

## 99% & 26dB Bandwidth

### Test Result

| 5G NR N30 SCS=15kHz 5MHz |      |               |                     |                      |             |         |
|--------------------------|------|---------------|---------------------|----------------------|-------------|---------|
| Modulation               | CH   | RB Allocation | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| DFT-s-OFDM PI/2 BPSK     | Low  | Outer_Full    | 4.4783              | 5.135                | /           | Pass    |
| CP-OFDM QPSK             |      | Outer_Full    | 4.5113              | 5.157                | /           | Pass    |
| DFT-s-OFDM PI/2 BPSK     | Mid  | Outer_Full    | 4.4837              | 5.162                | /           | Pass    |
| CP-OFDM QPSK             |      | Outer_Full    | 4.5383              | 5.083                | /           | Pass    |
| DFT-s-OFDM PI/2 BPSK     | High | Outer_Full    | 4.4528              | 5.026                | /           | Pass    |
| CP-OFDM QPSK             |      | Outer_Full    | 4.4914              | 5.188                | /           | Pass    |

| 5G NR N30 SCS=15kHz 10MHz |     |               |                     |                      |             |         |
|---------------------------|-----|---------------|---------------------|----------------------|-------------|---------|
| Modulation                | CH  | RB Allocation | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| DFT-s-OFDM PI/2 BPSK      | Mid | Outer_Full    | 8.929               | 9.517                | /           | Pass    |
| CP-OFDM QPSK              |     | Outer_Full    | 9.2958              | 10.06                | /           | Pass    |

## Peak-Average Ratio

### Test Result

| 5G NR N30 SCS=15kHz 5MHz |        |               |                         |       |         |
|--------------------------|--------|---------------|-------------------------|-------|---------|
| Modulation               | CH     | RB Allocation | Peak-Average Ratio (dB) | Limit | Verdict |
| DFT-s-OFDM PI/2 BPSK     | Low    | Outer_Full    | 3.92                    | <=13  | Pass    |
| CP-OFDM QPSK             |        | Outer_Full    | 6.65                    | <=13  | Pass    |
| DFT-s-OFDM PI/2 BPSK     | Middle | Outer_Full    | 3.7                     | <=13  | Pass    |
| CP-OFDM QPSK             |        | Outer_Full    | 6.37                    | <=13  | Pass    |
| DFT-s-OFDM PI/2 BPSK     | High   | Outer_Full    | 3.5                     | <=13  | Pass    |
| CP-OFDM QPSK             |        | Outer_Full    | 6.15                    | <=13  | Pass    |

| 5G NR N30 SCS=15kHz 10MHz |        |               |                         |       |         |
|---------------------------|--------|---------------|-------------------------|-------|---------|
| Modulation                | CH     | RB Allocation | Peak-Average Ratio (dB) | Limit | Verdict |
| DFT-s-OFDM PI/2 BPSK      | Middle | Outer_Full    | 3.79                    | <=13  | Pass    |
| CP-OFDM QPSK              |        | Outer_Full    | 6.34                    | <=13  | Pass    |

# Power spectral density

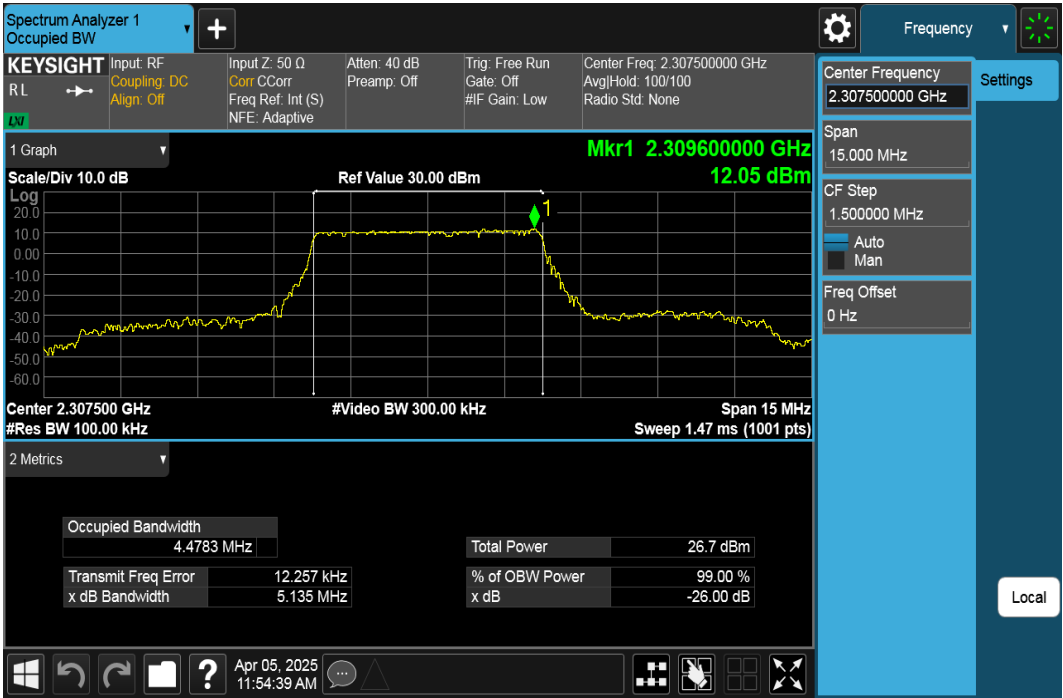
## Test Result

| 5G NR N30 SCS=15kHz 5MHz |         |               |                              |                  |         |
|--------------------------|---------|---------------|------------------------------|------------------|---------|
| Modulation               |         | RB Allocation | Power spectral density (dBm) | Limit/5MHz (dBm) | Verdict |
| DFT-s-OFDM PI/2 BPSK     | Low CH  | 1RB0          | 21.963                       | 23.98            | Pass    |
| DFT-s-OFDM QPSK          |         | 1RB0          | 21.616                       | 23.98            | Pass    |
| DFT-s-OFDM 16QAM         |         | 1RB0          | 20.983                       | 23.98            | Pass    |
| DFT-s-OFDM 64QAM         |         | 1RB0          | 20.276                       | 23.98            | Pass    |
| DFT-s-OFDM 256QAM        |         | 1RB0          | 18.358                       | 23.98            | Pass    |
| CP-OFDM QPSK             |         | 1RB0          | 16.168                       | 23.98            | Pass    |
| CP-OFDM 16QAM            |         | 1RB0          | 16.22                        | 23.98            | Pass    |
| CP-OFDM 64QAM            |         | 1RB0          | 15.628                       | 23.98            | Pass    |
| CP-OFDM 256QAM           |         | 1RB0          | 12.9                         | 23.98            | Pass    |
| DFT-s-OFDM PI/2 BPSK     | Midd CH | 1RB0          | 22.104                       | 23.98            | Pass    |
| DFT-s-OFDM QPSK          |         | 1RB0          | 21.637                       | 23.98            | Pass    |
| DFT-s-OFDM 16QAM         |         | 1RB0          | 20.881                       | 23.98            | Pass    |
| DFT-s-OFDM 64QAM         |         | 1RB0          | 19.904                       | 23.98            | Pass    |
| DFT-s-OFDM 256QAM        |         | 1RB0          | 18.299                       | 23.98            | Pass    |
| CP-OFDM QPSK             |         | 1RB0          | 16.096                       | 23.98            | Pass    |
| CP-OFDM 16QAM            |         | 1RB0          | 16.153                       | 23.98            | Pass    |
| CP-OFDM 64QAM            |         | 1RB0          | 15.47                        | 23.98            | Pass    |
| CP-OFDM 256QAM           |         | 1RB0          | 12.973                       | 23.98            | Pass    |
| DFT-s-OFDM PI/2 BPSK     | High CH | 1RB0          | 22.148                       | 23.98            | Pass    |
| DFT-s-OFDM QPSK          |         | 1RB0          | 21.761                       | 23.98            | Pass    |
| DFT-s-OFDM 16QAM         |         | 1RB0          | 20.816                       | 23.98            | Pass    |
| DFT-s-OFDM 64QAM         |         | 1RB0          | 19.97                        | 23.98            | Pass    |
| DFT-s-OFDM 256QAM        |         | 1RB0          | 18.304                       | 23.98            | Pass    |
| CP-OFDM QPSK             |         | 1RB0          | 16.358                       | 23.98            | Pass    |
| CP-OFDM 16QAM            |         | 1RB0          | 15.943                       | 23.98            | Pass    |
| CP-OFDM 64QAM            |         | 1RB0          | 15.671                       | 23.98            | Pass    |
| CP-OFDM 256QAM           |         | 1RB0          | 12.542                       | 23.98            | Pass    |

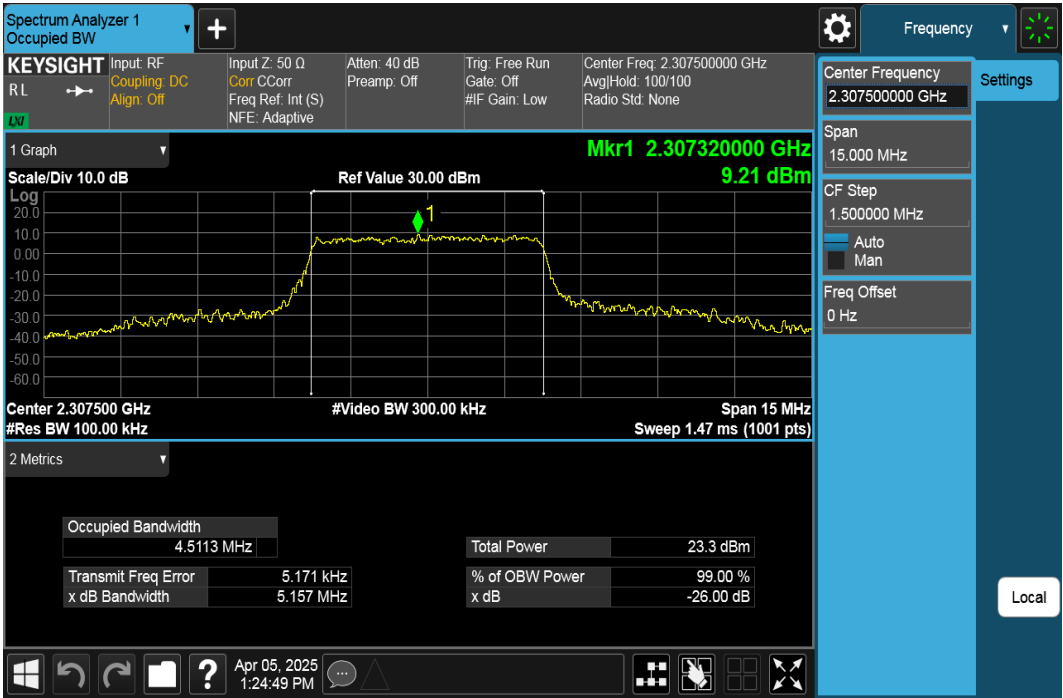
| 5G NR N30 SCS=15kHz 10MHz |         |               |                              |                  |         |
|---------------------------|---------|---------------|------------------------------|------------------|---------|
| Modulation                |         | RB Allocation | Power spectral density (dBm) | Limit/5MHz (dBm) | Verdict |
| DFT-s-OFDM PI/2 BPSK      | Midd CH | 1RB0          | 18.744                       | 23.98            | Pass    |
| DFT-s-OFDM QPSK           |         | 1RB0          | 18.244                       | 23.98            | Pass    |
| DFT-s-OFDM 16QAM          |         | 1RB0          | 17.355                       | 23.98            | Pass    |
| DFT-s-OFDM 64QAM          |         | 1RB0          | 16.986                       | 23.98            | Pass    |
| DFT-s-OFDM 256QAM         |         | 1RB0          | 15.124                       | 23.98            | Pass    |
| CP-OFDM QPSK              |         | 1RB0          | 16.358                       | 23.98            | Pass    |
| CP-OFDM 16QAM             |         | 1RB0          | 16.537                       | 23.98            | Pass    |
| CP-OFDM 64QAM             |         | 1RB0          | 16.026                       | 23.98            | Pass    |
| CP-OFDM 256QAM            |         | 1RB0          | 12.669                       | 23.98            | Pass    |

OBW Test graph

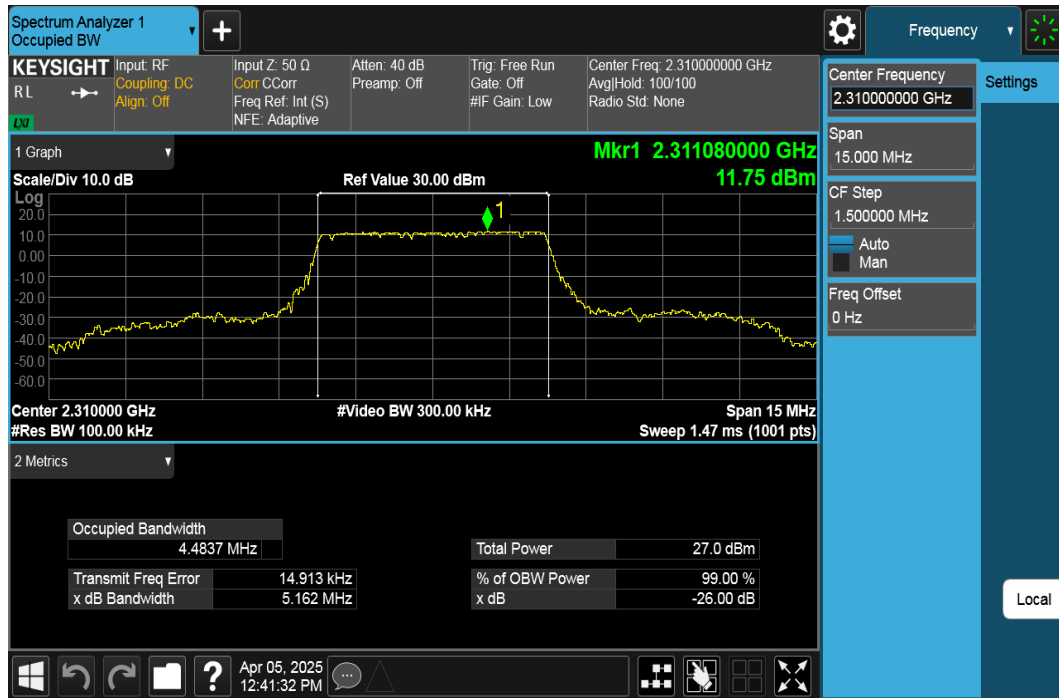
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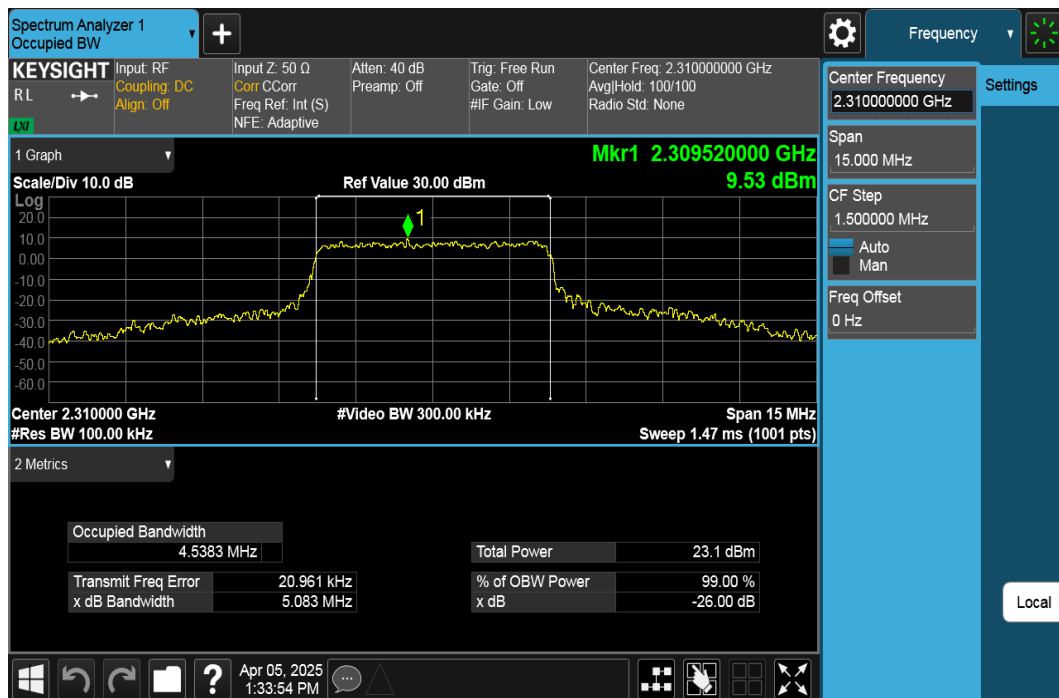
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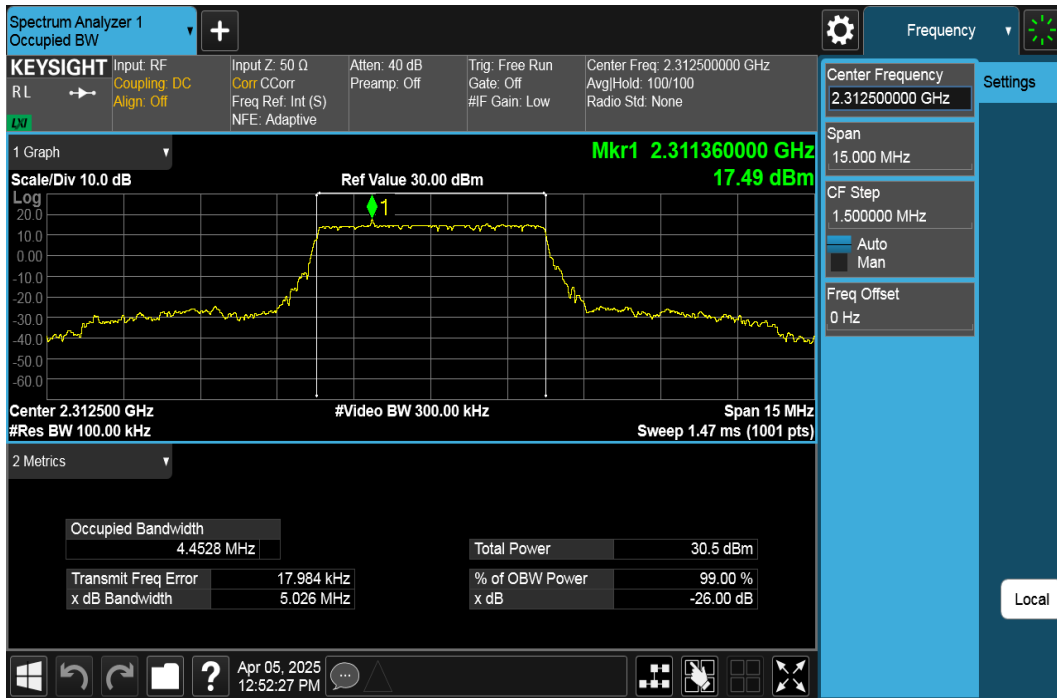
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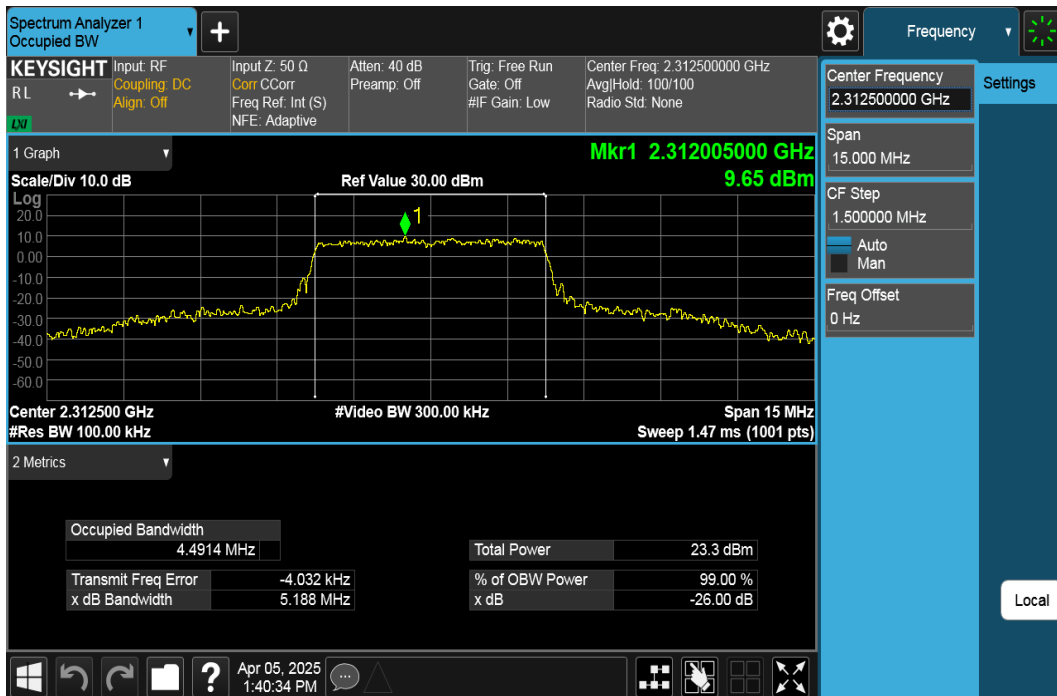
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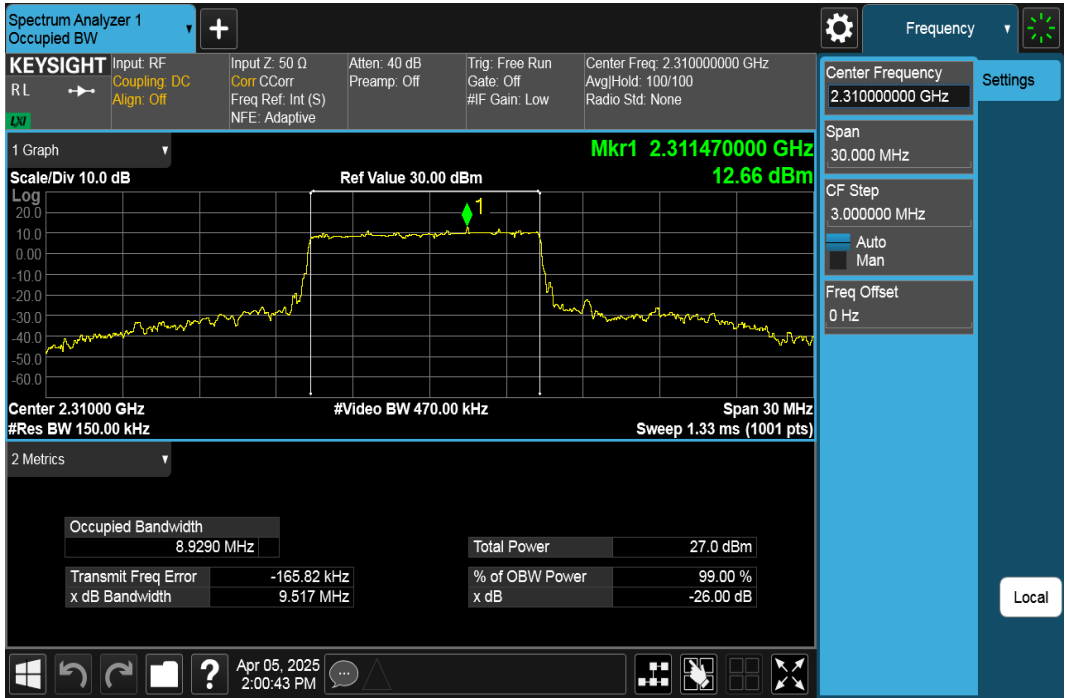
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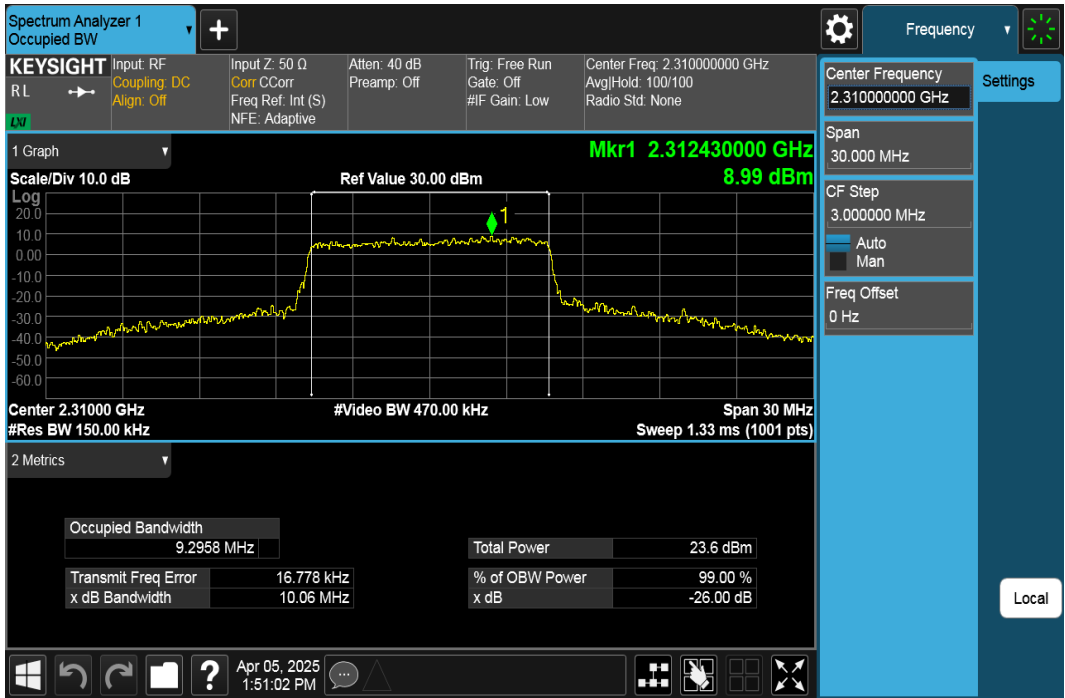
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N30-10M-OBW-MCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



N30-10M-OBW-MCH-CP-OFDM-QPSK-Outer\_Full



PAPR Test graph

N30-5M-PAPR-LCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



N30-5M-PAPR-LCH-CP-OFDM-QPSK-Outer\_Full



# N30-5M-PAPR-MCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



# N30-5M-PAPR-MCH-CP-OFDM-QPSK-Outer\_Full





# N30-5M-PAPR-HCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



# N30-5M-PAPR-HCH-CP-OFDM-QPSK-Outer\_Full



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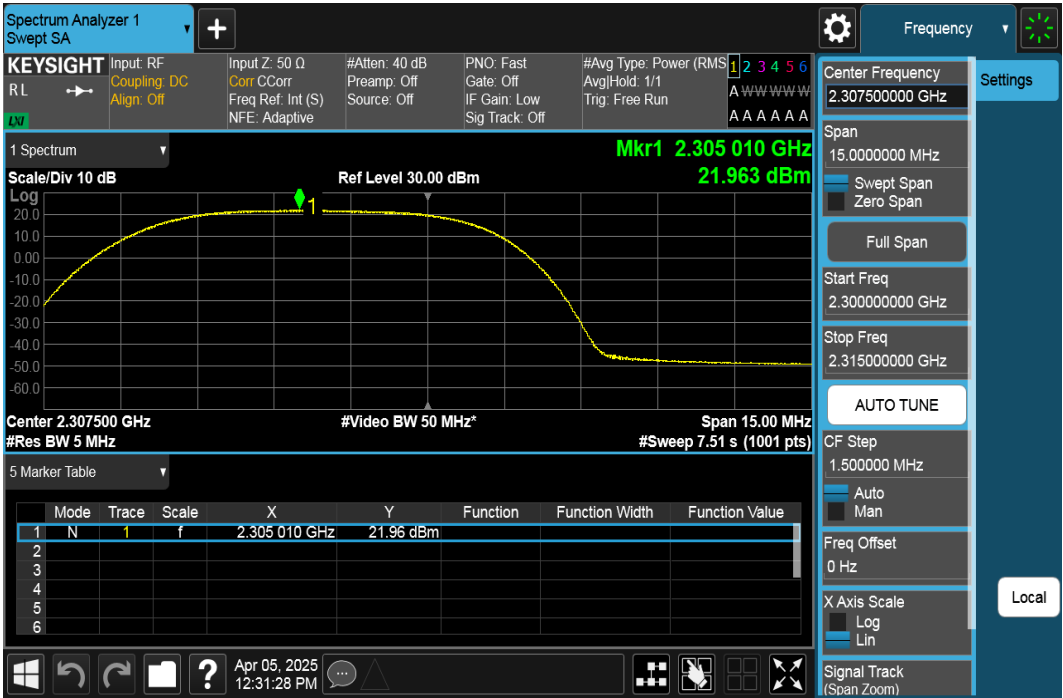
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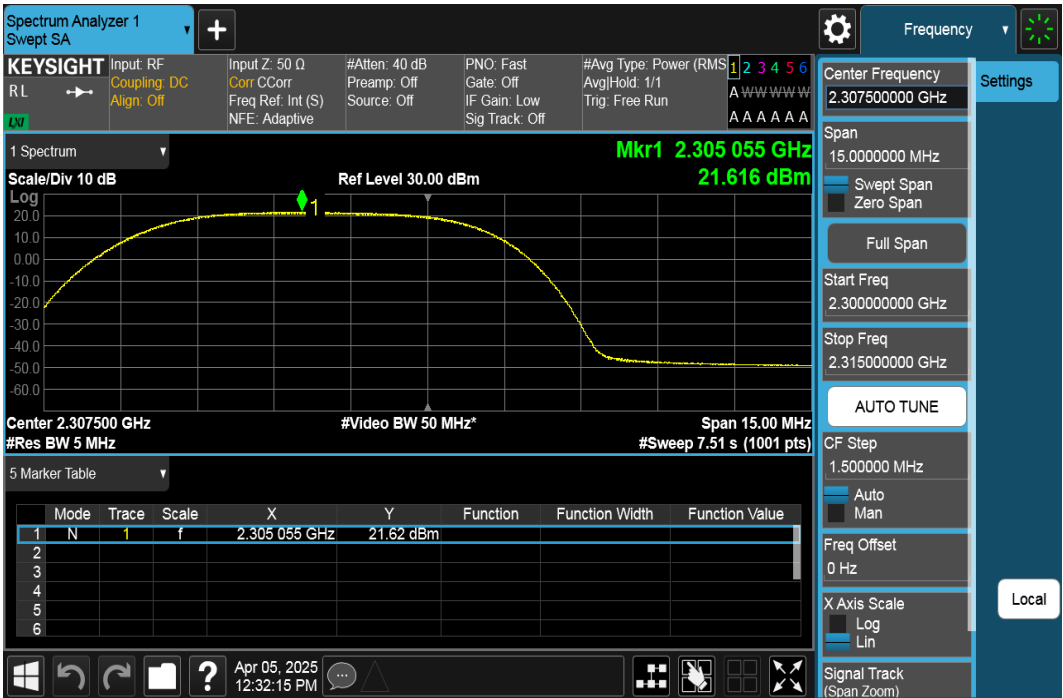
# Power spectral density

test graph

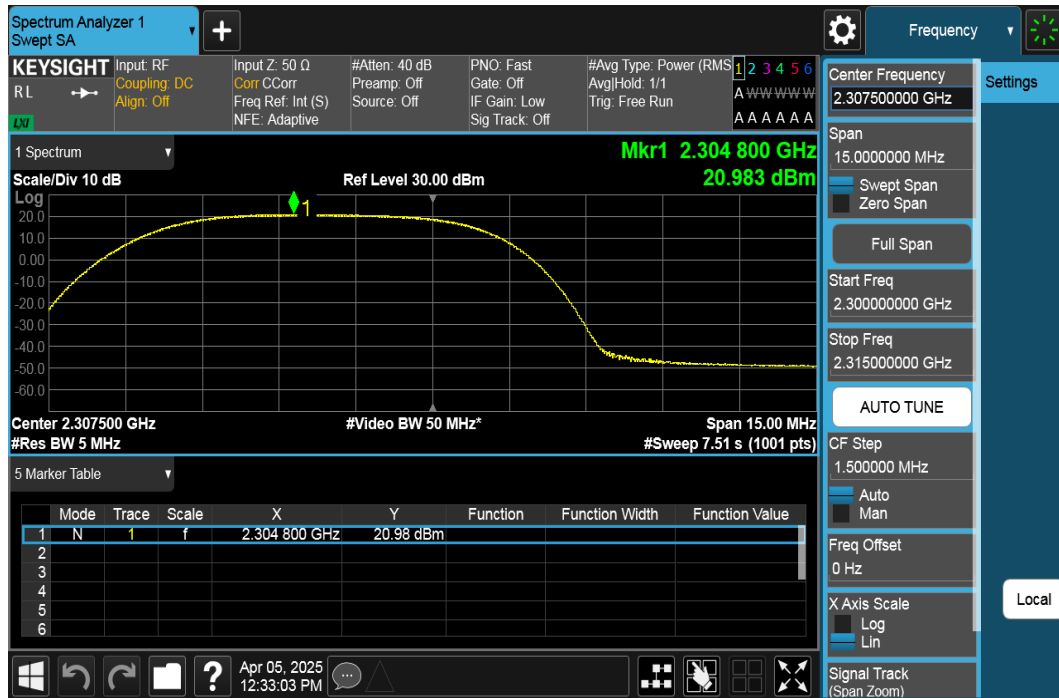
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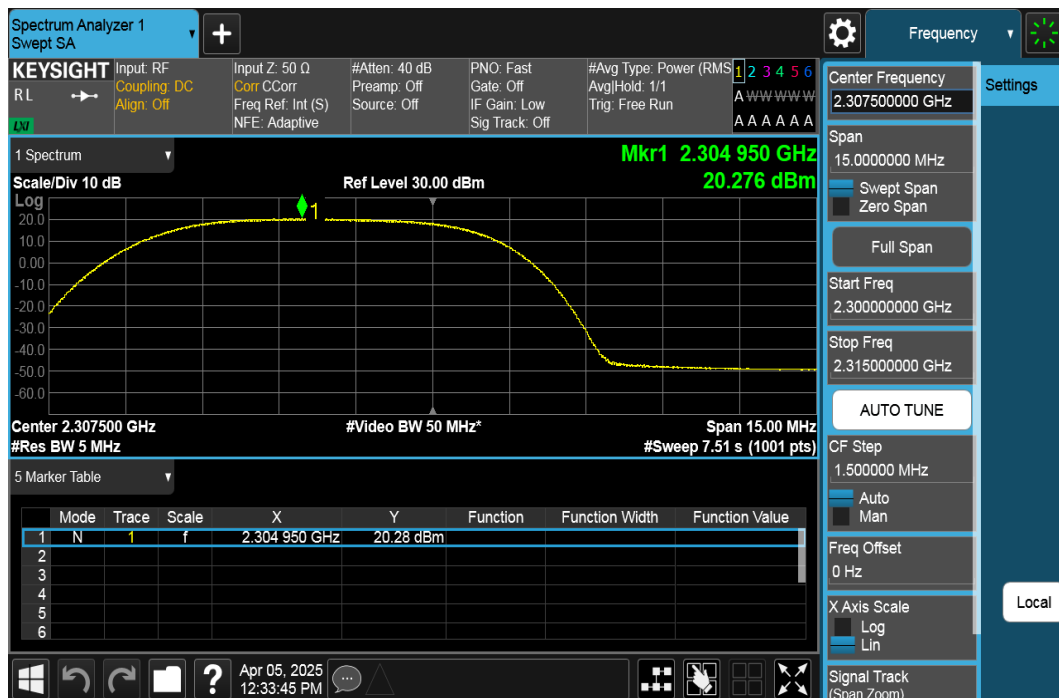
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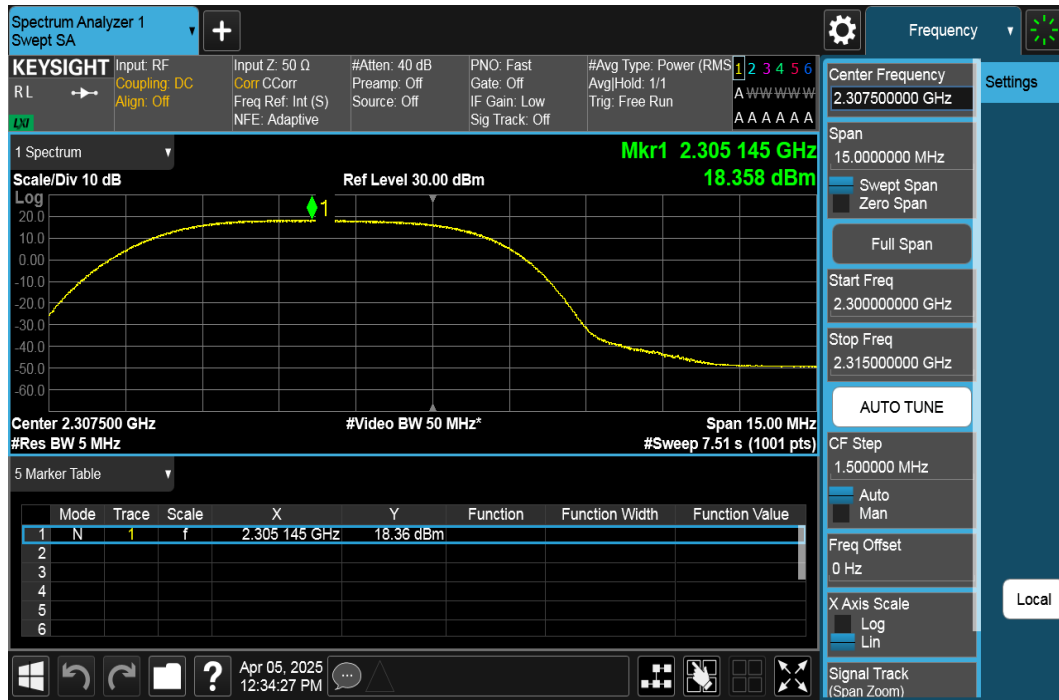
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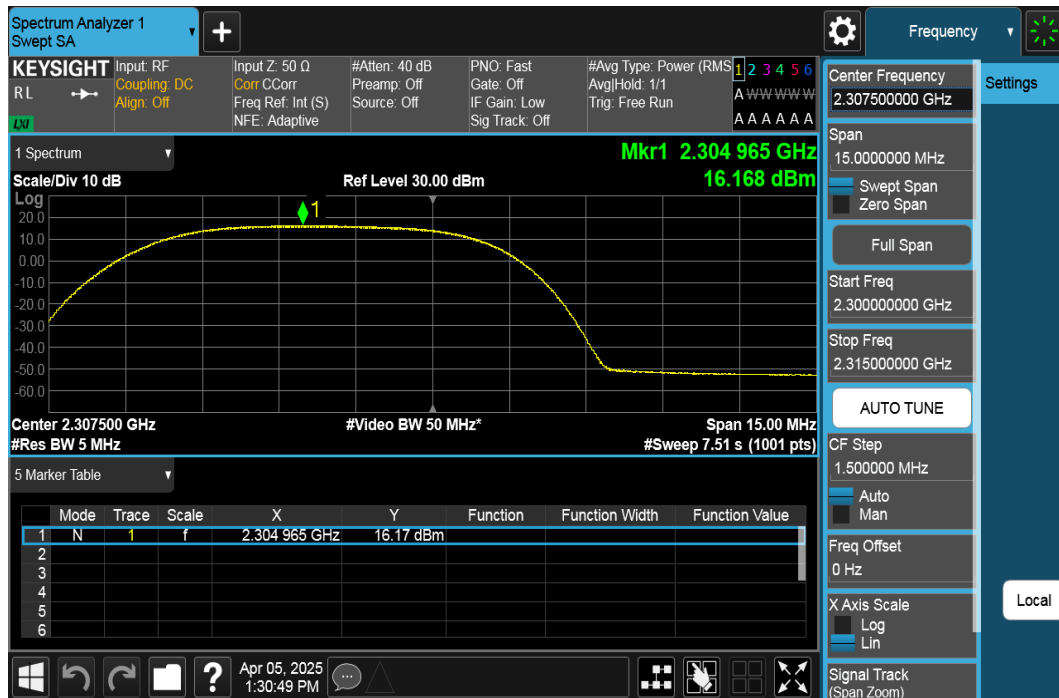
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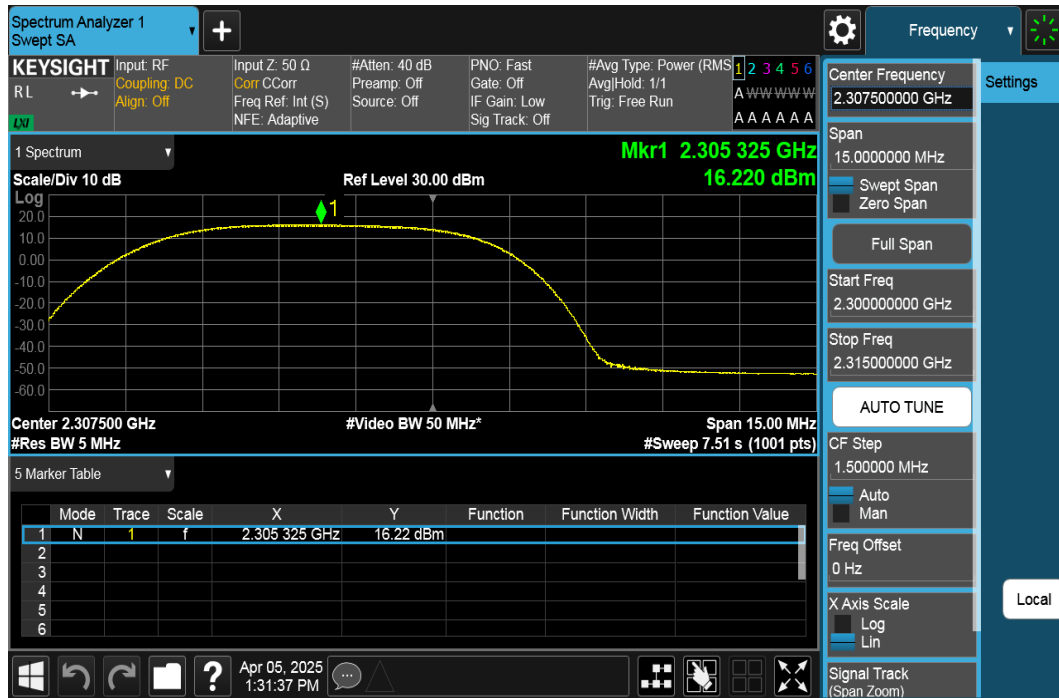
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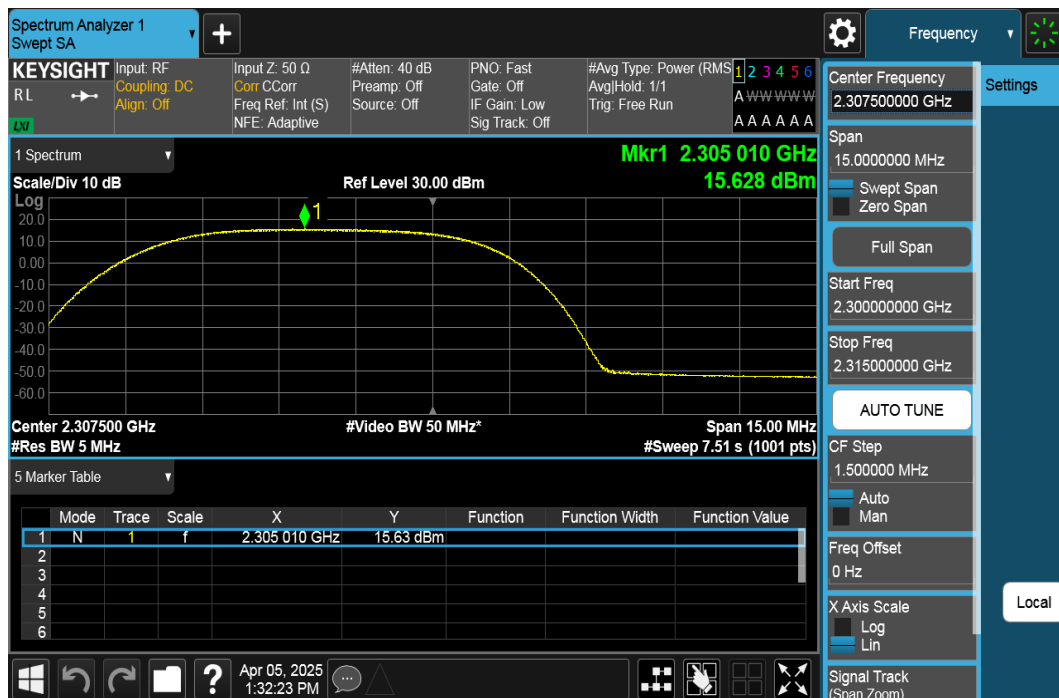
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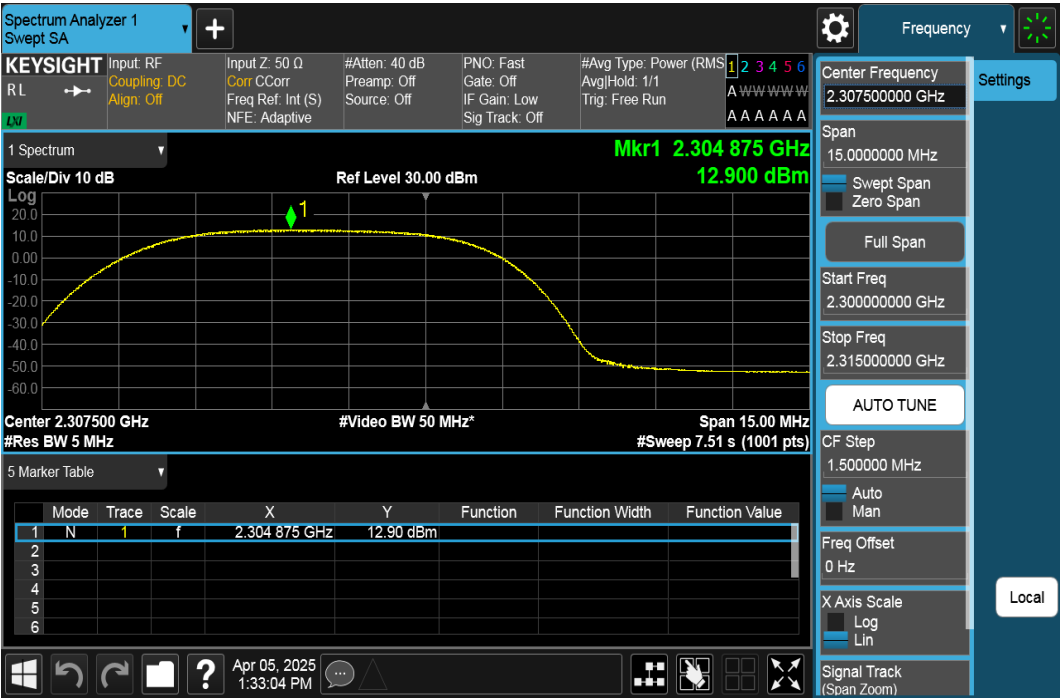
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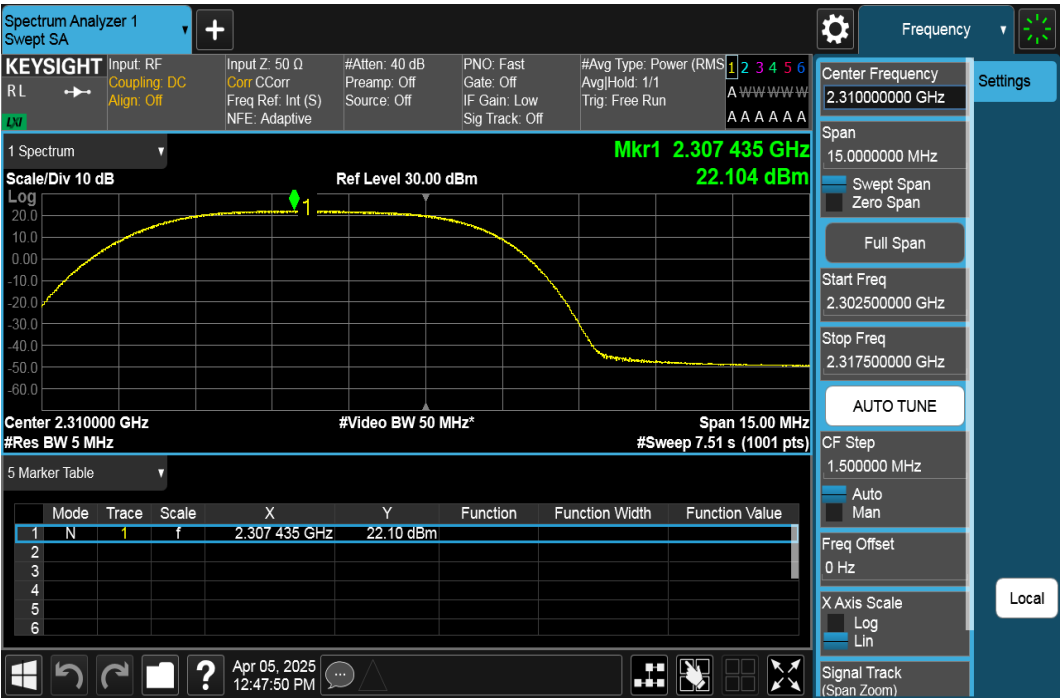
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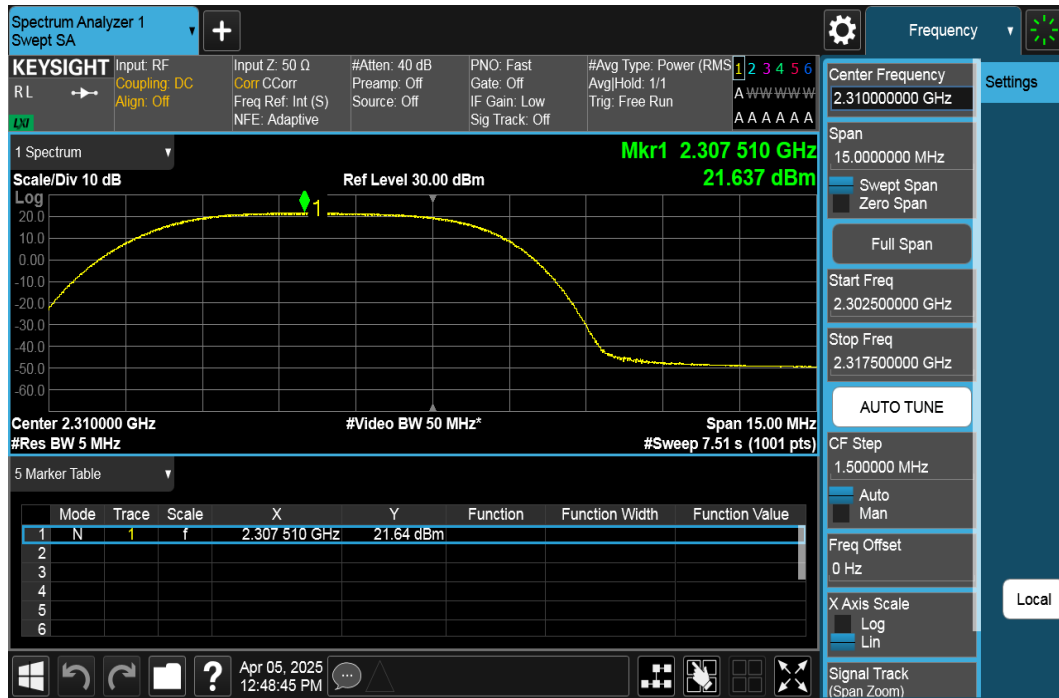
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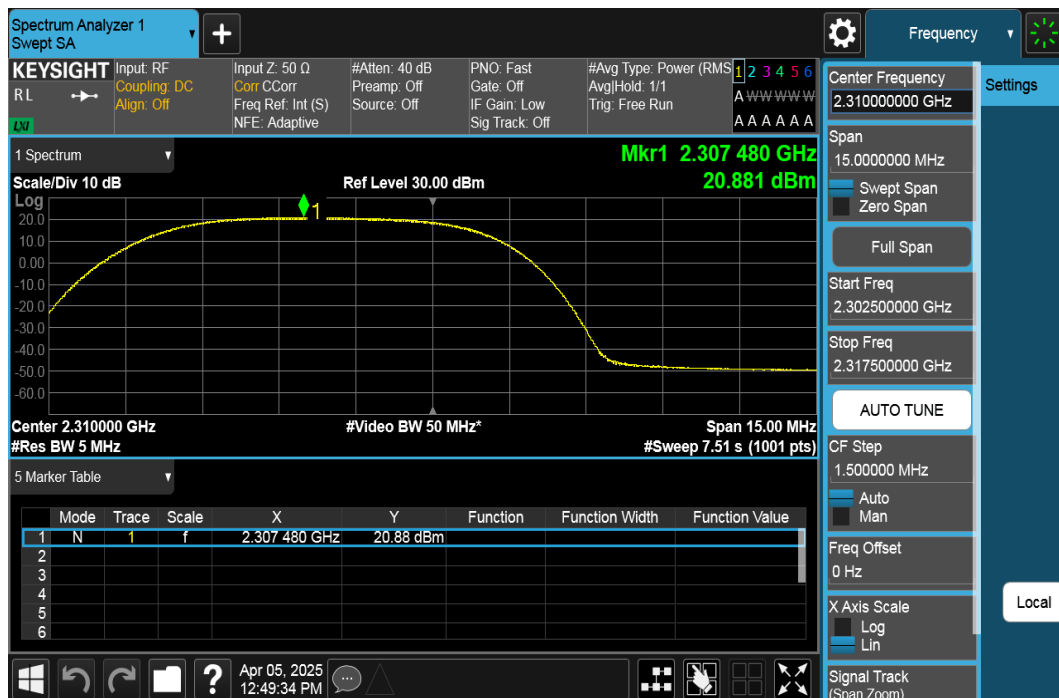
N30-5M-PSD-MCH-DFT-s-OFDM-Pi2 BPSK-1RB0



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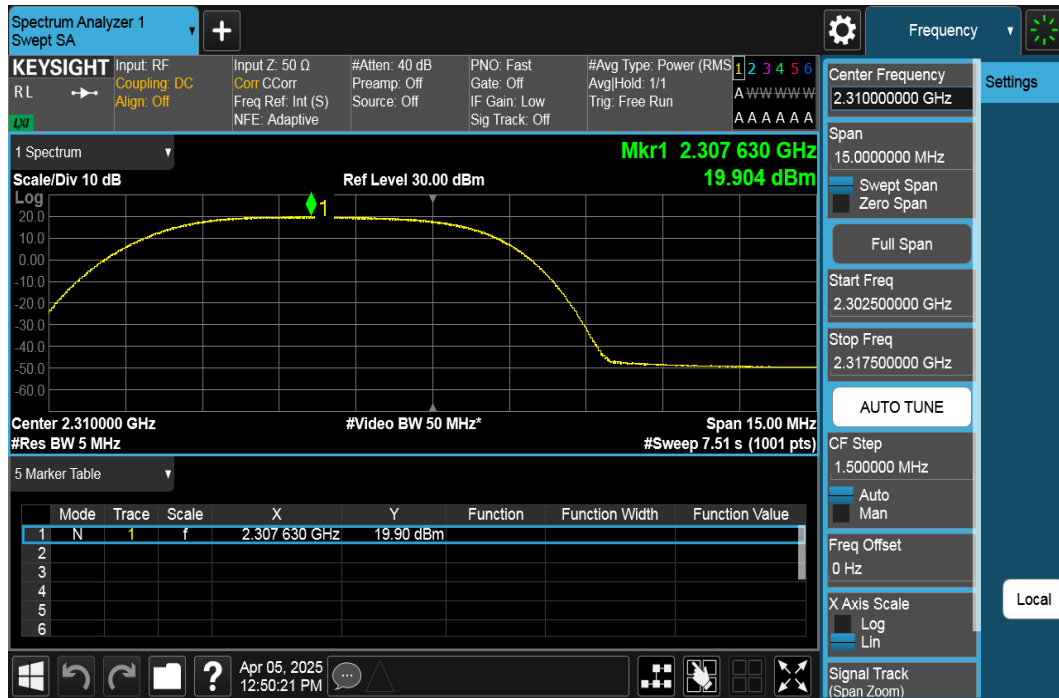


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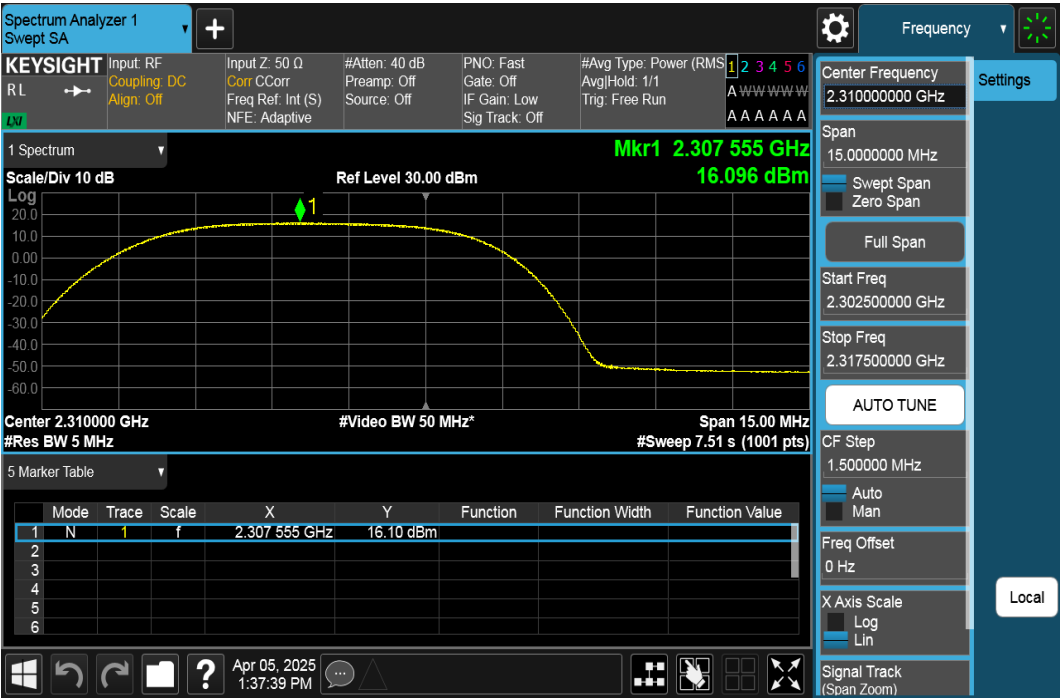
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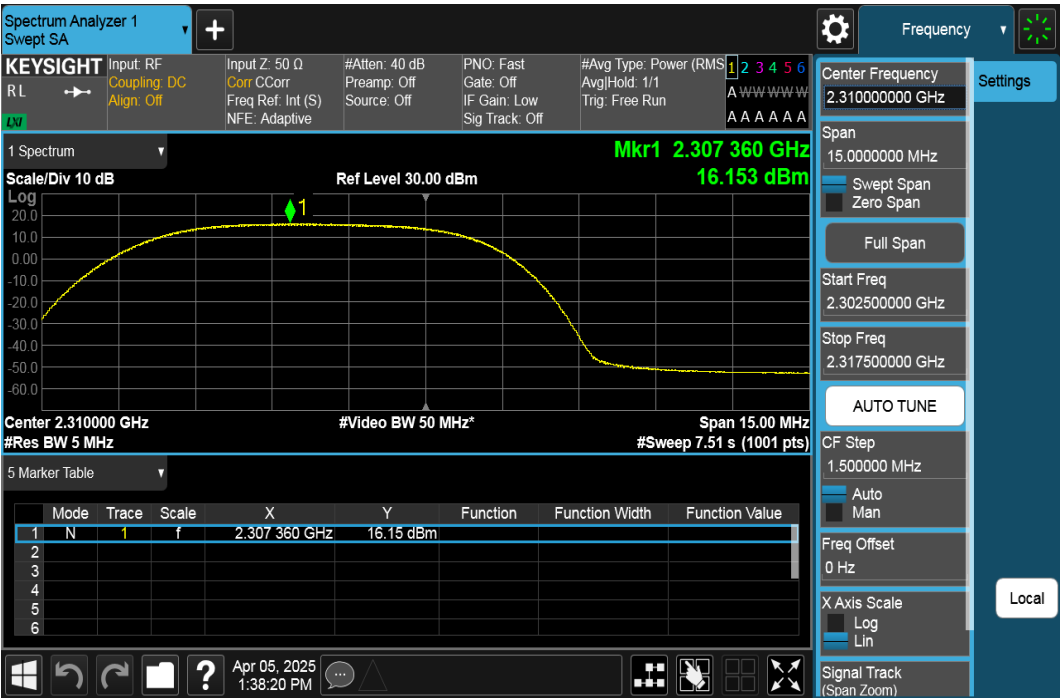
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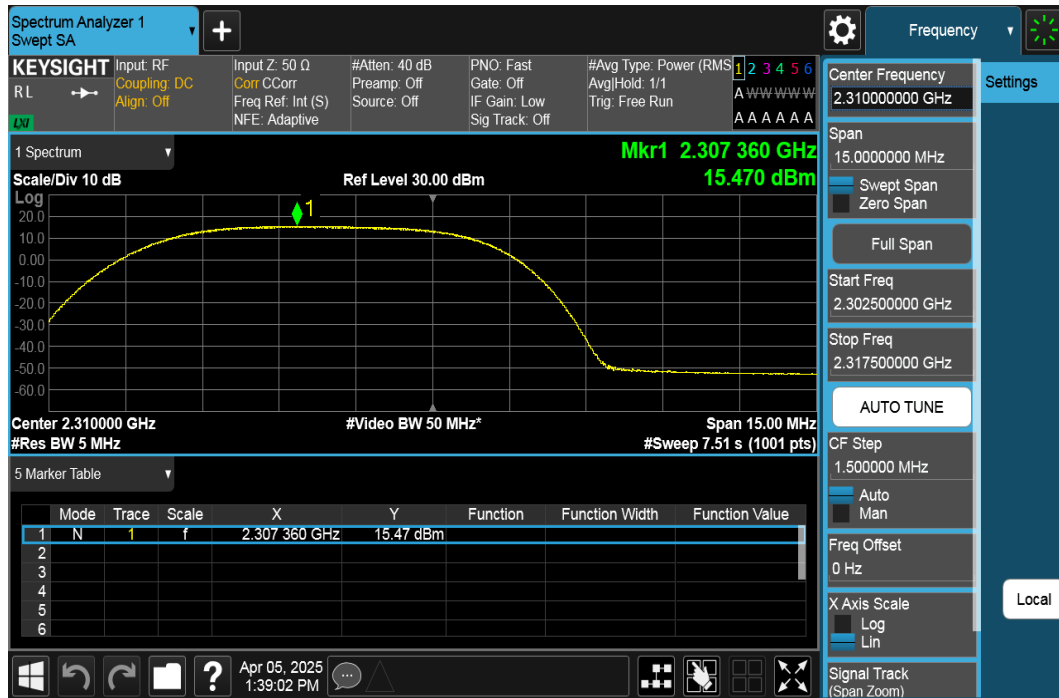
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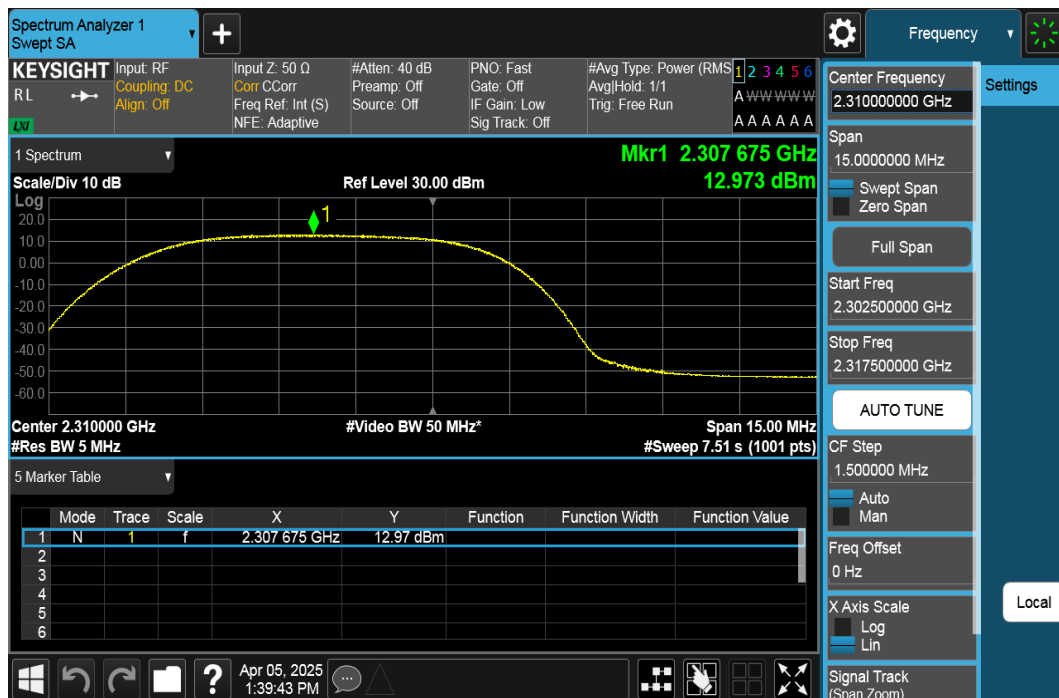
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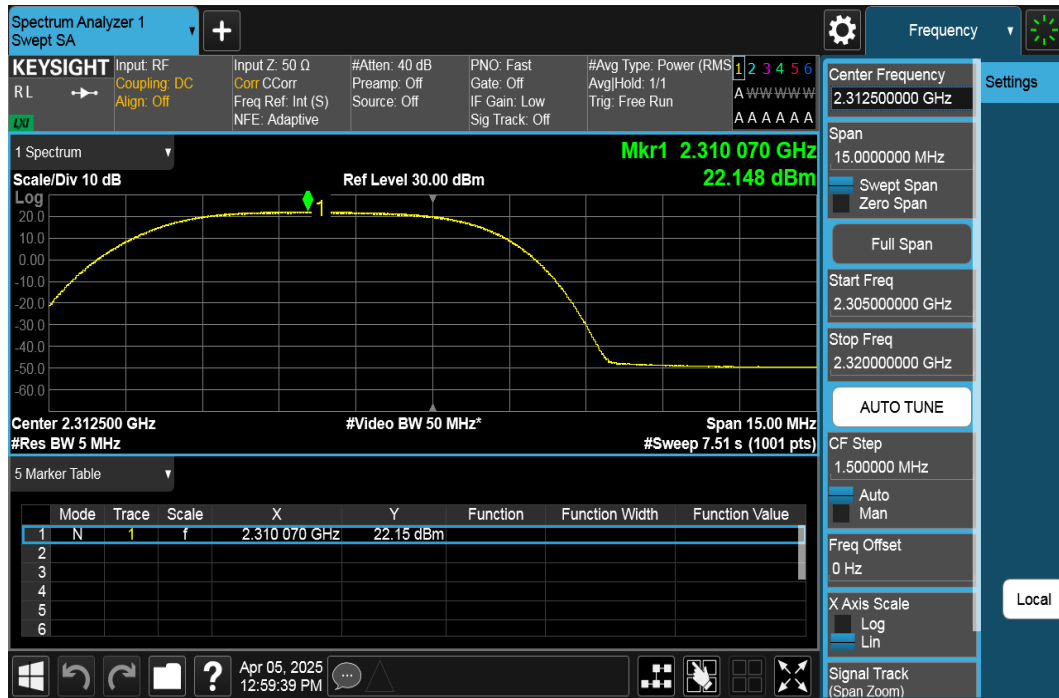
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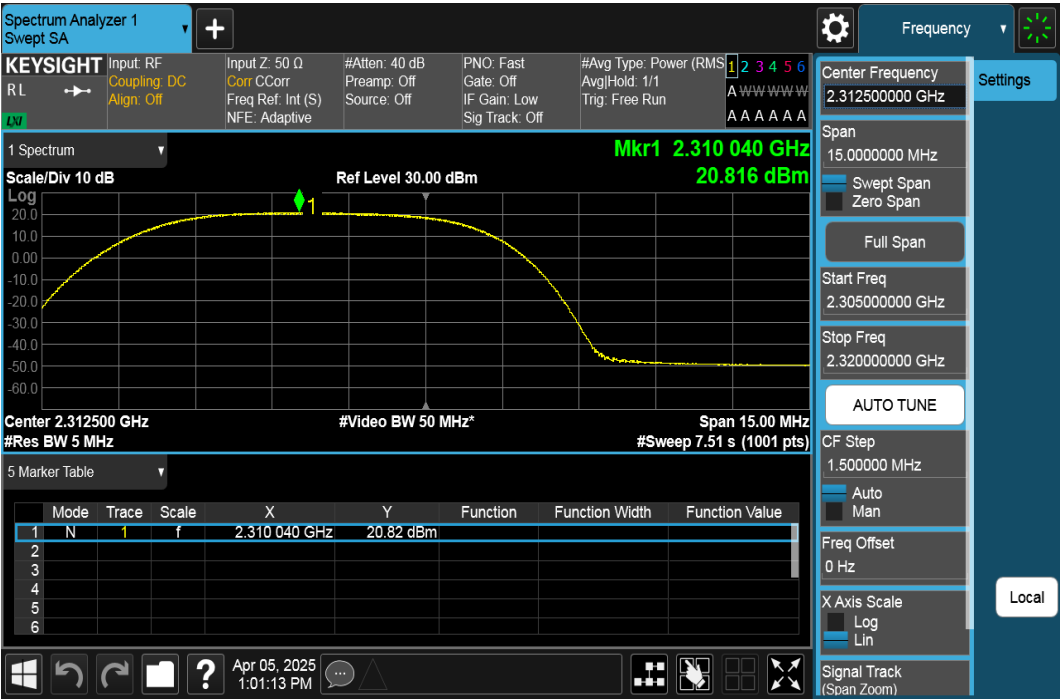
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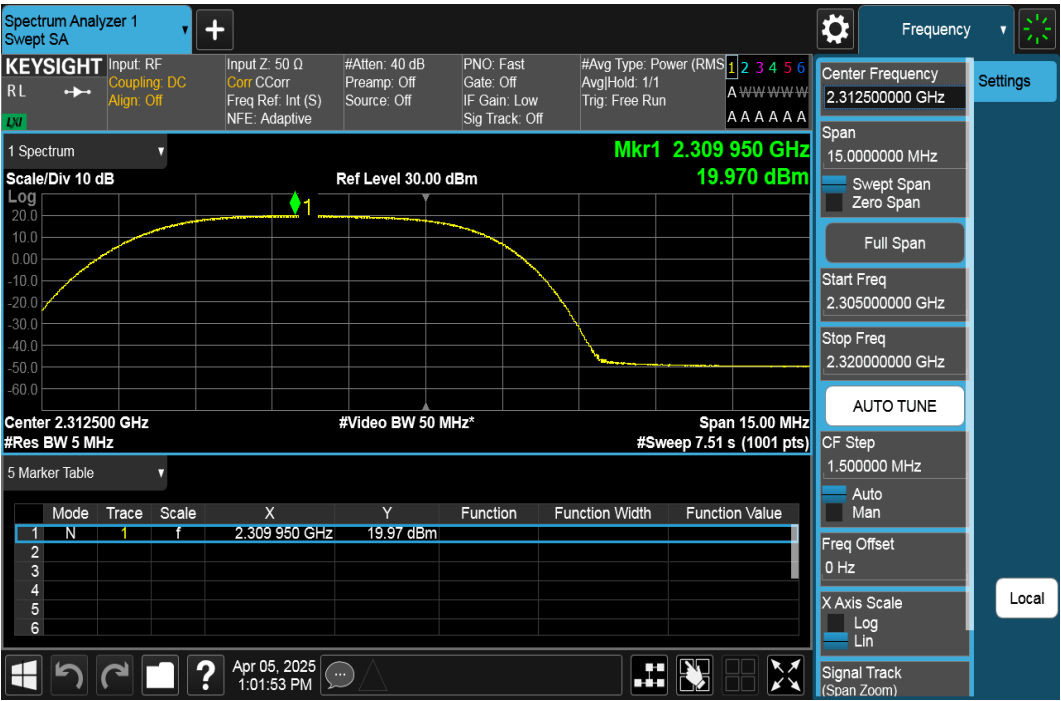
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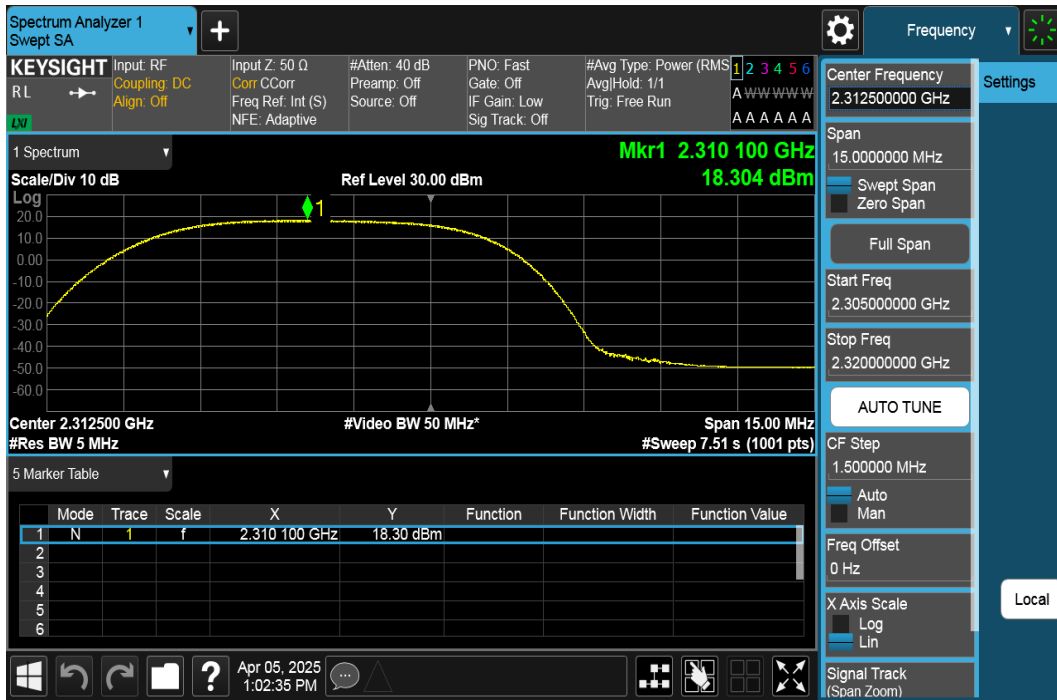
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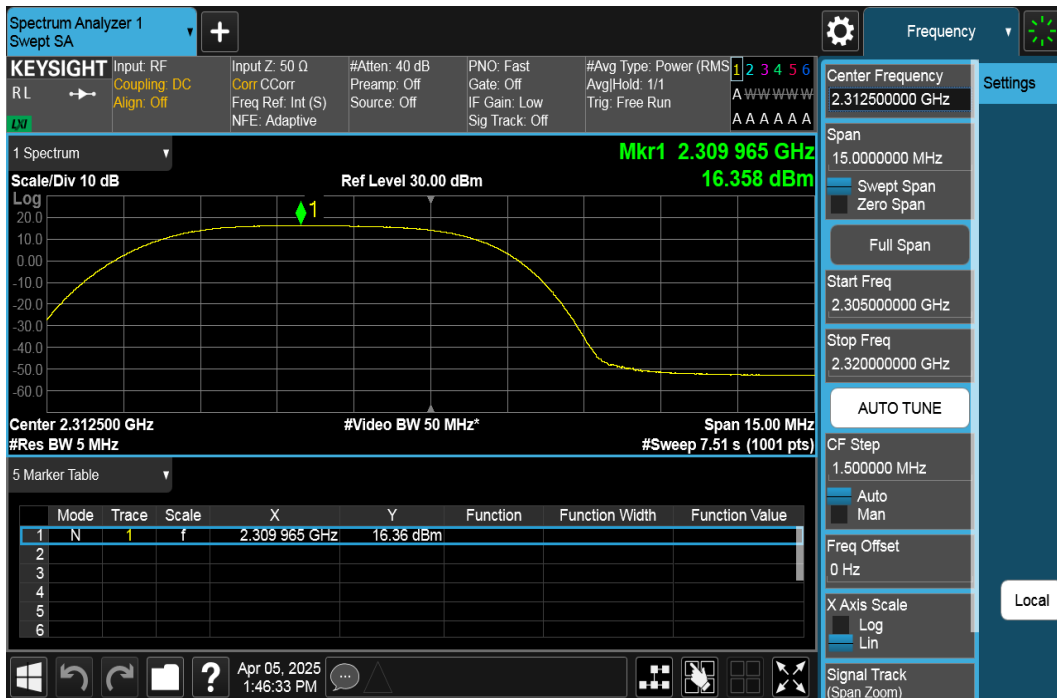
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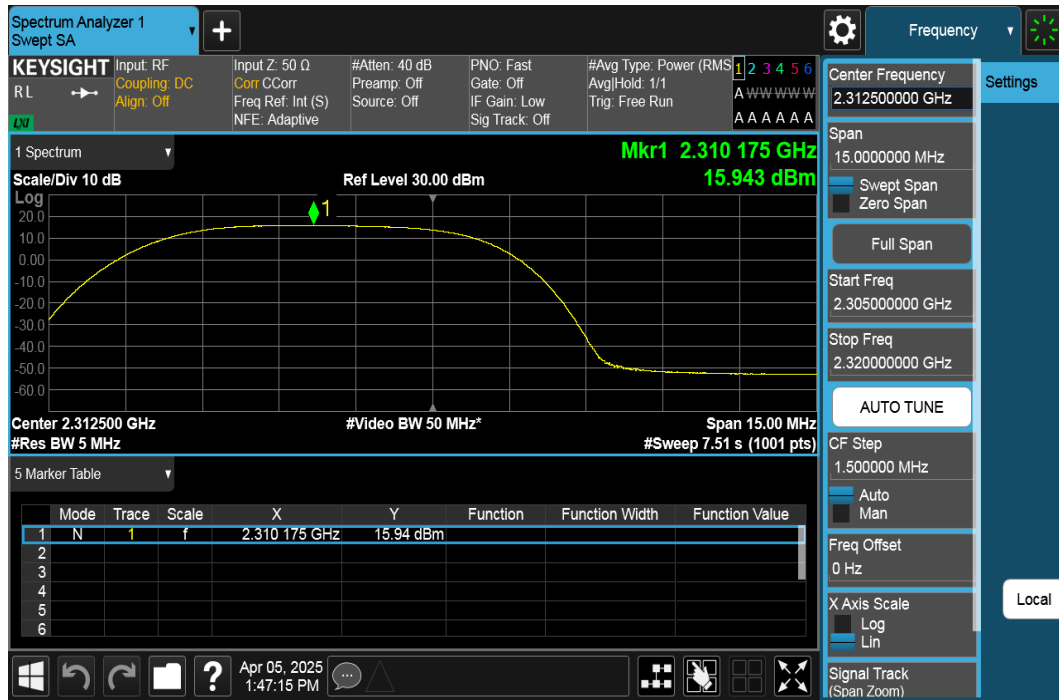
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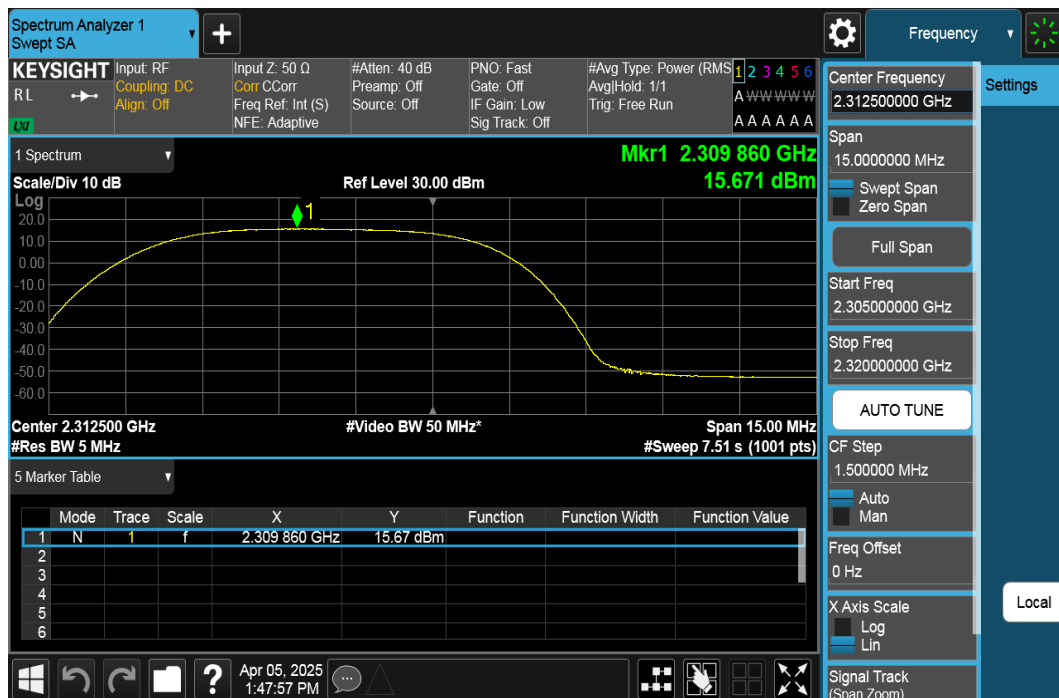
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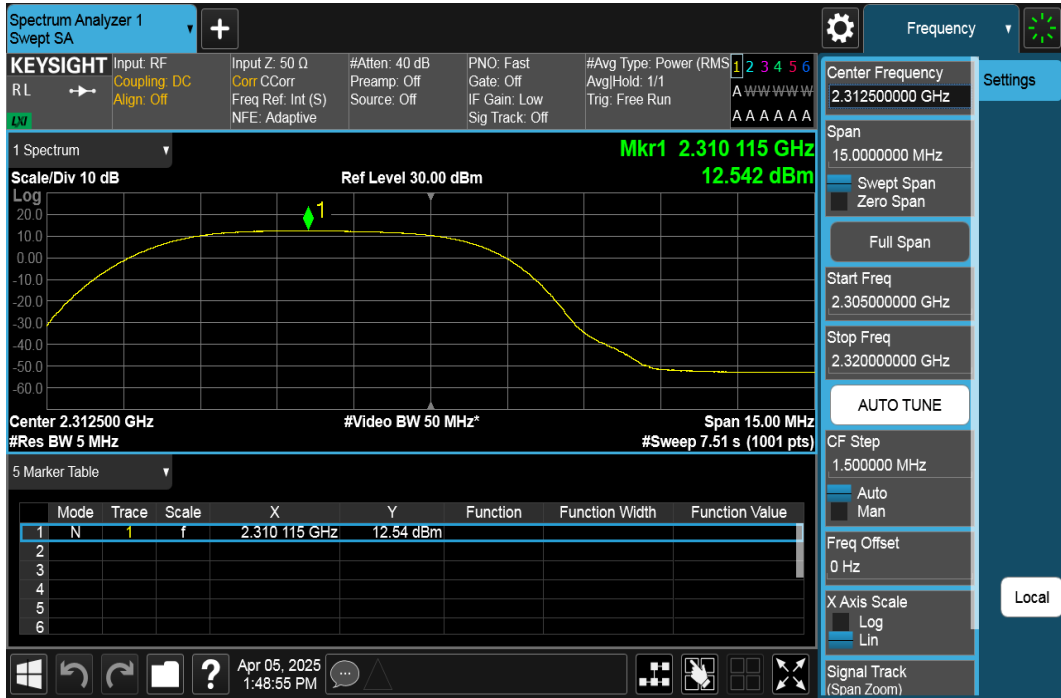
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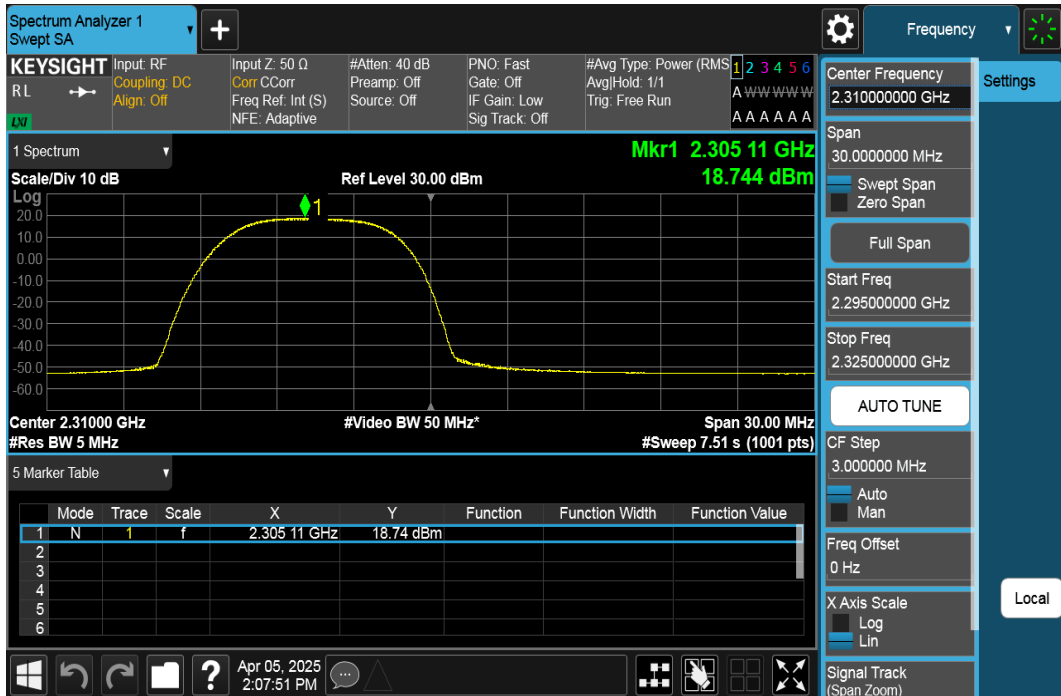
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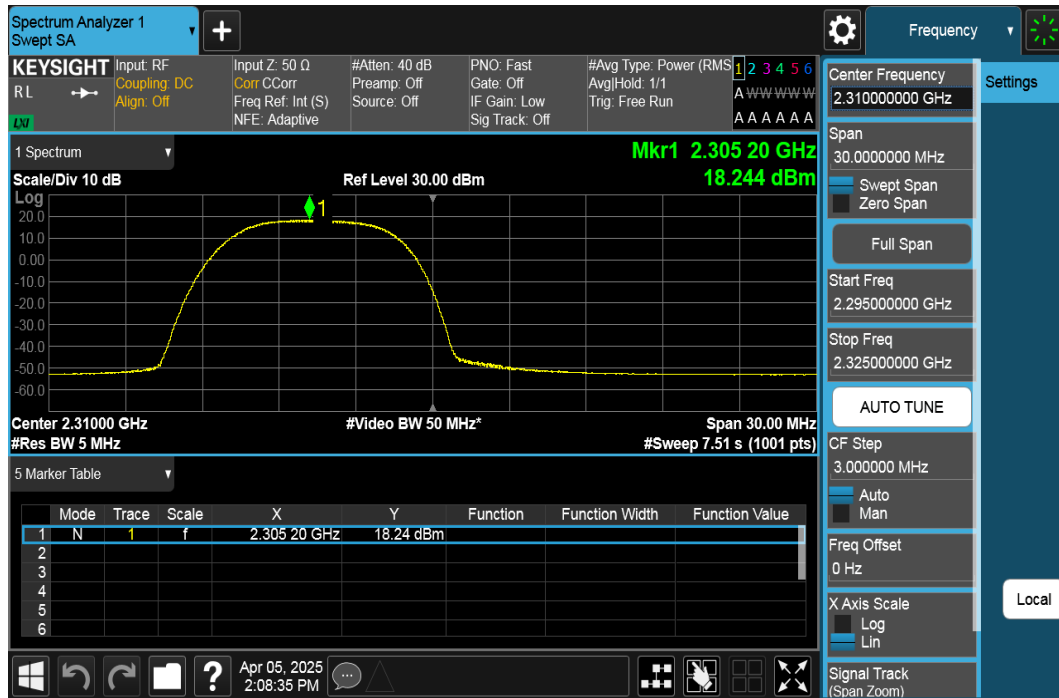


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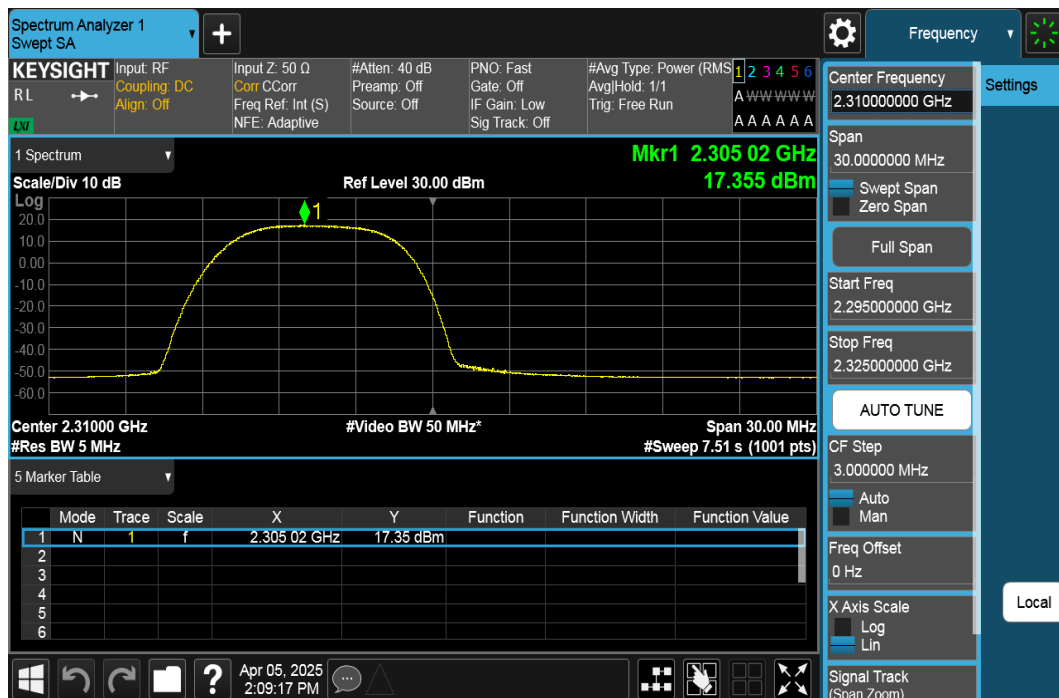




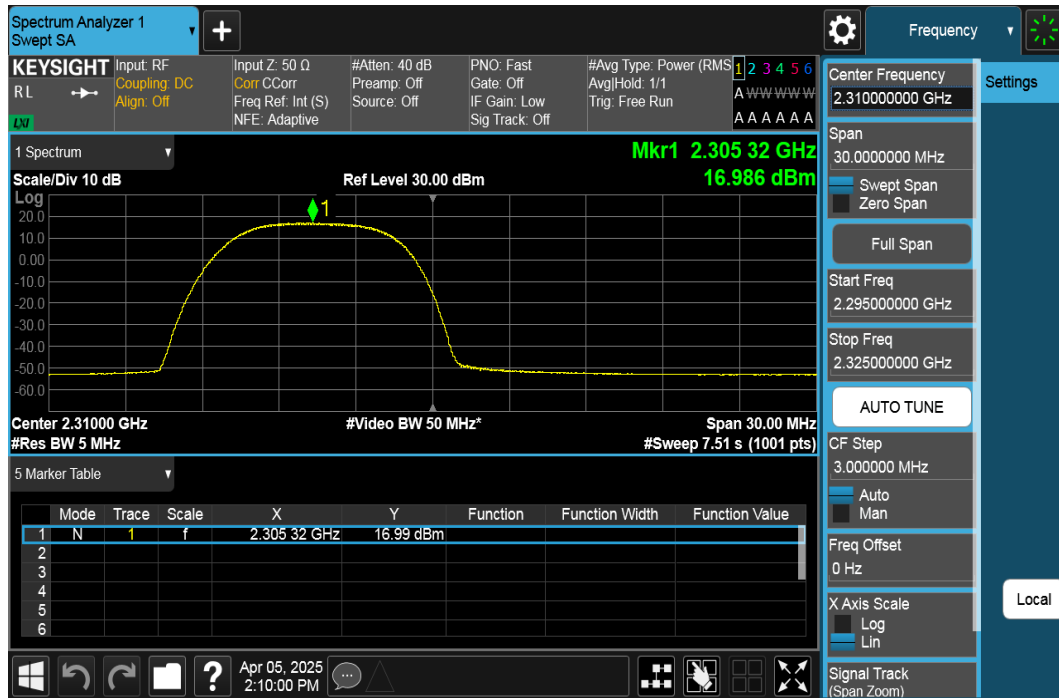
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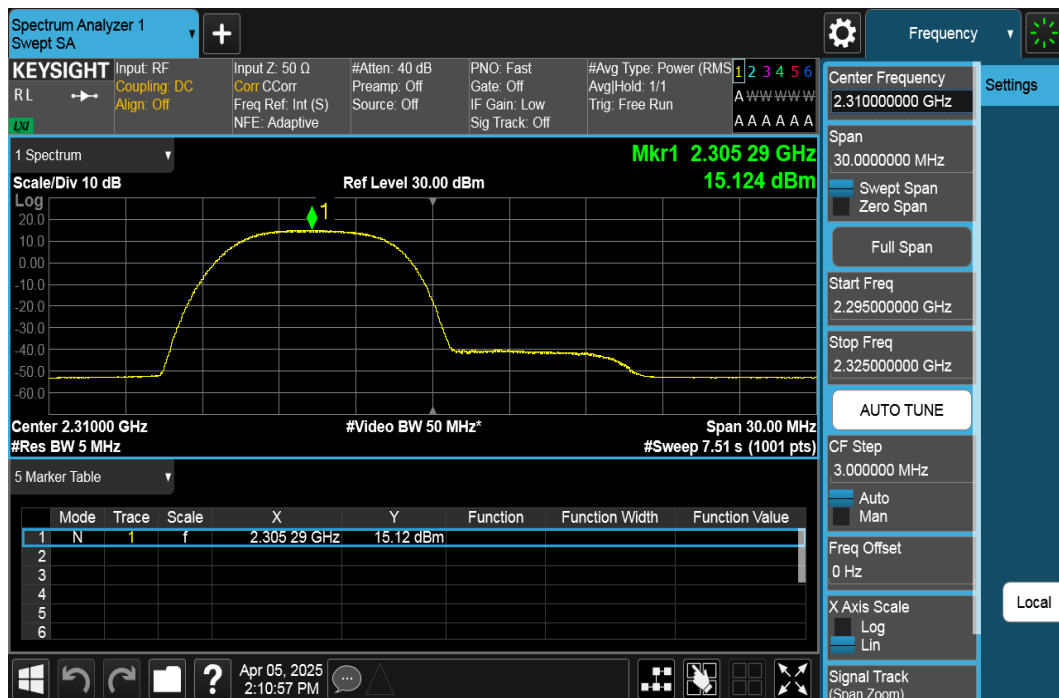
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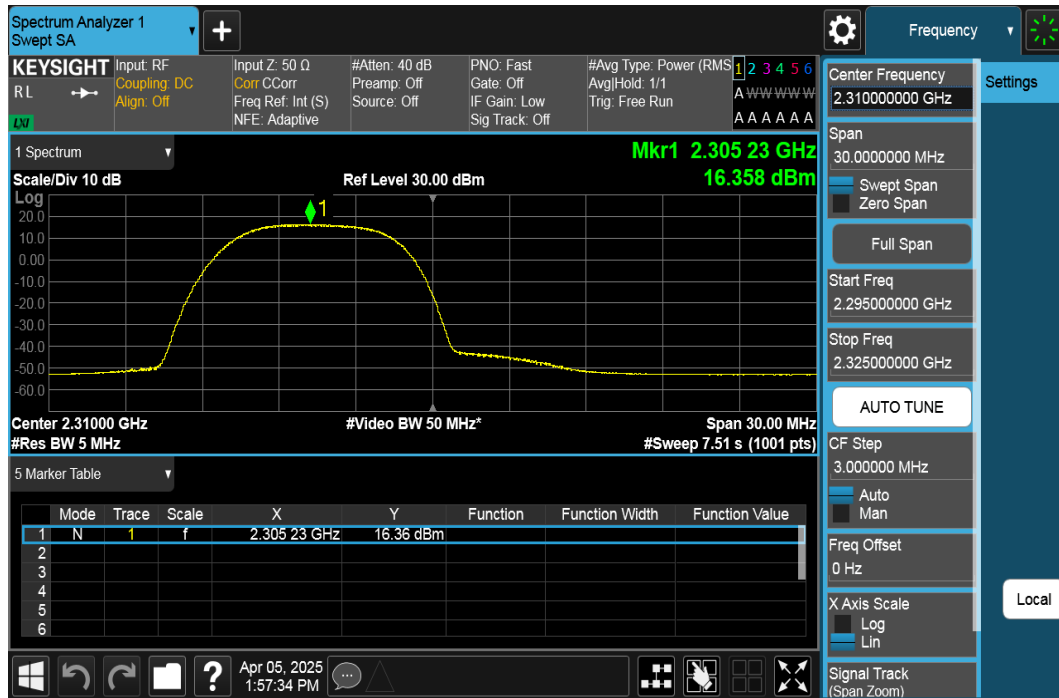
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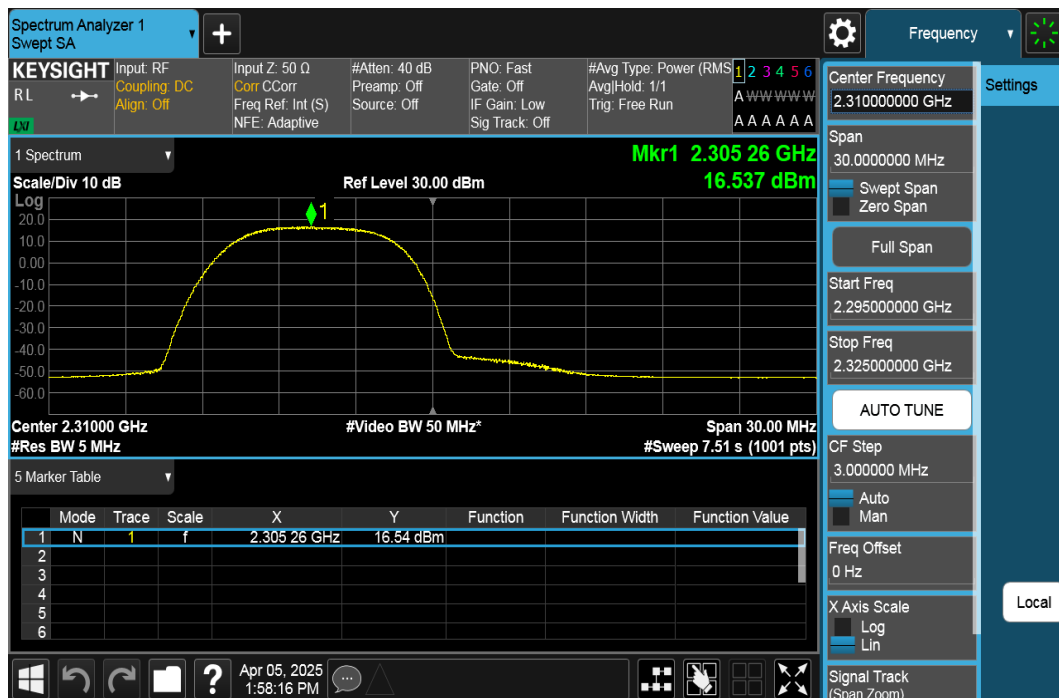
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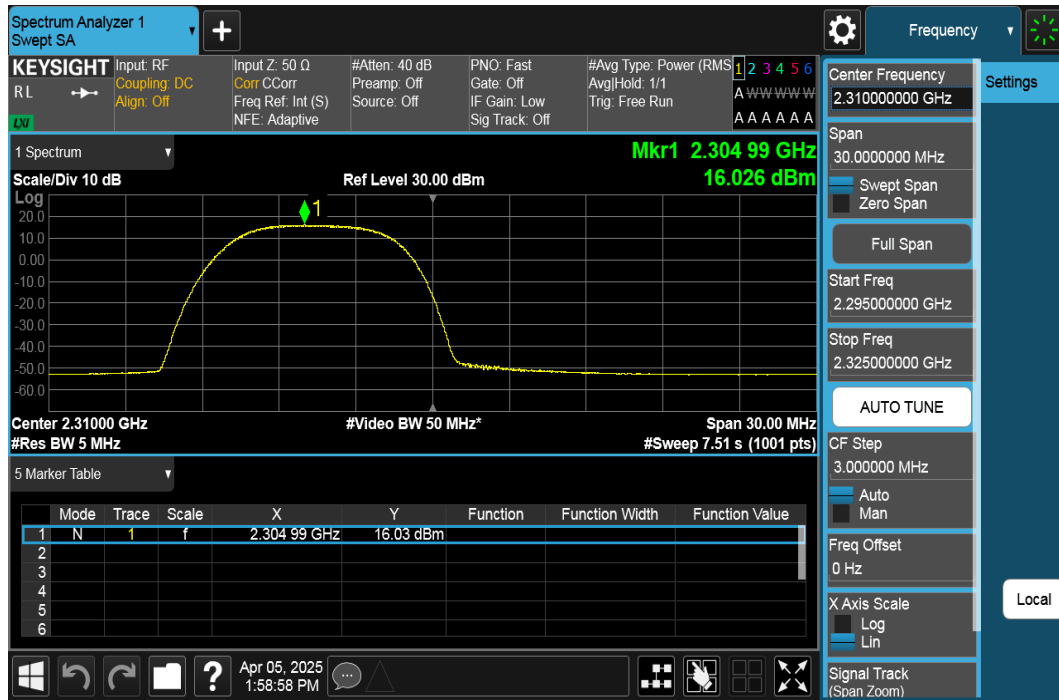
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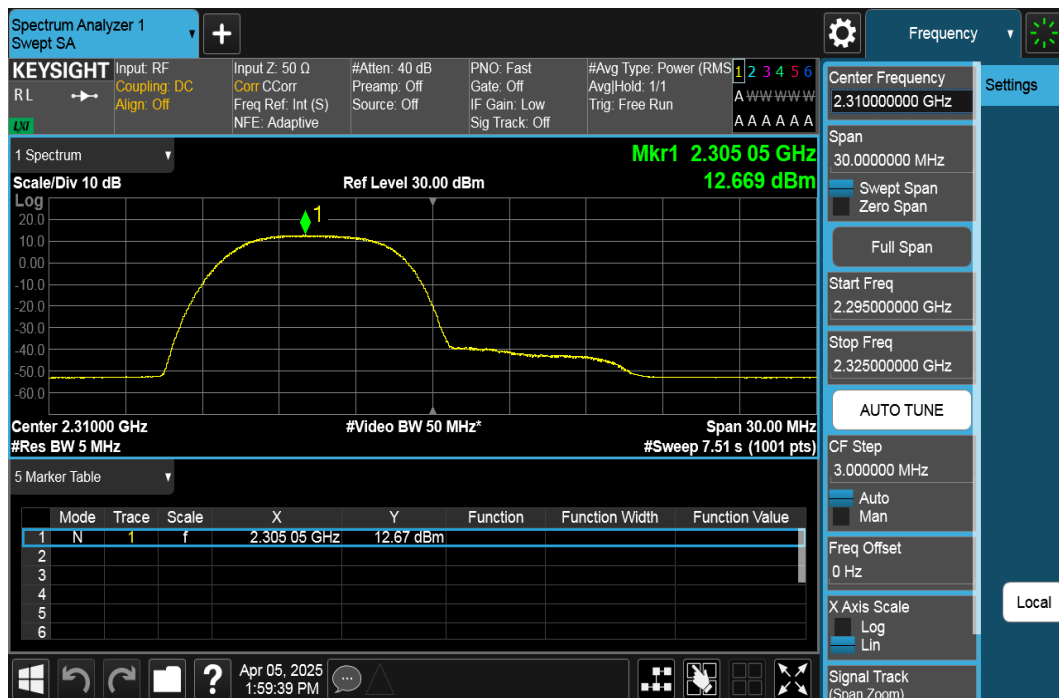
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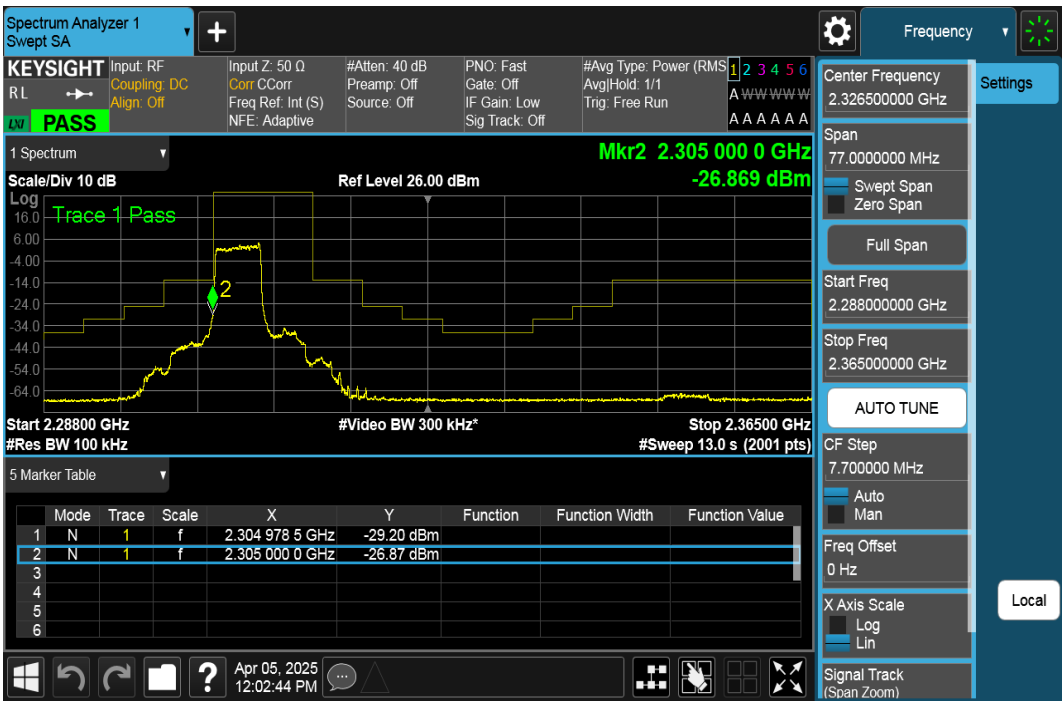
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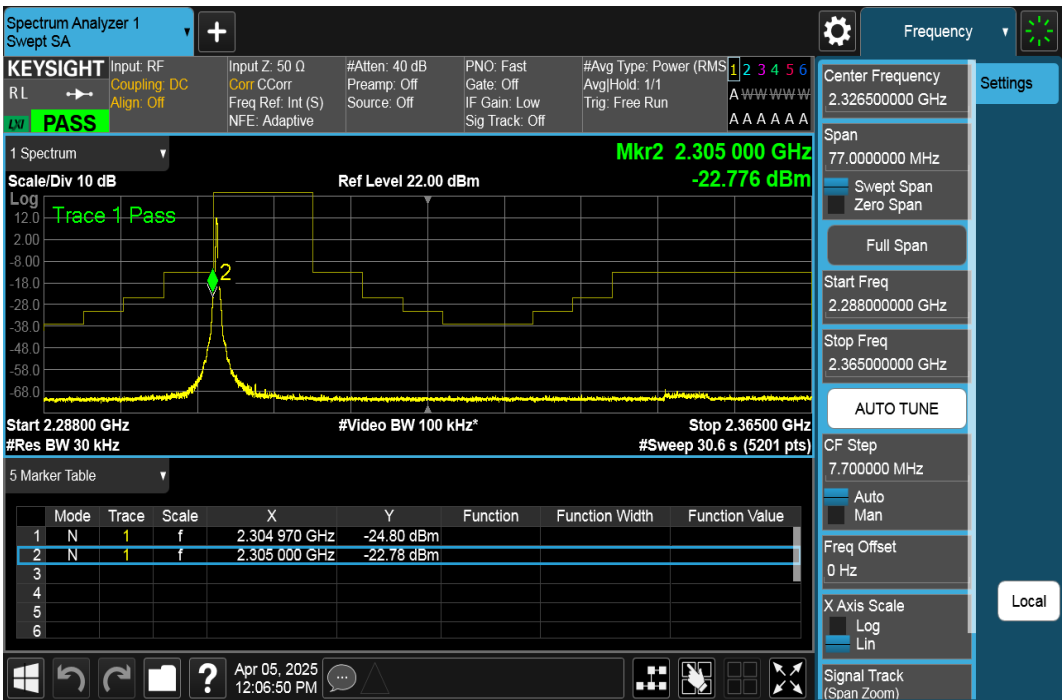
# Bandedge

test graph

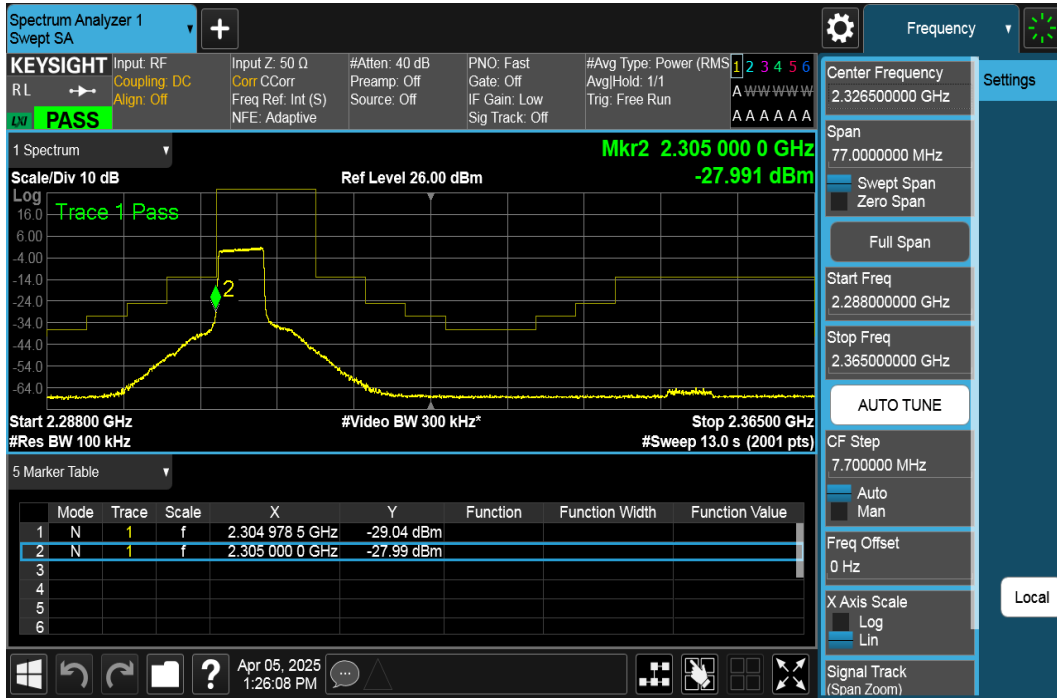
N30-5M-Bandedge-LCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



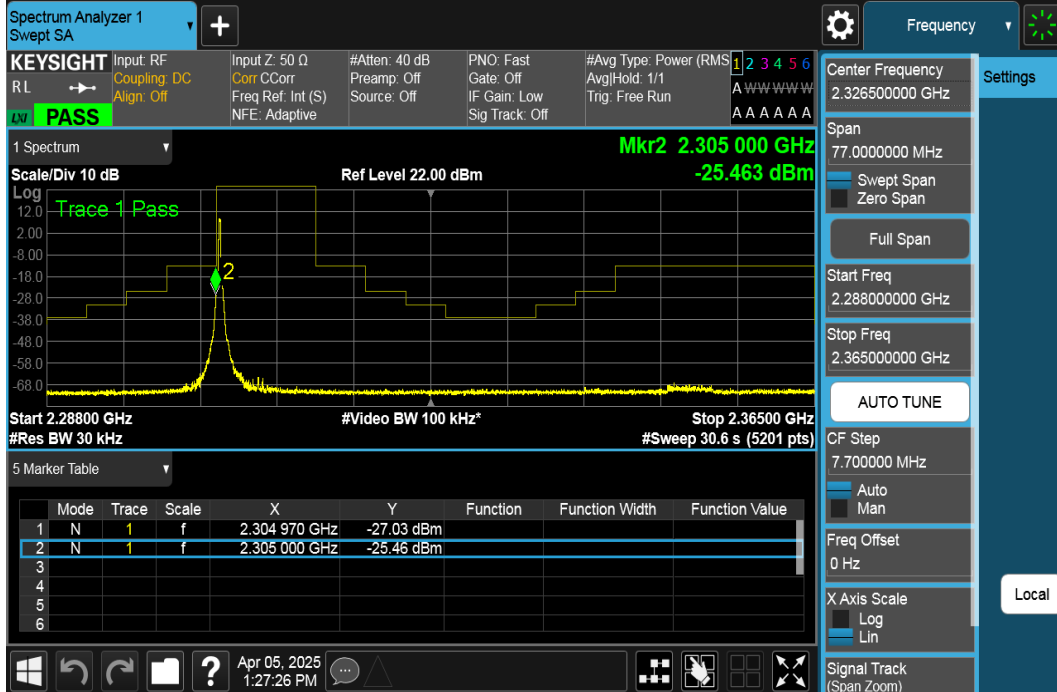
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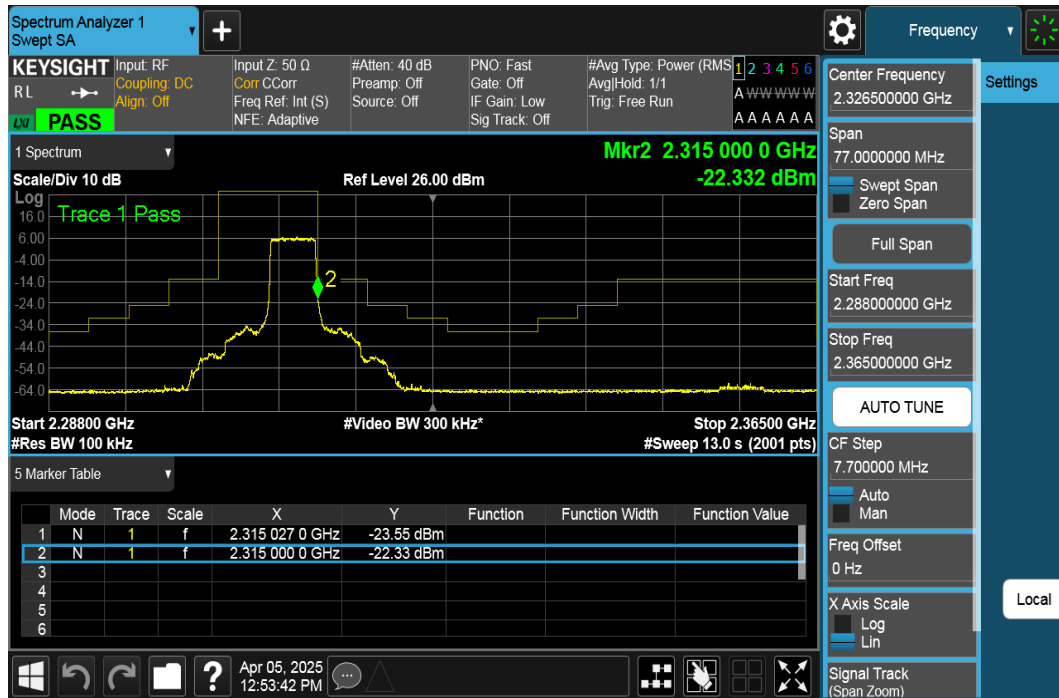
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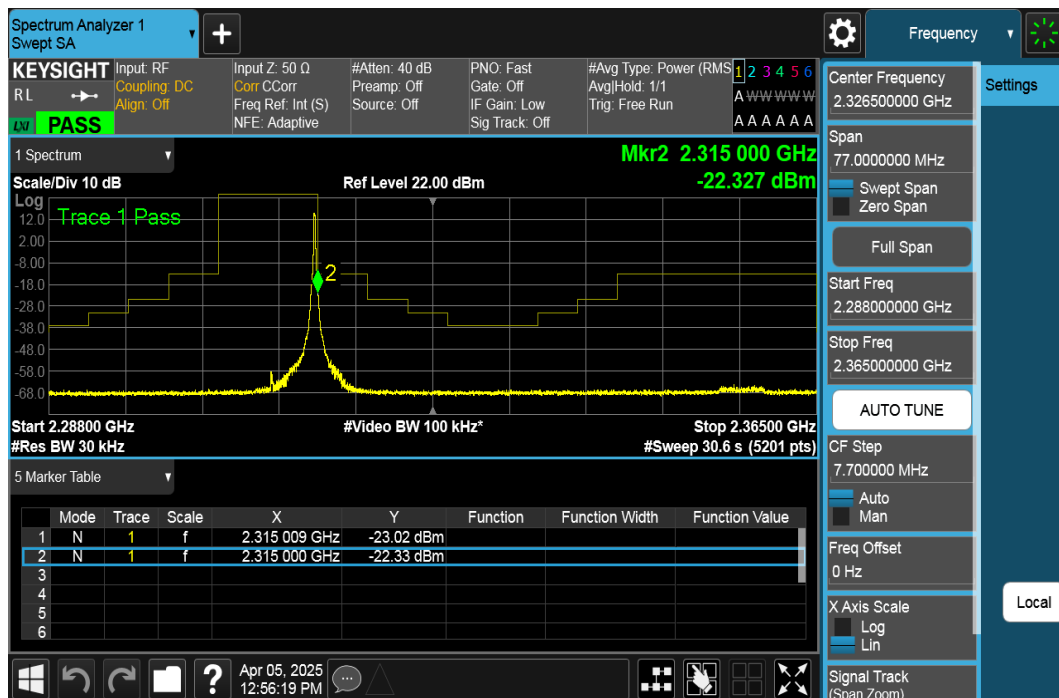
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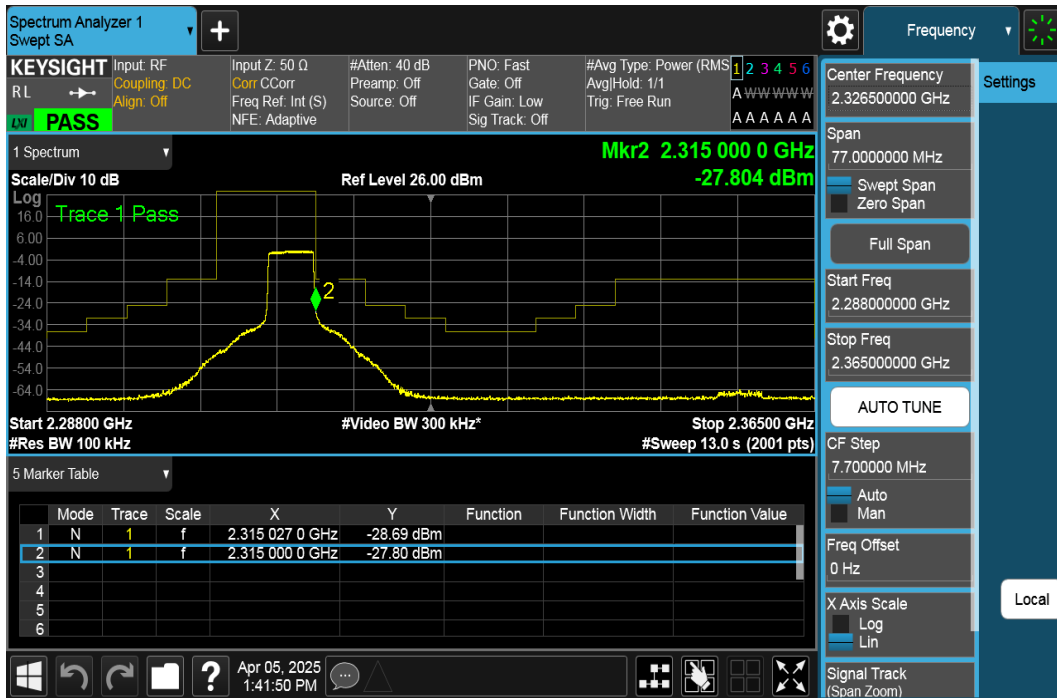
# N30-5M-Bandedge-HCH-DFT-s-OFDM-Pi2 BPSK-Outter\_Full



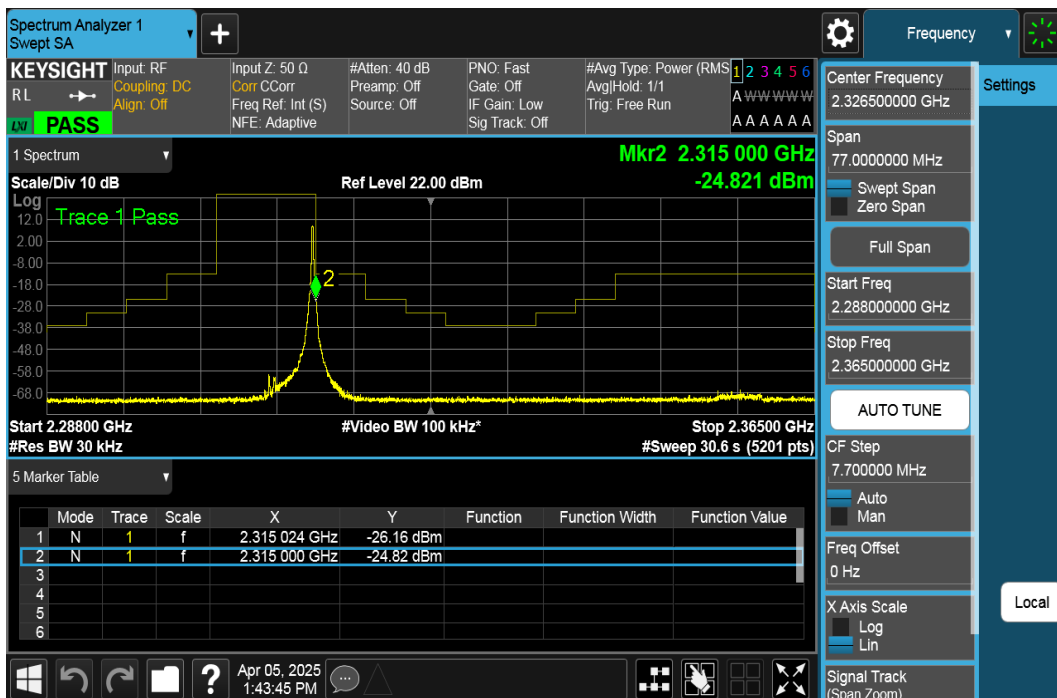
# N30-5M-Bandedge-HCH-DFT-s-OFDM-Pi2 BPSK-1RB\_MAX



# N30-5M-Bandedge-HCH-CP-OFDM-QPSK-Outer\_Full

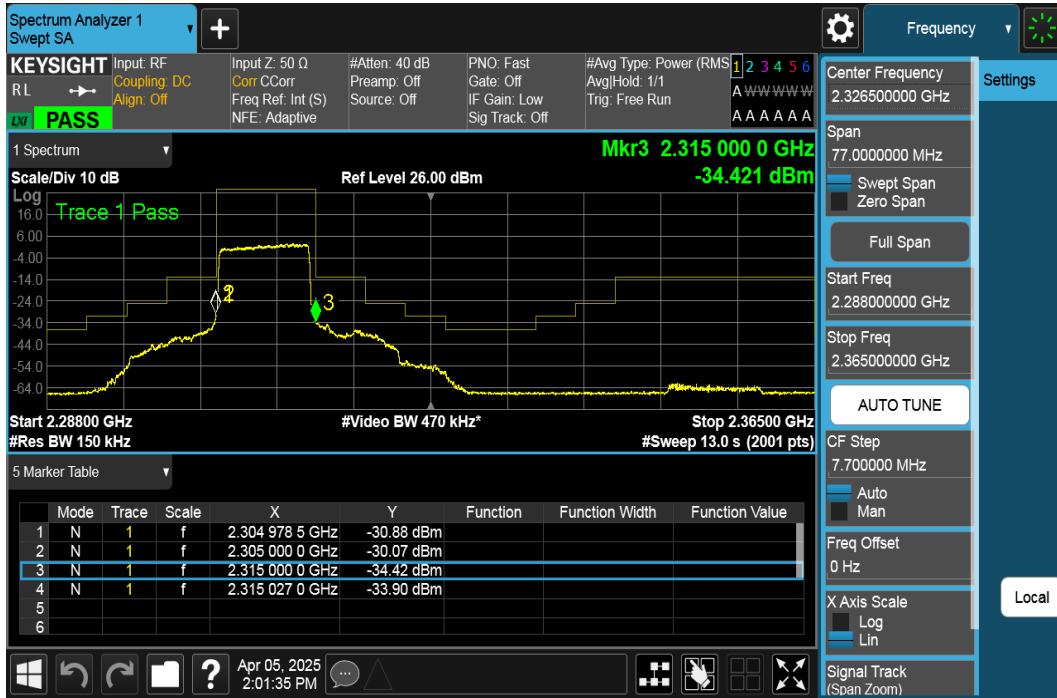


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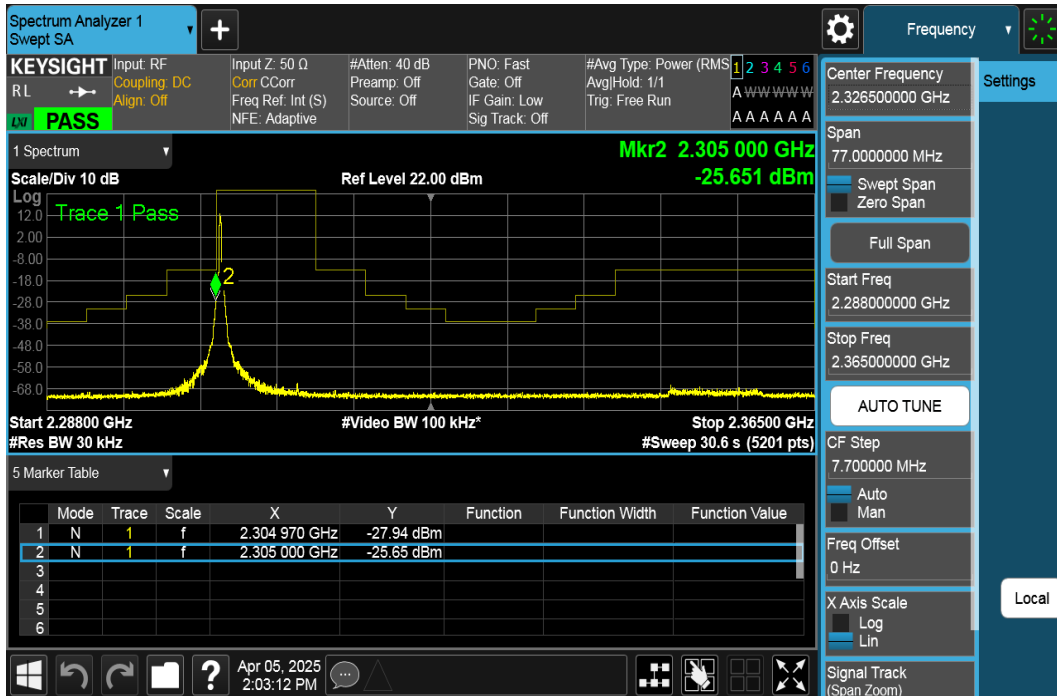




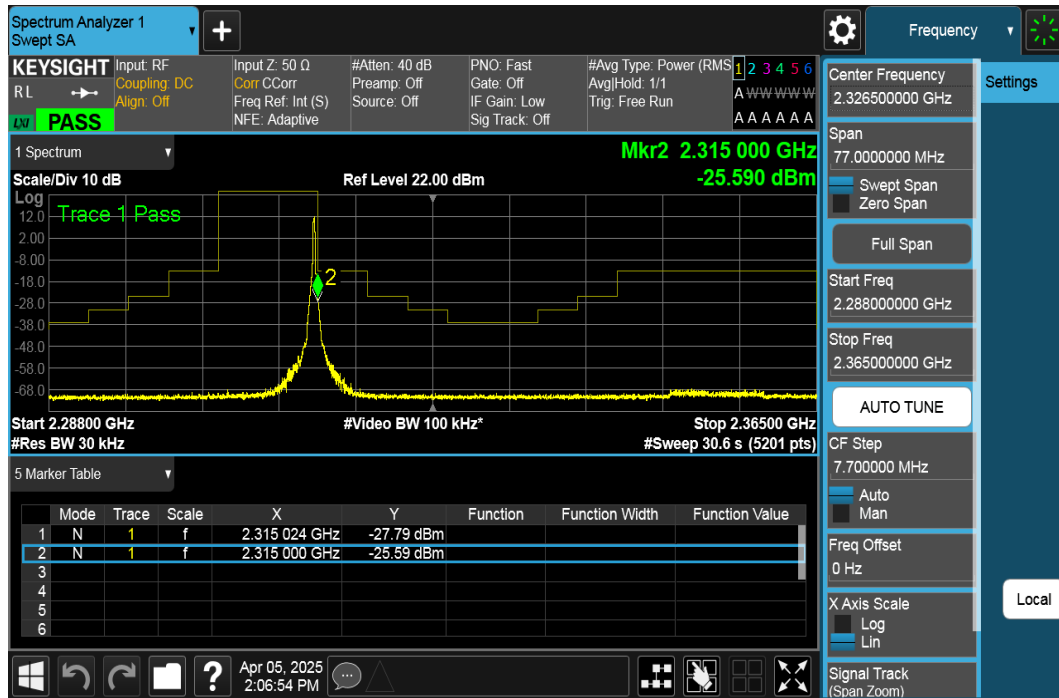
# N30-10M-Bandedge-MCH-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



# N30-10M-Bandedge-MCH-DFT-s-OFDM-Pi2 BPSK-1RB0



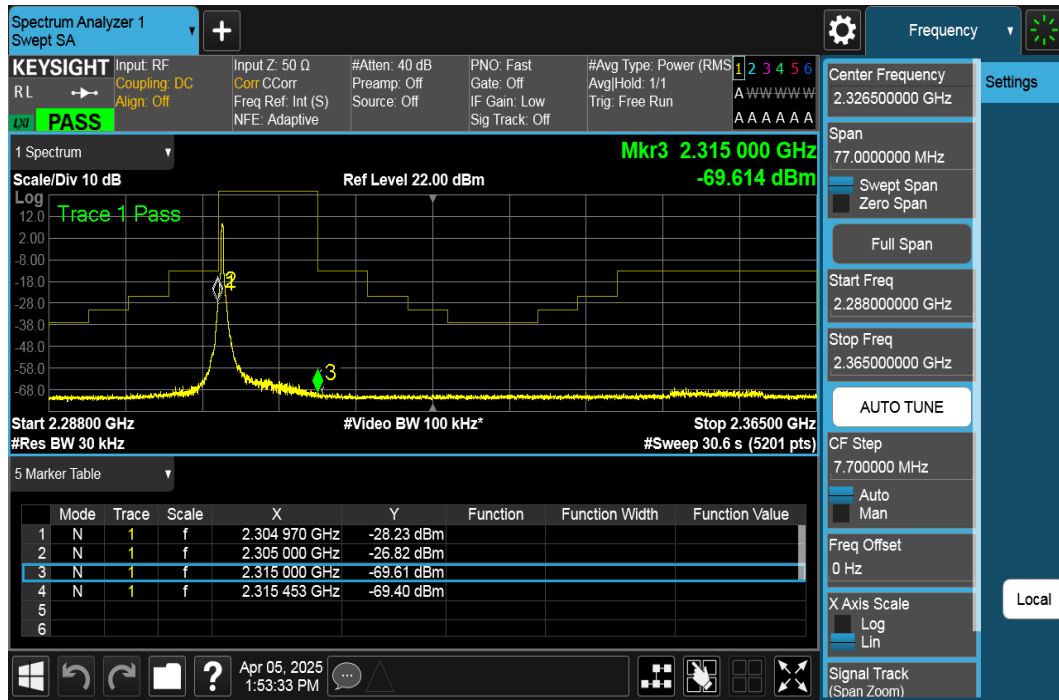
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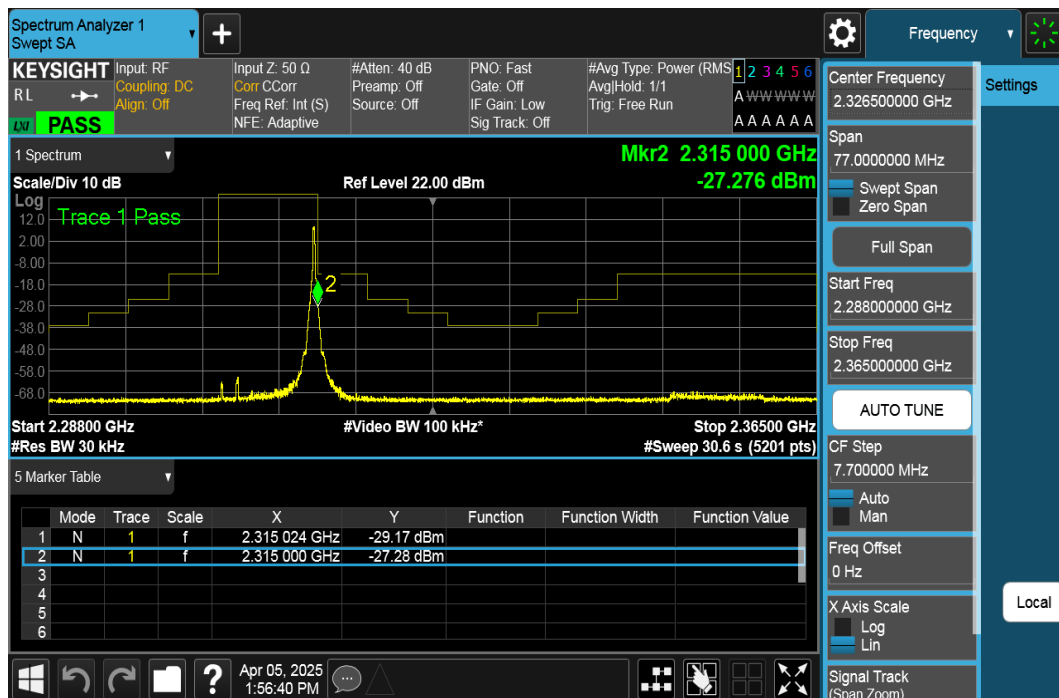
# N30-10M-Bandedge-MCH-CP-OFDM-QPSK-Outer\_Full



# N30-10M-Bandedge-MCH-CP-OFDM-QPSK-1RB0



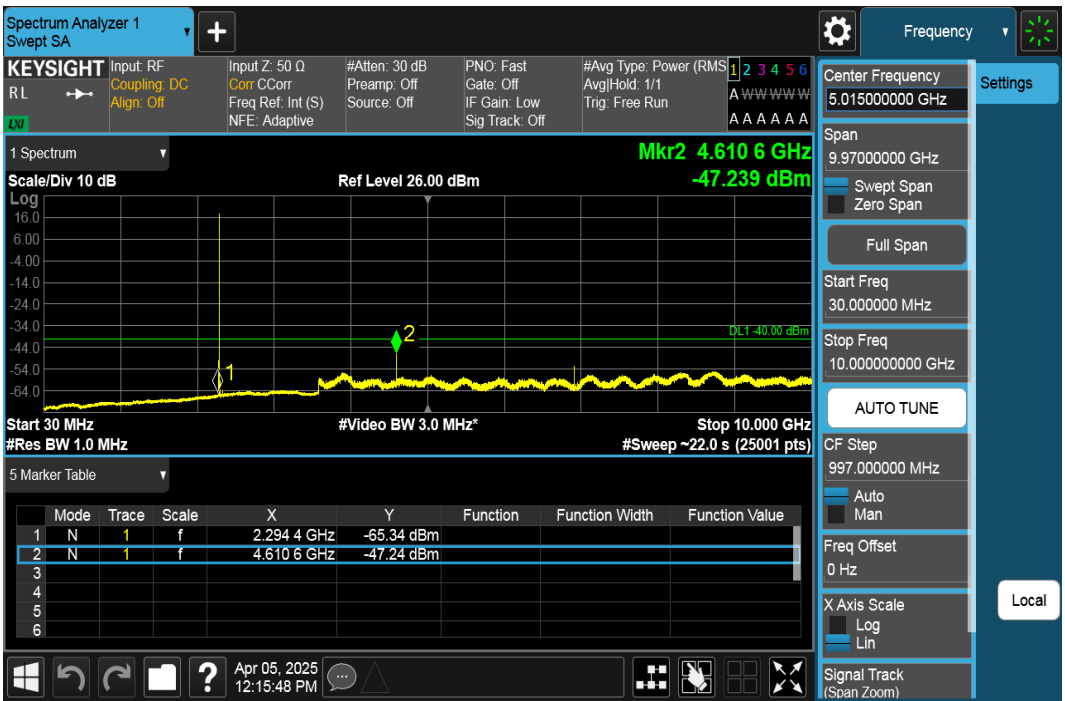
# N30-10M-Bandedge-MCH-CP-OFDM-QPSK-1RB\_MAX



# Conducted spurious emissions

test graph

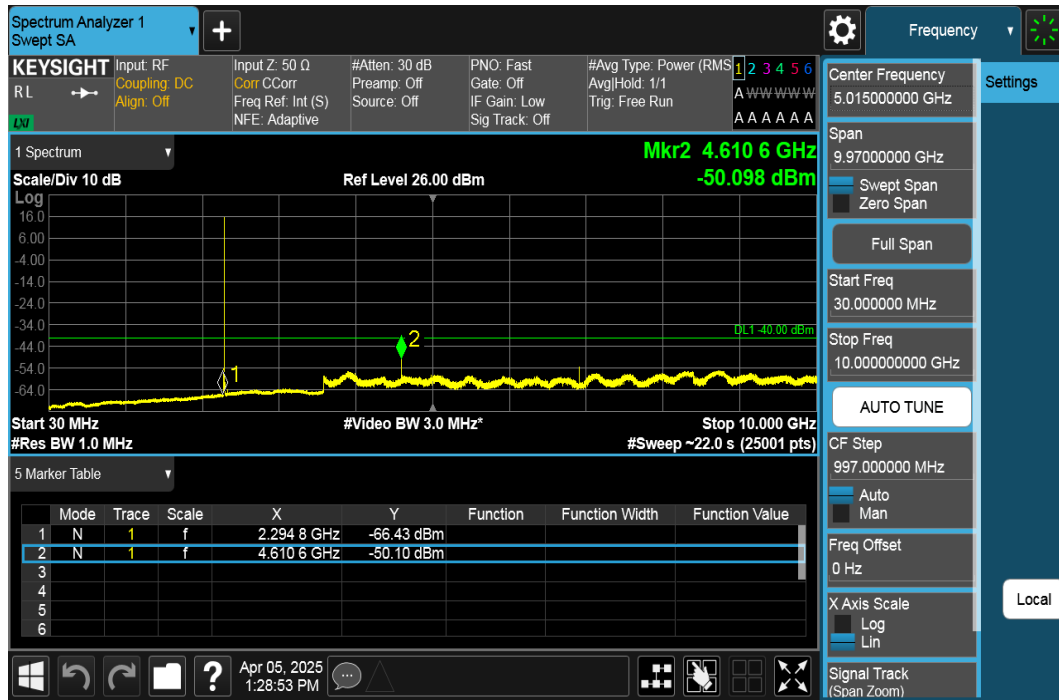
N30-5M-CSE-LCH-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



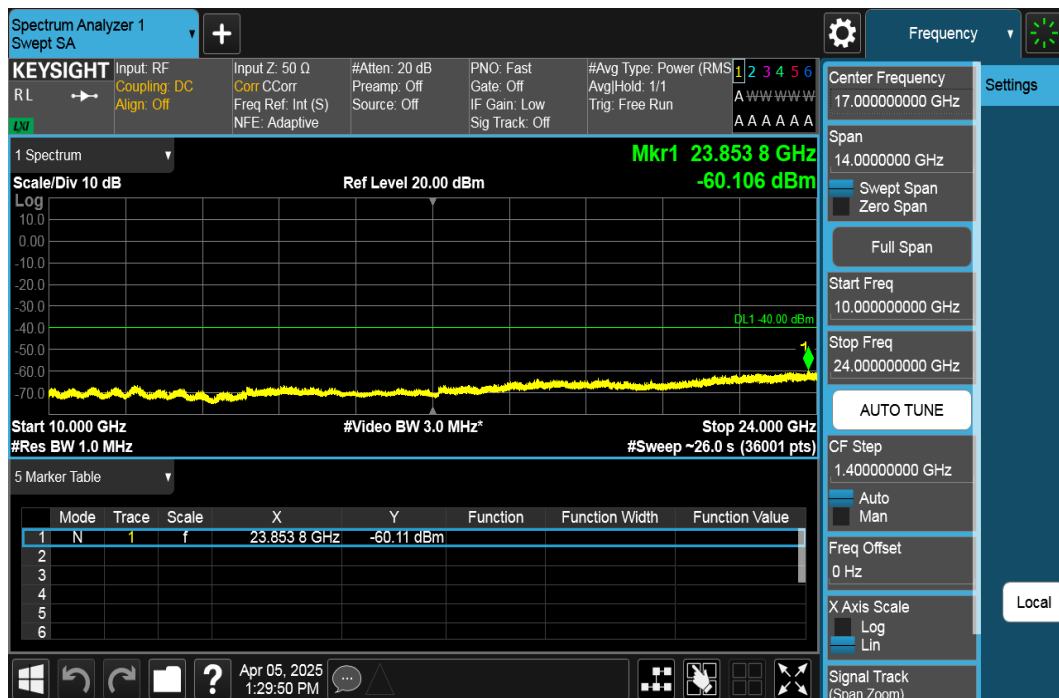
N30-5M-CSE-LCH-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-24GHz



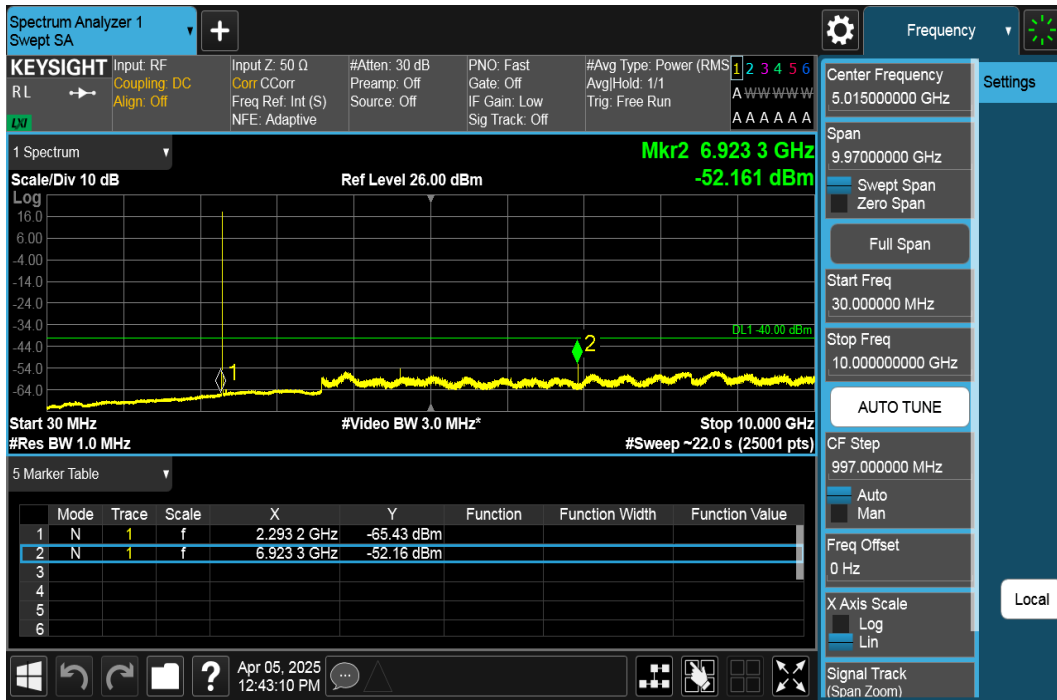
# N30-5M-CSE-LCH-CP-OFDM-QPSK-1RB0-30MHz-10GHz



# N30-5M-CSE-LCH-CP-OFDM-QPSK-1RB0-10GHz-24GHz



# N30-5M-CSE-MCH-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



# N30-5M-CSE-MCH-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-24GHz

