

Address

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FCC Test Report

Shenzhen SOYES Premium Technology Applicant

limited

502 West Gate, Building 427, Bagua Ling

Industrial Zone, No.47 Bagua Fourth Road,

Futian District, Shenzhen, 518000, China

Mini smartphone **Product Name**

Report Date Jun. 28, 2023

Anbotek Anbotek Compliande Laboratory Limited Shenzhen Anbotek







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TEST REPORT

Shenzhen SOYES Premium Technology limited Applicant

Manufacturer Shenzhen SOYES Premium Technology limited

Product Name Mini smartphone

XS14Pro, XS15Pro, XS16Pro, P60Pro, M80Pro, XS88Pro, XS17Pro, W88Pr Model No.

SOYES M1Pro, K13, D13, i14mini, S202306

SOYES Trade Mark

Input: DC 5V (with DC 3.85V, 2000mAh Battery inside) Rating(s)

Test Standard(s) FCC PART 2, FCC Part 22(H)

ANSI C63.26-2015 Test Method(s)

KDB 971168 D01 Power Meas License Digital Systems v03r01

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 22 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt	Juli. 01, 2023	
Date of Test:	Jun. 01 ~ Jun. 19, 2023	
Anbotek Anbotek Anbotek Anbotek	Nian xiu Chen	
Prepared by :	k hotek Anbor All tek ant	o
	(Nianxiu Chen)	
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Approved & Authorized Signer :	Aupore West Viposes Vipos	

Shenzhen Anbotek Compliance Laboratory Limited

Code: AB-RF-05-b 400-003-0500 www.anbotek.com.cn

(Kingkong Jin)





Revision History

Report Version	Description	Issued Date		
R00	Original Issue.	Jun. 28, 2023		
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1. General Information

1.1. Client Information

Applicant	:	Shenzhen SOYES Premium Technology limited	
Address		502 West Gate, Building 427, Bagua Ling Industrial Zone, No.47 Bagua Fourth Road, Futian District, Shenzhen, 518000, China	
Manufacturer : Shenzhen SOYES Premium Technology limited			
Address : 502 West Gate, Building 427, Bagua Ling Industrial Zone, No.47 Fourth Road, Futian District, Shenzhen, 518000, China			
Factory : Shenzhen SOYES Premium Technology limited		Shenzhen SOYES Premium Technology limited	
Address		502 West Gate, Building 427, Bagua Ling Industrial Zone, No.47 Bagua Fourth Road, Futian District, Shenzhen, 518000, China	

1.2. Description of Device (EUT)

Product Name	:	Mini smartphone
Model No.	:	XS14Pro, XS15Pro, XS16Pro, P60Pro,M80Pro, XS88Pro, XS17Pro, W88Pro, SOYES M1Pro, K13, D13, i14mini, S202306 (Note: All samples are the same except the model number and appearanc color, so we prepare "XS14Pro" for test only.)
Trade Mark	:	SOYES AND THE REPORT OF THE PARTY OF THE PAR
Test Power Supply	:	DC 3.85V Battery inside
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A inbotek Anbotek Anbotek Anbotek Anbotek Anbotek
RF Specification		
Support Band	:	☐ FDD Band II
Transmit Frequency	:	826.40MHz~846.60MHz
Receive Frequency	:	871.40MHz~891.60MHz
Modulation Type	:	QPSK Andrew Andrew Andrew Andrew Andrew
Power Class	:	Class 3
Antenna Type	:	FPC Antenna
Antenna Gain(Peak)	:	1.45 dBi (Provided by customer)

Shenzhen Anbotek Compliance Laboratory Limited

Code:AB-RF-05-b

Hotline
400-003-0500

www.anbotek.com.cn





1.3. Auxiliary Equipment Used During Test

Description		Rating(s)								
And	anbotek	- Aupo	V.	hotek	Anbore	PUL	rek	anborek	Aupo	.Vo

1.4. Operation State

Test frequency list:

	FDD Band V								
Channel						Free	quency (M	1Hz)	
Anbo	4132	,nbore	Mr. Potek		Inpoter	Aupo	826.40	abotek	Aupor
Aupor	4183	Anbores	VU6	e)K	Anbotek	AUL	836.60	Projek	Anboren
Anboro	4233	Anbotek	Aupo	-tek	aborel	- 1	846.60	Votek.	Anbore

Test mode:

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03 and ANSI C63.26-2015 with maximum output power.

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

30 MHz to 10th harmonic for FDD Band V.

All modes and data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

WO	ALL	
	Test modes	
Band	Radiated	Conducted
FDD Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link

1.5. Environmental Conditions

Temperature range:	21-25℃	Anbore	Aur	Anbotek	Aupo.	abotek
Humidity range:	40-75%	Anbore.	Ann	Anborek	Anbo.	h. sbotek
Pressure range:	86-106kPa	a Anbote	And	anbotek	Anbo.	r 200%







1.6. Test Equipment List

	by.					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interva
1.	EMI Preamplifier	SKET Electronic	LNPA-0118G-45	SKET-PA-002	Oct. 13, 2022	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	Oct. 23, 2022	1 Year
_e k3.	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	Oct. 16, 2022	3 Year
0°4.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Oct. 23, 2022	2 Year
5.	Pre-amplifier	SONOMA	310N	186860	Oct. 23, 2022	1 Year
6.	EMI Test Software EZ-EMC	SHURPLE	nbotek N/A Moot	N/A	N/A	N/A
7.	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	Oct. 13, 2022	1 Year
8.	MXG RF Vector Signal Generator	Agilent	N5182A	MY48180656	Oct. 13, 2022	1 Year
9.	DC Power Supply	LW	TPR-6420D	374470	Oct. 22, 2022	1 Year
10.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80B	N/A	Oct. 19, 2022	1 Year
otek 11.ek nborek	Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	167336	Oct. 13, 2022	1 Year
12.	High-Pass Filter	CDKMV	ZHPF-BM1100 -4000-0730	B2015094550	Oct. 22, 2022	1 Year
13.	High-Pass Filter	CDKMV	ZHPF-M3.5 -18G-3834	1307006523	Oct. 22, 2022	1 Year
14.	Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	01109	Oct. 16, 2022	3 Year
15.	Double Ridged Horn Antenna	Chengyi Electronics Co., Ltd.	GTH-0118	351600	Nov. 02, 2022	2 Year





1.7. Measurement Uncertainty

Maximum measurement uncertainty

Parameter	Uncertainty
RF output power, conducted	±1,5 dB
Power Spectral Density, conducted	±3 dB
Unwanted Emissions, conducted	±3 dB
All emissions, radiated	±6 dB
Temperature	±1°C
Humidity	±5 %
DC and low frequency voltages	±3 %
Anbote Anbote Anbote	±5 %
Confidence interval: 9	5%. Confidence factor:k=2

1.8. Description of Test Facility

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

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, 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. Registration No. 184111.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518102







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2. Summary of Test

2.1. Summary of test result

FCC Rules	Description of Test	Result
Part 2.1046 Part 22.913(a)	Conducted Output Power	Compliance
Anbotek Anbotek Anbotek	Peak-Average Ratio	Compliance
§ 2.1047	Modulation Characteristics	N/A
Part 2.1049	99% Occupied Bandwidth & 26 dB Bandwidth	Compliance
Part 2.1051 Part 22.917	Conducted Spurious Emission	Compliance
Part 2.1051 Part 22.917	Band Edge	Compliance
Part 2.1055(a)(1)(b) Part 22.355	Frequency stability VS. temperature	Compliance
Part 2.1055(d)(1)(2) Part 22.355	Frequency stability VS. voltage	Compliance
Part 2.1046 Part 22.913(a)	ERP and EIRP	Compliance
Part 2.1053 Part 22.917	Radiated Spurious Emission	Compliance

Note: Testing was performed by configuring EUT to maximum output power status, the declared output power class for different







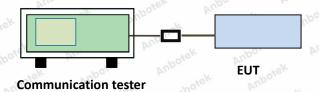
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3. Conducted Output Power Test

3.1. Test Standard and Limit

	M	13.3	L-D53			1-011
Applicable Standard:	Part 2.1046	abotek	Anbor	Air. Sofek	Anboren	And
	Part 22.913(a)					Aupo,
Limit:	N/A	And	hotek	Anbo.	r Projek	Anbo

3.2. Test Setup



3.3. Test Procedure

- 1. The EUT output port was connected to communication tester.
- 2. Set EUT at maximum power through communication tester.
- 3. Select lowest, middle, and highest channels for each band and different modulation.
- 4. Measure the maximum burst average power.

3.4. Test Data

Pass

Please refer to Appendix A of the Appendix Test Data.







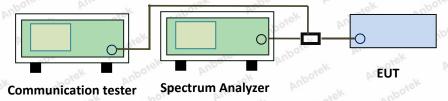
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4. Peak-Average Ratio

4.1. Test Standard and Limit

Applicable Standard:	W. Will	Yes	abotek	Anbore	Ar. Loiek	Anboren	Anbe
Limit:	13dB	rupo,	hotek wotek	Anbore	And	abotek	Anbo.

4.2. Test Setup



4.3. Test Procedure

According with KDB 971168 D01 Section 5.7:

- 1. The EUT was connected to the spectrum analyzer and communication tester via a power splitter.
- 2. Set EUT in maximum power output.
- 3. Center Frequency = Carrier frequency, RBW > Emission bandwidth of signal.
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve.
- 5. The measurement interval was set depending on the type of signal analyzed.
 - i. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms.
 - ii. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power
- 6. Record the maximum PAPR level associated with a probability of 0.1%.

4.4. Test Data

Pass

Please refer to Appendix B of the Appendix Test Data.







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5. Modulation Characteristic

According to FCC § 2.1047(d), Part 22H there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.





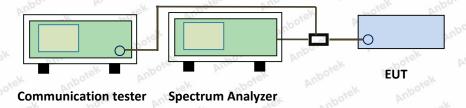
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6. 99% Occupied Bandwidth & 26 dB Bandwidth

6.1. Test Standard and Limit

Applicable Standard:	Part 2.1049	Yo.	aborek	Auport	Pir.	Anboten	Vup.
Limit:	N/A	, V	hotek.	Anborer	Ans	abotek	Anbo.

6.2. Test Setup



6.3. Test Procedure

- 1. The EUT was connected to the spectrum analyzer and communication tester via a power splitter.
- 2. Set EUT in maximum power output.
- Spectrum analyzer setting as follow:
 Center Frequency= Carrier frequency, RBW=1% to 5% of anticipated OBW, VBW= 3 * RBW,
 Detector=Peak,

Trace maximum hold.

4. Record the value of 99% Occupied bandwidth and -26dB bandwidth.

6.4. Test Data

Pass

Please refer to Appendix C of the Appendix Test Data.







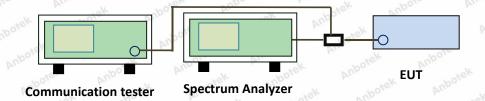
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7. Band Edge

7.1. Test Standard and Limit

Applicable Standard:	Part 2.1051 Part 22.917
Limit:	Part 22.917 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.

7.2. Test Setup



7.3. Test Procedure

- 1. The EUT was connected to the spectrum analyzer and communication tester via a power splitter.
- 2. Set EUT in maximum power output.
- 3. The band edges of low and high channels were measured.
- Spectrum analyzer setting as follow:
 RBW=3KHz, VBW = 10KHz, Sweep time= Auto
- 5. Record the test plot.

7.4. Test Data

Pass

Please refer to Appendix D of the Appendix Test Data.







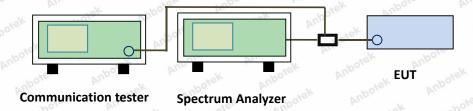
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8. Conducted Spurious Emission

8.1. Test Standard and Limit

Applicable Standard:	Part 2.1051 Part 22.917
Limit:	Part 22.917 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.

8.2. Test Setup



8.3. Test Procedure

- 1. The EUT was connected to the spectrum analyzer and communication tester via a power splitter.
- 2. Set EUT in maximum power output.
- Spectrum analyzer setting as follow:
 Below 1GHz, RBW=100KHz, VBW = 300KHz, Detector=Peak, Sweep time= Auto
 Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peak, Sweep time= Auto
 Scan frequency range up to 10th harmonic.
- 4. Record the test plot.

8.4. Test Data

Pass

Please refer to Appendix E of the Appendix Test Data.







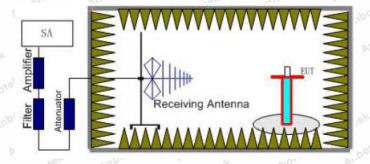
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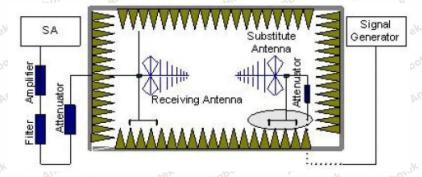
9. Radiated Spurious Emission

9.1. Test Standard and Limit

Ų.	Applicable Standard:	Part 2.1053	aborek	Anbor	bi.	Anboten	Anb
3.5		Part 22.917					Aupor
0	Limit:	-13dBm	Ann -tek	abotek	Anbo.	k hotek	Anbo

9.2. Test Setup





9.3. 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



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- 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 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.
 - 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.







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9.4. Test Data

Pass

Note: Worst case at WCDMA Band V.

- 40.	VUD	Har	~po,	by.	7,01	and	
			WCDMA	Band V			
	Frequency		Spurious	Emission		Limit	
Channel	(MHz)	Polarization	reading (dBm)	factor (dB)	Level (dBm)	(dBm)	Result
botek	1652.80	Vertical	-40.38	5.62	-34.76	Aupotek	Aupo
	2479.20	Aupo, A	-48.66	9.32	-39.34	<-13.00	PASS
Aupotek	3305.60	PLU AUT	-54.61	12.69	-41.92	k h. abotel	Anbo
4132	1652.80	Horizontal	-40.73	5.62	-35.11	rek ab	Hek An
	2479.20	tek H Anbots	-48.99	9.32	-39.67	<-13.00	PASS
	3305.60	notek H Ant	-54.92	12.69	-42.23	inpose b	hotek
otek p	1673.20	Vertical	-42.16	7.69	-34.47	Aupoten	Vier Potek
	2509.80	Arra Vek	-48.52	9.46	-39.06	<-13.00	PASS
	3346.40	And vek	-53.92	12.26	-41.66	Anboren	Anbo
4183	1673.20	Horizontal	-42.56	7.69	-34.87	rek Anbo	lek Vu
	2509.80	lek H Aupo	-48.90	9.46	-39.44	<-13.00	PASS
	3346.40	potek H Anb	-54.27	12.26	-42.01	you stek	anbotek
oter p	1693.20	Vertical	-42.38	8.26	-34.12	Aupr	nbotek
	2539.80	Nek	-48.38	9.65	-38.73	<-13.00	PASS
	3386.40	Votek	-53.76	12.41	-41.35	Anboro	ek v
4233	1693.20	Horizontal	-42.84	8.26	-34.58	lek Vupo,	Pt.
	2539.80	H H	-48.82	9.65	-39.17	<-13.00	PASS
	3386.40	Publican H	-54.17	12.41	-41.76	sbotek	Aupole

Remark:

- 1. The emission behaviour belongs to narrowband spurious emission.
- 2. The emission levels of not record in the report are very lower than the limit and not show in test report.







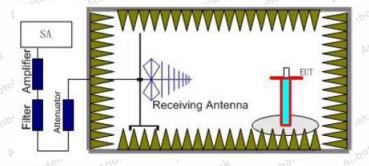
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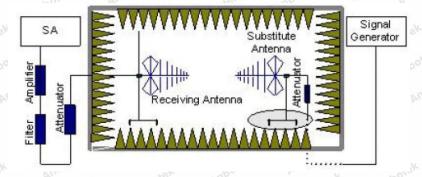
10. ERP and EIRP

10.1. Test Standard and Limit

Applicable Standard:	Part 2.1046	abotek	Aupor	Air.	Anboten	Anb
	Part 22.913(a)					Aupor
Limit:	WCDMA Band V: 7	'W (38.45dBr	n) ERP	Aupo.	L hotek	Anb

10.2. Test Setup





10.3. 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



Code:AB-RF-05-b
Hotline
400-003-0500
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- 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 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.
 - c) Record the output power level of the signal generator when equivalence is achieved in step b).
- 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.







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10.4. Test Data

Pass

The state of the s	W. 1.	LOV			10.7
Mode	Channel	Antenna Pol.	ERP	Limit (dBm)	Result
botek P	4132	atek V notore	19.90	Potek Vup	o de
Arr	4132 An	H with	19.49	Vu.	
MCDMA Bond V	4183	aborer V Anto	19.22	200 AE	My value
WCDMA Band V	4103	H _{ot}	17.57	<38.45	Pass
pole And	4222	Anbo V.	17.96	VUr.	abotek p
-otek Anbore	4233	~bHer	18.28	otek anbore	Ville





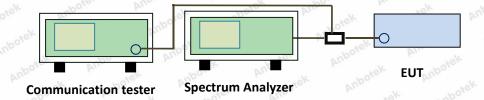
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11. Frequency stability VS Voltage measurement

11.1. Test Standard and Limit

			4.653		· · · · · · · · · · · · · · · · · · ·	4 - 5 3 7
Applicable Standard:	Part 2.1055(d)(1)(2)					And
	Part 22.355					Aupo,
Limit:	2.5ppm	Anu	abotek	Anbo.	k hotek	Anbo

11.2. Test Setup



11.3. Test Procedure

- 1. The equipment under test was connected to an external DC power supply and input rated voltage.
- 2. The EUT output port was connected to communication tester.
- 3. The EUT was placed inside the temperature chamber at 25°C.
- 4. The power supply voltage to the EUT was varied ±15% of the nominal value measured at the input to the EUT.
- 5. Record the maximum frequency change.

11.4. Test Data

Pass

Please refer to Appendix F of the Appendix Test Data.







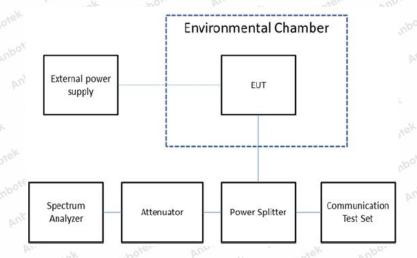
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12. Frequency stability VS Temperature measurement

12.1. Test Standard and Limit

Applicable Standard:	Part 2.1055(a)(1)(b)	abotek	Aupor	V. Potek	Anboren	And
	Part 22.355					Vupo,
Limit:	2.5ppm	Ann rek	Sabotek	Aupo.	, worek	Anb

12.2. Test Setup



12.3. Test Procedure

- 1. The equipment under test was connected to an external DC power supply and input rated voltage.
 - 2. The EUT output port was connected to communication tester.
 - 3. The EUT was placed inside the temperature chamber.
 - 4. Turn EUT off and set the chamber temperature to –30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.
- 5. Repeat step 4 measure with 10°C increased per stage until the highest temperature of +50°C reached.

12.4. Test Data

Pass

Please refer to Appendix G of the Appendix Test Data.







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APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_Licence

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

----- End of Report -----

