



RF Test Report

Applicant: Quectel Wireless Solutions Co., Ltd.

Address:

Building 5, Shanghai Business Park Phase III (Area B), No.1016

Tianlin Road, Minhang District, Shanghai, 200233, China

Product: IATF 16949 Compliant Automotive Grade 5G NR + DSDS Module

Model No.: AG598E-ROWA

Brand Name: QUECTEL

FCC ID: XMR025AG598EROWA

47 CFR Part 2

47 CFR Part 22

Standards: 47 CFR Part 24

47 CFR Part 27 47 CFR Part 90

Report No.: PD20250077-R3E

Issue Date: 2025/08/15

Test Result: PASS *

* Testing performed at Hefei Panwin Technology Co., Ltd. on the above equipment indicates the product meets the requirements of the relevant standards.

Reviewed By: Charlie Wang

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Stee Jung

Hefei Panwin Technology Co., Ltd.

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Revision History

Report No.	Version	Description	Issue Date	Note
PD20250077-R3E	01	Initial Report	2025/08/15	Valid

Remark:

Model AG598E-ROWA all use Qualcomm SA522M chipset, share the same chipset baseline.

They support the same LGA form factor package.

The difference between these three OCs are the GNSS function, LTE UE categories and DL MIMO:

- R1.0 GNSS supports L1+L5 & LTE CAT 19 & 4*4 MIMO, and with U2601 PA used for MIMO3 LB + UHB (N77/N78/B42) NSA mode;
- R1.1 GNSS supports L1+L5 & LTE CAT 16 & 2*2 MIMO, and only have a single PA (N77/N78/N79/B42) for UHB LTE/NR and NSA mode;
- R1.2 does not support GNSS and supports LTE CAT 16 & 2*2 MIMO, and only have a single PA (N77/N78/N79/B42) for UHB LTE/NR and NSA mode.

Based on the differences in hardware versions mentioned above, the testing plan is as follows:

- Compared with R1.0, SA and NSA of N77/N78 with R1.1 and R1.2 were fully tested.
- The output power was verified by other band combinations, and compared with R1.0, the results of R1.1 and R2.2 did not deteriorate. Both R1.1 and R1.2 reused data from R1.0 (report number: PD20250077-R3B).



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Test Summary

NR Band n2 / 25

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective	§2.1046,	EIRP ≤2 Watt	
<u>'</u>	Radiated Power	§24.232(c)	LINE 32 Wall	
2	Peak-to-Average Ratio	§24.232(d)	≤13 dB	
3	Occupied Bandwidth	§2.1049	No limit.	
			≤ -13 dBm/1%*EBW, in 1	
4	Conducted Band Edge	§2.1051,	MHz bands immediately	
4	Measurement	§24.238(a)	outside and adjacent to	
			the frequency block.	Reference report:
			≤ -13 dBm/1 MHz, from 9	PD20250077-R3B
	Spurious Emissions at Antonna	\$2.4054	kHz to 10 th harmonics	
5	Spurious Emissions at Antenna	§2.1051,	but outside authorized	
	Terminals	§24.238(a)	operating frequency	
			ranges.	
		\$0.40EE	Within authorized bands	
6	Frequency Stability	§2.1055	of operation/frequency	
		§24.235	block.	
7	Dadieted Couniers Fraissies	§2.1053,	40 dD/4 MU-	DACC
7	Radiated Spurious Emission	§24.238(a)	≤ -13 dBm/1 MHz.	PASS



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NR Band n66

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective	§2.1046,	EIRP ≤ 1 Watt	
'	Radiated Power	§27.50(d)(4)	LINE 3 I Wall	
2	Peak-to-Average Ratio	§27.50(d)(5)	≤13 dB	
3	Occupied Bandwidth	§2.1049	No limit.	
			≤ -13 dBm/1%*EBW, in 1	
4	Conducted Band Edge	§2.1051,	MHz bands immediately	
4	Measurement	§27.53(h)	outside and adjacent to	
			the frequency block.	Reference report:
			≤ -13 dBm/1 MHz, from 9	PD20250077-R3B
	Courieus Fraissians et Antonna	\$0.4054	kHz to 10 th harmonics	
5	Spurious Emissions at Antenna Terminals	§2.1051,	but outside authorized	
	reminals	§27.53(h)	operating frequency	
			ranges.	
		\$2.4055	Within authorized bands	
6	Frequency Stability	§2.1055	of operation/frequency	
		§27.54	block.	
7	Padiated Spurious Emissies	§2.1053,	≤ -13 dBm/1 MHz.	PASS
	Radiated Spurious Emission	§27.53(h)	≥ - 13 UDIII/ 1 IVI⊓Z.	PASS



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NR Band n5 / n26(824~849 MHz)

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective	§2.1046	ERP ≤ 7 Watt	
'	Radiated Power	§22.913 (a)(5)	ERP > / Wall	
2	Peak-to-Average Ratio	§22.913 (d)	≤13 dB	
3	Occupied Bandwidth	§2.1049	No limit.	
			≤ -13 dBm/1%*EBW, in 1	
4	Conducted Band Edge	§2.1051	MHz bands immediately	
4	Measurement	§22.917 (a)	outside and adjacent to	Reference report:
			the frequency block.	PD20250077-R3B
			FCC: ≤ -13 dBm/100	FD20230077-R3B
	Spurious Emissions at Antonna	\$2.1051	kHz, from 9 kHz to 10 th	
5	Spurious Emissions at Antenna 5	§2.1051 §22.917(a)	harmonics but outside	
	Terminals	922.917(a)	authorized operating	
			frequency ranges.	
6	Eroguanov Stability	§2.1055	< ±2.5 ppm	
L°	Frequency Stability	§22.355	< ±2.5 ppm	
7	Padiated Spurious Emission	§2.1053	FCC: ≤ -13 dBm/100	DASS
	Radiated Spurious Emission	§22.917(a)	kHz.	PASS



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NR Band n26 (814~824 MHz)

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective Radiated Power	§2.1046, §90.635(b)	< 100 W	
2	Peak-to-Average Ratio		≤13 dB	
3	Occupied Bandwidth	§2.1049	No limit.	
			For any frequency removed from the EA licensee's	
			frequency block by up to and including 37.5 kHz,	
		\$2.1051	the power of any emission shall be attenuated	Reference report: PD20250077-R3B
			below the transmitter power (P) in watts by at least	
4	4 Emission Mask		116 Log10(f/6.1) decibels or 50 + 10 Log10(P)	
		g 90.091(a)	decibels or 80 decibels, whichever is the lesser	
			attenuation, where f is the frequency removed from	
			the center of the outer channel in the block in	
			kilohertz and where f is greater than 12.5 kHz.	
5	Spurious Emissions	§2.1051,	< 43 + 10Log10(P[Watts]) for all out-of- band	
	at Antenna Terminals	§90.691	emissions	
6	Frequency Stability	§2.1055	Within authorized bands of	
Ľ	Trequericy Stability	§90.213	operation/frequency block.	
7	Radiated Spurious	§2.1053,	< 43 + 10Log10(P[Watts]) for all out-of- band	PASS
	Emission	§90.691	emissions	FAGG



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NR Band n7 / n38 / n41

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective Radiated Power	§2.1046, §27.50(h)(2)	EIRP ≤ 2 Watt	
2	Peak-to-Average Ratio		≤13 dB	
3	Occupied Bandwidth	§2.1049	No limit.	
4	Conducted Band Edge Measurement	§2.1051, §27.53(m4)	For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz.	Reference report: PD20250077-R3B
5	Spurious Emissions at Antenna Terminals	§2.1051, §27.53(m)	Channel Edge -25dBm/ 1 MHz 1 MHz 1 MHz 9 kHz 9.5 MHz XMHz 10 th harmonics X=Max {6MHz, EBW}	
6	Frequency Stability	§2.1055 §27.54	Within authorized bands of operation/frequency block.	
7	Radiated Spurious Emission	§2.1053, §27.53(m)	Channel Edge -25dBm/ 1 MHz 1 MHz 9 kHz 9 5 MHz X=Max {6MHz, EBW}	PASS



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NR Band n12

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective Radiated Power	§2.1046, §27.50(c)(10)	ERP ≤ 3 Watt	
2	Peak-to-Average Ratio		≤13 dB	
3	Occupied Bandwidth	§2.1049	No limit.	
4	Conducted Band Edge Measurement	§2.1051, §27.53(g)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Reference report: PD20250077-R3B
5	Spurious Emissions at Antenna Terminals	§2.1051, §27.53(g)	FCC: ≤ -13 dBm/100 kHz, from 9 kHz to 10 th harmonics but outside authorized operating frequency ranges.	
6	Frequency Stability	§2.1055 §27.54	Within authorized bands of operation/frequency block.	
7	Radiated Spurious Emission	§2.1053, §27.53(g)	FCC: ≤ -13 dBm/100 kHz.	PASS



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NR Band n77(3450 to 3550MHz) / n78(3450 to 3550MHz)

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective Radiated Power	§2.1046, §27.50(k)(3)	EIRP ≤ 30dBm	PASS
2	Peak-to-Average Ratio	§27.50(k)(4)	≤13 dB	PASS
3	Occupied Bandwidth	§2.1049	No limit.	Report Only
4	Conducted Band Edge Measurement	§2.1051,	For mobile operations in the 3450-3550	PASS
5	Spurious Emissions at Antenna Terminals	§27.50(n)(2) MHz band, the conducted power of emission outside the licensee's	•	PASS
6	Radiated Spurious Emission	§2.1053, §27.50(n)(2)	-13 dBm/MHz.	PASS
7	Frequency Stability	§2.1055 §27.54	Within authorized bands of operation/frequency block.	PASS



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NR Band n77(3700 to 3980MHz) / n78(3700 to 3800MHz)

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective Radiated Power	§2.1046, §27.50(j)(3)	EIRP ≤ 1W	PASS
2	Peak-to-Average Ratio		≤13 dB	PASS
3	Occupied Bandwidth	§2.1049	No limit.	Report Only
4	Conducted Band Edge Measurement	§2.1051, §27.53(I)(2)	For mobile operations in the 3700–3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed –13 dBm/MHz. Compliance with this paragraph (I)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.	PASS
5	Spurious Emissions at Antenna Terminals	§2.1051, §27.53(I)(2)	not exceed -13 dBm/MHz.	PASS
6	Radiated Spurious Emission	§2.1053, §27.53(I)(2)	not exceed -13 dBm/MHz.	PASS
7	Frequency Stability	§2.1055 §27.54	Within authorized bands of operation/frequency block.	PASS



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NR Band n71

No.	Test Case	FCC Rules	Limit	Verdict
1	RF Output Power & Effective Radiated Power	§2.1046, §27.50(c)(10)	ERP ≤ 3 Watt	
2	Peak-to-Average Ratio		≤13 dB	
3	Occupied Bandwidth	§2.1049	No limit.	
4	Conducted Band Edge Measurement	§2.1051, §27.53(g)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Reference report: PD20250077-R3B
5	Spurious Emissions at Antenna Terminals	§2.1051, §27.53(g)	FCC: ≤ -13 dBm/1 MHz, from 9 kHz to 10 th harmonics but outside authorized operating frequency ranges.	
6	Frequency Stability	§2.1055 §27.54	within the authorized bands of operation.	
7	Radiated Spurious Emission	§2.1053, §27.53(g)	≤ -13 dBm/1 MHz.	PASS

Conducted detection date: 2025/05/13 to 2025/07/05 and 2025/07/30 to 2025/08/08 Radiated detection date: 2025/06/09 to 2025/07/02 and 2025/08/03 to 2025/08/06

Date of sample received: 2025/05/13 and 2025/07/30

■ The samples tested have been evaluated in accordance with the procedures given in the application standards in **Section 2.4** of this report and have been shown to comply with the applicable technical standards.

All indications of PASS/FAIL in this report are based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.

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1 Test Laboratory

1.1 Notes of the Test Report

This report is invalid without signature of auditor and approver or with any alterations. The report shall not be partially reproduced without written approval of the testing company. Entrusted test results are only responsible for incoming samples. If there is any objection to the testing report, it shall be raised to the testing company within 15 days from the date of receiving the report. In the test results, "NA" means "not applicable", and the test items marked with " Δ " are subcontracted projects.

1.2 Test Facility

A2LA (Certificate Number: 6849.01)

Hefei Panwin Technology Co., Ltd. has been accredited by American Association for Laboratory Accreditation to perform measurement.

FCC (Designation Number: CN1361, Test Firm Registration Number: 473156)

Hefei Panwin Technology Co., Ltd. has been accredited on the US Federal Communications Commission list of test facilities recognized to perform measurements.

1.3 Testing Laboratory

Company Name	Hefei Panwin Technology Co., Ltd.
Address	Floor 1, Zone E, Plant 2#, Mingzhu Industrial Park, No.106 Chuangxin Avenue, High-tech Zone, Hefei City, Anhui Province, China
Telephone	+86-0551-63811775
Post Code	230031

2 General Description of Equipment under Test

2.1 Details of Application

Applicant	Quectel Wireless Solutions Co., Ltd.		
Applicant Address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin		
Applicant Address	Road, Minhang District, Shanghai, 200233, China		
Manufacturer	Quectel Wireless Solutions Co., Ltd.		
Manufactures Address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin		
Manufacturer Address	Road, Minhang District, Shanghai, 200233, China		



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2.2 Details of EUT

Product			IATF 169	49 Compliar	nt Automotive Grade 5	G NR + DSDS Mo	odule
Model			AG598E-	ROWA			
Hardware V	ersion		R1.1 R1.2				
Software Ve	ersion				2A10M8G_OCPU A10M8G_OCPU_YO	СТО	
SN					\5A000024(R1.1), E1\ A000058(R1.1), E1Y2	,	•
Support			☑SA	✓N	SA		
	NR	Duplex		ed SCS &	ENDC	Tx (MHz)	Rx (MHz)
	Band	Mode	Band	lwidth			
				5MHz 10MHz			
				15MHz	DC_5A_n2A		1930 to 1990
	n2	FDD	15KHz	20MHz	DC_12A_n2A	1850 to 1910	
		TOTALIZ	25MHz	DC_71A_n2A			
			30MHz				
				35MHz			
				40MHz			
	n5 FD			5MHz	DC_2A_n5A	824 to 849	869 to 894
		FDD	15KHz	10MHz	DC_4A_n5A		
Operating				15MHz	DC_7A_n5A		
Band for				20MHz	DC_66A_n5A		
NR				5MHz			
Bands in				10MHz			
FR1				15MHz			
				20MHz	DC_5A_n7A		
	n7	FDD	15KHz	25MHz	DC_12A_n7A	2500 to 2570	2620 to 2690
				30MHz	DC_71A_n7A		
				35MHz			
				40MHz			
				50MHz			
	40	EDD	45141-	5MHz	DC_2A_n12A	000 + 740	700 1 740
	n12	FDD	15KHz	10MHz	DC_7A_n12A	699 to 716	729 to 746
				15MHz	DC_66A_n12A		
				5MHz	DC_5A_n25A		
	n25	FDD	15KHz	10MHz	DC_12A_n25A	1850 to 1915	1930 to 1995
			15MHz	DC_26A_n25A			
				20MHz	DC_71A_n25A		



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				25MHz			
				30MHz			
				35MHz			
				40MHz			
				5MHz			
				10MHz			
	n26	FDD	15KHz	15MHz	DC_7A_n26A	814 to 849	859 to 894
				20MHz			
				10MHz			
				15MHz			
				20MHz	DC_5A_n38A		
	n38	TDD	30KHz	25MHz	DC_12A_n38A	2570 to 2620	2570 to 2620
				30MHz	20_12/(_1100/1		
				40MHz			
				10MHz			
				15MHz			
				20MHz			
	n41 TDD		25MHz				
			30MHz				
				35MHz	DC_5A_n41A DC_12A_n41A	2496 to 2690	2496 to 2690
				40MHz			
		TDD	30KHz	45MHz			
			50MHz	DC_26A_n41A			
				60MHz			
				70MHz			
				80MHz			
				90MHz			
				100MHz			
				5MHz			
				10MHz			
				15MHz			
				20MHz	DC_5A_n66A		
	n66	FDD	15KHz	25MHz	DC_12A_n66A	1710 to 1780	2110 to 2180
				30MHz	DC_71A_n66A		
				35MHz			
				40MHz			
				45MHz			
				5MHz	DO 04744		
	r-74	FDD	451/1-	10MHz	DC_2A_n71A	662 to 600	647 1- 650
	n71	FDD	15KHz	15MHz	DC_7A_n71A	663 to 698	617 to 652
				20MHz	DC_66A_n71A		
	n77	TDD	30KHz	10MHz	DC_2A_n77A	3450 to 3550	3450 to 3550



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				15MHz	DC	_5A_n77	Ą	3700 to 3980	3700 to 3980	
				20MHz	DC	_7A_n77	4			
				25MHz	DC_	_12A_n77	Ά			
				30MHz	DC_25A_n77A					
				40MHz		_41A_n77				
				50MHz		_66A_n77				
				60MHz	DC ₋	_71A_n77	Ά			
				70MHz						
				80MHz						
				90MHz						
				100MHz						
				10MHz	DC	_2A_n78/	Δ			
				15MHz		_2A_n78/ :_4A_n78/				
				20MHz		,				
				25MHz		7A_n78				
				30MHz		 _12A_n78			3450 to 3550 3700 to 3800	
	n78	TDD	30KHz	40MHz		 _25A_n78		3450 to 3550		
				50MHz		 _26A_n78		3700 to 3800		
				60MHz		 _38A_n78				
				70MHz	DC	_41A_n78	Α			
				80MHz	DC	_66A_n78	Α			
				90MHz	DC_	_71A_n78	Α			
			UL Modu	100MHz			וח	Modulation		
				DM PI/2BPS	SK		/	viodulation		
			DFT-s-OFDM QPSK			,				
			DFT-s-OFDM 16 QAM			1				
Modulation	Tuno For	ND Panda	DFT-s-OFDM 64 QAM			/				
Modulation	rype rur	ivit Dallus	DFT-s-OFDM 256 QAM			1				
			CP-OFDM QPSK			CP-OFDM QPSK				
			CP-OFDM 16 QAM				CP-OFDM 16 QAM			
			CP-OFDM 64 QAM				CP-OFDM 64 QAM			
	CP-OFDM 256 QAM			CP-OFDM 256 QAM						
HPUE Pow	er Class		Class 2: n41, n77, n78							
Antenna Type		☑Externa	ıl 🗆	Integra	ted					
			n2		1.80dBi(Ant M	IAIN)			
			n5		0.30dBi(Ant D	IV)			
Antenna G	Antenna Gain			n7		1.40dBi(Ant M	IAIN)		
				n12		-0.50dBi	(Ant [DIV)		
				n25	1.80dBi(Ant MAIN)					



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n26	0.30dBi(Ant DIV)
n38	1.40dBi(Ant MAIN)
n41	1.40dBi(Ant MAIN)
n66	1.50dBi(Ant MAIN)
n71	-0.90dBi(Ant DIV)
n77(3450 to 3550MHz)	1.88dBi(Ant MAIN)
n77(3700 to 3980MHz)	1.88dBi(Ant MAIN)
n78(3450 to 3550MHz)	1.88dBi(Ant MAIN)
n78(3700 to 3800MHz)	1.88dBi(Ant MAIN)

- **Note 1:** The declared of product specification for EUT and/or Antenna presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.
- **Note 2:** The frequency band subcarrier interval of TDD is 30kHz, and the frequency band subcarrier interval of FDD is 15kHz.
- Note 3: Tested the power and RSE of ENDC, report only show worst mode.
- **Note 4:** 5G NR support SA mode and NSA mode. According to the maximum power between SA and NSA mode, SA covers NSA mode.
- Note 5: The maximum ERP/EIRP is calculated from max output power and max antenna gain.
- Note 6: All modulations have been tested.
- **Note 7:** The device supports two PAs for NR n77/n78 (main PA with Ant MAIN for SA mode, and other PA with Ant DIV for NSA mode), both the PA are full test.
- **Note 8:** From C63.26: As an alternative, the highest power level measured in a narrower RBW (relative to the specified reference bandwidth) can be scaled by applying a correction factor determined from: 10 log [(reference bandwidth) / (resolution or measurement bandwidth)]. When using a smaller RBW, the current usage limit needs to be converted from the original limit.

Support Equipment							
Equipment	Manufacturer	Description	Model	Serial Number			
EVB	QUECTEL	-	Q2-A0459	MPQ22J610000143 P1Q21KT15000254 MPQ23CB17000493			
Adapter	Dong Guan City GangQi Electronic Co.,Ltd	AC to DC power supply to EVB	GQ36-120300-AX	-			
Base Station Simulator	Anritsu	-	MT8821C	PWC0039			
Base Station Simulator	Anritsu	-	MT8000A	PWB0092			



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2.3 Frequency List of Low/Middle/High Channels

NR Band n2 Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest	
5	Channel	370500	376000	381500	
5	Frequency	1852.5	1880	1907.5	
10	Channel	371000	376000	381000	
10	Frequency	1855	1880	1905	
15	Channel	371500	376000	380500	
15	Frequency	1857.5	1880	1902.5	
20	Channel	372000	376000	380000	
20	Frequency	1860	1880	1900	
25	Channel	372500	376000	379500	
25	Frequency	1862.5	1880	1897.5	
30	Channel	373000	376000	379000	
30	Frequency	1865	376000	1895	
35	Channel	373500	1880	378500	
35	Frequency	1867.5	376000	1892.5	
40	Channel	374000	1880	378000	
40	Frequency	1870	376000	1890	

NR Band n5 Channel and Frequency List						
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest		
5	Channel	165300	167300	169300		
	Frequency	826.5	836.5	846.5		
10	Channel	165800	167300	168800		
	Frequency	829	836.5	844		
15	Channel	166300	167300	168300		
	Frequency	831.5	836.5	841.5		
20	Channel	166800	167300	167800		
	Frequency	834	836.5	839		

NR Band n7 Channel and Frequency List						
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest		
5	Channel	500500	507000	513500		
5	Frequency	2502.5	2535	2567.5		
40	Channel	501000	507000	513000		
10	Frequency	2505	2535	2565		
15	Channel	501500	507000	512500		
15	Frequency	2507.5	2535	2562.5		
20	Channel	502000	507000	512000		
	Frequency	2510	2535	2560		



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25	Channel	502500	507000	511500
25	Frequency	2512.5	2535	2557.5
30	Channel	503000	507000	511000
30	Frequency	2515	2535	2555
٥٢	Channel	503500	507000	510500
35	Frequency	2517.5	2535	2552.5
40	Channel	504000	507000	510000
40	Frequency	2520	2535	2550
50	Channel	505000	507000	509000
	Frequency	2525	2535	2545

NR Band n12 Channel and Frequency List						
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest		
5	Channel	140300	141500	142700		
	Frequency	701.5	707.5	713.5		
10	Channel	140800	141500	142200		
	Frequency	704	707.5	711		
15	Channel	141300	141500	141700		
	Frequency	706.5	707.5	708.5		

NR Band n25 Channel and Frequency List						
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest		
5	Channel	370500	376500	382500		
5	Frequency	1852.5	1882.5	1912.5		
10	Channel	371000	376500	382000		
10	Frequency	1855	1882.5	1910		
15	Channel	371500	376500	381500		
15	Frequency	1857.5	1882.5	1907.5		
20	Channel	372000	376500	381000		
20	Frequency	1860	1882.5	1905		
25	Channel	372500	376500	380500		
25	Frequency	1862.5	1882.5	1902.5		
30	Channel	373000	376500	380000		
30	Frequency	1865	1882.5	1900		
35	Channel	373500	376500	379500		
35	Frequency	1867.5	1882.5	1897.5		
40	Channel	374000	376500	379000		
40	Frequency	1870	1882.5	1895		

NR Band n26 (824 to 849MHz) Channel and Frequency List				
BW [MHz] Channel/Frequency(MHz) Lowest Middle Highest				
5	Channel	165300	167300	169300



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	Frequency	826.5	836.5	846.5
10	Channel	165800	167300	168800
10	Frequency	829	836.5	844
15	Channel	166300	167300	168300
	Frequency	831.5	836.5	841.5
20	Channel	166800	167300	167800
	Frequency	834	836.5	839

NR Band n26 (814 to 824MHz) Channel and Frequency List					
BW [MHz] Channel/Frequency(MHz) Lowest Middle Highest					
5	Channel	163300	163800	164300	
	Frequency	816.5	819	821.5	
10	Channel	1	163800	1	
	Frequency	1	819	1	

NR Band n38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	515000	519000	523000
10	Frequency	2575	2595	2615
15	Channel	515500	519000	522500
15	Frequency	2577.5	2595	2612.5
	Channel	516000	519000	522000
20	Frequency	2580	2595	2610
25	Channel	516500	519000	521500
25	Frequency	2582.5	2595	2607.5
20	Channel	517000	519000	521000
30	Frequency	2585	2595	2605
40	Channel	518000	519000	520000
	Frequency	2590	2595	2600

NR Band n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	500202	518598	537000
10	Frequency	2501.01	2592.99	2685
15	Channel	500700	518598	536496
15	Frequency	2503.5	2592.99	2682.48
20	Channel	501204	518598	535998
20	Frequency	2506.02	2592.99	2679.99
25	Channel	501702	518598	535500
25	Frequency	2508.51	2592.99	2677.5
20	Channel	502200	518598	534996
30	Frequency	2511	2592.99	2674.98



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35	Channel	502698	518598	534498
35	Frequency	2513.49	2592.99	2672.49
40	Channel	503202	518598	534000
40	Frequency	2516.01	2592.99	2670
45	Channel	503700	518598	533496
45	Frequency	2518.5	2592.99	2667.48
50	Channel	504204	518598	532998
50	Frequency	2521.02	2592.99	2664.99
60	Channel	505200	518598	532002
60	Frequency	2526	2592.99	2660.01
70	Channel	506202	518598	531000
70	Frequency	2531.01	2592.99	2655
80	Channel	507204	518598	529998
60	Frequency	2536.02	2592.99	2649.99
90	Channel	508200	518598	528996
90	Frequency	2541	2592.99	2644.98
100	Channel	509202	518598	528000
100	Frequency	2546.01	2592.99	2640

	NR Band n66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest	
F	Channel	342500	349000	355500	
5	Frequency	1712.5	1745	1777.5	
40	Channel	343000	349000	355000	
10	Frequency	1715	1745	1775	
15	Channel	343500	349000	354500	
15	Frequency	1717.5	1745	1772.5	
20	Channel	344000	349000	354000	
20	Frequency	1720	1745	1770	
25	Channel	344500	349000	353500	
25	Frequency	1722.5	1745	1767.5	
30	Channel	345000	349000	353000	
30	Frequency	1725	1745	1765	
35	Channel	345500	349000	352500	
35	Frequency	1727.5	1745	1762.5	
40	Channel	346000	349000	352000	
40	Frequency	1730	1745	1760	
AF	Channel	346500	349000	351500	
45	Frequency	1732.5	1745	1757.5	

NR Band n71 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest



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F	Channel	133100	136100	139100
5	Frequency	665.5	680.5	695.5
10	Channel	133600	136100	138600
10	Frequency	668	680.5	693
4.5	Channel	134100	136100	138100
15	Frequency	670.5	680.5	690.5
20	Channel	134600	136100	137600
	Frequency	673	680.5	688

	NR Band n77 (3700 to 39	80MHz) Channel and	l Frequency List	
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	647000	656000	665000
10	Frequency	3705	3840	3975
15	Channel	647168	656000	664832
15	Frequency	3707.52	3840	3972.48
20	Channel	647334	656000	664666
20	Frequency	3710.01	3840	3969.99
25	Channel	647500	656000	664498
25	Frequency	3712.5	3840	3967.47
30	Channel	647666	656000	664332
30	Frequency	3714.99	3840	3964.98
40	Channel	648000	656000	664000
40	Frequency	3720	3840	3960
50	Channel	648334	656000	663666
50	Frequency	3725.01	3840	3954.99
60	Channel	648668	656000	663334
00	Frequency	3730.02	3840	3950.01
70	Channel	649000	656000	663000
70	Frequency	3735	3840	3945
80	Channel	649334	656000	662666
00	Frequency	3740.01	3840	3939.99
00	Channel	649668	656000	662332
90	Frequency	3745.02	3840	3934.98
100	Channel	650000	656000	662000
100	Frequency	3750	3840	3930

NR Band n77/78 (3450 to 3550MHz) Channel and Frequency List					
BW [MHz] Channel/Frequency(MHz) Lowest Middle Highest					
10	Channel	630334	633334	636332	
10	Frequency	3455.01	3500.01	3544.98	
15	Channel	630500	633334	636166	
	Frequency	3457.5	3500.01	3542.49	



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20	Channel	630666	633334	636000
20	Frequency	3459.99	3500.01	3540
25	Channel	630834	633334	635834
25	Frequency	3462.51	3500.01	3537.51
30	Channel	631000	633334	635666
30	Frequency	3465	3500.01	3534.99
40	Channel	631334	633334	635334
40	Frequency	3470.01	3500.01	3530.01
50	Channel	631666	633334	635000
50	Frequency	3474.99	3500.01	3525
60	Channel	632000	633334	634666
00	Frequency	3480	3500.01	3519.99
70	Channel	632334	633334	634334
70	Frequency	3485.01	3500.01	3515.01
80	Channel	632666	633334	634000
60	Frequency	3489.99	3500.01	3510
90	Channel	633000	633334	633666
90	Frequency	3495	3500.01	3504.99
100	Channel	1	633334	1
100	Frequency	1	3500.01	1

NR Band n78 (3700 to 3800MHz) Channel and Frequency List						
BW [MHz]	Channel/Frequency(MHz)	Channel/Frequency(MHz) Lowest Middle		Highest		
10	Channel	647000	650000	653000		
10	Frequency	3705	3750	3795		
15	Channel	647168	650000	652832		
15	Frequency	3707.52	3750	3792.48		
20	Channel	647334	650000	652666		
20	Frequency	3710.01	3750	3789.99		
25	Channel	647500	650000	652500		
25	Frequency	3712.5	3750	3787.5		
30	Channel	647666	650000	652334		
30	Frequency	3714.99	3750	3785.01		
40	Channel	648000	650000	652000		
40	Frequency	3720	3750	3780		
50	Channel	648334	650000	651666		
50	Frequency	3725.01	3750	3774.99		
60	Channel	648668	650000	651332		
	Frequency	3730.02	3750	3769.98		
70	Channel	649000	650000	651000		
70	Frequency	3735	3750	3765		
80	Channel	649334	650000	650666		



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	Frequency	3740.01	3750	3759.99	
00	Channel	649668	650000	650332	
90	Frequency	3745.02	3750	3754.98	
100	Channel	1	650000	/	
100	Frequency	1	3750	1	



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2.4 Application Standards

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

47 CFR Part 2

47 CFR Part 22

47 CFR Part 24

47 CFR Part 27

47 CFR Part 90

ANSI C63.26-2015

FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

FCC KDB 412172 D01 Determining ERP and EIRP v01r01

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

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3 Test Condition

3.1 Test Environmental Conditions

During testing, environmental conditions are described below.

Normal Configuration		Extreme Configuration				
Voltage	Voltage 3.8V		High: 4.3V	Low: 3.3V		

3.2 Test Configuration

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture). The worst cases were recorded in this report.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes (Z, X, Y axis), receiver antenna polarization (horizontal and vertical), the worst emission was found in 'Z' position and the worst case was recorded.

Took Cook	DV4/	modulation					RB		СН		
Test Case	BW	BPSK	QPSK	16QAM	64QAM	256QAM	1	full	L	М	Н
RF Output Power &											
Effective (Isotropic) Radiated	all	V	V	v	v	V	v	v	v	v	v
Power											
Occupied Bandwidth	all		٧	V	V	V		V		V	
Conducted Band Edge	all		.,,				.,	.,	,,		.,
Measurement	all	V	V				V	V	V		V
Spurious Emissions at		.,	.,				.,		.,	.,	,,
Antenna Terminals	all	V	V				V		V	V	V
Peak-to-Average Ratio	all	٧	V	V	V	V		V		V	
Frequency Stability	max		V					V		V	
Radiated Spurious Emission					worst	case					

Note:

- 1. The mark " V " means that this configuration is chosen for testing.
- 2. The mark " -- " means that this bandwidth is not supported.
- 3. The device is investigated from 30Hz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.
- 4.Frequency Stability: Normal Voltage = 3.8V; Low Voltage =3.3V.; High Voltage =4.3V
- 5. For radiation spurious emission, the worst cases were recorded for PSK/QPSK modulation in this report.



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3.3 Equipment List

Instrument	Manufacturer	Model	Asset No.	Cal. Interval	Cal. Due Date		
Conducted							
Base Station Simulator	Keysight	E7515E	PWC0042	1 Year	2025/09/12		
Spectrum Analyzer	Keysight	N9020B	PWC0049	1 Year	2025/09/12		
Base Station Simulator	Anritsu	MT8000A_020/021	PWC0032	1 Year	2025/09/12		
Spectrum Analyzer	R&S	FSV3044	PWC0036	1 Year	2025/10/20		
Coupling unit	Tonscend	JS0806-1	PWC0056	1 Year	2025/09/12		
DC Power	Keysight	E3640A	PWC0044	1 Year	2025/09/12		
Climate Chamber	Boyi	B-T-48C	PWC0050	1 Year	2025/09/12		
Shielded Chamber	Mao Rui	MR534	PWC0041	3 Years	2026/08/26		
RF cable	TIMES Microwave Systems	SFT205PUR- NMSWSM-1.50M	PWD0154	1 Year	2025/09/12		
RF cable	TIMES Microwave Systems	SFT205PUR- NMSWSM-1.50M	PWD0155	1 Year	2025/09/12		
RF cable	TIMES Microwave Systems	HF160- KMKMR-1.50M	PWD0153	1 Year	2025/09/12		
Test Software	Tonscend	JS1120 V3.1.46	-	-	-		
		Radiated	•				
Receiver	R&S	ESR7	PWB0023	1 Year	2025/09/11		
Spectrum Analyzer	R&S	FSV3044	PWB0024	1 Year	2025/09/11		
Loop Antenna	R&S	HFH2-Z2E	PWB0026	1 Year	2025/09/13		
TRILOG Broadband Antenna	Schwarzbeck	VULB9162	PWB0029	1 Year	2025/09/09		
Double-Ridged Guide Antenna	ETS-Lindgren	3117	PWB0031	1 Year	2025/09/26		
k Type Horn Antenna	Steatite Antennas	QMS-00880	PWB0035	1 Year	2025/09/08		
Pre-Amplifier	R&S	OSP220 (OSP-B155G)	PWB0042	1 Year	2025/09/11		
Pre-Amplifier	COM-MW	DLNA8	PWB0094	1 Year	2025/09/11		
Pre-Amplifier	R&S	SCU18F	PWB0034	1 Year	2025/09/11		
Pre-Amplifier	R&S	SCU40F1	PWB0036	1 Year	2025/09/11		
Anechoic Chamber	ETS-Lindgren	Fact 3-2m	PWB0003	3 Years	2026/06/05		
Test Software	Tonscend	JS36 V5.0.0	-	-	-		



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3.4 Test Uncertainty

No.	Parameter	Uncertainty
1	Maximum transmit power	0.677dB
2	Frequency error	37.064Hz
3	Bandwidth occupied	5.9kHz
		10Hz-3.5GHz: 0.982dB
4	Emission spurious, Band edge and PAPR	3.5GHz-18GHz: 1dB
4		18GHz-26.5GHz: 0.777dB
		26.5GHz-40GHz: 1.066dB
5	Dadieted Spurious Emission	Below 1GHz: 4.88 dB
5	Radiated Spurious Emission	Above 1GH: 5.06 dB
6	Temperature	3°C
7	Humidity	1.3 %
8	Supply voltages	0.006 V



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4 Test Items Description

Ambient condition

Shielded Chamber

Temperature [°C]	22.1 to 25.3
Humidity [%RH]	35 to 49
Pressure [kPa]	101.3 to 103.5

Anechoic Chamber

Temperature [°C]	20.6 to 21.7
Humidity [%RH]	49 to 52
Pressure [kPa]	99.6 to 100.2

4.1 RF Output Power & Effective (Isotropic) Radiated Power

Methods of Measurement

Base Station Simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

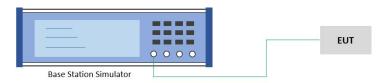
According to KDB 412172 D01 Power Approach,

EIRP = PT + GT - LC, ERP = EIRP - 2.15, where

PT = transmitter output power in dBm

GT = gain of the transmitting antenna in dBi

LC = signal attenuation in the connecting cable between the transmitter and antenna in dB



- 1. The testing follows ANSI C63.26 Section 5.2.
- 2. The transmitter output port was connected to the base station simulator.
- 3.Set EUT at maximum power through the base station simulator
- 4.Select lowest, middle, and highest channels for each band and different modulation.
- 5. Measure and record the power level from the system simulator.



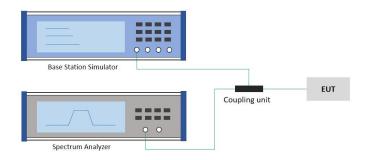
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4.2 EIRP Power Density

Methods of Measurement

Measurement Procedure: C63.26 -2015 section 5.2.4



- 1.Set instrument center frequency to OBW center frequency.
- 2.Set span to at least 1.5 times the OBW.
- 3.Set the RBW to the specified reference bandwidth (often 1 MHz).
- 4.Set VBW ≥ 3 × RBW.
- 5.Detector = RMS (power averaging).
- 6.Ensure that the number of measurement points in the sweep ≥ 2 × span/RBW.
- 7.Sweep time = auto couple.
- 8.Employ trace averaging (RMS) mode over a minimum of 100 traces.
- 9.Use the peak marker function to determine the maximum amplitude level within the reference bandwidth (PSD).



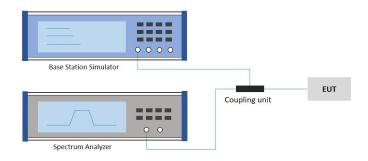
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4.3 Peak-to-Average Ratio

Methods of Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth.



- 1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
- 2. The EUT was connected to spectrum and system simulator via a coupling unit.
- 3.Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
- 4.The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
- 5. Record the deviation as Peak to Average Ratio.



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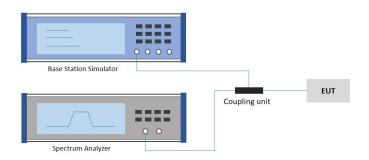
4.4 Occupied Bandwidth

Methods of Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

Test Setup



The testing follows ANSI C63.26 Section 5.4.

The EUT was connected to spectrum analyzer and system simulator via a coupling unit.

The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.

The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.

Set the detection mode to peak, and the trace mode to max hold.

Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.

(this is the reference value).

Determine the '-26 dB down amplitude' as equal to (Reference Value – X).

Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the '–X dB down amplitude' determined in step 6. If a marker is below this '-X dB down amplitude' value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.

Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.



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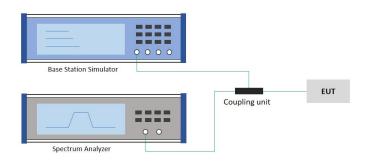
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4.5 Conducted Band Edge Measurement

Methods of Measurement

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 6.0

The transmitter output was connected to a calibrated coaxial cable, attenuator and Spectrum analyser, the other end of which was connected to a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The tests were performed at two frequencies (low channel and high channel). In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of 100kHz or 1% of the emission bandwidth of the fundamental emission of the transmitter may be employed. The EUT emission bandwidth is measured as the width of the signal between two points, outside of which all emission are attenuated at least 26dB below the transmitter power. The video bandwidth of the spectrum analyzer was set at thrice the resolution bandwidth. Detector Mode was set to RMS.



- 1. The testing follows ANSI C63.26 section 5.7
- 2.The EUT was connected to spectrum analyzer and system simulator via a coupling unit.
- 3. The band edges of low and high channels for the highest RF powers were measured.
- 4.Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
- 5.Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used and the measured power was integrated over the full required measurement bandwidth of 1 MHz.
- 6.Set spectrum analyzer with RMS detector.
- 7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.



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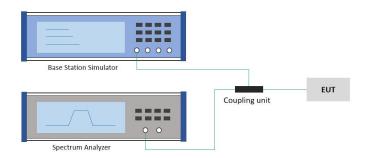
4.6 Spurious Emissions at Antenna Terminals

Methods of Measurement

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 6.0

The transmitter output was connected to a calibrated coaxial cable, attenuator and Spectrum analyzer, the other end of which was connected to a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

Test Setup



- 1. The testing follows ANSI C63.26 section 5.7
- 2. The EUT was connected to spectrum analyzer and system simulator via a coupling unit.
- 3.The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 4. The middle channel for the highest RF power within the transmitting frequency was measured.
- 5. The conducted spurious emission for the whole frequency range was taken.
- 6.Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
- 7.Set spectrum analyzer with RMS detector.
- 8. Taking the record of maximum spurious emission.
- 9.The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

Note: As described in Section C63.26 4.2.3: Generally, the measurement must be corrected by adding 10 log [(reference bandwidth) / (resolution or measurement bandwidth)] to the measured value (such bandwidth scaling is limited to cases where the measurement bandwidth used to perform the measurement is less than the reference bandwidth). Therefore, the converted limit value is the standard limit value minus the conversion factor.



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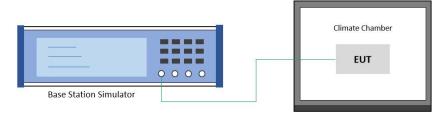
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4.7 Frequency Stability

Methods of Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

Test Setup



Test Procedures for Temperature Variation

- 1. The testing follows ANSI C63.26 section 5.6.4
- 2.The EUT was set up in the thermal chamber and connected with the system simulator.
- 3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
- 4.With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

Test Procedures for Voltage Variation

- 1. The testing follows ANSI C63.26 section 5.6.5
- 2.The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
- 3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
- 4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
- 5. The variation in frequency was measured for the worst case.

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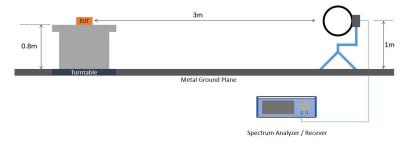
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4.8 Radiated Spurious Emission

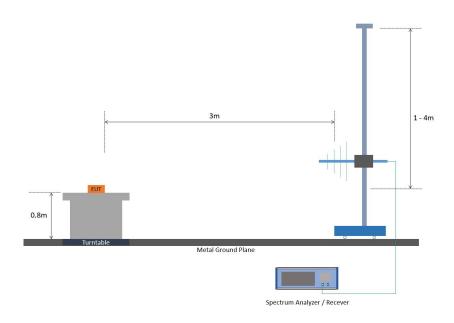
Methods of Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.



For radiated test below 30MHz

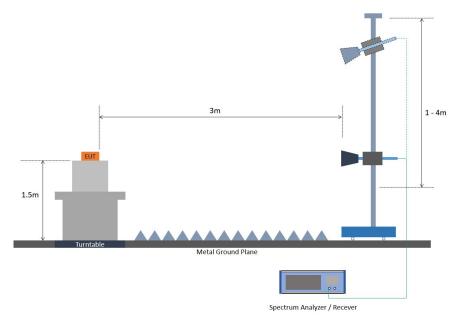


For radiated test from 30MHz to 1GHz



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For radiated test above 1GHz

- 1. The testing follows ANSI C63.26 Section 5.5
- 2.The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
- 3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
- 4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
- 6.During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
- 7.Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
- 8.A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- 9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- 10.EIRP (dBm) = S.G. Power Tx Cable Loss + Tx Antenna Gain
- 11.ERP (dBm) = EIRP 2.15
- 12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

Remark: The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

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



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ANNEX A: Test Results

Test Results of Conducted Test

NR Band n2	Refer to ANNEX A.1
NR Band n5	Refer to ANNEX A.2
NR Band n7	Refer to ANNEX A.3
NR Band n12	Refer to ANNEX A.4
NR Band n25	Refer to ANNEX A.5
NR Band n26(814-824MHz)	Refer to ANNEX A.6
NR Band n26(824-849MHz)	Refer to ANNEX A.7
NR Band n38	Refer to ANNEX A.8
NR Band n41	Refer to ANNEX A.9
NR Band n66	Refer to ANNEX A.10
NR Band n71	Refer to ANNEX A.11
NR Band n77(3450-3550MHz)	Refer to ANNEX A.21
NR Band n77(3700-3980MHz)	Refer to ANNEX A.22
NR Band n78(3450-3550MHz)	Refer to ANNEX A.23
NR Band n78(3700-3800MHz)	Refer to ANNEX A.24
NR Band DC_5A_n77A(3450-3550MHz)	Refer to ANNEX A.25
NR Band DC_5A_n77A(3700-3980MHz)	Refer to ANNEX A.26
NR Band DC_5A_n78A(3450-3550MHz)	Refer to ANNEX A.27
NR Band DC_5A_n78A(3700-3800MHz)	Refer to ANNEX A.28

Test Results of Radiated Test



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ANNEX B: The EUT Appearance

The EUT Appearance (internal and external photographs) are submitted separately.



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ANNEX C: Test Setup Photographs

The Test Setup Photographs are submitted separately.