

# **TEST REPORT**

Report No. ....: CTC2025005902

FCC ID.....: 2ALYRHG-D04

Applicant .....: High Great Technology Co., Ltd

Floor 2, Building 6, Yuanlingzai Park, Hengping Road, Yuanshan Address....:

Street, Longgang District, Shenzhen, China

Manufacturer....: High Great Technology Co., Ltd

Floor 2, Building 6, Yuanlingzai Park, Hengping Road, Yuanshan Address....:

Street, Longgang District, Shenzhen, China

Product Name ....: **Intelligent Flight Equipment** 

Trade Mark .....: NA

HG-D04 Model/Type reference....:

Listed Model(s)....: NA

Standard .....: FCC CFR Title 47 Part 15 Subpart E Section 15.407

Test Report Form No .....: CTC-TR-063 A1

Master TRF.....: Dated 2024-09-20

Date of receipt of test sample.....: Jan. 21, 2025

Date of testing..... Jan. 21, 2025 ~ Feb. 20, 2025

Date of issue....: Feb. 21, 2025

Result....: **PASS** 

Compiled by:

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(Printed name+signature) Eric Zhang lucy lan Zic Zhang Jednas

Approved by:

(Printed name+signature) Totti Zhao

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3.9.

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## 1. TEST SUMMARY

## 1.1. Test Standards

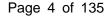
The tests were performed according to following standards:

<u>FCC Rules Part 15.407</u>: for 802.11a/n/ac/ax, the test procedure follows the FCC KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

ANSI C63.10-2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

## 1.2. Report Version

Revised No.	Report No.	Date of issue	Description
01	CTC2025005902	Feb. 21, 2025	Original





1.3. Test Description

FCC Part 15 Subpart E (15.407)				
Test Item	Standard Section	Result	Test Engineer	
Antenna Requirement	15.203	Pass	Marrow	
Conducted Emission	15.207	N/A	N/A	
Band Edge Emissions	15.407(b)	Pass	Marrow	
26dB Bandwidth & 99% Bandwidth	15.407(a)	Pass	Marrow	
6dB Bandwidth (only for UNII-3)	15.407(e)	Pass	Marrow	
Peak Output Power	15.407(a)	Pass	Marrow	
Power Spectral Density	15.407(a)	Pass	Marrow	
Transmitter Radiated Spurious Emission	15.407(b) &15.209	Pass	Marrow	
Frequency Stability	15.407(g)	Pass	Marrow	
Dynamic Frequency Selection (DFS)	15.407(h)	N/A	N/A	
Automatically Discontinue Transmission	15.407(c)	Pass	Note 3	

#### Note:

- 1. The measurement uncertainty is not included in the test result.
- 2. N/A: means this test item is not applicable for this device according to the technology characteristic of device.
- 3. During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



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# 1.4. Test Facility

### Address of the report laboratory

## CTC Laboratories, Inc.

Add: Room 101 of Building B, Room 107, 108, 207, 208 of Building A, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China

#### Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

#### A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

### Industry Canada (Registration No.: 9783A, CAB Identifier: CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

### FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 951311, Aug 26, 2017.



1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the CTC Laboratories, Inc. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Below is the best measurement capability for CTC Laboratories, Inc.

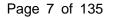
Test Items	Measurement Uncertainty	Notes
Emission Bandwidth	±0.0196%	(1)
Maximum Conduct Output Power	±0.766dB	(1)
Power Spectral Density	±1.22dB	(1)
Band Edge Measurements	±1.328dB	(1)
Unwanted Emissions Measurement	9kHz-1GHz: ±0.746dB 1GHz-26GHz: ±1.328dB	(1)
Frequency Stability	±2.76%	(1)
Conducted Emissions 9kHz~30MHz	±3.08 dB	(1)
Radiated Emissions 30~1000MHz	±4.51 dB	(1)
Radiated Emissions 1~18GHz	±5.84 dB	(1)
Radiated Emissions 18~40GHz	±6.12 dB	(1)

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

## 1.6. Environmental Conditions

	Temperature	15 °C to 35 °C
Normal	Relative Humidity	20 % to 75 %
Condition	Air Pressure	101 kPa
	Voltage	The normal test voltage for the equipment shall be the nominal voltage for which the equipment was designed.
		Measurements shall be made over the extremes of the operating temperature range as declared by the manufacturer.
Condition	Voltage	Measurements shall be made over the extremes of the operating temperature range as declared by the manufacturer.

Normal Condition T <sub>N</sub> =Normal Temperature		25 °C
Fytuama Candition	T <sub>L</sub> =Lower Temperature	0 °C
Extreme Condition	T <sub>H</sub> =Higher Temperature	45 °C





2. GENERAL INFORMATION

## 2.1. Client Information

Applicant:	High Great Technology Co., Ltd
Address:	Floor 2, Building 6, Yuanlingzai Park, Hengping Road, Yuanshan Street, Longgang District, Shenzhen, China
Manufacturer:	High Great Technology Co., Ltd
Address:	Floor 2, Building 6, Yuanlingzai Park, Hengping Road, Yuanshan Street, Longgang District, Shenzhen, China
Factory:	High Great Technology Co., Ltd
Address:	Floor 2, Building 6, Yuanlingzai Park, Hengping Road, Yuanshan Street, Longgang District, Shenzhen, China

# 2.2. General Description of EUT

Product Name:	Intelligent Flight Equipment			
Trade Mark:	NA			
Model/Type reference:	HG-D04			
Listed Model(s):	NA			
Sample ID:	CTC240829-0	04-S137		
Power Supply:	14.4Vdc from	5000mAh Lithiu	m polymer batte	ry
Hardware Version:	/			
Software Version:	/			
5G Wi-Fi				
Operation Band:	□U-NII-1	□U-NII-2A	□U-NII-2C	⊠U-NII-3
Operation Frequency:	U-NII-3	5725MHz~585	50MHz	
	802.11a	□ 20MHz		
Support Bandwidth:	802.11n	⊠ 20MHz	⊠ 40MHz	
Support Barluwidiri.	802.11ac	⊠ 20MHz	⊠ 40MHz	
	802.11ax	⊠ 20MHz	⊠ 40MHz	
Modulation:	802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)			
Antenna Type:	FPC Antenna			
Antenna Gain:	ANT1: 1.96dB	i; ANT2: 4.86dB	i	

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# 2.3. Accessory Equipment Information

Equipment Information				
Name	Model	S/N	Manufacturer	
Notebook	ThinkBook 14 G3 ACL	MP246Q6S	Lenovo	
Cable Information				
Name	Shielded Type	Ferrite Core	Length	
USB Cable	Unshielded	NO	150cm	
Test Software Information				
Name	Version	/	/	
SecureCRTPortable	/	/	/	



## 2.4. Operation State

Operation Frequency List: The EUT has been tested under typical operating condition. The Applicant provides communication tools software to control the EUT for staying in continuous transmitting.

Operation Frequency List:

Operating	20MHz	Bandwidth	40MHz Bandwidth	
Band	Channel	Frequency (MHz)	Channel	Frequency (MHz)
	149	5745	151	5755
	153	5765	151	5755
U-NII-3	157	5785		
	161	5805	159	5795
	165	5825		

#### Test channel is below:

Operating	Test	20MHz Bandwidth		40MHz Bandwidth	
Band	Channel	Channel	Frequency (MHz)	Channel	Frequency (MHz)
	CHL	149	5745	151	5755
U-NII-3	СНм	157	5785	/	/
	СНн	165	5825	159	5795

#### Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	NA	NA	FPC Antenna	IPEX	1.96
2	NA	NA	FPC Antenna	IPEX	4.86

This EUT supports MIMO 2X2 with the unequal antenna gain, and any transmit signals are correlated with each other.

According to KDB 662911 D01, Directional Gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/N]$  dBi, that is Directional Gain =  $10\log[((10^{(1.96/20)+10^{(4.86/20)})^2)/2]=6.54$ dBi. So, output power limit of UNII-3 is 30-7.07+6=29.46 dBm. The power spectral density limit of UNII-3 is 30-7.07+6=29.46dBm/500kHz. Data Rated:

Preliminary tests were performed in different data rate, and found which the below bit rate is worst case mode, so only show data which it is a worst case mode.

Test Mode	Data Rate (worst mode)
802.11a	6Mbps
802.11n(HT20)/ 802.11n(HT40)	HT-MCS0
802.11ac(VHT20)/ 802.11ac(VHT40)	VHT-MCS0
802.11ax(HE20)/ 802.11ax(HE40)	HE-MCS0



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#### Test Mode:

## For RF test items:

The engineering test program was provided and enabled to make EUT continuous transmit.

For AC power line conducted emissions:

The EUT was set to connect with the WLAN AP under large package sizes transmission.

For Radiated spurious emissions test item:

The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

For DFS test items:

The EUT has been tested under test mode condition. The Applicant provides software to control the EUT for staying in DFS mode for testing.

# 2.5. Measurement Instruments List

	RF Test System - SRD								
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until				
1	Spectrum Analyzer	R&S	FSV40-N	101331	Mar. 21, 2025				
2	RF Control Unit	Tonscend	JS0806-2	/	Aug. 21, 2025				
3	High and low temperature test chamber	ESPEC	MT3035	/	Mar. 21, 2025				
4	Test Software	Tonscend	JS1120-3	V3.3.38	/				

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		Radia	ated emission			
Item	Test Equipment	Manufacturer Model No.		Serial No.	Calibrated Until	
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9163	01026	Dec. 24, 2025	
2	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-647	Sep. 25, 2025	
3	Test Receiver	Keysight	N9038A	MY56400071	Dec. 12, 2025	
4	Broadband Amplifier	Schwarzbeck	BBV9743B	259	Dec. 12, 2025	
5	Mirowave Broadband Amplifier	Schwarzbeck	BBV9718C	111	Dec. 12, 2025	
6	3m chamber 3	YIHENG	EE106	/	Aug. 28, 2026	
7	Test Software	FARA	EZ-EMC	FA-03A2	/	

Note: 1. The Cal. Interval was one year.

- 2. The Cal. Interval was three years of the antenna.
- 3. The cable loss has been calculated in test result which connection between each test instruments.

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## 3. TEST ITEM AND RESULTS

## 3.1. Conducted Emission

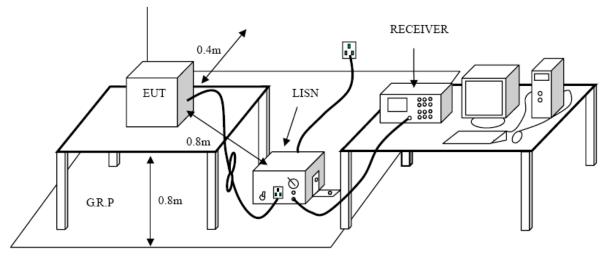
#### <u>Limit</u>

## FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency (MHz)	Conducted Limit (dBµV)			
	Quasi-peak	Average		
0.15 - 0.5	66 to 56 *	56 to 46 *		
0.5 - 5	56	46		
5 - 30	60	50		

<sup>\*</sup> Decreases with the logarithm of the frequency.

## **Test Configuration**



#### **Test Procedure**

- 1. The EUT was setup according to ANSI C63.10:2013 requirements.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
- 3. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm / 50  $\mu$ H coupling impedance for the measuring equipment.
- 4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
- 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
- 6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
- 8. During the above scans, the emissions were maximized by cable manipulation.

#### **Test Mode**

Please refer to the clause 2.4.

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N/A



## 3.2. Radiated Emission

## **Limit**

## FCC CFR Title 47 Part 15 Subpart C Section 15.209

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(meters)
0.009~0.490	2400/F (kHz)	300
0.490~1.705	24000/F (kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Fraguency Panga (MHz)	dBµV/m (at 3 meters)		
Frequency Range (MHz)	Peak	Average	
Above 1000	74	54	

#### Note:

(1) The tighter limit applies at the band edges.

(2) Emission Level ( $dB\mu V/m$ )=20log Emission Level ( $\mu V/m$ ).

Limits of unwanted emission out of the restricted bands FCC CFR Title 47 Part 15 Subpart E Section 15, 407(b)

Frequency	EIRP Limits	Equivalent Field Strength
(MHz)	(dBm)	at 3m (dBµV/m)
5150~5250	-27	68.2
5250~5350	-27	68.2
5470~5725	-27	68.2
	-27 (Note 2)	68.2
5725~5825	10 (Note 2)	105.2
3725~3623	15.6 (Note 2)	110.8
	27 (Note 2)	122.2

## Note:

1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:  $E = \frac{1000000\sqrt{30P}}{3} \mu V/m$ , where P is the eirp (Watts).

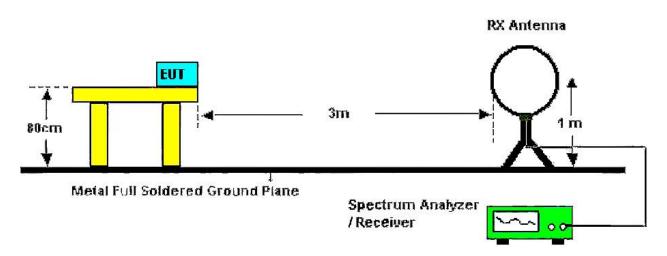
2. According to FCC 16-24, all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

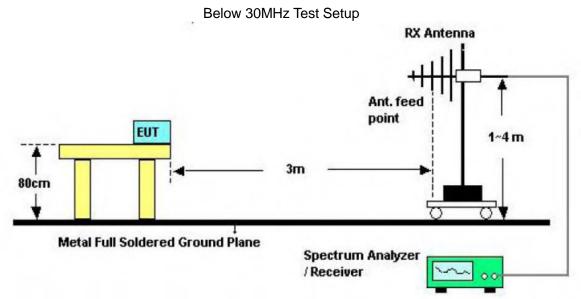
CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

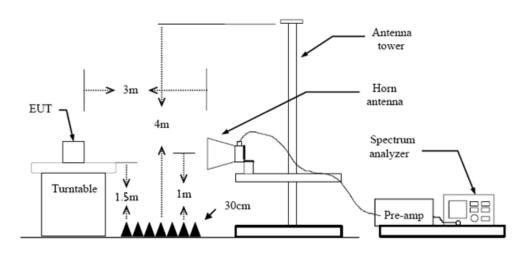


**Test Configuration** 





30-1000MHz Test Setup



Above 1GHz Test Setup

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#### **Test Procedure**

- The EUT was setup and tested according to ANSI C63.10:2013.
- The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable 3. height antenna tower.
- For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the
- 5. Set to the maximum power setting and enable the EUT transmit continuously.
- 6. Use the following spectrum analyzer settings
- (1) Span shall wide enough to fully capture the emission being measured;
- (2) 9k 150kHz:

RBW=300 Hz, VBW=1 kHz, Sweep=auto, Detector function=peak, Trace=max hold

(3) 0.15M - 30MHz:

RBW=10 kHz, VBW=30 kHz, Sweep=auto, Detector function=peak, Trace=max hold

(4) 30M - 1 GHz:

RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

(5) From 1 GHz to 10<sup>th</sup> harmonic:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause Duty Cycle.

#### **Test Mode**

Please refer to the clause 2.4.

#### **Test Result**

#### 9 kHz~30 MHz

From 9 kHz to 30 MHz: The conclusion is PASS.

- Note: 1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
  - 2. Pre-scan all antenna, only show the test data for worse case antenna on the test report.

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10

0

Ant. No. Ant 1 Ant. Pol. Horizontal **Test Mode:** TX 802.11a Mode 5745MHz (U-NII-1) Remark: Only worse case is reported. dBuV/m 90.0 80 70 60 FCC Part15 RE-Class B 30-1000M Margin -6 dB 50 40 30

30.000	0 60.00 (MHz) 300.00				1000.000		
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	129.9225	41.34	-17.53	23.81	43.50	-19.69	QP
2	170.7926	45.17	-16.98	28.19	43.50	-15.31	QP
3	212.2694	54.20	-18.76	35.44	43.50	-8.06	QP
4 *	229.2930	56.40	-18.32	38.08	46.00	-7.92	QP
5	336.0351	46.50	-14.91	31.59	46.00	-14.41	QP
6	768.7481	37.15	-4.07	33.08	46.00	-12.92	QP

#### Remarks

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value



Ant. No. Ant 1 Ant. Pol. Vertical **Test Mode:** TX 802.11a Mode 5745MHz (U-NII-1) Remark: Only worse case is reported. dBuV/m 90.0 80 70 60 FCC Part15 RE-Class B 30-1000M Margin -6 dB 50 40 30 20 10 0 30.000 (MHz) 1000.000 60.00 300.00

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	161.4742	37.44	-16.21	21.23	43.50	-22.27	QP
2	202.1005	43.05	-18.86	24.19	43.50	-19.31	QP
3	228.4904	45.51	-18.35	27.16	46.00	-18.84	QP
4	309.9977	42.91	-15.33	27.58	46.00	-18.42	QP
5	768.7481	40.02	-4.07	35.95	46.00	-10.05	QP
6 *	796.1830	40.69	-3.32	37.37	46.00	-8.63	QP

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11490.616	25.13	15.09	40.22	54.00	-13.78	AVG
2	11490.759	37.28	15.09	52.37	74.00	-21.63	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

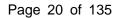
Ant. No.	Ant 1		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11489.175	24.59	15.09	39.68	54.00	-14.32	AVG
2	11489.462	37.13	15.09	52.22	74.00	-21.78	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)			Detector
1	11570.521	37.06	15.23	52.29	74.00	-21.71	peak
2 *	11570.524	25.07	15.23	40.30	54.00	-13.70	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

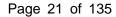
Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11569.571	24.76	15.23	39.99	54.00	-14.01	AVG
2	11570.507	36.77	15.23	52.00	74.00	-22.00	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)		Detector
1 *	11649.961	25.20	15.28	40.48	54.00	-13.52	AVG
2	11650.332	37.40	15.29	52.69	74.00	-21.31	peak

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

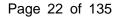
Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11649.779	38.14	15.28	53.42	74.00	-20.58	peak
2 *	11650.526	24.84	15.29	40.13	54.00	-13.87	AVG

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)			Detector
1 *	11490.347	24.92	15.09	40.01	54.00	-13.99	AVG
2	11490.421	37.00	15.09	52.09	74.00	-21.91	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

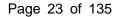
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11490.288	36.98	15.09	52.07	74.00	-21.93	peak
2 *	11490.597	24.46	15.09	39.55	54.00	-14.45	AVG

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11569.921	37.17	15.23	52.40	74.00	-21.60	peak
2 *	11570.431	24.92	15.23	40.15	54.00	-13.85	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

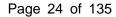
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)			Detector
1	11569.803	37.67	15.23	52.90	74.00	-21.10	peak
2 *	11570.272	25.16	15.23	40.39	54.00	-13.61	AVG

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11649.648	37.11	15.28	52.39	74.00	-21.61	peak
2 *	11650.529	24.75	15.29	40.04	54.00	-13.96	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

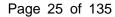
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11649.405	24.93	15.28	40.21	54.00	-13.79	AVG
2	11650.632	37.22	15.29	52.51	74.00	-21.49	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)		Detector
1	11509.813	37.45	15.12	52.57	74.00	-21.43	peak
2 *	11510.223	25.42	15.12	40.54	54.00	-13.46	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

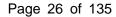
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11509.952	24.67	15.12	39.79	54.00	-14.21	AVG
2	11510.752	37.03	15.12	52.15	74.00	-21.85	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11589.911	37.69	15.27	52.96	74.00	-21.04	peak
2 *	11590.314	24.98	15.27	40.25	54.00	-13.75	AVG

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

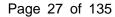
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)		Detector
1	11589.941	37.67	15.27	52.94	74.00	-21.06	peak
2 *	11590.259	24.92	15.27	40.19	54.00	-13.81	AVG

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11489.836	37.09	15.09	52.18	74.00	-21.82	peak
2 *	11490.291	25.49	15.09	40.58	54.00	-13.42	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

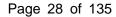
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11489.568	24.01	15.09	39.10	54.00	-14.90	AVG
2	11490.133	37.08	15.09	52.17	74.00	-21.83	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11569.860	37.39	15.23	52.62	74.00	-21.38	peak
2 *	11570.584	25.16	15.23	40.39	54.00	-13.61	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

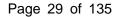
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)			Detector
1	11569.107	37.24	15.23	52.47	74.00	-21.53	peak
2 *	11570.211	25.04	15.23	40.27	54.00	-13.73	AVG

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11649.809	24.77	15.28	40.05	54.00	-13.95	AVG
2	11650.331	36.86	15.29	52.15	74.00	-21.85	peak

#### Remarks:

 $1. Factor \ (dB/m) = Antenna \ Factor \ (dB/m) + Cable \ Factor \ (dB) - Pre-amplifier \ Factor$ 

2.Margin value = Level -Limit value

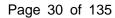
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)		Detector
1	11650.344	37.54	15.29	52.83	74.00	-21.17	peak
2 *	11650.621	24.71	15.29	40.00	54.00	-14.00	AVG

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)		Detector
1	11509.944	37.26	15.12	52.38	74.00	-21.62	peak
2 *	11510.221	25.15	15.12	40.27	54.00	-13.73	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)			Detector
1 *	11510.688	25.66	15.12	40.78	54.00	-13.22	AVG
2	11510.864	37.69	15.12	52.81	74.00	-21.19	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11589.656	24.84	15.27	40.11	54.00	-13.89	AVG
2	11590.874	37.55	15.27	52.82	74.00	-21.18	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

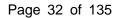
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11590.160	37.20	15.27	52.47	74.00	-21.53	peak
2 *	11590.213	24.86	15.27	40.13	54.00	-13.87	AVG

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ax(HE20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11489.918	25.37	15.09	40.46	54.00	-13.54	AVG
2	11490.654	37.29	15.09	52.38	74.00	-21.62	peak

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

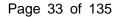
Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ax(HE20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11490.208	24.12	15.09	39.21	54.00	-14.79	AVG
2	11490.235	37.48	15.09	52.57	74.00	-21.43	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ax(HE20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)	Limit (dBuV/m)		Detector
1 *	11569.929	26.22	15.23	41.45	54.00	-12.55	AVG
2	11570.531	37.22	15.23	52.45	74.00	-21.55	peak

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ax(HE20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

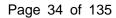
No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)			Detector
1 *	11569.939	24.89	15.23	40.12	54.00	-13.88	AVG
2	11570.589	38.42	15.23	53.65	74.00	-20.35	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

For anti-fake verification, please visit the official website of China Inspection And Testing TRF No: CTC-TR-063\_A1 Society: <u>yz.cnca.cn</u>





Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ax(HE20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11649.669	37.85	15.28	53.13	74.00	-20.87	peak
2 *	11650.213	25.90	15.29	41.19	54.00	-12.81	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ax(HE20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11650.325	24.91	15.29	40.20	54.00	-13.80	AVG
2	11650.509	37.82	15.29	53.11	74.00	-20.89	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





<b>Ant. No.</b> Ant 1 + Ant 2		
Ant. Pol.	Horizontal	
Test Mode:	TX 802.11ax(HE40) Mode 5755MHz (U-NII-3)	
Remark:	No report for the emission which more than 20 dB below the prescribed limit.	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11510.531	25.01	15.12	40.13	54.00	-13.87	AVG
2	11510.719	37.78	15.12	52.90	74.00	-21.10	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

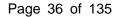
<b>Ant. No.</b> Ant 1 + Ant 2	
Ant. Pol. Vertical	
Test Mode:	TX 802.11ax(HE40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)		Detector
1	11509.824	37.06	15.12	52.18	74.00	-21.82	peak
2 *	11510.054	23.10	15.12	38.22	54.00	-15.78	AVG

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value





Ant. No.	Ant 1 + Ant 2	
Ant. Pol. Horizontal		
Test Mode:	TX 802.11ax(HE40) Mode 5795MHz (U-NII-3)	
Remark:	No report for the emission which more than 20 dB below the prescribed limit.	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11589.792	36.93	15.27	52.20	74.00	-21.80	peak
2 *	11590.359	24.75	15.27	40.02	54.00	-13.98	AVG

### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol. Vertical	
Test Mode:	TX 802.11ax(HE40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)		Level (dBuV/m)			Detector
1 *	11589.481	23.90	15.27	39.17	54.00	-14.83	AVG
2	11590.311	37.50	15.27	52.77	74.00	-21.23	peak

## Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

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# 3.3. Band Edge Emissions

### Limit

Limits of unwanted emission out of the restricted bands

FCC CFR Title 47 Part 15 Subpart E Section 15. 407(b)

Frequency	EIRP Limits	Equivalent Field Strength
(MHz)	(dBm)	at 3m (dBµV/m)
5150~5250	-27	68.2
5250~5350	-27	68.2
5470~5725	-27	68.2
	-27 (Note 2)	68.2
5725 5925	10 (Note 2)	105.2
5725~5825	15.6 (Note 2)	110.8
	27 (Note 2)	122.2

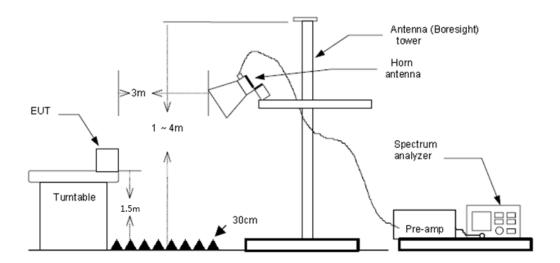
#### Note:

1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field  $\frac{1000000\sqrt{20R}}{1000000}$ 

strength:  $E = \frac{1000000\sqrt{30P}}{3} \mu V/m$ , where P is the eirp (Watts).

2. According to FCC 16-24, all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

### **Test Configuration**





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#### **Test Procedure**

- 1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
- 2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
- 5. The receiver set as follow:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause Duty Cycle.

### **Test Mode**

Please refer to the clause 2.4.



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## **Test Result**

Note: 1. Pre-scan both 4500-5150MHz, 5350-5460MHz were investigated, report only shows the test data for worst case.

2. Pre-scan all antenna, only show the test data for worse case antenna on the test report.



Ant. No. Ant 1 Ant. Pol. Horizontal **Test Mode:** TX 802.11a Mode 5745MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 Market and the second 50 40 30 20

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	12.26	38.16	50.42	122.20	-71.78	peak

(MHz)

5842.50

5815.00

5870.00

5897.50

5925.00

#### Remarks:

10.0

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value



Ant. No. Ant 1 Ant. Pol. Vertical **Test Mode:** TX 802.11a Mode 5745MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 Waller Alexandra Market Commencer Co 50 40 30 20 10.0 5760.00 5650.000 5677.50 5705.00 5732.50 (MHz) 5842.50 5925.00

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	13.92	38.16	52.08	122.20	-70.12	peak

5815.00

5870.00

5897.50

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

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5925.00

5897.50



Ant. No. Ant 1 Ant. Pol. Horizontal **Test Mode:** TX 802.11a Mode 5825MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20 10.0

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	14.09	38.47	52.56	122.20	-69.64	peak

(MHz)

5842.50

5870.00

5815.00

#### Remarks:

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value



Ant. No. Ant 1 Ant. Pol. Vertical **Test Mode:** TX 802.11a Mode 5825MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 toping the Mark Mark the Mark the state of t 50 40 30 20 10.0 5760.00 5842.50 5650.000 5677.50 5705.00 5732.50 (MHz) 5815.00 5925.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	14.33	38.47	52.80	122.20	-69.40	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

5870.00

5897.50

5925.00



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11n(HT20) Mode 5745MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	12.56	38.16	50.72	122.20	-71.48	peak

(MHz)

5815.00

5842.50

#### Remarks:

10.0

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value

5870.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11n(HT20) Mode 5745MHz (U-NII-3) dBuV/m 130.0 120 110 100 W90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 att fill a hour to play the course of the parties and a fill the 50 40 30 20 10.0 5760.00 5842.50 5650.000 5677.50 5705.00 5732.50 (MHz) 5815.00 5925.00

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	15.77	38.16	53.93	122.20	-68.27	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

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5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11n(HT20) Mode 5825MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 and the supplemental and the s 50 40 30 20 10.0

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	13.96	38.47	52.43	122.20	-69.77	peak

(MHz)

5842.50

5870.00

5815.00

#### Remarks:

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11n(HT20) Mode 5825MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20 10.0

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	12.15	38.47	50.62	122.20	-71.58	peak

(MHz)

5815.00

5842.50

5870.00

#### Remarks:

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11n(HT40) Mode 5755MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 blate, the plant with the way from the ball and be with 50 40 30 20 10.0 5760.00 5870.00 5650.000 5677.50 5705.00 5732.50 (MHz) 5815.00 5842.50 5925.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	12.23	38.16	50.39	122.20	-71.81	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11n(HT40) Mode 5755MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 Mandallyhan oppositelyn de literatura her more than the first the first and war and the standard the standar 50 40 30 20 10.0 5760.00 5650.000 5677.50 5705.00 5732.50 5842.50 5925.00 (MHz) 5815.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	13.22	38.16	51.38	122.20	-70.82	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11n(HT40) Mode 5795MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	14.53	38.47	53.00	122.20	-69.20	peak

(MHz)

5842.50

5870.00

5815.00

#### Remarks:

20 10.0

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11n(HT40) Mode 5795MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 Militari di Mangali mangkan mangkan di katah dan di adah katah katah katah di katah katah katah katah katah ka 50 40 30 20

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	18.71	38.47	57.18	122.20	-65.02	peak

(MHz)

5842.50

5870.00

5815.00

#### Remarks:

10.0

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 of handele by a dellar detection as period for in the sale 50 40 30 20 10.0 5760.00 5650.000 5677.50 5705.00 5732.50 (MHz) 5815.00 5842.50 5925.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	
1 *	5725.000	12.82	38.16	50.98	122.20	-71.22	peak	

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 Specifical and record for a began of Allentha color of a conserved on the conserved and because the conserved when a debut on roleddinool, galpenoorsel afanolledin beleger bewelsteen 50 40 30 20 10.0 5760.00 5650.000 5677.50 5705.00 5732.50 (MHz) 5842.50 5925.00 5815.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	11.85	38.16	50.01	122.20	-72.19	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 Mary Complete Land Department of Mary Complete C 50 40 30

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	12.43	38.47	50.90	122.20	-71.30	peak

(MHz)

5842.50

5870.00

5815.00

#### Remarks:

20 10.0

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 delphorecontext of the constitution of the con 50 40 30 20 10.0 5760.00 5650.000 5677.50 5705.00 5732.50 (MHz) 5815.00 5842.50 5925.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	14.43	38.47	52.90	122.20	-69.30	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	14.70	38.16	52.86	122.20	-69.34	peak

(MHz)

5815.00

5842.50

5870.00

#### Remarks:

10.0

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 warmhan aller and any hand a horar mandal bland 50 40 30 20 10.0 5760.00 5650.000 5677.50 5705.00 5732.50 5842.50 5925.00 (MHz) 5815.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	11.62	38.16	49.78	122.20	-72.42	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20 10.0

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	12.64	38.47	51.11	122.20	-71.09	peak

(MHz)

5842.50

5870.00

5815.00

#### Remarks:

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 whitehad and water who the Matter Maller 50 40 30 20

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	14.58	38.47	53.05	122.20	-69.15	peak

(MHz)

5842.50

5870.00

5815.00

#### Remarks:

10.0

5650.000 5677.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

5732.50

5705.00

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ax(HE20) Mode 5745MHz dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20 10.0

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	11.60	38.16	49.76	122.20	-72.44	peak

(MHz)

5842.50

5870.00

5815.00

#### Remarks:

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11ax(HE20) Mode 5745MHz (U-NII-3) dBuV/m 130.0 120 110 100 WVV90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	13.98	38.16	52.14	122.20	-70.06	peak

(MHz)

5815.00

5842.50

5870.00

#### Remarks:

10.0

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ax(HE20) Mode 5825MHz dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20 10.0 5842.50 5650.000 5677.50 5705.00 5732.50 5760.00 (MHz) 5815.00 5925.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	12.98	38.47	51.45	122.20	-70.75	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11ax(HE20) Mode 5825MHz (U-NII-3) dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 Additional transfer of the formal and the formal property of the formal and the formal and the formal additional and the formal additional and the formal additional 4. Landon Lander La 50 40 30 20 10.0 5650.000 5677.50 5705.00 5732.50 5760.00 (MHz) 5815.00 5842.50 5925.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	13.36	38.47	51.83	122.20	-70.37	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

5925.00

5897.50



Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ax(HE40) Mode 5755MHz dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 Hallander and Joseph March March Commence of the State of 50 40 30

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	12.15	38.16	50.31	122.20	-71.89	peak

(MHz)

5815.00

5842.50

5870.00

#### Remarks:

20 10.0

5650.000 5677.50

5705.00

5732.50

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5760.00

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11ax(HE40) Mode 5755MHz dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 watanihada Albandalahahaan da kaingkah A. Allebaria, La de Caracter d 50 40 30 20 10.0 5842.50 5650.000 5677.50 5732.50 5925.00 5705.00 5760.00 (MHz) 5815.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	11.96	38.16	50.12	122.20	-72.08	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

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Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ax(HE40) Mode 5795MHz dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20 10.0 5842.50 5650.000 5677.50 5705.00 5732.50 5760.00 (MHz) 5925.00 5815.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	13.96	38.47	52.43	122.20	-69.77	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11ax(HE40) Mode 5795MHz dBuV/m 130.0 120 110 100 90 80 FCC Part15.407 U-NII-3 70 Margin -6 dB 60 50 40 30 20 10.0 5760.00 5842.50 5650.000 5677.50 5732.50 (MHz) 5925.00 5705.00 5815.00 5870.00 5897.50

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	15.36	38.47	53.83	122.20	-68.37	peak

#### Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value



# 3.4. Bandwidth

## <u>Limit</u>

## FCC CFR Title 47 Part 15 Subpart E Section 15.407(a) & (e)

Test Item	Limit	Frequency Range (MHz)
		5150~5250
26dB Bandwidth& 99% Bandwidth	N/A	5250~5350
		5500~5700
6 dB Bandwidth	≥500 kHz	5725~5850

### **Test Configuration**



## **Test Procedure**

Please refer to KDB789033 D02 for the measurement methods.

# The setting of the spectrum analyzer as below:

26dB Bandwidth Test				
Spectrum Parameters	Setting			
Attenuation	Auto			
Span	>26 dB Bandwidth			
RBW	Approximately 1% of the emission bandwidth			
VBW	>RBW			
Detector	Peak			
Trace	Max Hold			
Sweep Time	Auto			



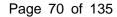
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6dB Bandwidth Test					
Spectrum Parameters	Setting				
Attenuation	Auto				
Span	>6 dB Bandwidth				
RBW	100 kHz				
VBW	≥ 3*RBW				
Detector	Peak				
Trace	Max Hold				
Sweep Time	Auto				
	99% Occupied Bandwidth Test				
Spectrum Parameters	Setting				
Attenuation	Auto				
RBW	1% to 5% of the OBW				
VBW	≥ 3*RBW				
Detector	Peak				
Trace	Max Hold				

NOTE: The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

## **Test Mode**

Please refer to the clause 2.4.

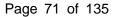




## **Test Result**

## 26dB Bandwidth & 99% Bandwidth

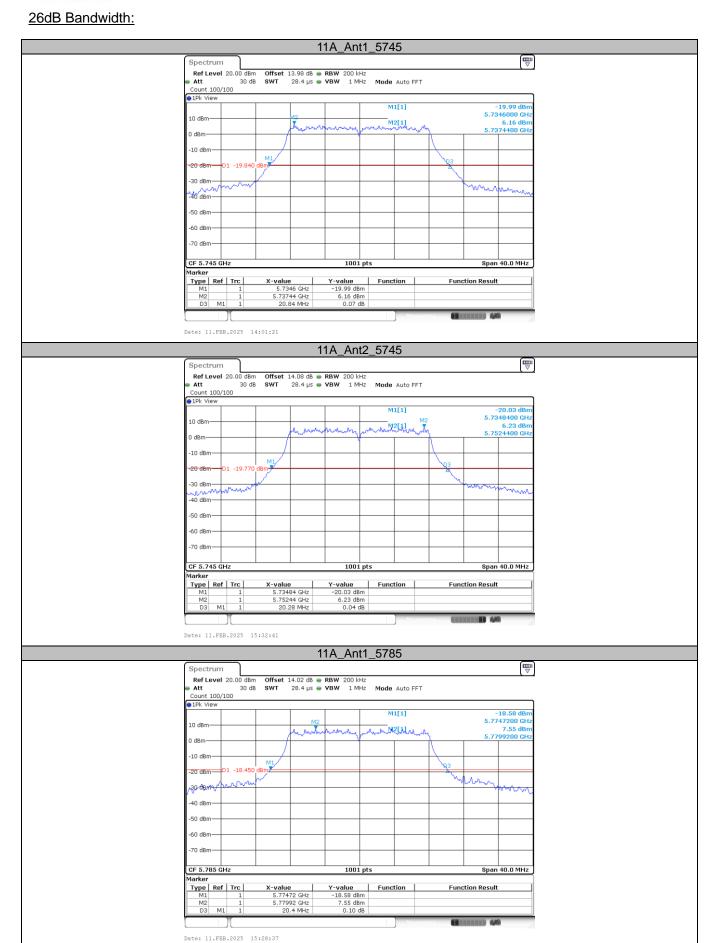
TestMode	Antenna	Freq (MHz)	26db EBW [MHz]	OCB [MHz]
	Ant1	5745	20.84	16.823
	Ant2	5745	20.28	17.263
11A	Ant1	5785	20.40	17.023
IIA	Ant2	5785	20.36	17.143
	Ant1	5825	20.20	16.863
	Ant2	5825	20.40	17.023
	Ant1	5745	20.76	18.142
	Ant2	5745	20.84	18.062
441100141140	Ant1	5785	21.04	18.102
11N20MIMO	Ant2	5785	20.88	18.022
	Ant1	5825	20.68	18.262
	Ant2	5825	20.84	17.742
	Ant1	5755	41.44	36.523
44140141140	Ant2	5755	41.68	36.683
11N40MIMO	Ant1	5795	42.40	36.603
	Ant2	5795	42.00	36.603
	Ant1	5745	20.88	17.862
	Ant2	5745	20.88	17.942
44 4 0000 4114 40	Ant1	5785	21.04	17.822
11AC20MIMO	Ant2	5785	20.92	17.822
	Ant1	5825	20.84	18.302
	Ant2	5825	21.00	18.142
	Ant1	5755	41.76	36.364
44.4.0.4014114.0	Ant2	5755	41.52	36.763
11AC40MIMO	Ant1	5795	41.68	36.683
	Ant2	5795	41.36	36.603
	Ant1	5745	21.12	19.061
	Ant2	5745	21.20	19.221
44.4.\\000.411.40	Ant1	5785	21.28	19.141
11AX20MIMO	Ant2	5785	21.12	19.181
	Ant1	5825	20.96	19.181
	Ant2	5825	21.16	19.181
	Ant1	5755	40.88	38.202
44.4.7/40141140	Ant2	5755	40.72	38.122
11AX40MIMO	Ant1	5795	40.96	38.202
	Ant2	5795	41.28	38.362





**6dB Bandwidth** 

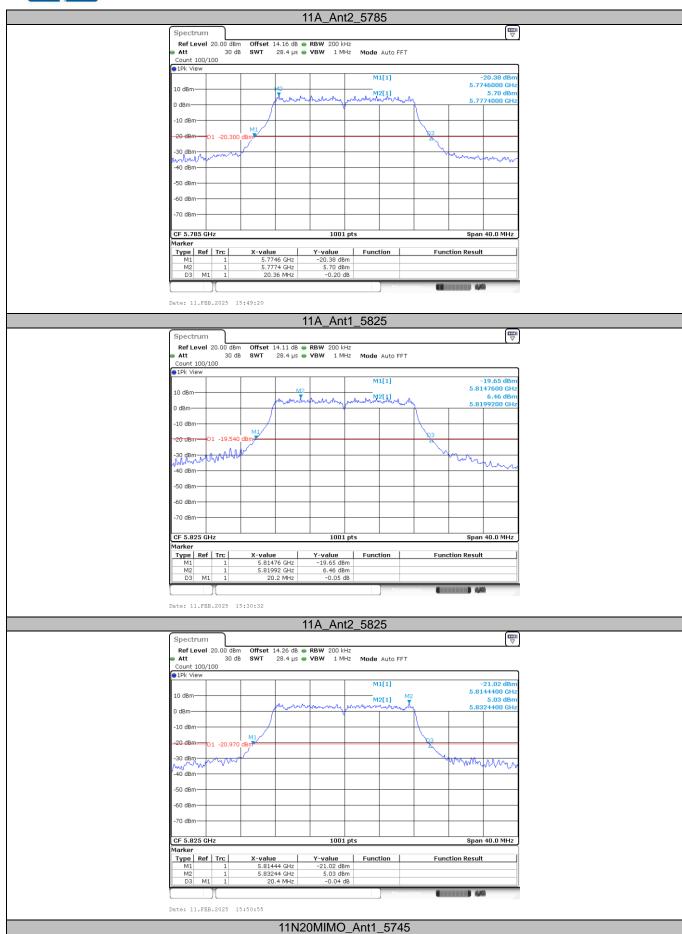
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
	Ant1	5745	16.40	5736.76	5753.16	0.5	PASS
11A	Ant2	5745	16.32	5736.76	5753.08	0.5	PASS
	Ant1	5785	16.56	5776.64	5793.20	0.5	PASS
	Ant2	5785	16.32	5776.76	5793.08	0.5	PASS
	Ant1	5825	16.52	5816.68	5833.20	0.5	PASS
	Ant2	5825	16.52	5816.68	5833.20	0.5	PASS
	Ant1	5745	17.60	5736.12	5753.72	0.5	PASS
	Ant2	5745	17.56	5736.16	5753.72	0.5	PASS
44100141140	Ant1	5785	17.80	5776.04	5793.84	0.5	PASS
11N20MIMO	Ant2	5785	17.60	5776.12	5793.72	0.5	PASS
	Ant1	5825	17.60	5816.12	5833.72	0.5	PASS
	Ant2	5825	17.76	5816.04	5833.80	0.5	PASS
	Ant1	5755	36.32	5736.76	5773.08	0.5	PASS
111140141140	Ant2	5755	36.32	5736.76	5773.08	0.5	PASS
11N40MIMO	Ant1	5795	36.32	5776.76	5813.08	0.5	PASS
	Ant2	5795	36.32	5776.76	5813.08	0.5	PASS
	Ant1	5745	17.60	5736.12	5753.72	0.5	PASS
	Ant2	5745	17.80	5736.04	5753.84	0.5	PASS
11AC20MIMO	Ant1	5785	17.60	5776.12	5793.72	0.5	PASS
TTACZUIVIIIVIO	Ant2	5785	17.72	5776.08	5793.80	0.5	PASS
	Ant1	5825	17.80	5816.04	5833.84	0.5	PASS
	Ant2	5825	17.72	5816.08	5833.80	0.5	PASS
	Ant1	5755	36.40	5736.76	5773.16	0.5	PASS
11AC40MIMO	Ant2	5755	36.40	5736.76	5773.16	0.5	PASS
TTAC40IVIIIVIO	Ant1	5795	36.32	5776.76	5813.08	0.5	PASS
	Ant2	5795	36.48	5776.68	5813.16	0.5	PASS
	Ant1	5745	18.88	5735.44	5754.32	0.5	PASS
	Ant2	5745	18.96	5735.44	5754.40	0.5	PASS
44 A V 20 M I M O	Ant1	5785	18.92	5775.48	5794.40	0.5	PASS
11AX20MIMO	Ant2	5785	18.92	5775.48	5794.40	0.5	PASS
	Ant1	5825	18.88	5815.44	5834.32	0.5	PASS
	Ant2	5825	19.04	5815.40	5834.44	0.5	PASS
	Ant1	5755	37.60	5736.04	5773.64	0.5	PASS
44 A V 40 MINAO	Ant2	5755	36.56	5737.24	5773.80	0.5	PASS
11AX40MIMO	Ant1	5795	38.16	5775.80	5813.96	0.5	PASS
	Ant2	5795	37.76	5775.96	5813.72	0.5	PASS

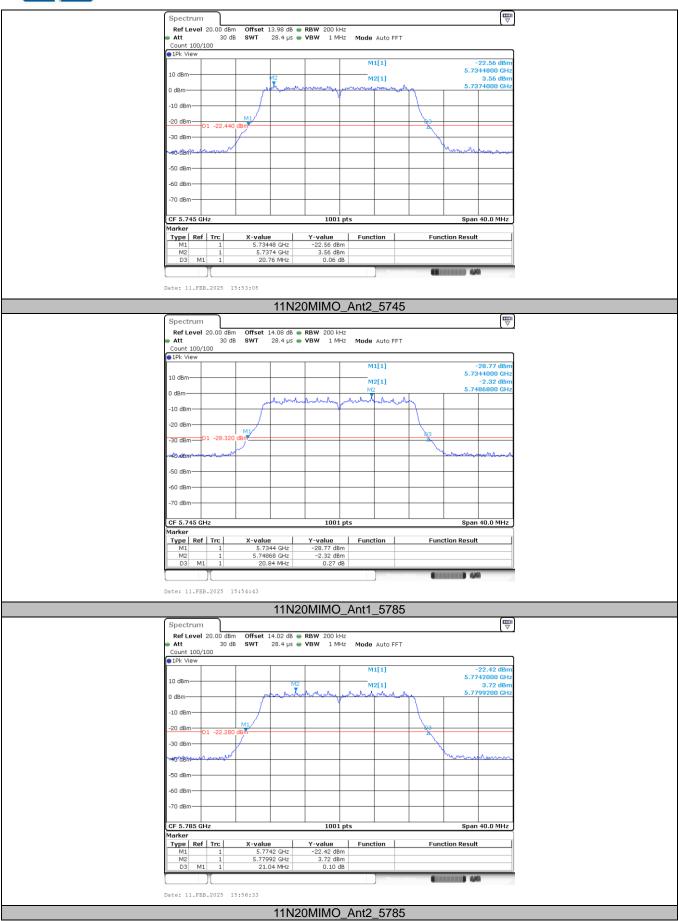


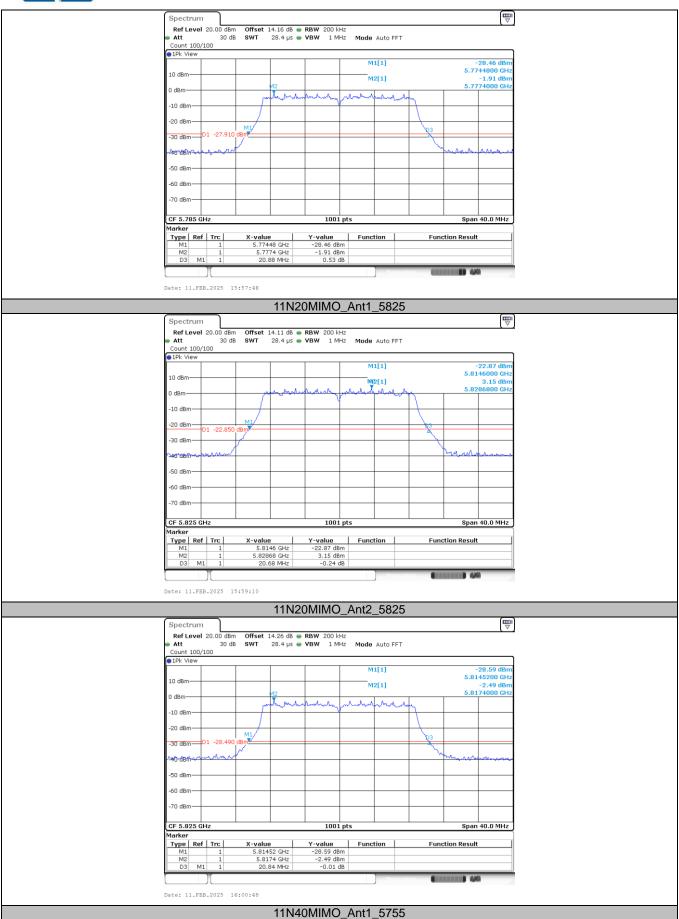
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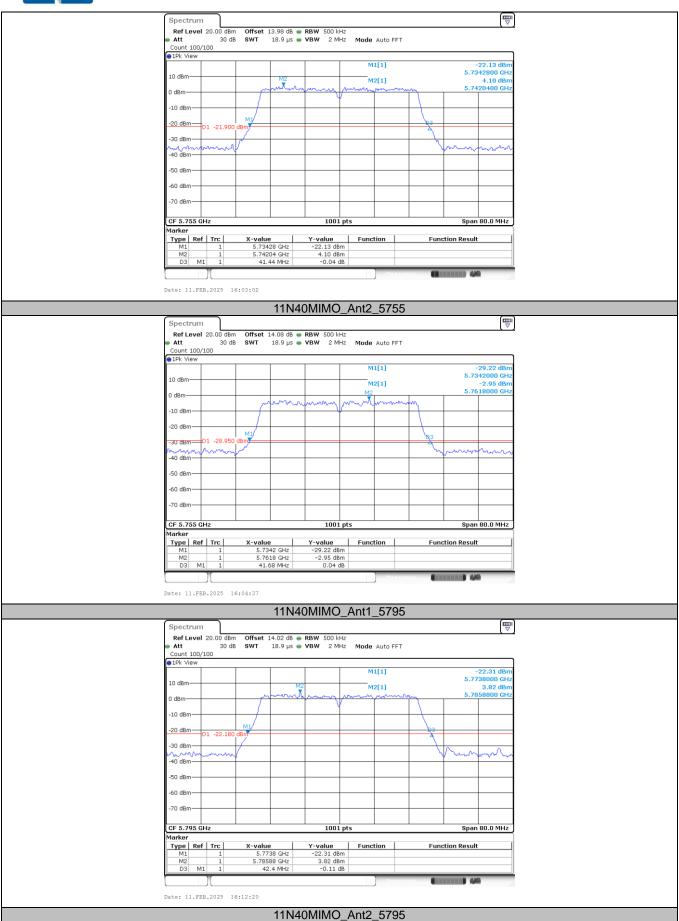
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

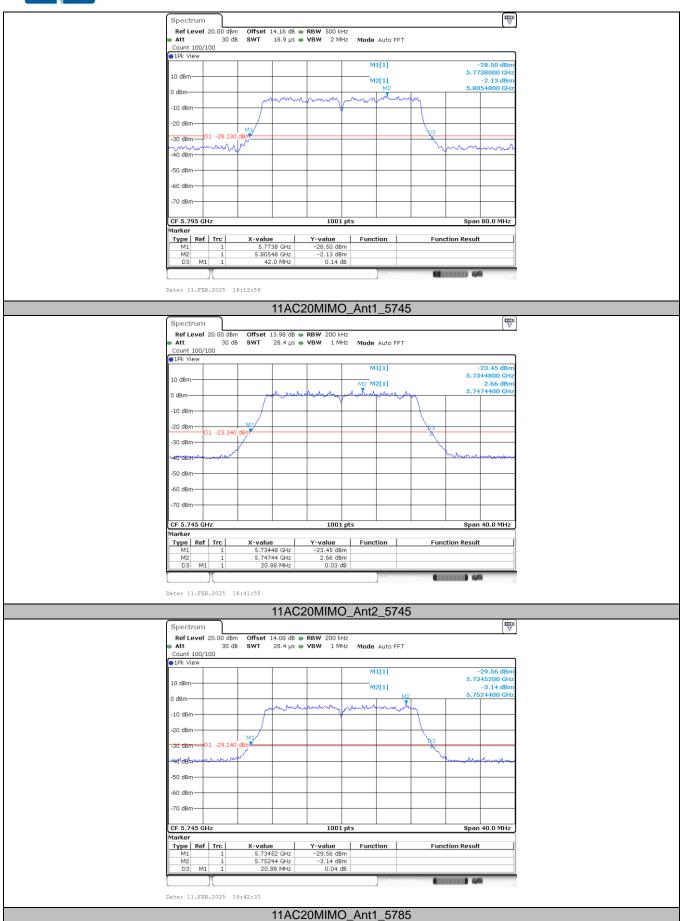
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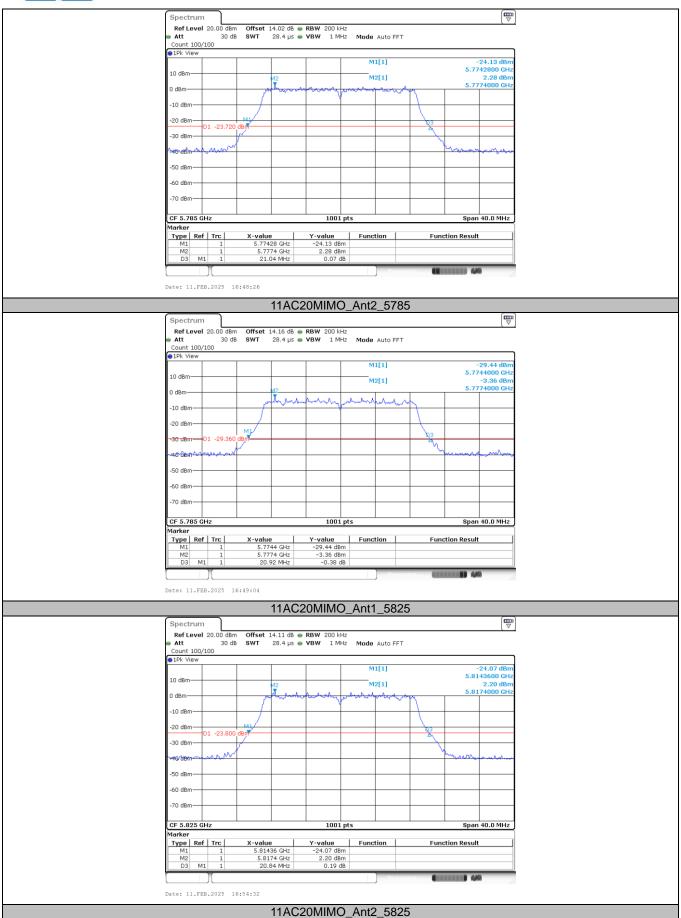


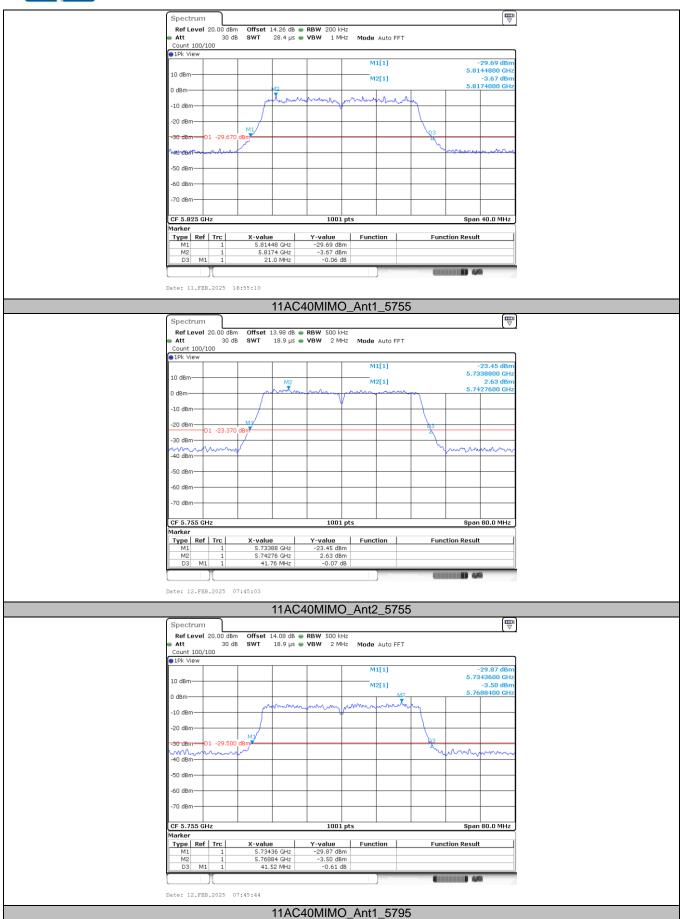


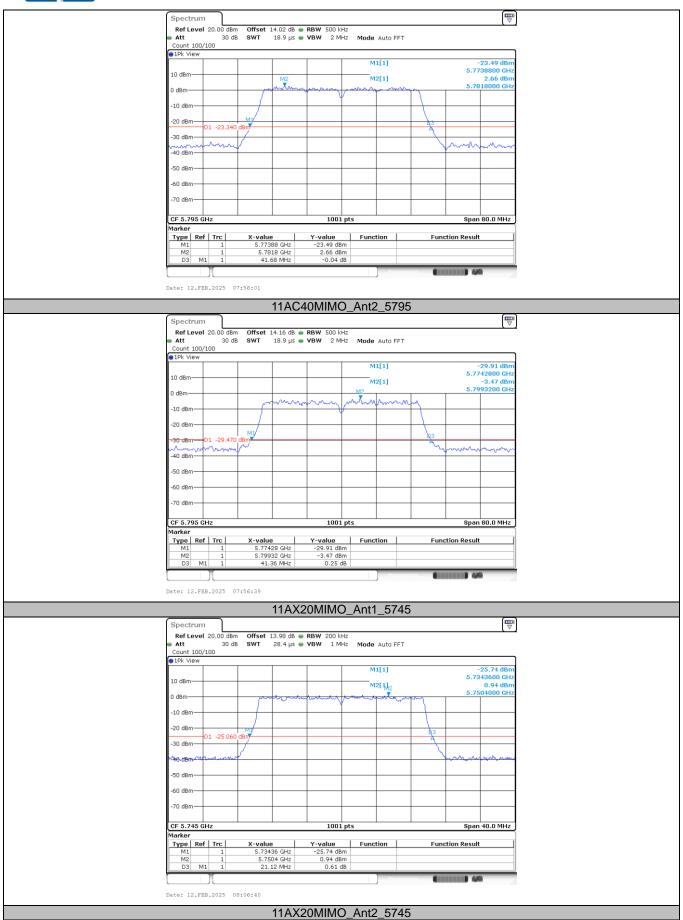


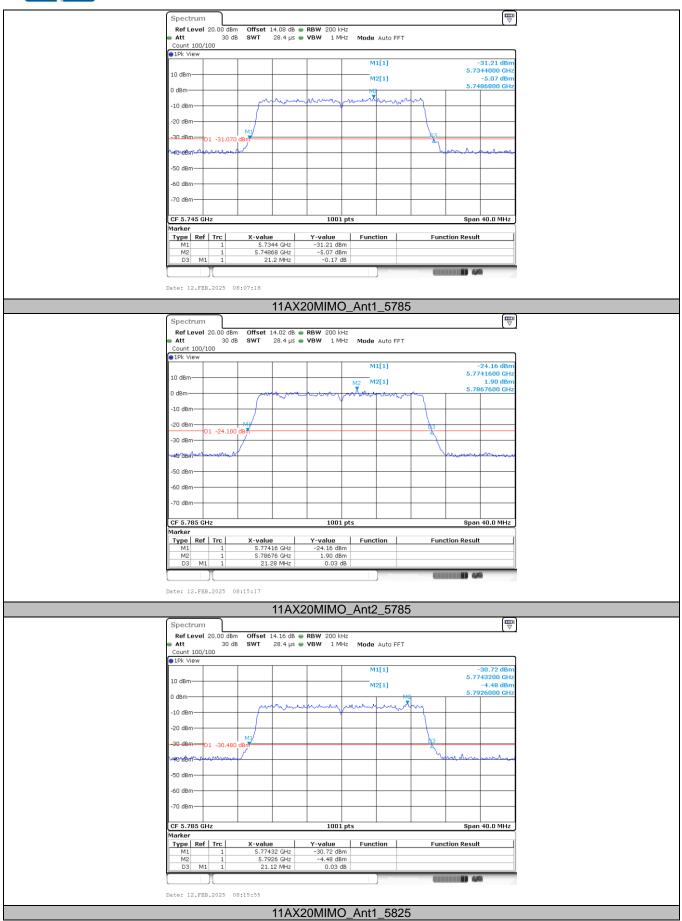


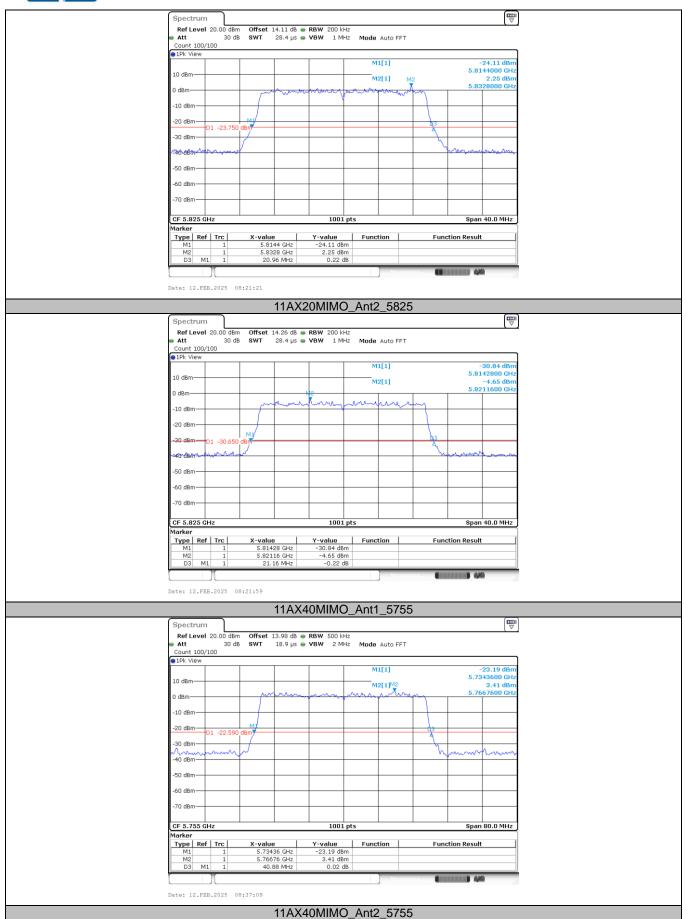


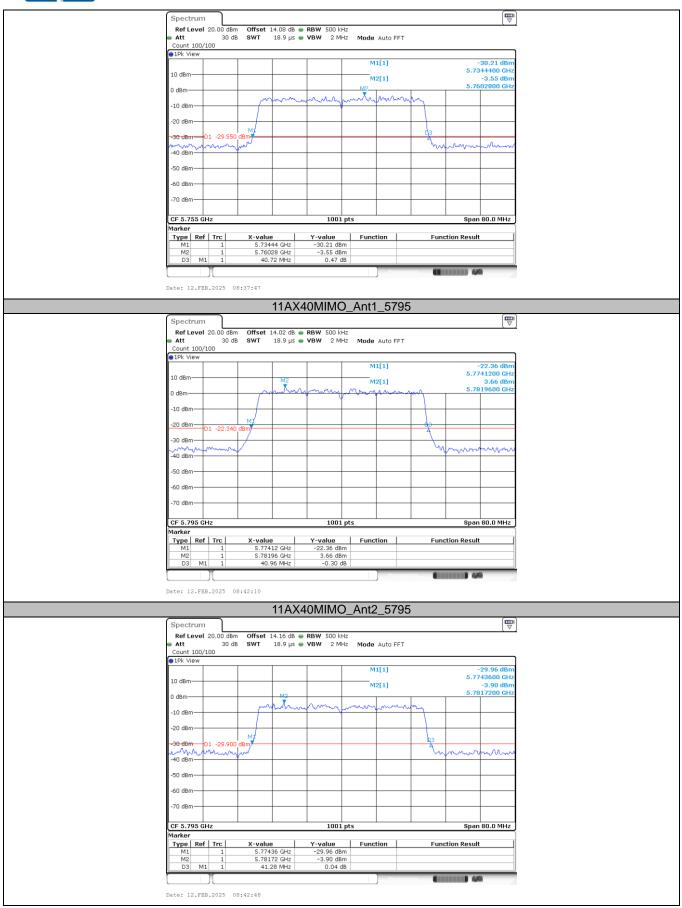




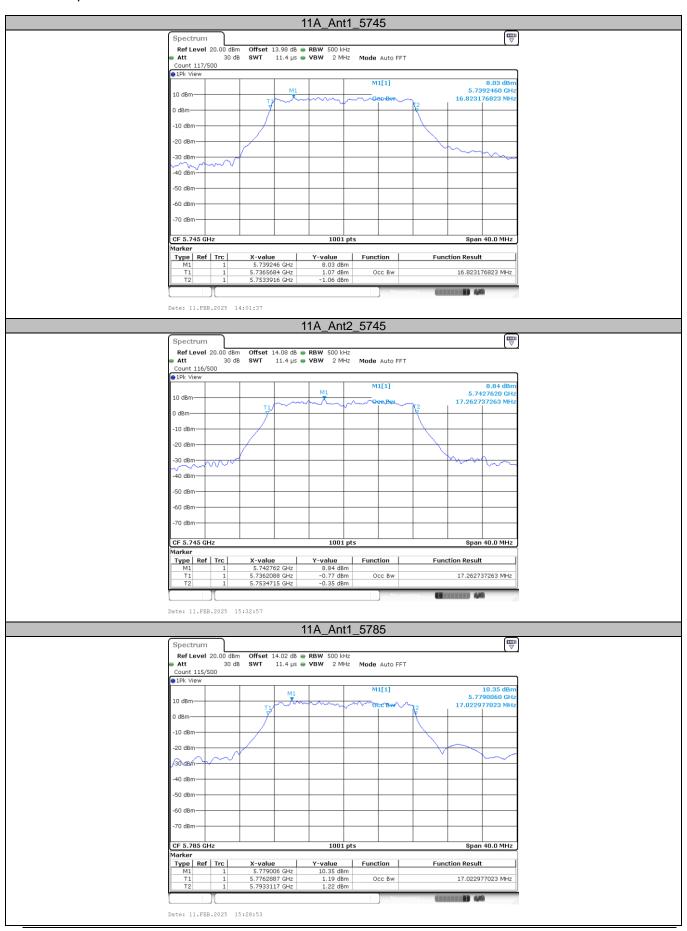








## 99% Occupied Bandwidth



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