

TEST REPORT

Application No: SUCR2605000461AT

Applicant: Gosuncn Technology Group Co., Ltd.

Address of Applicant: Address: 6F, No. 2819, KaiChuang Avenue, Science City, Huangpu District, Guangzhou City, Guangdong Province, China

Manufacturer: Gosuncn Technology Group Co., Ltd.

Address of Manufacturer: Address: 6F, No. 2819, KaiChuang Avenue, Science City, Huangpu District, Guangzhou City, Guangdong Province, China

EUT Description: HARDWARE ASSY-TELEMATIC NODE

Model No.: GT819

Trade Mark: GOSUNCN

FCC ID: 2APNRGT819

Standards: 47 CFR Part 2
47 CFR Part 22
47 CFR Part 24
47 CFR Part 27
47 CFR Part 90
47 CFR Part 96

Date of Receipt: 2026-06-12

Date of Test: 2026-06-15 to 2026-06-24

Date of Issue: 2026-07-06

Test Result:	PASS *
---------------------	---------------

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

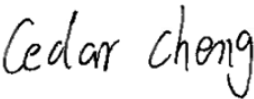
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone:(86-755) 8307 1443, or email: CN.Doccheck@sgs.com



Version

Revision Record			
Version	Description	Date	Remark
00	Original	2026-07-06	/

Authorized for issue by:			
Tested By			
		Hayley Zhang/Project Engineer	
Approved By			
		Cedar Cheng /Reviewer	

Contents

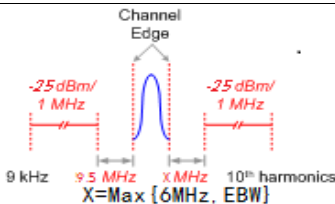
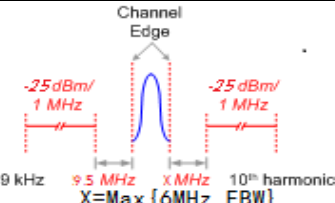
Version	2
1 Test Summary	4
1.1 NR Band n5	4
1.2 NR Band n7/NR Band n38/NR Band n41	5
1.3 NR Band n2/ NR Band n25	6
1.1 NR Band n12	7
1.2 NR Band n14	8
1.3 NR Band n66	10
1.4 NR Band n71	11
1.5 NR Band n77 / NR Band n78	12
1.6 NR Band n48	14
2 General Information	16
2.1 Test Location	16
2.2 Test Facility	16
2.3 General Description of EUT	17
2.4 Test Mode	18
2.5 Test Environment	18
2.6 Description of Support Units	18
2.7 Technical Specification	19
2.8 Test Frequencies	22
3 Equipment List	42
4 Measurement Uncertainty	44
5 Description of Tests	45
5.1 Conducted Output Power	45
5.2 Effective (Isotropic) Radiated Power of Transmitter	46
5.3 Field Strength of Spurious Radiation	47
5.4 Test Setups	48
5.5 Test Conditions	49
6 Appendixes	50

1 Test Summary

1.1 NR Band n5

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913(a)(5)	FCC: ERP $\leq$ 7 W	Refer to the Appendixs	Pass
Peak-Average Ratio	§22.913(d)	Limit $\leq$ 13 dB		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Band Edges Compliance	§2.1051, §22.917(a)	$\leq$ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.		
Spurious Emission at Antenna Terminals	§2.1051, §22.917(a)	FCC: $\leq$ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.		Pass
Field Strength of Spurious Radiation	§2.1053, §22.917(a)	FCC: $\leq$ -13 dBm/100 kHz.		
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(2) §22.355	$\pm$ 2.5ppm.		Reference report TCWA25020010502

1.2 NR Band n7/NR Band n38/NR Band n41

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(h)(2)	EIRP $\leq$ 2W	Refer to the Appendixs	Pass
Peak-Average Ratio	---	$\leq$ 13 dB		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Band Edges Compliance	§2.1051, §27.53(m)(4)	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.		
Spurious Emission at Antenna Terminals	§2.1051, §27.53(m)			Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(m)			
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d) (2) §27.54	Within authorized bands of operation/frequency block.		Reference report TCWA25020010502

1.3 NR Band n2/ NR Band n25

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §24.232(c)	$EIRP \leq 2\text{ W}$	Refer to the Appendixs	Pass
Peak-Average Ratio	§24.232(d)	Limit $\leq 13\text{ dB}$		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Band Edges Compliance	§2.1051, §24.238(a)	$\leq -13\text{ dBm}/1\% \cdot \text{EBW}$, in 1 MHz bands immediately outside and adjacent to the frequency block.		
Spurious Emission at Antenna Terminals	§2.1051, §24.238(a)	$\leq -13\text{ dBm}/1\text{ MHz}$, from 9 kHz to 10 th harmonics but outside authorized operating frequency ranges.		Pass
Field Strength of Spurious Radiation	§2.1053, §24.238(a)	$\leq -13\text{ dBm}/1\text{ MHz}$.		
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d) (2) §24.235	Within authorized bands of operation/frequency block.		Reference report TCWA25020010502

1.1 NR Band n12

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(c)(10)	ERP ≤ 3 W.	Refer to the Appendices	Pass
Peak-Average Ratio	---	Limits ≤ 13 dB		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Band Edges Compliance	§2.1051, §27.53(g)	≤ 43+10log ₁₀ (P[Watts])		
Spurious Emission at Antenna Terminals	§2.1051, §27.53(g)	≤ 43+10log ₁₀ (P[Watts])		
Field Strength of Spurious Radiation	§2.1053, §27.53(g)	FCC: ≤ -13 dBm/100 kHz.		Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(2) §27.54	Within authorized bands of operation/frequency block.		Reference report TCWA25020010502

1.2 NR Band n14

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §90.542(a)	ERP ≤ 3 W.	Refer to the Appendices	Pass
Peak-Average Ratio	---	Limits≤13 dB		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Emission Mask	§2.1051 §90.210(b)	Transmitters designed for operation under this part on frequencies other than listed in this section must meet the emission mask requirements of Emission Mask B. Equipment operating under this part on frequencies allocated to but shared with the Federal Government, must meet the applicable Federal Government technical standards (b) Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows: (1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.(2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB..(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 + 10 log (P) dB.		
Band Edges Compliance	§2.1051 §90.543(e)(2)(3)	(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.		
Spurious Emission at Antenna Terminals	§2.1051, §90.543(c) §90.543(f)	FCC: ≤ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges. For operations in the 758-775		

		MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/ MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.		
Field Strength of Spurious Radiation	§2.1053, §90.543(c) §90.543(f)	FCC: ≤ -13 dBm/100 kHz. For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/ MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.		Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(2) §90.213	Within authorized bands of operation/frequency block.		Reference report TCWA25020010502

1.3 NR Band n66

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(d)(4)	$EIRP \leq 1\text{ W}$	Refer to the Appendixs	Pass
Peak-Average Ratio	§27.50(d)(5)	Limits $\leq 13\text{ dB}$		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Band Edges Compliance	§2.1051, §27.53(h)	$\leq -13\text{ dBm}/1\% \cdot \text{EBW}$, in 1 MHz bands immediately outside and adjacent to the frequency block.		
Spurious Emission at Antenna Terminals	§2.1051, §27.53(h)	$\leq -13\text{ dBm}/1\text{ MHz}$, from 9 kHz to 10 th harmonics but outside authorized operating frequency ranges.		Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(h)	$\leq -13\text{ dBm}/1\text{ MHz}$.		
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d) (2) §27.54	Within authorized bands of operation/frequency block.		Reference report TCWA25020010502

1.4 NR Band n71

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(c)(10)	ERP ≤ 3 W	Refer to the Appendices	Pass
Peak-Average Ratio	---	Limit≤13 dB		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Band Edges Compliance	§2.1051, §27.53(g)	≤ 43+10log10(P[Watts])		
Spurious Emission at Antenna Terminals	§2.1051, §27.53(g)	≤ 43+10log10(P[Watts])		
Field Strength of Spurious Radiation	§2.1053, §27.53(g)	≤ -13 dBm/1 MHz.		Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d) (2) §27.54	within the authorized bands of operation.		Reference report TCWA25020010502

1.5 NR Band n77 / NR Band n78

3450-3550MHz:

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(k)(3)	EIRP $\leq$ 30dBm	Refer to the Appendixs	Pass
Peak-Average Ratio	§27.50(k)(4)	FCC: Limit $\leq$ 13 dB		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
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.		
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.		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.		
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d) (2) §27.54	Within authorized bands of operation/ frequency block.		Reference report TCWA25020010502

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	Refer to the Appendix	Pass
Peak-Average Ratio	---	≤13 dB		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Band Edges Compliance	§2.1051, §27.53(l)(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 (l)(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.		
Spurious Emission at Antenna Terminals	§2.1051, §27.53(l)(2)	not exceed -13 dBm/MHz.		
Field Strength of Spurious Radiation	§2.1053, §27.53(l)(2)	not exceed -13 dBm/MHz		Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d) (2) §27.54	Within authorized bands of operation/frequency block.		Reference report TCWA25020010502

1.6 NR Band n48

3550-3700MHz:

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §96.41	EIRP $\leq$ 23dBm	Refer to the Appendixs	Pass
Peak-Average Ratio	§96.41	FCC: Limit $\leq$ 13 dB		Reference report TCWA25020010502
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.		
Band Edges Compliance	§2.1051, §96.41	for channel and frequency assignments made by the SAS to CBSDs, the conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge.		
Spurious Emission at Antenna Terminals	§2.1051, §96.41	for channel and frequency assignments made by the SAS to CBSDs, the conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any emission shall not exceed -25 dBm/MHz. (2) Additional protection levels. Notwithstanding paragraph (d)(1) of this section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.		
Field Strength of Spurious Radiation	§2.1053, §96.41	for channel and frequency assignments made by the SAS to CBSDs, the conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS		Pass



Test Item	FCC Rule No.	Requirements	Test Result	Verdict
		assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any emission shall not exceed -25 dBm/MHz. (2) Additional protection levels. Notwithstanding paragraph (d)(1) of this section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.		
Frequency Stability	§2.1055, §96.41	Within authorized bands of operation/ frequency block.		Reference report TCWA25020010502
Adjacent Channel Leakage Ratio	§96.41	the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.		

Remark:

This test report (Report No.: SUCR260500046104 issue on 2026-07-06) is based on the original test report (Report No.: TCWA25020010502 issue on 2025-03-28).

Review this report and original report, this report just changing the parts according to the declaration letter from client.

Therefore in this report only power and Field Strength of Spurious Radiation were performed based on the original report with report number TCWA25020010502 issue on 2025-03-28, and other test data in this report are refer to the previous report with report number TCWA25020010502 issue on 2025-03-28.

2 General Information

2.1 Test Location

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

2.2 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).

• **FCC (Designation Number: CN1312)**

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. has been recognized as an accredited testing laboratory.

Test Firm Registration Number: 717327

• **ISED (CAB Identifier: CN0120)**

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 27594

2.3 General Description of EUT

Hardware Version:	6608656717/A		
Software Version:	6608656593/B		
HPUE Power Class:	Class 2: NR Band n41; NR Band n77; NR Band n78		
Antenna Type:	Monopole Antenna		
4Antenna Gain:	NR Band n2:	1.49dBi(Internal Antenna); 2.75dBi(External Antenna DX1H); 0.83dBi(External Antenna EX1H)	
	NR Band n5:	0.33dBi(Internal Antenna); 0.29dBi(External Antenna DX1H); -0.50dBi(External Antenna EX1H)	
	NR Band n7:	2.75dBi(Internal Antenna); 2.63dBi(External Antenna DX1H); 1.91dBi(External Antenna EX1H)	
	NR Band n12:	0.27dBi(Internal Antenna); -0.87dBi(External Antenna DX1H); -0.81dBi(External Antenna EX1H)	
	NR Band n14:	0.26dBi(Internal Antenna); -0.94dBi(External Antenna DX1H); -0.52dBi(External Antenna EX1H)	
	NR Band n25:	1.49dBi(Internal Antenna); 2.75dBi(External Antenna DX1H); 0.83dBi(External Antenna EX1H)	
	NR Band n38:	2.93dBi(Internal Antenna); 2.63dBi(External Antenna DX1H); 1.91dBi(External Antenna EX1H)	
	NR Band n41:	2.90dBi(Internal Antenna); 2.63dBi(External Antenna DX1H); 1.91dBi(External Antenna EX1H)	
	NR Band n48:	3.22dBi(Internal Antenna); 2.84dBi(External Antenna DX1H); 2.50dBi(External Antenna EX1H)	
	NR Band n66:	2.75dBi(Internal Antenna); 3.16dBi(External Antenna DX1H); 0.82dBi(External Antenna EX1H)	
	NR Band n71:	-0.12dBi(Internal Antenna); -0.99dBi(External Antenna DX1H); -1.10dBi(External Antenna EX1H)	
	NR Band n77:	3.25dBi(Internal Antenna); 2.98dBi(External Antenna DX1H); 2.58dBi(External Antenna EX1H)	
	NR Band n78:	3.63dBi(Internal Antenna); 2.84dBi(External Antenna DX1H); 2.58dBi(External Antenna EX1H)	
	Note: The antenna gain are derived from the gain information report provided by the manufacturer.		
RF Cable:	9kHz ~ 30MHz (0.3dB)	30MHz ~ 1000MHz (0.6dB)	1000MHz ~ 2000MHz (0.8dB)
	2000MHz ~ 4000MHz (1.1dB)	4000MHz ~ 6000MHz (1.8dB)	6000MHz ~ 12750MHz (2.6dB)
	Above 12750MHz(3.5dB)		
Note: As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.			

2.4 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.	

2.5 Test Environment

Environment Parameter	101 kPa Selected Values During Tests	
Relative Humidity	44-46 % RH Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	22~25	12
Remark:		
NV: Normal Voltage	LV: Low Extreme Test Voltage	HV: High Extreme Test Voltage
NT: Normal Temperature	LT: Low Extreme Test Temperature	HT: High Extreme Test Temperature

2.6 Description of Support Units

The EUT has been tested as an independent unit.

2.7 Technical Specification

Characteristics	Description					
Radio System Type	☒ SA ☒ NSA					
Supported Frequency Range	Band	TX		RX		
	NR Band n2	1850 to 1910 MHz		1930 to 1990 MHz		
	NR Band n5	824 to 849 MHz		869 to 894 MHz		
	NR Band n7	2500 to 2570 MHz		2620 to 2690 MHz		
	NR Band n12	699 to 716 MHz		729 to 746 MHz		
	NR Band n14	788 to 798 MHz		758 to 768 MHz		
	NR Band n25	1850 to 1915MHz		1930 to 1995 MHz		
	NR Band n38	2570 to 2620 MHz		2570 to 2620 MHz		
	NR Band n41	2496 to 2690 MHz		2496 to 2690 MHz		
	NR Band n48	3550 to 3700 MHz		3550 to 3700 MHz		
	NR Band n66	1710 to 1780 MHz		2110 to 2180 MHz		
	NR Band n71	663 to 698 MHz		617 to 652 MHz		
	NR Band n77	3700 to 3980 MHz		3700 to 3980 MHz		
		3450 to 3550 MHz		3450 to 3550 MHz		
	NR Band n78	3700 to 3800 MHz		3700 to 3800 MHz		
		3450 to 3550 MHz		3450 to 3550 MHz		
	ENDC: DC_71A_n78A;DC_4A_n78A;DC_5A_n78A; DC_7A_n78A;DC_2A_n78A;DC_12A_n78A; DC_5A_n77A;DC_66A_n77A;DC_7A_n77A; DC_14A_n77A;DC_13A_n77A;DC_2A_n77A; DC_12A_n77A;DC_25A_n77A;DC_26A_n77A; Remark: ENDC and UL CA inter-band only test RSE, report only show worst mode.					
	Supported Channel Bandwidth	NR Band n2	SCS 15kHz:			
			☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	☒ 20 MHz
☒ 25 MHz			☒ 30 MHz			
SCS 30kHz:						
☒ 10 MHz			☒ 15 MHz	☒ 20 MHz	☒ 25 MHz	
☒ 30 MHz						
NR Band n5		SCS 15kHz:				
		☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	
		SCS 30kHz:				
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz		
NR Band n7		SCS 15kHz:				
		☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	

		SCS 30kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	
	NR Band n12	SCS 15kHz:			
		☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	
		SCS 30kHz:			
		☒ 10 MHz	☒ 15 MHz		
	NR Band n14	SCS 15kHz:			
		☒ 5 MHz	☒ 10 MHz		
		SCS 30kHz:			
		☒ 10 MHz			
	NR Band n25	SCS 15kHz:			
		☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	☒ 20 MHz
		☒ 25 MHz	☒ 30 MHz	☒ 35 MHz	☒ 40 MHz
		SCS 30kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 25 MHz
		☒ 30 MHz	☒ 35 MHz	☒ 40 MHz	
	NR Band n38	SCS 15kHz:			
		☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	☒ 20 MHz
		☒ 25 MHz	☒ 30 MHz	☒ 40 MHz	
		SCS 30kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 25 MHz
		☒ 30 MHz	☒ 40 MHz		
	NR Band n41	SCS 15kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 30 MHz
		☒ 40 MHz	☒ 50 MHz		
		SCS 30kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 30 MHz
		☒ 40 MHz	☒ 50 MHz	☒ 60 MHz	☒ 70 MHz
		☒ 80 MHz	☒ 90 MHz	☒ 100 MHz	
	NR Band n48	SCS 15kHz:			
		☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	☒ 20 MHz
		☒ 30 MHz	☒ 40 MHz	☒ 50 MHz	
		SCS 30kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 30 MHz
		☒ 40 MHz	☒ 50 MHz	☒ 60 MHz	☒ 80 MHz
		☒ 90 MHz	☒ 100 MHz		
	NR Band n66	SCS 15kHz:			

		☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	☒ 20 MHz
		☒ 25 MHz	☒ 30 MHz	☒ 40 MHz	
		SCS 30kHz			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 25 MHz
		☒ 30 MHz	☒ 40 MHz		
	NR Band n71	SCS 15kHz:			
		☒ 5 MHz	☒ 10 MHz	☒ 15 MHz	☒ 20 MHz
		SCS 30kHz			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	
	NR Band n77	SCS 15kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 30 MHz
		☒ 40 MHz	☒ 50 MHz		
		SCS 30kHz			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 30 MHz
		☒ 40 MHz	☒ 50 MHz	☒ 60 MHz	☒ 70 MHz
		☒ 80 MHz	☒ 90 MHz	☒ 100 MHz	
	NR Band n78	SCS 15kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 30 MHz
		☒ 40 MHz	☒ 50 MHz		
		SCS 30kHz:			
		☒ 10 MHz	☒ 15 MHz	☒ 20 MHz	☒ 30 MHz
		☒ 40 MHz	☒ 50 MHz	☒ 60 MHz	☒ 70 MHz
		☒ 80 MHz	☒ 90 MHz	☒ 100 MHz	
	Remark: The SCS 15kHz and 30kHz of all NR band are tested, but only showed the worst case in this report.				

2.8 Test Frequencies

2.8.1 Reference test frequencies for NR operating band n2

2.8.1.1 Test frequencies for NR operating band n2 and SCS 15 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink	Low	1932.5	386500	15
		Mid	1960	392000	
		High	1987.5	397500	
	Uplink	Low	1852.5	370500	-
		Mid	1880	376000	
		High	1907.5	381500	
10	Downlink	Low	1935	387000	15
		Mid	1960	392000	
		High	1985	397000	
	Uplink	Low	1855	371000	-
		Mid	1880	376000	
		High	1905	381000	
15	Downlink	Low	1937.5	387500	15
		Mid	1960	392000	
		High	1982.5	396500	
	Uplink	Low	1857.5	371500	-
		Mid	1880	376000	
		High	1902.5	380500	
20	Downlink	Low	1940	388000	15
		Mid	1960	392000	
		High	1980	396000	
	Uplink	Low	1860	372000	-
		Mid	1880	376000	
		High	1900	380000	
25	Downlink	Low	1942.5	388500	15
		Mid	1960	392000	
		High	1977.5	395500	
	Uplink	Low	1862.5	372500	-
		Mid	1880	376000	
		High	1897.5	379500	
30	Downlink	Low	1945	389000	15
		Mid	1960	392000	
		High	1975	395000	
	Uplink	Low	1865	373000	-
		Mid	1880	376000	
		High	1895	379000	

2.8.2 Reference test frequencies for NR operating band n2

2.8.2.1 Test frequencies for NR operating band n2 and SCS 30 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink	Low	1935	387000	30
		Mid	1960	392000	
		High	1985	397000	
	Uplink	Low	1855	371000	-
		Mid	1880	376000	
		High	1905	381000	
15	Downlink	Low	1937.5	387500	30
		Mid	1960	392000	
		High	1982.5	396500	
	Uplink	Low	1857.5	371500	-
		Mid	1880	376000	
		High	1902.5	380500	
20	Downlink	Low	1940	388000	30
		Mid	1960	392000	
		High	1980	396000	
	Uplink	Low	1860	372000	-
		Mid	1880	376000	
		High	1900	380000	
25	Downlink	Low	1942.5	388500	30
		Mid	1960	392000	
		High	1977.5	395500	
	Uplink	Low	1862.5	372500	-
		Mid	1880	376000	
		High	1897.5	379500	
30	Downlink	Low	1945	389000	30
		Mid	1960	392000	
		High	1975	395000	
	Uplink	Low	1865	373000	-
		Mid	1880	376000	
		High	1895	379000	

2.8.3 Reference test frequencies for NR operating band n5

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

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

2.8.4 Reference test frequencies for NR operating band n5

2.8.4.1 Test frequencies for NR operating band n5 and SCS 30 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink	Low	874	174800	30
		Mid	881.5	176300	
		High	889	177800	
	Uplink	Low	829	165800	-
		Mid	836.5	167300	
		High	844	168800	
15	Downlink	Low	876.5	175300	30
		Mid	881.5	176300	
		High	886.5	177300	
	Uplink	Low	831.5	166300	-
		Mid	836.5	167300	
		High	841.5	168300	
20	Downlink	Low	879	175800	30
		Mid	881.5	176300	
		High	884	176800	
	Uplink	Low	834	166800	-
		Mid	836.5	167300	
		High	839	167800	

2.8.5 Reference test frequencies for NR operating band n7

2.8.5.1 Test frequencies for NR operating band n7 and SCS 15 kHz

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink	Low	2622.5	524500	15
		Mid	2655	531000	
		High	2687.5	537500	
	Uplink	Low	2502.5	500500	-
		Mid	2535	507000	
		High	2567.5	513500	
10	Downlink	Low	2625	525000	15
		Mid	2655	531000	
		High	2685	537000	
	Uplink	Low	2505	501000	-
		Mid	2535	507000	
		High	2565	513000	
15	Downlink	Low	2627.5	525500	15
		Mid	2655	531000	
		High	2682.5	536500	
	Uplink	Low	2507.5	501500	-
		Mid	2535	507000	
		High	2562.5	512500	
20	Downlink	Low	2630	526000	15
		Mid	2655	531000	
		High	2680	536000	
	Uplink	Low	2510	502000	-
		Mid	2535	507000	
		High	2560	512000	

2.8.6 Reference test frequencies for NR operating band n7

2.8.6.1 Test frequencies for NR operating band n7 and SCS 30 kHz

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink	Low	2625	525000	30
		Mid	2655	531000	
		High	2685	537000	
	Uplink	Low	2505	501000	-
		Mid	2535	507000	
		High	2565	513000	
15	Downlink	Low	2627.5	525500	30
		Mid	2655	531000	
		High	2682.5	536500	
	Uplink	Low	2507.5	501500	-
		Mid	2535	507000	
		High	2562.5	512500	
20	Downlink	Low	2630	526000	30
		Mid	2655	531000	
		High	2680	536000	
	Uplink	Low	2510	502000	-
		Mid	2535	507000	
		High	2560	512000	

2.8.7 Reference test frequencies for NR operating band n12

2.8.7.1 Test frequencies for NR operating band n7 and SCS 15 kHz

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink	Low	731.5	146300	15
		Mid	737.5	147500	
		High	743.5	148700	
	Uplink	Low	701.5	140300	--
		Mid	707.5	141500	
		High	713.5	142700	
10	Downlink	Low	734	146800	15
		Mid	737.5	147500	
		High	741	148200	
	Uplink	Low	704	140800	--
		Mid	707.5	141500	
		High	711	142200	
15	Downlink	Low	736.5	147300	15
		Mid	737.5	147500	
		High	738.5	147700	
	Uplink	Low	706.5	141300	--
		Mid	707.5	141500	
		High	708.5	141700	

2.8.8 Reference test frequencies for NR operating band n12

2.8.8.1 Test frequencies for NR operating band n7 and SCS 30 kHz

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink	Low	734	146800	30
		Mid	737.5	147500	
		High	741	148200	
	Uplink	Low	704	140800	--
		Mid	707.5	141500	
		High	711	142200	
15	Downlink	Low	736.5	147300	30
		Mid	737.5	147500	
		High	738.5	147700	
	Uplink	Low	706.5	141300	--
		Mid	707.5	141500	
		High	708.5	141700	

2.8.9 Reference test frequencies for NR operating band n14

2.8.9.1 Test frequencies for NR operating band n7 and SCS 15 kHz

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink	Low	760.5	151200	15
		Mid	763	152600	
		High	765.5	153100	
	Uplink	Low	790.5	158100	--
		Mid	793	158600	
		High	795.5	159100	
10	Downlink	Low	/	/	15
		Mid	763	152600	
		High	/	/	
	Uplink	Low	/	/	--
		Mid	793	158600	
		High	/	/	

2.8.10 Reference test frequencies for NR operating band n14

2.8.10.1 Test frequencies for NR operating band n7 and SCS 30 kHz

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink	Low	/	/	30
		Mid	763	152600	
		High	/	/	
	Uplink	Low	/	/	--
		Mid	793	158600	
		High	/	/	

2.8.11 Reference test frequencies for NR operating band n25

2.8.11.1 Test frequencies for NR operating band n26 and SCS 15 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink	Low	1932.5	386500	15
		Mid	1962.5	392500	
		High	1992.5	398500	
	Uplink	Low	1852.5	370500	-
		Mid	1882.5	376500	
		High	1912.5	382500	
10	Downlink	Low	1935	387000	15
		Mid	1962.5	392500	
		High	1990	398000	
	Uplink	Low	1855	371000	-
		Mid	1882.5	376500	
		High	1910	382000	
15	Downlink	Low	1937.5	387500	15
		Mid	1962.5	392500	
		High	1987.5	397500	
	Uplink	Low	1857.5	371500	-
		Mid	1882.5	376500	
		High	1907.5	381500	
20	Downlink	Low	1940	388000	15
		Mid	1962.5	392500	
		High	1985	397000	
	Uplink	Low	1860	372000	-
		Mid	1882.5	376500	
		High	1905	381000	
25	Downlink	Low	1942.5	388500	15
		Mid	1962.5	392500	
		High	1982.5	396500	
	Uplink	Low	1862.5	372500	-
		Mid	1882.5	376500	
		High	1902.5	380500	
30	Downlink	Low	1945	389000	15
		Mid	1962.5	392500	
		High	1980	396000	
	Uplink	Low	1865	373000	-
		Mid	1882.5	376500	
		High	1900	380000	
35	Downlink	Low	1947.5	389500	15
		Mid	1962.5	392500	
		High	1977.5	395500	
	Uplink	Low	1867.5	373500	-
		Mid	1882.5	376500	
		High	1897.5	379500	
40	Downlink	Low	1950	390000	15
		Mid	1962.5	392500	
		High	1975	395000	
	Uplink	Low	1870	374000	-
		Mid	1882.5	376500	
		High	1895	379000	

2.8.12 Reference test frequencies for NR operating band n25

2.8.12.1 Test frequencies for NR operating band n26 and SCS 30 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink	Low	1935	387000	30
		Mid	1962.5	392500	
		High	1990	398000	
	Uplink	Low	1855	371000	-
		Mid	1882.5	376500	
		High	1910	382000	
15	Downlink	Low	1937.5	387500	30
		Mid	1962.5	392500	
		High	1987.5	397500	
	Uplink	Low	1857.5	371500	-
		Mid	1882.5	376500	
		High	1907.5	381500	
20	Downlink	Low	1940	388000	30
		Mid	1962.5	392500	
		High	1985	397000	
	Uplink	Low	1860	372000	-
		Mid	1882.5	376500	
		High	1905	381000	
25	Downlink	Low	1942.5	388500	30
		Mid	1962.5	392500	
		High	1982.5	396500	
	Uplink	Low	1862.5	372500	-
		Mid	1882.5	376500	
		High	1902.5	380500	
30	Downlink	Low	1945	389000	30
		Mid	1962.5	392500	
		High	1980	396000	
	Uplink	Low	1865	373000	-
		Mid	1882.5	376500	
		High	1900	380000	
35	Downlink	Low	1947.5	389500	30
		Mid	1962.5	392500	
		High	1977.5	395500	
	Uplink	Low	1867.5	373500	-
		Mid	1882.5	376500	
		High	1897.5	379500	
40	Downlink	Low	1950	390000	30
		Mid	1962.5	392500	
		High	1975	395000	
	Uplink	Low	1870	374000	-
		Mid	1882.5	376500	
		High	1895	379000	

2.8.13 Reference test frequencies for NR operating band n38

2.8.13.1 Test frequencies for NR operating band n38 and SCS 15 kHz

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink & Uplink	Low	2572.5	514500	15
		Mid	2595	519000	
		High	2617.5	523500	
10	Downlink & Uplink	Low	2575	515000	15
		Mid	2595	519000	
		High	2615	523000	
15	Downlink & Uplink	Low	2577.5	515500	15
		Mid	2595	519000	
		High	2612.5	522500	
20	Downlink & Uplink	Low	2580	516000	15
		Mid	2595	519000	
		High	2610	522000	
25	Downlink & Uplink	Low	2582.5	516500	15
		Mid	2595	519000	
		High	2607.5	521500	
30	Downlink & Uplink	Low	2585	517000	15
		Mid	2595	519000	
		High	2605	521000	
40	Downlink & Uplink	Low	2590	518000	15
		Mid	2595	519000	
		High	2600	520000	

2.8.14 Reference test frequencies for NR operating band n38

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

Bandwidth [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink & Uplink	Low	2575	515000	30
		Mid	2595	519000	
		High	2615	523000	
15	Downlink & Uplink	Low	2577.5	515500	30
		Mid	2595	519000	
		High	2612.5	522500	
20	Downlink & Uplink	Low	2580	516000	30
		Mid	2595	519000	
		High	2610	522000	
25	Downlink & Uplink	Low	2582.5	516500	30
		Mid	2595	519000	
		High	2607.5	521500	
30	Downlink & Uplink	Low	2585	517000	30
		Mid	2595	519000	
		High	2605	521000	
40	Downlink & Uplink	Low	2590	518000	30
		Mid	2595	519000	
		High	2600	520000	

2.8.15 Reference test frequencies for NR operating band n41

2.8.15.1 Test frequencies for NR operating band n41 and SCS 15 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink & Uplink	Low	2501.01	500202	15
		Mid	2593.005	518601	
		High	2685	537000	
15	Downlink & Uplink	Low	2503.5	500700	15
		Mid	2593.005	518601	
		High	2682.495	536499	
20	Downlink & Uplink	Low	2506.005	501201	15
		Mid	2593.005	518601	
		High	2679.99	535998	
30	Downlink & Uplink	Low	2511	502200	15
		Mid	2593.005	518601	
		High	2674.993	534999	
40	Downlink & Uplink	Low	2516.01	503202	15
		Mid	2593.005	518601	
		High	2670	534000	
50	Downlink & Uplink	Low	2521.005	504201	15
		Mid	2593.005	518601	
		High	2664.99	532998	

2.8.16 Reference test frequencies for NR operating band n41

2.8.16.1 Test frequencies for NR operating band n41 and SCS 30 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink & Uplink	Low	2501.01	500202	30
		Mid	2592.99	518598	
		High	2685	537000	
15	Downlink & Uplink	Low	2503.5	500700	30
		Mid	2592.99	518598	
		High	2682.48	536496	
20	Downlink & Uplink	Low	2506.02	501204	30
		Mid	2592.99	518598	
		High	2679.99	535998	
30	Downlink & Uplink	Low	2511	502200	30
		Mid	2592.99	518598	
		High	2674.98	534996	
40	Downlink & Uplink	Low	2516.01	503202	30
		Mid	2592.99	518598	
		High	2670	534000	
50	Downlink & Uplink	Low	2521.02	504204	30
		Mid	2592.99	518598	
		High	2664.99	532998	
60	Downlink & Uplink	Low	2526	505200	30
		Mid	2592.99	518598	
		High	2659.98	531996	
70	Downlink & Uplink	Low	2531.01	506202	30
		Mid	2592.29	518598	
		High	2655	531000	
80	Downlink & Uplink	Low	2536.02	507204	30
		Mid	2592.99	518598	
		High	2649.99	529998	
90	Downlink & Uplink	Low	2541	508200	30
		Mid	2592.99	518598	
		High	2644.98	528996	
100	Downlink & Uplink	Low	2546.01	509202	30
		Mid	2592.99	518598	
		High	2640	528000	

2.8.17 Reference test frequencies for NR operating band n48

2.8.17.1 Test frequencies for NR operating band n48 and SCS 15 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink & Uplink	Low	3552.51	636834	15
		Mid	3625.005	641667	
		High	3697.5	646500	
10	Downlink & Uplink	Low	3555	637000	15
		Mid	3624.99	641666	
		High	3694.98	646332	
15	Downlink & Uplink	Low	3557.52	637168	15
		Mid	3624.99	641666	
		High	3692.49	646166	
20	Downlink & Uplink	Low	3560.01	637334	15
		Mid	3624.99	641666	
		High	3690	646000	
30	Downlink & Uplink	Low	3565.02	637668	15
		Mid	3624.99	641666	
		High	3684.99	645666	
40	Downlink & Uplink	Low	3570	638000	15
		Mid	3624.99	641666	
		High	3679.98	645332	
50	Downlink & Uplink	Low	3575.01	638334	15
		Mid	3624.99	641666	
		High	3675	645000	

2.8.18 Reference test frequencies for NR operating band n48

2.8.18.1 Test frequencies for NR operating band n48 and SCS 30 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink & Uplink	Low	3555	637000	30
		Mid	3624.99	641666	
		High	3694.98	646332	
15	Downlink & Uplink	Low	3557.52	637168	30
		Mid	3624.99	641666	
		High	3692.49	646166	
20	Downlink & Uplink	Low	3560.01	637334	30
		Mid	3624.99	641666	
		High	3690	646000	
30	Downlink & Uplink	Low	3565.02	637668	30
		Mid	3624.99	641666	
		High	3684.99	645666	
40	Downlink & Uplink	Low	3570	638000	30
		Mid	3624.99	641666	
		High	3679.98	645332	
50	Downlink & Uplink	Low	3575.01	638334	30
		Mid	3624.99	641666	
		High	3675	645000	
60	Downlink & Uplink	Low	3580.02	638668	30
		Mid	3624.99	641666	
		High	3669.99	644666	
80	Downlink & Uplink	Low	3590.01	639334	30
		Mid	3624.99	641666	
		High	3660	644000	
90	Downlink & Uplink	Low	3595.02	639668	30
		Mid	3624.99	641666	
		High	3654.99	643666	
100	Downlink & Uplink	Low	3600	640000	30
		Mid	3624.99	641666	
		High	3649.98	643332	

2.8.19 Reference test frequencies for NR operating band n66

2.8.19.1 Test frequencies for NR operating band n66 and SCS 15 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink	Low	2112.5	422500	15
		Mid	2145	429000	
		High	2177.5	435500	
	Uplink	Low	1712.5	342500	-
		Mid	1745	349000	
		High	1777.5	355500	
10	Downlink	Low	2115	423000	15
		Mid	2145	429000	
		High	2175	435000	
	Uplink	Low	1715	343000	-
		Mid	1745	349000	
		High	1775	355000	
15	Downlink	Low	2117.5	423500	15
		Mid	2145	429000	
		High	2172.5	434500	
	Uplink	Low	1717.5	343500	-
		Mid	1745	349000	
		High	1772.5	354500	
20	Downlink	Low	2120	424000	15
		Mid	2145	429000	
		High	2170	434000	
	Uplink	Low	1720	344000	-
		Mid	1745	349000	
		High	1770	354000	
25	Downlink	Low	2122.5	424500	15
		Mid	2145	429000	
		High	2167.5	433500	
	Uplink	Low	1722.5	344500	-
		Mid	1745	349000	
		High	1767.5	353500	
30	Downlink	Low	2125	425000	15
		Mid	2145	429000	
		High	2165	433000	
	Uplink	Low	1725	345000	-
		Mid	1745	349000	
		High	1765	353000	
40	Downlink	Low	2130	426000	15
		Mid	2145	429000	
		High	2160	432000	
	Uplink	Low	1730	346000	-
		Mid	1745	349000	
		High	1760	352000	

2.8.20 Reference test frequencies for NR operating band n66

2.8.20.1 Test frequencies for NR operating band n66 and SCS 30 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink	Low	2115	423000	30
		Mid	2145	429000	
		High	2175	435000	
	Uplink	Low	1715	343000	-
		Mid	1745	349000	
		High	1775	355000	
15	Downlink	Low	2117.5	423500	30
		Mid	2145	429000	
		High	2172.5	434500	
	Uplink	Low	1717.5	343500	-
		Mid	1745	349000	
		High	1772.5	354500	
20	Downlink	Low	2120	424000	30
		Mid	2145	429000	
		High	2170	434000	
	Uplink	Low	1720	344000	-
		Mid	1745	349000	
		High	1770	354000	
25	Downlink	Low	2122.5	424500	30
		Mid	2145	429000	
		High	2167.5	433500	
	Uplink	Low	1722.5	344500	-
		Mid	1745	349000	
		High	1767.5	353500	
30	Downlink	Low	2125	425000	30
		Mid	2145	429000	
		High	2165	433000	
	Uplink	Low	1725	345000	-
		Mid	1745	349000	
		High	1765	353000	
40	Downlink	Low	2130	426000	30
		Mid	2145	429000	
		High	2160	432000	
	Uplink	Low	1730	346000	-
		Mid	1745	349000	
		High	1760	352000	

2.8.21 Reference test frequencies for NR operating band n71

2.8.21.1 Test frequencies for NR operating band n71 and SCS 15 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
5	Downlink	Low	619.5	123900	15
		Mid	634.5	126900	
		High	649.5	129900	
	Uplink	Low	665.5	133100	-
		Mid	680.5	136100	
		High	695.5	139100	
10	Downlink	Low	622	124400	15
		Mid	634.5	126900	
		High	647	129400	
	Uplink	Low	668	133600	-
		Mid	680.5	136100	
		High	693	138600	
15	Downlink	Low	624.5	124900	15
		Mid	634.5	126900	
		High	644.5	128900	
	Uplink	Low	670.5	134100	-
		Mid	680.5	136100	
		High	690.5	138100	
20	Downlink	Low	627	125400	15
		Mid	634.5	126900	
		High	642	128400	
	Uplink	Low	673	134600	-
		Mid	680.5	136100	
		High	688	137600	

2.8.22 Reference test frequencies for NR operating band n71

2.8.22.1 Test frequencies for NR operating band n71 and SCS 30 kHz

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink	Low	622	124400	30
		Mid	634.5	126900	
		High	647	129400	
	Uplink	Low	668	133600	-
		Mid	680.5	136100	
		High	693	138600	
15	Downlink	Low	624.5	124900	30
		Mid	634.5	126900	
		High	644.5	128900	
	Uplink	Low	670.5	134100	-
		Mid	680.5	136100	
		High	690.5	138100	
20	Downlink	Low	627	125400	30
		Mid	634.5	126900	
		High	642	128400	
	Uplink	Low	673	134600	-
		Mid	680.5	136100	
		High	688	137600	

2.8.23 Reference test frequencies for NR operating band n77/n78

2.8.23.1 Test frequencies for NR operating band n77/n78 and SCS 15 kHz

3450-3550:

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink & Uplink	Low	3455.01	630334	15
		Mid	3499.995	633333	
		High	3544.995	636333	
15	Downlink & Uplink	Low	3457.5	630500	15
		Mid	3499.995	633333	
		High	3542.49	636166	
20	Downlink & Uplink	Low	3460.005	630667	15
		Mid	3499.995	633333	
		High	3540	636000	
30	Downlink & Uplink	Low	3465	631000	15
		Mid	3499.995	633333	
		High	3534.99	635666	
40	Downlink & Uplink	Low	3470.01	631334	15
		Mid	3499.995	633333	
		High	3529.995	635333	
50	Downlink & Uplink	Low	3475.005	631667	15
		Mid	3499.995	633333	
		High	3525	635000	

2.8.24 Reference test frequencies for NR operating band n77/n78

2.8.24.1 Test frequencies for NR operating band n77/n78 and SCS 30 kHz

3450-3550:

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink & Uplink	Low	3455.01	630334	30
		Mid	3500.01	633334	
		High	3545.01	636334	
15	Downlink & Uplink	Low	3457.5	630500	30
		Mid	3500.01	633334	
		High	3542.49	636166	
20	Downlink & Uplink	Low	3460.02	630668	30
		Mid	3500.01	633334	
		High	3540	636000	
30	Downlink & Uplink	Low	3465	631000	30
		Mid	3500.01	633334	
		High	3534.99	635666	
40	Downlink & Uplink	Low	3470.01	631334	30
		Mid	3500.01	633334	
		High	3530.01	635334	
50	Downlink & Uplink	Low	3475.02	631668	30
		Mid	3500.01	633334	
		High	3525	635000	
60	Downlink & Uplink	Low	3480	632000	30
		Mid	3500.01	633334	
		High	3519.99	634666	
70	Downlink & Uplink	Low	3485.01	632334	30
		Mid	3500.01	633334	
		High	3515.01	634334	
80	Downlink & Uplink	Low	3490.02	632668	30
		Mid	3500.01	633334	
		High	3510	634000	
90	Downlink & Uplink	Low	3495	633000	30
		Mid	3500.01	633334	
		High	3504.99	633666	
100	Downlink & Uplink	Low	\	\	30
		Mid	3500.01	633334	
		High	\	\	

N77 3700-3980:

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink & Uplink	Low	3705	647000	30
		Mid	3840	656000	
		High	3975	665000	
15	Downlink & Uplink	Low	3707.52	647168	30
		Mid	3840	656000	
		High	3972.48	664832	
20	Downlink & Uplink	Low	3710.01	647334	30
		Mid	3840	656000	
		High	3969.99	664666	
30	Downlink & Uplink	Low	3714.99	647666	30
		Mid	3840	656000	
		High	3965.01	664334	
40	Downlink & Uplink	Low	3720	648000	30
		Mid	3840	656000	
		High	3960	664000	
50	Downlink & Uplink	Low	3725.01	648334	30
		Mid	3840	656000	
		High	3954.99	663666	
60	Downlink & Uplink	Low	3730.02	648668	30
		Mid	3840	656000	
		High	3949.98	663332	
70	Downlink & Uplink	Low	3735	649000	30
		Mid	3840	656000	
		High	3945	663000	
80	Downlink & Uplink	Low	3740.01	649334	30
		Mid	3840	656000	
		High	3939.99	662666	
90	Downlink & Uplink	Low	3745.02	649668	30
		Mid	3840	656000	
		High	3934.98	662332	
100	Downlink & Uplink	Low	3750	650000	30
		Mid	3840	656000	
		High	3930	662000	

N78 3700-3800:

CBW [MHz]	Range		Carrier centre [MHz]	Carrier centre [ARFCN]	SS block SCS [kHz]
10	Downlink & Uplink	Low	3705	647000	30
		Mid	3750	650000	
		High	3795	653000	
15	Downlink & Uplink	Low	3707.52	647168	30
		Mid	3750	650000	
		High	3792.48	652832	
20	Downlink & Uplink	Low	3710.01	647334	30
		Mid	3750	650000	
		High	3789.99	652666	
30	Downlink & Uplink	Low	3715.02	647668	30
		Mid	3750	650000	
		High	3785.01	652334	
40	Downlink & Uplink	Low	3720	648000	30
		Mid	3750	650000	
		High	3780	652000	
50	Downlink & Uplink	Low	3725.01	648334	30
		Mid	3750	650000	
		High	3774.99	651666	
60	Downlink & Uplink	Low	3730.02	648668	30
		Mid	3750	650000	
		High	3769.98	651332	
70	Downlink & Uplink	Low	3735	649000	30
		Mid	3750	650000	
		High	3765	651000	
80	Downlink & Uplink	Low	3740.01	649334	30
		Mid	3750	650000	
		High	3759.99	650666	
90	Downlink & Uplink	Low	3745.02	649668	30
		Mid	3750	650000	
		High	3754.98	650332	
100	Downlink & Uplink	Low	/	/	30
		Mid	3750	650000	
		High	/	/	

3 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2026/1/14	2027/1/13
2	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-15	2025/11/21	2026/11/20
3	MXG Vector signal genitor	KEYSIGHT	N5182B	SUWI-01-38-01	2026/1/14	2027/1/13
4	Signal Generator	ROHDE&SCHWARZ	SMW200A	SUWI-01-07-08	2026/1/14	2027/1/13
5	Signal Generator	ROHDE&SCHWARZ	SMW100A	SUWI-01-08-01	2026/1/14	2027/1/13
6	MXG Vector Signal Generator	ROHDE&SCHWARZ	SMR20	SUWI-01-33-01	2025/11/21	2026/11/20
7	Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-13	2026/4/22	2027/4/21
8	Wideband Radio Communication Test Station	Anritsu	MT8000A	SUWI-01-34-02	2025/11/21	2026/11/20
9	Wideband Radio Communication Tester	Anritsu	MT8821C	SUWI-01-26-03	2025/11/21	2026/11/20
10	Power meter	Anritsu	ML2495A	SUWI-01-31-01	2025/11/21	2026/11/20
11	Pulse power sensor	Anritsu	MA2411B	SUWI-01-32-01	2025/11/21	2026/11/20
12	DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	2026/1/14	2027/1/13
13	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-07	2026/2/11	2027/2/10
15	Measurement Software	TST	TST 272 V2.02	SUWI-03-55-03	NCR	NCR
16	RF Control unit	TST	TSCB3023R2	SUWI-02-20-01	NCR	NCR
17	RFCables	Tonscend	NA	SUWI-01-03-01	2026/1/15	2027/1/14
RF Radiated Test						
1	Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-01	2026/6/9	2029/6/8
2	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2026/1/14	2027/1/13
3	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-07	2025/11/20	2026/11/19
4	Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2026/1/14	2027/1/13
5	Signal Generator	ROHDE&SCHWARZ	SMW100A	SUWI-01-18-01	2026/1/14	2027/1/13
6	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	2025/11/29	2027/11/28
7	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-02	2025/5/7	2027/5/6
8	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	2025/5/7	2027/5/6
9	Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	2025/5/7	2027/5/6
10	Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	2026/1/14	2027/1/13
11	Amplifier	Tonscend	TAP01018050	SUWI-01-14-02	2026/1/14	2027/1/13
12	Amplifier	Tonscend	TAP18040048	SUWI-01-14-03	2026/1/14	2027/1/13
13	Wideband Radio Communication Tester	Anritsu	MT8820C	SUWI-01-26-01	2025/8/25	2026/8/24
14	Wideband Radio Communication Tester	Anritsu	MT8821C	SUWI-01-26-03	2025/8/25	2026/8/24
15	Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-09	2025/8/26	2026/8/25
16	Radio Communication Analyzer	StarPoint	SP9500E	SUWI-01-28-06	2025/11/21	2026/11/20
17	Signal Generator	ROHDE&SCHWARZ	SMB100A	SUWI-01-08-01	2026/1/14	2027/1/13
18	DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	2026/1/14	2027/1/13



19	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-05	2026/2/11	2027/2/10
20	Measurement Software	Tonscend	JS32-RE 4.0.0.0	SUWI-02-09-06	NCR	NCR
21	RF Control unit	Tonscend	JS0806-1	SUWI-02-20-01	NCR	NCR
22	RFCables	Tonscend	NA	SUWI-01-03-02	NCR	NCR

Remark: NCR=No Calibration Requirement.

4 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	Radiated Emission	± 3.13dB (9k -30MHz)
		± 4.8dB (30M -1GHz)
		± 4.8dB (1GHz to 18 GHz)
		± 4.8dB (Above 18GHz)
Remark: The U _{lab} (lab Uncertainty) is less than U _{cispr/ETSI} (CISPR/ETSI Uncertainty), so the test results – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit; – non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.		

5 Description of Tests

5.1 Conducted Output Power

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 5.2.1

The transmitter output was connected to a calibrated coaxial cable 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

5.2 Effective (Isotropic) Radiated Power of Transmitter

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 5.8.4

Calculate power in dBm by the following formula:

$ERP\ (dBm) = \text{Conducted Power (dBm)} + \text{antenna gain (dBd)}$

$EIRP(dBm) = \text{Conducted Power (dBm)} + \text{antenna gain (dBi)}$

$EIRP=ERP+2.15dB$

5.3 Field Strength of Spurious Radiation

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 5.8

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.

$$E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dB}\mu\text{V)} + (\text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)} - \text{AMP(dB)})$$

$$\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20 \log D - 104.8; \text{ where D is the measurement distance in meters}$$

Above 1GHz test procedure as below:

- 1) 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:

$$E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dB}\mu\text{V)} + (\text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)} - \text{AMP(dB)})$$

$$\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20 \log D - 104.8; \text{ where D is the measurement distance in meters}$$
- 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. At a measurement distance of 1 meter the limit line was increased by $20 \cdot \log(3/1) = 9.54 \text{ dB}$.

Remark: Reference test setup 2

Remark:

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

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Level = Reading Level + AF + Factor -95.26

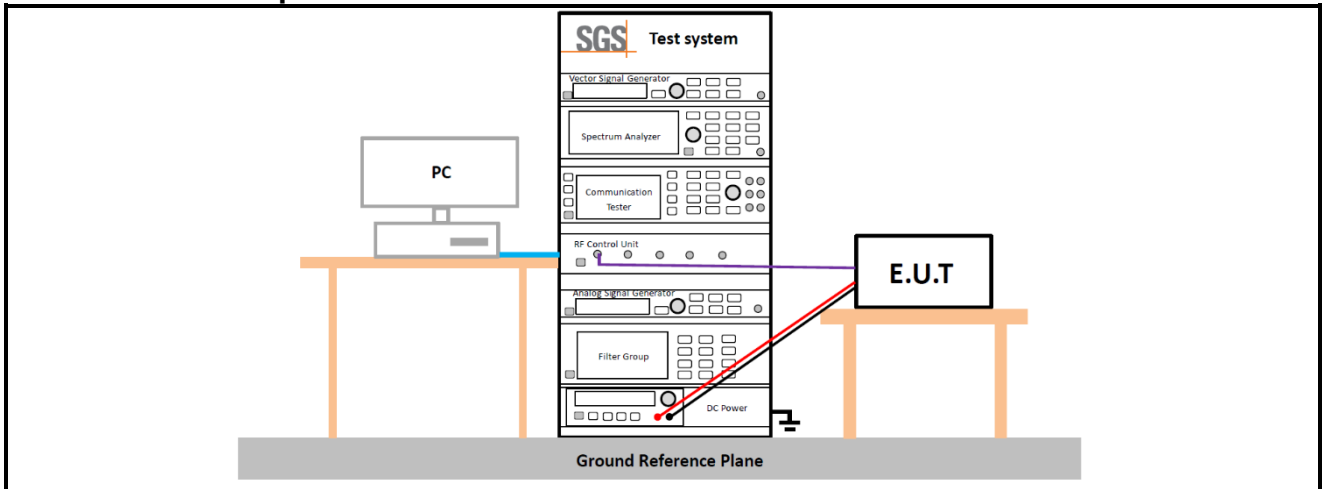
Margin = Limit – Level

- 2) Scan from 9kHz to 40GHz, The disturbance between 9KHz to 30MHz and 18GHz to 40GHz was very low, and the harmonics were the highest point could be found when testing, so only the 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.

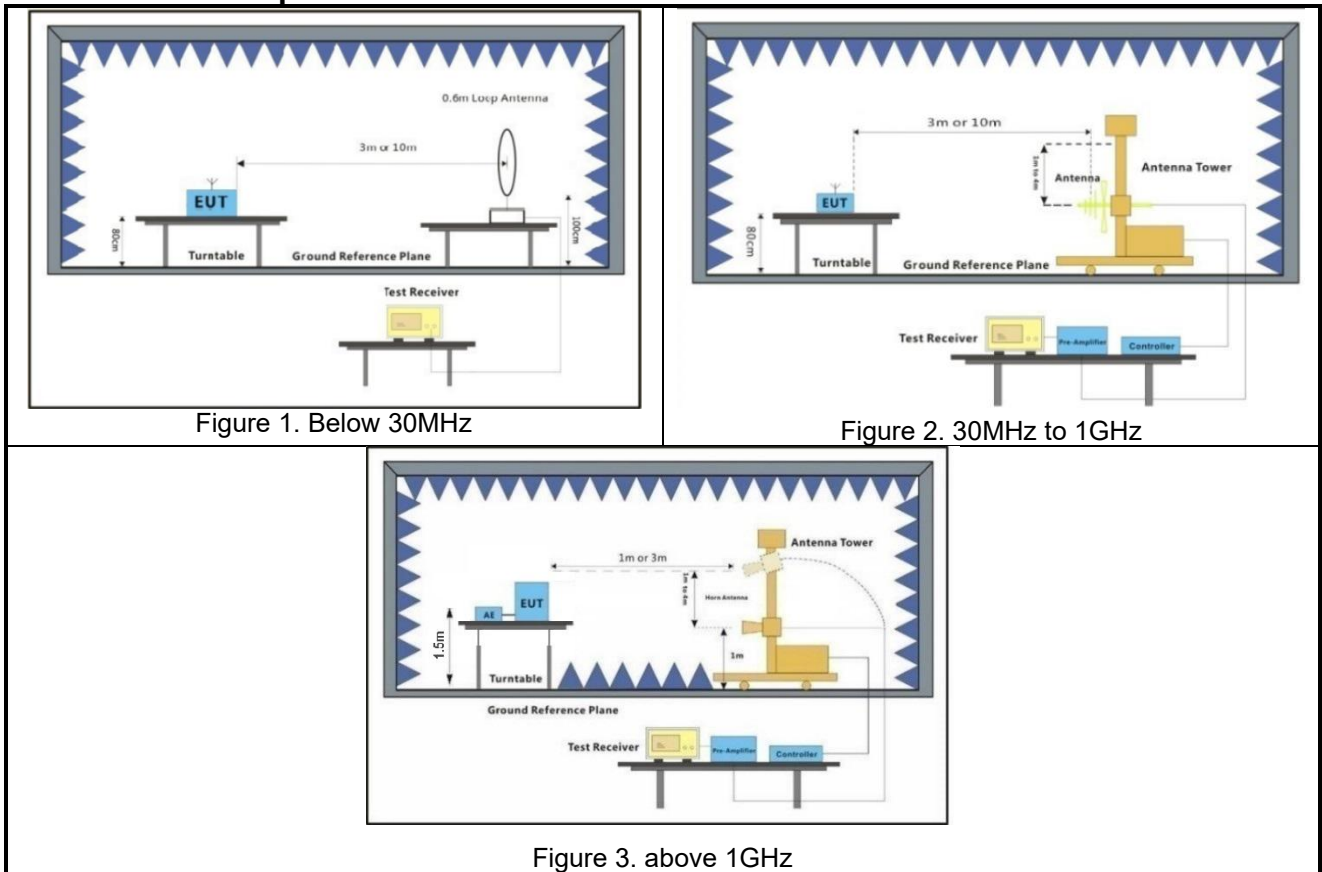
- 3) All modes have been tested, but only the worst case data displayed in this report.

5.4 Test Setups

5.4.1 Test Setup 1



5.4.2 Test Setup 2



5.5 Test Conditions

Transmit Output Power Data - Average Power, Total	
Test Case	Test Conditions
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)
Test Mode	NR/TM1;NR/TM2; NR/TM3; NR/TM4; NR/TM5; NR/TM6; NR/TM7; NR/TM8; NR/TM9
Field Strength of Spurious Radiation	
Test Case	Test Conditions
Test Environment	Ambient Climate & Rated Voltage
Test Setup	Test Setup 2
RF Channels (TX)	L, M, H (L= low channel, M= middle channel, H= high channel)
Test Mode	NR/TM2 Remark: All bandwidth and modulation of NR have been pre tested, and only the worst results are reflected in the report.

6 Appendixes

Appendix A.3	Setup Photo
Appendix B.24	NR Band n2
Appendix B.25	NR Band n5
Appendix B.26	NR Band n7
Appendix B.27	NR Band n12
Appendix B.28	NR Band n14
Appendix B.29	NR Band n25
Appendix B.30	NR Band n38
Appendix B.31	NR Band n41
Appendix B.32	NR Band n48
Appendix B.33	NR Band n66
Appendix B.34	NR Band n71
Appendix B.35	NR Band n77(3450-3550)
Appendix B.36	NR Band n77(3700-3980)
Appendix B.37	NR Band n78(3450-3550)
Appendix B.38	NR Band n78(3700-3800)
Appendix C.5	RSE for SA
Appendix C.6	RSE for NSA

---End of Report---