TEST REPORT

Application No.:	SZEM2101001002CR
Applicant:	Hallofo BV
Address of Applicant:	Korianderlaan 38, Amstelveen, 1187EE Netherlands.
Manufacturer:	Hallofo BV
Address of Manufacturer:	Korianderlaan 38, Amstelveen, 1187EE Netherlands.
Factory:	Audo(Xiamen) Technology Co., Ltd
Address of factory:	4th Floor,5th floor workshop, No.6 South Yanguang Road, Xinyang Street, HaicangDistrict, Xiamen city
Equipment Under Test (EUT):	
EUT Name:	Rebel Cactus smart watch
Model No.:	Rebel Cactus play -1
Trade mark:	Rebel Cactus
FCC ID:	2AY4Y-PLAY001A
Standard(s) :	47 CFR Part 2 47 CFR Part 22 subpart H 47 CFR Part 24 subpart E
Date of Receipt:	2021-01-25
Date of Test:	2021-01-26 to 2021-02-02
Date of Issue:	2021-03-15
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Keny Xu
EMC Laboratory Manager

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		2021-03-15		Original

Authorized for issue by:				
		Edison Li **Edison Li/Project Engineer**		
		Eric Fu **Eric Fu/Reviewer**		

2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913, §24.232	ERP≤7W(GSM850, WCDMA band V) EIRP≤2W(GSM1900, WCDMA band II)	PASS
Peak-Average Ratio	§24.232	≤13dB	PASS
Modulation Characteristics	§2.1047	Digital modulation	PASS
Bandwidth	§2.1049(h)	OBW: No limit EBW: No limit	PASS
Band Edge Compliance	§2.1051, §22.917, §24.238	≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	PASS
Spurious emissions at antenna terminals	§2.1051, §22.917, §24.238	≤ -13dBm	PASS
Field strength of spurious radiation	§2.1051, §22.917, §24.238	≤ -13dBm	PASS
Frequency stability	§2.1055, §22.355, §24.235	≤ ±2.5ppm.	PASS

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3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 3.8V 650mAh rechargeable battery which charged by USB port
Cable(s):	DC cable:98cm unshielded
Sample Type:	Portable product
Support Network:	GSM, GPRS, EGPRS, RMC, HSDPA, HSUPA
Operation Frequency Band:	GSM850/GSM1900/UMTS FDD Band II/V
Modulation Type:	GMSK for GSM/GPRS/EGPRS; 8PSK for EGPRS; QPSK for WCDMA
Supported Channel Bandwidth:	200KHz for GSM; 5MHz for WCDMA
GPRS Class:	12
EGPRS Class:	12
UMTS Power Class:	Level 3
Antenna Type:	Integral
Antenna Gain:	GSM850: 0.3dBi; PCS1900: 0.9dBi WCDMA band II: 0.9dBi; band V: 0.3dBi
Extreme temp. Tolerance:	-30°C to +50°C
Extreme vol. Limits:	3.4VDC to 4.35VDC (nominal: 3.8VDC)

4.2 Test Frequency

Test mode:	TX / RX	RF Channel		
		Low (L)	Middle (M)	High (H)
GSM850	TX	Channel 128	Channel 190	Channel 251
		824.2MHz	836.6 MHz	848.8 MHz
	RX	Channel 128	Channel 190	Channel 251
		869.2 MHz	881.6 MHz	893.8 MHz
Test mode:	TX / RX	RF Channel		
		Low (L)	Middle (M)	High (H)
GSM1900	TX	Channel 512	Channel 661	Channel 810
		1850.2MHz	1880.0 MHz	1909.8 MHz
	RX	Channel 512	Channel 661	Channel 810
		1930.2 MHz	1960.0 MHz	1989.8 MHz
Test Mode	TX/RX	RF Channel		
		Low(L)	Middle (M)	High (H)
WCDMA Band V	TX	Channel 4132	Channel 4183	Channel 4233
		826.4 MHz	836.6 MHz	846.6 MHz
	RX	Channel 4357	Channel 4407	Channel 4458
		871.4 MHz	881.4 MHz	891.6 MHz
Test Mode	TX/RX	RF Channel		
		Low(L)	Middle (M)	High (H)
WCDMA Band II	TX	Channel 9262	Channel 9400	Channel 9538
		1852.4 MHz	1880.0 MHz	1907.6 MHz
	RX	Channel 9662	Channel 9800	Channel 9938
		1932.4 MHz	1960.0 MHz	1987.6 MHz

4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	52%	
Atmospheric Pressure:	1015Pa	
Temperature:	TN	20 °C
Voltage:	VL	3.4 V
	VN	3.8 V
	VH	4.35 V

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

4.4 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Adapter	Provided by SGS	A1357 W010A051	REF. No.SEA0500

4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	± 7.25 x 10^{-8}
2	Duty cycle	± 0.37%
3	Occupied Bandwidth	± 3%
4	RF conducted power	± 0.75dB
5	RF power density	± 2.84dB
6	Conducted Spurious emissions	± 0.75dB
7	RF Radiated power	± 4.5dB (below 1GHz)
		± 4.8dB (above 1GHz)
8	Radiated Spurious emission test	± 4.5dB (Below 1GHz)
		± 4.8dB (Above 1GHz)
9	Temperature test	± 1°C
10	Humidity test	± 3%
11	Supply voltages	± 1.5%
12	Time	± 3%

4.6 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.7 Test Facility

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

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC –Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.8 Deviation from Standards

None

4.9 Abnormalities from Standard Conditions

None

5 Equipment List

RF conducted test					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. Date**	**Cal. Due date**
DC Power Supply	ZhaoXin	PS-3005D	SEM011-05	2020-09-23	2021-09-22
Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2020-04-11	2021-04-10
Signal Analyzer (10Hz-40GHz)	Rohde & Schwarz	FSV40	SEM008-04	2020-03-31	2021-03-30
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.6	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2020-07-10	2021-07-09
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2020-03-31	2021-03-30
Power Sensor	KEYSIGHT	U2021XA	SEM009-13	2020-04-11	2021-04-10

RE in Chamber					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. Date**	**Cal. Due date**
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
EXA Signal Analyzer	Agilent Technologies Inc	N9010A	SEM004-12	2020-04-09	2021-04-08
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2020-09-23	2021-09-22
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2020-07-10	2021-07-09
Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2020-11-14	2023-11-13
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2020-04-01	2021-03-31
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2020-03-31	2021-03-30
Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2020-06-26	2023-06-25
Signal Generator	R&S	SMA100A	102174	2020-07-10	2021-07-09

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RE in Chamber					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. Date**	**Cal. Due date**
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2020-07-19	2023-07-18
MXE EMI Receiver	Agilent Technologies	N9038A	SEM004-15	2020-11-02	2021-11-01
BiConiLog Antenna	ETS-LINDGREN	3142C	SEM003-02	2019-05-24	2022-05-23
Pre-Amplifier	Agilent Technologies	8447D	SEM005-01	2020-04-01	2021-03-31
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2020-07-10	2021-07-09
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2020-03-31	2021-03-30
Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2020-06-26	2023-06-25
Signal Generator	R&S	SMA100A	102174	2020-07-10	2021-07-09

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2020-09-15	2021-09-14
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2020-09-15	2021-09-14
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2020-04-07	2021-04-06

6 Radio Spectrum Matter Test Results

6.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement: §2.1046, §22.913, §24.232

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

Limit: ERP≤7W(GSM850, WCDMA BAND V)
EIRP≤2W(GSM1900, WCDMA BAND II)

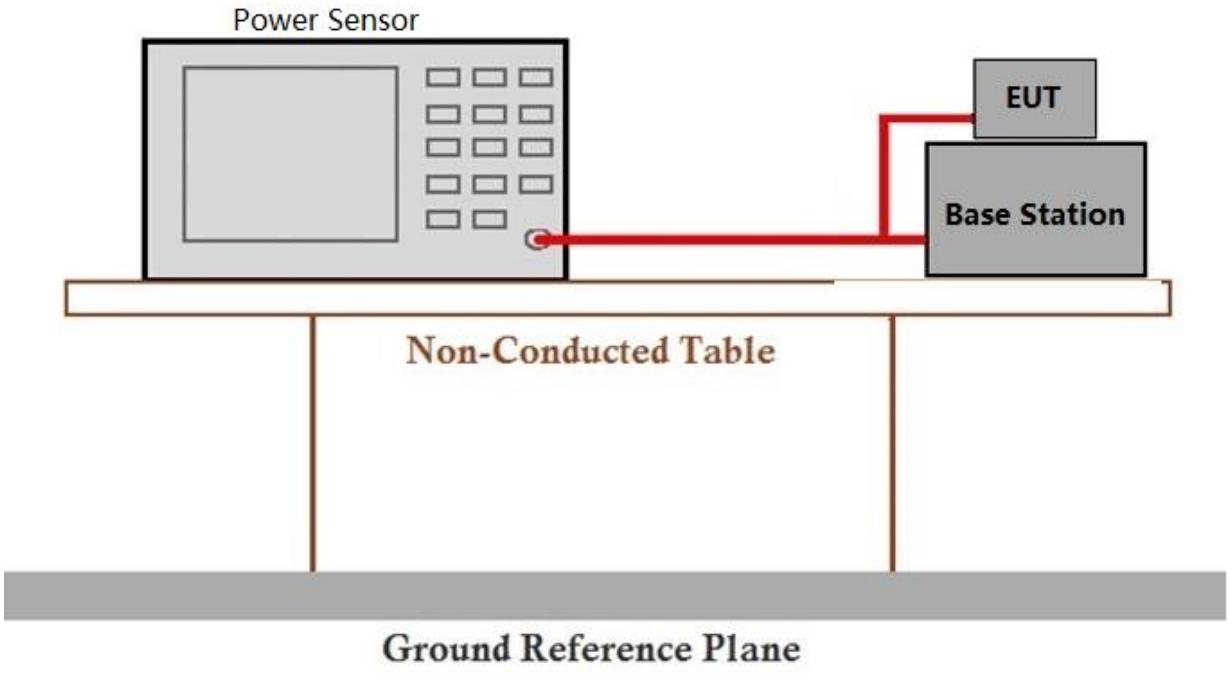
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 26.1 °C Humidity: 43.2 % RH Atmospheric Pressure: 1010 mbar

Test mode: 22: TX mode_Keep the EUT in transmitting mode

6.1.2 Test Setup Diagram



6.1.3 Measurement Data

Please refer to GSM & WCDMA test data appendix.

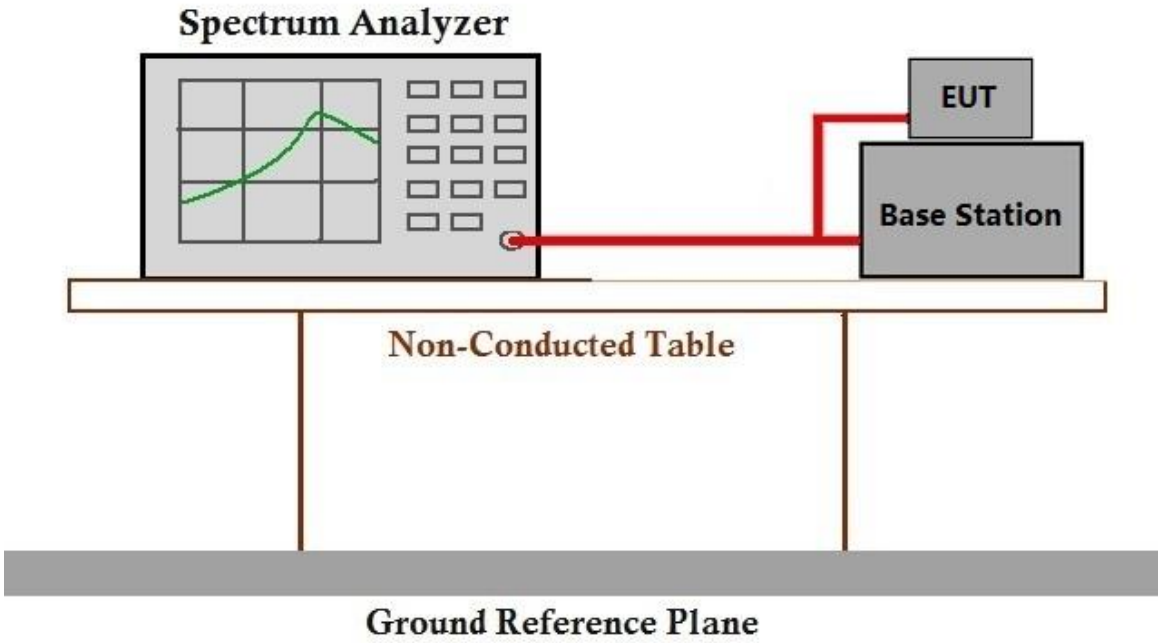
6.2 Peak-Average Ratio

Test Requirement: §24.232
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ≤13dB

6.2.1 E.U.T. Operation

Operating Environment:
Temperature: 26.1 °C Humidity: 43.2 % RH Atmospheric Pressure: 1010 mbar
Test mode: 22: TX mode_Keep the EUT in transmitting mode

6.2.2 Test Setup Diagram



6.2.3 Measurement Data

Please refer to GSM & WCDMA test data appendix.

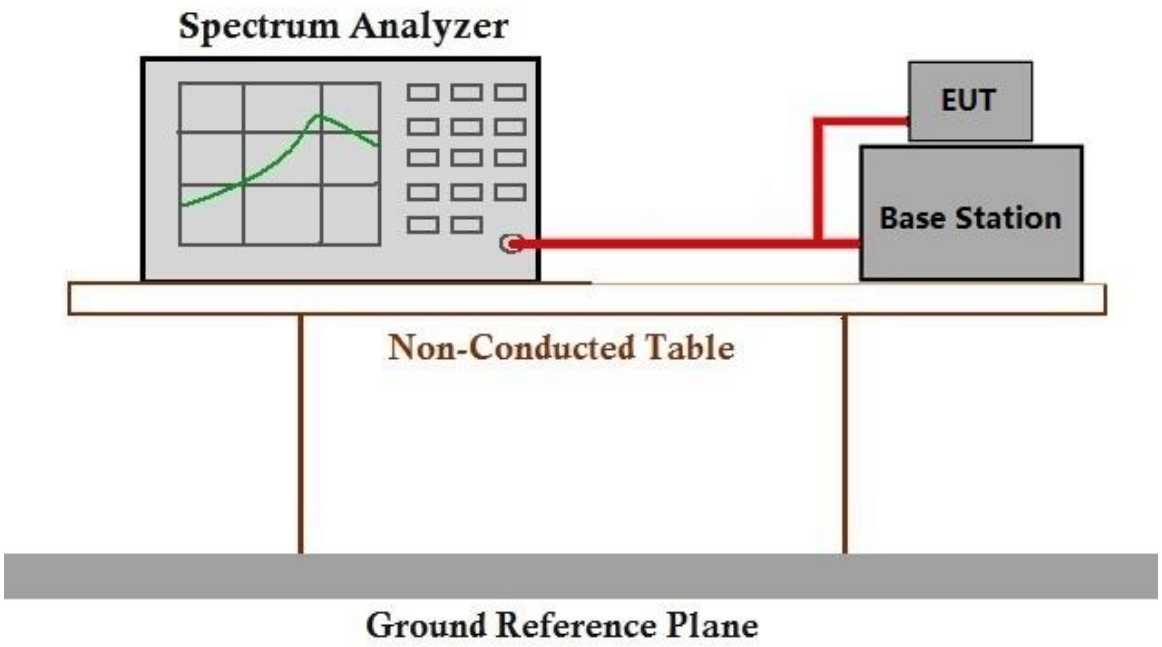
6.3 Bandwidth

Test Requirement: §2.1049(h)
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: OBW: No limit
EBW: No limit

6.3.1 E.U.T. Operation

Operating Environment:
Temperature: 26.1 °C Humidity: 43.2 % RH Atmospheric Pressure: 1010 mbar
Test mode: 22: TX mode_Keep the EUT in transmitting mode

6.3.2 Test Setup Diagram



6.3.3 Measurement Data

Please refer to GSM & WCDMA test data appendix.

6.4 Band Edge Compliance

Test Requirement: §2.1051, §22.917, §24.238

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

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

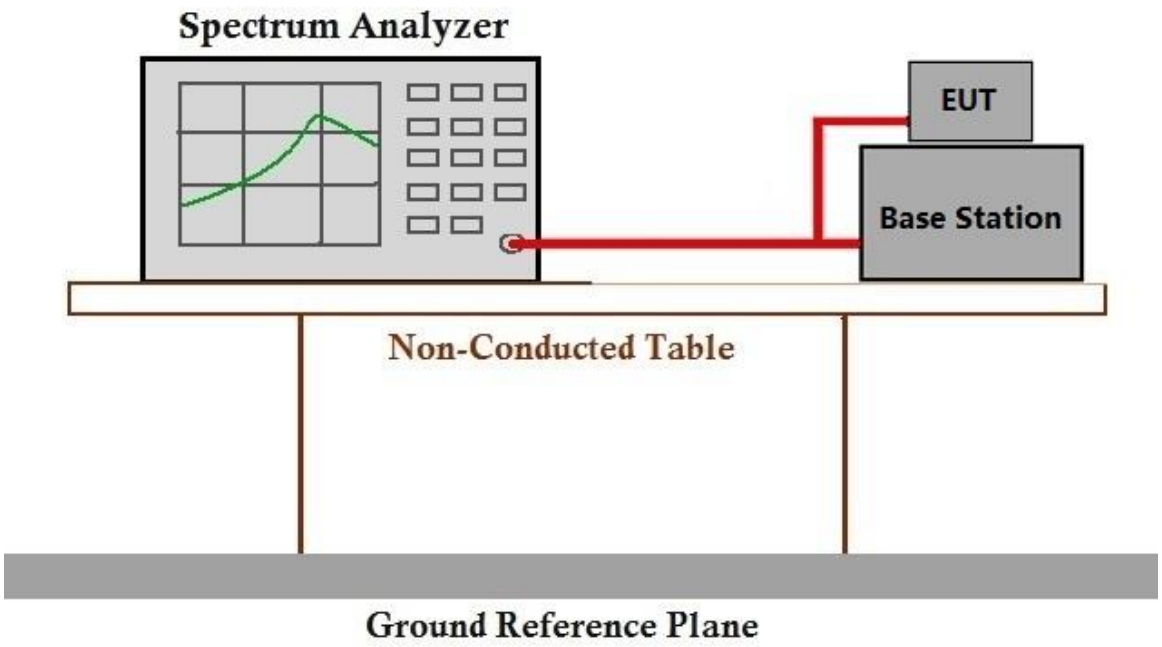
6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 26.1 °C Humidity: 43.2 % RH Atmospheric Pressure: 1010 mbar

Test mode: 22: TX mode_Keep the EUT in transmitting mode

6.4.2 Test Setup Diagram



6.4.3 Measurement Data

Please refer to GSM & WCDMA test data appendix.

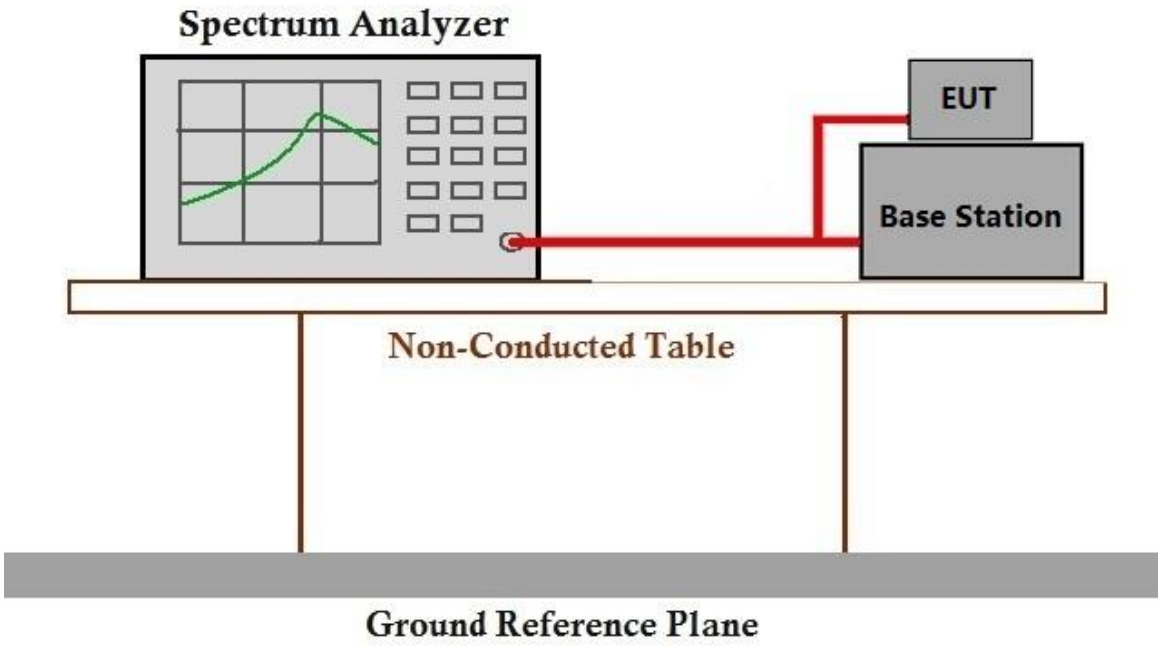
6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051, §22.917, §24.238
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ≤ -13dBm

6.5.1 E.U.T. Operation

Operating Environment:
Temperature: 26.1 °C Humidity: 43.2 % RH Atmospheric Pressure: 1010 mbar
Test mode: 22: TX mode_Keep the EUT in transmitting mode

6.5.2 Test Setup Diagram



6.5.3 Measurement Data

Please refer to GSM & WCDMA test data appendix.

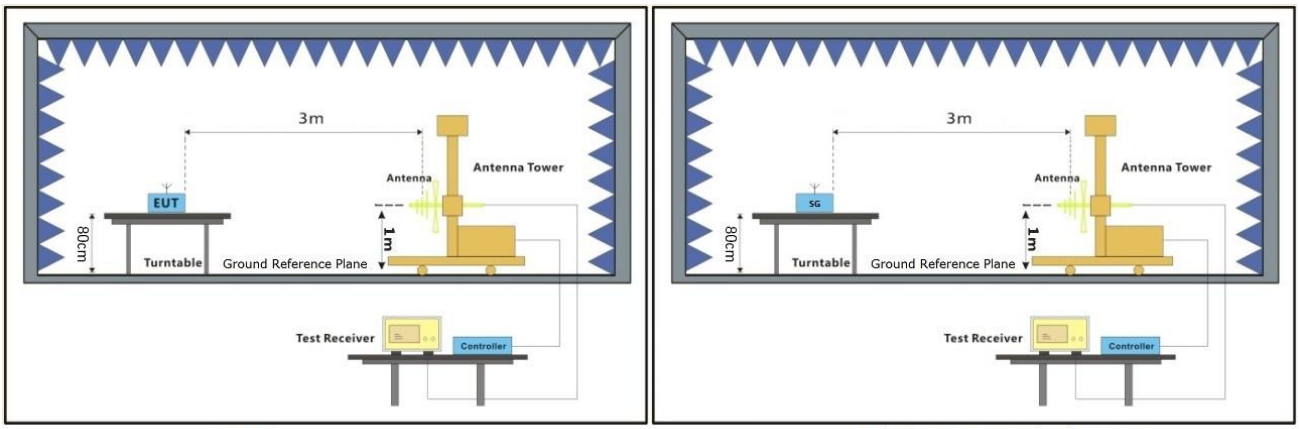
6.6 Field strength of spurious radiation

Test Requirement: §2.1051, §22.917, §24.238
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ≤ -13dBm

6.6.1 E.U.T. Operation

Operating Environment:
Temperature: 26.1 °C Humidity: 43.2 % RH Atmospheric Pressure: 1010 mbar
Test mode: 22: TX mode_Keep the EUT in transmitting mode

6.6.2 Test Setup Diagram



EUT Substiute Antenna+Signal Generator

6.6.3 Measurement Procedure and Data

Test Procedure:

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

GSM850-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1652.8	-47.5	-13	-34.5	-52.98	0.52	6	Horizontal	Pass
2479.2	-34.07	-13	-21.07	-39.34	0.53	5.8	Horizontal	Pass
3305.6	-46.81	-13	-33.81	-52.36	0.65	6.2	Horizontal	Pass
1652.8	-48.59	-13	-35.59	-54.07	0.52	6	Vertical	Pass
2479.2	-36.51	-13	-23.51	-41.78	0.53	5.8	Vertical	Pass
3305.6	-46.12	-13	-33.12	-51.67	0.65	6.2	Vertical	Pass

GSM850-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1672.8	-43.18	-13	-30.18	-48.66	0.52	6	Horizontal	Pass
2509.2	-34.41	-13	-21.41	-39.12	0.59	5.3	Horizontal	Pass
3345.6	-44.75	-13	-31.75	-50.3	0.65	6.2	Horizontal	Pass
1672.8	-46.8	-13	-33.8	-52.28	0.52	6	Vertical	Pass
2509.2	-35.79	-13	-22.79	-40.5	0.59	5.3	Vertical	Pass
3345.6	-47.48	-13	-34.48	-53.03	0.65	6.2	Vertical	Pass

GSM850-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1693.2	-44.67	-13	-31.67	-50.15	0.52	6	Horizontal	Pass
2539.8	-34.47	-13	-21.47	-39.18	0.59	5.3	Horizontal	Pass
3386.4	-43.07	-13	-30.07	-48.62	0.65	6.2	Horizontal	Pass
1693.2	-47.36	-13	-34.36	-52.84	0.52	6	Vertical	Pass
2539.8	-33.77	-13	-20.77	-38.48	0.59	5.3	Vertical	Pass
3386.4	-42.91	-13	-29.91	-48.46	0.65	6.2	Vertical	Pass

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PCS1900-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3704.8	-49.23	-13	-36.23	-56.12	0.71	7.6	Horizontal	Pass
5557.2	-43.88	-13	-30.88	-53.33	0.85	10.3	Horizontal	Pass
7409.6	-39.1	-13	-26.1	-51	1	12.9	Horizontal	Pass
3704.8	-49.47	-13	-36.47	-56.36	0.71	7.6	Vertical	Pass
5557.2	-42.21	-13	-29.21	-51.66	0.85	10.3	Vertical	Pass
7409.6	-42.4	-13	-29.4	-54.3	1	12.9	Vertical	Pass

PCS1900-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-48.61	-13	-35.61	-55.5	0.71	7.6	Horizontal	Pass
5640	-46.03	-13	-33.03	-55.48	0.85	10.3	Horizontal	Pass
7520	-43.04	-13	-30.04	-55.25	0.99	13.2	Horizontal	Pass
3760	-49.53	-13	-36.53	-56.42	0.71	7.6	Vertical	Pass
5640	-43.72	-13	-30.72	-53.17	0.85	10.3	Vertical	Pass
7520	-41.36	-13	-28.36	-53.57	0.99	13.2	Vertical	Pass

PCS1900-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3815.2	-48.34	-13	-35.34	-55.23	0.71	7.6	Horizontal	Pass
5722.8	-45.5	-13	-32.5	-54.95	0.85	10.3	Horizontal	Pass
7630.4	-41.57	-13	-28.57	-53.78	0.99	13.2	Horizontal	Pass
3815.2	-48.59	-13	-35.59	-55.48	0.71	7.6	Vertical	Pass
5722.8	-45.03	-13	-32.03	-54.48	0.85	10.3	Vertical	Pass
7630.4	-41.28	-13	-28.28	-53.49	0.99	13.2	Vertical	Pass

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WCDMA BAND V-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1652.8	-54.28	-13	-41.28	-59.76	0.52	6	Horizontal	Pass
2479.2	-53.02	-13	-40.02	-58.29	0.53	5.8	Horizontal	Pass
3305.6	-47.8	-13	-34.8	-53.35	0.65	6.2	Horizontal	Pass
1652.8	-54.93	-13	-41.93	-60.41	0.52	6	Vertical	Pass
2479.2	-51.67	-13	-38.67	-56.94	0.53	5.8	Vertical	Pass
3305.6	-45.88	-13	-32.88	-51.43	0.65	6.2	Vertical	Pass

WCDMA BAND V-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1672.8	-54.02	-13	-41.02	-59.5	0.52	6	Horizontal	Pass
2509.2	-51.12	-13	-38.12	-55.83	0.59	5.3	Horizontal	Pass
3345.6	-46.72	-13	-33.72	-52.27	0.65	6.2	Horizontal	Pass
1672.8	-54.19	-13	-41.19	-59.67	0.52	6	Vertical	Pass
2509.2	-49.03	-13	-36.03	-53.74	0.59	5.3	Vertical	Pass
3345.6	-47.06	-13	-34.06	-52.61	0.65	6.2	Vertical	Pass

WCDMA BAND V-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1693.2	-52.61	-13	-39.61	-58.09	0.52	6	Horizontal	Pass
2539.8	-51.02	-13	-38.02	-55.73	0.59	5.3	Horizontal	Pass
3386.4	-48.32	-13	-35.32	-53.87	0.65	6.2	Horizontal	Pass
1693.2	-52.59	-13	-39.59	-58.07	0.52	6	Vertical	Pass
2539.8	-49.82	-13	-36.82	-54.53	0.59	5.3	Vertical	Pass
3386.4	-45.48	-13	-32.48	-51.03	0.65	6.2	Vertical	Pass

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WCDMA Band II-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3704.8	-48.91	-13	-35.91	-55.8	0.71	7.6	Horizontal	Pass
5557.2	-42.38	-13	-29.38	-51.83	0.85	10.3	Horizontal	Pass
7409.6	-39.88	-13	-26.88	-51.78	1	12.9	Horizontal	Pass
3704.8	-47.27	-13	-34.27	-54.16	0.71	7.6	Vertical	Pass
5557.2	-43.97	-13	-30.97	-53.42	0.85	10.3	Vertical	Pass
7409.6	-39.94	-13	-26.94	-51.84	1	12.9	Vertical	Pass

WCDMA Band II-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-48.16	-13	-35.16	-55.05	0.71	7.6	Horizontal	Pass
5640	-43.21	-13	-30.21	-52.66	0.85	10.3	Horizontal	Pass
7520	-42.01	-13	-29.01	-54.22	0.99	13.2	Horizontal	Pass
3760	-48.41	-13	-35.41	-55.3	0.71	7.6	Vertical	Pass
5640	-43.54	-13	-30.54	-52.99	0.85	10.3	Vertical	Pass
7520	-41.72	-13	-28.72	-53.93	0.99	13.2	Vertical	Pass

WCDMA Band II-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3815.2	-46.79	-13	-33.79	-53.68	0.71	7.6	Horizontal	Pass
5722.8	-44.91	-13	-31.91	-54.36	0.85	10.3	Horizontal	Pass
7630.4	-39.17	-13	-26.17	-51.38	0.99	13.2	Horizontal	Pass
3815.2	-45.9	-13	-32.9	-52.79	0.71	7.6	Vertical	Pass
5722.8	-43.65	-13	-30.65	-53.1	0.85	10.3	Vertical	Pass
7630.4	-41.09	-13	-28.09	-53.3	0.99	13.2	Vertical	Pass

Note:

For GSM, all modes have been tested and we found GSM Test mode has the worst test result. Only record the worst test result.

For WCDMA, all modes have been tested and we found RMC Test mode has the worst test result. Only record the worst test result.

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6.7 Frequency stability

Test Requirement: §2.1055, §22.355, §24.235

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

Limit: ≤ ±2.5ppm.

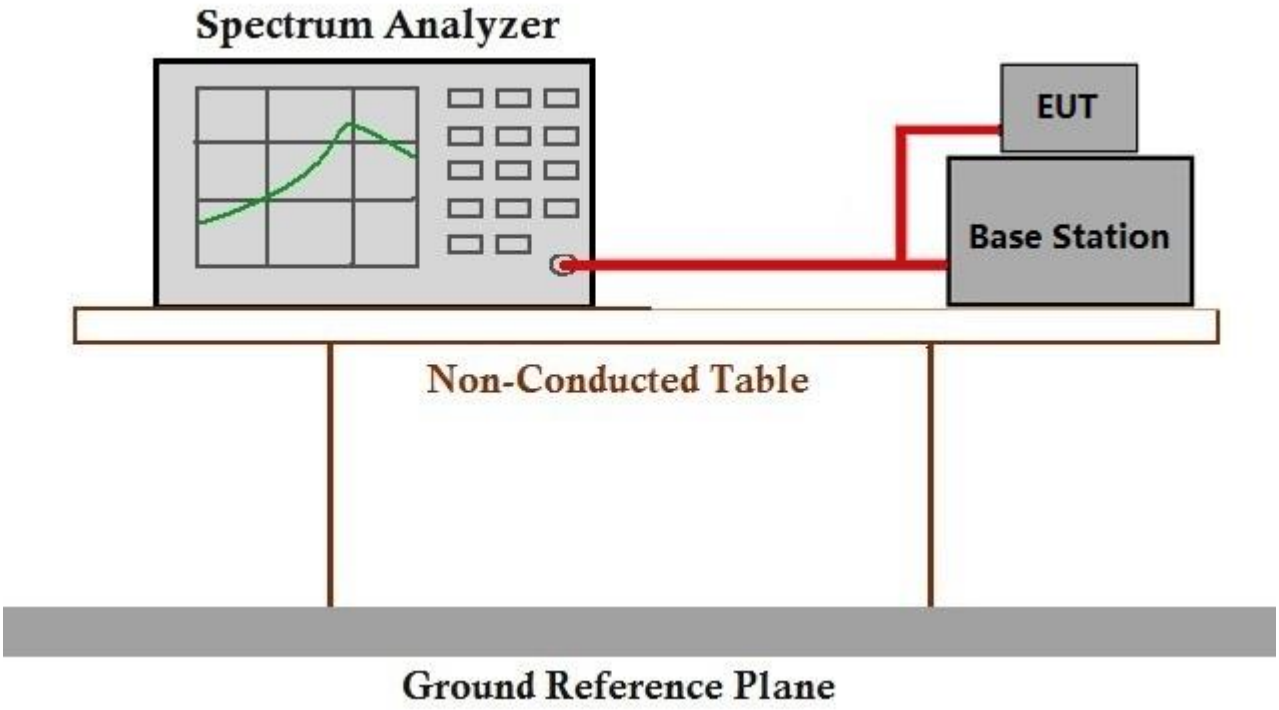
6.7.1 E.U.T. Operation

Operating Environment:

Temperature: 26.1 °C Humidity: 43.2 % RH Atmospheric Pressure: 1010 mbar

Test mode: 22: TX mode_Keep the EUT in transmitting mode

6.7.2 Test Setup Diagram



6.7.3 Measurement Data

Please refer to GSM & WCDMA test data appendix.

6.8 Modulation Characteristics

Test Requirement: §2.1047
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: Digital modulation

6.8.1 E.U.T. Operation

Operating Environment:
Temperature: 26.1 °C Humidity: 43.2 % RH Atmospheric Pressure: 1010 mbar
Test mode: 22: TX mode_Keep the EUT in transmitting mode

6.8.2 Test Setup Diagram

6.8.3 Measurement Data

Please refer to GSM & WCDMA test data appendix.

- End of the Report -