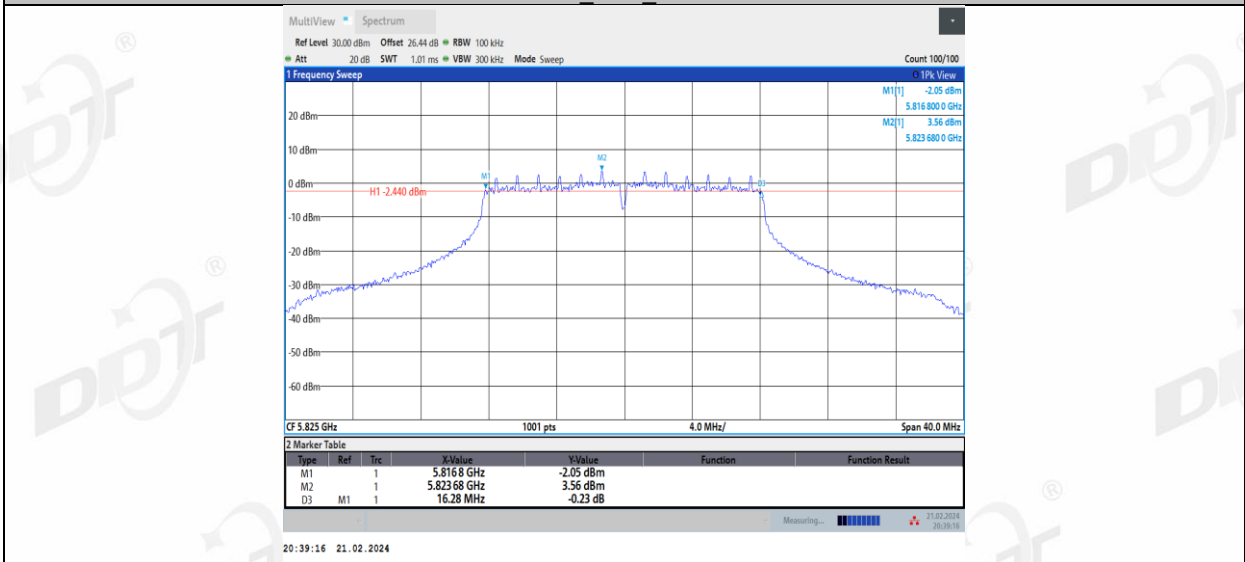
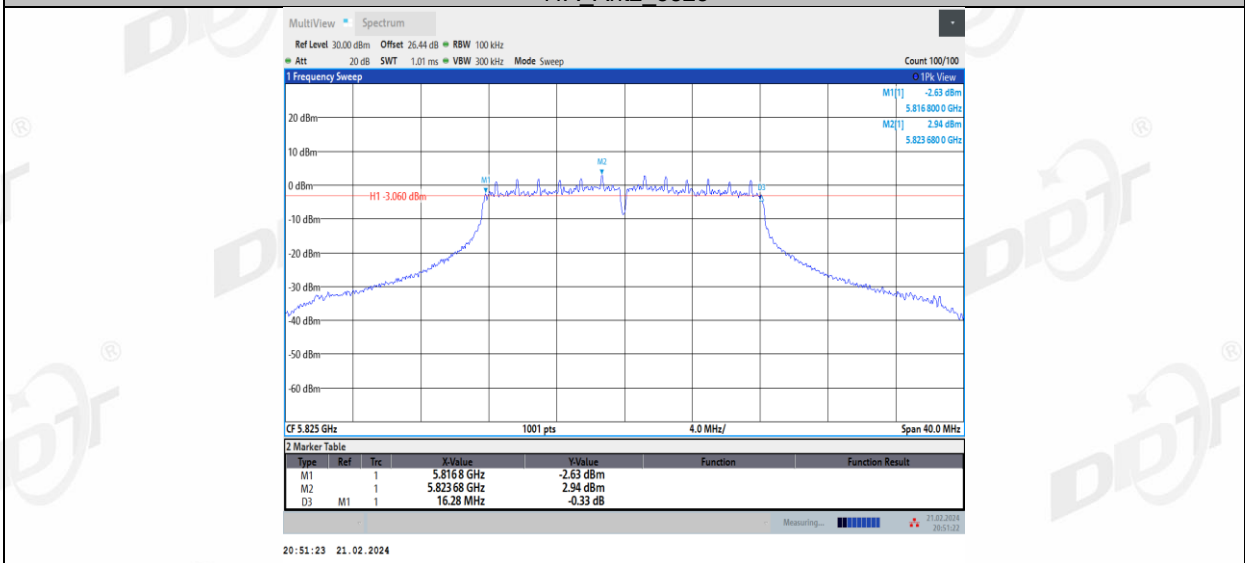


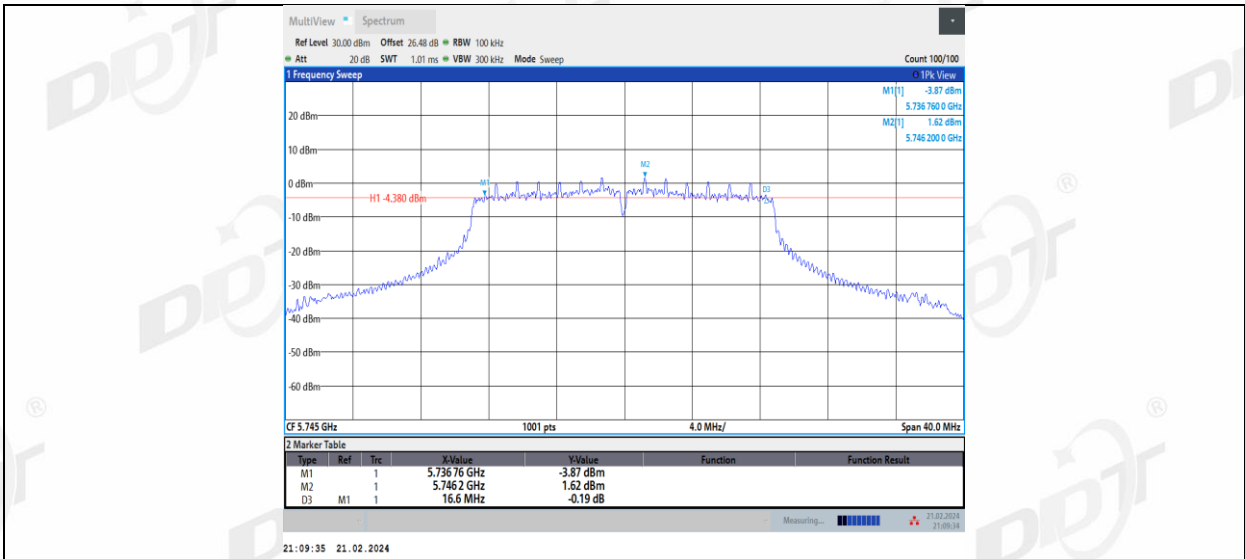
11A\_Ant1\_5825



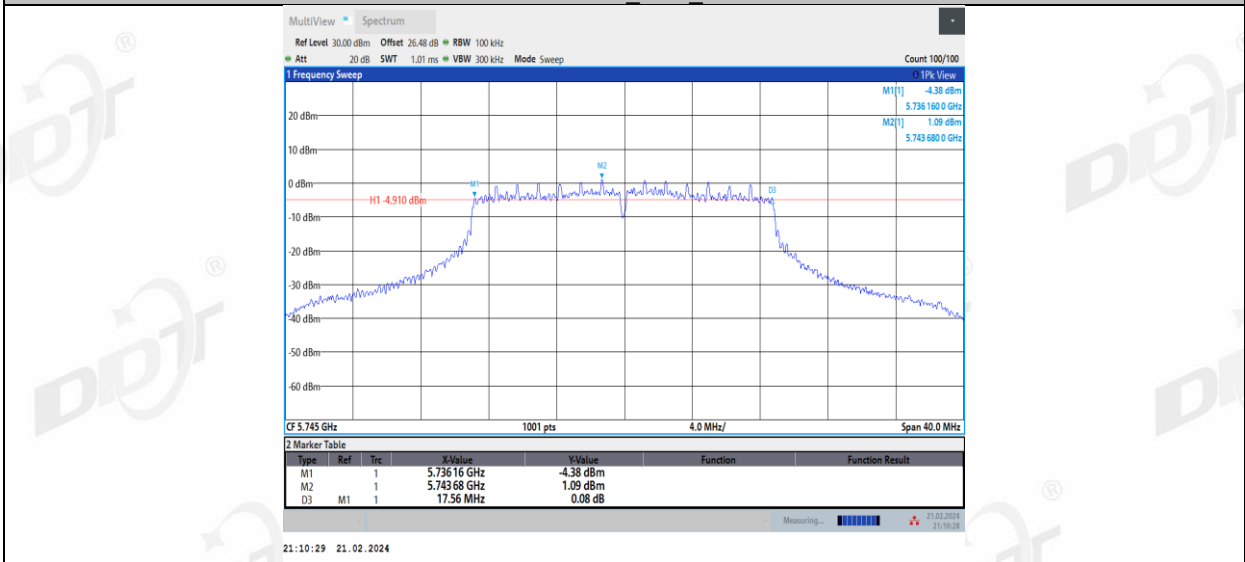
11A\_Ant2\_5825



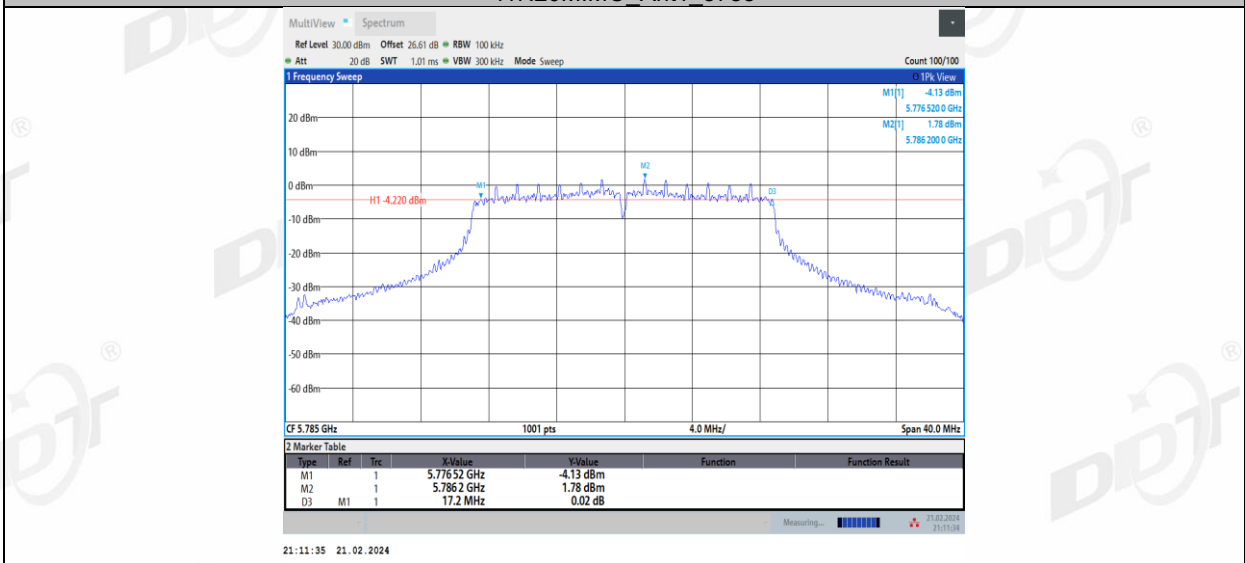
11N20MIMO\_Ant1\_5745



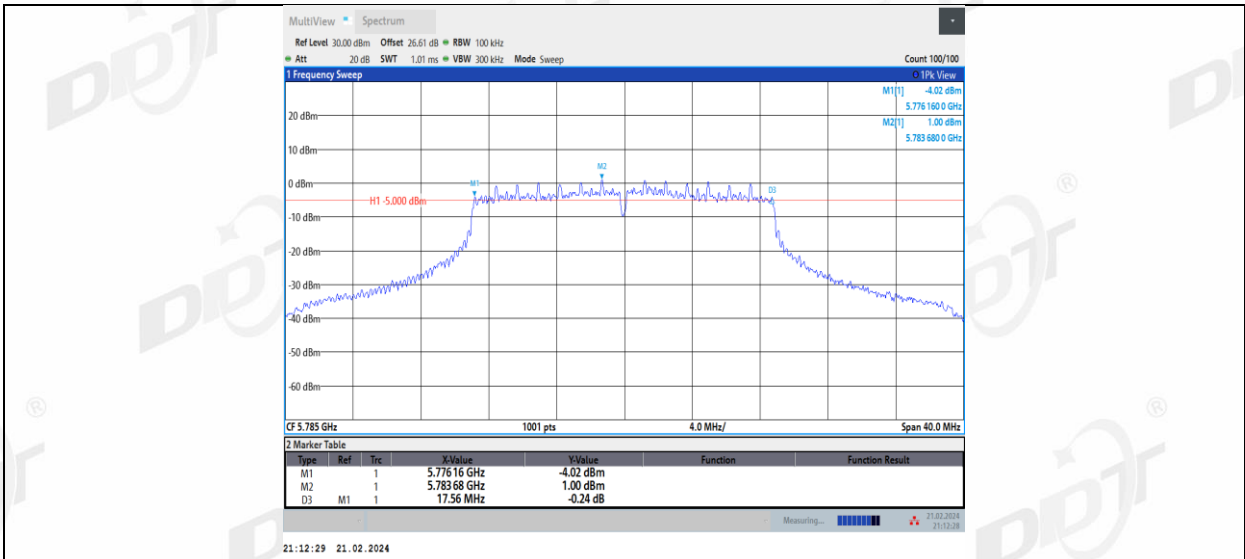
11N20MIMO\_Ant2\_5745



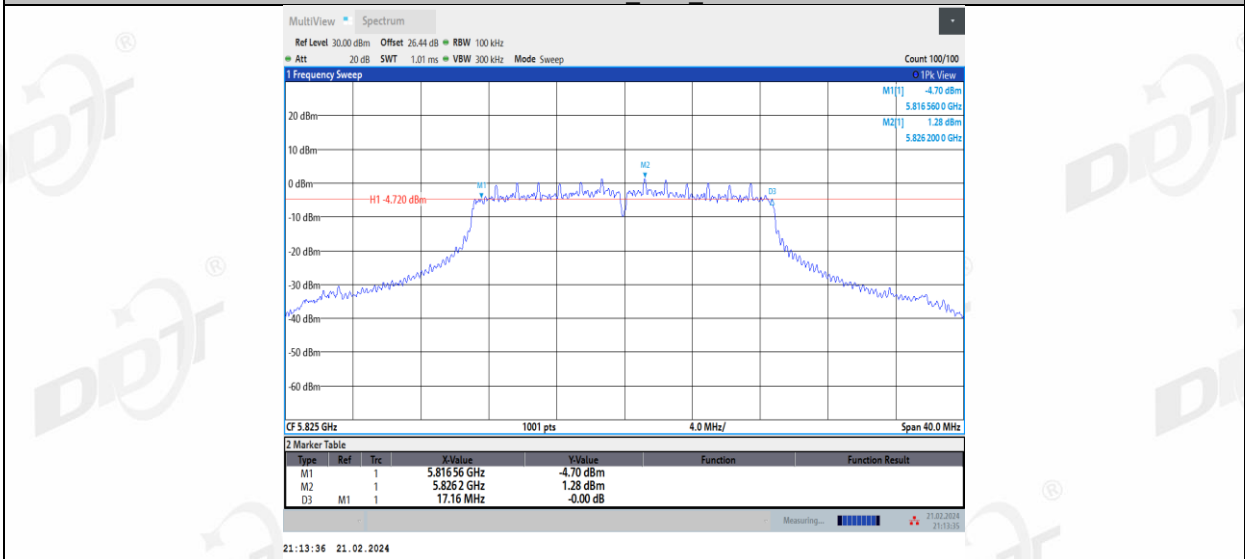
11N20MIMO\_Ant1\_5785



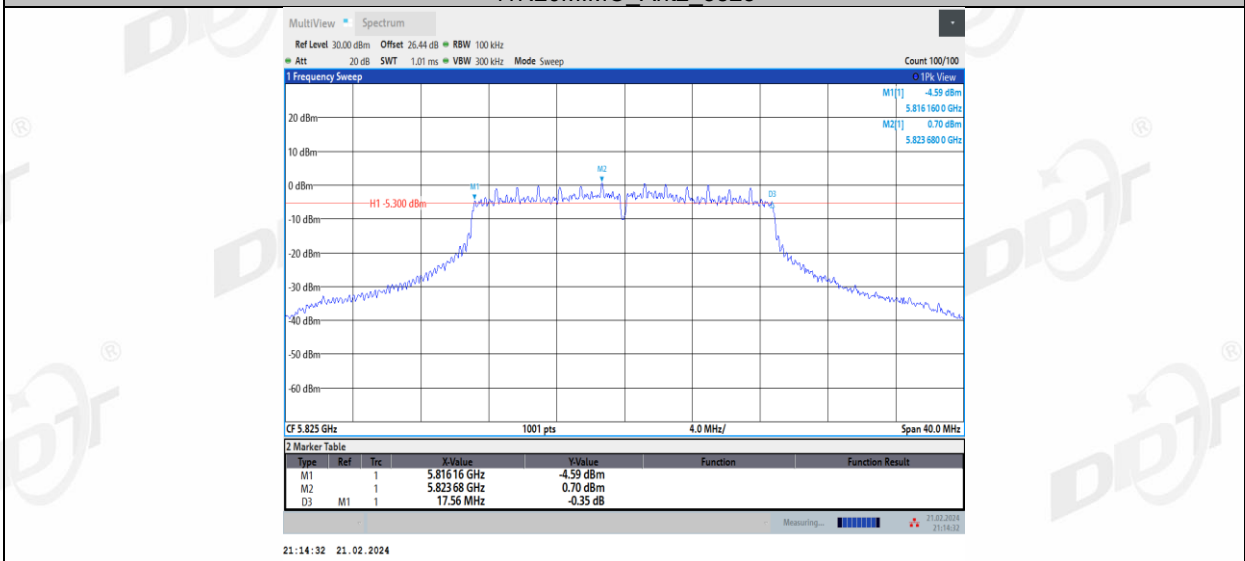
11N20MIMO\_Ant2\_5785



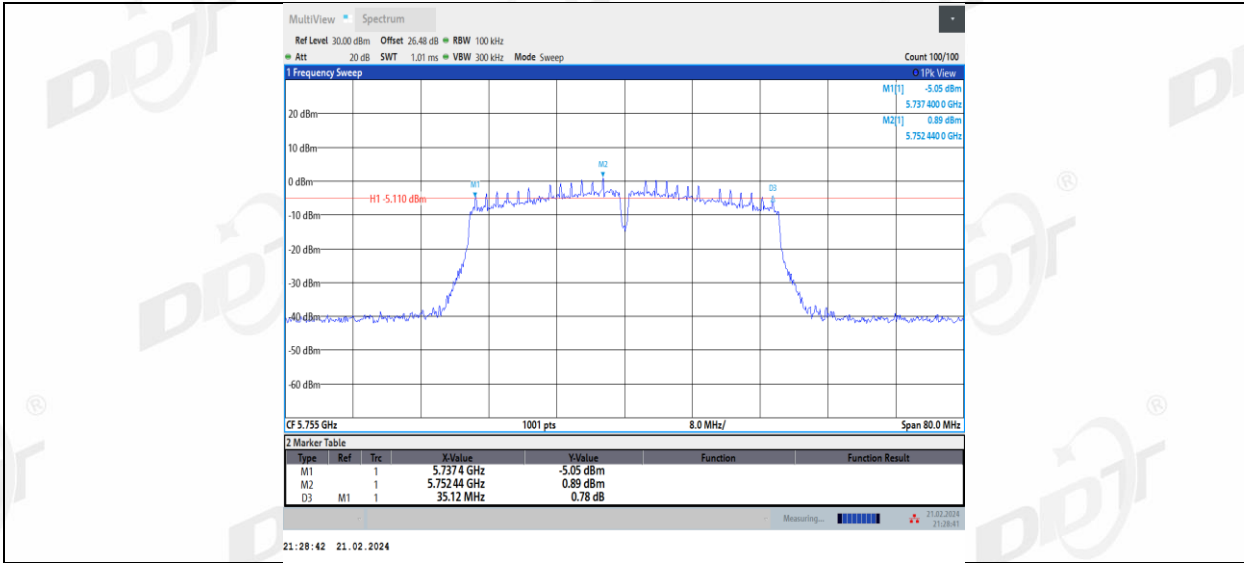
11N20MIMO\_Ant1\_5825



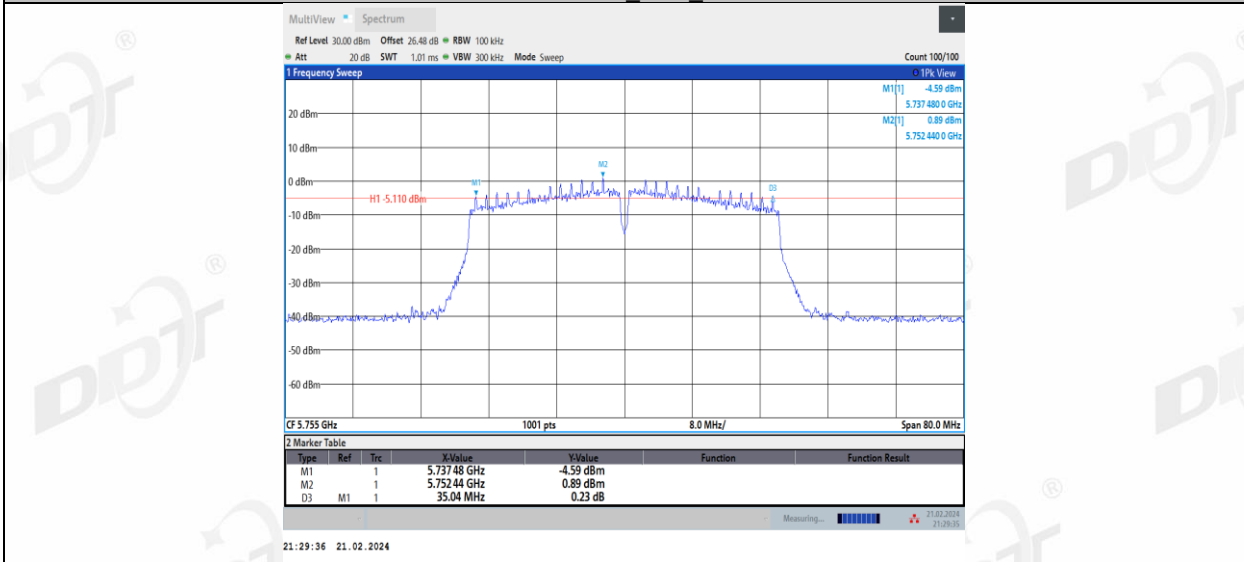
11N20MIMO\_Ant2\_5825



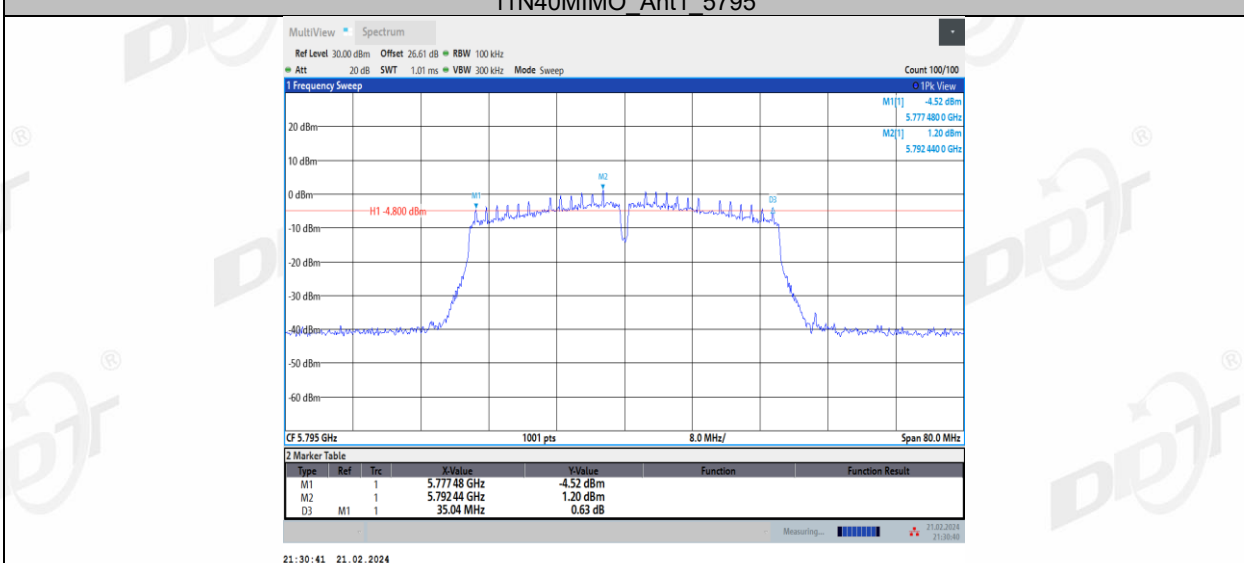
11N40MIMO\_Ant1\_5755



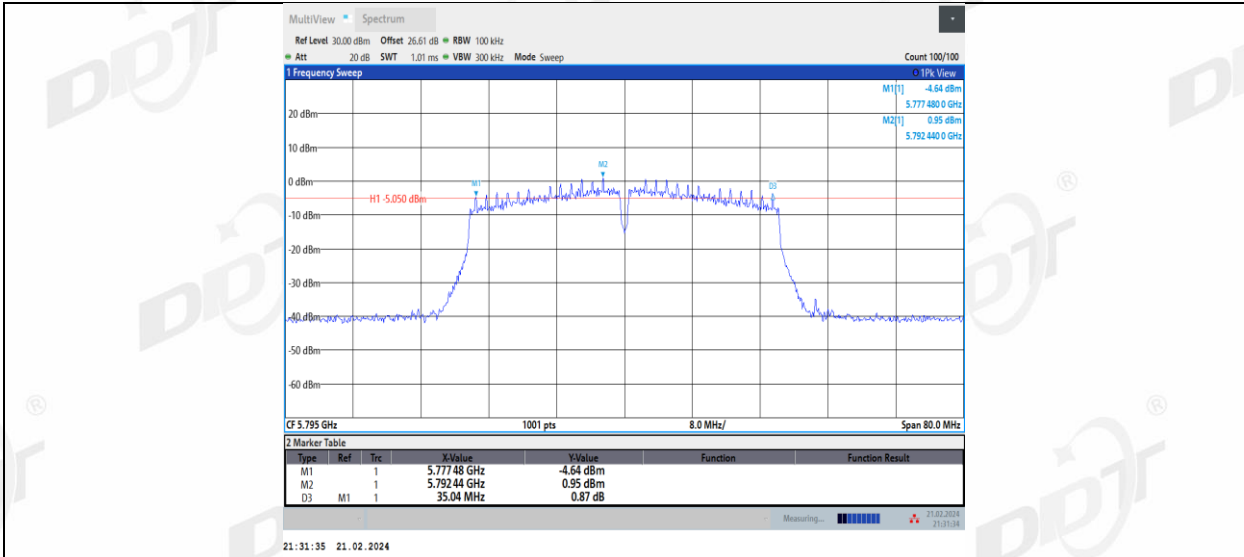
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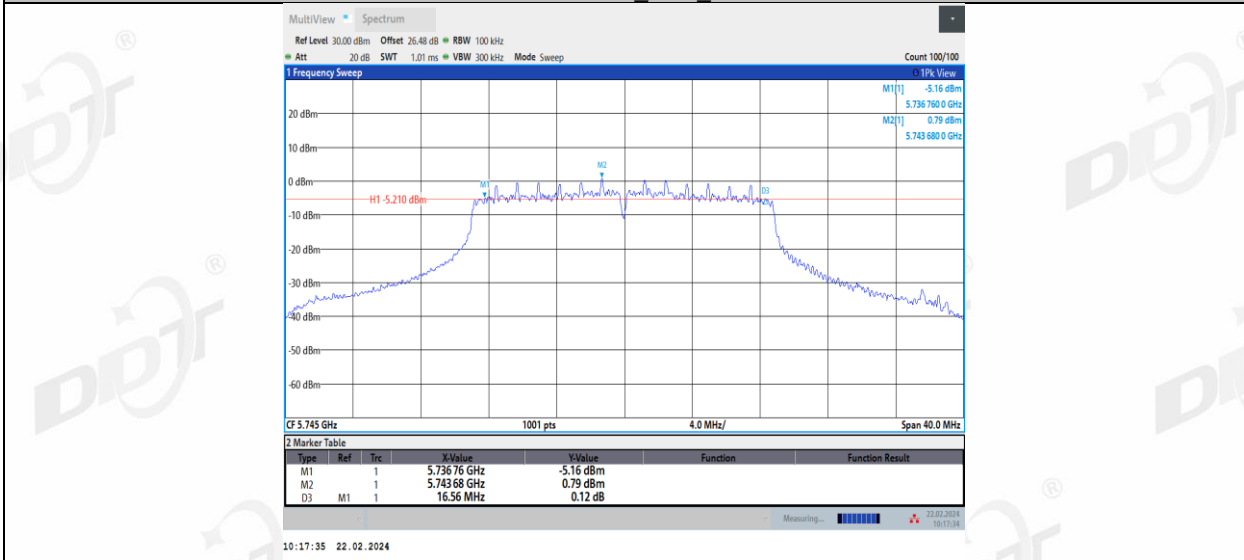
11N40MIMO\_Ant1\_5795



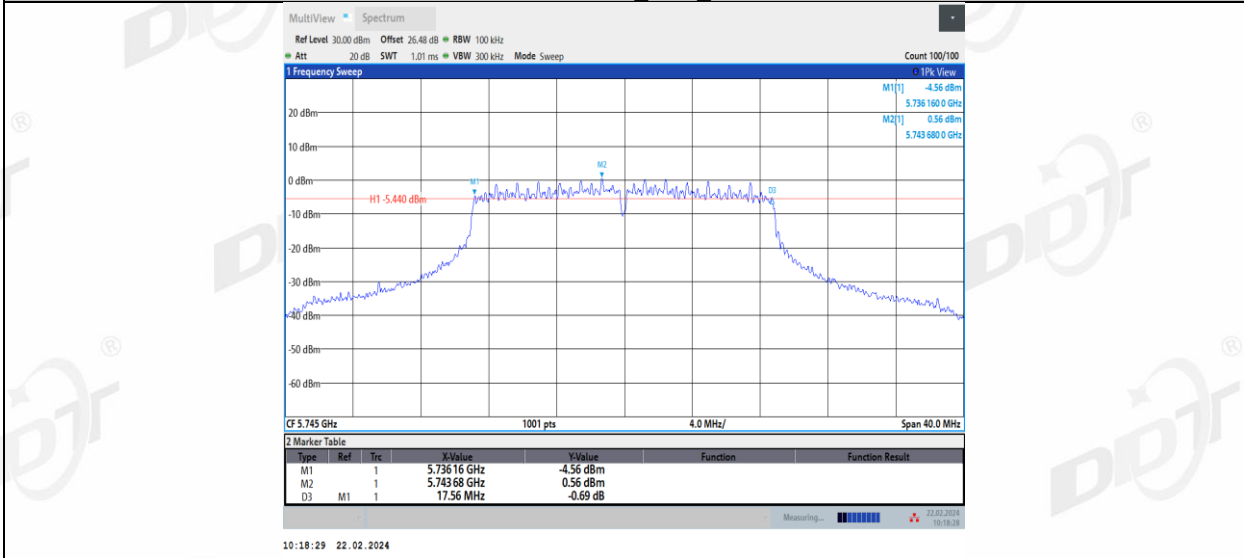
11N40MIMO\_Ant2\_5795



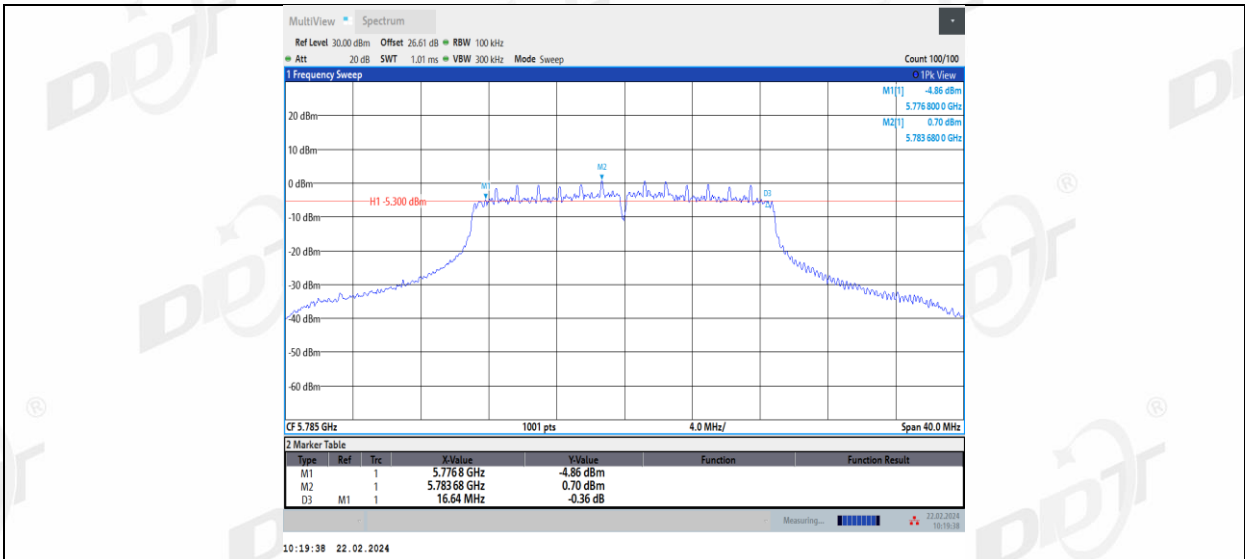
11AC20MIMO\_Ant1\_5745



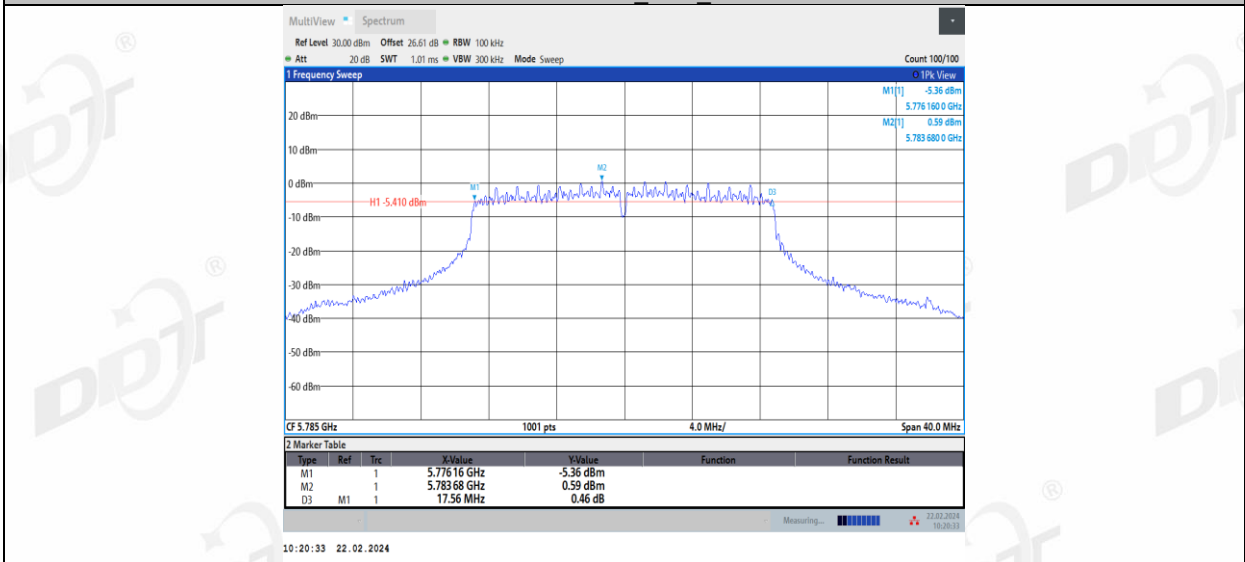
11AC20MIMO\_Ant2\_5745



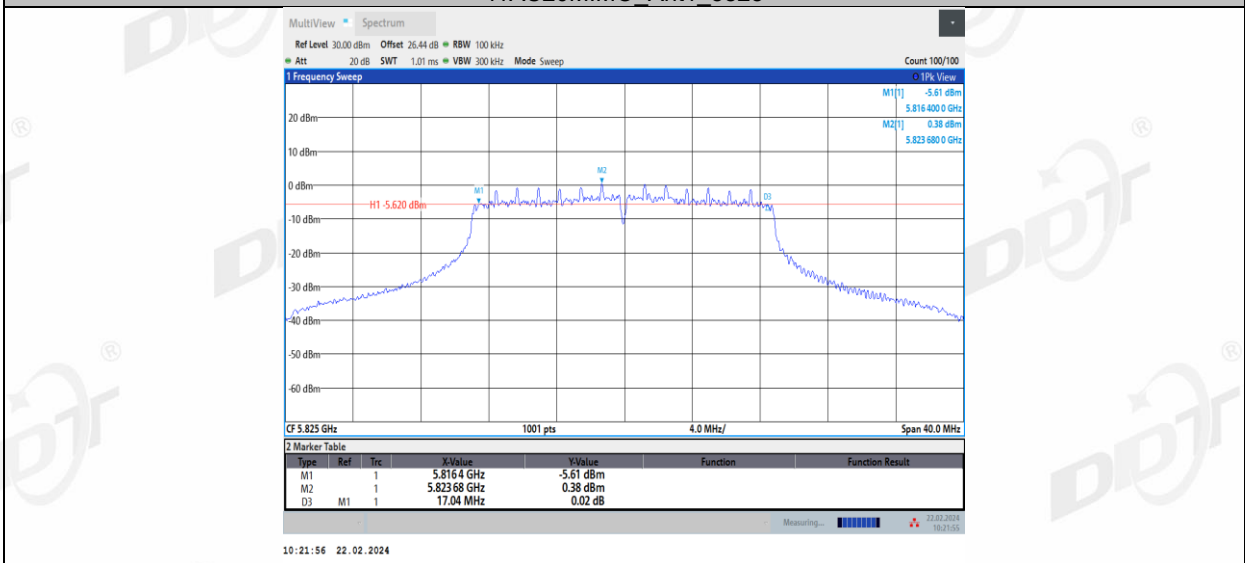
11AC20MIMO\_Ant1\_5785



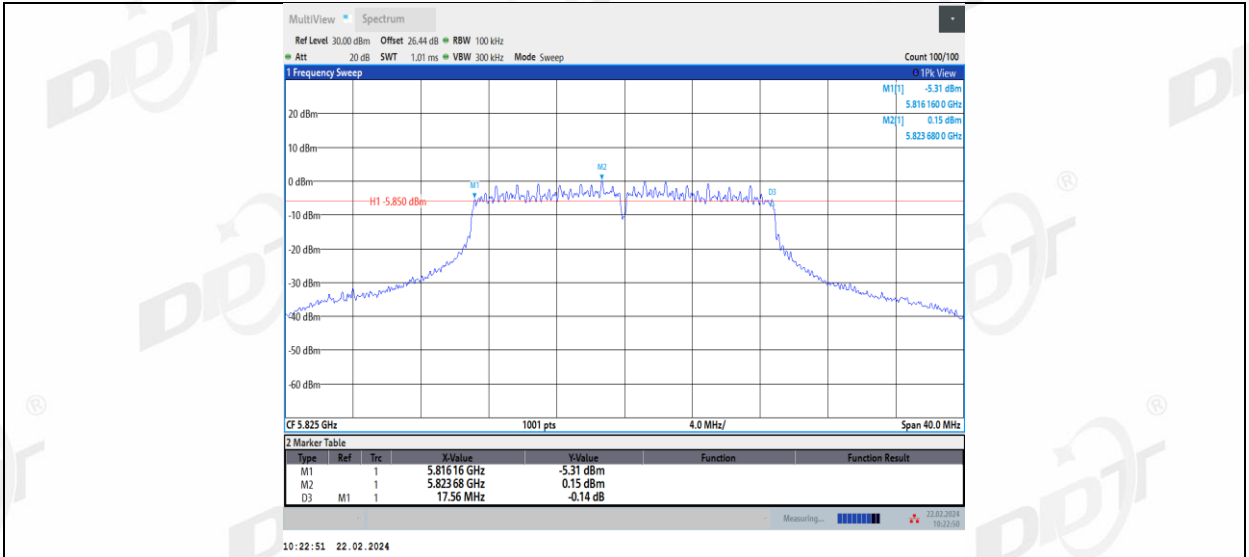
11AC20MIMO\_Ant2\_5785



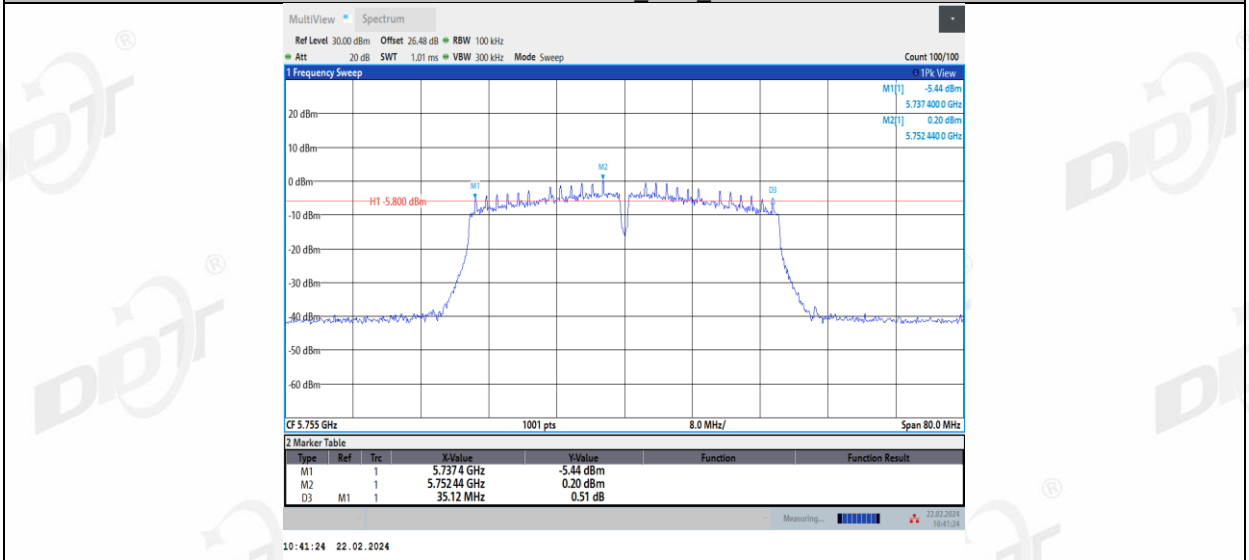
11AC20MIMO\_Ant1\_5825



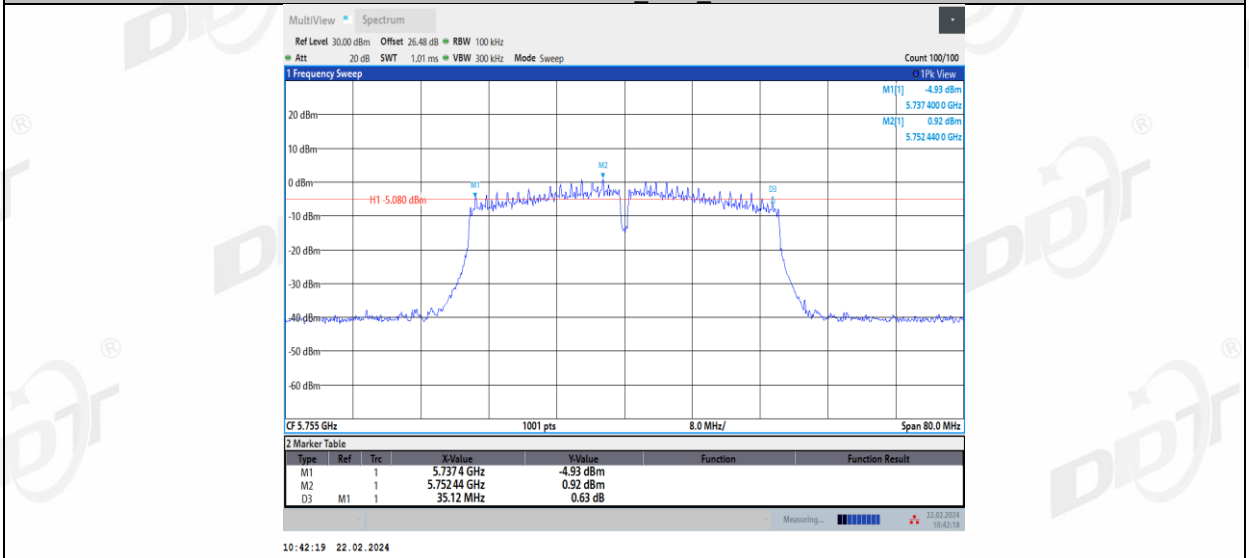
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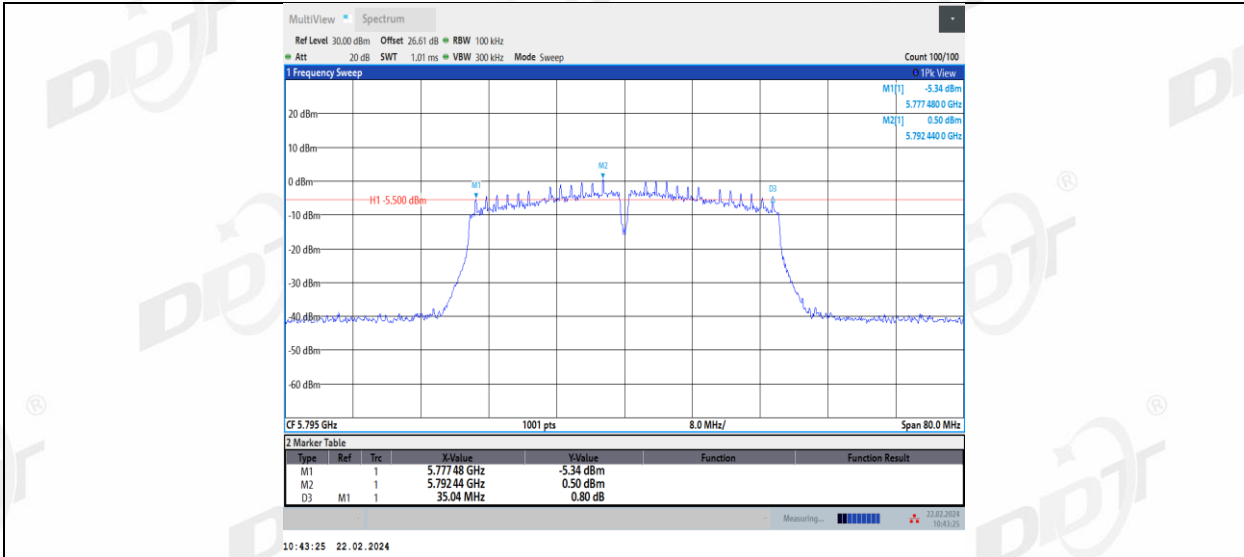
11AC40MIMO\_Ant1\_5755



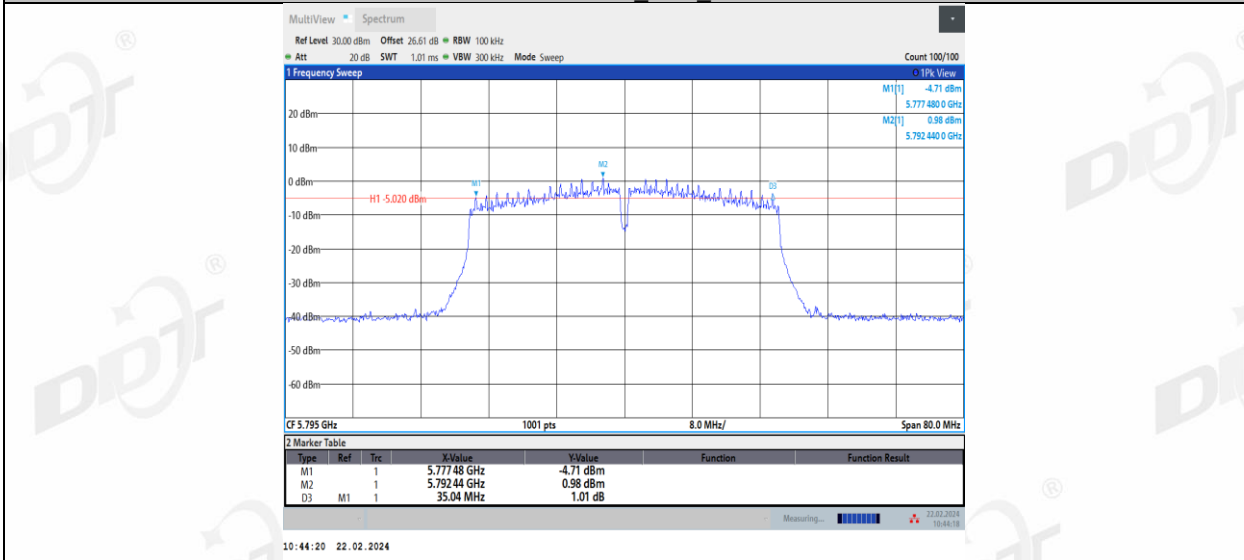
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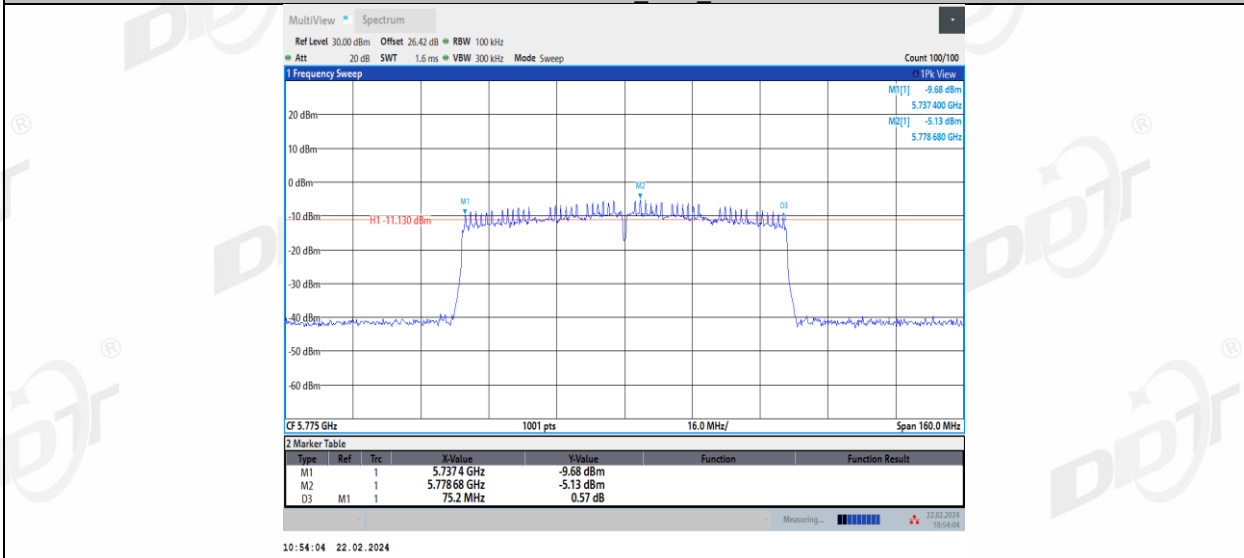
11AC40MIMO\_Ant1\_5795



11AC40MIMO\_Ant2\_5795

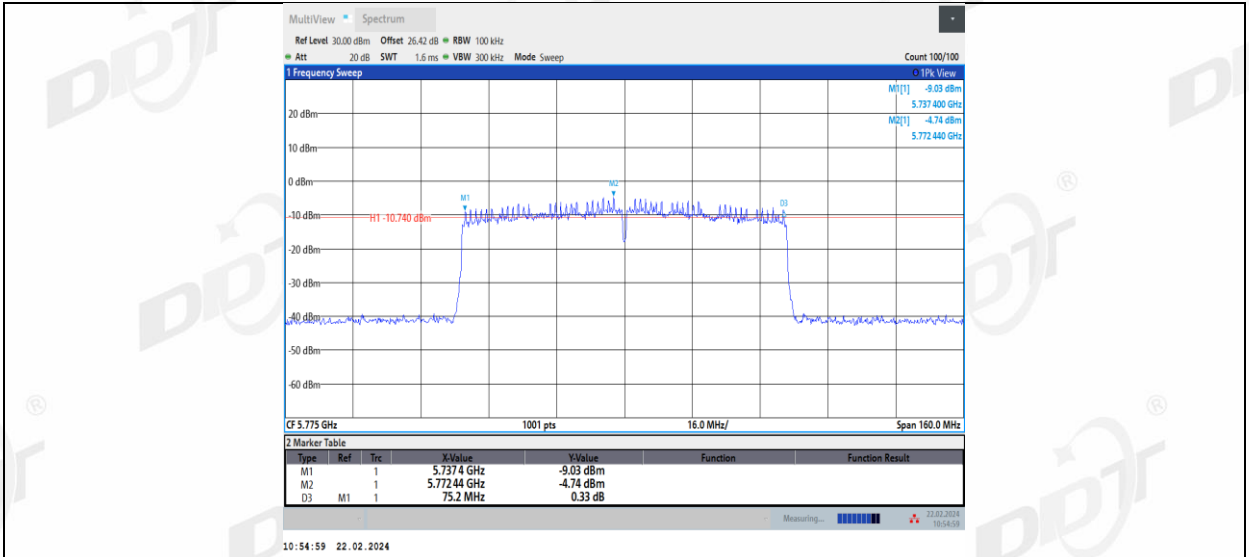


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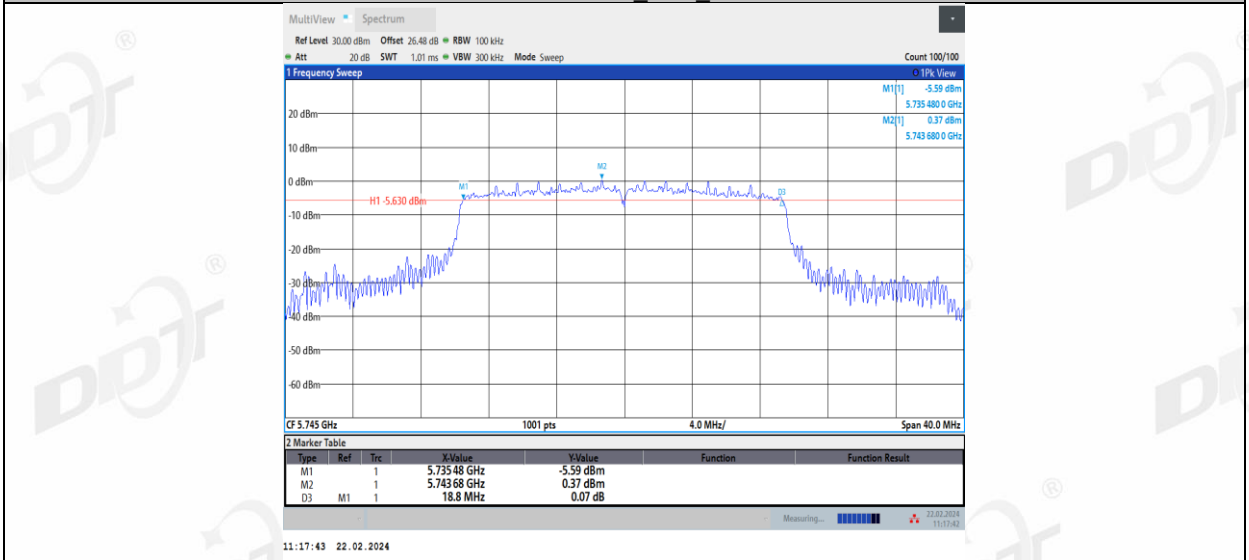


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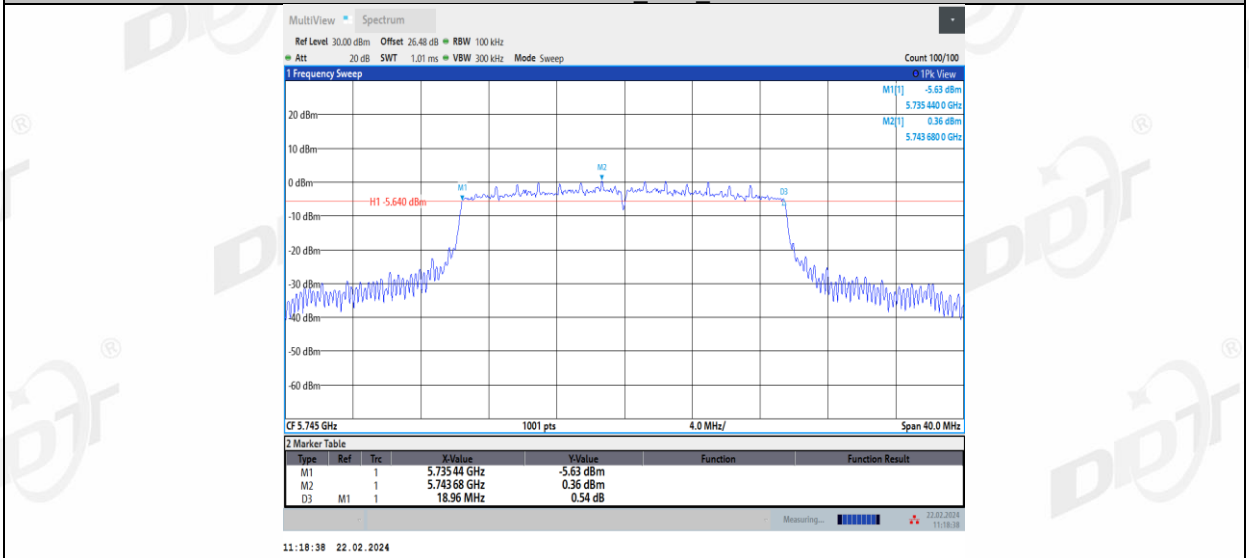




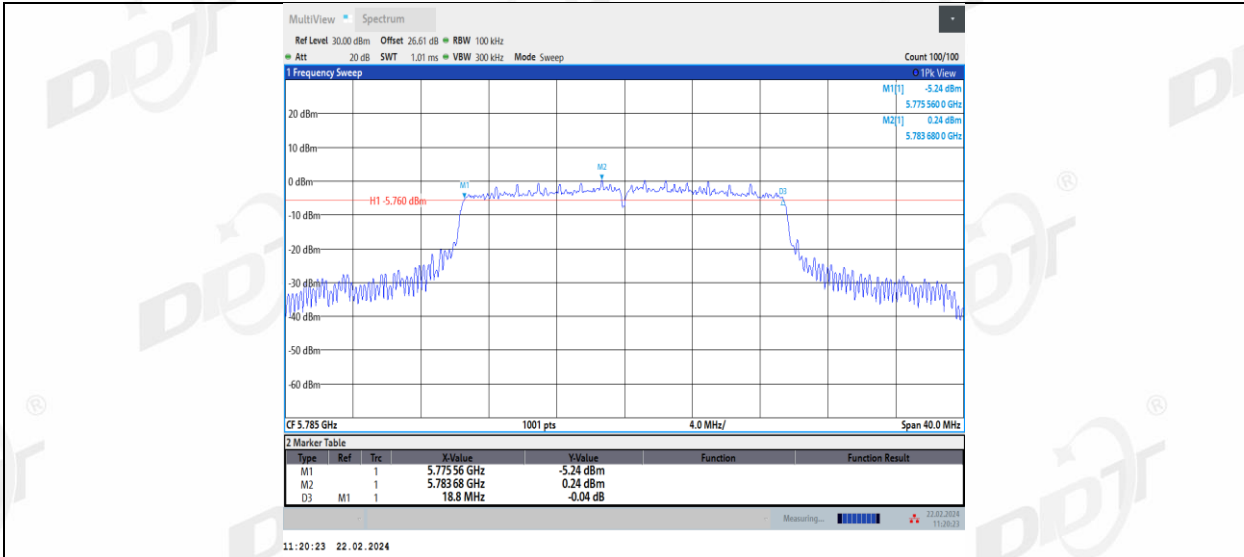
11AX20MIMO\_Ant1\_5745



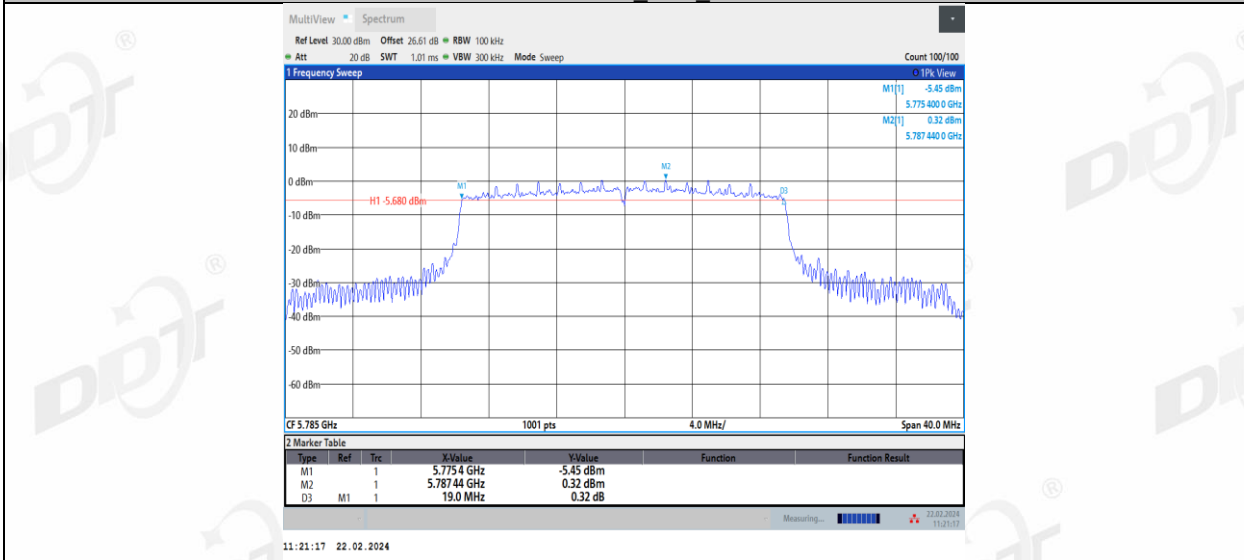
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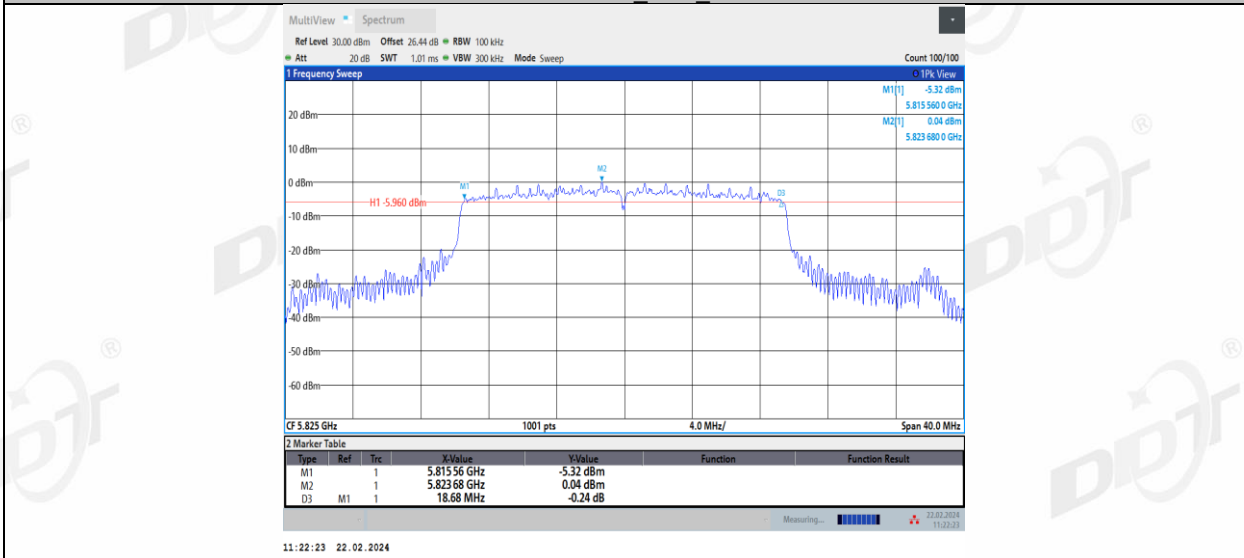
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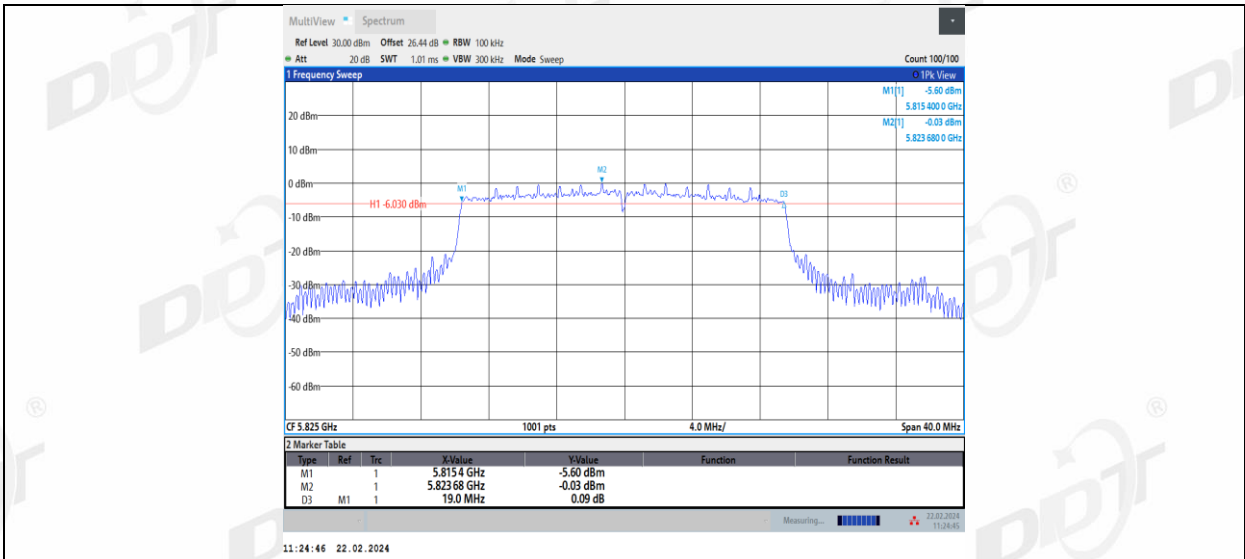
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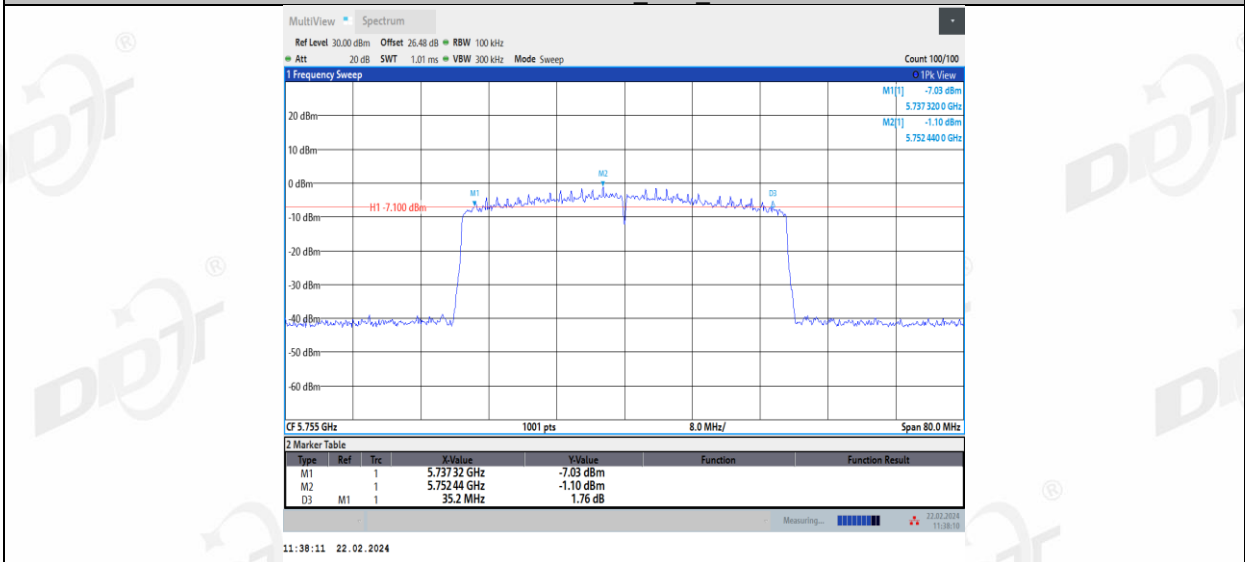
11AX20MIMO\_Ant1\_5825



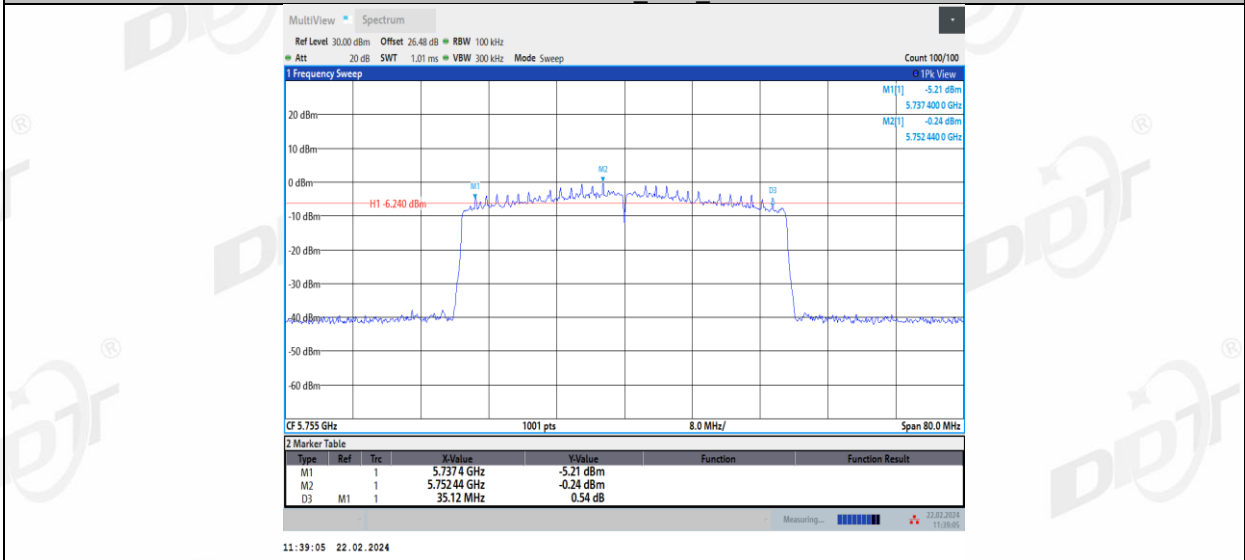
11AX20MIMO\_Ant2\_5825



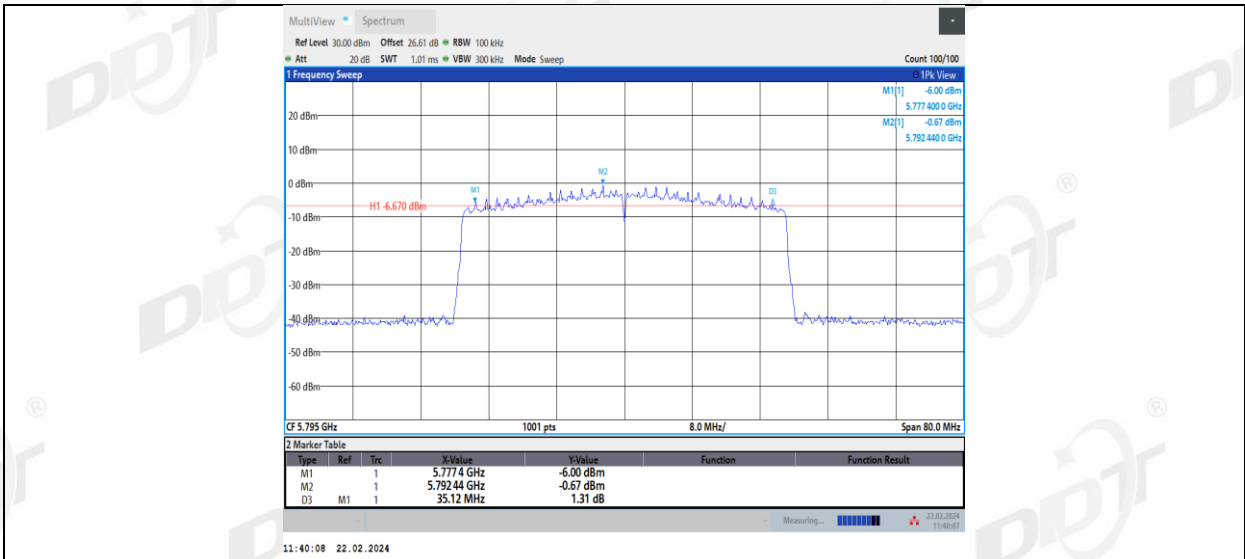
11AX40MIMO\_Ant1\_5755



11AX40MIMO\_Ant2\_5755



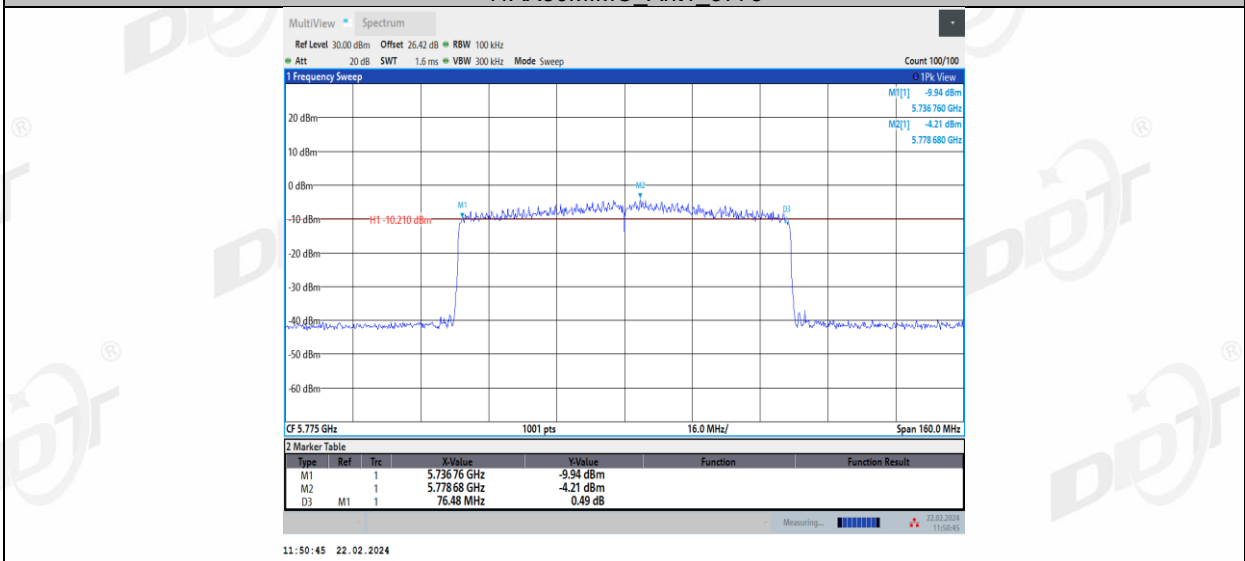
11AX40MIMO\_Ant1\_5795



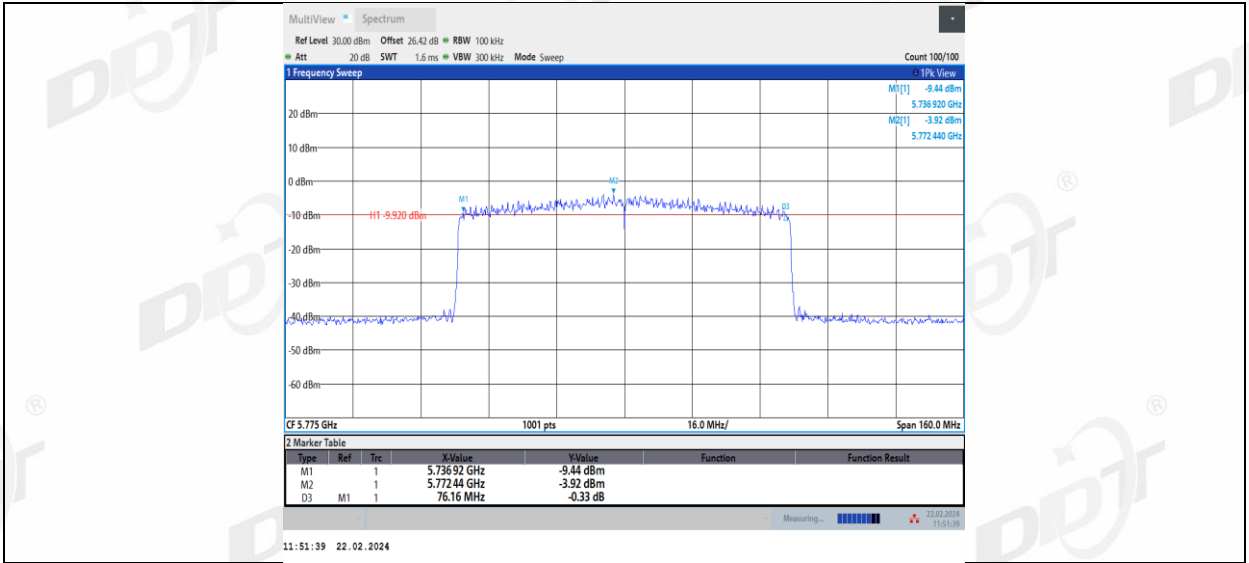
11AX40MIMO\_Ant2\_5795



11AX80MIMO\_Ant1\_5775

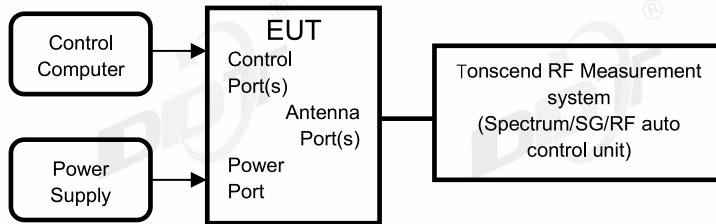


11AX80MIMO\_Ant2\_5775



## 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 4#
Ambient Condition:	24.4°C,45.3%RH	Test Date:	2024.02.20-2024.02.22
Test Power Supply:	Battery	EUT:	Wireless Speaker
Sample Number:	S23111313-04	Model No.:	CHARGE5 Wi-Fi

Test Mode	Antenna	Frequenc y [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict	
11A	Ant1	5180	19.31	5170.2905	5189.6009	---	---	
	Ant2	5180	19.287	5170.2456	5189.5321	---	---	
	Ant1	5200	19.189	5190.3620	5209.5506	---	---	
	Ant2	5200	19.2	5190.3411	5209.5415	---	---	
	Ant1	5240	17.204	5231.2935	5248.4970	---	---	
	Ant2	5240	17.202	5231.3173	5248.5192	---	---	
	Ant1	5260	19.119	5250.3858	5269.5045	---	---	
	Ant2	5260	19.163	5250.3497	5269.5124	---	---	
	Ant1	5280	19.163	5270.2949	5289.4581	---	---	
	Ant2	5280	19.2	5270.2908	5289.4912	---	---	
	Ant1	5320	19.265	5310.2152	5329.4804	---	---	
	Ant2	5320	19.261	5310.2597	5329.5205	---	---	
	Ant1	5500	19.211	5490.3190	5509.5300	---	---	
	Ant2	5500	19.227	5490.2993	5509.5266	---	---	
	Ant1	5580	19.269	5570.2142	5589.4828	---	---	
	Ant2	5580	19.277	5570.2290	5589.5059	---	---	
	Ant1	5700	19.233	5690.2464	5709.4793	---	---	
	Ant2	5700	19.262	5690.2458	5709.5079	---	---	
	Ant1	5720	19.197	5710.2837	5729.4807	---	---	
	Ant2	5720	19.205	5710.2904	5729.4950	---	---	
	Ant1	5720_UN II-2C		14.716	5710.2837	5725	---	---
	Ant2	5720_UN II-2C		14.71	5710.2904	5725	---	---
	Ant1	5720_UN II-3		4.481	5725	5729.4807	---	---
	Ant2	5720_UN II-3		4.495	5725	5729.4950	---	---
	Ant1	5745	19.114	5735.2526	5754.3668	---	---	
	Ant2	5745	19.115	5735.2510	5754.3657	---	---	
	Ant1	5785	19.095	5775.3822	5794.4774	---	---	
	Ant2	5785	19.152	5775.3734	5794.5253	---	---	
	Ant1	5825	19.196	5815.2306	5834.4270	---	---	
	Ant2	5825	19.25	5815.2000	5834.4496	---	---	
	11N20MIM O	Ant1	5180	20.189	5169.8837	5190.0725	---	---
		Ant2	5180	18.611	5170.5223	5189.1338	---	---
Ant1		5200	20.061	5190.0051	5210.0657	---	---	
Ant2		5200	18.575	5190.6110	5209.1861	---	---	
Ant1		5240	18.004	5230.9449	5248.9490	---	---	
Ant2		5240	17.737	5231.0623	5248.7997	---	---	
Ant1		5260	20.081	5250.0083	5270.0893	---	---	
Ant2		5260	18.52	5250.6289	5269.1491	---	---	
Ant1		5280	20.177	5269.9264	5290.1035	---	---	
Ant2		5280	18.587	5270.5900	5289.1769	---	---	
Ant1		5320	20.131	5309.8716	5330.0025	---	---	
Ant2		5320	18.564	5310.5769	5329.1408	---	---	
Ant1		5500	20.058	5489.9696	5510.0274	---	---	
Ant2		5500	18.581	5490.5453	5509.1264	---	---	
Ant1		5580	20.203	5569.8709	5590.0743	---	---	
Ant2		5580	18.635	5570.5176	5589.1522	---	---	
Ant1		5700	20.131	5689.8972	5710.0283	---	---	
Ant2		5700	18.624	5690.5221	5709.1457	---	---	
Ant1		5720	20.097	5709.9435	5730.0407	---	---	
Ant2		5720	18.589	5710.5679	5729.1566	---	---	
Ant1	5720_UN		15.056	5709.9435	5725	---	---	

	Ant2	II-2C 5720_UN II-2C	14.432	5710.5679	5725	---	---	
	Ant1	5720_UN II-3	5.041	5725	5730.0407	---	---	
	Ant2	5720_UN II-3	4.157	5725	5729.1566	---	---	
	Ant1	5745	20.053	5734.9147	5754.9680	---	---	
	Ant2	5745	18.568	5735.5566	5754.1250	---	---	
	Ant1	5785	20.073	5775.0070	5795.0803	---	---	
	Ant2	5785	18.571	5775.5730	5794.1443	---	---	
	Ant1	5825	20.151	5814.8644	5835.0152	---	---	
	Ant2	5825	18.603	5815.5308	5834.1334	---	---	
	11N40MIM O	Ant1	5190	36.017	5171.9705	5207.9878	---	---
		Ant2	5190	36.123	5171.9047	5208.0273	---	---
		Ant1	5230	35.902	5212.0054	5247.9078	---	---
		Ant2	5230	35.955	5211.9530	5247.9083	---	---
		Ant1	5270	35.908	5252.0217	5287.9298	---	---
Ant2		5270	36.004	5252.0087	5288.0124	---	---	
Ant1		5310	35.904	5292.0111	5327.9153	---	---	
Ant2		5310	36.066	5291.9064	5327.9727	---	---	
Ant1		5510	35.939	5492.0050	5527.9439	---	---	
Ant2		5510	36.05	5491.9186	5527.9690	---	---	
Ant1		5550	35.892	5532.0293	5567.9213	---	---	
Ant2		5550	35.95	5531.9514	5567.9013	---	---	
Ant1		5670	35.894	5652.0439	5687.9379	---	---	
Ant2		5670	36.014	5651.9990	5688.0130	---	---	
Ant1		5710	35.946	5691.9909	5727.9369	---	---	
Ant2		5710	36.027	5691.8967	5727.9240	---	---	
Ant1		5710_UN II-2C	33.009	5691.9909	5725	---	---	
Ant2		5710_UN II-2C	33.103	5691.8967	5725	---	---	
Ant1		5710_UN II-3	2.937	5725	5727.9369	---	---	
Ant2		5710_UN II-3	2.924	5725	5727.9240	---	---	
Ant1		5755	35.947	5736.9631	5772.9100	---	---	
Ant2		5755	36.003	5736.9085	5772.9112	---	---	
Ant1		5795	35.911	5776.9879	5812.8987	---	---	
Ant2		5795	35.999	5776.9455	5812.9445	---	---	
11AC20MI MO		Ant1	5180	19.946	5169.9850	5189.9308	---	---
		Ant2	5180	18.349	5170.8487	5189.1977	---	---
		Ant1	5200	19.906	5190.0612	5209.9672	---	---
		Ant2	5200	18.294	5190.8965	5209.1901	---	---
		Ant1	5240	17.963	5230.9698	5248.9327	---	---
		Ant2	5240	17.628	5231.1366	5248.7642	---	---
	Ant1	5260	19.695	5250.1338	5269.8286	---	---	
	Ant2	5260	18.201	5250.9563	5269.1576	---	---	
	Ant1	5280	19.74	5270.0618	5289.8015	---	---	
	Ant2	5280	18.219	5270.8752	5289.0940	---	---	
	Ant1	5320	19.831	5310.0683	5329.8996	---	---	
	Ant2	5320	18.358	5310.8486	5329.2068	---	---	
	Ant1	5500	19.826	5490.0955	5509.9219	---	---	
	Ant2	5500	18.314	5490.8578	5509.1718	---	---	
	Ant1	5580	19.826	5570.0429	5589.8692	---	---	
	Ant2	5580	18.268	5570.8886	5589.1568	---	---	
	Ant1	5700	19.895	5690.0087	5709.9036	---	---	
	Ant2	5700	18.324	5690.8062	5709.1301	---	---	
	Ant1	5720	19.776	5710.0698	5729.8457	---	---	
	Ant2	5720	18.225	5710.8910	5729.1163	---	---	
	Ant1	5720_UN II-2C	14.93	5710.0698	5725	---	---	
	Ant2	5720_UN	14.109	5710.8910	5725	---	---	

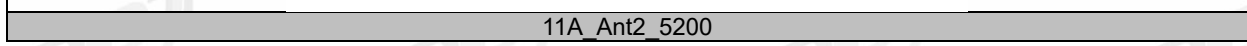
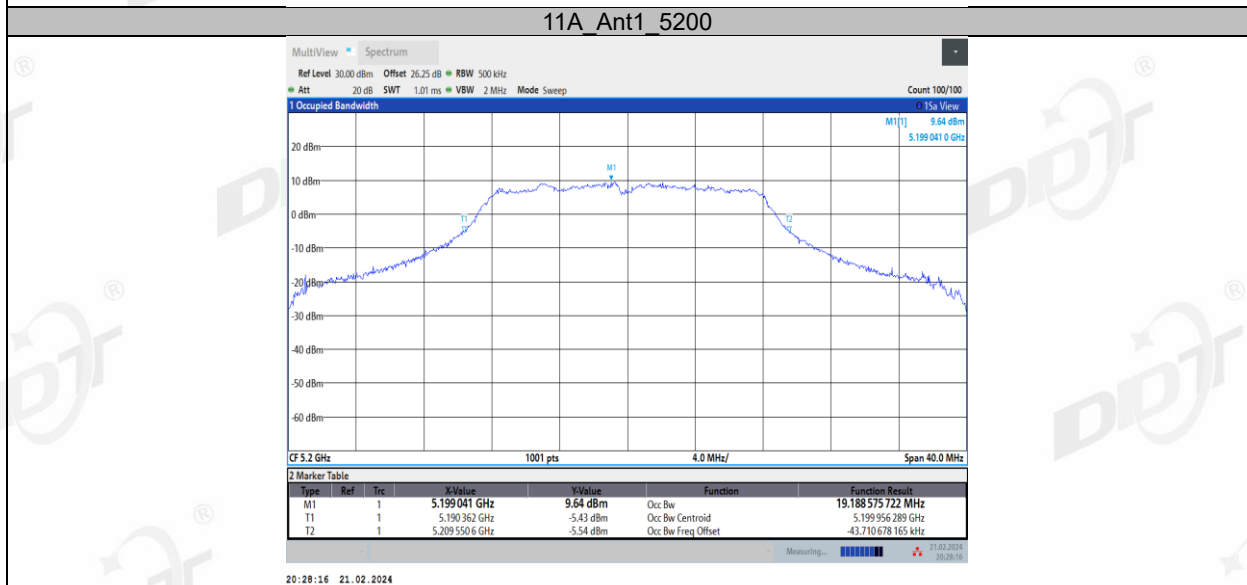
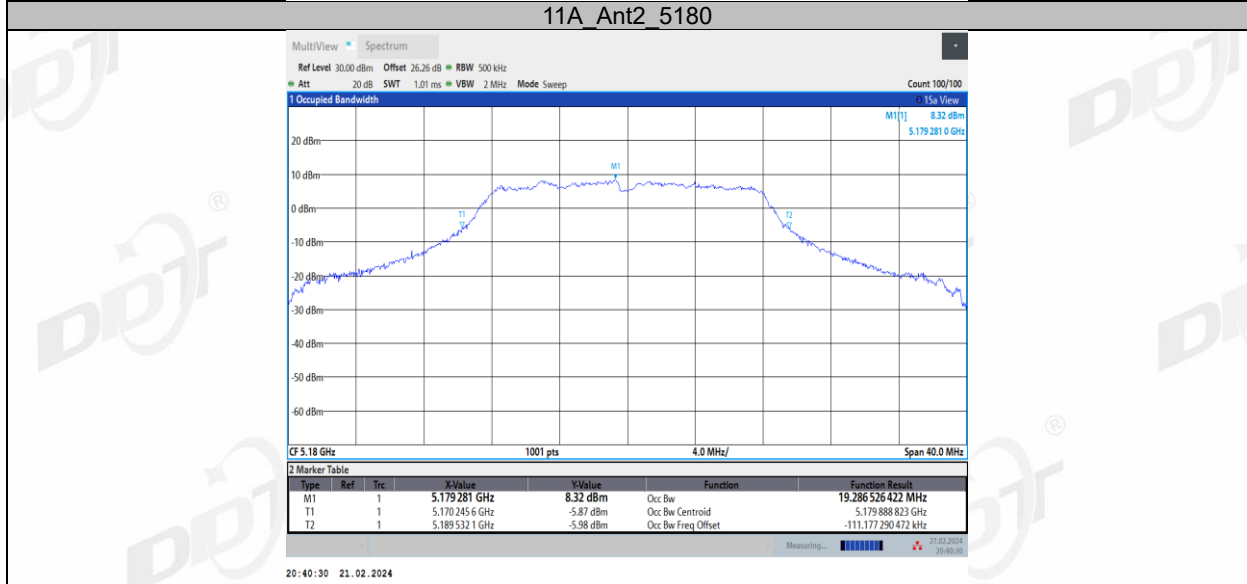
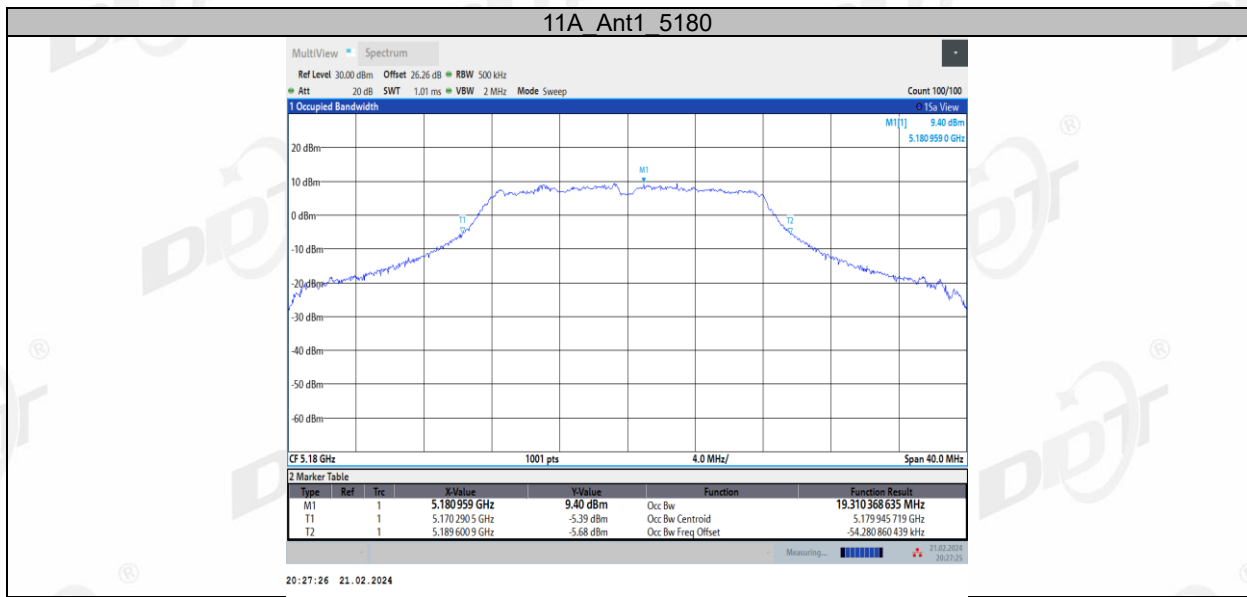


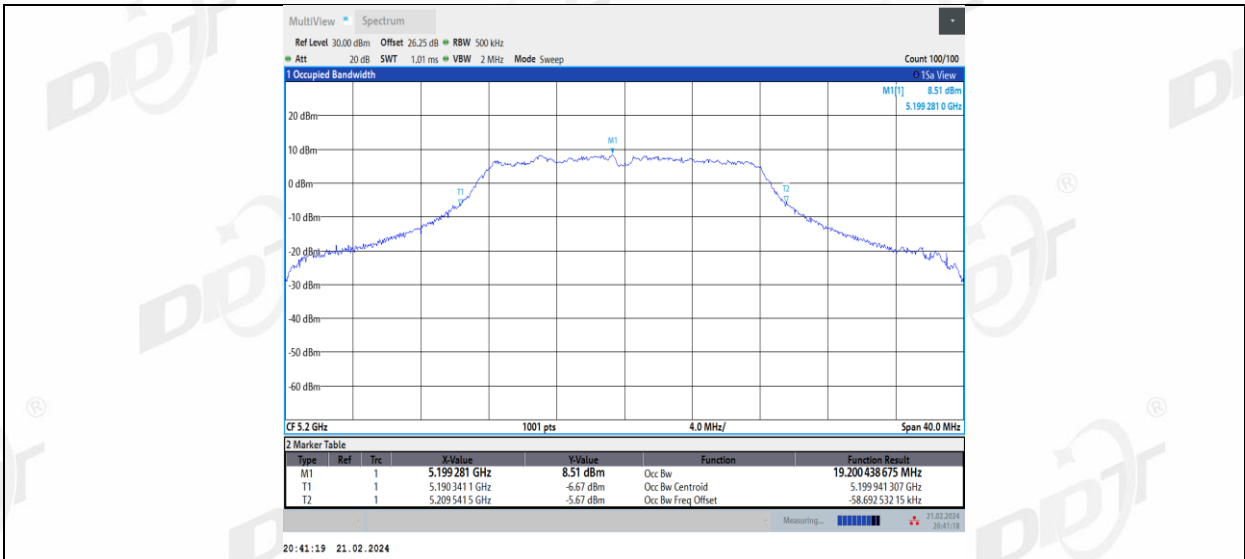
		II-2C						
	Ant1	5720_UN II-3	4.846	5725	5729.8457	---	---	
	Ant2	5720_UN II-3	4.116	5725	5729.1163	---	---	
	Ant1	5745	19.646	5735.0248	5754.6712	---	---	
	Ant2	5745	18.147	5735.8961	5754.0432	---	---	
	Ant1	5785	19.735	5775.1225	5794.8570	---	---	
	Ant2	5785	18.193	5775.9203	5794.1131	---	---	
	Ant1	5825	19.815	5815.0212	5834.8358	---	---	
	Ant2	5825	18.206	5815.8437	5834.0501	---	---	
11AC40MI MO	Ant1	5190	35.86	5172.0322	5207.8919	---	---	
	Ant2	5190	36.123	5171.9848	5208.1074	---	---	
	Ant1	5230	35.797	5212.0651	5247.8619	---	---	
	Ant2	5230	36.158	5211.8687	5248.0271	---	---	
	Ant1	5270	35.836	5252.0408	5287.8764	---	---	
	Ant2	5270	36.041	5251.9952	5288.0360	---	---	
	Ant1	5310	35.827	5292.0303	5327.8577	---	---	
	Ant2	5310	36.159	5291.9048	5328.0636	---	---	
	Ant1	5510	35.845	5492.0361	5527.8810	---	---	
	Ant2	5510	36.182	5491.9040	5528.0862	---	---	
	Ant1	5550	35.825	5532.0150	5567.8400	---	---	
	Ant2	5550	36.062	5531.9382	5568.0007	---	---	
	Ant1	5670	35.793	5652.0475	5687.8410	---	---	
	Ant2	5670	36.031	5652.0032	5688.0339	---	---	
	Ant1	5710	35.894	5692.0144	5727.9085	---	---	
	Ant2	5710	36.18	5691.8724	5728.0522	---	---	
		Ant1	5710_UN II-2C	32.986	5692.0144	5725	---	---
		Ant2	5710_UN II-2C	33.128	5691.8724	5725	---	---
		Ant1	5710_UN II-3	2.908	5725	5727.9085	---	---
		Ant2	5710_UN II-3	3.052	5725	5728.0522	---	---
		Ant1	5755	35.907	5736.9287	5772.8353	---	---
		Ant2	5755	36.12	5736.8573	5772.9769	---	---
		Ant1	5795	35.779	5777.0580	5812.8367	---	---
		Ant2	5795	36.104	5776.9462	5813.0503	---	---
11AC80MI MO	Ant1	5210	75.226	5172.3815	5247.6071	---	---	
	Ant2	5210	74.872	5172.5567	5247.4287	---	---	
	Ant1	5290	75.262	5252.3143	5327.5759	---	---	
	Ant2	5290	74.957	5252.5559	5327.5127	---	---	
	Ant1	5530	75.185	5492.3335	5567.5189	---	---	
	Ant2	5530	74.934	5492.5262	5567.4605	---	---	
	Ant1	5610	75.187	5572.3324	5647.5193	---	---	
	Ant2	5610	74.819	5572.5653	5647.3847	---	---	
	Ant1	5690	75.259	5652.3245	5727.5839	---	---	
	Ant2	5690	74.9	5652.5603	5727.4605	---	---	
		Ant1	5690_UN II-2C	72.676	5652.3245	5725	---	---
		Ant2	5690_UN II-2C	72.44	5652.5603	5725	---	---
		Ant1	5690_UN II-3	2.584	5725	5727.5839	---	---
		Ant2	5690_UN II-3	2.461	5725	5727.4605	---	---
		Ant1	5775	75.393	5737.1775	5812.5706	---	---
		Ant2	5775	75.135	5737.3292	5812.4641	---	---
11AX20MI MO	Ant1	5180	19.442	5170.2086	5189.6507	---	---	
	Ant2	5180	19.311	5170.2981	5189.6086	---	---	
	Ant1	5200	19.355	5190.2867	5209.6418	---	---	
	Ant2	5200	19.341	5190.2828	5209.6237	---	---	
	Ant1	5240	18.911	5230.4979	5249.4087	---	---	

	Ant2	5240	18.908	5230.4973	5249.4051	---	---
	Ant1	5260	19.34	5250.2969	5269.6368	---	---
	Ant2	5260	19.313	5250.3324	5269.6455	---	---
	Ant1	5280	19.397	5270.2454	5289.6420	---	---
	Ant2	5280	19.281	5270.2953	5289.5761	---	---
	Ant1	5320	19.413	5310.2815	5329.6949	---	---
	Ant2	5320	19.307	5310.3141	5329.6209	---	---
	Ant1	5500	19.366	5490.3077	5509.6733	---	---
	Ant2	5500	19.352	5490.2766	5509.6284	---	---
	Ant1	5580	19.45	5570.2511	5589.7009	---	---
	Ant2	5580	19.35	5570.2919	5589.6424	---	---
	Ant1	5700	19.436	5690.2557	5709.6914	---	---
	Ant2	5700	19.363	5690.2537	5709.6162	---	---
	Ant1	5720	19.403	5710.2408	5729.6439	---	---
	Ant2	5720	19.274	5710.3163	5729.5907	---	---
	Ant1	5720_UN II-2C	14.759	5710.2408	5725	---	---
	Ant2	5720_UN II-2C	14.684	5710.3163	5725	---	---
	Ant1	5720_UN II-3	4.644	5725	5729.6439	---	---
	Ant2	5720_UN II-3	4.591	5725	5729.5907	---	---
	Ant1	5745	19.328	5735.2693	5754.5973	---	---
	Ant2	5745	19.279	5735.2890	5754.5683	---	---
	Ant1	5785	19.361	5775.3157	5794.6768	---	---
	Ant2	5785	19.295	5775.3302	5794.6255	---	---
	Ant1	5825	19.376	5815.2673	5834.6431	---	---
	Ant2	5825	19.315	5815.2702	5834.5856	---	---
	Ant1	5190	37.608	5171.1454	5208.7537	---	---
	Ant2	5190	37.586	5171.2101	5208.7965	---	---
	Ant1	5230	37.628	5211.1353	5248.7634	---	---
	Ant2	5230	37.595	5211.1746	5248.7696	---	---
	Ant1	5270	37.567	5251.1573	5288.7243	---	---
	Ant2	5270	37.583	5251.1819	5288.7648	---	---
	Ant1	5310	37.628	5291.1369	5328.7649	---	---
	Ant2	5310	37.646	5291.1511	5328.7972	---	---
	Ant1	5510	37.653	5491.1217	5528.7749	---	---
	Ant2	5510	37.665	5491.1423	5528.8071	---	---
	Ant1	5550	37.648	5531.0924	5568.7407	---	---
	Ant2	5550	37.599	5531.1621	5568.7607	---	---
	Ant1	5670	37.623	5651.1478	5688.7709	---	---
	Ant2	5670	37.502	5651.2586	5688.7603	---	---
	Ant1	5710	37.649	5691.1279	5728.7772	---	---
	Ant2	5710	37.672	5691.1201	5728.7922	---	---
	Ant1	5710_UN II-2C	33.872	5691.1279	5725	---	---
	Ant2	5710_UN II-2C	33.88	5691.1201	5725	---	---
	Ant1	5710_UN II-3	3.777	5725	5728.7772	---	---
	Ant2	5710_UN II-3	3.792	5725	5728.7922	---	---
	Ant1	5755	37.657	5736.0858	5773.7427	---	---
	Ant2	5755	37.633	5736.1041	5773.7371	---	---
	Ant1	5795	37.574	5776.1918	5813.7663	---	---
	Ant2	5795	37.654	5776.1419	5813.7956	---	---
	Ant1	5210	77.098	5171.4271	5248.5248	---	---
	Ant2	5210	77.025	5171.4631	5248.4877	---	---
	Ant1	5290	77.042	5251.4574	5328.4997	---	---
	Ant2	5290	77.231	5251.3842	5328.6154	---	---
	Ant1	5530	76.981	5491.4540	5568.4346	---	---
	Ant2	5530	77.056	5491.3882	5568.4442	---	---
	Ant1	5610	77.002	5571.4443	5648.4462	---	---

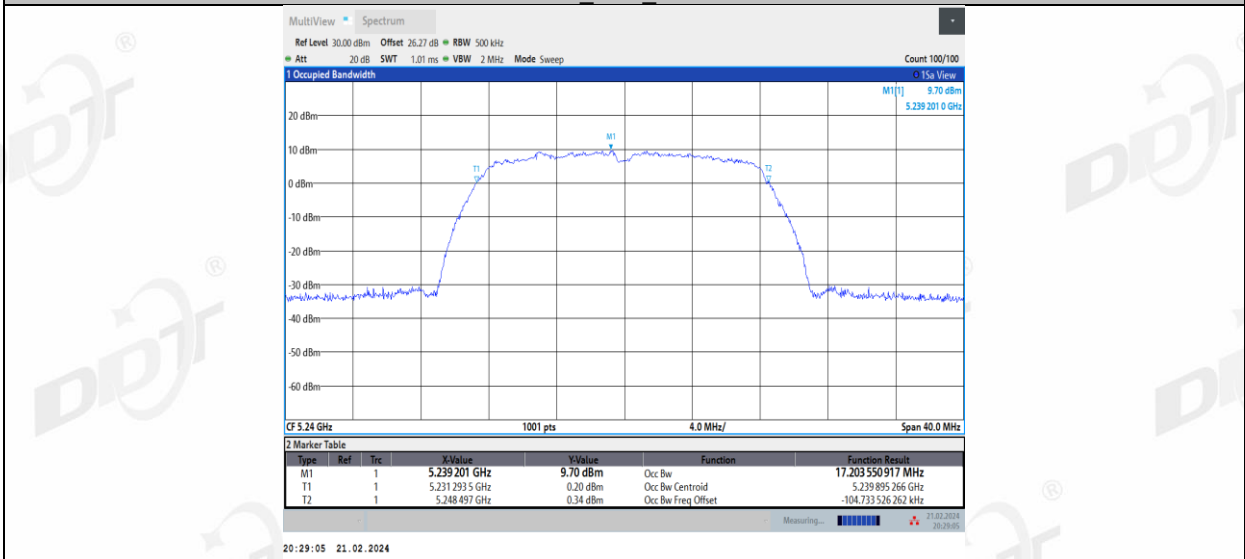
Ant2	5610	77.214	5571.2837	5648.4979	---	---
Ant1	5690	77.121	5651.4862	5728.6068	---	---
Ant2	5690	77.086	5651.4648	5728.5508	---	---
Ant1	5690_UN II-2C	73.514	5651.4862	5725	---	---
Ant2	5690_UN II-2C	73.535	5651.4648	5725	---	---
Ant1	5690_UN II-3	3.607	5725	5728.6068	---	---
Ant2	5690_UN II-3	3.551	5725	5728.5508	---	---
Ant1	5775	77.263	5736.2254	5813.4889	---	---
Ant2	5775	77.38	5736.2248	5813.6050	---	---

### 6.5. Test graphs

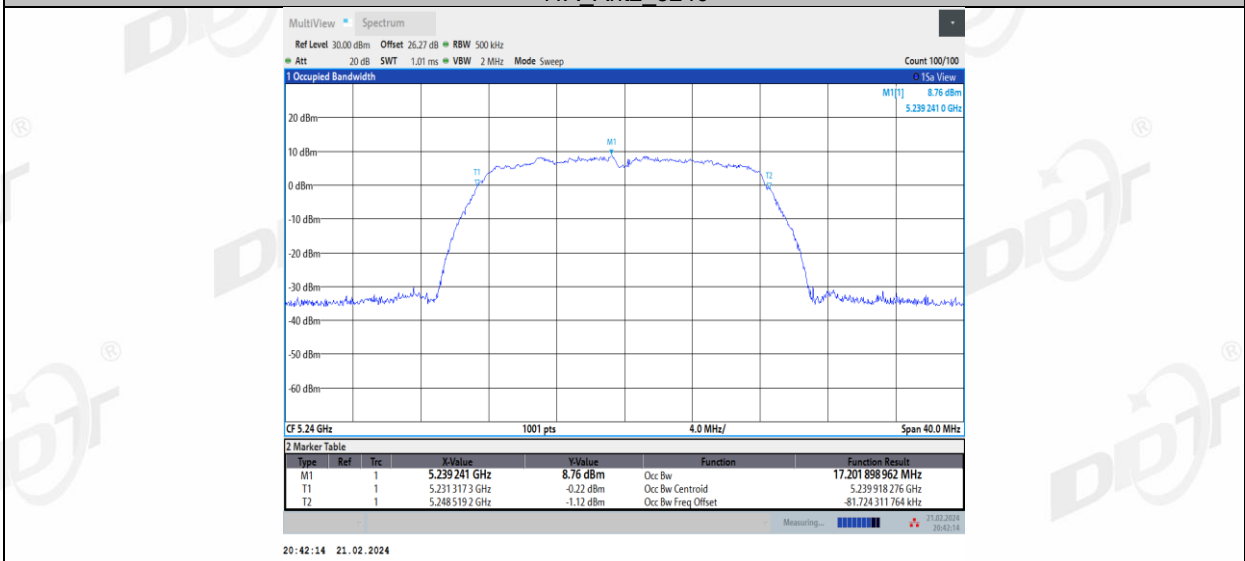




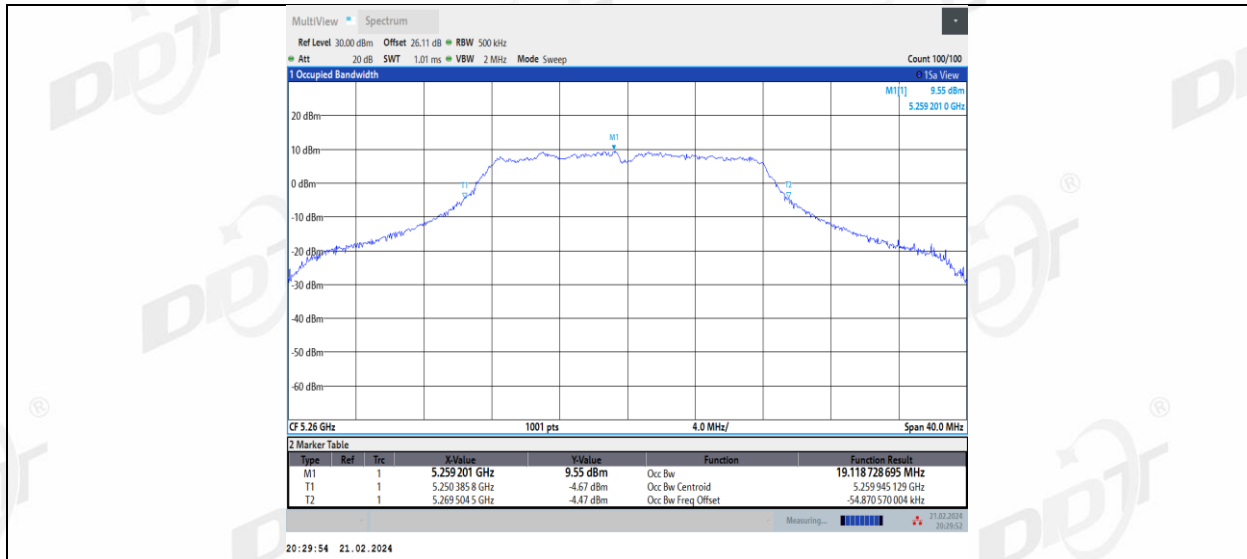
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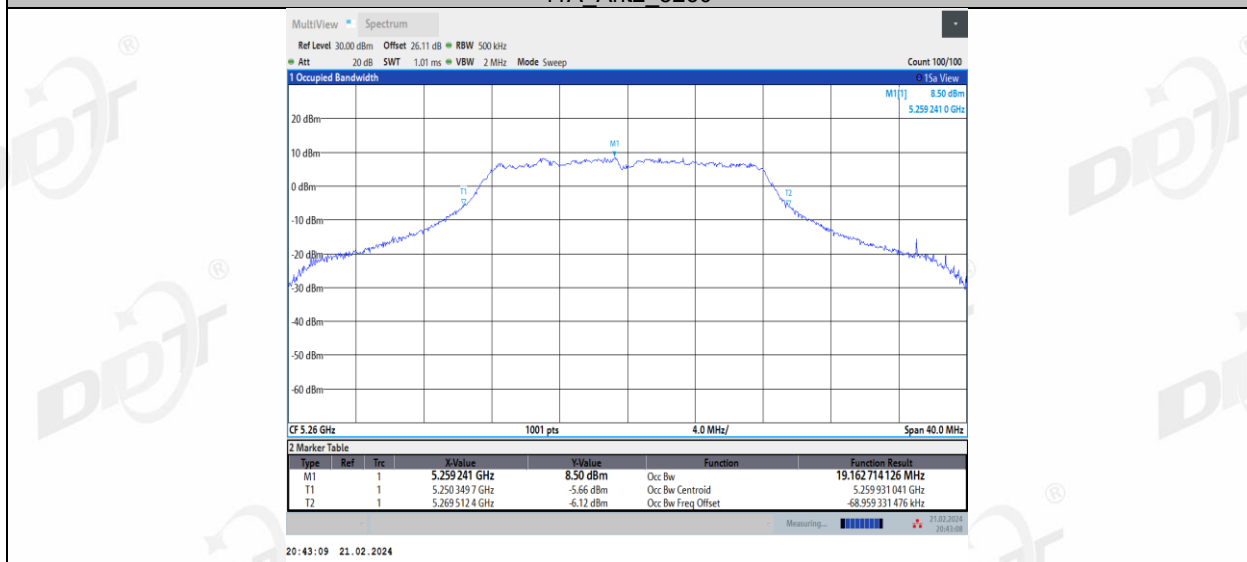
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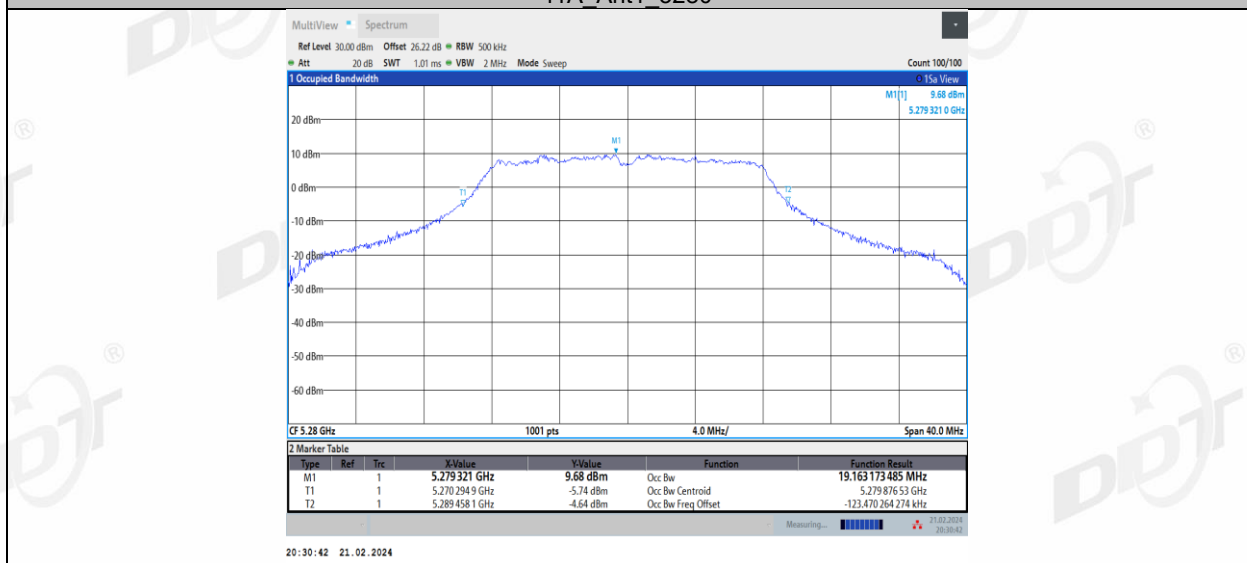
11A\_Ant1\_5260



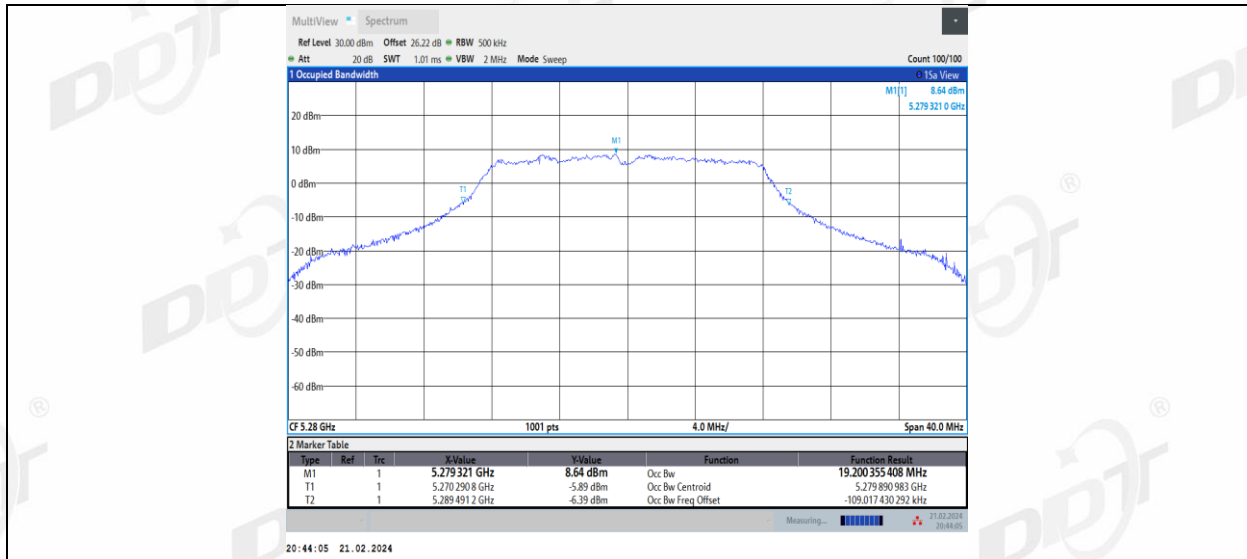
11A\_Ant2\_5260



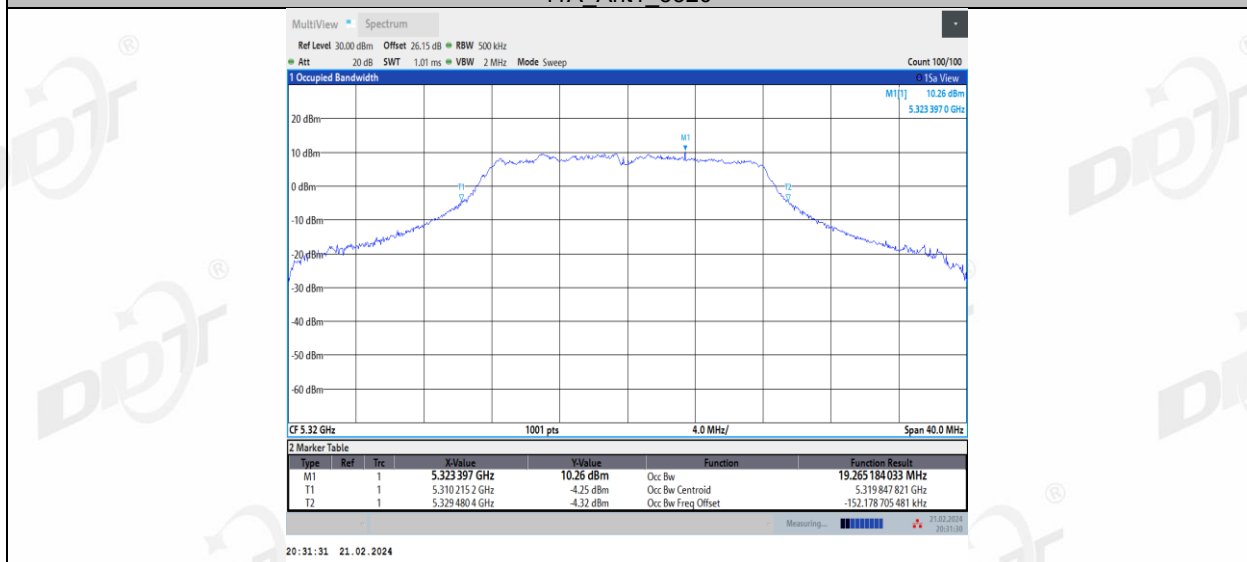
11A\_Ant1\_5280



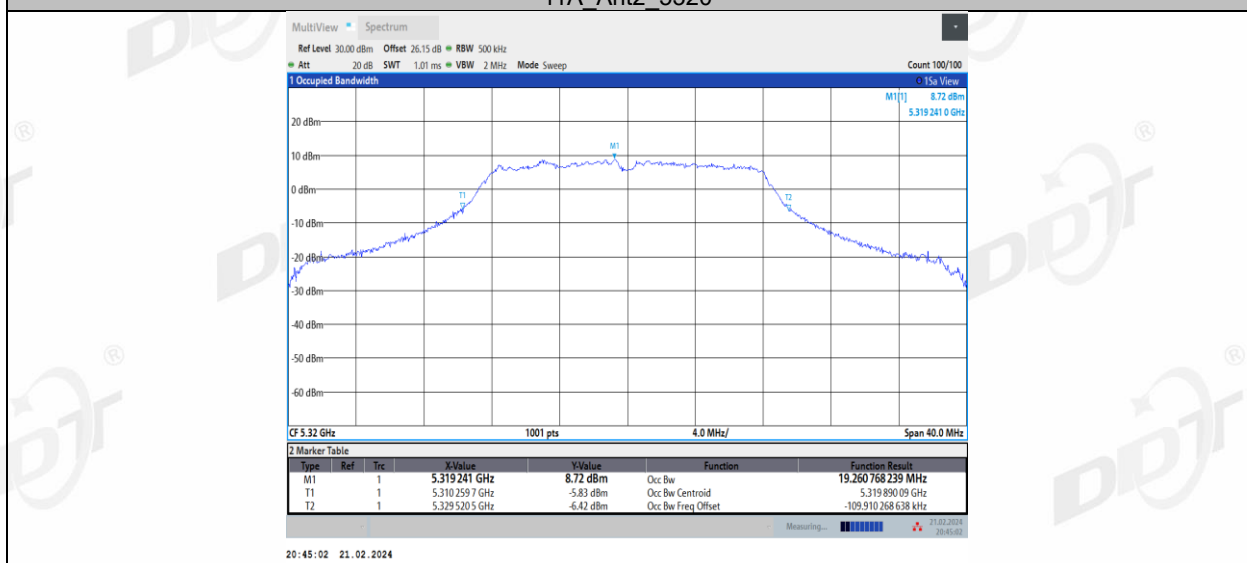
11A\_Ant2\_5280



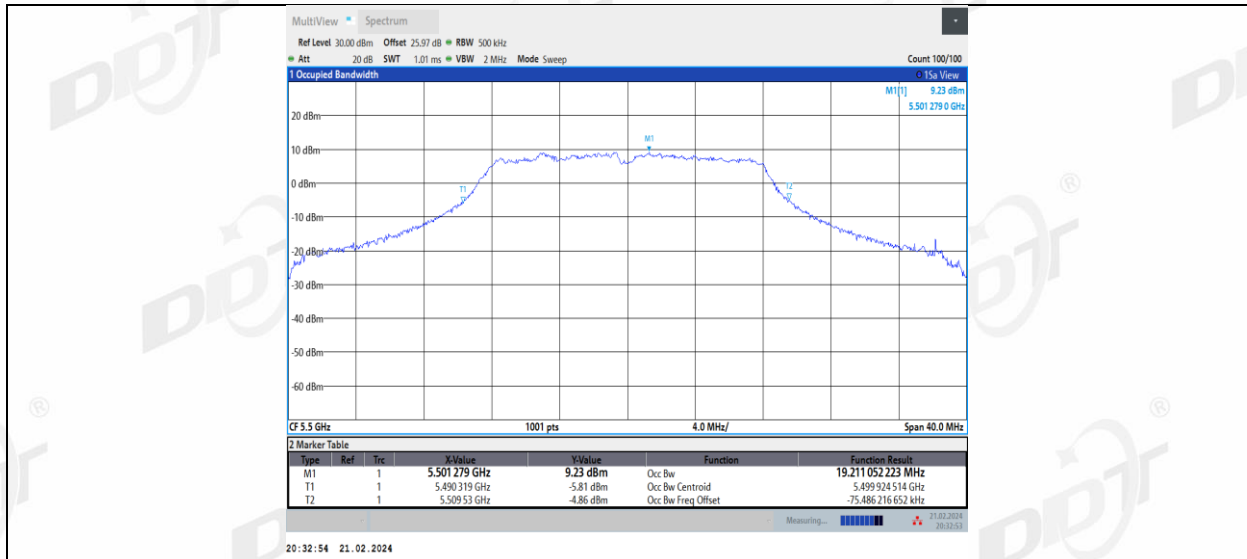
11A\_Ant1\_5320



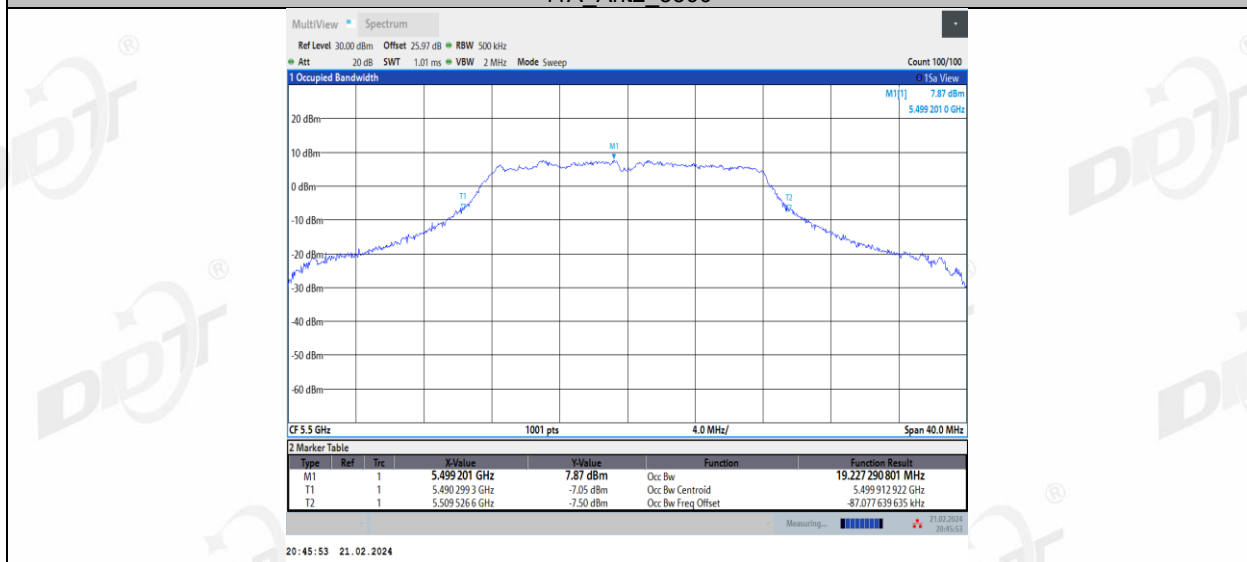
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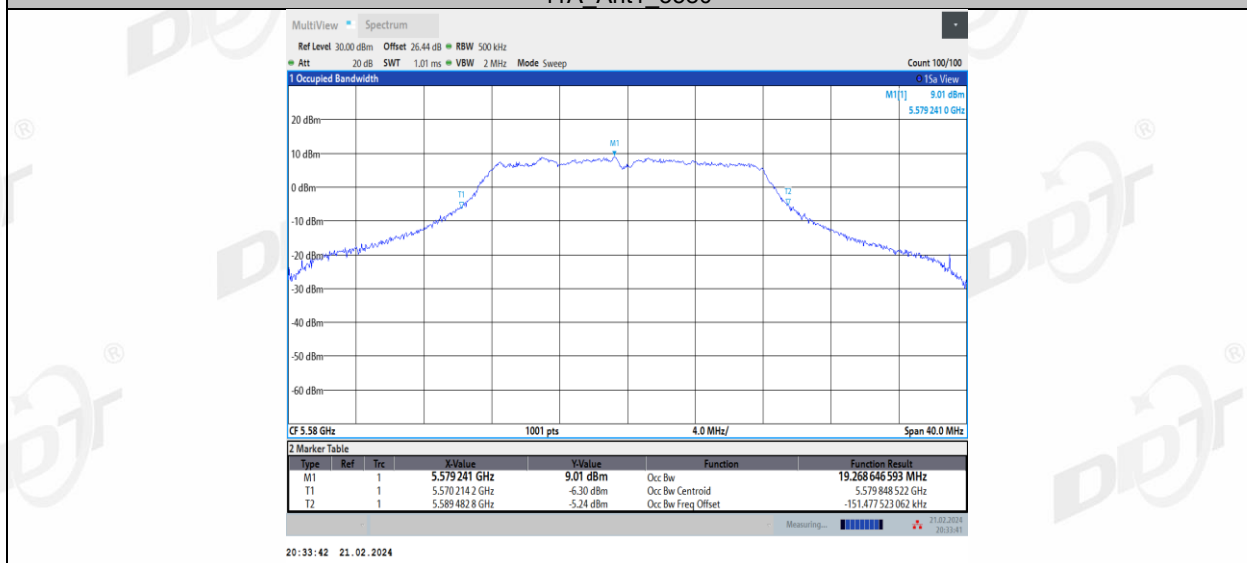
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11A\_Ant2\_5500

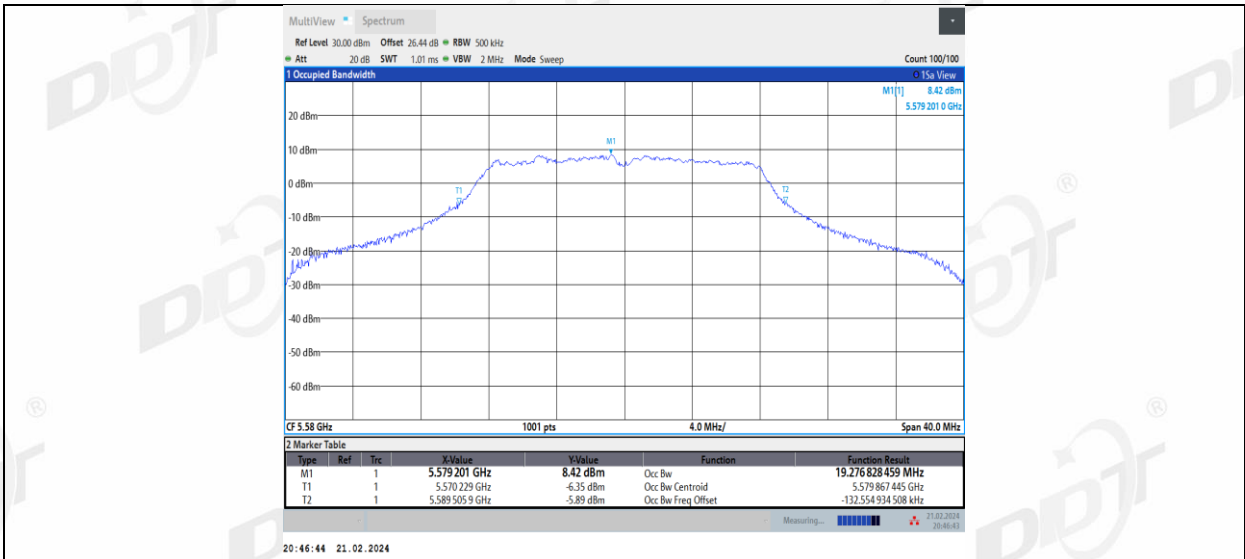


11A\_Ant1\_5580

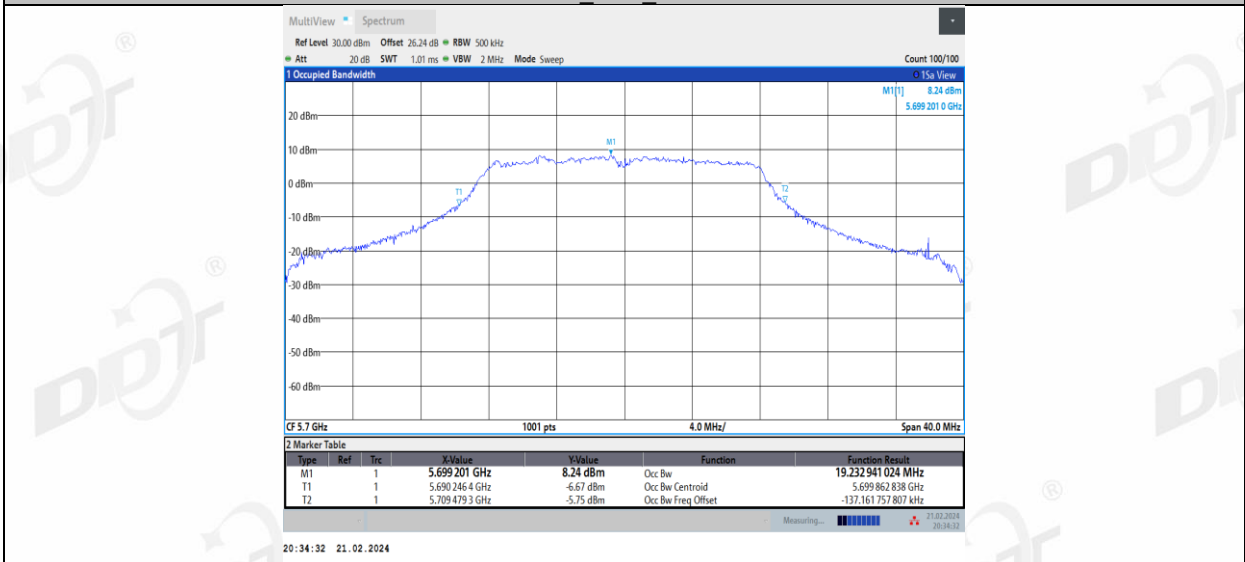


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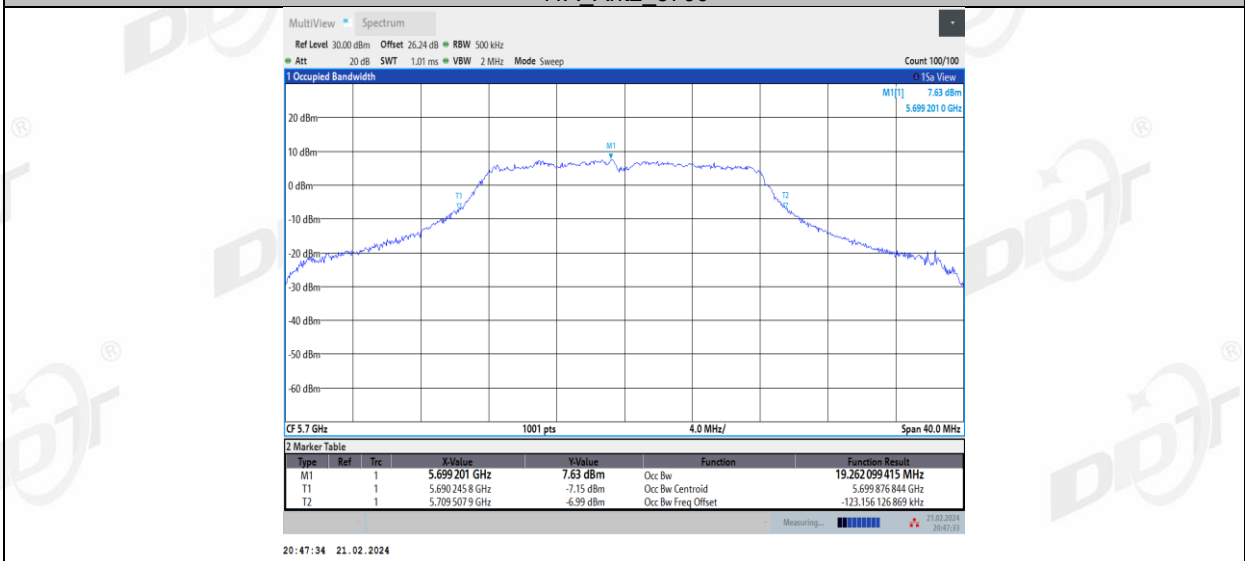




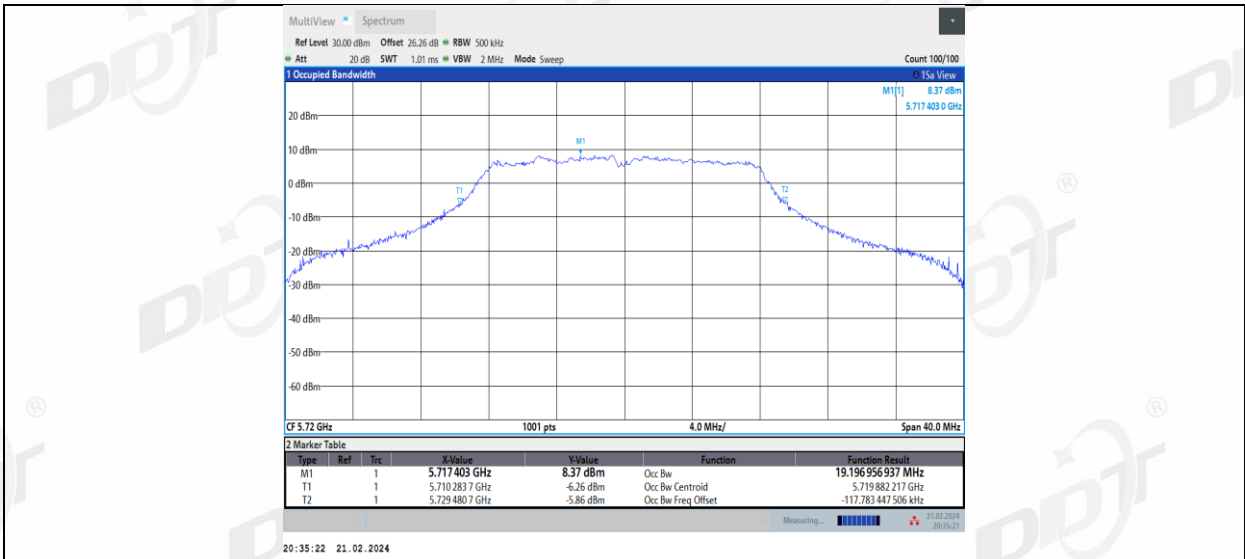
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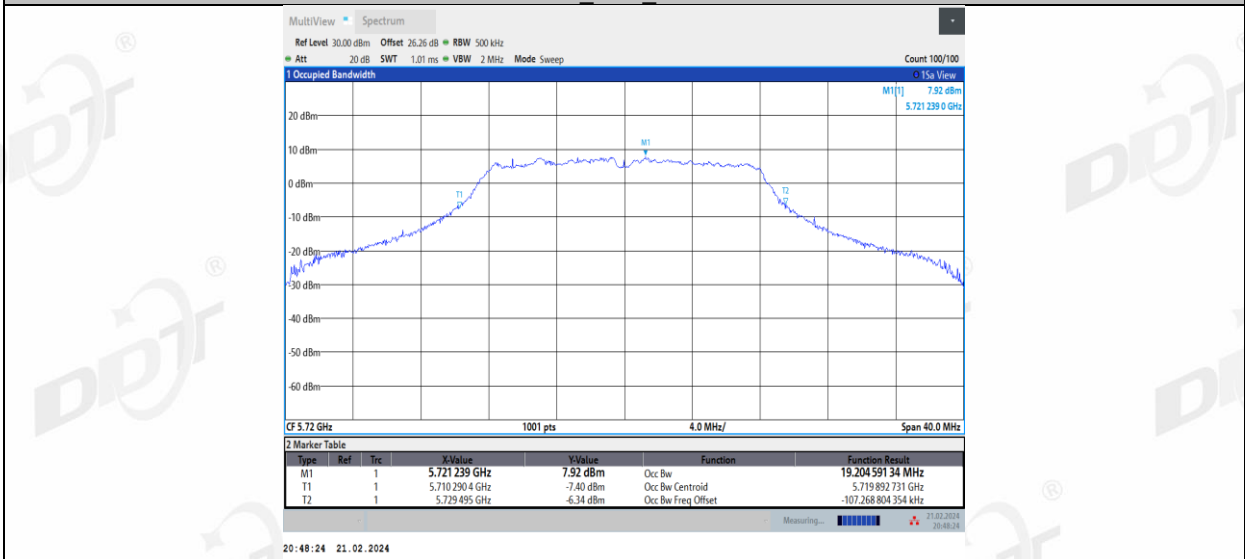
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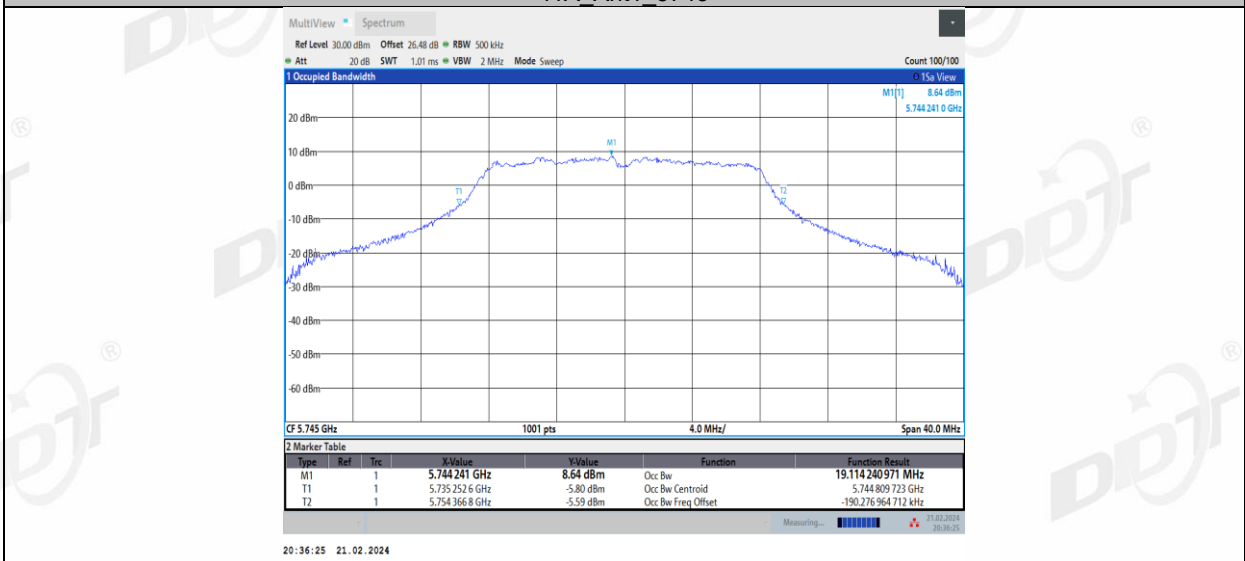
11A\_Ant1\_5720



11A\_Ant2\_5720



11A\_Ant1\_5745



11A\_Ant2\_5745