

FCC TEST REPORT FOR

WizarPos International Co., Ltd.

Smart POS

Test Model: WIZARPOS UPT

Prepared for : WizarPos International Co., Ltd.

Address : 4F, No 507 Wuning Rd, Shanghai, China

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.

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Date of receipt of test sample : July 29, 2022

Number of tested samples : 2

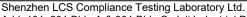
Sample No. : A072922029-1, A072922029-2

Serial number : Prototype

Date of Test : July 29, 2022 ~ August 19, 2022

Date of Report : August 22, 2022







FCC PART 22/24 TEST REPORT

FCC Part 22H / Part 24E

Report Reference No.....: LCSA072922029EE FCC ID.....:: 2AG97-WIZARPOSUPT

Date of Issue.....: August 22, 2022

Testing Laboratory Name...... Shenzhen LCS Compliance Testing Laboratory Ltd.

Applicant's name...... WizarPos International Co., Ltd.

Address.....: 4F, No 507 Wuning Rd, Shanghai, China

Test specification....:

FCC Part 22H: Cellular Radiotelephone Service Standard.....

FCC Part 24E: Broadband PCS

Test Report Form No: LCSEMC-1.0

TRF Originator...... Shenzhen LCS Compliance Testing Laboratory Ltd.

Master TRF.....: Dated 2011-03

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Test item description.....: Smart POS

Trade Mark...... WIZARPOS

Test Model....: WIZARPOS UPT

Ratings...... Please refer to page 7

Hardware version.....: 1.0.0

Software version: 1.0.0

Frequency: UMTS Band II/V

Result.....: PASS

Compiled by:

Supervised by:

Approved by:

Diamond Lu/ Administrator

Diamond be

Cary Luo/ Technique principal

Gavin Liang/ Manager





TEST REPORT

Test Report No. :	LCSA072922029EE	August 22, 2022
rest Report No	LOSA012922029LL	Date of issue

EUT..... : Smart POS : WIZARPOS UPT Test Model..... : WizarPos International Co., Ltd. Applicant..... : 4F, No 507 Wuning Rd, Shanghai, China Address..... Telephone..... : / Fax..... : / Manufacturer..... : WizarPos International Co., Ltd. : 4F, No 507 Wuning Rd, Shanghai, China Address..... Telephone..... : / : / Fax..... Factory..... : / Address..... : / Telephone..... : / : / Fax.....

Test Result: PASS

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.



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Revison History

Report Version	Issue Date	Revision Content	Revised By
000	August 22, 2022	Initial Issue	



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TEST STANDARDS

The tests were performed according to following standards:

FCC Part 22H: Cellular Radiotelephone Service.

FCC Part 24E: Broadband PCS.

TIA-603-E March 2016: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

47 CFR FCC Part 15 Subpart B: Unintentional Radiators.

FCC Part 2: Frequency Allocations And Radio Treaty Matters; General Rules And Regulations.

ANSI C63.4:2014: Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

ANSI C63.26-2015: Compliance Testing of Transmitters Used in Licensed Radio Services.





2 SUMMARY

2.1 Product Description

The **WizarPos International Co., Ltd.**'s Model: WIZARPOS UPT or the "EUT" as referred to in this report; more general information as follows, for more details, refer to the user's manual of the EUT.

EUT : Smart POS

Test Model : WIZARPOS UPT

Power Supply : Input: DC 24V

For AC Adapter(model: AD65CM240250A): Input: 100-240V~, 50/60Hz, 1.5A Max

Output: 24V---2.5A 60.0W

For AC Adapter(model: ADP-60D24): Input: 100-240V~, 50/60Hz, 1.5A MAX

Output: 24V=2.5A

Hardware Version : 1.0.0 Software Version : 1.0.0

Bluetooth

Frequency Range : 2402MHz~2480MHz

Channel Number : 79 channels for Bluetooth V4.1 (DSS)

40 channels for Bluetooth V4.1 (DTS)

Channel Spacing : 1MHz for Bluetooth V4.1 (DSS)

2MHz for Bluetooth V4.1 (DTS)

Modulation Type : GFSK, π/4-DQPSK, 8-DPSK for Bluetooth V4.1(DSS)

GFSK for Bluetooth V4.1 (DTS)

Bluetooth Version : V4.1

Antenna Description : FPC Antenna, 1.59dBi(Max.)

WIFI(2.4G Band) :

Frequency Range : 2412MHz~2462MHz

Channel Number : 11 Channels for 20MHz bandwidth (2412~2462MHz)

Channel Spacing : 5MHz

Modulation Type : IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK)

IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)

IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)

Antenna Description : FPC Antenna, 1.59dBi(Max.)

2G :

Support Band : ⊠ GSM 900 (EU-Band) ⊠ DCS 1800 (EU-Band)

□ GSM 850 (U.S.-Band) □ PCS 1900 (U.S.-Band)

Release Version : R99

GPRS Class : Class 12 EGPRS Class : Class 12

Type Of Modulation : GMSK for GSM/GPRS; GMSK/8PSK for EGPRS

Antenna Description : FPC Antenna

-0.67dBi (max.) For GSM 850 1.84dBi (max.) For PCS 1900



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3G :

Support Band : ⊠ WCDMA Band II (U.S.-Band)

WCDMA Band I (EU-Band)
 WCDMA Band VIII (EU-Band)

Release Version : R6

Type Of Modulation : QPSK, 16QAM

Antenna Description : FPC Antenna

1.84dBi (max.) For WCDMA Band II -0.67dBi (max.) For WCDMA Band V

LTE :

Support Band : ⊠ E-UTRA Band 2(U.S.-Band)

☑ E-UTRA Band 4(U.S.-Band)
☑ E-UTRA Band 5(U.S.-Band)
☑ E-UTRA Band 7(U.S.-Band)
☑ E-UTRA Band 38(U.S.-Band)
☑ E-UTRA Band 41(U.S.-Band)

LTE Release Version : R9

Type Of Modulation : QPSK/16QAM

Antenna Description : FPC Antenna

1.84dBi (max.) For E-UTRA Band 2 1.66dBi (max.) For E-UTRA Band 4 -0.67dBi (max.) For E-UTRA Band 5 1.82dBi (max.) For E-UTRA Band 7 1.91dBi (max.) For E-UTRA Band 38 1.91dBi (max.) For E-UTRA Band 41

Power Class : Class 3

NFC :

Operating Frequency : 13.56MHz

Modulation Type : ASK

Antenna Description : Coil Antenna, 0.5dBi(Max.)

GPS function : Support and only RX

Extreme temp.

Tolerance

: -30°C to +50°C

Extreme vol. Limits : 21.6VDC to 26.4VDC (nominal: 24VDC)













2.2 Equipment under Test

Power supply system utilised

Power supply voltage	:	0	120V / 60 Hz	0	115V / 60Hz
		0	12 V DC	•	24 V DC
		0	Other (specified in blank below) V DC) V DC

Test frequency list

Test Mode	TX/RX	RF Channel			
Test Mode		Low(L)	Middle (M)	High (H)	
	allà TV	Channel 4132	Channel 4182	Channel 4233	
WCDMA Band V	TX	826.4 MHz	836.4 MHz	846.6 MHz	
WCDIVIA Dariu V	RX	Channel 4357	Channel 4407	Channel 4458	
1/30 LCS 1		871.4 MHz	881.4 MHz	891.6 MHz	
Test Mode	TX/RX	RF Channel			
Test Mode	IA/KA	Low(L)	Middle (M)	High (H)	
	TX	Channel 9262	Channel 9400	Channel 9538	
MCDMA Bond II	1.	1852.4 MHz	1880.0 MHz	1907.6 MHz	
WCDMA Band II	RX	Channel 9662	Channel 9800	Channel 9938	
	KX	1932.4 MHz	1960.0 MHz	1987.6 MHz	

2.3 Short description of the Equipment under Test (EUT)

2.3.1 General Description

WIZARPOS UPT is subscriber equipment in the BT/BLE/2.4GWIFI/NFC/GSM/WCDMA/LTE/GPS system. GSM/GPRS/EGPRS frequency band is Band II/V. The HSPA/UMTS frequency band is Band II/V. LTE frequency band is band 2/4/5/7/38/41. The HSPA/UMTS frequency band II and Band V test data included in this report. The WIZARPOS UPT implements such functions as RF signal receiving/transmitting, GSM/GPRS/EGPRS/ HSPA/UMTS/LTE protocol processing, video MMS service and etc.

2.4 Internal Identification of AE used during the test

AE ID*	Description
AE1	Rechargeable Li-Polymer Battery
AE2	Switching Adapter

AE2

For AC Adapter(model: AD65CM240250A): Input: 100-240V~, 50/60Hz, 1.5A Max

Output: 24V=2.5A 60.0W

For AC Adapter(model: ADP-60D24): Input: 100-240V~, 50/60Hz, 1.5A MAX

Output: 24V-2.5A

All adapters were tested and we only record the worst case which model is AD65CM240250A.

2.5 Normal Accessory setting

N/A





2.6 Test Sample

	rest Sample		
Ť	he application provides 2 samples to	meet requirement;	ir p
	Sample Number	Description	
	Sample 1(A072922029-1)	Engineer sample – continuous transmit	Assessed to the same of the sa
	Sample 2(A072922029-2)	Normal sample – Intermittent transmit	

2.7 **EUT** configuration

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

- supplied by the manufacturer
- supplied by the lab

0	- supplied by the lab			
0	Power Cable	Length (m):	1 7	Test Title
	103 100	Shield:	/	1122 100
		Detachable :	/	No.
0	Multimeter	Manufacturer :	/	
		Model No. :	1	

2.8 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: 2AG97-WIZARPOSUPT filing to comply with FCC Part 22H, Part 24E Rules.

Modifications 2.9

No modifications were implemented to meet testing criteria.

2.10 General Test Conditions/Configurations

2.10.1 Test Modes

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

Test Mode	Test Modes Description	
UMTS/TM1	WCDMA system, QPSK,16QAM modulation	
UMTS/TM2	HSDPA system, QPSK,16QAM modulation	
UMTS/TM3	HSUPA system, QPSK,16QAM modulation	

Note: As WCDMA, HSDPA and HSUPA with the same emission designator, test result recorded in this report at the worst case UMTS/TM1 only after exploratory scan.

2.10.2 Test Environment

Environment Parameter	Selected Values During Tests			
Relative Humidity	Ambient			
Temperature	TN	Ambient		
	VL	DC 21.6V		
Voltage	VN	DC 24V		
	VH	DC 26.4V		

NOTE: VL=lower extreme test voltage VN=nominal voltage VH=upper extreme test voltage TN=normal temperature





3 TEST ENVIRONMENT

3.1 Address of the test laboratory

Shenzhen LCS Compliance Testing Laboratory Ltd

101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

The sites are constructed in conformance with the requirements of ANSI C63.4 (2014) and CISPR Publication 32.

3.2 Test Facility

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

NVLAP Accreditation Code is 600167-0.

FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.

Test Firm Registration Number: 254912.

3.3 Environmental conditions

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

Temperature:	15-35 ° C
155 100	102 100
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

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













3.4 Test Description

3.4.1 Cellular Band (824-849MHz paired with 869-894MHz) (Band V)

Test Item FCC Rule No.		Requirements	Verdict	
Effective(Isotropic) Radiated Output Power	§2.1046, §22.913	FCC: ERP ≤ 7W.	Pass	
Modulation Characteristics	§2.1047	Digital modulation	N/A	
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Pass	
Band Edges Compliance	§2.1051, §22.917	≤-13dBm/1%*EBW, in 1MHz bands immediately outside and adjacent to The frequency block.	Pass	
Spurious Emission at Antenna Terminals	§2.1051, §22.917	≤ -13dBm/100kHz, from 9kHz to 10 th harmonics but outside authorized operating frequency ranges.	Pass	
Field Strength of \$2.1053, \$22.917 Radiation \$2.1055, \$22.355		≤ -13dBm/100kHz.	Pass	
		≤ ±2.5ppm.	Pass	
Peak-Average Ratio	§24.232	≤13dB	Pass	
NOTE 1: For the verdi	ct, the "N/A"	denotes "not applicable", the "N/T" de notes "n	ot tested".	

3.4.2 PCS Band (1850-1910MHz paired with 1930-1990MHz) (Band II)

Test Item	FCC Rule No.	Requirements	Verdict
Effective(Isotropic) Radiated Output Power	§2.1046, §24.232	EIRP ≤ 2W	Pass
Peak-Average Ratio	§2.1046, §24.232	≤13dB	Pass
Modulation Characteristics	§2.1047	Digital modulation	N/A
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Pass
Band Edges Compliance	§2.1051, §24.238	≤ -13dBm/1%*EBW, In 1MHz bands immediately outside and adjacent to The frequency block.	Pass
Spurious Emission at Antenna Terminals	§2.1051, §24.238	≤-13dBm/1MHz, from 9kHz to10 th harmonics but outside authorized operating frequency ranges.	
Field Strength of Spurious Radiation	§2.1053, §24.238	≤ -13dBm/1MHz.	Pass
Frequency Stability	§2.1055, §24.235	≤ ±2.5ppm.	Pass
NOTE 1: For the verdict, the "N	/A" denotes "not appli	cable", the "N/T" de notes "not tested	



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Equipments Used during the Test

	Equipments Used duri		N4 1 1 N		0.15.4	
Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Power Meter	R&S	NRVS	100444	2022-06-16	2023-06-15
2	Power Sensor	R&S	NRV-Z81	100458	2022-06-16	2023-06-15
3	Power Sensor	R&S	NRV-Z32	10057	2022-06-16	2023-06-15
4	LTE Test Software	Tonscend	JS1120-1	N/A	N/A	N/A
5	RF Control Unit	Tonscend	JS0806-1	158060009	2022-06-16	2023-06-15
6	MXA Signal Analyzer	Agilent	N9020A	MY51250905	2021-11-16	2022-11-15
7	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW 500	103818	2022-06-16	2023-06-15
8	DC Power Supply	Agilent	E3642A	N/A	2021-11-15	2022-11-14
9	EMI Test Software	AUDIX	E3	1	N/A	N/A
10	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2022-06-16	2023-06-15
11	Positioning Controller	Max-Full	MF7802BS	MF780208586	N/A	N/A
12	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	00005	2021-08-29	2024-08-28
13	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2021-09-12	2024-09-11
14	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2021-09-05	2024-09-04
15	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	791	2021-08-29	2024-08-28
16	Broadband Preamplifier	SCHWARZBECK	BBV9719	9719-025	2022-06-16	2023-06-15
17	EMI Test Receiver	R&S	ESR 7	101181	2022-06-16	2023-06-15
18	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2021-11-16	2022-11-15
19	Broadband Preamplifier	LCS Test	BP- 01M18G	P190501	2022-06-16	2023-06-15
20	6dB Attenuator	1	100W/6dB	1172040	2022-06-16	2023-06-15
21	3dB Attenuator	1	2N-3dB	1	2021-11-15	2022-11-14
22	Temperature & Humidity Chamber	GUANGZHOU GOGNWEN	GDS-100	70932	2021-10-07	2022-10-06
23	EMI Test Software	Farad	EZ	/	N/A	N/A

















3.6 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 ETSI TR 100 028 " Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics" and is documented in the Shenzhen LCS Compliance Testing Laboratory 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 LCS Compliance Testing Laboratory Ltd. is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	3.10 dB	(1)
Radiated Emission	1~18GHz	3.80 dB	(1)
Radiated Emission	18-40GHz	3.90 dB	(1)
Conducted Disturbance	0.15~30MHz	1.63 dB	(1)
Conducted Power	9KHz~18GHz	0.61 dB	(1)
Spurious RF Conducted Emission	9KHz~40GHz	1.22 dB	(1)
Band Edge Compliance of RF Emission	9KHz~40GHz	1.22 dB	(1)
Occuiped Bandwidth	9KHz~40GHz	-	(1)

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



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4 TEST CONDITIONS AND RESULTS

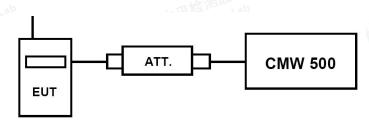
4.1 Output Power

TEST APPLICABLE

During the process of testing, the EUT was controlled via R&S WIDEBAND RADIO COMMUNICATION TESTER (CMW 500) to ensure max power transmission and proper modulation. This result contains output power and EIRP measurements for the EUT. In all cases, output power is within the specified limits.

4.1.1. Conducted Output Power

TEST CONFIGURATION



TEST PROCEDURE

Conducted Power Measurement:

- a) Place the EUT on a bench and set it in transmitting mode.
- b) Connect a low loss RF cable from the antenna port to a CMW 500 by an Att.
- c) EUT Communicate with CMW 500 then selects a channel for testing.
- d) Add a correction factor to the display CMW 500, and then test.

TEST RESULTS

	band	WCDM	WCDMA Band II result (dBm)			WCDMA Band V result (dBm)		
Item	Danu	Chani	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
item	sub-test	9262/	9400/	9538/	4132/	4182/	4233/	
	รนม-เฮรเ	1852.4	1880	1907.6	826.4	836.4	846.6	
RMC	12.2kbps RMC	23.49	23.56	23.57	23.39	23.46	23.54	
	Sub –Test 1	22.87	22.91	22.88	22.87	22.83	22.75	
HSDPA	Sub –Test 2	22.83	22.74	22.72	22.71	22.89	22.83	
порра	Sub –Test 3	22.86	22.79	22.74	22.75	22.74	22.85	
	Sub –Test 4	22.76	22.84	22.71	22.74	22.87	22.89	
	Sub –Test 1	22.81	22.89	22.81	22.77	22.71	22.73	
	Sub –Test 2	22.89	22.88	22.90	22.89	22.79	22.82	
HSUPA	Sub –Test 3	22.83	22.78	22.87	22.76	22.89	22.83	
	Sub –Test 4	22.77	22.77	22.77	22.77	22.80	22.72	
	Sub –Test 5	22.86	22.81	22.86	22.80	22.82	22.78	



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4.1.1 Radiated Output Power

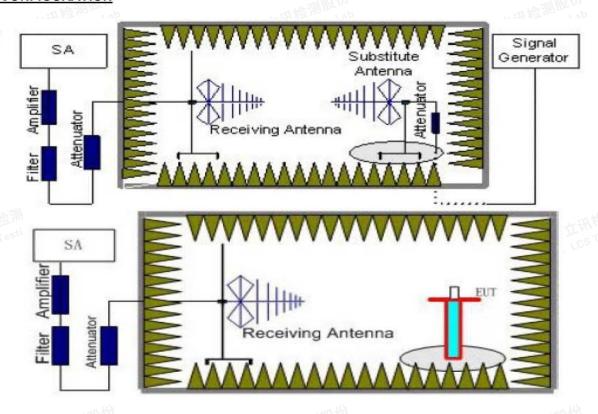
TEST DESCRIPTION

This is the test for the maximum radiated power from the EUT.

Rule Part 24.232(c) specifies, "Mobile/portable stations are limited to 2 watts e.i.r.p. Peak power" and 24.232(e) specifies that "Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage."

Rule Part 22.913(a) specifies "The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts."

TEST CONFIGURATION



TEST PROCEDURE

- 1. EUT was placed on a 1.50 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.50m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
- 2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
- 3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=10MHz,VBW=10MHz, And the maximum value of the receiver should be recorded as (P_r).





- 4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
- 5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (P_{cl}) ,the Substitution Antenna Gain (G_a) and the Amplifier Gain (P_{Ag}) should be recorded after test.
 - The measurement results are obtained as described below:
 - Power(EIRP)= P_{Mea} + P_{Ag} P_{cl} + G_a
- 6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
- 7. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

TEST LIMIT

According to 22.913(a)(5), 24.232(c)the ERP(EIRP) should be not exceeding following table limits:

<u> </u>	included the content of the content
	Burst Average EIRP
UMTS Band II	FCC: ≤33.01dBm (2W)

	Burst Average ERP
UMTS Band V	FCC: ≤38.45dBm (7W)

TEST RESULTS

Remark:

- 1. We were tested all Configuration refer 3GPP TS134 121.
- 2. $EIRP=P_{Mea}(dBm)-P_{cl}(dB)+P_{Aa}(dB)+G_a(dBi)$
- 3. ERP = EIRP 2.15dBi as EIRP by subtracting the gain of the dipole.
- 4. Margin = Emission Level Limit
- 5. We tested the worst-case records for H and V directions, and only the worst-case records for V direction were recorded in the report.

UMTS/TM1/UMTS Band II

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	G _a Antenna Gain (dB)	P _{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1852.4	-19.10	4.03	8.38	35.51	20.76	33.01	-12.25	V
1880.0	-18.72	4.08	8.33	35.56	21.09	33.01	-11.92	TO SECUL
1907.6	-18.93	4.14	8.26	35.63	20.82	33.01	-12.19	ring LV

UMTS/TM1/UMTS Band V

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	G _a Antenna Gain (dB)	Correction (dB)	P _{Ag} (dB)	Burst Average ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.4	-16.59	3.45	8.45	2.15	33.79	20.05	38.45	-18.40	V
836.4	-16.09	3.49	8.45	2.15	33.85	20.57	38.45	-17.88	V
846.6	-16.32	3.55	8.36	2.15	33.88	20.22	38.45	-18.23	V



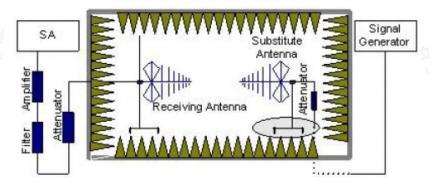


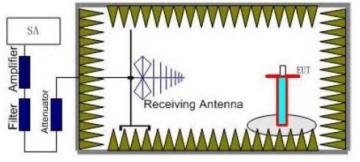
4.2 Radiated Spurious Emssion

TEST APPLICABLE

According to the TIA-603-E:2016 and FCC Part 2.1033 test method, The Receiver or Spectrum was scanned from lowest frequency frequency generated within the equipment to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier that can be as high as 1910 MHz. The resolution bandwidth is set as outlined in Part 24.238, Part 22.917, The spectrum is scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of WCDMA Band II and WCDMA Band V.

TEST CONFIGURATION





TEST PROCEDURE

- 1. EUT was placed on a 1.50 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.50 m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
- 2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
- 3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz, And the maximum value of the receiver should be recorded as (P_r).
- 4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach





the previously recorded (P_r) . The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

- 5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (P_{cl}) , the Substitution Antenna Gain (G_a) and the Amplifier Gain (P_{Ag}) should be recorded after test.
 - The measurement results are obtained as described below:
 - Power(EIRP)= P_{Mea} + P_{Ag} P_{cl} + G_a
- 6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
- ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15dBi.
- 8. In order to make sure test results more clearly, we set frequency range and sweep time for difference frequency range as follows table:

Working Frequency	Subrange (GHz)	RBW	VBW	Sweep time (s)
11 15 18 18 18 18 18 18 18 18 18 18 18 18 18	0.00009~0.15	1KHz	3KHz	30
	0.00015~0.03	10KHz	30KHz	10
LIMTO/TMA/	0.03~1	100KHz	300KHz	10
UMTS/TM1/	1~2	1 MHz	3 MHz	2
WCDMA Band V	2~5	1 MHz	3 MHz	3
	5~8	1 MHz	3 MHz	3
	8~10	1 MHz	3 MHz	3
	0.00009~0.15	1KHz	3KHz	30
	0.00015~0.03	10KHz	30KHz	10
	0.03~1	100KHz	300KHz	10
	1~2	1 MHz	3 MHz	2
UMTS/TM1/	2~5	1 MHz	3 MHz	3
WCDMA Band II	5~8	1 MHz	3 MHz	3
[[] [] [] [] [] [] [] [] [] [8~11	ab 1 MHz	3 MHz	3
	11~14	1 MHz	3 MHz	3 3
	14~18	1 MHz	3 MHz	3
	18~20	1 MHz	3 MHz	2

TEST LIMITS

According to 24.238, 22.917, specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

Frequency	Channel	Frequency Range	Verdict
UMTS/TM1/ WCDMA	Low	9KHz - 10GHz	PASS
Band V	Middle	9KHz - 10GHz	PASS
band v	High	9KHz - 10GHz	PASS
UMTS/TM1/ WCDMA	Low	9KHz - 20GHz	PASS
Band II	Middle	9KHz - 20GHz	PASS
Danu II	High	9KHz - 20GHz	PASS

TEST RESULTS

Remark:

- 1. We were tested all Configuration refer 3GPP TS134 121.
- 2. $EIRP=P_{Mea}(dBm)-P_{cl}(dB)+P_{Aq}(dB)+G_{a}(dBi)$
- 3. ERP = EIRP 2.15dBi as EIRP by subtracting the gain of the dipole.
- 4. Margin = EIRP Limit



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UMTS/TM1/ WCDMA Band II _ Low Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3704.8	-39.58	5.26	3.00	9.88	-34.96	-13.00	-21.96	Н
5557.2	-45.10	6.11	3.00	11.36	-39.85	-13.00	-26.85	Н
3704.8	-44.75	5.26	3.00	9.88	-40.13	-13.00	-27.13	V
5557.2	-48.09	6.11	3.00	11.36	-42.84	-13.00	-29.84	V

UMTS/TM1/ WCDMA Band II Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3760.0	-37.73	5.32	3.00	10.03	-33.02	-13.00	-20.02	H
5640.0	-43.98	6.19	3.00	11.41	-38.76	-13.00	-25.76	CSAN NEW YH
3760.0	-43.40	5.32	3.00	10.03	-38.69	-13.00	-25.69	and LaV
5640.0	-48.23	6.19	3.00	11.41	-43.01	-13.00	-30.01	V

UMTS/TM1/ WCDMA Band II _ High Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3815.2	-42.98	5.36	3.00	9.62	-38.72	-13.00	-25.72	Н
5722.8	-51.62	6.24	3.00	11.46	-46.40	-13.00	-33.40	Н
3815.2	-46.51	5.36	3.00	9.62	-42.25	-13.00	-29.25	V
5722.8	-53.62	6.24	3.00	11.46	-48.40	-13.00	-35.40	V

UMTS/TM1/ WCDMA Band V _ Low Channel							William	
Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G₂ Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1652.8	-48.20	3.86	3.00	8.56	-43.50	-13.00	-30.50	Н
2479.2	-49.61	4.29	3.00	6.98	-46.92	-13.00	-33.92	Н
1652.8	-44.64	3.86	3.00	8.56	-39.94	-13.00	-26.94	V
2479.2	-44.99	4.29	3.00	6.98	-42.30	-13.00	-29.30	V

UMTS/TM1/ WCDMA Band V _ Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1672.8	-49.61	3.9	3.00	8.58	-44.93	-13.00	-31.93	H W Status
2509.2	-51.47	4.32	3.00	6.8	-48.99	-13.00	-35.99	Pierra LaH
1672.8	-45.25	3.9	3.00	8.58	-40.57	-13.00	-27.57	V
2509.2	-45.61	4.32	3.00	6.8	-43.13	-13.00	-30.13	V

UMTS/TM1/ WCDMA Band V _ High Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1693.2	-52.03	3.91	3.00	9.06	-46.88	-13.00	-33.88	Н
2539.8	-54.23	4.32	3.00	6.65	-51.90	-13.00	-38.90	Н
1693.2	-49.28	3.91	3.00	9.06	-44.13	-13.00	-31.13	V
2539.8	-51.05	4.32	3.00	6.65	-48.72	-13.00	-35.72	V



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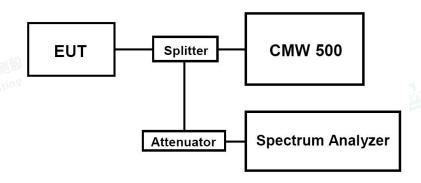


4.3 Occupied Bandwidth and Emission Bandwith

TEST APPLICABLE

Similar to conducted emissions; occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. The table below lists the measured 99% Bandwidth and - 26dBc Bandwidth.

TEST CONFIGURATION



TEST PROCEDURE

- 1. The EUT was set up for the max output power with pseudo random data modulation;
- 2. The Occupied bandwidth and Emission Bandwidth were measured with Aglient Spectrum Analyzer N9020A (peak);
- 3. Set RBW=100KHz, VBW=300KHz, Span=10MHz, SWT=Auto;
- 4. Set SPA Max hold and View, Set 99% Occupied Bandwidth/ Set -26dBc Occupied Bandwidth
- 5. These measurements were done at 3 frequencies for WCDMA band II/V. (low, middle and high of operational frequency range).

TEST RESULTS

Test Mode	Channel	Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)	Emission Bandwidth (-26 dBc BW) (MHz)	Verdict
UMTS/TM1/	9262	1852.4	4.1584	4.671	PASS
WCDMA Band II	9400	1880.0	4.1526	4.675	PASS
-10.00	9538	1907.6	4.1524	4.671	PASS
UMTS/TM1/	4132	826.4	4.1432	4.666	PASS
WCDMA Band	4182	836.4	4.1520	4.665	PASS
V	4233	846.6	4.1480	4.658	PASS

Remark:

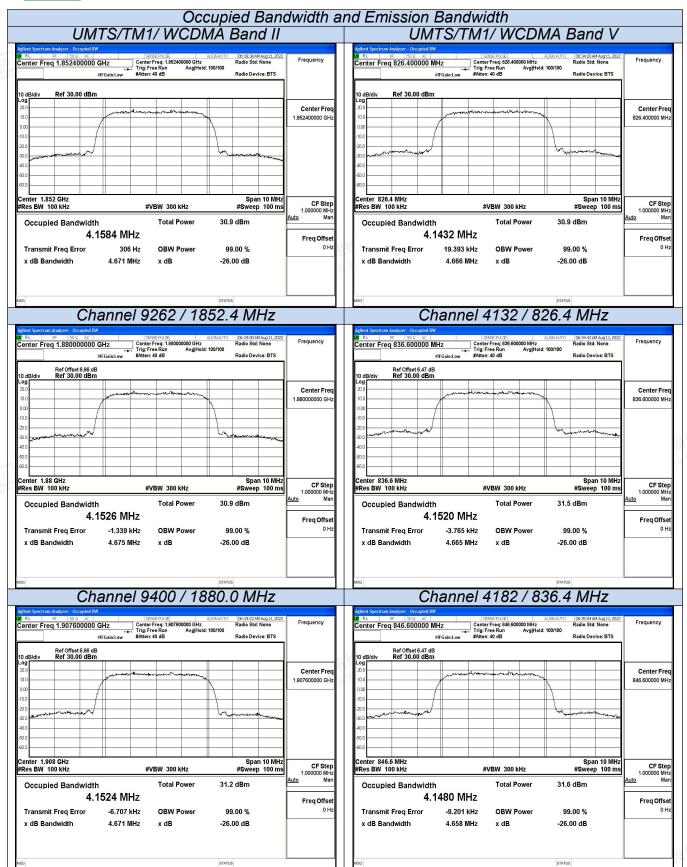
- 1. Test results including cable loss;
- 2. Please refer to following plots;



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Channel 9538 / 1907.6 MHz

Channel 4233 / 846.6 MHz

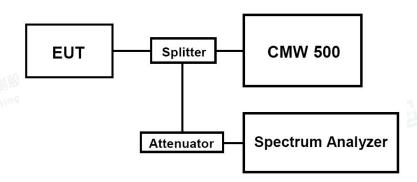


Band Edge Compliance

TEST APPLICABLE

During the process of testing, the EUT was controlled via R&S WIDEBAND RADIO COMMUNICATION TESTER (CMW 500) to ensure max power transmission and proper modulation.

TEST CONFIGURATION



TEST PROCEDURE

- The EUT was set up for the max output power with pseudo random data modulation;
- The power was measured with Spectrum Analyzer N9020A;
- 3. Set RBW=100KHz,VBW=300KHz,Span=2MHz,SWT=Auto,Dector: RMS;

These measurements were done at 2 frequencies for WCDMA band II/V. (low and high of operational frequency range).

TEST RESULTS

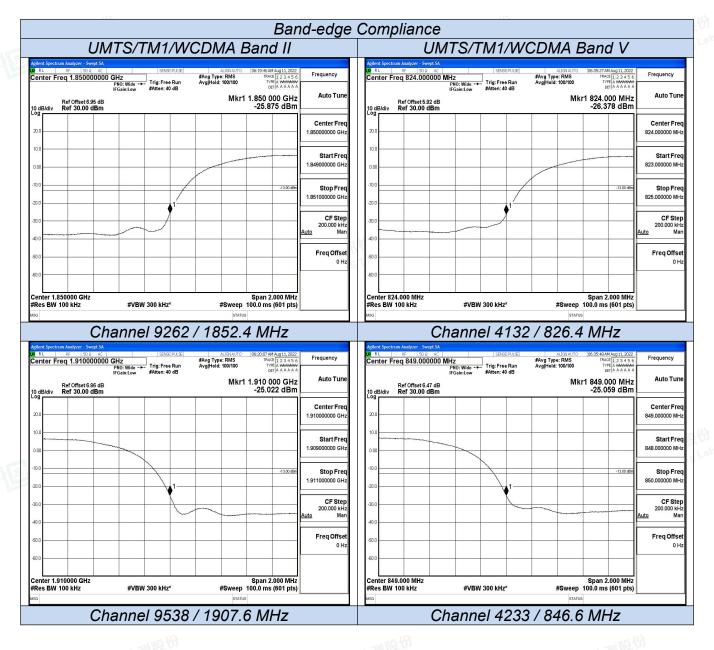
Frequency	Band Edg Compliance	Limits					
nnel Trequeriey			Verdict				
	<-13dBm	-13dBm	D400				
38 1907.6	<-13dBm	-13dBm	PASS				
UMTS/TM1/WCDMA Band V							
nnel Frequency (MHz)	Band Edg Compliance (dBm)	Limits (dBm)	Verdict				
32 826.4	<-13dBm	-13dBm	PASS				
33 846.6	<-13dBm	-13dBm	PASS				
	(MHz) 62 1852.4 38 1907.6 UMTS/TM1/WC nnel Frequency (MHz) 32 826.4	(MHz) (dBm) 62 1852.4 <-13dBm 38 1907.6 <-13dBm UMTS/TM1/WCDMA Band V Frequency (MHz) (dBm) 32 826.4 <-13dBm	(MHz) (dBm) (dBm) 62 1852.4 <-13dBm				

Remark:

- Test results including cable loss;
- Please refer to following plots;







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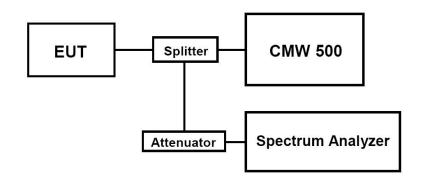
4.5 Spurious Emssion on Antenna Port

TEST APPLICABLE

The following steps outline the procedure used to measure the conducted emissions from the EUT.

- Determine frequency range for measurements: From CFR 2.1057 the spectrum should be investigated from the lowest radio frequency generated in the equipment up to at least the 10th harmonic of the carrier frequency. For the equipment of WCDMA band II, this equates to a frequency range of 9 KHz to 19GHz, data taken from 30 MHz to 19 GHz. For WCDMA Band V, this equates to a frequency range of 9 KHz to 9 GHz,data taken from 30 MHz to 9 GHz.
- 2. The sweep time is set automatically by instrument itself. That should be the optimal sweep time for the span and the RBW. If the sweep time is too short, that is sweep is too fast, the sweep result is not accurate; if the sweep time is too long, that is sweep is too low, some frequency components may be lost. The instrument will give an optimal sweep time according the selected span and RBW.
- The procedure to get the conducted spurious emission is as follows:
 The trace mode is set to MaxHold to get the highest signal at each frequency;
 Wait 25 seconds;
 Get the result.
- 4. Determine EUT transmit frequencies: below outlines the band edge frequencies pertinent to conducted emissions testing.

TEST CONFIGURATION



TEST PROCEDURE

- 1. The EUT was set up for the max output power with pseudo random data modulation;
- 2. The power was measured with Spectrum Analyzer N9020A;
- 3. These measurements were done at 3 frequencies for WCDMA band II/V. (low, middle and high of operational frequency range).

TEST LIMIT

Part 24.238, Part 22.917, specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.





TEST RESULTS

TEST RESULTS					
Test Mode	Channel	Frequency (MHz)	Spurious RF Conducted Emission (dBm)	Limits (dBm)	Verdict
UMTS/TM1/WCDMA	9262	1852.4	<-13dBm	-13dBm	
Band II	9400 9538	1880.0 1907.6	<-13dBm <-13dBm	-13dBm -13dBm	PASS
UMTS/TM1/WCDMA	4132	826.4	<-13dBm	-13dBm	
Band V	4182	836.4	<-13dBm	-13dBm	PASS
Danu V	4233	846.6	<-13dBm	-13dBm	

Remark:

- 1. Test results including cable loss;
- Please refer to following plots;
- Not reorded test plots from 9 KHz to 30 MHz as emission levels 20dB lower than emission limit;



Spurious Emssion on Antenna Port UMTS/TM1/WCDMA Band II Channel 9262 / 1852.4 MHz RL RF 50 0 AC | HIGH First Free Run | FGaint.low | #Atten: 36 dB #Avg Type: RMS Avg|Hold: 50/50 #Avg Type: RMS AvgIHold: 3/3 Auto Tun Auto Tun Ref Offset 6.36 dB Ref 25.00 dBm Center Fre 515.000000 MH Center Fre 5.500000000 GH Start Free Start Free Stop Free Stop Fre MH MH Freq Offse Freq Offse Stop 10.000 GHz #Sweep 5.000 s (20001 pts) Start 30.0 MHz #Res BW 1.0 MHz #VBW 3.0 MHz* #VBW 3.0 MHz* 30 MHz - 1000 MHz 1 GHz - 10 GHz #Avg Type: RMS AvalHold: 3/3 Frequency Auto Tun Mkr1 16.961 05 GHz -49.361 dBm Ref Offset 10.86 dB Ref 10.00 dBm Center Fre Start Free 10.000000000 GH Stop Fre Ma Freq Offse 0 Hz Stop 19.000 GHz #Sweep 5.000 s (20001 pts) 10 GHz - 19 GHz [3] 立州位河南



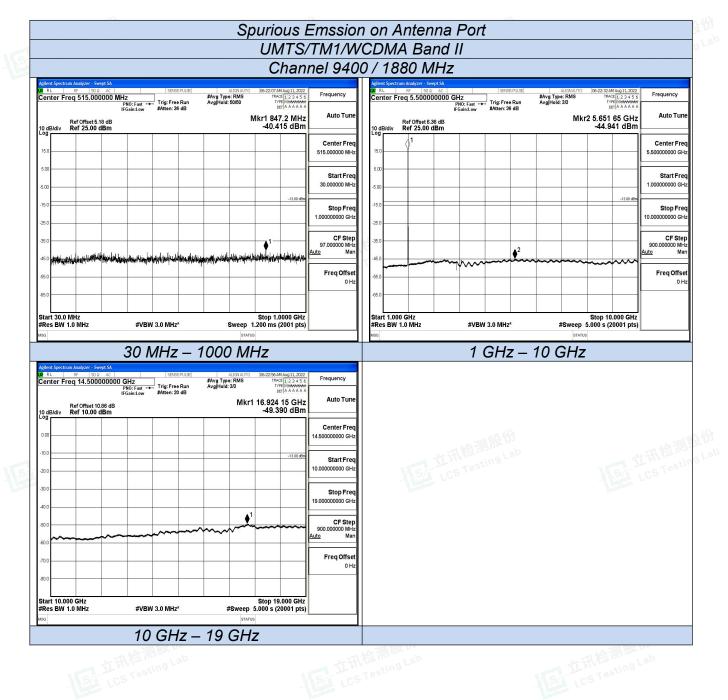
























Spurious Emssion on Antenna Port UMTS/TM1/WCDMA Band II Channel 9538 / 1907.6 MHz RL RF 500 AC enter Freq 5.500000000 GHz PNO: Fast Free Run IFGain:Low #Atten: 36 dB Frequency #Avg Type: RMS AvgHold: 50/50 #Avg Type: RMS AvglHold: 3/3 Auto Tun Mkr1 199.8 MHz -39.841 dBm Auto Tur Ref Offset 5.18 dB Ref 25.00 dBm Ref Offset 6.36 dB Ref 25.00 dBm Center Free Center Fre Start Fre Start Free 1.000000000 GH -13.00 c -13.00 d Stop Free 10.000000000 GH 1.000000000 GH CF Step 97.000000 MH 0 Mar CF Step 900.000000 MHz uto Man Freq Offse Freq Offse 0 H Stop 10.000 GHz #Sweep 5.000 s (20001 pts) Start 30.0 MHz #Res BW 1.0 MHz Stop 1.0000 GHz Sweep 1.200 ms (2001 pts) #VBW 3.0 MHz* 30 MHz - 1000 MHz 1 GHz - 10 GHz RL 8F 50 0 AC | HC | HC | Free Run | Free Ru #Avg Type: RMS Avg|Hold: 3/3 Frequency Mkr1 16.956 55 GHz -49.434 dBm Ref Offset 10.86 dB Ref 10.00 dBm Center Free Start Fre Stop Fred CF Step 900.000000 MH Mai Freq Offse 0 Hz Stop 19.000 GHz #Sweep 5.000 s (20001 pts) #VBW 3.0 MHz* 10 GHz -19 GHz



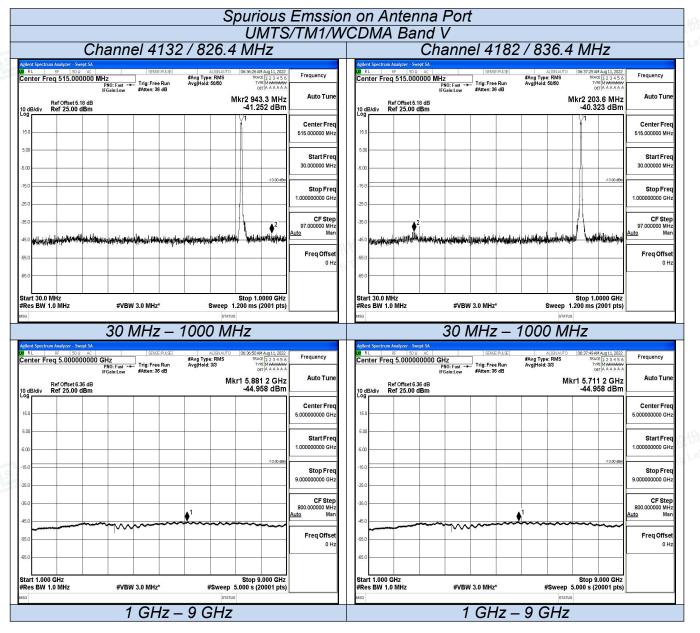












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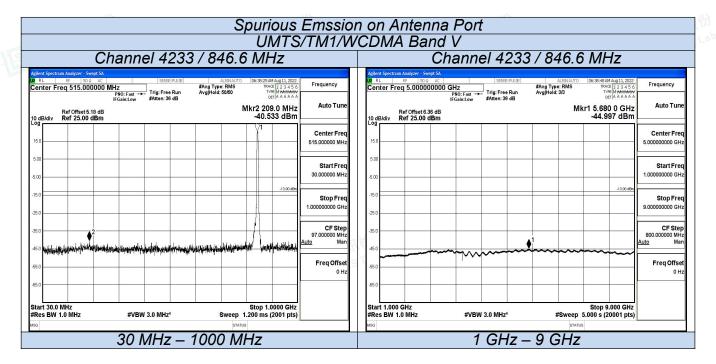












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4.6 Frequency Stability Test

TEST APPLICABLE

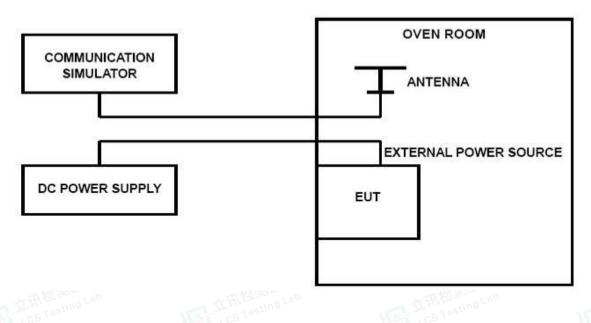
- 1. According to FCC Part 2 Section 2.1055 (a)(1), the frequency stability shall be measured with variation of ambient temperature from -30℃ to +50℃ centigrade.
- 2. According to FCC Part 2 Section 2.1055 (e)(2), for battery powered equipment, the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point, which is specified by the manufacture.
- 3. Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried voltage equipment and the end voltage point was 3.3V.

TEST PROCEDURE

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S WIDEBAND RADIO COMMUNICATION TESTER (CMW 500).

- 1. Measure the carrier frequency at room temperature;
- 2. Subject the EUT to overnight soak at -30°C;
- 3. With the EUT, powered via nominal voltage, connected to the CMW 500 and in a simulated call on middle channel of WCDMA band II/V, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming;
- 4. Repeat the above measurements at 10℃ increments from -30℃ to +50℃. Allow at least 0.5 hours at each temperature, unpowered, before making measurements;
- 5. Remeasure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments remeasuring carrier frequency at each voltage. Pause at nominal voltage for 0.5 hours unpowered, to allow any self-heating to stabilize, before continuing;
- Subject the EUT to overnight soak at +50°C;
- 7. With the EUT, powered via nominal voltage, connected to the CMW 500 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming;
- 8. Repeat the above measurements at 10°C increments from +50°C to -30°C. Allow at least 0.5 hours at each temperature, unpowered, before making measurements;
- 9. At all temperature levels hold the temperature to +/- 0.5 °C during the measurement procedure;

TEST CONFIGURATION







TEST LIMITS

For Hand carried battery powered equipment

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of between 3.40VDC and 4.30VDC, with a nominal voltage of 3.80DC. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress. These voltages represent a tolerance of -10 % and +12.5 %. For the purposes of measuring frequency stability these voltage limits are to be used.

For equipment powered by primary supply voltage

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. For this EUT section 2.1055(d)(1) applies. This requires varying primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

TEST RESULTS

		UMTS/TM1/WC	DMA Band II		
DC Power	Temperature (℃)	Frequency error(Hz)	Frequency error(ppm)	Limit (ppm)	Verdict
VL	25	-12	-0.006	2.50	PASS
VN	25	5	0.003	2.50	PASS
VH	25	Testing 10	0.005	2.50	PASS
VN	-30	-10	-0.005	2.50	PASS
VN	-20	-5	-0.003	2.50	PASS
VN	-10	-16	-0.009	2.50	PASS
VN	0	12	0.006	2.50	PASS
VN	10	9	0.005	2.50	PASS
VN	20	-16	-0.009	2.50	PASS
VN	30	16	0.009	2.50	PASS
VN	40	-17	-0.009	2.50	PASS
VN	50	-4	-0.002	2.50	PASS

	Temperature	UMTS/TM1/WCI Frequency	Frequency	Limit	
DC Power	remperature (°C)	error(Hz)	error(ppm)	(ppm)	Verdict
VL	25	8	0.010	2.50	PASS
VN	25	15	0.018	2.50	PASS
VH	25	-8	-0.010	2.50	PASS
VN	-30	-2	-0.002	2.50	PASS
VN	-20	-8	-0.010	2.50	PASS
VN	-10	15	0.018	2.50	PASS
VN	0	-13	-0.016	2.50	PASS
VN	10	-8	-0.010	2.50	PASS
VN	20	-14	-0.017	2.50	PASS
VN	30	-20	-0.024	2.50	PASS
VN	40	2	0.002	2.50	PASS
VN	50	4	0.005	2.50	PASS



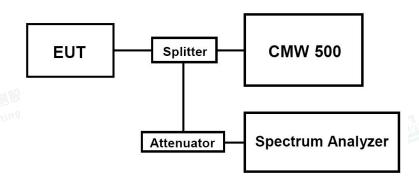


4.7 Peak-to-Average Ratio (PAR)

LIMIT

The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

TEST CONFIGURATION



TEST PROCEDURE

- Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function:
- 2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
- 3. Set the number of counts to a value that stabilizes the measured CCDF curve;
- 4. Set the measurement interval as follows:
 - 1). for continuous transmissions, set to 1 ms,
 - 2). for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
- 5. Record the maximum PAPR level associated with a probability of 0.1%.

TEST RESULTS

Test Mode	Channel	Frequency (MHz)	PAPR Value (dB)	Limits (dB)	Verdict
UMTS/TM1/	9262	1852.4	2.90	13.0	PASS
WCDMA Band	9400	1880.0	2.90	13.0	PASS
II	9538	1907.6	2.87	13.0	PASS
UMTS/TM1/ WCDMA Band V	4132	826.4	3.00	13.0	PASS
	4182	836.4	2.98	13.0	PASS
	4233	846.6	2.99	13.0	PASS

Remark:

- 1. Test results including cable loss;
- 2. Please refer to following plots;

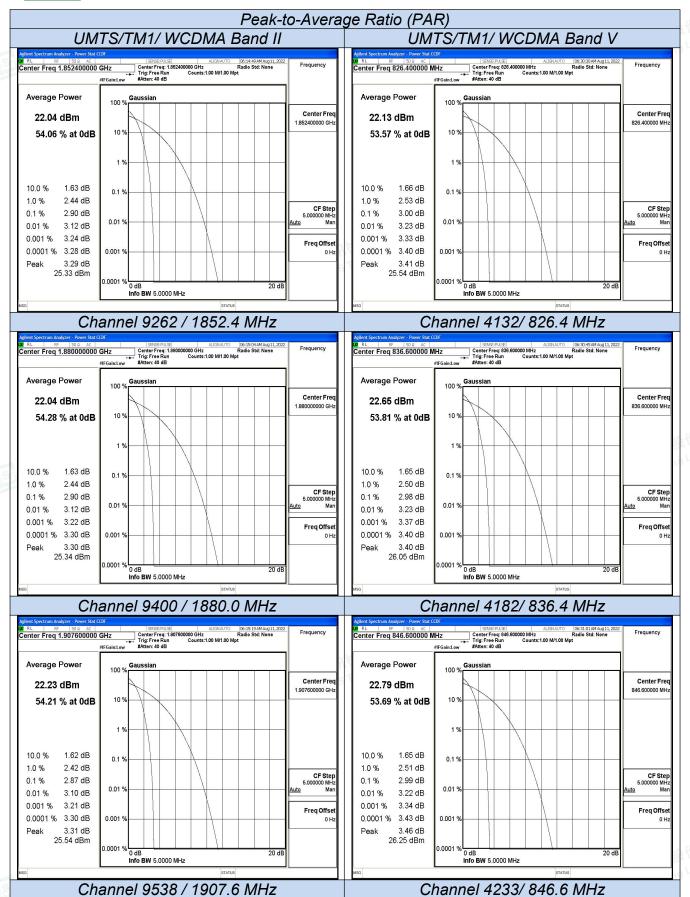


LES Testing Lab













5 Test Setup Photos of the EUT

Please refer to separated files for Test Setup Photos of the EUT.

6 External Photos of the EUT

Please refer to separated files for External Photos of the EUT.

7 Internal Photos of the EUT

Please refer to separated files for Internal Photos of the EUT.

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