FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| FCC TEST REPORT | | | | |
|--------------------------------|------|--|--|--|
| | | For | | |
| | | | | |
| F | ujia | n Newland Auto-ID Tech Co., Ltd. | | |
| | | Portable Data Collector | | |
| | | Model No.: NLS-MT65 | | |
| | | | | |
| Prepared for | : | Fujian Newland Auto-ID Tech Co., Ltd. | | |
| Address | : | Newland Science & Technology Park, No.1 Rujiang West Rd., Mawei district, Fuzhou, Fujian, 350015, China | | |
| | | | | |
| Prepared by | : | Shenzhen LCS Compliance Testing Laboratory Ltd. | | |
| Address | : | 1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, Bao'an District, Shenzhen, Guangdong, China | | |
| Tel | : | (+86)755-82591330 | | |
| Fax | : | (+86)755-82591332 | | |
| Web | : | www.LCS-cert.com | | |
| Mail | : | webmaster@LCS-cert.com | | |
| | | | | |
| Date of receipt of test sample | : | August 19, 2015 | | |
| Number of tested samples | : | 1 | | |
| Serial number | : | Prototype | | |
| Date of Test | : | August 19, 2015 – September 17, 2015 | | |
| Date of Report | : | September 17, 2015 | | |
| | | | | |
| | | | | |

SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

| FCC TEST REPORT FCC CFR 47 PART 22 SUBPART H AND PART 24 SUBPART E | | | |
|--|--|--|--|
| Report Reference No | LCS1508191108E | | |
| Date of Issue | September 17, 2015 | | |
| Testing Laboratory Name | Shenzhen LCS Compliance Testing | g Laboratory Ltd. | |
| Address | 1/F., Xingyuan Industrial Park, Tor Bao'an District, Shenzhen, Guangdor | ig, Cillia | |
| Testing Location/ Procedure | Full application of Harmonised stand Partial application of Harmonised sta Other standard testing method □ | | |
| Applicant's Name | Fujian Newland Auto-ID Tech Co. | , Ltd. | |
| Address | Newland Science & Technology Parl Mawei district, Fuzhou, Fujian, 3500 | | |
| Test Specification | | | |
| Standard | FCC CFR 47 PART 2, FCC CFR 47 AND PART 24 SUBPART E | PART 22 SUBPART H | |
| Test Report Form No | LCSEMC-1.0 | | |
| TRF Originator | : Shenzhen LCS Compliance Testing Laboratory Ltd. | | |
| Master TRF | Dated 2011-03 | | |
| This publication may be reproduced Shenzhen LCS Compliance Testing of the material. Shenzhen LCS Com | ng Laboratory Ltd. All rights reserv I in whole or in part for non-commerci Laboratory Ltd. is acknowledged as c npliance Testing Laboratory Ltd. takes es resulting from the reader's interpreta ontext. | al purposes as long as the opyright owner and source no responsibility for and | |
| Test Item Description | Portable Data Collector | | |
| Trade Mark | Newland | | |
| Model/ Type reference | NLS-MT65 | | |
| Ratings | DC 3.7V, 3700mAh | | |
| Result | mput. 100 240 V Me, 50/00112, 0.55 | A; Output: DC 5V, 2A | |
| Compiled by: | Supervised by: | Approved by: | |

Jacky Li

Jacky Li/ File administrators

Com h

Javino Lia

Gavin Liang/ Manager

Glin Lu/ Technique principal

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 2 of 47 SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

FCC -- TEST REPORT

Test Report No. : LCS1508191108E

September 17, 2015

Date of issue

| Type / Model | : NLS-MT65 | |
|--------------|---|--|
| EUT | : Portable Data Collector | |
| Applicant | : Fujian Newland Auto-ID Tech Co., Ltd. | |
| Address | : Newland Science & Technology Park, No.1 Rujiang West Rd., | |
| | Mawei district, Fuzhou, Fujian, 350015, China | |
| Telephone | : 0591-83979235 | |
| Fax | : 0591-83979250 | |
| | | |
| Manufacturer | : Fujian Newland Auto-ID Tech Co., Ltd. | |
| Address | : Newland Science & Technology Park, No.1 Rujiang West Rd., | |
| | Mawei district, Fuzhou, Fujian, 350015, China | |
| Telephone | : 0591-83979235 | |
| Fax | : 0591-83979250 | |
| - | | |
| Factory | : Fujian Newland Auto-ID Tech Co., Ltd. | |
| Address | : Newland Science & Technology Park, No.1 Rujiang West Rd., | |
| | Mawei district, Fuzhou, Fujian, 350015, China | |
| Telephone | : 0591-83979235 | |
| Fax | : 0591-83979250 | |
| | | |

Test Result

Positive

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

TABLE OF CONTENTS

| 1. GENERAL INFORMATION | 5 |
|--|----|
| 1.1. DESCRIPTION OF DEVICE (EUT) | 5 |
| 1.2. HOST SYSTEM CONFIGURATION LIST AND DETAILS | 5 |
| 1.3. External I/O Cable | |
| 1.4. DESCRIPTION OF TEST FACILITY | |
| 1.5. STATEMENT OF THE MEASUREMENT UNCERTAINTY | |
| 1.6. Measurement Uncertainty | |
| 1.7. Test environment | 6 |
| 2. TEST METHODOLOGY | 7 |
| 2.1. EUT CONFIGURATION | 7 |
| 2.2. Objective | |
| 2.3. GENERAL TEST PROCEDURES | 7 |
| 2.4. Test Mode | 8 |
| 3. SYSTEM TEST CONFIGURATION | 9 |
| 3.1. JUSTIFICATION | 9 |
| 3.2. EUT Exercise Software | 9 |
| 3.3. Special Accessories | 9 |
| 3.4. BLOCK DIAGRAM/SCHEMATICS | |
| 3.5. Equipment Modifications | |
| 3.6. TEST SETUP | 9 |
| 4. SUMMARY OF TEST RESULTS | 10 |
| 5. TEST RESULT | 11 |
| 5.1. RF OUTPUT POWER | 11 |
| 5.3. SPURIOUS AND HARMONIC EMISSION AT ANTENNA TERMINAL | 21 |
| 5.4. RADIATED SPURIOUS EMISSIONS MEASUREMENT | |
| 5.5. POWER LINE CONDUCTED EMISSIONS | |
| 5.6.MODULATION CHARACTERISTIC | |
| 5.7. FREQUENCY STABILITY OVER TEMPERATURE AND VOLTAGE VARIATIONS | |
| 5.8. PEAK-TO-AVERAGE RATIO | 44 |
| 6. LIST OF MEASURING EQUIPMENTS | |

SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

1. GENERAL INFORMATION

| 1.1. Description of Device (EUT) | | | |
|----------------------------------|---|--|--|
| EUT | : Portable Data Collector | | |
| Test Model | : NLS-MT65 | | |
| Power Supply | DC 3.7V, 3700mAh : Input: 100~240V AC, 50/60Hz, 0.35A; Output: DC 5V, 2A | | |
| | GSM 850 (U.SBand) PCS 1900 (U.SBand) | | |
| Support Band | : UMTS FDD Band II (U.SBand) | | |
| | UMTS FDD Band V (U.SBand) | | |
| I Inlink | GSM 850: 824.2MHz ~ 848.8MHz | | |
| Uplink | PCS 1900: 1850.2MHz ~ 1909.8MHz | | |
| ~ | GSM 850: 869.2MHz ~ 893.8MHz | | |
| Downlink | : PCS 1900: 1930.2MHz ~ 1989.8MHz | | |
| Type Of Modulation | : GSM/GPRS:GMSK; EGPRS: 8-PSK | | |
| Antenna Description | : Internal Antenna, 2.0 dBi | | |
| Software Version | : V1.0 | | |
| Hardware Version | : GMT80MBV1.2 | | |

1.2. Host System Configuration List and Details

| Manufacturer | Description | Model | Serial Number | Certificate |
|--------------|-------------|-----------------------|---------------|-------------|
| | Adapter | TEKA012-050 2000XX | | VOC |

1.3. External I/O Cable

| I/O Port Description | Quantity | Cable |
|----------------------|----------|----------------|
| USB | 1 | 1.2m, Shielded |
| Earphone | 1 | N/A |

1.4. Description of Test Facility

| Site Description | | |
|------------------|--|--|
| EMC Lab. | CNAS Registration Number. is L4595. | |
| | FCC Registration Number. is 899208. | |
| | Industry Canada Registration Number. is 9642A-1. | |
| | VCCI Registration Number. is C-4260 and R-3804. | |
| | ESMD Registration Number. is ARCB0108. | |
| | UL Registration Number. is 100571-492. | |
| | TUV SUD Registration Number. is SCN1081. | |
| | TUV RH Registration Number. is UA 50296516-001 | |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 5 of 47

1.5. Statement of The Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

1.6. Measurement Uncertainty

| Test Item | | Frequency Range | Uncertainty | Note |
|------------------------|---|-----------------|---------------|------|
| | | 9KHz~30MHz | ±3.10dB | (1) |
| Dediction Uncentainty | : | 30MHz~200MHz | ±2.96dB | (1) |
| Radiation Uncertainty | | 200MHz~1000MHz | ±3.10dB | (1) |
| | | 1GHz~26.5GHz | ±3.80dB | (1) |
| Conduction Uncertainty | : | 150kHz~30MHz | ±1.63dB | (1) |
| Power disturbance | : | 30MHz~300MHz | ± 1.60 dB | (1) |

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.7. Test environment

All tests were performed under the following environmental conditions:

| Condition | Minimum value | Maximum value |
|---------------------|-----------------------|---------------|
| Barometric pressure | 86kPa | 106kPa |
| Temperature | 15 °C | 30 °C |
| Relative Humidity | 20 % | 75 % |
| Power supply range | ±5% of rated voltages | |

2. TEST METHODOLOGY

All tests and measurements indicated in this document were performed in accordance with FCC CFR 47 part 2, FCC CFR 47 part 22 subpart H and part 24 subpart E.

Applicable Standards: TIA/EIA603-D, ANSI C63.4-2003.The radiated testing was performed at an antenna-to-EUT distance of 3 meters. All radiated and conducted emissions measurement was performed at Shenzhen LCS Compliance Testing Laboratory Ltd..

2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2. Objective

This type approval report is prepared on behalf of **Fujian Newland Auto-ID Tech Co., Ltd.** in accordance with FCC CFR 47 part 2, FCC CFR 47 part 22 subpart H and part 24 subpart E.

The objective is to determine compliance with FCC rules for RF output power, modulation characteristics, occupied bandwidth, spurious emissions at antenna terminal, field strength of spurious radiation, frequency stability, band edge, and conducted and radiated margin.

2.3. General Test Procedures

2.3.1 Conducted Emissions

According to the requirements in Section 6.2 of TIA/EIA603-D, AC power-line conducted emissions shall be measured in the frequency range between 0.15 MHz and 30MHz using Quasi-peak and average detector modes.

2.3.2 Radiated Emissions

The EUT is placed on a turn table and the turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 6.3 of TIA/EIA603-D.

2.4. Test Mode

GSM / GPRS/EGRS 850: Channel Low (CH128), Channel Mid (CH190) and Channel High (CH251) were chosen for full testing. The test PCL(Power Control Level)/Class is level 5/class 3(For GPRS/EGRS).

PCS / GPRS/ EGRS 1900: Channel Low (CH512), Channel Mid (CH661) and Channel High (CH810) were chosen for full testing. The test PCL(Power Control Level)/Class is level 0/class 3(For GPRS/EGRS).

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

For the field strength of spurious emission, the worst emission was found in lie-down position (X axis) for GSM /GPRS/EGPRS 850, lie-down position (X axis) for PCS /GPRS/EGPRS 1900 and the worst case was recorded.

3. SYSTEM TEST CONFIGURATION

3.1. Justification

The EUT had been tested under operating condition. EUT staying in continuous transmitting mode.

3.2. EUT Exercise Software

N/A.

3.3. Special Accessories

N/A.

3.4. Block Diagram/Schematics

Please refer to the related document

3.5. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

3.6. Test Setup

Please refer to the test setup photo.

4. SUMMARY OF TEST RESULTS

| Applied Standard: 47 CFR FCC Part 22 Subpart H, Part 24 Subpart E | | | | |
|---|---|------------------------|-----------|--|
| FCC Rules | Description of Test | | Result | |
| §2.1046, §22.913, §24.232 | RF Output Power | Conducted Output Power | Compliant | |
| §2.1040, §22.713, §24.232 | Ki [*] Output I Ower | Radiated Output Power | Compliant | |
| §2.1049, §22.905 | Occupi | ad Bandwidth | Compliant | |
| §2.917, §24.238 | Occupied Bandwidth | | Compliant | |
| §2.1053, §2.917, §24.238 | Spurious Radiated Emissions | | Compliant | |
| §2.1051, §2.917, §24.238 | Spurious Emissions at Antenna Terminals | | Compliant | |
| \$2.917, \$24.238 | Band Edge | | Compliant | |
| §2.1055, §22.355, §24.235 | Frequency Stability | | Compliant | |
| §15.107 / §15.207 | AC power line conducted emissions | | Compliant | |
| §2.1047 | Modulation Characteristics | | Compliant | |
| §1.1310, §2.1091 | RF Exposure Information | | Compliant | |
| §24.232(d) | Peak-to- | -Average Ratio | Compliant | |

5. TEST RESULT

5.1. RF OUTPUT POWER

5.1.1. Standard Applicable

According to FCC §2.1046 and §22.913, the maximum effective radiated power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

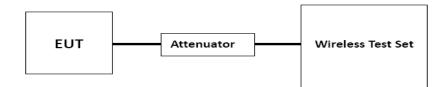
According to FCC §2.1046 and §22.232, mobile and portable stations are limited to 2 Watts and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

5.1.2. Measuring Instruments

Please refer to section 6 of equipments list in this report.

5.1.3. Test Procedures

Conducted method:



Radiated method:

TIA 603-D section 2.2.17

SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

5.1.4. Test Results

| Temperature | 25°C | Humidity | 60% |
|---------------|----------|---------------|-------|
| ATM Pressure: | 101.4kPa | Test Engineer | Jacky |

| Conducted | Dower |
|-----------|--------|
| Conducted | Power: |

| Mode | Channel | Frequency | Output Power | Limit |
|----------------------|---------|-----------|----------------|-------|
| | Channel | (MHz) | (Average, dBm) | (dBm) |
| | 128 | 824.2 | 32.44 | 38.45 |
| GSM 850 | 190 | 836.6 | 32.57 | 38.45 |
| | 251 | 848.8 | 32.55 | 38.45 |
| GPRS 850 | 128 | 824.2 | 32.12 | 38.45 |
| | 190 | 836.6 | 32.15 | 38.45 |
| (Slot 1) | 251 | 848.8 | 32.13 | 38.45 |
| | 128 | 824.2 | 31.25 | 38.45 |
| GPRS 850 | 190 | 836.6 | 31.14 | 38.45 |
| (Slot 2) | 251 | 848.8 | 31.20 | 38.45 |
| | 128 | 824.2 | 29.31 | 38.45 |
| GPRS 850 (Slot 3) | 190 | 836.6 | 29.27 | 38.45 |
| (3013) | 251 | 848.8 | 29.37 | 38.45 |
| GPRS 850 | 128 | 824.2 | 27.36 | 38.45 |
| | 190 | 836.6 | 27.22 | 38.45 |
| (Slot 4) | 251 | 848.8 | 27.31 | 38.45 |
| EGPRS 850 | 128 | 824.2 | 26.52 | 38.45 |
| | 190 | 836.6 | 26.44 | 38.45 |
| (Slot 1) | 251 | 848.8 | 26.56 | 38.45 |
| | 128 | 824.2 | 25.45 | 38.45 |
| EGPRS 850 | 190 | 836.6 | 25.33 | 38.45 |
| (Slot 2) | 251 | 848.8 | 25.51 | 38.45 |
| | 128 | 824.2 | 24.62 | 38.45 |
| EGPRS 850 | 190 | 836.6 | 24.63 | 38.45 |
| (Slot 3) | 251 | 848.8 | 24.58 | 38.45 |
| | 128 | 824.2 | 24.14 | 38.45 |
| EGPRS 850 | 190 | 836.6 | 24.17 | 38.45 |
| (Slot 4) | 251 | 848.8 | 24.15 | 38.45 |

SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| Mode | | Frequency | Output Power | Limit |
|------------|---------|-----------|----------------|-------|
| Widde | Channel | (MHz) | (Average, dBm) | (dBm) |
| | 512 | 1850.2 | 29.55 | 33 |
| PCS 1900 | 661 | 1880.0 | 29.59 | 33 |
| | 810 | 1909.8 | 29.63 | 33 |
| | 512 | 1850.2 | 29.24 | 33 |
| GPRS 1900 | 661 | 1880.0 | 29.28 | 33 |
| (Slot 1) | 810 | 1909.8 | 29.31 | 33 |
| 0000 4000 | 512 | 1850.2 | 28.66 | 33 |
| GPRS 1900 | 661 | 1880.0 | 28.68 | 33 |
| (Slot 2) | 810 | 1909.8 | 28.62 | 33 |
| 0000 4000 | 512 | 1850.2 | 26.51 | 33 |
| GPRS 1900 | 661 | 1880.0 | 26.57 | 33 |
| (Slot 3) | 810 | 1909.8 | 26.53 | 33 |
| 0000 4000 | 512 | 1850.2 | 24.41 | 33 |
| GPRS 1900 | 661 | 1880.0 | 24.29 | 33 |
| (Slot 4) | 810 | 1909.8 | 24.36 | 33 |
| | 512 | 1850.2 | 24.45 | 33 |
| EGPRS 1900 | 661 | 1880.0 | 24.40 | 33 |
| (Slot 1) | 810 | 1909.8 | 24.52 | 33 |
| | 512 | 1850.2 | 23.35 | 33 |
| EGPRS 1900 | 661 | 1880.0 | 23.44 | 33 |
| (Slot 2) | 810 | 1909.8 | 23.55 | 33 |
| | 512 | 1850.2 | 22.52 | 33 |
| EGPRS 1900 | 661 | 1880.0 | 22.66 | 33 |
| (Slot 3) | 810 | 1909.8 | 22.57 | 33 |
| | 512 | 1850.2 | 22.25 | 33 |
| EGPRS 1900 | 661 | 1880.0 | 22.31 | 33 |
| (Slot 4) | 810 | 1909.8 | 22.22 | 33 |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 13 of 47
 SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.
 FCC ID: SL9NLS-MT65

Radiated Power:

The worst test data as follow:

| | | | Test Resu | lt | |
|---------|---------|--------------------|------------------------|--------------|----------------|
| Mode | Channel | Frequency (MHz) | Max. Peak ERP (dBm) | Polarization | Limit (dBm) |
| | 128 | 824.2 | 33.91 | Н | 38.45 |
| GSM 850 | 190 | 836.6 | 33.98 | Н | 38.45 |
| | 251 | 848.8 | 34.02 | Н | 38.45 |

| | | | Test Result | | |
|-----------|---------|--------------------|------------------------|--------------|----------------|
| Mode | Channel | Frequency (MHz) | Max. Peak ERP (dBm) | Polarization | Limit (dBm) |
| | 128 | 824.2 | 28.42 | Н | 38.45 |
| EGPRS 850 | 190 | 836.6 | 28.35 | Н | 38.45 |
| | 251 | 848.8 | 28.51 | Н | 38.45 |

| | | | Test Resu | lt | |
|----------|---------|--------------------|-------------------------|--------------|----------------|
| Mode | Channel | Frequency (MHz) | Max. Peak EIRP (dBm) | Polarization | Limit (dBm) |
| | 512 | 1850.2 | 31.37 | Н | 33 |
| PCS 1900 | 661 | 1880.0 | 31.35 | Н | 33 |
| | 810 | 1909.8 | 31.42 | Н | 33 |

| | | | Test Result | | |
|------------|---------|--------------------|-------------------------|--------------|----------------|
| Mode | Channel | Frequency (MHz) | Max. Peak EIRP (dBm) | Polarization | Limit (dBm) |
| | 512 | 1850.2 | 26.25 | Н | 33 |
| EGPRS 1900 | 661 | 1880.0 | 26.34 | Н | 33 |
| | 810 | 1909.8 | 26.38 | Н | 33 |

NOTE: All conditions have been tested and we only record the worst results in each bands.

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 14 of 47

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

5.2. OCCUPIED BANDWIDTH

5.2.1. Standard Applicable

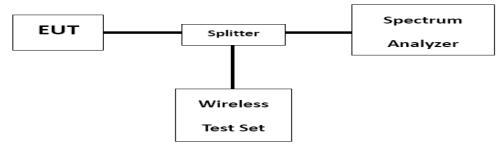
FCC §2.1049, §22.917, §22.905 and §24.238.

5.2.2. Measuring Instruments

Please refer to section 6 of equipments list in this report.

5.2.3. Test Procedures

The RF output of the transmitter was connected to the wireless communication tester and spectrum analyzer through attenuation.



The -26dB & 99% bandwidth was recorded.

Report No.: LCS1508191108E

5.2.4. Test Results

| Temperature | 25°C | Humidity | 60% |
|---------------|----------|---------------|-------|
| ATM Pressure: | 101.4kPa | Test Engineer | Jacky |

The worst test data as follow:

| Mode | Channel | Frequency (MHz) | Emission Bandwidth (-26dBc) (kHz) | Occupied Bandwidth (99%) (kHz) |
|---------|---------|--------------------|---|--------------------------------------|
| | 128 | 824.2 | 319.10 | 243.28 |
| GSM 850 | 190 | 836.6 | 316.30 | 246.42 |
| | 251 | 848.8 | 319.30 | 244.96 |

| Mode | Channel | Frequency (MHz) | Emission Bandwidth (-26dBc) (kHz) | Occupied Bandwidth (99%) (kHz) |
|-----------|---------|--------------------|---|--------------------------------------|
| | 128 | 824.2 | 323.80 | 248.65 |
| EGPRS 850 | 190 | 836.6 | 319.80 | 246.44 |
| | 251 | 848.8 | 318.00 | 249.51 |

| Mode | Channel | Frequency (MHz) | Emission Bandwidth (-26dBc) (kHz) | Occupied Bandwidth (99%) (kHz) |
|----------|---------|--------------------|---|--------------------------------------|
| | 512 | 1850.2 | 311.10 | 240.93 |
| PCS 1900 | 661 | 1880.0 | 321.40 | 242.57 |
| | 810 | 1909.8 | 313.20 | 241.56 |

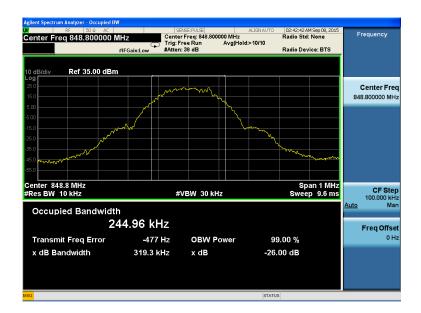
| Mode | Channel | Frequency (MHz) | Emission Bandwidth (-26dBc) (kHz) | Occupied Bandwidth (99%) (kHz) |
|------------|---------|--------------------|---|--------------------------------------|
| | 512 | 1850.2 | 314.40 | 243.75 |
| EGPRS 1900 | 661 | 1880.0 | 296.20 | 238.80 |
| | 810 | 1909.8 | 306.00 | 238.25 |

NOTE: All conditions have been tested and we only record the worst results in each bands.

Test Plots For GSM 850







This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 17 of 47

Test Plots For EGPRS 850

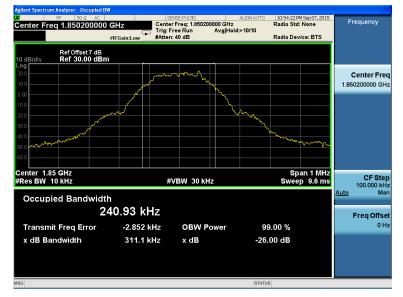






This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 18 of 47

Test Plots For PCS 1900







This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 19 of 47

Test Plots For EGPRS 1900







This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 20 of 47

FCC ID: SL9NLS-MT65

5.3. SPURIOUS AND HARMONIC EMISSION AT ANTENNA TERMINAL

5.3.1. Standard Applicable

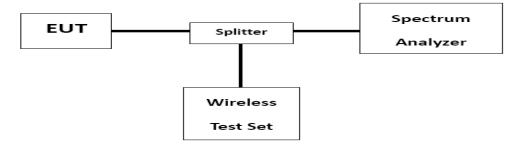
FCC §2.1051, §22.917 and §24.238.

5.3.2. Measuring Instruments

Please refer to section 6 of equipments list in this report.

5.3.3. Test Procedures

The RF output of the transmitter was connected to the wireless communication tester and spectrum analyzer through attenuation.



5.3.4. Test Results

Please refer to the following plots.

Transmitting Mode, CH 128, GSM 850

| XI I | um Analyzer - Sw RF 50 © 976.69669 | AC | SENSE:P | Avg tun Avg | ALIGNAUTO Type: Log-Pwr Hold>100/100 | 02:18:06 AM Sep 08, 2015 TRACE 1 2 3 4 5 0 TYPE MWWWWW DET P N N N N | Peak Search |
|-------------------------------------|--|--|--|--|--|---|--------------|
| 10 dB/div | Ref Offset 7 Ref 35.00 | dB | | | N | /lkr1 976.7 MHz -33.919 dBm | |
| - 09 25.0 15.0 5.00 | | | | | | | Next Pk Righ |
| -5.00 | | | | | | -13.00 dBm | Next Pk Let |
| -35.0 -45.0 -55.0 | Many and a start | an a | ala ge Maria - a stran fan at a dirak strakter | م بر روم والاور روا الار وروا الار وروا الار الم | alath airright de fran t-du | | Marker Delt |
| Start 30.0 #Res BW | 1.0 MHz | X | VBW 3.0 MHz | FUNCTION | Sweep 1 | Stop 1.0000 GHz .066 ms (1000 pts) FUNCTION VALUE | Mkr→C |
| 1 N 1 2 3 4 5 6 | f | 976.7 MHz | -33.919 dBn | | | | Mkr→RefLv |
| 7 8 9 10 11 | | | | | | | Mor 1 of |
| < ISG | | | | | STATUS | s | |

| | SENSE:PULSE | | 02:20:42 AM Sep 08, 2015 | Peak Search |
|---|---|--|--|---------------|
| arker 3 4.12312312312 | PNO: Fast Trig: Free Run IEGain: Low Atten: 24 dB | Avg Type: Log-Pwr Avg Hold>100/100 | TRACE 123456 TYPE MUNICIPAL DET PNNNNN | r cak ocarerr |
| Ref Offset 7 dB dB/div Ref 20.00 dBm | | Ν | /kr3 4.123 GHz -43.626 dBm | Next Pea |
| | | | | Next Pk Rig |
| | 3 | | | Next Pk Le |
| 0 .0 | Angeneral and an an and an | ist former of the first season of the product of th | Anna and the second | Marker De |
| art 1.000 GHz tes BW 1.0 MHz | #VBW 3.0 MHz | | Stop 9.000 GHz 3.39 ms (1000 pts) | Mkr→C |
| R MODE TRC SCL X | 2.473 GHz -26.787 dBm 1.649 GHz -27.267 dBm 4.123 GHz -43.626 dBm | FUNCTION FUNCTION WDTH | FUNCTION VALUE | Mkr→RefL |
| | | | | Мо |

Transmitting Mode, CH 190, GSM 850

| RF 50 Q AC | | SENSE:PULSE | | ALIGN AUTO | 02:18:36 AM Sep 08, 2015 | |
|---|----------------------------------|-------------|--|----------------------------------|---|--------------|
| arker 1 945.625625626 | MHz PNO: Fast G IFGain:Low | | Avg | g Type: Log-Pwr Hold≫100/100 | TRACE 123456 TYPE MUMUUUU DET P N N N N N | Peak Search |
| Ref Offset 7 dB dB/div Ref 35.00 dBm | | | | N | lkr1 945.6 MHz -35.465 dBm | NextPea |
| 9 .0 .0 | | | | | | Next Pk Righ |
| .0 | | | | | -13.00 dBm | Next Pk Le |
| .0 .0 | | | nen an | ynynagyn as gygdawyddwy | and househouse an ereal solar with | Marker Del |
| art 30.0 MHz tes BW 1.0 MHz | #VBV | V 3.0 MHz | | Sweep 1 | Stop 1.0000 GHz .066 ms (1000 pts) | Mkr→C |
| R MODE TRC SCL X | 945.6 MHz | -35.465 dBm | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | |
| | | | | | | Mkr→RefL |
| | | | | | | Mo 1 of |
| | | | | | | 1 01 |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 22 of 47
 SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.
 FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| | AC | SENSE:PULSE | ALIGNAUTO | 02:20:06 AM Sep 08, 2015 | Peak Search |
|---------------------------------|--------------------------------------|--------------------------------|---|---|-------------------|
| arker 1 2.5135135 | 13514 GHz PNO: Fast IFGain:Low | Trig: Free Run Atten: 24 dB | Avg Type: Log-Pwr Avg Hold≫100/100 | TRACE 123456 TYPE MUMMUM DET PINNNNN | |
| Ref Offset 7 dB/div Ref 20.00 d | | | IV | lkr1 2.514 GHz -30.436 dBm | NextPea |
| 9 0.0 00 | | | | -13.00 dBm | Next Pk Rig |
| 1.0 2 1.0 2 1.0 | 1 | | | | Next Pk Le |
| 1.0 \\ | Hannall Handshert Courses | | ann hef halen Ale tal lan yn afferet a yn Alestad | treastad 200 may and a second | Marker De |
| | | | | Stop 9.000 GHz | |
| art 1.000 GHz Res BW 1.0 MHz | #VE | 3W 3.0 MHz | Sweep 1 | 3.39 ms (1000 pts) | Mkr→C |
| R MODE TRC SCL | × | Y | Sweep 1 | 3.39 ms (1000 pts) | Mkr→C |
| tes BW 1.0 MHz | | | | 3.39 ms (1000 pts) | Mkr→0 Mkr→RefL |

Transmitting Mode, CH 251, GSM 850

| larker 1 955.335335 | AC 335 MHz PNO: Fast | SENSE:PULSE | Avg T | ALIGNAUTO ype: Log-Pwr bld>100/100 | TYPE | 123456 Minterference | Peak Search |
|---------------------------------|----------------------------|---|--|---|---------------------------|-------------------------|-------------|
| Ref Offset 7 dE | IFGain:Low | Atten: 38 dB | | | ьет kr1 955. -35.16 | 9 dBm | Next Pea |
| -09 25.0 15.0 5.00 | | | | | | | Next Pk Rig |
| 5.00 | | | | | | -13.00 dBm | Next Pk Le |
| 35.0 | -timetre -formalistantisch | 1998, J. 1993, Same Stare Sta | an a | al Phase of the second s | | **************** | Marker De |
| tart 30.0 MHz Res BW 1.0 MHz | #VB | SW 3.0 MHz | | Sweep 1. | Stop 1.00 066 ms (1 | | Mkr⊸ |
| IKR MODE TRC SCL | Х | Y | FUNCTION | FUNCTION WIDTH | FUNCTION | VALUE | |
| | × 955.3 MHz | -35.169 dBm | FUNCTION | FUNCTION WIDTH | FUNCTION | VALUE | Mkr→RefL |

| | RF | 50.Ω AC | | | SENSE | PULSE | | ALIGN AUTO | | 4 Sep 08, 2015 | Peak Search |
|---------------------------|---|--------------------|--------------------------|---|--|--------------|-----------------|-------------------------------|---------------------|---------------------------------------|-------------|
| arker 2 | 1.6966 | 9669669 | 97 GHz PNO: IFGain | Fast 🕞 | Trig: Free Atten: 24 | | Avg Avg H | Type: Log-Pwr Hold≫100/100 | TYI | E 123456 E MANNAN F P N N N N N | Peak Search |
|) dB/div | Ref Offs Ref 20 | et 7 dB .00 dBm | | | | | | I | /lkr2 1.6 -33.0 | 97 GHz 30 dBm | Next Pea |
| | | | | | | | | | | -13.00 dDm | Next Pk Rig |
| 0.0 0.0 0.0 | 2 | 1 | | | | | | | | | Next Pk L |
| 0.0 0.0 0.0 | ann a li ann ann ann ann ann ann ann ann ann an | | | ر و بیادالی و اور اور اور اور اور اور اور اور اور ا | and an and a second | And Sector A | Auros 10-4940-0 | den son gestier versen der | and a sol Anna da a | and yn de hei an de hei | Marker De |
| | 1.0 MHz | | | #VBW | 3.0 MHz | | | Sweep 1 | Stop 9 3.39 ms (| .000 GHz 1000 pts) | Mkr⊸(|
| KR MODE T | | × | 2.546 G | | √ -32.423 dB | m | JNCTION | FUNCTION WIDTH | FUNCTIO | IN VALUE | |
| 2 N 3 3 4 5 5 | 1 f | | 1.697 G | Hz | -33.080 dB | m | | | | - | Mkr→Refl |
| | | | | | | | | | | | Mo |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 23 of 47

Transmitting Mode, CH 128, EGPRS 850

| la nel 1 | RF 50 Q A 772.79279279 | | SENSE:PUL | Avg | ALIGNAUTO Type: Log-Pwr Hold>100/100 | 02:26:39 AM Sep 08 TRACE 2 3 TYPE MWWA DET P N N | 456 | Peak Search |
|--------------------------------|---|------------|--|---------------------|--|---|-------|-----------------------|
| 0 dB/div | Ref Offset 7 dB Ref 35.00 dBi | IFGain:Low | Atten: 38 dB | | Ň | Ikr1 772.8 M -33.737 d | | NextPea |
| 25.0 | | | | | | | | Next Pk Rig |
| 5.00 | | | | | .1 | -13) | 0 dBm | Next Pk Lo |
| 5.0 | and and an an alternative strategy and an alternative strategy and an alternative strategy and an alternative s | | an a | unter nor and and a | function of the state of the st | | | Marker De |
| tart 30.0 Res BW | 1.0 MHz | #V | BW 3.0 MHz | FUNCTION | Sweep 1 | Stop 1.0000 (.066 ms (1000 | pts) | Mkr→ |
| KR MODE T | | | -33.737 dBm | Tonenon | Tonenon wibini | TORCHOR WEDE | | |
| KR MODE TI 2 3 4 5 | | 772.8 MHz | -55.157 0611 | | | | | Mkr→Refl |
| 1 N 1 2 3 4 | | 772.8 MHz | | | | | | Mkr→RefL Mo 1 o |

| | RF 50Ω A | | SENSE:PUL | | ALIGN AUTO | 02:23:26 AM Sep 08, 2015 | Peak Search |
|---|--|------------------------------------|--|-------------------|---|--|--------------|
| arker 3 | 4.123123123 [.] | 123 GHz PNO: Fast IFGain:Low | Trig: Free Ru Atten: 24 dB | | g Type: Log-Pwr Hold≫100/100 | TRACE 2 3 4 5 6 TYPE MUNICIPAL DET P N N N N N | |
|) dB/div | Ref Offset 7 dB Ref 20.00 dB | m | | | N | 1kr3 4.123 GHz -44.798 dBm | Next Pea |
| | | | | | | | Next Pk Righ |
| 0.0 | $\langle \rangle^2 \qquad \langle \rangle^1$ | | 3 | | | | Next Pk Le |
| i0.0 in a standard i0.0 in a standard i0.0 in a standard | and the second sec | Angelen and Start Long and Start | ak ala ana ana ana ana ana ana ana ana ana | et.syslandaroorge | Holizandra dina minangan di Mangangan dina minangan di | en algester konflikter anneren gehande konflikter | Marker Del |
| tart 1.00 Res BW | 1.0 MHz | | BW 3.0 MHz | | | Stop 9.000 GHz 3.39 ms (1000 pts) | Mkr→C |
| KR MODE TR | C SCL f f | × 2.473 GHz 1.649 GHz | Y -36.001 dBm -35.458 dBm | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | |
| 3 N 1 4 5 6 | f | 4.123 GHz | -44.798 dBm | | | - | Mkr→RefL |
| 7 | | | | | | | Мо |
| 8 | | | | | | | 1 01 |

Transmitting Mode, CH 190, EGPRS 850

| larker 1 9 | RF 50 Q AC 154.364364364 | MHz PNO: Fast (IFGain:Low | Trig: Free Rur Atten: 38 dB | Avg | ALIGNAUTO Type: Log-Pwr Hold>100/100 | 02:27:27 AM Sep 08, 2015 TRACE 1 2:3 4 5 6 TYPE MWWWWW DET PINNINN | Peak Search |
|------------------------------------|---|----------------------------------|--------------------------------|--|--|---|-------------------|
| 0 dB/div | Ref Offset 7 dB Ref 35.00 dBm | | | | N | 1kr1 954.4 MHz -34.181 dBm | NextPea |
| og 25.0 15.0 | | | | | | | Next Pk Rig |
| .00 5.0 5.0 | | | | | | -13.00 dBm | Next Pk Le |
| 5.0 | Sheet will be for a first first of the last | and here a factor of the | endelanangkan di marang | ************************************** | ************************************** | and have a second as the second | Marker De |
| tart 30.0 I Res BW 1 | | #VB | W 3.0 MHz | | Sweep 1 | Stop 1.0000 GHz .066 ms (1000 pts) | Mkr→C |
| KR MODE TRC 1 N 1 2 3 4 5 | | 954.4 MHz | Y -34.181 dBm | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | Mkr→RefL |
| 6 7 8 9 | | | | | | | M o 1 o |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 24 of 47
 SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.
 FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| | 50 Q AC | SENSE:PULS | | ALIGNAUTO | 02:24:08 AM Sep 08, 2015 | Peak Search |
|--------------------------------|---|----------------------------|-----------------|--------------------------------|--|-------------|
| arker 2 2.5135 | 13513514 GHz PNO: Fast IFGain:Lov | | Avg' N Avg ⊢ | Type: Log-Pwr Iold:>100/100 | TRACE 2 3 4 5 6 TYPE MOMMANN DET P N N N N N | |
| | set 7 dB).00 dBm | | | N | lkr2 2.514 GHz -39.126 dBm | NextPea |
| 9 | | | | | | Next Pk Rig |
| | 2 | | | | | Next Pk Le |
| 1.0 | and a second and a s | Harris Barris and Branch | - Laver A () | arm lag, and less and and | angen de bellefinnte en parte programmet des | Marker De |
| art 1.000 GHz tes BW 1.0 MH | z #\ | /BW 3.0 MHz | | Sweep 1 | Stop 9.000 GHz 3.39 ms (1000 pts) | Mkr→C |
| R MODE TRC SCL | × | Y OL ODE UD | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | |
| N 1 F N 1 F | <u>1.673 GHz</u> 2.514 GHz | -31.005 dBm -39.126 dBm | | | | Mkr→RefL |
| | | | | | | Мо |

Transmitting Mode, CH 251, EGPRS 850

| Peak Search | Sep 08, 2015 E 1 2 3 4 5 6 E Ministricture | TRACE | ALIGN AUTO :: Log-Pwr >100/100 | | | SENSE:F | z NO: Fast 🔾 | 2 AC 51061 MH | | | a |
|------------------|--|-----------------------------------|--------------------------------------|---|--|----------------|----------------------|---|-------------------------|------------------------------|--------------------------------------|
| Next Pea | .1 MHz 07 dBm | kr1 931 | | | | Atten: 38 d | Gain:Low | dB | ef Offset 7 ef 35.00 | | 10 dB |
| Next Pk Rig | | | | | | | | | | | - og 25.0 15.0 |
| Next Pk Le | -13.00 dBm | | | | | | | | | | 5.00 - 5.00 - 15.0 - 25.0 - |
| Marker De | | | | ang | مۇ ^{يى} رىكى ئېرلىر _{چىرى} | and the second | نامالەمبىرىيەن يېرىغ | and a constitution of the second s | and an an an an a | مى _{لى} دۇنىيە مىلە | |
| Mkr→C | 000 pts) | Stop 1.0 066 ms (1 FUNCTION | Sweep 1. | TION FI | FUN | 3.0 MHz Y | #VBW | × |) MHz | 30.0 N BW 1. | Res |
| Mkr→RefL | | | | | 1 | -33.607 dBr | 1 MHz | 931 | f | N 1 | 2345 |
| Мо 1 о | | | | | | | | | | | 6 7 8 9 0 |
| | > | | STATUS | | | 10 | | | | | |

| | RF | | AC | | | SENSE | PULSE | | ALIGN AUTO | | VM Sep 08, 201 | | Manlana |
|----------------|---------------|-----------------------|----------|--------------------|------|--------------------------|-----------|---------|----------------------------|----------------------------|----------------|----------|----------------|
| arker 1 | 2.54 | 554554 | 15546 | | | Trig: Free | D | | /pe:Log-Pwr old>100/100 | TRA | CE 1 2 3 4 5 | 6 | Marker |
| | | | | PNO: F IFGain:I | | Atten: 24 | | Avgino | sia:>100/100 | | DET PINNN | N | |
| _ | _ | | | ii Ouinia | | | | | | Alend O | 546 GH | | Select Marker |
| 0 dB/div | | Offset 7 c 20.00 c | | | | | | | I | -41.4 | 92 dBn | | 1 |
| og | | | | | | | | | | | | | |
| | | | | | | | | | | | | | Norm |
| .00 | | | | | | | | | | | | | |
|).0 | | | | | | | | | | | -13.00 dB | | |
| 0.0 | | | | | | | | | | | | | |
| 0.0 | _0 ŕ _ | _ | 1 | | | | | | | | | | Del |
| 0.0 | | | <u>`</u> | | | | | | | | | | |
| | | and the second | | moundary | | مىلاھىرىيەلىر | menergule | An mary | handreament | - Andrewson and the second | and management | | |
| 0.0 | | | | | | | | | | | | | F ire d |
| | | | | | | | | | | | | | Fixed |
| 0.0 | | | | | | | | | | | | | |
| tart 1.00 | 00 GH | z | | | | | | | | Stop | .000 GH | 2 | |
| Res BW | | | | ; | #VBW | / 3.0 MHz | | | Sweep 1 | 3.39 ms | (1000 pts |) | 0 |
| KR MODE TI | | | × | | | Y | | ICTION | FUNCTION WIDTH | FUNCT | ION VALUE | I | |
| 1 N 1 2 N 1 | | | | 2.546 GH | | -41.492 dE -34.033 dE | 3m | | | | | | |
| 3 | | | | 1.097 GF | 12 | -34.033 dE | SITI | | | | | | |
| 4 | | | | | | | | | | | | | Properties |
| 5 6 | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | Mo |
| 9 | | | | | | | | | | | | - | 1 of |
| 9 | | | | | | | | | | | | | |
| 9 | | | | | | II | | | | | | | |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 25 of 47

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

Transmitting Mode, CH 512, PCS 1900

| | | | | | | | | | Analyzer - Sv | Spectrur | gilent |
|----------------|---------------------------------|--|------------------------------------|-----------|-------------------|--|--|--------------------|---------------------------|---------------------------------------|-----------------------------|
| Peak Search | 1 Sep 07, 2015 E 1 2 3 4 5 6 | TRAC | ALIGNAUTO : Log-Pwr | Avg Typ | | SENSE | | ∞ AC 0000 MHz | | (er 1 3 | 4 Mark |
| NextPeak | 0.0 MHz | DE Mkr1 30 | | Avg Hold | | Trig: Free Atten: 28 | NO: Fast 🕞 Gain:Low | P IF | Ref Offset 7 Ref 25.00 | | 10 dB |
| Next Pk Righ | | | | | | | | | | | 15.0 5.00 |
| Next Pk Lef | -13.00 dBm | | | | | | | | | 1 | -15.0 -25.0 -35.0 |
| Marker Delta | nteresty means year | an an tha an | ماسي مەرمىر ا مىرلىيىتى | nulaharre | a fafilina a daga | and a factor of the second | an a share a s | nin warde statione | Rossierine Josef | U | -45.0 -55.0 - -65.0 - |
| Mkr→CF | 1000 GHz 1000 pts) | .066 ms (| Sweep 1 | | | 3.0 MHz | #VBW | × | O MHZ | t 30.0 f 5 BW 1 10de tro N 1 | #Res |
| Mkr→RefLv | | | | | | | | | | | 23456 |
| More 1 of 2 | - | | | | | | | | | | 7 8 9 10 11 |
| | | 1 | STATUS | _ | | | | | | | ISG |

| arker 2 | | DQ AC | | SENSE:PULSE | | ALIGN AUTO | 11:09:39 PM Sep 07,3 | |
|----------|------------------------|-----------------------|--------------|--------------|----------|---|---|-----------|
| | 2 5.792792 | 2792793 GHz | :Fast 😱 Tri | ig: Free Run | Avg | Type: Log-Pwr Hold:>100/100 | TRACE 123 TYPE Moder | 456 |
| | | IFGai | | tten: 34 dB | | | DET P N N | NNN |
| | - | | | | | Ν | 1kr2 5.793 G | Next P |
| 0 dB/div | Ref Offset Ref 30.0 | | | | | | -32.019 di | |
| .og | | | | | | | | |
| 20.0 | | | | | | | | Next Pk R |
| 10.0 | | | | | | | | |
| .00 | | | | | | | | |
| 10.0 | | | | | | | -10.0 | 0 dBm |
| 20.0 | 1 | ا ور مع ک | | | | | | Next Pk |
| 30.0 | <u> </u> | <mark>♦</mark> 2 | | | | | | |
| an n | andres | and the second second | and a second | M. Anardena | monter | and a second and a s | and a second and a s | |
| | | | | | | | | |
| 50.0 | | | | | | | | MarkerD |
| 60.0 | | | | | | | | |
| tart 1.0 | 00 GHz | | | | | | Stop 20.000 G | 2H7 |
| | | | | MHZ | | Swoon A | 2 5 5 | |
| | 1.0 MHz | | #VBW 3.0 | 101112 | | aweep 4 | 7.55 ms (1000 j | DIS) Mkr- |
| | | × | | Y Y | FUNCTION | FUNCTION WIDTH | 7.55 ms (1000 p | ots) Mkr- |
| Res BW | TRC SCL | 2.445 (| GHz -27. | Y 850 dBm | FUNCTION | | | Dts) Mkr- |
| Res BW | TRC SCL | | GHz -27. | Y | FUNCTION | | | |
| Res BW | TRC SCL | 2.445 (| GHz -27. | Y 850 dBm | FUNCTION | | | |
| Res BW | TRC SCL | 2.445 (| GHz -27. | Y 850 dBm | FUNCTION | | | |
| Res BW | TRC SCL | 2.445 (| GHz -27. | Y 850 dBm | FUNCTION | | | Mkr→Re |
| Res BW | TRC SCL | 2.445 (| GHz -27. | Y 850 dBm | FUNCTION | | | |
| Res BW | TRC SCL | 2.445 (| GHz -27. | Y 850 dBm | FUNCTION | | | Mkr→Re |

Transmitting Mode, CH 661, PCS 1900

| | | SENSE:PULSE | | ALIGN AUTO | 11:11:48 PM Sep 07, 2015 | |
|--|--------------------------------|--------------------------------|--------------------|----------------------------------|---------------------------------------|-------------|
| arker 1 31.941941942 M | NHZ PNO: Fast IEGain:Low | Trig: Free Run Atten: 28 dB | | j Type:Log-Pwr Hold:>100/100 | TRACE 123456 TYPE Middleton | Peak Search |
| Ref Offset 7 dB dB/div Ref 25.00 dBm | IFGain:Low | Atten: 20 dB | | | Mkr1 31.9 MHz -38.610 dBm | NextPea |
| 9 | | | | | | Next Pk Rig |
| 5.0 5.0 5.0 2 | | | | | -13.00 dBm | Next Pk Lo |
| 5.0 Harring and the second sec | normaliza ere anterar | -tailmanethtann-tilfailanni | hajnature (juarda) | normalis construction | n | Marker De |
| art 30.0 MHz Res BW 1.0 MHz | #VB | W 3.0 MHz | | Sweep 1 | Stop 1.0000 GHz .066 ms (1000 pts) | Mkr→0 |
| R MODE TRC SCL X | 31.9 MHz | ۲ -38.610 dBm | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | |
| | | | | | = | Mkr→RefL |
| 7 | | | | | | Mc 1 o |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 26 of 47

SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| | RF | 50.Ω AC | | SENSE:PUI | | ALIGN AUTO | 11:10:24 PM Sep 07, 2015 | |
|--|--------------------|-------------------|-----------------------|---------------|----------------|--|---|-------------------|
| arker 2 | 2 6.1351 | 35135135 | 5 GHz PNO: Fast | Trig: Free Ru | | Type: Log-Pwr Hold:>100/100 | TRACE 12345 TYPE MWWWWW DET P N N N N | |
| | | | IFGain:Low | Atten: 34 dB | | | 001 | Select Trace |
| dB/div | Ref Offs Ref 30 | et7 dB .00 dBm | | | | N | 1kr2 6.135 GH: -36.067 dBm | 2 |
| | | | | | | | | |
| 0.0 | | | | | | | | Clear Wr |
| 00 | | | | | | | | |
|).0 | | | | | | | -10.00 dDr | |
| 1.0 | 1 | | | | | | | Trace Avera |
| 1.0 | <u> </u> | | 2 | | | | | |
| 10 | | | and the second second | mound | وبهتعملهمتمنيس | -water and a start of the start | mentother | • |
| 0.0 | | | | | | | | Max Ho |
| 0.0 | | | | | | | | Maxino |
| | | | | | | | | |
| tart 1.00 | 00 GHz 1.0 MHz | | #\/D | W 3.0 MHz | | Swoon 4 | Stop 20.000 GHz 7.55 ms (1000 pts | Ballio I I a |
| | | | # V L | | | | | |
| (R MODE T | 1 f | × | 2.445 GHz | -27.704 dBm | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | |
| 2 N ' | | | 6.135 GHz | -36.067 dBm | | | | View Blank |
| | | | | | | | | Trace O |
| 3 | | | | | | | | |
| 3 | | | | | | | | |
| 34444 | | | | | | | | |
| 3 4 5 6 7 8 9 | | | | | | | | |
| 2 N 3 4 5 5 6 7 8 9 9 0 | | | | | | | | M o 1 o |

Transmitting Mode, CH 810, PCS 1900

| | | | | | | | | | nalyzer - S | | t Spect |
|-------------------|---|----------------------------------|---------------------------------------|----------------|-----------------|--------------------------------------|--------------------|--------------------------|------------------------|-------------|----------------|
| Peak Search | 1 Sep 07, 2015 E 1 2 3 4 5 6 E Ministration | TRAC | ALIGNAUTO e: Log-Pwr d:>100/100 | Avg T Avg H | Run | | NO: Fast 🔾 | 826 MH | | ⊪ 35. | ker 1 |
| Next Pea | 8 MHz 8 dBm | Mkr1 35 | | | | Atten: 28 | Gain:Low | dB | f Offset 7 ef 25.00 | | 3/div |
| Next Pk Rig | | | | | | | | | | | |
| Next Pk Le | -13.00 dBm | | | | | | | | | | 1 |
| Marker Del | | ng the trade of grade of g | Jan Jacob and Street of States | mandeneer | 110-140 (h.a.). | s,dylg,cant ^{ti} r vianitys | Leverth-Q178070000 | an bei en der Balanen er | an fred for the second | Lagrand and | Hura |
| Mkr→C | | Stop 1.0 .066 ms (FUNCTIO | Sweep 1 | NCTION | FL | 3.0 MHz Y | #VBW | × | MHz | 1.0 | t 30.0 s BW |
| Mkr→RefL | | | | | 3m | -39.268 dE | .8 MHz | 3 | | 1 f | N |
| Mo 1 of | | | | | | | | | | | |
| | ~ | | | | | 111 | | | | | |

| | | AC | SENSE | | ALIGN AUTO | 11:10:53PM Sep 07, 2015 | Trace/Detector |
|--|--|--|-------------------------------|--|----------------------------------|--|--------------------------------------|
| larker 2 | 2 5.3933933 | PNO: F | ast 👝 Trig: Free | Run Avg | g Type: Log-Pwr Hold: 80/100 | TRACE 123456 TYPE MWWWWWW DET PNNNNN | Trace/Detector |
| | | IFGain: | Low Atten: 34 | dB | | | Select Trac |
| 0 dB/div | Ref Offset 7 Ref 30.00 | | | | N | /kr2 5.393 GHz -35.904 dBm | |
| og 20.0 | | | | | | | |
| 10.0 | | | | | | | Clear Wr |
| 0.00 | | | | | | | |
| | | | | | | | |
| 10.0 | | | | | | -13.00 dBm | Trace Avera |
| 20.0 | 1 | • 2 | | | | | TTace Avera |
| 30.0 | Y II | | | and the second sec | and the second second | monum | |
| 40.0 www. | and the second s | and the second s | and the second and the second | | | | |
| 50.0 | | | | | | | Max Ho |
| | | | | | | | Max Ho |
| 60.0 | | | | | | | MaxHo |
| | 00 GHz | | | | | Stop 20 000 GHz | MaxHo |
| tart 1.00 | 00 GHz / 1.0 MHz | | #VBW 3.0 MHz | | Sweep 4 | Stop 20.000 GHz 7.55 ms (1000 pts) | |
| 50.0 Start 1.00 Res BW | / 1.0 MHz | × | #VBW 3.0 MHz | FUNCTION | Sweep 4 | Stop 20.000 GHz 7.55 ms (1000 pts) | Max Ho |
| Itart 1.00 Res BW | I 1.0 MHZ | × 2.445 Gł | ۲ -31.056 d⊟ | 3m | | 7.55 ms (1000 pts) | |
| tart 1.00 Res BW | I 1.0 MHZ | × | ۲ -31.056 d⊟ | 3m | | 7.55 ms (1000 pts) | Min Ho |
| tart 1.00 Res BW KR MODE T 1 N 2 N 3 4 | I 1.0 MHZ | × 2.445 Gł | ۲ -31.056 d⊟ | 3m | | 7.55 ms (1000 pts) | Min Ho View Blan |
| tart 1.00 Res BW KR MODE T 1 N 2 N 3 4 5 6 | I 1.0 MHZ | × 2.445 Gł | ۲ -31.056 d⊟ | 3m | | 7.55 ms (1000 pts) | Min Ho View Blan |
| tart 1.00 Res BW KR MODE T 1 N 2 N 3 4 5 | I 1.0 MHZ | × 2.445 Gł | ۲ -31.056 d⊟ | 3m | | 7.55 ms (1000 pts) | Min Ho View Blani Trace O |
| tart 1.00 Res BW | I 1.0 MHZ | × 2.445 Gł | ۲ -31.056 d⊟ | 3m | | 7.55 ms (1000 pts) | Min Ho View Blan Trace O Mo |
| Itart 1.00 Res BW | I 1.0 MHZ | × 2.445 Gł | ۲ -31.056 d⊟ | 3m | | 7.55 ms (1000 pts) | |

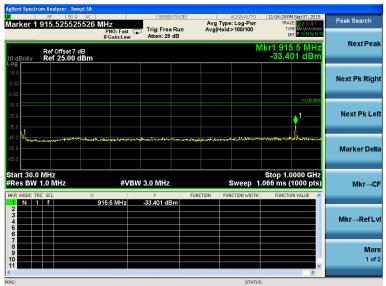
This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 27 of 47

Transmitting Mode, CH 512, EGPRS 1900

| RF 50 Q larker 1 30.000000 | AC 000 MHz PNO: Fast | SENSE:PUL | Avg | ALIGNAUTO Type: Log-Pwr Hold>100/100 | TYPE | 23456 | Peak Search |
|--|----------------------------|---------------------------------|------------------|--|--|------------|-------------------|
| Ref Offset 7 0 dB/div Ref 25.00 | IFGain:Low | | | | Mkr1 30.0 -35.231 | MHz dBm | NextPea |
| .og 15.0 5.00 | | | | | | | Next Pk Rig |
| 5.00 15.0 25.0 - 1 35.0 - 1 | | | | | | -13.00 dBm | Next Pk Le |
| 45.0 55.0 65.0 | | And and the construction of the | Wraphile and and | ution of a second s | | ****** | Marker Del |
| Start 30.0 MHz Res BW 1.0 MHz KKR MODE TRC SCL | × | BW 3.0 MHz | FUNCTION | Sweep 1 | Stop 1.000 .066 ms (100 FUNCTION W | 00 pts) | Mkr→C |
| 1 N 1 f 2 3 4 5 6 | 30.0 MHz | -35.231 dBm | | | | = | Mkr→RefL |
| 7 8 9 10 11 | | | | | | | Mo 1 of |
| | | 10 | | | | × | |

| Trace/Detector | 1 Sep 07, 2015 E 1 2 3 4 5 6 E Montrolation | TRAC | ALIGNAUTO | Avg Ty Avg Ho | :PULSE | | | r - Swept SA 50 & AC 45445445 | RF | xi |
|----------------------|---|------|--|--|-------------|--|---------------------------|-------------------------------------|--------------------|------------------------|
| Select Trace 1 | 45 GHz 33 dBm | DE | | Avgino | | Atten: 28 | PNO: Fast 🕞 IFGain:Low | set 7 dB .00 dBm | Ref (| 10 dB/div |
| Clear Wri | | | | | | | | | | 15.0 5.00 |
| Trace Avera | -13.00 dBm | | | | | | | | 1 | 15.0 |
| Max Ho | | Wwp | and the second | and the second | hter gerret | an a | | hay reterented and | hulmun | 45.0 55.0 65.0 |
| Min Ho | .000 GHz 1000 pts) | | Sweep 4 | CTION F | | / 3.0 MHz | #VBV | 2 × | 000 GH: N 1.0 M | |
| View Blan Trace O | | | | | im | -30.383 dE | 445 GHz | 2 | 1 f | 1 N 2 3 4 5 6 |
| M c 1 c | | | | | | | | | | 7 8 9 10 |
| | > | | STATUS | | | Ш | | | | G |

Transmitting Mode, CH 661, EGPRS 1900



This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 28 of 47
 SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.
 FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| | RF 50 Ω A | | SENSE:PU | | ALIGN AUTO | 11:06:26 PM Sep 07, 2015 | Trace/Detecto |
|--------------------|----------------------------------|------------------------------------|----------------|--------------------|--|---|---------------|
| arker 1 | 2.4454454454 | 445 GHz PNO: Fast IFGain:Low | | un Avg | j Type: Log-Pwr Hold: 65/100 | TRACE 123456 TYPE MUNANNA DET P NNNNN | |
| dB/div | Ref Offset 7 dB Ref 25.00 dBi | m | | | N | lkr1 2.445 GHz -33.347 dBm | |
| 5.0 .00 | | | | | | | Clear Wr |
| 5.0 | | | | | | -13.00 dBm | |
| 5.0 | •1 | | | | | | Trace Avera |
| 5.0 5.0 | a martine and a state way | M. Marganeters Marson | and the second | لسيهم بمستجر ومالي | an service and a | Maglor of the other states and | |
| 5.0 | | | | | | | Max H |
| | | | | | | | |
| art 1.00 Res BW | 00 GHz 1.0 MHz | #V | BW 3.0 MHz | | Sweep 4 | Stop 20.000 GHz 7.55 ms (1000 pts) | |
| R MODE T | 1.0 MHz | X | Y | FUNCTION | Sweep 4 | | |
| tes BW | 1.0 MHz | | | | | 7.55 ms (1000 pts) | |

Transmitting Mode, CH 810, EGPRS 1900

| Peak Search | 1Sep 07, 2015 E 1 2 3 4 5 6 E MUUUUUUUU | TRAC | ALIGN AUTO :: Log-Pwr >100/100 | | | Trig: Free | PNO: Fast 🗔 | R AC 0971 MHz | | | a |
|-------------|--|-----------------------------------|--------------------------------------|-------------------------|-------------------|------------------------|----------------------|--------------------------|---------------------------------------|-------|----------------------------|
| Next Pea | <u> </u> | Mkr1 31 | | | dB | Atten: 28 | Gain:Low | dB | ef Offset 7 ef 25.00 | | 10 dB/c |
| Next Pk Rig | | | | | | | | | | | 15.0 - |
| Next Pk Le | -13.00 dBm | | | | | | | | | | -15.0 -25.0 -35.0 |
| Marker Del | ~ | ate Protonga and the | | angerand to game of the | an din tradiciona | ingenallyngebod en old | nin ladin takan kara | nte granne (de condição) | a a a a a a a a a a a a a a a a a a a | ***** | 45.0 🗛 55.0 — 65.0 — |
| Mkr→C | 1000 pts) | Stop 1.0 .066 ms (1 FUNCTIO | Sweep 1 | CTION | | 3.0 MHz Y | | X | MHz | W 1.0 | Start 3 Res I |
| Mkr→RefL | = | | | | | -38.550 dE | .0 MHz | 3' | | 1 | 1 2 3 4 5 6 |
| Mo 1 of | | | | | | | | | | | 7 8 9 10 |
| | | | STATUS | | | 10 | | | | | G |

| | 50 Q AC | | SENSE | PULSE | | ALIGNAUTO | 11:05:52 PM | | Peak Search |
|-------------------|---|----------------------------------|----------------------------------|--------------------------------|---|---------------------------|--|--|--|
| 2.44544 | PN | IO: Fast | | | | | TYP | MINNAMA | Feak Search |
| | t7dB | ain:Low_ | Atten: 20 | | | IV | lkr1 2.4 -33.70 | 15 GHz 6 dBm | Next Pea |
| | | | | | | | | | Next Pk Rig |
| •1 | | | | | | | | -13.00 dBm | Next Pk Lo |
| un lease days | م _{وا} قب مانان محمور موادم می | enda dest | and the production | and the second second | 4 | hingt ^h ugalan | | an the second | Marker De |
| 00 GHz 1.0 MHz | | #VB | W 3.0 MHz | | | Sweep 4 | 7.55 ms (1 | 000 pts) | Mkr→ |
| RC SCL | × 2.44 | 5 GHz | ۲ -33.706 dB | | ION FUN | NCTION WIDTH | FUNCTIO | N VALUE | |
| | | | | | | | | - | Mkr→Refl |
| | | | | | | | | | Mo |
| | Ref Offse Ref 25.1 | Ref Offset 7 dB Ref 25.00 dBm | Ref Offset 7 dB Ref 25.00 dBm | PRO: Fast Trig: Free Atten: 28 | PNO: Fast Tig: Free Run Ref Offset 7 dB Ref 25.00 dBm | RE SCL X Y EUCTON FUT | PHO: Frast Tig: Free Run Avg Hold: 81/100 Ref Offset 7 dB Ref 25.00 dBm | PHO: Feat Trig: Free Run AvgiHoid: 81/100 Trig: Free Run Atten: 28 dB AvgiHoid: 81/100 Trig: 70 dB AvgiHoid: 81 | PHO: Fast: Trig: Free Run Atten: Avg Heid: Strift Provide Ref Offset 7 dB Mkr1 2.445 GHz |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 29 of 47

FCC ID: SL9NLS-MT65

Test Result of Band Edge Emissions, GSM 850





Test Result of Band Edge Emissions, EGPRS 850



This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 30 of 47



Test Result of Band Edge Emissions, PCS 1900





This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 31 of 47

FCC ID: SL9NLS-MT65

Test Result of Band Edge Emissions, EGPRS 1900





NOTE: All conditions have been tested and we only record the worst results in each bands.

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 32 of 47

5.4. RADIATED SPURIOUS EMISSIONS MEASUREMENT

5.4.1. Standard Applicable

FCC §2.1053, §22.917 and §24.238.

5.4.2. Measuring Instruments

Please refer to section 6 of equipments list in this report.

5.4.3. Test Procedures

The EUT was placed on a non-conductive, the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

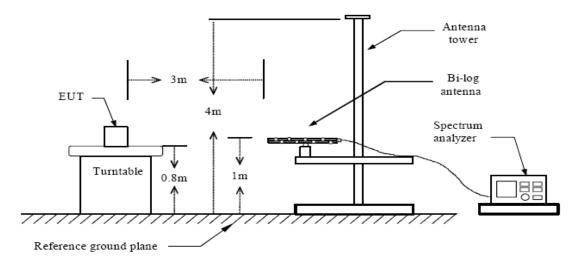
The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission were identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP = S.G. output (dBm) + Antenna Gain (dBd) - Cable (dB)

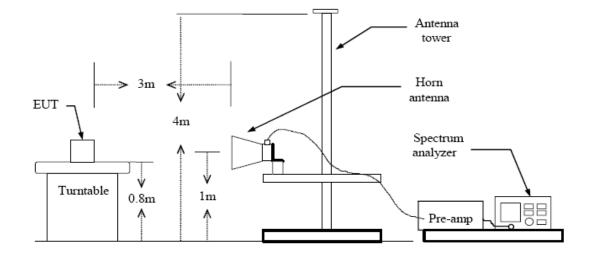
EIRP = S.G. output (dBm) + Antenna Gain (dBi) - Cable (dB)

For radiated spurious emissions below 1GHz

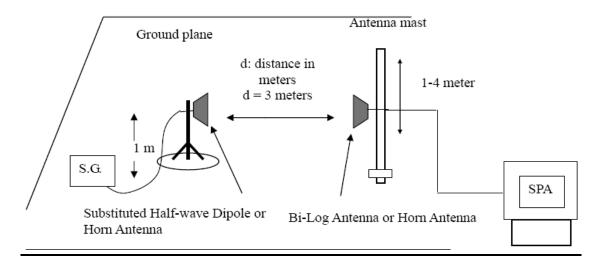


FCC ID: SL9NLS-MT65

For radiated spurious emissions above 1GHz



Substituted Method



5.4.4. Test Results

The worst test data as follow: 30MHz~10GHz

| | The Worst Test Result For GSM 850, CH 128 | | | | | | | | | | |
|--------------------|---|----------------|--------|----------|--|--|--|--|--|--|--|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity | | | | | | | |
| 951.50 | -66.57 | | | | | | | | | | |
| 1648.57 | -19.69 | -13 | Pass | н | | | | | | | |
| 2472.69 | -23.23 | | | | | | | | | | |
| 47.46 | -63.28 | | | | | | | | | | |
| 1648.57 | -22.41 | -13 | Pass | V | | | | | | | |
| 2472.69 | -25.25 | | | | | | | | | | |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 34 of 47
 SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.
 FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| The Worst Test Result For GSM 850, CH 190 | | | | |
|---|-------------------------|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -65.78 | -13 | | |
| 1673.29 | -20.36 | -13 | Pass | н |
| 2509.88 | -24.02 | -13 | | |
| 47.46 | -64.41 | -13 | | |
| 1673.29 | -22.78 | -13 | Pass | V |
| 2509.88 | -24.39 | -13 | | |

| | The Worst Test Result For GSM 850, CH 251 | | | | |
|--------------------|---|----------------|--------|----------|--|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity | |
| 951.50 | -65.41 | -13 | | | |
| 1697.51 | -19.78 | -13 | Pass | Н | |
| 2546.23 | -24.22 | -13 | | | |
| 47.46 | -62.15 | -13 | | | |
| 1697.51 | -21.74 | -13 | Pass | V | |
| 2546.23 | -24.96 | -13 | | | |

30MHz~10GHz

| The Worst Test Result For GSM 850, CH 128 | | | | |
|---|-------------------------|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -65.45 | | | |
| 1648.42 | -24.61 | -13 | Pass | н |
| 2472.55 | -26.72 | | | |
| 47.46 | -64.45 | | | |
| 1648.42 | -24.11 | -13 | Pass | V |
| 2472.55 | -28.36 | | | |

| | The Worst Test Result For GSM 850, CH 190 | | | |
|--------------------|---|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -65.74 | -13 | | |
| 1673.21 | -23.89 | -13 | Pass | Н |
| 2509.85 | -27.06 | -13 | 7 | |
| 47.46 | -64.12 | -13 | | |
| 1673.21 | -24.81 | -13 | Pass | V |
| 2509.85 | -28.42 | -13 | | |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 35 of 47

SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| The Worst Test Result For GSM 850, CH 251 | | | | |
|---|-------------------------|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -64.46 | -13 | | |
| 1697.44 | -23.87 | -13 | Pass | Н |
| 2546.39 | -28.63 | -13 | | |
| 47.46 | -65.11 | -13 | | |
| 1697.44 | -25.75 | -13 | Pass | V |
| 2546.39 | -29.54 | -13 | | |

30MHz~20GHz

| The Worst Test Result For PCS 1900, CH 512 | | | | |
|--|-------------------------|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -65.37 | -13 | | |
| 3700.44 | -26.11 | -13 | Pass | Н |
| 5550.26 | -29.26 | -13 | | |
| 47.46 | -64.41 | -13 | | |
| 3700.44 | -28.78 | -13 | Pass | V |
| 5550.26 | -30.46 | -13 | | |

| | The Worst Test Result For PCS 1900, CH 661 | | | |
|--------------------|--|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -65.63 | -13 | | |
| 3760.36 | -26.42 | -13 | Pass | Н |
| 5640.41 | -29.55 | -13 | | |
| 47.46 | -65.36 | -13 | | |
| 3760.36 | -28.12 | -13 | Pass | V |
| 5640.41 | -30.74 | -13 | | |

| | The Worst Test Result For PCS 1900, CH 810 | | | | |
|--------------------|--|----------------|--------|----------|--|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity | |
| 951.50 | -65.74 | -13 | | | |
| 3819.17 | -26.35 | -13 | Pass | Н | |
| 5729.23 | -29.18 | -13 | | | |
| 47.46 | -64.22 | -13 | | | |
| 3819.17 | -28.64 | -13 | Pass | V | |
| 5729.23 | -30.58 | -13 | | | |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 36 of 47
 SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.
 FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| | The Worst Test Result For PCS 1900, CH 512 | | | |
|--------------------|--|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -65.86 | -13 | | |
| 3700.36 | -29.12 | -13 | Pass | н |
| 5550.58 | -31.74 | -13 | | |
| 47.46 | -63.25 | -13 | | |
| 3700.36 | -30.43 | -13 | Pass | V |
| 5550.58 | -33.85 | -13 | | |

30MHz~20GHz

| The Worst Test Result For PCS 1900, CH 661 | | | | |
|--|-------------------------|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -65.55 | -13 | | |
| 3760.21 | -29.16 | -13 | Pass | Н |
| 5640.26 | -31.94 | -13 | | |
| 47.46 | -63.29 | -13 | | |
| 3760.21 | -30.36 | -13 | Pass | V |
| 5640.26 | -33.41 | -13 | | |

| | The Worst Test Result For PCS 1900, CH 810 | | | |
|--------------------|--|----------------|--------|----------|
| Frequency (MHz) | Emission Level (dBm) | Limit (dBm) | Result | Polarity |
| 951.50 | -65.74 | -13 | | |
| 3819.45 | -29.38 | -13 | Pass | Н |
| 5729.37 | -31.22 | -13 | | |
| 47.46 | -63.45 | -13 | | |
| 3819.45 | -30.77 | -13 | Pass | V |
| 5729.37 | -33.86 | -13 | | |

NOTE : The result below 30MHz is too low, there is only base environmental noise. We Only record the worst results above 30MHz.

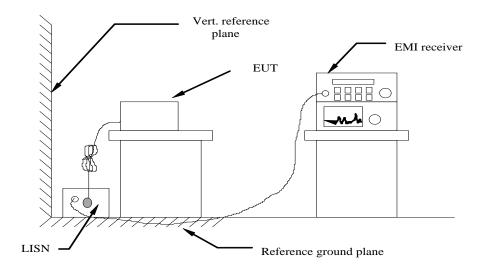
5.5. POWER LINE CONDUCTED EMISSIONS

5.5.1 Standard Applicable

According to \$15.107 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolt (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

| Frequency Range | Limits (dBµV) | | |
|-----------------|---------------|----------|--|
| (MHz) | Quasi-peak | Average | |
| 0.15 to 0.50 | 66 to 56 | 56 to 46 | |
| 0.50 to 5 | 56 | 46 | |
| 5 to 30 | 60 | 50 | |

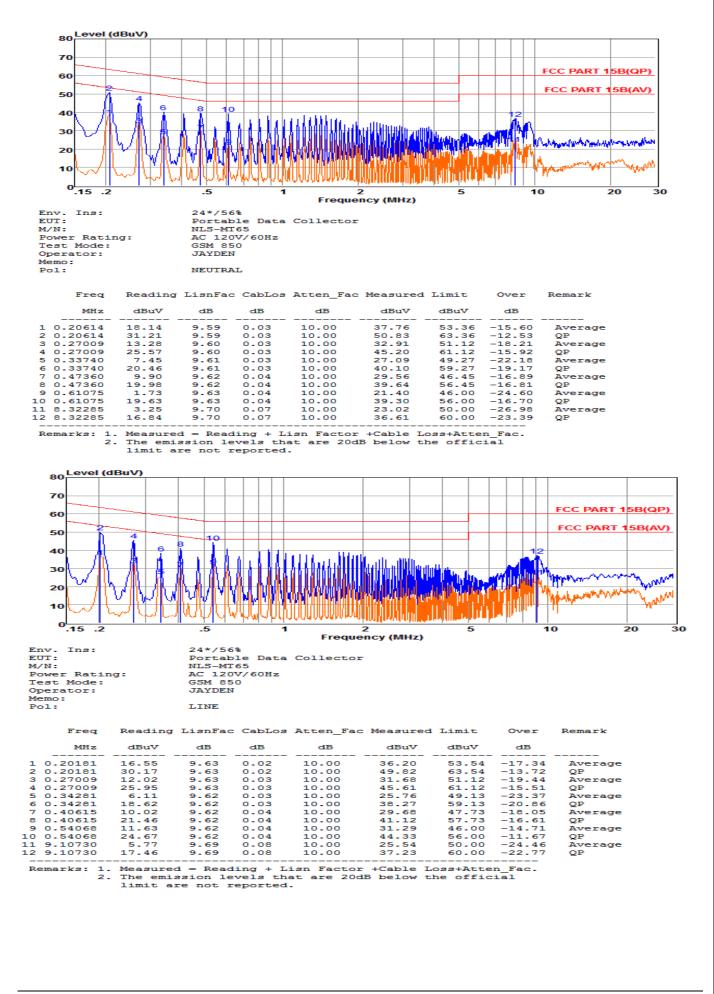
5.5.2 Block Diagram of Test Setup



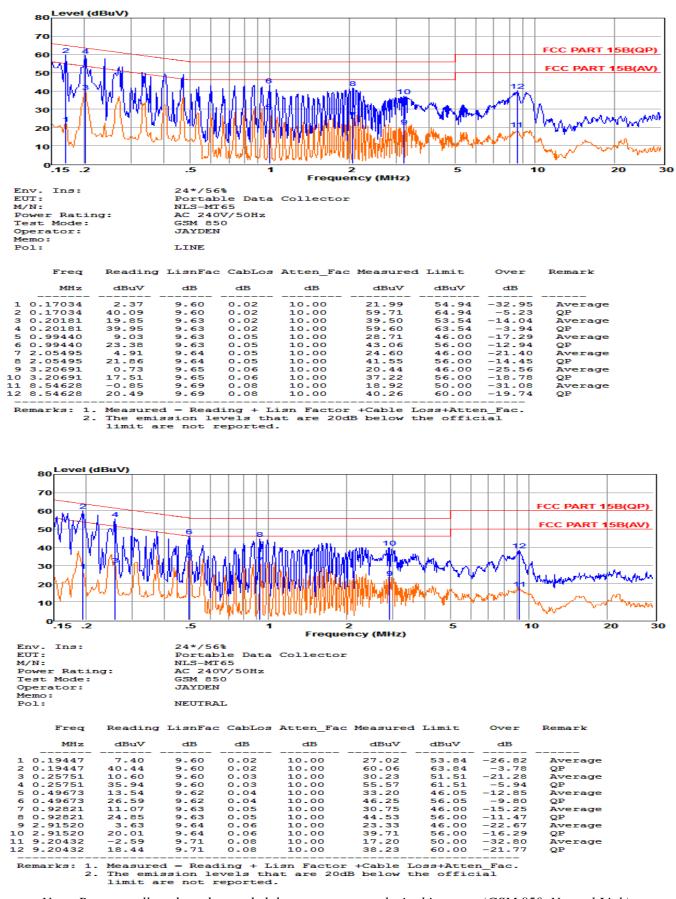
5.5.3 Test Results

PASS.

The test data please refer to following page.



This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 39 of 47



Note: Pre-scan all mode and recorded the worst case results in this report (GSM 850, Normal Link)

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 40 of 47

5.6.MODULATION CHARACTERISTIC

According to FCC §2.1047(d), Part 22H & 24E there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

5.7. FREQUENCY STABILITY OVER TEMPERATURE AND VOLTAGE

VARIATIONS

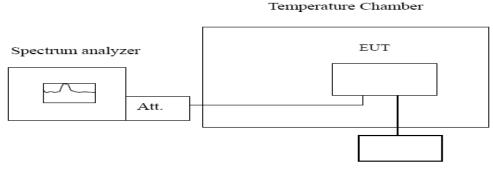
5.7.1. Standard Applicable

FCC §2.1055, §22.355 and §24.235, Frequency Tolerance: 2.5ppm

5.7.2. Test Procedures

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency.

Turn EUT off and set the chamber temperature to -30° C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10° C increased per stage until the highest temperature of $+50^{\circ}$ C reached.



Variable Power Supply

5.7.3. Test Results

Pass

| SHENZHEN | LCS | COMP | LIANCE | TESTING | LABORAT | ORY LTD. |
|-----------------|-----|------|--------|---------|---------|----------|
| | | | | | | |

FCC ID: SL9NLS-MT65 Re

Report No.: LCS1508191108E

The worst test data as follow:

| R | | SM850 Mide | lle channel=190 channel= | 836.6MHz | |
|--|------------------------|------------|--------------------------|-------------|--------|
| Power supplied (Vdc) | Temperature (℃) | F | requency error | Limit (ppm) | Result |
| III III III III III III III III III II | I , | Hz | ppm | | |
| | -30 | 5 | 0.0060 | | |
| | -20 | 2 | 0.0024 | | |
| | -10 | 6 | 0.0072 | | |
| | 0 | 5 | 0.0060 | | |
| 3.70 | 10 | 4 | 0.0048 | 2.5 | Pass |
| | 20 | 2 | 0.0024 | | |
| | 30 | 6 | 0.0072 | | |
| | 40 | 3 | 0.0036 | | |
| | 50 | 4 | 0.0048 | | |
| R | Reference Frequency: P | CS1900 Mid | dle channel=661 channel= | =1880MHz | |
| Power supplied (Vdc) | Temperature (℃) | | requency error | | Result |
| · · · · · | - | Hz | ppm | | |
| | -30 | 3 | 0.0016 | | |
| | -20 | 5 | 0.0026 | | |
| | -10 | 7 | 0.0037 | | |
| | 0 | 6 | 0.0032 | | |
| 3.70 | 10 | 2 | 0.0011 | 2.5 | Pass |
| | 20 | 4 | 0.0021 | | |
| | 30 | 6 | 0.0032 | | |
| | 40 | 4 | 0.0021 | | |
| | 50 | 5 | 0.0026 | | |

| Reference Frequency: GSM850 Middle channel=190 channel=836.6MHz | | | | | | | |
|---|------------------------|-------------------|-------------------|-------------|--------|--|--|
| Temperature (℃) | Power supplied | Frequer | cy error | Limit (ppm) | Result | | |
| F | (Vdc) | Hz | ppm | | | | |
| | 4.25 | 3 | 0. 0036 | | | | |
| 25 | 3.70 | 7 | 0. 0083 | 2.5 | Pass | | |
| | 3.40 | 5 | 0. 0060 | | | | |
| F | Reference Frequency: P | CS1900 Middle cha | nnel=661 channel= | =1880MHz | | | |
| Temperature (℃) | Power supplied | Frequency error | | Limit (ppm) | Result | | |
| . I , , | (Vdc) | Hz | ppm | | | | |
| | 4.25 | 6 | 0. 0072 | | | | |
| 25 | 3.70 | 4 | 0. 0048 | 2.5 | Pass | | |
| | 3.40 | 4 | 0. 0048 | | | | |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 42 of 47 SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

| Reference Frequency: EGPRS 850 Middle channel=190 channel=836.6MHz | | | | | | | |
|--|-----------------------|------------|--------------------------|-------------|--------|--|--|
| Power supplied (Vdc) | Temperature (℃) | F | requency error | Limit (ppm) | Result | | |
| | Temperature (0) | Hz | ppm | | | | |
| | -30 | 5 | 0.0060 | | | | |
| | -20 | 3 | 0.0036 | | | | |
| | -10 | 4 | 0.0048 | | | | |
| | 0 | 2 | 0.0024 | | | | |
| 3.70 | 10 | 7 | 0.0083 | 2.5 | Pass | | |
| | 20 | 6 | 0.0072 | | | | |
| | 30 | 4 | 0.0048 | | | | |
| | 40 | 5 | 0.0060 | | | | |
| | 50 | 3 | 0.0036 | | | | |
| Ret | ference Frequency: EG | PRS 1900 M | iddle channel=661 channe | el=1880MHz | | | |
| Power supplied (Vdc) | Temperature (℃) | | requency error | | Result | | |
| | 1 , , | Hz | ppm | | | | |
| | -30 | 6 | 0.0032 | | | | |
| | -20 | 4 | 0.0021 | | | | |
| | -10 | 5 | 0.0026 | | | | |
| | 0 | 7 | 0.0037 | | | | |
| 3.70 | 10 | 4 | 0.0021 | 2.5 | Pass | | |
| | 20 | 5 | 0.0026 | | | | |
| | 30 | 2 | 0.0011 | | | | |
| | 40 | 4 | 0.0021 | | | | |
| | 50 | 3 | 0.0016 | | | | |

| | eference Frequency: EGI | | | F | |
|----------------------------|-------------------------|-----------------|-------------------|--------------|--------|
| Temperature (°C) | Power supplied | Freque | ncy error | Limit (ppm) | Result |
| remperator (0) | (Vdc) | Hz | ppm | Zinni (ppin) | |
| | 4.25 | 3 | 0. 0036 | | Pass |
| 25 | 3.70 | 5 | 0. 0060 | 2.5 | |
| | 3.40 | 4 | 0. 0048 | | |
| Re | ference Frequency: EGF | RS 1900 Middle | channel=661 chann | el=1880MHz | |
| Temperature (℃) | Power supplied | Frequency error | | Limit (ppm) | |
| I I I I I I I I I I | (Vdc) | Hz | ppm | (FF) | Result |
| | | | | | |
| | 4.25 | 4 | 0. 0021 | | |
| 25 | 4.25 3.70 | 4 | 0. 0021 | 2.5 | Pass |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 43 of 47

5.8. PEAK-TO-AVERAGE RATIO

5.8.1. Standard Applicable

According to FCC \$2.1046 and \$24.232(d), the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

5.8.2. Measuring Instruments

Please refer to section 6 of equipments list in this report.

5.8.3. Test Procedures

The following steps outline the procedure used to measure the Peak-to-Average Ratio from the EUT.

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.

2. For GSM/EGPRS operating modes:

a. Set the RBW = 1MHz, VBW = 1MHz, Peak detector in spectrum analyzer.

b. Set EUT in maximum power output, and triggered the burst signal.

c. Measured respectively the Peak level and Mean level, and the deviation was recorded as Peak to Average Ratio.

3. For UMTS operating modes:

a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.

b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.

| 5.8.4. Test Resu | llts | | | | | |
|-------------------------------|----------|------|--------|--|--|--|
| Modes | PCS 1900 | | | | | |
| Channal | 512 | 661 | 810 | | | |
| Channel | Low | Mid | High | | | |
| Frequency(MHz) | 1850.2 | 1880 | 1909.8 | | | |
| Peak-To-Average Ratio (dB) | 0.43 | 0.55 | 0.37 | | | |

| Modes | EGPRS 1900 | | | | | |
|-------------------------------|------------|------|--------|--|--|--|
| Channel | 512 | 661 | 810 | | | |
| Channel | Low | Mid | High | | | |
| Frequency(MHz) | 1850.2 | 1880 | 1909.8 | | | |
| Peak-To-Average Ratio (dB) | 0.62 | 0.52 | 0.44 | | | |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 45 of 47

SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

FCC ID: SL9NLS-MT65

Report No.: LCS1508191108E

6. LIST OF MEASURING EQUIPMENTS

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Cal Date | Due Date |
|------------------|--------------|----------------------------------|-------------|-----------------|------------------|------------------|
| | | | | | | |
| EMC Receiver | R&S | ESCS 30 | 100174 | 9kHz – 2.75GHz | June 18, 2015 | June 17, 2016 |
| Signal analyzer | Agilent | E4448A(External mixers to 40GHz) | US44300469 | 9kHz~40GHz | July 18, 2015 | July 17, 2016 |
| Signal analyzer | Agilent | N9020A | MY50510140 | 9kHz~26.5GHz | October 27, 2014 | October 26, 2015 |
| LISN | MESS Tec | NNB-2/16Z | 99079 | 9KHz-30MHz | June 25, 2015 | June 24, 2016 |
| LISN | EMCO | 3819/2NM | 9703-1839 | 9KHz-30MHz | June 25, 2015 | June 24, 2016 |
| RF Cable-CON | UTIFLEX | 3102-26886-4 | CB049 | 9KHz-30MHz | June 25, 2015 | June 24, 2016 |
| ISN | SCHAFFNER | ISN ST08 | 21653 | 9KHz-30MHz | June 25, 2015 | June 24, 2016 |
| 3m Semi Anechoic | SIDT | SAC-3M | 03CH03-HY | 30M-1GHz | June 18, 2015 | June 17, 2016 |
| Amplifier | SCHAFFNER | COA9231A | 18667 | 9kHz-2GHzz | June 16, 2015 | June 15, 2016 |
| Amplifier | Agilent | 8449B | 3008A02120 | 1GHz-26.5GHz | July 16, 2015 | July 15, 2016 |
| Amplifier | MITEQ | AMF-6F-260400 | 9121372 | 26.5GHz-40GHz | July 16, 2015 | July 15, 2016 |
| Loop Antenna | R&S | HFH2-Z2 | 860004/001 | 9k-30MHz | June 16, 2015 | June 15, 2016 |
| Loop Antenna | R&S | HFH2-Z2 | 860024/003 | 9k-30MHz | June 16, 2015 | June 15, 2016 |
| By-log Antenna | SCHWARZBECK | VULB9163 | 9163-470 | 30MHz-1GHz | June 16, 2015 | June 15, 2016 |
| By-log Antenna | SCHWARZBECK | VULB9163 | 9163-475 | 30MHz-1GHz | June 16, 2015 | June 15, 2016 |
| Horn Antenna | EMCO | 3115 | 6741 | 1GHz-18GHz | June 16, 2015 | June 15, 2016 |
| Horn Antenna | SCHWARZBECK | BBHA9170 | BBHA9170154 | 15GHz-40GHz | June 16, 2015 | June 15, 2016 |
| RF Cable-R03m | Jye Bao | RG142 | CB021 | 30MHz-1GHz | June 25, 2015 | June 24, 2016 |
| RF Cable-HIGH | SUHNER | SUCOFLEX 106 | 03CH03-HY | 1GHz-40GHz | June 25, 2015 | June 24, 2016 |
| Spectrum Meter | R&S | FSP 30 | 100023 | 9kHz-30GHz | July 16, 2015 | July 15, 2016 |
| Power Meter | R&S | NRVS | 100444 | DC-40GHz | June 18, 2015 | June 17, 2016 |
| Power Sensor | R&S | NRV-Z51 | 100458 | DC-30GHz | June 18, 2015 | June 17, 2016 |
| Power Sensor | R&S | NRV-Z32 | 10057 | 30MHz-6GHz | June 18, 2015 | June 17, 2016 |
| AC Power Source | HPC | HPA-500E | HPA-9100024 | AC 0~300V | June 18, 2015 | June 17, 2016 |
| DC power Soure | GW | GPC-6030D | C671845 | DC 1V-60V | June 18, 2015 | June 17, 2016 |
| Temp. and | Giant Force | GTH-225-20-S | MAB0103-00 | N/A | June 18, 2015 | June 17, 2016 |
| RF CABLE-1m | JYE Bao | RG142 | CB034-1m | 20MHz-7GHz | June 25, 2015 | June 24, 2016 |
| RF CABLE-2m | JYE Bao | RG142 | CB)35-2m | 20MHz-1GHz | June 25, 2015 | June 24, 2016 |
| Vector signal | R&S | SMU200A | 102098 | 100kHz~6GHz | June 18, 2015 | June 17, 2016 |
| Signal Generator | R&S | SMR40 | 10016 | 10MHz~40GHz | July 16, 2015 | July 15, 2016 |

This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.. Page 46 of 47

| <u>SHENZHEN LCS C</u> | OMPLIANCE TEST | ING LABORATORY | LTD. FC | CC ID: SL9NLS-MT65 | Report No | .: LCS1508191108E |
|-----------------------|---------------------|----------------|-----------|--------------------|---------------|-------------------|
| Universal Radio | R&S | CMU200 | 112012 | N/A | July 18, 2015 | July 17, 2016 |
| Note: All equipment | through GRGT EST ca | libration | | · | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | THE | END OF RE | PORT | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |