













11AX80SISO Ant1 5690

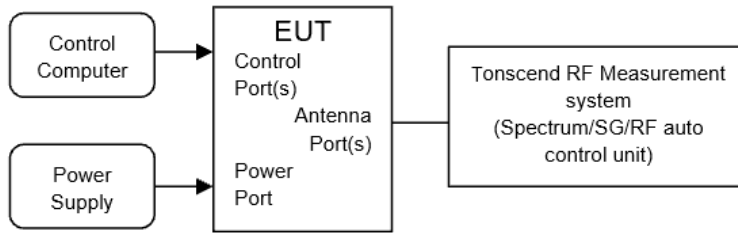


11AX80SISO Ant1 5775



8. Maximum Output Power

8.1. Block diagram of test setup



8.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Maximum Output Power	For FCC: outdoor access point: 1 W(30 dBm) indoor access point: 1 W(30 dBm) fixed point-to-point access points1 W(30 dBm) client devices: 250 mW (23.98 dBm)	5150-5250
	For RSS: e.i.r.p. power: not exceed 200 mW (23.01 dBm) or $10 + 10 \log_{10} B$	
	For FCC: 250 mW (23.98 dBm) or $11 + 10 \log_{10} B$	
	For RSS: For conducted output power: 250 mW (23.98 dBm) or $11 + 10 \log_{10} B$	5250-5350
	For RSS: e.i.r.p. power: not exceed 1.0 W (30 dBm) or $17 + 10 \log_{10} B$	
	For FCC: 250 mW (23.98 dBm) or $11 + 10 \log_{10} B$	
	For RSS: For conducted output power: 250 mW (23.98 dBm) or $11 + 10 \log_{10} B$	For FCC:5470 - 5725 For IC:5470 - 5600
	For RSS: e.i.r.p. power: not exceed 1.0 W (30 dBm) or $17 + 10 \log_{10} B$	5650 - 5725
	1 Watt (30 dBm)	5725-5850

Note 1: For FCC: B=26 bandwidth; For ISDE: B=99% bandwidth.

Note 2: If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi, but for fixed point-to-point transmitters operating in 5150-5250MHz band that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and operating in 5725-5850 band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.

8.3. Test procedure

Connect each EUT's antenna output to power sensor by RF cable and attenuator

Measure the output power of each antenna port by power sensor.

8.4. Test result channel power

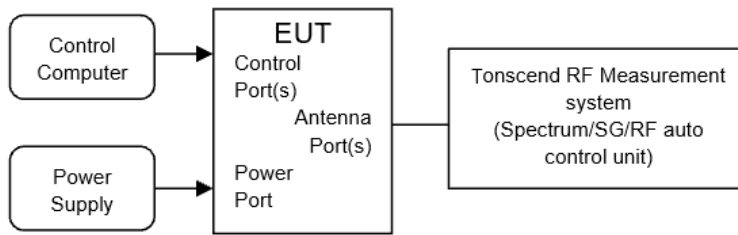
Test Engineer:	Zeng Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	24.1-26.9℃,34.0-41.6%RH	Test Date:	2025.09.23-2025.10.16
Test Power Supply:	Battery	Sample Number:	S25071020

Test Mode	Ant.	Freq [MHz]	Duty Cycle [%]	DC Factor [dB]	Result [dBm]	FCC Limit [dBm]	Verdict
11A	Ant1	5180	99.06	0.04	14.85	≤23.98	PASS
		5200	99.06	0.04	15.01	≤23.98	PASS
		5240	99.06	0.04	15.33	≤23.98	PASS
		5260	99.53	0.02	15.75	≤23.98	PASS
		5280	99.53	0.02	15.89	≤23.98	PASS
		5320	99.06	0.04	16.07	≤23.98	PASS
		5500	99.06	0.04	15.70	≤23.98	PASS
		5580	99.06	0.04	15.39	≤23.98	PASS
		5700	99.06	0.04	14.48	≤23.98	PASS
		5720	99.05	0.04	14.60	≤23.98	PASS
		5745	99.06	0.04	15.37	≤30.00	PASS
		5785	99.06	0.04	15.89	≤30.00	PASS
11N20SISO	Ant1	5825	99.53	0.02	16.22	≤30.00	PASS
		5180	99.63	0.02	15.35	≤23.98	PASS
		5200	99.63	0.02	15.50	≤23.98	PASS
		5240	99.63	0.02	15.98	≤23.98	PASS
		5260	99.63	0.02	16.44	≤23.98	PASS
		5280	99.63	0.02	16.63	≤23.98	PASS
		5320	99.63	0.02	16.77	≤23.98	PASS
		5500	99.63	0.02	16.63	≤23.98	PASS
		5580	99.63	0.02	16.24	≤23.98	PASS
		5700	99.63	0.02	15.38	≤23.98	PASS
		5720	99.63	0.02	15.28	≤23.98	PASS
		5745	99.63	0.02	15.19	≤30.00	PASS
11N40SISO	Ant1	5785	99.63	0.02	15.79	≤30.00	PASS
		5825	99.63	0.02	16.12	≤30.00	PASS
		5230	99.63	0.02	11.94	≤23.98	PASS
		5270	99.63	0.02	12.41	≤23.98	PASS
		5310	99.63	0.02	12.66	≤23.98	PASS
		5510	99.63	0.02	12.43	≤23.98	PASS
		5550	99.63	0.02	12.18	≤23.98	PASS
		5670	99.63	0.02	11.41	≤23.98	PASS
		5710	99.63	0.02	11.34	≤23.98	PASS
		5755	99.63	0.02	15.71	≤30.00	PASS
		5795	99.63	0.02	16.12	≤30.00	PASS
11AC20SISO	Ant1	5180	99.63	0.02	15.23	≤23.98	PASS
		5200	99.63	0.02	15.38	≤23.98	PASS
		5240	99.63	0.02	15.84	≤23.98	PASS
		5260	99.63	0.02	16.23	≤23.98	PASS
		5280	99.63	0.02	16.44	≤23.98	PASS
		5320	99.63	0.02	16.53	≤23.98	PASS
		5500	99.63	0.02	16.42	≤23.98	PASS
		5580	99.63	0.02	16.09	≤23.98	PASS
		5700	99.63	0.02	15.31	≤23.98	PASS
		5720	99.63	0.02	15.33	≤23.98	PASS
		5745	99.63	0.02	15.16	≤30.00	PASS
		5785	99.63	0.02	15.74	≤30.00	PASS
11AC40SISO	Ant1	5825	99.63	0.02	16.08	≤30.00	PASS
		5190	99.45	0.02	11.35	≤23.98	PASS
		5230	99.82	0.01	11.87	≤23.98	PASS
		5270	99.45	0.02	12.44	≤23.98	PASS
		5310	99.63	0.02	12.62	≤23.98	PASS
		5510	99.63	0.02	12.59	≤23.98	PASS

		5550	99.63	0.02	12.29	≤23.98	PASS
		5670	99.63	0.02	11.59	≤23.98	PASS
		5710	99.63	0.02	11.42	≤23.98	PASS
		5755	99.63	0.02	15.68	≤30.00	PASS
		5795	99.63	0.02	16.21	≤30.00	PASS
		5210	99.63	0.02	10.60	≤23.98	PASS
11AC80SISO	Ant1	5290	99.63	0.02	11.40	≤23.98	PASS
		5530	99.63	0.02	11.18	≤23.98	PASS
		5610	99.63	0.02	10.68	≤23.98	PASS
		5690	99.63	0.02	10.45	≤23.98	PASS
		5775	99.63	0.02	15.89	≤30.00	PASS
		5180	100.00	0.00	13.16	≤23.98	PASS
11AX20SISO	Ant1	5200	99.73	0.01	13.45	≤23.98	PASS
		5240	99.63	0.02	13.90	≤23.98	PASS
		5260	99.73	0.01	14.14	≤23.98	PASS
		5280	100.00	0.00	14.27	≤23.98	PASS
		5320	99.63	0.02	14.47	≤23.98	PASS
		5500	99.63	0.02	14.40	≤23.98	PASS
		5580	99.63	0.02	14.03	≤23.98	PASS
		5700	99.63	0.02	13.30	≤23.98	PASS
		5720	99.63	0.02	13.31	≤23.98	PASS
		5745	99.63	0.02	15.21	≤30.00	PASS
		5785	99.63	0.02	15.74	≤30.00	PASS
		5825	99.73	0.01	16.11	≤30.00	PASS
11AX40SISO	Ant1	5190	99.63	0.02	11.59	≤23.98	PASS
		5230	99.64	0.02	11.89	≤23.98	PASS
		5270	39.88	0.02	12.62	≤23.98	PASS
		5310	39.96	0.02	12.93	≤23.98	PASS
		5510	39.88	0.02	12.87	≤23.98	PASS
		5550	39.92	0.02	12.67	≤23.98	PASS
		5670	99.63	0.02	11.79	≤23.98	PASS
		5710	99.63	0.02	11.57	≤23.98	PASS
		5755	99.63	0.02	15.50	≤30.00	PASS
11AX80SISO	Ant1	5795	99.82	0.01	16.05	≤30.00	PASS
		5210	99.63	0.02	11.04	≤23.98	PASS
		5290	99.82	0.01	11.88	≤23.98	PASS
		5530	99.63	0.02	11.53	≤23.98	PASS
		5610	99.82	0.01	11.03	≤23.98	PASS
		5690	99.63	0.02	10.58	≤23.98	PASS
		5775	99.63	0.02	15.91	≤30.00	PASS

9. Power Spectral Density

9.1. Block diagram of test setup



9.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For FCC: Other than Mobile and portable:17 dBm/MHz Mobile and portable client devices:11 dBm/MHz	5150-5250
	For RSS eirp: 10 dBm/MHz	
	11 dBm/MHz	5250-5350
	11 dBm/MHz	For FCC: 5470 - 5725 For ISDE: 5470 - 5600 5650 - 5725
	30 dBm/500 kHz	5725-5850
Note: If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi, but for fixed point-to-point transmitters operating in 5150-5250MHz band that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum Power Spectral Density.		

9.3. Test procedure

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.

Connect the UUT to the spectrum analyser and use the following settings:

5150 MHz~5250 MHz, 5250 MHz~5350 MHz, 5470 MHz~5725 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

5725 MHz-5850 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

9.4. Test result

Test Engineer:	Zeng Zhongyao	Test Site:	RF Measurement System 3#
Ambient Condition:	24.1-26.9℃,34.0-41.6%RH	Test Date:	2025.09.23-2025.10.16
Test Power Supply:	Battery	Sample Number:	S25071020

Test Mode	Antenna	Freq. [MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	3.37	≤11.00	PASS
		5200	2.78	≤11.00	PASS
		5240	2.76	≤11.00	PASS
		5260	3.95	≤11.00	PASS
		5280	3.32	≤11.00	PASS
		5320	4.13	≤11.00	PASS
		5500	4.31	≤11.00	PASS
		5580	2.85	≤11.00	PASS
		5700	2.69	≤11.00	PASS
		5720 UNII-2C	2.06	≤11.00	PASS
		5720 UNII-3	-1.09	≤30.00	PASS
		5745	1.98	≤30.00	PASS
		5785	2.29	≤30.00	PASS
		5825	2.43	≤30.00	PASS
11N20SISO	Ant1	5180	3.25	≤11.00	PASS
		5200	3.38	≤11.00	PASS
		5240	3.82	≤11.00	PASS
		5260	3.79	≤11.00	PASS
		5280	4.20	≤11.00	PASS
		5320	4.28	≤11.00	PASS
		5500	4.78	≤11.00	PASS
		5580	4.06	≤11.00	PASS
		5700	2.97	≤11.00	PASS
		5720 UNII-2C	2.98	≤11.00	PASS
		5720 UNII-3	-0.25	≤30.00	PASS
		5745	2.17	≤30.00	PASS
		5785	3.06	≤30.00	PASS
		5825	3.36	≤30.00	PASS
11N40SISO	Ant1	5230	-3.10	≤11.00	PASS
		5270	-2.99	≤11.00	PASS
		5310	-2.65	≤11.00	PASS
		5510	-2.33	≤11.00	PASS
		5550	-2.85	≤11.00	PASS
		5670	-4.03	≤11.00	PASS
		5710 UNII-2C	-3.96	≤11.00	PASS
		5710 UNII-3	-7.75	≤30.00	PASS
		5755	-0.24	≤30.00	PASS
		5795	0.47	≤30.00	PASS
11AC20SISO	Ant1	5180	3.31	≤11.00	PASS
		5200	3.45	≤11.00	PASS
		5240	3.85	≤11.00	PASS
		5260	3.83	≤11.00	PASS
		5280	4.18	≤11.00	PASS
		5320	4.24	≤11.00	PASS
		5500	4.72	≤11.00	PASS
		5580	4.11	≤11.00	PASS
		5700	3.07	≤11.00	PASS
		5720 UNII-2C	3.14	≤11.00	PASS
		5720 UNII-3	-0.10	≤30.00	PASS
		5745	2.13	≤30.00	PASS
		5785	2.96	≤30.00	PASS
		5825	3.33	≤30.00	PASS
11AC40SISO	Ant1	5190	-3.53	≤11.00	PASS
		5230	-3.07	≤11.00	PASS
		5270	-3.01	≤11.00	PASS

		5310	-2.68	≤11.00	PASS
		5510	-2.31	≤11.00	PASS
		5550	-2.79	≤11.00	PASS
		5670	-3.98	≤11.00	PASS
		5710 UNII-2C	-3.93	≤11.00	PASS
		5710 UNII-3	-7.74	≤30.00	PASS
		5755	-0.29	≤30.00	PASS
		5795	0.42	≤30.00	PASS
11AC80SISO	Ant1	5210	-7.58	≤11.00	PASS
		5290	-6.83	≤11.00	PASS
		5530	-6.84	≤11.00	PASS
		5610	-7.66	≤11.00	PASS
		5690 UNII-2C	-8.14	≤11.00	PASS
		5690 UNII-3	-12.59	≤30.00	PASS
11AX20SISO	Ant1	5775	-3.04	≤30.00	PASS
		5180	1.01	≤11.00	PASS
		5200	1.29	≤11.00	PASS
		5240	1.79	≤11.00	PASS
		5260	1.46	≤11.00	PASS
		5280	1.66	≤11.00	PASS
		5320	2.04	≤11.00	PASS
		5500	2.40	≤11.00	PASS
		5580	1.72	≤11.00	PASS
		5700	0.72	≤11.00	PASS
		5720 UNII-2C	0.82	≤11.00	PASS
		5720 UNII-3	-2.43	≤30.00	PASS
		5745	1.80	≤30.00	PASS
		5785	2.66	≤30.00	PASS
		5825	3.15	≤30.00	PASS
11AX40SISO	Ant1	5190	-3.55	≤11.00	PASS
		5230	-3.90	≤11.00	PASS
		5270	0.56	≤11.00	PASS
		5310	0.61	≤11.00	PASS
		5510	0.96	≤11.00	PASS
		5550	-0.18	≤11.00	PASS
		5670	-4.49	≤11.00	PASS
		5710 UNII-2C	-4.66	≤11.00	PASS
		5710 UNII-3	-8.41	≤30.00	PASS
		5755	-0.42	≤30.00	PASS
		5795	0.29	≤30.00	PASS
11AX80SISO	Ant1	5210	-7.18	≤11.00	PASS
		5290	-6.52	≤11.00	PASS
		5530	-6.70	≤11.00	PASS
		5610	-7.50	≤11.00	PASS
		5690 UNII-2C	-8.02	≤11.00	PASS
		5690 UNII-3	-12.44	≤30.00	PASS
		5775	-2.94	≤30.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor is compensated in the graph.

9.5. Test graphs



