

FCC Part 15.247

Test Information:

|             |        |              |              |
|-------------|--------|--------------|--------------|
| Serial No.: | 2GUK-1 | Test Date:   | 2024/02/04   |
| Test Site:  | RF     | Test Mode:   | Transmitting |
| Tester:     | Chin   | Test Result: | Pass         |

Environmental Conditions:

|                      |      |                           |    |                        |       |
|----------------------|------|---------------------------|----|------------------------|-------|
| Temperature:<br>(°C) | 22.3 | Relative Humidity:<br>(%) | 51 | ATM Pressure:<br>(kPa) | 101.0 |
|----------------------|------|---------------------------|----|------------------------|-------|

Test Equipment List and Details:

| Manufacturer | Description       | Model   | Serial Number | Calibration Date | Calibration Due Date |
|--------------|-------------------|---------|---------------|------------------|----------------------|
| R&S          | Spectrum Analyzer | FSU26   | 200256        | 2023/03/31       | 2024/03/30           |
| zhuoxiang    | Coaxial Cable     | SMA-178 | 211001        | Each time        | N/A                  |

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Chin Qin

Gary Ling

6dB Emission Bandwidth

BLE 1M

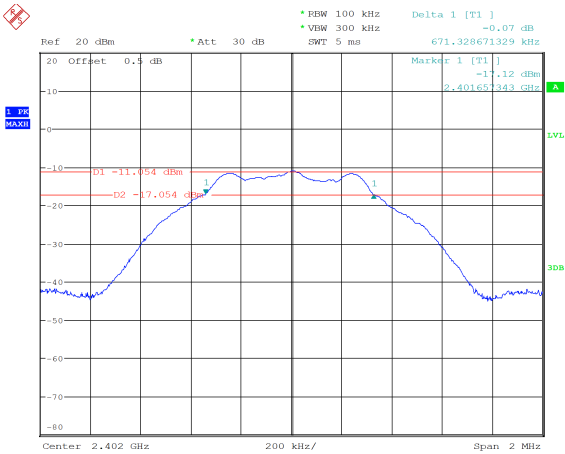
| Mode   | Value (MHz) | Limit (MHz) | Result |
|--------|-------------|-------------|--------|
| Low    | 0.671       | 0.5         | Pass   |
| Middle | 0.671       | 0.5         | Pass   |
| High   | 0.515       | 0.5         | Pass   |

BLE 2M

| Mode   | Value (MHz) | Limit (MHz) | Result |
|--------|-------------|-------------|--------|
| Low    | 1.155       | 0.5         | Pass   |
| Middle | 1.155       | 0.5         | Pass   |
| High   | 1.159       | 0.5         | Pass   |

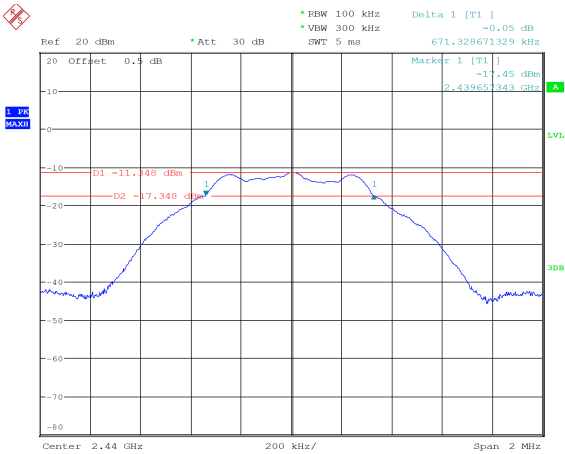
BLE 1M

Low 0.671 MHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:51:04

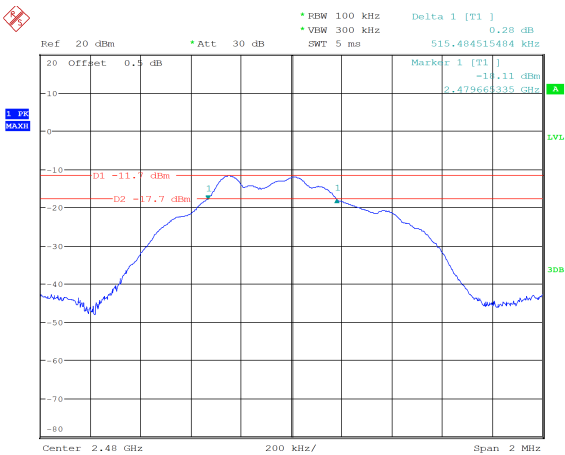
Middle 0.671 MHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:54:11

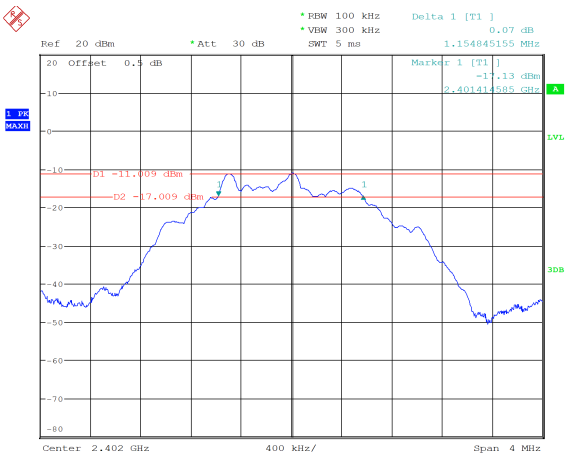
BLE 2M

High 0.515 MHz



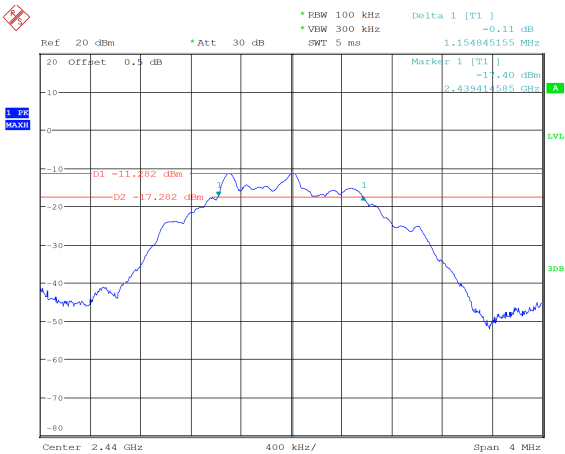
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:36:37

Low 1.155 MHz



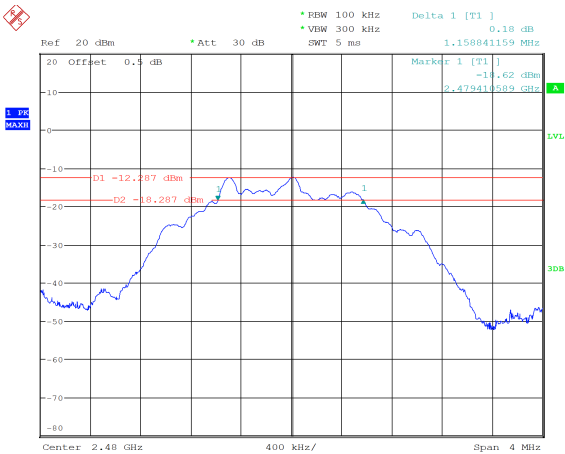
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:05:53

Middle 1.155 MHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:12:03

High 1.159 MHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:17:17

99% Occupied Bandwidth

BLE 1M

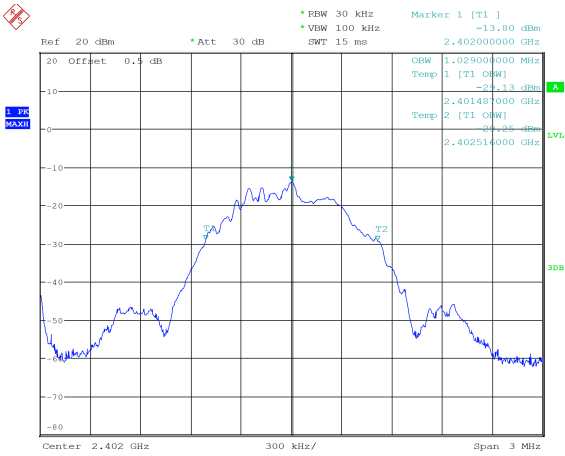
| Mode   | 99% OBW (MHz) |
|--------|---------------|
| Low    | 1.029         |
| Middle | 1.029         |
| High   | 1.032         |

BLE 2M

| Mode   | 99% OBW (MHz) |
|--------|---------------|
| Low    | 2.046         |
| Middle | 2.052         |
| High   | 2.052         |

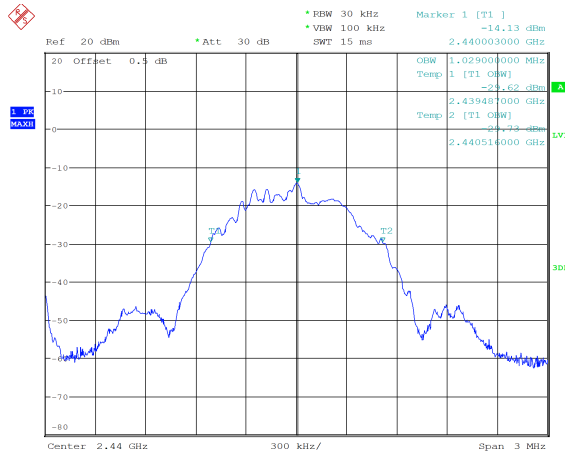
BLE 1M

Low 1.029 MHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:51:31

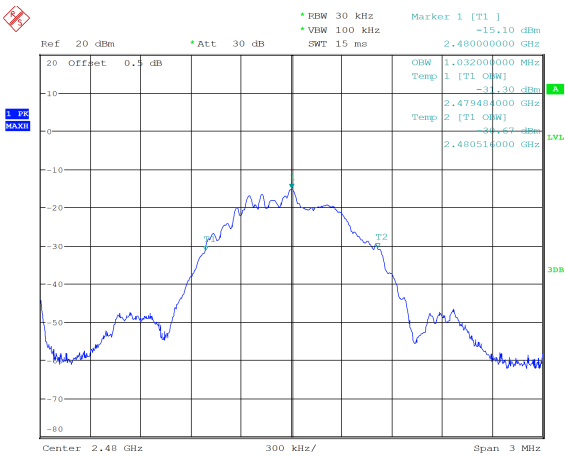
Middle 1.029 MHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:54:32

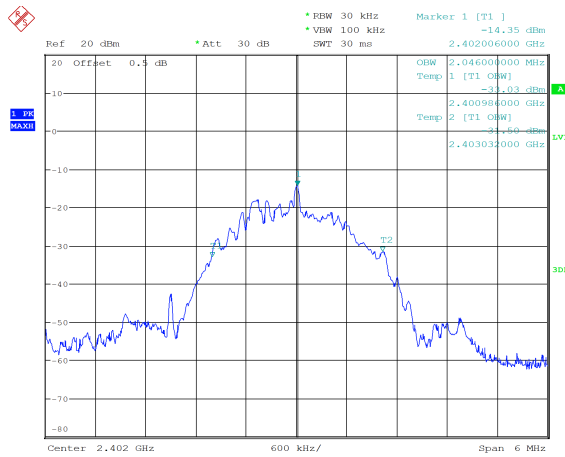
BLE 2M

High 1.032 MHz



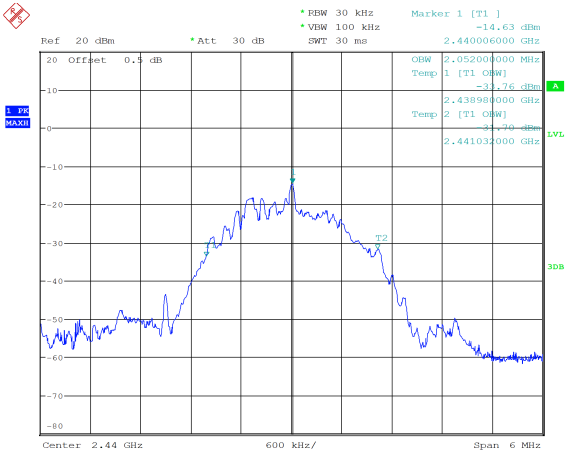
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:58:50

Low 2.046 MHz



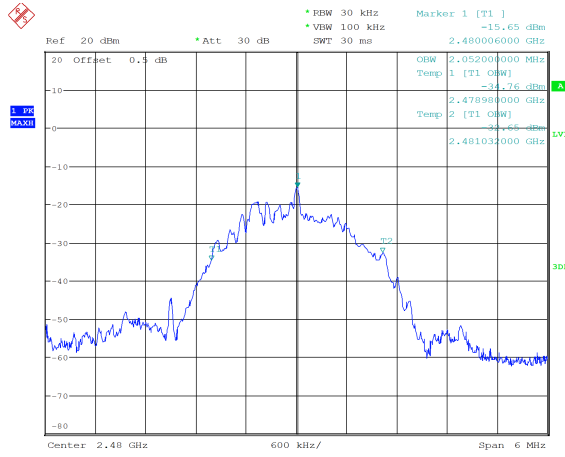
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:06:20

Middle 2.052 MHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:12:37

High 2.052 MHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:17:40

**Maximum Conducted Output Power****BLE 1M**

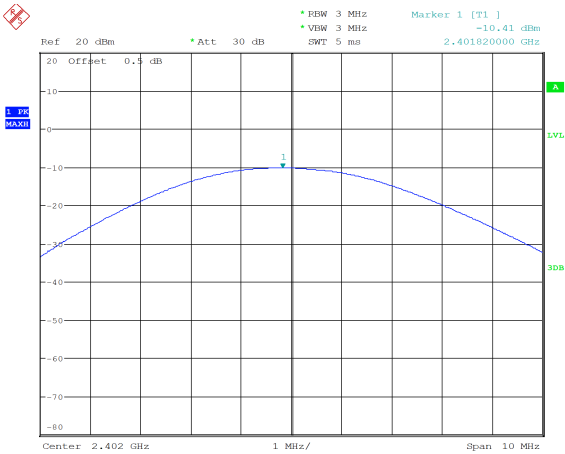
| Mode   | Value (dBm) | Limit (dBm) | Result |
|--------|-------------|-------------|--------|
| Low    | -10.41      | 30.00       | Pass   |
| Middle | -10.13      | 30.00       | Pass   |
| High   | -11.18      | 30.00       | Pass   |

**BLE 2M**

| Mode   | Value (dBm) | Limit (dBm) | Result |
|--------|-------------|-------------|--------|
| Low    | -10.23      | 30.00       | Pass   |
| Middle | -10.46      | 30.00       | Pass   |
| High   | -11.38      | 30.00       | Pass   |

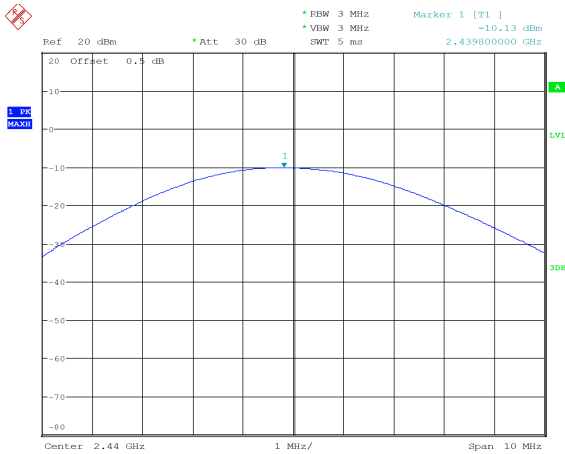
BLE 1M

Low -10.41 dBm



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:49:45

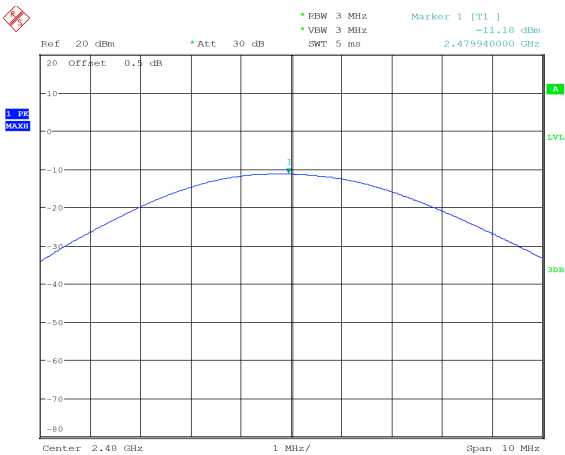
Middle -10.13 dBm



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:34:00

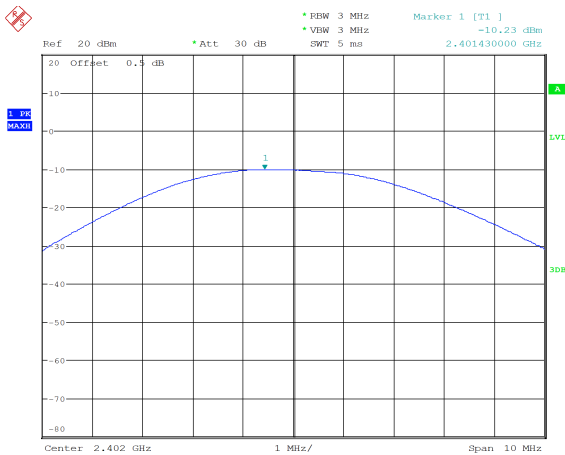
BLE 2M

High -11.18 dBm



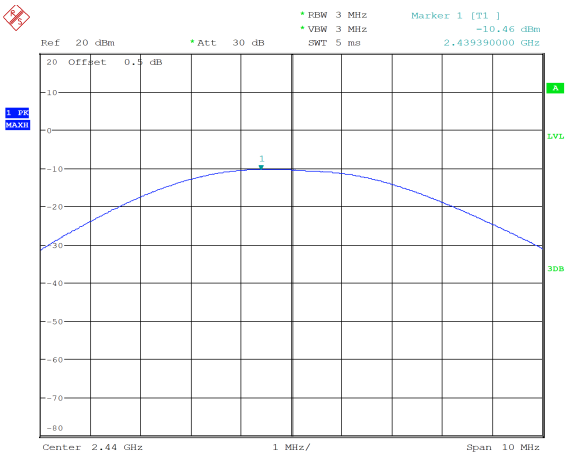
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:32:21

Low -10.23 dBm



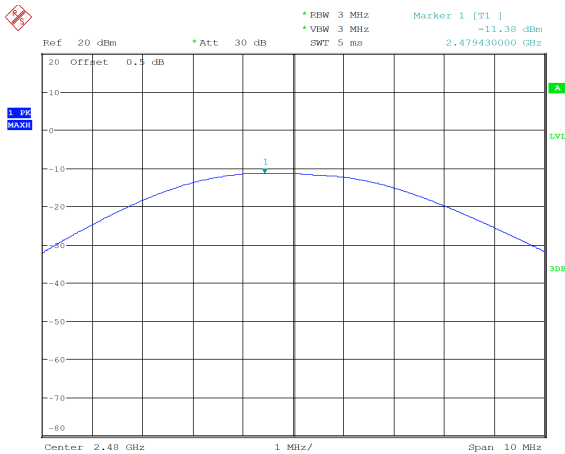
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:04:33

Middle -10.46 dBm



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:11:41

High -11.38 dBm



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:15:26

**100 kHz Bandwidth of Frequency Band Edge****BLE 1M**

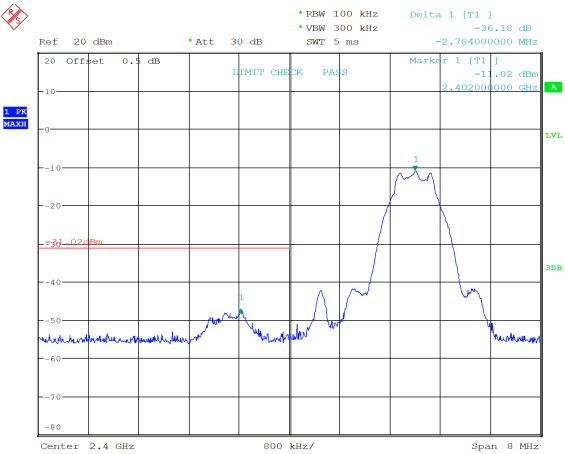
| Mode | Value (dB) | Limit (dB) | Result |
|------|------------|------------|--------|
| Low  | 36.18      | 20.00      | Pass   |
| High | 40.23      | 20.00      | Pass   |

**BLE 2M**

| Mode | Value (dB) | Limit (dB) | Result |
|------|------------|------------|--------|
| Low  | 30.67      | 20.00      | Pass   |
| High | 39.93      | 20.00      | Pass   |

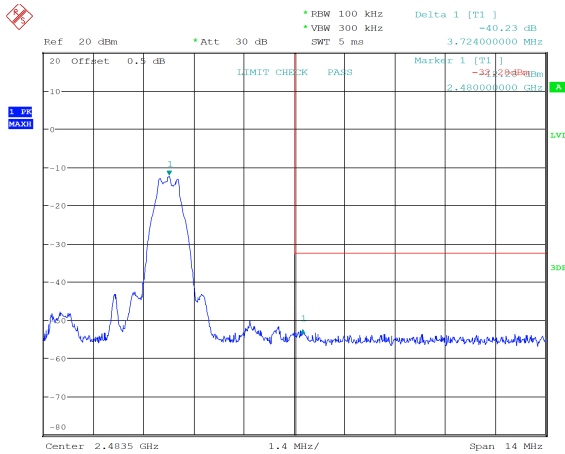
BLE 1M

Low 36.18 dB



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:50:45

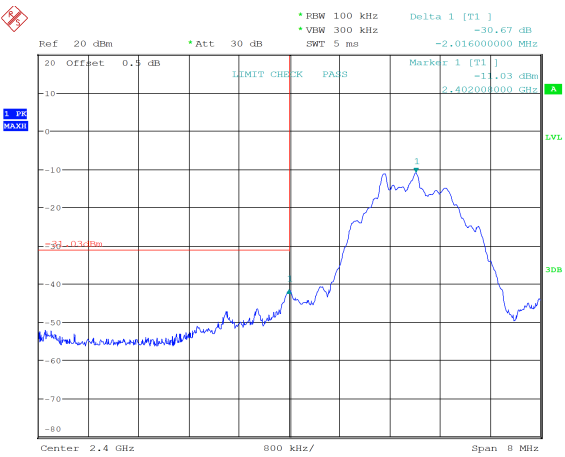
High 40.23 dB



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:58:07

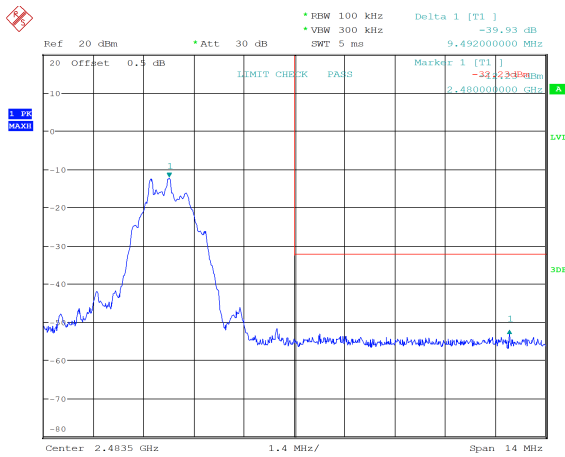
BLE 2M

Low 30.67 dB



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:05:28

High 39.93 dB



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:16:44

Power Spectral Density

BLE 1M

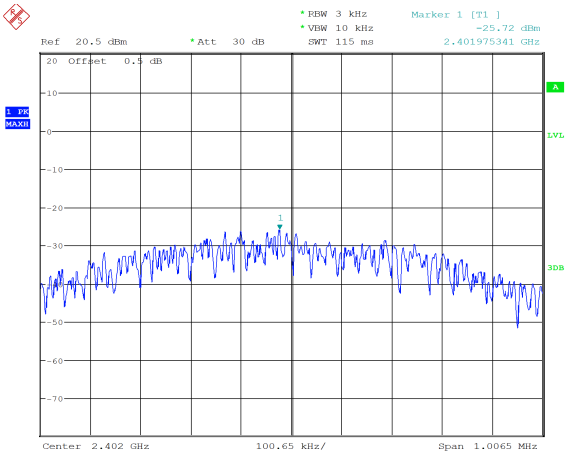
| Mode   | Value<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Result |
|--------|---------------------|---------------------|--------|
| Low    | -25.72              | 8.00                | Pass   |
| Middle | -26.06              | 8.00                | Pass   |
| High   | -27.02              | 8.00                | Pass   |

BLE 2M

| Mode   | Value<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Result |
|--------|---------------------|---------------------|--------|
| Low    | -29.04              | 8.00                | Pass   |
| Middle | -29.36              | 8.00                | Pass   |
| High   | -30.37              | 8.00                | Pass   |

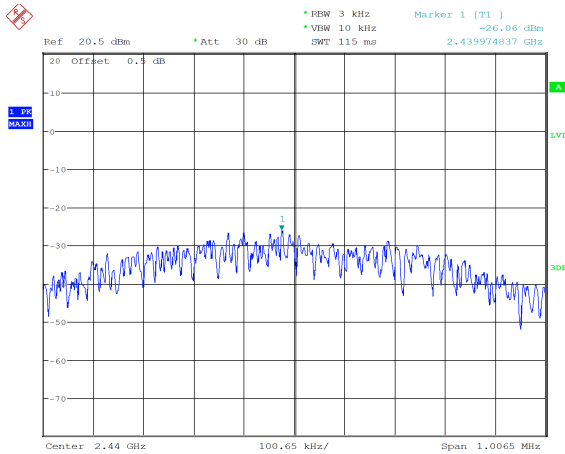
BLE 1M

Low -25.72 dBm/3kHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:53:24

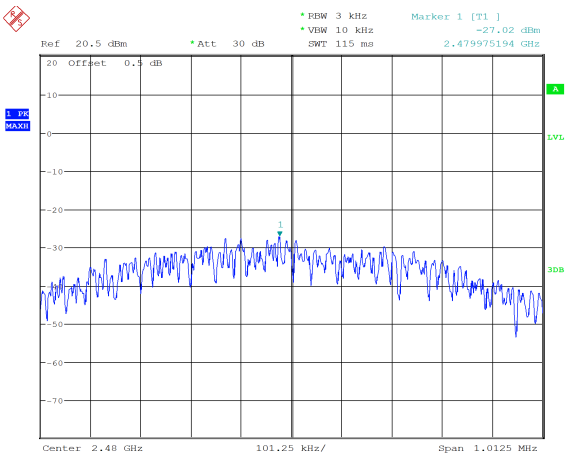
Middle -26.06 dBm/3kHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:55:57

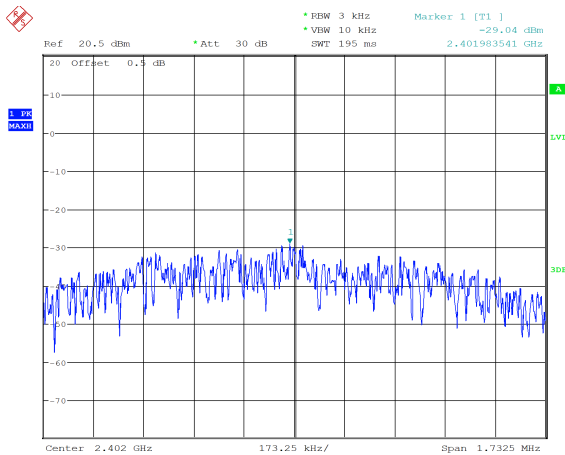
BLE 2M

High -27.02 dBm/3kHz



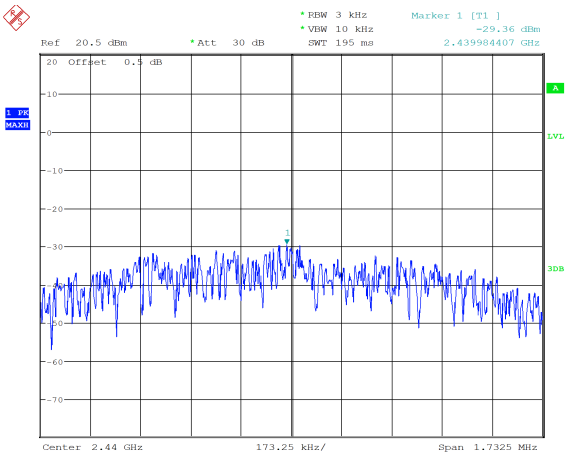
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:01:56

Low -29.04 dBm/3kHz



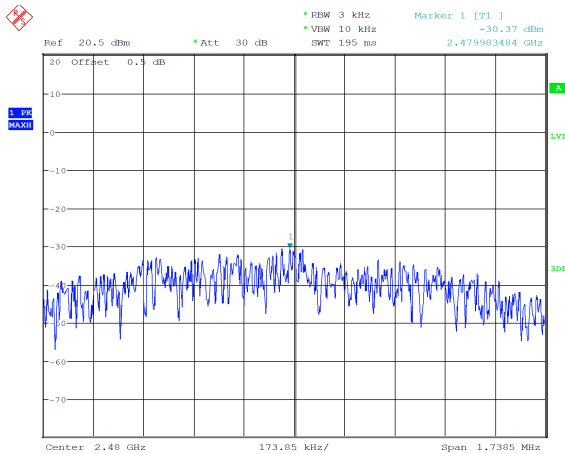
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:08:56

Middle -29.36 dBm/3kHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:14:18

High -30.37 dBm/3kHz



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:19:32

Duty Cycle

BLE 1M

| Mode   | Ton<br>(ms) | Ton+Toff<br>(ms) | Duty Cycle<br>(%) | 1/Ton<br>(Hz) | VBW Setting<br>(kHz) |
|--------|-------------|------------------|-------------------|---------------|----------------------|
| Low    | 0.404       | 0.624            | 64.74             | 2475          | 3                    |
| Middle | 0.413       | 0.634            | 65.14             | 2421          | 3                    |
| High   | 0.401       | 0.627            | 63.96             | 2494          | 3                    |

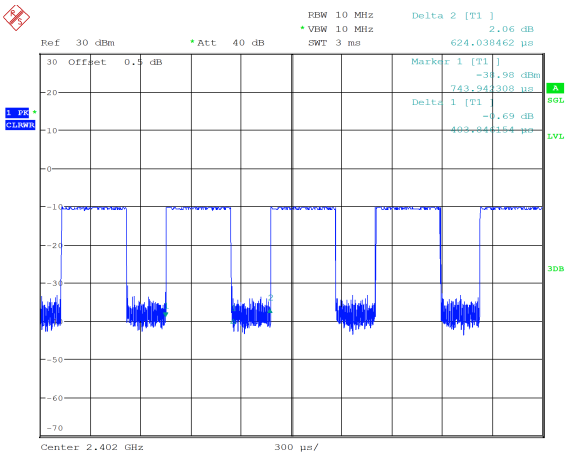
BLE 2M

| Mode   | Ton<br>(ms) | Ton+Toff<br>(ms) | Duty Cycle<br>(%) | 1/Ton<br>(Hz) | VBW Setting<br>(kHz) |
|--------|-------------|------------------|-------------------|---------------|----------------------|
| Low    | 0.216       | 0.624            | 34.62             | 4630          | 5                    |
| Middle | 0.226       | 0.624            | 36.22             | 4425          | 5                    |
| High   | 0.218       | 0.623            | 34.99             | 4587          | 5                    |

Duty Cycle = Ton/(Ton+Toff)\*100%

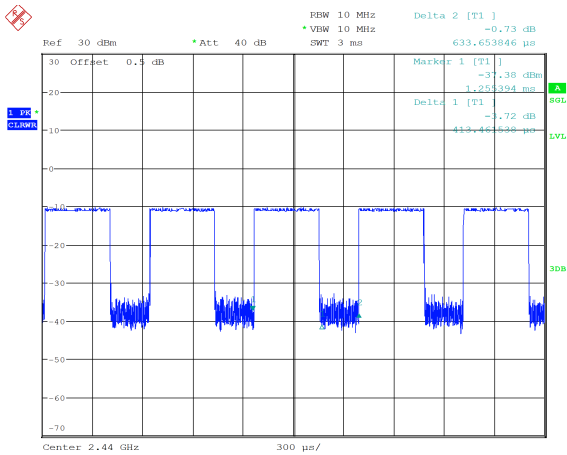
BLE 1M

Low  
0.404 ms,0.624ms



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:52:56

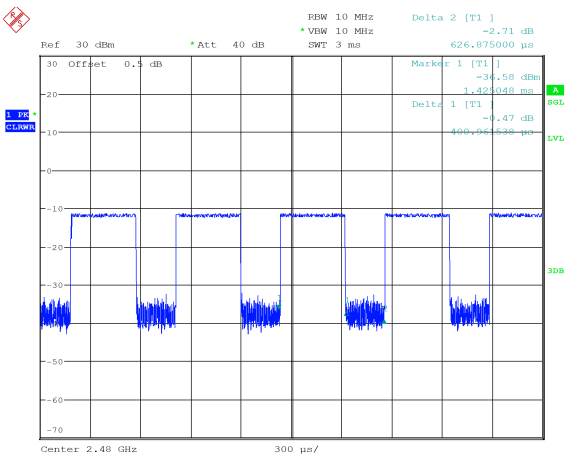
Middle  
0.413 ms,0.634ms



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 08:55:28

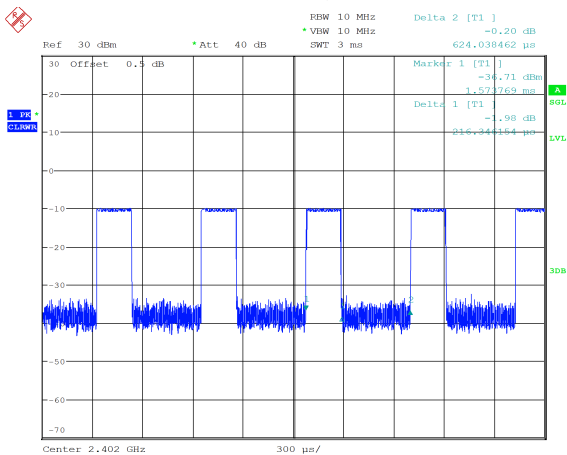
BLE 2M

High  
0.401 ms,0.627ms



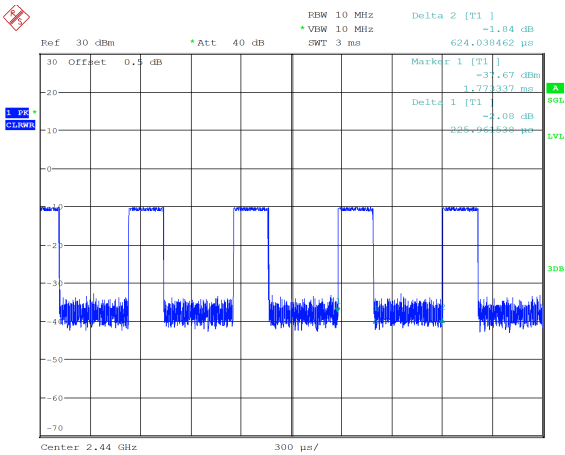
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:01:29

Low  
0.216 ms,0.624ms



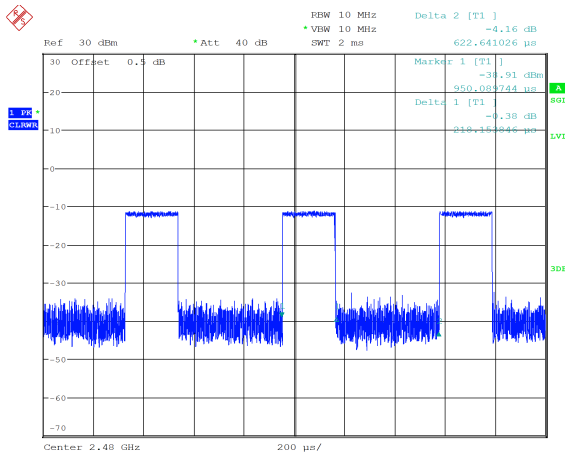
ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:08:19

Middle  
0.226 ms,0.624ms



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:13:48

High  
0.218 ms,0.623ms



ProjectNo.:CR240104515-RF Tester:Chin  
Date: 4.FEB.2024 09:18:53