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# wscTEST REPORT wsc

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FCC ID: 2ADYY-K16SAA

Product: Laptop Computer [7]

Model No.: K16SAA

Trade Mark: TECNO

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Report No.: WSCT-ANAB-R&E240700030A-Wi-Fi3 LT

Issued Date: 12 August 2024

**Issued for:** 

 
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 FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
 FLAT N 16/F BLOCK BUNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET

Issued By:

WSCT 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

TEL: +86-755-26996192

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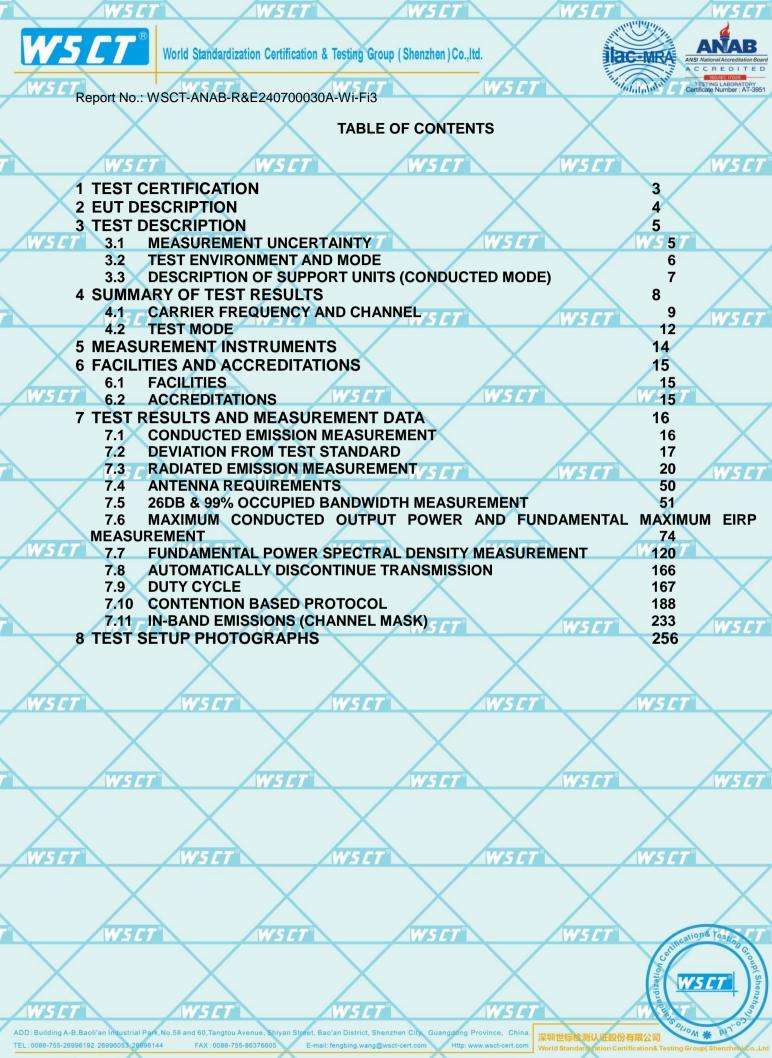
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Report No.: WSCT-ANAB-R&E240700030A-Wi-Fi3

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2 EUT Descrip	tion WSET WSET
Product:	Laptop Computer
Model No.:	K16SAA
Trade Mark:	TECNO <sup>SET</sup> WSET
Operation Freque	U-NII-7: 6525-6875MHz U-NII-8: 6875-7125MHz
Modulation type:	IEEE 802.11a/n/ac/ax: OFDM/OFDMA (BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)
Antenna Type:	FIPA Antenna
Antenna Gain	ANT1(MAIN):0.65dBi ANT2(AUX): 0.21dBi
Operating Voltage	Adapter1: E065-1R200325VU INPUT: 100-240V~50/60Hz, 1.5A OUTPUT:20.0V
Remark:	N/A.
onfiguration differences	no applicable. provided by the customer. WSCT WSCT
Configuration/ Processor	Camera
K16SAA (i5)	1M(Shengtai)
K16SAA (i7)	1M(Visual Era)
	oth configurations have been tested, and worst test result, which is the main test

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#### **TEST DESCRIPTION** 3

### 3.1 MEASUREMENT UNCERTAINTY

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

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		V V		X
	No.	Item	Uncertainty	
WS	1	Conducted Emission Test	±3.2dB W5CT	WSET
$\bigvee$	2	RF power, conducted	±0.16dB	$\sim$
$\wedge$	3	Spurious emissions, conducted	±0.21dB	$\wedge$
NSET	4	All emissions, radiated(<1GHz)	±4.7dB577	WSET
	5	All emissions, radiated(>1GHz)	±4.7dB	
X	6	Temperature	±0.5°C	
WS	7	Humidityrser	±2%	WSCT
	8	Receiver Spurious Emissions	±2.5%	
Х	9	Transmitter Unwanted Emissions in the Spurious Domain	±2.5%	$\mathbf{X}$
NS ET	10 W	Transmitter Unwanted Emission in the out-of Band	±1.3%/5 <i>[</i> 7	WSCT
	11	Occupied Channel Bandwidth	±2.4%	

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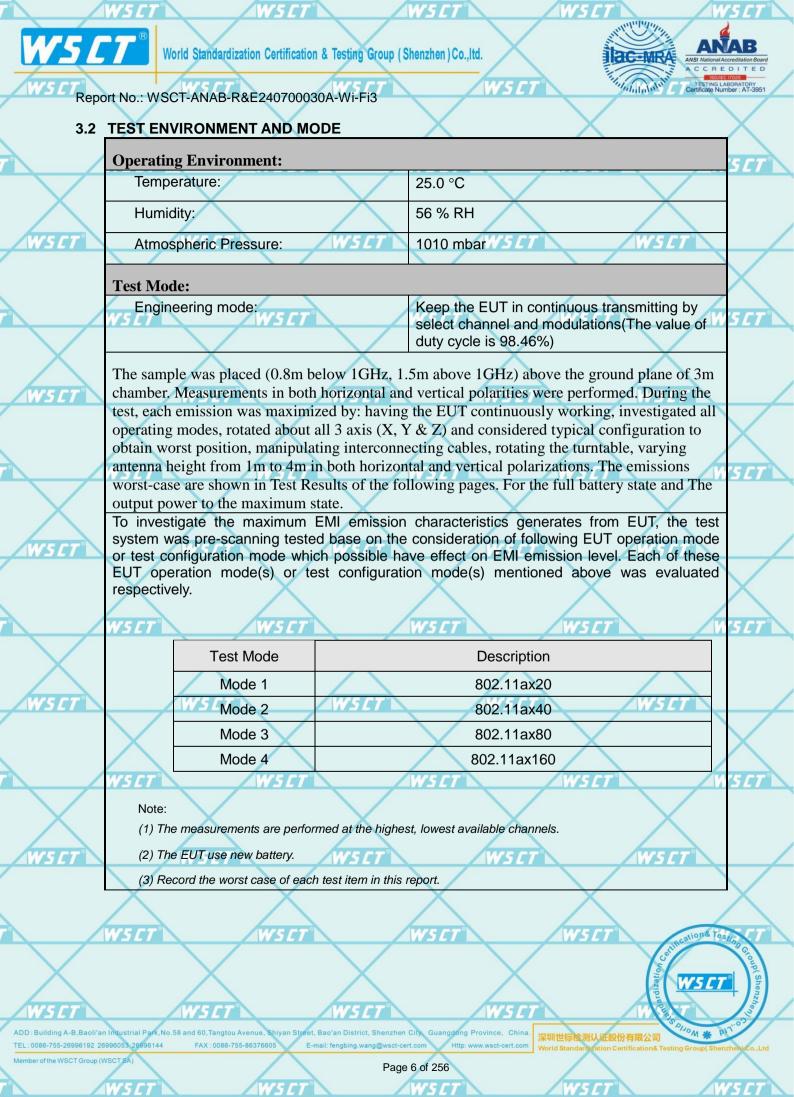
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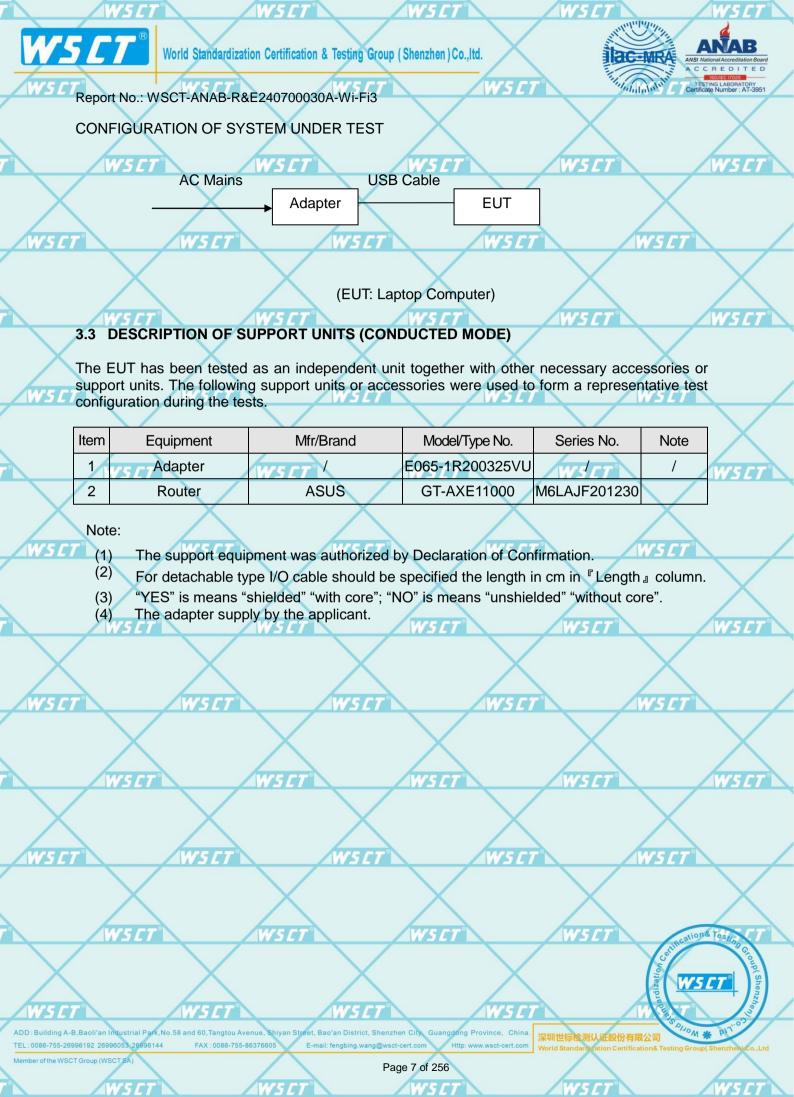
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                                                                                                                                      深圳世标检测认证股份有限公司
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                                              FAX:0086-755-8637660
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# 4 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

## FCC Part15 Subpart C&E

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	Standard Section	Test Item	Judgment	Remark				
	15.403(i) 15.407(a)(10)	26dB Emission Bandwidth	PASS	Complies				
$\overline{}$	2.1049	99% Occupied Bandwidth	PASS	Complies				
$\bigtriangleup$	15.407(a)(8)	Maximum Conducted Output Power	PASS	Complies				
W5C1	15.407(a)(8)	Fundamental Maximum EIRP	PASS	Complies				
	15.407(a)(8)	Power Spectral Density	PASS	Complies				
	15.407(b)	Fundamental Power Spectral Density	PASS*/5	Complies				
$\times$	15.407(d)(6)	Contention Based Protocol	PASS	Complies				
wsci	15.407(b)	Unwanted Emissions	PASS	Complies				
	15.207	AC Conducted Emission	PASS	Complies				
	15.407(c)	Automatically Discontinue Transmission	PASS	Complies				
$\overline{\mathbf{\nabla}}$	15.407(b)(6)	In-Band Emissions (Channel Mask)	PASS	Complies				
			$\wedge$					

NOTE:

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(1)" N/A" denotes test is not applicable in this test report. WS []

(2)EUT has been tested in unfolded states, and the report only reflects data in the unfolded state (worst-case scenario)

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(3) All test items in this report, except for power and PSD, are tested based on the minimum

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# 4.1 CARRIER FREQUENCY AND CHANNEL

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					1					/	$\langle \rangle$
	Test p	program			ws.	*#*#364	6633#*#	•W5C7			5 <i>CT</i>
		Channel	1	5	9	13	17	21	25	29	
	BW 20M	Freq. (MHz)	5955	5975	5995	6015	6035	6055	6075	6095	
WSET		Channel		3/5 <i>CT</i>		11	SET	9	W 52	77	
	BW 40M	Freq. (MHz)	59	85	60	005	60	45	60	85	$\checkmark$
		Channel		7				2	3		$\wedge$
	BW 80M	Freq. (MHz)	ET	598	35 W S	<b>CT</b>	/	W 5 .60	65		SCT
		Channel		$\smallsetminus$			15				
	BW 160M	Freq. (MHz)		$\wedge$		60	)25				
WSET									1000		_
		Channel	33	37	41	45	49	53	57	61	
	BW 20M	Freq. (MHz)	6115	6135	6155	6175	6195	6215	6235	6255	X
		Channel	3	5		43	5	1	5	9	
	BW 40M	Freq. (MHz)	61	25	6	165	62	05	62	45	/ <i>5 CT</i> ° N
$\times$		Channel		39	9		$\times$	5	5		
	BW 80M	Freq. (MHz)		614	45	_		62			
WS ET		Channel		NSCT <sup>®</sup>		W	17 IT		WS		/
	BW 160M	Freq. (MHz)				61	185	$\sim$			$\mathbf{X}$
				1							$\langle \rangle$
	BW 20M	Channel	<b>C</b> 765	69	73 5	77	81	W85 C7	89	93	SCT
	BW 20W	Freq. (MHz)	6275	6295	6315	6335	6355	6375	6395	6415	-
	BW 40M	Channel	6	57	-	75	8	3	9	1	-
WSET	BVV 40IVI	Freq. (MHz)	62	855 77	6	325	rs r <del>7</del> 63	65	64	05	
		Channel		71	1	/		8	7		
	BW 80M	Freq. (MHz)	$\langle \rangle$	630	)5			63	85		$\mathbf{X}$
		Channel	CT°		Aves		79	wsrz		6	SET
	BW 160M	Freq. (MHz)				63	345			/	
X		X		X			X				

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		/	$\overline{\mathbf{X}}$								X
	BW 20M	Channel	97	101	105	109	113	117	121	125	ISET
	BVV ZUIVI	Freq. (MHz)	6435	6455	6475	6495	6515	6535	6555	6575	
X	BW 40M	Channel	9	9	1	07	X 11	5	1:	23	
		Freq. (MHz)	64	45	64	485	65	25		65	
WSET		Channel	-/	<u>10</u>	3	W	SET N	11	9		
	BW 80M	Freq. (MHz)	$\boldsymbol{\mathbf{x}}$	646	65			654	45		$\times$
	DW 4COM	Channel				1	11			4	
	BW 160M	Freq. (MHz)			<u>/ws</u>	65	505	WS CT			<i>15 CT</i>
		$\sim$		$\mathbf{V}$						/	-
$\sim$	BW 20M	Channel	129	133	137	141	145	149	153	157	_
WSET		Freq. (MHz)	6595	6615	6635	6655	6675	6695	6715	6735	
	BW 40M	Channel	1:	31	1	39	14	17	1:	55	$\checkmark$
		Freq. (MHz)	66	605	66	645	66	85	67	25	$\wedge$
	BW 80M	Channel	CT.	13	5 ws		/	ws r15	1		75 CT
		Freq. (MHz)		662	25			670	05		
		Channel		X	143			X			
WSET	BW 160M	Freq. (MHz)		WG CT		66	665			<b>77</b>	
	BW 20M	Channel	161	165	169	173	177	181	185	189	$\mathbf{X}$
		Freq. (MHz)	6755	6775	6795	6815	6835	6855	6875	6895	
	BW 40M	Channel		63	<b>W</b> 5	71	17	79 <sup>WS</sup> ET	18	37	VSCT
		Freq. (MHz)	67	65	68	305	68	45	68	85	
	BW 80M	Channel		16	7	/	$\sim$	18	3		
WSET		Freq. (MHz)		N 5 [ 678	35	W	' <i>5 [ T</i> ° 🔪	680	65 WS		-/
		Channel				1	75	$\sim$			$\bigvee$
	BW 160M	Freq. (MHz)			$ \land$	68	325	$\wedge$			$\wedge$
	WSET	ws	CT'		w5	77	/	WSET			VS CT

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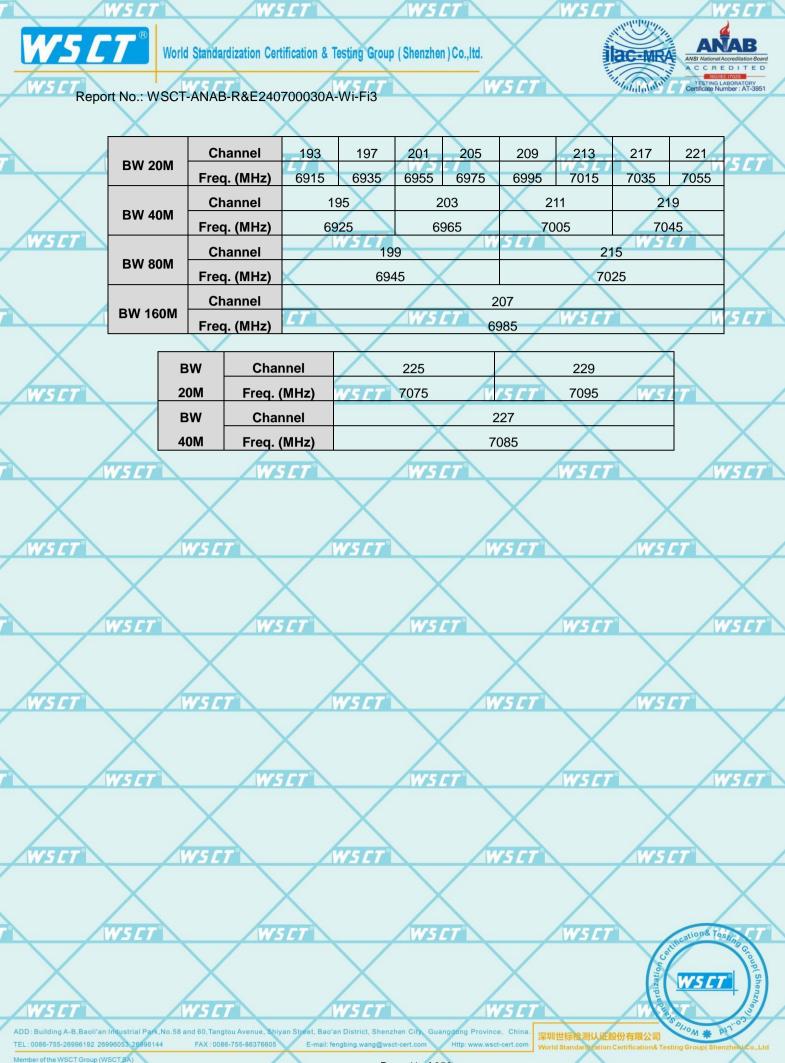
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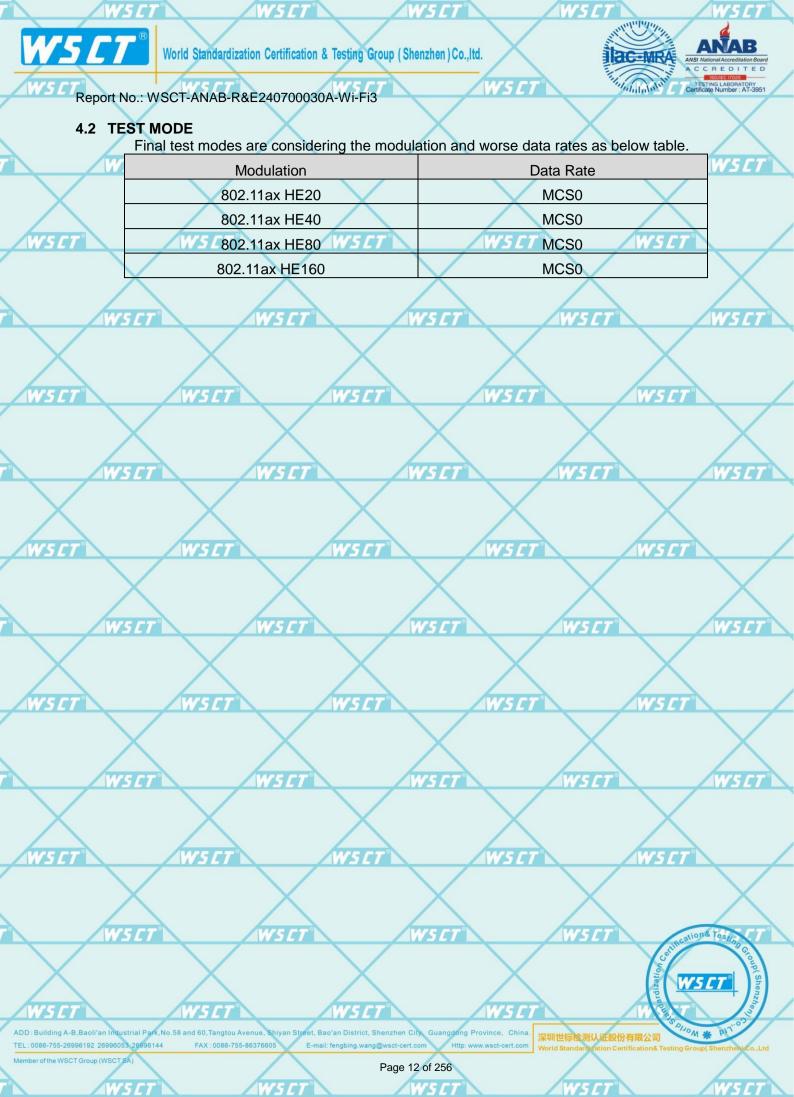
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	Х		X	X		X	X
			5925-7125 MHz	5925-7125 MHz	5925-7125 MHz	5925-7125 MHz	
		CH.#	U-NII-5	U-NII-6	U-NII-7	U-NII-8	W5C7
X			802.11ax HE20	802.11ax HE20	802.11ax HE20	802.11ax HE20	
	L	Low	001	097	117	189	
WSET	М	Middle	045	105	149	209	
	н	High	093	113	-	229	$\sim$
	St	traddle	-	- / \	185	<u> </u>	$\langle \rangle$
W	5 <i>C1</i>		W5LT	WS ET		5C7°	W5CT
			5925-7125 MHz	5925-7125 MHz	5925-7125 MHz	5925-7125 MHz	
		CH.#	U-NII-5	U-NII-6	U-NII-7	U-NII-8	
WSET			802.11ax HE40	802.11ax HE40	802.11ax HE40	802.11ax HE40	
	L	Low	003	099	123	203	$\overline{}$
	М	Middle	043	- X	147	× -	$\mathbf{X}$
	Н	High	091	107.05.07	179	227	WSET
	St	traddle		115		187	
X		>		Х	X	X	1
			5925-7125 MHz	5925-7125 MHz	5925-7125 MHz	5925-7125 MHz	
WSET		CH.#	U-NII-5	U-NII-6	U-NII-7	U-NII-8	
			802.11ax HE80	802.11ax HE80	802.11ax HE80	802.11ax HE80	
	L	Low	007		135	199	$\langle \rangle$
W.	М	Middle	039-7	103W5 []	W.	<i></i>	WSCT
	Н	High	087	$\sim$	151	215	
	St	traddle	- /	119	183	$\land$	
WSCT		WS	77	NS FT	WSFT	WSFT	
			5925-7125 MHz	5925-7125 MHz	5925-7125 MHz	5925-7125 MHz	
		CH.#	U-NII-5	U-NII-6	U-NII-7	U-NII-8	X
			802.11ax HE160	802.11ax HE160	802.11ax HE160	802.11ax HE160	WSET
	L	Low	015				
X	М	Middle	047	Х -	143	207	
	Н	High	079				
WSET		traddle	-	111	175	WSLI	
N	lote		idiation spurious en		dulation and the wo	orst data rate was	X
		reieren	ce the max RF cond	aucteu power.	/		

2. The RF test items make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

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#### **MEASUREMENT INSTRUMENTS** 5

	WSFT	WSIT	/wsrt		/5 <i>ГТ</i> °		E1
$\overline{\langle}$	NAME OF EQUIPMENT	MANUFACTURER	MODEL	SERIAL NUMBER	Calibration Date	Calibration Due.	
ET	Test softwares	- /w	C7EZ-EMC	CON-03A	-/ws	CT°	
	Test software		MTS8310	-	<u> </u>	-	/
	EMI Test Receiver	R&S	ESCI	100005	11/05/2023	11/04/2024	
	W5 LIISN	AFJ	LS165 <i>CT</i>	16010222119	11/05/2023	11/04/2024	<i>C</i> 7
$\checkmark$	LISN(EUT)	Mestec	AN3016	04/10040	11/05/2023	11/04/2024	
ET	Universal Radio Communication Tester	R&S	CMU 200	1100.0008.02	11/05/2023	11/04/2024	
	Coaxial cable	Megalon	LMR400	N/A	11/05/2023	11/04/2024	1
	GPIB cable	Megalon	GPIB	N/A	11/05/2023	11/04/2024	
	Spectrum Analyzer	R&S	FSU S CT	100114	11/05/2023	11/04/2024	[]
$\times$	Pre Amplifier	H.P.	HP8447E	2945A02715	11/05/2023	11/04/2024	
	Pre-Amplifier	CDSI	PAP-1G18-38		11/05/2023	11/04/2024	
5 <i>CT</i> 1	Bi-log Antenna	SUNOL Sciences	JB3	A021907	11/05/2023	11/04/2024	
	9*6*6 Anechoic	X	- X		11/05/2023	11/04/2024	K
	Horn Antenna	COMPLIANCE ENGINEERING	CE18000	- /	11/05/2023	11/04/2024	<b>C</b> 7
	Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-631	11/05/2023	11/04/2024	
	Cable	TIME MICROWAVE	LMR-400	N-TYPE04	11/05/2023	11/04/2024	
ET	System-Controller	CCS WS	C7 N/A	W N/AT	N.C.RW	CN.C.R	
	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	<u> </u>	11/05/2023	11/04/2024	<b>[</b> 7
$\times$	Loop Antenna	EMCO	6502	00042960	11/05/2023	11/04/2024	
	Horn Antenna	SCHWARZBECK	BBHA 9170	1123	11/05/2023	11/04/2024	
5 <i>CT</i> 1	Power meter	Anritsu	ML2487A	6K00003613	11/05/2023	11/04/2024	
	Power sensor	Anritsu	MX248XD		11/05/2023	11/04/2024	$\langle$
	Spectrum Analyzer	Keysight	N9010B	MY60241089	11/05/2023	11/04/2024	57
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# 6 Facilities and Accreditations

### 6.1 FACILITIES

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

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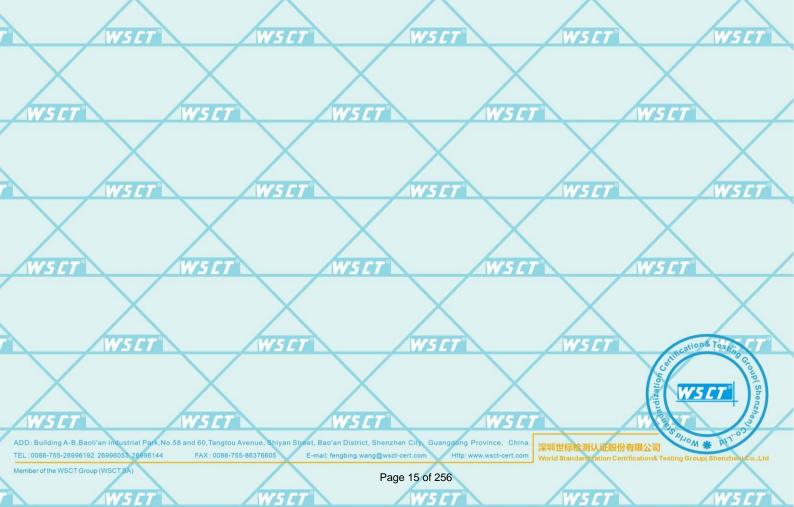
The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

6.2 ACCREDITATIONS ANAB - Certificate Number: AT-3951

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

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# 7 Test Results and Measurement Data

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# 7.1 CONDUCTED EMISSION MEASUREMENT POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

7	FREQUENCY (MHz)	Class A	(dBuV)	Class B	(dBuV)	Standard
		Quasi-peak	Average	Quasi-peak	Average	Stanuaru
	0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
	0.50 -5.0	73.00	60.00	56.00	46.00	FCC
	5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

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### The following table is the setting of the receiver

	Receiver Parameters	Setting	
	Attenuation	10 dB	
	Start Frequency	0.15 MHz	
WS C1	Stop Frequency WS CT	W5C30 MHz W5C7	
	IF Bandwidth	9 kHz	

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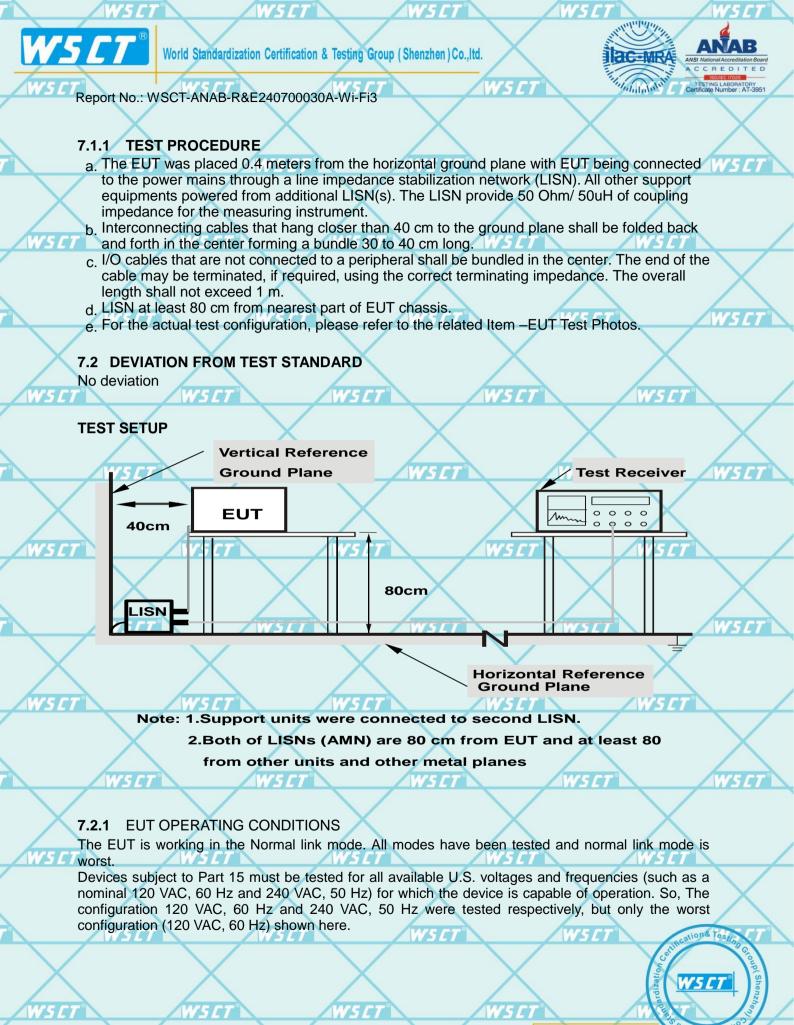
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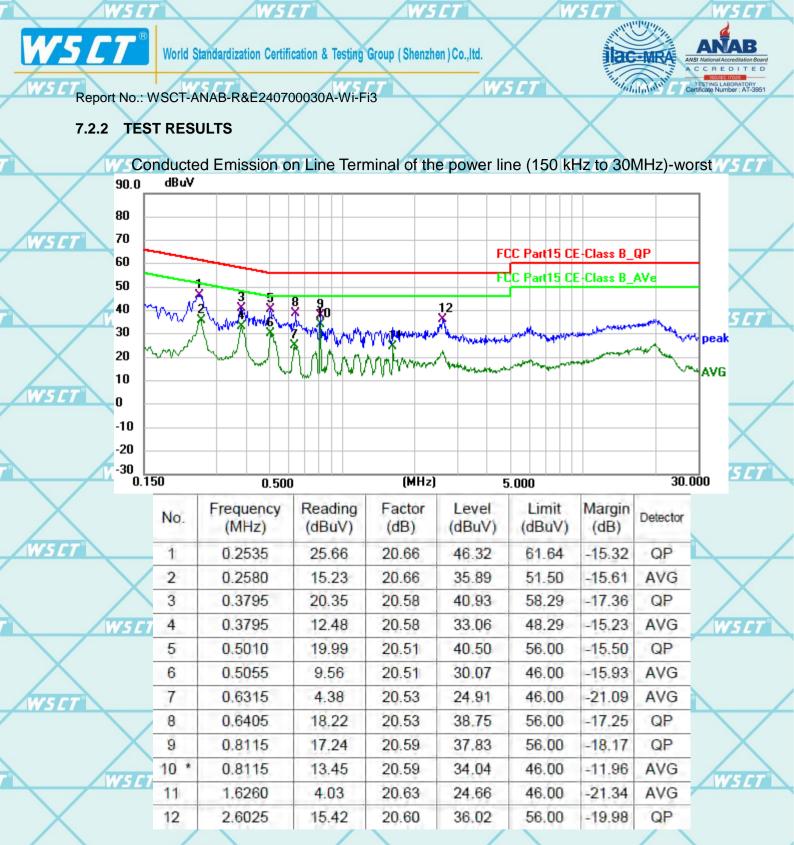
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Remark: All the modes have been investigated, and only worst mode is presented in this report.

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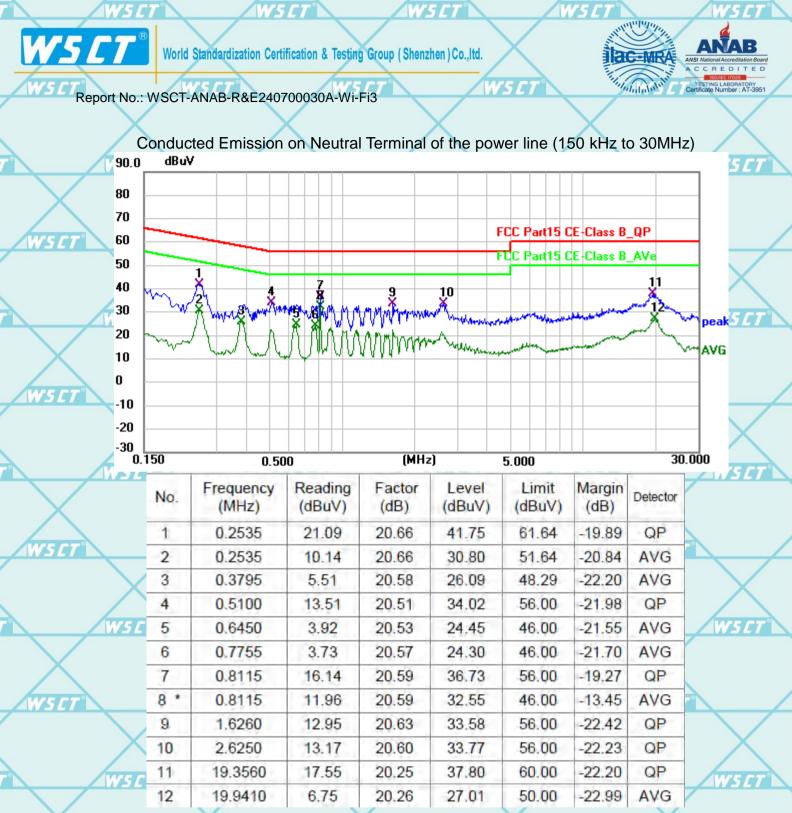
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#### Note1:

### Freq. = Emission frequency in MHz

- Reading level ( $dB\mu V$ ) = Receiver reading  $V \leq C$
- Corr. Factor (dB) = Antenna factor + Cable loss
- Measurement  $(dB\mu V) = Reading level (dB\mu V) + Corr. Factor (dB)$
- Limit ( $dB\mu V$ ) = Limit stated in standard
- Margin (dB) = Measurement (dB $\mu$ V) Limits (dB $\mu$ V)
- Q.P. =Quasi-Peak AVG =average
- \* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

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Report No.: WSCT-ANAB-R&E240700030A-Wi-Fi3

# 7.3 RADIATED EMISSION MEASUREMENT

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Radiated Emission Limits (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

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3	Frequencies	Field Strength	Measurement Distance
1	(MHz)	(micorvolts/meter)	(meters)
	0.009~0.490	2400/F(KHz)	300
1	0.490~1.705	24000/F(KHz)	30
V	/5 <i>CT</i> 1.705~30.0 W5C	30 WS CT	W30 CT
	30~88	100	3
	88~216	150	3
1	216~960	W5C7200	<b>W5[T</b> ] 3 <b>W5[</b>
	Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

	Limit (dBuV/m) (at 3M)					
FREQUENCY (MHz)	PEAK	AVERAGE				
Above 1000	W5574	<b>WSET</b> 54 <b>WSE</b>	<b>7</b> °N			

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
  - (3) Emission level (dBuV/m)=20log Emission level (uV/m).

$\mathbf{X}$	Spectrum Parameter	Setting	
WSET	Attenuation	SCT WSCAuto WSCT	
	Start Frequency	1000 MHz	/
	Stop Frequency	10th carrier harmonic	X
	RB / VB (emission in restricted	1 MHz / 1 MHz for Peak, 1 MHz / 1Hz for Average	ET
	band)		
X	X	X X X	
	Receiver Parameter	Catting	
	Neceiver Farameter	Setting	
WSET	Attenuation	Setting	
WSET			$\overline{\langle}$
WS CT	Attenuation	SCT WSCAuto WSCT	$\overline{\langle}$
WSET	Attenuation Start ~ Stop Frequency	SCT Auto 9kHz~150kHz / RB 200Hz for QP	

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### 7.3.1 **TEST PROCEDURE**

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.

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- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note:

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Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

7.3.2 DEVIATION FROM TEST STANDARD

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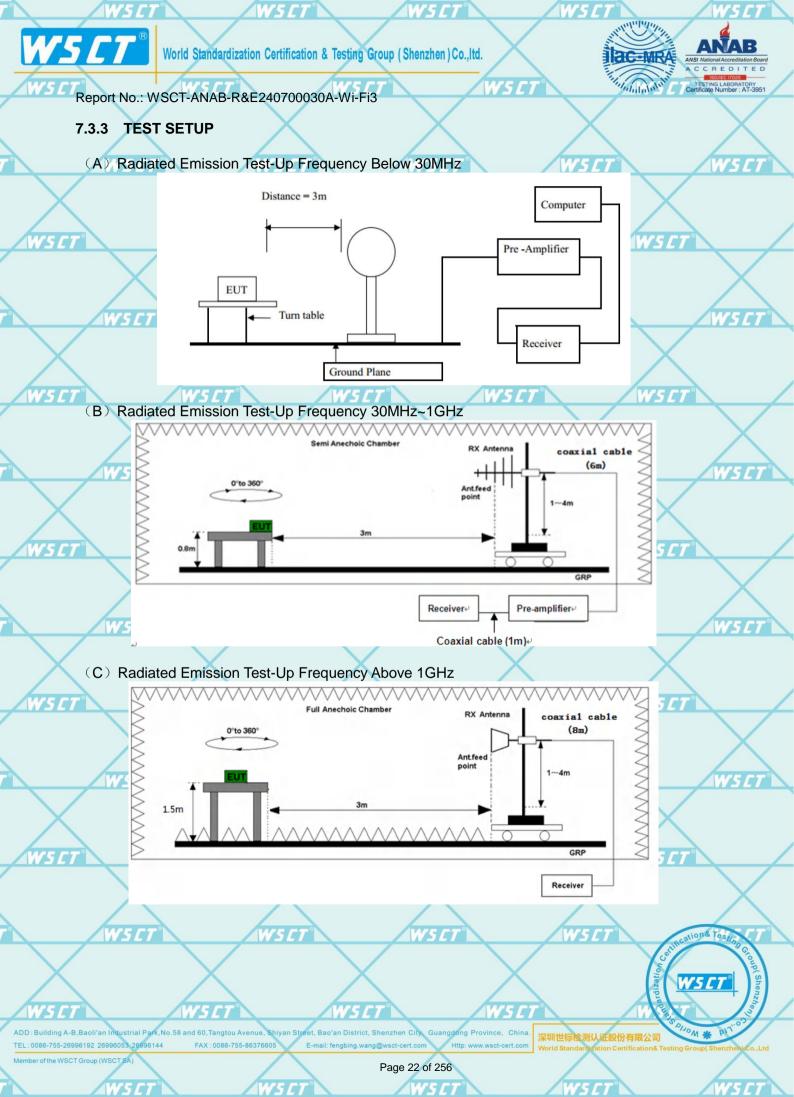
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### 7.3.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing. WSF 2 E RESULTS (BELOW 30 MHZ)

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1.3	7.3.5 RESULIS (BELOW 30 MILZ)						
X	Freq.	Reading	Limit	Margin	State		
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F		
					P		
	Х	Χ	X	X	Р		

Note 1: The symbol of "--" in the table which means not application.

For the test data above 1 GHz, According the ANSI C63.10-2013, where limits are specified for both average and Note 2: peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower

Note 3:

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than the limit line per 15.31(o) was not reported.

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The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is Note 4:

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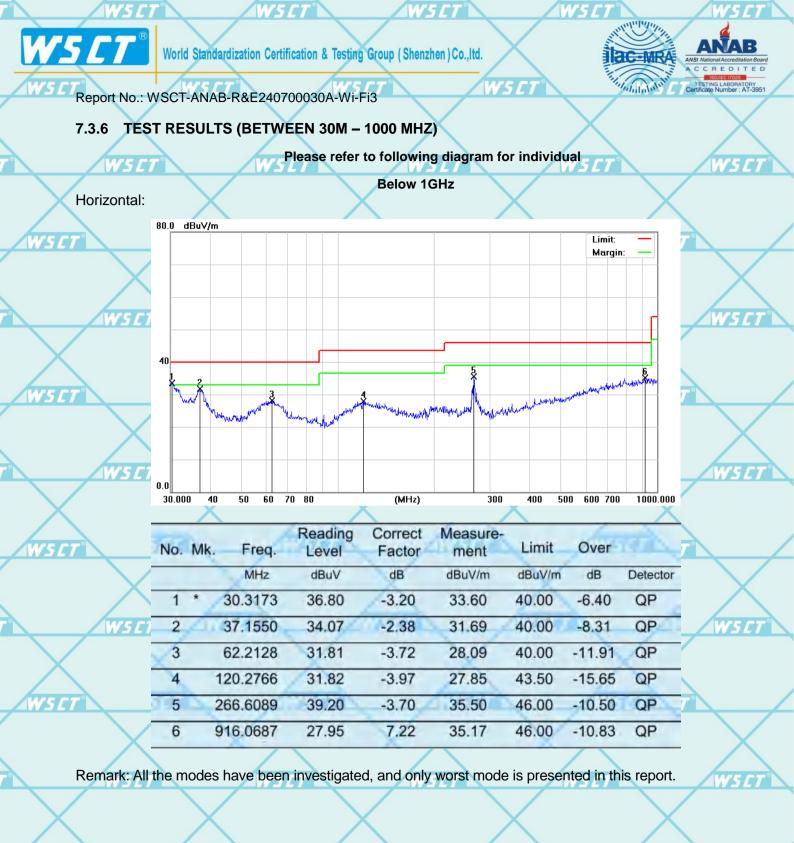
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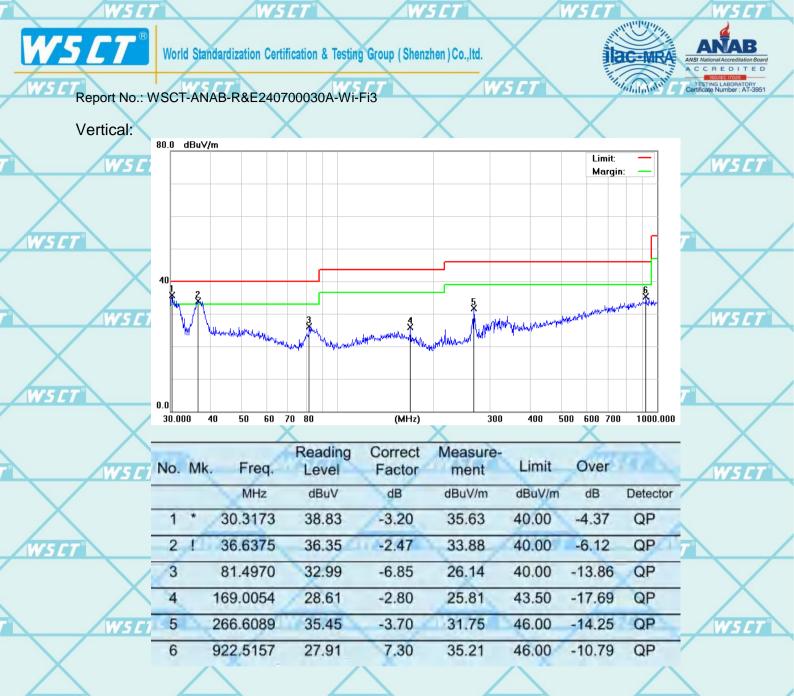
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### //5///Note1:

Freq. = Emission frequency in MHz Reading level  $(dB\mu V)$  = Receiver reading Corr. Factor (dB) = Antenna factor + Cable loss - Amplifier factor. Measurement  $(dB\mu V)$  = Reading level  $(dB\mu V)$  + Corr. Factor (dB)Limit  $(dB\mu V)$  = Limit stated in standard Margin (dB) = Measurement  $(dB\mu V)$  - Limits  $(dB\mu V)$ 

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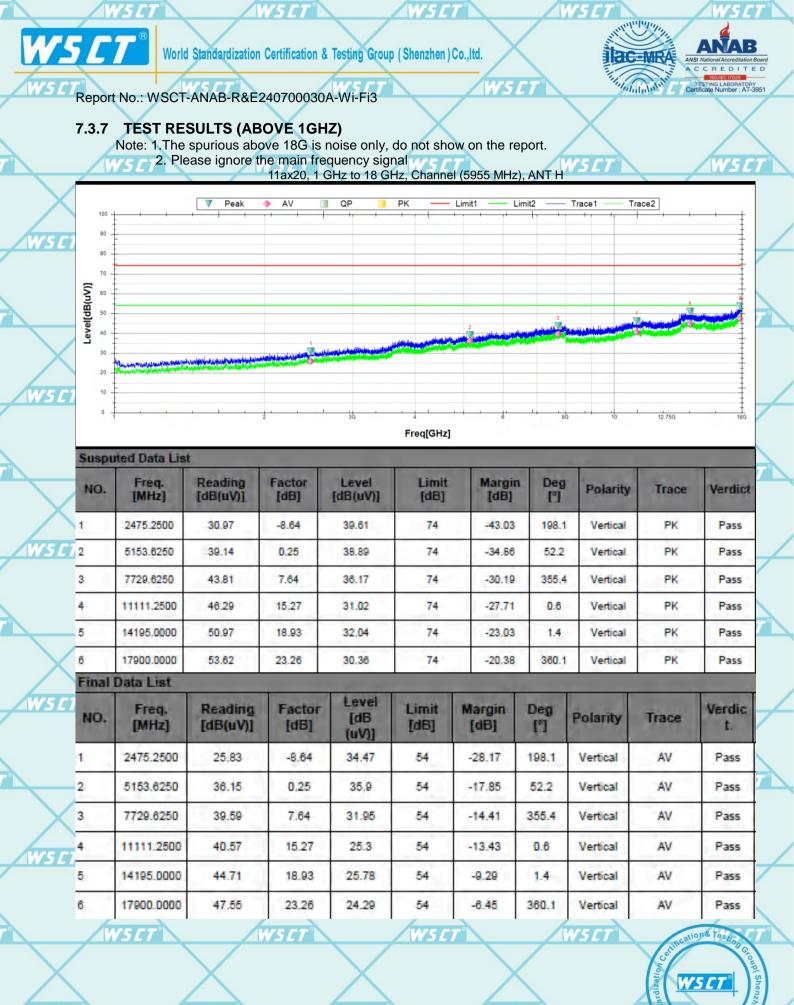
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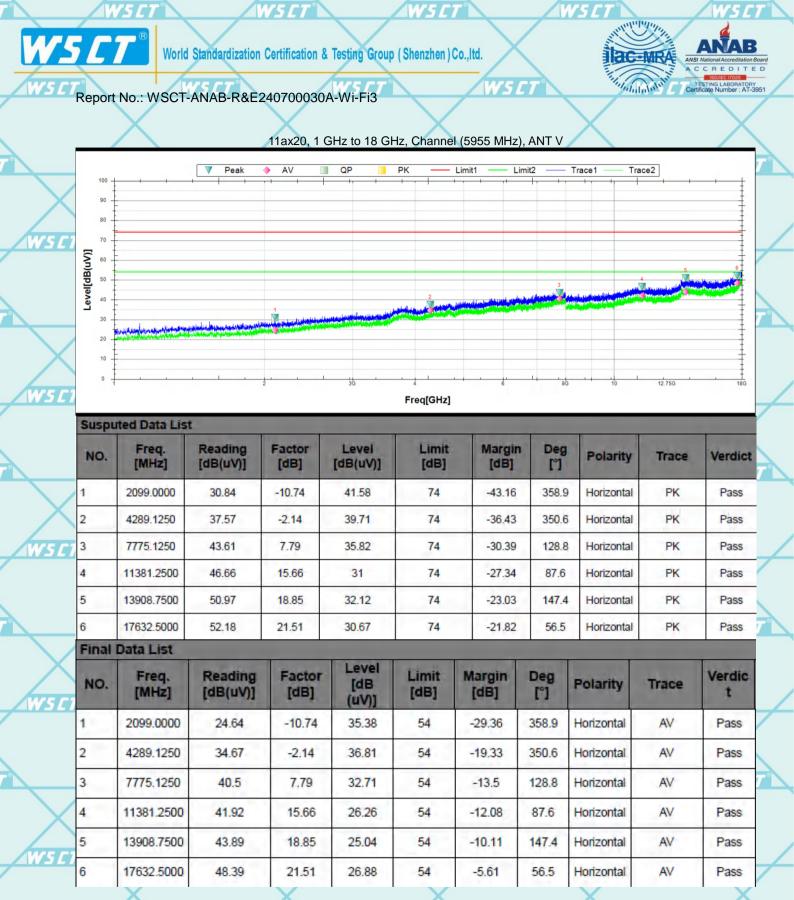
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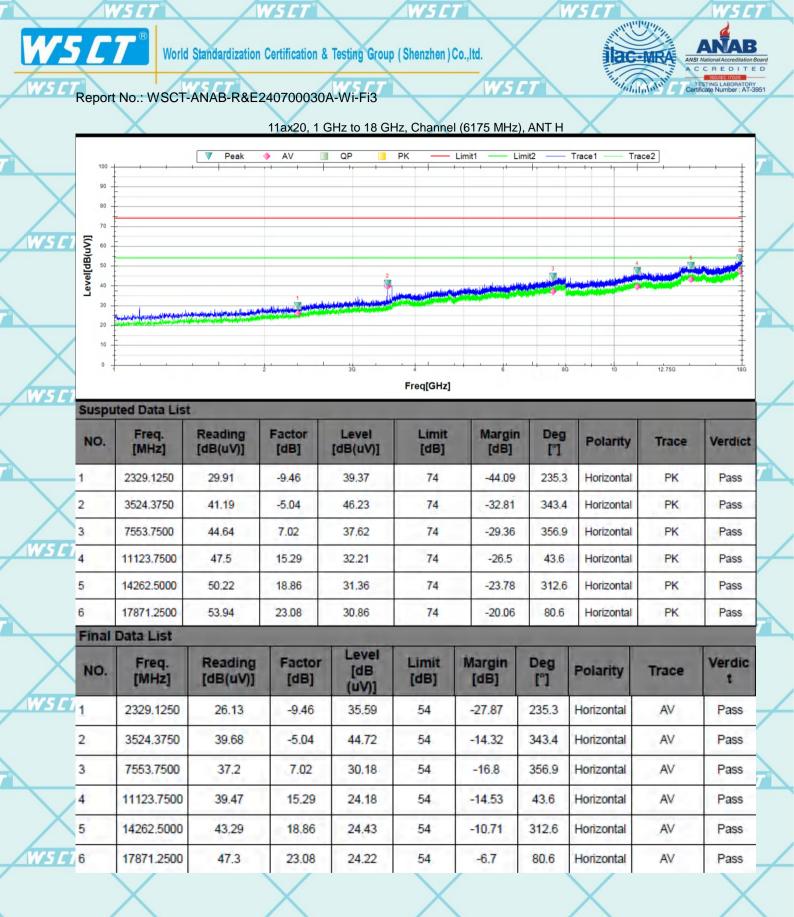
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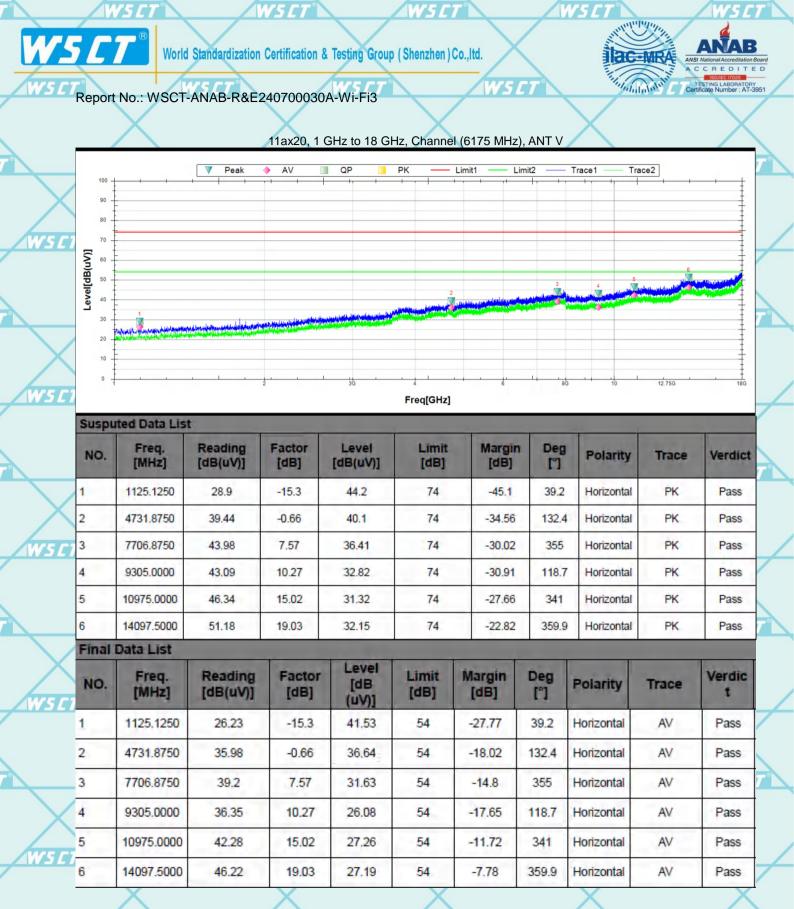
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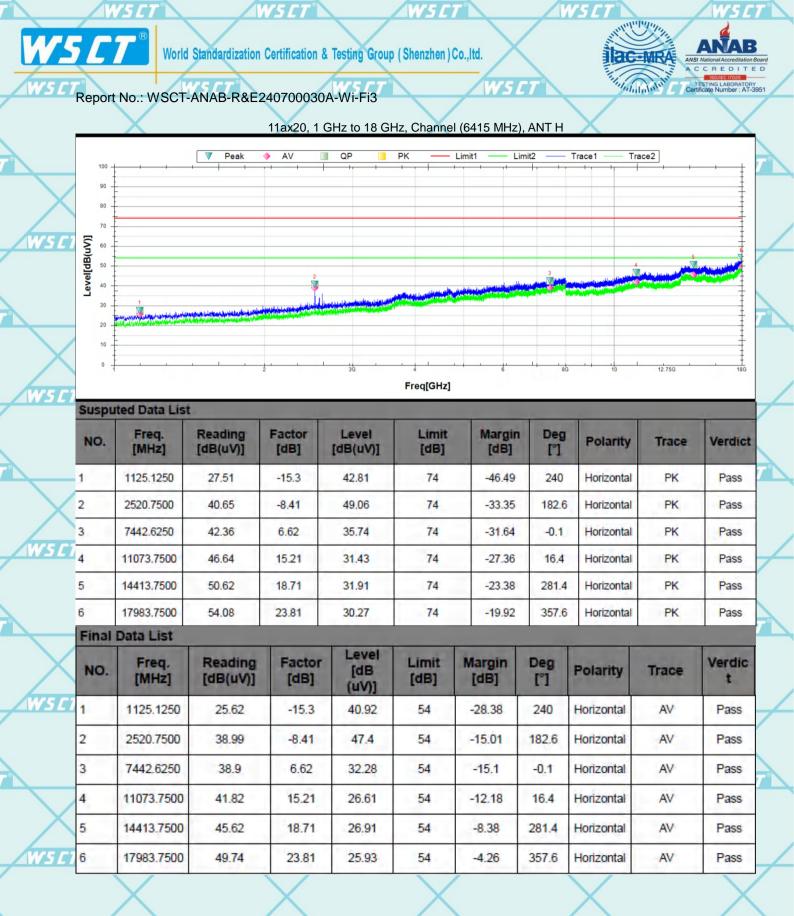
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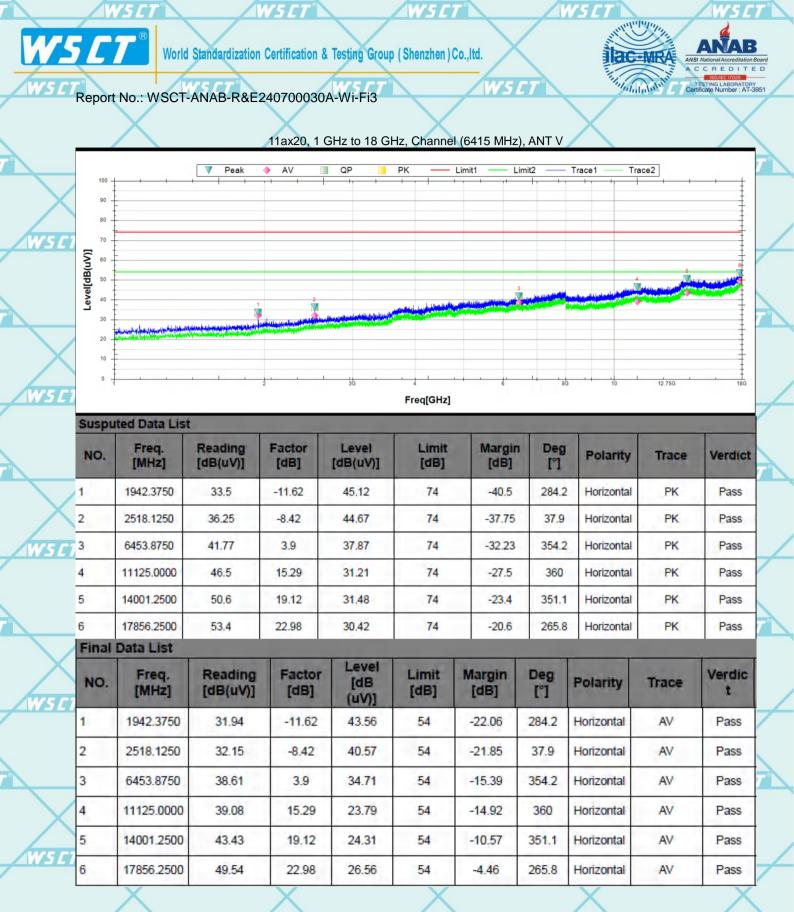
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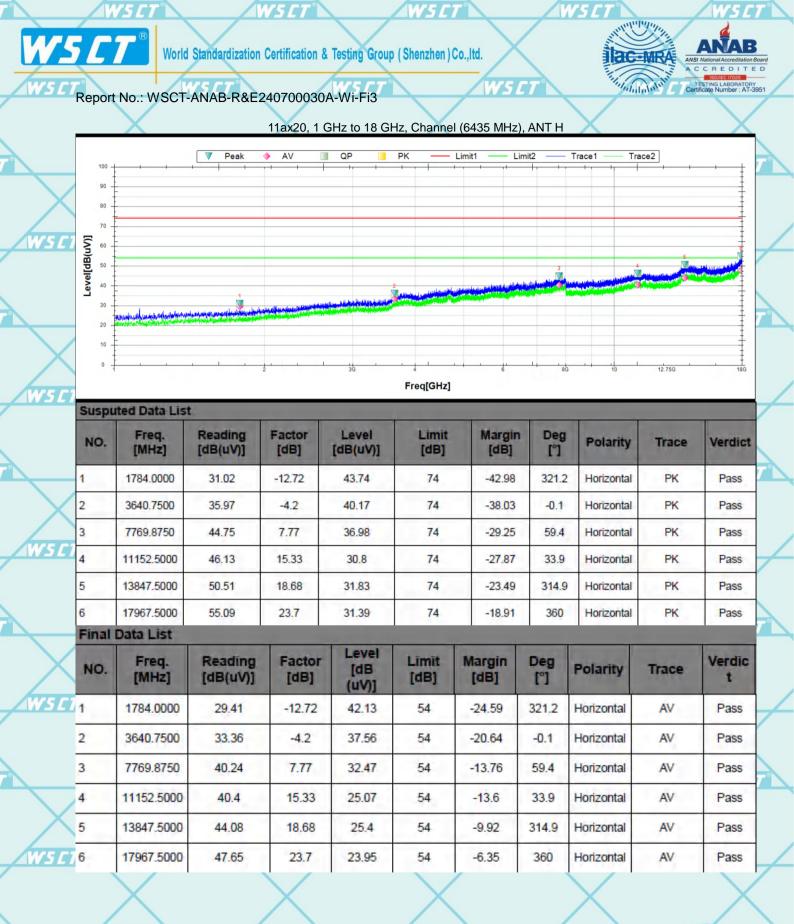
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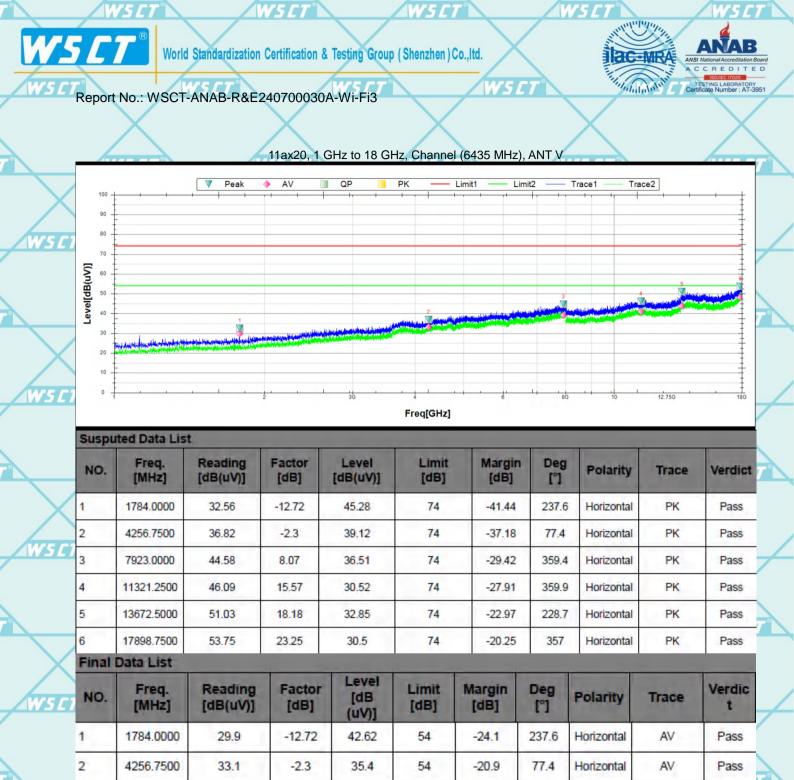
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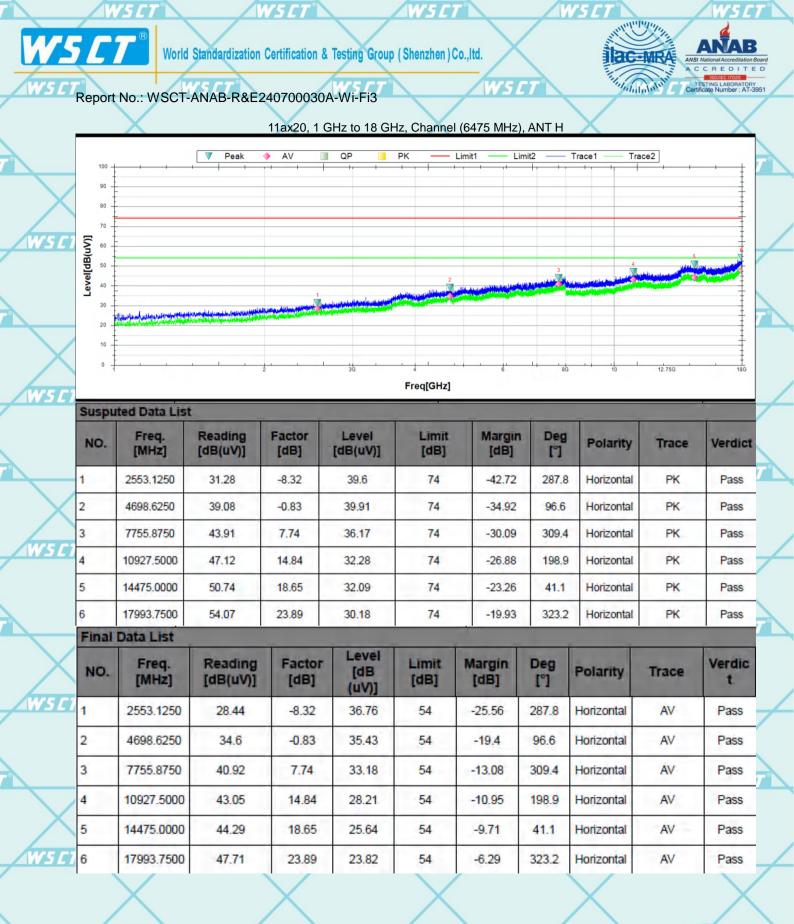
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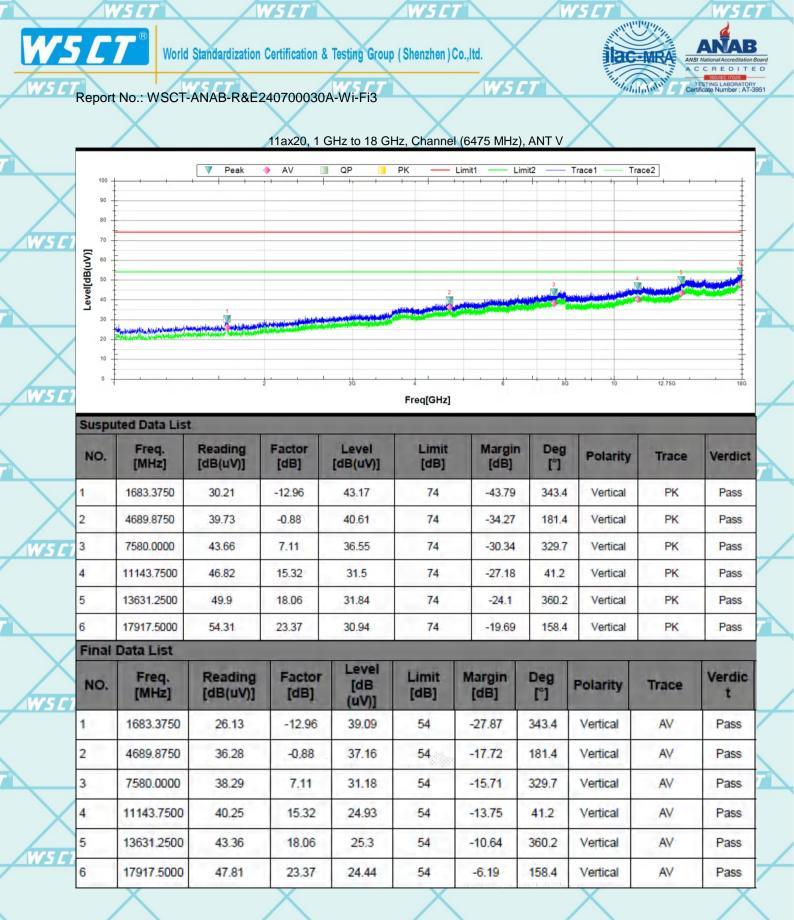
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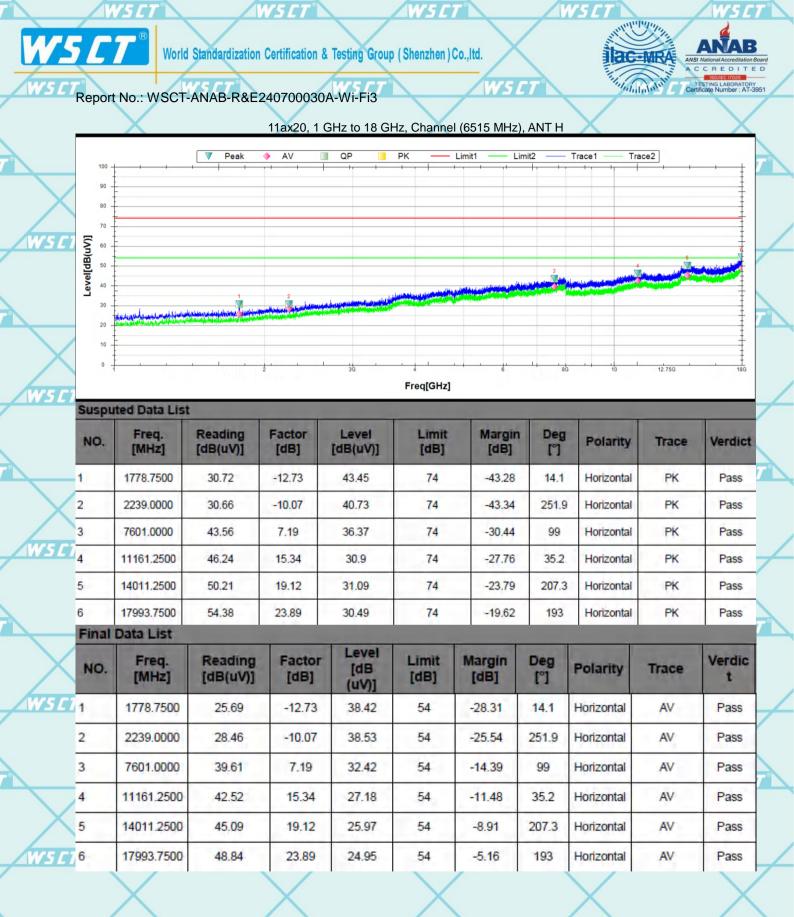
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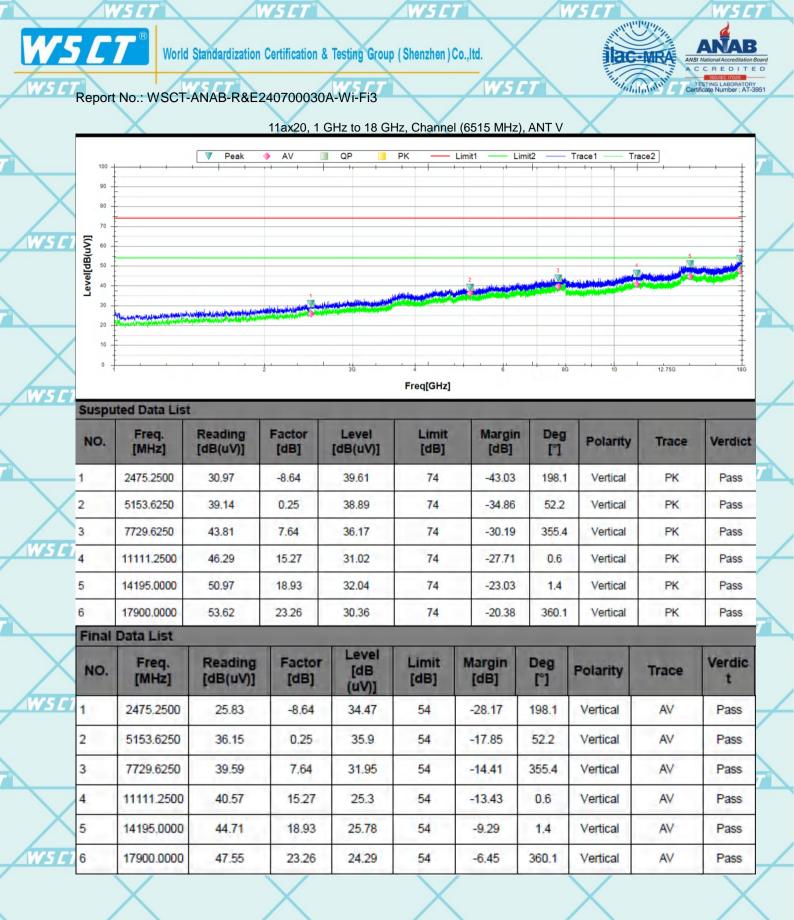
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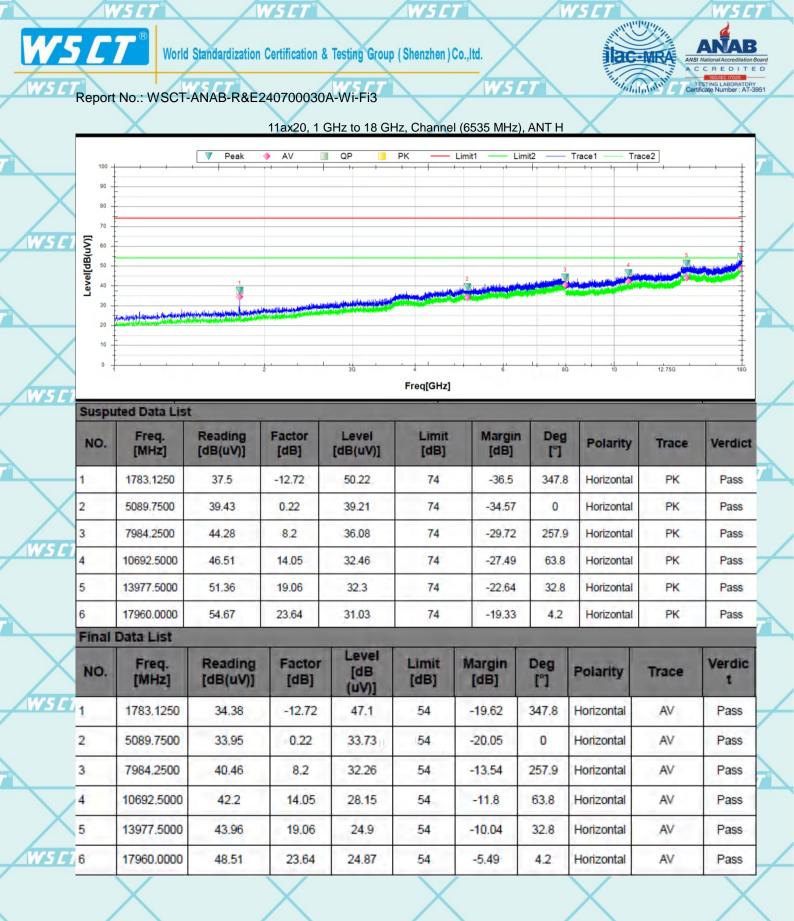
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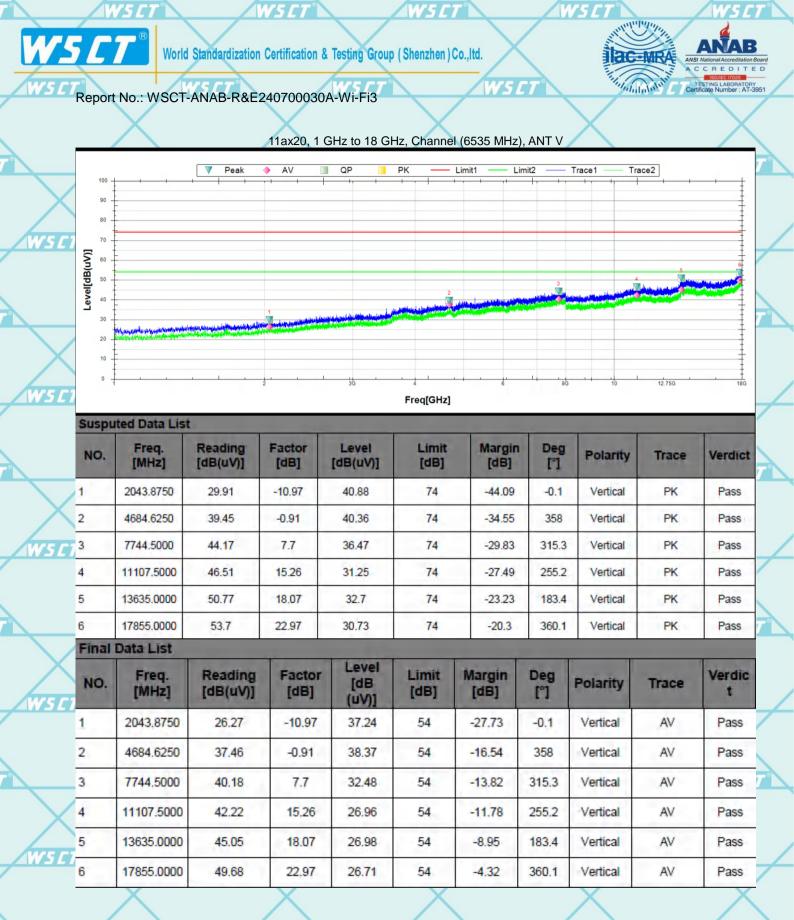
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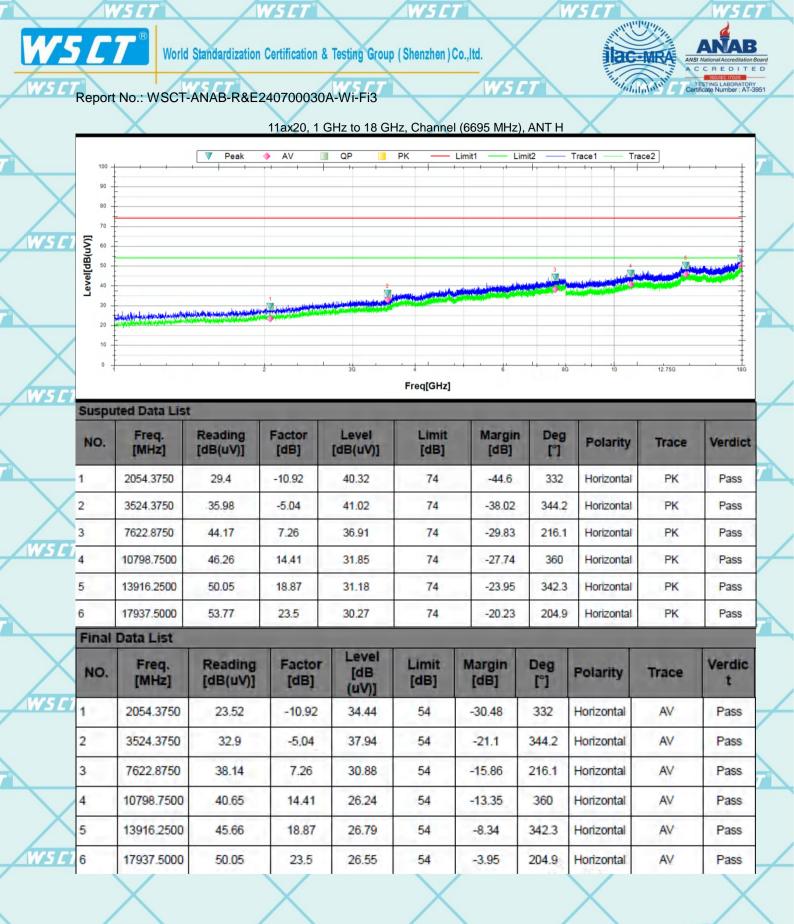
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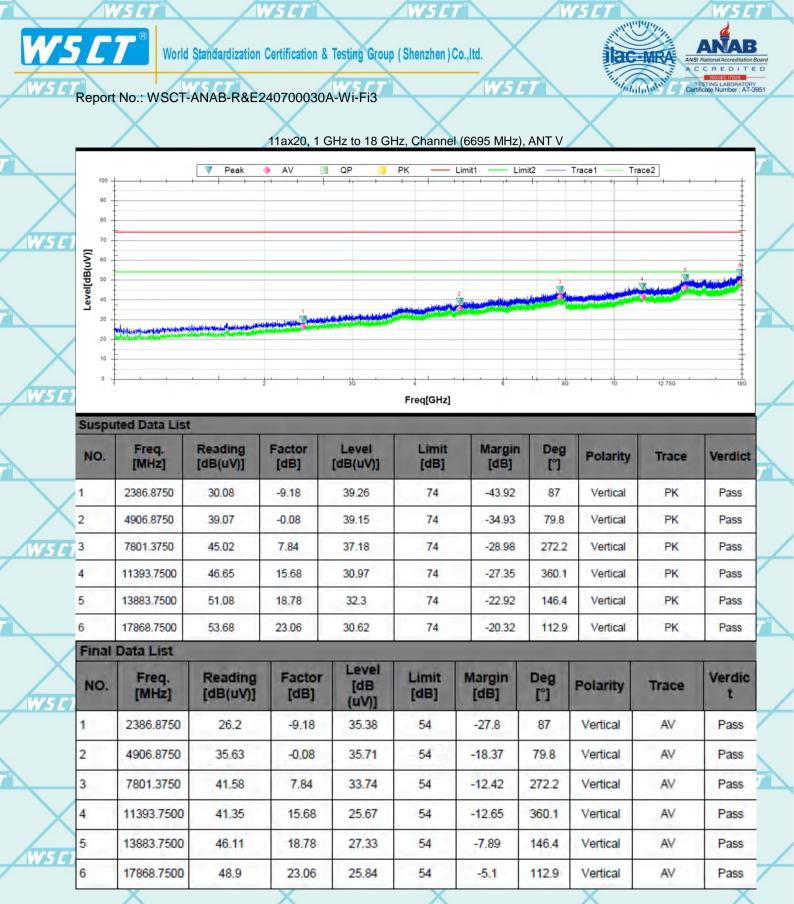
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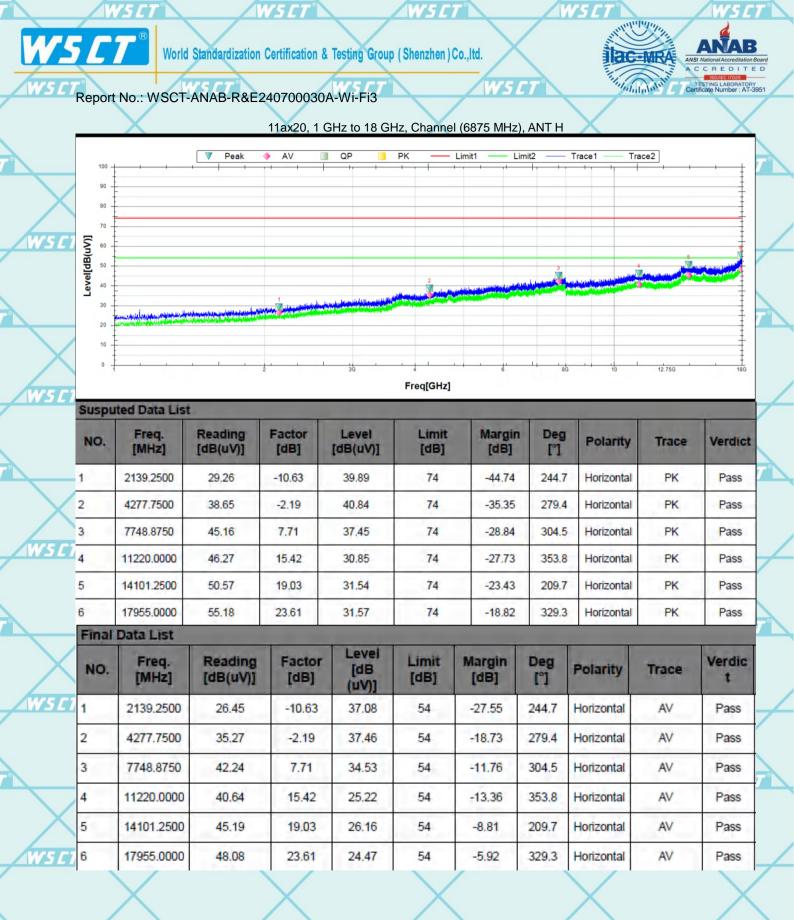
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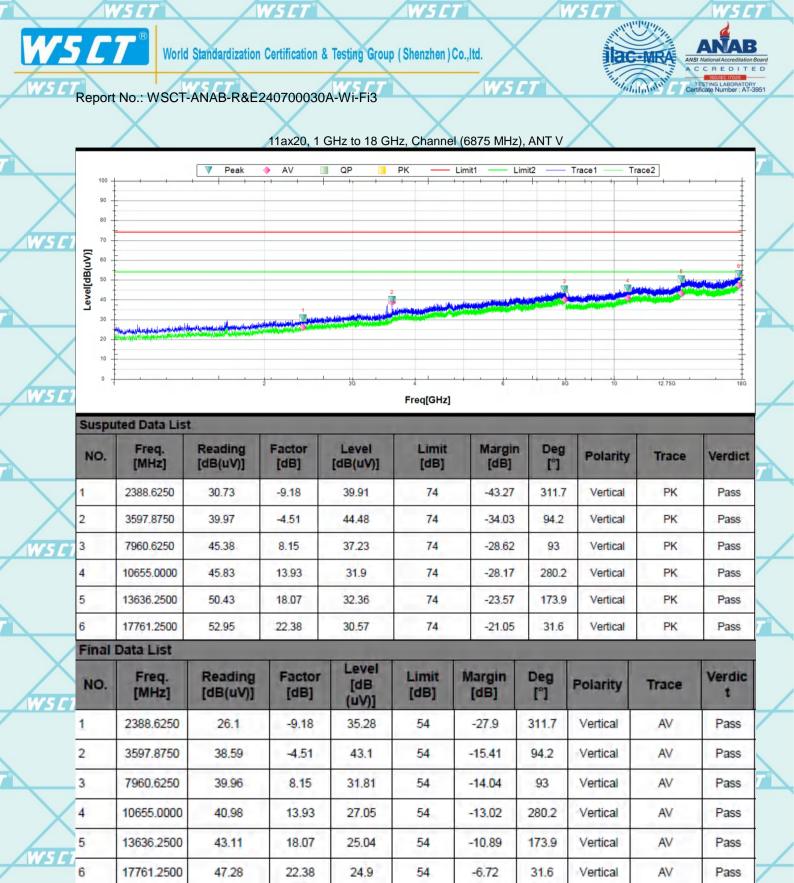
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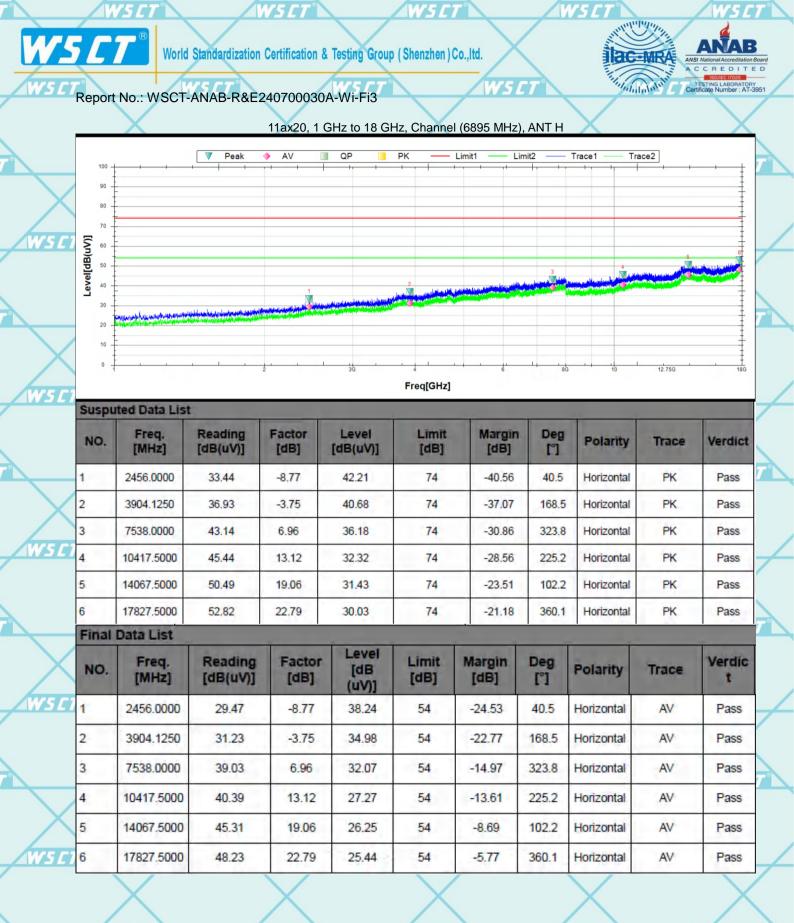
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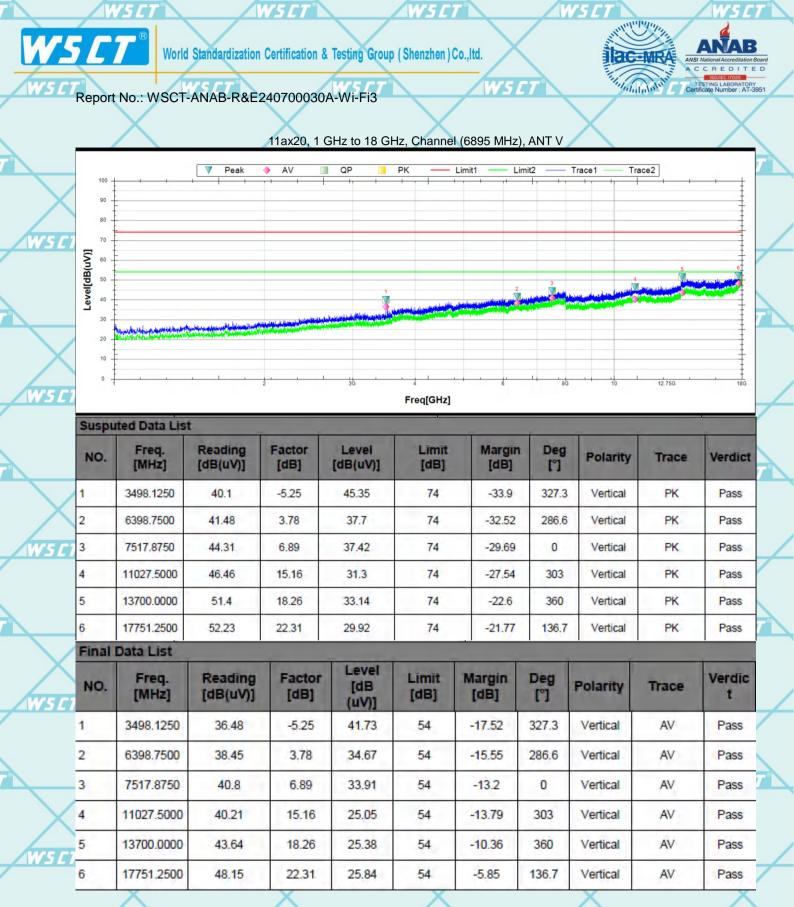
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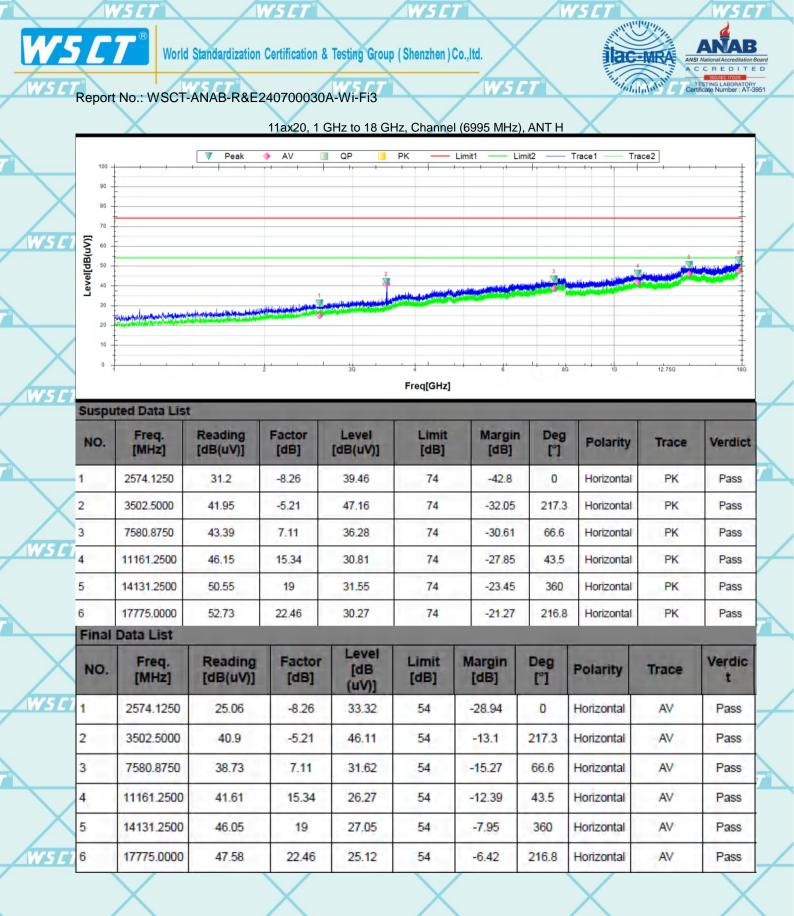
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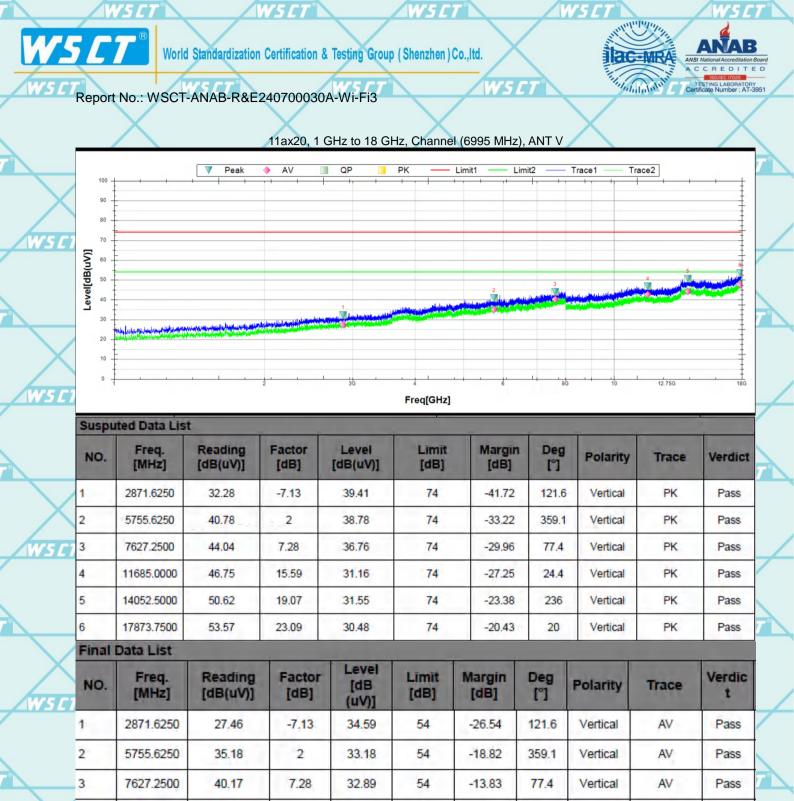
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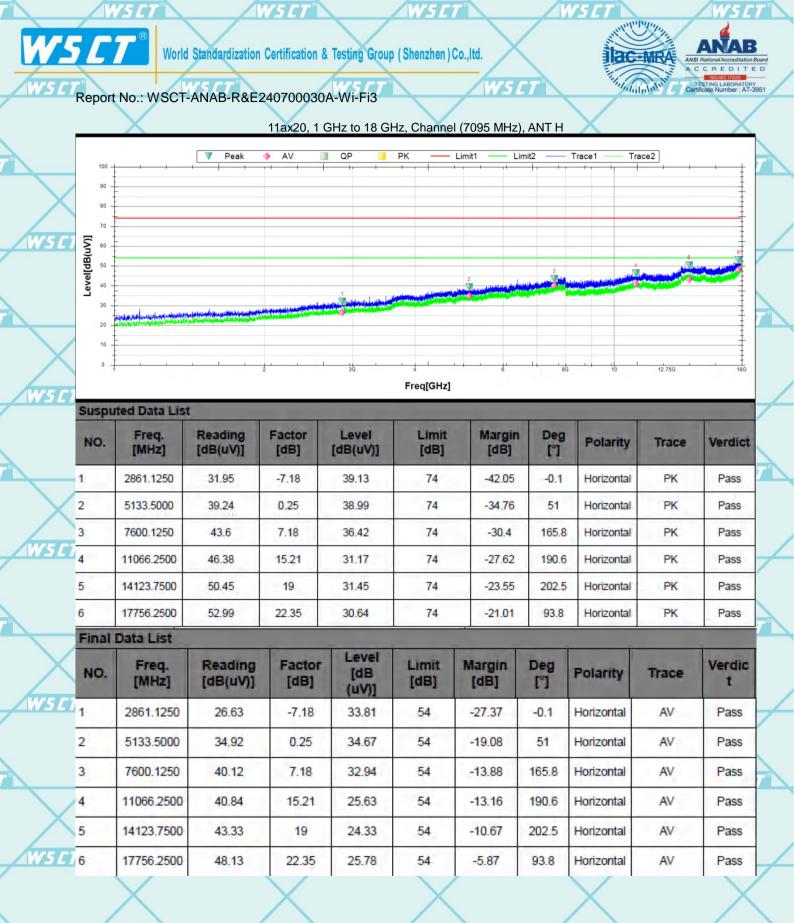
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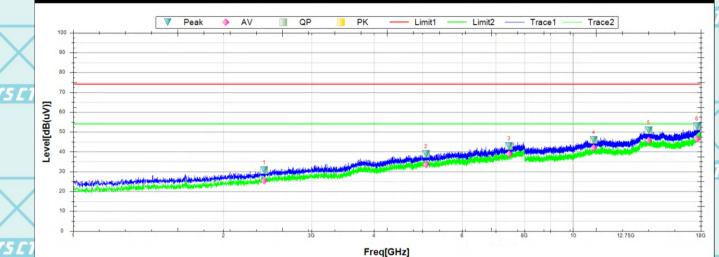
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Report No.: WSCT-ANAB-R&E240700030A-Wi-Fi3

11ax20, 1 GHz to 18 GHz, Channel (7095 MHz), ANT V

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Sus	Susputed Data List									
NO	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Levei [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2412.2500	30.64	-9.05	39.69	74	-43.36	272.2	Vertical	PK	Pass
2	5079.2500	38.93	0.22	38.71	74	-35.07	-0.1	Vertical	PK	Pass
<b>[</b> ]3	7447.8750	42.85	6.64	36.21	74	-31.15	355	Vertical	PK	Pass
4	11000.0000	45.9	15.11	30.79	74	-28.1	343.4	Vertical	PK	Pass
5	14160.0000	50.79	18.96	31.83	74	-23.21	305.2	Vertical	PK	Pass
6	17688.7500	52.73	21.88	30.85	74	-21.27	345.8	Vertical	PK	Pass
Fin	al Data List		1			1		1 1		

inal Data Lis Level Limit Reading Factor Margin Deg Verdic Freq. NO. [dB Polarity Trace [dB(uV)] [MHz] [dB] [dB] [dB] [°] t (uV)Pass 2412.2500 25.35 -9.05 34.4 54 -28.65 272.2 Vertical AV 1 2 5079.2500 33.6 0.22 33.38 54 -20.4-0.1 Vertical AV Pass 3 7447.8750 38.87 32.23 54 -15.13 355 Vertical Pass 6.64 AV 4 11000.0000 41.9 15.11 26.79 54 -12.1343.4 Vertical AV Pass 5 14160.0000 45.8 18.96 26.84 54 -8.2 305.2 Vertical AV Pass 6 17688.7500 54 -7.56 46.44 21.88 24.56 345.8 Vertical AV Pass

Note:

1. All emissions not reported were more than 20dB below the specified limit or in the noise floor.

2. Emission Level= Reading Level+ Probe Factor +Cable Loss.

3. Data of measurement within this frequency range shown "--" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

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Report No.: WSCT-ANAB-R&E240700030A-Wi-Fi3

## 7.4 ANTENNA REQUIREMENTS

## Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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## **Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.

## Antenna Gain

<CDD Modes > WSET FCC KDB 662911 D01 Multiple Transmitter Output v02r01 For CDD transmissions, directional gain is calculated as Directional gain = GANT + Array Gain, where Array Gain is as follows. For power spectral density (PSD) measurements on all devices, Array Gain = 10 log(NANT/NSS=1) dB. WSC For power measurements on IEEE 802.11 devices, Array Gain = 0 dB (i.e., no array gain) for NANT  $\leq 4$ . Directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain; The EUT supports CDD mode.

For power, the directional gain GANT is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01. The directional gain "DG" is calculated as following table.

	<cdd modes=""></cdd>	Ant1	Ant2	DG for power	DG for PSD		
1000		(dBi)	(dBi)	(dBi)	(dBi)	-	
	5925~7125MHz	0.65	0.21	0.65	3.44		

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Power limit reduction = Composite gain - 6dBi, (min = 0) PSD limit reduction = Composite gain + PSD Array gain - 6dBi, (min = 0)

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