





























11AX40SISO_Ant1_5795



11AX80SISO_Ant1_5210



11AX80SISO Ant1 5290





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	17.048	5171.4715	5188.5195	---	---
		5200	17.215	5191.4025	5208.6175	---	---
		5240	17.180	5231.4286	5248.6086	---	---
		5260	17.048	5251.4619	5268.5099	---	---
		5280	17.204	5271.2802	5288.4842	---	---
		5320	17.017	5311.4213	5328.4383	---	---
		5500	17.013	5491.4929	5508.5059	---	---
		5580	17.147	5571.4336	5588.5806	---	---
		5700	17.252	5691.4522	5708.7042	---	---
		5720	17.327	5711.2549	5728.5819	---	---
		5720 UNII-2C	13.745	5711.2549	5725	---	---
		5720 UNII-3	3.582	5725	5728.5819	---	---
		5745	17.276	5736.3032	5753.5792	---	---
		5785	17.307	5776.3601	5793.6671	---	---
		5825	17.128	5816.4233	5833.5513	---	---
11N20SISO	Ant1	5180	18.131	5170.9326	5189.0636	---	---
		5200	18.098	5190.9545	5209.0525	---	---

		5240	18.286	5230.8278	5249.1138	---	---
		5260	18.201	5250.8733	5269.0743	---	---
		5280	18.155	5271.0020	5289.1570	---	---
		5320	18.186	5310.8086	5328.9946	---	---
		5500	18.452	5490.8206	5509.2726	---	---
		5580	18.373	5570.8050	5589.1780	---	---
		5700	18.330	5690.7670	5709.0970	---	---
		5720	18.283	5710.8184	5729.1014	---	---
		5720_UNII-2C	14.182	5710.8184	5725	---	---
		5720_UNII-3	4.101	5725	5729.1014	---	---
		5745	18.314	5735.8734	5754.1874	---	---
		5785	18.400	5775.7755	5794.1755	---	---
		5825	18.524	5815.7104	5834.2344	---	---
		5190	36.443	5171.7578	5208.2008	---	---
11N40SISO	Ant1	5230	36.505	5211.6908	5248.1958	---	---
		5270	36.498	5251.6788	5288.1768	---	---
		5310	36.507	5291.7628	5328.2698	---	---
		5510	36.685	5491.5809	5528.2659	---	---
		5550	36.699	5531.6607	5568.3597	---	---
		5670	36.728	5651.5842	5688.3122	---	---
		5710	36.867	5691.4933	5728.3603	---	---
		5710_UNII-2C	33.507	5691.4933	5725	---	---
		5710_UNII-3	3.36	5725	5728.3603	---	---
		5755	36.842	5736.5684	5773.4104	---	---
		5795	36.828	5776.6210	5813.4490	---	---
		5180	18.318	5170.8399	5189.1579	---	---
		5200	18.235	5190.8382	5209.0732	---	---
		5240	18.327	5230.8281	5249.1551	---	---
		5260	18.244	5250.8216	5269.0656	---	---
11AC20SISO	Ant1	5280	18.207	5270.8909	5289.0979	---	---
		5320	18.265	5310.8008	5329.0658	---	---
		5500	18.563	5490.6814	5509.2444	---	---
		5580	18.422	5570.8253	5589.2473	---	---
		5700	18.442	5690.7709	5709.2129	---	---
		5720	18.252	5710.7671	5729.0191	---	---
		5720_UNII-2C	14.233	5710.7671	5725	---	---
		5720_UNII-3	4.019	5725	5729.0191	---	---
		5745	18.279	5735.8925	5754.1715	---	---
		5785	18.350	5775.7711	5794.1211	---	---
		5825	18.387	5815.7478	5834.1348	---	---
		5190	36.402	5171.8614	5208.2634	---	---
		5230	36.635	5211.6856	5248.3206	---	---
		5270	36.752	5251.5609	5288.3129	---	---
		5310	36.610	5291.8031	5328.4131	---	---
11AC40SISO	Ant1	5510	36.821	5491.5238	5528.3448	---	---
		5550	36.698	5531.7127	5568.4107	---	---
		5670	36.912	5651.4321	5688.3441	---	---
		5710	36.894	5691.5222	5728.4162	---	---
		5710_UNII-2C	33.478	5691.5222	5725	---	---
		5710_UNII-3	3.416	5725	5728.4162	---	---
		5755	37.043	5736.4742	5773.5172	---	---
		5795	36.825	5776.5888	5813.4138	---	---
		5210	75.991	5172.0203	5248.0113	---	---
		5290	77.282	5251.5259	5328.8079	---	---
		5530	76.406	5492.1747	5568.5807	---	---
		5610	75.920	5571.9076	5647.8276	---	---
		5690	76.134	5651.6959	5727.8299	---	---
		5690_UNII-2C	73.304	5651.6959	5725	---	---
		5690_UNII-3	2.83	5725	5727.8299	---	---
11AC80SISO	Ant1	5775	76.317	5736.7323	5813.0493	---	---

11AX20SISO	Ant1	5180	19.084	5170.3788	5189.4628	---	---
		5200	19.099	5190.4399	5209.5389	---	---
		5240	19.086	5230.4512	5249.5372	---	---
		5260	19.186	5250.4031	5269.5891	---	---
		5280	19.155	5270.4173	5289.5723	---	---
		5320	19.136	5310.3669	5329.5029	---	---
		5500	19.244	5490.4060	5509.6500	---	---
		5580	19.204	5570.4069	5589.6109	---	---
		5700	19.263	5690.3144	5709.5774	---	---
		5720	19.396	5710.3686	5729.7646	---	---
		5720_UNII-2C	14.631	5710.3686	5725	---	---
		5720_UNII-3	4.765	5725	5729.7646	---	---
		5745	19.182	5735.4201	5754.6021	---	---
		5785	19.231	5775.4324	5794.6634	---	---
		5825	19.142	5815.4126	5834.5546	---	---
11AX40SISO	Ant1	5190	37.888	5171.0415	5208.9295	---	---
		5230	37.971	5211.0320	5249.0030	---	---
		5270	37.921	5251.0045	5288.9255	---	---
		5310	38.004	5290.9243	5328.9283	---	---
		5510	38.087	5490.9513	5529.0383	---	---
		5550	38.009	5531.0621	5569.0711	---	---
		5670	38.109	5650.9353	5689.0443	---	---
		5710	38.039	5690.9657	5729.0047	---	---
		5710_UNII-2C	34.034	5690.9657	5725	---	---
		5710_UNII-3	4.005	5725	5729.0047	---	---
		5755	38.076	5735.9538	5774.0298	---	---
		5795	38.162	5775.9222	5814.0842	---	---
		5210	77.355	5171.2414	5248.5964	---	---
11AX80SISO	Ant1	5290	77.437	5251.2185	5328.6555	---	---
		5530	77.840	5491.2658	5569.1058	---	---
		5610	77.922	5571.0989	5649.0209	---	---
		5690	77.749	5651.1164	5728.8654	---	---
		5690_UNII-2C	73.884	5651.1164	5725	---	---
		5690_UNII-3	3.865	5725	5728.8654	---	---
		5775	77.634	5736.1172	5813.7512	---	---

Note: Offset=cable loss + Test system insertion loss

Test Mode	Ant.	Freq. (MHz)	26dB EBW (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
11A	Ant1	5180	23.200	5168.080	5191.280	---	---
		5200	21.880	5189.160	5211.040	---	---
		5240	22.600	5228.720	5251.320	---	---
		5260	22.800	5248.000	5270.800	---	---
		5280	22.800	5269.280	5292.080	---	---
		5320	22.000	5308.680	5330.680	---	---
		5500	23.160	5488.800	5511.960	---	---
		5580	22.880	5569.280	5592.160	---	---
		5700	24.280	5687.360	5711.640	---	---
		5720	24.280	5707.680	5731.960	---	---
		5720_UNII-2C	17.32	5707.680	5725	---	---
		5720_UNII-3	6.96	5725	5731.960	---	---
		5745	24.520	5732.680	5757.200	---	---
		5785	23.920	5772.640	5796.560	---	---
		5825	23.920	5812.200	5836.120	---	---
11N20SISO	Ant1	5180	22.960	5168.880	5191.840	---	---
		5200	24.320	5188.040	5212.360	---	---
		5240	23.040	5228.440	5251.480	---	---
		5260	25.280	5247.280	5272.560	---	---
		5280	24.160	5267.920	5292.080	---	---
		5320	23.880	5307.920	5331.800	---	---

		5500	25.200	5486.960	5512.160	---	---
		5580	26.320	5567.120	5593.440	---	---
		5700	23.400	5688.240	5711.640	---	---
		5720	24.680	5707.680	5732.360	---	---
		5720 UNII-2C	17.32	5707.680	5725	---	---
		5720 UNII-3	7.36	5725	5732.360	---	---
		5745	24.720	5732.320	5757.040	---	---
		5785	24.320	5773.120	5797.440	---	---
		5825	25.320	5811.840	5837.160	---	---
11N40SISO	Ant1	5190	43.120	5168.720	5211.840	---	---
		5230	43.360	5208.080	5251.440	---	---
		5270	43.760	5247.840	5291.600	---	---
		5310	43.360	5288.000	5331.360	---	---
		5510	46.240	5487.040	5533.280	---	---
		5550	44.240	5527.840	5572.080	---	---
		5670	43.920	5648.240	5692.160	---	---
		5710	43.520	5687.600	5731.120	---	---
		5710 UNII-2C	37.4	5687.600	5725	---	---
		5710 UNII-3	6.12	5725	5731.120	---	---
		5755	45.040	5732.200	5777.240	---	---
		5795	45.680	5772.440	5818.120	---	---
11AC20SISO	Ant1	5180	26.440	5166.320	5192.760	---	---
		5200	23.800	5188.080	5211.880	---	---
		5240	23.920	5228.000	5251.920	---	---
		5260	23.440	5248.000	5271.440	---	---
		5280	22.760	5268.320	5291.080	---	---
		5320	24.320	5308.080	5332.400	---	---
		5500	24.080	5488.000	5512.080	---	---
		5580	26.000	5566.840	5592.840	---	---
		5700	24.960	5687.400	5712.360	---	---
		5720	24.120	5708.320	5732.440	---	---
		5720 UNII-2C	16.68	5708.320	5725	---	---
		5720 UNII-3	7.44	5725	5732.440	---	---
		5745	23.800	5733.560	5757.360	---	---
		5785	23.880	5772.840	5796.720	---	---
		5825	25.080	5813.160	5838.240	---	---
11AC40SISO	Ant1	5190	44.560	5167.840	5212.400	---	---
		5230	43.600	5208.720	5252.320	---	---
		5270	43.440	5248.000	5291.440	---	---
		5310	44.960	5286.080	5331.040	---	---
		5510	43.840	5487.760	5531.600	---	---
		5550	45.360	5527.600	5572.960	---	---
		5670	44.640	5647.520	5692.160	---	---
		5710	44.320	5687.680	5732.000	---	---
		5710 UNII-2C	37.32	5687.680	5725	---	---
		5710 UNII-3	7	5725	5732.000	---	---
		5755	44.560	5732.520	5777.080	---	---
		5795	44.320	5772.280	5816.600	---	---
		5210	85.440	5166.320	5251.760	---	---
		5290	84.320	5247.920	5332.240	---	---
11AC80SISO	Ant1	5530	85.120	5487.600	5572.720	---	---
		5610	94.240	5561.520	5655.760	---	---
		5690	88.960	5647.120	5736.080	---	---
		5690 UNII-2C	77.88	5647.120	5725	---	---
		5690 UNII-3	11.08	5725	5736.080	---	---
		5775	88.480	5729.080	5817.560	---	---
		5180	26.640	5167.880	5194.520	---	---
11AX20SISO	Ant1	5200	24.400	5187.640	5212.040	---	---
		5240	23.720	5228.760	5252.480	---	---
		5260	24.560	5248.400	5272.960	---	---
		5260	24.560	5248.400	5272.960	---	---

		5280	24.000	5267.880	5291.880	---	---
		5320	22.560	5308.160	5330.720	---	---
		5500	25.920	5488.280	5514.200	---	---
		5580	26.200	5567.880	5594.080	---	---
		5700	26.440	5688.160	5714.600	---	---
		5720	24.240	5708.600	5732.840	---	---
		5720_UNII-2C	16.4	5708.600	5725	---	---
		5720_UNII-3	7.84	5725	5732.840	---	---
		5745	25.320	5732.440	5757.760	---	---
		5785	27.760	5772.880	5800.640	---	---
		5825	25.840	5812.400	5838.240	---	---
11AX40SISO	Ant1	5190	43.440	5168.800	5212.240	---	---
		5230	42.640	5208.240	5250.880	---	---
		5270	41.360	5248.880	5290.240	---	---
		5310	43.440	5288.400	5331.840	---	---
		5510	42.240	5489.200	5531.440	---	---
		5550	42.640	5528.240	5570.880	---	---
		5670	42.080	5648.560	5690.640	---	---
		5710	42.880	5688.240	5731.120	---	---
		5710_UNII-2C	36.76	5688.240	5725	---	---
		5710_UNII-3	6.12	5725	5731.120	---	---
		5755	41.600	5735.400	5777.000	---	---
11AX80SISO	Ant1	5795	42.960	5772.440	5815.400	---	---
		5210	83.200	5167.760	5250.960	---	---
		5290	82.240	5248.720	5330.960	---	---
		5530	88.000	5486.960	5574.960	---	---
		5610	83.360	5569.040	5652.400	---	---
		5690	84.800	5647.760	5732.560	---	---
		5690_UNII-2C	77.24	5647.760	5725	---	---
		5690_UNII-3	7.56	5725	5732.560	---	---
		5775	84.640	5732.600	5817.240	---	---

Note: Offset=cable loss + Test system insertion loss

Test Mode	Ant.	Freq. (MHz)	6dB EBW (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
11A	Ant1	5720	16.320	5711.840	5728.160	---	---
		5720_UNII-2C	13.16	5711.840	5725	---	---
		5720_UNII-3	3.16	5725	5728.160	0.5	PASS
		5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.320	5816.840	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	17.560	5776.200	5793.760	0.5	PASS
		5825	17.600	5816.200	5833.800	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	36.320	5736.840	5773.160	0.5	PASS
		5795	36.320	5776.840	5813.160	0.5	PASS
11AC20SISO	Ant1	5720	17.560	5711.200	5728.760	---	---
		5720_UNII-2C	13.8	5711.200	5725	---	---
		5720_UNII-3	3.76	5725	5728.760	0.5	PASS
		5745	17.600	5736.200	5753.800	0.5	PASS
		5785	17.600	5776.200	5793.800	0.5	PASS
		5825	17.600	5816.200	5833.800	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
11AC80SISO	Ant1	5690	76.160	5651.920	5728.080	---	---
		5690_UNII-2C	73.08	5651.920	5725	---	---
		5690_UNII-3	3.08	5725	5728.080	0.5	PASS
		5775	76.160	5736.920	5813.080	0.5	PASS
		5720	19.040	5710.480	5729.520	---	---
11AX20SISO	Ant1	5720_UNII-2C	14.52	5710.480	5725	---	---
		5720_UNII-3	4.52	5725	5729.520	0.5	PASS
		5745	18.920	5735.560	5754.480	0.5	PASS
		5785	19.000	5775.480	5794.480	0.5	PASS
		5825	18.840	5815.480	5834.320	0.5	PASS
11AX40SISO	Ant1	5710	38.080	5690.960	5729.040	---	---
		5710_UNII-2C	34.04	5690.960	5725	---	---
		5710_UNII-3	4.04	5725	5729.040	0.5	PASS
		5755	38.160	5735.880	5774.040	0.5	PASS
		5795	37.920	5776.040	5813.960	0.5	PASS
11AX80SISO	Ant1	5690	77.760	5651.120	5728.880	---	---
		5690_UNII-2C	73.88	5651.120	5725	---	---
		5690_UNII-3	3.88	5725	5728.880	0.5	PASS
		5775	77.280	5735.960	5813.240	0.5	PASS

Note: Offset=cable loss + Test system insertion loss

9.5. Original Test Data

99% Bandwidth:

























