

Report No.: GZCR240300030901 Rev 1.1 EMC-TRF-01

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FCC ID: OU9LS802GAM2

## TEST REPORT

GZCR2403000309ME **Application No.:** 

Applicant: Guangdong Transtek Medical Electronics Co., Ltd.

Zone A, No.105, Dongli Road, Torch Development District, 528437 **Address of Applicant:** 

Zhongshan, Guangdong, China

Guangdong Transtek Medical Electronics Co., Ltd. Manufacturer:

Zone A, No.105, Dongli Road, Torch Development District, 528437 Address of Manufacturer:

Zhongshan, Guangdong, China

Guangdong Transtek Medical Electronics Co., Ltd. Factory:

Zone A, No.105, Dongli Road, Torch Development District, 528437 Address of Factory:

Zhongshan, Guangdong, China

Blood pressure monitor **Product Name:** Model No.: LS802-Ga, LS802-Gb

47 CFR Part 2 Standard(s):

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

2024-03-29 Date of Receipt:

Date of Test: 2024-04-08 to 2024-04-27

2024-04-28 Date of Issue:

Pass\* Test Result:

Jery Chen Jerry Chan Manager

检验检测专用章

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邮编:510663

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



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	Revision Record					
Version	Report No.	Date	Remark			
01	GZCR240300030901	2024-04-28	Original			

Authorized for issue by:		
	Jim Li	
	Jim Li/Project Engineer	
	Riday Lin	
	Ricky Liu/Reviewer	



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## **Test Summary**

#### LTE 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	≤43 + 10 log10 (P) dB, (P) in watts.	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	The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.	PASS

#### LTE CatM1 Band 4

LIE Calivi I Ballu 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)	≤ 43 + 10 log10 (P) dB, (P) in watts.	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	The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.	PASS	



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#### LTE CatM1 Band 12

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046 §27.50(c)	ERP≤3W	PASS
Modulation Characteristics	§2.1047	Digital modulation	PASS
Bandwidth	§2.1049(h)	OBW: No limit	PASS
Banamaan	3=:10.10(11)	EBW: No limit	
Band Edge Compliance	§2.1051 §27.53(g)	≤ 43 + 10 log (P) dB, (P) in watts. (However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.)	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	The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.	PASS

#### Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.



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### **General Information**

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

Test voltage:

Power supply: AC Adapter

Model: BLJ06L060100P-U

Input: 100-240V, 50/60Hz, 0.2A Max

Output: 6.0V, 1.0A

DC 6 V = Size "AA" battery 1.5V x 4pcs AC 120V, 60Hz powered by AC adapter.

DC 6V powered by batteries.

Cable(s): Adapter DC output cable, 2 wires, 1.5m, unshielded.

Operation Frequency: LTE CatM1 Band 2, 4, 12

Modulation Type: QPSK, 16QAM Antenna Type: PIFA Antenna

CatM1 Band 2: 2.81 dBi

CatM1 Band 4: 0.66 dBi Antenna Gain: CatM1 Band 12: -1.89 dBi

(Declared by antenna specifications)

-30°C to +50°C Extreme temp. Tolerance: Sample Type: Fixed device.

Remark: The information in this section is provided by the applicant or

manufacturer, SGS is not liable to the accuracy, suitability, reliability

or/and integrity of the information.

### 4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
CMW500 Test Card	1	1	/



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### 4.3 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	
	3	1851.5	1880	1908.5	
CotM1 Dand 2	5	1852.5	1880	1907.5	
CatM1 Band 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	
Cativi Band 4	10	1715.0	1732.5	1750.0	
	15	1717.5	1732.5	1747.5	
	20	1720.0	1732.5	1745.0	

	Nominal	RF Channel			
Test Mode	Bandwidth (MHz)	Low (L)	Middle (M)	High (H)	
		MHz	MHz	MHz	
	1.4	699.7	707.5	715.3	
CatM1 Band 12	3	700.5	707.5	714.5	
Cativi i Ballu 12	5	701.5	707.5	713.5	
	10	704.0	707.5	711.0	



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#### 4.4 Test Environment

<b>Environment Parameter</b>	Selected Values During Tests			
Relative Humidity	52.	4%		
Atmospheric Pressure:	101	8Pa		
	TL	-30°C		
Temperature:	TN	+20°C		
	TH	+50°C		
	VL	102 V		
Test Voltage:	VN	120 V		
	VH	138 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

### 4.5 Measurement Uncertainty

Test Item	Measurement Uncertainty			
Effective (Isotropic) Radiated Power Output Data	± 0.75dB			
Peak-Average Ratio	± 0.75dB			
Bandwidth	± 3%			
Band Edge Compliance	± 0.75dB			
Spurious emissions at antenna terminals	± 0.75dB			
Field strength of anurious radiation	±5.00dB (3m); ±4.38dB (10m) (Below 1GHz)			
Field strength of spurious radiation	±5.12dB (1GHz-6GHz);±5.38dB (6GHz- 18GHz); ±5.61dB (18GHz-40GHz)			
Frequency stability	7.25 x 10 <sup>-8</sup>			

#### Remark:

The U<sub>lab</sub> (lab Uncertainty) is less than U<sub>ETSI</sub> (ETSI Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

#### 4.6 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663

Tel: +86 20 82155555

No tests were sub-contracted.



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### 4.7 Test Facility

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

#### ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

#### SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

### FCC Recognized Accredited Test Firm(Registration No.: 486818)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

#### • ISED (Registration No.: 4620B, CAB identifier: CN0052)

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

### VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

#### • CBTL (Lab Code: TL129)

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

#### 4.8 Deviation from Standards

None

#### 4.9 Abnormalities from Standard Conditions

None



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#### **Equipment List** 5

RF Conducted Test					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
MI CABLE	SGS-EMC	M8.0	EMC2137	2023-11-02	2025-11-01
MI CABLE	SGS-EMC	0.8M	EMC0543	2023-11-02	2025-11-01
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2023-08-23	2024-08-22
4X4 Power sensor Unit	TST	TSPS2023R	EMC2226	2023-08-23	2024-08-22
Test Software	TST	V2.0	GZE100-78	N/A	N/A
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	EMC2215	2023/11/10	2024/11/09
Temperature Chamber	GZ GongWen Co.Ltd.	GDJW-100	EMC0039	2023-06-29	2024-06-28
Splitter	Mini-Circuits	ZFSC-2-10G+	RFCONMBINE R05	2023-11-02	2025-11-01

Field strength of spurio	Field strength of spurious radiation Above 1GHz											
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date							
1GHz-26.5 GHz Pre- Amplifier	Agilent	8449B	EMC0521	2023-11-10	2024-11-09							
EMI Test Receiver (10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2023-12-15	2024-12-14							
Chamber cable (Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2022-08-24	2024-08-23							
Horn Antenna (1GHz- 18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2022-09-23	2025-09-22							
Horn Antenna (14- 40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2023-06-18	2026-06-17							
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2023-08-23	2024-08-22							
MXE EMI Receiver (10Hz-8.4GHz)	Keysight	N9038A	EMC2139	2023-10-20	2024-10-19							
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	EMC2215	2023/11/10	2024/11/09							
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2023-12-20	2026-12-19							
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A							



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Field strength of spurio	us radiation below 10	GHz			
966 Anechoic Chamber	Shenzhen C.R.T	CRTSGSSAC9 66	EMC2230	2022-04-12	2025-04-11
EMI Test Receiver(1Hz- 8GHz)	Rohde & Schwarz	ESW8	EMC2229	2024-02-19	2025-02-18
Amplifier(9k-1000MHz)	SONOMA	310	EMC2237	2024-03-22	2025-03-21
TRILOG Broadband Antenna (25M-2GHz)	SCHWRZBECK	VULB 9168	EMC2238	2022-04-20	2025-04-19
Coaxial Cable	Mirco-COAX UTIFLEX ve	LA2-C125- 8000	EMC2239	2023-06-14	2025-06-13
Test Software E3	Audix	Ver.6.191211	GZE100-81	N/A	N/A
Active Loop Antenna- RED	ETS-Lindgren	6502	EMC2190	2024-04-08	2026-04-07

G	ieneral used equipmen	t				
	Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
	DMM	Fluke	73	EMC0006	2023-06-11	2024-06-10



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#### **Radio Spectrum Matter Test Results** 6

### 6.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement Reference test summary

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

Limit: Reference test summary

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

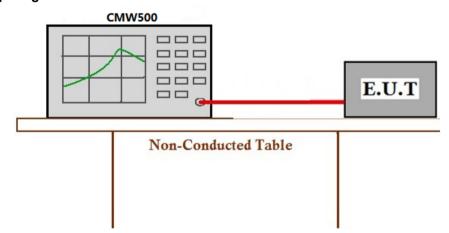
#### 6.1.2 Test Mode Description

Pre-scan / Mode Final test Code

**Description** 

Final test 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

Reference test summary Limit:

#### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

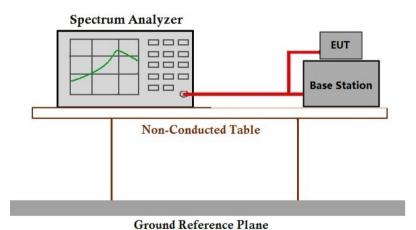
#### 6.2.2 Test Mode Description

Mode Pre-scan / Final test Code

**Description** 

Final test 00 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:

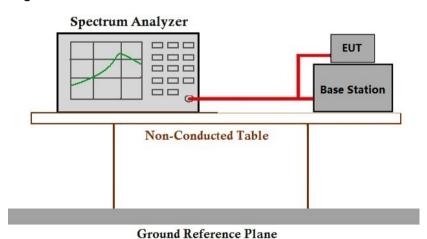
Temperature: 25.9 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

#### 6.3.1 Test Mode Description

Mode Pre-scan / **Description** Final test Code

Final test 00 TX mode Keep the EUT in transmitting mode

#### 6.3.2 Test Setup Diagram



#### 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

Reference test summary Limit:

#### 6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

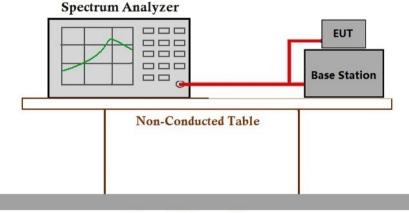
#### 6.4.2 Test Mode Description

Mode Pre-scan / Final test Code

**Description** 

Final test 00 TX mode Keep the EUT in transmitting mode

#### 6.4.3 Test Setup Diagram



Ground Reference Plane

#### 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

Reference test summary Limit:

#### 6.5.1 E.U.T. Operation

Operating Environment:

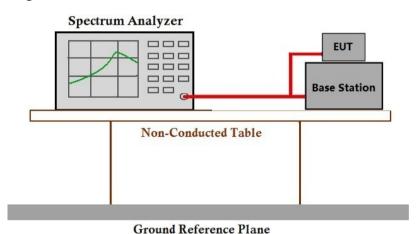
Temperature: 25.9 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

#### 6.5.2 Test Mode Description

Mode Pre-scan / **Description** Final test Code

Final test 00 TX mode Keep the EUT in transmitting mode

#### 6.5.3 Test Setup Diagram



#### 6.5.4 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

Reference test summary Limit:

#### 6.6.1 E.U.T. Operation

Operating Environment:

Temperature: 25.9 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

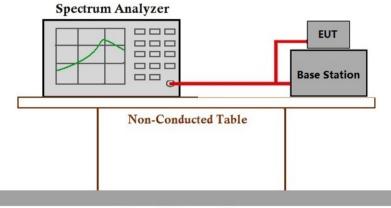
#### 6.6.2 Test Mode Description

Mode Pre-scan / Final test Code

**Description** 

Final test 00 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

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

Limit: Reference test summary

#### 6.7.1 E.U.T. Operation

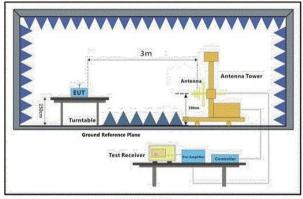
Operating Environment:

Temperature: 25.9 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

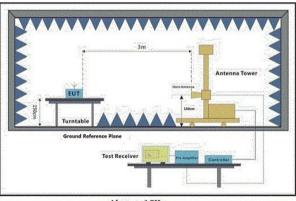
#### 6.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	LTE B2 TX Mode_ Establish connection with auxiliary equipment CMW500(Only the data of worst case for QPSK@1RB is recorded in the report).
Final test	02	LTE B4 TX Mode_ Establish connection with auxiliary equipment CMW500(Only the data of worst case for QPSK@1RB is recorded in the report).
Final test	03	LTE B12 TX Mode_ Establish connection with auxiliary equipment CMW500(Only the data of worst case for QPSK@1RB is recorded in the report).

#### 6.7.3 Test Setup Diagram







Above 1GHz



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#### 6.7.4 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.

#### Remark:

The spurious emissions 9kHz to 1GHz were very low and not displayed in this report.



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Test Mode: 01

	1000.000												
	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	-50.34	-13	-37.34	-52.56	6.99	9.21	Horizontal	Pass					
5553	-47.13	-13	-34.13	-49.45	8.27	10.59	Horizontal	Pass					
7404	-45.08	-13	-32.08	-48.62	8.19	11.73	Horizontal	Pass					
3702	-50.52	-13	-37.52	-52.74	6.99	9.21	Vertical	Pass					
5553	-47.84	-13	-34.84	-50.16	8.27	10.59	Vertical	Pass					
7404	-43.99	-13	-30.99	-47.53	8.19	11.73	Vertical	Pass					

		CatM Band 2	-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
3742	-51.23	-13	-38.23	-53.45	6.99	9.21	Horizontal	Pass
5613	-47.62	-13	-34.62	-49.94	8.27	10.59	Horizontal	Pass
7484	-45.18	-13	-32.18	-48.72	8.19	11.73	Horizontal	Pass
3742	-49.45	-13	-36.45	-51.67	6.99	9.21	Vertical	Pass
5613	-48.12	-13	-35.12	-50.44	8.27	10.59	Vertical	Pass
7484	-43.79	-13	-30.79	-47.33	8.19	11.73	Vertical	Pass

		CatM Band 2	2-20MHz 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
3782	-49.34	-13	-36.34	-51.56	6.99	9.21	Horizontal	Pass
5673	-48.15	-13	-35.15	-50.47	8.27	10.59	Horizontal	Pass
7564	-44.58	-13	-31.58	-48.41	8.43	12.26	Horizontal	Pass
3782	-49.73	-13	-36.73	-51.95	6.99	9.21	Vertical	Pass
5673	-49.17	-13	-36.17	-51.49	8.27	10.59	Vertical	Pass
7564	-44.34	-13	-31.34	-48.17	8.43	12.26	Vertical	Pass



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Test Mode: 02

		CatM Band	4-20MHz Low	channel M	Modulation: (	ODSK 1 DB	!	
		Calivi Dallu	4-ZUIVII IZ LUW	Charine, i	viodulation. v	QI ON, I ND		
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3422	-51.34	-13	-38.34	-53.92	5.72	8.3	Horizontal	Pass
5133	-46.74	-13	-33.74	-48.74	8.3	10.3	Horizontal	Pass
6844	-46.66	-13	-33.66	-50.21	7.7	11.25	Horizontal	Pass
3422	-51.7	-13	-38.7	-54.28	5.72	8.3	Vertical	Pass
5133	-47.88	-13	-34.88	-49.88	8.3	10.3	Vertical	Pass
6844	-46.72	-13	-33.72	-50.27	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	-50.54	-13	-37.54	-53.12	5.72	8.3	Horizontal	Pass
5170.5	-48.14	-13	-35.14	-50.14	8.3	10.3	Horizontal	Pass
6894	-46.01	-13	-33.01	-49.56	7.7	11.25	Horizontal	Pass
3447	-51.25	-13	-38.25	-53.83	5.72	8.3	Vertical	Pass
5170.5	-48.08	-13	-35.08	-50.08	8.3	10.3	Vertical	Pass
6894	-46.24	-13	-33.24	-49.79	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	-51.35	-13	-38.35	-53.93	5.72	8.3	Horizontal	Pass				
5208	-47.17	-13	-34.17	-49.17	8.3	10.3	Horizontal	Pass				
6944	-45.87	-13	-32.87	-49.42	7.7	11.25	Horizontal	Pass				
3472	-50.08	-13	-37.08	-52.66	5.72	8.3	Vertical	Pass				
5208	-47.24	-13	-34.24	-49.24	8.3	10.3	Vertical	Pass				
6944	-46.16	-13	-33.16	-49.71	7.7	11.25	Vertical	Pass				



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Test Mode: 03

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	-42.24	-13	-29.24	-44.77	2.64	5.17	Horizontal	Pass
2098.5	-49.59	-13	-36.59	-51.92	4.75	7.08	Horizontal	Pass
2798	-52.15	-13	-39.15	-54.62	5.13	7.6	Horizontal	Pass
1399	-51.14	-13	-38.14	-53.67	2.64	5.17	Vertical	Pass
2098.5	-53.58	-13	-40.58	-55.91	4.75	7.08	Vertical	Pass
2798	-50.15	-13	-37.15	-52.62	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	-41.73	-13	-28.73	-44.26	2.64	5.17	Horizontal	Pass
2109	-55.14	-13	-42.14	-57.47	4.75	7.08	Horizontal	Pass
2812	-51.37	-13	-38.37	-53.84	5.13	7.6	Horizontal	Pass
1406	-54.21	-13	-41.21	-56.74	2.64	5.17	Vertical	Pass
2109	-54.42	-13	-41.42	-56.75	4.75	7.08	Vertical	Pass
2812	-52.09	-13	-39.09	-54.56	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	-41.22	-13	-28.22	-43.75	2.64	5.17	Horizontal	Pass
2119.5	-53.38	-13	-40.38	-55.71	4.75	7.08	Horizontal	Pass
2826	-51.46	-13	-38.46	-53.93	5.13	7.6	Horizontal	Pass
1413	-52.08	-13	-39.08	-54.61	2.64	5.17	Vertical	Pass
2119.5	-53.49	-13	-40.49	-55.82	4.75	7.08	Vertical	Pass
2826	-49.46	-13	-36.46	-51.93	5.13	7.6	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

Reference test summary Limit:

#### 6.8.1 E.U.T. Operation

Operating Environment:

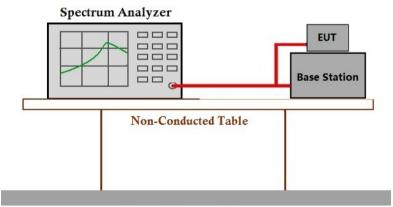
Temperature: 25.9 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

#### 6.8.2 Test Mode Description

Mode Pre-scan / **Description** Final test Code

Final test 00 TX mode Keep the EUT in transmitting mode

#### 6.8.3 Test Setup Diagram



Ground Reference Plane

#### 6.8.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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#### **Test Setup Photo** 7

Refer to Appendix - Test Setup Photos for GZCR240300030901



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#### **EUT Constructional Details (EUT Photos)** 8

Refer to Appendix - External and Internal Photos for GZCR2403000309ME

-- End of the Report--



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