

Report No.: FYCR220400006403

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# TEST REPORT

Application No.: FYCR2204000064ME

**Applicant:** Guangdong Transtek Medical Electronics Co., Ltd.

Address of Applicant: Zone A, No.105, Dongli Road, Torch Development District, Zhongshan,

528437, Guangdong, China

Manufacturer: Guangdong Transtek Medical Electronics Co., Ltd.

Address of Manufacturer: Zone A, No.105, Dongli Road, Torch Development District, Zhongshan,

528437, Guangdong, China

Factory: Guangdong Transtek Medical Electronics Co., Ltd.

Address of Factory: Zone A, No.105, Dongli Road, Torch Development District, Zhongshan,

528437, Guangdong, China

**Equipment Under Test (EUT):** 

**EUT Name:** Pro Cellular Blood pressure monitor

 Model No.:
 TMB-2092-G

 FCC ID:
 OU9TMB2092-G

Trade mark: Transtek

Standard(s): 47 CFR Part 2

47 CFR Part 24 subpart E 47 CFR Part 27 subpart C

**Date of Receipt:** 2022-04-08

**Date of Test:** 2022-04-13 to 2022-04-25

**Date of Issue:** 2022-04-26

Test Result: Pass\*

Kidd Yang EMC Laboratory Manager



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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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	Revision Record				
Version	Chapter	Date	Modifier	Remark	
01		2022-04-26		Original	

Authorized for issue by:		
	Tree Zhan	
	Tree Zhan/Project Engineer	
	WinkeyWarg	
	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

Cativi Darid 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

Cativi i Band 13				
Test Item	FCC	Requirements	Verdict	
	Rule No.			
Effective (Isotropic) Radiated Power Output	§2.1046	ERP≤3W	PASS	
Data	§27.50(c)			
Dook Average Detic	§2.1046	≤13dB	DACC	
Peak-Average Ratio	§27.50(c)	SISUD	PASS	
Modulation	§2.1047	Digital modulation	PASS	
Characteristics	3=			
Bandwidth	§2.1049(h)	OBW: No limit	PASS	
Danawiatii	32.1043(II)	EBW: No limit		
Band Edge Compliance	§2.1051	≤ -13dBm/1%*EBW, in 1 MHz bands immediately	PASS	
Band Edge Compliance	§27.53(g)	outside and adjacent to the frequency block.	FA33	
Spurious emissions at	§2.1051	≤ -13 dBm/100 kHz, from 9 kHz to 10th harmonics	PASS	
antenna terminals	§27.53(g)	but outside authorized operating frequency ranges.	FASS	
Field strength of	§2.1053	≤ -13dBm/100KHz	PASS	
spurious radiation	§27.53(g)	= -13ubiii/10UKIIZ	PASS	
Eroguanay stability	§2.1055	< ±2 5ppm	PASS	
Frequency stability	§27.54	≤ ±2.5ppm	FASS	





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#### CatM1 Band 25

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





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### 4 General Information

### 4.1 Details of E.U.T.

Power supply:	AC Adapter Model: BLJ06L060100P-U Input: AC 100-240V, 50/60Hz, 0.2A Max Output: DC 6.0V, 1.0A  DC 6V(4*AA Batteries)
Cable(s):	DC cable:146cm unshielded
Internal Source:	More than 108MHz
Sample Type:	Fixed device
Operation Frequency Band:	CatM1 Band 2, 4, 12, 13, 25
Modulation Type:	QPSK, 16QAM
Antenna Type:	PIFA Antenna
Antenna Gain:	CatM1 Band 12/13: -3.17dBi,
	CatM1 Band 2/4/25: 2.79dBi;
Extreme temp. Tolerance:	-30°C to +50°C
Extreme vol. Limits:	5.1VDC to 6.9VDC (nominal: 6VDC)

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	± 3.1dB (Below 1GHz),± 4.4dB (Above 1GHz)
Peak-Average Ratio	± 0.8dB
Modulation Characteristics	± 0.8dB
Bandwidth	± 0.3%
Band Edge Compliance	± 2.7dB
Spurious emissions at antenna terminals	± 2.7dB
Field strength of spurious radiation	± 2.7dB
Frequency stability	± 5.4 x 10-8





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### 2.1 Test Frequency

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





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	Nominal	RF Channel					
Test Mode	Bandwidth	Low (L)	Middle (M)	High (H)			
	(MHz)	MHz	MHz	MHz			
	1.4	1850.7	1882.5	1914.3			
	3	1851.5	1882.5	1913.5			
CatM1 Band 25	5	1852.5	1882.5	1912.5			
Calivi i Banu 25	10	1855.0	1882.5	1910.0			
	15	1857.5	1882.5	1907.5			
	20	1860.0	1882.5	1905.0			

#### 2.2 Test Environment

Environment Parameter	Selected Va	alues During Tests
Relative Humidity		52%
Atmospheric Pressure:	1	015Pa
	TL	-30°C
Temperature:	TN	+20°C
	TH	+50°C
	VL	5.1 V
Voltage:	VN	6 V
	VH	6.9 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:

Compliance Certification Services (Kunshan) Inc. Shenzhen branch.

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 spuriou	· · · · · · · · · · · · · · · · · · ·	I .	, , , , , , , , , , , , , , , , , , ,		1	
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)	CLAVIIO	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

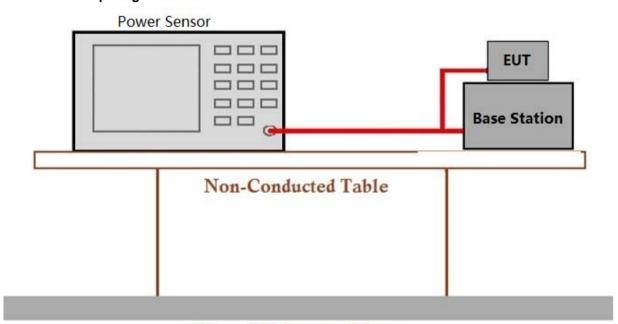
Limit: Reference test summary

### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.1 °C Humidity: 56.7 % RH Atmospheric Pressure: 1015 mbar

### 6.1.2 Test Setup Diagram



Ground Reference Plane

#### 6.1.3 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

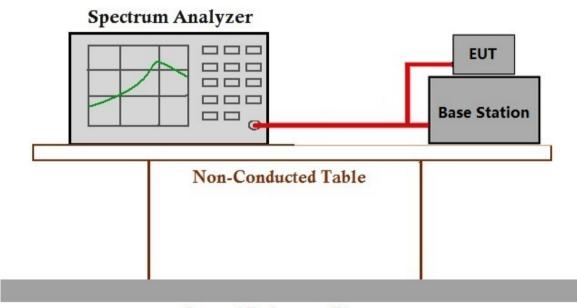
Limit: Reference test summary

### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22.1 °C Humidity: 56.7 % RH Atmospheric Pressure: 1015 mbar

### 6.2.2 Test Setup Diagram



Ground Reference Plane

#### 6.2.3 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

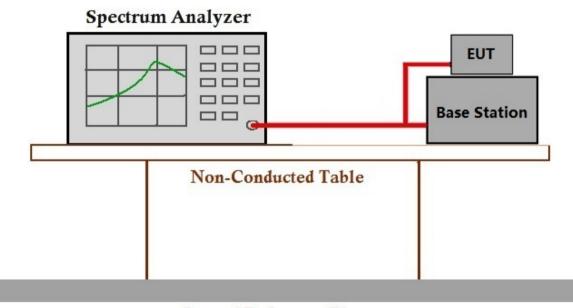
Limit: Reference test summary

### 6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22.1 °C Humidity: 56.7 % RH Atmospheric Pressure: 1015 mbar

### 6.3.2 Test Setup Diagram



Ground Reference Plane

#### 6.3.3 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

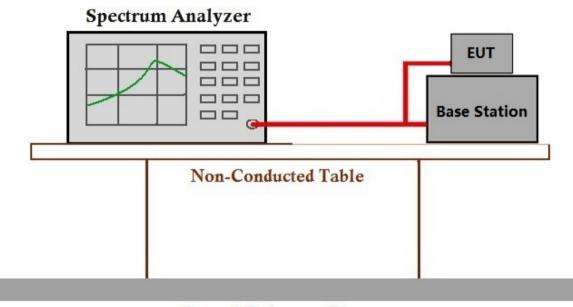
Limit: Reference test summary

### 6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22.1 °C Humidity: 56.7 % RH Atmospheric Pressure: 1015 mbar

### 6.4.2 Test Setup Diagram



Ground Reference Plane

#### 6.4.3 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

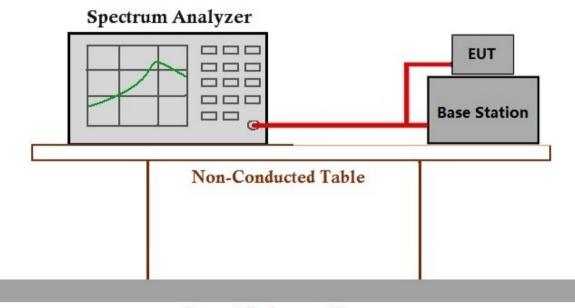
Limit: Reference test summary

### 6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22.1 °C Humidity: 56.7 % RH Atmospheric Pressure: 1015 mbar

### 6.5.2 Test Setup Diagram



Ground Reference Plane

#### 6.5.3 Measurement Procedure and Data

Please Refer to Appendix for Details





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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

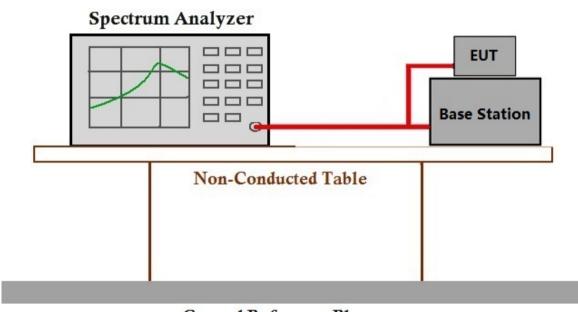
Operating Environment:

Temperature: 23.5 °C Humidity: 56.3 % 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



**Ground Reference Plane** 

#### 6.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details





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### 6.7 Field strength of spurious radiation

Test Requirement Reference test summary

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

Measurement Distance: 3m

Limit: Reference test summary

### 6.7.1 E.U.T. Operation

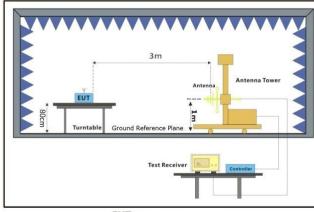
Operating Environment:

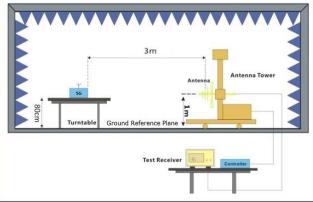
21.7 °C Temperature: Humidity: 51.4 % RH Atmospheric Pressure: 1020 mbar

### 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





EUT

Substiute Antenna+Signal Generator

#### 6.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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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 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.





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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	-50.5	-13	-37.5	-52.72	6.99	9.21	Horizontal	Pass			
5553	-46.65	-13	-33.65	-48.97	8.27	10.59	Horizontal	Pass			
7404	-45.68	-13	-32.68	-49.22	8.19	11.73	Horizontal	Pass			
3702	-50.01	-13	-37.01	-52.23	6.99	9.21	Vertical	Pass			
5553	-45.66	-13	-32.66	-47.98	8.27	10.59	Vertical	Pass			
7404	-45.03	-13	-32.03	-48.57	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	-50.75	-13	-37.75	-52.97	6.99	9.21	Horizontal	Pass			
5613	-48.11	-13	-35.11	-50.43	8.27	10.59	Horizontal	Pass			
7484	-43.56	-13	-30.56	-47.1	8.19	11.73	Horizontal	Pass			
3742	-51.08	-13	-38.08	-53.3	6.99	9.21	Vertical	Pass			
5613	-48.16	-13	-35.16	-50.48	8.27	10.59	Vertical	Pass			
7484	-44.08	-13	-31.08	-47.62	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	-48.32	-13	-35.32	-50.54	6.99	9.21	Horizontal	Pass			
5673	-48.16	-13	-35.16	-50.48	8.27	10.59	Horizontal	Pass			
7564	-44.29	-13	-31.29	-48.12	8.43	12.26	Horizontal	Pass			
3782	-49.38	-13	-36.38	-51.6	6.99	9.21	Vertical	Pass			
5673	-47.47	-13	-34.47	-49.79	8.27	10.59	Vertical	Pass			
7564	-44.02	-13	-31.02	-47.85	8.43	12.26	Vertical	Pass			





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		CatM Band	4-20MHz Low	channel, I	Modulation: (	QPSK, 1 RE	3	
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3422	-35.45	-13	-22.45	-38.03	5.72	8.3	Horizontal	Pass
5133	-46.08	-13	-33.08	-48.08	8.3	10.3	Horizontal	Pass
6844	-47.05	-13	-34.05	-50.6	7.7	11.25	Horizontal	Pass
3422	-35.74	-13	-22.74	-38.32	5.72	8.3	Vertical	Pass
5133	-47.13	-13	-34.13	-49.13	8.3	10.3	Vertical	Pass
6844	-47.15	-13	-34.15	-50.7	7.7	11.25	Vertical	Pass

		CatM Band 4	-20MHz Middle	e channel,	Modulation:	QPSK, 1 R	В	
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3447	-35.61	-13	-22.61	-38.19	5.72	8.3	Horizontal	Pass
5170.5	-47.89	-13	-34.89	-49.89	8.3	10.3	Horizontal	Pass
6894	-47.69	-13	-34.69	-51.24	7.7	11.25	Horizontal	Pass
3447	-36.56	-13	-23.56	-39.14	5.72	8.3	Vertical	Pass
5170.5	-47.63	-13	-34.63	-49.63	8.3	10.3	Vertical	Pass
6894	-46.28	-13	-33.28	-49.83	7.7	11.25	Vertical	Pass

		CatM Band	4-20MHz High	channel, l	Modulation:	QPSK, 1 RE	3	
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3472	-36.1	-13	-23.1	-38.68	5.72	8.3	Horizontal	Pass
5208	-47.45	-13	-34.45	-49.45	8.3	10.3	Horizontal	Pass
6944	-46.33	-13	-33.33	-49.88	7.7	11.25	Horizontal	Pass
3472	-35.99	-13	-22.99	-38.57	5.72	8.3	Vertical	Pass
5208	-47.68	-13	-34.68	-49.68	8.3	10.3	Vertical	Pass
6944	-46.67	-13	-33.67	-50.22	7.7	11.25	Vertical	Pass





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		CatM Band	12-10MHz Lov	w channel,	Modulation:	QPSK, 1 R	В	
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1399	-30	-13	-17	-32.53	2.64	5.17	Horizontal	Pass
2098.5	-40.23	-13	-27.23	-42.56	4.75	7.08	Horizontal	Pass
2798	-52.25	-13	-39.25	-54.72	5.13	7.6	Horizontal	Pass
1399	-30.97	-13	-17.97	-33.5	2.64	5.17	Vertical	Pass
2098.5	-40.98	-13	-27.98	-43.31	4.75	7.08	Vertical	Pass
2798	-52.54	-13	-39.54	-55.01	5.13	7.6	Vertical	Pass

		CatM Band 1	2-10MHz Mido	dle channe	I, Modulation	n: 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	-34.63	-13	-21.63	-37.16	2.64	5.17	Horizontal	Pass
2109	-39.74	-13	-26.74	-42.07	4.75	7.08	Horizontal	Pass
2812	-52.25	-13	-39.25	-54.72	5.13	7.6	Horizontal	Pass
1406	-35.1	-13	-22.1	-37.63	2.64	5.17	Vertical	Pass
2109	-40.54	-13	-27.54	-42.87	4.75	7.08	Vertical	Pass
2812	-52.22	-13	-39.22	-54.69	5.13	7.6	Vertical	Pass

		CatM Band	12-10MHz Hig	h channel,	Modulation	: QPSK, 1 R	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	-32.68	-13	-19.68	-35.21	2.64	5.17	Horizontal	Pass
2119.5	-40.08	-13	-27.08	-42.41	4.75	7.08	Horizontal	Pass
2826	-52.12	-13	-39.12	-54.59	5.13	7.6	Horizontal	Pass
1413	-33.89	-13	-20.89	-36.42	2.64	5.17	Vertical	Pass
2119.5	-40.33	-13	-27.33	-42.66	4.75	7.08	Vertical	Pass
2826	-50.91	-13	-37.91	-53.38	5.13	7.6	Vertical	Pass





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		CatM Band	25-20MHz Lov	w channel,	Modulation:	QPSK, 1 R	lB	
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3702	-42.41	-13	-29.41	-44.63	6.99	9.21	Horizontal	Pass
5553	-47.09	-13	-34.09	-49.41	8.27	10.59	Horizontal	Pass
7404	-45.7	-13	-32.7	-49.24	8.19	11.73	Horizontal	Pass
3702	-41.97	-13	-28.97	-44.19	6.99	9.21	Vertical	Pass
5553	-46.8	-13	-33.8	-49.12	8.27	10.59	Vertical	Pass
7404	-44.98	-13	-31.98	-48.52	8.19	11.73	Vertical	Pass

		CatM Band 2	5-20MHz Midd	dle channe	I, Modulation	n: 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
3747	-41.43	-13	-28.43	-43.65	6.99	9.21	Horizontal	Pass
5620.5	-48.21	-13	-35.21	-50.53	8.27	10.59	Horizontal	Pass
7494	-45.21	-13	-32.21	-48.75	8.19	11.73	Horizontal	Pass
3747	-41.79	-13	-28.79	-44.01	6.99	9.21	Vertical	Pass
5620.5	-47.93	-13	-34.93	-50.25	8.27	10.59	Vertical	Pass
7494	-43.28	-13	-30.28	-46.82	8.19	11.73	Vertical	Pass

		CatM Band	25-20MHz Hig	h channel,	Modulation	: QPSK, 1 R	RB	
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3792	-40.04	-13	-27.04	-42.26	6.99	9.21	Horizontal	Pass
5688	-48.65	-13	-35.65	-50.97	8.27	10.59	Horizontal	Pass
7584	-44.32	-13	-31.32	-48.15	8.43	12.26	Horizontal	Pass
3792	-40.14	-13	-27.14	-42.36	6.99	9.21	Vertical	Pass
5688	-47.91	-13	-34.91	-50.23	8.27	10.59	Vertical	Pass
7584	-45.98	-13	-32.98	-49.81	8.43	12.26	Vertical	Pass





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		CatM Band 1	3-10MHz Midd	dle channe	I, Modulation	n: 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	-38.76	-13	-25.76	-42.42	3.77	7.43	Horizontal	Pass
2332.5	-47.31	-13	-34.31	-49.64	4.75	7.08	Horizontal	Pass
3110	-48.93	-13	-35.93	-51.51	5.72	8.3	Horizontal	Pass
1555	-42.24	-13	-29.24	-45.9	3.77	7.43	Vertical	Pass
2332.5	-51.87	-13	-38.87	-54.2	4.75	7.08	Vertical	Pass
3110	-49.6	-13	-36.6	-52.18	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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### 6.8 Frequency stability

Test Requirement Reference test summary

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

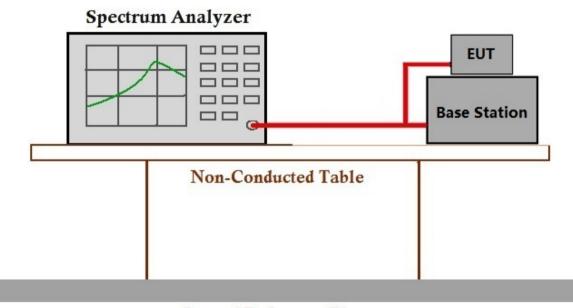
Limit: Reference test summary

### 6.8.1 E.U.T. Operation

Operating Environment:

Temperature: 22.1 °C Humidity: 56.7 % RH Atmospheric Pressure: 1015 mbar

### 6.8.2 Test Setup Diagram



Ground Reference Plane

#### 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 FYCR2204000064AT

## 4 EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for FYCR2204000064AT

- End of the Report -

