# Appendix for LTE Band 41

Product Name: Rugged handheld
Model No: UA60

# Appendix A: Average Power Output Data

## Test Result

| Band | Bandwidth | Modulation | Channel | RB Configuration | Result(dBm) | Verdict |
|---|---|---|---|---|---|---|
| Band41 | 5MHz | QPSK | 39675 | 1RB#0 | 22.50 | PASS |
| Band41 | 5MHz | QPSK | 39675 | 1RB#12 | 22.59 | PASS |
| Band41 | 5MHz | QPSK | 39675 | 1RB#24 | 22.45 | PASS |
| Band41 | 5MHz | QPSK | 39675 | 12RB#0 | 21.50 | PASS |
| Band41 | 5MHz | QPSK | 39675 | 12RB#6 | 21.49 | PASS |
| Band41 | 5MHz | QPSK | 39675 | 12RB#13 | 21.46 | PASS |
| Band41 | 5MHz | QPSK | 39675 | 25RB#0 | 21.43 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 1RB#0 | 21.49 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 1RB#12 | 21.58 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 1RB#24 | 21.38 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 12RB#0 | 20.43 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 12RB#6 | 20.50 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 12RB#13 | 20.39 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 25RB#0 | 20.43 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 1RB#0 | 22.53 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 1RB#12 | 22.63 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 1RB#24 | 22.57 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 12RB#0 | 21.51 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 12RB#6 | 21.53 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 12RB#13 | 21.59 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 25RB#0 | 21.50 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 1RB#0 | 21.51 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 1RB#12 | 21.53 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 1RB#24 | 21.47 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 12RB#0 | 20.59 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 12RB#6 | 20.58 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 12RB#13 | 20.60 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 25RB#0 | 20.54 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 1RB#0 | 22.54 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 1RB#12 | 22.58 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 1RB#24 | 22.59 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 12RB#0 | 21.52 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 12RB#6 | 21.54 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 12RB#13 | 21.61 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 25RB#0 | 21.64 | PASS |
| Band41 | 5MHz | 16QAM | 41565 | 1RB#0 | 21.50 | PASS |

| | | | | | | |
|---|---|---|---|---|---|---|
| Band41 | 5MHz | 16QAM | 41565 | 1RB#12 | 21.53 | PASS |
| Band41 | 5MHz | 16QAM | 41565 | 1RB#24 | 21.50 | PASS |
| Band41 | 5MHz | 16QAM | 41565 | 12RB#0 | 20.49 | PASS |
| Band41 | 5MHz | 16QAM | 41565 | 12RB#6 | 20.52 | PASS |
| Band41 | 5MHz | 16QAM | 41565 | 12RB#13 | 20.52 | PASS |
| Band41 | 5MHz | 16QAM | 41565 | 25RB#0 | 20.63 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 1RB#0 | 22.45 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 1RB#24 | 22.47 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 1RB#49 | 22.48 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 25RB#0 | 21.52 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 25RB#12 | 21.54 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 25RB#25 | 21.46 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 50RB#0 | 21.44 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 1RB#0 | 21.58 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 1RB#24 | 21.62 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 1RB#49 | 21.61 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 25RB#0 | 20.46 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 25RB#12 | 20.51 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 25RB#25 | 20.48 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 50RB#0 | 20.45 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 1RB#0 | 22.57 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 1RB#24 | 22.67 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 1RB#49 | 22.55 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 25RB#0 | 21.44 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 25RB#12 | 21.51 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 25RB#25 | 21.60 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 50RB#0 | 21.53 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 1RB#0 | 21.51 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 1RB#24 | 21.50 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 1RB#49 | 21.55 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 25RB#0 | 20.62 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 25RB#12 | 20.52 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 25RB#25 | 20.62 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 50RB#0 | 20.55 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 1RB#0 | 22.52 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 1RB#24 | 22.63 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 1RB#49 | 22.61 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 25RB#0 | 21.53 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 25RB#12 | 21.56 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 25RB#25 | 21.68 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 50RB#0 | 21.67 | PASS |
| Band41 | 10MHz | 16QAM | 41540 | 1RB#0 | 21.47 | PASS |

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|---|---|---|---|---|---|---|
| Band41 | 10MHz | 16QAM | 41540 | 1RB#24 | 21.48 | PASS |
| Band41 | 10MHz | 16QAM | 41540 | 1RB#49 | 21.52 | PASS |
| Band41 | 10MHz | 16QAM | 41540 | 25RB#0 | 20.51 | PASS |
| Band41 | 10MHz | 16QAM | 41540 | 25RB#12 | 20.52 | PASS |
| Band41 | 10MHz | 16QAM | 41540 | 25RB#25 | 20.67 | PASS |
| Band41 | 10MHz | 16QAM | 41540 | 50RB#0 | 20.63 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 1RB#0 | 22.29 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 1RB#38 | 22.22 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 1RB#74 | 22.33 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 38RB#0 | 21.44 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 38RB#18 | 21.38 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 38RB#37 | 21.31 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 75RB#0 | 21.44 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 1RB#0 | 21.39 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 1RB#38 | 21.30 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 1RB#74 | 21.22 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 38RB#0 | 21.42 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 38RB#18 | 21.29 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 38RB#37 | 21.31 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 75RB#0 | 20.35 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 1RB#0 | 22.39 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 1RB#38 | 22.38 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 1RB#74 | 22.45 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 38RB#0 | 21.44 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 38RB#18 | 21.43 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 38RB#37 | 21.41 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 75RB#0 | 21.42 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 1RB#0 | 21.34 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 1RB#38 | 21.38 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 1RB#74 | 21.38 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 38RB#0 | 21.43 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 38RB#18 | 21.44 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 38RB#37 | 21.43 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 75RB#0 | 20.45 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 1RB#0 | 22.32 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 1RB#38 | 22.40 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 1RB#74 | 22.46 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 38RB#0 | 21.57 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 38RB#18 | 21.57 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 38RB#37 | 21.53 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 75RB#0 | 21.38 | PASS |
| Band41 | 15MHz | 16QAM | 41515 | 1RB#0 | 21.47 | PASS |

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|---|---|---|---|---|---|---|
| Band41 | 15MHz | 16QAM | 41515 | 1RB#38 | 21.37 | PASS |
| Band41 | 15MHz | 16QAM | 41515 | 1RB#74 | 21.27 | PASS |
| Band41 | 15MHz | 16QAM | 41515 | 38RB#0 | 21.54 | PASS |
| Band41 | 15MHz | 16QAM | 41515 | 38RB#18 | 21.42 | PASS |
| Band41 | 15MHz | 16QAM | 41515 | 38RB#37 | 21.53 | PASS |
| Band41 | 15MHz | 16QAM | 41515 | 75RB#0 | 20.37 | PASS |
| Band41 | 20MHz | QPSK | 39750 | 1RB#0 | 22.26 | PASS |
| Band41 | 20MHz | QPSK | 39750 | 1RB#49 | 22.32 | PASS |
| Band41 | 20MHz | QPSK | 39750 | 1RB#99 | 22.28 | PASS |
| Band41 | 20MHz | QPSK | 39750 | 50RB#0 | 21.38 | PASS |
| Band41 | 20MHz | QPSK | 39750 | 50RB#25 | 21.36 | PASS |
| Band41 | 20MHz | QPSK | 39750 | 50RB#50 | 21.34 | PASS |
| Band41 | 20MHz | QPSK | 39750 | 100RB#0 | 21.33 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 1RB#0 | 21.14 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 1RB#49 | 21.31 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 1RB#99 | 21.17 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 50RB#0 | 20.36 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 50RB#25 | 20.39 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 50RB#50 | 20.33 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 100RB#0 | 20.32 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 1RB#0 | 22.38 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 1RB#49 | 22.38 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 1RB#99 | 22.40 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 50RB#0 | 21.39 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 50RB#25 | 21.40 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 50RB#50 | 21.47 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 100RB#0 | 21.39 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 1RB#0 | 21.50 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 1RB#49 | 21.41 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 1RB#99 | 21.39 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 50RB#0 | 20.45 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 50RB#25 | 20.45 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 50RB#50 | 20.45 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 100RB#0 | 20.44 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 1RB#0 | 22.38 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 1RB#49 | 22.47 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 1RB#99 | 22.73 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 50RB#0 | 21.43 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 50RB#25 | 21.38 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 50RB#50 | 21.50 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 100RB#0 | 21.40 | PASS |
| Band41 | 20MHz | 16QAM | 41490 | 1RB#0 | 21.43 | PASS |

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|---|---|---|---|---|---|---|
| Band41 | 20MHz | 16QAM | 41490 | 1RB#49 | 21.31 | PASS |
| Band41 | 20MHz | 16QAM | 41490 | 1RB#99 | 21.45 | PASS |
| Band41 | 20MHz | 16QAM | 41490 | 50RB#0 | 20.42 | PASS |
| Band41 | 20MHz | 16QAM | 41490 | 50RB#25 | 20.42 | PASS |
| Band41 | 20MHz | 16QAM | 41490 | 50RB#50 | 20.49 | PASS |
| Band41 | 20MHz | 16QAM | 41490 | 100RB#0 | 20.41 | PASS |

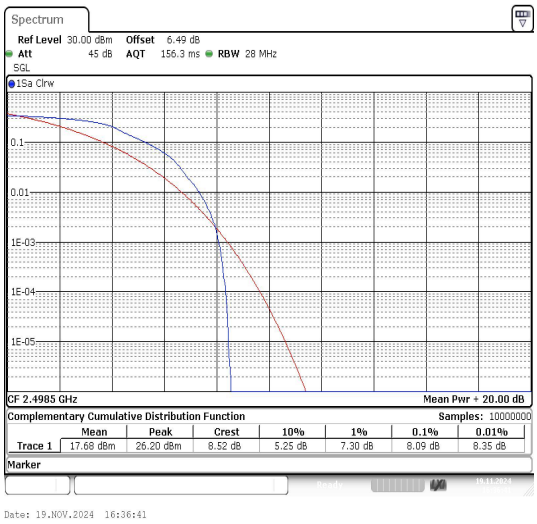
# Appendix B: Peak-to-Average Ratio(CCDF)

## Test Result

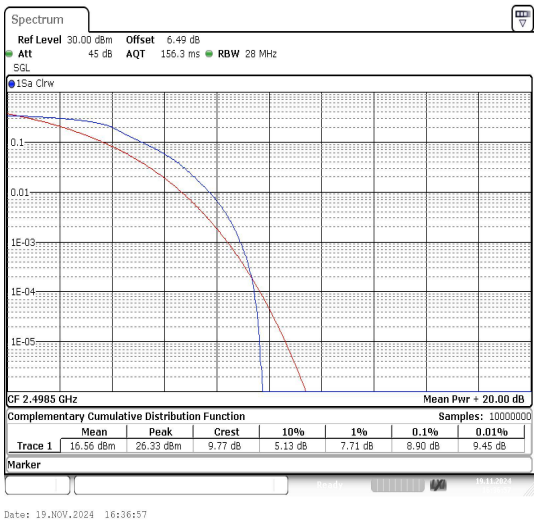
| Band | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|---|---|---|---|---|---|---|---|
| Band41 | 5MHz | QPSK | 39675 | 1RB#0 | 8.09 | 13 | PASS |
| Band41 | 5MHz | QPSK | 39675 | 25RB#0 | 8.90 | 13 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 1RB#0 | 9.10 | 13 | PASS |
| Band41 | 5MHz | 16QAM | 39675 | 25RB#0 | 9.59 | 13 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 1RB#0 | 8.58 | 13 | PASS |
| Band41 | 5MHz | QPSK | 40620 | 25RB#0 | 9.07 | 13 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 1RB#0 | 9.45 | 13 | PASS |
| Band41 | 5MHz | 16QAM | 40620 | 25RB#0 | 9.88 | 13 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 1RB#0 | 7.65 | 13 | PASS |
| Band41 | 5MHz | QPSK | 41565 | 25RB#0 | 8.49 | 13 | PASS |
| Band41 | 5MHz | 16QAM | 41565 | 1RB#0 | 8.67 | 13 | PASS |
| Band41 | 5MHz | 16QAM | 41565 | 25RB#0 | 9.36 | 13 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 1RB#0 | 8.09 | 13 | PASS |
| Band41 | 10MHz | QPSK | 39700 | 50RB#0 | 8.78 | 13 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 1RB#0 | 8.93 | 13 | PASS |
| Band41 | 10MHz | 16QAM | 39700 | 50RB#0 | 9.57 | 13 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 1RB#0 | 8.58 | 13 | PASS |
| Band41 | 10MHz | QPSK | 40620 | 50RB#0 | 9.07 | 13 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 1RB#0 | 9.30 | 13 | PASS |
| Band41 | 10MHz | 16QAM | 40620 | 50RB#0 | 9.88 | 13 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 1RB#0 | 7.57 | 13 | PASS |
| Band41 | 10MHz | QPSK | 41540 | 50RB#0 | 8.46 | 13 | PASS |
| Band41 | 10MHz | 16QAM | 41540 | 1RB#0 | 8.67 | 13 | PASS |
| Band41 | 10MHz | 16QAM | 41540 | 50RB#0 | 9.36 | 13 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 1RB#0 | 8.26 | 13 | PASS |
| Band41 | 15MHz | QPSK | 39725 | 75RB#0 | 9.16 | 13 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 1RB#0 | 9.04 | 13 | PASS |
| Band41 | 15MHz | 16QAM | 39725 | 75RB#0 | 9.83 | 13 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 1RB#0 | 8.72 | 13 | PASS |
| Band41 | 15MHz | QPSK | 40620 | 75RB#0 | 9.36 | 13 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 1RB#0 | 9.51 | 13 | PASS |
| Band41 | 15MHz | 16QAM | 40620 | 75RB#0 | 9.94 | 13 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 1RB#0 | 7.94 | 13 | PASS |
| Band41 | 15MHz | QPSK | 41515 | 75RB#0 | 8.81 | 13 | PASS |
| Band41 | 15MHz | 16QAM | 41515 | 1RB#0 | 8.90 | 13 | PASS |
| Band41 | 15MHz | 16QAM | 41515 | 75RB#0 | 9.51 | 13 | PASS |
| Band41 | 20MHz | QPSK | 39750 | 1RB#0 | 8.35 | 13 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Band41 | 20MHz | QPSK | 39750 | 100RB#0 | 8.87 | 13 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 1RB#0 | 9.16 | 13 | PASS |
| Band41 | 20MHz | 16QAM | 39750 | 100RB#0 | 9.71 | 13 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 1RB#0 | 8.70 | 13 | PASS |
| Band41 | 20MHz | QPSK | 40620 | 100RB#0 | 9.07 | 13 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 1RB#0 | 9.51 | 13 | PASS |
| Band41 | 20MHz | 16QAM | 40620 | 100RB#0 | 9.83 | 13 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 1RB#0 | 8.09 | 13 | PASS |
| Band41 | 20MHz | QPSK | 41490 | 100RB#0 | 8.75 | 13 | PASS |
| Band41 | 20MHz | 16QAM | 41490 | 1RB#0 | 8.87 | 13 | PASS |
| Band41 | 20MHz | 16QAM | 41490 | 100RB#0 | 9.54 | 13 | PASS |

## Test Graphs



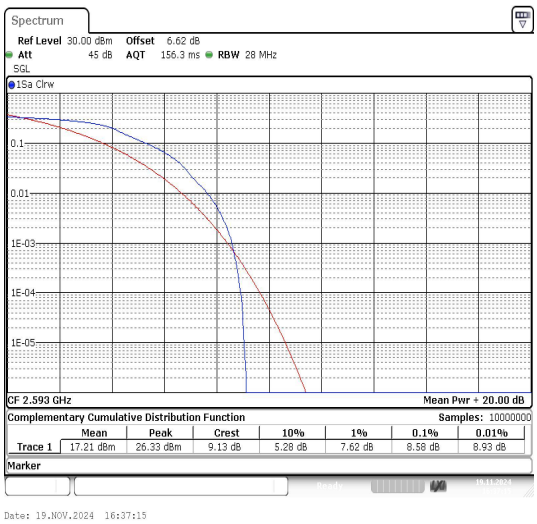

Band41-5MHz-QPSK-39675-1RB#0-PASS




Band41-5MHz-QPSK-39675-25RB#0-PASS

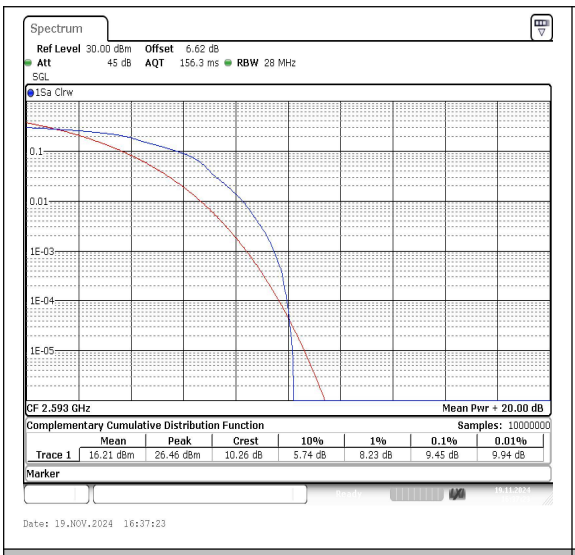
Band41-5MHz-16QAM-39675-1RB#0-PASS

Band41-5MHz-16QAM-39675-25RB#0-PASS

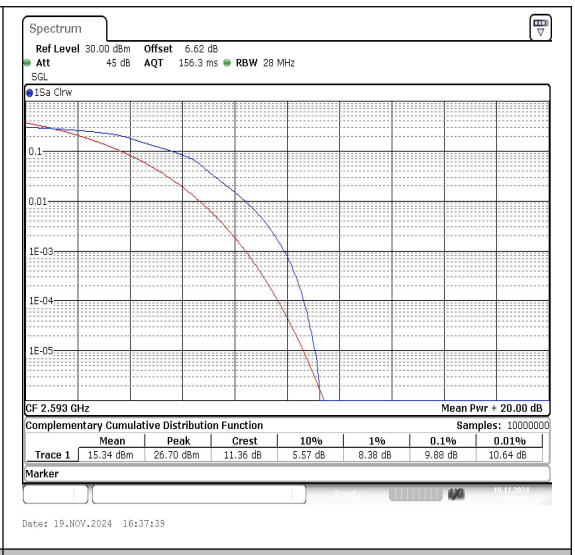



Band41-5MHz-QPSK-40620-1RB#0-PASS

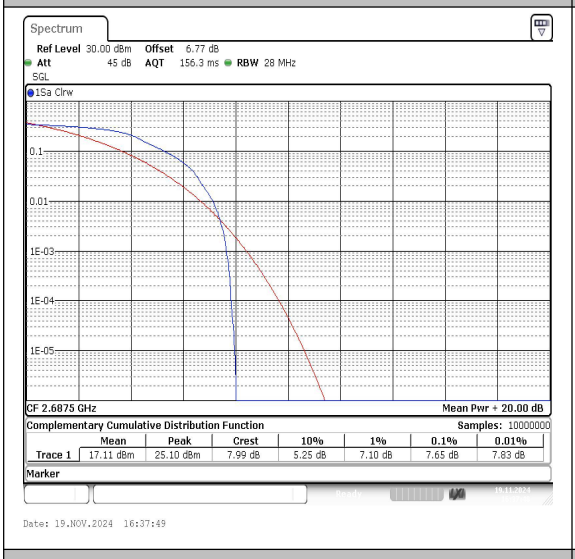
Band41-5MHz-QPSK-40620-25RB#0-PASS



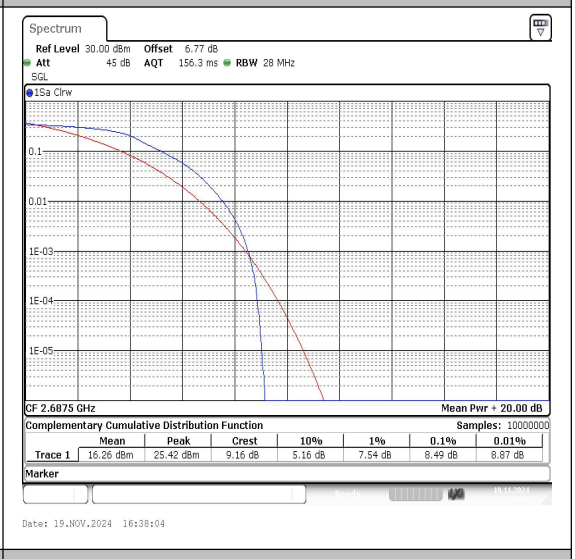

Band41-5MHz-16QAM-40620-1RB#0-PASS



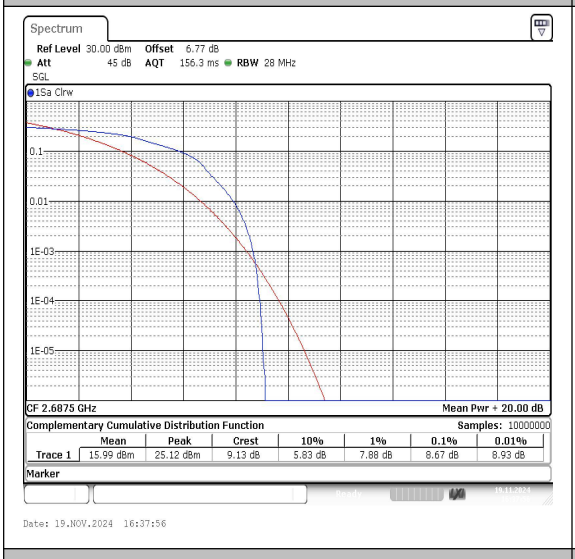

Band41-5MHz-16QAM-40620-25RB#0-PASS



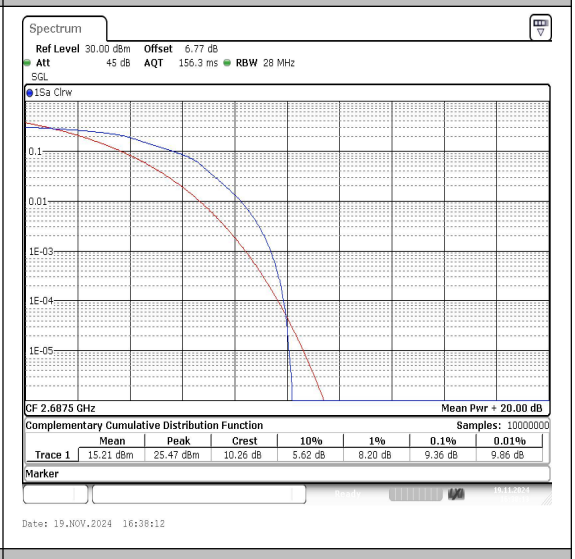

Band41-5MHz-QPSK-41565-1RB#0-PASS




Band41-5MHz-QPSK-41565-25RB#0-PASS




Band41-5MHz-16QAM-41565-1RB#0-PASS




Band41-5MHz-16QAM-41565-25RB#0-PASS