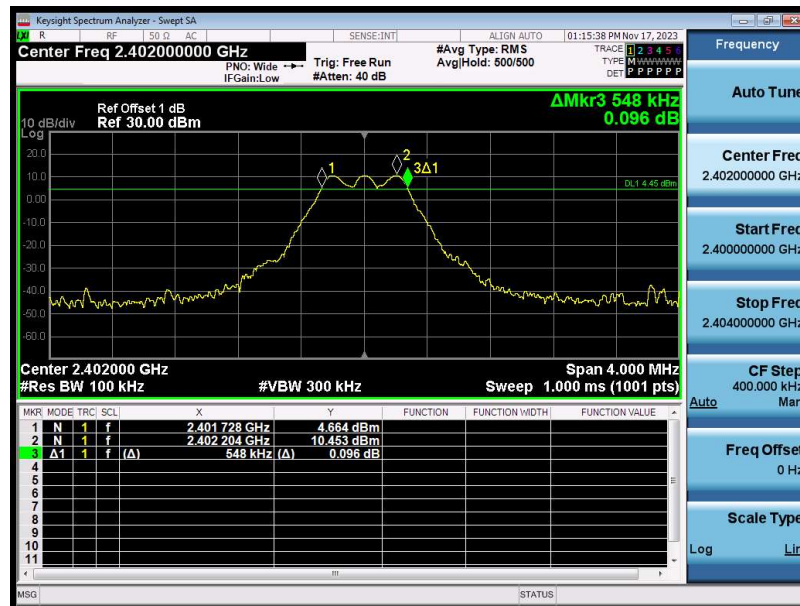


| Mode | CH. | Test Freq.<br>(MHz) | 6dB Occupied Bandwidth<br>(KHz) | Limit<br>(kHz) | Result |
|------|-----|---------------------|---------------------------------|----------------|--------|
| 4    | 00  | 2402                | 548                             | $\geq 500$     | Pass   |
|      | 39  | 2441                | 540                             | $\geq 500$     | Pass   |
|      | 78  | 2480                | 536                             | $\geq 500$     | Pass   |

## 6dB Occupied Bandwidth

## CH00 (2402MHz)



## CH39 (2441MHz)



CH79 (2480MHz)



| Mode | CH. | Test Freq.<br>(MHz) | 6dB Occupied Bandwidth<br>(KHz) | Limit<br>(kHz) | Result |
|------|-----|---------------------|---------------------------------|----------------|--------|
| 5    | 00  | 2403                | 944                             | $\geq 500$     | Pass   |
|      | 39  | 2442                | 936                             | $\geq 500$     | Pass   |
|      | 76  | 2479                | 952                             | $\geq 500$     | Pass   |

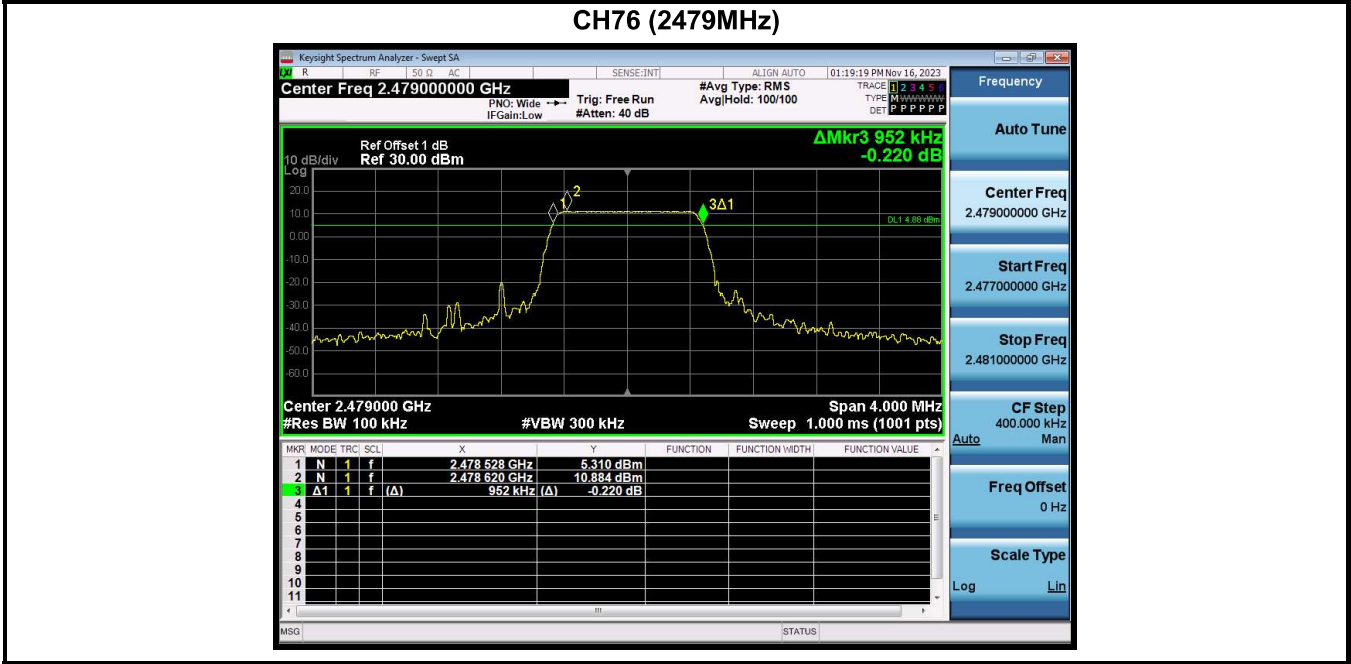
## 6dB Occupied Bandwidth

## CH00 (2403MHz)



## CH39 (2442MHz)

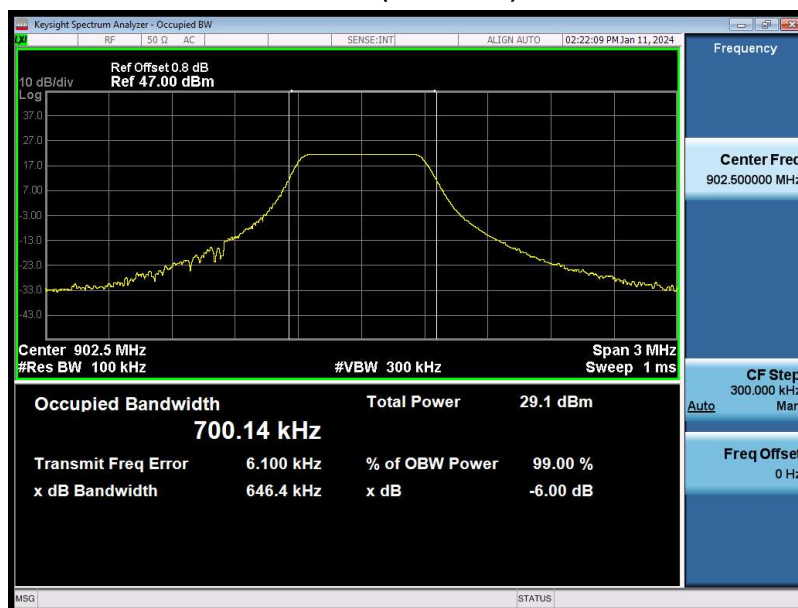




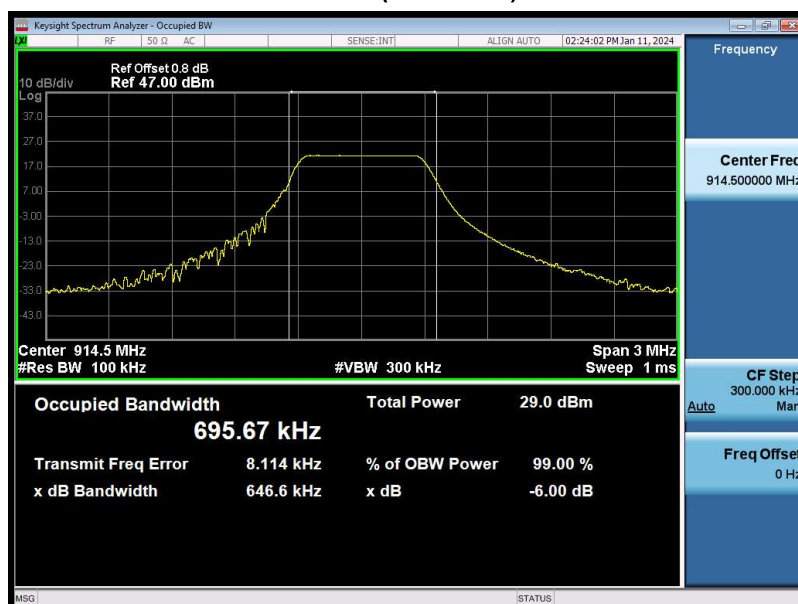
| Mode | CH. | Test Freq.<br>(MHz) | 6dB Occupied Bandwidth<br>(KHz) | Limit<br>(kHz) | Result |
|------|-----|---------------------|---------------------------------|----------------|--------|
| 6    | 01  | 902.5               | 646.4                           | $\geq 500$     | Pass   |
|      | 16  | 914.5               | 646.6                           | $\geq 500$     | Pass   |
|      | 31  | 926.5               | 645.0                           | $\geq 500$     | Pass   |

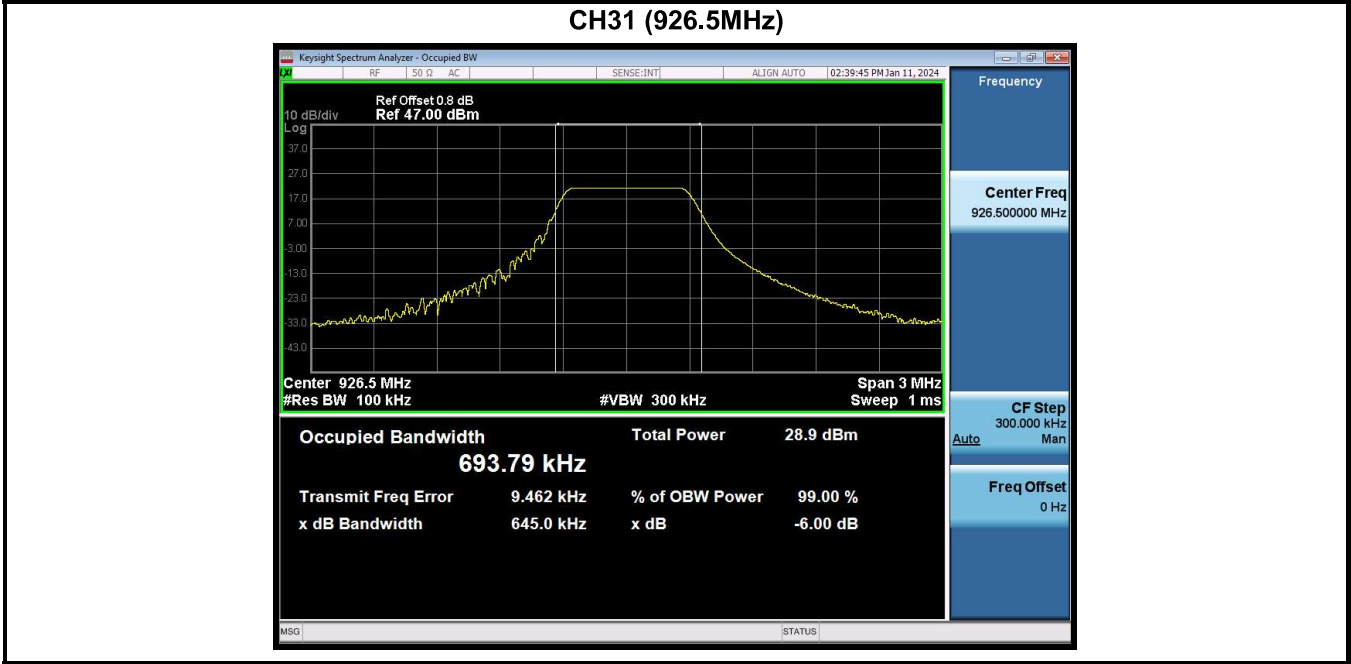
## 6dB Occupied Bandwidth

## CH01 (902.5MHz)



## CH16 (914.5MHz)

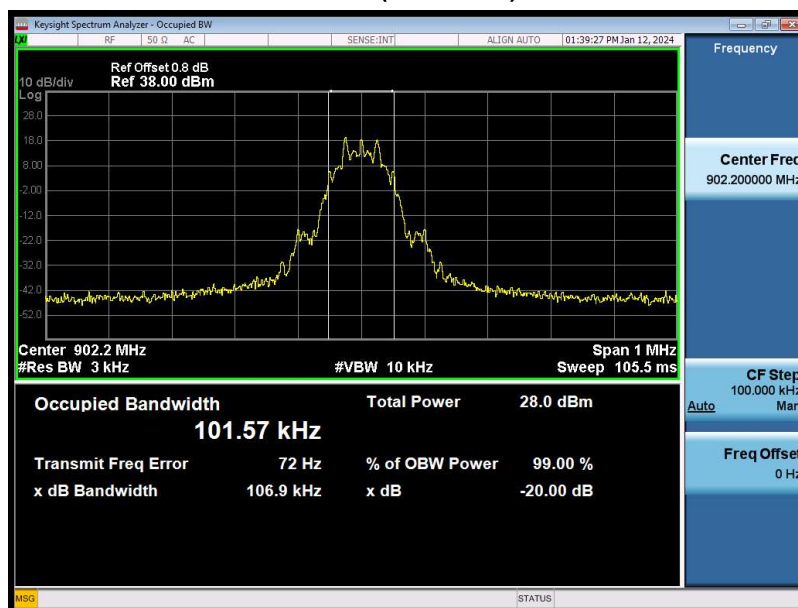




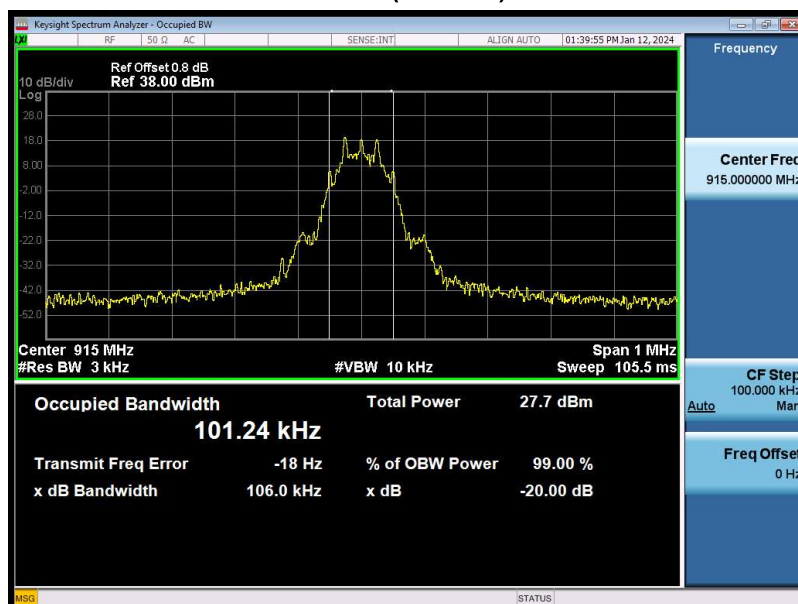
| Mode | CH. | Test Freq.<br>(MHz) | 20dB Occupied Bandwidth<br>(Hz) | Limit<br>(kHz) | Result |
|------|-----|---------------------|---------------------------------|----------------|--------|
| 7    | 01  | 902.2               | 106.9                           | ≤250           | Pass   |
|      | 65  | 915                 | 106.0                           | ≤250           | Pass   |
|      | 129 | 927.8               | 105.5                           | ≤250           | Pass   |

## 20dB Occupied Bandwidth

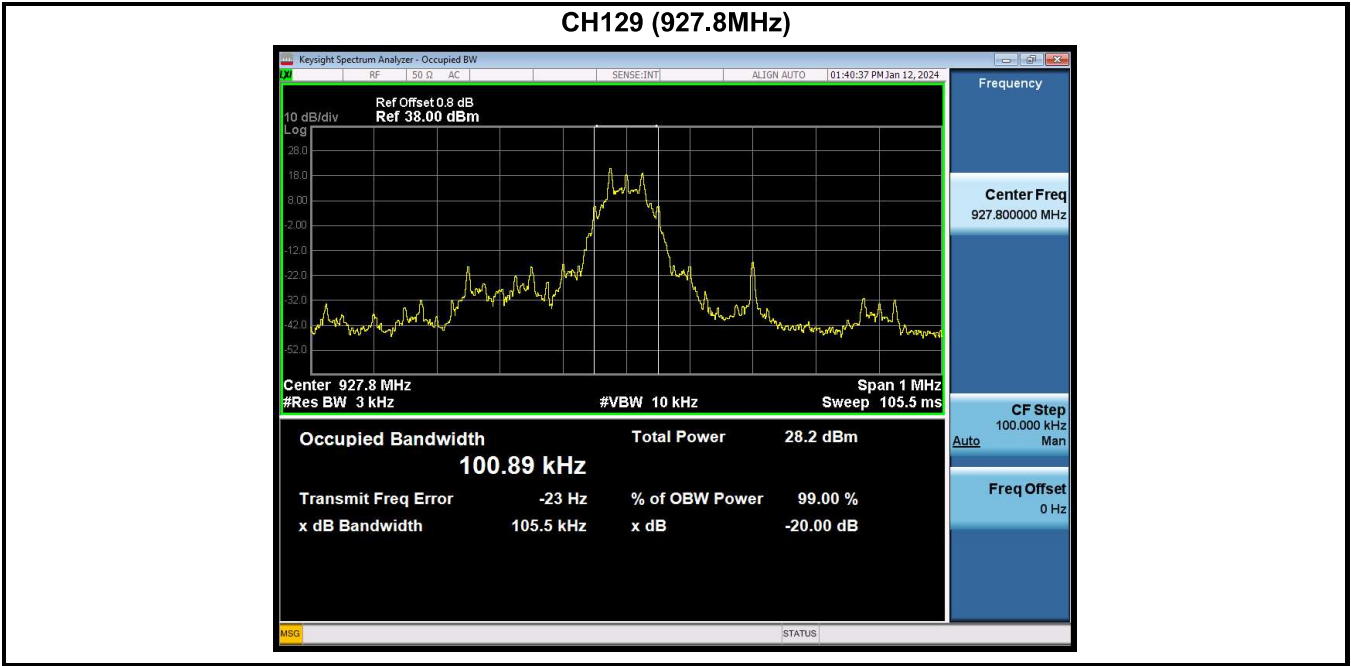
## CH01 (902.2MHz)



## CH65 (915MHz)





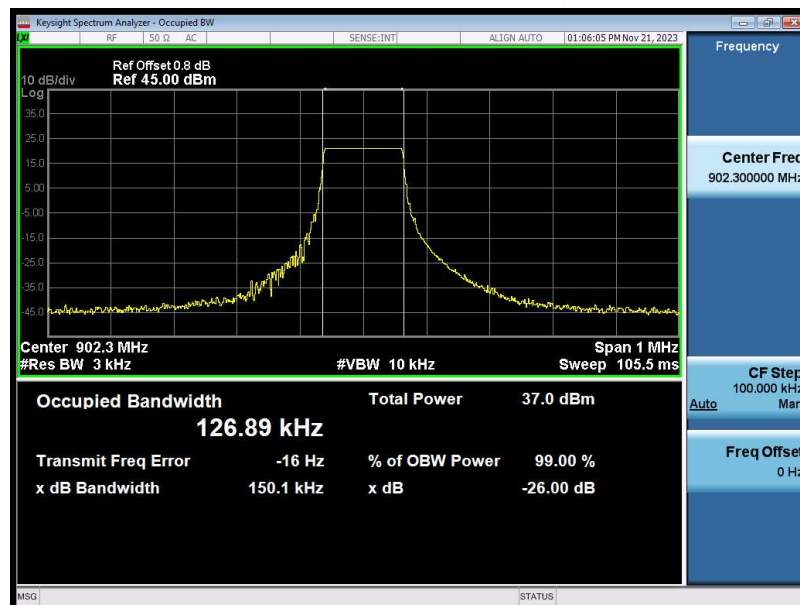




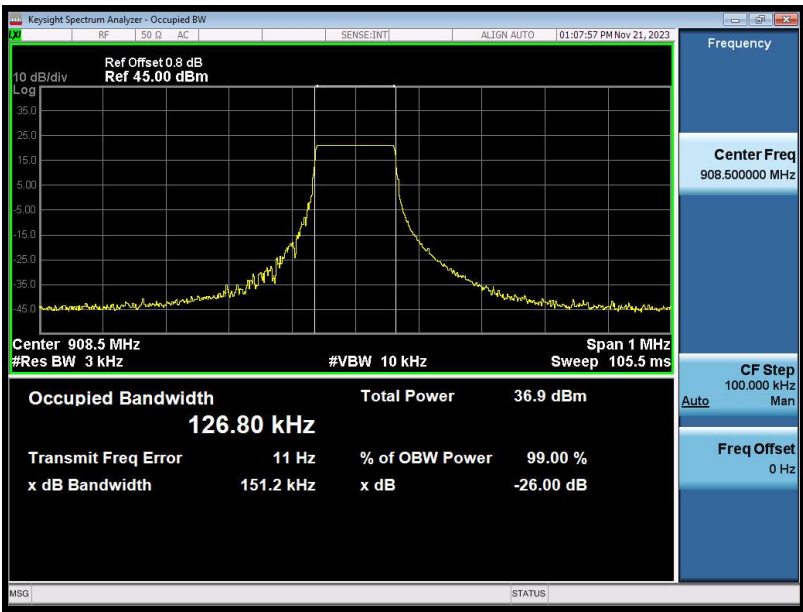
| Mode | CH. | Test Freq.<br>(MHz) | 99% Occupied Bandwidth<br>(kHz) | Limit                  | Result |
|------|-----|---------------------|---------------------------------|------------------------|--------|
| 1    | 00  | 902.3               | 126.89                          | Within frequency range | Pass   |
|      | 31  | 908.5               | 126.80                          | Within frequency range | Pass   |
|      | 63  | 914.9               | 126.75                          | Within frequency range | Pass   |
| 2    | 64  | 903.0               | 507.13                          | Within frequency range | Pass   |
|      | 67  | 907.8               | 504.72                          | Within frequency range | Pass   |
|      | 71  | 914.2               | 505.75                          | Within frequency range | Pass   |
| 3    | 64  | 903.0               | 0.813                           | Within frequency range | Pass   |
|      | 67  | 907.8               | 0.704                           | Within frequency range | Pass   |
|      | 71  | 914.2               | 0.542                           | Within frequency range | Pass   |
| 4    | 00  | 2402                | 606.48                          | Within frequency range | Pass   |
|      | 39  | 2441                | 596.89                          | Within frequency range | Pass   |
|      | 78  | 2480                | 568.74                          | Within frequency range | Pass   |
| 5    | 00  | 2403                | 857.18                          | Within frequency range | Pass   |
|      | 39  | 2442                | 847.87                          | Within frequency range | Pass   |
|      | 76  | 2479                | 853.54                          | Within frequency range | Pass   |
| 6    | 01  | 902.5               | 505.02                          | Within frequency range | Pass   |
|      | 16  | 914.5               | 504.10                          | Within frequency range | Pass   |
|      | 31  | 926.5               | 503.60                          | Within frequency range | Pass   |
| 7    | 01  | 902.2               | 99.636                          | Within frequency range | Pass   |
|      | 65  | 915                 | 101.590                         | Within frequency range | Pass   |
|      | 129 | 927.8               | 100.700                         | Within frequency range | Pass   |

## 99% Occupied Bandwidth

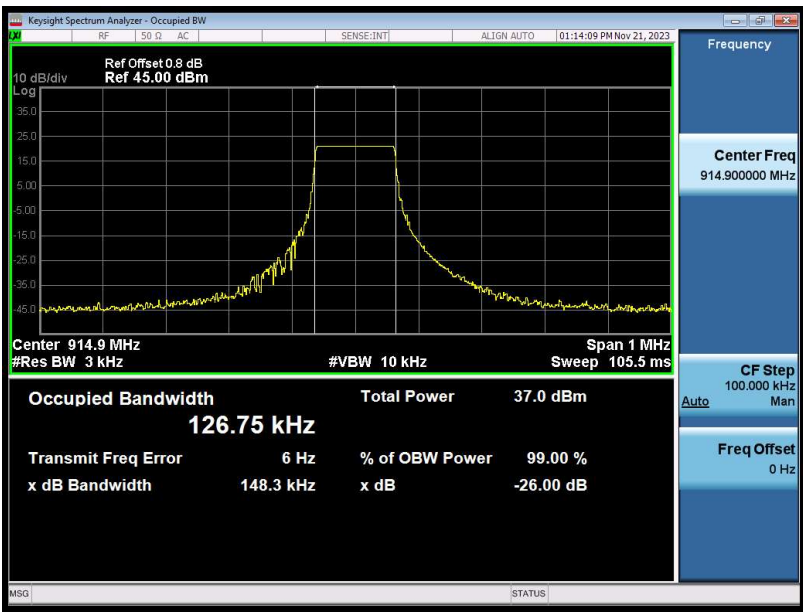
## Mode 1 CH00 (902.3MHz)



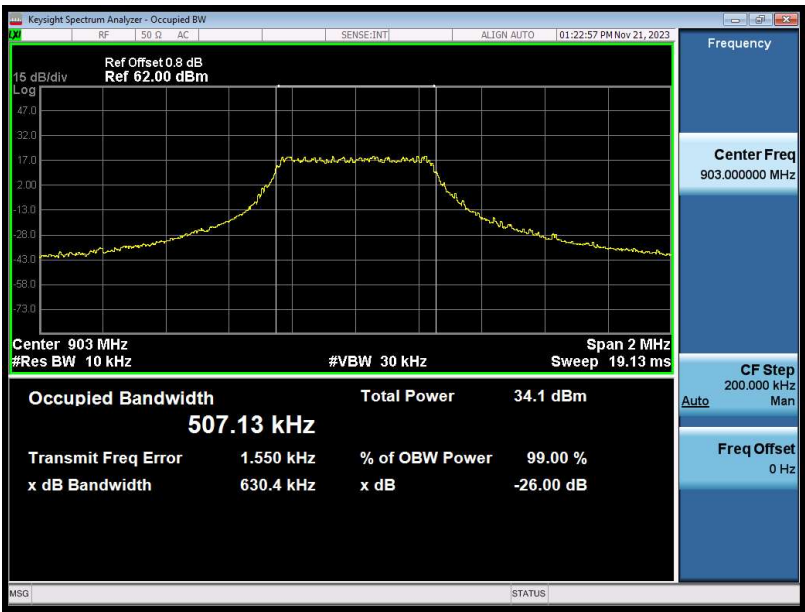
Mode 1 CH31 (908.5MHz)



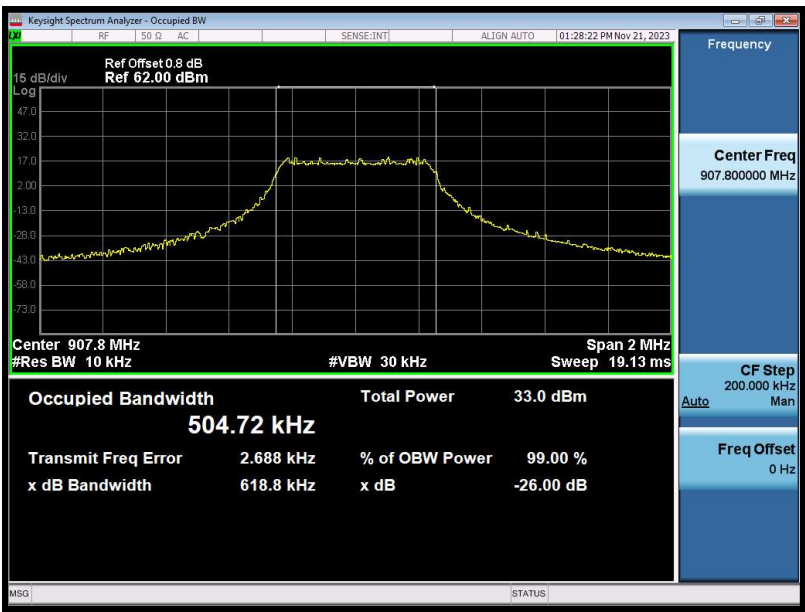
Mode 1 CH63 (914.9MHz)



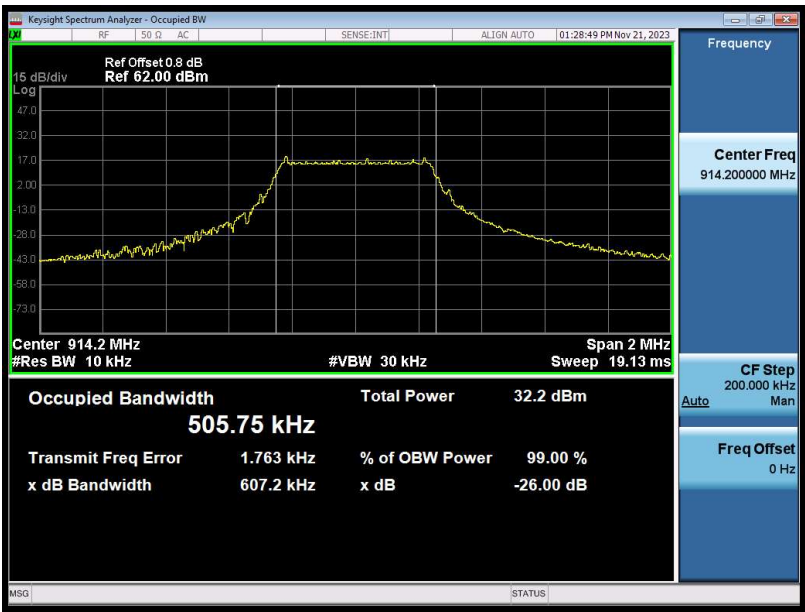
**Mode 2 CH64 (903.0MHz)**



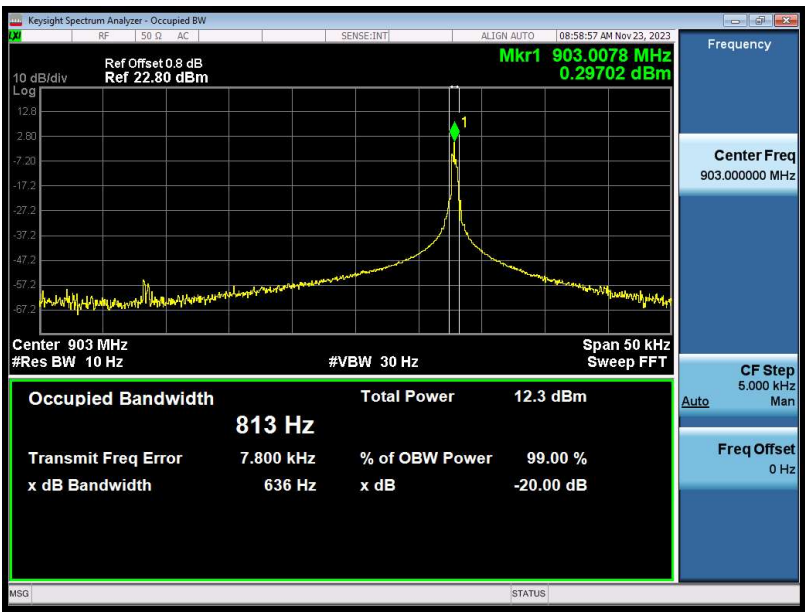
**Mode 2 CH67 (907.8MHz)**

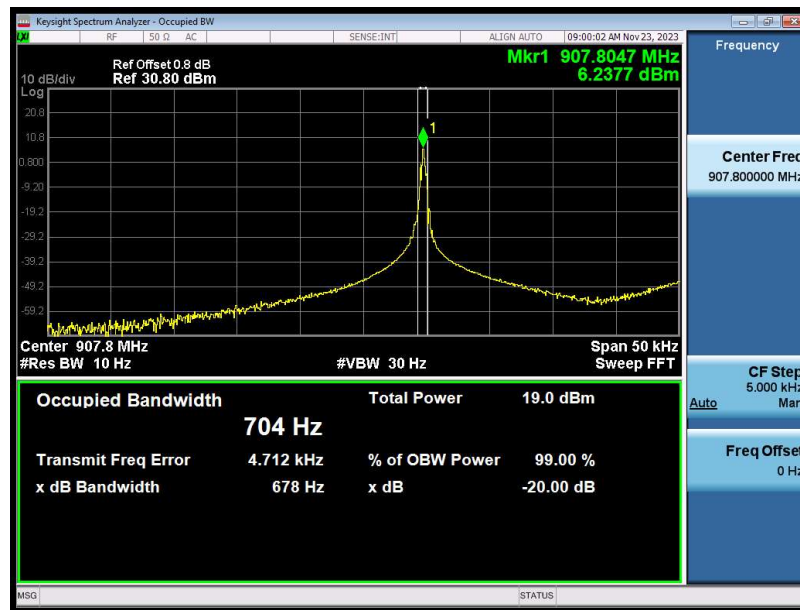
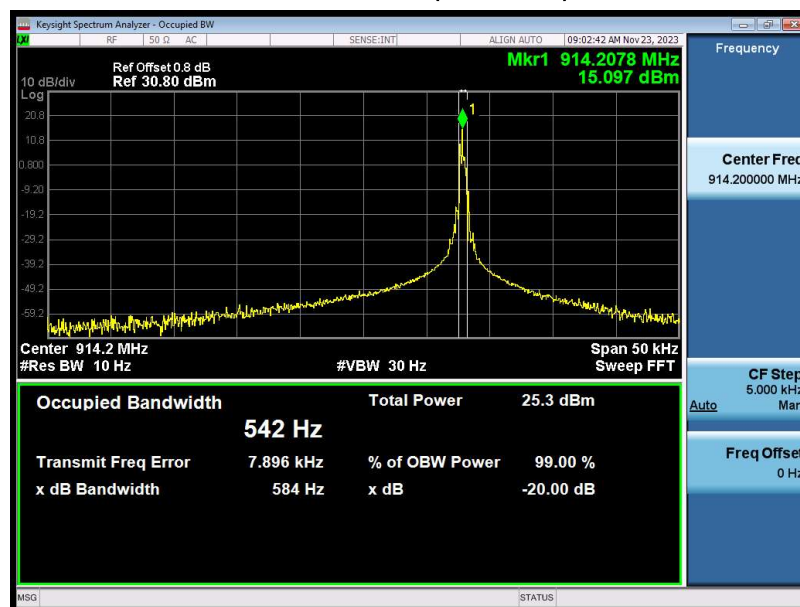


**Mode 2 CH71 (914.2MHz)**



**Mode 3 CH64 (903.0MHz)**



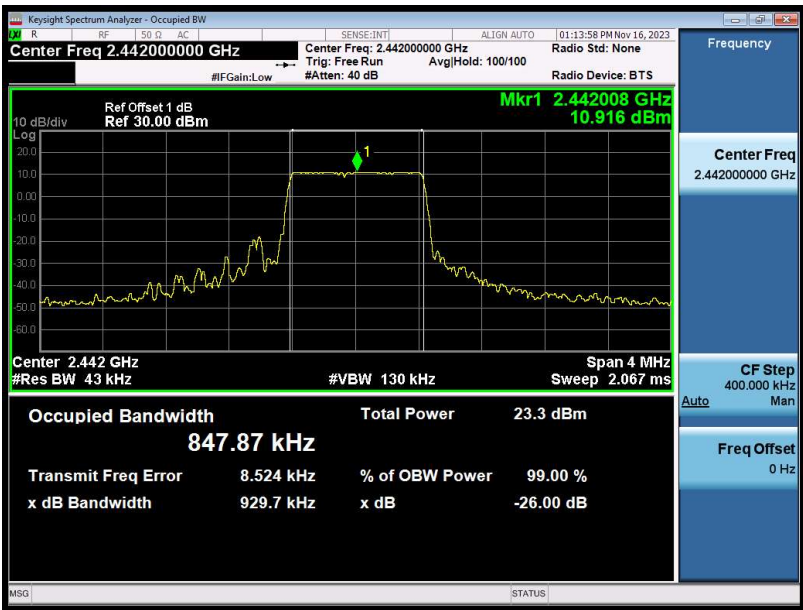
**Mode 3 CH67 (907.8MHz)****Mode 3 CH67 (914.2MHz)**

**Mode 4 CH00 (2402MHz)****Mode 4 CH39 (2441MHz)**

**Mode 4 CH78 (2480MHz)****Mode 5 CH00 (2403MHz)**



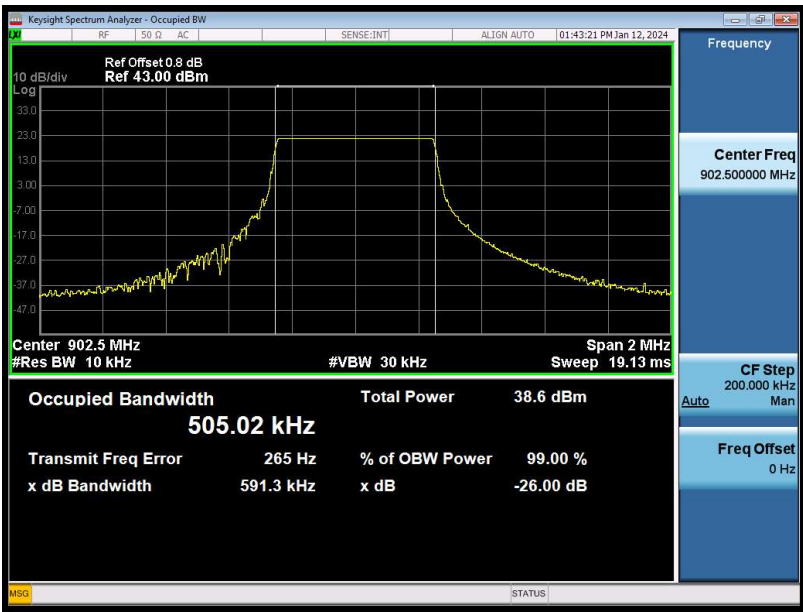
Mode 5 CH39 (2442MHz)



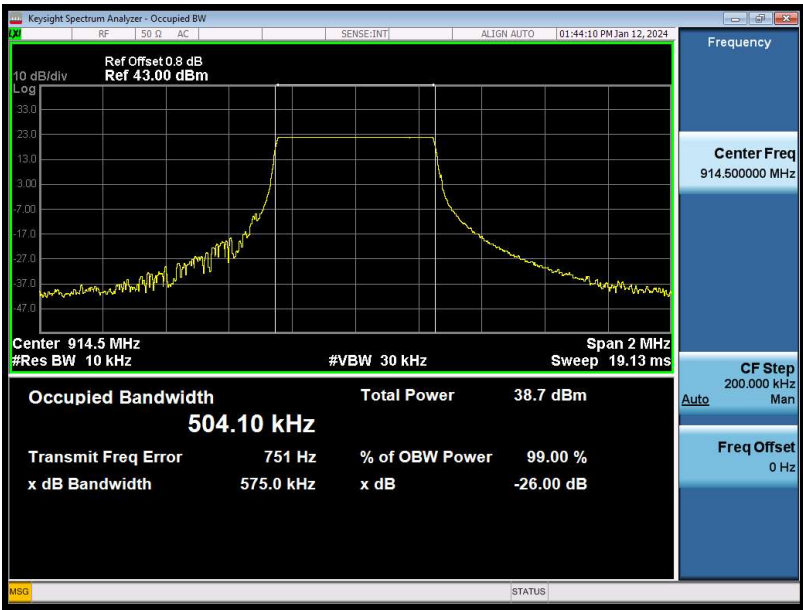
Mode 5 CH76 (2479MHz)



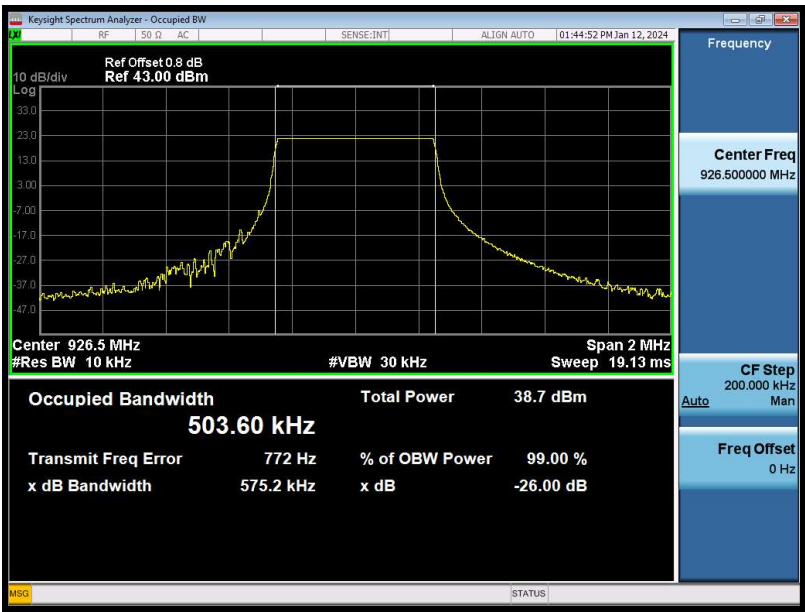
Mode 6 CH01 (902.5MHz)



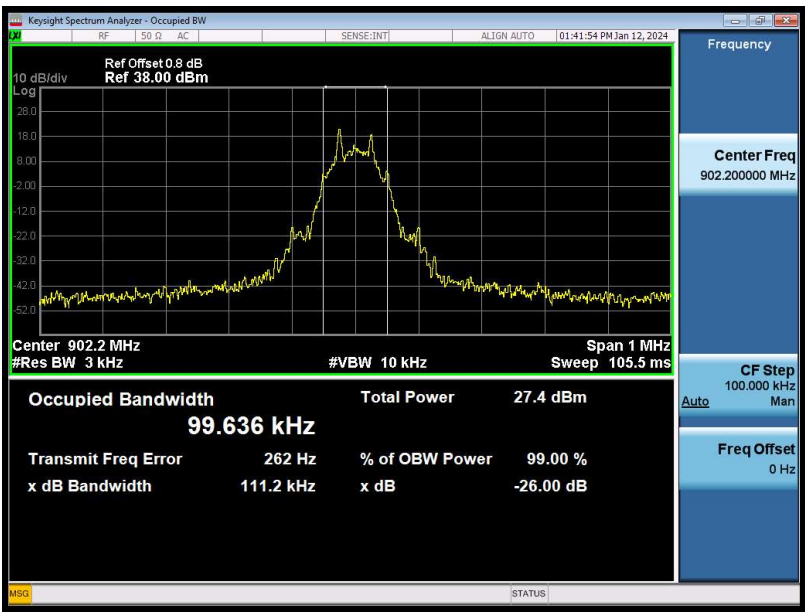
Mode 6 CH16 (914.5MHz)



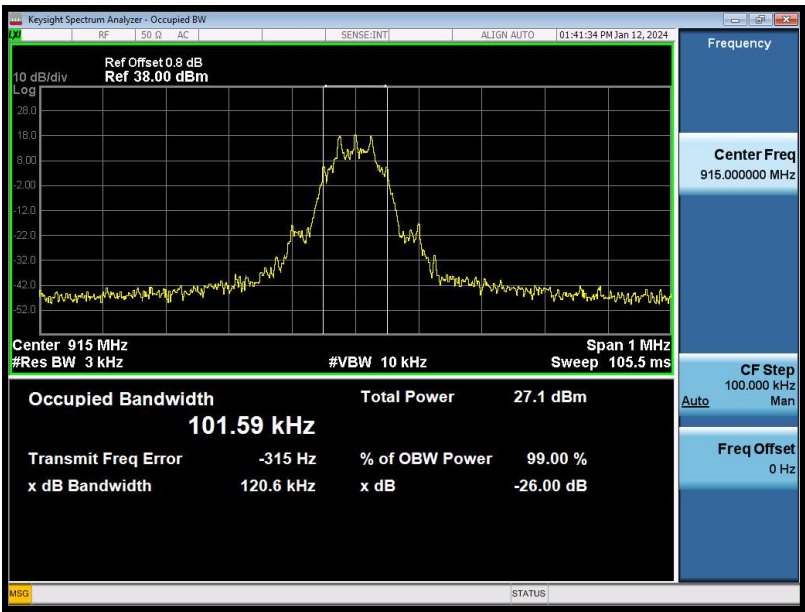
**Mode 6 CH31 (926.5MHz)**



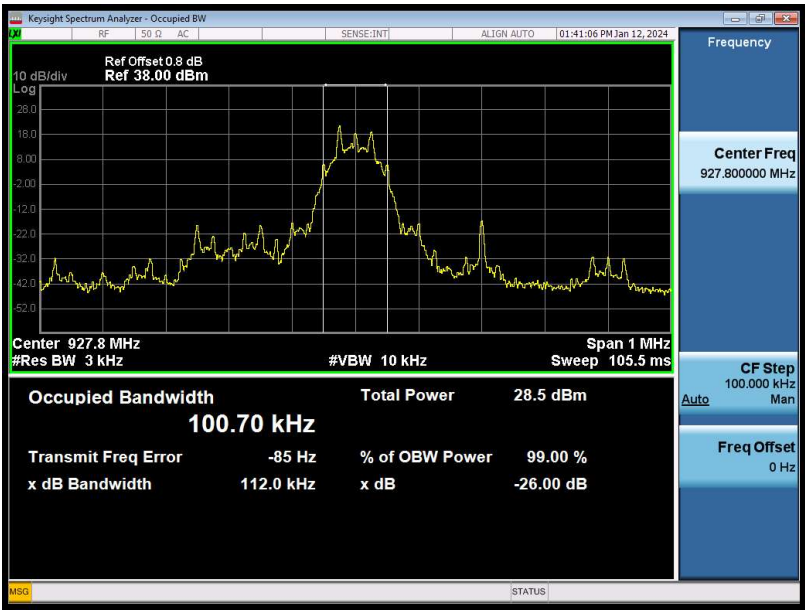
**Mode 7 CH01 (902.2MHz)**



Mode 7 CH65 (915MHz)

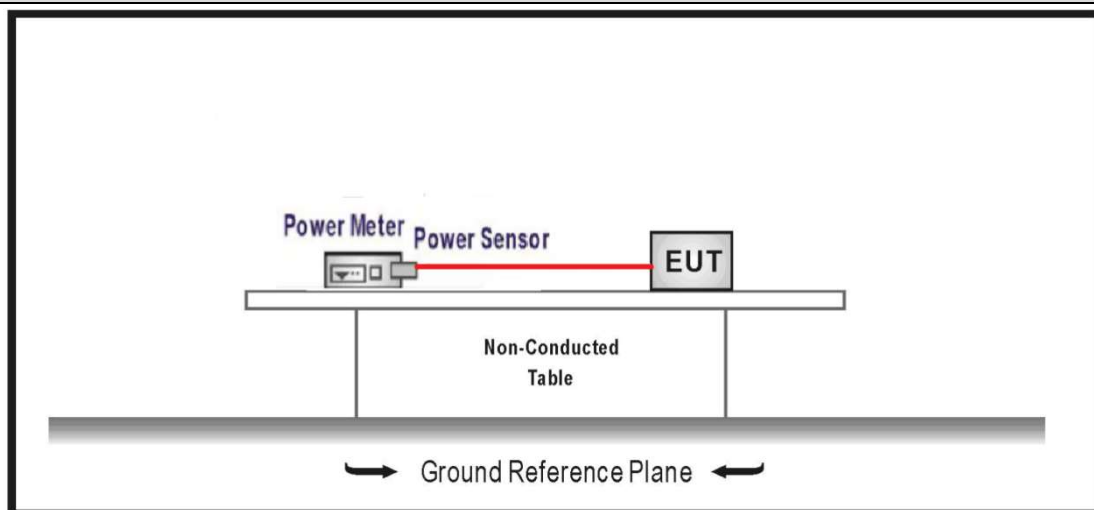


Mode 7 CH129 (927.8MHz)



**4.6 Fundamental emission output power****VERDICT: PASS****4.6.1 Limit**

| Standard                                                |                                                                                                                                                                                                                                   | FCC Part 15 Subpart C Paragraph 15.247 (b)(3)           |                         |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------|
| <input checked="" type="checkbox"/>                     | GTX <6dBi                                                                                                                                                                                                                         |                                                         | Pout≤30dBm              |
| <input type="checkbox"/>                                | GTX >6dBi                                                                                                                                                                                                                         |                                                         |                         |
|                                                         | <input type="checkbox"/>                                                                                                                                                                                                          | Non-Fix point-point                                     | Pout≤30-( GTX -6)       |
|                                                         | <input type="checkbox"/>                                                                                                                                                                                                          | Fix point-point                                         | Pout≤30-[(GTX-6)]/3     |
|                                                         | <input type="checkbox"/>                                                                                                                                                                                                          | Point-to-multipoint                                     | Pout≤30-(GTX-6)         |
|                                                         | <input type="checkbox"/>                                                                                                                                                                                                          | Overlap Beams                                           | Pout≤30-[(GTX-6)]/3     |
|                                                         | <input type="checkbox"/>                                                                                                                                                                                                          | Aggregate power transmitted simultaneously on all beams | Pout≤30-[(GTX-6)]/3     |
|                                                         | <input type="checkbox"/>                                                                                                                                                                                                          | single directional beam                                 | Pout≤30-[(GTX-6)]/3+8dB |
| <input checked="" type="checkbox"/>                     | For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels |                                                         |                         |
| Note 1 : GTX directional gain of transmitting antennas. |                                                                                                                                                                                                                                   |                                                         |                         |
| Note 2 : Pout is maximum peak conducted output power .  |                                                                                                                                                                                                                                   |                                                         |                         |

**4.6.2 Test Setup**

| 4.6.3 Test Procedure                |                                     |                                     |                                     |             |                                                                                  |                                            |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------|----------------------------------------------------------------------------------|--------------------------------------------|
|                                     | References Rule                     |                                     |                                     | Chapter     | Description                                                                      |                                            |
| <input checked="" type="checkbox"/> | ANSI C63.10                         |                                     |                                     | 11.9        | Fundamental emission output power                                                |                                            |
|                                     | <input type="checkbox"/>            | ANSI C63.10                         |                                     | 11.9.1      | Maximum peak conducted output power                                              |                                            |
|                                     |                                     | <input type="checkbox"/>            | ANSI C63.10                         | 11.9.1.1    | RBW ≥ DTS bandwidth                                                              |                                            |
|                                     |                                     | <input type="checkbox"/>            | ANSI C63.10                         | 11.9.1.2    | Integrated band power method                                                     |                                            |
|                                     |                                     | <input type="checkbox"/>            | ANSI C63.10                         | 11.9.1.3    | PKPM1 Peak power meter method                                                    |                                            |
|                                     | <input checked="" type="checkbox"/> | ANSI C63.10                         |                                     | 11.9.2      | Maximum conducted (average) output power                                         |                                            |
|                                     |                                     | <input checked="" type="checkbox"/> | ANSI C63.10                         |             | 11.9.2.2                                                                         | Measurement using a spectrum analyzer (SA) |
|                                     |                                     |                                     | <input type="checkbox"/>            | ANSI C63.10 | 11.9.2.2.2                                                                       | Method AVGSA-1(Duty cycle≥98%)             |
|                                     |                                     |                                     | <input type="checkbox"/>            | ANSI C63.10 | 11.9.2.2.3                                                                       | Method AVGSA-1A(Duty cycle≥98%)            |
|                                     |                                     |                                     | <input checked="" type="checkbox"/> | ANSI C63.10 | 11.9.2.2.4                                                                       | Method AVGSA-2(Duty cycle≤98%)             |
|                                     |                                     |                                     | <input type="checkbox"/>            | ANSI C63.10 | 11.9.2.2.5                                                                       | Method AVGSA-2A(Duty cycle≤98%)            |
|                                     |                                     |                                     | <input type="checkbox"/>            | ANSI C63.10 | 11.9.2.2.4                                                                       | Method AVGSA-3                             |
|                                     |                                     |                                     | <input type="checkbox"/>            | ANSI C63.10 | 11.9.2.2.5                                                                       | Method AVGSA-3A                            |
|                                     |                                     | <input checked="" type="checkbox"/> | ANSI C63.10                         |             | 11.9.2.3                                                                         | Measurement using a power meter (PM)       |
|                                     |                                     |                                     | <input checked="" type="checkbox"/> | ANSI C63.10 | 11.9.2.3.1                                                                       | Method AVGPM                               |
|                                     | <input type="checkbox"/>            |                                     | ANSI C63.10                         | 11.9.2.3.2  | Method AVGPM-G                                                                   |                                            |
| <input checked="" type="checkbox"/> | ANSI C63.10                         |                                     |                                     | 7.8.5       | Output power test procedure for frequency-hopping spread-spectrum (FHSS) devices |                                            |

**4.6.4 Test Data**

| Mode | Channel | Test Frequency (MHz) | Output Power (dBm) | E.I.R.P (dBm) | Conducted Limit (dBm) | E.I.R.P Limit (dBm) | Result |
|------|---------|----------------------|--------------------|---------------|-----------------------|---------------------|--------|
| 1    | 00      | 902.3                | 21.37              | 23.37         | 30.00                 | 36.00               | Pass   |
|      | 31      | 908.5                | 21.39              | 23.39         | 30.00                 | 36.00               | Pass   |
|      | 63      | 914.9                | 21.43              | 23.43         | 30.00                 | 36.00               | Pass   |
| 2    | 64      | 903.0                | 21.38              | 23.38         | 30.00                 | 36.00               | Pass   |
|      | 67      | 907.8                | 21.42              | 23.42         | 30.00                 | 36.00               | Pass   |
|      | 71      | 914.2                | 21.44              | 23.44         | 30.00                 | 36.00               | Pass   |
| 3    | 64      | 903.0                | 21.42              | 23.42         | 30.00                 | 36.00               | Pass   |
|      | 67      | 907.8                | 21.38              | 23.38         | 30.00                 | 36.00               | Pass   |
|      | 71      | 914.2                | 21.42              | 23.42         | 30.00                 | 36.00               | Pass   |
| 4    | 00      | 2402                 | 10.24              | 12.74         | 30.00                 | 36.00               | Pass   |
|      | 39      | 2441                 | 10.66              | 13.16         | 30.00                 | 36.00               | Pass   |
|      | 78      | 2480                 | 10.78              | 13.28         | 30.00                 | 36.00               | Pass   |
| 5    | 00      | 2403                 | 10.28              | 12.78         | 30.00                 | 36.00               | Pass   |
|      | 39      | 2442                 | 10.62              | 13.12         | 30.00                 | 36.00               | Pass   |
|      | 76      | 2479                 | 10.72              | 13.22         | 30.00                 | 36.00               | Pass   |
| 6    | 01      | 902.5                | 21.56              | 23.56         | 30.00                 | 36.00               | Pass   |
|      | 16      | 914.5                | 21.42              | 23.42         | 30.00                 | 36.00               | Pass   |
|      | 31      | 926.5                | 21.35              | 23.35         | 30.00                 | 36.00               | Pass   |
| 7    | 01      | 902.2                | 21.39              | 23.39         | 30.00                 | 36.00               | Pass   |
|      | 65      | 915                  | 21.43              | 23.43         | 30.00                 | 36.00               | Pass   |
|      | 129     | 927.8                | 21.35              | 23.35         | 30.00                 | 36.00               | Pass   |

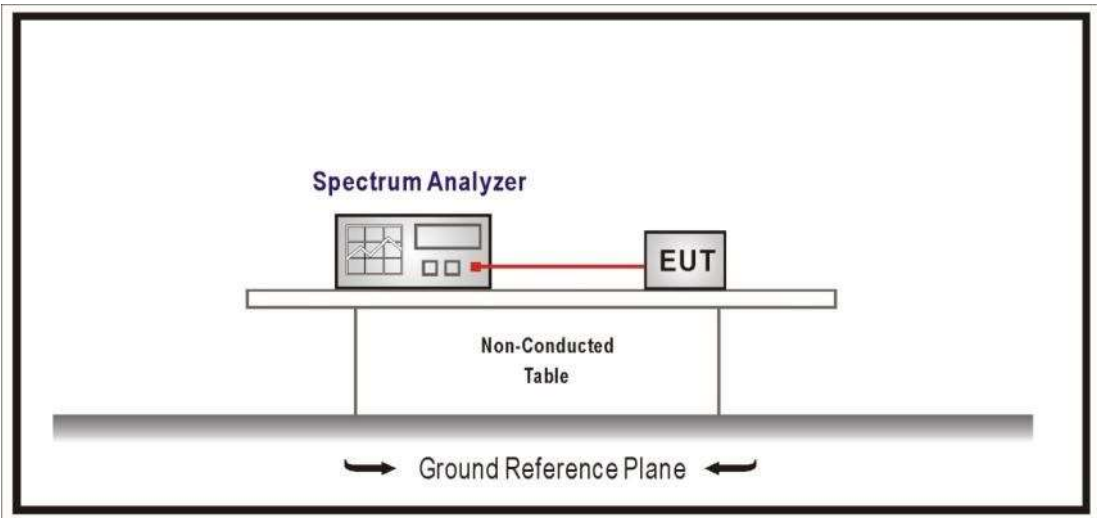
Note:

1. E.I.R.P.= Output Power + Antenna Gain
2. Please refer to clause 1.2 for antenna gain.



|                          |                      |
|--------------------------|----------------------|
| <b>4.7 Power Density</b> | <b>VERDICT: PASS</b> |
|--------------------------|----------------------|

|                                                       |                                            |
|-------------------------------------------------------|--------------------------------------------|
| <b>4.7.1 Limit:</b>                                   |                                            |
| <b>Standard</b>                                       | FCC Part 15 Subpart C Paragraph 15.247 (e) |
| Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$ |                                            |

|                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>4.7.2 Test Setup</b>                                                                                                                                                                                                                                                                                                                                                    |
|  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an EUT (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane, indicated by a horizontal line with arrows pointing outwards.</p> |

| <b>4.7.3 Test Procedure</b>         |                 |         |                                                                  |
|-------------------------------------|-----------------|---------|------------------------------------------------------------------|
|                                     | References Rule | Chapter | Description                                                      |
| <input checked="" type="checkbox"/> | ANSI C63.10     | 11.10   | Maximum power spectral density level in the fundamental emission |
| <input type="checkbox"/>            | ANSI C63.10     | 11.10.2 | Method PKPSD (peak PSD)                                          |
| <input type="checkbox"/>            | ANSI C63.10     | 11.10.3 | Method AVGPSD-1(Duty cycle $\geq 98\%$ )                         |
| <input type="checkbox"/>            | ANSI C63.10     | 11.10.4 | Method AVGPSD-1A(Duty cycle $\geq 98\%$ )                        |
| <input checked="" type="checkbox"/> | ANSI C63.10     | 11.10.5 | Method AVGPSD-2(Duty cycle $< 98\%$ )                            |
| <input type="checkbox"/>            | ANSI C63.10     | 11.10.6 | Method AVGPSD-2A(Duty cycle $< 98\%$ )                           |
| <input type="checkbox"/>            | ANSI C63.10     | 11.10.7 | Method AVGPSD-3                                                  |
| <input type="checkbox"/>            | ANSI C63.10     | 11.10.8 | Method AVGPSD-3A                                                 |

**4.7.4 Test Data**

| Mode | Channel | Test Frequency (MHz) | Reading level (dBm/3kHz) | Measurement PSD (dBm/3kHz) | Limit (dBm/3kHz) | Result |
|------|---------|----------------------|--------------------------|----------------------------|------------------|--------|
| 1    | 00      | 902.3                | 5.339                    | 5.519                      | $\leq 8$         | Pass   |
|      | 31      | 908.5                | 5.502                    | 5.682                      | $\leq 8$         | Pass   |
|      | 63      | 914.9                | 5.630                    | 5.810                      | $\leq 8$         | Pass   |
| 2    | 64      | 903.0                | -0.75                    | 1.14                       | $\leq 8$         | Pass   |
|      | 67      | 907.8                | -0.99                    | 0.9                        | $\leq 8$         | Pass   |
|      | 71      | 914.2                | -1.04                    | 0.85                       | $\leq 8$         | Pass   |
| 4    | 00      | 2402                 | -14.239                  | -3.159                     | $\leq 8$         | Pass   |
|      | 39      | 2441                 | -14.585                  | -3.505                     | $\leq 8$         | Pass   |
|      | 78      | 2480                 | -15.451                  | -4.371                     | $\leq 8$         | Pass   |
| 5    | 00      | 2403                 | -10.916                  | -10.916                    | $\leq 8$         | Pass   |
|      | 39      | 2442                 | -11.054                  | -11.054                    | $\leq 8$         | Pass   |
|      | 76      | 2479                 | -10.456                  | -10.456                    | $\leq 8$         | Pass   |
| 6    | 01      | 902.5                | 1.472                    | 1.832                      | $\leq 8$         | Pass   |
|      | 16      | 914.5                | 1.534                    | 1.894                      | $\leq 8$         | Pass   |
|      | 31      | 926.5                | 1.602                    | 1.962                      | $\leq 8$         | Pass   |

Note 1: Measurement PSD = Reading level + Duty factor