

Report No.: KSCR220500071003

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# TEST REPORT

Application No.: KSCR2205000710AT

**FCC ID**: 2AD6I-A200G4B

**Applicant:** Hillstone Networks Corp.

Address of Applicant: 5201 Great America Pkwy, suite 420, Santa Clara, CA 95054

Manufacturer: Hillstone Networks Co., Ltd.

Address of Manufacturer: NO. 181 Jingrun Road, High-Tech Zone, Suzhou

Factory: X-SPEED INFORMATION TECHNOLOGY CO.,LTD

Address of Factory: 4th Floor, Building 2,Xinyu Electronic Industrial Park,No.69,

Zhaishan, Houshan Village, High-tech Zone, Fuzhou, Fujian , China

**Equipment Under Test (EUT):** 

**EUT Name:** Firewall Appliance

**Model No.:** SG-6000-A200G4B-IN, SG-6000-A200G4B¤

Please refer to section 2 of this report which indicates which model was

actually tested and which were electrically identical.

Trade Mark: Hilstone

47 CFR Part 2

Standard(s): 47 CFR Part 22

47 CFR Part 24 47 CFR Part 27

**Date of Receipt:** 2022-05-12

**Date of Test:** 2022-06-21 to 2022-06-21

**Date of Issue:** 2022-06-22

Test Result: Pass

Eric Lin Laboratory Manager

Fra fin



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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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Revision Record					
Version	Description	Date	Remark		
00	Original	2022-06-22	/		

Authorized for issue by:			
	Damon zhou		
	Damon Zhou / Project Engineer	-	
	Eni fri		
	Eric Lin / Reviewer	-	



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# 2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §22.913 §24.232 §27.50(a)	ERP≤7W(LTE Band 5) EIRP≤ 2W(LTE Band 2,7) EIRP≤ 0.25W(LTE Band 40)	PASS
Peak-Average Ratio	24.232	≤13dB	PASS
Modulation Characteristics	§2.1047	Digital modulation	PASS
Bandwidth	§2.1049(h)	OBW:No limit EBW: No limit	PASS
Band Edge Compliance	§2.1051 §22.917 §24.238 §27.53(a)	≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block	PASS
Spurious emissions at antenna terminals	§2.1051 §22.917 §24.238 §27.53(a)	<ul><li>≤ -13dBm(LTE Band2,5)</li><li>≤ -25dBm(LTE Band7)</li><li>≤ -40dBm(LTE Band40)</li></ul>	PASS
Field strength of spurious radiation	§2.1051 §22.917 §24.238 §27.53(a)	≤ -13dBm(LTE Band2,5) ≤ -25dBm(LTE Band7) ≤ -40dBm(LTE Band40)	PASS
Frequency stability	§2.1055, §22.355, §24.235 §27.54	≤ ±2.5ppm.	PASS

### **Declaration of EUT Family Grouping:**

Note: There are series models mentioned in this report, and they are the identical in electrical and electronic characters. Only the model SG-6000-A200G4B-IN was tested since their differences were the model number and appearance.



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## 4 General Information

## 4.1 Details of E.U.T.

	DC 12V by adapter			
Power Supply:	Adapter Model:EA1019HVRS-120			
1 ower cappiy.	AC Input:100-240Vac,0.8A,50-60Hz			
	DC Output:12.0Vdc,2.0A 24.0W			
Test voltage:	AC120V/60Hz			
Serial Number:	6324916223000543			
Firmware version:	SG-6000-A200			
Sample Type:	Fixed production			
LTE Operation	LTE Band 2,5,7,40			
Frequency Band:				
Modulation Type:	QPSK, 16QAM			
Antenna Type:	Dipole Antenna			
	B2: -2.25dBi(Provided by the manufacturer)			
Antenna Gain:	B5: -0.3dBi(Provided by the manufacturer)			
/ intornia Gain.	B7: -2.22dBi(Provided by the manufacturer)			
	B40: 0.84dBi(Provided by the manufacturer)			
Extreme temp. Tolerance:	0°C to +45°C			
Extreme vol. Limits:	102V AC to 138V AC (nominal: 120 AC)			
IMEI:	869374040656190			

#### Note:

The antenna gain value is provided by the customer. The test lab will not be responsible for wrong test result due to incorrect information about antenna gain values.



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## 4.2 Test Frequency

iz rest Frequency	Nominal	RF Channel			
Test mode:	Bandwidth	Low (L)	Middle (M)	High (H)	
	(MHz)	MHz	MHz	MHz	
	1.4	1850.7	1880	1909.3	
	3	1851.5	1880	1908.5	
LTE EDD Dond 0	5	1852.5	1880	1907.5	
LTE FDD Band 2	10	1855.0	1880	1905.0	
	15	1857.5	1880	1902.5	
	20	1860.0	1880	1900.0	
	Nominal		RF Channel		
Test mode:	Bandwidth	Low (L)	Middle (M)	High (H)	
	(MHz)	MHz	MHz	MHz	
	1.4	824.7	836.5	848.3	
LTE EDD Dande	3	825.5	836.5	847.5	
LTE FDD Band 5	5	826.5	836.5	846.5	
	10	829.0	836.5	844.0	
	Nominal	RF Channel			
Test mode:	Bandwidth	Low (L)	Middle (M)	High (H)	
	(MHz)	MHz	MHz	MHz	
	5	2502.5	2535	2567.5	
LTE EDD Dand 7	10	2505	2535	2565	
LTE FDD Band 7	15	2507.5	2535	2562.5	
	20	2510	2535	2560	
	Nominal		RF Channel		
Test mode:	Bandwidth	Low (L)	Middle (M)	High (H)	
	(MHz)	MHz	MHz	MHz	
LTE TDD Band 40	5	2307.5	2310	2312.5	
(2305MHz- 2315MHz)	10	/	2310	/	
	Nominal		RF Channel		
Test mode:	Bandwidth	Low (L)	Middle (M)	High (H)	
	(MHz)	MHz	MHz	MHz	
LTE TDD Band 40	5	2352.5	2355	2357.5	
(2350MHz- 2360MHz)	10	/	2355	/	



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#### 4.3 Test Environment

Environment Parameter	Selected Va	alues During Tests	
Relative Humidity	Relative Humidity 4		
Atmospheric Pressure:	1015Pa		
Temperature:	TN	25 °C	
	VL	102V AC	
Voltage:	VN	120V AC	
	VH	138V AC	

NOTE: VL= lower extreme test voltage

VN= nominal voltage

VH= upper extreme test voltage

TN= normal temperature

### 4.4 Description of Support Units

The EUT has been tested as an independent unit.



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## 4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4 x 10 <sup>-8</sup>
2	Timeout	2s
3	Duty cycle	0.37%
4	Occupied Bandwidth	3%
5	RF conducted power	0.6dB
6	RF power density	2.84dB
7	Conducted Spurious emissions	0.75dB
0	DE Dodieted novem	4.6dB (Below 1GHz)
8	RF Radiated power	4.1dB (Above 1GHz)
		4.2dB (Below 30MHz)
9	Radiated Spurious emission test	4.4dB (30MHz-1GHz)
9		4.8dB (1GHz-18GHz)
		5.2dB (Above 18GHz)
10	Temperature test	1°C
11	Humidity test	3%
12	Supply voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



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#### 4.6 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

### 4.7 Test Facility

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

### • CNAS (No. CNAS L4354)

CNAS has accredited Compliance Certification Services (Kunshan) Inc. to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

#### A2LA (Certificate No. 2541.01)

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

#### • FCC (Designation Number: CN1172)

Compliance Certification Services Inc. has been recognized as an accredited testing laboratory.

Designation Number: CN1172.

#### • ISED (CAB identifier: CN0072)

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

#### • VCCI (Member No.: 1938)

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600,C-11707, T-11499, G-10216 respectively.

#### 4.8 Deviation from Standards

None

### 4.9 Abnormalities from Standard Conditions

None



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# 5 Equipment List

Item	Equipment	Manufacturer	Model	Serial Number	Cal Date	Cal. Due Date
RF	Conducted Test	•		•		
1	Spectrum Analyzer	Agilent	E4446A	MY44020154	04/16/2022	04/15/2023
2	Spectrum Analyzer	Keysight	N9020A	MY55370209	12/02/2021	12/01/2022
3	Spectrum Analyzer	Keysight	N9010A	MY56480443	02/01/2022	01/31/2023
4	Signal Generator	Agilent	N5182A	MY50142015	09/25/2021	09/24/2022
5	Radio Communication Test Station	Anritsu	MT8000A	6262012849	N/A	N/A
6	Radio Communication Analyzer	Anritsu	MT8821C	6201692222	N/A	N/A
7	Universal Radio Communication Tester	R&S	CMW500	159275	10/19/2021	10/18/2022
8	Universal Radio Communication Tester	R&S	CMW500	167239	04/16/2022	04/15/2023
9	Power Meter	Anritsu	ML2495A	1445010	04/15/2022	04/14/2023
10	Switcher	CCSRF	FY562	KUS2001M001 -3	10/19/2021	10/18/2022
11	6dB Attenuator	Mini-Circuits	NAT-6-2W	15542-1	N.C.R	N.C.R
12	Power Divider	AISI	IOWOPE2068	PE2068	N.C.R	N.C.R
13	Filter	MICRO-TRONICS	BRM50701	5	N.C.R	N.C.R
14	Conducted test cable	/	RF01-RF04	/	04/15/2022	04/14/2023
15	Software	BST	TST-PASS	N/A	N/A	N/A
16	Temp. / Humidity Chamber	TERCHY	MHK-120AK	X30109	04/15/2022	04/14/2023
17	Thermometer	Anymetre	TH603	CCS007	10/16/2021	10/15/2022
RF R	adiated Test					
1	Spectrum Analyzer	R&S	FSV40	101493	10/19/2021	10/18/2022
2	Signal Generator	Agilent	E8257C	MY43321570	10/19/2021	10/18/2022
4	Bilog Antenna	TESEQ	CBL 6112D	35403	06/21/2020	06/20/2022
5	Bilog Antenna	TESEQ	CBL 6112D	35403	06/21/2021	06/20/2023
6	Bilog Antenna	SCHWARZBECK	VULB9160	9160-3342	04/13/2021	04/12/2023
7	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	267	10/26/2020	10/25/2022
8	Horn-antenna(1-18GHz)	ETS-LINDGREN	3117	00143290	02/22/2021	02/21/2023
9	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	BBHA9170171	02/22/2022	02/21/2023
10	Pre-Amplifier(30MHz~18GHz)	LNA	/	/	04/15/2022	04/14/2023
11	Amplifier(18~40GHz)	COM-POWER	PAM-840A	461332	10/23/2021	10/22/2022
12	Low Pass Filter	MICRO-TRONICS	VLFX-950	RV142900829	N.C.R	N.C.R
13	High Pass Filter	Mini-Circuits	VHF-1200	15542	N.C.R	N.C.R
14	Filter (885 MHz~915 MHz)	MICRO-TRONICS	BRM14698	1	N.C.R	N.C.R
15	Filter (815 MHz~860 MHz)	MICRO-TRONICS	BRM14697	1	N.C.R	N.C.R
16	Filter (1745 MHz~1910 MHz)	MICRO-TRONICS	BRM14700	1	N.C.R	N.C.R
17	Filter (1922 MHz~1977 MHz)	MICRO-TRONICS	BRM50715	1	N.C.R	N.C.R
18	Filter (1532 MHz~1845 MHz)	MICRO-TRONICS	BRM50713	1	N.C.R	N.C.R
19	RE test cable	/	RE01-RE04	/	04/15/2022	04/14/2023
20	Software	Faratronic	EZ_EMC-v 3A1	N/A	N/A	N/A



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21	Universal Radio Communication Tester	R&S	CMW500	159275	10/19/2021	10/18/2022
22	Universal Radio Communication Tester	R&S	CMW500	167239	04/16/2022	04/15/2023



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# 6 Radio Spectrum Matter Test Results

## 6.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement: \$2.1046,§22.913,§24.232,§27.50(a)
Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: ERP≤7W(LTE Band 5)
EIRP≤ 2W(LTE Band 2,7)

EIRP≤ 0.25W(LTE Band 40)

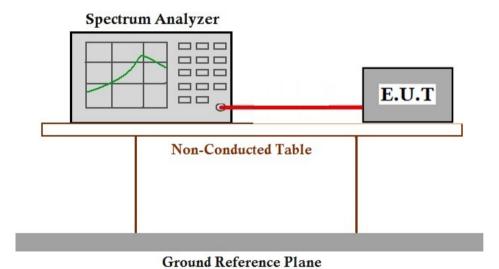
### 6.1.1 E.U.T. Operation

**Operating Environment:** 

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: a: Tx mode, Keep the EUT in transmitting mode.

#### 6.1.2 Test Setup Diagram



#### 6.1.3 Measurement Data

Please refer to

Appendix E for KSCR220500071003, Appendix F for KSCR220500071003 Appendix G for KSCR220500071003, Appendix H for KSCR220500071003 Appendix I for KSCR220500071003.



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## 6.2 Peak-Average Ratio

Test Requirement: §24.232

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: ≤13dB

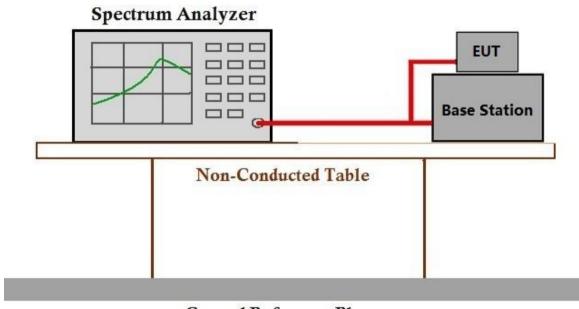
#### 6.2.1 E.U.T. Operation

**Operating Environment:** 

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: a: Tx mode, Keep the EUT in transmitting mode.

### 6.2.2 Test Setup Diagram



### Ground Reference Plane

#### 6.2.3 Measurement Data

Appendix E for KSCR220500071003, Appendix F for KSCR220500071003 Appendix G for KSCR220500071003, Appendix H for KSCR220500071003 Appendix I for KSCR220500071003.



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### 6.3 Bandwidth

Test Requirement: §2.1049(h)

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: OBW: No limit

EBW: No limit

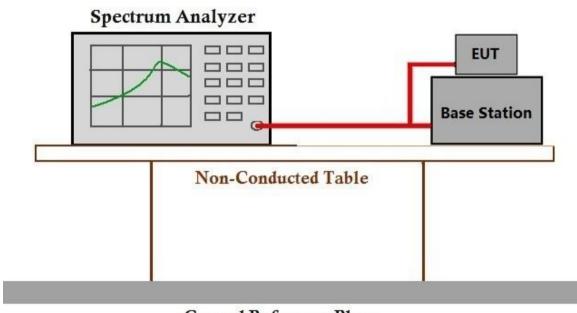
#### 6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: a: Tx mode, Keep the EUT in transmitting mode.

#### 6.3.2 Test Setup Diagram



## **Ground Reference Plane**

#### 6.3.3 Measurement Data

Appendix E for KSCR220500071003, Appendix F for KSCR220500071003 Appendix G for KSCR220500071003, Appendix H for KSCR220500071003 Appendix I for KSCR220500071003.



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### 6.4 Band Edge Compliance

Test Requirement: §2.1051

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: ≤ -13dBm/1%\*EBW, in 1 MHz bands immediately outside and adjacent to

the frequency block

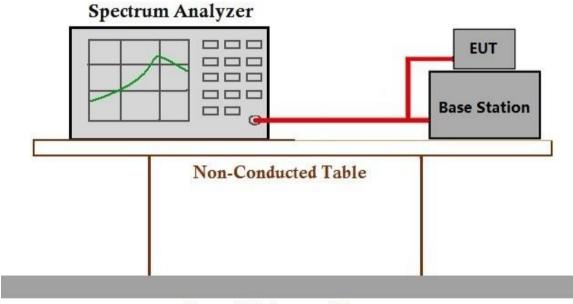
#### 6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: a: Tx mode, Keep the EUT in transmitting mode.

#### 6.4.2 Test Setup Diagram



### Ground Reference Plane

### 6.4.3 Measurement Data

Appendix E for KSCR220500071003, Appendix F for KSCR220500071003 Appendix G for KSCR220500071003, Appendix H for KSCR220500071003 Appendix I for KSCR220500071003.



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### 6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit:  $\leq -13dBm(LTE Band2,5)$ 

≤ -25dBm(LTE Band7)

≤ -40dBm(LTE Band40)

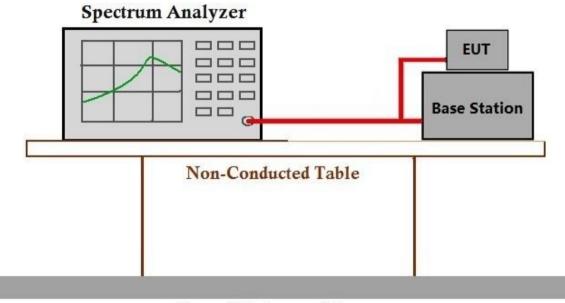
### 6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: a: Tx mode, Keep the EUT in transmitting mode.

#### 6.5.2 Test Setup Diagram



### Ground Reference Plane

#### 6.5.3 Measurement Data

Appendix E for KSCR220500071003, Appendix F for KSCR220500071003 Appendix G for KSCR220500071003, Appendix H for KSCR220500071003 Appendix I for KSCR220500071003.



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## 6.6 Field strength of spurious radiation

Test Requirement: §2.1051

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: ≤ -13dBm(LTE Band2,5)

≤ -25dBm(LTE Band7) ≤ -40dBm(LTE Band40)

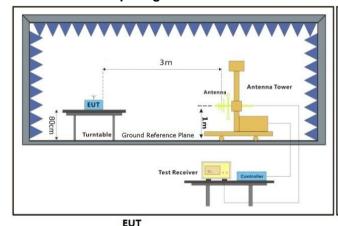
### 6.6.1 E.U.T. Operation

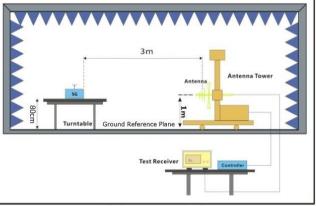
**Operating Environment:** 

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: a: Tx mode, Keep the EUT in transmitting mode.

### 6.6.2 Test Setup Diagram





Substiute Antenna+Signal Generator





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#### 6.6.3 Measurement Procedure and Data

#### Test Procedure:

- (1)On a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
- (2) The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
- (3)The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- (4) The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- (5)The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
- (6)The transmitter shall than be rotated through 360 in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- (7)The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- (8) The maximum signal level detected by the measuring receiver shall be noted.
- (9)The measurement shall be repeated with the test antenna set to horizontal polarization.
- (10) Replace the antenna with a proper Antenna (substitution antenna).
- (11) The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
- (12) The substitution antenna shall be connected to a calibrated signal generator.
- (13)If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- (14) The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- (15)The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- (16) The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- (17)The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.



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LTE BAND 2-Low channel						
Frequency	Level	Limit	Over Limit	Polarization		
(MHz)	(dBm)	(dBm)	(dB)			
3720.000	-59.18	-13	-46.18	Horizontal		
5580.000	-59.70	-13	-46.70	Horizontal		
7440.000	-57.59	-13	-44.59	Horizontal		
3720.000	-51.72	-13	-38.72	Vertical		
5580.000	-59.92	-13	-46.92	Vertical		
7440.000	-57.84	-13	-44.84	Vertical		

LTE BAND 2-Middle channel					
Frequency	Level	Limit	Over Limit	Polarization	
(MHz)	(dBm)	(dBm)	(dB)		
3760.000	-51.45	-13	-38.45	Horizontal	
5640.000	-61.18	-13	-48.18	Horizontal	
7520.000	-56.65	-13	-43.65	Horizontal	
3760.000	-54.55	-13	-41.55	Vertical	
5640.000	-59.35	-13	-46.35	Vertical	
7520.000	-59.96	-13	-46.96	Vertical	

LTE BAND 2-High channel					
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization	
3800.000	-61.38	-13	-48.38	Horizontal	
5700.000	-61.44	-13	-48.44	Horizontal	
7600.000	-52.83	-13	-39.83	Horizontal	
3800.000	-56.56	-13	-43.56	Vertical	
5700.000	-63.81	-13	-50.81	Vertical	
7600.000	-55.81	-13	-42.81	Vertical	



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LTE BAND 5-Low channel					
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization	
1658.000	-56.48	-13	-43.48	Horizontal	
2487.000	-57.17	-13	-44.17	Horizontal	
3316.000	-56.75	-13	-43.75	Horizontal	
1658.000	-61.05	-13	-48.05	Vertical	
2487.000	-56.61	-13	-43.61	Vertical	
3316.000	-53.74	-13	-40.74	Vertical	

LTE BAND 5-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1673.000	-57.94	-13	-44.94	Horizontal
2509.500	-59.38	-13	-46.38	Horizontal
3346.000	-60.52	-13	-47.52	Horizontal
1673.000	-51.60	-13	-38.60	Vertical
2509.500	-60.14	-13	-47.14	Vertical
3346.000	-56.84	-13	-43.84	Vertical

LTE BAND 5-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1688.000	-59.70	-13	-46.70	Horizontal
2532.000	-61.33	-13	-48.33	Horizontal
3376.000	-55.28	-13	-42.28	Horizontal
1688.000	-55.33	-13	-42.33	Vertical
2532.000	-62.81	-13	-49.81	Vertical
3376.000	-54.46	-13	-41.46	Vertical



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LTE BAND 7-Low channel					
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization	
5020.000	-54.65	-25	-29.65	Horizontal	
7530.000	-61.49	-25	-36.49	Horizontal	
10040.000	-58.74	-25	-33.74	Horizontal	
5020.000	-59.25	-25	-34.25	Vertical	
7530.000	-57.17	-25	-32.17	Vertical	
10040.000	-55.21	-25	-30.21	Vertical	

LTE BAND 7-Middle channel				
Frequency	Level	Limit	Over Limit	Polarization
(MHz)	(dBm)	(dBm)	(dB)	
5070.000	-53.85	-25	-28.85	Horizontal
7605.000	-62.30	-25	-37.30	Horizontal
10140.000	-56.89	-25	-31.89	Horizontal
5070.000	-58.59	-25	-33.59	Vertical
7605.000	-59.25	-25	-34.25	Vertical
10140.000	-56.37	-25	-31.37	Vertical

LTE BAND 7-High channel					
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization	
5120.000	-58.59	-25	-33.59	Horizontal	
7680.000	-61.57	-25	-36.57	Horizontal	
10240.000	-57.53	-25	-32.53	Horizontal	
5120.000	-60.82	-25	-35.82	Vertical	
7680.000	-58.89	-25	-33.89	Vertical	
10240.000	-55.08	-25	-30.08	Vertical	



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LTE BAND 40-Low channel					
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization	
4615.000	-55.84	-40	-15.84	Horizontal	
6922.500	-58.3	-40	-18.3	Horizontal	
9230.000	-53.1	-40	-13.1	Horizontal	
4615.000	-52.7	-40	-12.7	Vertical	
6922.500	-59.52	-40	-19.52	Vertical	
9230.000	-55.3	-40	-15.3	Vertical	

LTE BAND 40-Middle channel					
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization	
4620.000	-53.41	-40	-13.41	Horizontal	
6930.000	-58.02	-40	-18.02	Horizontal	
9240.000	-55.7	-40	-15.7	Horizontal	
4620.000	-58.56	-40	-18.56	Vertical	
6930.000	-58.04	-40	-18.04	Vertical	
9240.000	-58.85	-40	-18.85	Vertical	

LTE BAND 40-High channel					
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization	
4625.000	-53.34	-40	-13.34	Horizontal	
6937.500	-62.77	-40	-22.77	Horizontal	
9250.000	-54.14	-40	-14.14	Horizontal	
4625.000	-58.3	-40	-18.3	Vertical	
6937.500	-60.79	-40	-20.79	Vertical	
9250.000	-55.06	-40	-15.06	Vertical	

#### Remark

We have tested all modulation and all Bandwidth, but only the worst case data presented in this report.



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### 6.7 Frequency stability

Test Requirement: §2.1055

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit:  $\leq \pm 2.5$ ppm.

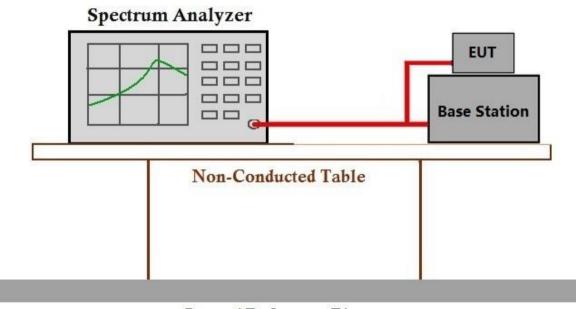
## 6.7.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: a: Tx mode, Keep the EUT in transmitting mode.

#### 6.7.2 Test Setup Diagram



### Ground Reference Plane

#### 6.7.3 Measurement Data

Appendix E for KSCR220500071003, Appendix F for KSCR220500071003 Appendix G for KSCR220500071003, Appendix H for KSCR220500071003 Appendix I for KSCR220500071003.



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#### 6.8 Modulation Characteristics

Test Requirement: §2.1047
Test Method: ANSI C63.26
Limit: Digital modulation

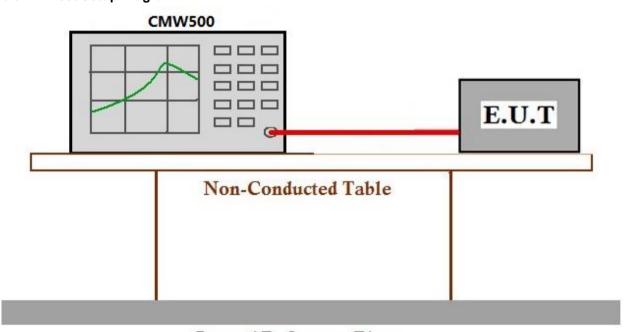
#### 6.8.1 E.U.T. Operation

**Operating Environment:** 

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: a: Tx mode, Keep the EUT in transmitting mode.

### 6.8.2 Test Setup Diagram



## **Ground Reference Plane**

### 6.8.3 Measurement Data

Appendix E for KSCR220500071003, Appendix F for KSCR220500071003 Appendix G for KSCR220500071003, Appendix H for KSCR220500071003 Appendix I for KSCR220500071003.



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# 7 Photographs

Refer to the < Photographs >

- End of the Report -



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