

# ELECTROMAGNETIC EMISSIONS **COMPLIANCE REPORT**



| Applicant:            | BONX Inc.<br>GRANBIZ TOKYO NIHOMBASHI 9F, 2-10-5, Nihonbashi,<br>Chuo-ku, Tokyo, 103-0027, Japan |
|-----------------------|--------------------------------------------------------------------------------------------------|
| Manufacturer:         | NTT sonority, Inc.<br>3-20-2, Nishishinjuku, Shinjuku-ku, Tokyo 163-1432, Japan                  |
| Product Name:         | BONX Stick                                                                                       |
| Brand Name:           | BONX                                                                                             |
| Model No.:            | BN2-MBK1                                                                                         |
| Report Number:        | TERF2409002766E2                                                                                 |
| FCC ID                | 2AJZGBN2                                                                                         |
| Date of EUT Received: | Sep. 11, 2024                                                                                    |
| Date of Test:         | Sep. 12, 2024~Sep. 25, 2024                                                                      |
| Issue Date:           | Oct. 16, 2024                                                                                    |
|                       |                                                                                                  |

Approved By

ken Huana

## We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Central RF Lab The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10:2013 and the energy emitted by the sample EUT comply with FCC rule part §15.247.

The results of this report relate only to the sample identified in this report.

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| Revision History |          |             |               |            |        |  |  |  |  |
|------------------|----------|-------------|---------------|------------|--------|--|--|--|--|
| Report Number    | Revision | Description | Issue Date    | Revised By | Remark |  |  |  |  |
| TERF2409002766E2 | 00       | Original.   | Oct. 16, 2024 | Yami Kuo   |        |  |  |  |  |
|                  |          |             |               |            |        |  |  |  |  |
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|                  |          |             |               |            |        |  |  |  |  |

## Note:

1 . The remark "\*" indicates modification of the report upon requests from certification body.

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### **GENERAL INFORMATION** 1

#### 1.1 **Product Description**

| Product Name:                   | BONX Stick                |
|---------------------------------|---------------------------|
| Brand Name:                     | BONX                      |
| Model No.:                      | BN2-MBK1                  |
| Hardware Version:               | N/A                       |
| Firmware Version:               | N/A                       |
| EUT Series No.:                 | N/A                       |
| Power Supply:                   | 5Vdc                      |
| Test Software<br>(Name/Version) | RTLBTAPP Version_5.2.3.49 |

#### 1.2 **RF Specification**

| Radio Technology: | BLE                                                                              |  |
|-------------------|----------------------------------------------------------------------------------|--|
| Frequency Range:  | 2402 – 2480MHz                                                                   |  |
| Channel number:   | 40 channels                                                                      |  |
| Modulation type:  | GFSK                                                                             |  |
| Transmit Power:   | BLE 1M: 8.00 dBm<br>BLE 2M: 8.07 dBm<br>BLE 125k: 7.95 dBm<br>BLE 500k: 8.00 dBm |  |

#### 1.3 **Antenna Designation**

| Antenna<br>Type | Supplier                         | Antenna<br>Part No.             | Freq.<br>(MHz) | Peak Antenna<br>Gain (dBi) |
|-----------------|----------------------------------|---------------------------------|----------------|----------------------------|
| PIFA            | Advanced Wireless & Antenna Inc. | AVF5Y-100003B<br>(1415-0AVN000) | 2402~2480      | -0.11                      |

Note: Antenna information is provided by the applicant.

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#### 1.4 **Test Methodology of Applied Standards**

FCC Part 15, Subpart C §15.247 FCC KDB 558074 D01 15.247 Meas Guidance v05r02 ANSI C63.10:2013

#### 1.5 **Test Facility**

| Laboratory      | Test Site Address                                                                                                                                                                 | Test Site Name | FCC Designa-<br>tion number | IC CAB<br>identifier |  |  |  |  |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------|----------------------|--|--|--|--|
|                 |                                                                                                                                                                                   | SAC 1          |                             |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | SAC 2          |                             |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | SAC 3          |                             |                      |  |  |  |  |
|                 | No 124 We Kens Dood New Trinci                                                                                                                                                    | Conduction 1   |                             |                      |  |  |  |  |
|                 | No.134, Wu Kung Road, New Taipei<br>Industrial Park, Wuku District, New                                                                                                           | Conducted 1    | TW0027                      |                      |  |  |  |  |
|                 | Taipei City, Taiwan.                                                                                                                                                              | Conducted 2    | 100027                      |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | Conducted 3    |                             |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | Conducted 4    |                             | TW3702               |  |  |  |  |
|                 |                                                                                                                                                                                   | Conducted 5    |                             |                      |  |  |  |  |
| SGS Taiwan Ltd. |                                                                                                                                                                                   | Conducted 6    |                             |                      |  |  |  |  |
| Central RF Lab. |                                                                                                                                                                                   | Conduction C   |                             |                      |  |  |  |  |
| (TAF code 3702) |                                                                                                                                                                                   | SAC C          | -                           |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | SAC D          |                             |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | SAC G          |                             |                      |  |  |  |  |
|                 | No 2 Kaji dat Dd. Gwiahan District                                                                                                                                                | Conducted A    |                             |                      |  |  |  |  |
|                 | No.2, Keji 1st Rd., Guishan District,<br>Taoyuan City, Taiwan 333                                                                                                                 | Conducted B    | TW0028                      |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | Conducted C    |                             |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | Conducted D    |                             |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | Conducted E    |                             |                      |  |  |  |  |
|                 |                                                                                                                                                                                   | Conducted F    |                             |                      |  |  |  |  |
|                 | Conducted G                                                                                                                                                                       |                |                             |                      |  |  |  |  |
|                 | <b>Note:</b> Test site name is remarked on the equipment list in each section of this report as an indica-<br>tion where measurements occurred in specific test site and address. |                |                             |                      |  |  |  |  |

#### 1.6 **Special Accessories**

There are no special accessories used while test was conducted.

#### 1.7 **Equipment Modifications**

There was no modification incorporated into the EUT.

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### SYSTEM TEST CONFIGURATION 2

#### 2.1 **EUT Configuration**

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

#### 2.2 **EUT Exercise**

An engineering test mode (software/firmware) that applicant provided was utilized to manipulate the EUT into transmit, selection of the test channel, and modulation scheme.

#### 2.3 **Test Procedure**

#### 2.3.1 **Conducted Emissions**

The EUT is a placed on a table which is 0.8 m above ground plane. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz. The CISPR Quasi-Peak and Average detector mode is employed. The two LISNs provide 50uH/50 ohm of coupling impedance for the measuring instrument. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

#### Conducted Test (RF) 2.3.2

The active antenna port of the unlicensed wireless device is connected to the spectrum analyzer with attenuator to protect the instrumentation. If a second antenna port is available, it is tested at one operating frequency, with other port(s) appropriately terminated, to verify it has similar output characteristics as the fully tested port.

#### 2.3.3 **Radiated Emissions**

The EUT is a placed on a turn table. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.

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#### 2.4 **Measurement Results Explanation Example**

## 2.4.1 Radiated Emission Test Sites For Measurements From 9 kHz To 30 MHz

Radiated emission below 30MHz is measured in a 9m\*6m\*6m semi-anechoic chamber, the measurements correspond to those obtained at an open-field test site.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

## 2.4.2 For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.

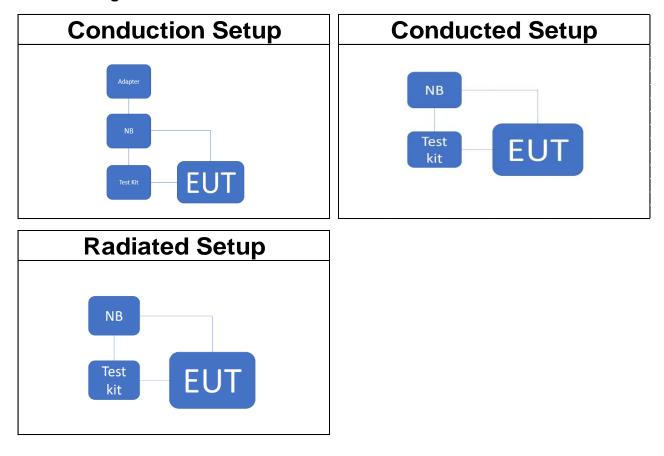
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#### 2.5 **Test Configuration**



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#### 2.6 Control Unit(s)

| AC Power-Line Conducted Emission Test Site: Conduction C |           |                     |                             |           |          |  |
|----------------------------------------------------------|-----------|---------------------|-----------------------------|-----------|----------|--|
| EQUIPMENT TYPE                                           | MFR       | MODEL NUMBER        | SERIAL NUMBER               | LAST CAL. | CAL DUE. |  |
| Test Kit                                                 | Waveshare | FT232RL             | N/A                         | N/A       | N/A      |  |
| NB Adapter                                               | Lenovo    | ADLX65YLC3A         | 8SSA10M13945L1CZ<br>88N0F8W | N/A       | N/A      |  |
| NB                                                       | Lenovo    | L480                | PF-1M4G6J                   | N/A       | N/A      |  |
| USB Cable                                                | Fong Hua  | USB-C18             | 128342                      | N/A       | N/A      |  |
|                                                          | C         | onducted Emission T | est Site: Conducted         | с         |          |  |
| EQUIPMENT TYPE                                           | MFR       | MODEL NUMBER        | SERIAL NUMBER               | LAST CAL. | CAL DUE. |  |
| Notebook                                                 | Lenovo    | T14                 | P0003332                    | N/A       | N/A      |  |
| Test Kit                                                 | waveshare | FT232               | N/A                         | N/A       | N/A      |  |
| Usb cable                                                | Mcdodo    | CA-6390             | N/A                         | N/A       | N/A      |  |
|                                                          |           | Radiated Emissio    | n Test Site: SAC D          |           |          |  |
| EQUIPMENT TYPE                                           | MFR       | MODEL NUMBER        | SERIAL NUMBER               | LAST CAL. | CAL DUE. |  |
| Test Kit                                                 | Waveshare | FT232RL             | N/A                         | N/A       | N/A      |  |
| NB                                                       | Lenovo    | L480                | PF-1M4G6J                   | N/A       | N/A      |  |
| USB Cable                                                | Fong Hua  | USB-C18             | 128342                      | N/A       | N/A      |  |

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# **3 SUMMARY OF TEST RESULTS**

| FCC Rules             | Description Of Test                          | Result    |
|-----------------------|----------------------------------------------|-----------|
| §15.207(a)            | AC Power Line Conducted Emission             | Compliant |
| §15.247(b) (3)        | Peak Output Power                            | Compliant |
| §15.247(a)(2)         | Emission Bandwidth                           | Compliant |
| §15.247(d)<br>§15.209 | Conducted Band Edge<br>and Spurious Emission | Compliant |
| §15.247(d)<br>§15.209 | Radiated Band Edge<br>and Spurious Emission  | Compliant |
| §15.205               | Restricted Bands                             | Compliant |
| §15.247(e)            | Peak Power Density                           | Compliant |
| §15.203               | Antenna Requirement                          | Compliant |

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#### **DESCRIPTION OF TEST MODES** 4

#### 4.1 **Operating Frequencies**

| 2400~2483.5 MHz |                |    |                |    |                |    |                |  |
|-----------------|----------------|----|----------------|----|----------------|----|----------------|--|
| СН              | Freq.<br>(MHz) | СН | Freq.<br>(MHz) | СН | Freq.<br>(MHz) | СН | Freq.<br>(MHz) |  |
| 0               | 2402           | 10 | 2422           | 20 | 2442           | 30 | 2462           |  |
| 1               | 2404           | 11 | 2424           | 21 | 2444           | 31 | 2464           |  |
| 2               | 2406           | 12 | 2426           | 22 | 2446           | 32 | 2466           |  |
| 3               | 2408           | 13 | 2428           | 23 | 2448           | 33 | 2468           |  |
| 4               | 2410           | 14 | 2430           | 24 | 2450           | 34 | 2470           |  |
| 5               | 2412           | 15 | 2432           | 25 | 2452           | 35 | 2472           |  |
| 6               | 2414           | 16 | 2434           | 26 | 2454           | 36 | 2474           |  |
| 7               | 2416           | 17 | 2436           | 27 | 2456           | 37 | 2476           |  |
| 8               | 2418           | 18 | 2438           | 28 | 2458           | 38 | 2478           |  |
| 9               | 2420           | 19 | 2440           | 29 | 2460           | 39 | 2480           |  |

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#### 4.2 The Worst Test Modes and Channel Details

- 1. The EUT has been tested under operating condition.
- 2. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.
- 3. The field strength of radiation emission was measured as the EUT positioned in different orthogonal planes (E1/E2/H) based on actual usage of the EUT to pre-scan the emissions for determining the worst case scenario.
- 4. Investigation has been done on all the possible configurations for searching the worst case.

| CONDUCTED TEST |                      |                   |            |                     |  |  |  |
|----------------|----------------------|-------------------|------------|---------------------|--|--|--|
| MODE           | AVAILABLE<br>CHANNEL | TESTED<br>CHANNEL | MODULATION | DATA RATE<br>(Mbps) |  |  |  |
| Bluetooth LE   | 0 to 39              | 0,20,39           | GFSK       | 1                   |  |  |  |
| Bluetooth LE   | 0 to 39              | 0,20,39           | GFSK       | 2                   |  |  |  |
| Bluetooth LE   | 0 to 39              | 0,20,39           | GFSK       | 0.125               |  |  |  |
| Bluetooth LE   | 0 to 39              | 0,20,39           | GFSK       | 0.5                 |  |  |  |

|              | TRANSMIT RADIATED EMISSION TEST (BELOW 1 GHz) |                    |                   |                     |  |  |  |
|--------------|-----------------------------------------------|--------------------|-------------------|---------------------|--|--|--|
| MODE         | AVAILABLE<br>CHANNEL                          | TESTED<br>CHANNEL  | MODULATION        | DATA RATE<br>(Mbps) |  |  |  |
| Bluetooth LE | 0 to 39                                       | 20                 | GFSK              | 1                   |  |  |  |
| Bluetooth LE | 0 to 39                                       | 20                 | GFSK              | 2                   |  |  |  |
| Bluetooth LE | 0 to 39                                       | 20                 | GFSK              | 0.125               |  |  |  |
| Bluetooth LE | 0 to 39                                       | 20                 | GFSK              | 0.5                 |  |  |  |
|              | TRANSMIT RAI                                  | DIATED EMISSION TI | EST (ABOVE 1 GHz) |                     |  |  |  |
| MODE         | AVAILABLE<br>CHANNEL                          | TESTED<br>CHANNEL  | MODULATION        | DATA RATE<br>(Mbps) |  |  |  |
| Bluetooth LE | 0 to 39                                       | 0,20,39            | GFSK              | 1                   |  |  |  |
| Bluetooth LE | 0 to 39                                       | 0,20,39            | GFSK              | 2                   |  |  |  |
| Bluetooth LE | 0 to 39                                       | 0,20,39            | GFSK              | 0.125               |  |  |  |
| Bluetooth LE | 0 to 39                                       | 0,20,39            | GFSK              | 0.5                 |  |  |  |

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#### **MEASUREMENT UNCERTAINTY** 5

| Test Items                       | Ur  | ncertaint | y  |
|----------------------------------|-----|-----------|----|
| AC Power Line Conducted Emission | +/- | 1.54      | dB |
| Output Power measurement         | +/- | 0.97      | dB |
| Emission Bandwidth               | +/- | 1.38      | Hz |
| Conducted emission measurement   | +/- | 0.77      | dB |
| Peak Power Density               | +/- | 0.61      | dB |
| Temperature                      | +/- | 0.6       | °C |
| Humidity                         | +/- | 3         | %  |
| DC / AC Power Source             | +/- | 1         | %  |

| Radiated Spurious E        | missi | on Measu | rement | Uncertainty     |
|----------------------------|-------|----------|--------|-----------------|
|                            | +/-   | 1.89     | dB     | 9kHz~30MHz      |
| Polarization: Vertical     | +/-   | 4.15     | dB     | 30MHz - 1000MHz |
| Foldrization. Vertical     | +/-   | 3.43     | dB     | 1GHz - 18GHz    |
|                            | +/-   | 3.86     | dB     | 18GHz - 40GHz   |
|                            | +/-   | 1.89     | dB     | 9kHz~30MHz      |
| Polarization: Horizontal   | +/-   | 4.02     | dB     | 30MHz - 1000MHz |
| Folarization. Horizontai   | +/-   | 3.43     | dB     | 1GHz - 18GHz    |
|                            | +/-   | 3.86     | dB     | 18GHz - 40GHz   |
|                            | +/-   | 2        | dB     | 33GHz-50GHz     |
|                            | +/-   | 1.59     | dB     | 50GHz-60GHz     |
| Radiated Spurious Emission | +/-   | 1.7      | dB     | 60GHz-90GHz     |
|                            | +/-   | 1.64     | dB     | 90GHz-140GHz    |
|                            | +/-   | 3.83     | dB     | 140GHz-220GHz   |

## Note:

- 1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 2. The conformity assessment statement in this report is based solely on the test results, measurement uncertainty is excluded.

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### MEASUREMENT EQUIPMENT USED 6

#### 6.1 **Emission from AC power line**

|                   | AC Power-Line Conducted Emission Test Site: Conduction C |               |                             |            |            |  |  |  |
|-------------------|----------------------------------------------------------|---------------|-----------------------------|------------|------------|--|--|--|
| EQUIPMENT TYPE    | MFR                                                      | MODEL NUMBER  | SERIAL NUMBER               | LAST CAL.  | CAL DUE.   |  |  |  |
| Coaxial Cable     | EC Lab                                                   | RF-HY-CAB-250 | RF-HY-CAB-250-01            | 03/27/2024 | 03/26/2025 |  |  |  |
| EMI Test Receiver | R&S                                                      | ESCI          | 101342                      | 04/29/2024 | 04/28/2025 |  |  |  |
| EMI Test Receiver | R&S                                                      | ESU 40        | 100363                      | 04/30/2024 | 04/29/2025 |  |  |  |
| LISN              | SCHWARZBECK<br>Mess-Elektronik                           | NSLK8127      | 973                         | 04/22/2024 | 04/21/2025 |  |  |  |
| Pulse Limiter     | EC Lab                                                   | VTSD 9561F-N  | 485                         | 03/27/2024 | 03/26/2025 |  |  |  |
| TEMPERATURE       | N/A                                                      | EC-RFHY-05    | N/A                         | 05/22/2024 | 05/21/2025 |  |  |  |
| Test Software     | audix                                                    | е3            | E3 20923 SGS Ver.9<br>( C ) | N.C.R      | N.C.R      |  |  |  |

#### 6.2 **Conducted Measurement**

|                   | Conducted Emission Test Site: Conducted C |                        |               |            |            |  |  |  |  |
|-------------------|-------------------------------------------|------------------------|---------------|------------|------------|--|--|--|--|
| EQUIPMENT TYPE    | MFR                                       | MODEL NUMBER           | SERIAL NUMBER | LAST CAL.  | CAL DUE.   |  |  |  |  |
| Attenuator        | Woken                                     | WATT-218FS-10          | RF19          | 11/15/2023 | 11/14/2024 |  |  |  |  |
| DC Block          | PASTERNACK                                | PE8210                 | RF155         | 11/15/2023 | 11/14/2024 |  |  |  |  |
| Power Meter       | Anritsu                                   | ML2496A                | 1804002       | 04/26/2024 | 04/25/2025 |  |  |  |  |
| Power Sensor      | Anritsu                                   | MA2411B                | 1726106       | 04/26/2024 | 04/25/2025 |  |  |  |  |
| Power Sensor      | Anritsu                                   | MA2411B                | 1726105       | 04/26/2024 | 04/25/2025 |  |  |  |  |
| Spectrum Analyzer | KEYSIGHT                                  | N9010B                 | MY59071573    | 05/24/2024 | 05/23/2025 |  |  |  |  |
| Test Software     | SGS Taiwan                                | Radio Test<br>Software | Ver.21        | N.C.R      | N.C.R      |  |  |  |  |

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#### 6.3 **Radiated Measurement**

|                          |                 | Radiated Emissio      | n Test Site: SAC D          |            |            |
|--------------------------|-----------------|-----------------------|-----------------------------|------------|------------|
| EQUIPMENT TYPE           | MFR             | MODEL NUMBER          | SERIAL NUMBER               | LAST CAL.  | CAL DUE.   |
| 3m Site NSA              | SGS             | 966 chamber D         | N/A                         | 04/30/2024 | 04/29/2025 |
| Active Loop<br>Antenna   | COM-POWER       | AL-130R               | 10160105                    | 12/04/2023 | 12/03/2024 |
| Attenuator               | Woken           | WATT-218FS-10         | RF17                        | 11/15/2023 | 11/14/2024 |
| Band Rejection<br>Filter | Micro-Tronics   | G008                  | RF205                       | 11/15/2023 | 11/14/2024 |
| Band Rejection<br>Filter | Micro-Tronics   | G015                  | RF198                       | 11/15/2023 | 11/14/2024 |
| Band Rejection<br>Filter | Micro-Tronics   | G016                  | RF199                       | 11/15/2023 | 11/14/2024 |
| Band Rejection<br>Filter | Micro-Tronics   | G021                  | RF200                       | 11/15/2023 | 11/14/2024 |
| Broadband<br>Antenna     | SCHWARZBECK     | VULB 9168             | 9168-617                    | 12/14/2023 | 12/13/2024 |
| Coaxial Cable            | Huber+Suhner    | EMC106-SM-SM-<br>7200 | 150703                      | 11/15/2023 | 11/14/2024 |
| Coaxial Cable            | Huber+Suhner    | RG 214/U              | W21.01                      | 11/15/2023 | 11/14/2024 |
| Highpass Filter          | R&S             | F13 HPF 3GHz          | RF175                       | 11/15/2023 | 11/14/2024 |
| Highpass Filter          | R&S             | HPF7.0                | RF174                       | 11/15/2023 | 11/14/2024 |
| Horn Antenna             | Schwarzbeck     | BBHA9120D             | 1341                        | 05/30/2024 | 05/29/2025 |
| Horn Antenna             | Schwarzbeck     | BBHA9170              | 184                         | 12/28/2023 | 12/27/2024 |
| Lowpass Filter           | Woken           | EWT-56-0019           | RF173                       | 11/15/2023 | 11/14/2024 |
| Pre-Amplifier            | EMC Instruments | EMC12630SE            | 980273                      | 11/15/2023 | 11/14/2024 |
| Pre-Amplifier            | EMC Instruments | EMC18405SEE           | 980881                      | 11/15/2023 | 11/14/2024 |
| Pre-Amplifier            | EMC Instruments | EMC9135               | 980234                      | 11/15/2023 | 11/14/2024 |
| Spectrum Analyzer        | KEYSIGHT        | N9010A                | MY57120200                  | 04/03/2024 | 04/02/2025 |
| Test Software            | audix           | e3                    | E3 20923 SGS Ver.9<br>( C ) | N.C.R      | N.C.R      |

NOTE: N.C.R refers to Not Calibrated Required.

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### CONDUCTED EMISSION TEST 7

#### 7.1 **Standard Applicable:**

Frequency range within 150kHz to 30MHz shall not exceed the Limit table as below.

| Frequency range |            | mits<br>3µV) |
|-----------------|------------|--------------|
| MHz             | Quasi-peak | Average      |
| 0.15 to 0.50    | 66 to 56   | 56 to 46     |
| 0.50 to 5       | 56         | 46           |
| 5 to 30         | 60         | 50           |
| Note            |            |              |

Note

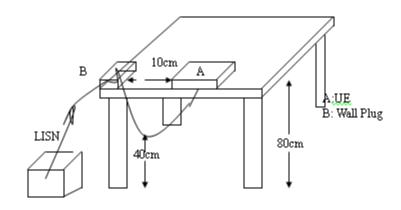
1. The lower limit shall apply at the transition frequencies

The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

#### 7.2 **EUT Setup:**

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.10:2013.
- 2. The AC/DC Power adaptor of EUT was plug-in LISN. The EUT was placed flushed with the rear of the table.
- 3. The LISN was connected with 120Vac/60Hz power source.

#### 7.3 **Test Setup**



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#### 7.4 **Measurement Procedure:**

- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3. Repeat above procedures until all phases of power being supplied by given UE are completed

#### 7.5 Measurement Result:

Note: Refer to next page for measurement data and plots. Note2: The \* reveals the worst-case results that closest to the limit.

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

| Report Number    | :TERF2409002766E2        | Test Site           | :Conductio          | on C  |        |
|------------------|--------------------------|---------------------|---------------------|-------|--------|
| Test Mode        | :BLE                     | Test Date           | :2024-09-2          | 25    |        |
| Power            | :120V/60Hz               | Temp./Humi.         | : <b>23.0°</b> ℃/61 | %     |        |
| Probe            | :L1                      | Engineer            | :Howard H           | luang |        |
|                  |                          |                     |                     |       |        |
| 80 Level (dBuV   | <u>n</u>                 |                     |                     |       |        |
| 70               |                          |                     |                     |       |        |
| 60               |                          |                     |                     |       |        |
| 50               |                          |                     |                     |       |        |
| 40 1             |                          |                     | M                   |       |        |
| M <sup>r</sup> W | AMARAN MAN MAN MARAN     | www.www.            | M Mu S              |       |        |
| 30               | tal he a solution of the | wmwwwww             |                     |       |        |
| 20               |                          |                     |                     | ma    |        |
| 10               |                          |                     |                     |       |        |
| 0.15 0.2         | 0.5 1                    | 2 5<br>quency (MHz) | 10                  | 20 30 |        |
| Freq.            | Detector Spectrum        |                     | tual                | Limit | Margin |
| ricq.            | Mode Reading Level       |                     | S                   | Linnt | Margin |
| MHz F            | PK/QP/AV dBµV            | dB dE               | βμV                 | dBµV  | dB     |
| 0.156            | Peak 29.43               | 10.65 40            | .08                 | 65.65 | -25.57 |
| 0.156            | Peak 29.43<br>Peak 26.67 |                     |                     | 63.36 | -25.57 |
| 0.424            | Peak 26.85               |                     | .62                 | 57.37 | -19.91 |
| 0.918            | Peak 22.21               |                     | .89                 | 56.00 | -23.11 |
| 8.683            | Peak 34.82               |                     |                     | 60.00 | -14.22 |
| 15.718           | Peak 20.65               | 11.09 31            | .74                 | 60.00 | -28.26 |

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| Report Number<br>Test Mode<br>Power<br>Probe | :TERF2409002<br>:BLE<br>:120V/60Hz<br>:N | 2766E2                  | Test Site<br>Test Date<br>Temp./Humi.<br>Engineer | :Conduction C<br>:2024-09-25<br>:23.0°C/61%<br>:Howard Huan | g        |
|----------------------------------------------|------------------------------------------|-------------------------|---------------------------------------------------|-------------------------------------------------------------|----------|
| 80 Level (dBuV                               |                                          |                         |                                                   |                                                             |          |
| 60                                           |                                          |                         |                                                   |                                                             |          |
| 50                                           |                                          |                         |                                                   |                                                             |          |
| 40 1 2<br>MM/1 1 2                           | 3 4                                      |                         | M                                                 | n <sup>m</sup> n                                            |          |
| 30                                           | n www.way                                | Mandana Mr. 1           | W WWWW                                            | Maria                                                       |          |
| 20                                           |                                          | in new W                | ·II                                               | and Anna                                                    | Marker 1 |
| 10                                           |                                          |                         |                                                   | 6                                                           |          |
| 0.15 0.2                                     | 0.5                                      | 1 2<br>Frequency        | 5<br>(MHz)                                        | 10 20                                                       | 30       |
| Freq.                                        |                                          | ectrum Fa<br>ding Level | actor Actu<br>FS                                  |                                                             | t Margin |
| MHz                                          |                                          | •                       | dB dBµ                                            | LV dBμV                                                     | V dB     |
| 0.155                                        | Peak                                     | 30.26 10                | ).66 40.9                                         | 91 65.7                                                     | 4 -24.82 |
| 0.258                                        |                                          |                         | ).64 38.8                                         |                                                             |          |
| 0.466                                        |                                          |                         | ).61 38.7                                         |                                                             |          |
| 0.759                                        |                                          |                         | ).64 36.5                                         |                                                             |          |
| 3.565                                        |                                          |                         | ).86 34.9                                         |                                                             |          |
| 8.148                                        |                                          |                         | ).95 13. <sup>2</sup>                             |                                                             |          |
| 8.148                                        | 0                                        |                         | ).95 35.3                                         |                                                             |          |
| 0.1.10                                       |                                          |                         |                                                   | 50.0                                                        | 2 1.00   |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### PEAK OUTPUT POWER MEASUREMENT 8

#### 8.1 **Standard Applicable:**

#### 8.1.1 **Duty Cycle**

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

#### 8.1.2 FCC

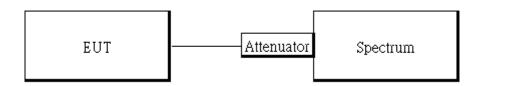
For systems using digital modulation in the 2400-2483.5 MHz bands, the limit for peak output power is 1Watt.

If the transmitting antenna of directional gain greater than 6dBi are used the peak output power form the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the Antenna exceeds 6dBi.

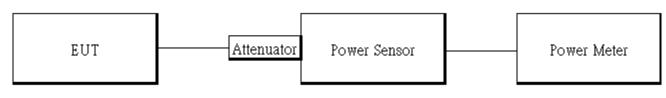
In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of Antenna exceeds 6dBi.

#### 8.2 **Test Setup**

## 8.2.1 Duty Cycle



## 8.2.2 Output Power



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#### 8.3 **Measurement Procedure:**

#### 8.3.1 **Duty Cycle**

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Set span = Zero
- 3. RBW = 8MHz, VBW = 8MHz,
- 4. Detector = Peak

#### 8.3.2 **Output Power**

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter.
- 4. Record the max. Reading as observed from Power Meter.
- Repeat above procedures until all test default channel measured was complete.

#### 8.4 **Duty Factor:**

|          | Duty Cycle (%)<br>= Ton / (Ton+Toff) | Duty Factor<br>(dB)<br>=10*log (<br>1/Duty Cycle ) | 1/T (kHz) | VBW<br>setting<br>(kHz) |
|----------|--------------------------------------|----------------------------------------------------|-----------|-------------------------|
| BLE 1M   | 63.20                                | 1.99                                               | 2.53      | 3.00                    |
| BLE 2M   | 33.60                                | 4.74                                               | 4.76      | 5.00                    |
| BLE 125k | 82.89                                | 0.81                                               | 0.32      | 1.00                    |
| BLE 500k | 57.33                                | 2.42                                               | 0.93      | 1.00                    |

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## BLE\_1M\_LowCH00-2402

| Spectrum Analy<br>Swept SA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | yzer 1 🔻                                            | +                                    | ]                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    | $\mathbf{v}$                                                                                       | Frequency                                                                                                                                         | •        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------|--------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| EYSIGHT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Input: RF<br>Coupling: DC<br>Align: Auto            |                                      | Input Ζ: 50 Ω<br>Corrections: O<br>Freq Ref: Int (S |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PNO: Fast<br>Gate: Off<br>IF Gain: Le<br>Sig Track: | Trig: I        | ype: Voltage<br>ree Run  | 1 2 3 4 5 6<br>W <del>W W W W</del><br>P N N N N N | 2.402                                                                                              | r Frequency<br>000000 GHz                                                                                                                         | Settings |
| Spectrum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | v                                                   |                                      |                                                     | Ref Lvl Offset                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                     |                | ΔM                       | kr3 625.0 µs                                       | Span<br>0.000                                                                                      | 00000 Hz                                                                                                                                          |          |
| cale/Div 10 d<br>og                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                     | 3∆4                                  |                                                     | Ref Level 20.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ) dBm                                               |                |                          | 0.00 dB                                            |                                                                                                    | wept Span<br>ero Span                                                                                                                             | I        |
| 0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                     |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    |                                                                                                    | Full Span                                                                                                                                         | I        |
| 0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                     |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    | Start F                                                                                            | ·                                                                                                                                                 | I        |
| 0.0 muly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Verven                                              |                                      | holm                                                | newth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | hardhan                                             | Wrad           | human                    | huinnan                                            | 2.402                                                                                              | 000000 GHz                                                                                                                                        | I        |
| 0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                     |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    | Stop F<br>2.402                                                                                    | req<br>000000 GHz                                                                                                                                 | I        |
| 0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                     |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    | A                                                                                                  | UTO TUNE                                                                                                                                          | I        |
| enter 2.4020<br>es BW 8 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                     |                                      |                                                     | #Video BW 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | .0 MHz                                              |                | Sweep 5                  | Span 0 Hz<br>.00 ms (1001 pts)                     | CF Ste                                                                                             | ep                                                                                                                                                | 1        |
| Marker Table                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | •                                                   |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    | 8.000                                                                                              | 000 MHz                                                                                                                                           | I        |
| Mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Trace Scale                                         |                                      | X                                                   | Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Function                                            | Function       | Width F                  | Function Value                                     |                                                                                                    | uto<br>Ian                                                                                                                                        | I        |
| 1 Δ2<br>2 F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1 t<br>1 t                                          | (Δ)                                  | 285.0                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | n                                                   |                |                          |                                                    | Freq C                                                                                             | )ffset                                                                                                                                            | 1        |
| 3 ∆4<br>4 F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1 t<br>1 t                                          | (Δ)                                  | 625.0<br>285.0                                      | ) µs (Δ)0.002940 d<br>) µs 6.562 dBr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                     |                |                          |                                                    | 0 Hz                                                                                               |                                                                                                                                                   | 1        |
| 5<br>6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                     |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    | X Axis                                                                                             | og                                                                                                                                                | l        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                     | ?                                    | Sep 24, 2024<br>1:53:14 PM                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    | Signal                                                                                             |                                                                                                                                                   | 1        |
| pectrum Analy<br>wept SA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     | +                                    | ]                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    | ¢                                                                                                  | Frequency                                                                                                                                         | •        |
| EYSIGHT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Input: RF<br>Coupling: DC<br>Align: Auto            |                                      | Input Z: 50 Ω<br>Corrections: O<br>Freq Ref: Int (S |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PNO: Fast<br>Gate: Off<br>IF Gain: Le<br>Sig Track: | Trig: I        | ype: Voltage<br>Free Run | 123456<br>WWWWWW<br>PNNNNN                         |                                                                                                    | r Frequency<br>000000 GHz                                                                                                                         | Settings |
| v<br>Spectrum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                     |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                | ΔΜ                       | kr3 625.0 µs                                       | Span                                                                                               | 00000 Hz                                                                                                                                          | 1        |
| cale/Div 10 d                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | IB                                                  |                                      |                                                     | Ref LvI Offset<br>Ref Level 20.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                     |                |                          | 0.01 dB                                            | 0.000                                                                                              | 00000 Hz                                                                                                                                          | 1        |
| og                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A1A2                                                | 20                                   | 1                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          | 0.01 0.0                                           | S                                                                                                  | wept Span                                                                                                                                         |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                     | <u>3∆</u> 4                          | ' <u> </u>                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    |                                                                                                    | wept Span<br>ero Span                                                                                                                             | l        |
| 10.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2                                                   | 544                                  |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |                          |                                                    |                                                                                                    | ero Span<br>Full Span                                                                                                                             |          |
| 10.0<br>20.0<br>30.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2<br>Minurlum                                       |                                      | hunanhuna                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | dawaren II.                                         | himper all all |                          |                                                    | Start F                                                                                            | ero Span<br>Full Span                                                                                                                             |          |
| 500<br>10.0<br>20.0<br>30.0<br>40.0<br>50.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                     |                                      |                                                     | Level of the second sec | alawyorth II.                                       | hharralan k    | ukkus on                 |                                                    | Start F<br>2.402<br>Stop F                                                                         | ero Span<br>Full Span<br>Freq<br>000000 GHz<br>Freq                                                                                               |          |
| 0.00<br>20.0<br>30.0<br>40.0<br>50.0<br>50.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                     |                                      |                                                     | Contraction of the second seco | aduryory 11,                                        | Municipal In   |                          |                                                    | Start F<br>2.402<br>Stop F                                                                         | ero Span<br>Full Span<br>Freq<br>000000 GHz                                                                                                       |          |
| 0.00<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 00000 GHz                                           |                                      |                                                     | #Video BW 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                     | Nonrolus a     |                          | Span 0 Hz                                          | Start F<br>2.402<br>Stop F<br>2.402                                                                | reg<br>000000 GHz<br>ireq<br>000000 GHz<br>UTO TUNE                                                                                               |          |
| 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 00000 GHz                                           |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     | hhayreyyd h    |                          | Windowsky K                                        | Start F<br>2.402<br>Stop F<br>2.402<br>A<br>CF Ste                                                 | reg<br>000000 GHz<br>ireq<br>000000 GHz<br>UTO TUNE                                                                                               |          |
| 0.00<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 00000 GHz                                           |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     | Function       | Sweep 5                  | Span 0 Hz                                          | Start F<br>2.402<br>Stop F<br>2.402<br>A<br>CF Ste                                                 | Full Span<br>Full Span<br>Freq<br>0000000 GHz<br>ireq<br>0000000 GHz<br>UTO TUNE<br>20<br>000 MHz<br>uto                                          |          |
| 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 00000 GHz                                           |                                      | X                                                   | #Video BW 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | .0 MHz                                              |                | Sweep 5                  | Span 0 Hz<br>.00 ms (1001 pts)                     | Start F<br>2.402<br>Stop F<br>2.402<br>A<br>CF Ste<br>8.000<br>A<br>Freq C                         | Full Span<br>Full Span<br>Freq<br>0000000 GHz<br>ireq<br>0000000 GHz<br>UTO TUNE<br>P<br>000 MHz<br>uto<br>lan                                    |          |
| 0.00         0.00           10.0         0.00           0.00         0.00           30.0         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           0.00 </td <td>000000 GHz<br/>z<br/>Trace Scale<br/>1 t<br/>1 t<br/>1 t</td> <td></td> <td>×<br/>210.0<br/>355.0<br/>625.0</td> <td>#Video BW 8<br/>#Video BW 8<br/>γ μs (Δ) 0.1198 d<br/>μs (Δ) 0.797 dBr<br/>μs (Δ) 0.008084 d</td> <td>0 MHz</td> <td></td> <td>Sweep 5</td> <td>Span 0 Hz<br/>.00 ms (1001 pts)</td> <td>Start F<br/>2.402<br/>Stop F<br/>2.402<br/>A<br/>CF Ste<br/>8.000<br/>A<br/>Freq C<br/>0 Hz</td> <td>ero Span<br/>Full Span<br/>Freq<br/>000000 GHz<br/>ireq<br/>000000 GHz<br/>UTO TUNE<br/>20<br/>000 MHz<br/>uto<br/>lan<br/>Dffset</td> <td></td> | 000000 GHz<br>z<br>Trace Scale<br>1 t<br>1 t<br>1 t |                                      | ×<br>210.0<br>355.0<br>625.0                        | #Video BW 8<br>#Video BW 8<br>γ μs (Δ) 0.1198 d<br>μs (Δ) 0.797 dBr<br>μs (Δ) 0.008084 d                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0 MHz                                               |                | Sweep 5                  | Span 0 Hz<br>.00 ms (1001 pts)                     | Start F<br>2.402<br>Stop F<br>2.402<br>A<br>CF Ste<br>8.000<br>A<br>Freq C<br>0 Hz                 | ero Span<br>Full Span<br>Freq<br>000000 GHz<br>ireq<br>000000 GHz<br>UTO TUNE<br>20<br>000 MHz<br>uto<br>lan<br>Dffset                            |          |
| 1         Δ2           2         F           3         Δ4           4         F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 000000 GHz<br>z<br>Trace Scale<br>1 t<br>1 t<br>1 t | ÷ (Δ)                                | × 210.0<br>355.0                                    | #Video BW 8<br>#Video BW 8<br>γ μs (Δ) 0.1198 d<br>μs (Δ) 0.797 dBr<br>μs (Δ) 0.008084 d                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0 MHz                                               |                | Sweep 5                  | Span 0 Hz<br>.00 ms (1001 pts)                     | Start F<br>2.402<br>Stop F<br>2.402<br>A<br>CF Ste<br>8.000<br>A<br>Freq C<br>0 Hz<br>X Axis       | ero Span<br>Full Span<br>Full Span<br>Freq<br>000000 GHz<br>req<br>000000 GHz<br>UTO TUNE<br>2P<br>000 MHz<br>uto<br>lan<br>0ffset<br>Scale<br>og |          |
| 000         000           000         000           000         000           000         000           000         000           000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000           0000         000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 00000 GHz<br>z<br>Trace Scale<br>1 t<br>1 t<br>1 t  | <ul> <li>(Δ)</li> <li>(Δ)</li> </ul> | ×<br>210.0<br>355.0<br>625.0                        | ¥Video BW 8           μs         (Δ)         0.1198 d           μs         6.797 dBr           μs         (Δ)0.008084 d           μs         6.797 dBr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0 MHz                                               |                | Sweep 5                  | Span 0 Hz<br>.00 ms (1001 pts)                     | Start F<br>2.402<br>Stop F<br>2.402<br>A<br>CF Stet<br>8.000<br>A<br>A<br>Freq C<br>0 Hz<br>X Axis | ero Span<br>Full Span<br>Full Span<br>Freq<br>000000 GHz<br>req<br>000000 GHz<br>UTO TUNE<br>2P<br>000 MHz<br>uto<br>lan<br>0ffset<br>Scale<br>og |          |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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| BLE_125k | _LowCH00-2402 |
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|----------|---------------|

| Li       → Augr. Auto       Freq Ref. Int (S)       [j] Gant. Corr       [j] Minter Minter       [j] Minter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | L       - Constructions: Off       Galaxie off       Trig Free Run       Wire Were Were Were Were Were Were Were                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Spectrum Anal<br>Swept SA | lyzer 1             | +            |                 |                   |                                 |                           |                                                                                                                 | Ø                          | Frequenc    | y •     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------|--------------|-----------------|-------------------|---------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------|-------------|---------|
| Spectrum       Fer Lui Offset 10.80 dB       AMKr3 3.740 ms       Spectrum         Cate[Ut 01 0B       0.04 dB       0.04 dB       0.0000000 Hz         00       0       0       0.04 dB       0.04 dB         00       0       0       0.04 dB       0.04 dB         00       0       0       0       0.04 dB       0.04 dB         00       0       0       0       0       0.04 dB       Stat Freq<br>2.40200000 GHz         00       0       0       0       0       0       0       0       0         1       2.6       0.04 dB       0.0522 dB       Function Function Width       Function Value       0       Main         1       2.6       1       1.00 dp a6.6.57 dBm       0       Main       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td< td=""><td>Synchrum       Ref Live (156et 10.80 dB       0.04 dB       0.0000000 Hz         Calk(UT 07 dB       0.0000000 Hz       Szer Span         Calk(UT 07 dB       0.000000 Hz       Szer Span         Calk(UT 07 dB       0.0000000 Hz       Szer Span         Calk(UT 07 dB       0.0000000 Hz       Szer Span         Szer Span       Szer Span       Szer Span</td><td>L +&gt;+</td><td>Coupling: DC</td><td>C</td><td>orrections: Off</td><td>#Atten: 30 dB</td><td>Gate: Off<br/>IF Gain: Lov</td><td>Trig: Free Rur</td><td>W WW WW W</td><td></td><td></td><td>Setting</td></td<>                                                                                                                                                                     | Synchrum       Ref Live (156et 10.80 dB       0.04 dB       0.0000000 Hz         Calk(UT 07 dB       0.0000000 Hz       Szer Span         Calk(UT 07 dB       0.000000 Hz       Szer Span         Calk(UT 07 dB       0.0000000 Hz       Szer Span         Calk(UT 07 dB       0.0000000 Hz       Szer Span         Szer Span       Szer Span       Szer Span                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | L +>+                     | Coupling: DC        | C            | orrections: Off | #Atten: 30 dB     | Gate: Off<br>IF Gain: Lov       | Trig: Free Rur            | W WW WW W                                                                                                       |                            |             | Setting |
| Bale Der Vi 0 dB       Ref Level 20.00 dBm       -0.04 dB       Bale Der Vi 0 dB       Bal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Description of other       Provide of the set o                                     |                           |                     |              |                 |                   | olg Hack o                      |                           |                                                                                                                 |                            |             |         |
| 99       113.0.4       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       <                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 99       113.04       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>4</td><td></td><td>0.000</td><td></td><td>J.</td></t<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                           |                     |              |                 |                   |                                 | 4                         |                                                                                                                 | 0.000                      |             | J.      |
| Image: Sector And Sector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Image: Low of the set o                            |                           |                     | 1004         |                 | Rei Levei 20.00 d | Bm                              |                           | -0.04 0D                                                                                                        |                            |             |         |
| 000       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       1000       10000       1000       10000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                           |                     | 504          | _               |                   |                                 |                           |                                                                                                                 |                            |             |         |
| 0.0       1       1       1       2       1       2       1       2       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.00       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Full Span</td> <td></td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 |                            | Full Span   |         |
| 1000       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100 <td< td=""><td>000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       0000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       0000       000       000       <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Start F</td><td>req</td><td>1</td></t<></td></td<>                                                                                                                                                                                                                                                                                         | 000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       0000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       000       0000       000       000 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Start F</td><td>req</td><td>1</td></t<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 | Start F                    | req         | 1       |
| 0.0       Image: State Frequency       State Frequency       State Frequency         0.0       Image: State Frequency       State Frequency       State Frequency         0.0       Image: State Frequency       State Frequency       State Frequency         0.0       Image: State Frequency       State Freq       State Freq       State Freq         0.00       Image: State Freq       State Freq       State Freq       State Freq         0.00       Image: State Freq       State Freq       State Freq       State Freq         0.00       Image: State Freq       State Freq       State Freq       State Freq         0.00       Image: State Freq       State Freq       State Freq       State Freq         0.00       Image: State Freq       State State       State State       State Freq         0.00       Image: State State       Image: State State       State State       State Freq         0.00       Image: State State       Image: State State       State Freq       State Freq         0.00       Image: State State       Image: State State       State Freq       State Freq         0.00       Image: State State       Image: State State       State Freq       State Freq         0.00       Image: State State       Sta                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | P.                        | - Inda              |              | t               | ve l              | - AN                            | Server 1                  | bulg                                                                                                            | 2.402                      | 000000 GHz  | 1       |
| 0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 | Stop F                     | req         |         |
| 0.0       Image: Provide of the set                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.0       meter 2.4020000 0Hz       Syne 0 Hz       Syne 0 Hz         Marker Table       •       AUTO TUNE       F         1       0.0       1       0.0       0.05592 dB       Function       Function Viatue       Auto         1       0.0       1       1       1       0.0       0.5577 dBm       Auto       Fee 0 Offset       Auto         1       0.0       0.577 dBm       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       • <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.402</td> <td>.000000 GHz</td> <td></td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 | 2.402                      | .000000 GHz |         |
| enter 2.40200000 GHz       #Video BW 8.0 MHz       Speep 20.0 ms (100 pth<br>Sweep 20.0 ms (100 pth<br>Auto         Mode       Trace       Scale       X       Y       Function       Function Width       Function Value         Markar Table       Image: Scale       X       Y       Function       Function Width       Function Value       Function Value         Mode       Trace       Scale       X       Y       Function       Function Value       Function Value <t< td=""><td>Entre 7.40200000 0Hz       Span 0 Hz       Span 0 Hz         Sweep 20.0 ms (100 pts)       C Filep         Marker Table       •         Mode       Trace       Scale         1 0.0 µ       3.100 ms (Δ) 0.05392 dB       Function         1 0.0 µ       0.3100 ms (Δ) 0.05392 dB       Function         1 0.0 µ       0.3100 ms (Δ) 0.05392 dB       Function         1 0.0 µ       0.3110 ms (Δ) 0.05392 dB       Function         1 0.0 µ       0.3110 ms (Δ) 0.05392 dB       Pathon         1 0.0 µ       0.517 dBm       Pathon         1 0.0 µ       0.517 dBm       Pathon         1 0.0 µ       2 F4 1 t       (Δ) 0.5592 dB         1 1 0.0 µ       2 Sep 24, 2024       Pathon         1 1 0.0 µ       1 1.0 (Δ) 0.5592 dB       Pathon         1 0.0 µ       Pathon       Pathon       Pathon         1 0.0 µ       Pathon</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></t<> | Entre 7.40200000 0Hz       Span 0 Hz       Span 0 Hz         Sweep 20.0 ms (100 pts)       C Filep         Marker Table       •         Mode       Trace       Scale         1 0.0 µ       3.100 ms (Δ) 0.05392 dB       Function         1 0.0 µ       0.3100 ms (Δ) 0.05392 dB       Function         1 0.0 µ       0.3100 ms (Δ) 0.05392 dB       Function         1 0.0 µ       0.3110 ms (Δ) 0.05392 dB       Function         1 0.0 µ       0.3110 ms (Δ) 0.05392 dB       Pathon         1 0.0 µ       0.517 dBm       Pathon         1 0.0 µ       0.517 dBm       Pathon         1 0.0 µ       2 F4 1 t       (Δ) 0.5592 dB         1 1 0.0 µ       2 Sep 24, 2024       Pathon         1 1 0.0 µ       1 1.0 (Δ) 0.5592 dB       Pathon         1 0.0 µ       Pathon       Pathon       Pathon         1 0.0 µ       Pathon                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 |                            |             | 1       |
| es BW 9 MHz       Sweep 20.0 ms (1001 pts)         Marker Table       •         Mode Trace Scale       X         Y       Function         Mode Trace Scale       X         Y       Function         Mode Trace Scale       X         Y       Function         Y       Y         Y       Function         Y       Function      <                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | es       BW Atz       Sweep 20.0 ms (1001 pts)         Markor Table          Markor Table       <                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | enter 2.4020              | 00000 GHz           |              |                 | #Video BW 8.0     | MHz                             |                           | Span 0 Hz                                                                                                       |                            |             |         |
| Imake Trace       Scale       X       Y       Function       Function <td>Imake index       y         Imake index       y         <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Swe</td><td></td><td></td><td>ер</td><td></td></t<></td>                                                                                                                                                                                                                                                                              | Imake index       y         Imake index       y <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Swe</td><td></td><td></td><td>ер</td><td></td></t<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                           |                     |              |                 |                   |                                 | Swe                       |                                                                                                                 |                            | ер          |         |
| Mode       Trace       Scale       X       Y       Function       Function Value         1       1       1       1       1       0.00000000000000000000000000000000000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Man       Function       Function Vidth       Function Vidth       Function Vidth         1       Δ2       1       t       Δ3.100 m/s0.00582 cm       File                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Marker Table              | •                   |              |                 |                   |                                 |                           |                                                                                                                 |                            |             | J.      |
| 1       1       1       (Δ)       0.002892 dB       Image: Constraint of the c                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1       1       1       1       100 ms (A) 0.05292 dB         2       F       1       100 0 µs       6.517 dBm         3       1       1       100 0 µs       6.517 dBm         4       F       1       100 0 µs       6.517 dBm         5       Image: Construction of the set                                                                                                                                                                                                                                                                                              |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 |                            | uto         |         |
| 2       F       1       t       (13.04)       1       t       (2)       3.44)       F       1       t       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)       (3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2       F       1       1       100.0 µsi       6.517 dBm       Image: Construction of the second                                                                                   |                           |                     |              |                 |                   | Function                        | Function width            | Function value                                                                                                  |                            |             |         |
| 4       P       1       1       100       100.0 µc       6.517 dBm         5       1       1       1       100.0 µc       6.517 dBm       Log         C       5       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1 <td>4       F       1       1       100.0 μg       6.517 dBm         5       1       1       100.0 μg       6.517 dBm       Log         C       1       1       100.0 μg       6.517 dBm       Log         C       1       1       1       100.0 μg       6.517 dBm       Signal Track         C       1       1       1       1       1       1       1       1         C       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1</td> <td>2 F</td> <td>1 t</td> <td></td> <td>180.0 µ</td> <td>s 6.517 dBm</td> <td></td> <td></td> <td></td> <td></td> <td>Jinset</td> <td></td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4       F       1       1       100.0 μg       6.517 dBm         5       1       1       100.0 μg       6.517 dBm       Log         C       1       1       100.0 μg       6.517 dBm       Log         C       1       1       1       100.0 μg       6.517 dBm       Signal Track         C       1       1       1       1       1       1       1       1         C       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2 F                       | 1 t                 |              | 180.0 µ         | s 6.517 dBm       |                                 |                           |                                                                                                                 |                            | Jinset      |         |
| Sep 24, 2024       Sep 24, 2024         Image: Sep 24, 2024       Image: Sep 24, 2024         Image: Sep 24, 2024       Ima                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 5       Image: Second Se                                     |                           |                     | ( <u>(</u> ) |                 |                   |                                 |                           |                                                                                                                 |                            |             |         |
| Lin <sup>®</sup><br>Sep 24, 2024<br>■ Sep 2                                                                                                                                                                                                                                              | Content or solution of the solution of th | 5                         |                     |              |                 |                   |                                 |                           |                                                                                                                 |                            |             |         |
| Image: State Frequency       State Freq         Spectrum       Image: Spectrum         Image: Spectrum       Image: Spectrum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | I 156:30 PM     I 156:30 PM     Input Z 50 0     Inp | 6                         |                     |              |                 |                   |                                 |                           |                                                                                                                 | ∥⊟ĭ                        | in          |         |
| BLE_500k_LowCH00-2402         ippectrum Analyzer 1       Imput Z 50 Ω       Frequency         Imput RF       Corrections: Off       Frequency       Setting         Imput RF       Corrections: Off       Freq Ref. Int (s)       Imput Z 50 Ω       Frequency       Setting         Ispectrum       Imput RF       Corrections: Off       Freq Ref. Int (s)       Imput Z 50 Ω       Freq Int (s)       Imput Z 50 Ω       Imput Z 50 Ω <td>BLE_500k_LowCH00-2402         pectrum Analyzer 1          ••••             •••••••••••••••••••••••••••••</td> <td></td> <td>a 🗖</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Signal</td> <td>Track</td> <td>-<br/>1</td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | BLE_500k_LowCH00-2402         pectrum Analyzer 1          ••••             •••••••••••••••••••••••••••••                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                           | a 🗖                 | 2            |                 |                   |                                 |                           |                                                                                                                 | Signal                     | Track       | -<br>1  |
| Spectrum       Ref Lvi Offset 10.80 dB       ΔMkr3 1.875 ms       0.0000000 Hz         scale/Div 10 dB       Ref Level 20.00 dBm       0.02 dB       0.02 dB         .000       .000       .02 dB       .02 dB       .02 dB         .000       .02 dB       .02 dB       .02 dB       .02 dB         .000       .02 dB       .02 dB       .02 dB       .02 dB         .000       .02 dB       .02 dB       .02 dB       .02 dB         .000       .02 dB       .02 dB       .02 dB       .02 dB         .000       .02 dB       .02 dB       .02 dB       .02 dB       .02 dB         .000       .02 dB       .02 dB       .02 dB       .02 dB       .02 dB       .02 dB         .000       .02 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Spectrum       Y       Ref Lvi Offset 10.80 dB       ΔMkr3       1.875 ms       0.0000000 Hz         Cale/Div 10 dB       Ref Level 20.00 dBm       0.02 dB       0.02 dB       0.0000000 Hz         000       1/Δ2       3/Δ4       0       0.0000000 Hz       Swept Span         000       1/Δ2       3/Δ4       0       0.0000000 Hz       Swept Span         0.000       1/Δ2       3/Δ4       0       Start Freq       2.402000000 GHz         0.000       1/Δ2       3/Δ4       0       Start Freq       2.402000000 GHz         0.000       1/Δ2       1/Δ2       Span 0 Hz       Start Freq       2.402000000 GHz         0.000       1/Δ2       1/Δ2       Sweep 5.00 ms (1001 pts)       Start Freq       2.402000000 GHz         Marker Table       V       V       Function Function Width Function Value       AUTO TUNE         1       Δ2       1       t       1.300 ms       6.567 dBm       Auto         3       Δ4       1       t       1.300 ms       6.567 dBm       Auto         5       1       1.300 ms       6.567 dBm       Auto       Hz         6       1       1.300 ms       6.567 dBm       Auto       Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EYSIGHT                   | Coupling: DC        | С            | orrections: Off | #Atten: 30 dB     | Gate: Off<br>IF Gain: Lov       | Trig: Free Rur<br>v<br>ff | P N N N N                                                                                                       | Cente<br>2.402<br>Span     |             | Setting |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Order       Order       1 Δ2       3 Δ4       Image: State Freq       2 402000000 GHz         Statt Freq       2 402000000 GHz       State Freq       2 402000000 GHz         State Freq       2 402000000 GHz       State Freq       2 402000000 GHz         State Freq       2 402000000 GHz       State Freq       2 402000000 GHz         Marker Table       V       Function       Function Width       Function Value         1       Δ2       1       t       (Δ)       1.075 ms (Δ)       0.02058 dB       Freq       2.402000000 GHz         3       Δ4       1       t       (Δ)       0.02058 dB       Freq       2.402000000 GHz         3       Δ4       1       t       1.300 ms       6.567 dBm       Grego       Main         5       1       1       1.300 ms       6.567 dBm       Grego       Log       Log         Log       Lin       Image: State Freq       Log       Log       Log       Log                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Spectrum                  | v                   |              |                 | Ref LvI Offset 10 | .80 dB                          | Δ                         |                                                                                                                 | 0.000                      | 00000 Hz    |         |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 100       11/2       0.5/24         100       2       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1         100       1       1       1       1         100       1       1       1       1       1         100       1       1       1       1       1       1         100       1       1       1       1       1       1       1         100       1       1       1       1       1       1       1       1       1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                           | dB                  |              |                 | Ref Level 20.00 d | Bm                              |                           | 0.02 dB                                                                                                         |                            |             |         |
| 0.000       Image: Second Secon                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                           |                     | ,            | <u>v</u>        | <u></u> 01∆2      | 2                               | 3∆4                       |                                                                                                                 |                            | ero Span    |         |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 20.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                           |                     | /            | ^^ <u>2</u>     |                   |                                 |                           |                                                                                                                 |                            | Full Span   |         |
| 30.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 30.0     Light - Million - Mi                       |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 | Start F                    | reg         | 7       |
| Mode         Trace         Scale         X         Y         Function         Width         Function Vidth         Function Vidth         Function Vidth         Function Vidth         G         Auto         Man         Freq         Auto         Man         Freq 0ffset         Output         Man </td <td>Mode     Trace     Scale     X     Y     Function     Function     Width     Function     Value       1     Δ2     1     t     (Δ)     1.075 ms&lt;(Δ)</td> 0.02058 dB     —     —     —     —     —     Auto       1     Δ2     1     t     (Δ)     1.075 ms<(Δ)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mode     Trace     Scale     X     Y     Function     Function     Width     Function     Value       1     Δ2     1     t     (Δ)     1.075 ms<(Δ)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                           | Anna and the        | the star     |                 | 1                 | والأعمر ومار الالار             |                           | lief of the second second                                                                                       |                            |             |         |
| 0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.000       0.000       0.000       0.000       0.000       0.0000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0.000000       GE       AUTO TUNE       0.00000       0.00000       0.00000       GE       0.00000       0.00000       GE       0.00000       Max       0.00000       Max       0.00000       Max       Max       Freq Offset       0.0000       0.00000       Max       0.00000       Max       Max       South       South       Max       South       South       Max       Eve       0.00000       Max       0.000000       Max       0.00000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 40.0                      | Angletonet, Aladary | mmunu        | •               |                   | -managed and and a start of the |                           | waran managan ang kanan kan |                            |             | 1       |
| Marker Table       Y       Function       Function       Width       Function       Value         1       Δ2       1       t       1.075 ms (Δ)       0.02058 dB       Auto       Man         2       F       1       t       1.300 ms       6.567 dBm       Man       Freq Offset       0 Hz         3       Δ4       1       t       1.300 ms       6.567 dBm       Man       Freq Offset       0 Hz         4       F       1       t       1.300 ms       6.567 dBm       Man       Freq Offset       0 Hz         5       -       -       -       -       -       -       -       -       Log                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Mode       Trace       Scale       X       Y       Function       Function       Width       Function Value         1       Δ2       1       t       (Δ)       1.075 ms (Δ)       0.02058 dB       4       F       1       t       (Δ)       1.075 ms (Δ)       0.02058 dB       6.567 dBm       Freq Offset       0 Hz         3       Δ4       1       t       (Δ)       0.02058 dB       1.075 ms (Δ)       0.02058 dB       1.000000000000000000000000000000000000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 |                            |             |         |
| Marker Table         Y         Function         Function         Width         Function         Value           1         Δ2         1         t         1.075 ms (Δ)         0.02058 dB         Auto         Man           2         F         1         t         1.300 ms         6.567 dBm         Freq Offset         0 Hz           3         Δ4         1         t         1.300 ms         6.567 dBm         Encode         DHz           4         F         1         t         1.300 ms         6.567 dBm         Encode         Encode         DHz           5         L         L         1.300 ms         6.567 dBm         Encode         E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Marker Table       Y       Y       Function       Function       Width       Function       Value         Marker Table       Y       Y       Function       Function       Function       Value       Auto         Mode       Trace       Scale       X       Y       Function       Function       Value       Auto         1       Δ2       1       t       (Δ)       1.075 ms (Δ)       0.02058 dB       Auto       Man         2       F       1       t       1.300 ms       6.567 dBm       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B       B <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></td<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 |                            |             | 1       |
| BW 8 MHz     Sweep 5.00 ms (1001 pts)       Marker Table        Mode     Trace       Scale     X       Y     Function       F     1       t     (Δ)       1.075 ms (Δ)       0.02058 dB       3     Δ4       1     t       1.300 ms     6.567 dBm       6     6.567 dBm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BW 8 MHz     Sweep 5.00 ms (1001 pts)       Marker Table     v       Mode     Trace       Scale     X       Y     Function       F     1       t     1.300 ms       6     6       6     1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 |                            | UTO TUNE    |         |
| Marker Table         V         Function         Function Width         Function Value           1         Δ2         1         t         (Δ)         1.075 ms         (Δ)         0.02058 dB         Auto           2         F         1         t         1.300 ms         6.567 dBm         Freq Offset         0 Hz           3         Δ4         1         t         (Δ)         0.20258 dB         Control         Hz           4         F         1         t         1.300 ms         6.567 dBm         Control         Hz           5         I         I         1.300 ms         6.567 dBm         Control         Interview                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Marker Table       •       8.000000 MHz         Mode       Trace       Scale       X       Y       Function       Function Width       Function Value         1       Δ2       1       t       (Δ)       1.075 ms (Δ)       0.02058 dB       Man         2       F       1       t       1.300 ms       6.567 dBm       Freq Offset       0 Hz         3       Δ4       1       t       (Δ)       1.875 ms (Δ)       0.02058 dB       OHz         4       F       1       t       1.300 ms       6.567 dBm       OHz       XAis Scale         5       6       Image: Comparison of the state of the stat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                           |                     |              |                 | #video BW 8.0     | WITZ                            | Swe                       |                                                                                                                 |                            | ep          |         |
| Mode         Trace         Scale         X         Y         Function         Function Width         Function Value           1         Δ2         1         t         (Δ)         1.075 ms         (Δ)         0.02058 dB         Image: Constraint of the state of t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Mode         Trace         Scale         X         Y         Function         Function Width         Function Value           1         Δ2         1         t         (Δ)         1.075 ms         (Δ)         0.02058 dB         Image: Scale         Image: Scale </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>(.co. ptd)</td> <td></td> <td></td> <td></td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                           |                     |              |                 |                   |                                 |                           | (.co. ptd)                                                                                                      |                            |             |         |
| 1     Δ2     1     t     (Δ)     1.075 ms (Δ)     0.02058 dB       2     F     1     t     1.300 ms     6.567 dBm       3     Δ4     1     t     (Δ)     1.875 ms (Δ)     0.02058 dB       4     F     1     t     1.300 ms     6.567 dBm       5     -     -     -     -       6     -     -     -     -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1       Δ2       1       t       (Δ)       1.075 ms (Δ)       0.02058 dB         2       F       1       t       1.300 ms       6.567 dBm       Image: Constraint of the state of                                                                                                                                                                  |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 |                            |             | 1       |
| 2     F     1     t     1.300 ms     6.567 dBm       3     Δ4     1     t     (Δ)     1.875 ms (Δ)     0.02058 dB       4     F     1     t     1.300 ms     6.567 dBm       5     -     -     -     -       6     -     -     -     -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2       F       1       t       1.300 ms       6.567 dBm       Pred Offset       0 Hz         3       Δ4       1       t       (Δ)       0.02058 dB       0 Hz       0 Hz         4       F       1       t       1.300 ms       6.567 dBm       0 Hz       0 Hz         5       6       6       6       6       0 Hz       0 Hz       1 Lin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                           |                     |              |                 |                   | Function                        | Function Width            | Function Value                                                                                                  | M                          | lan         |         |
| 3         Δ4         1         t         (Δ)         1.875 ms (Δ)         0.02058 dB         0           4         F         1         t         1.300 ms         6.567 dBm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3     Δ4     1     t     (Δ)     1.875 ms (Δ)     0.02058 dB     0 Hz       4     F     1     t     1.300 ms     6.567 dBm     1 Hz       5     -     -     -     -     -       6     -     -     -     -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                           |                     | (Δ)          |                 |                   |                                 |                           |                                                                                                                 |                            | Offset      |         |
| 5 XAXIS Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 5   Axis Scale     6   Image: Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <u>3</u> ∆4               | 1 t                 | (Δ)          | 1.875 m         | s (Δ) 0.02058 dB  |                                 |                           |                                                                                                                 | 0 Hz                       |             |         |
| 6 Log                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 6 Log                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | 1 t                 | _            | 1.300 m         | s 6.567 dBm       |                                 |                           |                                                                                                                 | X Axis                     | Scale       | 1       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                           |                     |              |                 |                   |                                 |                           |                                                                                                                 | <b>      </b> , <u> </u> - | og          |         |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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#### 8.5 **Output Power:**

#### 8.5.1 Peak & Avg

## BLE 1M mode:

| СН | Frequency<br>(MHz) | Power<br>Setting | Peak Output Power<br>(dBm) | Required Limit<br>(dBm) |
|----|--------------------|------------------|----------------------------|-------------------------|
| 0  | 2402               | default          | 7.74                       | 30                      |
| 20 | 2442               | default          | 8.00                       | 30                      |
| 39 | 2480               | default          | 7.85                       | 30                      |
| СН | Frequency<br>(MHz) | Power<br>Setting | Avg. Output Power<br>(dBm) | Required Limit<br>(dBm) |
| 0  | 2402               | default          | 7.67                       | 30                      |
| 20 | 2442               | default          | 7.95                       | 30                      |
|    |                    |                  |                            |                         |

## \*Note:

1.Measured by power meter, cable loss 10.8 dB + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.

## BLE 2M mode:

| СН      | Frequency<br>(MHz) | Power<br>Setting | Peak Output Power<br>(dBm) | Required Limit<br>(dBm) |
|---------|--------------------|------------------|----------------------------|-------------------------|
| 0       | 2402               | default          | 7.80                       | 30                      |
| 20      | 2442               | default          | 8.07                       | 30                      |
| 39      | 2480               | default          | 7.89                       | 30                      |
| СН      | Frequency          | Power            | Avg. Output Power          | Required Limit          |
|         | (MHz)              | Setting          | (dBm)                      | (dBm)                   |
| 0       | 2402               | default          | (dBm)<br>7.78              | ( <b>dBm</b> )<br>30    |
| 0<br>20 | . ,                | •                | . ,                        | , ,<br>,                |

## \*Note:

1.Measured by power meter, cable loss 10.8 dB + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.

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## BLE 125k mode(Payload S=8):

| СН | Frequency<br>(MHz) | Power<br>Setting | Peak Output Power<br>(dBm) | Required Limit<br>(dBm) |
|----|--------------------|------------------|----------------------------|-------------------------|
| 0  | 2402               | default          | 7.69                       | 30                      |
| 20 | 2442               | default          | 7.95                       | 30                      |
| 39 | 2480               | default          | 7.77                       | 30                      |
| CU | Frequency          | Power            | Avg. Output Power          | Required Limit          |
| СН | (MHz)              | Setting          | (dBm)                      | (dBm)                   |
|    |                    |                  | • •                        | -                       |
|    | (MHz)              | Setting          | (dBm)                      | (dBm)                   |

\*Note:

1.Measured by power meter, cable loss 10.8 dB + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.

## BLE 500k mode(Payload S=2):

| СН             | Frequency<br>(MHz) | Power<br>Setting | Peak Output Power<br>(dBm) | Required Limit<br>(dBm) |
|----------------|--------------------|------------------|----------------------------|-------------------------|
| 0              | 2402               | default          | 7.72                       | 30                      |
| 20             | 2442               | default          | 8.00                       | 30                      |
| 39             | 2480               | default          | 7.82                       | 30                      |
|                |                    | _                |                            |                         |
| СН             | Frequency<br>(MHz) | Power<br>Setting | Avg. Output Power<br>(dBm) | Required Limit<br>(dBm) |
| <b>СН</b><br>0 |                    |                  | • .                        | •                       |
|                | (MHz)              | Setting          | (dBm)                      | (dBm)                   |

\*Note:

1.Measured by power meter, cable loss 10.8 dB + Duty cycle factor has been offseted to the power meter for Avg. power and cable loss has been offseted for Peak power measurement.

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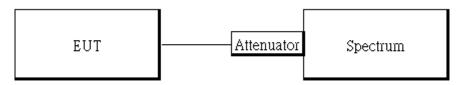


### EMISSION BANDWIDTH MEASUREMENT 9

#### 9.1 **Standard Applicable**

The minimum 6 dB bandwidth shall be at least 500 kHz.

#### 9.2 **Test Setup**



#### 9.3 **Measurement Procedure:**

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

#### 9.3.1 6dB BW measurements

- 1. The testing follows the Measurement Procedure of the KDB 558074 D01.
- 2. Set the spectrum analyzer as

RBW = 100 kHz, VBW = 3 X RBW.Span= 2 to 5 times of the OBW, Sweep=auto, Detector = Peak, and Max hold.

- 3. Mark the upper and lower frequencies of -6dB.
- 4. Repeat above procedures until all test default channel is completed.

#### 9.3.2 99% BW measurements

- 1. The testing follows the Measurement Procedure of the RSS-Gen section 6.7.
- 2. Set the spectrum analyzer as RBW= 1 % to 5% of 99%, VBW  $\geq$  3 X RBW. Span= large enough to capture all products of the modulation process Sweep=auto, Detector = Peak, and Max hold.
- 3. Mark the upper and lower frequencies of 99%.
- 4. Repeat above procedures until all test default channel is completed.

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#### 9.4 **Measurement Result:**

#### 6dB BW measurements 9.4.1

## BLE 1M mode

| Frequency<br>(MHz) | 6dB<br>BW<br>(MHz) | Required<br>BW<br>(MHz) | Result |
|--------------------|--------------------|-------------------------|--------|
| 2402               | 0.6715             | $\ge$ 0.5               | PASS   |
| 2442               | 0.6624             | $\ge$ 0.5               | PASS   |
| 2480               | 0.6715             | $\ge$ 0.5               | PASS   |

## BLE 2M mode

| Frequency<br>(MHz) | 6dB<br>BW<br>(MHz) | Required<br>BW<br>(MHz) | Result |
|--------------------|--------------------|-------------------------|--------|
| 2402               | 1.116              | $\ge$ 0.5               | PASS   |
| 2442               | 1.129              | $\ge$ 0.5               | PASS   |
| 2480               | 1.098              | $\geq$ 0.5              | PASS   |

## BLE 125k mode(Payload S=8)

| Frequency<br>(MHz) | 6dB<br>BW<br>(MHz) | Required<br>BW<br>(MHz) | Result |
|--------------------|--------------------|-------------------------|--------|
| 2402               | 0.6009             | $\ge$ 0.5               | PASS   |
| 2442               | 0.601              | $\ge$ 0.5               | PASS   |
| 2480               | 0.6022             | $\ge$ 0.5               | PASS   |

## BLE 500k mode(Payload S=2)

| Frequency<br>(MHz) | 6dB<br>BW<br>(MHz) | Required<br>BW<br>(MHz) | Result |
|--------------------|--------------------|-------------------------|--------|
| 2402               | 0.6715             | $\ge$ 0.5               | PASS   |
| 2442               | 0.6697             | $\ge$ 0.5               | PASS   |
| 2480               | 0.6689             | $\ge$ 0.5               | PASS   |

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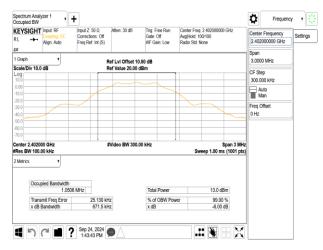
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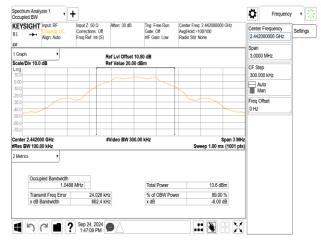
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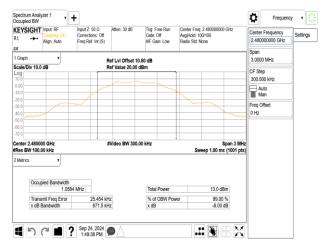
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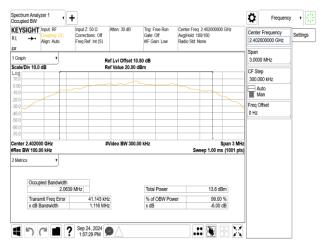
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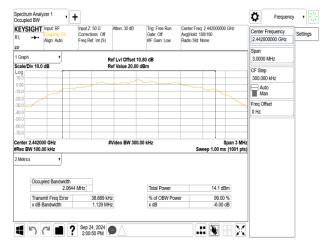
## OBW\_BLE 1M\_HighCH39-2480MHz



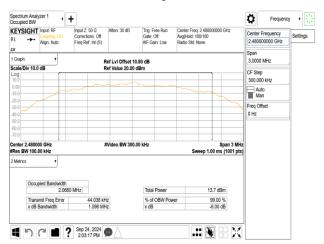
## OBW BLE 2M LowCH00-2402MHz



## OBW\_BLE 2M\_MidCH20-2442MHz



### OBW\_BLE 2M\_HighCH39-2480MHz



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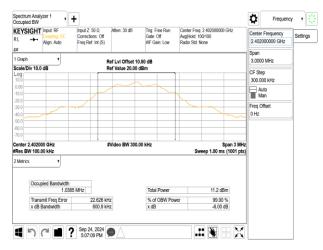
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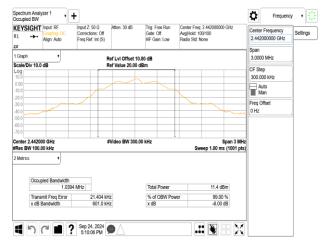
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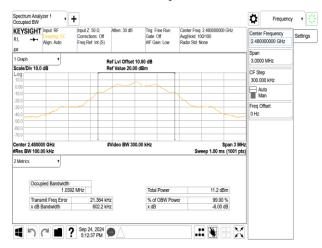
## OBW\_BLE 125k\_LowCH00-2402MHz



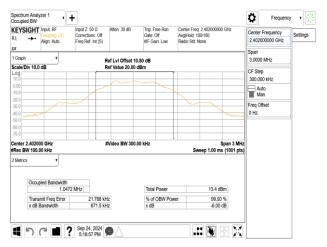
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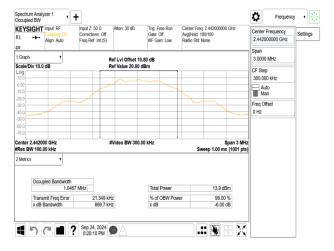
### OBW\_BLE 125k\_HighCH39-2480MHz



### OBW\_BLE 500k\_LowCH00-2402MHz



## OBW\_BLE 500k\_MidCH20-2442MHz



### OBW\_BLE 500k\_HighCH39-2480MHz



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#### 9.4.2 99% Bandwidth

## BLE 1M mode

| Frequency (MHz) | 99%Bandwidth (MHz) |
|-----------------|--------------------|
| 2402            | 1.0247             |
| 2442            | 1.0314             |
| 2480            | 1.0345             |

## BLE 2M mode

| Frequency (MHz) | 99%Bandwidth (MHz) |
|-----------------|--------------------|
| 2402            | 2.0638             |
| 2442            | 2.0649             |
| 2480            | 2.0635             |

## BLE 125k mode(Payload S=8)

| Frequency (MHz) | 99%Bandwidth (MHz) |
|-----------------|--------------------|
| 2402            | 1.0513             |
| 2442            | 1.0512             |
| 2480            | 1.051              |

## BLE 500k mode(Payload S=2)

| Frequency (MHz) | 99%Bandwidth (MHz) |
|-----------------|--------------------|
| 2402            | 1.0196             |
| 2442            | 1.0206             |
| 2480            | 1.0195             |

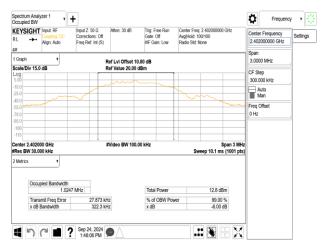
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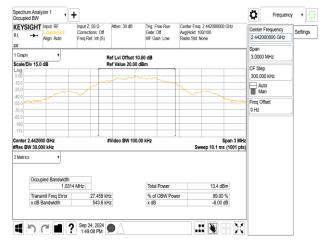
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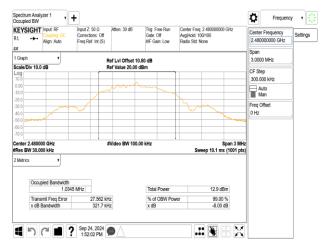
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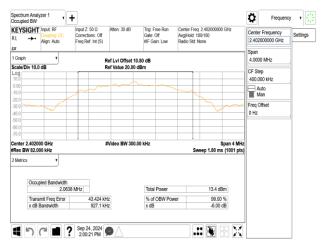
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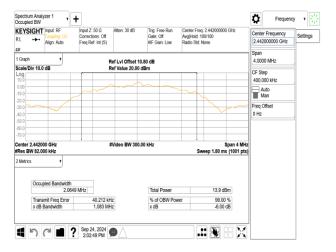
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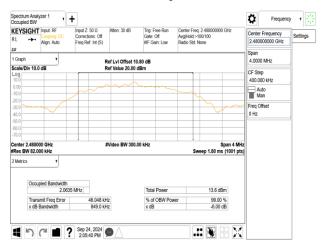
## IC OBW\_BLE 2M\_LowCH00-2402MHz



## IC OBW\_BLE 2M\_MidCH20-2442MHz



### IC OBW\_BLE 2M\_HighCH39-2480MHz



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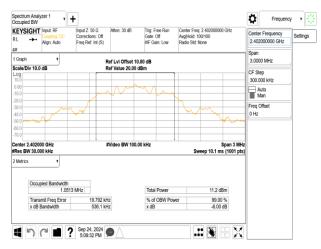
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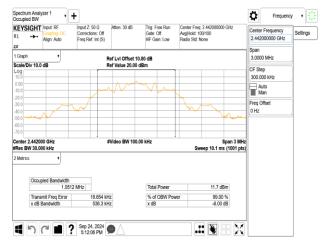
## Report No.: TERF2409002766E2 Page: 32 of 100



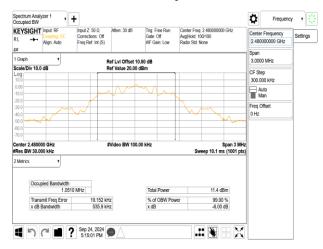
### IC OBW BLE 125k LowCH00-2402MHz



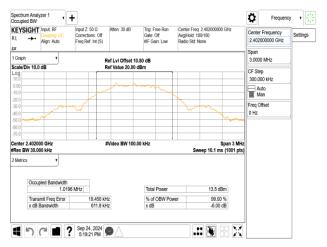
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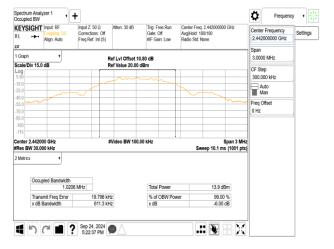
### IC OBW\_BLE 125k\_HighCH39-2480MHz



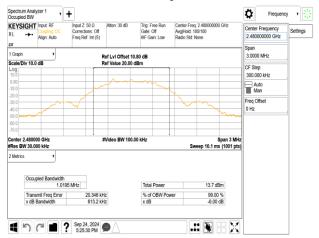
### IC OBW BLE 500k LowCH00-2402MHz



### IC OBW BLE 500k MidCH20-2442MHz



### IC OBW\_BLE 500k\_HighCH39-2480MHz



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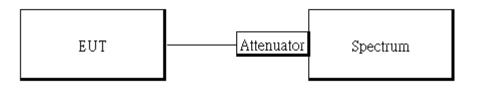


# **10 CONDUCTED BAND EDGES AND SPURIOUS EMISSION MEASUREMENT**

#### 10.1 **Standard Applicable**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

#### 10.2 Test Setup



#### 10.3 **Measurement Procedure**

#### 10.3.1 **Reference Level of Emission Limit:**

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance.
- 3. Set the span to 1.5 times the DTS channel bandwidth.
- 4. Set the RBW = 100kHz & VBW = 300 kHz.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.

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#### 10.3.2 **Conducted Band Edge:**

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 4. Set start to edge frequency, and stop frequency of spectrum analyzer so as to encompass the spectrum to be examined.
- 5. Set the spectrum analyzer as RBW=100 kHz, VBW=300 kHz, Detector = Peak, Sweep = auto
- 6. Set DL as the limit = reading on marker of reference level measurement 20dBm
- Mark the highest readings of the emissions outside of 2400MHz~2483.5MHz.
- 8. Repeat above procedures until all default test channel (low and high) was complete.

#### 10.3.3 **Conducted Spurious Emission:**

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance.
- 3. Set RBW = 100 kHz & VBW=300 kHz, Detector = Peak, Sweep = Auto
- 4. Allow trace to fully stabilize.
- 5. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
- 6. Repeat above procedures until all default test channel measured were complete.

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#### 10.4 **Measurement Result**

## BLE 1M\_Reference Level of Limit

| Frequency<br>(MHz) | RF Power<br>Density (dBm) | Reference Level of Limit<br>= PSD - 20dB<br>(dBm) |
|--------------------|---------------------------|---------------------------------------------------|
| 2402               | 6.37                      | -13.63                                            |
| 2442               | 6.85                      | -13.15                                            |
| 2480               | 6.58                      | -13.42                                            |

\*Note:

1.cable loss as 10.8dB that offsets in the spectrum 2.Refer to next page for plots.

## BLE 2M\_Reference Level of Limit

| Frequency<br>(MHz) | RF Power<br>Density (dBm) | Reference Level of Limit<br>= PSD - 20dB<br>(dBm) |
|--------------------|---------------------------|---------------------------------------------------|
| 2402 6.71          |                           | -13.29                                            |
| 2442               | 7.08                      | -12.92                                            |
| 2480               | 6.85                      | -13.15                                            |

\*Note:

1.cable loss as 10.8dB that offsets in the spectrum 2.Refer to next page for plots.

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## BLE 125k(Payload S=8)\_Reference Level of Limit

| Frequency<br>(MHz) | RF Power<br>Density (dBm) | Reference Level of Limit<br>= PSD - 20dB<br>(dBm) |
|--------------------|---------------------------|---------------------------------------------------|
| 2402               | 6.80                      | -13.20                                            |
| 2442               | 7.09                      | -12.91                                            |
| 2480               | 6.84                      | -13.16                                            |

## \*Note:

1.cable loss as 10.8dB that offsets in the spectrum 2.Refer to next page for plots.

| Frequency<br>(MHz) | RF Power<br>Density (dBm) | Reference Level of Limit<br>= PSD - 20dB<br>(dBm) |  |  |  |  |
|--------------------|---------------------------|---------------------------------------------------|--|--|--|--|
| 2402               | 6.83                      | -13.17                                            |  |  |  |  |
| 2442               | 7.19                      | -12.81                                            |  |  |  |  |
| 2480               | 6.93                      | -13.07                                            |  |  |  |  |
| *Noto:             |                           | •                                                 |  |  |  |  |

## BLE 500k(Payload S=2)\_Reference Level of Limit

\*Note:

1.cable loss as 10.8dB that offsets in the spectrum 2.Refer to next page for plots.

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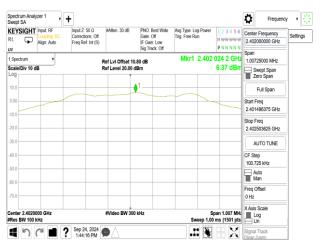
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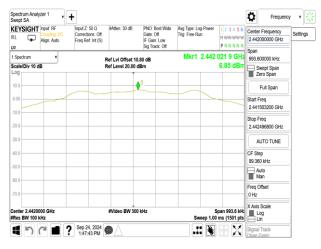
## Report No.: TERF2409002766E2 Page: 37 of 100



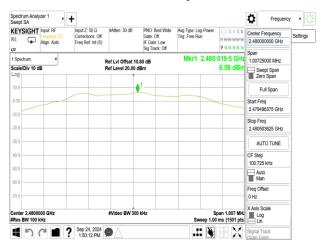
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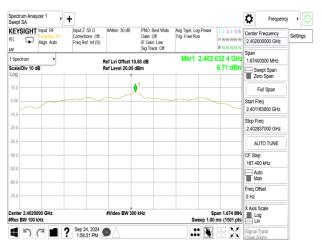
## Reference Level\_BLE 1M\_MidCH20-2442MHz



### Reference Level\_BLE 1M\_HighCH39-2480MHz



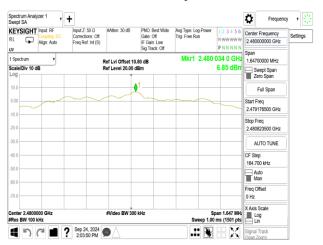
### Reference Level\_BLE 2M\_LowCH00-2402MHz



### Reference Level\_BLE 2M\_MidCH20-2442MHz



### Reference Level\_BLE 2M\_HighCH39-2480MHz



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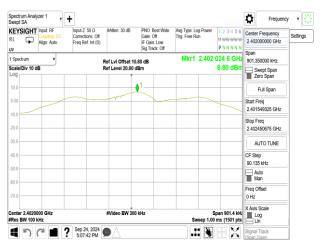
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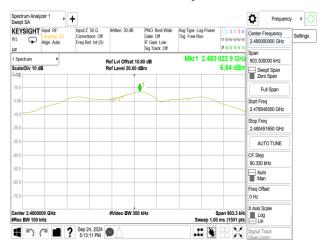
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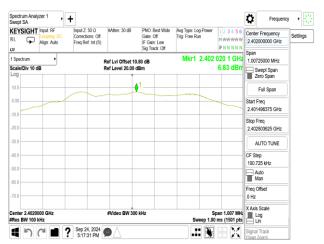
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### Reference Level\_BLE 125k\_HighCH39-2480MHz



### Reference Level\_BLE 500k\_LowCH00-2402MHz



### Reference Level BLE 500k MidCH20-2442MHz



### Reference Level\_BLE 500k\_HighCH39-2480MHz



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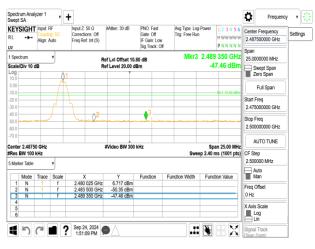
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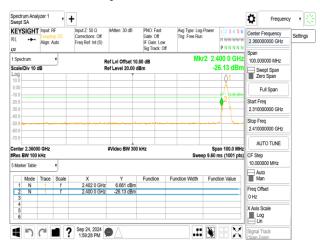
## Band Edge BLE 1M LowCH00-2402MHz

| wept              |          |                                  |          | +                                                      |                          |                                                          |                                     |                  | ¢                | Frequency                 | •        |
|-------------------|----------|----------------------------------|----------|--------------------------------------------------------|--------------------------|----------------------------------------------------------|-------------------------------------|------------------|------------------|---------------------------|----------|
| 2EYS<br>:L<br>g   | SIGHT    | linput: F<br>Couplin<br>Align: / |          | Input Z: 50 D<br>Corrections: Off<br>Freq Ref: Int (S) | #Atten: 30 dB            | PNO: Fast<br>Gate: Off<br>IF Gain: Low<br>Sig Track: Off | Avg Type: Log-Pow<br>Trig: Free Run | P N N N N N      | 2.360            | r Frequency<br>000000 GHz | Settings |
| Spec              |          | _                                | •        |                                                        | ef LvI Offset 10.        |                                                          | Mkr3                                | 2.326 9 GHz      | 100.0            | 00000 MHz                 |          |
| og<br>0.0         | Div 10 c | IB                               |          | R                                                      | ef Level 20.00 d         | Bm                                                       |                                     | -47.47 dBm       |                  | wept Span<br>ero Span     |          |
| .00               |          |                                  |          |                                                        |                          |                                                          |                                     | 01 13 63 dBm     |                  | Full Span                 |          |
| 0.0               |          |                                  | • 2      |                                                        |                          |                                                          |                                     |                  | Start F<br>2.310 | Freq<br>000000 GHz        |          |
| 0.0<br>0.0<br>0.0 |          |                                  | <u> </u> |                                                        | •.··                     |                                                          | •••• <b>•</b> ••••                  |                  | Stop F<br>2.410  | req<br>000000 GHz         |          |
| 10.0              | r 2.3600 |                                  |          |                                                        | #Video BW 300            | 6419                                                     |                                     | Span 100.0 MHz   | A                | UTO TUNE                  |          |
| Res E             | BW 100   |                                  | _        |                                                        | Frideo 544 300           | kn2                                                      | Sweep 9.                            | 60 ms (1001 pts) |                  | ep<br>0000 MHz            |          |
| Mark              | er Table |                                  | •        |                                                        |                          |                                                          |                                     |                  |                  | uto                       |          |
|                   | Mode     | Trace                            | Scale    | Х                                                      | Y                        | Function                                                 | Function Width F                    | unction Value    | N I              | lan                       |          |
| 1                 | N        | 1                                | f        | 2.402 0 GHz                                            | 6.509 dBm                |                                                          |                                     |                  | Freq (           | lifset                    | 1        |
| 2                 | N        | 1                                | f        | 2.400 0 GHz<br>2.326 9 GHz                             | -49.29 dBm<br>-47.47 dBm |                                                          |                                     |                  | 0 Hz             |                           |          |
| 4                 | N        | 1                                | Т        | 2.320 9 GHZ                                            | -47.47 dBm               |                                                          |                                     |                  | 0112             |                           |          |
| 4<br>5<br>6       |          |                                  |          |                                                        |                          |                                                          |                                     |                  | X Axis           | og                        |          |
| 1                 | 5        | 2                                | 2        | Sep 24, 2024<br>1:45:13 PM                             |                          |                                                          |                                     |                  | Signal<br>(Span) | Track                     |          |

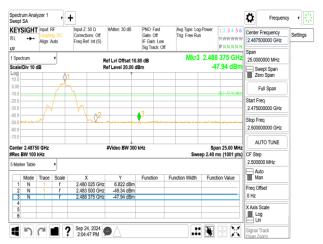
Band Edge\_BLE 1M\_HighCH39-2480MHz



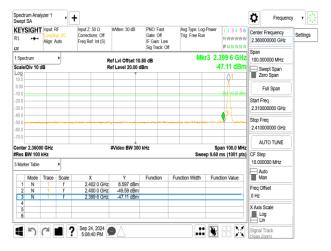
### Band Edge\_BLE 2M\_LowCH00-2402MHz



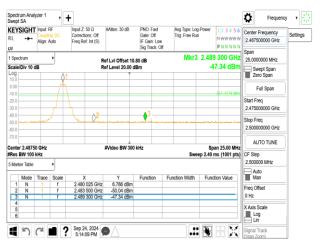
## Band Edge\_BLE 2M\_HighCH39-2480MHz



Band Edge\_BLE 125k\_LowCH00-2402MHz



## Band Edge\_BLE 125k\_HighCH39-2480MHz



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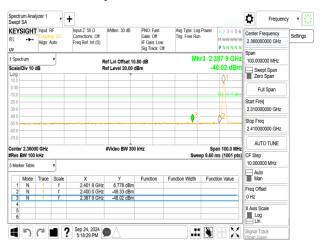
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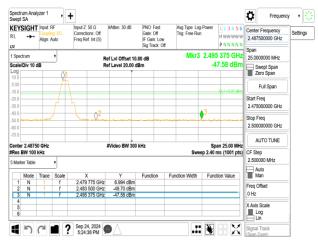
## Report No.: TERF2409002766E2 Page: 40 of 100



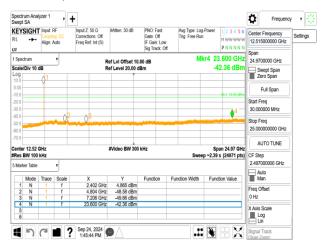
## Band Edge BLE 500k LowCH00-2402MHz



## Band Edge\_BLE 500k\_HighCH39-2480MHz



### Spurious Emission\_BLE 1M\_LowCH00-2402MHz



### Spurious Emission\_BLE 1M\_MidCH20-2442MHz



## Spurious Emission\_BLE 1M\_HighCH39-2480MHz



### Spurious Emission\_BLE 2M\_LowCH00-2402MHz

| wept SA      |            |           | hput Z: 50 Ω          | #Atten: 30 dB                                    | 010.5-1      | to Torolo                                                           |            |               | ٥                | Frequency   | •       |
|--------------|------------|-----------|-----------------------|--------------------------------------------------|--------------|---------------------------------------------------------------------|------------|---------------|------------------|-------------|---------|
| EYSIGH       | Couple     | ner<br>DC | Corrections: Off      | #Atten: 30 dB                                    | Gate: Off    | PNO: Fast Avg Type: Log-Power 1 2 3 4 5<br>Gate: Off Trig: Free Run |            | 123456        | Center Prequency |             | Setting |
| :L 🔸         | Align: A   |           | Freg Ref: Int (S)     |                                                  | IF Gain: Lov |                                                                     | M WWWW     |               |                  |             | Jeungs  |
| a            |            |           |                       |                                                  | Sig Track: 0 | Dff                                                                 |            | P N N N N N   |                  |             |         |
| Spectrum     |            |           |                       |                                                  |              | M                                                                   | kr4 24     | 124 GHz       | Span             |             |         |
|              |            | <u> </u>  |                       | f Lvi Offset 10.80 dB MIKI*<br>f Level 20.00 dBm |              |                                                                     | -42.33 dBm |               | 24.8/0000 GHz    |             |         |
| cale/Div 10  | 38         |           | ĸ                     | ef Level 20.00 d                                 | Bm           |                                                                     | -4         | 2.33 UDIII    | - 3              | wept Span   |         |
| 10.0         | 1          |           |                       |                                                  |              |                                                                     |            |               | 2                | ero Span    |         |
| 0.00         | <u>v</u> . |           |                       |                                                  |              |                                                                     |            |               |                  | Full Span   |         |
| 10.0         |            |           |                       |                                                  |              |                                                                     |            | QL1 13 29 48m |                  | Full Spall  |         |
| 20.0         |            |           |                       |                                                  |              |                                                                     |            |               | Start F          | req         |         |
| 30.0         | -          |           |                       |                                                  |              |                                                                     |            | <b>4</b>      | 30.00            | 0000 MHz    |         |
| 10.0         | -          | <u>2</u>  | A <u>8</u>            |                                                  |              |                                                                     |            | 97            |                  |             |         |
| 50.0         | -          | A MAR     | and the second second |                                                  |              |                                                                     |            |               | Stop F           |             |         |
| 50.0         | -          |           |                       |                                                  |              |                                                                     |            |               | 25.00            | 0000000 GHz |         |
| 70.0         | -          |           |                       |                                                  |              |                                                                     |            |               | <b>—</b>         | UTO TUNE    |         |
| enter 12.52  | GHz        |           |                       | #Video BW 300                                    | kHz          |                                                                     | Sn         | an 24.97 GHz  |                  | UTOTUNE     |         |
| Res BW 100   | kHz        |           |                       |                                                  |              | Swe                                                                 |            | s (24971 pts) | CF Ste           | ep          |         |
| Marker Table |            | ,         |                       |                                                  |              |                                                                     |            |               | 2.497            | 000000 GHz  |         |
| market table |            | <u> </u>  |                       |                                                  |              |                                                                     |            |               | 6.               | uto         |         |
| Mode         | Trace      | Scale     | Х                     | Y                                                | Function     | Function Width                                                      | Func       | tion Value    |                  | lan         |         |
| 1 N          |            | 1         | 2.402 GHz             | 0.4318 dBm                                       |              |                                                                     |            |               |                  |             |         |
| 2 N          |            | f         | 4.804 GHz             | -50.46 dBm                                       |              |                                                                     |            |               | Freq C           | mset        |         |
| 3 N          | 1          | 1         | 7.206 GHz             | -51.23 dBm                                       |              |                                                                     |            |               | 0 Hz             |             |         |
| 4 N<br>5     | 1          | f         | 24.124 GHz            | -42.33 dBm                                       |              |                                                                     |            |               | X Axis           | Scale       |         |
| 5            |            |           |                       |                                                  |              |                                                                     | -          |               |                  | og          |         |
| V            |            |           |                       |                                                  |              |                                                                     |            |               | 1 Aŭ             | in          |         |

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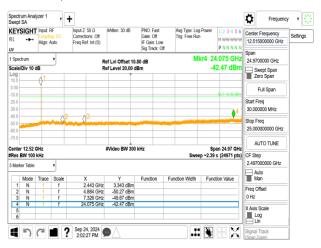
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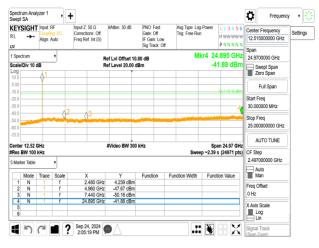
## Report No.: TERF2409002766E2 Page: 41 of 100



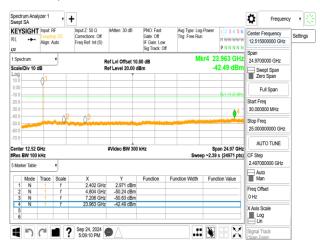
## Spurious Emission\_BLE 2M\_MidCH20-2442MHz



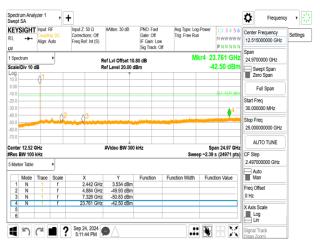
### Spurious Emission BLE 2M HighCH39-2480MHz



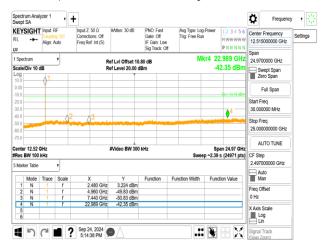
### Spurious Emission\_BLE 125k\_LowCH00-2402MHz



## Spurious Emission\_BLE 125k\_MidCH20-2442MHz



Spurious Emission\_BLE 125k\_HighCH39-2480MHz



### Spurious Emission\_BLE 500k\_LowCH00-2402MHz



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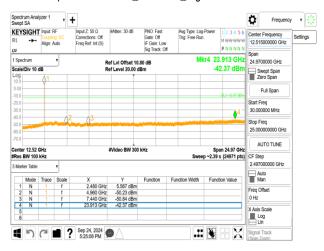
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## Spurious Emission\_BLE 500k\_MidCH20-2442MHz



## Spurious Emission\_BLE 500k\_HighCH39-2480MHz



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# 11 RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT

## **Spurious Emission**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands must also comply with the §15.209 limit as below.

And according to §15.33(a) (1) for an intentional radiator operates below 10GHz, the frequency range of measurements: to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower.

| Frequency<br>(MHz) | Field strength<br>(microvolts/meter) | Distance<br>(meters) |  |  |
|--------------------|--------------------------------------|----------------------|--|--|
| 0.009-0.490        | 2400/F(kHz)                          | 300                  |  |  |
| 0.490-1.705        | 24000/F(kHz)                         | 30                   |  |  |
| 1.705-30           | 30                                   | 30                   |  |  |
| 30-88              | 100                                  | 3                    |  |  |
| 88-216             | 150                                  | 3                    |  |  |
| 216-960            | 200                                  | 3                    |  |  |
| Above 960          | 500                                  | 3                    |  |  |

Note: The lower limit shall apply at the transition frequencies.

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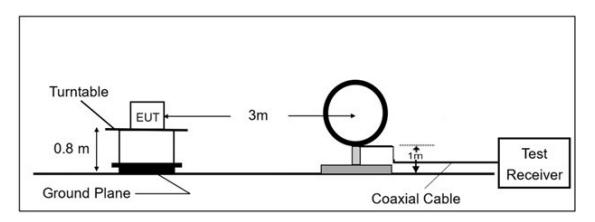
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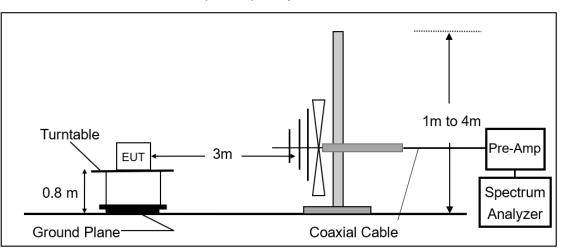


## 11.1 Test Setup

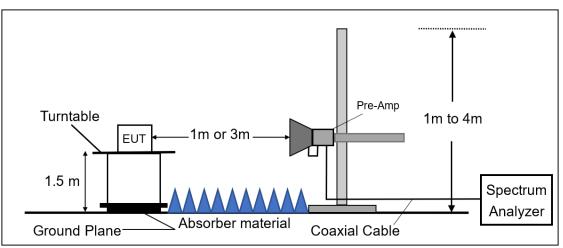
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz.



(B) Radiated Emission Test Set-Up, Frequency From 30MHz to 1000MHz.



(C) Radiated Emission Test Set-Up, Frequency Above 1GHz.



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#### **Measurement Procedure** 11.2

- 1. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance.
- 2. The EUT was placed on a turn table with 0.8m for frequency< 1GHz and 1.5m for frequency> 1GHz above ground plane.
- 3. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
- 4. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- 5. Set the spectrum analyzer as RBW=100 kHz and VBW=300 kHz for Peak Detector (PK) at frequency between 30MHz and 1 GHz.
- 6. Use receiver mode as RBW=120 kHz for Quasi-peak (QP) at frequency between 30MHz and 1 GHz.
- 7. Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Maximum Emission Measurements at frequency above 1 GHz.
- Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW ≥ 1/T (Duty cycle < 98%) for Average Emission Measurements at frequency above 1 GHz.
- 9. When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.
- 10. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 11. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 12. Repeat above procedures until all default test channel measured were complete.

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#### 11.3 **Field Strength Calculation**

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

# FS = RA + AF + CL - AG

*Where FS* = *Field Strength RA* = *Reading Amplitude* AF = Antenna Factor

CL = Cable Attenuation Factor (Cable Loss) AG = Amplifier Gain

The limit of the emission level is expressed in dBuV/m, which converts 20\*log(uV/m)

Actual  $FS(dB\mu V/m) = SPA$ . Reading level(dB $\mu V$ ) + Factor(dB)  $Factor(dB) = Antenna Factor(dB\mu V/m) + Cable Loss(dB) - Pre_Amplifier Gain(dB)$ 

#### 11.4 Test Results of Radiated Spurious Emissions from 9 kHz to 30 MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit per 15.31(o) was not reported.

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