

# TEST REPORT

WS CT

FCC ID: 2AXYP-OSW-804

**Product: Smart Watch** 

Model No.: OSW-804

Trade Mark: oraimo

Report No.: WSCT-ANAB-R&E240800044A-BT

Issued Date: 20 September 2024

Issued for:

ORAIMO TECHNOLOGY LIMITED FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 WS CISHAN MEI STREET FOTAN NT HONGKONG

WSET

Issued By:

World Standardization Certification & Testing Group(Shenzhen) Co.,Ltd. Building A-B, Baoli'an Industrial Park, No. 58 and 60, Tangtou Avenue, Shiyan Street, Bao'an District, Shenzhen City, Guangdong Province, China

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ing Group( Shenzheh) Co.,Lt





### **Test Certification** 1.

Smart Watch Product:

Report No.: WSCT-ANAB-R&E240800044A-BT

Model No.: OSW-804

oraimo Trade Mark:

> Applicant: ORAIMO TECHNOLOGY LIMITED

FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE

19-25 SHAN MEI STREET FOTAN NT HONGKONG

ORAIMO TECHNOLOGY LIMITED Manufacturer:

FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE

WSET

19-25 SHAN MEI STREET FOTAN NT HONGKONG

06 September 2024 to 20 September 2024 **Date of Test:** 

**Applicable** FCC CFR Title 47 Part 15 Subpart C Section 15.247

Standards:

The above equipment has been tested by World Standardization Certification & Testing Group(Shenzhen)Co., Ltd. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

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Tested By:

Checked By:

(Chen Xu)

Approved By:

Date: 20 September 202

(Li Huaibi)

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### **Test Result Summary** 2.

	The second second	The same of the sa		7
1	Requirement	CFR 47 Section	Result	4
	Antenna Requirement	§15.203/§15.247 (c)	PASS	
7	AC Power Line Conducted Emission	\\ \begin{align*}  \text{  \text{ \text{ \text{ \text{ \text{  \text{ \text{ \text{ \text{  \text{  \text{  \text{  \qqq                \	NA WSET	-
_	Conducted Peak Output Power	§15.247 (b)(1) §2.1046	W5L PASS	4
	20dB Occupied Bandwidth	§15.247 (a)(1) §2.1049	PASS	
	Carrier Frequencies Separation	§15.247 (a)(1)	PASS	*
	Hopping Channel Number	§15.247 (a)(1)	PASS	4
7	Dwell Time	§15.247 (a)(1)	PASS	
	Radiated Emission	§15.205/§15.209 §2.1053, §2.1057	PASS <sub>/5LT</sub>	
	Band Edge	§15.247(d) §2.1051, §2.1057	PASS	4

### Note:

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- 1. PASS: Test item meets the requirement.
- 2. Fail: Test item does not meet the requirement.
- 3. N/A: Test case does not apply to the test object.
- 4. The test result judgment is decided by the limit of test standard.

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# 3. EUT Description

	Product Name:	Smart Watch W5[7]	V5 ET
$\times$	Model :	OSW-804	
WSET	Trade Mark:	oraimo	
ZWPILI	Operation Frequency:	2402MHz~2480MHz	$\overline{}$
	Channel Separation:	1MHz	$\times$
	Number of Channel:	797 WSET WSET	V5 ET
$\times$	Modulation Type:	GFSK, π/4-DQPSK, 8-DPSK	
WSET	Modulation Technology:	FHSS WSET WSET WSET	
	Antenna Type:	Wire antenna	$\times$
	Antenna Gain:	0.63dBi	V5 ET
WSET	Operating Voltage	Li-ion Polymer Battery: 552123 Nominal Voltage: 3.8V Rated Capacity: 300mAh Rated Energy: 1.14Wh	
	Remark:	Limited Charge Voltage: 4.2V N/A.	X

WSET	WSEI	WSET	WSLT	WSET	
	X	X	X	X	X
	WSET	WSET	WSET	WSET	WSET
$\times$	$\times$		$\times$	$\times$	

 $\times$   $\times$   $\times$   $\times$ 

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X WSGI

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WSGT WSGT





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Operation Frequency each of channel for GFSK, π/4-DQPSK, 8DPSK

- 1						/		
	Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
	M 05 E 7	2402MHz	<b>1/20 1</b>	2422MHz	40	2442MHz	605	2462MHz
	1	2403MHz	21	2423MHz	41	2443MHz	61	2463MHz
	10	2412MHz	30	2432MHz	50	2452MHz	70	2472MHz
	11	2413MHz	31	2433MHz	51	2453MHz	71	2473MHz
	X		X		X		X	
	18	2420MHz	38	2440MHz	58	2460MHz	78	2480MHz
B	V19 - T	2421MHz	<b>4/39 67</b>	2441MHz	59 5	2461MHz	W5E	7 -
r								

Remark: Channel 0, 39 &78 have been tested for GFSK, π/4-DQPSK, 8DPSK modulation mode.							
WSET WSE	WSGT	WSCT	WSET				
	X	$\times$	X	X			
WSET	WSET	WSET	WSET	WSET			
WSCT		WSET	WSCT				
WSET	WSET	X	WSET	WSET			
WSCI		WSET	WSCT	,			
WSET	WSET	X	WSET	WSET			
WSCT		WSET	WSLT	/			
WSET	WSET	X	W5 [T]	Tests All			
WSCI		WSET	W5	p(Shenzhen			
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Keep the EUT in continuous transmitting by select channel and modulations with

Fully-charged battery



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### **Genera Information** 4.

Engineering mode:

### 4.1. Test environment and mode

	Operating Environment:	
1	Temperature:	25.0 °C
	Humidity:	56 % RH
	Atmospheric Pressure:	1010 mbar
_	Test Mode:	

The sample was placed 0.8m & 1.5m for the measurement below & above 1GHz above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

## **Description of Support Units**

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
Adapter	XCU32	/	1	X /

### Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
- 3. For conducted measurements (Output Power, 20dB Occupied Bandwidth, Carrier Frequencies Separation, Hopping Channel Number, Dwell Time, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

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### 5. Facilities and Accreditations

### 5.1. Facilities

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All measurement facilities used to collect the measurement data are located at World Standardization Certification & Testing Group (Shenzhen) Co., Ltd. Building A-B,Baoli'an Industrial Park,No.58 and 60,Tangtou Avenue, Shiyan Street, Bao'an District, Shenzhen City, Guangdong Province, China

The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

### **5.2.ACCREDITATIONS**

ANAB - Certificate Number: AT-3951

The EMC Laboratory has been accredited by the American Association for Laboratory Accreditation (ANAB). Certification Number: AT-3951

	WSET	WSET	WSET	WSET	WSET
WS	$\langle \hspace{0.1cm} \rangle$	$\langle \ \rangle$			
	WSCT	WSET	WSET	WSCT	WSCT
WS	$\langle \ \ \rangle$	$\langle \ \rangle$		$\langle \ \rangle$	Ш
	WSCT	WSET	WSGT	WSET	WSIT
WS	$\langle \ \ \ \rangle$	$\langle \hspace{0.1cm} \rangle$			TIT I
	WSGT	WSCT	WSET	$\times$	$\times$
WS	$\langle \hspace{0.1cm} \rangle$	$\langle \hspace{0.1cm} \rangle$		As collegion	WSET Shear

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## **Measurement Uncertainty**

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

				_
WSET	No.	Item	MU	
	1	Conducted Emission Test	±3.2dB	
	2	RF power, conducted	±0.16dB	/
	3	Spurious emissions, conducted	±0.21dB	W5
X	4	All emissions, radiated(<1GHz)	±4.7dB	
WSET	5	All emissions, radiated(>1GHz)	±4.7dB/5/7	
	6	Temperature	±0.5°C	
	7	Humidity	±2.0%	WZS
	- 1 A APR A			1 1 1

WSET	WSET	WSCT	WSET	WSET	,
		UT WS			SET
WSCI	WSET	WSET	WSET	WSET	,
	ET WS	TT WS		ET W	SET
WSCI	WSLI	WSET	WSET	WSET	
		WS			
X	X	X	X	WSCT	& Group (Shen

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# **5.4. MEASUREMENT INSTRUMENTS**

	011111111111111111111111111111111111111	(LINE 11)	COMERTIC				
	NAME OF EQUIPMENT	MANUFACTURER	MODEL	SERIAL NUMBER	Calibration Date	Calibration Due.	75
(	Test software		EZ-EMC	CON-03A	-	X	
7	Test software	- /	MTS8310	WSIT	- /	V5 [T	
	EMI Test Receiver	R&S	ESCI	100005	11/05/2023	11/04/2024	
	LISN	AFJ	LS16	16010222119	11/05/2023	11/04/2024	
	LISN(EUT)	Mestec	AN3016	04/10040	11/05/2023	11/04/2024	5
<	Universal Radio Communication Tester	R&S	CMU 200	1100.0008.02	11/05/2023	11/04/2024	
7	Coaxial cable	Megalon	LMR400	N/A	11/05/2023	11/04/2024	
	GPIB cable	Megalon	GPIB	N/A	11/05/2023	11/04/2024	
	Spectrum Analyzer	R&S	FSU	100114	11/05/2023	11/04/2024	
	Pre Amplifier	H.P. <i>LT</i>	HP8447E 57	2945A02715	11/05/2023	11/04/2024	75
	Pre-Amplifier	CDSI	PAP-1G18-38		11/05/2023	11/04/2024	
1	Bi-log Antenna	SCHWARZBECK	VULB9168	01488	11/05/2023	11/04/2024	
5	9*6*6 Anechoic	<i>ET Y</i>	VSET L	W.S.CT	11/05/2023	11/04/2024	
	Horn Antenna	COMPLIANCE ENGINEERING	CE18000		11/05/2023	11/04/2024	$\rangle$
	Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-631	11/05/2023	11/04/2024	75
,	Cable	TIME MICROWAVE	LMR-400	N-TYPE04	11/05/2023	11/04/2024	
	System-Controller	ccs	N/A	N/A	N.C.R	N.C.R	
7	Turn Table	ccs	N/A	N/A	N.C.R	N.C.R	
	Antenna Tower	ccs	N/A	N/A	N.C.R	N.C.R	
	RF cable	Murata	MXHQ87WA300 0	-	11/05/2023	11/04/2024	
	Loop Antenna	EMCO	6502W5L	00042960	11/05/2023	11/04/2024	75
1	Horn Antenna	SCHWARZBECK	BBHA 9170	1123	11/05/2023	11/04/2024	
1	Power meter	Anritsu	ML2487A	6K00003613	11/05/2023	11/04/2024	
4	Power sensor	Anritsu	MX248XD	WEIT	11/05/2023	11/04/2024	
	Spectrum Analyzer	Keysight	N9010B	MY60241089	11/05/2023	11/04/2024	$\rangle$

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### Test Results and Measurement Data 6.

## 6.1. Antenna requirement

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Standard requirement:

FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

E.U.T Antenna:

The Bluetooth antenna is a Wire antenna. it meets the standards, and the best case gain of the antenna is 0.63dBi.

Please refer to the attachment "OSW-804 Internal Photo" for the antenna location

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### **Conducted Emission** 6.2.

	6.2.1. Test Specification	W541	WSLI
X	Test Requirement:	FCC Part15 C Section 15.207	
WSET	Test Method: 5 77	ANSI C63.10:2014 W5 [T] W5 [T]	
	Frequency Range:	150 kHz to 30 MHz	X
	Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto	WSET
WSET	Limits:	Frequency range (MHz)         Limit (dBuV)           0.15-0.5         66 to 56*         56 to 46*           0.5-5         56         46           5-30         60         50	
		Reference Plane	X
$\overline{}$	WSET WSE	LISN 40cm 80cm Filter AC power	WSET
WSET	Test Setup:	Test table/Insulation plane  Remark: E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0 8m	WSET
X	Test Mode:	Refer to item 4.1	
WSET	WSET WSE Test Procedure:	<ol> <li>The E.U.T is connected to an adapter through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of</li> </ol>	WSET
X	WSET WSE Test Result:	the interface cables must be changed according to ANSI C63.10:2014 on conducted measurement.  NA	Tesung Group (Sh.
		The Care	- 5







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### 6.2.2. EUT OPERATING CONDITIONS

The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

### Test data:

Note: EUT is powered by batteries and cannot transmit normally while charging. This project does not require testing

WSET	WSCT	WSET	WSET	WSET
Wist	$\langle \hspace{0.1cm} \rangle$	$\langle \hspace{0.1cm} \rangle$	$\langle \hspace{0.1cm} \rangle$	$\langle  \times $
WSCT	WSET	WSET	WSGT	WSET
WSL	$\langle \hspace{0.1cm} \rangle$	$\langle \hspace{0.1cm} \rangle$	$\langle \hspace{0.1cm} \rangle$	$\langle  \times $
WSET	WSET	WSET	WSET	WSGT
WSI	$\langle \ \ \rangle$	$\langle \ \ \rangle$	$\langle \hspace{0.1cm} \rangle$	$\langle  \times $
WSGT	WSET	WSET	WSGT	WSET
Wist	$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	
WSGT	WSET	WSET	WSGT	WSET WSET
ADD BUILDING A B BOOK A LANGUAGE	Dad No Ed and Ed Touris Aurana Shine	Start Busine Biotela Sharehan Side Samuel	marker Desires China	00/1000

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WSET

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# 6.3. Conducted Output Power

## 6.3.1. Test Specification

X	X X X
Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.10:2014
Limit:	Section 15.247 (b) The maximum peak conducted output power of the intentional radiator shall not exceed the following: (1) For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band 0.125 watts.
Test Setup:	Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	Use the following spectrum analyzer settings:  Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel  RBW > the 20 dB bandwidth of the emission being measured VBW ≥ RBW  Sweep = auto  Detector function = peak  Trace = max hold  Allow the trace to stabilize.  Use the marker-to-peak function to set the marker to the peak of the emission.
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### 6.3.2. Test Data

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W5 E1

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	ode		
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	6.39	20.97	PASS
Middle	7.17	20.97	PASS
Highest	7.25	20.97	PASS

7				
	Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
	Lowest	6.735	20.97	PASS
	Middle	7.52	20.97	PASS
	Highest	7.62	20.97	PASS

,							
	8DPSK mode						
	Test channel	Peak Output Power (dBm)	Limit (dBm)	Result			
Lowest		6.92	20.97	PASS			
	Middle	7.64	20.97	PASS			
	Highest	W5 [7 7.69 W	20.97	75 T PASS			

### Test plots as follows:

	W5LT	WSLT	WSET	WSE		NSLT
1		W/C/C-2	WSET	WSET	Ween	W/2 = 2
	$\bigvee$	WSET		11514	WSET	WSET

WSET	WSET	WSET	WSET

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# 6.4. 20dB Occupy Bandwidth

## 6.4.1. Test Specification

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WSLT	Test Requirement:	FCC Part15 C Section 15.247 (a)(1)		
	Test Method:	ANSI C63.10:2014		
	Limit:	N/A	$\times$	
X	Test Setup:	Spectrum Analyzer EUT	WS ET	
WSET"	Test Mode:	Transmitting mode with modulation		
WSET	Test Procedure:	<ol> <li>The testing follows ANSI C63.10:2014 Measurement Guidelines.</li> <li>The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Use the following spectrum analyzer settings for 20dB Bandwidth measurement.</li> <li>Span = approximately 2 to 5 times the 20 dB</li> </ol>	WSET	
WSET		bandwidth, centered on a hopping channel; 1%≤ RBW≤5% of the 20 dB bandwidth; VBW≥3RBW; Sweep = auto; Detector function = peak; Trace = max hold.  5. Measure and record the results in the test report.		
	Test Result:	PASS	X	

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## 6.4.2. Test data

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	Test channel	-20	dB Occupy Band	lwidth (MHz	)
	rest charmer	GFSK	π/4-DQPSK	8DPSK	Conclusion
	Lowest	0.954 ws/	1.317	1,310	PASS//5
	Middle	0.947	1.333	1.294	PASS
/	Highest	0.944	1.317	1.350	PASS

Test plots as follows:

WS ET W5 CI W5 C1 WS ET W5 CT

W5E1 WSEI WS ET WS CT

> W5 ET WSET WS ET W5E7 W5 CT

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# 6.5. Carrier Frequencies Separation

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Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
Test Method:	ANSI C63.10:2014 W5 [7] W5 [7]	
Limit:	Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.	WSET
Test Setup:	Spectrum Analyzer EUT W5.77	
Test Mode:	Hopping mode	$\vee$
Test Procedure:	<ol> <li>The testing follows ANSI C63.10:2014 Measurement Guidelines.</li> <li>The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Enable the EUT hopping function.</li> <li>Use the following spectrum analyzer settings:         <ul> <li>Span = wide enough to capture the peaks of two adjacent channels; RBW is set to approximately 30% of the channel spacing, adjust as necessary to best identify the center of each individual channel; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold.</li> <li>Use the marker-delta function to determine the separation between the peaks of the adjacent channels. Record the value in report.</li> </ul> </li> </ol>	WSET
Test Result:	PASS	
	Test Method:  Limit:  Test Setup:  Test Mode:  Test Procedure:	Test Method:  ANSI C63.10:2014  Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.  Test Setup:  Test Mode:  Hopping mode  1. The testing follows ANSI C63.10:2014 Measurement Guidelines. 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 3. Set to the maximum power setting and enable the EUT transmit continuously. 4. Enable the EUT hopping function. 5. Use the following spectrum analyzer settings: Span = wide enough to capture the peaks of two adjacent channels; RBW is set to approximately 30% of the channel spacing, adjust as necessary to best identify the center of each individual channel; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold. 6. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. Record the value in report.

	WSET	WSET	WSET	WSET	WSET
	X	X	X	X	X
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## 6.5.2. Test data

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	WELT	WELL	/CFT W	15 FT	WSET
*		GFSK mo	ode		
	Test channel	Carrier Frequencies Separation (MHz)	Limit (MHz)	Result	
	Lowest	0.994	0.636	PASS	
	Middle	0.994	0.631	PASS	X
	Highest	1.012	0.629	PASS	11/2

		Pi/4 DQPSK mode				
10	Test channel	Carrier Frequencies Separation (MHz)	Limit (MHz)	Result		
	Lowest	1.012	0.878	PASS		
	Middle	0.996	0.889	PASS		
_	Highest	W5_T1.002	5_7 0.878	5 CT PASS		

	Test channel	Carrier Frequencies Separation (MHz)	Limit (MHz)	Result
	Lowest	0.988	0.873	PASS
	Middle	0.998	0.863	PASS
,	Highest	1.004	0.900	PASS

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WSET	WSCT	WSET	WSET

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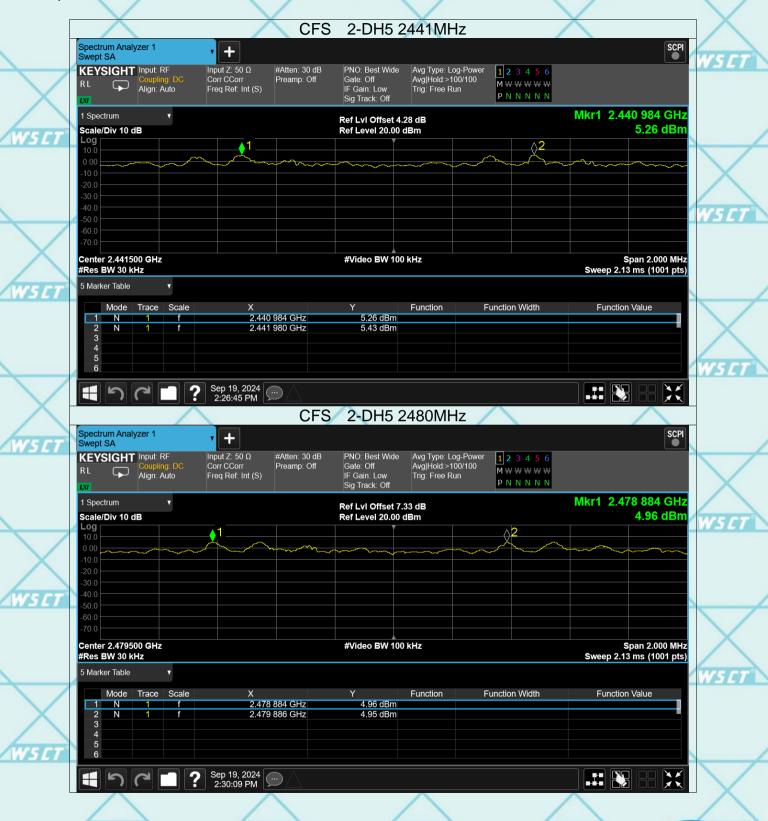




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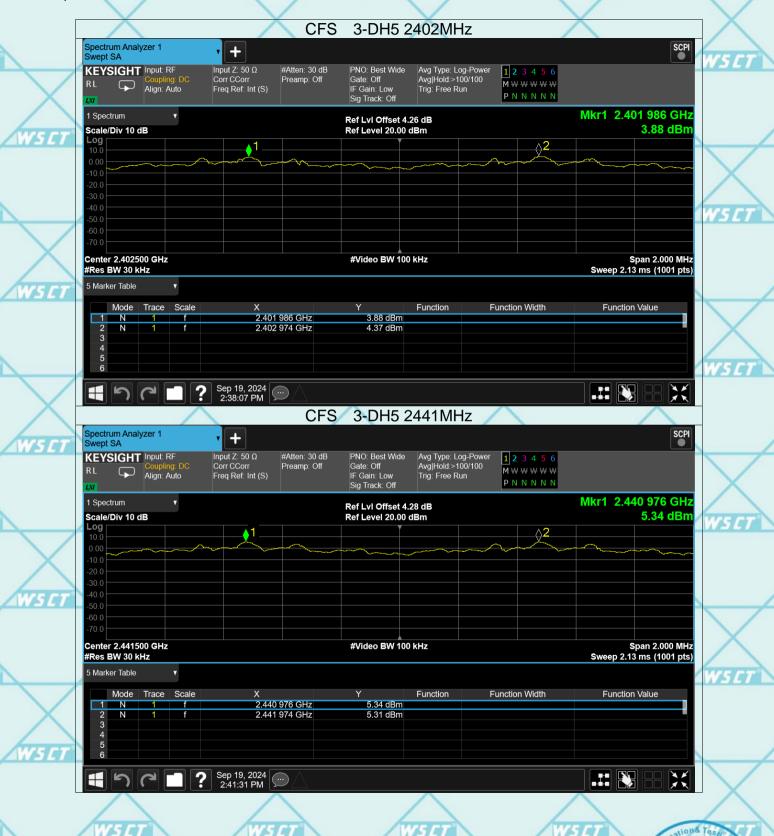




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# 6.6. Hopping Channel Number

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## 6.6.1. Test Specification

WSET	Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
	Test Method:	ANSI C63.10:2014	
	Limit:	Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.	$\triangle$
WSET	Test Setup:	Spectrum Analyzer EUT WS 7.7	WSET
	Test Mode:	Hopping mode	
WSET	Test Procedure:	<ol> <li>The testing follows ANSI C63.10:2014 Measurement Guidelines.</li> <li>The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Enable the EUT hopping function.</li> <li>Use the following spectrum analyzer settings: Span = the frequency band of operation; set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold.</li> <li>The number of hopping frequency used is defined as</li> </ol>	W5CT
	Test Result:	the number of total channel. 7. Record the measurement data in report. PASS	$\times$
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### 6.6.2. Test data

	Mode	Hopping channel numbers	Limit	Result	1
	GFSK, P/4-DQPSK, 8DPSK	79	15	PASS	
,					

Test plots as follows: W5 CI WSET W5C W5E7 W5 ET W5 CT W5 ET W5CI W5E1 W5 ET WSET W5 ET WSET WS ET W5E7 WS ET W5E WSE W5E W5 C

W5 E1 WS ET W5 CT W5 ET

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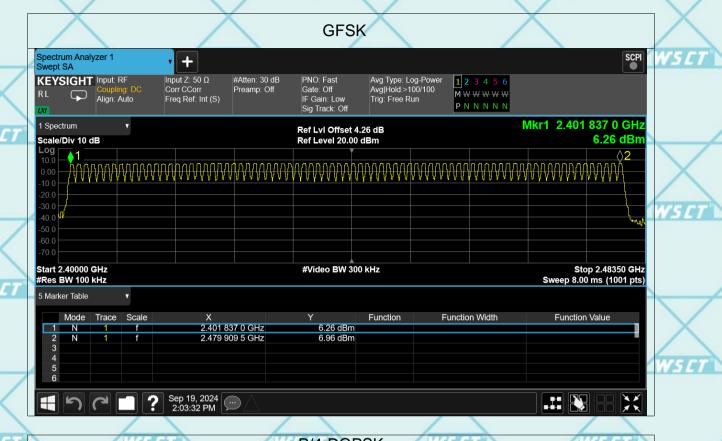


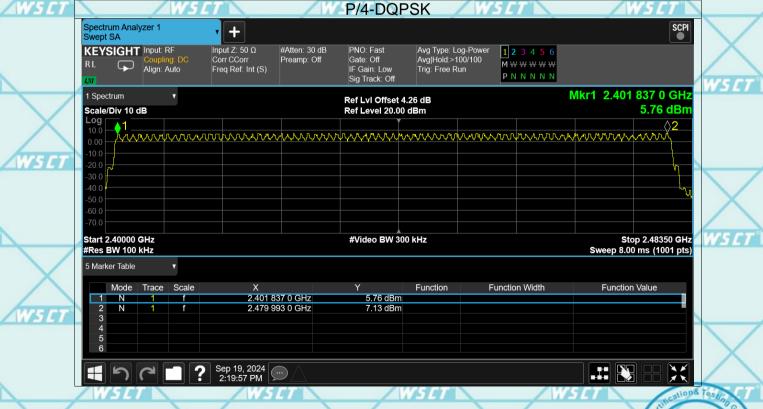


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### 6.7. Dwell Time

# 6.7.1. Test Specification

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			<u>.</u>
X	Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
WSET	Test Method:	ANSI C63.10:2014 W5 [T] W5 [T]	
	Limit:	The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.	WSEI
X	Test Setup:	Spectrum Analyzer EUT	
WSET	Test Mode:	Hopping mode W5.57 W5.57	
WSET	Test Procedure:	<ol> <li>The testing follows ANSI C63.10:2014 Measurement Guidelines.</li> <li>The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Enable the EUT hopping function.</li> <li>Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel; RBW shall be ≤ channel spacing and where possible RBW should be set &gt;&gt; 1 / T, where T is the expected dwell time per channel; VBW≥RBW; Sweep = as necessary to capture the entire dwell time per hopping channel; Detector function = peak; Trace = max hold.</li> <li>Measure and record the results in the test report.</li> </ol>	WSET
	Test Result:	PASS	7772
	1177	Wald	WELL

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### 6.7.2. Test Data

**Total Dwell Time** Frequency **Period Time** Limit Verdict Mode **Pulse Time** Burst (MHz) Count (ms) (ms) (ms) (ms) 1-DH1 122.56 Pass 2402 0.383 320 31600 400 1-DH1 2441 0.383 122.177 319 400 Pass 31600 0.383 1-DH1 2480 121.794 318 31600 400 Pass 1-DH3 2402 1.639 267.157 163 31600 400 **Pass** 1-DH3 2441 1.639 276.991 169 31600 400 Pass 1-DH3 2480 1.639 276.991 169 31600 400 Pass 1-DH5 2402 2.886 323.232 112 31600 400 **Pass** 107 400 Pass 1-DH5 2441 2.888 309.016 31600 400 1-DH5 2480 2.887 119 31600 Pass 343.553

Note: 1. In normal mode, hopping rate is 1600 hops/s with 6 slots in 79 hopping channels.

For DH1, With channel hopping rate (1600 / 2 / 79) in Occupancy Time Limit (0.4 x 79) (s), Hops Over Occupancy Time comes to  $(1600/2/79) \times (0.4 \times 79) = 320 \text{ hops}$ 

> For DH3, With channel hopping rate (1600 / 4 / 79) in Occupancy Time Limit (0.4 x 79) (s), Hops Over Occupancy Time comes to  $(1600 / 4 / 79) \times (0.4 \times 79) = 160 \text{ hops}$

For DH5, With channel hopping rate (1600 / 6 / 79) in Occupancy Time Limit (0.4 x 79) (s), Hops Over Occupancy Time comes to  $(1600 / 6 / 79) \times (0.4 \times 79) = 106.67 \text{ hops}$ 

2. Dwell Time(s) = Hops Over Occupancy Time (hops) x Package Transfer Time

Test plots as follows:

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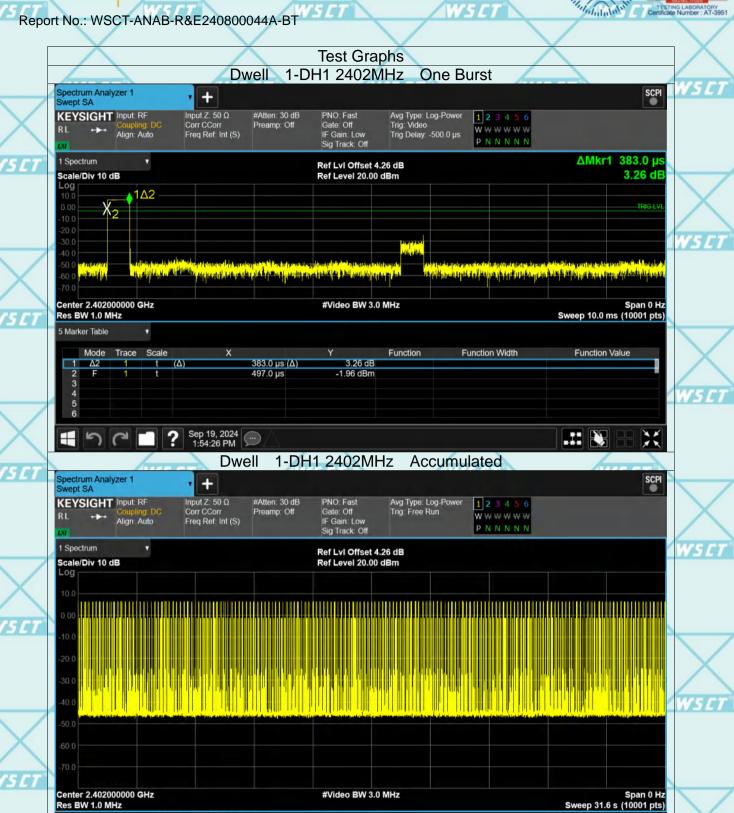
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Res BW 1.0 MHz

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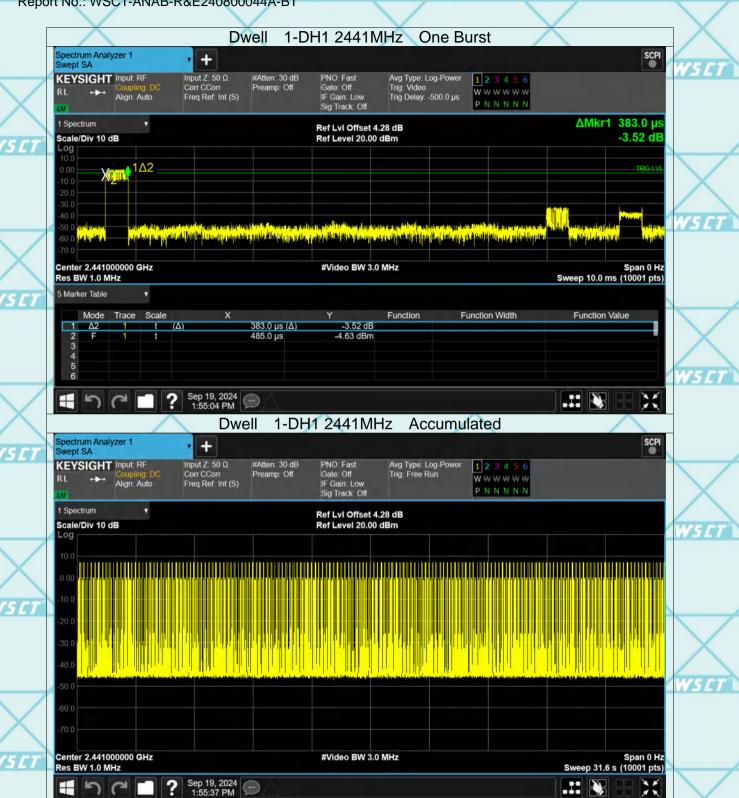
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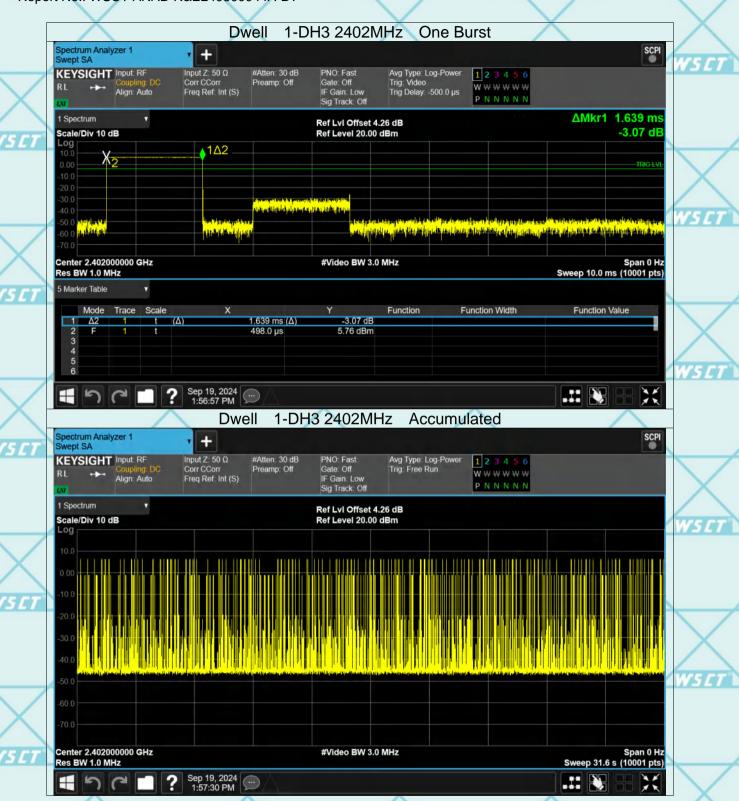
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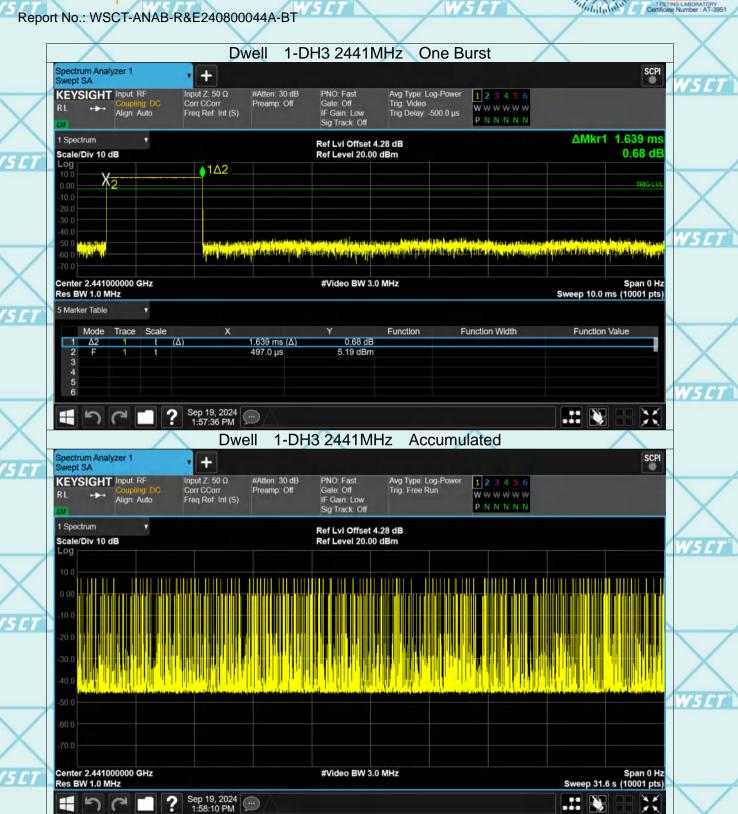


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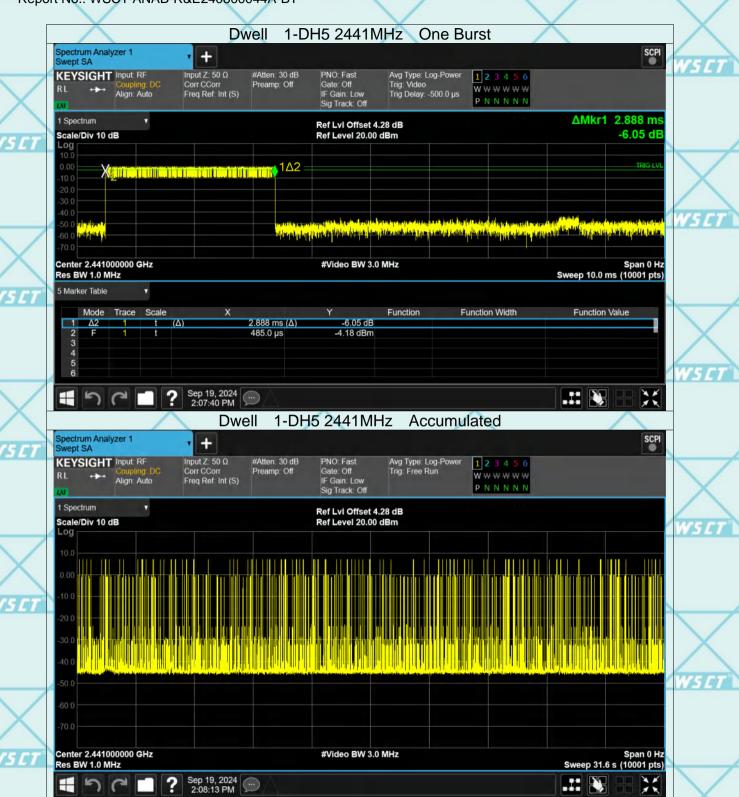




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### 6.8. Pseudorandom Frequency Hopping Sequence

## Test Requirement: FCC Part15 C Section 15.247 (a)(1) requirement:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

Alternatively. Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a Pseudorandom ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

### **EUT Pseudorandom Frequency Hopping Sequence**

The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first one of 9 consecutive ones; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: 29-1 = 511 bits
- Longest sequence of zeros: 8 (non-inverted signal)

Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:

0 2 4 6 62 64 78 1 73 75 77

Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

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CT WSCT WSCT WSC

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Report No.: WSCT-ANAB-R&E240800044A-BT

# 6.9. Conducted Band Edge Measurement

# 6.9.1. Test Specification

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	Test Requirement:	FCC Part15 C Section 15.247 (d)	
<b>[</b> ]	Test Method:	ANSI C63.10:2014 W5 [T] W5 [T]	
	Limit:	In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.	WSET
-	Test Setup:	Spectrum Analyzer EUT	
	Test Mode:	Transmitting mode with modulation	
	Test Procedure:	<ol> <li>The testing follows the guidelines in Band-edge Compliance of RF Conducted Emissions of ANSI C63.10:2014 Measurement Guidelines.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Set RBW = 100 kHz (≥1% span=10MHz), VBW = 300 kHz (≥RBW). Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. The attenuation shall be 30 dB instead of 20 dB when RMS conducted output power procedure is used.</li> <li>Enable hopping function of the EUT and then repeat step 2 and 3.</li> <li>Measure and record the results in the test report.</li> </ol>	WSCT
	Test Result:	PASS	WELT
_	THE THE PARTY OF T	TIPITAL TIPITAL T	TE 17

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SEE

SET WSET







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#### 6.9.2. Test Data



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W5 ET

WS E1

WS ET

W5 E1

Test Result:

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W5 CT



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#### **Conducted Spurious Emission Measurement** 6.10.

_	6.10.1. Test Specificatio	n WSET	W	5CT	W5
	Test Requirement:	FCC Part15 C Section	15.247 (d)	X	
	Test Method:	ANSI C63.10:2014	WSCT	WSET	
_	Limit:	In any 100 kHz bandwick radiation frequency bar shall be at least 20 dB I radiated power. In addition the restricted bands a radiated emission limits	nd, the radio frequency below the highestion, radiated em must also compl	uency power at level of the hissions which fall	W.S
	Test Setup:	Spectrum Analyzer	EUT	WSET	
	Test Mode:	Transmitting mode with	modulation	×	
		<ol> <li>The testing follows to Conducted Emission Measurement Guide</li> <li>The RF output of Element Spectrum analyzer to path loss was comported measurement.</li> <li>Set to the maximum</li> </ol>	ns of ANSI C63. elines JT was connected by RF cable and ensated to the re	ed to the attenuator. The esults for each	WS
	Test Procedure:	EUT transmit contin  4. Set RBW = 100 kHz through 10th harmor at least 20 dB down within the authorized kHz RBW.  5. Measure and record 6. The RF fundamental against the limit line	uously.  c, VBW = 300kH.  nic. All harmonic  from the highes d band as meas  I the results in the Il frequency shou	z, scan up s / spurs must be it emission level ured with a 100 ie test report. uld be excluded	WS
				V	

**PASS** 

WSET WSET WS ET WSET

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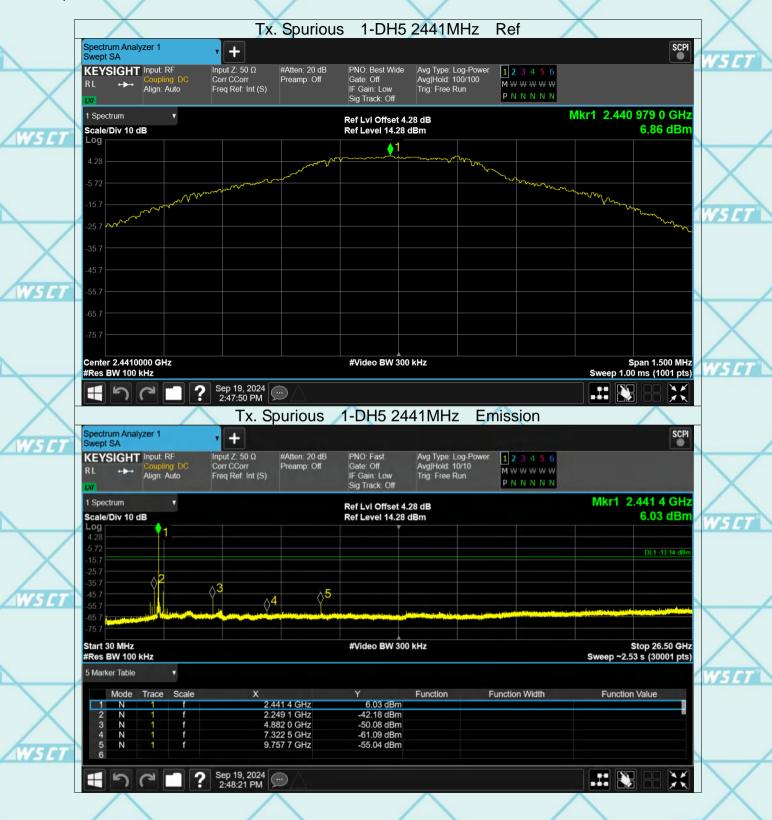
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Report No.: WSCT-ANAB-R&E240800044A-BT





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Report No.: WSCT-ANAB-R&E240800044A-BT

### 6.11. Radiated Spurious Emission Measurement

# 6.11.1. Test Specification

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Test Requirement:	FCC Part15 C Section 15.209
Test Method:	ANSI C63.10:2014
Frequency Range:	9 kHz to 25 GHz
Measurement Distance:	3 m

Antenna Polarization: Horizontal & Vertical

	ricquericy	בוכוכו	I DVV	VDVV	Remain
X	9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
	150kHz-	Quasi-peak	9kHz	30kHz	Quasi-peak Value
Receiver Setup:	30MHz		WSIT		WSIT
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
$\vee$	Ab 0.10 4 CL I=	Peak	1MHz	3MHz	Peak Value
	Above 1GHz	Peak	1MHz	10Hz	Average Value

		\	
WSET	Frequency	Field Strength	Measurement
	rrequeries	(microvolts/meter)	Distance (meters)
	0.009-0.490	2400/F(KHz)	300
	0.490-1.705	24000/F(KHz)	30
	1.705-30	30	30
WSET	30-88	100	V35 <i>LT</i> N
	88-216	150	3
Limit:	216-960	200	3
	Above 960	500	3

WELL			MARK PER	
101	Frequency	Field Strength (microvolts/meter)	Measurement Distance (meters)	Detector
	Abaya 4CHa	500	3	Average
MACHE	Above 1GHz	5000	2	Pook

For radiated emissions below 30MHz

	Distance = 3m	Computer
WSCT		Pre -Amplifier
Test setup:	EUT Turn table	
X	- Tull dole	Receiver

30MHz to 1GHz

WSET

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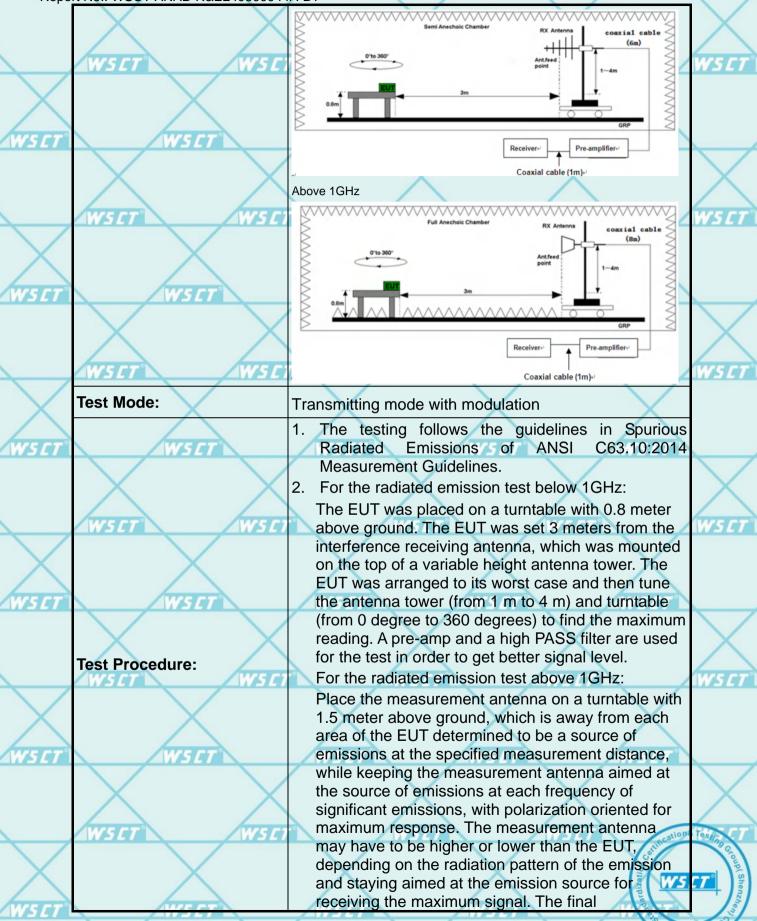
SET WSET





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EL: 0086-755-26996192 26996053 29996144 FAX: 0086-755-86: ember of the WSCT Group (WSCT.SA)

Street, Bao'an District, Shenzhen City, Guangdong Province, Chin E-mail: fengbing.wang@wsct-cert.com Http://www.wsct-cert.com 深圳世标检测认证股份有限公司
World Standard ration Certification & Testing Groups Shenzhen, Co.,Lt





Report No.: WSCT-ANAB-R&E240800044A-BT measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be WSI restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. 3. Set to the maximum power setting and enable the **EUT** transmit continuously. 4. Use the following spectrum analyzer settings: (1) Span shall wide enough to fully capture the emission being measured; (2) Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak (3) For average measurement: use duty cycle correction factor method per 15.35(c). Duty cycle = On time/100 milliseconds On time =N1\*L1+N2\*L2+...+Nn-1\*LNn-1+Nn\*Ln Where N1 is number of type 1 pulses, L1 is length of type 1 pulses, etc. Average Emission Level = Peak Emission Level + 20\*log(Duty cycle) WSCI Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

**PASS** 

Test results:

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Report No.: WSCT-ANAB-R&E240800044A-BT

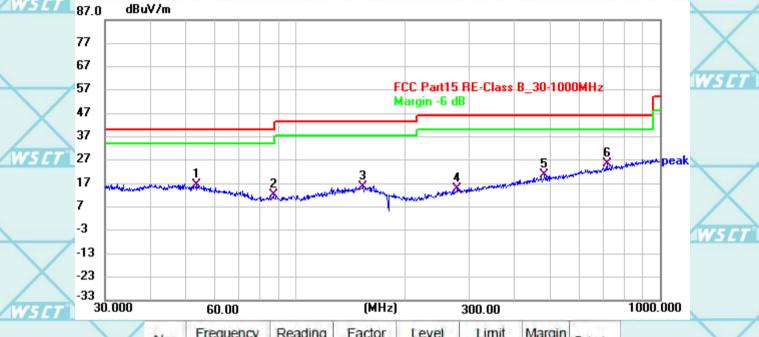
#### 6.11.2. **Test Data**

Please refer to following diagram for individual

**Below 1GHz** 

The worst mode is GFSK

Horizontal:



$\times$	No.	Frequency (MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	
	1	53.8582	35.82	-19.19	16.63	40.00	-23.37	QP	
WSET	2	87.3794	35.98	-23.91	12.07	40.00	-27.93	QP	
	3	153.7385	35.05	-19.54	15.51	43.50	-27.99	QP	1
	4	279.0436	35.82	-21.03	14.79	46.00	-31.21	QP	/
WSET	5	483.4854	36.43	-15.81	20.62	46.00	-25.38	QP	WS
	6 *	717.3106	37.25	-11.95	25.30	46.00	-20.70	QP	

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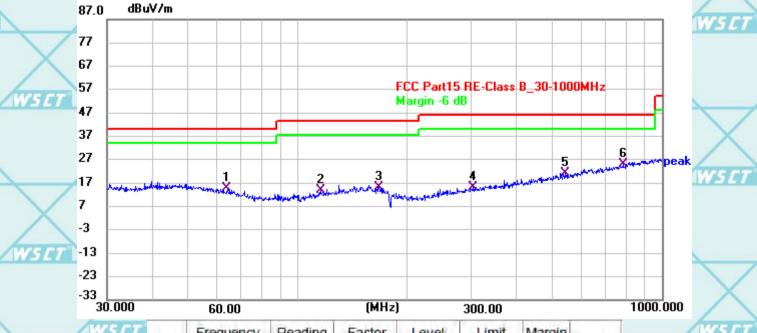






Report No.: WSCT-ANAB-R&E240800044A-BT Vertical:

WSET



	(MHz)	Reading (dBuV)	Factor (dB/m)	(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	64.2074	35.87	-21.12	14.75	40.00	-25.25	QP
2	116.0813	35.72	-21.74	13.98	43.50	-29.52	QP
3	167.2368	35.50	-20.29	15.21	43.50	-28.29	QP
4	303.1448	35.14	-20.10	15.04	46.00	-30.96	QP
5	542.0848	36.22	-14.98	21.24	46.00	-24.76	QP
6 *	783.3747	36.09	-11.21	24.88	46.00	-21.12	QP
	3 4 5	(MHZ)  1 64.2074  2 116.0813  3 167.2368  4 303.1448  5 542.0848	(MHZ) (0BUV)  1 64.2074 35.87  2 116.0813 35.72  3 167.2368 35.50  4 303.1448 35.14  5 542.0848 36.22	(MHZ) (dBuV) (dB/m)  1 64.2074 35.87 -21.12  2 116.0813 35.72 -21.74  3 167.2368 35.50 -20.29  4 303.1448 35.14 -20.10  5 542.0848 36.22 -14.98	(MHZ) (dBuV) (dB/m) (dBuV/m)  1 64.2074 35.87 -21.12 14.75  2 116.0813 35.72 -21.74 13.98  3 167.2368 35.50 -20.29 15.21  4 303.1448 35.14 -20.10 15.04  5 542.0848 36.22 -14.98 21.24	(MHZ) (dBuV) (dB/m) (dBuV/m) (dBuV/m) 1 64.2074 35.87 -21.12 14.75 40.00 2 116.0813 35.72 -21.74 13.98 43.50 3 167.2368 35.50 -20.29 15.21 43.50 4 303.1448 35.14 -20.10 15.04 46.00 5 542.0848 36.22 -14.98 21.24 46.00	(MHZ)     (dBuV)     (dBMV)     (dBuV/m)     (dBuV/m)

Note1:

Freq. = Emission frequency in MHz

Reading level (dBµV) = Receiver reading

Corr. Factor (dB) = Antenna factor + Cable loss - Amplifier factor.

Measurement ( $dB\mu V$ ) = Reading level ( $dB\mu V$ ) + Corr. Factor (dB)

Limit (dBµV) = Limit stated in standard

Margin (dB) = Measurement (dB $\mu$ V) - Limits (dB $\mu$ V)

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#### **Above 1GHz**

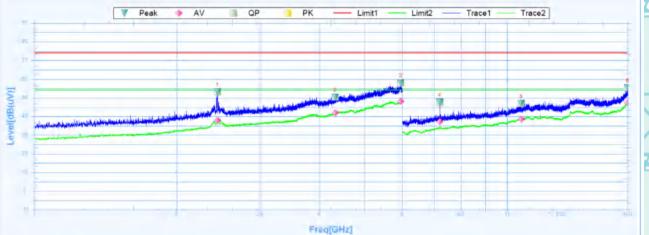
Note 1: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note 2: The spurious above 18G is noise only, do not show on the report.

The worst mode is GFSK

Low channel: 2402MHz

Horizontal:



W5 E

Suspu	ited Data Lis	t								
NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2438.1250	53.17	27.39	25.78	74	-20.83	0.1	Horizontal	PK	Pass
1	2438.1250	37.88	27.39	10.49	54	-16.12	0.1	Horizontal	AV	Pass
2	4326.8750	50.3	30.29	20.01	74	-23.7	46.6	Horizontal	PK	Pass
2	4326.8750	41.88	30.29	11.59	54	-12.12	46.6	Horizontal	AV	Pass
3	5958.7500	57.94	32.73	25.21	74	-16.06	59.7	Horizontal	PK	Pass
3	5958.7500	48.12	32.73	15.39	54	-5.88	59.7	Horizontal	AV	Pass
4	7206.0000	47.62	7	40.62	74	-26.38	257.6	Horizontal	PK	Pass
4	7206.0000	37.28	7	30.28	54	-16.72	257.6	Horizontal	AV	Pass
5	10717.5000	47.09	14.63	32.46	74	-26.91	360.1	Horizontal	PK	Pass
5	10717.5000	38.63	14.63	24	54	-15.37	360.1	Horizontal	AV	Pass
6	17994.0000	55.32	23.89	31.43	74	-18.68	0.5	Horizontal	PK	Pass
6	17994.0000	47.42	23.89	23.53	54	-6.58	0.5	Horizontal	AV	Pass

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Freq[GHz]

7 1	 _	_	-

W5 C

Suspi	uted Data Lis	t					/ 1	_		
NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	1482.5000	41.13	25.02	16.11	74	-32.87	289	Vertical	PK	Pass
1	1482.5000	29.87	25.02	4.85	54	-24.13	289	Vertical	AV	Pass
2	2438.1250	48.41	27.39	21.02	74	-25.59	253.2	Vertical	PK	Pass
2	2438.1250	37.59	27.39	10.2	54	-16.41	253.2	Vertical	AV	Pass
3	5821.2500	57.31	32.51	24.8	74	-16.69	93	Vertical	PK	Pass
3	5821.2500	46.03	32.51	13.52	54	-7.97	93	Vertical	AV	Pass
4	7206.0000	46.19	7	39.19	74	-27.81	96.1	Vertical	PK	Pass
4	7206.0000	38.84	7	31.84	54	-15.16	96.1	Vertical	AV	Pass
5	10300.5000	45.2	13.29	31.91	74	-28.8	240.8	Vertical	PK	Pass
5	10300.5000	37.42	13.29	24.13	54	-16.58	240.8	Vertical	AV	Pass
6	17941.5000	53.82	23.53	30.29	74	-20.18	38.7	Vertical	PK	Pass
6	17941.5000	46.58	23.53	23.05	54	-7.42	38.7	Vertical	AV	Pass

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Middle channel: 2440MHz

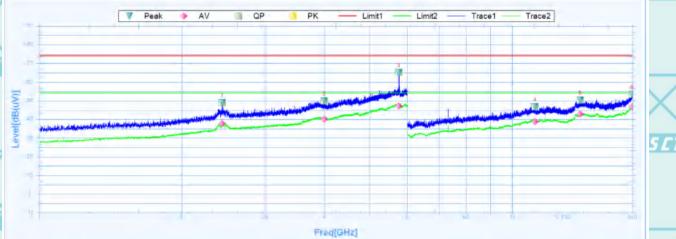
Horizontal:

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Suspi	uted Data Lis	t								-
NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2437.5000	49.07	27.39	21.68	74	-24.93	-0.1	Horizontal	PK	Pass
1	2437.5000	37.75	27.39	10.36	54	-16.25	-0.1	Horizontal	AV	Pass
2	4008.1250	49.89	29.71	20.18	74	-24.11	29.6	Horizontal	PK	Pass
2	4008.1250	40.12	29.71	10.41	54	-13.88	29.6	Horizontal	AV	Pass
3	5761.8750	65.1	32.42	32.68	74	-8.9	108.5	Horizontal	PK	Pass
3	5761.8750	47.22	32.42	14.8	54	-6.78	108.5	Horizontal	AV	Pass
4	11194.5000	46.85	15.74	31.11	74	-27.15	37.5	Horizontal	PK	Pass
4	11194.5000	38.91	15.74	23.17	54	-15.09	37.5	Horizontal	AV	Pass
5	13953.0000	50.29	18.99	31.3	74	-23.71	287.4	Horizontal	PK	Pass
5	13953.0000	42.83	18.99	23.84	54	-11.17	287.4	Horizontal	AV	Pass
6	17941.5000	53.5	23.53	29.97	74	-20.5	183.4	Horizontal	PK	Pass
6	17941.5000	46.82	23.53	23.29	54	-7.18	183.4	Horizontal	AV	Pass

	6	17941.5000	46.82	23.53	23.29	54	-7.18	183.4	Horizontal	AV	Pass
		-	_				-			-	_
AWS CT			SET		WS ET		/ W/S			W5 L	

WSET	WSET	W	SET	VSET W	SET
X	X	$\times$	$\times$	$\times$	

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WSET	WSET	W5ET	WSET	scationa Testion
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深圳世标检测认证股份有限公司 \*\* 內

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VSCT WSCT







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WSET

Vertical:



W5 E1

W5 E

Susputed Data List											
NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict	
1	1798.7500	43.25	25	18.25	74	-30.75	182.6	Vertical	PK	Pass	
1	1798.7500	30.55	25	5.55	54	-23.45	182.6	Vertical	AV	Pass	
2	3401.2500	54.92	28.44	26.48	74	-19.08	-0.1	Vertical	PK	Pass	
2	3401.2500	37.56	28.44	9.12	54	-16.44	-0.1	Vertical	AV	Pass	
3	5944.3750	57.08	32.71	24.37	74	-16.92	173	Vertical	PK	Pass	
3	5944.3750	47.51	32.71	14.8	54	-6.49	173	Vertical	AV	Pass	
4	7323.0000	46.17	6.88	39.29	74	-27.83	197.7	Vertical	PK	Pass	
4	7323.0000	39.16	6.88	32.28	54	-14.84	197.7	Vertical	AV	Pass	
5	14194.5000	50.5	18.93	31.57	74	-23.5	355.8	Vertical	PK	Pass	
5	14194.5000	42.56	18.93	23.63	54	-11.44	355.8	Vertical	AV	Pass	
6	17997.0000	53.96	23.91	30.05	74	-20.04	226.4	Vertical	PK	Pass	
6	17997.0000	47.22	23.91	23.31	54	-6.78	226.4	Vertical	AV	Pass	

WSET	WSC	WSE	7 W	SET	WSET
	WSET	WSET	WSET	WSET	WSET
X	X				X

W5ET WSET W5 ET WSET







Report No.: WSCT-ANAB-R&E240800044A-BT

High channel: 2480MHz

Horizontal:

W5 CT



WS E1

W5 CI

Sus	Susputed Data List										
NO	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict	
1	2198.1250	43.14	26.57	16.57	74	-30.86	248.7	Horizontal	PK	Pass	
1	2198.1250	33.23	26.57	6.66	54	-20.77	248.7	Horizontal	AV	Pass	
2	2435.6250	47	27.38	19.62	74	-27	161.4	Horizontal	PK	Pass	
2	2435.6250	36.89	27.38	9.51	54	-17.11	161.4	Horizontal	AV	Pass	
3	5713.1250	57.18	32.34	24.84	74	-16.82	0.1	Horizontal	PK	Pass	
3	5713.1250	47.51	32.34	15.17	54	-6.49	0.1	Horizontal	AV	Pass	
4	10719.0000	45.8	14.64	31,16	74	-28.2	347	Horizontal	PK	Pass	
4	10719.0000	38.89	14.64	24.25	54	-15.11	347	Horizontal	AV	Pass	
5	14121.0000	51.84	19	32.84	74	-22.16	238.2	Horizontal	PK	Pass	
5	14121.0000	42.49	19	23.49	54	-11.51	238.2	Horizontal	AV	Pass	
6	17953,5000	53.53	23.6	29.93	74	-20.47	142.6	Horizontal	PK	Pass	
6	17953.5000	46.74	23.6	23.14	54	-7.26	142.6	Horizontal	AV	Pass	

0	1/953.5000	46.74	23.6	23.14	54	-7.26	142.6	Horizontal	AV	Pass	
WSGT	, v	YSET		WSET		WS	ET		WSE		,
	WSET		WSGT		WSET			WSET			SET
WSET		VSET		WSET		WS			WSE		,
	WSET		WSET		WSET			WSET		cations test	
X		X		X					150	WSET	Group (Shenz)

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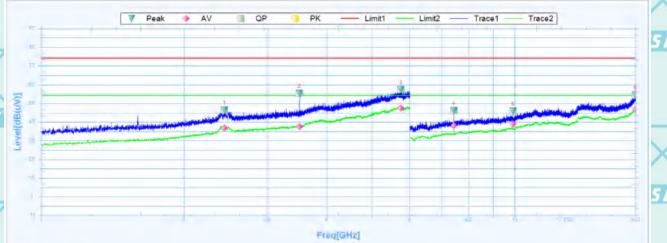




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WSC





NSE

NSE

Suspi	uted Data Lis	t				A				
NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2434.3750	46.26	27.38	18.88	74	-27.74	358.1	Vertical	PK	Pass
1	2434.3750	36.82	27.38	9.44	54	-17.18	358.1	Vertical	AV	Pass
2	3508.1250	55.38	28.52	26.86	74	-18.62	0	Vertical	PK	Pass
2	3508.1250	37.59	28.52	9.07	54	-16.41	0	Vertical	AV	Pass
3	5750.6250	57.37	32.4	24.97	74	-16.63	43.9	Vertical	PK	Pass
3	5750.6250	47.42	32.4	15.02	54	-6.58	43.9	Vertical	AV	Pass
4	7440.0000	46.21	7.3	38.91	74	-27.79	220.2	Vertical	PK	Pass
4	7440.0000	38.08	7.3	30.78	54	-15.92	220.2	Vertical	AV	Pass
5	9913.5000	45.92	12.16	33.76	74	-28.08	329	Vertical	PK	Pass
5	9913.5000	38.91	12.16	26.75	54	-15.09	329	Vertical	AV	Pass
6	17997.0000	54.4	23.91	30.49	74	-19.6	268.1	Vertical	PK	Pass
6	17997.0000	46.79	23.91	22.88	54	-7.21	268.1	Vertical	AV	Pass

#### Note:

- The emission levels of other frequencies are very lower than the limit and not show in test report.
- Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
  - Measurements were conducted in all three modulation (GFSK, Pi/4 DQPSK, 8DPSK), and the worst case Mode (GFSK) was submitted only.

\*\*\*\*\*END OF REPORT\*\*\*\*\*

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