

## **Appendix for N5**

Product Name: Smart Phone

Model No: K50

## Appendix A: Average Power Output

### Test Result

| Band | SCS | Bandwidth | Modulation | Channel | RB Config      | Power (dBm) | Power Class | Verdict |
|------|-----|-----------|------------|---------|----------------|-------------|-------------|---------|
| N5   | 15  | 5         | DFT-QPSK   | L       | Outer_Full     | 23.52       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | L       | Inner_Full     | 24.53       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | L       | Edge_1RB_Left  | 23.33       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | L       | Edge_1RB_Right | 23.47       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | L       | Outer_Full     | 22.50       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | L       | Inner_Full     | 23.53       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | L       | Edge_1RB_Left  | 22.61       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | L       | Edge_1RB_Right | 22.66       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | M       | Outer_Full     | 23.65       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | M       | Inner_Full     | 24.64       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | M       | Edge_1RB_Left  | 23.56       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | M       | Edge_1RB_Right | 23.51       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | M       | Outer_Full     | 22.58       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | M       | Inner_Full     | 23.65       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | M       | Edge_1RB_Left  | 22.76       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | M       | Edge_1RB_Right | 22.77       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | H       | Outer_Full     | 23.69       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | H       | Inner_Full     | 24.74       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | H       | Edge_1RB_Left  | 23.54       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | H       | Edge_1RB_Right | 23.49       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | H       | Outer_Full     | 22.61       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | H       | Inner_Full     | 23.76       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | H       | Edge_1RB_Left  | 22.78       | PC3         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | H       | Edge_1RB_Right | 22.75       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | L       | Outer_Full     | 23.46       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | L       | Inner_Full     | 24.49       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | L       | Edge_1RB_Left  | 23.40       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | L       | Edge_1RB_Right | 23.46       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | L       | Outer_Full     | 22.44       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | L       | Inner_Full     | 23.48       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | L       | Edge_1RB_Left  | 22.66       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | L       | Edge_1RB_Right | 22.75       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | M       | Outer_Full     | 23.59       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | M       | Inner_Full     | 24.58       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | M       | Edge_1RB_Left  | 23.43       | PC3         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | M       | Edge_1RB_Right | 23.55       | PC3         | PASS    |

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|    |    |    |           |   |                |       |     |      |
|----|----|----|-----------|---|----------------|-------|-----|------|
| N5 | 15 | 10 | DFT-16QAM | M | Outer_Full     | 22.64 | PC3 | PASS |
| N5 | 15 | 10 | DFT-16QAM | M | Inner_Full     | 23.56 | PC3 | PASS |
| N5 | 15 | 10 | DFT-16QAM | M | Edge_1RB_Left  | 22.69 | PC3 | PASS |
| N5 | 15 | 10 | DFT-16QAM | M | Edge_1RB_Right | 22.83 | PC3 | PASS |
| N5 | 15 | 10 | DFT-QPSK  | H | Outer_Full     | 23.66 | PC3 | PASS |
| N5 | 15 | 10 | DFT-QPSK  | H | Inner_Full     | 24.65 | PC3 | PASS |
| N5 | 15 | 10 | DFT-QPSK  | H | Edge_1RB_Left  | 23.66 | PC3 | PASS |
| N5 | 15 | 10 | DFT-QPSK  | H | Edge_1RB_Right | 23.56 | PC3 | PASS |
| N5 | 15 | 10 | DFT-16QAM | H | Outer_Full     | 22.64 | PC3 | PASS |
| N5 | 15 | 10 | DFT-16QAM | H | Inner_Full     | 23.63 | PC3 | PASS |
| N5 | 15 | 10 | DFT-16QAM | H | Edge_1RB_Left  | 22.84 | PC3 | PASS |
| N5 | 15 | 10 | DFT-16QAM | H | Edge_1RB_Right | 22.84 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | L | Outer_Full     | 23.49 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | L | Inner_Full     | 24.47 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | L | Edge_1RB_Left  | 23.35 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | L | Edge_1RB_Right | 23.54 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | L | Outer_Full     | 22.52 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | L | Inner_Full     | 23.52 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | L | Edge_1RB_Left  | 22.50 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | L | Edge_1RB_Right | 22.88 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | M | Outer_Full     | 23.57 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | M | Inner_Full     | 24.53 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | M | Edge_1RB_Left  | 23.45 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | M | Edge_1RB_Right | 23.49 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | M | Outer_Full     | 22.59 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | M | Inner_Full     | 23.59 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | M | Edge_1RB_Left  | 22.58 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | M | Edge_1RB_Right | 22.66 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | H | Outer_Full     | 23.62 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | H | Inner_Full     | 24.65 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | H | Edge_1RB_Left  | 23.59 | PC3 | PASS |
| N5 | 15 | 15 | DFT-QPSK  | H | Edge_1RB_Right | 23.56 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | H | Outer_Full     | 22.66 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | H | Inner_Full     | 23.72 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | H | Edge_1RB_Left  | 22.74 | PC3 | PASS |
| N5 | 15 | 15 | DFT-16QAM | H | Edge_1RB_Right | 22.89 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | L | Outer_Full     | 23.52 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | L | Inner_Full     | 24.83 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | L | Edge_1RB_Left  | 23.36 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | L | Edge_1RB_Right | 23.54 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | L | Outer_Full     | 22.52 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | L | Inner_Full     | 23.54 | PC3 | PASS |

|    |    |    |           |   |                |       |     |      |
|----|----|----|-----------|---|----------------|-------|-----|------|
| N5 | 15 | 20 | DFT-16QAM | L | Edge_1RB_Left  | 22.58 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | L | Edge_1RB_Right | 22.81 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | M | Outer_Full     | 23.52 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | M | Inner_Full     | 24.61 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | M | Edge_1RB_Left  | 23.35 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | M | Edge_1RB_Right | 23.53 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | M | Outer_Full     | 22.58 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | M | Inner_Full     | 23.63 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | M | Edge_1RB_Left  | 22.61 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | M | Edge_1RB_Right | 22.73 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | H | Outer_Full     | 23.55 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | H | Inner_Full     | 24.62 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | H | Edge_1RB_Left  | 23.44 | PC3 | PASS |
| N5 | 15 | 20 | DFT-QPSK  | H | Edge_1RB_Right | 23.44 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | H | Outer_Full     | 22.59 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | H | Inner_Full     | 23.63 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | H | Edge_1RB_Left  | 22.72 | PC3 | PASS |
| N5 | 15 | 20 | DFT-16QAM | H | Edge_1RB_Right | 22.76 | PC3 | PASS |

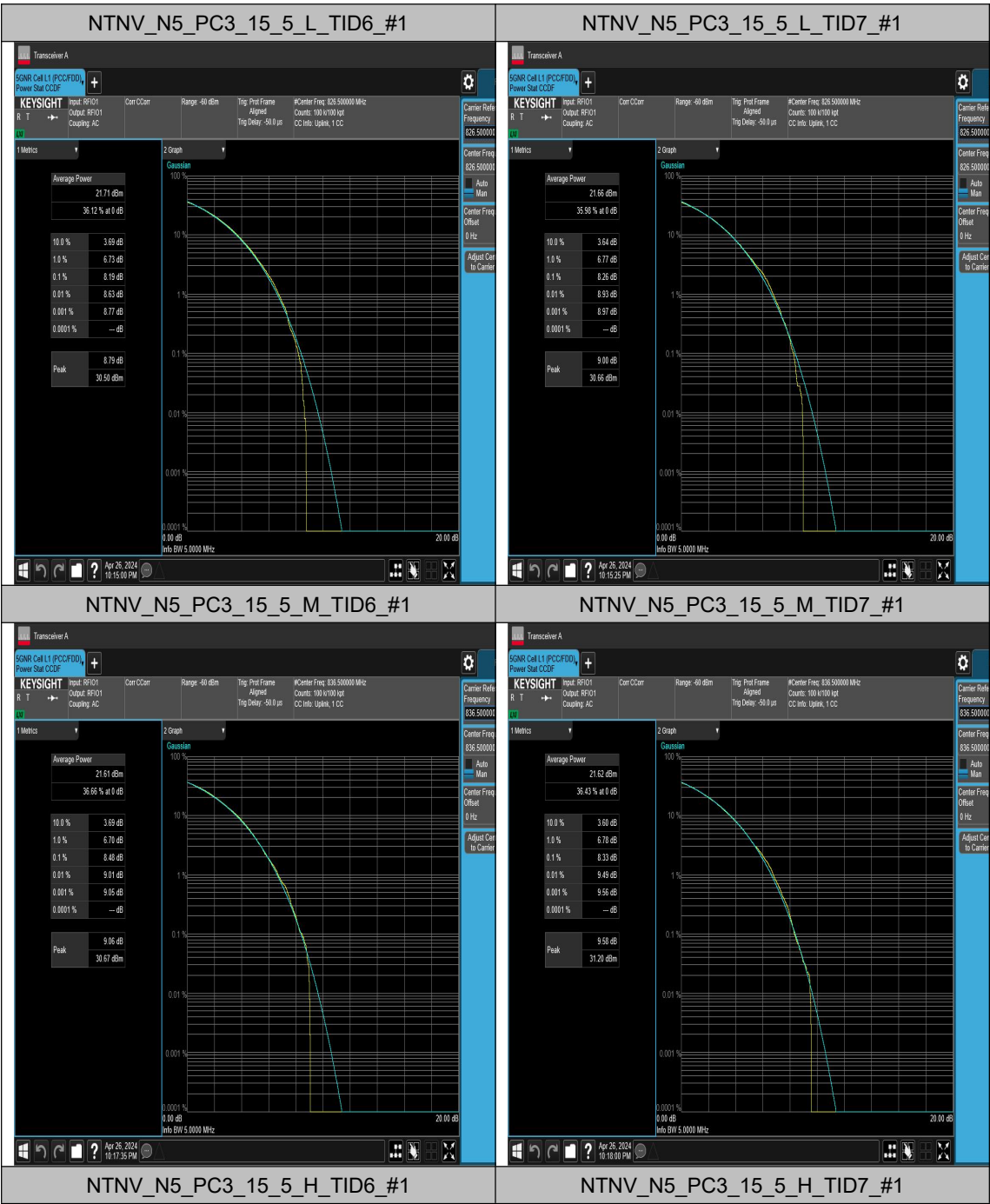
## Appendix B: Peak-to-Average Ratio for SA

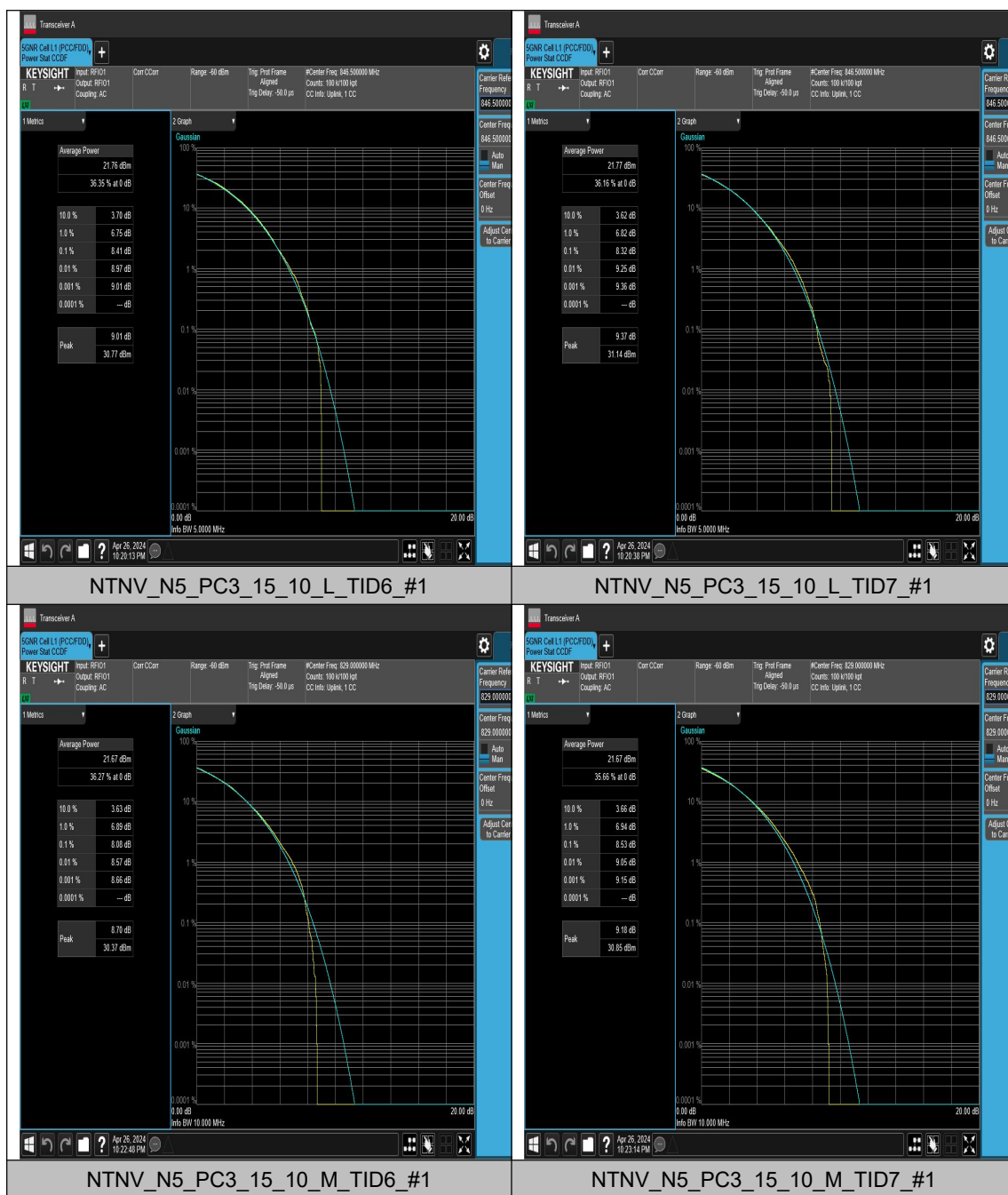
### Peak-to-Average Ratio(CCDF)

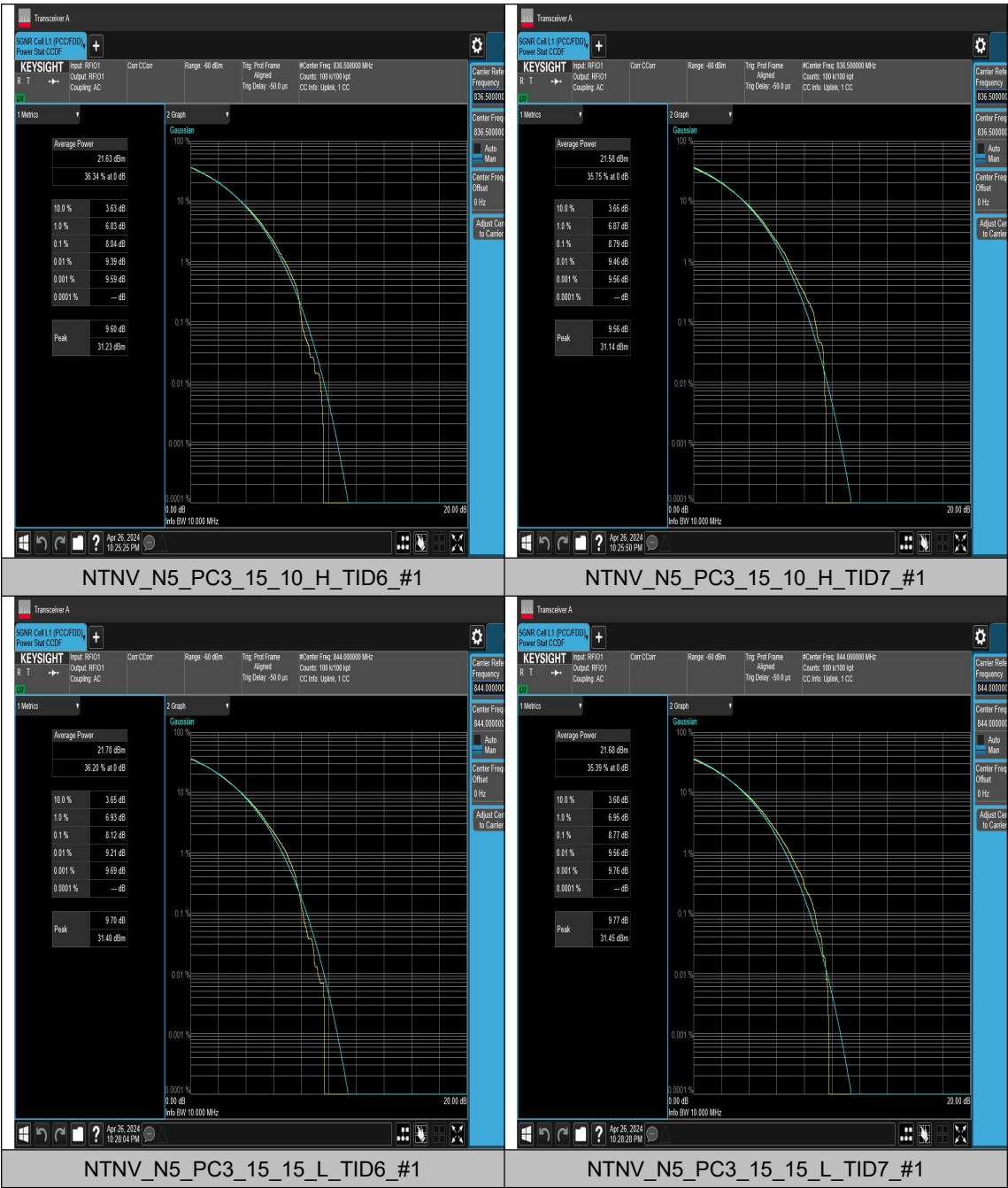
#### Test Result

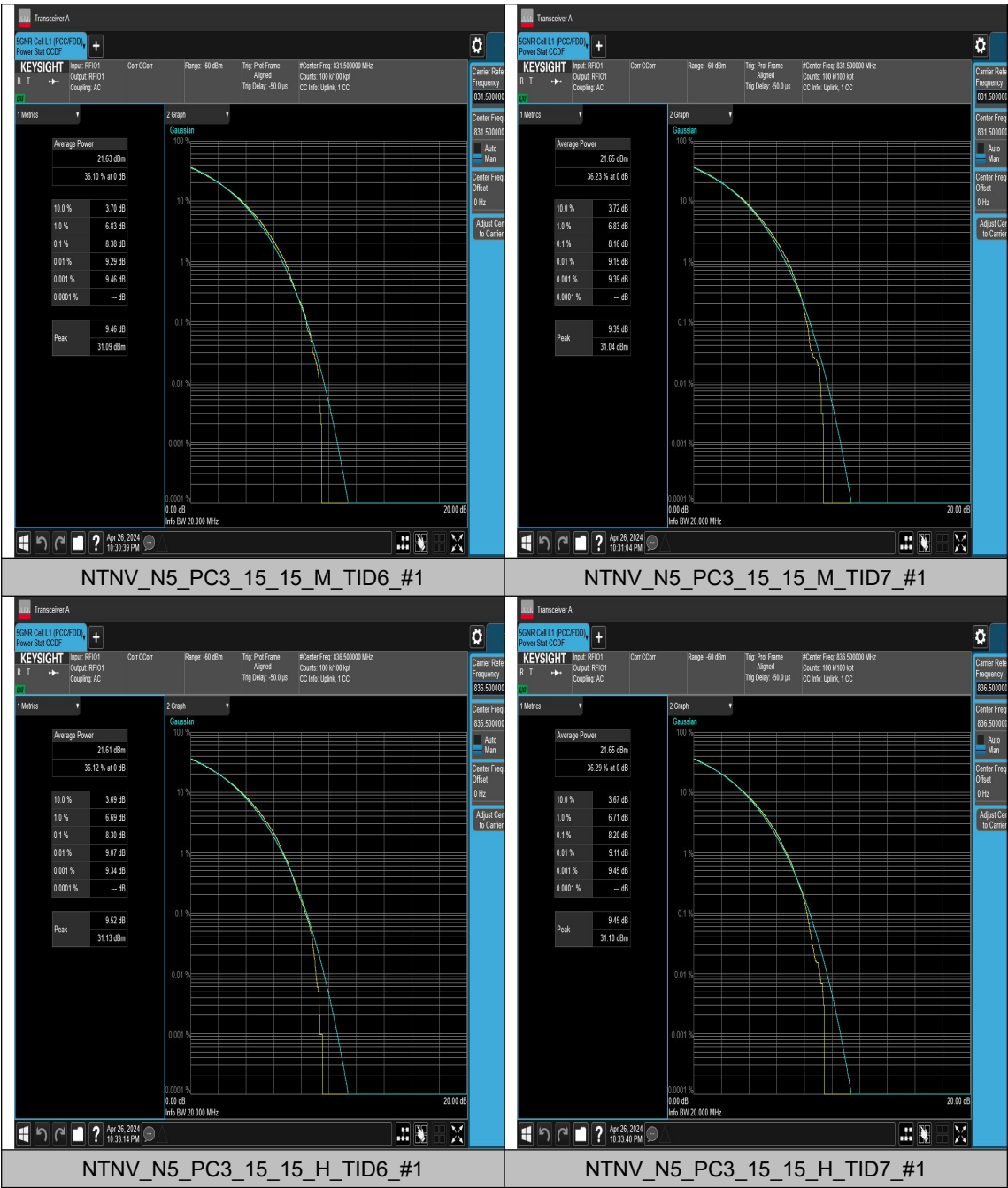
| Band | SCS | Bandwidth | Modulation | Channel | RB Config  | Result | Limit | Verdict |
|------|-----|-----------|------------|---------|------------|--------|-------|---------|
| N5   | 15  | 5         | DFT-QPSK   | L       | Outer_Full | 8.19   | ≤13   | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | L       | Outer_Full | 8.26   | ≤13   | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | M       | Outer_Full | 8.48   | ≤13   | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | M       | Outer_Full | 8.33   | ≤13   | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | H       | Outer_Full | 8.41   | ≤13   | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | H       | Outer_Full | 8.32   | ≤13   | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | L       | Outer_Full | 8.08   | ≤13   | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | L       | Outer_Full | 8.53   | ≤13   | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | M       | Outer_Full | 8.04   | ≤13   | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | M       | Outer_Full | 8.79   | ≤13   | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | H       | Outer_Full | 8.12   | ≤13   | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | H       | Outer_Full | 8.77   | ≤13   | PASS    |
| N5   | 15  | 15        | DFT-QPSK   | L       | Outer_Full | 8.38   | ≤13   | PASS    |
| N5   | 15  | 15        | DFT-16QAM  | L       | Outer_Full | 8.16   | ≤13   | PASS    |
| N5   | 15  | 15        | DFT-QPSK   | M       | Outer_Full | 8.30   | ≤13   | PASS    |
| N5   | 15  | 15        | DFT-16QAM  | M       | Outer_Full | 8.20   | ≤13   | PASS    |
| N5   | 15  | 15        | DFT-QPSK   | H       | Outer_Full | 8.57   | ≤13   | PASS    |
| N5   | 15  | 15        | DFT-16QAM  | H       | Outer_Full | 8.37   | ≤13   | PASS    |
| N5   | 15  | 20        | DFT-QPSK   | L       | Outer_Full | 8.36   | ≤13   | PASS    |
| N5   | 15  | 20        | DFT-16QAM  | L       | Outer_Full | 8.33   | ≤13   | PASS    |
| N5   | 15  | 20        | DFT-QPSK   | M       | Outer_Full | 8.46   | ≤13   | PASS    |
| N5   | 15  | 20        | DFT-16QAM  | M       | Outer_Full | 8.38   | ≤13   | PASS    |
| N5   | 15  | 20        | DFT-QPSK   | H       | Outer_Full | 8.40   | ≤13   | PASS    |
| N5   | 15  | 20        | DFT-16QAM  | H       | Outer_Full | 8.35   | ≤13   | PASS    |

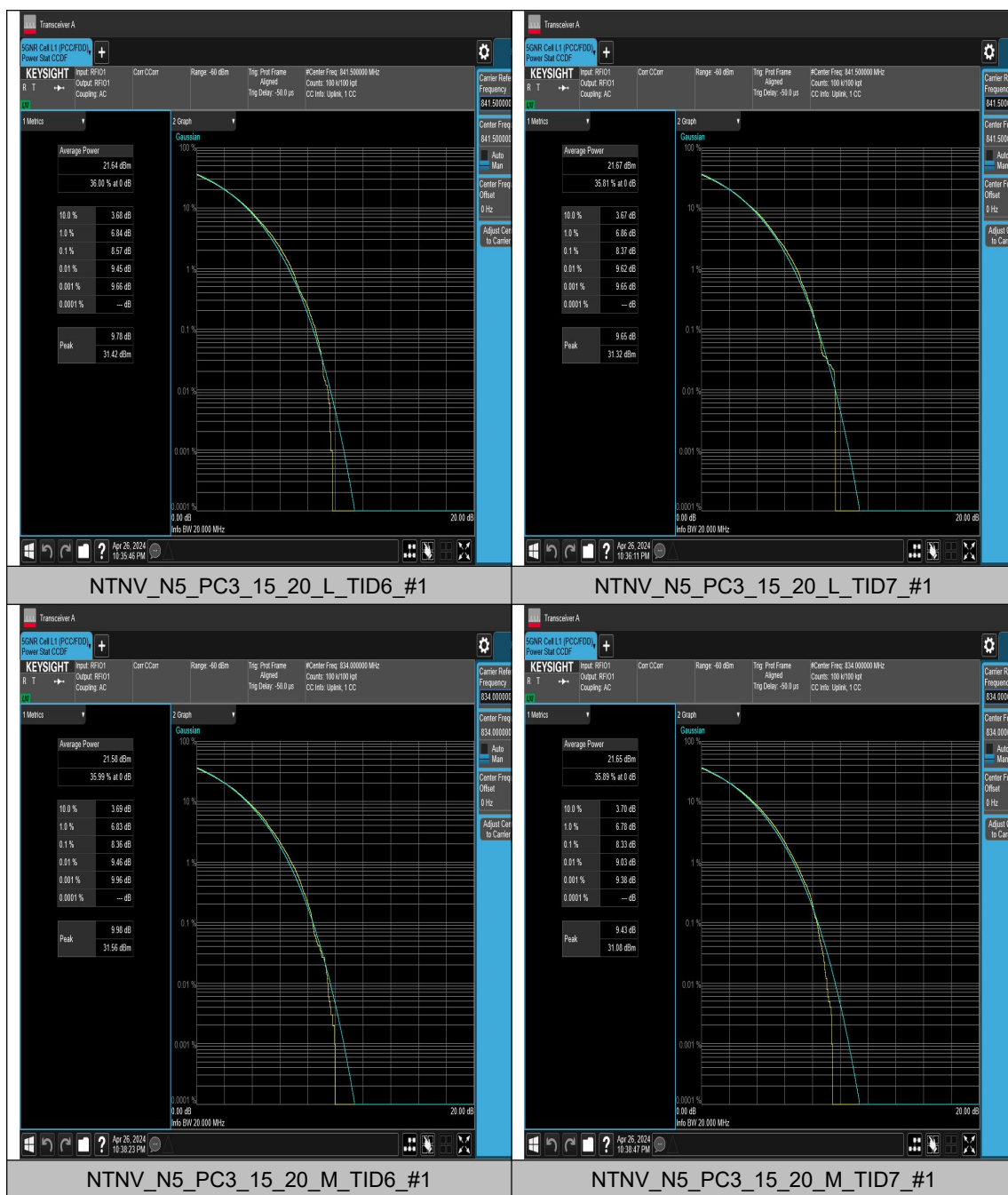
Test Graphs

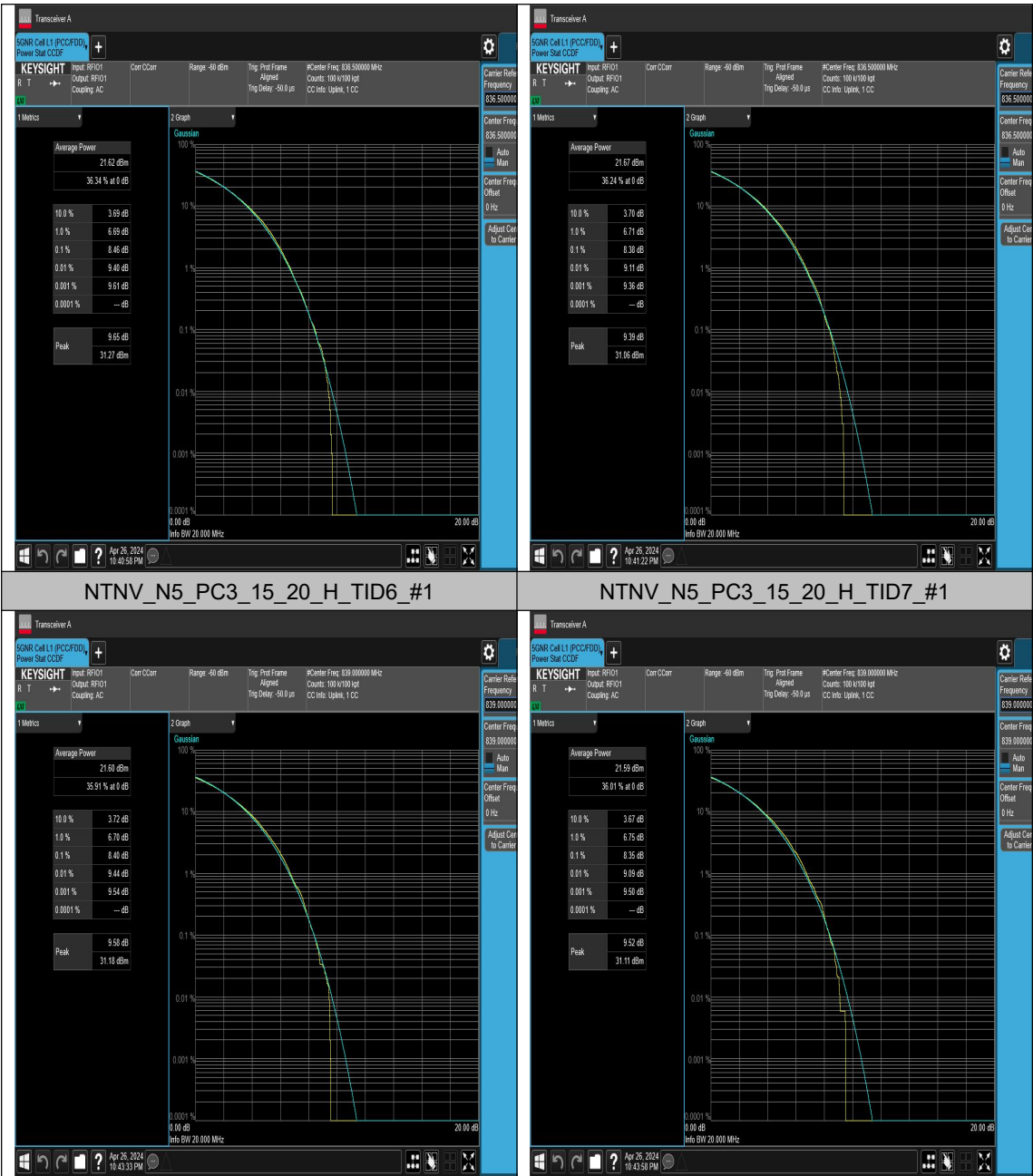












## Appendix C: 26dB Bandwidth and Occupied Bandwidth for SA

### Test Result

| Band | SCS | Bandwidth | Modulation | Channel | RB Config  | Result (99%) | Result (26dB) | Verdict |
|------|-----|-----------|------------|---------|------------|--------------|---------------|---------|
| N5   | 15  | 5         | DFT-QPSK   | L       | Outer_Full | 4.4692       | 4.854         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | L       | Outer_Full | 4.4573       | 4.810         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | M       | Outer_Full | 4.4700       | 4.874         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | M       | Outer_Full | 4.4580       | 4.813         | PASS    |
| N5   | 15  | 5         | DFT-QPSK   | H       | Outer_Full | 4.4691       | 4.854         | PASS    |
| N5   | 15  | 5         | DFT-16QAM  | H       | Outer_Full | 4.4547       | 4.802         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | L       | Outer_Full | 9.2757       | 9.804         | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | L       | Outer_Full | 9.2899       | 9.801         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | M       | Outer_Full | 9.2912       | 9.784         | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | M       | Outer_Full | 9.2845       | 9.817         | PASS    |
| N5   | 15  | 10        | DFT-QPSK   | H       | Outer_Full | 9.2726       | 9.775         | PASS    |
| N5   | 15  | 10        | DFT-16QAM  | H       | Outer_Full | 9.2843       | 9.775         | PASS    |
| N5   | 15  | 15        | DFT-QPSK   | L       | Outer_Full | 14.091       | 14.75         | PASS    |
| N5   | 15  | 15        | DFT-16QAM  | L       | Outer_Full | 14.112       | 14.77         | PASS    |
| N5   | 15  | 15        | DFT-QPSK   | M       | Outer_Full | 14.090       | 14.76         | PASS    |
| N5   | 15  | 15        | DFT-16QAM  | M       | Outer_Full | 14.097       | 14.74         | PASS    |
| N5   | 15  | 15        | DFT-QPSK   | H       | Outer_Full | 14.085       | 14.72         | PASS    |
| N5   | 15  | 15        | DFT-16QAM  | H       | Outer_Full | 14.086       | 14.74         | PASS    |
| N5   | 15  | 20        | DFT-QPSK   | L       | Outer_Full | 18.897       | 19.73         | PASS    |
| N5   | 15  | 20        | DFT-16QAM  | L       | Outer_Full | 18.883       | 19.80         | PASS    |
| N5   | 15  | 20        | DFT-QPSK   | M       | Outer_Full | 18.900       | 19.74         | PASS    |
| N5   | 15  | 20        | DFT-16QAM  | M       | Outer_Full | 18.901       | 19.76         | PASS    |
| N5   | 15  | 20        | DFT-QPSK   | H       | Outer_Full | 18.898       | 19.75         | PASS    |
| N5   | 15  | 20        | DFT-16QAM  | H       | Outer_Full | 18.886       | 19.81         | PASS    |

Test Graphs

