

Test Report

Verified code: 324379

Report No.: E202111246805-5

Customer: Chengdu Vantron Technology Co., Ltd.

Address: No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China

Sample Name: Tablet

Sample Model: VT-TAB55-RK68-DB8

Receive Sample Date: Dec.02,2021

Test Date: Dec.10,2021 ~ Apr.14,2022

Reference Document: CFR 47, FCC Parts 15 Subpart E Unlicensed National Information Infrastructure Devices

Test Result: Pass

Prepared by: Yang Zhaoyun Reviewed by: Jiang Tao

Approved by: Xiao Liang



GUANGZHOU GRG METROLOGY & TEST CO., LTD

Issued Date: 2022-06-01

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5. Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved propaganda.

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REPORT ISSUED HISTORY

Report Version	Report No.	Description	Compile Date
1.0	E202111246805-5	Original Issue	2022-05-26

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1. TEST RESULT SUMMARY

Standard	Item	Limit / Severity	Result
CFR 47, FCC Parts 15 Subpart E (§15.407)	6dB Bandwidth & 26dB Bandwidth & 99% Occupied Bandwidth	15.407(a) 15.407(e)	PASS
	AC Power Line Conducted Emissions	15.207 15.407(b)(9)	PASS
	Unwanted Emissions and Band Edge	15.205 15.209 15.407(b)	PASS
	Output Power	15.407(a)	PASS
	Peak Power Spectral Density	15.407(a)	PASS
	Frequency Stability	15.407(g)	PASS
	Antenna Requirement	15.203	PASS ¹⁾

Note: ¹⁾ The EUT have two antenna. The max gain of antenna 1 is 4.73dBi, and that of antenna 2 is 0.59dBi. Both antennas are FPC antennas, which accordance 15.203 is considered sufficient to comply with the provisions of this section.

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2. GENERAL DESCRIPTION OF EUT

2.1. APPLICANT

Name: Chengdu Vantron Technology Co., Ltd.
Address: No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China

2.2. MANUFACTURER

Name: Dolby Laboratories, Inc.
Address: 1275 Market Street, San Francisco CA 94103, USA

2.3. FACTORY

Name: Chengdu Vantron Technology Co., Ltd.
Address: No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China

2.4. BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Product Name: Tablet
Product Model: VT-TAB55-RK68-DB8
Adding Model: /
Trade Name: 
FCC ID: 2AAGETAB55
Power Supply: 5Vdc power supplied by adapter
3.8Vdc power supplied by Rechargeable Li-ion battery
Adapter Specification: Model: FJ-SW1260502000UN
Input: 100-240V~50-60Hz 0.4A Max
Output: 5.0V --- 2.0A 10.0W
Battery Specification: Model: 496867-2P1S
Rated voltage: 3.8V
Rated capacity: 7200mAh, 27.36Wh
Frequency Band: U-NII-1: 5180 MHz~5240 MHz
U-NII-3: 5745 MHz~5825 MHz
Modulation Type: OFDM
Antenna Specification: FPC antenna
U-NII-1:
Antenna 1 with 4.73dBi gain (Max.)
Antenna 2 with 0.59dBi gain (Max.)
U-NII-3:
Antenna 1 with 2.55dBi gain (Max.)
Antenna 2 with 0.38dBi gain (Max.)

Number Of Channel U-NII-1:
802.11a / n HT20 / ac VHT20: 4 Channels
802.11n HT40 / ac VHT40: 2 Channels
802.11ac VHT80: 1 Channel
U-NII-3:
802.11a / n HT20 / ac VHT20: 5 Channels
802.11n HT40 / ac VHT40: 2 Channels
802.11ac VHT80: 1 Channel

Channels Spacing: 802.11a: 20MHz
802.11n HT20: 20MHz
802.11n HT40: 40MHz
802.11ac VHT20: 20MHz
802.11ac VHT40: 40MHz
802.11ac VHT80: 80MHz

Transmit Power: U-NII-1:
14.35dBm for 802.11a
17.09dBm for 802.11n HT20
16.88dBm for 802.11ac VHT20
13.80dBm for 802.11n HT40
13.77dBm for 802.11ac VHT40
12.17dBm for 802.11ac VHT80
U-NII-3:
13.26dBm for 802.11a
15.90dBm for 802.11n HT20
15.81dBm for 802.11ac VHT20
15.06dBm for 802.11n HT40
14.79dBm for 802.11ac VHT40
13.77dBm for 802.11ac VHT80

Temperature Range: 0°C~40°C

Hardware Version: V3.0

Software Version: Android 7

Sample submitting way: ☒ Provided by customer ☐ Sampling

Sample No: E202111246805-0001,E202111246805-0002

Note: /

2.5. TEST OPERATION MODE

Mode No.	Description of the modes
1	5G Wi-Fi TX mode

Note: The items of radiated emission just record the worst case of 20MHz/40MHz/80MHz bandwidth.

2.6. LOCAL SUPPORTIVEINSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Note
Adapter	/	/	/	/
Notebook	Dell	Latitude3490	2095LR2	/

No.	Cable Type	Qty.	Shielded Type	Ferrite Core(Qty.)	Length
1	USB Cable	1	No	0	0.5m (unshielded)

2.7. CONFIGURATION OF SYSTEM UNDER TEST



Test software:

Software version
RFTestTool

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Power Setting:

Mode	Frequency (MHz)	Power Setting
802.11a	5180	-1
	5200	-1
	5240	-1
	5745	-1
	5785	-1
	5825	-1

Mode	Frequency (MHz)	Power Setting	Mode	Frequency (MHz)	Power Setting
802.11n HT20	5180	-1	802.11ac VHT20	5180	-1
	5200	-1		5200	-1
	5240	-1		5240	-1
	5745	-1		5745	-1
	5785	-1		5785	-1
	5825	-1		5825	-1

Mode	Frequency (MHz)	Power Setting	Mode	Frequency (MHz)	Power Setting
802.11n HT40	5190	-1	802.11ac VHT40	5190	-1
	5230	-1		5230	-1
	5755	-1		5755	-1
	5795	-1		5795	-1

Mode	Frequency (MHz)	Power Setting	Frequency (MHz)	Power Setting
802.11ac VHT80	5210	-1	5775	-1

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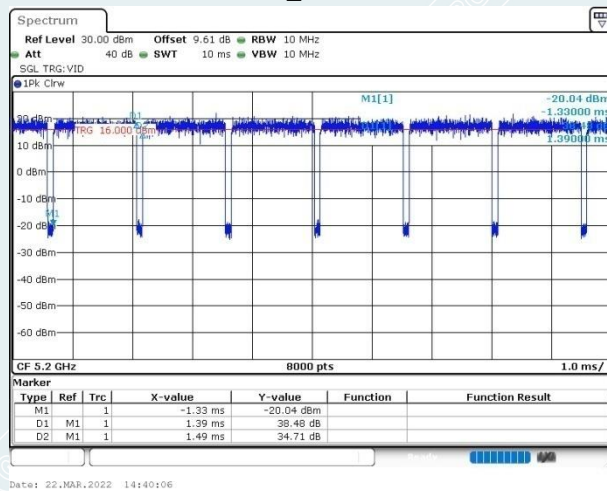
2.8. DUTY CYCLE

EUT Name	Tablet	Model	VT-TAB55-RK68-DB8
Environmental Conditions	23.5°C/48%RH	Test Voltage	DC 3.8V
Tested By	Lu Wei	Tested Date	2022-03-24

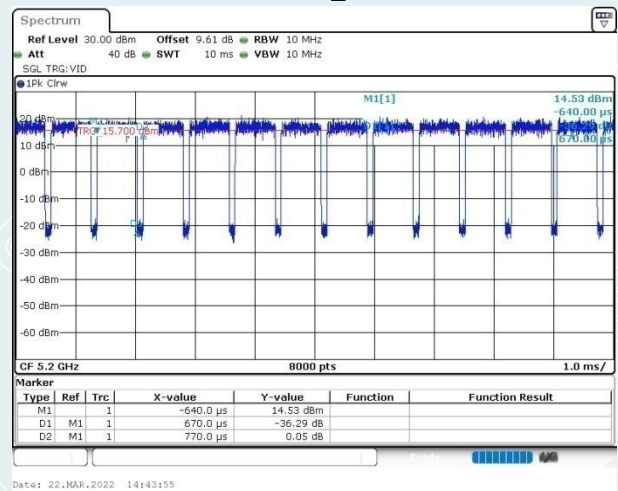
Duty Cycle Calculation						
	Mode	ON Time(ms)	Total Time(ms)	Duty Cycle	Duty Factor (dB)	T(s)
duty cycle	802.11a	1.390	1.490	93.29%	0.30	0.00139
	802.11n HT20	0.670	0.770	87.01%	0.60	0.00067
	802.11n HT40	0.340	0.440	77.27%	1.12	0.00034
	802.11ac VHT20	1.920	1.940	98.97%	0.00	0.00192
	802.11ac VHT40	1.540	1.560	98.72%	0.00	0.00154
	802.11ac VHT80	2.230	2.250	99.11%	0.00	0.00223

Note:Duty Factor= $10\log(1/\text{Duty Cycle})$.

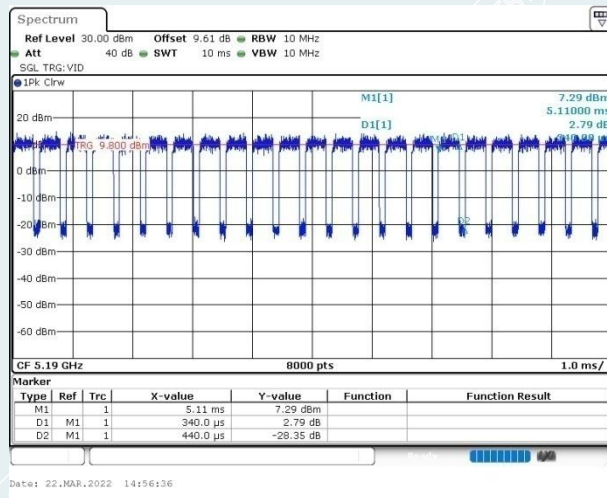
802.11a_5200 MHz



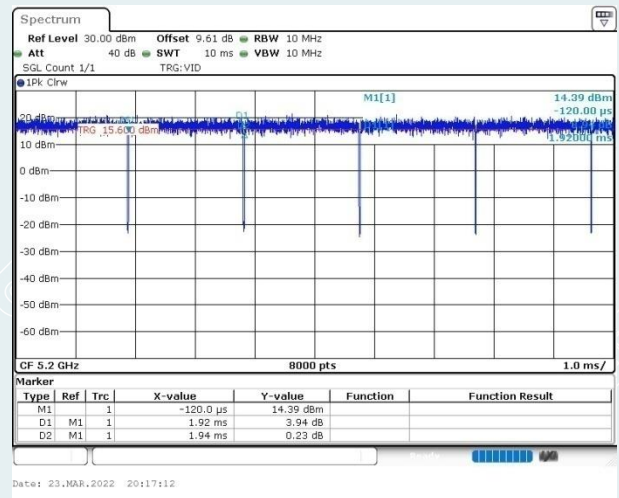
802.11n HT20_5200MHz



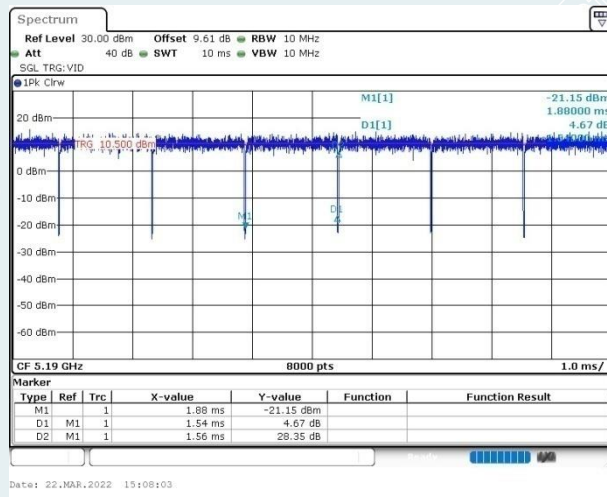
802.11n HT40_5190MHz



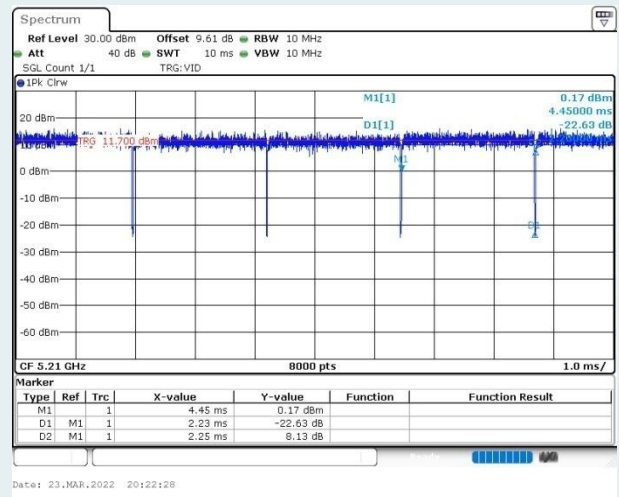
802.11ac VHT20_5200MHz



802.11ac VHT40_5190MHz



802.11ac VHT80_5210MHz



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3. LABORATORY AND ACCREDITATIONS

3.1. LABORATORY

The tests & measurements refer to this report were performed by Shenzhen EMC Laboratory of Guangzhou GRG Metrology & Test Co., Ltd.

Add : No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua District
Shenzhen, 518110, People's Republic of China

P.C. : 518110

Tel : 0755-61180008

Fax : 0755-61180008

3.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA A2LA(Certificate #2861.01)

China CNAS(L0446)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada ISED (Company Number: 24897, CAB identifier:CN0069)

USA FCC (Registration Number: 759402, Designation Number:CN1198)

Copies of granted accreditation certificates are available for downloading from our web site,
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3.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement		Frequency	Uncertainty
Radiated Emission	Horizontal	9kHz~30MHz	4.46dB
		30MHz~1000MHz	4.30dB
		1GHz~18GHz	5.60dB
		18GHz~26GHz	3.65dB
		26GHz~40GHz	4.00dB
	Vertical	9kHz~30MHz	4.46dB
		30MHz~1000MHz	4.30dB
		1GHz~18GHz	5.60dB
		18GHz~26GHz	3.65dB
		26GHz~40GHz	4.00dB
Conduction Emission		9kHz~150kHz	2.80dB
		150kHz~10MHz	2.80dB
		10MHz~30MHz	2.20dB

Measurement	Uncertainty
RF frequency	6.0×10^{-6}
RF power conducted	0.78 dB
Occupied channel bandwidth	0.4 dB
Unwanted emission, conducted	0.68 dB
Humidity	6 %
Temperature	2 °C

This uncertainty represents an expanded uncertainty factor of $k=2$.

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4. LIST OF USED TEST EQUIPMENT AT GRGT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Conducted Emissions				
TEST RECEIVER	R&S	ESCI	100783	2022-09-13
LISN(EUT)	R&S	ENV216	101543	2022-09-14
EZ-EMC	EZ	CCS-3A1-CE	/	/
Radiated Spurious Emission&Restricted bands of operation				
Test S/W	EZ	CCS-03A1		
Loop Antenna	TESEQ	HLA6121	52599	2022-04-21
Test Receiver	R&S	ESR7	102444	2022-09-21
Preamplifier	EMEC	EM330	I00426	2022-03-21
Bi-log Antenna	Schwarzbeck	VULB9160	VULB9160-3401	2022-10-27
Spectrum Analyzer	Agilent	N9020B	MY57120179	2022-08-08
Horn Antenna	Schwarzbeck	BBHA9120D(120 1)	02143	2022-10-22
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170-497	2022-10-16
Amplifier	Tonscend	TAP01018048	AP20E8060075	2022-05-09
Amplifier	Tonscend	TAP184050	AP20E806071	2022-05-17
Test S/W	Tonscend	JS32-RE/2.5.2.4		
6DB Bandwidth &26DB Bandwidth& 99% Occupied bandwidth				
Spectrum Analyzer	R&S	FSV30	104381-rH	2022-12-10
Output Power				
Pulse power sensor	Anritsu	MA2411B	1126150	2023-03-01
Power Meter	Anritsu	NL2495A	1204003	2023-02-28
Frequency Stability				
Spectrum Analyzer	R&S	FSV30	104381-rH	2022-12-10
Temperature& humidity chamber	HOSON	HS01060SDF	1910008401	2022-09-02
Power Spectral Density				
Spectrum Analyzer	R&S	FSV30	104381-rH	2022-12-10

Note: The calibration interval of the above test instruments is 12 months.

5. CONDUCTED EMISSION MEASUREMENT

5.1. LIMITS

Frequency range	Limits (dB μ V)	
	Quasi-peak	Average
150kHz~0.5MHz	66~56	56~46
0.5MHz~5MHz	56	46
5MHz~30MHz	60	50

NOTE: (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases in line with the logarithm of the frequency in the range of 150kHz to 0.5MHz.

5.2. TEST PROCEDURES

Procedure of Preliminary Test

Test procedures follow ANSI C63.10:2013.

For measurement of the disturbance voltage the equipment under test (EUT) is connected to the power supply mains and any other extended network via one or more artificial network(s). An EUT, whether intended to be grounded or not, and which is to be used on a table is configured as follows:

- Either the bottom or the rear of the EUT shall be at a controlled distance of 40 cm from a reference ground plane. This ground plane is normally the wall or floor of a shielded room. It may also be a grounded metal plane of at least 2 m by 2 m. This is physically accomplished as follows:

- 1) place the EUT on a table of non-conducting material which is at least 80 cm high. Place the EUT so that it is 40 cm from the wall of the shielded room, or

- 2) place the EUT on a table of non-conducting material which is 40 cm high so that the bottom of the EUT is 40 cm above the ground plane;

- All other conductive surfaces of the EUT shall be at least 80 cm from the reference ground plane;

- The EUT are placed on the floor that one side of the housings is 40 cm from the vertical reference ground plane and other metallic parts;

- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 cm to 40 cm long, hanging approximately in the middle between the ground plane and the table.

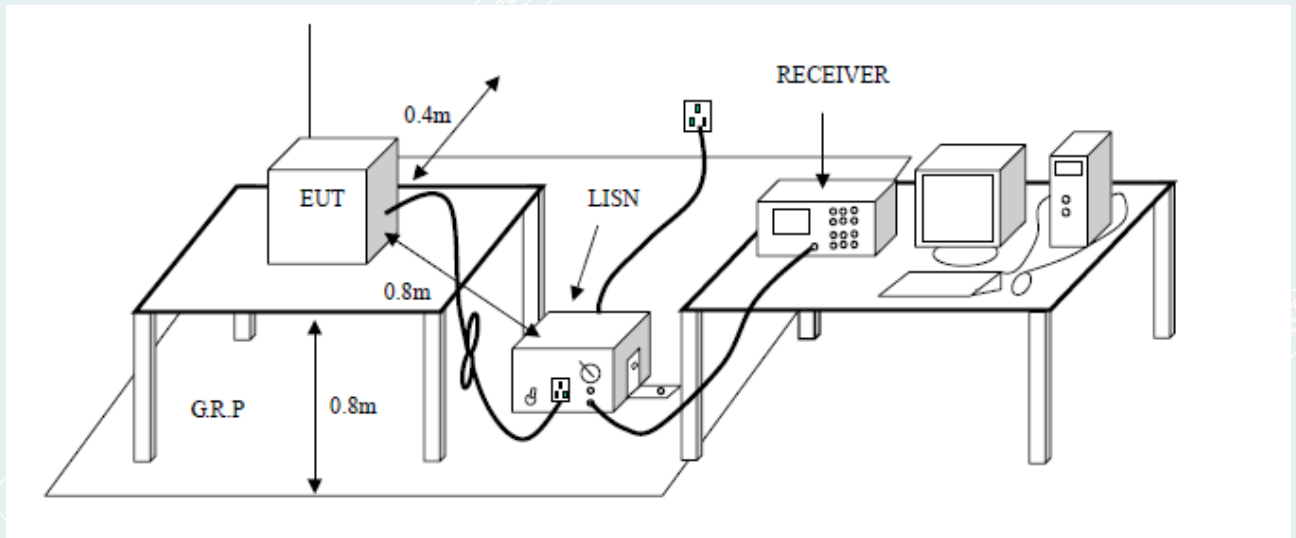
- Use serial board or connecting line to make EUT and notebook to communicate, according to the actual demand to make EUT emit fixed frequency signal.

The test mode(s) described in Item 2.5 were scanned during the preliminary test. After the preliminary scan, we found the test mode described in Item 2.5 producing the highest emission level. The EUT configuration and cable configuration of the above highest emission levels were recorded for reference of the final test.

Procedure of Final Test

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test. A scan was taken on both power lines, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. The test data of the worst-case condition(s) was recorded.

5.3. TEST SETUP



5.4. DATA SAMPLE

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XXXX	32.69	25.65	11.52	44.21	37.17	65.78	55.79	-21.57	-18.62	Pass

Factor = Insertion loss of LISN + Cable Loss
 Result = Quasi-peak Reading/ Average Reading + Factor
 Limit = Limit stated in standard
 Margin = Result (dBuV) – Limit (dBuV)

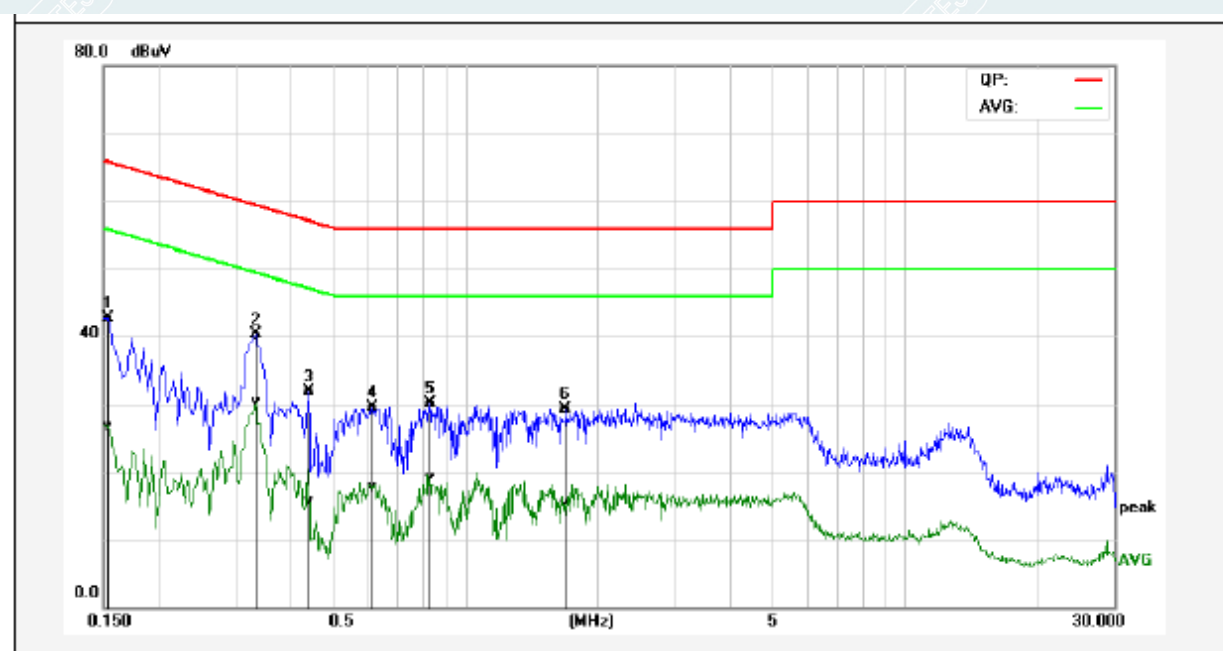
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5.5. TEST RESULTS

All models were pretested and only the worst modes and channels were recorded in this report. (802.11ac VHT20 5180MHz)

EUT Name	Tablet	Model	VT-TAB55-RK68-DB8
Environmental Conditions	23.2°C/59%RH	Test Mode	Mode 1
Power supply	AC 120V/60Hz	Test Engineer	Tang Shenghui
Test Date	2022-04-14	Sample No.	E202111246805-0002

802.11ac VHT20 :5180MHz

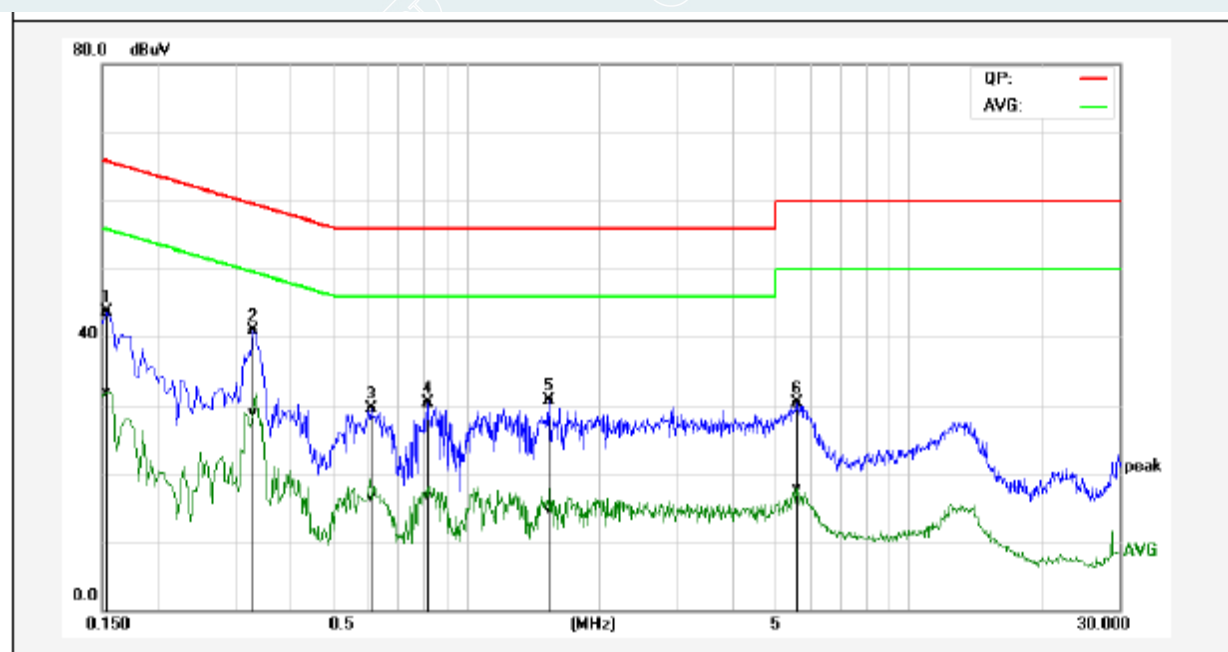


No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1	0.1539	33.27	17.21	9.53	42.80	26.74	65.78	55.79	-22.98	-29.05	Pass
2*	0.3339	30.64	20.77	9.56	40.20	30.33	59.35	49.35	-19.15	-19.02	Pass
3	0.4420	22.41	6.07	9.57	31.98	15.64	57.02	47.02	-25.04	-31.38	Pass
4	0.6140	20.02	8.15	9.57	29.59	17.72	56.00	46.00	-26.41	-28.28	Pass
5	0.8340	20.62	9.44	9.57	30.19	19.01	56.00	46.00	-25.81	-26.99	Pass
6	1.6980	19.76	5.66	9.60	29.36	15.26	56.00	46.00	-26.64	-30.74	Pass

Note: L = Live Line

EUT Name	Tablet	Model	VT-TAB55-RK68-DB8
Environmental Conditions	23.2°C/59%RH	Test Mode	Mode 1
Power supply	AC 120V/60Hz	Test Engineer	Tang Shenghui
Test Date	2022-04-14	Sample No.	E202111246805-0002

802.11ac VHT20 :5180MHz



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1	0.1539	34.21	22.36	9.53	43.74	31.89	65.78	55.79	-22.04	-23.90	Pass
2*	0.3300	31.40	19.36	9.56	40.96	28.92	59.45	49.45	-18.49	-20.53	Pass
3	0.6100	19.84	6.84	9.57	29.41	16.41	56.00	46.00	-26.59	-29.59	Pass
4	0.8180	20.79	7.11	9.57	30.36	16.68	56.00	46.00	-25.64	-29.32	Pass
5	1.5420	21.15	5.08	9.60	30.75	14.68	56.00	46.00	-25.25	-31.32	Pass
6	5.6140	20.69	7.97	9.69	30.38	17.66	60.00	50.00	-29.62	-32.34	Pass

Note: N = Neutral Line.

6. RADIATED SPURIOUS EMISSIONS

6.1. LIMITS

The maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band: 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.

The unwanted emissions which fall in Restricted bands shall not exceed the field strength levels specified in the following table:

15.209 Radiated emission limits

Frequency (MHz)	Field Strength(μ V/m)	Distance(m)
0.009-0.490	$2400/F(\text{kHz})$	300
0.490-1.705	$24000/F(\text{kHz})$	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

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6.2. TEST PROCEDURES

- EUT was placed on a turn table, which is 0.8 meter high above ground for below 1GHz test, and which is 1.5 meter high above ground for above 1GHz test.
- EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower.
- Set the EUT transmit continuously with maximum output power.
- The turn table can rotate 360 degrees to determine the position of the maximum emission level.
- The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.
- Spectrum analyzer setting parameters please see the below table.
- Repeat above procedures until all channels were measured.
- Record the results in the test report.

For 9kHz-150kHz

Spectrum Parameters	Setting
RBW	300Hz(for Peak&AVG)/CISPR 200Hz(for QP)
VBW	300Hz(for Peak&AVG)/CISPR 200Hz(for QP)
Start frequency	9kHz
Stop frequency	150kHz
Sweep Time	Auto
Detector	PEAK/QP/AVG
Trace Mode	Max Hold

Note : For 9kHz-90kHz&110kHz-150kHz,the detector is average,other frequency is CISPR QP detector.

For 150kHz-30MHz

Spectrum Parameters	Setting
RBW	9kHz
VBW	9kHz
Start frequency	150kHz
Stop frequency	30MHz
Sweep Time	Auto
Detector	QP
Trace Mode	Max Hold

Note : For 150kHz-490kHz,the detector is average,other frequency is CISPR QP detector.

----- The following blanks -----

For 30MHz-1GHz

Spectrum Parameters	Setting
RBW	120kHz
VBW	300kHz
Start frequency	30MHz
Stop frequency	1GHz
Sweep Time	Auto
Detector	QP
Trace Mode	Max Hold

For Above 1GHz

Spectrum Parameters	Setting	
RBW	1MHz	
VBW	PEAK Measurement	AVG Measurement
	3MHz	Duty cycle $\geq$ 98%,VBW=10Hz Duty cycle $<$ 98%,VBW $\geq$ 1/T Video bandwidth mode=RMS (power averaging)
Start frequency	1GHz	
Stop frequency	40GHz	
Sweep Time	Auto	
Detector	PEAK	
Trace Mode	Max Hold	

Note :

- (1) T is the on-time time of the duty cycle,when EUT transmit continuously with maximum output power,unit is seconds. reference section 2.8 for the on-time time.
- (2) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20\log D + 104.8$$
 where:
 E = electric field strength in dB μ V/m,
 EIRP = equivalent isotropic radiated power in dBm
 D = specified measurement distance in meters.
 So: $E = -27 - 20\log 3 + 104.8 = 68.3$ (dB μ V/m).
- (3) The unwanted emissions which fall in Restricted bands shall not exceed the field strength ,Above 18G test distance is 1m, so the Peak Limit= $74 + 20 \cdot \log(3/1) = 83.54$ (dB μ V/m).
 The Avg Limit= $54 + 20 \cdot \log(3/1) = 63.54$ (dB μ V/m).
- (4) The maximum emissions of the operation frequency bands ,Above 18G test distance is 1m, so the Peak Limit= $68.3 + 20 \cdot \log(3/1) = 77.84$ (dB μ V/m).

----- The following blanks -----

6.3. TEST SETUP

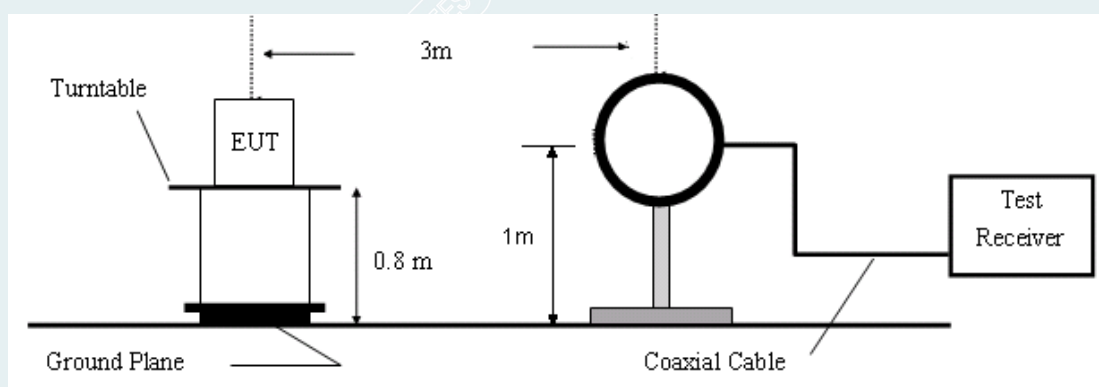


Figure 1. 9kHz to 30MHz radiated emissions test configuration

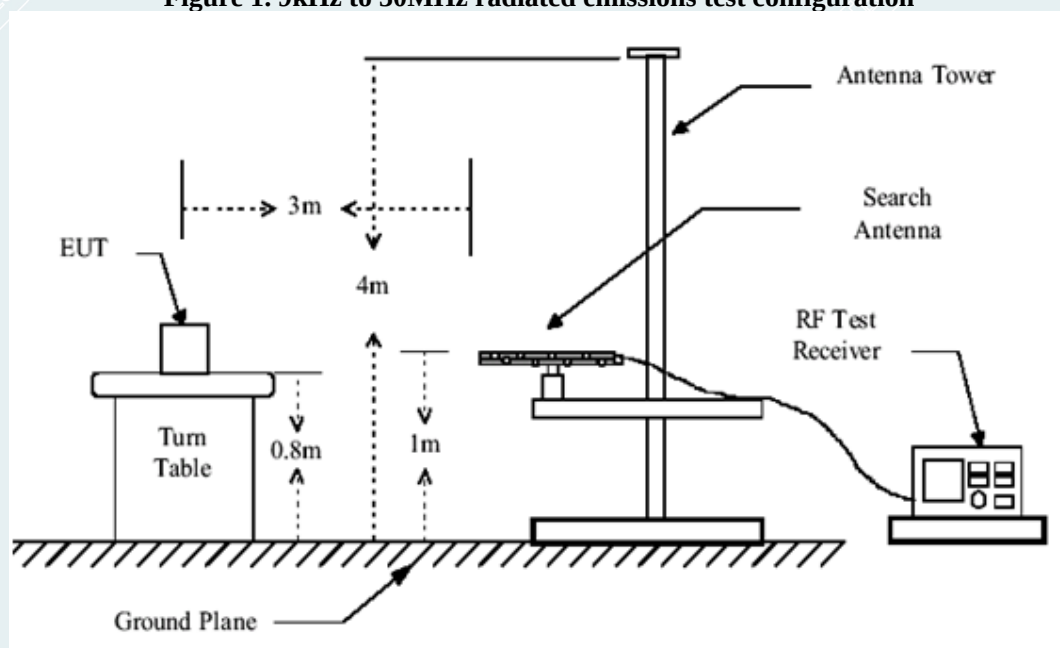


Figure 2. 30MHz to 1GHz radiated emissions test configuration

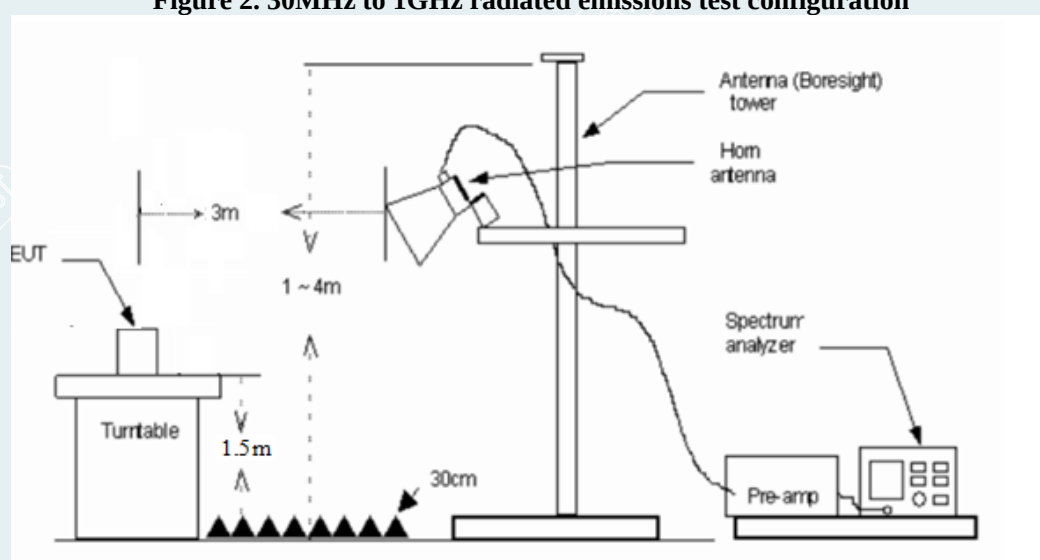


Figure 3. 1GHz to 18GHz radiated emissions test configuration

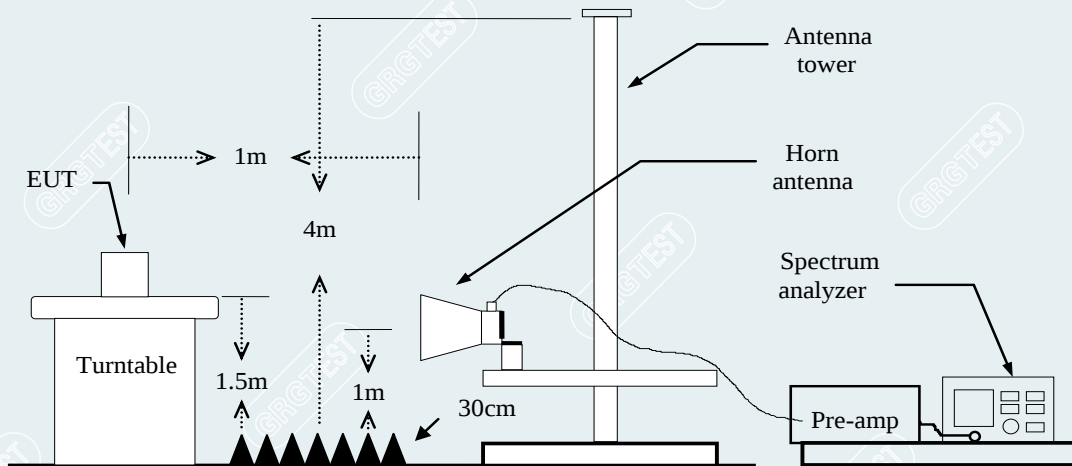


Figure 4. Above 18GHz radiated emissions test configuration

6.4. DATA SAMPLE

30MHz to 1GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	37.06	-15.48	21.58	40.00	-18.42	QP	Vertical

1GHz to 18GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Level (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	49.66	53.43	3.77	74.00	20.57	peak	Vertical
xxx	xxx	34.98	38.75	3.77	54.00	15.25	AVG	Vertical

Above 18GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Level (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	59.22	58.58	-0.64	83.54	24.96	peak	Vertical
xxx	xxx	53.01	52.37	-0.64	63.54	11.17	AVG	Vertical

Frequency (MHz) = Emission frequency in MHz

Ant. Pol. (H/V) = Antenna polarization

Reading (dBuV) = Uncorrected Analyzer / Receiver reading

Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain

Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)

Limit (dBuV/m) = Limit stated in standard

Margin (dB) = Remark Result (dBuV/m) – Limit (dBuV/m)

Peak = Peak Reading

QP = Quasi-peak Reading

AVG = Average Reading

6.5. TEST RESULTS

Below 1GHz

All models were pretested and only the worst modes and channels were recorded in this report. (802.11ac VHT20 5180MHz)

Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

Mode: Mode 1/ 802.11ac VHT20

Frequency :5180MHz

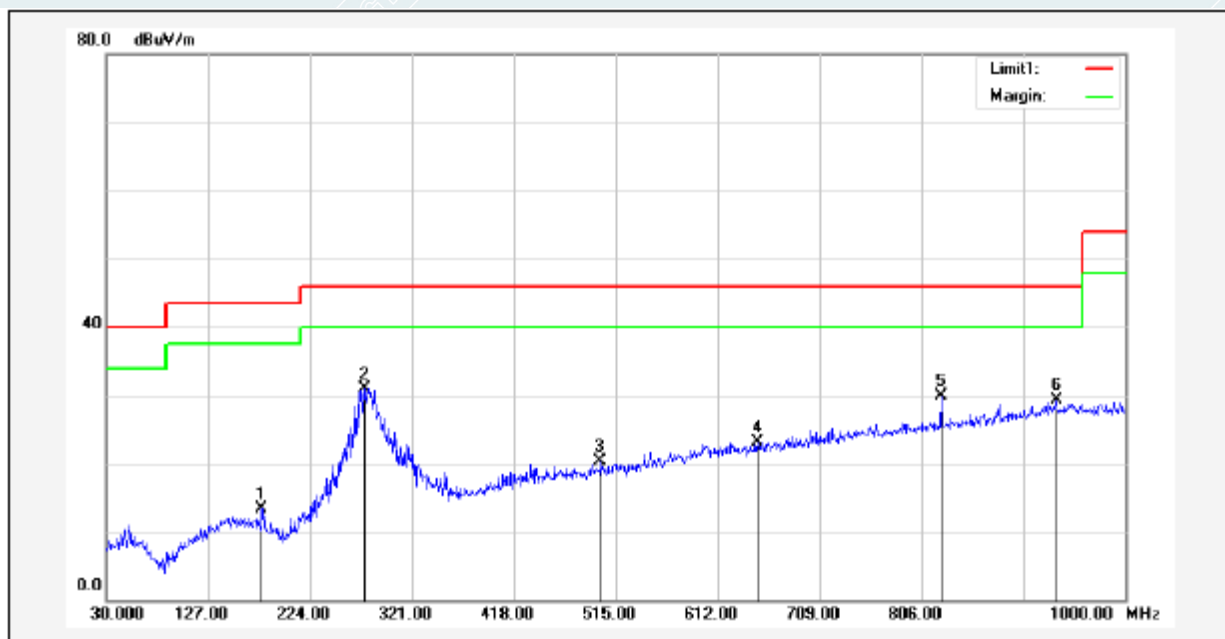
Temp. /Hum.:24.0°C/48%RH

Power supply:AC 120V/60Hz

Test Engineer: Zeng Xianglong

Test Date: 2022-03-02

Polarity: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over (dB)	Degree (deg.)	Height (cm)	Remark
1	178.4100	38.79	-25.50	13.29	43.50	-30.21	0	103	QP
2*	276.3800	54.90	-23.97	30.93	46.00	-15.07	261	100	QP
3	500.4500	37.66	-17.30	20.36	46.00	-25.64	0	197	QP
4	649.8300	36.85	-13.68	23.17	46.00	-22.83	30	300	QP
5	824.4300	40.47	-10.61	29.86	46.00	-16.14	131	100	QP
6	934.0400	38.32	-8.96	29.36	46.00	-16.64	22	100	QP

Mode: Mode 1/ 802.11ac VHT20

Temp. /Hum.:24.0°C/48%RH

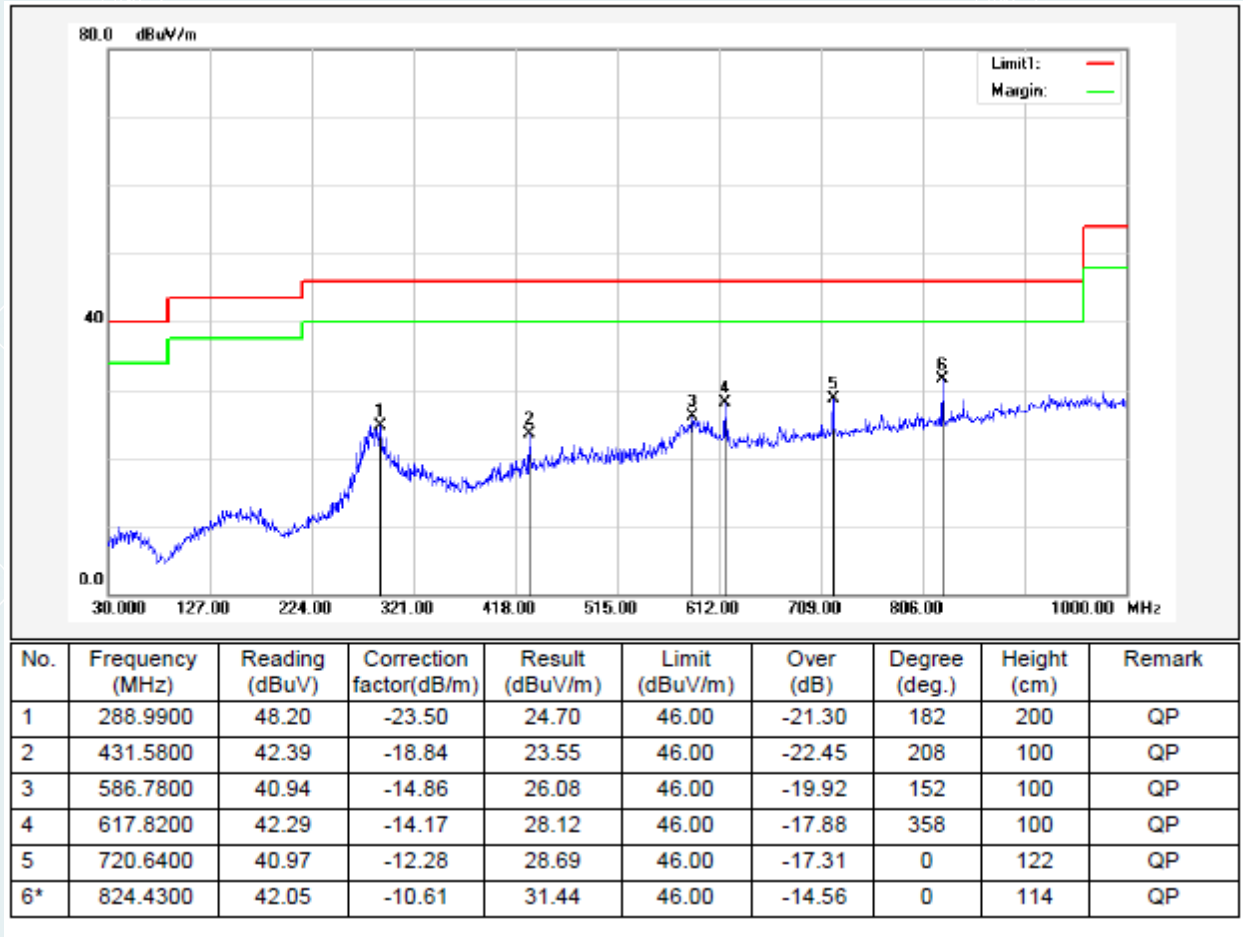
Test Engineer: Zeng Xianglong

Polarity: Vertical

Frequency :5180MHz

Power supply: AC 120V/60Hz

Test Date: 2022-03-02

**Remark:**

- 1 No emission found between lowest internal used/generated frequency to 30MHz.
- 2 Radiated emissions measured in frequency range from 9 kHz to 1GHz were made with an instrument using Quasi-peak detector mode.
- 3 Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of Receiver between 30MHz to 1GHz was 120 kHz.

Above 1GHz-18GHz

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

Pre-scan all modes and recorded the worst case results in this report (802.11a / 802.11n HT20 / 802.11n HT40 /802.11ac VHT80).

Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

ANT 1:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5180MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	59.28	37.41	-21.87	68.30	30.89	200	248	Horizontal
2	3296.8000	66.97	50.11	-16.86	68.30	18.19	200	158	Horizontal
3	7150.7000	48.56	45.22	-3.34	68.30	23.08	100	0	Horizontal
4	7750.2000	48.08	45.94	-2.14	68.30	22.36	100	215	Horizontal
5	10428.7000	44.97	47.90	2.93	68.30	20.40	200	4	Horizontal
6	13783.7000	41.70	50.23	8.53	68.30	18.07	200	104	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	62.11	40.24	-21.87	68.30	28.06	100	4	Vertical
2	3298.6000	58.20	41.35	-16.85	68.30	26.95	200	296	Vertical
3	6578.2000	49.78	44.73	-5.05	68.30	23.57	100	150	Vertical
4	7701.8000	47.83	45.37	-2.46	74.00	28.63	200	112	Vertical
5	10209.8000	44.33	46.91	2.58	68.30	21.39	200	5	Vertical
6	12859.7000	41.98	49.09	7.11	68.30	19.21	100	52	Vertical

----- The following blanks -----

ANT 2:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5180MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1747.0000	62.38	39.94	-22.44	68.30	28.36	200	83	Horizontal
2	3297.4000	65.70	48.85	-16.85	68.30	19.45	200	138	Horizontal
3	4204.0000	54.48	42.15	-12.33	74.00	31.85	200	220	Horizontal
4	6749.2000	50.46	45.35	-5.11	68.30	22.95	100	295	Horizontal
5	8736.9000	45.93	45.83	-0.10	68.30	22.47	100	319	Horizontal
6	9528.9000	45.93	46.87	0.94	68.30	21.43	200	147	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1757.8000	63.51	41.13	-22.38	68.30	27.17	200	1	Vertical
2	3302.2000	58.20	41.37	-16.83	68.30	26.93	200	288	Vertical
3	6265.6000	49.80	43.70	-6.10	68.30	24.60	200	355	Vertical
4	7150.7000	49.44	46.10	-3.34	68.30	22.20	200	121	Vertical
5	8734.7000	46.36	46.24	-0.12	68.30	22.06	100	264	Vertical
6	10814.8000	44.14	47.89	3.75	74.00	26.11	100	326	Vertical

----- The following blanks -----

ANT 1:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5200MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1746.4000	56.11	33.68	-22.43	68.30	34.62	200	191	Horizontal
2	3299.2000	66.65	49.81	-16.84	68.30	18.49	200	130	Horizontal
3	3899.8000	56.59	43.47	-13.12	74.00	30.53	100	185	Horizontal
4	6569.8000	49.26	44.28	-4.98	68.30	24.02	200	75	Horizontal
5	7196.9000	49.18	45.38	-3.80	68.30	22.92	200	86	Horizontal
6	9206.6000	45.77	46.16	0.39	68.30	22.14	200	99	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1854.4000	57.93	36.06	-21.87	68.30	32.24	100	328	Vertical
2	3299.8000	59.40	42.56	-16.84	68.30	25.74	100	41	Vertical
3	6350.2000	49.57	44.12	-5.45	68.30	24.18	200	82	Vertical
4	7138.6000	48.59	44.91	-3.68	68.30	23.39	200	58	Vertical
5	8896.4000	46.10	46.00	-0.10	68.30	22.30	100	134	Vertical
6	10818.1000	43.83	47.59	3.76	74.00	26.41	200	113	Vertical

----- The following blanks -----

ANT 2:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5200MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1748.8000	61.31	38.87	-22.44	68.30	29.43	200	340	Horizontal
2	3304.0000	65.60	48.77	-16.83	68.30	19.53	200	142	Horizontal
3	4199.2000	58.15	45.79	-12.36	74.00	28.21	200	223	Horizontal
4	6576.4000	49.49	44.45	-5.04	68.30	23.85	100	203	Horizontal
5	7678.7000	48.43	45.90	-2.53	74.00	28.10	100	27	Horizontal
6	9137.3000	46.36	46.82	0.46	74.00	27.18	200	226	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1759.6000	62.01	39.64	-22.37	68.30	28.66	100	202	Vertical
2	1853.8000	58.59	36.72	-21.87	68.30	31.58	100	311	Vertical
3	3298.0000	57.63	40.78	-16.85	68.30	27.52	200	271	Vertical
4	6578.8000	49.61	44.55	-5.06	68.30	23.75	200	326	Vertical
5	7667.7000	48.30	45.73	-2.57	74.00	28.27	100	360	Vertical
6	9545.4000	45.42	46.43	1.01	68.30	21.87	100	355	Vertical

----- The following blanks -----

ANT 1:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5240MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1746.4000	64.30	41.87	-22.43	68.30	26.43	100	1	Horizontal
2	3299.2000	66.29	49.45	-16.84	68.30	18.85	200	326	Horizontal
3	3929.8000	57.58	44.66	-12.92	74.00	29.34	100	359	Horizontal
4	6748.0000	49.76	44.62	-5.14	68.30	23.68	100	217	Horizontal
5	7704.0000	47.68	45.24	-2.44	74.00	28.76	100	144	Horizontal
6	10503.5000	44.07	47.89	3.82	68.30	20.41	200	206	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1747.0000	63.37	40.93	-22.44	68.30	27.37	200	181	Vertical
2	3301.0000	61.26	44.42	-16.84	68.30	23.88	200	284	Vertical
3	3930.4000	56.30	43.38	-12.92	74.00	30.62	200	0	Vertical
4	6328.6000	49.36	43.62	-5.74	68.30	24.68	200	202	Vertical
5	7177.1000	49.12	45.52	-3.60	68.30	22.78	100	1	Vertical
6	9534.4000	45.76	46.72	0.96	68.30	21.58	200	336	Vertical

----- The following blanks -----

ANT 2:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5240MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1762.6000	62.40	40.06	-22.34	68.30	28.24	100	223	Horizontal
2	1853.8000	58.28	36.41	-21.87	68.30	31.89	200	243	Horizontal
3	3297.4000	63.19	46.34	-16.85	68.30	21.96	200	155	Horizontal
4	7181.5000	49.18	45.53	-3.65	68.30	22.77	100	14	Horizontal
5	7677.6000	48.61	46.07	-2.54	74.00	27.93	100	349	Horizontal
6	9340.8000	45.84	46.40	0.56	74.00	27.60	200	62	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1750.6000	62.43	39.99	-22.44	68.30	28.31	100	270	Vertical
2	2153.2000	56.94	35.52	-21.42	68.30	32.78	100	140	Vertical
3	3296.2000	57.88	41.02	-16.86	68.30	27.28	200	285	Vertical
4	7155.1000	48.09	44.71	-3.38	68.30	23.59	200	20	Vertical
5	8885.4000	46.45	46.14	-0.31	68.30	22.16	100	274	Vertical
6	10099.8000	44.56	46.87	2.31	68.30	21.43	100	287	Vertical

----- The following blanks -----

ANT 1:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5745MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1854.4000	57.54	35.67	-21.87	68.30	32.63	100	259	Horizontal
2	3299.2000	65.50	48.66	-16.84	68.30	19.64	200	144	Horizontal
3	4675.0000	52.43	43.03	-9.40	74.00	30.97	100	170	Horizontal
4	7138.6000	48.79	45.11	-3.68	68.30	23.19	200	243	Horizontal
5	7917.4000	48.09	45.66	-2.43	68.30	22.64	100	58	Horizontal
6	9532.2000	46.32	47.28	0.96	68.30	21.02	100	78	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	58.29	36.42	-21.87	68.30	31.88	100	308	Vertical
2	1946.2000	58.70	36.76	-21.94	68.30	31.54	200	309	Vertical
3	3301.6000	60.81	43.97	-16.84	68.30	24.33	200	260	Vertical
4	6600.4000	50.10	44.85	-5.25	68.30	23.45	100	184	Vertical
5	7687.5000	47.97	45.46	-2.51	74.00	28.54	200	326	Vertical
6	9516.8000	45.78	46.67	0.89	68.30	21.63	100	209	Vertical

----- The following blanks -----

ANT 2:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5745MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1748.2000	62.21	39.77	-22.44	68.30	28.53	200	103	Horizontal
2	3300.4000	65.61	48.77	-16.84	68.30	19.53	200	158	Horizontal
3	4202.8000	54.59	42.25	-12.34	74.00	31.75	200	219	Horizontal
4	7135.3000	49.19	45.41	-3.78	68.30	22.89	100	278	Horizontal
5	8912.9000	47.02	46.80	-0.22	68.30	21.50	200	24	Horizontal
6	9537.7000	46.73	47.71	0.98	68.30	20.59	200	17	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1746.4000	65.75	43.32	-22.43	68.30	24.98	200	103	Vertical
2	3299.2000	59.63	42.79	-16.84	68.30	25.51	200	261	Vertical
3	4573.0000	52.91	42.63	-10.28	74.00	31.37	200	220	Vertical
4	6064.0000	51.89	44.62	-7.27	68.30	23.68	100	143	Vertical
5	7743.6000	47.30	45.12	-2.18	74.00	28.88	100	87	Vertical
6	9528.9000	45.45	46.39	0.94	68.30	21.91	100	25	Vertical

----- The following blanks -----

ANT 1:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5785MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1763.8000	59.58	37.24	-22.34	68.30	31.06	200	48	Horizontal
2	3301.6000	64.61	47.77	-16.84	68.30	20.53	200	158	Horizontal
3	4202.2000	56.79	44.45	-12.34	74.00	29.55	200	219	Horizontal
4	7155.1000	49.79	46.41	-3.38	68.30	21.89	200	352	Horizontal
5	8719.3000	45.70	45.47	-0.23	68.30	22.83	200	223	Horizontal
6	10758.7000	44.33	47.77	3.44	74.00	26.23	200	229	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	57.56	35.69	-21.87	68.30	32.61	100	321	Vertical
2	2441.8000	54.80	35.12	-19.68	68.30	33.18	200	55	Vertical
3	3298.6000	58.17	41.32	-16.85	68.30	26.98	200	260	Vertical
4	7694.1000	47.80	45.31	-2.49	74.00	28.69	100	312	Vertical
5	9291.3000	46.30	46.75	0.45	68.30	21.55	200	100	Vertical
6	10852.2000	44.43	48.30	3.87	74.00	25.70	100	299	Vertical

----- The following blanks -----

ANT 2:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5785MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1763.8000	59.29	36.95	-22.34	68.30	31.35	100	207	Horizontal
2	3297.4000	66.19	49.34	-16.85	68.30	18.96	200	150	Horizontal
3	4196.8000	55.55	43.17	-12.38	74.00	30.83	200	218	Horizontal
4	7168.3000	48.08	44.57	-3.51	68.30	23.73	200	196	Horizontal
5	9288.0000	46.12	46.49	0.37	68.30	21.81	100	283	Horizontal
6	11224.0000	43.36	47.83	4.47	74.00	26.17	200	319	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1747.6000	61.82	39.38	-22.44	68.30	28.92	100	130	Vertical
2	3302.2000	58.34	41.51	-16.83	68.30	26.79	200	281	Vertical
3	6569.8000	49.35	44.37	-4.98	68.30	23.93	200	164	Vertical
4	7719.4000	47.10	44.76	-2.34	74.00	29.24	100	251	Vertical
5	8897.5000	46.08	46.00	-0.08	68.30	22.30	100	210	Vertical
6	10348.4000	44.15	47.30	3.15	68.30	21.00	100	100	Vertical

----- The following blanks -----

ANT 1:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5825MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1748.8000	60.33	37.89	-22.44	68.30	30.41	200	143	Horizontal
2	3302.2000	61.11	44.28	-16.83	68.30	24.02	200	150	Horizontal
3	4202.8000	56.30	43.96	-12.34	74.00	30.04	200	219	Horizontal
4	6647.8000	51.10	45.51	-5.59	68.30	22.79	200	246	Horizontal
5	7702.9000	47.76	45.31	-2.45	74.00	28.69	200	141	Horizontal
6	8894.2000	46.33	46.19	-0.14	68.30	22.11	200	346	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1747.6000	62.45	40.01	-22.44	68.30	28.29	200	41	Vertical
2	1853.8000	58.07	36.20	-21.87	68.30	32.10	100	322	Vertical
3	3299.2000	58.48	41.64	-16.84	68.30	26.66	200	274	Vertical
4	6539.2000	50.38	45.34	-5.04	68.30	22.96	200	336	Vertical
5	7147.4000	48.34	44.93	-3.41	68.30	23.37	100	237	Vertical
6	7696.3000	47.76	45.28	-2.48	74.00	28.72	200	160	Vertical

----- The following blanks -----

ANT 2:

Mode: Mode 1/ 802.11a-SISO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5825MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1751.8000	61.57	39.14	-22.43	68.30	29.16	200	192	Horizontal
2	3304.0000	61.80	44.97	-16.83	68.30	23.33	200	150	Horizontal
3	4199.2000	55.37	43.01	-12.36	74.00	30.99	200	219	Horizontal
4	7160.6000	48.36	44.92	-3.44	68.30	23.38	100	39	Horizontal
5	7677.6000	47.87	45.33	-2.54	74.00	28.67	200	38	Horizontal
6	9556.4000	45.30	46.34	1.04	68.30	21.96	100	356	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1748.2000	64.75	42.31	-22.44	68.30	25.99	100	123	Vertical
2	3300.4000	60.11	43.27	-16.84	68.30	25.03	200	260	Vertical
3	4635.4000	52.17	42.72	-9.45	74.00	31.28	100	185	Vertical
4	7155.1000	48.67	45.29	-3.38	68.30	23.01	100	217	Vertical
5	7677.6000	48.27	45.73	-2.54	74.00	28.27	100	25	Vertical
6	8791.9000	46.84	45.86	-0.98	68.30	22.44	200	326	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT20-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5180MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1747.0000	65.89	43.45	-22.44	68.30	24.85	100	123	Horizontal
2	3299.2000	65.72	48.88	-16.84	68.30	19.42	200	150	Horizontal
3	4200.4000	55.32	42.97	-12.35	74.00	31.03	200	219	Horizontal
4	7148.5000	48.94	45.56	-3.38	68.30	22.74	200	134	Horizontal
5	7749.1000	48.57	46.42	-2.15	74.00	27.58	100	278	Horizontal
6	8783.1000	46.50	45.72	-0.78	68.30	22.58	100	66	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1748.2000	64.44	42.00	-22.44	68.30	26.30	100	178	Vertical
2	3301.0000	59.35	42.51	-16.84	68.30	25.79	200	122	Vertical
3	3885.4000	55.13	42.01	-13.12	74.00	31.99	100	288	Vertical
4	6045.4000	50.96	43.91	-7.05	68.30	24.39	200	8	Vertical
5	6641.8000	50.81	45.26	-5.55	68.30	23.04	100	349	Vertical
6	8731.4000	45.91	45.77	-0.14	68.30	22.53	100	11	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT20-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5200MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	57.26	35.39	-21.87	68.30	32.91	100	252	Horizontal
2	3298.0000	67.51	50.66	-16.85	68.30	17.64	200	137	Horizontal
3	4199.2000	59.37	47.01	-12.36	74.00	26.99	200	212	Horizontal
4	6640.6000	50.32	44.78	-5.54	68.30	23.52	100	359	Horizontal
5	7687.5000	48.03	45.52	-2.51	74.00	28.48	200	161	Horizontal
6	9548.7000	45.43	46.45	1.02	68.30	21.85	200	264	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1762.6000	62.98	40.64	-22.34	68.30	27.66	100	123	Vertical
2	3299.8000	59.89	43.05	-16.84	68.30	25.25	200	109	Vertical
3	3899.8000	55.48	42.36	-13.12	74.00	31.64	100	301	Vertical
4	4641.4000	53.38	44.03	-9.35	74.00	29.97	100	21	Vertical
5	7143.0000	48.69	45.15	-3.54	68.30	23.15	100	292	Vertical
6	7697.4000	47.71	45.23	-2.48	74.00	28.77	200	142	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT20-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5240MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1854.4000	58.40	36.53	-21.87	68.30	31.77	200	73	Horizontal
2	3297.4000	63.45	46.60	-16.85	68.30	21.70	200	326	Horizontal
3	3929.8000	57.94	45.02	-12.92	74.00	28.98	100	359	Horizontal
4	7151.8000	48.32	44.97	-3.35	68.30	23.33	100	239	Horizontal
5	7686.4000	47.84	45.33	-2.51	74.00	28.67	200	20	Horizontal
6	8721.5000	46.52	46.30	-0.22	68.30	22.00	200	109	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	59.13	37.26	-21.87	68.30	31.04	100	162	Vertical
2	3299.2000	57.54	40.70	-16.84	68.30	27.60	100	346	Vertical
3	3929.8000	56.84	43.92	-12.92	74.00	30.08	100	73	Vertical
4	6043.6000	50.78	43.70	-7.08	68.30	24.60	200	11	Vertical
5	7672.1000	47.86	45.31	-2.55	74.00	28.69	200	192	Vertical
6	8896.4000	46.51	46.41	-0.10	68.30	21.89	100	266	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT20-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5745MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1756.6000	60.36	37.97	-22.39	68.30	30.33	200	1	Horizontal
2	3299.2000	65.68	48.84	-16.84	68.30	19.46	200	144	Horizontal
3	4499.8000	53.87	42.98	-10.89	68.30	25.32	200	219	Horizontal
4	7136.4000	49.54	45.80	-3.74	68.30	22.50	200	359	Horizontal
5	8271.6000	47.03	45.19	-1.84	74.00	28.81	200	127	Horizontal
6	8894.2000	46.51	46.37	-0.14	68.30	21.93	200	45	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1759.6000	69.19	46.82	-22.37	68.30	21.48	200	130	Vertical
2	3299.8000	60.84	44.00	-16.84	68.30	24.30	200	301	Vertical
3	4195.6000	53.76	41.36	-12.40	74.00	32.64	200	199	Vertical
4	6344.2000	50.05	44.52	-5.53	68.30	23.78	100	82	Vertical
5	7748.0000	47.64	45.49	-2.15	74.00	28.51	200	148	Vertical
6	9299.0000	45.60	46.25	0.65	68.30	22.05	200	52	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT20-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5785MHz

Power supply: AC 120V/60Hz

Test Date: 2022-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1757.8000	64.89	42.51	-22.38	68.30	25.79	100	259	Horizontal
2	3297.4000	66.07	49.22	-16.85	68.30	19.08	200	144	Horizontal
3	4204.6000	55.00	42.67	-12.33	74.00	31.33	200	212	Horizontal
4	7155.1000	48.88	45.50	-3.38	68.30	22.80	100	292	Horizontal
5	8166.0000	46.21	45.39	-0.82	74.00	28.61	100	346	Horizontal
6	9596.0000	45.91	47.00	1.09	68.30	21.30	100	148	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1750.6000	62.29	39.85	-22.44	68.30	28.45	100	212	Vertical
2	3296.8000	60.19	43.33	-16.86	68.30	24.97	200	301	Vertical
3	4633.6000	52.31	42.82	-9.49	74.00	31.18	200	157	Vertical
4	6995.2000	49.15	44.87	-4.28	68.30	23.43	100	178	Vertical
5	8769.9000	46.64	46.17	-0.47	68.30	22.13	100	11	Vertical
6	10226.3000	45.21	47.55	2.34	68.30	20.75	200	66	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT20-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5825MHz

Power supply: AC 120V/60Hz

Test Date: 2022-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1756.0000	63.49	41.10	-22.39	68.30	27.20	200	349	Horizontal
2	3301.6000	64.55	47.71	-16.84	68.30	20.59	200	137	Horizontal
3	4493.8000	53.95	43.05	-10.90	68.30	25.25	200	219	Horizontal
4	7158.4000	48.43	45.02	-3.41	68.30	23.28	200	333	Horizontal
5	9556.4000	45.65	46.69	1.04	68.30	21.61	100	251	Horizontal
6	10416.6000	44.89	47.76	2.87	68.30	20.54	100	155	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1747.0000	64.37	41.93	-22.44	68.30	26.37	200	55	Vertical
2	3302.2000	59.38	42.55	-16.83	68.30	25.75	200	274	Vertical
3	4637.8000	52.46	43.05	-9.41	74.00	30.95	100	158	Vertical
4	7144.1000	48.16	44.65	-3.51	68.30	23.65	200	356	Vertical
5	7926.2000	48.10	45.85	-2.25	68.30	22.45	100	2	Vertical
6	8895.3000	46.62	46.50	-0.12	68.30	21.80	200	0	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT40-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5190MHz

Power supply: AC 120V/60Hz

Test Date: 2022-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	57.86	35.99	-21.87	68.30	32.31	200	51	Horizontal
2	3299.8000	65.15	48.31	-16.84	68.30	19.99	200	326	Horizontal
3	3892.6000	54.50	41.38	-13.12	74.00	32.62	100	359	Horizontal
4	7143.0000	47.71	44.17	-3.54	68.30	24.13	200	199	Horizontal
5	7704.0000	47.85	45.41	-2.44	74.00	28.59	100	239	Horizontal
6	9181.3000	46.16	46.71	0.55	74.00	27.29	100	102	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	58.57	36.70	-21.87	68.30	31.60	100	52	Vertical
2	3298.6000	57.94	41.09	-16.85	68.30	27.21	100	79	Vertical
3	3892.6000	54.01	40.89	-13.12	74.00	33.11	100	59	Vertical
4	4636.6000	52.46	43.03	-9.43	74.00	30.97	100	5	Vertical
5	7196.9000	48.67	44.87	-3.80	68.30	23.43	200	14	Vertical
6	8243.0000	47.18	45.24	-1.94	74.00	28.76	100	164	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT40-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5230MHz

Power supply: AC 120V/60Hz

Test Date: 2022-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1749.4000	58.18	35.74	-22.44	68.30	32.56	200	265	Horizontal
2	3299.8000	65.83	48.99	-16.84	68.30	19.31	200	299	Horizontal
3	3922.6000	57.46	44.49	-12.97	74.00	29.51	100	0	Horizontal
4	6043.6000	49.81	42.73	-7.08	68.30	25.57	200	196	Horizontal
5	7686.4000	47.68	45.17	-2.51	74.00	28.83	100	164	Horizontal
6	8689.6000	45.95	45.51	-0.44	68.30	22.79	100	360	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	58.79	36.92	-21.87	68.30	31.38	100	93	Vertical
2	3299.8000	59.19	42.35	-16.84	68.30	25.95	200	326	Vertical
3	3922.6000	56.34	43.37	-12.97	74.00	30.63	100	58	Vertical
4	6616.6000	49.32	43.95	-5.37	68.30	24.35	200	26	Vertical
5	7691.9000	47.78	45.29	-2.49	74.00	28.71	200	102	Vertical
6	8725.9000	46.53	46.35	-0.18	68.30	21.95	100	219	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT40-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5755MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	58.05	36.18	-21.87	68.30	32.12	200	72	Horizontal
2	3298.0000	66.04	49.19	-16.85	68.30	19.11	200	305	Horizontal
3	4200.4000	54.89	42.54	-12.35	74.00	31.46	200	38	Horizontal
4	6562.6000	48.93	44.02	-4.91	68.30	24.28	100	292	Horizontal
5	7674.3000	47.01	44.46	-2.55	74.00	29.54	200	75	Horizontal
6	9135.1000	46.03	46.47	0.44	74.00	27.53	200	83	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	58.51	36.64	-21.87	68.30	31.66	100	175	Vertical
2	3299.8000	58.09	41.25	-16.84	68.30	27.05	100	356	Vertical
3	4732.0000	51.76	42.72	-9.04	74.00	31.28	200	312	Vertical
4	7154.0000	48.58	45.21	-3.37	68.30	23.09	100	268	Vertical
5	7909.7000	47.56	44.98	-2.58	68.30	23.32	200	34	Vertical
6	8727.0000	45.84	45.66	-0.18	68.30	22.64	200	88	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11n HT40-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5795MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-02

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	58.63	36.76	-21.87	68.30	31.54	200	51	Horizontal
2	3301.0000	65.11	48.27	-16.84	68.30	20.03	200	312	Horizontal
3	4199.2000	56.89	44.53	-12.36	74.00	29.47	200	24	Horizontal
4	7161.7000	47.53	44.08	-3.45	68.30	24.22	200	206	Horizontal
5	7710.6000	47.24	44.84	-2.40	74.00	29.16	200	4	Horizontal
6	9525.6000	45.46	46.39	0.93	68.30	21.91	200	227	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1853.8000	59.79	37.92	-21.87	68.30	30.38	100	161	Vertical
2	3302.2000	58.46	41.63	-16.83	68.30	26.67	100	73	Vertical
3	4628.2000	51.62	42.04	-9.58	74.00	31.96	200	299	Vertical
4	7178.2000	48.28	44.67	-3.61	68.30	23.63	200	157	Vertical
5	7677.6000	47.34	44.80	-2.54	74.00	29.20	200	335	Vertical
6	10534.3000	43.50	47.14	3.64	68.30	21.16	100	20	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11ac VHT80-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5210MHz

Power supply: AC 120V/60Hz

Test Date: 2022-04-13

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1289.8000	56.40	34.33	-22.07	68.30	33.97	200	158	Horizontal
2	1853.8000	56.23	34.60	-21.63	68.30	33.70	100	278	Horizontal
3	3299.2000	63.12	46.53	-16.59	68.30	21.77	200	142	Horizontal
4	5042.8000	55.37	48.20	-7.17	74.00	25.80	200	165	Horizontal
5	5899.6000	49.89	47.35	-2.54	68.30	20.95	200	123	Horizontal
6	10800.5000	44.45	47.17	2.72	74.00	26.83	100	111	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1102.0000	57.23	35.59	-21.64	74.00	38.41	200	20	Vertical
2	1853.8000	59.69	36.66	-23.03	68.30	31.64	100	310	Vertical
3	3298.0000	58.35	42.63	-15.72	68.30	25.67	200	286	Vertical
4	5065.6000	56.48	49.42	-7.06	74.00	24.58	100	215	Vertical
5	6987.4000	48.35	45.12	-3.23	68.30	23.18	200	24	Vertical
6	10171.3000	46.52	48.48	1.96	68.30	19.82	100	88	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11ac VHT80-MIMO

Temp. /Hum.:25°C/60%RH

Test Engineer: Lu Qiang

Frequency :5775MHz

Power supply: AC 120V/60Hz

Test Date: 2022-04-13

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1193.8000	57.58	34.43	-23.15	74.00	39.57	200	14	Horizontal
2	1853.8000	55.79	34.16	-21.63	68.30	34.14	100	162	Horizontal
3	2533.0000	55.77	38.24	-17.53	68.30	30.06	200	1	Horizontal
4	3299.2000	64.94	48.35	-16.59	68.30	19.95	100	142	Horizontal
5	8716.0000	48.04	46.58	-1.46	68.30	21.72	100	262	Horizontal
6	13924.5000	41.89	48.49	6.60	68.30	19.81	100	177	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1442.2000	58.71	37.09	-21.62	74.00	36.91	200	175	Vertical
2	1854.4000	59.28	36.27	-23.01	68.30	32.03	100	338	Vertical
3	3299.2000	58.05	42.35	-15.70	68.30	25.95	200	109	Vertical
4	4416.4000	53.07	40.63	-12.44	68.30	27.67	100	10	Vertical
5	7860.2000	47.57	44.39	-3.18	68.30	23.91	100	124	Vertical
6	10997.4000	42.75	46.77	4.02	74.00	27.23	100	337	Vertical

----- The following blanks -----

Above 18 GHz

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

Pre-scan all modes and recorded the worst case results in this report(802.11ac VHT20)

Mode: Mode 1/ 802.11ac VHT20

Temp. /Hum.:25°C/60%RH

Test Engineer:Lu Qiang

Frequency :5180MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-26

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18336.6000	56.71	45.16	-11.55	83.54	38.38	150	64	Horizontal
2	22317.5000	53.75	44.17	-9.58	83.54	39.37	150	332	Horizontal
3	25906.8000	56.18	47.92	-8.26	77.84	29.92	150	211	Horizontal
4	30842.5000	57.29	48.84	-8.45	77.84	29.00	150	64	Horizontal
5	35238.1000	58.21	49.42	-8.79	77.84	28.42	150	199	Horizontal
6	38933.0000	53.52	51.24	-2.28	77.84	26.60	150	345	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18999.9000	55.78	44.68	-11.10	83.54	38.86	150	138	Vertical
2	23882.8000	54.08	45.70	-8.38	83.54	37.84	150	61	Vertical
3	25893.6000	54.18	45.94	-8.24	77.84	31.90	150	268	Vertical
4	29966.9000	56.35	48.19	-8.16	77.84	29.65	150	10	Vertical
5	34662.8000	58.64	49.44	-9.20	77.84	28.40	150	321	Vertical
6	37980.4000	54.42	51.17	-3.25	77.84	26.67	150	169	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11ac VHT20

Temp. /Hum.:25°C/60%RH

Test Engineer:Lu Qiang

Frequency :5200MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-26

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18751.3000	56.66	45.34	-11.32	83.54	38.20	150	8	Vertical
2	21612.4000	54.56	44.64	-9.92	77.84	33.20	150	118	Vertical
3	23860.8000	54.07	45.67	-8.40	83.54	37.87	150	247	Vertical
4	27340.1000	54.43	46.39	-8.04	77.84	31.45	150	247	Vertical
5	31044.9000	57.94	49.54	-8.40	77.84	28.30	150	8	Vertical
6	38088.2000	54.62	51.56	-3.06	77.84	26.28	150	356	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18893.2000	56.67	45.47	-11.20	83.54	38.07	150	64	Horizontal
2	22892.8000	53.88	44.87	-9.01	83.54	38.67	150	142	Horizontal
3	25192.9000	54.03	46.39	-7.64	77.84	31.45	150	167	Horizontal
4	28530.3000	55.74	47.67	-8.07	77.84	30.17	150	327	Horizontal
5	32408.9000	58.39	49.83	-8.56	77.84	28.01	150	302	Horizontal
6	38082.7000	54.66	51.60	-3.06	77.84	26.24	150	109	Horizontal

----- The following blanks -----

Mode: Mode 1/ 802.11ac VHT20
Temp. /Hum.:25°C/60%RH
Test Engineer:Lu Qiang

Frequency :5240MHz
Power supply: AC 120V/60Hz
Test Date:2022-03-26

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18894.3000	56.75	45.55	-11.20	83.54	37.99	150	96	Horizontal
2	20900.7000	55.38	45.07	-10.31	83.54	38.47	150	51	Horizontal
3	23816.8000	53.99	45.54	-8.45	83.54	38.00	150	1	Horizontal
4	28599.6000	55.78	47.68	-8.10	77.84	30.16	150	257	Horizontal
5	34165.6000	58.40	49.40	-9.00	77.84	28.44	150	264	Horizontal
6	39782.2000	53.15	51.96	-1.19	77.84	25.88	150	154	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18577.5000	56.77	45.35	-11.42	83.54	38.19	150	166	Vertical
2	21503.5000	54.75	44.74	-10.01	77.84	33.10	150	154	Vertical
3	26597.6000	53.53	45.95	-7.58	77.84	31.89	150	179	Vertical
4	28017.7000	57.23	48.91	-8.32	77.84	28.93	150	115	Vertical
5	32520.0000	57.78	49.05	-8.73	77.84	28.79	150	154	Vertical
6	39194.8000	53.69	51.60	-2.09	77.84	26.24	150	64	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11ac VHT20
Temp. /Hum.:25℃/60%RH
Test Engineer:Lu Qiang

Frequency :5745MHz
Power supply: AC 120V/60Hz
Test Date:2022-03-26

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18887.7000	56.84	45.64	-11.20	83.54	37.90	150	174	Horizontal
2	23845.4000	54.01	45.59	-8.42	83.54	37.95	150	199	Horizontal
3	27306.0000	54.56	46.53	-8.03	77.84	31.31	150	295	Horizontal
4	29530.2000	56.70	48.86	-7.84	77.84	28.98	150	141	Horizontal
5	34010.5000	58.56	49.49	-9.07	77.84	28.35	150	264	Horizontal
6	39697.5000	52.58	51.31	-1.27	77.84	26.53	150	104	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18676.5000	56.62	45.26	-11.36	83.54	38.28	150	282	Vertical
2	23815.7000	54.61	46.16	-8.45	83.54	37.38	150	82	Vertical
3	25183.0000	54.26	46.61	-7.65	77.84	31.23	150	242	Vertical
4	28772.3000	55.47	47.30	-8.17	77.84	30.54	150	334	Vertical
5	34194.2000	58.40	49.41	-8.99	77.84	28.43	150	158	Vertical
6	39642.5000	53.58	52.25	-1.33	77.84	25.59	150	82	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11ac VHT20

Temp. /Hum.:25°C/60%RH

Test Engineer:Lu Qiang

Frequency :5785MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-26

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18674.3000	56.32	44.95	-11.37	83.54	38.59	150	290	Horizontal
2	23914.7000	53.83	45.48	-8.35	83.54	38.06	150	14	Horizontal
3	27973.7000	55.73	47.42	-8.31	77.84	30.42	150	245	Horizontal
4	30907.4000	57.84	49.40	-8.44	77.84	28.44	150	225	Horizontal
5	36652.7000	56.57	49.42	-7.15	77.84	28.42	150	245	Horizontal
6	39579.8000	52.56	51.15	-1.41	77.84	26.69	150	277	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18856.9000	56.61	45.38	-11.23	83.54	38.16	150	160	Vertical
2	23882.8000	54.19	45.81	-8.38	83.54	37.73	150	250	Vertical
3	25797.9000	54.60	46.47	-8.13	77.84	31.37	150	237	Vertical
4	31220.9000	57.56	49.15	-8.41	83.54	34.39	150	237	Vertical
5	35095.1000	58.70	49.74	-8.96	77.84	28.10	150	340	Vertical
6	37952.9000	55.03	51.68	-3.35	77.84	26.16	150	250	Vertical

----- The following blanks -----

Mode: Mode 1/ 802.11ac VHT20

Temp. /Hum.:25°C/60%RH

Test Engineer:Lu Qiang

Frequency :5825MHz

Power supply: AC 120V/60Hz

Test Date:2022-03-26

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18347.6000	57.55	46.00	-11.55	83.54	37.54	150	26	Vertical
2	21428.7000	55.19	45.12	-10.07	77.84	32.72	150	167	Vertical
3	25151.1000	53.62	45.93	-7.69	77.84	31.91	150	283	Vertical
4	30051.6000	57.52	49.25	-8.27	77.84	28.59	150	231	Vertical
5	35395.4000	58.32	49.66	-8.66	77.84	28.18	150	347	Vertical
6	39653.5000	52.74	51.42	-1.32	77.84	26.42	150	296	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18920.7000	57.03	45.86	-11.17	83.54	37.68	150	52	Horizontal
2	21604.7000	54.66	44.74	-9.92	77.84	33.10	150	239	Horizontal
3	25021.3000	54.12	46.25	-7.87	77.84	31.59	150	174	Horizontal
4	30817.2000	57.15	48.69	-8.46	77.84	29.15	150	167	Horizontal
5	34228.3000	58.25	49.28	-8.97	77.84	28.56	150	123	Horizontal
6	40000.0000	52.50	51.53	-0.97	77.84	26.31	150	232	Horizontal

----- The following blanks -----

7. RESTRICTED BANDS OF OPERATION

7.1. LIMITS

Section 15.407(b)(10) The provisions of §15.205 apply to intentional radiators operating under this section.

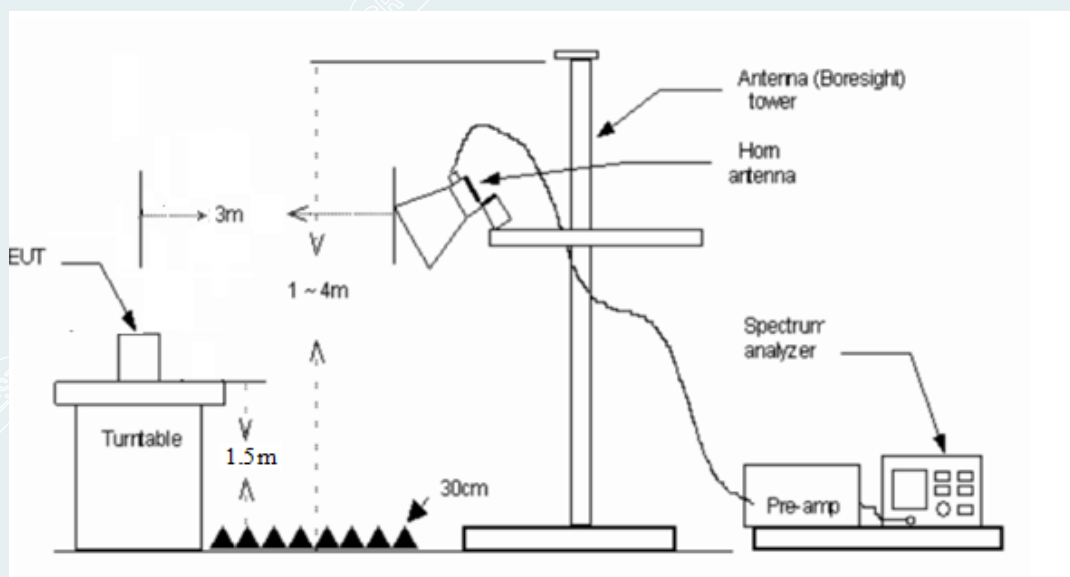
15.205(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

7.2. TEST PROCEDURES

- 1) The EUT is placed on a turntable, which is 1.5m above the ground plane.
- 2) The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4) Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - a) PEAK Measurement: RBW=1MHz / VBW=3MHz / Sweep=AUTO
 - b) AVERAGE Measurement: RBW=1MHz, Sweep=AUTO, There are two cases of VBW.
If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW=10Hz. If the EUT duty cycle is $< 98\%$, set $\text{VBW} \geq 1/T$, Where T is defined in section 2.8.
- 5) Repeat the procedures until all the PEAK and AVERAGE versus polarization are measured.

7.3. TEST SETUP



----- The following blanks -----

7.4. TEST RESULTS

Temp: 25℃; Humi:60%	Power supply: AC 120V/60Hz
Test Engineer: Lu Qiang	Test Date:2022-03-02 to 2022-04-14

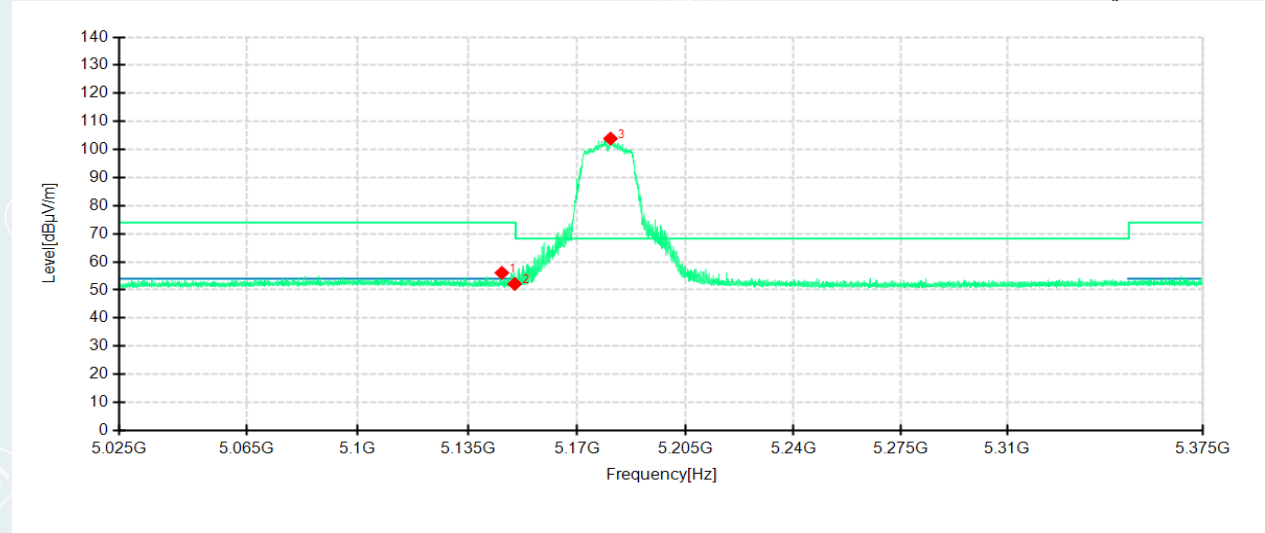
Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

ANT 1:

802.11a mode/5180MHz-SISO

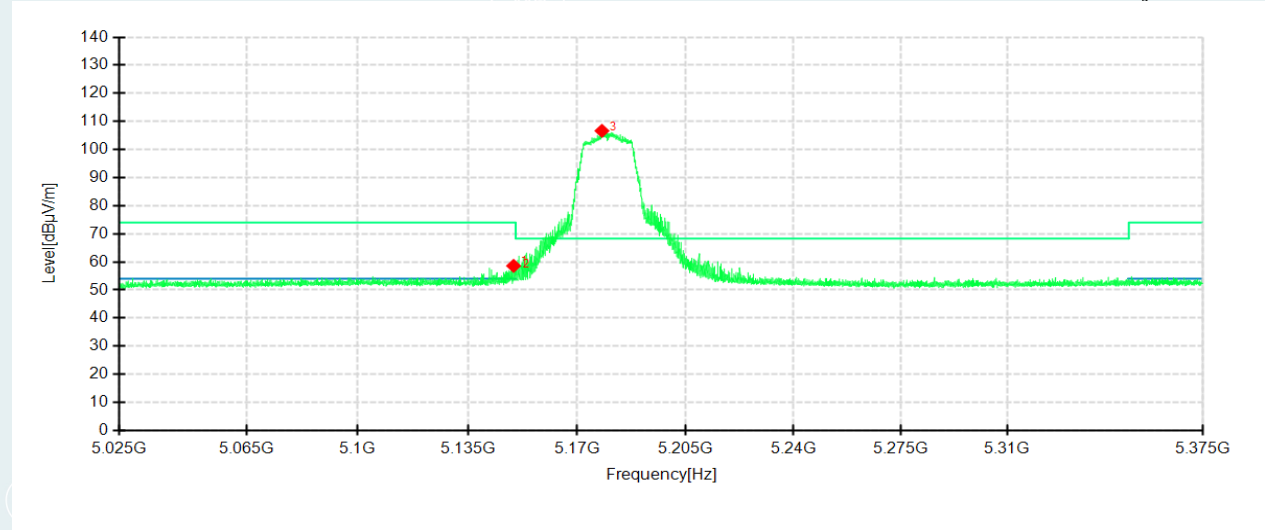
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical

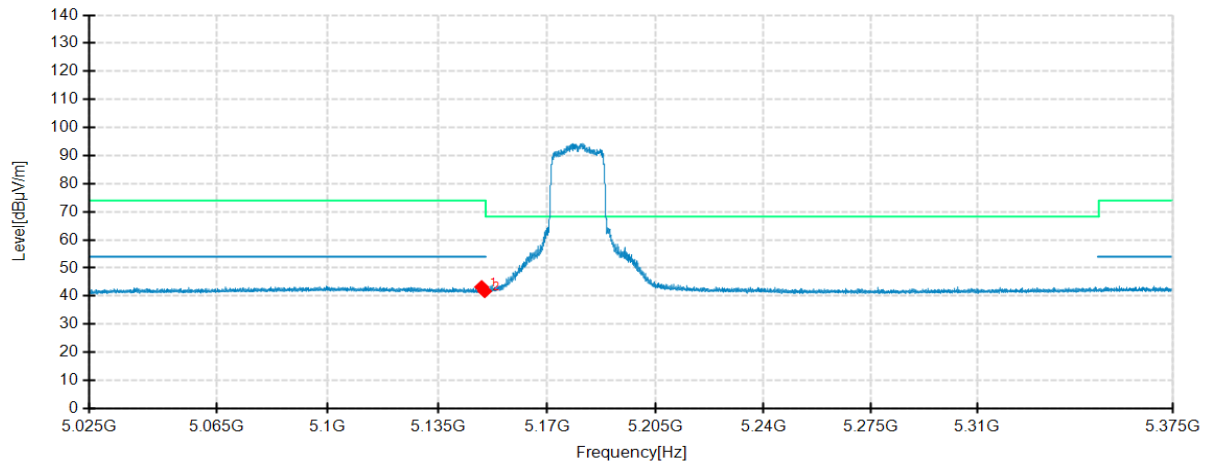


No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5145.8900	42.24	56.10	13.86	74.00	17.90	200	12	Horizontal	/
2	5150.0000	38.37	52.14	13.77	74.00	21.86	100	360	Horizontal	/
3	5180.7500	89.37	103.89	14.52	68.30	-35.59	100	307	Horizontal	No limit
1	5149.6350	44.80	58.58	13.78	74.00	15.42	100	218	Vertical	/
2	5150.0000	44.08	57.85	13.77	74.00	16.15	100	3	Vertical	/
3	5177.9850	92.19	106.64	14.45	68.30	-38.34	100	1	Vertical	No limit

802.11a mode/5180MHz-SISO

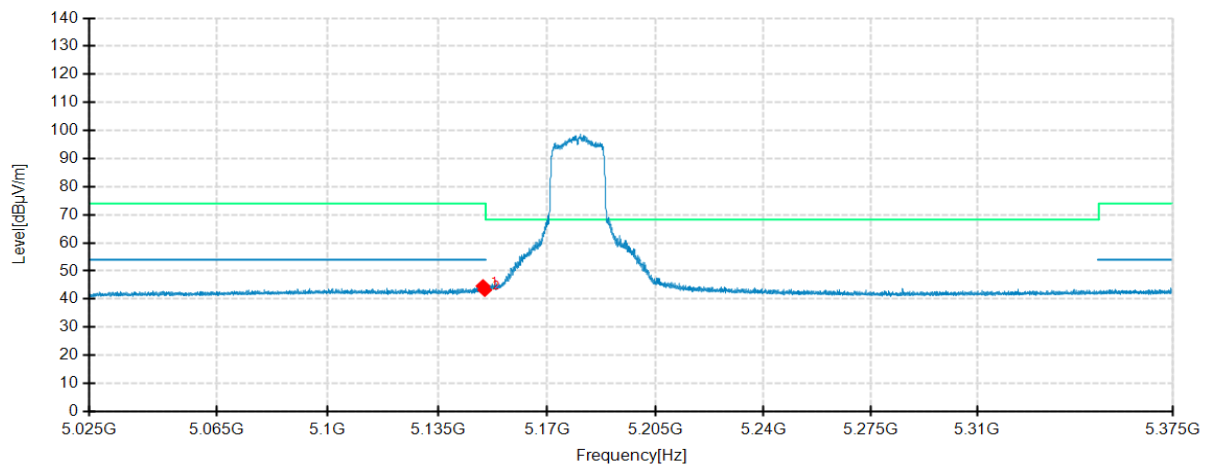
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical

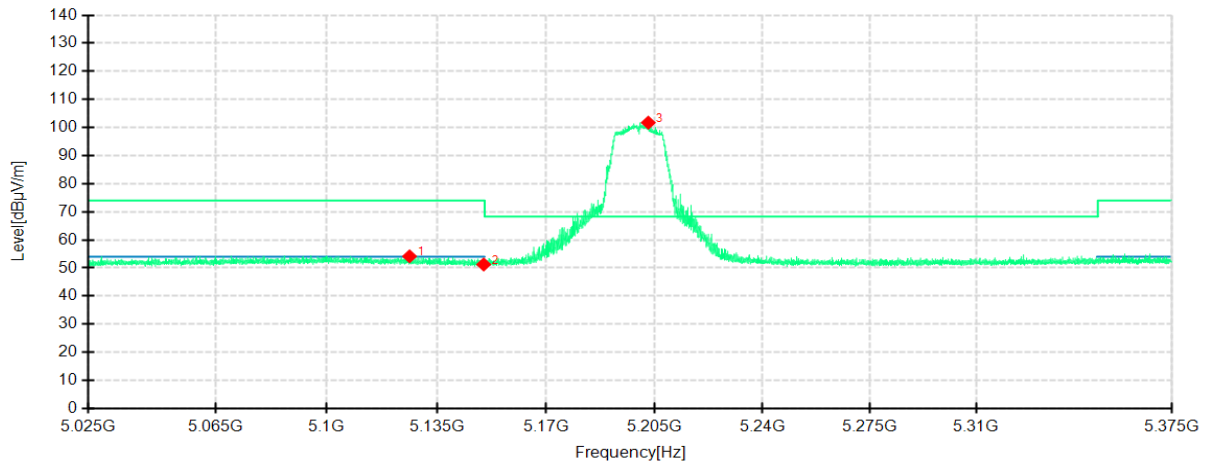


No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5149.0050	29.44	43.23	13.79	54.00	10.77	200	122	Horizontal	/
2	5150.0000	27.95	41.72	13.77	54.00	12.28	200	218	Horizontal	/
1	5149.4600	30.86	44.64	13.78	54.00	9.36	100	12	Vertical	/
2	5150.0000	29.45	43.22	13.77	54.00	10.78	100	218	Vertical	/

802.11a mode/5200MHz-SISO

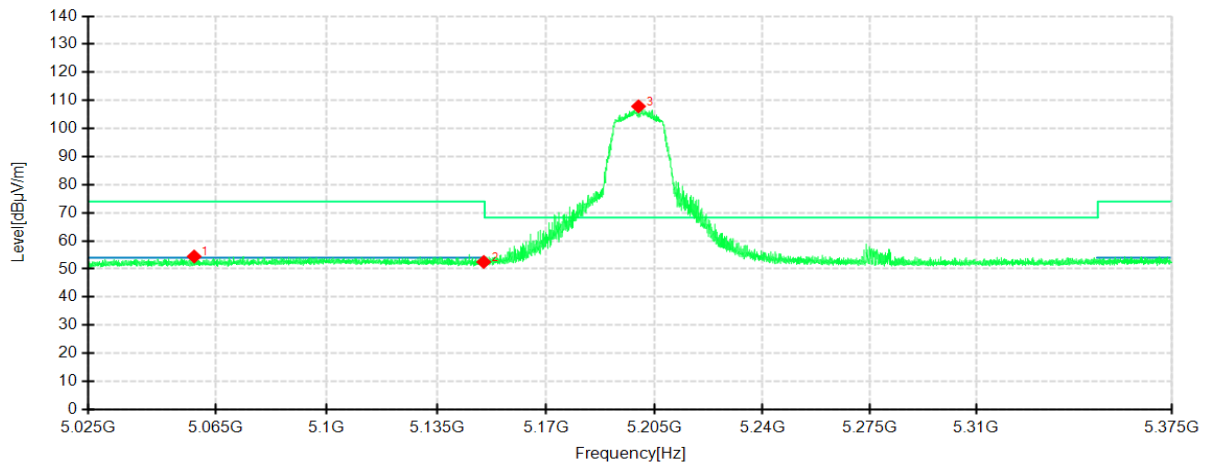
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical

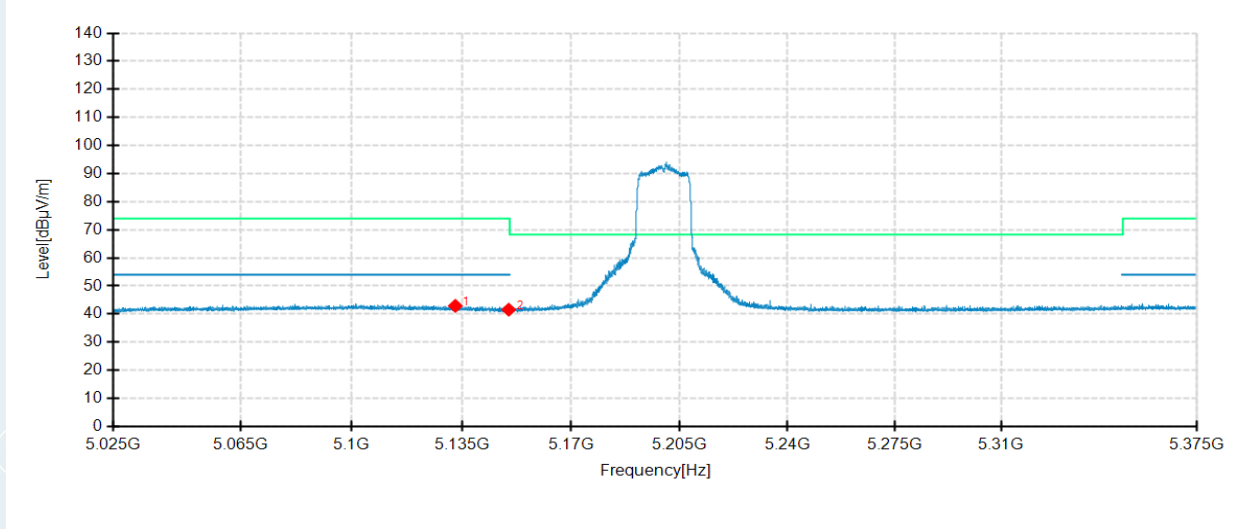


No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5126.3250	39.87	54.15	14.28	74.00	19.85	200	28	Horizontal	/
2	5150.0000	37.48	51.25	13.77	68.30	17.05	200	21	Horizontal	/
3	5202.9400	86.79	101.73	14.94	68.30	-33.43	100	142	Horizontal	No limit
1	5058.1800	39.98	54.44	14.46	74.00	19.56	100	218	Vertical	/
2	5150.0000	38.73	52.50	13.77	74.00	21.50	200	197	Vertical	/
3	5199.7900	92.90	107.88	14.98	68.30	-39.58	100	170	Vertical	No limit

802.11a mode/5200MHz-SISO

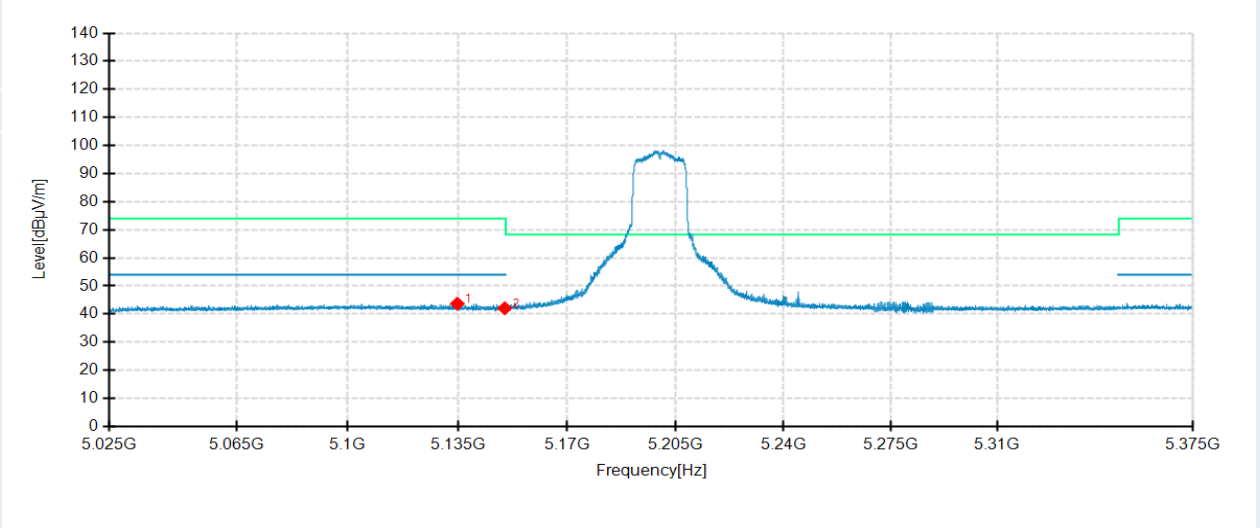
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5132.9400	28.77	42.91	14.14	54.00	11.09	100	142	Horizontal	/
2	5150.0000	27.79	41.56	13.77	54.00	12.44	100	142	Horizontal	/
1	5134.8650	29.59	43.69	14.10	54.00	10.31	100	142	Vertical	/
2	5150.0000	28.29	42.06	13.77	54.00	11.94	200	204	Vertical	/