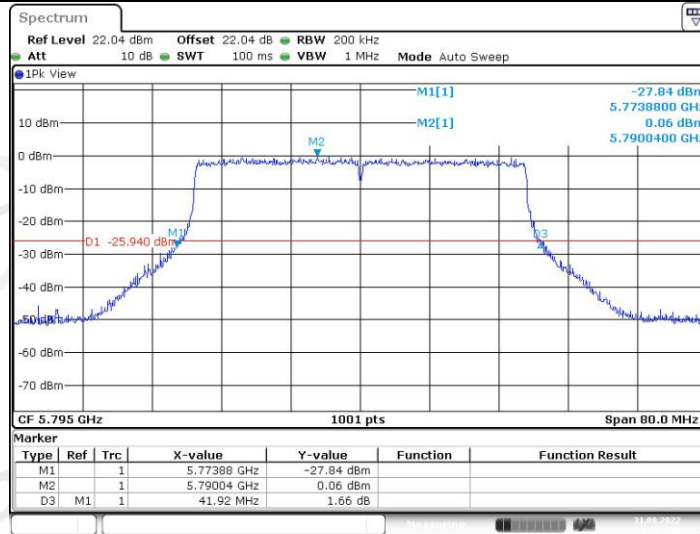
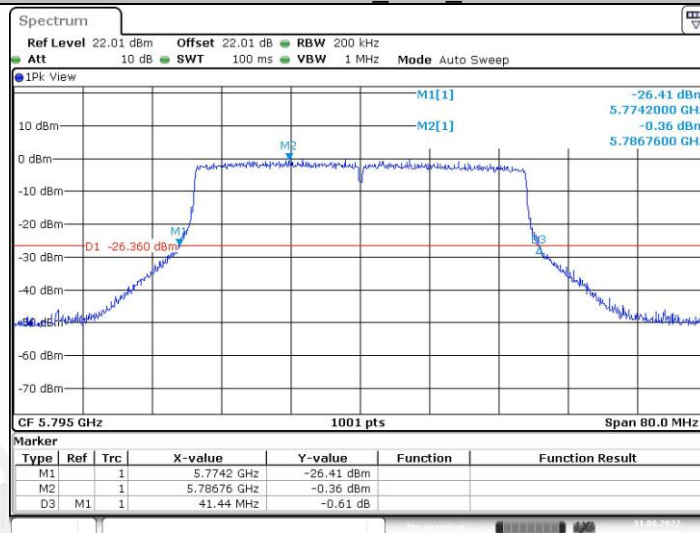


11AX40MIMO_Ant1_5795



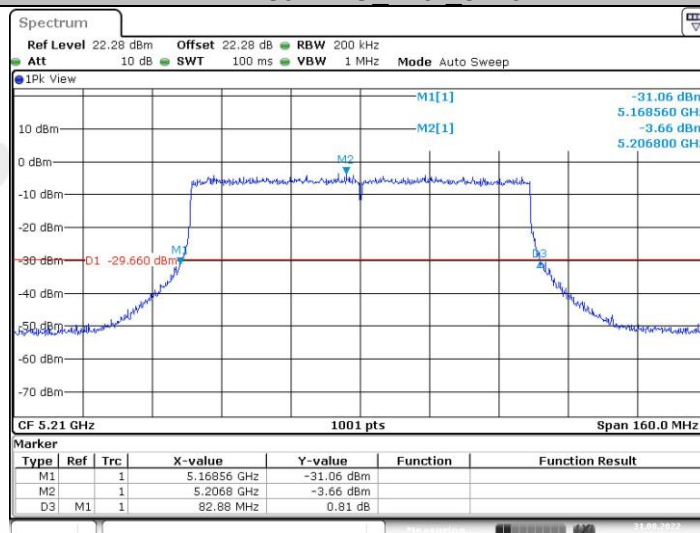
Date: 31 AUG 2022 03:02:39

11AX40MIMO_Ant2_5795



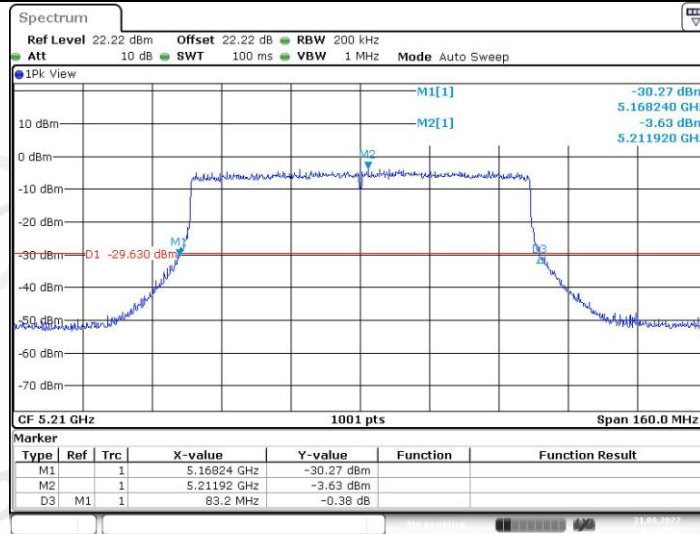
Date: 31 AUG 2022 03:03:52

11AX80MIMO_Ant1_5210



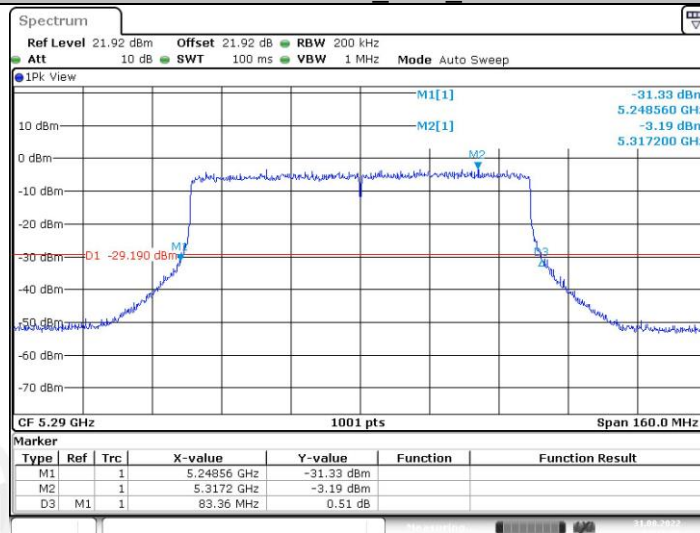
Date: 31 AUG 2022 03:06:05

11AX80MIMO_Ant2_5210



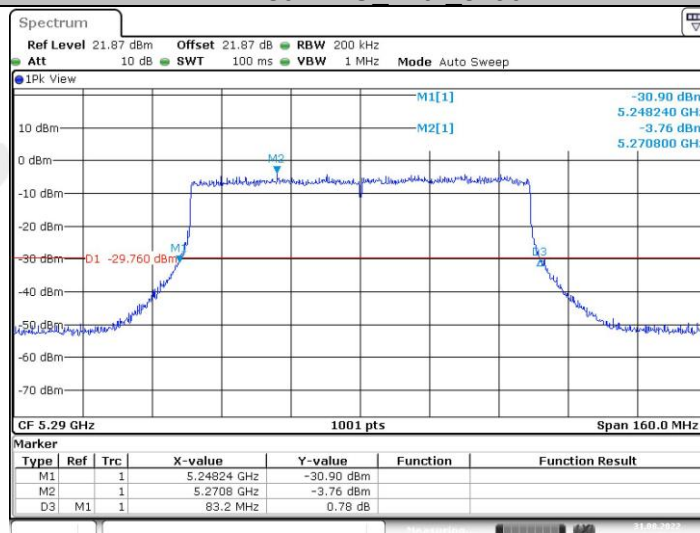
Date: 31 AUG 2022 03:07:08

11AX80MIMO_Ant1_5290



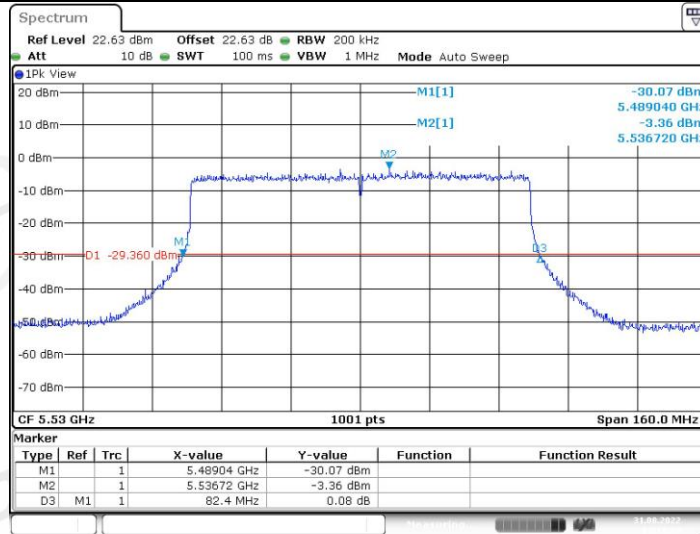
Date: 31 AUG 2022 03:16:41

11AX80MIMO_Ant2_5290



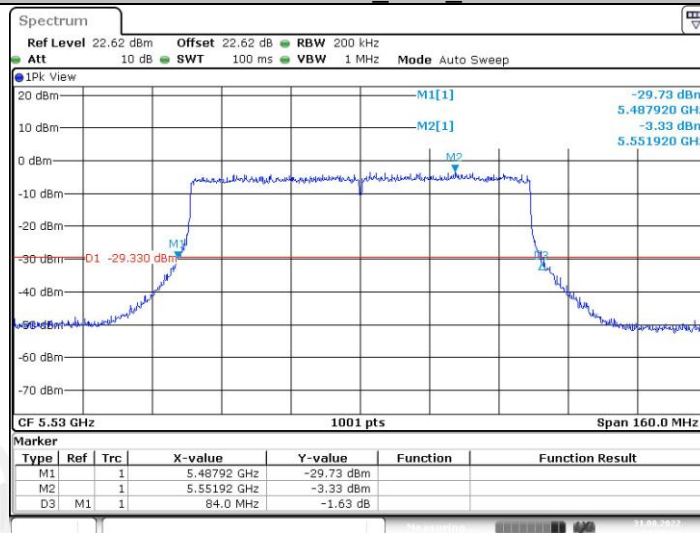
Date: 31 AUG 2022 03:17:39

11AX80MIMO_Ant1_5530



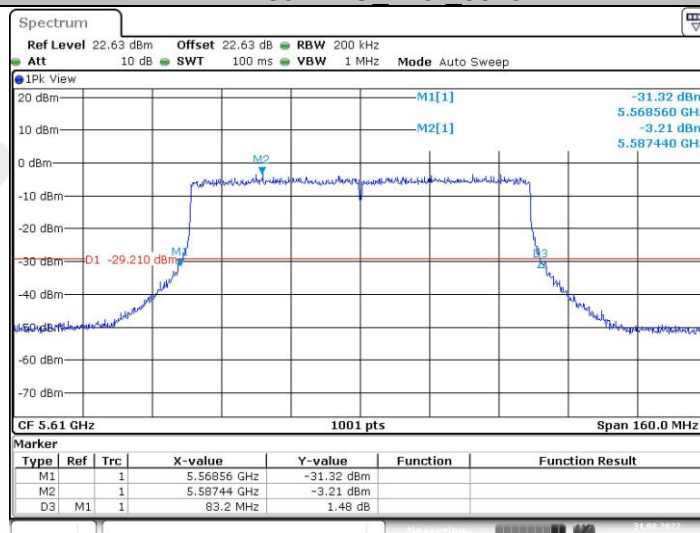
Date: 31 AUG 2022 03:19:24

11AX80MIMO_Ant2_5530



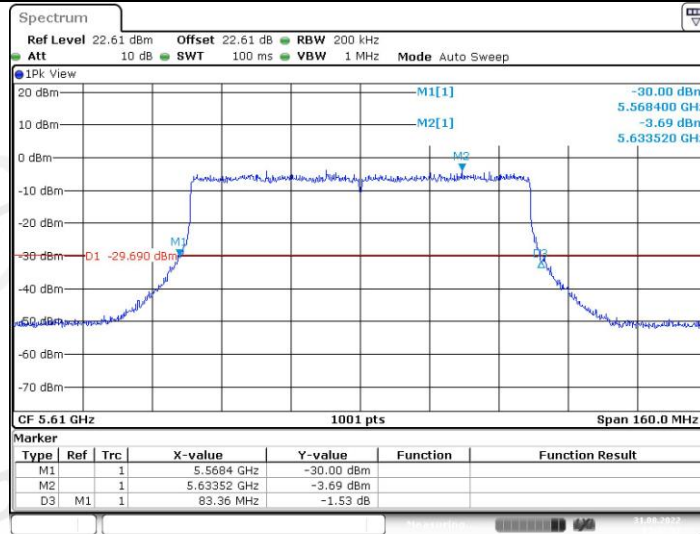
Date: 31 AUG 2022 03:20:29

11AX80MIMO_Ant1_5610



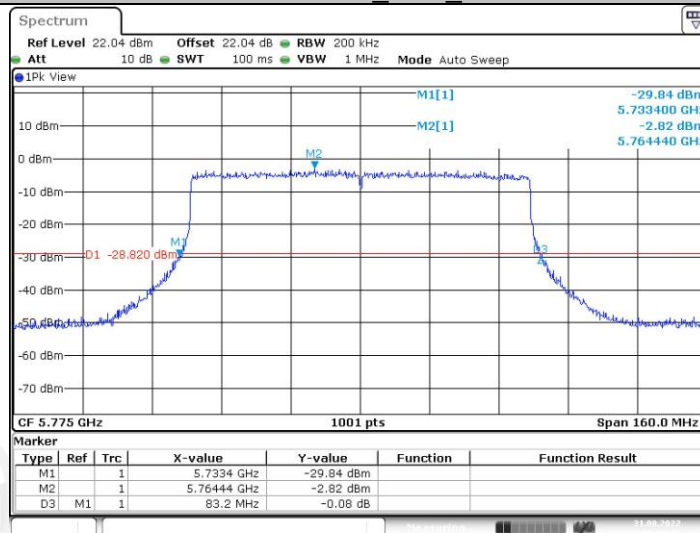
Date: 31 AUG 2022 03:21:50

11AX80MIMO_Ant2_5610



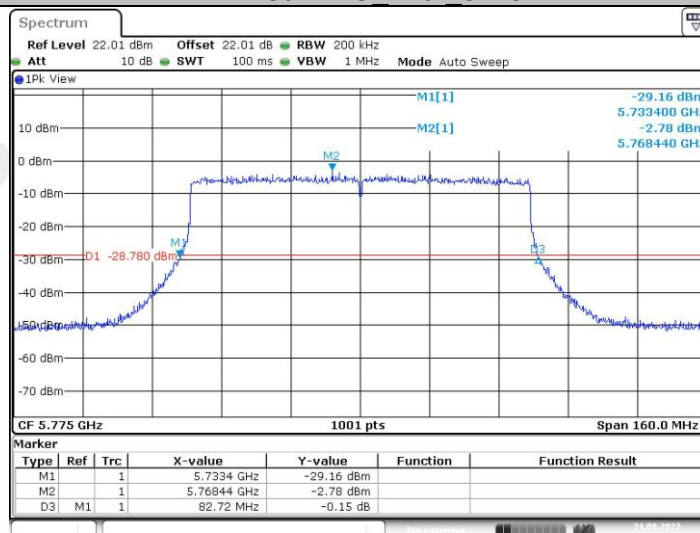
Date: 31 AUG 2022 03:22:57

11AX80MIMO_Ant1_5775



Date: 31 AUG 2022 03:24:46

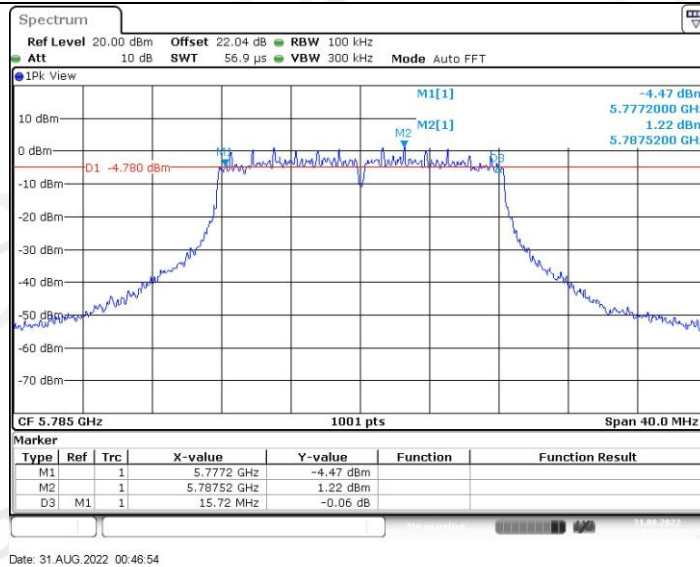
11AX80MIMO_Ant2_5775



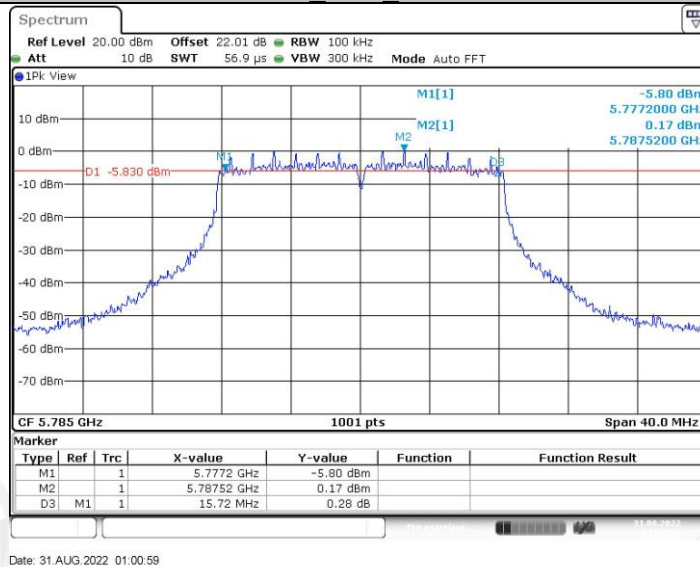
Date: 31 AUG 2022 03:25:56

6db EBW:

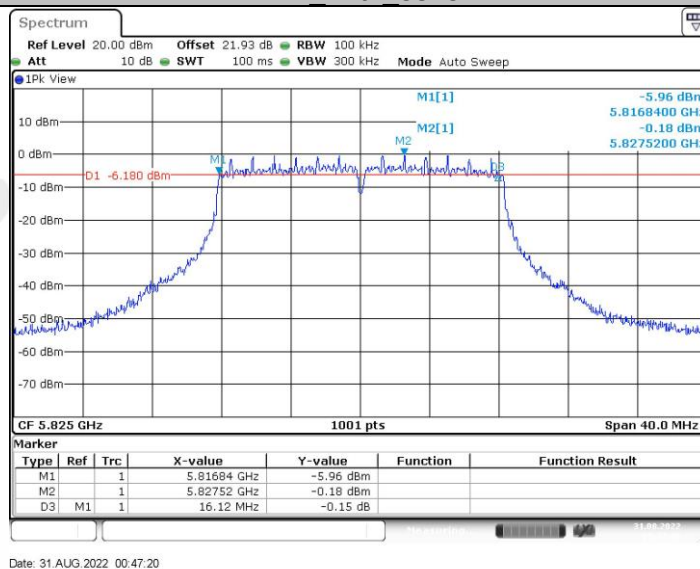




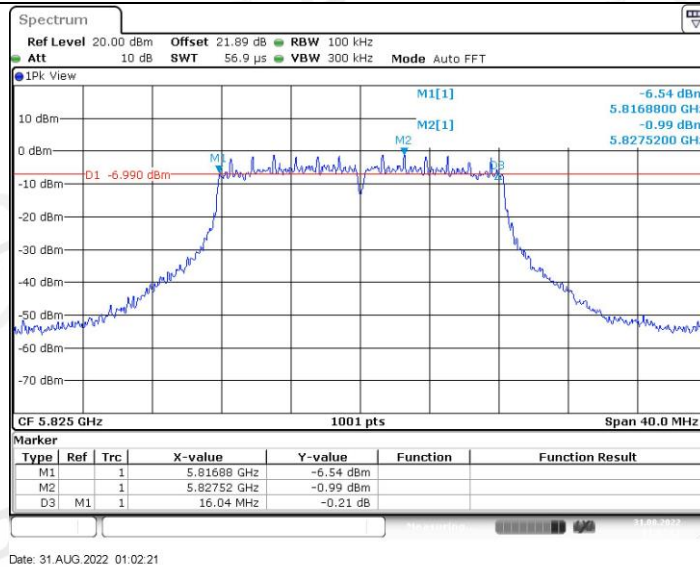
11A Ant2 5785



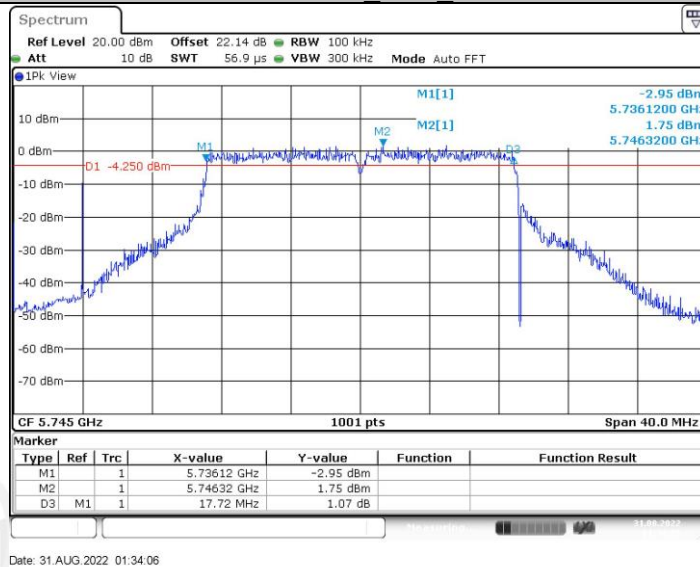
11A Ant1 5825



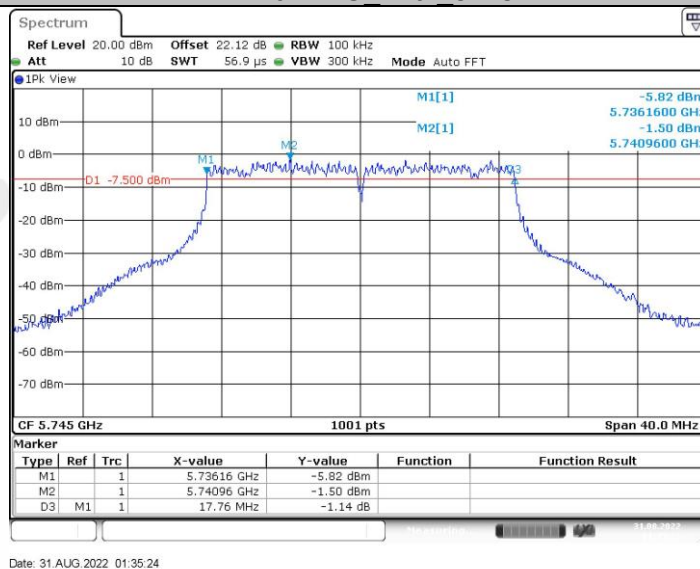
11A Ant2 5825



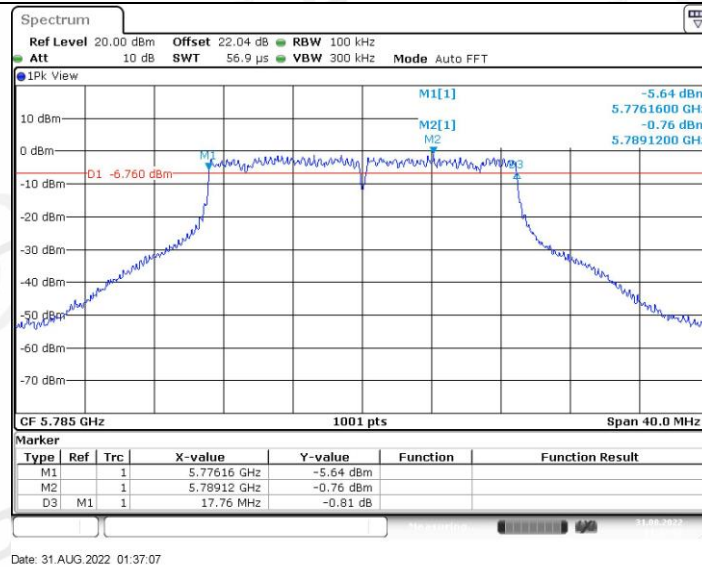
11N20MIMO Ant1 5745



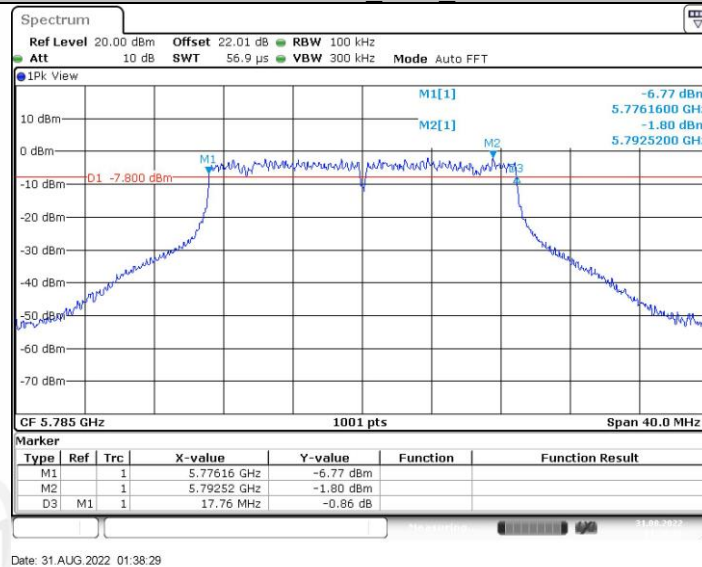
11N20MIMO Ant2 5745



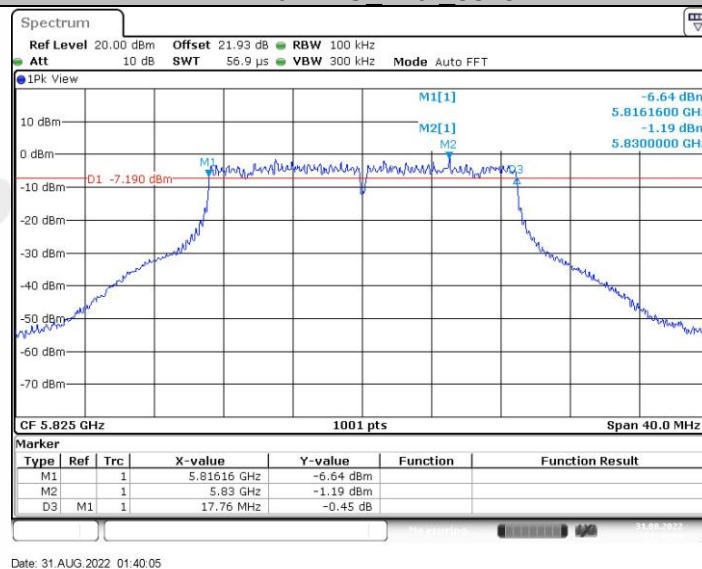
11N20MIMO Ant1 5785



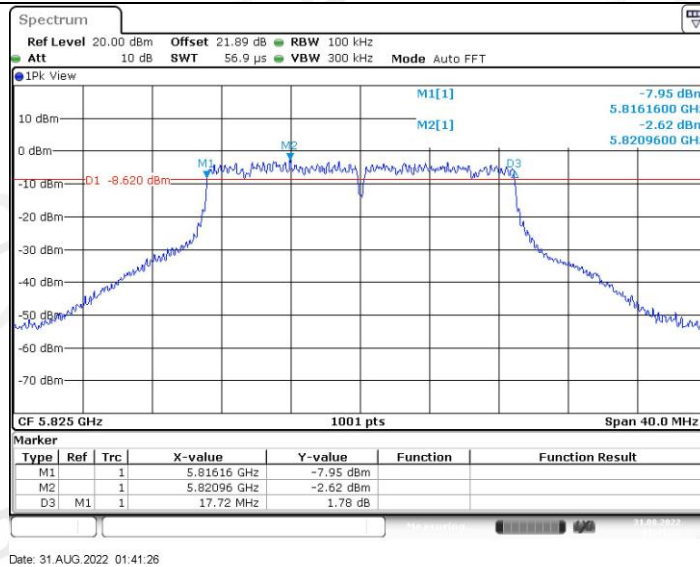
11N20MIMO Ant2 5785



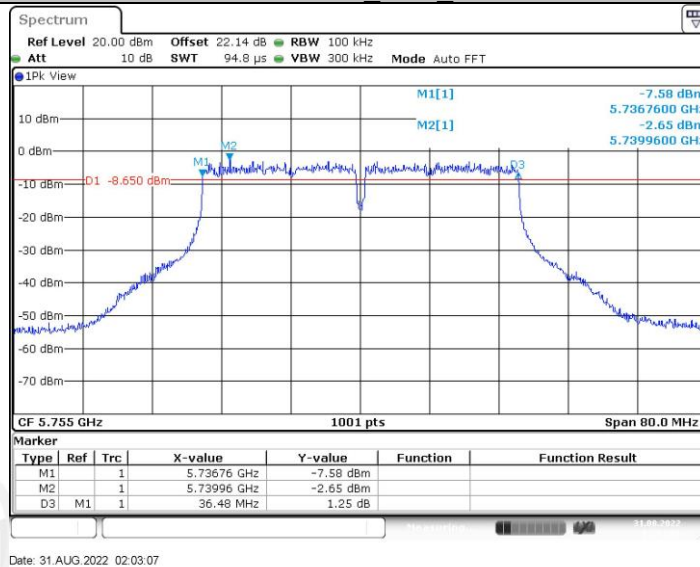
11N20MIMO Ant1 5825



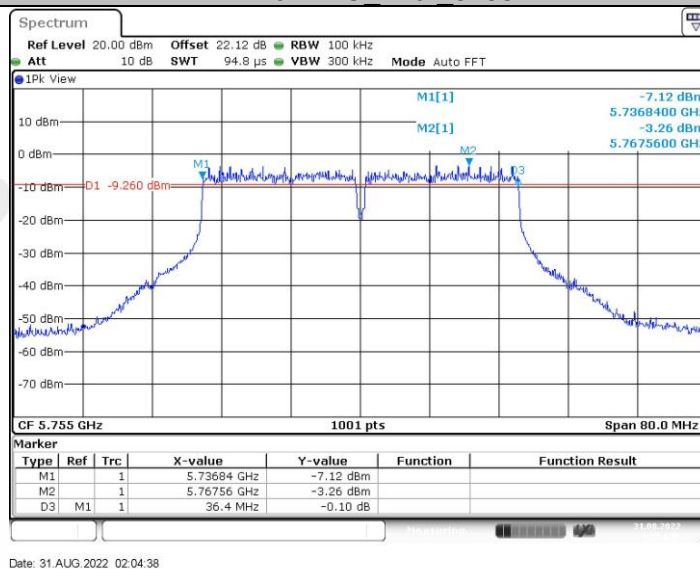
11N20MIMO Ant2 5825



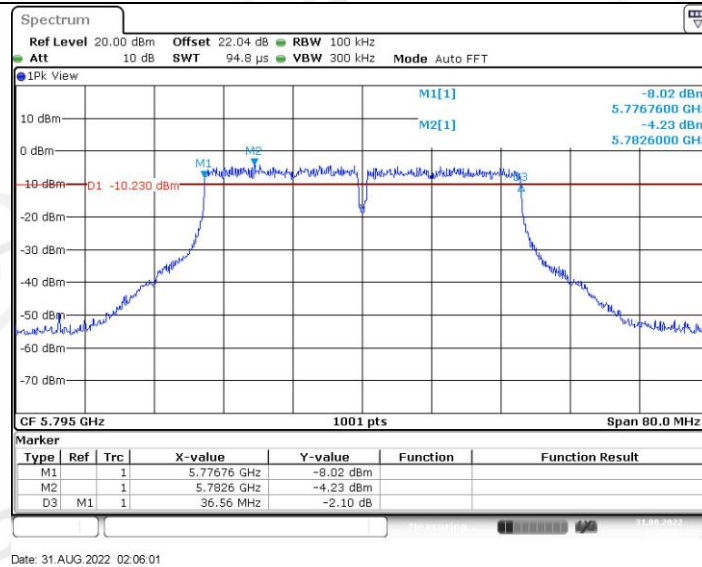
11N40MIMO Ant1 5755



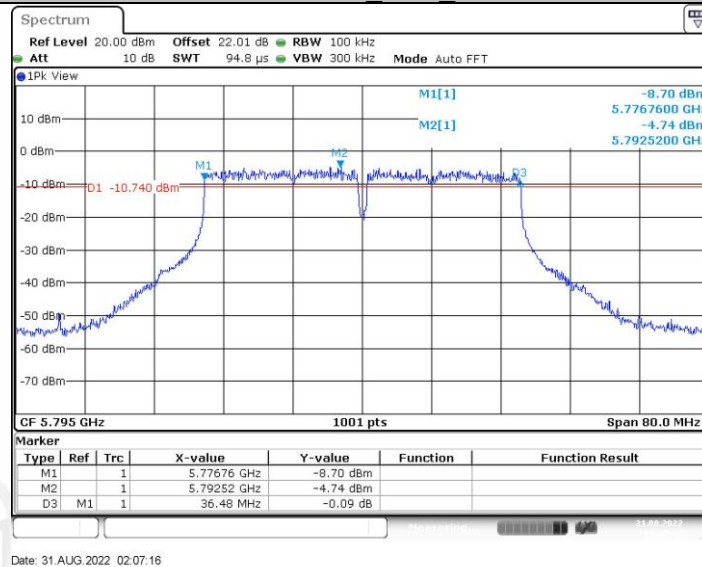
11N40MIMO Ant2 5755



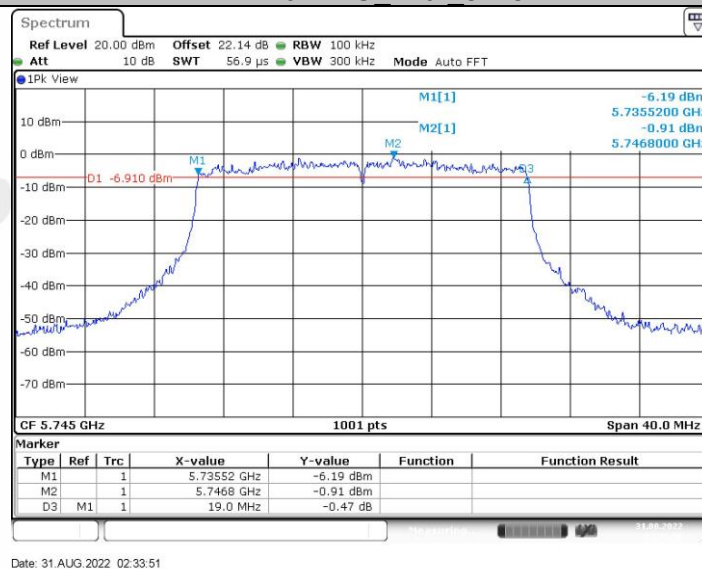
11N40MIMO Ant1 5795



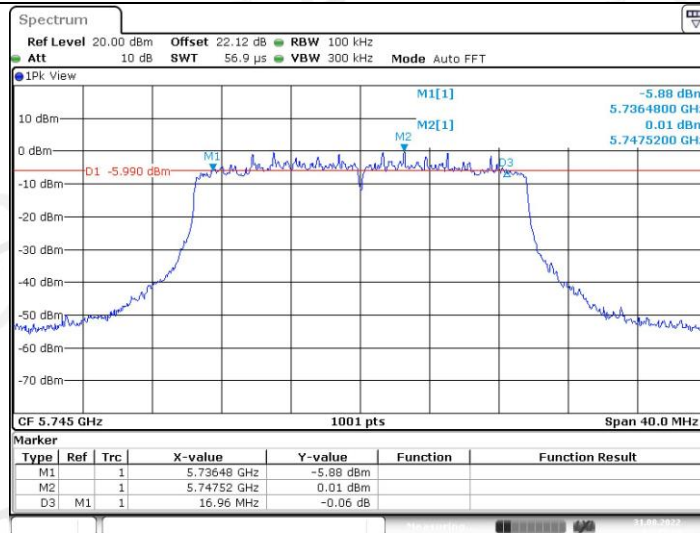
11N40MIMO Ant2 5795



11AX20MIMO Ant1 5745

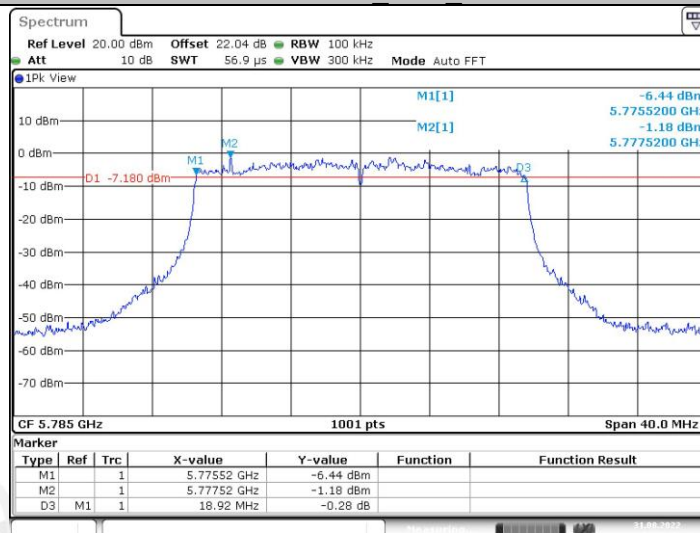


11AX20MIMO Ant2 5745



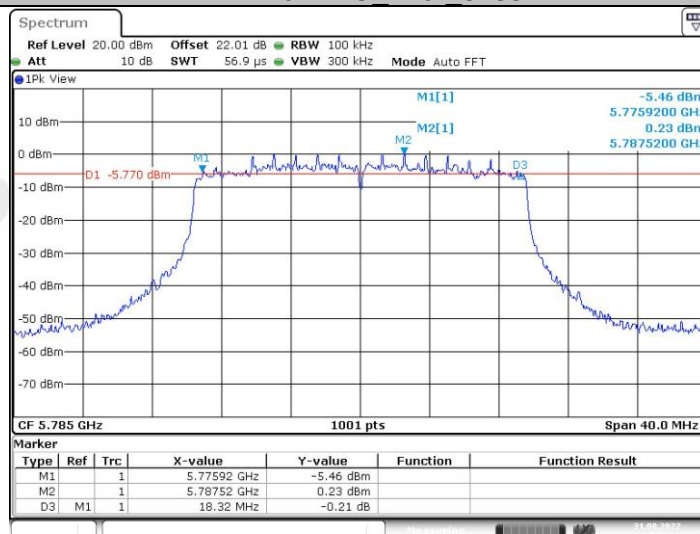
Date: 31 AUG 2022 02:35:14

11AX20MIMO_Ant1_5785



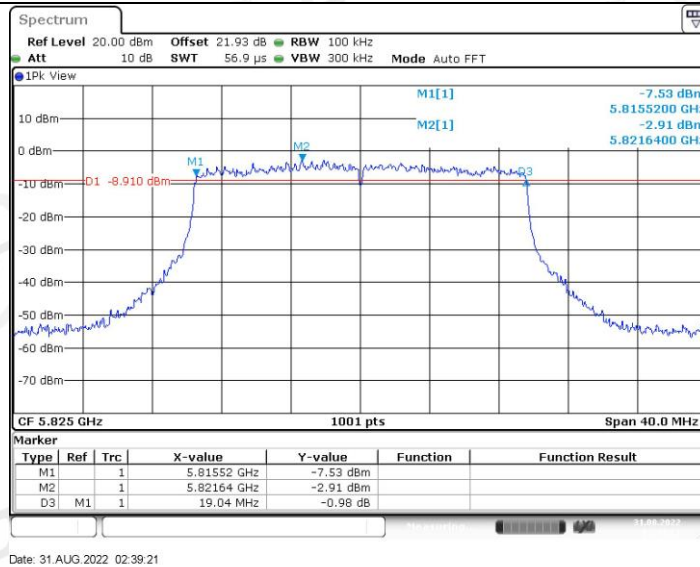
Date: 31 AUG 2022 02:36:43

11AX20MIMO_Ant2_5785

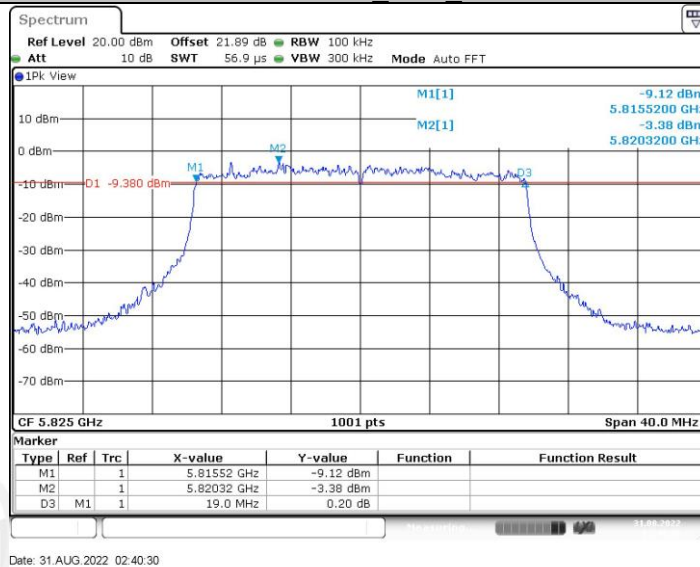


Date: 31 AUG 2022 02:37:51

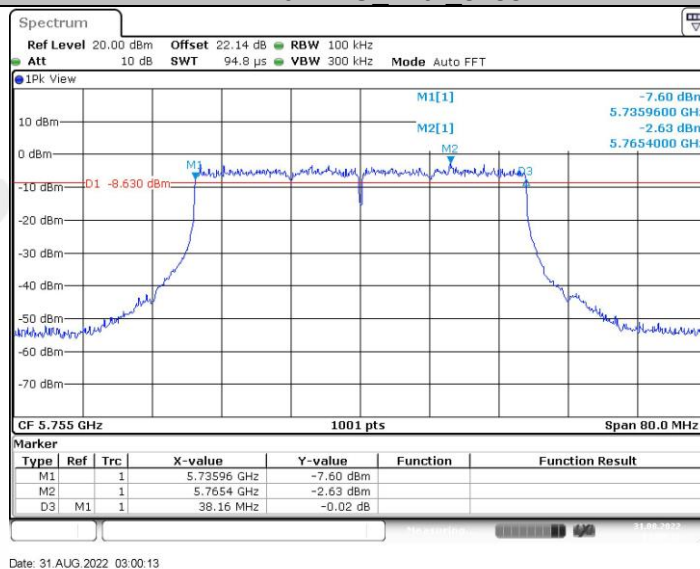
11AX20MIMO_Ant1_5825



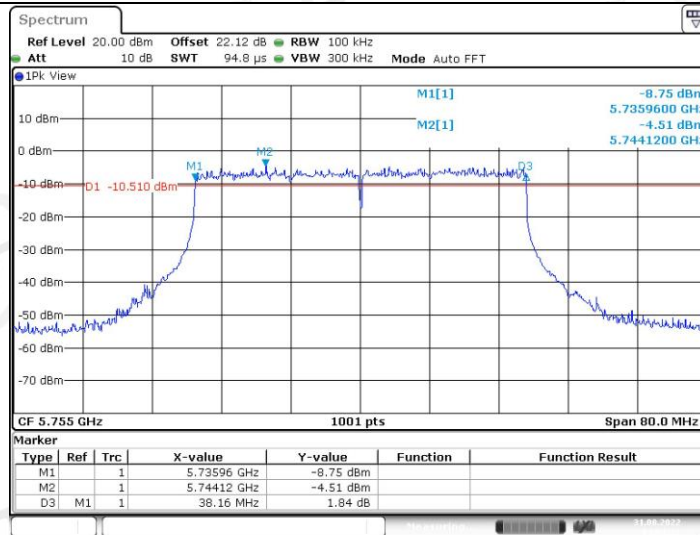
11AX20MIMO_Ant2_5825



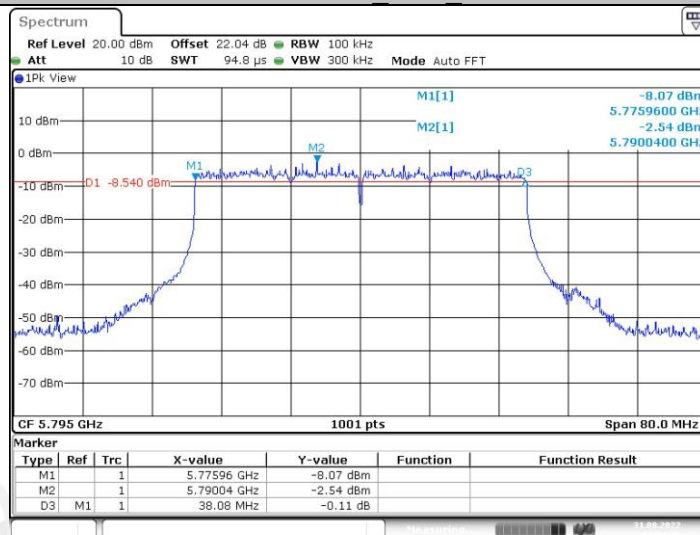
11AX40MIMO_Ant1_5755



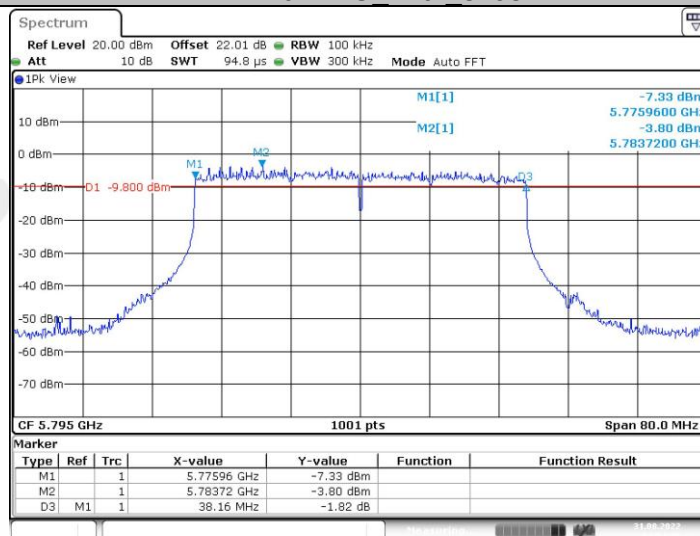
11AX40MIMO_Ant2_5755



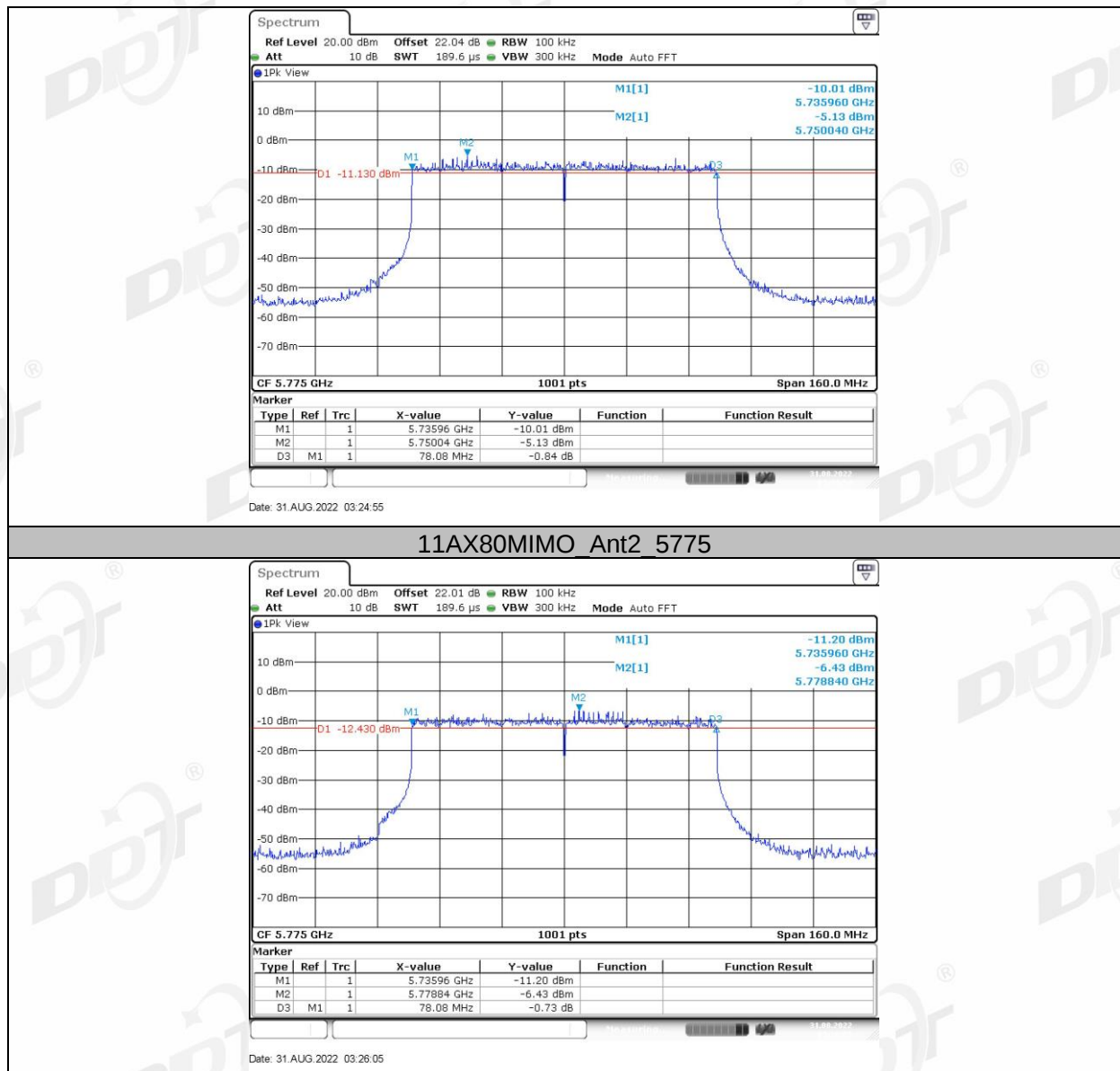
11AX40MIMO Ant1 5795



11AX40MIMO Ant2 5795



11AX80MIMO Ant1 5775



5. Maximum Output Power

5.1. Block diagram of test setup

Same as section 4.1

5.2. Limits

FCC Part15, Subpart E/		
Test Item	Limit	Frequency Range (MHz)
Maximum Output Power	For FCC client devices: 250 mW (24 dBm)	5150-5250
	For FCC: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	5250-5350
	For FCC: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	5470 - 5725
	1 Watt (30 dBm)	5725-5850
Note 1: For FCC: B=26 bandwidth; Note 2: For 802.11n, 802.11ac and 802.11ax, the EUT incorporates a MIMO function. The Antenna directional gain is 8.21 dBi. The Output Power limit is the above limits-(8.21-6) dB		

5.3. Test Procedure

Connect each EUT's antenna output to power sensor by RF cable and attenuator
 Measure the output power of each antenna port by power sensor.

5.4. Test Result

Test Mode	Antenna	Channel	Conducted Output Power Result [dBm]	Conducted FCC Limit [dBm]	Verdict
11A	Ant1	5180	11.14	24	PASS
	Ant2	5180	10.89	24	PASS
	Ant1	5200	11.11	24	PASS
	Ant2	5200	11.03	24	PASS
	Ant1	5240	11.24	24	PASS
	Ant2	5240	10.69	24	PASS
	Ant1	5260	11.30	24	PASS
	Ant2	5260	10.58	24	PASS
	Ant1	5280	11.71	24	PASS
	Ant2	5280	10.47	24	PASS
	Ant1	5320	12.22	24	PASS
	Ant2	5320	10.80	24	PASS
	Ant1	5500	11.05	24	PASS
	Ant2	5500	11.39	24	PASS
	Ant1	5580	10.93	24	PASS
	Ant2	5580	10.92	24	PASS
	Ant1	5700	12.23	24	PASS
	Ant2	5700	10.94	24	PASS
	Ant1	5745	12.25	30	PASS
	Ant2	5745	10.85	30	PASS
	Ant1	5785	12.02	30	PASS
	Ant2	5785	10.95	30	PASS
	Ant1	5825	11.06	30	PASS
	Ant2	5825	10.06	30	PASS
11N20MIMO	Ant1	5180	10.97	21.79	PASS
	Ant2	5180	10.66	21.79	PASS
	total	5180	13.83	21.79	PASS
	Ant1	5200	10.90	21.79	PASS
	Ant2	5200	10.75	21.79	PASS
	total	5200	13.84	21.79	PASS
	Ant1	5240	11.11	21.79	PASS
	Ant2	5240	10.46	21.79	PASS
	total	5240	13.81	21.79	PASS
	Ant1	5260	11.22	21.79	PASS
	Ant2	5260	10.39	21.79	PASS
	total	5260	13.84	21.79	PASS
	Ant1	5280	11.59	21.79	PASS
	Ant2	5280	10.24	21.79	PASS
	total	5280	13.98	21.79	PASS
	Ant1	5320	12.10	21.79	PASS
	Ant2	5320	10.59	21.79	PASS
	total	5320	14.42	21.79	PASS
	Ant1	5500	10.87	21.79	PASS
	Ant2	5500	11.27	21.79	PASS
	total	5500	14.08	21.79	PASS

	Ant1	5580	10.75	21.79	PASS
	Ant2	5580	10.84	21.79	PASS
	total	5580	13.81	21.79	PASS
	Ant1	5700	12.12	21.79	PASS
	Ant2	5700	10.83	21.79	PASS
	total	5700	14.53	21.79	PASS
	Ant1	5745	12.22	27.79	PASS
	Ant2	5745	10.75	27.79	PASS
	total	5745	14.56	27.79	PASS
	Ant1	5785	11.88	27.79	PASS
	Ant2	5785	10.91	27.79	PASS
	total	5785	14.43	27.79	PASS
	Ant1	5825	10.93	27.79	PASS
	Ant2	5825	9.98	27.79	PASS
	total	5825	13.49	27.79	PASS
11N40MIMO	Ant1	5190	11.06	21.79	PASS
	Ant2	5190	10.95	21.79	PASS
	total	5190	14.02	21.79	PASS
	Ant1	5230	11.14	21.79	PASS
	Ant2	5230	11.02	21.79	PASS
	total	5230	14.09	21.79	PASS
	Ant1	5270	11.45	21.79	PASS
	Ant2	5270	10.74	21.79	PASS
	total	5270	14.12	21.79	PASS
	Ant1	5310	12.15	21.79	PASS
	Ant2	5310	11.04	21.79	PASS
	total	5310	14.64	21.79	PASS
	Ant1	5510	10.97	21.79	PASS
	Ant2	5510	11.41	21.79	PASS
	total	5510	14.21	21.79	PASS
	Ant1	5550	10.98	21.79	PASS
	Ant2	5550	11.36	21.79	PASS
	total	5550	14.18	21.79	PASS
	Ant1	5670	12.13	21.79	PASS
	Ant2	5670	11.03	21.79	PASS
	total	5670	14.63	21.79	PASS
	Ant1	5755	12.34	27.79	PASS
	Ant2	5755	11.09	27.79	PASS
	total	5755	14.77	27.79	PASS
	Ant1	5795	11.80	27.79	PASS
	Ant2	5795	11.02	27.79	PASS
	total	5795	14.44	27.79	PASS
11AX20MIMO	Ant1	5180	10.91	21.79	PASS
	Ant2	5180	10.79	21.79	PASS
	total	5180	13.86	21.79	PASS
	Ant1	5200	10.88	21.79	PASS
	Ant2	5200	10.84	21.79	PASS
	total	5200	13.87	21.79	PASS
	Ant1	5240	10.97	21.79	PASS
	Ant2	5240	10.54	21.79	PASS
	total	5240	13.77	21.79	PASS

	Ant1	5260	11.09	21.79	PASS
	Ant2	5260	10.46	21.79	PASS
	total	5260	13.80	21.79	PASS
	Ant1	5280	11.42	21.79	PASS
	Ant2	5280	10.30	21.79	PASS
	total	5280	13.91	21.79	PASS
	Ant1	5320	12.04	21.79	PASS
	Ant2	5320	10.61	21.79	PASS
	total	5320	14.39	21.79	PASS
	Ant1	5500	10.83	21.79	PASS
	Ant2	5500	11.28	21.79	PASS
	total	5500	14.07	21.79	PASS
	Ant1	5580	10.73	21.79	PASS
	Ant2	5580	10.75	21.79	PASS
	total	5580	13.75	21.79	PASS
	Ant1	5700	12.04	21.79	PASS
	Ant2	5700	11.03	21.79	PASS
	total	5700	14.57	21.79	PASS
	Ant1	5745	12.08	27.79	PASS
	Ant2	5745	10.66	27.79	PASS
	total	5745	14.44	27.79	PASS
	Ant1	5785	11.80	27.79	PASS
	Ant2	5785	11.40	27.79	PASS
	total	5785	14.61	27.79	PASS
	Ant1	5825	10.88	27.79	PASS
	Ant2	5825	9.90	27.79	PASS
	total	5825	13.43	27.79	PASS
11AX40MIMO	Ant1	5190	11.10	21.79	PASS
	Ant2	5190	11.13	21.79	PASS
	total	5190	14.13	21.79	PASS
	Ant1	5230	11.15	21.79	PASS
	Ant2	5230	11.33	21.79	PASS
	total	5230	14.25	21.79	PASS
	Ant1	5270	11.57	21.79	PASS
	Ant2	5270	10.79	21.79	PASS
	total	5270	14.21	21.79	PASS
	Ant1	5310	12.22	21.79	PASS
	Ant2	5310	11.16	21.79	PASS
	total	5310	14.73	21.79	PASS
	Ant1	5510	11.01	21.79	PASS
	Ant2	5510	11.26	21.79	PASS
	total	5510	14.15	21.79	PASS
	Ant1	5550	11.02	21.79	PASS
	Ant2	5550	11.60	21.79	PASS
	total	5550	14.33	21.79	PASS
	Ant1	5670	12.15	21.79	PASS
	Ant2	5670	11.48	21.79	PASS
	total	5670	14.84	21.79	PASS
	Ant1	5755	12.46	27.79	PASS
	Ant2	5755	11.51	27.79	PASS
	total	5755	15.02	27.79	PASS

	Ant1	5795	11.94	27.79	PASS
	Ant2	5795	11.59	27.79	PASS
	total	5795	14.78	27.79	PASS
11AX80MIMO	Ant1	5210	10.92	21.79	PASS
	Ant2	5210	10.96	21.79	PASS
	total	5210	13.95	21.79	PASS
	Ant1	5290	11.53	21.79	PASS
	Ant2	5290	10.67	21.79	PASS
	total	5290	14.13	21.79	PASS
	Ant1	5530	10.73	21.79	PASS
	Ant2	5530	11.21	21.79	PASS
	total	5530	13.99	21.79	PASS
	Ant1	5610	11.12	21.79	PASS
	Ant2	5610	10.40	21.79	PASS
	total	5610	13.79	21.79	PASS
	Ant1	5775	11.97	27.79	PASS
	Ant2	5775	11.07	27.79	PASS
	total	5775	14.55	27.79	PASS

6. Power Spectral Density

6.1. Block diagram of test setup

Same with 4.1

6.2. Limits

FCC Part15, Subpart E/		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For FCC: Other than Mobile and portable:17 dBm/MHz Mobile and portable client devices:11 dBm/MHz	5150-5250
	11 dBm/MHz	5250-5350
	11 dBm/MHz	5470 - 5725
	30 dBm/500 kHz	5725-5850
Note: For 802.11n, 802.11ac and 802.11ax, the EUT incorporates a MIMO function. The Antenna directional gain is 8.21 dBi. For FCC, the Power Spectral Density limit is the above limits-(8.21-6) dB		

6.3. Test Procedure

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.

Connect the UUT to the spectrum analyser and use the following settings:

5150 MHz~5250 MHz, 5250 MHz~5350 MHz, 5470 MHz~5725 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

5725 MHz-5850 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

6.4. Test Result

Test Mode	Antenna	Channel	Conducted Result [dBm/MHz]	Conducted FCC Limit [dBm/MHz]	Verdict
11A	Ant1	5180	0.2	11	PASS
	Ant2	5180	-0.08	11	PASS
	Ant1	5200	0.07	11	PASS
	Ant2	5200	-0.08	11	PASS
	Ant1	5240	-0.04	11	PASS
	Ant2	5240	-0.6	11	PASS
	Ant1	5260	0.27	11	PASS
	Ant2	5260	-0.49	11	PASS
	Ant1	5280	0.36	11	PASS
	Ant2	5280	-0.88	11	PASS
	Ant1	5320	1.08	11	PASS
	Ant2	5320	-0.34	11	PASS
	Ant1	5500	0.06	11	PASS
	Ant2	5500	0.34	11	PASS
	Ant1	5580	-0.07	11	PASS
	Ant2	5580	-0.02	11	PASS
	Ant1	5700	1.19	11	PASS
	Ant2	5700	-0.05	11	PASS
	Ant1	5745	-1.75	30	PASS
	Ant2	5745	-3.24	30	PASS
	Ant1	5785	-2.04	30	PASS
	Ant2	5785	-3.11	30	PASS
	Ant1	5825	-3.29	30	PASS
	Ant2	5825	-4.21	30	PASS
11N20MIMO	Ant1	5180	-0.52	8.79	PASS
	Ant2	5180	-0.87	8.79	PASS
	total	5180	2.32	8.79	PASS
	Ant1	5200	-0.72	8.79	PASS
	Ant2	5200	-0.78	8.79	PASS
	total	5200	2.26	8.79	PASS
	Ant1	5240	-0.69	8.79	PASS
	Ant2	5240	-1.33	8.79	PASS
	total	5240	2.01	8.79	PASS
	Ant1	5260	-0.35	8.79	PASS
	Ant2	5260	-1.18	8.79	PASS
	total	5260	2.27	8.79	PASS
	Ant1	5280	-0.41	8.79	PASS
	Ant2	5280	-1.52	8.79	PASS
	total	5280	2.08	8.79	PASS
	Ant1	5320	0.35	8.79	PASS
	Ant2	5320	-0.93	8.79	PASS
	total	5320	2.77	8.79	PASS
	Ant1	5500	-0.79	8.79	PASS
	Ant2	5500	-0.21	8.79	PASS
	total	5500	2.52	8.79	PASS
	Ant1	5580	-0.8	8.79	PASS
	Ant2	5580	-0.56	8.79	PASS

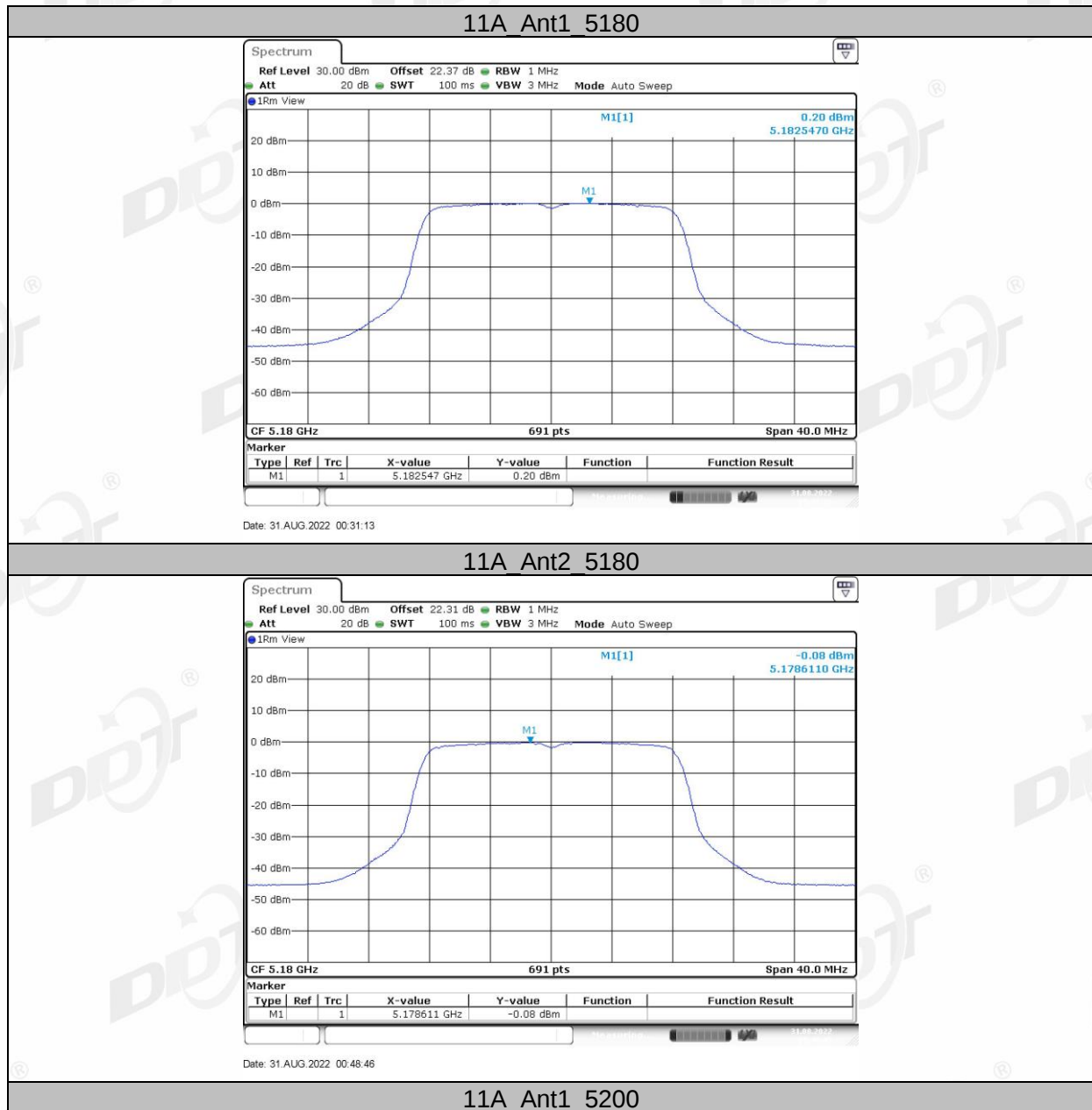
	total	5580	2.33	8.79	PASS
	Ant1	5700	0.49	8.79	PASS
	Ant2	5700	-0.65	8.79	PASS
	total	5700	2.97	8.79	PASS
	Ant1	5745	-2.53	27.79	PASS
	Ant2	5745	-3.87	27.79	PASS
	total	5745	-0.14	27.79	PASS
	Ant1	5785	-2.81	27.79	PASS
	Ant2	5785	-3.83	27.79	PASS
	total	5785	-0.28	27.79	PASS
	Ant1	5825	-4.01	27.79	PASS
	Ant2	5825	-4.86	27.79	PASS
	total	5825	-1.40	27.79	PASS
11N40MIMO	Ant1	5190	-3.67	8.79	PASS
	Ant2	5190	-3.71	8.79	PASS
	total	5190	-0.68	8.79	PASS
	Ant1	5230	-3.63	8.79	PASS
	Ant2	5230	-3.63	8.79	PASS
	total	5230	-0.62	8.79	PASS
	Ant1	5270	-3.49	8.79	PASS
	Ant2	5270	-4.1	8.79	PASS
	total	5270	-0.77	8.79	PASS
	Ant1	5310	-2.48	8.79	PASS
	Ant2	5310	-3.49	8.79	PASS
	total	5310	0.05	8.79	PASS
	Ant1	5510	-3.81	8.79	PASS
	Ant2	5510	-3.16	8.79	PASS
	total	5510	-0.46	8.79	PASS
	Ant1	5550	-3.64	8.79	PASS
	Ant2	5550	-3.1	8.79	PASS
	total	5550	-0.35	8.79	PASS
	Ant1	5670	-2.64	8.79	PASS
	Ant2	5670	-3.63	8.79	PASS
	total	5670	-0.10	8.79	PASS
	Ant1	5755	-5.41	27.79	PASS
	Ant2	5755	-6.61	27.79	PASS
	total	5755	-2.96	27.79	PASS
	Ant1	5795	-6.05	27.79	PASS
	Ant2	5795	-6.79	27.79	PASS
	total	5795	-3.39	27.79	PASS
11AX20MIMO	Ant1	5180	-0.62	8.79	PASS
	Ant2	5180	-0.73	8.79	PASS
	total	5180	2.34	8.79	PASS
	Ant1	5200	-0.78	8.79	PASS
	Ant2	5200	-0.6	8.79	PASS
	total	5200	2.32	8.79	PASS
	Ant1	5240	-0.89	8.79	PASS
	Ant2	5240	-1.17	8.79	PASS
	total	5240	1.98	8.79	PASS
	Ant1	5260	-0.65	8.79	PASS
	Ant2	5260	-1.03	8.79	PASS

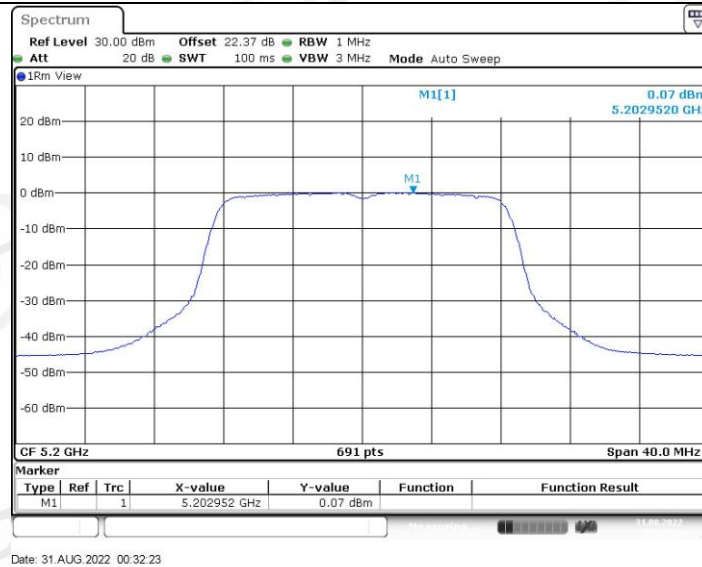
	total	5260	2.17	8.79	PASS
	Ant1	5280	-0.51	8.79	PASS
	Ant2	5280	-1.39	8.79	PASS
	total	5280	2.08	8.79	PASS
	Ant1	5320	0.21	8.79	PASS
	Ant2	5320	-0.85	8.79	PASS
	total	5320	2.72	8.79	PASS
	Ant1	5500	-0.77	8.79	PASS
	Ant2	5500	-0.3	8.79	PASS
	total	5500	2.48	8.79	PASS
	Ant1	5580	-0.81	8.79	PASS
	Ant2	5580	-0.67	8.79	PASS
	total	5580	2.27	8.79	PASS
	Ant1	5700	0.42	8.79	PASS
	Ant2	5700	-0.5	8.79	PASS
	total	5700	2.99	8.79	PASS
	Ant1	5745	-2.62	27.79	PASS
	Ant2	5745	-4.06	27.79	PASS
	total	5745	-0.27	27.79	PASS
	Ant1	5785	-2.87	27.79	PASS
	Ant2	5785	-3.33	27.79	PASS
	total	5785	-0.08	27.79	PASS
	Ant1	5825	-4.02	27.79	PASS
	Ant2	5825	-5.04	27.79	PASS
	total	5825	-1.49	27.79	PASS
11AX40MIMO	Ant1	5190	-3.98	8.79	PASS
	Ant2	5190	-3.86	8.79	PASS
	total	5190	-0.91	8.79	PASS
	Ant1	5230	-3.95	8.79	PASS
	Ant2	5230	-3.67	8.79	PASS
	total	5230	-0.80	8.79	PASS
	Ant1	5270	-3.73	8.79	PASS
	Ant2	5270	-4.62	8.79	PASS
	total	5270	-1.14	8.79	PASS
	Ant1	5310	-2.85	8.79	PASS
	Ant2	5310	-3.73	8.79	PASS
	total	5310	-0.26	8.79	PASS
	Ant1	5510	-4.12	8.79	PASS
	Ant2	5510	-3.94	8.79	PASS
	total	5510	-1.02	8.79	PASS
	Ant1	5550	-3.92	8.79	PASS
	Ant2	5550	-3.2	8.79	PASS
	total	5550	-0.53	8.79	PASS
	Ant1	5670	-2.98	8.79	PASS
	Ant2	5670	-3.51	8.79	PASS
	total	5670	-0.23	8.79	PASS
	Ant1	5755	-5.57	27.79	PASS
	Ant2	5755	-6.54	27.79	PASS
	total	5755	-3.02	27.79	PASS
	Ant1	5795	-6.24	27.79	PASS
	Ant2	5795	-6.27	27.79	PASS

	total	5795	-3.24	27.79	PASS
11AX80MIMO	Ant1	5210	-7.18	8.79	PASS
	Ant2	5210	-6.99	8.79	PASS
	total	5210	-4.07	8.79	PASS
	Ant1	5290	-6.55	8.79	PASS
	Ant2	5290	-7.27	8.79	PASS
	total	5290	-3.88	8.79	PASS
	Ant1	5530	-7.11	8.79	PASS
	Ant2	5530	-6.61	8.79	PASS
	total	5530	-3.84	8.79	PASS
	Ant1	5610	-6.82	8.79	PASS
	Ant2	5610	-7.48	8.79	PASS
	total	5610	-4.13	8.79	PASS
	Ant1	5775	-9.29	27.79	PASS
	Ant2	5775	-10.11	27.79	PASS
	total	5775	-6.67	27.79	PASS

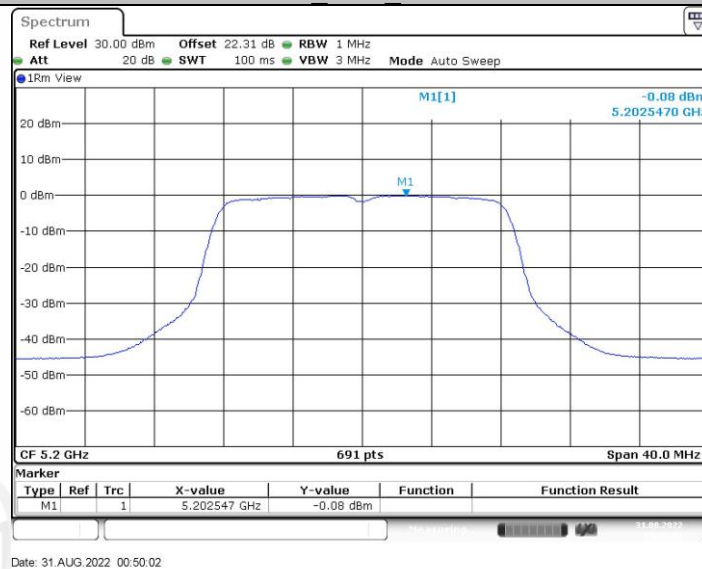
Note: The units of the Result and Limit for band 5725-5850 MHz is dBm/500kHz

6.5. Original test data

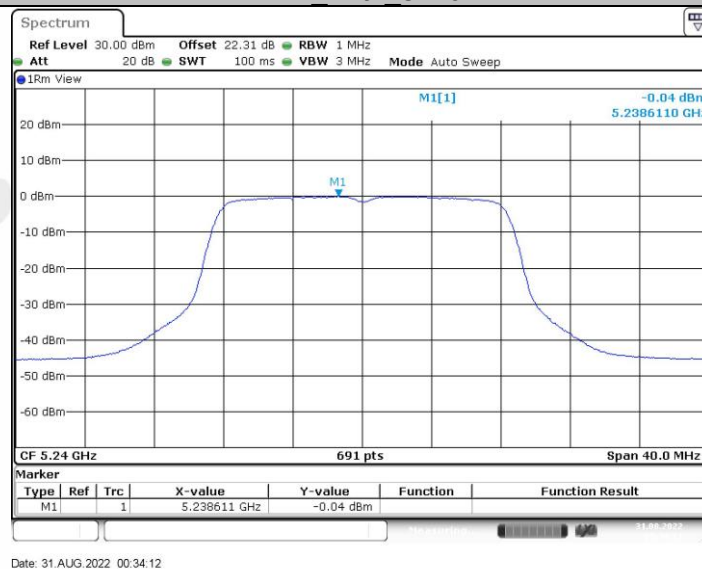




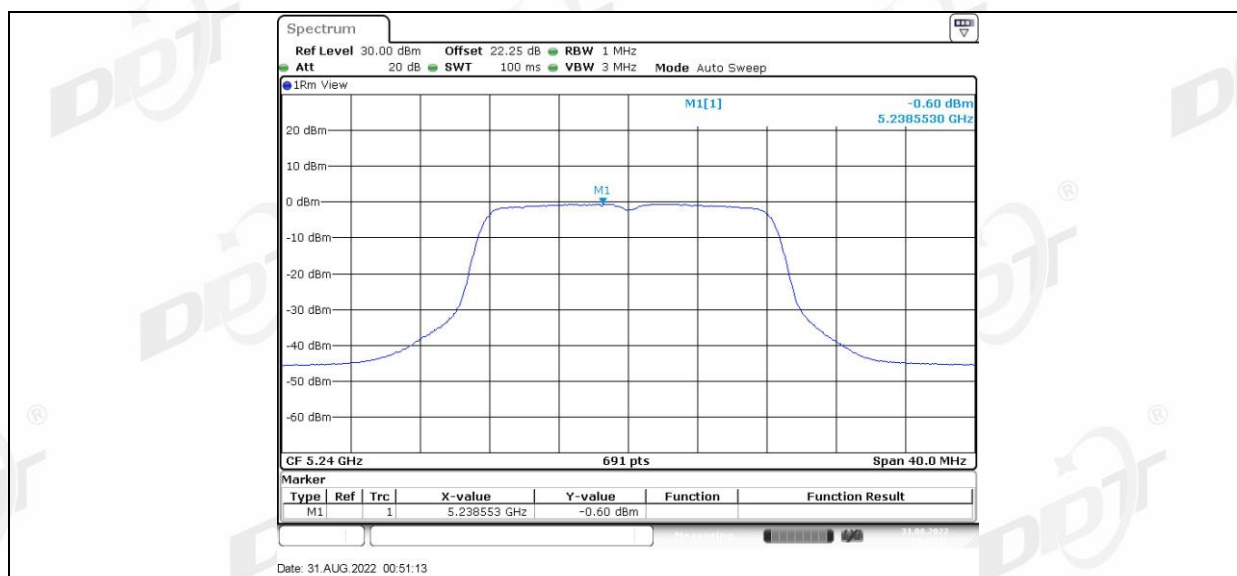
11A_Ant2_5200



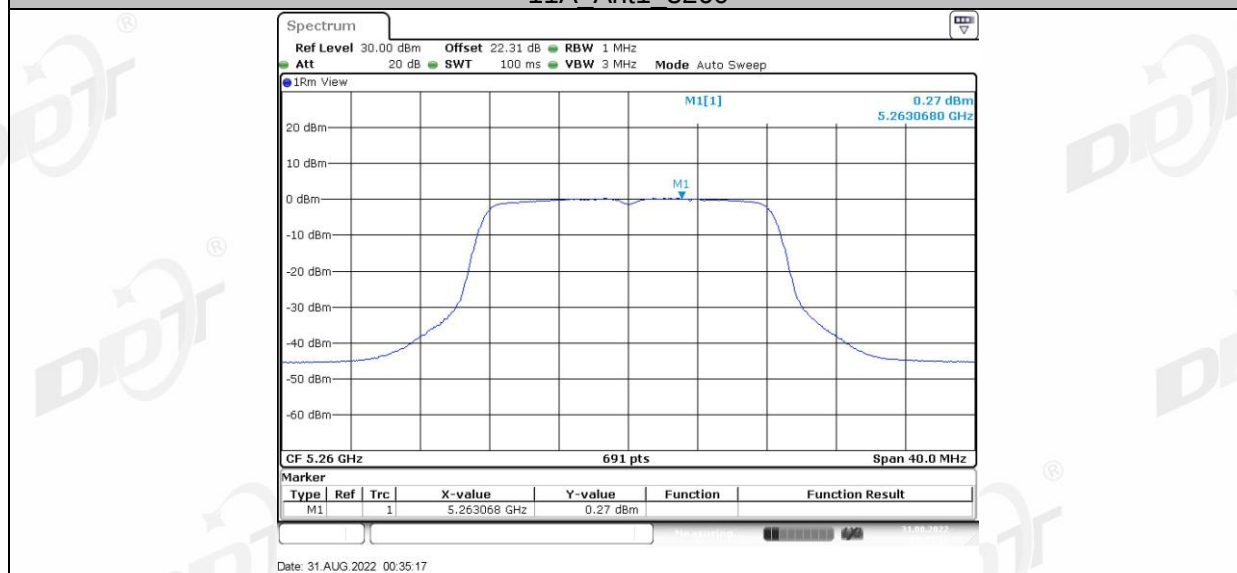
11A_Ant1_5240



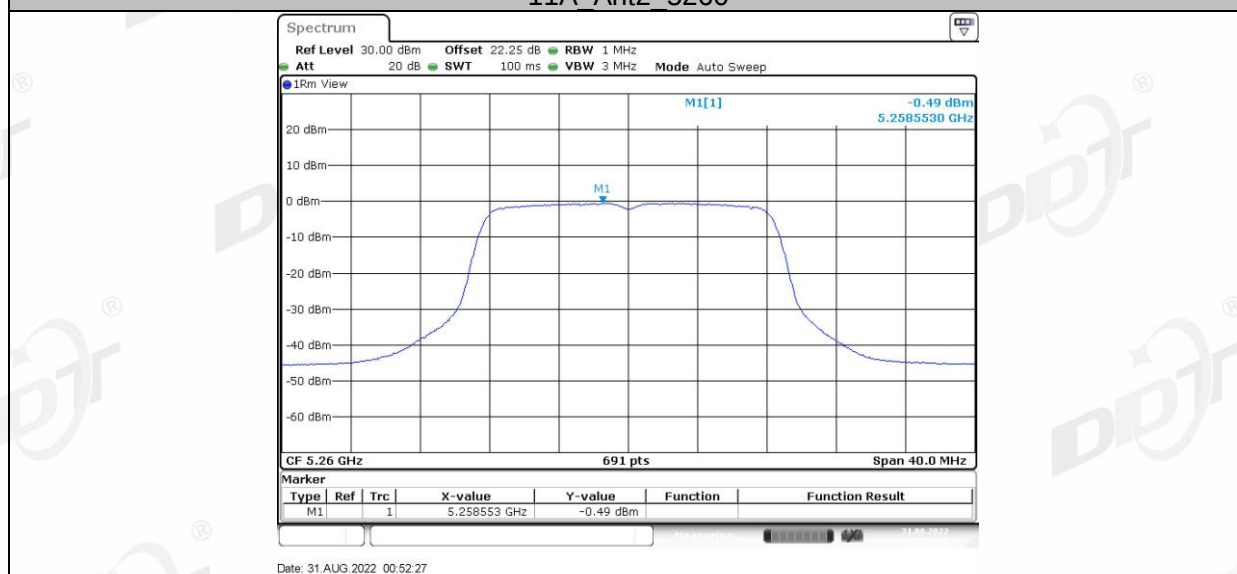
11A_Ant2_5240



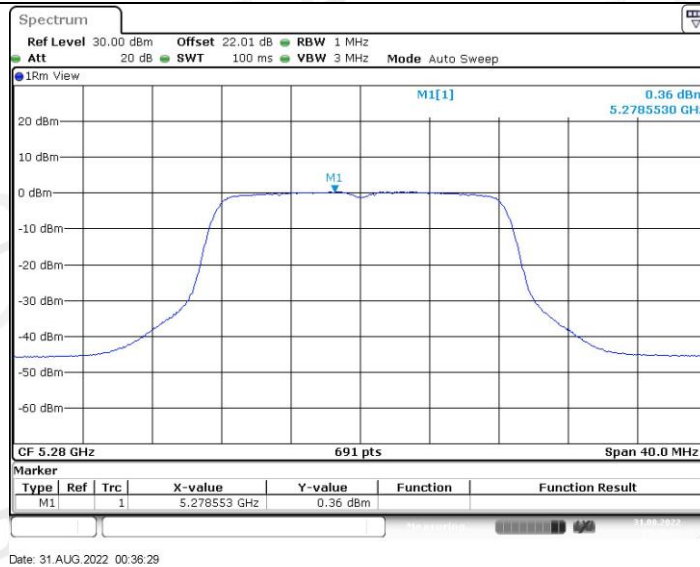
11A Ant1 5260



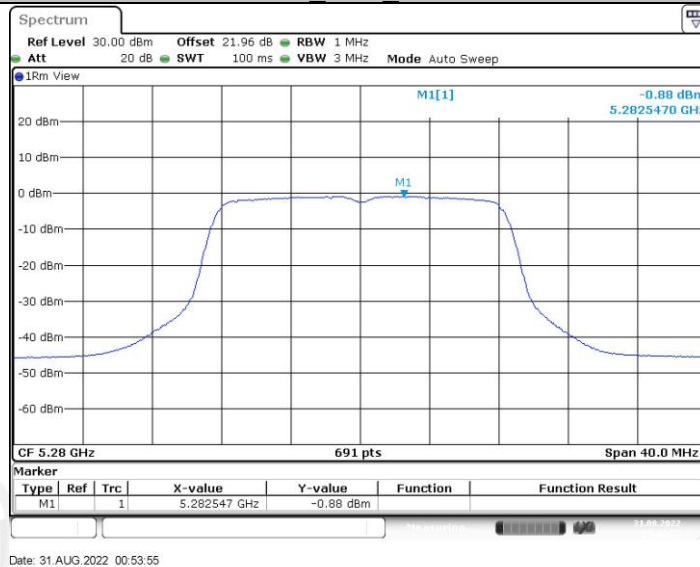
11A Ant2 5260



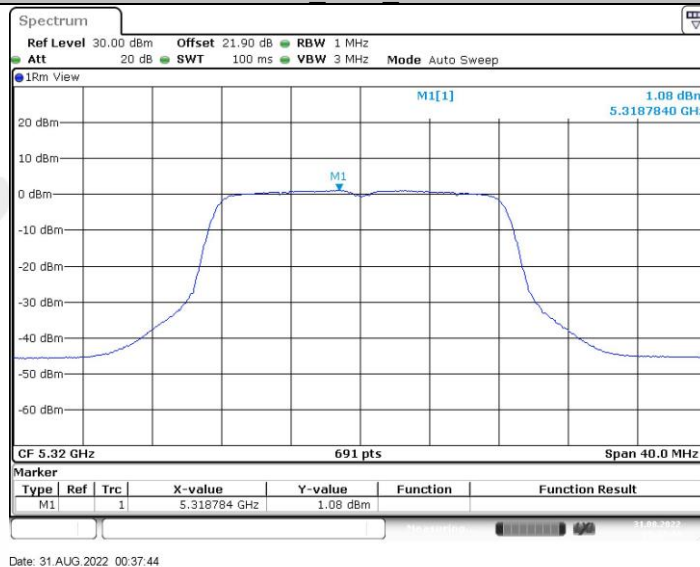
11A Ant1 5280



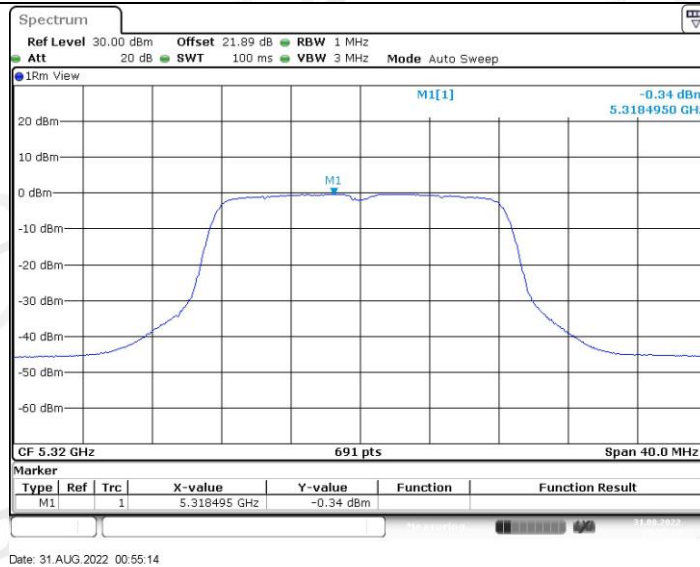
11A Ant2 5280



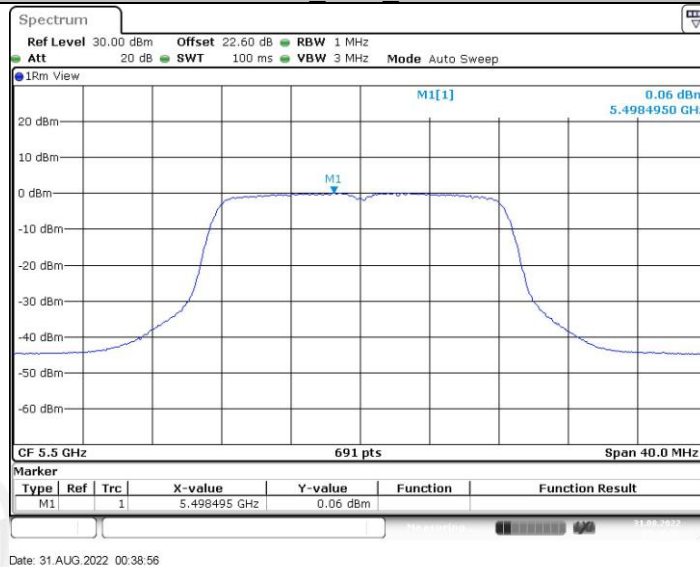
11A Ant1 5320



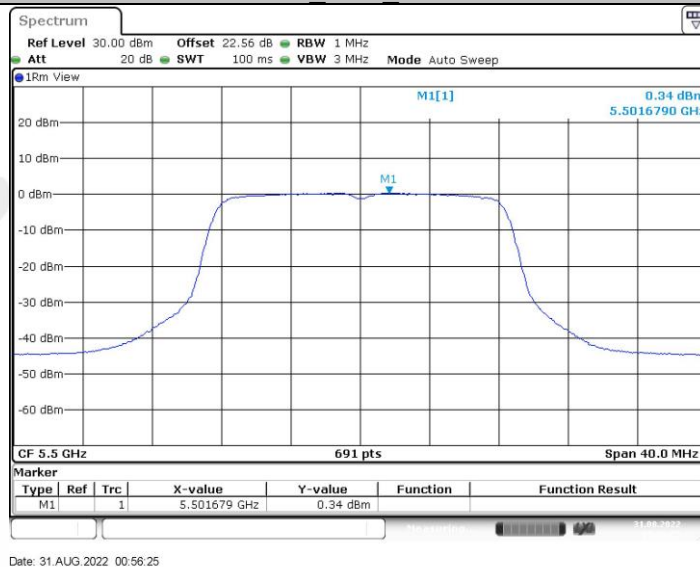
11A Ant2 5320



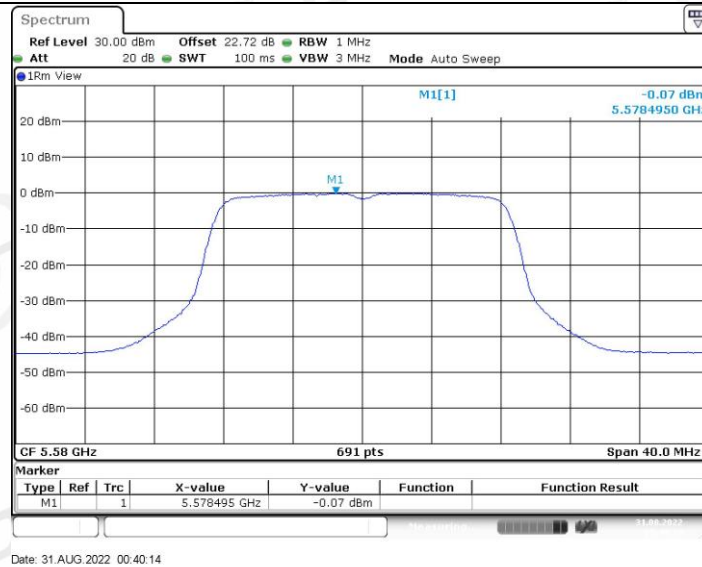
11A Ant1 5500



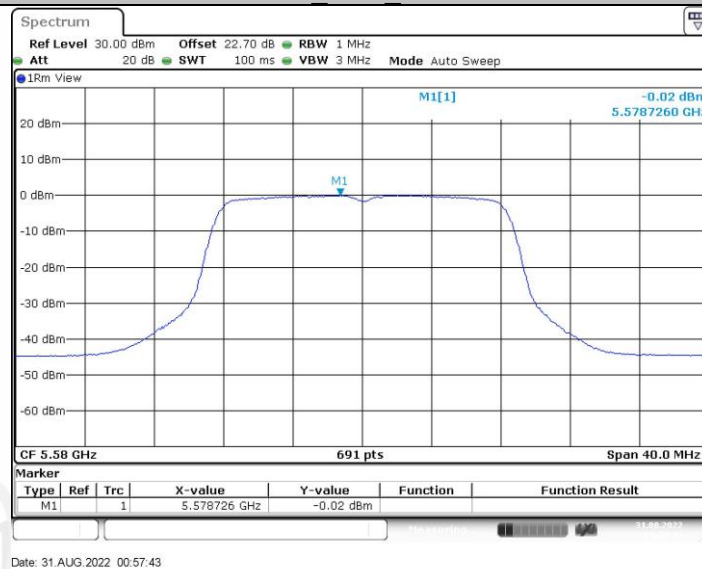
11A Ant2 5500



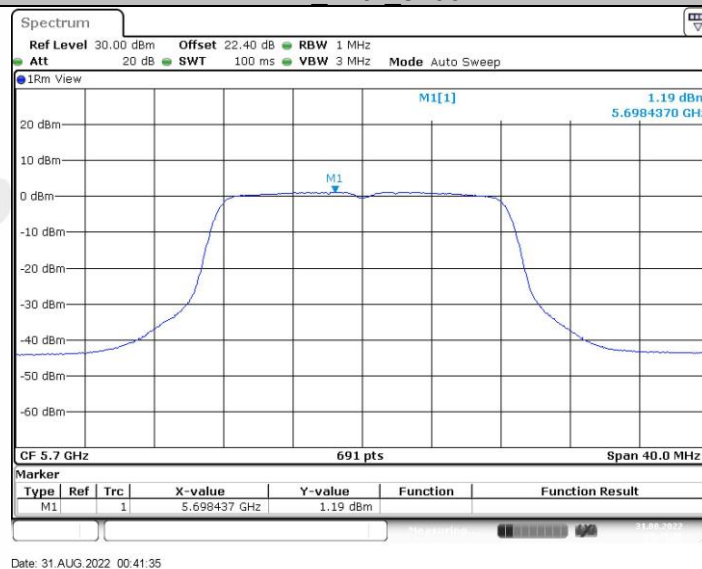
11A Ant1 5580



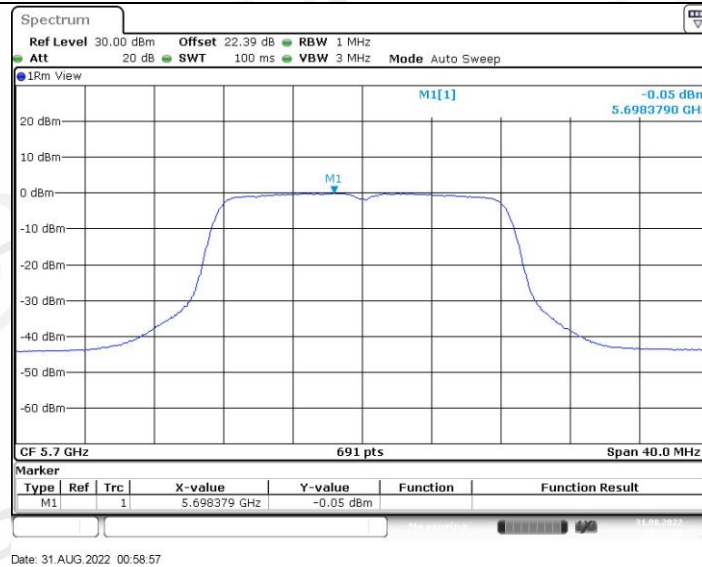
11A_Ant2_5580



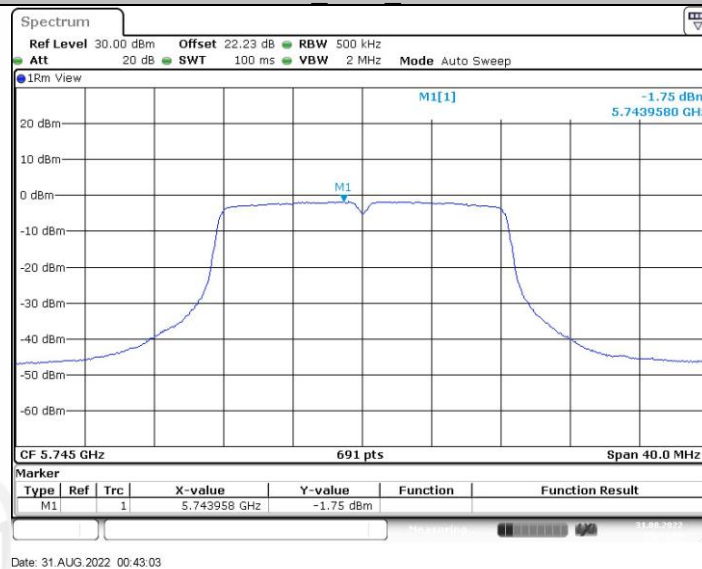
11A_Ant1_5700



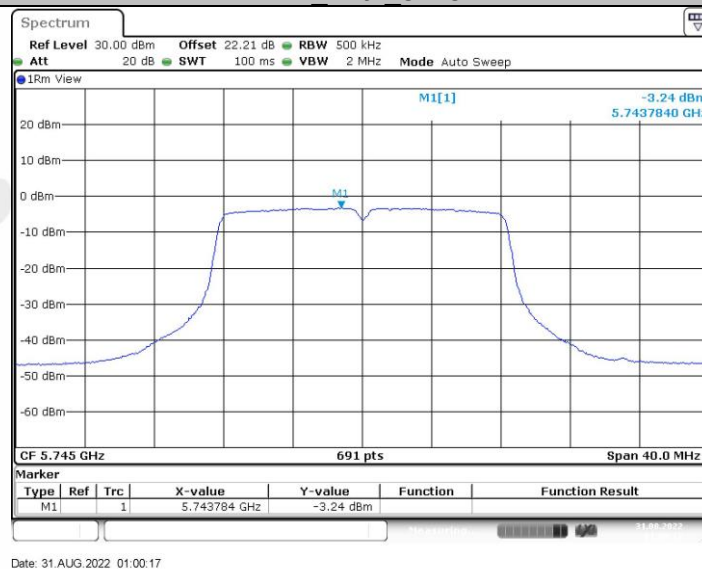
11A_Ant2_5700



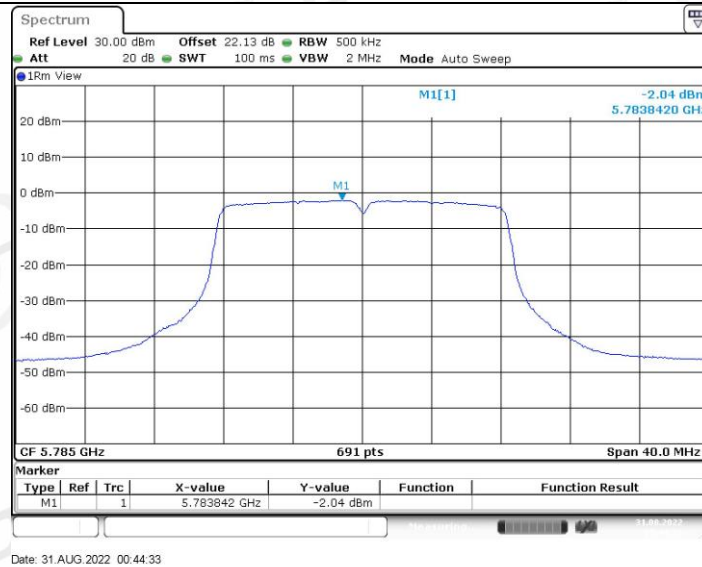
11A Ant1 5745



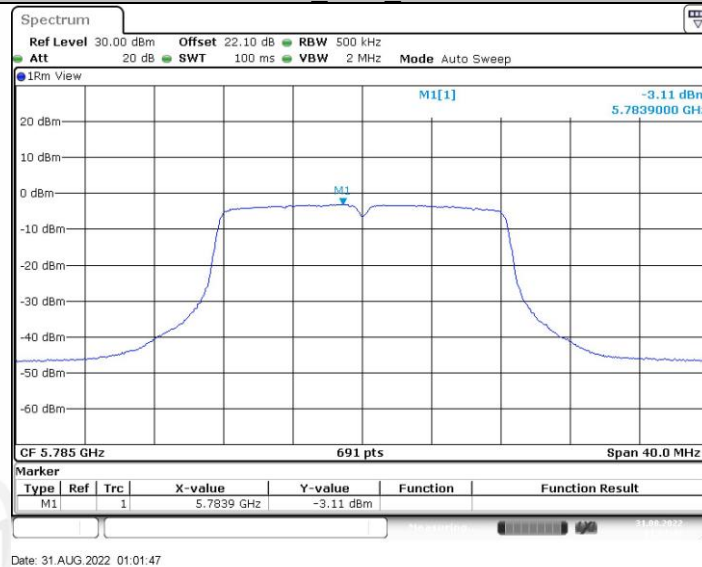
11A Ant2 5745



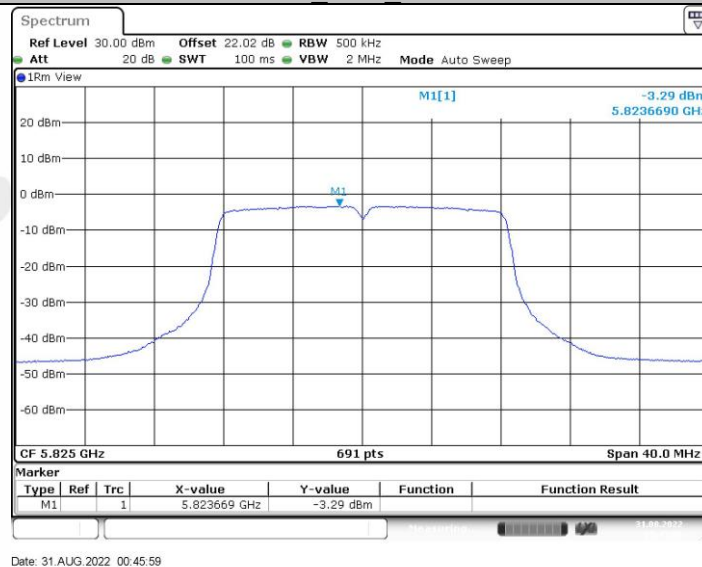
11A Ant1 5785



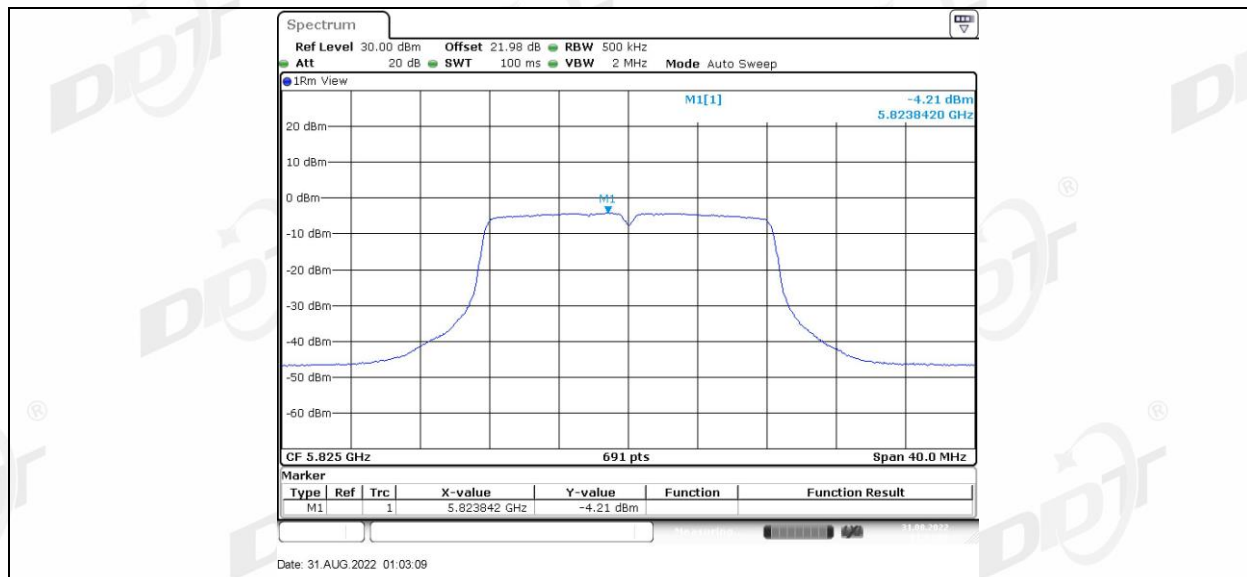
11A_Ant2_5785



11A_Ant1_5825



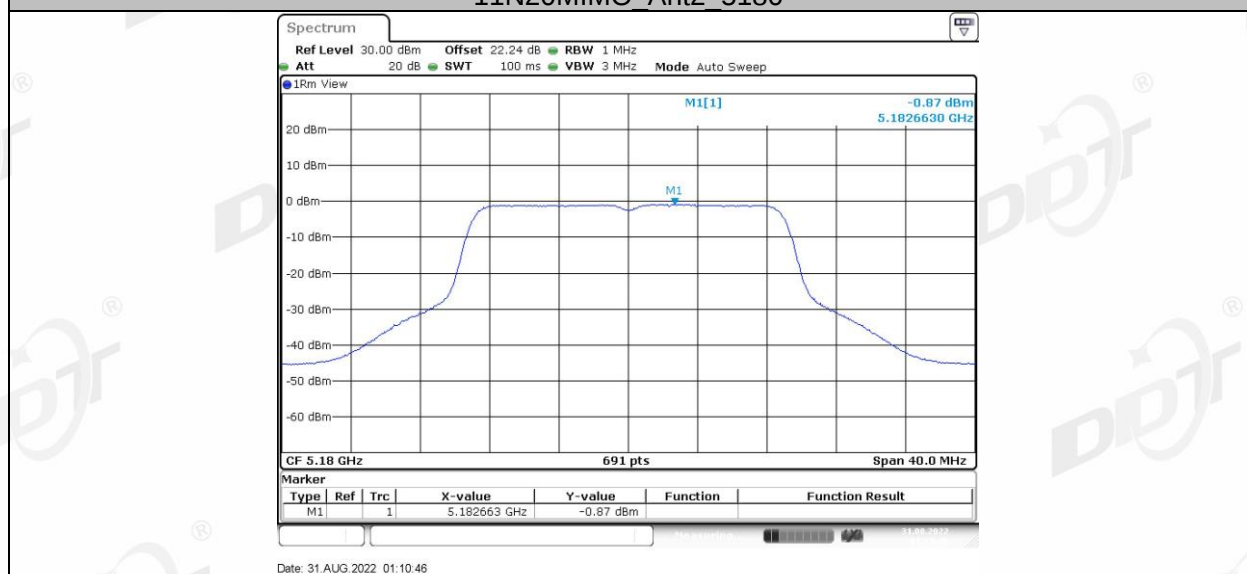
11A_Ant2_5825



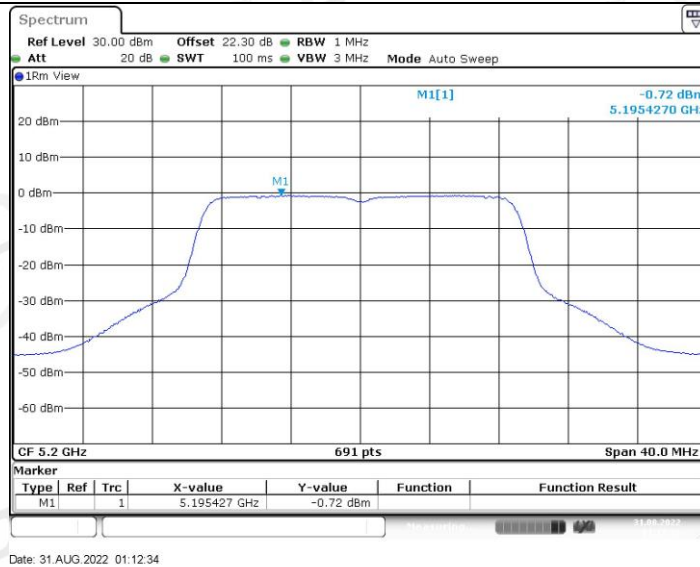
11N20MIMO_Ant1_5180



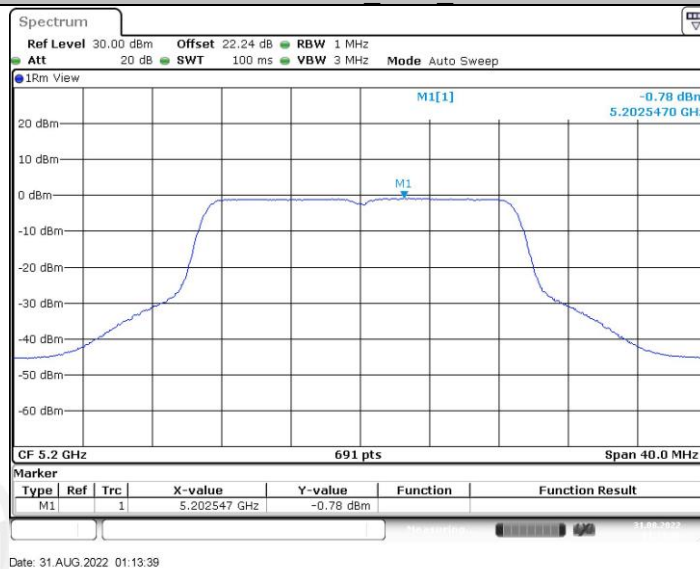
11N20MIMO_Ant2_5180



11N20MIMO_Ant1_5200



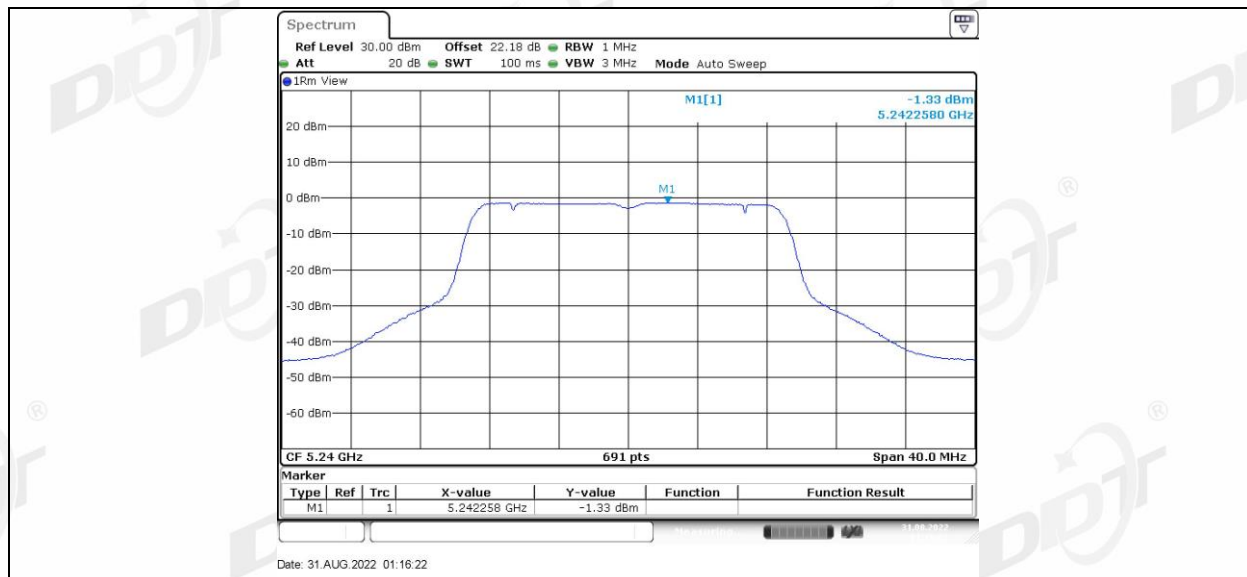
11N20MIMO_Ant2_5200



11N20MIMO_Ant1_5240



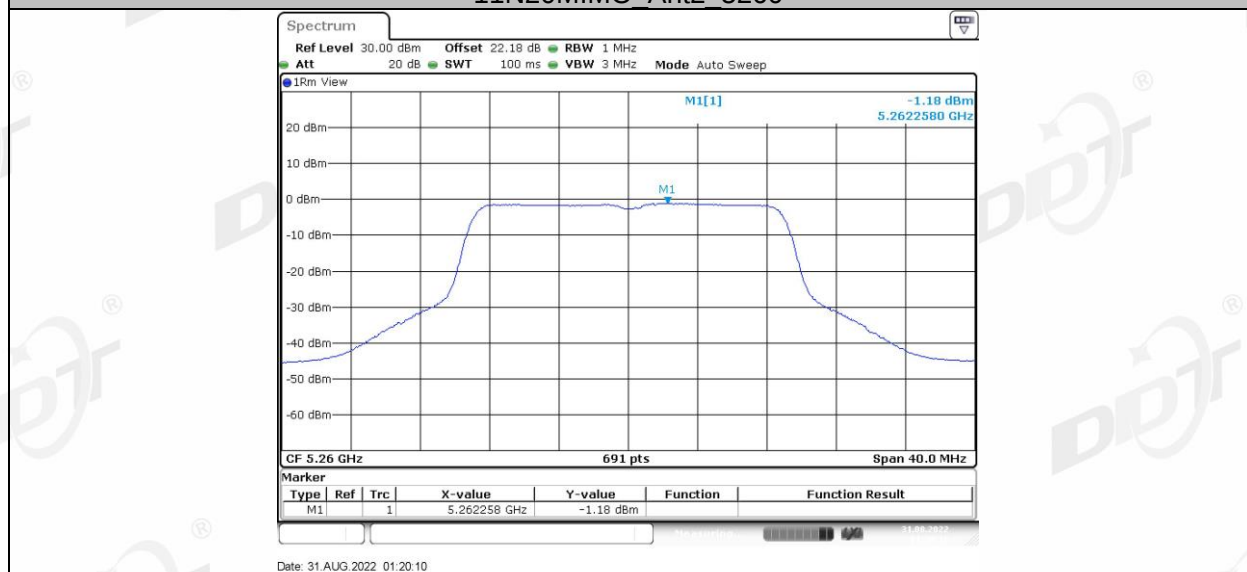
11N20MIMO_Ant2_5240



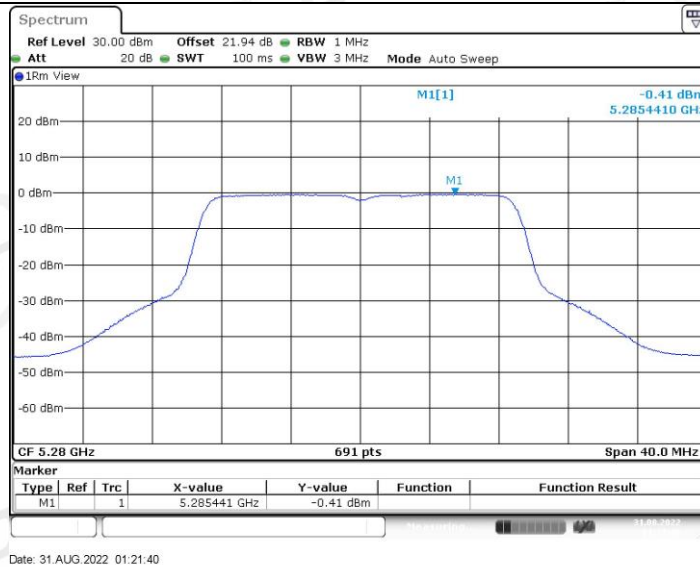
11N20MIMO_Ant1_5260



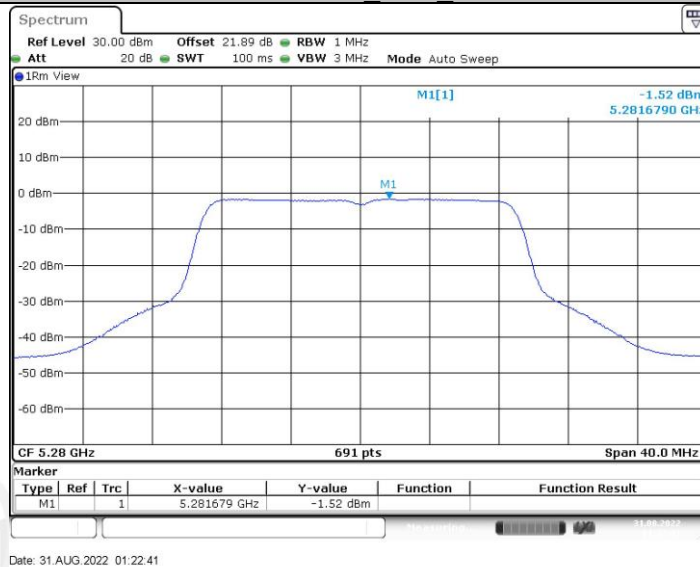
11N20MIMO_Ant2_5260



11N20MIMO_Ant1_5280



11N20MIMO Ant2 5280



11N20MIMO Ant1 5320



11N20MIMO Ant2 5320