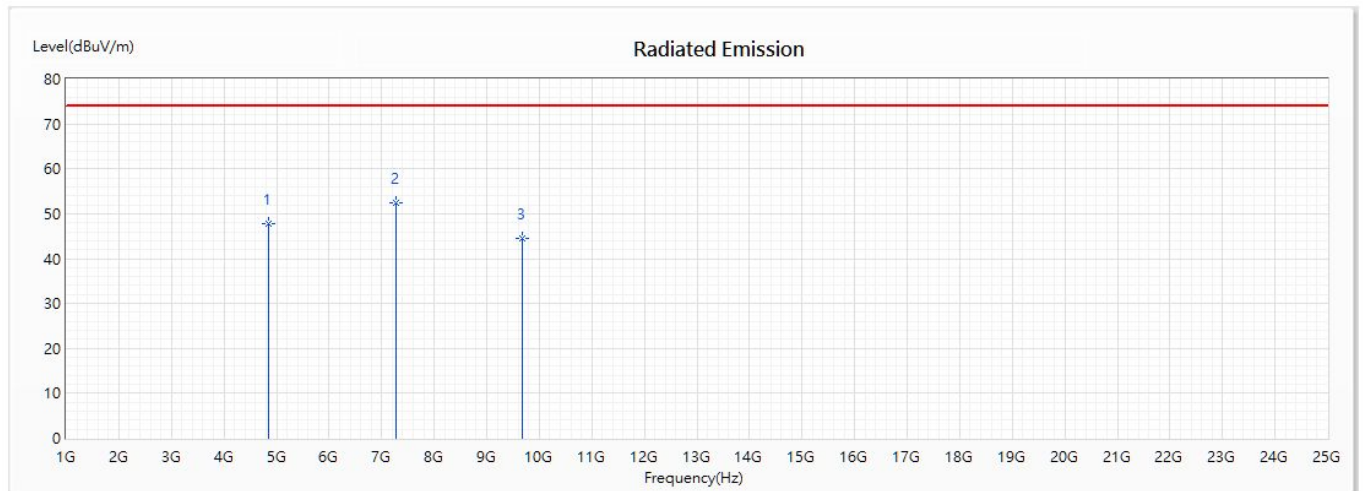


Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2422MHz)  
 Test Date : 2020/05/26

## HORIZONTAL



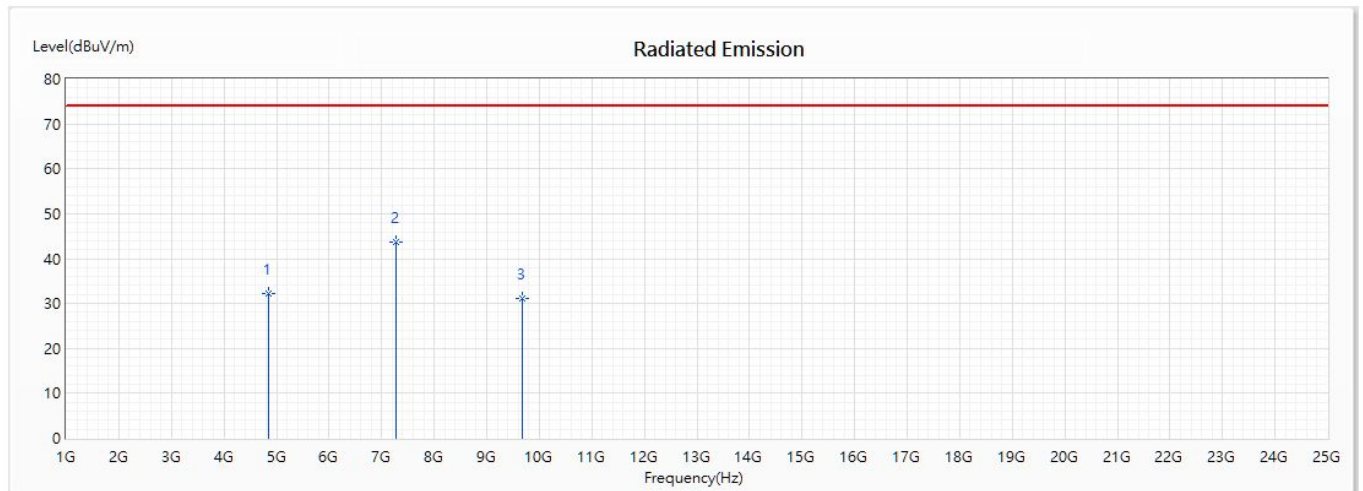
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 4844            | 47.73                   | 74.00          | -26.27      | 59.56                | -11.83                | PK            |
| * 2 | 7266            | 52.41                   | 74.00          | -21.59      | 65.44                | -13.03                | PK            |
| 3   | 9688            | 44.51                   | 74.00          | -29.49      | 57.29                | -12.78                | PK            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2422MHz)  
 Test Date : 2020/05/26

## VERTICAL



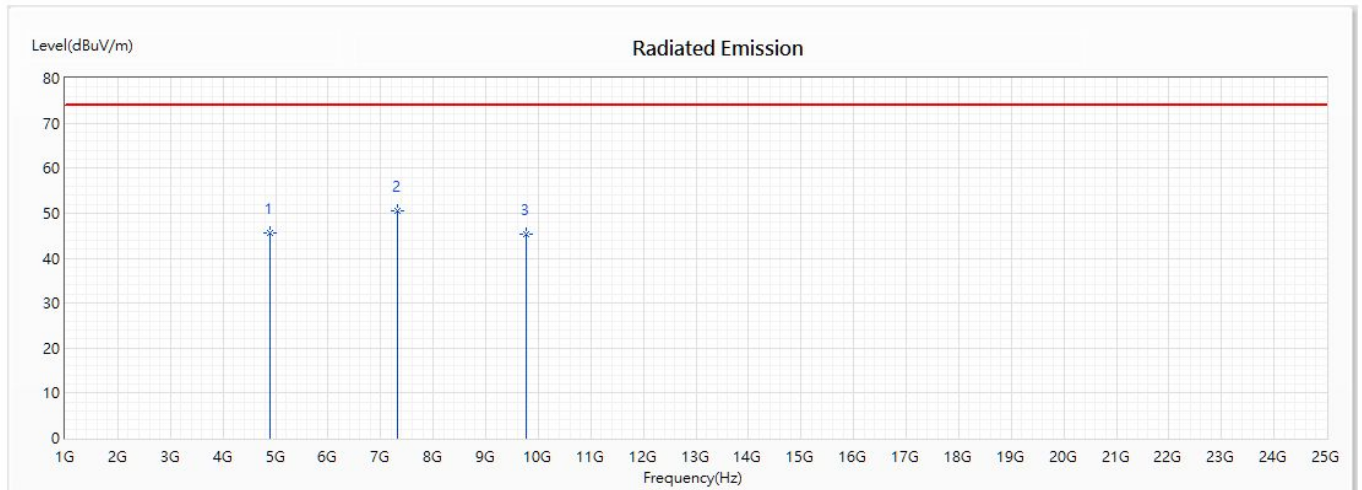
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 4844            | 32.32                   | 74.00          | -41.68      | 44.15                | -11.83                | PK            |
| * 2 | 7266            | 43.59                   | 74.00          | -30.41      | 56.62                | -13.03                | PK            |
| 3   | 9688            | 31.09                   | 74.00          | -42.91      | 43.87                | -12.78                | PK            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2442 MHz)  
 Test Date : 2020/05/26

## HORIZONTAL



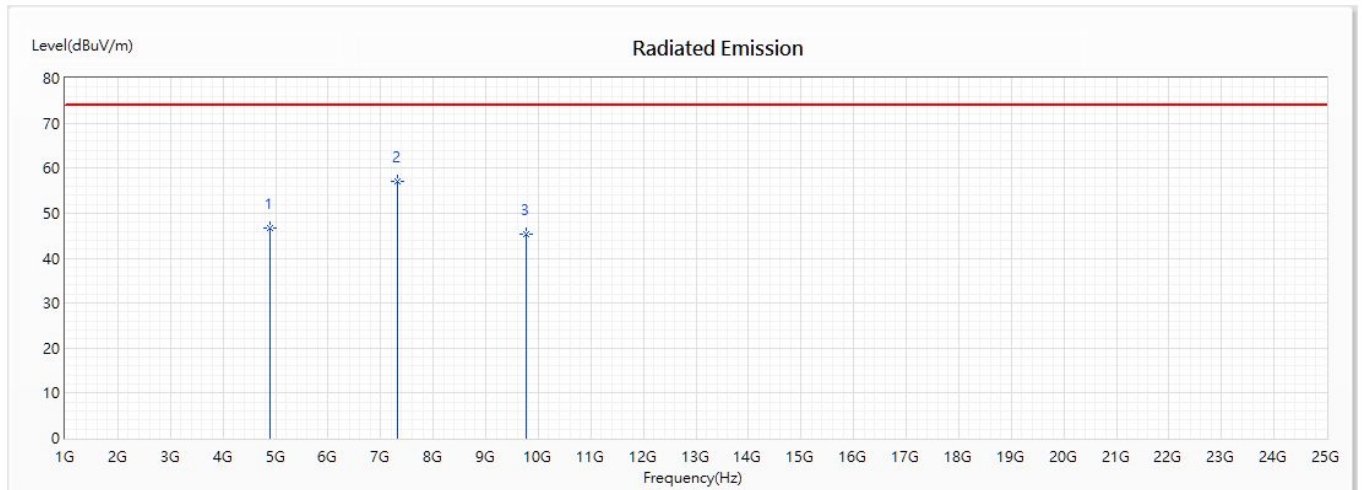
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 4884            | 45.53                   | 74.00          | -28.47      | 57.11                | -11.58                | PK            |
| * 2 | 7326            | 50.52                   | 74.00          | -23.48      | 64.12                | -13.60                | PK            |
| 3   | 9768            | 45.38                   | 74.00          | -28.62      | 57.95                | -12.57                | PK            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2442 MHz)  
 Test Date : 2020/05/26

## VERTICAL



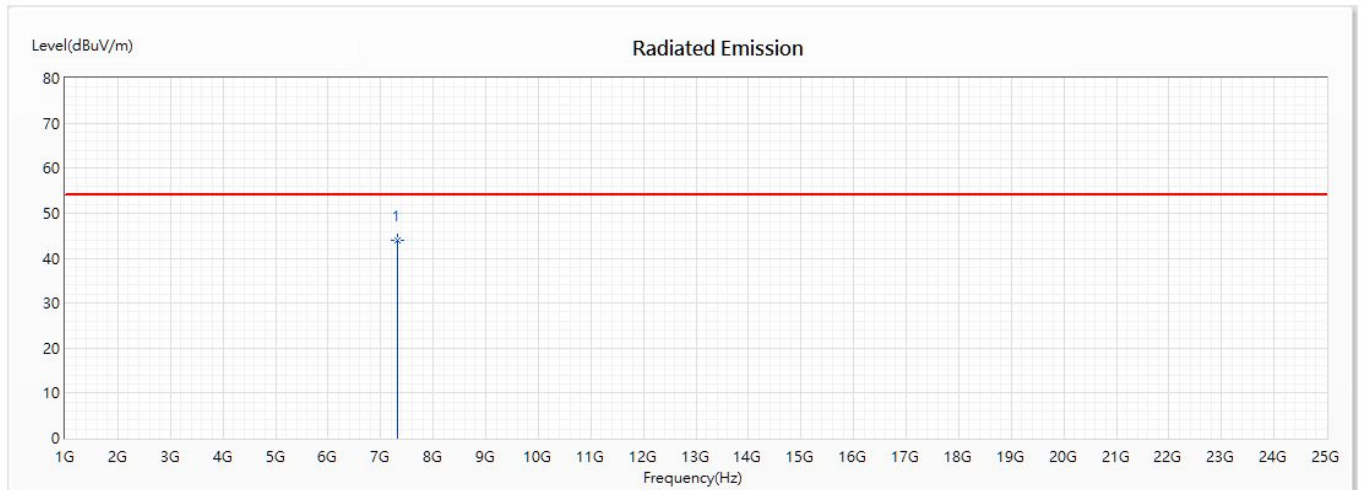
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 4884            | 46.66                   | 74.00          | -27.34      | 58.24                | -11.58                | PK            |
| * 2 | 7326            | 57.07                   | 74.00          | -16.93      | 70.67                | -13.60                | PK            |
| 3   | 9768            | 45.32                   | 74.00          | -28.68      | 57.89                | -12.57                | PK            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2442 MHz)  
 Test Date : 2020/05/26

## VERTICAL



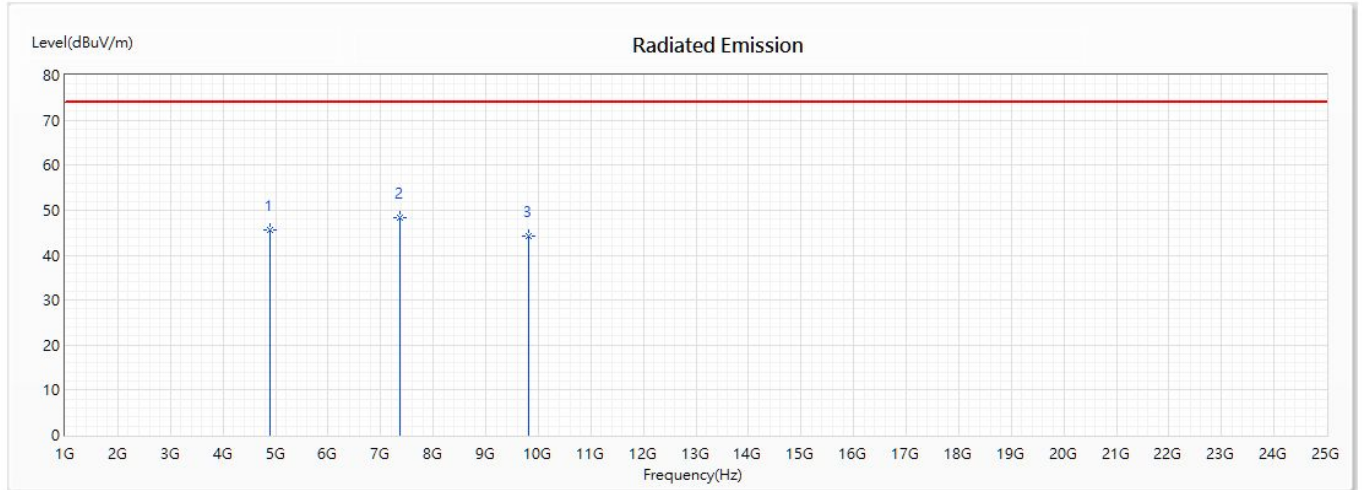
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 7326            | 44.05                   | 54.00          | -9.95       | 57.65                | -13.60                | AV            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2452 MHz)  
 Test Date : 2020/05/26

## HORIZONTAL



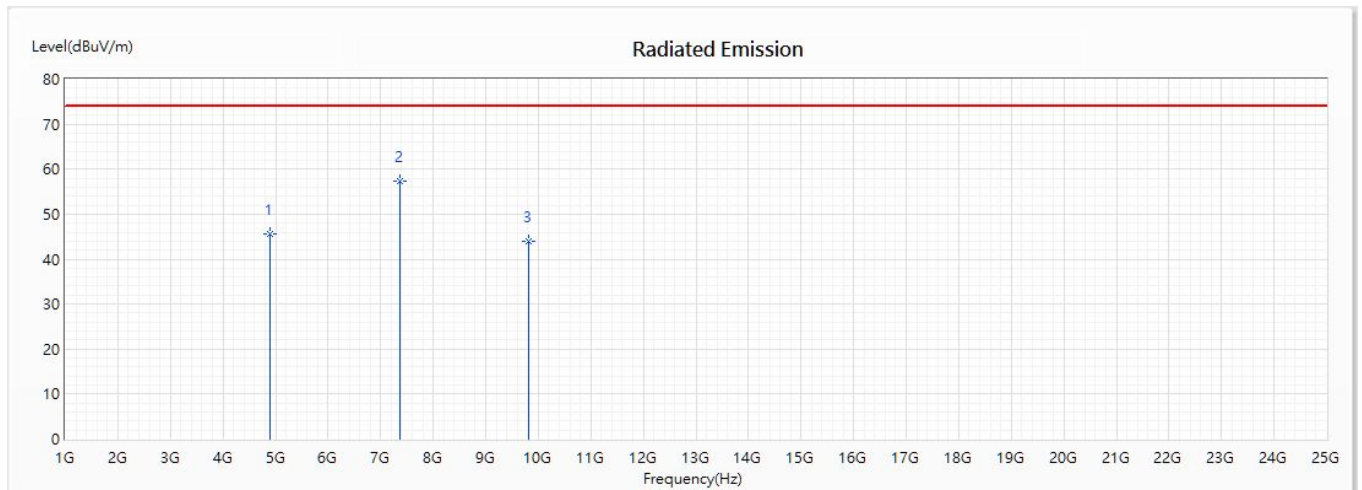
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 4904            | 45.73                   | 74.00          | -28.27      | 57.17                | -11.44                | PK            |
| * 2 | 7356            | 48.37                   | 74.00          | -25.63      | 62.21                | -13.84                | PK            |
| 3   | 9808            | 44.32                   | 74.00          | -29.68      | 57.32                | -13.00                | PK            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2452 MHz)  
 Test Date : 2020/05/26

## VERTICAL



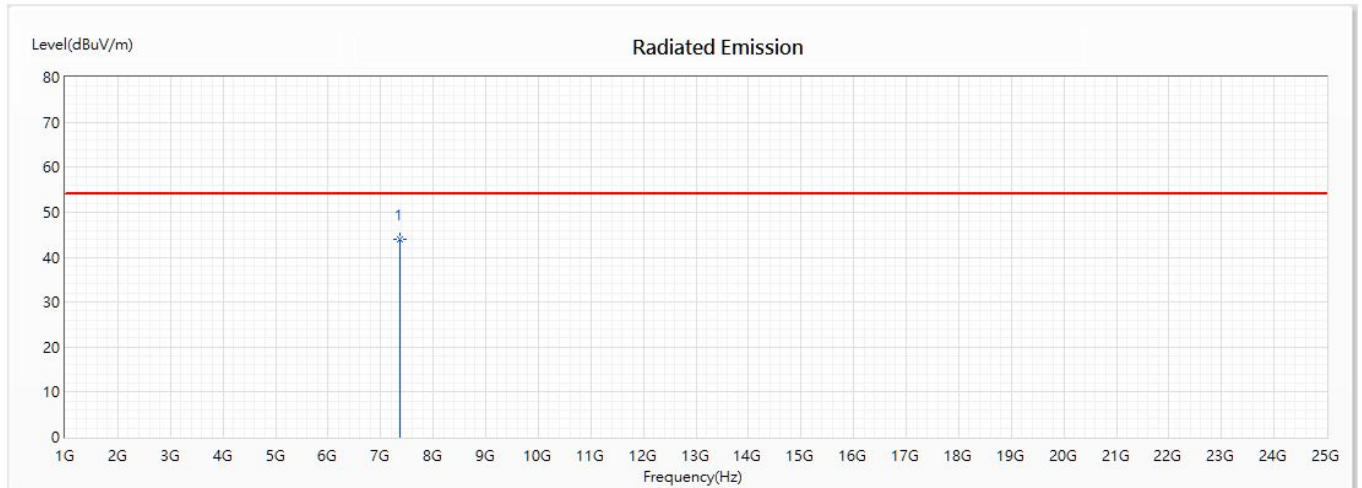
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 4904            | 45.53                   | 74.00          | -28.47      | 56.97                | -11.44                | PK            |
| * 2 | 7356            | 57.39                   | 74.00          | -16.61      | 71.23                | -13.84                | PK            |
| 3   | 9808            | 44.08                   | 74.00          | -29.92      | 57.08                | -13.00                | PK            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2452 MHz)  
 Test Date : 2020/05/26

## VERTICAL



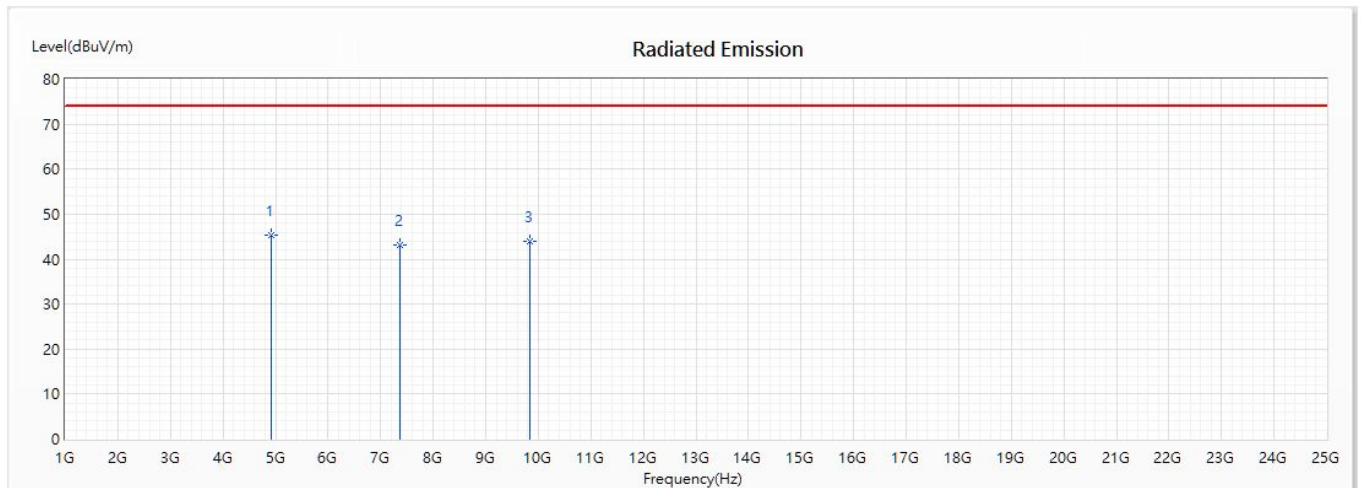
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 7356            | 44.05                   | 54.00          | -9.95       | 57.89                | -13.84                | AV            |

## Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2457 MHz)  
 Test Date : 2020/05/26

## HORIZONTAL



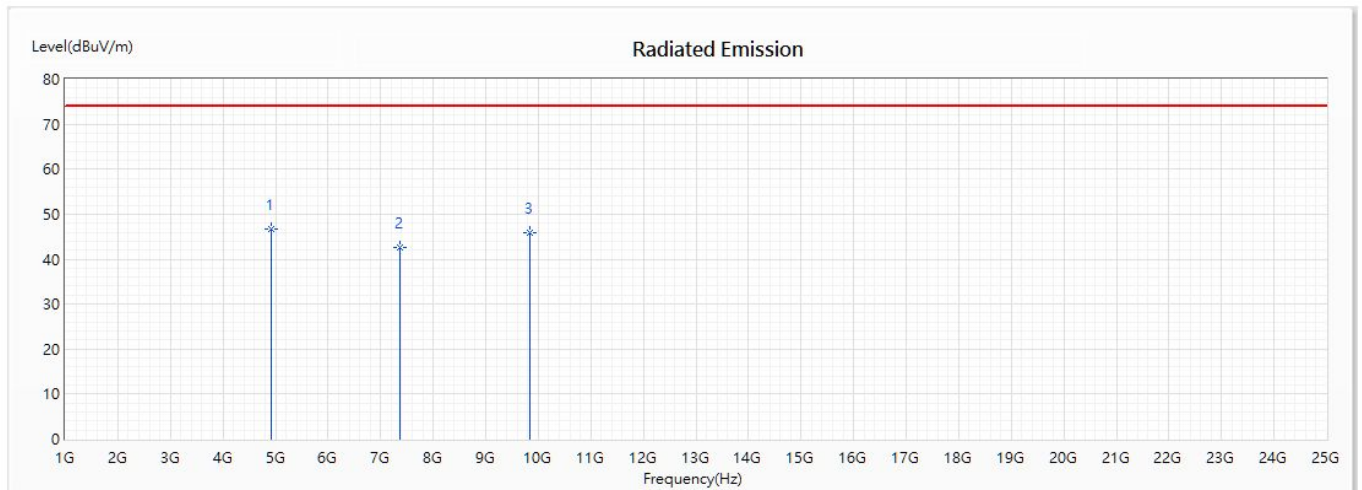
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 4914            | 45.26                   | 74.00          | -28.74      | 56.60                | -11.34                | PK            |
| 2   | 7371            | 43.11                   | 74.00          | -30.89      | 57.09                | -13.98                | PK            |
| 3   | 9828            | 43.95                   | 74.00          | -30.05      | 57.18                | -13.23                | PK            |

## Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2457 MHz)  
 Test Date : 2020/05/26

## VERTICAL



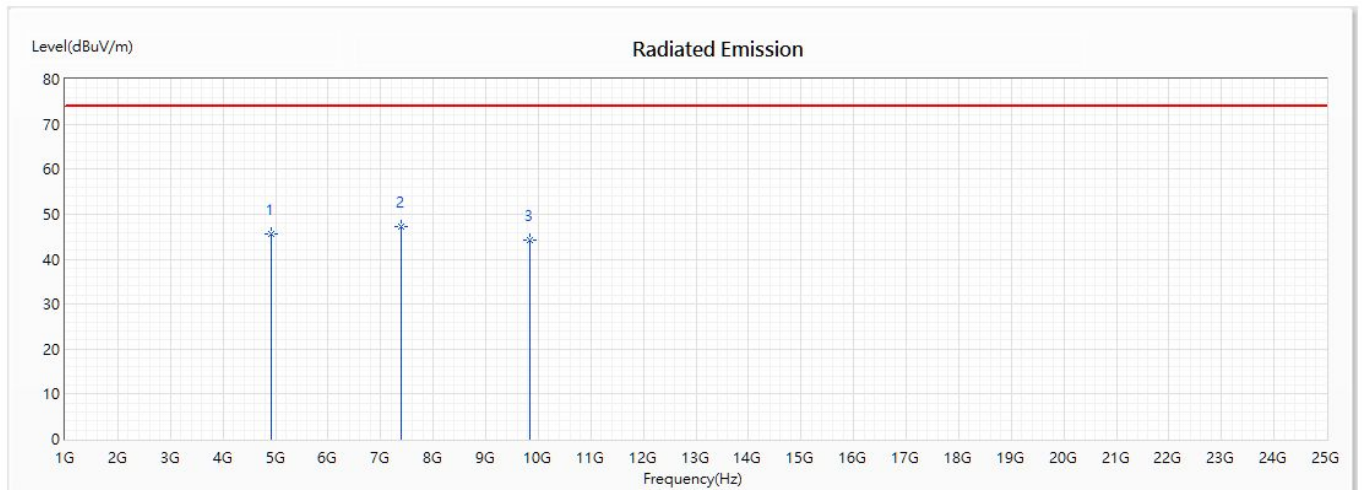
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 4914            | 46.56                   | 74.00          | -27.44      | 57.90                | -11.34                | PK            |
| 2   | 7371            | 42.47                   | 74.00          | -31.53      | 56.45                | -13.98                | PK            |
| 3   | 9828            | 45.78                   | 74.00          | -28.22      | 59.01                | -13.23                | PK            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2462 MHz)  
 Test Date : 2020/05/26

## HORIZONTAL



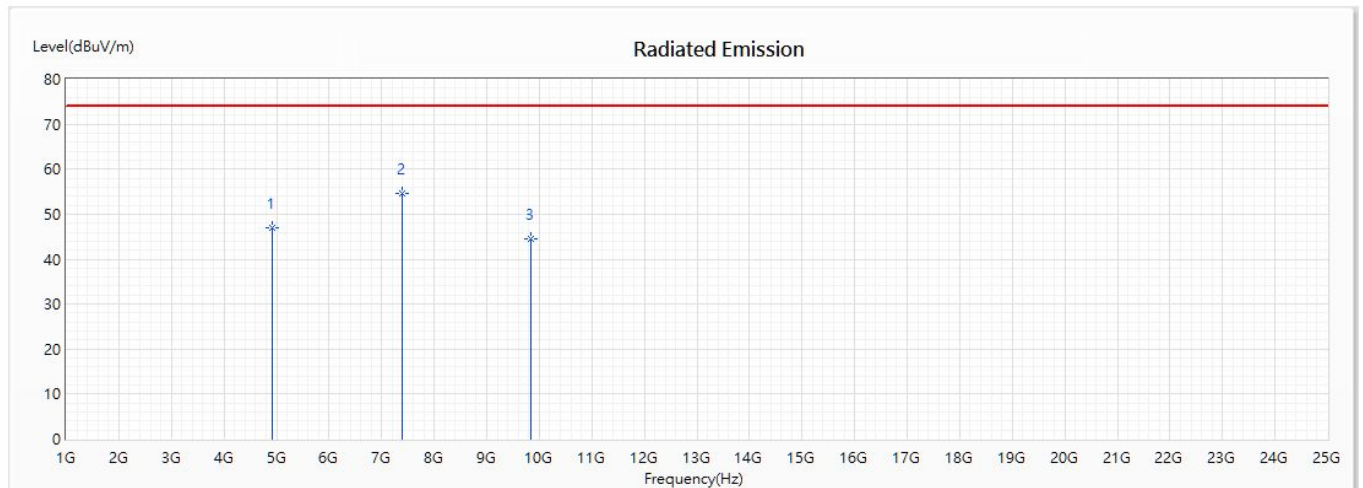
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 4924            | 45.65                   | 74.00          | -28.35      | 56.89                | -11.24                | PK            |
| * 2 | 7386            | 47.27                   | 74.00          | -26.73      | 61.37                | -14.10                | PK            |
| 3   | 9848            | 44.18                   | 74.00          | -29.82      | 57.62                | -13.44                | PK            |

## Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2462 MHz)  
 Test Date : 2020/05/26

## VERTICAL



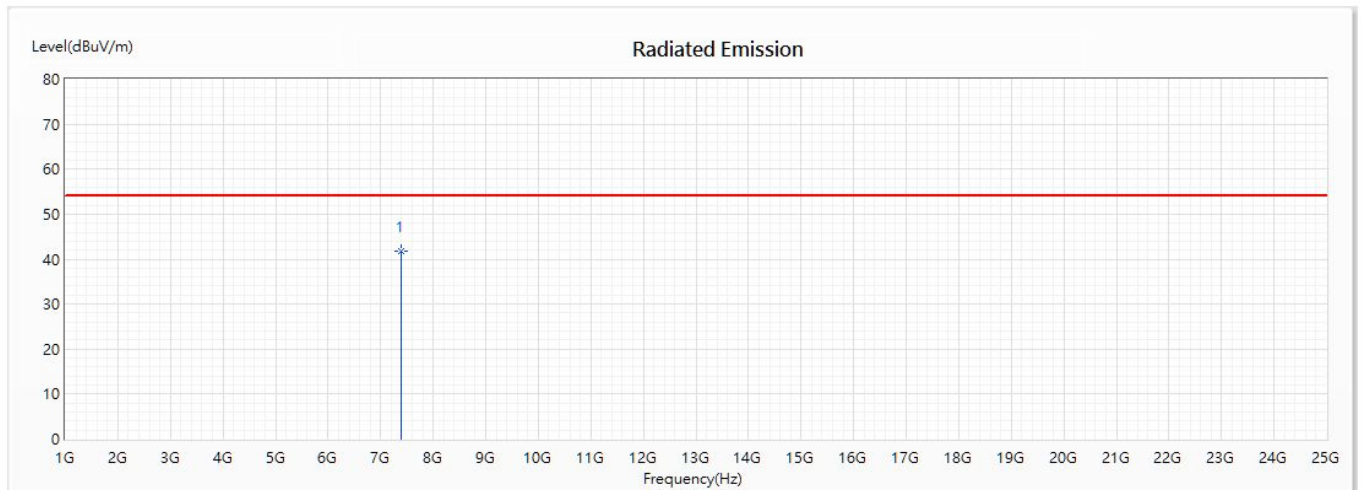
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 4924            | 47.05                   | 74.00          | -26.95      | 58.29                | -11.24                | PK            |
| * 2 | 7386            | 54.66                   | 74.00          | -19.34      | 68.76                | -14.10                | PK            |
| 3   | 9848            | 44.42                   | 74.00          | -29.58      | 57.86                | -13.44                | PK            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : Harmonic Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2462 MHz)  
 Test Date : 2020/05/26

## VERTICAL



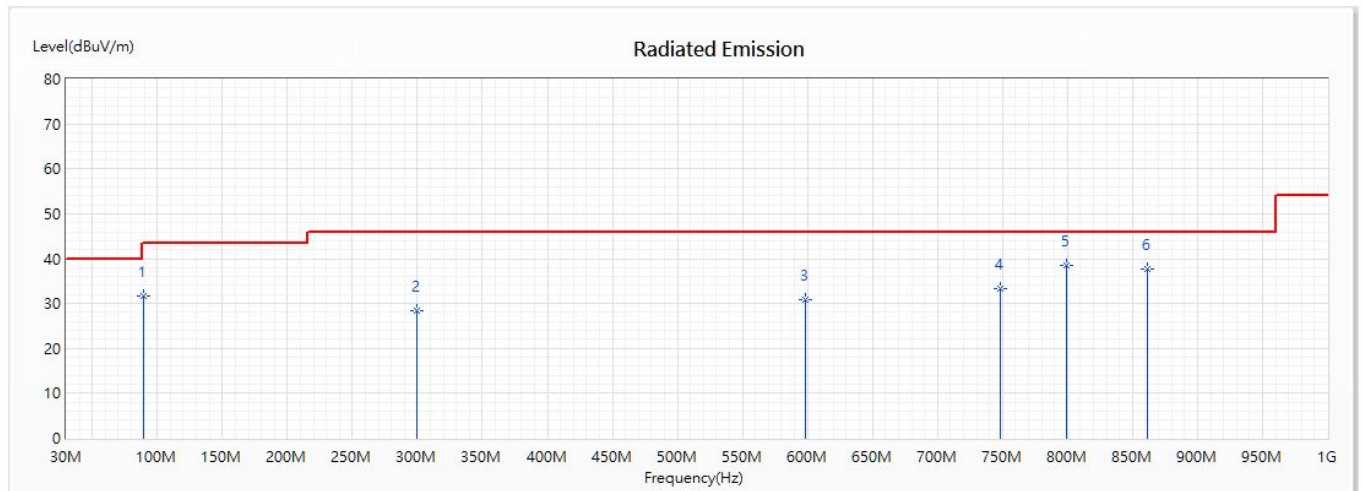
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 7386            | 41.81                   | 54.00          | -12.19      | 55.91                | -14.10                | AV            |

## Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 7 SISO B: Transmit (802.11b\_1Mbps) (2442 MHz)  
 Test Date : 2020/05/12

## HORIZONTAL



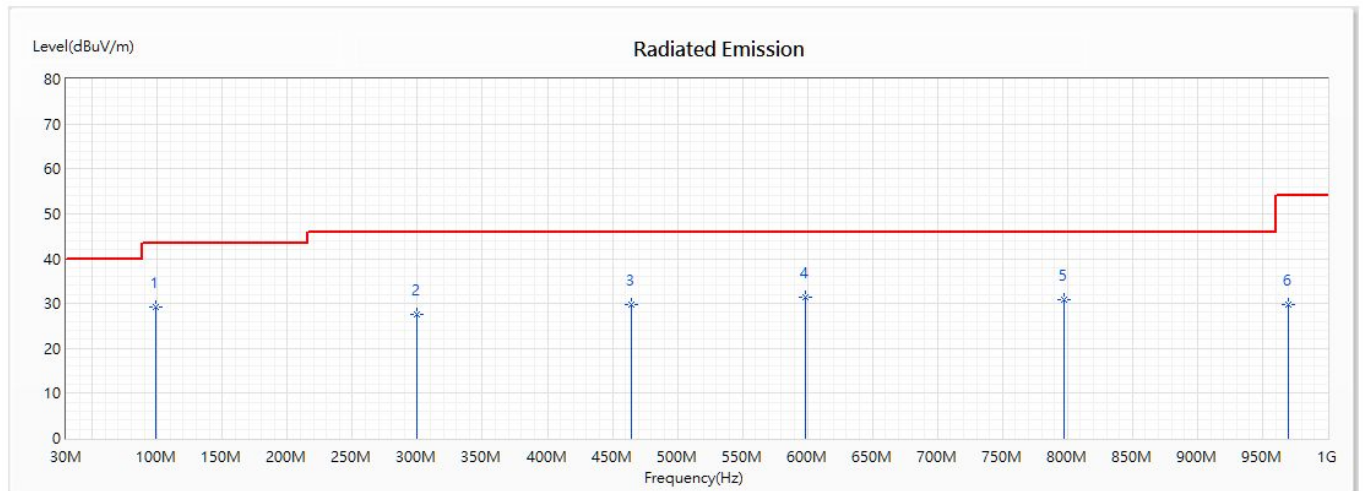
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 89.17           | 31.68                   | 43.50          | -11.82      | 41.08                | -9.40                 | QP            |
| 2   | 299.66          | 28.51                   | 46.00          | -17.49      | 36.79                | -8.28                 | QP            |
| 3   | 598.42          | 30.74                   | 46.00          | -15.26      | 30.96                | -0.22                 | QP            |
| 4   | 748.77          | 33.42                   | 46.00          | -12.58      | 33.73                | -0.31                 | QP            |
| * 5 | 799.21          | 38.60                   | 46.00          | -7.40       | 41.29                | -2.69                 | QP            |
| 6   | 861.29          | 37.60                   | 46.00          | -8.40       | 39.71                | -2.11                 | QP            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 7 SISO B: Transmit (802.11b\_1Mbps) (2442 MHz)  
 Test Date : 2020/05/12

## VERTICAL



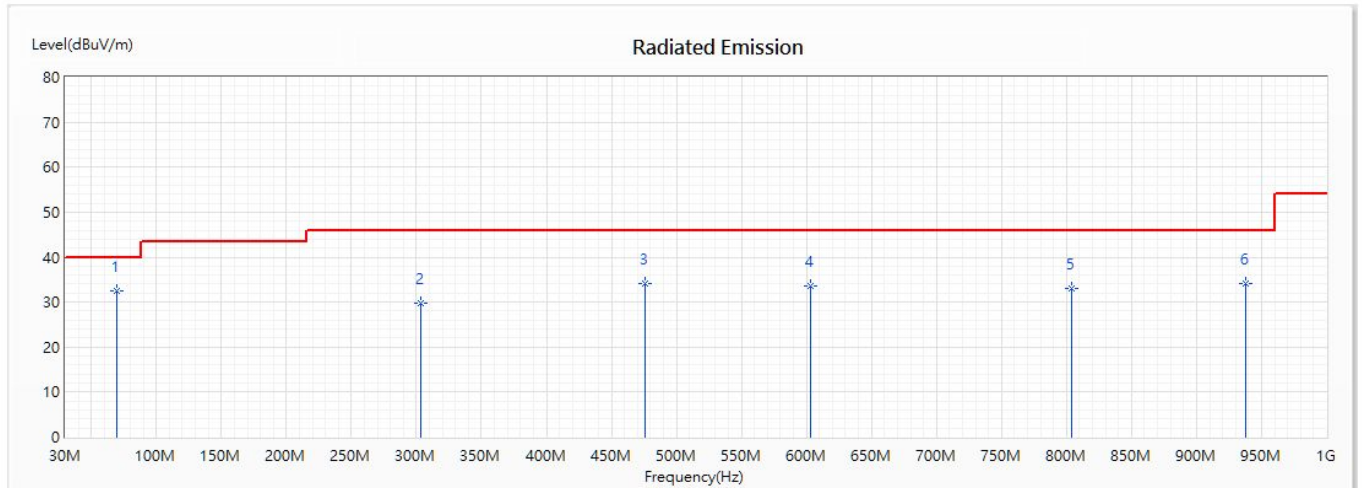
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 98.87           | 29.20                   | 43.50          | -14.30      | 37.86                | -8.66                 | QP            |
| 2   | 299.66          | 27.61                   | 46.00          | -18.39      | 35.89                | -8.28                 | QP            |
| 3   | 464.56          | 29.73                   | 46.00          | -16.27      | 34.22                | -4.49                 | QP            |
| 4   | 598.42          | 31.48                   | 46.00          | -14.52      | 31.70                | -0.22                 | QP            |
| 5   | 797.27          | 30.78                   | 46.00          | -15.22      | 33.43                | -2.65                 | QP            |
| 6   | 969.93          | 29.72                   | 54.00          | -24.28      | 31.58                | -1.86                 | QP            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 13 MIMO: Transmit (802.11n-20BW\_14.4Mbps) (2442 MHz)  
 Test Date : 2020/05/28

## HORIZONTAL



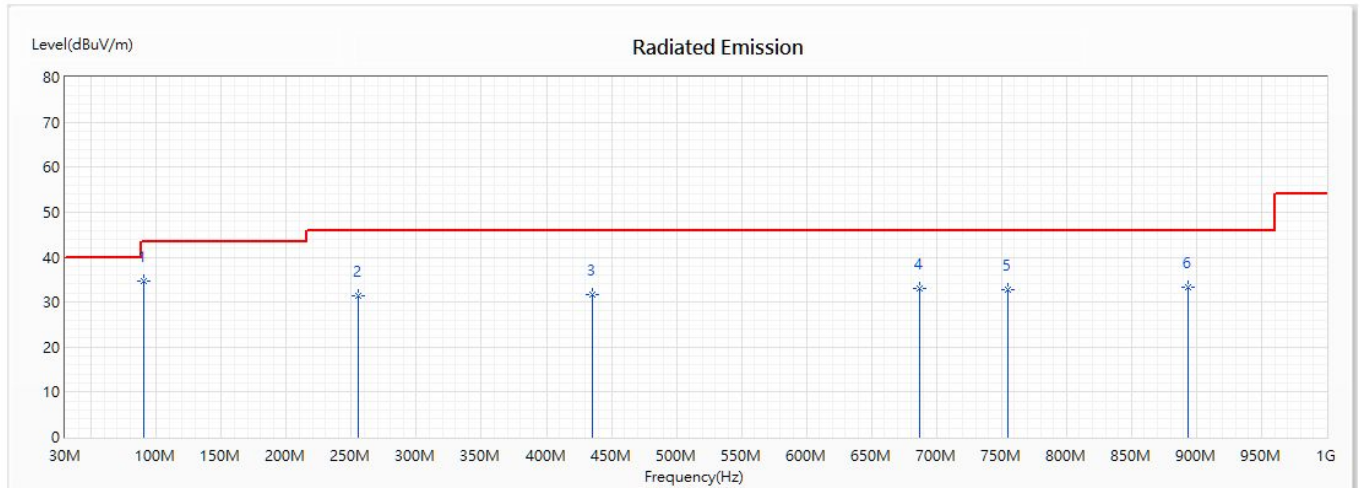
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 69.2            | 32.55                   | 40.00          | -7.45       | 46.44                | -13.89                | QP            |
| 2   | 303.31          | 29.66                   | 46.00          | -16.34      | 37.78                | -8.12                 | QP            |
| 3   | 476.34          | 34.26                   | 46.00          | -11.74      | 39.68                | -5.42                 | QP            |
| 4   | 603.58          | 33.45                   | 46.00          | -12.55      | 33.87                | -0.42                 | QP            |
| 5   | 803.47          | 33.16                   | 46.00          | -12.84      | 35.88                | -2.72                 | QP            |
| 6   | 937.51          | 34.21                   | 46.00          | -11.79      | 36.63                | -2.42                 | QP            |

## Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 13 MIMO: Transmit (802.11n-20BW\_14.4Mbps) (2442 MHz)  
 Test Date : 2020/05/28

## VERTICAL



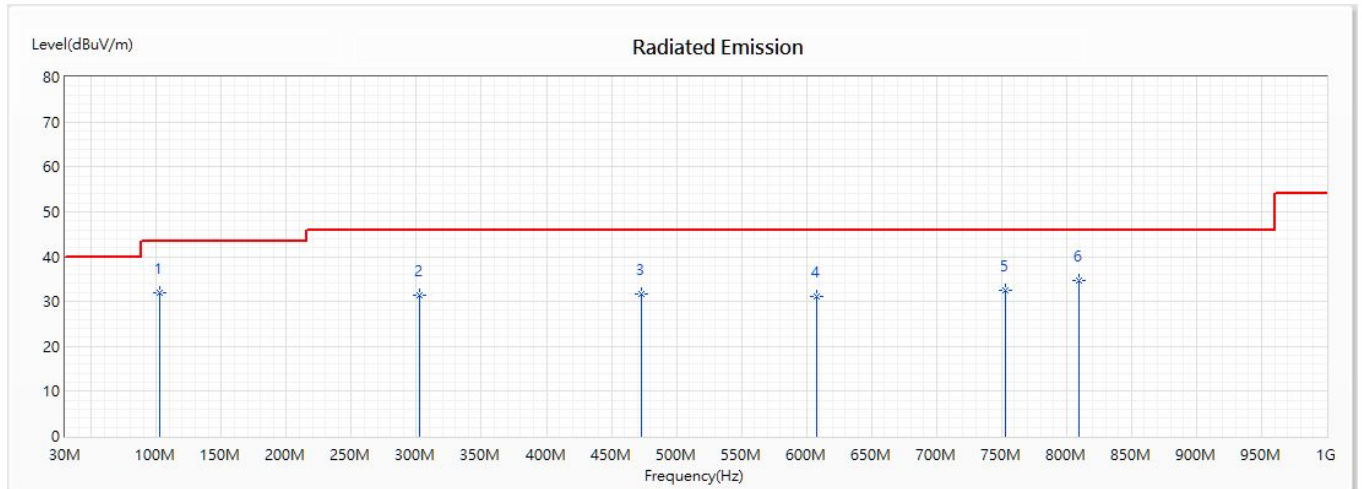
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 90.46           | 34.65                   | 43.50          | -8.85       | 43.78                | -9.13                 | QP            |
| 2   | 255.37          | 31.52                   | 46.00          | -14.48      | 43.16                | -11.64                | QP            |
| 3   | 435.66          | 31.65                   | 46.00          | -14.35      | 35.50                | -3.85                 | QP            |
| 4   | 686.95          | 33.07                   | 46.00          | -12.93      | 36.13                | -3.06                 | QP            |
| 5   | 755.25          | 32.76                   | 46.00          | -13.24      | 33.82                | -1.06                 | QP            |
| 6   | 893.662         | 33.27                   | 46.00          | -12.73      | 36.38                | -3.11                 | QP            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 14 MIMO: Transmit (802.11n-40BW\_30Mbps) (2442 MHz)  
 Test Date : 2020/05/28

## HORIZONTAL



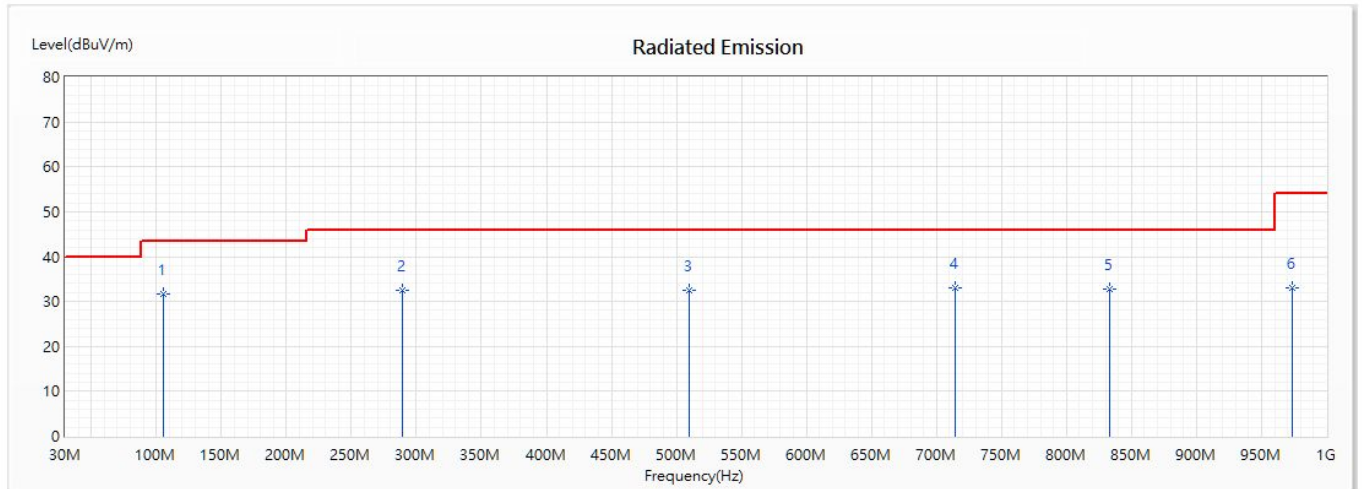
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 102.78          | 31.96                   | 43.50          | -11.54      | 40.74                | -8.78                 | QP            |
| 2   | 302.87          | 31.47                   | 46.00          | -14.53      | 39.60                | -8.13                 | QP            |
| 3   | 472.69          | 31.57                   | 46.00          | -14.43      | 36.70                | -5.13                 | QP            |
| 4   | 607.41          | 31.23                   | 46.00          | -14.77      | 31.96                | -0.73                 | QP            |
| 5   | 753.47          | 32.54                   | 46.00          | -13.46      | 33.40                | -0.86                 | QP            |
| * 6 | 809.26          | 34.65                   | 46.00          | -11.35      | 37.39                | -2.74                 | QP            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 14 MIMO: Transmit (802.11n-40BW\_30Mbps) (2442 MHz)  
 Test Date : 2020/05/28

## VERTICAL



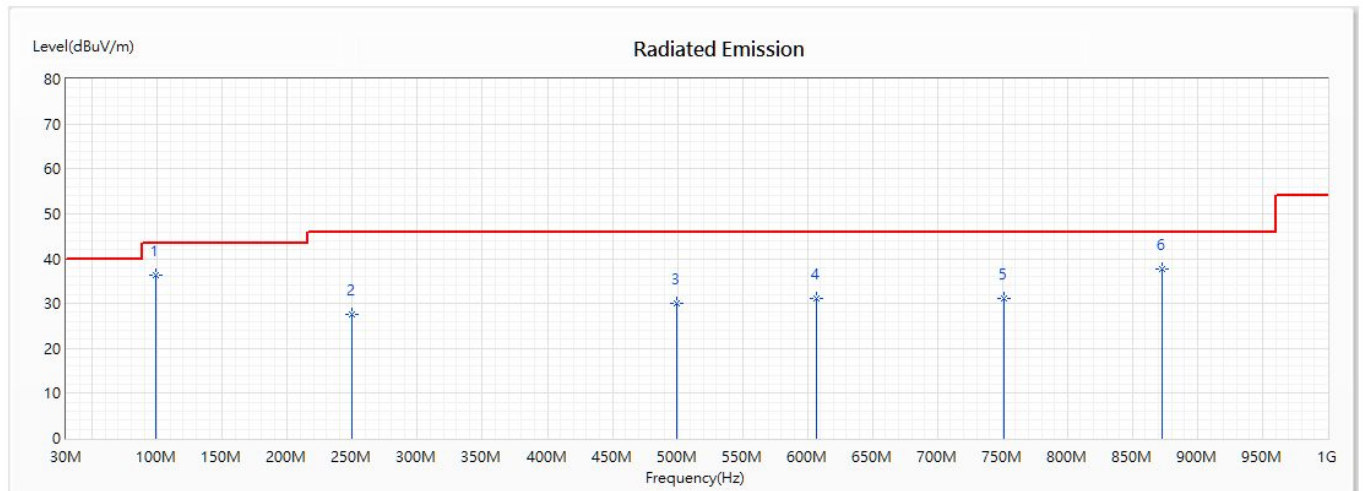
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 105.38          | 31.62                   | 43.50          | -11.88      | 40.72                | -9.10                 | QP            |
| 2   | 289.37          | 32.42                   | 46.00          | -13.58      | 43.23                | -10.81                | QP            |
| 3   | 509.51          | 32.37                   | 46.00          | -13.63      | 36.98                | -4.61                 | QP            |
| 4   | 714.23          | 33.05                   | 46.00          | -12.95      | 35.99                | -2.94                 | QP            |
| 5   | 833.62          | 32.89                   | 46.00          | -13.11      | 35.31                | -2.42                 | QP            |
| 6   | 973.89          | 33.16                   | 54.00          | -20.84      | 34.91                | -1.75                 | QP            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 15 MIMO: Transmit (802.11ax-20BW\_17.2Mbps) (2442 MHz)  
 Test Date : 2020/05/28

## HORIZONTAL

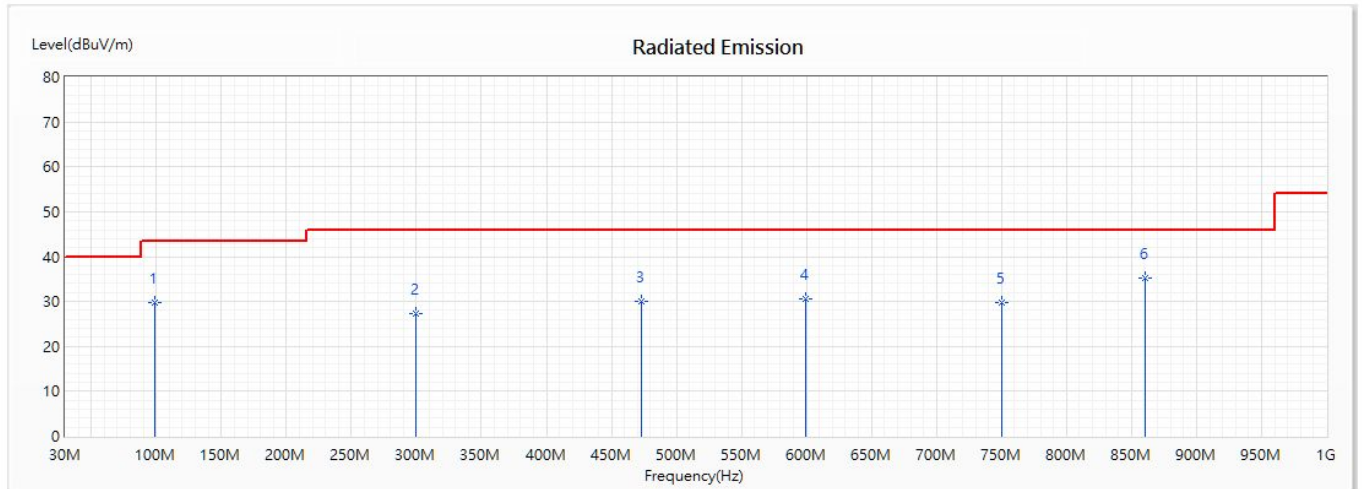


### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 15 MIMO: Transmit (802.11ax-20BW\_17.2Mbps) (2442 MHz)  
 Test Date : 2020/05/28

## VERTICAL



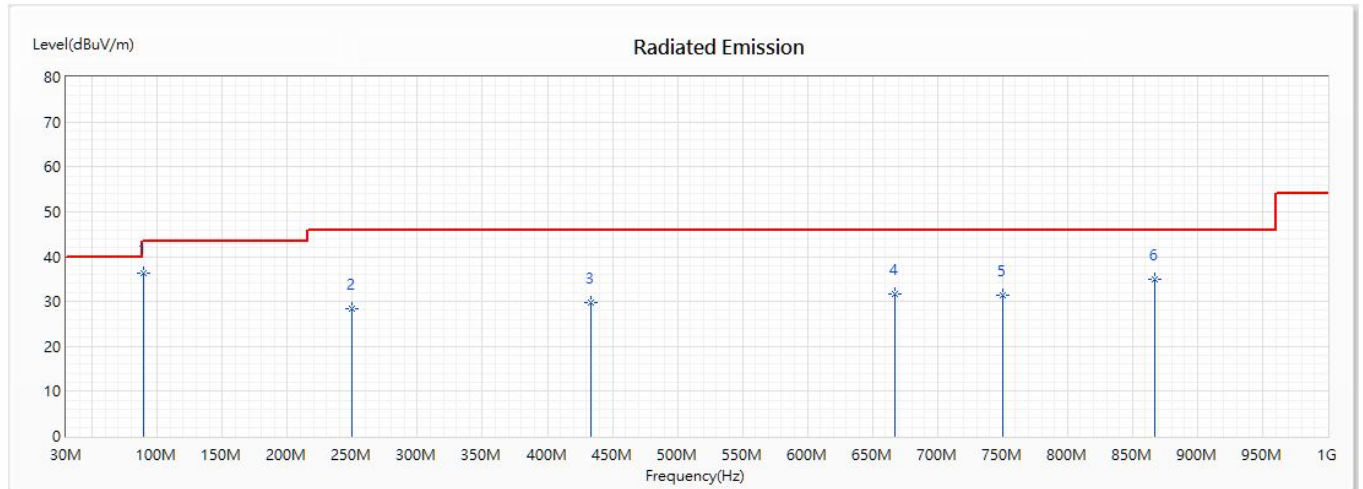
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| 1   | 98.87           | 29.76                   | 43.50          | -13.74      | 38.42                | -8.66                 | QP            |
| 2   | 299.66          | 27.32                   | 46.00          | -18.68      | 35.60                | -8.28                 | QP            |
| 3   | 473.29          | 30.12                   | 46.00          | -15.88      | 35.30                | -5.18                 | QP            |
| 4   | 599.39          | 30.53                   | 46.00          | -15.47      | 30.71                | -0.18                 | QP            |
| 5   | 749.74          | 29.68                   | 46.00          | -16.32      | 30.10                | -0.42                 | QP            |
| * 6 | 860.32          | 35.13                   | 46.00          | -10.87      | 37.24                | -2.11                 | QP            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2442 MHz)  
 Test Date : 2020/05/28

## HORIZONTAL



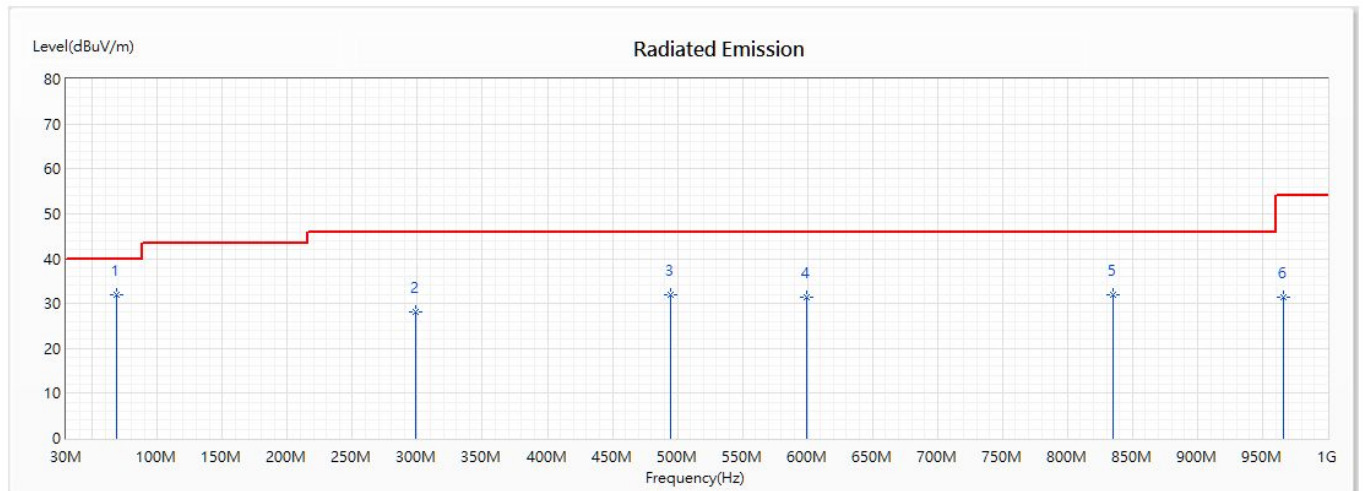
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB/m) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|-----------------------|---------------|
| * 1 | 89.17           | 36.27                   | 43.50          | -7.23       | 45.67                | -9.40                 | QP            |
| 2   | 249.22          | 28.46                   | 46.00          | -17.54      | 39.91                | -11.45                | QP            |
| 3   | 433.52          | 29.63                   | 46.00          | -16.37      | 33.69                | -4.06                 | QP            |
| 4   | 667.29          | 31.72                   | 46.00          | -14.28      | 35.31                | -3.59                 | QP            |
| 5   | 749.74          | 31.35                   | 46.00          | -14.65      | 31.77                | -0.42                 | QP            |
| 6   | 867.11          | 34.90                   | 46.00          | -11.10      | 37.01                | -2.11                 | QP            |

### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Portable computer  
 Test Item : General Radiated Emission Data  
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps) (2442 MHz)  
 Test Date : 2020/05/28

## VERTICAL



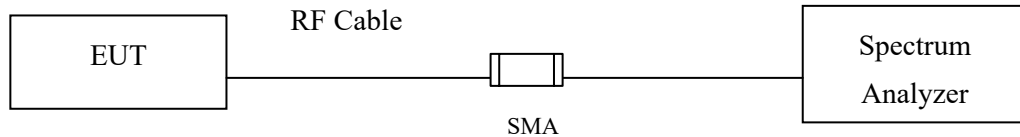
### Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

## 5. RF antenna conducted test

### 5.1. Test Setup

#### RF antenna Conducted Measurement:



### 5.2. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

### 5.3. Test Procedure

The EUT was tested according to C63.10:2013 Section 11.11 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

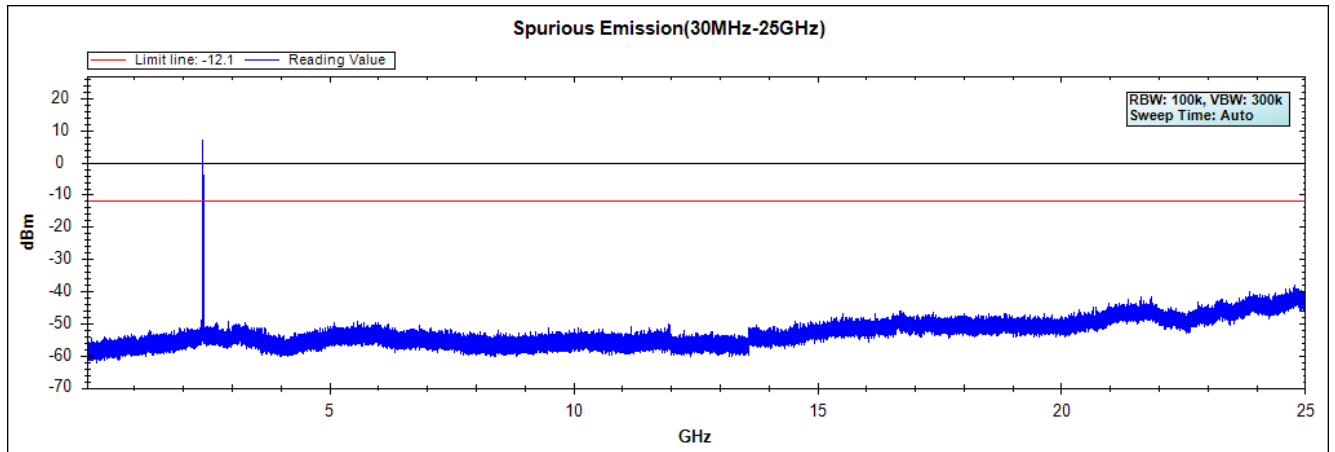
### 5.4. Uncertainty

$\pm 1.20\text{dB}$

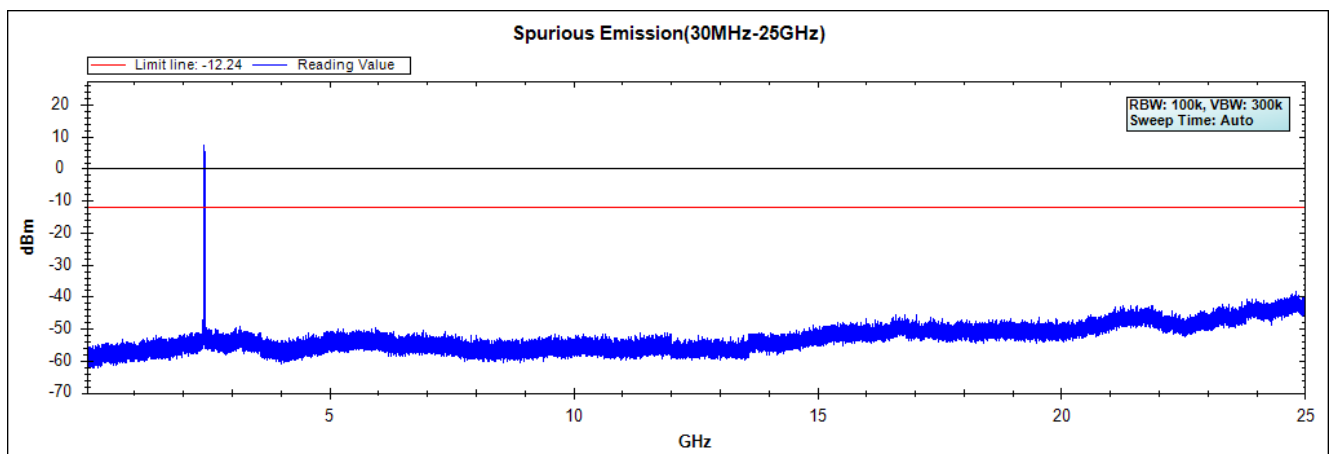
## 5.5. Test Result of RF antenna conducted test

Product : Portable computer  
Test Item : RF antenna conducted test  
Test Mode : Mode 7 SISO B: Transmit (802.11b\_1Mbps)  
Test Date : 2020/05/12

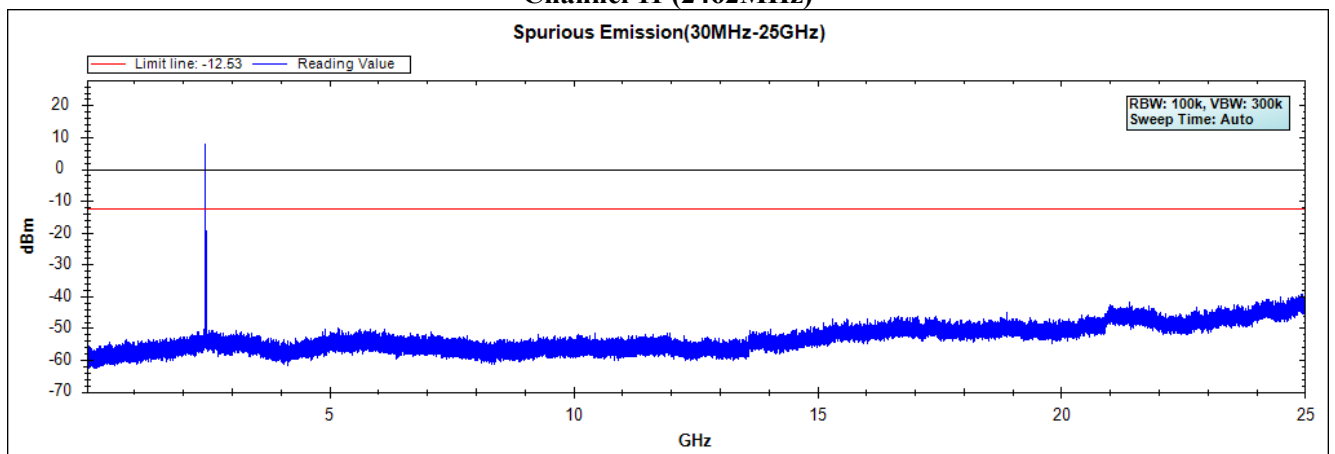
### Channel 01 (2412MHz)



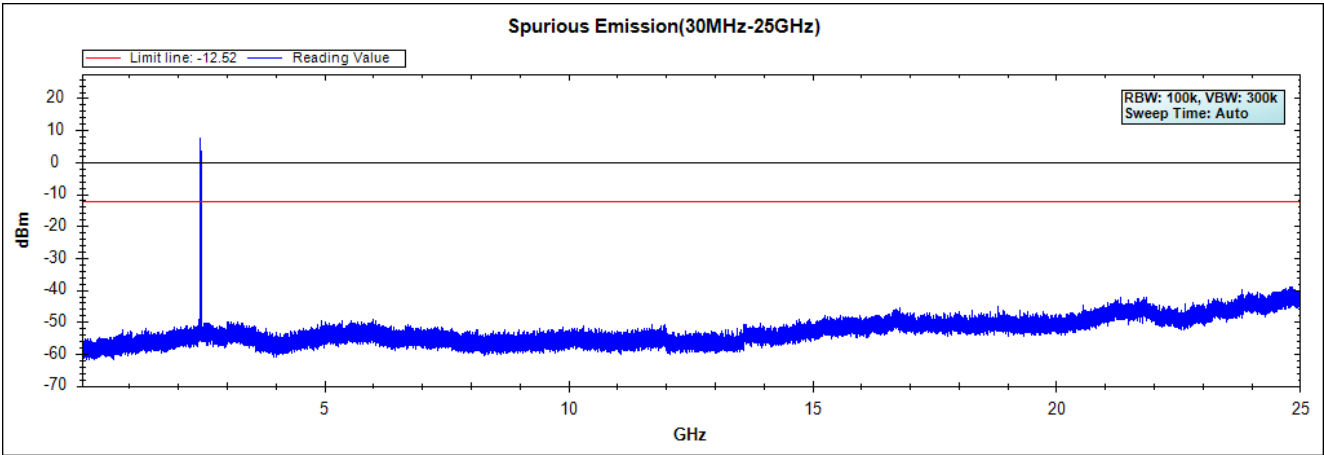
### Channel 03 (2442MHz)



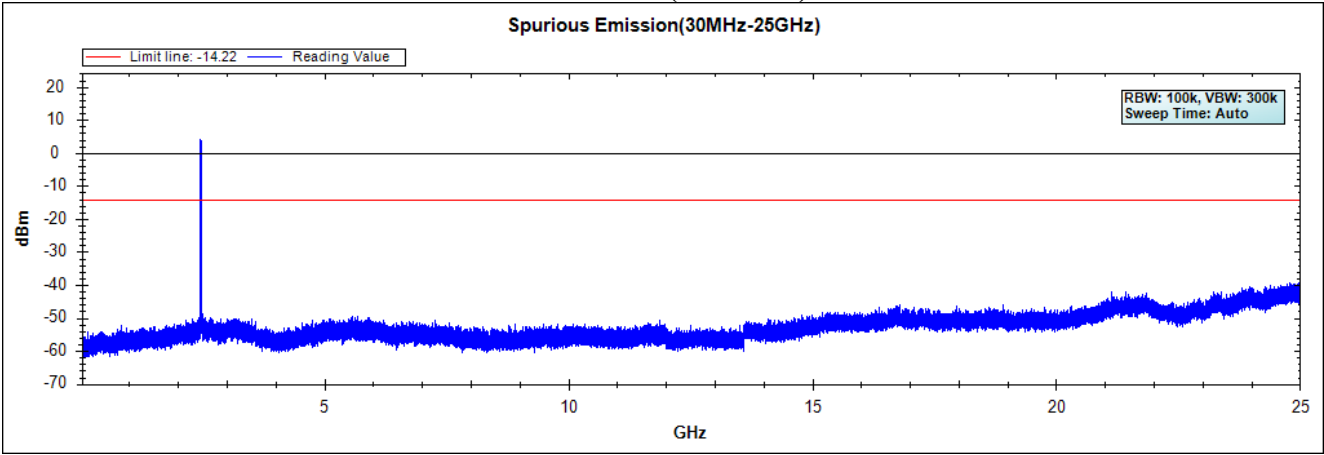
### Channel 11 (2462MHz)



Channel 12 (2467MHz)



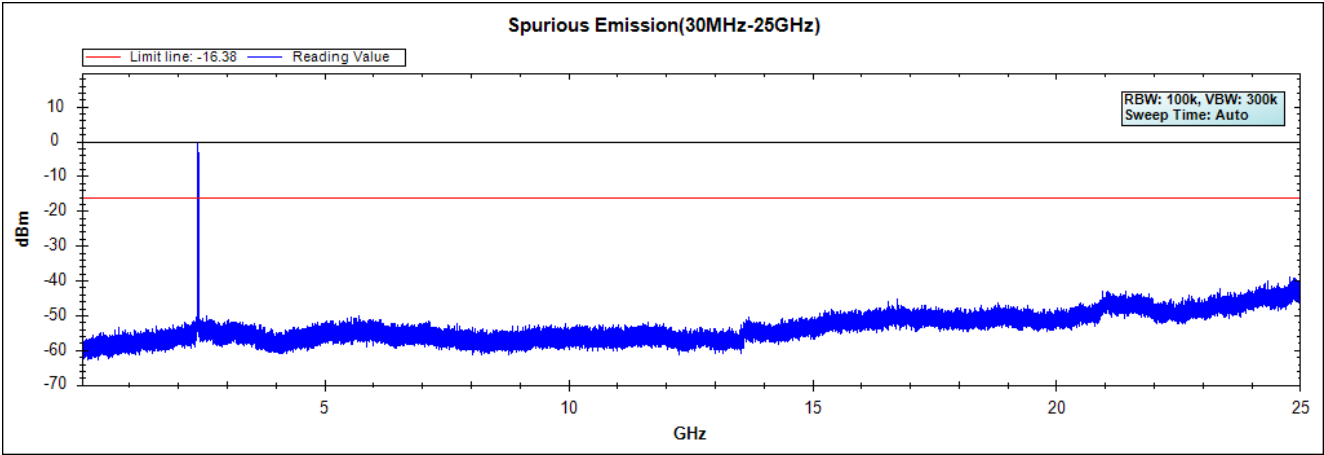
Channel 13 (2472MHz)



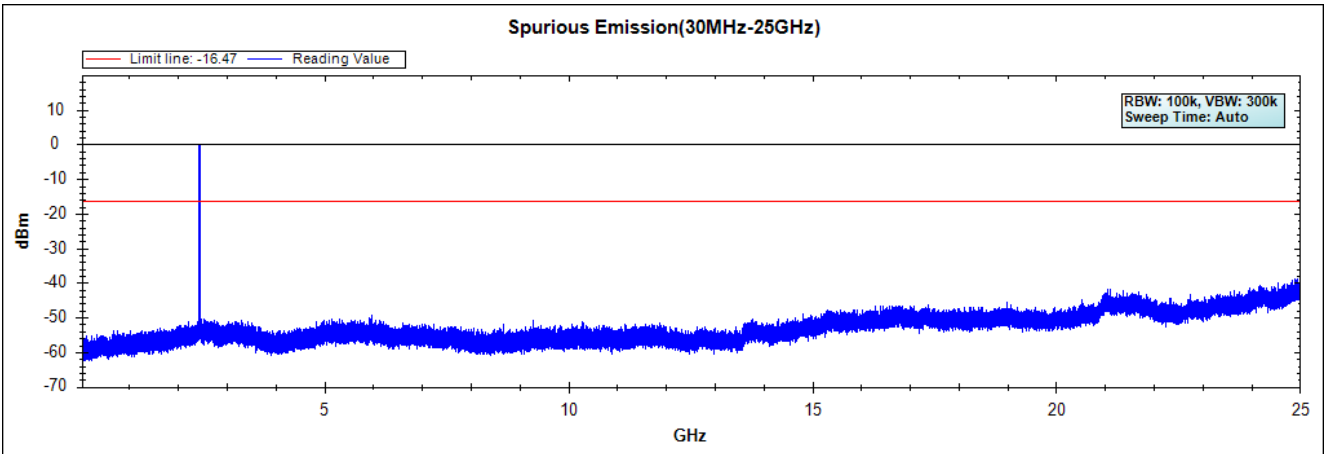
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Portable computer  
Test Item : RF Antenna Conducted Spurious  
Test Mode : Mode 13 MIMO: Transmit (802.11n-20BW\_14.4Mbps)  
Test Date : 2020/05/12

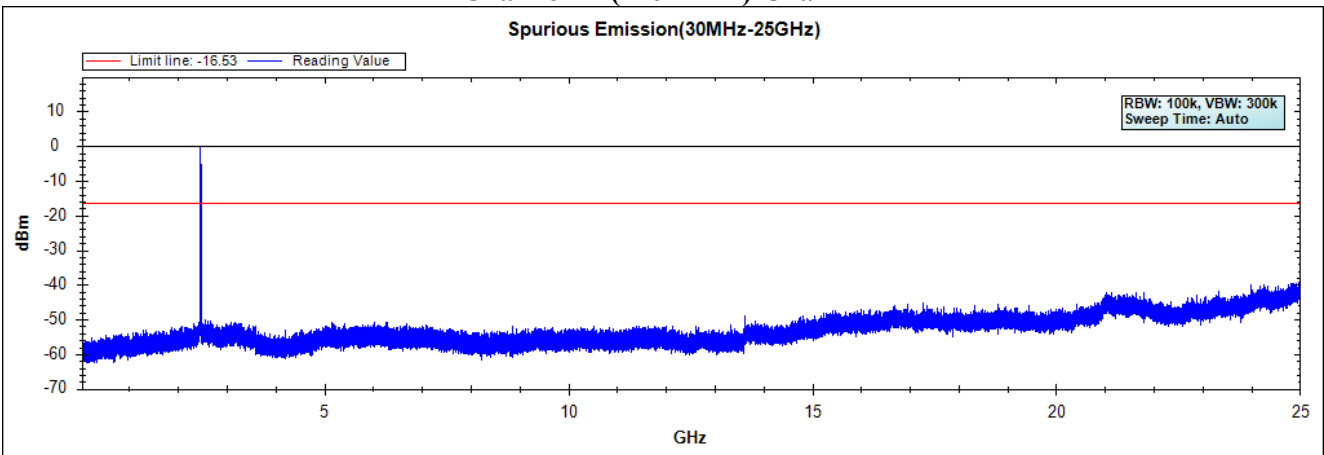
Channel 01 (2412MHz)-Chain A



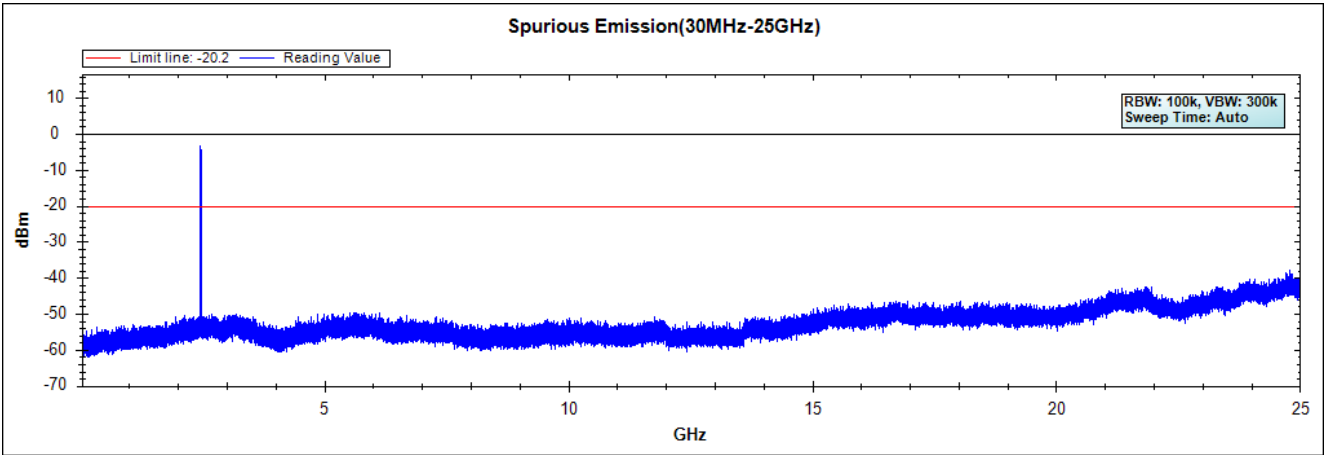
Channel 03 (2442MHz)-Chain A



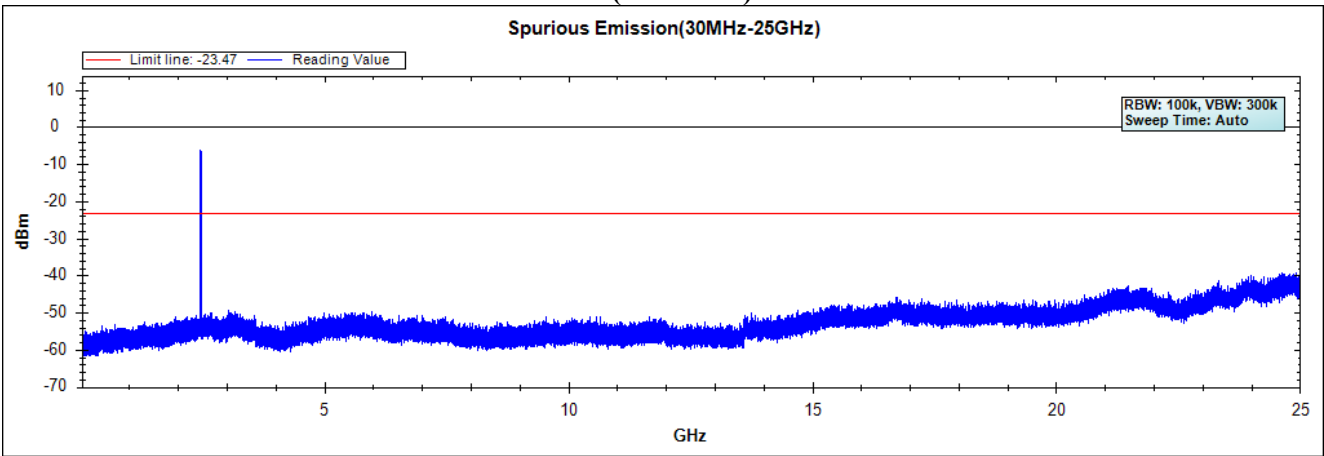
Channel 11 (2462MHz)-Chain A



Channel 12 (2467MHz)-Chain A



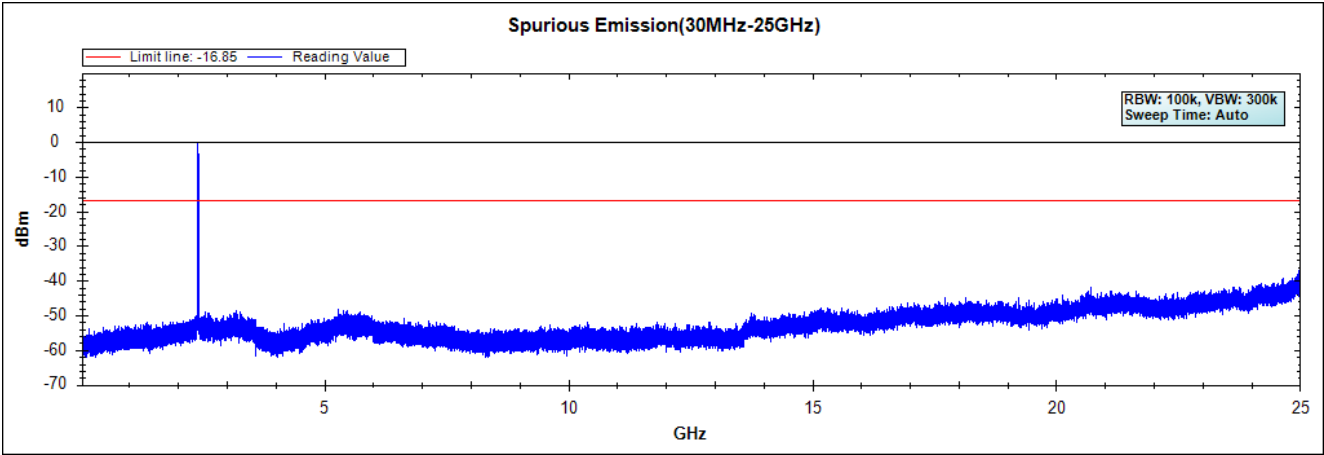
Channel 13 (2472MHz)-Chain A



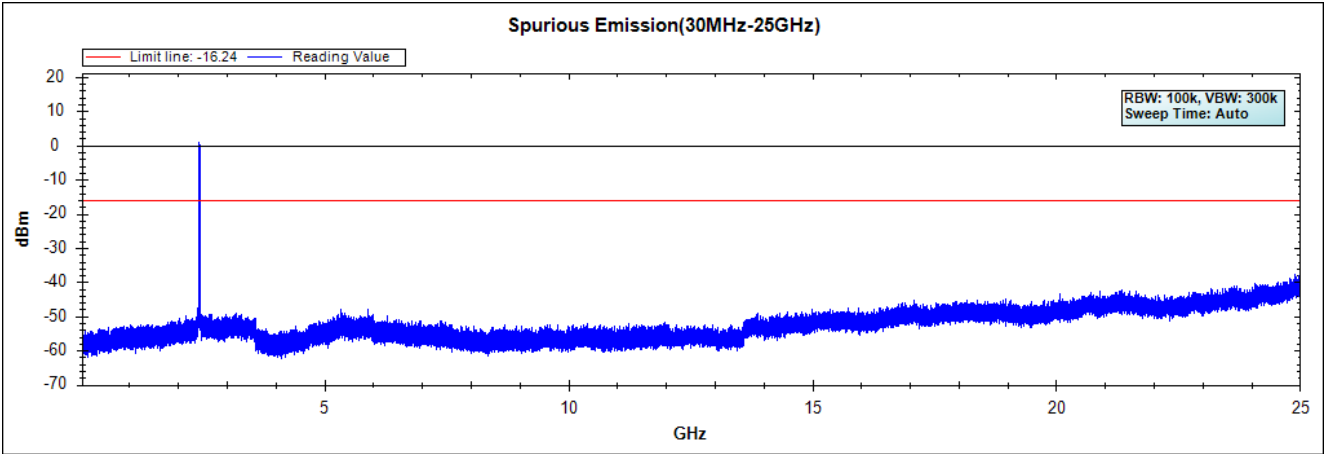
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Portable computer  
Test Item : RF Antenna Conducted Spurious  
Test Mode : Mode 13 MIMO: Transmit (802.11n-20BW\_14.4Mbps)  
Test Date : 2020/05/12

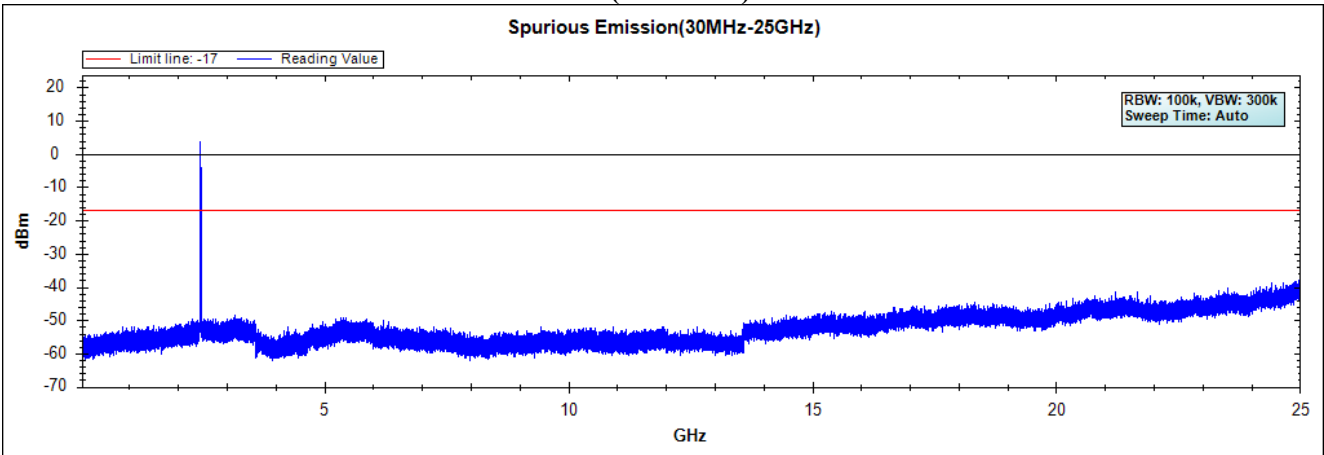
Channel 01 (2412MHz)-Chain B



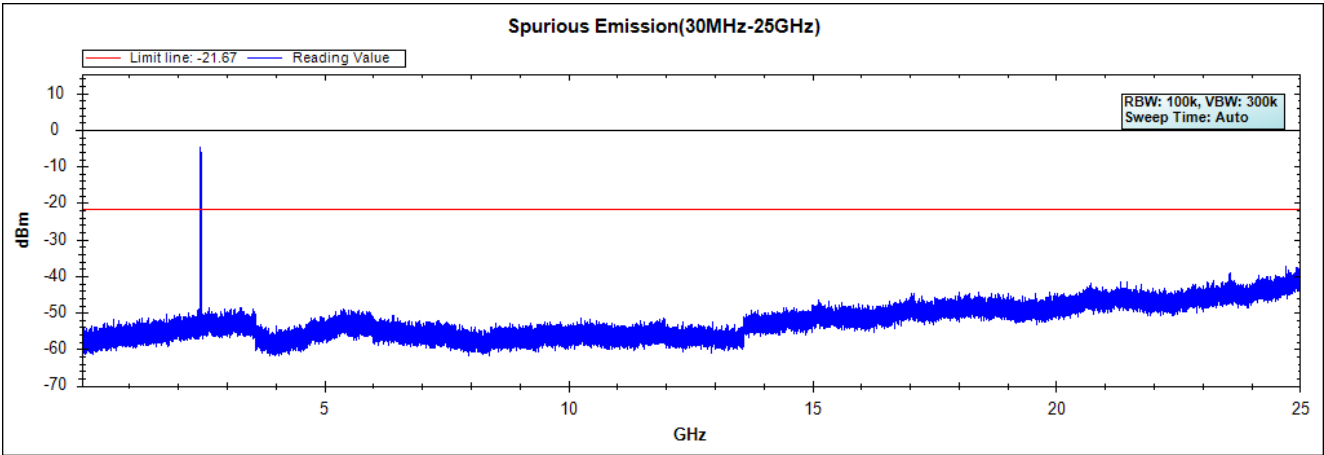
Channel 03 (2442MHz)-Chain B



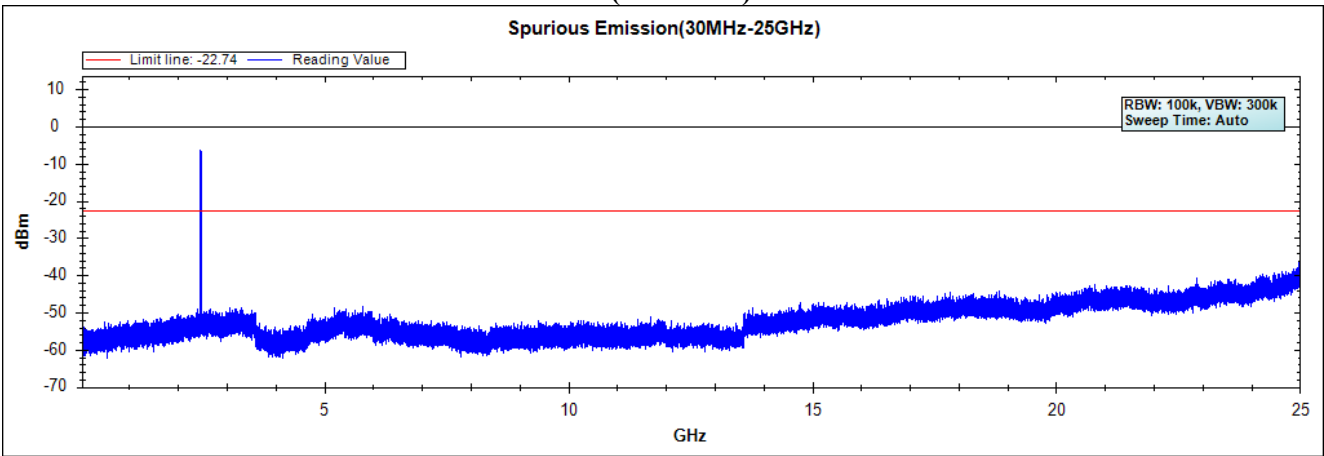
Channel 11 (2462MHz)-Chain B



Channel 12 (2467MHz)-Chain B



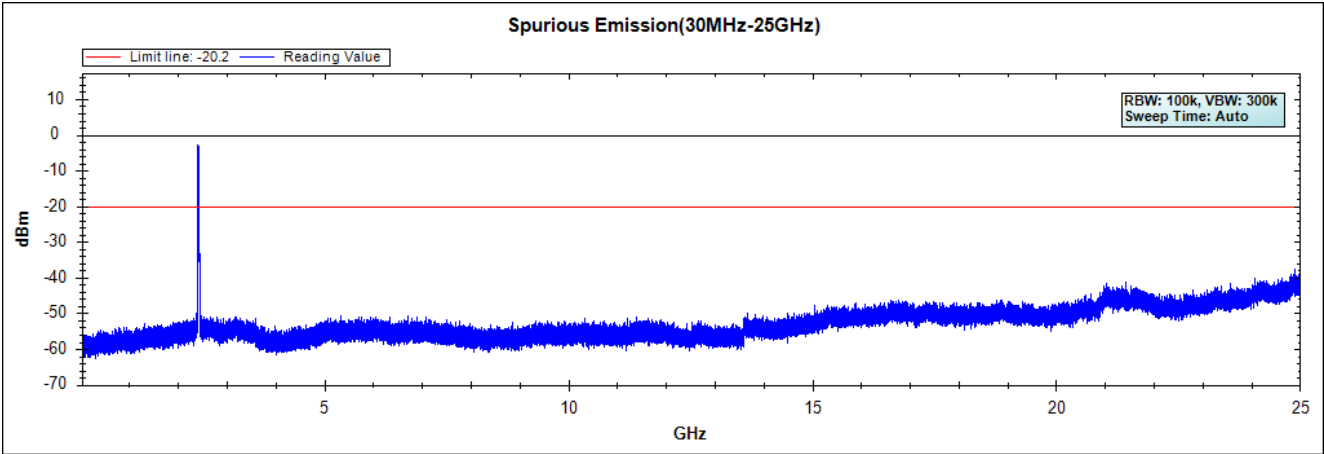
Channel 13 (2472MHz)-Chain B



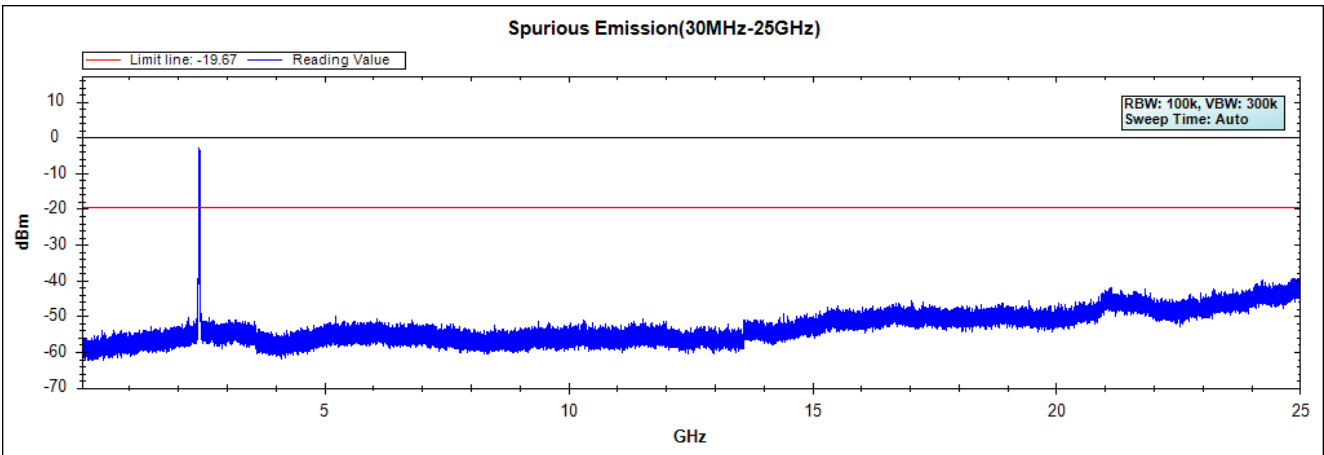
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Portable computer  
Test Item : RF Antenna Conducted Spurious  
Test Mode : Mode 14 MIMO: Transmit (802.11n-40BW\_30Mbps)  
Test Date : 2020/05/12

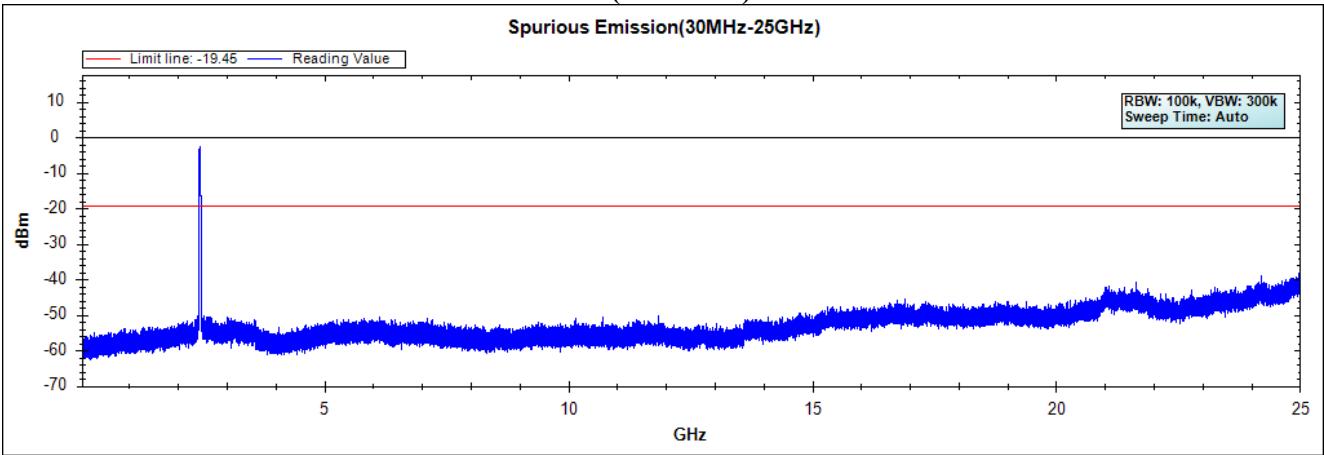
Channel 03 (2422MHz)-Chain A



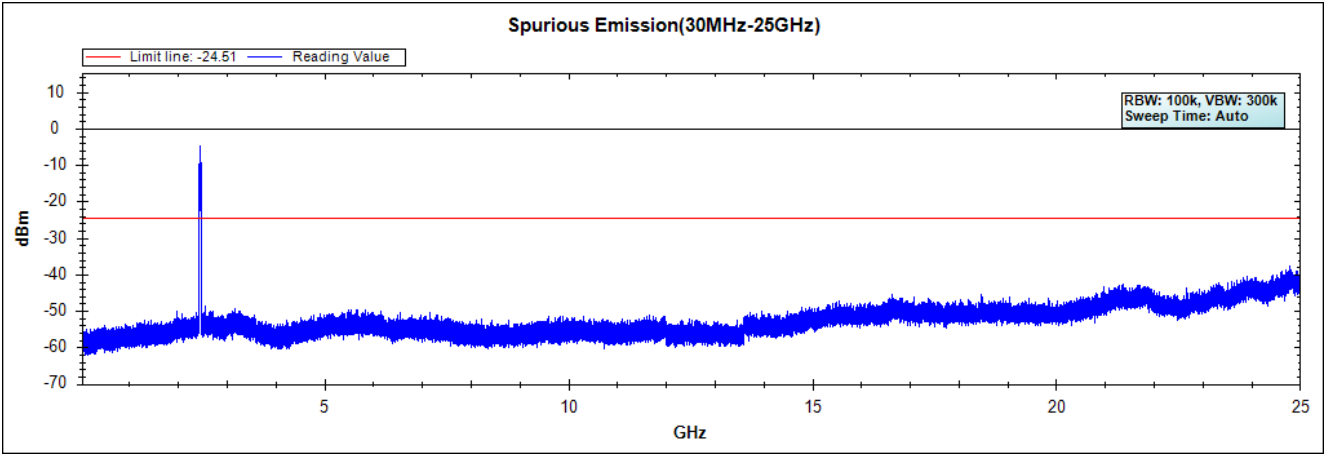
Channel 07 (2442MHz)-Chain A



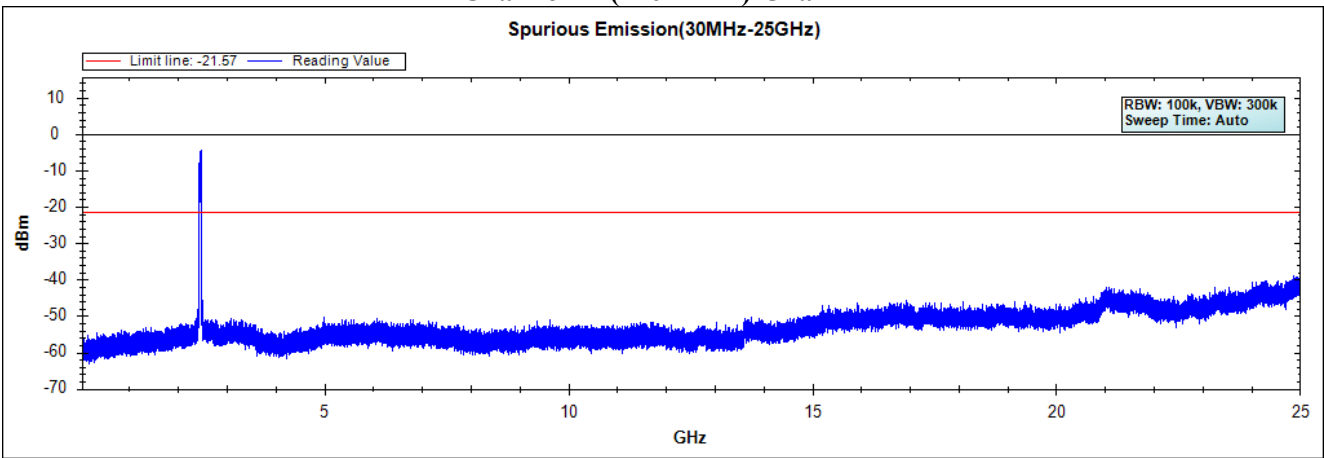
Channel 09 (2452MHz)-Chain A



Channel 10 (2457MHz)-Chain A



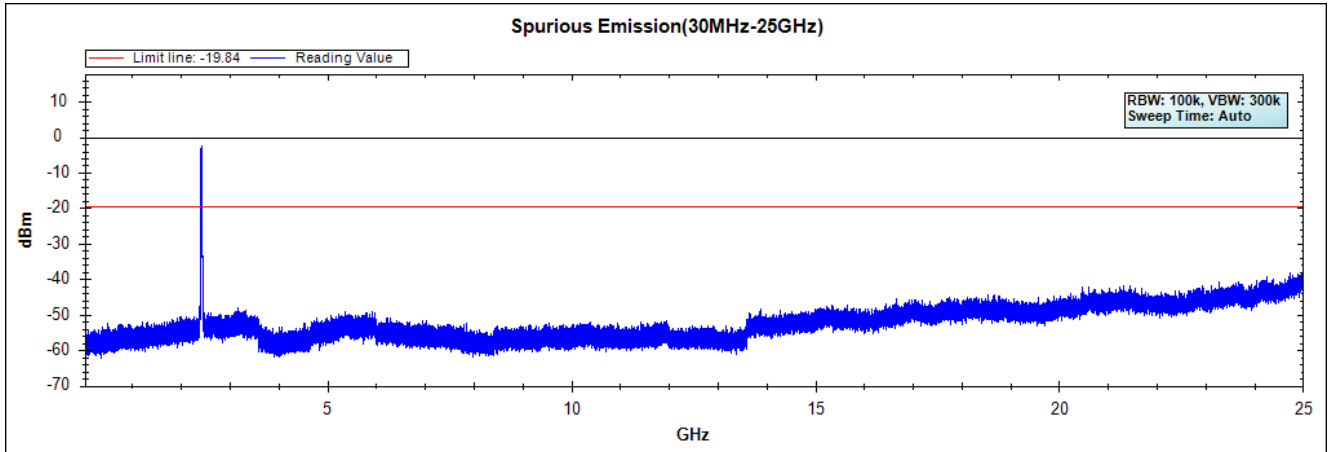
Channel 11 (2462MHz)-Chain A



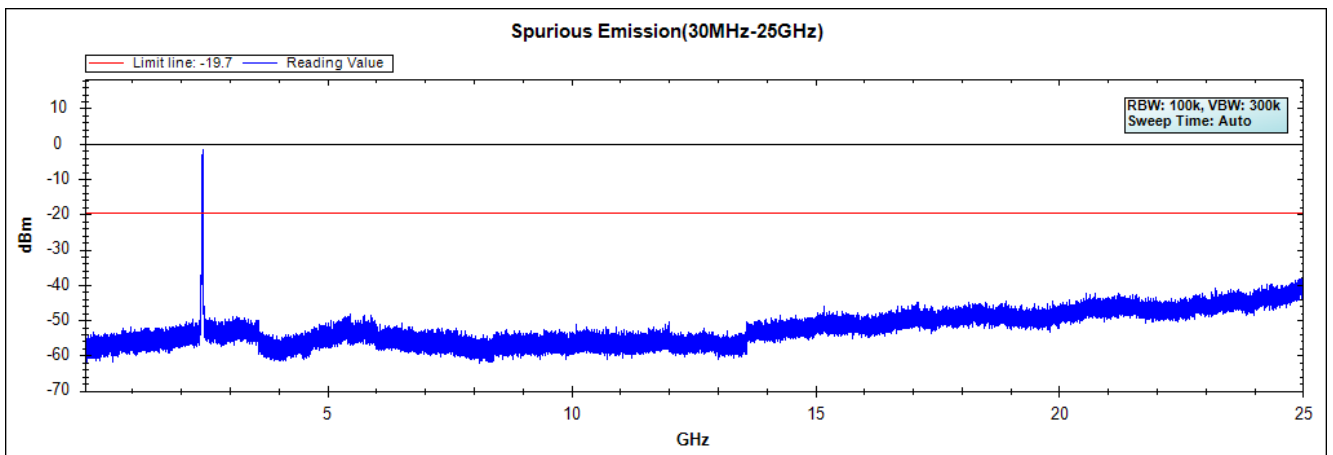
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Portable computer  
Test Item : RF Antenna Conducted Spurious  
Test Mode : Mode 14 MIMO: Transmit (802.11n-40BW\_30Mbps)  
Test Date : 2020/05/12

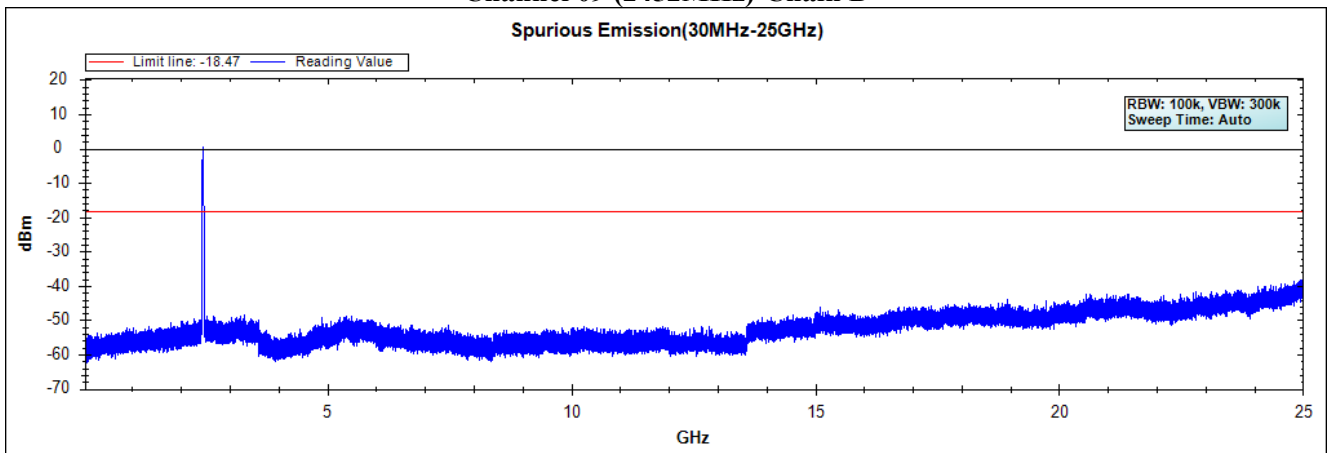
### Channel 03 (2422MHz)-Chain B



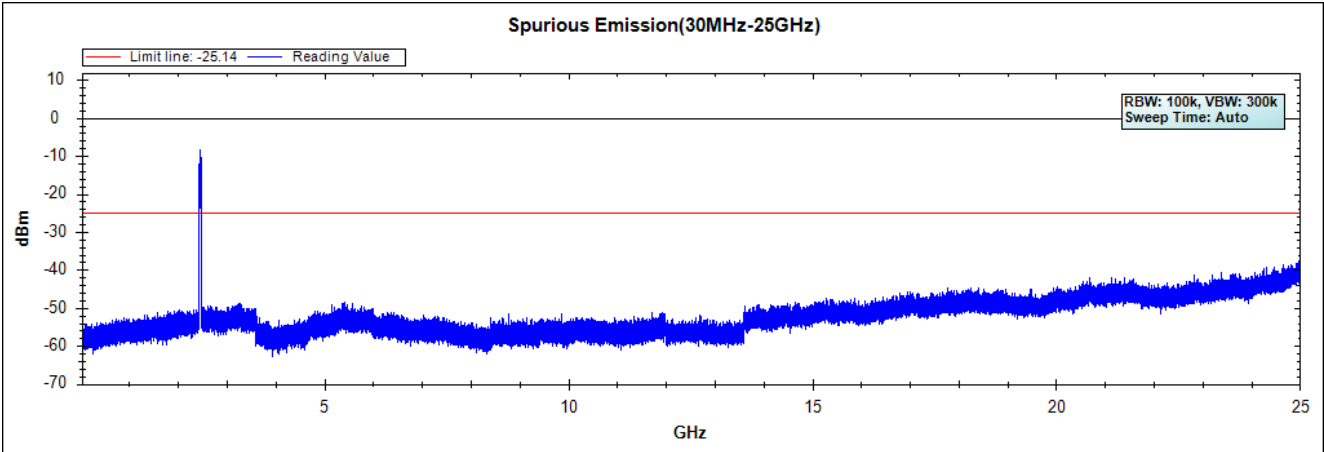
### Channel 07 (2442MHz)-Chain B



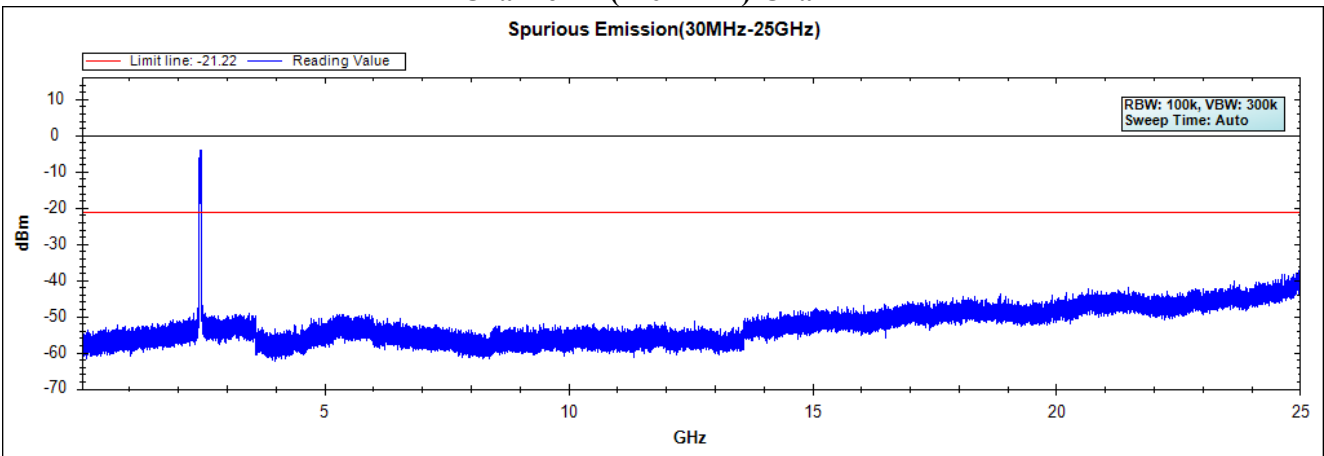
### Channel 09 (2452MHz)-Chain B



Channel 10 (2457MHz)-Chain B



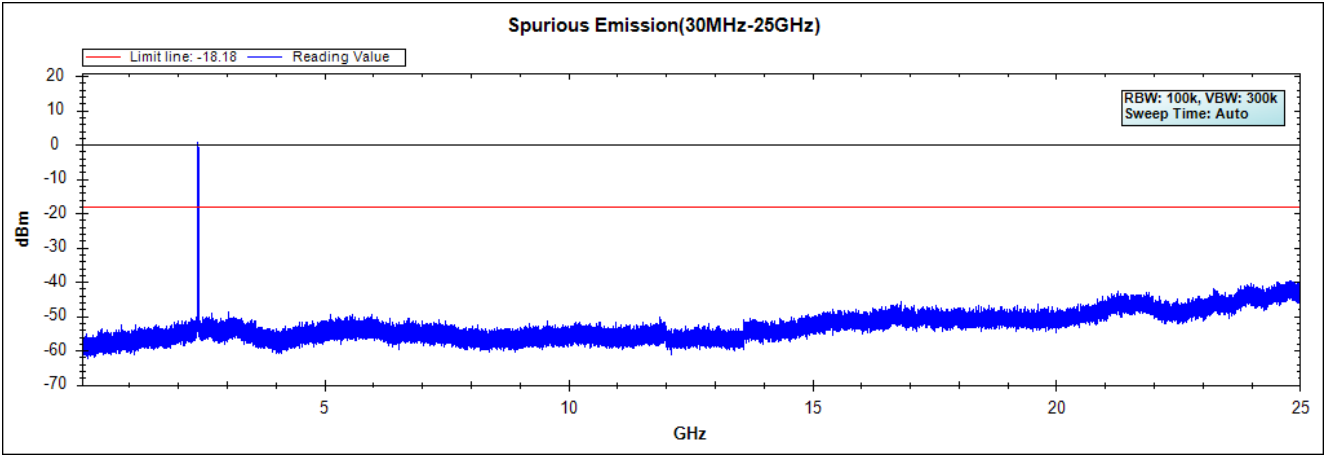
Channel 11 (2462MHz)-Chain B



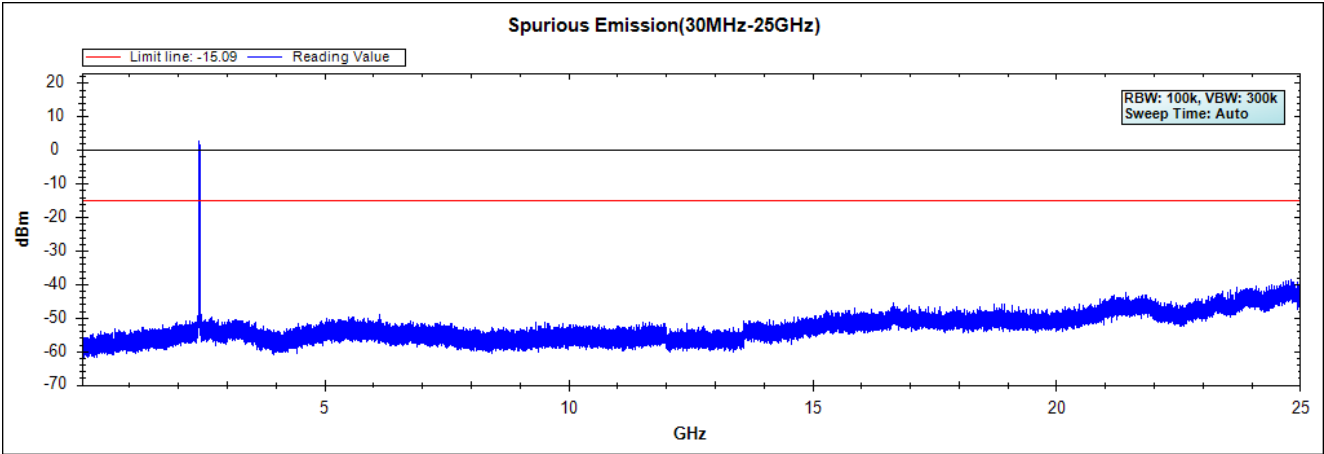
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Portable computer  
Test Item : RF Antenna Conducted Spurious  
Test Mode : Mode 15 MIMO: Transmit (802.11ax-20BW\_17.2Mbps)  
Test Date : 2020/05/12

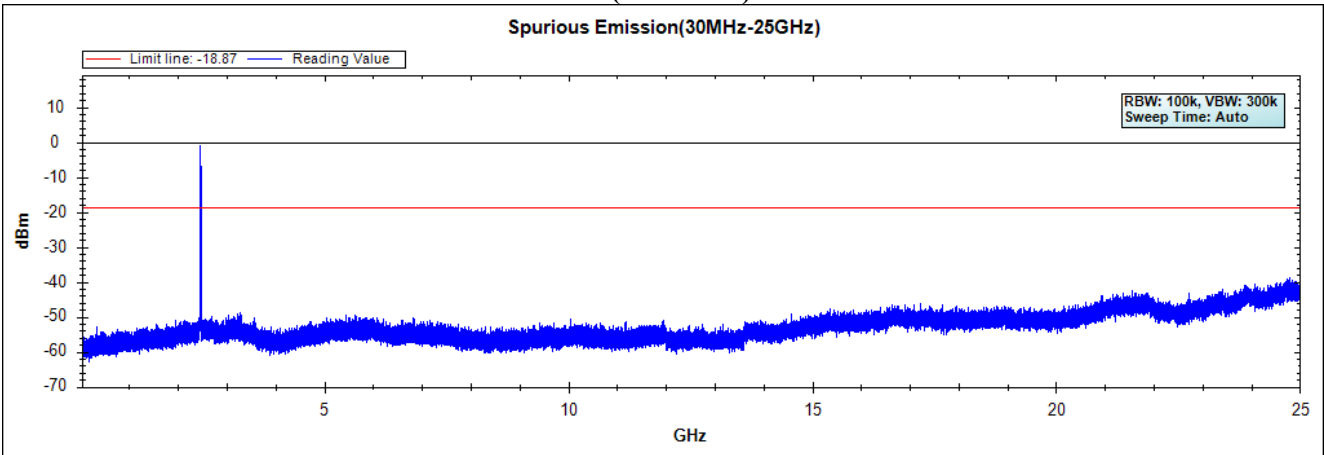
Channel 01 (2412MHz)-Chain A



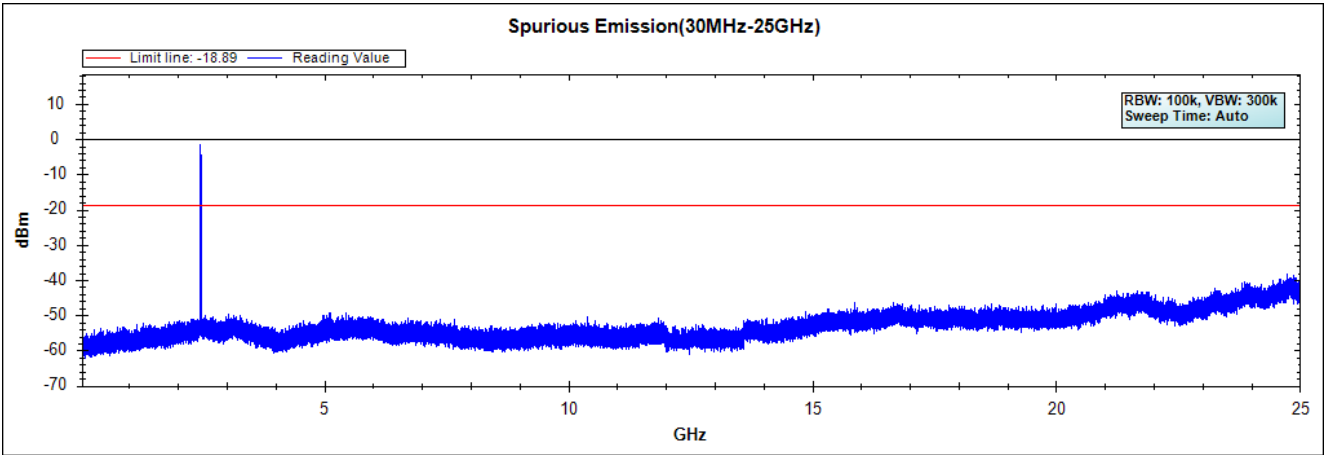
Channel 03 (2442MHz)-Chain A



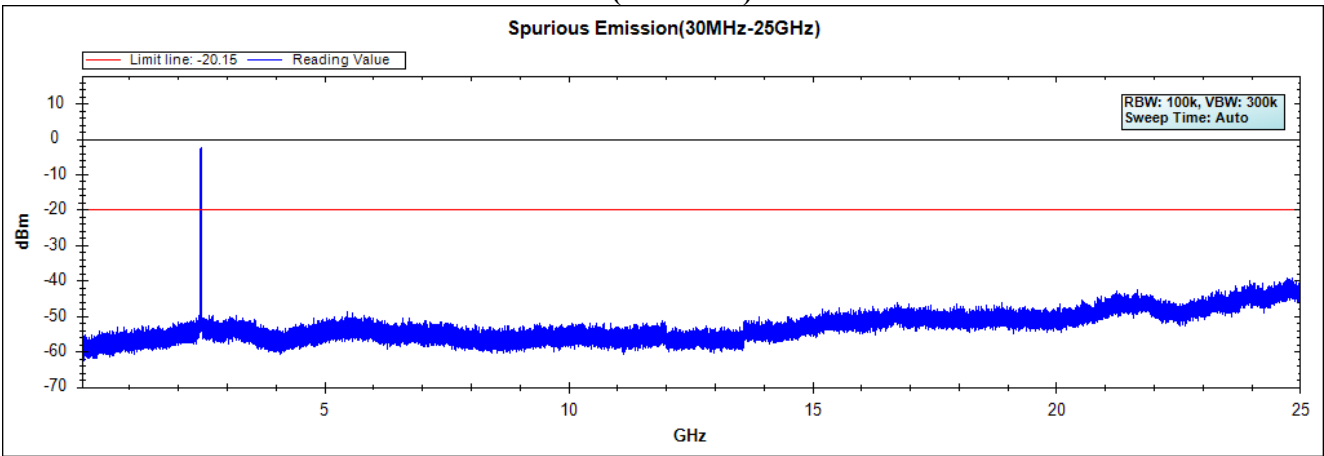
Channel 11 (2462MHz)-Chain A



Channel 12 (2467MHz)-Chain A



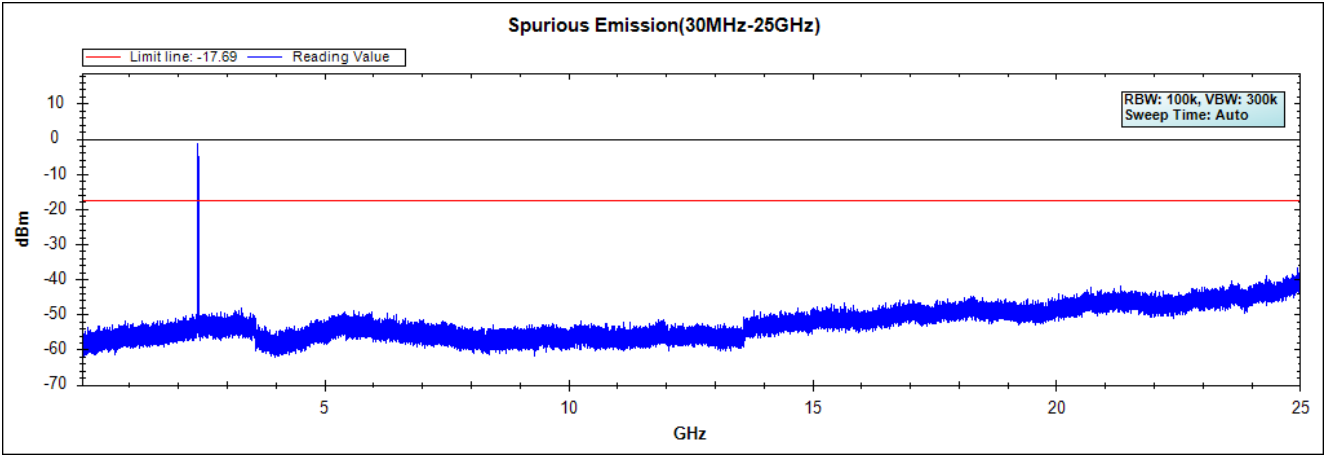
Channel 13 (2472MHz)-Chain A



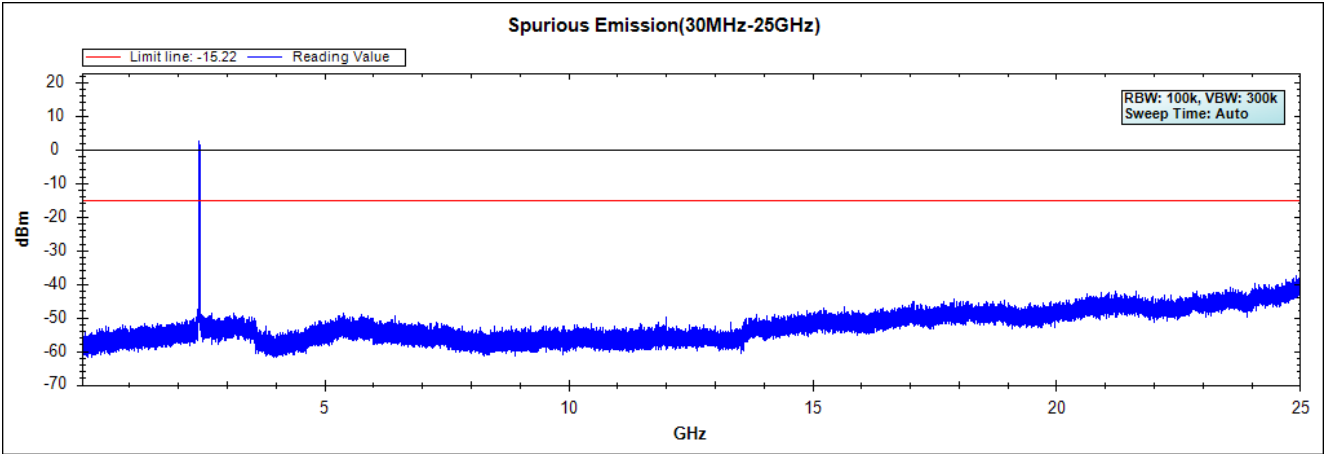
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Portable computer  
Test Item : RF Antenna Conducted Spurious  
Test Mode : Mode 15 MIMO: Transmit (802.11ax-20BW\_17.2Mbps)  
Test Date : 2020/05/12

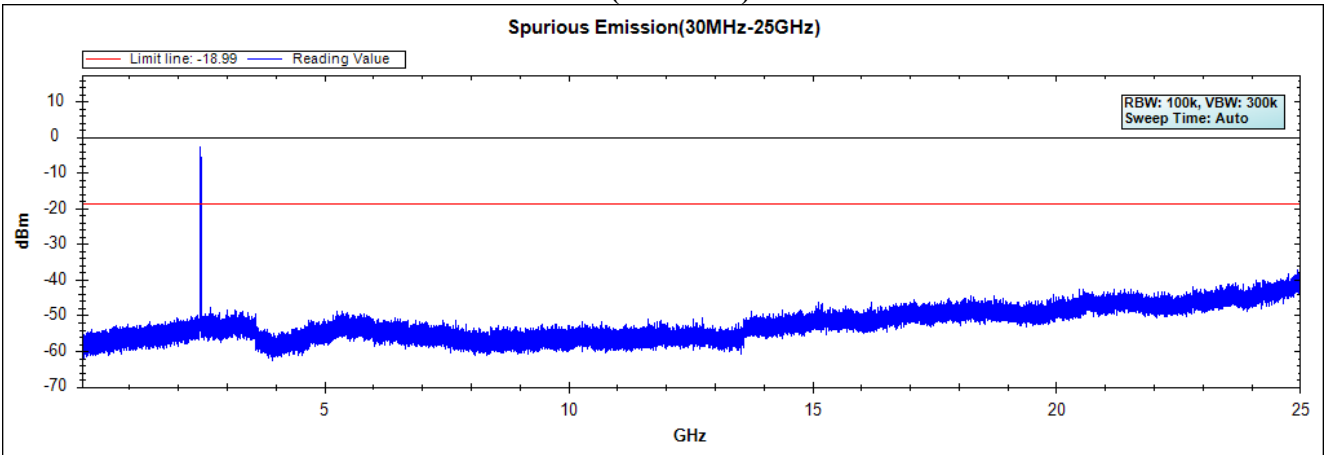
Channel 01 (2412MHz)-Chain B



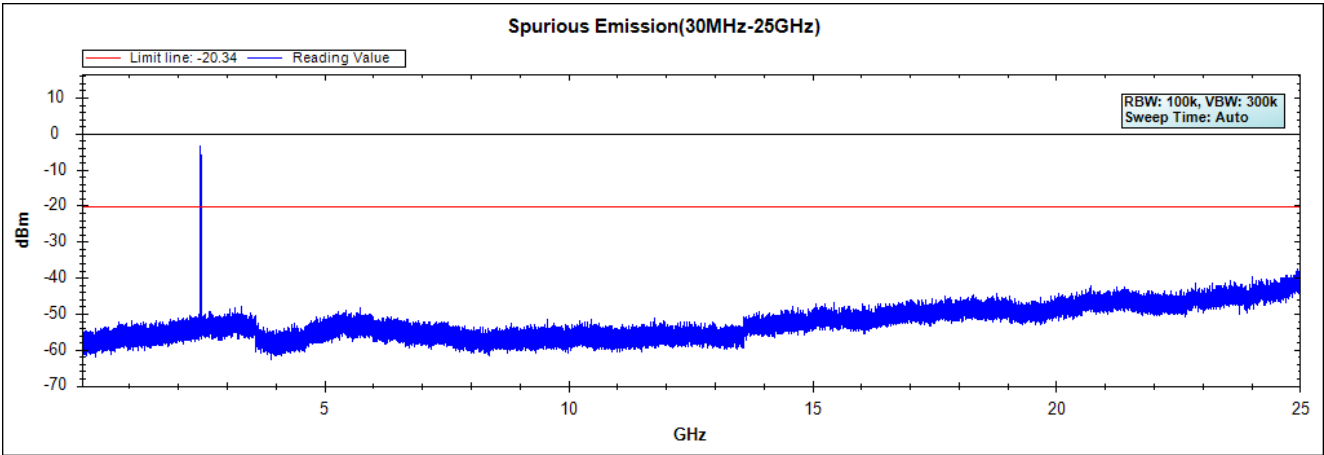
Channel 03 (2442MHz)-Chain B



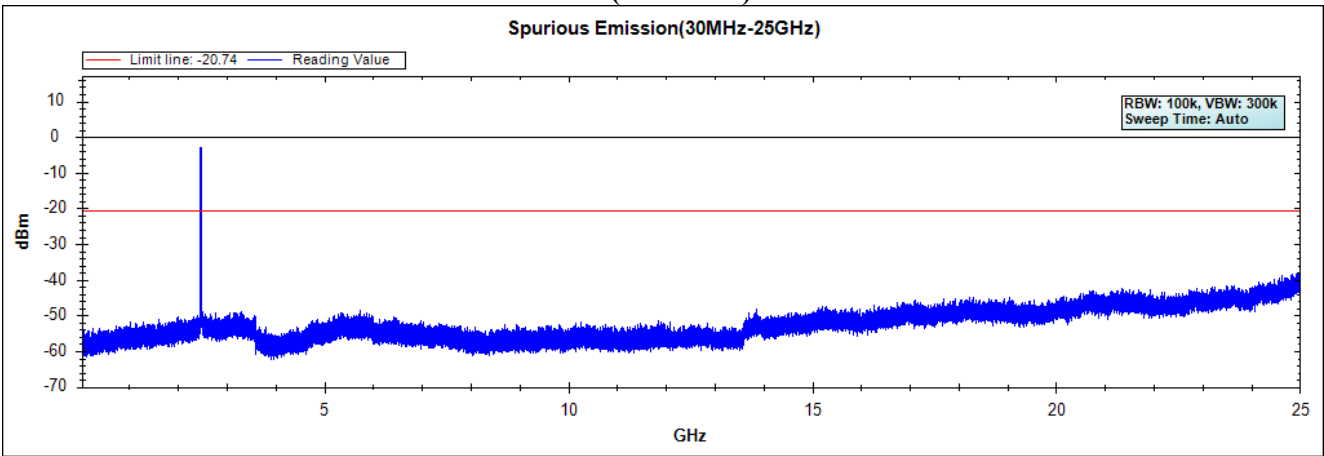
Channel 11 (2462MHz)-Chain B



Channel 12 (2467MHz)-Chain B



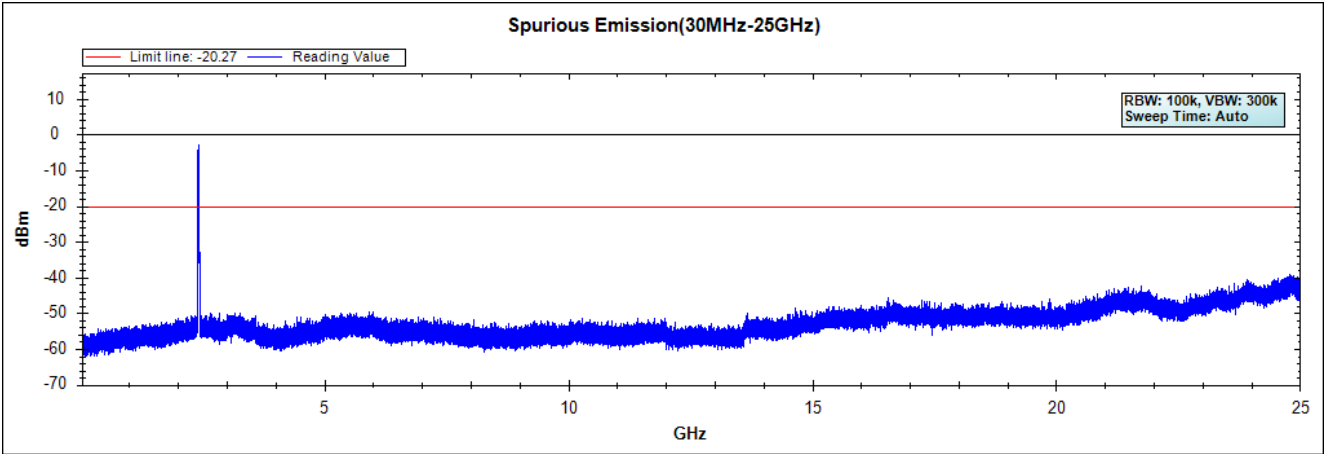
Channel 13 (2472MHz)-Chain B



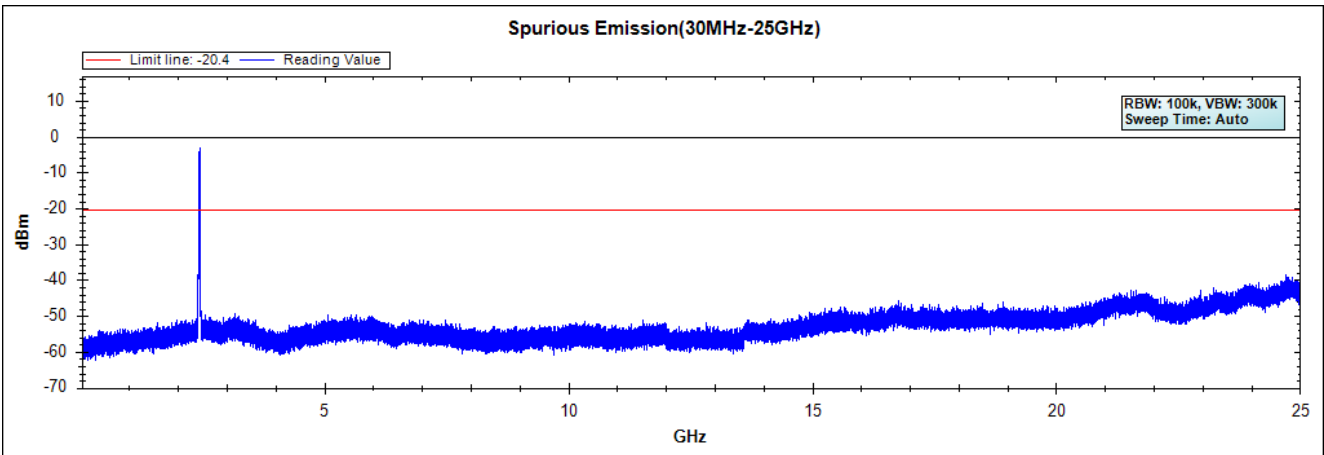
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Portable computer  
Test Item : RF Antenna Conducted Spurious  
Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps)  
Test Date : 2020/05/12

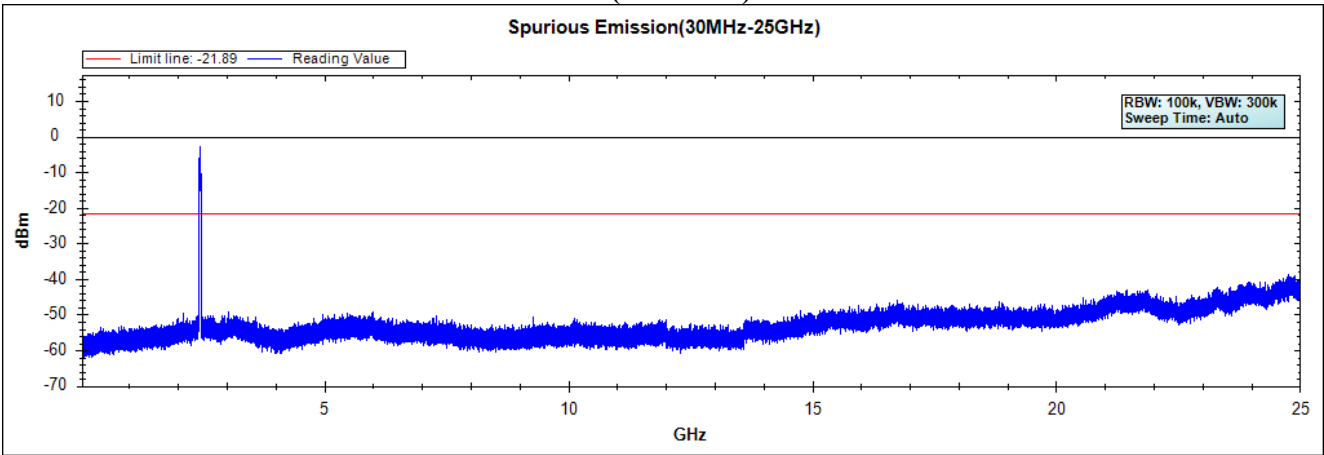
Channel 03 (2422MHz)-Chain A



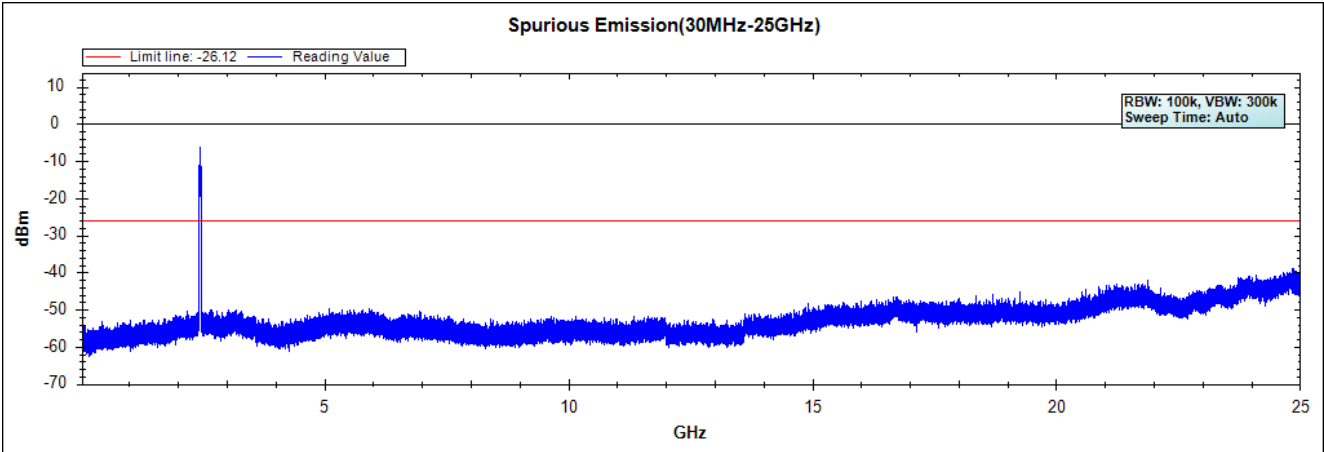
Channel 07 (2442MHz)-Chain A



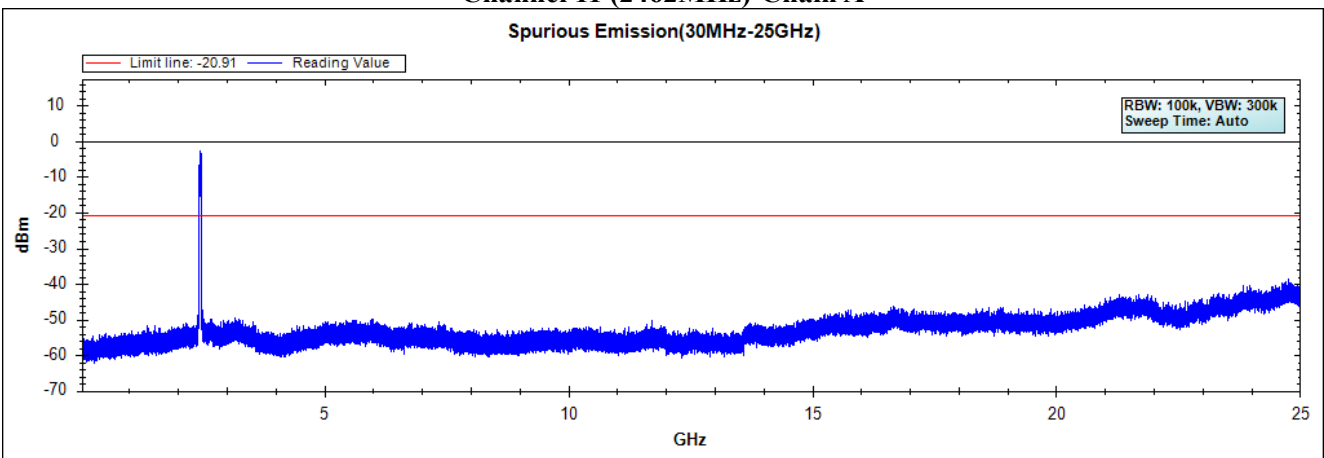
Channel 09 (2452MHz)-Chain A



Channel 10 (2457MHz)-Chain A



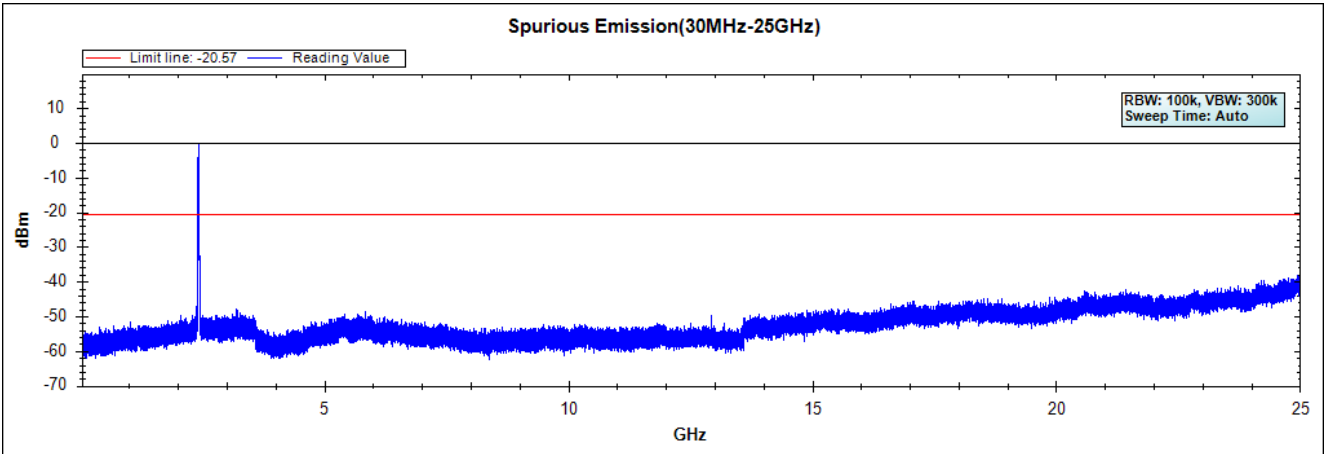
Channel 11 (2462MHz)-Chain A



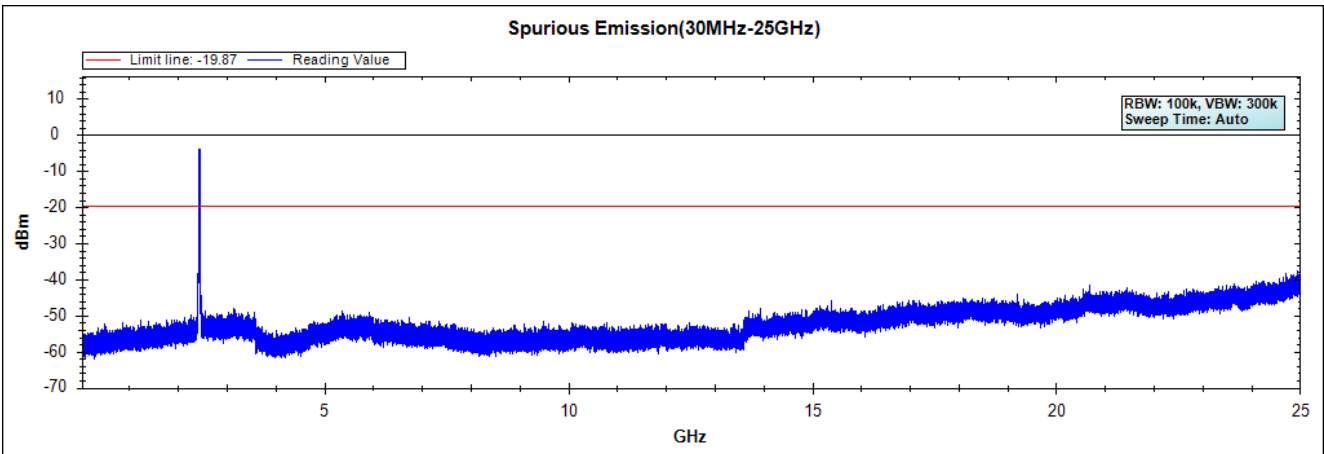
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Portable computer  
Test Item : RF Antenna Conducted Spurious  
Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW\_34.4Mbps)  
Test Date : 2020/05/12

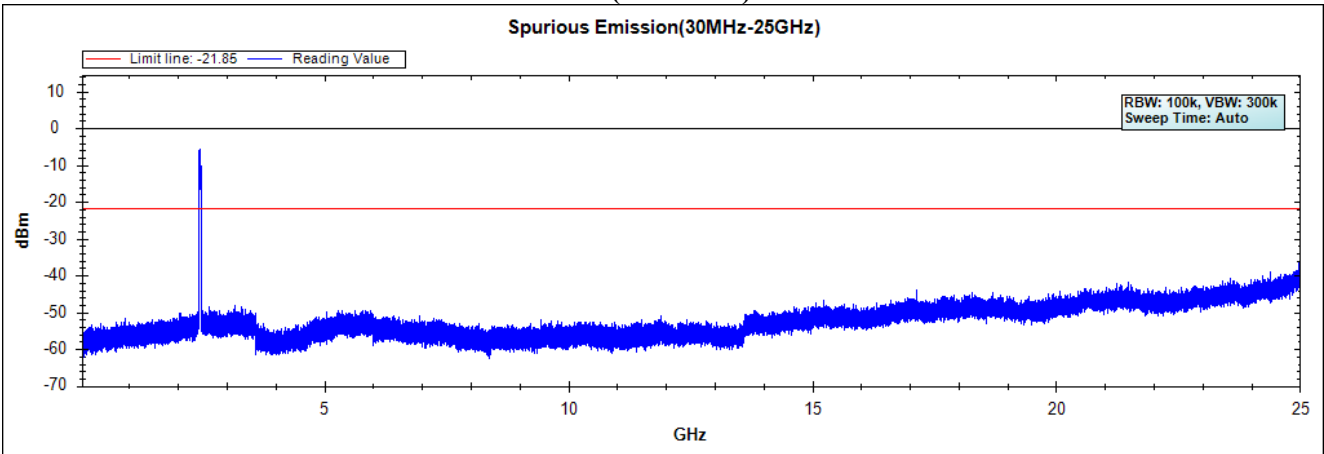
Channel 03 (2422MHz)-Chain B



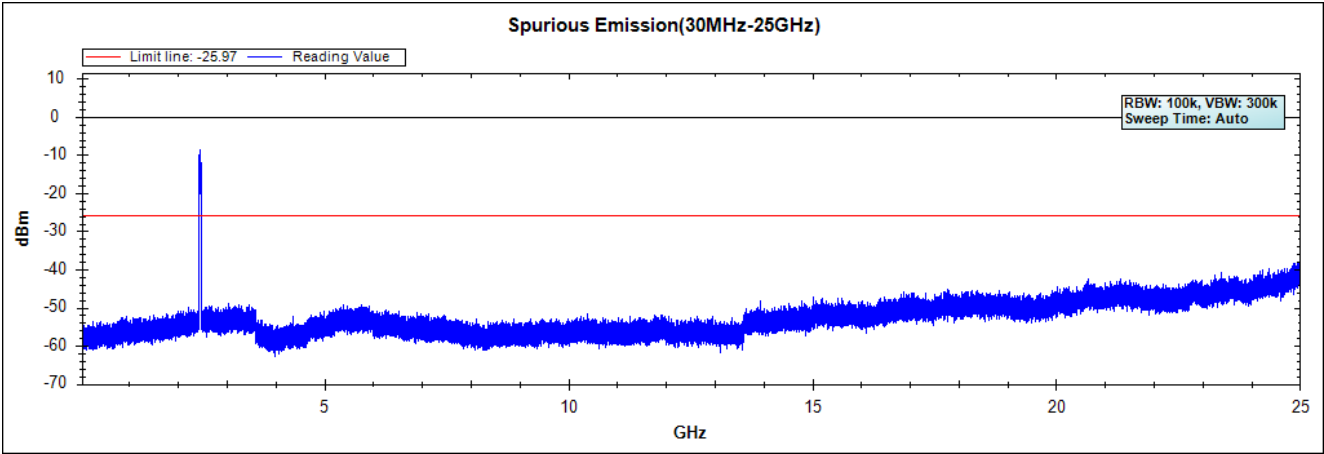
Channel 07 (2442MHz)-Chain B



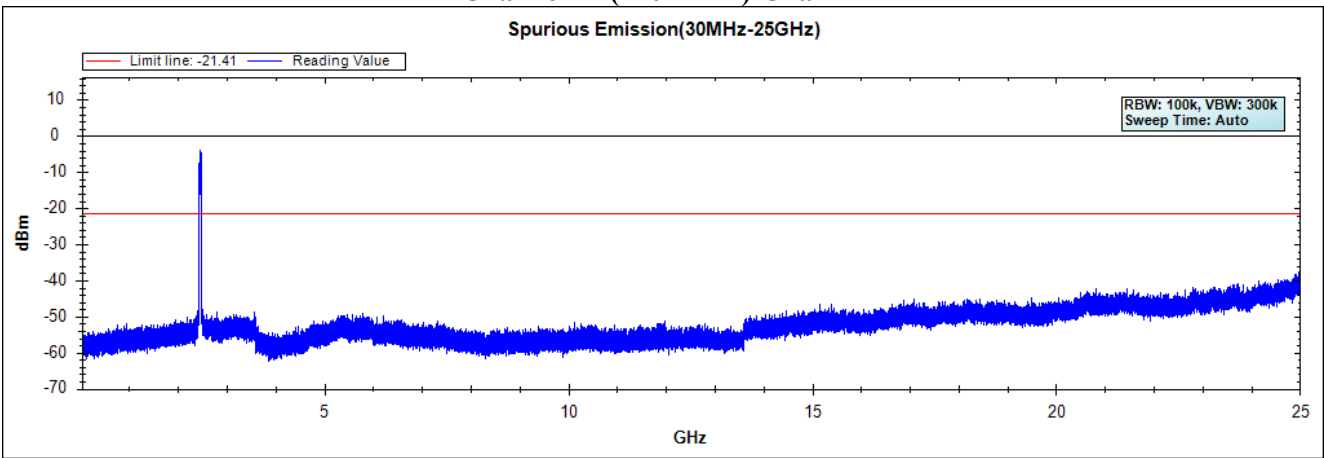
Channel 09 (2452MHz)-Chain B



Channel 10 (2457MHz)-Chain B



Channel 11 (2462MHz)-Chain B

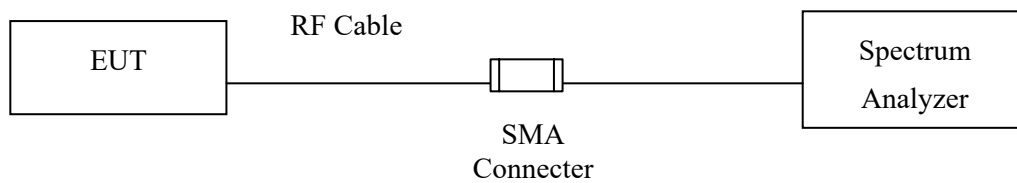


Note: The above test pattern is synthesized by multiple of the frequency range.

## 6. Band Edge

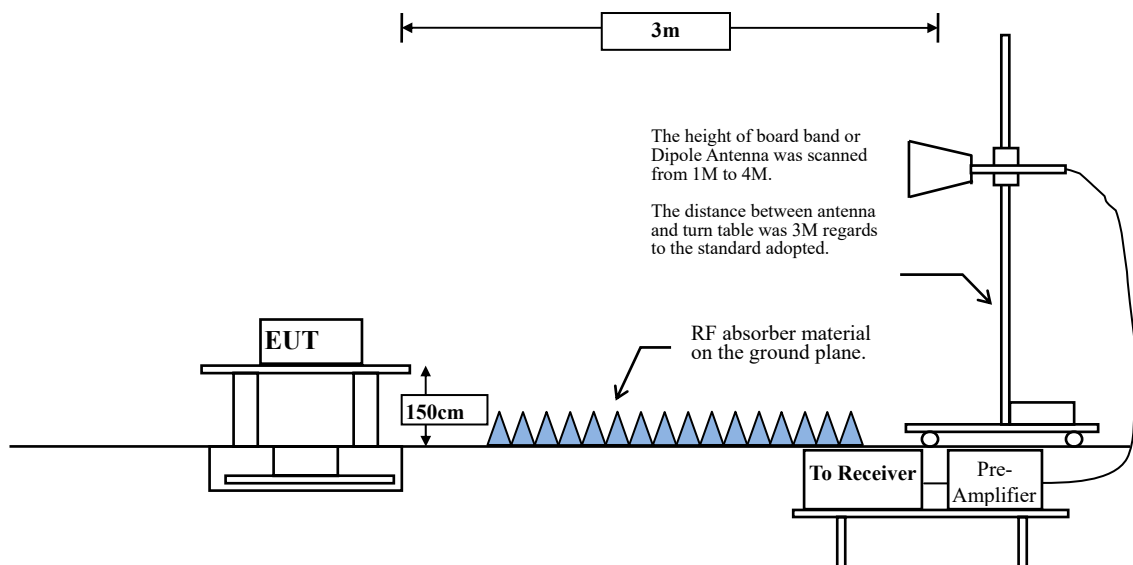
### 6.1. Test Setup

#### RF Conducted Measurement



#### RF Radiated Measurement:

Above 1GHz



## 6.2. Limits

According to FCC Section 15.247(d). 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 measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

## 6.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to C63.10:2013 Section 11.12.1 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

**RBW and VBW Parameter setting:**

According to C63.10 Section 11.12.2.4 Peak measurement procedure.

RBW = as specified in Table 1.

$VBW \geq 3 \times RBW$ .

**Table 1 —RBW as a function of frequency**

| Frequency   | RBW         |
|-------------|-------------|
| 9-150 kHz   | 200-300 Hz  |
| 0.15-30 MHz | 9-10 kHz    |
| 30-1000 MHz | 100-120 kHz |
| > 1000 MHz  | 1 MHz       |

According to C63.10 Section 11.12.2.5 Average measurement procedure.

RBW = 1MHz.

VBW = 10Hz, when duty cycle  $\geq 98 \%$

$VBW \geq 1/T$ , when duty cycle  $< 98 \%$

( T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

| 2.4GHz band       | Duty Cycle (%) | T (ms)  | 1/T (Hz) | VBW (Hz) |
|-------------------|----------------|---------|----------|----------|
| 802.11 b-SISOB    | 97.13          | 8.3478  | 120      | 500      |
| 802.11 n20-SISOB  | 98.79          | 24.8043 | 40       | 10       |
| 802.11 n40-SISOB  | 98.99          | 36.8840 | 27       | 10       |
| 802.11ax20-SISOB  | 98.50          | 24.7101 | 40       | 10       |
| 802.11 ax40-SISOB | 98.39          | 18.6232 | 54       | 10       |
| 802.11 n20-MIMO   | 99.15          | 18.5507 | 54       | 10       |
| 802.11 n40-MIMO   | 95.91          | 8.8406  | 113      | 500      |
| 802.11ax20-MIMO   | 98.78          | 18.6957 | 53       | 10       |
| 802.11 ax40-MIMO  | 95.35          | 9.2029  | 109      | 500      |

Note: Duty Cycle Refer to Section 9

**6.4. Uncertainty**

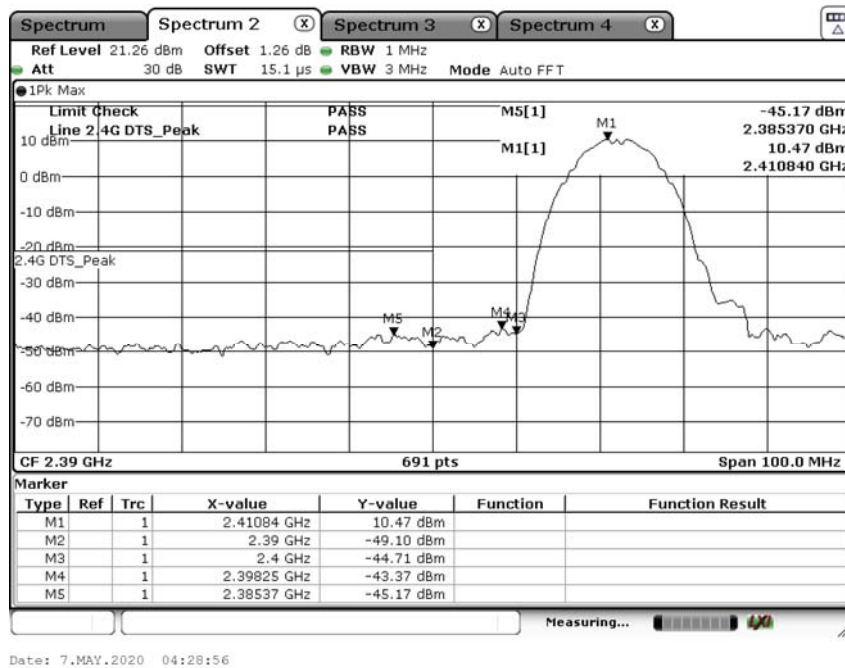
$\pm 4.08$  dB above 1GHz

$\pm 4.22$  dB below 1GHz

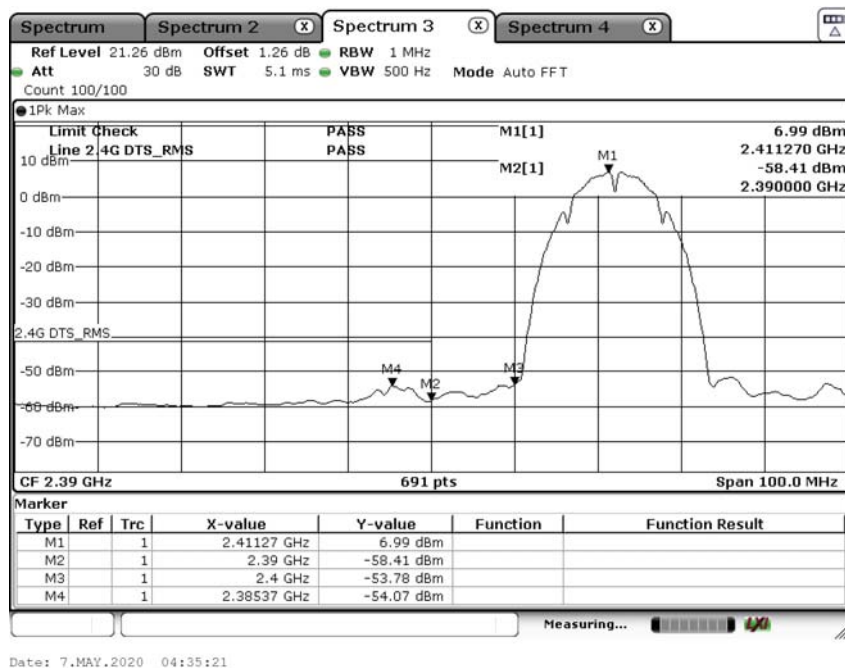
## 6.5. Test Result of Band Edge

Product : Portable computer  
 Test Item : Band Edge Data  
 Test Mode : Mode 7 SISO B: Transmit (802.11b\_1Mbps) (2412MHz)  
 Test Date : 2020/05/28

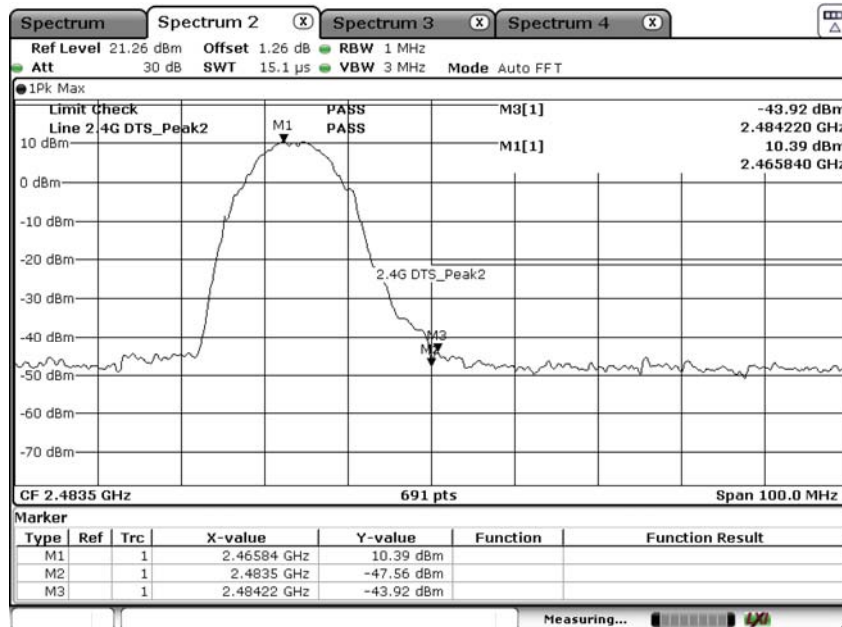
### Peak:



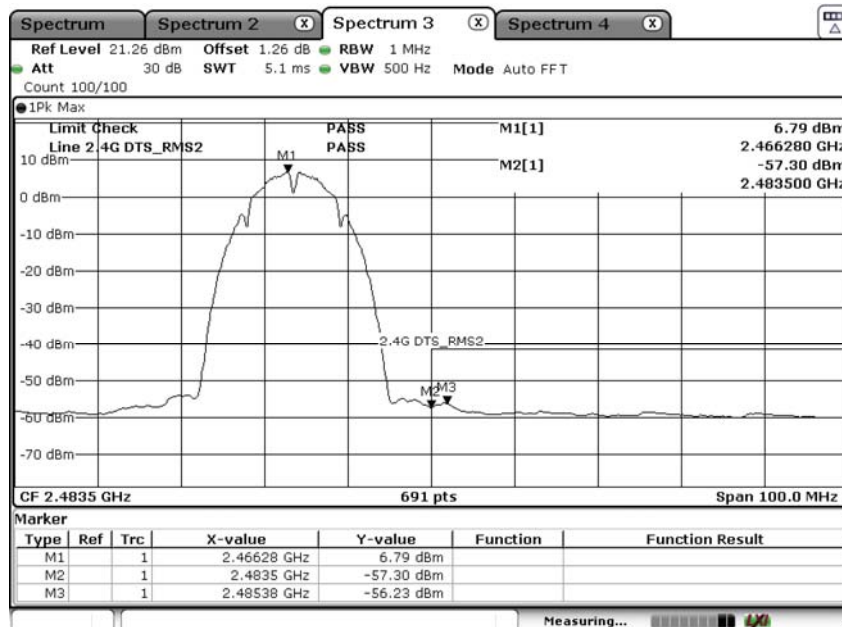
### Average:



Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 7 SISO B: Transmit (802.11b\_1Mbps) (2467MHz)  
Test Date : 2020/05/28

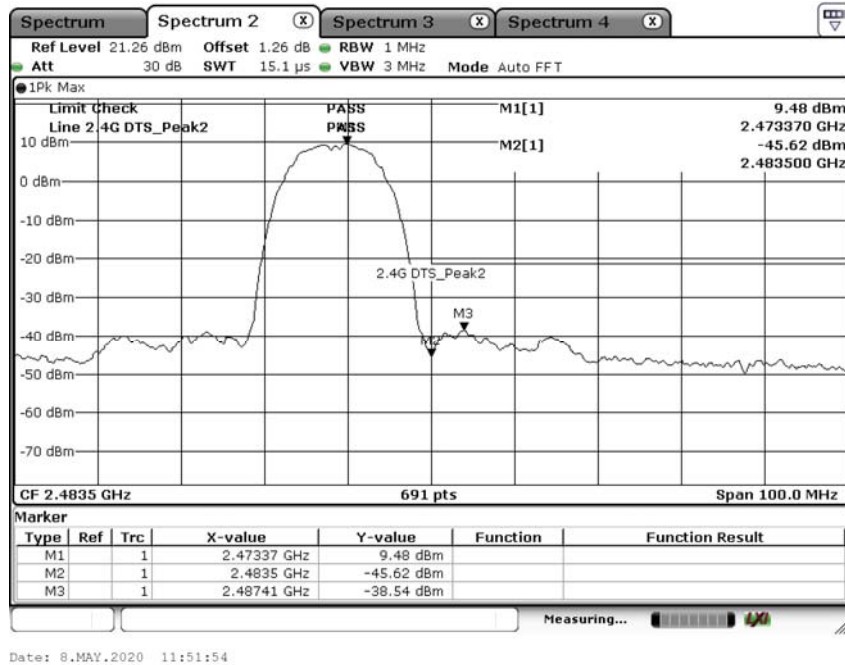
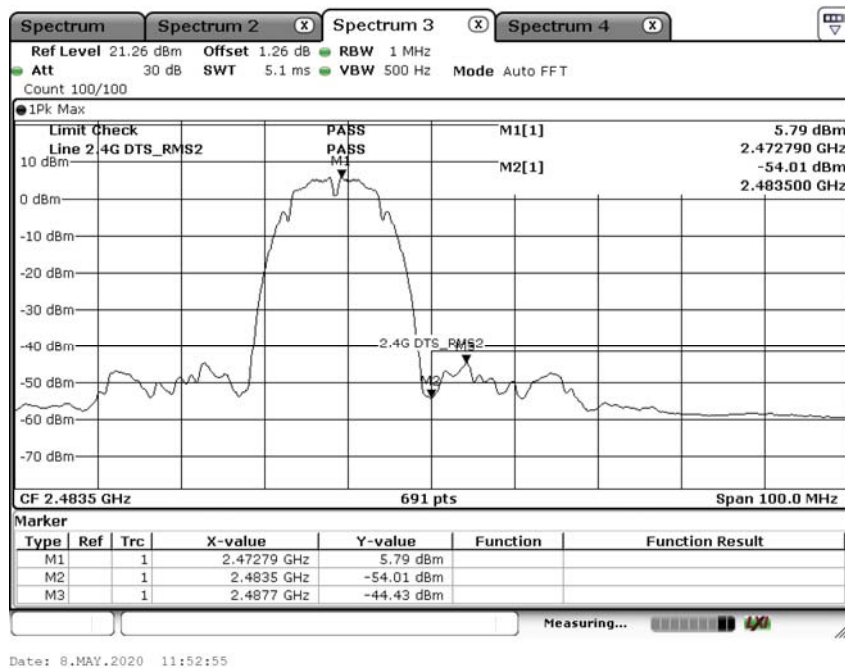
**Peak:**

Date: 7.MAY.2020 05:09:05

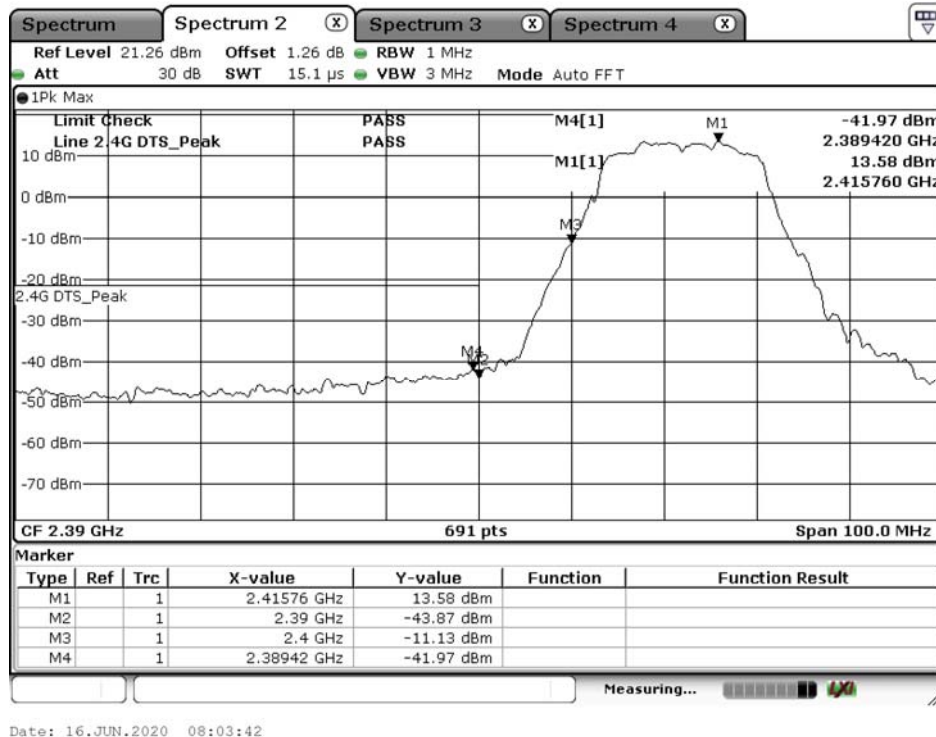
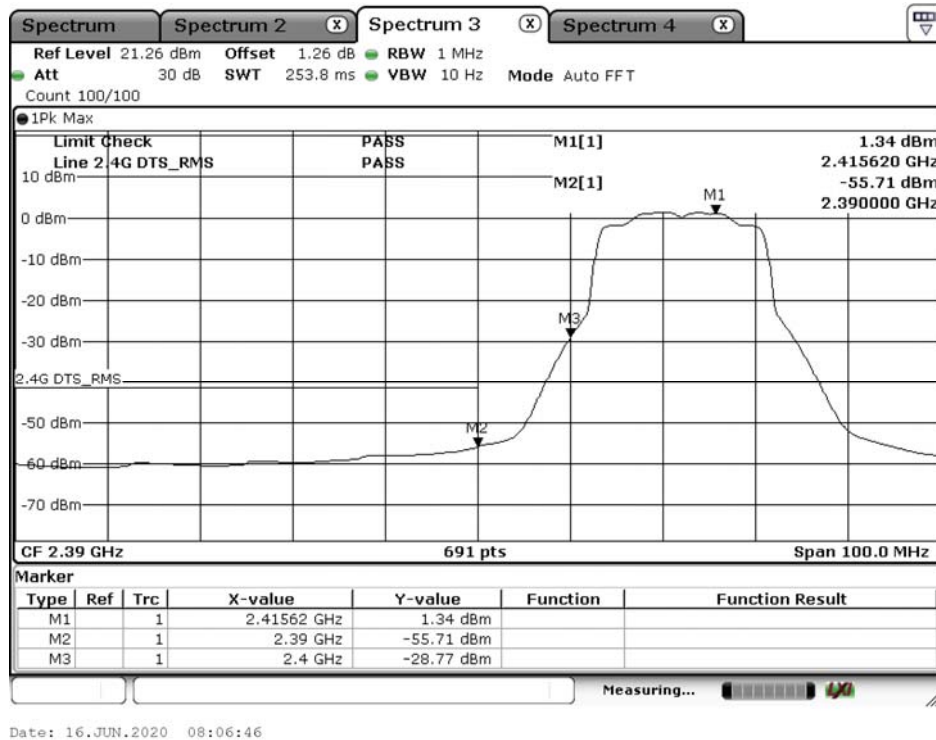
**Average:**

Date: 7.MAY.2020 05:09:38

Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 7 SISO B: Transmit (802.11b\_1Mbps) (2472MHz)  
Test Date : 2020/05/28

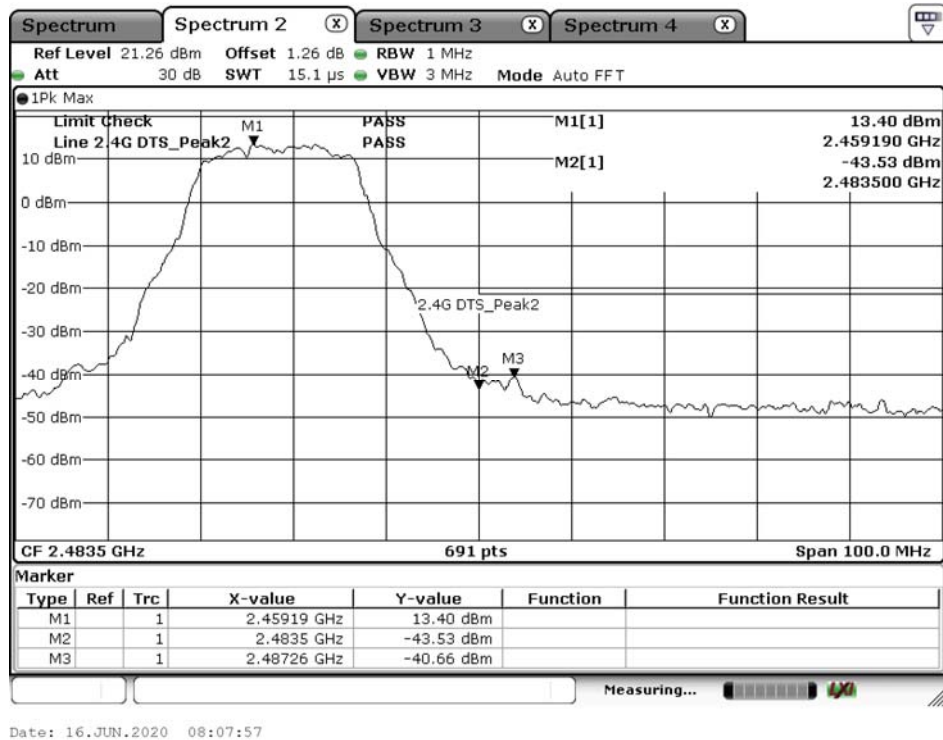
**Peak:****Average:**

Product : Portable computer  
 Test Item : Band Edge Data  
 Test Mode : Mode 9 SISO B: Transmit (802.11n-20BW\_7.2Mbps) (2412MHz)  
 Test Date : 2020/06/16

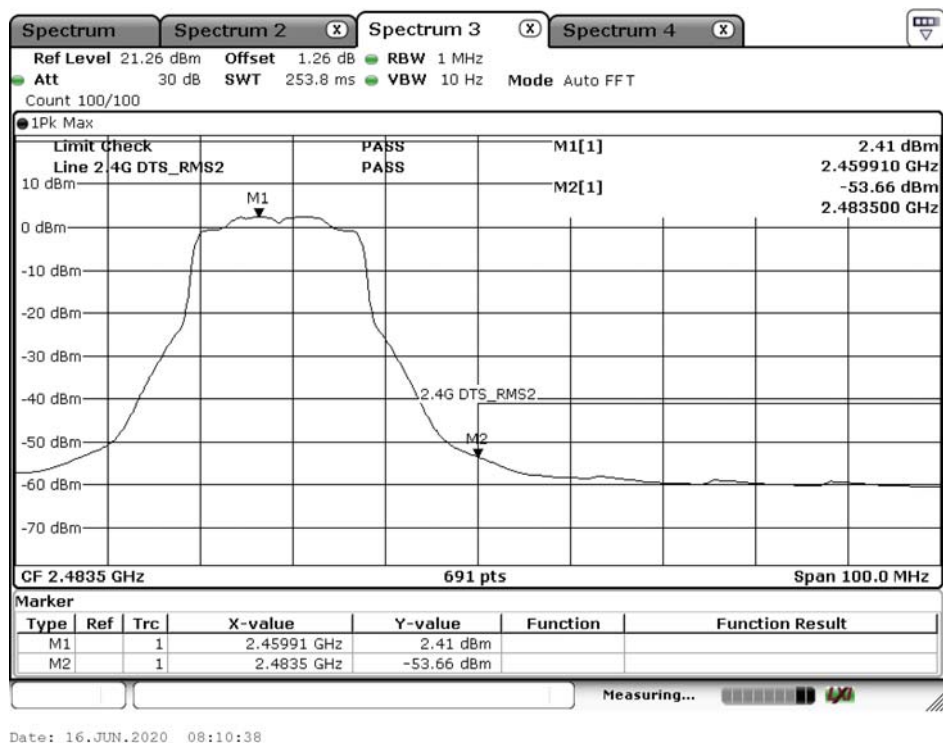
**Peak:****Average:**

Product : Portable computer  
 Test Item : Band Edge Data  
 Test Mode : Mode 9 SISO B: Transmit (802.11n-20BW\_7.2Mbps) (2462MHz)  
 Test Date : 2020/06/16

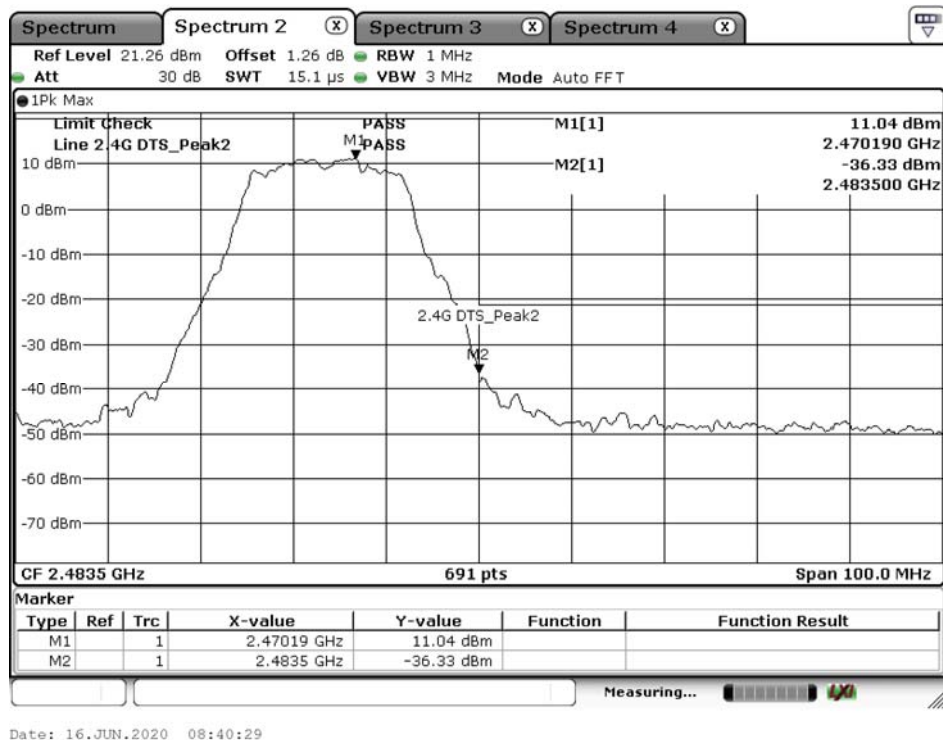
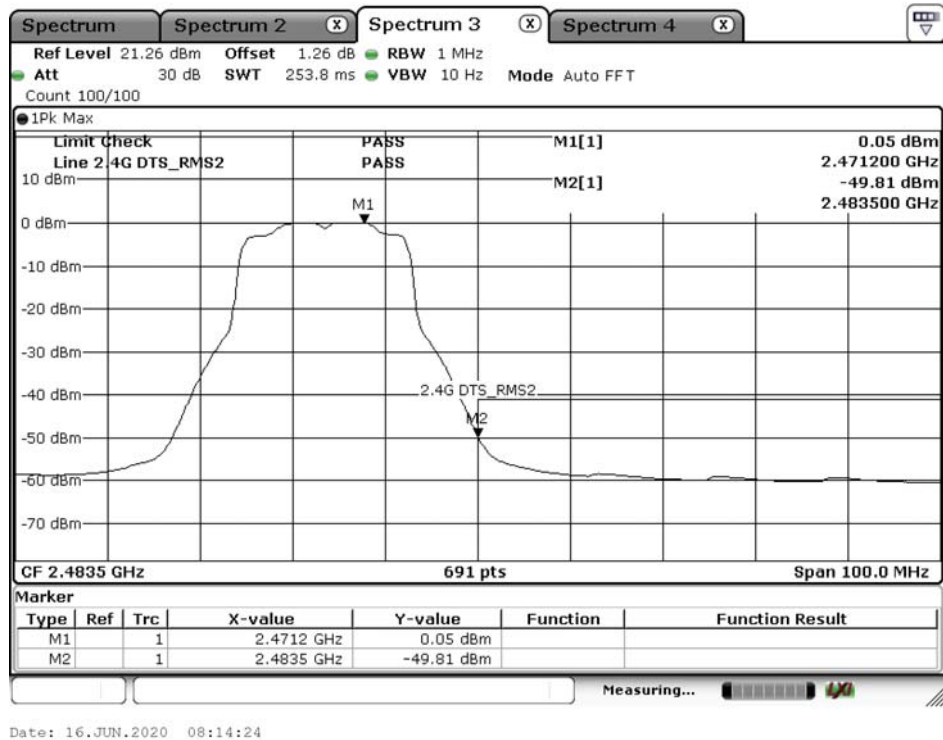
### Peak:



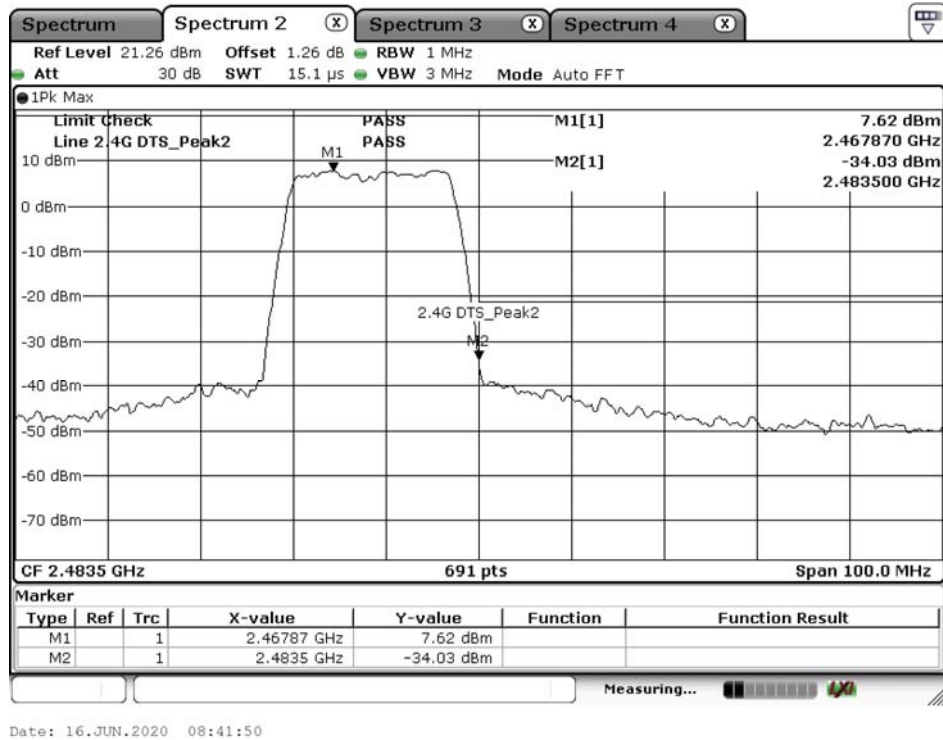
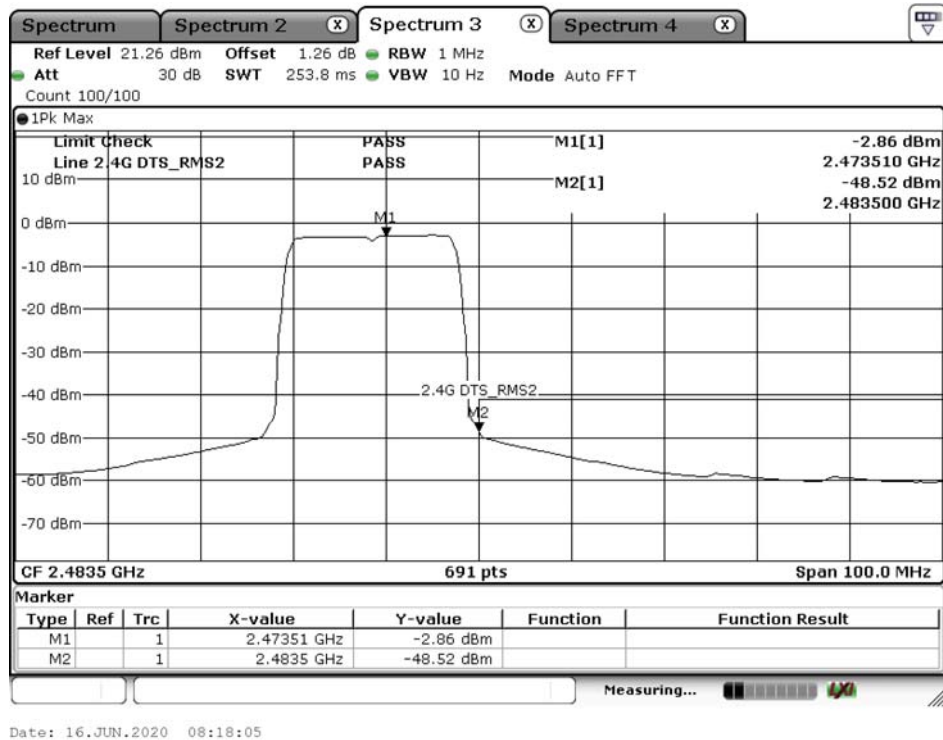
### Average:



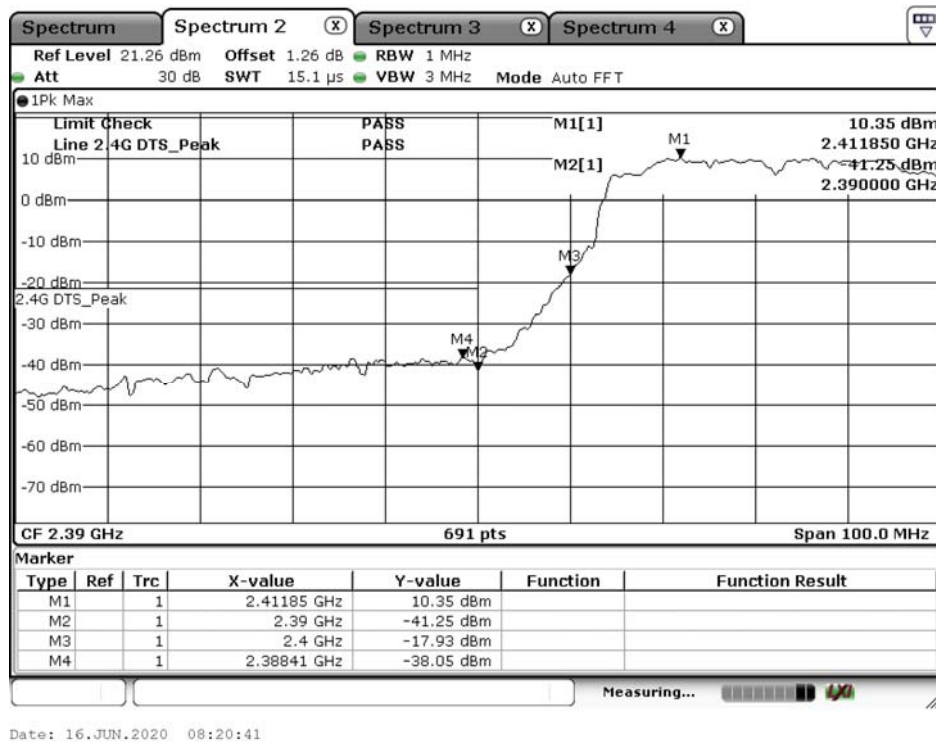
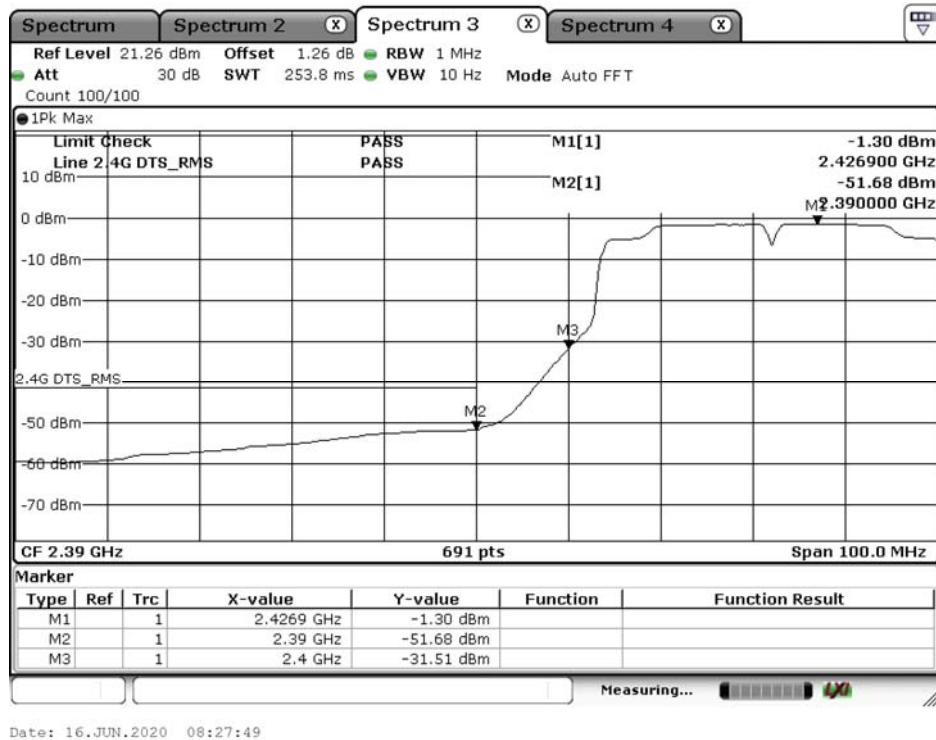
Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 9 SISO B: Transmit (802.11n-20BW\_7.2Mbps) (2467MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

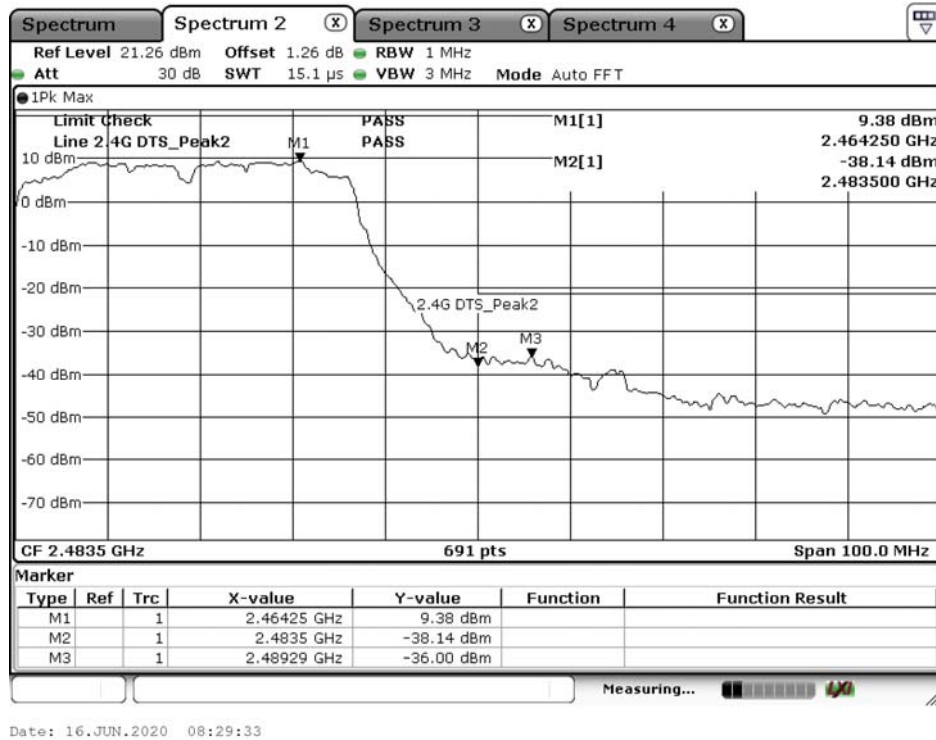
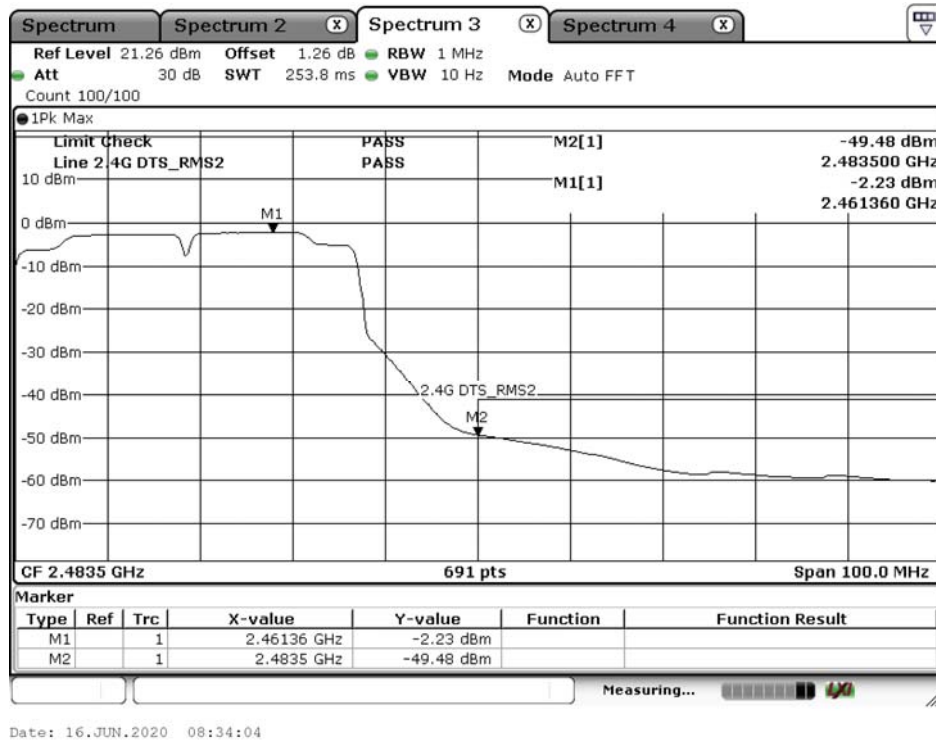
Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 9 SISO B: Transmit (802.11n-20BW\_7.2Mbps) (2472MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

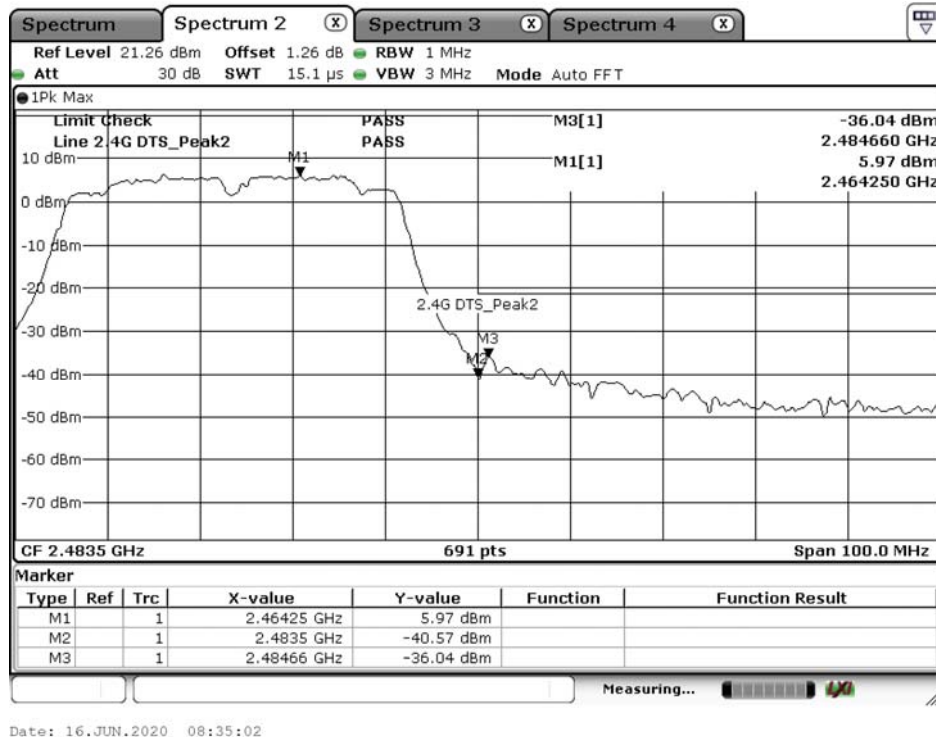
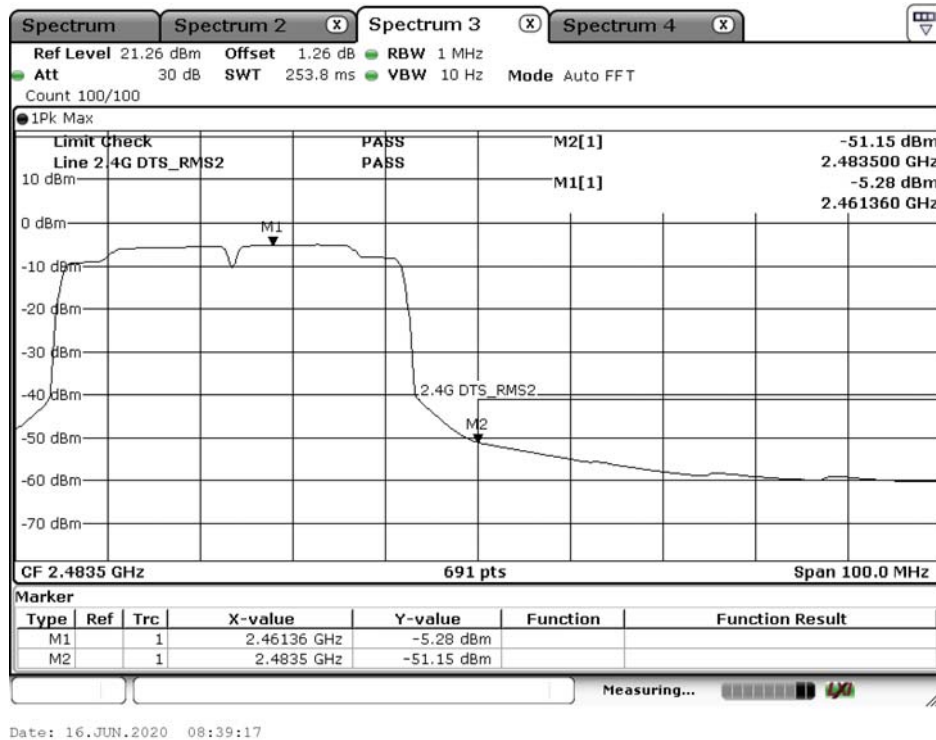
Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 10 SISO B: Transmit (802.11n-40BW\_15Mbps) (2422MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

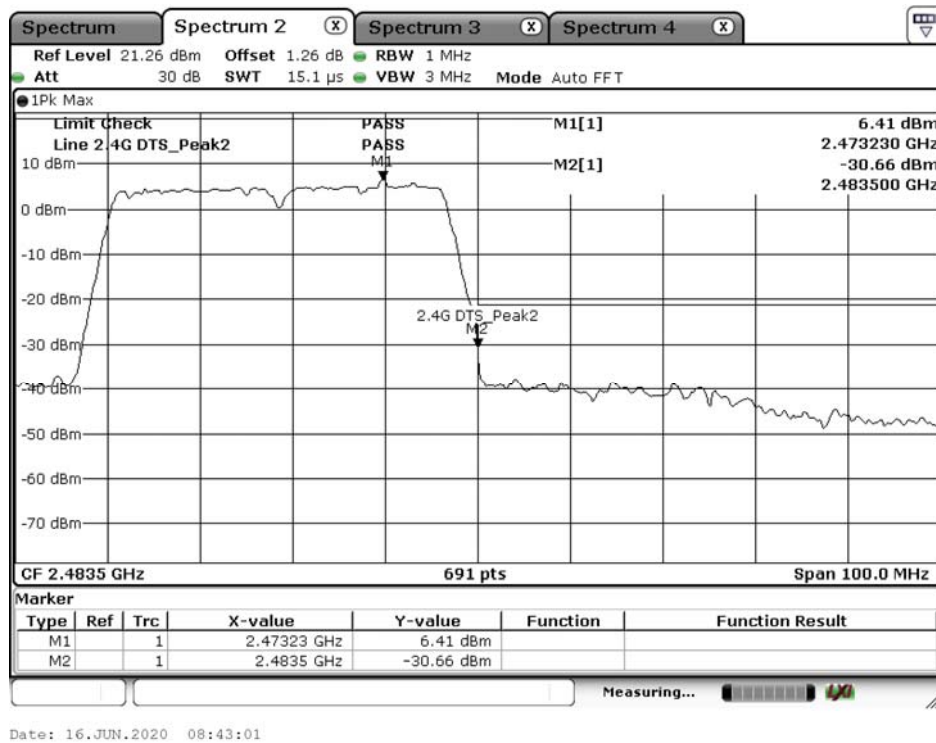
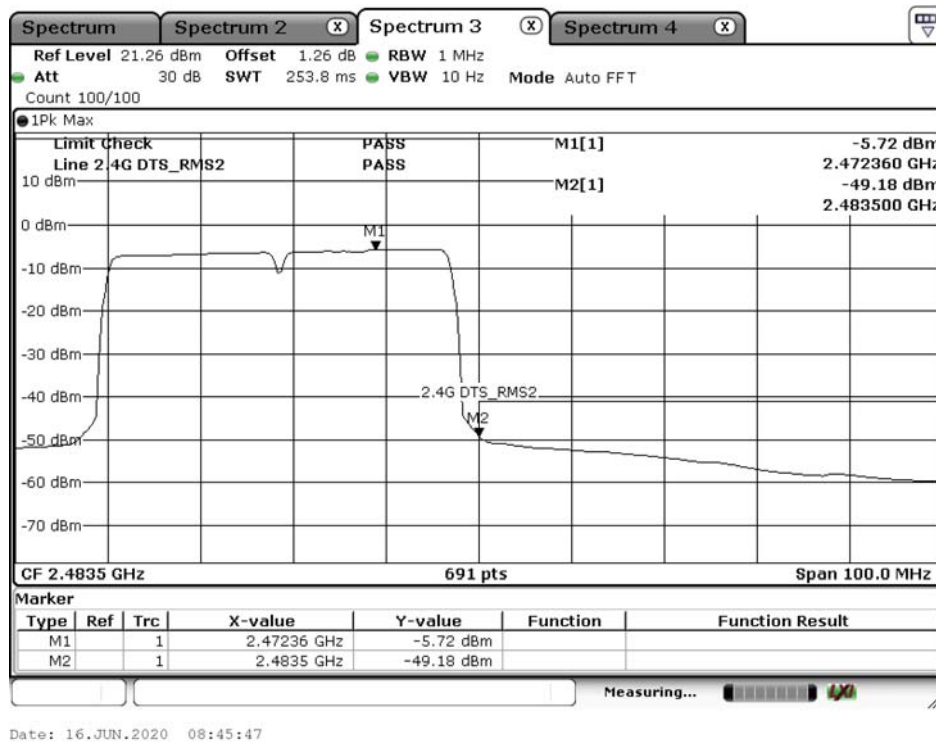
Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 10 SISO B: Transmit (802.11n-40BW\_15Mbps) (2452MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

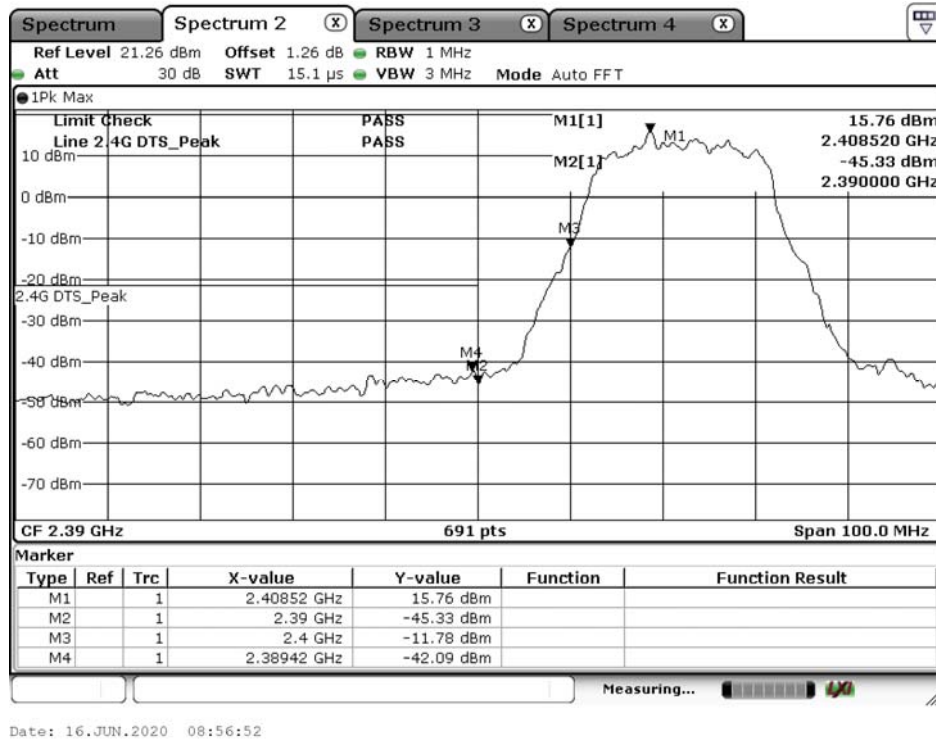
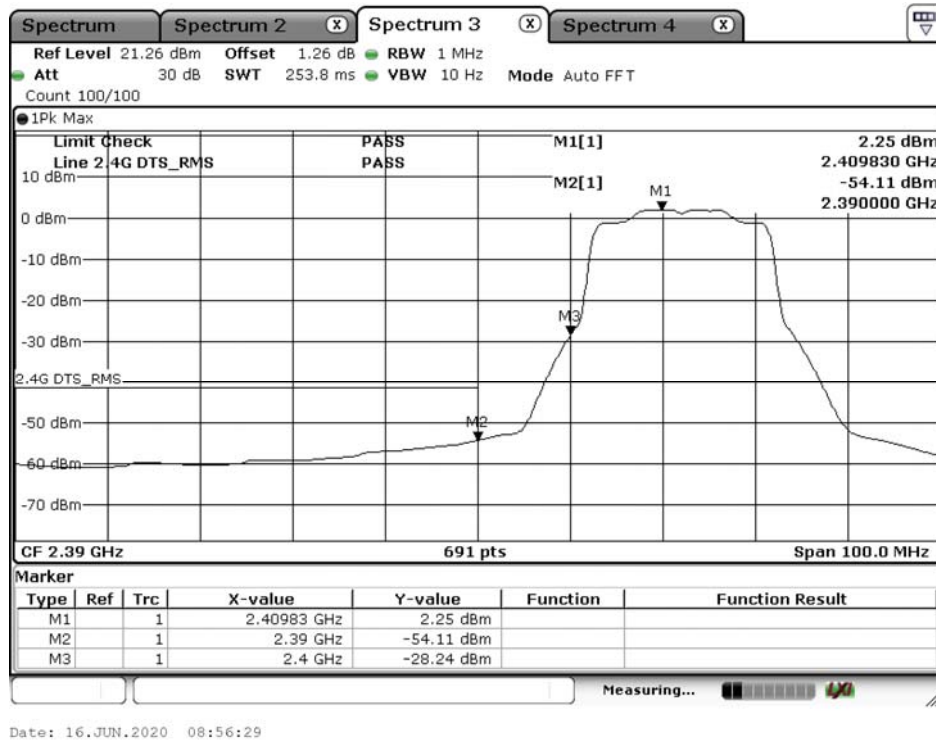
Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 10 SISO B: Transmit (802.11n-40BW\_15Mbps) (2457MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

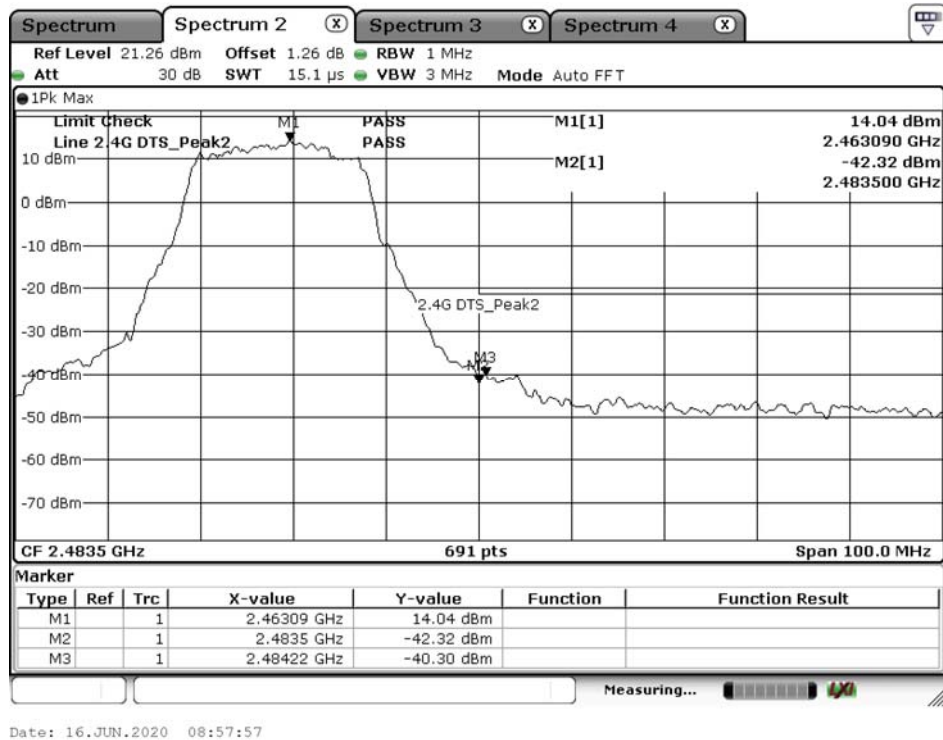
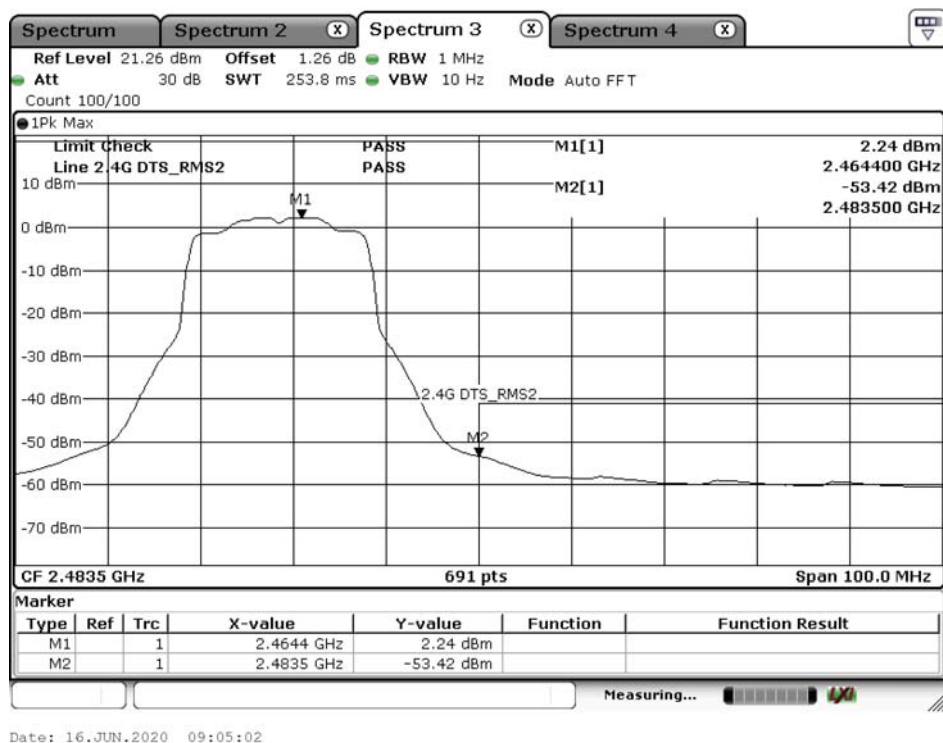
Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 10 SISO B: Transmit (802.11n-40BW\_15Mbps) (2462MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

Product : Portable computer  
 Test Item : Band Edge Data  
 Test Mode : Mode 11 SISO B: Transmit (802.11ax-20BW\_8.6Mbps) (2412MHz)  
 Test Date : 2020/06/16

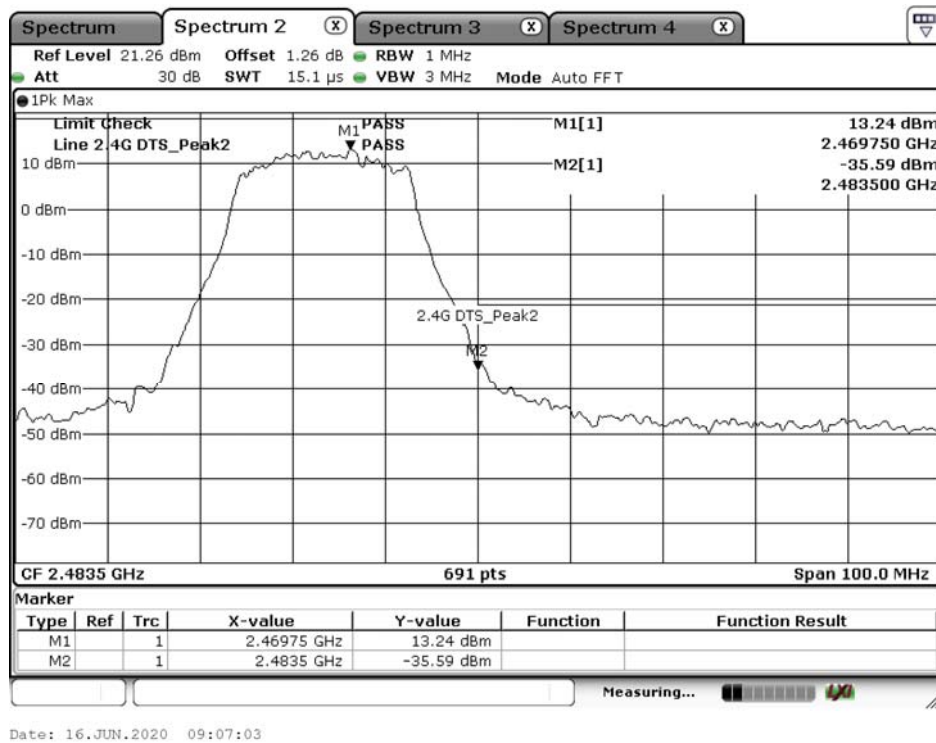
**Peak:****Average:**

Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 11 SISO B: Transmit (802.11ax-20BW\_8.6Mbps) (2462MHz)  
Test Date : 2020/06/16

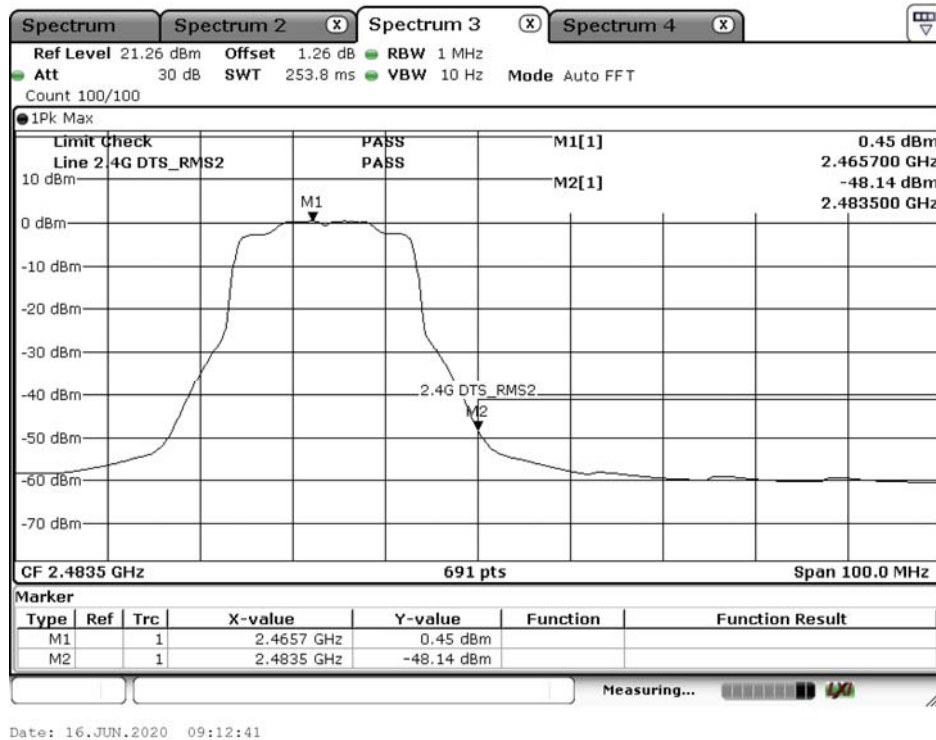
**Peak:****Average:**

|           |   |                                                            |
|-----------|---|------------------------------------------------------------|
| Product   | : | Portable computer                                          |
| Test Item | : | Band Edge Data                                             |
| Test Mode | : | Mode 11 SISO B: Transmit (802.11ax-20BW_8.6Mbps) (2467MHz) |
| Test Date | : | 2020/06/16                                                 |

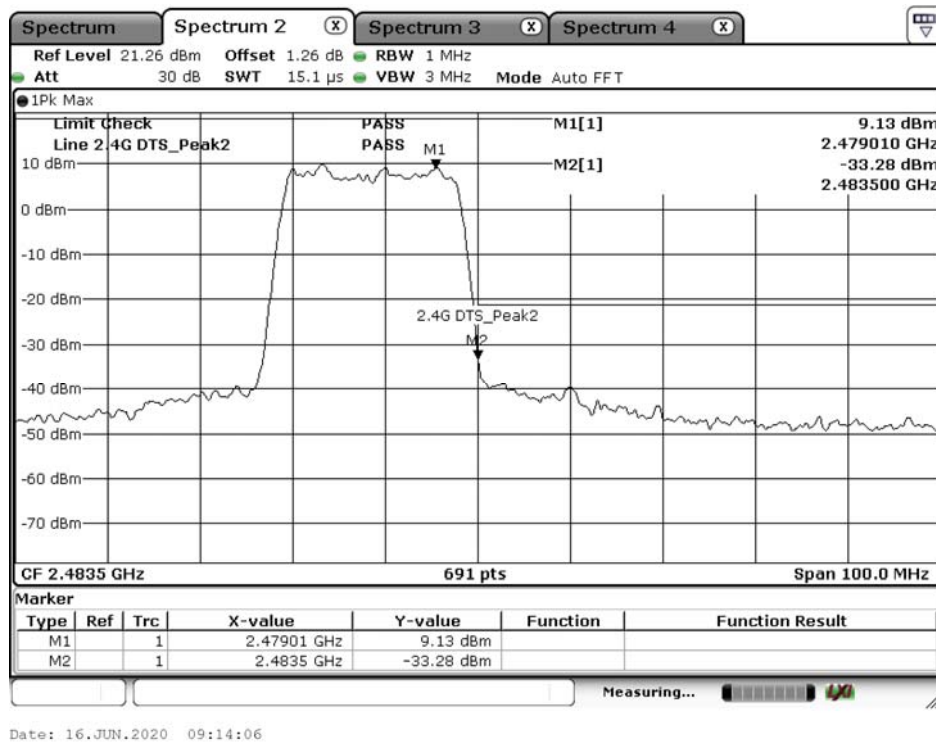
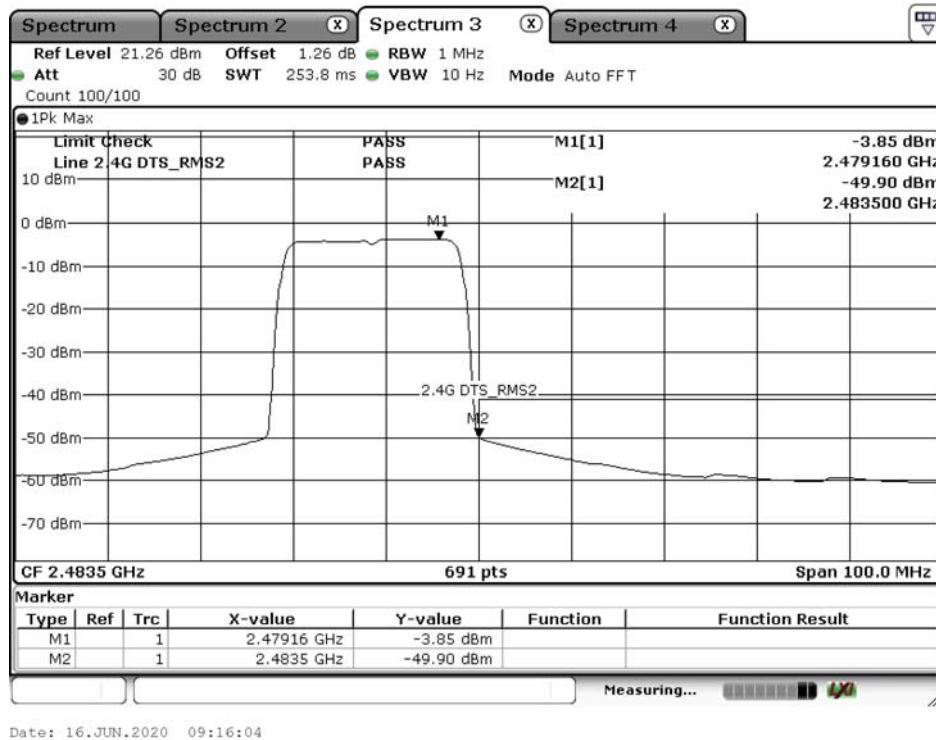
**Peak:**



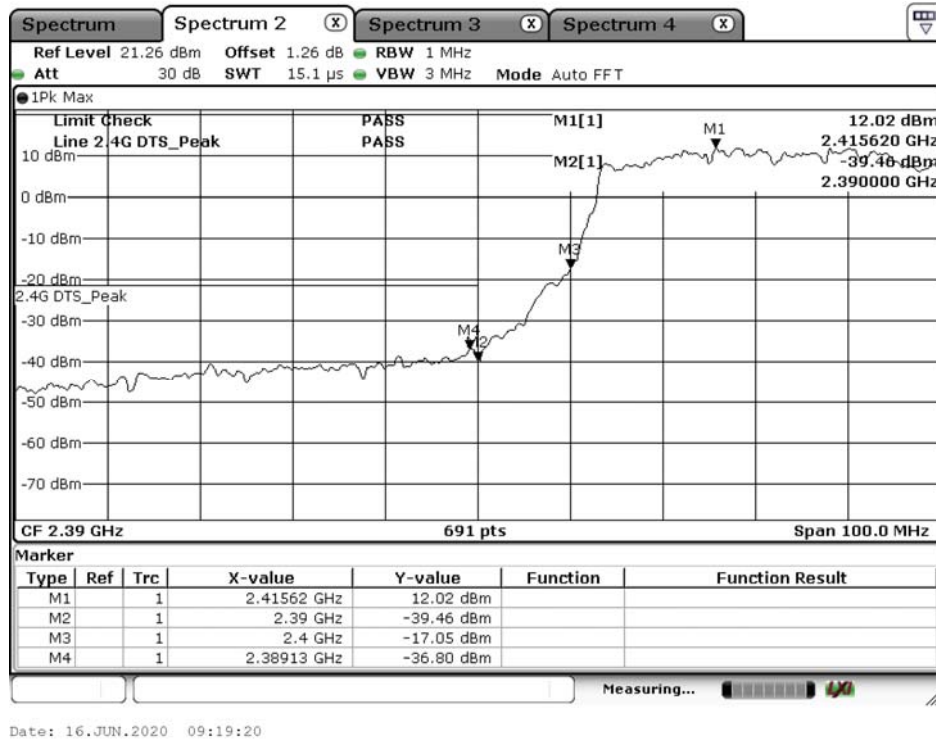
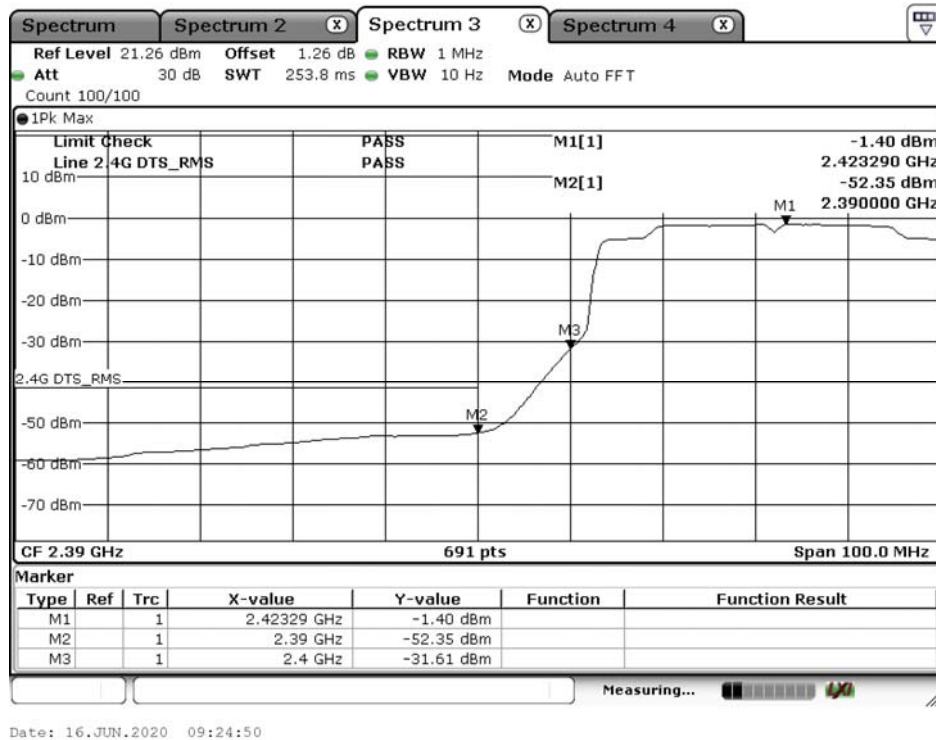
**Average:**



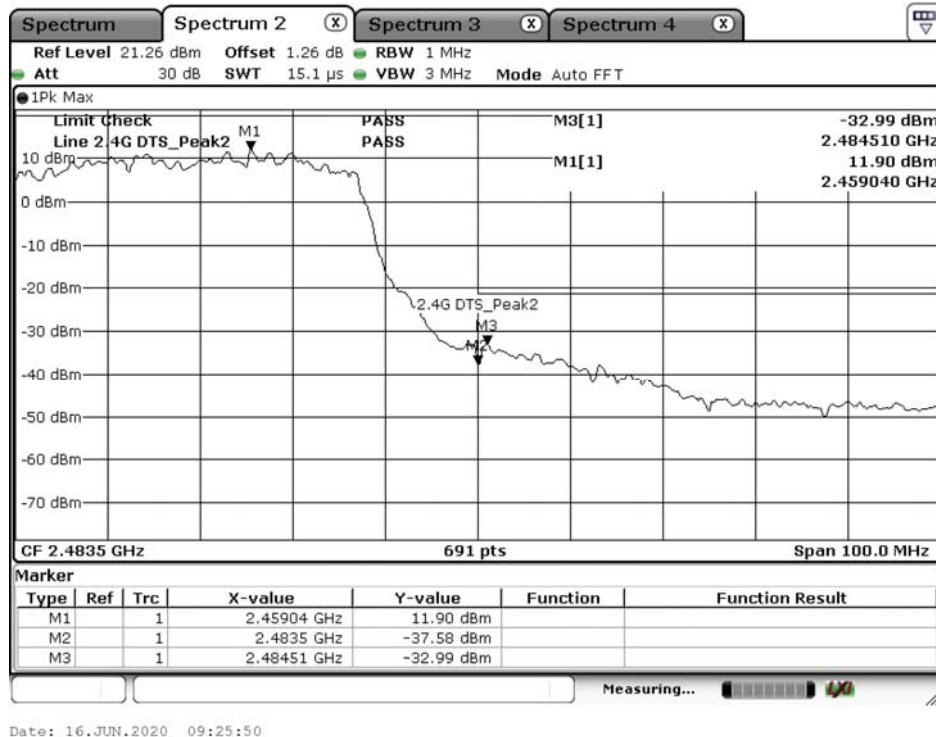
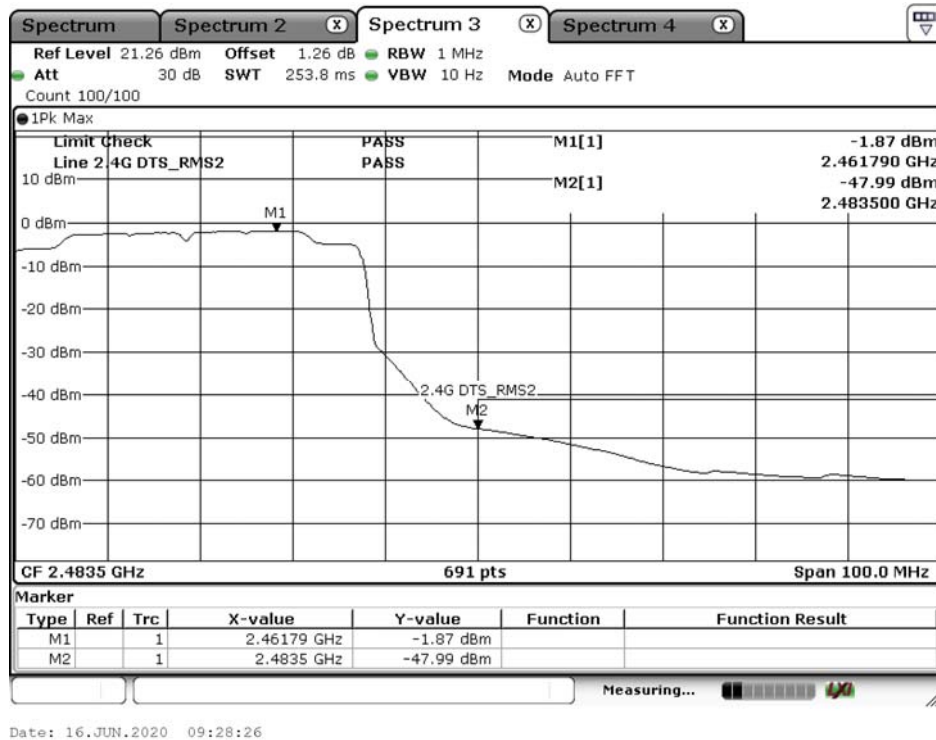
Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 11 SISO B: Transmit (802.11ax-20BW\_8.6Mbps) (2472MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

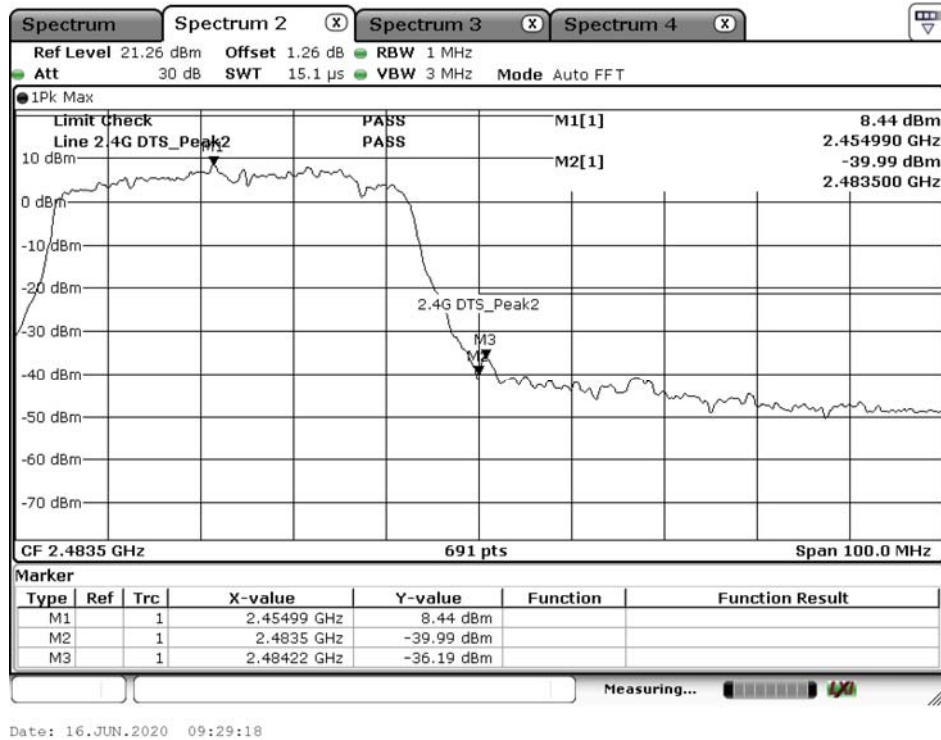
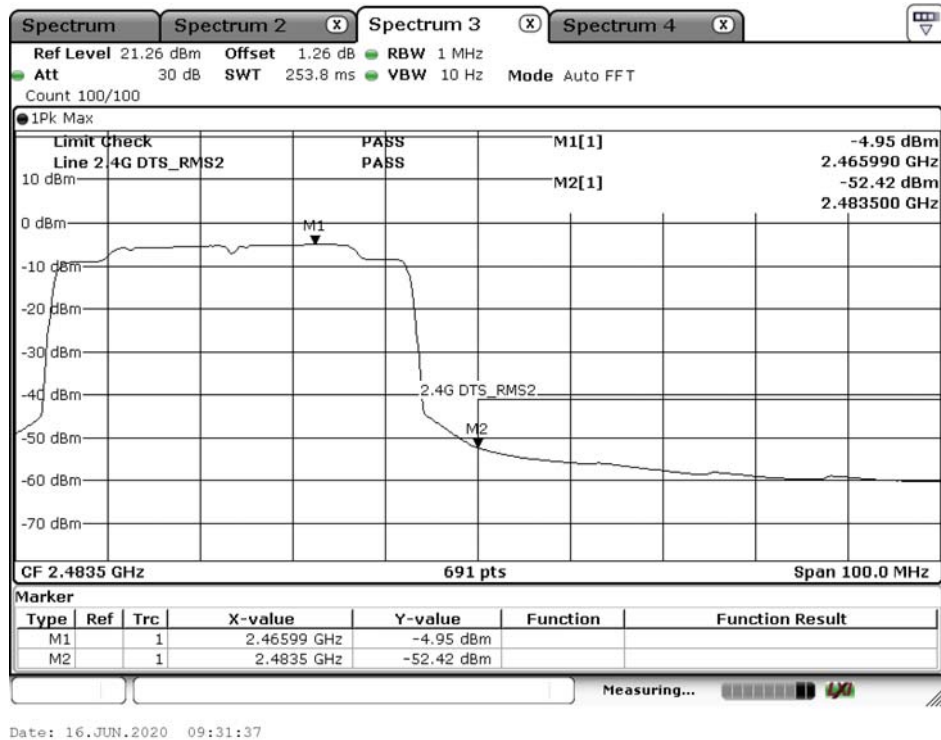
Product : Portable computer  
 Test Item : Band Edge Data  
 Test Mode : Mode 12 SISO B: Transmit (802.11ax-40BW\_17.2Mbps) (2422MHz)  
 Test Date : 2020/06/16

**Peak:****Average:**

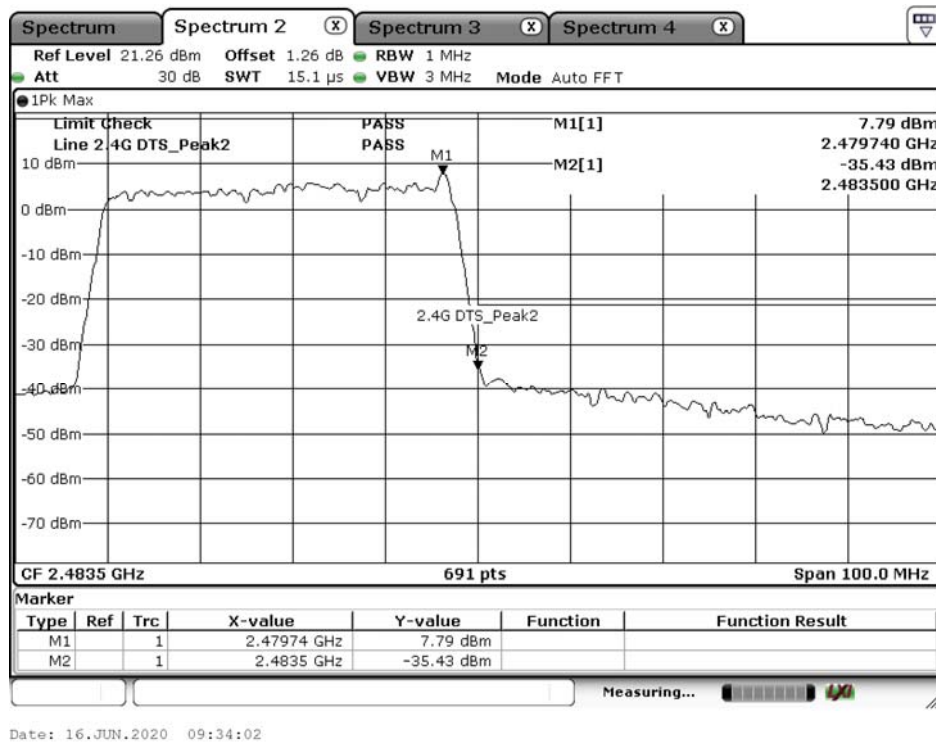
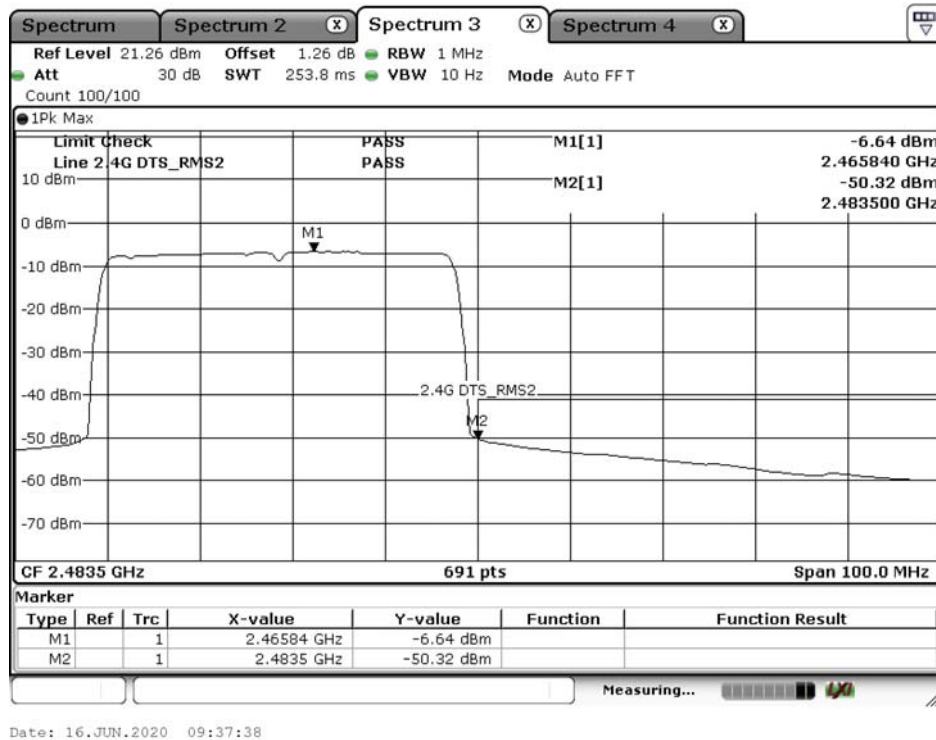
Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 12 SISO B: Transmit (802.11ax-40BW\_17.2Mbps) (2452MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 12 SISO B: Transmit (802.11ax-40BW\_17.2Mbps) (2457MHz)  
Test Date : 2020/06/16

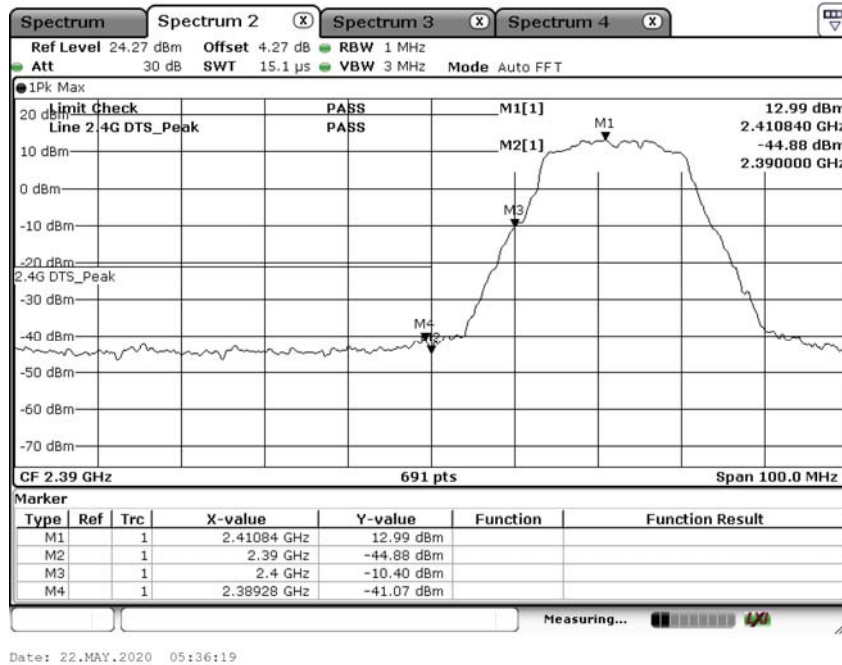
**Peak:****Average:**

Product : Portable computer  
Test Item : Band Edge Data  
Test Mode : Mode 12 SISO B: Transmit (802.11ax-40BW\_17.2Mbps) (2462MHz)  
Test Date : 2020/06/16

**Peak:****Average:**

Product : Portable computer  
 Test Item : Band Edge Data  
 Test Mode : Mode 13 MIMO: Transmit (802.11n-20BW\_14.4Mbps) (2412MHz)  
 Test Date : 2020/05/28

### Peak: - Chain A



### Average: - Chain A

