

## Appendix C

### RF Test Data for 5.8G WIFI (Conducted Measurement)

Product Name: 4G LTE WIFI ROUTER

Trade Mark: N/A

Test Model: FG8002AC

#### Environmental Conditions

|                    |            |
|--------------------|------------|
| Temperature:       | 23.4 ° C   |
| Relative Humidity: | 55.7%      |
| ATM Pressure:      | 100.0 kPa  |
| Test Engineer:     | Keven Wu   |
| Supervised by:     | Henry Wang |

## C.1 FREQUENCY STABILITY

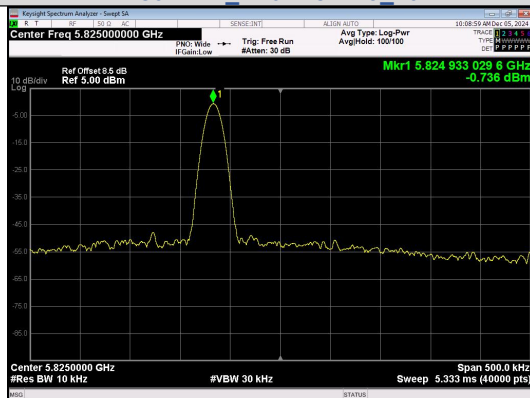
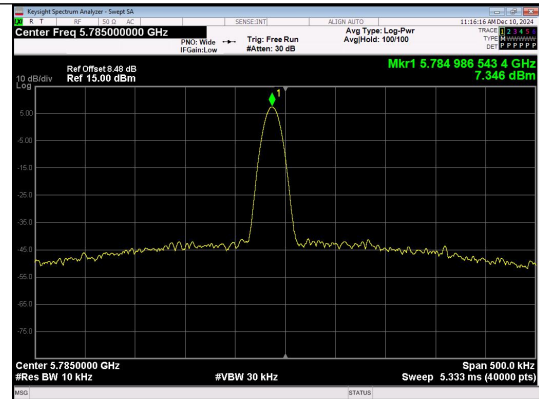
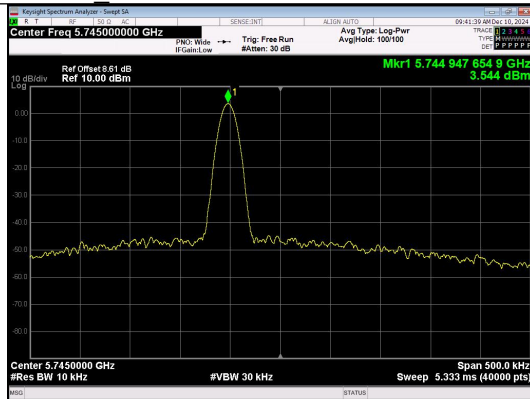
### Test Result

| Condition | Mode             | Ch. | Antenna | Center Frequency (MHz) | Calculated Value of Center Frequency(MHz) | Result (ppm) | Limit (ppm)            | State |
|-----------|------------------|-----|---------|------------------------|-------------------------------------------|--------------|------------------------|-------|
| NT/NV     | IEEE 802.11n_20  | 149 | 3       | 5745.0                 | 5744.947655                               | -9.11        | Within authorized band | PASS  |
|           |                  | 157 |         | 5785.0                 | 5784.986543                               | -2.33        |                        | PASS  |
|           |                  | 165 |         | 5825.0                 | 5824.933030                               | -11.5        |                        | PASS  |
|           | IEEE 802.11n_40  | 151 |         | 5755.0                 | 5754.949330                               | -8.8         |                        | PASS  |
|           |                  | 159 |         | 5795.0                 | 5794.983356                               | -2.87        |                        | PASS  |
|           | IEEE 802.11ac_80 | 155 |         | 5775.0                 | 5774.905929                               | -16.29       |                        | PASS  |

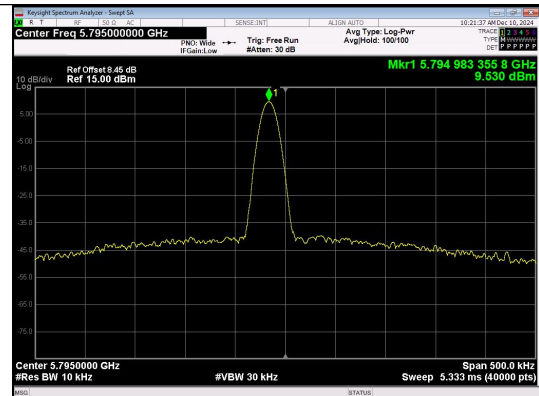
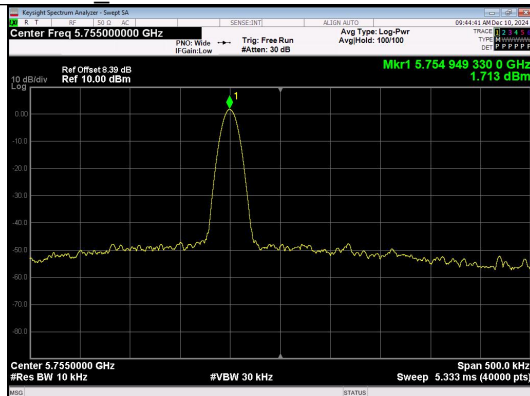
### Test Graphs

#### NT/NV

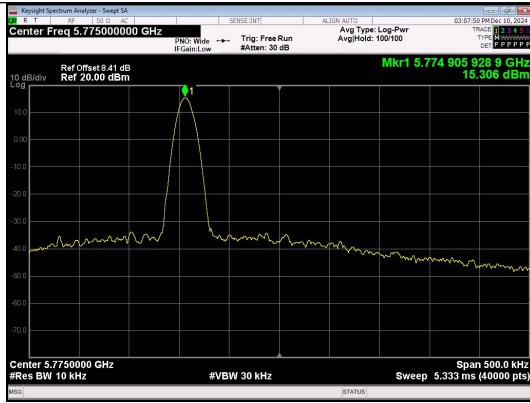
#### IEEE 802.11n\_20



#### IEEE 802.11n\_40



#### IEEE 802.11ac\_80



NT/NV\_Antenna 3  
IEEE 802.11ac\_Channel 155\_80MHz

## C.2 MAXIMUM CONDUCTED OUTPUT POWER

Conducted output power

| Condition | Mode | Frequency (MHz) | Antenna | Maximum conducted output power (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|--------------------------------------|-------------|---------|
| NVNT      | a    | 5745            | Ant3    | 15.743                               | 26.44       | Pass    |
| NVNT      | a    | 5785            | Ant3    | 16.159                               | 26.44       | Pass    |
| NVNT      | a    | 5825            | Ant3    | 14.408                               | 26.44       | Pass    |
| NVNT      | n20  | 5745            | Ant3    | 15.773                               | 26.44       | Pass    |
| NVNT      | n20  | 5785            | Ant3    | 15.787                               | 26.44       | Pass    |
| NVNT      | n20  | 5825            | Ant3    | 14.216                               | 26.44       | Pass    |
| NVNT      | n40  | 5755            | Ant3    | 14.743                               | 26.44       | Pass    |
| NVNT      | n40  | 5795            | Ant3    | 14.422                               | 26.44       | Pass    |
| NVNT      | ac20 | 5745            | Ant3    | 15.263                               | 26.44       | Pass    |
| NVNT      | ac20 | 5785            | Ant3    | 15.196                               | 26.44       | Pass    |
| NVNT      | ac20 | 5825            | Ant3    | 13.67                                | 26.44       | Pass    |
| NVNT      | ac40 | 5755            | Ant3    | 15.508                               | 26.44       | Pass    |
| NVNT      | ac40 | 5795            | Ant3    | 15.193                               | 26.44       | Pass    |
| NVNT      | ac80 | 5775            | Ant3    | 14.89                                | 26.44       | Pass    |

| Condition | Mode | Frequency (MHz) | Antenna | Maximum conducted output power (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|--------------------------------------|-------------|---------|
| NVNT      | a    | 5745            | Ant4    | 16.469                               | 30          | Pass    |
| NVNT      | a    | 5785            | Ant4    | 11.14                                | 30          | Pass    |
| NVNT      | a    | 5825            | Ant4    | 14.328                               | 30          | Pass    |
| NVNT      | n20  | 5745            | Ant4    | 12.866                               | 30          | Pass    |
| NVNT      | n20  | 5785            | Ant4    | 12.885                               | 30          | Pass    |
| NVNT      | n20  | 5825            | Ant4    | 11.249                               | 30          | Pass    |
| NVNT      | n40  | 5755            | Ant4    | 14.902                               | 30          | Pass    |
| NVNT      | n40  | 5795            | Ant4    | 14.84                                | 30          | Pass    |
| NVNT      | ac20 | 5745            | Ant4    | 15.234                               | 30          | Pass    |
| NVNT      | ac20 | 5785            | Ant4    | 15.155                               | 30          | Pass    |
| NVNT      | ac20 | 5825            | Ant4    | 14.127                               | 30          | Pass    |
| NVNT      | ac40 | 5755            | Ant4    | 15.157                               | 30          | Pass    |
| NVNT      | ac40 | 5795            | Ant4    | 14.938                               | 30          | Pass    |
| NVNT      | ac80 | 5775            | Ant4    | 15.559                               | 30          | Pass    |

MIMO

| Condition | Mode | Frequency (MHz) | Total Power (dBm) |        |           | Limit (dBm) | Verdict |
|-----------|------|-----------------|-------------------|--------|-----------|-------------|---------|
|           |      |                 | Ant3              | Ant4   | Ant3+Ant4 |             |         |
| NVNT      | n20  | 5745            | 15.773            | 12.866 | 17.57     | 26.44       | Pass    |
| NVNT      | n20  | 5785            | 15.787            | 12.885 | 17.58     | 26.44       | Pass    |
| NVNT      | n20  | 5825            | 14.216            | 11.249 | 15.99     | 26.44       | Pass    |
| NVNT      | n40  | 5755            | 14.743            | 14.902 | 17.83     | 26.44       | Pass    |
| NVNT      | n40  | 5795            | 14.422            | 14.84  | 17.65     | 26.44       | Pass    |
| NVNT      | ac20 | 5745            | 15.263            | 15.234 | 18.26     | 26.44       | Pass    |
| NVNT      | ac20 | 5785            | 15.196            | 15.155 | 18.19     | 26.44       | Pass    |
| NVNT      | ac20 | 5825            | 13.67             | 14.127 | 16.91     | 26.44       | Pass    |
| NVNT      | ac40 | 5755            | 15.508            | 15.157 | 18.35     | 26.44       | Pass    |
| NVNT      | ac40 | 5795            | 15.193            | 14.938 | 18.08     | 26.44       | Pass    |
| NVNT      | ac80 | 5775            | 14.89             | 15.559 | 18.25     | 26.44       | Pass    |

## C.3 99% BANDWIDTH

### Test Result

| Mode             | Channel | Ant. | Center Frequency (MHz) | 99% BW (MHz) |
|------------------|---------|------|------------------------|--------------|
| IEEE 802.11a     | 149     | 3    | 5745                   | 16.464       |
|                  | 157     |      | 5785                   | 16.467       |
|                  | 165     |      | 5825                   | 16.490       |
| IEEE 802.11n_20  | 149     |      | 5745                   | 17.597       |
|                  | 157     |      | 5785                   | 17.594       |
|                  | 165     |      | 5825                   | 17.600       |
| IEEE 802.11n_40  | 151     |      | 5755                   | 35.989       |
|                  | 159     |      | 5795                   | 36.019       |
| IEEE 802.11ac_20 | 149     |      | 5745                   | 17.649       |
|                  | 157     |      | 5785                   | 17.646       |
| IEEE 802.11ac_40 | 165     |      | 5825                   | 17.646       |
|                  | 151     |      | 5755                   | 35.936       |
| IEEE 802.11ac_80 | 159     |      | 5795                   | 36.039       |
|                  | 155     |      | 5775                   | 75.596       |

### Test Graphs

