

Report No.: SUHR/2021/B001101

Rev.: 01

Page: 1 of 32

# TEST REPORT

**Application No.:** HR/2021/B0011

**Applicant:** Quectel Wireless Solutions Co., Ltd.

**Address of Applicant:** Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China, 200233

**Manufacturer:** Quectel Wireless Solutions Co., Ltd.

**Address of Manufacturer:** Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China, 200233

**EUT Description:** LTE Module

**Model No.:** SC606T-NAD

**Trade Mark:** Quectel

**FCC ID:** XMR2021SC606TNAD

**Standards:**

- 47 CFR Part 2
- 47 CFR Part 22 subpart H
- 47 CFR Part 24 subpart E
- 47 CFR Part 27 subpart E
- 47 CFR Part 27 subpart H
- 47 CFR Part 27 subpart L
- 47 CFR Part 27 subpart M
- 47 CFR Part 27 subpart N
- 47 CFR Part 90 subpart R
- 47 CFR Part 90 subpart S

**Date of Receipt:** 2021/12/29

**Date of Test:** 2022/1/7 to 2022/1/9

**Date of Issue:** 2022/1/17

<b>Test Result :</b>	<b>PASS *</b>
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\* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:



Panta Sun  
Wireless Laboratory Manager



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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 2 of 32

## 1 Version

### Revision Record

Version	Chapter	Date	Modifier	Remark
01		2022/1/17		Original

Prepared By		Weller Liu
<hr/> (Weller Liu) / Engineer		
Checked By		Well Wei
<hr/> (Well Wei) / Reviewer		

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## Contents

1	Version .....	2
2	Test Summary .....	4
2.1	LTE Band 5/26(824~849 MHz) .....	4
2.2	LTE Band 2/25 .....	5
2.3	LTE Band 4/66 .....	6
2.4	LTE Band 7/41 .....	7
2.5	LTE Band 12/17 .....	8
2.6	LTE Band 13 .....	9
2.7	LTE Band 14 .....	10
2.8	LTE Band 26(814~824 MHz) .....	12
2.9	LTE Band 71 .....	13
3	General Information .....	15
3.1	Details of Client .....	15
3.2	Test Location .....	15
3.3	Test Facility .....	15
3.4	General Description of EUT .....	16
3.5	Test Mode .....	17
3.6	Test Environment .....	17
3.7	Technical Specification .....	18
3.8	Test Frequencies .....	20
4	Description of Tests .....	27
4.1	Field Strength of Spurious Radiation .....	27
	Test on the worst case: .....	28
	Radiated Spurious Emissions .....	28
	Traffic mode .....	28
	Test Band =Band14 TM1 .....	28
	Test Channel = Mid .....	28
4.2	Test Setups .....	29
4.2.1	Test Setup 1 .....	29
5	Main Test Instruments .....	30
6	Measurement Uncertainty .....	31
7	Photographs - EUT Constructional Details .....	32

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 4 of 32

## 2 Test Summary

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

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913(a)(5)	ERP ≤ 7 W	Refer to HR/2020/A000201	Pass
Peak-Average Ratio	§22.913(d)	Limit≤13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	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.	Refer to HR/2020/A000201	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.	Refer to HR/2020/A000201	Pass
Field Strength of Spurious Radiation	§2.1053, §22.917(a)	FCC: ≤ -13 dBm/100 kHz.	Section 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §22.355	≤ ±2.5ppm.	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 5 of 32

## 2.2 LTE Band 2/25

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §24.232(c)	EIRP ≤ 2 W	Refer to HR/2020/A000201	Pass
Peak-Average Ratio	§24.232(d)	Limit≤13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	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.	Refer to HR/2020/A000201	Pass
Spurious Emission at Antenna Terminals	§2.1051, §24.238(a)	≤ -13 dBm/1 MHz, from 9 kHz to 10 <sup>th</sup> harmonics but outside authorized operating frequency ranges.	Refer to HR/2020/A000201	Pass
Field Strength of Spurious Radiation	§2.1053, §24.238(a)	≤ -13 dBm/1 MHz.	Section 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §24.235	Within authorized bands of operation/frequency block.	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 6 of 32

## 2.3 LTE Band 4/66

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(d)(4)	EIRP ≤ 1 W	Refer to HR/2020/A000201	Pass
Peak-Average Ratio	§27.50(d)(5)	Limit≤13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	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.	Refer to HR/2020/A000201	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(h)	≤ -13 dBm/1 MHz, from 9 kHz to 10 <sup>th</sup> harmonics but outside authorized operating frequency ranges.	Refer to HR/2020/A000201	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(h)	≤ -13 dBm/1 MHz.	Section 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Refer to HR/2020/A000201	Pass

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 Rev.: 01  
 Page: 7 of 32

## 2.4 LTE Band 7/41

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(h)(2)	EIRP ≤ 2W	Refer to HR/2020/A000201	Pass
Peak-Average Ratio	---	≤13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	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 defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz.	Refer to HR/2020/A000201	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(m)		Refer to HR/2020/A000201	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(m)		Section 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 8 of 32

## 2.5 LTE Band 12/17

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 HR/2020/A000201	Pass
Peak-Average Ratio	---	Limit ≤ 13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	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.	Refer to HR/2020/A000201	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.	Refer to HR/2020/A000201	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(g)	FCC: ≤ -13 dBm/100 kHz.	Section 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 9 of 32

## 2.6 LTE Band 13

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(b)(10)	ERP ≤ 3 W.	Refer to HR/2020/A000201	Pass
Peak-Average Ratio	---	Limit≤13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049,	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	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.	Refer to HR/2020/A000201	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(c) §27.53(f)	≤ -13 dBm/100 kHz, from 9 kHz to 10 <sup>th</sup> harmonics but outside authorized operating frequency ranges. 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. 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.	Refer to HR/2020/A000201	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 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	Within authorized bands of operation/frequency block.	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 10 of 32

## 2.7 LTE Band 14

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §90.542(c) §90.542(d)	ERP ≤ 3 W.	Refer to HR/2020/A000201	Pass
Peak-Average Ratio	---	Limit ≤ 13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	Pass
Emission Mask	§2.1051 §90.210(n)	<p>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</p> <p>(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 <math>43 + 10 \log (P)</math> dB.</p>	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 11 of 32

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.	Refer to HR/2020/A000201	Pass
Spurious Emission at Antenna Terminals	§2.1051, §90.543(c) §90.543(f)	FCC: $\leq -13$ 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.	Refer to HR/2020/A000201	Pass
Field Strength of Spurious Radiation	§2.1053, §90.543(c) §90.543(f)	FCC: $\leq -13$ 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 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §90.213	Within authorized bands of operation/frequency block.	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 12 of 32

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

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Transmitter Conducted Power Output	§2.1046, §90.635(b)	< 100 W.	Refer to HR/2020/A000201	Pass
Peak-Average Ratio	---	Limit≤13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	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 $116 \text{ Log10}(f/6.1)$ decibels or $50+10\text{Log10}(P)$ 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.	Refer to HR/2020/A000201	Pass
Spurious Emission at Antenna Terminals	§2.1051, §90.691	< $43 + 10\text{Log10}(P[\text{Watts}])$ for all out-of-band emissions	Refer to HR/2020/A000201	Pass
Field Strength of Spurious Radiation	§2.1053, §90.691	< $43 + 10\text{Log10}(P[\text{Watts}])$ for all out-of-band emissions	Section 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §90.213	Within authorized bands of operation/frequency block.	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 13 of 32

## 2.9 LTE Band 71

Test Item	FCC Rule No.	Requirements	Test Result	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(c)(10)	EIRP ≤ 3 W	Refer to HR/2020/A000201	Pass
Peak-Average Ratio	---	Limit≤13 dB	Refer to HR/2020/A000201	Pass
Modulation Characteristics	§2.1047	Digital modulation	Refer to HR/2020/A000201	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Refer to HR/2020/A000201	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.	Refer to HR/2020/A000201	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(g)	≤ -13 dBm/1 MHz, from 9 kHz to 10 <sup>th</sup> harmonics but outside authorized operating frequency ranges.	Refer to HR/2020/A000201	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(g)	≤ -13 dBm/1 MHz.	Section 4.1	Pass
Frequency Stability	§2.1055(a)(1)(b) §2.1055(d)(1) §27.54	within the authorized bands of operation.	Refer to HR/2020/A000201	Pass

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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 14 of 32

Remark:

This test report (Report No.: SUHR/2021/B001101 issued on 2022/1/17) is based on the original FCC ID with ID number XMR2021SC606TNAD issued on 2022/1/16.

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

Considering to the difference, pre-scan were performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore in this report only radiated spurious emissions were performed based on the worst case of the original FCC ID with ID number XMR2021SC606TNAD issued on 2022/1/16 and other test data in this report are based on the previous FCC ID with ID number XMR2021SC606TNAD issued on 2022/1/16.

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Report No.: SUHR/2021/B001101  
Rev.: 01  
Page: 15 of 32

## 3 General Information

### 3.1 Details of Client

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

### 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, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone
Post code:	215000
Test engineer:	Weller Liu, King-p Li, Nature Shen, Tizzy Song

### 3.3 Test Facility

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

**• A2LA (Certificate No. 6336.01)**

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

**• Innovation, Science and Economic Development Canada**

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

CAB identifier: CN0120.

IC#: 27594.

**• FCC –Designation Number: CN1312**

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

Designation Number: CN1312.

Test Firm Registration Number:0031225543

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Report No.: SUHR/2021/B001101  
Rev.: 01  
Page: 16 of 32

### 3.4 General Description of EUT

EUT Description:	LTE Module			
Model No.:	SC606T-NAD			
Trade Mark:	Quectel			
Hardware Version:	R1.0			
Software Version:	SC606TNADNAR09A01			
Sample Type:	<input type="checkbox"/> Portable Device, <input checked="" type="checkbox"/> Module			
Antenna Type:	<input checked="" type="checkbox"/> External, <input type="checkbox"/> Integrated			
Antenna Gain*:	<input checked="" type="checkbox"/> Provided by applicant			
	LTE Band 2:	4.0dBi	LTE Band 4:	4.0dBi
	LTE Band 5:	4.0dBi	LTE Band 7:	4.0dBi
	LTE Band 12:	4.0dBi	LTE Band 13:	4.0dBi
	LTE Band 14:	4.0dBi	LTE Band 17:	4.0dBi
	LTE Band 25:	4.0dBi	LTE Band 26:	4.0dBi
	LTE Band 41:	4.0dBi	LTE Band 66:	4.0dBi
	LTE Band 71:	4.0dBi		
RF Cable*:	<input checked="" type="checkbox"/> Provided by applicant			
	0.5dB(0.6~1GHz)	0.8dB(1.4~2GHz)	1.0dB(2.1~2.7GHz)	
	1.5dB(3~4GHz)	1.8dB(4.4~6GHz)		
Remark:	*Since the above data and/or information is provided by the applicant relevant results or conclusions of this report are only made for these data and/or information, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.			

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Report No.: SUHR/2021/B001101  
Rev.: 01  
Page: 17 of 32

### 3.5 Test Mode

Test Mode	Test Modes Description
LTE/TM1	LTE system, QPSK modulation
LTE/TM2	LTE system, 16QAM modulation

Remark: The test mode(s) are selected according to relevant radio technology specifications.

### 3.6 Test Environment

Environment Parameter	101.0 KPa Selected Values During Tests	
Relative Humidity	44-46 % RH Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	22~23	3.85
LTLV	-35	3.55
LTHV	-35	4.3
HTLV	65	3.55
HTHV	65	4.3

Remark:

NV: Normal Voltage  
NT: Normal Temperature  
LT: Low Extreme Test Temperature  
HT: High Extreme Test Temperature  
LV: Low Extreme Test Voltage  
HV: High Extreme Test Voltage



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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 18 of 32

### 3.7 Technical Specification

Characteristics	Description			
Radio System Type	<input checked="" type="checkbox"/> LTE			
Supported Frequency Range	Band	TX	RX	
	LTE Band 2	1850 to 1910 MHz	1930 to 1990 MHz	
	LTE Band 4	1710 to 1755 MHz	2110 to 2155 MHz	
	LTE Band 5	824 to 849 MHz	869 to 894 MHz	
	LTE Band 7	2500 to 2570 MHz	2620 to 2690 MHz	
	LTE Band 12	699 to 716 MHz	729 to 746 MHz	
	LTE Band 13	777 to 787 MHz	746 to 756 MHz	
	LTE Band 14	788 to 798 MHz	758 to 768 MHz	
	LTE Band 17	704 to 716 MHz	734 to 746 MHz	
	LTE Band 25	1850 to 1915MHz	1930 to 1995 MHz	
	LTE Band 26 (814 to 824 MHz )	814 to 824MHz	859 to 869 MHz	
	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	1710 to 1780 MHz	2110 to 2180 MHz	
	LTE Band 71	663 to 698 MHz	617 to 652 MHz	
Supported Channel Bandwidth	LTE Band 2	<input checked="" type="checkbox"/> 1.4 MHz <input checked="" type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz <input checked="" type="checkbox"/> 20 MHz		
	LTE Band 4	<input checked="" type="checkbox"/> 1.4 MHz <input checked="" type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz <input checked="" type="checkbox"/> 20 MHz		
	LTE Band 5	<input checked="" type="checkbox"/> 1.4 MHz <input checked="" type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz		
	LTE Band 7	<input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz <input checked="" type="checkbox"/> 20 MHz		
	LTE Band 12	<input checked="" type="checkbox"/> 1.4 MHz <input checked="" type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz		
	LTE Band 13	<input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz		
	LTE Band 14	<input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz		
	LTE Band 17	<input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz		
	LTE Band 25	<input checked="" type="checkbox"/> 1.4 MHz <input checked="" type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz <input checked="" type="checkbox"/> 20 MHz		
	LTE Band 26(814-824)	<input checked="" type="checkbox"/> 1.4 MHz <input checked="" type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz		
	LTE Band 26(824-849)	<input checked="" type="checkbox"/> 1.4 MHz <input checked="" type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz		

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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 19 of 32

		<input checked="" type="checkbox"/> 15 MHz			
LTE Band 41		<input checked="" type="checkbox"/> 5 MHz	<input checked="" type="checkbox"/> 10 MHz	<input checked="" type="checkbox"/> 15 MHz	<input checked="" type="checkbox"/> 20 MHz
LTE Band 66		<input checked="" type="checkbox"/> 1.4 MHz	<input checked="" type="checkbox"/> 3 MHz	<input checked="" type="checkbox"/> 5 MHz	<input checked="" type="checkbox"/> 10 MHz
LTE Band 71		<input checked="" type="checkbox"/> 15MHz	<input checked="" type="checkbox"/> 20MHz		



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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 20 of 32

### 3.8 Test Frequencies

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band 2	1.4MHz	TX	Channel 18607	Channel 18900	Channel 19193
			1850.7 MHz	1880 MHz	1909.3 MHz
	3MHz	RX	Channel 607	Channel 900	Channel 1193
			1930.7 MHz	1960 MHz	1989.3 MHz
	5MHz	TX	Channel 18615	Channel 18900	Channel 19185
			1851.5 MHz	1880 MHz	1908.5 MHz
	10MHz	RX	Channel 615	Channel 900	Channel 1185
			1931.5 MHz	1960 MHz	1988.5 MHz
	15MHz	TX	Channel 18625	Channel 18900	Channel 19175
			1852.5 MHz	1880 MHz	1907.5 MHz
	20MHz	RX	Channel 625	Channel 900	Channel 1175
			1932.5 MHz	1960 MHz	1987.5 MHz
	TX	TX	Channel 18650	Channel 18900	Channel 19150
			1855 MHz	1880 MHz	1905 MHz
	RX	RX	Channel 650	Channel 900	Channel 1150
			1935 MHz	1960 MHz	1985 MHz
	TX	TX	Channel 18675	Channel 18900	Channel 19125
			1857.5 MHz	1880 MHz	1902.5 MHz
	RX	RX	Channel 675	Channel 900	Channel 1125
			1937.5 MHz	1960 MHz	1982.5 MHz
	TX	TX	Channel 18700	Channel 18900	Channel 19100
			1860 MHz	1880 MHz	1900 MHz
	RX	RX	Channel 700	Channel 900	Channel 1100
			1940 MHz	1960 MHz	1980 MHz

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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 21 of 32

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

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band 5	1.4MHz	TX	Channel 20407	Channel 20525	Channel 20643
			824.7 MHz	836.5 MHz	848.3 MHz
	3MHz	RX	Channel 2407	Channel 2525	Channel 2643
			869.7 MHz	881.5 MHz	893.3 MHz
	5MHz	TX	Channel 20415	Channel 20525	Channel 20635
			825.5 MHz	836.5 MHz	847.5 MHz
	10MHz	RX	Channel 2415	Channel 2525	Channel 2635
			870.5 MHz	881.5 MHz	892.5 MHz
	10MHz	TX	Channel 20425	Channel 20525	Channel 20625
			826.5 MHz	836.5 MHz	846.5 MHz
	20MHz	RX	Channel 2425	Channel 2525	Channel 2625
			871.5 MHz	881.5 MHz	891.5 MHz
	10MHz	TX	Channel 20450	Channel 20525	Channel 20600
			829 MHz	836.5 MHz	844 MHz
	20MHz	RX	Channel 2450	Channel 2525	Channel 2600
			874 MHz	881.5 MHz	889 MHz



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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 22 of 32

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

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

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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 23 of 32

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band 13	5MHz	TX	Channel 23025	Channel 23230	Channel 23255
			779.5 MHz	782 MHz	784.5 MHz
		RX	Channel 5205	Channel 5230	Channel 5255
			748.5 MHz	751 MHz	753.5 MHz
	10MHz	TX	Channel 23230	Channel 23230	Channel 23230
			782 MHz	782 MHz	782 MHz
		RX	Channel 5230	Channel 5230	Channel 5230
			751 MHz	751 MHz	751 MHz

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band 14	5MHz	TX	Channel 23305	Channel 23330	Channel 23355
			790.5 MHz	793 MHz	795.5 MHz
		RX	Channel 5305	Channel 5330	Channel 5355
			760.5 MHz	763 MHz	765.5 MHz
	10MHz	TX	Channel 23330	Channel 23330	Channel 23330
			793MHz	793 MHz	793 MHz
		RX	Channel 5330	Channel 5330	Channel 5330
			763MHz	763 MHz	763 MHz

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band 17	5MHz	TX	Channel 23755	Channel 23790	Channel 23825
			706.5 MHz	710 MHz	713.5 MHz
		RX	Channel 5755	Channel 5790	Channel 5825
			736.5 MHz	740 MHz	743.5 MHz
	10MHz	TX	Channel 23780	Channel 23790	Channel 23800
			709 MHz	710 MHz	711 MHz
		RX	Channel 5780	Channel 5790	Channel 5800
			739 MHz	740 MHz	741 MHz

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Rev.: 01

Page: 24 of 32

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

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band 26 (814-824)	1.4MHz	TX	Channel 26697	Channel 26740	Channel 26783
			814.7 MHz	819 MHz	823.3 MHz
	3MHz	RX	Channel 8697	Channel 8740	Channel 8783
			859.7 MHz	864MHz	868.3 MHz
	5MHz	TX	Channel 26705	Channel 26740	Channel 26775
			815.5 MHz	819 MHz	822.5 MHz
	10MHz	RX	Channel 8705	Channel 8740	Channel 8775
			860.5 MHz	864MHz	867.5 MHz
	5MHz	TX	Channel 26715	Channel 26740	Channel 26765
			816.5 MHz	819 MHz	821.5 MHz
	10MHz	RX	Channel 8715	Channel 8740	Channel 8755
			861.5 MHz	864MHz	866.5 MHz
	10MHz	TX	Channel 26740	Channel 26740	Channel 26740
			819 MHz	819 MHz	819 MHz
	10MHz	RX	Channel 8740	Channel 8740	Channel 8740
			864MHz	864MHz	864MHz



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Rev.: 01

Page: 25 of 32

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band26 (824-849)	1.4MHz	TX	Channel 26797	Channel 26915	Channel 27033
			824.7 MHz	836.5 MHz	848.3 MHz
	3MHz	RX	Channel 8697	Channel 8915	Channel 9033
			859.7 MHz	881.5 MHz	893.3 MHz
	5MHz	TX	Channel 26805	Channel 26915	Channel 27025
			825.5 MHz	836.5 MHz	847.5 MHz
	10MHz	RX	Channel 8805	Channel 8915	Channel 9025
			860.5 MHz	881.5 MHz	892.5 MHz
LTE Band 41 (2496-2690)	5MHz	TX	Channel 26815	Channel 26915	Channel 27015
			826.5 MHz	836.5 MHz	846.5 MHz
	10MHz	RX	Channel 8815	Channel 8915	Channel 9015
			871.5 MHz	881.5 MHz	891.5 MHz
	15MHz	TX	Channel 26840	Channel 26915	Channel 26990
			829 MHz	836.5 MHz	844 MHz
	20MHz	RX	Channel 8840	Channel 8915	Channel 8990
			874 MHz	881.5 MHz	889 MHz
LTE Band 41 (2496-2690)	15MHz	TX	Channel 26865	Channel 26915	Channel 26965
			831.5 MHz	836.5 MHz	841.5 MHz
	20MHz	RX	Channel 8865	Channel 8915	Channel 8965
			876.5 MHz	881.5 MHz	886.5 MHz

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band 41 (2496-2690)	5MHz	TX / RX	Channel 39675	Channel 40620	Channel 41565
			2498.5 MHz	2593 MHz	2687.5 MHz
	10MHz	TX / RX	Channel 39700	Channel 40620	Channel 41540
			2501 MHz	2593 MHz	2685 MHz
	15MHz	TX / RX	Channel 39725	Channel 40620	Channel 41515
			2503.5 MHz	2593 MHz	2682.5 MHz
	20MHz	TX / RX	Channel 39750	Channel 40620	Channel 41490
			2506 MHz	2593 MHz	2680 MHz



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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 26 of 32

Test Mode	Bandwidth	TX / RX	RF Channel		
			Low (L)	Middle (M)	High (H)
LTE Band66	1.4MHz	TX	Channel 131979	Channel 132322	Channel 132665
			1710.7 MHz	1745 MHz	1779.3 MHz
		RX	Channel 66443	Channel 66786	Channel 67329
			2110.7 MHz	2145MHz	2199.3 MHz
	3MHz	TX	Channel 131987	Channel 132322	Channel 132657
			1711.5 MHz	1745 MHz	1778.5MHz
		RX	Channel 66451	Channel 66786	Channel 67321
			2111.5 MHz	2145MHz	2198.5MHz
	5MHz	TX	Channel 131997	Channel 132322	Channel 132647
			1712.5 MHz	1745 MHz	1777.5 MHz
		RX	Channel 66461	Channel 66786	Channel 67311
			2112.5 MHz	2145MHz	2197.5 MHz
	10MHz	TX	Channel 132022	Channel 132322	Channel 132622
			1715 MHz	1745 MHz	1775 MHz
		RX	Channel 66486	Channel 66786	Channel 67286
			2115 MHz	2145MHz	2195 MHz
	15MHz	TX	Channel 132047	Channel 132322	Channel 132597
			1717.5 MHz	1745 MHz	1772.5 MHz
		RX	Channel 66511	Channel 66786	Channel 67261
			2117.5 MHz	2145MHz	2192.5 MHz
	20MHz	TX	Channel 132072	Channel 132322	Channel 132572
			1720 MHz	1745 MHz	1770 MHz
		RX	Channel 66536	Channel 66786	Channel 67236
			2120 MHz	2145MHz	2190 MHz

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

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Report No.: SUHR/2021/B001101  
Rev.: 01  
Page: 27 of 32

## 4 Description of Tests

### 4.1 Field Strength of Spurious Radiation

Measurement Procedure: FCC KDB 971168 D01 V03r01

#### Below 1GHz test procedure as below:

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

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

$\text{EIRP } (\text{dBm}) = E (\text{dB}\mu\text{V}/\text{m}) + 20 \log D - 104.8$ ; 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:  
 $E (\text{dB}\mu\text{V}/\text{m}) = \text{Measured amplitude level } (\text{dB}\mu\text{V}) + (\text{Cable Loss } (\text{dB}) + \text{Antenna Factor } (\text{dB}/\text{m}) - \text{AMP}(\text{dB}))$   
 $\text{EIRP } (\text{dBm}) = E (\text{dB}\mu\text{V}/\text{m}) + 20 \log D - 104.8$ ; 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 1

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

#### Remark: Reference test setup 1

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

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

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

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



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Report No.: SUHR/2021/B001101  
Rev.: 01  
Page: 28 of 32

**Test on the worst case:  
Radiated Spurious Emissions  
Traffic mode**  
**Test Band =Band14 TM1**  
**Test Channel = Mid**

<b>Final Data List</b>									
NO.	Frequency [MHz]	Reading [dB $\mu$ V]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1577.1429	59.93	-118.17	-58.24	-13.00	45.24	196	173	Horizontal
2	2365.77	77.71	-115.30	-37.59	-13.00	24.59	154	312	Horizontal
3	3154.36	50.50	-112.15	-61.65	-13.00	48.65	163	41	Horizontal
4	3942.95	49.77	-110.81	-61.04	-13.00	48.04	221	349	Horizontal
5	4731.54	49.70	-108.90	-59.20	-13.00	46.20	147	188	Horizontal
6	5520.13	47.59	-107.49	-59.90	-13.00	46.90	205	213	Horizontal

<b>Final Data List</b>									
NO.	Frequency [MHz]	Reading [dB $\mu$ V]	Factor [dB]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1577.18	55.72	-118.17	-62.45	-13.00	49.45	106	149	Vertical
2	2365.7143	69.03	-115.30	-46.27	-13.00	33.27	188	188	Vertical
3	3154.36	51.48	-112.15	-60.67	-13.00	47.67	222	360	Vertical
4	3942.95	50.11	-110.81	-60.70	-13.00	47.70	145	347	Vertical
5	4731.54	48.46	-108.90	-60.44	-13.00	47.44	266	4	Vertical
6	5520.13	48.05	-107.49	-59.44	-13.00	46.44	189	288	Vertical

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Report No.: SUHR/2021/B001101

Rev.: 01

Page: 29 of 32

## 4.2 Test Setups

### 4.2.1 Test Setup 1

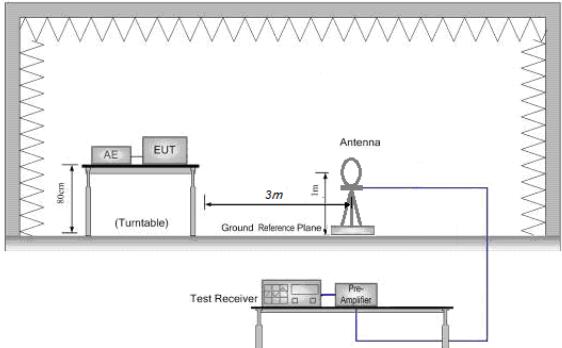


Figure 1. Below 30MHz

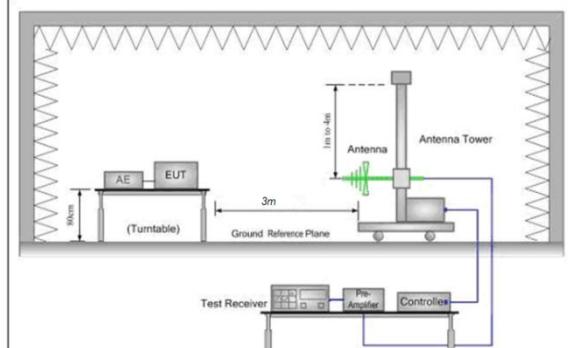


Figure 2. 30MHz to 1GHz

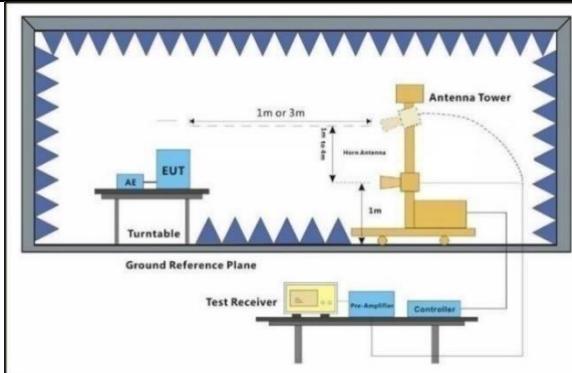


Figure 3. above 1GHz

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Report No.: SUHR/2021/B001101  
 Rev.: 01  
 Page: 30 of 32

## 5 Main Test Instruments

RSE Test Equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-01	2021/5/8	2024/5/7
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-05	2021/2/20	2022/2/19
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2021/5/28	2022/5/27
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2021/2/20	2022/2/19
DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	2021/2/20	2022/2/19
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9163	SUWI-01-11-01	2021/5/16	2022/5/15
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-02	2021/5/16	2022/5/15
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	2021/5/14	2022/5/13
Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	2021/2/20	2022/2/19
Amplifier	Tonscend	TAP01018050	SUWI-01-14-02	2021/2/20	2022/2/19
Amplifier	Tonscend	TAP18040048	SUWI-01-14-03	2021/2/20	2022/2/19
Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	2021/6/10	2022/6/9
Measurement Software	Tonscend	JS32-RE V3.0.0.3	SUWI-02-09-04	NCR	NCR
Radio Communication Analyzer	ROHDE&SCHWARZ	CMW500	SUWI-01-27-01	2021/9/28	2022/9/27
Radio communication analyzer	Anritsu	MT8820C	SUWI-01-16-08	2021/2/20	2022/2/19

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Rev.: 01

Page: 31 of 32

## 6 Measurement Uncertainty

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

No.	Item	Measurement Uncertainty
1	Radiated Emission	± 3.13dB (9kHz - 30MHz)
		± 4.8dB (30MHz - 1GHz)
		± 4.8dB (1GHz to 18GHz)
		± 4.8dB (Above 18GHz)

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Rev.: 01

Page: 32 of 32

## 7 Photographs - EUT Constructional Details

Refer to Appendix A.1 WWAN Setup Photos.

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The End

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