Shenzhen Huatongwei International Inspection Co., Ltd.

1/F,Bldg 3,Hongfa Hi-tech Industrial Park,Genyu Road,Tianliao,Gongming,Shenzhen,China Phone:86-755-26748019 Fax:86-755-26748089 http://www.szhtw.com.cn



FCC REPORT

Report Reference No.....:: CHTEW20120069 Report verification:

Project No....:: SHT2009099801EW

FCC ID.....:: 2AXDV-N402

Applicant's name.....: NEXT4

Address....: 3 avenue Didier Daurat 31400 TOULOUSE, France

Manufacturer....: NEXT4

Address....: 3 avenue Didier Daurat 31400 TOULOUSE, France

Test item description: N402

Trade Mark:

Model/Type reference..... N402

Listed Model(s):

FCC CFR Title 47 Part 2 Standard::

FCC CFR Title 47 Part 90

Date of receipt of test sample..... Oct. 23, 2020

Date of testing.....: Oct. 24, 2020- Dec. 08, 2020

Date of issue....: Dec. 09, 2020

Result....: **Pass**

Compiled by

(position+printedname+signature)...: File administrators Silvia Li

Supervised by

(position+printedname+signature)....: Project Engineer Aaron Fang Silvia Li Aaron.Fang

Approved by

(position+printedname+signature)....: Manager Hans Hu

Testing Laboratory Name: Shenzhen Huatongwei International Inspection Co., Ltd.

Address....: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road,

Tianliao, Gongming, Shenzhen, China

Shenzhen Huatongwei International Inspection Co., Ltd. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen Huatongwei International Inspection Co., Ltd. is acknowledged as copyright owner and source of the material. Shenzhen Huatongwei International Inspection Co., Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

The test report merely correspond to the test sample.

Report No.: CHTEW20120069 Page: 2 of 17 Issued: 2020-12-09

Contents

<u>1.</u>	TEST STANDARDS AND REPORT VERSION	3
1.1.	Applicable Standards	3
1.2.	Report version information	3
<u>2.</u>	TEST DESCRIPTION	4
<u>3.</u>	SUMMARY	5
3.1.	Client Information	5
3.2.	Product Description	5
3.3.	Operation state	5
3.4.	EUT operation mode	6
3.5.	EUT configuration	6
3.6.	Modifications	6
<u>4.</u>	TEST ENVIRONMENT	7
4.1.	Address of the test laboratory	7
4.2.	Test Facility	7
4.3.	Equipments Used during the Test	8
4.4.	Environmental conditions	9
4.5.	Statement of the measurement uncertainty	9
<u>5.</u>	TEST CONDITIONS AND RESULTS	10
5.1.	ERP	10
5.2.	Radiated Spurious Emission	13
<u>6.</u>	TEST SETUP PHOTOS OF THE EUT	17
<u>7.</u>	EXTERNAL AND INTERNAL PHOTOS OF THE EUT	17
8.	APPENDIX REPORT	17

Report No.: CHTEW20120069 Page: 3 of 17 Issued: 2020-12-09

1. TEST STANDARDS AND REPORT VERSION

1.1. Applicable Standards

The tests were performed according to following standards:

FCC Rules Part 2: FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

FCC Rules Part 90: PRIVATE LAND MOBILE RADIO SERVICES.

ANSI C63.26: 2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

KDB 971168 D01 Power Meas License Digital Systems v03: MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS

1.2. Report version information

Revision No.	Date of issue	Description
N/A	2020-12-09	Original

Report No.: CHTEW20120069 Page: 4 of 17 Issued: 2020-12-09

2. Test Description

Test Item	Section in CFR 47	Result	Test Engineer
Conducted Output Power	Part 2.1046 Part 90.635(b)	Pass*	N/A
Peak-to-Average Ratio	-	Pass*	N/A
99% Occupied Bandwidth & 26 dB Bandwidth	Part 2.1049	Pass*	N/A
Band Edge	Part 2.1051 Part 90.691	Pass*	N/A
Conducted Spurious Emissions	Part 2.1051 Part 90.691	Pass*	N/A
Frequency stability VS Temperature	Part 2.1055(a)(1)(b) Part 90.213	Pass*	N/A
Frequency stability VS Voltage	y stability VS Voltage Part 2.1055(d)(1)(2) Part 90.213 Pass*		N/A
ERP	Part 22.913(a) Part 90.635(b)	Pass	Pan Xie
Radiated Spurious Emissions	Part 2.1053 Part 90.691	Pass	Pan Xie

Note:

^{1.} The measurement uncertainty is not included in the test result.

^{2.} * reference to module report , which FCC ID is XMR201707BG96

Report No.: CHTEW20120069 Page: 5 of 17 Issued: 2020-12-09

3. **SUMMARY**

3.1. Client Information

Applicant:	NEXT4
Address:	3 avenue Didier Daurat 31400 TOULOUSE, France
Manufacturer:	NEXT4
Address:	3 avenue Didier Daurat 31400 TOULOUSE, France

3.2. Product Description

Name of EUT:	NEXT4
Trade Mark:	-
Model No.:	N402
Listed Model(s):	-
SIM Information:	Support One eSIM Card
Power supply:	DC4.5V by 3*AA battery
Hardware version:	2.2.b
Software version:	1.3.0
4G	
Category	M1
Operation Band:	☑ FDD Band 26
Transmit frequency:	814.7 MHz – 823.3 MHz
Receive frequency:	859.7 MHz – 868.3 MHz
Channel bandwidth:	1.4MHz, 3MHz, 5MHz, 10MHz
Power Class:	Class 3
Modulation type:	QPSK, 16QAM
Antenna type	Flex Antenna
Antenna Gain	-2.0dBi

3.3. Operation state

> Test frequency list

TDD Band 26	Test Frequency ID	Banwidth[MHz]	N _{UL}	Frequency of Uplink [MHz]	N _{DL}	Frequency of Downlink [MHz]
		1.4	26997	814.7	8697	859.7
	Law Banas	3	26705	815.5	8705	860.5
	Low Range	5	26715	816.5	8715	861.5
		10	-	-	-	-
	Mid Range	1.4/3/5/10	26740	819	8740	864
		1.4	26783	823.3	8783	868.3
	High Range	3	26775	822.5	8775	867.5
	nigh Kange	5	26765	821.5	8765	866.5
		10	-	-	-	-

Report No.: CHTEW20120069 Page: 6 of 17 Issued: 2020-12-09

3.4. EUT operation mode

For RF test items

The EUT has been tested under typical operating condition. Testing was performed by configuring EUT to maximum output power status.

Toot Itomo	Dond		Bandwidth (MHz)			Modulation		RB#		
Test Items	Band	1.4	3	5	10	QPSK	16QAM	1	Half	Full
Conducted Output Power	26	0	0	0	0	0	0	0	0	0
Peak-to-Average Ratio	26	0	0	0	0	0	0	0	-	0
99% Occupied Bandwidth & 26 dB Bandwidth	26	0	0	0	0	0	0	-	-	0
Band Edge	26	0	0	0	0	0	0	0	-	0
Conducted Spurious Emission	26	0	0	0	0	0	0	0	-	-
Frequency Stability	26	0	0	0	0	0	0	-	-	0
ERP and EIRP	26	0	0	0	0	0	0	0	-	-
Radiated Spurious Emission	26	0	0	0	0	0	0	0	-	-
Remark	The mark " o"means that this configuration is chosenfor testing The mark "-"means that this bandwidth is not test. The device is investigatedfrom 30MHz to10 times offundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.									

3.5. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

supplied by the manufacturer

-	sup	plied	bν	the	lab

0	/	Manufacturer:	/
	1	Model No.:	/
	1	Manufacturer:	/
0		Model No.:	/

3.6. Modifications

No modifications were implemented to meet testing criteria.

Report No.: CHTEW20120069 Page: 7 of 17 Issued: 2020-12-09

4. TEST ENVIRONMENT

4.1. Address of the test laboratory

Laboratory: Shenzhen Huatongwei International Inspection Co., Ltd. Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

4.2. Test Facility

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 3902.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 762235

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files.

IC-Registration No.:5377A

Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No.: 5377A.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

Report No.: CHTEW20120069 Page: 8 of 17 Issued: 2020-12-09

4.3. Equipments Used during the Test

Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Signal and spectrum Analyzer	R&S	HTWE0242	FSV40	100048	2020/10/19	2021/10/18
•	Signal & Spectrum Analyzer	R&S	HTWE0262	FSW26	103440	2020/10/19	2021/10/18
•	Spectrum Analyzer	Agilent	HTWE0286	N9020A	MY50510187	2020/10/19	2021/10/18
•	Radio communication tester	R&S	HTWE0287	CMW500	137688-Lv	2020/10/19	2021/10/18
•	Test software	Tonscend	N/A	JS1120	N/A	N/A	N/A

•	Radiated Spu	rious Emission					
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Semi-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	N/A	2018/09/27	2021/09/26
•	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2020/10/20	2021/10/19
•	Loop Antenna	R&S	HTWE0170	HFH2-Z2	100020	2018/04/02	2021/04/01
•	Broadband Horn Antenna	SCHWARZBECK	HTWE0103	BBHA9170	BBHA9170472	2018/10/12	2021/10/11
•	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0123	VULB9163	538	2018/04/04	2021/04/03
•	Horn Antenna	SCHWARZBECK	HTWE0126	9120D	1011	2020/04/01	2023/03/31
•	Pre-amplifier	CD	HTWE0071	PAP-0102	12004	2020/11/12	2021/11/11
•	Broadband Preamplifier	SCHWARZBECK	HTWE0201	BBV 9718	9718-248	2020/05/10	2021/05/09
•	RF Connection Cable	HUBER+SUHNER	HTWE0120- 01	6m 18GHz S Serisa	N/A	2020/05/10	2021/05/09
•	RF Connection Cable	HUBER+SUHNER	HTWE0120- 02	6m 3GHz RG Serisa	N/A	2020/05/10	2021/05/09
•	RF Connection Cable	HUBER+SUHNER	HTWE0120- 03	6m 3GHz RG Serisa	N/A	2020/05/10	2021/05/09
•	RF Connection Cable	HUBER+SUHNER	HTWE0120- 04	6m 3GHz RG Serisa	N/A	2020/05/10	2021/05/09
•	RF Connection Cable	HUBER+SUHNER	HTWE0121- 01	6m 18GHz S Serisa	N/A	2020/05/10	2021/05/09
•	EMI Test Software	Audix	N/A	E3	N/A	N/A	N/A

•	Auxiliary Equipment										
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)				
•	Climate chamber	ESPEC	HTWE0254	GPL-2	N/A	2020/10/21	2021/10/20				
•	DC Power Supply	Gwinstek	HTWE0274	SPS-2415	GER835793	N/A	N/A				

Report No.: CHTEW20120069 Page: 9 of 17 Issued: 2020-12-09

4.4. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Voltage	VN=Nominal Voltage	DC 4.50V	
	VL=Lower Voltage	DC 4.05V	
	VH=Higher Voltage	DC 4.95V	
Temperature	TN=Normal Temperature	25 °C	
	Extreme Temperature From -30° to + 50° centigrade		
Humidity	ty 30~60 %		
Air Pressure	950-1050 hPa		

4.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01"Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics;Part 1"and TR-100028-02 "Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics;Part 2 " and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongweilaboratory is reported:

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.51 dB	(1)
Transmitter power Radiated	2.66dB for <1GHz 3.44dB for >1GHz	(1)
Conducted spurious emissions 9kHz~40GHz	0.51 dB	(1)
Radiated spurious emissions	2.66dB for <1GHz	(1)
Tradiated oparious simpolorie	3.44dB for >1GHz	(· /
Occupied Pandwidth	15Hz for <1GHz	(1)
Occupied Bandwidth	70Hz for >1GHz	(1)
Fraguency orrer	15Hz for <1GHz	(1)
Frequency error	70Hz for >1GHz	(1)

⁽¹⁾ This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

Report No.: CHTEW20120069 Page: 10 of 17 Issued: 2020-12-09

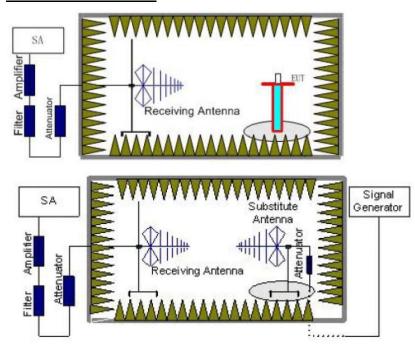
5. TEST CONDITIONS AND RESULTS

5.1. ERP

LIMIT

LTE Band 26: 100W(50.00dBm) ERP

TEST CONFIGURATION



TEST PROCEDURE

- Place the EUT in the center of the turntable.
 - a) For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table at a nominal height of 80 cm above the reference ground plane
 - b) For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table at a nominal height of 1.5 m above the ground plane.
- 2. Unless the EUT uses an integral antenna, the EUT shall be terminated with a non-radiating transmitter load. In cases where the EUT uses an adjustable antenna, the antenna shall be adjusted through typical positions and lengths to maximize emissions levels.
- The EUT shall be tested while operating on the frequency per manufacturer specification. Set the transmitter to operate in continuous transmit mode.
- 4. Receiver or Spectrum set as follow:

Below 1GHz, RBW=100kHz, VBW=300kHz, Detector=Peak, Sweep time=Auto

Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peck, Sweep time=Auto

- 5. Each emission under consideration shall be evaluated:
 - a) Raise and lower the measurement antenna from 1 m to 4 m, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
 - b) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.
 - c) Return the turntable to the azimuth where the highest emission amplitude level was observed.
 - d) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
 - e) Record the measured emission amplitude level and frequency
- 6. Repeat step 5 for each emission frequency with the measurement antenna oriented in both the horizontal

Report No.: CHTEW20120069 Page: 11 of 17 Issued: 2020-12-09

and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.

- Set-up the substitution measurement with the reference point of the substitution antenna located as near
 as possible to where the center of the EUT radiating element was located during the initial EUT
 measurement.
- 8. Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.
- 9. Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.
- 10. For each emission that was detected and measured in the initial test
 - Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.
 - b) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step 5 and step 6.
 - c) Record the output power level of the signal generator when equivalence is achieved in step b).
- 11. Repeat step 8 through step 10 with the measurement antenna oriented in the opposite polarization.
- 12. Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:

Pe = Ps(dBm) - cable loss (dB) + antenna gain (dBd)

where

Pe = equivalent emission power in dBm

Ps = source (signal generator) power in dBm

NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.

13. Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from:

gain (dBd) = gain (dBi) -2.15 dB.

If necessary, the antenna gain can be calculated from calibrated antenna factor information

14. Provide the complete measurement results as a part of the test report.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

 Report No.: CHTEW20120069 Page: 12 of 17 Issued: 2020-12-09

LTE Band 26-1.4MHz						
Modulation	Channel	ERP	ERP (dBm)		Dooult	
Modulation	Channel	Vertical	Horizontal	Limit (dBm)	Result	
	Low	21.09	18.35	50.00		
QPSK	Mid	22.00	19.21		PASS	
	High	20.67	18.26			
	Low	21.03	18.32	<50.00		
16QAM	Mid	21.96	19.29		PASS	
	High	20.61	18.20			

	LTE Band 26-3MHz						
Modulation	Channel	ERP (dBm)		Limit (dPm)	Popult		
Modulation	Channel	Vertical	Horizontal	Limit (dBm)	Result		
	Low	21.09	18.37		PASS		
QPSK	Mid	22.05	19.18				
	High	20.73	18.31				
	Low	20.99	18.27	<50.00 	PASS		
16QAM	Mid	21.88	19.20				
	High	20.55	18.20				

LTE Band 26-5MHz						
Modulation	Channel	ERP	ERP (dBm)		Danish	
Modulation	Channel	Vertical	Horizontal	Limit (dBm)	Result	
	Low	21.05	18.31		PASS	
QPSK	Mid	21.96	19.23			
	High	20.67	18.38			
	Low	21.08	18.45	<50.00		
16QAM	Mid	21.92	19.17		PASS	
	High	20.54	18.24			

LTE Band 26-10MHz						
Modulation	Channel	ERP (dBm)		Limit (dPm)	Decult	
Modulation	Chamei	Vertical	Horizontal	Limit (dBm)	Result	
QPSK	Mid	22.04	19.25	<50.00	PASS	
16QAM	Mid	22.04	19.30	<50.00	PASS	

Report No.: CHTEW20120069 Page: 13 of 17 Issued: 2020-12-09

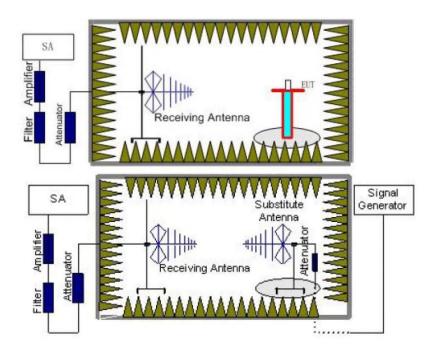
5.2. Radiated Spurious Emission

LIMIT

(1) 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 + 10 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.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 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 37.5 kHz.

TEST CONFIGURATION



TEST PROCEDURE

- 1. Place the EUT in the center of the turntable.
 - a) For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table at a nominal height of 80 cm above the reference ground plane
 - b) For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table at a nominal height of 1.5 m above the ground plane.
- 2. Unless the EUT uses an integral antenna, the EUT shall be terminated with a non-radiating transmitter load. In cases where the EUT uses an adjustable antenna, the antenna shall be adjusted through typical positions and lengths to maximize emissions levels.
- 3. The EUT shall be tested while operating on the frequency per manufacturer specification. Set the transmitter to operate in continuous transmit mode.
- 4. Receiver or Spectrum set as follow:

Below 1GHz, RBW=100kHz, VBW=300kHz, Detector=Peak, Sweep time=Auto Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peck, Sweep time=Auto

- 5. Each emission under consideration shall be evaluated:
 - a) Raise and lower the measurement antenna from 1 m to 4 m, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
 - b) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.

Report No.: CHTEW20120069 Page: 14 of 17 Issued: 2020-12-09

- c) Return the turntable to the azimuth where the highest emission amplitude level was observed.
- d) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
- e) Record the measured emission amplitude level and frequency
- 6. Repeat step 5 for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.
- Set-up the substitution measurement with the reference point of the substitution antenna located as near
 as possible to where the center of the EUT radiating element was located during the initial EUT
 measurement.
- 8. Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.
- 9. Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.
- 10. For each emission that was detected and measured in the initial test
 - a) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.
 - b) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step 5 and step 6.
 - Record the output power level of the signal generator when equivalence is achieved in step b).
- 11. Repeat step 8 through step 10 with the measurement antenna oriented in the opposite polarization.
- 12. Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:

Pe = Ps(dBm) - cable loss (dB) + antenna gain (dBd)

where

Pe = equivalent emission power in dBm

Ps = source (signal generator) power in dBm

NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.

13. Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from:

gain (dBd) = gain (dBi) -2.15 dB.

If necessary, the antenna gain can be calculated from calibrated antenna factor information

14. Provide the complete measurement results as a part of the test report.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Note: only show the worse case for QPSK modulation.

Report No.: CHTEW20120069 Page: 15 of 17 Issued: 2020-12-09

LTE Band 26-1.4MHz						
Channel	Frequency	Spurious	Emission	Lineit (dDae)	Result	
Channel	(MHz)	Polarization	Level (dBm)	Limit (dBm)		
	1629.4	Vertical	-30.03			
	2444.1	V	-38.69	<-13.00	Pass	
Low	3258.8	V	-40.50			
LOW	1629.4	Horizontal	-35.11			
	2444.1	Н	-42.19	<-13.00	Pass	
	3258.8	Н	-41.96			
	1638	Vertical	-29.85	<-13.00	Pass	
	2457	V	-38.29			
Mid	3276	V	-40.18			
iviid	1638	Horizontal	-34.86		Pass	
	2457	Н	-41.66	<-13.00		
	3276	Н	-41.40			
	1646.6	Vertical	-29.59			
	2469.9	V	-37.78	<-13.00	Pass	
∐iah	3293.2	V	-39.75			
High	1646.6	Horizontal	-34.62			
	2469.9	Н	-40.77	<-13.00	Pass	
	3293.2	Н	-40.53	1		

LTE Band 26-3MHz						
Channal	Frequency	Spurious I	Emission	Lineit (dDae)	D It	
Channel	(MHz)	Polarization	Level (dBm)	Limit (dBm)	Result	
	1631	Vertical	-29.37			
	2446.5	V	-37.49	<-13.00	Pass	
Low	3262	V	-39.55			
LOW	1631	Horizontal	-34.49			
	2446.5	Н	-40.45	<-13.00	Pass	
	3262	Н	-40.26			
	1638	Vertical	-29.73	<-13.00	Pass	
	2457	V	-38.01			
Mid	3276	V	-39.95			
IVIIU	1638	Horizontal	-34.68		Pass	
	2457	Н	-41.29	<-13.00		
	3276	Н	-41.01			
	1645	Vertical	-29.55			
	2467.5	V	-37.65	<-13.00	Pass	
High	3290	V	-39.65			
	1645	Horizontal	-34.51			
	2467.5	Н	-40.67	<-13.00	Pass	
	3290	Н	-40.40			

Report No.: CHTEW20120069 Page: 16 of 17 Issued: 2020-12-09

	LTE Band 26-5MHz						
Channal	Frequency	Spurious I	Emission	Lineit (dDne)	D !!		
Channel	(MHz)	Polarization	Level (dBm)	Limit (dBm)	Result		
	1633	Vertical	-29.11				
	2449.5	V	-37.06	<-13.00	Pass		
Low	3266	V	-39.25				
LOW	1633	Horizontal	-34.25				
	2449.5	Н	-40.03	<-13.00	Pass		
	3302	Н	-39.85				
	1638	Vertical	-28.86	<-13.00	Pass		
	2457	V	-36.49				
Mid	3276	V	-38.80				
IVIIU	1638	Horizontal	-33.90		Pass		
	2457	Н	-39.29	<-13.00			
	3276	Н	-39.06				
	1643	Vertical	-28.50				
	2464.5	V	-35.77	<-13.00	Pass		
∐iah	3286	V	-38.20				
High	1643	Horizontal	-33.56				
	2464.5	Н	-38.65	<-13.00	Pass		
	3286	Н	-38.54				

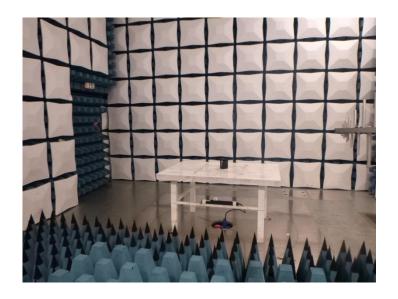
LTE Band 26-10MHz						
Channel	Frequency	Spurious Emission		Limit (dDm)	Result	
Channel	(MHz)	Polarization	Level (dBm)	Limit (dBm)	Result	
	1638	Vertical	-27.96	<-13.00	Pass	
	2457	V	-34.85			
Mid	3276	V	-37.40			
IVIIG	1638	Horizontal	-33.23			
	2457	Н	-37.88	<-13.00	Pass	
	3276	Н	-37.93			

Remark:

- 1. Remark"---" means that the emission level is too low to be measured
- 2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Report No.: CHTEW20120069 Page: 17 of 17 Issued: 2020-12-09

6. TEST SETUP PHOTOS OF THE EUT





7. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Refere to the test report No.: CHTEW20120067

8. APPENDIX REPORT