

TEST REPORT

Applicant: Sercomm Corporation **EUT Description:** G5SEM Model: G5SEM Brand: N/A FCC ID: P27-TMOG5SEM Standards: FCC CFR Title 47 Part 2 FCC CFR Title 47 Part 96.47 Date of Receipt: 2025/02/06 Date of Test: 2025/02/06 to 2025/04/29 Date of Issue: 2025/04/29

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.

Huang Kun Approved By:

22

Chen Chengfu Reviewed By:



Revision History

Rev.	Issue Date	Description	Revised by
01	2025/04/29	Original	Chen Chengfu



Summary of Test Results

FCC Part	Test Item	Verdict
§96.47	End user device additional requirements	Pass



Contents

Gene	eral De	scription	5
1.1	La	b Information	5
	1.1.1	Testing Location	5
	1.1.2	Test Facility / Accreditations	5
1.2	Cli	ent Information	5
	1.2.1	Applicant	5
	1.2.2	Manufacturer	5
1.3	Pro	oduct Information	6
Test	Config	juration	7
2.1	De	scription of test setup	7
2.2	Te	st Environment	7
2.3	Te	st RF Cable	7
2.4	Ма	odifications	7
Equi	pment	and Measurement Uncertainty	8
3.1			
3.2	Ме	asurement Uncertainty	8
Test		-	
4.1	En	d user Device Additional Requirements	9
Test		-	
	•		
	1.1 1.2 1.3 Test 2.1 2.2 2.3 2.4 Equi 3.1 3.2 Test 4.1 Test	1.1 Lat 1.1.1 1.1.2 1.2 Cli 1.2.1 1.2.2 1.2 1.2.1 1.2.2 1.2.2 1.3 Pro 7.3 Pro 2.1 De 2.2 Te 2.3 Te 2.4 Mo Equipment 3.1 3.2 Me Test Result 4.1 4.1 En Test Setup Test	1.1.1 Testing Location 1.1.2 Test Facility / Accreditations 1.2 Client Information 1.2.1 Applicant 1.2.2 Manufacturer 1.3 Product Information Test Configuration



1 General Description

1.1 Lab Information

1.1.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014 Tel.: +86-755-27212361

Contact Email: info@towewireless.com

1.1.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)

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).

FCC Designation No.: CN1353

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory. Designation Number: CN1353.

ISED CAB identifier: CN0152

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory. CAB identifier: CN0152

Company Number: 31000

1.2 Client Information

1.2.1 Applicant

Applicant:	Sercomm Corporation
Address:	8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.

1.2.2 Manufacturer

Manufacturer:	Sercomm Corporation
Address:	8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.



1.3 Product Information

EUT Description:	G5SEM			
Model:	G5SEM			
Brand:	N/A			
Hardware Version:	V1.1			
Software Version:	0.00.02			
IMEI:	355660790004917			
Technical specification:				
	LTE:	M, 🛛	64QAM, 🔀 256QAM	
Modulation Type:	NR: DFT-s-OFDM: Pi/2-BPSK, QPSK, CP-OFDM: QPSK, 16-QAM, 64		M, 64-QAM, 256-QAM 256-QAM	
	Band	TX Fr	requency	RX Frequency
Operation Frequency Range:	LTE Band 48	3550	to 3700 MHz	3550 to 3700 MHz
	NR Band n48	3550	to 3700 MHz	3550 to 3700 MHz
Antenna Type:	🖾 External, 🗌 Inte	grated		
	Band		Ant1(dBi)	Ant7(dBi)
Antenna Gain:	LTE Band 48		0	0
	NR Band n48		0	0
Remark: The above EUT's informanual for more detailed descr		by ap	plicant, please refer to the	e specifications or user



2 Test Configuration

2.1 Description of test setup

Description	Manufacturer	Model	ID
LTE Base Station	Baicells	mBS31001	2AG32MBS3100196N
NR Base Station	Baicells	BSC7048A243	2AG32BSC7048A243
Router	TP Link	TL-WDR6300	1
Laptop	DELL	Latitude 3510	1
Development Board *	N/A	DBG-G5SEM	1
Remark: *the information is p	rovided by applicant.		

2.2 Test Environment

Temperature:	24°C ~ 26°C
Relative Humidity	45-56 % RH Ambient
Voltage:	Nominal: 3.8 Vdc

2.3 Test RF Cable

For all conducted test items: The offset level is set spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

2.4 Modifications

No modifications were made during testing.



3 Equipment and Measurement Uncertainty

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, whichever is less, and where applicable is traceable recognized national standards.

3.1 Test Equipment List

	F	Radiated Emission			
Description	Manufacturer	Model	SN	Last Due	Cal Due
Signal Analyzar	Kovoight	N9020A	US46470468	2024/03/25	2025/03/24
Signal Analyzer	Keysight	N9020A	0340470408	2025/03/14	2026/03/13
Power Divider	Ostana	DBPD0200001800C	22122900036	2023/04/08	2025/04/07
Power Divider	Qotana	DBPD0200001800C	22122900036	2025/03/11	2026/03/10

3.2 Measurement Uncertainty

Parameter	Ulab
Frequency error	371.88Hz

Uncertainty figures are valid to a confidence level of 95%



4 Test Results

4.1 End user Device Additional Requirements.

Limits

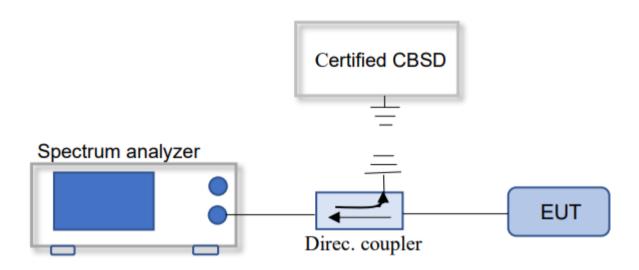
End User Devices will operate only after it receives authorization from an associated CBSD, including the frequencies and power limits for their operation.

End User Devices discontinues operation, changes Frequency, and changes its operational power level within 10 s of receiving instructions from its associated CBSD.

Test Procedure

KDB 940660 D01 Part 96 CBRS Eqpt v02, WINNF-TS-0122 V1.0.2

<u>Test Setup</u>



Test Settings

Based on the End user device additional requirements. During the test, use a certified Ruckus CBSD device (LTE Base Station FCC ID: 2AG32MBS3100196N, NR Base Station FCC ID: 2AG32BSC7048A243) as a companion device.

- 1. Configure CBSD to operate at 3600MHz~3620MHz, and Power level 17dBm/MHz
- 2. Enable AP service from Ruckus Cloud management
- 3. Check End User Devices Frequency and Power
- 4. Disable AP service from Ruckus Cloud management, check whether the EUT stops transmitting within 10s
- 5. Repeat step 2 to step 4 with the CBSD operating at 3670MHz~3690MHz, and Power level 7dBm/MHz.

Measuring Instruments

The measuring equipment is listed in the section 3.1 of this test report.

Test Result

The detailed test data see: Appendix.

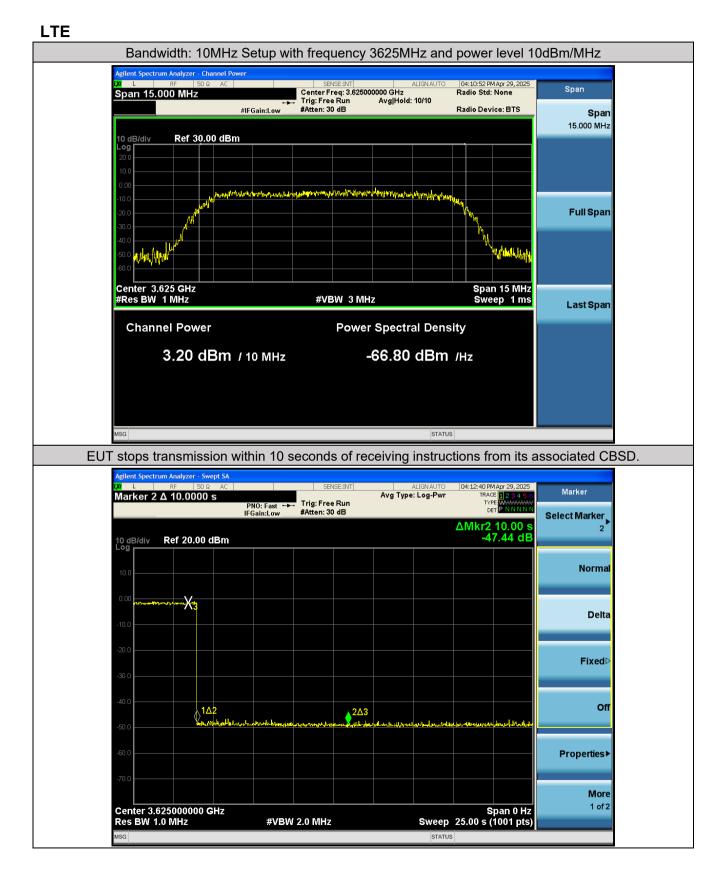


5 Test Setup Photos

The detailed test data see: Appendix-D PART96.47 Setup Photos



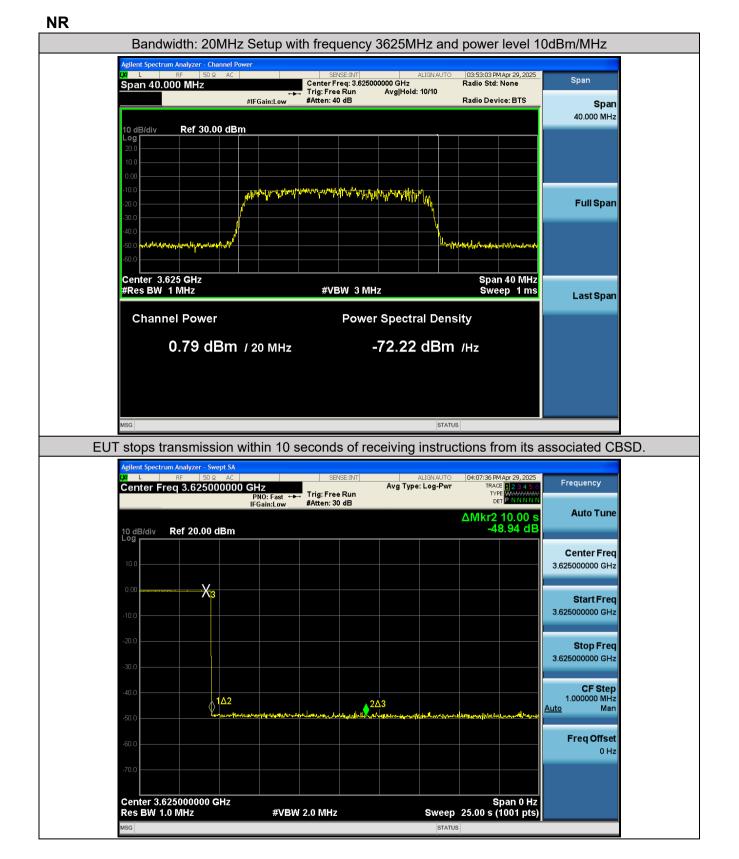
Appendix





Bandwidth: 20MHz Setup	with frequency 3690MHz and p	ower level 20dBm/MHz
Agilent Spectrum Analyzer - Channel Power LX RF 50 Ω AC #IFGain:Low	Center Freq: 3.69000000 GHz R Trig: Free Run Avg Hold: 10/10	D4:17:47 PM Apr 29, 2025 adio Std: None adio Device: BTS
10 dB/div Ref 30.00 dBm Log		Span 30 MHz
#Res BW 1 MHz Channel Power 12.05 dBm / 20 MHz	#VBW 3 MHz Power Spectral Density z -60.96 dBm /H	PhNoise Op
	2 -60.96 UBIN /	Z Auto <u>Mar</u> Mor 1 of:
MSG	STATUS	
EUT stops transmission within 10	seconds of receiving instruction	ons from its associated C
Agilent Spectrum Analyzer - Swept SA LAC L RE 50 Q AC Marker 2 A 10.0000 s PNO: Fast IFGain:Low	Avg Type: Log-Pwr →→ Trig: Free Run #Atten: 30 dB	H119:00 PM Apr 29, 2025 TRACE 23 4 5 6 TYPE WWWWWW DET P N N N N N MKr2 10.00 S 2 2
10 dB/div Ref 20.00 dBm		-47.66 dB
		Norma
0.00 masher at marked with the second secon		Norma Delta
-10.0 -20.0 -40.0		
-20.0 -30.0		Delta Fixed







Agilent Spectrum Analyz	er - Channel Power				
LXI RF	50 Ω AC	SENSE:INT Center Freq: 3.680000000	ALIGNAUTO 03:59: 3Hz Radio 1	38 PM Apr 29, 2025 Std: None	Meas Setup
	#IFGain:Low	🛶 Trig: Free Run 🛛 Avg	Hold: 10/10	Device: BTS	Avg/Hold Num
	#IFGam:Low	Maten. ov ub	Tadio		10
10 dB/div Ref	30.00 dBm				n Off
20.0					
10.0					Avg Mode xp Repeat
0.00					
-10.0	profession and profession	how have been and you and you and he allow	~~mm	_	Inte a DW
-20.0					Integ BW 40.000 MHz
-30.0					
-40.0					
-50.0 www.mythy/w.hymaty/	HLX-100 MAY HAPPIN		To Walk for both Mar	While the Min March	
Center 3.68 GHz #Res BW 1 MHz		#VBW 3 MHz	S	pan 80 MHz weep 1 ms	
Channel Po	ower	Power Sp	ectral Density		
					PhNoise Opt Fast Tuning ►
8.68	3 dBm / 40 мн	z -67	34 dBm /нz	A	uto <u>Man</u>
					More
					1 of 2
			071710		
MSG			STATUS		
	nission within 10) seconds of receiv		from its as	sociated CBSD.
EUT stops transn Agilent Spectrum Analyz	er - Swept SA		ing instructions		sociated CBSD.
EUT stops transn Agilent Spectrum Analyz	er - Swept SA 50 Ω AC 580000000 GHz			51 PM Apr 29, 2025	sociated CBSD.
EUT stops transn Agilent Spectrum Analyz Va L RF	ter - Swept SA 50 Ω AC	SENSE:INT Av			Frequency
EUT stops transn Agilent Spectrum Analyz Va L RF	er - Swept SA 50 Ω AC S80000000 GHz PN0: Fast	SENSE:INT Av	Ing instructions	51 PM Apr 29, 2025 TRACE 12 3 4 5 6 TYPE WWWWWW DET P NNNNN r2 10.00 S	
EUT stops transn Agilent Spectrum Analyz XX L RF Center Freq 3.6	er - Swept SA 50 Ω AC S80000000 GHz PN0: Fast	SENSE:INT Av	Ing instructions	51 PM Apr 29, 2025 TRACE 1 2 3 4 5 6 TYPE WWWWWW DET P N N N N N	Frequency
EUT stops transn Agilent Spectrum Analyz X L RF Center Freq 3.6	er - Swept SA 50 Ω AC 880000000 GHz PNO: Fast IFGain:Low	SENSE:INT Av	Ing instructions	51 PM Apr 29, 2025 TRACE 12 3 4 5 6 TYPE WWWWWW DET P NNNNN r2 10.00 S	Frequency Auto Tune
EUT stops transn Agilent Spectrum Analyz (X) L RF Center Freq 3.6 10 dB/div Ref 20	eer - Swept SA 50 0 AC BRO000000 GHz PNO: Fast IFGain:Low 0.00 dBm	SENSE:INT Av	Ing instructions	51 PM Apr 29, 2025 TRACE 12 3 4 5 6 TYPE WWWWWW DET P NNNNN r2 10.00 S	Frequency
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EUT stops transn Aglent Spectrum Analyz Da L RF Center Freq 3.6 10 dB/div Ref 20 10.0 -10.0 -20.0	er - Swept SA 50 Q AC B80000000 GHz PN0: Fast IFGain:Low 0.00 dBm	SENSE:INT Av ,→→ Trig: Free Run #Atten: 30 dB	Ing instructions	51 PM Apr 29, 2025 TRACE 12 3 4 5 6 TYPE WWWWWW DET P NNNNN r2 10.00 S	Frequency Auto Tune Center Freq 3.680000000 GHz 3.680000000 GHz 3.680000000 GHz 3.680000000 GHz
EUT stops transn Aglent Spectrum Analyz Center Freq 3.6 10 dB/div Ref 20 10.0 -10.0 -20.0 -30.0 -40.0	eer - Swept SA 50 0 AC BRO000000 GHz PNO: Fast IFGain:Low 0.00 dBm	SENSE:INT Av	Ing instructions	51 PMApr 29, 2025 TRACE 12 3 4 5 G DET 2 NINNIN r2 10.00 s -59.40 dB	Frequency Auto Tune Center Freq 3.680000000 GHz Start Freq 3.680000000 GHz
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EUT stops transn Aglent Spectrum Analyz Center Freq 3.6 10 dB/div Ref 20 10.0 -10.0 -20.0 -30.0 -40.0	er - Swept SA 50 Q AC B80000000 GHz PN0: Fast IFGain:Low 0.00 dBm	SENSE:INT Av ,→→ Trig: Free Run #Atten: 30 dB	Ing instructions	51 PMApr 29, 2025 TRACE 12 3 4 5 G DET 2 NINNIN r2 10.00 s -59.40 dB	Frequency Auto Tune Center Freq 3.680000000 GHz Start Freq 3.680000000 GHz Stop Freq 3.680000000 GHz CF Step 1.000000 MHz uto Man
EUT stops transn Agient Spectrum Analyz Center Freq 3.6 10 dB/div Ref 2 10.0 -10.0 -20.0 -30.0 -40.0 -50.0	er - Swept SA 50 Q AC B80000000 GHz PN0: Fast IFGain:Low 0.00 dBm	SENSE:INT Av ,→→ Trig: Free Run #Atten: 30 dB	Ing instructions	51 PMApr 29, 2025 TRACE 12 3 4 5 G DET 2 NINNIN r2 10.00 s -59.40 dB	Frequency Auto Tune Center Freq 3.680000000 GHz Start Freq 3.680000000 GHz Stop Freq 3.680000000 GHz
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EUT stops transn Agient Spectrum Analyz Center Freq 3.6 10 dB/div Ref 2 10 0 -10.0 -20.0 -30.0 -30.0 -40.0 -60.0	er - Swept SA 50 Ω AC 280000000 GHz PNO: Fast IFGain:Low 0.00 dBm X3 1Δ2 1Δ2 0.00 GHz	SENSE:INT Av ,→→ Trig: Free Run #Atten: 30 dB	Ing instructions	Span 0 Hz	Frequency Auto Tune Center Freq 3.680000000 GHz Start Freq 3.680000000 GHz Stop Freq 3.680000000 GHz CF Step 1.000000 MHz uto Man

~The End~