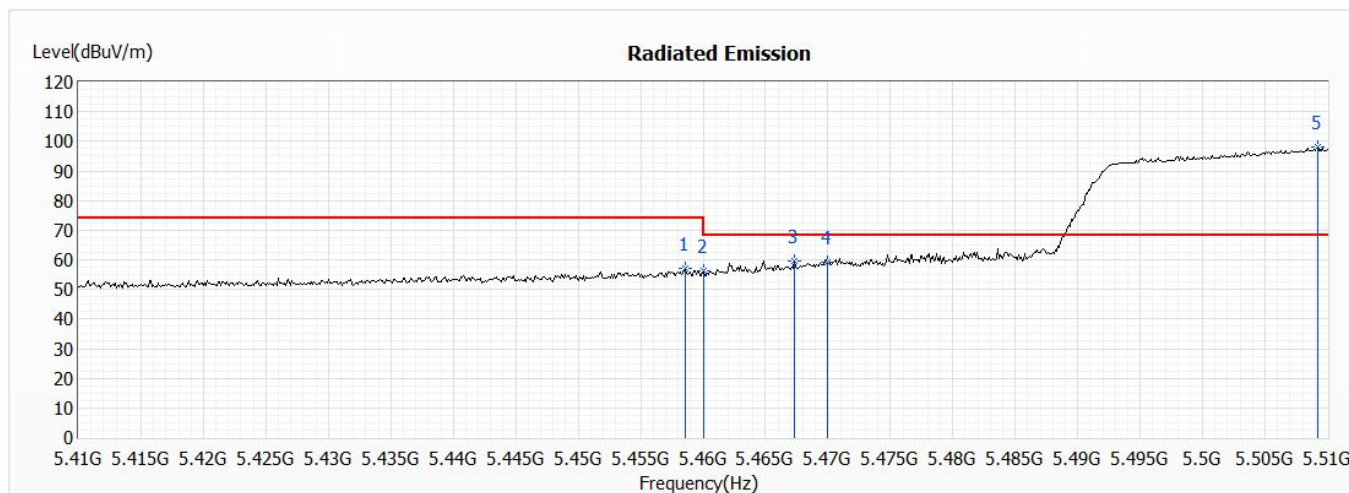


Product : WCDMA/LTE/5G Mobile Phone  
 Test Item : Band Edge Data  
 Test Mode : Mode 4: Transmit (802.11ac-80BW 32.5Mbps) (5530MHz)  
 Test Date : 2021/06/04

## Vertical



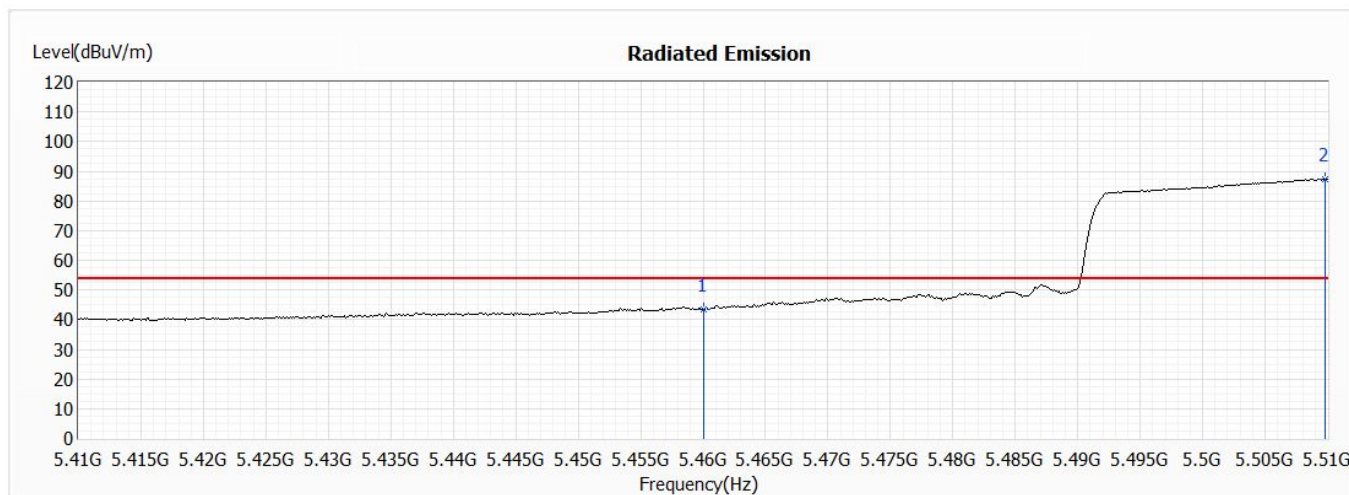
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|---------------------|---------------|
| 1   | 5458.600        | 56.90                   | 74.00          | -17.10      | 37.84                | 19.06               | PK            |
| 2   | 5460.000        | 56.14                   | 74.00          | -17.86      | 37.07                | 19.07               | PK            |
| 3   | 5467.300        | 59.62                   | 68.22          | -8.60       | 40.54                | 19.08               | PK            |
| 4   | 5470.000        | 58.97                   | 68.22          | -9.25       | 39.88                | 19.09               | PK            |
| ! 5 | 5509.200        | 97.94                   | --             | --          | 78.75                | 19.19               | PK            |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product : WCDMA/LTE/5G Mobile Phone  
 Test Item : Band Edge Data  
 Test Mode : Mode 4: Transmit (802.11ac-80BW 32.5Mbps) (5530MHz)  
 Test Date : 2021/06/04

## Vertical



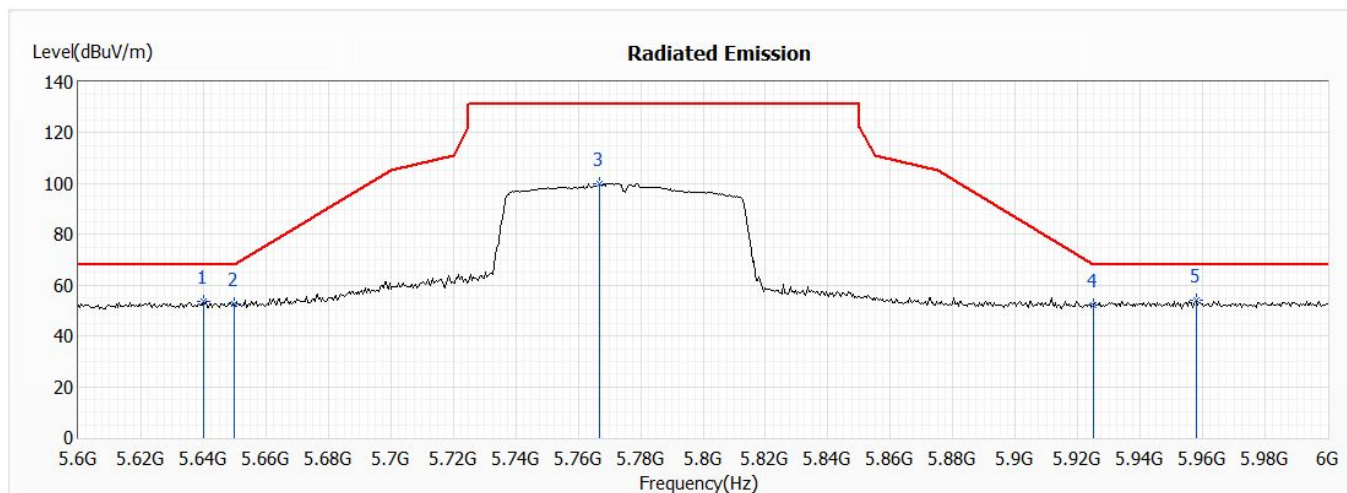
|     | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|---------------------|---------------|
| 1   | 5460.000        | 43.46                   | 54.00          | -10.54      | 24.39                | 19.07               | AV            |
| ! 2 | 5509.800        | 87.45                   | --             | --          | 68.26                | 19.19               | AV            |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product : WCDMA/LTE/5G Mobile Phone  
 Test Item : Band Edge Data  
 Test Mode : Mode 4: Transmit (802.11ac-80BW 32.5Mbps) (5775MHz)  
 Test Date : 2021/06/03

## Horizontal



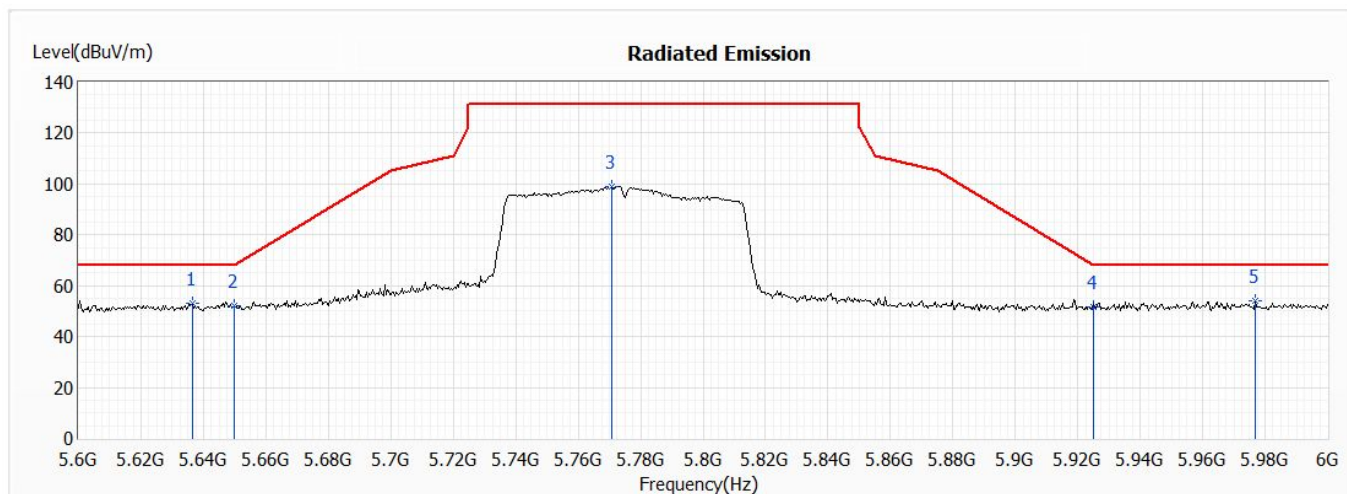
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|---------------------|---------------|
| 1   | 5640.000        | 53.62                   | 68.22          | -14.60      | 34.42                | 19.20               | PK            |
| 2   | 5650.000        | 52.79                   | 68.22          | -15.43      | 33.63                | 19.16               | PK            |
| 3   | 5766.800        | 100.16                  | 131.20         | -31.04      | 80.51                | 19.65               | PK            |
| 4   | 5925.000        | 52.20                   | 68.22          | -16.02      | 32.00                | 20.20               | PK            |
| * 5 | 5958.000        | 53.90                   | 68.22          | -14.32      | 33.65                | 20.25               | PK            |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product : WCDMA/LTE/5G Mobile Phone  
 Test Item : Band Edge Data  
 Test Mode : Mode 4: Transmit (802.11ac-80BW 32.5Mbps) (5775MHz)  
 Test Date : 2021/06/04

## Vertical



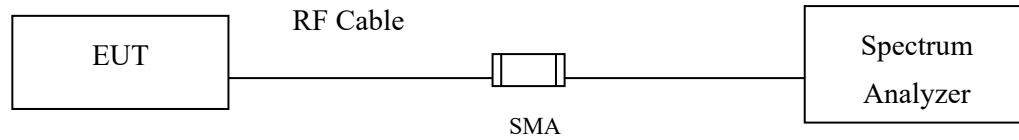
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Reading Level (dBuV) | Correct Factor (dB) | Detector Type |
|-----|-----------------|-------------------------|----------------|-------------|----------------------|---------------------|---------------|
| 1   | 5636.400        | 53.24                   | 68.22          | -14.98      | 34.02                | 19.22               | PK            |
| 2   | 5650.000        | 52.13                   | 68.22          | -16.09      | 32.97                | 19.16               | PK            |
| 3   | 5770.800        | 99.12                   | 131.20         | -32.08      | 79.45                | 19.67               | PK            |
| 4   | 5925.000        | 51.66                   | 68.22          | -16.56      | 31.46                | 20.20               | PK            |
| * 5 | 5976.800        | 54.09                   | 68.22          | -14.13      | 33.80                | 20.29               | PK            |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

## 7. Occupied Bandwidth

### 7.1. Test Setup



### 7.2. Limits

For the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz

### 7.3. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

#### 7.4. Test Result of Occupied Bandwidth

Product : WCDMA/LTE/5G Mobile Phone  
 Test Item : Occupied Bandwidth Data  
 Test Mode : Mode 1: Transmit (802.11a-6Mbps)  
 Test Date : 2021/06/07

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 149         | 5745            | 15400                   | >500                 | Pass   |
| 157         | 5785            | 15200                   | >500                 | Pass   |
| 165         | 5825            | 15200                   | >500                 | Pass   |

Figure Channel 149:

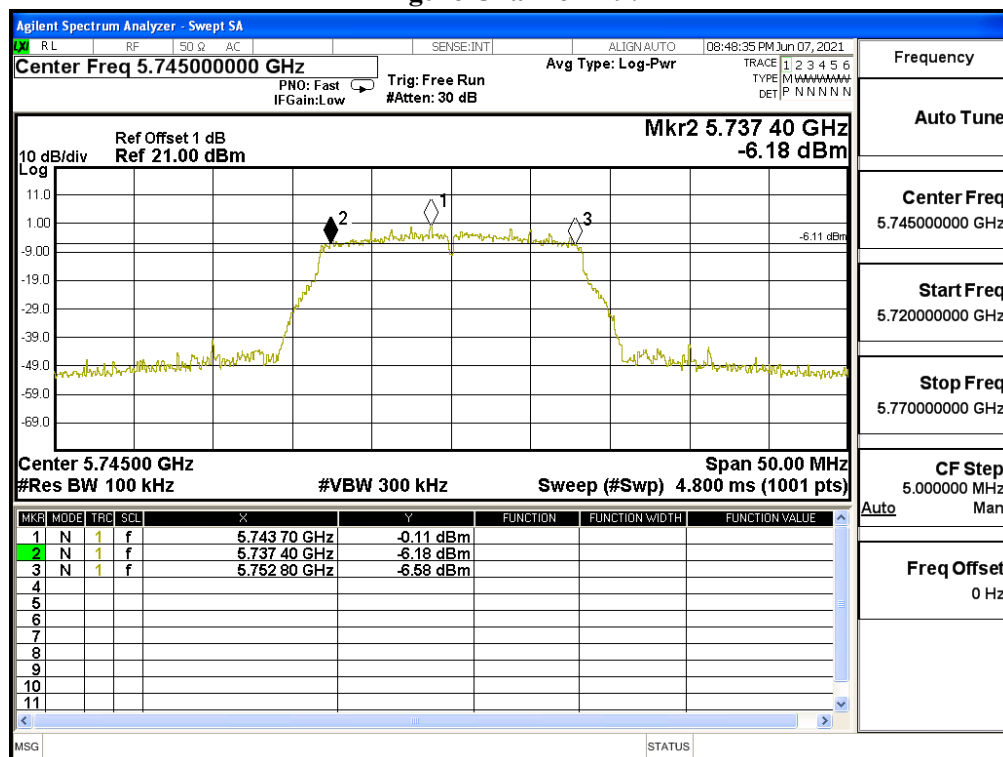


Figure Channel 157:

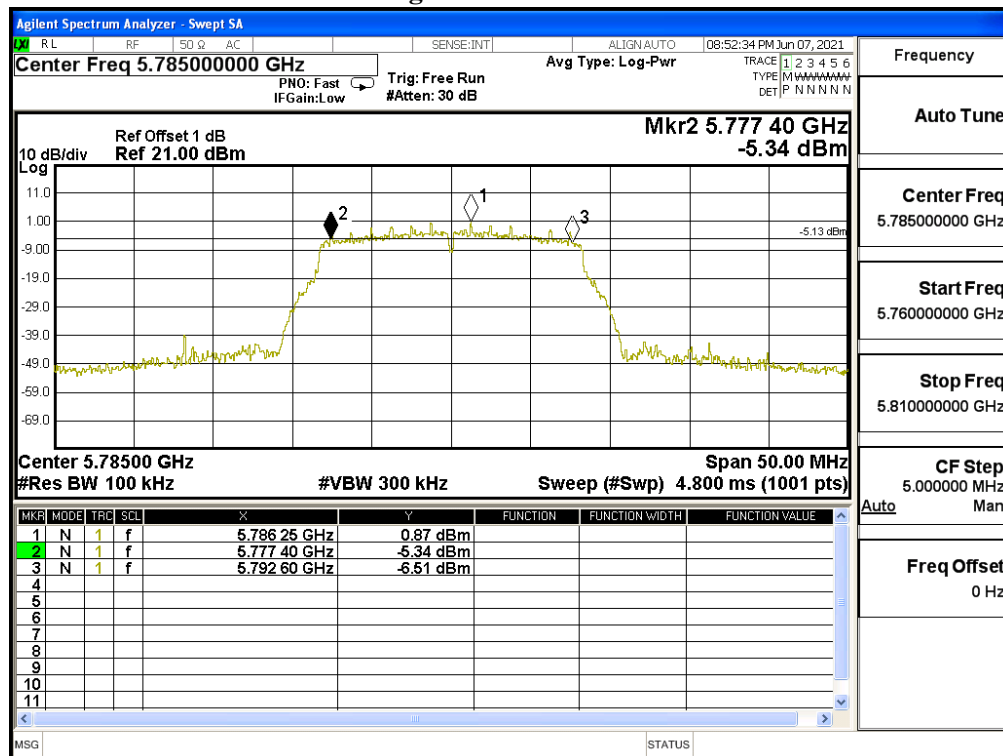
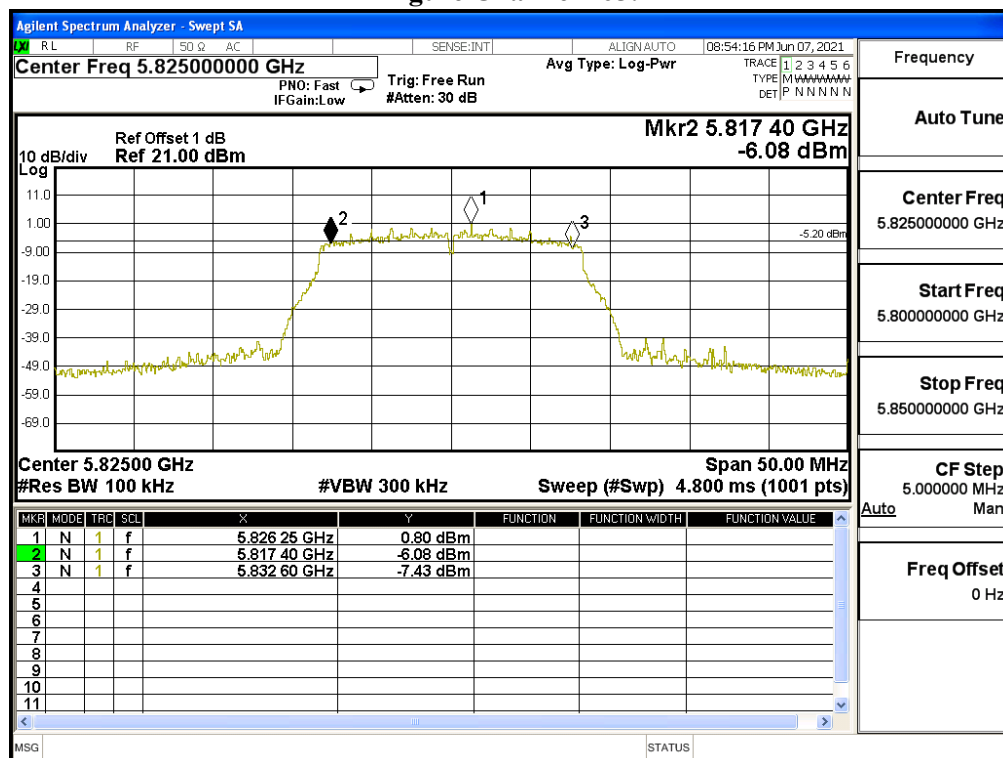


Figure Channel 165:



Product : WCDMA/LTE/5G Mobile Phone  
 Test Item : Occupied Bandwidth Data  
 Test Mode : Mode 2: Transmit (802.11ac-20BW 7.2Mbps)  
 Test Date : 2021/06/07

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 149         | 5745            | 15200                   | >500                 | Pass   |
| 157         | 5785            | 15200                   | >500                 | Pass   |
| 165         | 5825            | 15150                   | >500                 | Pass   |

Figure Channel 149:

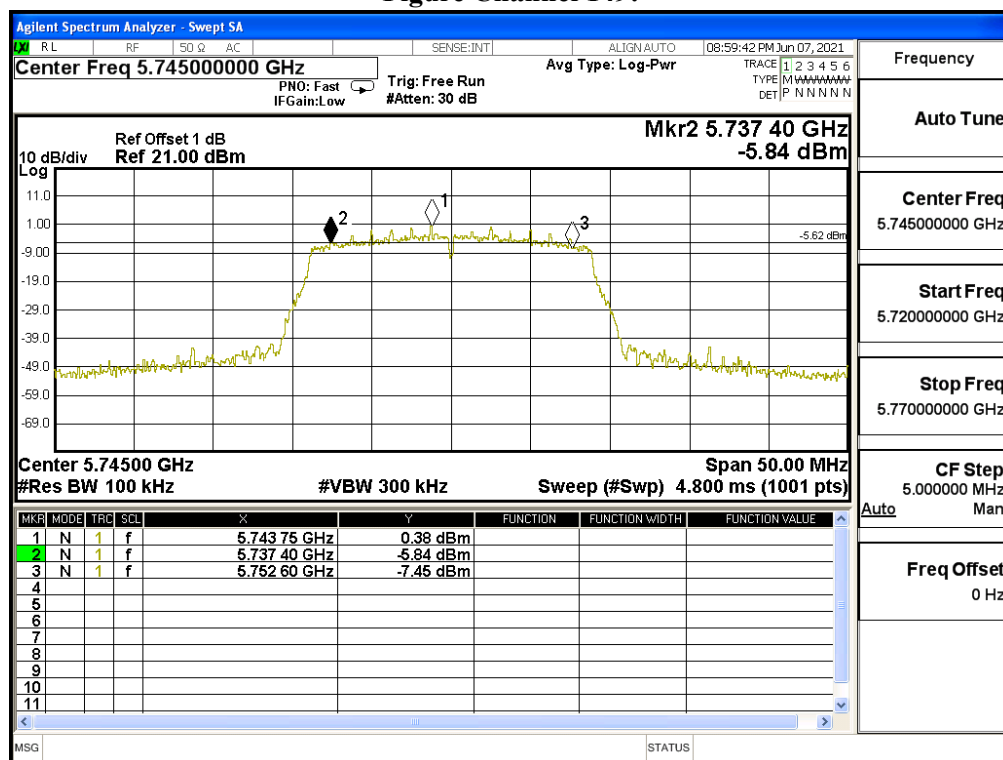




Figure Channel 157:

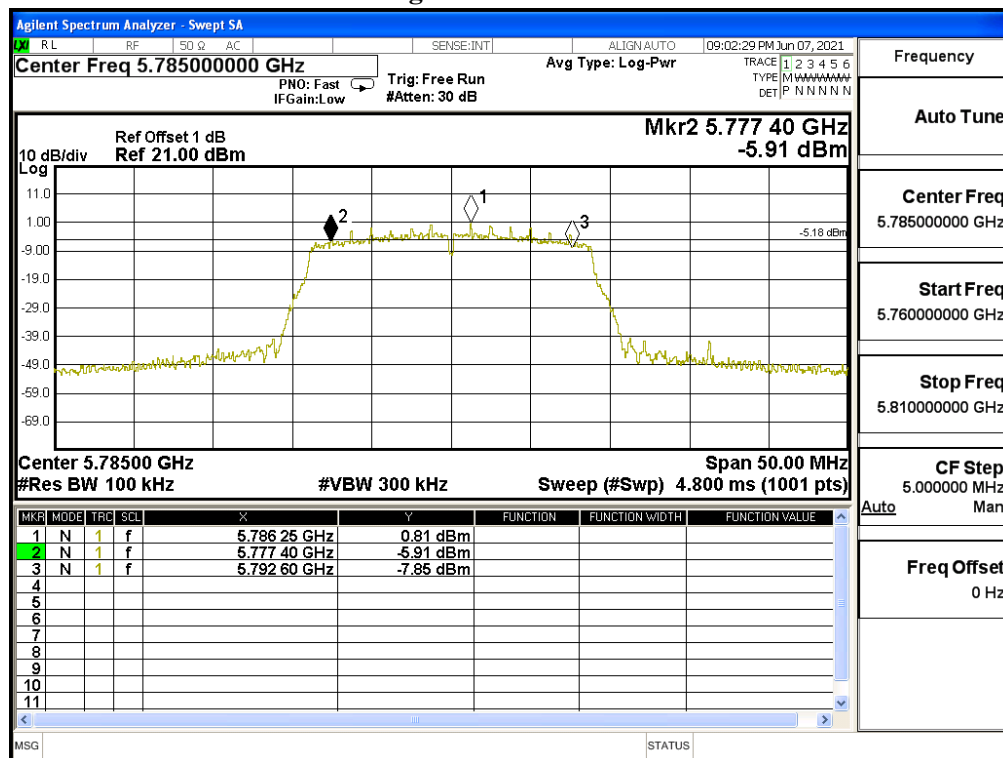
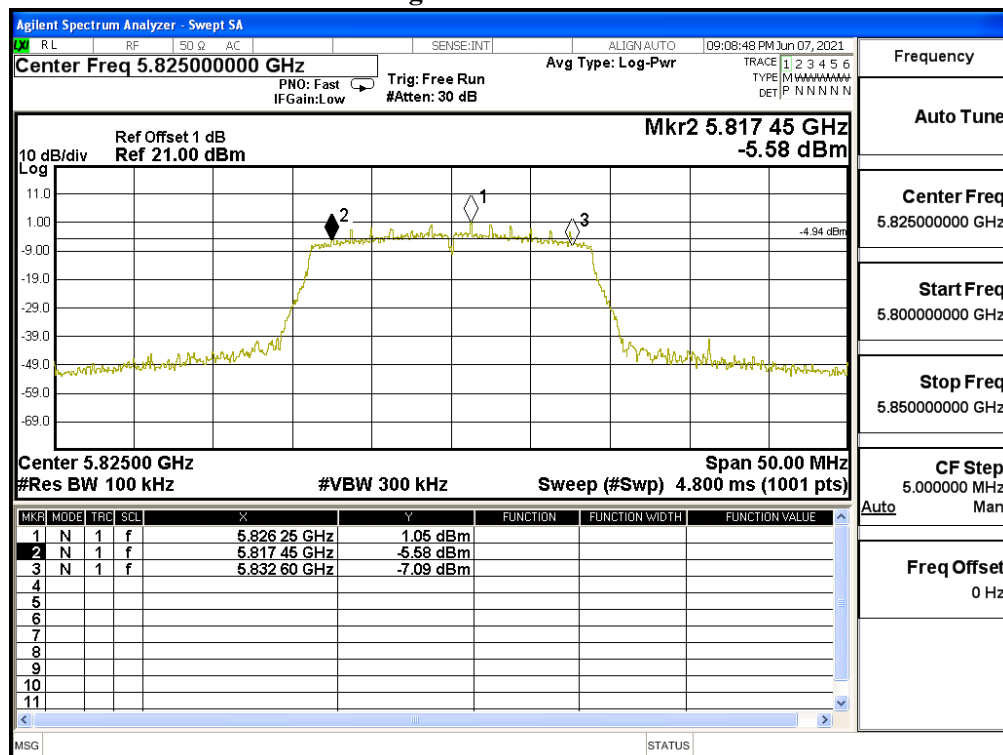


Figure Channel 165:



Product : WCDMA/LTE/5G Mobile Phone  
 Test Item : Occupied Bandwidth Data  
 Test Mode : Mode 3: Transmit (802.11ac-40BW 15Mbps)  
 Test Date : 2021/06/07

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 151         | 5755            | 35300                   | >500                 | Pass   |
| 159         | 5795            | 35300                   | >500                 | Pass   |

Figure Channel 151:

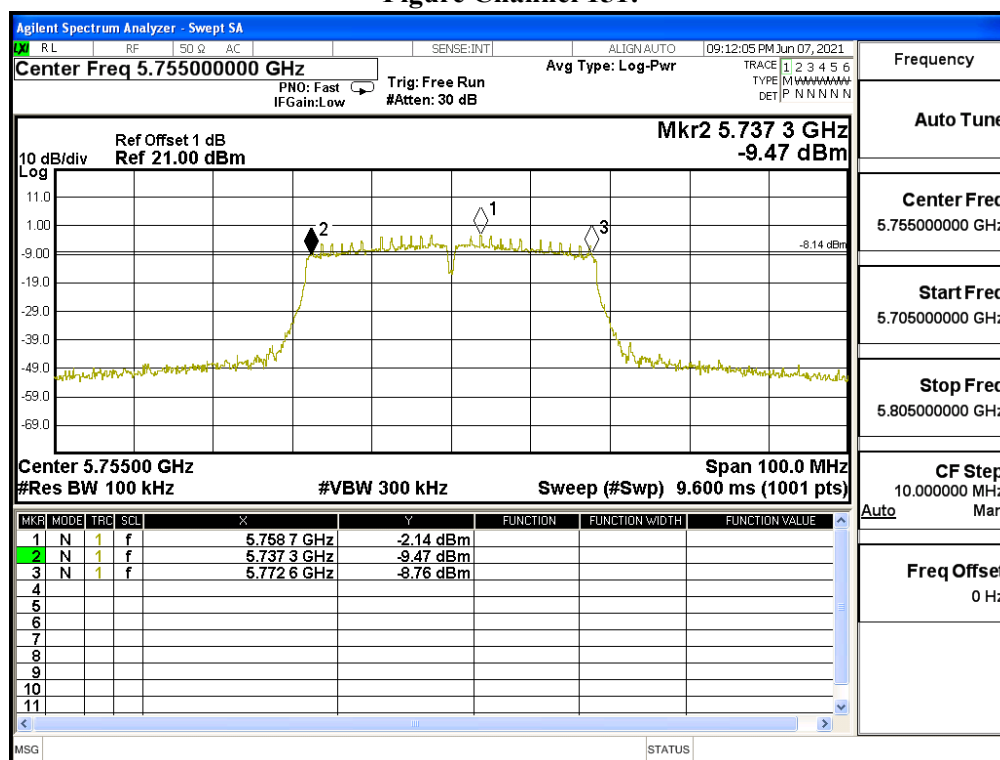
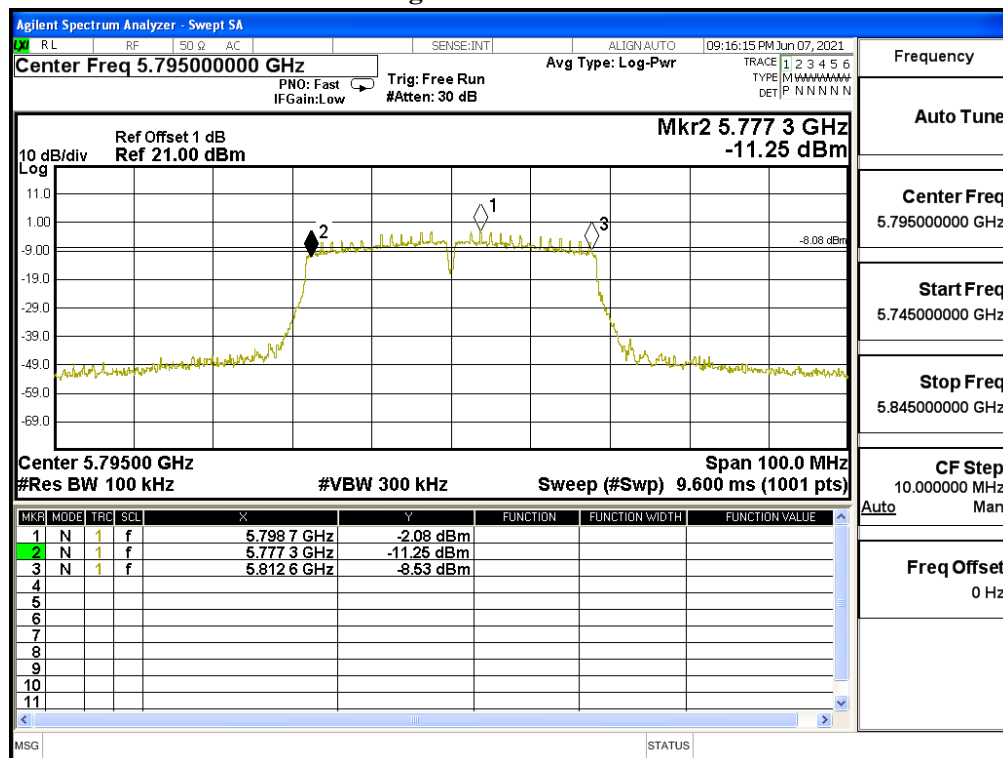


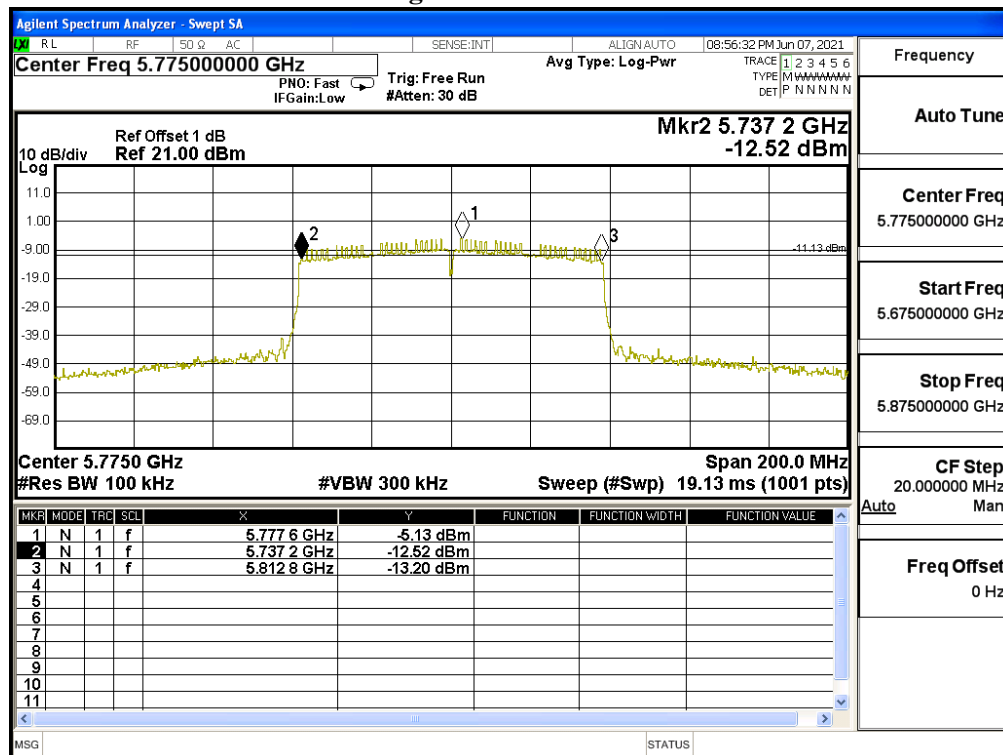
Figure Channel 159:



Product : WCDMA/LTE/5G Mobile Phone  
 Test Item : Occupied Bandwidth Data  
 Test Mode : Mode 4: Transmit (802.11ac-80BW 32.5Mbps)  
 Test Date : 2021/06/07

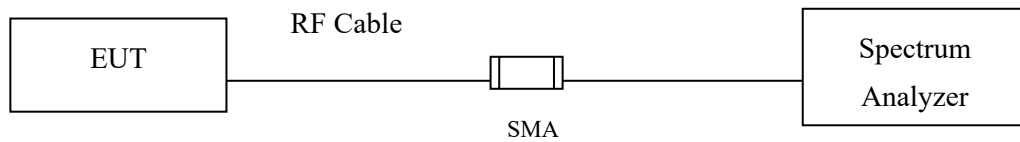
| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 155         | 5775            | 75600                   | >500                 | Pass   |

Figure Channel 155:



## 8. Duty Cycle

### 8.1. Test Setup



### 8.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to U-NII test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.

### 8.3. Test Result of Duty Cycle

Product : WCDMA/LTE/5G Mobile Phone  
Test Item : Duty Cycle  
Test Mode : Transmit

Duty Cycle Formula:

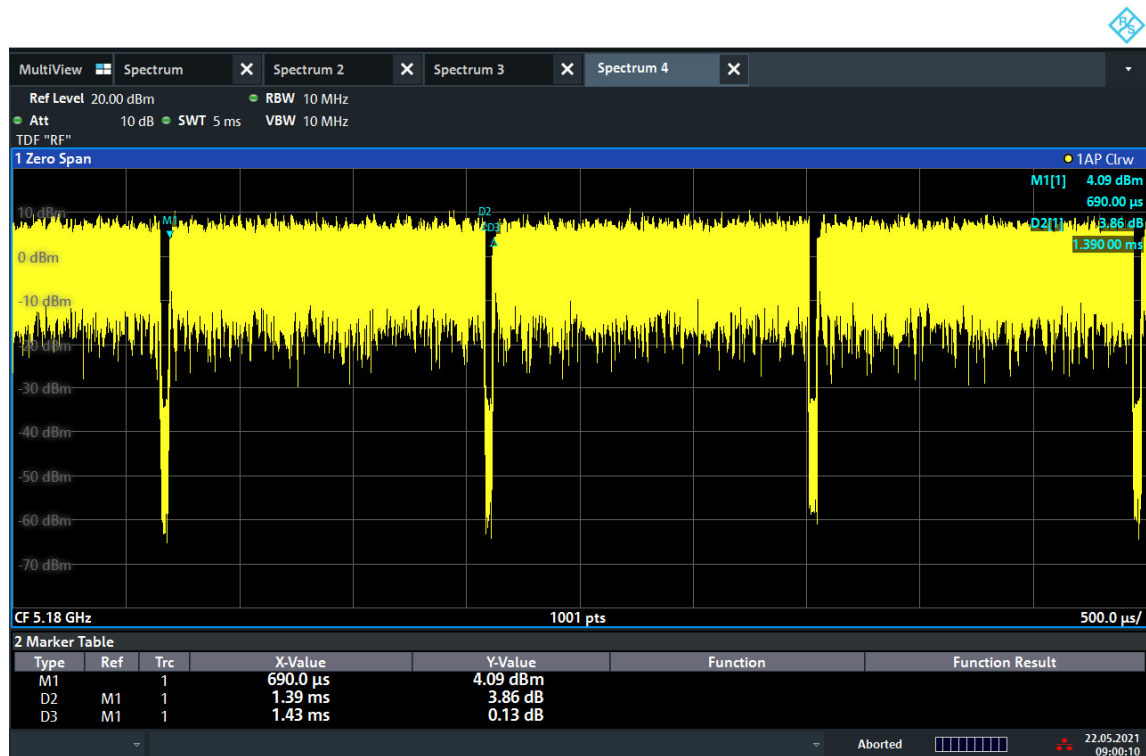
$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$

$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$

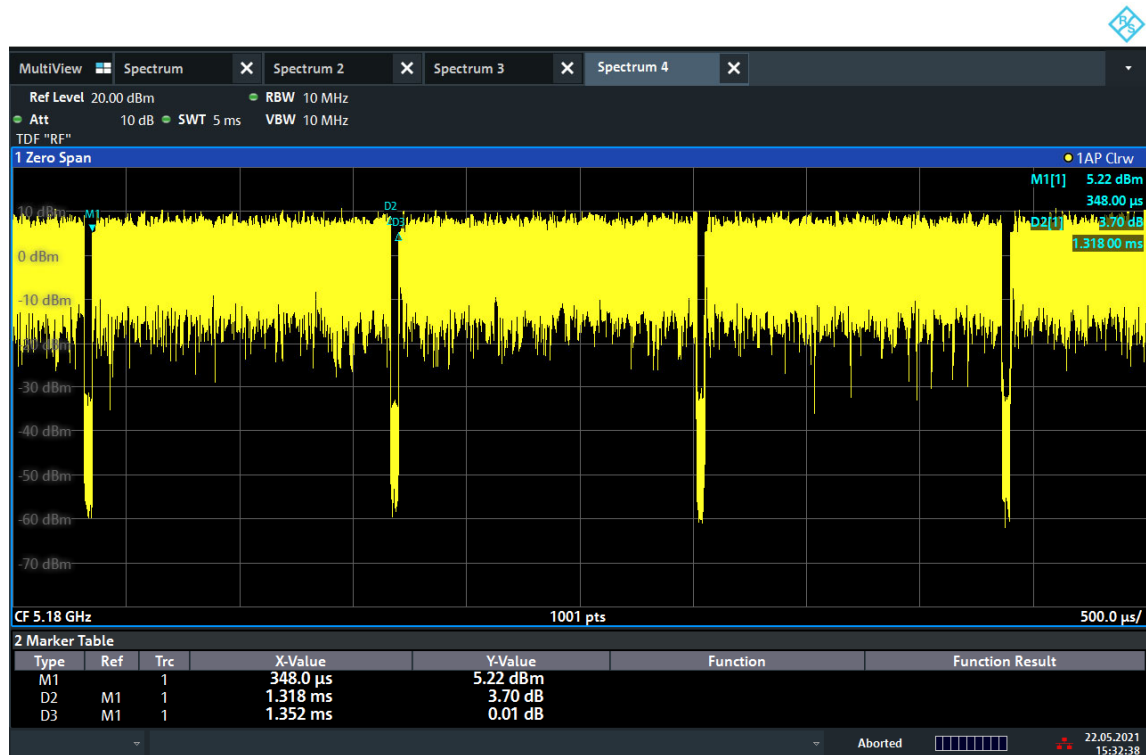
Results:

| 5GHz band  | Ton<br>(ms) | Ton + Toff<br>(ms) | Duty Cycle<br>(%) | Duty Factor<br>(dB) |
|------------|-------------|--------------------|-------------------|---------------------|
| 802.11a    | 1.3900      | 1.4300             | 97.20             | 0.12                |
| 802.11ac20 | 1.3180      | 1.3520             | 97.49             | 0.11                |
| 802.11ac40 | 0.6520      | 0.6880             | 94.77             | 0.23                |
| 802.11ac80 | 0.3250      | 0.3590             | 90.53             | 0.43                |

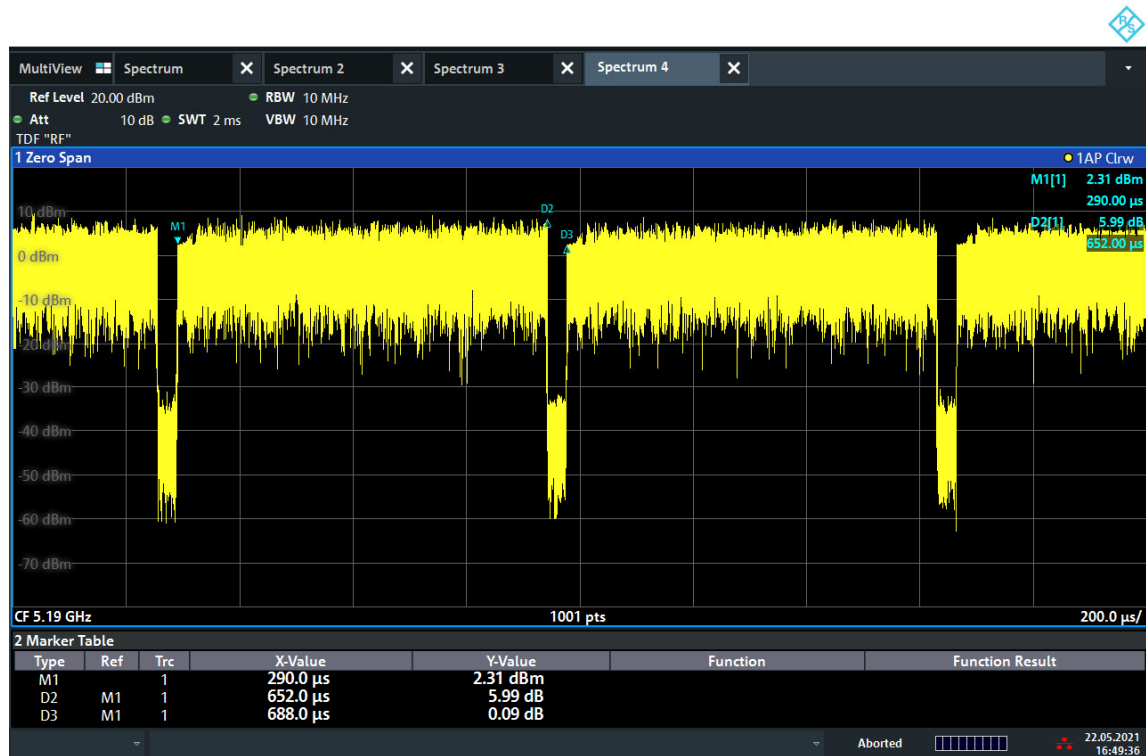
802.11a



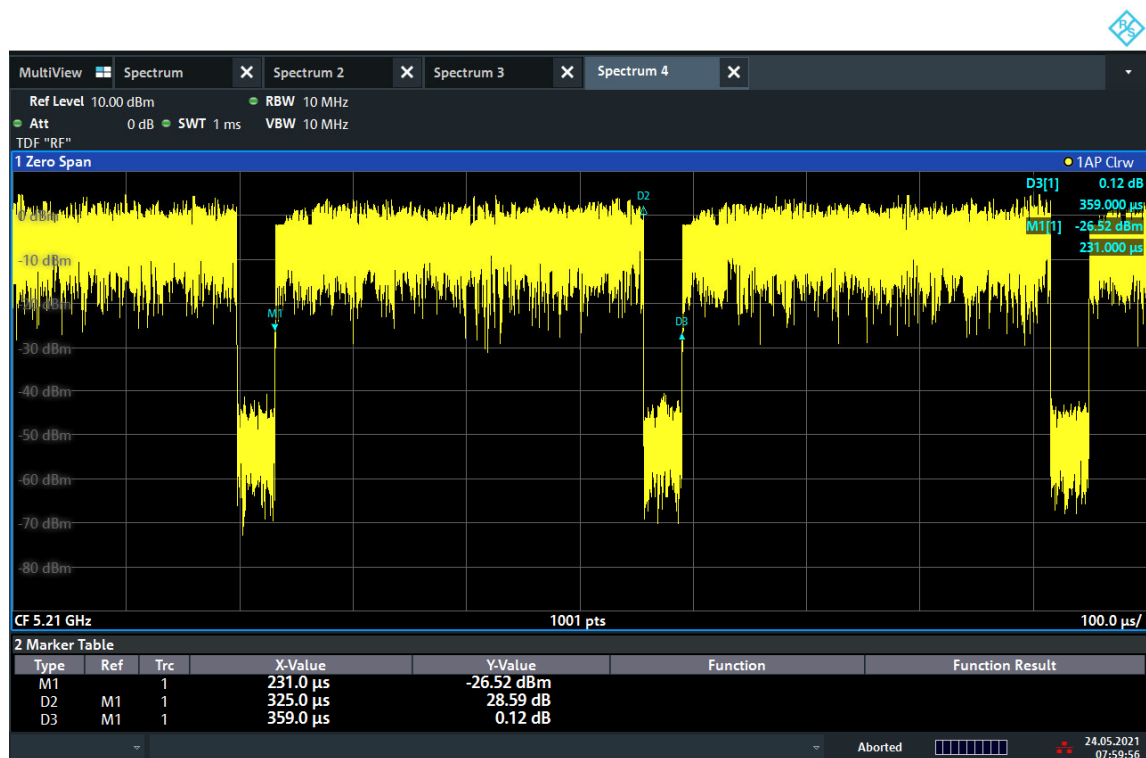
802.11ac20



802.11ac40



802.11ac80





## **9. EMI Reduction Method During Compliance Testing**

No modification was made during testing.