

TEST REPORT

Application No.: FYCR2205000177AT
Applicant: Zhongshan Transtek Electronics Co., Ltd.
Address of Applicant: No. 23, Jin'an Road, Minzhong, Zhongshan, Guangdong, China
Manufacturer: Zhongshan Transtek Electronics Co., Ltd.
Address of Manufacturer: No. 23, Jin'an Road, Minzhong, Zhongshan, Guangdong, China
Factory: Zhongshan Transtek Electronics Co., Ltd.
Address of Factory: No. 23, Jin'an Road, Minzhong, Zhongshan, Guangdong, China
Equipment Under Test (EUT):
EUT Name: Pro Cellular Body Scale
Model No.: BS-2001-G1
FCC ID: 2AOJNBS-2001-G1
Standard(s) : 47 CFR Part 2
47 CFR Part 24 subpart E
47 CFR Part 27 subpart C
Date of Receipt: 2022-05-17
Date of Test: 2022-05-18 to 2022-06-08
Date of Issue: 2022-06-09

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.



EMC Technical Manager



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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2022-06-09		Original

Authorized for issue by:				
		Tree Zhan		
		Tree Zhan/Project Engineer		
		Winkey Wang		
		Winkey Wang/Reviewer		



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2 Test Summary

CatM1 Band 2

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §24.232	EIRP≤2W	PASS
Peak-Average Ratio	§2.1046 §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 §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 §24.238	≤ -13 dBm/1MHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	PASS
Field strength of spurious radiation	§2.1053 §24.238	≤ -13dBm/1MHz	PASS
Frequency stability	§2.1055 §24.235	≤ ±2.5ppm	PASS

CatM1 Band 4

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(d)	EIRP≤1W	PASS
Peak-Average Ratio	§2.1046 §27.50(d)	≤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 §27.53(h)	≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	PASS
Spurious emissions at antenna terminals	§2.1051 §27.53(h)	≤ -13 dBm/1MHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	PASS
Field strength of spurious radiation	§2.1053 §27.53(h)	≤ -13dBm/1MHz	PASS
Frequency stability	§2.1055 §27.54	≤ ±2.5ppm	PASS



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CatM1 Band 12

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(c)	ERP≤3W	PASS
Peak-Average Ratio	§2.1046 §27.50(c)	≤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 §27.53(g)	≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	PASS
Spurious emissions at antenna terminals	§2.1051 §27.53(g)	≤ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	PASS
Field strength of spurious radiation	§2.1053 §27.53(g)	≤ -13dBm/100KHz	PASS
Frequency stability	§2.1055 §27.54	≤ ±2.5ppm	PASS

CatM1 Band 13

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(c)	ERP≤3W	PASS
Peak-Average Ratio	§2.1046 §27.50(c)	≤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 §27.53(g)	≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	PASS
Spurious emissions at antenna terminals	§2.1051 §27.53(g)	≤ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	PASS
Field strength of spurious radiation	§2.1053 §27.53(g)	≤ -13dBm/100KHz	PASS
Frequency stability	§2.1055 §27.54	≤ ±2.5ppm	PASS



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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 6V(4*1.5V AA Batteries)
Internal Source:	More than 108MHz
Operation Frequency Band:	CatM1 Band 2, 4, 12, 13
Modulation Type:	QPSK, 16QAM
Antenna Type:	PIFA Antenna
Antenna Gain:	CatM Band2: 3.86dBi(Low/Middle Channel), 1.65dBi(High channel) CatM Band4: 3.86dBi CatM Band12: 1.38dBi CatM Band13: 1.38dBi
Extreme temp. Tolerance:	-30°C to +50°C

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
--	--	--	--
The EUT has been tested as an independent unit.			

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Effective (Isotropic) Radiated Power Output Data	$\pm 3.1\text{dB}$ (Below 1GHz), $\pm 4.4\text{dB}$ (Above 1GHz)
Peak-Average Ratio	$\pm 0.8\text{dB}$
Modulation Characteristics	$\pm 0.8\text{dB}$
Bandwidth	$\pm 0.3\%$
Band Edge Compliance	$\pm 2.7\text{dB}$
Spurious emissions at antenna terminals	$\pm 2.7\text{dB}$
Field strength of spurious radiation	$\pm 2.7\text{dB}$
Frequency stability	$\pm 5.4 \times 10^{-8}$



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2.1 Test Frequency

Test Mode	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
CatM1 Band 2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855.0	1880	1905.0
	15	1857.5	1880	1902.5
	20	1860.0	1880	1900.0
Test Mode	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
CatM1 Band 4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715.0	1732.5	1750.0
	15	1717.5	1732.5	1747.5
	20	1720.0	1732.5	1745.0
Test Mode	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
CatM1 Band 12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704.0	707.5	711.0
Test Mode	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
CatM1 Band 13	5	779.5	782.0	784.5
	10	/	782.0	/

2.2 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	52%	
Atmospheric Pressure:	1015Pa	
Temperature:	TL	-30°C
	TN	+20°C
	TH	+50°C
Voltage:	VL	5.1 V
	VN	6 V
	VH	6 V

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



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4.4 Test Location

All tests were performed at:

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Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

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

• **A2LA (Certificate No. 6606.01)**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 6606.01.

• **FCC –Designation Number: CN1322**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

• **Innovation, Science and Economic Development Canada**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

RF Conducted Test					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2021/7/13	2022/7/12
MXA Signal Analyzer(10Hz-26.5GHz)	Agilent	N9020A	SEM004-20	2021/7/13	2022/7/12
Signal Generator(9kHz-40GHz)	Agilent	N5173B	SEM006-05	2021/7/13	2022/7/12
ESG Vector Signal Generator(250kHz-6GHz)	Agilent	E4438C	SEM006-15	2021/7/13	2022/7/12
Power Sensor	Erika Fiedler	U2021XA	SEM009-15	2021/7/13	2022/7/12
Power Sensor	Erika Fiedler	U2021XA	SEM009-16	2021/7/13	2022/7/12
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-08	2021/7/13	2022/7/12
Programmable DC Source	Chroma	62024P-80-60	SEM011-09	2021/7/13	2022/7/12
Attenuator(18GHz, 20dB, 2W)	Huber+Suhner	6620_SMA-50-1	SEM021-09	2021/7/13	2022/7/12

Field strength of spurious radiation(Below 1GHz & Above 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2022/7/12
Trilog-Broadband Antenna(25MHz-2GHz)	Schwarzbeck	VULB9168	SEM003-33	2021/9/25	2024/9/24
Biconical Antenna(150MHz-1GHz)	Schwarzbeck	VUBA9117	SEM003-35	2021/12/26	2024/12/25
Loop Antenna(9kHz-30MHz)	ETS-LINDGREN	6502	SEM003-36	2021/9/26	2024/9/25
MXE EMI receiver(20Hz-8.4GHz)	Agilent	N9038A	SEM004-05	2021/7/13	2022/7/12
Pre-amplifier (0.1-1.3GHz)	HP	8447D	SEM005-02	2021/7/13	2022/7/12
Broad-Band Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2021/7/11	2024/7/10
Broad-Band Horn Antenna (1-18GHz)	Schwarzbeck	BBHA 9120D	SEM003-32	2021/9/26	2024/9/25
Double-ridged waveguide horn (1-18GHz)	ETS-LINDGREN	3117	SEM003-34	2021/9/25	2024/9/24



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Spectrum Analyzer(20Hz-43GHz)	Rohde & Schwarz	101288	SEM004-08	2021/7/13	2022/7/12
Low Noise Amplifier(100MHz-18GHz)	CLAVIO	BDLNA-0118-352810	SEM005-05	2021/7/13	2022/7/12
Pre-amplifier(26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2021/7/13	2022/7/12
Pre-amplifier(18GHz-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2021/7/13	2022/7/12

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-22	2021-07-13	2022-07-12
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-23	2021-07-13	2022-07-12
Barometer	DUMAI	DYM3	SEM002-24	2021-07-13	2022-07-12



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6 Radio Spectrum Matter Test Results

6.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement	Reference test summary
Test Method:	ANSI C63.26, KDB 971168 D01 v03
Limit:	Reference test summary

6.1.1 E.U.T. Operation

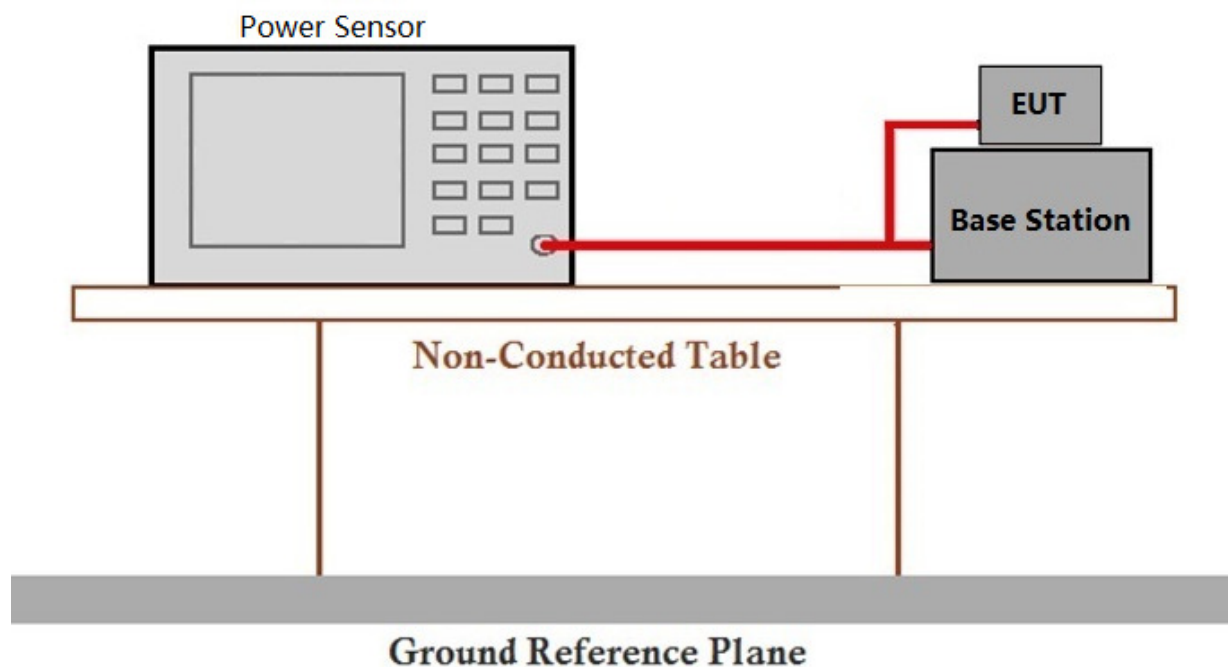
Operating Environment:

Temperature: 22.3 °C Humidity: 55.8 % RH Atmospheric Pressure: 1020 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting mode

6.1.3 Test Setup Diagram



6.1.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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6.2 Peak-Average Ratio

Test Requirement	Reference test summary
Test Method:	ANSI C63.26, KDB 971168 D01 v03
Limit:	Reference test summary

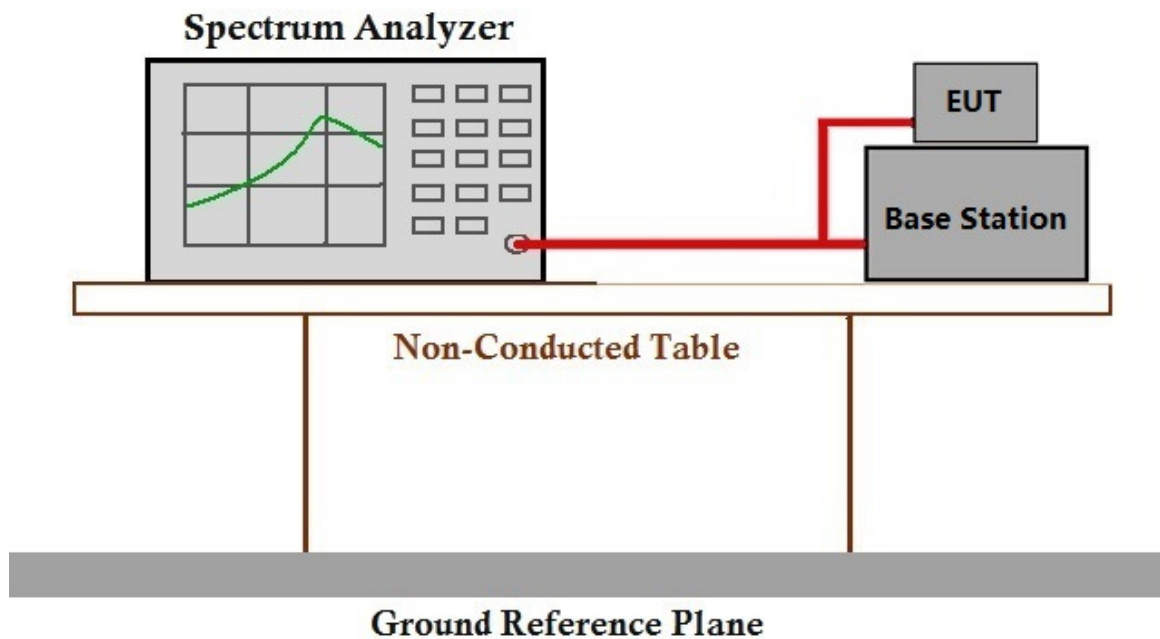
6.2.1 E.U.T. Operation

Operating Environment:			
Temperature:	22.3 °C	Humidity:	55.8 % RH
		Atmospheric Pressure:	1020 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting mode

6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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6.3 Modulation Characteristics

Test Requirement Reference test summary
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: Reference test summary

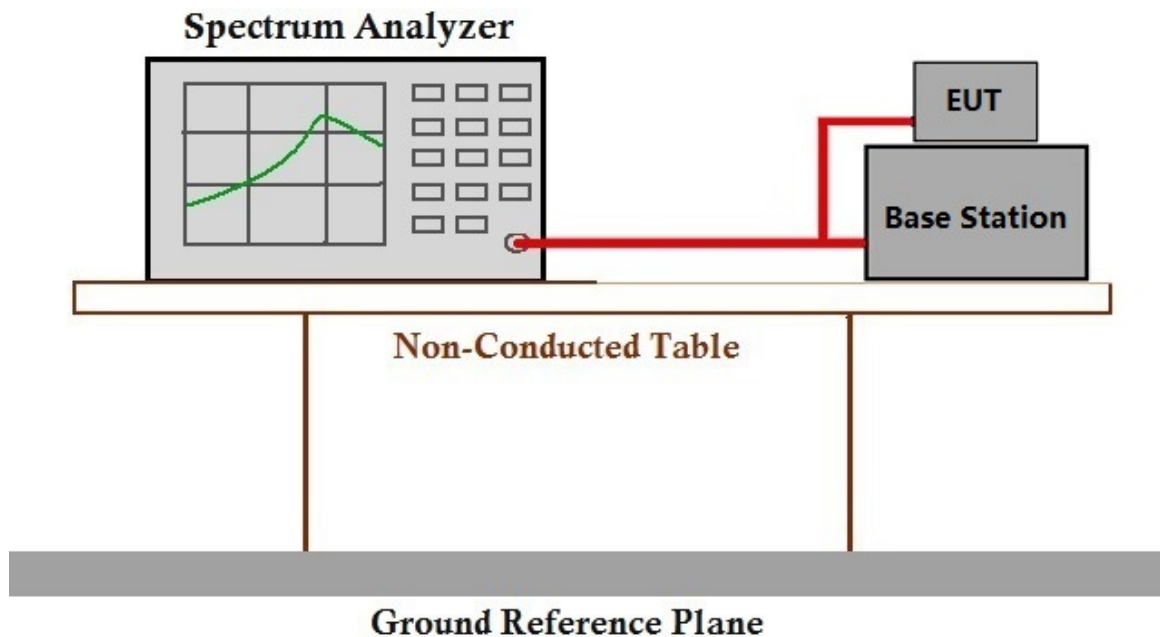
6.3.1 E.U.T. Operation

Operating Environment:
Temperature: 22.3 °C Humidity: 55.8 % RH Atmospheric Pressure: 1020 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting mode

6.3.3 Test Setup Diagram



6.3.4 Measurement Procedure and Data

Note: This device uses digital modulation.



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6.4 Bandwidth

Test Requirement Reference test summary
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: Reference test summary

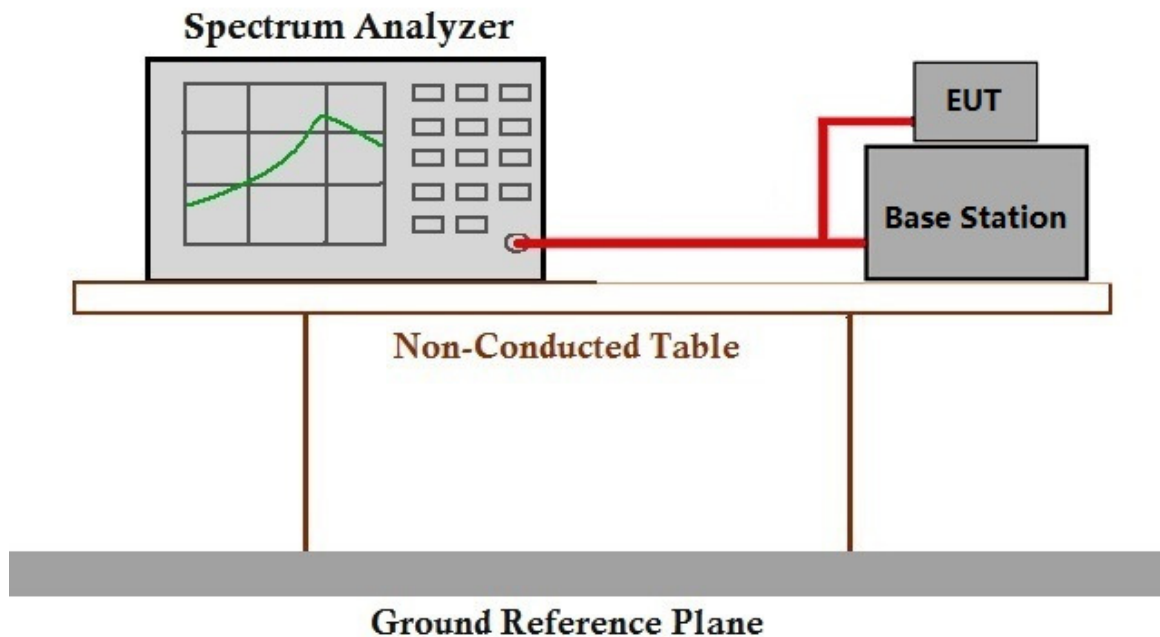
6.4.1 E.U.T. Operation

Operating Environment:
Temperature: 22.3 °C Humidity: 55.8 % RH Atmospheric Pressure: 1020 mbar

6.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting mode

6.4.3 Test Setup Diagram



6.4.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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6.5 Band Edge Compliance

Test Requirement Reference test summary
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: Reference test summary

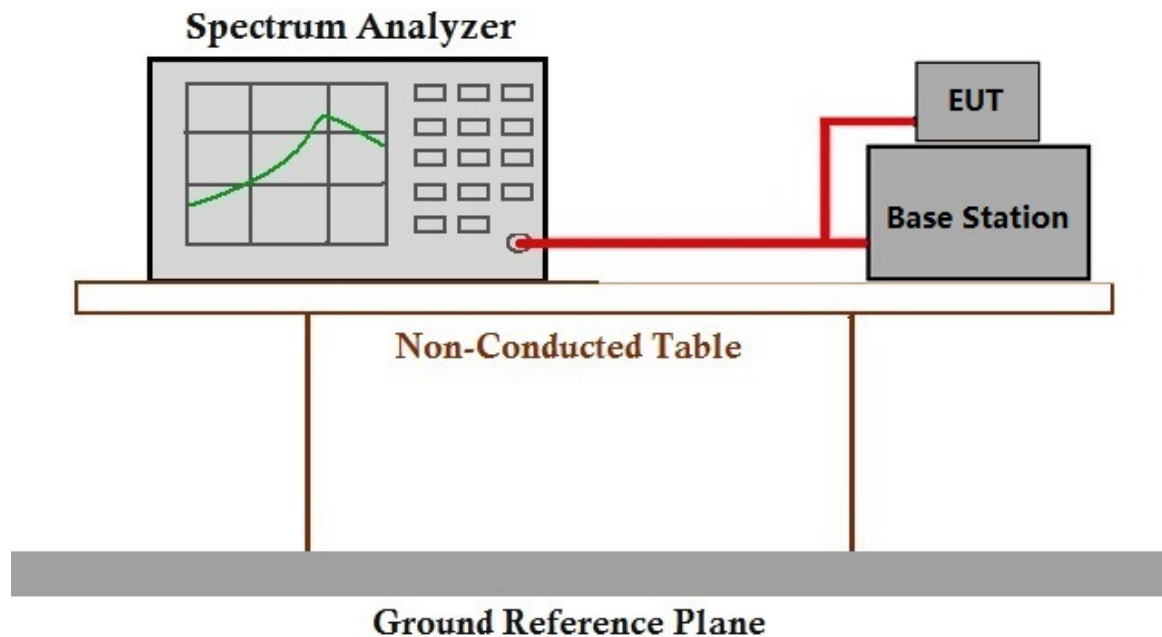
6.5.1 E.U.T. Operation

Operating Environment:
Temperature: 22.3 °C Humidity: 55.8 % RH Atmospheric Pressure: 1020 mbar

6.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting mode

6.5.3 Test Setup Diagram



6.5.4 Measurement Procedure and Data

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6.6 Spurious emissions at antenna terminals

Test Requirement Reference test summary
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: Reference test summary

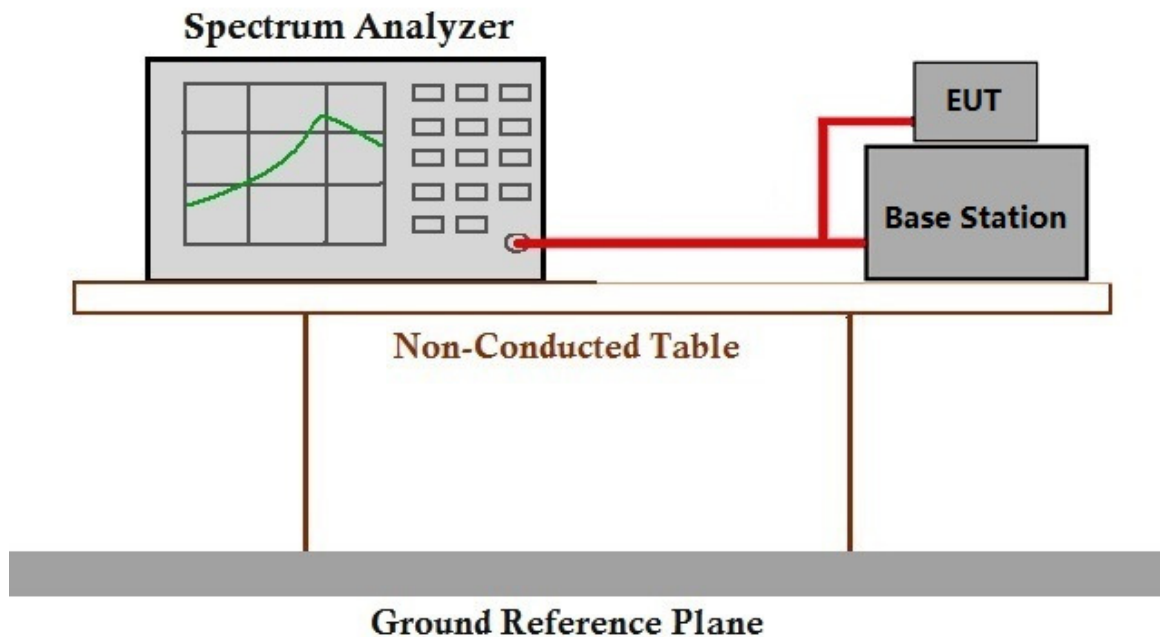
6.6.1 E.U.T. Operation

Operating Environment:
Temperature: 22.3 °C Humidity: 55.8 % RH Atmospheric Pressure: 1020 mbar

6.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting mode

6.6.3 Test Setup Diagram



6.6.4 Measurement Procedure and Data

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6.7 Field strength of spurious radiation

Test Requirement Reference test summary
Test Method: ANSI C63.26, KDB 971168 D01 v03
Measurement Distance: 3m
Limit: Reference test summary

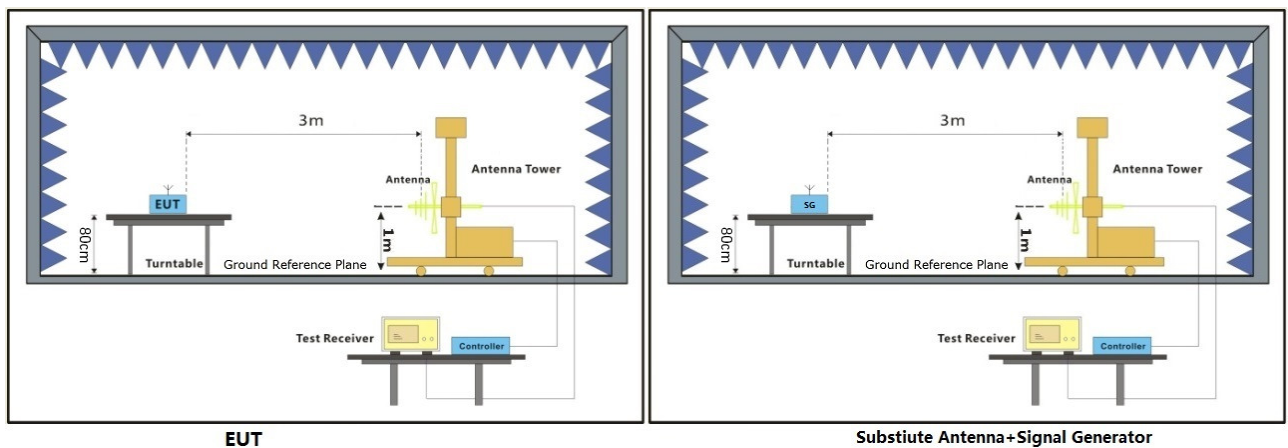
6.7.1 E.U.T. Operation

Operating Environment:
Temperature: 22.3 °C Humidity: 55.8 % RH Atmospheric Pressure: 1020 mbar

6.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting mode

6.7.3 Test Setup Diagram



6.7.4 Measurement Procedure and Data

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2.2.1 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 then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- (7) The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- (8) The maximum signal level detected by the measuring receiver shall be noted.
- (9) The measurement shall be repeated with the test antenna set to horizontal polarization.
- (10) Replace the antenna with a proper Antenna (substitution antenna).
- (11) The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
- (12) The substitution antenna shall be connected to a calibrated signal generator.
- (13) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- (14) The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- (15) The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- (16) The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- (17) The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.



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CatM Band 2-20MHz Low channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3702	-50.3	-13	-37.3	-52.52	6.99	9.21	Horizontal	Pass
5553	-47.77	-13	-34.77	-50.09	8.27	10.59	Horizontal	Pass
7404	-44.48	-13	-31.48	-48.02	8.19	11.73	Horizontal	Pass
3702	-50.74	-13	-37.74	-52.96	6.99	9.21	Vertical	Pass
5553	-48.42	-13	-35.42	-50.74	8.27	10.59	Vertical	Pass
7404	-45.39	-13	-32.39	-48.93	8.19	11.73	Vertical	Pass

CatM Band 2-20MHz Middle channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3742	-51.78	-13	-38.78	-54	6.99	9.21	Horizontal	Pass
5613	-47.77	-13	-34.77	-50.09	8.27	10.59	Horizontal	Pass
7484	-44.3	-13	-31.3	-47.84	8.19	11.73	Horizontal	Pass
3742	-51.11	-13	-38.11	-53.33	6.99	9.21	Vertical	Pass
5613	-48.72	-13	-35.72	-51.04	8.27	10.59	Vertical	Pass
7484	-44.27	-13	-31.27	-47.81	8.19	11.73	Vertical	Pass

CatM Band 2-20MHz High channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3782	-49.01	-13	-36.01	-51.23	6.99	9.21	Horizontal	Pass
5673	-48.96	-13	-35.96	-51.28	8.27	10.59	Horizontal	Pass
7564	-44.78	-13	-31.78	-48.61	8.43	12.26	Horizontal	Pass
3782	-49.97	-13	-36.97	-52.19	6.99	9.21	Vertical	Pass
5673	-48.53	-13	-35.53	-50.85	8.27	10.59	Vertical	Pass
7564	-44.28	-13	-31.28	-48.11	8.43	12.26	Vertical	Pass



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CatM Band 4-20MHz Low channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3422	-51.09	-13	-38.09	-53.67	5.72	8.3	Horizontal	Pass
5133	-47.47	-13	-34.47	-49.47	8.3	10.3	Horizontal	Pass
6844	-47.01	-13	-34.01	-50.56	7.7	11.25	Horizontal	Pass
3422	-51.4	-13	-38.4	-53.98	5.72	8.3	Vertical	Pass
5133	-46.71	-13	-33.71	-48.71	8.3	10.3	Vertical	Pass
6844	-47.6	-13	-34.6	-51.15	7.7	11.25	Vertical	Pass

CatM Band 4-20MHz Middle channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3447	-51.28	-13	-38.28	-53.86	5.72	8.3	Horizontal	Pass
5170.5	-46.82	-13	-33.82	-48.82	8.3	10.3	Horizontal	Pass
6894	-46.86	-13	-33.86	-50.41	7.7	11.25	Horizontal	Pass
3447	-51.41	-13	-38.41	-53.99	5.72	8.3	Vertical	Pass
5170.5	-46.91	-13	-33.91	-48.91	8.3	10.3	Vertical	Pass
6894	-46.57	-13	-33.57	-50.12	7.7	11.25	Vertical	Pass

CatM Band 4-20MHz High channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3472	-50.84	-13	-37.84	-53.42	5.72	8.3	Horizontal	Pass
5208	-47.04	-13	-34.04	-49.04	8.3	10.3	Horizontal	Pass
6944	-46.71	-13	-33.71	-50.26	7.7	11.25	Horizontal	Pass
3472	-50.84	-13	-37.84	-53.42	5.72	8.3	Vertical	Pass
5208	-47.04	-13	-34.04	-49.04	8.3	10.3	Vertical	Pass
6944	-46.71	-13	-33.71	-50.26	7.7	11.25	Vertical	Pass



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CatM Band 12-10MHz Low channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1399	-47.59	-13	-34.59	-50.12	2.64	5.17	Horizontal	Pass
2098.5	-45.57	-13	-32.57	-47.9	4.75	7.08	Horizontal	Pass
2798	-53.47	-13	-40.47	-55.94	5.13	7.6	Horizontal	Pass
1399	-48.62	-13	-35.62	-51.15	2.64	5.17	Vertical	Pass
2098.5	-48.23	-13	-35.23	-50.56	4.75	7.08	Vertical	Pass
2798	-52.96	-13	-39.96	-55.43	5.13	7.6	Vertical	Pass

CatM Band 12-10MHz Middle channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1406	-49.35	-13	-36.35	-51.88	2.64	5.17	Horizontal	Pass
2109	-48.24	-13	-35.24	-50.57	4.75	7.08	Horizontal	Pass
2812	-52.52	-13	-39.52	-54.99	5.13	7.6	Horizontal	Pass
1406	-46.07	-13	-33.07	-48.6	2.64	5.17	Vertical	Pass
2109	-48.24	-13	-35.24	-50.57	4.75	7.08	Vertical	Pass
2812	-52.77	-13	-39.77	-55.24	5.13	7.6	Vertical	Pass

CatM Band 12-10MHz High channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1413	-50.33	-13	-37.33	-52.86	2.64	5.17	Horizontal	Pass
2119.5	-47.46	-13	-34.46	-49.79	4.75	7.08	Horizontal	Pass
2826	-51.88	-13	-38.88	-54.35	5.13	7.6	Horizontal	Pass
1413	-47.99	-13	-34.99	-50.52	2.64	5.17	Vertical	Pass
2119.5	-48.46	-13	-35.46	-50.79	4.75	7.08	Vertical	Pass
2826	-51.95	-13	-38.95	-54.42	5.13	7.6	Vertical	Pass



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CatM Band 13-10MHz Middle channel, Modulation: QPSK, 1 RB								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1555	-51.1	-13	-38.1	-54.76	3.77	7.43	Horizontal	Pass
2332.5	-47.93	-13	-34.93	-50.26	4.75	7.08	Horizontal	Pass
3110	-50.65	-13	-37.65	-53.23	5.72	8.3	Horizontal	Pass
1555	-50.16	-13	-37.16	-53.82	3.77	7.43	Vertical	Pass
2332.5	-47.04	-13	-34.04	-49.37	4.75	7.08	Vertical	Pass
3110	-49.01	-13	-36.01	-51.59	5.72	8.3	Vertical	Pass

Note: All modes have been tested and we found QPSK test mode has the worst test result. Only record the worst test result.

EIRP= S.G. Power- Cable loss+ Antenna Gain



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Shenzhen Branch

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6.8 Frequency stability

Test Requirement Reference test summary
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: Reference test summary

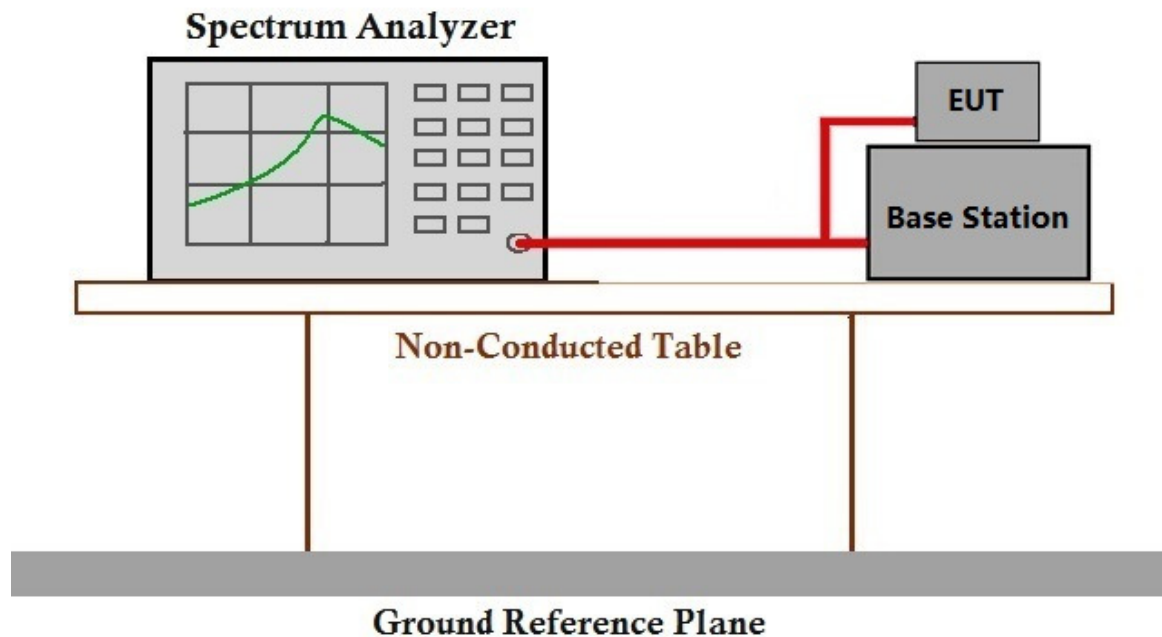
6.8.1 E.U.T. Operation

Operating Environment:
Temperature: 22.3 °C Humidity: 55.8 % RH Atmospheric Pressure: 1020 mbar

6.8.1 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting mode

6.8.2 Test Setup Diagram



6.8.3 Measurement Procedure and Data

Please Refer to Appendix for Details



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3 Test Setup Photo

Refer to Appendix – Test Setup Photos for FYCR2205000177AT

4 EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for FYCR2205000177AT

- End of the Report -



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