

## 99% & 26dB Bandwidth

### Test Result

| 5G NR N77a(3450-3550MHz) SCS=30kHz 10MHz |        |               |                     |                      |             |         |
|------------------------------------------|--------|---------------|---------------------|----------------------|-------------|---------|
| Modulation                               | CH     | RB Allocation | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| DFT-s-OFDM PI/2 BPSK                     | Low    | Outer_Full    | 8.5773              | 9.789                | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 8.6093              | 9.629                | /           | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | Middle | Outer_Full    | 8.6047              | 9.688                | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 8.5915              | 9.672                | /           | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | High   | Outer_Full    | 8.6083              | 9.791                | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 8.6158              | 10.09                | /           | Pass    |

| 5G NR N77a(3450-3550MHz) SCS=30kHz 15MHz |        |               |                     |                      |             |         |
|------------------------------------------|--------|---------------|---------------------|----------------------|-------------|---------|
| Modulation                               | CH     | RB Allocation | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| DFT-s-OFDM PI/2 BPSK                     | Low    | Outer_Full    | 12.951              | 14.26                | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 13.662              | 15.37                | /           | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | Middle | Outer_Full    | 12.956              | 14.23                | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 13.655              | 15.46                | /           | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | High   | Outer_Full    | 12.9                | 14.35                | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 13.645              | 15.04                | /           | Pass    |

| 5G NR N77a(3450-3550MHz) SCS=30kHz 20MHz |        |               |                     |                      |             |         |
|------------------------------------------|--------|---------------|---------------------|----------------------|-------------|---------|
| Modulation                               | CH     | RB Allocation | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| DFT-s-OFDM PI/2 BPSK                     | Low    | Outer_Full    | 17.862              | 19.08                | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 18.185              | 20.37                | /           | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | Middle | Outer_Full    | 17.977              | 19.3                 | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 18.177              | 19.56                | /           | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | High   | Outer_Full    | 17.893              | 19.16                | /           | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 18.286              | 19.62                | /           | Pass    |

# Peak-Average Ratio

## Test Result

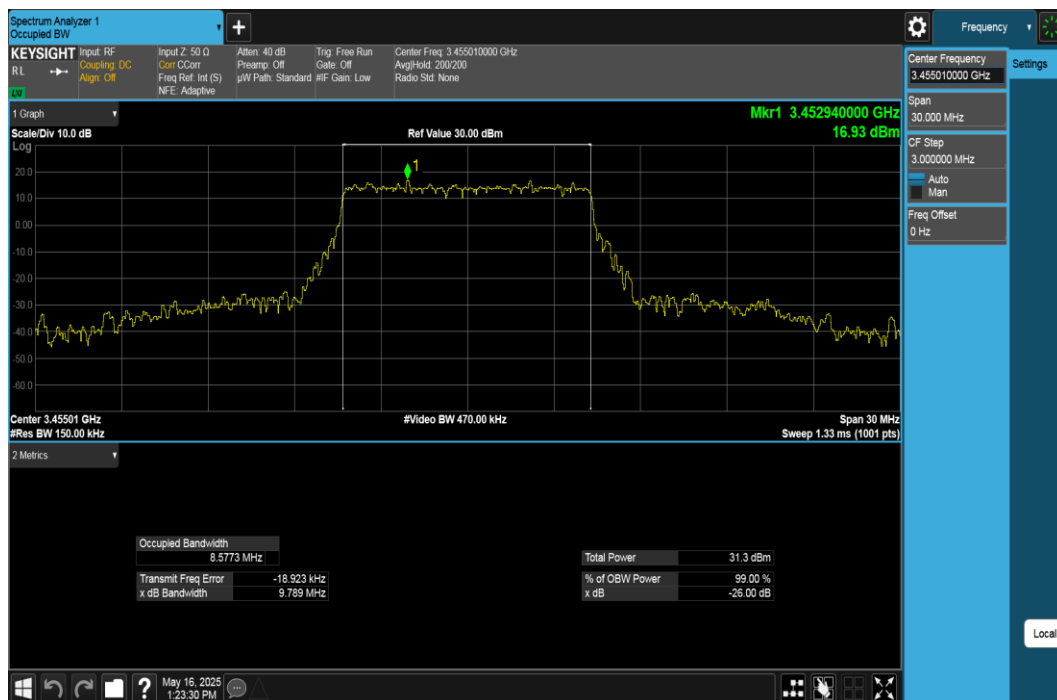
| 5G NR N77a(3450-3550MHz) SCS=30kHz 10MHz |        |               |                         |       |         |
|------------------------------------------|--------|---------------|-------------------------|-------|---------|
| Modulation                               | CH     | RB Allocation | Peak-Average Ratio (dB) | Limit | Verdict |
| DFT-s-OFDM PI/2 BPSK                     | Low    | Outer_Full    | 3.88                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.65                    | <=13  | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | Middle | Outer_Full    | 4.03                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.8                     | <=13  | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | High   | Outer_Full    | 3.95                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.73                    | <=13  | Pass    |

| 5G NR N77a(3450-3550MHz) SCS=30kHz 15MHz |        |               |                         |       |         |
|------------------------------------------|--------|---------------|-------------------------|-------|---------|
| Modulation                               | CH     | RB Allocation | Peak-Average Ratio (dB) | Limit | Verdict |
| DFT-s-OFDM PI/2 BPSK                     | Low    | Outer_Full    | 3.97                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.65                    | <=13  | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | Middle | Outer_Full    | 4.08                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.8                     | <=13  | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | High   | Outer_Full    | 4.29                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.58                    | <=13  | Pass    |

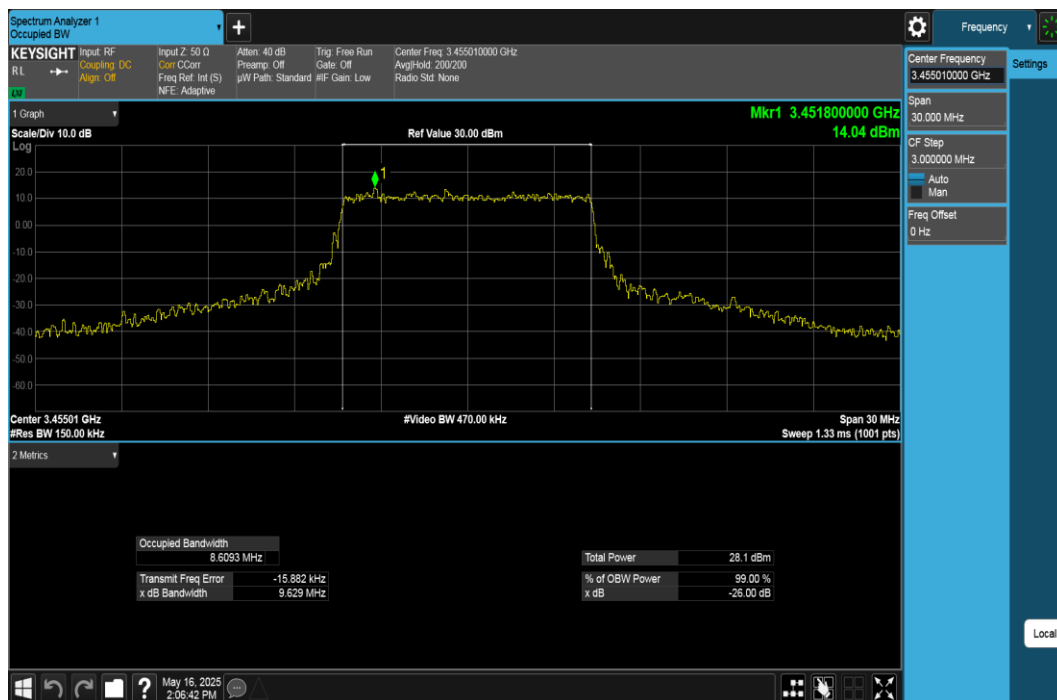
| 5G NR N77a(3450-3550MHz) SCS=30kHz 20MHz |        |               |                         |       |         |
|------------------------------------------|--------|---------------|-------------------------|-------|---------|
| Modulation                               | CH     | RB Allocation | Peak-Average Ratio (dB) | Limit | Verdict |
| DFT-s-OFDM PI/2 BPSK                     | Low    | Outer_Full    | 3.96                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.7                     | <=13  | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | Middle | Outer_Full    | 4.07                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.84                    | <=13  | Pass    |
| DFT-s-OFDM PI/2 BPSK                     | High   | Outer_Full    | 3.86                    | <=13  | Pass    |
| CP-OFDM QPSK                             |        | Outer_Full    | 6.62                    | <=13  | Pass    |

## OBW test graph

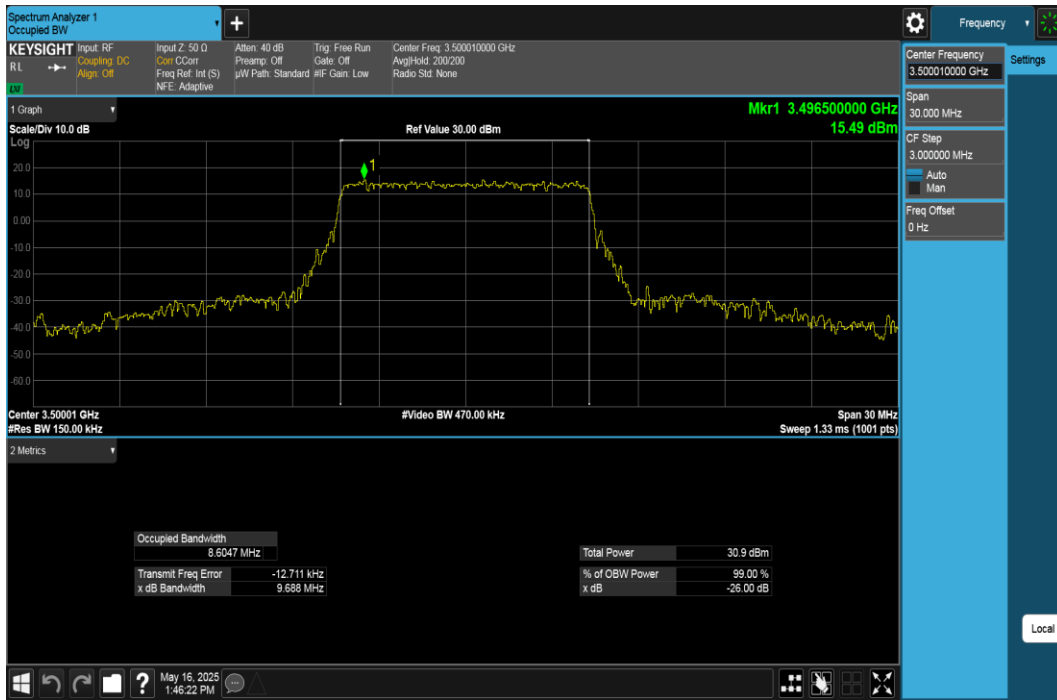
N77a(3450-3550MHz)-10M-OBW-LCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



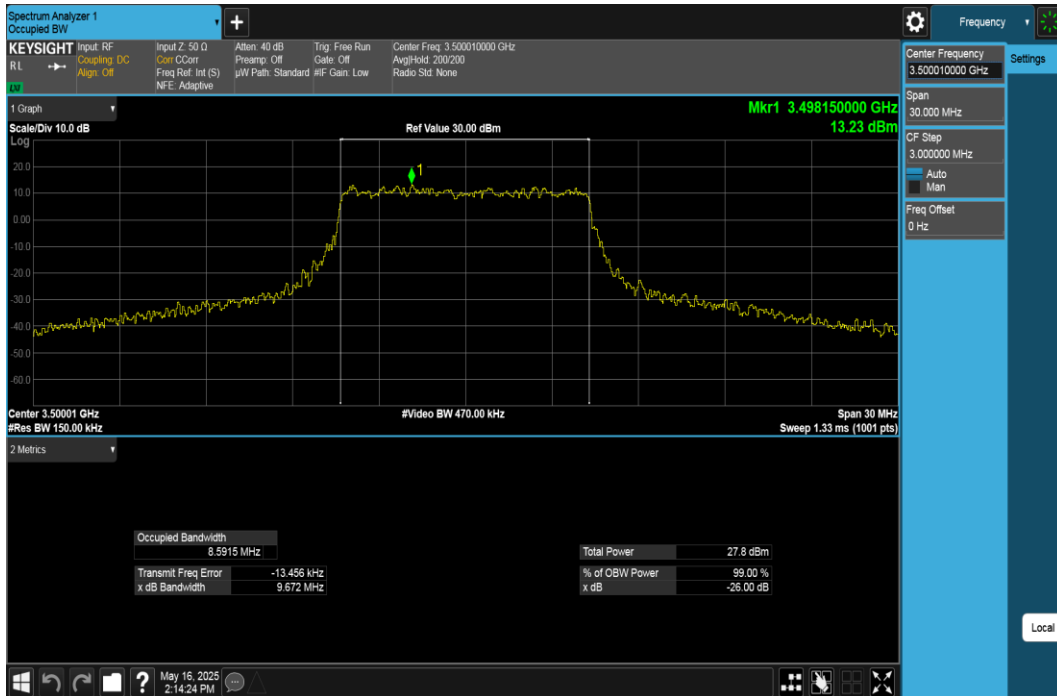
N77a(3450-3550MHz)-10M-OBW-LCH-CP-OFDM-QPSK-Outer\_Full



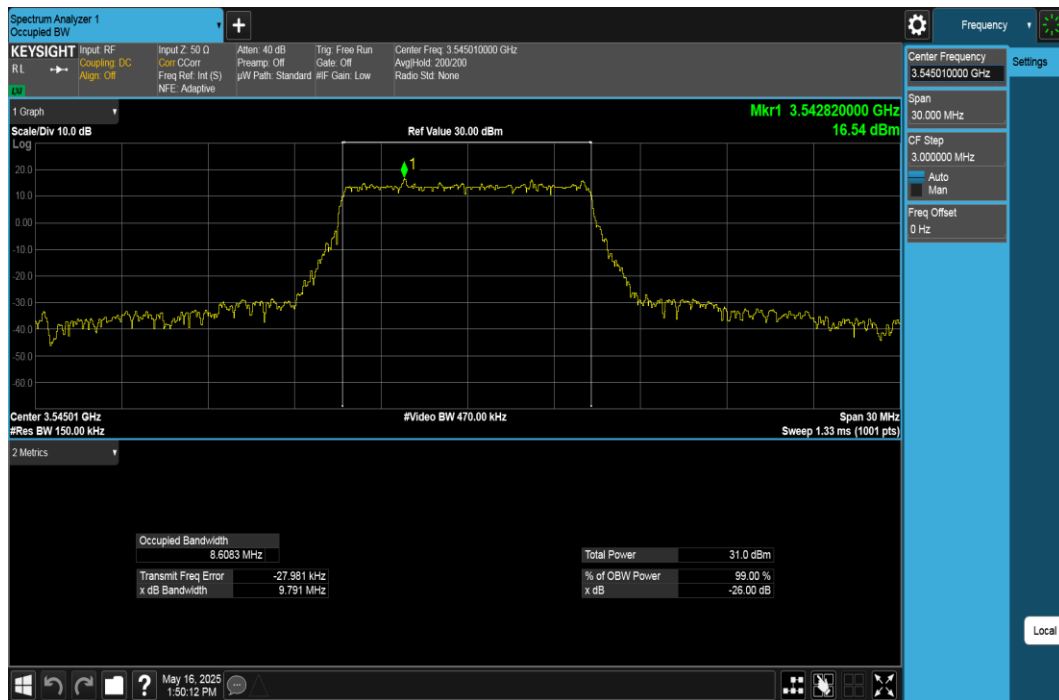
# N77a(3450-3550MHz)-10M-OBW-MCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



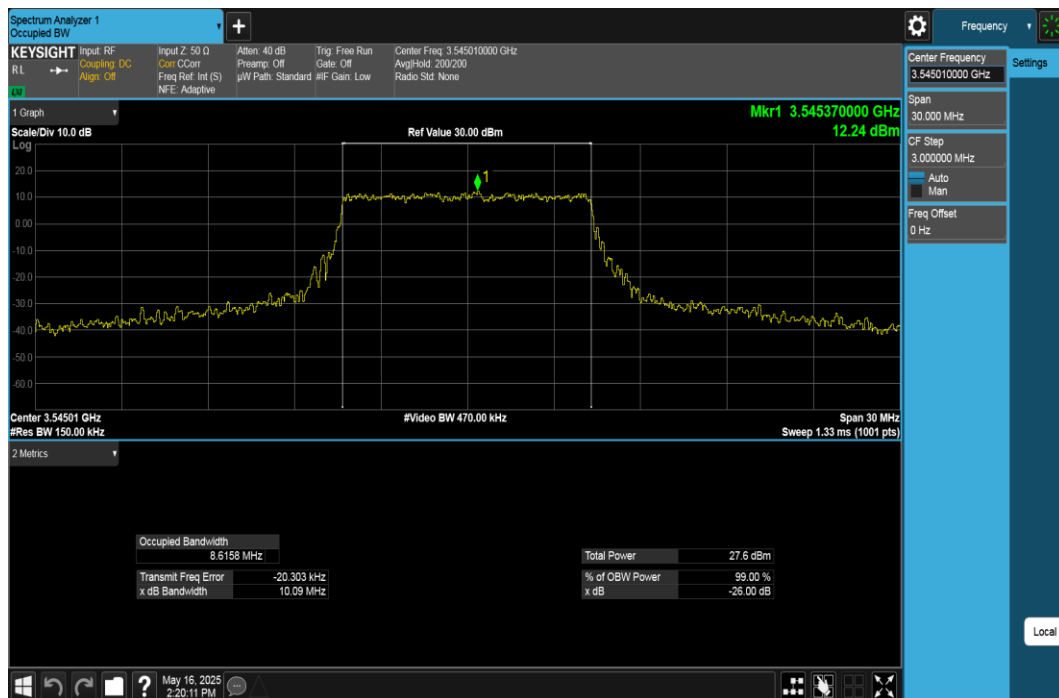
# N77a(3450-3550MHz)-10M-OBW-MCH-CP-OFDM-QPSK-Outer\_Full



# N77a(3450-3550MHz)-10M-OBW-HCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



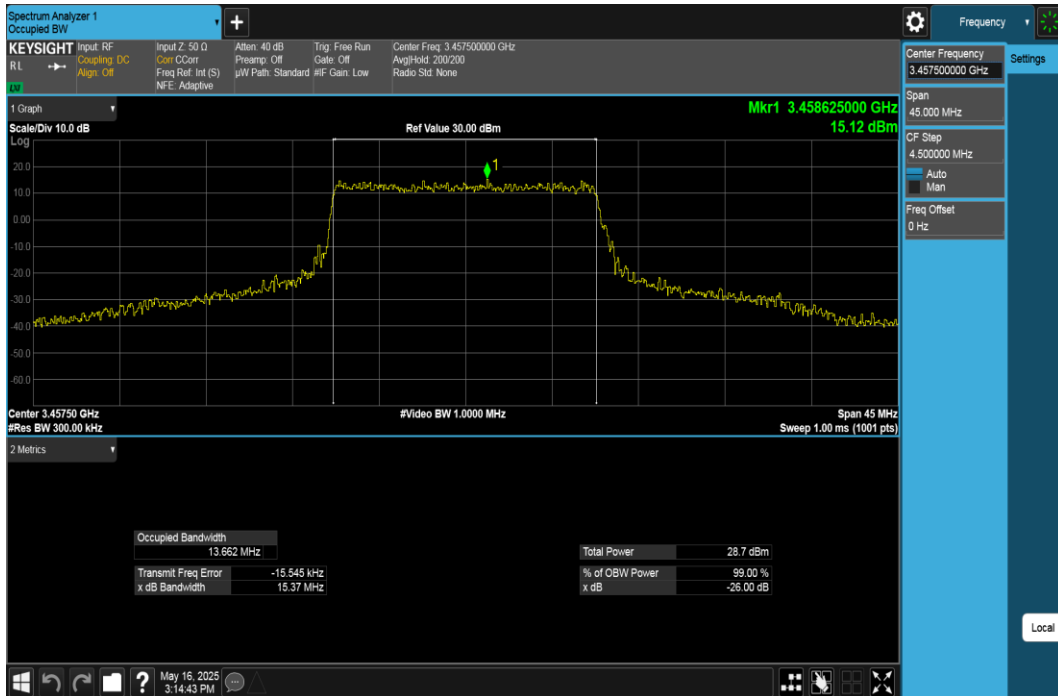
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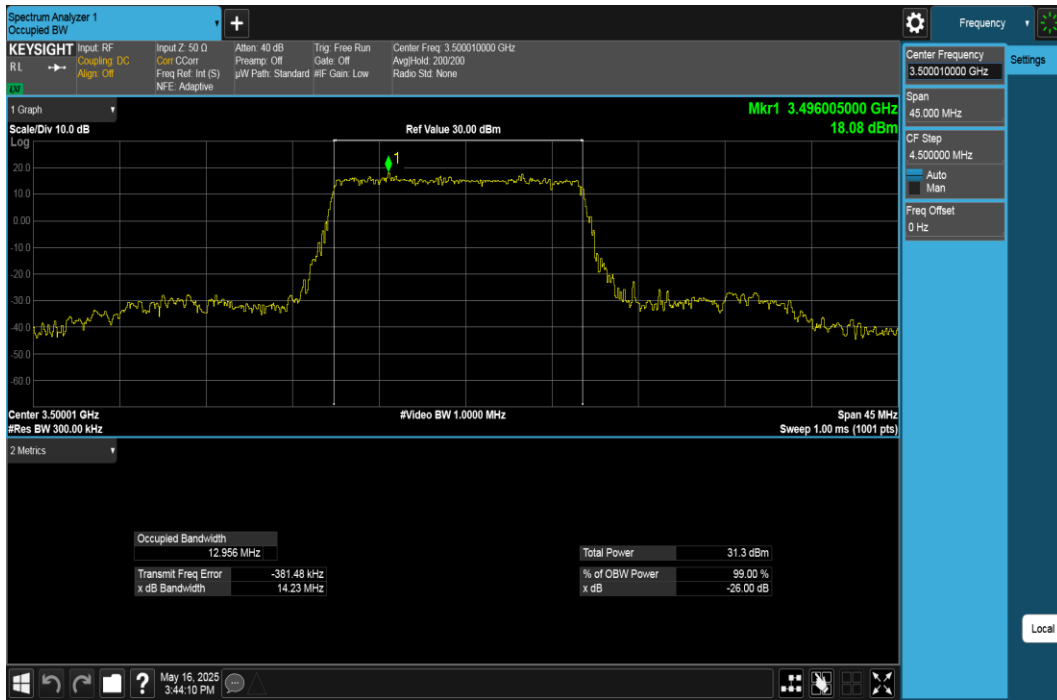
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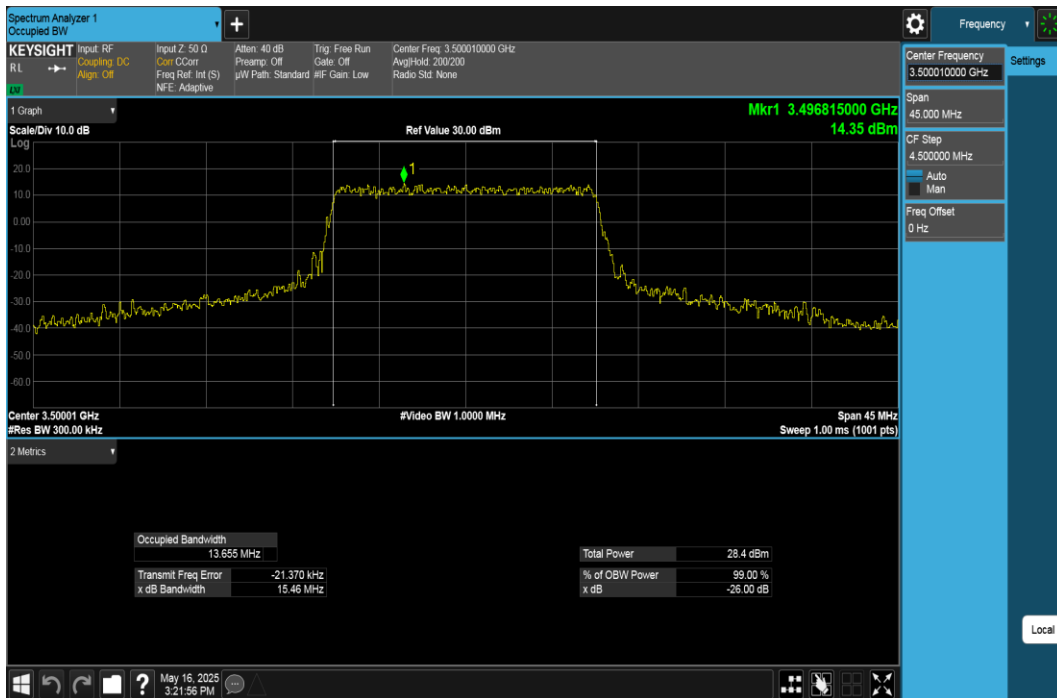
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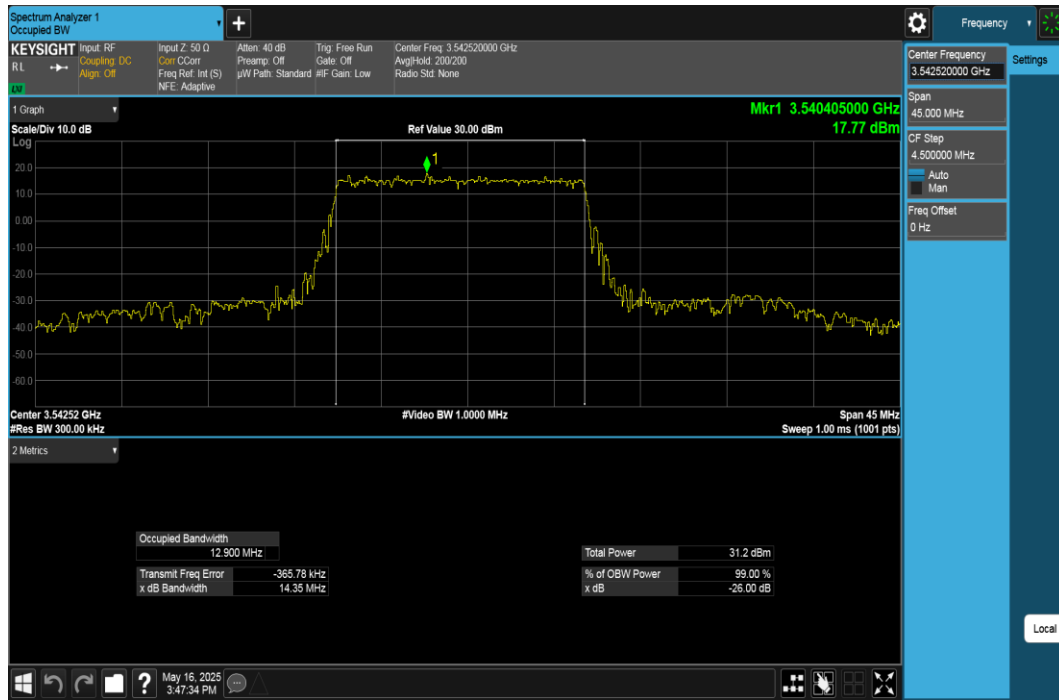
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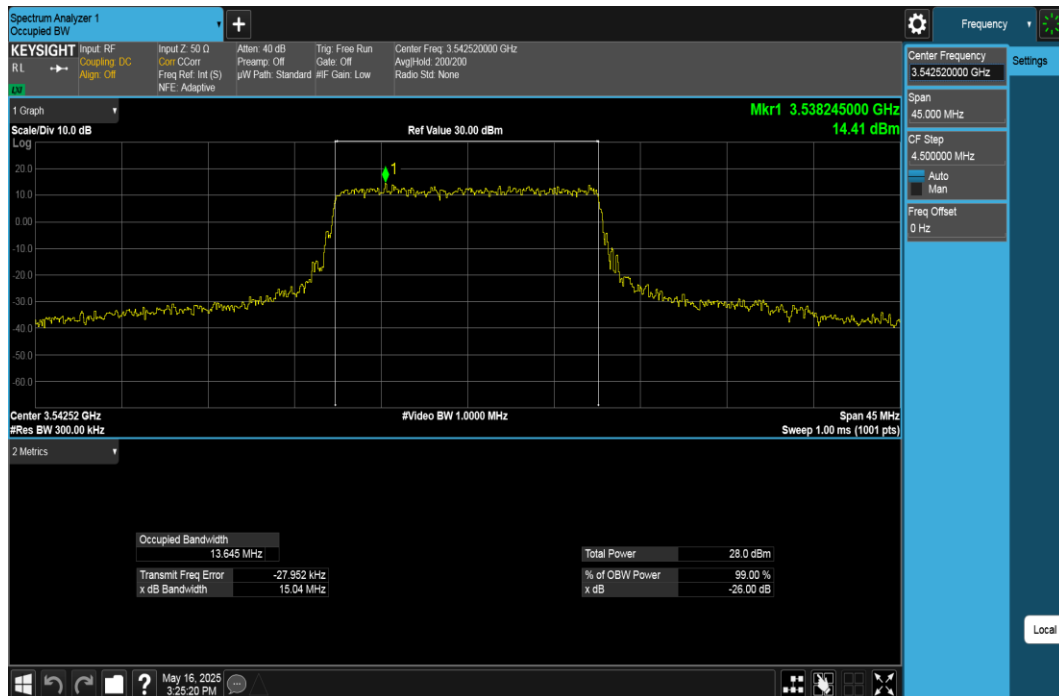
# N77a(3450-3550MHz)-15M-OBW-MCH-CP-OFDM-QPSK-Outer\_Full



# N77a(3450-3550MHz)-15M-OBW-HCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full

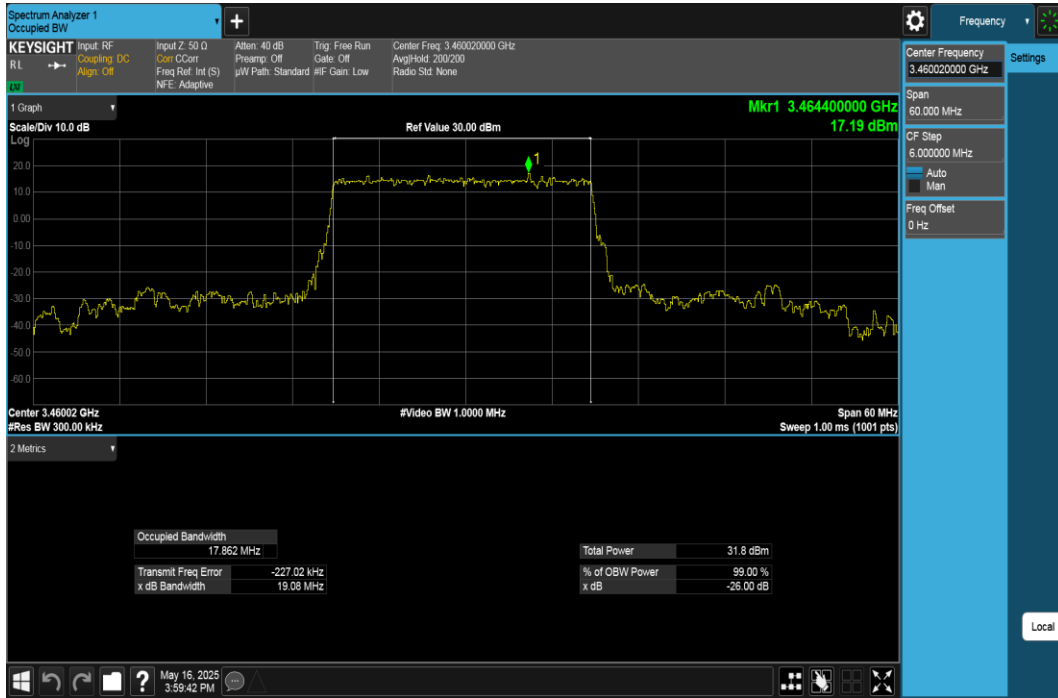


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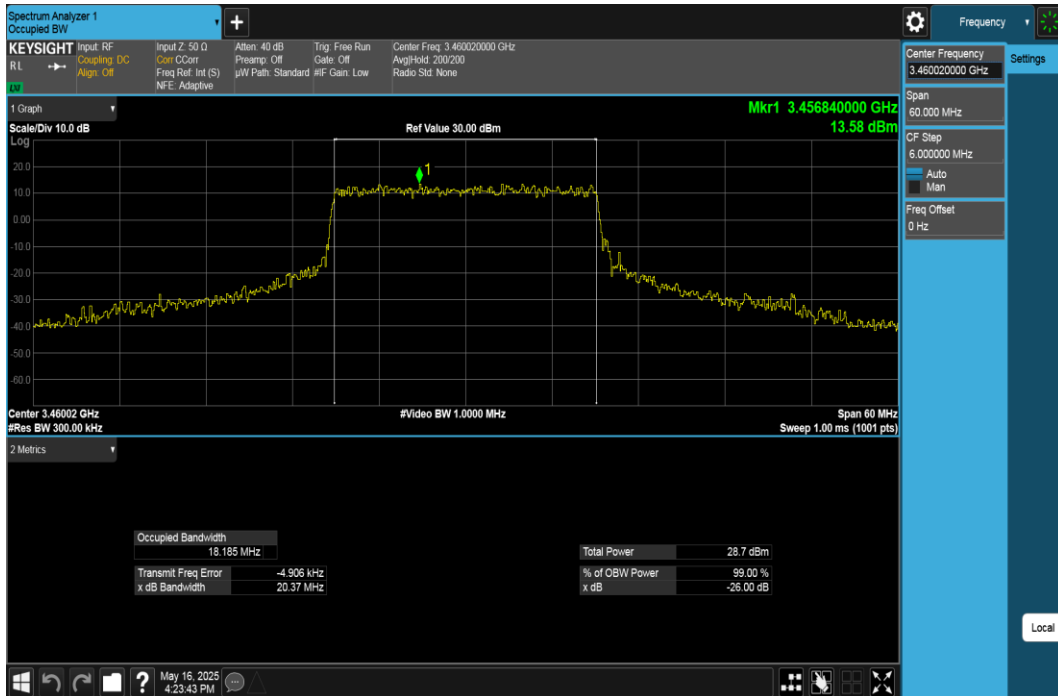




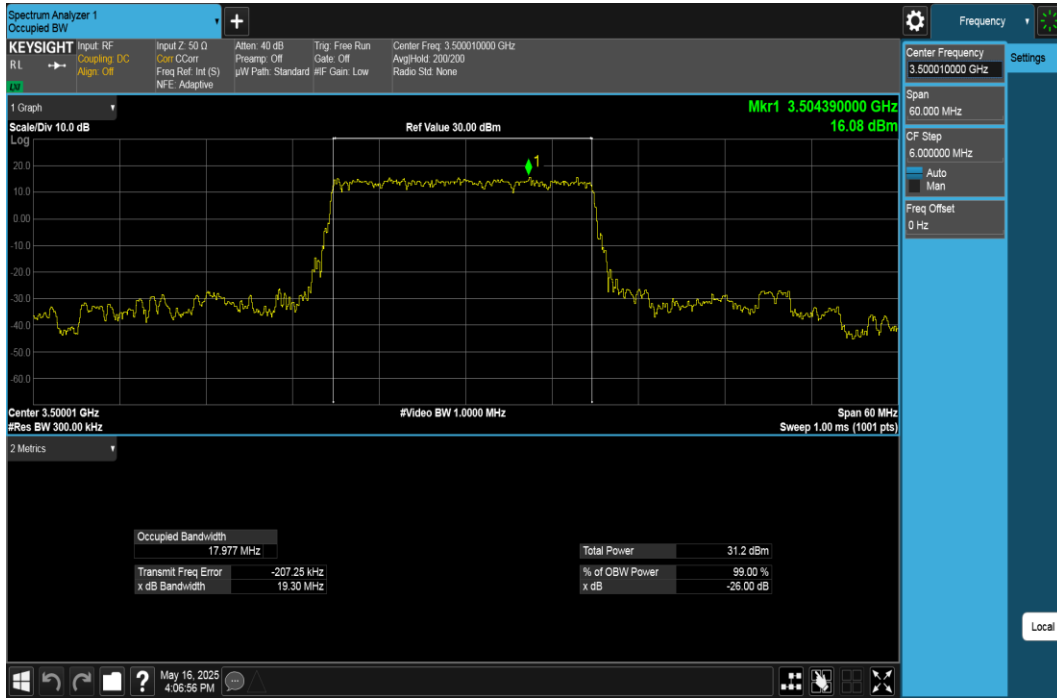
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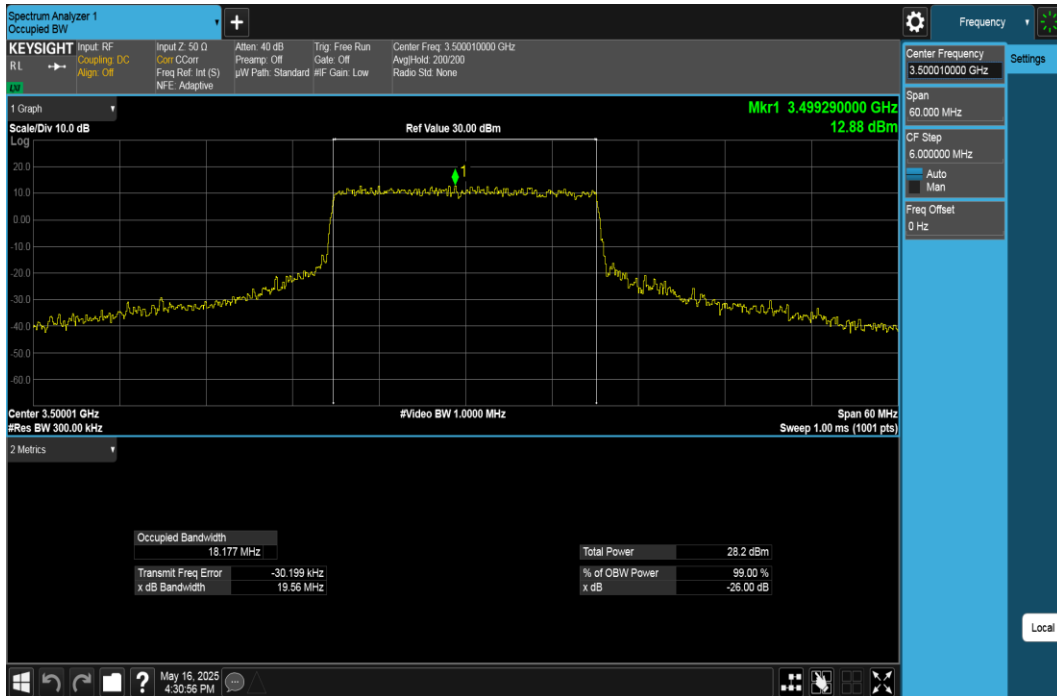
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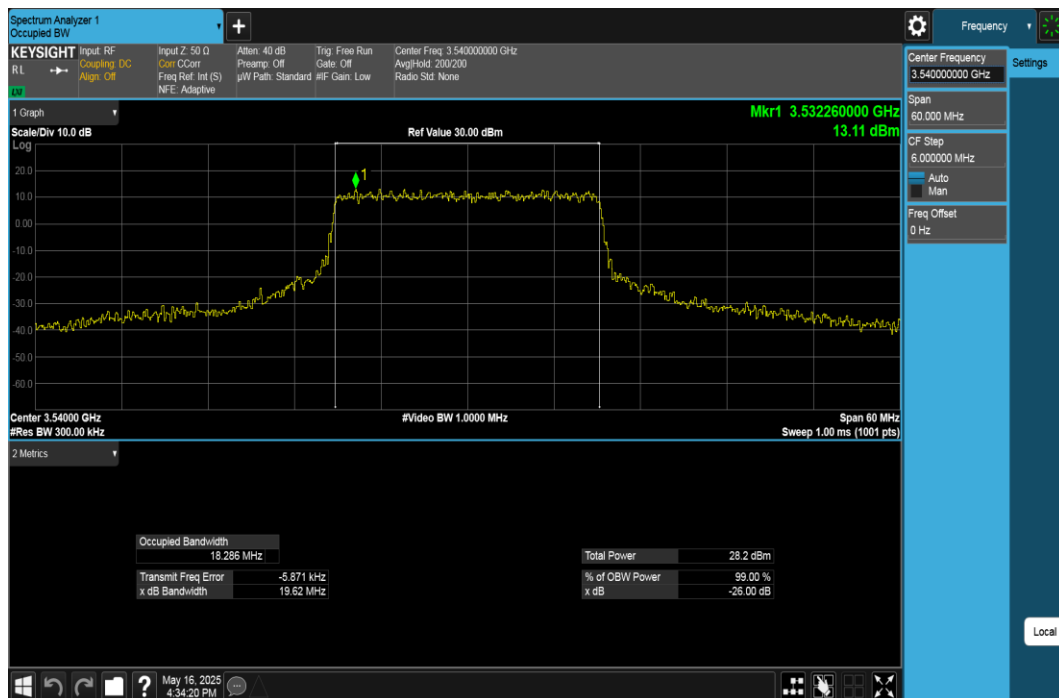
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N77a(3450-3550MHz)-20M-OBW-HCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full

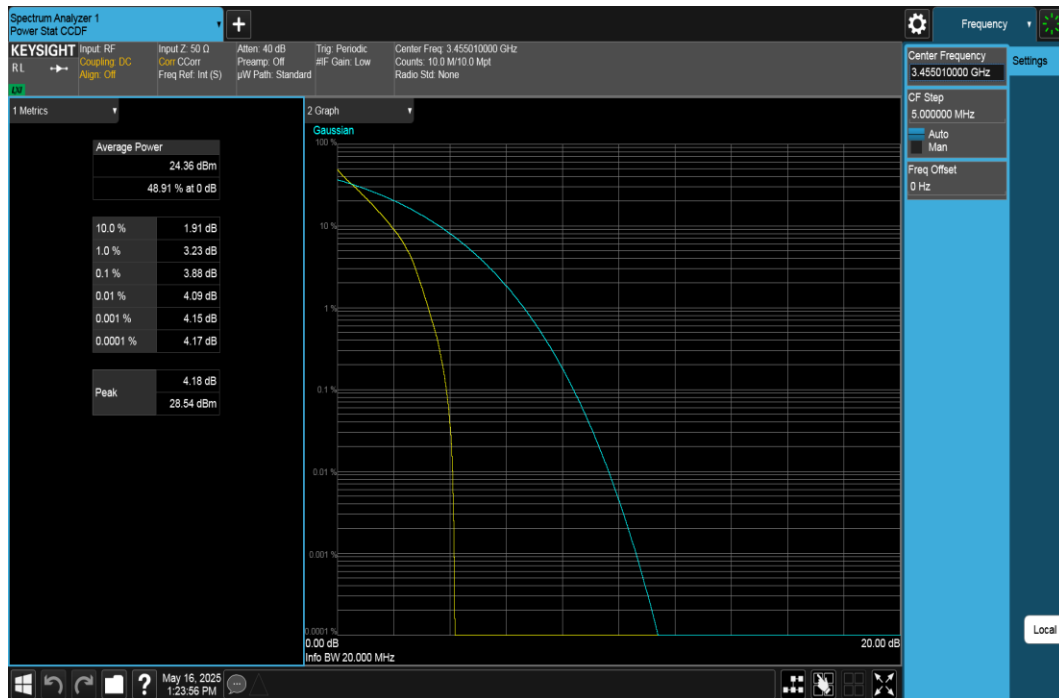


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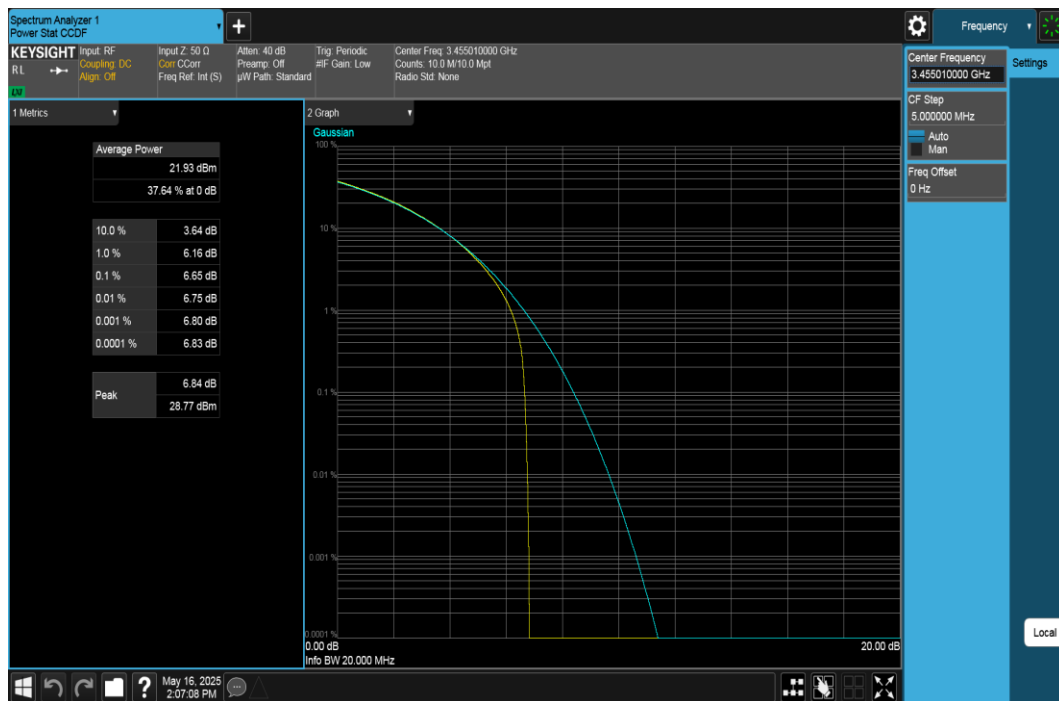


PAPR test graph

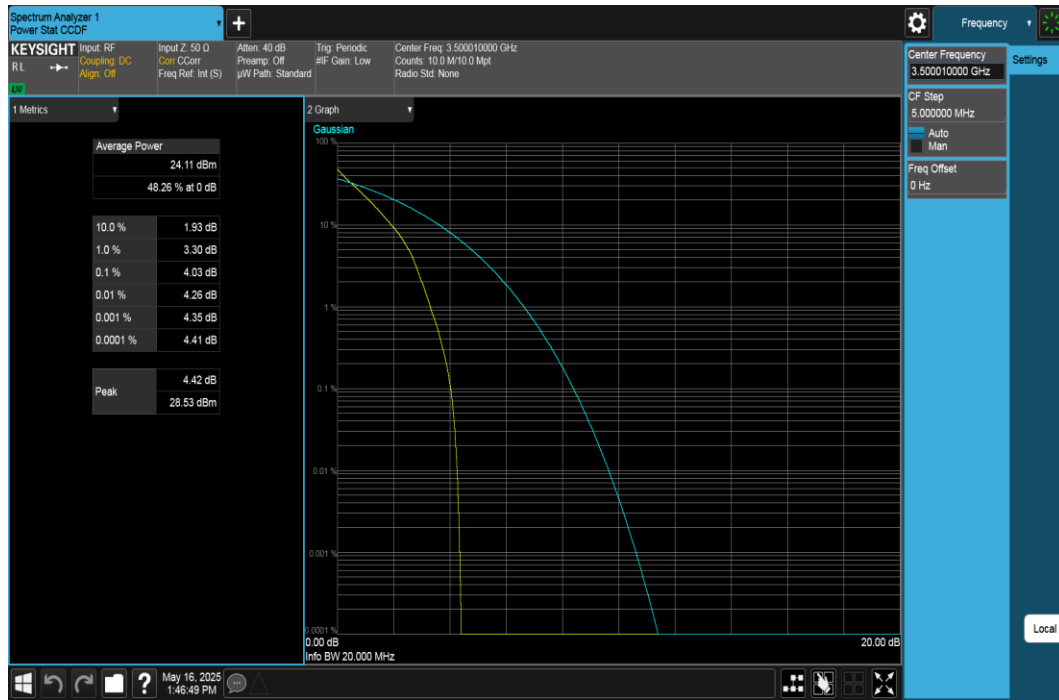
N77a(3450-3550MHz)-10M-PAPR-LCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



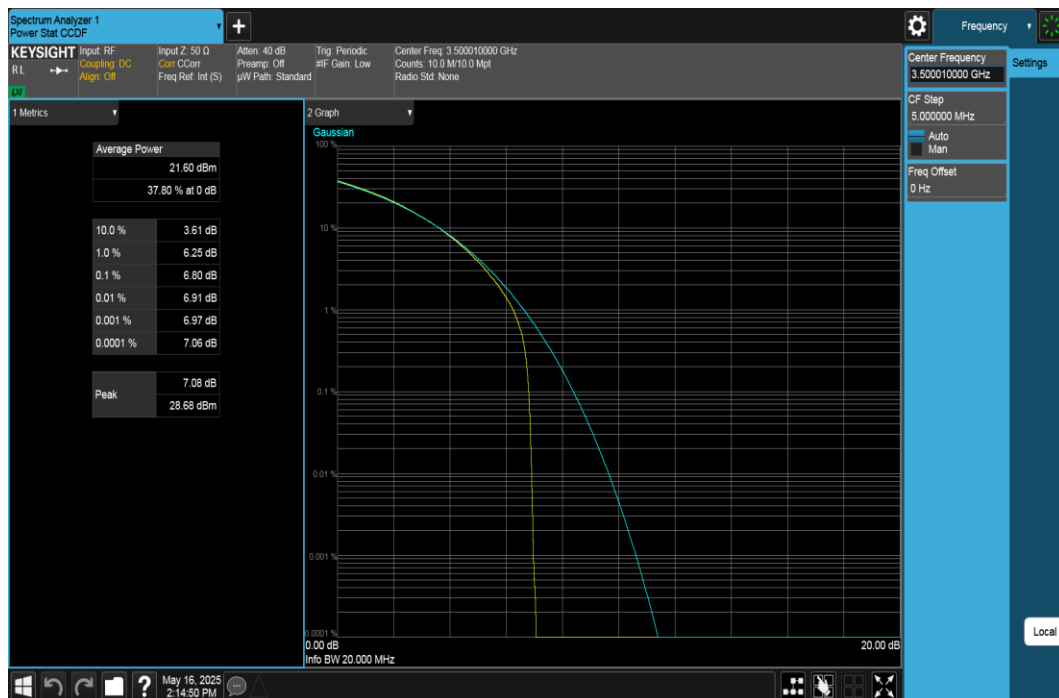
N77a(3450-3550MHz)-10M-PAPR-LCH-CP-OFDM-QPSK-Outer\_Full



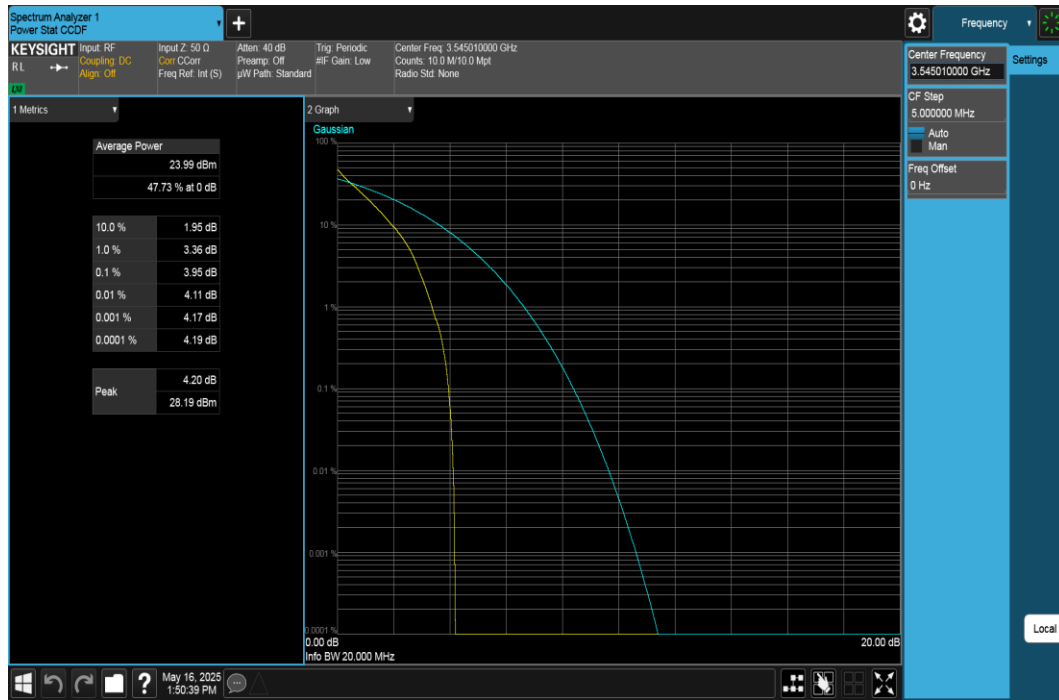
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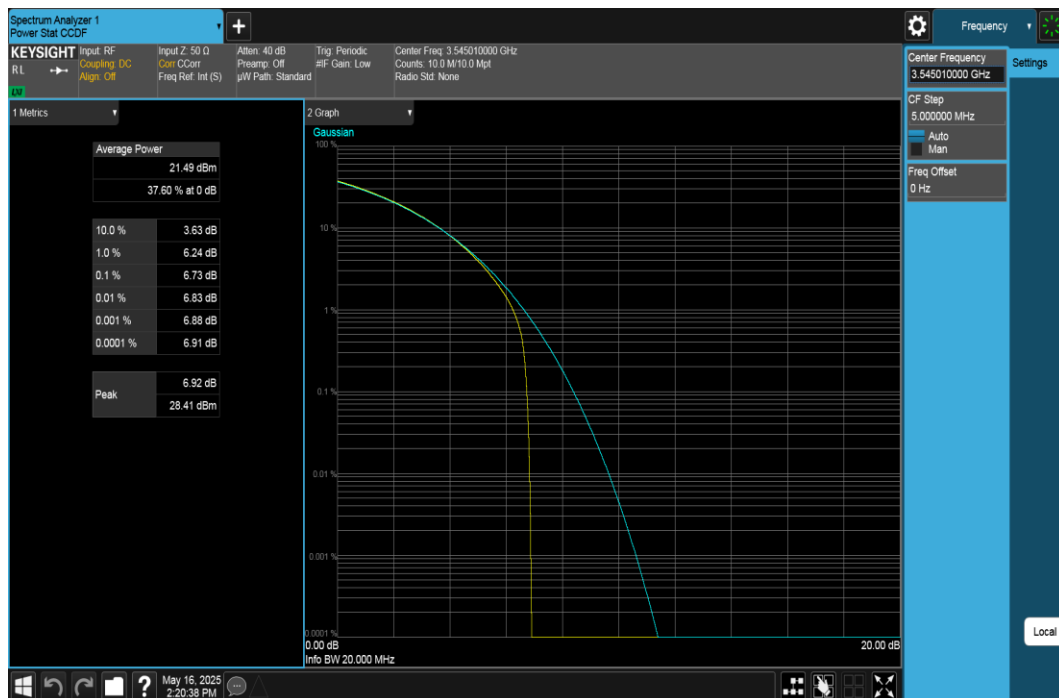
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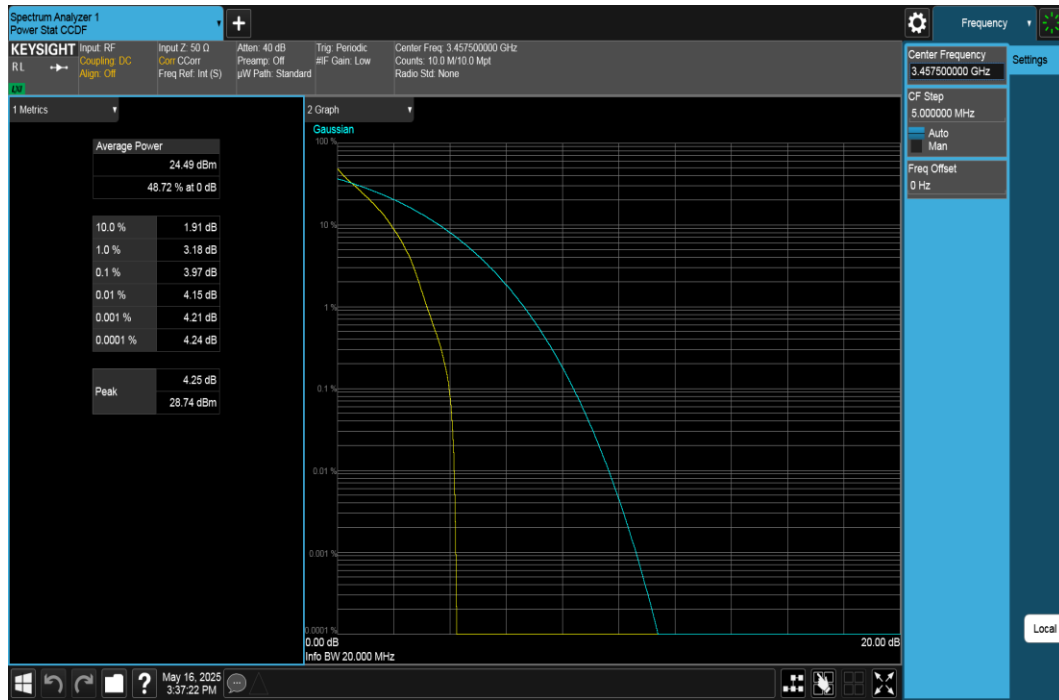
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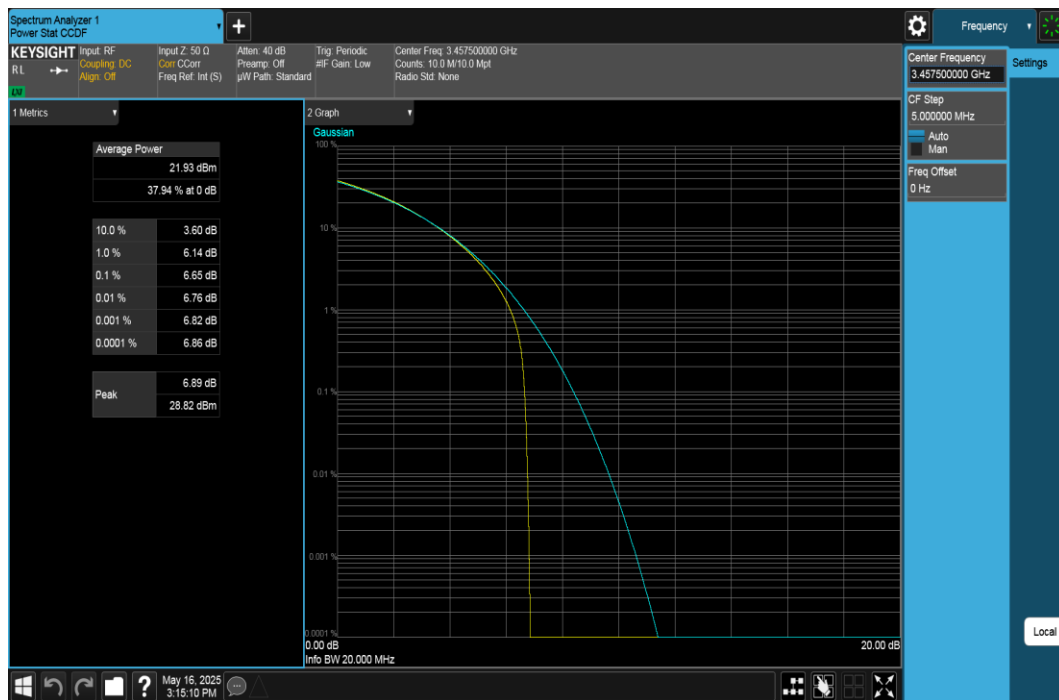
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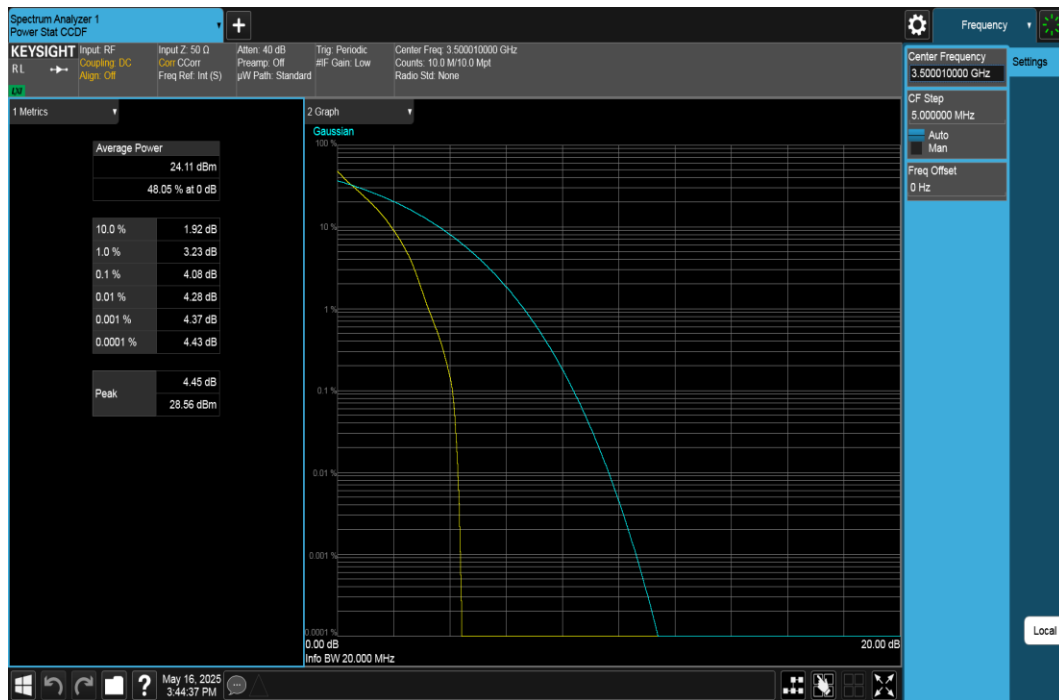
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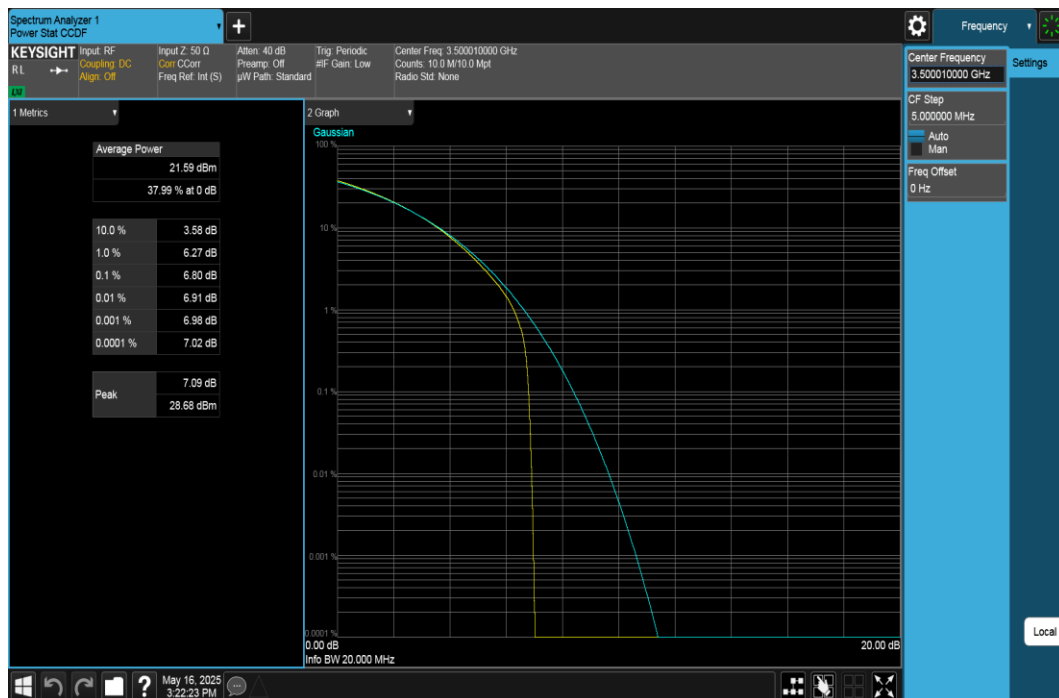
# N77a(3450-3550MHz)-15M-PAPR-LCH-CP-OFDM-QPSK-Outer\_Full



# N77a(3450-3550MHz)-15M-PAPR-MCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full

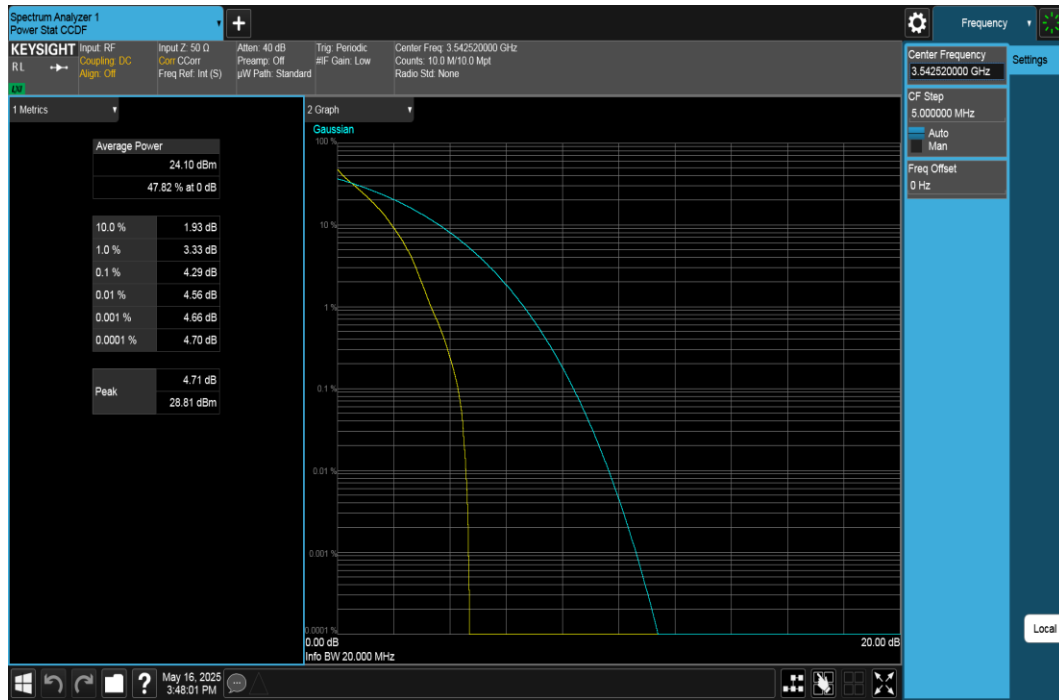


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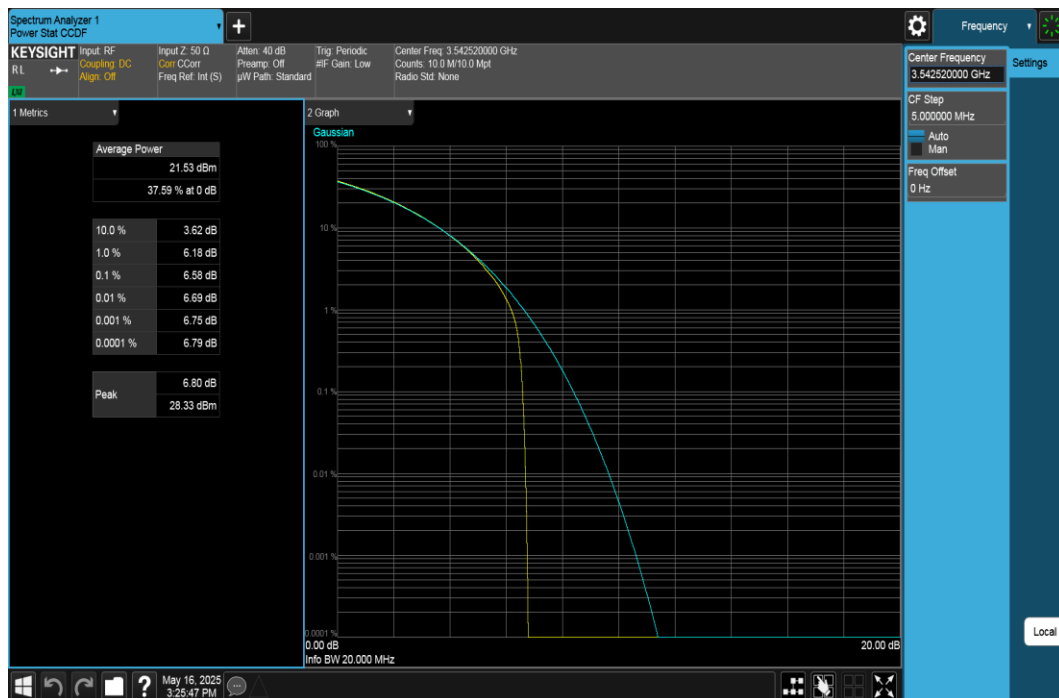




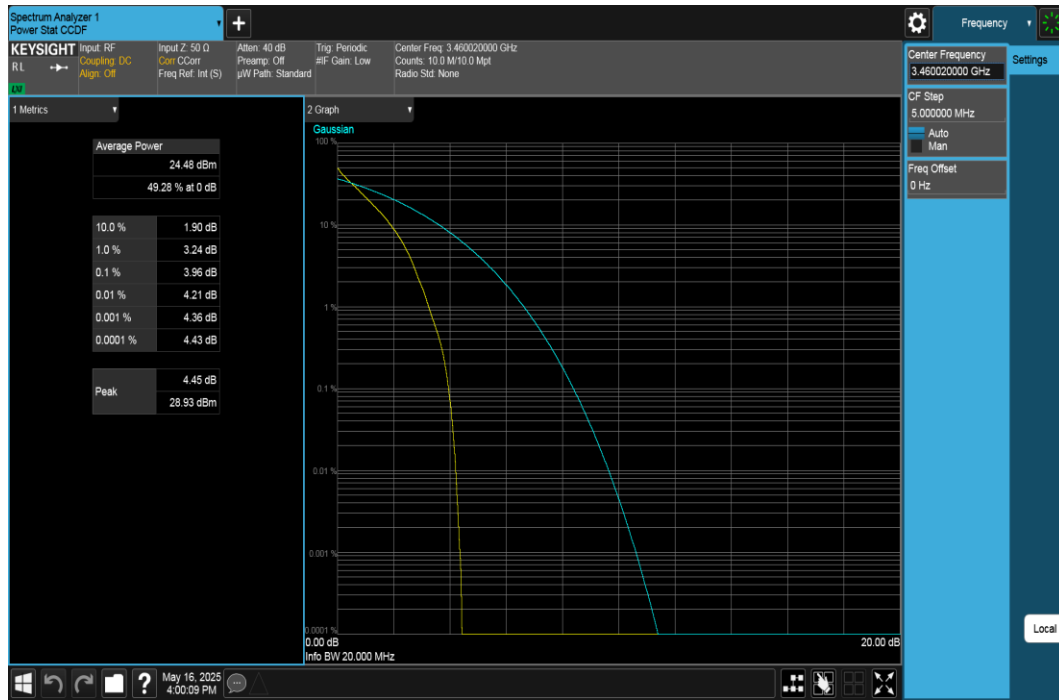
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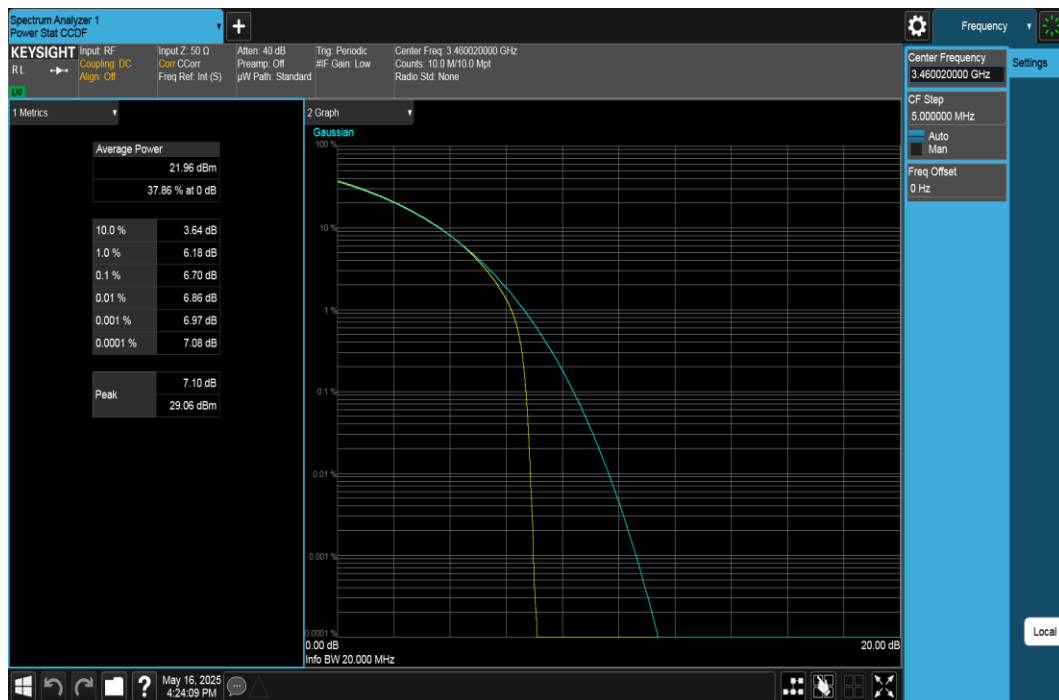
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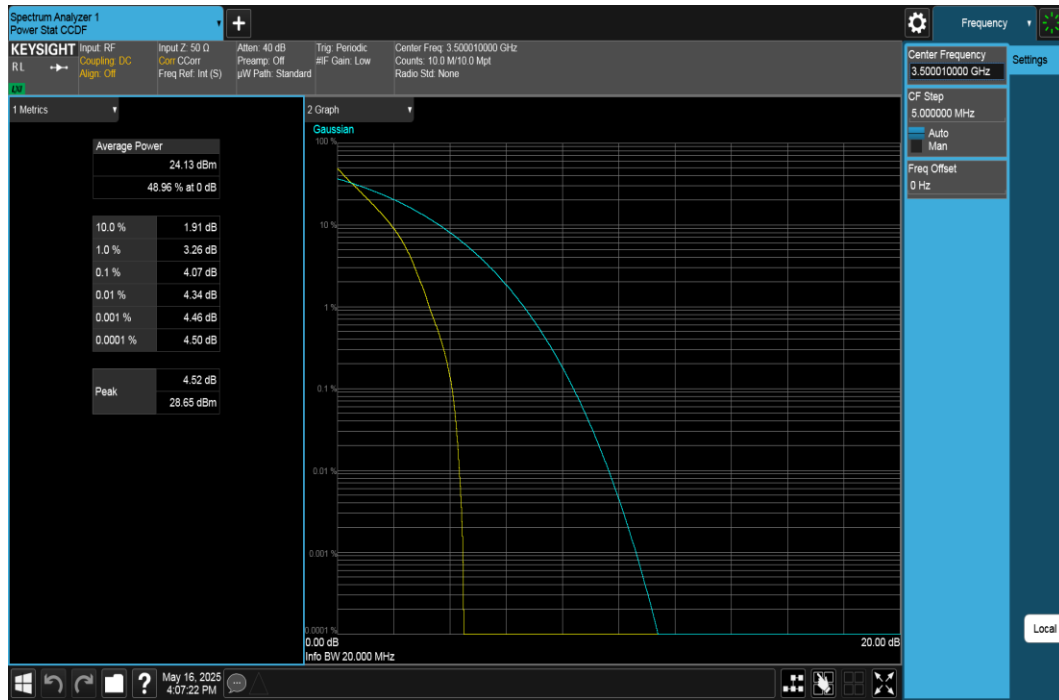
# N77a(3450-3550MHz)-20M-PAPR-LCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



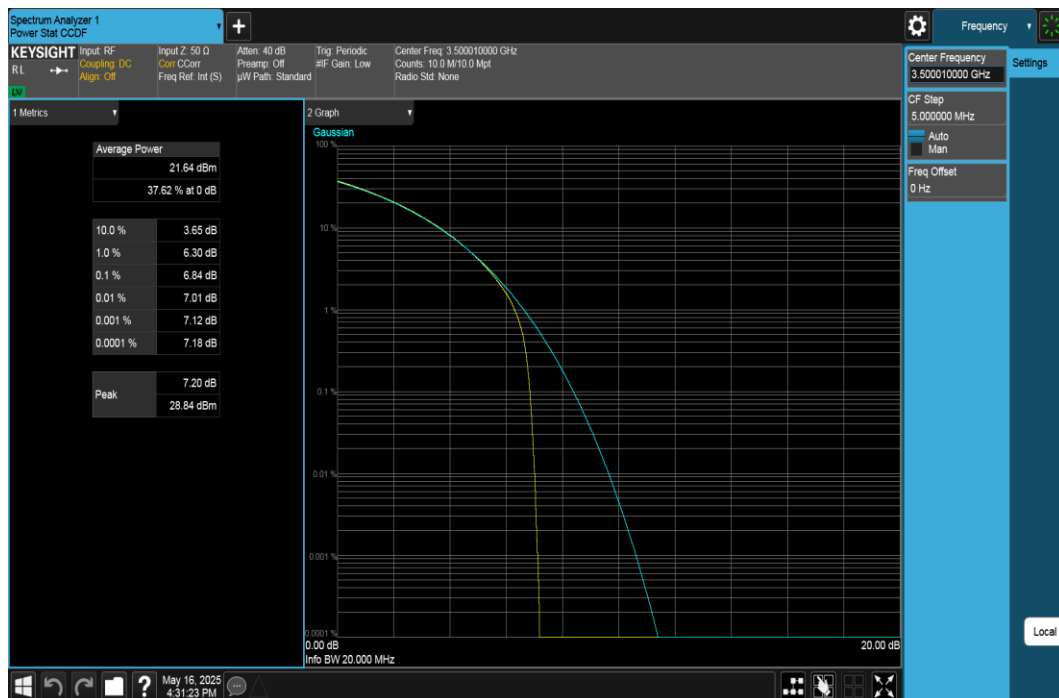
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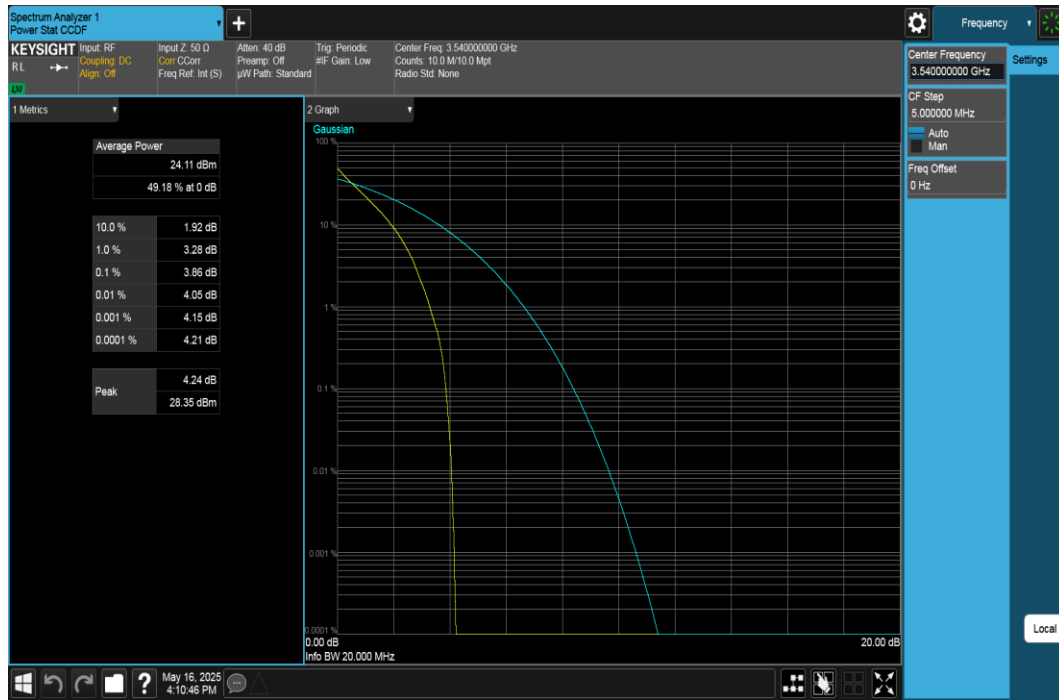
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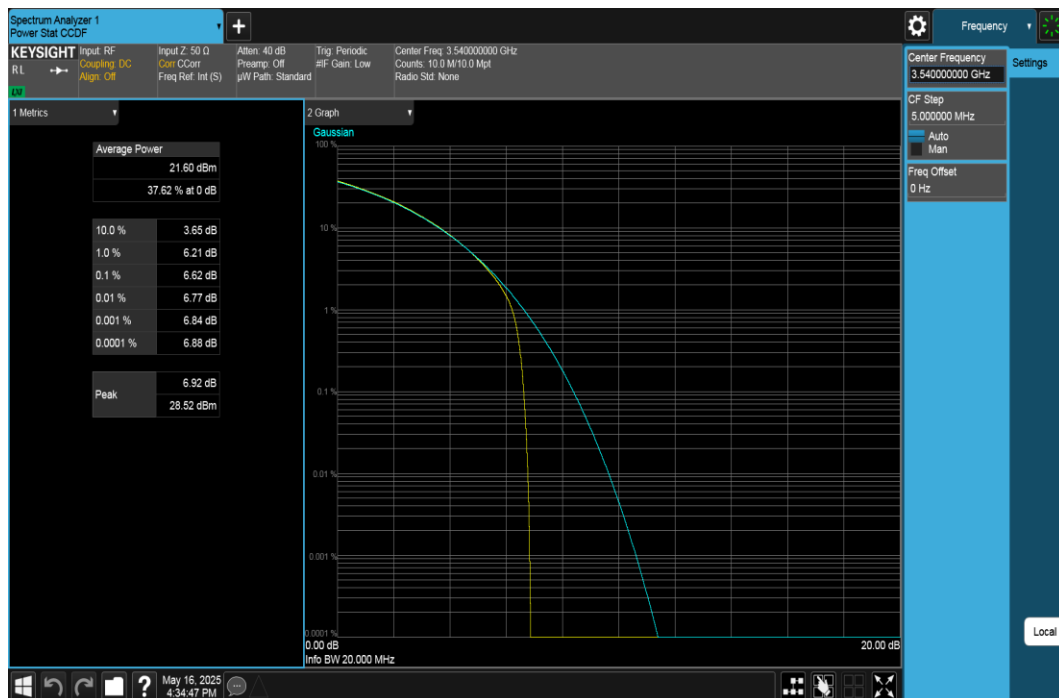
# N77a(3450-3550MHz)-20M-PAPR-MCH-CP-OFDM-QPSK-Outer\_Full



# N77a(3450-3550MHz)-20M-PAPR-HCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



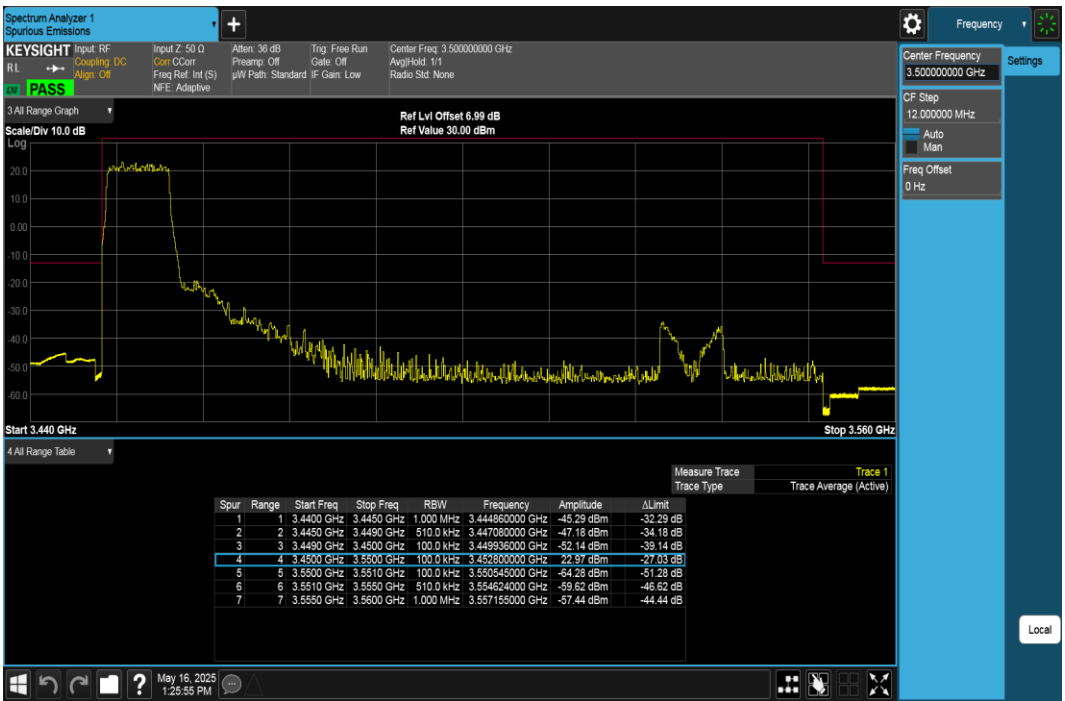
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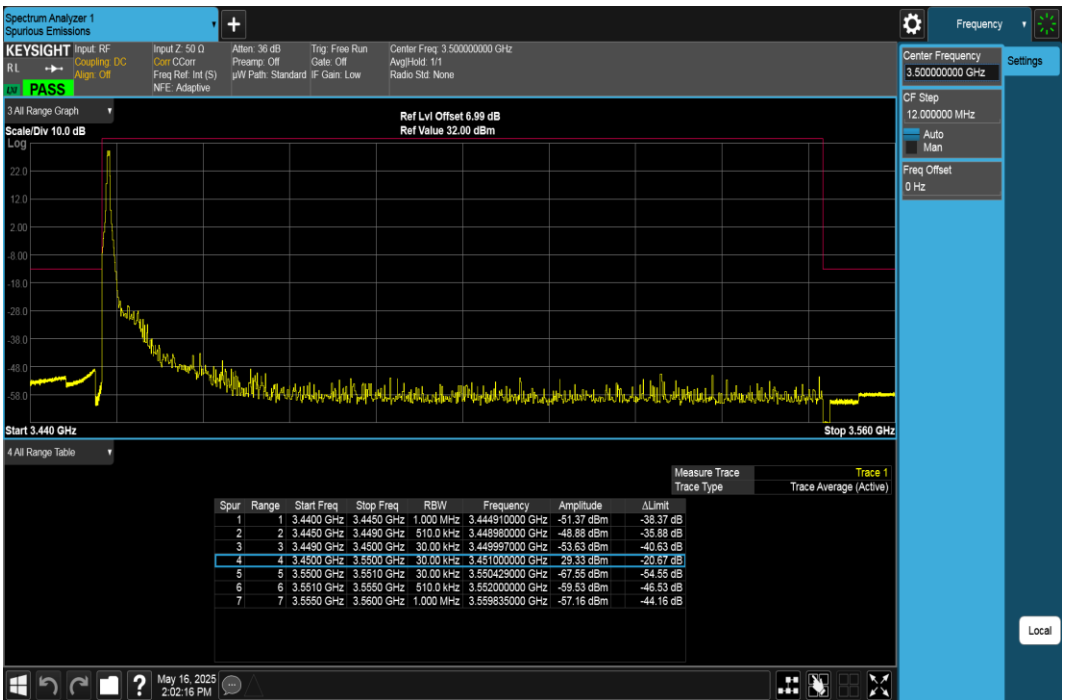
# Bandedge

test graph

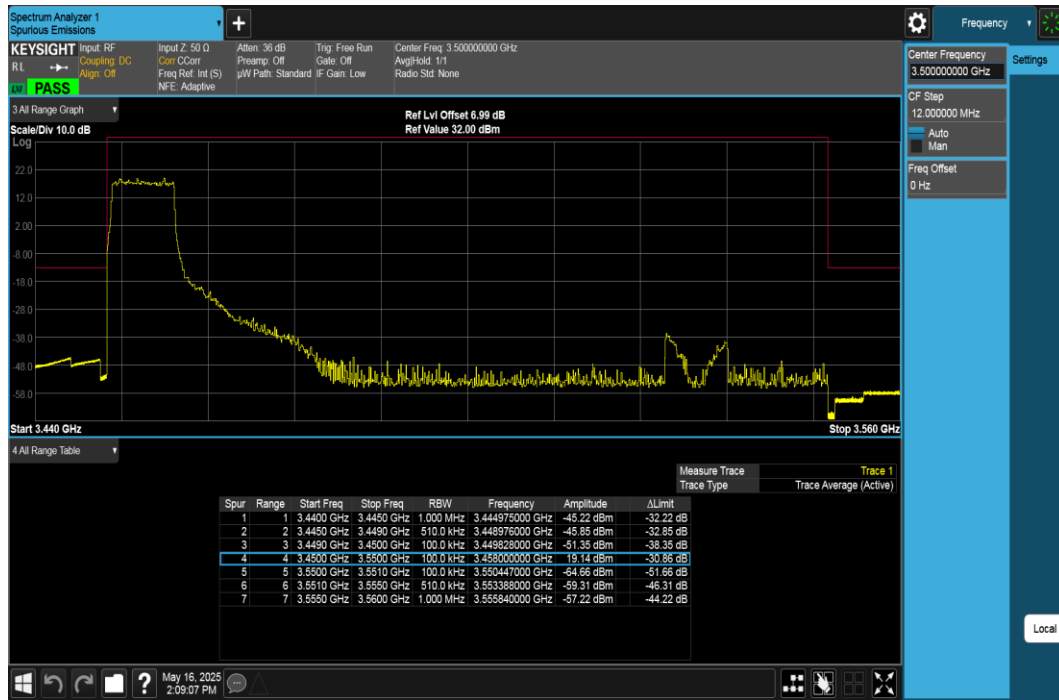
N77a(3450-3550MHz)-10M-Bandedge-LCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



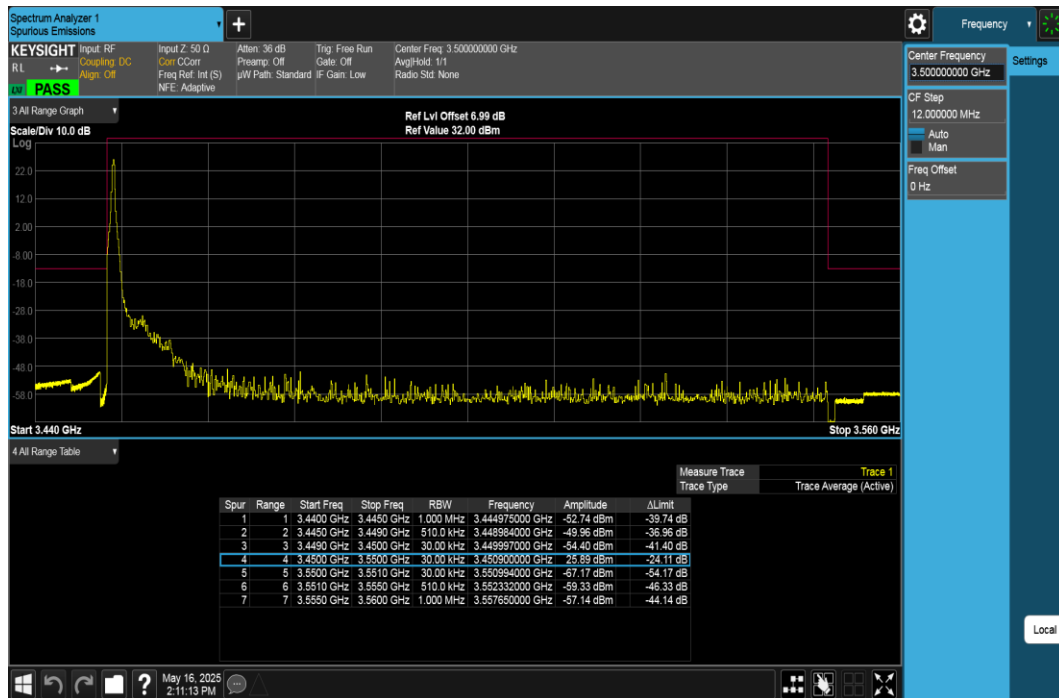
N77a(3450-3550MHz)-10M-Bandedge-LCH-DFT-s-OFDM-Pi2 BPSK-1RB0



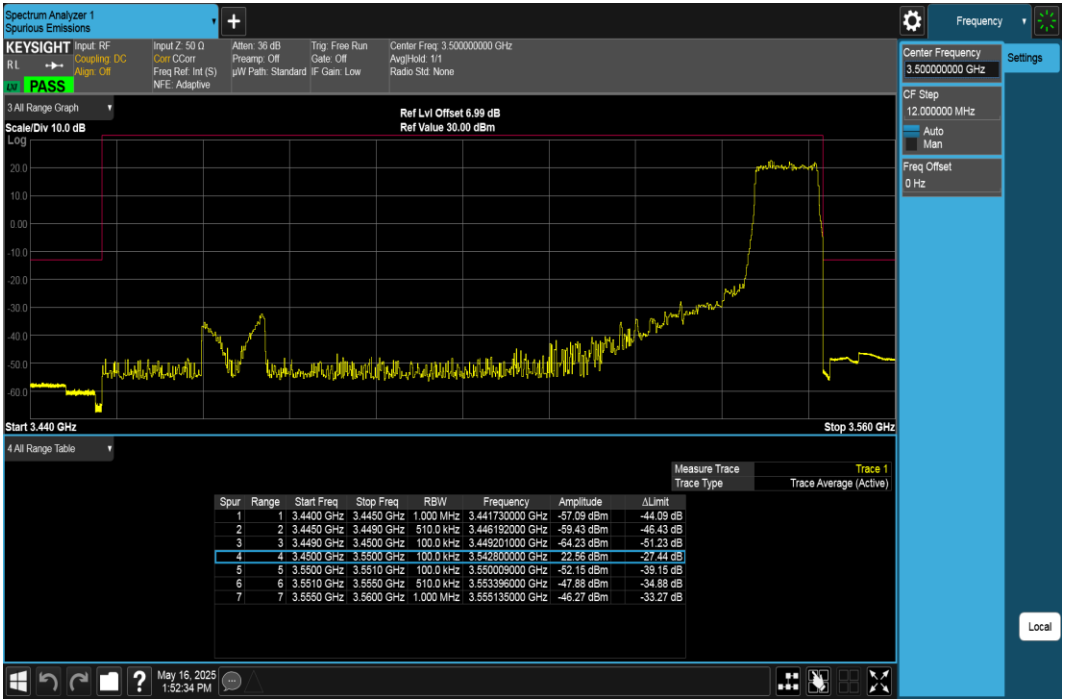
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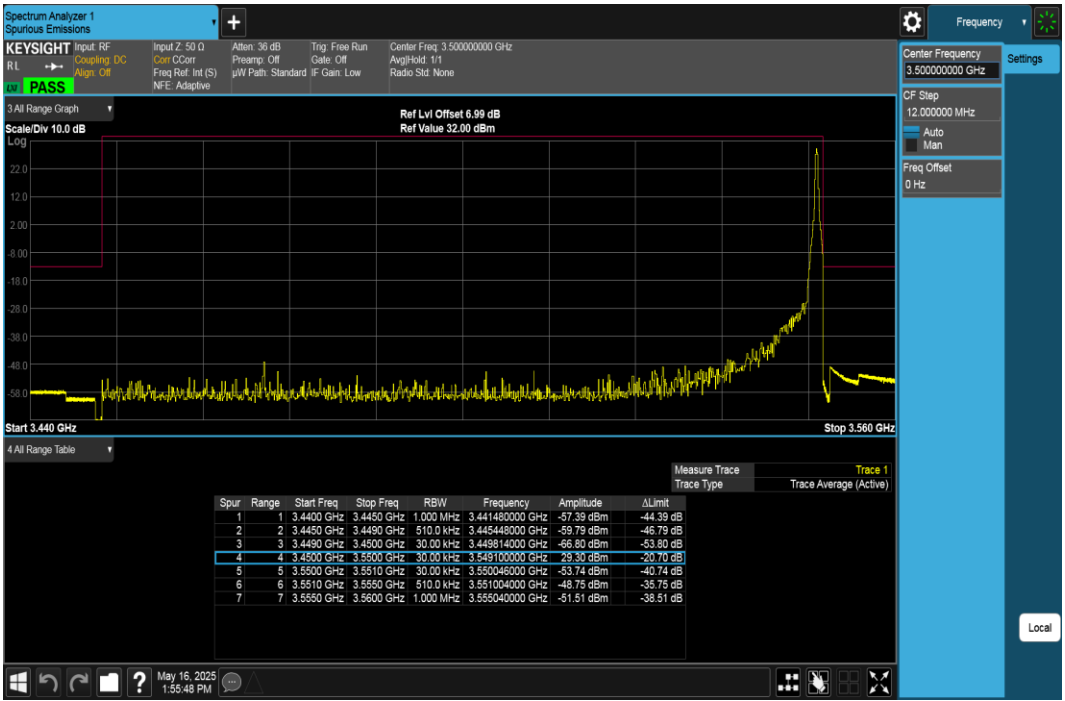
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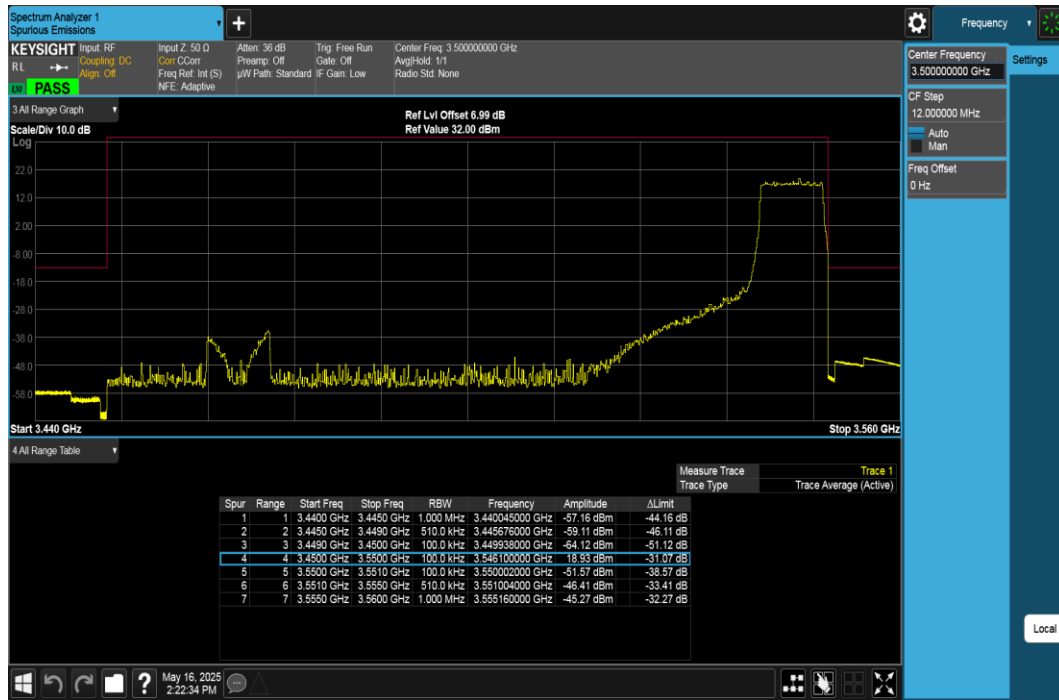
N77a(3450-3550MHz)-10M-Bandedge-HCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



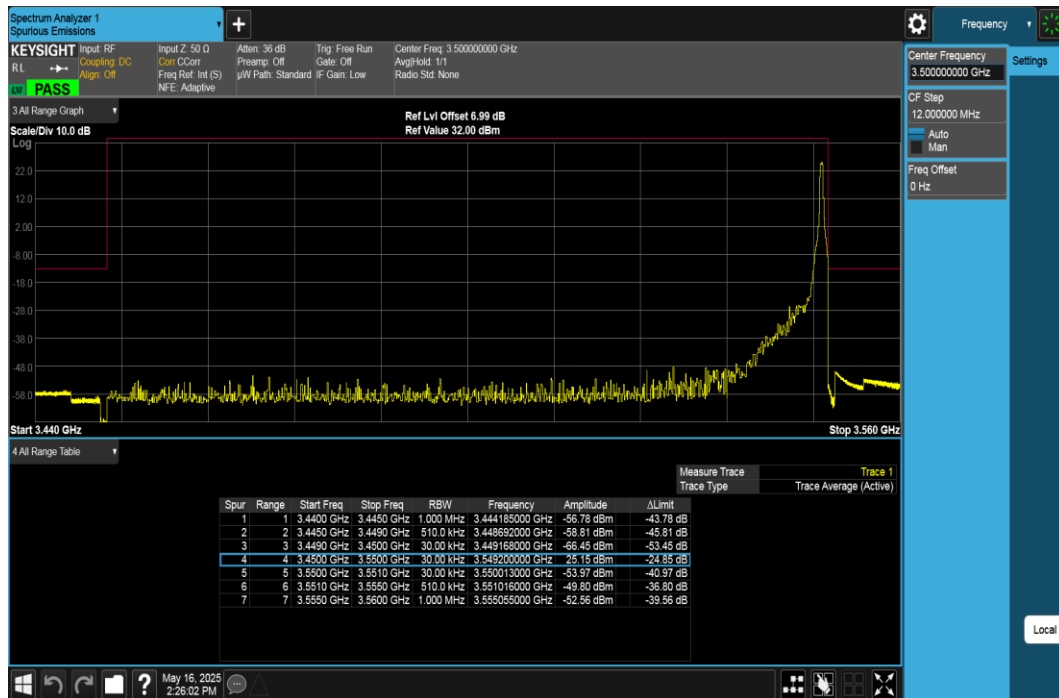
N77a(3450-3550MHz)-10M-Bandedge-HCH-DFT-s-OFDM-Pi2 BPSK-1RB\_MAX



# N77a(3450-3550MHz)-10M-Bandedge-HCH-CP-OFDM-QPSK-Outer\_Full

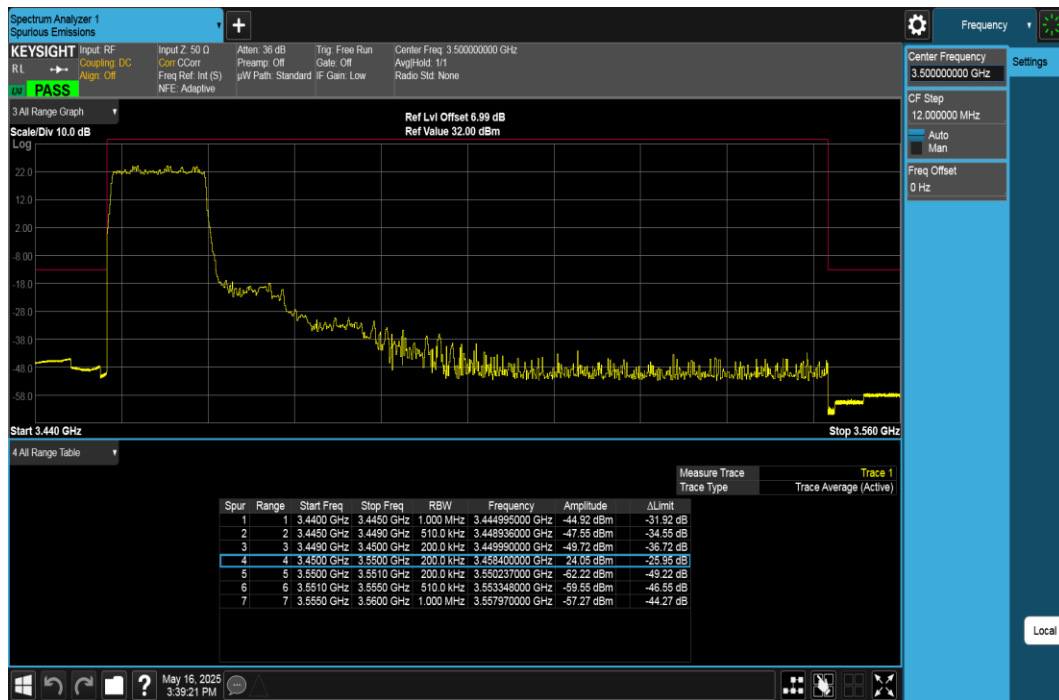


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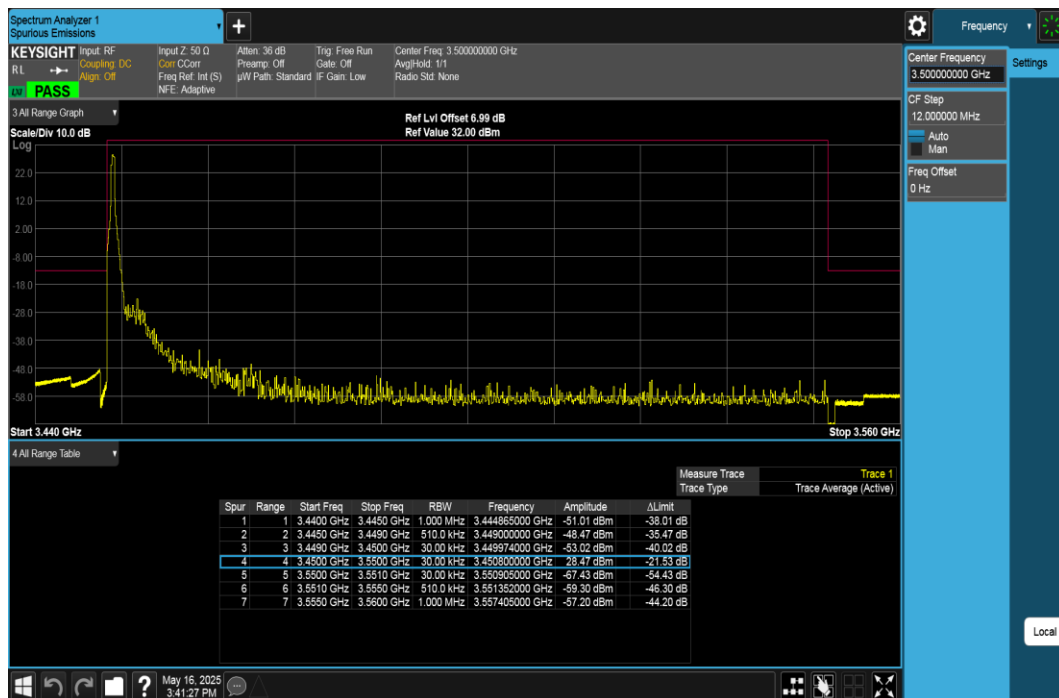




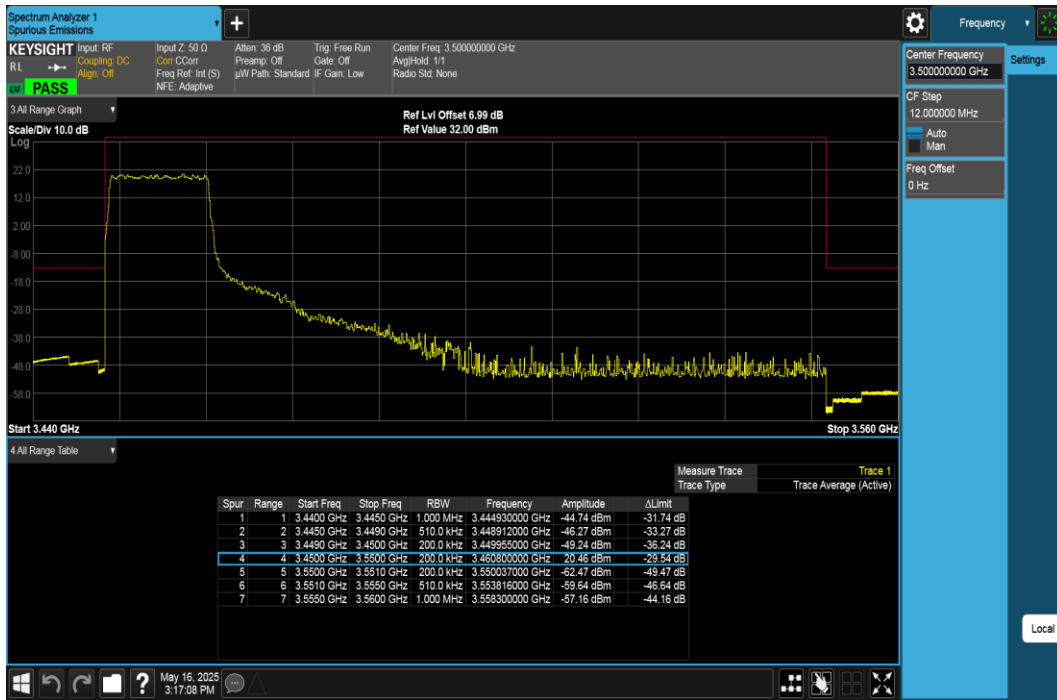
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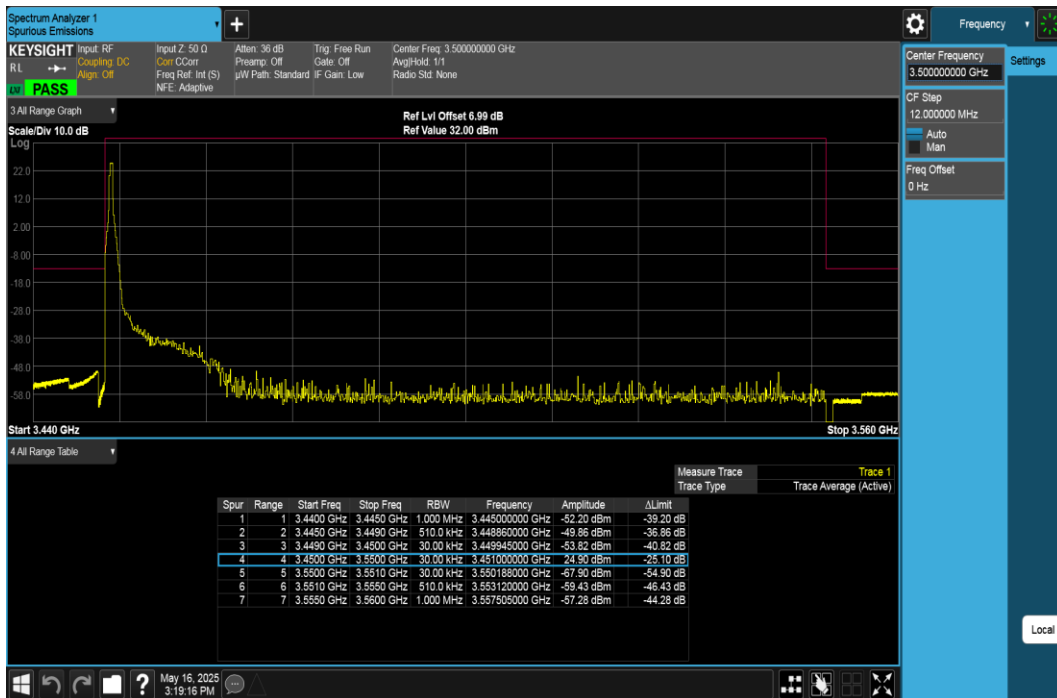
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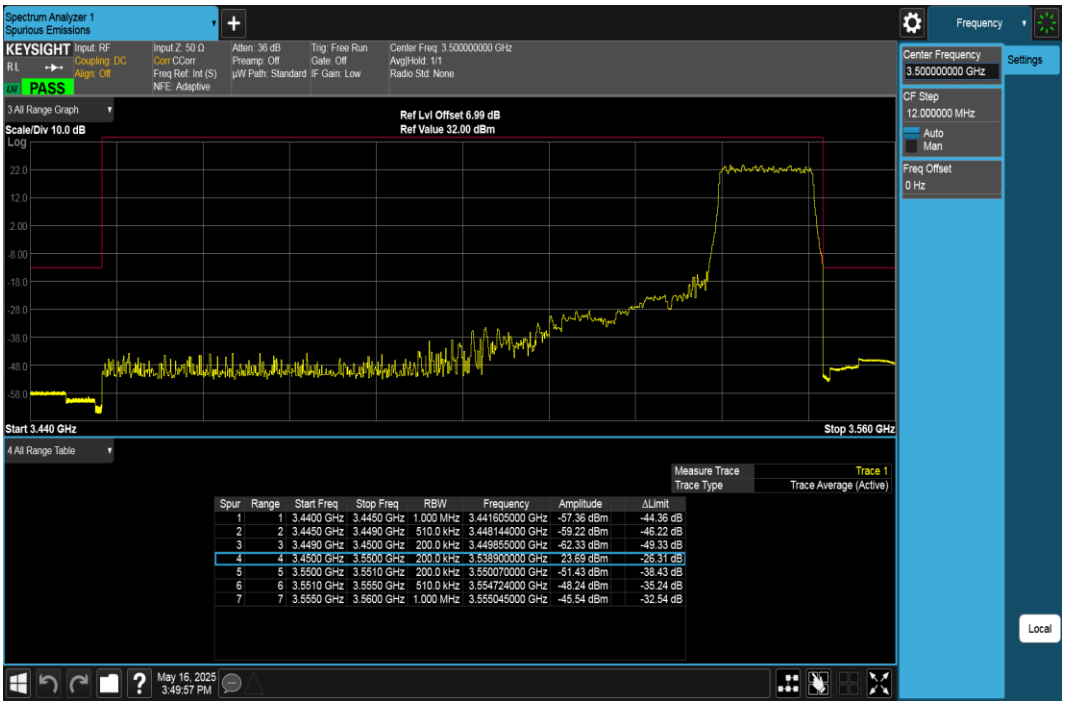
# N77a(3450-3550MHz)-15M-Bandedge-LCH-CP-OFDM-QPSK-Outer\_Full



# N77a(3450-3550MHz)-15M-Bandedge-LCH-CP-OFDM-QPSK-1RB0



N77a(3450-3550MHz)-15M-Bandedge-HCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



N77a(3450-3550MHz)-15M-Bandedge-HCH-DFT-s-OFDM-Pi2 BPSK-1RB\_MAX

