































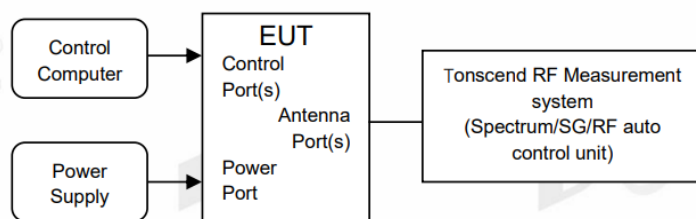






7. Maximum Output Power

7.1. Block diagram of test setup



7.2. Limits

FCC Part15, Subpart E		
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 (24 dBm)	5150-5250
	For FCC: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	5250-5350
	For FCC: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	For FCC:5470 - 5725 For IC:5470 - 5600 5650 - 5725
	1 Watt (30 dBm)	5725-5850
Note: For FCC: B=26 bandwidth		

7.3. Test procedure

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

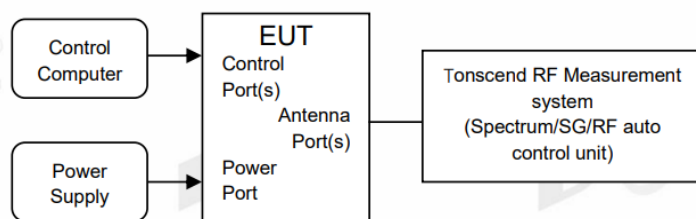
Measure the output power of each antenna port by power sensor.

7.4. Test result channel power

Test Mode	Antenna	Frequency [MHz]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	98.57	0.06	11.43	≤23.98	PASS
		5200	98.10	0.08	13.49	≤23.98	PASS
		5240	98.10	0.08	13.41	≤23.98	PASS
		5260	98.57	0.06	14.24	≤23.98	PASS
		5280	98.57	0.06	14.23	≤23.98	PASS
		5320	98.57	0.06	14.14	≤23.98	PASS
		5500	98.57	0.06	13.22	≤23.98	PASS
		5580	98.57	0.06	13.31	≤23.98	PASS
		5700	98.10	0.08	13.16	≤23.98	PASS
		5745	98.57	0.06	12.37	≤30.00	PASS
		5785	98.10	0.08	12.02	≤30.00	PASS
		5825	98.57	0.06	11.83	≤30.00	PASS
11N20SISO	Ant1	5180	98.47	0.07	11.09	≤23.98	PASS
		5200	97.96	0.09	13.19	≤23.98	PASS
		5240	97.96	0.09	12.92	≤23.98	PASS
		5260	97.96	0.09	13.96	≤23.98	PASS
		5280	98.46	0.07	13.73	≤23.98	PASS
		5320	98.47	0.07	13.55	≤23.98	PASS
		5500	98.46	0.07	12.89	≤23.98	PASS
		5580	98.46	0.07	12.83	≤23.98	PASS
		5700	98.46	0.07	12.61	≤23.98	PASS
		5745	98.46	0.07	11.95	≤30.00	PASS
		5785	98.47	0.07	11.95	≤30.00	PASS
		5825	98.46	0.07	11.52	≤30.00	PASS
11N40SISO	Ant1	5190	96.91	0.14	7.33	≤23.98	PASS
		5230	97.94	0.09	10.70	≤23.98	PASS
		5270	96.91	0.14	12.66	≤23.98	PASS
		5310	97.94	0.09	12.40	≤23.98	PASS
		5510	97.94	0.09	12.31	≤23.98	PASS
		5550	97.94	0.09	12.34	≤23.98	PASS
		5670	97.94	0.09	11.95	≤23.98	PASS
		5755	97.94	0.09	11.33	≤30.00	PASS
		5795	97.94	0.09	11.37	≤30.00	PASS
11AC20SISO	Ant1	5180	98.48	0.07	10.94	≤23.98	PASS
		5200	97.97	0.09	13.17	≤23.98	PASS
		5240	98.47	0.07	12.58	≤23.98	PASS
		5260	97.97	0.09	13.79	≤23.98	PASS
		5280	97.97	0.09	13.48	≤23.98	PASS
		5320	98.47	0.07	13.47	≤23.98	PASS
		5500	98.47	0.07	12.61	≤23.98	PASS
		5580	98.47	0.07	12.26	≤23.98	PASS
		5700	98.47	0.07	12.29	≤23.98	PASS
		5745	97.97	0.09	11.57	≤30.00	PASS
11AC40SISO	Ant1	5190	98.43	0.07	7.07	≤23.98	PASS
		5230	97.66	0.10	10.46	≤23.98	PASS
		5270	98.43	0.07	12.39	≤23.98	PASS
		5310	98.43	0.07	12.06	≤23.98	PASS
		5510	98.43	0.07	11.96	≤23.98	PASS
		5550	97.66	0.10	11.92	≤23.98	PASS
		5670	98.43	0.07	11.84	≤23.98	PASS
		5755	98.43	0.07	11.01	≤30.00	PASS
11AC80SISO	Ant1	5795	97.66	0.10	10.74	≤30.00	PASS
		5210	97.14	0.13	3.27	≤23.98	PASS
		5290	97.14	0.13	7.41	≤23.98	PASS
		5530	97.14	0.13	12.20	≤23.98	PASS
		5610	97.18	0.12	12.03	≤23.98	PASS
		5775	97.14	0.13	12.26	≤30.00	PASS

8. Power Spectral Density

8.1. Block diagram of test setup



8.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For FCC: Other than Mobile and portable:17 dBm/MHz	5150 - 5250
	Mobile and portable client devices:11 dBm/MHz	
	11 dBm/MHz	5250 - 5350
	11 dBm/MHz	5470 - 5725
	30 dBm/500 kHz	5725 - 5850

8.3. 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

8.4. Test result

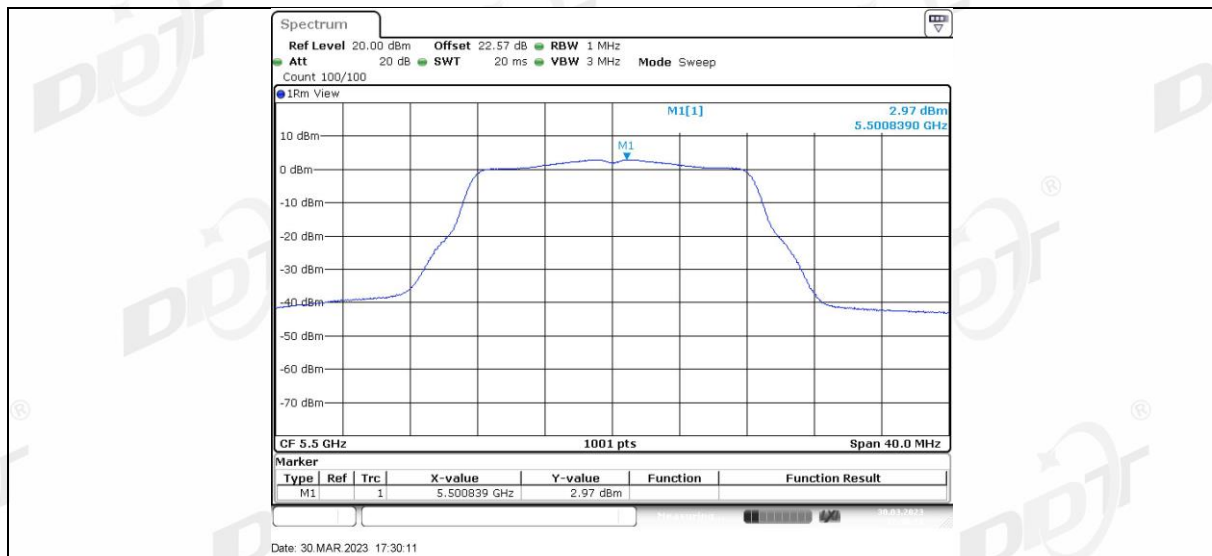
Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	1.46	≤11.00	PASS
		5200	3.16	≤11.00	PASS
		5240	3.05	≤11.00	PASS
		5260	3.90	≤11.00	PASS
		5280	3.63	≤11.00	PASS
		5320	3.81	≤11.00	PASS
		5500	2.97	≤11.00	PASS
		5580	2.65	≤11.00	PASS
		5700	2.79	≤11.00	PASS
		5745	-0.77	≤30.00	PASS
		5785	-1.25	≤30.00	PASS
11N20SISO	Ant1	5825	-1.50	≤30.00	PASS
		5180	0.74	≤11.00	PASS
		5200	2.53	≤11.00	PASS
		5240	2.24	≤11.00	PASS
		5260	3.28	≤11.00	PASS
		5280	2.84	≤11.00	PASS
		5320	2.95	≤11.00	PASS
		5500	2.25	≤11.00	PASS
		5580	2.14	≤11.00	PASS
		5700	1.90	≤11.00	PASS
		5745	-1.46	≤30.00	PASS
11N40SISO	Ant1	5785	-1.75	≤30.00	PASS
		5825	-2.10	≤30.00	PASS
		5190	-6.06	≤11.00	PASS
		5230	-2.87	≤11.00	PASS
		5270	-1.22	≤11.00	PASS
		5310	-1.13	≤11.00	PASS
		5510	-1.07	≤11.00	PASS
		5550	-1.05	≤11.00	PASS
11AC20SISO	Ant1	5670	-1.80	≤11.00	PASS
		5755	-5.11	≤30.00	PASS
		5795	-5.14	≤30.00	PASS
		5180	0.24	≤11.00	PASS
		5200	2.14	≤11.00	PASS
		5240	1.44	≤11.00	PASS
		5260	2.64	≤11.00	PASS
		5280	2.19	≤11.00	PASS
		5320	2.31	≤11.00	PASS
		5500	1.45	≤11.00	PASS
		5580	1.68	≤11.00	PASS
11AC40SISO	Ant1	5700	1.28	≤11.00	PASS
		5745	-2.46	≤30.00	PASS
		5785	-2.14	≤30.00	PASS
		5825	-2.92	≤30.00	PASS
		5190	-6.81	≤11.00	PASS
		5230	-3.48	≤11.00	PASS
		5270	-1.98	≤11.00	PASS
		5310	-2.10	≤11.00	PASS
11AC80SISO	Ant1	5510	-2.07	≤11.00	PASS
		5550	-1.75	≤11.00	PASS
		5670	-2.55	≤11.00	PASS
		5755	-5.82	≤30.00	PASS
		5795	-6.22	≤30.00	PASS
	Ant1	5210	-13.52	≤11.00	PASS
		5290	-9.74	≤11.00	PASS
		5530	-4.63	≤11.00	PASS
		5610	-4.83	≤11.00	PASS
		5775	-7.83	≤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.

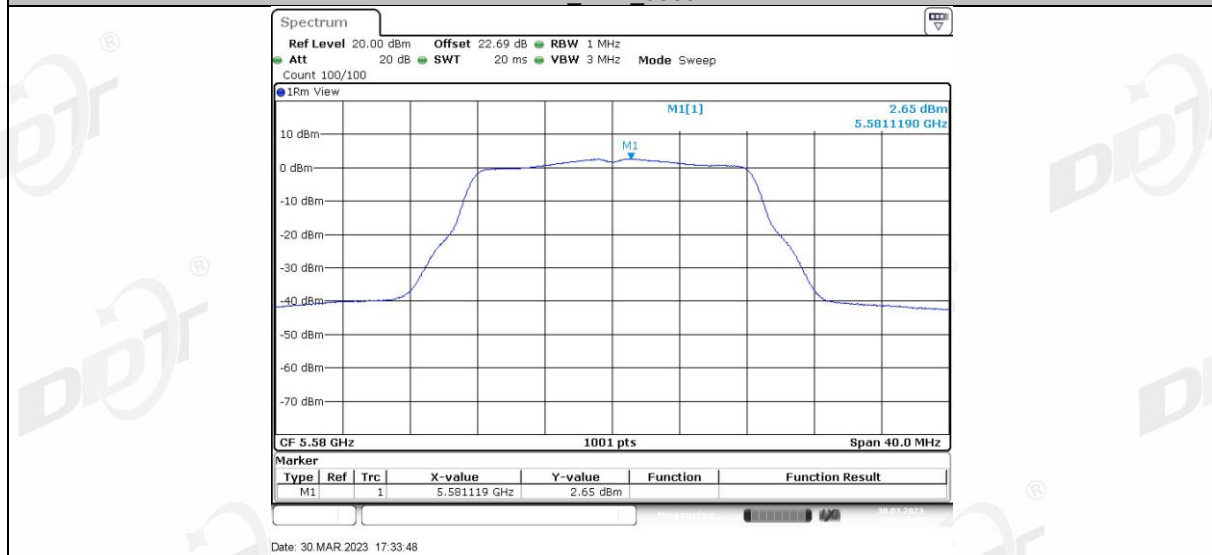
8.5. Test graphs



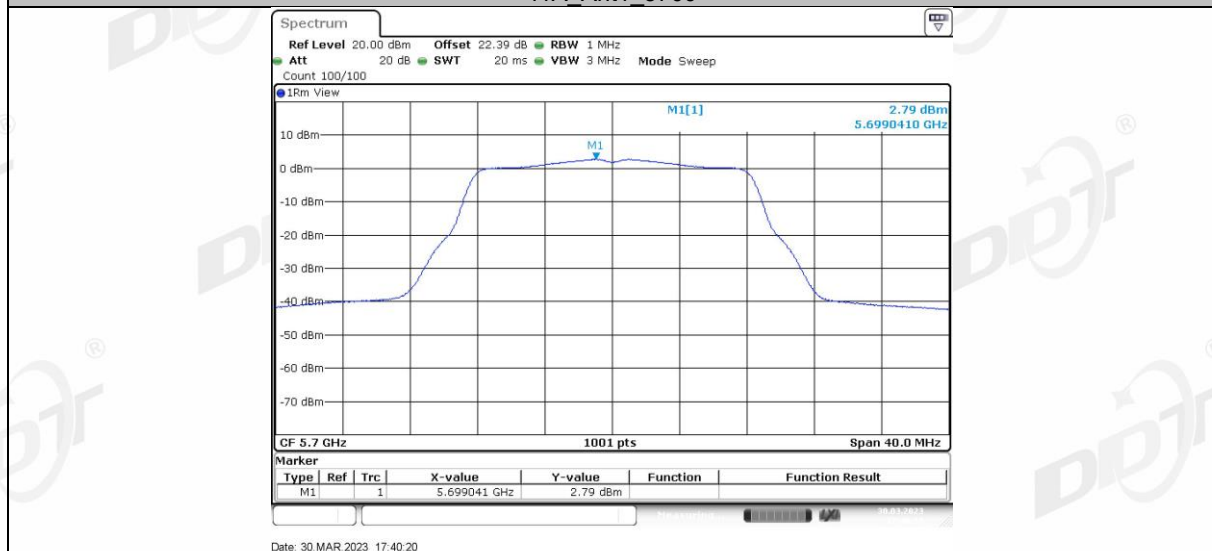




11A Ant1 5580



11A Ant1 5700



11A Ant1 5745











