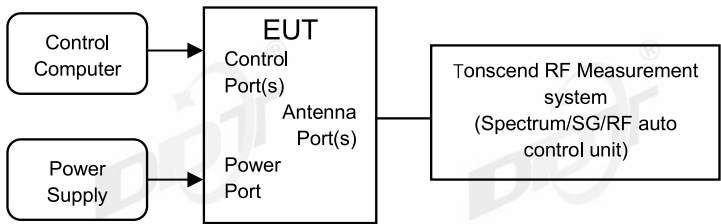


5. 6dB Bandwidth

5.1. Block diagram of test setup



5.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
6 dB Bandwidth	Minimum 500 kHz	5725 - 5850

5.3. Test procedure

Connect EUT's antenna output to spectrum analyzer by RF cable.

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth: RBW=100 kHz For 26 dB Bandwidth: approximately 1% of the emission bandwidth.
VBW	For 6 dB Bandwidth: VBW=300 kHz For 26 dB Bandwidth: >3 RBW
Trace	Max hold
Sweep	Auto couple

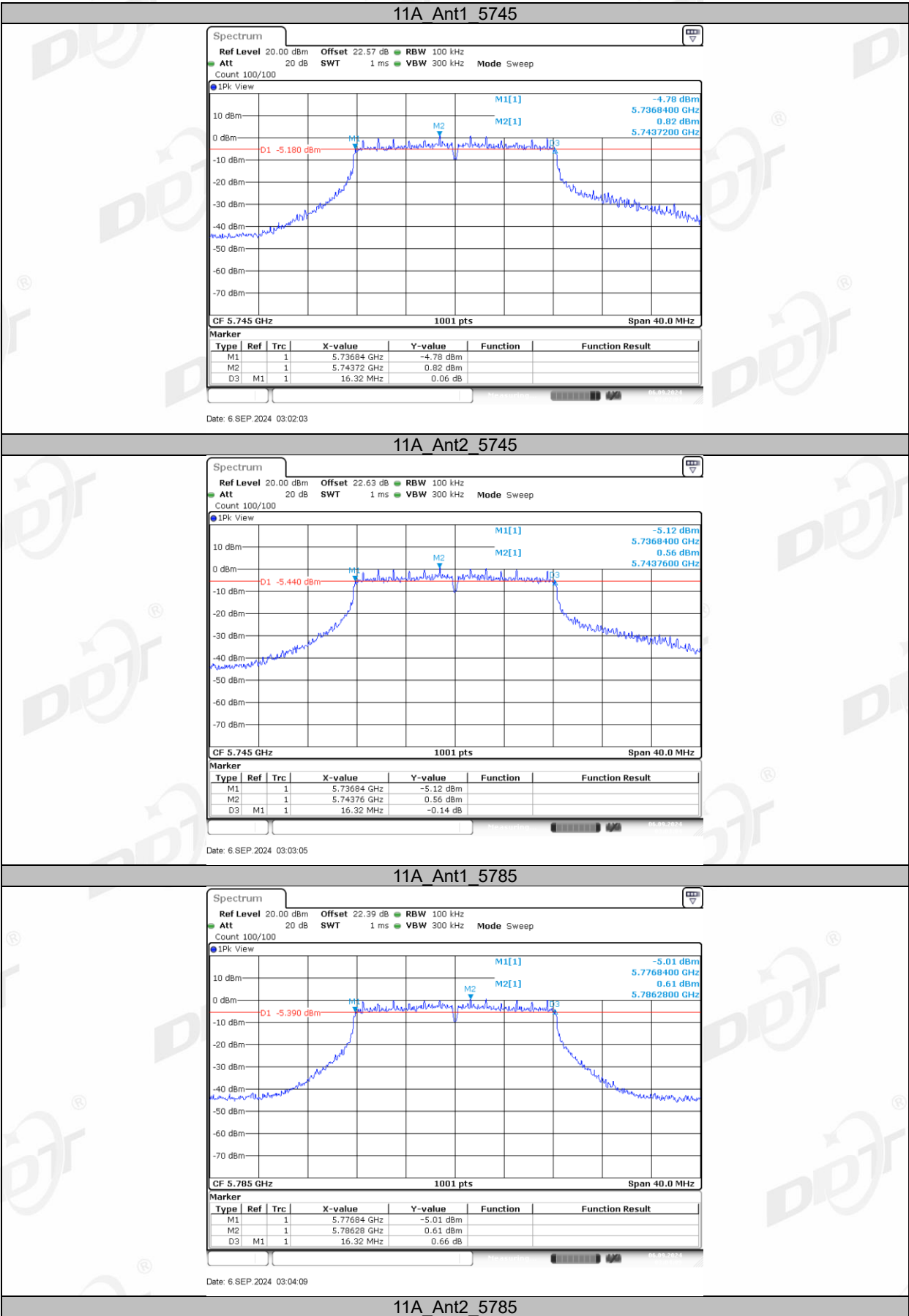
Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.4. Test result B4

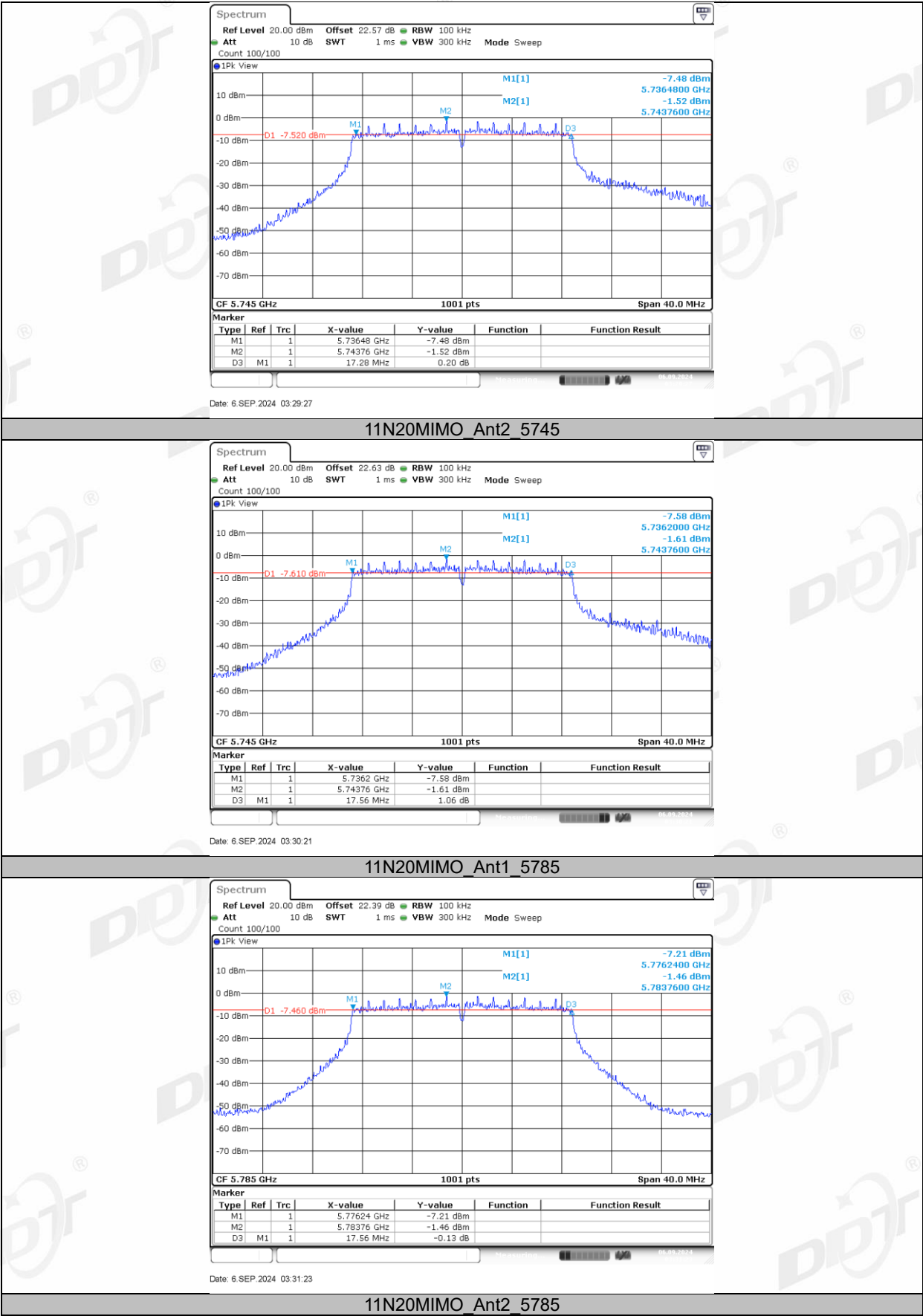
Test Engineer:	Haofeng	Test Site:	RF Measurement System 3#
Ambient Condition:	26.5℃,43.5%RH	Test Date:	2024.09.04-2024.09.06
Test Power Supply:	AC120V/60Hz	Sample Number:	S24072915-002

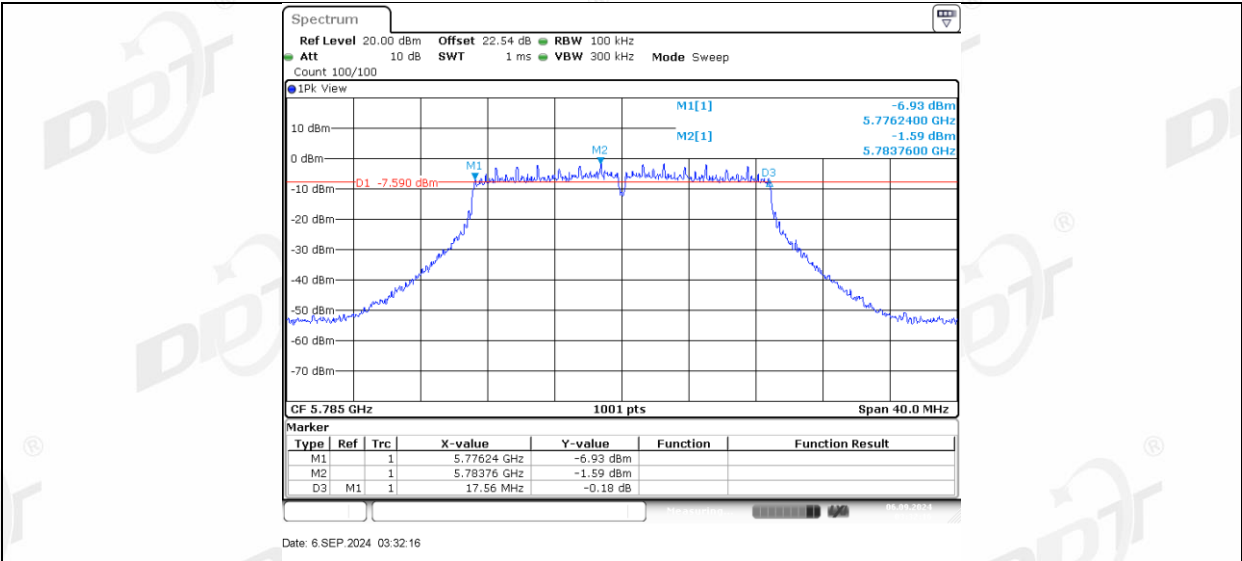
Test Mode	Antenna	Frequenc y[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.32	5736.84	5753.16	0.5	PASS
	Ant2	5745	16.32	5736.84	5753.16	0.5	PASS
	Ant1	5785	16.32	5776.84	5793.16	0.5	PASS
	Ant2	5785	16.32	5776.84	5793.16	0.5	PASS
	Ant1	5825	16.32	5816.84	5833.16	0.5	PASS
	Ant2	5825	16.32	5816.84	5833.16	0.5	PASS
11N20MIM O	Ant1	5745	17.28	5736.48	5753.76	0.5	PASS
	Ant2	5745	17.56	5736.20	5753.76	0.5	PASS
	Ant1	5785	17.56	5776.24	5793.80	0.5	PASS
	Ant2	5785	17.56	5776.24	5793.80	0.5	PASS
	Ant1	5825	17.52	5816.24	5833.76	0.5	PASS
	Ant2	5825	17.60	5816.20	5833.80	0.5	PASS
11N40MIM O	Ant1	5755	35.12	5737.48	5772.60	0.5	PASS
	Ant2	5755	35.04	5737.48	5772.52	0.5	PASS
	Ant1	5795	35.12	5777.48	5812.60	0.5	PASS
	Ant2	5795	35.12	5777.48	5812.60	0.5	PASS
11AC20MI MO	Ant1	5745	17.28	5736.48	5753.76	0.5	PASS
	Ant2	5745	17.56	5736.24	5753.80	0.5	PASS
	Ant1	5785	17.56	5776.24	5793.80	0.5	PASS
	Ant2	5785	17.60	5776.20	5793.80	0.5	PASS
	Ant1	5825	17.28	5816.48	5833.76	0.5	PASS
	Ant2	5825	17.60	5816.20	5833.80	0.5	PASS
11AC40MI MO	Ant1	5755	35.12	5737.48	5772.60	0.5	PASS
	Ant2	5755	35.04	5737.48	5772.52	0.5	PASS
	Ant1	5795	35.12	5777.48	5812.60	0.5	PASS
	Ant2	5795	35.12	5777.48	5812.60	0.5	PASS
11AC80MI MO	Ant1	5775	75.20	5737.40	5812.60	0.5	PASS
	Ant2	5775	75.20	5737.40	5812.60	0.5	PASS
11AX20MI MO	Ant1	5745	18.84	5735.60	5754.44	0.5	PASS
	Ant2	5745	18.40	5735.64	5754.04	0.5	PASS
	Ant1	5785	18.36	5775.84	5794.20	0.5	PASS
	Ant2	5785	18.60	5775.80	5794.40	0.5	PASS
	Ant1	5825	18.88	5815.56	5834.44	0.5	PASS
	Ant2	5825	18.80	5815.64	5834.44	0.5	PASS
11AX40MI MO	Ant1	5755	35.36	5737.48	5772.84	0.5	PASS
	Ant2	5755	35.04	5737.48	5772.52	0.5	PASS
	Ant1	5795	36.80	5776.60	5813.40	0.5	PASS
	Ant2	5795	35.52	5777.08	5812.60	0.5	PASS
11AX80MI MO	Ant1	5775	75.68	5737.40	5813.08	0.5	PASS
	Ant2	5775	75.20	5737.40	5812.60	0.5	PASS

5.5. Test graphs B4

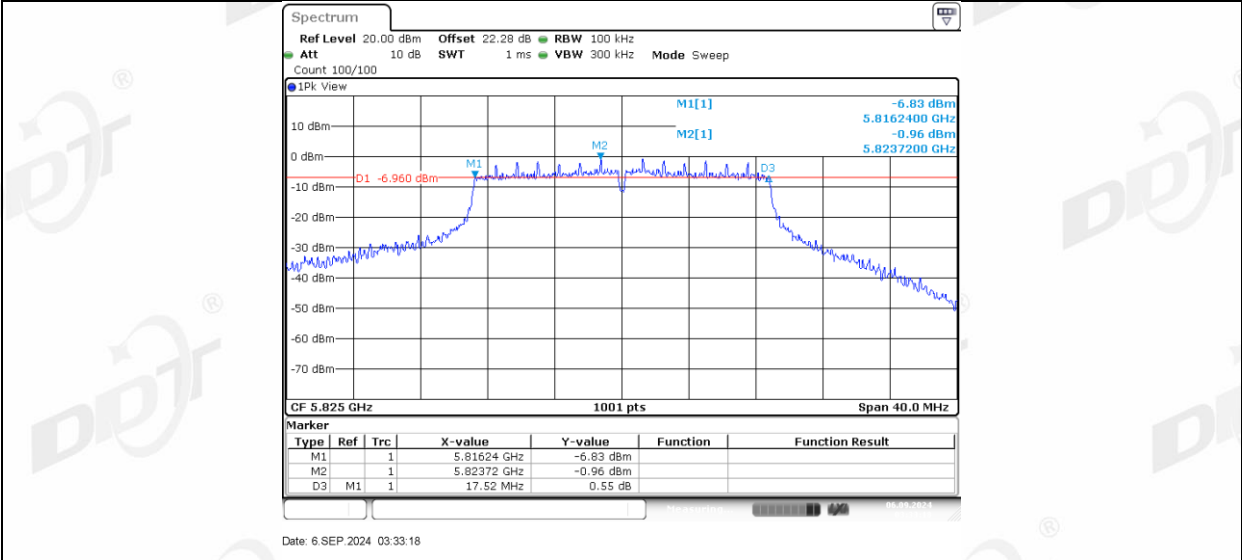




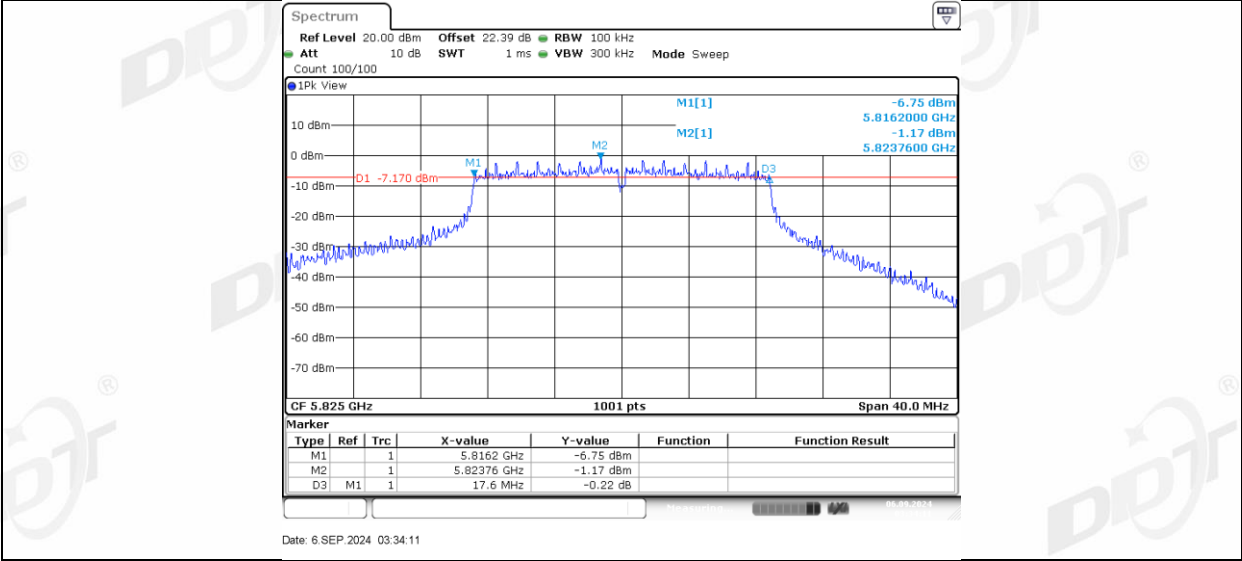




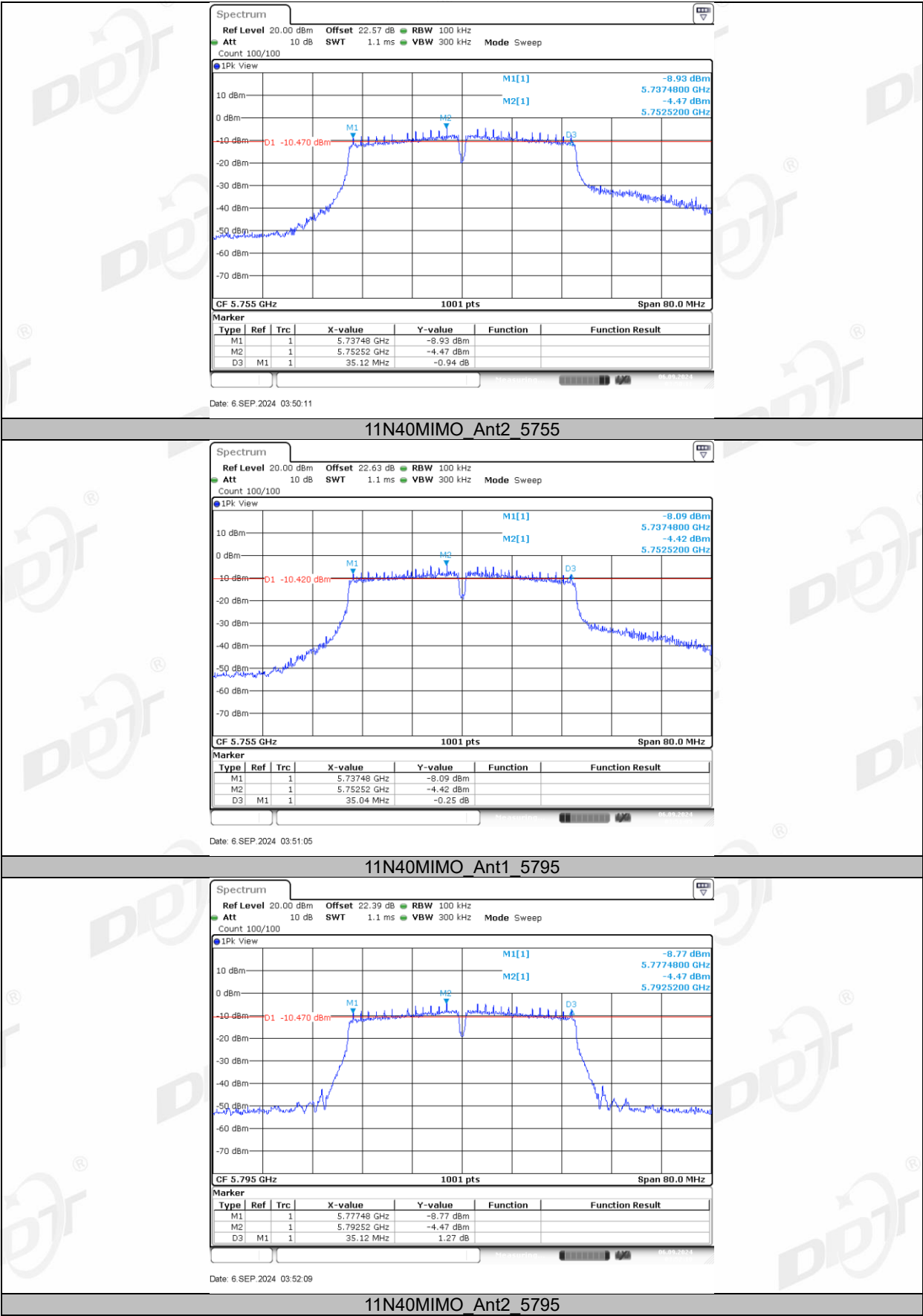
11N20MIMO_Ant1_5825

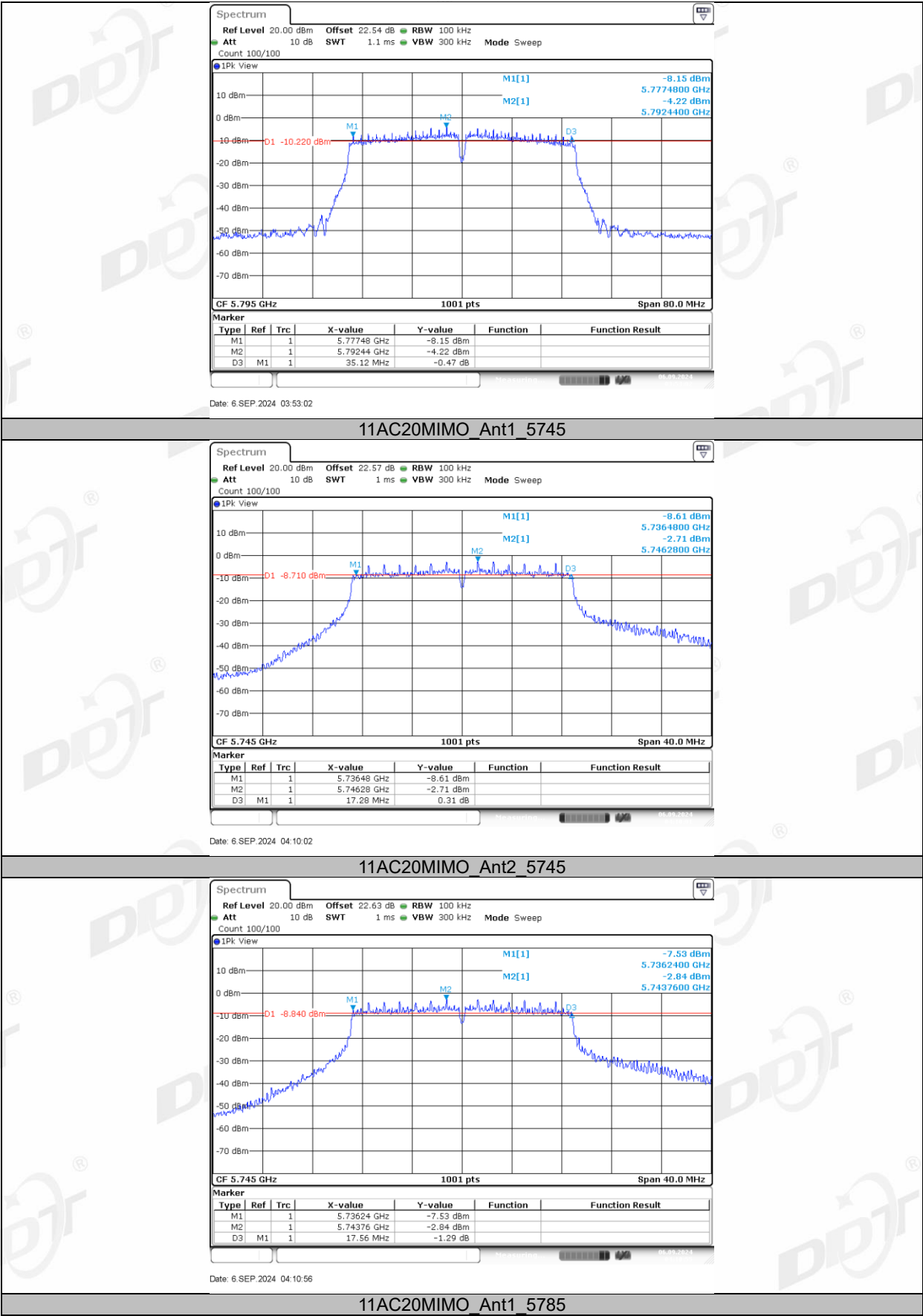


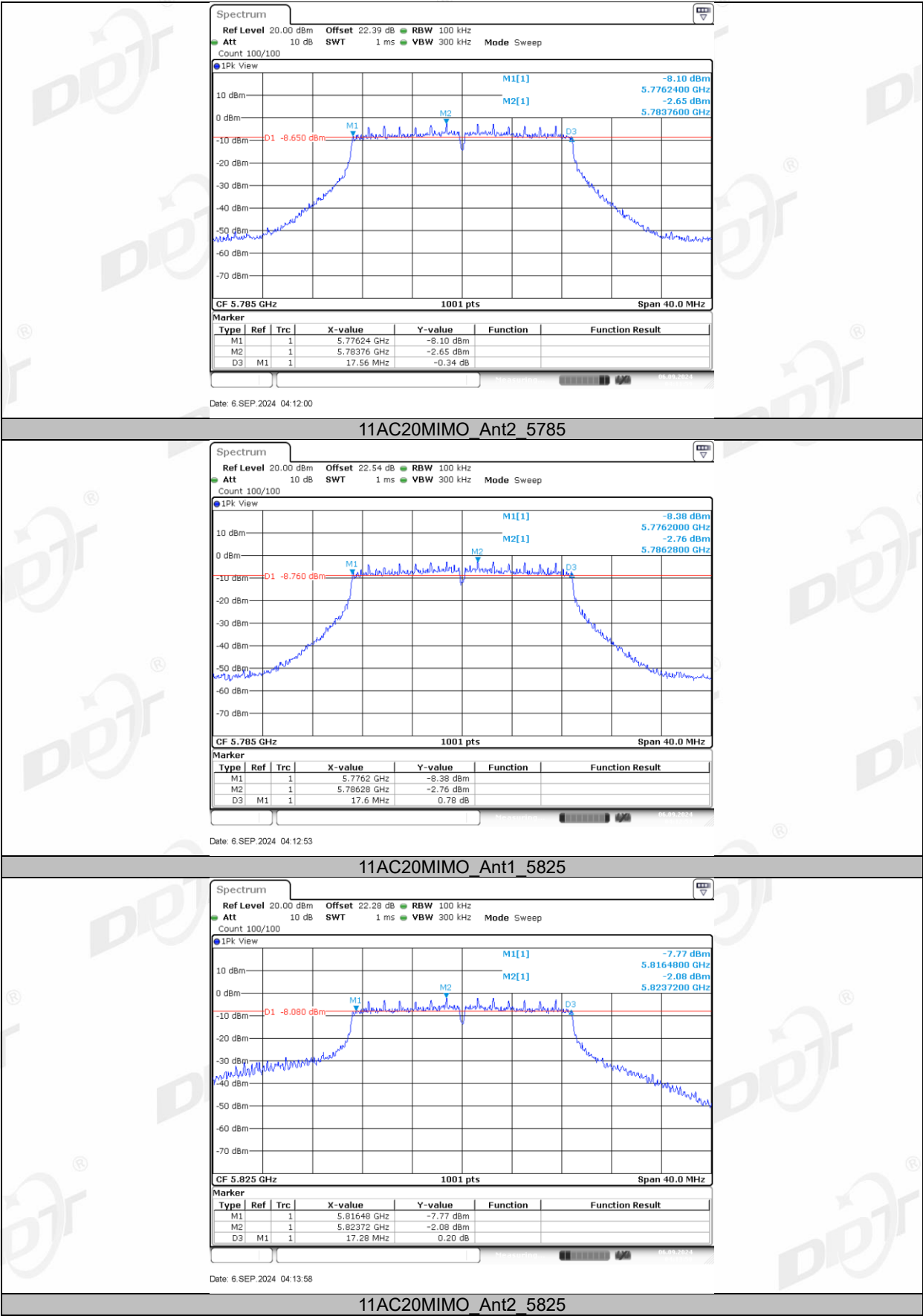
11N20MIMO_Ant2_5825

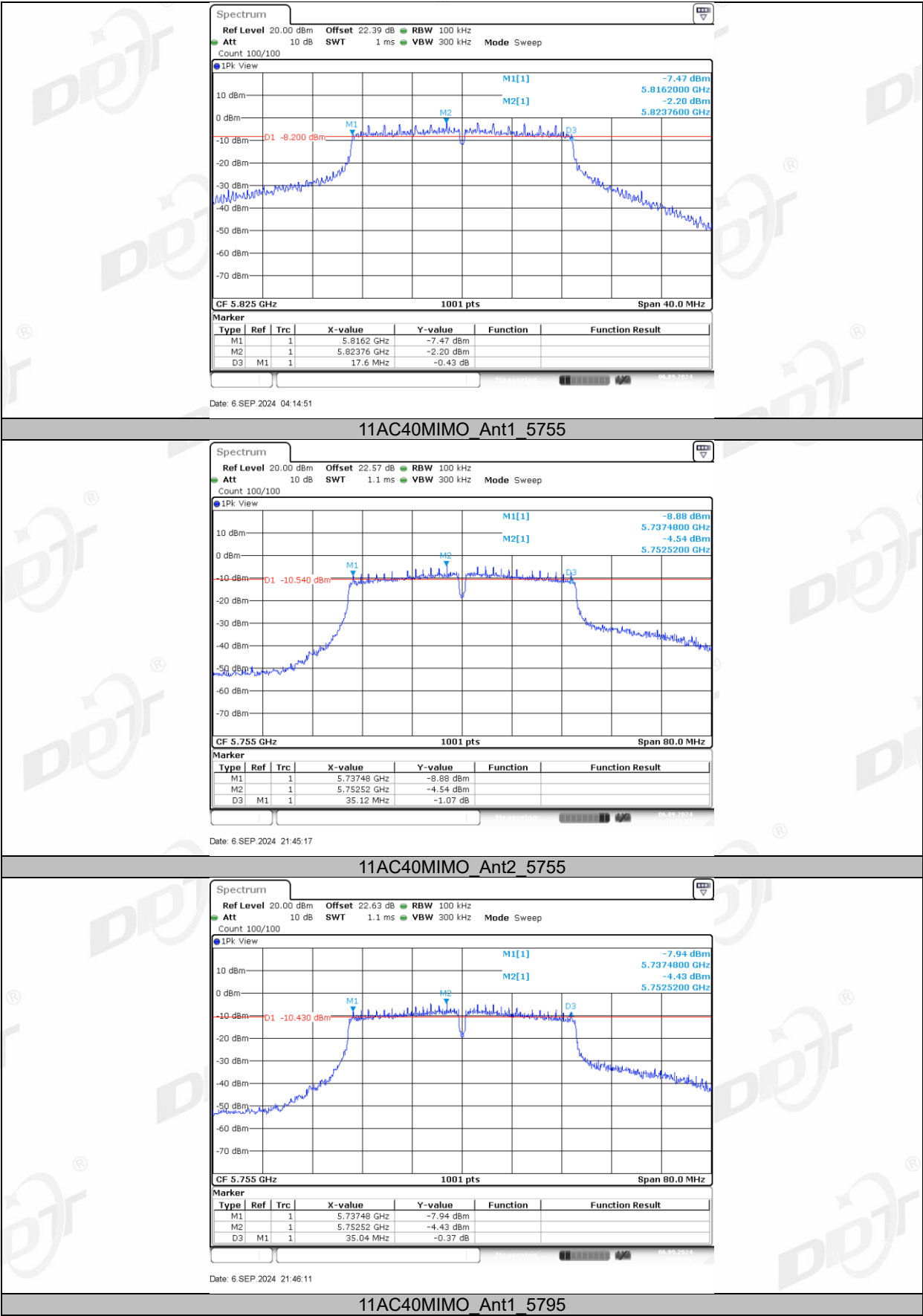


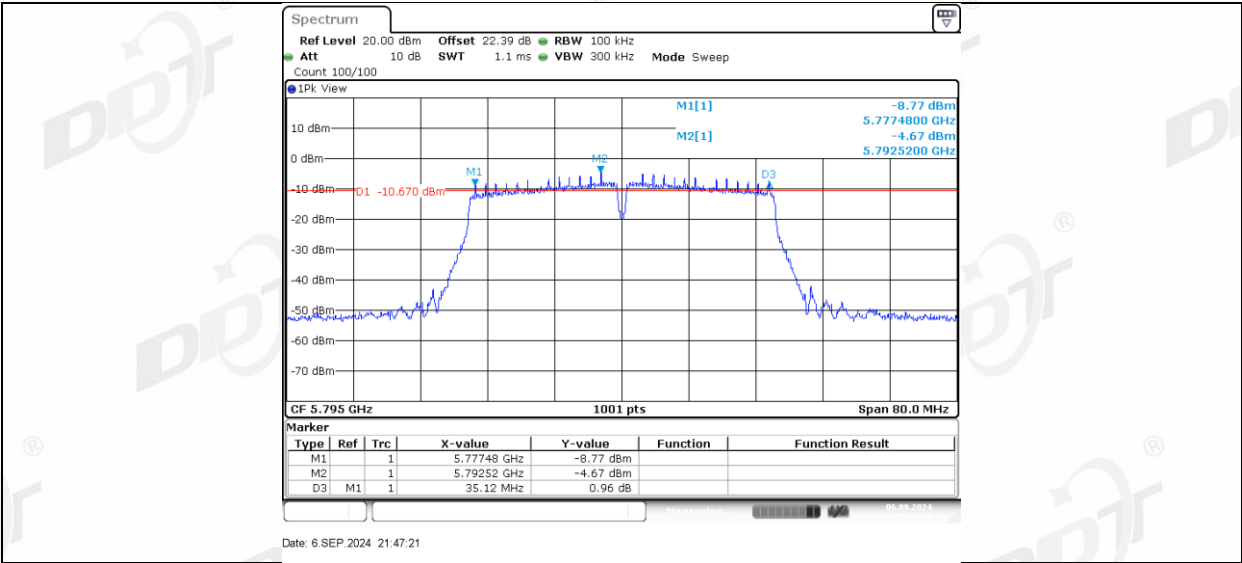
11N40MIMO_Ant1_5755



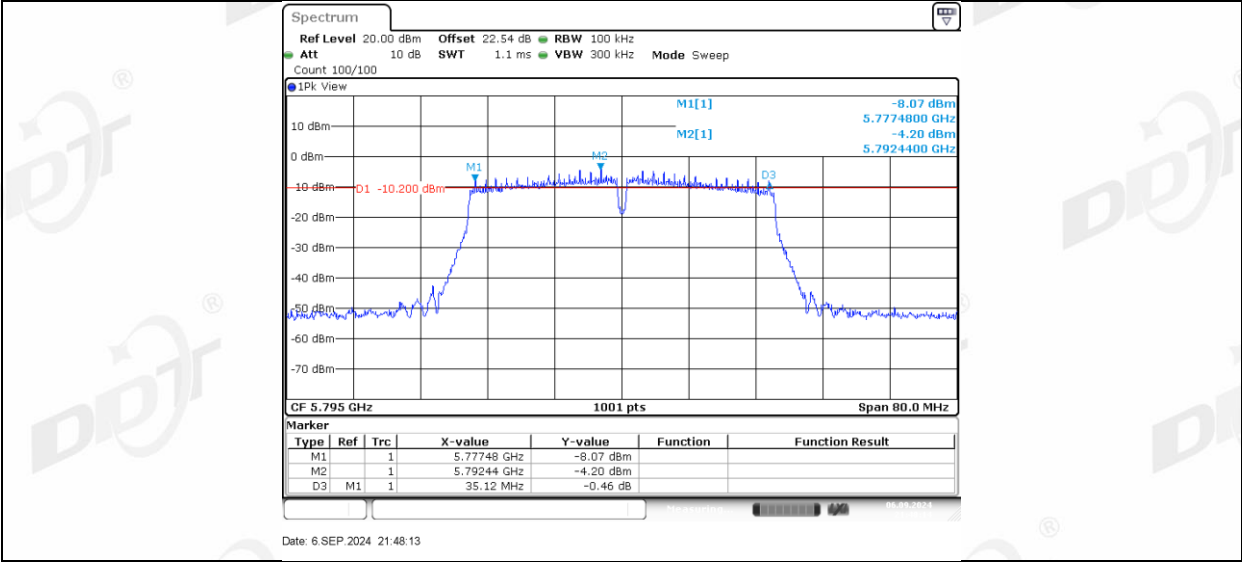




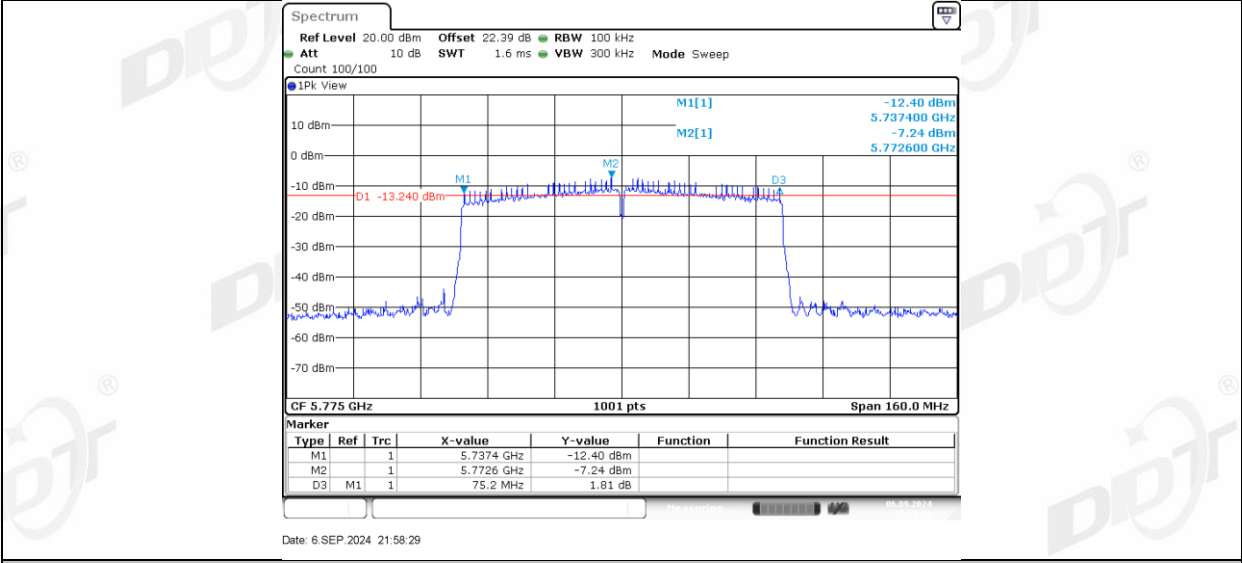




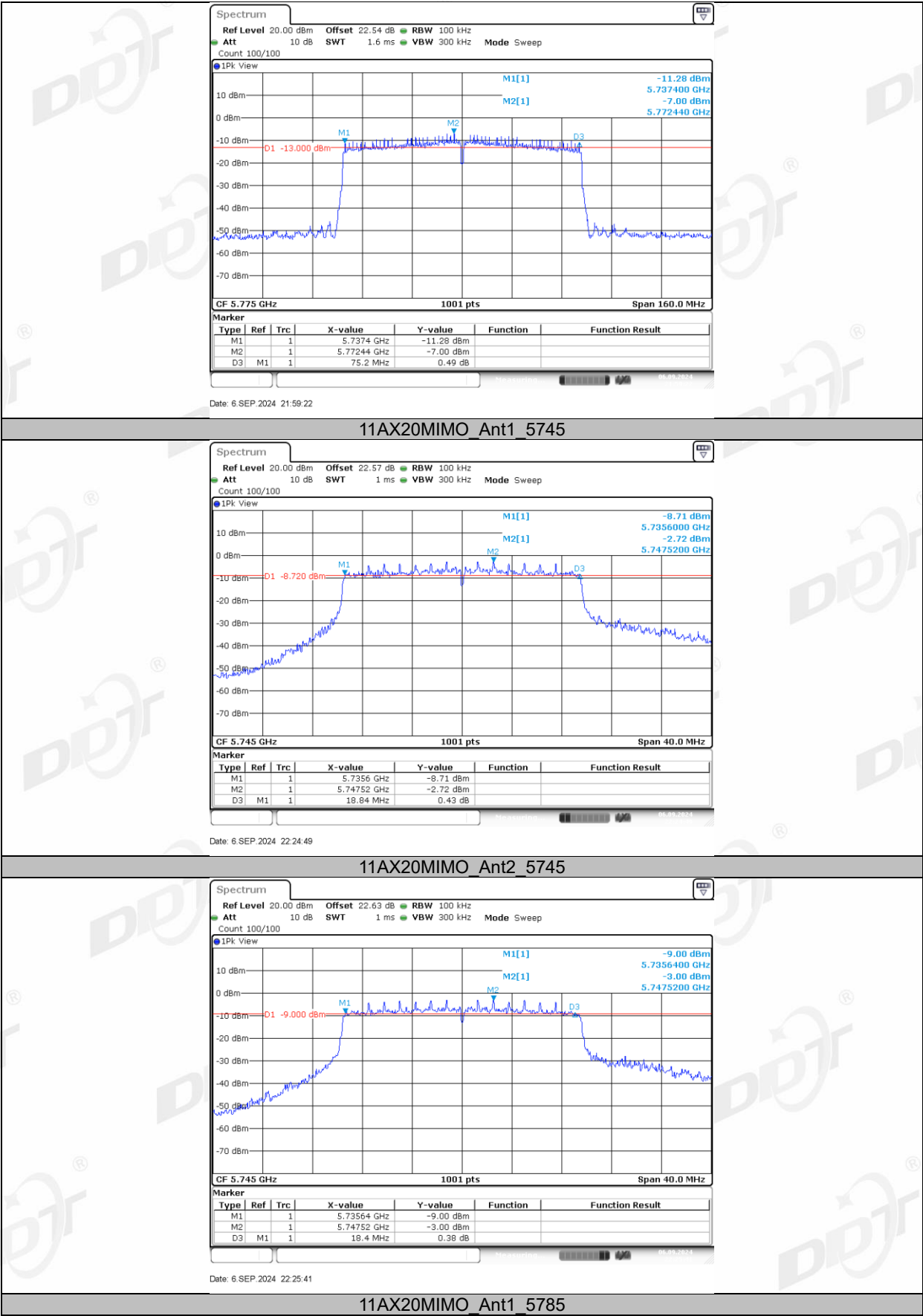
11AC40MIMO_Ant2_5795



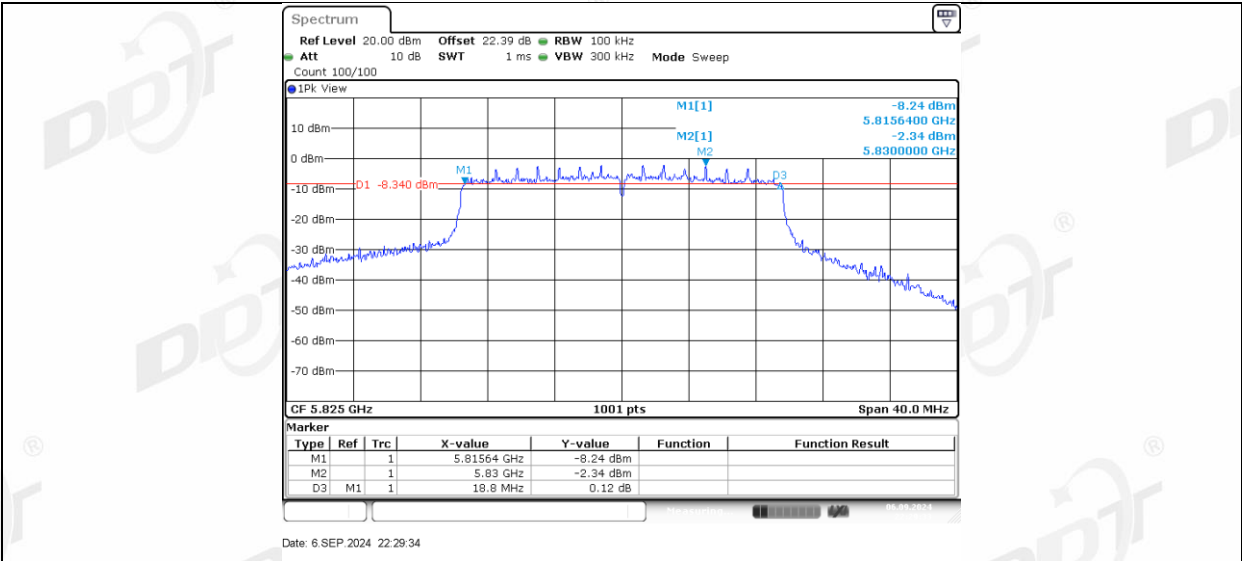
11AC80MIMO_Ant1_5775



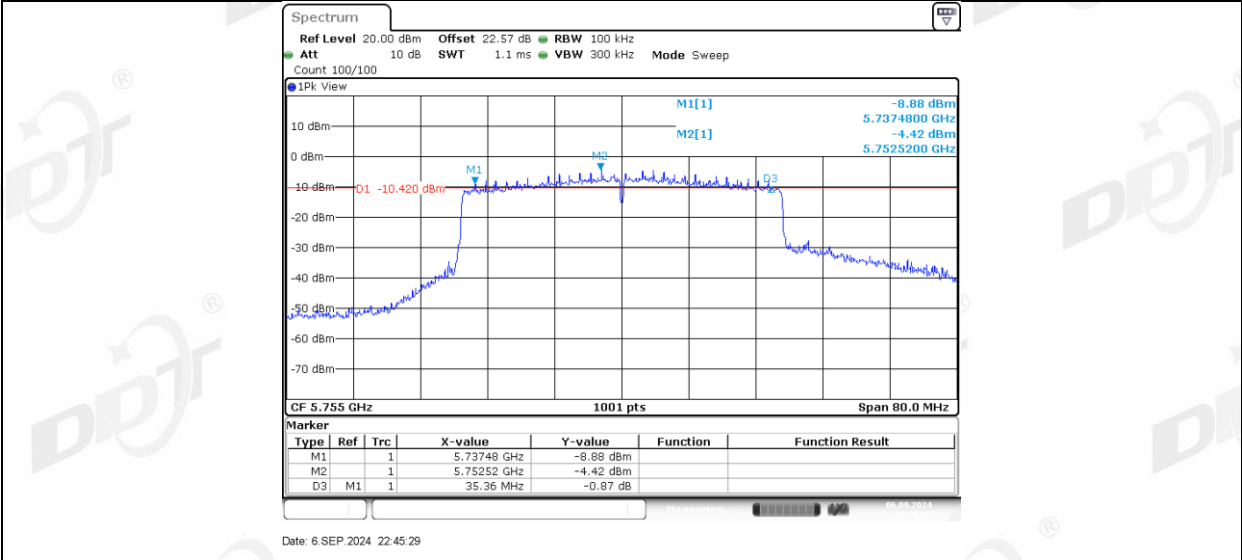
11AC80MIMO_Ant2_5775



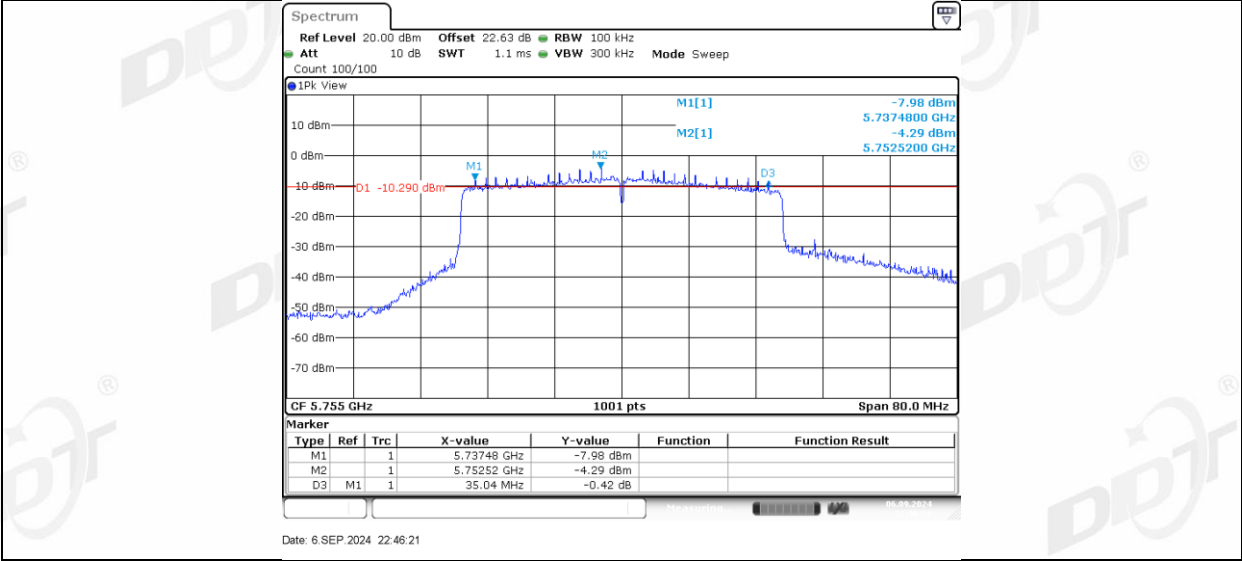




11AX40MIMO_Ant1_5755

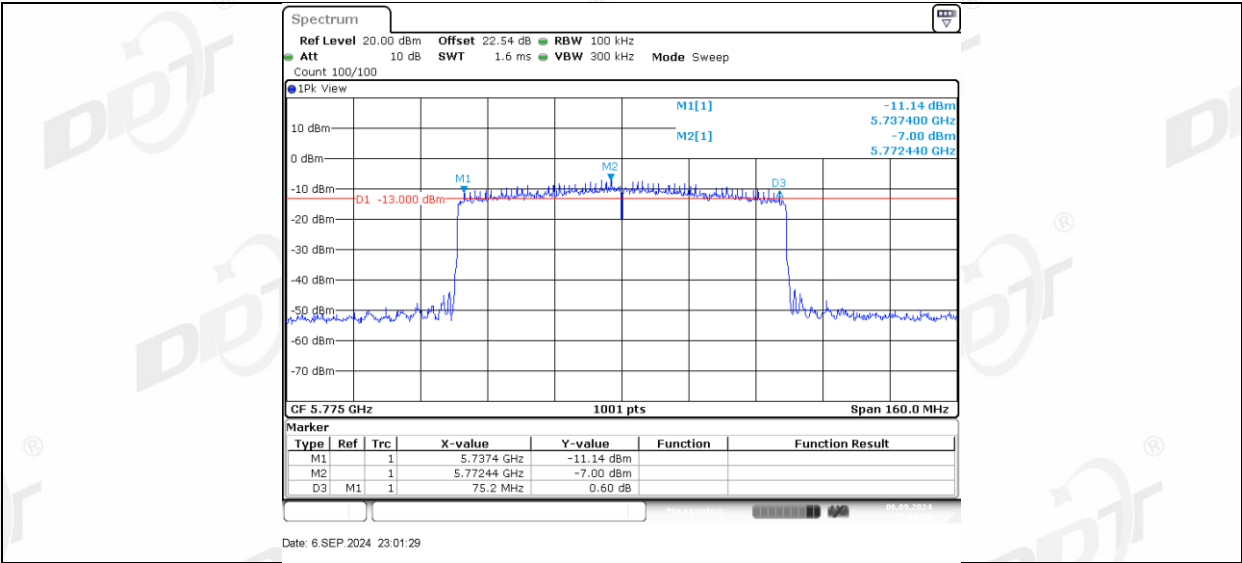


11AX40MIMO_Ant2_5755



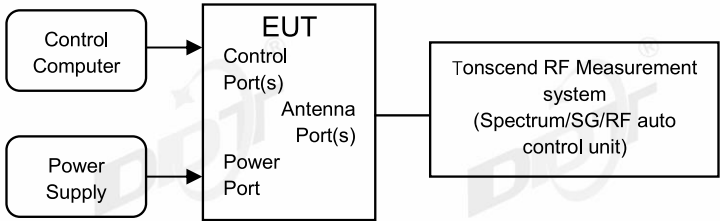
11AX40MIMO_Ant1_5795





6. 99% Bandwidth

6.1. Block diagram of test setup



6.2. Limits

Just for Report.

6.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	1% to 5% of the OBW
VBW	approximately three times the RBW
Trace	Max hold

Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

6.4. Test result

Test Engineer:	Haofeng	Test Site:	RF Measurement System 3#
Ambient Condition:	26.5℃,43.5%RH	Test Date:	2024.09.04-2024.09.06
Test Power Supply:	AC120V/60Hz	Sample Number:	S24072915-002

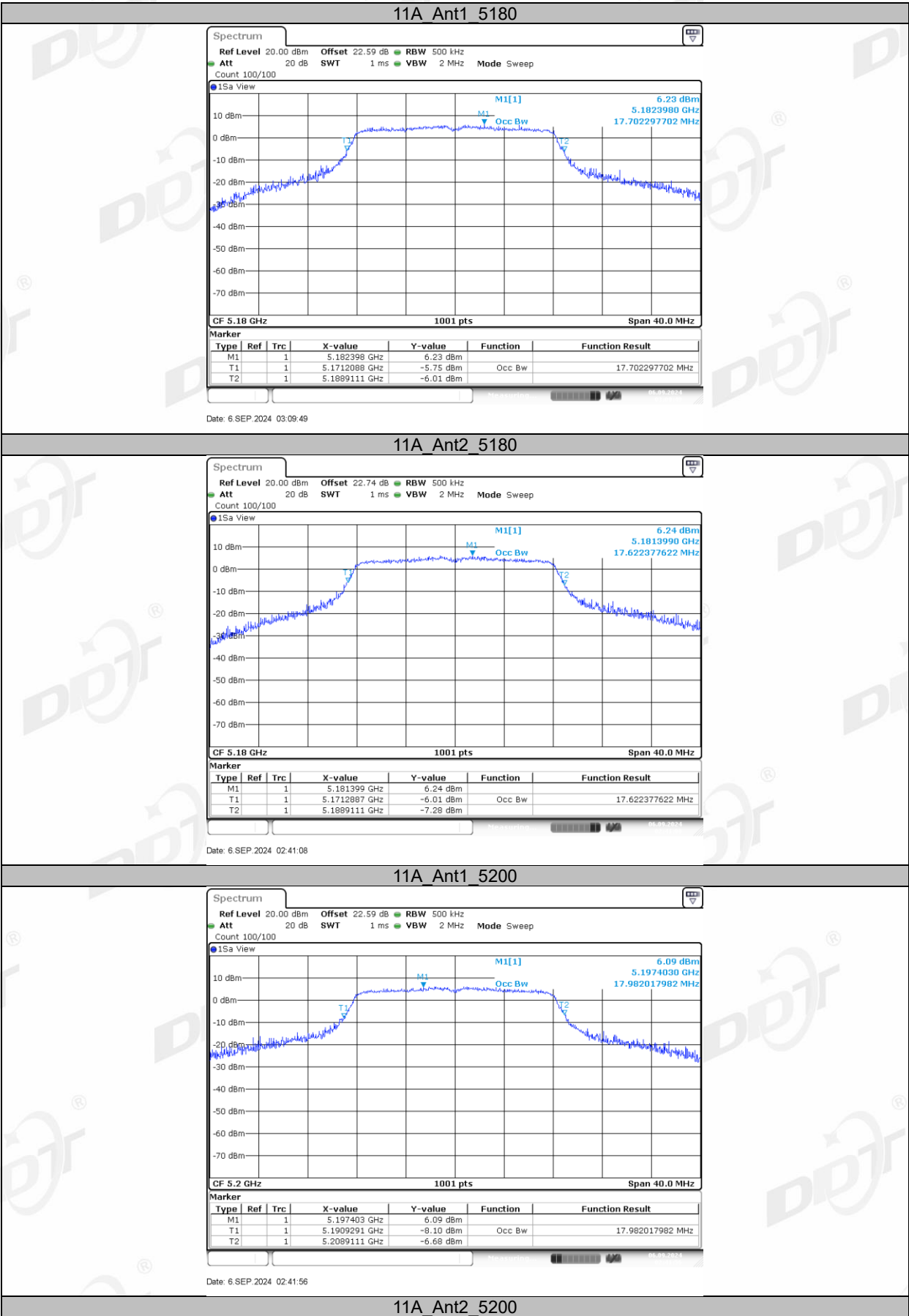
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.702	5171.2088	5188.9111	---	---
	Ant2	5180	17.622	5171.2887	5188.9111	---	---
	Ant1	5200	17.982	5190.9291	5208.9111	---	---
	Ant2	5200	17.862	5191.0889	5208.9510	---	---
	Ant1	5240	17.343	5231.3287	5248.6713	---	---
	Ant2	5240	17.303	5231.3686	5248.6713	---	---
	Ant1	5260	17.263	5251.3686	5268.6314	---	---
	Ant2	5260	17.263	5251.3686	5268.6314	---	---
	Ant1	5280	17.263	5271.3686	5288.6314	---	---
	Ant2	5280	17.263	5271.3686	5288.6314	---	---
	Ant1	5320	17.822	5311.0090	5328.8312	---	---
	Ant2	5320	17.782	5311.0889	5328.8711	---	---
	Ant1	5500	17.822	5491.1289	5508.9510	---	---
	Ant2	5500	17.902	5491.0889	5508.9910	---	---
	Ant1	5580	17.183	5571.3686	5588.5514	---	---
	Ant2	5580	17.223	5571.3686	5588.5914	---	---
	Ant1	5700	17.662	5691.0490	5708.7113	---	---
	Ant2	5700	17.622	5691.0889	5708.7113	---	---
	Ant1	5720	17.263	5711.3686	5728.6314	---	---
	Ant2	5720	17.223	5711.3686	5728.5914	---	---
	Ant1	5720_UNII-2C	13.631	5711.3686	5725	---	---
	Ant2	5720_UNII-2C	13.631	5711.3686	5725	---	---
	Ant1	5720_UNII-3	3.631	5725	5728.6314	---	---
	Ant2	5720_UNII-3	3.591	5725	5728.5914	---	---
	Ant1	5745	17.662	5736.4086	5754.0709	---	---
	Ant2	5745	17.662	5736.3287	5753.9910	---	---
	Ant1	5785	17.263	5776.3686	5793.6314	---	---
	Ant2	5785	17.223	5776.3686	5793.5914	---	---
	Ant1	5825	17.662	5816.0490	5833.7113	---	---
	Ant2	5825	17.742	5815.9291	5833.6713	---	---
11N20MIMO	Ant1	5180	18.821	5170.6893	5189.5105	---	---
	Ant2	5180	18.302	5170.9291	5189.2308	---	---
	Ant1	5200	18.901	5190.5295	5209.4306	---	---
	Ant2	5200	18.422	5190.7692	5209.1908	---	---
	Ant1	5240	18.262	5230.8492	5249.1109	---	---
	Ant2	5240	17.862	5231.0889	5248.9510	---	---
	Ant1	5260	18.302	5250.8492	5269.1508	---	---
	Ant2	5260	17.982	5251.0090	5268.9910	---	---
	Ant1	5280	18.302	5270.8492	5289.1508	---	---
	Ant2	5280	17.942	5271.0490	5288.9910	---	---
	Ant1	5320	18.901	5310.4895	5329.3906	---	---
	Ant2	5320	18.382	5310.7692	5329.1508	---	---
	Ant1	5500	18.901	5490.5694	5509.4705	---	---
	Ant2	5500	18.342	5490.8891	5509.2308	---	---
	Ant1	5580	18.302	5570.8092	5589.1109	---	---
	Ant2	5580	17.942	5571.0090	5588.9510	---	---
	Ant1	5700	18.661	5690.5694	5709.2308	---	---
	Ant2	5700	18.182	5690.8492	5709.0310	---	---
	Ant1	5720	18.342	5710.8492	5729.1908	---	---
	Ant2	5720	17.902	5711.0490	5728.9510	---	---
	Ant1	5720_UNII-2C	14.151	5710.8492	5725	---	---
	Ant2	5720_UNII-2C	13.951	5711.0490	5725	---	---
	Ant1	5720_UNII-3	4.191	5725	5729.1908	---	---
	Ant2	5720_UNII-3	3.951	5725	5728.9510	---	---
	Ant1	5745	18.621	5735.8492	5754.4705	---	---
	Ant2	5745	18.262	5735.9690	5754.2308	---	---
	Ant1	5785	18.342	5775.8492	5794.1908	---	---
	Ant2	5785	17.942	5776.0490	5793.9910	---	---
	Ant1	5825	18.741	5815.5295	5834.2707	---	---

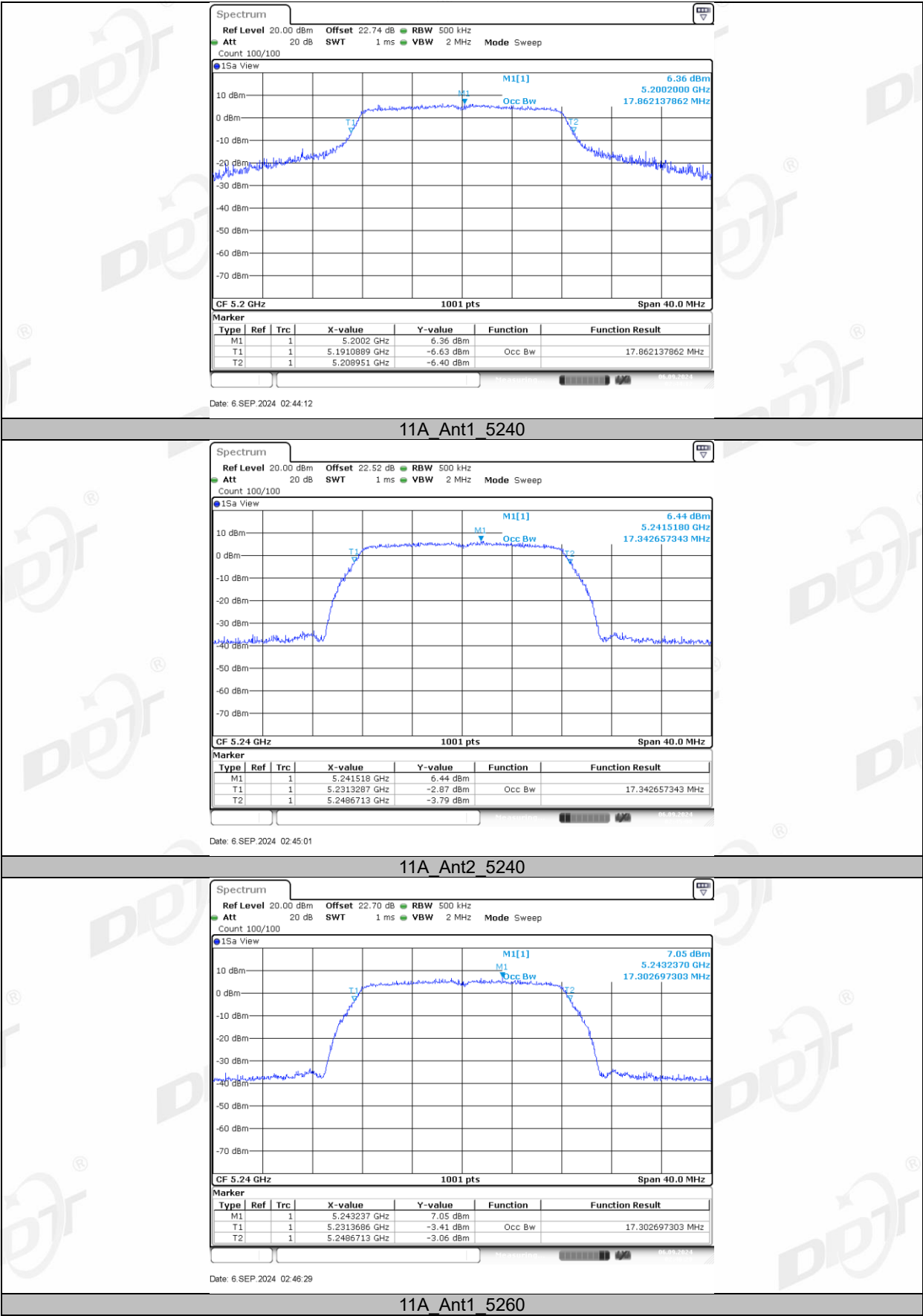
11N40MIMO	Ant2	5825	18.342	5815.6893	5834.0310	---	---
	Ant1	5190	36.843	5171.6184	5208.4615	---	---
	Ant2	5190	36.683	5171.6983	5208.3816	---	---
	Ant1	5230	36.444	5211.6983	5248.1419	---	---
	Ant2	5230	36.364	5211.7782	5248.1419	---	---
	Ant1	5270	36.523	5251.7782	5288.3017	---	---
	Ant2	5270	36.444	5251.7782	5288.2218	---	---
	Ant1	5310	36.923	5291.5385	5328.4615	---	---
	Ant2	5310	36.763	5291.5385	5328.3017	---	---
	Ant1	5510	37.003	5491.5385	5528.5415	---	---
	Ant2	5510	36.843	5491.6184	5528.4615	---	---
	Ant1	5550	36.523	5531.6983	5568.2218	---	---
	Ant2	5550	36.444	5531.7782	5568.2218	---	---
	Ant1	5670	37.163	5651.4585	5688.6214	---	---
	Ant2	5670	36.923	5651.5385	5688.4615	---	---
	Ant1	5710	36.523	5691.7782	5728.3017	---	---
	Ant2	5710	36.364	5691.7782	5728.1419	---	---
	Ant1	5710_UNII-2C	33.222	5691.7782	5725	---	---
	Ant2	5710_UNII-2C	33.222	5691.7782	5725	---	---
	Ant1	5710_UNII-3	3.302	5725	5728.3017	---	---
	Ant2	5710_UNII-3	3.142	5725	5728.1419	---	---
	Ant1	5755	36.923	5736.7782	5773.7013	---	---
	Ant2	5755	36.683	5736.7782	5773.4615	---	---
	Ant1	5795	36.444	5776.8581	5813.3017	---	---
	Ant2	5795	36.284	5776.7782	5813.0619	---	---
11AC20MIMO	Ant1	5180	18.781	5170.6893	5189.4705	---	---
	Ant2	5180	18.302	5170.9291	5189.2308	---	---
	Ant1	5200	18.901	5190.5295	5209.4306	---	---
	Ant2	5200	18.422	5190.7692	5209.1908	---	---
	Ant1	5240	18.262	5230.8492	5249.1109	---	---
	Ant2	5240	17.902	5231.0490	5248.9510	---	---
	Ant1	5260	18.302	5250.8492	5269.1508	---	---
	Ant2	5260	17.942	5251.0490	5268.9910	---	---
	Ant1	5280	18.342	5270.8492	5289.1908	---	---
	Ant2	5280	17.942	5271.0490	5288.9910	---	---
	Ant1	5320	18.861	5310.5295	5329.3906	---	---
	Ant2	5320	18.422	5310.7293	5329.1508	---	---
	Ant1	5500	18.901	5490.5694	5509.4705	---	---
	Ant2	5500	18.422	5490.8492	5509.2707	---	---
	Ant1	5580	18.342	5570.7692	5589.1109	---	---
	Ant2	5580	17.942	5571.0490	5599.1409	---	---
	Ant1	5700	18.741	5690.4895	5709.2308	---	---
	Ant2	5700	18.182	5690.8891	5709.0709	---	---
	Ant1	5720	18.342	5710.8492	5729.1908	---	---
	Ant2	5720	17.902	5711.0490	5728.9510	---	---
	Ant1	5720_UNII-2C	14.151	5710.8492	5725	---	---
	Ant2	5720_UNII-2C	13.951	5711.0490	5725	---	---
	Ant1	5720_UNII-3	4.191	5725	5729.1908	---	---
	Ant2	5720_UNII-3	3.951	5725	5728.9510	---	---
	Ant1	5745	18.741	5735.8492	5754.5904	---	---
	Ant2	5745	18.182	5736.0090	5754.1908	---	---
	Ant1	5785	18.342	5775.8492	5794.1908	---	---
	Ant2	5785	17.902	5776.0490	5793.9510	---	---
11AC40MIMO	Ant1	5825	18.701	5815.5694	5834.2707	---	---
	Ant2	5825	18.382	5815.6494	5834.0310	---	---
	Ant1	5190	37.083	5171.6184	5208.7013	---	---
	Ant2	5190	36.763	5171.6983	5208.4615	---	---
	Ant1	5230	36.444	5211.7782	5248.2218	---	---
	Ant2	5230	36.444	5211.7782	5248.2218	---	---
	Ant1	5270	36.444	5251.7782	5288.2218	---	---
	Ant2	5270	36.364	5251.8581	5288.2218	---	---
	Ant1	5310	37.083	5291.4585	5328.5415	---	---
	Ant2	5310	36.843	5291.4585	5328.3017	---	---
	Ant1	5510	37.243	5491.5385	5528.7812	---	---
	Ant2	5510	36.923	5491.6184	5528.5415	---	---
	Ant1	5550	36.523	5531.7782	5568.3017	---	---
	Ant2	5550	36.364	5531.7782	5568.1419	---	---

	Ant1	5670	37.483	5651.3786	5688.8611	---	---
	Ant2	5670	37.083	5651.4585	5688.5415	---	---
	Ant1	5710	36.523	5691.7782	5728.3017	---	---
	Ant2	5710	36.284	5691.8581	5728.1419	---	---
	Ant1	5710 UNII-2C	33.222	5691.7782	5725	---	---
	Ant2	5710 UNII-2C	33.142	5691.8581	5725	---	---
	Ant1	5710 UNII-3	3.302	5725	5728.3017	---	---
	Ant2	5710 UNII-3	3.142	5725	5728.1419	---	---
	Ant1	5755	37.083	5736.7782	5773.8611	---	---
	Ant2	5755	36.763	5736.6983	5773.4615	---	---
	Ant1	5795	36.444	5776.8581	5813.3017	---	---
	Ant2	5795	36.444	5776.6983	5813.1419	---	---
11AC80MIMO	Ant1	5210	75.764	5172.1179	5247.8821	---	---
	Ant2	5210	75.924	5172.1179	5248.0420	---	---
	Ant1	5290	76.084	5251.7982	5327.8821	---	---
	Ant2	5290	75.924	5252.1179	5328.0420	---	---
	Ant1	5530	75.924	5491.9580	5567.8821	---	---
	Ant2	5530	75.764	5492.2777	5568.0420	---	---
	Ant1	5610	75.445	5572.1179	5647.5624	---	---
	Ant2	5610	75.445	5572.4376	5647.8821	---	---
	Ant1	5690	75.445	5652.2777	5727.7223	---	---
	Ant2	5690	75.285	5652.4376	5727.7223	---	---
	Ant1	5690 UNII-2C	72.722	5652.2777	5725	---	---
	Ant2	5690 UNII-2C	72.562	5652.4376	5725	---	---
	Ant1	5690 UNII-3	2.722	5725	5727.7223	---	---
	Ant2	5690 UNII-3	2.722	5725	5727.7223	---	---
	Ant1	5775	75.285	5737.4376	5812.7223	---	---
	Ant2	5775	75.285	5737.2777	5812.5624	---	---
11AC160MIMO	Ant1	5250	155.045	5172.6374	5327.6823	---	---
	Ant2	5250	154.725	5172.9570	5327.6823	---	---
	Ant1	5250 UNII-1	77.363	5172.6374	5250	---	---
	Ant2	5250 UNII-1	77.043	5172.9570	5250	---	---
	Ant1	5250 UNII-2A	77.682	5250	5327.6823	---	---
	Ant2	5250 UNII-2A	77.682	5250	5327.6823	---	---
	Ant1	5570	154.725	5491.9980	5646.7233	---	---
	Ant2	5570	155.365	5492.6374	5648.0020	---	---
11AX20MIMO	Ant1	5180	19.381	5170.3297	5189.7103	---	---
	Ant2	5180	19.341	5170.4096	5189.7502	---	---
	Ant1	5200	19.5	5190.2498	5209.7502	---	---
	Ant2	5200	19.381	5190.3297	5209.7103	---	---
	Ant1	5240	18.941	5230.5295	5249.4705	---	---
	Ant2	5240	18.941	5230.5295	5249.4705	---	---
	Ant1	5260	19.141	5250.4096	5269.5504	---	---
	Ant2	5260	19.181	5250.4096	5269.5904	---	---
	Ant1	5280	19.181	5270.4096	5289.5904	---	---
	Ant2	5280	19.141	5270.4496	5289.5904	---	---
	Ant1	5320	19.341	5310.3297	5329.6703	---	---
	Ant2	5320	19.381	5310.2498	5329.6304	---	---
	Ant1	5500	19.421	5490.2897	5509.7103	---	---
	Ant2	5500	19.301	5490.3696	5509.6703	---	---
	Ant1	5580	19.141	5570.3696	5589.5105	---	---
	Ant2	5580	19.181	5570.4096	5589.5904	---	---
	Ant1	5700	19.381	5690.2897	5709.6703	---	---
	Ant2	5700	19.341	5690.3297	5709.6703	---	---
	Ant1	5720	19.181	5710.4096	5729.5904	---	---
	Ant2	5720	19.101	5710.4496	5729.5504	---	---
	Ant1	5720 UNII-2C	14.59	5710.4096	5725	---	---
	Ant2	5720 UNII-2C	14.55	5710.4496	5725	---	---
	Ant1	5720 UNII-3	4.59	5725	5729.5904	---	---
	Ant2	5720 UNII-3	4.55	5725	5729.5504	---	---
	Ant1	5745	19.341	5735.4096	5754.7502	---	---
	Ant2	5745	19.301	5735.3696	5754.6703	---	---
	Ant1	5785	19.181	5775.4096	5794.5904	---	---
	Ant2	5785	19.141	5775.4496	5794.5904	---	---
	Ant1	5825	19.301	5815.3297	5834.6304	---	---
	Ant2	5825	19.341	5815.2897	5834.6304	---	---
11AX40MIMO	Ant1	5190	37.962	5171.0589	5209.0210	---	---

	Ant2	5190	37.882	5171.1389	5209.0210	---	---
	Ant1	5230	37.722	5211.1389	5248.8611	---	---
	Ant2	5230	37.642	5211.1389	5248.7812	---	---
	Ant1	5270	37.722	5251.1389	5288.8611	---	---
	Ant2	5270	37.642	5251.2188	5288.8611	---	---
	Ant1	5310	38.042	5290.9790	5329.0210	---	---
	Ant2	5310	38.042	5290.8991	5328.9411	---	---
	Ant1	5510	38.042	5490.9790	5529.0210	---	---
	Ant2	5510	38.042	5490.9790	5529.0210	---	---
	Ant1	5550	37.722	5531.1389	5568.8611	---	---
	Ant2	5550	37.802	5531.1389	5568.9411	---	---
	Ant1	5670	38.122	5650.9790	5689.1009	---	---
	Ant2	5670	38.122	5650.9790	5689.1009	---	---
	Ant1	5710	37.722	5691.1389	5728.8611	---	---
	Ant2	5710	37.642	5691.1389	5728.7812	---	---
	Ant1	5710 UNII-2C	33.861	5691.1389	5725	---	---
	Ant2	5710 UNII-2C	33.861	5691.1389	5725	---	---
	Ant1	5710 UNII-3	3.861	5725	5728.8611	---	---
	Ant2	5710 UNII-3	3.781	5725	5728.7812	---	---
	Ant1	5755	37.962	5736.1389	5774.1009	---	---
	Ant2	5755	37.962	5736.0589	5774.0210	---	---
	Ant1	5795	37.722	5776.1389	5813.8611	---	---
	Ant2	5795	37.722	5776.0589	5813.7812	---	---
11AX80MIMO	Ant1	5210	77.522	5171.1588	5248.6813	---	---
	Ant2	5210	77.522	5171.3187	5248.8412	---	---
	Ant1	5290	77.522	5251.1588	5328.6813	---	---
	Ant2	5290	77.363	5251.3187	5328.6813	---	---
	Ant1	5530	77.682	5490.9990	5568.6813	---	---
	Ant2	5530	77.682	5491.3187	5569.0010	---	---
	Ant1	5610	77.203	5571.3187	5648.5215	---	---
	Ant2	5610	77.522	5571.3187	5648.8412	---	---
	Ant1	5690	77.043	5651.4785	5728.5215	---	---
	Ant2	5690	77.043	5651.6384	5728.6813	---	---
	Ant1	5690 UNII-2C	73.521	5651.4785	5725	---	---
	Ant2	5690 UNII-2C	73.362	5651.6384	5725	---	---
	Ant1	5690 UNII-3	3.521	5725	5728.5215	---	---
	Ant2	5690 UNII-3	3.681	5725	5728.6813	---	---
	Ant1	5775	77.043	5736.6384	5813.6813	---	---
	Ant2	5775	77.043	5736.4785	5813.5215	---	---
11AX160MIMO	Ant1	5250	156.963	5171.6783	5328.6414	---	---
	Ant2	5250	156.643	5171.9980	5328.6414	---	---
	Ant1	5250 UNII-1	78.322	5171.6783	5250	---	---
	Ant2	5250 UNII-1	78.002	5171.9980	5250	---	---
	Ant1	5250 UNII-2A	78.641	5250	5328.6414	---	---
	Ant2	5250 UNII-2A	78.641	5250	5328.6414	---	---
	Ant1	5570	156.643	5491.0390	5647.6823	---	---
	Ant2	5570	156.643	5491.9980	5648.6414	---	---

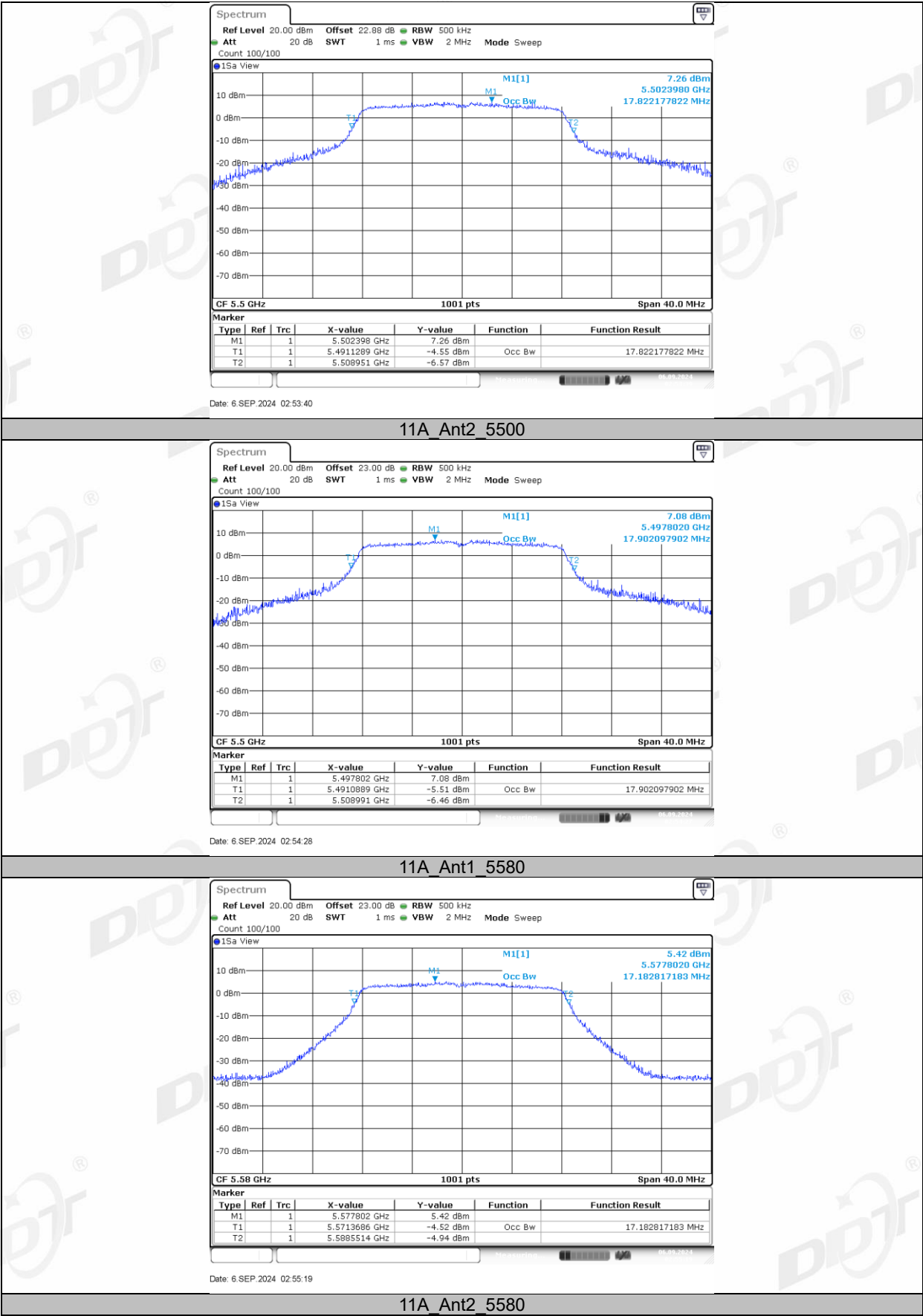
6.5. Test graphs

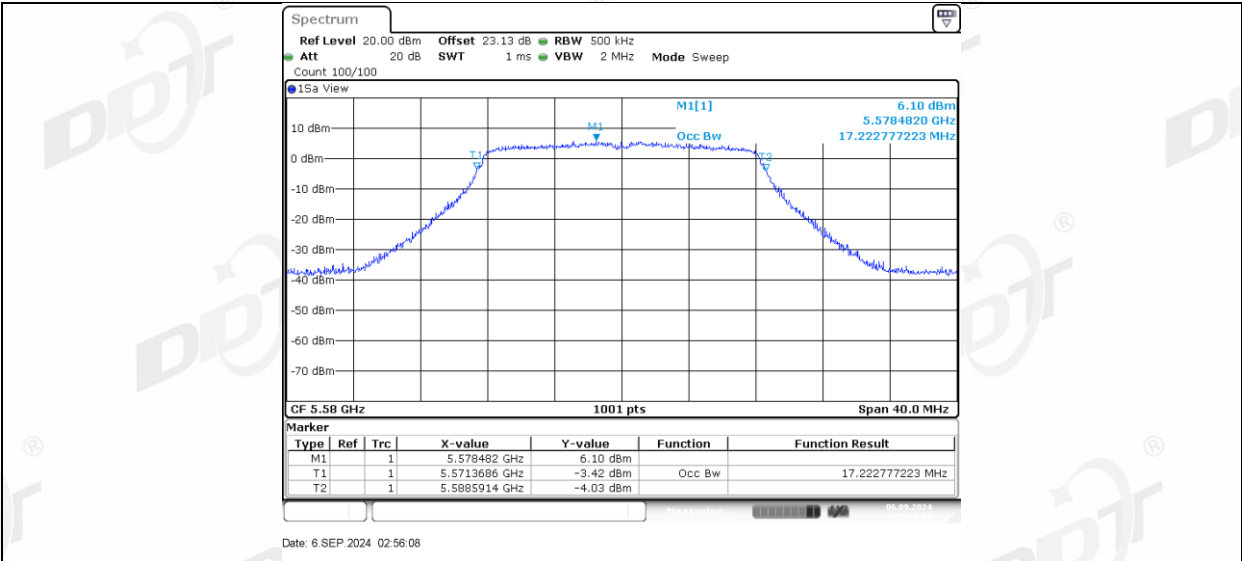




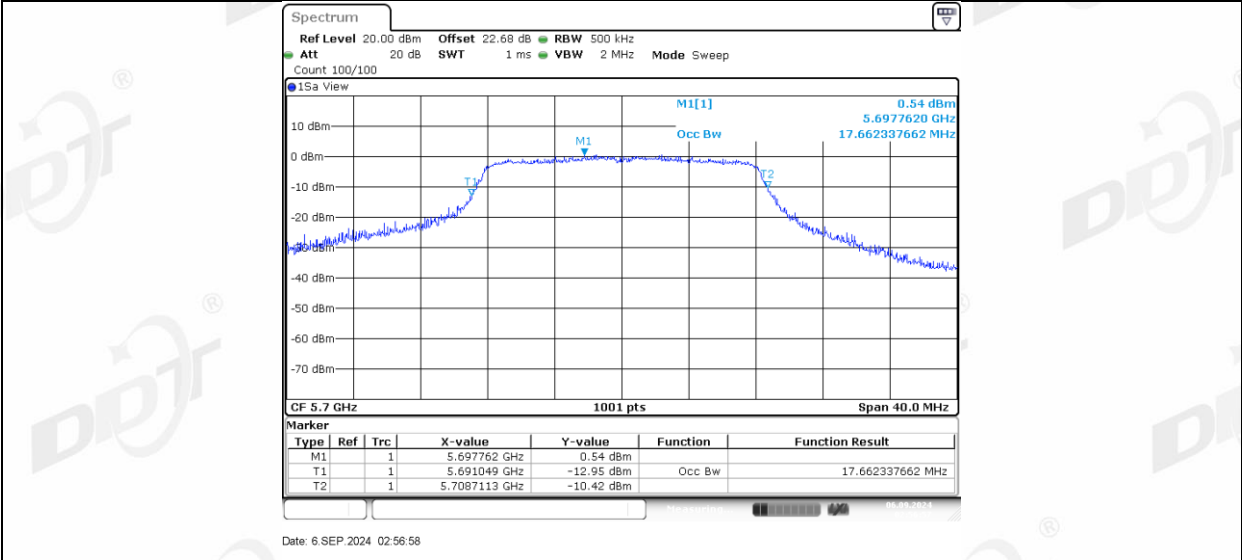




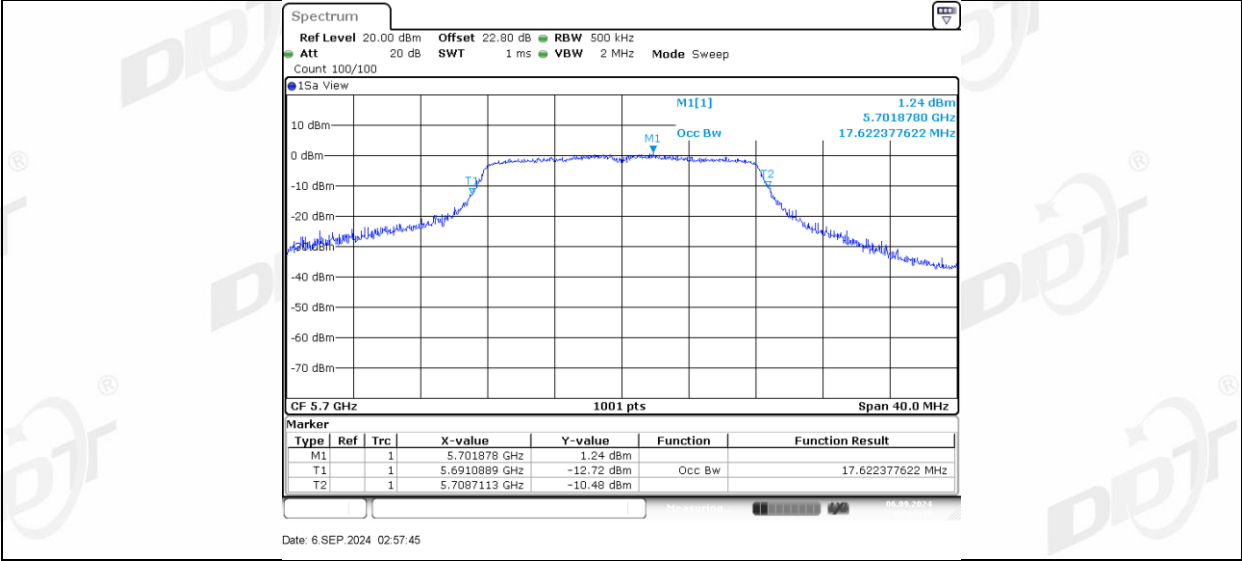




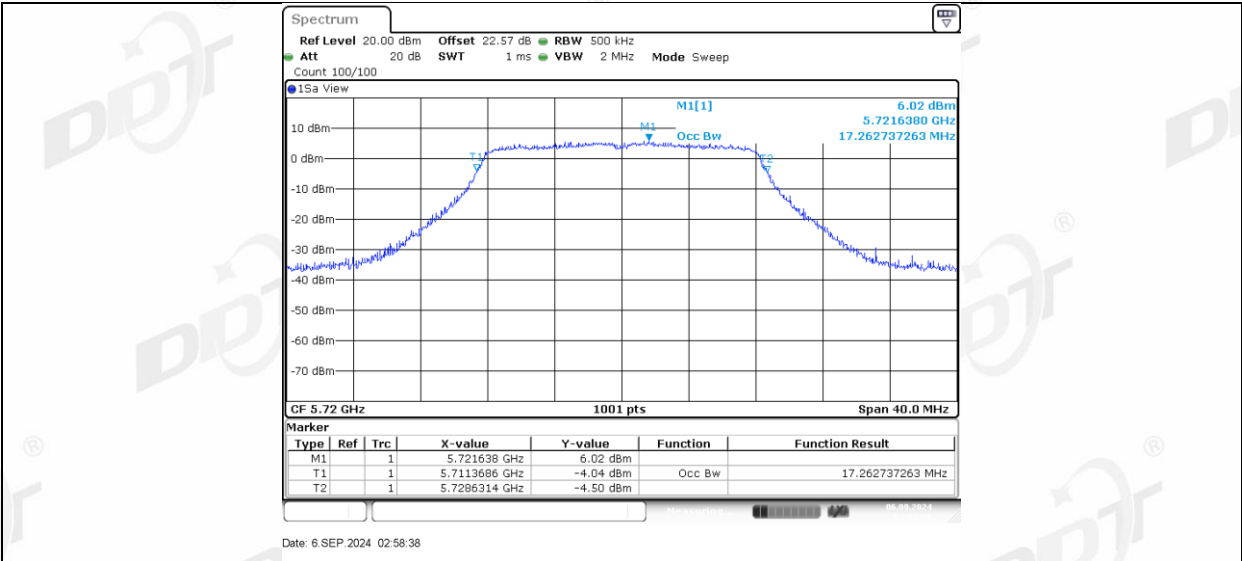
11A_Ant1_5700



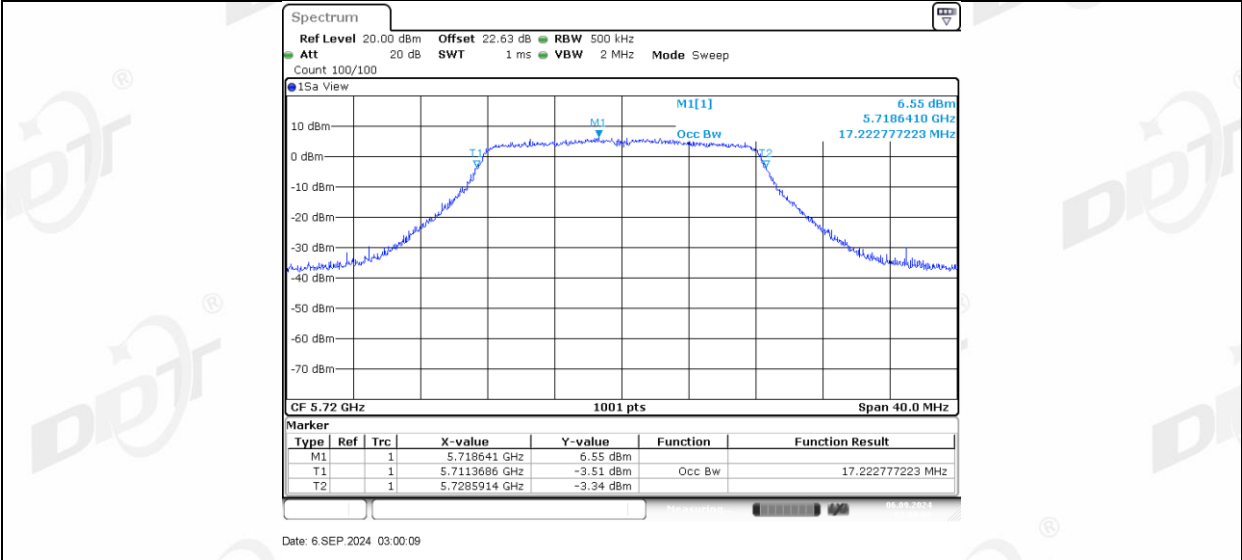
11A_Ant2_5700



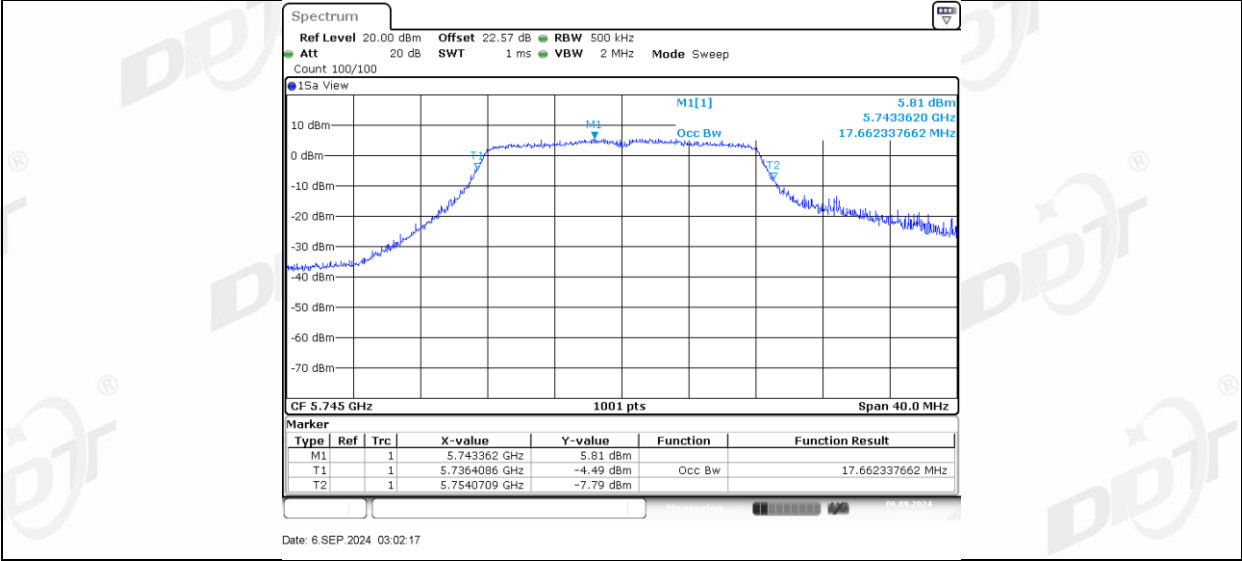
11A_Ant1_5720



11A_Ant2_5720



11A_Ant1_5745



11A_Ant2_5745

