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### **TEST REPORT**

Test Result :	PASS *
Date of Issue:	2024/01/16
Date of Test:	2023/10/28 to 2024/01/16
Date of Receipt:	2023/10/24
	47 CFR Part 90
	47 CFR Part 27
	47 CFR Part 24
Standards:	47 CFR Part 2 47 CFR Part 22
FCC ID:	LHJ-FE5NAR131
Trade Mark:	Continental
Model No.:	FE5NAR131
EUT Description:	FE5NAR131
Address of Manufacturer:	21440 West Lake Cook, Deer Park, Illinois 60010, USA
Manufacturer:	Continental Automotive Systems, Inc.
Address of Applicant:	21440 West Lake Cook, Deer Park, Illinois 60010, USA
Applicant:	Continental Automotive Systems, Inc.
••	
Application No.:	SEWA2310000127RG

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

Authorized Signature:

C(I

\*

Well Wei Wireless Laboratory Manager



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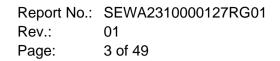
Revision Record					
Version	Chapter	Date	Modifier	Remark	
01		2024/01/16		Original	

Prepared By	(Levi Li) / Test Engineer
Checked By	Stone Ju (Stone Gu) / Reviewer



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### 2 Test Summary

### 2.1 GSM 850/UMTS Band 5

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913(a)(5)	ERP ≤ 7 W	Section 1 of Appendix B.1&B.5	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §22.355	≤ ±2.5ppm.	Section 2 of Appendix B.1&B.5	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 3 of Appendix B.1&B.5	Pass
Peak-Average Ratio	§22.913(d)	Limit≤13 dB	Section 4 of Appendix B.1&B.5	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 5 of Appendix B.1&B.5	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.1&B.5	Pass
Field Strength of Spurious Radiation	§2.1053, §22.917(a)	FCC: ≤ -13 dBm/100 kHz.	Section 6 of Appendix B.1&B.5	Pass



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### 2.2 LTE Band 5/26(824~849 MHz)

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Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §22.355	≤ ±2.5ppm.	Section 1 of Appendix B.8&B.16	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.8&B.16	Pass
Peak-Average Ratio	§22.913(d)	Limit≤13 dB	Section 3 of Appendix B.8&B.16	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 4 of Appendix B.8&B.16	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 4 of Appendix B.8&B.16	Pass
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913(a)(5)	ERP ≤ 7 W	Section 5 of Appendix B.8&B.16	Pass
Field Strength of Spurious Radiation	§2.1053, §22.917(a)	FCC: ≤ -13 dBm/100 kHz.	Section 6 of Appendix B.8&B.16	Pass



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#### 2.3 GSM 1900/UMTS Band 2

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Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §24.232(c)	EIRP ≤ 2 W	Section 1 of Appendix B.2&B.3	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §24.235	Within authorized bands of operation/frequency block.	Section 2 of Appendix B.2&B.3	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 3 of Appendix B.2&B.3	Pass
Peak-Average Ratio	§24.232(d)	Limit≤13 dB	Section 4 of Appendix B.2&B.3	Pass
Spurious Emission at Antenna Terminals	§2.1051, §24.238(a)	<ul> <li>≤ -13 dBm/1 MHz, from 9 kHz to 10<sup>th</sup> harmonics but outside authorized operating frequency ranges.</li> </ul>	Section 5 of Appendix B.2&B.3	Pass
Band Edges Compliance	§2.1051, §24.238(a)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Section 5 of Appendix B.2&B.3	Pass
Field Strength of Spurious Radiation	§2.1053, §24.238(a)	≤ -13 dBm/1 MHz.	Section 6 of Appendix B.2&B.3	Pass



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Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §24.235	Within authorized bands of operation/frequency block.	Section 1 of Appendix B.6&B.14	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.6&B.14	Pass
Peak-Average Ratio	§24.232(d)	Limit≤13 dB	Section 3 of Appendix B.6&B.14	Pass
Spurious Emission at Antenna Terminals	§2.1051, §24.238(a)	<ul> <li>≤ -13 dBm/1 MHz, from 9 kHz to 10<sup>th</sup> harmonics but outside authorized operating frequency ranges.</li> </ul>	Section 4 of Appendix B.6&B.14	Pass
Band Edges Compliance	§2.1051, §24.238(a)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Section 4 of Appendix B.6&B.14	Pass
Effective (Isotropic) Radiated Power Output Data	§2.1046, §24.232(c)	EIRP ≤ 2 W	Section 5 of Appendix B.6&B.14	Pass
Field Strength of Spurious Radiation	§2.1053, §24.238(a)	≤ -13 dBm/1 MHz.	Section 6 of Appendix B.6&B.14	Pass

### 2.4 LTE Band 2 /25

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#### 2.5 UMTS Band 4

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(d)(4)	EIRP ≤ 1 W	Section 1 of Appendix B.4	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Section 2 of Appendix B.4	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 3 of Appendix B.4	Pass
Peak-Average Ratio	§27.50(d)(5)	Limit≤13 dB	Section 4 of Appendix B.4	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(h)	<ul> <li>≤ -13 dBm/1 MHz, from 9 kHz to 10<sup>th</sup> harmonics but outside authorized operating frequency ranges.</li> </ul>	Section 5 of Appendix B.4	Pass
Band Edges Compliance	§2.1051, §27.53(h)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Section 5 of Appendix B.4	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(h)	≤ -13 dBm/1 MHz.	Section 6 of Appendix B.4	Pass



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### 2.6 LTE Band 4 /66

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Section 1 of Appendix B.7&B.18	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.7&B.18	Pass
Peak-Average Ratio	§27.50(d)(5)	Limit≤13 dB	Section 3 of Appendix B.7&B.18	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(h)	<ul> <li>≤ -13 dBm/1 MHz, from 9 kHz to 10<sup>th</sup> harmonics but outside authorized operating frequency ranges.</li> </ul>	Section 4 of Appendix B.7&B.18	Pass
Band Edges Compliance	§2.1051, §27.53(h)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Section 4 of Appendix B.7&B.18	Pass
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(d)(4)	EIRP ≤ 1 W	Section 5 of Appendix B.7&B.18	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(h)	≤ -13 dBm/1 MHz.	Section 6 of Appendix B.7&B.18	Pass



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Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Section 1 of Appendix B.9&B.17	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.9&B.17	Pass
Peak-Average Ratio		≤13 dB	Section 3 of Appendix B.9&B.17	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(m)	25dBm/ 1 MHz 9 kHz 25 MHz 25 MHz 25 dBm/ 1 MHz 1 MH	Section 4 of Appendix B.9&B.17	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 4 of Appendix B.9&B.17	Pass
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(h)(2)	EIRP ≤ 2W	Section 5 of Appendix B.9&B.17	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(m)	25 dBm/ 1 MHz 9 kHz 9 kHz 25 dBm/ 1 MHz 9 kHz 25 dBm/ 1 MHz 1 M	Section 6 of Appendix B.9&B.17	Pass

### 2.7 LTE Band 7/41

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Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Section 1 of Appendix B.10&B.13	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.10&B.13	Pass
Peak-Average Ratio		Limit≤13 dB	Section 3 of Appendix B.10&B.13	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(g)	FCC: ≤ -13 dBm/100 kHz, from 9 kHz to 10 <sup>th</sup> harmonics but outside authorized operating frequency ranges.	Section 4 of Appendix B.10&B.13	Pass
Band Edges Compliance	§2.1051, §27.53(g)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Section 4 of Appendix B.10&B.13	Pass
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(c)(10)	ERP ≤ 3 W.	Section 5 of Appendix B.10&B.13	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(g)	FCC: ≤ -13 dBm/100 kHz.	Section 6 of Appendix B.10&B.13	Pass

#### 2.8 LTE Band 12/17

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Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Section 1 of Appendix B.11	Pass
Bandwidth	§2.1049,	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.11	Pass
Peak-Average Ratio		Limit≤13 dB	Section 3 of Appendix B.11	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(c) §27.53(f)	<ul> <li>≤ -13 dBm/100 kHz, from 9 kHz to 10<sup>th</sup> harmonics but outside authorized operating frequency ranges.</li> <li>On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.</li> <li>For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions 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.</li> </ul>	Section 4 of Appendix B.11	Pass
Band Edges Compliance	§2.1051, §27.53(c)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Section 4 of Appendix B.11	Pass
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(b)(10)	ERP ≤ 3 W.	Section 5 of Appendix B.11	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(c) §27.53(f)	FCC: ≤ -13 dBm/100 kHz. For operations in the 746-758 MHz, 775- 788 MHz, and 805-806 MHz bands, emissions 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.	Section 6 of Appendix B.11	Pass

### 2.9 LTE Band 13

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#### 2.10 LTE Band 14

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Test Item	FCC Rule No.	Requirements	Test Result	Verdict	
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §90.213	Within authorized bands of operation/frequency block.	Section 1 of Appendix B.12	Pass	
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.12	Pass	
Peak-Average Ratio		Limit≤13 dB	Section 3 of Appendix B.12	Pass	
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.	Section 4 of Appendix B.12	Pass	
Band Edges Compliance	§2.1051 §90.543(e)(2)(3)	<ul> <li>(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.</li> </ul>	Section 4 of Appendix B.12	Pass	
Effective (Isotropic) Radiated Power Output Data	§2.1046 §90.542(a)	ERP ≤ 3 W	Section 5 of Appendix B.12	Pass	
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.	Section 6 of Appendix B.12	Pass	



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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 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.	Section 7 of Appendix B.12	Pass



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### 2.11 LTE Band 26(814~824 MHz)

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Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §90.213	Within authorized bands of operation/frequency block.	Section 1 of Appendix B.15	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.15	Pass
Peak-Average Ratio		Limit≤13 dB	Section 3 of Appendix B.15	Pass
Spurious Emission at Antenna Terminals	§2.1051, §90.691	< 43 + 10Log10(P[Watts]) for all out-of-band emissions	Section 4 of Appendix B.15	Pass
Emission Mask	§2.1051 § 90.691(a)	For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50+10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.	Section 4 of Appendix B.15	Pass
Transmitter Conducted Power Output	§2.1046, §90.635(b)	< 100 W.	Section 5 of Appendix B.15	Pass
Field Strength of Spurious Radiation	§2.1053, §90.691	< 43 + 10Log10(P[Watts]) for all out-of-band emissions	Section 6 of Appendix B.15	Pass



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#### 2.12 LTE Band 71

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Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	within the authorized bands of operation.	Section 1 of Appendix B.19	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Section 2 of Appendix B.19	Pass
Peak-Average Ratio		Limit≤13 dB	Section 3 of Appendix B.19	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(g)	<ul> <li>≤ -13 dBm/1 MHz, from 9 kHz to 10<sup>th</sup> harmonics but outside authorized operating frequency ranges.</li> </ul>	Section 4 of Appendix B.19	Pass
Band Edges Compliance	§2.1051, §27.53(g)	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Section 4 of Appendix B.19	Pass
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(c)(10)	ERP ≤ 3 W	Section 5 of Appendix B.19	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(g)	≤ -13 dBm/1 MHz.	Section 6 of Appendix B.19	Pass



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### **3** General Information

### 3.1 Details of Client

Applicant:	Continental Automotive Systems, Inc.
Address of Applicant:	21440 West Lake Cook, Deer Park, Illinois 60010, USA
Manufacturer:	Continental Automotive Systems, Inc.
Address of Manufacturer:	21440 West Lake Cook, Deer Park, Illinois 60010, USA

### 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 Park, Suzho Area, China (Jiangsu) Pilot Free Trade Zone	
Post code:	215000	
Test engineer:	Levi Li, 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

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EUT Description:	FE5NAR131					
Model No.:	FE5NAR131					
Trade Mark:	Continental					
Hardware Version:	P2-1					
Software Version:	MODEMSA515M_L	.E2.1_0 <sup>2</sup>	1.18.52.01			
Power Supply:	DC 14V					
	RF Conducted	35066	7090000136			
IMEI:	RSE	35066	7090000169			
Antenna Type:	External, Integ	rated				
HPUE Power Class:	LTE Band 41					
	GSM850:	2.560	Bi (Ant1)	GSM1900:		1.93dBi (Ant1)
	WCDMA Band II:	1.93dBi (Ant1) WCDMA Band IV:		and IV:	1.93dBi (Ant1)	
	WCDMA Band V:	2.560	Bi (Ant1)			
	LTE Band 2:	1.930	Bi (Ant1)	LTE Band	4:	1.93dBi (Ant1)
	LTE Band 5:	2.560	Bi (Ant1)	LTE Band	7:	1.24dBi (Ant1)
	LTE Band 12:	-0.32	dBi (Ant1)	LTE Band	13:	-0.32dBi (Ant1)
Antenna Gain:	LTE Band 14:	-0.32	dBi (Ant1)	LTE Band	17:	-0.32dBi (Ant1)
	LTE Band 25:	1.930	Bi (Ant1)	LTE Band	26:	2.56dBi (Ant1)
	LTE Band 41:	1.240	Bi (Ant1)	LTE Band	66:	1.93dBi (Ant1)
	LTE Band 71:	0.940	Bi (Ant1)			
	Note: The antenna gain a manufacturer.	re derive	ed from the gain	information r	report pro	ovided by the
RF Cable:	4.5dB (Below 1GHz) 4.8dB (1.0~2.4GHz) 5.2dB (2.4~3.4GHz)			2.4~3.4GHz)		
Remark: 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.						



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### 3.5 Test Mode

Test Mode	Test Modes Description			
GSM/TM1	GSM system, GSM/GPRS, GMSK modulation			
GSM/TM2	GSM system, EGPRS, 8PSK modulation			
UMTS/TM1	JMTS system, WCDMA, QPSK modulation			
LTE/TM1	LTE system, QPSK modulation			
LTE/TM2 LTE system, 16QAM modulation				
LTE/TM3 LTE system, 64QAM modulation				
Remark: The test mode(s	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 %	44-46 % RH Ambient		
Value	Temperature(°C)	Voltage(Vdc)		
NTNV	22~23	4.0		
LTLV	-30	3.8		
LTHV	-30	4.2		
HTLV	50	3.8		
HTHV	50	4.2		
Remark:				
NV: Normal Voltage LV: L	w Extreme Test Voltage	IV: High Extreme Test Voltage		
NT: Normal Temperature LT: Lo	w Extreme Test Temperature	HT: High Extreme Test Temperature		

### 3.7 Description of Support Units

Description	Manufacture	Serial No			
PCB Mother Board	Continental	A2-C772-3210-7-00			
Test Antenna	Continental	TG.55.8113W			
Remark: all above the information of table are provided by client.					



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### 3.8 Technical Specification

Characteristics	Description						
Radio System Type	🖾 GSM	🖾 UMTS	⊠ LTE				
	Band		T)	<		RX	
	GSM 850		82	4 to 849	MHz	869 to 894	MHz
	GSM1900		18	50 to 19	10 MHz	1930 to 19	90 MHz
	UMTS Band II		18	50 to 19	10 MHz	1930 to 19	90 MHz
	UMTS Band IV	/	17	'10 to 17	55 MHz	2110 to 21	55 MHz
	UMTS Band V		82	4 to 849	MHz	869 to 894	MHz
	LTE Band 2		18	50 to 19	10 MHz	1930 to 19	90 MHz
	LTE Band 4		17	'10 to 17	55 MHz	2110 to 21	55 MHz
	LTE Band 5		82	4 to 849	MHz	869 to 894	MHz
	LTE Band 7		25	00 to 25	70 MHz	2620 to 26	90 MHz
Supported Frequency Range	LTE Band 12		69	699 to 716 MHz		729 to 746	MHz
Supported Frequency Mange	LTE Band 13		77	777 to 787 MHz		746 to 756 MHz	
	LTE Band 14		78	788 to 798 MHz		758 to 768 MHz	
	LTE Band 17		70	4 to 716	MHz	734 to 746	MHz
	LTE Band 25		18	50 to 19	15MHz	1930 to 19	95 MHz
	LTE Band 26		81	4 to 824	MH-7	859 to 869	MH-7
	(814 to 824 MHz)				00910009		
	LTE Band 26 (824 to 849 MHz)		824 to 849 MHz		869 to 894	MHz	
	LTE Band 41		2496 to 2690MHz		2496 to 2690MHz		
	LTE Band 66		17	'10 to 17	80 MHz	2110 to 2200 MHz	
	LTE Band 71		66	i3 to 698	MHz	617 to 652 MHz	
	GSM system:		$\square$	).2 MHz			
	UMTS system:	:	⊠!	5 MHz			
	LTE Band 2		×.	1.4 MHz	🖂 3 MHz	⊠5 MHz	🛛 10 MHz
Currented Channel Denducidth			×.	15 MHz	⊠20 MHz		
Supported Channel Bandwidth	LTE Band 4		Ń	1.4 MHz	🖂 3 MHz	⊠5 MHz	🛛 10 MHz
			Ň	15 MHz	⊠20 MHz		
	LTE Band 5		×.	1.4 MHz	🖂 3 MHz	⊠5 MHz	⊠10 MHz
	LTE Band 7		$\boxtimes$	5 MHz	🛛 10 MHz	🛛 15 MHz	20 MHz



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	LTE Band 12		⊠1.4 MHz	3 MHz	z 🛛 🖂 5 MHz	🛛 10 MHz
	LTE Band 13		⊠5 MHz	⊠10 MH	łz	
	LTE Band 14		⊠5 MHz	⊠10 MH	lz	
	LTE Band 17		⊠5 MHz	⊠10 MH	łz	
			⊠1.4 MHz	🖂 3 MHz	z 🛛 🖂 5 MHz	🛛 10 MHz
	LTE Band 25		🛛 15 MHz	⊠20 MH	łz	
	LTE Band 26(814-824)		⊠1.4 MHz	🖂 3 MHz	z 🛛 🛛 🖂 5 MHz	🛛 10 MHz
	LTE Band 26(824-849)	)	⊠1.4 MHz ⊠15 MHz	⊠3 MHz	z 🛛 🖂 5 MHz	⊠10 MHz
	LTE Band 41		⊠10 MHz	⊠10 MH	lz ⊠15 MHz	20 MHz
			⊠1.4 MHz	_		⊠10 MHz
	LTE Band 66		⊠15MHz			
	LTE Band 71		SMHz			20MHz
	Note: WCDMA support					
	case was tested and th				•	
Characteristics	Description					
	GSM:	GM	SK 8	PSK		
	GSM 850	247KGXW 2		48KG7W		
	GSM 1900	249	KGXW 2	54KG7W		
	UMTS:	QP	SK			
	Band II	4M1	17F9W			
	Band IV	4M1	18F9W			
Designation of Emissions	Band V	4M1	18F9W			
(Remark: the necessary bandwidth of which is the	E-UTRA:	QP	SK 10	6QAM	64QAM	
worst value from the		1M1	10G7D 1	M11W7D	1M11W7D	
measured occupied bandwidths for each type of		2M7	75G7D 2	M73W7D	2M75W7D	
channel bandwidth	LTE Band 2	4M5	54G7D 4	M56W7D	4M55W7D	
configuration.)		9M0	07G7D 9	M04W7D	9M06W7D	
		13N	/16G7D 13	3M6W7D	13M6W7D	
		18N	/1G7D 1	8M1W7D	18M1W7D	
		1M1	12G7D 1	M11W7D	1M12W7D	
	LTE Band 4	2M7	75G7D 2	M74W7D	2M75W7D	
		4M5	56G7D 4	M57W7D	4M56W7D	
		9M0	05G7D 9	M05W7D	9M07W7D	



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		13M6G7D		13M6W7D
		18M2G7D	18M1W7D	18M2W7D
		1M11G7D	1M11W7D	1M10W7D
		2M74G7D	2M76W7D	2M74W7D
L	LTE Band 5	4M57G7D	4M57W7D	4M56W7D
		9M03G7D	9M04W7D	9M06W7D
-		4M57G7D	4M55W7D	4M54W7D
		9M04G7D	9M05W7D	9M06W7D
	LTE Band 7	13M6G7D	13M6W7D	13M6W7D
		18M1G7D	18M1W7D	18M1W7D
		1M11G7D	1M10W7D	1M11W7D
		2M75G7D	2M75W7D	2M75W7D
	LTE Band 12	4M56G7D	4M54W7D	4M56W7D
		9M05G7D	9M04W7D	9M06W7D
	LTE Band 13	4M57G7D	4M55W7D	4M55W7D
		9M01G7D	9M04W7D	9M03W7D
	LTE Band 14	4M57G7D	4M56W7D	4M55W7D
		9M05G7D	9M05W7D	9M03W7D
	LTE Band 17	4M55G7D	4M57W7D	4M56W7D
		9M05G7D	9M07W7D	9M07W7D
		1M11G7D	1M11W7D	1M11W7D
		2M75G7D	2M74W7D	2M75W7D
	LTE Band 25	4M55G7D	4M57W7D	4M56W7D
		9M04G7D	9M04W7D	9M04W7D
		13M6G7D	13M6W7D	13M6W7D
		18M1G7D	18M1W7D	18M1W7D
		1M11G7D	1M11W7D	1M11W7D
L	LTE Band 26	2M74G7D	2M74W7D	2M73W7D
(	(814-824)	4M56G7D	4M55W7D	4M56W7D
		9M00G7D	9M04W7D	9M06W7D
	TE Bond 26	1M12G7D	1M11W7D	1M10W7D
	LTE Band 26 (824-849)	2M75G7D	2M75W7D	2M74W7D
		4M54G7D	4M54W7D	4M55W7D



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		9M05G7D		9M02W7D
		13M6G7D	13M6W7D	13M6W7D
		4M56G7D	4M57W7D	4M55W7D
	LTE Band 41	9M04G7D	9M06W7D	9M05W7D
		13M6G7D	13M6W7D	13M6W7D
	1	18M1G7D	18M1W7D	18M1W7D
	LTE Band 66	1M11G7D	1M11W7D	1M11W7D
		2M75G7D	2M75W7D	2M75W7D
		4M57G7D	4M56W7D	4M56W7D
		9M04G7D	9M04W7D	9M05W7D
		13M6G7D	13M6W7D	13M7W7D
		18M2G7D	18M2W7D	18M2W7D
		4M57G7D	4M57W7D	4M55W7D
	LTE Band 71	9M05G7D	9M06W7D	9M07W7D
		13M6G7D	13M6W7D	13M6W7D
	18N	18M1G7D	18M1W7D	18M1W7D



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### 3.9 Test Frequencies

Test Mode	TX / RX	TY / PY RF Channel				
I EST MODE		Low (L)	Middle (M)	High (H)		
	ТΧ	Channel 128	Channel 190	Channel 251		
		824.2MHz	836.6 MHz	848.8 MHz		
GSM 850	RX	Channel 128	Channel 190	Channel 251		
		869.2 MHz	881.6 MHz	893.8 MHz		

Test Mode	TX / RX	RF Channel				
Test Mode		Low (L)	Middle (M)	High (H)		
	ТХ	Channel 512	Channel 661	Channel 810		
CSM1000	IA	1850.2MHz	1880.0 MHz	1909.8 MHz		
GSM1900	DV	Channel 512	Channel 661	Channel 810		
	RX	1930.2 MHz	1960.0 MHz	1989.8 MHz		

Test Mode	TX / RX	RF Channel				
		Low (L)	Middle (M)	High (H)		
	ТΧ	Channel 9262	Channel 9400	Channel 9538		
		1852.4 MHz	1880.0 MHz	1907.6 MHz		
WCDMA Band II	DV	Channel 9662	Channel 9800	Channel 9938		
	RX	1932.4 MHz	1960.0 MHz	1987.6 MHz		

Test Mode	TX / RX	TX / PX RF Channel				
I EST MOUE		Low (L)	Middle (M)	High (H)		
		Channel 1312	Channel 1413	Channel 1513		
WCDMA Band IV	TX	1712.4MHz	1732.6 MHz	1752.6 MHz		
	٧D	Channel 1537	Channel 1638	Channel 1738		
	RX	2112.4 MHz	2132.6 MHz	2152.6 MHz		

Test Mode	TX / RX	RF Channel				
I est Mode		Low (L)	Middle (M)	High (H)		
	ТХ	Channel 4132	Channel 4182	Channel 4233		
WCDMA Band V		826.4MHz	836.4 MHz	846.6 MHz		
	RX	Channel 4357	Channel 4407	Channel 4458		
		871.4 MHz	881.4 MHz	891.6 MHz		



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	-			RF Channel	
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)
			Channel 18607	Channel 18900	Channel 19193
		ТХ	1850.7 MHz	1880 MHz	1909.3 MHz
	1.4MHz		Channel 607	Channel 900	Channel 1193
		RX	1930.7 MHz	1960 MHz	1989.3 MHz
			Channel 18615	Channel 18900	Channel 19185
		ТХ	1851.5 MHz	1880 MHz	1908.5 MHz
	3MHz	DV	Channel 615	Channel 900	Channel 1185
		RX	1931.5 MHz	1960 MHz	1988.5 MHz
		ТХ	Channel 18625	Channel 18900	Channel 19175
			1852.5 MHz	1880 MHz	1907.5 MHz
	5MHz	RX	Channel 625	Channel 900	Channel1175
LTE Band 2		КЛ	1932.5 MHz	1960 MHz	1987.5 MHz
LIE Dallu Z			Channel 18650	Channel 18900	Channel 19150
		ТХ	1855 MHz	1880 MHz	1905 MHz
	10MHz	RX	Channel 650	Channel 900	Channel 1150
		ΓA	1935 MHz	1960 MHz	1985 MHz
			Channel 18675	Channel 18900	Channel 19125
		ТХ	1857.5 MHz	1880 MHz	1902.5 MHz
	15MHz	RX	Channel 675	Channel 900	Channel 1125
			1937.5 MHz	1960 MHz	1982.5 MHz
			Channel 18700	Channel 18900	Channel 19100
		ТХ	1860 MHz	1880 MHz	1900 MHz
	20MHz	RX	Channel 700	Channel 900	Channel 1100
		IVA	1940 MHz	1960 MHz	1980 MHz



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	-			RF Channel	
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)
			Channel 19957	Channel 20175	Channel 20393
		ТХ	1710.7 MHz	1732.5 MHz	1754.3 MHz
	1.4MHz	DV	Channel 1975	Channel 2175	Channel 2375
		RX	2112.5 MHz	2132.5MHz	2152.5 MHz
			Channel 19965	Channel 20175	Channel 20385
		ТХ	1711.5 MHz	1732.5 MHz	1753.5 MHz
	3MHz	RX	Channel 2000	Channel 2175	Channel 2350
		КХ	2115 MHz	2132.5MHz	2150 MHz
	5MHz	тх	Channel 19975	Channel 20175	Channel 20375
			1712.5 MHz	1732.5 MHz	1752.5 MHz
		RX	Channel 1975	Channel 2175	Channel 2375
			2112.5 MHz	2132.5MHz	2152.5 MHz
LTE Band 4		тх	Channel 20000	Channel 20175	Channel 20350
			1715 MHz	1732.5 MHz	1750 MHz
	10MHz	RX	Channel 2000	Channel 2175	Channel 2350
		ΓA	2115 MHz	2132.5MHz	2150 MHz
			Channel 20025	Channel 20175	Channel 20325
		ТХ	1717.5 MHz	1732.5 MHz	1747.5 MHz
	15MHz	RX	Channel 2025	Channel 2175	Channel 2325
			2117.5 MHz	2132.5MHz	2147.5 MHz
			Channel 20050	Channel 20175	Channel 20300
		ТХ	1720 MHz	1732.5 MHz	1745 MHz
	20MHz	RX	Channel 2050	Channel 2175	Channel 2300
		ΓΛ	2120 MHz	2132.5MHz	2145 MHz

Toot Mode	Dondwidth	Pondwidth TX / BX		RF Channel			
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)		
			Channel 20407	Channel 20525	Channel 20643		
		TX	824.7 MHz	836.5 MHz	848.3 MHz		
	1.4MHz	RX	Channel 2407	Channel 2525	Channel 2643		
		КЛ	869.7 MHz	881.5 MHz	893.3 MHz		
			Channel 20415	Channel 20525	Channel 20635		
	3MHz	TX	825.5 MHz	836.5 MHz	847.5 MHz		
		RX	Channel 2415	Channel 2525	Channel 2635		
			870.5 MHz	881.5 MHz	892.5 MHz		
LTE Band 5		тх	Channel 20425	Channel 20525	Channel 20625		
			826.5 MHz	836.5 MHz	846.5 MHz		
	5MHz	RX	Channel 2425	Channel 2525	Channel 2625		
		КЛ	871.5 MHz	881.5 MHz	891.5 MHz		
			Channel 20450	Channel 20525	Channel 20600		
		TX	829 MHz	836.5 MHz	844 MHz		
	10MHz	ΡY	Channel 2450	Channel 2525	Channel 2600		
		RX	874 MHz	881.5 MHz	889 MHz		



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Test Mode	Bandwidth			RF Channel		
Test Mode	Danuwiuun		Low (L)	Middle (M)	High (H)	
			Channel 20775	Channel 21100	Channel 21425	
		TX	2502.5 MHz	2535 MHz	2567.5 MHz	
	5MHz	DV	Channel 2775	Channel 3100	Channel 5825	
		TX RX TX RX TX RX RX	2622.5 MHz	2655 MHz	2687.5 MHz	
	10MHz		Channel 20800	Channel 21100	Channel 21400	
		ТХ	2505 MHz	2535 MHz	2565 MHz	
		PY	Channel 2800	Channel 3100	Channel 3400	
		ΓΛ	2625 MHz	2655 MHz	2685 MHz	
LTE Band 7			Channel 20825	Channel 21100	Channel 21375	
		ТХ	2507.5 MHz	2535 MHz	2562.5 MHz	
	15MHz	DV	Channel 2825	Channel 3100	Channel 3375	
		КЛ	2627.5 MHz	2655 MHz	2682.5 MHz	
			Channel 20850	Channel 21100	Channel 21350	
		TX	2510 MHz	2535 MHz	2560 MHz	
	20MHz	BV	Channel 2850	Channel 3100	Channel 3350	
		RX	2630 MHz	2655 MHz	2680 MHz	

Test Mode	Dondwidth		RF Channel		
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)
			Channel 23017	Channel 23095	Channel 23173
		TX	699.7 MHz	707.5 MHz	715.3 MHz
	1.4MHz	RX	Channel 5017	Channel 5095	Channel 5173
		КЛ	729.7 MHz	737.5 MHz	745.3 MHz
			Channel 23025 Channel 23095 C	Channel 23165	
		TX	700.5 MHz	707.5 MHz	714.5 MHz
	3MHz	DV	Channel 5025	el 5025 Channel 5095 Channe	Channel 5165
		RX	730.5 MHz	737.5 MHz	744.5 MHz
LTE Band 12			Channel 23035	Channel 23095	Channel 23155
		TX	701.5 MHz	707.5 MHz	713.5 MHz
	5MHz	RX	Channel 5035	Channel 5095 Channel 51	Channel 5155
		КЛ	731.5 MHz	737.5 MHz	743.5 MHz
			Channel 23060	Channel 23095	Channel 23130
		ТХ	704 MHz	707.5 MHz	711 MHz
	10MHz	RX	Channel 5060	Channel 5095	Channel 5130
		ΓΛ	734 MHz	737.5 MHz	741 MHz



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Tarihada	Dec. 1 Mil			RF Channel	
Test Mode	Bandwidth	TX/RX	Low (L)	Middle (M)	High (H)
			Channel 23025	Channel 23230	Channel 23255
		ТХ	779.5 MHz	782 MHz	784.5 MHz
	5MHz	DV	Channel 5205	Channel 5230	Channel 5255
LTE David 40		RX	748.5 MHz	751 MHz	753.5 MHz
LTE Band 13			Channel 23230	Channel 23230	Channel 23230
		TX	782 MHz	782 MHz	782 MHz
	10MHz	RX	Channel 5230	Channel 5230	Channel 5230
		KX	751 MHz	751 MHz	751 MHz
Test Mede				RF Channel	
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)
	5MHz		Channel 23305	Channel 23330	Channel 23355
		ТХ	790.5 MHz 793 MH	793 MHz	795.5 MHz
		RX	Channel 5305	Channel 5330	Channel 5355
LTE Band 14		КЛ	760.5 MHz	763 MHz	765.5 MHz
LIE Dallu 14	10MHz		Channel 23330	Channel 23330	Channel 23330
		ТХ	793MHz	793 MHz	793 MHz
		RX	Channel 5330	Channel 5330	Channel 5330
			763MHz	763 MHz	763 MHz
Test Made	Dondwidth	TX / RX		RF Channel	
Test Mode	Bandwidth		Low (L)	Middle (M)	High (H)
			Channel 23755	Channel 23790	Channel 23825
LTE Band 17		ТХ	706.5 MHz	710 MHz	713.5 MHz
	5MHz	RX	Channel 5755	Channel 5790	Channel 5825
		ΓΛ	736.5 MHz	740 MHz	743.5 MHz
LIE Dallu I/			Channel 23780	Channel 23790	Channel 23800
		ТХ	709 MHz	710 MHz	711 MHz
	10MHz	DV	Channel 5780	Channel 5790	Channel 5800
	RX	۲۸	739 MHz	740 MHz	741 MHz



739 MHz

740 MHz

741 MHz

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				RF Channel	
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)
			Channel 26047	Channel 26365	Channel 26683
		ТХ	1850.7 MHz	1882.5 MHz	1914.3 MHz
	1.4MHz	DV	Channel 8047	Channel 8365	Channel 8683
		RX	1930.7 MHz	1962.5 MHz	1994.3 MHz
			Channel 26055	Channel 26365	Channel 26675
		ТХ	1851.5 MHz	1882.5 MHz	1913.5 MHz
	3MHz	RX	Channel 8055	Channel 8365	3365 Channel 8675
		ΓA	1931.5 MHz	1962.5 MHz	1993.5 MHz
	5MHz		Channel 26065	Channel 26365	Channel 26665
		ТХ	1852.5 MHz	1882.5 MHz	Channel 26665 1912.5 MHz Channel 8665
		RX	Channel 8065	Channel 8365	Channel 8665
			1932.5 MHz	1962.5 MHz	1992.5 MHz
LTE Band 25	10MHz		Channel 26090	Channel 26365	Channel 26640
		ТХ	1855 MHz	1882.5 MHz	1910 MHz
		RX	Channel 8090	Channel 8365	Channel 8640
		ΓA	1935 MHz		1990 MHz
			Channel 26115	Channel 26365	Channel 26615
			1857.5 MHz	1882.5 MHz	1907.5 MHz
	15MHz	RX	Channel 8115	Channel 8365	Channel 8615
			1937.5 MHz	1962.5 MHz	1987.5 MHz
			Channel 26140	Channel 26365	Channel 26590
		ТХ	1860 MHz	1882.5 MHz	1905 MHz
	20MHz	RX	Channel 8140	Channel 8365	Channel 8590
		٢٨	1940 MHz	1962.5 MHz	1985 MHz



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Teet Mede	Dondwidth			RF Channel			
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)		
			Channel 26697	Channel 26740	Channel 26783		
		ТХ	814.7 MHz	819 MHz	Channel 26783 823.3 MHz Channel 8783 868.3 MHz Channel 26775 822.5 MHz Channel 8775 867.5 MHz Channel 26765		
	1.4MHz	RX	Channel 8697	Channel 8740	Channel 8783		
		ΓΛ	Rev.:         01           Page:         31 of 49           RF Channel         RF Channel           Low (L)         Middle (M)           Channel 26697         Channel 26740           814.7 MHz         819 MHz           Channel 8697         Channel 8740           Channel 8697         Channel 8740           Channel 26705         Channel 26740           815.5 MHz         819 MHz           Channel 26705         Channel 26740           Channel 26705         Channel 26740           Channel 26705         Channel 26740           Channel 26705         Channel 26740           Channel 26705         Channel 8740           Channel 26715         Channel 8740           Channel 26715         Channel 26740           816.5 MHz         819 MHz           Channel 8715         Channel 8740           Channel 8715         Channel 8740           861.5 MHz         864MHz           Channel 26740         Cl           861.5 MHz         864MHz           Channel 26740         Channel 26740           819 MHz         819 MHz	868.3 MHz			
			Channel 26705	Channel 26740	Channel 26775		
		ТХ	815.5 MHz	819 MHz	822.5 MHz		
	3MHz	RX	Channel 8705	Channel 8740	Channel 8775		
LTE Band 26		ΓΛ	860.5 MHz	864MHz	867.5 MHz		
(814-824)			Channel 26715	Channel 26740	Channel 26765		
(0.1.0_1)		ТХ	816.5 MHz	819 MHz	821.5 MHz		
	5MHz	DV	Channel 8715	Channel 8740	Channel 8755		
-		RX	861.5 MHz	864MHz	866.5 MHz		
			Channel 26740	Channel 26740	Channel 26740		
		ТХ	819 MHz	819 MHz	819 MHz		
	10MHz	DV	Channel 8740	Channel 8740	Channel 8740		
		RX	864MHz	864MHz	864MHz		

Toot Mode	Donoduuidth	vidth TX / RX	RF Channel		
Test Mode	Bandwidth	IA / KA	Low (L)	Low (L) Middle (M) H	High (H)
			Channel 26797	Channel 26915	Channel 27033
		TX	824.7 MHz	836.5 MHz	848.3 MHz
	1.4MHz	RX	Channel 8697	Channel 8915	Channel 9033
		КЛ	859.7 MHz	881.5 MHz	893.3 MHz
		<b></b> \ <i>i</i>	Channel 26805	Channel 26915	Channel 27025
		TX	825.5 MHz	836.5 MHz	847.5 MHz
	3MHz	RX	Channel 8805	Channel 8915	Channel 9025
		ΓA	860.5 MHz	881.5 MHz	892.5 MHz
	5MHz -		Channel 26815	Channel 26915	Channel 27015
LTE Band26		ТХ	826.5 MHz	836.5 MHz	846.5 MHz
(824-849)		DΥ	Channel 8815	Channel 8915	Channel 9015
(		RX	871.5 MHz	881.5 MHz	891.5 MHz
			Channel 26840	Channel 26915	Channel 26990
		TX	829 MHz	836.5 MHz	844 MHz
	10MHz	DV	Channel 8840	Channel 8915	Channel 8990
		RX	874 MHz	881.5 MHz	889 MHz
	15MHz TX RX			Channel 26965	
		IX	831.5 MHz	836.5 MHz	841.5 MHz
		RX	Channel 8865	Channel 8915	Channel 8965
		876.5 MHz	881.5 MHz	886.5 MHz	



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				RF Channel	
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)
			Channel 39675	Channel40620	Channel 41565
	5MHz	TX / RX	2498.5 MHz	2593 MHz	2687.5 MHz
			Channel 39700	Channel40620	Channel 41540
LTE Band 41	10MHz	TX / RX	2501 MHz	2593 MHz	2685 MHz
(2496-2690)			Channel 39725	Channel40620	Channel 41515
, , , , , , , , , , , , , , , , , , ,	15MHz	TX / RX	2503.5 MHz	2593 MHz	2682.5 MHz
			Channel 39750	Channel40620	Channel 41490
	20MHz	TX / RX	2506 MHz	2593 MHz	2680 MHz

TestMede	Bandwidth	TX/RX		RF Channel	
Test Mode			Low (L)	Middle (M)	High (H)
			Channel 131979	Channel 132322	Channel 132665
		TX	1710.7 MHz	1745 MHz	1779.3 MHz
	1.4MHz	RX	Channel 66443	Channel 66786	Channel 67329
		κ <u>λ</u>	2110.7 MHz	2145MHz	2199.3 MHz
			Channel 131987	Channel 132322	Channel 132657
		TX	1711.5 MHz	1745 MHz	1778.5MHz
	3MHz	RX	Channel 66451	Channel 66786	Channel 67321
		ΓΛ.	2111.5 MHz	2145MHz	2198.5MHz
	5MHz		Channel 131997	Channel 132322	Channel 132647
		ТХ	1712.5 MHz	1745 MHz	Channel 67321 2198.5MHz
		RX	Channel 66461	Channel 66786	Channel 67311
LTE Band66		ΓΛ.	2112.5 MHz	2145MHz	2197.5 MHz
LIE Danuoo	10MHz		Channel 132022	Channel 132322	Channel 132622
		TX	1715 MHz	1745 MHz	1775 MHz
		RX	Channel 66486	Channel 66786	Channel 67286
			2115 MHz	2145MHz	2195 MHz
			Channel 132047	Channel 132322	Channel 132597
		TX	1717.5 MHz	1745 MHz	1772.5 MHz
	15MHz	RX	Channel 66511	Channel 66786	Channel 67261
			2117.5 MHz	2145MHz	2192.5 MHz
			Channel 132072	Channel 132322	Channel 132572
		ТХ	1720 MHz	1745 MHz	1770 MHz
	20MHz	RX	Channel 66536	Channel 66786	Channel 67236
		۲۸	2120 MHz	2145MHz	2190 MHz



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Test Mede	Dondwidth			RF Channel	
Test Mode	Bandwidth	TX / RX	Low (L)	Middle (M)	High (H)
			Channel 133147	Channel 133297	Channel 133447
		TX	665.5 MHz	680.5 MHz	695.5 MHz
	5MHz	RX	Channel 68611	Channel 68761	Channel 68911
		КЛ	619.5 MHz	634.5 MHz	High (H)           97         Channel 133447           695.5 MHz           61         Channel 68911           649.5 MHz           97         Channel 133422           693 MHz           61         Channel 68886           647 MHz           97         Channel 68886           647 MHz           97         Channel 68886           647 MHz           97         Channel 68886           690.5 MHz           690.5 MHz           691         Channel 133397           690.5 MHz           61         Channel 68861           644.5 MHz           97         Channel 133372           688 MHz
	10MHz		Channel 133172	Channel 133297	Channel 133422
		TX	668 MHz	680.5 MHz	693 MHz
		Hz RX	Channel 68636	Channel 68761	Channel 68886
		КЛ	622 MHz	634.5 MHz	647 MHz
LTE Band71			Channel 133197	Channel 133297	Channel 133397
		ТХ	670.5 MHz	680.5 MHz	690.5 MHz
	15MHz	DV	Channel 68661	Channel 68761	Channel 68861
		RX	624.5 MHz	634.5 MHz	644.5 MHz
			Channel 133222	Channel 133297	Channel 133372
		ТХ	673 MHz	680.5 MHz	688 MHz
	20MHz	RX	Channel 68686	Channel 68761	Channel 68836
		KΛ	627 MHz	634.5 MHz	642 MHz



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### 4 Description of Tests

#### 4.1 Conducted Output Power

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 5.2.1

The transmitter output was connected to a calibrated coaxial cable, 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 Section 5.8.4 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

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#### 4.3 Occupied Bandwidth

Measurement Procedure: FCC KDB 971168 D01 V03r01 Section 4.2 & 4.3

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
- 3. VBW ≥ 3 x RBW
- 4. 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 rms.

#### 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
- 4.  $VBW \ge 3 \times RBW$
- 5. Detector = RMS
- 6. Number of sweep points ≥ 2 x Span/RBW
- 7. 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 Section 6.0

The transmitter output was connected to a calibrated coaxial cable, attenuator and Spectrum analyzer, the other end of which was connected to a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The 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 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

1. Start frequency was set to 9kHz and stop frequency was set to at least 10\* the fundamental

frequency(Separated into at least two plots per channel)

- 2. Detector = RMS
- 3. Trace mode = trace average for continuous emissinos, max hold for pulse emissions
- 4. 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 5.7.2

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 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 (dBµV/m) = Measured amplitude level (dBµV) + (Cable Loss (dB) + Antenna Factor (dB/m) – AMP(dB)) EIRP (dBm) = E (dBµV/m) + 20 log D – 104.8; 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 (dBµV/m) = Measured amplitude level (dBµV) + (Cable Loss (dB) + Antenna Factor (dB/m) AMP(dB))
   EIRP (dBm) = E (dBµV/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. At a measurement distance of 1 meter the limit line was increased by 20\*LOG(3/1) = 9.54 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.



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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; Section 9

- . 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  $\pm 0.00025\%$  ( $\pm 2.5$  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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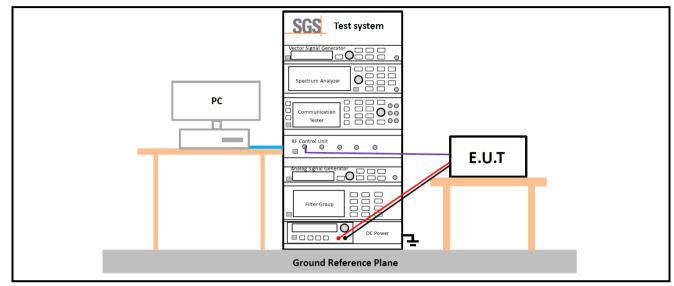
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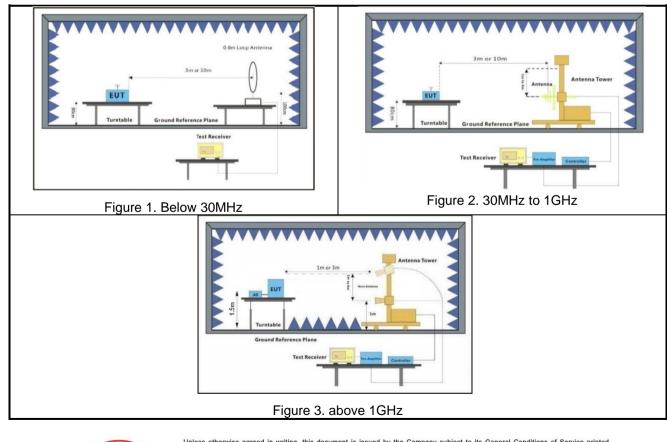
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## 4.9 Test Setups

### 4.9.1 Test Setup 1



#### 4.9.2 Test Setup 2





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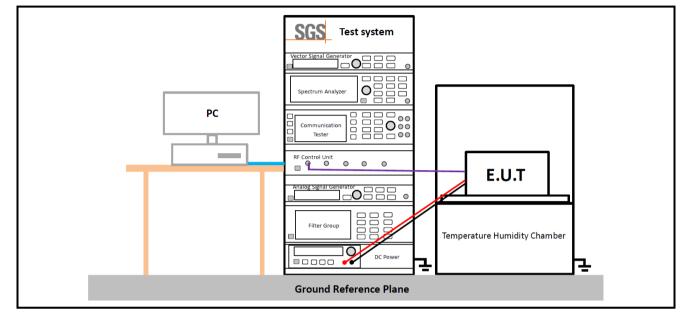
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#### 4.9.3 Test Setup 3





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## 4.10Test Conditions

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	GSM/TM1;GSM/TM2;UMTS/TM1;LTE/TM1;LTE/TM2;LTE/TM3				
	Peak-to-Average Ratio				
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	GSM/TM1;GSM/TM2;UMTS/TM1;LTE/TM1;LTE/TM2;LTE/TM3				
	Bandwidth - Occupied Bandwidth				
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	GSM/TM1;GSM/TM2;UMTS/TM1;LTE/TM1;LTE/TM2;LTE/TM3				
Bandwidth - Emission Bandwidth					
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 GSM/TM1;GSM/TM2;UMTS/TM1;LTE/TM1;LTE/TM2;LTE/TM3					
	Band Edges Compliance				
Test Case	Test Conditions				
Test Environment	Ambient Climate & Rated Voltage				
Test Setup	Test Setup 1				
RF Channels (TX)	L, H (L= low channel, H= high channel)				
Test Mode GSM/TM1;GSM/TM2;UMTS/TM1;LTE/TM1;LTE/TM2;LTE/TM3					
	Spurious Emission at Antenna Terminals				
Test Case	Test Conditions				



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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 GSM/TM1;GSM/TM2;UMTS/TM1;LTE/TM1;LTE/TM2;LTE/TM3					
	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	GSM/TM1;UMTS/TM1;LTE/TM1 Remark: All bandwidth and modulation of GSM/UMTS/LTE have been pre tested, and only the worst results are reflected in the report.				
	Frequency Stability				
Test Case	Test Conditions				
Test Environment	<ul> <li>(1) -30 °C to +50 °C with step 10 °C at Rated Voltage</li> <li>(2) VL, VN and VH of Rated Voltage at Ambient Climate.</li> </ul>				
Test Setup	Test Setup 3				
RF Channels (TX)	M (M= middle channel)				
Test Mode	GSM/TM1;GSM/TM2;UMTS/TM1;LTE/TM1;LTE/TM2;LTE/TM3				
	The report only show the bandwidth with the worst case.				



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## 5 Main Test Instruments

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RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)
Shielding Room	Brilliant-emc	N/A	SUWI-04-01-06	2021/05/08	2024/05/07
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-07	2023/02/06	2024/02/05
Signal Analyzer	ROHDE&SCHWARZ	FSV3030	SUWI-01-02-02	2023/05/11	2024/05/10
Measurement Software	Tonscend	JS1120-3 Test System V 2.6.88.0336	SUWI-02-09-09	NCR	NCR
Measurement Software	TST	TST-271-2.0	SUWI-03-55-01	NCR	NCR
Radio Communication	Amritavy	MT0004C		2022/11/23	2023/11/22
Analyzer	Anritsu	MT8821C	SUWI-01-26-03	2023/11/21	2024/11/20
Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-05	2023/02/06	2024/02/05
DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	2023/02/06	2024/02/05
Temperature Chamber	ESPEC	SU-242	SUWI-01-13-01	2023/02/06	2024/02/05
Wideband Radio Communication Test Ststion	Anritsu	MT8000A	SUWI-01-34-02	2023/09/12	2024/09/11
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2023/05/11	2024/05/10

Remark: NCR=No Calibration Requirement.



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RSE Test System					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)
Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-02	2021/11/25	2024/11/24
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-13	2023/02/07	2024/02/06
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2023/05/11	2024/05/10
	KEYSIGHT	N9020A	SUWI-01-02-06	2022/11/23	2023/11/22
Signal Analyzer	RETSIGNT			2023/11/21	2024/11/20
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2023/02/08	2024/02/07
Receiving	SCHWRZBECK			2021/12/05	2023/12/04
antenna	MESS- ELEKTRONIK	VULB 9168	SUWI-01-11-04	2023/11/25	2024/11/24
Receiving	SCHWRZBECK			2021/12/05	2023/12/04
antenna	MESS- ELEKTRONIK	BBHA 9120D	SUWI-01-11-05	2023/11/25	2024/11/24
Receiving antenna	SCHWRZBECK MESS- ELEKTRONIK	BBHA 9170	SUWI-01-11-03	2023/05/12	2024/05/11
Active Loop Antenna	SCHWRZBECK MESS- ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	2023/05/13	2024/05/12
Amplifier	Tonscend	TAP9K3G32	SUWI-01-14-06	2022/11/23	2023/11/22
Amplifier				2023/11/21	2024/11/20
Amplifier	Tonscend	TAP01018050	SUWI-01-14-04	2022/11/23	2023/11/22
Amplifier				2023/11/21	2024/11/20
Amplifier	Tonscend	TAP30M7G30	SUWI-01-14-05	2022/11/23	2023/11/22
Amplifier				2023/11/21	2024/11/20
Wideband Radio Communication Tester	Anritsu	MT8820C	SUWI-01-16-08	2023/02/06	2024/02/05
Radio	Anritsu	MT8821C	SUWI-01-26-03	2022/11/23	2023/11/22
Communication Analyzer				2023/11/21	2024/11/20
Measurement Software	Tonscend	JS32-RE V4.0.0.0	SUWI-02-09-04	NCR	NCR

Remark: NCR=No Calibration Requirement.

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#### **Measurement Uncertainty** 6

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in

Item	Measurement Uncertainty	
Total RF power, conducted	±0.54dB	
RF power density, conducted	±1.03dB	
Spurious emissions, conducted	±0.54dB	
Radio Frequency	±1.0 %	
Duty Cycle	±0.37%	
Occupied Bandwidth	±1.0 %	
	± 3.13dB (9k -30MHz)	
Dedicted Emission	± 4.88dB (30M -1GHz)	
	± 4.75dB (1GHz to 18GHz)	
	± 4.77dB (Above 18GHz)	
	Total RF power, conducted         RF power density, conducted         Spurious emissions, conducted         Radio Frequency         Duty Cycle	

accordance with the recommendations of ISO 17025 as following:

The Ulab (lab Uncertainty) is less than Ucispi/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.



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## 7 Appendixes

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Appendix B.1	GSM 850
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Appendix B.3	WCDMA Band II
Appendix B.4	WCDMA Band IV
Appendix B.5	WCDMA Band V
Appendix B.6	LTE Band 2
Appendix B.7	LTE Band 4
Appendix B.8	LTE Band 5
Appendix B.9	LTE Band 7
Appendix B.10	LTE Band 12
Appendix B.11	LTE Band 13
Appendix B.12	LTE Band 14
Appendix B.13	LTE Band 17
Appendix B.14	LTE Band 25
Appendix B.15	LTE Band 26(814-824)
Appendix B.16	LTE Band 26(824-849)
Appendix B.17	LTE Band 41
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---End of Report---



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