11AX40SISO_Ant1_5795

9. 26dB Bandwidth, 6dB Bandwidth and 99% Bandwidth

9.1. Block Diagram of Test Setup

Same as section 8.1

9.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Bandwidth	26 dB Bandwidth	5150 - 5250
	26 dB Bandwidth	5250 - 5350
	26 dB Bandwidth	For FCC: 5470 - 5725 For IC: 5470 - 5600 5650 - 5725
	Minimum 500 kHz 6 dB Bandwidth	5725 - 5850
	For reporting purposes only.	For IC: 5150 ~ 5825

9.3. Test Procedure

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

Center Frequency	The centre 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. For 99 % Occupied Bandwidth: approximately 1 % ~ 5 % of the OBW.
VBW	For 6 dB Bandwidth: VBW=300 kHz For 26 dB Bandwidth: >3*RBW For 99 % Bandwidth: >3*RBW
Trace	Max hold
Sweep	Auto couple

(2) 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 26 dB and 6 dB relative to the maximum level measured in the fundamental emission.

(3) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

9.4. Test Result

Test Mode	Ant.	Freq. (MHz)	OCB (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
11A	Ant1	5180	17.035	5171.4361	5188.4711	---	---
		5200	17.417	5191.2299	5208.6469	---	---
		5240	17.299	5231.3336	5248.6326	---	---
		5260	17.501	5251.1800	5268.6810	---	---
		5280	17.409	5271.2896	5288.6986	---	---
		5320	17.501	5311.2606	5328.7616	---	---
		5500	17.644	5491.2079	5508.8519	---	---
		5580	17.609	5571.1876	5588.7966	---	---
		5700	17.573	5691.2146	5708.7876	---	---
		5720	17.578	5711.1871	5728.7651	---	---
		5720_UNII-2C	13.813	5711.1871	5725	---	---
		5720_UNII-3	3.765	5725	5728.7651	---	---
		5745	17.594	5736.1790	5753.7730	---	---
		5785	17.643	5776.1446	5793.7876	---	---
		5825	17.613	5816.0881	5833.7011	---	---
11N20SISO	Ant1	5180	18.499	5170.7731	5189.2721	---	---
		5200	18.500	5190.7054	5209.2054	---	---

		5240	18.514	5230.7298	5249.2438	---	---
		5260	18.603	5250.6880	5269.2910	---	---
		5280	18.536	5270.8115	5289.3475	---	---
		5320	18.566	5310.6844	5329.2504	---	---
		5500	18.690	5490.6996	5509.3896	---	---
		5580	18.846	5570.5820	5589.4280	---	---
		5700	18.589	5690.7263	5709.3153	---	---
		5720	18.843	5710.5435	5729.3865	---	---
		5720_UNII-2C	14.457	5710.5435	5725	---	---
		5720_UNII-3	4.386	5725	5729.3865	---	---
		5745	18.663	5735.6572	5754.3202	---	---
		5785	18.746	5775.5848	5794.3308	---	---
		5825	18.733	5815.5708	5834.3038	---	---
11N40SISO	Ant1	5190	36.871	5171.6052	5208.4762	---	---
		5230	36.782	5211.6536	5248.4356	---	---
		5270	36.927	5251.5662	5288.4932	---	---
		5310	36.950	5291.6493	5328.5993	---	---
		5510	37.061	5491.5648	5528.6258	---	---
		5550	37.040	5531.5837	5568.6237	---	---
		5670	37.250	5651.4879	5688.7379	---	---
		5710	36.967	5691.3776	5728.3446	---	---
		5710_UNII-2C	33.622	5691.3776	5725	---	---
		5710_UNII-3	3.345	5725	5728.3446	---	---
		5755	37.115	5736.3305	5773.4455	---	---
		5795	37.174	5776.3798	5813.5538	---	---
11AC20SISO	Ant1	5180	18.620	5170.6835	5189.3035	---	---
		5200	18.563	5190.6228	5209.1858	---	---
		5240	18.558	5230.7552	5249.3132	---	---
		5260	18.618	5250.6345	5269.2525	---	---
		5280	18.457	5270.7904	5289.2474	---	---
		5320	18.499	5310.8057	5329.3047	---	---
		5500	18.760	5490.6939	5509.4539	---	---
		5580	18.761	5570.6938	5589.4548	---	---
		5700	18.670	5690.6549	5709.3249	---	---
		5720	18.620	5710.6740	5729.2940	---	---
		5720_UNII-2C	14.326	5710.6740	5725	---	---
		5720_UNII-3	4.294	5725	5729.2940	---	---
		5745	18.741	5735.6272	5754.3682	---	---
		5785	18.753	5775.5844	5794.3374	---	---
		5825	18.800	5815.5109	5834.3109	---	---
11AC40SISO	Ant1	5190	36.844	5171.5903	5208.4343	---	---
		5230	36.883	5211.6118	5248.4948	---	---
		5270	37.024	5251.4842	5288.5082	---	---
		5310	36.967	5291.4153	5328.3823	---	---
		5510	37.118	5491.5140	5528.6320	---	---
		5550	37.070	5531.4359	5568.5059	---	---
		5670	37.079	5651.3496	5688.4286	---	---
		5710	37.289	5691.3424	5728.6314	---	---
		5710_UNII-2C	33.658	5691.3424	5725	---	---
		5710_UNII-3	3.631	5725	5728.6314	---	---
		5755	37.180	5736.2556	5773.4356	---	---
		5795	37.284	5776.2122	5813.4962	---	---
11AX20SISO	Ant1	5180	19.383	5170.2967	5189.6797	---	---
		5200	19.261	5190.3045	5209.5655	---	---
		5240	19.229	5230.3397	5249.5687	---	---
		5260	19.202	5250.3150	5269.5170	---	---
		5280	19.182	5270.3833	5289.5653	---	---
		5320	19.399	5310.2478	5329.6468	---	---
		5500	19.533	5490.2161	5509.7491	---	---
		5580	19.596	5570.2111	5589.8071	---	---

		5700	19.353	5690.2621	5709.6151	---	---
		5720	19.509	5710.2025	5729.7115	---	---
		5720_UNII-2C	14.797	5710.2025	5725	---	---
		5720_UNII-3	4.712	5725	5729.7115	---	---
		5745	19.483	5735.2309	5754.7139	---	---
		5785	19.444	5775.2046	5794.6486	---	---
		5825	19.381	5815.2633	5834.6443	---	---
11AX40SISO	Ant1	5190	38.130	5170.8359	5208.9659	---	---
		5230	38.155	5210.7853	5248.9403	---	---
		5270	38.138	5250.8535	5288.9915	---	---
		5310	38.090	5290.9268	5329.0168	---	---
		5510	38.138	5490.9334	5529.0714	---	---
		5550	38.328	5530.7690	5569.0970	---	---
		5670	38.263	5650.8926	5689.1556	---	---
		5710	38.258	5690.8577	5729.1157	---	---
		5710_UNII-2C	34.142	5690.8577	5725	---	---
		5710_UNII-3	4.116	5725	5729.1157	---	---
		5755	38.229	5735.8153	5774.0443	---	---
		5795	38.361	5775.7942	5814.1552	---	---

Test Mode	Ant.	Freq. (MHz)	26dB EBW (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
11A	Ant1	5180	22.800	5167.600	5190.400	---	---
		5200	23.840	5188.240	5212.080	---	---
		5240	23.760	5227.680	5251.440	---	---
		5260	23.680	5248.000	5271.680	---	---
		5280	23.520	5268.000	5291.520	---	---
		5320	24.080	5308.360	5332.440	---	---
		5500	24.880	5487.400	5512.280	---	---
		5580	24.320	5567.400	5591.720	---	---
		5700	24.880	5687.040	5711.920	---	---
		5720	25.280	5707.400	5732.680	---	---
		5720_UNII-2C	17.6	5707.400	5725	---	---
		5720_UNII-3	7.68	5725	5732.680	---	---
		5745	24.840	5732.400	5757.240	---	---
		5785	24.040	5773.200	5797.240	---	---
		5825	25.360	5811.880	5837.240	---	---
11N20SISO	Ant1	5180	25.680	5167.520	5193.200	---	---
		5200	25.840	5186.920	5212.760	---	---
		5240	24.320	5227.760	5252.080	---	---
		5260	25.200	5246.880	5272.080	---	---
		5280	24.760	5267.600	5292.360	---	---
		5320	24.240	5307.880	5332.120	---	---
		5500	26.040	5487.320	5513.360	---	---
		5580	25.560	5567.120	5592.680	---	---
		5700	25.480	5687.320	5712.800	---	---
		5720	25.520	5707.240	5732.760	---	---
		5720_UNII-2C	17.76	5707.240	5725	---	---
		5720_UNII-3	7.76	5725	5732.760	---	---
		5745	26.400	5731.720	5758.120	---	---
		5785	25.360	5772.000	5797.360	---	---
		5825	26.160	5811.320	5837.480	---	---
11N40SISO	Ant1	5190	44.560	5167.600	5212.160	---	---
		5230	45.680	5207.200	5252.880	---	---
		5270	44.960	5247.440	5292.400	---	---
		5310	44.320	5287.920	5332.240	---	---
		5510	46.480	5486.480	5532.960	---	---
		5550	45.840	5527.120	5572.960	---	---
		5670	46.160	5646.880	5693.040	---	---
		5710	45.600	5687.200	5732.800	---	---

		5710_UNII-2C	37.8	5687.200	5725	---	---
		5710_UNII-3	7.8	5725	5732.800	---	---
		5755	46.960	5731.800	5778.760	---	---
		5795	46.160	5771.880	5818.040	---	---
11AC20SISO	Ant1	5180	25.920	5167.040	5192.960	---	---
		5200	24.680	5187.840	5212.520	---	---
		5240	24.320	5227.480	5251.800	---	---
		5260	25.200	5246.880	5272.080	---	---
		5280	24.720	5267.520	5292.240	---	---
		5320	24.200	5308.160	5332.360	---	---
		5500	25.680	5487.040	5512.720	---	---
		5580	26.040	5567.160	5593.200	---	---
		5700	25.920	5687.040	5712.960	---	---
		5720	26.520	5706.640	5733.160	---	---
		5720_UNII-2C	18.36	5706.640	5725	---	---
		5720_UNII-3	8.16	5725	5733.160	---	---
		5745	25.120	5732.520	5757.640	---	---
		5785	26.200	5771.320	5797.520	---	---
		5825	25.320	5812.200	5837.520	---	---
11AC40SISO	Ant1	5190	45.520	5166.800	5212.320	---	---
		5230	45.200	5206.960	5252.160	---	---
		5270	48.240	5245.120	5293.360	---	---
		5310	45.680	5286.640	5332.320	---	---
		5510	45.360	5487.600	5532.960	---	---
		5550	45.440	5527.040	5572.480	---	---
		5670	45.680	5646.640	5692.320	---	---
		5710	46.720	5686.400	5733.120	---	---
		5710_UNII-2C	38.6	5686.400	5725	---	---
		5710_UNII-3	8.12	5725	5733.120	---	---
		5755	45.760	5732.440	5778.200	---	---
		5795	45.280	5771.720	5817.000	---	---
11AX20SISO	Ant1	5180	25.560	5167.320	5192.880	---	---
		5200	24.480	5187.720	5212.200	---	---
		5240	23.800	5228.200	5252.000	---	---
		5260	25.080	5247.240	5272.320	---	---
		5280	25.080	5267.440	5292.520	---	---
		5320	23.280	5308.320	5331.600	---	---
		5500	26.040	5487.280	5513.320	---	---
		5580	26.920	5567.240	5594.160	---	---
		5700	25.280	5686.960	5712.240	---	---
		5720	25.880	5706.600	5732.480	---	---
		5720_UNII-2C	18.4	5706.600	5725	---	---
		5720_UNII-3	7.48	5725	5732.480	---	---
		5745	26.280	5731.200	5757.480	---	---
		5785	26.920	5771.760	5798.680	---	---
		5825	25.040	5812.120	5837.160	---	---
11AX40SISO	Ant1	5190	42.240	5168.560	5210.800	---	---
		5230	44.800	5207.280	5252.080	---	---
		5270	45.040	5247.760	5292.800	---	---
		5310	44.960	5287.200	5332.160	---	---
		5510	44.240	5487.440	5531.680	---	---
		5550	45.120	5527.360	5572.480	---	---
		5670	44.960	5647.280	5692.240	---	---
		5710	45.440	5687.360	5732.800	---	---
		5710_UNII-2C	37.64	5687.360	5725	---	---
		5710_UNII-3	7.8	5725	5732.800	---	---
		5755	45.840	5731.560	5777.400	---	---
		5795	44.640	5772.440	5817.080	---	---

Test Mode	Ant.	Freq. (MHz)	6dB EBW (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
11A	Ant1	5720	16.360	5711.800	5728.160	---	---
		5720_UNII-2C	13.2	5711.800	5725	---	---
		5720_UNII-3	3.16	5725	5728.160	0.5	PASS
		5745	16.520	5736.720	5753.240	0.5	PASS
		5785	16.520	5776.720	5793.240	0.5	PASS
		5825	16.360	5816.800	5833.160	0.5	PASS
11N20SISO	Ant1	5720	17.600	5711.200	5728.800	---	---
		5720_UNII-2C	13.8	5711.200	5725	---	---
		5720_UNII-3	3.8	5725	5728.800	0.5	PASS
		5745	17.600	5736.200	5753.800	0.5	PASS
		5785	17.600	5776.200	5793.800	0.5	PASS
		5825	17.560	5816.200	5833.760	0.5	PASS
11N40SISO	Ant1	5710	36.320	5691.840	5728.160	---	---
		5710_UNII-2C	33.16	5691.840	5725	---	---
		5710_UNII-3	3.16	5725	5728.160	0.5	PASS
		5755	36.400	5736.760	5773.160	0.5	PASS
		5795	36.320	5776.760	5813.080	0.5	PASS
11AC20SISO	Ant1	5720	17.600	5711.200	5728.800	---	---
		5720_UNII-2C	13.8	5711.200	5725	---	---
		5720_UNII-3	3.8	5725	5728.800	0.5	PASS
		5745	17.600	5736.200	5753.800	0.5	PASS
		5785	17.560	5776.200	5793.760	0.5	PASS
		5825	17.600	5816.160	5833.760	0.5	PASS
11AC40SISO	Ant1	5710	36.320	5691.840	5728.160	---	---
		5710_UNII-2C	33.16	5691.840	5725	---	---
		5710_UNII-3	3.16	5725	5728.160	0.5	PASS
		5755	36.320	5736.840	5773.160	0.5	PASS
		5795	36.320	5776.840	5813.160	0.5	PASS
11AX20SISO	Ant1	5720	19.040	5710.480	5729.520	---	---
		5720_UNII-2C	14.52	5710.480	5725	---	---
		5720_UNII-3	4.52	5725	5729.520	0.5	PASS
		5745	18.960	5735.520	5754.480	0.5	PASS
		5785	18.960	5775.520	5794.480	0.5	PASS
		5825	19.000	5815.480	5834.480	0.5	PASS
11AX40SISO	Ant1	5710	38.000	5691.040	5729.040	---	---
		5710_UNII-2C	33.96	5691.040	5725	---	---
		5710_UNII-3	4.04	5725	5729.040	0.5	PASS
		5755	37.520	5736.360	5773.880	0.5	PASS
		5795	38.080	5775.960	5814.040	0.5	PASS

9.5. Original Test Data

99% Bandwidth:

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_5720

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

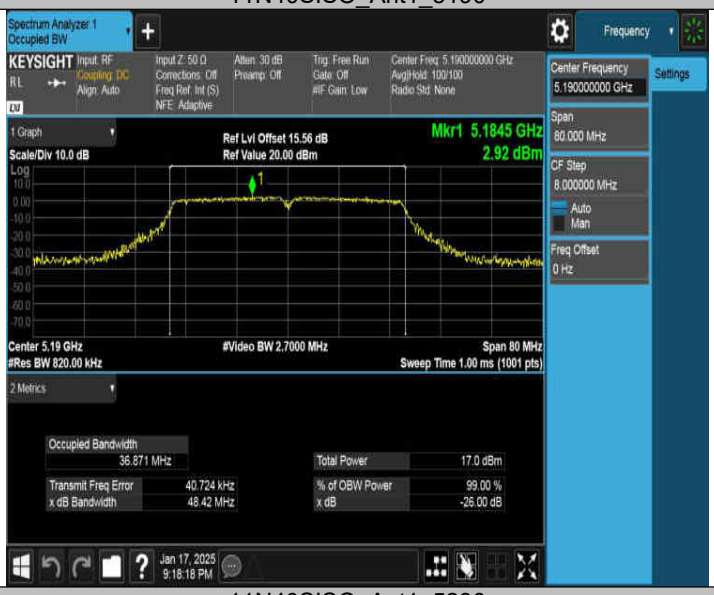
11N20SISO_Ant1_5720

11N20SISO_Ant1_5745

11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

11N40SISO_Ant1_5270

11N40SISO_Ant1_5310

11N40SISO_Ant1_5510

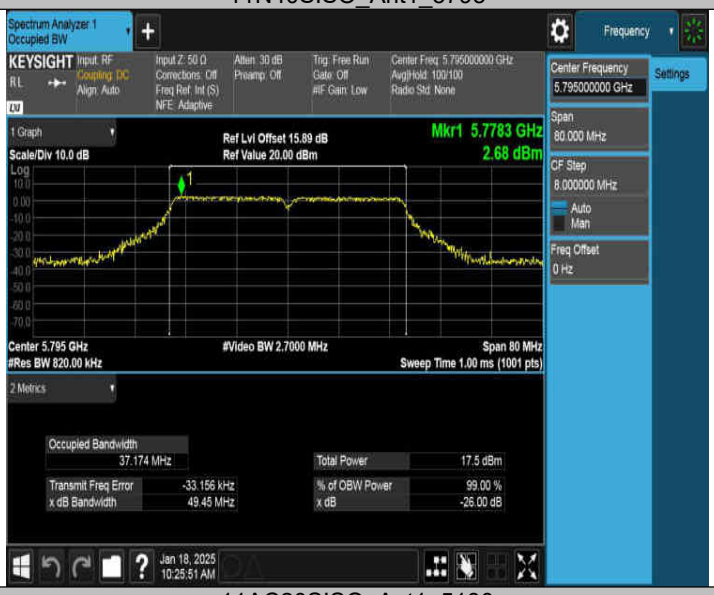
11N40SISO_Ant1_5550

11N40SISO_Ant1_5670

11N40SISO_Ant1_5710

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_5720

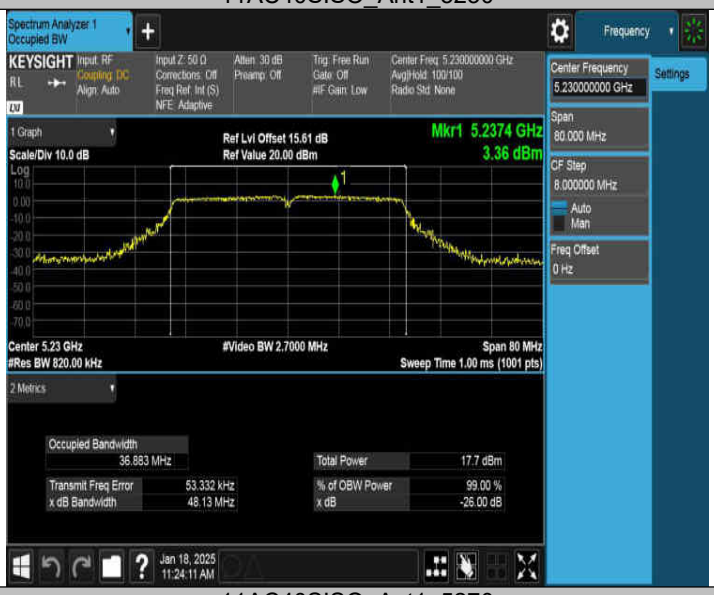
11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5190

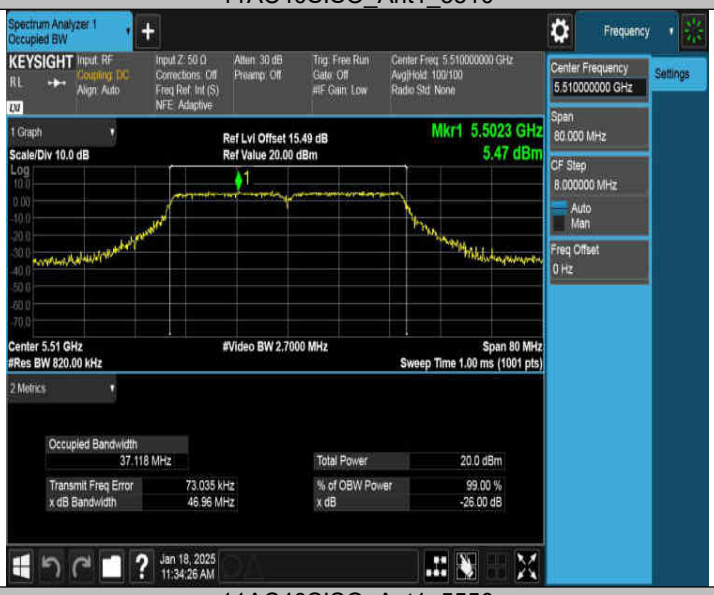
11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5270

11AC40SISO_Ant1_5310

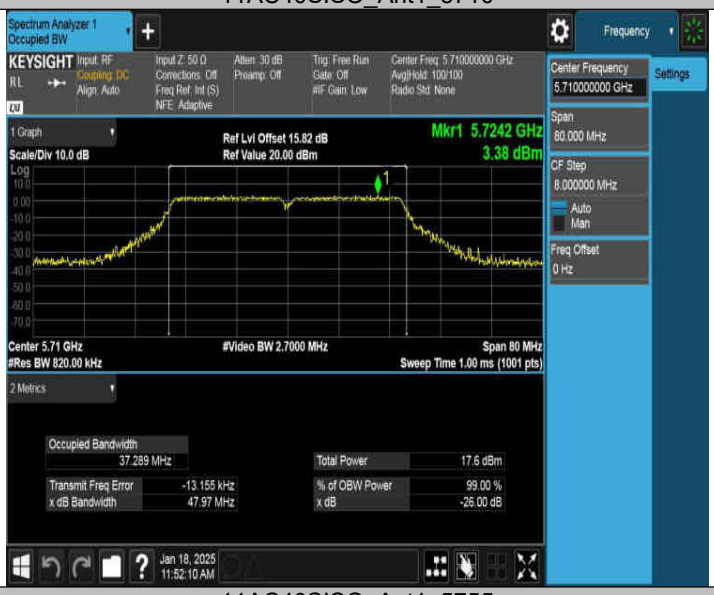
11AC40SISO_Ant1_5510



11AC40SISO_Ant1_5550

11AC40SISO_Ant1_5670

11AC40SISO_Ant1_5710



11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AX20SISO_Ant1_5180

11AX20SISO_Ant1_5200

11AX20SISO_Ant1_5240

11AX20SISO_Ant1_5260

11AX20SISO_Ant1_5280

11AX20SISO_Ant1_5320

11AX20SISO_Ant1_5500

11AX20SISO_Ant1_5580

11AX20SISO_Ant1_5700

11AX20SISO_Ant1_5720

11AX20SISO_Ant1_5745

11AX20SISO_Ant1_5785

11AX20SISO_Ant1_5825

11AX40SISO_Ant1_5190

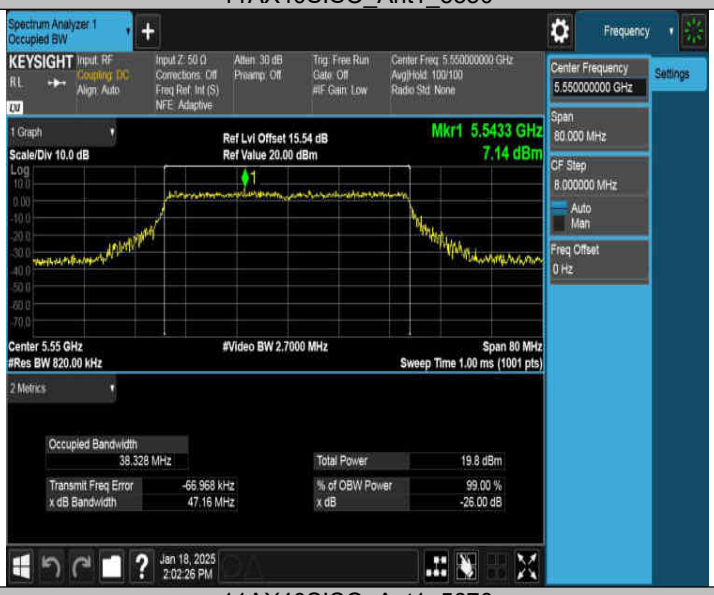
11AX40SISO_Ant1_5230

11AX40SISO_Ant1_5270

11AX40SISO_Ant1_5310

11AX40SISO_Ant1_5510

11AX40SISO_Ant1_5550



11AX40SISO_Ant1_5670

11AX40SISO_Ant1_5710

11AX40SISO_Ant1_5755

11AX40SISO_Ant1_5795

26dB Bandwidth:

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_5720

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

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11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

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11N40SISO_Ant1_5550

11N40SISO_Ant1_5670

11N40SISO_Ant1_5710

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795