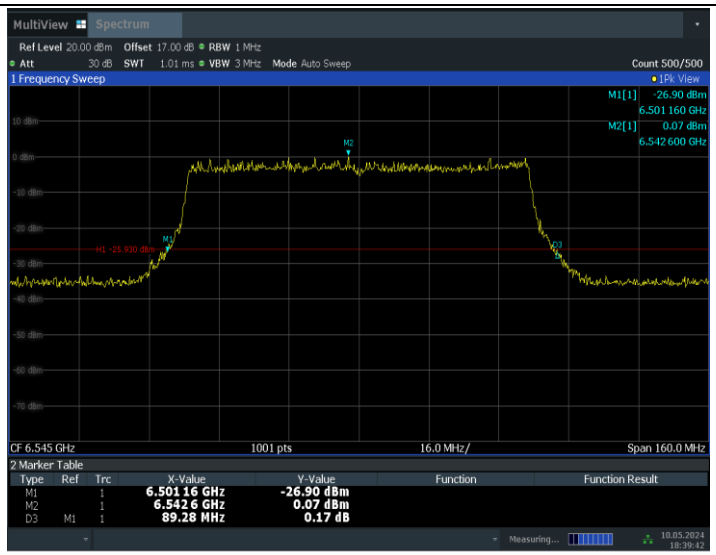

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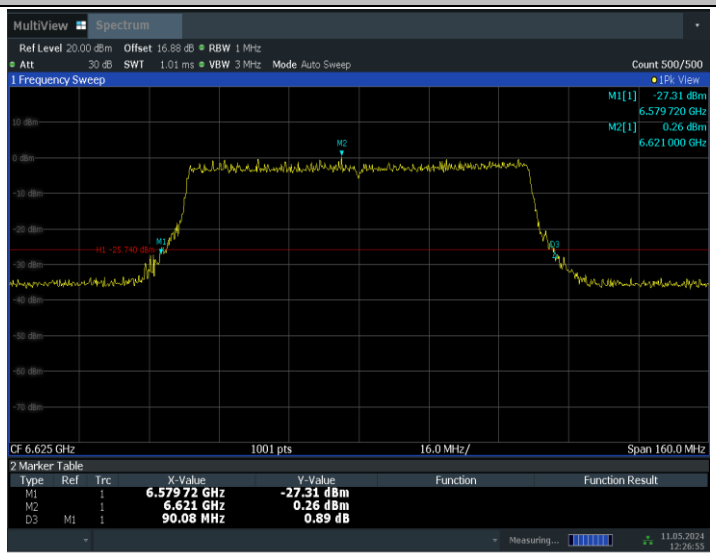

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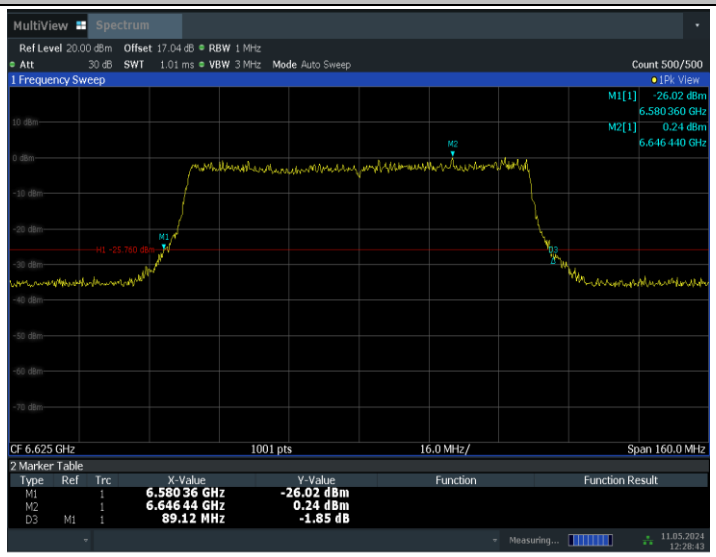

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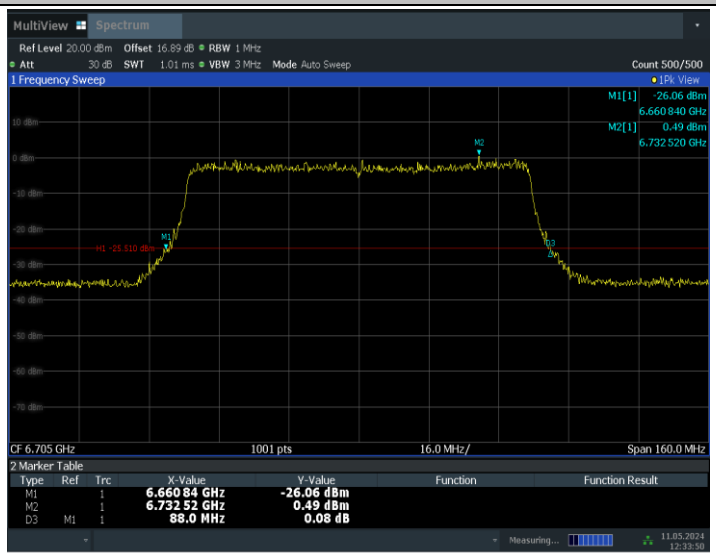

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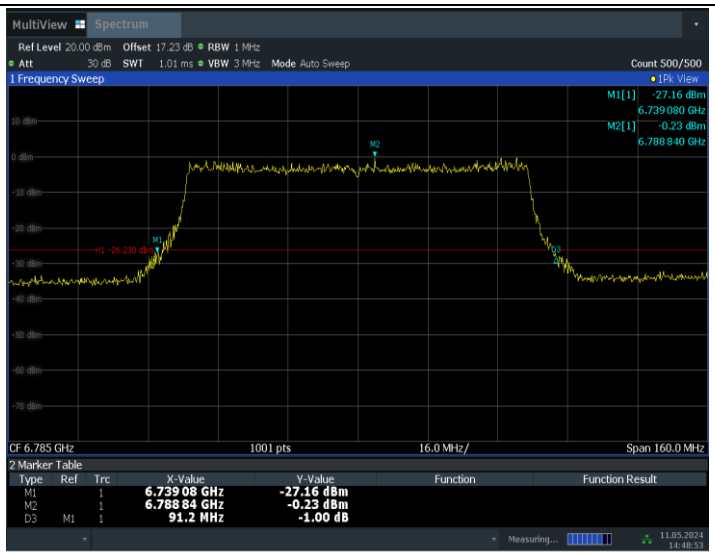

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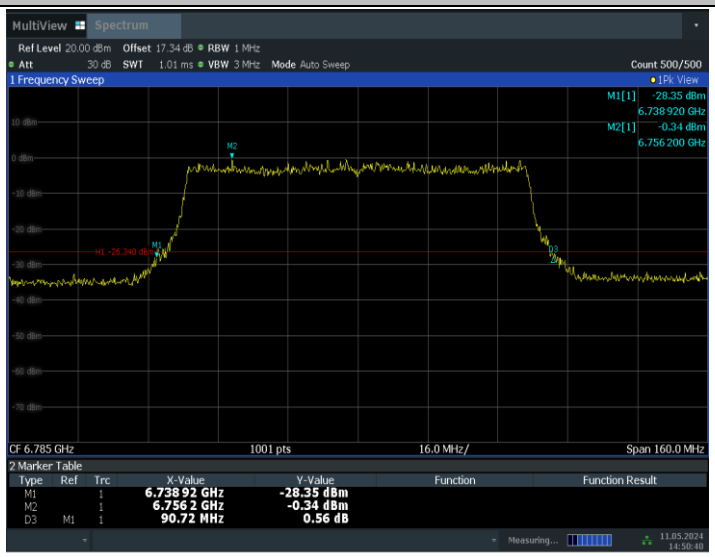

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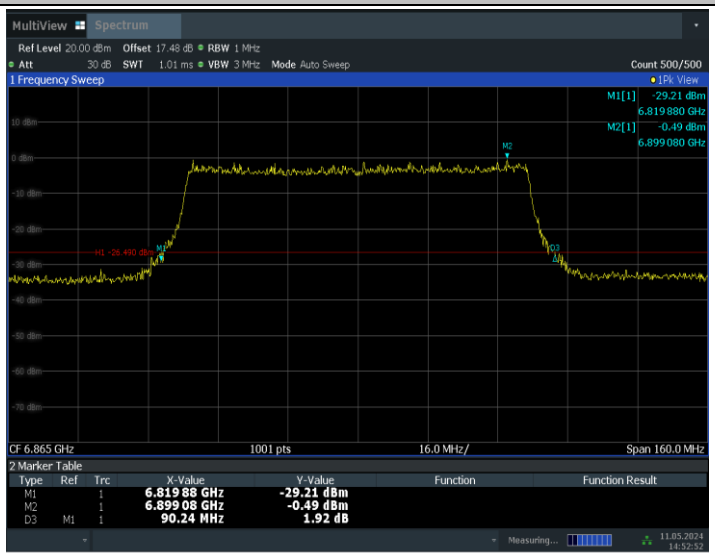

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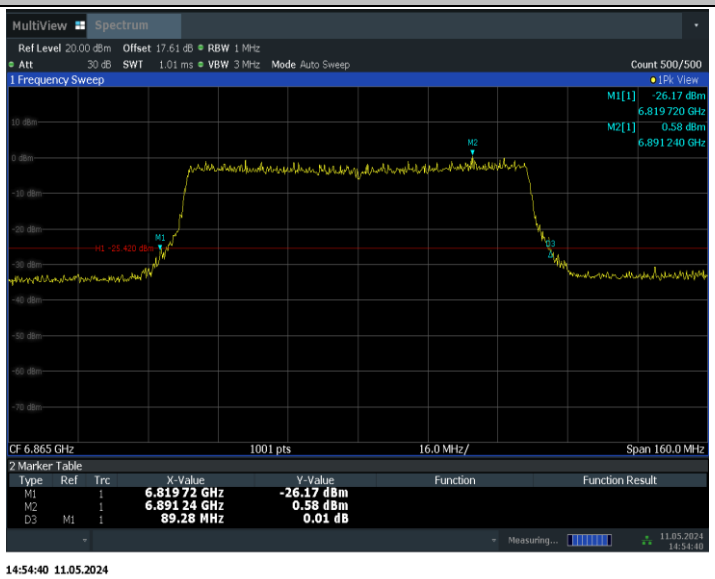

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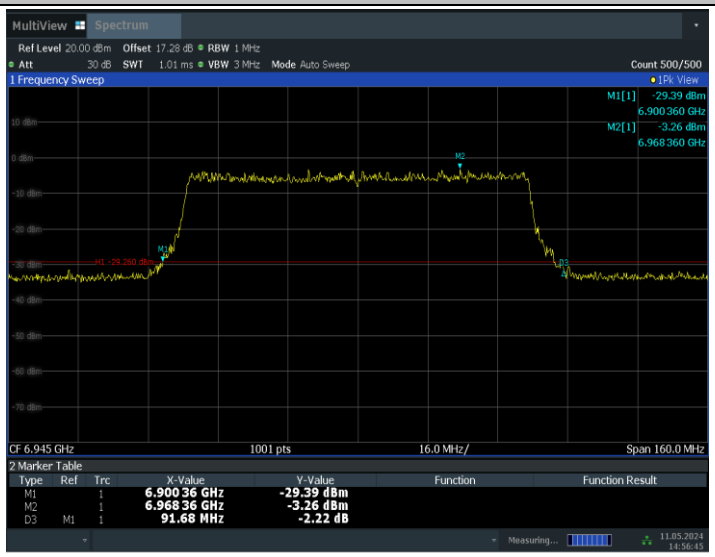

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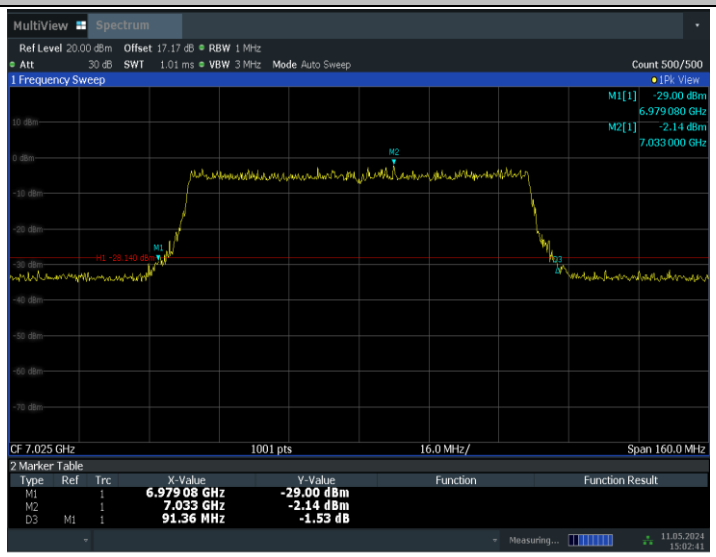

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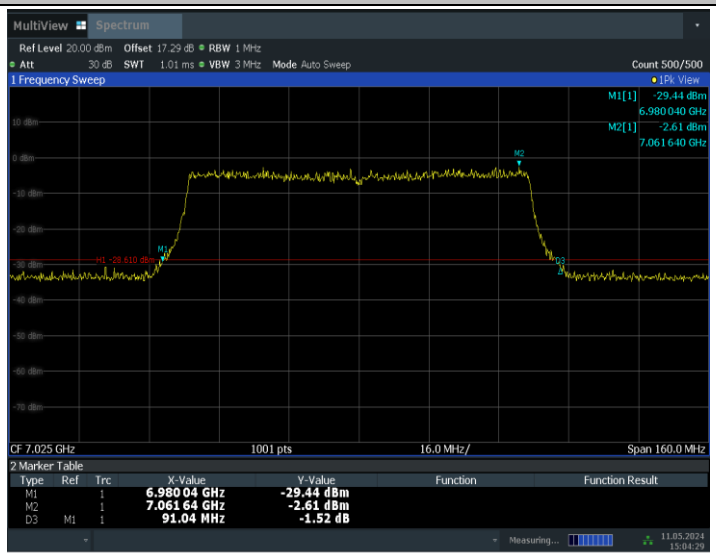

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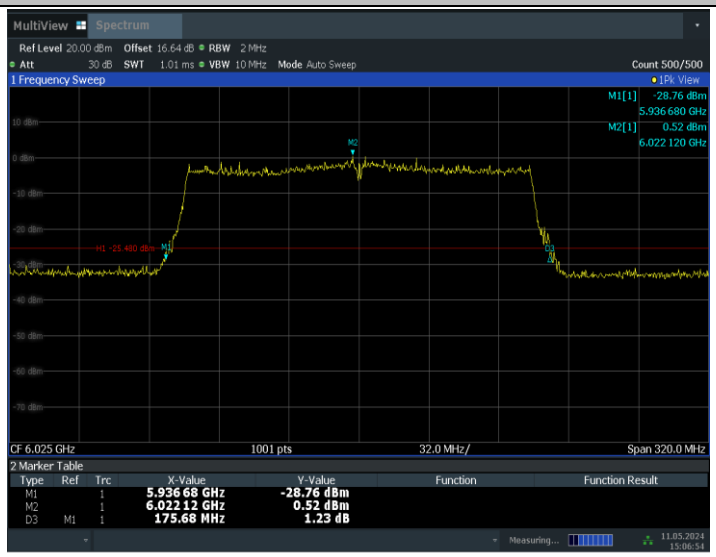

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11BE160MIMO_Ant0_6185

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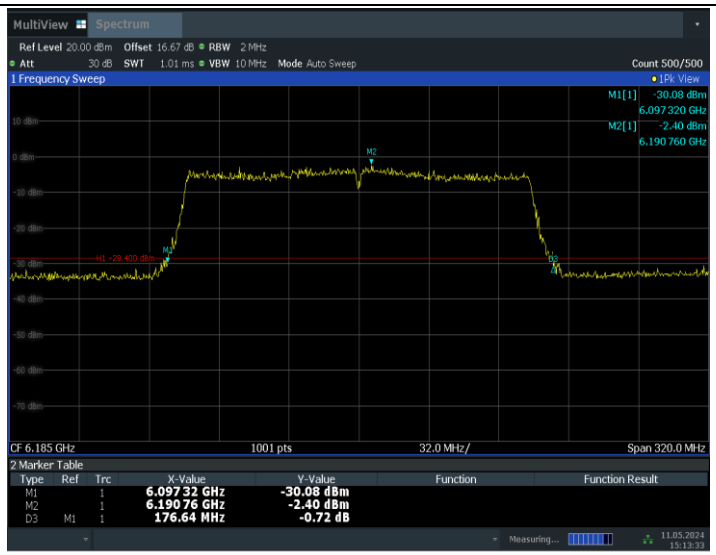

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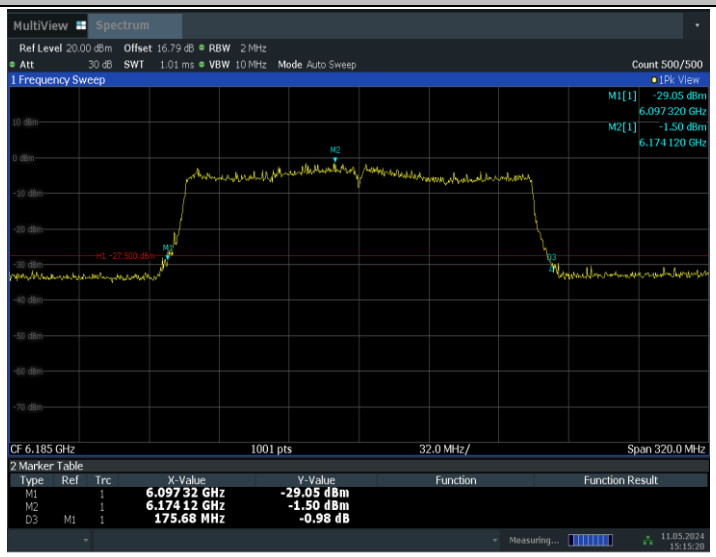

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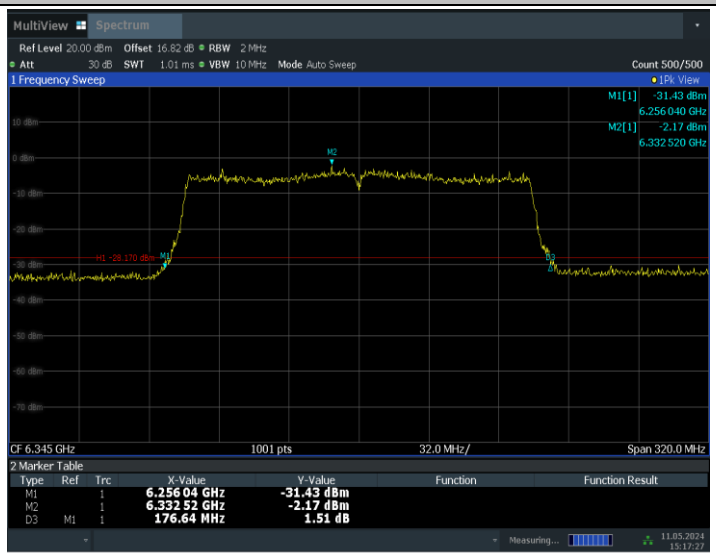

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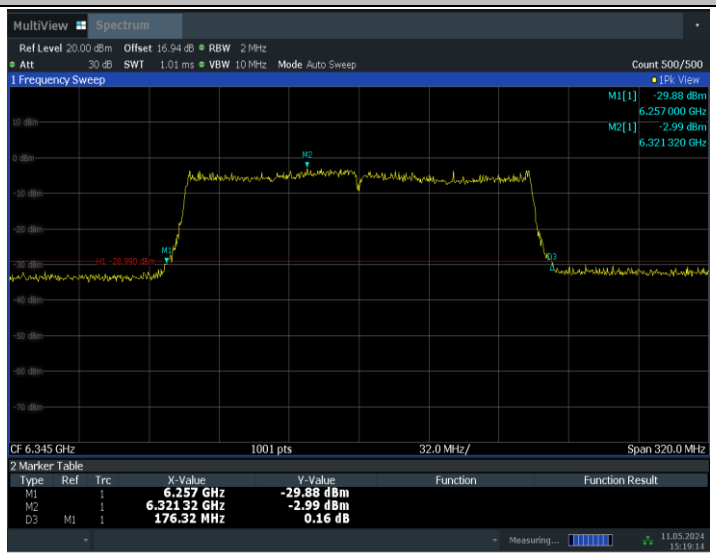

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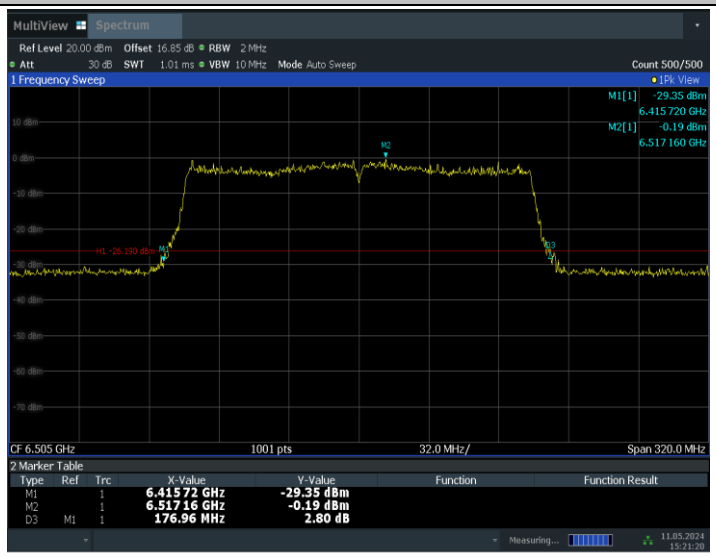

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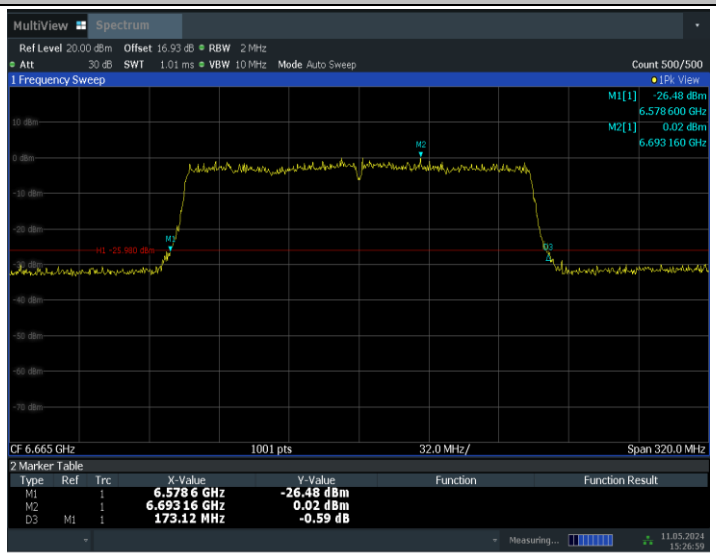

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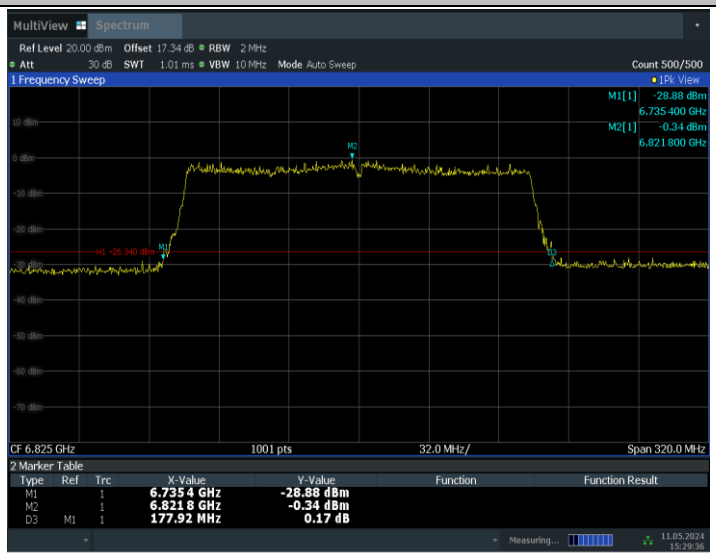 15:29:37 11.05.2024
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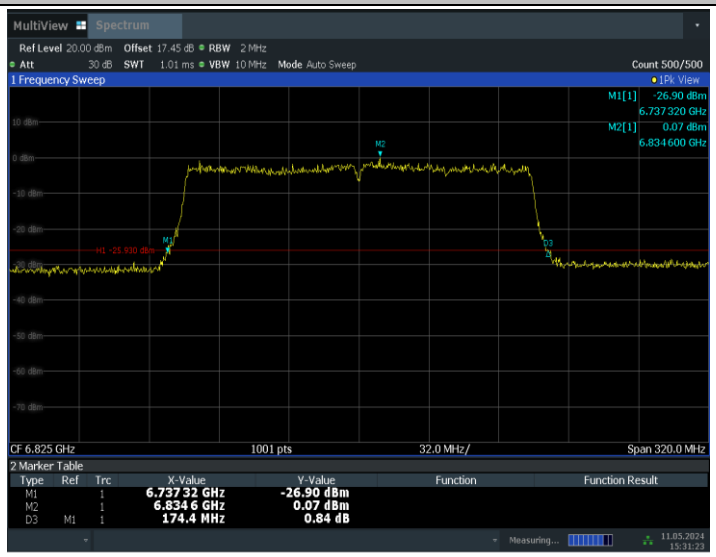 15:31:24 11.05.2024
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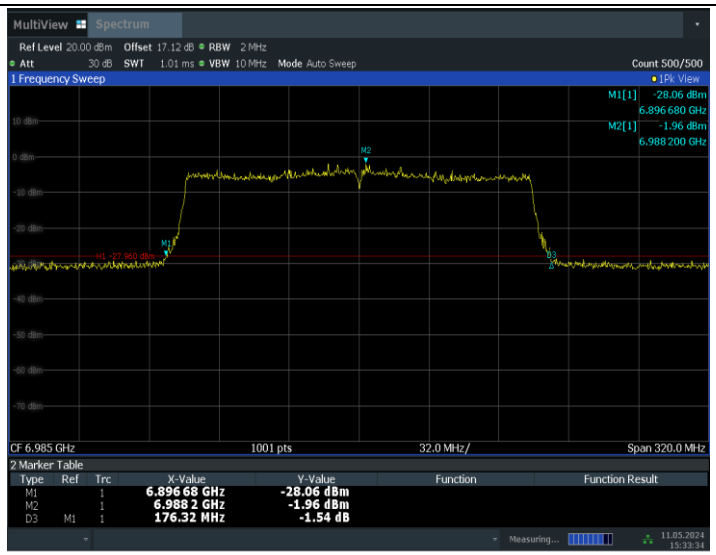

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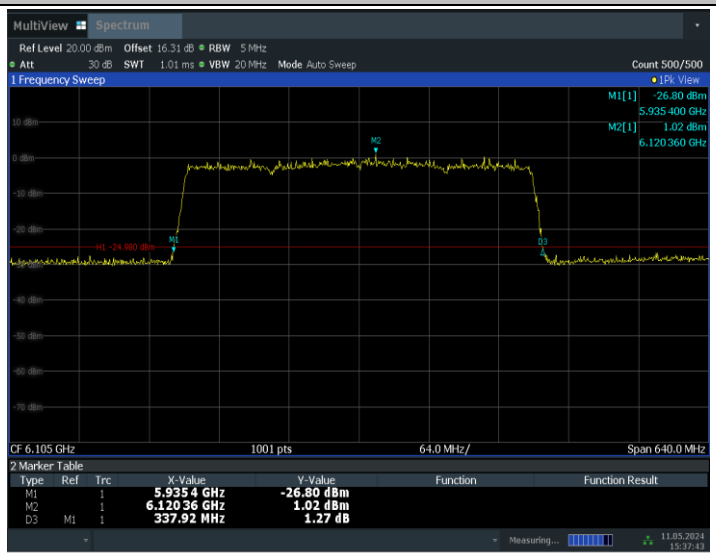

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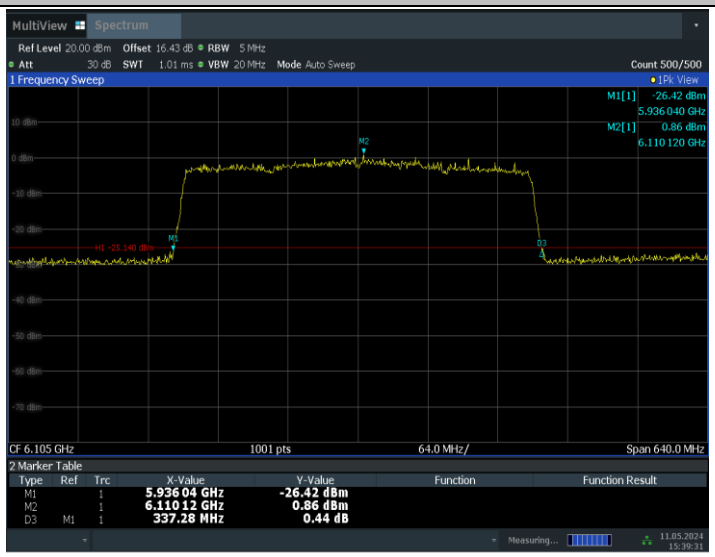

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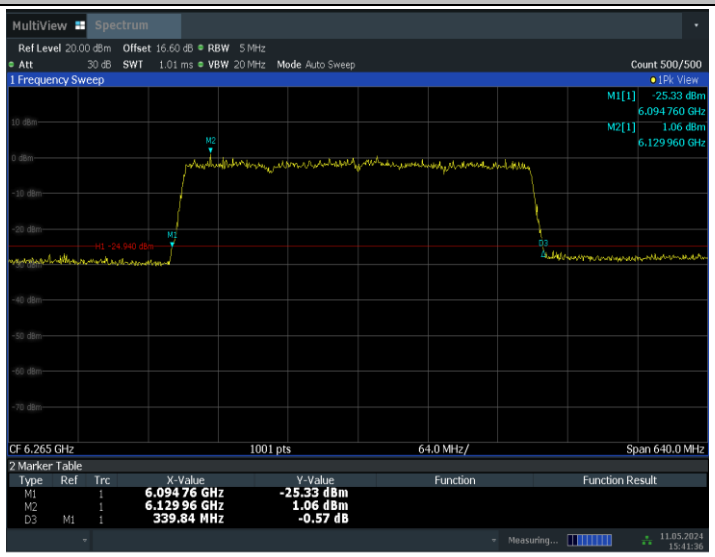

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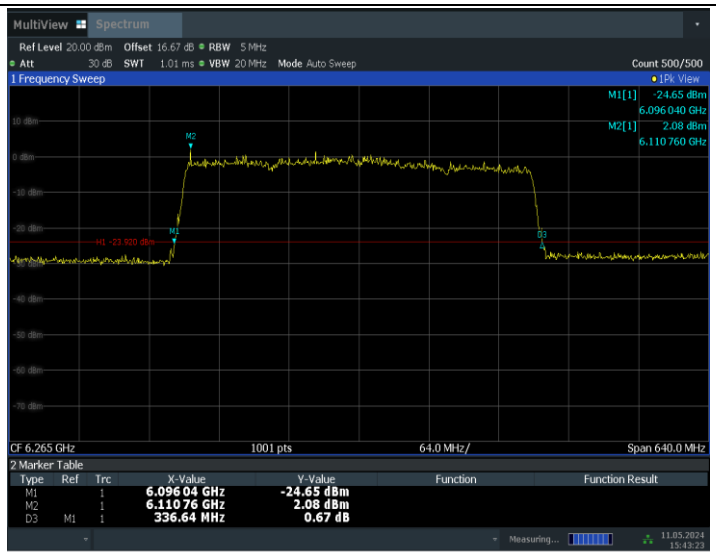

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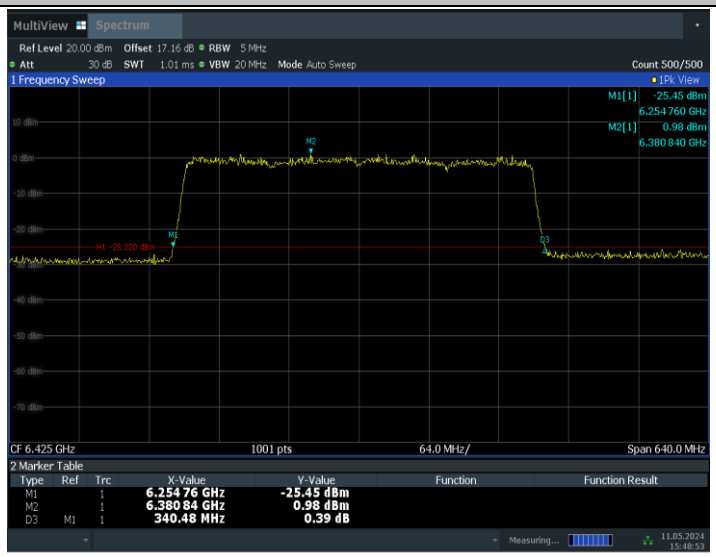

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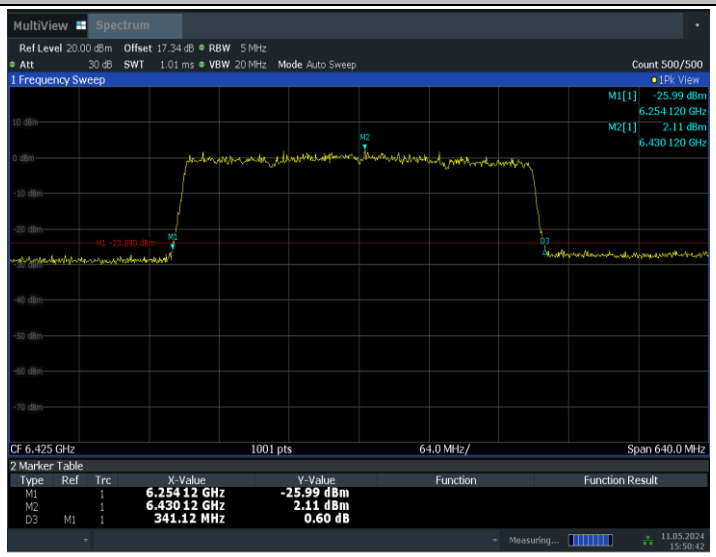

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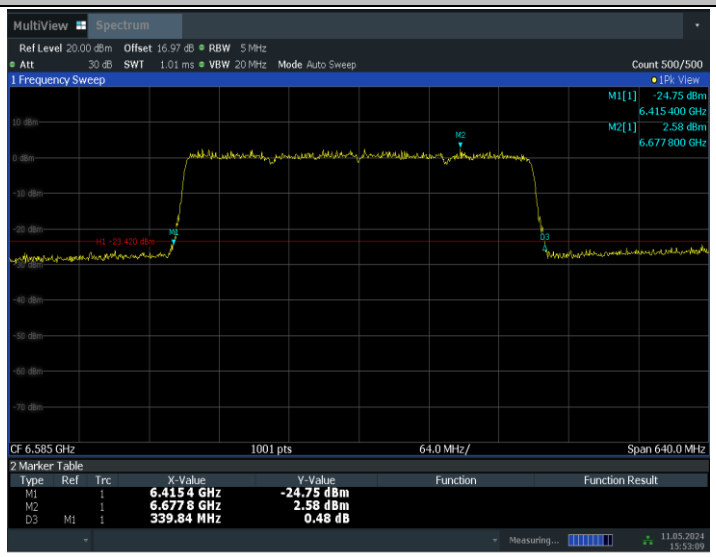

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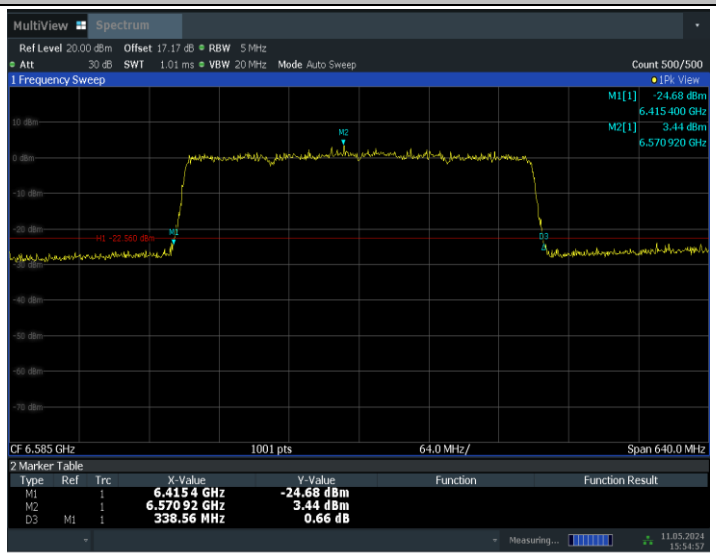

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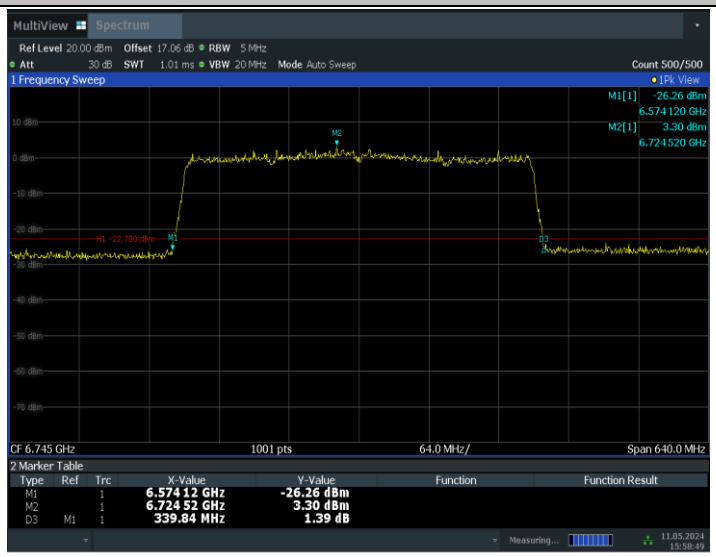

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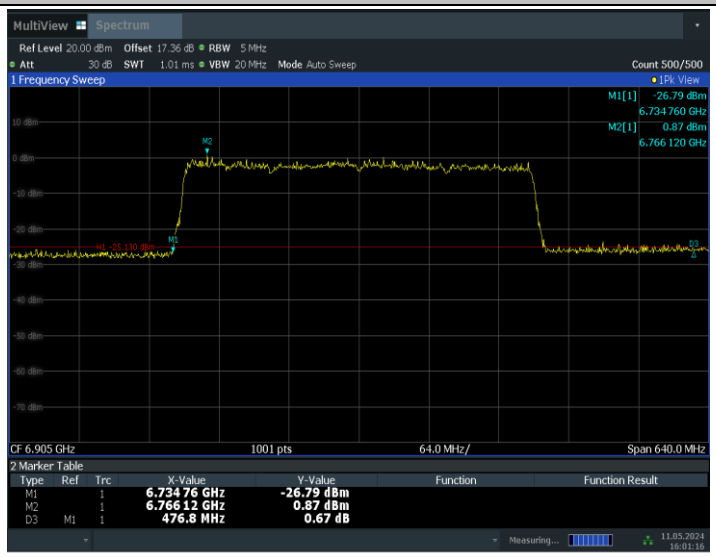

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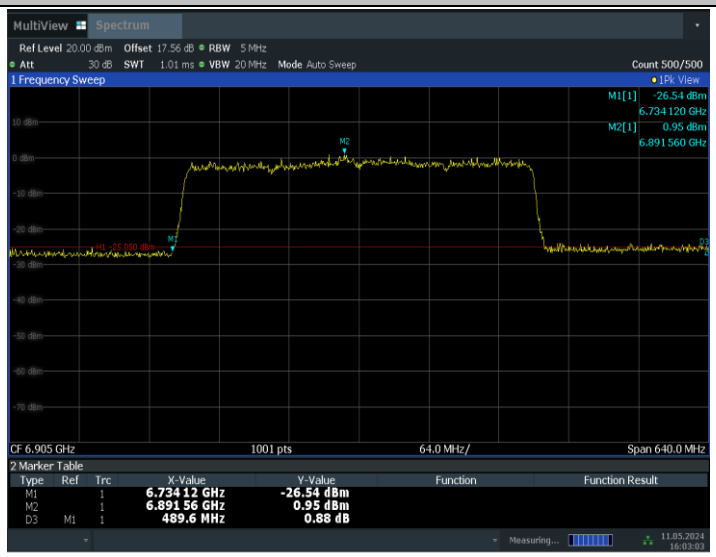

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A.5. 99% Occupied bandwidth

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% ofthe 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.

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TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]
11A-MIMO	Ant0	5955	17.116	5946.3653	5963.4814
	Ant1	5955	16.887	5946.5636	5963.4506
	Ant0	6175	17.114	6166.3492	6183.4637
	Ant1	6175	16.905	6166.4992	6183.4039
	Ant0	6415	17.117	6406.3473	6423.4644
	Ant1	6415	16.93	6406.5372	6423.4670
	Ant0	6435	17.111	6426.3598	6443.4713
	Ant1	6435	16.889	6426.5176	6443.4065
	Ant0	6475	17.117	6466.3701	6483.4874
	Ant1	6475	16.865	6466.5873	6483.4523
	Ant0	6515	17.111	6506.3784	6523.4897
	Ant1	6515	16.887	6506.5614	6523.4484
	Ant0	6535	17.108	6526.3833	6543.4910
	Ant1	6535	16.92	6526.5049	6543.4253
	Ant0	6695	17.083	6686.4001	6703.4830
	Ant1	6695	16.922	6686.5266	6703.4483
	Ant0	6855	17.138	6846.3727	6863.5106
	Ant1	6855	16.962	6846.4952	6863.4572
	Ant0	6875	17.168	6866.3505	6883.5183
	Ant1	6875	16.961	6866.5180	6883.4787
	Ant0	6895	17.201	6886.3352	6903.5361
	Ant1	6895	16.914	6886.5289	6903.4433
	Ant0	6995	17.162	6986.3521	7003.5142
	Ant1	6995	16.918	6986.5434	7003.4611
	Ant0	7115	18.295	7105.7454	7124.0403
	Ant1	7115	17.821	7106.0275	7123.8485
11BE20MIMO	Ant0	5955	19.196	5945.3944	5964.5908
	Ant1	5955	19.203	5945.4196	5964.6224
	Ant0	6175	19.167	6165.3856	6184.5524
	Ant1	6175	19.215	6165.3836	6184.5984
	Ant0	6415	19.232	6405.3909	6424.6227
	Ant1	6415	19.224	6405.3792	6424.6035
	Ant0	6435	19.191	6425.4032	6444.5939
	Ant1	6435	19.179	6425.4014	6444.5808
	Ant0	6475	19.218	6465.3928	6484.6104
	Ant1	6475	19.189	6465.4201	6484.6090
	Ant0	6515	19.178	6505.4073	6524.5855
	Ant1	6515	19.186	6505.4026	6524.5888
	Ant0	6535	19.182	6525.3953	6544.5769
	Ant1	6535	19.199	6525.3744	6544.5734
	Ant0	6695	19.19	6685.4190	6704.6090
	Ant1	6695	19.228	6685.3709	6704.5993

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	Ant0	6855	19.226	6845.3937	6864.6201
	Ant1	6855	19.229	6845.3824	6864.6116
	Ant0	6875	19.223	6865.3794	6884.6028
	Ant1	6875	19.243	6865.3815	6884.6241
	Ant0	6895	19.224	6885.3770	6904.6011
	Ant1	6895	19.197	6885.3815	6904.5780
	Ant0	6995	19.244	6985.3645	7004.6086
	Ant1	6995	19.218	6985.3997	7004.6182
	Ant0	7115	19.486	7105.2445	7124.7304
	Ant1	7115	19.487	7105.2149	7124.7021
11BE40MIMO	Ant0	5965	38.307	5945.8034	5984.1108
	Ant1	5965	38.248	5945.8952	5984.1435
	Ant0	6165	38.338	6145.7733	6184.1111
	Ant1	6165	38.324	6145.8154	6184.1397
	Ant0	6405	38.277	6385.8362	6424.1129
	Ant1	6405	38.493	6385.7177	6424.2104
	Ant0	6445	38.274	6425.8019	6464.0759
	Ant1	6445	38.313	6425.7793	6464.0920
	Ant0	6485	38.308	6465.8005	6504.1084
	Ant1	6485	38.27	6465.8336	6504.1034
	Ant0	6525	38.284	6505.8046	6544.0883
	Ant1	6525	38.305	6505.8225	6544.1277
	Ant0	6565	38.306	6545.8090	6584.1151
	Ant1	6565	38.462	6545.7214	6584.1838
	Ant0	6685	38.286	6665.8146	6704.1005
	Ant1	6685	38.259	6665.8492	6704.1080
	Ant0	6845	38.318	6825.7780	6864.0960
	Ant1	6845	38.234	6825.8334	6864.0678
	Ant0	6885	38.346	6865.8071	6904.1534
	Ant1	6885	38.311	6865.8327	6904.1438
	Ant0	6925	38.347	6905.7952	6944.1422
	Ant1	6925	38.436	6905.7615	6944.1975
	Ant0	6965	38.41	6945.7658	6984.1754
	Ant1	6965	38.474	6945.6902	6984.1647
	Ant0	7085	38.427	7065.7468	7104.1743
	Ant1	7085	38.406	7065.8165	7104.2221
11BE80MIMO	Ant0	5985	79.003	5945.4815	6024.4847
	Ant1	5985	78.857	5945.6616	6024.5182
	Ant0	6145	78.813	6105.4965	6184.3098
	Ant1	6145	78.743	6105.6454	6184.3884
	Ant0	6385	78.877	6345.5710	6424.4482
	Ant1	6385	79.091	6345.6115	6424.7025
	Ant0	6465	78.91	6425.5337	6504.4437

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	Ant1	6465	78.945	6425.4498	6504.3953
	Ant0	6545	78.904	6505.4859	6584.3900
	Ant1	6545	78.783	6505.6590	6584.4416
	Ant0	6625	78.855	6585.5377	6664.3927
	Ant1	6625	78.974	6585.5865	6664.5605
	Ant0	6705	78.96	6665.5191	6744.4790
	Ant1	6705	78.698	6665.6052	6744.3035
	Ant0	6785	79.208	6745.2631	6824.4706
	Ant1	6785	78.915	6745.4714	6824.3867
	Ant0	6865	79.031	6825.4747	6904.5059
	Ant1	6865	78.804	6825.7039	6904.5076
	Ant0	6945	79.236	6905.3931	6984.6288
	Ant1	6945	79.061	6905.5112	6984.5721
	Ant0	7025	79.087	6985.3908	7064.4782
	Ant1	7025	78.973	6985.5117	7064.4851
11BE160MIMO	Ant0	6025	160.013	5945.1582	6105.1713
	Ant1	6025	159.692	5945.3904	6105.0821
	Ant0	6185	160.197	6104.9094	6265.1066
	Ant1	6185	159.567	6105.2183	6264.7849
	Ant0	6345	160.072	6265.0390	6425.1106
	Ant1	6345	159.751	6265.2288	6424.9794
	Ant0	6505	159.683	6425.0201	6584.7026
	Ant1	6505	159.174	6425.4673	6584.6418
	Ant0	6665	159.821	6584.8461	6744.6673
	Ant1	6665	158.957	6585.3478	6744.3045
	Ant0	6825	160.022	6744.8675	6904.8898
	Ant1	6825	159.925	6745.0646	6904.9898
	Ant0	6985	160.502	6904.6968	7065.1991
	Ant1	6985	160.324	6904.9161	7065.2405
11BE320MIMO	Ant0	6105	319.337	5945.3530	6264.6905
	Ant1	6105	318.442	5945.5751	6264.0172
	Ant0	6265	319.587	6105.1482	6424.7350
	Ant1	6265	319.086	6104.6918	6423.7773
	Ant0	6425	319.261	6265.3851	6584.6459
	Ant1	6425	319.108	6265.0805	6584.1888
	Ant0	6585	319.743	6425.0018	6744.7452
	Ant1	6585	319.221	6425.6843	6744.9050
	Ant0	6745	318.931	6585.2815	6904.2121
	Ant1	6745	319.049	6586.0105	6905.0597
	Ant0	6905	319.238	6744.7283	7063.9666
	Ant1	6905	319.956	6745.6359	7065.5917

Test graphs as below:

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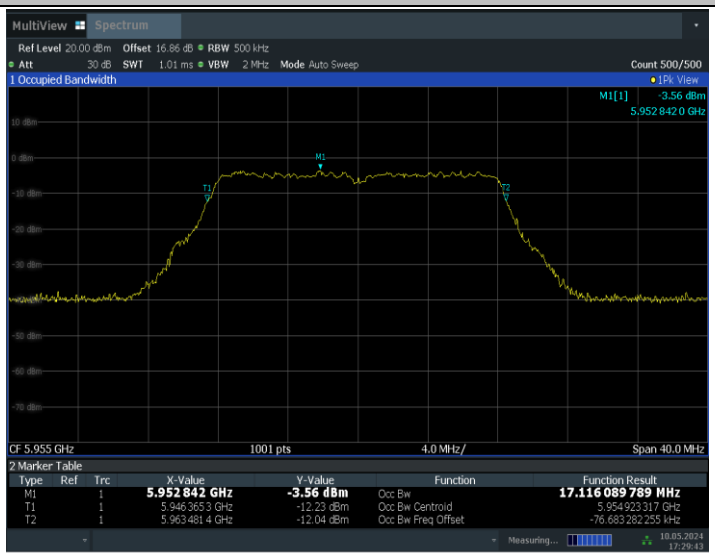

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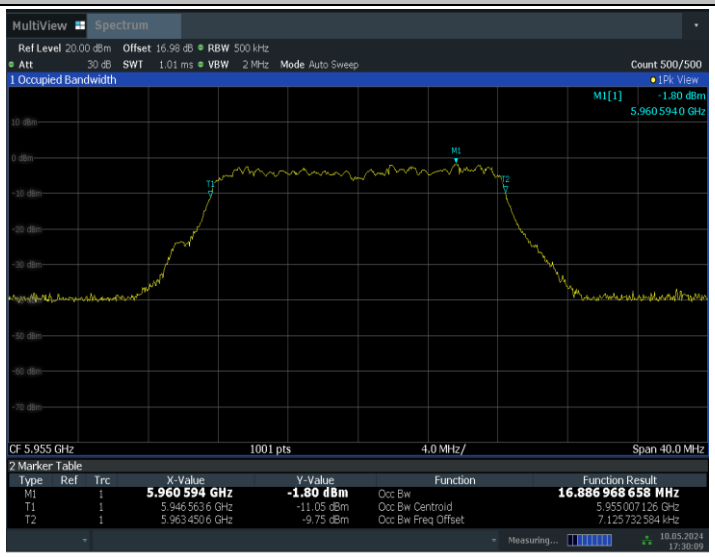

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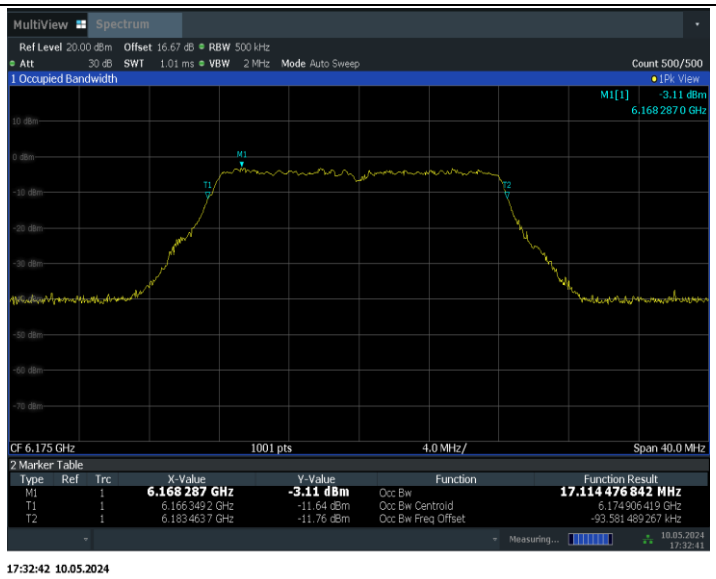

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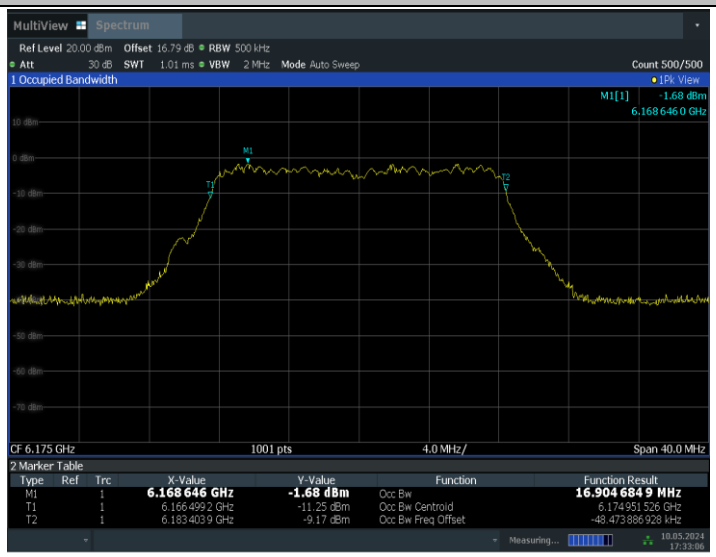

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11A-MIMO_Ant0_6415

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11A-MIMO_Ant1_6415

17:34:16 10.05.2024

11A-MIMO_Ant0_6435

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11A-MIMO_Ant1_6435

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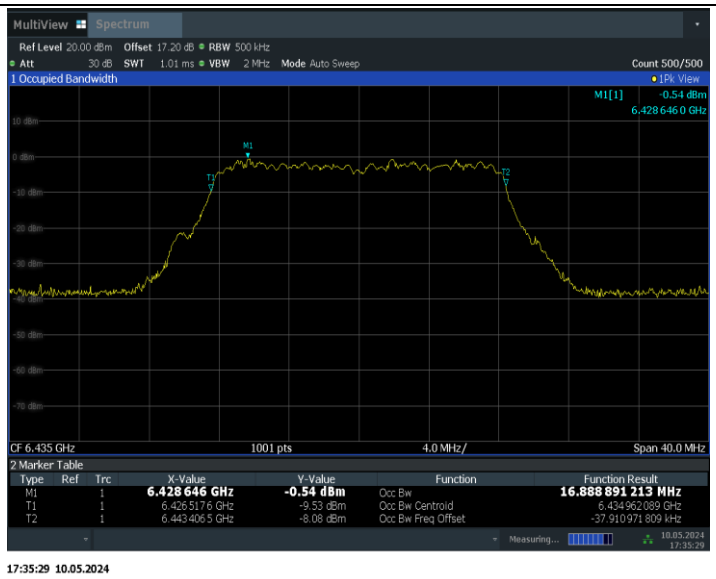

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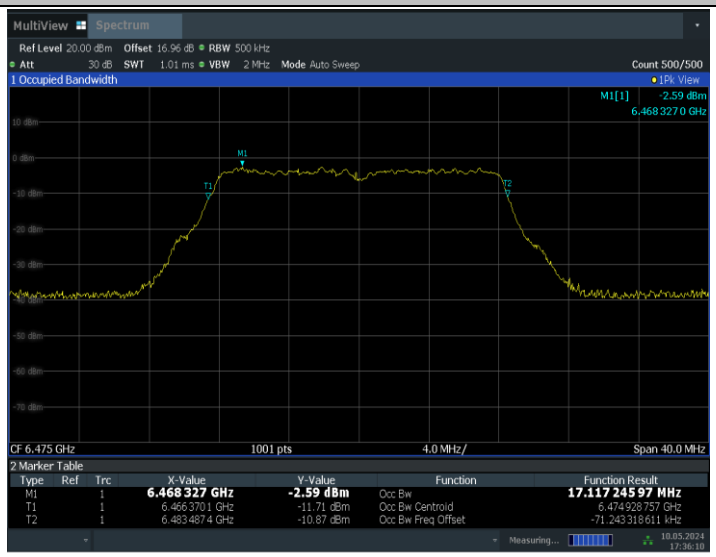

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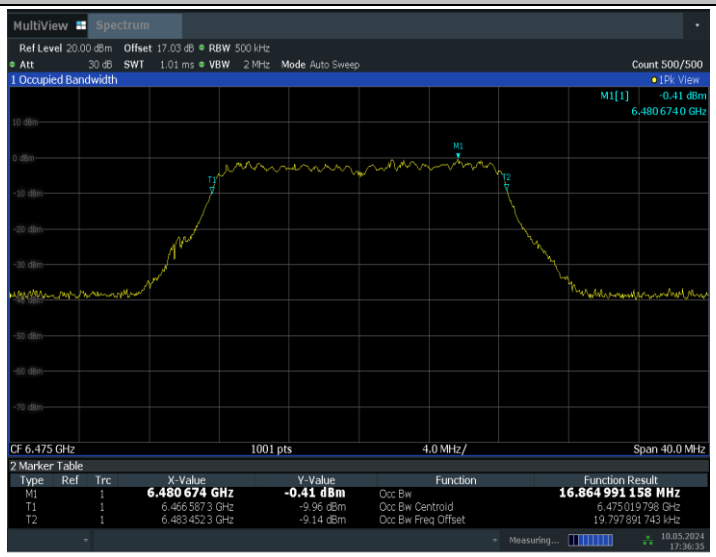

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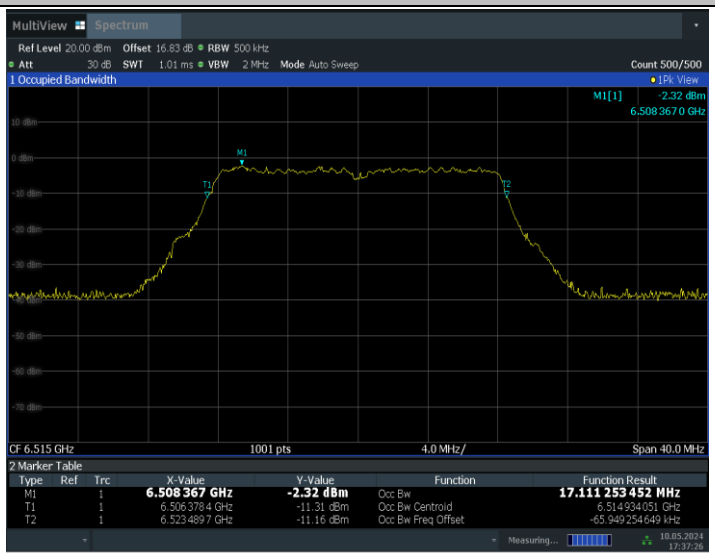

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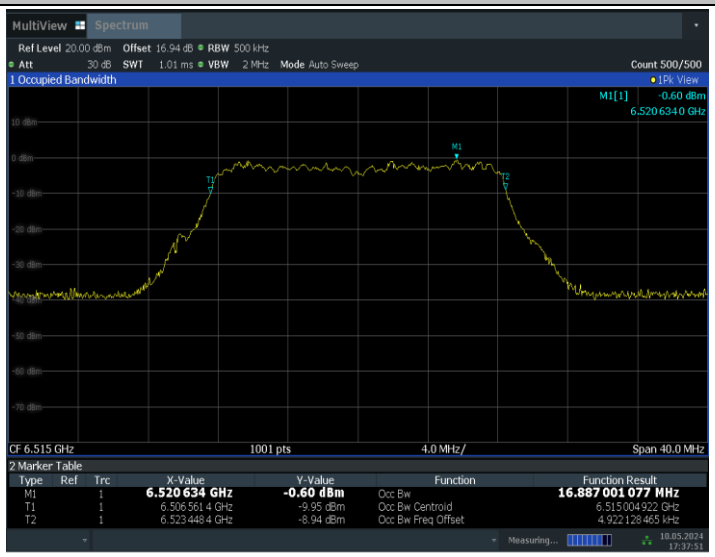

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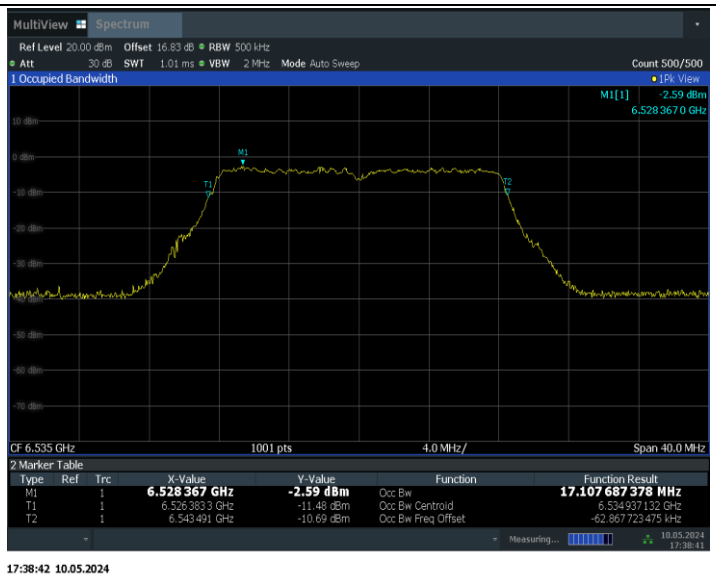

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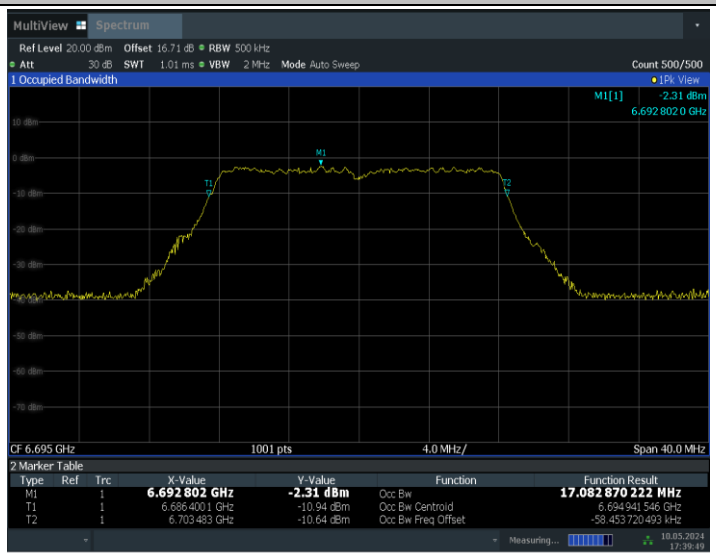

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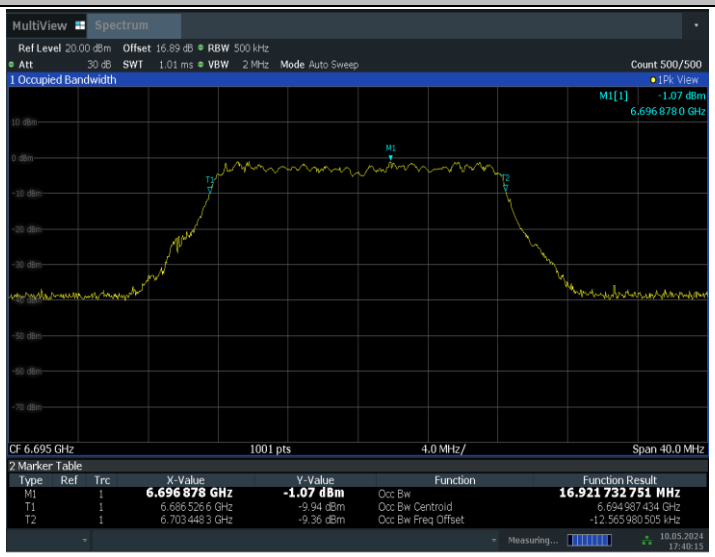

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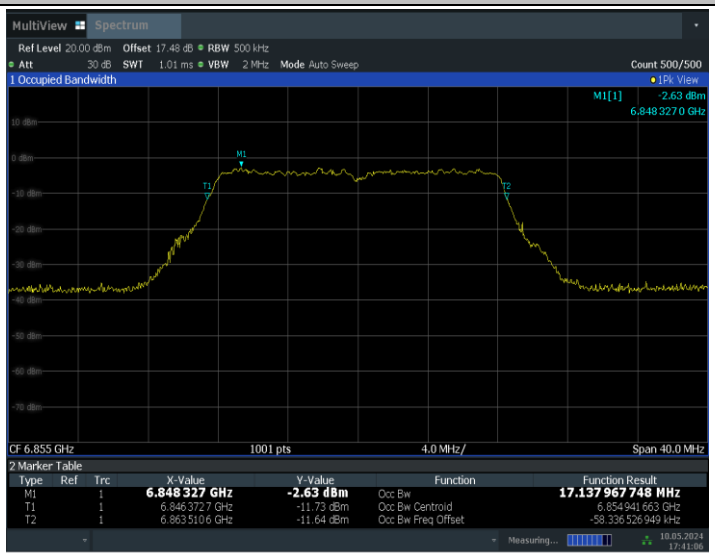

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11A-MIMO_Ant1_6855

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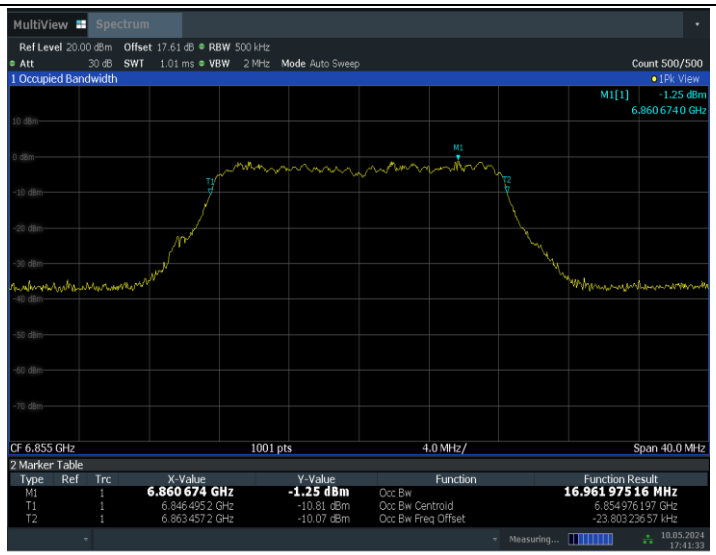

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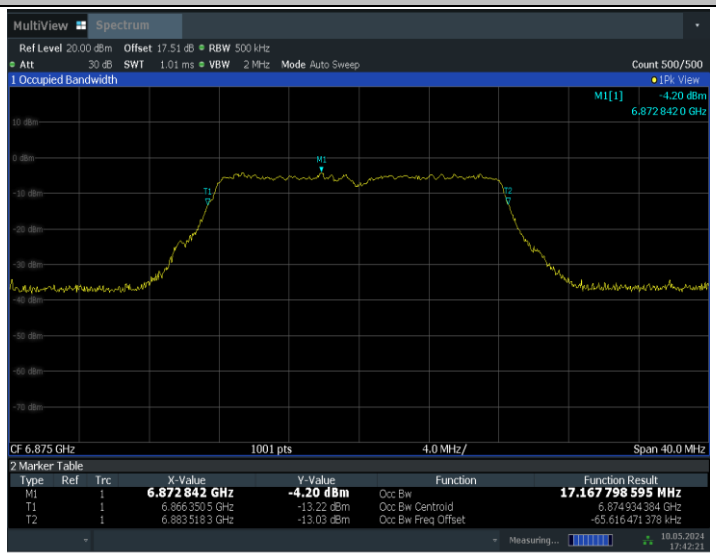

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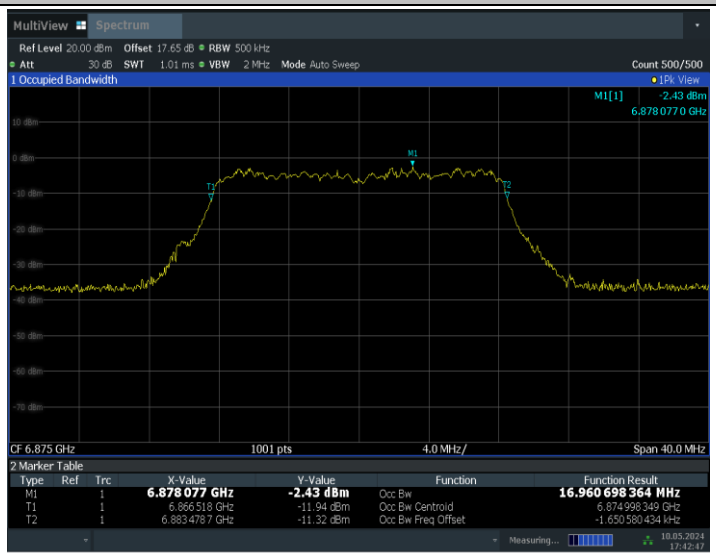

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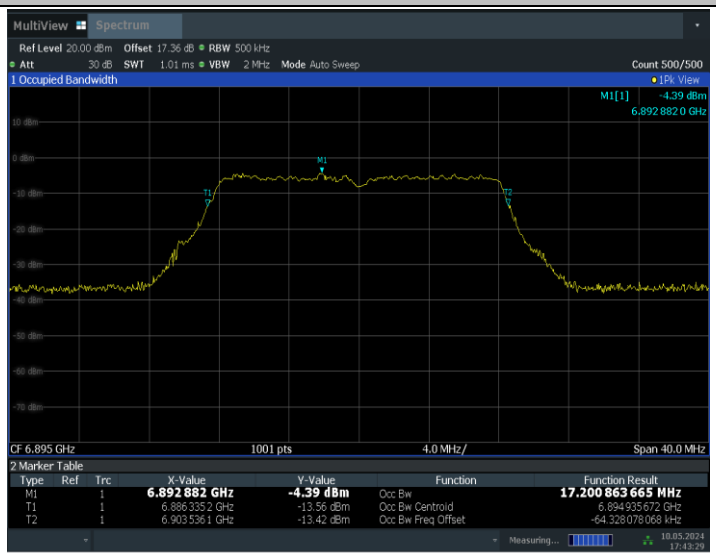

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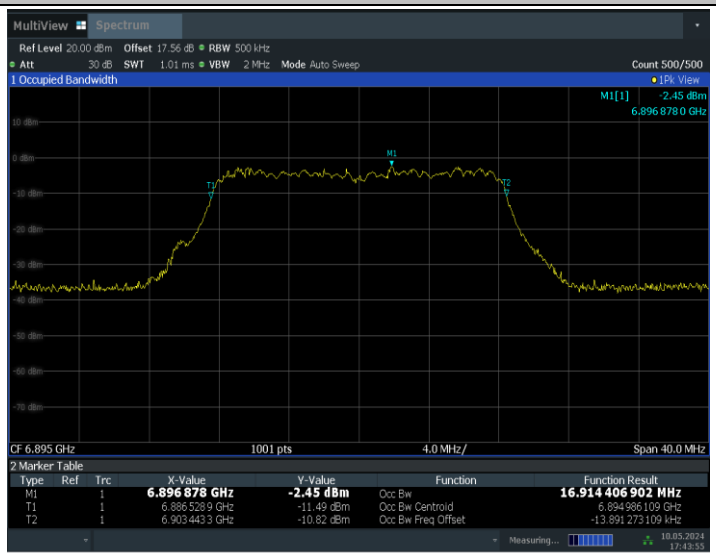

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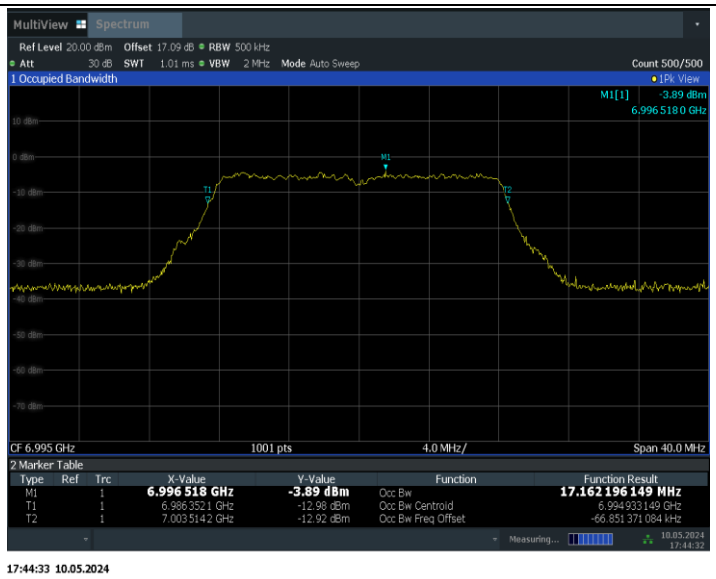

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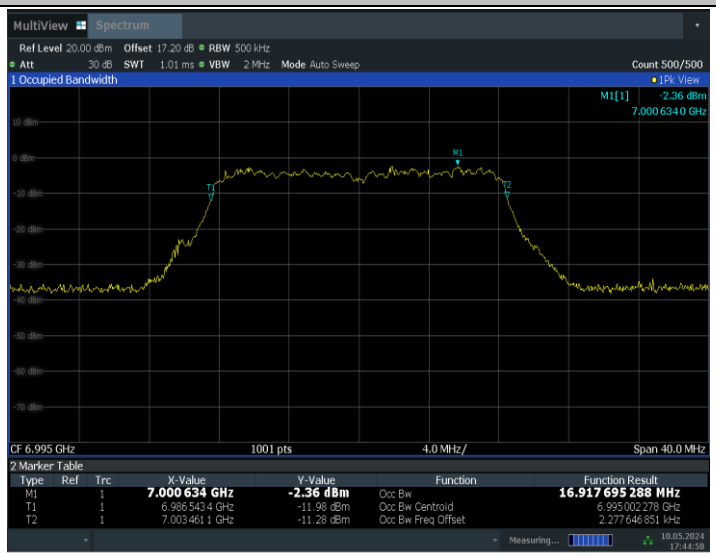

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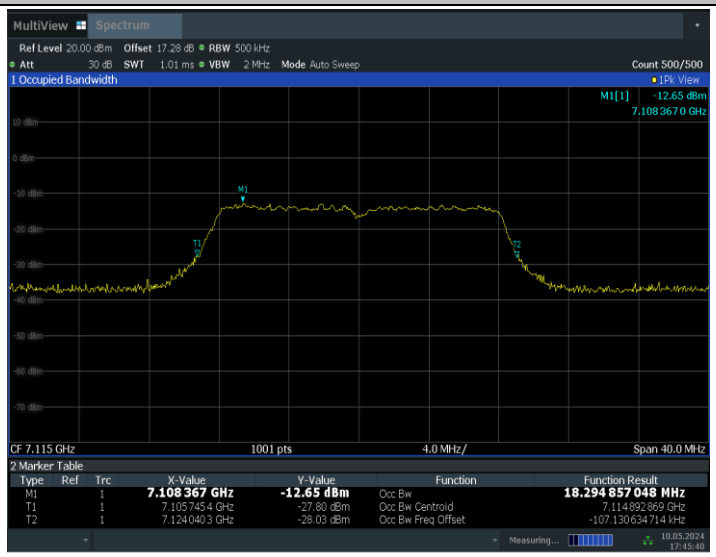

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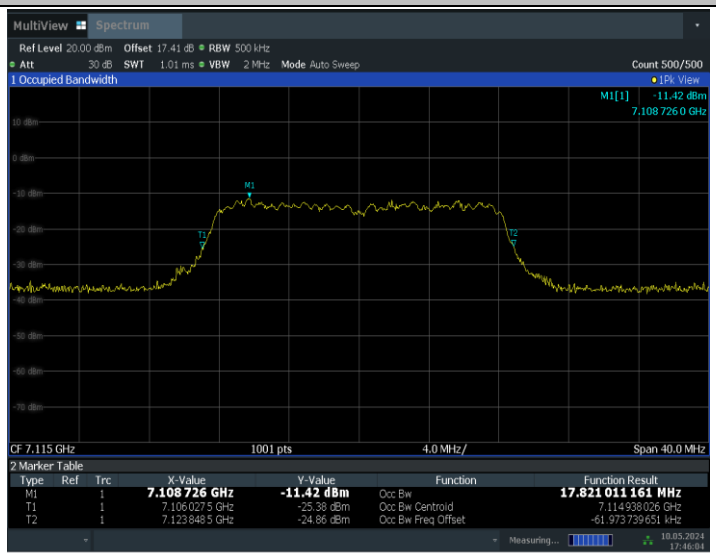

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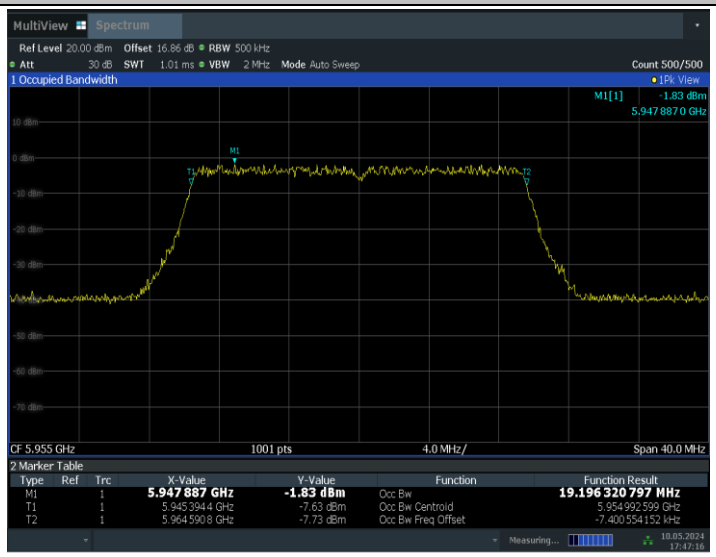

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11BE20MIMO_Ant1_5955

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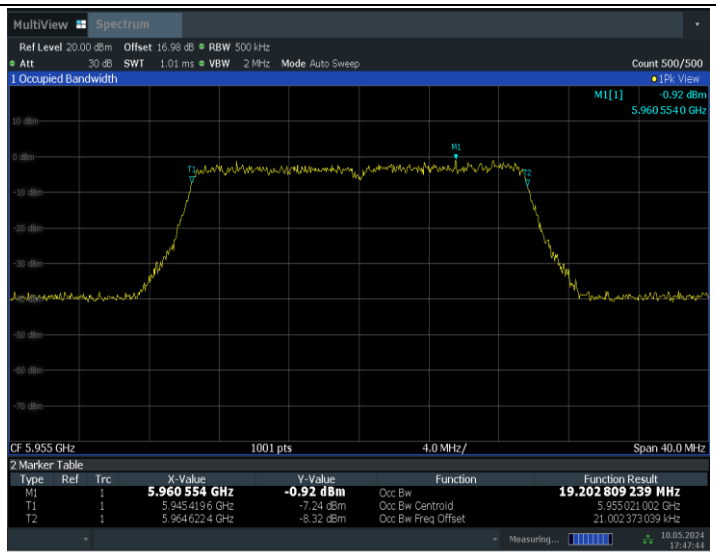

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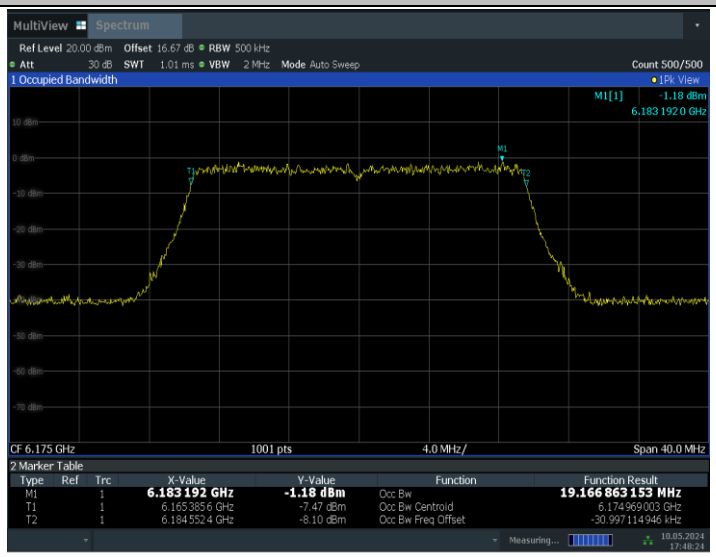

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11BE20MIMO_Ant1_6175

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11BE20MIMO_Ant0_6415

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11BE20MIMO_Ant1_6415

17:49:58 10.05.2024

11BE20MIMO_Ant0_6435

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