

# **FCC LTE Band Test Data**

**FCC ID : 2BF4O-CC4PRO**

**Company: : Shenzhen TEYES High tech Co., Ltd.**

**EUT : Car Headunit**

**Model Number : CC4PRO**

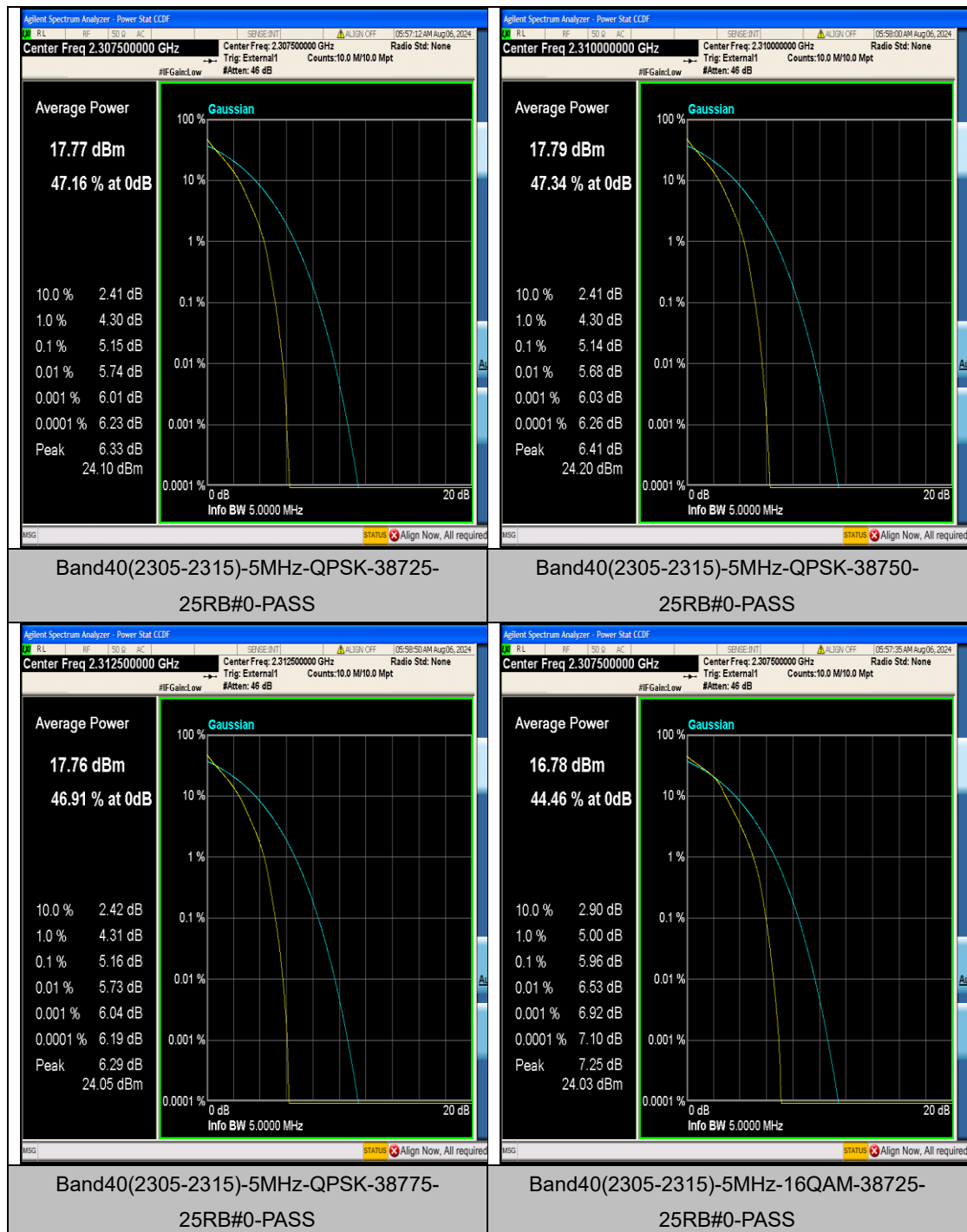
**Reviewed By : Eric Wang**

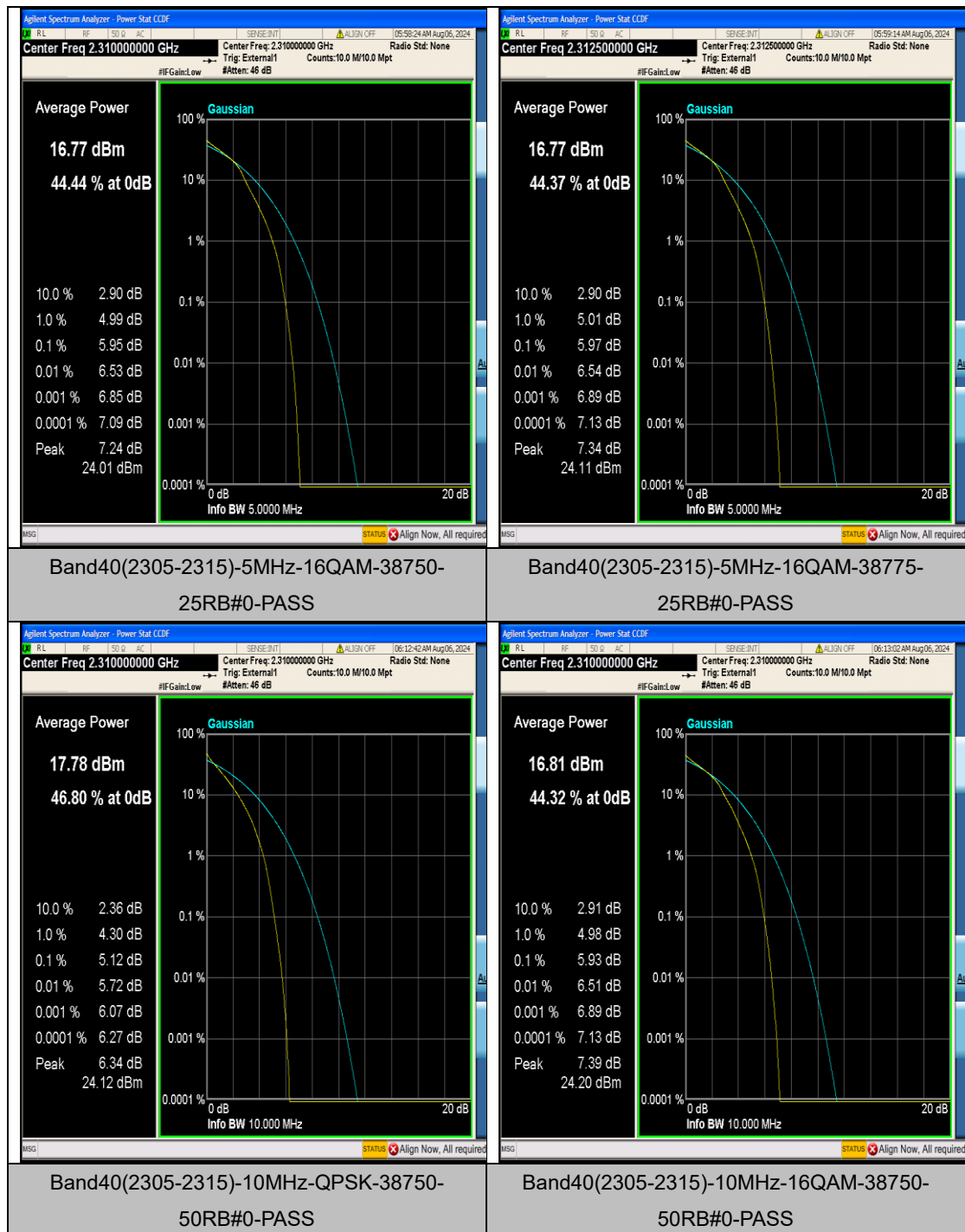
## Appendix B: Peak-to-Average Ratio(CCDF)

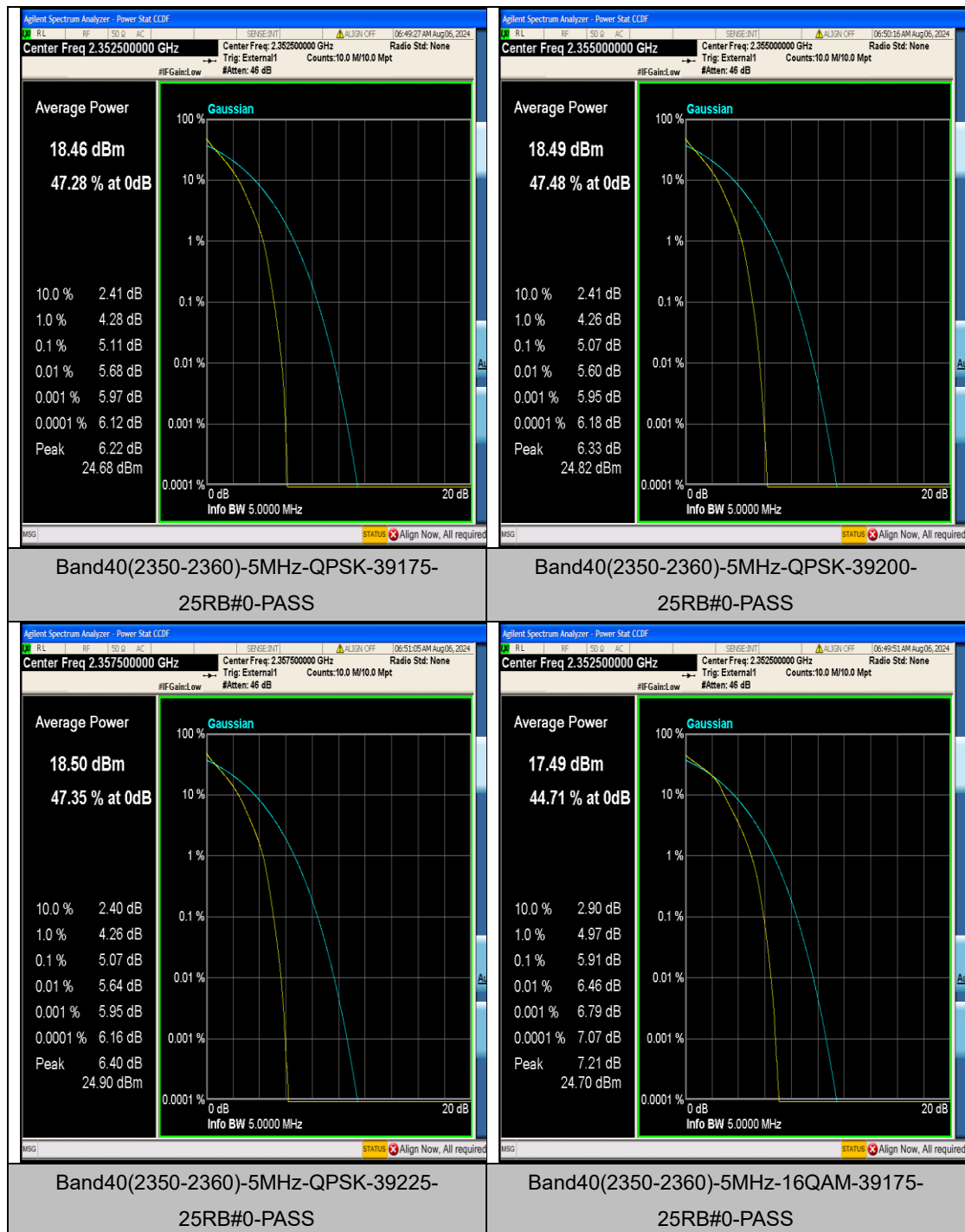
### Test Result

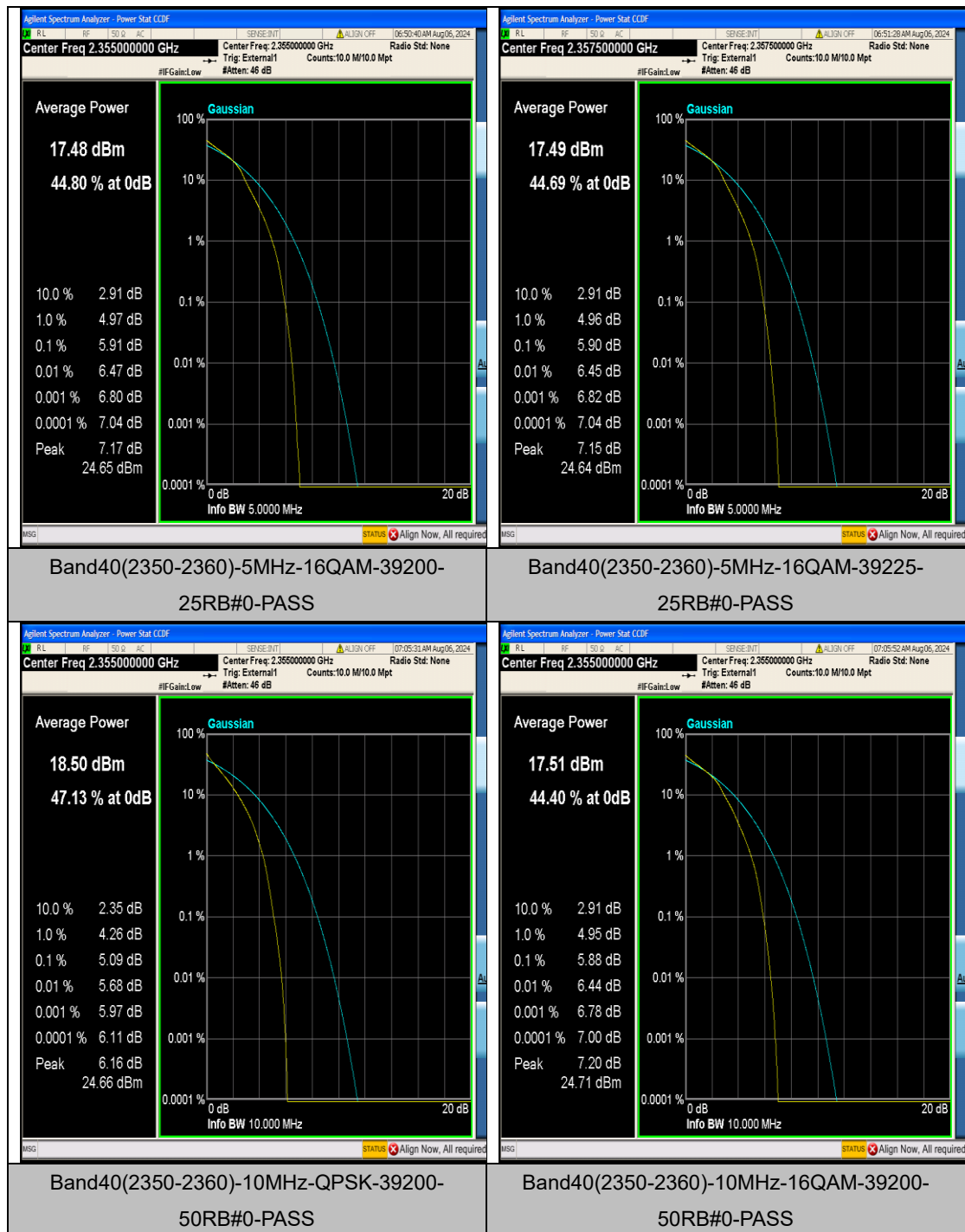
| Band              | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|-------------------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band40(2305-2315) | 5MHz      | QPSK       | 38725   | 25RB#0           | 5.15       | 13        | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38750   | 25RB#0           | 5.14       | 13        | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38775   | 25RB#0           | 5.16       | 13        | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38725   | 25RB#0           | 5.96       | 13        | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38750   | 25RB#0           | 5.95       | 13        | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38775   | 25RB#0           | 5.97       | 13        | PASS    |
| Band40(2305-2315) | 10MHz     | QPSK       | 38750   | 50RB#0           | 5.12       | 13        | PASS    |
| Band40(2305-2315) | 10MHz     | 16QAM      | 38750   | 50RB#0           | 5.93       | 13        | PASS    |
| Band40(2350-2360) | 5MHz      | QPSK       | 39175   | 25RB#0           | 5.11       | 13        | PASS    |
| Band40(2350-2360) | 5MHz      | QPSK       | 39200   | 25RB#0           | 5.07       | 13        | PASS    |
| Band40(2350-2360) | 5MHz      | QPSK       | 39225   | 25RB#0           | 5.07       | 13        | PASS    |
| Band40(2350-2360) | 5MHz      | 16QAM      | 39175   | 25RB#0           | 5.91       | 13        | PASS    |
| Band40(2350-2360) | 5MHz      | 16QAM      | 39200   | 25RB#0           | 5.91       | 13        | PASS    |
| Band40(2350-2360) | 5MHz      | 16QAM      | 39225   | 25RB#0           | 5.90       | 13        | PASS    |
| Band40(2350-2360) | 10MHz     | QPSK       | 39200   | 50RB#0           | 5.09       | 13        | PASS    |
| Band40(2350-2360) | 10MHz     | 16QAM      | 39200   | 50RB#0           | 5.88       | 13        | PASS    |

## Test Graphs







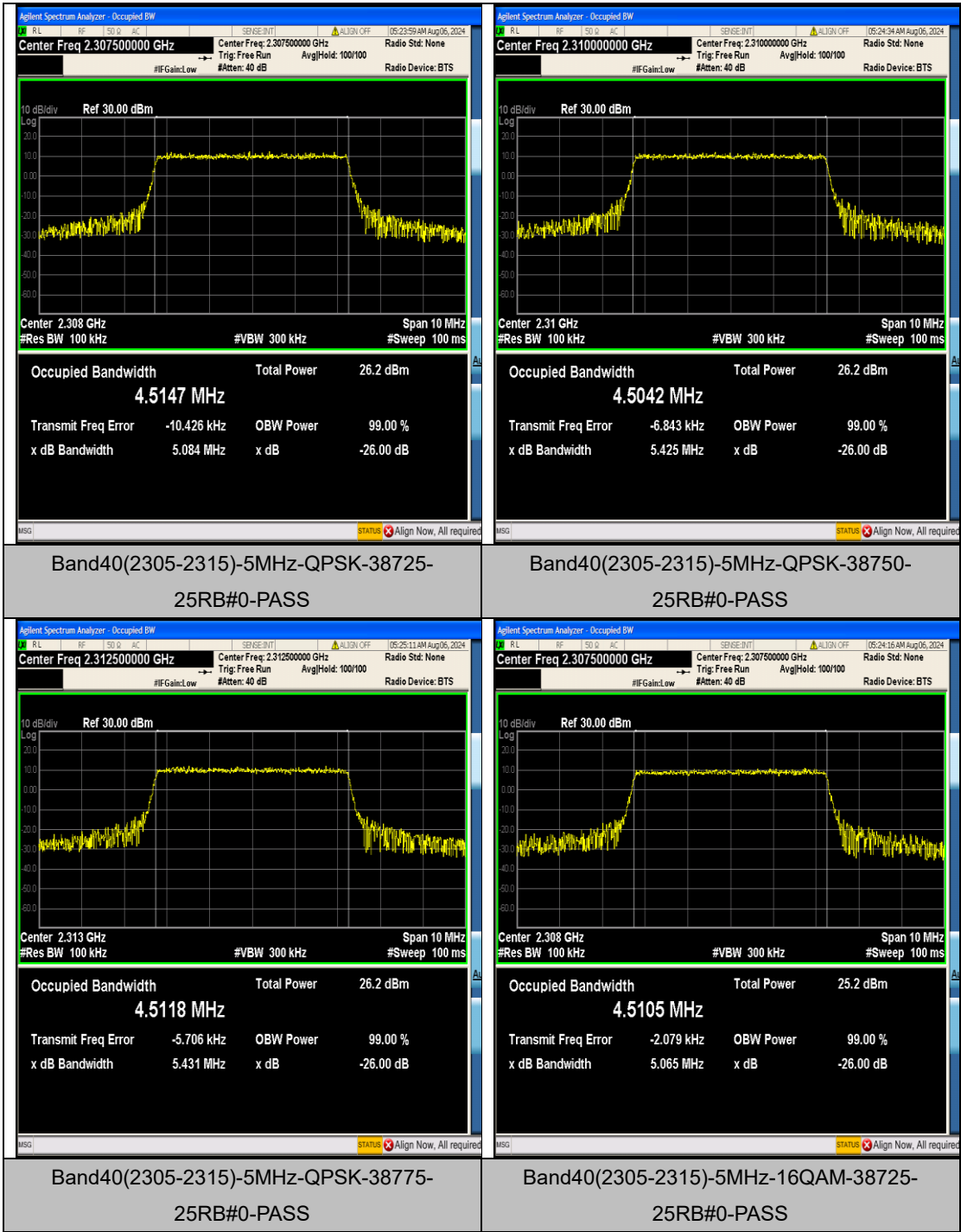


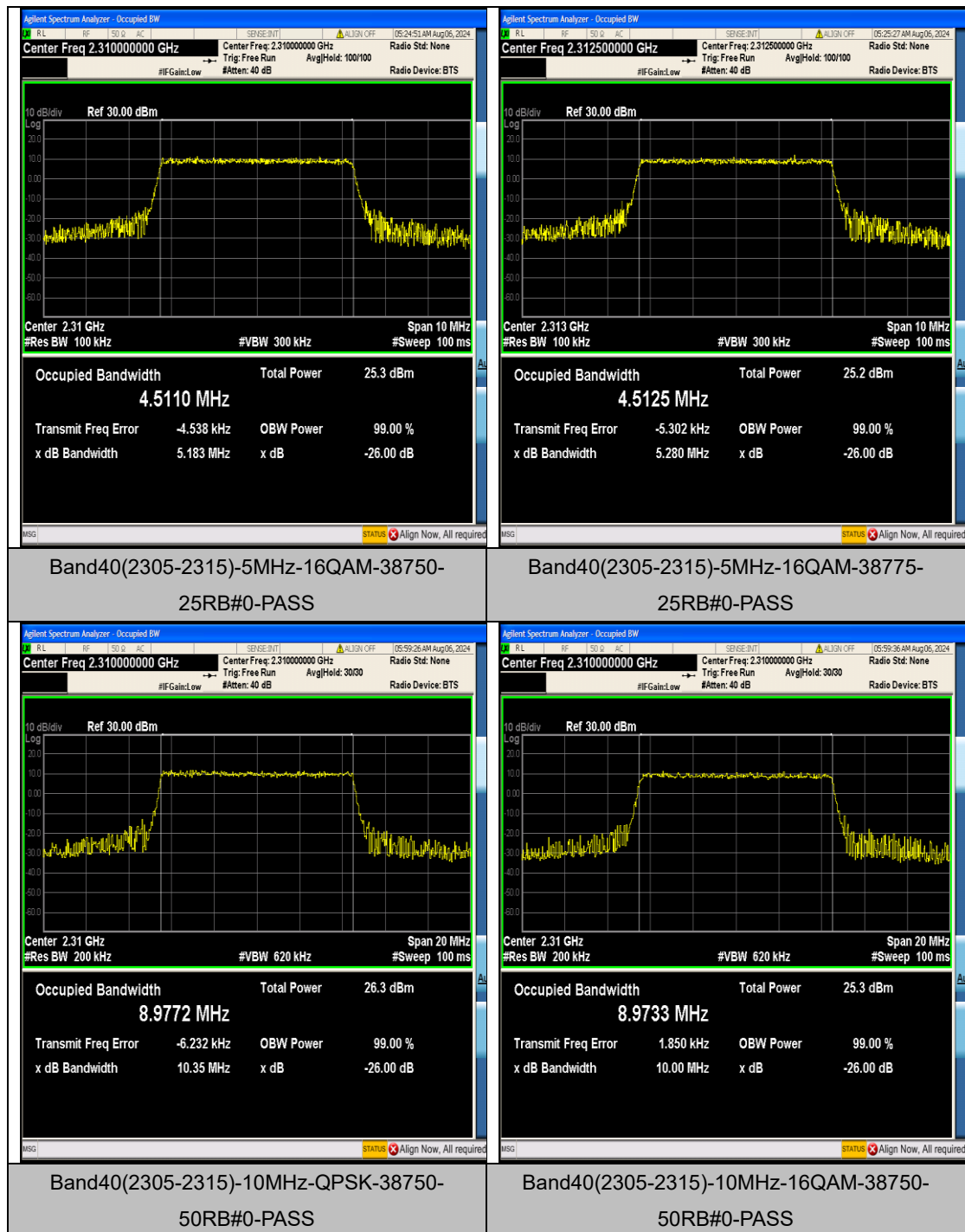
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

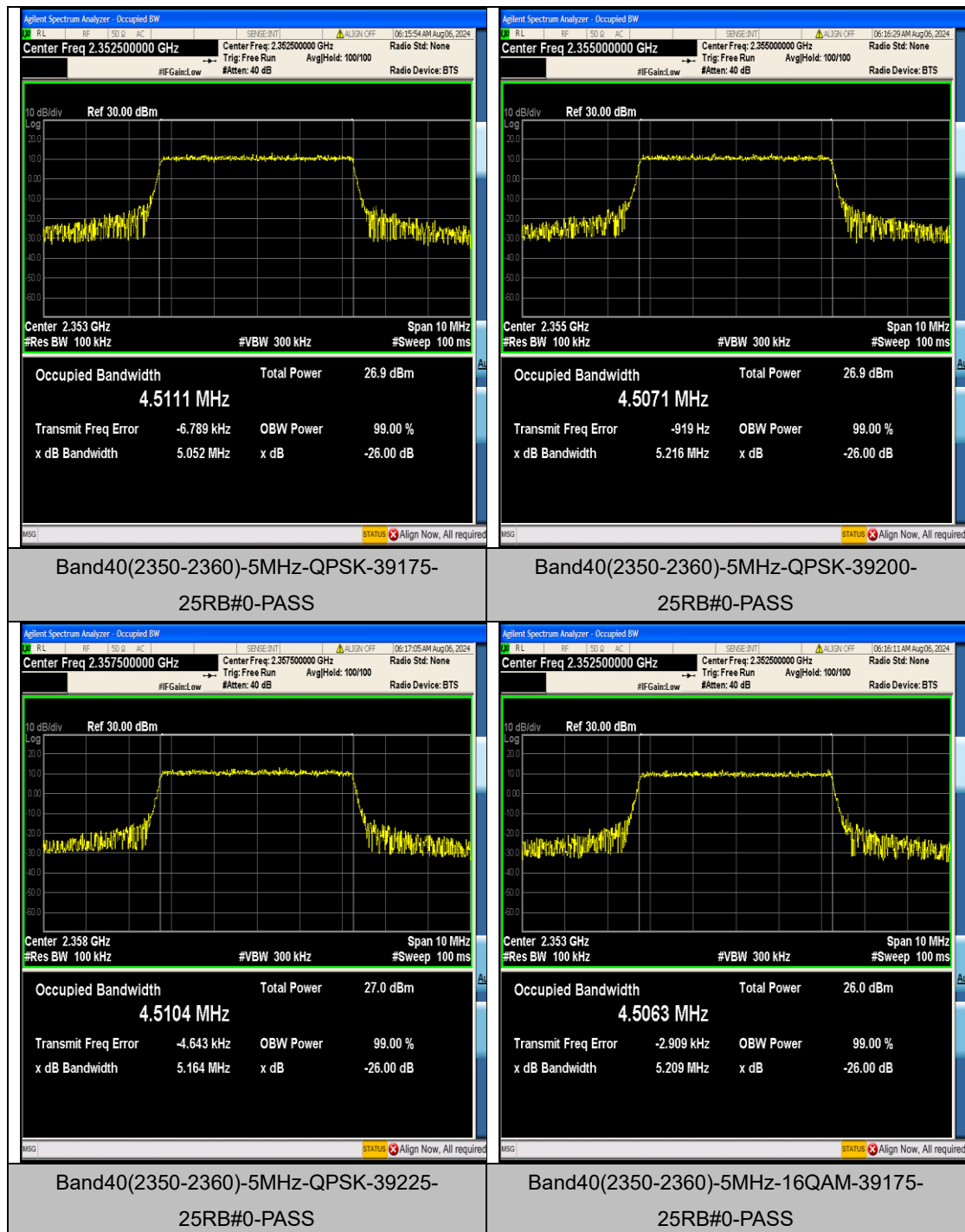
### Test Result

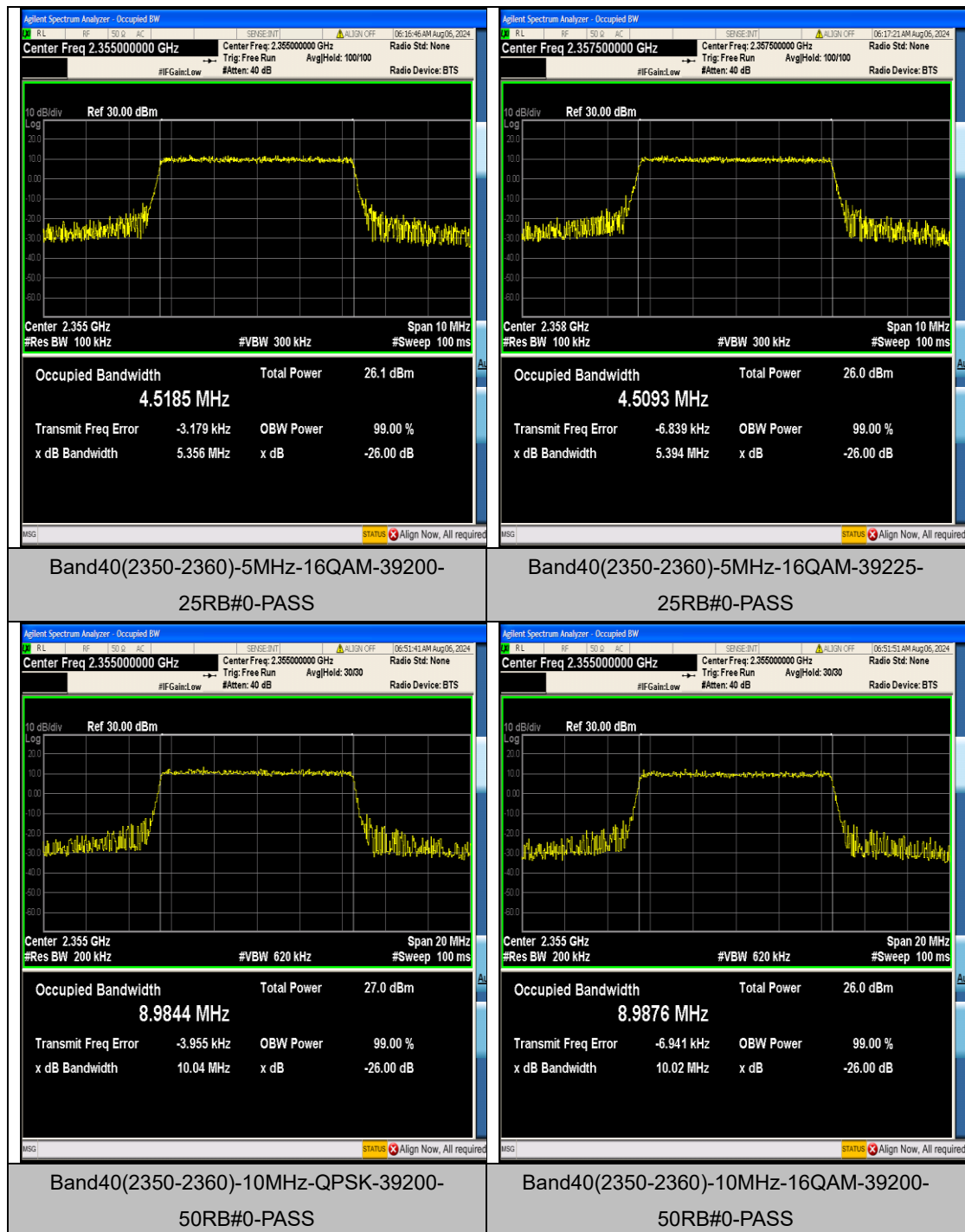
| Band              | Bandwidth | Modulation | Channel | RB Configuration | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|-------------------|-----------|------------|---------|------------------|--------------------------|----------------------|---------|
| Band40(2305-2315) | 5MHz      | QPSK       | 38725   | 25RB#0           | 4.5147                   | 5.084                | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38750   | 25RB#0           | 4.5042                   | 5.425                | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38775   | 25RB#0           | 4.5118                   | 5.431                | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38725   | 25RB#0           | 4.5105                   | 5.065                | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38750   | 25RB#0           | 4.5110                   | 5.183                | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38775   | 25RB#0           | 4.5125                   | 5.280                | PASS    |
| Band40(2305-2315) | 10MHz     | QPSK       | 38750   | 50RB#0           | 8.9772                   | 10.35                | PASS    |
| Band40(2305-2315) | 10MHz     | 16QAM      | 38750   | 50RB#0           | 8.9733                   | 10.00                | PASS    |
| Band40(2350-2360) | 5MHz      | QPSK       | 39175   | 25RB#0           | 4.5111                   | 5.052                | PASS    |
| Band40(2350-2360) | 5MHz      | QPSK       | 39200   | 25RB#0           | 4.5071                   | 5.216                | PASS    |
| Band40(2350-2360) | 5MHz      | QPSK       | 39225   | 25RB#0           | 4.5104                   | 5.164                | PASS    |
| Band40(2350-2360) | 5MHz      | 16QAM      | 39175   | 25RB#0           | 4.5063                   | 5.209                | PASS    |
| Band40(2350-2360) | 5MHz      | 16QAM      | 39200   | 25RB#0           | 4.5185                   | 5.356                | PASS    |
| Band40(2350-2360) | 5MHz      | 16QAM      | 39225   | 25RB#0           | 4.5093                   | 5.394                | PASS    |
| Band40(2350-2360) | 10MHz     | QPSK       | 39200   | 50RB#0           | 8.9844                   | 10.04                | PASS    |
| Band40(2350-2360) | 10MHz     | 16QAM      | 39200   | 50RB#0           | 8.9876                   | 10.02                | PASS    |

Test Graphs







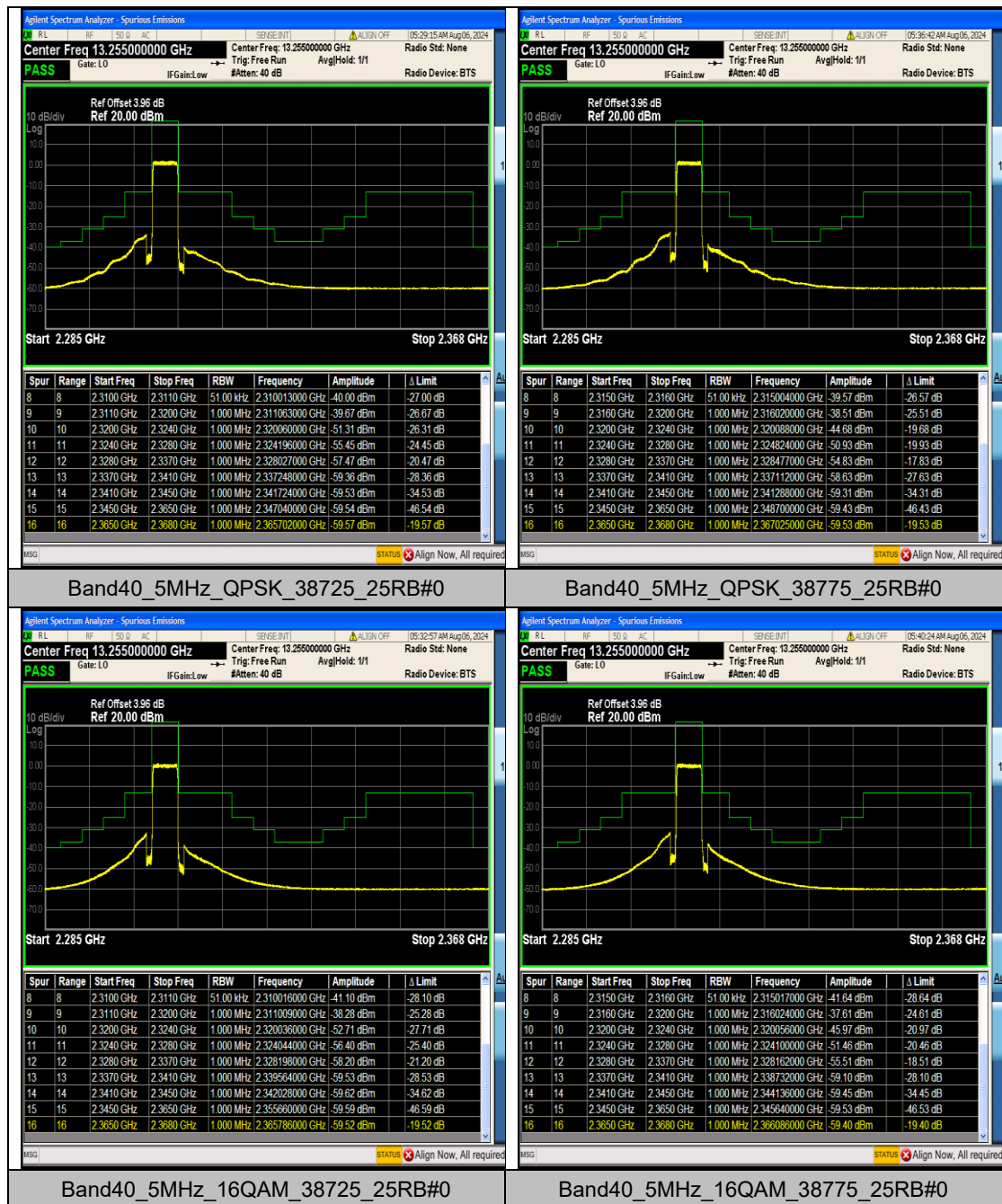


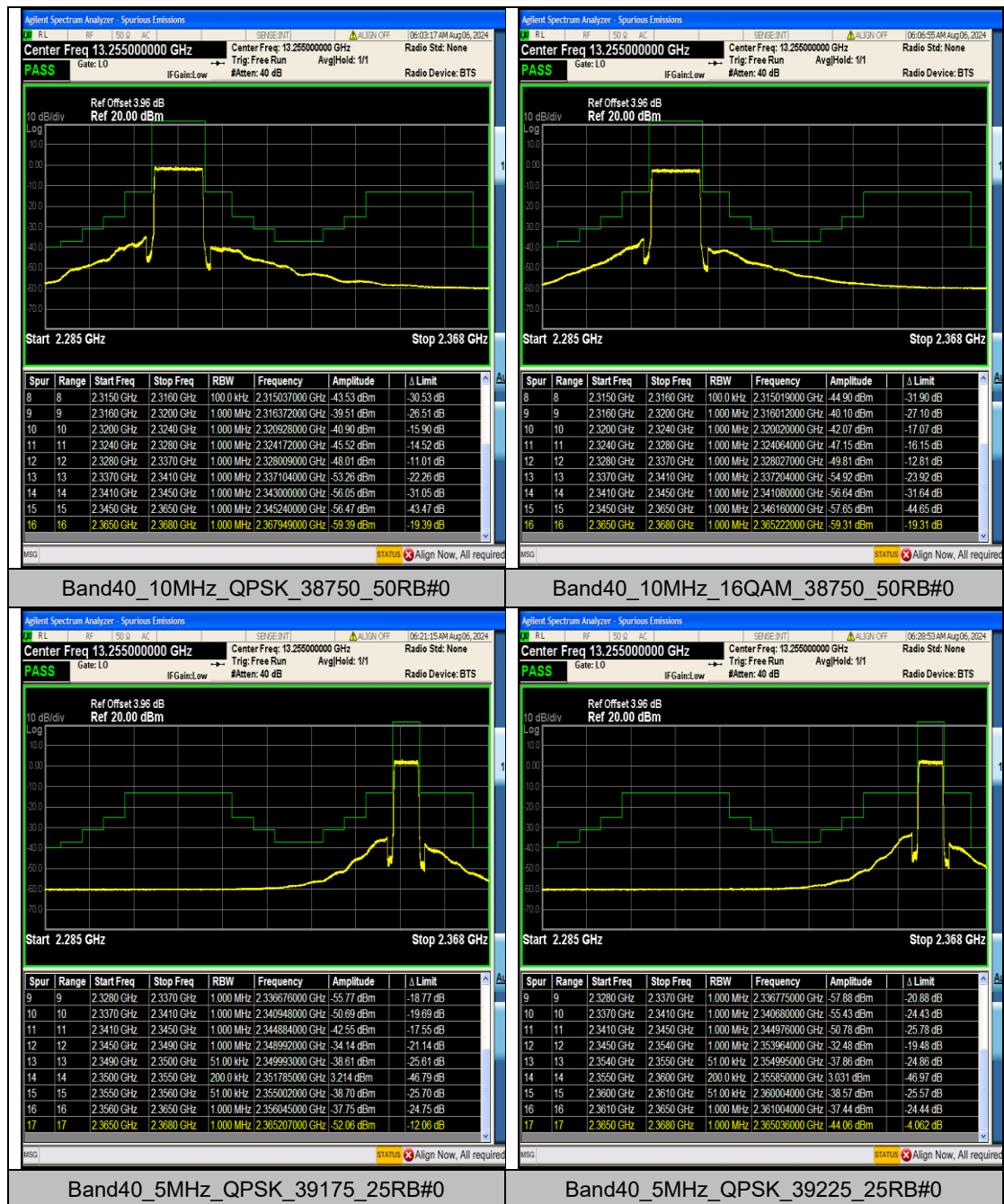
## Appendix D: Band Edge

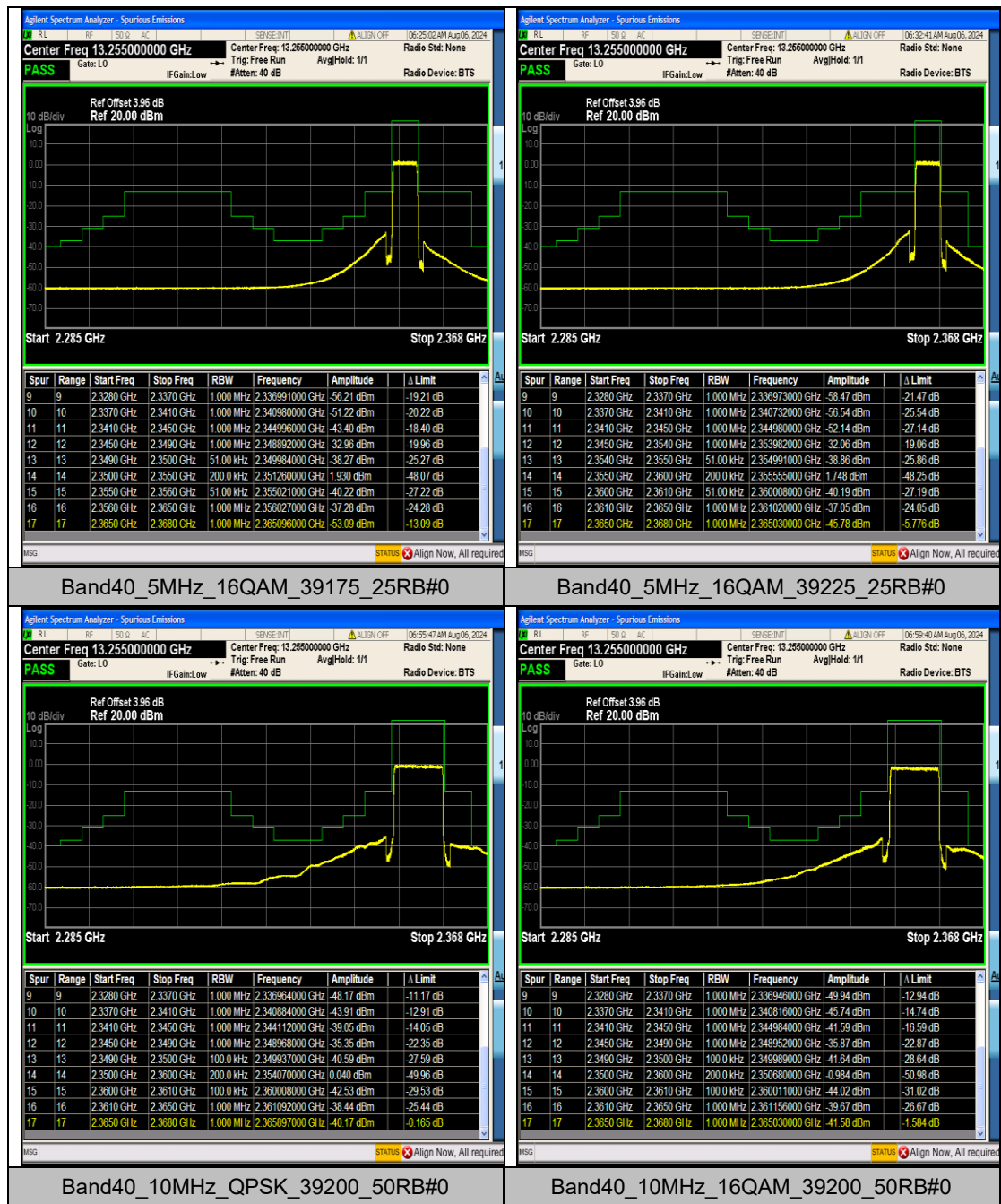
### Test Result

| Band              | Bandwidth | Modulation | Channel | RB Configuration | Result(dBm) | Verdict |
|-------------------|-----------|------------|---------|------------------|-------------|---------|
| Band40(2305-2315) | 5MHz      | QPSK       | 38725   | 25RB#0           | -58.48      | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38775   | 25RB#0           | -54.83      | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38725   | 25RB#0           | -58.76      | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38775   | 25RB#0           | -55.51      | PASS    |
| Band40(2305-2315) | 10MHz     | QPSK       | 38750   | 50RB#0           | -48.01      | PASS    |
| Band40(2305-2315) | 10MHz     | 16QAM      | 38750   | 50RB#0           | -49.81      | PASS    |
| Band40(2350-2360) | 5MHz      | QPSK       | 39175   | 25RB#0           | -52.06      | PASS    |
| Band40(2350-2360) | 5MHz      | QPSK       | 39225   | 25RB#0           | -44.06      | PASS    |
| Band40(2350-2360) | 5MHz      | 16QAM      | 39175   | 25RB#0           | -53.09      | PASS    |
| Band40(2350-2360) | 5MHz      | 16QAM      | 39225   | 25RB#0           | -45.78      | PASS    |
| Band40(2350-2360) | 10MHz     | QPSK       | 39200   | 50RB#0           | -40.17      | PASS    |
| Band40(2350-2360) | 10MHz     | 16QAM      | 39200   | 50RB#0           | -41.58      | PASS    |

## Test Graphs







## Appendix E: Conducted Spurious Emission

### Test Result

| Band              | Bandwidth | Modulation | Channel | RB Configuration | Frequency Range | Result (dBm) | Verdict |
|-------------------|-----------|------------|---------|------------------|-----------------|--------------|---------|
| Band40(2305-2315) | 5MHz      | QPSK       | 38725   | 25RB#0           | 0.009~0.15      | -84.63       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38725   | 25RB#0           | 0.15~30         | -65.63       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38725   | 25RB#0           | 30~1000         | -67.27       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38725   | 25RB#0           | 1000~3000       | -47.74       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38725   | 25RB#0           | 3000~26500      | -60.82       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38750   | 25RB#0           | 0.009~0.15      | -83.51       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38750   | 25RB#0           | 0.15~30         | -66.48       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38750   | 25RB#0           | 30~1000         | -67.14       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38750   | 25RB#0           | 1000~3000       | -46.91       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38750   | 25RB#0           | 3000~26500      | -60.88       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38775   | 25RB#0           | 0.009~0.15      | -70.80       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38775   | 25RB#0           | 0.15~30         | -65.77       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38775   | 25RB#0           | 30~1000         | -66.86       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38775   | 25RB#0           | 1000~3000       | -47.33       | PASS    |
| Band40(2305-2315) | 5MHz      | QPSK       | 38775   | 25RB#0           | 3000~26500      | -60.85       | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38725   | 25RB#0           | 0.009~0.15      | -70.79       | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38725   | 25RB#0           | 0.15~30         | -69.18       | PASS    |
| Band40(2305-2315) | 5MHz      | 16QAM      | 38725   | 25RB#0           | 30~1000         | -67.23       | PASS    |

|                   |       |       |       |        |                |            |      |
|-------------------|-------|-------|-------|--------|----------------|------------|------|
| Band40(2305-2315) | 5MHz  | 16QAM | 38725 | 25RB#0 | 1000~3000      | -<br>49.64 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38725 | 25RB#0 | 3000~2650<br>0 | -<br>60.97 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38750 | 25RB#0 | 0.009~0.15     | -71.11     | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38750 | 25RB#0 | 0.15~30        | -<br>64.89 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38750 | 25RB#0 | 30~1000        | -<br>67.02 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38750 | 25RB#0 | 1000~3000      | -<br>48.06 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38750 | 25RB#0 | 3000~2650<br>0 | -<br>60.85 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38775 | 25RB#0 | 0.009~0.15     | -<br>71.70 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38775 | 25RB#0 | 0.15~30        | -<br>65.37 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38775 | 25RB#0 | 30~1000        | -<br>67.06 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38775 | 25RB#0 | 1000~3000      | -<br>48.64 | PASS |
| Band40(2305-2315) | 5MHz  | 16QAM | 38775 | 25RB#0 | 3000~2650<br>0 | -<br>60.87 | PASS |
| Band40(2305-2315) | 10MHz | QPSK  | 38750 | 50RB#0 | 0.009~0.15     | -<br>70.70 | PASS |
| Band40(2305-2315) | 10MHz | QPSK  | 38750 | 50RB#0 | 0.15~30        | -<br>66.00 | PASS |
| Band40(2305-2315) | 10MHz | QPSK  | 38750 | 50RB#0 | 30~1000        | -<br>67.07 | PASS |
| Band40(2305-2315) | 10MHz | QPSK  | 38750 | 50RB#0 | 1000~3000      | -<br>50.98 | PASS |
| Band40(2305-2315) | 10MHz | QPSK  | 38750 | 50RB#0 | 3000~2650<br>0 | -<br>60.95 | PASS |
| Band40(2305-2315) | 10MHz | 16QAM | 38750 | 50RB#0 | 0.009~0.15     | -<br>72.47 | PASS |
| Band40(2305-2315) | 10MHz | 16QAM | 38750 | 50RB#0 | 0.15~30        | -<br>68.32 | PASS |
| Band40(2305-2315) | 10MHz | 16QAM | 38750 | 50RB#0 | 30~1000        | -<br>67.31 | PASS |
| Band40(2305-2315) | 10MHz | 16QAM | 38750 | 50RB#0 | 1000~3000      | -<br>52.08 | PASS |
| Band40(2305-2315) | 10MHz | 16QAM | 38750 | 50RB#0 | 3000~2650<br>0 | -<br>60.96 | PASS |

|                   |      |       |       |        |                |            |      |
|-------------------|------|-------|-------|--------|----------------|------------|------|
| Band40(2350-2360) | 5MHz | QPSK  | 39175 | 25RB#0 | 0.009~0.15     | -<br>73.57 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39175 | 25RB#0 | 0.15~30        | -<br>68.31 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39175 | 25RB#0 | 30~1000        | -<br>67.06 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39175 | 25RB#0 | 1000~3000      | -<br>48.02 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39175 | 25RB#0 | 3000~2650<br>0 | -<br>60.74 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39200 | 25RB#0 | 0.009~0.15     | -<br>72.15 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39200 | 25RB#0 | 0.15~30        | -<br>65.92 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39200 | 25RB#0 | 30~1000        | -<br>67.27 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39200 | 25RB#0 | 1000~3000      | -<br>48.40 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39200 | 25RB#0 | 3000~2650<br>0 | -<br>60.81 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39225 | 25RB#0 | 0.009~0.15     | -<br>73.53 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39225 | 25RB#0 | 0.15~30        | -<br>66.96 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39225 | 25RB#0 | 30~1000        | -<br>67.07 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39225 | 25RB#0 | 1000~3000      | -<br>48.92 | PASS |
| Band40(2350-2360) | 5MHz | QPSK  | 39225 | 25RB#0 | 3000~2650<br>0 | -<br>60.93 | PASS |
| Band40(2350-2360) | 5MHz | 16QAM | 39175 | 25RB#0 | 0.009~0.15     | -<br>74.59 | PASS |
| Band40(2350-2360) | 5MHz | 16QAM | 39175 | 25RB#0 | 0.15~30        | -<br>65.53 | PASS |
| Band40(2350-2360) | 5MHz | 16QAM | 39175 | 25RB#0 | 30~1000        | -<br>67.05 | PASS |
| Band40(2350-2360) | 5MHz | 16QAM | 39175 | 25RB#0 | 1000~3000      | -<br>49.15 | PASS |
| Band40(2350-2360) | 5MHz | 16QAM | 39175 | 25RB#0 | 3000~2650<br>0 | -<br>60.99 | PASS |
| Band40(2350-2360) | 5MHz | 16QAM | 39200 | 25RB#0 | 0.009~0.15     | -<br>74.26 | PASS |
| Band40(2350-2360) | 5MHz | 16QAM | 39200 | 25RB#0 | 0.15~30        | -<br>64.91 | PASS |

|                   |       |       |       |        |                |            |      |
|-------------------|-------|-------|-------|--------|----------------|------------|------|
| Band40(2350-2360) | 5MHz  | 16QAM | 39200 | 25RB#0 | 30~1000        | -<br>67.08 | PASS |
| Band40(2350-2360) | 5MHz  | 16QAM | 39200 | 25RB#0 | 1000~3000      | -<br>49.99 | PASS |
| Band40(2350-2360) | 5MHz  | 16QAM | 39200 | 25RB#0 | 3000~2650<br>0 | -<br>60.88 | PASS |
| Band40(2350-2360) | 5MHz  | 16QAM | 39225 | 25RB#0 | 0.009~0.15     | -73.11     | PASS |
| Band40(2350-2360) | 5MHz  | 16QAM | 39225 | 25RB#0 | 0.15~30        | -<br>63.66 | PASS |
| Band40(2350-2360) | 5MHz  | 16QAM | 39225 | 25RB#0 | 30~1000        | -<br>66.88 | PASS |
| Band40(2350-2360) | 5MHz  | 16QAM | 39225 | 25RB#0 | 1000~3000      | -<br>50.40 | PASS |
| Band40(2350-2360) | 5MHz  | 16QAM | 39225 | 25RB#0 | 3000~2650<br>0 | -<br>60.89 | PASS |
| Band40(2350-2360) | 10MHz | QPSK  | 39200 | 50RB#0 | 0.009~0.15     | -73.11     | PASS |
| Band40(2350-2360) | 10MHz | QPSK  | 39200 | 50RB#0 | 0.15~30        | -<br>67.07 | PASS |
| Band40(2350-2360) | 10MHz | QPSK  | 39200 | 50RB#0 | 30~1000        | -<br>67.02 | PASS |
| Band40(2350-2360) | 10MHz | QPSK  | 39200 | 50RB#0 | 1000~3000      | -<br>51.41 | PASS |
| Band40(2350-2360) | 10MHz | QPSK  | 39200 | 50RB#0 | 3000~2650<br>0 | -<br>60.88 | PASS |
| Band40(2350-2360) | 10MHz | 16QAM | 39200 | 50RB#0 | 0.009~0.15     | -<br>75.42 | PASS |
| Band40(2350-2360) | 10MHz | 16QAM | 39200 | 50RB#0 | 0.15~30        | -<br>68.76 | PASS |
| Band40(2350-2360) | 10MHz | 16QAM | 39200 | 50RB#0 | 30~1000        | -<br>66.97 | PASS |
| Band40(2350-2360) | 10MHz | 16QAM | 39200 | 50RB#0 | 1000~3000      | -<br>52.51 | PASS |
| Band40(2350-2360) | 10MHz | 16QAM | 39200 | 50RB#0 | 3000~2650<br>0 | -<br>60.96 | PASS |

## Test Graphs

