HEALTH TEST REPORT

For

Shenzhen KVD Communication Equipment Limited

LTE GSM/WCDMA Smartphone

Test Model: S60 Lite

Prepared for	:	Shenzhen KVD Communication Equipment Limited
Address	:	Lenovo R&D Center 2F-B, South First Road, High-tech Park, Nanshan District, Shenzhen, Guangdong, China
Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
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Mail	:	webmaster@LCS-cert.com
Date of receipt of test sample	:	Dec 21, 2017
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	Dec 21, 2017~Jan 03, 2018
Date of Report	:	Jan 03, 2018

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HEALTH TEST REPORT

EN 62479: 2010

Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz).

Report Reference No.	**: LCS171221034AEJ**
Date of Issue	: Jan 03, 2018
Testing Laboratory Name.....	**: Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address	: 1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, Bao'an District, Shenzhen, Guangdong, China
Testing Location/ Procedure.....	: Full application of Harmonised standards ■ Partial application of Harmonised standards ☐ Other standard testing method ☐
Applicant's Name.....	**: Shenzhen KVD Communication Equipment Limited**
Address	: Lenovo R&D Center 2F-B, South First Road, High-tech Park, Nanshan District, Shenzhen, Guangdong, China
Test Specification	
Standard	: EN 62479: 2010
Test Report Form No.	: LCSEMC-1.0
TRF Originator	: Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF	: Dated 2017-06

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Test Item Description.	**: LTE GSM/WCDMA Smartphone**
Trade Mark	: DOOGEE
Test Model	: S60 Lite
Ratings	: DC 3.8V by Li-ion Battery(5580mAh) Recharged by DC 5V/7V/3A,9V/2.7A,12V/2A Adapter
Result	**: Positive**

Compiled by:	**Supervised by:**	**Approved by:**
Calvin Weng	Dick Su	
Calvin Weng/ Administrators	Dick Su/ Technique principal	Gavin Liang/ Manager

HEALTH -- TEST REPORT

Test Report No. : LCS171221034AEJ	Jan 03, 2018 Date of issue

Test Model.....	:	S60 Lite
EUT.....	:	LTE GSM/WCDMA Smartphone
Applicant.....	:	**Shenzhen KVD Communication Equipment Limited**
Address.....	:	Lenovo R&D Center 2F-B, South First Road, High-tech Park, Nanshan District, Shenzhen, Guangdong, China
Telephone.....	:	
Fax.....	:	
Manufacturer.....	:	**Shenzhen KVD Communication Equipment Limited**
Address.....	:	A,3rd floor, Building A2, Silicon valley Digital Industrial Park,22nd of Dafu industrial area,Aobei Community,Guanlan town,Longhua District,shenzhen 518000, China
Telephone.....	:	
Fax.....	:	
Factory.....	:	**Shenzhen KVD Communication Equipment Limited**
Address.....	:	A,3rd floor, Building A2, Silicon valley Digital Industrial Park,22nd of Dafu industrial area,Aobei Community,Guanlan town,Longhua District,shenzhen 518000, China
Telephone.....	:	
Fax.....	:	

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.

1. GENERAL INFORMATION

1.1. Product Description for Equipment Under Test (EUT)

EUT	:	LTE GSM/WCDMA Smartphone
Test Model	:	S60 Lite
Power Supply	:	DC 3.8V by Li-ion Battery(5580mAh) Recharged by DC 5V/7V/3A,9V/2.7A,12V/2A Adapter
Hardware Version	:	T777_MAIN_PCB_V1.1
Software Version	:	DOOGEE-S60 Lite-Android7.0-20171227
2G	:	
Support Band	:	☒GSM 900 (EU-Band) ☒DCS 1800 (EU-Band) ☒GSM 850 (U.S.-Band) ☒PCS 1900 (U.S.-Band)
Release Version	:	R99
GPRS Class	:	Class 12
EGPRS Class	:	Class 12
Uplink	:	GSM 900: 880MHz ~ 915MHz DCS 1800: 1710MHz ~ 1785MHz
Downlink	:	GSM 900: 925MHz ~ 960MHz DCS 1800: 1805MHz ~ 1880MHz
Type Of Modulation	:	GMSK for GSM/GPRS; GMSK/8PSK for EGPRS
Antenna Description	:	PIFA Antenna, 0dBi(Max.)
Power Class	:	GSM 900: Class 4, DCS 1800: Class 1
3G	:	
Support Band	:	☐WCDMA Band II (U.S.-Band) ☐WCDMA Band V (U.S.-Band) ☒WCDMA Band I (EU-Band) ☒WCDMA Band VIII (EU-Band)
Release Version	:	R99
Uplink	:	WCDMA Band I: 1920MHz ~ 1980MHz WCDMA Band VIII: 880MHz~915MHz
Downlink	:	WCDMA Band I: 2110MHz ~ 2170MHz WCDMA Band VIII: 925MHz~960MHz
Type Of Modulation	:	WCDMA: QPSK; HSDPA/HSUPA: QPSK
Antenna Description	:	PIFA Antenna, 0dBi(Max.)
Power Class	:	Class 3

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LTE	:	
Support Band	:	☒E-UTRA Band 1(EU-Band) ☒E-UTRA Band 3(EU-Band) ☒E-UTRA Band 7(EU-Band) ☒E-UTRA Band 8(EU-Band) ☒E-UTRA Band 20(EU-Band)
LTE Release Version	:	R9
Uplink	:	E-UTRA Band 1: 1920MHz ~ 1980MHz E-UTRA Band 3: 1710MHz~1785MHz E-UTRA Band 7: 2500MHz ~ 2570MHz E-UTRA Band 8: 880MHz ~ 915MHz E-UTRA Band 20: 832MHz ~ 862MHz
Downlink	:	E-UTRA Band 1: 2110MHz ~ 2170MHz E-UTRA Band 3: 1805MHz~1880MHz E-UTRA Band 7: 2620MHz ~ 2690MHz E-UTRA Band 8: 925MHz ~ 960MHz E-UTRA Band 20: 791MHz ~ 821MHz
Type Of Modulation	:	QPSK/16-QAM
Antenna Description	:	PIFA Antenna; 0dBi(Max.) for Band 1,3,7,8,20
Power Class	:	Class 3
Bluetooth	:	
Frequency Range	:	2.402-2.480GHz
Channel Number	:	79 channels for Bluetooth V4.0 (DSS) 40 channels for Bluetooth V4.0 (DTS)
Channel Spacing	:	1MHz for Bluetooth V4.0 (DSS) 2MHz for Bluetooth V4.0 (DTS)
Modulation Type	:	GFSK, π/4-DQPSK, 8-DPSK for Bluetooth V4.0 (DSS) GFSK for Bluetooth V4.0 (DTS)
Bluetooth Version	:	V4.0
Antenna Description	:	PIFA Antenna, -1dBi(Max.)
WIFI(2.4G Band)	:	
Frequency Range	:	2412-2472MHz
Channel Spacing	:	5MHz
Channel Number	:	13 Channel for 20MHz bandwidth(2412~2472MHz) 9 channels for 40MHz bandwidth(2422~2462MHz)
Modulation Type	:	802.11b: DSSS; 802.11g/n: OFDM
Antenna Description	:	PIFA Antenna, -1dBi(Max.)

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GPS Receiver	:
Receive Frequency	: 1575.42MHz
Channel Number	: 1
Antenna Description	: PIFA Antenna
FM Receiver	:
Frequency Range	: 87.5MHz ~ 108MHz
Modulation Type	: FM
Antenna Description	: External Antenna(earphone)

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1.2. Objective

According to its specifications, the EUT must comply with the requirements of the following standards: EN 62479: 2010 –Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

1.3. Test Methodology

All measurements contained in this report were conducted with EN 62479: 2010.

1.4. Description of Test Facility

FCC Registration Number. is 254912.
Industry Canada Registration Number. is 9642A-1.
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

1.5. Support equipment List

Manufacturer	Description	Model	Serial Number	Certificate
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1.6. External I/O

I/O Port Description	Quantity	Cable
USB Port	1	1 m, unshielded
Earphone	1	N/A

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1.7. Equipment

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

1.8. Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	5 %
RF output power, conducted	1,5 dB
Power Spectral Density, conducted	3 dB
Unwanted Emissions, conducted	3 dB
All emissions, radiated	6 dB
Temperature	1 °C
Humidity	5 %
DC and low frequency voltages	3 %
Time	5 %
Duty Cycle	5 %

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2. HUMAN EXPOSURE TO THE ELECTROMAGNETIC FIELDS

2.1 Test Methodology

2.1.1.General description of applied standards

According to its specifications, the EUT must comply with the requirements of the following standards: EN 62479- Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

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2.1.2.Description of test modes

The EUT has been tested under its typical operating condition. Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

2.2 Test limit

If the average power emitted by apparatus operating in the frequency range 10 MHz – 300GHz is less than or equal to 20 mW and the transmitting peak power is less than 20 W then the apparatus is deemed to comply with the basic restrictions without testing.

2.3 Test Results

Since Max. output power for Bluetooth is 1.55mW (1.91dBm According to radio test report LCS171221034AEC & LCS171221034AED) less than 20mW specified in EN 62479. This unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation (1999/519/EC).

The unit complies with the EN 62479 for RF exposure requirement.

No non-compliance noted.

----------THE END OF REPORT----------

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