



FCC Radio Test Report

APPLICANT : OnePlus Technology (Shenzhen) Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : ONEPLUS, 
MODEL NAME : CPH2749
FCC ID : 2ABZ2-OP24865
STANDARD : FCC Part 15 Subpart E §15.407
TEST DATE(S) : Sep. 26, 2025

We, Sporton International Inc. (ShenZhen), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. (ShenZhen), the test report shall not be reproduced except in full.

Fly Liang

Approved by: Fly Liang



Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055
People's Republic of China



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Applicant.....	5
1.2 Manufacturer.....	5
1.3 Product Feature of Equipment Under Test.....	5
1.4 Product Specification of Equipment Under Test.....	5
1.5 Modification of EUT	6
1.6 Testing Location	6
1.7 Applicable Standards.....	6
2 Test Result	7
2.1 Transmit Power Control (TPC)	7
3 List of Measuring Equipment.....	11
Appendix A. Setup Photographs	



History of this test report

Report No.	Version	Description	Issue Date
FR561202J	01	Initial issue of report	Sep. 26, 2025



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2.1	15.407(d)(10)	Transmit Power Control (TPC)	Pass	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

OnePlus Technology (Shenzhen) Co., Ltd.

18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, P.R. China.

1.2 Manufacturer

OnePlus Technology (Shenzhen) Co., Ltd.

18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, P.R. China.

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	ONEPLUS, 
Model Name	CPH2749
FCC ID	2ABZ2-OP24865
IMEI Code	867621080021194/867621080021186
HW Version	11
SW Version	OxygenOS 16.0
EUT Stage	Production Unit

Remark: The EUT's information above is declared by manufacturer.

1.4 Product Specification of Equipment Under Test

Product Specification is subject to this standard	
Tx/Rx Frequency Range	U-NII-5: 5925 MHz ~ 6425 MHz U-NII-6: 6425 MHz ~ 6525 MHz U-NII-7: 6525 MHz ~ 6875 MHz U-NII-8: 6875 MHz ~ 7125 MHz
Antenna Type / Gain	<5925 MHz ~ 6425 MHz > <Ant. 15> : IFA Antenna with gain -1.20 dBi <Ant. 10> : IFA Antenna with gain -2.10 dBi <6425 MHz ~ 6525 MHz > <Ant. 15> : IFA Antenna with gain -1.40 dBi <Ant. 10> : IFA Antenna with gain -3.90 dBi <6525 MHz ~ 6875 MHz > <Ant. 15> : IFA Antenna with gain -2.10 dBi <Ant. 10> : IFA Antenna with gain -4.60 dBi <6875 MHz ~ 7125 MHz > <Ant. 15> : IFA Antenna with gain -4.70 dBi <Ant. 10> : IFA Antenna with gain -7.00 dBi
Type of Modulation	802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ax : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM) 802.11be : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM / 4096QAM)



1.5 Modification of EUT

No modifications made to the EUT during the testing.

1.6 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ	CN1256	421272

1.7 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 987594 D02 U-NII 6 GHz EMC Measurement v03
- ♦ ANSI C63.10-2020

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Result

2.1 Transmit Power Control (TPC)

2.1.1 Limit of Unwanted Emissions

<FCC 14-30 CFR 15.407>

(d)(10) Very low power devices operating in the 5.925-7.125 GHz band shall employ a transmit power control (TPC) mechanism. A very low power device is required to have the capability to operate at least 6 dB below the maximum EIRP PSD value of -5 dBm/MHz.

2.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

2.1.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Section F) Maximum power spectral density.

Method SA-2

(power averaging (rms) detection with max hold):

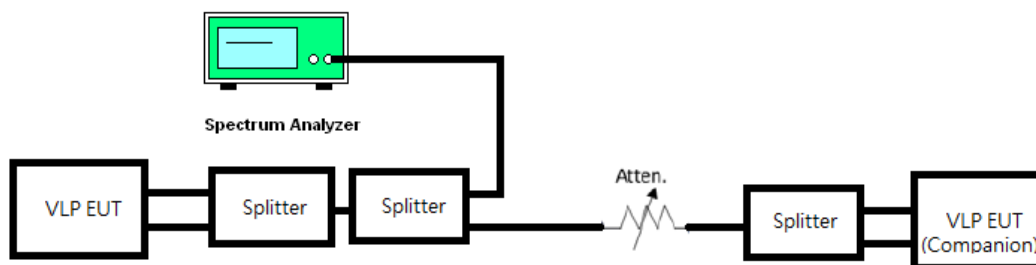
- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz.
- Set VBW $\geq$ 3 MHz.
- Number of points in sweep $\geq$ 2 Span / RBW.
- Sweep time = auto.
- Detector = power averaging (rms)
- Trace mode = max hold.
- Trace average at least 100 traces in power averaging (rms) mode
- Add $[10 \log (1 / D)]$, where D is the duty cycle, to the measured power to compute the average

power during the actual transmission times.

Measure the PPSD and record it.

1. Set the same center frequency between the EUT and VLP Master and establish a link
2. Set the adjustable attenuator to 0 and record the PSD value (high RSSI) on spectrum analyzer.
3. Incrementally increase the impedance of the adjustable attenuator and record the PSD value (low RSSI) on spectrum analyzer.
4. If the high RSSI is less than the low RSSI by more than 6dB, the TPC mechanism is met.

2.1.4 Test Setup



2.1.5 Support Unit used in test configuration and system

Instrument	Brand Name	Model No.	Characteristics
Spectrum Analyzer	R&S	FSV40	10kHz~40GHz
Splitter	TOJOIN	PS-2SM-04265	30M~18GHz
Splitter	Titantek	T0510E2W0526A	30M~26.5GHz
Adjustable Attenuator	Agilent	8494B	Attenuator 11dB

2.1.6 Test Result

The purpose of this test is to verify the relative power drop as the RSSI is increased.

If the conducted PSD delta is greater than 6dB then it ensures the EIRP PSD is at least 6 dB below the maximum EIRP power spectral density (PSD) value of -5 dBm/MHz.

Center Frequency [MHz]	BW [MHz]	High RSSI PSD (dBm/MHz)	Low RSSI PSD (dBm/MHz)	Antenna MIMO Gain (dBi)	High RSSI EIRP PSD (dBm/MHz)	Low RSSI EIRP PSD (dBm/MHz)	Limit [dBm/MHz]	Test Result
6185	160	-19.23	-12.50	1.37	-17.86	-11.13	≤ -11	PASS

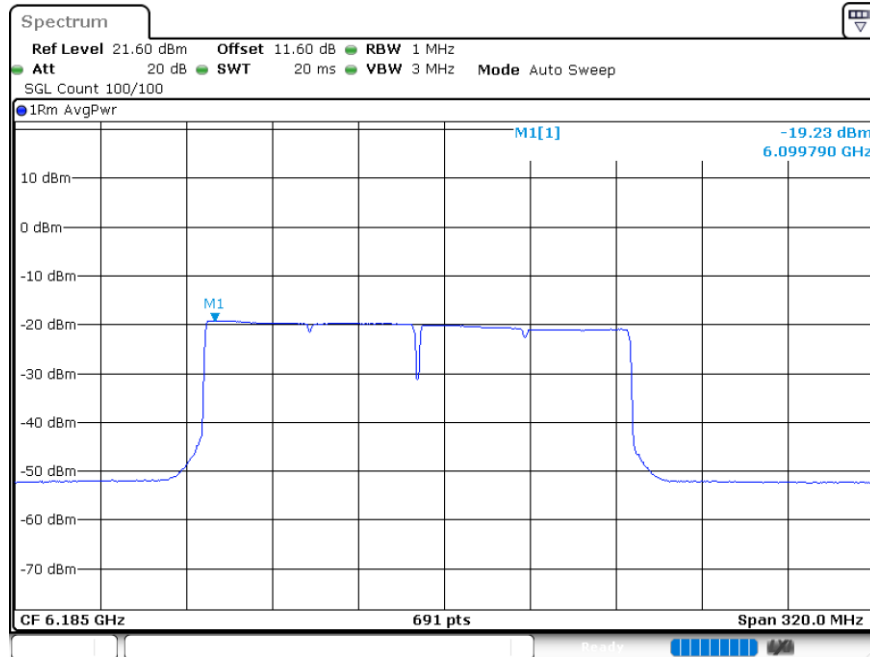
Note 1: The path loss between the DUT and the Spectrum Analyzer has been offset and configured in the Spectrum Analyzer.

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



High RSSI

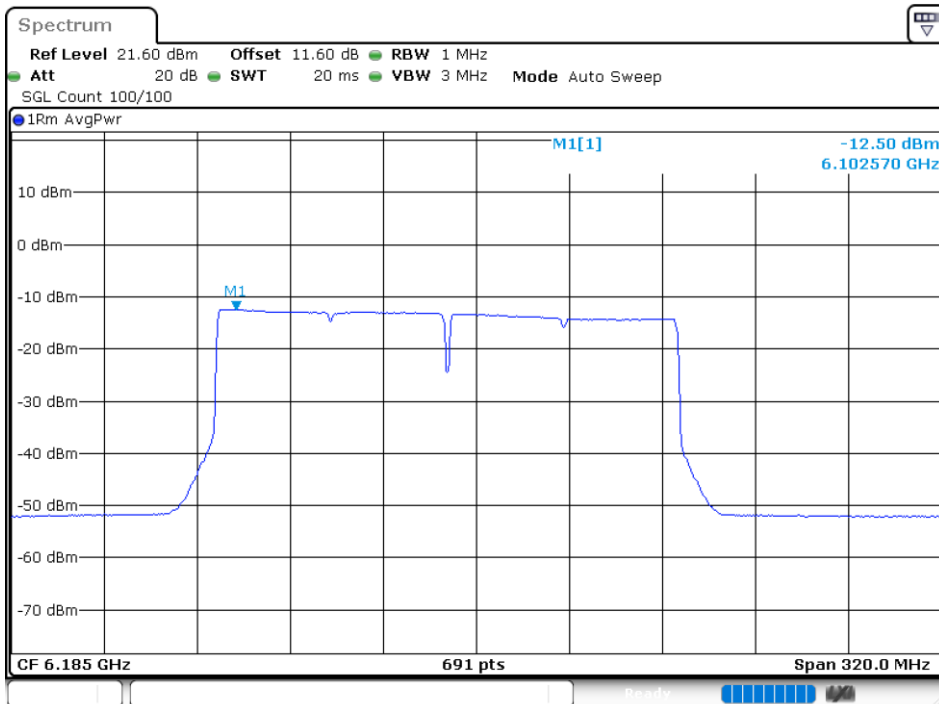
DUT Center Frequency 6185 MHz, Bandwidth 160 MHz, Total Conducted PSD -19.23 [dBm/MHz]



Date: 26.SEP.2025 22:54:06

Low RSSI

DUT Center Frequency 6185 MHz, Bandwidth 160 MHz, Total Conducted PSD -12.50 [dBm/MHz]



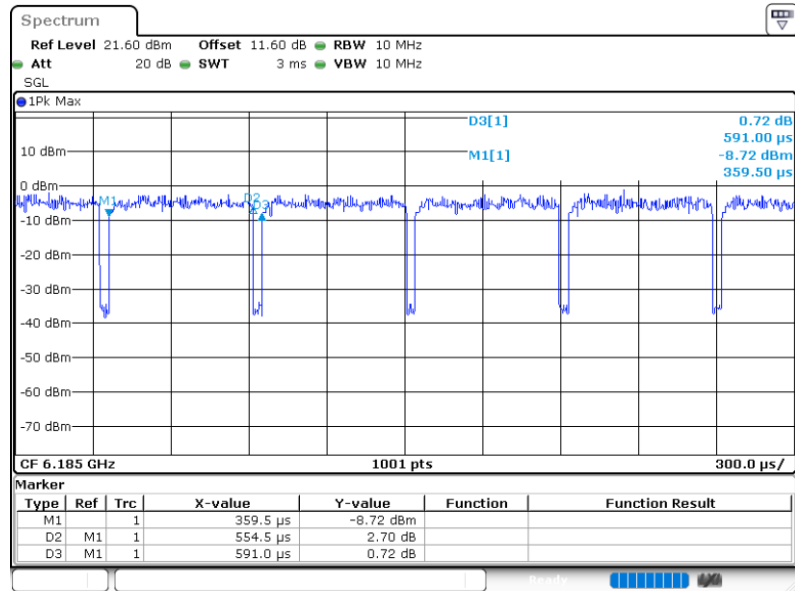
Date: 26.SEP.2025 22:55:19



Duty Cycle

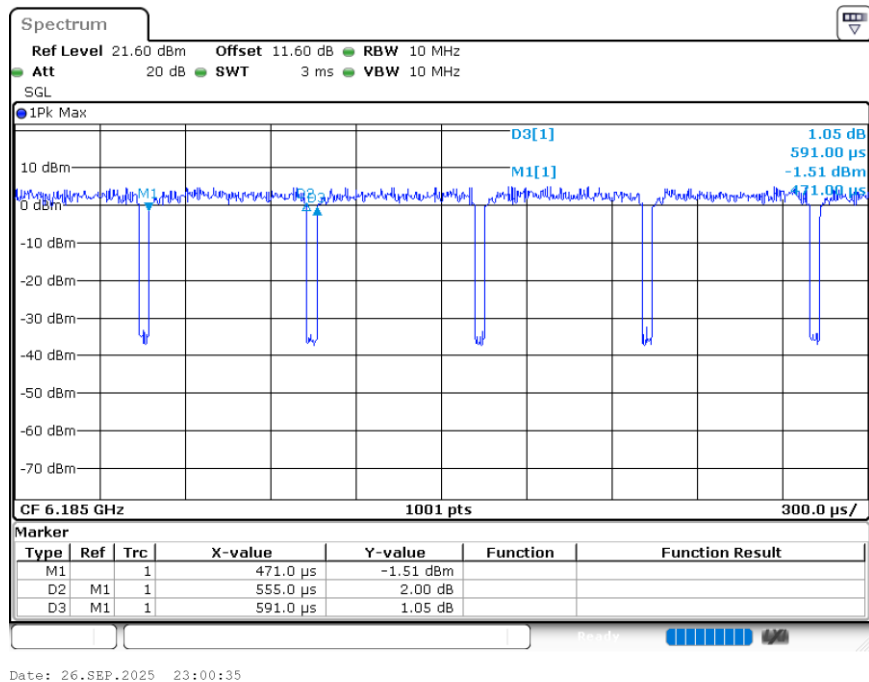
High RSSI

Duty Cycle 93.8%



Low RSSI

Duty Cycle 93.9%





3 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 02, 2025	Sep. 26, 2025	Apr. 01, 2026	Conducted (TH01-SZ)
adjustable attenuator	Agilent	8494B	MY42156768	Attenuator 11dB	May 30.2025	Sep. 26, 2025	May 29.2026	Conducted (TH01-SZ)
Splitter	TOJOIN	PS-2SM-04265	30M~18GHz	Splitter	NCR	Sep. 26, 2025	NCR	Conducted (TH01-SZ)
Splitter	Titantek	T0510E2W0526A	30M~26.5GHz	Splitter	NCR	Sep. 26, 2025	NCR	Conducted (TH01-SZ)
RF Cable	HUBER+SUHNER	SUCOFLEX 104	MY28863/4	30MHz-40GHz	Jul. 13, 2025	Sep. 26, 2025	Jul. 12, 2026	Conducted (TH01-SZ)
RF Cable	HUBER+SUHNER	SUCOFLEX 104	MY28867/4	30MHz-40GHz	Jul. 13, 2025	Sep. 26, 2025	Jul. 12, 2026	Conducted (TH01-SZ)

NCR: No Calibration Required

----- THE END -----