



HUAK TESTING

Test Result Certification

Applicant's Name : SONGDIAN TECHNOLOGY(GUANGDONG)CO., LTD.

Address : Building 17, Tongde Intelligent Manufacturing Park, Ronggui Street, Shunde District, Foshan City, China

Manufacturer's Name : SONGDIAN TECHNOLOGY(GUANGDONG)CO., LTD.

Address : Building 17, Tongde Intelligent Manufacturing Park, Ronggui Street, Shunde District, Foshan City, China

Product Description

Trade Mark : N/A

Product Name : Digital camera

Model and/or Type Reference : DC320

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

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Date of Test :

Date (s) of performance of tests : Aug. 27, 2025 ~ Sept. 11, 2025

Date of Issue : Sept. 11, 2025

Test Result : Pass

Testing Engineer

Len Liao

Len Liao

Technical Manager

Sliver Wan

Sliver Wan

Authorized Signatory

Jason Zhou

Jason Zhou

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Report No.: HK2508274881-2E

** Modified History **

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	Sept. 11, 2025	Jason Zhou
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1. Test Result 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 HUAK 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 expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	±0.37dB
2	RF Power, Conducted	±3.35dB
3	Spurious Emissions, Conducted	±2.20dB
4	All Emissions, Radiated(<1G)	±3.90dB
5	All Emissions, Radiated(>1G)	±4.28dB
6	Temperature	±0.1°C
7	Humidity	±1.0%



2. EUT Description

2.1 General Description of EUT

Equipment:	Digital camera
Model Name:	DC320
Series Model(s):	N/A
Model Difference:	N/A
Trade Mark:	N/A
FCC ID:	2BNYY-DC320
Operation Frequency:	IEEE 802.11a/n/ac (HT20)5.745GHz-5.825GHz IEEE 802.11n/ac (HT40)5.755GHz-5.795GHz
Modulation Technology:	IEEE 802.11a/n/ac
Modulation Type:	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
Antenna Type:	FPC Antenna
Antenna Gain:	1.44dBi
Power Source:	DC5V, 1A from adapter with AC100-240V, 50/60Hz 0.5A or DC3.7V from battery
Power Supply:	DC5V, 1A from adapter with AC100-240V, 50/60Hz 0.5A or DC3.7V from battery
Hardware Version:	V1.0
Software Version:	V1.0

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. Antenna gain Refer to the antenna specifications.
3. The cable loss data is obtained from the supplier.
4. The test results in the report only apply to the tested sample.



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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

802.11a/802.11n(HT20)/ 802.11ac(HT20)		802.11n(HT40)/ 802.11ac(HT40)	
Channel	Frequency	Channel	Frequency
149	5745	151	5755
153	5765	159	5790
157	5785		
161	5805		
165	5825		

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:

Band IV (5725 - 5850MHz)		
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

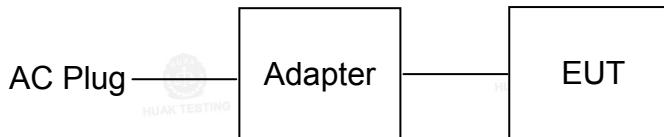
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2.4 Description of Test Setup

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.

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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	Note
1	Digital camera	N/A	DC320	N/A	EUT
2	Adapter	N/A	S531	Input: AC100-240V, 50/60Hz, 0.5A Output: DC5V, 1A	Accessory
3	USB Cable	N/A	N/A	Length: 95cm	Accessory

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.



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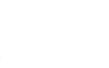
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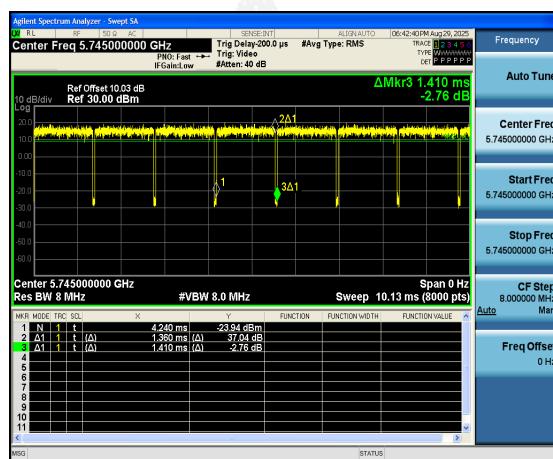
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3. General Information

3.1 Test Environment and Mode

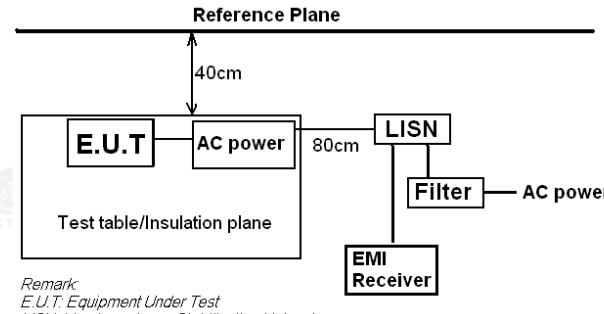
Operating Environment:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010 mbar
Test Mode:	
Engineering Mode:	Keep the EUT in continuous transmitting by select channel and modulations
We have verified the construction and function in typical operation. All the test modes were carried out 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)	MCS0
Final Test Mode:	
Operation Mode:	Keep the EUT in continuous transmitting with modulation
Mode Test Duty Cycle:	
Mode	Duty Cycle
802.11a	0.9645
802.11n(HT20)	0.9624
802.11n(HT40)	0.9275
802.11ac(HT20)	0.9621
802.11ac(HT40)	0.9130
Test plots as follows:	

**802.11a**

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 border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <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> </tbody> </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:	 <p>Reference Plane</p> <p>40cm</p> <p>E.U.T</p> <p>AC power</p> <p>LISN</p> <p>Test table/Insulation plane</p> <p>80cm</p> <p>Filter</p> <p>AC power</p> <p>EMI Receiver</p> <p>Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>														
Test Mode:	Transmitting with modulation														
Test Procedure:	<ol style="list-style-type: none"> 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:	N/A														

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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).

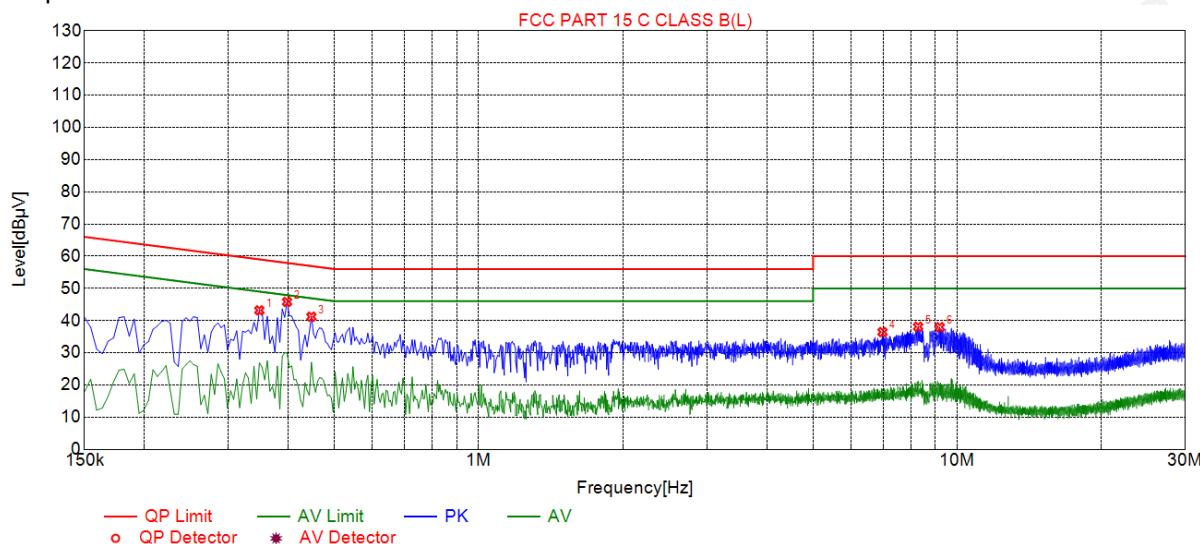


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4.1.3. Test Data

Test Specification: Line



Suspected List

NO.	Freq. [MHz]	Level [dBμV]	Factor [dB]	Limit [dBμV]	Margin [dB]	Reading [dBμV]	Detector	Type
1	0.3480	43.17	19.83	59.01	15.84	23.34	PK	L
2	0.3975	45.82	19.84	57.91	12.09	25.98	PK	L
3	0.4470	41.21	19.84	56.93	15.72	21.37	PK	L
4	6.9855	36.44	20.40	60.00	23.56	16.04	PK	L
5	8.2905	38.09	20.72	60.00	21.91	17.37	PK	L
6	9.2040	37.98	20.96	60.00	22.02	17.02	PK	L

Remark: Margin = Limit – Level

Correction factor = Cable loss + LISN insertion loss

Level=Test receiver reading + correction factor

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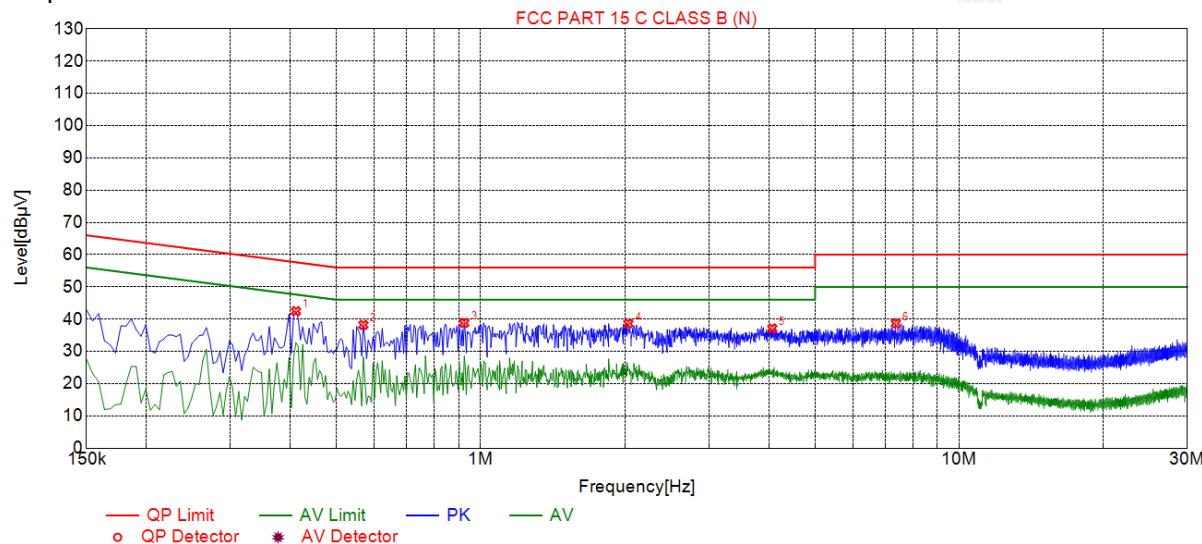


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Test Specification: Neutral

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Suspected List

NO.	Freq. [MHz]	Level [dB μ V]	Factor [dB]	Limit [dB μ V]	Margin [dB]	Reading [dB μ V]	Detector	Type
1	0.4110	42.46	19.70	57.63	15.17	22.76	PK	N
2	0.5685	38.21	19.75	56.00	17.79	18.46	PK	N
3	0.9240	38.82	19.76	56.00	17.18	19.06	PK	N
4	2.0355	38.61	19.95	56.00	17.39	18.66	PK	N
5	4.0695	37.09	20.16	56.00	18.91	16.93	PK	N
6	7.3770	38.65	20.55	60.00	21.35	18.10	PK	N

Remark: Margin = Limit – Level

Correction factor = Cable loss + LISN insertion loss

Level=Test receiver reading + correction factor

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4.2.2. Test Instruments

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

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

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Test Data

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Configuration Band IV (5745 - 5825 MHz)

Mode	Test channel	Maximum Conducted Output Power (dBm)	FCC Limit (dBm)	Result
802.11a	CH149	1.40	30	PASS
802.11a	CH157	2.26	30	PASS
802.11a	CH165	2.56	30	PASS
802.11n(HT20)	CH149	2.01	30	PASS
802.11n(HT20)	CH157	2.02	30	PASS
802.11n(HT20)	CH165	2.33	30	PASS
802.11n(HT40)	CH151	2.26	30	PASS
802.11n(HT40)	CH159	1.86	30	PASS
802.11ac(HT20)	CH149	2.19	30	PASS
802.11ac(HT20)	CH157	1.88	30	PASS
802.11ac(HT20)	CH165	2.04	30	PASS
802.11ac(HT40)	CH151	2.18	30	PASS
802.11ac(HT40)	CH159	1.92	30	PASS

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4.3 6dB Emission Bandwidth

4.3.1. Test Specification

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).

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4.3.3. Test Data

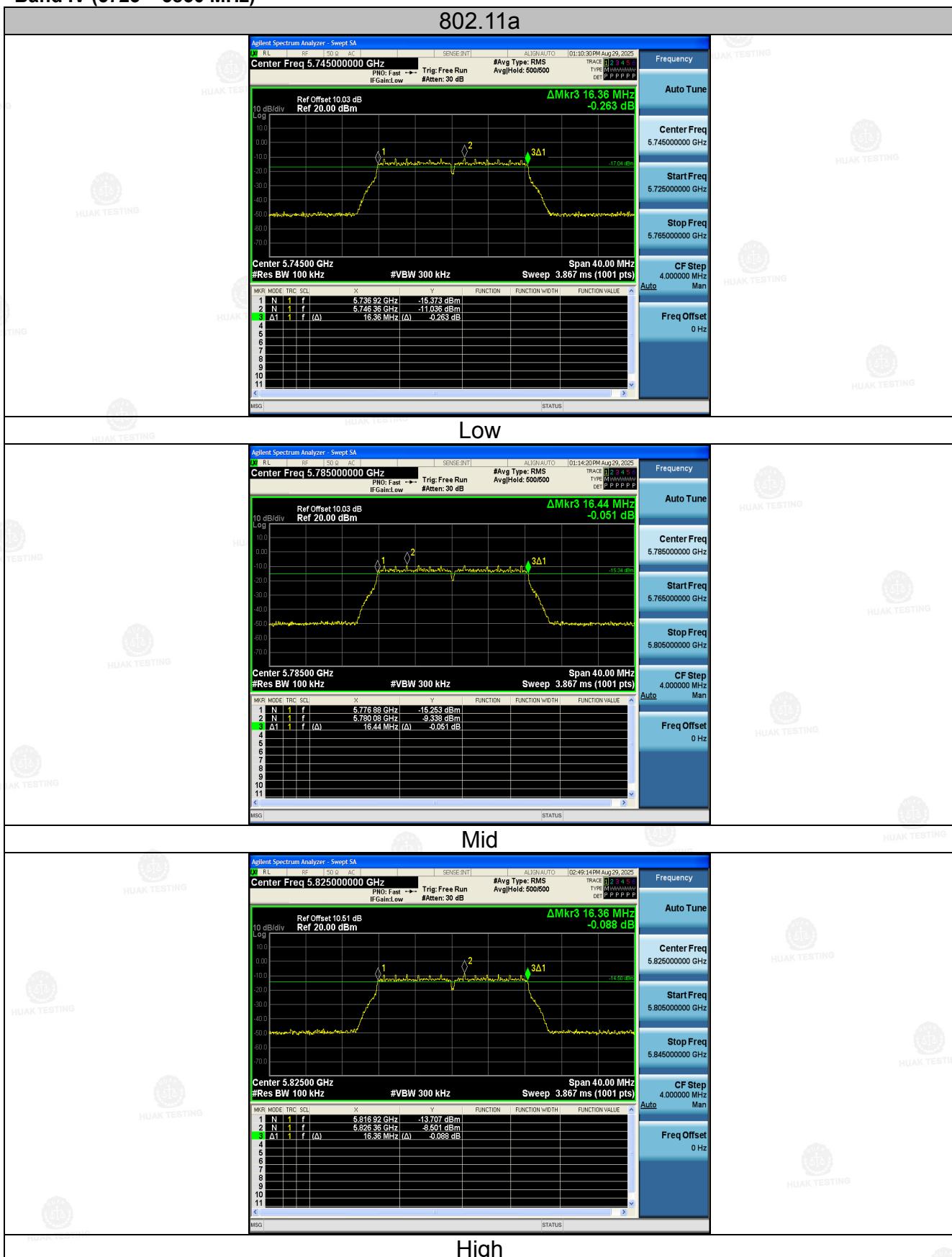
Band IV (5745 - 5825 MHz)					
Mode	Test channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a	CH149	5745	16.360	0.5	PASS
802.11a	CH157	5785	16.440	0.5	PASS
802.11a	CH165	5825	16.360	0.5	PASS
802.11n(HT20)	CH149	5745	17.600	0.5	PASS
802.11n(HT20)	CH157	5785	17.560	0.5	PASS
802.11n(HT20)	CH165	5825	17.640	0.5	PASS
802.11n(HT40)	CH151	5755	36.320	0.5	PASS
802.11n(HT40)	CH159	5795	36.320	0.5	PASS
802.11ac(HT20)	CH149	5745	17.640	0.5	PASS
802.11ac(HT20)	CH157	5785	17.560	0.5	PASS
802.11ac(HT20)	CH165	5825	17.600	0.5	PASS
802.11ac(HT40)	CH151	5755	36.320	0.5	PASS
802.11ac(HT40)	CH159	5795	36.320	0.5	PASS

Test plots as follows:

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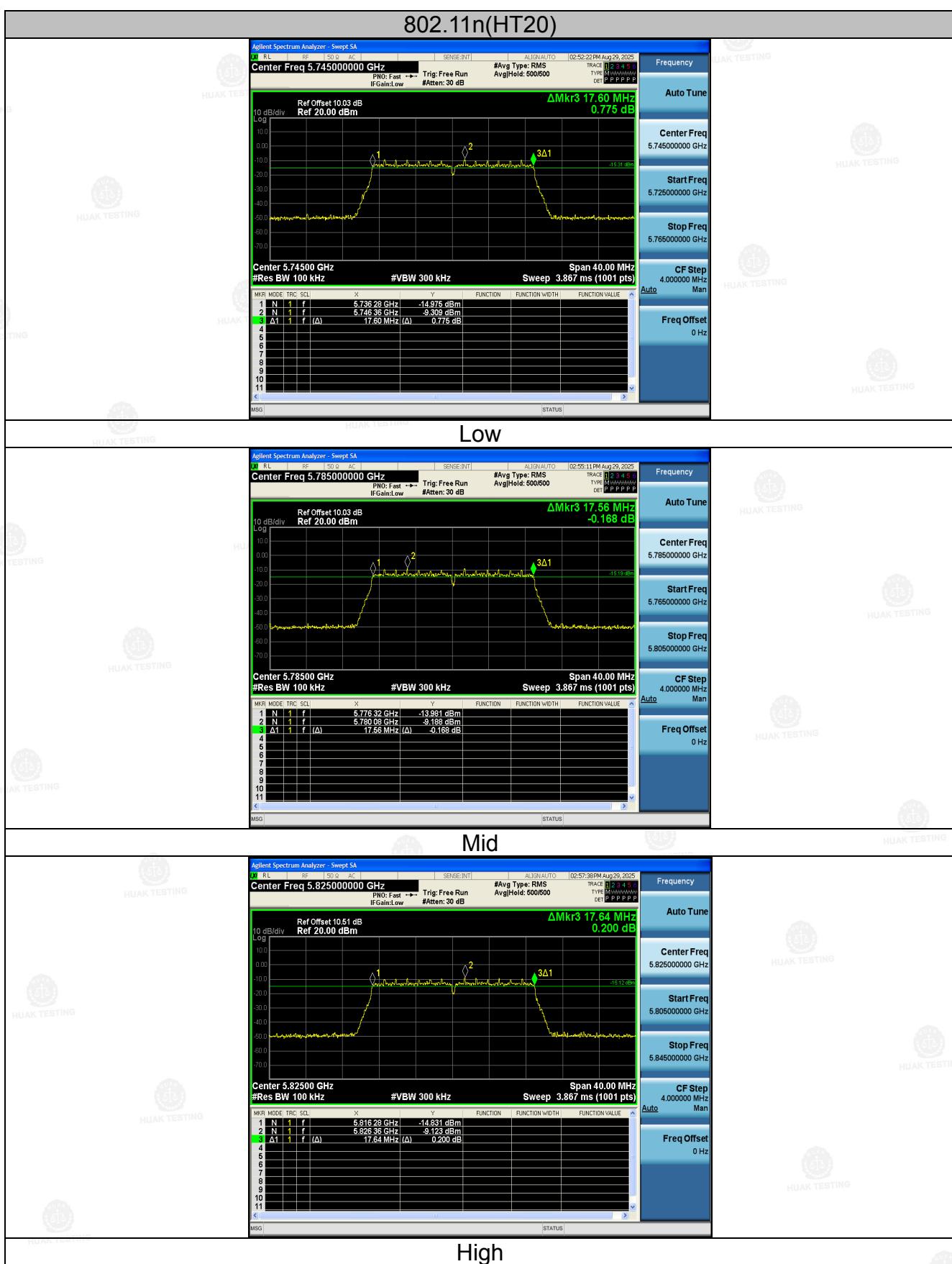
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802.11n(HT40)



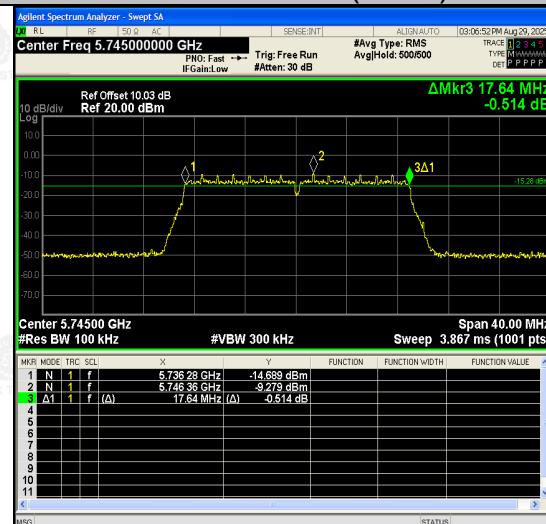
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802.11ac(HT20)



Frequency

Auto Tune

Center Freq

Start Freq

Stop Freq

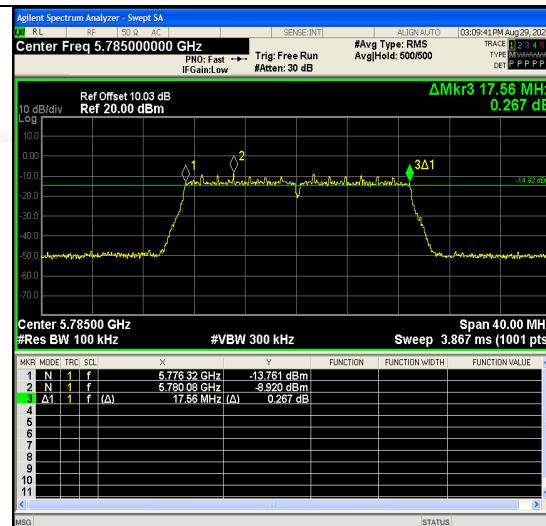
CF Step

Freq Offset

MSG STATUS

HUAK TESTING

LOW



Frequency

Auto Tune

Center Freq

Start Freq

Stop Freq

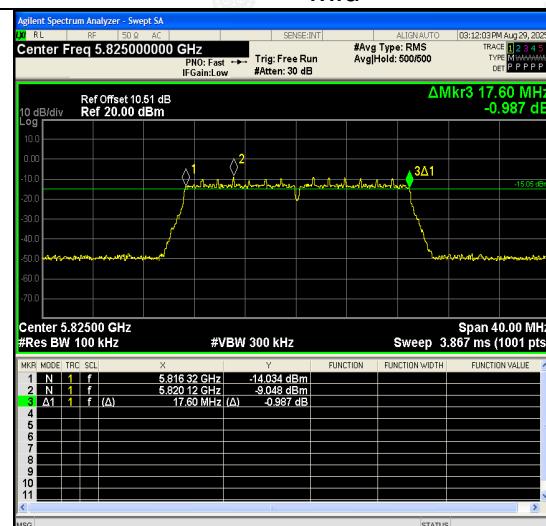
CF Step

Freq Offset

MSG STATUS

HUAK TESTING

Mid



Frequency

Auto Tune

Center Freq

Start Freq

Stop Freq

CF Step

Freq Offset

MSG STATUS

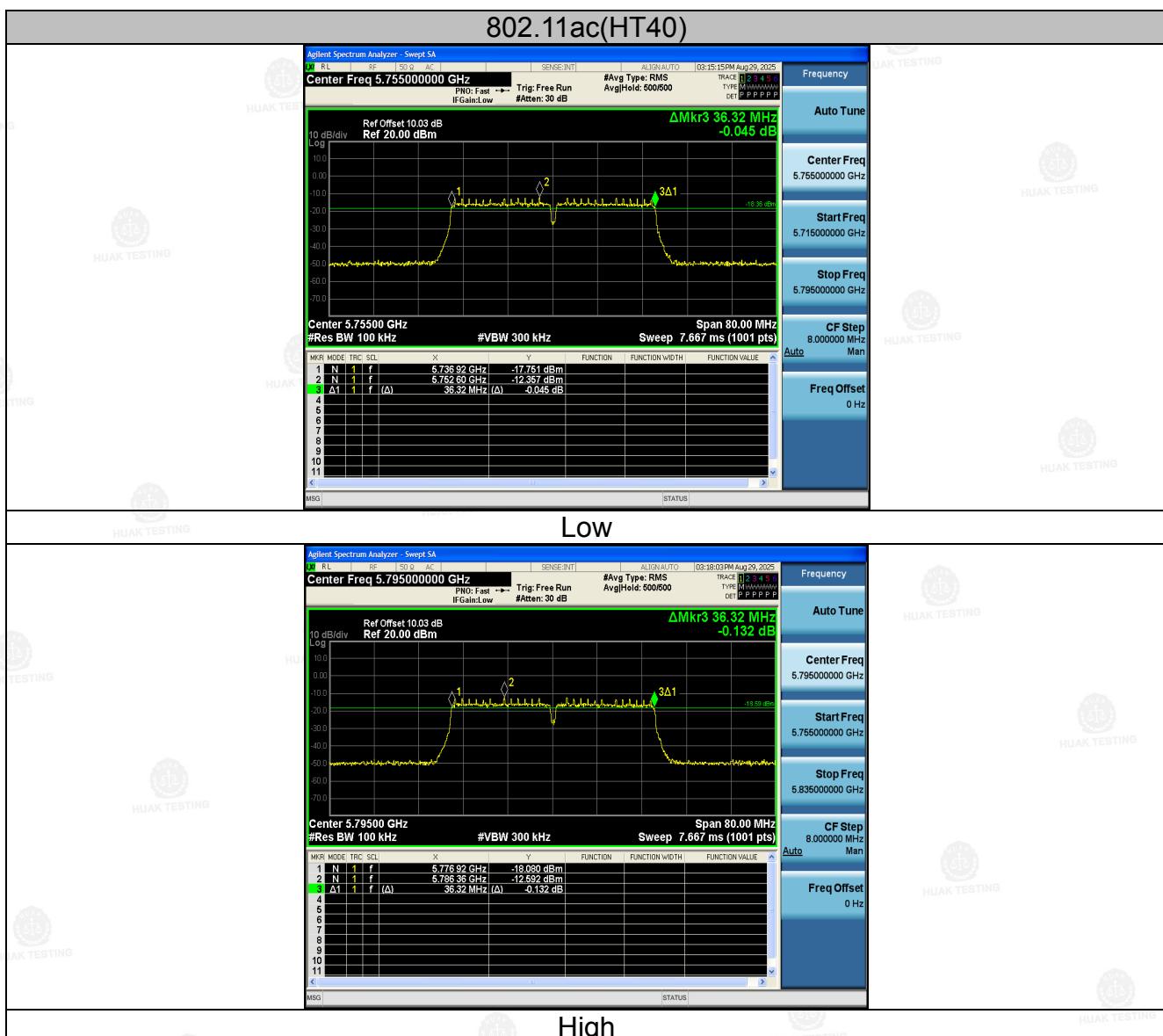
HUAK TESTING

High

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4.4 26dB Bandwidth and 99% Occupied Bandwidth

4.4.1. Test Specification

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

NA

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4.5.3. Test Data

Configuration Band IV (5745 - 5825 MHz)						
Mode	Test channel	Level [dBm/510kHz]	10log (500/510)	Power Spectral Density	Limit (dBm/500kHz)	Result
802.11a	CH149	-7.34	-0.086	-7.426	30	PASS
802.11a	CH157	-5.22	-0.086	-5.306	30	PASS
802.11a	CH165	-5.06	-0.086	-5.146	30	PASS
802.11n(HT20)	CH149	-6.23	-0.086	-6.316	30	PASS
802.11n(HT20)	CH157	-4.34	-0.086	-4.426	30	PASS
802.11n(HT20)	CH165	-4.61	-0.086	-4.696	30	PASS
802.11n(HT40)	CH151	-8.19	-0.086	-8.276	30	PASS
802.11n(HT40)	CH159	-9.16	-0.086	-9.246	30	PASS
802.11ac(HT20)	CH149	-5.65	-0.086	-5.736	30	PASS
802.11ac(HT20)	CH157	-5.37	-0.086	-5.456	30	PASS
802.11ac(HT20)	CH165	-5.81	-0.086	-5.896	30	PASS
802.11ac(HT40)	CH151	-8.50	-0.086	-8.586	30	PASS
802.11ac(HT40)	CH159	-8.91	-0.086	-8.996	30	PASS

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

Test plots as follows:

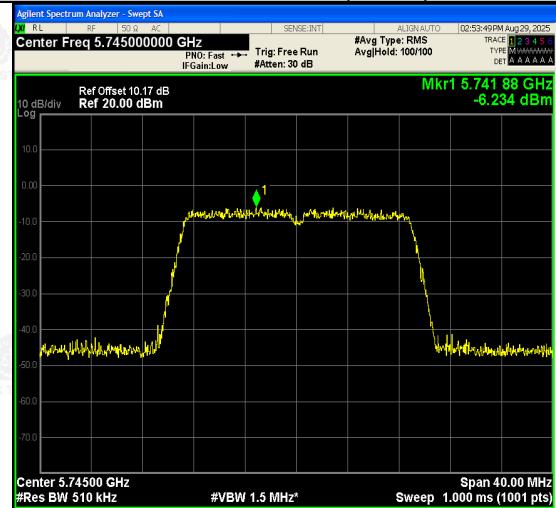


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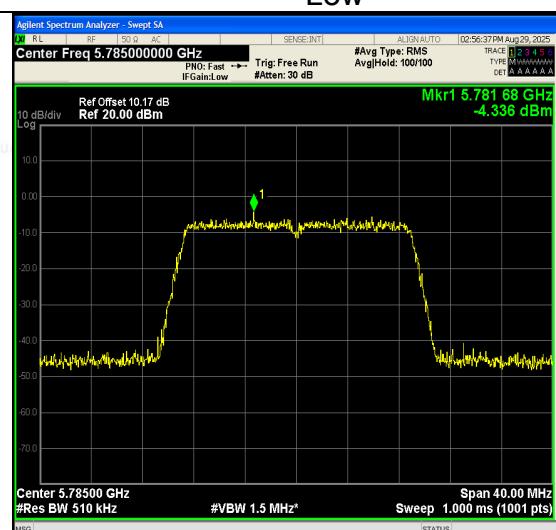
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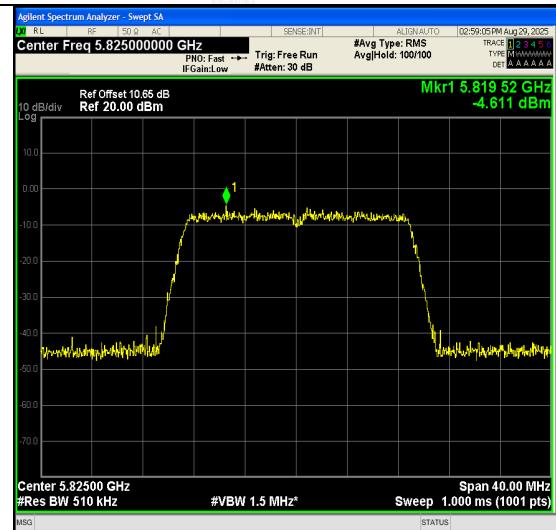
802.11n(HT20)



Low



Mid



High

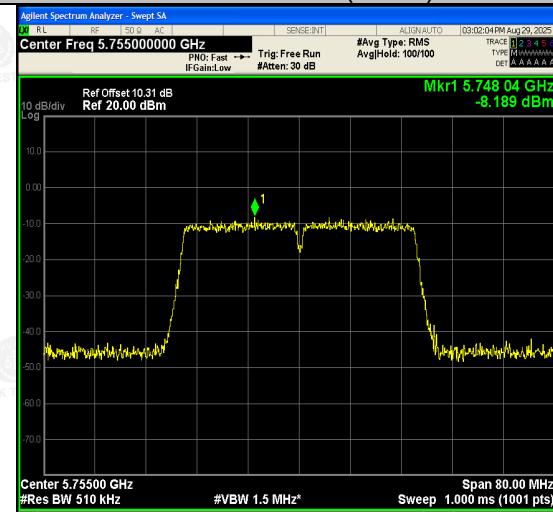
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802.11n(HT40)



Frequency

Auto Tune

Center Freq

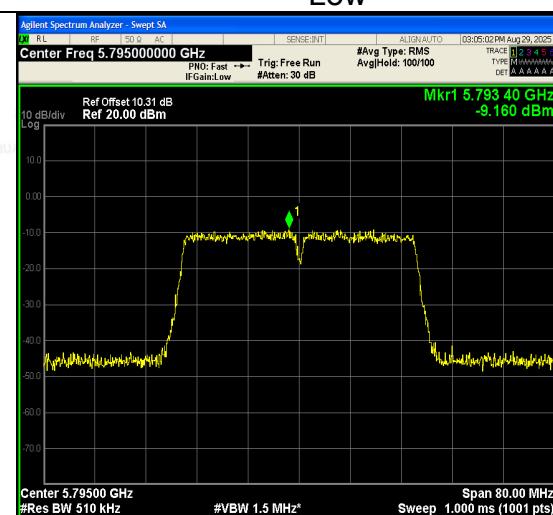
Start Freq

Stop Freq

CF Step

Freq Offset

LOW



Frequency

Auto Tune

Center Freq

Start Freq

Stop Freq

CF Step

Freq Offset

High

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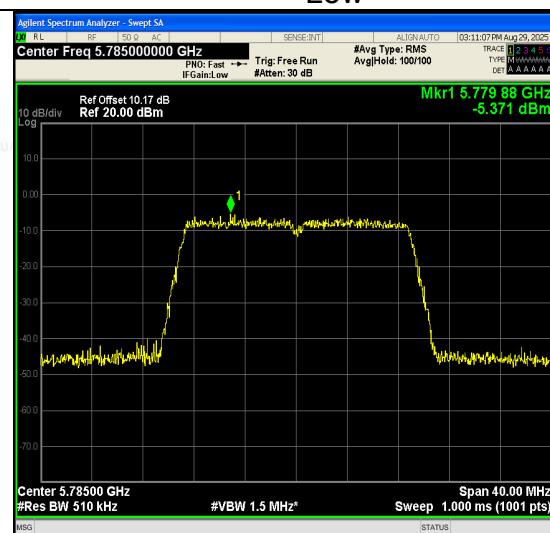


802.11ac(HT20)



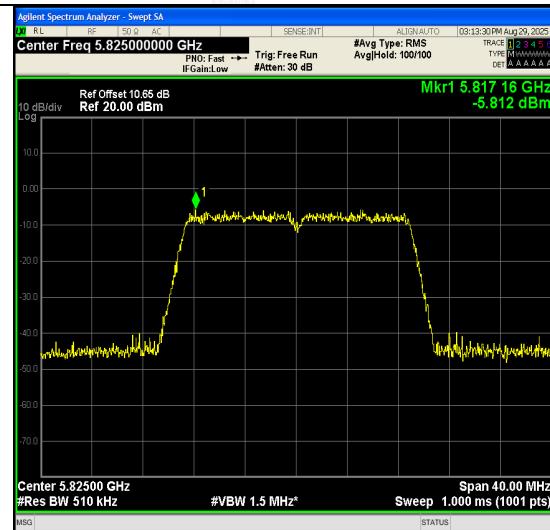
Frequency
Auto Tune
Center Freq 5.745000000 GHz
Start Freq 5.725000000 GHz
Stop Freq 5.765000000 GHz
CF Step 4.000000 MHz Man
Freq Offset 0 Hz

LOW



Frequency
Auto Tune
Center Freq 5.785000000 GHz
Start Freq 5.765000000 GHz
Stop Freq 5.805000000 GHz
CF Step 4.000000 MHz Man
Freq Offset 0 Hz

Mid



Frequency
Auto Tune
Center Freq 5.825000000 GHz
Start Freq 5.805000000 GHz
Stop Freq 5.845000000 GHz
CF Step 4.000000 MHz Man
Freq Offset 0 Hz

High

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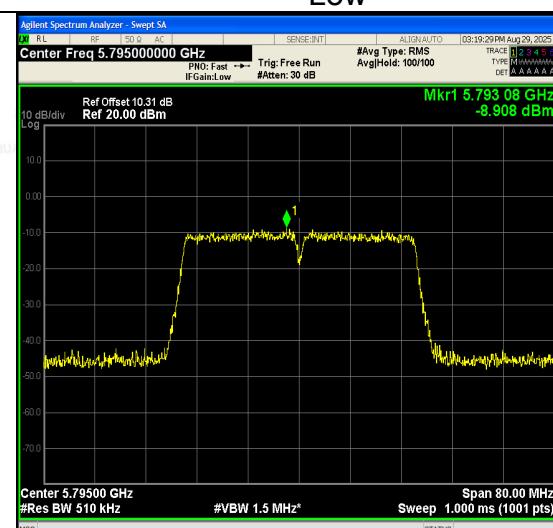
802.11ac(HT40)



Frequency
Auto Tune
Center Freq
Start Freq
Stop Freq
CF Step
Freq Offset

5.755000000 GHz
5.715000000 GHz
5.795000000 GHz
8.000000 MHz
0 Hz

LOW



Frequency
Auto Tune
Center Freq
Start Freq
Stop Freq
CF Step
Freq Offset

5.795000000 GHz
5.755000000 GHz
5.835000000 GHz
8.000000 MHz
0 Hz

High

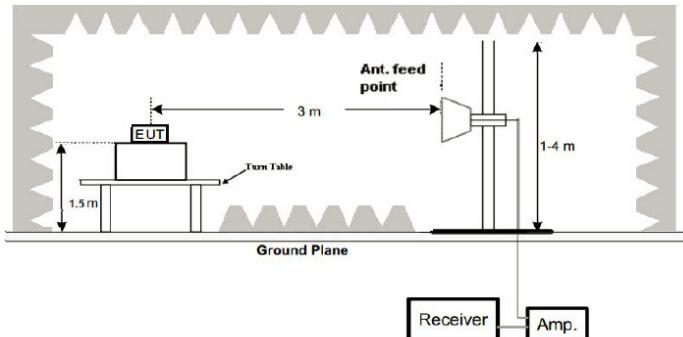
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4.6 Band Edge

4.6.1. Test Specification

Test Requirement:	FCC CFR47 Part 15E Section 15.407
Test Method:	ANSI C63.10: 2020
Limit:	<p>(1) For transmitters operating in the 5.725-5.85 GHz band: (i) 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 25 MHz 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 27 dBm/MHz at the band edge.</p> <p>The limit of frequency below 1GHz and which fall in restricted bands should complies 15.209.</p>
Test Setup:	 <p>The diagram illustrates the test setup. An EUT (Equipment Under Test) is placed on a turntable 0.8 meters above a ground plane. The turntable is 3 meters away from an antenna feed point on a variable-height antenna tower. The antenna height is 1.4 meters above the ground. A receiver and an amplifier (Amp.) are connected to the antenna system.</p>
Test Mode:	Transmitting mode with modulation
Test Procedure:	<ol style="list-style-type: none"> The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.



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	<p>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi peak or average method as specified and then reported in a data sheet.</p>
Test Result:	PASS

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IFICATION

4.6.2. Test Instruments

Radiated Emission Test Site (966)

Name of 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
Spectrum analyzer	R&S	FSV3044	HKE-126	Feb. 19, 2025	Feb. 18, 2026
Preamplifier	EMCI	EMC051845S	HKE-006	Feb. 19, 2025	Feb. 18, 2026
Preamplifier	Schwarzbeck	BBV 9743	HKE-016	Feb. 19, 2025	Feb. 18, 2026
Preamplifier	A.H. Systems	SAS-574	HKE-182	Feb. 19, 2025	Feb. 18, 2026
6dB Attenuator	Pasternack	6db	HKE-184	Feb. 19, 2025	Feb. 18, 2026
EMI Test Receiver	Rohde & Schwarz	ESR-7	HKE-010	Feb. 19, 2025	Feb. 18, 2026
Broadband Antenna	Schwarzbeck	VULB9168	HKE-167	Feb. 21, 2024	Feb. 20, 2026
Loop Antenna	COM-POWER	AL-130R	HKE-014	Feb. 21, 2024	Feb. 20, 2026
Horn Antenna	Schwarzbeck	9120D	HKE-013	Feb. 21, 2024	Feb. 20, 2026
EMI Test Software	Tonscend	JS32-RE 5.0.0	HKE-082	N/A	N/A
RSE Test Software	Tonscend	JS36-RSE 5.0.0	HKE-184	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).



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4.6.3. Test Data

Operation Mode: 802.11a Mode with 5.8G TX CH Low

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5650	47.49	-2.06	45.43	68.2	22.77	peak
5700	78.82	-1.96	76.86	105.2	28.34	peak
5720	83.08	-2.87	80.21	110.8	30.59	peak
5725	102.15	-2.14	100.01	122.2	22.19	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5650	48.12	-2.06	46.06	68.2	22.14	peak
5700	77.97	-1.96	76.01	105.2	29.19	peak
5720	82.32	-2.87	79.45	110.8	31.35	peak
5725	102.08	-2.14	99.94	122.2	22.26	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5850	100.35	-1.97	98.38	122.2	23.82	peak
5855	83.31	-2.13	81.18	110.8	29.62	peak
5875	75.31	-2.65	72.66	105.2	32.54	peak
5925	44.69	-2.28	42.41	68.2	25.79	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5850	101.35	-1.97	99.38	122.2	22.82	peak
5855	82.02	-2.13	79.89	110.8	30.91	peak
5875	76.04	-2.65	73.39	105.2	31.81	peak
5925	44.22	-2.28	41.94	68.2	26.26	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Operation Mode: 802.11n20 Mode with 5.8G TX CH Low

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Report No.: HK2508274881-2E

Horizontal:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5650	46.99	-2.06	44.93	68.2	23.27	peak
5700	76.71	-1.96	74.75	105.2	30.45	peak
5720	80.55	-2.87	77.68	110.8	33.12	peak
5725	102.67	-2.14	100.53	122.2	21.67	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5650	47.35	-2.06	45.29	68.2	22.91	peak
5700	76.29	-1.96	74.33	105.2	30.87	peak
5720	80.22	-2.87	77.35	110.8	33.45	peak
5725	101.91	-2.14	99.77	122.2	22.43	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Horizontal:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5850	101.64	-1.97	99.67	122.2	22.53	
5855	82.87	-2.13	80.74	110.8	30.06	peak
5875	75.84	-2.65	73.19	105.2	32.01	peak
5925	44.69	-2.28	42.41	68.2	25.79	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5850	100.16	-1.97	98.19	122.2	24.01	
5855	81.39	-2.13	79.26	110.8	31.54	peak
5875	75.76	-2.65	73.11	105.2	32.09	peak
5925	43.77	-2.28	41.49	68.2	26.71	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Operation Mode: 802.11n40 Mode with 5.8G TX CH Low

Horizontal:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5650	47.44	-2.06	45.38	68.2	22.82	peak
5700	76.79	-1.96	74.83	105.2	30.37	peak
5720	81.41	-2.87	78.54	110.8	32.26	peak
5725	103.48	-2.14	101.34	122.2	20.86	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency (MHz)	Meter Reading (dBµV)	Factor (dB)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Detector Type
5650	46.55	-2.06	44.49	68.2	23.71	peak
5700	76.73	-1.96	74.77	105.2	30.43	peak
5720	80.28	-2.87	77.41	110.8	33.39	peak
5725	102.68	-2.14	100.54	122.2	21.66	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Operation Mode: TX CH High with 5.8G

Horizontal:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5850	100.12	-1.97	98.15	122.2	24.05	peak
5855	82.48	-2.13	80.35	110.8	30.45	peak
5875	76.34	-2.65	73.69	105.2	31.51	peak
5925	44.83	-2.28	42.55	68.2	25.65	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5850	100.64	-1.97	98.67	122.2	23.53	peak
5855	82.71	-2.13	80.58	110.8	30.22	peak
5875	74.92	-2.65	72.27	105.2	32.93	peak
5925	45.02	-2.28	42.74	68.2	25.46	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5650	47.19	-2.06	45.13	68.2	23.07	peak
5700	76.85	-1.96	74.89	105.2	30.31	peak
5720	80.42	-2.87	77.55	110.8	33.25	peak
5725	102.43	-2.14	100.29	122.2	21.91	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5650	47.61	-2.06	45.55	68.2	22.65	peak
5700	77.42	-1.96	75.46	105.2	29.74	peak
5720	80.18	-2.87	77.31	110.8	33.49	peak
5725	101.55	-2.14	99.41	122.2	22.79	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Operation Mode: TX CH High with 5.8G

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5850	101.83	-1.97	99.86	122.2	22.34	peak
5855	81.46	-2.13	79.33	110.8	31.47	peak
5875	75.52	-2.65	72.87	105.2	32.33	peak
5925	43.25	-2.28	40.97	68.2	27.23	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5850	101.38	-1.97	99.41	122.2	22.79	peak
5855	81.69	-2.13	79.56	110.8	31.24	peak
5875	74.78	-2.65	72.13	105.2	33.07	peak
5925	44.97	-2.28	42.69	68.2	25.51	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Horizontal:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5650	47.62	-2.06	45.56	68.2	22.64	
5700	78.11	-1.96	76.15	105.2	29.05	peak
5720	80.28	-2.87	77.41	110.8	33.39	peak
5725	103.33	-2.14	101.19	122.2	21.01	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
5650	48.12	-2.06	46.06	68.2	22.14	
5700	76.49	-1.96	74.53	105.2	30.67	peak
5720	80.23	-2.87	77.36	110.8	33.44	peak
5725	101.92	-2.14	99.78	122.2	22.42	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5850	100.58	-1.97	98.61	122.2	23.59	peak
5855	82.94	-2.13	80.81	110.8	29.99	peak
5875	75.63	-2.65	72.98	105.2	32.22	peak
5925	43.61	-2.28	41.33	68.2	26.87	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
5850	102.09	-1.97	100.12	122.2	22.08	peak
5855	82.89	-2.13	80.76	110.8	30.04	peak
5875	75.53	-2.65	72.88	105.2	32.32	peak
5925	44.57	-2.28	42.29	68.2	25.91	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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Test Procedure:	<p>1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</p> <p>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</p> <p>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</p> <p>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.</p> <p>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</p>
Test Results:	PASS



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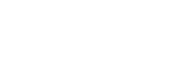
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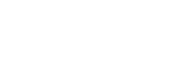
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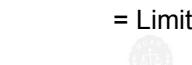
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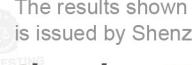
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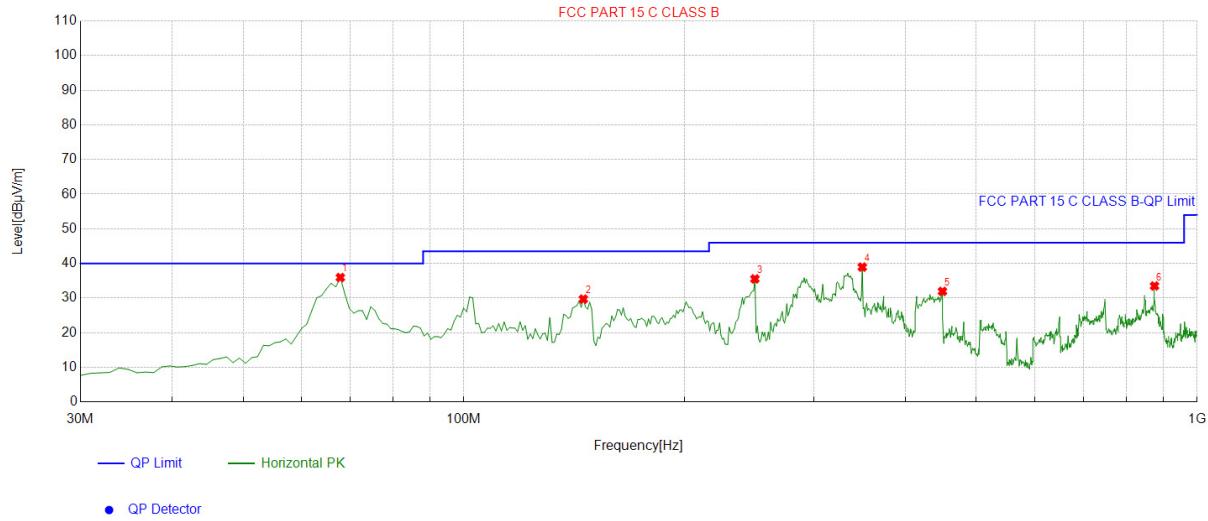
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4.7.2. Test Data

Remark: All the test modes completed for test. Only the worst result of 802. 11a was reported as below:

Below 1GHz

Horizontal



Suspected List

NO.	Freq. [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	67.8679	-16.02	51.96	35.94	40.00	4.06	100	142	Horizontal
2	145.5455	-18.27	47.98	29.71	43.50	13.79	100	14	Horizontal
3	249.4394	-13.41	48.95	35.54	46.00	10.46	100	46	Horizontal
4	349.4494	-10.04	48.99	38.95	46.00	7.05	100	344	Horizontal
5	449.4595	-8.78	40.72	31.94	46.00	14.06	100	10	Horizontal
6	874.7447	-1.70	35.20	33.50	46.00	12.50	100	6	Horizontal

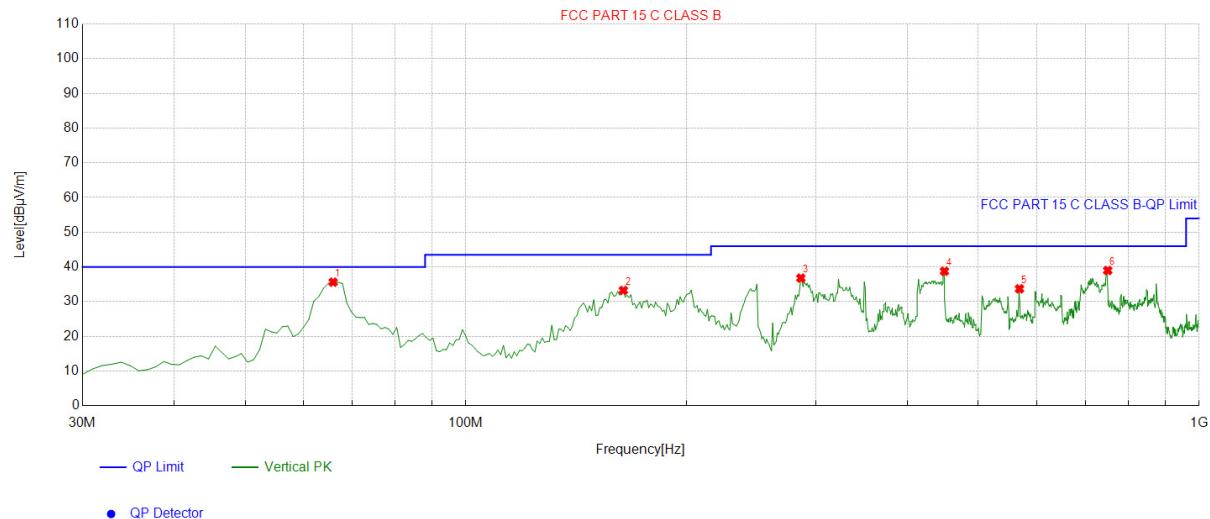
Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit – Level;



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Vertical



Suspected List

NO.	Freq. [MHz]	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	65.9259	-15.95	51.57	35.62	40.00	4.38	100	77	Vertical
2	163.9940	-17.59	50.84	33.25	43.50	10.25	100	358	Vertical
3	286.3363	-12.36	49.15	36.79	46.00	9.21	100	324	Vertical
4	449.4595	-8.78	47.55	38.77	46.00	7.23	100	331	Vertical
5	568.8889	-5.94	39.64	33.70	46.00	12.30	100	177	Vertical
6	750.4605	-3.85	42.84	38.99	46.00	7.01	100	55	Vertical

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit – Level;

Harmonics and Spurious Emissions

Frequency Range (9 kHz-30MHz)

Frequency (MHz)	Level@3m (dB μ V/m)	Limit@3m (dB μ V/m)
--	--	--
--	--	--
--	--	--
--	--	--

Note: 1. Emission Level=Reading+ Cable loss-Antenna factor-Amp factor

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement

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Above 1GHz**Radiated Emission Test**

LOW CH 149 (802.11 a Mode with 5.8G)/5745

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
3368	53.23	-4.59	48.64	68.2	19.56	peak
11096	49.52	4.21	53.73	74	20.27	peak
11096	31.88	4.21	36.09	54</td		



MID CH157 (802.11 a Mode with 5.8G)/5785

Horizontal:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
3172	52.11	-4.59	47.52	68.2	20.68	peak
10523	52.14	4.21	56.35	68.2	11.85	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
3172	52.67	-4.59	48.08	68.2	20.12	peak
10523	52.17	4.21	56.38	68.2	11.82	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.



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MID CH157

Horizontal:

Horizontal						
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
3172	52.33	-4.59	47.74	68.2	20.46	peak
10523	52.17	4.21	56.38	68.2	11.82	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
3172	51.28	-4.59	46.69	68.2	21.51	peak
10523	51.22	4.21	55.43	68.2	12.77	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level

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HIGH CH165

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Report No.: HK2508274881-2E

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
2705	58.65	-4.59	54.06	74	19.94	peak
2705	43.67	-4.59	39.08	54	14.92	AVG
11717	51.24	4.84	56.08	74	17.92	peak
11717	36.88	4.84	41.72	54	12.28	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
2705	59.64	-4.59	55.05	74	18.95	peak
2705	44.32	-4.59	39.73	54	14.27	AVG
11717	49.78	4.84	54.62	74	19.38	peak
11717	35.21	4.84	40.05	54	13.95	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dB μ V/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dB μ V/m(PK Value) <54 dB μ V/m(AV Limit), the Average Detected not need to completed.

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MID CH159

Horizontal:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
3172	53.24	-4.59	48.65	68.2	19.55	peak
10523	52.11	4.21	56.32	68.2	11.88	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
3172	52.17	-4.59	47.58	68.2	20.62	peak
10523	51.26	4.21	55.47	68.2	12.73	peak

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

5.8G 802.11ac20 Mode

LOW CH 149

Horizontal:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
3368	52.36	-4.59	47.77	68.2	20.43	peak
11096	53.13	4.21	57.34	74	16.66	peak
11096	30.25	4.21	34.46	54	19.54	AVG

Vertical:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
3368	52.87	-4.59	48.28	68.2	19.92	peak
11096	52.16	4.21	56.37	74	17.63	peak
11096	29.88	4.21	34.09	54	19.91	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level.

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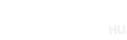
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Horizontal:

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Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
2705	52.16	-4.59	47.57	74	26.43	peak
2705	42.87	-4.59	38.28	54	15.72	AVG
11717	48.25	4.84	53.09	74	20.91	peak
11717	35.61	4.84	40.45	54	13.55	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level

Vertical:

Frequency (MHz)	Meter Reading (dB μ V)	Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type
2705	53.17	-4.59	48.58	74	25.42	peak
2705	41.26	-4.59	36.67	54	17.33	AVG
11717	48.32	4.84	53.16	74	20.84	peak
11717	36.11	4.84	40.95	54	13.05	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level

Remark:

(1) Measuring frequencies from 1 GHz to the 40 GHz.
(2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
(4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.



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5.8G 802.11ac40 Mode

LOW CH 151

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)	
3368	52.16	-4.59	47.57	68.2	20.63	peak
11096	50.87	4.21	55.08	74	18.92	peak
11096	31.26	4.21	35.47	54	18.53	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level

Vertical:

Frequency (MHz)	Meter Reading (dBµV)	Factor (dB)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Detector Type
3368	51.24	-4.59	46.65	68.2	21.55	peak
11096	52.36	4.21	56.57	74	17.43	peak
11096	30.22	4.21	34.43	54	19.57	AVG

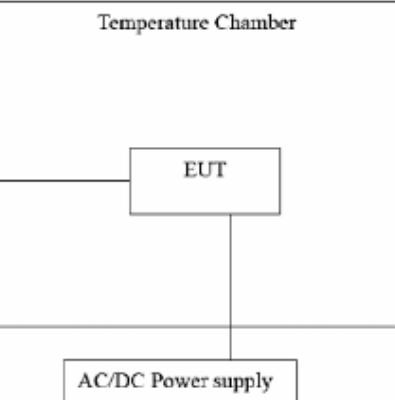
Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit - Level

Remark:

(1) Measuring frequencies from 1 GHz to the 40 GHz.
(2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
(4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dB_V/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dB_V/m(PK Value) <54 dB_V/m(AV Limit), the Average Detected not need to completed.

4.8 Frequency Stability Measurement

4.8.1. Test Specification

Test Requirement:	FCC Part15 Section 15.407(g)
Test Method:	ANSI C63.10: 2020
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Setup:	 <pre> graph LR SA[Spectrum Analyzer] --- EUT[EUT] EUT --- ACDC[AC/DC Power supply] EUT --- TC[Temperature Chamber] </pre>
Test Procedure:	<ol style="list-style-type: none"> The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. Turn the EUT on and couple its output to a spectrum analyzer. Turn the EUT off and set the chamber to the highest temperature specified. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test Result:	PASS
Remark:	N/A

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4.9 Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.249, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

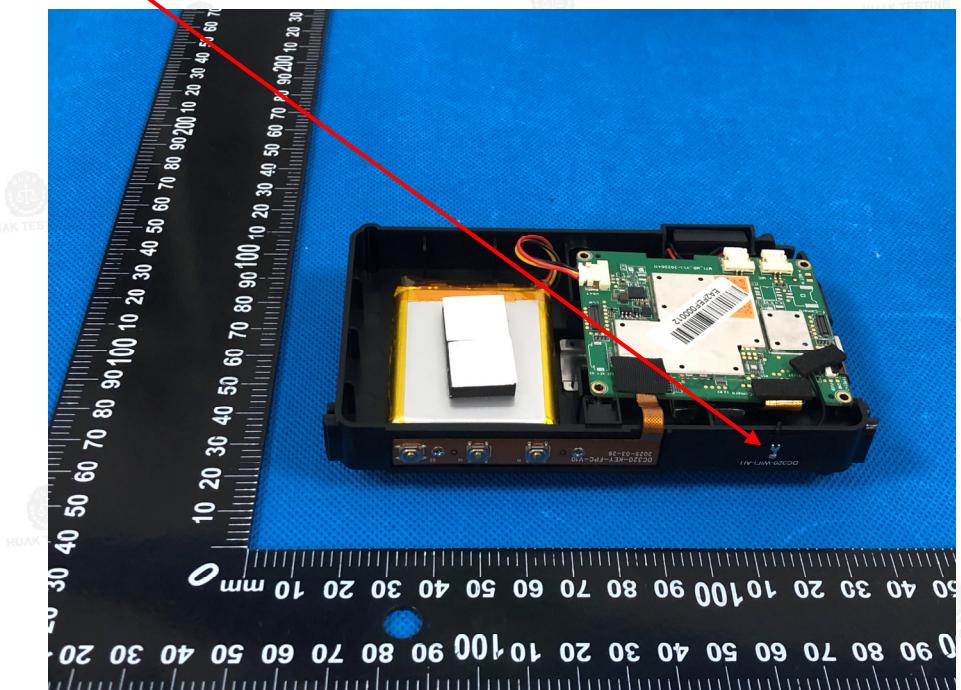
Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

Antenna Connected Construction

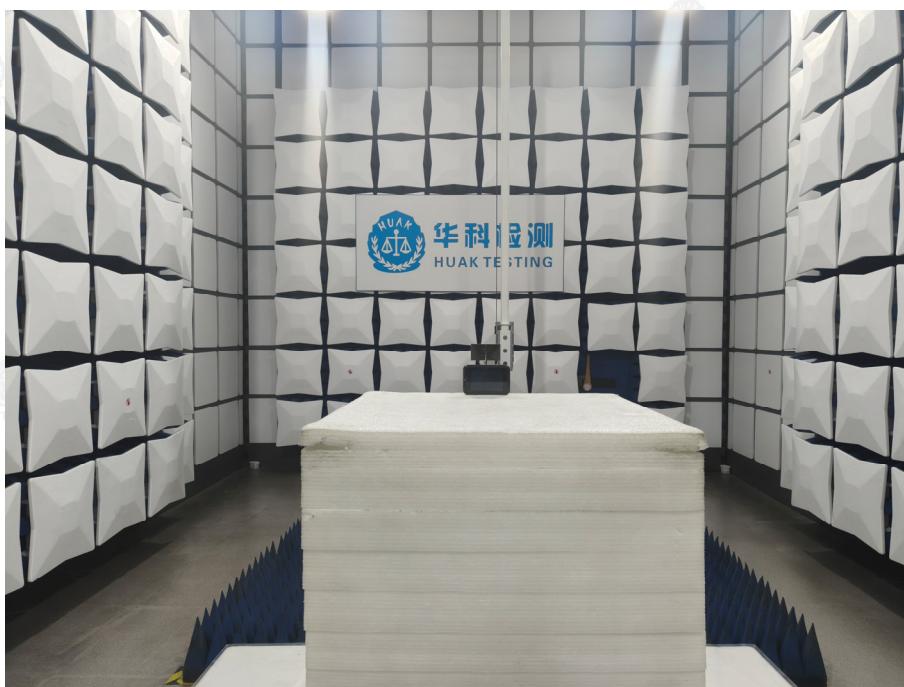
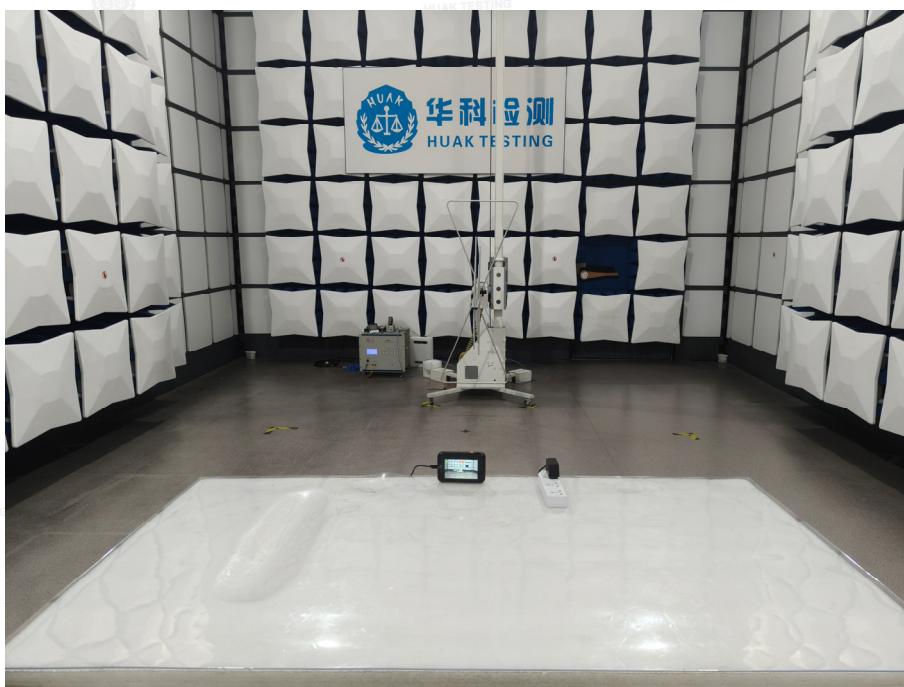
Antenna Connected Construction
The antenna used in this product is a FPC antenna, need professional installation, not easy to remove. It conforms to the standard requirements. The directional gains of antenna used for transmitting is 1.44dB.

WIFI ANTENNA



5. Photographs of Test Setup

Radiated Emission



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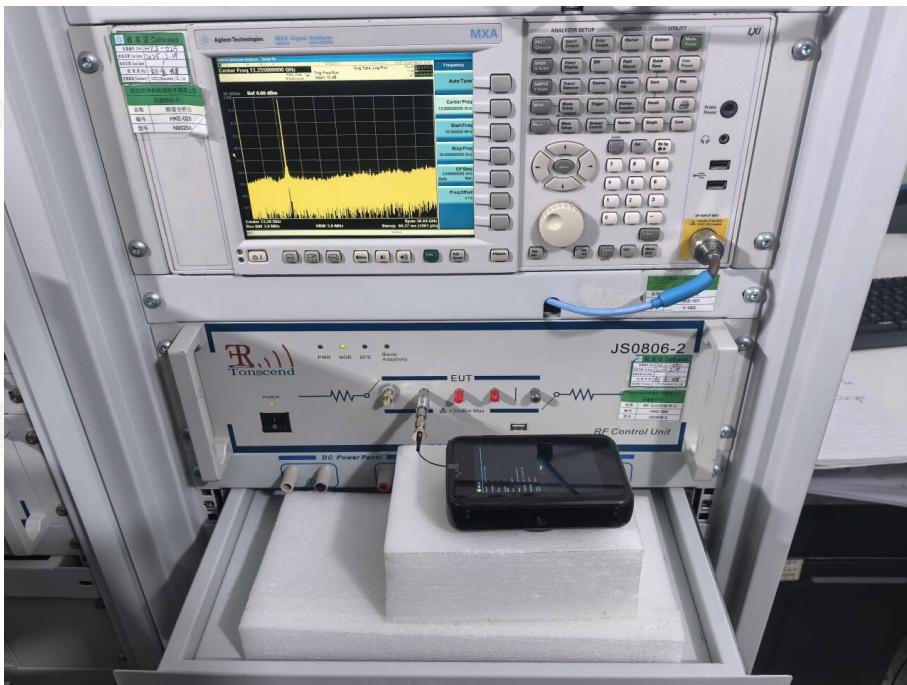
Add : 12/F, Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

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AC Conducted Emission



RF Conducted Emission



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6. Photos of the EUT

Reference to the report: ANNEX A of external photos and ANNEX B of internal photos

-----End of test report-----



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