

Appendix for Band 5

Appendix A: Average Power Output Data

Test Result

Channel Bandwidth: 1.4 MHz

| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
|------------|---------|------------------|--------|---------------------|---------|
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 22.77 | PASS |
| | | 1 | 3 | 22.93 | PASS |
| | | 1 | 5 | 22.81 | PASS |
| | | 3 | 0 | 22.34 | PASS |
| | | 3 | 2 | 22.37 | PASS |
| | | 3 | 3 | 22.34 | PASS |
| | | 6 | 0 | 21.78 | PASS |
| | MCH | 1 | 0 | 22.84 | PASS |
| | | 1 | 3 | 23.03 | PASS |
| | | 1 | 5 | 22.91 | PASS |
| | | 3 | 0 | 22.34 | PASS |
| | | 3 | 2 | 22.33 | PASS |
| | | 3 | 3 | 22.32 | PASS |
| | | 6 | 0 | 21.84 | PASS |
| 16QAM | HCH | 1 | 0 | 23.03 | PASS |
| | | 1 | 3 | 23.17 | PASS |
| | | 1 | 5 | 23.04 | PASS |
| | | 3 | 0 | 22.14 | PASS |
| | | 3 | 2 | 22.19 | PASS |
| | | 3 | 3 | 22.16 | PASS |
| | | 6 | 0 | 22.07 | PASS |
| | LCH | 1 | 0 | 22.06 | PASS |
| | | 1 | 3 | 22.22 | PASS |
| | | 1 | 5 | 22.05 | PASS |
| | | 3 | 0 | 22.01 | PASS |
| | | 3 | 2 | 21.99 | PASS |
| | | 3 | 3 | 21.93 | PASS |
| | | 6 | 0 | 20.78 | PASS |
| | MCH | 1 | 0 | 22.31 | PASS |
| | | 1 | 3 | 22.44 | PASS |
| | | 1 | 5 | 22.28 | PASS |
| | | 3 | 0 | 21.95 | PASS |
| | | 3 | 2 | 21.99 | PASS |

| | | | | | |
|-----|-----|---|---|-------|------|
| | | 3 | 3 | 21.97 | PASS |
| | | 6 | 0 | 20.84 | PASS |
| HCH | HCH | 1 | 0 | 22.33 | PASS |
| | | 1 | 3 | 22.43 | PASS |
| | | 1 | 5 | 22.36 | PASS |
| | | 3 | 0 | 22.19 | PASS |
| | | 3 | 2 | 22.21 | PASS |
| | | 3 | 3 | 22.22 | PASS |
| | | 6 | 0 | 21.14 | PASS |
| | | | | | |

Channel Bandwidth: 3 MHz

| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
|------------|---------|------------------|--------|---------------------|---------|
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 22.75 | PASS |
| | | 1 | 7 | 23.06 | PASS |
| | | 1 | 14 | 22.83 | PASS |
| | | 8 | 0 | 21.77 | PASS |
| | | 8 | 4 | 21.82 | PASS |
| | | 8 | 7 | 21.79 | PASS |
| | | 15 | 0 | 21.77 | PASS |
| | MCH | 1 | 0 | 22.87 | PASS |
| | | 1 | 7 | 23.10 | PASS |
| | | 1 | 14 | 22.83 | PASS |
| | | 8 | 0 | 21.85 | PASS |
| | | 8 | 4 | 21.89 | PASS |
| | | 8 | 7 | 21.83 | PASS |
| | | 15 | 0 | 21.79 | PASS |
| | HCH | 1 | 0 | 23.08 | PASS |
| | | 1 | 7 | 23.17 | PASS |
| | | 1 | 14 | 23.08 | PASS |
| | | 8 | 0 | 22.00 | PASS |
| | | 8 | 4 | 22.06 | PASS |
| | | 8 | 7 | 21.98 | PASS |
| | | 15 | 0 | 22.04 | PASS |
| 16QAM | LCH | 1 | 0 | 22.06 | PASS |
| | | 1 | 7 | 22.34 | PASS |
| | | 1 | 14 | 22.18 | PASS |
| | | 8 | 0 | 20.86 | PASS |
| | | 8 | 4 | 20.93 | PASS |
| | | 8 | 7 | 20.86 | PASS |
| | | 15 | 0 | 20.77 | PASS |
| | MCH | 1 | 0 | 22.38 | PASS |

| | | | | | |
|--|-----|----|----|-------|------|
| | | 1 | 7 | 22.47 | PASS |
| | | 1 | 14 | 22.30 | PASS |
| | | 8 | 0 | 20.90 | PASS |
| | | 8 | 4 | 20.89 | PASS |
| | | 8 | 7 | 20.85 | PASS |
| | | 15 | 0 | 20.84 | PASS |
| | HCH | 1 | 0 | 22.41 | PASS |
| | | 1 | 7 | 22.48 | PASS |
| | | 1 | 14 | 22.39 | PASS |
| | | 8 | 0 | 20.98 | PASS |
| | | 8 | 4 | 21.06 | PASS |
| | | 8 | 7 | 21.01 | PASS |
| | | 15 | 0 | 21.03 | PASS |

Channel Bandwidth: 5 MHz

| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
|------------|---------|------------------|--------|---------------------|---------|
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 22.73 | PASS |
| | | 1 | 12 | 22.95 | PASS |
| | | 1 | 24 | 22.83 | PASS |
| | | 12 | 0 | 21.74 | PASS |
| | | 12 | 6 | 21.88 | PASS |
| | | 12 | 13 | 21.81 | PASS |
| | | 25 | 0 | 21.81 | PASS |
| | MCH | 1 | 0 | 22.80 | PASS |
| | | 1 | 12 | 22.91 | PASS |
| | | 1 | 24 | 22.79 | PASS |
| | | 12 | 0 | 21.87 | PASS |
| | | 12 | 6 | 21.91 | PASS |
| | | 12 | 13 | 21.82 | PASS |
| | | 25 | 0 | 21.85 | PASS |
| | HCH | 1 | 0 | 22.97 | PASS |
| | | 1 | 12 | 23.39 | PASS |
| | | 1 | 24 | 23.06 | PASS |
| | | 12 | 0 | 21.97 | PASS |
| | | 12 | 6 | 22.05 | PASS |
| | | 12 | 13 | 21.92 | PASS |
| | | 25 | 0 | 22.00 | PASS |
| 16QAM | LCH | 1 | 0 | 22.08 | PASS |
| | | 1 | 12 | 22.40 | PASS |
| | | 1 | 24 | 22.09 | PASS |
| | | 12 | 0 | 20.89 | PASS |

| | | | | | |
|-----|--|----|----|-------|------|
| | | 12 | 6 | 20.94 | PASS |
| | | 12 | 13 | 20.91 | PASS |
| | | 25 | 0 | 20.86 | PASS |
| MCH | | 1 | 0 | 22.09 | PASS |
| | | 1 | 12 | 22.47 | PASS |
| | | 1 | 24 | 22.11 | PASS |
| | | 12 | 0 | 20.98 | PASS |
| | | 12 | 6 | 21.04 | PASS |
| | | 12 | 13 | 21.01 | PASS |
| | | 25 | 0 | 20.89 | PASS |
| HCH | | 1 | 0 | 22.22 | PASS |
| | | 1 | 12 | 22.39 | PASS |
| | | 1 | 24 | 22.20 | PASS |
| | | 12 | 0 | 20.96 | PASS |
| | | 12 | 6 | 21.05 | PASS |
| | | 12 | 13 | 20.95 | PASS |
| | | 25 | 0 | 21.06 | PASS |

Channel Bandwidth: 10 MHz

| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
|------------|---------|------------------|--------|---------------------|---------|
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 22.80 | PASS |
| | | 1 | 24 | 23.45 | PASS |
| | | 1 | 49 | 22.85 | PASS |
| | | 25 | 0 | 22.44 | PASS |
| | | 25 | 12 | 22.46 | PASS |
| | | 25 | 25 | 22.36 | PASS |
| | | 50 | 0 | 22.31 | PASS |
| | MCH | 1 | 0 | 22.86 | PASS |
| | | 1 | 24 | 23.35 | PASS |
| | | 1 | 49 | 22.87 | PASS |
| | | 25 | 0 | 21.93 | PASS |
| | | 25 | 12 | 21.91 | PASS |
| | | 25 | 25 | 21.89 | PASS |
| | | 50 | 0 | 21.82 | PASS |
| | HCH | 1 | 0 | 22.92 | PASS |
| | | 1 | 24 | 23.38 | PASS |
| | | 1 | 49 | 23.07 | PASS |
| | | 25 | 0 | 22.06 | PASS |
| | | 25 | 12 | 22.05 | PASS |
| | | 25 | 25 | 22.07 | PASS |
| | | 50 | 0 | 22.05 | PASS |

| | | | | | |
|-------|-----|----|----|-------|------|
| 16QAM | LCH | 1 | 0 | 22.15 | PASS |
| | | 1 | 24 | 22.33 | PASS |
| | | 1 | 49 | 22.16 | PASS |
| | | 25 | 0 | 20.99 | PASS |
| | | 25 | 12 | 20.91 | PASS |
| | | 25 | 25 | 20.97 | PASS |
| | | 50 | 0 | 20.92 | PASS |
| | MCH | 1 | 0 | 22.37 | PASS |
| | | 1 | 24 | 22.42 | PASS |
| | | 1 | 49 | 22.35 | PASS |
| | | 25 | 0 | 20.97 | PASS |
| | | 25 | 12 | 20.99 | PASS |
| | | 25 | 25 | 20.94 | PASS |
| | | 50 | 0 | 20.96 | PASS |
| | HCH | 1 | 0 | 22.27 | PASS |
| | | 1 | 24 | 22.31 | PASS |
| | | 1 | 49 | 22.41 | PASS |
| | | 25 | 0 | 21.14 | PASS |
| | | 25 | 12 | 21.06 | PASS |
| | | 25 | 25 | 21.13 | PASS |
| | | 50 | 0 | 21.15 | PASS |

Appendix B: Peak-to-Average Ratio

Test Result

Channel Bandwidth: 1.4 MHz

| Channel Bandwidth: 1.4 MHz | | | | | | |
|----------------------------|---------|------------------|--------|-------------------------------|---------------|---------|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio (dB) | Limit (dB) | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 1 | 0 | 5.05 | <13 | PASS |
| | | 1 | 3 | 5.12 | <13 | PASS |
| | | 1 | 5 | 5.29 | <13 | PASS |
| | | 3 | 0 | 5.4 | <13 | PASS |
| | | 3 | 2 | 5.38 | <13 | PASS |
| | | 3 | 3 | 5.42 | <13 | PASS |
| | | 6 | 0 | 5.65 | <13 | PASS |
| | MCH | 1 | 0 | 5.51 | <13 | PASS |
| | | 1 | 3 | 5.52 | <13 | PASS |
| | | 1 | 5 | 5.6 | <13 | PASS |
| | | 3 | 0 | 5.65 | <13 | PASS |
| | | 3 | 2 | 5.61 | <13 | PASS |
| | | 3 | 3 | 5.7 | <13 | PASS |
| | | 6 | 0 | 5.77 | <13 | PASS |
| 16QAM | LCH | 1 | 0 | 5.5 | <13 | PASS |
| | | 1 | 3 | 5.26 | <13 | PASS |
| | | 1 | 5 | 5.17 | <13 | PASS |
| | | 3 | 0 | 5.38 | <13 | PASS |
| | | 3 | 2 | 5.33 | <13 | PASS |
| | | 3 | 3 | 5.31 | <13 | PASS |
| | | 6 | 0 | 5.69 | <13 | PASS |
| | MCH | 1 | 0 | 6.46 | <13 | PASS |
| | | 1 | 3 | 6.38 | <13 | PASS |
| | | 1 | 5 | 6.39 | <13 | PASS |
| | | 3 | 0 | 6.44 | <13 | PASS |
| | | 3 | 2 | 6.44 | <13 | PASS |
| | | 3 | 3 | 6.45 | <13 | PASS |
| | | 6 | 0 | 6.54 | <13 | PASS |

| | | | | | | |
|-----|--|---|---|------|-----|------|
| | | 3 | 2 | 6.42 | <13 | PASS |
| | | 3 | 3 | 6.39 | <13 | PASS |
| | | 6 | 0 | 6.79 | <13 | PASS |
| HCH | | 1 | 0 | 6.3 | <13 | PASS |
| | | 1 | 3 | 6.12 | <13 | PASS |
| | | 1 | 5 | 6.3 | <13 | PASS |
| | | 3 | 0 | 6.47 | <13 | PASS |
| | | 3 | 2 | 6.34 | <13 | PASS |
| | | 3 | 3 | 6.39 | <13 | PASS |
| | | 6 | 0 | 6.69 | <13 | PASS |

Channel Bandwidth: 3 MHz

| Channel Bandwidth: 3 MHz | | | | | | |
|--------------------------|---------|------------------|--------|-------------------------------|---------------|---------|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 1 | 0 | 5.42 | <13 | PASS |
| | | 1 | 7 | 5.41 | <13 | PASS |
| | | 1 | 14 | 5.49 | <13 | PASS |
| | | 8 | 0 | 5.79 | <13 | PASS |
| | | 8 | 4 | 5.8 | <13 | PASS |
| | | 8 | 7 | 5.82 | <13 | PASS |
| | | 15 | 0 | 5.74 | <13 | PASS |
| | MCH | 1 | 0 | 5.25 | <13 | PASS |
| | | 1 | 7 | 5.3 | <13 | PASS |
| | | 1 | 14 | 5.29 | <13 | PASS |
| | | 8 | 0 | 5.85 | <13 | PASS |
| | | 8 | 4 | 5.76 | <13 | PASS |
| | | 8 | 7 | 5.85 | <13 | PASS |
| | | 15 | 0 | 5.95 | <13 | PASS |
| | HCH | 1 | 0 | 5.42 | <13 | PASS |
| | | 1 | 7 | 5.29 | <13 | PASS |
| | | 1 | 14 | 5.25 | <13 | PASS |
| | | 8 | 0 | 5.8 | <13 | PASS |
| | | 8 | 4 | 5.74 | <13 | PASS |
| | | 8 | 7 | 5.77 | <13 | PASS |
| | | 15 | 0 | 5.65 | <13 | PASS |
| 16QAM | LCH | 1 | 0 | 6.44 | <13 | PASS |
| | | 1 | 7 | 6.32 | <13 | PASS |
| | | 1 | 14 | 6.63 | <13 | PASS |
| | | 8 | 0 | 6.52 | <13 | PASS |
| | | 8 | 4 | 6.47 | <13 | PASS |

| | | | | | | |
|-----|--|----|----|------|-----|------|
| | | 8 | 7 | 6.42 | <13 | PASS |
| | | 15 | 0 | 6.7 | <13 | PASS |
| MCH | | 1 | 0 | 6.41 | <13 | PASS |
| | | 1 | 7 | 6.15 | <13 | PASS |
| | | 1 | 14 | 6.11 | <13 | PASS |
| | | 8 | 0 | 6.53 | <13 | PASS |
| | | 8 | 4 | 6.49 | <13 | PASS |
| | | 8 | 7 | 6.46 | <13 | PASS |
| | | 15 | 0 | 6.59 | <13 | PASS |
| HCH | | 1 | 0 | 6.39 | <13 | PASS |
| | | 1 | 7 | 6.26 | <13 | PASS |
| | | 1 | 14 | 6.45 | <13 | PASS |
| | | 8 | 0 | 6.82 | <13 | PASS |
| | | 8 | 4 | 6.8 | <13 | PASS |
| | | 8 | 7 | 6.78 | <13 | PASS |
| | | 15 | 0 | 6.48 | <13 | PASS |

Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | | |
|--------------------------|---------|------------------|--------|-------------------------------|---------------|---------|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 1 | 0 | 5.83 | <13 | PASS |
| | | 1 | 12 | 5.7 | <13 | PASS |
| | | 1 | 24 | 5.91 | <13 | PASS |
| | | 12 | 0 | 5.85 | <13 | PASS |
| | | 12 | 6 | 5.8 | <13 | PASS |
| | | 12 | 13 | 5.86 | <13 | PASS |
| | | 25 | 0 | 5.82 | <13 | PASS |
| | MCH | 1 | 0 | 5.6 | <13 | PASS |
| | | 1 | 12 | 5.46 | <13 | PASS |
| | | 1 | 24 | 5.62 | <13 | PASS |
| | | 12 | 0 | 5.72 | <13 | PASS |
| | | 12 | 6 | 5.66 | <13 | PASS |
| | | 12 | 13 | 5.74 | <13 | PASS |
| | | 25 | 0 | 5.8 | <13 | PASS |
| | HCH | 1 | 0 | 5.56 | <13 | PASS |
| | | 1 | 12 | 5.3 | <13 | PASS |
| | | 1 | 24 | 5.18 | <13 | PASS |
| | | 12 | 0 | 5.73 | <13 | PASS |
| | | 12 | 6 | 5.77 | <13 | PASS |
| | | 12 | 13 | 5.8 | <13 | PASS |

| | | | | | | |
|-------|-----|----|----|------|-----|------|
| | | 25 | 0 | 5.77 | <13 | PASS |
| 16QAM | LCH | 1 | 0 | 6.42 | <13 | PASS |
| | | 1 | 12 | 6.45 | <13 | PASS |
| | | 1 | 24 | 6.57 | <13 | PASS |
| | | 12 | 0 | 6.69 | <13 | PASS |
| | | 12 | 6 | 6.71 | <13 | PASS |
| | | 12 | 13 | 6.7 | <13 | PASS |
| | | 25 | 0 | 6.47 | <13 | PASS |
| | MCH | 1 | 0 | 6.52 | <13 | PASS |
| | | 1 | 12 | 6.48 | <13 | PASS |
| | | 1 | 24 | 6.62 | <13 | PASS |
| | | 12 | 0 | 6.56 | <13 | PASS |
| | | 12 | 6 | 6.53 | <13 | PASS |
| | | 12 | 13 | 6.58 | <13 | PASS |
| | | 25 | 0 | 6.64 | <13 | PASS |
| | HCH | 1 | 0 | 6.45 | <13 | PASS |
| | | 1 | 12 | 6.12 | <13 | PASS |
| | | 1 | 24 | 6.21 | <13 | PASS |
| | | 12 | 0 | 6.62 | <13 | PASS |
| | | 12 | 6 | 6.52 | <13 | PASS |
| | | 12 | 13 | 6.53 | <13 | PASS |
| | | 25 | 0 | 6.47 | <13 | PASS |

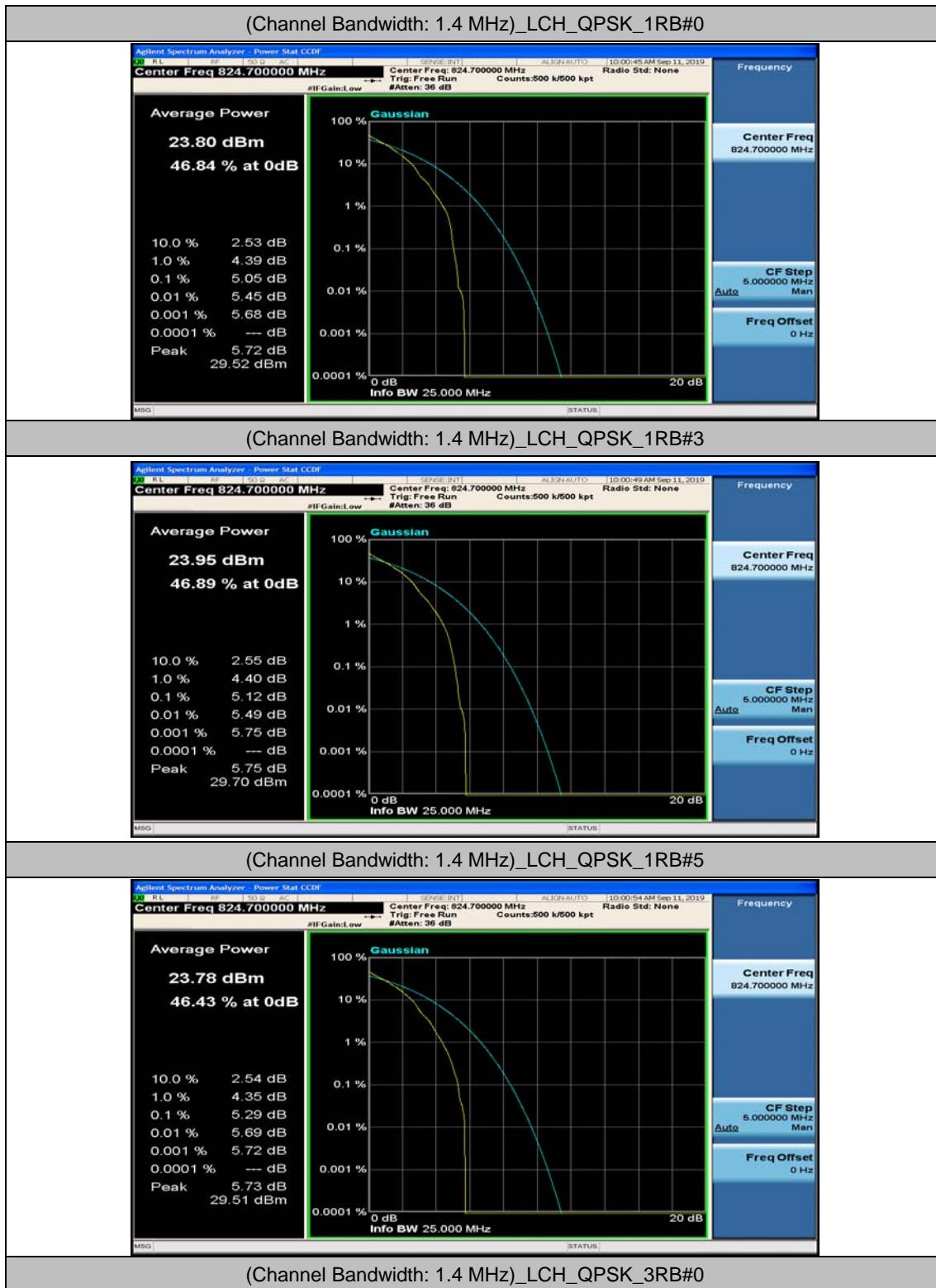
Channel Bandwidth: 10 MHz

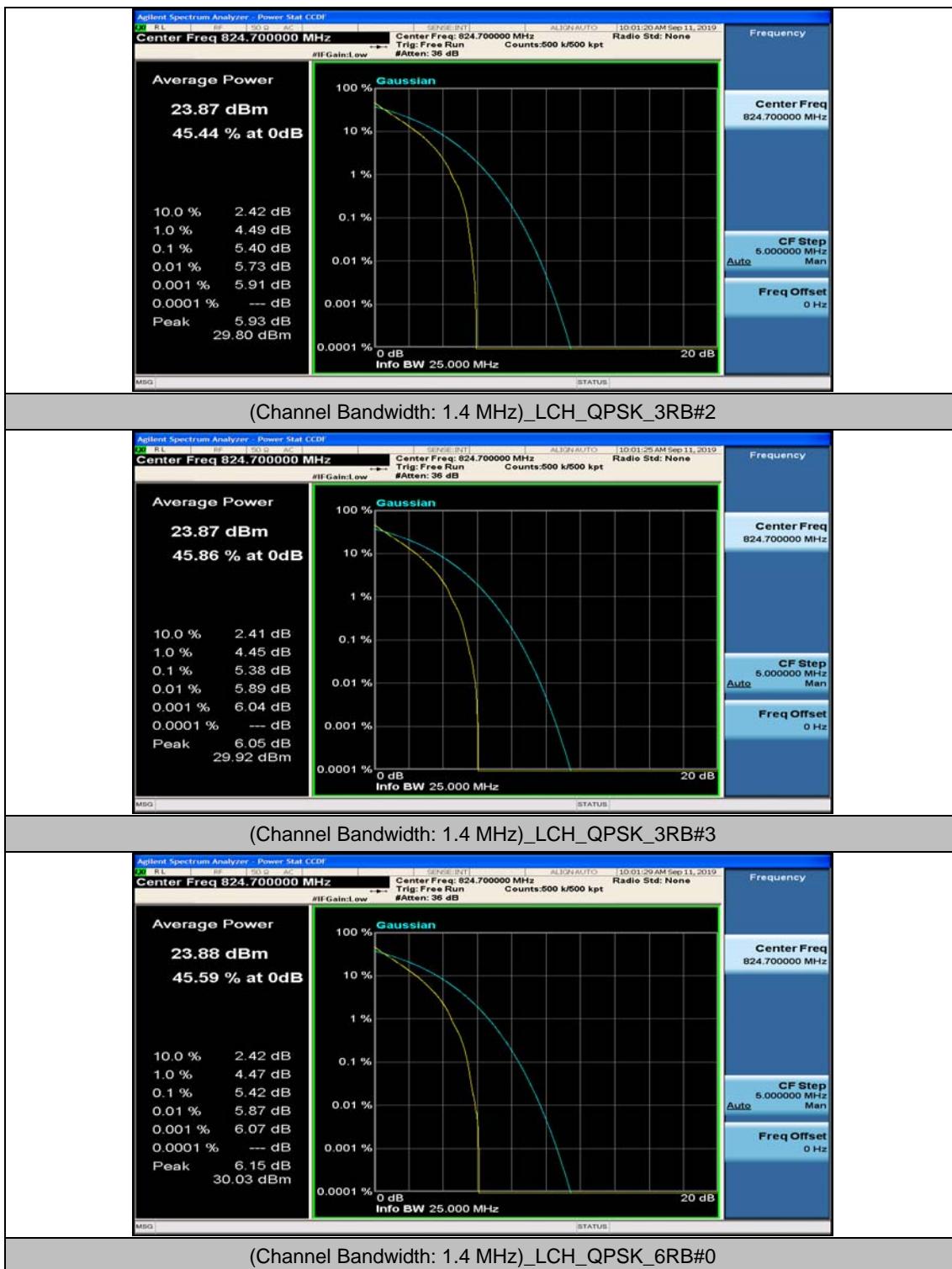
| Channel Bandwidth: 10 MHz | | | | | | |
|---------------------------|---------|------------------|--------|-------------------------------|---------------|---------|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 1 | 0 | 5.5 | <13 | PASS |
| | | 1 | 24 | 5.51 | <13 | PASS |
| | | 1 | 49 | 5.48 | <13 | PASS |
| | | 25 | 0 | 5.85 | <13 | PASS |
| | | 25 | 12 | 5.84 | <13 | PASS |
| | | 25 | 25 | 5.86 | <13 | PASS |
| | | 50 | 0 | 5.81 | <13 | PASS |
| | MCH | 1 | 0 | 5.38 | <13 | PASS |
| | | 1 | 24 | 5.26 | <13 | PASS |
| | | 1 | 49 | 5.23 | <13 | PASS |
| | | 25 | 0 | 5.85 | <13 | PASS |
| | | 25 | 12 | 5.84 | <13 | PASS |
| | | 25 | 25 | 5.81 | <13 | PASS |
| | | 50 | 0 | 5.82 | <13 | PASS |

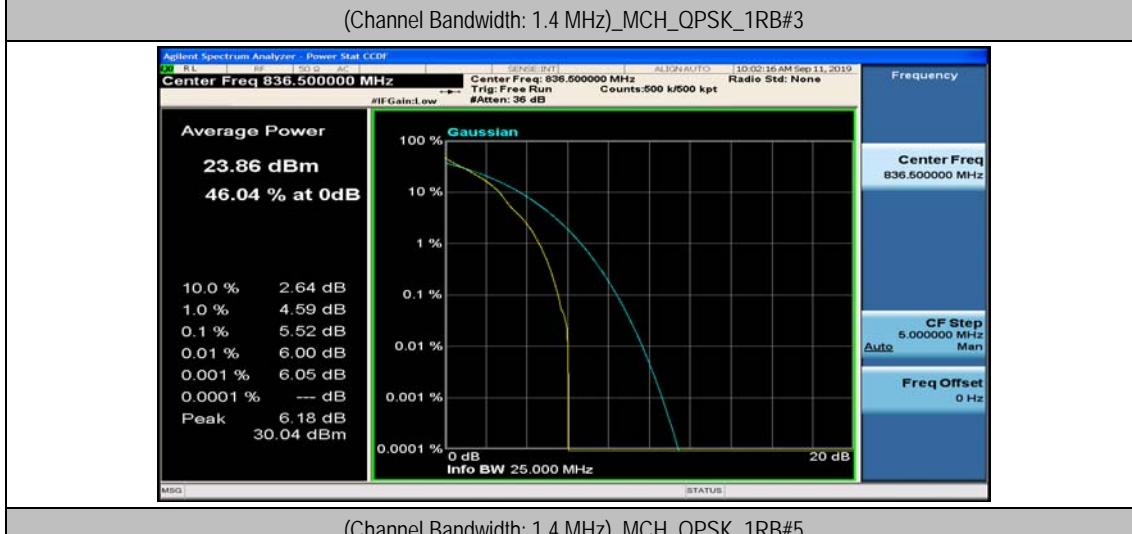
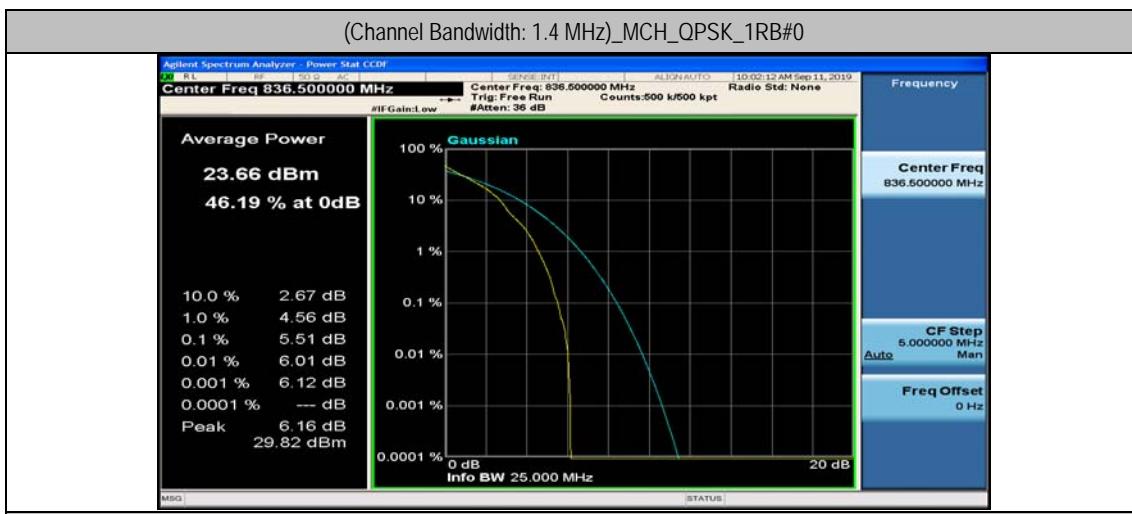
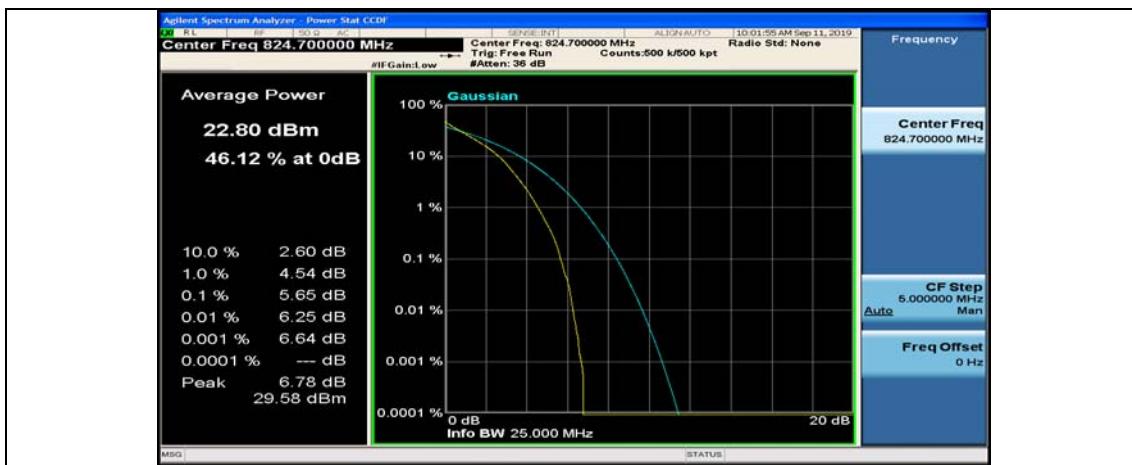
| | | | | | | |
|-------|-----|----|----|------|-----|------|
| | | 1 | 0 | 5.51 | <13 | PASS |
| | | 1 | 24 | 5.37 | <13 | PASS |
| | | 1 | 49 | 5.38 | <13 | PASS |
| | HCH | 25 | 0 | 5.75 | <13 | PASS |
| | | 25 | 12 | 5.74 | <13 | PASS |
| | | 25 | 25 | 5.64 | <13 | PASS |
| | | 50 | 0 | 5.82 | <13 | PASS |
| 16QAM | LCH | 1 | 0 | 6.27 | <13 | PASS |
| | | 1 | 24 | 6.51 | <13 | PASS |
| | | 1 | 49 | 6.64 | <13 | PASS |
| | | 25 | 0 | 6.67 | <13 | PASS |
| | | 25 | 12 | 6.71 | <13 | PASS |
| | | 25 | 25 | 6.71 | <13 | PASS |
| | | 50 | 0 | 6.54 | <13 | PASS |
| | MCH | 1 | 0 | 6.35 | <13 | PASS |
| | | 1 | 24 | 6.32 | <13 | PASS |
| | | 1 | 49 | 6.39 | <13 | PASS |
| | | 25 | 0 | 6.68 | <13 | PASS |
| | | 25 | 12 | 6.6 | <13 | PASS |
| | | 25 | 25 | 6.68 | <13 | PASS |
| | | 50 | 0 | 6.55 | <13 | PASS |
| | HCH | 1 | 0 | 6.74 | <13 | PASS |
| | | 1 | 24 | 6.44 | <13 | PASS |
| | | 1 | 49 | 6.33 | <13 | PASS |
| | | 25 | 0 | 6.72 | <13 | PASS |
| | | 25 | 12 | 6.67 | <13 | PASS |
| | | 25 | 25 | 6.53 | <13 | PASS |
| | | 50 | 0 | 6.54 | <13 | PASS |

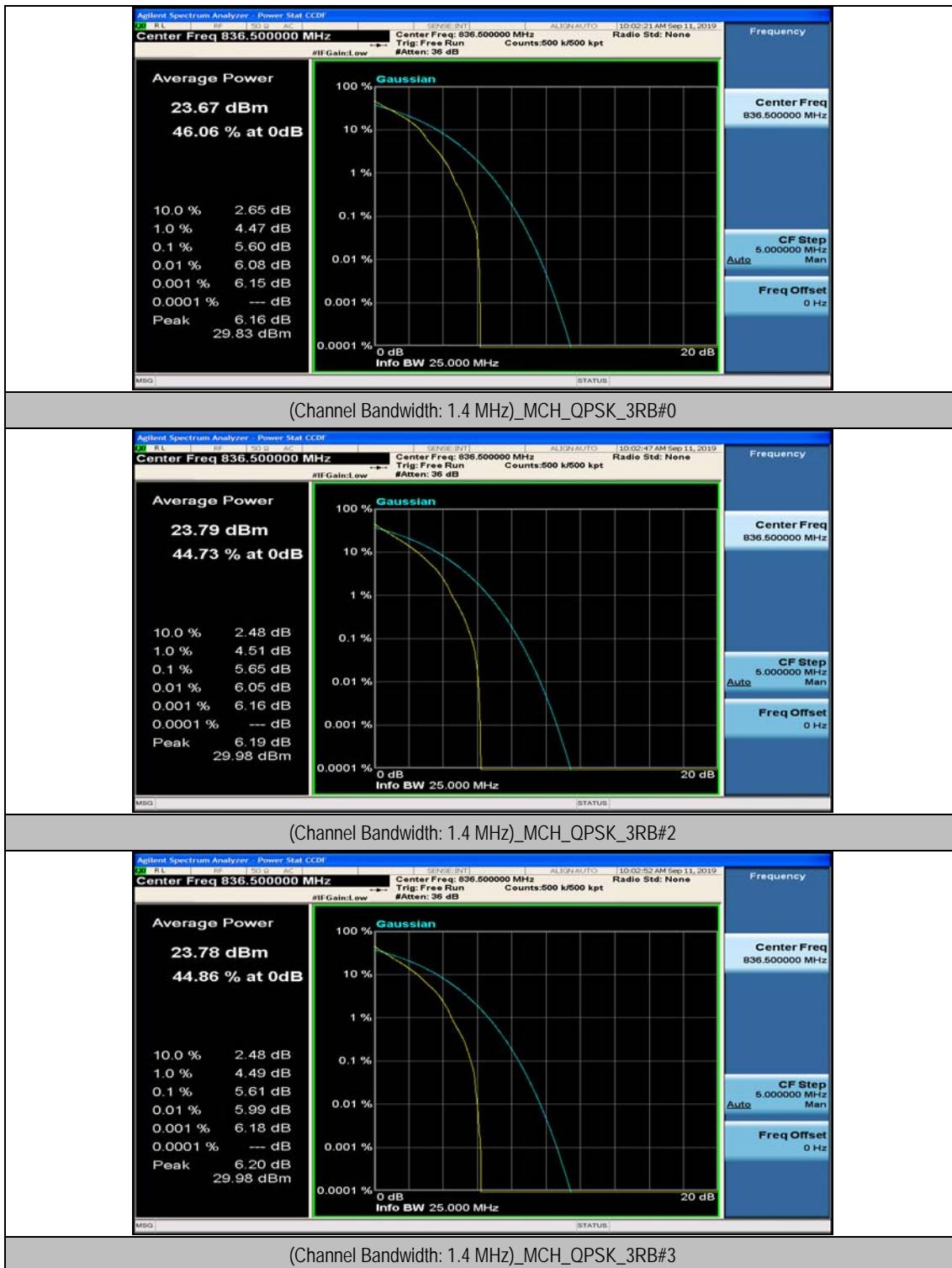
Test Graphs

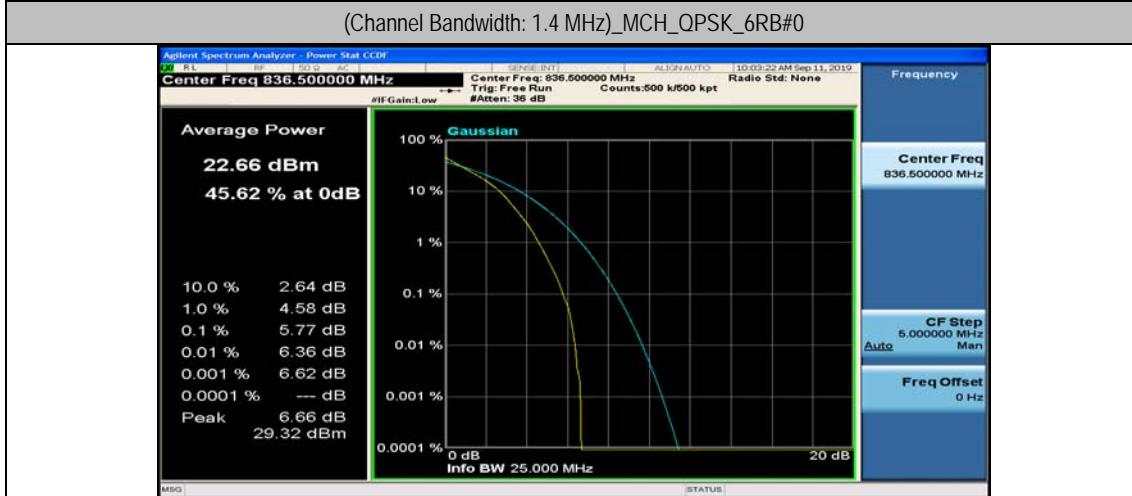
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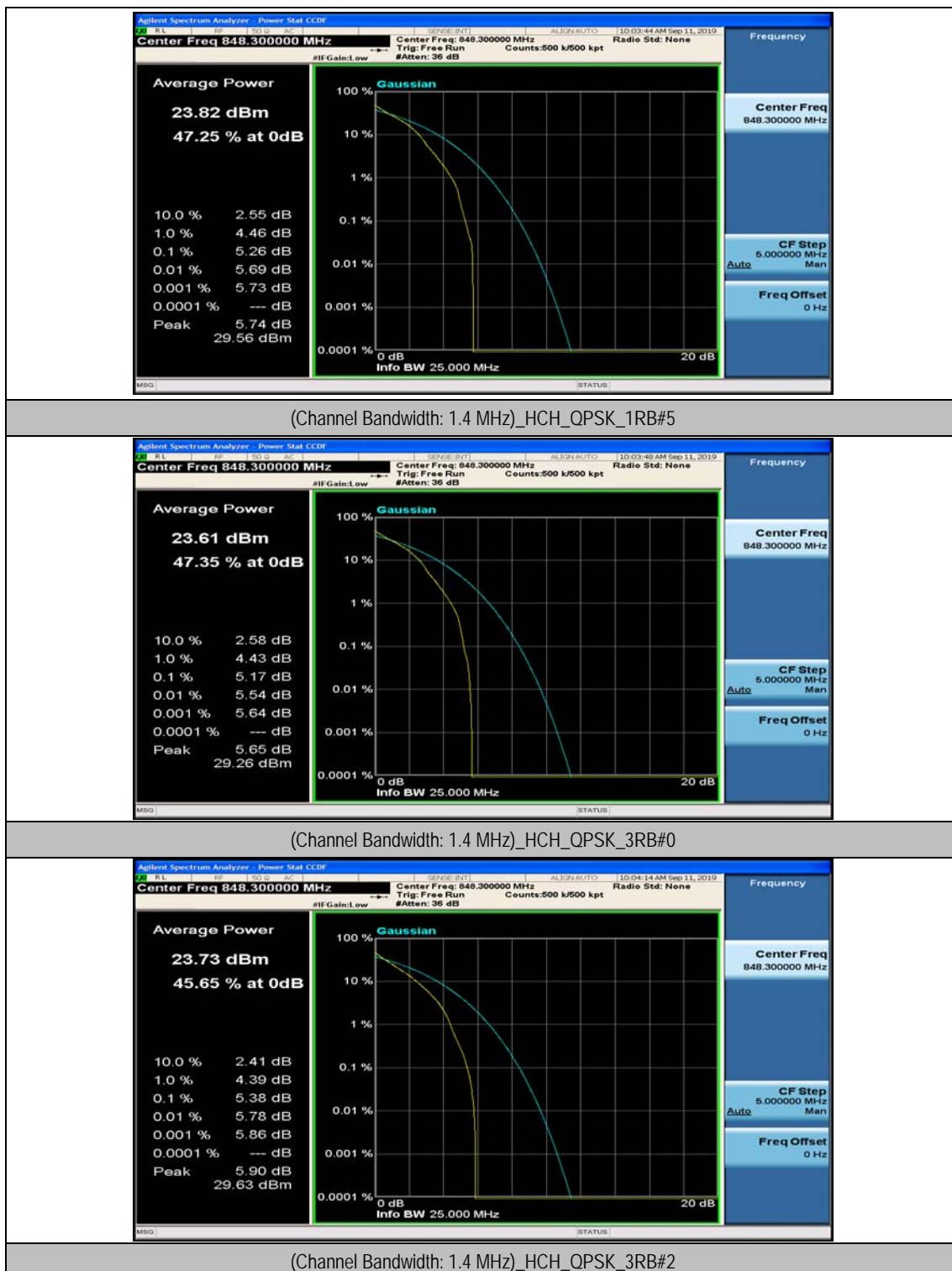


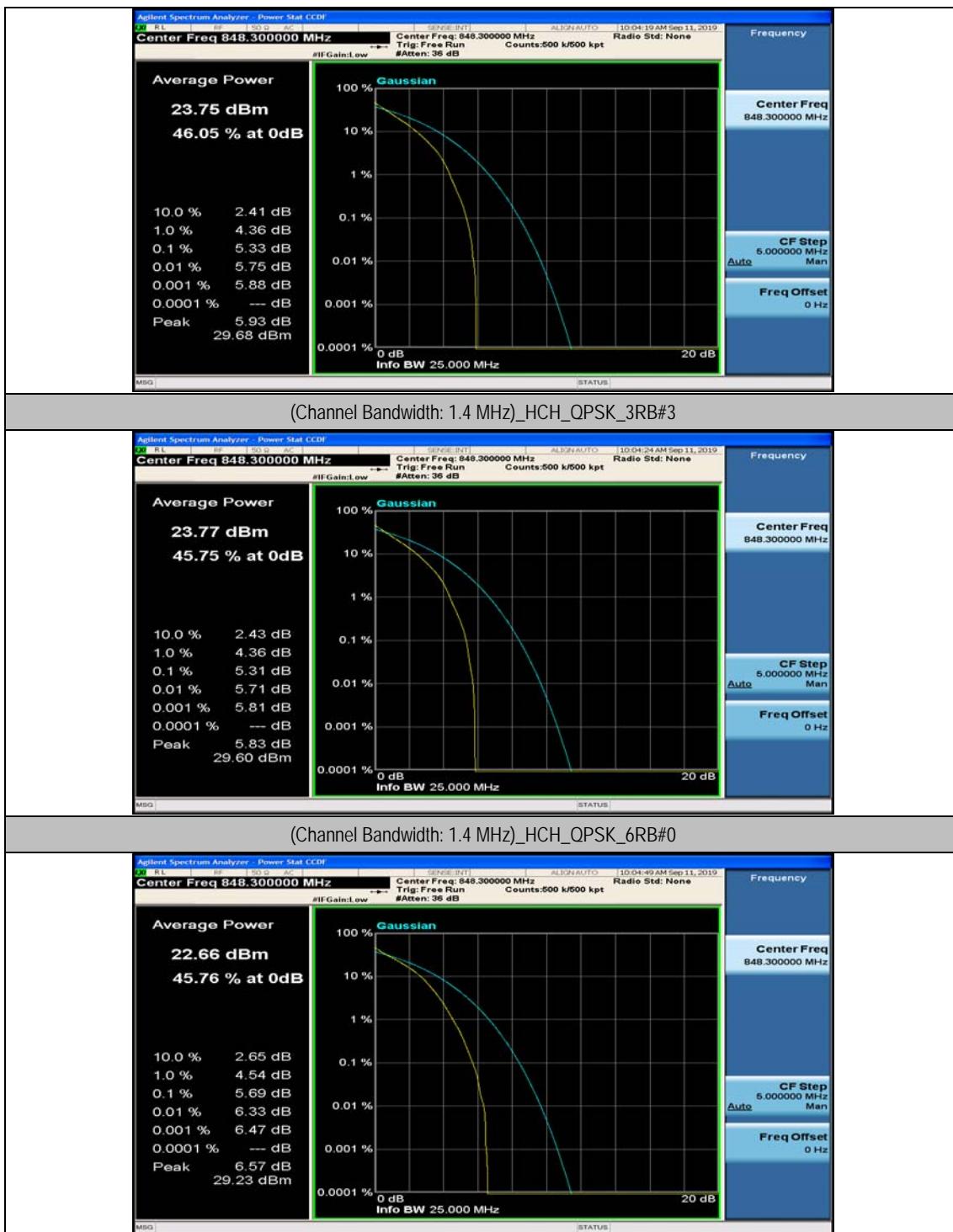


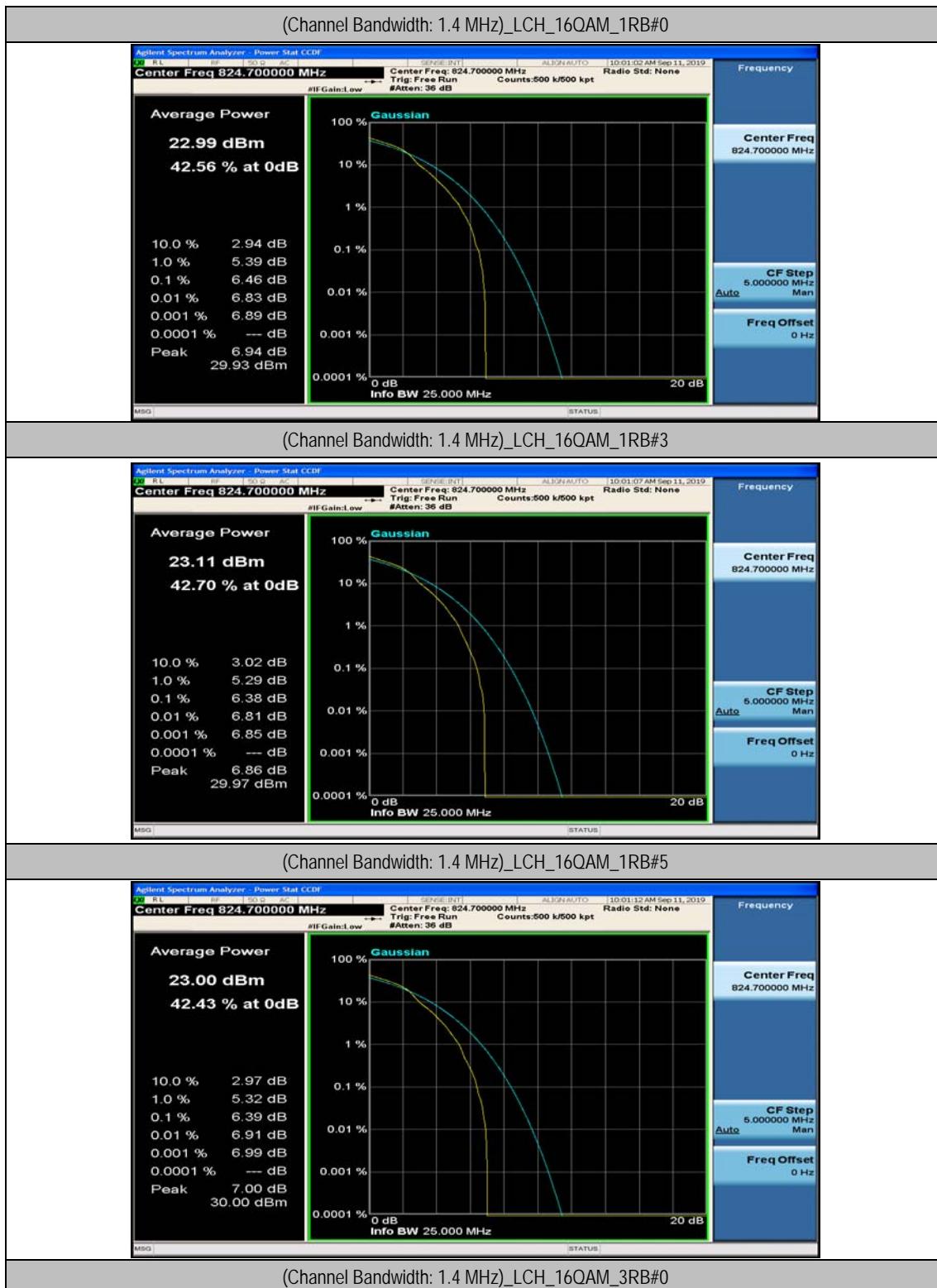


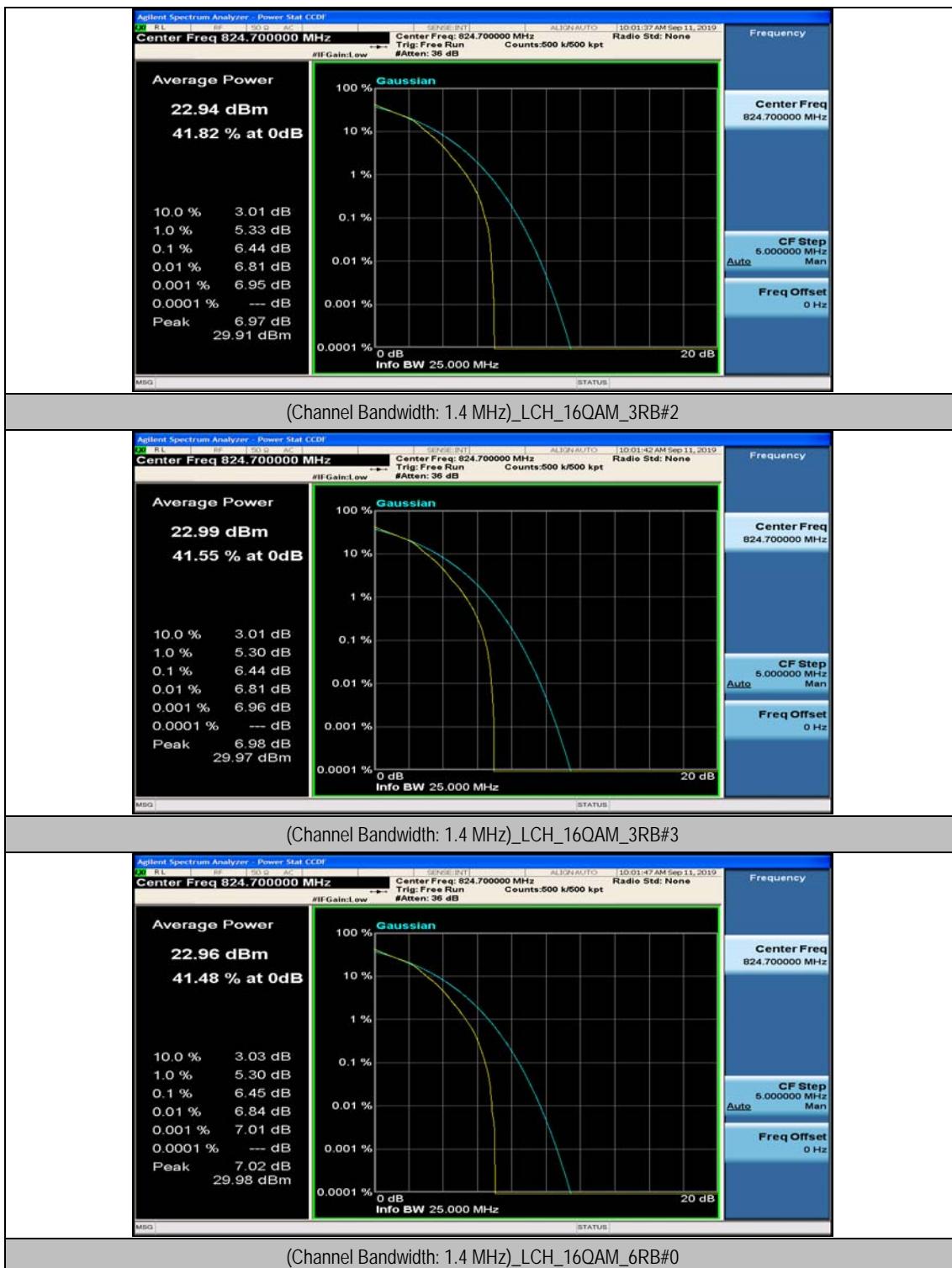


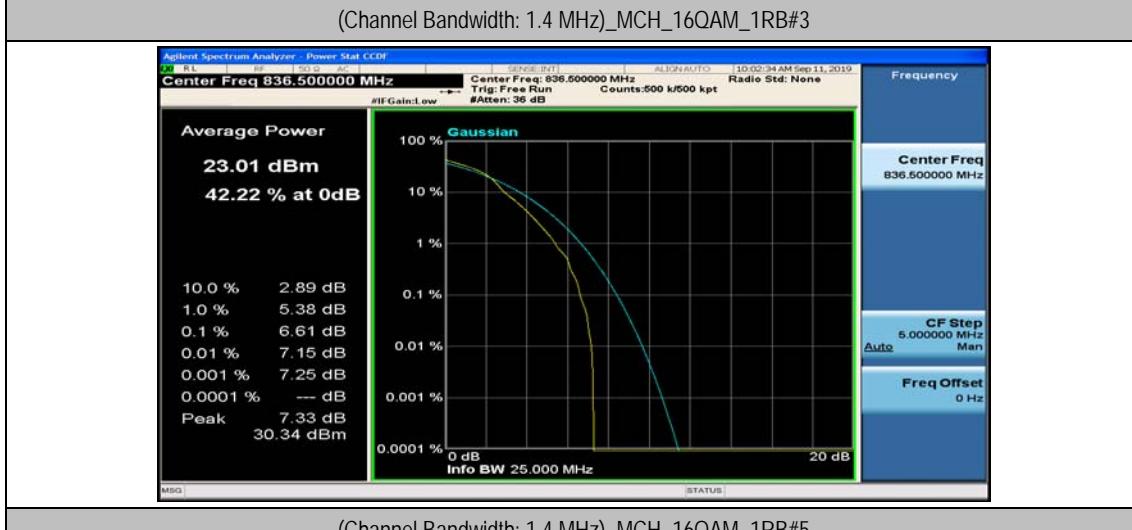
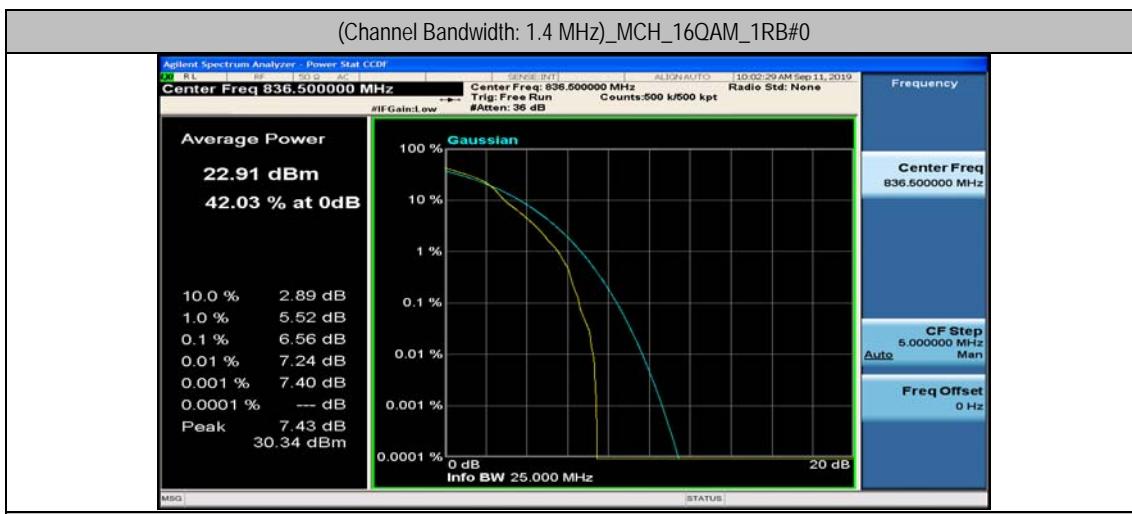


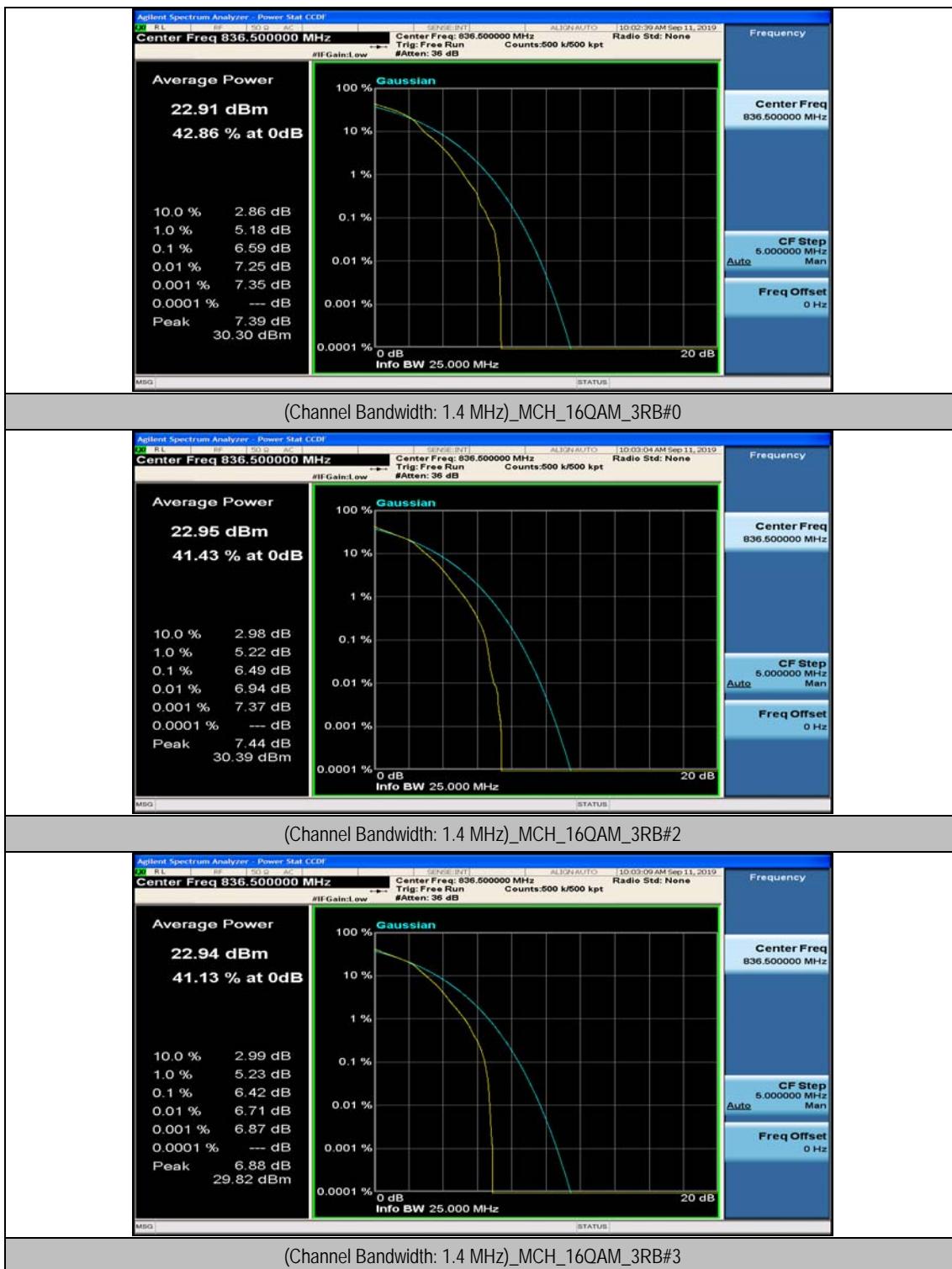


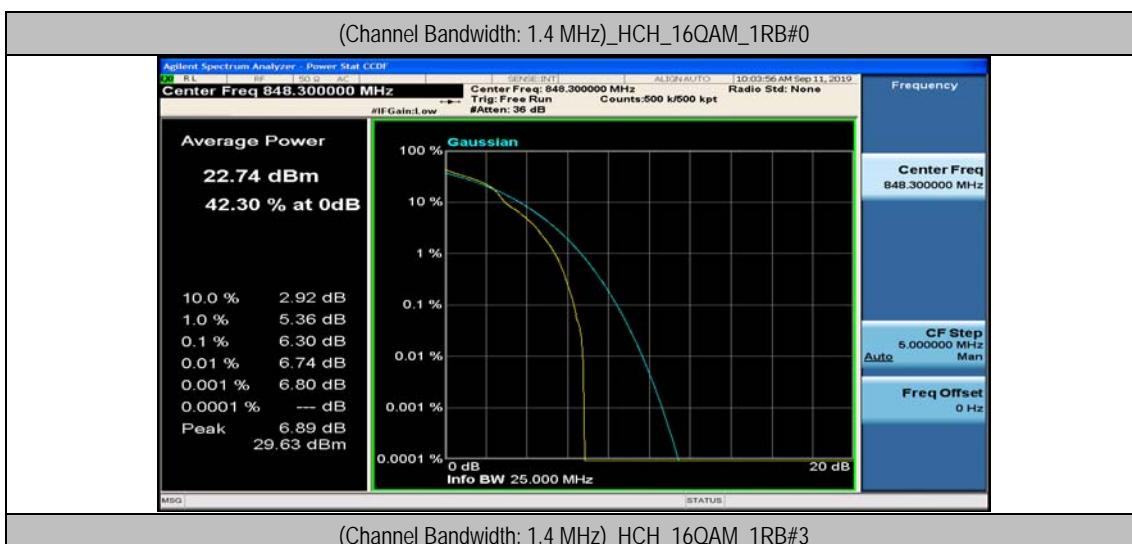
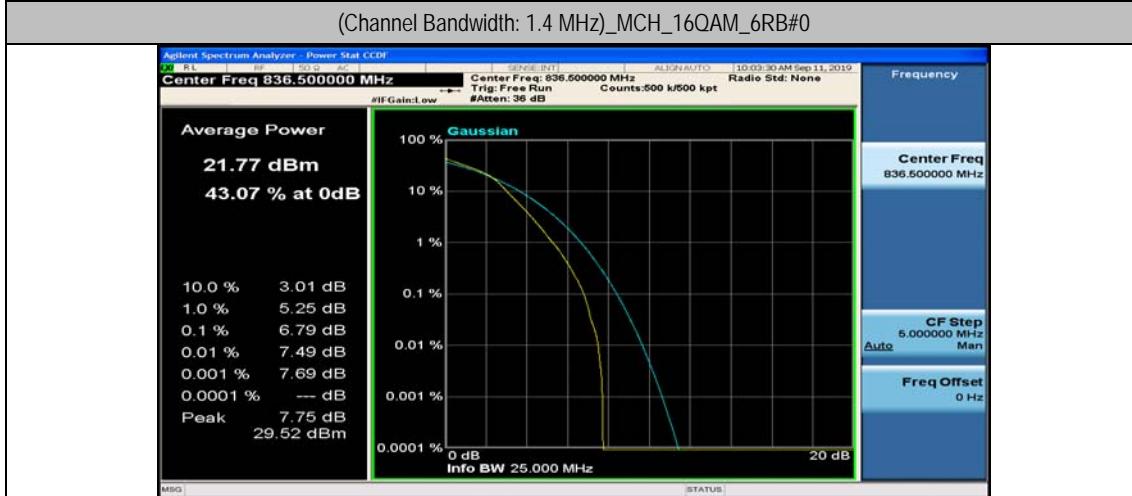
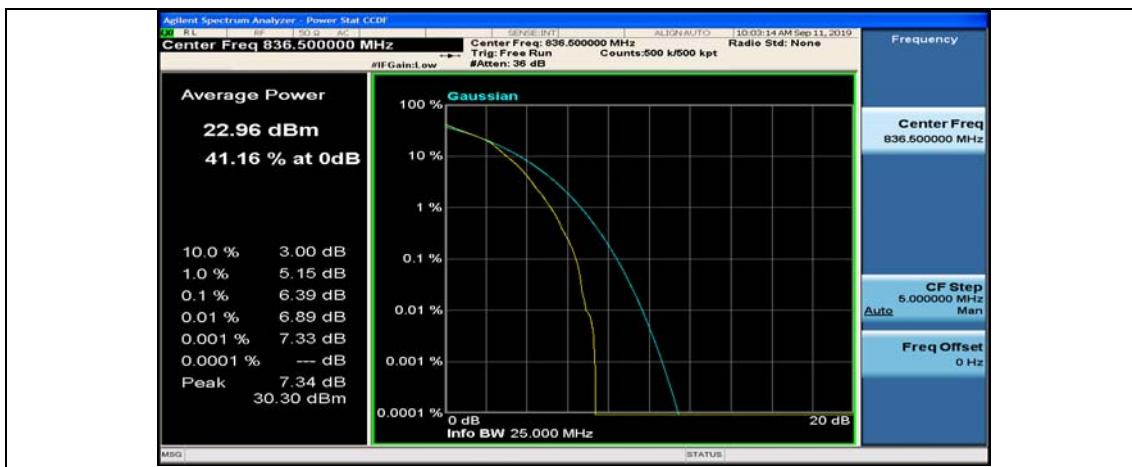


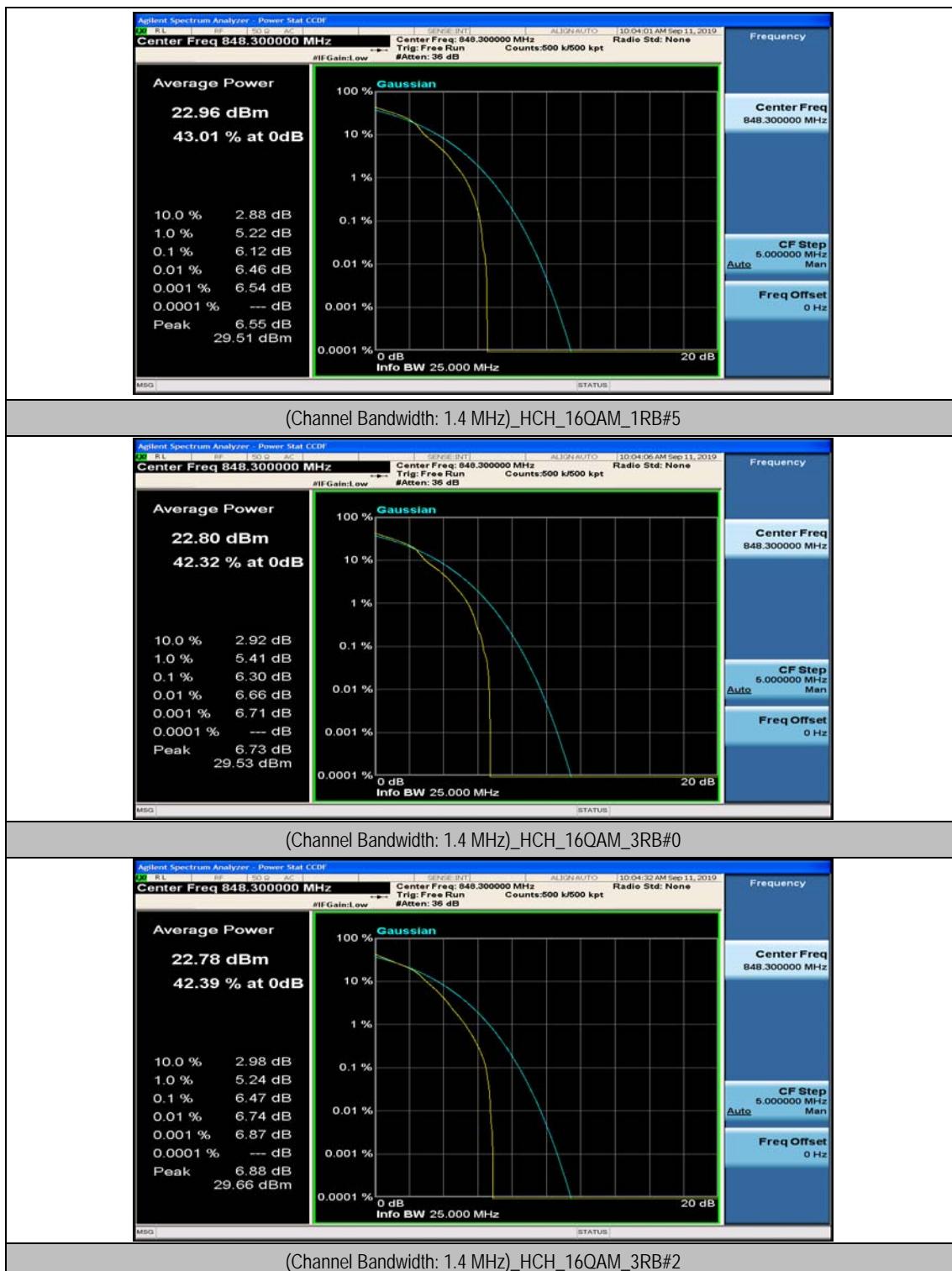


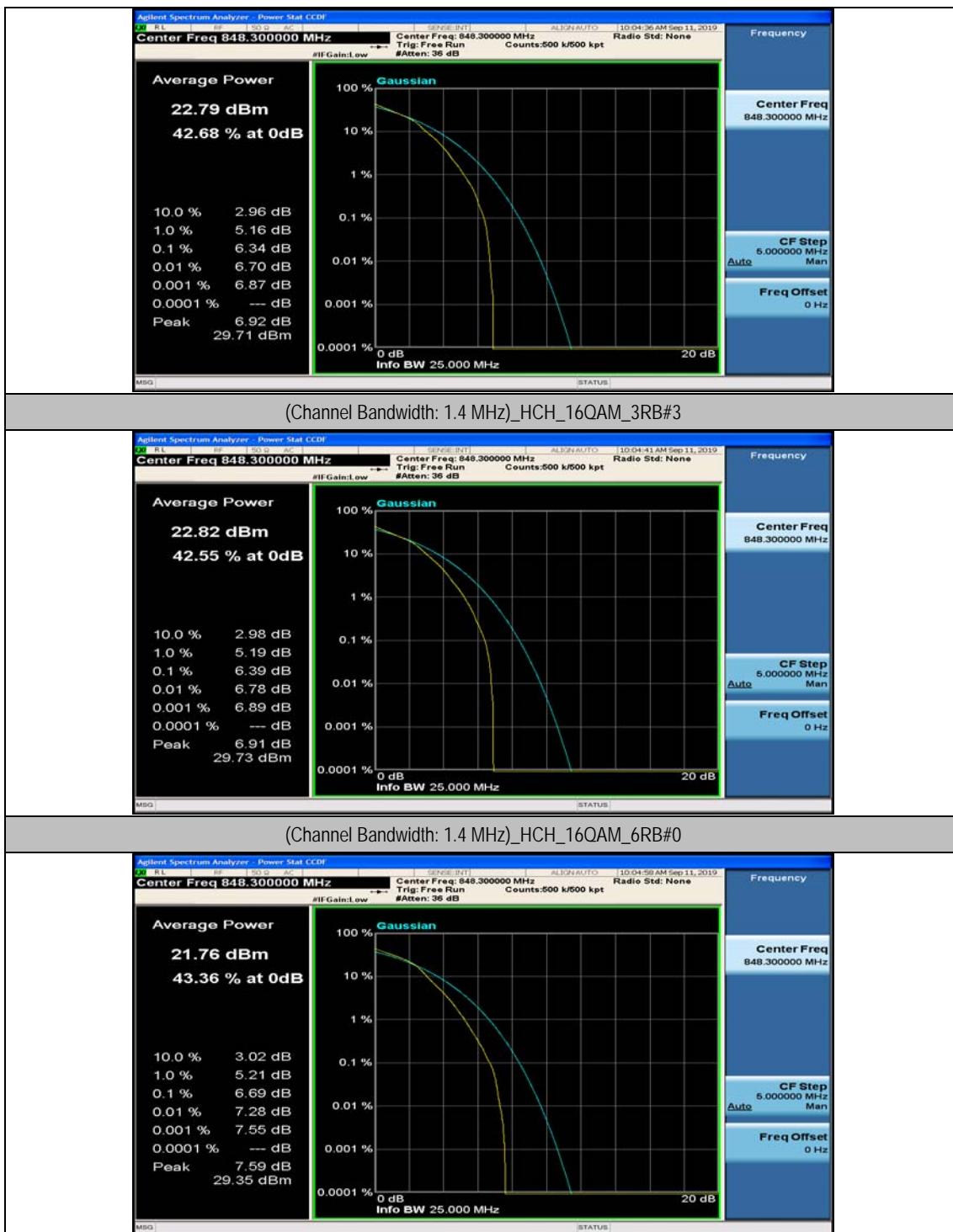




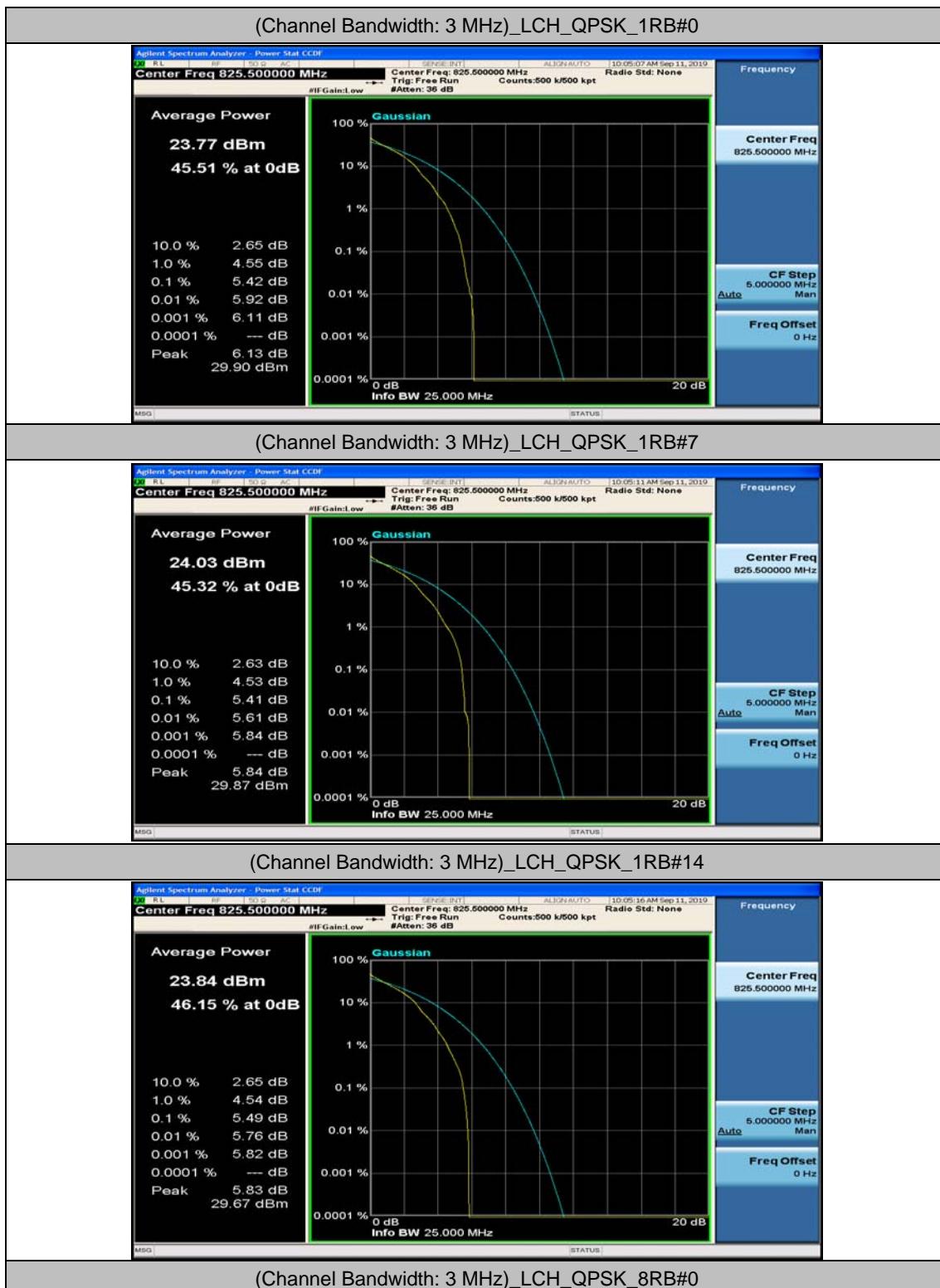


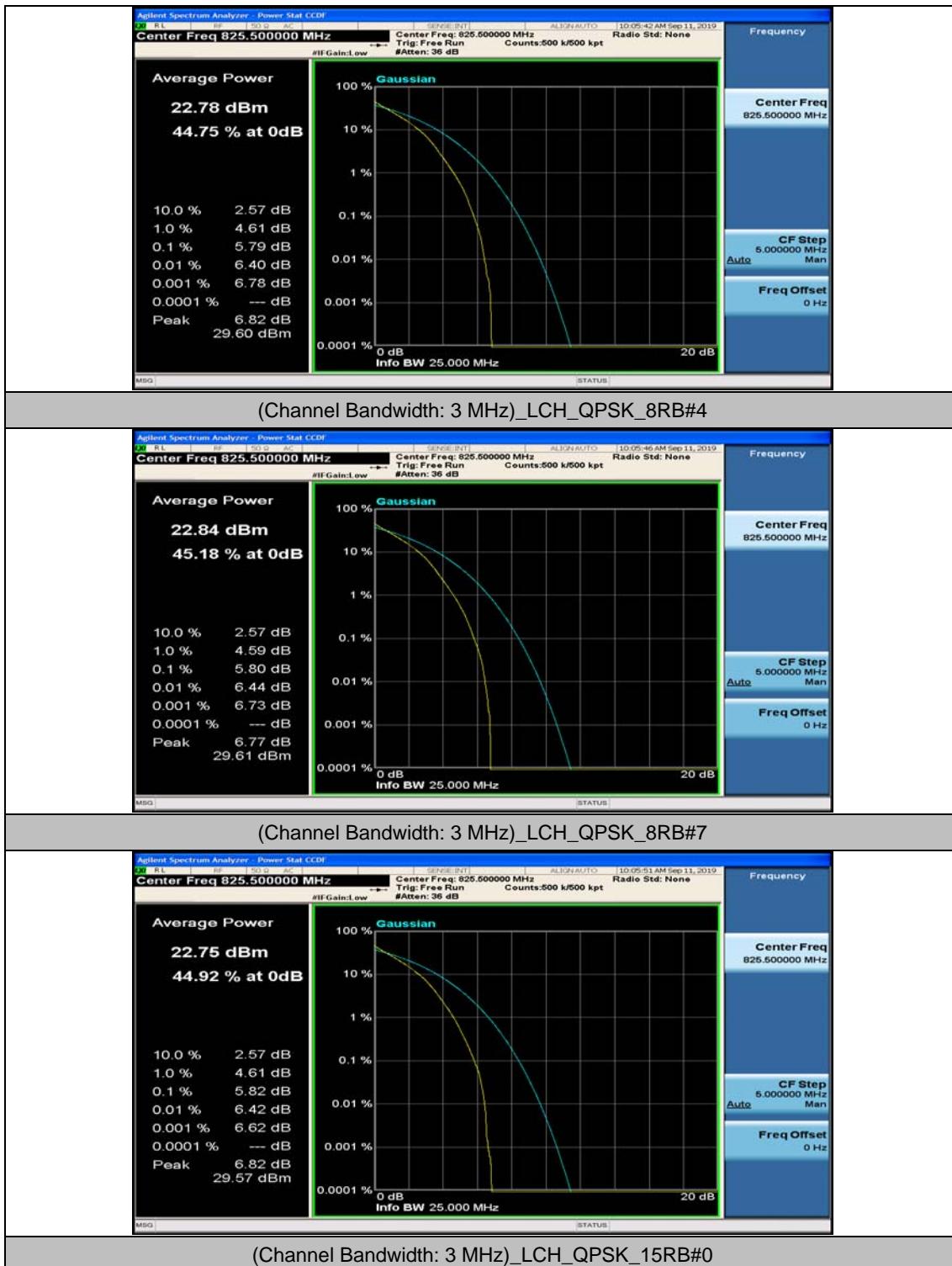


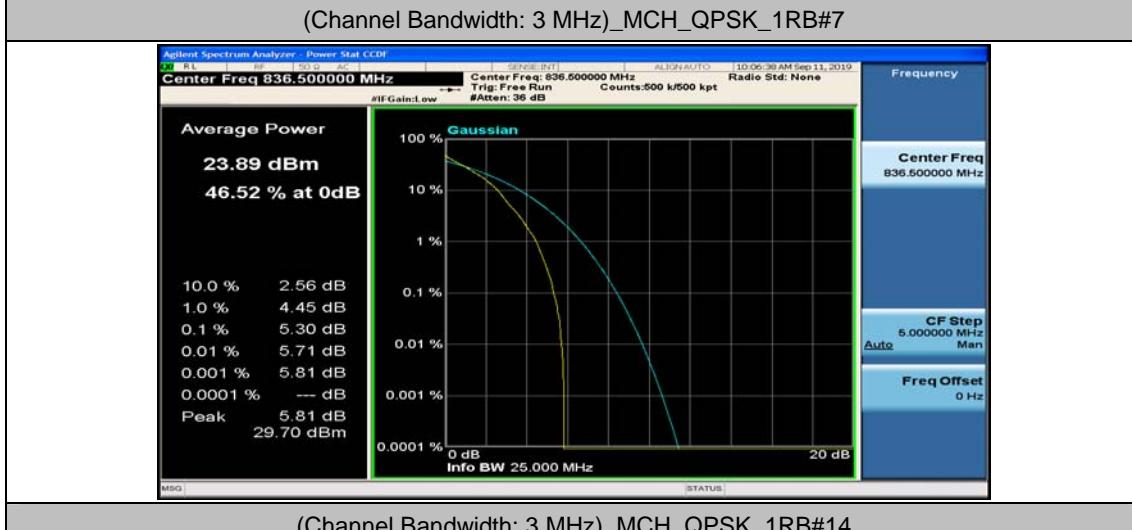
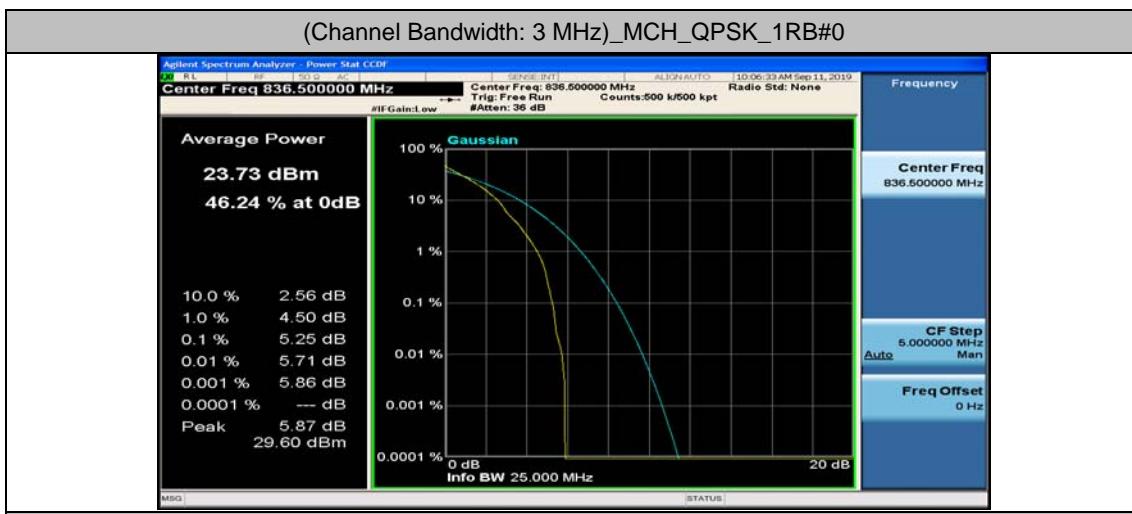




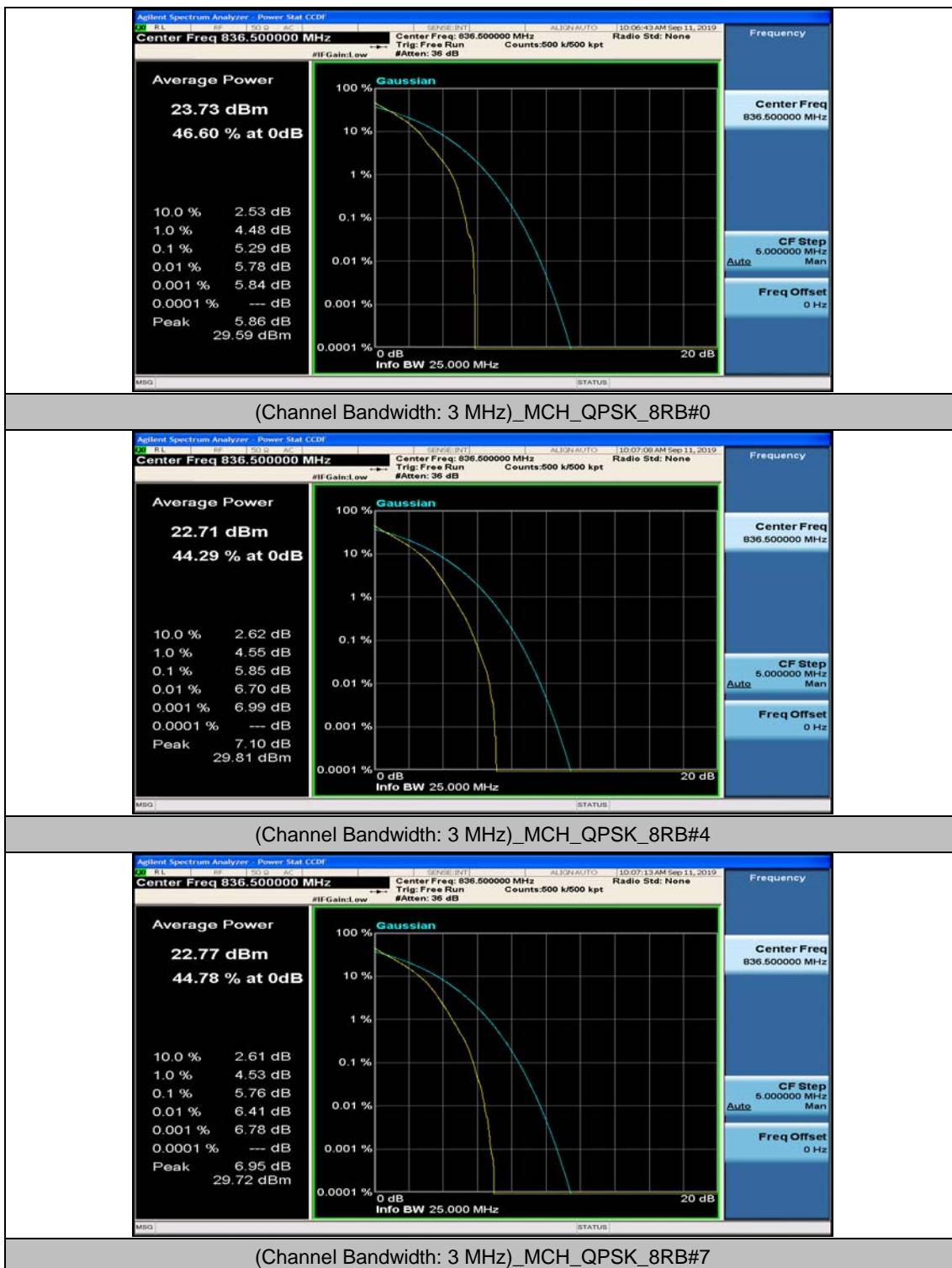
Channel Bandwidth: 3 MHz

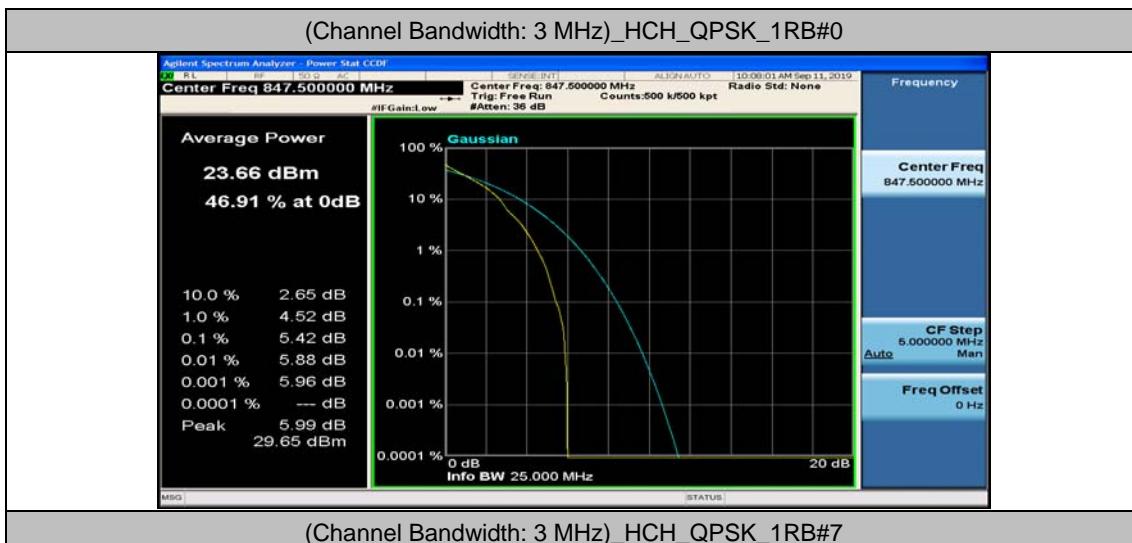
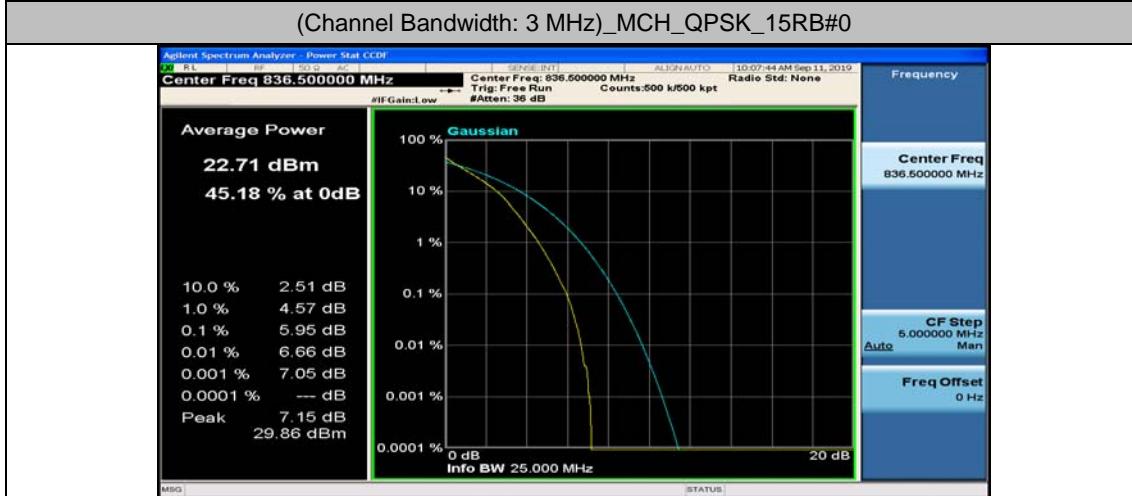
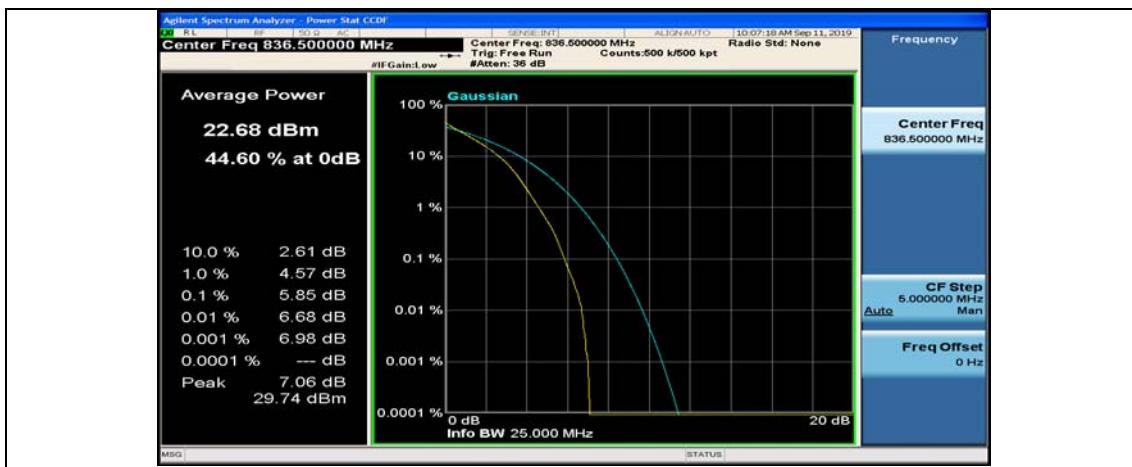


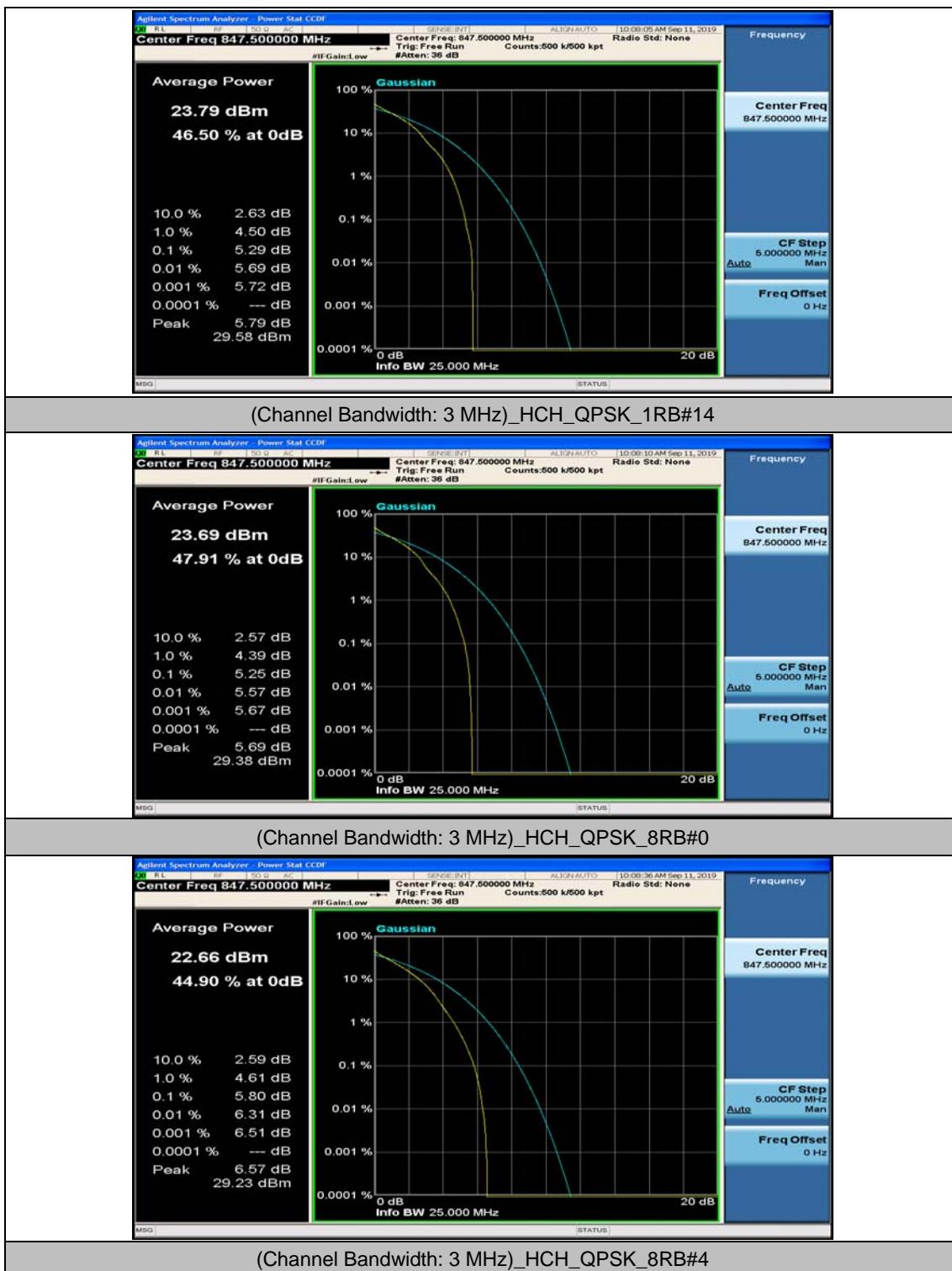


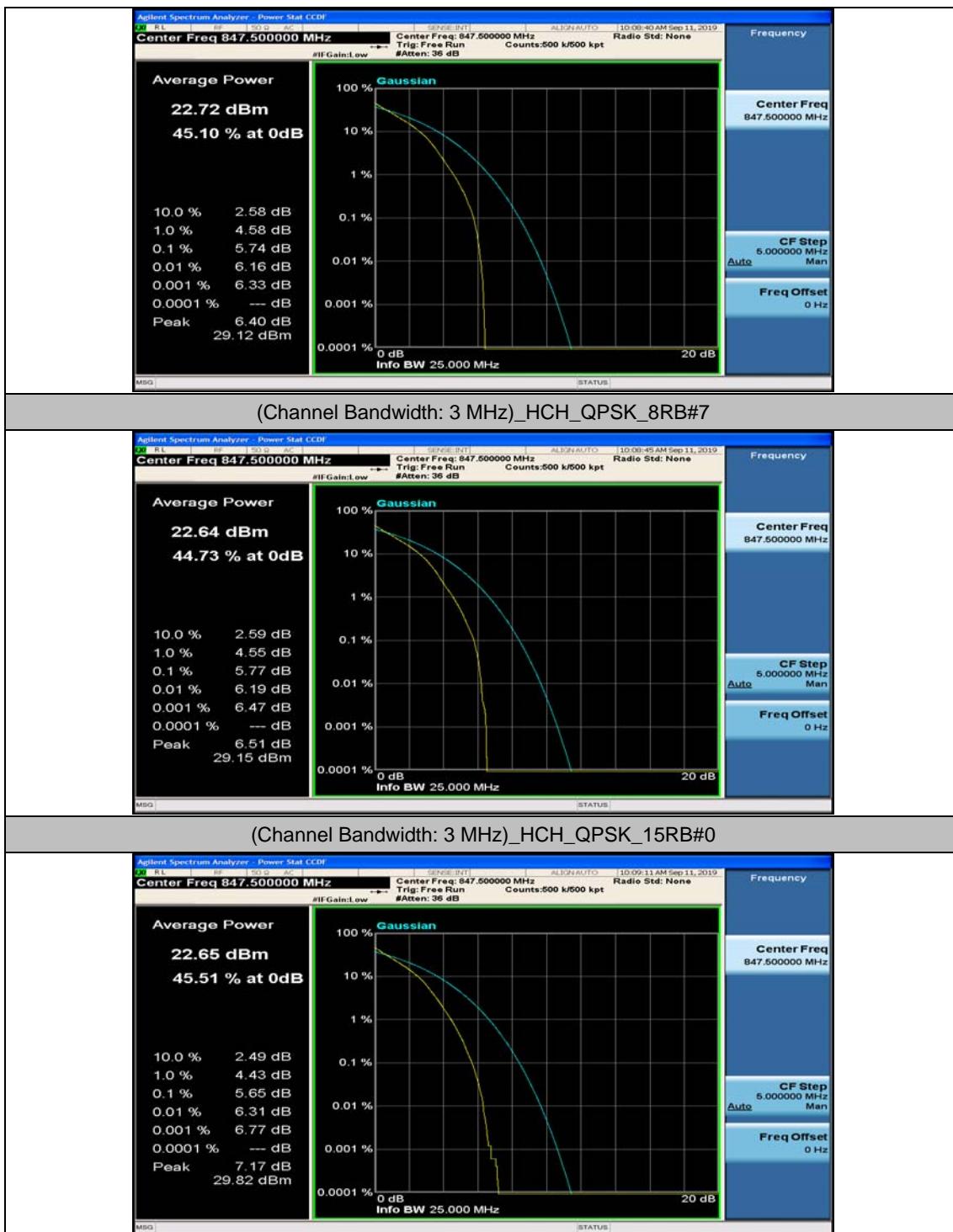


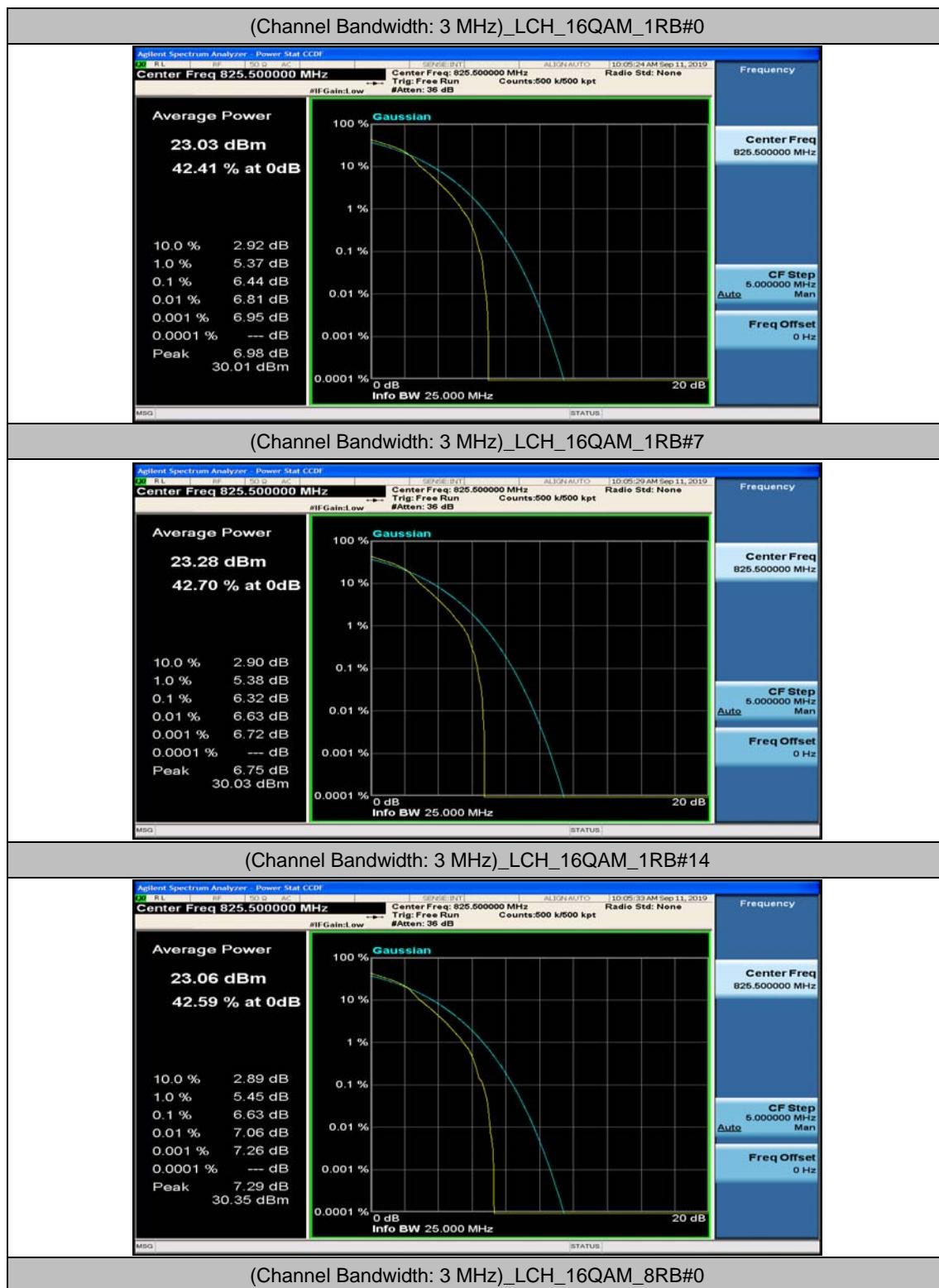
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14

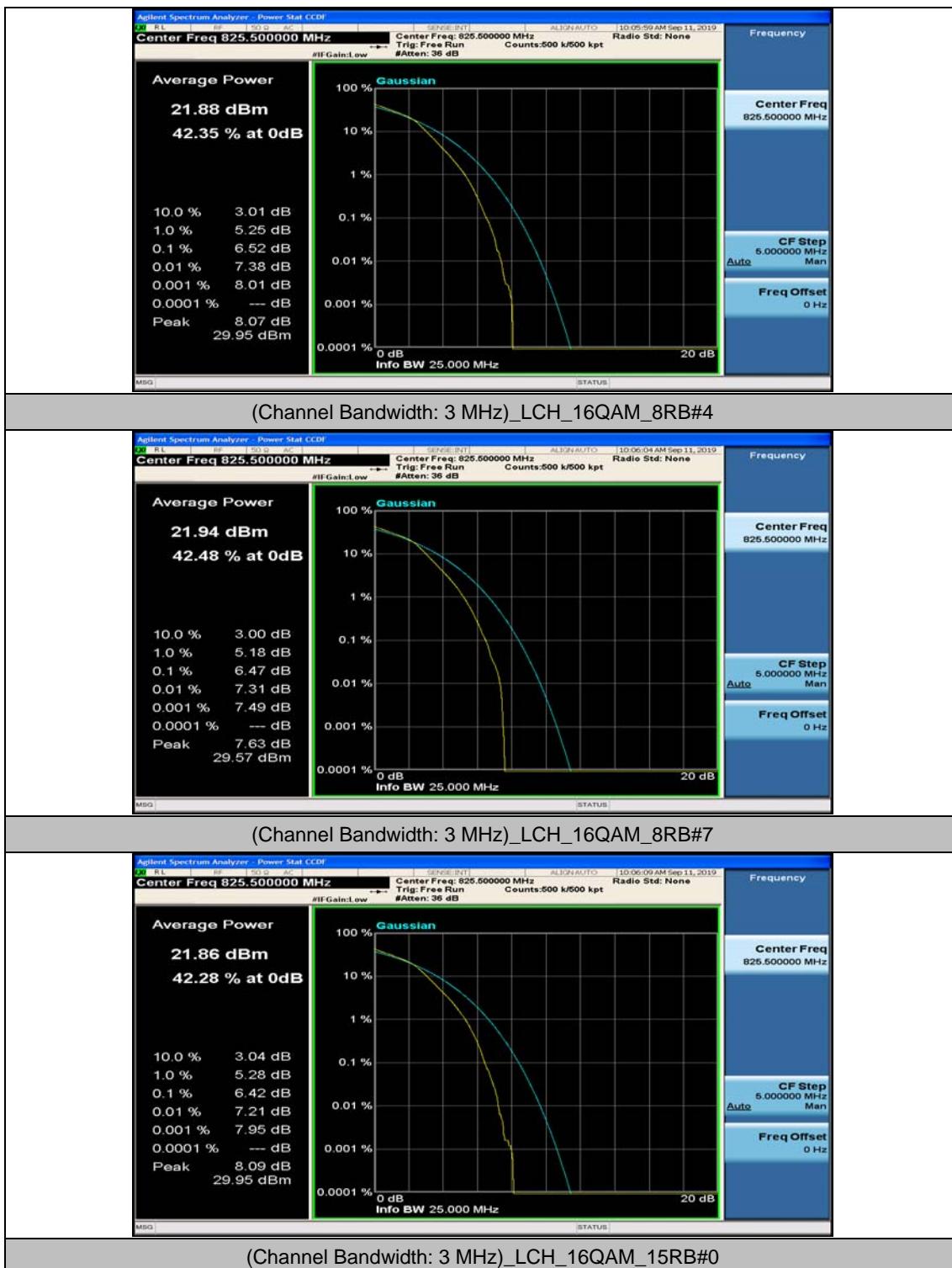


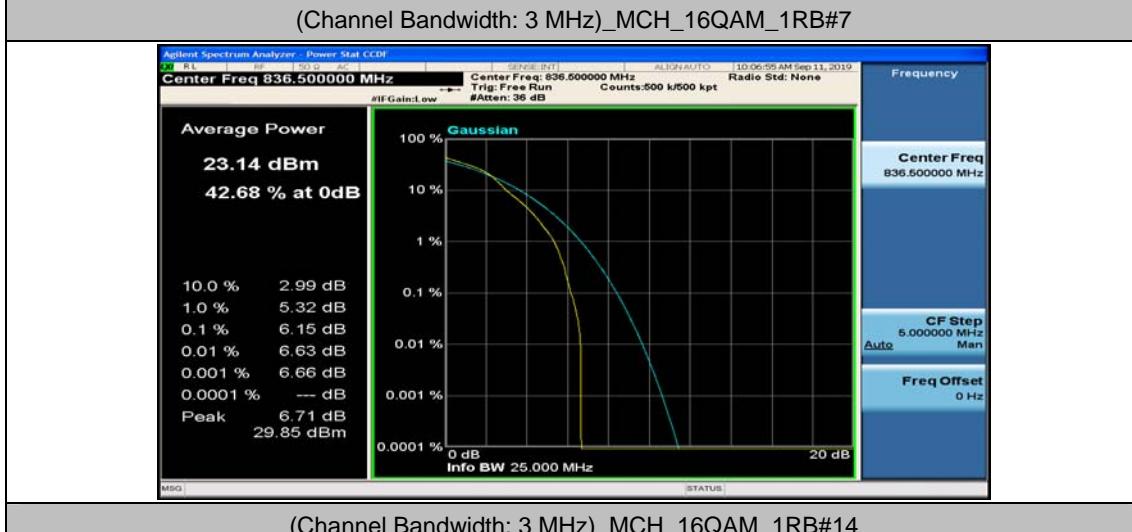
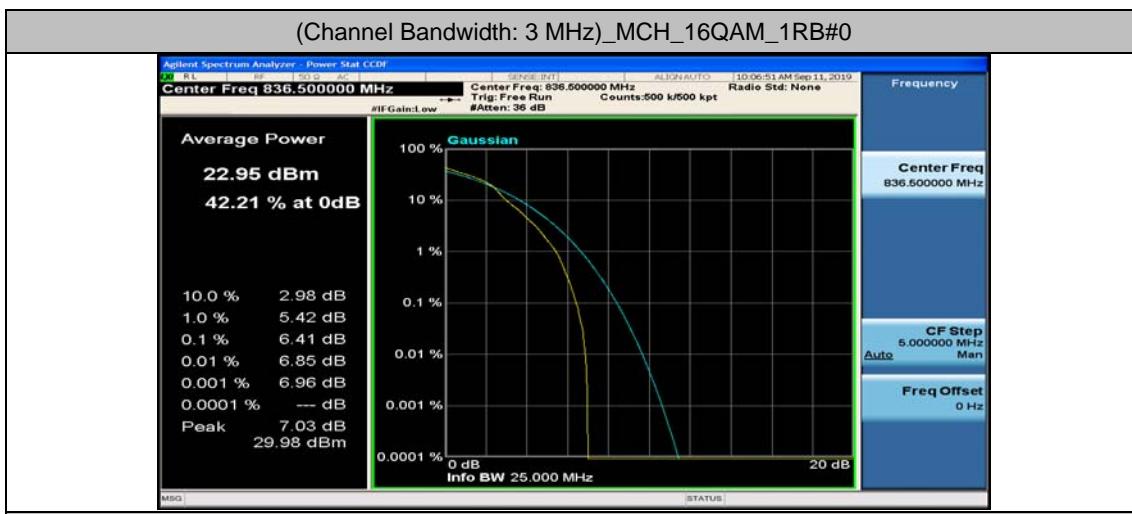
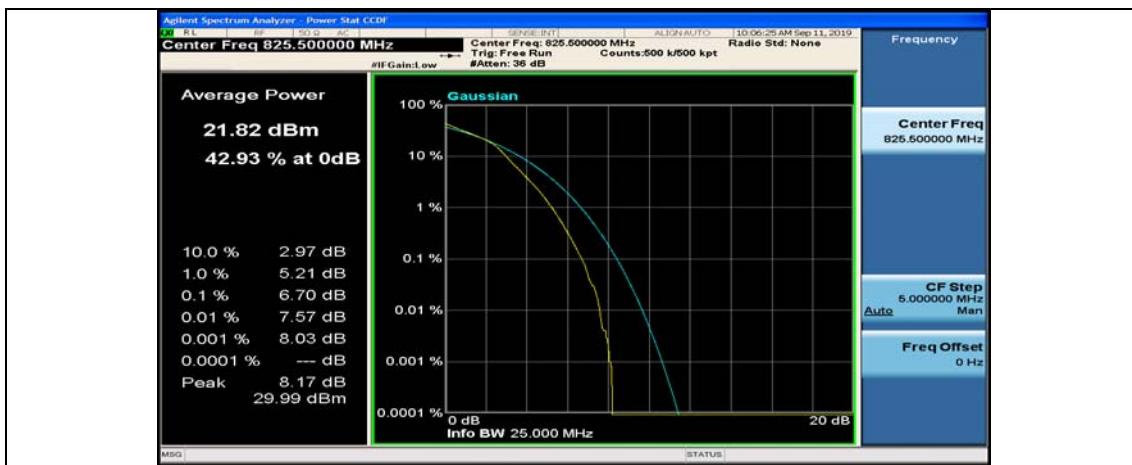




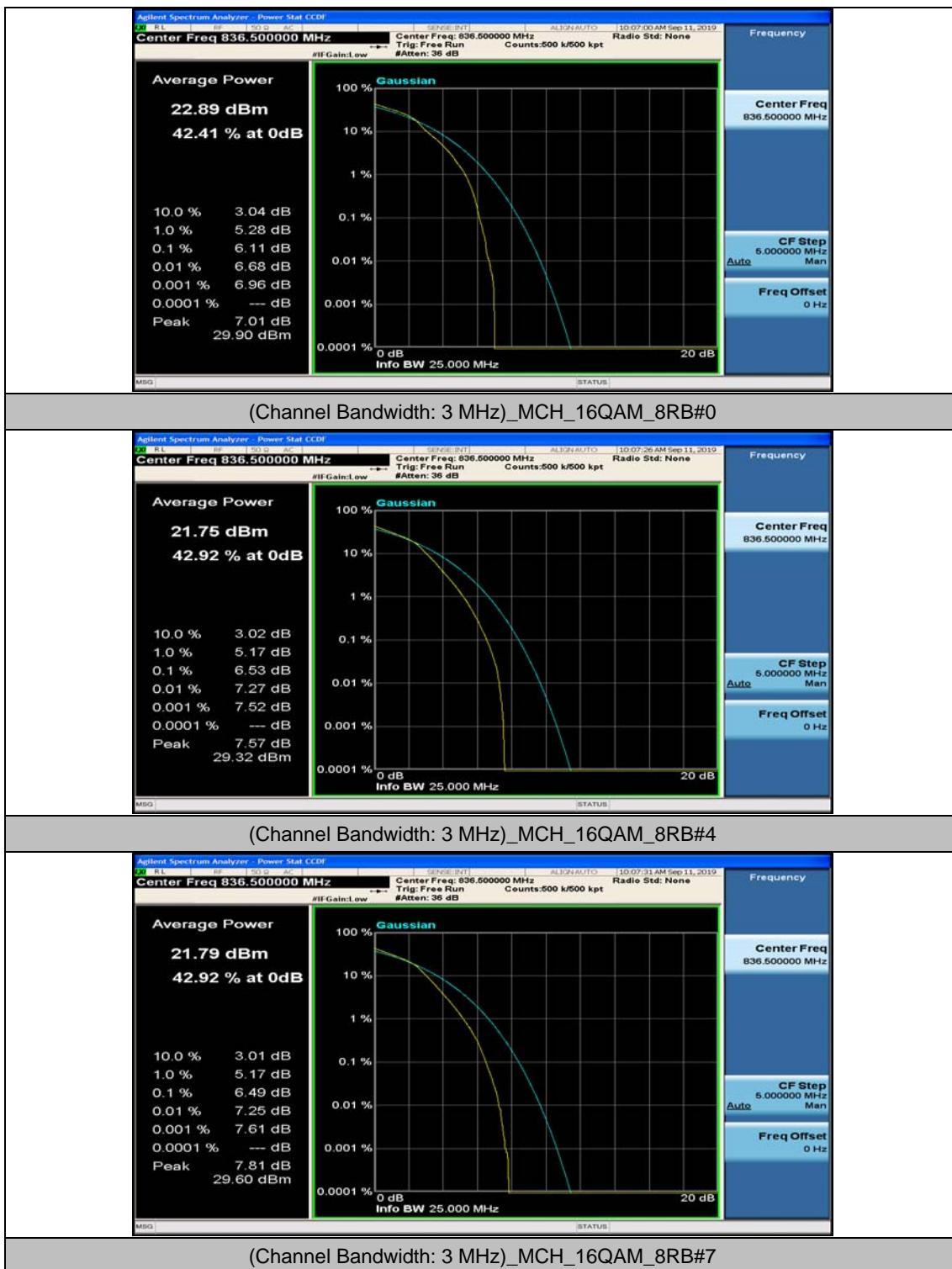


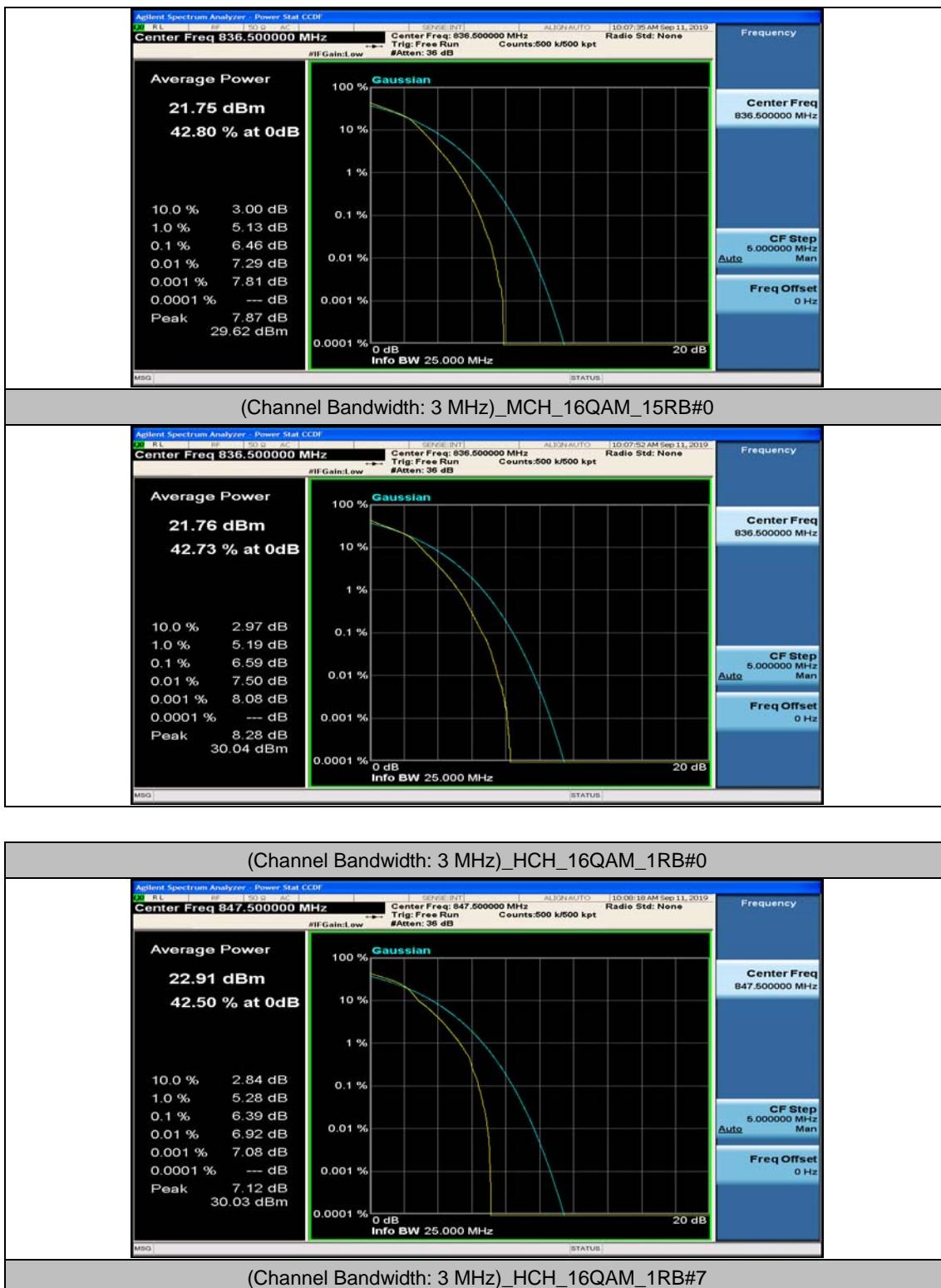


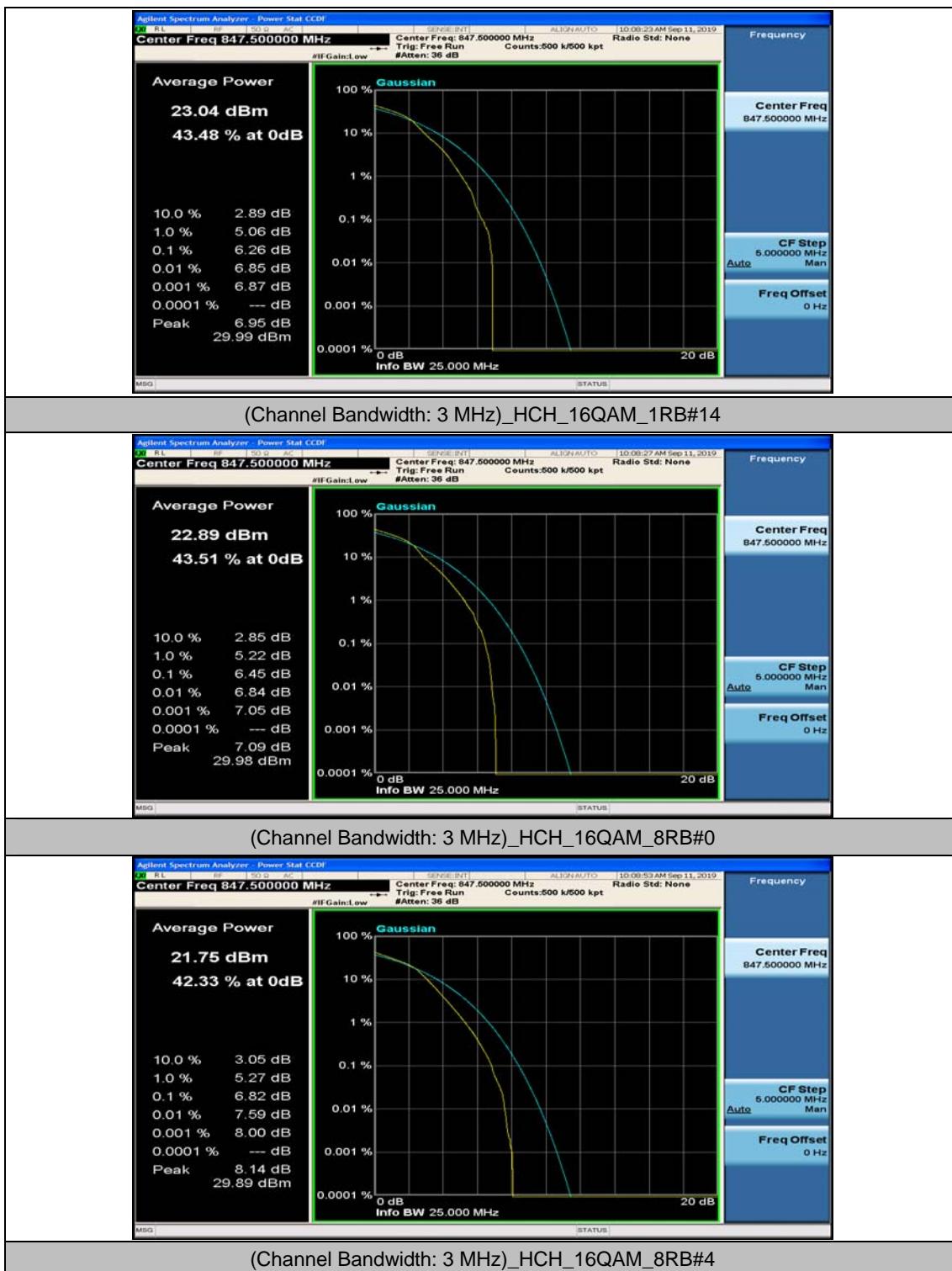


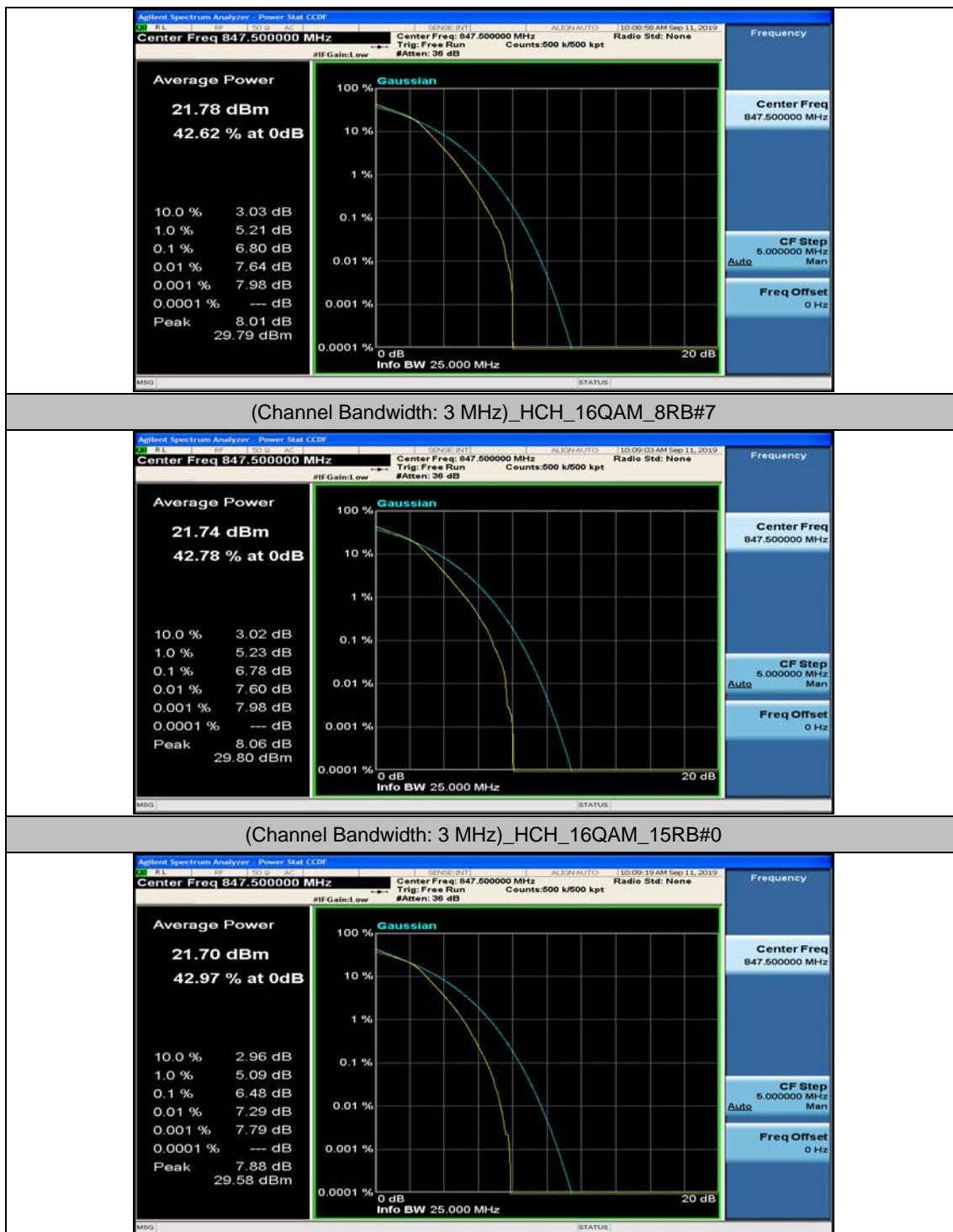


(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14

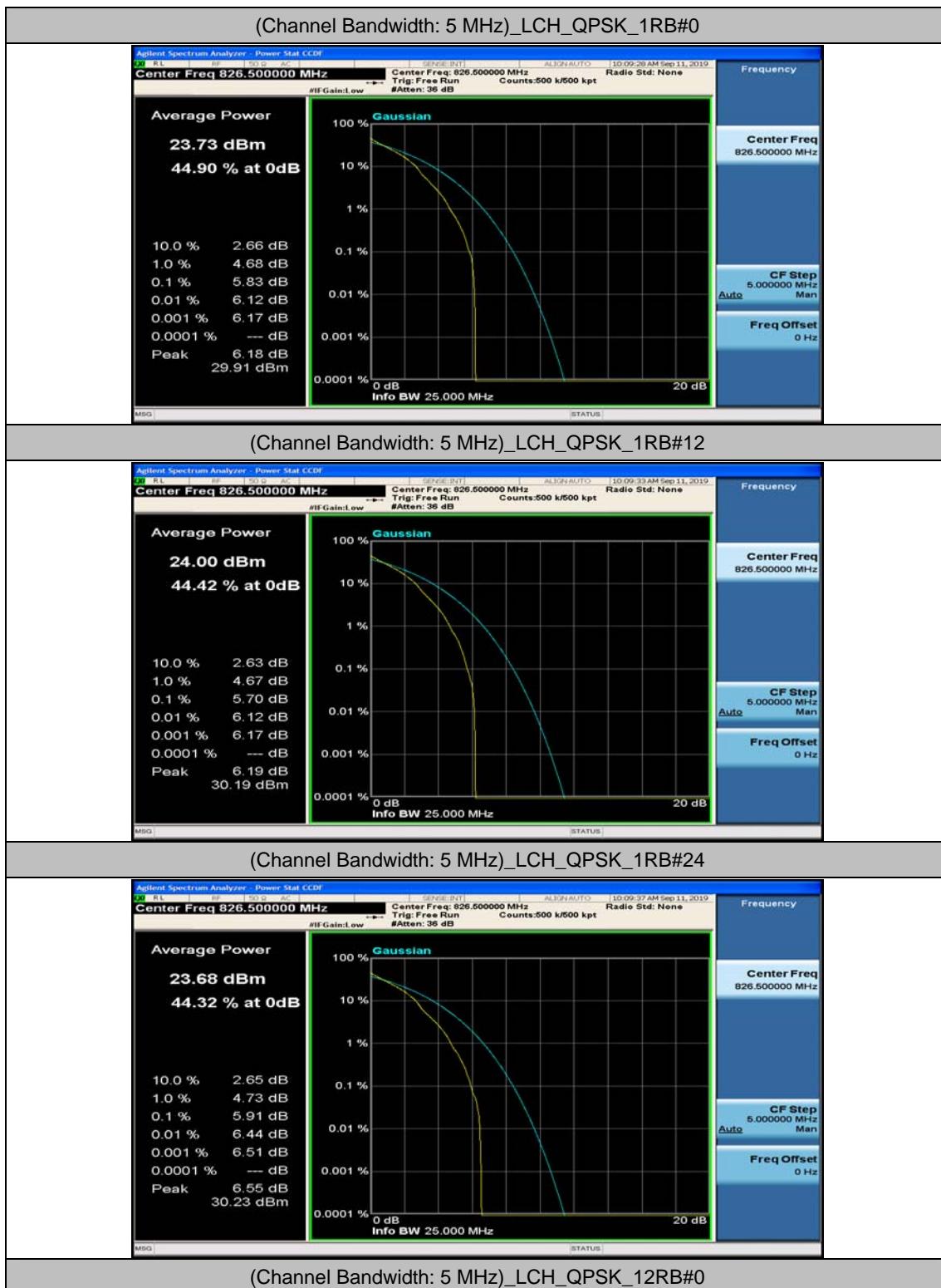


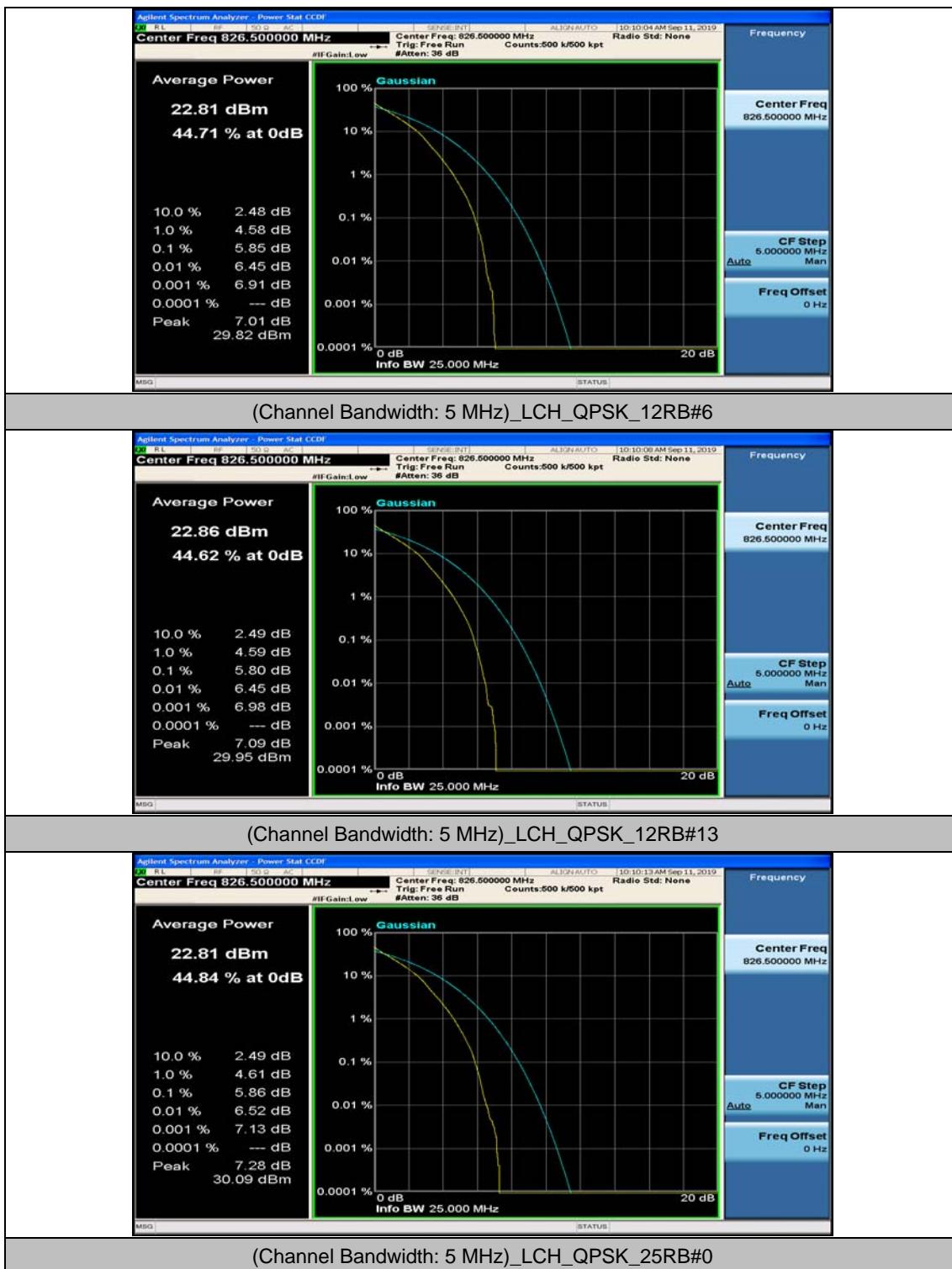


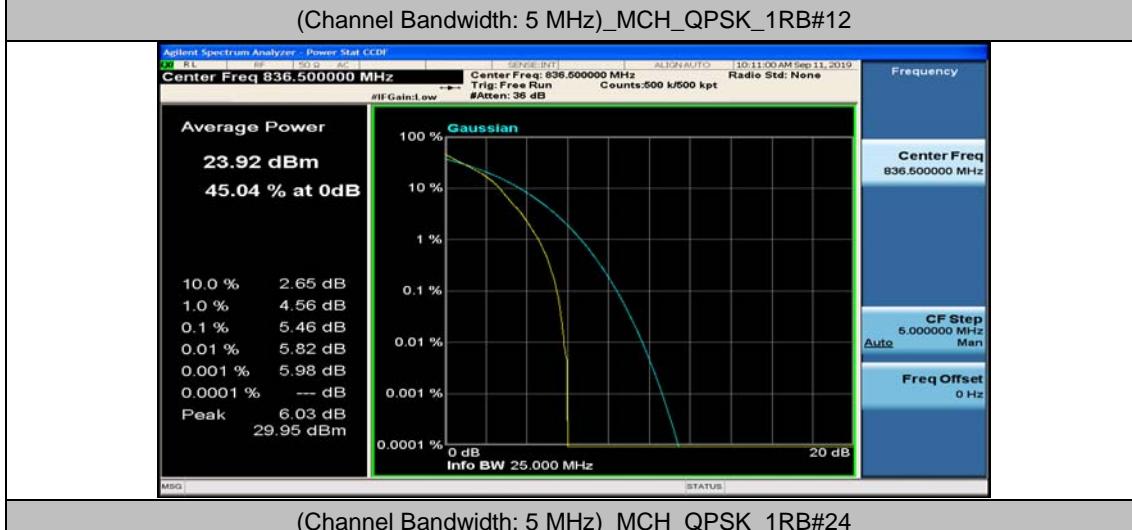
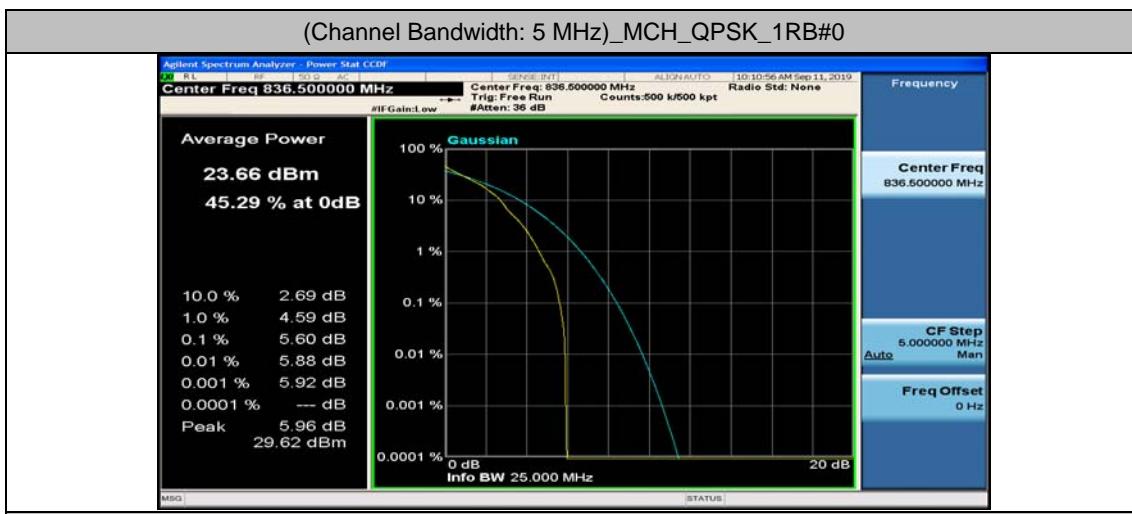
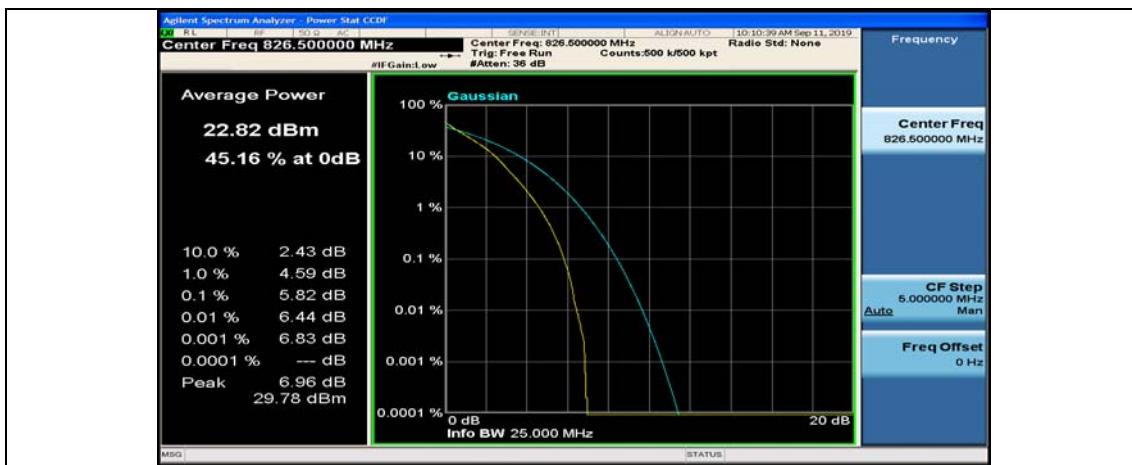




Channel Bandwidth: 5 MHz







(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

