 dBm 32 dBm 33 dBm 34 dBm 50/d8m 50/d8m 70 dBm 31 dBm 32 dBm 33 dBm 34 dBm 35 dBm 36 dBm 37 dBm 38 dBm 39 dBm 30 dBm 30 dBm 30 dBm 30 dBm 30 dBm	Tx. Spi im Offset 2 dB swT 2 64 dBm me 13 13 14 14 13 14 14 14 14 14 14 14 14 14 14 14 14 14	2.02 dB R R 265 ms V	BW 100 kHz 'BW 300 kHz 'BW 300 kHz 300 kHz 	Mode Sweep		2.44 	-4.64 dBr 02070 GH 29.83 dBr 06017 GH
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 11Pk Max 10 dBm 10 dBm 20 dBm 10 dBm 20 dBm 10 dBm 10 dBm 10 dBm 20 dBm 10 dBm 40 dBm 40 dBm 50/d9/51 40 dBm 70 dBm 70 dBm Start 30.0 MHz Type Ref Trc M1 1 M2 1 M3 1	Tx. Spi	2.02 dB R R R R R R R R R R R R R	BW 100 kHz BW 300 kHz BW 300 kHz BW 300 kHz BW 300 kHz BW 40	Mode Sweep		2.44 	-4.64 dBr 02070 GH 29.83 dBr 06017 GH
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 1Pk Max 0 dBm 0 dBm 10 dBm 10 dBm 20 dBm 20 dBm 40 dBm 50/d8m 50/d8m 60 dBm 70 dBm start 30.0 MHz arker Type Ref M1 1 M2 1 M3 1	Tx. Spi	2.02 dB R R 265 ms V	BW 100 kHz 'BW 300 kHz 'BW 300 kHz 300 kHz 	Mode Sweep		2.44 7.21	-4.64 dBr 02070 GH 29.83 dBr 06017 GH
Spectrum Ref Level 20.00 df Att 38 SGL Count 10/10 11Pk Max 10 dBm 10 dBm 20 dBm 10 dBm 20 dBm 10 dBm 10 dBm 10 dBm 20 dBm 10 dBm 40 dBm 40 dBm 50/d9/51 40 dBm 70 dBm 70 dBm Start 30.0 MHz Type Ref Trc M1 1 M2 1 M3 1	Tx. Spi	2.02 dB R R R R R R R R R R R R R	BW 100 kHz BW 300 kHz BW 300 kHz BW 300 kHz BW 300 kHz BW 40	Mode Sweep		2.44 	-4.64 dBr 02070 GH 29.83 dBr 06017 GH

TRF No.: 01-R005-3A



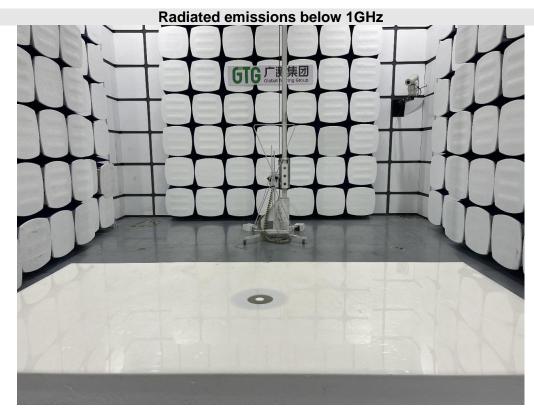
	Tx. Spurio	us NVNT BLE	1 M 2480MHZ AN	l Rei	
Spectrum					F
Ref Level 20.00 d	Bm Offset 2.05 dB	RBW 100 kHz			(
Att 38		VBW 300 kHz	Mode Sweep		
SGL Count 100/100					
1Pk Max					
			M1[1]		-3.25 dB
					2.48020380 G
.0 dBm					
I dBm			M1		
	mm	manna	month		
10 dBm			° Wr	m	
	- and -			- mon	
no do a contration					m
20 dBm					man
Sala and a start of the start o					Two and
SÖ dBm				+ +	- marken
40 dBm					
50 d0m					
50 dBm					
60 dBm				+ +	
70 dBm					
F 2.48 GHz		1001 p	ts		Span 1.5 MH
11			Ready		02.03.2023
te: 2.MAR.2023 15:5		NVNT BLE 1M	 2480MHz Ant1 E	Emission	
		NVNT BLE 1M	2480MHz Ant1 E	Emission	ſ
Spectrum	Tx. Spurious		2480MHz Ant1 E	Emission	[^E
Spectrum Ref Level 20.00 d	Tx. Spurious	e RBW 100 kHz		Emission	[E
Spectrum Ref Level 20.00 d Att 38	Tx. Spurious		2480MHz Ant1 E Mode Sweep	Emission	[
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10	Tx. Spurious	e RBW 100 kHz		Emission	[
Spectrum Ref Level 20.00 d	Tx. Spurious	e RBW 100 kHz	Mode Sweep	Emission	-3.19 dB
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 1Pk Max	Tx. Spurious	e RBW 100 kHz		Emission	
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 1Pk Max	Tx. Spurious	e RBW 100 kHz	Mode Sweep M1[1]	Emission	2.479720 GI
Ref Level 20.00 d Att 38 GGL Count 10/10 1Pk Max 0 dBm	Tx. Spurious	e RBW 100 kHz	Mode Sweep	Emission	2.479720 G -36.86 dB
Ref Level 20.00 d Att 38 GGL Count 10/10 1Pk Max 0 dBm	Tx. Spurious	e RBW 100 kHz	Mode Sweep M1[1]	Emission	2.479720 G -36.86 dB
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 1PK Max 0 dBm dBm	Tx. Spurious	e RBW 100 kHz	Mode Sweep M1[1]	Emission	2.479720 GI -36.86 dB
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 IPk Max 0 dBm dBm 10 dBm	Tx. Spurious	e RBW 100 kHz	Mode Sweep M1[1]		2.479720 GI -36.86 dB
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 IPk Max 0 dBm dBm 10 dBm	Tx. Spurious	e RBW 100 kHz	Mode Sweep M1[1]		2.479720 GI -36.86 dB
Spectrum	Tx. Spurious	e RBW 100 kHz	Mode Sweep M1[1]		2.479720 GI -36.86 dB
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 IPK Max 0 dBm 0 dBm 0 dBm 10 dBm 0 dBm 20 dBm 01 -23. 30 dBm 01 -23.	Tx. Spurious	e RBW 100 kHz	Mode Sweep M1[1]		2.479720 GI -36.86 dB
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 IPK Max 0 dBm 0 dBm 0 dBm 10 dBm 0 dBm 20 dBm 01 -23. 30 dBm 01 -23.	Tx. Spurious	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1]		2.479720 GI -36.86 dB
Spectrum	Tx. Spurious	e RBW 100 kHz	Mode Sweep M1[1]	Emission	2.479720 GI -36.86 dB
Spectrum	Tx. Spurious	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1]	Emission	2.479720 GI -36.86 dB
Spectrum	Tx. Spurious	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1]	Emission	-3.19 dB 2.479720 GI -36.86 dB 7.440718 GI
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 IPK Max 0 dBm dBm 0 dBm 20 dBm 20 dBm 00 dBm 50 dBm 50 dBm	Tx. Spurious	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1]	Emission	2.479720 GI -36.86 dB
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 IPK Max 0 dBm dBm 0 dBm 20 dBm 20 dBm 00 dBm 50 dBm 50 dBm	Tx. Spurious	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1]	Emission	2.479720 GI -36.86 dB
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 11 IPk Max 0 0 dBm 0 10 dBm 0 20 dBm 01 20 dBm 01 30 dBm 01 40 dBm 01 70 dBm 0	Tx. Spurious	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1] M2[1] _	Emission	2.479720 Gi -36.86 dB 7.440718 Gi
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 11 IPk Max 0 0 dBm 0 10 dBm 0 20 dBm 01 20 dBm 01 30 dBm 01 40 dBm 01 70 dBm 0	Tx. Spurious	RBW 100 kHz VBW 300 kHz	Mode Sweep M1[1] M2[1] _	Emission	2.479720 Gi -36.86 dB 7.440718 Gi
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 1 IPk Max 0 0 dBm 0 dBm 0 dBm 0 30 dBm 01 40 dBm 01 50/dBm 01 70 dBm 0 70 dBm 0 MHz 0	Tx. Spurious	RBW 100 kHz VBW 300 kHz	Mode Sweep	Emission	2.479720 G -36.86 dB 7.440718 G
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 1 IPK Max 0 0 dBm 0 dBm 0 20 dBm 0 20 dBm 0 30 dBm 0 50 dBm 0 50 dBm 0 70 dBm 0 ttart 30.0 MHz	Tx. Spurious	RBW 100 kHz VBW 300 kHz VBW 300 kHz	Mode Sweep M1[1] M2[1] 		2.479720 Gi -36.86 dB 7.440718 Gi
Spectrum Ref Level 20.00 d Att 38 SGL Count 198 SGL Count 191 1Pk Max 0 0 dBm 0 10 dBm 0 20 dBm 01 -23. 30 dBm 01 -23. 40 dBm 50 dBm 50 dBm 0 70 dBm 0 tart 30.0 MHz 0.0 MHz arker 1 Type Ref Trc M1 1 1	Tx. Spurious	RBW 100 kHz VBW 300 kHz VBW 300 kHz Solution Sol	Mode Sweep		2.479720 Gi -36.86 dB 7.440718 Gi
Spectrum Ref Level 20.00 d Att 38 SGL Count 10/10 1Pk Max 38 .0 dBm	Tx. Spurious Bm Offset 2.05 dB BM SWT 265 ms 253 dBm 200 200 253 dBm 200 200 200 MP 200 201 200 200 202 MP 200 203 MP 200 203 MP 200 203 MP 200 203 MP 200 204 MP 200 205 MP 200 206	RBW 100 kHz VBW 300 kHz VBW 300 kHz Solution Sol	Mode Sweep		2.479720 Gi -36.86 dB 7.440718 Gi
Spectrum	Tx. Spurious Bm Offset 2.05 dB BM SWT 265 ms 253 dBm 200 200 253 dBm 200 200 253 dBm 200 200 253 dBm 200 200 265 265 200 253 dBm 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 20	RBW 100 kHz VBW 300 kHz VBW 300 kHz Solution M5 Solution Solution	Mode Sweep M1[1] M2[1] M2[1		2.479720 Gi -36.86 dB 7.440718 Gi
Spectrum	Tx. Spurious	RBW 100 kHz VBW 300 kHz VBW 300 kHz Solution Sol	Mode Sweep M1[1] M2[1] M2[1] I Image: State of the state		2.479720 Gi -36.86 dB 7.440718 Gi
Spectrum	Tx. Spurious Bm Offset 2.05 dB BM SWT 265 ms 253 dBm 200 200 253 dBm 200 200 253 dBm 200 200 253 dBm 200 200 265 265 200 253 dBm 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 20	RBW 100 kHz VBW 300 kHz VBW 300 kHz Solution Sol	Mode Sweep M1[1] M2[1] M2[1] I Image: State of the state	Funct	2.479720 G -36.86 dE 7.440718 G
Spectrum	Tx. Spurious	RBW 100 kHz VBW 300 kHz VBW 300 kHz Solution Sol	Mode Sweep M1[1] M2[1] M2[1] I Image: State of the state	Funct	2.479720 Gi -36.86 dB 7.440718 Gi

Duty Cycle

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
BLE 1M	2402	Ant1	100	0	0
BLE 1M	2440	Ant1	100	0	0
BLE 1M	2480	Ant1	100	0	0

			Test Gr	apns				
	D	uty Cycle	NVNT BLE	TIM 2402N	/IHZ ANt1			Œ
Spectrum								∣⊽
Ref Level 20.00 di Att 30	Bm Offset dB = SWT		RBW 1 MHz VBW 3 MHz					
SGL 30	ub 🖶 3141	5 ms 🖶	TOW JIMIZ					
1Pk Clrw								
				M1[1	1			2.33 dBm 2000 ms
LO dBm								2000 1113
) dBm						м	1	
10 dBm								
20 dBm								
30 dBm								
40 dBm								
50 dBm								
60 dBm								
70 dBm								
F 2.402 GHz			10001	pts	1		50)0.0 µs/
arker				1				
Type Ref Trc M1 1	X-value	9 132 ms	<u>Y-value</u> -2.33 dBm	Function	<u>ו</u>	Functio	n Result	
			2100 4011					
te: 2.MAR.2023 15:45		uty Cycle	NVNT BLE	Read 1M 2440M	IY 🚺 IHz Ant1		02.0	03.2023 5145137
Spectrum	D			. 1M 2440M	/Hz Ant1		1 02.	13.2023
Spectrum Ref Level 20.00 dl Att 30	D	2.03 dB 👄	RBW 1 MHz VBW 3 MHz	1M 2440N	/Hz Ant1		02.	13.2023
Spectrum Ref Level 20.00 dl Att 30 SGL	D Bm Offset	2.03 dB 👄	RBW 1 MHz	9eed	/Hz Ant1		g 02.	13.2023 ∕∕
Spectrum Ref Level 20.00 dl Att 30 SGL	D Bm Offset	2.03 dB 👄	RBW 1 MHz	Pend 1M 2440M 				2.29 dBm
Spectrum Ref Level 20.00 dl Att 30 SGL 1PK Clrw	D Bm Offset	2.03 dB 👄	RBW 1 MHz					2.29 dBm
Spectrum Ref Level 20.00 dl Att 30 SGL 1Pk Clrw 0 dBm	D Bm Offset	2.03 dB 👄	RBW 1 MHz					2.29 dBn
Spectrum Ref Level 20.00 dl Att 30 SGL 1Pk Clrw 0 dBm	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBm
Spectrum Ref Level 20.00 dl Att 30 SGL 1Pk Clrw 0 dBm	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBn
Bpectrum	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBn
Spectrum Ref Level 20.00 dl Att 30 SGL 11Pk Clrw 0 dBm 0 10 dBm 10 dBm 20 dBm 20 dBm	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBn
Spectrum	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBm
Spectrum	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBm
Spectrum Ref Level 20.00 dl Att 30 SGL 11Pk Clrw .0 dBm	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBm
Spectrum	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBm
Spectrum Ref Level 20.00 dl Att 30 SGL	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBm
Spectrum Ref Level 20.00 dl Att 30 SGL 91Pk Clrw 10 dBm 9 10 dBm 9 20 dBm 9 30 dBm 9 40 dBm 9 50 dBm 9 60 dBm 60 dBm	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz					2.29 dBm
Att 30 SGL	D Bm Offset	2.03 dB 🖷 5 ms 🖷	RBW 1 MHz	M1[1				(2.29 dBrr 2500 ms
Spectrum Ref Level 20.00 dl Att 30 SGL 30 JPR Clrw 30 L0 dBm 30 20 dBm 30 40 dBm 30 50 dBm 40 50 dBm 30 60 dBm 30 70 dBm 30	D	2.03 dB • 5 ms •	RBW 1 MHz VBW 3 MHz	M1[1			1.77	2.29 dBm 2500 ms
Spectrum Ref Level 20.00 dl Att 30 SGL 11Pk Clrw 10 dBm 0 10 dBm 0 20 dBm 0 30 dBm 0 40 dBm 0 50 dBm 0 60 dBm 0 70 dBm 0 70 dBm 0 SF 2.44 GHz 0	D	2.03 dB • 5 ms •	RBW 1 MHz VBW 3 MHz	M1[1		Function	1.77	2.29 dBm 2500 ms
Spectrum Ref Level 20.00 dl Att 30 SGL 30 11Pk Clrw 30 0 dBm 30 10 dBm 30 20 dBm 30 30 dBm 40 40 dBm 50 50 dBm 50 70 dBm 51 70 dBm 52 744 GHz 31 374 dFz 74 375 dFz 75	D	2.03 dB • 5 ms •	RBW 1 MHz VBW 3 MHz	M1[1		Function	1.77	2.29 dBm 2500 ms

		D	uty Cycl	e NVNT BL	E 1M 248	0MHz	z Ant1		
Spectrum	ר								
Ref Level 20.	00 dBm	Offset	2.05 dB 🧉	RBW 1 MHz					
Att	30 dB	SWT	5 m s 🧉	• VBW 3 MHz					
SGL									
⊖1Pk Clrw									
10 dBm					М	1[1]			-2.11 dBm 3.069000 ms
10 dBm									
0 dBm						M1			
	lead to a straight				de la constant de sere				
-10 dBm									+
-20 dBm									
20 000									
-30 dBm									
-40 dBm									+
-50 dBm									
So abiii									
-60 dBm									
-70 dBm									+
CF 2.48 GHz				1000	1 pts				500.0 µs/
Marker									
Type Ref T		X-value		Y-value	Func	tion	F	unction Resu	ilt
M1	1	3.0)69 ms	-2.11 dB	mí				
					R	e ad y		4,40	02.03.2023
te: 2.MAR.2023	15:49:48				R	eady			02.03.2023



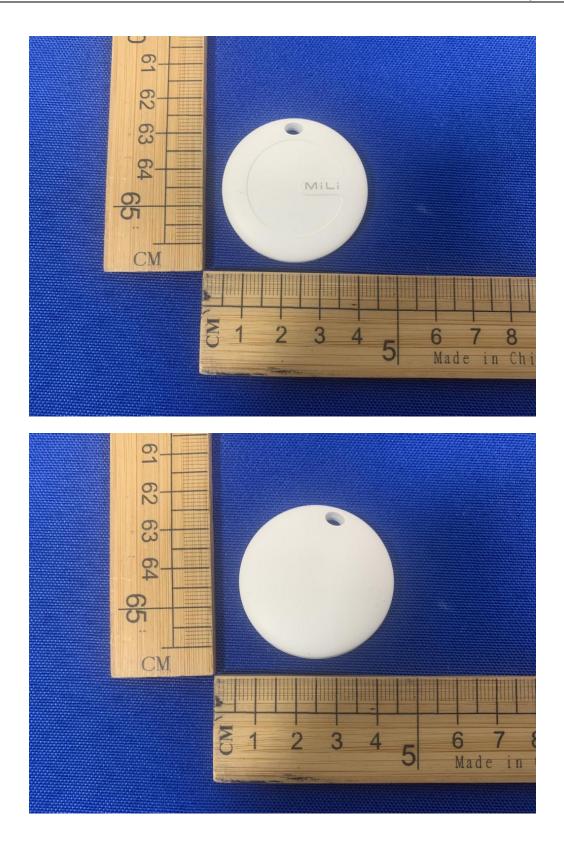
APPENDIX: PHOTOGRAPHS OF TEST CONFIGURATION

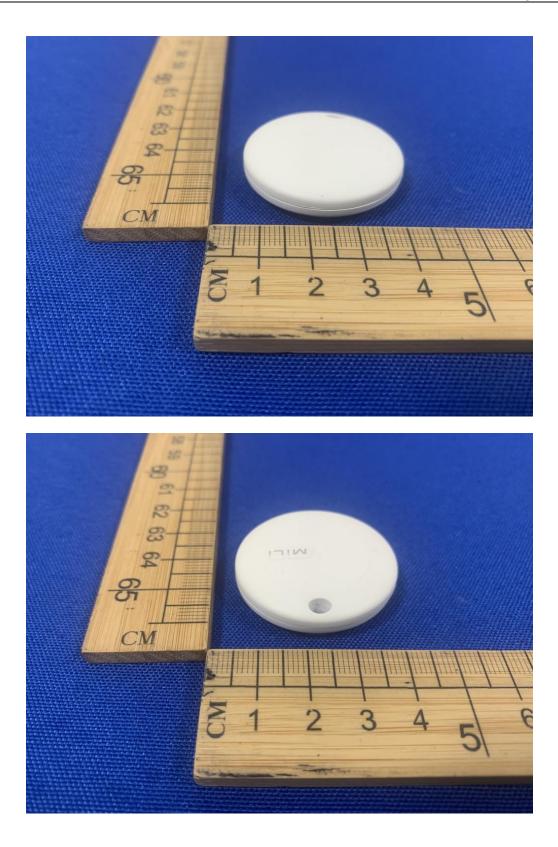
Radiated emissions above 1GHz

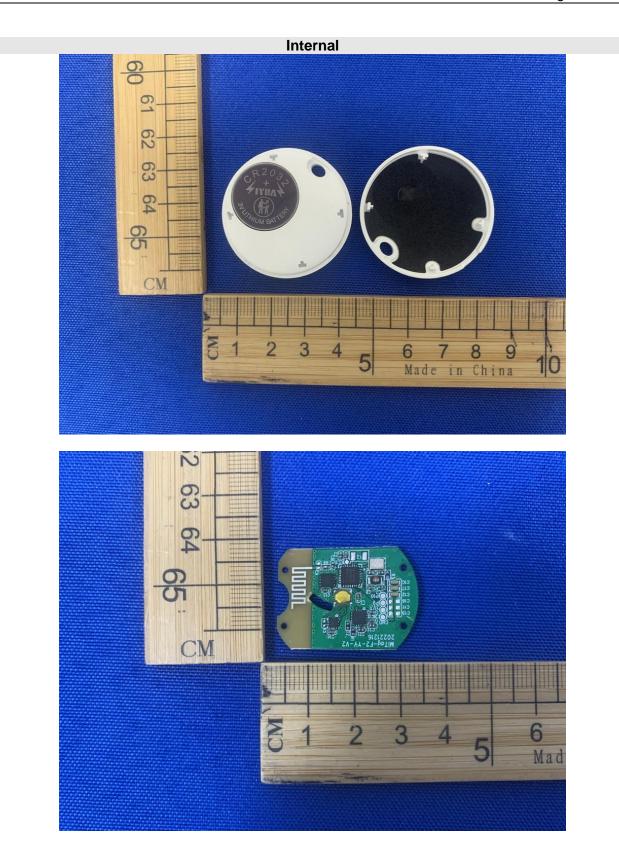


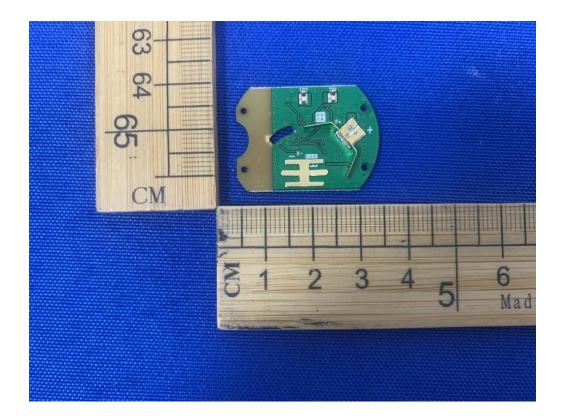


APPENDIX: PHOTOGRAPHS OF THE EUT









--- END OF REPORT---