

Report No.: SUAR/2021/C000302

Rev.: 01

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TEST REPORT

Application No: AR/2021/C0003

Applicant: Xiaomi Communications Co., Ltd.

Address of Applicant: #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District,

Beijing, China, 100085

Manufacturer: Xiaomi Communications Co., Ltd.

Address of Manufacturer: #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District,

Beijing, China, 100085

EUT Description: Mobile Phone **Model No.:** 22021211RG

Brand Name: POCO

FCC ID: 2AFZZ211RG Standards: 47 CFR Part 2

47 CFR Part 22 subpart H 47 CFR Part 27 subpart M 47 CFR Part 27 subpart O 47 CFR Part 27 subpart Q

Date of Receipt: 2022/1/14

Date of Test: 2022/1/28 to 2022/2/24

Date of Issue: 2022/2/24

Test Result: PASS *

Authorized Signature:

Panta Sun Wireless Laboratory Manager



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^{*} In the configuration tested, the EUT detailed in this report complied with the standards specified above.



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Revision Record					
Version	Chapter	Date	Modifier	Remark	
01		2022/2/24		Original	

Prepared By	weller liu	
	(Weller Liu) / Engineer	
Checked By	well wei'	
	(Well Wei) / Reviewer	



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Test Summary 2

2.1 NR Band n5(ENDC DC_7A-n5A)

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913(a)(5)	FCC: ERP ≤ 7 W	Section 1 of Appendix B	Pass
Peak-Average Ratio	§22.913(d)	Limit≤13 dB	Section 2 of Appendix B	Pass
Modulation Characteristics	§2.1047	Digital modulation	Section 3 of Appendix B	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 4 of Appendix B	Pass
Band Edges Compliance	§2.1051, §22.917(a)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Section 5 of Appendix B	Pass
Spurious Emission at Antenna Terminals	§2.1051, §22.917(a)	FCC: ≤ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	Section 6 of Appendix B	Pass
Field Strength of Spurious Radiation	§2.1053, §22.917(a)	FCC: ≤ -13 dBm/100 kHz.	Section 7 of Appendix B	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(2) §22.355	≤ ±2.5ppm.	Section 8 of Appendix B	Pass



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2.2 NR Band n7(ENDC DC_5A_n7A)/NR Band n38/NR Band n41

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective	FCC Rule No.	Requirements	Test Result	verdict
(Isotropic) Radiated Power Output Data	§2.1046, §27.50(h)(2)	EIRP ≤ 2W	Section 1 of Appendix B	Pass
Peak-Average Ratio		≤13 dB	Section 2 of Appendix B	Pass
Modulation Characteristics	§2.1047	Digital modulation	Section 3 of Appendix B	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 4 of Appendix B	Pass
Band Edges Compliance	§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 de ned 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.	Section 5 of Appendix B	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(m)	Channel Edge -25dBm/ 1 MHz 1 MHz 1 MHz 9 kHz 95 MHz XMHz 10 th harmonics X=Max {6MHz, EBW}	Section 6 of Appendix B	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(m)	9 kHz 9.5 MHz XMHz 10th harmonics X=Max {6MHz, EBW}	Section 7 of Appendix B	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(2) §27.54	Within authorized bands of operation/frequency block.	Section 8 of Appendix B	Pass



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2.3 NR Band n77 / NR Band n78 (ENDC DC_5A-n78A/ DC_7A-n78A/ DC_38A-n78A/ DC_41A-n78A)

3700-3980MHz:

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(j)(3)	EIRP ≤ 1W	Section 1 of Appendix B	Pass
Peak-Average Ratio		≤13 dB	Section 2 of Appendix B	Pass
Modulation Characteristics	§2.1047	Digital modulation	Section 3 of Appendix B	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 4 of Appendix B	Pass
Band Edges Compliance	§2.1051, §27.53(I)(2)	(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.	Section 5 of Appendix B	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(I)(2)	not exceed -13 dBm/MHz.	Section 6 of Appendix B	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(I)(2)	not exceed -13 dBm/MHz	Section 7 of Appendix B	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(2) §27.54	Within authorized bands of operation/frequency block.	Section 8 of Appendix B	Pass



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3450-3550MHz:

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(k)(3)	EIRP ≤ 30dBm	Section 1 of Appendix B	Pass
Peak-Average Ratio	§27.50(k)(4)	FCC: Limit≤13 dB	Section 2 of Appendix B	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 4 of Appendix B	Pass
Band Edges Compliance	§2.1051, §27.50(n)(2)	For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.	Section 5 of Appendix B	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.50(n)(2)	For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.	Section 6 of Appendix B	Pass
Field Strength of Spurious Radiation	§2.1053, §27.50(n)(2)	For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.	Section 7 of Appendix B	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(2) §27.54	Within authorized bands of operation/ frequency block.	Section 8 of Appendix B	Pass



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3 General Information

3.1 Client Information

Applicant:	Xiaomi Communications Co., Ltd.
Address of Applicant:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer:	Xiaomi Communications Co., Ltd.
Address of Manufacturer:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

3.2 Test Location

Company:	SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd		
Address: South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial F Area, China (Jiangsu) Pilot Free Trade Zone			
Post code:	215000		
Test engineer:	Weller Liu, King-p Li, Nature Shen, Tizzy Song		

3.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

A2LA (Certificate No. 6336.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

• Innovation, Science and Economic Development Canada

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• FCC -Designation Number: CN1312

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an

accredited testing laboratory. Designation Number: CN1312.

Test Firm Registration Number: 717327



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3.4 General Description of EUT

EUT Description:	Mobile Phone			
Model No.:	22021211RG			
Brand Name:	POCO			
Hardware Version:	P2			
Software Version:	MIUI 13			
Sample Type:	⊠ Port	able Device, \square M	odule	
Antenna Type:	PIFA An	ntenna		
Power Class 2: (only for SA n78)	⊠ Support, □Not Support			
	⊠Provided by client			
	n5:	-4.7dBi(ANT0); -3.7dBi(ANT1)		
	n7:	-5.4dBi(ANT0); -1.6dBi(ANT2); -2.7dBi(ANT3); -1.1dBi(ANT5)		
Antenna Gain*:	n38:	-5.6dBi(ANT0); -1.6dBi(ANT2); -2.7dBi(ANT3); -1.1dBi(ANT5)		
	n41:	-5.4dBi(ANT0); -1.6dBi(ANT2); -2.7dBi(ANT3); -1.1dBi(ANT5)		
	n77:	-0.8dBi(ANT4); -0.4dBi(ANT6); 2.6dBi(ANT7); -1.6dBi(ANT8)		
	n78:	78: -1.0dBi(ANT4); -1.4dBi(ANT6); 2.6dBi(ANT7); -1.6dBi(ANT8)		
RF Cable*:	⊠Provided by client			
NE Cable .	4.5dB (E	Below 1GHz)	5dB (1~2GHz)	5.5dB (Above 2GHz)

Remark:

- 1. Conduction Power & EIRP of all antennas are tested, and only the worst data is presented.
- 2. *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.



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3.5 Test Mode

Test Mode	Test Modes Description
NR/TM1	NR system, DFT-s-Pi/2-BPSK modulation
NR/TM2	NR system, DFT-s-QPSK modulation
NR/TM3	NR system, DFT-s-16QAM modulation
NR/TM4	NR system, DFT-s-64QAM modulation
NR/TM5	NR system, DFT-s-256QAM modulation
NR/TM6	NR system, CP-QPSK modulation
NR/TM7	NR system, CP-16QAM modulation
NR/TM8	NR system, CP-64QAM modulation
NR/TM9	NR system, CP-256QAM modulation
Remark: The test mode(s) are selected according to relevant radio technology specifications.

3.6 Test Environment

Environment Parameter	101.0 KPa Selected Values During Tests				
Relative Humidity	44-46 % RH Ambient				
Value	Temperature(°C) Voltage(V)				
NTNV	22~23	3.87			
LTLV	-30	3.6			
LTHV	-30	4.45			
HTLV	50	3.6			
HTHV	50	4.45			

Remark:

NV: Normal Voltage NT: Normal Temperature

LT: Low Extreme Test Temperature
HT: High Extreme Test Temperature
LV: Low Extreme Test Voltage
HV: High Extreme Test Voltage



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3.7 Technical Specification

Characteristics	Description						
Radio System Type	⊠ SA ⊠ NSA						
	Band	TX		RX			
	NR Band n5	824 to 849 MHz		869 to 894 M	869 to 894 MHz		
	NR Band n7	2500 to 2570 MHz		2620 to 2690) MHz		
0	NR Band n38	2570 to 2620) MHz	2570 to 2620) MHz		
Supported Frequency Range	NR Band n41	2496 to 2690) MHz	2496 to 2690) MHz		
9.	NR Band n77	3700 to 3980) MHz	3700 to 3980) MHz		
	INK Danu nii i	3450 to 3550) MHz	3450 to 3550) MHz		
	ND Dond n70	3700 to 3800) MHz	3700 to 3800) MHz		
	NR Band n78	3450 to 3550) MHz	3450 to 3550) MHz		
	NR Band n5	SCS 15kHz:					
		⊠5 MHz	⊠10 MHz	⊠15 MHz	⊠20 MHz		
	NR Band n7	SCS 15kHz:					
		⊠5 MHz	⊠10 MHz	⊠15 MHz	⊠20 MHz		
		⊠25 MHz	⊠30 MHz	⊠40 MHz			
	ND Dond n20	SCS 30kHz:					
	NR Band n38	⊠20 MHz	⊠30 MHz;	⊠40 MHz			
		SCS 30kHz:					
Supported Channel	NR Band n41	⊠20 MHz	⊠30 MHz	⊠40 MHz	⊠50 MHz		
Bandwidth		⊠60 MHz	⊠80 MHz	⊠90 MHz	⊠100 MHz		
		SCS 30kHz					
	NR Band n77	⊠20 MHz	⊠30 MHz	⊠40 MHz	⊠50 MHz		
	INK Ballu III I	⊠60 MHz ⊠70 MHz ⊠		⊠80 MHz	⊠90 MHz		
		⊠100 MHz					
		SCS 30kHz					
	NR Band n78	⊠20 MHz	⊠30 MHz	⊠40 MHz	⊠50 MHz		
	INK Dallu II/o	⊠60 MHz	⊠70 MHz	⊠80 MHz	⊠90 MHz		
		⊠100 MHz					
Designation of		DET-PI2BPS	SK CP-16Q	AM			
Emissions	NR Band n5	SCS 15kHz:					
(Remark: the necessary	INIX Danu IIO	4M48G7D	4M47W7	'D			



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bandwidth of which is the worst value from the measured occupied bandwidths for each type of channel bandwidth configuration.) NR Band n7 SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M8W7D 35M7G7D 37M8W7D 26M8G7D 27M9W7D 35M7G7D 37M8W7D 35M7G7D 37M8W7D	
the measured occupied bandwidths for each type of channel bandwidth configuration.) NR Band n7 NR Band n7 NR Band n38 13M4G7D	
bandwidths for each type of channel bandwidth configuration.) NR Band n7 NR Band n7 NR Band n7 NR Band n7 17M9G7D 18M9W7D 4M47W7D 4M47W7D 8M94G7D 9M29W7D 13M4G7D 14M1W7D 17M9G7D 18M9W7D 22M9G7D 23M8W7D 28M6G7D 28M6W7D 38M6G7D 38M5W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M8W7D 26M8G7D 37M8W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M8W7D 26M8G7D 27M8W7D 26M8G7D 27M9W7D	
bandwidth configuration.) NR Band n7 NR Band n38 NR Band n3	
Configuration.) NR Band n7 13M4G7D	
NR Band n7 NR Band n7 13M4G7D	
NR Band n7 17M9G7D 18M9W7D 22M9G7D 23M8W7D 28M6G7D 28M6W7D 38M6G7D 38M5W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M8W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 37M8W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M9W7D	
17M9G7D 18M9W7D 22M9G7D 23M8W7D 28M6G7D 28M6W7D 38M6G7D 38M5W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M8W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M8W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M9W7D	
28M6G7D 28M6W7D 38M6G7D 38M5W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M8W7D 35M7G7D 37M8W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M9W7D	
38M6G7D	
NR Band n38 SCS 30kHz:	
NR Band n38	
NR Band n38 26M8G7D 27M8W7D 35M7G7D 37M8W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M9W7D	
26M8G7D 27M8W7D 35M7G7D 37M8W7D SCS 30kHz: 17M9G7D 18M2W7D 26M8G7D 27M9W7D	
SCS 30kHz: 17M9G7D	
17M9G7D 18M2W7D 26M8G7D 27M9W7D	
26M8G7D 27M9W7D	
35M7G7D 37M8W7D	
oomi or b	
NR Band n41 45M7G7D 47M5W7D	
57M8G7D 57M7W7D	
77M0G7D 77M4W7D	
85M7G7D 87M3W7D	
96M2G7D 97M4W7D	
SCS 30kHz:	
17M9G7D 18M2W7D	
26M8G7D 27M9W7D	
35M7G7D 37M8W7D	
NR Band n77 45M7G7D 47M5W7D	
(3700-3980MHz) 57M8G7D 57M7W7D	
64M2G7D 67M4W7D	
77M1G7D 77M4W7D	
85M6G7D 87M3W7D	
96M3G7D 97M5W7D	J



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			rage.	14 01 30
		SCS 30kHz:		
		17M9G7D	18M2W7D	
		26M8G7D	27M9W7D	
		35M8G7D	37M8W7D	
	NR Band n78	45M7G7D	47M5W7D	
	(3450-3550MHz)	57M8G7D	57M7W7D	
		64M2G7D	67M5W7D	
		77M0G7D	77M4W7D	
		85M6G7D	87M4W7D	
		96M2G7D	97M3W7D	
		SCS 30kHz:		
		17M9G7D	18M2W7D	
		26M8G7D	27M9W7D	
		35M8G7D	37M9W7D	
	NR Band n78	45M7G7D	47M5W7D	
	(3700-3800MHz)	57M8G7D	57M9W7D	
		64M3G7D	67M5W7D	
		77M1G7D	77M4W7D	
		85M7G7D	87M5W7D	
		96M4G7D	97M5W7D	



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3.8 Test Frequencies

3.8.1 Reference test frequencies for NR operating band n5

3.8.1.1 Test frequencies for NR operating band n5 and SCS 15 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
[101112]		Low	871.5	174300	[KHZ]
	Downlink	Mid	881.5	176300	15
	Downlink	High	891.5	178300	10
5		Low	826.5	165300	
	Uplink	Mid	836.5	167300	† <u>-</u>
	Оршк	High	846.5	169300	-
		Low	874	174800	
	Downlink	Mid	881.5	176300	15
40		High	889	177800	
10	10 Uplink	Low	829	165800	
		Mid	836.5	167300	-
	·	High	844	168800	
		Low	876.5	175300	
	Downlink	Mid	881.5	176300	15
15		High	886.5	177300	
15		Low	831.5	166300	
	Uplink	Mid	836.5	167300	-
		High	841.5	168300	
		Low	879	175800	
	Downlink	Mid	881.5	176300	15
20		High	884	176800	1
		Low	834	166800	
	Uplink	Mid	836.5	167300	_
		High	839	167800	



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3.8.2 Reference test frequencies for NR operating band n7 3.8.2.1 Test frequencies for NR operating band n7 and SCS 15 kHz

Bandwidth [MHz]	Range	9	Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
		Low	2622.5	524500	
	Downlink	Mid	2655	531000	15
5		High	2687.5	537500	
5		Low	2502.5	500500	
	Uplink	Mid	2535	507000	
	·	High	2567.5	513500	
		Low	2625	525000	
	Downlink	Mid	2655	531000	15
40		High	2685	537000	
10		Low	2505	501000	
	Uplink	Mid	2535	507000	
	•	High	2565	513000	
		Low	2627.5	525500	
	Downlink	Mid	2655	531000	15
		High	2682.5	536500	
15		Low	2507.5	501500	
	Uplink	Mid	2535	507000	
	O p	High	2562.5	512500	
		Low	2630	526000	
	Downlink	Mid	2655	531000	15
	DOWILLIA	High	2680	536000	1
20		Low	2510	502000	
	Uplink	Mid	2535	507000	
	Орши	High	2560	512000	†
		Low	2632.5	526500	
	Downlink	Mid	2655	531000	15
25	DOWNIII	High	2677.5	535500	10
25		Low	2512.5	502500	
	Uplink	Mid	2535	507000	
	Оршк	High	2557.5	511500	
		Low	2635	52700	
	Downlink	Mid	2655	531000	15
30	DOWIIIIK	High	2675	535000	- 13
30		Low	2515	503000	
	Uplink	Mid	2535	507000	1
	Оршк	High	2555	511000	
		Low	2640	528000	
	Downlink	Mid			15
	DOWNIINK		2655	531000	15
40		High	2670	534000	
		Low	2520	504000	1
	Uplink	Mid	2535	507000	
		High	2550	510000	



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Reference test frequencies for NR operating band n38

3.8.3.1 Test frequencies for NR operating band n38 and SCS 30 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
	Downlink	Low	2580	516000	
20	&	Mid	2595	519000	30
	Uplink	High	2610	522000	
•	Downlink	Low	2585	517000	
30	&	Mid	2595	519000	30
	Uplink	High	2605	521000	
	Downlink	Low	2590	518000	
40	&	Mid	2595	519000	30
	Uplink	High	2600	520000	



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3.8.4 Reference test frequencies for NR operating band n41 3.8.4.1 Test frequencies for NR operating band n41 and SCS 30 kHz

CBW Carrier centre Range Carrier centre SS block SCS [ARFCN] [MHz] [MHz] [kHz] Downlink Low 2506.02 501204 20 Mid 2592.99 518598 30 Uplink High 2670 534000 Downlink 2511 502200 Low 30 Mid 2592.99 518598 30 Uplink High 2675 535000 Downlink 2516.01 503202 Low 30 40 ጲ Mid 2592.99 518598 Uplink High 2670 534000 Downlink Low 2521.02 504204 50 Mid 2592.99 518598 30 Uplink High 2664.99 532998 Downlink Low 2526 505200 2592.99 Mid 30 60 518598 Uplink High 2659.98 531996 Downlink Low 2536.02 507204 80 Mid 2592.99 518598 30 Uplink High 2649.99 529998 Downlink Low 2541 508200 90 Mid 2592.99 518598 30 Uplink High 2644.98 528996 Downlink 2546.01 509202 Low 2592.99 518598 30 100 Mid & Uplink High 2640 528000



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3.8.5 Reference test frequencies for NR operating band n77

3.8.5.1 Test frequencies for NR operating band n77 and SCS 30 kHz

3700-3980:

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
	Downlink	Low	3710.01	647334	
20	&	Mid	3840	656000	30
	Uplink	High	3969.99	664666	1
	Downlink	Low	3714.99	647666	
30	&	Mid	3840	656000	30
	Uplink	High	3965.01	664334	1
	Downlink	Low	3720	648000	
40	&	Mid	3840	656000	30
	Uplink	High	3960	664000	
	Downlink	Low	3725.01	648334	
50	&	Mid	3840	656000	30
	Uplink	High	3954.99	663666	
	Downlink	Low	3730.02	648668	
60	&	Mid	3840	656000	30
	Uplink	High	3949.98	663332	1
	Downlink	Low	3735	649000	
70	&	Mid	3840	656000	30
	Uplink	High	3945	663000	
	Downlink	Low	3740.01	649334	
80	&	Mid	3840	656000	30
	Uplink	High	3939.99	662666	1
	Downlink	Low	3745.02	649668	30
90	&	Mid	3840	656000	
	Uplink	High	3934.98	662332	
	Downlink	Low	3750	650000	
100	&	Mid	3840	656000	30
	Uplink	High	3930	662000	1



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3450-3550:

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
	Downlink	Low	3460.02	630668	
20	&	Mid	3500.01	633334	30
	Uplink	High	3540	636000	1
	Downlink	Low	3465	631000	
30	&	Mid	3500.01	633334	30
	Uplink	High	3534.99	635666]
	Downlink	Low	3470.01	631334	
40	&	Mid	3500.01	633334	30
	Uplink	High	3530.01	635334	1
	Downlink	Low	3475.02	631668	
50	&	Mid	3500.01	633334	30
	Uplink	High	3525	635000	
	Downlink	Low	3480	632000	
60	&	Mid	3500.01	633334	30
	Uplink	High	3519.99	634666	
	Downlink	Low	3485.01	632334	
70	&	Mid	3500.01	633334	30
	Uplink	High	3515.01	634334	
	Downlink	Low	3490.02	632668	
80	&	Mid	3500.01	633334	30
	Uplink	High	3510	634000	1
	Downlink	Low	3495	633000	30
90	&	Mid	3500.01	633334	
	Uplink	High	3504.99	633666	
	Downlink	Low	\	\	
100	&	Mid	3500.01	633334	30
	Uplink	High	\	\	



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3.8.6 Reference test frequencies for NR operating band n78

3.8.6.1 Test frequencies for NR operating band n78 and SCS 30 kHz

3700-3800:

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
	Downlink	Low	3710.01	647334	
20	&	Mid	3750	650000	30
	Uplink	High	3789.99	652666	1
	Downlink	Low	3715.02	647668	
30	&	& Mid 3750 650000	650000	30	
	Uplink	High	3785.01	652334	1
	Downlink	Low	3720	648000	
40	&	Mid	3750	650000	30
	Uplink	High	3780	652000	
	Downlink	Low	3725.01	648334	
50	&	Mid	3750	650000	30
	Uplink	High	3774.99	651666	
	Downlink	Low	3730.02	648668	30
60	&	Mid	3750	650000	
	Uplink	High	3769.98	651332	1
	Downlink	Low	3735	649000	
70	&	Mid	3750	650000	30
	Uplink	High	3765	651000	1
	Downlink	Low	3740.01	649334	
80	&	Mid	3750	650000	30
	Uplink	High	3759.99	650666	
	Downlink	Low	3745.02	649668	
90	&	Mid	3750	650000 30	30
	Uplink	High	3754.98	650332	1
	Downlink	Low	/	/	
100	&	Mid	3750	650000	30
	Uplink	High	/	/	1



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3450-3550:

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
	Downlink	Low	3460.02	630668	
20	&	Mid	3500.01	633334	30
	Uplink	High	3540	636000	1
	Downlink	Low	3465	631000	
30	&	Mid	3500.01	633334	30
	Uplink	High	3534.99	635666	
	Downlink	Low	3470.01	631334	
40	&	Mid	3500.01	633334	30
	Uplink	High	3530.01	635334	
	Downlink	Low	3475.02	631668	
50	&	Mid	3500.01	633334	30
	Uplink	High	3525	635000	
	Downlink	Low	3480	632000	30
60	&	Mid	3500.01	633334	
	Uplink	High	3519.99	634666	
	Downlink	Low	3485.01	632334	
70	&	Mid	3500.01	633334	30
	Uplink	High	3515.01	634334	
	Downlink	Low	3490.02	632668	
80	&	Mid	3500.01	633334	30
	Uplink	High	3510	634000	1
	Downlink	Low	3495	633000	30
90	&	Mid	3500.01	633334	
	Uplink	High	3504.99	633666	
	Downlink	Low	\	\	
100	&	Mid	3500.01	633334	30
	Uplink	High	\	\	



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4 Description of Tests

4.1 Conducted Output Power

Measurement Procedure: FCC KDB 971168 D01 V03r01

The transmitter output was connected to a calibrated coaxial cable, attenuator and power meter, 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 power output at the transmitter antenna port was determined by adding the value of the cable insertion loss to the power reading. The tests were performed at three frequencies (low channel, middle channel and high channel) and on the highest power levels, which can be setup on the transmitters.

Remark: Reference test setup 1



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4.2 Effective (Isotropic) Radiated Power of Transmitter

Measurement Procedure: FCC KDB 971168 D01 V03r01; ANSI/C63.26 (2015)

Calculate power in dBm by the following formula:

ERP (dBm) = Conducted Power (dBm) + antenna gain (dBd)

EIRP(dBm) = Conducted Power (dBm) + antenna gain (dBi)

EIRP=ERP+2.15dB

Measurement Procedure: FCC KDB 971168 D01 V03r01; ANSI/C63.26 (2015)

Below 1GHz test procedure as below:

- 1). The EUT was powered ON and placed on a 80cm high table in the chamber. The antenna of the transmitter was extended to its maximum length.
- 2). The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made.
- 3). Steps 1) and 2) were performed with the EUT and the receive antenna in both vertical and horizontal polarization.
- 4). Test the EUT in the lowest channel, the middle channel ,the Highest channel.
- 5). The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, Only the test worst case mode is recorded in the report.
- 6). Repeat above procedures until all frequencies measured was complete.

E (dBμV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m)

EIRP (dBm) = E (dB μ V/m) + 20 log D - 104.8; where D is the measurement distance in meters

ERP = EIRP - 2.15 (dB); where ERP and EIRP are expressed in consistent units.

Above 1GHz test procedure as below:

- Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber
- 2) Calculate power in dBm by the following formula:

E (dB μ V/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m)

EIRP (dBm) = E (dB μ V/m) + 20 log D - 104.8; where D is the measurement distance in meters

- 3). Test the EUT in the lowest channel, the middle channel the Highest channel
- 4). The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, Only the test worst case mode is recorded in the report.
- 5). Repeat above procedures until all frequencies measured was complete

Remark: Reference test setup 2



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4.3 Occupied Bandwidth

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 4.2

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured. 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 three frequencies (low channel, middle channel and high channel). The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1 percent of the selected span as is possible without being below 1 percent. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used since a peak or, peak hold, may produce a wider bandwidth than actual. The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 percent of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is recorded. The span between the two recorded frequencies is the occupied bandwidth.

Remark: Reference test setup 1

Test Settings

- The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
- 2. RBW = 1 5% of the expected OBW
- VBW ≥ 3 x RBW
- Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep = auto couple
- 7. The trace was allowed to stabilize
- 8. If necessary, steps 2 7 were repeated after changing the RBW such that it would be within
 - 1 5% of the 99% occupied bandwidth observed in Step 7



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4.4 Band Edge at Antenna Terminals

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 peak or peak hold power.

Remark: Reference test setup 1

Test Settings

- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. RBW > 1% of the emission bandwidth
- VBW > 3 x RBW
- Detector = RMS
- Number of sweep points ≥ 2 x Span/RBW
- Trace mode = trace average for continuous emissions, max hold for pulse emissions
- 8. Sweep time = auto couple
- 9. The trace was allowed to stabilize



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4.5 Spurious And Harmonic Emissions at Antenna Terminal

Measurement Procedure: FCC KDB 971168 D01 V03r01

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 tests were performed at three frequencies (low channel and high channel). 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.

Remark: Reference test setup 1

Test Settings

- Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
- Detector = RMS
- 3. Trace mode = trace average for continuous emissions, max hold for pulse emissions
- Sweep time = auto couple
- 5. The trace was allowed to stabilize
- 6. Please see test notes below for RBW and VBW settings



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4.6 Peak-Average Ratio

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 5.7.1

A peak to average ratio measurement is performed at the conducted port of the EUT. For WCDMA signals, the spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level. For GSM signals, an average and a peak trace are used on a spectrum analyzer to determine the largest deviation between the average and the peak power of the EUT in a bandwidth greater than the emission bandwidth. The traces are generated with the spectrum analyzer set to zero span mode.

Remark: Reference test setup 1

Test Settings

- 1. The signal analyzer's CCDF measurement profile is enabled
- 2. Frequency = carrier center frequency
- 3. Measurement BW > Emission bandwidth of signal
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power



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4.7 Field Strength of Spurious Radiation

Measurement Procedure: FCC KDB 971168 D01 V03r01

Below 1GHz test procedure as below:

- 1). The EUT was powered ON and placed on a 80cm high table in the chamber. The antenna of the transmitter was extended to its maximum length.
- 2). The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made.
- 3). Steps 1) and 2) were performed with the EUT and the receive antenna in both vertical and horizontal polarization.
- 4). Test the EUT in the lowest channel, the middle channel, the Highest channel.
- 5). The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, Only the test worst case mode is recorded in the report.
- 6). Repeat above procedures until all frequencies measured was complete.

E (dB μ V/m) = Measured amplitude level (μ V/m) + (Cable Loss (dB) + Antenna Factor (dB/m) – AMP(dB)) EIRP (dBm) = E (dB μ V/m) + 20 log D – 104.8; where D is the measurement distance in meters

Above 1GHz test procedure as below:

- Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber
- 2) Calculate power in dBm by the following formula:

E (dB μ V/m) = Measured amplitude level (dB μ V) + (Cable Loss (dB) + Antenna Factor (dB/m) – AMP(dB)) EIRP (dBm) = E (dB μ V/m) + 20 log D – 104.8; where D is the measurement distance in meters

- 3). Test the EUT in the lowest channel, the middle channel the Highest channel
- 4). The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, Only the test worst case mode is recorded in the report.
- 5). Repeat above procedures until all frequencies measured was complete

Remark1: Reference test setup 2

Remark2: The emission below 18G were measured at a 3m test distance, while emissions above 18GHz were measured at a 1m test distance.

Remark: Reference test setup 2

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Factor(Antenna Factor + Cable Factor - Preamplifier Factor)

- 2) Scan from 9kHz to 40GHz, The disturbance between 9KHz to 30MHz and 18GHz to 40GHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported .
- 3) All modes have been tested, but only the worst case data displayed in this report.



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4.8 Frequency Stability / Temperature Variation

Measurement Procedure:

Frequency stability testing is performed in accordance with the guidelines of FCC KDB 971168 D01 V03r01; ANSI/C63.26 (2015)

- . The frequency stability of the transmitter is measured by:
- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Specification – The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ (± 2.5 ppm) of the center frequency.

Time Period and Procedure:

- 1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
- 2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
- 3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Remark: Reference test setup 3



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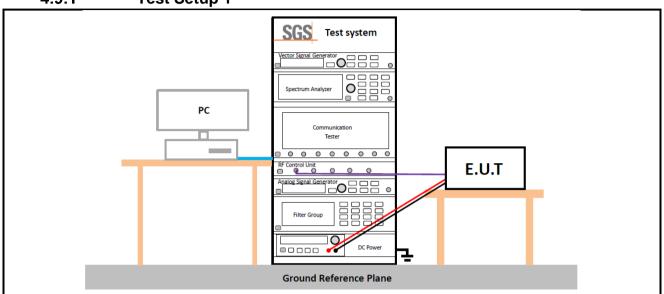
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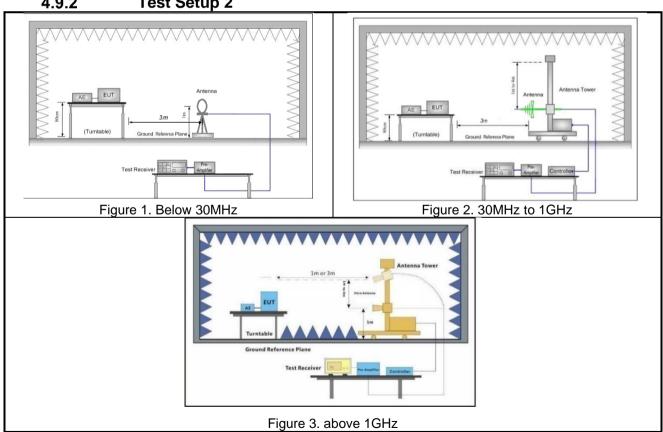
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4.9 Test Setups

4.9.1 **Test Setup 1**



4.9.2 **Test Setup 2**





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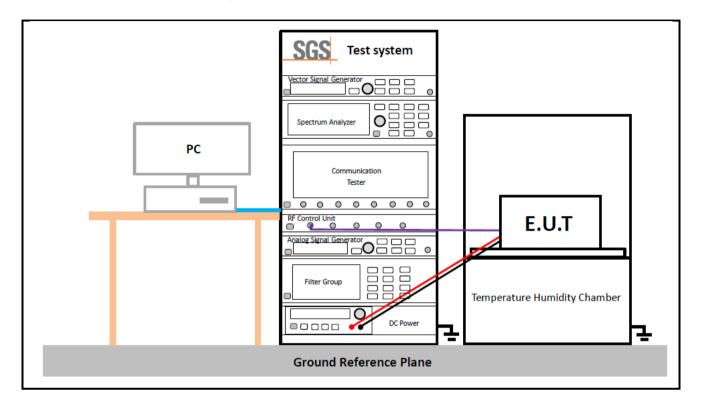


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4.9.3 Test Setup 3





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4.10Test Conditions

Test Case		Test Conditions			
	Average Power, Total	Test Environment	Ambient Climate & Rated Voltage		
		Test Setup	Test Setup 1		
		RF Channels (TX)	L, M, H (L= low channel, M= middle channel, H= high		
Transmit Output Power Data		Test Mode	NR/TM1;NR/TM2;NR/TM3;NR/TM4;NR/TM5;NR/TM6; NR/TM7;NR/TM8; NR/TM9;		
	Average Power, Spectral Density (if required)	Test Environment	Ambient Climate & Rated Voltage		
Data		Test Setup	Test Setup 1		
		RF Channels (TX)	L, M, H (L= low channel, M= middle channel, H= high channel)		
		Test Mode	NR/TM1;NR/TM2;NR/TM3;NR/TM4;NR/TM5;NR/TM6; NR/TM7;NR/TM8; NR/TM9;		
		Test Environment	Ambient Climate & Rated Voltage		
Peak-to-Av	erage Ratio	Test Setup	Test Setup 1		
(if required)		RF Channels (TX)	M (M= middle channel)		
		Test Mode	NR/TM1;NR/TM6		
		Test Environment	Ambient Climate & Rated Voltage		
Modulation		Test Setup	Test Setup 1		
Characteris	tics	RF Channels (TX)	M (M= middle channel)		
		Test Mode	NR/TM1;NR/TM2;NR/TM3;NR/TM4;NR/TM5;NR/TM6; NR/TM7;NR/TM8; NR/TM9;		
	Occupied Bandwidth	Test Environment	Ambient Climate & Rated Voltage		
		Test Setup	Test Setup 1		
		RF Channels (TX)	L, M, H (L= low channel, M= middle channel, H= high channel)		
Bandwidth		Test Mode	NR/TM1;NR/TM2;NR/TM3;NR/TM4;NR/TM5;NR/TM6; NR/TM7;NR/TM8; NR/TM9;		
Danuwiuin		Test Environment	Ambient Climate & Rated Voltage		
	Emission Bandwidth (if required)	Test Setup	Test Setup 1		
		RF Channels (TX)	L, M, H (L= low channel, M= middle channel, H= hig channel)		
		Test Mode	NR/TM1;NR/TM2;NR/TM3;NR/TM4;NR/TM5;NR/TM6; NR/TM7;NR/TM8; NR/TM9;		
Band Edges		Test Environment	Ambient Climate & Rated Voltage		
Compliance)	Test Setup	Test Setup 1		



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		raye. 34 01 30			
	RF Channels (TX)	L, H (L= low channel, H= high channel)			
	Test Mode	NR/TM1;NR/TM2;NR/TM3;NR/TM4;NR/TM5;NR/TM6; NR/TM7;NR/TM8; NR/TM9;			
	Test Environment	Ambient Climate & Rated Voltage			
	Test Setup	Test Setup 1			
Spurious Emission at Antenna Terminals	RF Channels (TX)	L,M, H (L= low channel, M= middle channel, H= high channel)			
	Test Mode	NR/TM1			
	Test Environment	Ambient Climate & Rated Voltage			
	Test Setup	Test Setup 2			
Field Strength of Spurious Radiation	Test Mode	NR/TM1 Remark: If applicable, the EUT conf. that has maximum power density (based on the equivalent power level) is selected.			
	RF Channels (TX)	L, M, H (L= low channel, M= middle channel, H= high channel)			
	Test Environment	(1) -30 °C to +50 °C with step 10 °C at Rated Voltage; (2) VL, VN and VH of Rated Voltage at Ambient Climate.			
Frequency Stability	Test Setup	Test Setup 4			
	RF Channels (TX)	L, M, H (L= low channel, M= middle channel, H= high channel)			
	Test Mode	NR/TM1;NR/TM6			



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5 Main Test Instruments

RF Test Equipment						
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date	
Shielding Room	Brilliant-emc	N/A	SUWI-04-01-06	2021/5/8	2024/5/7	
Temperature and	MingGao	TH101B	SUWI-01-01-07	2021/2/20	2022/2/19	
humidity meter				2022/2/19	2023/2/18	
Signal Analyzer	ROHDE&SCHWARZ	FSV3030	SUWI-01-02-02	2021/2/20	2022/2/19	
Signal Analyzei				2022/2/19	2023/2/18	
DC Dower Cumply	HYELEC	HY3005B	SUWI-01-18-01	2021/2/20	2022/2/19	
DC Power Supply				2022/2/19	2023/2/18	
Measurement Software	Tonscend	JS1120-3 Test System V 2.6.88.0336	SUWI-02-09-09	NCR	NCR	
Radio Communication Analyzer	StarPoint	SP9500E	SUWI-01-28-01	2021/9/28	2022/9/27	
Temperature	ESPEC	SU-242	SUWI-01-13-01	2021/2/20	2022/2/19	
Chamber				2022/2/19	2023/2/18	



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RSE Test Equipment 996-01					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-01	2021/5/8	2024/5/7
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-05	2021/2/20 2022/2/19	2022/2/19 2023/2/18
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2022/2/19	2023/2/18
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2021/2/20	2022/2/19 2023/2/18
DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	2021/2/20 2022/2/19	2022/2/19 2023/2/18
Receiving antenna	SCHWRZBECK MESS- ELEKTRONIK	VULB 9163	SUWI-01-11-01	2021/5/16	2022/5/15
Receiving antenna	SCHWRZBECK MESS- ELEKTRONIK	BBHA 9120D	SUWI-01-11-02	2021/5/16	2022/5/15
Receiving antenna	SCHWRZBECK MESS- ELEKTRONIK	BBHA 9170	SUWI-01-11-03	2021/5/14	2022/5/13
Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	2021/2/20 2022/2/19	2022/2/19 2023/2/18
Amplifier	Tonscend	TAP01018050	SUWI-01-14-02	2021/2/20 2022/2/19	2022/2/19 2023/2/18
Amplifier	Tonscend	TAP18040048	SUWI-01-14-03	2021/2/20 2022/2/19	2022/2/19 2023/2/18
Active Loop Antenna	SCHWRZBECK MESS- ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	2021/6/10	2022/6/9
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	SUWI-01-04-01	2021/2/20 2022/2/19	2022/2/19 2023/2/18
Radio Communication Analyzer	StarPoint	SP9500E	SUWI-01-28-01	2021/9/28	2022/9/27
Measurement Software	Tonscend	JS32-RE V3.0.0.3	SUWI-02-09-04	NCR	NCR



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6 Measurement Uncertainty

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	±0.54dB
2	RF power density, conducted	±1.03dB
3	Spurious emissions, conducted	±0.54dB
4	Radio Frequency	±7.25 x 10 ⁻⁸
5	Duty Cycle	±0.37%
6	Occupied Bandwidth	±7.25 x 10 ⁻⁸
		± 4.8dB (Below 1GHz)
7	Radiated Emission	± 4.8dB (1GHz to 6GHz)
		± 4.8dB (6GHz to 18GHz)
		± 4.8dB (Above 18GHz)



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7 Appendixes

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