FCC Part 96.47 Test Report

Applicant : Xiaomi Communications Co., Ltd.

Equipment : Mobile Phone

Brand Name : POCO

Model Name : 24069PC21G
FCC ID : 2AFZZPC21G
Standard : FCC Part 96.47
Test Date(s) : Feb. 28, 2024

We, Sporton International Inc. (Kunshan), 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 report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

JasonJia

Approved by: Jason Jia





Report No.: FG420425J

Sporton International Inc. (Kunshan)

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China

Sporton International Inc. (Kunshan)

TEL: +86-512-57900158 FCC ID: 2AFZZPC21G Page Number : 1 of 12 Issued Date : Mar. 27, 2024

Report Version : 01

Report Template No.: -FG96.47 Version 1.0

Table of Contents

1	GEN	NERAL DESCRIPTION	5
	1.1	Applicant	
	1.2	Manufacturer	5
	1.3	Product Feature of Equipment Under Test	5
	1.4	Product Specification of Equipment Under Test	5
	1.5	Testing Location	6
	1.6	Test Software	6
	1.7	Applicable Standards	6
2	TES	ST CONFIGURATION OF EQUIPMENT UNDER TEST	7
:	2.1	Connection Diagram of Test System	7
3	EN	O USER DEVICE ADDITIONAL REQUIREMENT	8
;	3.1	Test Requirement	8
;	3.2	Test Procedure	8
;	3.3	Test Result	9
4	LIS	T OF MEASURING EQUIPMENT	. 11
5	ME	ASUREMENT UNCERTAINTY	. 12

APPENDIX A. TEST SETUP PHOTO

Sporton International Inc. (Kunshan)

TEL: +86-512-57900158 FCC ID: 2AFZZPC21G Page Number : 2 of 12 Issued Date : Mar. 27, 2024

Report Version : 01

Report Template No.: -FG96.47 Version 1.0

History of this test report

Report No.	Version	Description	Issued Date
FG420425J	01	Initial issue of report	Mar. 27, 2024

 Sporton International Inc. (Kunshan)
 Page Number
 : 3 of 12

 TEL: +86-512-57900158
 Issued Date
 : Mar. 27, 2024

FCC ID: 2AFZZPC21G Report Version : 01

Report Template No.: -FG96.47 Version 1.0

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3	96.47	End User Device additional requirement	Pass	-

Conformity Assessment Condition:

- 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/manufacturer 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.

 Sporton International Inc. (Kunshan)
 Page Number
 : 4 of 12

 TEL: +86-512-57900158
 Issued Date
 : Mar. 27, 2024

FCC ID : 2AFZZPC21G Report Version : 01

Report Template No.: -FG96.47 Version 1.0

1 General Description

1.1 Applicant

Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

1.2 Manufacturer

Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

1.3 Product Feature of Equipment Under Test

Product Feature				
Equipment	Mobile Phone			
Brand Name	POCO			
Model Name	24069PC21G			
FCC ID	2AFZZPC21G			
IMEI Code	861593070018264/861593070018272			
HW Version	1351N16T			
SW Version	Xiaomi HyperOS 1.0			
EUT Stage	Identical Prototype			

Remark: The four model names are only for market segment, no other difference.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification					
Tx Frequency	5G NR n48: 3550 MHz ~ 3700 MHz				
Rx Frequency	5G NR n48: 3550 MHz ~ 3700 MHz				
Antenna Gain	<ant. 1=""> 5G NR n48: -3.1 dBi <ant. 6=""> 5G NR n48: -0.3 dBi <ant. 7=""> 5G NR n48: -0.7 dBi <ant. 8=""> 5G NR n48: -0.3 dBi</ant.></ant.></ant.></ant.>				
Type of Modulation	DFT-s-OFDM (PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM) CP-OFDM (QPSK / 16QAM / 64QAM / 256QAM)				

 Sporton International Inc. (Kunshan)
 Page Number
 : 5 of 12

 TEL: +86-512-57900158
 Issued Date
 : Mar. 27, 2024

FCC ID : 2AFZZPC21G Report Version : 01

Report Template No.: -FG96.47 Version 1.0

1.5 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)					
	No. 1098, Pengxi North Road, Kunshan Economic Development Zone					
Test Site Location	Jiangsu Province 215300 People's Republic of China					
	TEL: +86-512-57900158					
	Sporton Site No.	FCC Designation No.	FCC Test Firm			
Test Site No.	Sporton Site No.	rec besignation No.	Registration No.			
	DFS01-KS					
Test Engineer	Chad Wang	CN14257	04.4000			
Temperature	20~ 24.5℃	CN1257	314309			
Relative Humidity	40~ 60 %					

1.6 Test Software

Item	Site	Manufactor	Name	Version
1.	DFS01-KS	Sporton	DFS & Adaptivity Test Tools	1.0

1.7 Applicable Standards

- FCC Part 96.47
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

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

 Sporton International Inc. (Kunshan)
 Page Number
 : 6 of 12

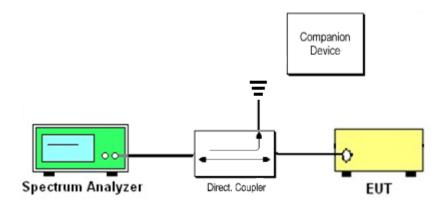
 TEL: +86-512-57900158
 Issued Date
 : Mar. 27, 2024

FCC ID : 2AFZZPC21G Report Version : 01

Report Template No.: -FG96.47 Version 1.0

2 Test Configuration of Equipment Under Test

2.1 Connection Diagram of Test System



The companion device is certified CBRS (FCC ID: PIDAS2900)

Sporton International Inc. (Kunshan)

TEL: +86-512-57900158 FCC ID: 2AFZZPC21G Page Number : 7 of 12 Issued Date : Mar. 27, 2024

Report Version : 01

Report Template No.: -FG96.47 Version 1.0

3 End User Device additional requirement

3.1 Test Requirement

FCC Part 96.47

- (a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.
- (1) An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

3.2 Test Procedure

Following procedure can be done by applying WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, use the certified Ruckus CBSD (FCC ID: PIDAS2900) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

- 1. Setup with frequency 3540-3620MHz and power level 30dBm/MHz
- 2. Enable AP service from Ruckus Cloud management
- 3. Check EUD Tx Frequency and power
- 4. Disable AP service from Ruckus Cloud management
 - a. Check EUD stops transmission within 10seconds.
- 5. Setup with 3630-3710MHz & power level 20dBm/MHz
- 6. Enable AP service from Ruckus Cloud management
- 7. Check EUD Tx Frequency and power
- 8. Disable AP service from Ruckus Cloud management
 - a. Check EUD stops transmission within 10seconds.

 Sporton International Inc. (Kunshan)
 Page Number
 : 8 of 12

 TEL: +86-512-57900158
 Issued Date
 : Mar. 27, 2024

FCC ID : 2AFZZPC21G Report Version : 01

Report Template No.: -FG96.47 Version 1.0

3.3 Test Result



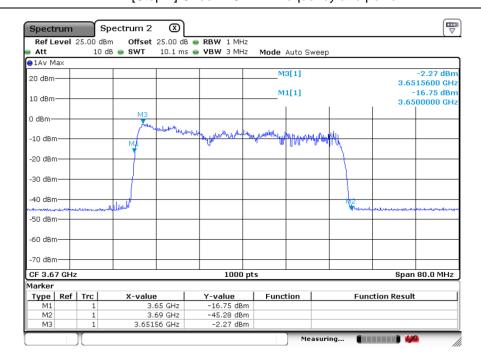
Sporton International Inc. (Kunshan)

TEL: +86-512-57900158 FCC ID: 2AFZZPC21G Page Number : 9 of 12 Issued Date : Mar. 27, 2024

Report Version : 01

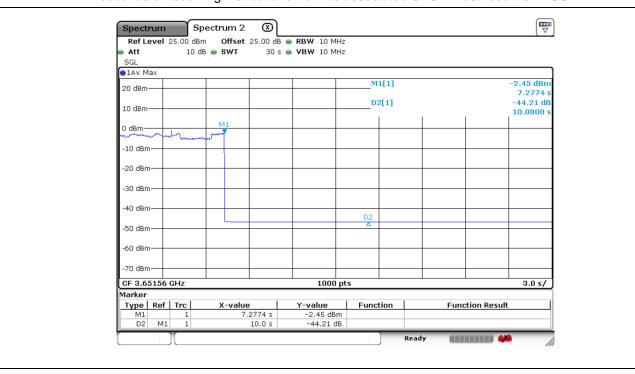
Report Template No.: -FG96.47 Version 1.0

[Step 5] Setup with 3630-3710MHz & power level 20dBm/MHz [Step 7] Check EUD Tx Frequency and power



[Step 8.a.] After changing the frequency and power level,

The module (EUT) discontinues operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD. Test result is PASS.



Sporton International Inc. (Kunshan)

TEL: +86-512-57900158 FCC ID: 2AFZZPC21G Page Number : 10 of 12 Issued Date : Mar. 27, 2024

Report Version : 01

Report Template No.: -FG96.47 Version 1.0

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Signal Analyzer	R&S	FSV7	101472	10Hz~7GHz	Jan. 02, 2024	Feb. 28, 2024	Jan. 01, 2025	Conducted (DFS01-KS)
Combiner	MTJ Cooperation	MTJ7112	N/A	0.4-6GHz	NCR	Feb. 28, 2024	NCR	Conducted (DFS01-KS)

 Sporton International Inc. (Kunshan)
 Page Number
 : 11 of 12

 TEL: +86-512-57900158
 Issued Date
 : Mar. 27, 2024

FCC ID: 2AFZZPC21G Report Version : 01

Report Template No.: -FG96.47 Version 1.0

5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Conducted Generated signal Levels	±0.56 dB	
Conducted Time	0.38%	

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

 Sporton International Inc. (Kunshan)
 Page Number
 : 12 of 12

 TEL: +86-512-57900158
 Issued Date
 : Mar. 27, 2024

FCC ID : 2AFZZPC21G Report Version : 01

Report Template No.: -FG96.47 Version 1.0