

## Appendix B: Test Results of 5GHz Wi-Fi

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## Appendix B.1: Test Results of Maximum Conducted output power

### U-NII-1 Band:

TestMode	Antenna	Channel	Result[dBm]	Conducted Power Limit[dBm]	EIRP [dBm]	ISED Limit EIRP [dBm]	Verdict
11A	Ant1	5180	12.08	23.98	14.73	≤22.50	PASS
		5200	11.90	23.98	14.55	≤22.50	PASS
		5240	12.45	23.98	15.1	≤22.50	PASS
11N20SISO	Ant1	5180	11.84	23.98	14.49	≤22.50	PASS
		5200	11.54	23.98	14.19	≤22.50	PASS
		5240	11.91	23.98	14.56	≤22.50	PASS
11N40SISO	Ant1	5190	11.29	23.98	13.94	≤22.50	PASS
		5230	11.47	23.98	14.12	≤22.50	PASS
11AC20SISO	Ant1	5180	10.98	23.98	13.63	≤22.50	PASS
		5200	10.62	23.98	13.27	≤22.50	PASS
		5240	11.13	23.98	13.78	≤22.50	PASS
11AC40SISO	Ant1	5190	9.50	23.98	12.15	≤22.50	PASS
		5230	9.70	23.98	12.35	≤22.50	PASS
11AC80SISO	Ant1	5210	8.24	23.98	10.89	≤22.50	PASS

Note: This product only supports SISO mode, and both Ports tested, only the worst-case reported.

The Duty Cycle Factor is compensated in the tables.

e.i.r.p.= $P_{(\text{conducted power})} + G$  (antenna gain, listed on section 3.2),.

**U-NII-2A, U-NII-2C and U-NII-3 Bands:**

TestMode	Antenna	Channel	Result[dBm]	Conducted Power Limit[dBm]	Verdict
11A	Ant1	5260	12.25	23.98	PASS
		5280	12.16	23.98	PASS
		5320	12.38	23.98	PASS
		5500	12.88	23.98	PASS
		5580	12.80	23.98	PASS
		5700	12.15	23.98	PASS
		5745	11.92	30.00	PASS
		5785	11.77	30.00	PASS
11N20SISO	Ant1	5825	11.54	30.00	PASS
		5260	11.78	23.98	PASS
		5280	11.67	23.98	PASS
		5320	12.02	23.98	PASS
		5500	12.33	23.98	PASS
		5580	12.40	23.98	PASS
		5700	11.68	23.98	PASS
		5745	11.48	30.00	PASS
11N40SISO	Ant1	5785	11.44	30.00	PASS
		5825	11.10	30.00	PASS
		5270	11.49	23.98	PASS
		5310	11.65	23.98	PASS
		5510	11.83	23.98	PASS
		5550	11.65	23.98	PASS
		5670	11.50	23.98	PASS
11AC20SISO	Ant1	5755	11.18	30.00	PASS
		5795	11.30	30.00	PASS
		5260	10.88	23.98	PASS
		5280	10.75	23.98	PASS
		5320	11.03	23.98	PASS
		5500	11.35	23.98	PASS
		5580	11.30	23.98	PASS
		5700	10.49	23.98	PASS
11AC40SISO	Ant1	5745	10.22	30.00	PASS
		5785	10.03	30.00	PASS
		5825	9.92	30.00	PASS
		5270	9.64	23.98	PASS
		5310	9.90	23.98	PASS
		5510	10.18	23.98	PASS
		5550	9.74	23.98	PASS
11AC80SISO	Ant1	5670	9.67	23.98	PASS
		5755	9.23	30.00	PASS
		5795	9.36	30.00	PASS
		5290	8.44	23.98	PASS
		5530	8.50	23.98	PASS
		5610	8.35	23.98	PASS
		5775	7.98	30.00	PASS

Note: This product only supports SISO mode, and both Ports tested, only the worst-case reported. The Duty Cycle Factor is compensated in the tables.

e.i.r.p.= $P_{\text{(conducted power)}} + G$  (antenna gain, listed on section 3.2), as U-NII-2A and U-NII-2C bands, the maximum e.i.r.p is also compliant with RSS-247 requirements.

A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW(27dBm).

## Appendix B.2: Test Results of Conducted Power Spectral Density

### U-NII-1 Band:

TestMode	Antenna	Channel	Conducted Result [dBm/300KHz]	Conducted Result [dBm/MHz]	FCC Limit Conducted Power [dBm/MHz]	EIRP [dBm/MHz]	IC Limit EIRP [dBm/MHz]	Verdict
11A	Ant1	5180	-0.82	4.41	≤11.00	7.06	≤10.00	PASS
		5200	0.3	5.53	≤11.00	8.18	≤10.00	PASS
		5240	-0.94	4.29	≤11.00	6.94	≤10.00	PASS
11N20SISO	Ant1	5180	-1.66	3.57	≤11.00	6.22	≤10.00	PASS
		5200	-0.93	4.30	≤11.00	6.95	≤10.00	PASS
		5240	-1.2	4.03	≤11.00	6.68	≤10.00	PASS
11N40SISO	Ant1	5190	-3.98	1.25	≤11.00	3.90	≤10.00	PASS
		5230	-4.02	1.21	≤11.00	3.86	≤10.00	PASS
11AC20SISO	Ant1	5180	-2.67	2.56	≤11.00	5.21	≤10.00	PASS
		5200	-1.84	3.39	≤11.00	6.04	≤10.00	PASS
		5240	-2.3	2.93	≤11.00	5.58	≤10.00	PASS
11AC40SISO	Ant1	5190	-5.91	-3.69	≤11.00	1.97	≤10.00	PASS
		5230	-5.78	-3.56	≤11.00	2.10	≤10.00	PASS
11AC80SISO	Ant1	5210	-10.31	-5.08	≤11.00	-2.43	≤10.00	PASS

Note:

1. This product only supports SISO mode, and both Ports tested, only the worst-case reported.
2. The Duty Cycle Factor is compensated in the tables.
3. As for U-NII-1 band, the e.i.r.p. spectral density does not exceed 10 dBm in any 1.0MHz band, also compliant with RSS-247 requirements.
4. Consider a narrower RBW 300KHz set in testing, a factor  $10 \log(1\text{MHz}/300\text{kHz})$  added for Bands U-NII-1&2A&2C,  $10 \log(500\text{kHz}/300\text{kHz})$  added for Band U-NII-3.

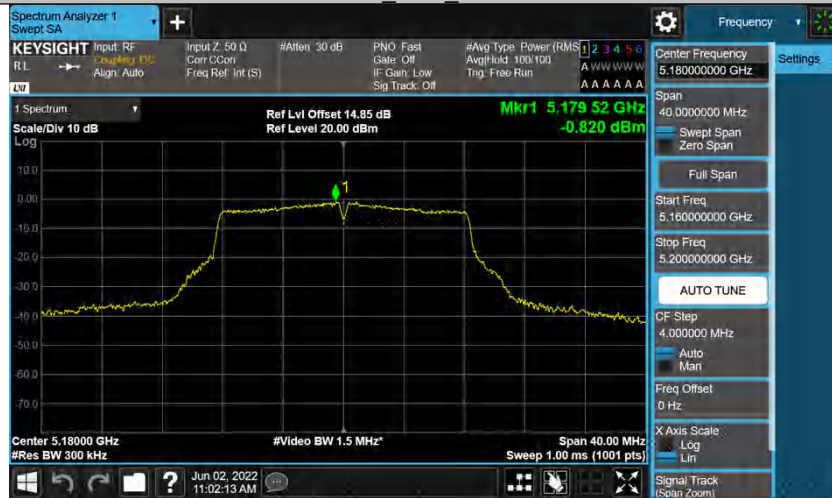
**U-NII-2A, U-NII-2C and U-NII-3 Bands:**

TestMode	Antenna	Channel	Result [dBm/300KHz]	Limit U-NII-2A, U-NII-2C [dBm/MHz] U-NII-3 [dBm/500KHz]	Limit UU-NII-2A, U-NII-2C [dBm/MHz] U-NII-3 [dBm/500KHz]	Verdict
11A	Ant1	5260	-1.15	4.08	≤11.00	PASS
		5280	-0.69	4.54	≤11.00	PASS
		5320	-0.61	4.62	≤11.00	PASS
		5500	-1.37	3.86	≤11.00	PASS
		5580	-1.32	3.91	≤11.00	PASS
		5700	-1.44	3.79	≤11.00	PASS
		5745	-5.3	-3.08	≤30.00	PASS
		5785	-4.94	-2.72	≤30.00	PASS
11N20SISO	Ant1	5260	-1.91	3.32	≤11.00	PASS
		5280	-1.5	3.73	≤11.00	PASS
		5320	-1.27	3.96	≤11.00	PASS
		5500	-2.35	2.88	≤11.00	PASS
		5580	-2.11	3.12	≤11.00	PASS
		5700	-2.19	3.04	≤11.00	PASS
		5745	-5.64	-3.42	≤30.00	PASS
		5785	-5.53	-3.31	≤30.00	PASS
11N40SISO	Ant1	5270	-4.75	0.48	≤11.00	PASS
		5310	-4.61	0.62	≤11.00	PASS
		5510	-5.15	0.08	≤11.00	PASS
		5550	-4.62	0.61	≤11.00	PASS
		5670	-5.21	0.02	≤11.00	PASS
		5755	-8.64	-6.42	≤30.00	PASS
		5795	-9.04	-6.82	≤30.00	PASS
		5825	-5.66	-3.44	≤30.00	PASS
11AC20SISO	Ant1	5260	-2.78	2.45	≤11.00	PASS
		5280	-2.64	2.59	≤11.00	PASS
		5320	-2.39	2.84	≤11.00	PASS
		5500	-3.3	1.93	≤11.00	PASS
		5580	-3.18	2.05	≤11.00	PASS
		5700	-3.39	1.84	≤11.00	PASS
		5745	-6.75	-1.52	≤30.00	PASS
		5785	-6.9	-1.67	≤30.00	PASS
11AC40SISO	Ant1	5270	-6.76	-4.54	≤11.00	PASS
		5310	-5.95	-0.72	≤11.00	PASS
		5510	-6.78	-1.55	≤11.00	PASS
		5550	-6.88	-1.65	≤11.00	PASS
		5670	-7.74	-5.52	≤11.00	PASS
		5755	-10.65	-8.43	≤30.00	PASS
		5795	-10.67	-5.44	≤30.00	PASS
		5825	-6.76	-1.53	≤30.00	PASS
11AC80SISO	Ant1	5290	-10.23	-5.00	≤11.00	PASS
		5530	-10.33	-5.10	≤11.00	PASS
		5610	-11.57	-6.34	≤11.00	PASS
		5775	-14.28	-12.06	≤30.00	PASS

Note:

5. This product only supports SISO mode, and both Ports tested, only the worst-case reported.
6. The Duty Cycle Factor is compensated in the tables.
7. As for U-NII-1 band, the e.i.r.p. spectral density does not exceed 10 dBm in any 1.0MHz band, also compliant with RSS-247 requirements.
8. Consider a narrower RBW 300KHz set in testing, a factor  $10 \log(1\text{MHz}/300\text{kHz})$  added for Bands U-NII-1&2A&2C,  $10 \log(500\text{kHz}/300\text{kHz})$  added for Band U-NII-3.

11A\_Ant1\_5180



11A\_Ant1\_5200



11A\_Ant1\_5240



11A\_Ant1\_5260



11A Ant1 5280



11A Ant1 5320



11A Ant1 5500



11A Ant1 5580



11A Ant1 5700



11A Ant1 5745





11A Ant1 5785



11A Ant1 5825



11N20SISO Ant1 5180



11N20SISO Ant1 5200



11N20SISO Ant1 5240



11N20SISO Ant1 5260



11N20SISO Ant1 5280



11N20SISO Ant1 5320



11N20SISO Ant1 5500



11N20SISO Ant1 5580



11N20SISO Ant1 5700



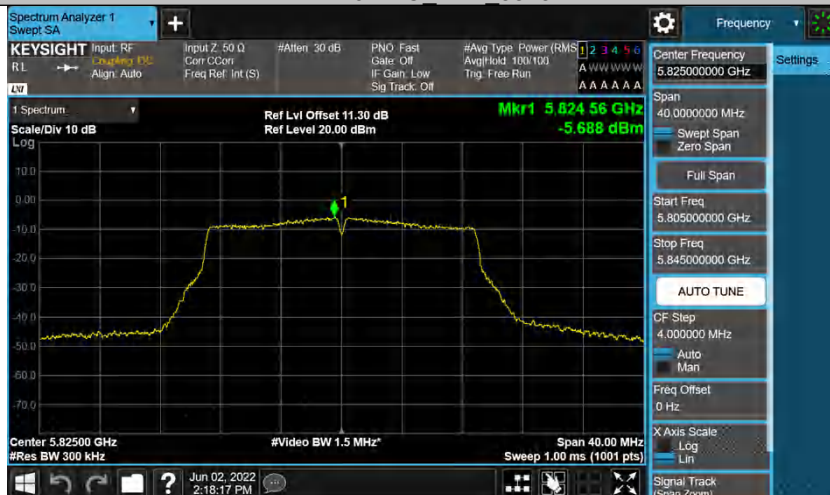
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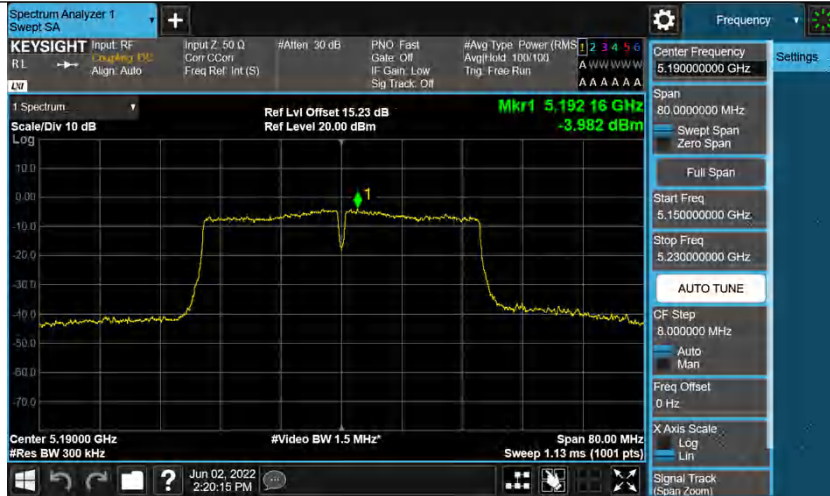
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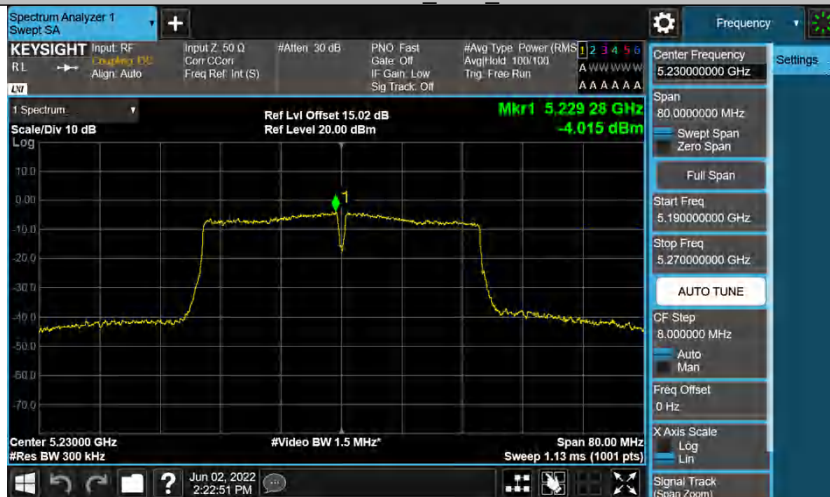
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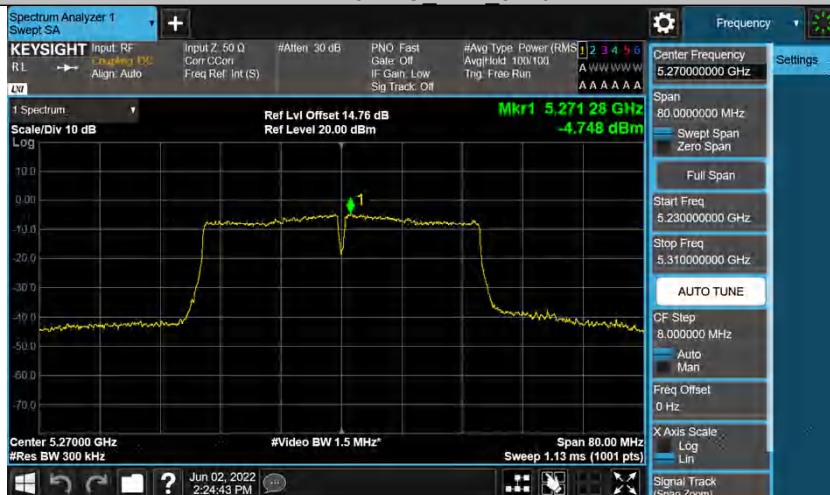
11N40SISO Ant1 5190



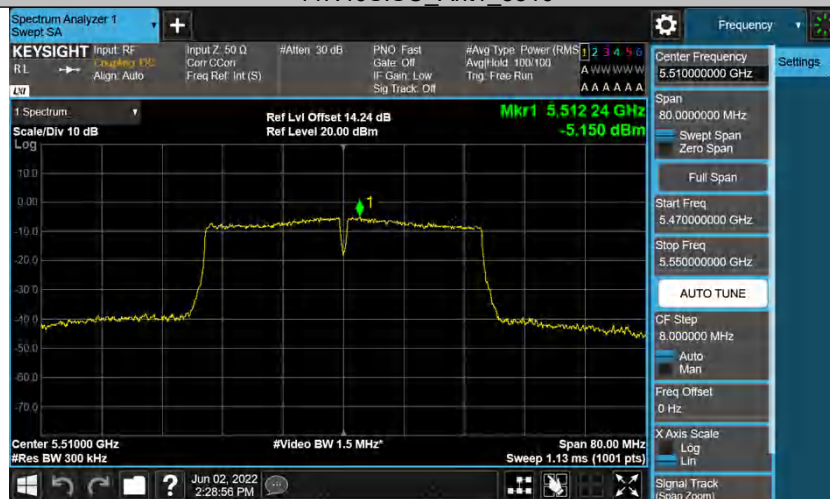
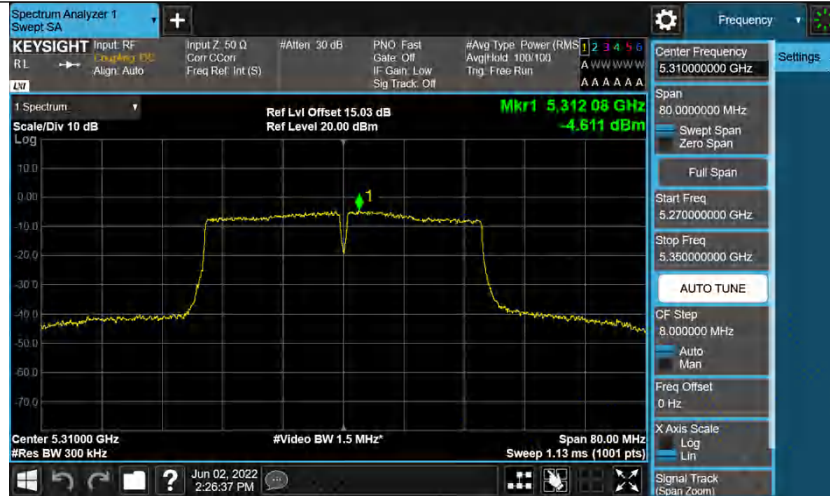
11N40SISO Ant1 5230

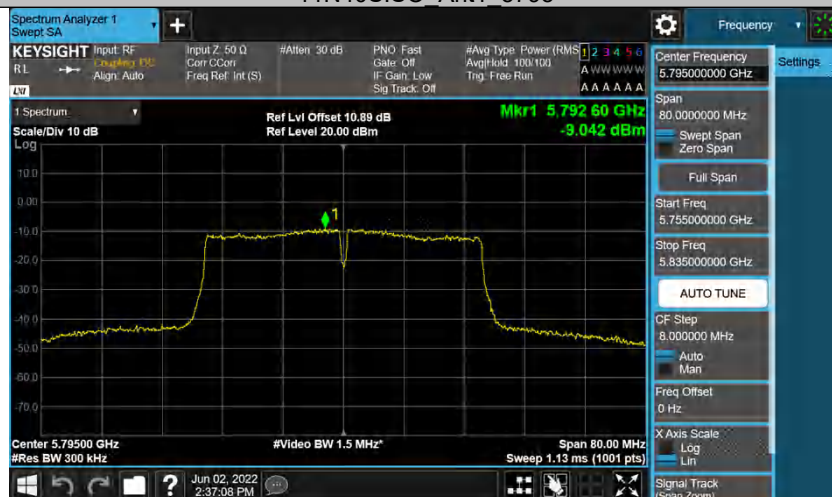
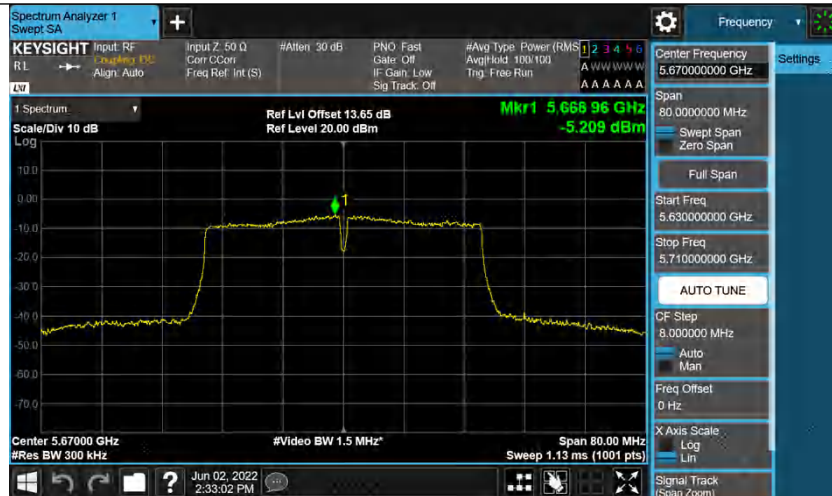


11N40SISO Ant1 5270



11N40SISO Ant1 5310









11AC20SISO\_Ant1\_5200



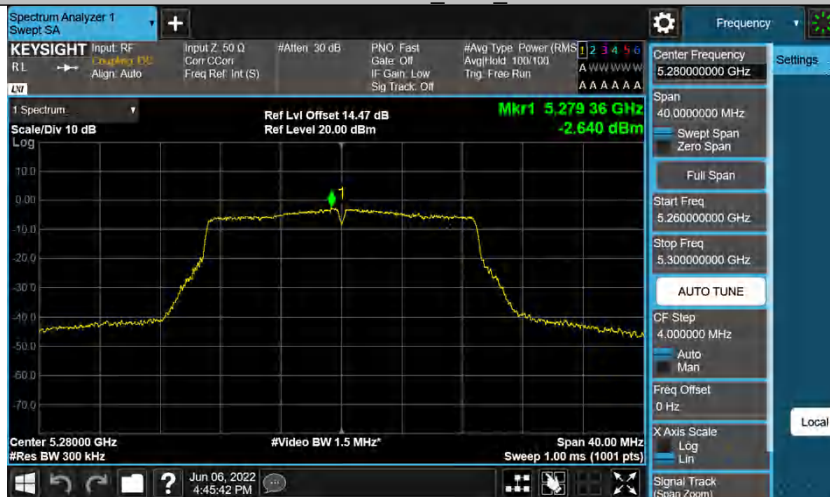
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11AC20SISO\_Ant1\_5260



11AC20SISO Ant1 5280



11AC20SISO Ant1 5320



11AC20SISO Ant1 5500



11AC20SISO\_Ant1\_5580



11AC20SISO\_Ant1\_5700



11AC20SISO\_Ant1\_5745



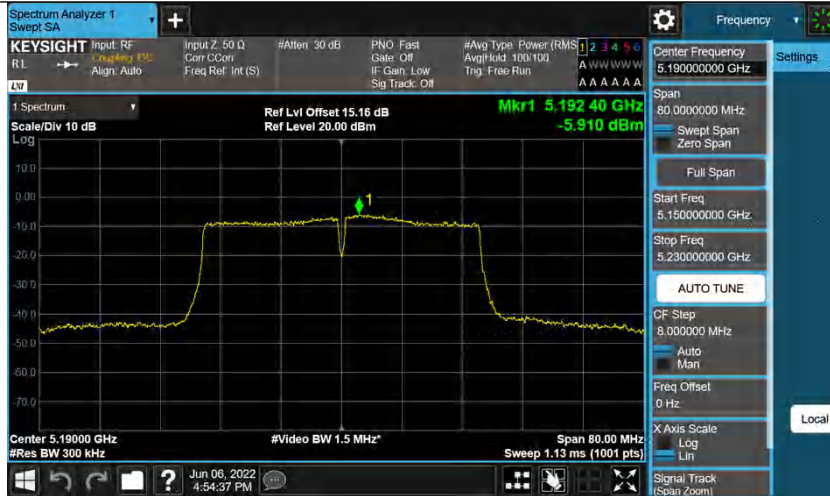
11AC20SISO\_Ant1\_5785



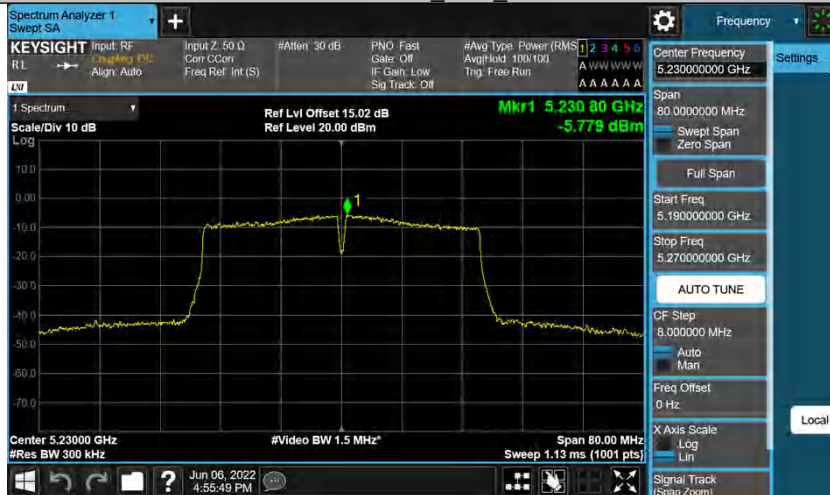
11AC20SISO\_Ant1\_5825



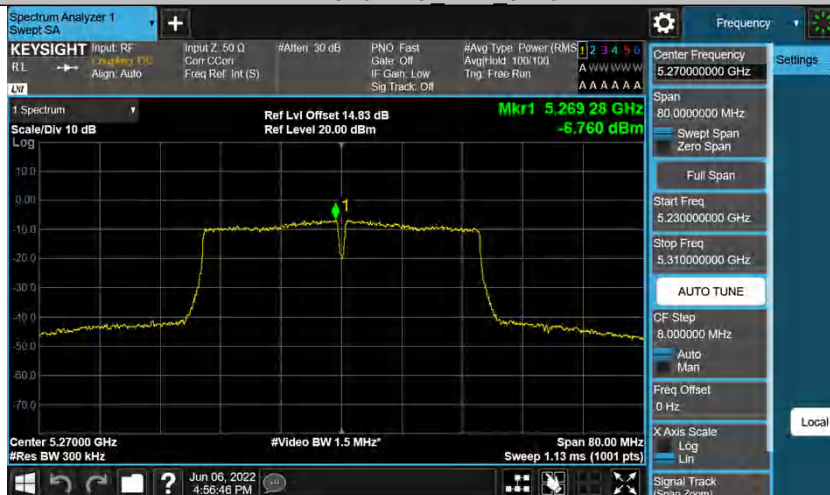
11AC40SISO\_Ant1\_5190



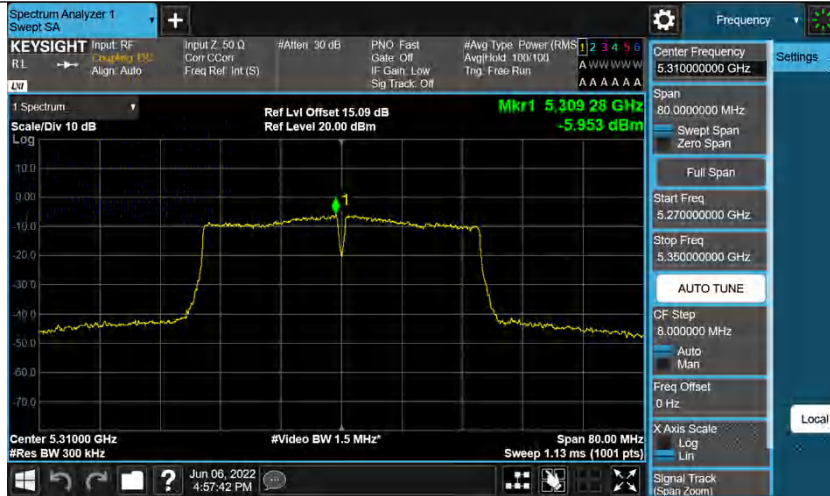
11AC40SISO\_Ant1\_5230



11AC40SISO\_Ant1\_5270



11AC40SISO\_Ant1\_5310



11AC40SISO\_Ant1\_5510



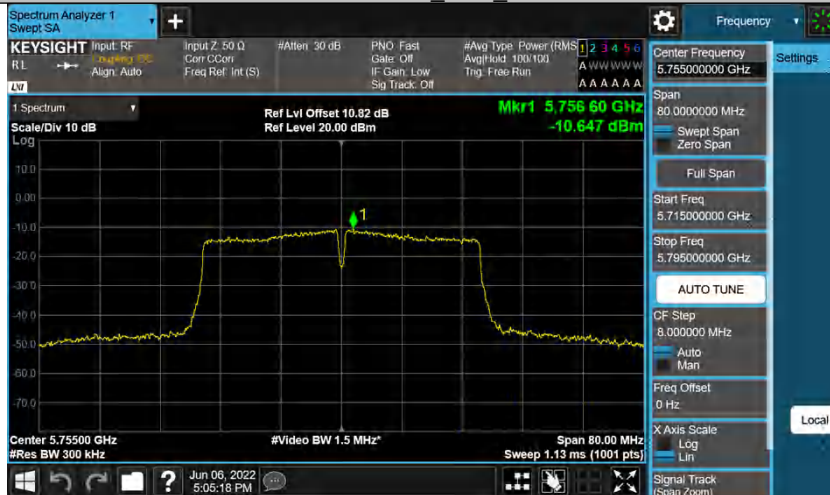
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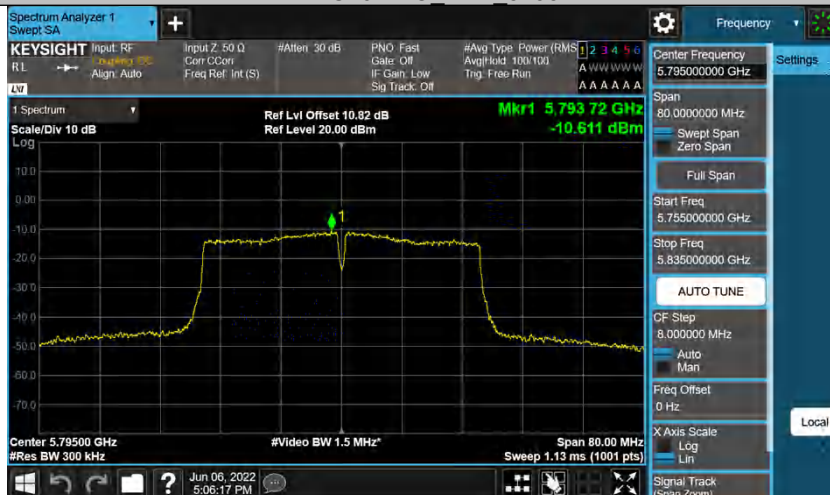
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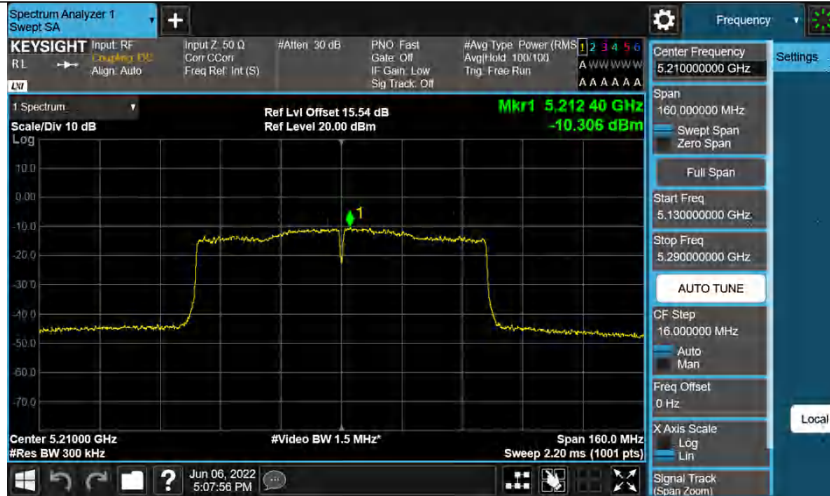
11AC40SISO Ant1 5755



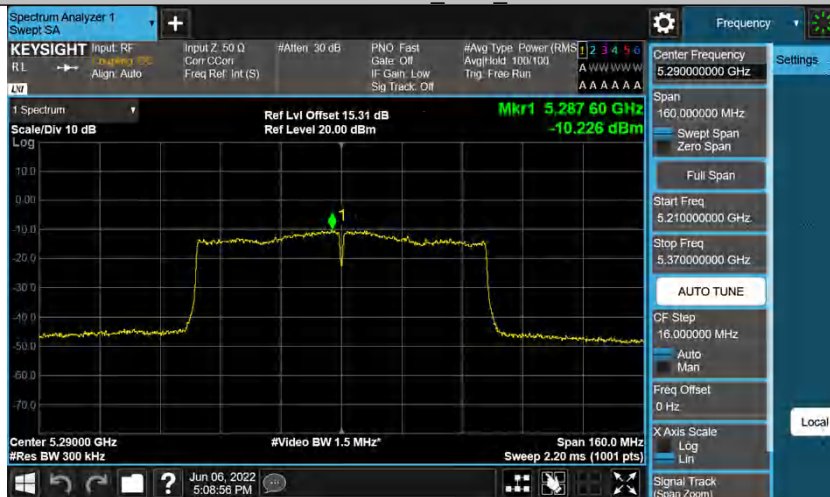
11AC40SISO Ant1 5795



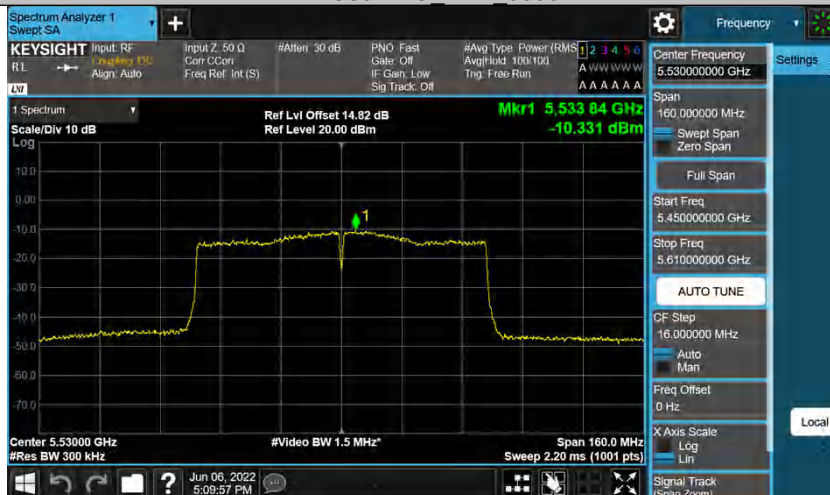
11AC80SISO Ant1 5210



11AC80SISO Ant1 5290

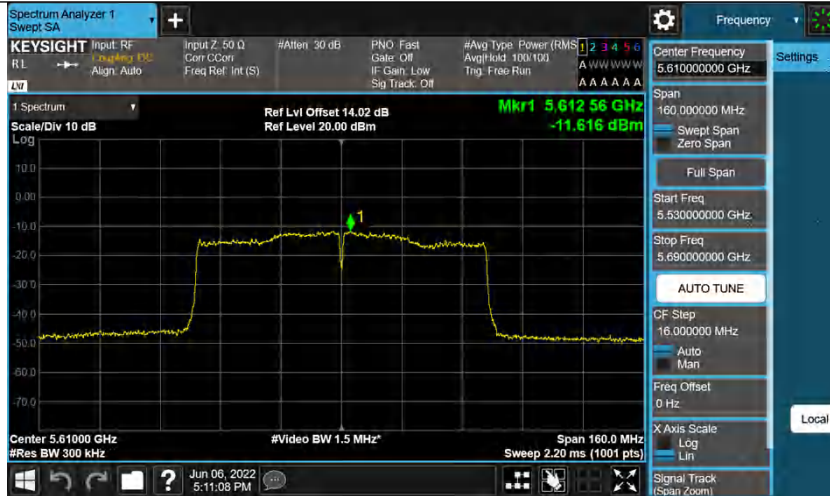


11AC80SISO Ant1 5300



11AC80SISO Ant1 5610





11AC80SISO Ant1 5775



**Appendix B.3: Test Results of 26dB Bandwidth**

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	21.160	5169.360	5190.520	---	---
		5200	21.000	5189.480	5210.480	---	---
		5240	21.080	5229.480	5250.560	---	---
		5260	21.200	5249.400	5270.600	---	---
		5280	21.240	5269.360	5290.600	---	---
		5320	20.800	5309.520	5330.320	---	---
		5500	21.000	5489.480	5510.480	---	---
		5580	21.360	5569.440	5590.800	---	---
		5700	21.200	5689.240	5710.440	---	---
		5745	21.120	5734.560	5755.680	---	---
		5785	21.120	5774.440	5795.560	---	---
		5825	20.960	5814.480	5835.440	---	---
11N20SISO	Ant1	5180	21.400	5169.360	5190.760	---	---
		5200	21.000	5189.560	5210.560	---	---
		5240	21.320	5229.360	5250.680	---	---
		5260	21.520	5249.240	5270.760	---	---
		5280	21.240	5269.440	5290.680	---	---
		5320	21.760	5309.240	5331.000	---	---
		5500	21.400	5489.440	5510.840	---	---
		5580	21.400	5569.400	5590.800	---	---
		5700	21.520	5689.200	5710.720	---	---
		5745	21.200	5734.440	5755.640	---	---
		5785	21.480	5774.160	5795.640	---	---
		5825	21.360	5814.360	5835.720	---	---
11N40SISO	Ant1	5190	56.080	5170.240	5226.320	---	---
		5230	43.920	5210.160	5254.080	---	---
		5270	43.280	5250.320	5293.600	---	---
		5310	39.360	5290.480	5329.840	---	---
		5510	43.280	5490.320	5533.600	---	---
		5550	39.600	5530.160	5569.760	---	---
		5670	39.760	5650.160	5689.920	---	---
		5755	45.200	5735.080	5780.280	---	---
		5795	44.240	5775.160	5819.400	---	---
11AC20SISO	Ant1	5180	21.400	5169.240	5190.640	---	---
		5200	21.280	5189.400	5210.680	---	---
		5240	21.720	5229.280	5251.000	---	---
		5260	21.320	5249.480	5270.800	---	---
		5280	21.280	5269.440	5290.720	---	---
		5320	21.280	5309.480	5330.760	---	---
		5500	21.360	5489.280	5510.640	---	---
		5580	21.280	5569.480	5590.760	---	---
		5700	21.480	5689.280	5710.760	---	---
		5745	21.320	5734.360	5755.680	---	---
		5785	21.520	5774.200	5795.720	---	---
		5825	21.200	5814.280	5835.480	---	---
11AC40SISO	Ant1	5190	39.280	5170.320	5209.600	---	---
		5230	39.680	5210.160	5249.840	---	---
		5270	39.680	5250.240	5289.920	---	---
		5310	39.680	5290.240	5329.920	---	---
		5510	39.520	5490.240	5529.760	---	---
		5550	39.600	5530.320	5569.920	---	---
		5670	39.600	5650.240	5689.840	---	---
		5755	39.440	5735.480	5774.920	---	---
		5795	39.600	5775.160	5814.760	---	---
11AC80SISO	Ant1	5210	80.960	5169.680	5250.640	---	---
		5290	81.280	5249.520	5330.800	---	---
		5530	81.280	5489.360	5570.640	---	---
		5610	82.560	5569.520	5652.080	---	---
		5775	80.640	5734.680	5815.320	---	---

11A\_Ant1\_5180



11A\_Ant1\_5200



11A\_Ant1\_5240



11A\_Ant1\_5260



11A Ant1 5280



11A Ant1 5320



11A Ant1 5500



11A Ant1 5580



11A Ant1 5700



11A Ant1 5745



11A Ant1 5785



11A Ant1 5825



11N20SISO Ant1 5180



11N20SISO Ant1 5200



11N20SISO Ant1 5240



11N20SISO Ant1 5260



11N20SISO Ant1 5280



11N20SISO Ant1 5320



11N20SISO Ant1 5500





11N20SISO Ant1 5580



11N20SISO Ant1 5700



11N20SISO Ant1 5745



11N20SISO Ant1 5785



11N20SISO Ant1 5825



11N40SISO Ant1 5190



11N40SISO Ant1 5230



11N40SISO Ant1 5270



11N40SISO Ant1 5310



11N40SISO Ant1 5510



11N40SISO Ant1 5550



11N40SISO Ant1 5670



11N40SISO\_Ant1\_5755



11N40SISO\_Ant1\_5795



11AC20SISO\_Ant1\_5180



11AC20SISO\_Ant1\_5200



11AC20SISO\_Ant1\_5240



11AC20SISO\_Ant1\_5260



11AC20SISO\_Ant1\_5280



11AC20SISO\_Ant1\_5320



11AC20SISO\_Ant1\_5500



11AC20SISO\_Ant1\_5580



11AC20SISO\_Ant1\_5700



11AC20SISO\_Ant1\_5745





11AC20SISO\_Ant1\_5785



11AC20SISO\_Ant1\_5825



11AC40SISO\_Ant1\_5190



11AC40SISO\_Ant1\_5230



11AC40SISO\_Ant1\_5270



11AC40SISO\_Ant1\_5310



11AC40SISO\_Ant1\_5510



11AC40SISO\_Ant1\_5550



11AC40SISO\_Ant1\_5670



11AC40SISO\_Ant1\_5755



11AC40SISO\_Ant1\_5795



11AC80SISO\_Ant1\_5210



11AC80SISO\_Ant1\_5290



11AC80SISO\_Ant1\_5530



11AC80SISO\_Ant1\_5610

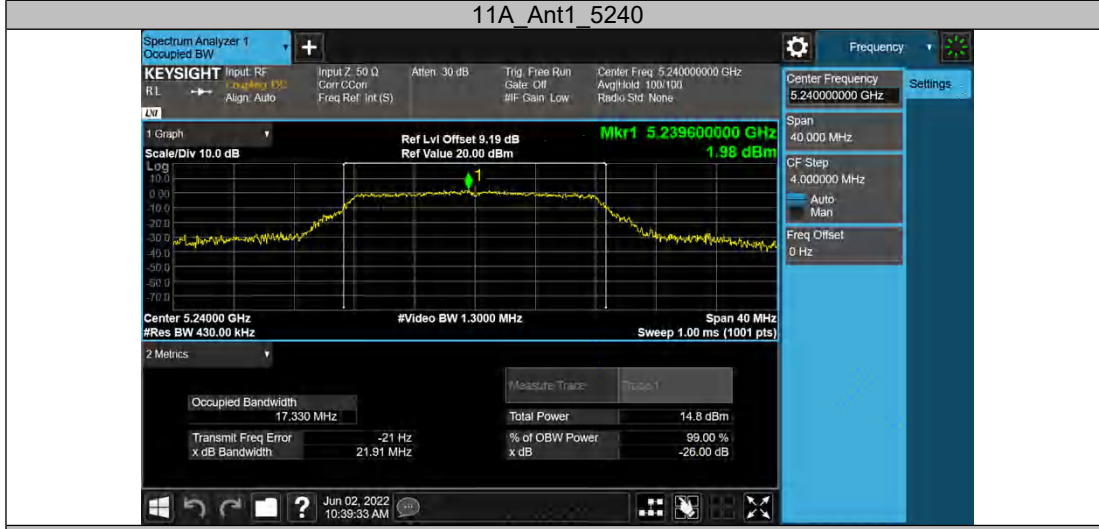
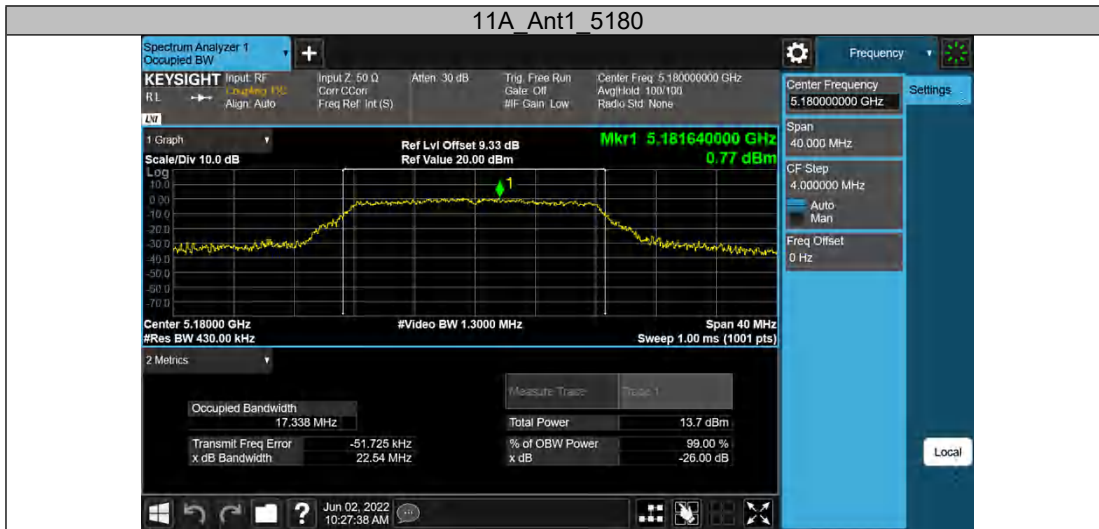


11AC80SISO Ant1 5775



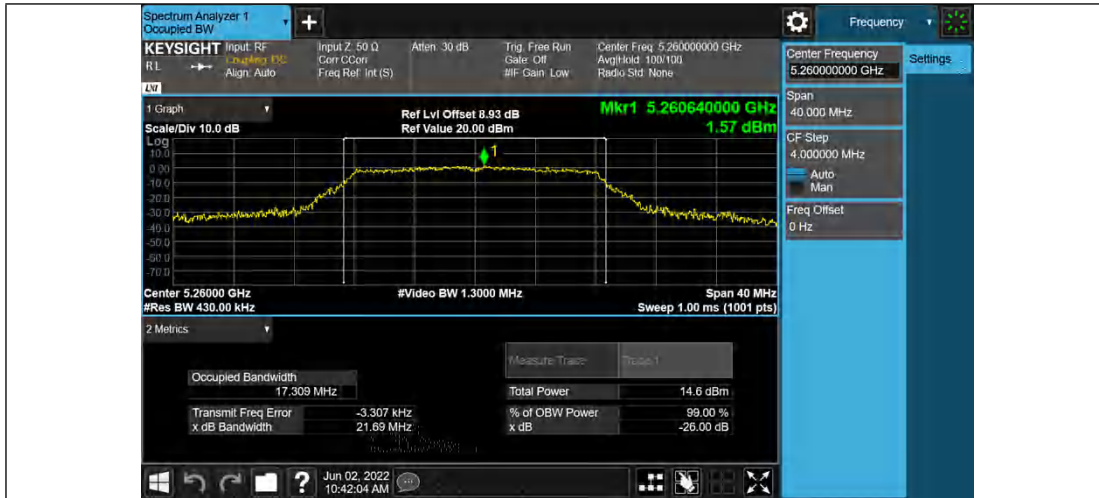
**Appendix B.4: Test Results of 99% Bandwidth**

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.338	5171.279	5188.617	---	---
		5200	17.246	5191.406	5208.652	---	---
		5240	17.330	5231.335	5248.665	---	---
		5260	17.309	5251.342	5268.651	---	---
		5280	17.204	5271.400	5288.604	---	---
		5320	17.263	5311.383	5328.646	---	---
		5500	17.401	5491.236	5508.637	---	---
		5580	17.386	5571.309	5588.695	---	---
		5700	17.327	5691.267	5708.594	---	---
		5745	17.368	5736.289	5753.657	---	---
		5785	17.360	5776.283	5793.643	---	---
5825	17.228	5816.378	5833.606	---	---		
11N20SISO	Ant1	5180	18.208	5170.899	5189.107	---	---
		5200	18.263	5190.926	5209.189	---	---
		5240	18.213	5230.899	5249.112	---	---
		5260	18.209	5250.929	5269.138	---	---
		5280	18.233	5270.934	5289.167	---	---
		5320	18.255	5310.916	5329.171	---	---
		5500	18.310	5490.851	5509.161	---	---
		5580	18.246	5570.939	5589.185	---	---
		5700	18.263	5690.826	5709.089	---	---
		5745	18.185	5735.985	5754.170	---	---
		5785	18.254	5775.879	5794.133	---	---
5825	18.227	5815.925	5834.152	---	---		
11N40SISO	Ant1	5190	36.433	5171.867	5208.300	---	---
		5230	36.393	5211.828	5248.221	---	---
		5270	36.397	5251.860	5288.257	---	---
		5310	36.413	5291.848	5328.261	---	---
		5510	36.501	5491.849	5528.350	---	---
		5550	36.476	5531.832	5568.308	---	---
		5670	36.384	5651.912	5688.296	---	---
		5755	36.495	5736.864	5773.359	---	---
		5795	36.335	5776.863	5813.198	---	---
11AC20SISO	Ant1	5180	18.154	5170.921	5189.075	---	---
		5200	18.205	5190.918	5209.123	---	---
		5240	18.219	5230.888	5249.107	---	---
		5260	18.256	5250.885	5269.141	---	---
		5280	18.194	5270.914	5289.108	---	---
		5320	18.166	5310.956	5329.122	---	---
		5500	18.211	5490.883	5509.094	---	---
		5580	18.167	5570.905	5589.072	---	---
		5700	18.183	5690.886	5709.069	---	---
		5745	18.160	5735.953	5754.113	---	---
		5785	18.227	5775.862	5794.089	---	---
5825	18.180	5815.933	5834.113	---	---		
11AC40SISO	Ant1	5190	36.401	5171.841	5208.242	---	---
		5230	36.313	5211.867	5248.180	---	---
		5270	36.387	5251.864	5288.251	---	---
		5310	36.341	5291.790	5328.131	---	---
		5510	36.543	5491.750	5528.293	---	---
		5550	36.422	5531.841	5568.263	---	---
		5670	36.379	5651.922	5688.301	---	---
		5755	36.422	5736.923	5773.345	---	---
		5795	36.343	5776.815	5813.158	---	---
11AC80SISO	Ant1	5210	75.713	5172.258	5247.971	---	---
		5290	75.805	5252.113	5327.918	---	---
		5530	75.761	5492.200	5567.961	---	---
		5610	75.654	5572.234	5647.888	---	---
		5775	75.856	5737.149	5813.005	---	---



11A\_Ant1\_5260





11A\_Ant1\_5280



11A\_Ant1\_5320



11A\_Ant1\_5500



11A\_Ant1\_5580



11A\_Ant1\_5700



11A\_Ant1\_5745



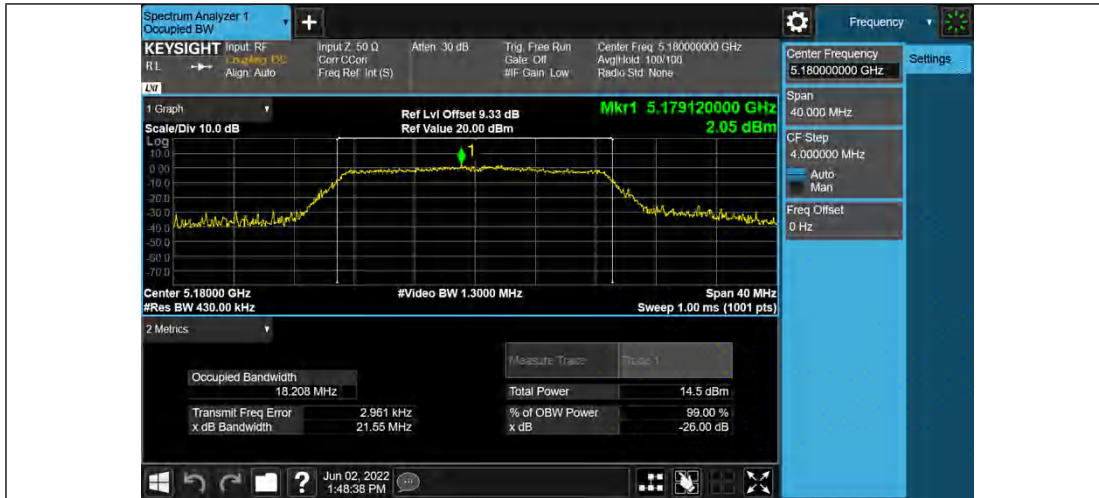
11A Ant1 5785



11A Ant1 5825



11N20SISO Ant1 5180



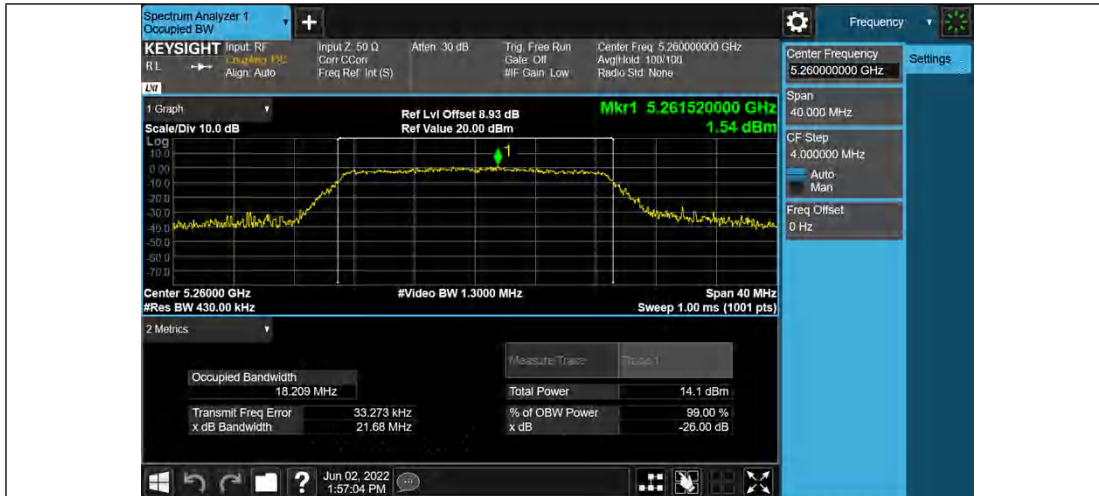
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11N20SISO\_Ant1\_5240



11N20SISO\_Ant1\_5260



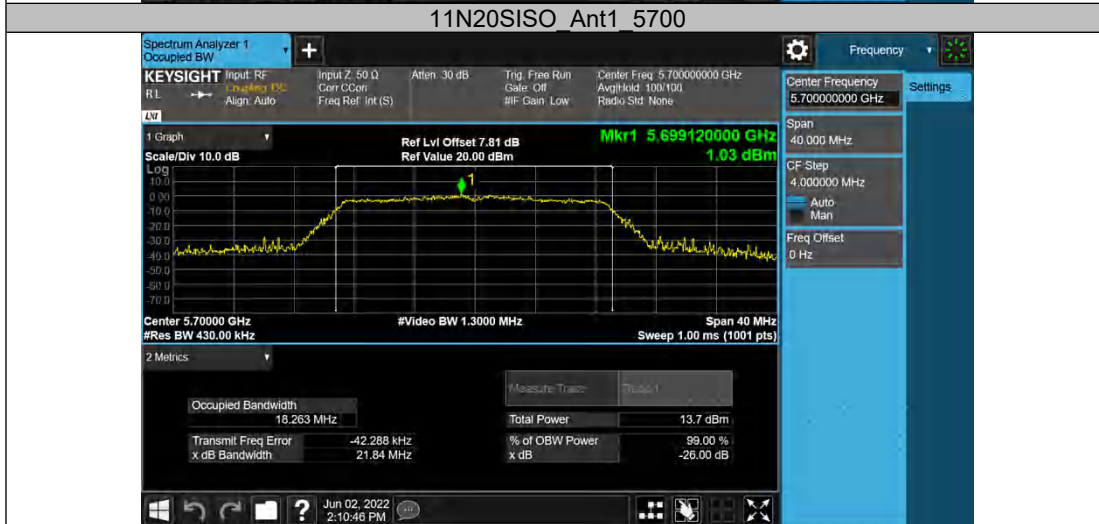
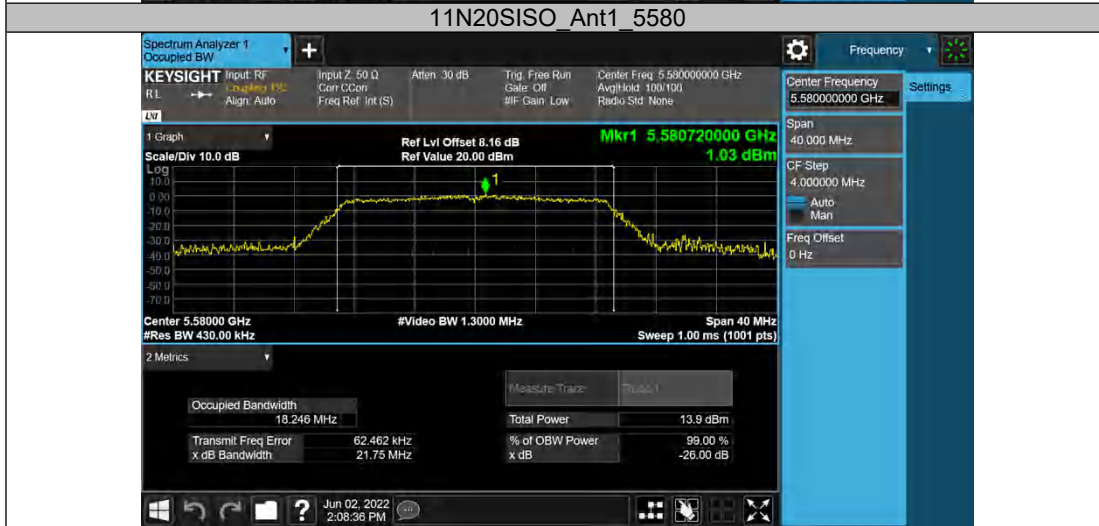
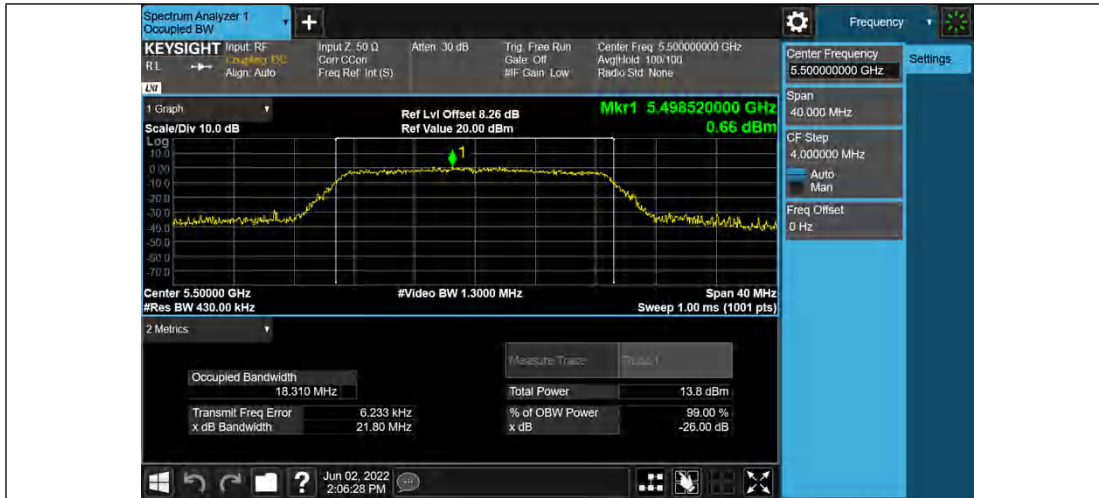
11N20SISO Ant1 5280



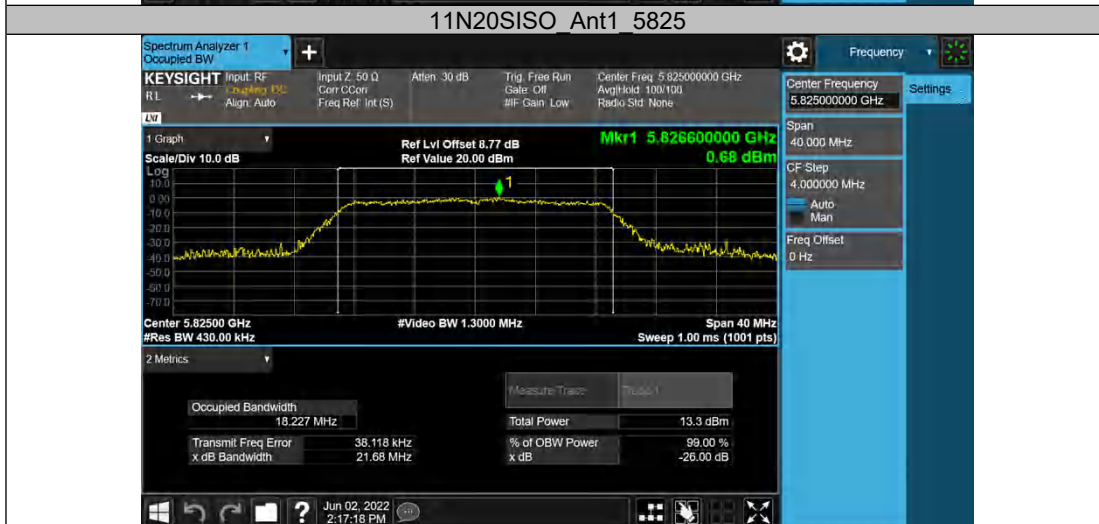
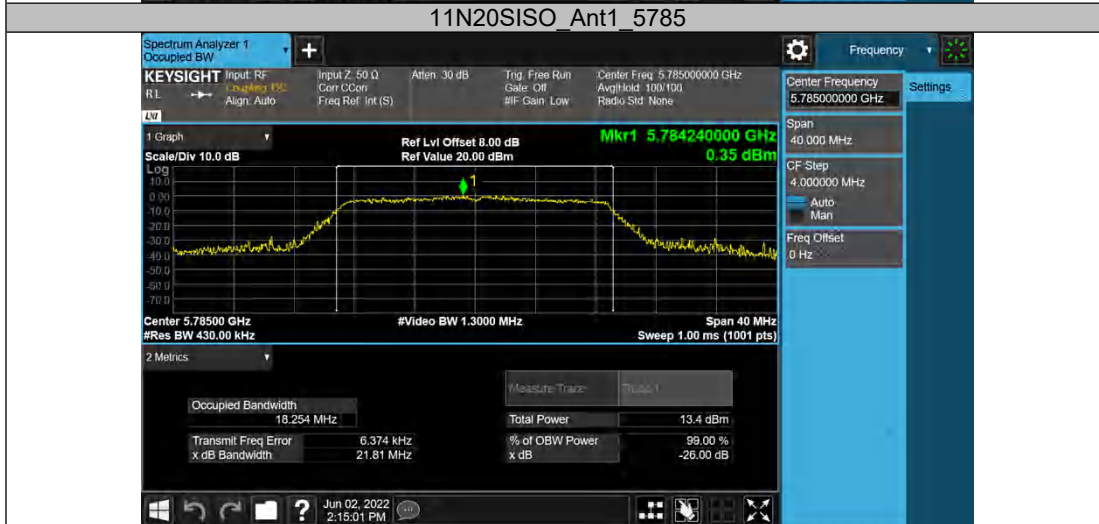
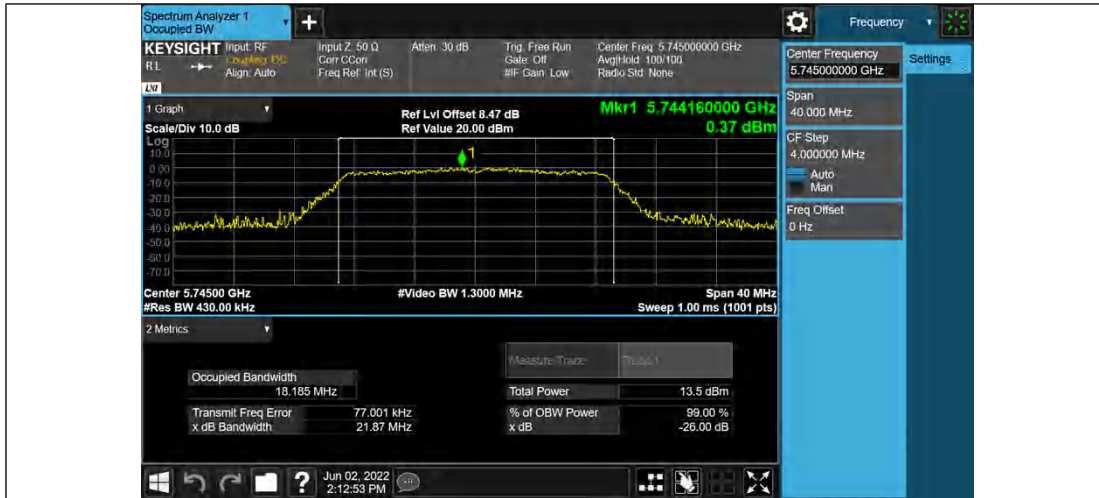
11N20SISO Ant1 5320

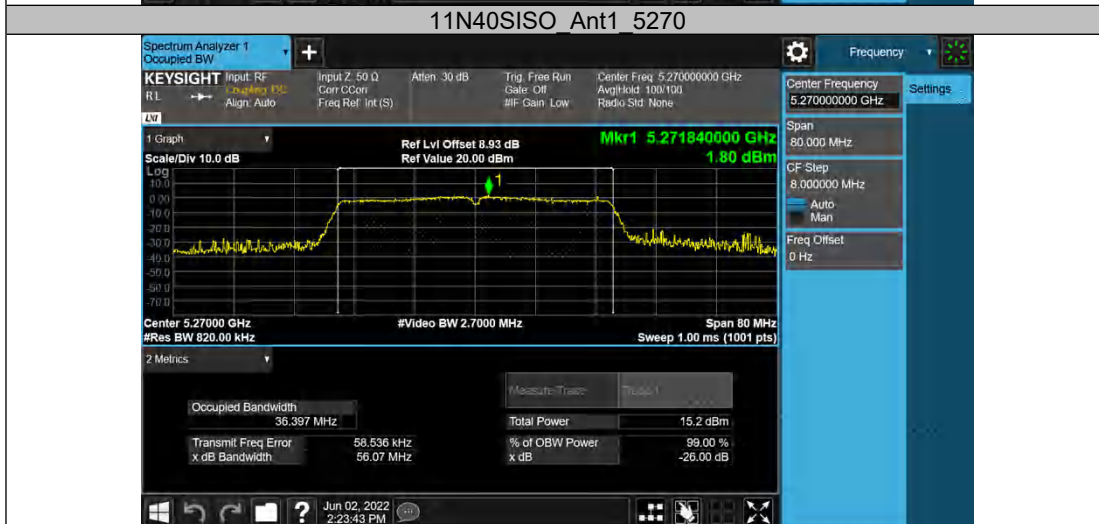
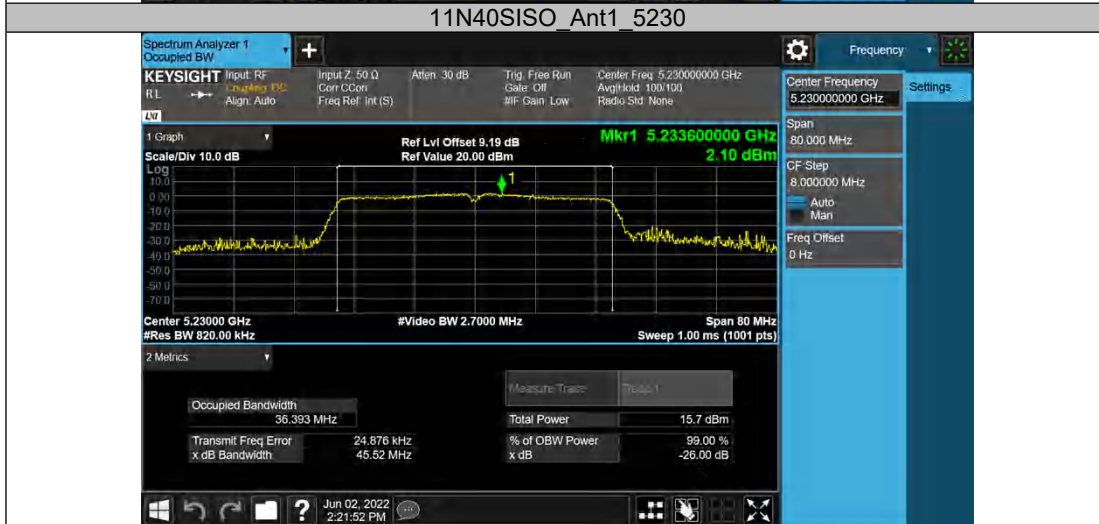
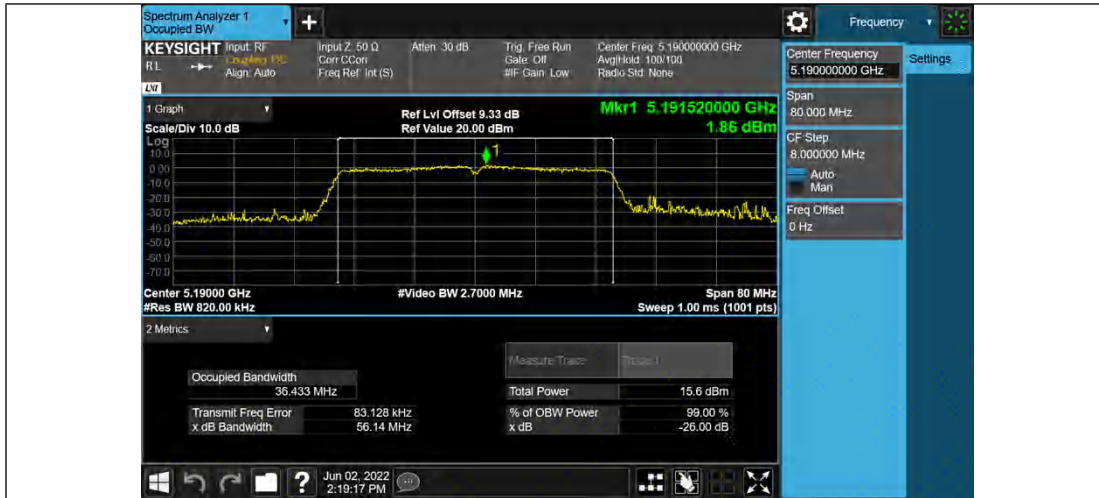


11N20SISO Ant1 5500



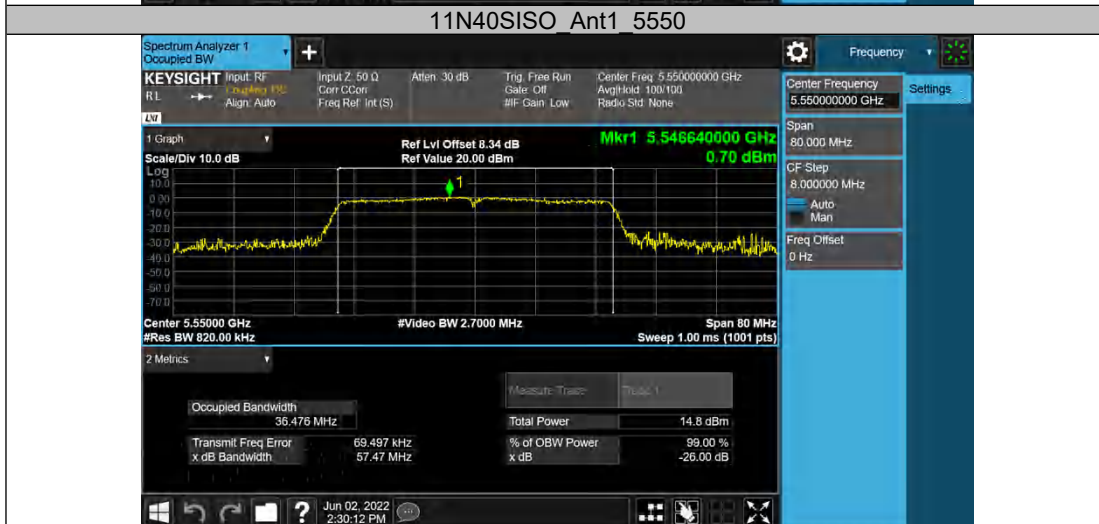
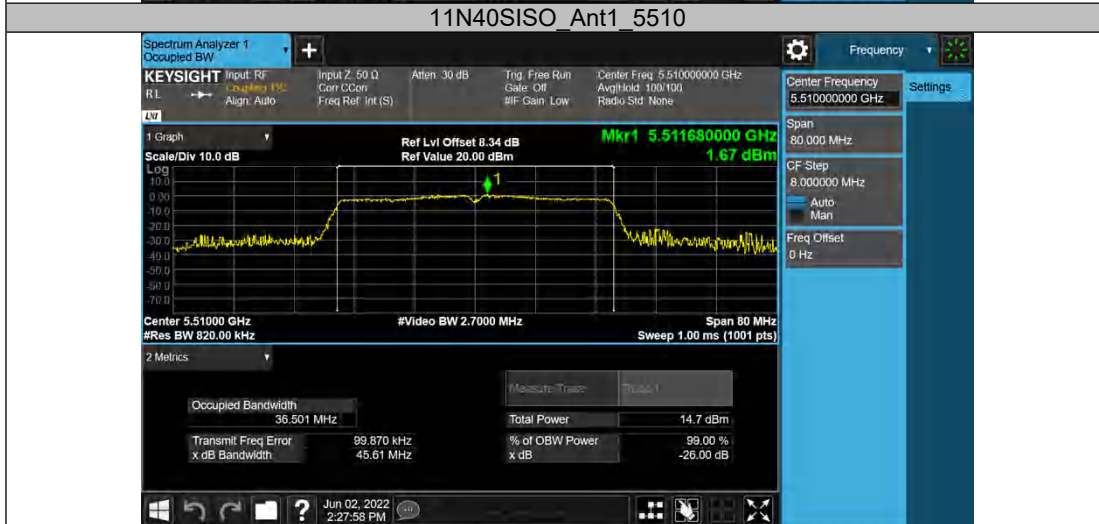
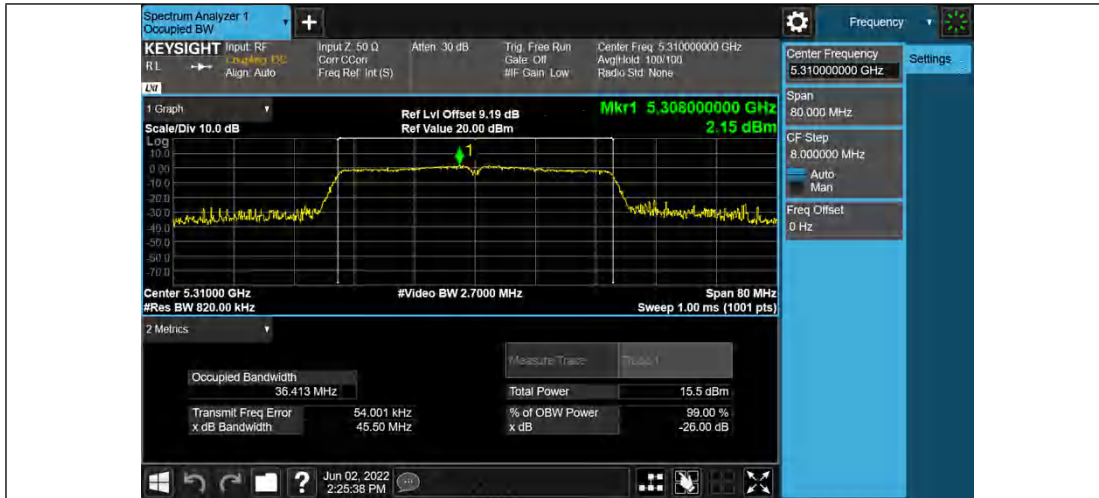
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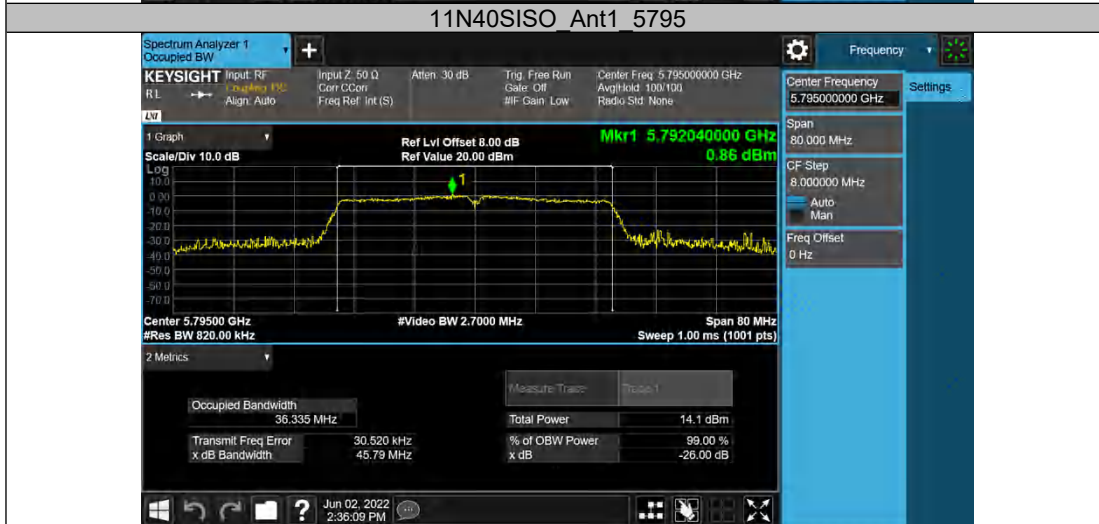
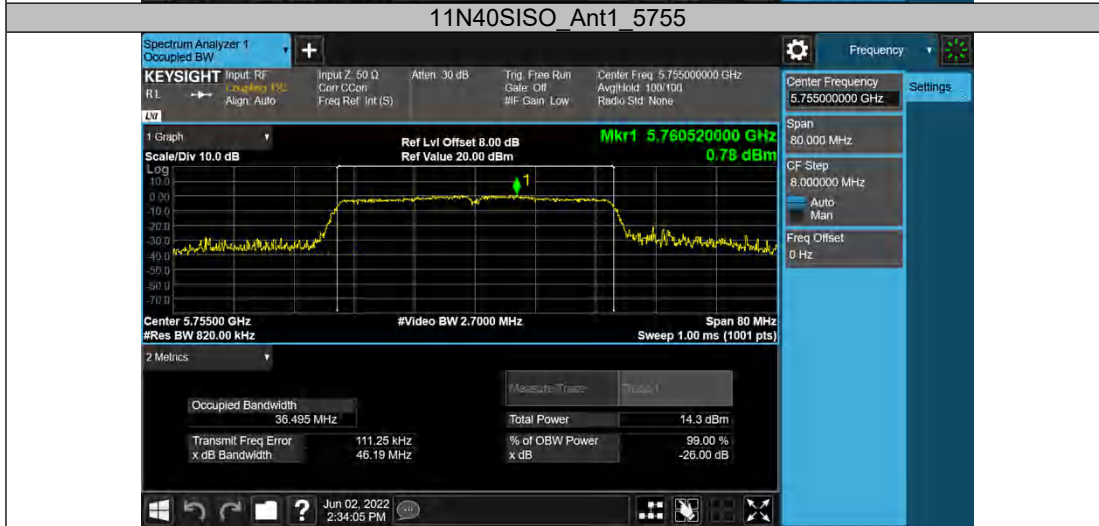
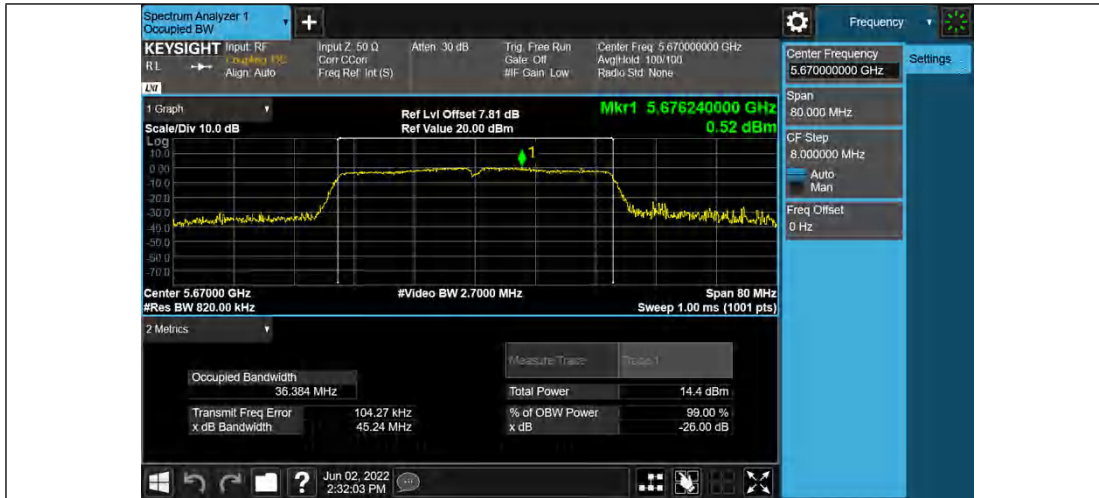




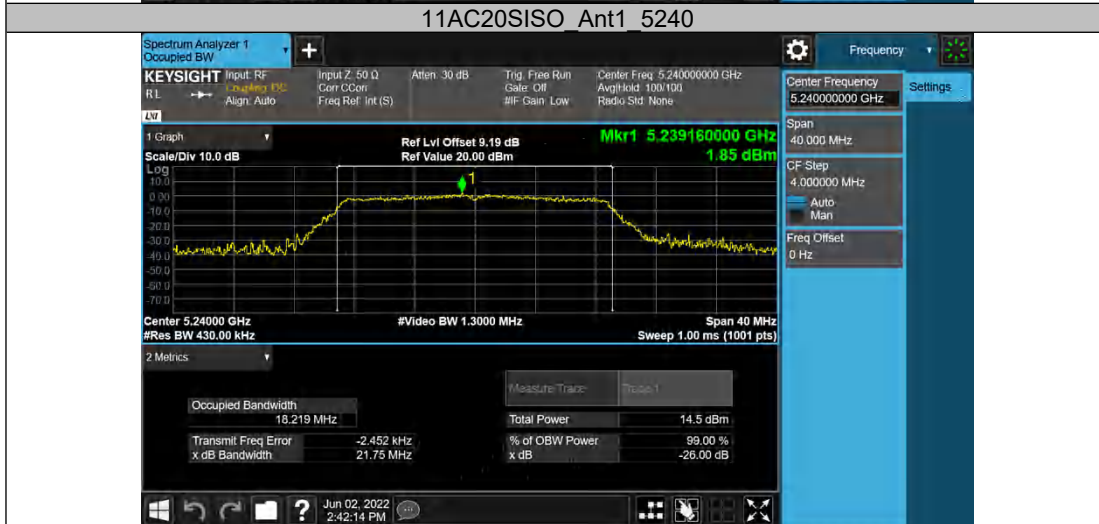
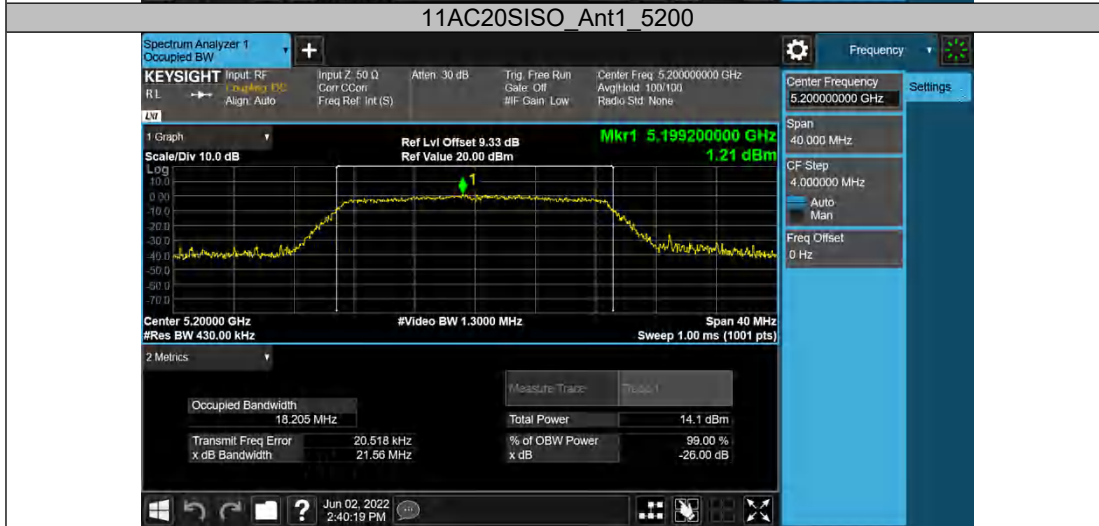
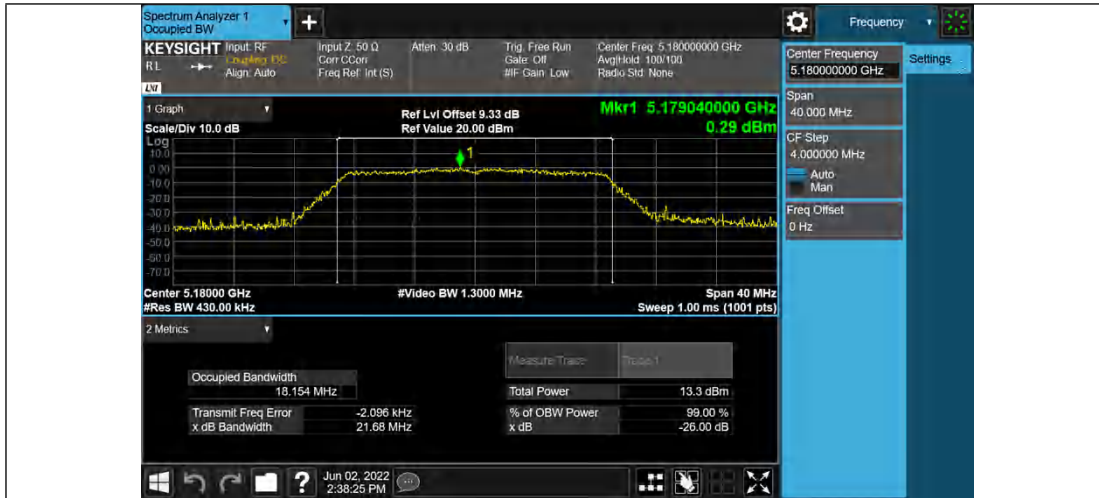
**11N40SISO Ant1 5310**

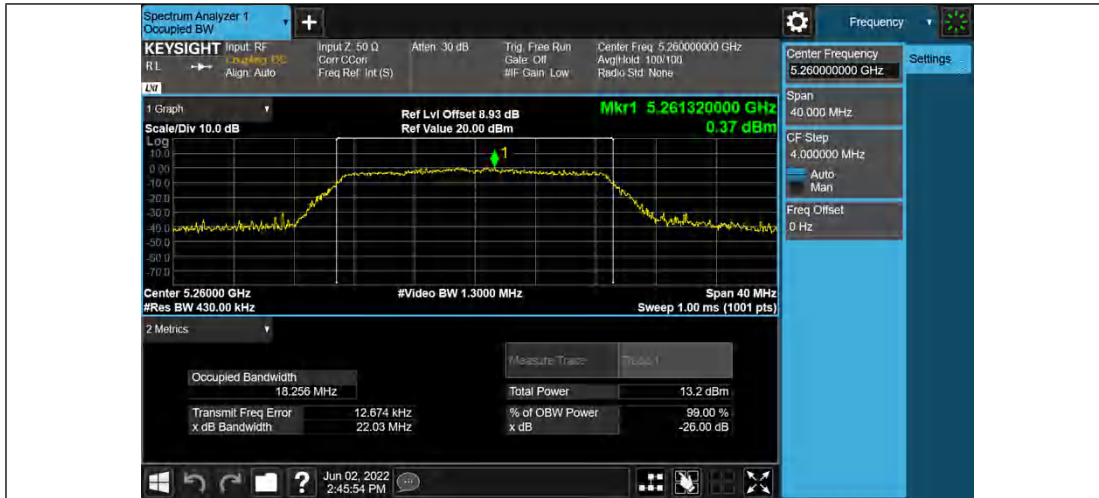






**11AC20SISO\_Ant1\_5180**





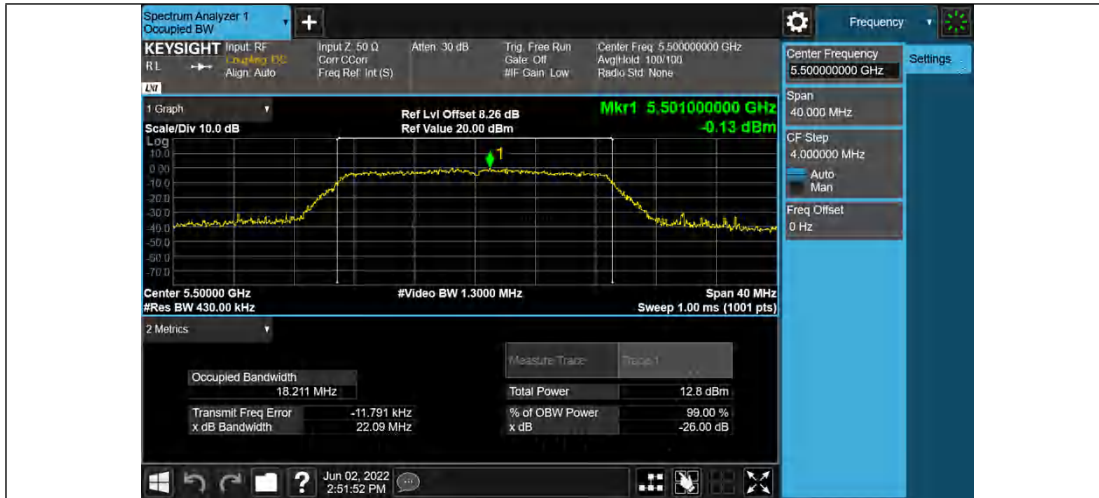
11AC20SISO\_Ant1\_5280



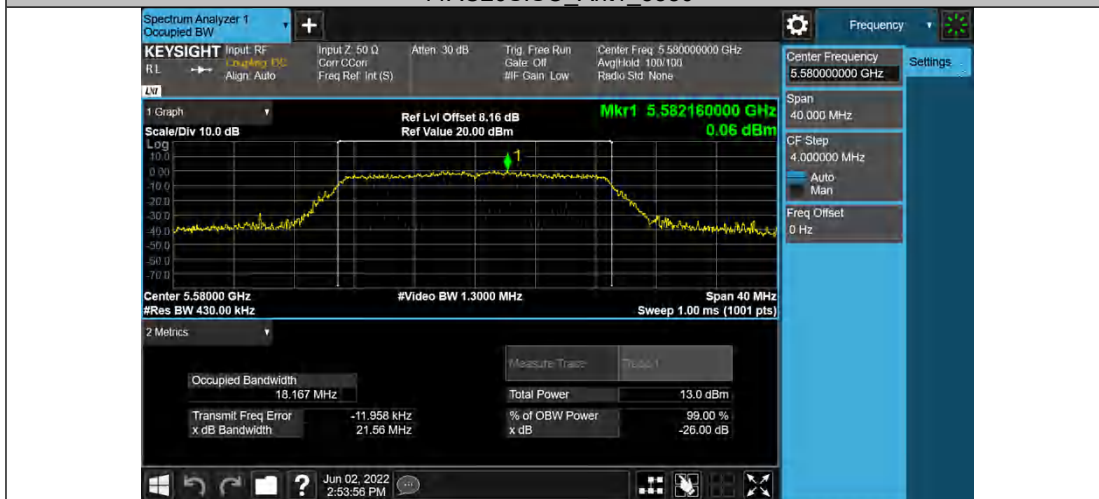
11AC20SISO\_Ant1\_5320



11AC20SISO\_Ant1\_5500



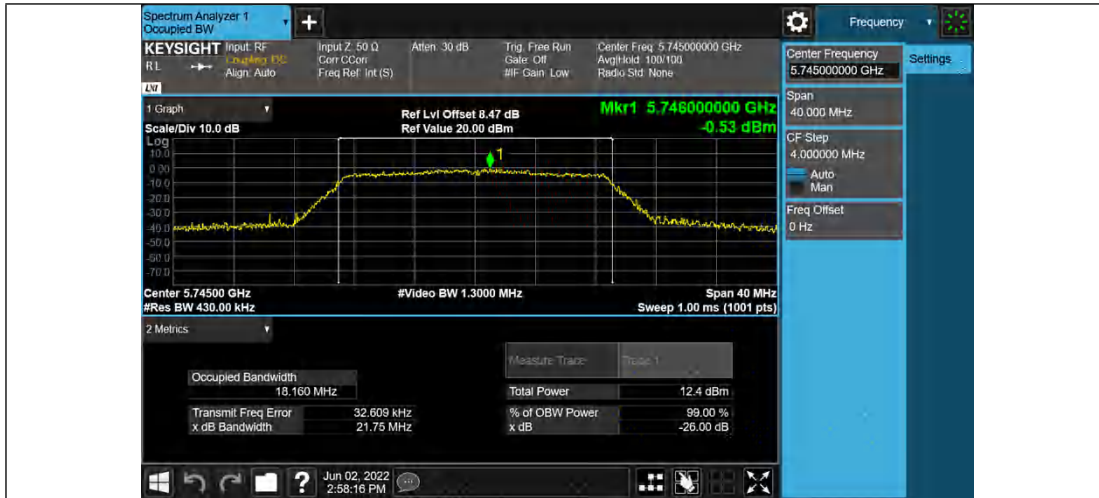
11AC20SISO\_Ant1\_5580



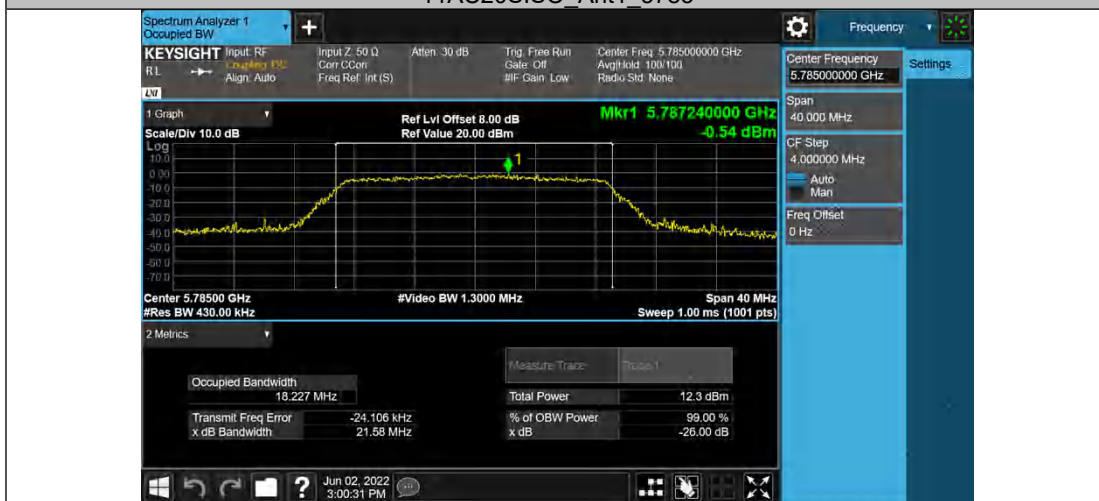
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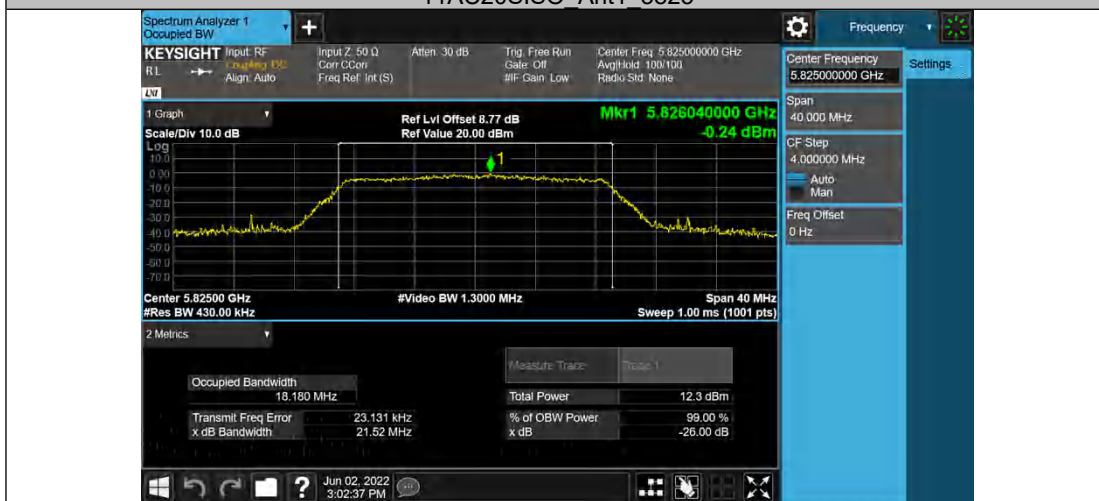
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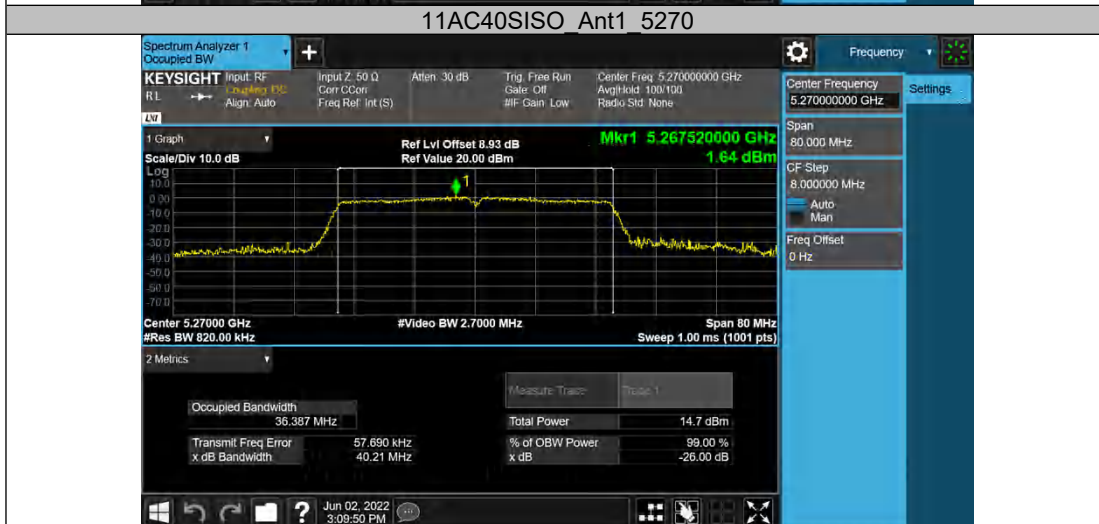
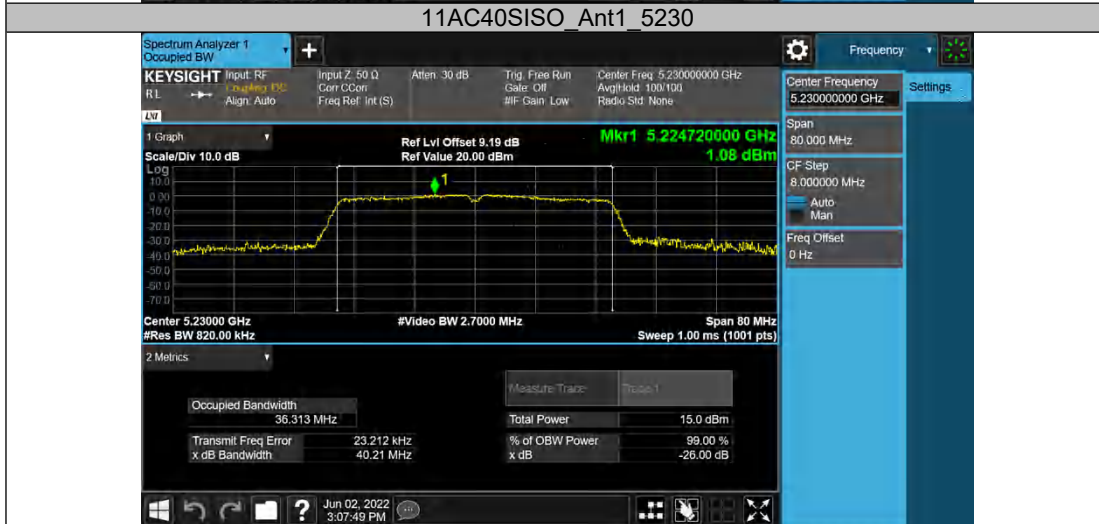
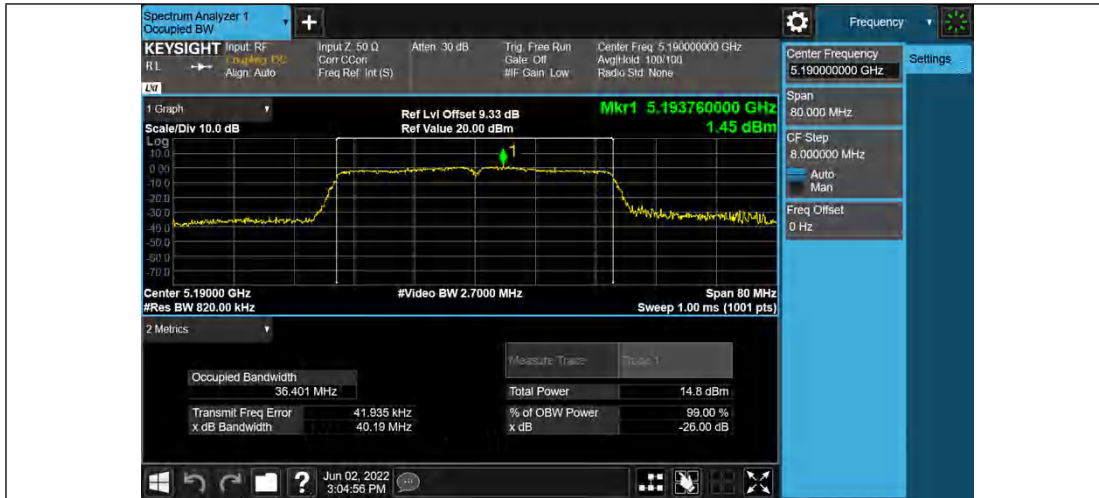
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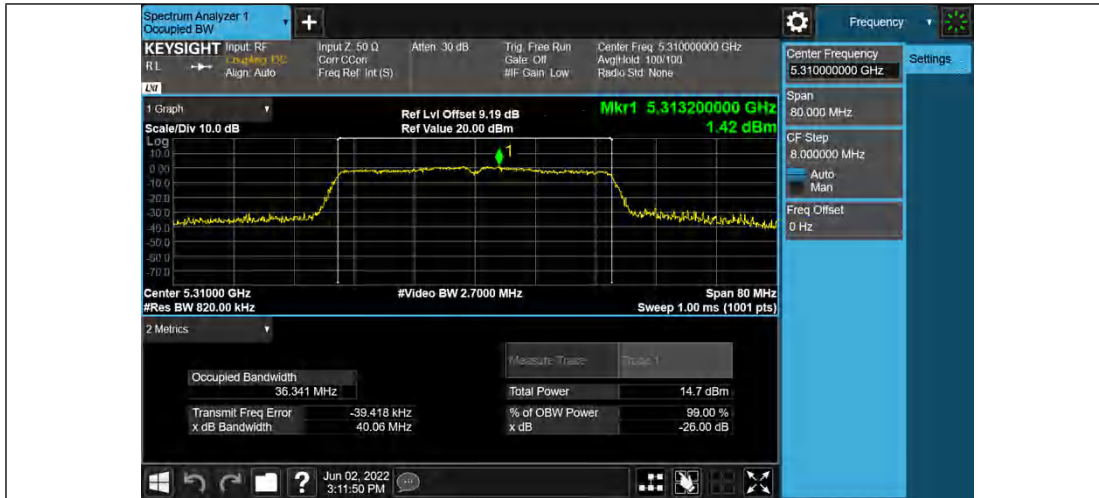


11AC20SISO\_Ant1\_5825

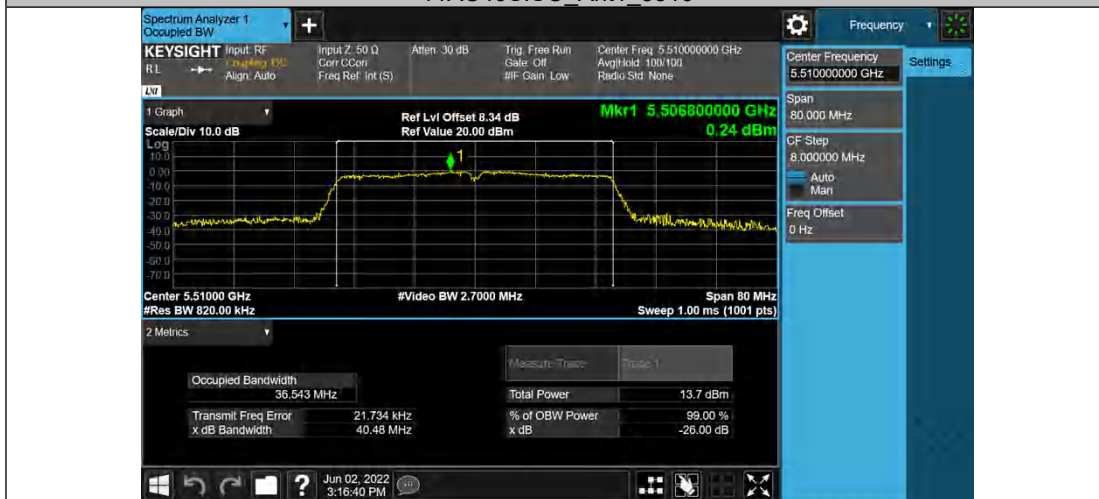


11AC40SISO\_Ant1\_5190

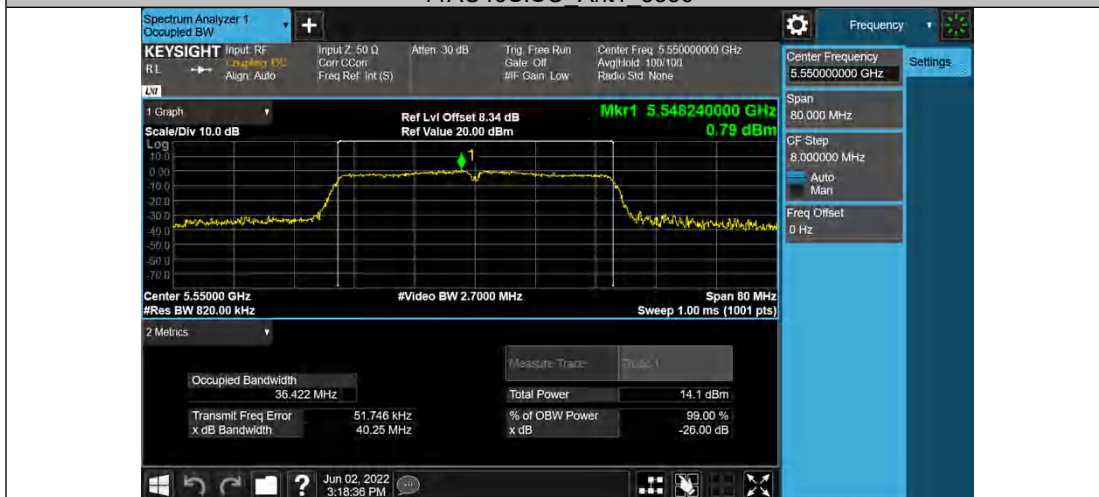




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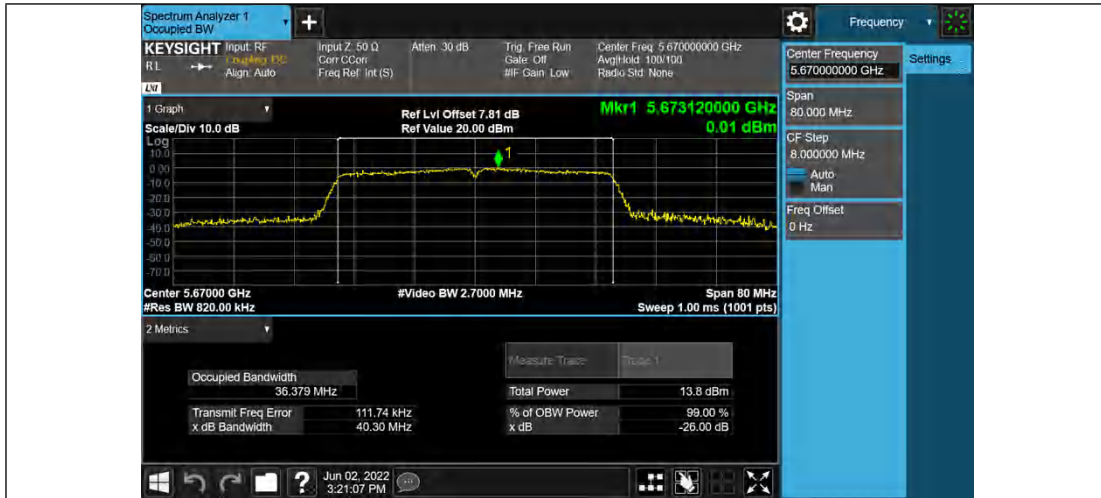


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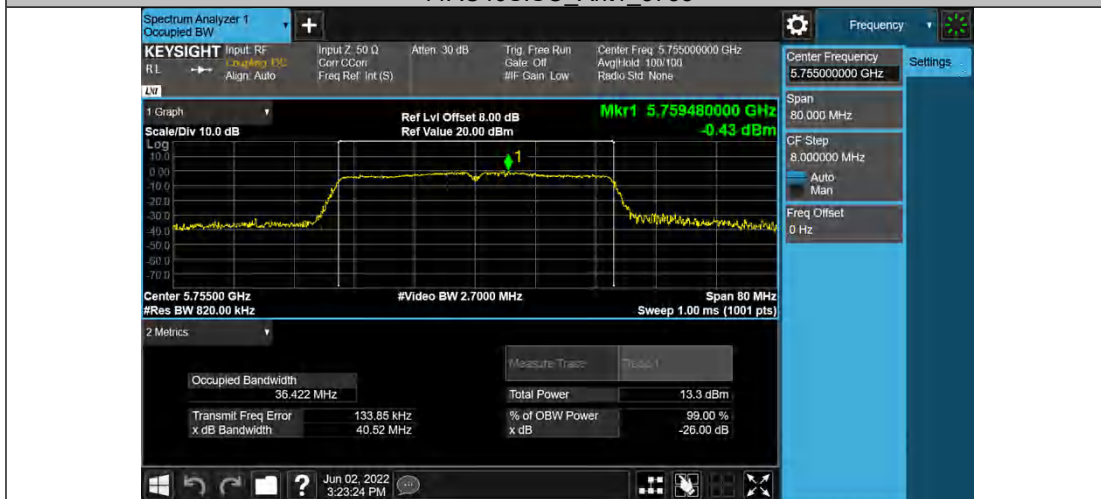


11AC40SISO\_Ant1\_5670

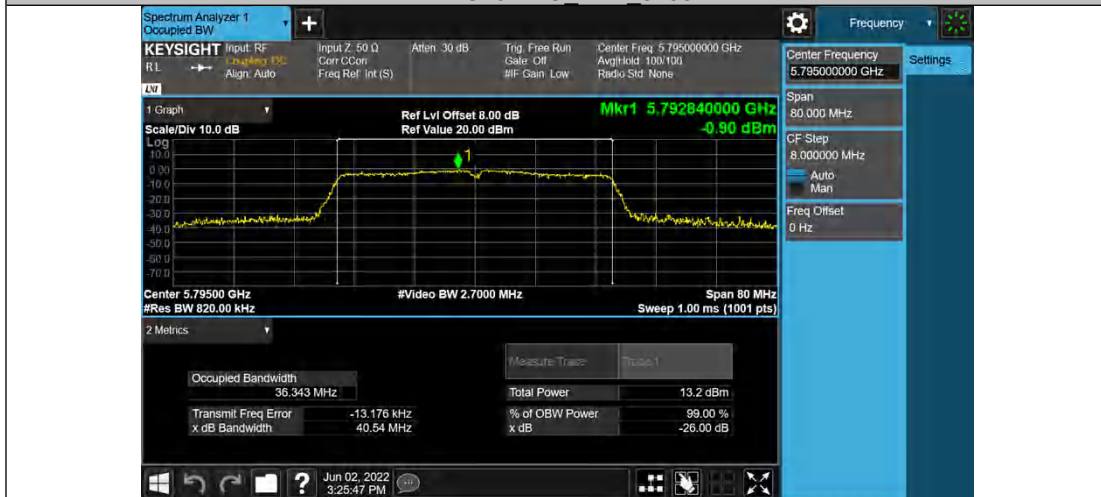




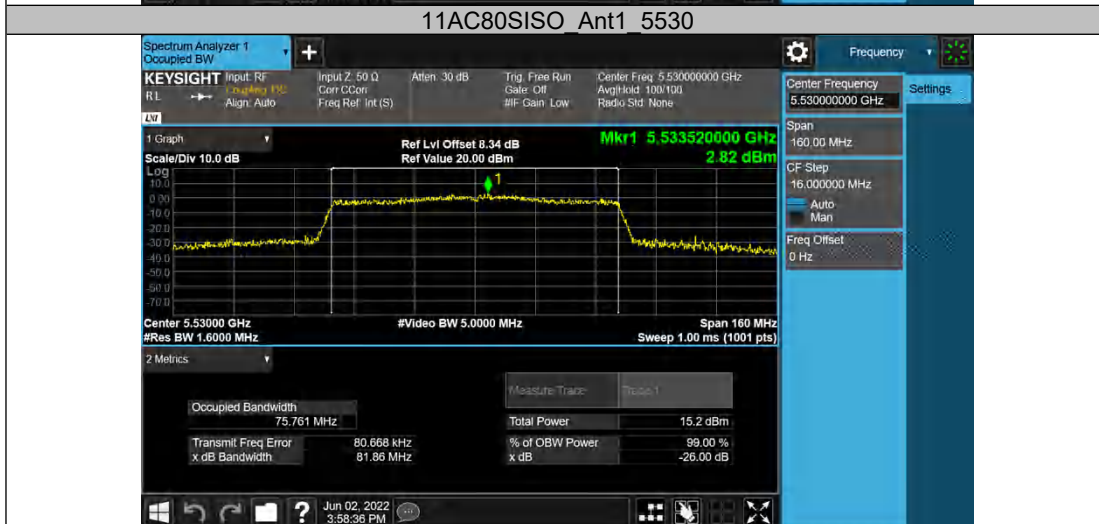
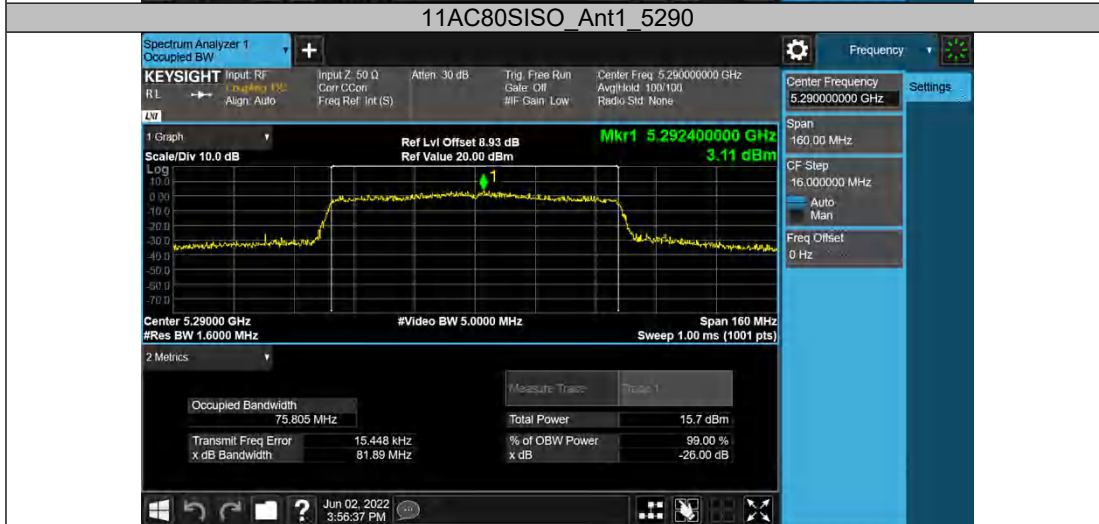
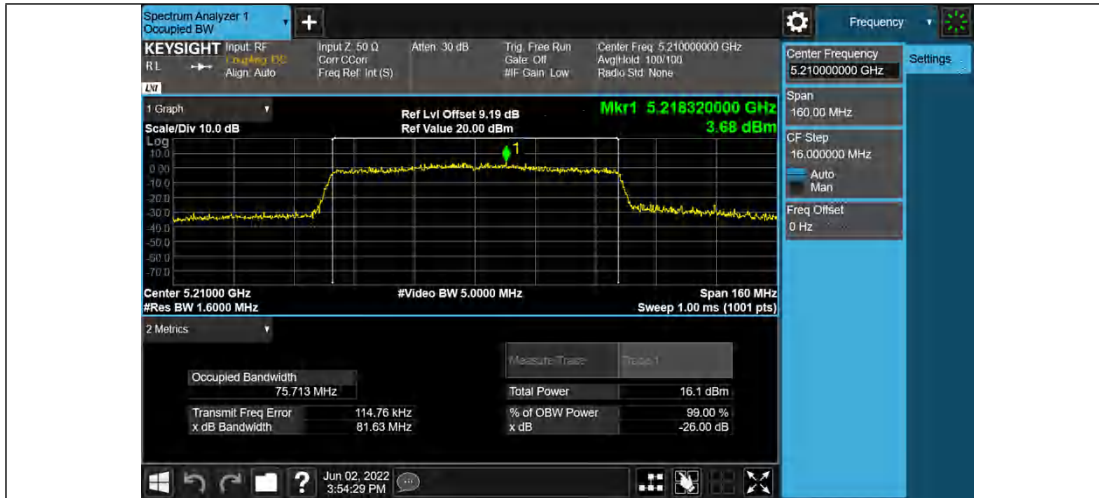
11AC40SISO\_Ant1\_5755



11AC40SISO\_Ant1\_5795



11AC80SISO\_Ant1\_5210





11AC80SISO\_Ant1\_5775

**Appendix B.5: Test Results of 6dB Bandwidth**

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.880	5753.200	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.080	5817.080	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.560	5736.240	5753.800	0.5	PASS
		5785	17.640	5776.200	5793.840	0.5	PASS
		5825	17.240	5816.240	5833.480	0.5	PASS
11N40SISO	Ant1	5755	35.040	5737.560	5772.600	0.5	PASS
		5795	35.680	5776.920	5812.600	0.5	PASS
11AC20SISO	Ant1	5745	15.960	5737.440	5753.400	0.5	PASS
		5785	17.320	5776.240	5793.560	0.5	PASS
		5825	17.320	5816.240	5833.560	0.5	PASS
11AC40SISO	Ant1	5755	34.080	5738.680	5772.760	0.5	PASS
		5795	36.240	5776.920	5813.160	0.5	PASS
11AC80SISO	Ant1	5775	75.040	5737.560	5812.600	0.5	PASS

11A Ant1 5745



11A Ant1 5785



11A Ant1 5825



11N20SISO Ant1 5745



11N20SISO Ant1 5785



11N20SISO Ant1 5825



11N40SISO Ant1 5755



11N40SISO\_Ant1\_5795



11AC20SISO\_Ant1\_5745



11AC20SISO\_Ant1\_5785



11AC20SISO\_Ant1\_5825



11AC40SISO\_Ant1\_5755



11AC40SISO\_Ant1\_5795





11AC80SISO Ant1 5775



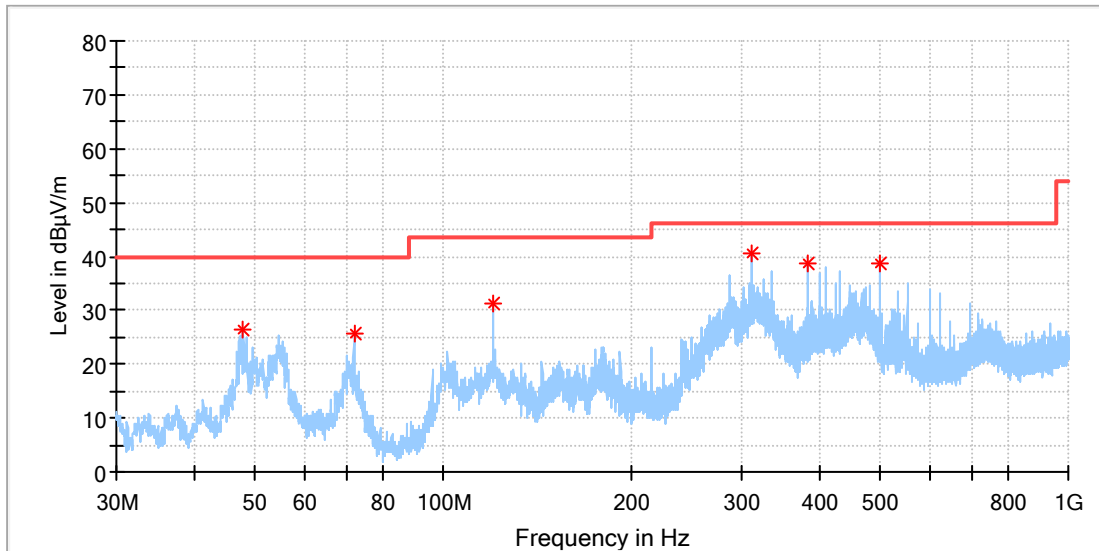
## Appendix B.6: Test Results of Radiated Spurious Emissions

Note: 1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported. 2. This testing was carried out on different modulations, but only the worst case was presented in this report.

### 30MHz - 1GHz (Worst case)

### EUT Information

EUT Name:	plant controller
Model:	IQ5-00-BW-24
Test Mode:	WIFI 5G_11a_Ch48
Order No/Sample No:	168374226/A003262749-003
Test Voltage::	DC 5V From USB
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



### Critical\_Freqs

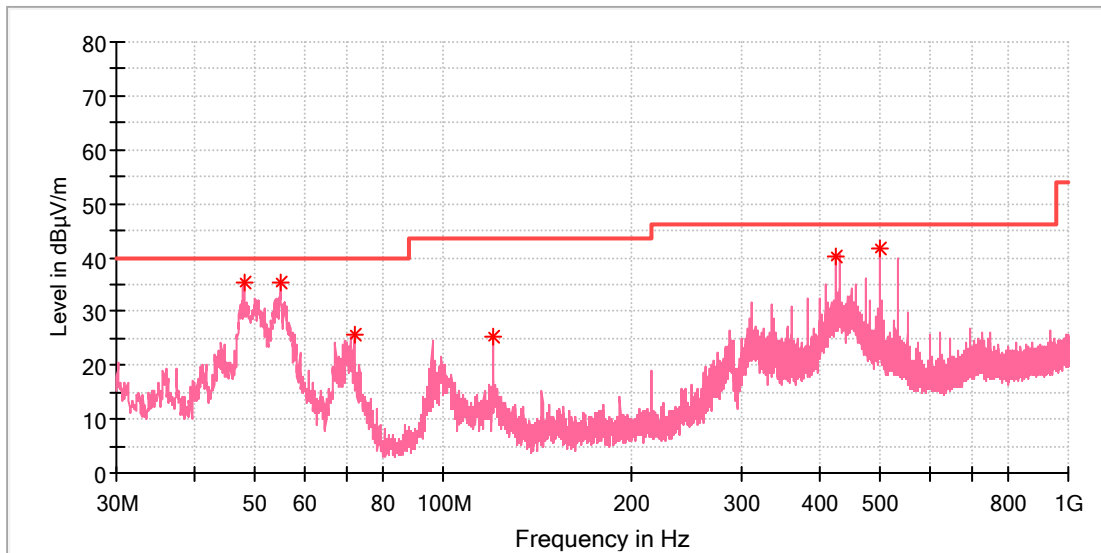
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
47.833077	26.37	40.00	13.63	100.0	H	244.0	-18.7
72.008462	25.81	40.00	14.19	100.0	H	263.0	-22.8
119.986154	31.15	43.50	12.35	100.0	H	180.0	-21.1
312.008846	40.46	46.00	5.54	100.0	H	253.0	-16.3
384.012692	38.55	46.00	7.45	100.0	H	164.0	-14.5
500.002308	38.68	46.00	7.33	100.0	H	253.0	-12.2

### Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11a\_Ch48  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
47.945000	35.42	40.00	4.58	100.0	V	110.0	-18.7
54.846923	35.18	40.00	4.82	100.0	V	28.0	-18.7
72.008462	25.79	40.00	14.21	100.0	V	329.0	-22.8
119.986154	25.18	43.50	18.32	100.0	V	224.0	-21.1
425.013846	40.35	46.00	5.65	100.0	V	282.0	-13.7
500.002308	41.63	46.00	4.37	100.0	V	174.0	-12.2

### Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

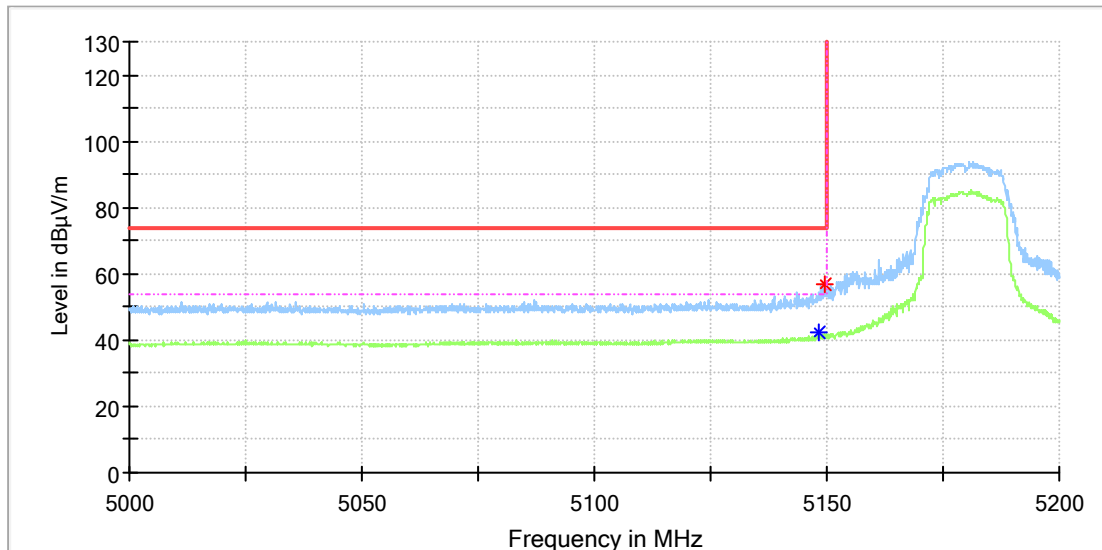
**Above 1GHz**

Note: The highest waveform in the figure is 5GHz Wi-Fi Fundamental.

**U-NII-1 Band**

**EUT Information**

EUT Name:	plant controller
Model:	IQ5-00-BW-24
Test Mode:	WIFI 5G_11a_Ch36
Order No/Sample No:	1683742226/A003262749-003
Test Voltage::	DC 5V From USB
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



**Critical Freqs**

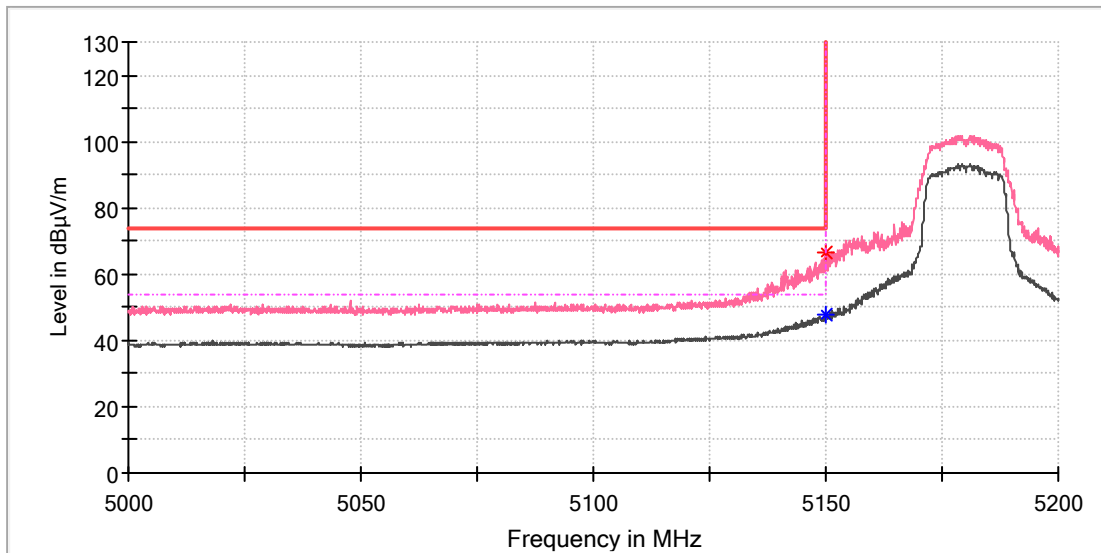
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5148.477778	---	42.11	54.00	11.89	100.0	H	124.0	12.4
5149.722222	57.10	---	74.00	16.90	100.0	H	124.0	12.4

**Final Result**

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11a\_Ch36  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

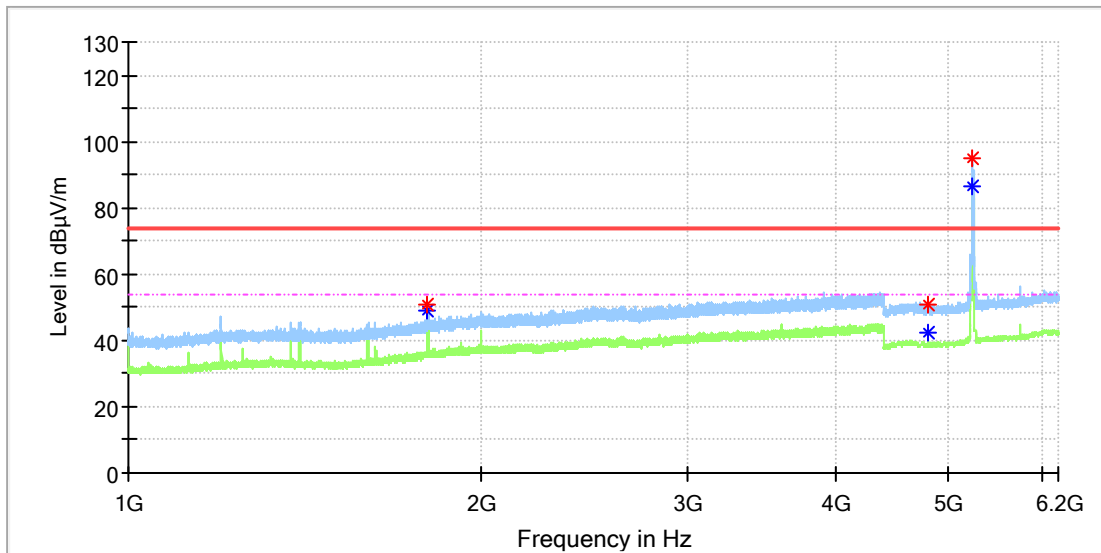
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5149.877778	66.30	---	74.00	7.70	100.0	V	279.0	12.4
5149.955556	---	47.96	54.00	6.04	100.0	V	279.0	12.4

### Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11a\_Ch48  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

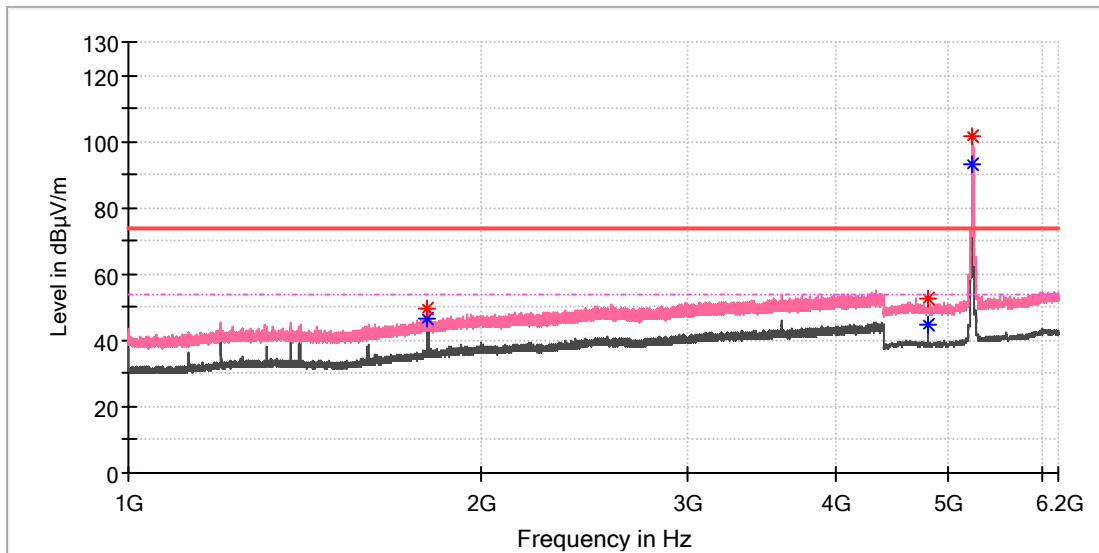
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1799.680000	50.89	---	74.00	23.11	100.0	H	338.0	4.7
1799.850000	---	48.69	54.00	5.31	100.0	H	338.0	4.7
4800.000000	50.91	---	74.00	23.09	100.0	H	260.0	11.8
4800.000000	---	42.07	54.00	11.93	100.0	H	260.0	11.8
5238.500000	95.20	---	74.00	-21.20	100.0	H	268.0	12.8
5239.000000	---	86.46	54.00	-32.46	100.0	H	268.0	12.8

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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## EUT Information

EUT Name:	plant controller
Model:	IQ5-00-BW-24
Test Mode:	WIFI 5G_11a_Ch48
Order No/Sample No:	168374226/A003262749-003
Test Voltage::	DC 5V From USB
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



## Critical Freqs

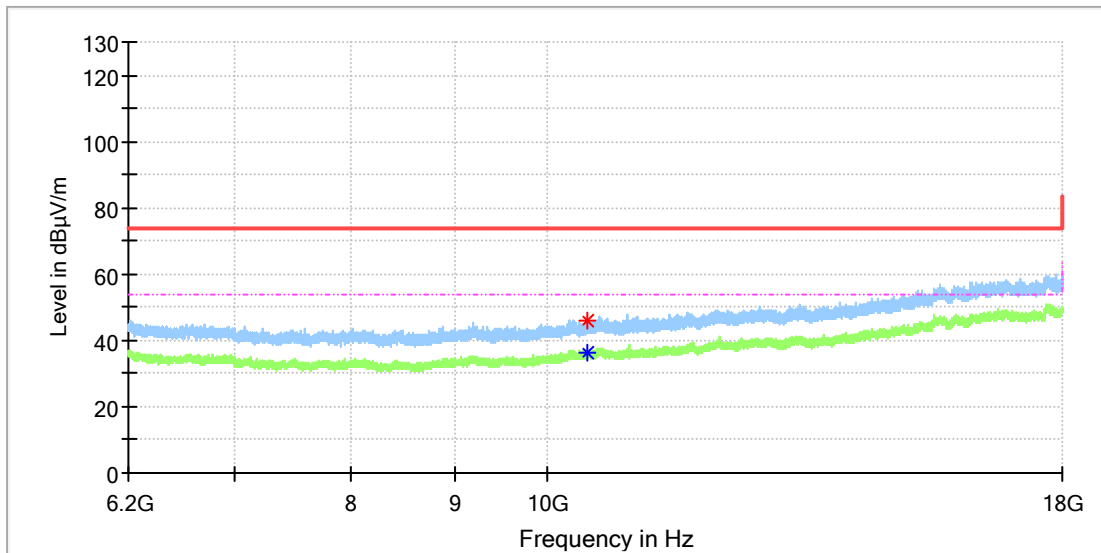
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1799.850000	49.68	---	74.00	24.32	100.0	V	283.0	4.7
1799.850000	---	46.39	54.00	7.61	100.0	V	283.0	4.7
4799.500000	52.57	---	74.00	21.43	100.0	V	241.0	11.8
4800.000000	---	44.75	54.00	9.25	100.0	V	241.0	11.8
5239.000000	---	93.20	54.00	-39.20	100.0	V	348.0	12.8
5241.500000	101.66	---	74.00	-27.66	100.0	V	262.0	12.8

## Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11a\_Ch48  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
10462.258333	46.08	---	74.00	27.92	100.0	H	32.0	12.0
10468.650000	---	36.41	54.00	17.59	100.0	H	201.0	12.0

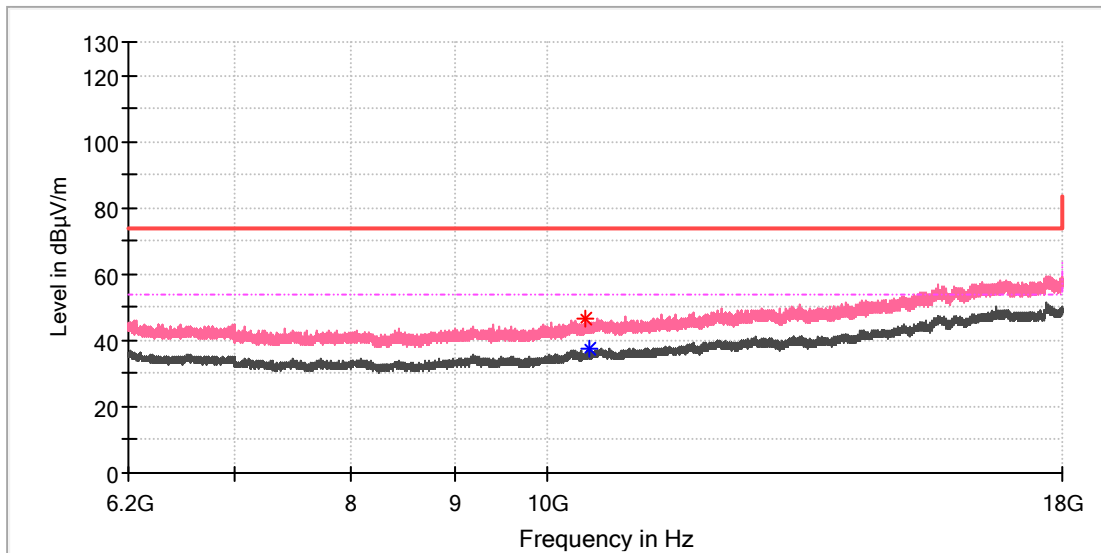
### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---



### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11a\_Ch48  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

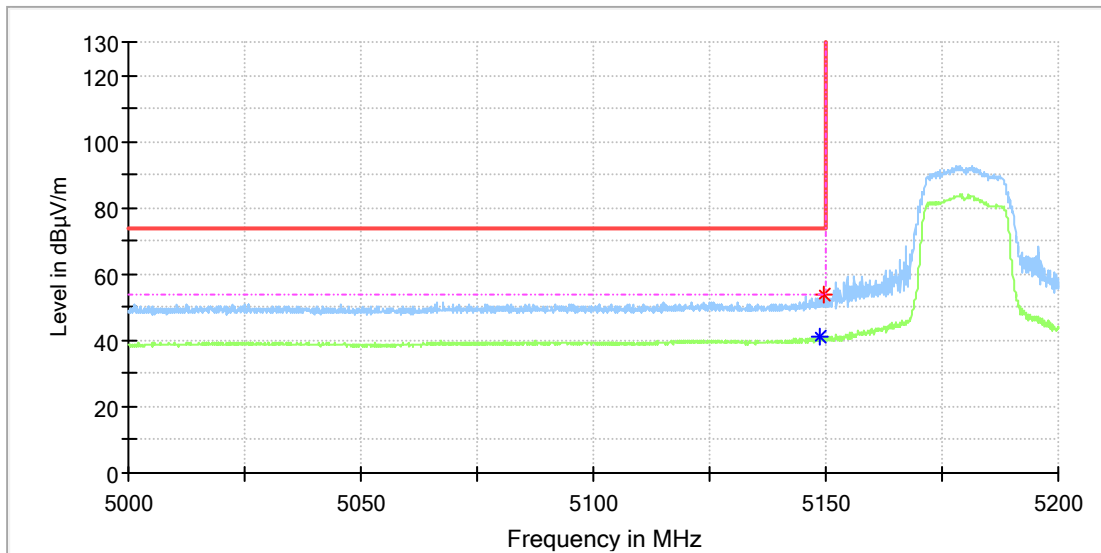
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
10446.033333	46.36	---	74.00	27.64	100.0	V	225.0	11.9
10480.941667	---	37.53	54.00	16.47	100.0	V	214.0	12.0

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n20\_Ch36  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

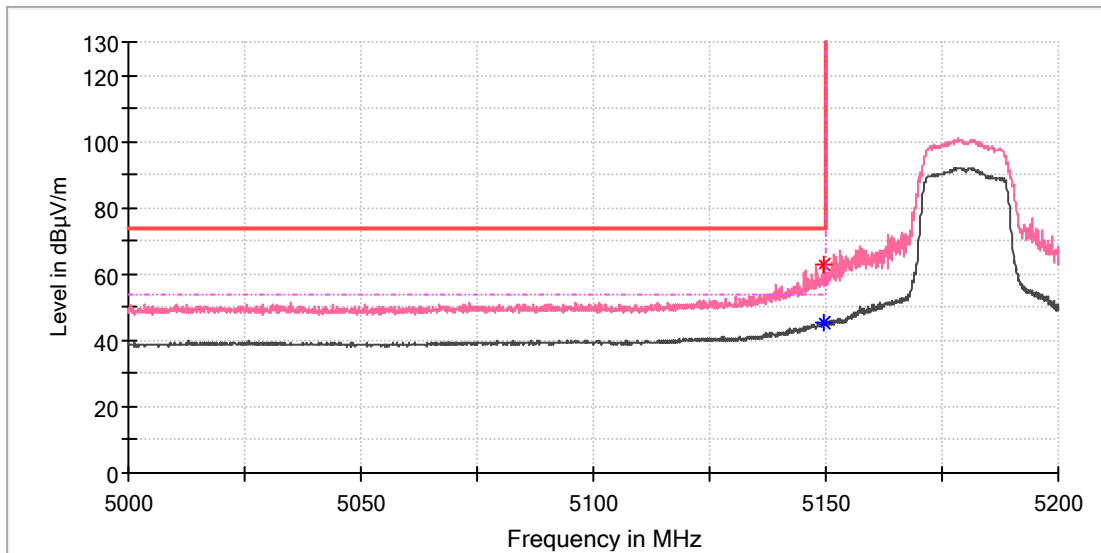
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5148.866667	---	41.02	54.00	12.98	100.0	H	120.0	12.4
5149.644445	53.87	---	74.00	20.13	100.0	H	120.0	12.4

### Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n20\_Ch36  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5149.411111	62.76	---	74.00	11.24	100.0	V	270.0	12.4
5149.488889	---	45.65	54.00	8.35	100.0	V	281.0	12.4

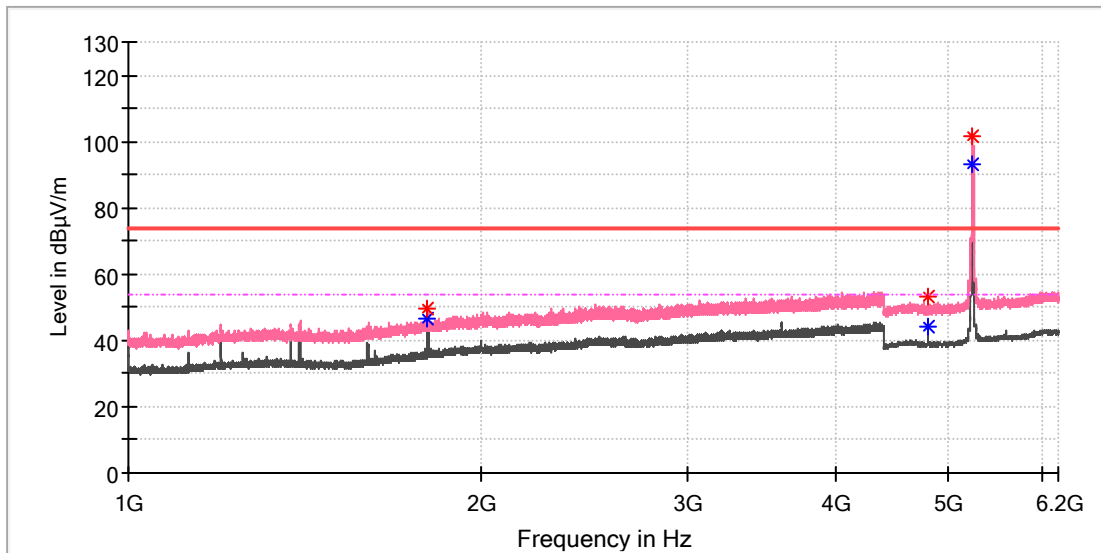
### Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n20\_Ch48  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

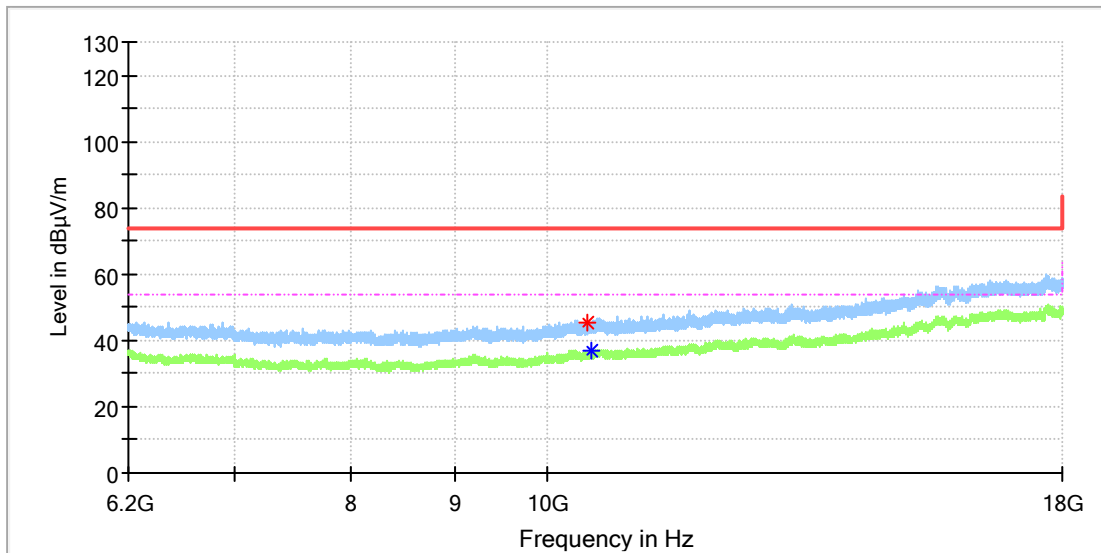
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1799.850000	49.34	---	74.00	24.66	100.0	V	282.0	4.7
1800.020000	---	46.54	54.00	7.46	100.0	V	282.0	4.7
4799.500000	---	44.35	54.00	9.65	100.0	V	239.0	11.8
4800.000000	52.91	---	74.00	21.09	100.0	V	239.0	11.8
5238.500000	101.84	---	74.00	-27.84	100.0	V	346.0	12.8
5239.000000	---	92.92	54.00	-38.92	100.0	V	346.0	12.8

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n20\_Ch48  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

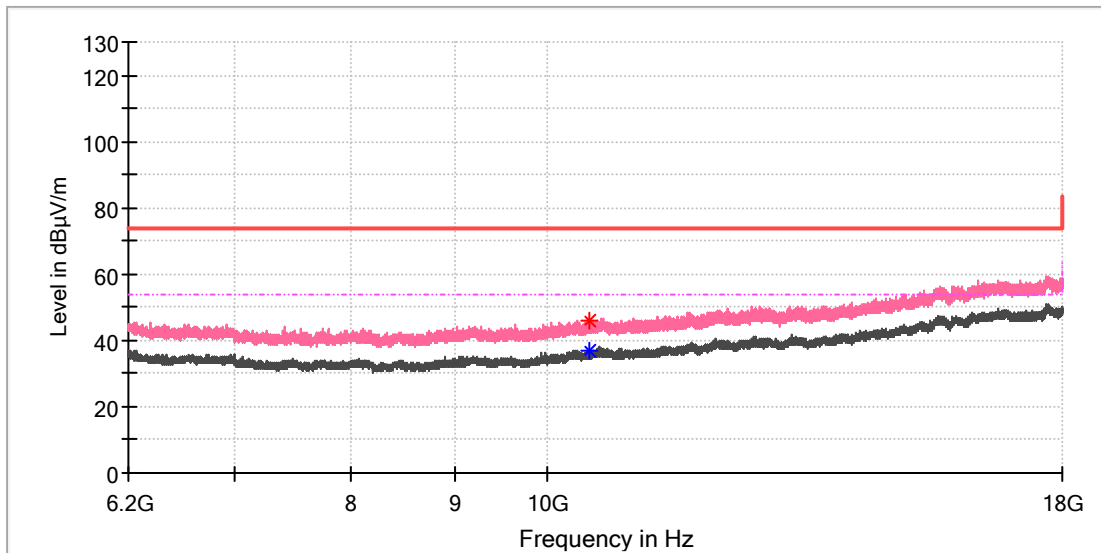
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
10474.058333	45.13	---	74.00	28.87	100.0	H	315.0	12.0
10504.541667	---	36.90	54.00	17.10	100.0	H	174.0	12.0

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n20\_Ch48  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

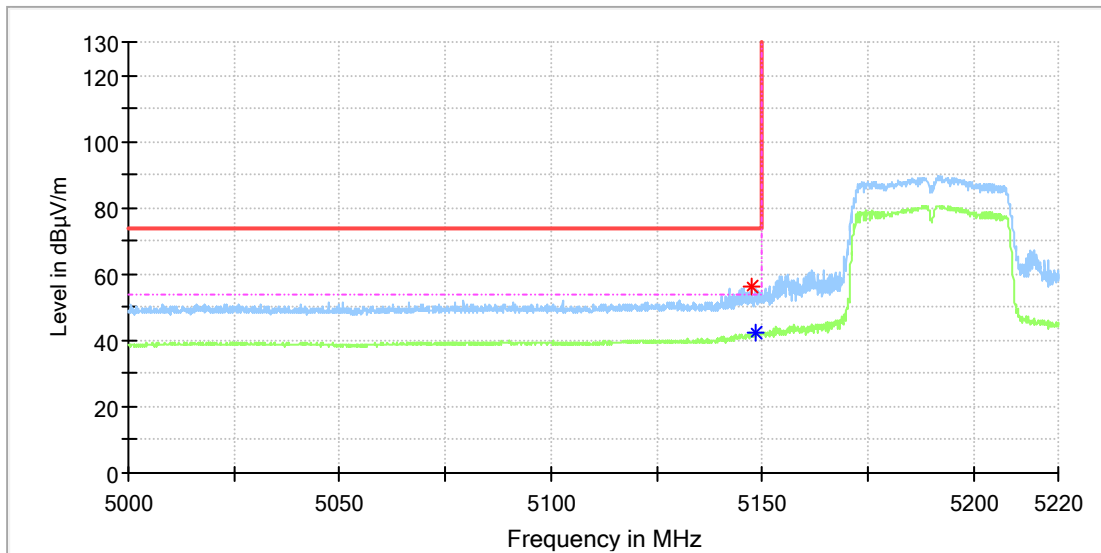
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
10481.433333	45.79	---	74.00	28.21	100.0	V	0.0	12.0
10481.433333	---	37.03	54.00	16.97	100.0	V	0.0	12.0

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n40\_Ch38  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5147.544445	55.95	---	74.00	18.05	100.0	H	98.0	12.4
5148.477778	---	42.14	54.00	11.86	100.0	H	114.0	12.4

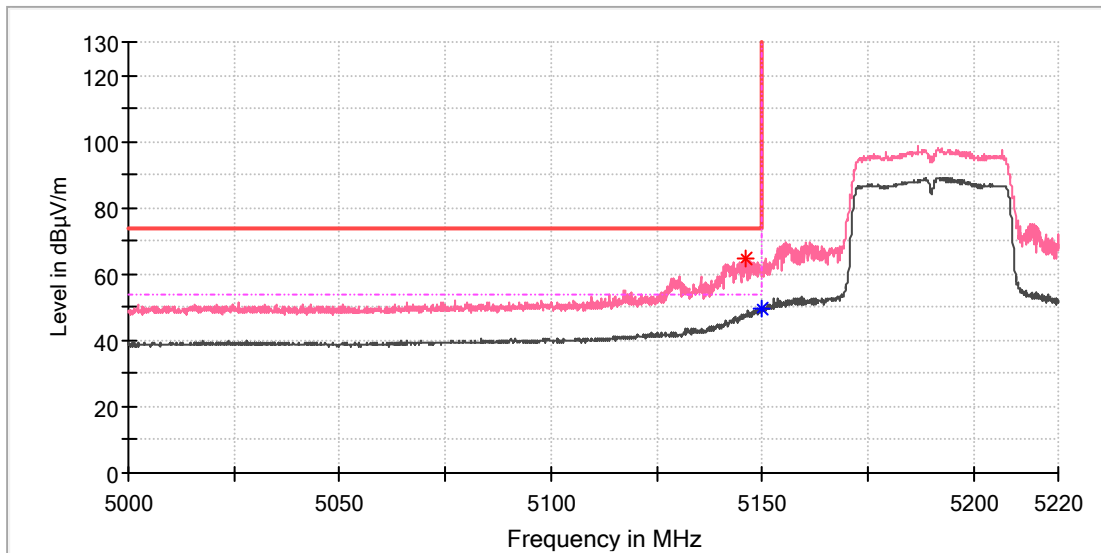
### Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n40\_Ch38  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5146.066667	64.54	---	74.00	9.46	100.0	V	280.0	12.4
5149.955556	---	49.77	54.00	4.23	100.0	V	280.0	12.4

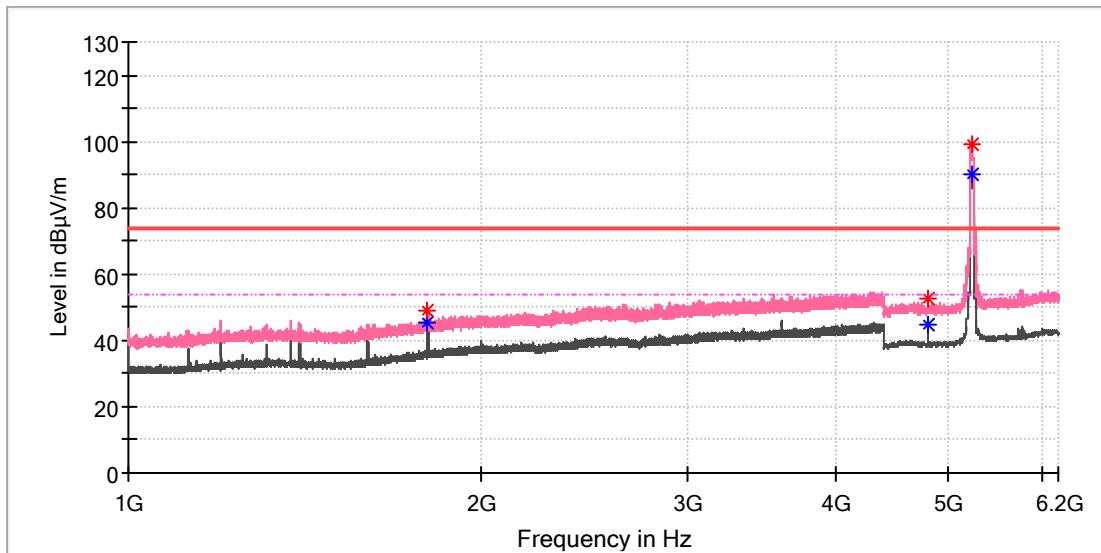
### Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n40\_Ch46  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

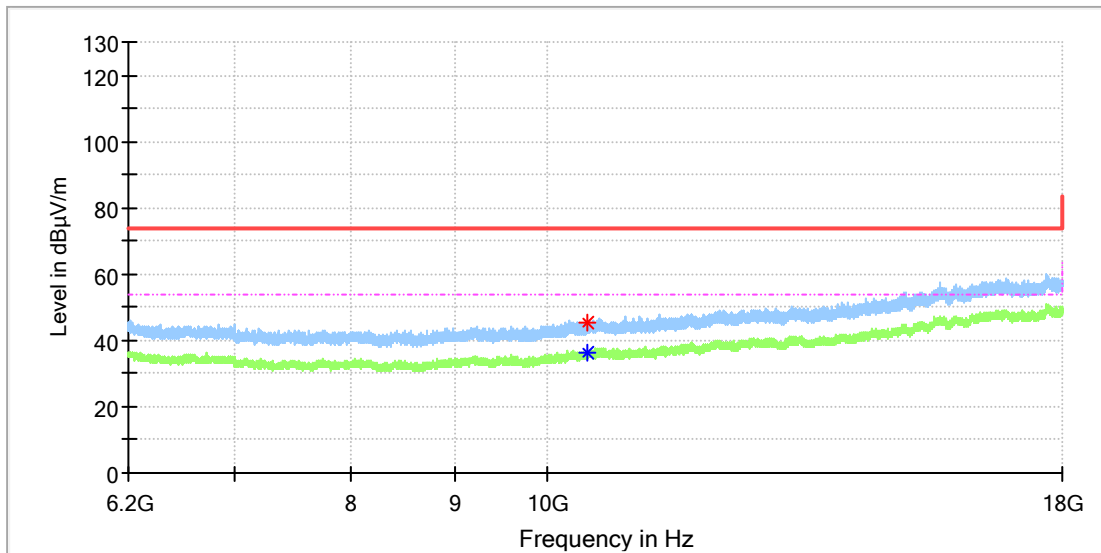
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1800.020000	48.69	---	74.00	25.31	100.0	V	286.0	4.7
1800.020000	---	45.61	54.00	8.39	100.0	V	286.0	4.7
4799.500000	52.50	---	74.00	21.50	100.0	V	241.0	11.8
4799.500000	---	44.69	54.00	9.31	100.0	V	241.0	11.8
5227.000000	---	90.29	54.00	-36.29	100.0	V	282.0	12.8
5228.000000	98.95	---	74.00	-24.95	100.0	V	0.0	12.8

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: plant controller  
 Model: IQ5-00-BW-24  
 Test Mode: WIFI 5G\_11n40\_Ch46  
 Order No/Sample No: 168374226/A003262749-003  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:55%  
 Test Standard: FCC 15.407  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
10464.716667	45.10	---	74.00	28.90	100.0	H	96.0	12.0
10468.650000	---	36.36	54.00	17.64	100.0	H	59.0	12.0

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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