

FCC Test Report

**Test Report
On Behalf of
Winner Wave Limited
For
CamCast
Model No.: CT-1**

FCC ID: 2ADFS-CAMCAST-CT1

Prepared For: Winner Wave Limited
Unit 2003 Cheong Tai Commercial Building 287-289 Reclamation Street
Kowloon, Hong Kong

Prepared By: Shenzhen HUAKE Testing Technology Co., Ltd.
1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping,
Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Date of Test: Nov. 18, 2025 ~ Dec. 12, 2025

Date of Report: Dec. 12, 2025

Report Number: HK2511186220-2E

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Test Result Certification

Applicant's Name: Winner Wave Limited
Address: Unit 2003 Cheong Tai Commercial Building 287-289
Reclamation Street Kowloon, Hong Kong
Manufacturer's Name: Actions Microelectronics Co., Ltd.
Address: 201, No.9 Building, Software Park, KeJiZhongEr Road,
GaoXinQu, NanShan, Shenzhen, China

Product Description

Trade Mark: EZCast
Product Name: CamCast
Model and/or Type Reference : CT-1

Standards: FCC Rules and Regulations Part 15 Subpart E Section 15.407
ANSI C63.10: 2020

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen HUAK Testing Technology Co., Ltd. is acknowledged as copyright owner and source of the material. Shenzhen HUAK Testing Technology Co., Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

Date of Test:
Date (s) of Performance of Tests: Nov. 18, 2025 ~ Dec. 12, 2025
Date of Issue: Dec. 12, 2025
Test Result: Pass

Testing Engineer

Len Liao

Len Liao

Technical Manager

Sliver Wan

Sliver Wan

Authorized Signatory

Jason Zhou

Jason Zhou

Table of Contents

1. Summary	5
1.1 Test Procedures and Results.....	5
1.2 Information of the Test Laboratory	5
1.3 Measurement Uncertainty	6
2. EUT Description	7
2.1 General Description of EUT	7
2.2 Operation Frequency Each of Channel.....	8
2.3 Operation of EUT during Testing.....	8
2.4 Description of Test Setup.....	9
2.5 Description of Support Units	10
3. General Information.....	11
3.1 Test Environment and Mode	11
4. Test Results and Measurement Data	15
4.1 AC Conducted Emission	15
4.2 Maximum Conducted Output Power	19
4.3 6dB Emission Bandwidth	23
4.4 26dB Bandwidth and 99% Occupied Bandwidth	36
4.5 Power Spectral Density	37
4.6 Band Edge.....	51
4.7 Spurious Emission.....	66
4.8 Frequency Stability Measurement.....	86
4.9 Antenna Requirement.....	89
5. Test Setup Photos of the EUT	90
6. Photos of the EUT.....	92

**** Modified History ****

Revision	Description	Issued Date	Remark
Revision 1.0	Initial Test Report Release	Dec. 12, 2025	Jason Zhou

1. Summary

1.1 Test Procedures and Results

Requirement	CFR 47 Section	Result
Antenna Requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Maximum Conducted Output Power	§15.407(a)	PASS
6dB Emission Bandwidth	§15.407(e)	PASS
26dB Emission Bandwidth & 99% Occupied Bandwidth	§15.407(a)	N/A
Power Spectral Density	§15.407(a)	PASS
Band Edge	§15.407(b)/15.209/15.205	PASS
Radiated Emission	§15.407(b)/15.209/15.205	PASS
Frequency Stability	§15.407(g)	PASS

Note:

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

1.2 Information of the Test Laboratory

Shenzhen HUAKE Testing Technology Co., Ltd.

Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

1.3 Measurement Uncertainty

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

No.	Item	MU
1	Conducted Emission	$\pm 0.37\text{dB}$
2	RF Power, Conducted	$\pm 3.35\text{dB}$
3	Spurious Emissions, Conducted	$\pm 2.20\text{dB}$
4	All Emissions, Radiated(<1G)	$\pm 3.90\text{dB}$
5	All Emissions, Radiated(>1G)	$\pm 4.28\text{dB}$
6	Temperature	$\pm 0.1^{\circ}\text{C}$
7	Humidity	$\pm 1.0\%$

2. EUT Description

2.1 General Description of EUT

Equipment	CamCast
Model Name	CT-1
Series Model(s)	N/A
Model Difference	N/A
Trade Mark	EZCast
FCC ID	2ADFS-CAMCAST-CT1
Operation Frequency	IEEE 802.11a/n/ac(HT20)5.745GHz-5.825GHz IEEE 802.11n/ac(HT40)5.755GHz-5.795GHz IEEE 802.11ac(HT80) 5.775GHz
Modulation Technology	IEEE 802.11a/n/ac
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
Antenna Type	PCB Antenna
Antenna Gain	Antenna 1: 2dBi Antenna 2: 2dBi MIMO: 5.01dBi
Power Source	DC 5V From Type-C or DC 7.4V From Battery
Power Supply	DC 5V From Type-C or DC 7.4V From Battery
Hardware Version	V1.0
Software Version	V1.0
Note: 1. The EUT incorporates a MIMO function. Physically, it provides two completed transmitters and receivers (2T2R), two transmit signals are completely correlated, then, Direction gain= GANT + Array Gain (Array Gain=10 log(2) dB for power spectral density; Array Gain=0 for power measurement). 2. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. 3. Antenna gain Refer to the antenna specifications. 4. The cable loss data is obtained from the supplier. 5. The test results in the report only apply to the tested sample.	

2.2 Operation Frequency Each of Channel

802.11a/802.11n(HT20) 802.11ac(HT20)		802.11n(HT40)/ 802.11ac(HT40)		802.11ac(HT80)	
Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

2.3 Operation of EUT during Testing

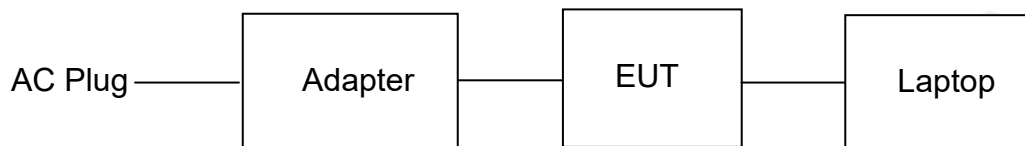
Band IV (5725 - 5850 MHz)		
For 802.11a/n (HT20)/ac(HT20)		
Channel Number	Channel	Frequency (MHz)
149	Low	5745
157	Mid	5785
165	High	5825

For 802.11n (HT40)/ac(HT40)		
Channel Number	Channel	Frequency (MHz)
151	Low	5755
159	High	5795

For 802.11ac(HT80)		
Channel Number	Channel	Frequency (MHz)
155	/	5775

2.4 Description of Test Setup

Operation of EUT during AC conducted and radiation below 1GHz testing:



Operation of EUT during radiation above 1GHz testing:



Operation of EUT during RF Conducted testing:



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

2.5 Description of Support Units

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

Item	Equipment	Trade Mark	Model/Type No.	Specification	Remark
1	CamCast	EZCast	CT-1	N/A	EUT
2	USB Cable	N/A	N/A	Length: 1.0m	Accessory
3	Adapter	N/A	MDY-10-EH	Input: 100-240V, 50/60Hz, 0.7A Output: 5V, 3A/9V, 3A/12V, 2.25A/20V, 1.35A	Peripheral
4	Adapter	N/A	N/A	Input: 100-240V, 50/60Hz, 0.5A Output: 5VDC, 2A	Peripheral
5	Laptop	Lenovo	ThinkPad L480	DC20V, 2.25/3.25A	Peripheral

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. For conducted measurements (Output Power, 6dB Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

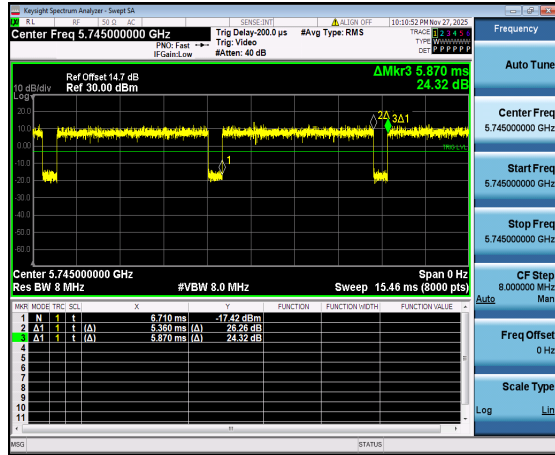
3. General Information

3.1 Test Environment and Mode

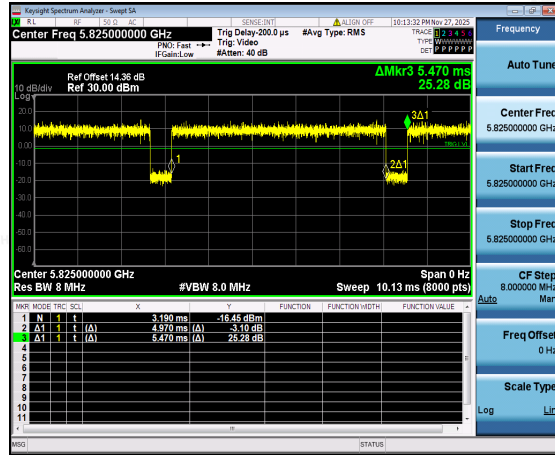
Operating Environment:															
Temperature:	25.0 °C														
Humidity:	56 % RH														
Atmospheric Pressure:	1010 mbar														
Test Mode:															
Engineering Mode:	Keep the EUT in continuous transmitting by select channel and modulations														
We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:															
Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.															
Mode	Data rate														
802.11a	6 Mbps														
802.11n(HT20)	MCS0														
802.11n(HT40)	MCS0														
802.11ac(HT20)/ac(HT40)/ac(HT80)	MCS0														
Final Test Mode:															
Operation mode:	Keep the EUT in continuous transmitting with modulation														
Mode Test Duty Cycle ANT.1: <table border="1"> <thead> <tr> <th>Mode</th><th>Duty Cycle</th></tr> </thead> <tbody> <tr> <td>802.11a</td><td>0.9131</td></tr> <tr> <td>802.11n(HT20)</td><td>0.9086</td></tr> <tr> <td>802.11n(HT40)</td><td>0.8934</td></tr> <tr> <td>802.11ac(HT20)</td><td>0.9086</td></tr> <tr> <td>802.11ac(HT40)</td><td>0.8934</td></tr> <tr> <td>802.11ac(HT80)</td><td>0.8038</td></tr> </tbody> </table>		Mode	Duty Cycle	802.11a	0.9131	802.11n(HT20)	0.9086	802.11n(HT40)	0.8934	802.11ac(HT20)	0.9086	802.11ac(HT40)	0.8934	802.11ac(HT80)	0.8038
Mode	Duty Cycle														
802.11a	0.9131														
802.11n(HT20)	0.9086														
802.11n(HT40)	0.8934														
802.11ac(HT20)	0.9086														
802.11ac(HT40)	0.8934														
802.11ac(HT80)	0.8038														

Test plots as follows:

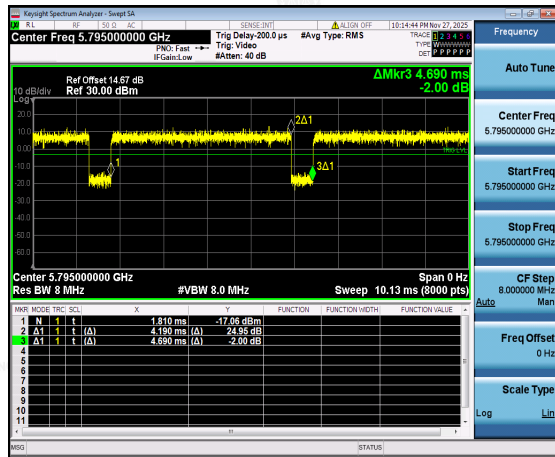
802.11a



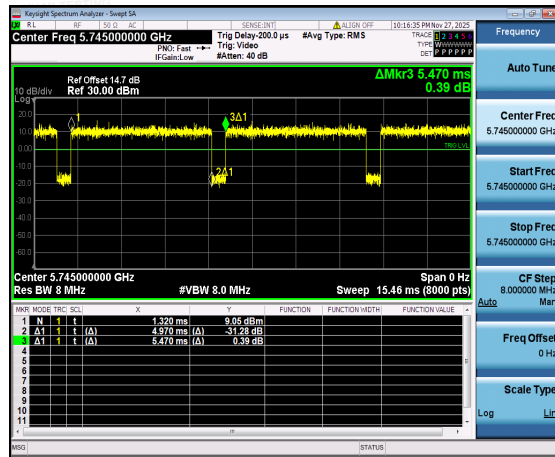
802.11n(HT20)



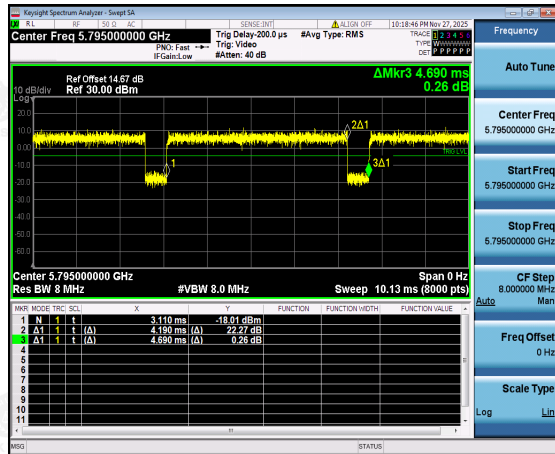
802.11n(HT40)



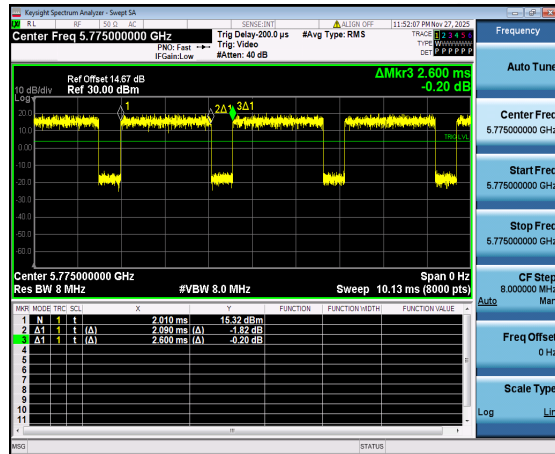
802.11ac(HT20)



802.11ac(HT40)



802.11ac(HT80)



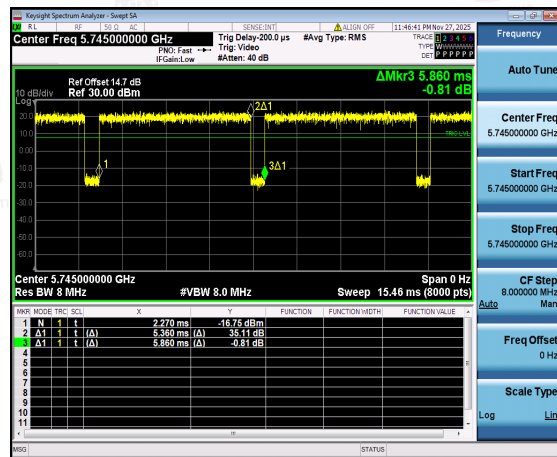
The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

ANT.2:

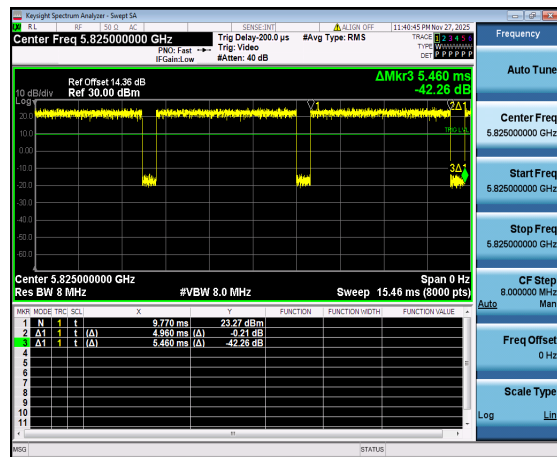
Mode	Duty Cycle
802.11a	0.9147
802.11n(HT20)	0.9084
802.11n(HT40)	0.8934
802.11ac(HT20)	0.9086
802.11ac(HT40)	0.8936
802.11ac(HT80)	0.8038

Test plots as follows:

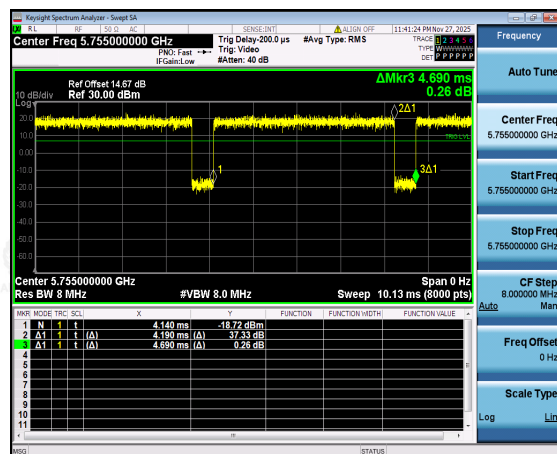
802.11a



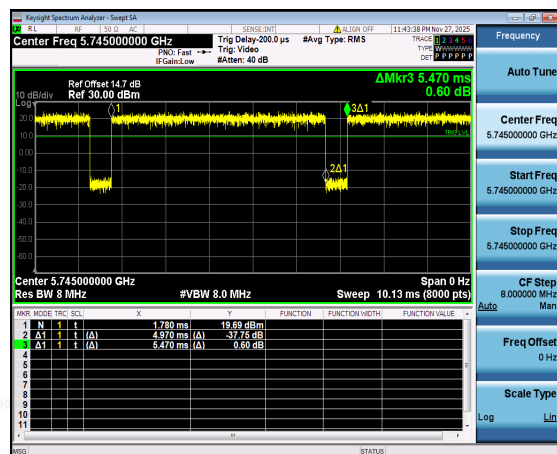
802.11n(HT20)



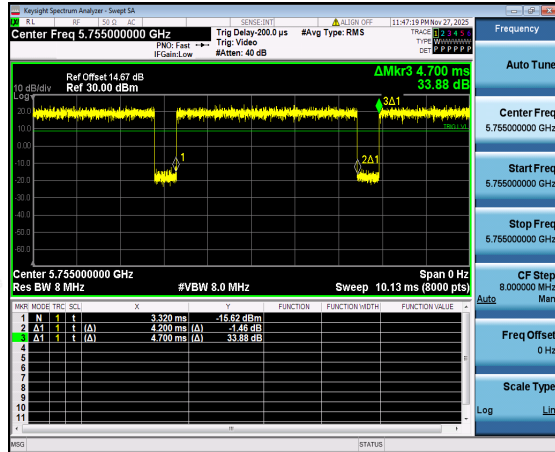
802.11n(HT40)



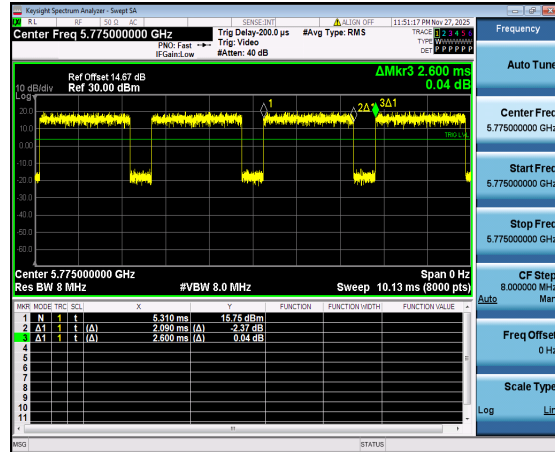
802.11ac(HT20)



802.11ac(HT40)



802.11ac(HT80)



4. Test Results and Measurement Data

4.1 AC Conducted Emission

4.1.1 Test Specification

Test Requirement:	FCC Part15 C Section 15.207														
Test Method:	ANSI C63.10: 2020														
Frequency Range:	150 kHz to 30 MHz														
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto														
Limits:	<table><tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBuV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></tr><tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr><tr><td>0.5-5</td><td>56</td><td>46</td></tr><tr><td>5-30</td><td>60</td><td>50</td></tr></table>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test Setup:	Reference Plane 40cm E.U.T AC power Test table/Insulation plane 80cm LISN Filter EMI Receiver AC power Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m														
Test Mode:	Tx Mode														
Test Procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2020 on conducted measurement.														
Test Result:	Pass														

4.1.2 Test Instruments

Conducted Emission Shielding Room Test Site (843)

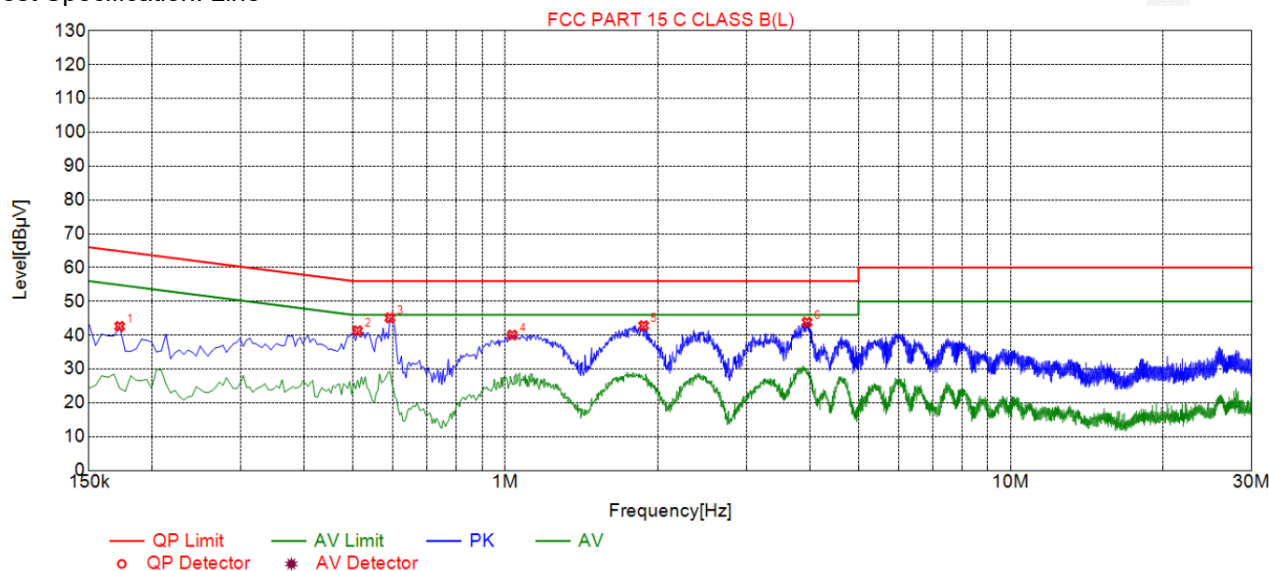
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Receiver	R&S	ESR	HKE-005	Feb. 19, 2025	Feb. 18, 2026
LISN	R&S	ENV216	HKE-002	Feb. 19, 2025	Feb. 18, 2026
LISN	R&S	ENV216	HKE-059	Feb. 19, 2025	Feb. 18, 2026
Coax cable (9KHz-30MHz)	Times	381806-002	N/A	Feb. 19, 2025	Feb. 18, 2026
EMI Test Software	Tonscend	JS32-CE 2.5.0.6	HKE-081	N/A	N/A
10dB Attenuator	Schwarzbeck	VTSD9561F	HKE-153	Feb. 19, 2025	Feb. 18, 2026

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

4.1.3 Test Data

All modes have been tested, only the worst result was reported as below:

Test Specification: Line



Suspected List

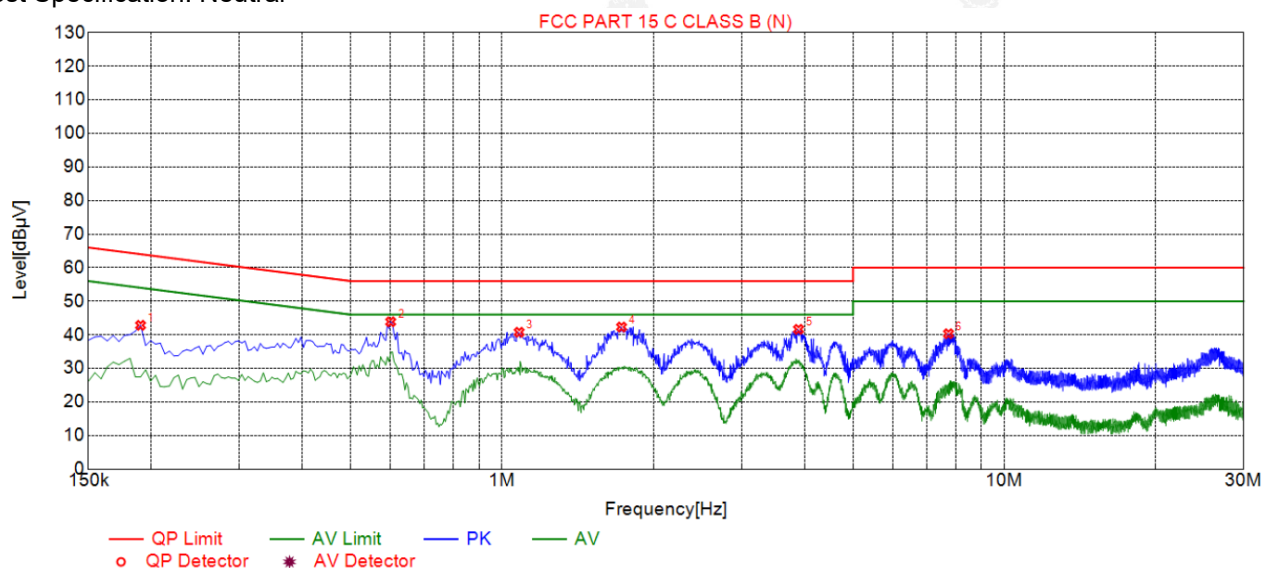
NO.	Freq. [MHz]	Level [dBμV]	Factor [dB]	Limit [dBμV]	Margin [dB]	Reading [dBμV]	Detector	Type
1	0.1725	42.61	19.67	64.84	22.23	23.14	PK	L
2	0.5100	41.31	19.83	56.00	14.69	21.68	PK	L
3	0.5910	45.13	19.76	56.00	10.87	25.37	PK	L
4	1.0320	40.05	19.78	56.00	15.95	20.47	PK	L
5	1.8780	42.84	20.10	56.00	13.16	22.94	PK	L
6	3.9525	43.85	20.35	56.00	12.15	23.70	PK	L

Remark: Margin = Limit – Level

Correction factor = Cable lose + LISN insertion loss

Level=Test receiver reading + correction factor

Test Specification: Neutral



Suspected List

NO.	Freq. [MHz]	Level [dBμV]	Factor [dB]	Limit [dBμV]	Margin [dB]	Reading [dBμV]	Detector	Type
1	0.1905	42.83	19.64	64.01	21.18	23.19	PK	N
2	0.6000	43.88	19.75	56.00	12.12	24.13	PK	N
3	1.0815	40.77	19.78	56.00	15.23	20.99	PK	N
4	1.7295	42.32	19.91	56.00	13.68	22.41	PK	N
5	3.8940	41.63	20.14	56.00	14.37	21.49	PK	N
6	7.7460	40.32	20.61	60.00	19.68	19.71	PK	N

Remark: Margin = Limit – Level

Correction factor = Cable lose + LISN insertion loss

Level=Test receiver reading + correction factor

4.2 Maximum Conducted Output Power

4.2.1 Test Specification

Test Requirement:	FCC Part15 E Section 15.407(a)	
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02.r01 Section E	
Limit:	Frequency Band (MHz)	Limit
	5725-5850	1 W
Test Setup:	 RF automatic control unit EUT	
Test Mode:	Transmitting mode with modulation	
Test Procedure:	1. The testing follows the Measurement Procedure of KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E, 3, a 2. The RF output of EUT was connected to the RF automatic control unit by RF cable. The path loss was compensated to the results for each measurement. 3. Set to the maximum power setting and enable the EUT transmit continuously. 4. Measure the conducted output power and record the results in the test report.	
Test Result:	PASS	
Remark:	Conducted output power= measurement power +10log(1/x) X is duty cycle=1, so 10log(1/1)=0 Conducted output power= measurement power	

4.2.2 Test Instruments

RF Test Room					
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Spectrum analyzer	Agilent	N9020A	HKE-025	Feb. 19, 2025	Feb. 18, 2026
Spectrum analyzer	Agilent	N9020A	HKE-117	Feb. 19, 2025	Feb. 18, 2026
Power meter	Agilent	E4419B	HKE-085	Feb. 19, 2025	Feb. 18, 2026
Power Sensor	Agilent	E9300A	HKE-086	Feb. 19, 2025	Feb. 18, 2026
RF cable	Times	1-40G	HKE-034	Feb. 19, 2025	Feb. 18, 2026
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 19, 2025	Feb. 18, 2026
RF Test Software	Tonscend	JS1120-3 Version 3.5.39	HKE-083	N/A	N/A

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

4.2.3 Test Data

Configuration Band IV (5725 - 5850 MHz)					
Mode	Test channel	Maximum Conducted Output Power (dBm)		Limit (dBm)	Result
		Antenna port 1	Antenna port 2		
802.11a	CH149	8.26	8.92	30	PASS
802.11a	CH157	9.11	7.44	30	PASS
802.11a	CH165	7.92	8.02	30	PASS
802.11n(HT20)	CH149	6.25	6.34	30	PASS
802.11n(HT20)	CH157	6.33	6.51	30	PASS
802.11n(HT20)	CH165	6.46	6.58	30	PASS
802.11n(HT40)	CH151	6.94	7.24	30	PASS
802.11n(HT40)	CH159	6.23	6.92	30	PASS
802.11ac(HT20)	CH149	6.39	6.31	30	PASS
802.11ac(HT20)	CH157	6.61	6.11	30	PASS
802.11ac(HT20)	CH165	6.22	6.55	30	PASS
802.11ac(HT40)	CH151	6.19	6.74	30	PASS
802.11ac(HT40)	CH159	6.35	6.65	30	PASS
802.11ac(HT80)	CH155	6.27	6.47	30	PASS

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

Configuration Band IV (5725 - 5850 MHz)						
Mode	Test channel	Maximum Conducted Output Power (dBm)			Limit (dBm)	Result
		Antenna port 1	Antenna port 2	MIMO		
802.11n(HT20)	CH149	6.25	6.34	9.31	30	PASS
802.11n(HT20)	CH157	6.33	6.51	9.43	30	PASS
802.11n(HT20)	CH165	6.46	6.58	9.53	30	PASS
802.11n(HT40)	CH151	6.94	7.24	10.10	30	PASS
802.11n(HT40)	CH159	6.23	6.92	9.60	30	PASS
802.11ac(HT20)	CH149	6.39	6.31	9.36	30	PASS
802.11ac(HT20)	CH157	6.61	6.11	9.38	30	PASS
802.11ac(HT20)	CH165	6.22	6.55	9.40	30	PASS
802.11ac(HT40)	CH151	6.19	6.74	9.48	30	PASS
802.11ac(HT40)	CH159	6.35	6.65	9.51	30	PASS
802.11ac(HT80)	CH155	6.27	6.47	9.38	30	PASS

4.3 6dB Emission Bandwidth

4.3.1 Test Specification

Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v01r04 Section C
Limit:	≥500kHz
Test Setup:	 Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be at least 500 kHz. 4. Measure and record the results in the test report.
Test Result:	PASS

4.3.2 Test Instruments

RF Test Room					
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Spectrum analyzer	Agilent	N9020A	HKE-025	Feb. 19, 2025	Feb. 18, 2026
Spectrum analyzer	Agilent	N9020A	HKE-117	Feb. 19, 2025	Feb. 18, 2026
RF cable	Times	1-40G	HKE-034	Feb. 19, 2025	Feb. 18, 2026
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 19, 2025	Feb. 18, 2026
RF Test Software	Tonscend	JS1120-3 Version 3.5.39	HKE-083	N/A	N/A

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

4.3.3 Test Data

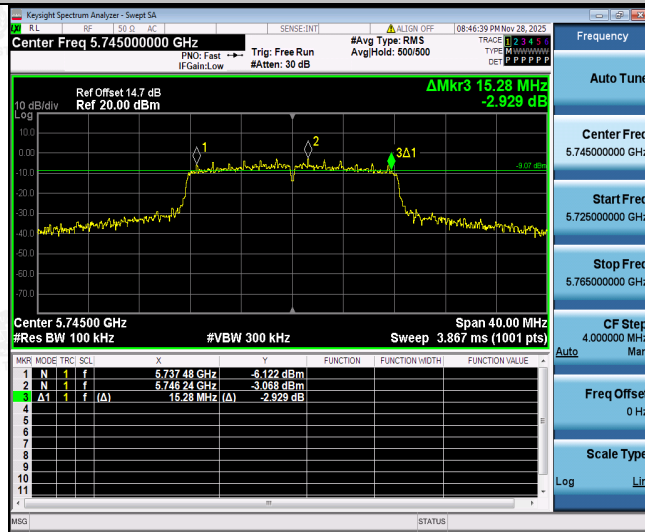
ANT. 1

Band IV (5725 - 5850 MHz)					
Mode	Test channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a	CH149	5745	15.28	0.5	PASS
802.11a	CH157	5785	15.28	0.5	PASS
802.11a	CH165	5825	15.48	0.5	PASS
802.11n(HT20)	CH149	5745	16.04	0.5	PASS
802.11n(HT20)	CH157	5785	15.16	0.5	PASS
802.11n(HT20)	CH165	5825	16.28	0.5	PASS
802.11n(HT40)	CH151	5755	35.12	0.5	PASS
802.11n(HT40)	CH159	5795	35.04	0.5	PASS
802.11ac(HT20)	CH149	5745	15.12	0.5	PASS
802.11ac(HT20)	CH157	5785	15.16	0.5	PASS
802.11ac(HT20)	CH165	5825	15.12	0.5	PASS
802.11ac(HT40)	CH151	5755	35.04	0.5	PASS
802.11ac(HT40)	CH159	5795	35.12	0.5	PASS
802.11ac(HT80)	CH155	5775	73.92	0.5	PASS

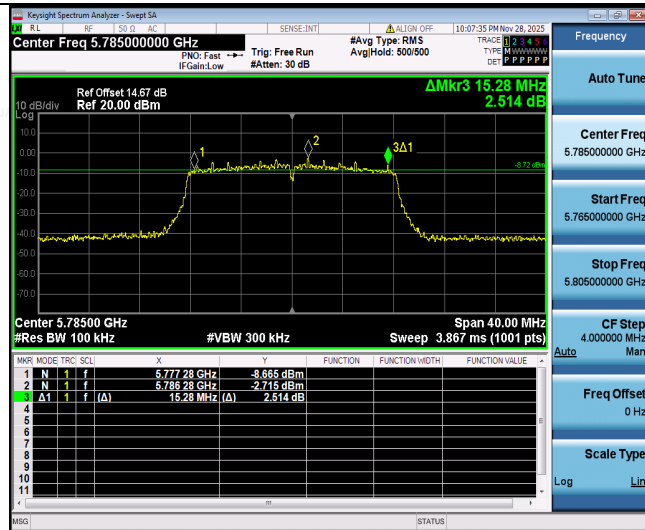
Test plots as follows:

Band IV (5725 – 5850MHz)

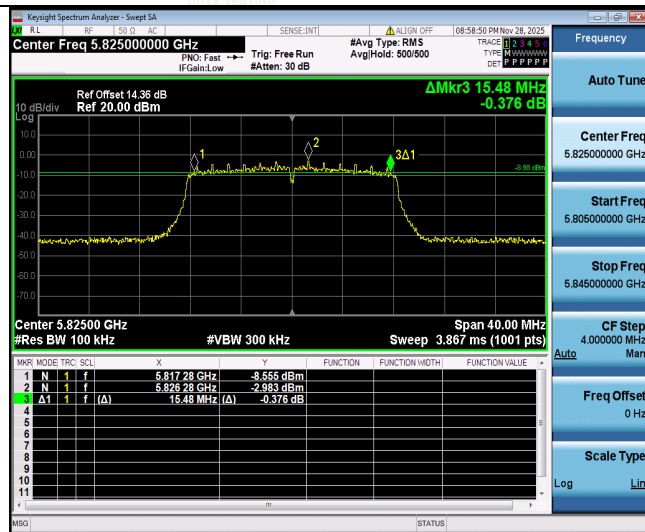
802.11a



Low



Mid



High

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

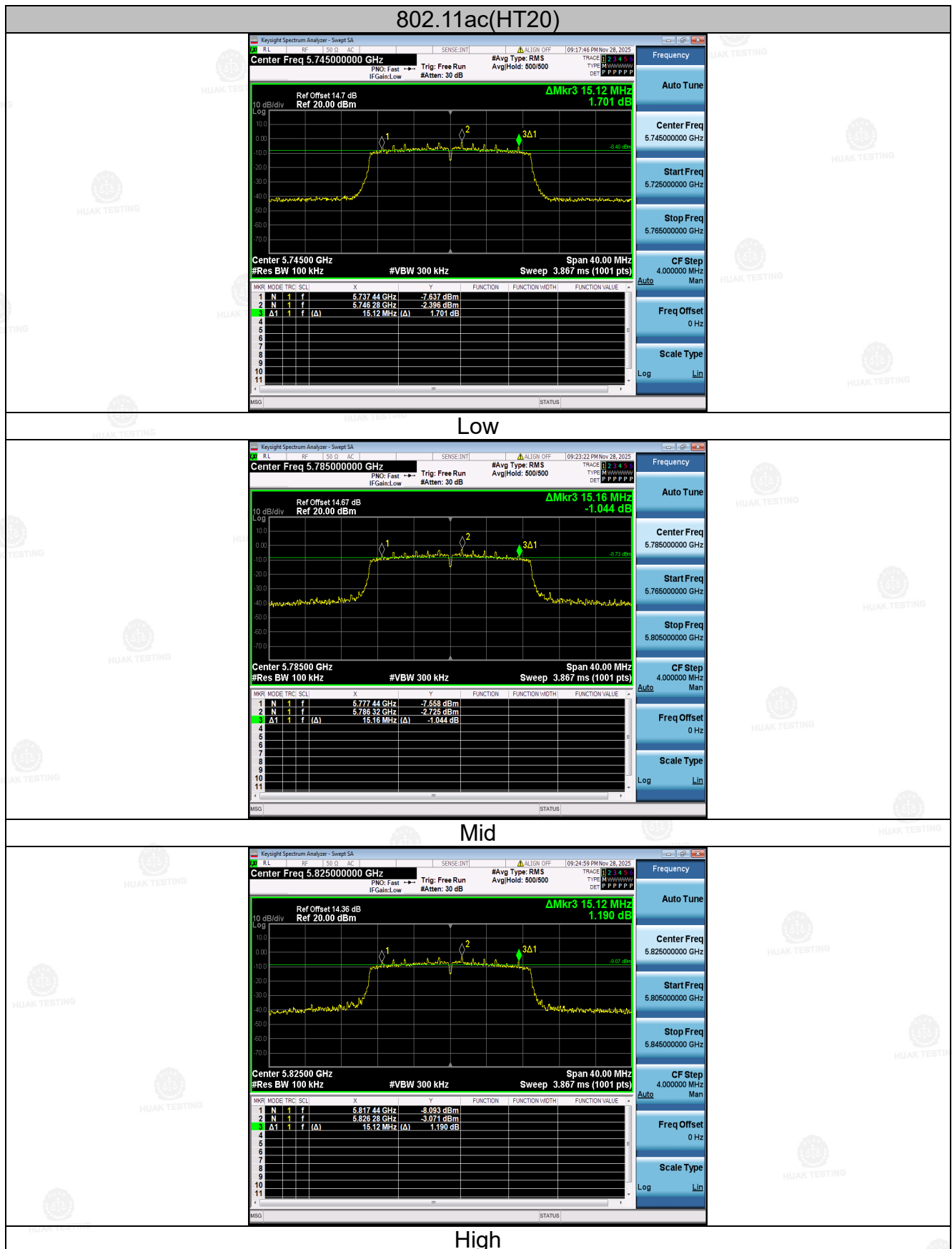


The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

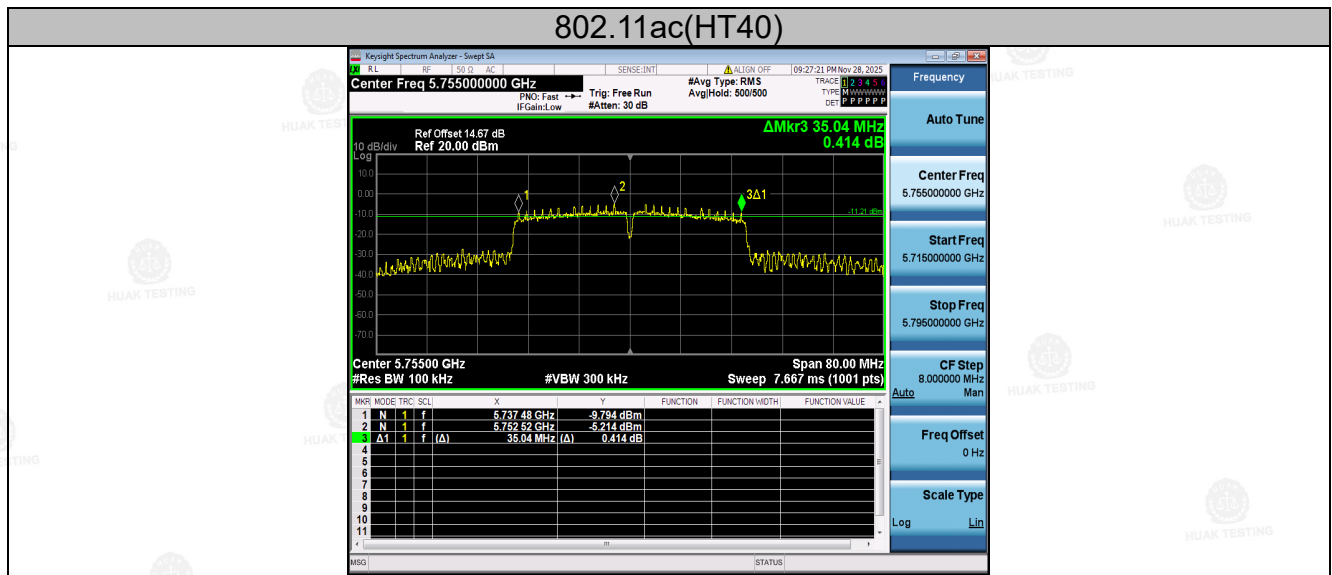


The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

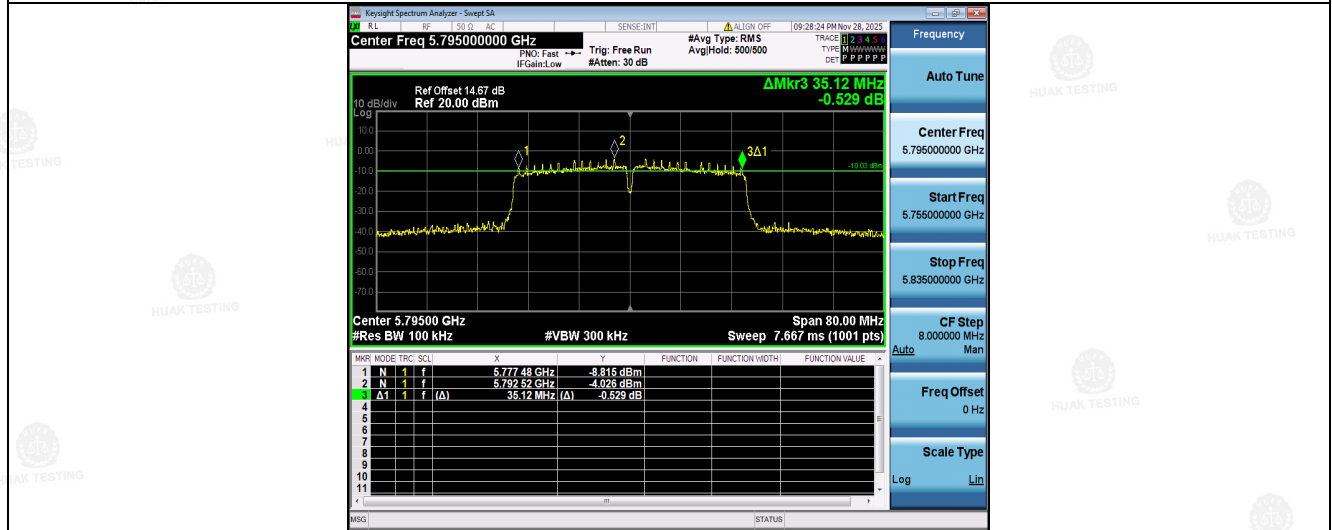
Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
 Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China



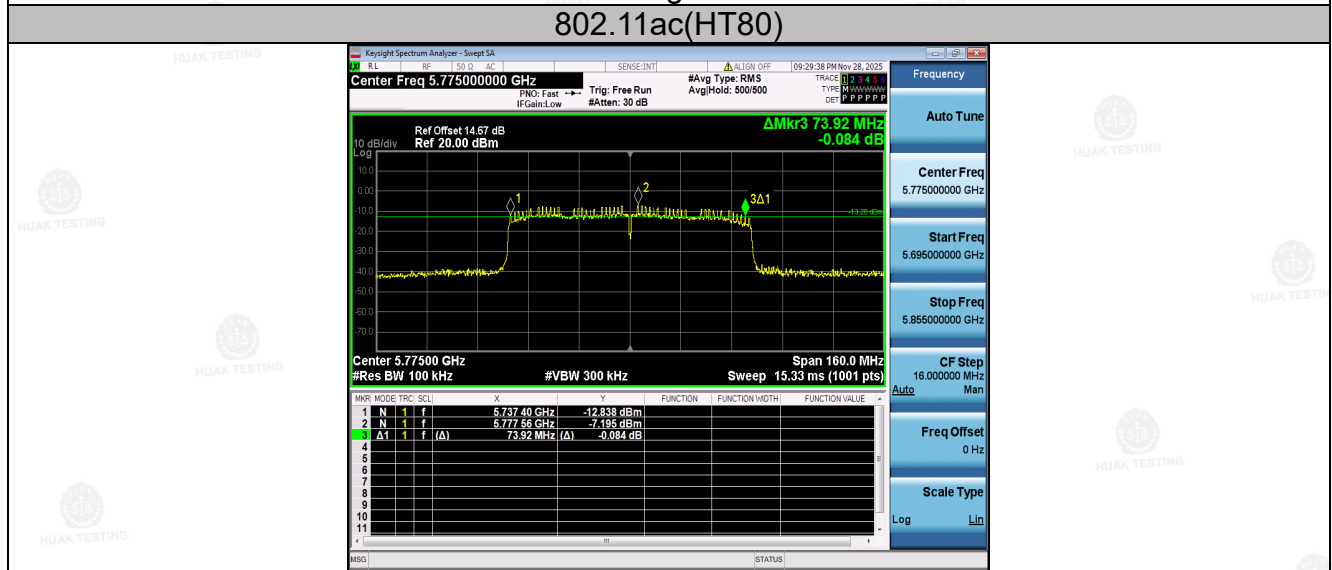
The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.



Low



High



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

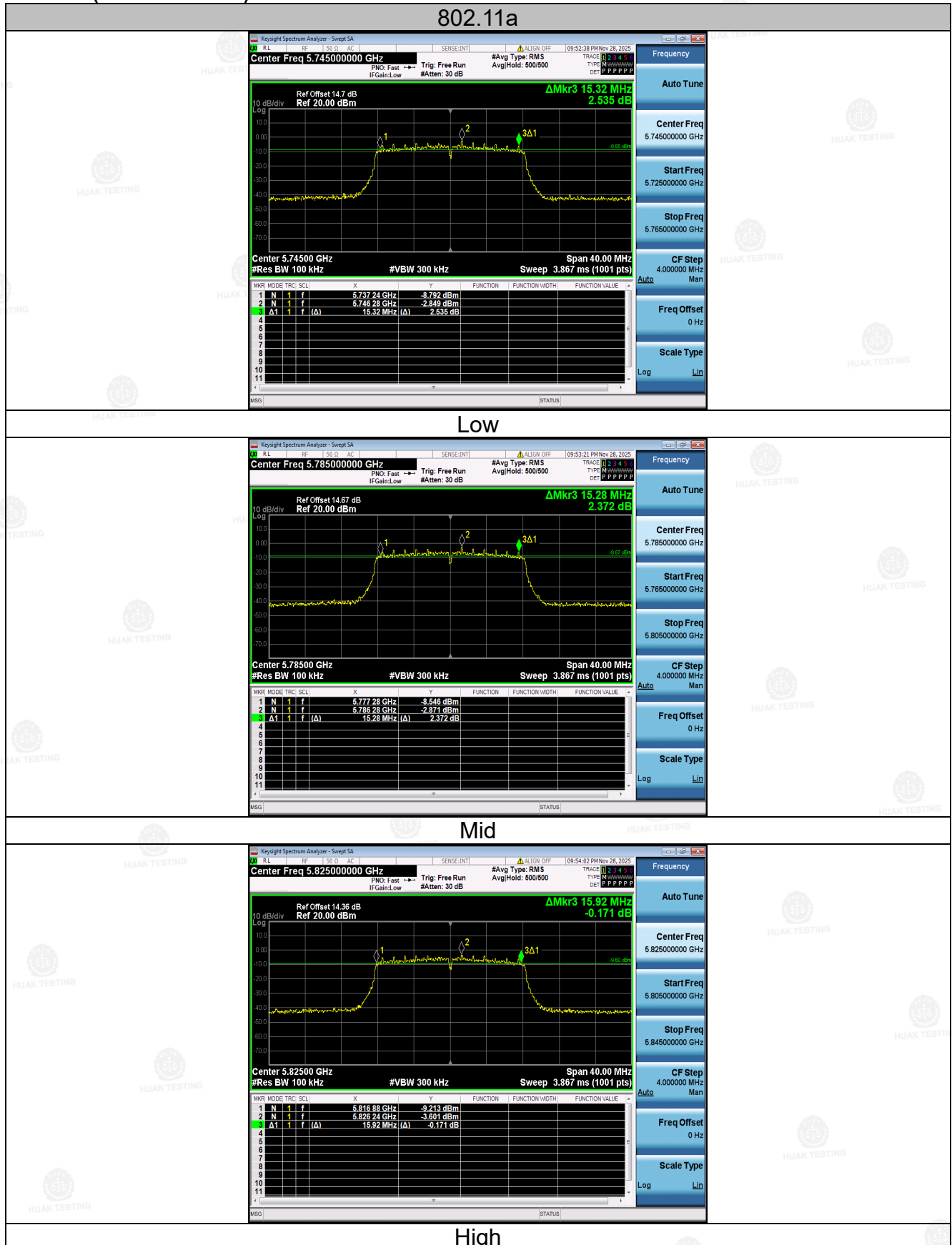
Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

ANT. 2

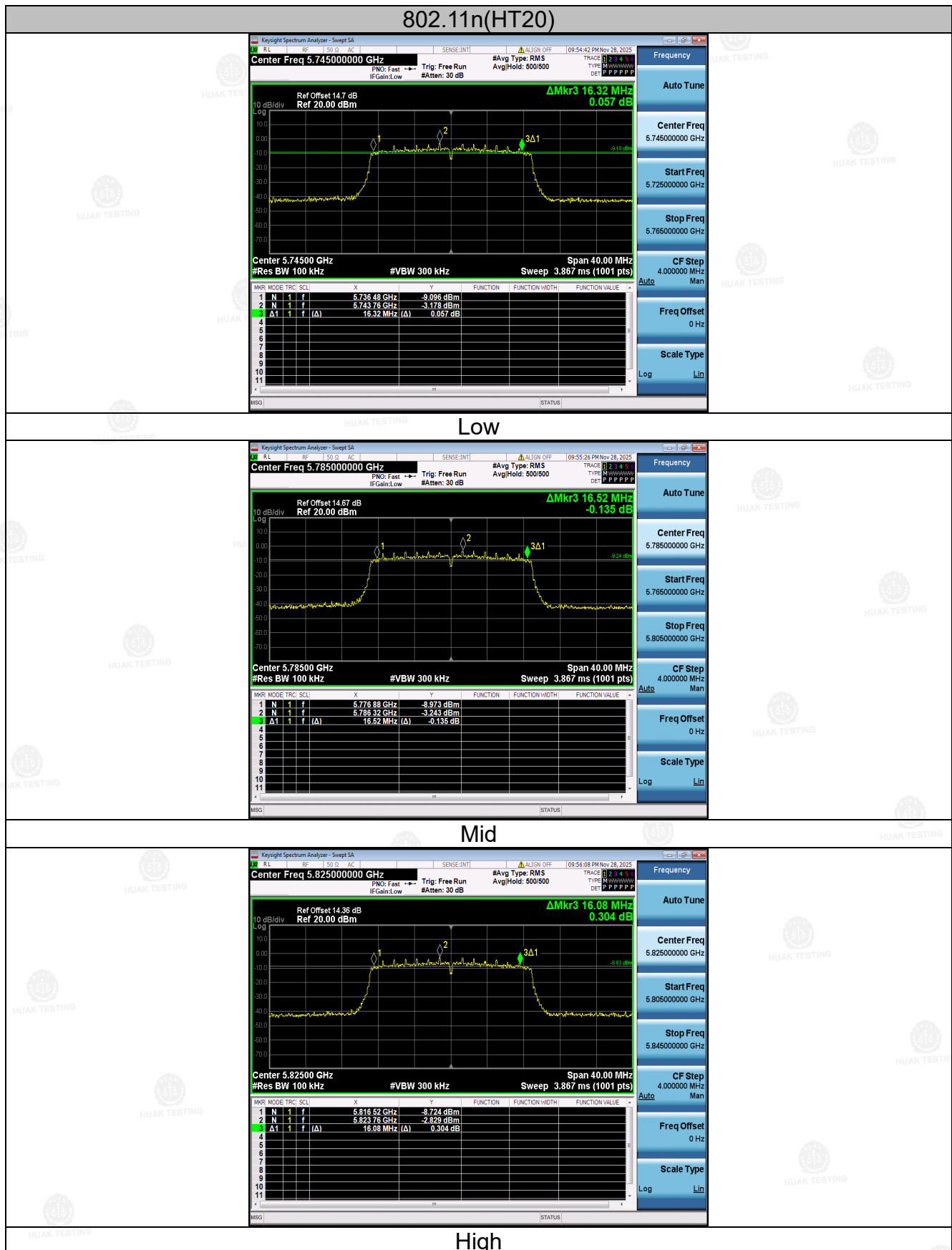
Band IV (5725 - 5850 MHz)					
Mode	Test channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a	CH149	5745	15.32	0.5	PASS
802.11a	CH157	5785	15.28	0.5	PASS
802.11a	CH165	5825	15.92	0.5	PASS
802.11n(HT20)	CH151	5745	16.32	0.5	PASS
802.11n(HT20)	CH159	5785	16.52	0.5	PASS
802.11n(HT20)	CH149	5825	16.08	0.5	PASS
802.11n(HT40)	CH157	5755	35.12	0.5	PASS
802.11n(HT40)	CH165	5795	35.12	0.5	PASS
802.11ac(HT20)	CH151	5745	15.32	0.5	PASS
802.11ac(HT20)	CH159	5785	15.16	0.5	PASS
802.11ac(HT20)	CH155	5825	15.68	0.5	PASS
802.11ac(HT40)	CH149	5755	35.12	0.5	PASS
802.11ac(HT40)	CH157	5795	35.04	0.5	PASS
802.11ac(HT80)	CH165	5775	75.20	0.5	PASS

Test plots as follows:

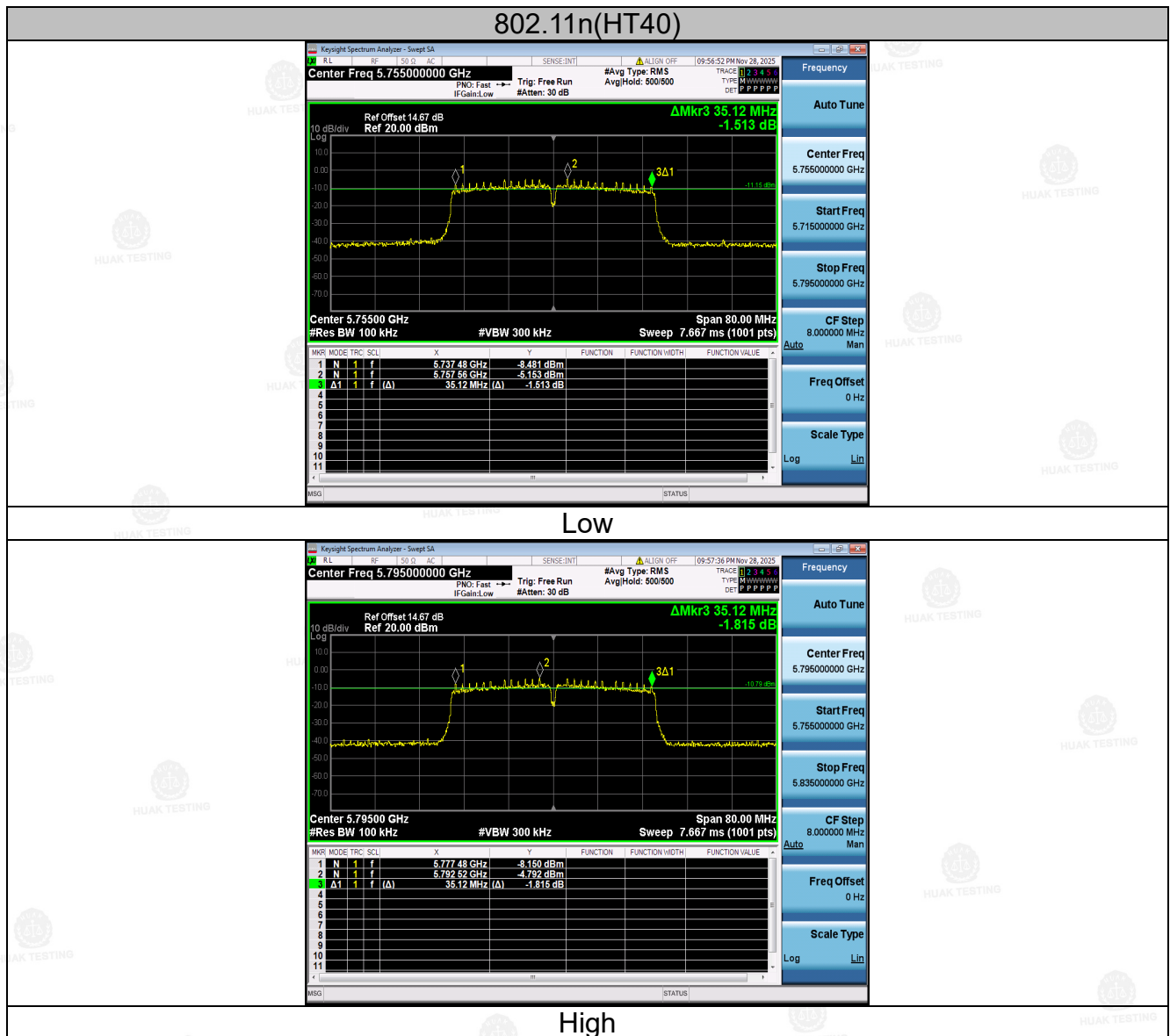
Band IV (5725 – 5850MHz)

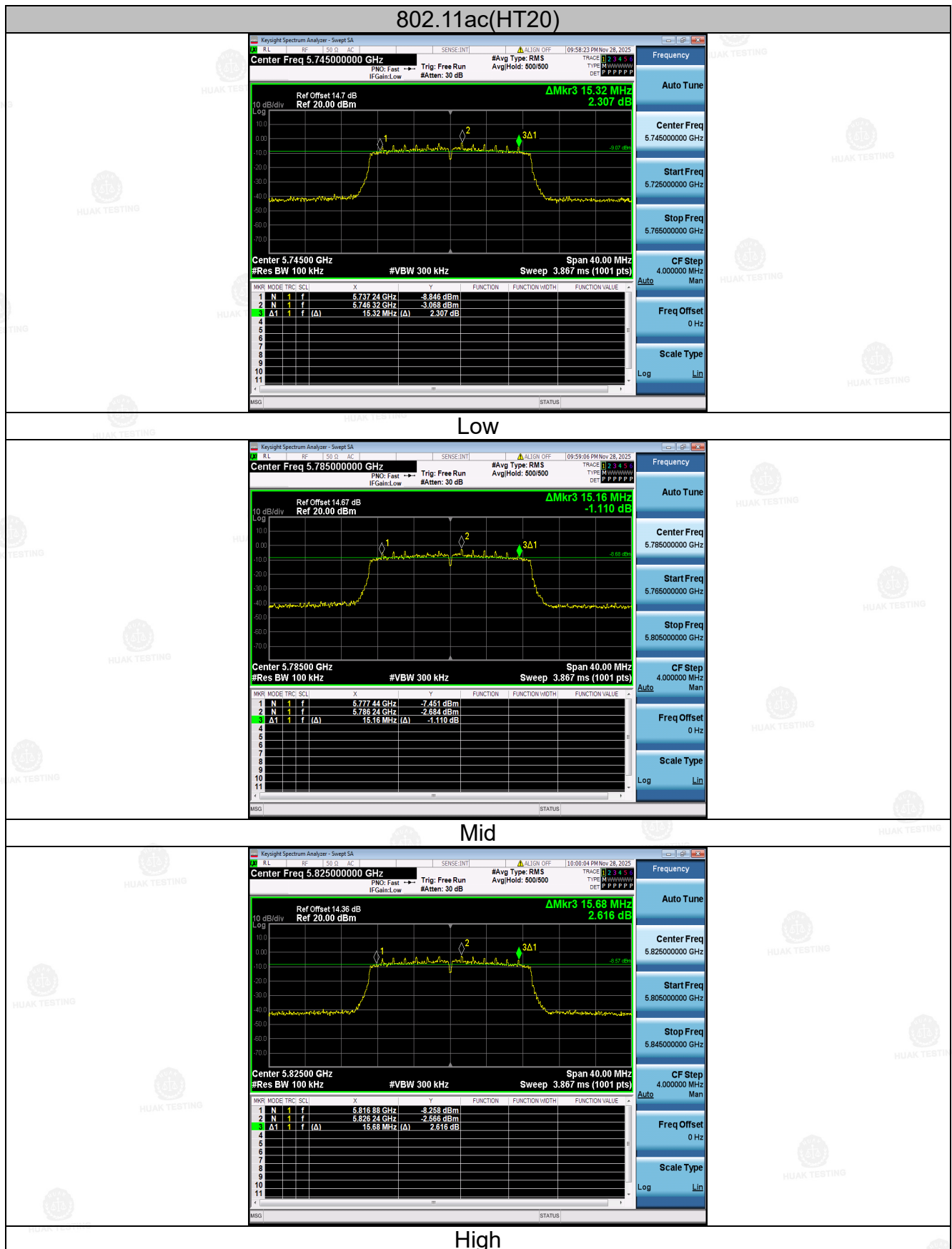


The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

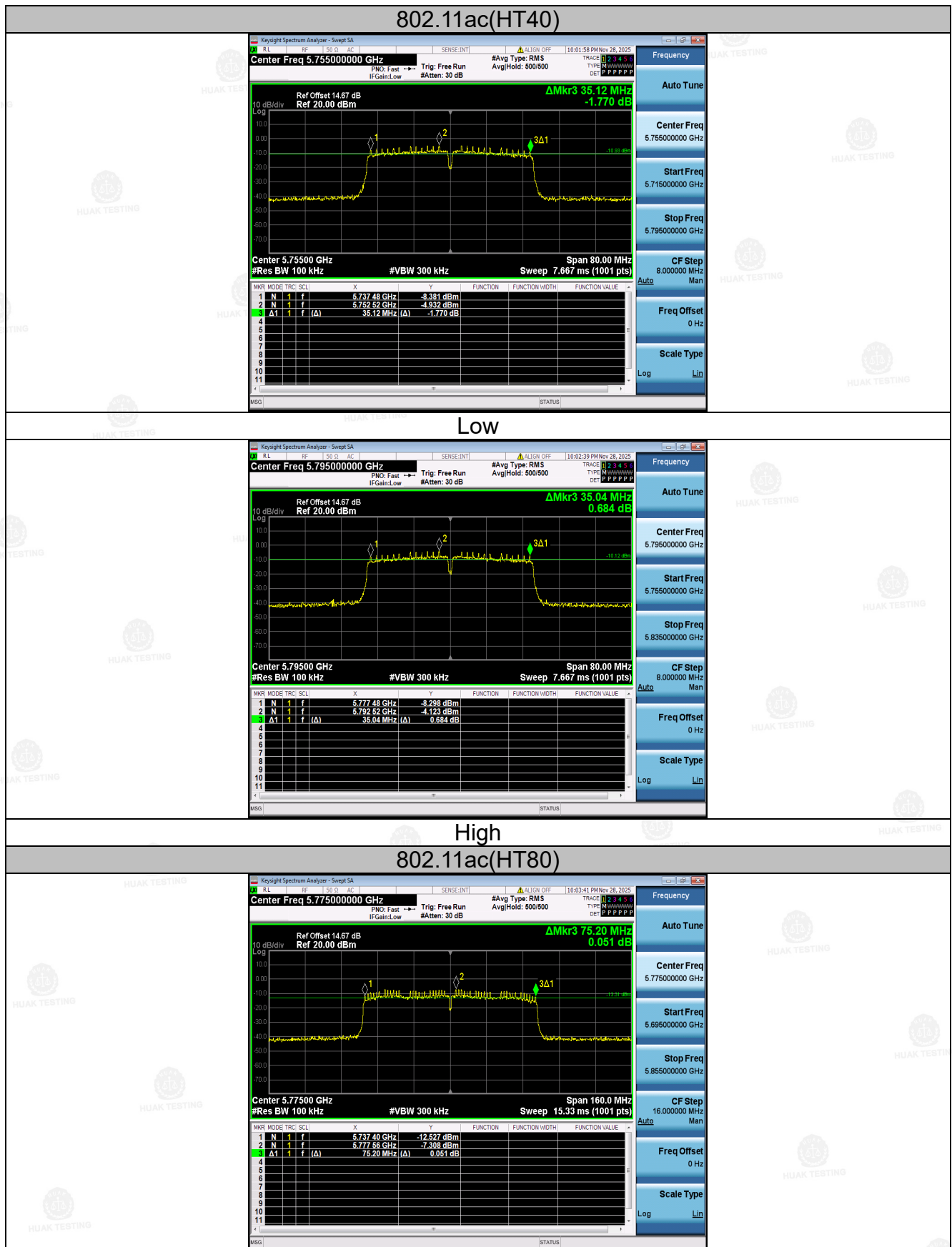


The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.





The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.



HUAKE TESTING

4.4 26dB Bandwidth and 99% Occupied Bandwidth

4.4.1 Test Specification

Test Requirement:	47 CFR Part 15C Section 15.407 (a)
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C
Limit:	No restriction limits
Test Setup:	 Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Make the measurement with the spectrum analyzer's resolution bandwidth $RBW = 1\% \text{ EBW}$, $VBW \geq 3RBW$, In order to make an accurate measurement. 4. Measure and record the results in the test report.
Test Result:	N/A

4.4.2 Test Instruments

RF Test Room					
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Spectrum analyzer	Agilent	N9020A	HKE-025	Feb. 19, 2025	Feb. 18, 2026
Spectrum analyzer	Agilent	N9020A	HKE-117	Feb. 19, 2025	Feb. 18, 2026
RF cable	Times	1-40G	HKE-034	Feb. 19, 2025	Feb. 18, 2026
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 19, 2025	Feb. 18, 2026
RF Test Software	Tonscend	JS1120-3 Version 3.5.39	HKE-083	N/A	N/A

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

4.4.3 Test Result

N/A

4.5 Power Spectral Density

4.5.1 Test Specification

Test Requirement:	FCC Part15 E Section 15.407 (a)
Test Method:	KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section F
Limit:	$\leq 30.00\text{dBm}/500\text{KHz}$ for Band IV 5725MHz-5850MHz
Test Setup:	 Spectrum Analyzer EUT
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth. 2. Set RBW = 510 kHz/1 MHz, VBW $\geq 3 \times \text{RBW}$, Sweep time = Auto, Detector = RMS. 3. Allow the sweeps to continue until the trace stabilizes. 4. Use the peak marker function to determine the maximum amplitude level. 5. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.
Test Result:	PASS

4.5.2 Test Instruments

RF Test Room					
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Spectrum analyzer	Agilent	N9020A	HKE-025	Feb. 19, 2025	Feb. 18, 2026
Spectrum analyzer	Agilent	N9020A	HKE-117	Feb. 19, 2025	Feb. 18, 2026
RF cable	Times	1-40G	HKE-034	Feb. 19, 2025	Feb. 18, 2026
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 19, 2025	Feb. 18, 2026
RF Test Software	Tonscend	JS1120-3 Version 3.5.39	HKE-083	N/A	N/A

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
 Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

4.5.3 Test Data

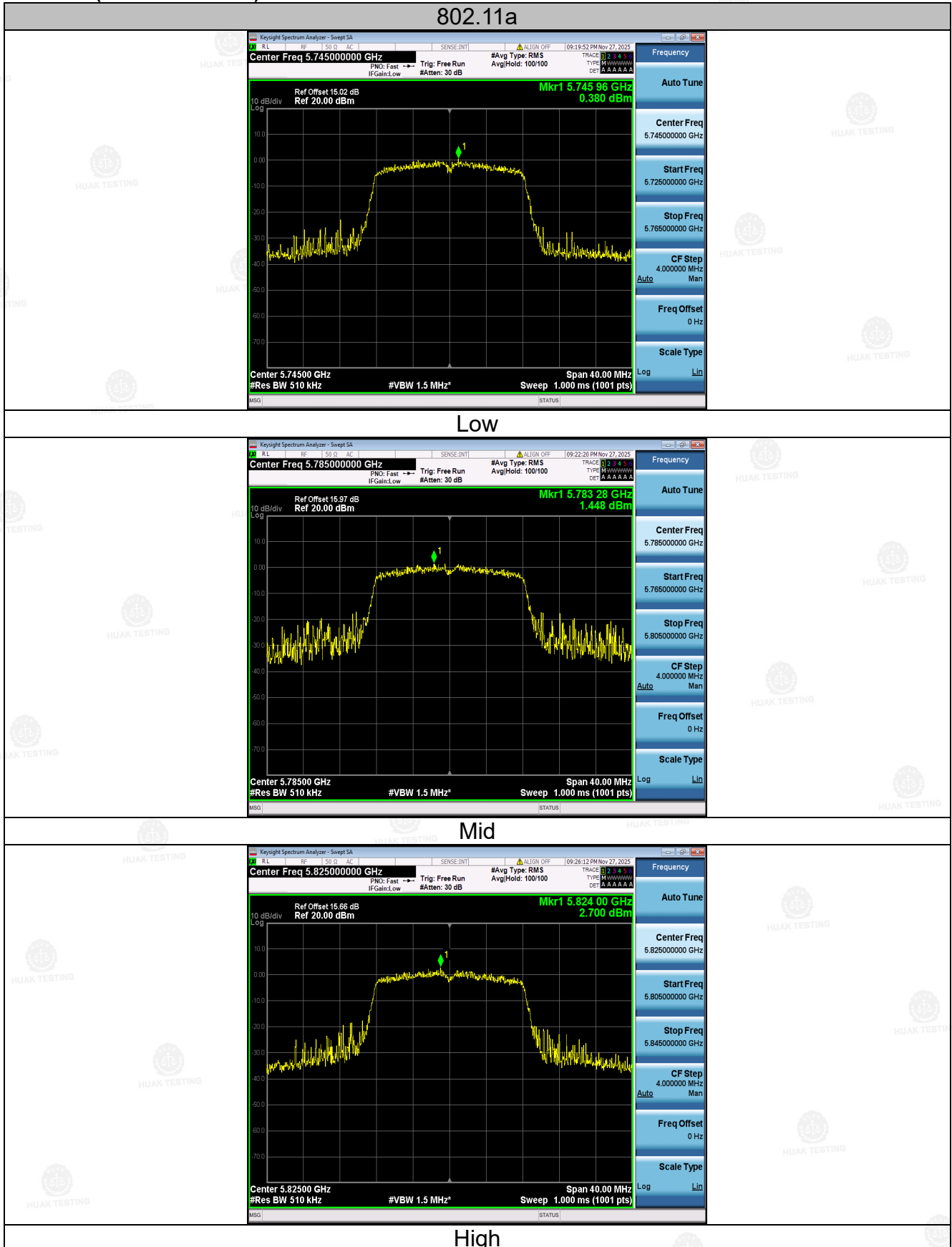
ANT. 1

Configuration Band IV (5725 - 5850 MHz)						
Mode	Test channel	Level [dBm/510kHz]	10log(500/510)	Power Spectral Density	Limit (dBm/500kHz)	Result
802.11a	CH149	0.38	-0.086	0.294	30	PASS
802.11a	CH157	1.45	-0.086	1.364	30	PASS
802.11a	CH165	2.70	-0.086	2.614	30	PASS
802.11n(HT20)	CH149	0.53	-0.086	0.444	30	PASS
802.11n(HT20)	CH157	1.62	-0.086	1.534	30	PASS
802.11n(HT20)	CH165	0.90	-0.086	0.814	30	PASS
802.11n(HT40)	CH151	-0.68	-0.086	-0.766	30	PASS
802.11n(HT40)	CH159	-0.69	-0.086	-0.776	30	PASS
802.11ac(HT20)	CH149	0.21	-0.086	0.124	30	PASS
802.11ac(HT20)	CH157	0.58	-0.086	0.494	30	PASS
802.11ac(HT20)	CH165	0.04	-0.086	-0.046	30	PASS
802.11ac(HT40)	CH151	-1.19	-0.086	-1.276	30	PASS
802.11ac(HT40)	CH159	-0.23	-0.086	-0.316	30	PASS
802.11ac(HT80)	CH155	-2.84	-0.086	-2.926	30	PASS

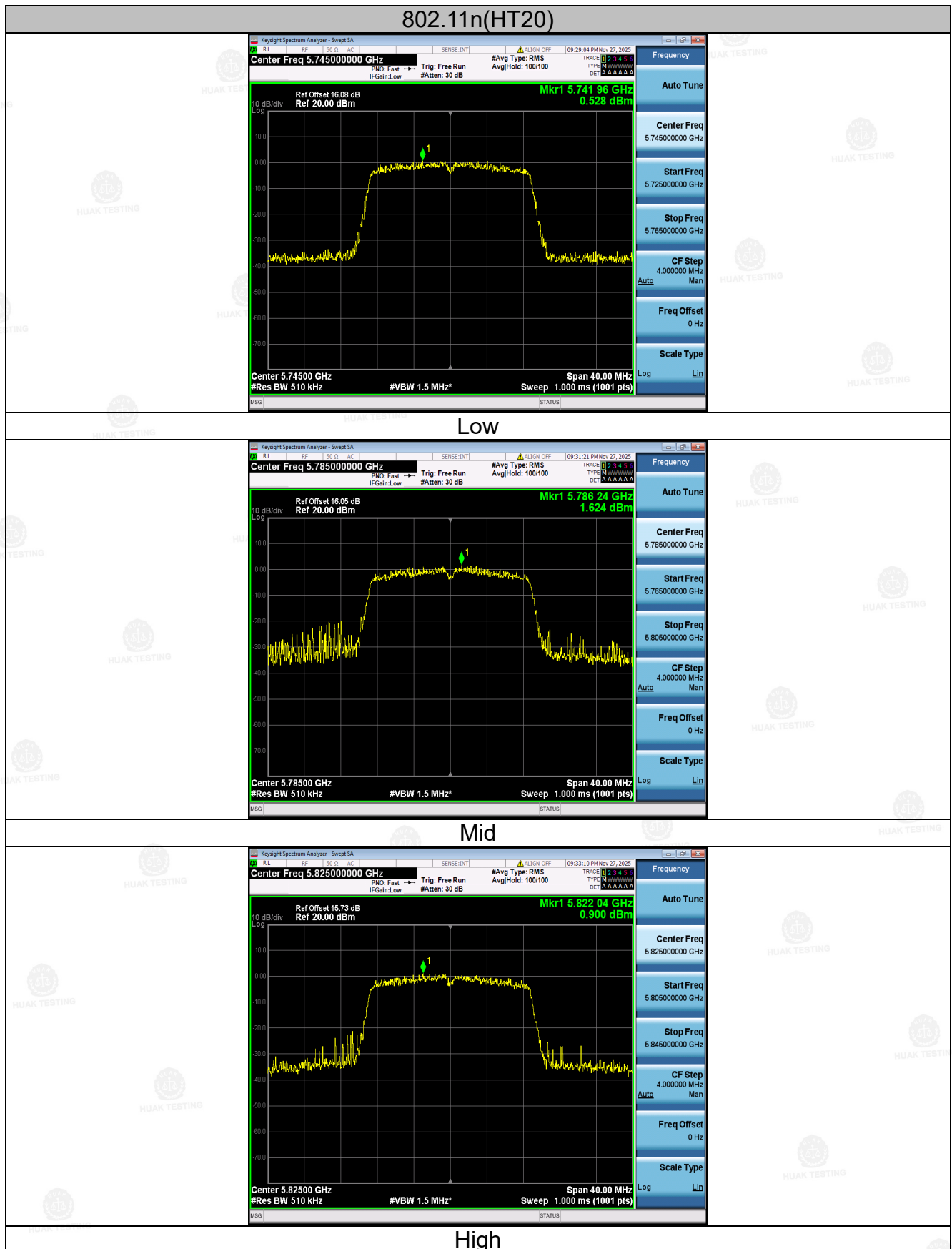
Note: 1. Power Spectral Density= Level [dBm/510kHz]+ (10log(Limit RBW/Test RBW))
2. Instrument attenuation and cable loss See test diagram

Test plots as follows:

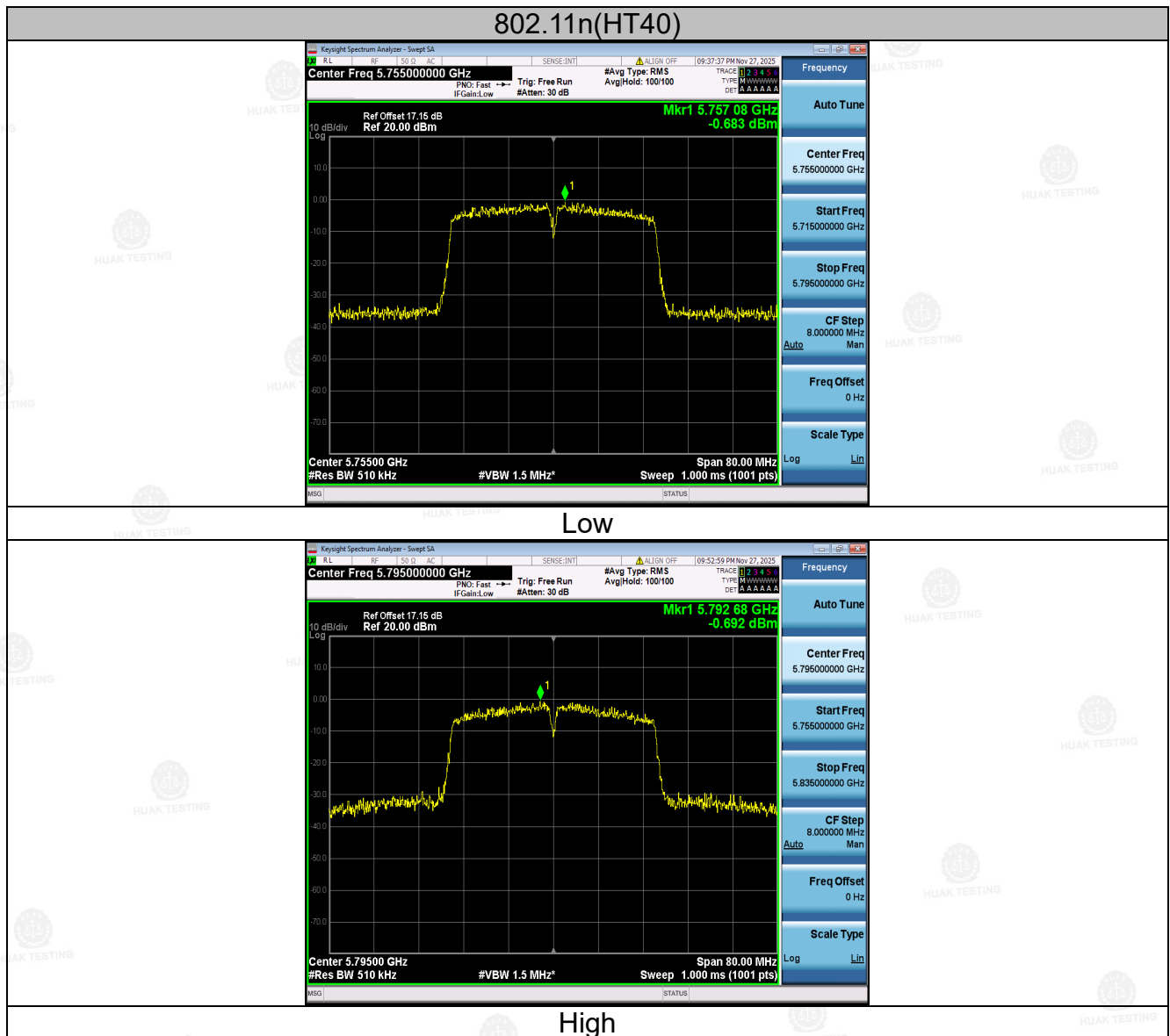
Band IV (5725 – 5850MHz)



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

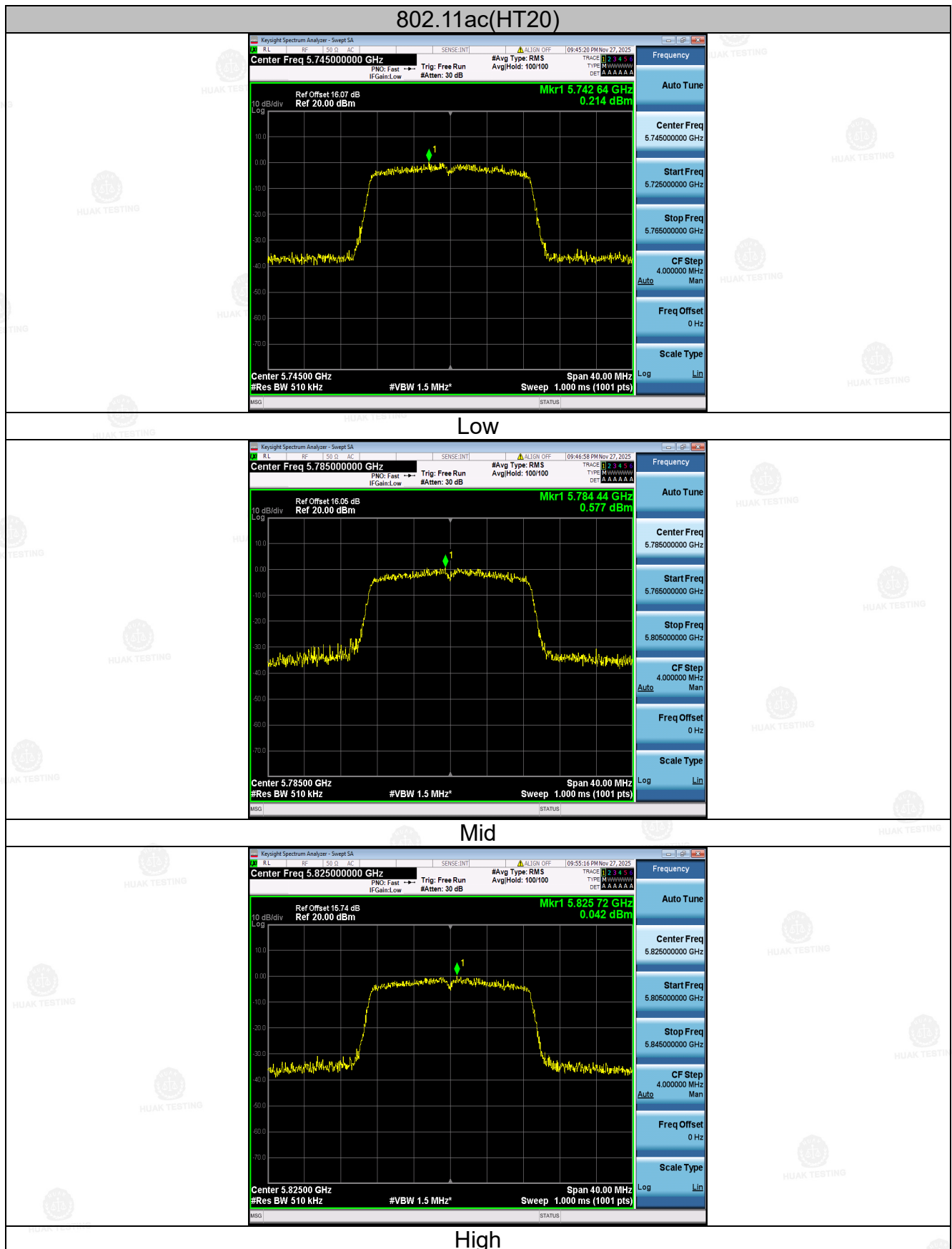


The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

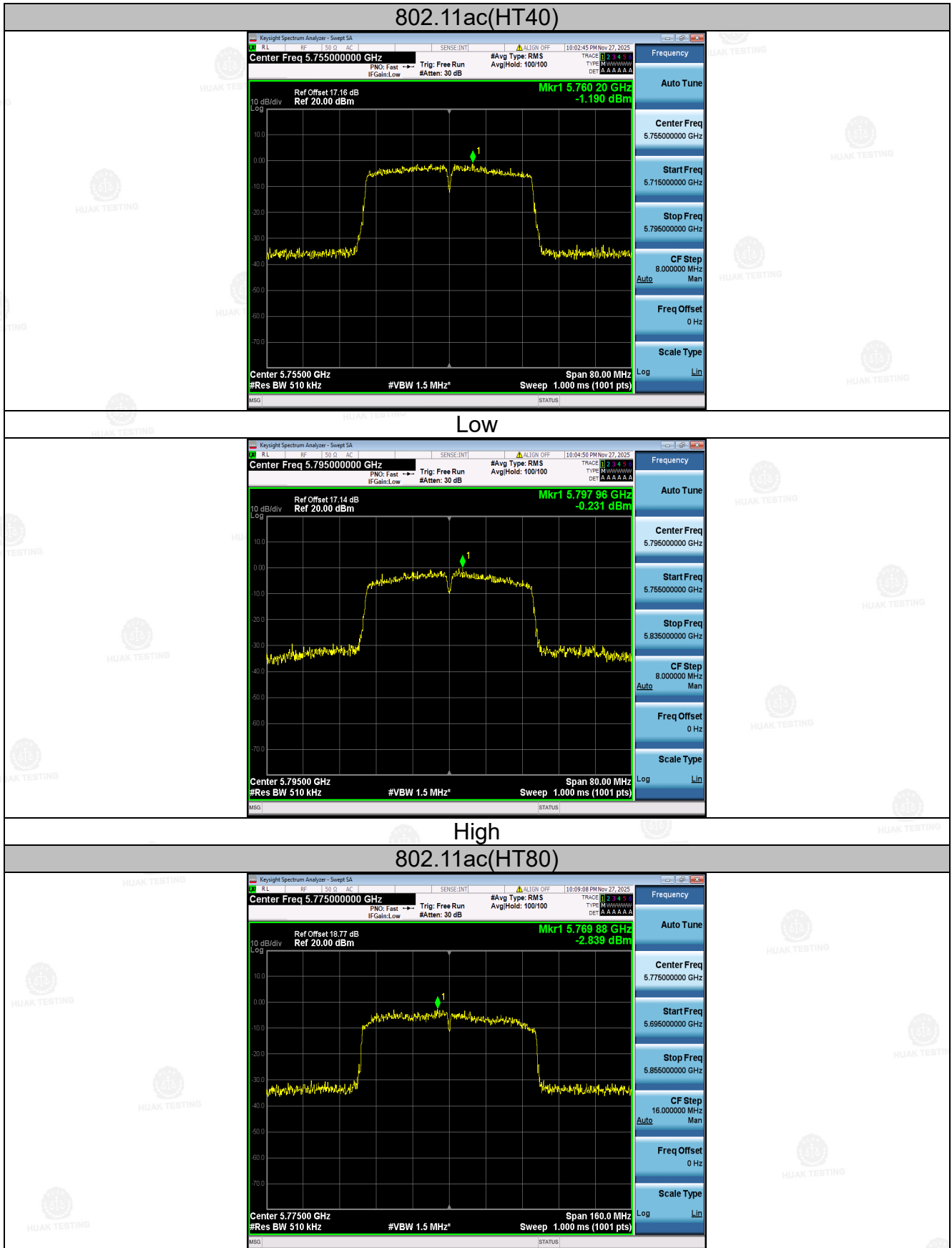


The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
 Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

ANT. 2

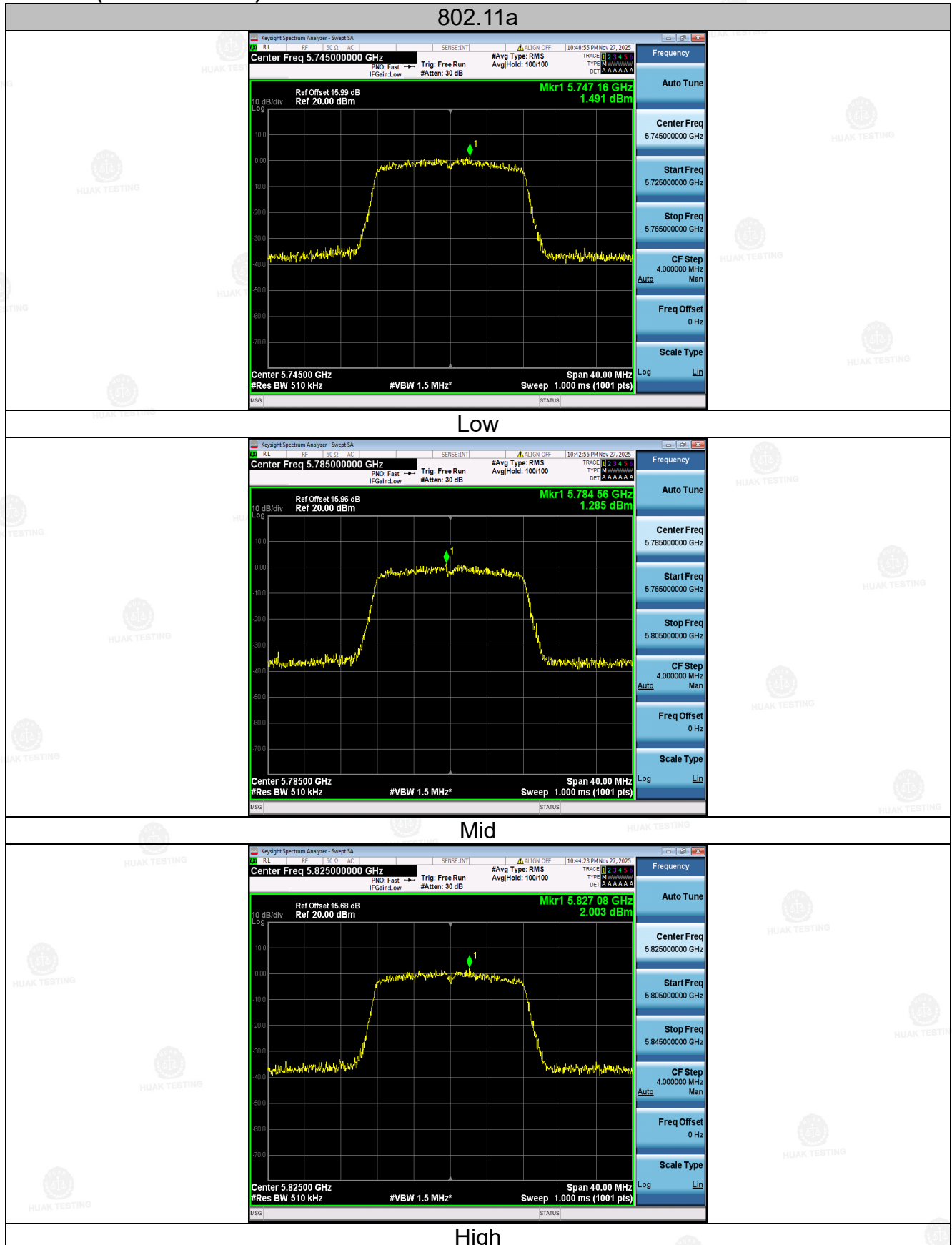
Configuration Band IV (5725 - 5850 MHz)						
Mode	Test channel	Level [dBm/510kHz]	$10\log(500/510)$	Power Spectral Density	Limit (dBm/500kHz)	Result
802.11a	CH149	1.49	-0.086	1.404	30	PASS
802.11a	CH157	1.29	-0.086	1.204	30	PASS
802.11a	CH161	2.00	-0.086	1.914	30	PASS
802.11n(HT20)	CH149	0.27	-0.086	0.184	30	PASS
802.11n(HT20)	CH157	0.45	-0.086	0.364	30	PASS
802.11n(HT20)	CH161	1.25	-0.086	1.164	30	PASS
802.11n(HT40)	CH151	-1.41	-0.086	-1.496	30	PASS
802.11n(HT40)	CH159	-0.96	-0.086	-1.046	30	PASS
802.11ac(HT20)	CH149	-0.03	-0.086	-0.116	30	PASS
802.11ac(HT20)	CH157	0.59	-0.086	0.504	30	PASS
802.11ac(HT20)	CH161	0.91	-0.086	0.824	30	PASS
802.11ac(HT40)	CH151	-1.04	-0.086	-1.126	30	PASS
802.11ac(HT40)	CH159	-1.17	-0.086	-1.256	30	PASS
802.11ac(HT80)	CH155	-3.57	-0.086	-3.656	30	PASS

Note: 1. Power Spectral Density= Level [dBm/510kHz]+ (10log(Limit RBW/Test RBW))

2. Instrument attenuation and cable loss See test diagram

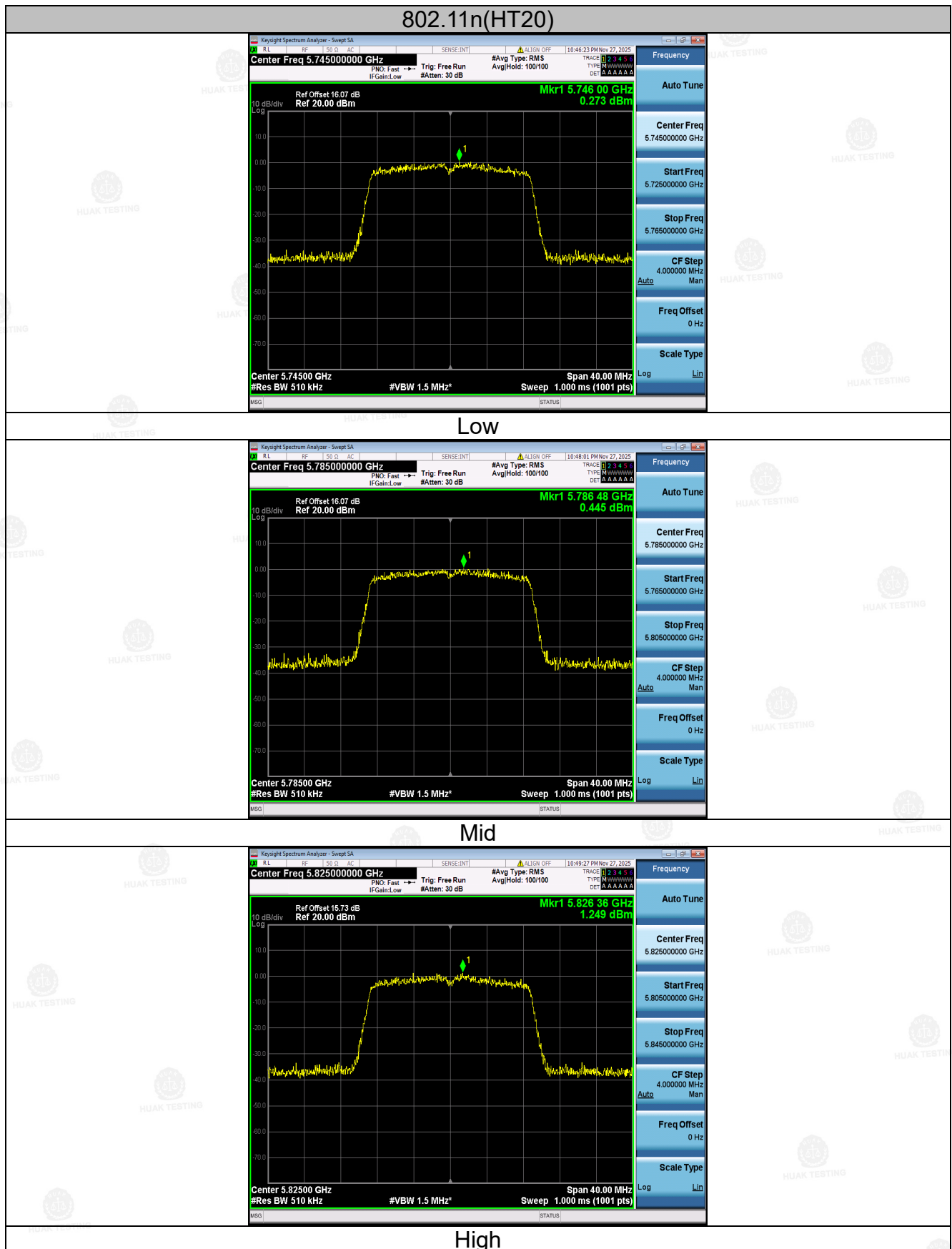
Test plots as follows:

Band IV (5725 – 5850MHz)



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
 Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

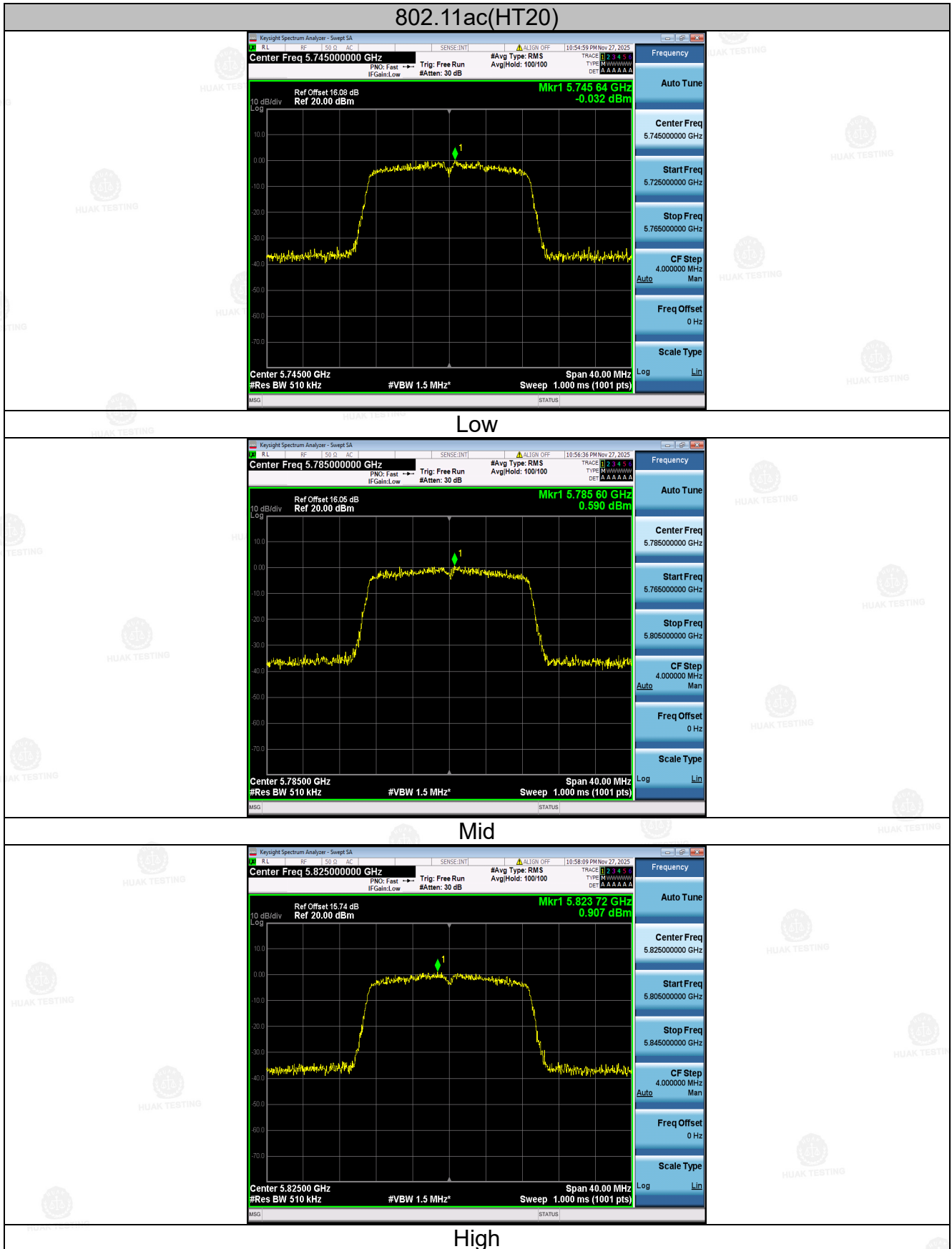


The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

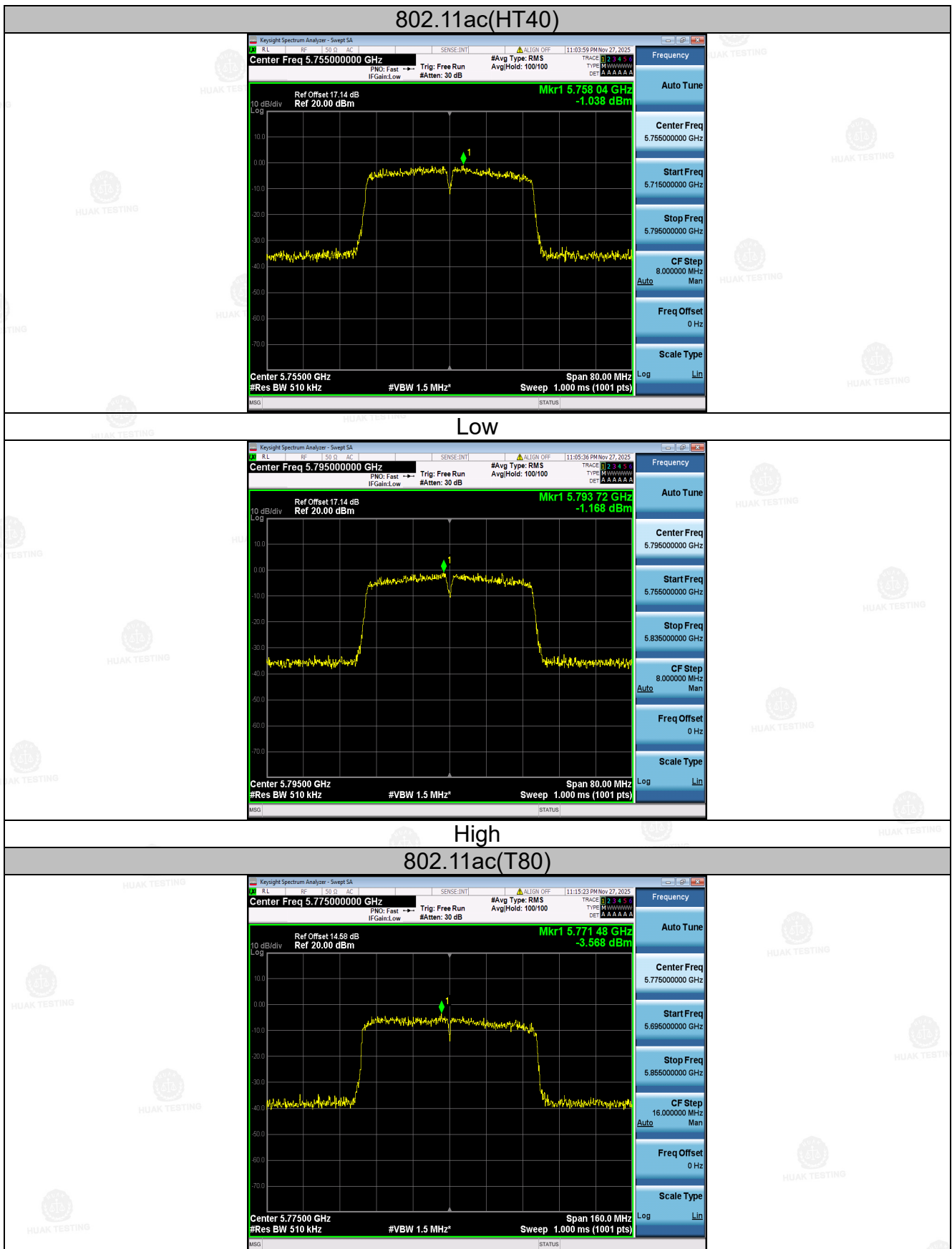


The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

Shenzhen HUAKE Testing Technology Co., Ltd. Tel.: +86-0755-2302 9901 E-mail: info@huak.com Web.: www.huak.com
 Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 15 days only. The document is issued by Shenzhen HUAKE Testing Technology Co., Ltd., this document cannot be reproduced except in full with our prior written permission.

For MIMO antenna port 1+antenna port 2

Configuration Band IV (5725 - 5850MHz)

Mode	Test Channel	Power Density (dBm)	Limit (dBm)	Result
802.11n(HT20)	CH149	3.33	30	PASS
802.11n(HT20)	CH157	4.00	30	PASS
802.11n(HT20)	CH161	4.00	30	PASS
802.11n(HT40)	CH151	1.89	30	PASS
802.11n(HT40)	CH159	2.10	30	PASS
802.11ac(HT20)	CH149	3.02	30	PASS
802.11ac(HT20)	CH157	3.51	30	PASS
802.11ac(HT20)	CH161	3.42	30	PASS
802.11ac(HT40)	CH151	1.81	30	PASS
802.11ac(HT40)	CH159	2.25	30	PASS
802.11ac(HT80)	CH155	-0.27	30	PASS

Note:

1. According to KDB 662911, Result power = $10\log(10^{(\text{ant1}/10)} + 10^{(\text{ant2}/10)})$.
2. Result unit: W, The end result is converted to units of dBm.
Limit=30dBm-(direction gain-6dBi)=30dBm
3. This product supports antenna 1 and antenna 2 launch, but only support 802.11 n/ac for MIMO mode, not support 802.11 a for MIMO mode.