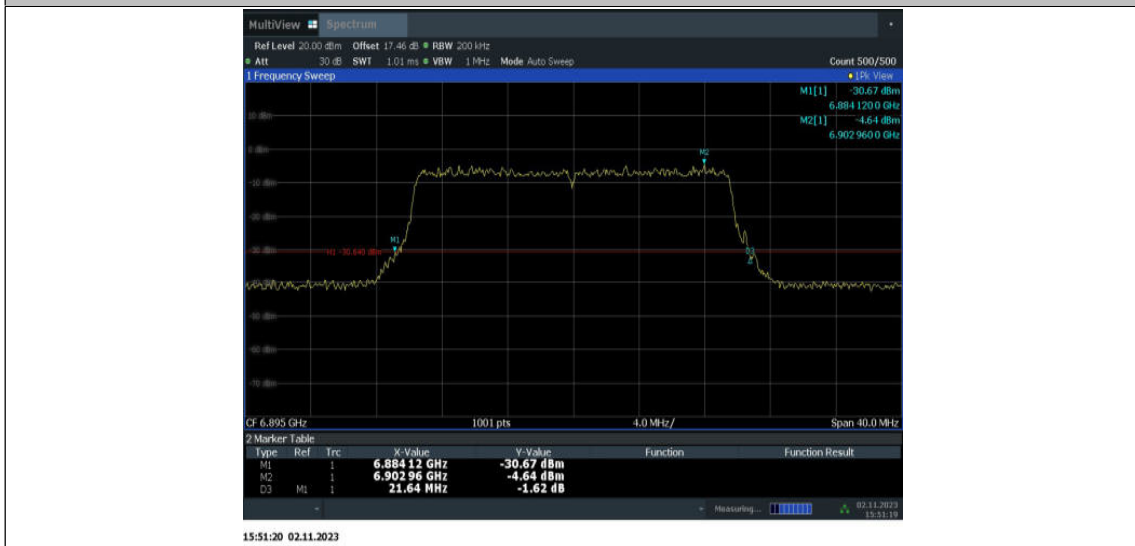


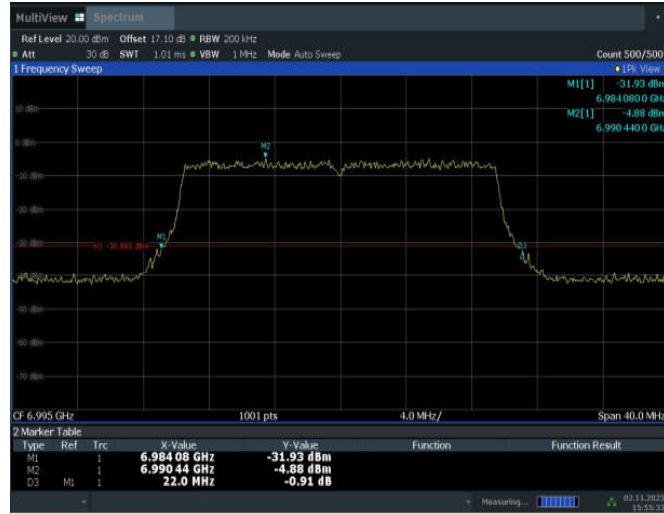
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11BE20MIMO\_Ant9\_6995

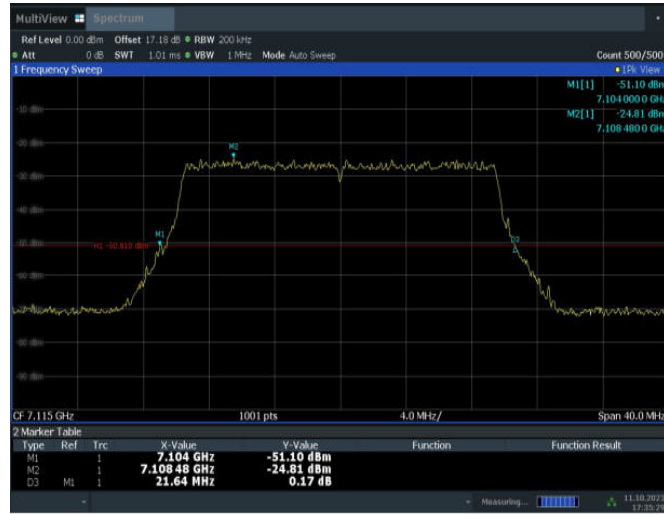


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15:55:33 02.11.2023

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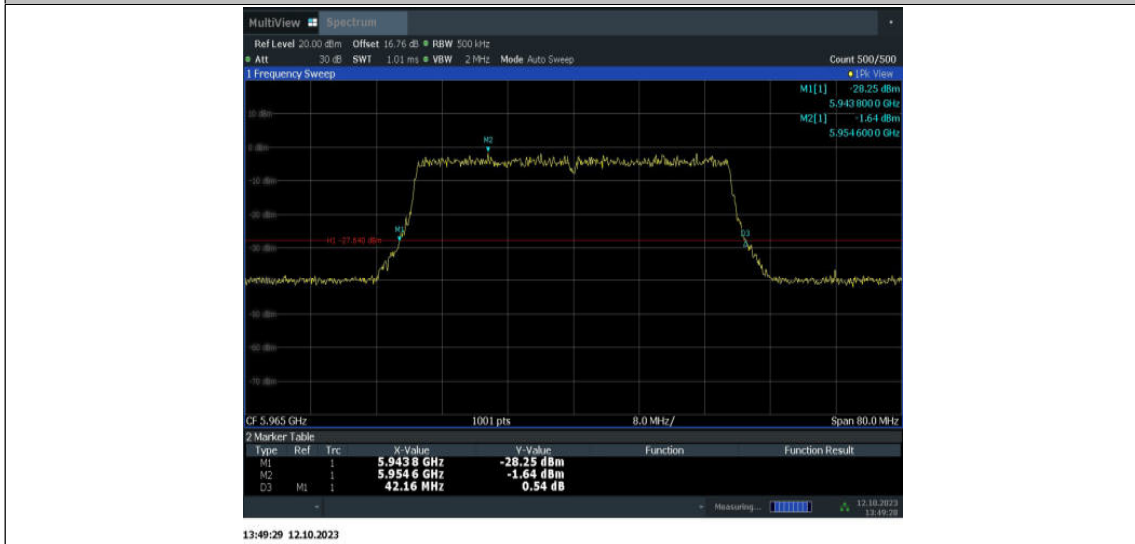


17:35:29 11.10.2023

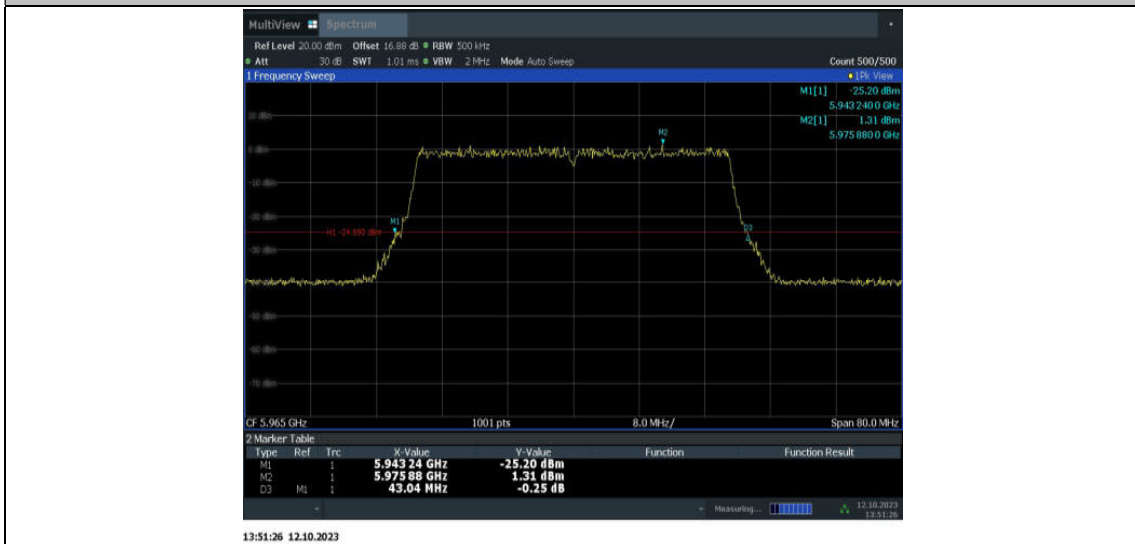
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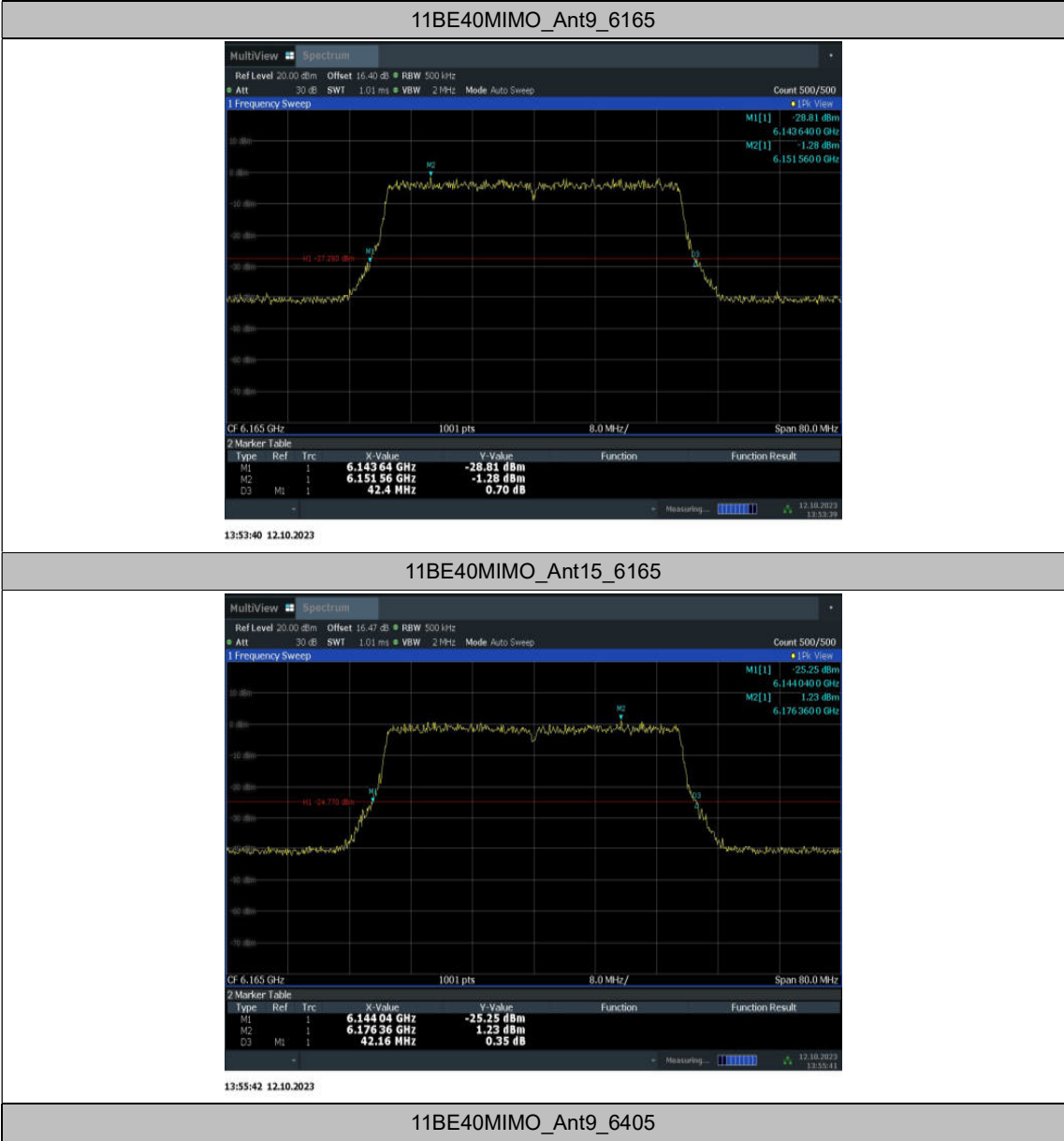


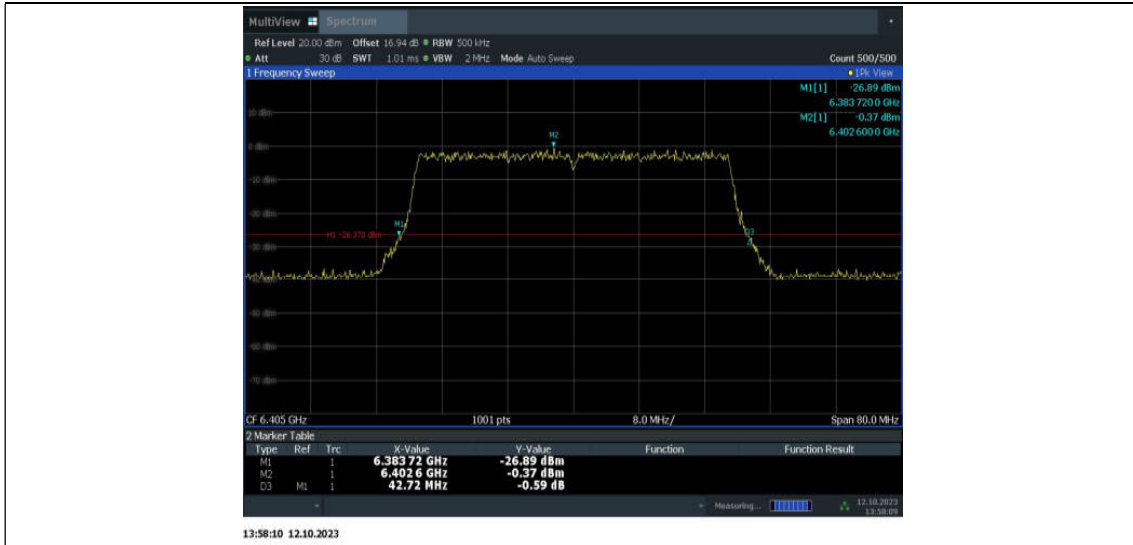
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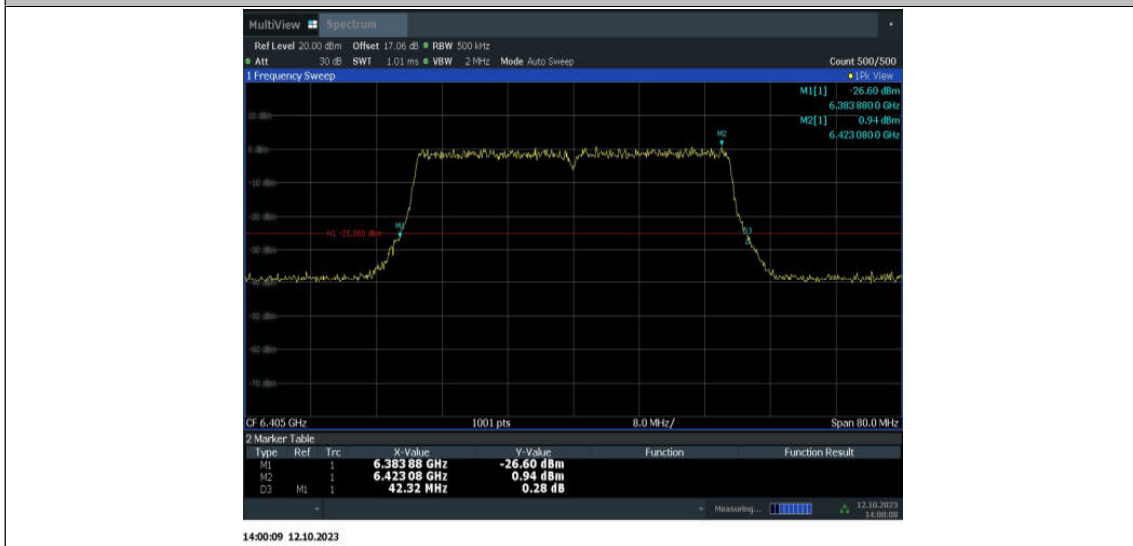
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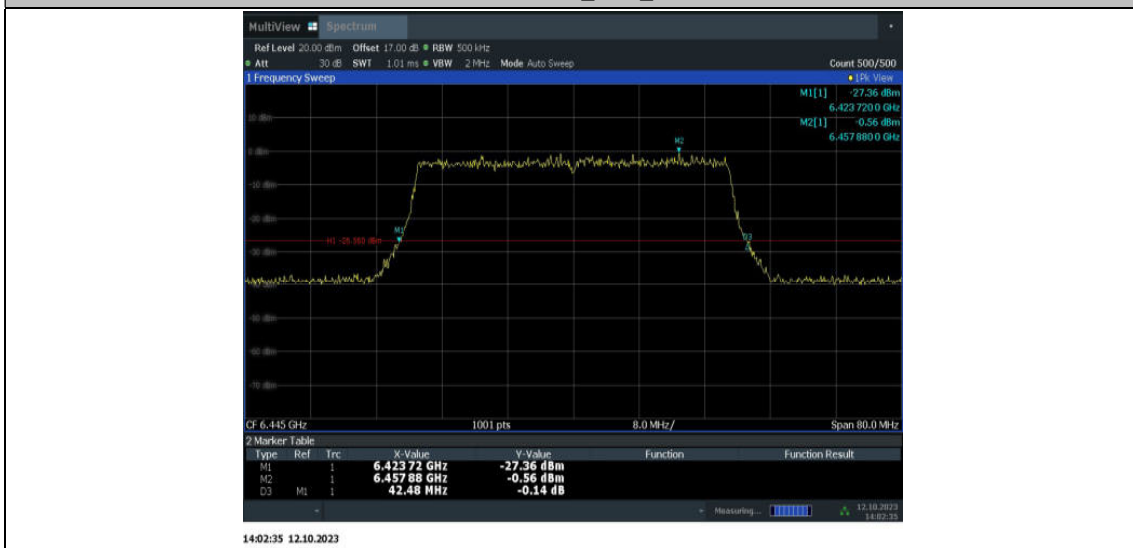




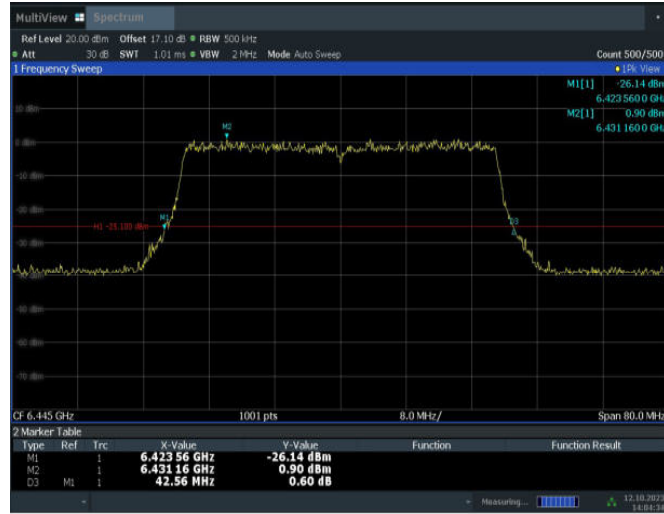
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11BE40MIMO\_Ant9\_6445



11BE40MIMO\_Ant15\_6445



14:04:35 12.10.2023

11BE40MIMO\_Ant9\_6485



14:07:10 12.10.2023

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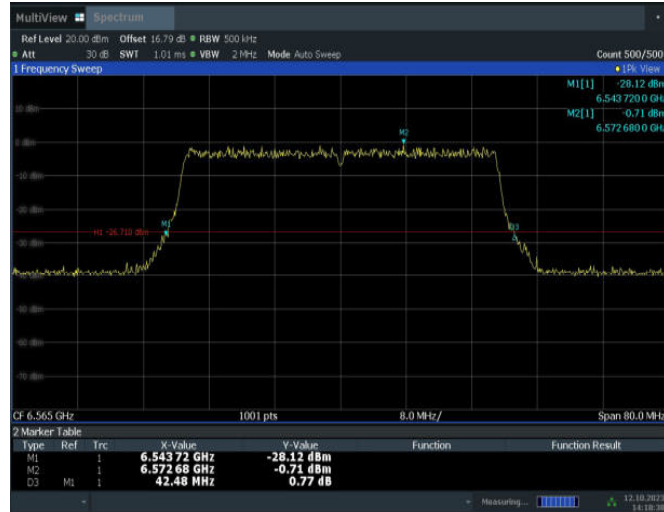
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11BE40MIMO\_Ant15\_6525

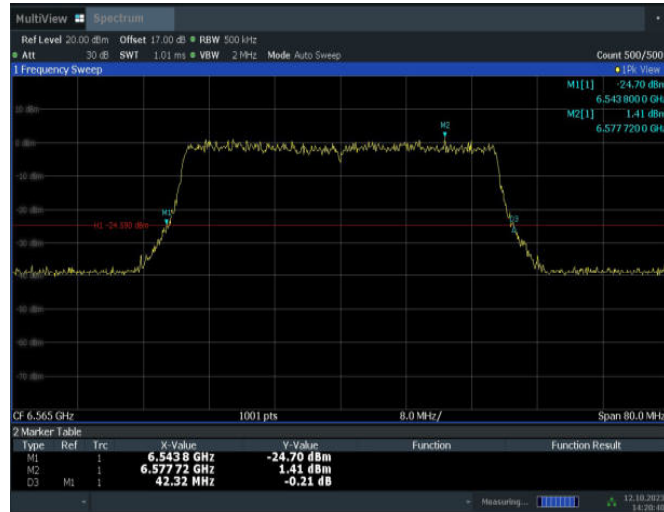


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14:18:39 12.10.2023

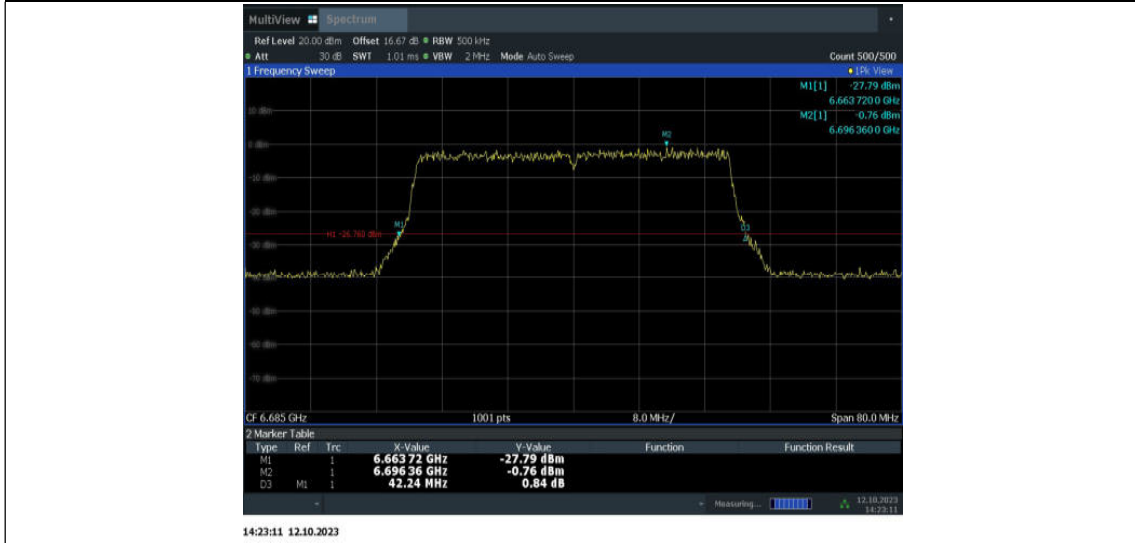
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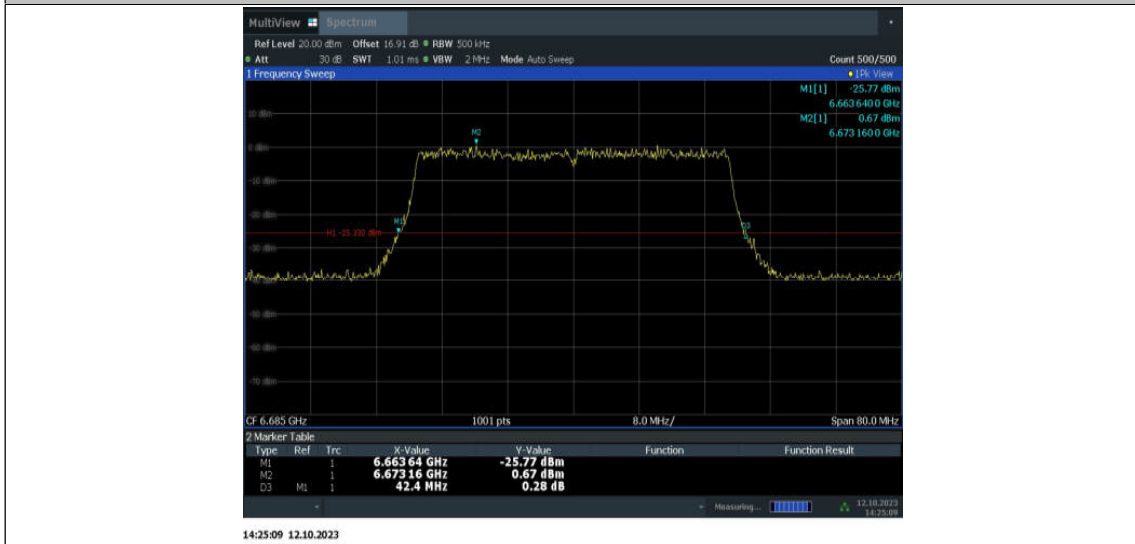
14:20:40 12.10.2023

11BE40MIMO\_Ant9\_6685





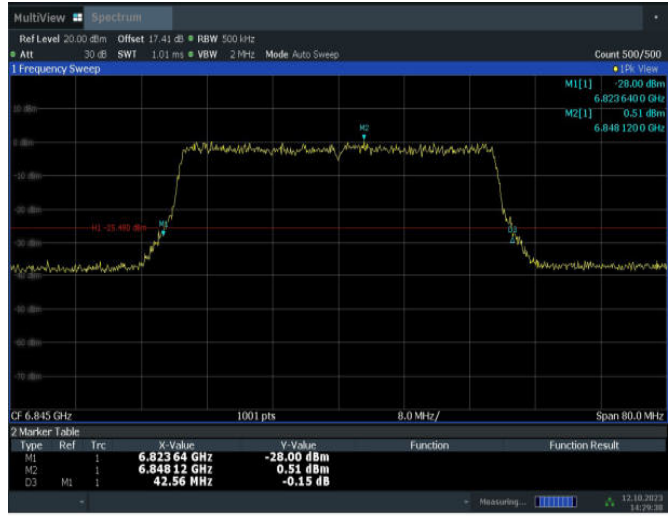
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11BE40MIMO\_Ant9\_6845

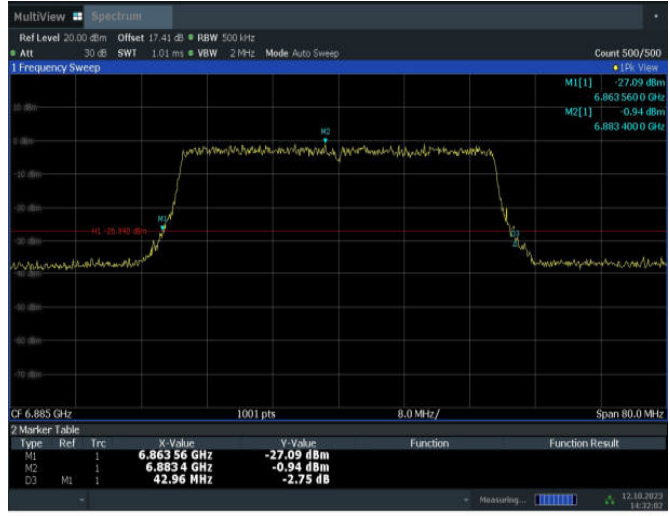


11BE40MIMO\_Ant15\_6845



14:29:39 12.10.2023

11BE40MIMO\_Ant9\_6885

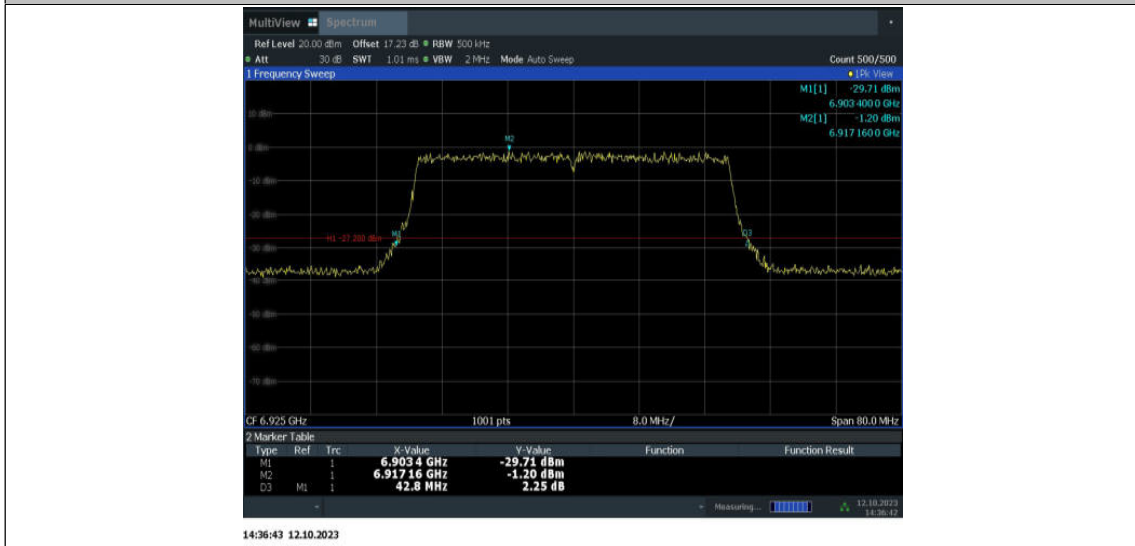


14:32:03 12.10.2023

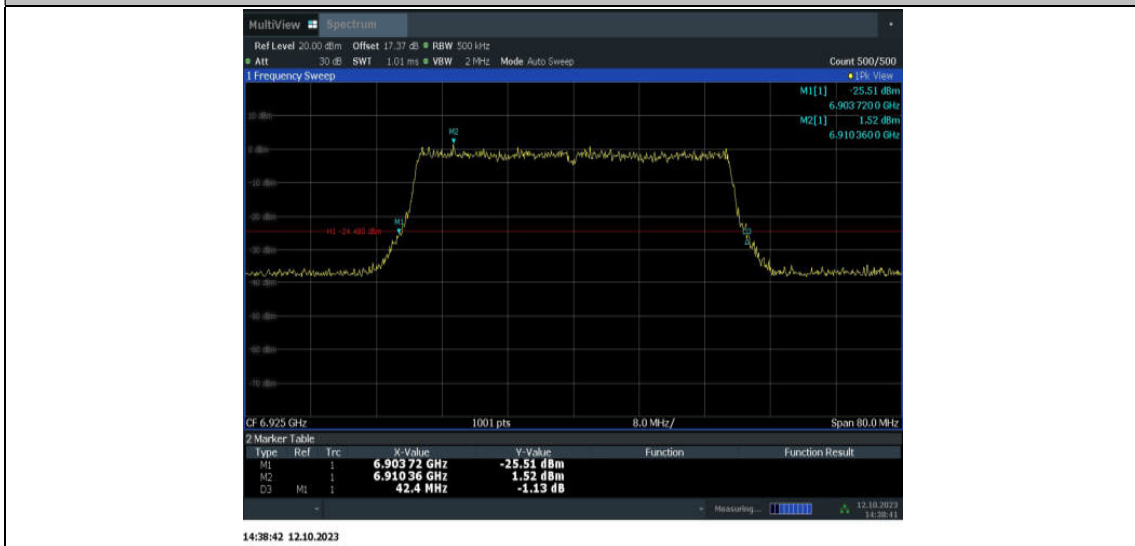
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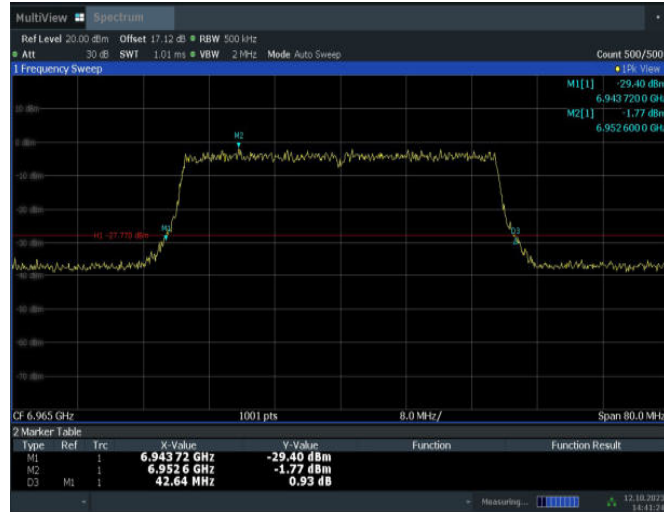
11BE40MIMO\_Ant9\_6925



11BE40MIMO\_Ant15\_6925



11BE40MIMO\_Ant9\_6965



14:41:24 12.10.2023

11BE40MIMO\_Ant15\_6965



14:43:25 12.10.2023

11BE40MIMO\_Ant9\_7085



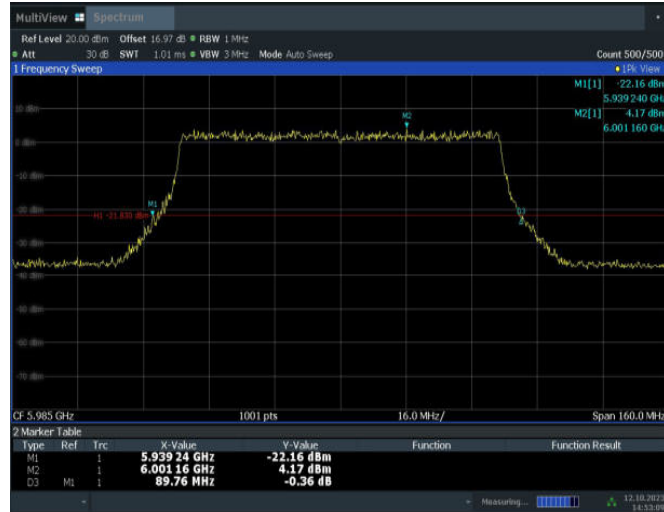
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11BE80MIMO\_Ant9\_5985

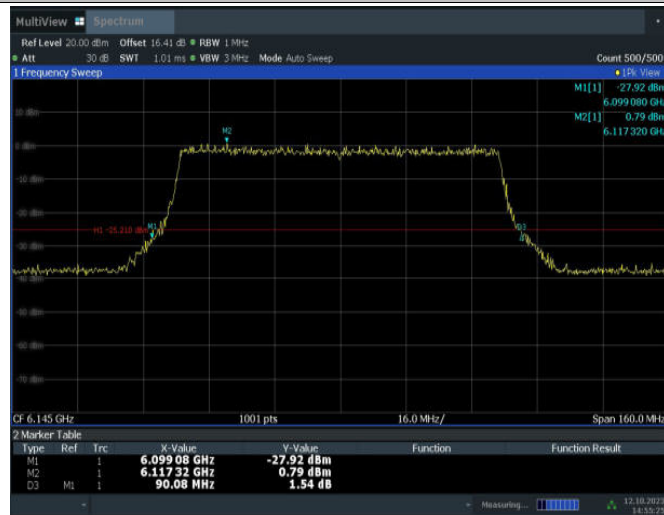


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14:53:09 12.10.2023

11BE80MIMO\_Ant9\_6145

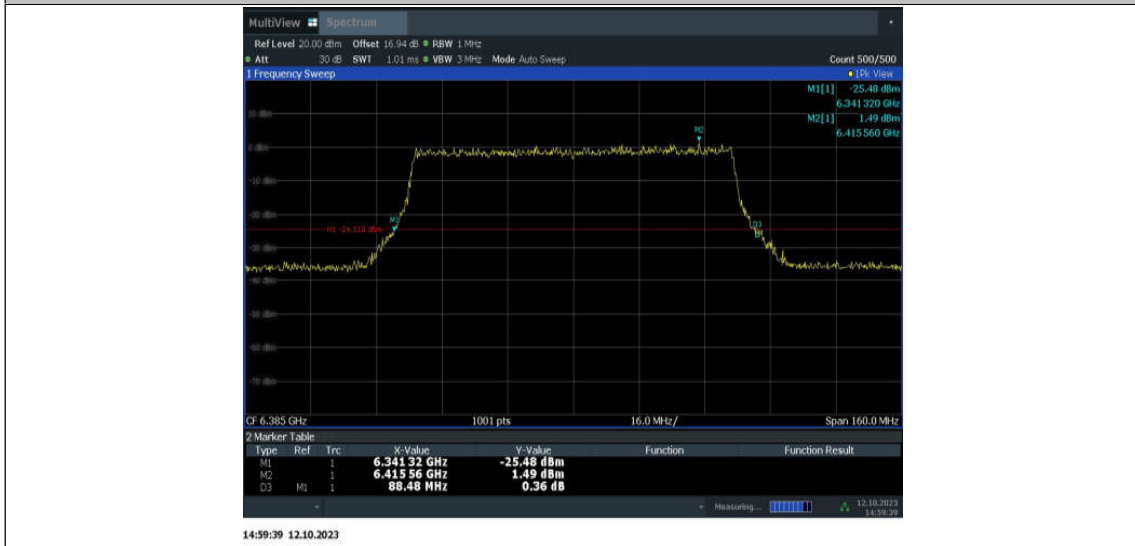


14:55:25 12.10.2023

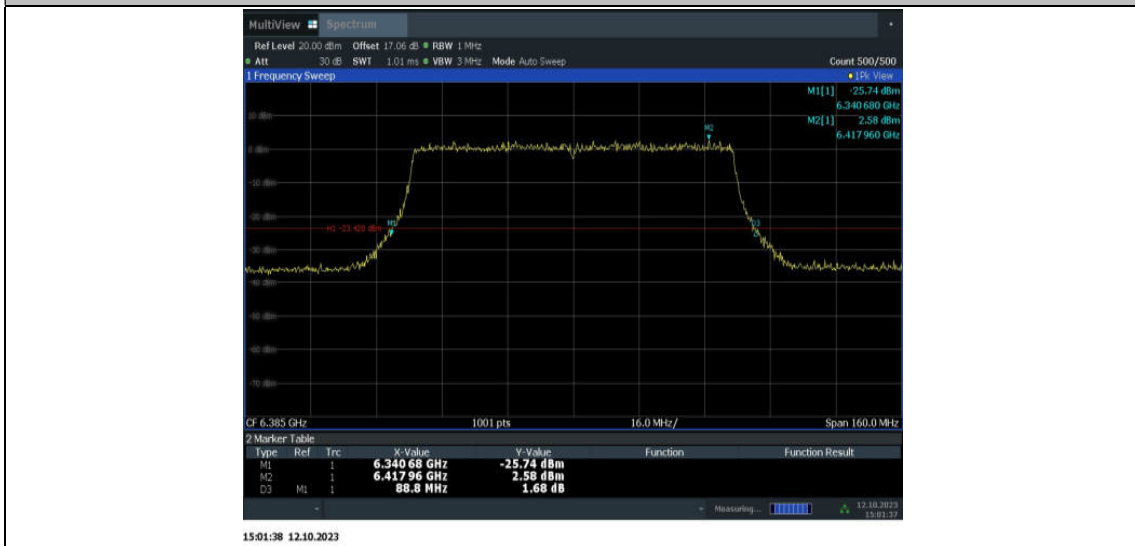
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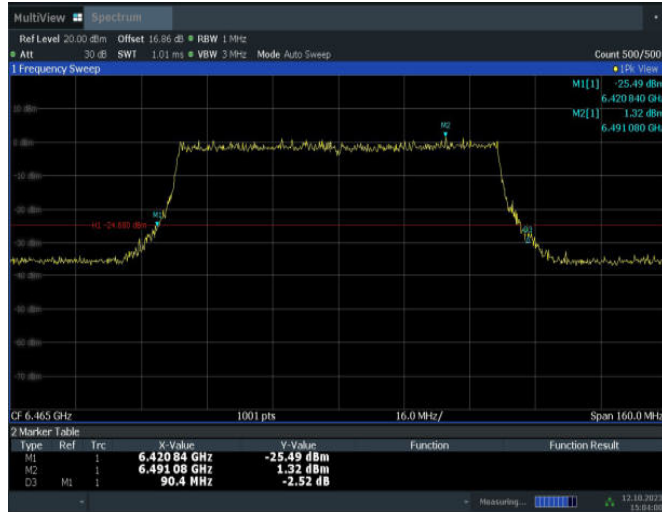
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11BE80MIMO\_Ant15\_6385

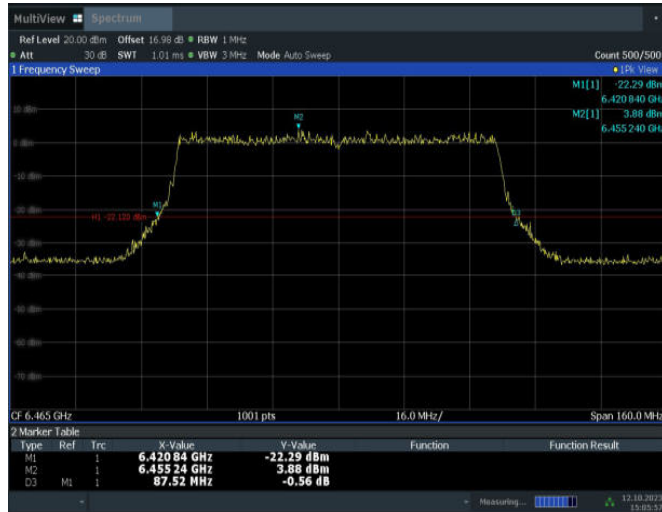


11BE80MIMO\_Ant9\_6465



15:04:00 12.10.2023

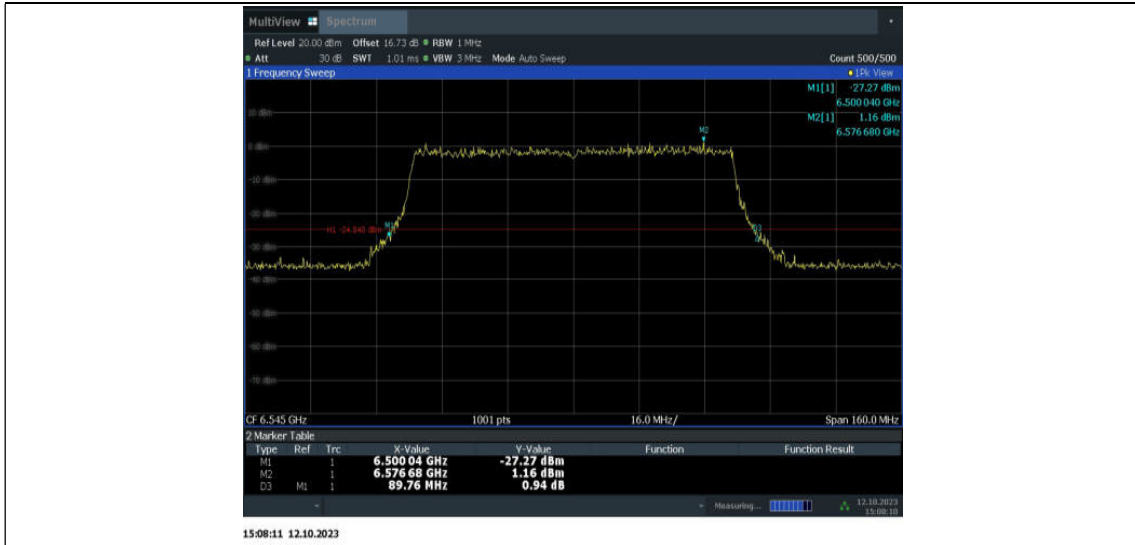
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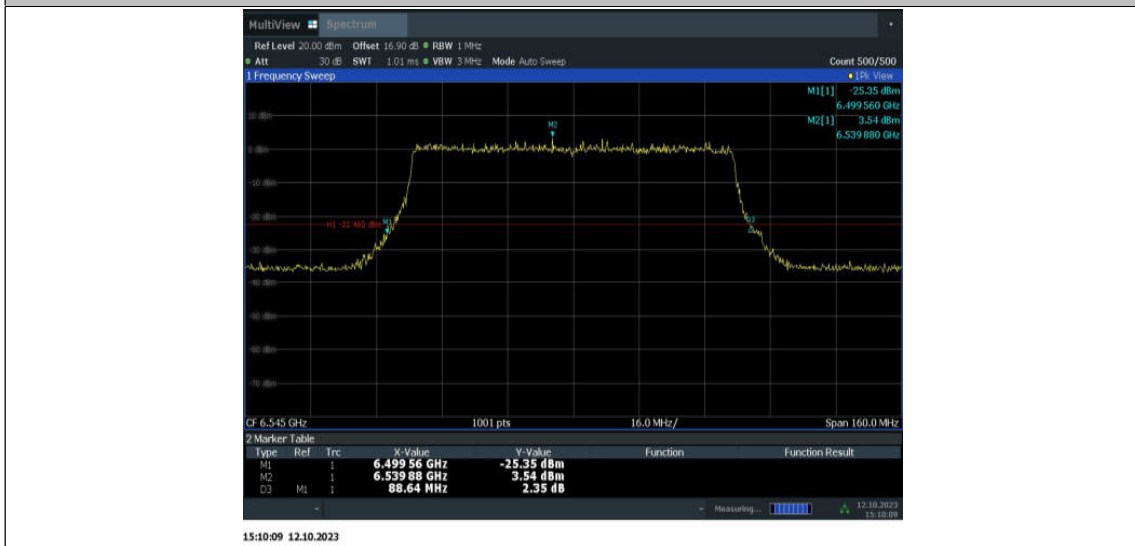
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11BE80MIMO\_Ant9\_6545





11BE80MIMO\_Ant15\_6545



11BE80MIMO\_Ant9\_6625



11BE80MIMO\_Ant15\_6625



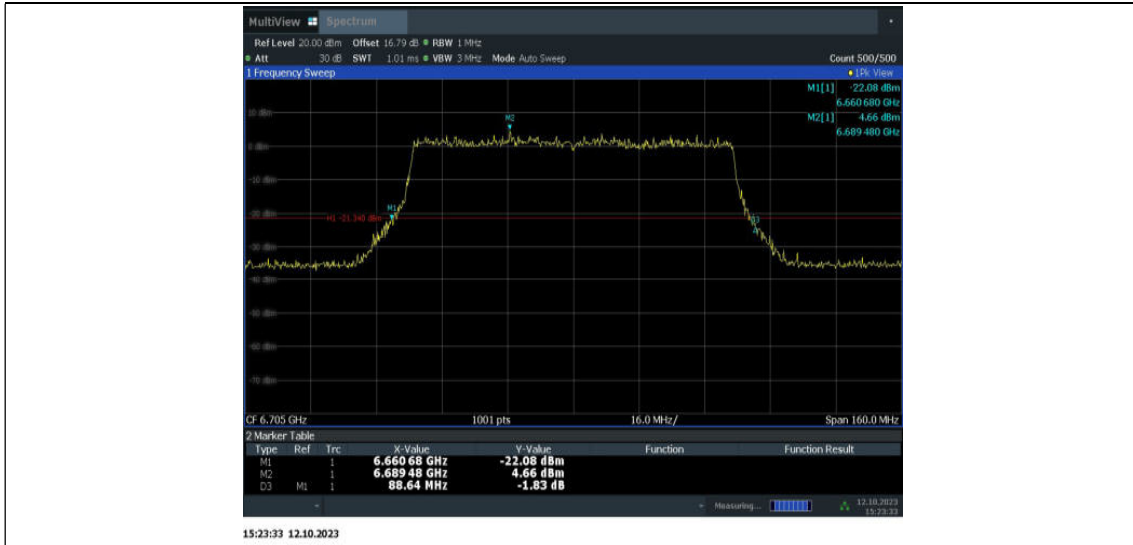
15:19:21 12.10.2023

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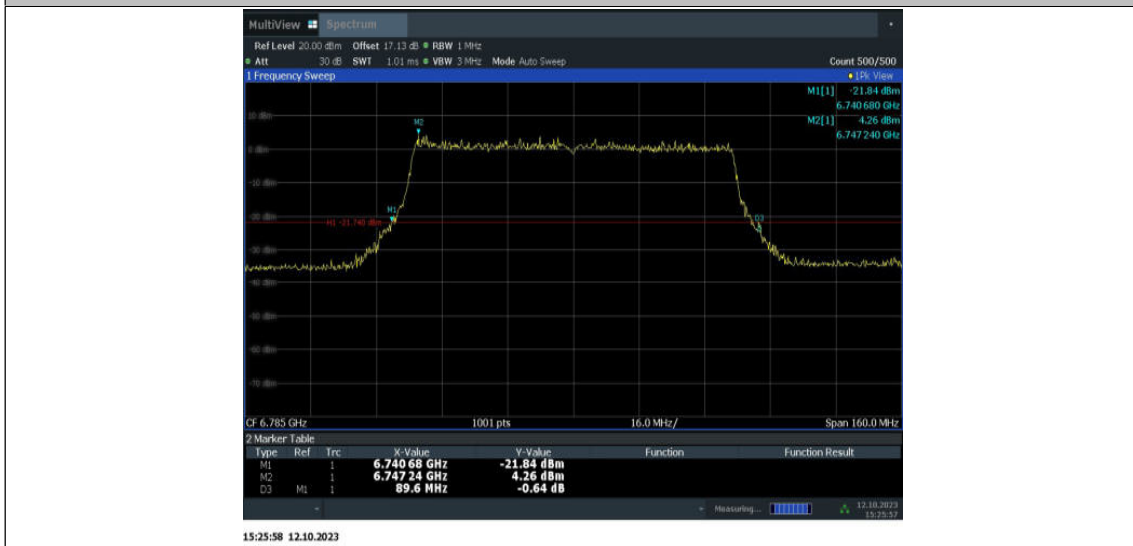


15:21:31 12.10.2023

11BE80MIMO\_Ant15\_6705

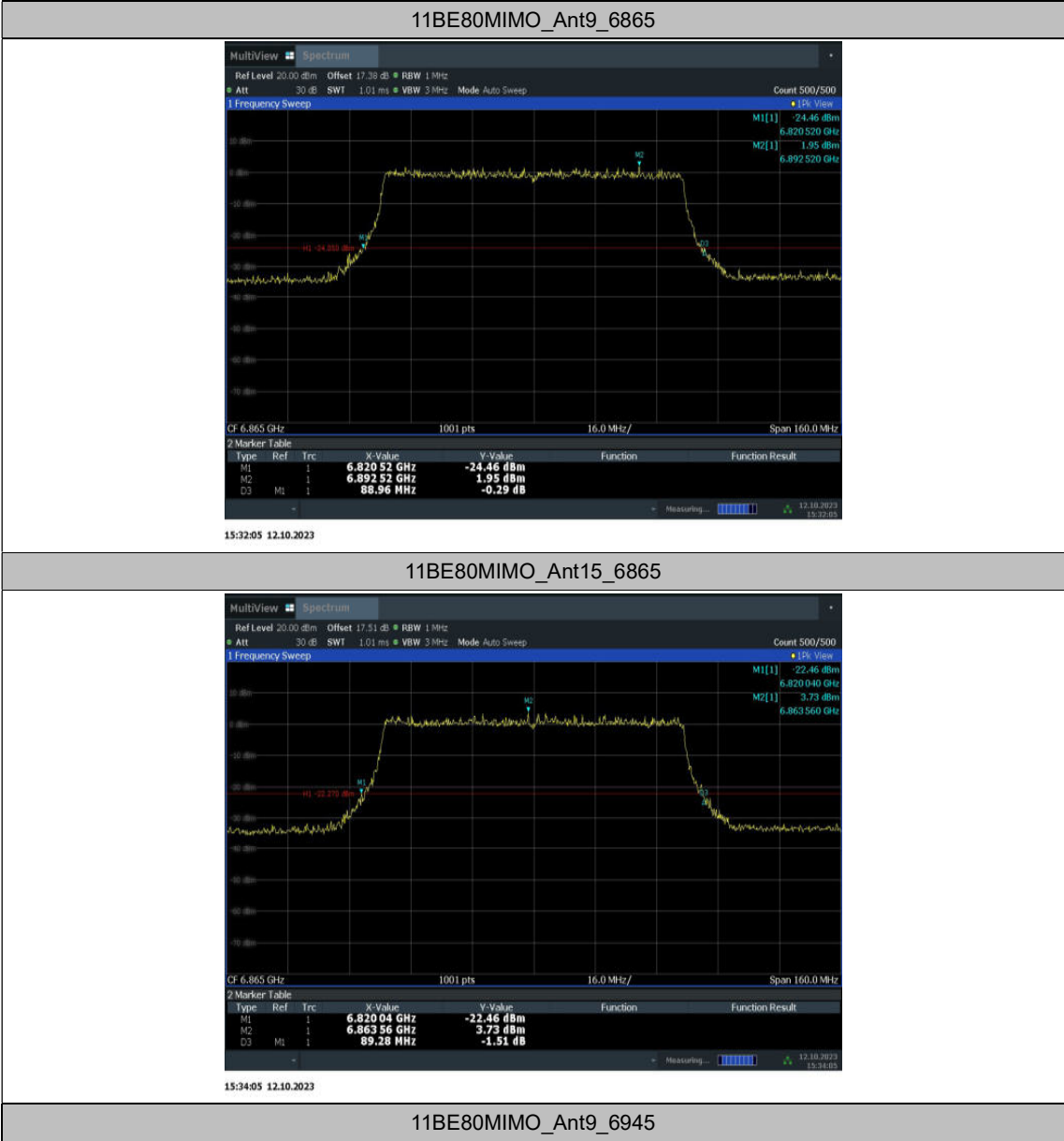


11BE80MIMO\_Ant9\_6785



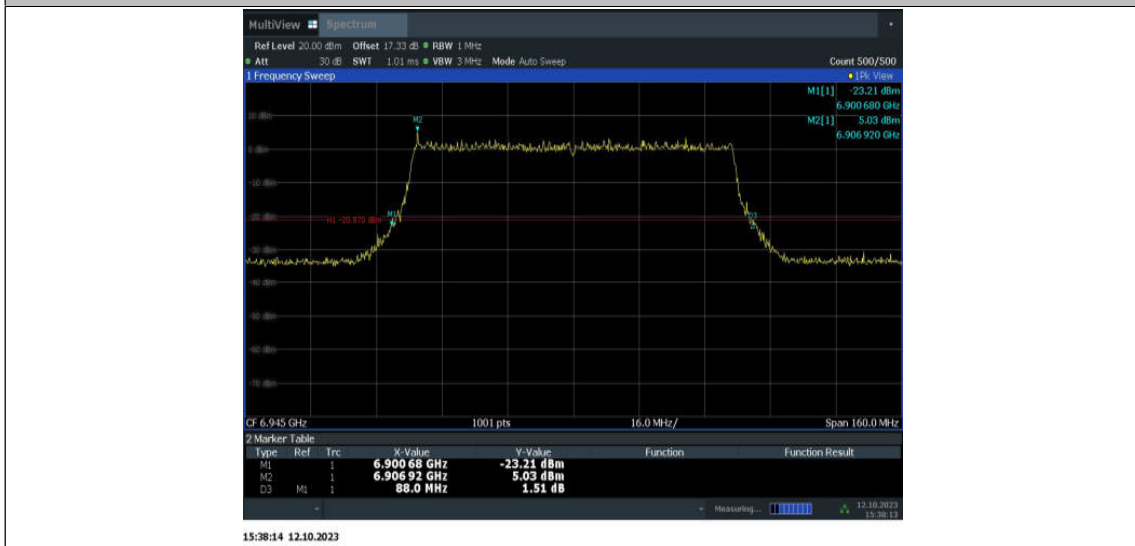
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11BE80MIMO\_Ant15\_6945



11BE80MIMO\_Ant9\_7025



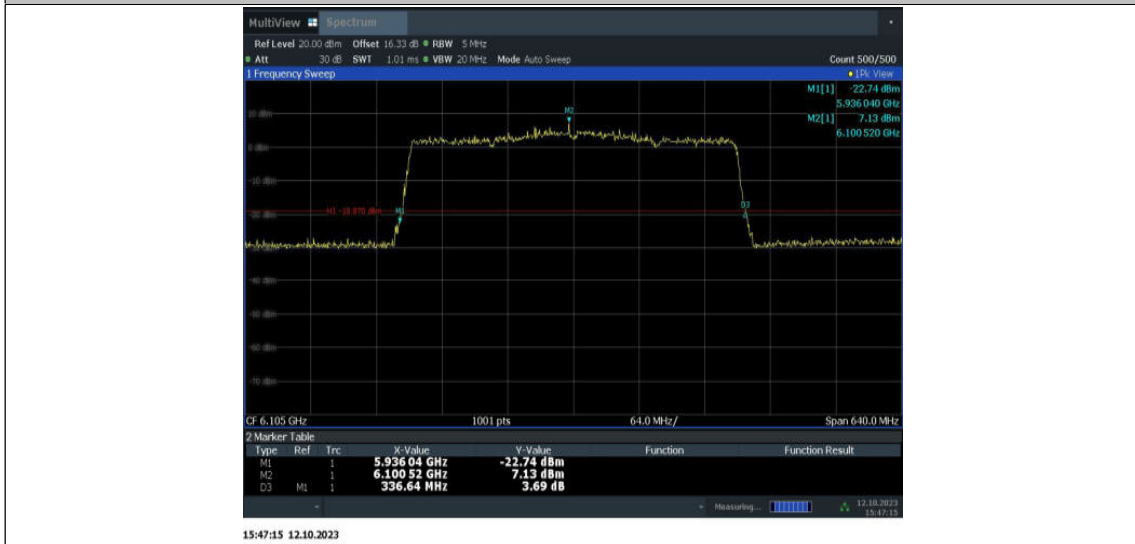
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11BE320MIMO\_Ant9\_6105



11BE320MIMO\_Ant15\_6105



11BE320MIMO\_Ant9\_6265

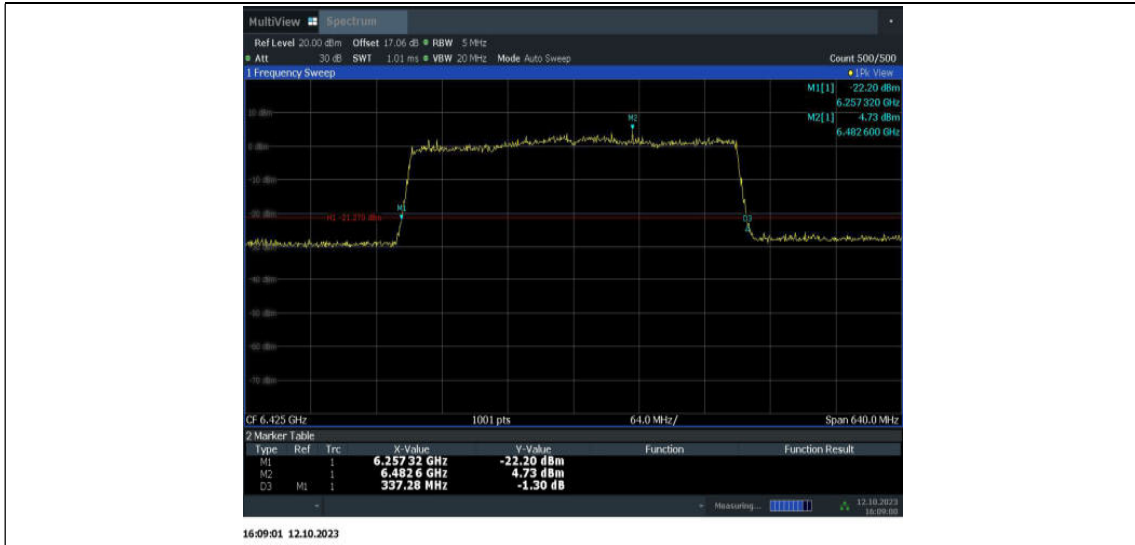


11BE320MIMO\_Ant15\_6265



11BE320MIMO\_Ant9\_6425





11BE320MIMO\_Ant15\_6425



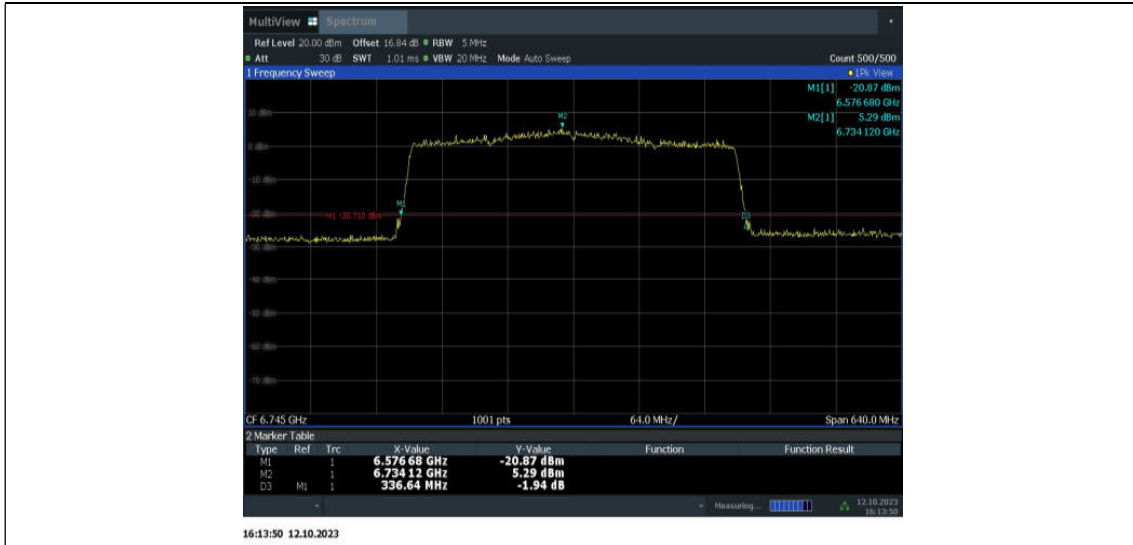
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11BE320MIMO\_Ant15\_6585



11BE320MIMO\_Ant9\_6745



11BE320MIMO\_Ant15\_6745



11BE320MIMO\_Ant9\_6905



11BE320MIMO\_Ant15\_6905



### A.5. 99% Occupied bandwidth

**Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.**

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than  $[10 \log (OBW/RBW)]$  below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

**Measurement Limit:**

According to FCC guidance, the 26 dB bandwidth has been applied for all channels below 320MHz. For 320MHz, the 99% bandwidth has been used.

47CFR 15.407(a)(10) The maximum transmitter channel bandwidth for U–NII devices in the 5.925–7.125 GHz band is 320 megahertz.

| Test Mode | Antenna | Channel | OCB [MHz] | FL[MHz]   | FH[MHz]   | Verdict |
|-----------|---------|---------|-----------|-----------|-----------|---------|
| 11A-MIMO  | Ant9    | 5955    | 17.112    | 5946.3748 | 5963.4873 | PASS    |
|           | Ant15   | 5955    | 16.897    | 5946.5108 | 5963.4080 | PASS    |
|           | Ant9    | 6175    | 17.127    | 6166.3389 | 6183.4662 | PASS    |
|           | Ant15   | 6175    | 16.917    | 6166.4913 | 6183.4088 | PASS    |
|           | Ant9    | 6415    | 17.114    | 6406.3359 | 6423.4502 | PASS    |
|           | Ant15   | 6415    | 16.928    | 6406.4776 | 6423.4055 | PASS    |
|           | Ant9    | 6435    | 17.143    | 6426.3361 | 6443.4794 | PASS    |
|           | Ant15   | 6435    | 16.958    | 6426.4482 | 6443.4064 | PASS    |
|           | Ant9    | 6475    | 17.161    | 6466.3191 | 6483.4799 | PASS    |
|           | Ant15   | 6475    | 16.947    | 6466.4528 | 6483.4000 | PASS    |
| Ant9      | 6515    | 17.157  | 6506.3150 | 6523.4719 | PASS      |         |

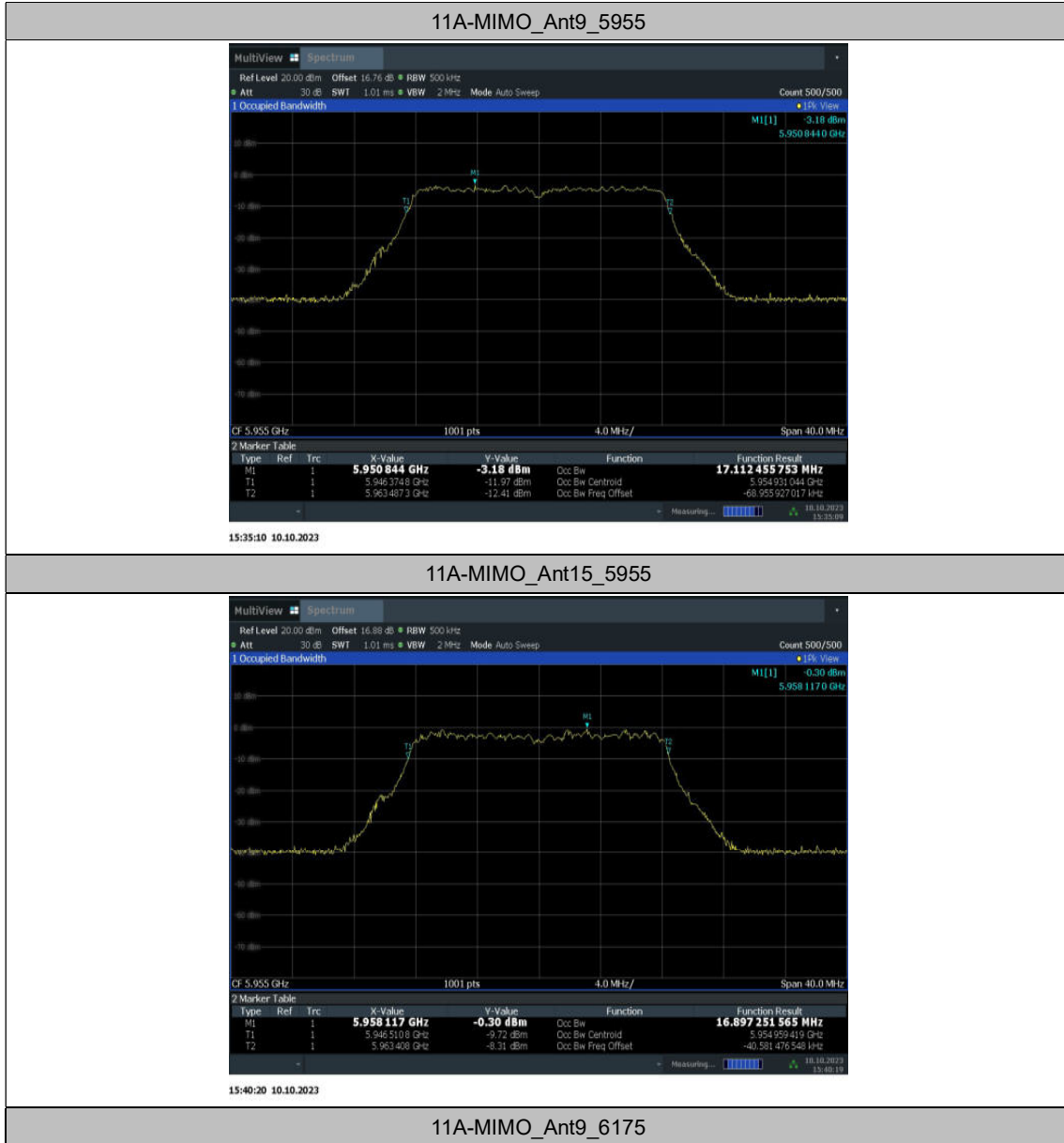
|                        |       |      |         |           |           |      |
|------------------------|-------|------|---------|-----------|-----------|------|
|                        | Ant15 | 6515 | 16.945  | 6506.4575 | 6523.4028 | PASS |
|                        | Ant9  | 6535 | 17.146  | 6526.3298 | 6543.4754 | PASS |
|                        | Ant15 | 6535 | 16.923  | 6526.4645 | 6543.3875 | PASS |
|                        | Ant9  | 6695 | 17.123  | 6686.3219 | 6703.4444 | PASS |
|                        | Ant15 | 6695 | 16.894  | 6686.4863 | 6703.3800 | PASS |
|                        | Ant9  | 6855 | 17.146  | 6846.2937 | 6863.4397 | PASS |
|                        | Ant15 | 6855 | 16.916  | 6846.4757 | 6863.3920 | PASS |
|                        | Ant9  | 6875 | 17.136  | 6866.3124 | 6883.4480 | PASS |
|                        | Ant15 | 6875 | 16.882  | 6866.5042 | 6883.3865 | PASS |
|                        | Ant9  | 6895 | 17.157  | 6886.2888 | 6903.4455 | PASS |
|                        | Ant15 | 6895 | 16.923  | 6886.4724 | 6903.3955 | PASS |
|                        | Ant9  | 6995 | 17.173  | 6986.2865 | 7003.4600 | PASS |
|                        | Ant15 | 6995 | 16.932  | 6986.4731 | 7003.4048 | PASS |
|                        | Ant9  | 7115 | 17.066  | 7106.3261 | 7123.3924 | PASS |
|                        | Ant15 | 7115 | 16.842  | 7106.5176 | 7123.3592 | PASS |
| 11AX160MIMO<br>Full RU | Ant9  | 6025 | 159.113 | 5945.8179 | 6104.9313 | PASS |
|                        | Ant15 | 6025 | 159.127 | 5945.5147 | 6104.6414 | PASS |
|                        | Ant9  | 6185 | 159.36  | 6105.0095 | 6264.3699 | PASS |
|                        | Ant15 | 6185 | 158.915 | 6105.5058 | 6264.4212 | PASS |
|                        | Ant9  | 6345 | 159.128 | 6265.8926 | 6425.0210 | PASS |
|                        | Ant15 | 6345 | 159.478 | 6265.3727 | 6424.8505 | PASS |
|                        | Ant9  | 6505 | 158.943 | 6425.7855 | 6584.7285 | PASS |
|                        | Ant15 | 6505 | 158.977 | 6425.3743 | 6584.3517 | PASS |
|                        | Ant9  | 6665 | 158.877 | 6585.7498 | 6744.6267 | PASS |
|                        | Ant15 | 6665 | 159.178 | 6585.2508 | 6744.4290 | PASS |
|                        | Ant9  | 6825 | 159.957 | 6744.5644 | 6904.5218 | PASS |
|                        | Ant15 | 6825 | 159.316 | 6744.9658 | 6904.2815 | PASS |
|                        | Ant9  | 6985 | 159.349 | 6905.1917 | 7064.5405 | PASS |
|                        | Ant15 | 6985 | 159.33  | 6905.3246 | 7064.6549 | PASS |
| 11BE20MIMO<br>Full RU  | Ant9  | 5955 | 19.208  | 5945.3668 | 5964.5746 | PASS |
|                        | Ant15 | 5955 | 19.215  | 5945.3730 | 5964.5884 | PASS |
|                        | Ant9  | 6175 | 19.262  | 6165.3356 | 6184.5978 | PASS |
|                        | Ant15 | 6175 | 19.242  | 6165.3452 | 6184.5872 | PASS |
|                        | Ant9  | 6415 | 19.196  | 6405.3596 | 6424.5556 | PASS |
|                        | Ant15 | 6415 | 19.232  | 6405.3617 | 6424.5934 | PASS |
|                        | Ant9  | 6435 | 19.244  | 6425.3713 | 6444.6157 | PASS |
|                        | Ant15 | 6435 | 19.265  | 6425.3303 | 6444.5951 | PASS |
|                        | Ant9  | 6475 | 19.222  | 6465.3712 | 6484.5937 | PASS |
|                        | Ant15 | 6475 | 19.237  | 6465.3359 | 6484.5731 | PASS |
|                        | Ant9  | 6515 | 19.214  | 6505.3550 | 6524.5693 | PASS |
|                        | Ant15 | 6515 | 19.222  | 6505.3444 | 6524.5659 | PASS |
|                        | Ant9  | 6535 | 19.2    | 6525.3702 | 6544.5699 | PASS |

|                       |       |        |           |           |           |      |
|-----------------------|-------|--------|-----------|-----------|-----------|------|
|                       | Ant15 | 6535   | 19.269    | 6525.3021 | 6544.5715 | PASS |
|                       | Ant9  | 6695   | 19.213    | 6685.3544 | 6704.5672 | PASS |
|                       | Ant15 | 6695   | 19.205    | 6685.3569 | 6704.5618 | PASS |
|                       | Ant9  | 6855   | 19.235    | 6845.3372 | 6864.5720 | PASS |
|                       | Ant15 | 6855   | 19.204    | 6845.3650 | 6864.5694 | PASS |
|                       | Ant9  | 6875   | 19.201    | 6865.3580 | 6884.5595 | PASS |
|                       | Ant15 | 6875   | 19.153    | 6865.3938 | 6884.5463 | PASS |
|                       | Ant9  | 6895   | 19.223    | 6885.3398 | 6904.5626 | PASS |
|                       | Ant15 | 6895   | 19.212    | 6885.3621 | 6904.5741 | PASS |
|                       | Ant9  | 6995   | 19.239    | 6985.3357 | 7004.5752 | PASS |
|                       | Ant15 | 6995   | 19.176    | 6985.3808 | 7004.5570 | PASS |
|                       | Ant9  | 7115   | 19.179    | 7105.3785 | 7124.5578 | PASS |
|                       | Ant15 | 7115   | 19.216    | 7105.3523 | 7124.5683 | PASS |
| 11BE40MIMO<br>Full RU | Ant9  | 5965   | 38.28     | 5945.8263 | 5984.1062 | PASS |
|                       | Ant15 | 5965   | 38.309    | 5945.8000 | 5984.1091 | PASS |
|                       | Ant9  | 6165   | 38.36     | 6145.7533 | 6184.1133 | PASS |
|                       | Ant15 | 6165   | 38.279    | 6145.7979 | 6184.0770 | PASS |
|                       | Ant9  | 6405   | 38.296    | 6385.8186 | 6424.1150 | PASS |
|                       | Ant15 | 6405   | 38.283    | 6385.7746 | 6424.0575 | PASS |
|                       | Ant9  | 6445   | 38.388    | 6425.7732 | 6464.1615 | PASS |
|                       | Ant15 | 6445   | 38.307    | 6425.8021 | 6464.1094 | PASS |
|                       | Ant9  | 6485   | 38.442    | 6465.7419 | 6504.1835 | PASS |
|                       | Ant15 | 6485   | 38.301    | 6465.7702 | 6504.0709 | PASS |
|                       | Ant9  | 6525   | 38.376    | 6505.7684 | 6544.1446 | PASS |
|                       | Ant15 | 6525   | 38.252    | 6505.7959 | 6544.0484 | PASS |
|                       | Ant9  | 6565   | 38.354    | 6545.7810 | 6584.1349 | PASS |
|                       | Ant15 | 6565   | 38.308    | 6545.7814 | 6584.0889 | PASS |
|                       | Ant9  | 6685   | 38.357    | 6665.7710 | 6704.1275 | PASS |
|                       | Ant15 | 6685   | 38.371    | 6665.7850 | 6704.1559 | PASS |
|                       | Ant9  | 6845   | 38.321    | 6825.7051 | 6864.0264 | PASS |
|                       | Ant15 | 6845   | 38.483    | 6825.6672 | 6864.1505 | PASS |
|                       | Ant9  | 6885   | 38.301    | 6865.7981 | 6904.0992 | PASS |
|                       | Ant15 | 6885   | 38.443    | 6865.6970 | 6904.1400 | PASS |
|                       | Ant9  | 6925   | 38.352    | 6905.7446 | 6944.0965 | PASS |
|                       | Ant15 | 6925   | 38.376    | 6905.7432 | 6944.1195 | PASS |
|                       | Ant9  | 6965   | 38.282    | 6945.8207 | 6984.1024 | PASS |
|                       | Ant15 | 6965   | 38.402    | 6945.7378 | 6984.1401 | PASS |
| Ant9                  | 7085  | 38.401 | 7065.7586 | 7104.1596 | PASS      |      |
| Ant15                 | 7085  | 38.442 | 7065.7218 | 7104.1640 | PASS      |      |
| 11BE80MIMO<br>Full RU | Ant9  | 5985   | 78.777    | 5945.6581 | 6024.4354 | PASS |
|                       | Ant15 | 5985   | 78.735    | 5945.6079 | 6024.3429 | PASS |
|                       | Ant9  | 6145   | 78.641    | 6105.6055 | 6184.2465 | PASS |

|                        |       |      |         |           |           |      |
|------------------------|-------|------|---------|-----------|-----------|------|
|                        | Ant15 | 6145 | 78.607  | 6105.6060 | 6184.2132 | PASS |
|                        | Ant9  | 6385 | 78.628  | 6345.7300 | 6424.3580 | PASS |
|                        | Ant15 | 6385 | 78.501  | 6345.6993 | 6424.2008 | PASS |
|                        | Ant9  | 6465 | 78.862  | 6425.5333 | 6504.3949 | PASS |
|                        | Ant15 | 6465 | 78.624  | 6425.5905 | 6504.2142 | PASS |
|                        | Ant9  | 6545 | 78.887  | 6505.5731 | 6584.4603 | PASS |
|                        | Ant15 | 6545 | 78.599  | 6505.5294 | 6584.1283 | PASS |
|                        | Ant9  | 6625 | 78.623  | 6585.7610 | 6664.3841 | PASS |
|                        | Ant15 | 6625 | 78.69   | 6585.4852 | 6664.1755 | PASS |
|                        | Ant9  | 6705 | 78.631  | 6665.5938 | 6744.2251 | PASS |
|                        | Ant15 | 6705 | 78.594  | 6665.5061 | 6744.1005 | PASS |
|                        | Ant9  | 6785 | 78.72   | 6745.3200 | 6824.0397 | PASS |
|                        | Ant15 | 6785 | 78.855  | 6745.3411 | 6824.1958 | PASS |
|                        | Ant9  | 6865 | 78.656  | 6825.5323 | 6904.1884 | PASS |
|                        | Ant15 | 6865 | 78.701  | 6825.4883 | 6904.1898 | PASS |
|                        | Ant9  | 6945 | 78.705  | 6905.5482 | 6984.2533 | PASS |
|                        | Ant15 | 6945 | 78.644  | 6905.5821 | 6984.2261 | PASS |
|                        | Ant9  | 7025 | 78.969  | 6985.3005 | 7064.2698 | PASS |
|                        | Ant15 | 7025 | 78.688  | 6985.6419 | 7064.3297 | PASS |
| 11BE320MIMO<br>Full RU | Ant9  | 6105 | 317.864 | 5946.2699 | 6264.1336 | PASS |
|                        | Ant15 | 6105 | 317.78  | 5946.2700 | 6264.0500 | PASS |
|                        | Ant9  | 6265 | 319.522 | 6105.5092 | 6425.0315 | PASS |
|                        | Ant15 | 6265 | 318.27  | 6105.8948 | 6424.1645 | PASS |
|                        | Ant9  | 6425 | 318.522 | 6267.0457 | 6585.5681 | PASS |
|                        | Ant15 | 6425 | 317.022 | 6266.4399 | 6583.4621 | PASS |
|                        | Ant9  | 6585 | 317.998 | 6426.9868 | 6744.9847 | PASS |
|                        | Ant15 | 6585 | 317.479 | 6425.6480 | 6743.1268 | PASS |
|                        | Ant9  | 6745 | 316.85  | 6586.1858 | 6903.0356 | PASS |
|                        | Ant15 | 6745 | 317.928 | 6584.8319 | 6902.7603 | PASS |
|                        | Ant9  | 6905 | 319.508 | 6744.4148 | 7063.9228 | PASS |
|                        | Ant15 | 6905 | 319.47  | 6744.7637 | 7064.2332 | PASS |

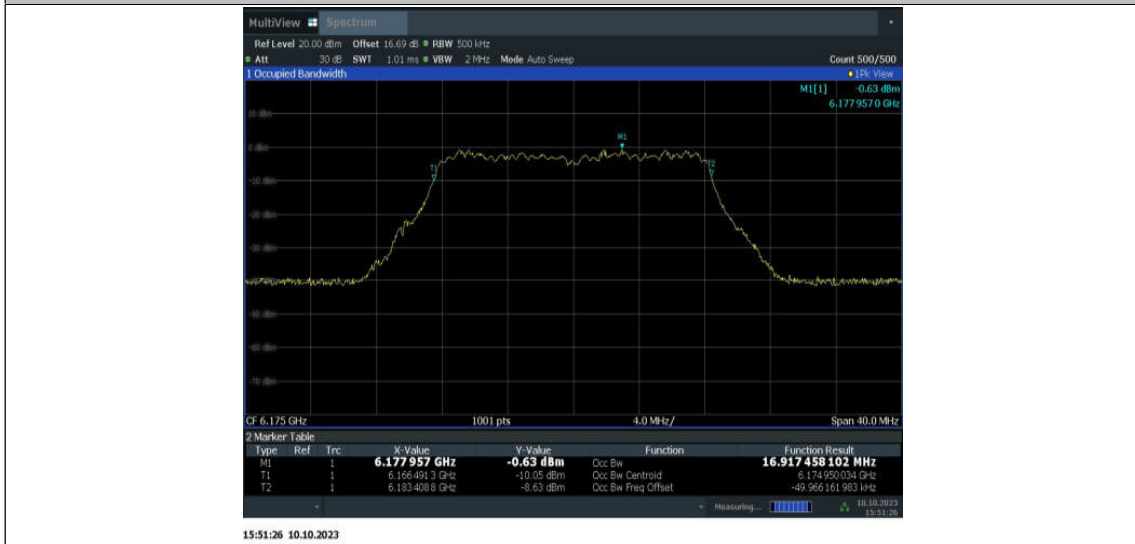


Test graphs as below:





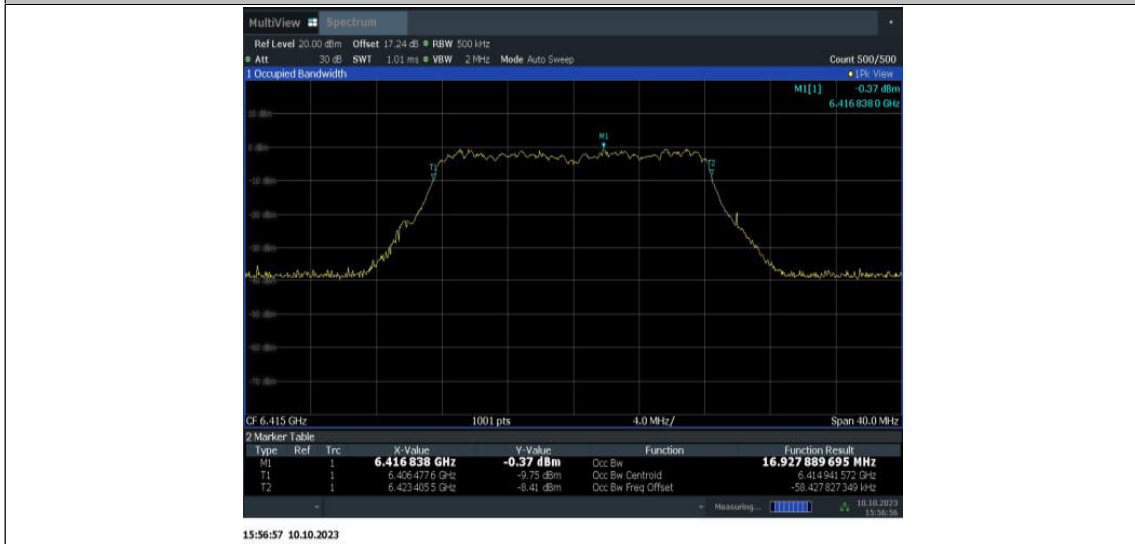
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11A-MIMO\_Ant9\_6415



11A-MIMO\_Ant15\_6415



11A-MIMO\_Ant9\_6435



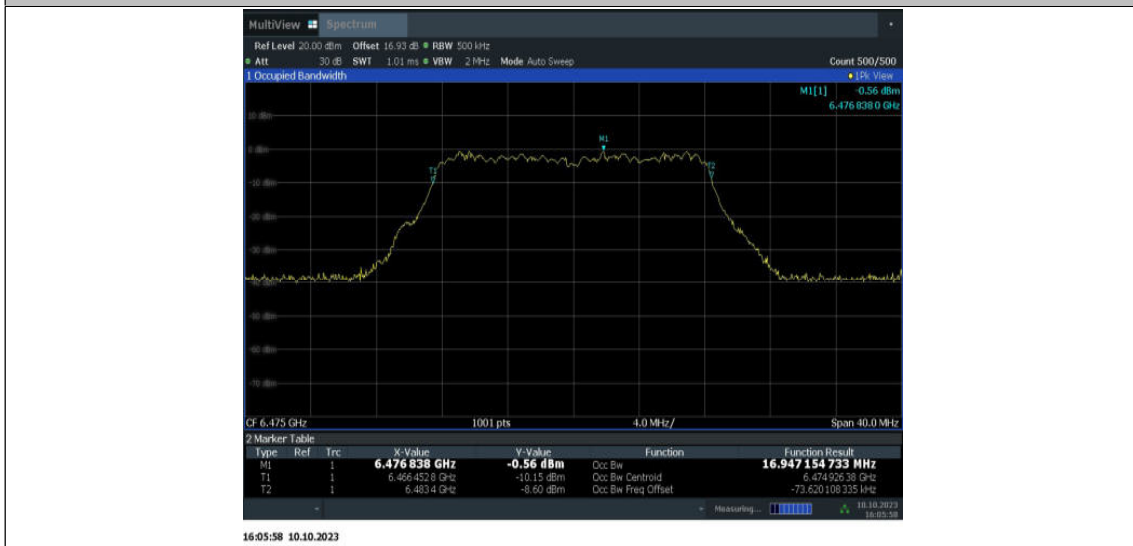
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11A-MIMO\_Ant9\_6475



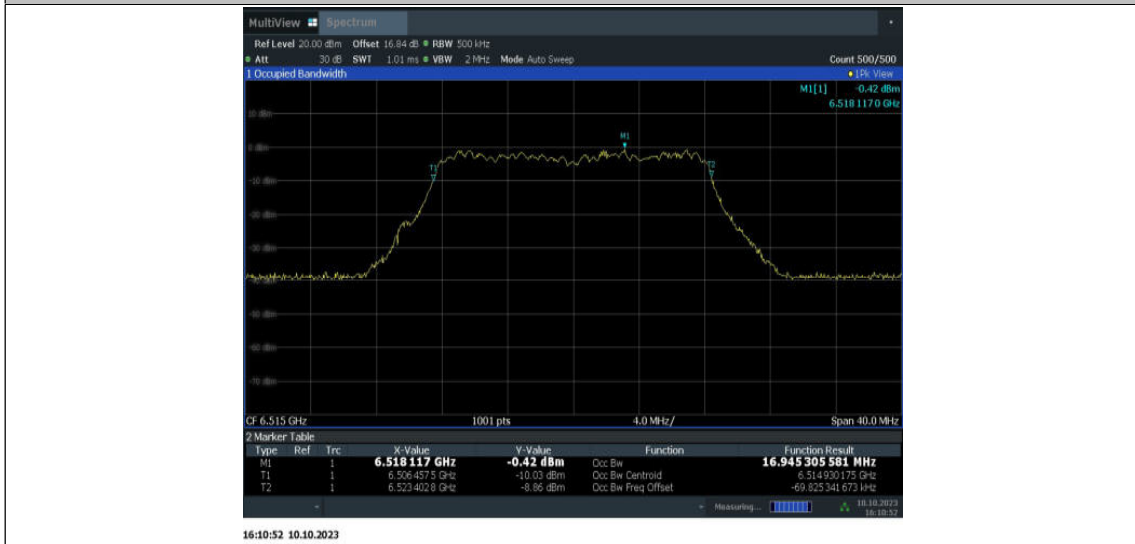
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11A-MIMO\_Ant9\_6515



11A-MIMO\_Ant15\_6515



11A-MIMO\_Ant9\_6535



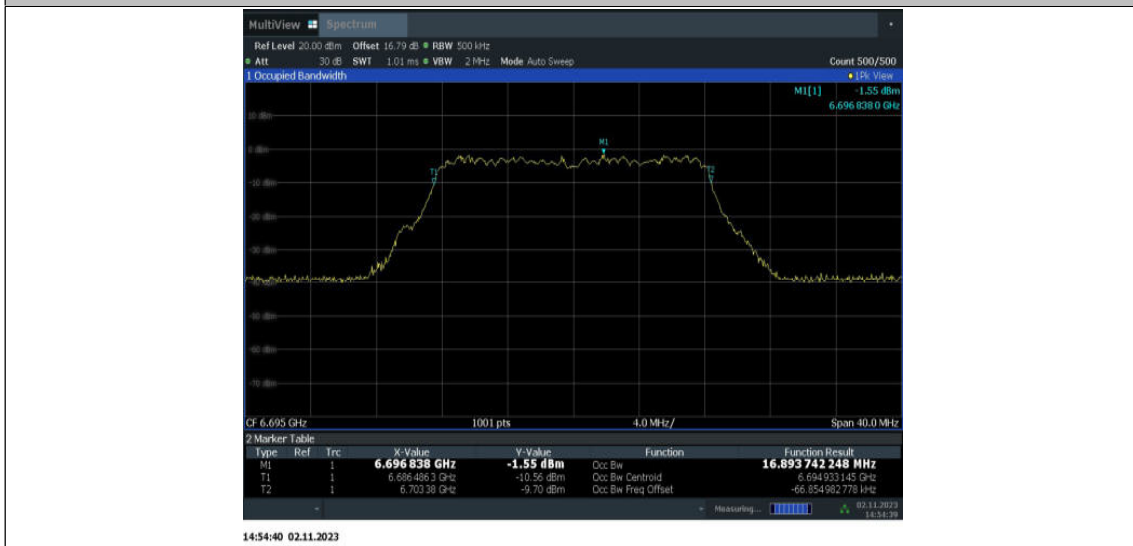
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11A-MIMO\_Ant9\_6695



11A-MIMO\_Ant15\_6695

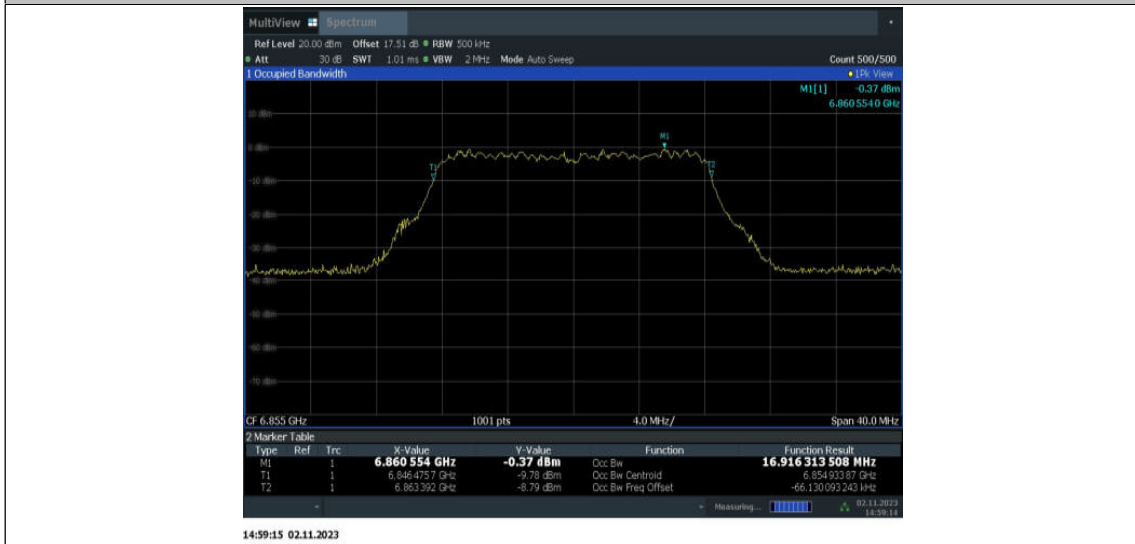


11A-MIMO\_Ant9\_6855





11A-MIMO\_Ant15\_6855



11A-MIMO\_Ant9\_6875



11A-MIMO\_Ant15\_6875



11A-MIMO\_Ant9\_6895



11A-MIMO\_Ant15\_6895



11A-MIMO\_Ant9\_6995



11A-MIMO\_Ant15\_6995



11A-MIMO\_Ant9\_7115



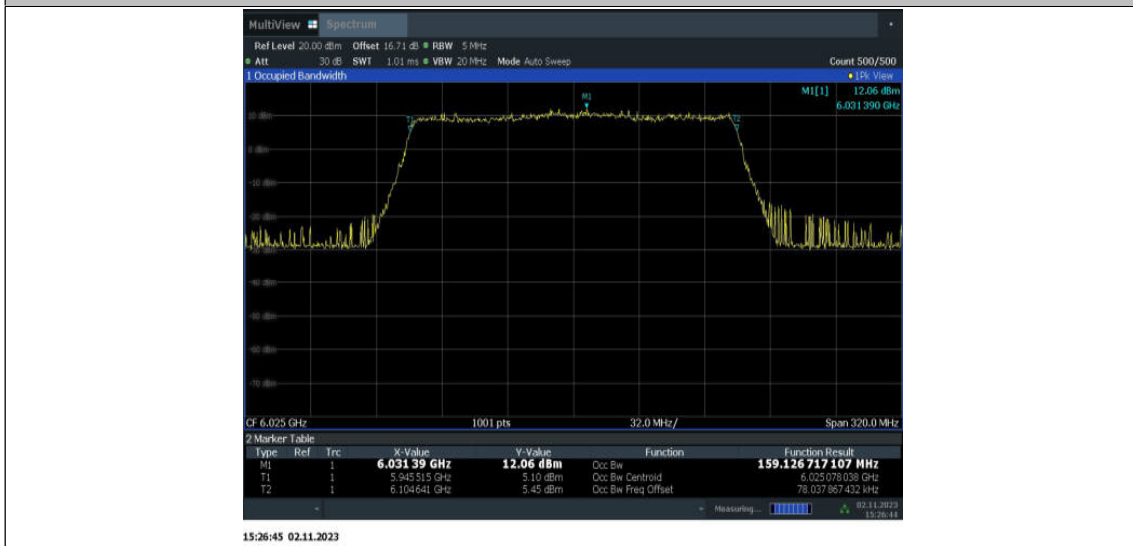
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11AX160MIMO\_Ant9\_6025



11AX160MIMO\_Ant15\_6025



11AX160MIMO\_Ant9\_6185



11AX160MIMO\_Ant15\_6185



11AX160MIMO\_Ant9\_6345

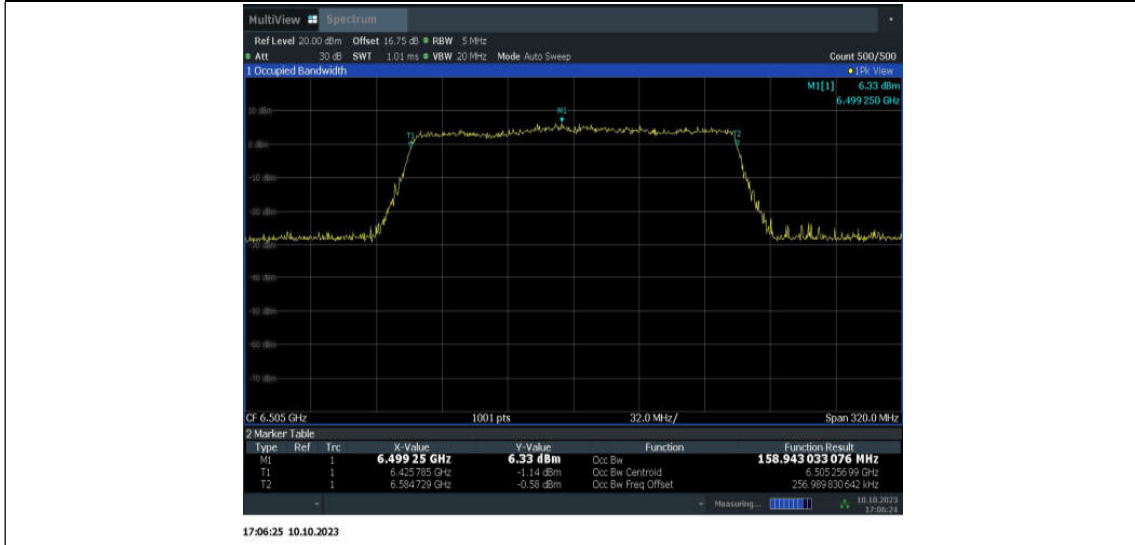


11AX160MIMO\_Ant15\_6345



11AX160MIMO\_Ant9\_6505





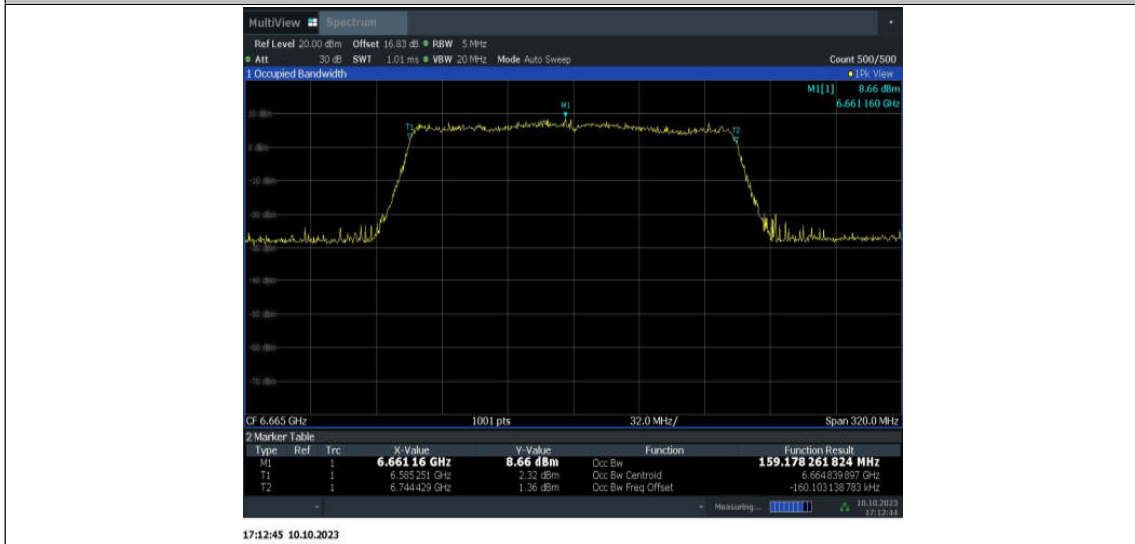
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11AX160MIMO\_Ant9\_6665



11AX160MIMO\_Ant15\_6665



11AX160MIMO\_Ant9\_6825



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11AX160MIMO\_Ant15\_6985



11BE20MIMO\_Ant9\_5955



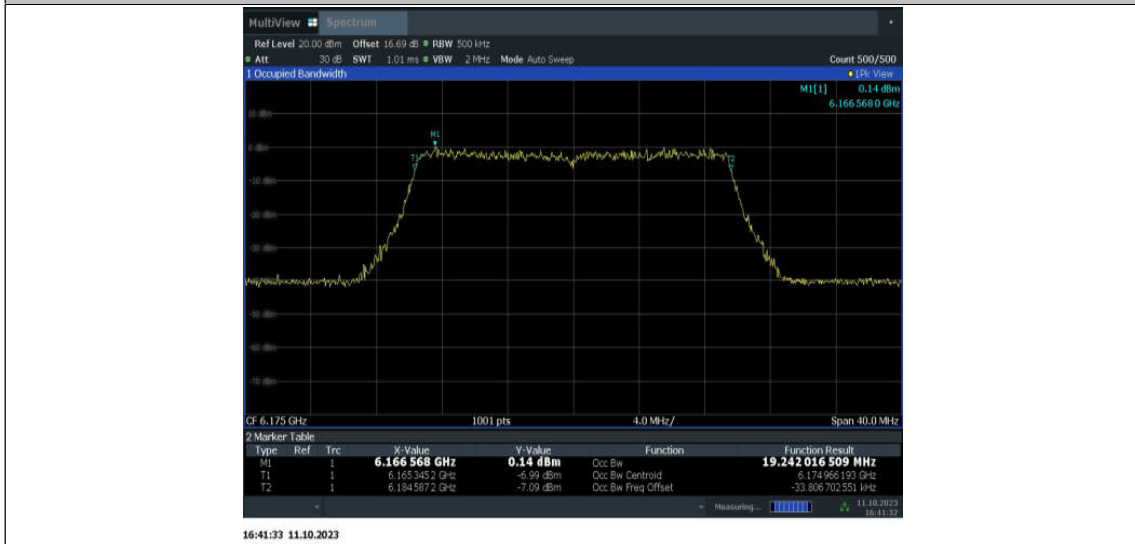
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11BE20MIMO\_Ant9\_6175



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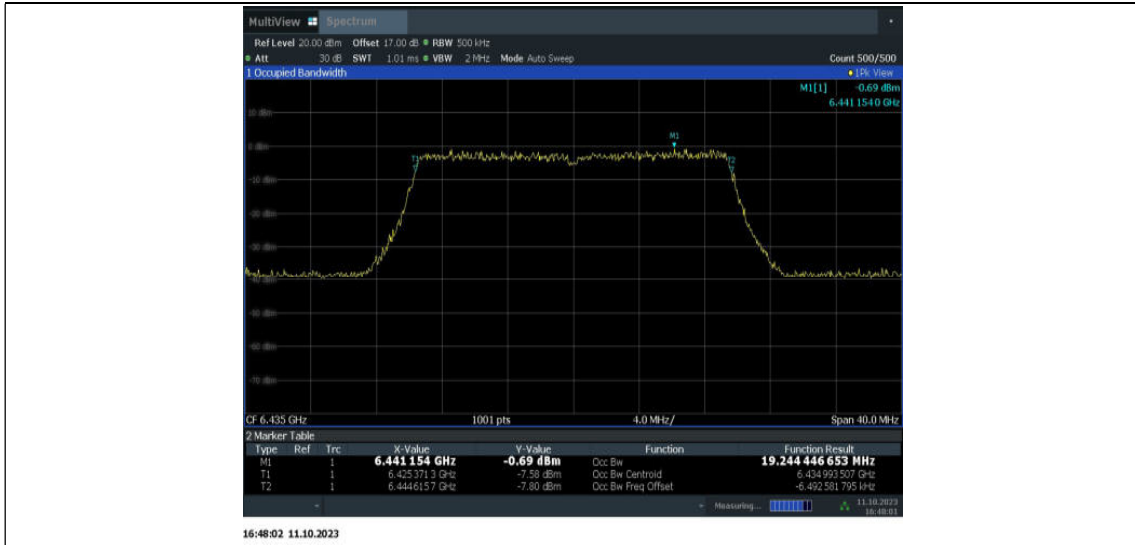
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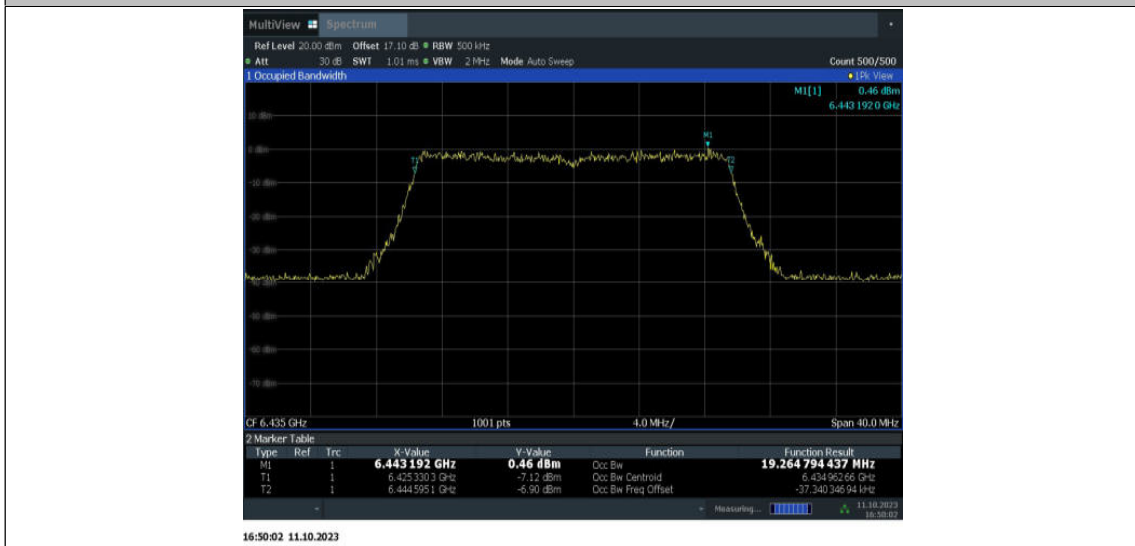
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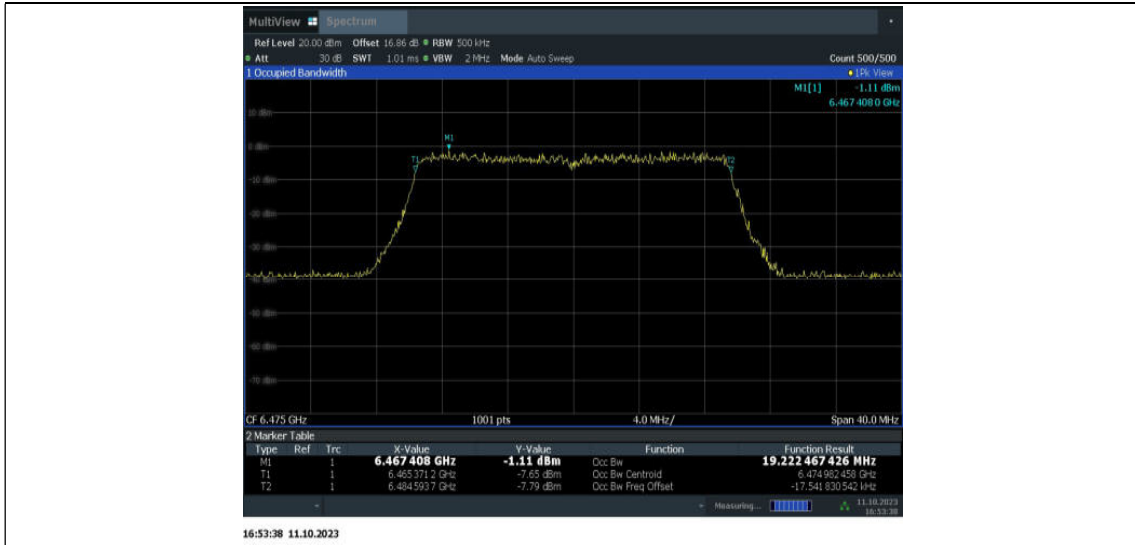


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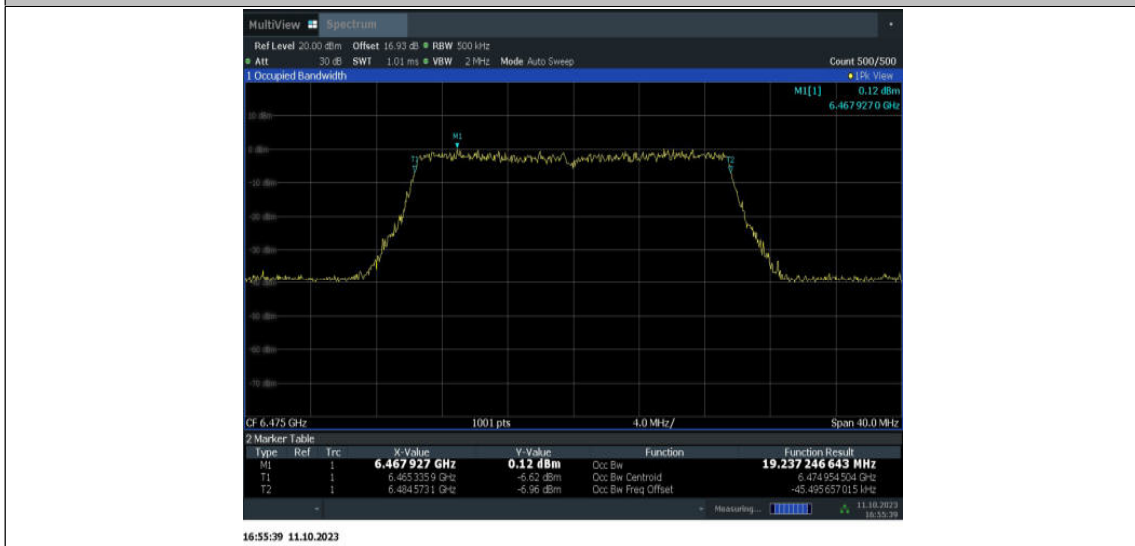


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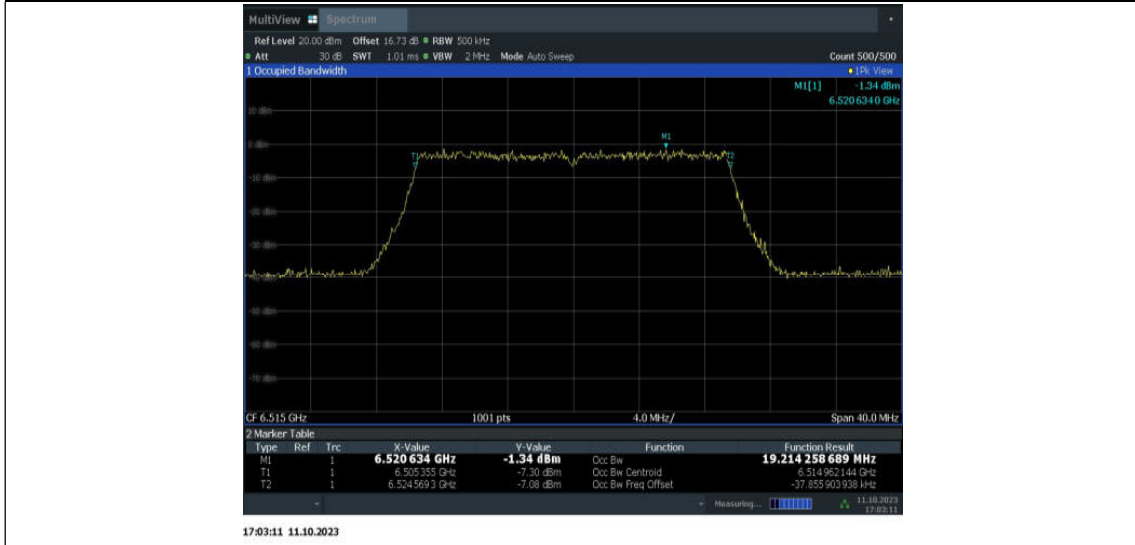




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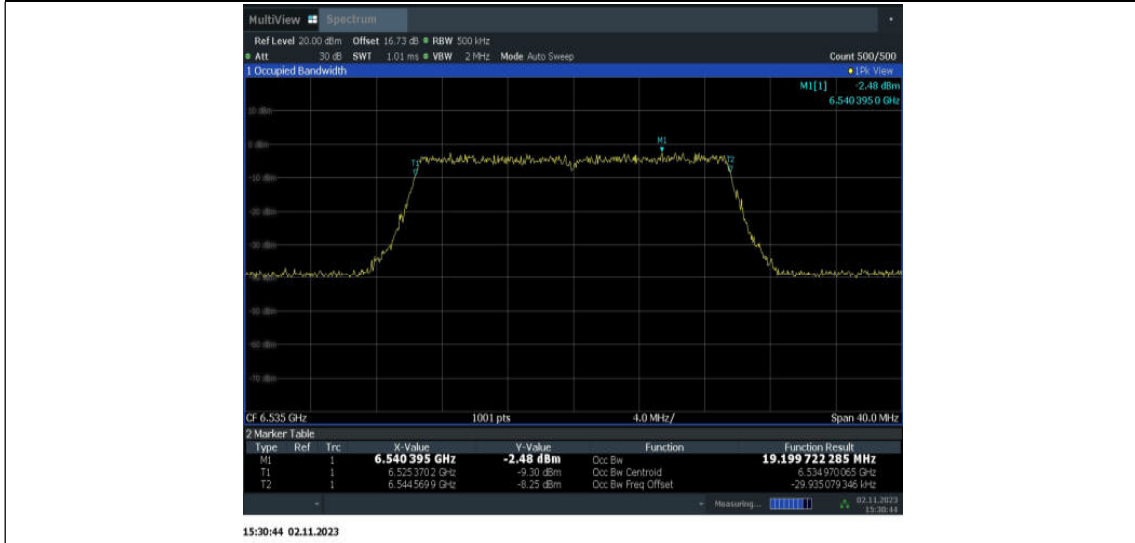
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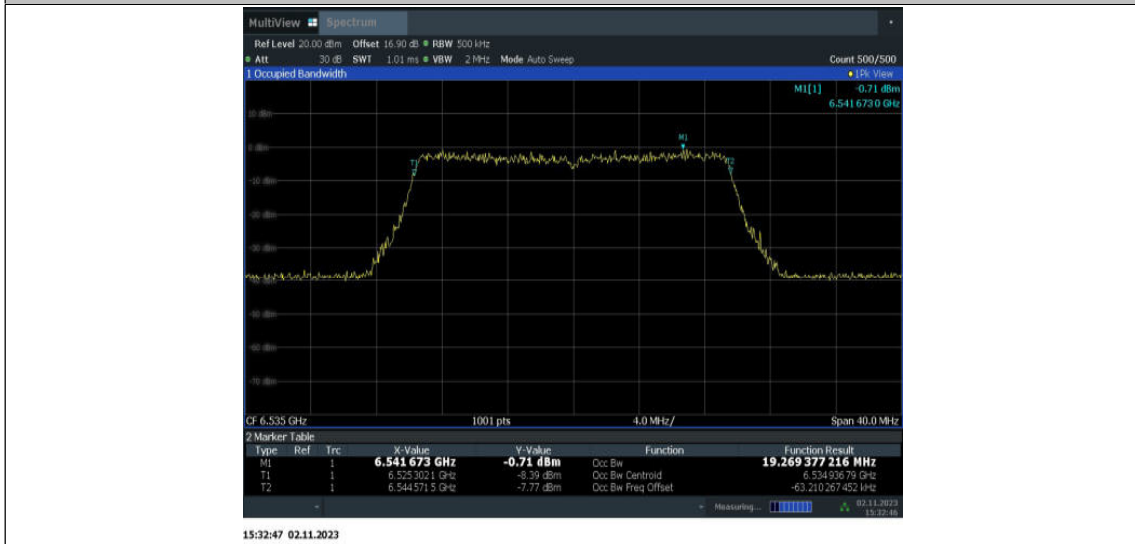
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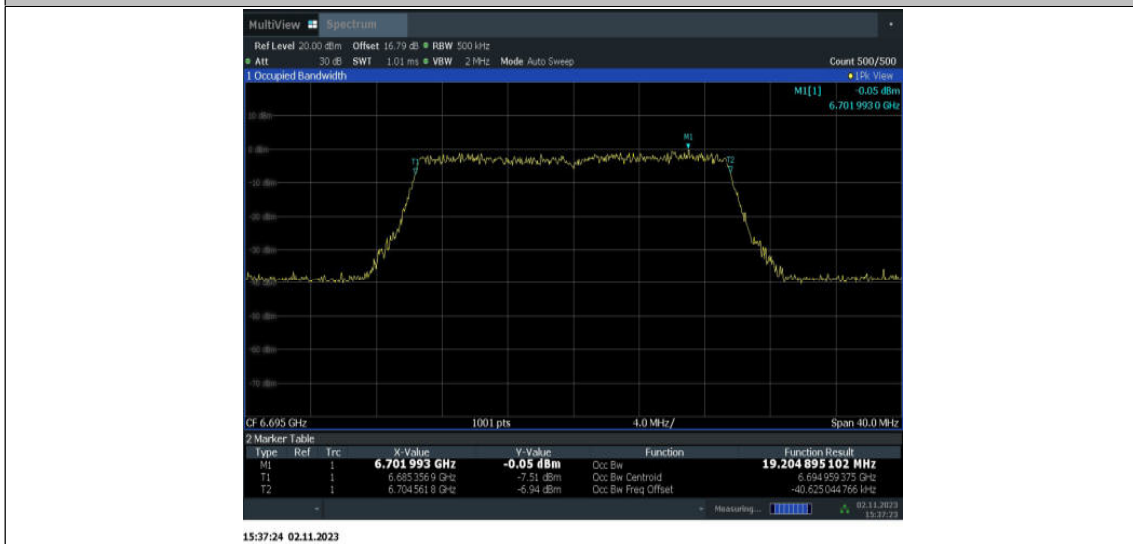
11BE20MIMO\_Ant15\_6535



11BE20MIMO\_Ant9\_6695



11BE20MIMO\_Ant15\_6695



11BE20MIMO\_Ant9\_6855