

#### 4.3.8 Test Result (Mode 2)

##### Non-Beamforming Mode

##### 802.11a

| Chan. | Chan. Freq. (MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power (mW) | Total Power (dBm) | Limit (dBm) | Pass / Fail |
|-------|-------------------|-------------------------------|---------|---------|---------|------------------|-------------------|-------------|-------------|
|       |                   | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                  |                   |             |             |
| 36    | 5180              | 7.70                          | 7.73    | 7.68    | 8.02    | 24.018           | 13.81             | 29.00       | Pass        |
| 40    | 5200              | 7.72                          | 7.76    | 7.65    | 8.03    | 24.06            | 13.81             | 29.00       | Pass        |
| 48    | 5240              | 7.69                          | 7.67    | 7.76    | 7.98    | 23.974           | 13.80             | 29.00       | Pass        |
| 149   | 5745              | 19.65                         | 19.84   | 19.77   | 20.06   | 384.873          | 25.85             | 29.00       | Pass        |
| 157   | 5785              | 19.79                         | 19.82   | 19.67   | 20.09   | 385.997          | 25.87             | 29.00       | Pass        |
| 165   | 5825              | 19.85                         | 19.93   | 19.69   | 19.76   | 382.741          | 25.83             | 29.00       | Pass        |

**Note:** 1. Antennas gain = 7dBi > 6dBi, so the power limit shall be reduced to 30-(7-6) = 29.00dBm.

##### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 36    | 5180              | 120.50          | 20.81            | 21                | Pass        |
| 40    | 5200              | 120.504         | 20.81            | 21                | Pass        |
| 48    | 5240              | 120.226         | 20.80            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

##### 802.11ac (VHT20)

| Chan. | Chan. Freq. (MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power (mW) | Total Power (dBm) | Limit (dBm) | Pass / Fail |
|-------|-------------------|-------------------------------|---------|---------|---------|------------------|-------------------|-------------|-------------|
|       |                   | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                  |                   |             |             |
| 36    | 5180              | 7.44                          | 7.54    | 7.49    | 7.79    | 22.844           | 13.59             | 29.00       | Pass        |
| 40    | 5200              | 7.56                          | 7.49    | 7.65    | 7.80    | 23.159           | 13.65             | 29.00       | Pass        |
| 48    | 5240              | 7.49                          | 7.54    | 7.62    | 7.80    | 23.092           | 13.63             | 29.00       | Pass        |
| 149   | 5745              | 19.79                         | 19.72   | 19.62   | 19.91   | 378.607          | 25.78             | 29.00       | Pass        |
| 157   | 5785              | 19.86                         | 19.73   | 19.61   | 19.96   | 381.295          | 25.81             | 29.00       | Pass        |
| 165   | 5825              | 19.71                         | 19.65   | 19.51   | 20.03   | 375.821          | 25.75             | 29.00       | Pass        |

**Note:** 1. Antennas gain = 7dBi > 6dBi, so the power limit shall be reduced to 30-(7-6) = 29.00dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 36    | 5180              | 114.55          | 20.59            | 21                | Pass        |
| 40    | 5200              | 116.145         | 20.65            | 21                | Pass        |
| 48    | 5240              | 115.611         | 20.63            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT40)

| Chan. | Chan. Freq. (MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power (mW) | Total Power (dBm) | Limit (dBm) | Pass / Fail |
|-------|-------------------|-------------------------------|---------|---------|---------|------------------|-------------------|-------------|-------------|
|       |                   | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                  |                   |             |             |
| 38    | 5190              | 7.71                          | 7.43    | 7.81    | 7.40    | 22.97            | 13.61             | 29.00       | Pass        |
| 46    | 5230              | 7.78                          | 7.48    | 7.84    | 7.41    | 23.185           | 13.65             | 29.00       | Pass        |
| 151   | 5755              | 20.41                         | 20.59   | 20.36   | 20.84   | 454.433          | 26.57             | 29.00       | Pass        |
| 159   | 5795              | 20.96                         | 21.06   | 20.91   | 21.42   | 514.368          | 27.11             | 29.00       | Pass        |

**Note:** 1. Antennas gain = 7dBi > 6dBi, so the power limit shall be reduced to 30-(7-6) = 29.00dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 38    | 5190              | 115.08          | 20.61            | 21                | Pass        |
| 46    | 5230              | 116.145         | 20.65            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | 7.67                          | 7.31    | 7.62    | 7.28    | 22.357                 | 13.49                   | 29.00          | Pass           |
| 155   | 5775                 | 18.49                         | 18.67   | 18.51   | 18.81   | 291.243                | 24.64                   | 29.00          | Pass           |

**Note:** 1. Antennas gain = 7dBi > 6dBi, so the power limit shall be reduced to 30-(7-6) = 29.00dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 111.94             | 20.49               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | 7.58                          | 7.68    | 7.62    | 7.86    | 23.48                  | 13.71                   | 29.00          | Pass           |
| 40    | 5200                 | 7.62                          | 7.65    | 7.71    | 7.88    | 23.642                 | 13.74                   | 29.00          | Pass           |
| 48    | 5240                 | 7.62                          | 7.69    | 7.76    | 7.93    | 23.835                 | 13.77                   | 29.00          | Pass           |
| 149   | 5745                 | 19.92                         | 19.87   | 19.74   | 20.02   | 389.876                | 25.91                   | 29.00          | Pass           |
| 157   | 5785                 | 19.96                         | 19.84   | 19.72   | 20.01   | 389.453                | 25.90                   | 29.00          | Pass           |
| 165   | 5825                 | 19.86                         | 19.79   | 19.68   | 20.11   | 387.569                | 25.88                   | 29.00          | Pass           |

**Note:** 1. Antennas gain = 7dBi > 6dBi, so the power limit shall be reduced to 30-(7-6) = 29.00dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 117.76             | 20.71               | 21                   | Pass        |
| 40    | 5200                 | 118.577            | 20.74               | 21                   | Pass        |
| 48    | 5240                 | 119.399            | 20.77               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | 7.86                          | 7.54    | 7.95    | 7.46    | 23.594                 | 13.73                   | 29.00          | Pass           |
| 46    | 5230                 | 7.93                          | 7.62    | 7.97    | 7.52    | 23.905                 | 13.78                   | 29.00          | Pass           |
| 151   | 5755                 | 20.53                         | 20.72   | 20.49   | 20.95   | 467.407                | 26.70                   | 29.00          | Pass           |
| 159   | 5795                 | 21.08                         | 21.21   | 21.03   | 21.53   | 529.361                | 27.24                   | 29.00          | Pass           |

**Note:** 1. Antennas gain = 7dBi > 6dBi, so the power limit shall be reduced to  $30-(7-6) = 29.00\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 38    | 5190                 | 118.30             | 20.73               | 21                   | Pass        |
| 46    | 5230                 | 119.674            | 20.78               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ax (HE80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | 7.78                          | 7.45    | 7.77    | 7.43    | 23.075                 | 13.63                   | 29.00          | Pass           |
| 155   | 5775                 | 18.62                         | 18.78   | 18.62   | 18.94   | 299.408                | 24.76                   | 29.00          | Pass           |

**Note:** 1. Antennas gain = 7dBi > 6dBi, so the power limit shall be reduced to  $30-(7-6) = 29.00\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 115.61             | 20.63               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

## Beamforming Mode

### 802.11ac (VHT20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power<br>(mW) | Total Power<br>(dBm) | Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|---------------------|----------------------|----------------|-------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                     |                      |                |             |
| 36    | 5180                 | 1.76                          | 1.74    | 1.64    | 1.88    | 5.993               | 7.78                 | 22.98          | Pass        |
| 40    | 5200                 | 1.74                          | 1.69    | 1.61    | 1.72    | 5.903               | 7.71                 | 22.98          | Pass        |
| 48    | 5240                 | 1.87                          | 1.65    | 1.54    | 1.60    | 5.871               | 7.69                 | 22.98          | Pass        |
| 149   | 5745                 | 16.74                         | 16.61   | 16.45   | 16.84   | 185.483             | 22.68                | 22.98          | Pass        |
| 157   | 5785                 | 16.67                         | 16.57   | 16.62   | 16.75   | 185.081             | 22.67                | 22.98          | Pass        |
| 165   | 5825                 | 16.68                         | 16.72   | 16.51   | 16.86   | 186.848             | 22.71                | 22.98          | Pass        |

Note: 1. For U-NII-1: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .  
 2. For U-NII-3: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 120.23             | 20.80               | 21                   | Pass        |
| 40    | 5200                 | 118.304            | 20.73               | 21                   | Pass        |
| 48    | 5240                 | 117.761            | 20.71               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ac (VHT40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power<br>(mW) | Total Power<br>(dBm) | Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|---------------------|----------------------|----------------|-------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                     |                      |                |             |
| 38    | 5190                 | 1.85                          | 1.57    | 1.75    | 1.63    | 5.918               | 7.72                 | 22.98          | Pass        |
| 46    | 5230                 | 1.87                          | 1.58    | 1.73    | 1.65    | 5.928               | 7.73                 | 22.98          | Pass        |
| 151   | 5755                 | 16.51                         | 16.67   | 16.37   | 16.87   | 183.215             | 22.63                | 22.98          | Pass        |
| 159   | 5795                 | 16.37                         | 16.65   | 16.52   | 16.85   | 182.881             | 22.62                | 22.98          | Pass        |

Note: 1. For U-NII-1: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .  
 2. For U-NII-3: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 38    | 5190              | 118.58          | 20.74            | 21                | Pass        |
| 46    | 5230              | 118.85          | 20.75            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT80)

| Chan. | Chan. Freq. (MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power (mW) | Total Power (dBm) | Limit (dBm) | Pass / Fail |
|-------|-------------------|-------------------------------|---------|---------|---------|------------------|-------------------|-------------|-------------|
|       |                   | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                  |                   |             |             |
| 42    | 5210              | 1.82                          | 1.53    | 1.93    | 1.59    | 5.945            | 7.74              | 22.98       | Pass        |
| 155   | 5775              | 16.45                         | 16.73   | 16.48   | 16.79   | 183.471          | 22.64             | 22.98       | Pass        |

Note: 1. For U-NII-1: The directional gain = 7dBi + 10log(4) =13.02dBi > 6dBi, so the power limit shall be reduced to 30-(13.02-6) = 22.98dBm.  
 2. For U-NII-3: The directional gain = 7dBi + 10log(4) =13.02dBi > 6dBi, so the power limit shall be reduced to 30-(13.02-6) = 22.98dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 42    | 5210              | 119.12          | 20.76            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | 1.92                          | 1.83    | 1.76    | 1.96    | 6.15                   | 7.89                    | 22.98          | Pass           |
| 40    | 5200                 | 1.86                          | 1.79    | 1.73    | 1.83    | 6.058                  | 7.82                    | 22.98          | Pass           |
| 48    | 5240                 | 1.99                          | 1.76    | 1.68    | 1.72    | 6.039                  | 7.81                    | 22.98          | Pass           |
| 149   | 5745                 | 16.82                         | 16.72   | 16.59   | 16.93   | 189.994                | 22.79                   | 22.98          | Pass           |
| 157   | 5785                 | 16.79                         | 16.71   | 16.73   | 16.86   | 190.261                | 22.79                   | 22.98          | Pass           |
| 165   | 5825                 | 16.81                         | 16.86   | 16.62   | 16.93   | 191.739                | 22.83                   | 22.98          | Pass           |

- Note: 1. For U-NII-1: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .
2. For U-NII-3: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 123.31             | 20.91               | 21                   | Pass        |
| 40    | 5200                 | 121.339            | 20.84               | 21                   | Pass        |
| 48    | 5240                 | 121.06             | 20.83               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ax (HE40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | 1.96                          | 1.71    | 1.89    | 1.76    | 6.098                  | 7.85                    | 22.98          | Pass           |
| 46    | 5230                 | 1.98                          | 1.69    | 1.86    | 1.77    | 6.091                  | 7.85                    | 22.98          | Pass           |
| 151   | 5755                 | 16.62                         | 16.73   | 16.48   | 16.96   | 187.14                 | 22.72                   | 22.98          | Pass           |
| 159   | 5795                 | 16.52                         | 16.72   | 16.65   | 16.98   | 187.991                | 22.74                   | 22.98          | Pass           |

- Note: 1. For U-NII-1: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .
2. For U-NII-3: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 38    | 5190                 | 122.18             | 20.87               | 21                   | Pass        |
| 46    | 5230                 | 122.18             | 20.87               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | 1.93                          | 1.67    | 2.02    | 1.72    | 6.107                  | 7.86                    | 22.98          | Pass           |
| 155   | 5775                 | 16.53                         | 16.86   | 16.59   | 16.92   | 188.314                | 22.75                   | 22.98          | Pass           |

Note: 1. For U-NII-1: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .  
2. For U-NII-3: The directional gain =  $7\text{dBi} + 10\log(4) = 13.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (13.02 - 6) = 22.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 122.46             | 20.88               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.



#### 4.3.9 Test Result (Mode 3)

##### Non-Beamforming Mode

##### 802.11a

| Chan. | Chan. Freq. (MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power (mW) | Total Power (dBm) | Limit (dBm) | Pass / Fail |
|-------|-------------------|-------------------------------|---------|---------|---------|------------------|-------------------|-------------|-------------|
|       |                   | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                  |                   |             |             |
| 36    | 5180              | 8.17                          | 8.21    | 8.15    | 8.47    | 26.746           | 14.27             | 29.50       | Pass        |
| 40    | 5200              | 8.18                          | 8.24    | 8.13    | 8.52    | 26.858           | 14.29             | 29.50       | Pass        |
| 48    | 5240              | 8.14                          | 8.22    | 8.18    | 8.51    | 26.826           | 14.29             | 29.50       | Pass        |
| 149   | 5745              | 16.95                         | 16.84   | 16.77   | 17.06   | 196.2            | 22.93             | 29.50       | Pass        |
| 157   | 5785              | 16.79                         | 16.82   | 16.67   | 17.09   | 193.457          | 22.87             | 29.50       | Pass        |
| 165   | 5825              | 16.41                         | 16.62   | 16.25   | 16.62   | 177.761          | 22.50             | 29.50       | Pass        |

**Note:** 1. Antennas gain = 6.5dBi > 6dBi, so the power limit shall be reduced to  $30 - (6.50 - 6) = 29.50$ dBm.

##### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 36    | 5180              | 119.40          | 20.77            | 21                | Pass        |
| 40    | 5200              | 119.95          | 20.79            | 21                | Pass        |
| 48    | 5240              | 119.95          | 20.79            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125$ mW(21 dBm) to compliance.

##### 802.11ac (VHT20)

| Chan. | Chan. Freq. (MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power (mW) | Total Power (dBm) | Limit (dBm) | Pass / Fail |
|-------|-------------------|-------------------------------|---------|---------|---------|------------------|-------------------|-------------|-------------|
|       |                   | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                  |                   |             |             |
| 36    | 5180              | 7.91                          | 8.06    | 8.01    | 8.23    | 25.554           | 14.07             | 29.50       | Pass        |
| 40    | 5200              | 7.96                          | 8.01    | 8.06    | 8.21    | 25.595           | 14.08             | 29.50       | Pass        |
| 48    | 5240              | 7.93                          | 8.03    | 8.12    | 8.30    | 25.809           | 14.12             | 29.50       | Pass        |
| 149   | 5745              | 18.81                         | 18.72   | 18.60   | 18.93   | 301.112          | 24.79             | 29.50       | Pass        |
| 157   | 5785              | 18.81                         | 18.73   | 18.58   | 18.89   | 300.234          | 24.77             | 29.50       | Pass        |
| 165   | 5825              | 18.74                         | 18.65   | 18.53   | 19.00   | 298.818          | 24.75             | 29.50       | Pass        |

**Note:** 1. Antennas gain = 6.5dBi > 6dBi, so the power limit shall be reduced to  $30 - (6.50 - 6) = 29.50$ dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 114.03             | 20.57               | 21                   | Pass        |
| 40    | 5200                 | 114.288            | 20.58               | 21                   | Pass        |
| 48    | 5240                 | 115.345            | 20.62               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | 8.24                          | 7.92    | 8.34    | 8.31    | 26.462                 | 14.23                   | 29.50          | Pass           |
| 46    | 5230                 | 8.31                          | 8.00    | 8.35    | 7.93    | 26.134                 | 14.17                   | 29.50          | Pass           |
| 151   | 5755                 | 18.42                         | 18.58   | 18.32   | 18.81   | 285.566                | 24.56                   | 29.50          | Pass           |
| 159   | 5795                 | 18.43                         | 18.59   | 18.40   | 18.92   | 289.106                | 24.61                   | 29.50          | Pass           |

**Note:** 1. Antennas gain = 6.5dBi > 6dBi, so the power limit shall be reduced to 30-(6.50-6) = 29.50dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 38    | 5190                 | 118.30             | 20.73               | 21                   | Pass        |
| 46    | 5230                 | 116.681            | 20.67               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | 8.12                          | 7.83    | 8.15    | 7.86    | 25.194                 | 14.01                   | 29.50          | Pass           |
| 155   | 5775                 | 19.02                         | 19.12   | 18.96   | 19.35   | 326.262                | 25.14                   | 29.50          | Pass           |

**Note:** 1. Antennas gain = 6.5dBi > 6dBi, so the power limit shall be reduced to  $30-(6.50-6) = 29.50\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 112.46             | 20.51               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ax (HE20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | 8.08                          | 8.18    | 8.12    | 8.36    | 26.345                 | 14.21                   | 29.50          | Pass           |
| 40    | 5200                 | 8.12                          | 8.15    | 8.21    | 8.33    | 26.448                 | 14.22                   | 29.50          | Pass           |
| 48    | 5240                 | 8.12                          | 8.19    | 8.26    | 8.43    | 26.743                 | 14.27                   | 29.50          | Pass           |
| 149   | 5745                 | 18.92                         | 18.87   | 18.74   | 19.02   | 309.69                 | 24.91                   | 29.50          | Pass           |
| 157   | 5785                 | 18.96                         | 18.84   | 18.72   | 19.01   | 309.353                | 24.90                   | 29.50          | Pass           |
| 165   | 5825                 | 18.86                         | 18.79   | 18.68   | 19.11   | 307.857                | 24.88                   | 29.50          | Pass           |

**Note:** 1. Antennas gain = 6.5dBi > 6dBi, so the power limit shall be reduced to  $30-(6.50-6) = 29.50\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 117.76             | 20.71               | 21                   | Pass        |
| 40    | 5200                 | 118.032            | 20.72               | 21                   | Pass        |
| 48    | 5240                 | 119.399            | 20.77               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ax (HE40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | 8.36                          | 8.04    | 8.45    | 8.46    | 27.236                 | 14.35                   | 29.50          | Pass           |
| 46    | 5230                 | 8.43                          | 8.12    | 8.47    | 8.02    | 26.822                 | 14.28                   | 29.50          | Pass           |
| 151   | 5755                 | 18.53                         | 18.72   | 18.49   | 18.95   | 294.914                | 24.70                   | 29.50          | Pass           |
| 159   | 5795                 | 18.58                         | 18.71   | 18.53   | 19.03   | 297.681                | 24.74                   | 29.50          | Pass           |

**Note:** 1. Antennas gain = 6.5dBi > 6dBi, so the power limit shall be reduced to  $30-(6.50-6) = 29.50\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 38    | 5190                 | 121.62             | 20.85               | 21                   | Pass        |
| 46    | 5230                 | 119.674            | 20.78               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ax (HE80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | 8.28                          | 7.95    | 8.27    | 7.93    | 25.89                  | 14.13                   | 29.50          | Pass           |
| 155   | 5775                 | 19.12                         | 19.28   | 19.12   | 19.44   | 335.941                | 25.26                   | 29.50          | Pass           |

**Note:** 1. Antennas gain = 6.5dBi > 6dBi, so the power limit shall be reduced to  $30-(6.50-6) = 29.50\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 115.61             | 20.63               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

## Beamforming Mode

### 802.11ac (VHT20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | 1.93                          | 2.13    | 1.97    | 2.24    | 6.442                  | 8.09                    | 23.48          | Pass           |
| 40    | 5200                 | 1.89                          | 1.97    | 2.04    | 2.13    | 6.352                  | 8.03                    | 23.48          | Pass           |
| 48    | 5240                 | 1.82                          | 2.02    | 2.11    | 2.27    | 6.425                  | 8.08                    | 23.48          | Pass           |
| 149   | 5745                 | 17.19                         | 17.21   | 17.06   | 17.35   | 210.103                | 23.22                   | 23.48          | Pass           |
| 157   | 5785                 | 17.29                         | 17.24   | 17.00   | 17.44   | 212.127                | 23.27                   | 23.48          | Pass           |
| 165   | 5825                 | 17.22                         | 17.09   | 17.06   | 17.46   | 210.426                | 23.23                   | 23.48          | Pass           |

- Note: 1. For U-NII-1: The directional gain =  $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (12.52 - 6) = 23.48\text{dBm}$ .
2. For U-NII-3: The directional gain =  $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (12.52 - 6) = 23.48\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 115.08             | 20.61               | 21                   | Pass        |
| 40    | 5200                 | 113.501            | 20.55               | 21                   | Pass        |
| 48    | 5240                 | 114.815            | 20.60               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ac (VHT40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | 2.24                          | 1.86    | 2.29    | 2.30    | 6.602                  | 8.20                    | 23.48          | Pass           |
| 46    | 5230                 | 2.25                          | 1.89    | 2.19    | 1.86    | 6.414                  | 8.07                    | 23.48          | Pass           |
| 151   | 5755                 | 16.84                         | 17.16   | 16.92   | 17.41   | 204.59                 | 23.11                   | 23.48          | Pass           |
| 159   | 5795                 | 17.02                         | 17.24   | 17.01   | 17.43   | 208.886                | 23.20                   | 23.48          | Pass           |

- Note: 1. For U-NII-1: The directional gain =  $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (12.52 - 6) = 23.48\text{dBm}$ .
2. For U-NII-3: The directional gain =  $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (12.52 - 6) = 23.48\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 38    | 5190                 | 118.03             | 20.72               | 21                   | Pass        |
| 46    | 5230                 | 114.551            | 20.59               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | 2.06                          | 1.84    | 2.10    | 1.93    | 6.316                  | 8.00                    | 23.48          | Pass           |
| 155   | 5775                 | 16.91                         | 17.02   | 16.93   | 17.25   | 201.847                | 23.05                   | 23.48          | Pass           |

Note: 1. For U-NII-1: The directional gain = 6.5dBi + 10log(4) =12.52dBi > 6dBi, so the power limit shall be reduced to 30-(12.52-6) = 23.48dBm.  
 2. For U-NII-3: The directional gain = 6.5dBi + 10log(4) =12.52dBi > 6dBi, so the power limit shall be reduced to 30-(12.52-6) = 23.48dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 112.72             | 20.52               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | 2.03                          | 2.24    | 2.04    | 2.31    | 6.573                  | 8.18                    | 23.48          | Pass           |
| 40    | 5200                 | 2.01                          | 2.12    | 2.18    | 2.26    | 6.552                  | 8.16                    | 23.48          | Pass           |
| 48    | 5240                 | 1.96                          | 2.13    | 2.20    | 2.34    | 6.577                  | 8.18                    | 23.48          | Pass           |
| 149   | 5745                 | 17.36                         | 17.33   | 17.20   | 17.49   | 217.111                | 23.37                   | 23.48          | Pass           |
| 157   | 5785                 | 17.42                         | 17.36   | 17.18   | 17.52   | 218.391                | 23.39                   | 23.48          | Pass           |
| 165   | 5825                 | 17.31                         | 17.24   | 17.13   | 17.55   | 215.32                 | 23.33                   | 23.48          | Pass           |

Note: 1. For U-NII-1: The directional gain =  $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (12.52 - 6) = 23.48\text{dBm}$ .

2. For U-NII-3: The directional gain =  $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (12.52 - 6) = 23.48\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 117.49             | 20.70               | 21                   | Pass        |
| 40    | 5200                 | 116.95             | 20.68               | 21                   | Pass        |
| 48    | 5240                 | 117.49             | 20.70               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ax (HE40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | 2.33                          | 1.96    | 2.41    | 2.43    | 6.772                  | 8.31                    | 23.48          | Pass           |
| 46    | 5230                 | 2.37                          | 2.01    | 2.32    | 1.99    | 6.602                  | 8.20                    | 23.48          | Pass           |
| 151   | 5755                 | 16.97                         | 17.28   | 17.06   | 17.53   | 210.67                 | 23.24                   | 23.48          | Pass           |
| 159   | 5795                 | 17.16                         | 17.34   | 17.15   | 17.57   | 215.228                | 23.33                   | 23.48          | Pass           |

Note: 1. For U-NII-1: The directional gain =  $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (12.52 - 6) = 23.48\text{dBm}$ .

2. For U-NII-3: The directional gain =  $6.5\text{dBi} + 10\log(4) = 12.52\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (12.52 - 6) = 23.48\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 38    | 5190              | 121.06          | 20.83            | 21                | Pass        |
| 46    | 5230              | 118.032         | 20.72            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE80)

| Chan. | Chan. Freq. (MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power (mW) | Total Power (dBm) | Limit (dBm) | Pass / Fail |
|-------|-------------------|-------------------------------|---------|---------|---------|------------------|-------------------|-------------|-------------|
|       |                   | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                  |                   |             |             |
| 42    | 5210              | 2.17                          | 1.92    | 2.22    | 2.03    | 6.467            | 8.11              | 23.48       | Pass        |
| 155   | 5775              | 17.02                         | 17.19   | 17.08   | 17.34   | 207.961          | 23.18             | 23.48       | Pass        |

- Note: 1. For U-NII-1: The directional gain = 6.5dBi + 10log(4) =12.52dBi > 6dBi, so the power limit shall be reduced to 30-(12.52-6) = 23.48dBm.  
 2. For U-NII-3: The directional gain = 6.5dBi + 10log(4) =12.52dBi > 6dBi, so the power limit shall be reduced to 30-(12.52-6) = 23.48dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 42    | 5210              | 115.61          | 20.63            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.



#### 4.3.10 Test Result (Mode 4)

##### Non-Beamforming Mode

##### 802.11a

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit (dBm) | Pass / Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|-------------|-------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |             |             |
| 36    | 5180                 | 2.68                          | 2.73    | 2.71    | 2.98    | 7.581                  | 8.80                    | 24.00       | Pass        |
| 40    | 5200                 | 2.62                          | 2.76    | 2.68    | 3.05    | 7.588                  | 8.80                    | 24.00       | Pass        |
| 48    | 5240                 | 2.64                          | 2.72    | 2.67    | 3.03    | 7.566                  | 8.79                    | 24.00       | Pass        |
| 149   | 5745                 | 17.96                         | 17.86   | 17.77   | 18.08   | 247.721                | 23.94                   | 24.00       | Pass        |
| 157   | 5785                 | 17.79                         | 17.85   | 17.65   | 18.11   | 243.996                | 23.87                   | 24.00       | Pass        |
| 165   | 5825                 | 17.87                         | 17.95   | 17.71   | 18.04   | 246.308                | 23.91                   | 24.00       | Pass        |

**Note:** 1. Antennas gain = 12dBi > 6dBi, so the power limit shall be reduced to  $30 - (12 - 6) = 24.00$  dBm.

##### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 120.23             | 20.80               | 21                   | Pass        |
| 40    | 5200                 | 120.226            | 20.80               | 21                   | Pass        |
| 48    | 5240                 | 119.95             | 20.79               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125$  mW (21 dBm) to compliance.

##### 802.11ac (VHT20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | 2.47                          | 2.59    | 2.51    | 2.81    | 7.274                  | 8.62                    | 24.00          | Pass           |
| 40    | 5200                 | 2.42                          | 2.54    | 2.61    | 2.71    | 7.231                  | 8.59                    | 24.00          | Pass           |
| 48    | 5240                 | 2.43                          | 2.51    | 2.68    | 2.81    | 7.296                  | 8.63                    | 24.00          | Pass           |
| 149   | 5745                 | 17.78                         | 17.72   | 17.63   | 17.91   | 238.88                 | 23.78                   | 24.00          | Pass           |
| 157   | 5785                 | 17.82                         | 17.67   | 17.62   | 17.88   | 238.199                | 23.77                   | 24.00          | Pass           |
| 165   | 5825                 | 17.71                         | 17.68   | 17.56   | 17.93   | 236.737                | 23.74                   | 24.00          | Pass           |

**Note:** 1. Antennas gain = 12dBi > 6dBi, so the power limit shall be reduced to  $30 - (12 - 6) = 24.00$  dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 36    | 5180              | 115.35          | 20.62            | 21                | Pass        |
| 40    | 5200              | 114.551         | 20.59            | 21                | Pass        |
| 48    | 5240              | 115.611         | 20.63            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT40)

| Chan. | Chan. Freq. (MHz) | Maximum Conducted Power (dBm) |         |         |         | Total Power (mW) | Total Power (dBm) | Limit (dBm) | Pass / Fail |
|-------|-------------------|-------------------------------|---------|---------|---------|------------------|-------------------|-------------|-------------|
|       |                   | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                  |                   |             |             |
| 38    | 5190              | 2.75                          | 2.48    | 2.81    | 2.35    | 7.282            | 8.62              | 24.00       | Pass        |
| 46    | 5230              | 2.79                          | 2.51    | 2.83    | 2.42    | 7.348            | 8.66              | 24.00       | Pass        |
| 151   | 5755              | 17.46                         | 17.62   | 17.38   | 17.82   | 228.764          | 23.59             | 24.00       | Pass        |
| 159   | 5795              | 17.46                         | 17.59   | 17.42   | 17.93   | 230.425          | 23.63             | 24.00       | Pass        |

**Note:** 1. Antennas gain = 12dBi > 6dBi, so the power limit shall be reduced to 30-(12-6) = 24.00dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq. (MHz) | EIRP Power (mW) | EIRP Power (dBm) | Power Limit (dBm) | Pass / Fail |
|-------|-------------------|-----------------|------------------|-------------------|-------------|
| 38    | 5190              | 115.35          | 20.62            | 21                | Pass        |
| 46    | 5230              | 116.413         | 20.66            | 21                | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | 2.62                          | 2.35    | 2.69    | 2.34    | 7.118                  | 8.52                    | 24.00          | Pass           |
| 155   | 5775                 | 17.53                         | 17.75   | 17.51   | 17.82   | 233.088                | 23.68                   | 24.00          | Pass           |

**Note:** 1. Antennas gain = 12dBi > 6dBi, so the power limit shall be reduced to 30-(12-6) = 24.00dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 112.72             | 20.52               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | 2.61                          | 2.73    | 2.64    | 2.92    | 7.494                  | 8.75                    | 24.00          | Pass           |
| 40    | 5200                 | 2.57                          | 2.68    | 2.73    | 2.89    | 7.481                  | 8.74                    | 24.00          | Pass           |
| 48    | 5240                 | 2.59                          | 2.71    | 2.82    | 2.96    | 7.573                  | 8.79                    | 24.00          | Pass           |
| 149   | 5745                 | 17.92                         | 17.88   | 17.78   | 18.03   | 246.833                | 23.92                   | 24.00          | Pass           |
| 157   | 5785                 | 17.99                         | 17.82   | 17.75   | 18.04   | 246.73                 | 23.92                   | 24.00          | Pass           |
| 165   | 5825                 | 17.89                         | 17.83   | 17.72   | 18.09   | 245.764                | 23.91                   | 24.00          | Pass           |

**Note:** 1. Antennas gain = 12dBi > 6dBi, so the power limit shall be reduced to 30-(12-6) = 24.00dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 118.85             | 20.75               | 21                   | Pass        |
| 40    | 5200                 | 118.577            | 20.74               | 21                   | Pass        |
| 48    | 5240                 | 119.95             | 20.79               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | 2.86                          | 2.59    | 2.96    | 2.49    | 7.499                  | 8.75                    | 24.00          | Pass           |
| 46    | 5230                 | 2.93                          | 2.65    | 2.99    | 2.54    | 7.59                   | 8.80                    | 24.00          | Pass           |
| 151   | 5755                 | 17.58                         | 17.75   | 17.52   | 17.96   | 235.857                | 23.73                   | 24.00          | Pass           |
| 159   | 5795                 | 17.63                         | 17.75   | 17.55   | 18.04   | 238.074                | 23.77                   | 24.00          | Pass           |

**Note:** 1. Antennas gain = 12dBi > 6dBi, so the power limit shall be reduced to  $30-(12-6) = 24.00\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 38    | 5190                 | 118.85             | 20.75               | 21                   | Pass        |
| 46    | 5230                 | 120.226            | 20.80               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ax (HE80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | 2.79                          | 2.48    | 2.82    | 2.46    | 7.347                  | 8.66                    | 24.00          | Pass           |
| 155   | 5775                 | 17.65                         | 17.86   | 17.62   | 17.97   | 239.776                | 23.80                   | 24.00          | Pass           |

**Note:** 1. Antennas gain = 12dBi > 6dBi, so the power limit shall be reduced to  $30-(12-6) = 24.00\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 116.41             | 20.66               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

## Beamforming Mode

### 802.11ac (VHT20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | -3.62                         | -3.54   | -3.68   | -3.37   | 1.7659                 | 2.47                    | 17.98          | Pass           |
| 40    | 5200                 | -3.61                         | -3.54   | -3.43   | -3.32   | 1.7976                 | 2.55                    | 17.98          | Pass           |
| 48    | 5240                 | -3.59                         | -3.42   | -3.31   | -3.28   | 1.8291                 | 2.62                    | 17.98          | Pass           |
| 149   | 5745                 | 11.78                         | 11.69   | 11.61   | 11.85   | 59.622                 | 17.75                   | 17.98          | Pass           |
| 157   | 5785                 | 11.79                         | 11.64   | 11.62   | 11.86   | 59.556                 | 17.75                   | 17.98          | Pass           |
| 165   | 5825                 | 11.62                         | 11.59   | 11.49   | 11.92   | 58.595                 | 17.68                   | 17.98          | Pass           |

Note: 1. For U-NII-1: The directional gain =  $12\text{dBi} + 10\log(4) = 18.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (18.02 - 6) = 17.98\text{dBm}$ .  
2. For U-NII-3: The directional gain =  $12\text{dBi} + 10\log(4) = 18.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (18.02 - 6) = 17.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 111.94             | 20.49               | 21                   | Pass        |
| 40    | 5200                 | 114.025            | 20.57               | 21                   | Pass        |
| 48    | 5240                 | 115.878            | 20.64               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore  $\text{Max. e.i.r.p} \leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ac (VHT40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | -3.34                         | -3.61   | -3.32   | -3.66   | 1.7951                 | 2.54                    | 17.98          | Pass           |
| 46    | 5230                 | -3.23                         | -3.53   | -3.19   | -3.62   | 1.8332                 | 2.63                    | 17.98          | Pass           |
| 151   | 5755                 | 11.42                         | 11.56   | 11.30   | 11.74   | 56.607                 | 17.53                   | 17.98          | Pass           |
| 159   | 5795                 | 11.44                         | 11.52   | 11.26   | 11.78   | 56.554                 | 17.52                   | 17.98          | Pass           |

Note: 1. For U-NII-1: The directional gain =  $12\text{dBi} + 10\log(4) = 18.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (18.02 - 6) = 17.98\text{dBm}$ .  
2. For U-NII-3: The directional gain =  $12\text{dBi} + 10\log(4) = 18.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (18.02 - 6) = 17.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 38    | 5190                 | 113.76             | 20.56               | 21                   | Pass        |
| 46    | 5230                 | 116.145            | 20.65               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ac (VHT80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | -3.48                         | -3.72   | -3.34   | -3.81   | 1.7527                 | 2.44                    | 17.98          | Pass           |
| 155   | 5775                 | 11.41                         | 11.59   | 11.36   | 11.71   | 56.759                 | 17.54                   | 17.98          | Pass           |

- Note: 1. For U-NII-1: The directional gain = 12dBi + 10log(4) = 18.02dBi > 6dBi, so the power limit shall be reduced to 30-(18.02-6) = 17.98dBm.  
 2. For U-NII-3: The directional gain = 12dBi + 10log(4) = 18.02dBi > 6dBi, so the power limit shall be reduced to 30-(18.02-6) = 17.98dBm.

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 111.17             | 20.46               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE20)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 36    | 5180                 | -3.54                         | -3.46   | -3.59   | -3.29   | 1.7997                 | 2.55                    | 17.98          | Pass           |
| 40    | 5200                 | -3.48                         | -3.43   | -3.34   | -3.24   | 1.8404                 | 2.65                    | 17.98          | Pass           |
| 48    | 5240                 | -3.53                         | -3.30   | -3.21   | -3.19   | 1.8686                 | 2.72                    | 17.98          | Pass           |
| 149   | 5745                 | 11.86                         | 11.78   | 11.72   | 11.96   | 60.975                 | 17.85                   | 17.98          | Pass           |
| 157   | 5785                 | 11.91                         | 11.76   | 11.68   | 11.99   | 61.056                 | 17.86                   | 17.98          | Pass           |
| 165   | 5825                 | 11.76                         | 11.72   | 11.61   | 12.01   | 60.229                 | 17.80                   | 17.98          | Pass           |

Note: 1. For U-NII-1: The directional gain =  $12\text{dBi} + 10\log(4) = 18.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (18.02 - 6) = 17.98\text{dBm}$ .

2. For U-NII-3: The directional gain =  $12\text{dBi} + 10\log(4) = 18.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (18.02 - 6) = 17.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 36    | 5180                 | 114.03             | 20.57               | 21                   | Pass        |
| 40    | 5200                 | 116.681            | 20.67               | 21                   | Pass        |
| 48    | 5240                 | 118.577            | 20.74               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq 125\text{mW}(21\text{ dBm})$  to compliance.

### 802.11ax (HE40)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 38    | 5190                 | -3.21                         | -3.49   | -3.16   | -3.58   | 1.8468                 | 2.66                    | 17.98          | Pass           |
| 46    | 5230                 | -3.11                         | -3.42   | -3.08   | -3.53   | 1.8793                 | 2.74                    | 17.98          | Pass           |
| 151   | 5755                 | 11.51                         | 11.67   | 11.43   | 11.82   | 57.952                 | 17.63                   | 17.98          | Pass           |
| 159   | 5795                 | 11.56                         | 11.63   | 11.39   | 11.91   | 58.172                 | 17.65                   | 17.98          | Pass           |

Note: 1. For U-NII-1: The directional gain =  $12\text{dBi} + 10\log(4) = 18.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (18.02 - 6) = 17.98\text{dBm}$ .

2. For U-NII-3: The directional gain =  $12\text{dBi} + 10\log(4) = 18.02\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (18.02 - 6) = 17.98\text{dBm}$ .

### EIRP POWER OUTPUT

| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 38    | 5190                 | 116.95             | 20.68               | 21                   | Pass        |
| 46    | 5230                 | 119.124            | 20.76               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.

### 802.11ax (HE80)

| Chan. | Chan. Freq.<br>(MHz) | Maximum Conducted Power (dBm) |         |         |         | Total<br>Power<br>(mW) | Total<br>Power<br>(dBm) | Limit<br>(dBm) | Pass /<br>Fail |
|-------|----------------------|-------------------------------|---------|---------|---------|------------------------|-------------------------|----------------|----------------|
|       |                      | Chain 0                       | Chain 1 | Chain 2 | Chain 3 |                        |                         |                |                |
| 42    | 5210                 | -3.37                         | -3.61   | -3.21   | -3.67   | 1.8028                 | 2.56                    | 17.98          | Pass           |
| 155   | 5775                 | 11.52                         | 11.73   | 11.49   | 11.82   | 58.383                 | 17.66                   | 17.98          | Pass           |

Note: 1. For U-NII-1: The directional gain = 12dBi + 10log(4) = 18.02dBi > 6dBi, so the power limit shall be reduced to 30-(18.02-6) = 17.98dBm.  
 2. For U-NII-3: The directional gain = 12dBi + 10log(4) = 18.02dBi > 6dBi, so the power limit shall be reduced to 30-(18.02-6) = 17.98dBm.

### EIRP POWER OUTPUT

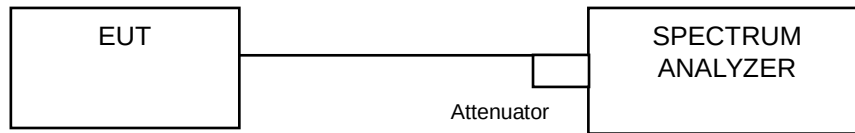
| Chan. | Chan. Freq.<br>(MHz) | EIRP Power<br>(mW) | EIRP Power<br>(dBm) | Power Limit<br>(dBm) | Pass / Fail |
|-------|----------------------|--------------------|---------------------|----------------------|-------------|
| 42    | 5210                 | 114.29             | 20.58               | 21                   | Pass        |

\*This device is outdoor access point and antenna at any elevation angle above 30 degrees as measured from the horizon, therefore Max. e.i.r.p  $\leq$  125mW(21 dBm) to compliance.



## 4.4 Occupied Bandwidth Measurement

### 4.4.1 Test Setup



### 4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to SAMPLE. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean power of a given emission.

#### 4.4.4 Test Results (Mode 1)

##### 802.11a

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 36      | 5180                    | 16.44                    | 16.68   | 16.68   | 16.56   |
| 40      | 5200                    | 16.44                    | 16.44   | 16.56   | 16.44   |
| 48      | 5240                    | 16.56                    | 16.44   | 16.56   | 16.44   |
| 149     | 5745                    | 16.56                    | 16.44   | 16.44   | 16.44   |
| 157     | 5785                    | 16.44                    | 16.44   | 16.56   | 16.56   |
| 165     | 5825                    | 16.44                    | 16.44   | 16.44   | 16.56   |

##### 802.11ax (HE20)

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 36      | 5180                    | 19.08                    | 18.96   | 18.96   | 19.08   |
| 40      | 5200                    | 19.08                    | 18.96   | 19.08   | 19.08   |
| 48      | 5240                    | 18.96                    | 19.08   | 18.96   | 19.08   |
| 149     | 5745                    | 19.08                    | 19.08   | 19.08   | 19.08   |
| 157     | 5785                    | 18.96                    | 18.96   | 18.96   | 18.96   |
| 165     | 5825                    | 18.96                    | 18.96   | 19.08   | 18.96   |

##### 802.11ax (HE40)

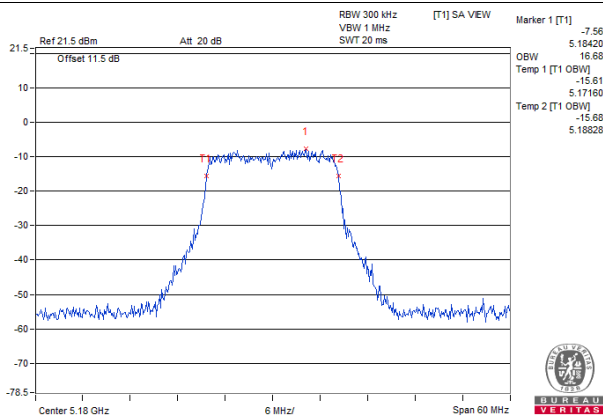
| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 38      | 5190                    | 38.16                    | 38.16   | 37.92   | 38.16   |
| 46      | 5230                    | 38.16                    | 37.92   | 38.16   | 38.16   |
| 151     | 5755                    | 37.92                    | 38.16   | 38.16   | 38.16   |
| 159     | 5795                    | 38.16                    | 38.16   | 37.92   | 38.16   |

##### 802.11ax (HE80)

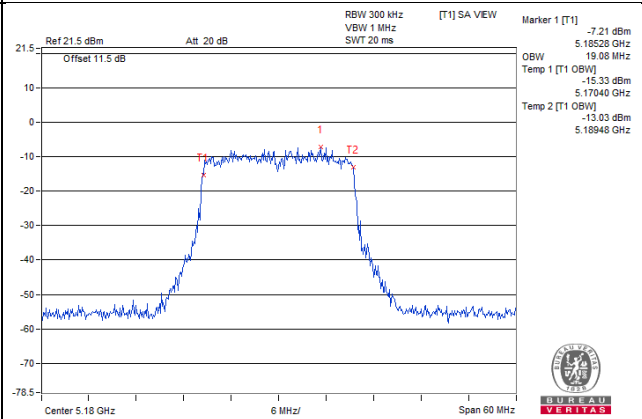
| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 42      | 5210                    | 77.28                    | 77.28   | 77.28   | 77.28   |
| 155     | 5775                    | 77.28                    | 77.28   | 77.28   | 77.28   |

## Spectrum Plot of Max. Value

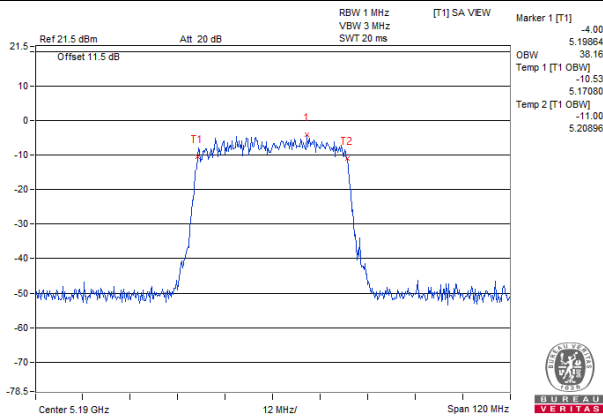
**802.11a\_Chain 1 / CH36**



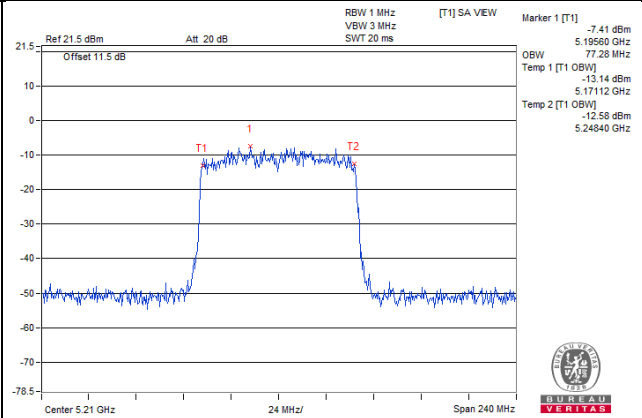
**802.11ax (HE20)\_Chain 0 / CH36**



**802.11ax (HE40)\_Chain 0 / CH38**

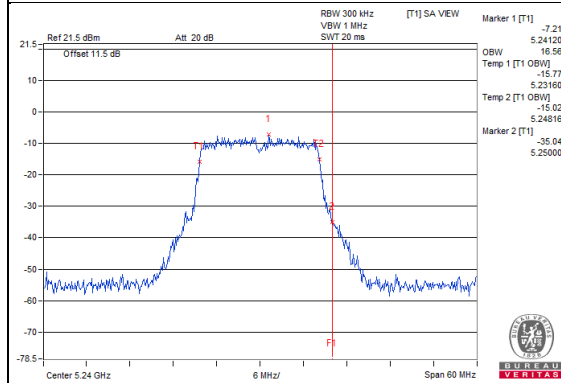


**802.11ax (HE80)\_Chain 0 / CH42**

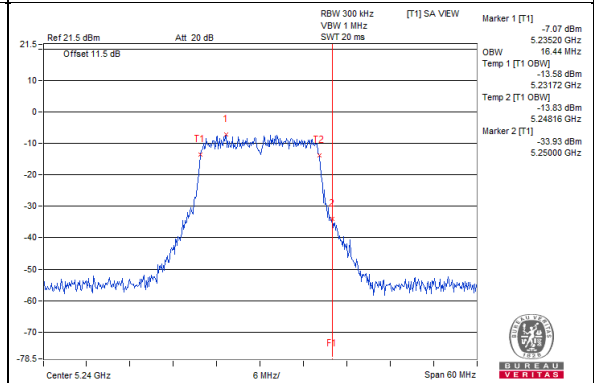


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2A band)

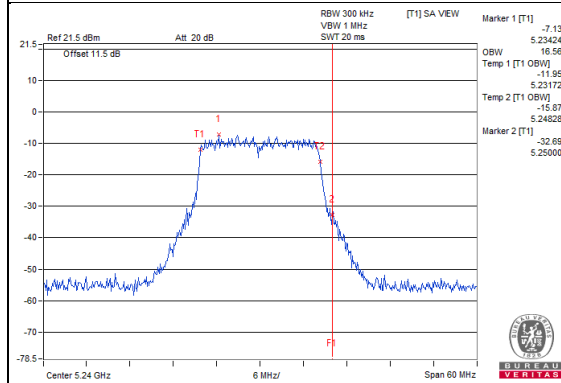
**802.11a\_Chain 0 / CH48**



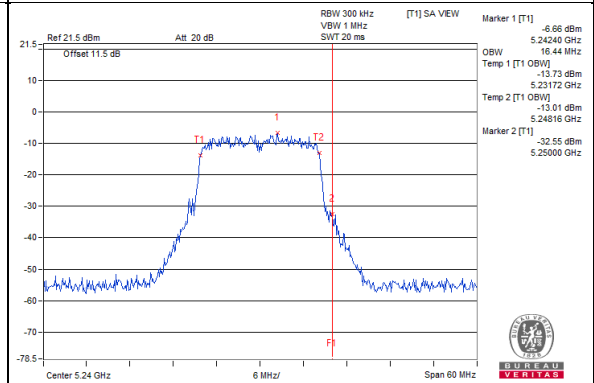
**802.11a\_Chain 1 / CH48**



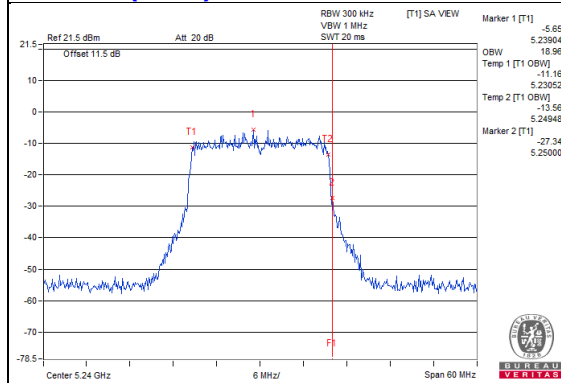
**802.11a\_Chain 2 / CH48**



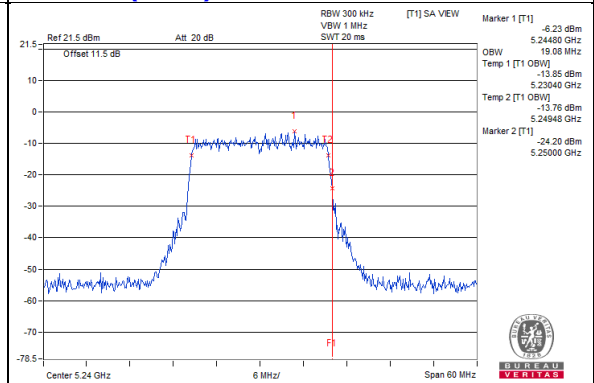
**802.11a\_Chain 3 / CH48**



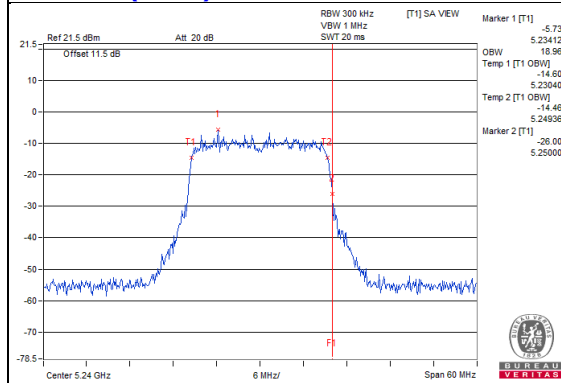
**802.11ax (HE20)\_Chain 0 / CH48**



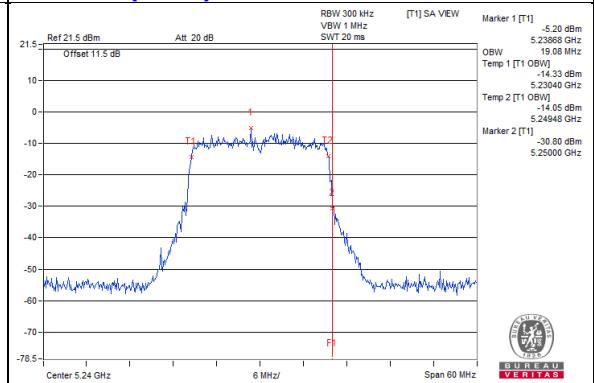
**802.11ax (HE20)\_Chain 1 / CH48**



**802.11ax (HE20)\_Chain 2 / CH48**

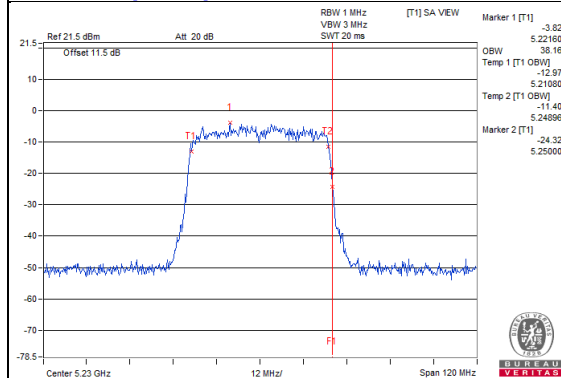


**802.11ax (HE20)\_Chain 3 / CH48**

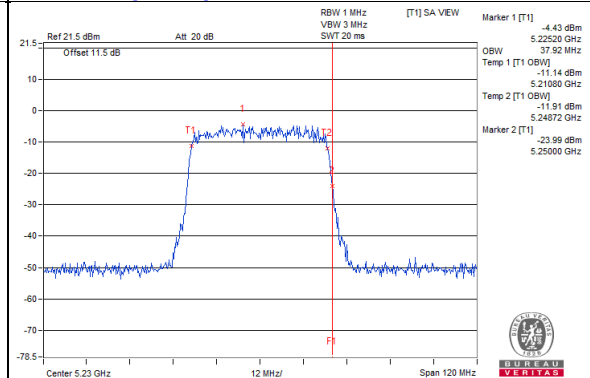


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2A band)

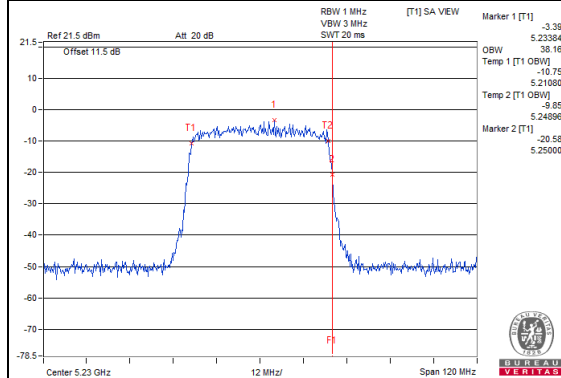
**802.11ax (HE40)\_Chain 0 / CH46**



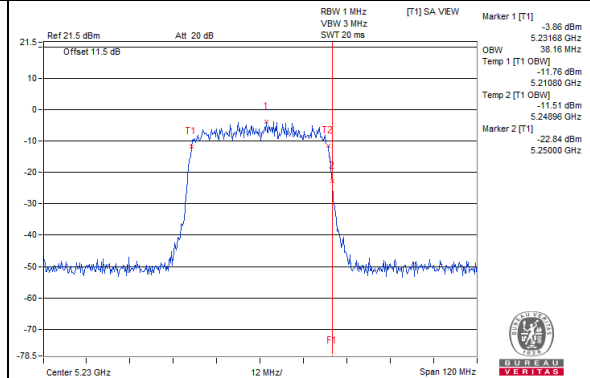
**802.11ax (HE40)\_Chain 1 / CH46**



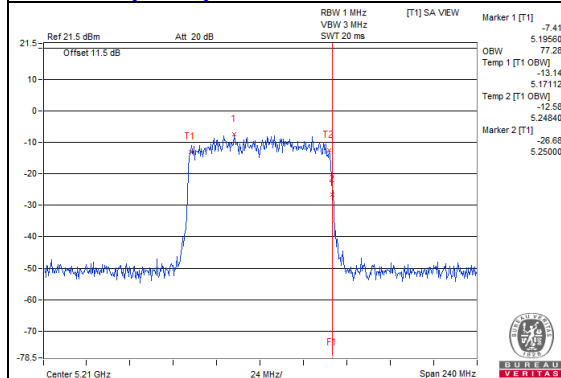
**802.11ax (HE40)\_Chain 2 / CH46**



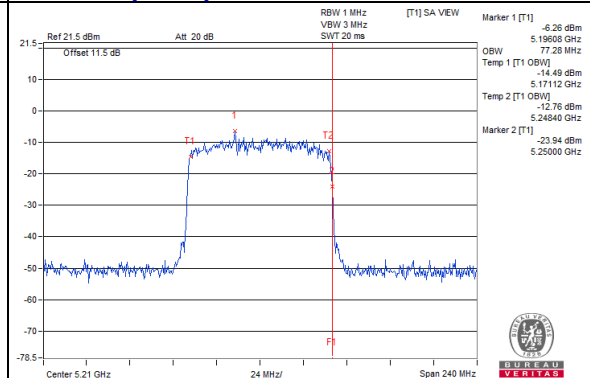
**802.11ax (HE40)\_Chain 3 / CH46**



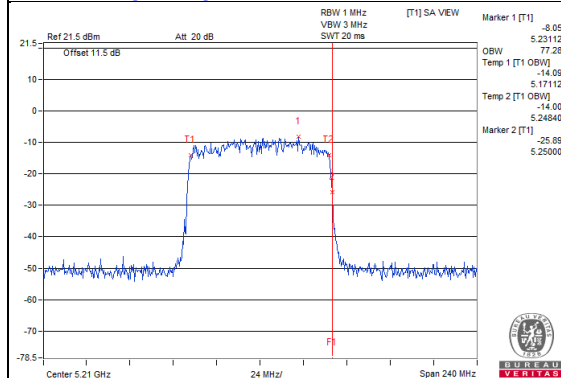
**802.11ax (HE80)\_Chain 0 / CH42**



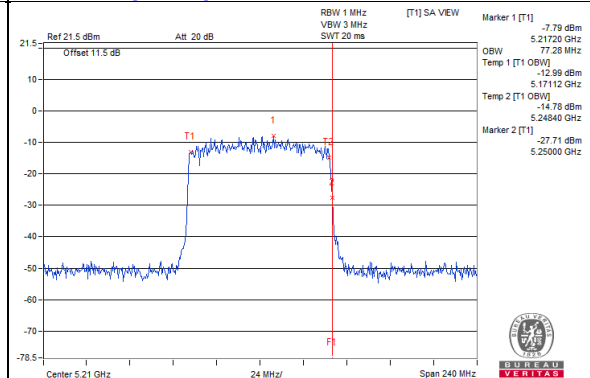
**802.11ax (HE80)\_Chain 1 / CH42**



**802.11ax (HE80)\_Chain 2 / CH42**

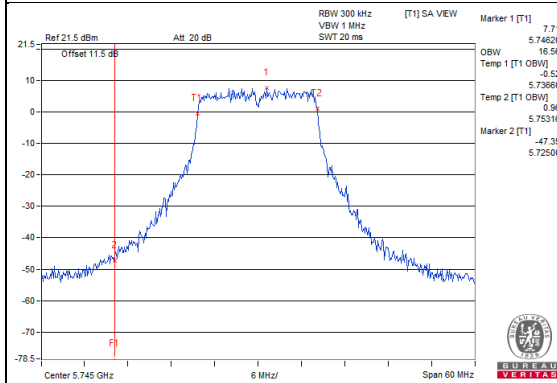


**802.11ax (HE80)\_Chain 3 / CH42**

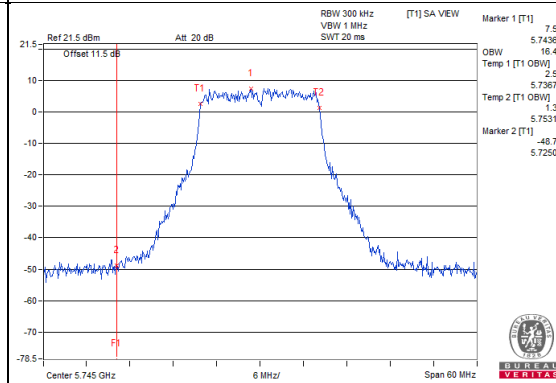


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2C band)

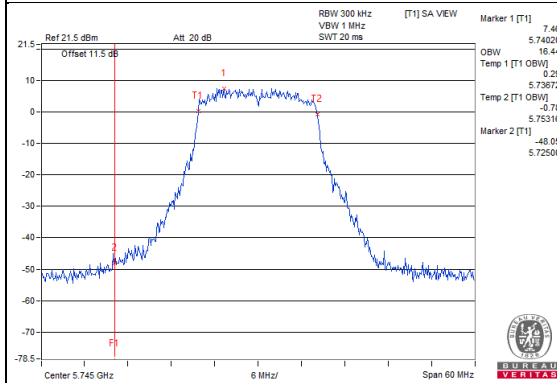
**802.11a\_Chain 0 / CH149**



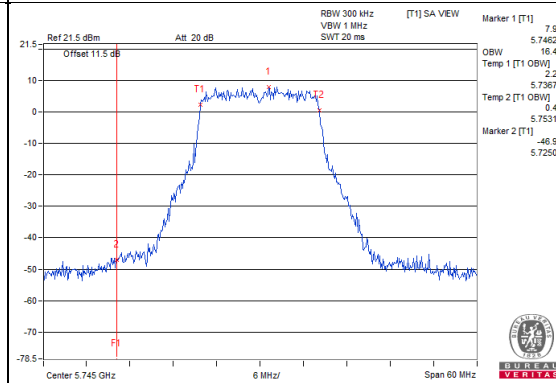
**802.11a\_Chain 1 / CH149**



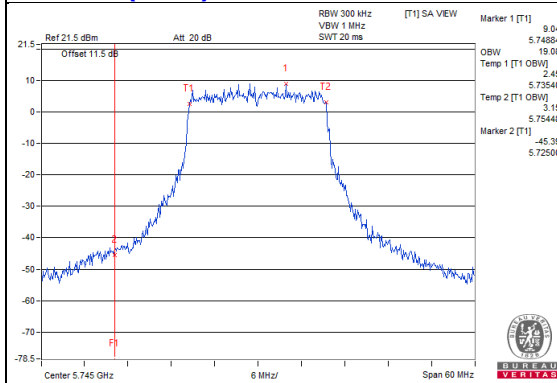
**802.11a\_Chain 2 / CH149**



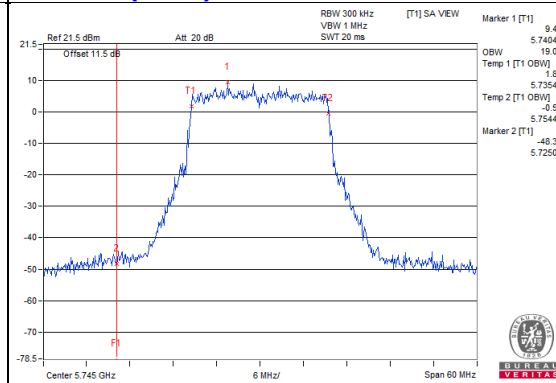
**802.11a\_Chain 3 / CH149**



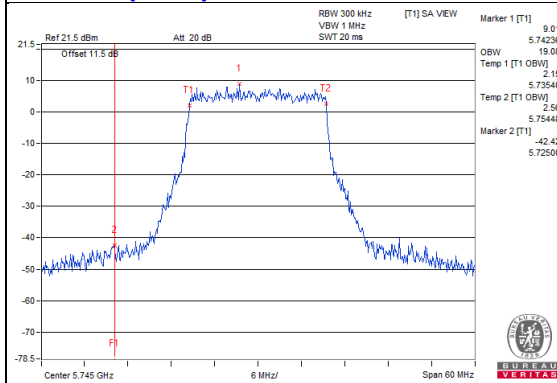
**802.11ax (HE20)\_Chain 0 / CH149**



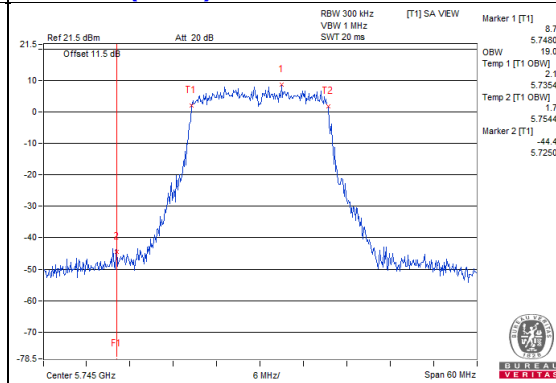
**802.11ax (HE20)\_Chain 1 / CH149**



**802.11ax (HE20)\_Chain 2 / CH149**

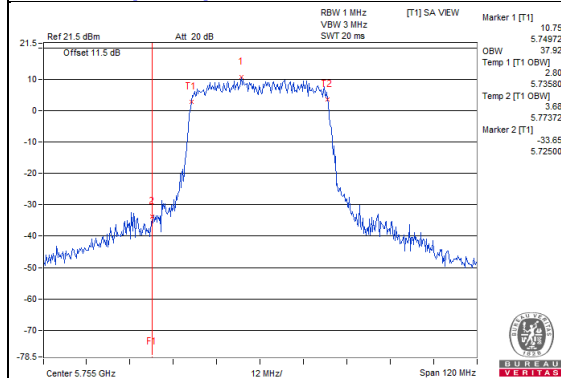


**802.11ax (HE20)\_Chain 3 / CH149**

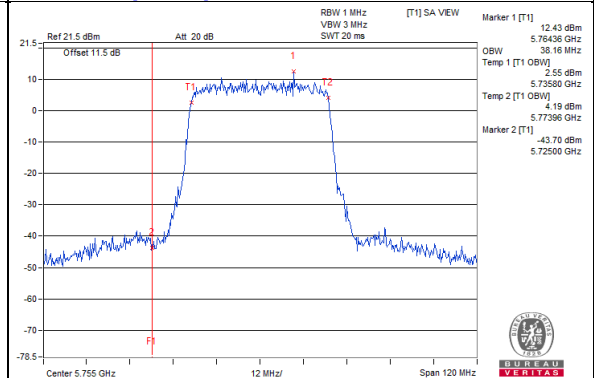


Spectrum Plot for near by DFS band  
(DFS is required, if 99% OCP straddle into U-NII-2C band)

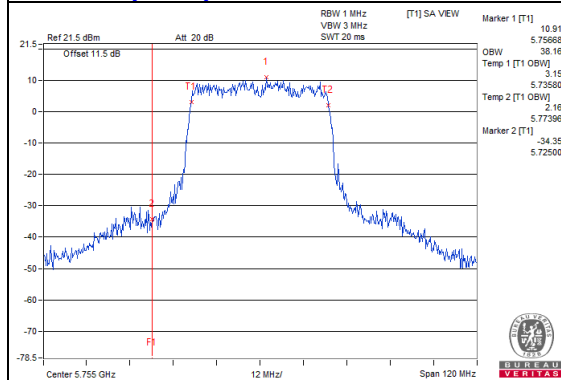
802.11ax (HE40)\_Chain 0 / CH151



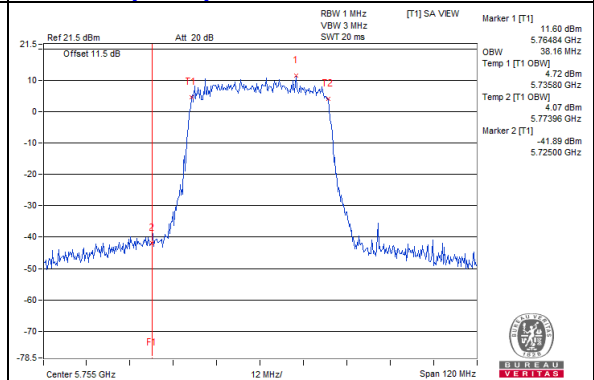
802.11ax (HE40)\_Chain 1 / CH151



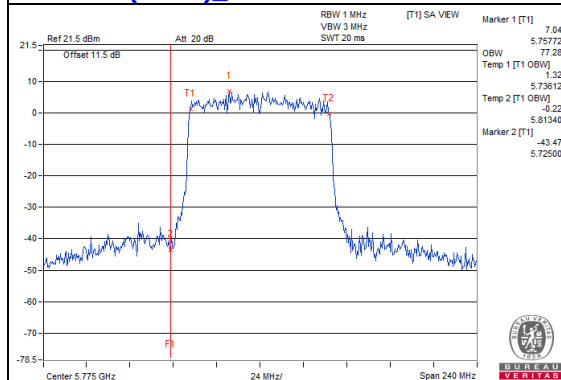
802.11ax (HE40)\_Chain 2 / CH151



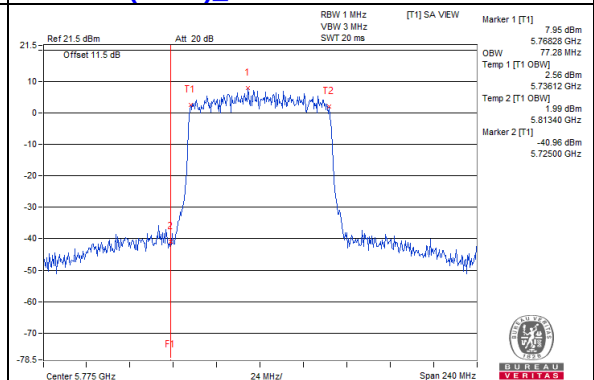
802.11ax (HE40)\_Chain 3 / CH151



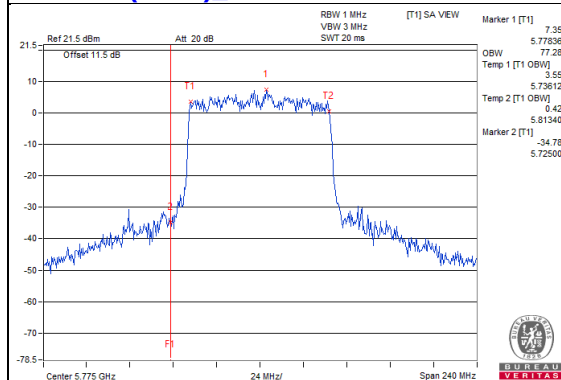
802.11ax (HE80)\_Chain 0 / CH155



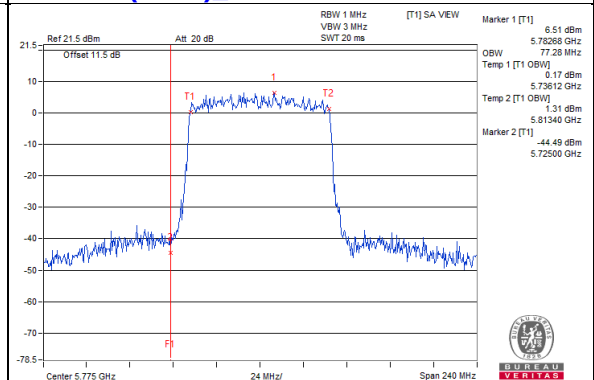
802.11ax (HE80)\_Chain 1 / CH155



802.11ax (HE80)\_Chain 2 / CH155



802.11ax (HE80)\_Chain 3 / CH155



#### 4.4.5 Test Results (Mode 2)

##### 802.11a

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 36      | 5180                    | 16.44                    | 16.44   | 16.56   | 16.44   |
| 40      | 5200                    | 16.44                    | 16.44   | 16.44   | 16.44   |
| 48      | 5240                    | 16.44                    | 16.56   | 16.56   | 16.44   |
| 149     | 5745                    | 16.8                     | 16.56   | 16.44   | 16.56   |
| 157     | 5785                    | 16.8                     | 16.44   | 16.68   | 16.56   |
| 165     | 5825                    | 16.56                    | 16.44   | 16.56   | 16.44   |

##### 802.11ax (HE20)

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 36      | 5180                    | 18.96                    | 19.08   | 18.96   | 19.08   |
| 40      | 5200                    | 19.08                    | 19.08   | 18.96   | 18.96   |
| 48      | 5240                    | 19.08                    | 18.84   | 19.08   | 19.08   |
| 149     | 5745                    | 19.08                    | 18.96   | 19.08   | 19.08   |
| 157     | 5785                    | 19.08                    | 18.96   | 19.08   | 18.96   |
| 165     | 5825                    | 19.08                    | 18.96   | 19.08   | 19.08   |

##### 802.11ax (HE40)

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 38      | 5190                    | 38.16                    | 37.92   | 37.92   | 37.92   |
| 46      | 5230                    | 38.16                    | 37.92   | 38.16   | 38.16   |
| 151     | 5755                    | 39.36                    | 38.64   | 39.36   | 42.24   |
| 159     | 5795                    | 38.64                    | 38.64   | 39.6    | 42      |

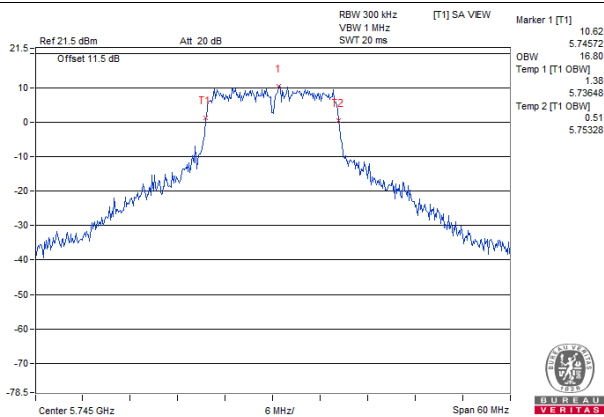
##### 802.11ax (HE80)

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 42      | 5210                    | 77.28                    | 77.28   | 77.28   | 77.28   |
| 155     | 5775                    | 77.28                    | 77.28   | 77.28   | 77.28   |

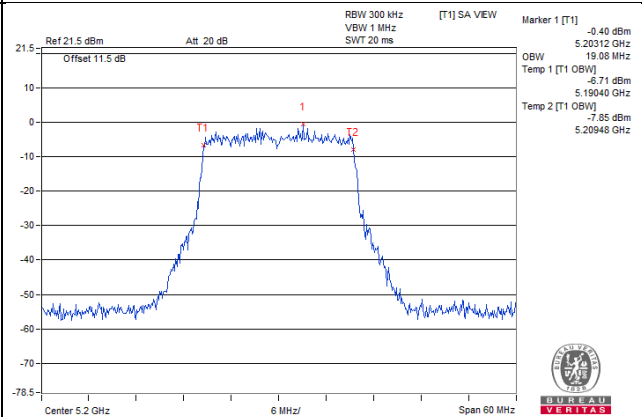


# Spectrum Plot of Max. Value

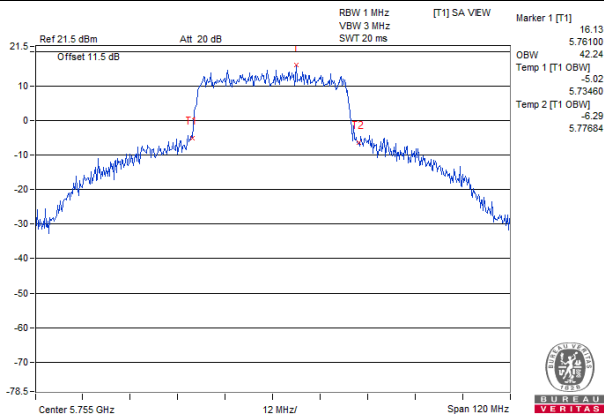
## 802.11a\_Chain 0 / CH149



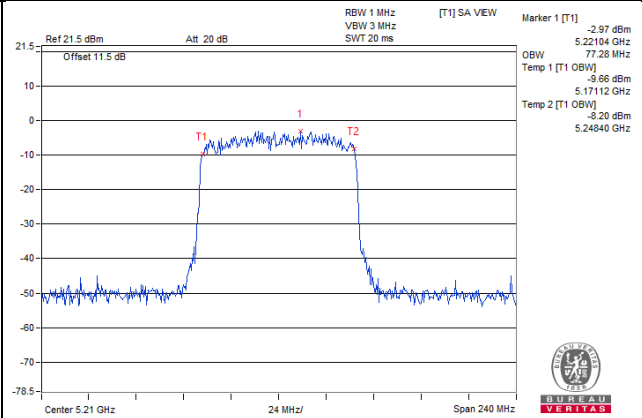
## 802.11ax (HE20)\_Chain 0 / CH40



## 802.11ax (HE40)\_Chain 3 / CH151

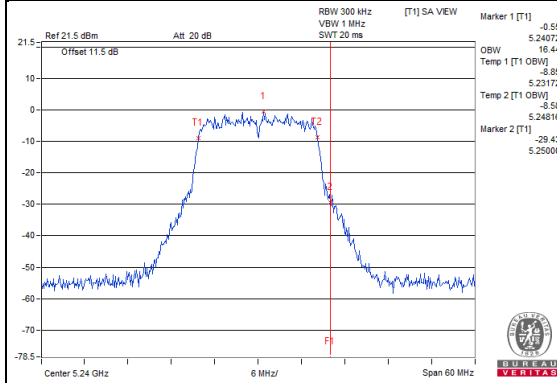


## 802.11ax (HE80)\_Chain 0 / CH42

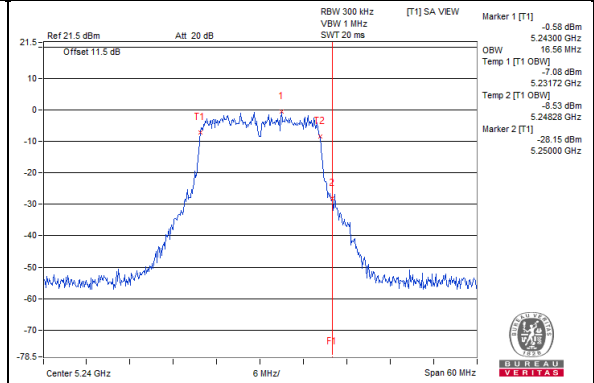


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2A band)

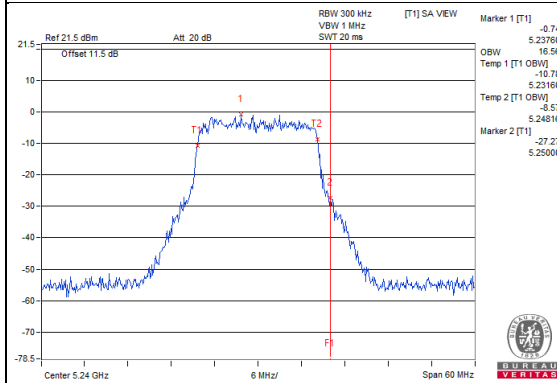
**802.11a\_Chain 0 / CH48**



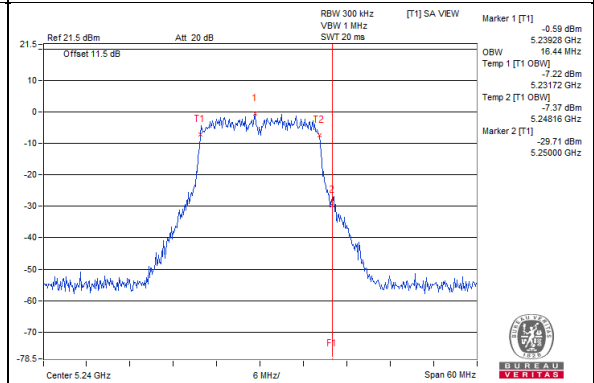
**802.11a\_Chain 1 / CH48**



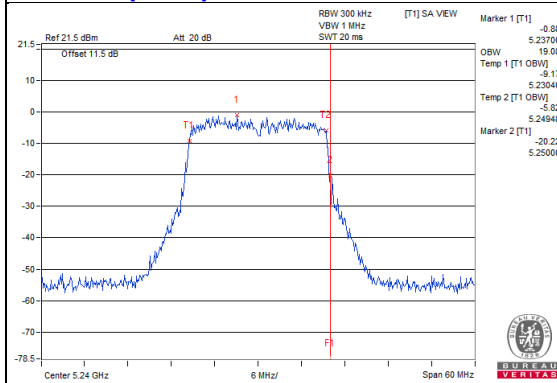
**802.11a\_Chain 2 / CH48**



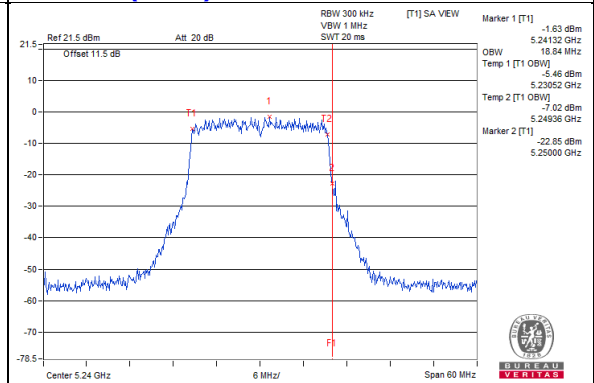
**802.11a\_Chain 3 / CH48**



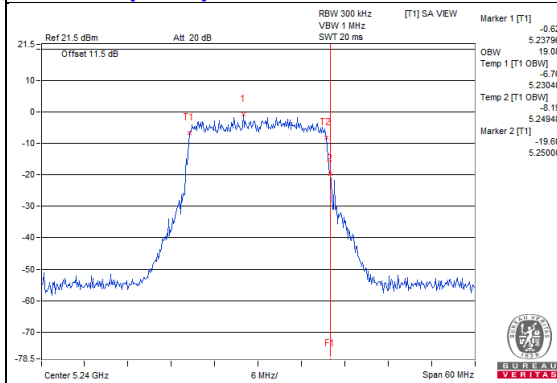
**802.11ax (HE20)\_Chain 0 / CH48**



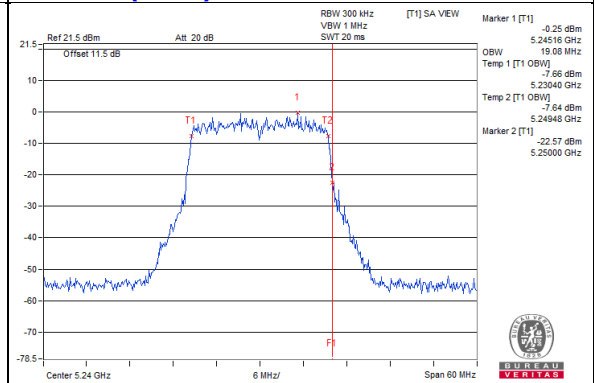
**802.11ax (HE20)\_Chain 1 / CH48**



**802.11ax (HE20)\_Chain 2 / CH48**

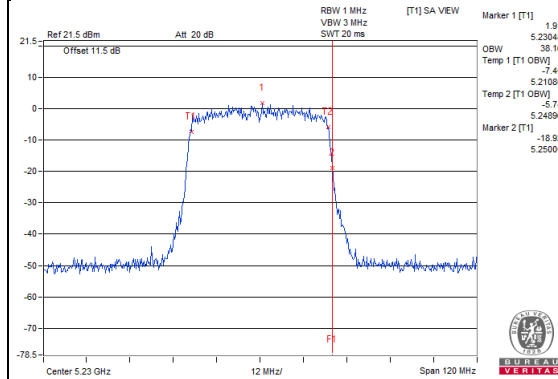


**802.11ax (HE20)\_Chain 3 / CH48**

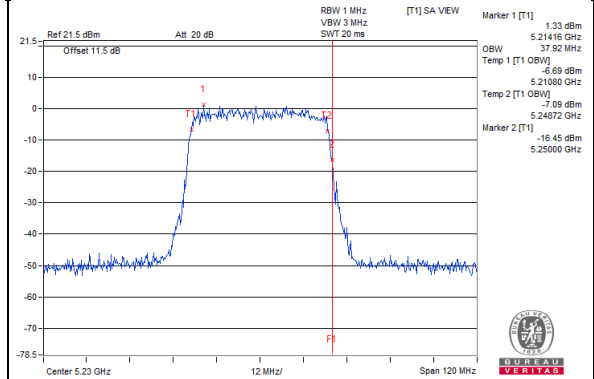


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2A band)

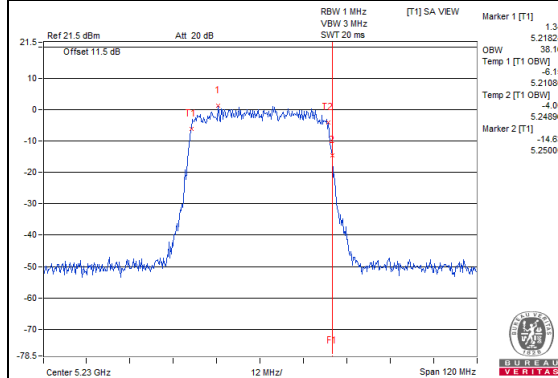
**802.11ax (HE40)\_Chain 0 / CH46**



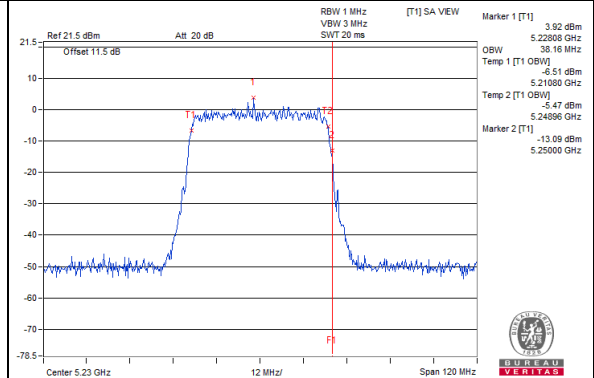
**802.11ax (HE40)\_Chain 1 / CH46**



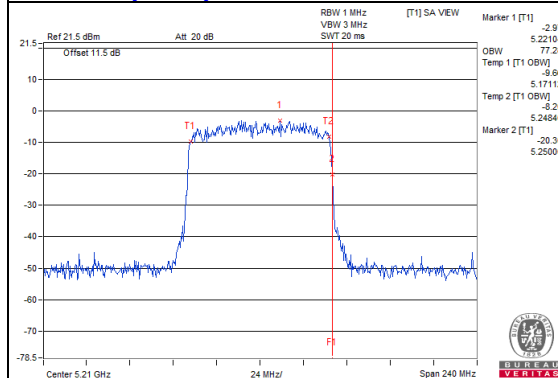
**802.11ax (HE40)\_Chain 2 / CH46**



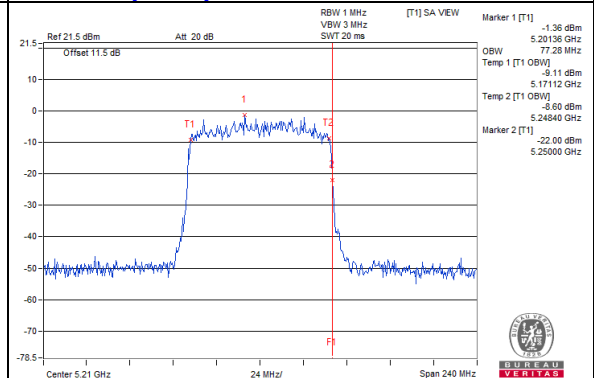
**802.11ax (HE40)\_Chain 3 / CH46**



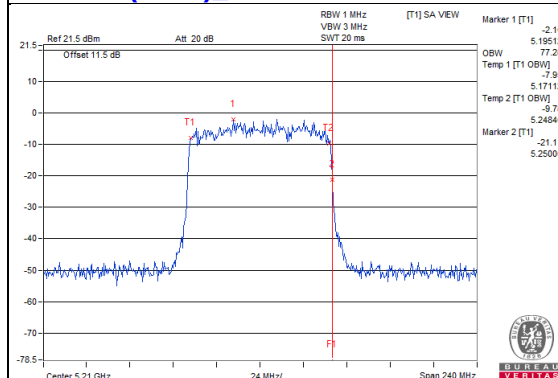
**802.11ax (HE80)\_Chain 0 / CH42**



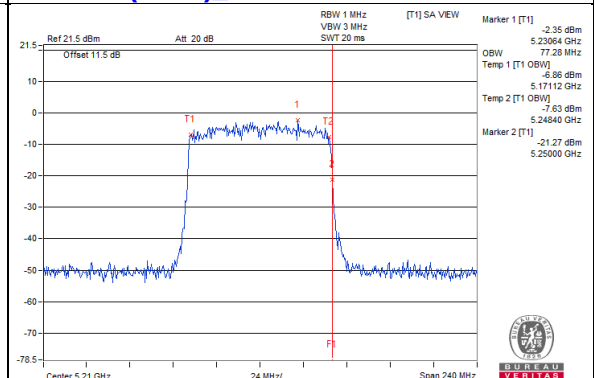
**802.11ax (HE80)\_Chain 1 / CH42**



**802.11ax (HE80)\_Chain 2 / CH42**

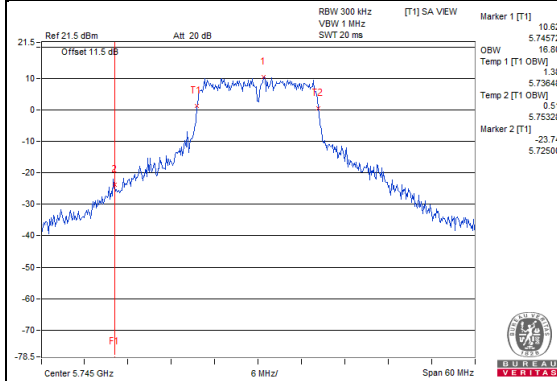


**802.11ax (HE80)\_Chain 3 / CH42**

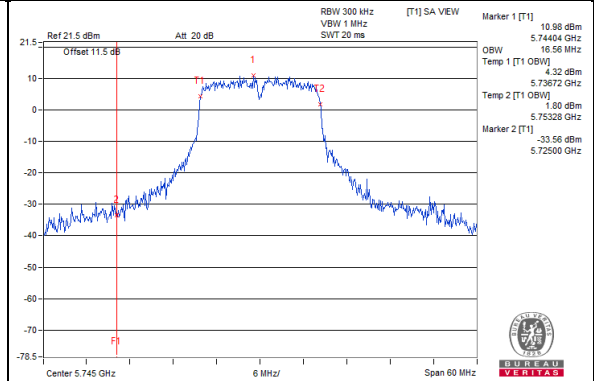


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2C band)

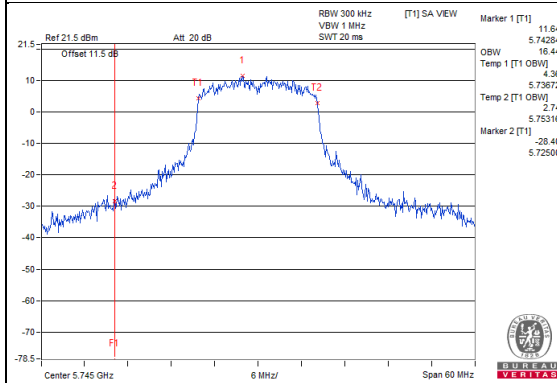
**802.11a\_Chain 0 / CH149**



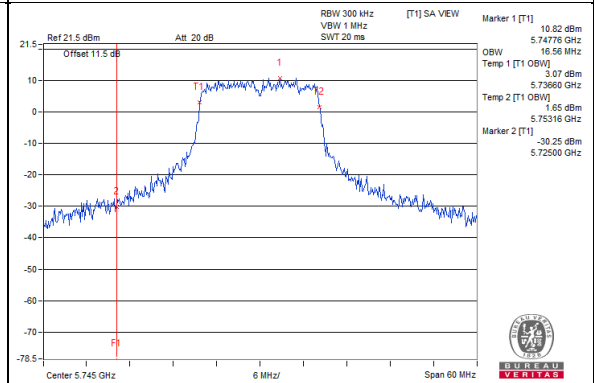
**802.11a\_Chain 1 / CH149**



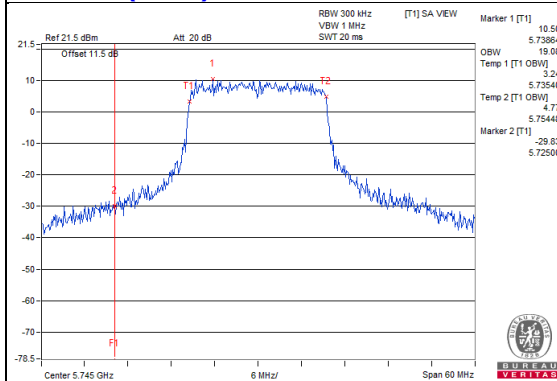
**802.11a\_Chain 2 / CH149**



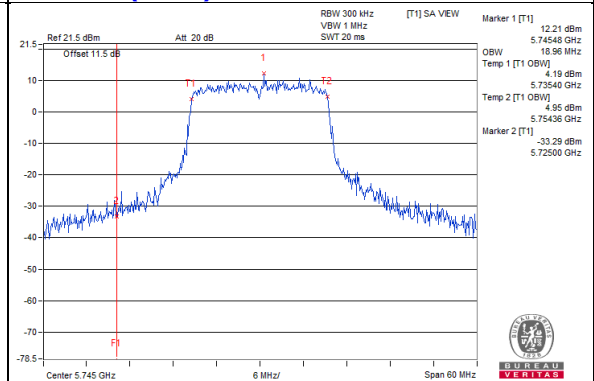
**802.11a\_Chain 3 / CH149**



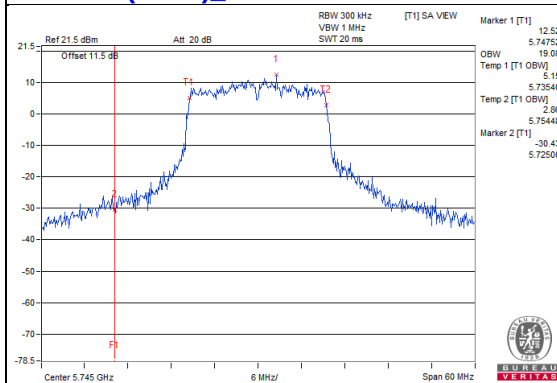
**802.11ax (HE20)\_Chain 0 / CH149**



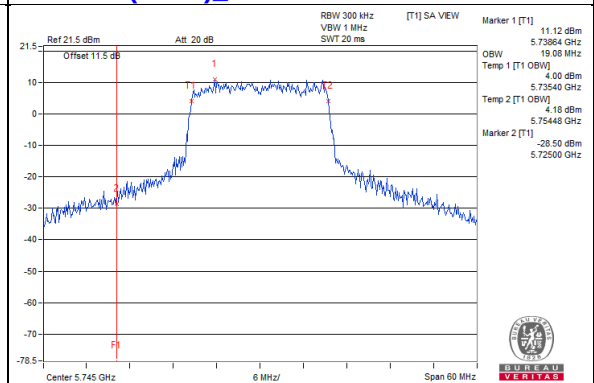
**802.11ax (HE20)\_Chain 1 / CH149**



**802.11ax (HE20)\_Chain 2 / CH149**

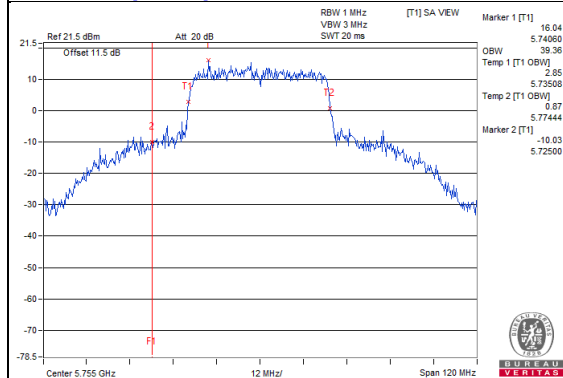


**802.11ax (HE20)\_Chain 3 / CH149**

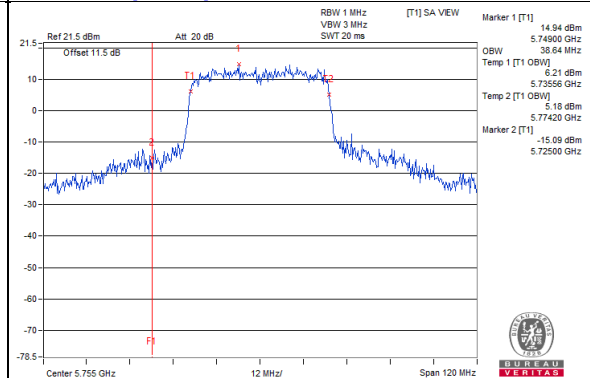


Spectrum Plot for near by DFS band  
(DFS is required, if 99% OCP straddle into U-NII-2C band)

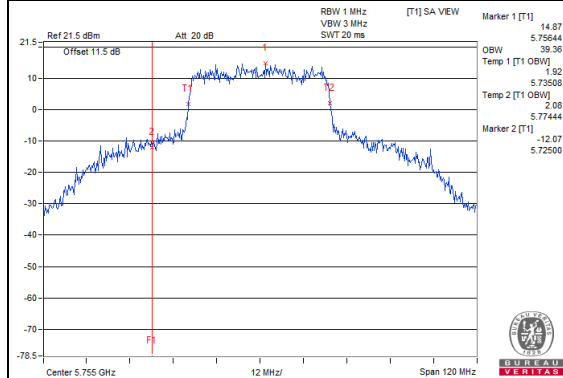
802.11ax (HE40)\_Chain 0 / CH151



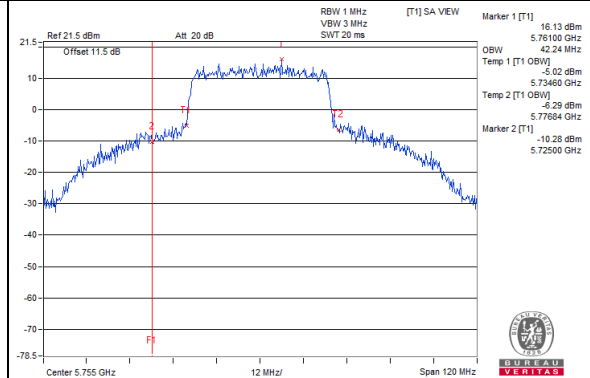
802.11ax (HE40)\_Chain 1 / CH151



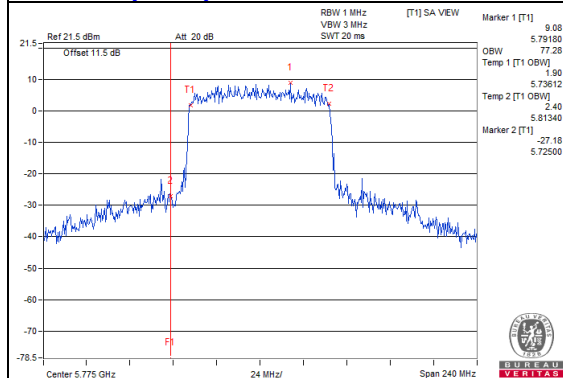
802.11ax (HE40)\_Chain 2 / CH151



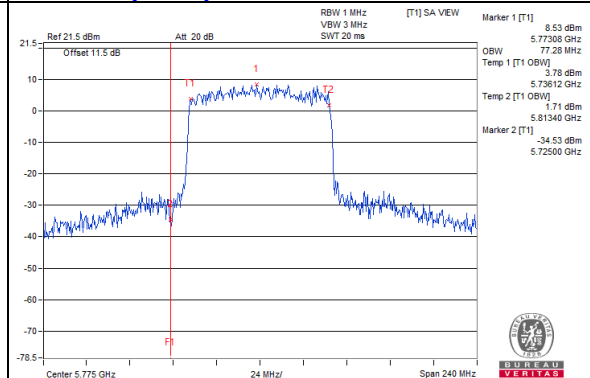
802.11ax (HE40)\_Chain 3 / CH151



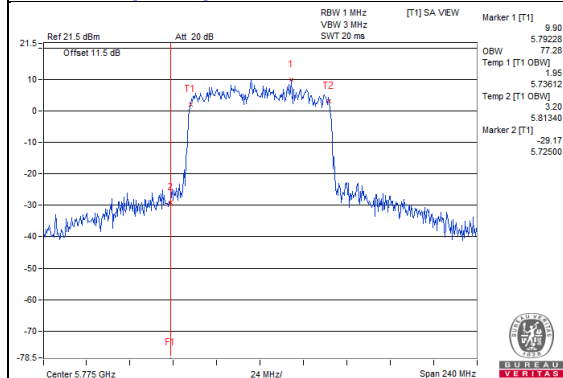
802.11ax (HE80)\_Chain 0 / CH155



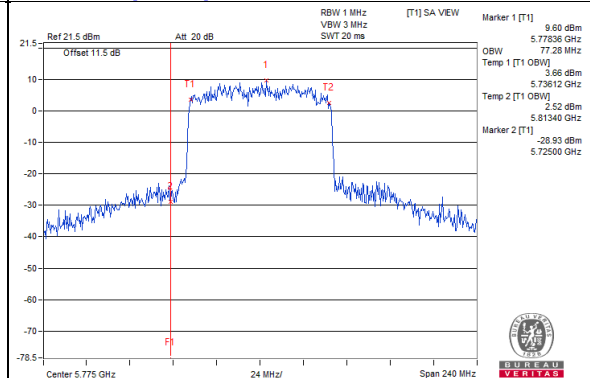
802.11ax (HE80)\_Chain 1 / CH155



802.11ax (HE80)\_Chain 2 / CH155



802.11ax (HE80)\_Chain 3 / CH155



#### 4.4.6 Test Results (Mode 3)

##### 802.11a

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 36      | 5180                    | 16.56                    | 16.56   | 16.44   | 16.44   |
| 40      | 5200                    | 16.44                    | 16.44   | 16.56   | 16.44   |
| 48      | 5240                    | 16.44                    | 16.56   | 16.44   | 16.44   |
| 149     | 5745                    | 16.44                    | 16.44   | 16.68   | 16.44   |
| 157     | 5785                    | 16.44                    | 16.56   | 16.32   | 16.56   |
| 165     | 5825                    | 16.56                    | 16.44   | 16.68   | 16.56   |

##### 802.11ax (HE20)

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 36      | 5180                    | 17.64                    | 18.96   | 19.08   | 19.08   |
| 40      | 5200                    | 17.76                    | 18.96   | 18.96   | 19.08   |
| 48      | 5240                    | 17.64                    | 19.08   | 18.96   | 19.08   |
| 149     | 5745                    | 18.96                    | 18.84   | 19.08   | 19.08   |
| 157     | 5785                    | 19.08                    | 19.08   | 19.08   | 18.96   |
| 165     | 5825                    | 19.08                    | 19.08   | 19.08   | 19.08   |

##### 802.11ax (HE40)

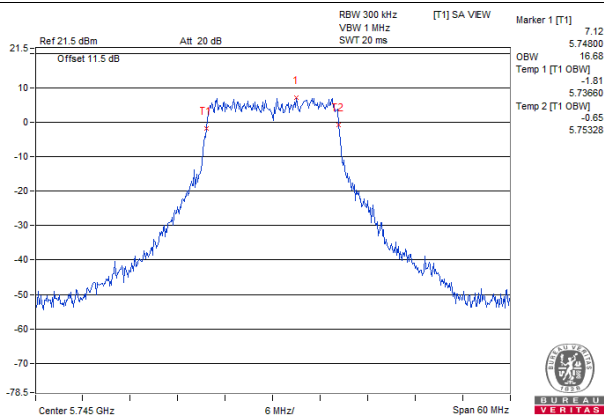
| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 38      | 5190                    | 38.16                    | 38.16   | 38.16   | 37.92   |
| 46      | 5230                    | 38.16                    | 37.92   | 38.16   | 38.16   |
| 151     | 5755                    | 38.16                    | 38.16   | 38.16   | 38.16   |
| 159     | 5795                    | 38.16                    | 38.16   | 38.16   | 37.92   |

##### 802.11ax (HE80)

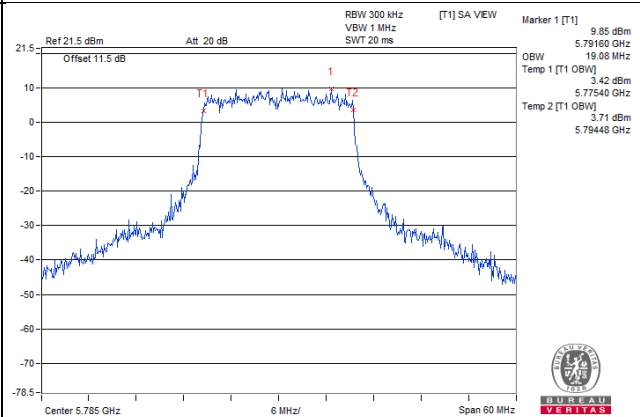
| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 42      | 5210                    | 77.28                    | 77.28   | 77.28   | 77.28   |
| 155     | 5775                    | 77.28                    | 77.28   | 77.28   | 77.76   |

# Spectrum Plot of Max. Value

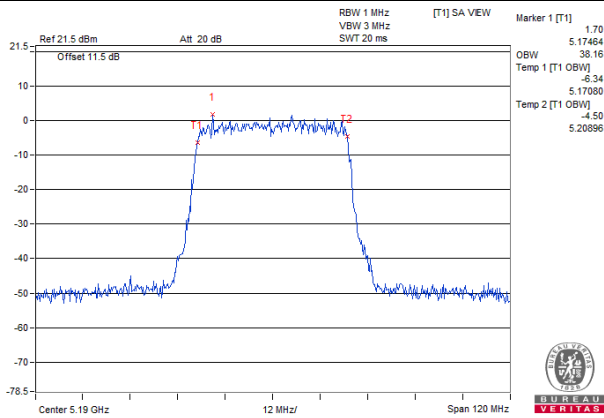
## 802.11a\_Chain 2 / CH149



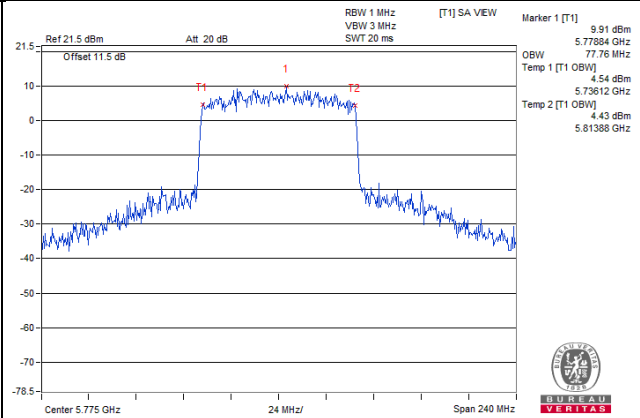
## 802.11ax (HE20)\_Chain 0 / CH157



## 802.11ax (HE40)\_Chain 0 / CH38

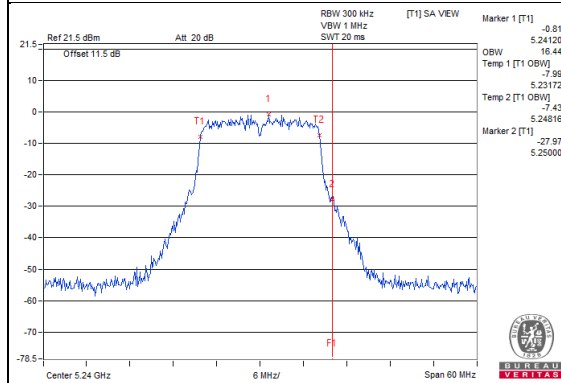


## 802.11ax (HE80)\_Chain 3 / CH155

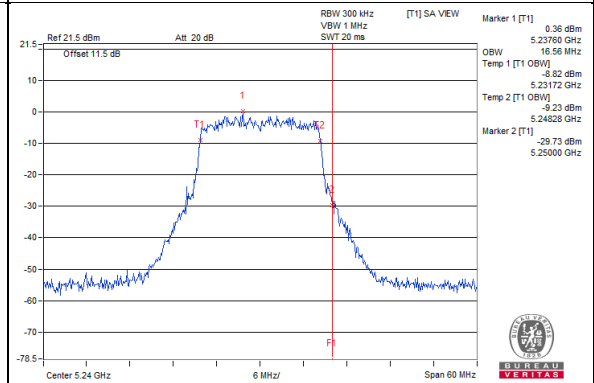


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2A band)

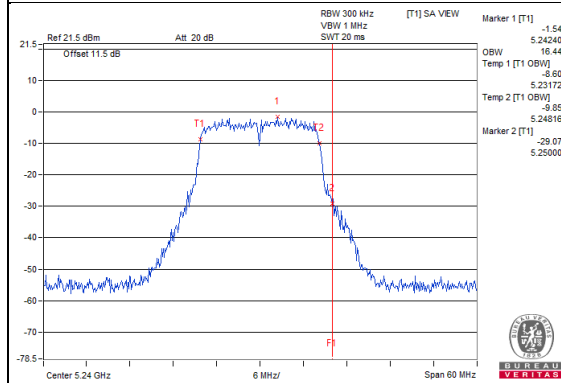
**802.11a\_Chain 0 / CH48**



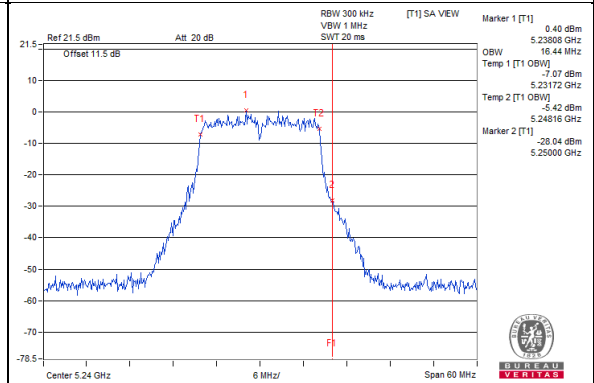
**802.11a\_Chain 1 / CH48**



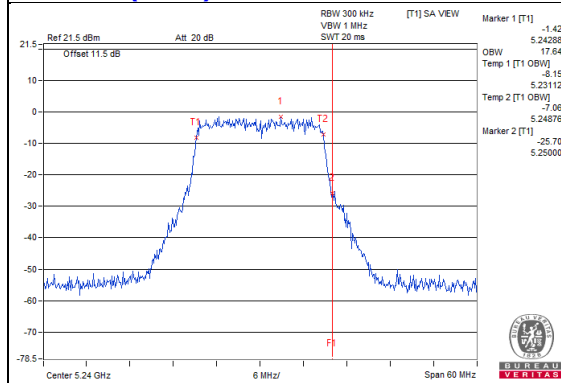
**802.11a\_Chain 2 / CH48**



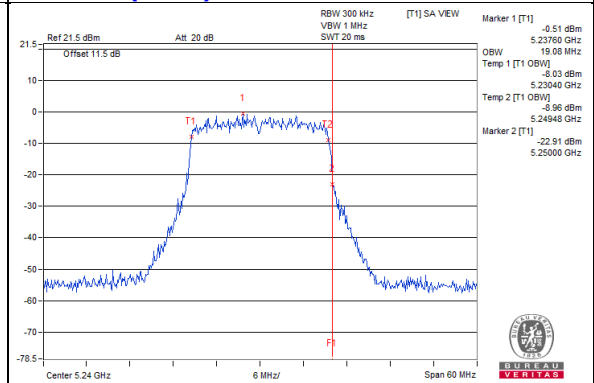
**802.11a\_Chain 3 / CH48**



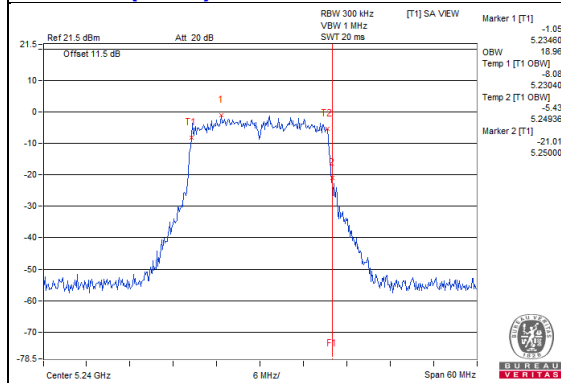
**802.11ax (HE20)\_Chain 0 / CH48**



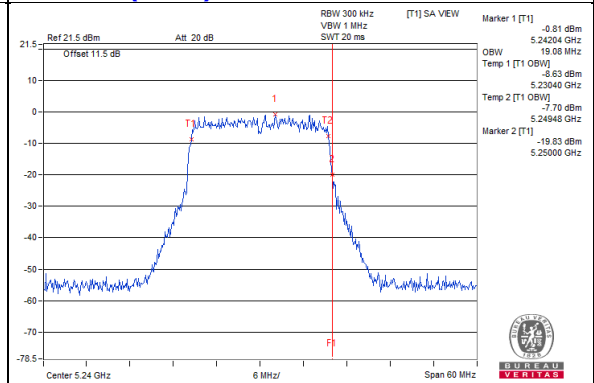
**802.11ax (HE20)\_Chain 1 / CH48**



**802.11ax (HE20)\_Chain 2 / CH48**



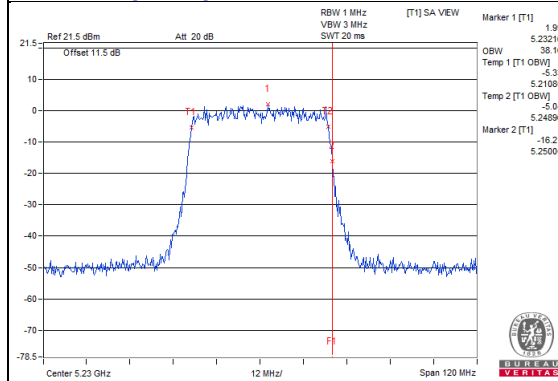
**802.11ax (HE20)\_Chain 3 / CH48**



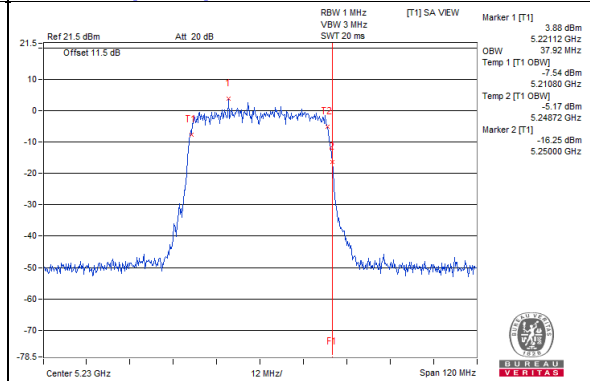


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2A band)

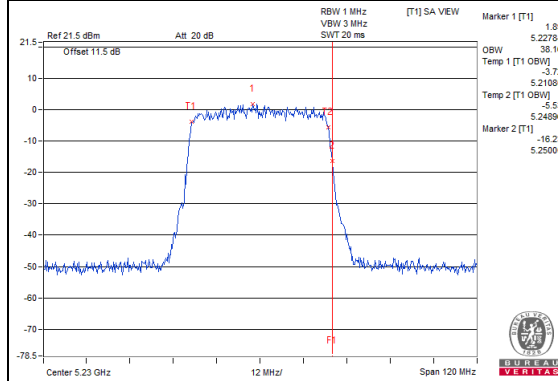
**802.11ax (HE40)\_Chain 0 / CH46**



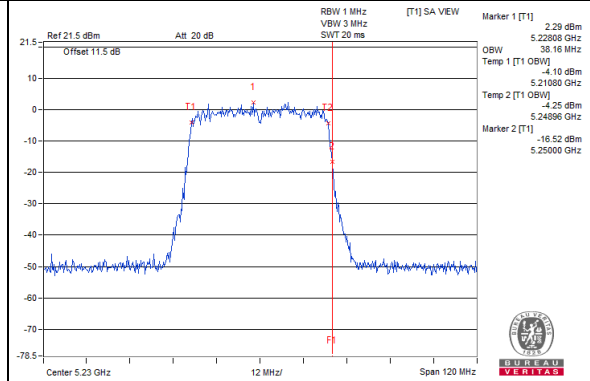
**802.11ax (HE40)\_Chain 1 / CH46**



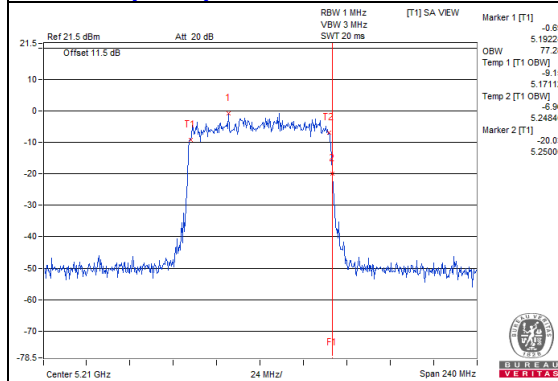
**802.11ax (HE40)\_Chain 2 / CH46**



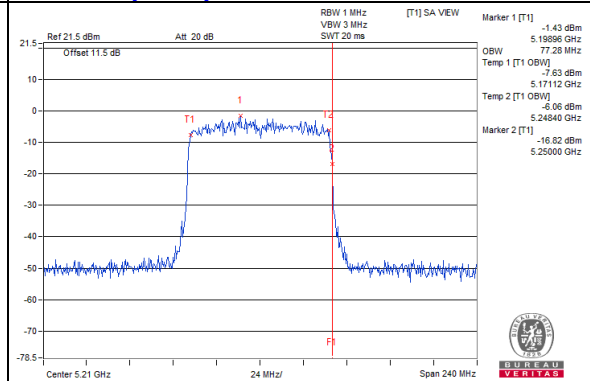
**802.11ax (HE40)\_Chain 3 / CH46**



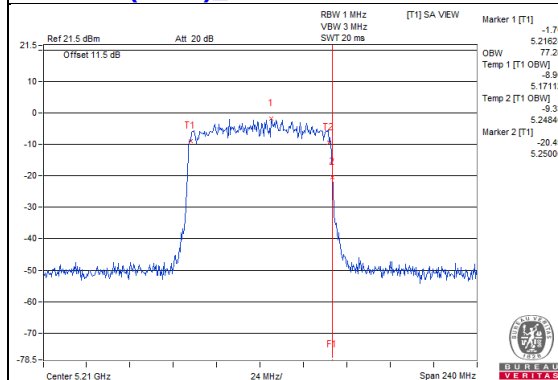
**802.11ax (HE80)\_Chain 0 / CH42**



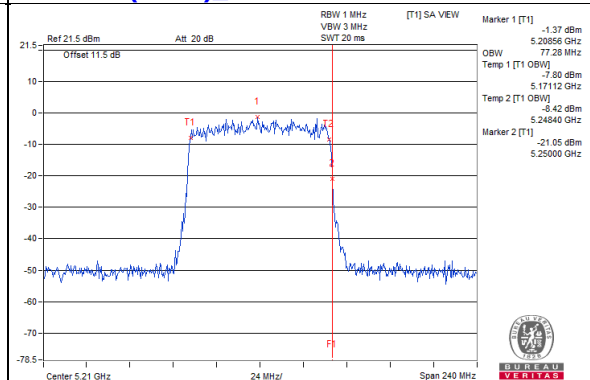
**802.11ax (HE80)\_Chain 1 / CH42**



**802.11ax (HE80)\_Chain 2 / CH42**

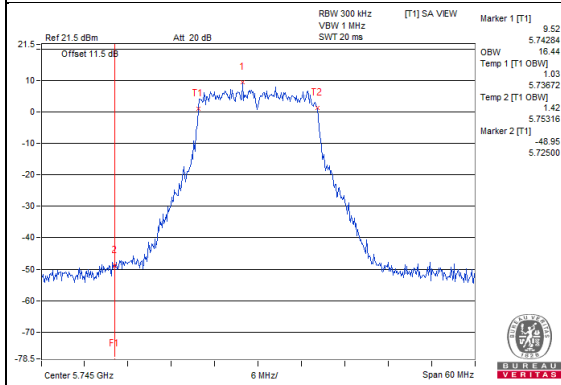


**802.11ax (HE80)\_Chain 3 / CH42**

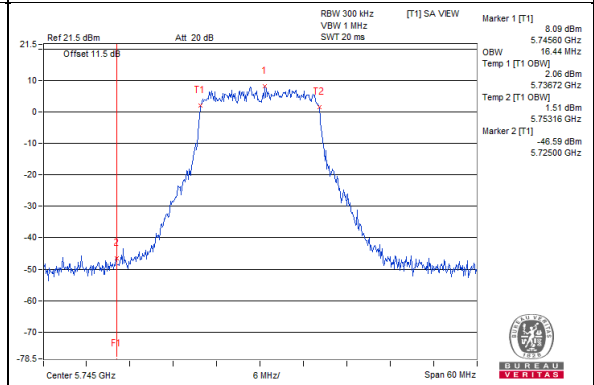


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2C band)

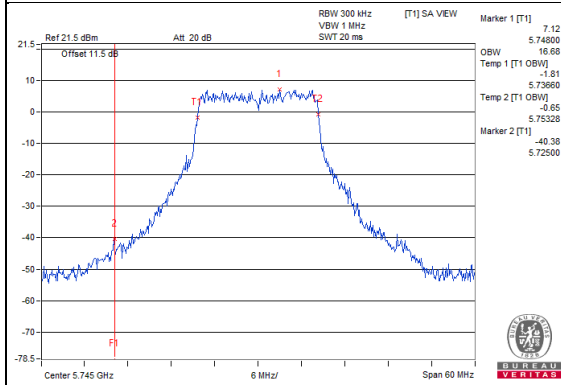
**802.11a\_Chain 0 / CH149**



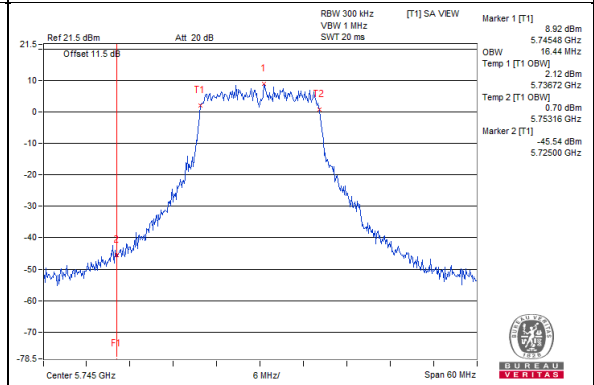
**802.11a\_Chain 1 / CH149**



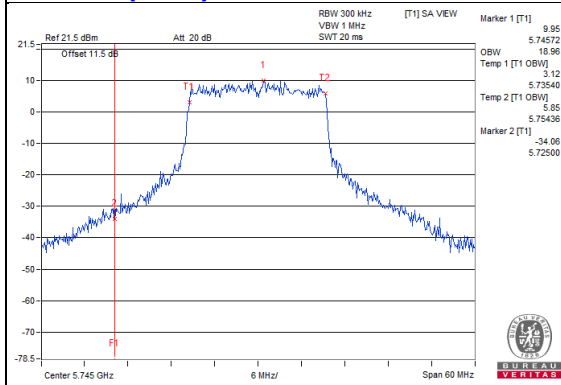
**802.11a\_Chain 2 / CH149**



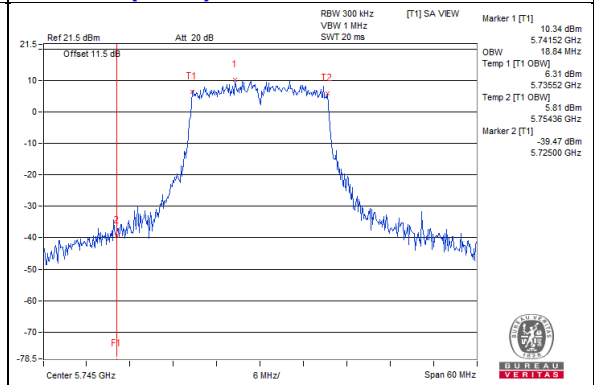
**802.11a\_Chain 3 / CH149**



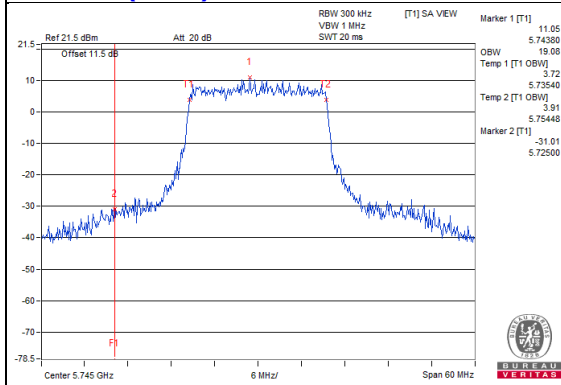
**802.11ax (HE20)\_Chain 0 / CH149**



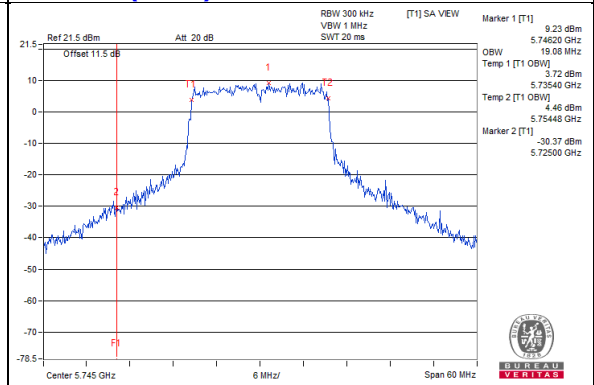
**802.11ax (HE20)\_Chain 1 / CH149**



**802.11ax (HE20)\_Chain 2 / CH149**

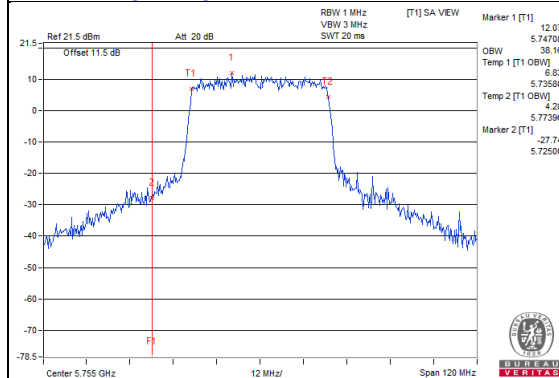


**802.11ax (HE20)\_Chain 3 / CH149**

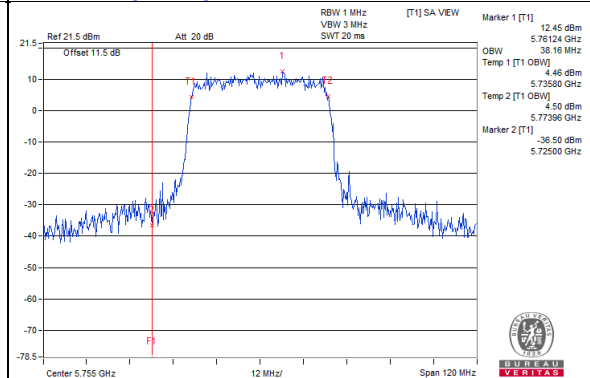


Spectrum Plot for near by DFS band  
(DFS is required, if 99% OCP straddle into U-NII-2C band)

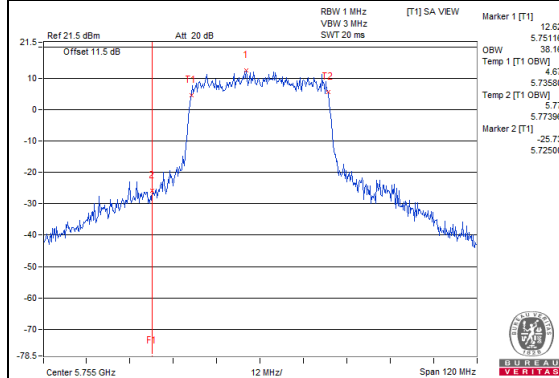
802.11ax (HE40)\_Chain 0 / CH151



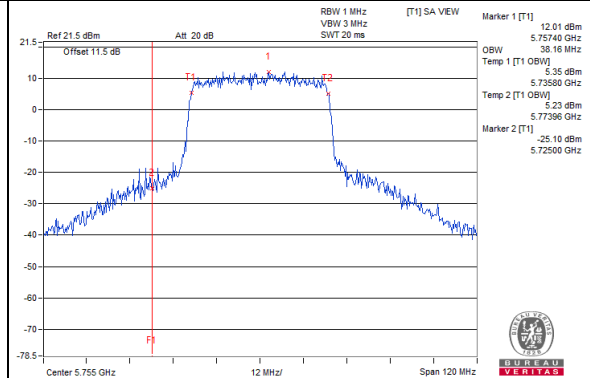
802.11ax (HE40)\_Chain 1 / CH151



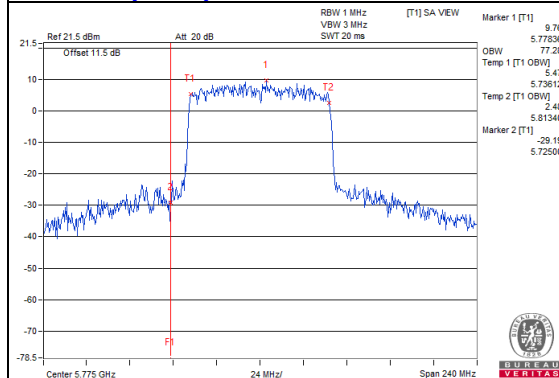
802.11ax (HE40)\_Chain 2 / CH151



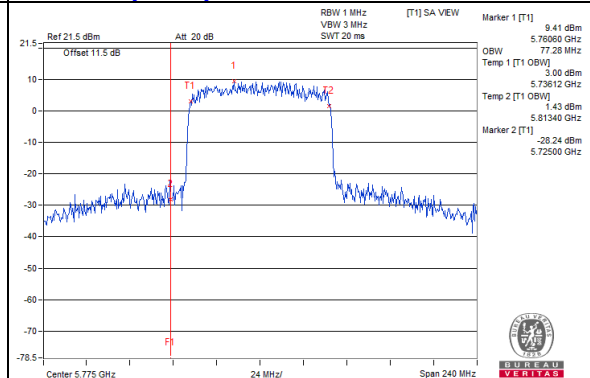
802.11ax (HE40)\_Chain 3 / CH151



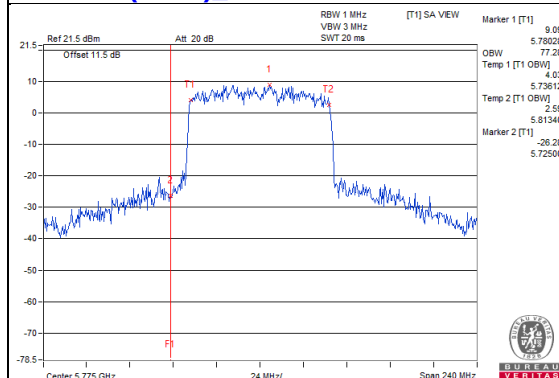
802.11ax (HE80)\_Chain 0 / CH155



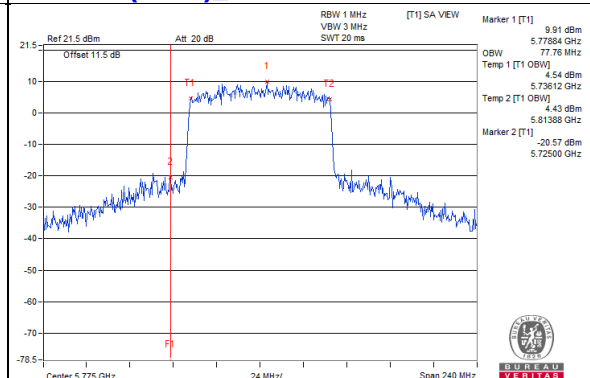
802.11ax (HE80)\_Chain 1 / CH155



802.11ax (HE80)\_Chain 2 / CH155



802.11ax (HE80)\_Chain 3 / CH155



#### 4.4.7 Test Results (Mode 4)

##### 802.11a

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 36      | 5180                    | 16.44                    | 16.56   | 16.44   | 16.56   |
| 40      | 5200                    | 16.44                    | 16.56   | 16.56   | 16.44   |
| 48      | 5240                    | 16.56                    | 16.56   | 16.56   | 16.44   |
| 149     | 5745                    | 16.68                    | 16.44   | 16.44   | 16.44   |
| 157     | 5785                    | 16.44                    | 16.44   | 16.44   | 16.44   |
| 165     | 5825                    | 16.56                    | 16.44   | 16.68   | 16.44   |

##### 802.11ax (HE20)

| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 36      | 5180                    | 19.08                    | 18.96   | 18.96   | 19.08   |
| 40      | 5200                    | 18.96                    | 18.96   | 18.96   | 18.84   |
| 48      | 5240                    | 19.08                    | 19.08   | 18.96   | 18.84   |
| 149     | 5745                    | 18.84                    | 18.84   | 19.08   | 19.08   |
| 157     | 5785                    | 19.08                    | 19.08   | 18.84   | 18.96   |
| 165     | 5825                    | 18.96                    | 18.96   | 18.96   | 18.84   |

##### 802.11ax (HE40)

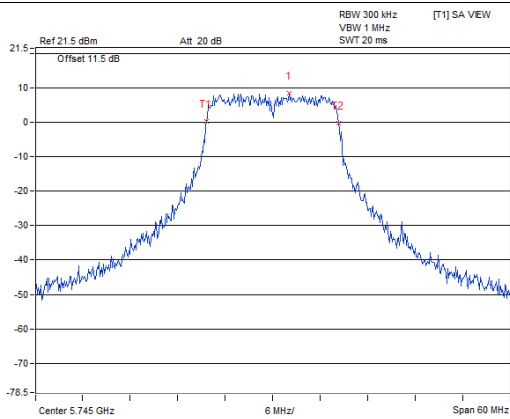
| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 38      | 5190                    | 38.16                    | 38.16   | 38.16   | 38.16   |
| 46      | 5230                    | 37.92                    | 37.92   | 38.16   | 38.16   |
| 151     | 5755                    | 37.92                    | 38.16   | 37.92   | 38.16   |
| 159     | 5795                    | 37.92                    | 38.16   | 38.16   | 37.92   |

##### 802.11ax (HE80)

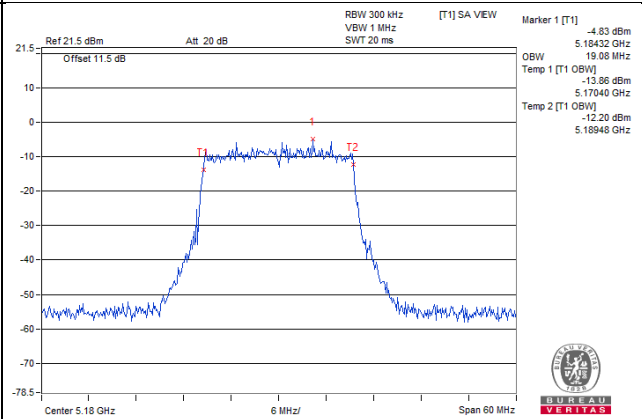
| Channel | Channel Frequency (MHz) | Occupied Bandwidth (MHz) |         |         |         |
|---------|-------------------------|--------------------------|---------|---------|---------|
|         |                         | Chain 0                  | Chain 1 | Chain 2 | Chain 3 |
| 42      | 5210                    | 77.28                    | 77.28   | 77.28   | 77.28   |
| 155     | 5775                    | 77.28                    | 77.28   | 76.8    | 77.28   |

# Spectrum Plot of Max. Value

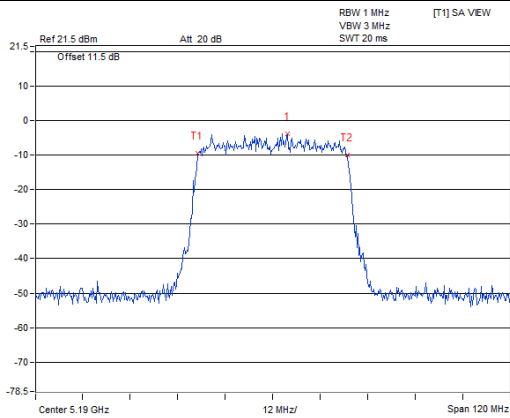
## 802.11a\_Chain 0 / CH149



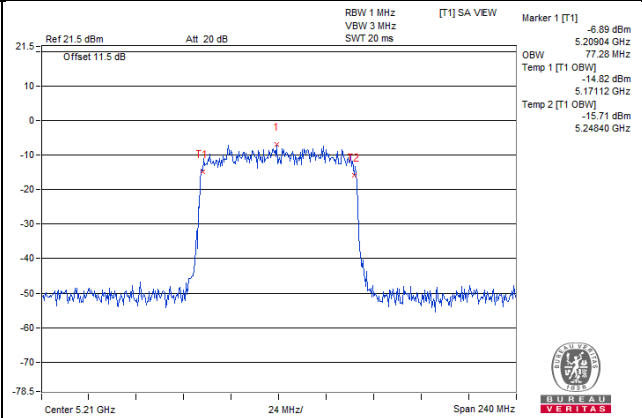
## 802.11ax (HE20)\_Chain 0 / CH36



## 802.11ax (HE40)\_Chain 0 / CH38

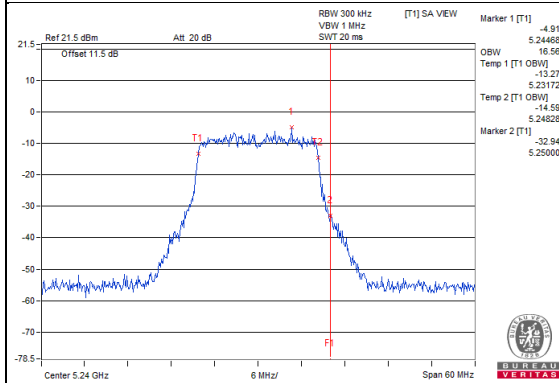


## 802.11ax (HE80)\_Chain 0 / CH42

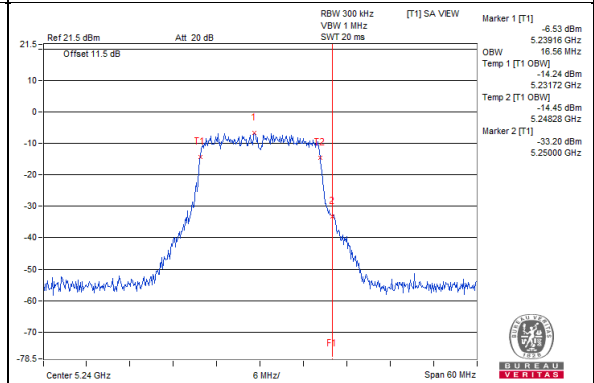


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2A band)

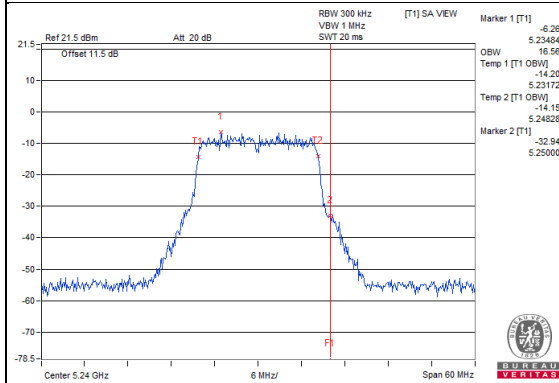
**802.11a\_Chain 0 / CH48**



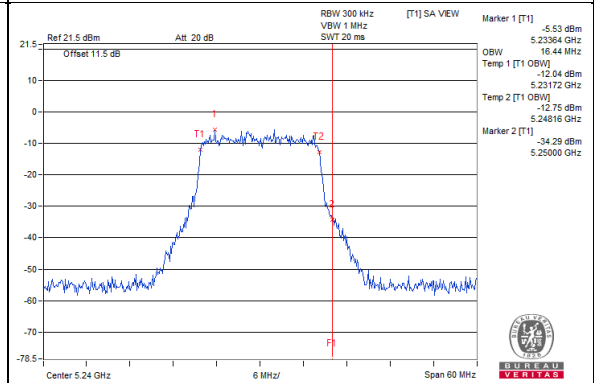
**802.11a\_Chain 1 / CH48**



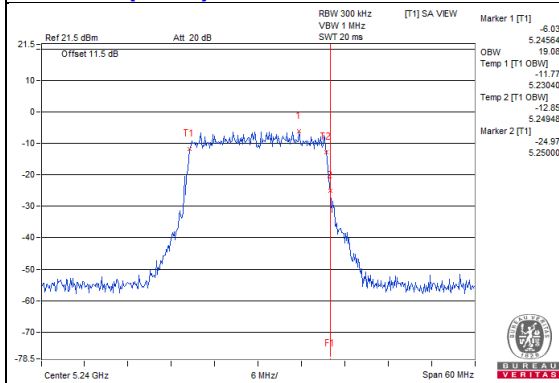
**802.11a\_Chain 2 / CH48**



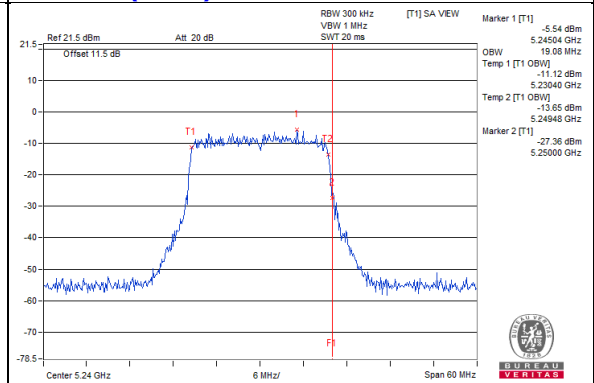
**802.11a\_Chain 3 / CH48**



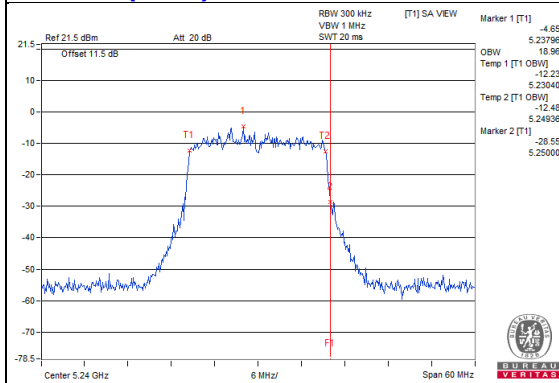
**802.11ax (HE20)\_Chain 0 / CH48**



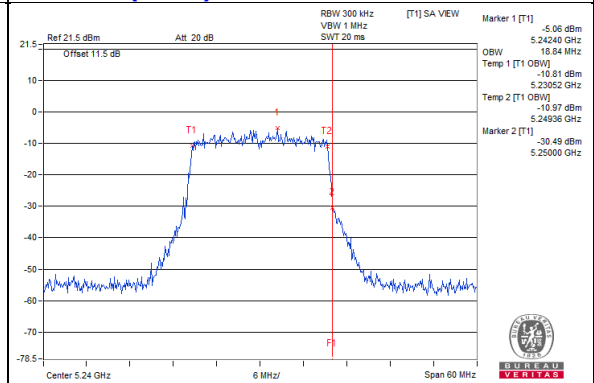
**802.11ax (HE20)\_Chain 1 / CH48**



**802.11ax (HE20)\_Chain 2 / CH48**

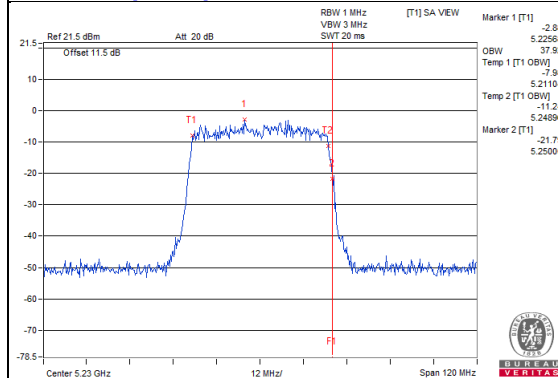


**802.11ax (HE20)\_Chain 3 / CH48**

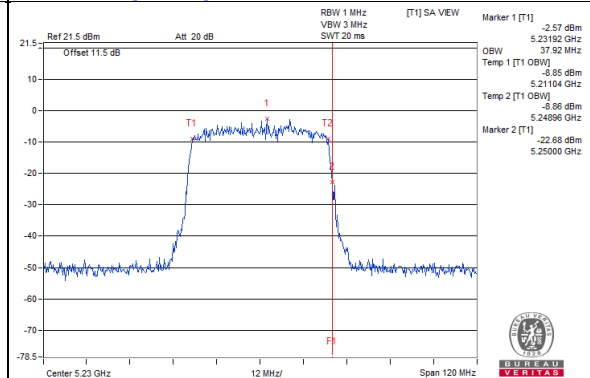


Spectrum Plot for near by DFS band  
(DFS is required, if 99% OCP straddle into U-NII-2A band)

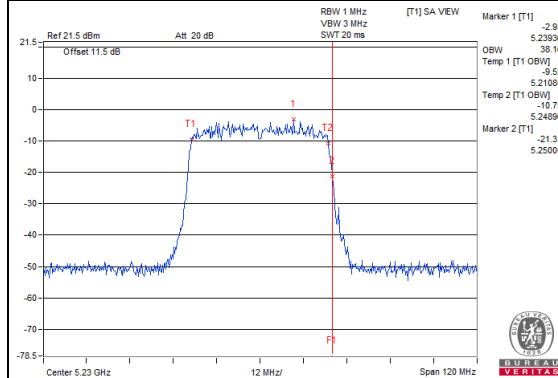
802.11ax (HE40)\_Chain 0 / CH46



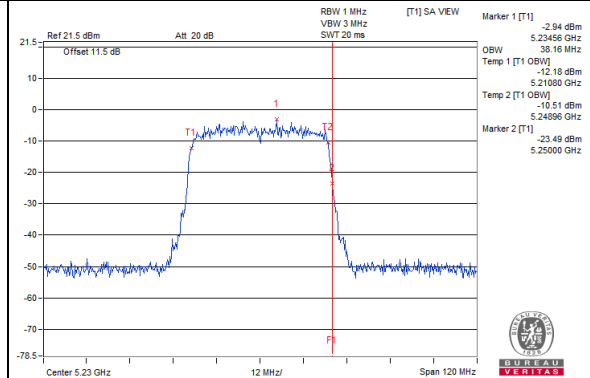
802.11ax (HE40)\_Chain 1 / CH46



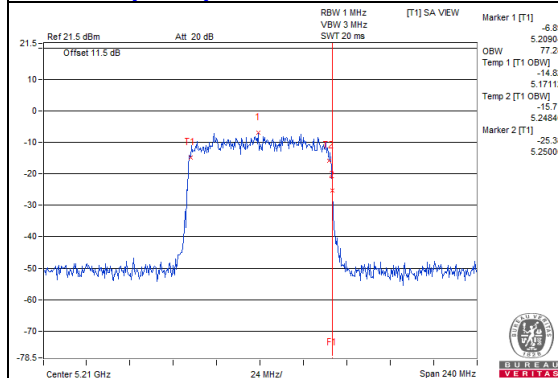
802.11ax (HE40)\_Chain 2 / CH46



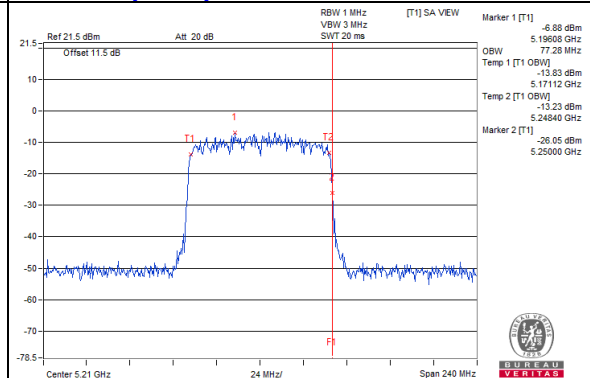
802.11ax (HE40)\_Chain 3 / CH46



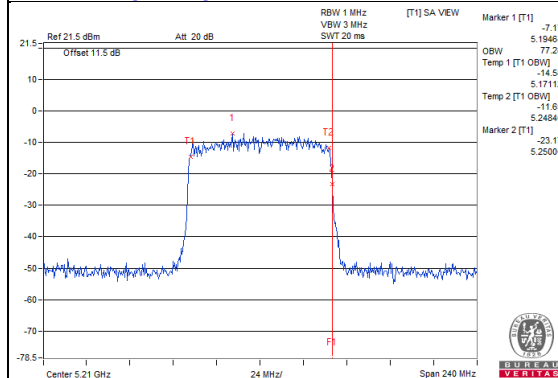
802.11ax (HE80)\_Chain 0 / CH42



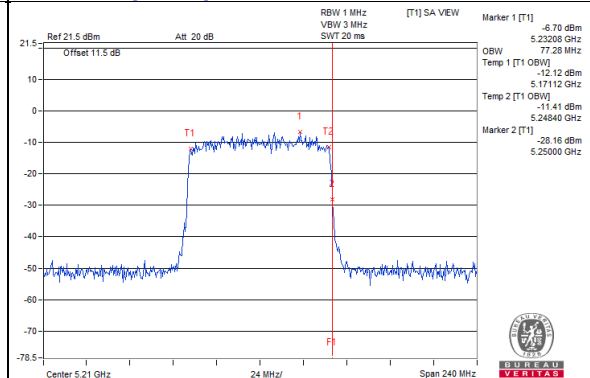
802.11ax (HE80)\_Chain 1 / CH42



802.11ax (HE80)\_Chain 2 / CH42

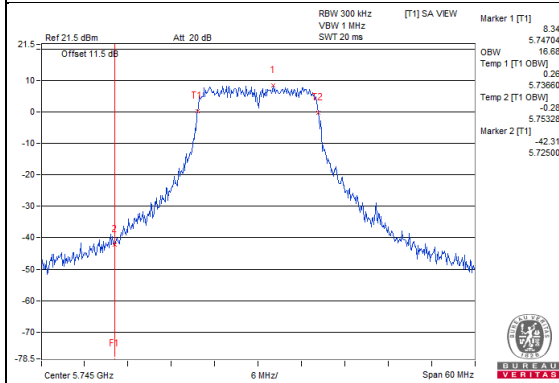


802.11ax (HE80)\_Chain 3 / CH42

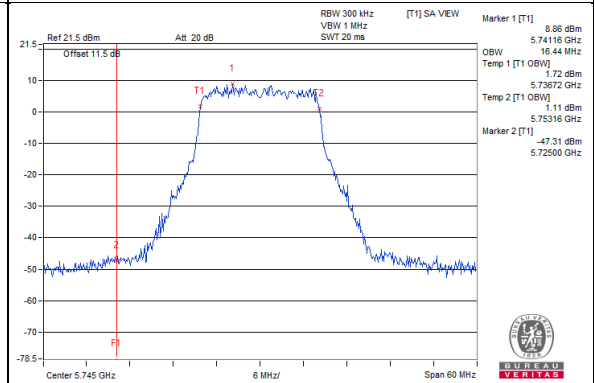


**Spectrum Plot for near by DFS band**  
(DFS is required, if 99% OCP straddle into U-NII-2C band)

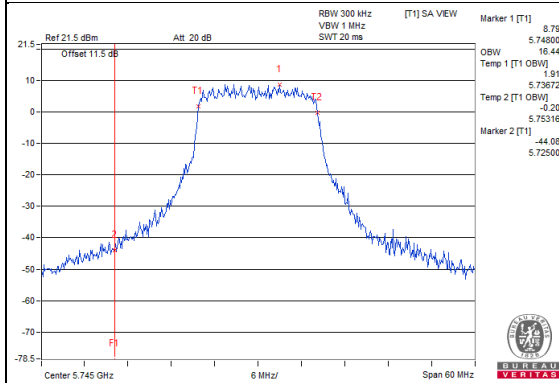
**802.11a\_Chain 0 / CH149**



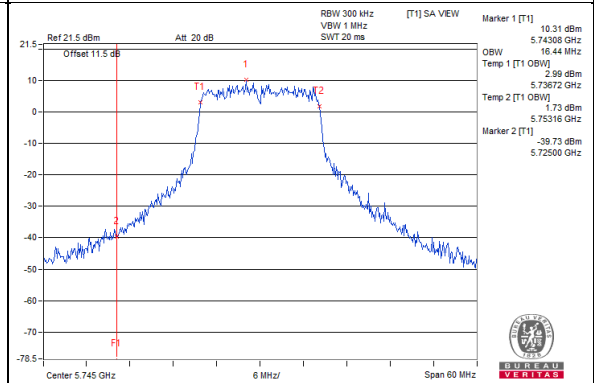
**802.11a\_Chain 1 / CH149**



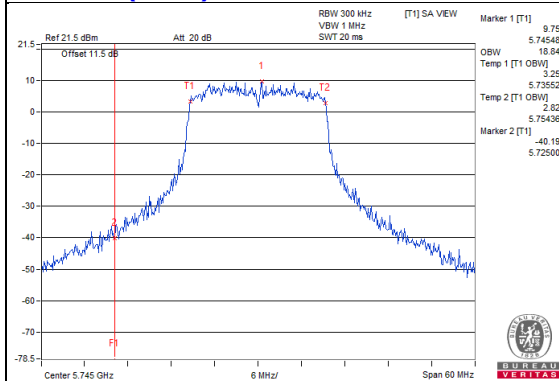
**802.11a\_Chain 2 / CH149**



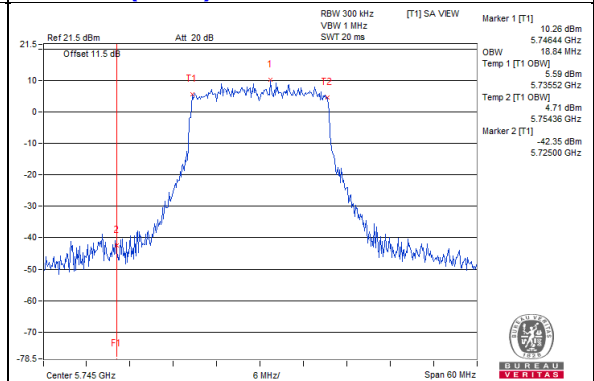
**802.11a\_Chain 3 / CH149**



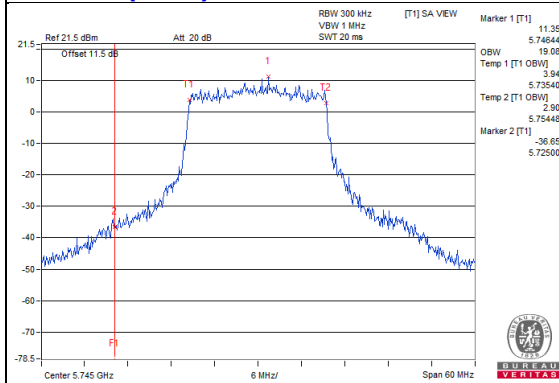
**802.11ax (HE20)\_Chain 0 / CH149**



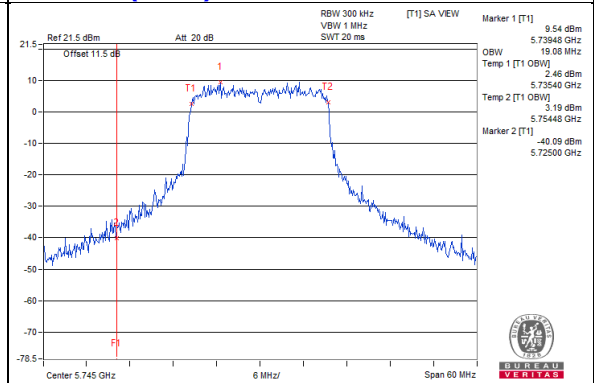
**802.11ax (HE20)\_Chain 1 / CH149**



**802.11ax (HE20)\_Chain 2 / CH149**



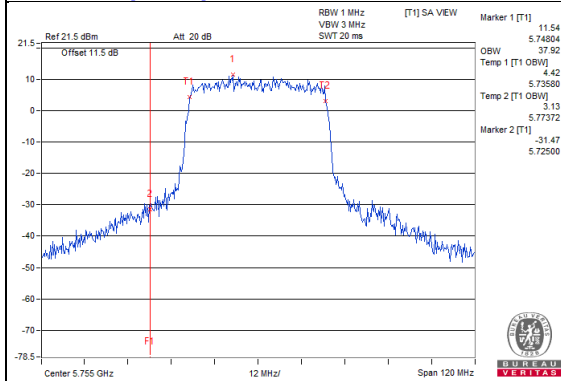
**802.11ax (HE20)\_Chain 3 / CH149**



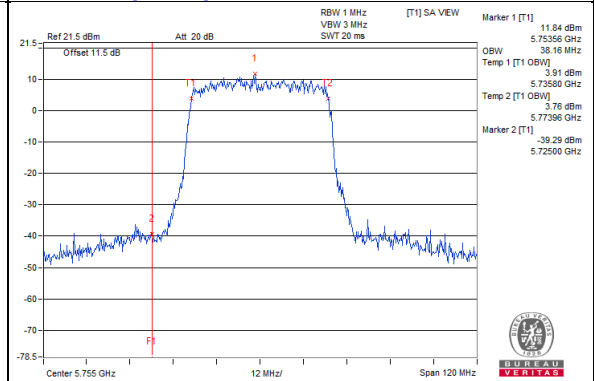


Spectrum Plot for near by DFS band  
(DFS is required, if 99% OCP straddle into U-NII-2C band)

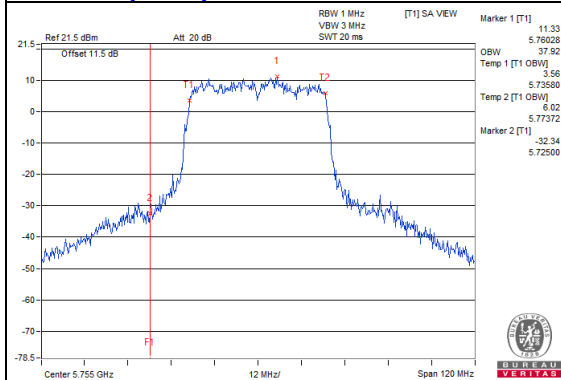
802.11ax (HE40)\_Chain 0 / CH151



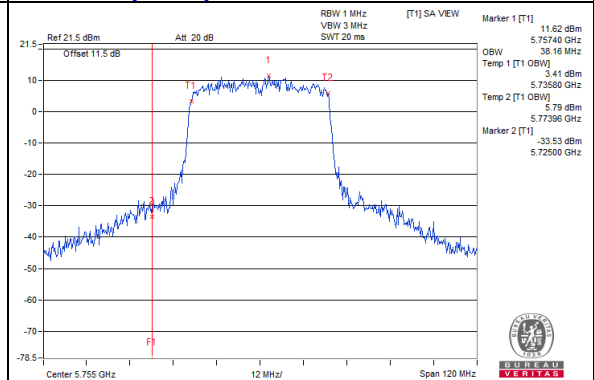
802.11ax (HE40)\_Chain 1 / CH151



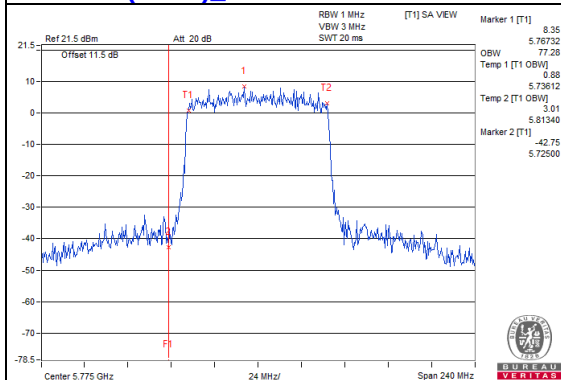
802.11ax (HE40)\_Chain 2 / CH151



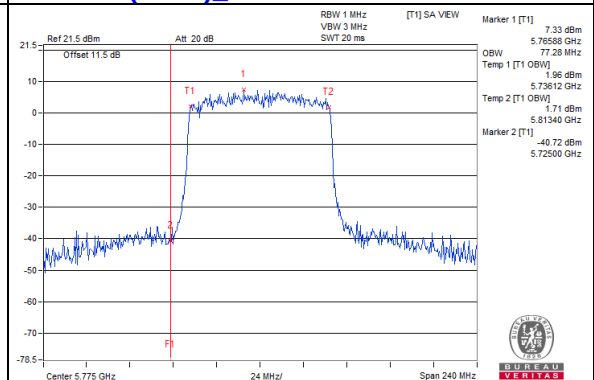
802.11ax (HE40)\_Chain 3 / CH151



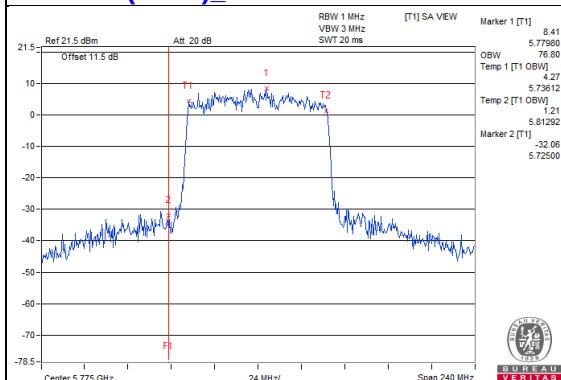
802.11ax (HE80)\_Chain 0 / CH155



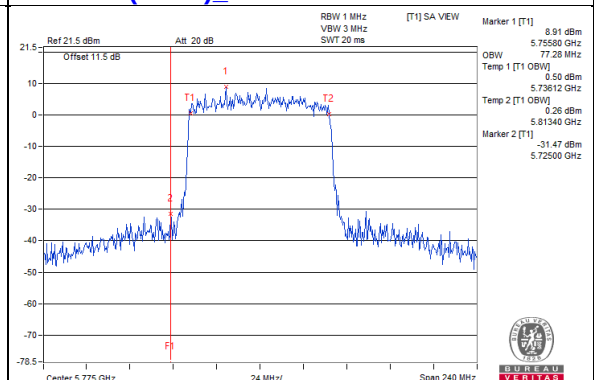
802.11ax (HE80)\_Chain 1 / CH155



802.11ax (HE80)\_Chain 2 / CH155



802.11ax (HE80)\_Chain 3 / CH155

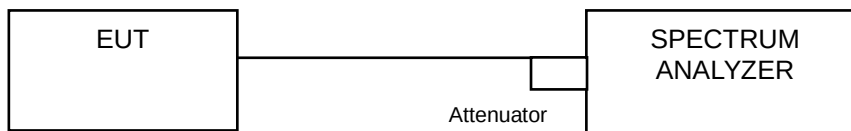


## 4.5 Peak Power Spectral Density Measurement

### 4.5.1 Limits of Peak Power Spectral Density Measurement

| Operation Band | EUT Category |                                   | Limit         |
|----------------|--------------|-----------------------------------|---------------|
| U-NII-1        | √            | Outdoor Access Point              | 17dBm/ MHz    |
|                |              | Fixed point-to-point Access Point |               |
|                |              | Indoor Access Point               |               |
|                |              | Client device                     | 11dBm/ MHz    |
| U-NII-2A       |              |                                   | 11dBm/ MHz    |
| U-NII-2C       |              |                                   | 11dBm/ MHz    |
| U-NII-3        |              | √                                 | 30dBm/ 500kHz |

### 4.5.2 Test Setup



### 4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.5.4 Test Procedure

Using method SA-2

#### For U-NII-1:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

#### For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500\text{ kHz}/300\text{kHz})$
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value and add 10 log (1/duty cycle)

#### 4.5.5 Deviation from Test Standard

No deviation.

#### 4.5.6 EUT Operating Condition

Same as Item 4.3.6.

#### 4.5.7 Test Results (Mode 1)

##### For U-NII-1:

##### 802.11a

| Chan. | Chan. Freq. (MHz) | PSD (dBm/MHz) |        |        |        | Duty Factor (dB) | Total PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Pass / Fail |
|-------|-------------------|---------------|--------|--------|--------|------------------|---------------------|--------------------------|-------------|
|       |                   | Chain0        | Chain1 | Chain2 | Chain3 |                  |                     |                          |             |
| 36    | 5180              | -15.28        | -12.80 | -13.40 | -12.15 | 0.35             | -7.24               | 3.98                     | PASS        |
| 40    | 5200              | -13.20        | -13.25 | -14.04 | -11.68 | 0.35             | -6.93               | 3.98                     | PASS        |
| 48    | 5240              | -12.05        | -12.94 | -13.67 | -12.66 | 0.35             | -6.77               | 3.98                     | PASS        |

- Note:** 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $13\text{dBi} + 10\log(4) = 19.02\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $17 - (19.02 - 6) = 3.98\text{dBm}$ .
3. Refer to section 3.3 for duty cycle spectrum plot.

##### 802.11ax (HE20)

| Chan. | Chan. Freq. (MHz) | PSD (dBm/MHz) |        |        |        | Duty Factor (dB) | Total PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Pass / Fail |
|-------|-------------------|---------------|--------|--------|--------|------------------|---------------------|--------------------------|-------------|
|       |                   | Chain0        | Chain1 | Chain2 | Chain3 |                  |                     |                          |             |
| 36    | 5180              | -14.30        | -14.42 | -13.88 | -14.10 | 0.18             | -8.15               | 3.98                     | PASS        |
| 40    | 5200              | -13.57        | -14.65 | -13.22 | -12.94 | 0.18             | -7.53               | 3.98                     | PASS        |
| 48    | 5240              | -13.00        | -12.80 | -12.76 | -12.81 | 0.18             | -6.82               | 3.98                     | PASS        |

- Note:** 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $13\text{dBi} + 10\log(4) = 19.02\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $17 - (19.02 - 6) = 3.98\text{dBm}$ .
3. Refer to section 3.3 for duty cycle spectrum plot.

##### 802.11ax (HE40)

| Chan. | Chan. Freq. (MHz) | PSD (dBm/MHz) |        |        |        | Duty Factor (dB) | Total PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Pass / Fail |
|-------|-------------------|---------------|--------|--------|--------|------------------|---------------------|--------------------------|-------------|
|       |                   | Chain0        | Chain1 | Chain2 | Chain3 |                  |                     |                          |             |
| 38    | 5190              | -16.73        | -15.31 | -16.61 | -16.94 | 0.24             | -10.33              | 3.98                     | PASS        |
| 46    | 5230              | -15.10        | -15.68 | -15.94 | -15.93 | 0.24             | -9.63               | 3.98                     | PASS        |

- Note:** 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain =  $13\text{dBi} + 10\log(4) = 19.02\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $17 - (19.02 - 6) = 3.98\text{dBm}$ .
3. Refer to section 3.3 for duty cycle spectrum plot.

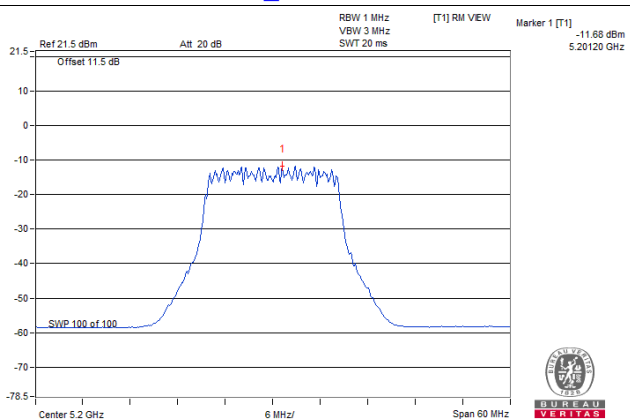
### 802.11ax (HE80)

| Chan. | Chan. Freq. (MHz) | PSD (dBm/MHz) |        |        |        | Duty Factor (dB) | Total PSD (dBm/MHz) | Max. PSD Limit (dBm/MHz) | Pass / Fail |
|-------|-------------------|---------------|--------|--------|--------|------------------|---------------------|--------------------------|-------------|
|       |                   | Chain0        | Chain1 | Chain2 | Chain3 |                  |                     |                          |             |
| 42    | 5210              | -18.84        | -19.53 | -19.54 | -19.80 | 0.19             | -13.39              | 3.98                     | PASS        |

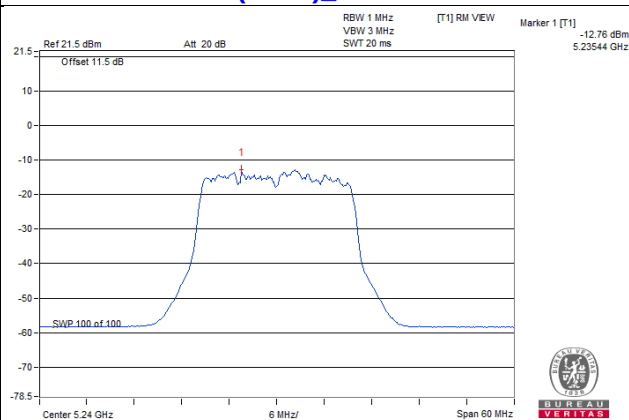
- Note:**
1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
  2. Directional gain =  $13\text{dBi} + 10\log(4) = 19.02\text{dBi} > 6\text{dBi}$  , so the power density limit shall be reduced to  $17 - (19.02 - 6) = 3.98\text{dBm}$ .
  3. Refer to section 3.3 for duty cycle spectrum plot.

# Spectrum Plot of Worst Value

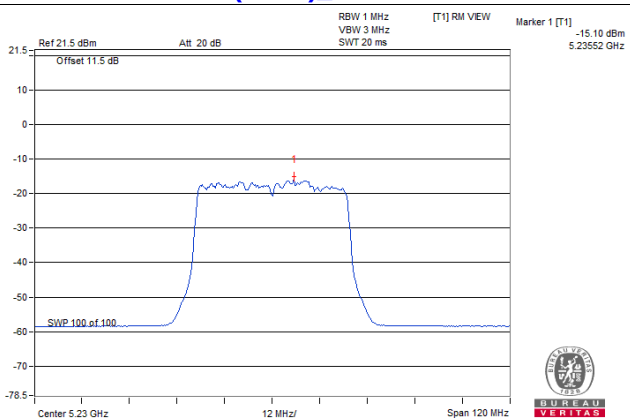
**802.11a\_Chain 3 / CH40**



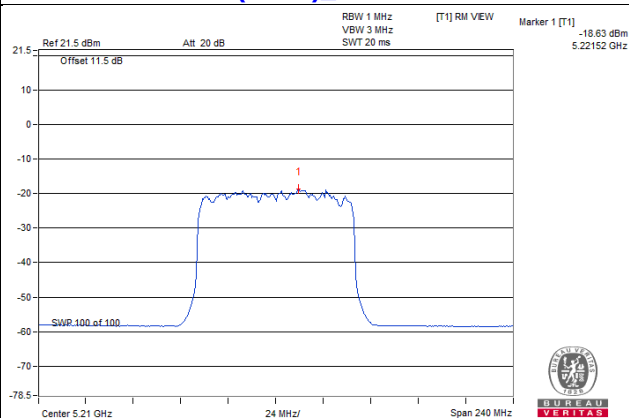
**802.11ax (HE20)\_Chain 2 / CH48**



**802.11ax (HE40)\_Chain 0 / CH46**



**802.11ax (HE80)\_Chain 0 / CH42**



### For U-NII-3:

#### 802.11a

| Chan. | Chan. Freq. (MHz) | PSD (dBm/300kHz) |        |        |        | Duty Factor (dB) | Total PSD (mW/300kHz) | Total PSD (dBm/300kHz) | Total PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Pass / Fail |
|-------|-------------------|------------------|--------|--------|--------|------------------|-----------------------|------------------------|------------------------|------------------------|-------------|
|       |                   | Chain0           | Chain1 | Chain2 | Chain3 |                  |                       |                        |                        |                        |             |
| 149   | 5745              | -5.72            | -5.68  | -5.43  | -6.00  | 0.35             | 1.1655                | 0.67                   | 2.89                   | 16.98                  | PASS        |
| 157   | 5785              | -5.46            | -6.31  | -5.59  | -4.81  | 0.35             | 1.2184                | 0.86                   | 3.08                   | 16.98                  | PASS        |
| 165   | 5825              | -5.92            | -5.93  | -6.30  | -5.69  | 0.35             | 1.0999                | 0.41                   | 2.63                   | 16.98                  | PASS        |

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.  
2. Directional gain =  $13\text{dBi} + 10\log(4) = 19.02\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $30 - (19.02 - 6) = 16.98\text{dBm}$ .  
3. Refer to section 3.3 for duty cycle spectrum plot.

#### 802.11ax (HE20)

| Chan. | Chan. Freq. (MHz) | PSD (dBm/300kHz) |        |        |        | Duty Factor (dB) | Total PSD (mW/300kHz) | Total PSD (dBm/300kHz) | Total PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Pass / Fail |
|-------|-------------------|------------------|--------|--------|--------|------------------|-----------------------|------------------------|------------------------|------------------------|-------------|
|       |                   | Chain0           | Chain1 | Chain2 | Chain3 |                  |                       |                        |                        |                        |             |
| 149   | 5745              | -6.76            | -6.71  | -6.05  | -6.95  | 0.18             | 0.9122                | -0.40                  | 1.82                   | 16.98                  | PASS        |
| 157   | 5785              | -7.28            | -7.24  | -6.69  | -6.48  | 0.18             | 0.8504                | -0.70                  | 1.52                   | 16.98                  | PASS        |
| 165   | 5825              | -6.91            | -6.42  | -6.88  | -7.34  | 0.18             | 0.8569                | -0.67                  | 1.55                   | 16.98                  | PASS        |

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.  
2. Directional gain =  $13\text{dBi} + 10\log(4) = 19.02\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $30 - (19.02 - 6) = 16.98\text{dBm}$ .  
3. Refer to section 3.3 for duty cycle spectrum plot.

#### 802.11ax (HE40)

| Chan. | Chan. Freq. (MHz) | PSD (dBm/300kHz) |        |        |        | Duty Factor (dB) | Total PSD (mW/300kHz) | Total PSD (dBm/300kHz) | Total PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Pass / Fail |
|-------|-------------------|------------------|--------|--------|--------|------------------|-----------------------|------------------------|------------------------|------------------------|-------------|
|       |                   | Chain0           | Chain1 | Chain2 | Chain3 |                  |                       |                        |                        |                        |             |
| 151   | 5755              | -9.11            | -9.37  | -8.71  | -10.06 | 0.24             | 0.49831               | -3.03                  | -0.81                  | 16.98                  | PASS        |
| 159   | 5795              | -10.10           | -9.68  | -9.53  | -9.83  | 0.24             | 0.44465               | -3.52                  | -1.30                  | 16.98                  | PASS        |

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.  
2. Directional gain =  $13\text{dBi} + 10\log(4) = 19.02\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $30 - (19.02 - 6) = 16.98\text{dBm}$ .  
3. Refer to section 3.3 for duty cycle spectrum plot.

### 802.11ax (HE80)

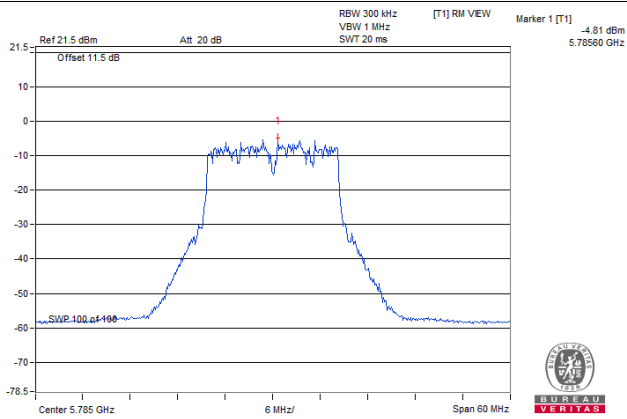
| Chan. | Chan. Freq. (MHz) | PSD (dBm/300kHz) |        |        |        | Duty Factor (dB) | Total PSD (mW/300kHz) | Total PSD (dBm/300kHz) | Total PSD (dBm/500kHz) | PSD Limit (dBm/500kHz) | Pass / Fail |
|-------|-------------------|------------------|--------|--------|--------|------------------|-----------------------|------------------------|------------------------|------------------------|-------------|
|       |                   | Chain0           | Chain1 | Chain2 | Chain3 |                  |                       |                        |                        |                        |             |
| 155   | 5775              | -13.00           | -13.25 | -12.44 | -13.05 | 0.19             | 0.21298               | -6.72                  | -4.50                  | 16.98                  | PASS        |

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain =  $13\text{dBi} + 10\log(4) = 19.02\text{dBi} > 6\text{dBi}$ , so the power density limit shall be reduced to  $30 - (19.02 - 6) = 16.98\text{dBm}$ .
3. Refer to section 3.3 for duty cycle spectrum plot.

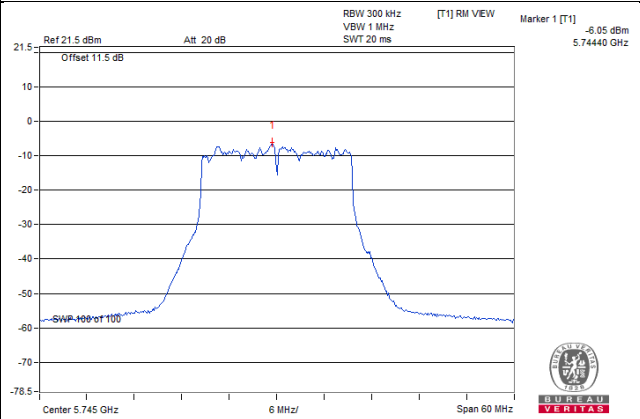


## Spectrum Plot of Worst Value

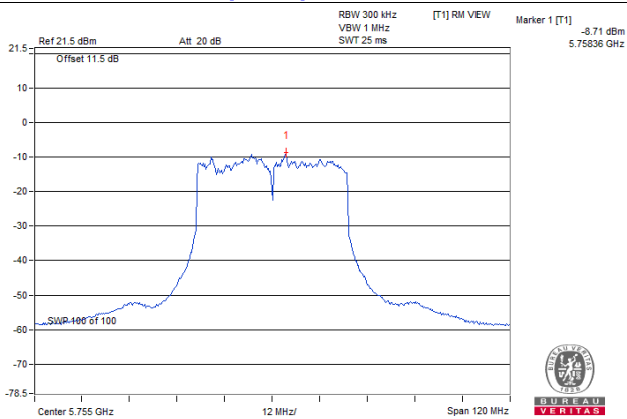
**802.11a\_Chain 3 / CH157**



**802.11ax (HE20)\_Chain 2 / CH149**



**802.11ax (HE40)\_Chain 2 / CH151**



**802.11ax (HE80)\_Chain 2 / CH155**

