



TEST REPORT

Applicant: VTech Telecommunications Ltd.

Address: 23/F, Tai Ping Industrial Centre, Block 1, 57 Ting Kok Road, Tai Po, Hong Kong.

FCC ID: EW780-2767-00

Product Name: DECT phone

Standard(s): FCC PART 15D ANSI C63.17-2013

The above equipment has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR230310044-00A

Date Of Issue: 2023/4/14

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230310044-00A	Original Report	2023/4/14

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	DECT phone
EUT Model:	SB67258
Operation Frequency:	1921.536-1928.448 MHz
Maximum Peak Output Power (Conducted):	20.14dBm
Modulation Type:	GFSK
Rated Input Voltage:	6Vdc from adapter
Serial Number:	22QZ_7
EUT Received Date:	2023/3/11
EUT Received Status:	Good
Note: EUT have two antennas and cannot transmit simultaneously, pre-scan output power of the two antennas, the	

worst case chain 0 was select to test.

Antenna Information Detail▲:

Antenna Chain	Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
Chain 0	Dipole	50	1.92~1.93GHz	0 dBi
Chain 1	Dipole	50	1.92~1.93GHz	0 dBi

The Method of §15.203 Compliance:

Antenna must be permanently attached to the unit.

Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

Accessory Information:

Accessory Description	Manufacturer	Model
Adapter	Jiangxi Jian Aohai Technology Co.,Ltd.	A318-060100W-US2

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Engineering Mode, which was provided by the manufacturer.
Equipment Modifications:	No
EUT Exercise Software:	No

The engineering mode was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer \blacktriangle :

1.2.2 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
VTech Telecommunications Ltd	DECT 6.0 cordless phone	BL102	ZA04331
OneKe	Program Control Telephone Exchange	TC-108H	EMZBDJ21103001
Luzhou Chiteng	Speaker	BS11	20221129001
CLC	Earphone	Blackview5.0	EP21103011W
R&S	Digital Radio communication Tester	CMD 60M	846956/010
Unknown	Antenna	Unknown	Unknown

1.2.3 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	То
RJ11 Cable*2	No	No	2	EUT	Program Control Telephone Exchange
RJ11 Cable	No	No	2	DECT 6.0 cordless phone	Program Control Telephone Exchange
Power Cable	No	No	1.2	EUT	Adapter
Earphone Cable	No	No	1	EUT	Earphone
Audio Cable	No	No	1.2	EUT	Speaker

1.2.4 Block Diagram of Test Setup





1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Power Spectral Density, conducted	±0.61 dB
Unwanted Emissions, radiated	30M~200MHz: 4.15 dB,200M~1GHz: 5.61 dB,1G~6GHz: 5.14 dB,
Uliwanieu Emissions, faulateu	6G~18GHz: 5.93 dB,18G~26.5G:5.47 dB,26.5G~40G:5.63 dB
Unwanted Emissions, conducted	±1.26 dB
Temperature	±1℃
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 0.4\%$
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

Standard(s) Section	Test Items	Result
FCC § 15.315, § 15.207	Conducted Emission	Compliant
FCC § 15.323 (a)	Emission Bandwidth	Compliant
FCC § 15.319 (c)	Peak Transmit Power	Compliant
FCC § 15.319 (d)	Power Spectral Density	Compliant
FCC § 15.323 (d)	Emission Inside and Outside the sub-band	Compliant
FCC § 15.323 (f)	Frequency Stability	Compliant
FCC § 15.323 (c)(e) & § 15.319 (f)	Specific Requirements for UPCS	Compliant
FCC § 15.317, § 15.203	Antenna Requirement	Compliant
FCC § 15.319 (i) & 1.1307	RF Exposure Evaluation	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 Conducted Emissions

3.1.1 Applicable Standard

FCC§15.315

An unlicensed PCS device that is designed to be connected to the public utility (AC) power line must meet the limits specified in §15.207.

3.1.2 EUT Setup



from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.315, FCC 15.207 and RSS-Gen limits.

The spacing between the peripherals was 10 cm.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

3.1.3 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase ("hot") line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the reported for each of the current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductor, or the six highest emissions may be reported over all the current-carrying conductors.

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor Factor = attenuation caused by cable loss + voltage division factor of AMN

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.2 Emission Bandwidth:

3.2.1 Applicable Standard

FCC §15.323 (a)

Operation shall be contained within the 1920–1930 MHz band. The emission bandwidth shall be less then 2.5 MHz and greater than 50 kHz.

3.2.2 EUT Setup



3.2.3 Test Procedure

According to ANSI C63.17-2013 Section 6.1.3

Table J-Spectrum analyzer settings for measurement of emissions bandwidth i	able 3—Spectrum ana	lyzer settings for measuremen	nt of emissions bandwidth E
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RBW	Approximately 1% of the emission bandwidth (a rough estimate may	
	be obtained from peak power level measurement, or use	
	manufacturer's declared value)	
Video bandwidth	\geq 3 × the RBW	
Center frequency	Nominal center frequency of channel	
Span	$\geq 2 \times$ the expected emission bandwidth	
Sweep time	Coupled to frequency span and RBW	
Amplitude scale	Log	
Detection	Peak detection with maximum hold enabled	

Record the maximum level of the modulated carrier. Find the two furthest frequencies above and below the frequency of the maximum level of the modulated carrier where the signal level is 26 dB below the peak level of the carrier. The difference in frequency between these two frequencies is the emission bandwidth.

If after measuring the emission bandwidth, it is found that the RBW used was not approximately 1% of the emission bandwidth, then adjust the RBW and repeat the procedure until the correct RBW is used. If the spectrum analyzer has fixed values of RBW, the one that is the nearest to 1% of the emission bandwidth is acceptable, provided it is no less than 0.5% of the emission bandwidth and no greater than 2% of the emission bandwidth.

3.3 Peak Transmit Power:

3.3.1 Applicable Standard

FCC §15.319 (c)

Peak transmit power shall not exceed 100 microwatts multiplied by the square root of the emission bandwidth in hertz. Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

3.3.2 EUT Setup



3.3.3 Test Procedure

According to ANSI C63.17-2013 Section 6.1.2

The resolution bandwidth (RBW) setting for this test must be adjusted by repeating this test and using increasing values of the RBW until there are negligible changes (within \pm 0.5 dB) in the measured values of the maximum power.

Table 2—Spectrum	analyzer	settings for	or determining	the	peak power
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RBW	≥ Emission bandwidth
Video bandwidth	≥RBW
Span	Zero
Center frequency	Nominal center frequency of transmit carrier
Amplitude scale	Log (linear may be used if analyzer has sufficient linear dynamic range
	and accuracy)
Detection	Peak detection
Trigger	Video
Sweep rate	Sufficiently rapid to permit the transmit pulse to be resolved accurately

3.4 Power Spectral Density:

3.4.1 Applicable Standard

FCC §15.319 (d) Power spectral density shall not exceed 3 milliwatts in any 3 kHz bandwidth as measured with a spectrum analyzer having a resolution bandwidth of 3 kHz.

3.4.2 EUT Setup



3.4.3 Test Procedure

According to ANSI C63.17-2013 Section 6.1.5

The EUT transmit data sequence and mode of operation shall be representative of that encountered in normal operation, so that transient effects associated with transmission bursts or data content are captured by the PSD measurement.

RBW	3 kHz
Video bandwidth	\geq 3 × RBW
Span	Zero span at frequency with the maximum level (frequency determined
	in 6.1.3 if the same type of signal (continuous versus burst) was used
	in 6.1.3)
Center frequency	Spectral peak as determined in 6.1.3
Sweep time	For burst signals, sufficient to include essentially all of the maximum
	length burst at the output of a 3 kHz filter (e.g., maximum input burst
	duration plus 600 µs). For continuous signals, 20 ms.
Amplitude scale	Log power
Detection	Sample detection and averaged for a minimum of 100 sweeps
Trigger	External or internal

Table 4—S	pectrum anal [,]	zer settings	for finding of	of the maximun	n of PSD _{FUT}

For burst-type signals, arrange to measure the wideband burst duration of each burst analyzed and compute the mean duration.

Determine the level that is 20 dB below the first peak. Record the power-averaged waveform between the 20 dB threshold levels around the first peak with at least 30 000 samples per second as shown in Figure 4. Multiple wideband bursts may produce the waveform between -20 dB peaks; these must be included in the determination of the average burst length. If there is no level that is 20 dB below the peak, then analyze the complete sweep and include all of the wideband waveform that occurs during the sweep time in the computation of average burst length.

Sum the values of the sample points (in linear units of power) and divide by the sample frequency to obtain the total pulse energy in the 3 kHz bandwidth, then divide by the average duration of the wideband input pulse to obtain the average pulse power.





3.5 Emission Inside and Outside the Sub-band:

3.5.1 Applicable Standard

FCC §15.323 (d)

Emissions outside the band shall be attenuated below a reference power of 112 milliwatts as follows: 30 dB between the band and 1.25 MHz above or below the band; 50 dB between 1.25 and 2.5 MHz above or below the band; and 60 dB at 2.5 MHz or greater above or below the band. Emissions inside the band must comply with the following emission mask: In the bands between 1B and 2B measured from the center of the emission bandwidth the total power emitted by the device shall be at least 30 dB below the transmit power permitted for that device; in the bands between 2B and 3B measured from the center of the emission bandwidth the total power emitted by an intentional radiator shall be at least 50 dB below the transmit power permitted for that radiator; in the bands between 3B and the band edge the total power emitted by an intentional radiator shall be at least 60 dB below the transmit power permitted for that radiator. B" is defined as the emission bandwidth of the device in hertz. Compliance with the emission limits is based on the use of measurement instrumentation employing peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

3.5.2 EUT Setup



3.5.3 Test Procedure

According to ANSI C63.17-2013 Section 6.1.6

In-band emission:

In the region between 1B and 2B from the center of the RF carrier, the measured emission level (measured with 1% of emission bandwidth) shall not exceed 30 dB below the permitted peak power for the EUT.

In the region between 2B and 3B from the center of the RF carrier, the measured emission level shall not exceed 50 dB below the permitted peak power for the EUT.

Table 5—Spectrum analyzer settings for measuring in-band emissions

RBW	Approximately 1% of the emission bandwidth (B)
Video bandwidth	$3 \times RBW$
Sweep time	The sweep time shall be sufficiently slow that the swept
	frequency rate shall not exceed one RBW per three
	transmit bursts.
Number of sweeps	Sufficient to stabilize the trace
Amplitude scale	Log
Detection	Peak detection and max hold enabled
Span	Approximately equal to 3.5 B

In the region between 3B and the UPCS band edge, as measured from the center of the RF carrier, the measured emission level shall not exceed 60 dB below the permitted peak power for the EUT.

Out-band emission:

Out-of-band tests shall be performed with the RF carrier set to the lowest and highest carriers defined by the EUT. The spectrum analyzer settings for in-band unwanted emissions in 6.1.6.1 also apply to out-of-band emissions. The EUT shall pass the tests of item a), item b), and either item c) or item d), as follows:

a) In the region between the band edges and 1.25 MHz below and above the lower and the upper band edges, respectively, the measured emission level shall not exceed -9.5 dBm.

b) In the region between 1.25 and 2.5 MHz below and above the lower and the upper band edges, respectively, the measured emission level shall not exceed -29.5 dBm.

c) In the region at 2.5 MHz or greater below and above the lower and upper band edges, respectively, the measured emission level shall not exceed -39.5 dBm.

d) In the region at 2.5 MHz or greater below and above the lower and upper band edges, respectively, the measured emission level shall not exceed the limits of 47CFR15.209. Measurement shall be made as a radiated test.

UPCS devices, in general, include digital circuitry not directly associated with the radio transmitter and are subject to the requirements for unintentional radiators as described in 47CFR15.109, for both in-band and out-of-band emissions. These emissions shall be measured with the EUT operating in receive and transmit modes. For the transmit mode, do not measure within 3.75 MHz or 3B, whichever is the largest, of the edges of the band. Emissions that are directly caused by digital circuits in the transmit path do not have to meet 47CFR15.109 limits, but shall meet those limits as mentioned in the preceding list.

3.6 Frequency Stability:

3.6.1 Applicable Standard

FCC §15.323(f)

The frequency stability of the carrier frequency of the intentional radiator shall be maintained within ± 10 ppm over 1 hour or the interval between channel access monitoring, whichever is shorter. The frequency stability shall be maintained over a temperature variation of -20° to $+50^{\circ}$ C at normal supply voltage, and over a variation in the primary supply voltage of 85 percent to 115 percent of the rated supply voltage at a temperature of 20 °C. For equipment that is capable only of operating from a battery, the frequency stability tests shall be performed using a new battery without any further requirement to vary supply voltage.

3.6.2 EUT Setup



3.6.3 Test Procedure

According to ANSI C63.17-2013 Section 6.2.1.2

This test does not apply to an EUT that is capable only of operating from a battery. For a mains-powered EUT, the mean value of the carrier frequency shall be measured at the power supply voltage extremes of row 1 of Table 7.

Table 7—Test parameters for carrier-frequency stability testing

Temperature	Supply voltage
$20 \circ C \pm 2 \circ C$	85% to 115% of
20 C ± 2 C	declared nominal voltage
-20 °C ± 2 °C	All declared nominal(s)
$+50 \degree C \pm 2 \degree C$	All declared nominal(s)

During test, the equipment shall be placed in the boxes and set the temperature to the specified requirement until the thermal balance has been reached.

3.7 Specific Requirements For UPCS Device:

3.7.1 Applicable Standard

FCC §15.319(f)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. The provisions in this section are not intended to preclude transmission of control and signaling information or use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

FCC §15.323(c)

Devices must incorporate a mechanism for monitoring the time and spectrum windows that its transmission is intended to occupy. The following criteria must be met:

(1) Immediately prior to initiating transmission, devices must monitor the combined time and spectrum windows in which they intend to transmit for a period of at least 10 milliseconds for systems designed to use a 10 milliseconds or shorter frame period or at least 20 milliseconds for systems designed to use a 20 milliseconds frame period.

(2) The monitoring threshold must not be more than 30 dB above the thermal noise power for a bandwidth equivalent to the emission bandwidth used by the device.

(3) If no signal above the threshold level is detected, transmission may commence and continue with the same emission bandwidth in the monitored time and spectrum windows without further monitoring. However, occupation of the same combined time and spectrum windows by a device or group of cooperating devices continuously over a period of time longer than 8 hours is not permitted without repeating the access criteria.

(4) Once access to specific combined time and spectrum windows is obtained an acknowledgment from a system participant must be received by the initiating transmitter within one second or transmission must cease. Periodic acknowledgments must be received at least every 30 seconds or transmission must cease. Channels used exclusively for control and signaling information may transmit continuously for 30 seconds without receiving an acknowledgment, at which time the access criteria must be repeated.

(5) If access to spectrum is not available as determined by the above, and a minimum of 20 duplex system access channels are defined for the system, the time and spectrum windows with the lowest power level may be accessed. A device utilizing the provisions of this paragraph must have monitored all access channels defined for its system within the last 10 seconds and must verify, within the 20 milliseconds (40 milliseconds for devices designed to use a 20 milliseconds frame period) immediately preceding actual channel access that the detected power of the selected time and spectrum windows is no higher than the previously detected value. The power measurement resolution for this comparison must be accurate to within 6 dB. No device or group of co-operating devices located within 1 meter of each other shall during any frame period occupy more than 6 MHz of aggregate bandwidth, or alternatively, more than one third of the time and spectrum windows defined by the system.

(6) If the selected combined time and spectrum windows are unavailable, the device may either monitor and select different windows or seek to use the same windows after waiting an amount of time, randomly chosen from a uniform random distribution between 10 and 150 milliseconds, commencing when the channel becomes available.

(7) The monitoring system bandwidth must be equal to or greater than the emission bandwidth of the intended transmission and have a maximum reaction time less than 50xSQRT (1.25/emission bandwidth in MHz) microseconds for signals at the applicable threshold level but shall not be required to be less than 50 microseconds. If a signal is detected that is 6 dB or more above the applicable threshold level, the maximum reaction time shall be 35xSQRT (1.25/emission bandwidth in MHz) microseconds but shall not be required to be less than 35 microseconds.

(8) The monitoring system shall use the same antenna used for transmission, or an antenna that yields equivalent reception at that location.

(9) Devices that have a power output lower than the maximum permitted under this subpart may increase their monitoring detection threshold by one decibel for each one decibel that the transmitter power is below the maximum permitted.

(10) An initiating device may attempt to establish a duplex connection by monitoring both its intended transmit and receive time and spectrum windows. If both the intended transmit and receive time and spectrum windows. If both the initiating device can initiate a transmission in the intended transmit time and spectrum window. If the power detected by the responding device can be decoded as a duplex connection signal from the initiating device, then the responding device may immediately begin transmitting on the receive time and spectrum window monitored by the initiating device.

(11) An initiating device that is prevented from monitoring during its intended transmit window due to monitoring system blocking from the transmissions of a co-located (within one meter) transmitter of the same system, may monitor the portions of the time and spectrum windows in which they intend to receive over a period of at least 10 milliseconds. The monitored time and spectrum must be within 1.25 MHz of the center frequency of channel(s) already occupied by that device or co-located co-operating devices. If the access criteria is met for the intended receive time and spectrum window under the above conditions, then transmission in the intended transmit window by the initiating device may commence.

(12) The provisions of (c)(10) or (c)(11) of this section shall not be used to extend the range of spectrum occupied over space or time for the purpose of denying fair access to spectrum to other devices. ANSI C63.17 2013 §6.2 Frequency and time stability and §7.Monitoring tests and §8.Time and spectrum window access procedure.

According to RSS-213 §5.1&§5.2 type of modulation and access protocol Equipment certified under this standard shall use digital modulation. In order to provide equitable access to the radio frequency spectrum, the licence-exempt PCS device must possess an access protocol.

FCC §15.323(e)

The frame period (a set of consecutive time slots in which the position of each time slot can be identified by reference to a synchronizing source) of an intentional radiator operating in this band shall be 20 milliseconds or 10 milliseconds/X where X is a positive whole number. Each device that implements time division for the purposes of maintaining a duplex connection on a given frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 50 parts per million (ppm). Each device which further divides access in time in order to support multiple communication links on a given frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 10 ppm. The jitter (time-related, abrupt, spurious variations in the duration of the frame interval) introduced at the two ends of such a communication link shall not exceed 25 microseconds for any two consecutive transmissions. Transmissions shall be continuous in every time and spectrum window during the frame period defined for the device.

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3.7.2 EUT Setup



3.7.3 Test Procedure

1) Monitoring Time

According to ANSI C63.17-2013 Section 7.3.3

2) Lower Monitoring Threshold

According to ANSI C63.17-2013 Section 7.3.1

3) Maximum Transmit Period

According to ANSI C63.17- 2013 Section 8.2.2

4) System Acknowledgement

According to ANSI C63.17-2013 Section 8.1, 8.2

5) Least Interfered Channel (LIC)

According to ANSI C63.17- 2013 Section 7.3.2, 7.3.3

6) Random waiting

According to ANSI C63.17- 2013 Section 8.1.2 or 8.1.3

7) Monitoring Bandwidth and Reaction Time

According to ANSI C63.17-2013 Section 7.4, 7.5

8) Monitoring Antenna

According to ANSI C63.17- 2013 Section 4

9) Monitoring threshold relaxation

According to ANSI C63.17-2013 Section 4

10) Duplex Connections

According to ANSI C63.17- 2013 Section 8.3

11) Alternative monitoring interval

According to ANSI C63.17- 2013 Section 8.4

12) Frame Repetition Stability Frame Period and Jitter

According to ANSI C63.17- 2013 Section 6.2.2, 6.2.3

4. Test DATA AND RESULTS

4.1 Conducted Emissions

Serial Number:	22QZ_7	Test Date:	2023/3/23
Test Site:	СЕ	Test Mode:	Transmitting(Chain 0 low channel was the worst)
Tester:	Vic Du	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	24.8	Relative Humidity: (%)	68	ATM Pressure: (kPa)	100.7

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2022/4/1	2023/3/31
R&S	EMI Test Receiver	ESR3	102726	2022/7/15	2023/7/14
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2022/8/7	2023/8/6
Audix	Test Software	E3	190306 (V9)	N/A	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).



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4.2 Emission Bandwidth:

Serial Number:	22QZ_7	Test Date:	2023/3/18
Test Site:	RF	Test Mode:	Transmitting
Tester:	Sugar Xie	Test Result:	NA

Environmental Conditions:						
Temperature: (℃)	27.9	Relative Humidity: (%)	55	ATM Pressure: (kPa)	101	

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2022/7/15	2023/7/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060305	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Digital Radio communication Tester	CMD 60M	846956/010	2022/4/1	2023/3/31

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Test Channel	Test Frequency (MHz)	99% Emission Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)	Limit (MHz)
Lowest	1921.536	1.217	1.409	50 kHz ~ 2.5 MHz
Middle	1924.992	1.232	1.413	$50 \text{ kHz} \sim 2.5 \text{ MHz}$
Highest	1928.448	1.217	1.439	50 kHz ~ 2.5 MHz





4.3 Peak Transmit Power:

Serial Number:	22QZ_7	Test Date:	2023/4/11
Test Site:	RF	Test Mode:	Transmitting
Tester:	Sugar Xie	Test Result:	Pass

Environmental Conditions:						
Temperature: (℃)	26.5	Relative Humidity: (%)	56	ATM Pressure: (kPa)	101.1	

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2022/7/15	2023/7/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060305	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Digital Radio communication Tester	CMD 60M	846956/010	2023/4/1	2024/3/31

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data: Chain 0

Channel	Frequency (MHz)	Peak Transmit Power (dBm)	Limit (dBm)
Low	1921.536	20.14	20.74
Middle	1924.992	20.12	20.75
High	1928.448	19.96	20.79

Note:

Peak Transmit Power Limit = $100(EBW)^{1/2} \mu W$

Chain 1

Channel	Frequency (MHz)	Peak Transmit Power (dBm)	Limit (dBm)
Low	1921.536	19.87	20.74
Middle	1924.992	19.84	20.75
High	1928.448	19.88	20.79

Note:

Peak Transmit Power Limit = $100(EBW)^{1/2}\mu W$

Chain 0





4.4 Power Spectral Density:

Serial Number:	22QZ_7	Test Date:	2023/4/11
Test Site:	RF	Test Mode:	Transmitting
Tester:	Sugar Xie	Test Result:	Pass

Environmental Conditions:						
Temperature: (°C)	26.5	Relative Humidity: (%)	56	ATM Pressure: (kPa)	101.1	

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2022/7/15	2023/7/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060305	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Digital Radio communication Tester	CMD 60M	846956/010	2023/4/1	2024/3/31

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Channel Frequency		Power Spect	Limit	
Channel	(MHz)	(dBm/3kHz)	(mW/3kHz)	(mW/3kHz)
Low	1921.536	2.22	1.667	3
Middle	1924.992	1.58	1.439	3
High	1928.448	2.24	1.674	3







4.5 Emission Inside and Outside the Sub-band:

Serial Number:	22QZ_7	Test Date:	2023/3/18
Test Site:	RF	Test Mode:	Transmitting
Tester:	Sugar Xie	Test Result:	NA

Environmental Conditions:						
Temperature: (℃)	27.9	Relative Humidity: (%)	55	ATM Pressure: (kPa)	101	

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2022/7/15	2023/7/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060305	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Digital Radio communication Tester	CMD 60M	846956/010	2022/4/1	2023/3/31

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:





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Ref Level 20.00 dBm O Att 30 dB = S	ffset 10.50 dB ⊕ RBW 30 WT 5 s ⊕ VBW 100	kHz kHz Mode Auto Sween		
1Pk Max				
Limit Check	PABS	M1[1]	-41.63 dBm	
10 dBm	PADS		2.114100 GHz	
0 d8m-				
-10 dBm				
10 0011				
-20 dBm				
-30 dBm				
Limit M1				
-50 dBm				
Reported of a bidde public with		Contraction of the second second		
-60 dBm				
-70 dBm				
Start 1 825 CH2	9001	Lote	Stop 2.0 CHz	
Marker	0003	t pts	atop 3.0 GHz	
Type Ref Trc X-	value Y-value	Function	Function Result	
M1 1	2.1141 GHz -41.63 dB	3m		
		Measuring	1 49	
Data: 18 MAD 2022 15:20.	1.0			
Date: 18.MAR.2023 15:39:	18			
Date: 18.MAR.2023 15:39:	18		Ē	
Date: 18.MAR.2023 15:39:3	18 ffset 10.50 dB • RBW 30	kHz		
 Date: 18.MAR.2023 15:39:3 Spectrum Ref Level 20.00 dBm O Att 30 dB 9 St	18 #fset 10.50 dB	kHz kHz Mode Auto Sweep		
 Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dbm O Att 30 db S 19k Max	18 #fset 10.50 dB	kHz kHz Mode Auto Sweep	(m)	
 Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm 0 Att 30 dB • S' 91Pk Max Limit check Limit check 10 km/dt	18 #fset 10.50 dB ← RBW 30 WT 20 ≤ ← VBW 100 PAbs PAbs	kHz kHz Mode Auto Sweep M1[1]	-47.01 dBm 12 96340 GHz	
 Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm O Att 30 dB S PIPk Max Line Limit 10 dBm	18 #fset 10.50 d8 ⊕ RBW 30 WT 20 ≤ ⊕ VBW 100 PASS PASS	kHz Mode Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dim O Att 30 dB St OPA Max Line Limit 10 dBm	18 #fset 10.50 dB ⊕ RBW 30 WT 20 5 ⊕ VBW 100 PASS PASS	kHz kHz Mode Auto Sweep M1[1]	-47.01 dBm 17,96340 GHz	
Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm O Att 30 dB S DFM at Linit Check Line Limit 10 dBm 0 dBm	18 #fset 10.50 dB ⇔ RBW 30 WT 20 5 ⇔ VBW 100 PA}S PA}S	kHz KHz Mode Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
 Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm O Att 30 dB S DFK Max Limit theck Limit theck Limit of Bm 0 dBm -10 dBm	18 #fset 10.50 dB	kHz KHz Made Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm O Att 30 dB S PIPK Max Limit Check Lime Limit 10 dBm -10 dBm	18 #fset 10.50 d8 ← RBW 30 WT 20 ≤ ← VBW 100 PA88 PA85	KHz KHZ Mode Auto Sweep M1[1]	-47.01 dBm 17,96340 GHz	
 Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm 0 Att 30 dB 5 B1Pk Max Linit Check Line Linit 10 dBm	18	Made Auto Sweep	-47.01 dBm 17.96340 GHz	
 Date: 18.MAR.2023 15:39: Spectrum Ref Lavel 20.00 dBm O Att 30 dB S O FK Max Linit Check Line Limit 0 dBm 0 dBm -10 dBm -20 d	18	kH2 KH2 Mode Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
 Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm 0 Watt 30 dB St Imit theck Limit theck 1 10 dBm 0 0 -10 dBm -20 dBm -30 dB	18 ffset 10.50 dB	kHz KHz Made Auto Sweep M1[1]	-47.01 dBm 17.96040 GHz	
Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm 0 MI GIPk Max Linit Check Line Linit 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm Linit	18	KHZ KHZ Made Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
 Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm O Att 30 dB S DFR Mat Linit Check Line Limit 10 dBm -10 dBm -20 dBm -30 dBm -30 dBm	18	KH2 KH2 Mode Auto Sweep M1[3]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39:3 Spectrum Ref Level 20.00 dBm 0 Att 30 dB = \$5' 0 5FK Max Linet Check Linet Check 0 0 8 0 dBm 0 0 9 10	18	kHz KHz Mode Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm 0 Att 20 dBm 0	18	KHZ KHZ Made Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39:3 Spectrum 0 Ref Level 20.00 dBm 0 Att 30 dB 0 BF Init Check Line Unit 0 BR 10 dBm 0 dBm 0 -10 dBm -0 -0 -0 -30 dBm -30 dBm -0 -0 -50 dBm -50 dBm -60 dBm -60 dBm	18	KH2 KH2 Mode Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39:3 Spectrum Office Office Ref Level 20.00 dBm O Att 30 dB S O dBm O O 10 dBm O O -10 dBm -0 O -20 dBm -0 O -30 dBm -0 -0 -30 dBm -0 -0 -30 dBm -0 -0	18	kH2 KH2 Mode Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39:3 Spectrum Ref Level 20.00 dBm 0 Att 30 dB = 5' 0 If K Max 0 0 0 Unit Check Line Linit 10 0 0 dBm - - 0 - -10 dBm - - - - -30 dBm - - - - - -60 dBm - - - - - - -70 dBm - - - - - - -	18	KHZ KHZ Made Auto Sweep M1[3]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm 0 Att 30 dB 5 19K Mat Unit Check Line Unit 0 dBm 0 0 dBm 0 -10 dBm 0 -20 dBm 0 -30 dBm 0	18	KH2 KH2 Made Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39: Spectrum Ref Level 20.00 dBm O Att 30 dB S DFR Max Linit Check Line Limit 10 dBm -10 dBm -20 dB	18	KH2 KH2 M1[1]	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39:3 Spectrum Ref Level 20.00 dBm O Att 30 dB = S 5 5 0 dBm Linet Check Linet Check 1 10 dBm - 0 - -10 dBm - - - -20 dBm - - - -30 dBm - - - -50 dBm - - - -60 dBm - - - -70 dBm - - - Start 3.0 GHz Marker - -	18	KH2 KH2 Made Auto Sweep M1[1] M1[1	-47.01 dBm 17.96340 GHz	
Date: 18.MAR.2023 15:39:3 Spectrum Ref Level 20.00 dBm 0 Att 30 dB e 5' 5' Init Check Line Linit 10 6'' 10 dBm 0 0 8'' -10 dBm - - - -20 dBm - - - -30 dBm - - - -50 dBm - - - -60 dBm - - - -70 dBm - - - Start 3.0 GHz - - - Markar Type Ref Trc X X M1	18	KHz Made Auto Sweep M1[1]	-47.01 dBm 17.96340 GHz	

Spectrum Ref Level 20.00 dBm 0	ffset 10.50 dB 👄 RBW 30	kHz	
Att 30 dB	WT 5 5 👄 VBW 100	kHz Mode Auto Sweep	
Limit Check Line Limit	PARS PARS	M1[1]	-49.72 dBm 962.600 MHz
10 dBm-			
0 dBm			
-10 dBm			
-20 dBm			
-30 dBm			
-wordBin	м		
-50 dBm	Using a second state	المراجع المراجع المراجع المراجع	and a second contractional survey of Advance. I
Cool of the second s	and the state of the second		alimite du color sel com acarla sudicilar outers, célél Elevisy
-70 dBm			
Start 30.0 MHz	8001	l pts	Stop 1.915 GHz
Marker Type Ref Trc X	value Y-value	Function	Function Result
	902.0 MH2 -49.72 UE	Measuring	444 11110222
Date: 18.MAR.2023 15:47:	17		
Spectrum			
RefLevel 20.00 dBm O Att 30 dB e S	ffset 10.50 dB ⊕ RBW 30 WT 5 s ⊕ VBW 100	kHz kHz Mode Auto Swee;)
1Pk Max Limit Check	PABS	M1[1]	-51.45 dBm
10 dBm	PASS		1.919849080 GHz
0 d8m			
-10 dBm			
-20 dBm			
-30 dBm			
Limit Pro dBm			
-50 dBm		Low to control to a state for	M1
-60 dBm			
-70 dBm			
Start 1.915 GHz	8001	L pts	Stop 1.92 GHz
Marker Type Ref Trc X	value Y-value	Function	Function Result
M1 1 1.9	1984908 GHz -51.45 d8	3m Monsuring	11012022
Date: 18.MAR.2023 15:48:	27		
Spectrum			Ē
Ref Level 20.00 dBm 0 Att 30 dB = 8	ffset 10.50 dB 👄 RBW 30 WT 1 s 👄 VBW 100	kHz kHz Mode Auto Swees	,
1Pk Max Limit Check	PABS	M1[1]	-52.26 dBm
10 dBm	PASS		1.93040710 GHz
0 dBm			
LimitdBm			
-20 dBm			
-30 dBm			
-40 dBm			
-50 dBm			
-60 dBm	interpretation and the second and	und the second states and the second states and the second states and the second states and the second states a	threene to an investigation of a strain and
-70 dBm			
Start 1.93 GHz Marker	1001	t pts	Stop 1.935 GHz
M1 1 1.	Value Y-value 9304071 GHz -52.26 dB	Function	Function Result

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Spectrum			
Ref Level 20.00 dBm O	fset 10.50 dB	kHz kHz Mode Auto Swaar	(\)
1Pk Max Limit (theset		MICO SWeep	-41.04.00
Line Limit 10 dBm	PASS	MI(I)	-41.34 dBm 1.735360 GHz
0 d8m			
-10 dBm			
-20 dBm			
-30 dBm			
Limit			101
-50 dBm			
	and the second provide states and the	antine and a second second	and the state of the
-30 dBm			
-70 ubm			
Start 30.0 MHz Marker	8001	pts	Stop 1.915 GHz
Type Ref Trc X-	value Y-value 1.73536 GHz -41.34 dB	m Function	Function Result
		Measuring	449 103-02
Date: 18.MAR.2023 15:56:	27		_
Spectrum	feet 10 50 db - pow	blio	
Att 30 dB St	WT 5 s	kHz Mode Auto Sweep	
Limit Check	PASS	M1[1]	-53.21 dBm
10 dBm			1.917200000 01/2
0 dBm			
-10 dBm			
-20 dBm			
-30 dBm			
Limit =40 dBm			
-50 dBm	M1		
-60 dBm			
-70 dBm			
Start 1.915 GHz	8001	pts	Stop 1.92 GHz
Marker Type Ref Trc X-	value Y-value	Function	Function Result
M1 1 1.93	728003 GHz -53.21 de	m Nessuring III	1103202
Date: 18.MAR.2023 15:57:	15		
Spectrum			
Ref Level 20.00 dBm O Att 30 dB S	fset 10.50 dB RBW 30 WT 1 s VBW 100	kHz kHz Mode Auto Sweep	(
1Pk Max Limit Check	PASS	M1[1]	-31.85 dBm
10 dBm	PASS		1.93007740 GHz
0 dBm			
Limit dBm			
-20 dBm			
M30 dBm			
-40 d8m			
-50 dBm	muthy non in		
-60 dBm	and "Profits (March 1994)	Views Many Minister Assam a Head	erbrahmanenleitenet Paytenetti yhtersee
-70 dBm			
-> 5 00m			
Start 1.93 GHz Marker	1001	pts	Stop 1.935 GHz
Type Ref Trc X- M1 1 1.9	value Y-value 300774 GHz -31.85 dB	m Function	Function Result

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4.6 Frequency Stability:

Serial Number:	22QZ_7	Test Date:	2023/3/18
Test Site:	RF	Test Mode:	Transmitting
Tester:	Sugar Xie	Test Result:	NA

Environmental Conditions:						
Temperature: (℃)	27.9	Relative Humidity: (%)	55	ATM Pressure: (kPa)	101	

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060305	Each time	N/A
R&S	Digital Radio communication Tester	CMD 60M	846956/010	2022/4/1	2023/3/31
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022/04/06	2023/04/05
HPA	AC Power Supply	HPA-1110T	HP20200912202	N/A	N/A
UNI-T	Multimeter	UT39A+	C210582554	2022/09/29	2023/09/28

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Temperature (°C)	Voltage (V _{AC})	Channel Frequency (MHz)	Measured Frequency Offset (kHz)	Measured Frequency Offset (ppm)	Limit (ppm)
-20	120	1924.992	6	3.12	±10
20	102	1924.992	5	2.60	±10
20	138	1924.992	4	2.08	±10
50	120	1924.992	2	1.04	±10

4.7 Specific Requirements For UPCS Device:

Serial Number:	22QZ_7	Test Date:	2023/3/18
Test Site:	RF	Test Mode:	Transmitting
Tester:	Sugar Xie	Test Result:	N/A

Environmental Conditions:

Temperature:	7.9	Relative Humidity: (%)	55	ATM Pressure: (kPa)	101
()				(

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2022/7/15	2023/7/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060305	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Digital Radio communication Tester	CMD 60M	846956/010	2022/4/1	2023/3/31
Agilent	MXG Vector Signal Generator	N5182B	MY51350144	2022/04/22	2023/04/21

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Test Result: Pass

Please see the below data

1) Automatic Discontinuation of Transmission

Test result:

The following tests were performed after a connection had been established with Handset.

Test condition	Reaction of EUT	Pass/Fail
Adapter removed from EUT	Connection break down	Pass
Battery remove from Handset	Connection break down	Pass

2) Monitoring Time

Test result:

This requirement is covered by the results of Least Interfered Channel (LIC).

Interference (Refer to ANSI C63.17 clause 7.3.3)	Reaction of EUT	Results
a) Apply the interference on f_1 at level T_L+U_M+20dB and no interference on f_2 . Initiate transmission and verify the transmission only on f_2 . Then terminate it.	EUT transmits on f ₂	Pass
b) Apply the interference on f_2 at level T_L+U_M+20 dB and immediately remove all interference from f_1 . The EUT should immediately attempt transmission on f_1 (but at least 20 ms after the interference on f_2 is applied), verify the transmission only on f_1 .	EUT transmission f_1	Pass

3) Lower Monitoring Threshold

Test result:

Not applicable because the EUT has more 40 defined duplex system access channels and meet the provision of the Least Interfered Channel (LIC).

4) Maximum Transmit Period

Test result:

Repetition of Access CriteriaMeasured Maximum Transmission Time (Second)		Limit (Second)	Results
First	18280	28,800	Pass
Second	18280	28,800	Pass

5) System Acknowledgement

Test result:

Test	Time taken (second)	Limit (second)	Result
Initial Connection acknowledgement	0.38	1	Pass
Change of access criteria for control information	N/A	30	N/A
Transmission cease time after loss of acknowledgement	4.17	30	Pass

Note: N/A=Not Applicable

6) Least Interfered Channel (LIC)

Calculation of monitoring threshold limits for isochroous devices:

Lower threshold: $T_L = -174+10Log_{10}B + M_L + P_{MAX}-P_{EUT}$ (dBm) Where: B=Emission bandwidth (Hz) $M_L = dB$ the threshold may exceed thermal noise (30 for T_L) $P_{MAX} = 5Log_{10}B-10$ (dBm) $P_{EUT} = Transmitted power (dBm)$

Calculated thresholds:

Monitor Threshold	B(MHz)	M _L (dB)	P _{MAX} (dBm)	P _{EUT} (dBm)	Threshold (dBm)
Lower threshold	1.439	30	20.79	20.14	-81.76

Note: 1. The upper threshold is applicable as the EUT utilizes more than 20 duplex system channels

Test result:

LIC procedure test:

Interference (Refer to ANSI C63.17 clause 7.3.3)	Reaction of EUT	Results
a) Apply the interference on f_1 at level T_L+U_M+7dB and the interference on f_2 at level T_L+U_M . Initiate transmission and verify the transmission only on f_2 . Repeat 5 times.	EUT transmits on f_2	Pass
b) Apply the interference on f_1 at level T_L+U_M and the interference on f_2 at level T_L+U_M+7dB . Initiate transmission and verify the transmission only on f_1 . Repeat 5 times.	EUT transmits on f_1	Pass
c) Apply the interference on f_1 at level T_L+U_M+1dB the interference on f_2 at level T_L+U_M-6dB . Initiate transmission and verify the transmission only on f_2 . Repeat 5 times.	EUT transmits on f_2	Pass
d) Apply the interference on f_1 at level T_L+U_M-6dB and the interference on f_2 at level T_L+U_M+1dB . Initiate transmission and verify the transmission only on f_1 . Repeat 5 times.	EUT transmits on f_1	Pass

Selected channel confirmation:

Interference (Refer to ANSI C63.17 clause 7.3.4)	Reaction of EUT	Results
a) Apply the interference on f_1 at level T_U+U_M and no interference on f_2 . Initiate transmission and verify the transmission only on f_2 . Then terminate it.	EUT transmits on f_2	Pass
b) Apply the interference on f_2 at level T_L+U_M and immediately remove all interference from f_1 . The EUT should immediately attempt transmission on f_1 (but at least 20 ms after the interference on f_2 is applied), verify the transmission only on f_1 .	EUT transmission f_1	Pass

7) Random waiting

Note: This is Not Applicable

8) Monitoring Bandwidth and Reaction Time

Test result:

Monitoring Bandwidth:

The antenna of the EUT used for monitoring is the same interior antenna that used for transmission, so the monitoring system bandwidth is equal to the emission bandwidth of the intended transmission

Reaction Time Test:

No.	Interference Pulse width (µs)	Reaction of EUT	Observing time (µs)	Result
1	50 μ s with level T _L +U _M	No transmission	26.44	Pass
2	$35\mu s$ with level T_L+U_M+6dB	No transmission	21.18	Pass

9) Monitoring Antenna

Test result:

The antenna of the EUT used for transmission is the same interior antenna that used for monitoring.

10) Monitoring threshold relaxation

Test result:

This requirement is covered by the results of Least Interfered Channel (LIC).

11) Duplex Connections

Test result:

Interference (Refer to ANSI C63.17 § 8.3& § 8.3.2)	Reaction of EUT	Results
a) Only a single carrier f1 for EUT TDMA systems and on <i>f</i> 1 and <i>f</i> 2 and corresponding duplex carriers for FDMA systems.	EUT can transmit	Pass
b) All Tx windows with level TL+UM except one & Rx windows with level TL+UM+7dB except one, which are not the duplex mate.	Connected on the target Rx window and its duplex mate.	Pass
c) All Tx windows with level TL+UM+7dB except one & Rx windows with level TL+UM except one, which are not duplex mate.	Connected on the target Tx window and its duplex mate.	Pass
d) All Tx & Rx windows with level TU+UM, except one for Tx window & one for Rx window, which are not duplex mate.	No connection possible	Pass

12) Alternative monitoring interval

Test result:

Interference (Refer to ANSI C63.17 § 8.4)	Reaction of EUT	Results
a) Only a single carrier f1 for EUT TDMA systems and on <i>f</i> 1 and <i>f</i> 2 and corresponding duplex carriers for FDMA systems.	EUT can transmit	Pass
b) Apply interference with same parameters as EUT transmissions on all Tx windows with level TL+UM on the enabled carrier(s) and no interference on the Rx windows on the enabled carriers.	No connection is established	Pass

13) Fair Access

Test result:

14) Frame Repetition Stability Frame Period and Jitter

Test result:

Frame Period and Jitter:

Max. pos. Jitter	Max. neg. Jitter	Frame period	Liı	nit
(μs)	(μs)	(ms)	Frame Period (ms)	Jitter (µs)
0.05	-0.06	10.12	20 or10/X	25

Note: X is a positive whole number.

5. RF EXPOSURE EVALUATION

5.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)		
0.3-1.34	$1,920 \text{ R}^2.$		
1.34-30	$3,450 \text{ R}^2/\text{f}^2$.		
30-300	3.83 R^2 .		
300-1,500	$0.0128 \text{ R}^2 \text{f.}$		
1,500-100,000	$19.2R^{2}$.		

5.2 Measurement Result

			Exemption ERP		Maximum			
Frequency (MHz)	λ/2π (mm)	Distance (mm)	(mW)	(dBm)	Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP (dBm)	MPE- Based Exemption
1920-1930	24.87	200	768	28.85	20.5	0	18.35	Compliant

Note:

The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

Result: The device compliant the MPE-Based Exemption at 20cm distances.

===== END OF REPORT ======