

Notified Body

Statement of Opinion

The TCF listed below has been evaluated to the requirements of the
European R&TTE Directive 1999/5/EC

Applicant name: Xiaomi Communications Co., Ltd.
EUT: Mobile Phone
Model: 2016102
Frequency bands: 880 MHz - 915 MHz
832 MHz - 862 MHz
1710 MHz - 1785 MHz
1920 MHz - 1980 MHz
2500 MHz - 2570 MHz
2570 MHz - 2620 MHz
2300 MHz - 2400 MHz
2402 MHz - 2480 MHz
2412 MHz - 2472 MHz
5180 MHz - 5240 MHz
5260 MHz - 5320 MHz
5500 MHz - 5700 MHz
5725 MHz - 5850 MHz
TCF NUMBER: R00000022
WLL Project Number: R000267

WLL is designated as a Notified Body under the
U.S.-EU Mutual Recognition Agreement
Washington Laboratories, Ltd
Notified Body Number 1317
7560 Lindbergh Dr
Gaithersburg, MD 20879

In the opinion of WLL the examination of the technical construction file presented demonstrates the requirements of Directive 1999/5/EC have been met. The product listed above and in Annex 1 of this document, is in conformity with Annex IV and the essential requirements of Articles 3.1a, 3.1b and 3.2 of Directive 1999/5/EC. This statement of opinion relates only to the documents provided to WLL. A list of documentation forming the basis for the examination is provided in Annex 2 of this document.



Notified Body: Michael Violette, P.E. iNARTE-Certified EMC Engineer

8 December 2016
DATE

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This Opinion is documented in the report for the above-reference WLL project number which is an integral part of this document, and includes all observations, comments and recommendations appropriate for this Opinion.

**Annex 1 of NB Statement of Opinion
Number: R000267**

The device under evaluation was a Mobile Phone.

It used GSM technology with GPRS and EGPRS/EDGE in the E-GSM 900 MHz and DCS 1800 MHz bands.

It used UMTS technology in the 900 MHz band VIII and 2100 MHz band I.

It used LTE technology in the LTE FDD Band 1/3/7/8/20 and LTE TDD band 38/40.

Details of operation:

<i>Description of service:</i>	E-GSM 900 MHz
<i>Transmit Frequency:</i>	880 MHz - 915 MHz
<i>Receive Frequency:</i>	925 MHz - 960 MHz
<i>Modulation type:</i>	GMSK, 8-PSK
<i>Power Class:</i>	Class 4, Class E2 (EGPRS/8-PSK)
<i>Transmit power (GSM/GMSK):</i>	32.39 dBm, conducted
<i>Transmit power (GPRS/GMSK):</i>	32.38 dBm, conducted
<i>Transmit power (EGPRS/8-PSK):</i>	25.97 dBm, conducted

<i>Description of service:</i>	DCS 1800MHz
<i>Transmit Frequency:</i>	1710 MHz - 1785 MHz
<i>Receive Frequency:</i>	1805 MHz - 1880 MHz
<i>Modulation type:</i>	GMSK, 8-PSK
<i>Power Class:</i>	Class 1, Class E2 (EGPRS/8-PSK)
<i>Transmit power (GSM/GMSK):</i>	30.16 dBm, conducted
<i>Transmit power (GPRS/GMSK):</i>	30.13 dBm, conducted
<i>Transmit power (EGPRS/8-PSK):</i>	25.48 dBm, conducted

<i>Description of service:</i>	UMTS 900 MHz Band VIII
<i>Transmit Frequency:</i>	880 MHz - 915 MHz
<i>Receive Frequency:</i>	925 MHz - 960 MHz
<i>Modulation type:</i>	QPSK, 16QAM (DL)
<i>Power Class:</i>	Class 3
<i>Transmit power (WCDMA):</i>	22.50 dBm, conducted
<i>Transmit power (HSDPA):</i>	20.93 dBm, conducted
<i>Transmit power (HSUPA):</i>	21.01 dBm, conducted
<i>Transmit power (DC-HSDPA):</i>	21.74 dBm, conducted
<i>Transmit power (HSPA⁺):</i>	21.51 dBm, conducted

<i>Description of service:</i>	UMTS 2100 MHz Band I
<i>Transmit Frequency:</i>	1920 MHz - 1980 MHz
<i>Receive Frequency:</i>	2110 MHz - 2170 MHz
<i>Modulation type:</i>	QPSK, 16QAM (DL)
<i>Power Class:</i>	Class 3
<i>Transmit power (WCDMA):</i>	23.42 dBm, conducted

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Transmit power (HSDPA): 22.44 dBm, conducted
Transmit power (HSUPA): 21.92 dBm, conducted
Transmit power (DC-HSDPA): 22.85 dBm, conducted
Transmit power (HSPA⁺): 22.42 dBm, conducted

Description of service: E-UTRA(LTE) Band 1
Transmit Frequency: 1920 MHz - 1980 MHz
Receive Frequency: 2110 MHz - 2170 MHz
Modulation type: QPSK, 16QAM, 64QAM(DL)
Power Class: Class 3
Transmit power : 23.37 dBm, conducted

Description of service: E-UTRA(LTE) Band 3
Transmit Frequency: 1710 MHz - 1785 MHz
Receive Frequency: 1805 MHz - 1880 MHz
Modulation type: QPSK, 16QAM, 64QAM(DL)
Power Class: Class 3
Transmit power : 23.35 dBm, conducted

Description of service: E-UTRA(LTE) Band 7
Transmit Frequency: 2500 MHz - 2570 MHz
Receive Frequency: 2620 MHz - 2690 MHz
Modulation type: QPSK, 16QAM, 64QAM(DL)
Power Class: Class 3
Transmit power : 23.15 dBm, conducted

Description of service: E-UTRA(LTE) Band 8
Transmit Frequency: 880 MHz - 915 MHz
Receive Frequency: 925 MHz - 960 MHz
Modulation type: QPSK, 16QAM, 64QAM(DL)
Power Class: Class 3
Transmit power : 22.29 dBm, conducted

Description of service: E-UTRA(LTE) Band 20
Transmit Frequency: 832 MHz - 862 MHz
Receive Frequency: 791 MHz - 821 MHz
Modulation type: QPSK, 16QAM, 64QAM(DL)
Power Class: Class 3
Transmit power : 22.77 dBm, conducted

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Description of service: E-UTRA(LTE) Band 38
Transmit Frequency: 2570 MHz - 2620 MHz
Receive Frequency: 2570 MHz - 2620 MHz
Modulation type: QPSK, 16QAM, 64QAM(DL)
Power Class: Class 3
Transmit power : 23.52 dBm, conducted

Description of service: E-UTRA(LTE) Band 40
Transmit Frequency: 2300 MHz - 2400 MHz
Receive Frequency: 2300 MHz - 2400 MHz
Modulation type: QPSK, 16QAM, 64QAM(DL)
Power Class: Class 3
Transmit power: 22.72 dBm, conducted

Description of service: Bluetooth
Transmit Frequency: 2402 - 2480 MHz
Receive Frequency: 2402 - 2480 MHz
Modulation type: EDR: GFSK, $\pi/4$ -DQPSK, 8DPSK
LE 4.0: GFSK
Power Class: N/A
Transmit power: EDR: 7.23 dBm EIRP
LE 4.0: 2.63 dBm EIRP

Description of service: WLAN
Transmit Frequency: 2.4 GHz:
802.11b, 802.11g, 802.11n(HT20): 2412 ~ 2472 MHz
802.11n(HT40): 2422 ~ 2462MHz
5.0 GHz, 802.11a
5180 MHz - 5240 MHz
5260 MHz - 5320 MHz
5500 MHz - 5700 MHz
5725 MHz - 5850 MHz
Receive Frequency: 2.4 GHz:
802.11b, 802.11g, 802.11n(20MHz): 2412 - 2472 MHz
802.11n(HT40): 2422 ~ 2462 MHz
5.0 GHz, 802.11a
5180 MHz - 5240 MHz
5260 MHz - 5320 MHz
5500 MHz - 5700 MHz
5725 MHz - 5850 MHz
Modulation type: CCK, DQPSK, DBPSK for DSSS
802.11a : OFDM
(BPSK/QPSK/16QAM/64QM)

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Power Class:

N/A

Transmit power:

2.4 GHz: 16.48dBm EIRP

5 GHz

5180 MHz - 5240 MHz:13.84 dBm EIRP

5260 MHz - 5320 MHz:13.43 dBm EIRP

5500 MHz - 5700 MHz:13.90 dBm EIRP

5725 MHz - 5850 MHz:13.28 dBm EIRP



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**Annex 2 of NB Statement of Opinion
Number: R000267**

1	Test Report:	Report number:	Dated:
	EMC	1610280462EMC-1	2016-11-21
	Radio (GSM)	SET2016-20945	2016-11-30
	Radio (UMTS)	SET2016-20946	2016-11-30
	Radio (LTE)	SET2016-20947	2016-11-30
	Radio (2.4GHz WLAN)	1610280462RFC-1	2016-11-21
	Radio (2.4GHz Bluetooth EDR)	1610280462RFC-2	2016-11-21
	Radio (2.4GHz Bluetooth LE)	1610280462RFC-3	2016-11-21
	Radio (5GHz WLAN Band 1, 2, 3)	1610280462RFC-4	2016-11-21
	Radio (5GHz WLAN DFS)	1610280462RFC-5	2016-11-21
	Radio (5GHz WLAN Band 4)	1610280462RFC-6	2016-11-21
	Radio (GPS)	1610280462RFC-7	2016-11-21
	RF Safety	SET2016-20944	2016-11-25
	Electrical Safety	1610280462SAF-1	2016-11-30
2	Technical Documentation provided:		
	Block Diagram	Schematic/Circuit Diagram	External Photographs
	Internal Photographs	Label Drawing	Parts List / Bill of Material
	PCB layout	Test Reports	User Manual
	Operation Description	Declaration of Conformity	
3	Conformity documentation:		Signed and Dated:
	Declaration of Conformity		2016-11-24
4	Standards used to show conformity to 1999/5/EC:		
	EMC	ETSI EN 301 489-1 v1.9.2 ETSI EN 301 489-3 v1.6.1 ETSI EN 301 489-7 v1.3.1 ETSI EN 301 489-17 v2.2.1 ETSI EN 301 489-24 v1.5.1	
	Radio Spectrum	ETSI EN 301 511 v12.1.1 ETSI EN 301 908-2 v7.1.1 ETSI EN 301 908-13 v7.1.1 ETSI EN 301 908-1 v7.1.1 ETSI EN 300 440-2 v1.4.1 ETSI EN 300 328 v1.9.1 ETSI EN 301 893 v1.8.1	
	RF Safety:	EN 50360 2001+A1: 2012 EN 50566: 2013/AC: 2014 EN 62311: 2008 EN 62479: 2010	
	Electrical Safety:	EN 60950-1: 2006+A11: 2009+A1: 2010+A12: 2011+A2: 2013	
	Other Relevant Essential Requirements		
	Art 6.3 Information to user provided:	Compliance	
	Art 6.4 Alert Symbol required:	Compliance	
	Art 12 CE Mark correct on device:	Compliance	

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- 5 Further information:
This is a Class 2 device.
Operation of the GSM, UMTS and LTE is permitted under the control of a licensed network.
The appropriate conformity information; CE Mark, Alert Symbol and Notified Body number (1317) must be clearly displayed on the equipment label, the user manual and the packaging.
A statement of compliance with Directive 1999/5/EC or a copy of the Declaration of Conformity must be provided with each device.
This review of the Technical Construction File (TCF) is limited to the documents as provided by the applicant, the applicant is obliged to verify that any document in the Technical Construction File (TCF) which has been not provided and thus not reviewed by the Notified Body meets the (administrative) requirements of the R&TTE Directive 1999/5/EC before the CE mark, indicating conformity with the essential requirements of the R&TTE Directive 1999/5/EC, may be affixed to the device.
HW: P3 SW: MIUI 8
- 6 Contact information:
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