A.7. 99% Occupied bandwidth

Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

d) Step a) through step c) might require iteration to adjust within the specified range.

e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% ofthe total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz

EUT ID: UT58a

Measurement Result:

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.701	5171.1668	5188.8678	---	---
		5200	17.673	5191.1416	5208.8144	---	---
		5240	17.668	5231.1606	5248.8284	---	---
		5260	17.826	5251.1027	5268.9285	---	---
		5280	17.692	5271.2114	5288.9036	---	---
		5320	17.744	5311.1479	5328.8918	---	---
		5500	17.789	5491.1228	5508.9117	---	---
		5580	17.753	5571.1257	5588.8789	---	---
		5700	17.838	5691.0832	5708.9214	---	---
		5720	17.81	5711.0813	5728.8914	---	---
11N20SISO	Ant1	5180	18.77	5170.6100	5189.3802	---	---

		5200	18.779	5190.5811	5209.3601	---	---
		5240	18.695	5230.6508	5249.3458	---	---
		5260	18.857	5250.5872	5269.4446	---	---
		5280	18.771	5270.6586	5289.4294	---	---
		5320	18.769	5310.6435	5329.4129	---	---
		5500	18.834	5490.5953	5509.4288	---	---
		5580	18.778	5570.5932	5589.3716	---	---
		5700	18.833	5690.5857	5709.4187	---	---
		5720	18.834	5710.5700	5729.4036	---	---
11N40SISO	Ant1	5190	37.246	5171.3758	5208.6219	---	---
		5230	37.256	5211.4066	5248.6625	---	---
		5270	37.365	5251.3542	5288.7196	---	---
		5310	37.363	5291.2959	5328.6586	---	---
		5510	37.212	5491.4126	5528.6245	---	---
		5550	37.274	5531.3456	5568.6200	---	---
		5670	37.246	5651.4216	5688.6679	---	---
		5710	37.259	5691.3732	5728.6322	---	---
11AC80SISO	Ant1	5210	76.671	5171.7722	5248.4431	---	---
		5290	76.676	5251.6740	5328.3497	---	---
		5530	76.529	5491.7305	5568.2598	---	---
		5610	76.756	5571.6518	5648.4083	---	---
		5690	76.514	5651.8096	5728.3232	---	---

Test graphs as below:

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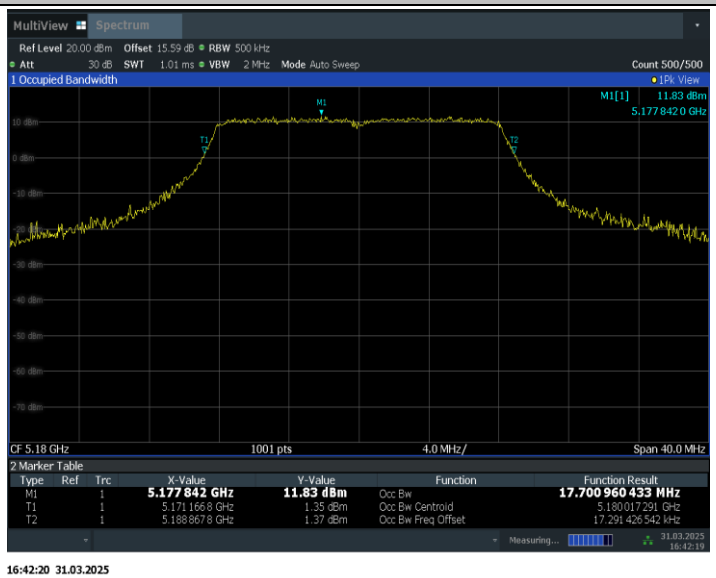

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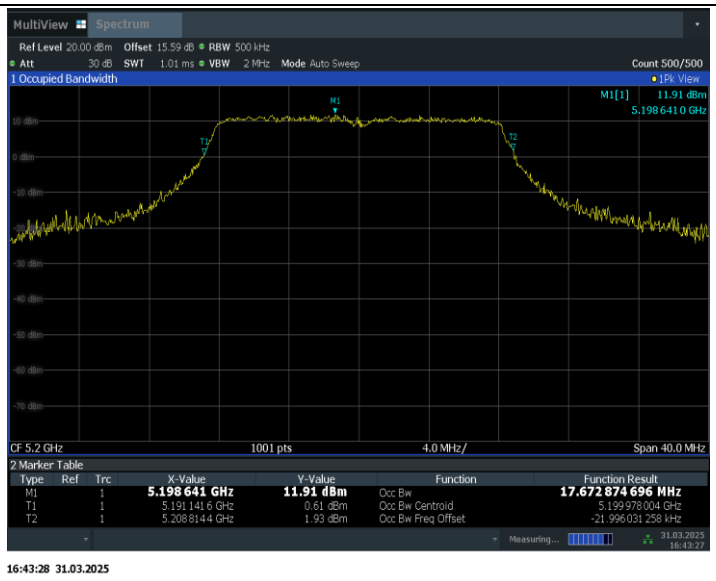

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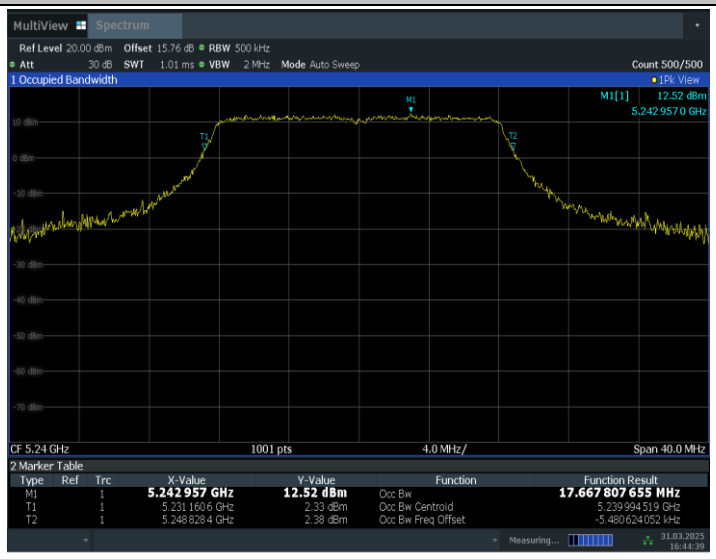

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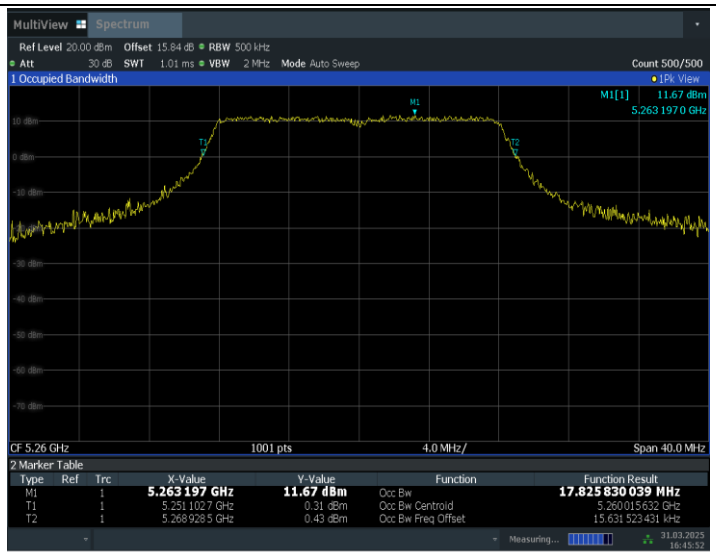

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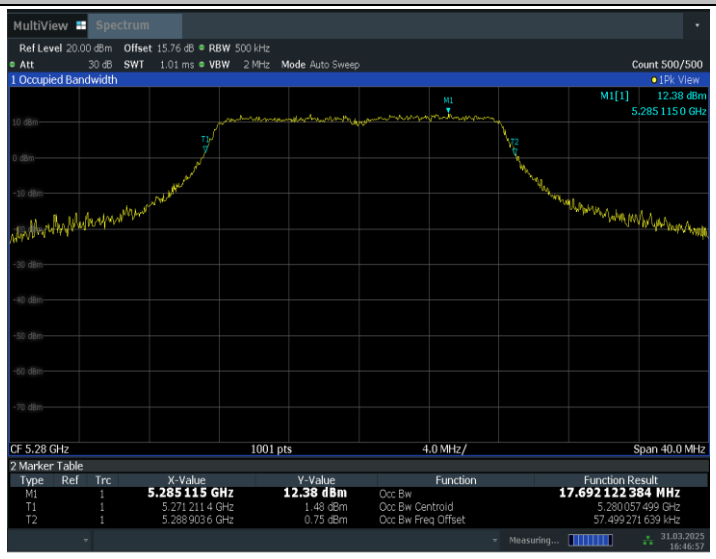

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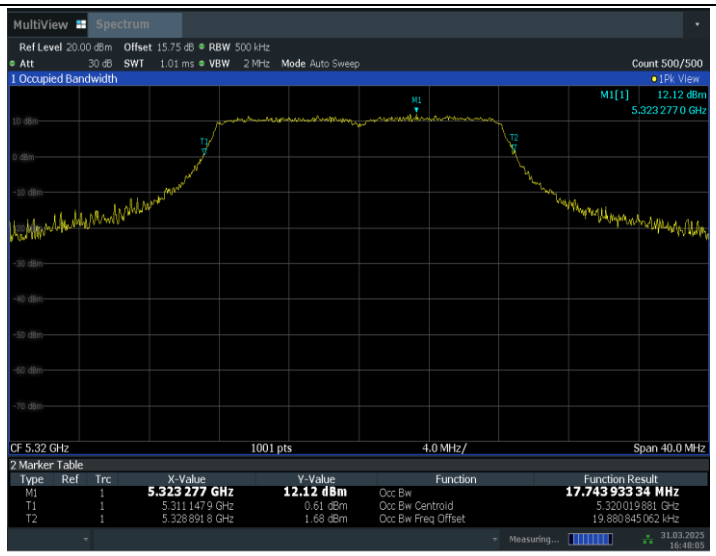

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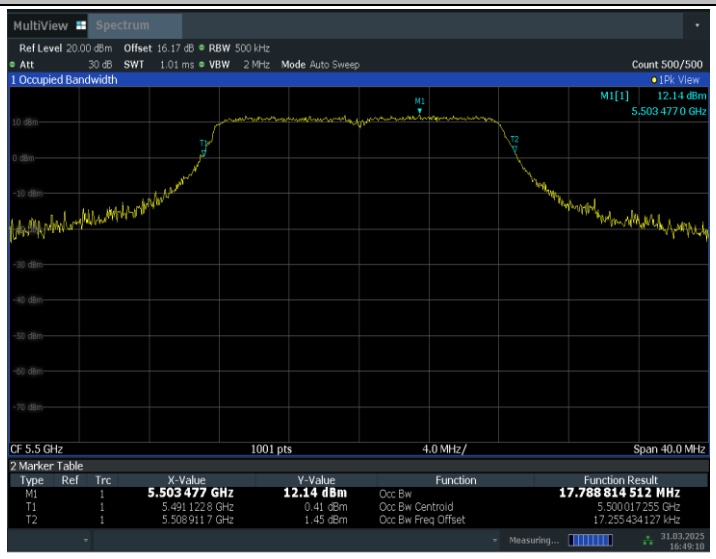

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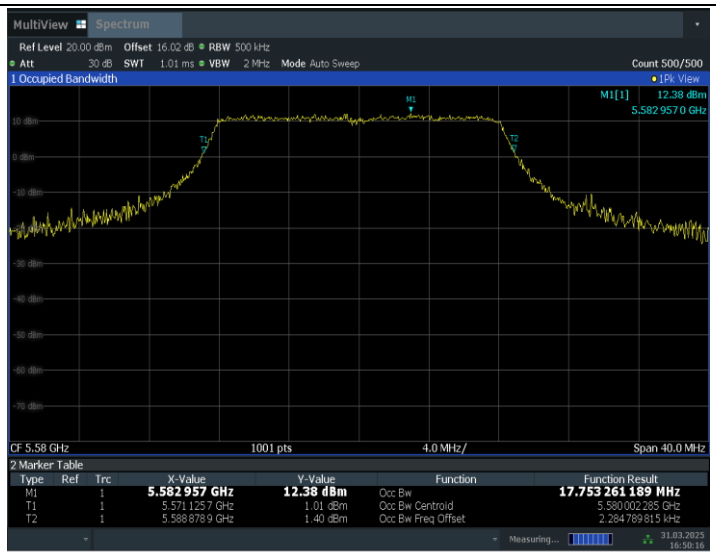

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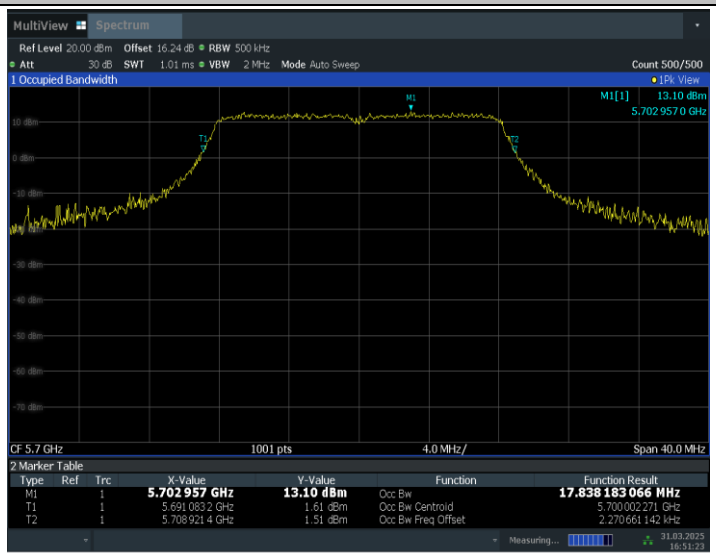

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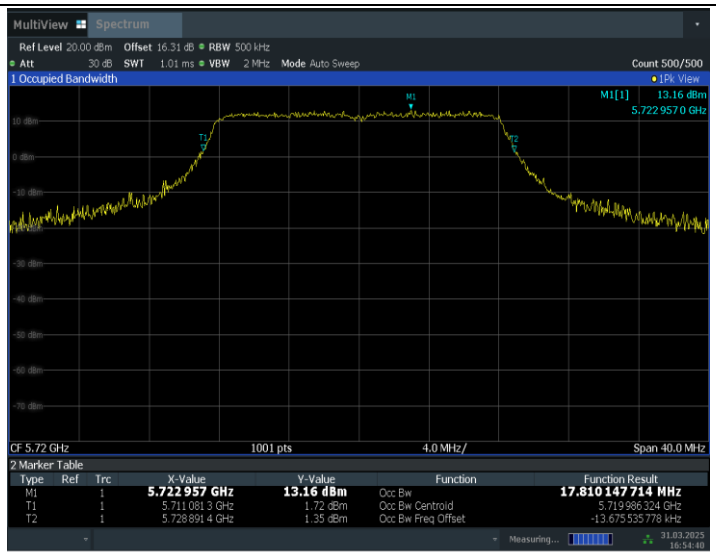

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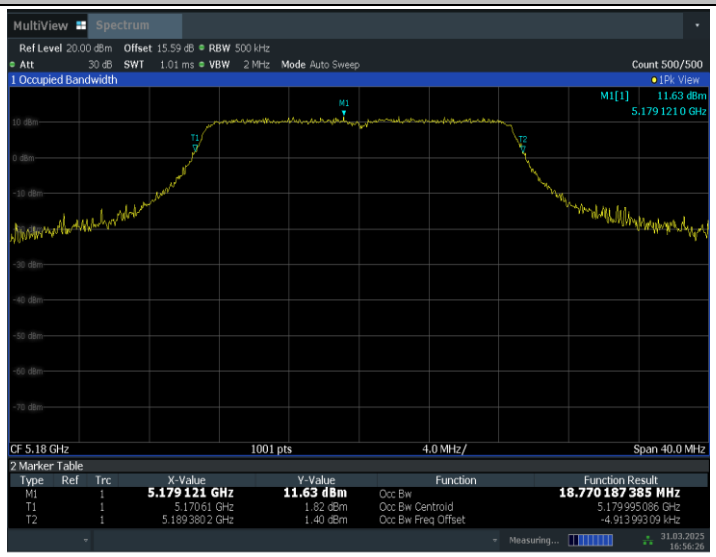

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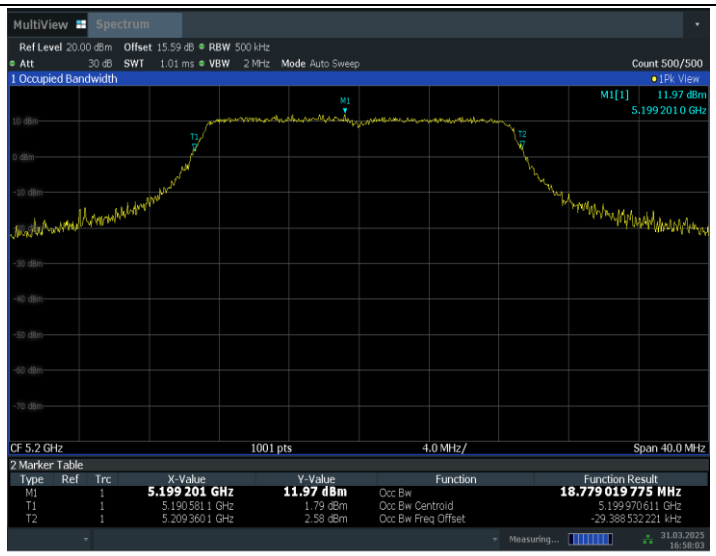

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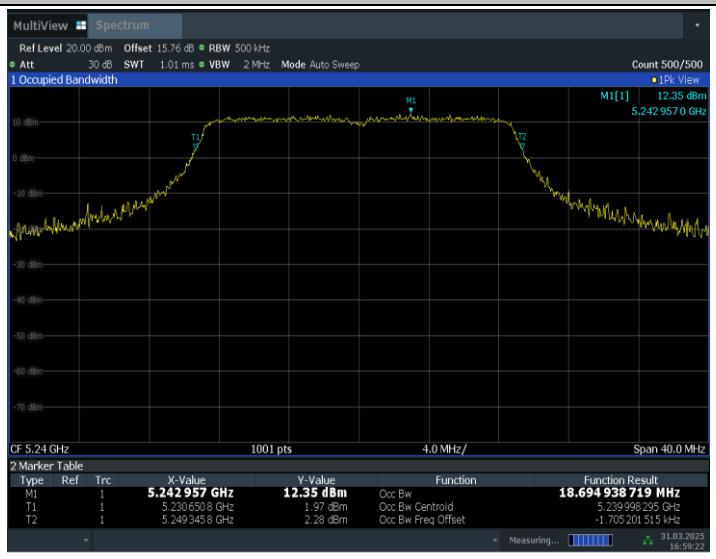

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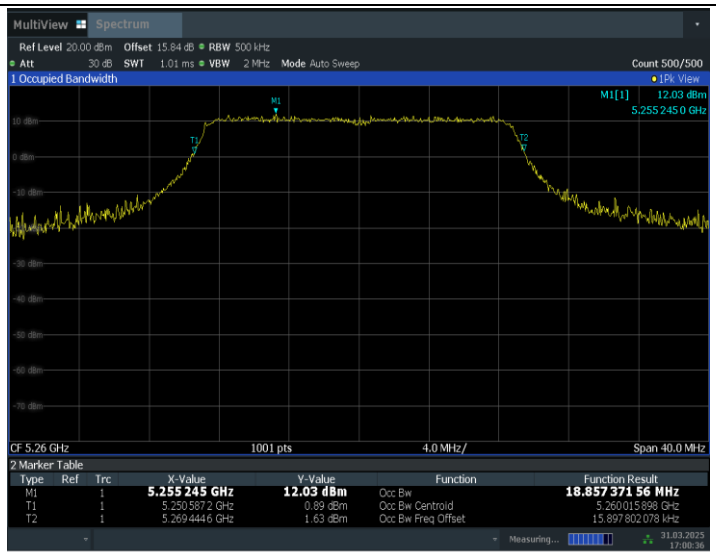

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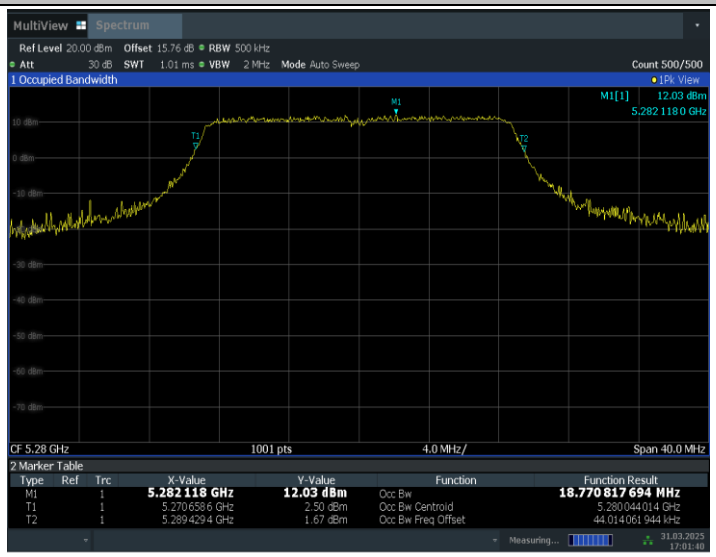

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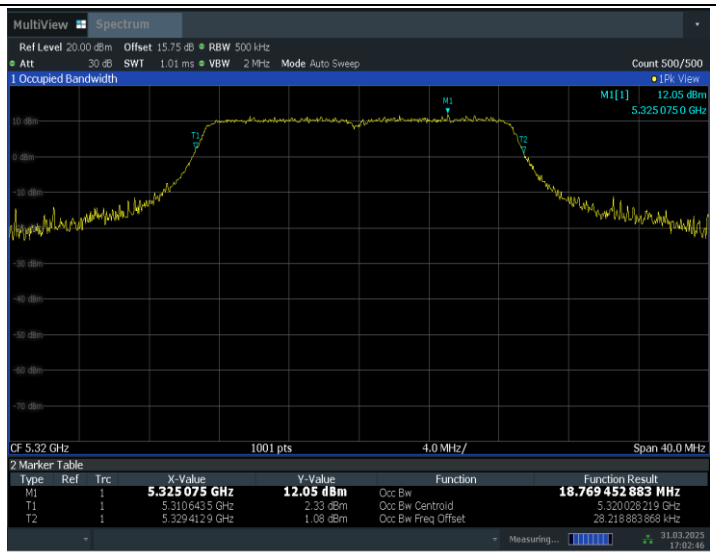

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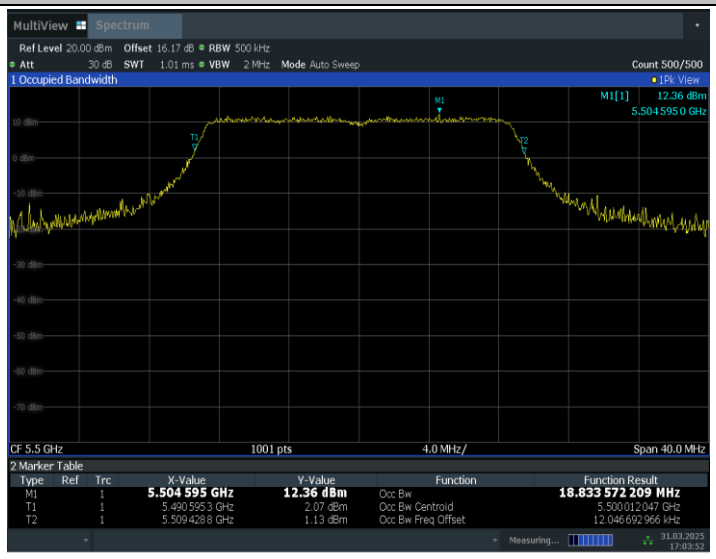

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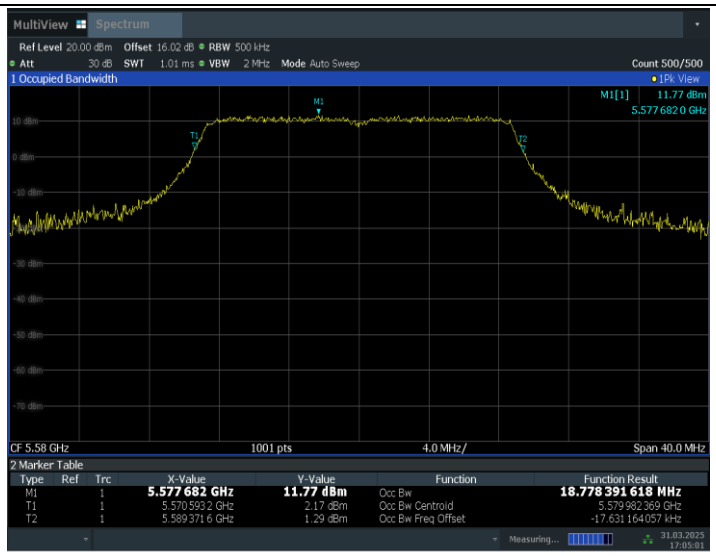

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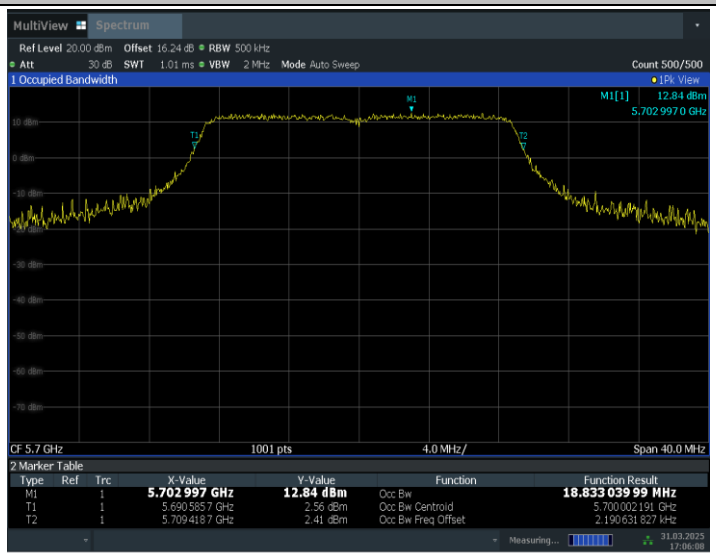

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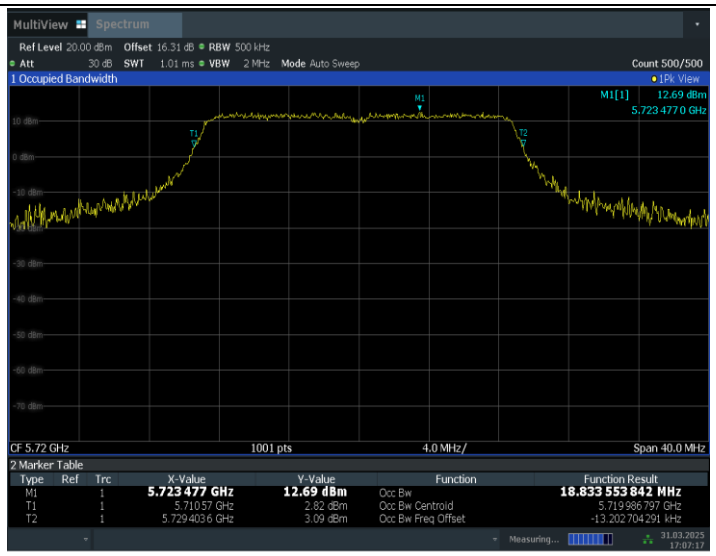

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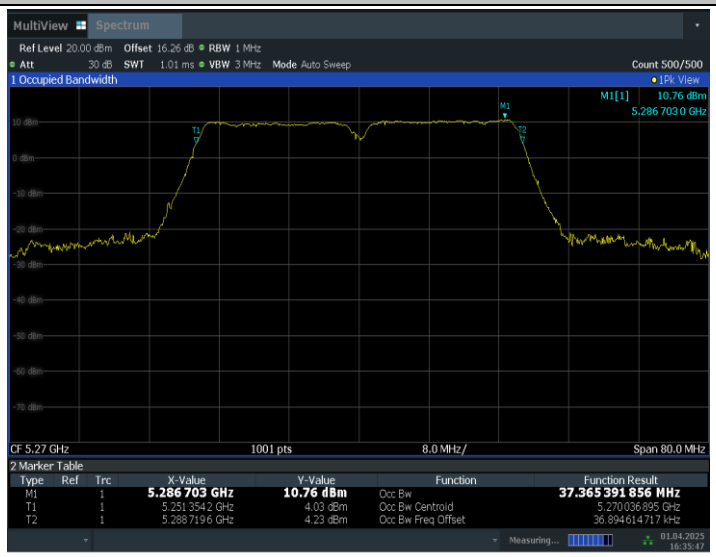

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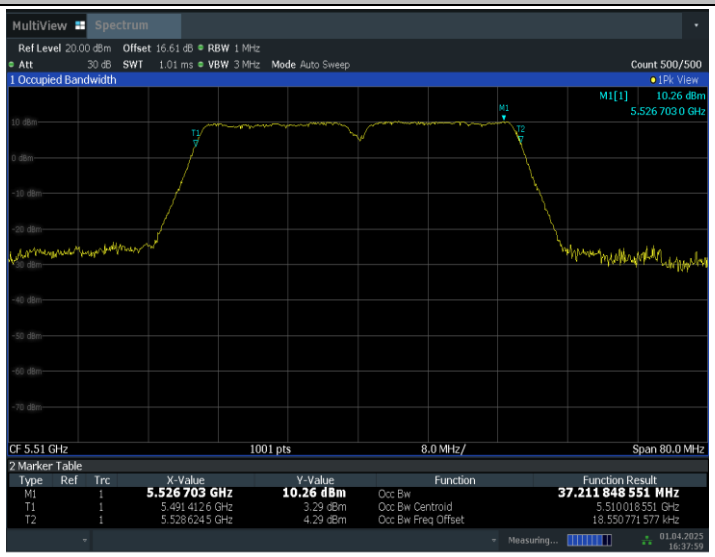

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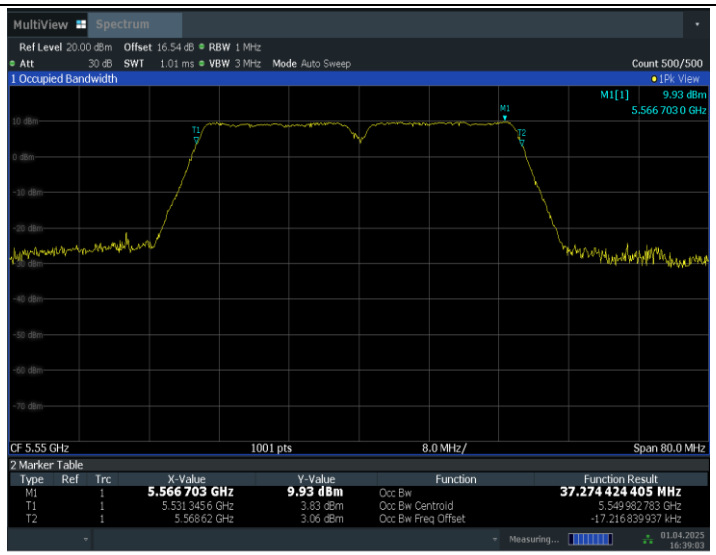

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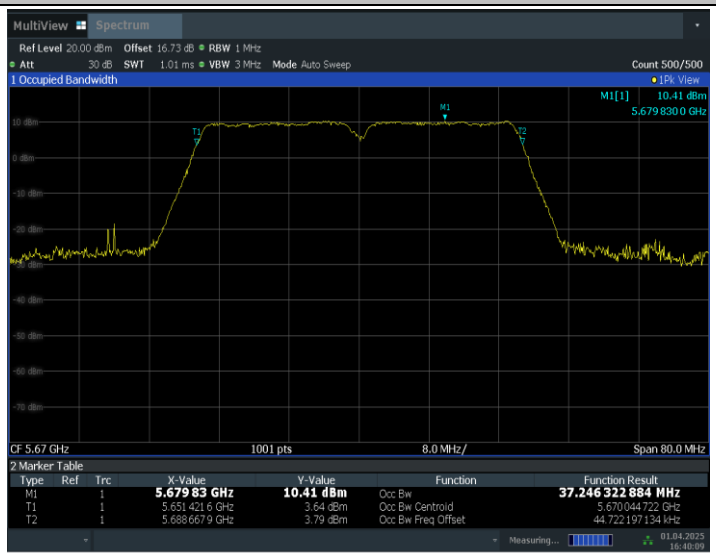

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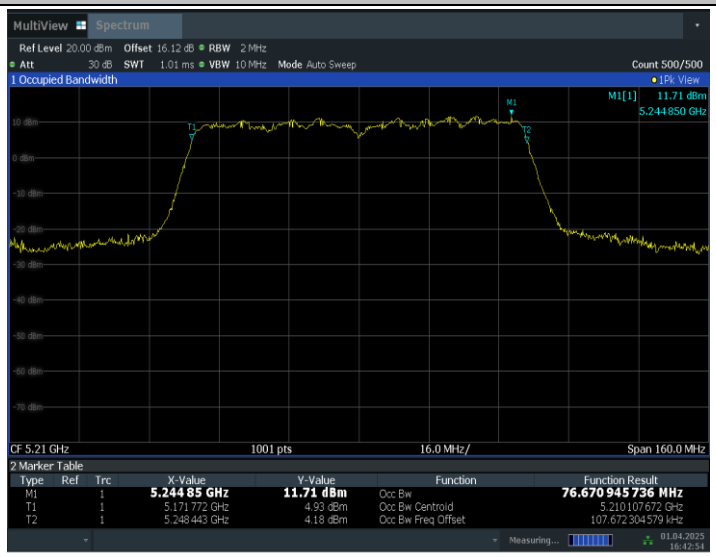

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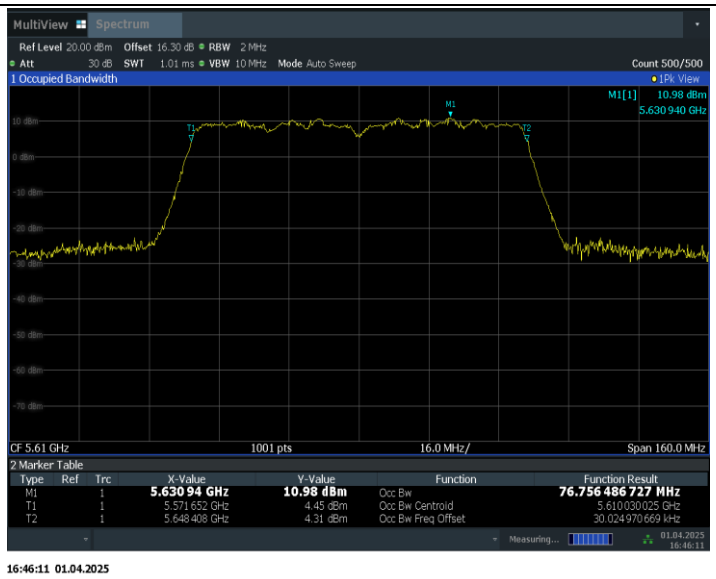

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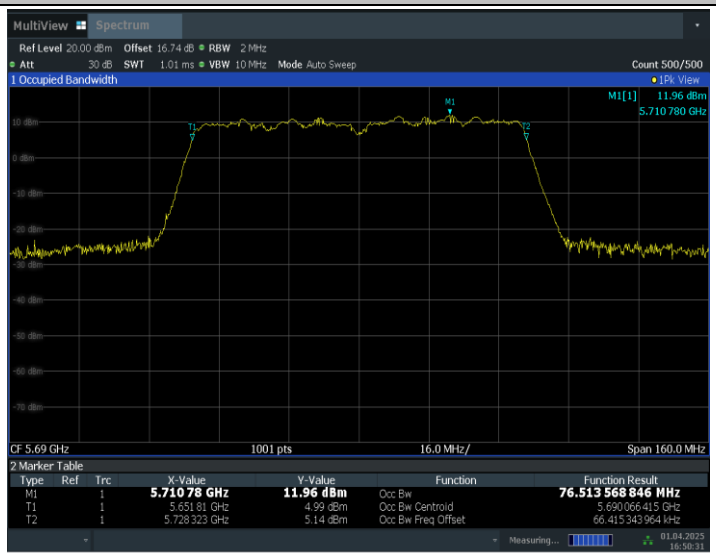

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Conclusion: PASS

A.8. Power control

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

A.9. Antenna Requirement

The antenna of the device is permanently attached. There are no provisions for connection to an external antenna.

The unit complies with the requirement of FCC Part 15.203.

ANNEX B: EUT parameters

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 23rd day of July 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

***** END OF REPORT BODY *****