

General Information on The Draft Amendment of The Third Generation Mobile Telecommunication Terminal Equipment Technical Specifications

The third-generation mobile communications (3G) service will be terminated in December 2018. Due to the requirement for CSFB, 3G network will still exist in the mobile broadband (4G) network as heterogeneous networks. Therefore, add the frequency of mobile broadband services into this regulation as the basis for the third-generation mobile communication terminal equipment certification. In addition, the referenced standard CNS 15285 "General requirements and test methods for chargers used by mobile terminals and other hand-held ICT devices" was revised on 14 July 2017. In accordance with relevant international technical standards, and the "Technical Specifications for Broadband Terminal Equipment of Mobile Broadband Business", the NCC proposes to revise the "Third Generation Mobile Telecommunication Terminal Equipment Technical Specifications". Also, there is no CDMA2000 service in Taiwan currently, therefore relevant test items are deleted. Amendment points are described as below:

- 1.Foundation and Scope (revision to Point 1)
- 2.Test Items and documents specified (revision to Point 3)
- 3.Date of implementation ◦ (deletion to Point 5)

Comparison Table of The Draft Amendments of The Third Generation Mobile Telecommunication Terminal Equipment Technical Specifications

Amended Provisions	Current Provisions	Descriptions
<p>1.Foundation and Scope</p> <p>Foundation The specification is issued pursuant to paragraph 1 of Article 42 of the Telecommunications Acts.</p> <p>Scope <u>This specifications are applied to third Generation mobile telecommunication terminal equipment. The relevant frequency bands are as follows:</u> <u>WCDMA FDD : Band 1 (1920 MHz~1980 MHz/2110 MHz~2170 MHz) , Band 3 (1710 MHz~1785 MHz/1805 MHz~1880 MHz), Band 7 (2500 MHz~2570 MHz/2620 MHz~2690 MHz) , Band 8 (885 MHz~915 MHz/930 MHz~960 MHz) .</u> <u>WCDMA TDD : (1915 MHz~1920 MHz/2010 MHz~2025 MHz) and (2570 MHz/2620 MHz) .</u></p> <p>Contents and Reference To comply with the international standard, the test items, conformance requirement, method of tests and relevant requirements of the Third</p>	<p>1.Foundation and Scope</p> <p>Foundation The specification is issued pursuant to paragraph 1 of Article 42 of the Telecommunications Acts.</p> <p>Scope This specification is only applied to the Third Generation mobile telecommunication terminal equipment which has been specified in WCDMA FDD (1920 MHz - 1980 MHz and 2110 MHz - 2170 MHz) , WCDMA TDD(1915 MHz - 1920 MHz and 2010 MHz - 2025 MHz) and CDMA2000 FDD(824 MHz - 849 MHz and 869 MHz- 894 MHz, 1920 MHz - 1980 MHz and RX from 2110 MHz to 2170 MHz) technical standards of IMT-2000 .</p> <p>Contents and Reference To comply with the international standard, the test items, conformance requirement, method of tests and relevant requirements of the Third Generation mobile telecommunication terminal equipment will be in accordance with the</p>	<p>The applicable scope of the specifications is amended.</p>

<p>Generation mobile telecommunication terminal equipment will be in accordance with the latest requirements of the 3GPP TS25.101, TS25.102, TS34.121, TS34.122, TS34.124 and 3GPP2 C.S0011-A (TIA/EIA-98-D) when this specification is not applicable.</p>	<p>latest requirements of the 3GPP TS25.101, TS25.102, TS34.121, TS34.122, TS34.124 and 3GPP2 C.S0011-A (TIA/EIA-98-D) when this specification is not applicable.</p>																																																					
<p>2. Abbreviations</p> <table border="1" data-bbox="185 512 893 1010"> <tr><td>ACLR</td><td>Adjacent Channel Leakage power Ratio</td></tr> <tr><td>CDMA</td><td>Code Division Multiple Access</td></tr> <tr><td>ERP</td><td>Effective Radiated Power</td></tr> <tr><td>EIRP</td><td>Effective Isotropic Radiated Power</td></tr> <tr><td>FCC</td><td>Federal Communications Commission</td></tr> <tr><td>FDD</td><td>Frequency Division Duplex</td></tr> <tr><td>ITU</td><td>International Telecommunication Union</td></tr> <tr><td>MS,UE</td><td>Mobile Station,User Equipment</td></tr> <tr><td>SAR</td><td>Specific Absorption Rate</td></tr> <tr><td>TDMA</td><td>Time Division Multiple Access</td></tr> <tr><td>TDD</td><td>Time Division Duplex</td></tr> <tr><td>TPC</td><td>Transmit Power Control</td></tr> <tr><td>WCDMA</td><td>Wideband Code Division Multiple Access</td></tr> </table>	ACLR	Adjacent Channel Leakage power Ratio	CDMA	Code Division Multiple Access	ERP	Effective Radiated Power	EIRP	Effective Isotropic Radiated Power	FCC	Federal Communications Commission	FDD	Frequency Division Duplex	ITU	International Telecommunication Union	MS,UE	Mobile Station,User Equipment	SAR	Specific Absorption Rate	TDMA	Time Division Multiple Access	TDD	Time Division Duplex	TPC	Transmit Power Control	WCDMA	Wideband Code Division Multiple Access	<p>2. Abbreviations</p> <table border="1" data-bbox="1072 512 1780 1010"> <tr><td>ACLR</td><td>Adjacent Channel Leakage power Ratio</td></tr> <tr><td>CDMA</td><td>Code Division Multiple Access</td></tr> <tr><td>ERP</td><td>Effective Radiated Power</td></tr> <tr><td>EIRP</td><td>Effective Isotropic Radiated Power</td></tr> <tr><td>FCC</td><td>Federal Communications Commission</td></tr> <tr><td>FDD</td><td>Frequency Division Duplex</td></tr> <tr><td>ITU</td><td>International Telecommunication Union</td></tr> <tr><td>MS,UE</td><td>Mobile Station,User Equipment</td></tr> <tr><td>SAR</td><td>Specific Absorption Rate</td></tr> <tr><td>TDMA</td><td>Time Division Multiple Access</td></tr> <tr><td>TDD</td><td>Time Division Duplex</td></tr> <tr><td>TPC</td><td>Transmit Power Control</td></tr> <tr><td>WCDMA</td><td>Wideband Code Division Multiple Access</td></tr> </table>	ACLR	Adjacent Channel Leakage power Ratio	CDMA	Code Division Multiple Access	ERP	Effective Radiated Power	EIRP	Effective Isotropic Radiated Power	FCC	Federal Communications Commission	FDD	Frequency Division Duplex	ITU	International Telecommunication Union	MS,UE	Mobile Station,User Equipment	SAR	Specific Absorption Rate	TDMA	Time Division Multiple Access	TDD	Time Division Duplex	TPC	Transmit Power Control	WCDMA	Wideband Code Division Multiple Access	<p>This point is not revised.</p>
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or certificate of approval in compliance with the relevant regulations for test items 9 and 10.

3. Test items 9 to 11 shall be tested with power adapter and charger cable set; for power adapters and charger cable sets that already received certificate of approval, it is a must to submit certificate of approval and testing report in order to be inspection free of test item 11.

3.1.2 Specified Documents

Item	Content	Conformance requirement	Note
1	SAR limits (hand-held only)	Shall comply with the SAR limit for partial body (any part of the head and surrounding area), 2.0 W/Kg(10g)	The applicant should provide with test report and test data.
2	RF Exposure Warning Label	Warning: "For Reducing RF Influence, Use Properly" Method of Labeling: Label on UE, carton and user manual.	The applicant should provide with guarantee. when the user manual is English version only.
3	SAR Label	SAR label content: " SAR limit 2.0 W/Kg; testing value: __W/Kg" Labeling method: Label on UE, carton and user manual.	The applicant should provide with guarantee.
4	A copy of certificate of approval	A copy of certificate of approval (e.g., issued by certification body which is accredited in compliance with the requirements of 3GPP)	Note the code and certification scope of 3GPP.

		mobile phone does not complying with Provision (A), it should adopt the specific connecting plug in connection cord set for charge or the adapter between micro-B plug and the socket on mobile phone. (3) Complying with the following provisions of (A) or submitting the test report provided in (B) : (A)The insulating material of connecting interface: class V-2 material at least (B)The test report complying with the technical specifications of USB-IF(Universal Serial Bus Implementers Forum), it should include the item in (A)			
12	Connecting Interface on Charger	(1)Socket on Charger and Plug to socket on Charger in connection cord set for charge : Complying with STD-A in Annex A of CNS15285			

<u>Channel spacing</u>	<u>5 MHz</u>
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Table 1-2 :

<u>Maximum Output Power</u>	<u>Band 1</u>	<u>Band 3</u>	<u>Band 7</u>	<u>Band 8</u>
<u>Power class 1</u>	<u>33 dBm +1/-3 dB</u>	-	-	-
<u>Power class 2</u>	<u>27 dBm +1/-3 dB</u>	-	-	-
<u>Power class 3</u>	<u>24 dBm +1/-3 dB</u>			
<u>Power class 4</u>	<u>21 dBm +2/-2 dB</u>			

Table 1-3 :

<u>Separation between the carrier frequency and the center of the measuring filter</u> <u>Δf (MHz)</u>	<u>Minimum Requirement</u>		<u>Measurement Bandwidth</u>
	<u>Relative requirement (dBc)</u>	<u>Absolute requirement (dBm)</u>	
2.5 - 3.5	$\left\{-35-15 \cdot \left(\frac{\Delta f}{MHz} - 2.5\right)\right\} dBc$	<u>-71.1</u>	30 kHz
3.5 - 7.5	$\left\{-35-1 \cdot \left(\frac{\Delta f}{MHz} - 3.5\right)\right\} dBc$	<u>-55.8</u>	1 MHz
7.5 - 8.5	$\left\{-39-10 \cdot \left(\frac{\Delta f}{MHz} - 7.5\right)\right\} dBc$	<u>-55.8</u>	1 MHz
8.5 - 12.5	-49 dBc	<u>-55.8</u>	1 MHz

Note: Minimum requirement is the larger one between relative requirement and absolute requirement.

Table 1-4 :

		V-2 material at least (B) The test report complying with the technical specifications of USB-IF, it should include the items in (A)			
13	Connection Cord for Charge	(1) Contact 1 is V _{BUS} and Contact 4 is GND in the connecting interface STD-A (2) Complying with the following provisions of (A) or submitting the test report provided in (B): (A) Electrical Requirement: Voltage Drop: complying with A4.3.3.2 of CNS15285 Cable Flex: complying with A4.3.6 of CNS15285 4-Axis Continuity: complying with A4.3.7 of CNS15285 Maximum Resistance of Wire: not exceed 0.232Ω/m Fireproofing			

Frequency Bandwidth	Measurement Bandwidth	Minimum requirement
$9 \text{ kHz} \leq f < 150 \text{ kHz}$	<u>1 kHz</u>	<u>-36 dBm</u>
$150 \text{ kHz} \leq f < 30 \text{ MHz}$	<u>10 kHz</u>	<u>-36 dBm</u>
$30 \text{ MHz} \leq f < 1000 \text{ MHz}$	<u>100 kHz</u>	<u>-36 dBm</u>
$1\text{GHz} \leq f < 12.75 \text{ GHz}$	<u>1 MHz</u>	<u>-30 dBm</u>

Table 1-5 : (Band 1)

Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
$462.5 \text{ MHz} \leq f \leq 467.5 \text{ MHz}$	<u>1 MHz</u>	<u>-50 dBm</u>
$703 \text{ MHz} \leq f \leq 803 \text{ MHz}$	<u>1 MHz</u>	<u>-50 dBm</u>
$791 \text{ MHz} \leq f \leq 821 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$852 \text{ MHz} \leq f \leq 859 \text{ MHz}$	<u>1 MHz</u>	<u>-50 dBm</u>
$859 \text{ MHz} \leq f \leq 894 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$921 \text{ MHz} \leq f < 925 \text{ MHz}$	<u>100 kHz</u>	<u>-60 dBm</u>
$925 \text{ MHz} \leq f \leq 935 \text{ MHz}$	<u>100 kHz</u>	<u>-67 dBm</u>
	<u>3.84 MHz</u>	<u>-60 dBm</u>
$935 \text{ MHz} < f \leq 960 \text{ MHz}$	<u>100 kHz</u>	<u>-79 dBm</u>
	<u>3.84 MHz</u>	<u>-60 dBm</u>
$1447 \text{ MHz} \leq f \leq 1467 \text{ MHz}$	<u>1 MHz</u>	<u>-50 dBm</u>
$1452 \text{ MHz} \leq f \leq 1510.9 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$1805 \text{ MHz} \leq f \leq 1880 \text{ MHz}$	<u>100 kHz</u>	<u>-71 dBm</u>
	<u>3.84 MHz</u>	<u>-60 dBm</u>
$1839.9 \text{ MHz} \leq f \leq 1879.9 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$1884.5 \text{ MHz} < f < 1915.7 \text{ MHz}$	<u>300 kHz</u>	<u>-41 dBm</u>
$2010 \text{ MHz} < f < 2025 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$2110 \text{ MHz} \leq f \leq 2170 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$2170 \text{ MHz} \leq f \leq 2200 \text{ MHz}$	<u>1 MHz</u>	<u>-50 dBm</u>
$2300 \text{ MHz} \leq f \leq 2400 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$2496 \text{ MHz} \leq f \leq 2570 \text{ MHz}$	<u>1 MHz</u>	<u>-50 dBm</u>
$2570 \text{ MHz} \leq f \leq 2690 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$3510 \text{ MHz} \leq f \leq 3590 \text{ MHz}$	<u>3.84 MHz</u>	<u>-60 dBm</u>
$3400 \text{ MHz} \leq f \leq 3800 \text{ MHz}$	<u>1 MHz</u>	<u>-50 dBm</u>

		Class of Connection Cord for Charge: class VW-1 at least (B) The test report complying with the technical specifications of USB-IF, it should include the items in (A)			
14	Electrical Requirements for Charger	(1)Input Electricity: complying with 4.3 and 4.4 of CNS15285 (2)Output Voltage: 5 Vdc, and allowable error is $\pm 5\%$. Check if it could comply with the above requirement by the experiment provided in 5.4 of CNS15285. (3)Output Electricity: complying with the provisions from 4.6 to 4.9 of CNS15285. (4)Inverse Current: complying with 4.10 of CNS15285 (5)Consumption Power without Load: complying with 4.11 of CNS15285 (6)Average Efficiency: complying with 4.12 of CNS15285			
15	The Public Warning and	Adhere to the provisions of Rule 4			

Table 1-6 : (Band 3)

Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
$462.5 \text{ MHz} \leq f \leq 467.5 \text{ MHz}$	1 MHz	-50 dBm
$703 \text{ MHz} \leq f \leq 803 \text{ MHz}$	1 MHz	-50 dBm
$791 \text{ MHz} \leq f \leq 821 \text{ MHz}$	3.84 MHz	-60 dBm
$852 \text{ MHz} \leq f \leq 859 \text{ MHz}$	1 MHz	-50 dBm
$859 \text{ MHz} \leq f \leq 894 \text{ MHz}$	3.84 MHz	-60 dBm (註)
$921 \text{ MHz} \leq f < 925 \text{ MHz}$	100 kHz	-60 dBm
$925 \text{ MHz} \leq f \leq 935 \text{ MHz}$	100 kHz	-67 dBm
	3.84 MHz	-60 dBm
$935 \text{ MHz} < f \leq 960 \text{ MHz}$	100 kHz	-79 dBm
	3.84 MHz	-60 dBm
$1447 \text{ MHz} \leq f \leq 1467 \text{ MHz}$	1 MHz	-50 dBm
$1452 \text{ MHz} \leq f \leq 1496 \text{ MHz}$	3.84 MHz	-60 dBm
$1475.9 \text{ MHz} \leq f \leq 1510.9 \text{ MHz}$	3.84 MHz	-60 dBm (Note)
$1805 \text{ MHz} \leq f \leq 1880 \text{ MHz}$	3.84 MHz	-60 dBm
$1880 \text{ MHz} \leq f \leq 1920 \text{ MHz}$	3.84 MHz	-60 dBm
$1884.5 \text{ MHz} \leq f \leq 1915.7 \text{ MHz}$	300 kHz	-41 dBm (Note)
$2010 \text{ MHz} < f < 2025 \text{ MHz}$	3.84 MHz	-60 dBm
$2110 \text{ MHz} \leq f \leq 2170 \text{ MHz}$	3.84 MHz	-60 dBm
$2170 \text{ MHz} \leq f \leq 2200 \text{ MHz}$	1 MHz	-50 dBm
$2300 \text{ MHz} \leq f \leq 2400 \text{ MHz}$	3.84 MHz	-60 dBm
$2496 \text{ MHz} \leq f \leq 2570 \text{ MHz}$	1 MHz	-50 dBm
$2570 \text{ MHz} \leq f \leq 2690 \text{ MHz}$	3.84 MHz	-60 dBm
$3510 \text{ MHz} \leq f \leq 3590 \text{ MHz}$	3.84 MHz	-60 dBm
$3400 \text{ MHz} \leq f \leq 3800 \text{ MHz}$	1 MHz	-50 dBm

Note: Only available for transmissions in 1744.9 MHz to 1784.9 MHz.

Disaster Prevention Messages Reception Function

Note : 1. For test items 2, 3, 4, 5, 6, 7 and 8, the UE should be operated at low frequency, mid frequency and high frequency meantime and refer to the latest method of measurement of 3GPP TS34.121 and TS34.124.

2. The applicant should submit the test report or certificate of approval in compliance with the relevant regulations for test items 9 and 10.

3. The Handset should be submitted with both the charger and charging connection cable for Type Approval and should comply with Items 9 to 14. A charger and charging connection cable that have been type-approved with the Handset shall not be inspected with Items 12 to 14 while submitting Certificate and Test report of the Handset. A mobile phone that is not a Handset (under normal operating mode, the distance from the source of transmission is more than 20cm from the body) shall not be inspected with Items 11 to 14.

3.1.2 Specified Documents

Item	Content	Conformance requirement	Note
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Table 1-7 : (Band 7)

Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
462.5 MHz ≤ f ≤ 467.5 MHz	1 MHz	-50 dBm
717 MHz ≤ f ≤ 728 MHz	1 MHz	-50 dBm
729 MHz ≤ f ≤ 746 MHz	3.84 MHz	-60 dBm
738 MHz ≤ f ≤ 758 MHz	1 MHz	-50 dBm
746 MHz ≤ f ≤ 756 MHz	3.84 MHz	-60 dBm
758 MHz ≤ f ≤ 768 MHz	3.84 MHz	-60 dBm
768 MHz ≤ f ≤ 791 MHz	1 MHz	-50 dBm
791 MHz ≤ f ≤ 821 MHz	3.84 MHz	-60 dBm
852 MHz ≤ f ≤ 859 MHz	1 MHz	-50 dBm
859 MHz ≤ f ≤ 894 MHz	3.84 MHz	-60 dBm
921 MHz ≤ f < 925 MHz	100 kHz	-60 dBm
925 MHz ≤ f ≤ 935 MHz	100 kHz	-67 dBm
	3.84 MHz	-60 dBm
935 MHz < f ≤ 960 MHz	100 kHz	-79 dBm
	3.84 MHz	-60 dBm
1452 MHz < f ≤ 1496 MHz	3.84 MHz	-60 dBm
1805 MHz ≤ f ≤ 1880 MHz	100 kHz	-71 dBm
	3.84 MHz	-60 dBm
1990 MHz ≤ f ≤ 1920 MHz	3.84 MHz	-60 dBm
1930 MHz ≤ f ≤ 1995 MHz	3.84 MHz	-60 dBm
2010 MHz < f < 2025 MHz	3.84 MHz	-60 dBm
2110 MHz ≤ f ≤ 2170 MHz	3.84 MHz	-60 dBm
2170 MHz ≤ f ≤ 2200 MHz	1 MHz	-50 dBm
2300 MHz < f < 2400 MHz	3.84 MHz	-60 dBm
2350 MHz ≤ f ≤ 2360 MHz	1 MHz	-50 dBm
2620 MHz ≤ f ≤ 2690 MHz	3.84 MHz	-60 dBm
2595 MHz ≤ f ≤ 2620 MHz	1 MHz	-40 dBm
3510 MHz ≤ f ≤ 3590 MHz	3.84 MHz	-60 dBm
3400 MHz ≤ f ≤ 3800 MHz	1 MHz	-50 dBm

Table 1-8 : (Band 8)

1	SAR limits (hand-held only)	Shall comply with the SAR limit for partial body (any part of the head and surrounding area), 2.0 W/Kg(10g)	The applicant should provide with test report and test data.
2	RF Exposure Warning Label	Warning: "For Reducing RF Influence, Use Properly" Method of Labeling: Label on UE, carton and user manual.	The applicant should provide with guarantee. when the user manual is English version only.
3	SAR Label	SAR label content: " SAR limit 2.0 W/Kg; testing value: __W/Kg" Labeling method: Label on UE, carton and user manual.	The applicant should provide with guarantee.
4	A copy of certificate of approval	A copy of certificate of approval (e.g., issued by certification body which is accredited in compliance with the requirements of 3GPP)	Note the code and certification scope of 3GPP.
5	IMEI number and unique guarantee	Test equipment may read and record the IMEI number of the unique guarantee proposed by the applicant.	

Note : 1. The documents specified by NCC mentioned above are regulated in compliance with Article 10.1.7 and Article 12.1.7 of Compliance Approval Regulations of Telecommunications Terminal Equipment.
2. Procedures of SAR are in accordance with CNS 14958-1: Human exposure to radio frequency fields from hand-held and body-mounted

Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
$462.5 \text{ MHz} \leq f \leq 467.5 \text{ MHz}$	1 MHz	-50 dBm
$703 \text{ MHz} \leq f \leq 803 \text{ MHz}$	1 MHz	-50 dBm
$791 \text{ MHz} \leq f \leq 821 \text{ MHz}$	3.84 MHz	-60 dBm
$860 \text{ MHz} \leq f \leq 890 \text{ MHz}$	1 MHz	-37 dBm (Note)
$925 \text{ MHz} \leq f \leq 935 \text{ MHz}$	100 kHz 3.84 MHz	-67 dBm -60 dBm
$935 \text{ MHz} < f \leq 960 \text{ MHz}$	100 kHz 3.84 MHz	-79 dBm -60 dBm
$1447 \text{ MHz} \leq f \leq 1467 \text{ MHz}$	1 MHz	-50 dBm
$1452 \text{ MHz} \leq f \leq 1496 \text{ MHz}$	3.84 MHz	-60 dBm
$1475.9 \text{ MHz} \leq f \leq 1510.9 \text{ MHz}$	3.84 MHz	-60 dBm (Note)
$1805 \text{ MHz} < f \leq 1830 \text{ MHz}$	100 kHz 3.84 MHz	-71 dBm -60 dBm
$1830 \text{ MHz} < f \leq 1880 \text{ MHz}$	100 kHz 3.84 MHz	-71 dBm -60 dBm
$1880 \text{ MHz} \leq f \leq 1920 \text{ MHz}$	3.84 MHz	-60 dBm
$1884.5 \text{ MHz} \leq f \leq 1915.7 \text{ MHz}$	300 kHz	-41 dBm (Note)
$2010 \text{ MHz} \leq f \leq 2025 \text{ MHz}$	3.84 MHz	-60 dBm
$2110 \text{ MHz} \leq f \leq 2170 \text{ MHz}$	3.84 MHz	-60 dBm
$2170 \text{ MHz} \leq f \leq 2200 \text{ MHz}$	1 MHz	-50 dBm
$2300 \text{ MHz} < f < 2400 \text{ MHz}$	3.84 MHz	-60 dBm
$2496 \text{ MHz} \leq f \leq 2570 \text{ MHz}$	1 MHz	-50 dBm
$2570 \text{ MHz} \leq f \leq 2640 \text{ MHz}$	3.84 MHz	-60 dBm
$2640 \text{ MHz} < f \leq 2690 \text{ MHz}$	3.84 MHz	-60 dBm
$3510 \text{ MHz} \leq f \leq 3590 \text{ MHz}$	3.84 MHz	-60 dBm
$3400 \text{ MHz} \leq f \leq 3800 \text{ MHz}$	1 MHz	-50 dBm

Note: Only available for transmissions in 900 MHz to 915 MHz.

wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz). Expiration Date to perform the related International Standard IEC 62209-1 and IEEE Std 1528 is June 30, 2012.

Table 1-1 :

Δf (MHz)	Minimum Requirement	Measurement Bandwidth
2.5 - 3.5	$\left\{ -35 - 15 \cdot \left(\frac{\Delta f}{\text{MHz}} - 2.5 \right) \right\} \text{dBc}$	30 kHz
3.5 - 7.5	$\left\{ -35 - 1 \cdot \left(\frac{\Delta f}{\text{MHz}} - 3.5 \right) \right\} \text{dBc}$	1 MHz
7.5 - 8.5	$\left\{ -39 - 10 \cdot \left(\frac{\Delta f}{\text{MHz}} - 7.5 \right) \right\} \text{dBc}$	1 MHz
8.5 - 12.5	-49 dBc	1 MHz

Table 1-2 :

Frequency Bandwidth	Minimum Requirement (Traffic mode)	Minimum Requirement (Idle mode)	Method of Measurement
$9 \text{ kHz} \leq f < 150 \text{ kHz}$	-36 dBm /1 kHz	-	Conducted
$150 \text{ kHz} \leq f < 30 \text{ MHz}$	-36 dBm /10 kHz	-	Conducted
$30 \text{ MHz} \leq f < 1000 \text{ MHz}$	-36 dBm /100 kHz	-57 dBm /100 kHz	Conducted
$1 \text{ GHz} \leq f < 12.75 \text{ GHz}$	-30 dBm /1 MHz	-47 dBm /1 MHz	Conducted

Table 1-3 :

Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
925 MHz \leq f \leq 935 MHz	100 kHz	-67 dBm
935 MHz < f \leq 960 MHz	100 kHz	-79 dBm
1805 MHz \leq f \leq 1880 MHz	100 kHz	-71 dBm
1893.5 MHz < f < 1919.6 MHz	300 kHz	-41 dBm

3.2 WCDMA TDD

3.2.1 Test Items

Item	Test Items	Conformance requirement	Test result	Compliance
1	Frequency bands and channel spacing	1915 MHz - 1920 MHz 2010 MHz - 2025 MHz 2570 MHz - 2620 MHz channel spacing : 5 MHz (3.84 Mcps TDD Option) , 1.6 MHz (1.28 Mcps TDD Option) or 10 MHz (7.68 Mcps TDD Option)		
2	Maximum output power	Comply with table 2-1		
3	Frequency error	Within ± 0.1 PPM		
4	Minimum controlled output power	\leq -44 dBm (3.84 Mcps TDD Option) \leq -49 dBm (1.28 Mcps TDD Option) \leq -41 dBm (7.68 Mcps TDD Option) (in one time slot excluding the guard period)		
5	Occupied	\leq 5 MHz (3.84 Mcps		

3.2 WCDMA TDD

3.2.1 Test Items

Item	Test Items	Conformance requirement	Test result	Compliance
1	Frequency bands and channel spacing	1915 MHz - 1920 MHz 2010 MHz - 2025 MHz channel spacing : 5 MHz (3.84 Mcps TDD Option) or 1.6 MHz (1.28 Mcps TDD Option)		
2	Maximum output power	Power class 1 : 30 dBm +1/-3 dB Power class 2 : 24 dBm +1/-3 dB Power class 3 : 21 dBm +2/-2 dB Power class 4 : 10 dBm +4/-4 dB		
3	frequency error	Within ± 0.1 PPM		
4	Minimum controlled output power	\leq -44 dBm (3.84 Mcps TDD Option) \leq -49 dBm (1.28 Mcps TDD Option) (in one time slot excluding the guard period)		

1. According to 3GPP TS 25.102, amend the specifications of test items for frequency bands, maximum output power, minimum controlled output power, occupied bandwidth, spectrum emissions mask, ACLR and spurious emission.

2. In accordance with the amendment of

10	Electrical safety	Complying with CNS14336-1 or CNS15598-1					Interface on Mobile Phone Handset (hereinafter as Handset)	requirement : complying with A4.2.3.1 of CNS15285				
11	<u>Mobile phones connection interface, power adapter connection interface, charger cable and power adapter</u>	Comply with mobile station device connection interface, power adapter connection interface, charger cable and power adapter relevant provisions of “Technical Specifications for Broadband Terminal Equipment of Mobile Broadband Business”.						(2)Complying with the following provisions of (A) or (B) : (A)Socket on mobile phone : complying with micro-B or micro-AB in Annex A of CNS15285 Plug to socket on mobile phone in connection cord set for charge : complying with micro-B in Annex A of CNS15285, Contact 1 is V _{BUS} and Contact 5 is GND in the connecting interface				
12	The Public Warning and Disaster Prevention Messages Reception Function	Adhere to the provisions of Rule 4						(B)If Socket on mobile phone does not complying with Provision (A), it should adopt the specific connecting plug in connection cord set for charge or the adapter between micro-B plug and the socket on mobile phone.				
<p>Note : 1. For test items 2, 3, 4, 5, 6, 7 and 8, the UE should be operated at low frequency, mid frequency and high frequency meantime and refer to the latest method of measurement of 3GPP TS34.121 and TS34.124.</p> <p>2. The applicant should submit the test report or certificate of approval in compliance with the relevant regulations for test items 9 and 10.</p> <p>3. <u>Test items 9 to 11 shall be tested with power adapter and charger cable set; for power adapters and charger cable sets that</u></p>												

already received certificate of approval, it is a must to submit certificate of approval and testing report in order to be inspection free of test item 11.

3.1.2 Specified Documents

Item	Content	Conformance requirement	Note
1	SAR limits (hand-held only)	Shall comply with the SAR limit for partial body (any part of the head and surrounding area), 2.0 W/Kg(10g)	The applicant should provide with test report and test data.
2	RF Exposure Warning Label	Warning: ”For Reducing RF Influence, Use Properly “ Method of Labeling: Label on UE, carton and user manual.	The applicant should provide with guarantee. when the user manual is English version only.
3	SAR Label	SAR label content: “ SAR limit 2.0 W/Kg; testing value: __W/Kg” Labeling method: Label on UE, carton and user manual.	The applicant should provide with guarantee.
4	A copy of certificate of approval	A copy of certificate of approval (e.g., issued by certification body which is accredited in compliance with the requirements of 3GPP)	Note the code and certification scope of 3GPP.
5	IMEI number and unique guarantee	Test equipment may read and record the IMEI number of the unique guarantee proposed by the applicant.	

Note : 1. The documents specified by NCC mentioned above are regulated in compliance with Article 10.1.7 and Article 12.1.7 of

		provided in (B) : (A)The insulating material of connecting interface: class V-2 material at least (B)The test report complying with the technical specifications of USB-IF(Universal Serial Bus Implementers Forum), it should include the item in (A)			
12	Connecting Interface on Charger	(1)Socket on Charger and Plug to socket on Charger in connection cord set for charge : Complying with STD-A in Annex A of CNS15285 Electrical Requirement: complying with A4.2.3.2 of CNS15285 (2) Complying with the following provisions of (A) or submitting the test report provided in (B): (A)Mechanism Requirement: complying with A4.2.2 of CNS15285 Insulating			

Compliance Approval Regulations of Telecommunications Terminal Equipment.

2. Procedures of SAR are in accordance with CNS 14958-1: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz). Expiration Date to perform the related International Standard IEC 62209-1 and IEEE Std 1528 is June 30, 2012.

Table 2-1 :

<u>Maximum output power</u>	<u>3.84 Mcps TDD Option</u>	<u>1.28 Mcps TDD Option</u>	<u>7.68 Mcps TDD Option</u>
Power class 1	30 dBm +1/-3 dB	33 dBm +1/-3 dB	30 dBm +1/-3 dB
Power class 2	24 dBm +1/-3 dB	24 dBm +1/-3 dB	24 dBm +1/-3 dB
Power class 3	21 dBm +2/-2 dB	21 dBm +2/-2 dB	21 dBm +2/-2 dB
Power class 4	10 dBm +4/-4 dB	27 dBm +1/-3 dB	10 dBm +4/-4 dB

Table 2-2 : (3.84 Mcps TDD Option)

<u>Separation between the carrier frequency and the center of</u>	<u>Minimum Requirement</u>	<u>Measurement Bandwidth</u>

Resistance: complying with A4.2.3.3 of CNS15285
 Insulating Voltage: complying with A4.2.3.4 of CNS15285
 Low Level Contact Resistance: complying with A4.2.3.5 of CNS15285
 Contact Capacitance : complying with A4.2.3.6 of CNS15285
 Insulating material of connecting interface: class V-2 material at least
 (B) The test report complying with the technical specifications of USB-IF, it should include the items in (A)

13 Connection Cord for Charge (1) Contact 1 is V_{BUS} and Contact 4 is GND in the connecting interface STD-A
 (2) Complying with the

<u>the measuring filter</u> Δf (MHz)		
2.5 - 3.5	$\left\{-35-15 \cdot \left(\frac{\Delta f}{MHz} - 2.5\right)\right\} dBc$	30 kHz
3.5 - 7.5	$\left\{-35-1 \cdot \left(\frac{\Delta f}{MHz} - 3.5\right)\right\} dBc$	1 MHz
7.5 - 8.5	$\left\{-39-10 \cdot \left(\frac{\Delta f}{MHz} - 7.5\right)\right\} dBc$	1 MHz
8.5 - 12.5	-49 dBc	1 MHz

Table 2-3 : (1.28 Mcps TDD Option)

<u>Separation between the carrier frequency and the center of the measuring filter</u> Δf (MHz)	<u>Minimum Requirement</u>	<u>Measurement Bandwidth</u>
0.8 - 1.8	$\left\{-35-14 \cdot \left(\frac{\Delta f}{MHz} - 0.8\right)\right\} dBc$	30 kHz
1.8 - 2.4	$\left\{-49-17 \cdot \left(\frac{\Delta f}{MHz} - 1.8\right)\right\} dBc$	30 kHz
2.4 - 4.0	-44 dBc	1 MHz

Table 2-4 : (7.68 Mcps TDD Option)

<u>Separation between the carrier frequency and</u>	<u>Minimum Requirement</u>	<u>Measurement Bandwidth</u>

		<p>following provisions of (A) or submitting the test report provided in (B):</p> <p>(A) Electrical Requirement: Voltage Drop: complying with A4.3.3.2 of CNS15285 Cable Flex: complying with A4.3.6 of CNS15285 4-Axis Continuity: complying with A4.3.7 of CNS15285 Maximum Resistance of Wire: not exceed 0.232 Ω/m Fireproofing Class of Connection Cord for Charge: class VW-1 at least</p> <p>(B) The test report complying with the technical specifications of USB-IF, it should include the items in (A)</p>				
14	Electrical Requirements for Charger	(1)Input Electricity: complying with 4.3 and 4.4 of CNS15285				

<u>the center of the measuring filter</u> Δf (MHz)		
<u>5.0 - 5.75</u>	$\left\{ -38 - 10.67 \cdot \left(\frac{\Delta f}{MHz} - 5.0 \right) \right\} dBc$	<u>30 kHz</u>
<u>5.75 - 7.0</u>	$\left\{ -46 - 5.6 \cdot \left(\frac{\Delta f}{MHz} - 5.75 \right) \right\} dBc$	<u>30 kHz</u>
<u>7.0 - 15.0</u>	$\left\{ -38 - 0.5 \cdot \left(\frac{\Delta f}{MHz} - 7.0 \right) \right\} dBc$	<u>1 MHz</u>
<u>15.0 - 17.0</u>	$\left\{ -42 - 5.0 \cdot \left(\frac{\Delta f}{MHz} - 15.0 \right) \right\} dBc$	<u>1 MHz</u>
<u>17.0 - 25.0</u>	<u>-53 dBc</u>	<u>1 MHz</u>

Table 2-5 :

	<u>Adjacent Channel</u>	<u>Chip Rate for RRC Measurement Filter</u>	<u>ACLR Limit</u>
<u>3.84 Mcps TDD Option</u>	<u>±5 MHz</u>		<u>33 dB</u>
	<u>±10 MHz</u>		<u>43 dB</u>
<u>1.28 Mcps TDD Option</u>	<u>±1.6 MHz</u>		<u>33 dB</u>
	<u>±3.2 MHz</u>		<u>43 dB</u>
<u>7.68 Mcps TDD Option</u>	<u>±7.5 MHz</u>	<u>3.84 MHz</u>	<u>33 dB</u>
	<u>±12.5 MHz</u>	<u>3.84 MHz</u>	<u>43 dB</u>
	<u>±10 MHz</u>	<u>7.68 MHz</u>	<u>33 dB</u>
	<u>±20 MHz</u>	<u>7.68 MHz</u>	<u>43 dB</u>

Table 2-6 :

<u>Frequency Bandwidth</u>	<u>Measurement Bandwidth</u>	<u>Minimum Requirement</u>
<u>9 kHz ≤ f < 150 kHz</u>	<u>1 kHz</u>	<u>-36 dBm</u>

		(2)Output Voltage: 5 Vdc, and allowable error is ±5 %. Check if it could comply with the above requirement by the experiment provided in 5.4 of CNS15285. (3)Output Electricity: complying with the provisions from 4.6 to 4.9 of CNS15285. (4)Inverse Current: complying with 4.10 of CNS15285 (5)Consumption Power without Load: complying with 4.11 of CNS15285 (6)Average Efficiency: complying with 4.12 of CNS15285			
15	The Public Warning and Disaster Prevention Messages Reception Function	Adhere to the provisions of Rule 4			

Note : 1. For test items 2, 3, 4, 5, 6, 7 and 8, the UE should be operated at low frequency, mid frequency and high frequency meantime and refer to the latest method of measurement of 3GPP TS34.122 and TS34.124.

$150 \text{ kHz} \leq f < 30 \text{ MHz}$	10 kHz	-36 dBm
$30 \text{ MHz} \leq f < 1000 \text{ MHz}$	100 kHz	-36 dBm
$1 \text{ GHz} \leq f < 12.75 \text{ GHz}$	1 MHz	-30 dBm

Table 2-7 : (3.84 Mcps TDD Option、7.68 Mcps TDD Option)

Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
$921 \text{ MHz} \leq f < 925 \text{ MHz}$	100 kHz	-60 dBm
$925 \text{ MHz} \leq f \leq 935 \text{ MHz}$	100 kHz	-67 dBm
$935 \text{ MHz} < f \leq 960 \text{ MHz}$	100 kHz	-79 dBm
$1805 \text{ MHz} \leq f \leq 1880 \text{ MHz}$	100 kHz	-71 dBm
$2620 \text{ MHz} \leq f \leq 2690 \text{ MHz}$	3.84 MHz	-37 dBm
$1884.5 \text{ MHz} \leq f \leq 1915.7 \text{ MHz}$	300 kHz	-41 dBm

Table 2-8 : (1.28 Mcps TDD Option)

Frequency bands	Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
1915 MHz~1920 MHz ; 2010 MHz~2025 MHz	$703 \text{ MHz} \leq f < 803 \text{ MHz}$	1 MHz	-50 dBm (註2)
	$921 \text{ MHz} \leq f < 925 \text{ MHz}$	100 kHz	-60 dBm
	$925 \text{ MHz} \leq f \leq 935 \text{ MHz}$	100 kHz	-67 dBm
	$935 \text{ MHz} < f \leq 960 \text{ MHz}$	100 kHz	-79 dBm
	$1805 \text{ MHz} \leq f \leq 1880 \text{ MHz}$	100 kHz	-71 dBm
	$2010 \text{ MHz} \leq f \leq 2025 \text{ MHz}$	1 MHz	-65 dBm (Note 1)
	$1880 \text{ MHz} \leq f \leq 1920 \text{ MHz}$	1 MHz	-65 dBm (Note2)
	$2300 \text{ MHz} \leq f \leq 2400 \text{ MHz}$	1 MHz	-65 dBm (Note2)
	$2496 \text{ MHz} \leq f \leq 2690 \text{ MHz}$	1 MHz	-50 dBm (Note2)
$3400 \text{ MHz} \leq f < 3600 \text{ MHz}$	1 MHz	-50 dBm (Note2)	

- The applicant should submit the test report or certificate of approval in compliance with the relevant regulations for test items 9 and 10.
- The Handset should be submitted with both the charger and charging connection cable for Type Approval and should comply with Items 9 to 14. A charger and charging connection cable that have been type-approved with the Handset shall not be inspected with Items 12 to 14 while submitting Certificate and Test report of the Handset. A mobile phone that is not a Handset (under normal operating mode, the distance from the source of transmission is more than 20cm from the body) shall not be inspected with Items 11 to 14.

3.2.2 Specified Documents

Item	Content	Conformance requirement	Note
1	SAR limits (hand-held only)	Shall comply with the SAR limit for partial body (any part of the head and surrounding area), 2.0 W/Kg(10g)	The applicant should provide with test report and test data.
2	RF Exposure Warning Label	Warning: "For Reducing RF Influence, Use Properly" Method of Labeling: Label on UE, carton and user manual.	The applicant should provide with guarantee when the user manual is English version only.

2570 MHz~2620 MHz	$1900 \text{ MHz} \leq f \leq 1920 \text{ MHz}$	1 MHz	-65 dBm
	$2010 \text{ MHz} \leq f \leq 2025 \text{ MHz}$	1 MHz	-65 dBm
	$2620 \text{ MHz} \leq f \leq 2690 \text{ MHz}$	3.84 MHz	-37 dBm

Note: 1. Only available for transmissions in 1915 MHz to 1920 MHz frequency band.
2. Only available for transmissions in 2010 MHz to 2025 MHz frequency band.

3	SAR Label	SAR label content: “ SAR limit 2.0 W/Kg; testing value: __W/Kg” Labeling method: Label on UE, carton and user manual.	The applicant should provide with guarantee.
4	A copy of certificate of approval	A copy of certificate of approval (e.g., issued by certification body which is accredited in compliance with the requirements of 3GPP)	Note the code and certification scope of 3GPP.
5	IMEI number and unique guarantee	Test equipment may read and record the IMEI number of the unique guarantee proposed by the applicant.	

Note : 1. The documents specified by NCC mentioned above are regulated in compliance with Article 10.1.7 and Article 12.1.7 of Compliance Approval Regulations of Telecommunications Terminal Equipment.
2. Procedures of SAR are in accordance with CNS 14958-1: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz). Expiration Date to perform the related International Standard IEC 62209-1 and IEEE Std 1528 is June 30, 2012.

Table 2-1 : (3.84 Mcps TDD Option)

Δf (MHz)	Minimum Requirement	Measurement Bandwidth
2.5 - 3.5	$\left\{-35-15 \cdot \left(\frac{\Delta f}{MHz}-2.5\right)\right\}dBc$	30 kHz
3.5 - 7.5	$\left\{-35-1 \cdot \left(\frac{\Delta f}{MHz}-3.5\right)\right\}dBc$	1 MHz
7.5 - 8.5	$\left\{-39-10 \cdot \left(\frac{\Delta f}{MHz}-7.5\right)\right\}dBc$	1 MHz
8.5 - 12.5	-49 dBc	1 MHz

Table 2-2 : (1.28 Mcps TDD Option)

Δf (MHz)	Minimum Requirement	Measurement Bandwidth
0.8	-35 dBc	30 kHz
0.8 - 1.8	$\left\{-35-14 \cdot \left(\frac{\Delta f}{MHz}-0.8\right)\right\}dBc$	30 kHz
1.8 - 2.4	$\left\{-49-25 \cdot \left(\frac{\Delta f}{MHz}-1.8\right)\right\}dBc$	30 kHz
2.4 - 4.0	-49 dBc	1 MHz

Table 2-3 :

Frequency Bandwidth	Minimum Requirement (Traffic mode)	Minimum Requirement (Idle mode)	Method of Measurement
9 kHz \leq f < 150 kHz	-36 dBm /1 kHz	-	Conducted
150 kHz \leq f < 30 MHz	-36 dBm /10 kHz	-	Conducted
30 MHz \leq f < 1000 MHz	-36 dBm /100 kHz	-57 dBm /100 kHz	Conducted

1 GHz ≤ f < 12.75 GHz	-30 dBm /1 MHz	-47 dBm /1 MHz	Conducted
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Table 2-4 :

Frequency Bandwidth	Measurement Bandwidth	Minimum Requirement
925 MHz ≤ f ≤ 935 MHz	100 kHz	-67 dBm
935 MHz < f ≤ 960 MHz	100 kHz	-79 dBm
1805 MHz ≤ f ≤ 1880 MHz	100 kHz	-71 dBm

3.3 Band Class 0 of CDMA2000 FDD

3.3.1 Test Items

Item	Test Items	Conformance requirement	Test result	Compliance
1	<u>frequency bands and channel spacing</u>	<u>Tx : 824 MHz - 849 MHz (Band Class 0)</u> <u>Rx : 869 MHz - 894 MHz</u> <u>Tx-Rx frequency separation : 45 MHz</u> <u>channel spacing : 1.23 MHz(Spreading Rate 1) or 3.69 MHz(Spreading Rate 3)</u>		
2	<u>maximum output power (ERP)</u>	<u>Power class 1 : 1 dBW(1.25 W) ~8 dBW (6.3 W)</u> <u>Power class 2 : -3 dBW(0.5 W) ~4 dBW (2.5 W)</u> <u>Power class 3 : -7 dBW(0.2 W) ~0 dBW (1.0 W)</u>		
3	<u>frequency error</u>	<u>Within ±300 Hz</u>		
4	<u>minimum controlled</u>	<u>≤ -50 dBm/1.23 MHz (Spreading Rate 1)</u>		

Currently, there is no CDMA2000 service in Taiwan, therefore relevant test items are deleted.

		<u>output power</u>	\leq -50 dBm/3.69 MHz (Spreading Rate 3)		
	<u>5</u>	<u>Conducted spurious emission</u>	Spreading Rate 1 : As Table 3-1 Spreading Rate 3 : As Table 3-2		
	<u>6</u>	<u>EMC</u>	Complying with CNS13438,FCC PART 15 subpart B or CISPR 22 Device under test (DUT) shall be tested (not applicable if none) in operation mode, standby mode (radiation emission interference), and charging mode (conducted power line emission interference, not applicable if none).		
	<u>7</u>	<u>electrical safety</u>	Complying with CNS14336-1		
	<u>8</u>	<u>Connecting Interface on Mobile Phone</u>	(1)Electrical requirement : complying with A4.2.3.1 of CNS15285 (2)Complying with the following provisions of (A) or (B) : (A)Socket on mobile phone : complying with micro-B or micro-AB in Annex A of CNS15285 Plug to socket on mobile phone in		

			<p><u>connection cord set for charge :</u> <u>complying with micro-B in Annex A of CNS15285.</u> <u>Contact 1 is V_{BUS} and Contact 5 is GND in the connecting interface</u> <u>(B)If Socket on mobile phone does not complying with Provision (A), it should adopt the specific connecting plug in connection cord set for charge or the adapter between micro-B plug and the socket on mobile phone.</u> <u>(3) Complying with the following provisions of (A) or submitting the test report provided in (B) :</u> <u>(A)The insulating material of connecting interface: class V-2 material at least</u> <u>(B)The test report complying with the technical specifications of USB-IF(Universal Serial Bus Implementers</u></p>			
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			<u>Forum), it should include the item in (A)</u>		
	9	<u>Connecting Interface on Charger</u>	<u>(1)Socket on Charger and Plug to socket on Charger in connection cord set for charge :</u> <u>Complying with STD-A in Annex A of CNS15285</u> <u>Electrical Requirement: complying with A4.2.3.2 of CNS15285</u> <u>(2) Complying with the following provisions of (A) or submitting the test report provided in (B):</u> <u>(A)Mechanism Requirement: complying with A4.2.2 of CNS15285</u> <u>Insulating Resistance: complying with A4.2.3.3 of CNS15285</u> <u>Insulating Voltage: complying with A4.2.3.4 of CNS15285</u> <u>Low Level Contact Resistance: complying with A4.2.3.5 of</u>		

			<p><u>CNS15285</u> <u>Contact</u> <u>Capacitance :</u> <u>complying with</u> <u>A4.2.3.6 of</u> <u>CNS15285</u> <u>Insulating</u> <u>material of</u> <u>connecting</u> <u>interface: class</u> <u>V-2 material at</u> <u>least</u> <u>(B) The test report</u> <u>complying with the</u> <u>technical</u> <u>specifications of</u> <u>USB-IF, it should</u> <u>include the items in</u> <u>(A)</u></p>			
	10	<p><u>Connection</u> <u>Cord for</u> <u>Charge</u></p>	<p><u>(1) Contact 1 is V_{BUS} and</u> <u>Contact 4 is GND in</u> <u>the connecting</u> <u>interface STD-A</u> <u>(2) Complying with the</u> <u>following provisions</u> <u>of (A) or submitting</u> <u>the test report</u> <u>provided in (B):</u> <u>(A) Electrical</u> <u>Requirement:</u> <u>Voltage Drop:</u> <u>complying with</u> <u>A4.3.3.2 of</u> <u>CNS15285</u> <u>Cable Flex:</u> <u>complying with</u> <u>A4.3.6 of</u> <u>CNS15285</u></p>			

			<p><u>4-Axis</u> <u>Continuity:</u> <u>complying with</u> <u>A4.3.7 of</u> <u>CNS15285</u> <u>Maximum</u> <u>Resistance of</u> <u>Wire: not exceed</u> <u>0.232 Ω/m</u> <u>Fireproofing</u> <u>Class of</u> <u>Connection Cord</u> <u>for Charge: class</u> <u>VW-1 at least</u> <u>(B) The test report</u> <u>complying with the</u> <u>technical</u> <u>specifications of</u> <u>USB-IF, it should</u> <u>include the items in</u> <u>(A)</u></p>			
	11	<u>Electrical</u> <u>Requirements</u> <u>for Charger</u>	<p><u>(1)Input Electricity:</u> <u>complying with 4.3</u> <u>and 4.4 of CNS15285</u> <u>(2)Output Voltage: 5 Vdc.</u> <u>and allowable error is</u> <u>±5 %. Check if it</u> <u>could comply with the</u> <u>above requirement by</u> <u>the experiment</u> <u>provided in 5.4 of</u> <u>CNS15285.</u> <u>(3)Output Electricity:</u> <u>complying with the</u> <u>provisions from 4.6 to</u> <u>4.9 of CNS15285.</u> <u>(4)Inverse Current:</u> <u>complying with 4.10</u></p>			

			<u>of CNS15285</u> <u>(5)Consumption Power</u> <u>without Load:</u> <u>complying with 4.11</u> <u>of CNS15285</u>			
			<u>(6)Average Efficiency:</u> <u>complying with 4.12</u> <u>of CNS15285</u>			
<p>Note : 1. <u>For test items 2, 3, 4 and 5, the UE should be operated at low frequency, mid frequency and high frequency meantimesandrefer to the lastest method of measurement of 3GPP2 C.S0011-A.</u></p> <p>2. <u>The applicant should submit the test report or certificate of approval in compliance with the relevant regulations for test items 6 and 7.</u></p> <p>3. <u>The Handset should be submitted with both the charger and charging connection cable for Type Approval and should comply with Items 9 to 14. A charger and charging connection cable that have been type-approved with the Handset shall not be inspected with Items 12 to 14 while submitting Certificate and Test report of the Handset. A mobile phone that is not a Handset (under normal operating mode, the distance from the source of transmission is more than 20 cm from the body) shall not be inspected with Items 11 to 14.</u></p>						

3.3.2 Specified Documents

<u>Item</u>	<u>Content</u>	<u>Conformance requirement</u>	<u>Note</u>
<u>1</u>	<u>SAR limits (hand-held only)</u>	<u>Shall comply with the SAR limit for partial body (any part of the head and surrounding area), 2.0 W/Kg(10g)</u>	<u>The applicant should provide with test report and test data.</u>
<u>2</u>	<u>RF Exposure Warning Label</u>	<u>Warning:</u> <u>”For Reducing RF Influence, Use Properly “</u> <u>Method of Labeling:</u> <u>Label on UE, carton and user manual.</u>	<u>The applicant should provide with guarantee. when the user manual is English version only.</u>
<u>3</u>	<u>SAR Label</u>	<u>SAR label content:</u> <u>“ SAR limit 2.0 W/Kg; testing value: W/Kg”</u> <u>Labeling method:</u> <u>Label on UE, carton and user manual.</u>	<u>The applicant should provide with guarantee.</u>
<u>4</u>	<u>A copy of certificate of approval</u>	<u>A copy of certificate of approval (e.g., issued by certification body which is accredited in compliance with the requirements of 3GPP2)</u>	<u>Note the code and certification scope of 3GPP2.</u>
<u>5</u>	<u>IMEI number and unique guarantee</u>	<u>Test equipment may read and record the IMEI number of the unique guarantee proposed by the applicant.</u>	

Note : 1. The documents specified by NCC mentioned above are regulated in compliance with Article 10.1.7 and Article 12.1.7 of Compliance Approval Regulations of Telecommunications Terminal Equipment.
2. Procedures of SAR are in accordance with

CNS 14958-1: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz). Expiration Date to perform the related International Standard IEC 62209-1 and IEEE Std 1528 is June 30, 2012.

Table 3-1 : (Spreading Rate 1)

<u>For Δf Within the Range</u>	<u>Emission Limit</u>								
<u>885 kHz - 1.98 MHz</u>	<u>Less stringent of -42 dBc/30 kHz or -54 dBm/1.23 MHz</u>								
<u>1.98 MHz - 4.00 MHz</u>	<u>Less stringent of -54 dBc/30 kHz or -54 dBm/1.23 MHz</u>								
<u>>4.00 MHz (ITU Category A : Tx : 825 MHz - 835 MHz of Band Class 0)</u>	<table border="0"> <tr> <td>-13 dBm/1 kHz;</td> <td>9 kHz < f < 150 kHz</td> </tr> <tr> <td>-13 dBm/10 kHz;</td> <td>150 kHz < f < 30 MHz</td> </tr> <tr> <td>-13 dBm/100 kHz;</td> <td>30 MHz < f < 1 GHz</td> </tr> <tr> <td>-13 dBm/1 MHz;</td> <td>1 GHz < f < 5 GHz</td> </tr> </table>	-13 dBm/1 kHz;	9 kHz < f < 150 kHz	-13 dBm/10 kHz;	150 kHz < f < 30 MHz	-13 dBm/100 kHz;	30 MHz < f < 1 GHz	-13 dBm/1 MHz;	1 GHz < f < 5 GHz
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<u>>4.00 MHz (ITU Category B : Tx : 835 MHz - 845 MHz of Band Class 0)</u>	<table border="0"> <tr> <td>-36 dBm/1 kHz;</td> <td>9 kHz < f < 150 kHz</td> </tr> <tr> <td>-36 dBm/10 kHz;</td> <td>150 kHz < f < 30 MHz</td> </tr> <tr> <td>-36 dBm/100 kHz;</td> <td>30 MHz < f < 1 GHz</td> </tr> <tr> <td>-30 dBm/1 MHz;</td> <td>1 GHz < f < 12.75 GHz</td> </tr> </table>	-36 dBm/1 kHz;	9 kHz < f < 150 kHz	-36 dBm/10 kHz;	150 kHz < f < 30 MHz	-36 dBm/100 kHz;	30 MHz < f < 1 GHz	-30 dBm/1 MHz;	1 GHz < f < 12.75 GHz
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-36 dBm/100 kHz;	30 MHz < f < 1 GHz								
-30 dBm/1 MHz;	1 GHz < f < 12.75 GHz								

Table 3-2 : (Spreading Rate 3)

<u>For</u> Δf <u>Within the</u> <u>Range</u>	<u>Emission Limit</u>
2.5 MHz – 2.7 MHz	-14 dBm/30 KHz
2.7 MHz – 3.5 MHz	-[14+15 • (Δf -2.7 MHz)]dBm/30 KHz
3.5 MHz – 7.5 MHz	-[13+1 • (Δf -3.5 MHz)]dBm/1 MHz
7.5 MHz – 8.5 MHz	-[17+10 • (Δf -7.5 MHz)]dBm/1 MHz
8.5 MHz – 12.5 MHz	-27 dBm/1 MHz
>12.5 MHz (ITU Category A ; Tx : 825 MHz – 835 MHz of Band Class 0)	-13 dBm/1 kHz; 9 kHz < f < 150 kHz -13 dBm/10 kHz; 150 kHz < f < 30 MHz -13 dBm/100 kHz; 30 MHz < f < 1 GHz -13 dBm/1 MHz; 1 GHz < f < 5 GHz
>12.5 MHz (ITU Category B ; Tx : 835 MHz – 845 MHz of Band Class 0)	-36 dBm/1 kHz; 9 kHz < f < 150 kHz -36 dBm/10 kHz; 150 kHz < f < 30 MHz -36 dBm/100 kHz; 30 MHz < f < 1 GHz -30 dBm/1 MHz; 1 GHz < f < 12.75 GHz

Note : Δf =center frequency - closer measurement edge
frequency

3.4 Band Class 6 of CDMA2000 FDD

3.4.1 Test Items

<u>Item</u>	<u>Test Items</u>	<u>Conformance requirement</u>	<u>Test result</u>	<u>Compliance</u>
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Currently, there is no CDMA2000 service in Taiwan, therefore relevant test items are deleted.

	<u>1</u>	<u>frequency bands and channel spacing</u>	Tx : 1920 MHz - 1980 MHz (Band Class 6) Rx : 2110 MHz - 2170 MHz Tx-Rx frequency separation : 190 MHz channel spacing : 1.23 MHz(Spreading Rate 1) or 3.69 MHz(Spreading Rate 3)			
	<u>2</u>	<u>maximum output power (EIRP)</u>	Power class 1 : -2 dBW(0.63 W) ~ 3 dBW (2.0 W) Power class 2 : -7 dBW(0.2 W) ~ 0 dBW (1.0 W) Power class 3 : -12 dBW(63 mW) ~ -3 dBW (0.5 W) Power class 4 : -17 dBW(20 mW) ~ -6 dBW (0.25 W) Power class 5 : -22 dBW(6.3 mW) ~ -9 dBW(0.13 W)			
	<u>3</u>	<u>frequency error</u>	Within ± 150 Hz			
	<u>4</u>	<u>minimum controlled output power</u>	≤ -50 dBm/1.23 MHz (Spreading Rate 1) ≤ -50 dBm/3.69 MHz (Spreading Rate 3)			
	<u>5</u>	<u>occupied bandwidth</u>	≤ 1.48 MHz (Spreading Rate 1) ≤ 4.6 MHz (Spreading			

		Rate 3)		
	<u>6</u>	<u>Conducted spurious emission</u>	<u>Spreading Rate 1 : As Table 4-1 and Table 4-3</u> <u>Spreading Rate 3 : As Table 4-2 and Table 4-3</u>	
	<u>7</u>	<u>EMC</u>	<u>Complying with CNS13438,FCC PART 15 subpart B or CISPR 22</u> <u>Device under test (DUT) shall be tested (not applicable if none) in operation mode, standby mode (radiation emission interference), and charging mode (conducted power line emission interference, not applicable if none).</u>	
	<u>8</u>	<u>electrical safety</u>	<u>Complying with CNS14336-1</u>	
	<u>9</u>	<u>Connecting Interface on Mobile Phone</u>	<u>(1)Electrical requirement : complying with A4.2.3.1 of CNS15285</u> <u>(2)Complying with the following provisions of (A) or (B) :</u> <u>(A)Socket on mobile phone : complying with micro-B or micro-AB in Annex A of CNS15285</u> <u>Plug to socket on mobile phone in connection cord set for charge :</u> <u>complying with</u>	

			<p><u>micro-B in Annex A of CNS15285.</u> <u>Contact 1 is V_{BUS}</u> <u>and Contact 5 is GND in the connecting interface</u> <u>(B)If Socket on mobile phone does not complying with Provision (A), it should adopt the specific connecting plug in connection cord set for charge or the adapter between micro-B plug and the socket on mobile phone.</u> <u>(3) Complying with the following provisions of (A) or submitting the test report provided in (B) :</u> <u>(A)The insulating material of connecting interface: class V-2 material at least</u> <u>(B)The test report complying with the technical specifications of USB-IF(Universal Serial Bus Implementers Forum), it should include the item in (A)</u></p>			
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		<p>10 <u>Connecting Interface on Charger</u></p>	<p>(1)<u>Socket on Charger and Plug to socket on Charger in connection cord set for charge : Complying with STD-A in Annex A of CNS15285</u> <u>Electrical Requirement: complying with A4.2.3.2 of CNS15285</u></p> <p>(2) <u>Complying with the following provisions of (A) or submitting the test report provided in (B):</u> <u>(A)Mechanism Requirement: complying with A4.2.2 of CNS15285</u> <u>Insulating Resistance: complying with A4.2.3.3 of CNS15285</u> <u>Insulating Voltage: complying with A4.2.3.4 of CNS15285</u> <u>Low Level Contact Resistance: complying with A4.2.3.5 of CNS15285</u> <u>Contact Capacitance :</u></p>			
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		<p><u>complying with A4.2.3.6 of CNS15285 Insulating material of connecting interface: class V-2 material at least</u></p> <p><u>(B) The test report complying with the technical specifications of USB-IF, it should include the items in (A)</u></p>			
11	<u>Connection Cord for Charge</u>	<p><u>(1) Contact 1 is V_{BUS} and Contact 4 is GND in the connecting interface STD-A</u></p> <p><u>(2) Complying with the following provisions of (A) or submitting the test report provided in (B):</u></p> <p><u>(A) Electrical Requirement: Voltage Drop: complying with A4.3.3.2 of CNS15285 Cable Flex: complying with A4.3.6 of CNS15285 4-Axis Continuity: complying with</u></p>			

			<u>A4.3.7 of CNS15285</u> <u>Maximum Resistance of Wire: not exceed 0.232Ω/m</u> <u>Fireproofing Class of Connection Cord for Charge: class VW-1 at least</u> <u>(B) The test report complying with the technical specifications of USB-IF, it should include the items in (A)</u>			
	12	<u>Electrical Requirements for Charger</u>	<u>(1)Input Electricity: complying with 4.3 and 4.4 of CNS15285</u> <u>(2)Output Voltage: 5 Vdc, and allowable error is ±5 %. Check if it could comply with the above requirement by the experiment provided in 5.4 of CNS15285.</u> <u>(3)Output Electricity: complying with the provisions from 4.6 to 4.9 of CNS15285.</u> <u>(4)Inverse Current: complying with 4.10 of CNS15285</u> <u>(5)Consumption Power without Load:</u>			

		<u>complying with 4.11 of CNS15285</u> <u>(6)Average Efficiency: complying with 4.12 of CNS15285</u>						
<p>Note : 1. <u>For test items 2, 3, 4, 5 and 6, the UE should be operated at low frequency, mid frequency and high frequency meantime and refer to the latest method of measurement of 3GPP2 C.S0011-A.</u></p> <p>2. <u>The applicant should submit the test report or certificate of approval in compliance with the relevant regulations for test items 7 and 8.</u></p> <p>3. <u>The Handset should be submitted with both the charger and charging connection cable for Type Approval and should comply with Items 9 to 14. A charger and charging connection cable that have been type-approved with the Handset shall not be inspected with Items 12 to 14 while submitting Certificate and Test report of the Handset. A mobile phone that is not a Handset (under normal operating mode, the distance from the source of transmission is more than 20 cm from the body) shall not be inspected with Items 11 to 14.</u></p> <p>3.4.2 documents specified</p>								
	<table border="1"> <thead> <tr> <th data-bbox="996 1305 1070 1343">Item</th> <th data-bbox="1070 1305 1265 1343">Content</th> <th data-bbox="1265 1305 1646 1343">Conformance requirement</th> <th data-bbox="1646 1305 1854 1343">Note</th> </tr> </thead> </table>	Item	Content	Conformance requirement	Note			
Item	Content	Conformance requirement	Note					

	1	<u>SAR limits (hand-held only)</u>	<u>Shall comply with the SAR limit for partial body (any part of the head and surrounding area), 2.0 W/Kg(10g)</u>	<u>The applicant should provide with test report and test data.</u>
	2	<u>RF Exposure Warning Label</u>	<u>Warning:</u> <u>”For Reducing RF Influence, Use Properly “</u> <u>Method of Labeling:</u> <u>Label on UE, carton and user manual.</u>	<u>The applicant should provide with 40uarantee.</u> <u>When the user manuel is English version only.</u>
	3	<u>SAR Label</u>	<u>SAR label content:</u> <u>“ SAR limit 2.0 W/Kg; testing value: W/Kg”</u> <u>Labeling method:</u> <u>Label on UE, carton and user manual.</u>	<u>The applicant should provide with 40uarantee.</u>
	4	<u>A copy of certificate of approval</u>	<u>A copy of certificate of approval (e.g., issued by certification body which is accredited in compliance with the requirements of 3GPP2)</u>	<u>Note the code and certification scope of 3GPP2.</u>
	5	<u>IMEI number and unique guarantee</u>	<u>Test equipment may read and record the IMEI number of the unique guarantee proposed by the applicant.</u>	
<p><u>Note : 1. The documents specified by NCC mentioned above are regulated in compliance with Article 10.1.7 and Article 12.1.7 of Compliance Approval Regulations of Telecommunications Terminal Equipment.</u></p> <p><u>2. Procedures of SAR are in accordance with CNS 14958-1: Human exposure to radio frequency fields from hand-held and body-</u></p>				

mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz). Expiration Date to perform the related International Standard IEC 62209-1 and IEEE Std 1528 is June 30, 2012.

Table 4-1 : (Spreading Rate 1)

<u>For Δf Within the Range</u>	<u>Emission Limit</u>
1.25 MHz – 1.98 MHz	Less stringent of -42 dBc/30 kHz or -54 dBm/1.23 MHz
1.98 MHz – 4.00 MHz	Less stringent of -50 dBc/30 kHz or -54 dBm/1.23 MHz
2.25 MHz – 4.00 MHz	$-[13+1 \cdot (\Delta f - 2.25 \text{ MHz})]\text{dBm/1 MHz}$
>4.00 MHz	-36 dBm/1 kHz; 9 kHz < f < 150 kHz -36 dBm/10 kHz; 150 kHz < f < 30 MHz -36 dBm/100 kHz; 30 MHz < f < 1 GHz -30 dBm/1 MHz; 1 GHz < f < 12.75 GHz

Table 4-2 : (Spreading Rate 3)

<u>For Δf Within the Range</u>	<u>Emission Limit</u>
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	<table border="1"> <tr> <td><u>2.5 MHz – 2.7 MHz</u></td> <td><u>-14 dBm/30 KHz</u></td> </tr> <tr> <td><u>2.7 MHz – 3.5 MHz</u></td> <td><u>-[14+15 • (Δf – 2.7 MHz)]dBm/30 KHz</u></td> </tr> <tr> <td><u>3.08 MHz</u></td> <td><u>-33 dBc/3.84 MHz</u></td> </tr> <tr> <td><u>3.5 MHz – 7.5 MHz</u></td> <td><u>-[13+1 • (Δf – 3.5 MHz)]dBm/1 MHz</u></td> </tr> <tr> <td><u>7.5 MHz – 8.5 MHz</u></td> <td><u>-[17+10 • (Δf – 7.5 MHz)]dBm/1 MHz</u></td> </tr> <tr> <td><u>8.08 MHz</u></td> <td><u>-43 dBc/3.84 MHz</u></td> </tr> <tr> <td><u>8.5 MHz – 12.5 MHz</u></td> <td><u>-27 dBm/1 MHz</u></td> </tr> <tr> <td><u>>12.5 MHz</u></td> <td> <u>-36 dBm/1 kHz; 9 kHz < f < 150 kHz</u> <u>-36 dBm/10 kHz; 150 kHz < f < 30 MHz</u> <u>-36 dBm/100 kHz; 30 MHz < f < 1 GHz</u> <u>-30 dBm/1 MHz; 1 GHz < f < 12.75 GHz</u> </td> </tr> </table> <p>Note : Δf =center frequency - closer measurement edge frequency</p> <p>Table 4-3 : (Spreading Rate 1, 3)</p> <table border="1"> <thead> <tr> <th><u>Frequency Bandwidth</u></th> <th><u>Measurement Bandwidth</u></th> <th><u>Minimum Requirement</u></th> </tr> </thead> <tbody> <tr> <td><u>925 MHz ≤ f ≤ 935 MHz</u></td> <td><u>100 kHz</u></td> <td><u>-67 dBm</u></td> </tr> <tr> <td><u>935 MHz < f ≤ 960 MHz</u></td> <td><u>100 kHz</u></td> <td><u>-79 dBm</u></td> </tr> <tr> <td><u>1805 MHz ≤ f ≤ 1880 MHz</u></td> <td><u>100 kHz</u></td> <td><u>-71 dBm</u></td> </tr> <tr> <td><u>1893.5 MHz < f < 1919.6 MHz</u></td> <td><u>300 kHz</u></td> <td><u>-41 dBm</u></td> </tr> </tbody> </table>	<u>2.5 MHz – 2.7 MHz</u>	<u>-14 dBm/30 KHz</u>	<u>2.7 MHz – 3.5 MHz</u>	<u>-[14+15 • (Δf – 2.7 MHz)]dBm/30 KHz</u>	<u>3.08 MHz</u>	<u>-33 dBc/3.84 MHz</u>	<u>3.5 MHz – 7.5 MHz</u>	<u>-[13+1 • (Δf – 3.5 MHz)]dBm/1 MHz</u>	<u>7.5 MHz – 8.5 MHz</u>	<u>-[17+10 • (Δf – 7.5 MHz)]dBm/1 MHz</u>	<u>8.08 MHz</u>	<u>-43 dBc/3.84 MHz</u>	<u>8.5 MHz – 12.5 MHz</u>	<u>-27 dBm/1 MHz</u>	<u>>12.5 MHz</u>	<u>-36 dBm/1 kHz; 9 kHz < f < 150 kHz</u> <u>-36 dBm/10 kHz; 150 kHz < f < 30 MHz</u> <u>-36 dBm/100 kHz; 30 MHz < f < 1 GHz</u> <u>-30 dBm/1 MHz; 1 GHz < f < 12.75 GHz</u>	<u>Frequency Bandwidth</u>	<u>Measurement Bandwidth</u>	<u>Minimum Requirement</u>	<u>925 MHz ≤ f ≤ 935 MHz</u>	<u>100 kHz</u>	<u>-67 dBm</u>	<u>935 MHz < f ≤ 960 MHz</u>	<u>100 kHz</u>	<u>-79 dBm</u>	<u>1805 MHz ≤ f ≤ 1880 MHz</u>	<u>100 kHz</u>	<u>-71 dBm</u>	<u>1893.5 MHz < f < 1919.6 MHz</u>	<u>300 kHz</u>	<u>-41 dBm</u>	
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<p>4. The Public Warning and Disaster Prevention Messages Reception Function.</p> <p>4.1 This test is suitable for terminal devices with access voice services function that have been provided by mobile broadband service operators.</p>	<p>4. The Public Warning and Disaster Prevention Messages Reception Function.</p> <p>4.1 This test is suitable for terminal devices with access voice services function that have been provided by mobile broadband service operators.</p>	<p>This point is not revised.</p>																															
<p>4.2 The public warning system (PWS) refers to the use</p>	<p>4.2 The public warning system (PWS) refers to the use</p>	<p>This point is not</p>																															

<p>of cell broadcast service (CBS) function of the mobile communication system. The CBS message identifier (MI) and the PWS alert contents will be sent by the base station to the receiving system of the terminal devices of a certain area.</p>	<p>of cell broadcast service (CBS) function of the mobile communication system. The CBS message identifier (MI) and the PWS alert contents will be sent by the base station to the receiving system of the terminal devices of a certain area.</p>	<p>revised.</p>
<p>4.3 Terminal devices should have the ability to receive the message identifier (MI) and display PWS alert contents.</p> <p>4.3.1 The language of the contents PWS alerts, message identifier, classification, preset receiving on or off, and the options of subscribers, etc shall comply with the provisions of table 5.1.</p> <p>4.3.2 The mobile device has been set up to receive the PWS message identifier (MI). When the mobile device receives the PWS alert, the device should clearly display the alert text and the message identifier (MI) in the subject header. See Figure 1 as a reference.</p> <p>4.3.3 Each message identifier shall be tested respectively following a PWS alert text.</p> <p>(1) The language of the PWS content in Traditional Chinese : [The message for public warning message Testing] Your mobile phone operator has set up cell broadcasting systems for transmitting public warning messages. Now this service is still in trial. We apologize for any inconvenience it may cause and appreciate your kind understanding. National Communications Commission</p>	<p>4.3 Terminal devices should have the ability to receive the message identifier (MI) and display PWS alert contents.</p> <p>4.3.1 The language of the contents PWS alerts, message identifier, classification, preset receiving on or off, and the options of subscribers, etc shall comply with the provisions of table 5.1.</p> <p>4.3.2 The mobile device has been set up to receive the PWS message identifier (MI). When the mobile device receives the PWS alert, the device should clearly display the alert text and the message identifier (MI) in the subject header. See Figure 1 as a reference.</p> <p>4.3.3 Each message identifier shall be tested respectively following a PWS alert text.</p> <p>(1) The language of the PWS content in Traditional Chinese : [The message for public warning message Testing] Your mobile phone operator has set up cell broadcasting systems for transmitting public warning messages. Now this service is still in trial. We apologize for any inconvenience it may cause and appreciate your</p>	<p>This point is not revised.</p>

<p>(2) The language of the PWS content in English : [The message for public warning message Testing] Your mobile phone operator has set up cell broadcasting systems for transmitting public warning messages. Now this service is still in trial. We apologize for any inconvenience it may cause and appreciate your kind understanding. National Communications Commission</p> <p>4.3.4 Mobile devices should have the ability to recall alert messages for review by the subscriber.</p> <p>4.3.5 Mobile devices shall not support any user interface capabilities to forward received PWS alerts, or to copy and paste PWS alert contents.</p>	<p>kind understanding. National Communications Commission</p> <p>(2) The language of the PWS content in English : [The message for public warning message Testing] Your mobile phone operator has set up cell broadcasting systems for transmitting public warning messages. Now this service is still in trial. We apologize for any inconvenience it may cause and appreciate your kind understanding. National Communications Commission</p> <p>4.3.4 Mobile devices should have the ability to recall alert messages for review by the subscriber.</p> <p>4.3.5 Mobile devices shall not support any user interface capabilities to forward received PWS alerts, or to copy and paste PWS alert contents.</p>	
<p>4.4 Audio signal :</p> <p>4.4.1 The audio signal shall be categorized into two kinds of signal: audio attention signal and audio general signal.</p> <p>(1) Audio attention signal :</p> <p>A. The audio attention signal shall have special audio frequency and special break duration. The audio attention signal shall not be set up by the subscriber or modified.</p> <p>(A) Special audio frequency : For devices that have polyphonic capabilities, the audio attention signal must consist of the fundamental frequencies</p>	<p>4.4 Audio signal :</p> <p>4.4.1 The audio signal shall be categorized into two kinds of signal: audio attention signal and audio general signal.</p> <p>(1) Audio attention signal :</p> <p>A. The audio attention signal shall have special audio frequency and special break duration. The audio attention signal shall not be set up by the subscriber or modified.</p> <p>(A) Special audio frequency : For devices that have polyphonic capabilities, the audio attention signal must consist of the fundamental</p>	<p>This point is not revised.</p>

<p>of 853 Hz and 960 Hz transmitted simultaneously. For devices with only a monophonic capability, the audio attention signal must be 960 Hz.</p> <p>(B) Special break duration : The audio attention signal must have a temporal pattern of one long tone of two seconds, followed by two short tones of one second each, with a half second interval between each tone. The entire sequence must be repeated twice with a half second interval between each repetition.</p> <p>(C) The temporal pattern of audio attention signal is shown in Figure 2.</p> <p>B. The audio attention signal must be restricted to use for alert messages under PWS.</p> <p>(2) The audio general signal does not have special audio frequency and special break duration. Audio general signal shall be set up by the subscriber or modified into other pattern. When the mobile device receives the message, it shall produce the audio signal.</p> <p>4.4.2 Generating timing: The mobile device has been set up to receive the PWS message identifier (MI). When mobile device receives the PWS alert, the device should produce corresponding audio signal as shown in Table 5.2 in accordance with the message identifier (MI) and the subscriber' s setting.</p> <p>4.4.3 The audio signal is considered to be an opt-out by the subscriber with the initial default</p>	<p>frequencies of 853 Hz and 960 Hz transmitted simultaneously. For devices with only a monophonic capability, the audio attention signal must be 960 Hz.</p> <p>(B) Special break duration : The audio attention signal must have a temporal pattern of one long tone of two seconds, followed by two short tones of one second each, with a half second interval between each tone. The entire sequence must be repeated twice with a half second interval between each repetition.</p> <p>(C) The temporal pattern of audio attention signal is shown in Figure 2.</p> <p>B. The audio attention signal must be restricted to use for alert messages under PWS.</p> <p>(2) The audio general signal does not have special audio frequency and special break duration. Audio general signal shall be set up by the subscriber or modified into other pattern. When the mobile device receives the message, it shall produce the audio signal.</p> <p>4.4.2 Generating timing: The mobile device has been set up to receive the PWS message identifier (MI). When mobile device receives the PWS alert, the device should produce corresponding audio signal as shown in Table 5.2 in accordance with the message identifier (MI) and the subscriber' s setting.</p> <p>4.4.3 The audio signal is considered to be an opt-</p>	
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<p>configuration being that all emergency alerts are enabled.</p> <p>4.4.4 When the mobile device activates the audio signal, the subscriber may deactivate that audio signal early.</p>	<p>out by the subscriber with the initial default configuration being that all emergency alerts are enabled.</p> <p>4.4.4 When the mobile device activates the audio signal, the subscriber may deactivate that audio signal early.</p>	
<p>4.5 The vibration cadence :</p> <p>4.5.1 The vibration cadence shall be divided into two kinds of cadences: vibration attention cadence and vibration general cadence.</p> <p>(1) Vibration attention cadence:</p> <p>A. The vibration attention cadence must have the special break duration. The vibration attention cadence shall not be set up by the subscriber or modified.</p> <p>(A) Special break duration : The vibration attention cadence must have a temporal pattern of one long vibration of two seconds, followed by two short vibrations of one second each, with a half second interval between each vibration. The entire sequence must be repeated twice with a half second interval between each repetition.</p> <p>(B) The temporal pattern of vibration attention cadence is shown in Figure 3.</p> <p>B. The vibration attention cadence must be restricted to use for alert messages under PWS.</p> <p>C. The signal between vibration attention cadence and audio attention signal does not need to be</p>	<p>4.5 The vibration cadence :</p> <p>4.5.1 The vibration cadence shall be divided into two kinds of cadences: vibration attention cadence and vibration general cadence.</p> <p>(1) Vibration attention cadence:</p> <p>A. The vibration attention cadence must have the special break duration. The vibration attention cadence shall not be set up by the subscriber or modified.</p> <p>(A) Special break duration : The vibration attention cadence must have a temporal pattern of one long vibration of two seconds, followed by two short vibrations of one second each, with a half second interval between each vibration. The entire sequence must be repeated twice with a half second interval between each repetition.</p> <p>(B) The temporal pattern of vibration attention cadence is shown in Figure 3.</p> <p>B. The vibration attention cadence must be restricted to use for alert messages under PWS.</p> <p>C. The signal between vibration attention cadence and audio attention signal does not need to be</p>	<p>This point is not revised.</p>

<p>synchronized.</p> <p>(2) The vibration general cadence does not have special break duration. When the mobile device receives the message, the device will produce the vibration general cadence.</p> <p>4.5.2 Generating timing: the mobile device has been set up to receive the PWS message identifier (MI). When mobile device receives the PWS alert, the device should produce corresponding vibration cadence as shown in Table 5.2 in accordance with the message identifier (MI) and the subscriber' s setting.</p> <p>4.5.3 The vibration cadence is considered to be an opt-out by the subscriber with the initial default configuration being that all emergency alerts are enabled.</p> <p>4.5.4 When mobile the device activates the vibration cadence, the subscriber may deactivate that vibration cadence early.</p>	<p>synchronized.</p> <p>(2) The vibration general cadence does not have special break duration. When the mobile device receives the message, the device will produce the vibration general cadence.</p> <p>4.5.2 Generating timing: the mobile device has been set up to receive the PWS message identifier (MI). When mobile device receives the PWS alert, the device should produce corresponding vibration cadence as shown in Table 5.2 in accordance with the message identifier (MI) and the subscriber' s setting.</p> <p>4.5.3 The vibration cadence is considered to be an opt-out by the subscriber with the initial default configuration being that all emergency alerts are enabled.</p> <p>4.5.4 When mobile the device activates the vibration cadence, the subscriber may deactivate that vibration cadence early.</p>	
<p>4.6 The presentation of the received PWS alert message should take priority over other mobile device functions. The PWS alert message shall not preempt an active voice or data session.</p>	<p>4.6 The presentation of the received PWS alert message should take priority over other mobile device functions. The PWS alert message shall not preempt an active voice or data session.</p>	<p>This point is not revised.</p>
<p>4.7 Measures of handling duplicate PWS alert messages:</p> <p>4.7.1 Duplicate PWS alert message refers to PWS alert messages with the same message identifier and serial number, indicating that they have been sent repeated. The definition of serial number shall</p>	<p>4.7 Measures of handling duplicate PWS alert messages:</p> <p>4.7.1 Duplicate PWS alert message refers to PWS alert messages with the same message identifier and serial number, indicating that they have been</p>	<p>This point is not revised.</p>

<p>refer to the technical standard 3GPP TS 23.041.</p> <p>4.7.2 Where the equipment receives duplicate PWS alert message from the base station, it shall not show the message content or generate signal and vibration.</p>	<p>sent repeated. The definition of serial number shall refer to the technical standard 3GPP TS 23.041.</p> <p>4.7.2 Where the equipment receives duplicate PWS alert message from the base station, it shall not show the message content or generate signal and vibration.</p>	
	<p><u>5. These articles shall become effective as of the date of promulgation.</u></p> <p><u>The revised articles, which were implemented on March 1, 2016, were amended on December 22, 2015.</u></p>	<p>The implementation date of this specification will be stated in the announcement, therefore this point is deleted.</p>

Table 5.1 The Language of PWS Alert Contents of Message Identifier, Classification, Preset Receiving On or Off, and The Options of Subscribers, etc.

Message identifier /Language of PWS alert contents		Classification	Preset receiving on or off	The options of subscriber
911/Chinese	919/English	Alert Message	Preset receiving on	Yes
4370/Chinese	4383/English	Presidential Alert	Preset receiving on	No
4371/Chinese	4384/English	Emergency Alert	Preset receiving on	Yes
4372/Chinese	4385/English	Emergency Alert	Preset receiving on	Yes
4373/Chinese	4386/English	Emergency Alert	Preset receiving on	Yes
4374/Chinese	4387/English	Emergency Alert	Preset receiving on	Yes
4375/Chinese	4388/English	Emergency Alert	Preset receiving on	Yes
4376/Chinese	4389/English	Emergency Alert	Preset receiving on	Yes
4377/Chinese	4390/English	Emergency Alert	Preset receiving on	Yes

Table 5.1 The Language of PWS Alert Contents of Message Identifier, Classification, Preset Receiving On or Off, and The Options of Subscribers, etc.

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4372/Chinese	4385/English	Emergency Alert	Preset receiving on	Yes
4373/Chinese	4386/English	Emergency Alert	Preset receiving on	Yes
4374/Chinese	4387/English	Emergency Alert	Preset receiving on	Yes
4375/Chinese	4388/English	Emergency Alert	Preset receiving on	Yes
4376/Chinese	4389/English	Emergency Alert	Preset receiving on	Yes
4377/Chinese	4390/English	Emergency Alert	Preset receiving on	Yes
4378/Chinese	4391/English	Emergency Alert	Preset	Yes

This table is not revised.

4378/Chinese	4391/English	Emergency Alert	Preset receiving on	Yes				receiving on																																					
4379/Chinese	4392/English	Emergency Alert	Preset receiving on	Yes	4379/Chinese	4392/English	Emergency Alert	Preset receiving on	Yes																																				
4380/Chinese	4393/English	Required Monthly Test	Preset receiving on	Yes	4380/Chinese	4393/English	Required Monthly Test	Preset receiving on	Yes																																				
Table 5.2 Device should produce corresponding audio signal and vibration cadence in accordance with the message identifier (MI) and the subscriber' s setting.					Table 5.2 Device should produce corresponding audio signal and vibration cadence in accordance with the message identifier (MI) and the subscriber' s setting.					This table is not revised.																																			
Message identifier		Subscriber's setting				Message identifier		Subscriber's setting																																					
		Deactivate sound	Activate sound	Deactivate vibration	Activate vibration			Deactivate sound	Activate sound	Deactivate vibration	Activate vibration																																		
911	919	Can not produce audio signal	Produce audio general signal	Can not produce vibration cadence	Produce vibration general cadence	911	919	Can not produce audio signal	Produce audio general signal	Can not produce vibration cadence	Produce vibration general cadence																																		
4370	4383		Produce audio attention signal		Produce vibration attention cadence	4370	4383		Produce audio attention signal		Produce vibration attention cadence																																		
4371	4384					4371	4384					4371	4384																																
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4378	4391																																					4378	4391	4378	4391				
4379	4392																																									4379	4392	4379	4392
4380	4393																																												

Figure 1: Example of PWS Alert Content and Headers

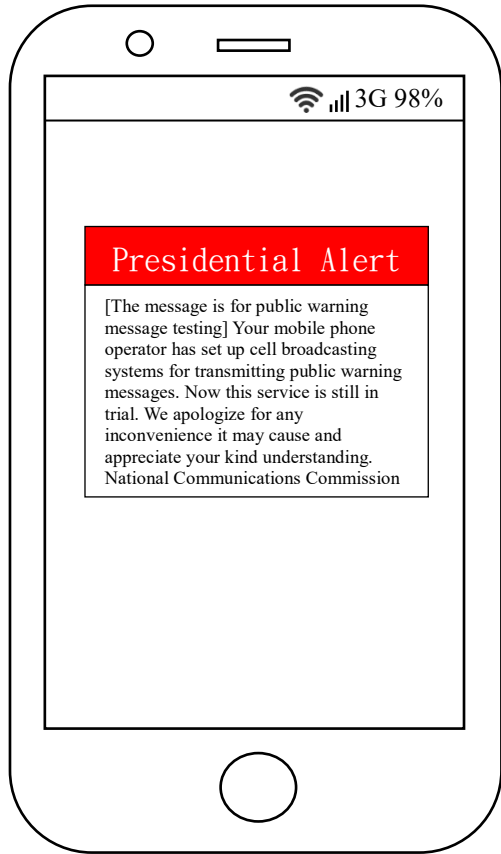
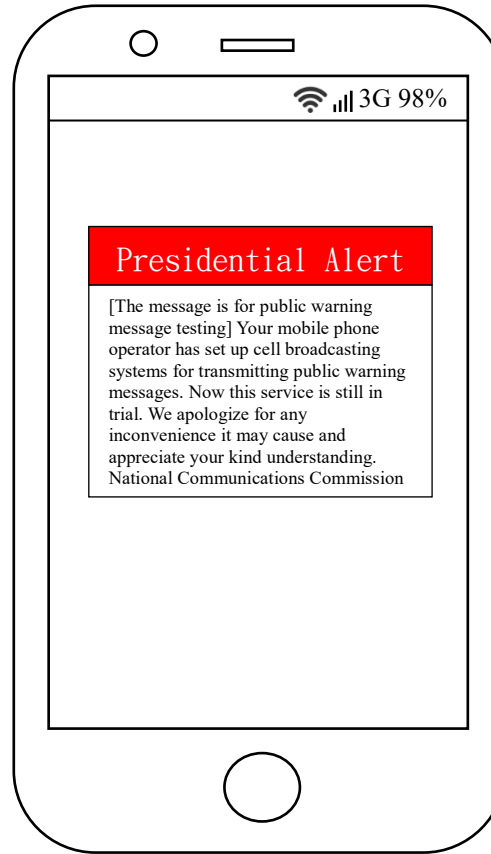


Figure 1: Example of PWS Alert Content and Headers



This figure is not revised.

Figure 2: The Pattern of Audio Attention Signal

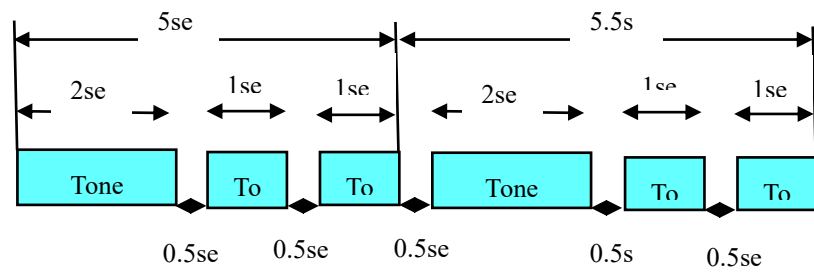
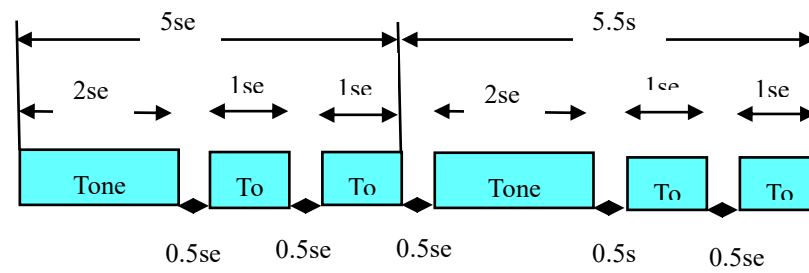


Figure 2: The Pattern of Audio Attention Signal



This figure is not revised.

Figure 3: The Pattern of Vibration Attention Cadence

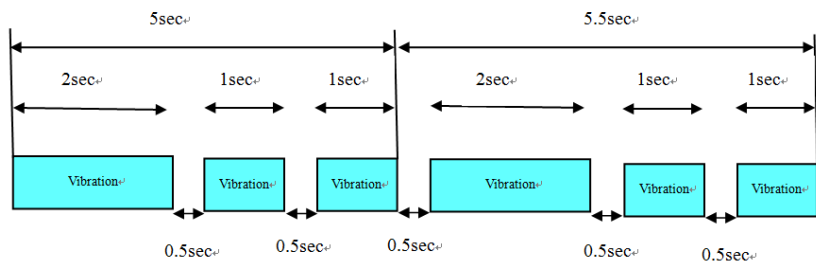
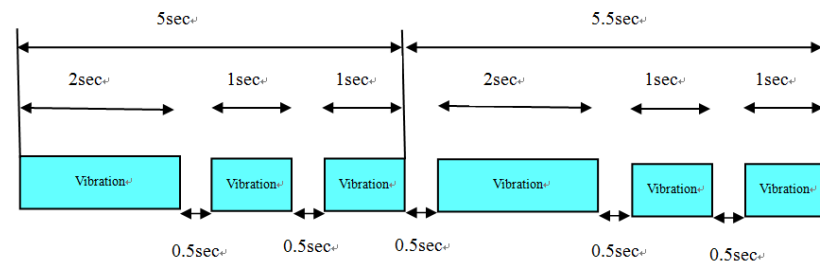


Figure 3: The Pattern of Vibration Attention Cadence



This figure is not revised.