

Test Report

Verified code: 328181

Report No.: E202112291004-12

Customer: Autel Intelligent Tech. Corp., Ltd.

Address: 7th-8th, 10th Floor, Bldg. B1, Zhiyuan, Xueyuan Rd. Xili, Nanshan, Shenzhen, 518055
China

Sample Name: Professional Key Tool

Sample Model: MaxiIM KM100

Receive Sample Date: Jan.06,2022

Test Date: Jan.10,2022 ~ Apr.08,2022

Reference Document: CFR 47, FCC Parts 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: 2022-04-18

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REPORT ISSUED HISTORY

Report Version	Report No.	Description	Compile Date
1.0	E202112291004-12	Original Issue	2022/04/09

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1. TEST RESULT SUMMARY

Standard	Item	Limit / Severity	Result
CFR 47, FCC Parts 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 one antenna. The antenna is Internal antenna.

The max gain of antenna is 2.6dBi, 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: Autel Intelligent Tech. Corp., Ltd.
Address: 7th-8th, 10th Floor, Bldg. B1, Zhiyuan, Xueyuan Rd. Xili, Nanshan, Shenzhen, 518055 China

2.2. MANUFACTURER

Name: Autel Intelligent Tech. Corp., Ltd.
Address: 7th-8th, 10th Floor, Bldg. B1, Zhiyuan, Xueyuan Rd. Xili, Nanshan, Shenzhen, 518055 China

2.3. FACTORY

Name: Autel Intelligent Technology Corp., Ltd. Guangming Branch
Address: 7F&6F, East Wing, Building 2, and 6F of Electronical Building, Yanxiang Industrial Zone, Gaoxin Rd, Dongzhou Community of Guangming New District, Shenzhen

2.4. BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Product Name: Professional Key Tool
Product Model: MaxiIM KM100
Adding Model: /
FCC ID: WQ8IMKM100
Trade Name: AUTEL
Power Supply: 5Vdc power supplied by adapter
3.85Vdc power supplied by Rechargeable Li-ion battery
Adapter Specification: Model: GME10C-050200FUu
Input: 100-240V~50-60Hz 0.28A
Output: 5.0V $\overline{\text{---}}$ 2A 10W
Model: IBQ088GA
Battery Specification: Rated voltage: 3.85Vdc
Limited charge voltage: 4.4Vdc
Rated capacity: 4950mAh, 19.06Wh
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 2.6dBi gain (Max.)
U-NII-3:
Antenna 1 with 2.6dBi gain (Max.)
Number Of Channel: U-NII-1:
IEEE 802.11a / n HT20 / ac VHT20: 4 Channels
IEEE 802.11n HT40 / ac VHT40: 2 Channels
IEEE 802.11ac VHT80: 1 Channel

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

Transmit Power: IEEE 802.11a: 20MHz
 IEEE 802.11n HT20: 20MHz
 IEEE 802.11n HT40: 40MHz
 IEEE 802.11ac VHT20: 20MHz
 IEEE 802.11ac VHT40: 40MHz
 IEEE 802.11ac VHT80: 80MHz

Temperature Range: U-NII-1:
 12.00dBm for IEEE 802.11a
 11.68dBm for IEEE 802.11n HT20
 10.24dBm for IEEE 802.11ac VHT20
 12.33dBm for IEEE 802.11n HT40
 11.82dBm for IEEE 802.11ac VHT40
 11.34dBm for IEEE 802.11ac VHT80

Hardware Version: U-NII-3:
 10.07dBm for IEEE 802.11a
 9.59dBm for IEEE 802.11n HT20
 9.85dBm for IEEE 802.11ac VHT20
 9.43dBm for IEEE 802.11n HT40
 9.32dBm for IEEE 802.11ac VHT40
 9.23dBm for IEEE 802.11ac VHT80

Software Version: 0°C~55°C

Sample submitting way: SM2031_MAIN_V5

Sample No: V1.20.24

Note: ■Provided by customer □Sampling

Sample No: E202112291004-0002, E202112291004-0003

Note: /

2.5. TEST OPERATION MODE

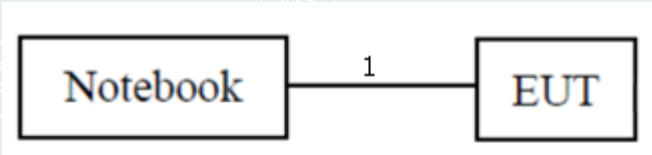
Mode No.	Description of the modes
1	5G Wi-Fi TX mode

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
Notebook	LENOVO	TianYi 310-14ISK	MP18DLC6	/
Cable				
1	/	/	/	Unshielded 1.0m (USB Cable)

2.7. CONFIGURATION OF SYSTEM UNDER TEST



Test software:

Software version
ADB

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Power Setting:

Mode	Frequency (MHz)	Power Setting
IEEE 802.11a	5180	13
	5200	13
	5240	12
	5745	12
	5785	12
	5825	12

Mode	Frequency (MHz)	Power Setting	Mode	Frequency (MHz)	Power Setting
IEEE 802.11n HT20	5180	13	IEEE 802.11ac VHT20	5180	12
	5200	13		5200	12
	5240	11		5240	10
	5745	12		5745	12
	5785	12		5785	12
	5825	12		5825	12

Mode	Frequency (MHz)	Power Setting	Mode	Frequency (MHz)	Power Setting
IEEE 802.11n HT40	5190	13	IEEE 802.11ac VHT40	5190	13
	5230	13		5230	13
	5755	11		5755	11
	5795	11		5795	11

Mode	Frequency (MHz)	Power Setting	Frequency (MHz)	Power Setting
IEEE 802.11ac VHT80	5210	13	5775	11

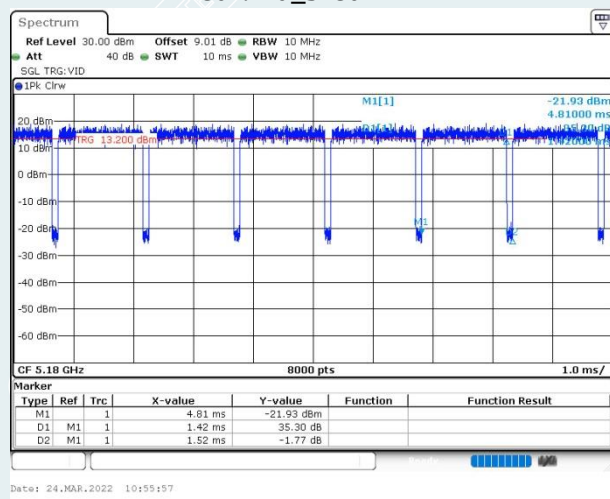
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2.8. DUTY CYCLE

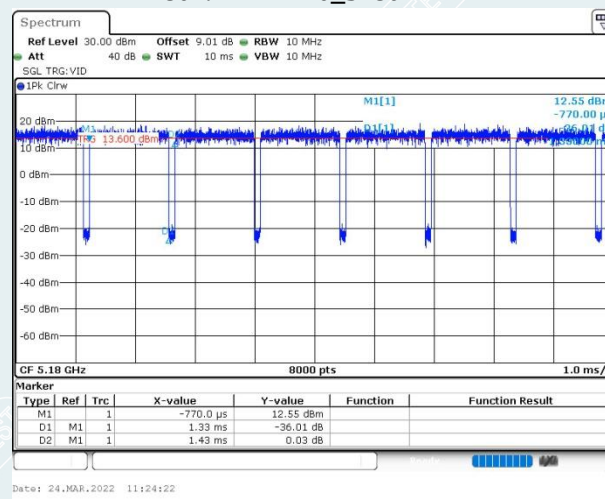
EUT Name	Professional Key Tool	Model	MaxiIM KM100
Environmental Conditions	23.5°C/48%RH	Test Voltage	DC 3.85V
Tested By	Lu Wei	Tested Date	2022/03/24

Duty Cycle Calculation						
	Mode	ON Time(ms)	Total Time(ms)	Duty Cycle	Duty Factor (dB)	T(s)
duty cycle	802.11a	1.42	1.52	93.42%	0.30	0.00142
	802.11n HT20	1.33	1.43	93.01%	0.31	0.00133
	802.11n HT40	0.66	0.77	85.71%	0.67	0.00066
	802.11ac VHT20	1.34	1.44	93.06%	0.31	0.00134
	802.11ac VHT40	0.67	0.77	87.01%	0.60	0.00067
	802.11ac VHT80	0.33	0.43	76.74%	1.15	0.00033

802.11a_5180MHz

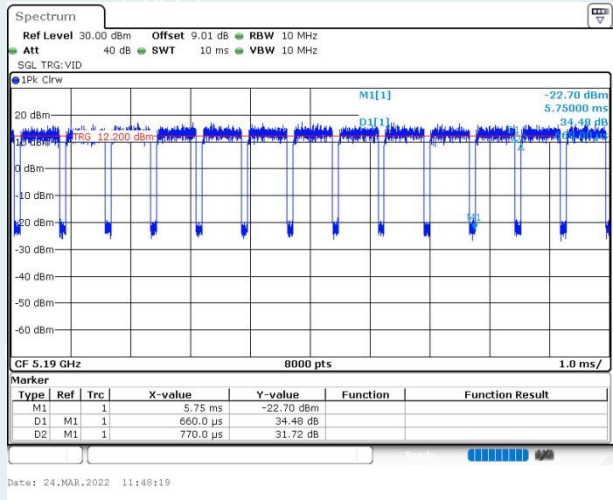


802.11n HT20_5180MHz

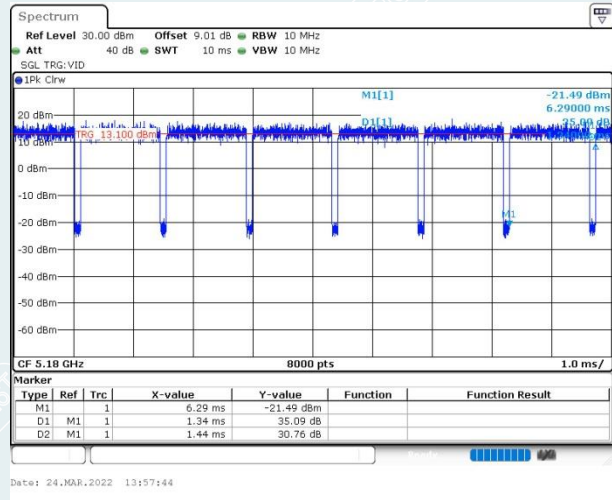


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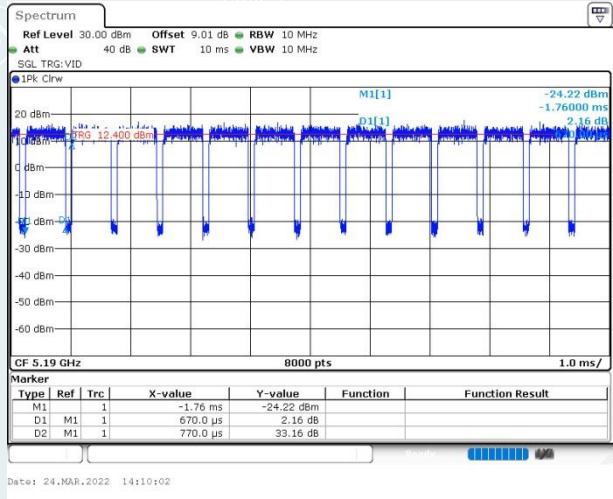
802.11n HT40_5190MHz



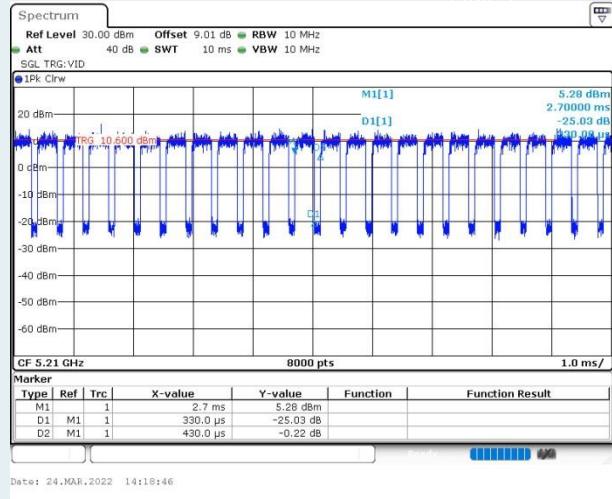
802.11ac VHT20_5180MHz



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. : 518000

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)

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,
U<http://www.grgtest.com>U

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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-2ANT		
Loop Antenna	TESEQ	HLA6121	52599	2022-04-21
Test Receiver	R&S	ESR7	102444	2022-09-22
Preamplifier	EMEC	EM330	/	2023-03-05
Bi-log Antenna	TESEQ	CBL6143A	32399	2022-11-25
Spectrum Analyzer	Agilent	N9020B	MY59050667	2022-12-10
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 150 kHz 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.

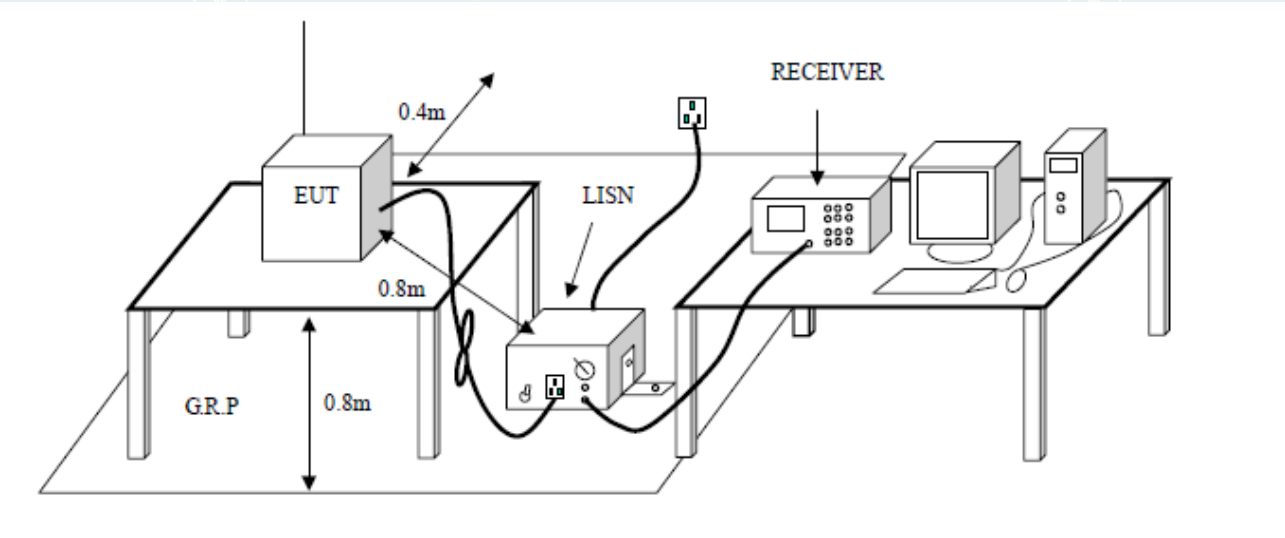
- Use serial board or connecting line to make EUT and notebook to communicate, according to the actual demand to make EUT emit fixed frequency signal.

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)

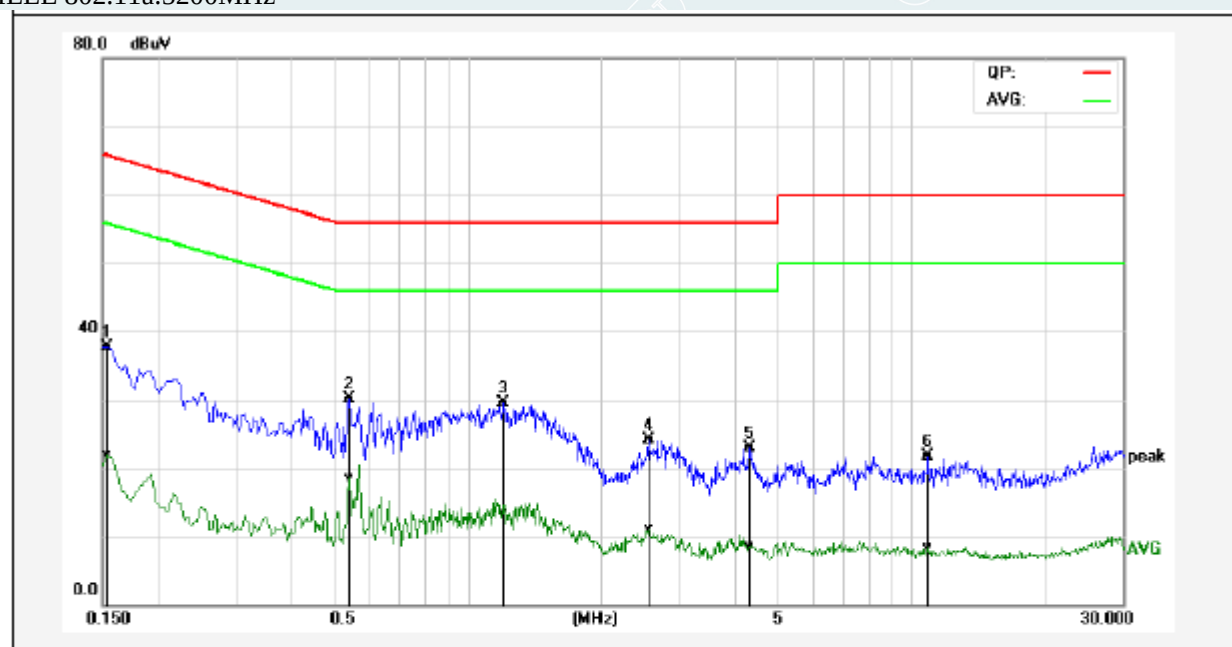
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5.5. TEST RESULTS

All models were pretested and only the worst modes and channels were recorded in this report. (IEEE 802.11a 5200MHz)

EUT Name	Professional Key Tool	Model	MaxiIM KM100
Environmental Conditions	21.7°C/41%RH	Test Mode	Mode 1
Power supply	AC 120V/60Hz	Test Engineer	Tang Shenghui
Test Date	2022/04/08	Sample No.	E202112291004-0002

IEEE 802.11a:5200MHz

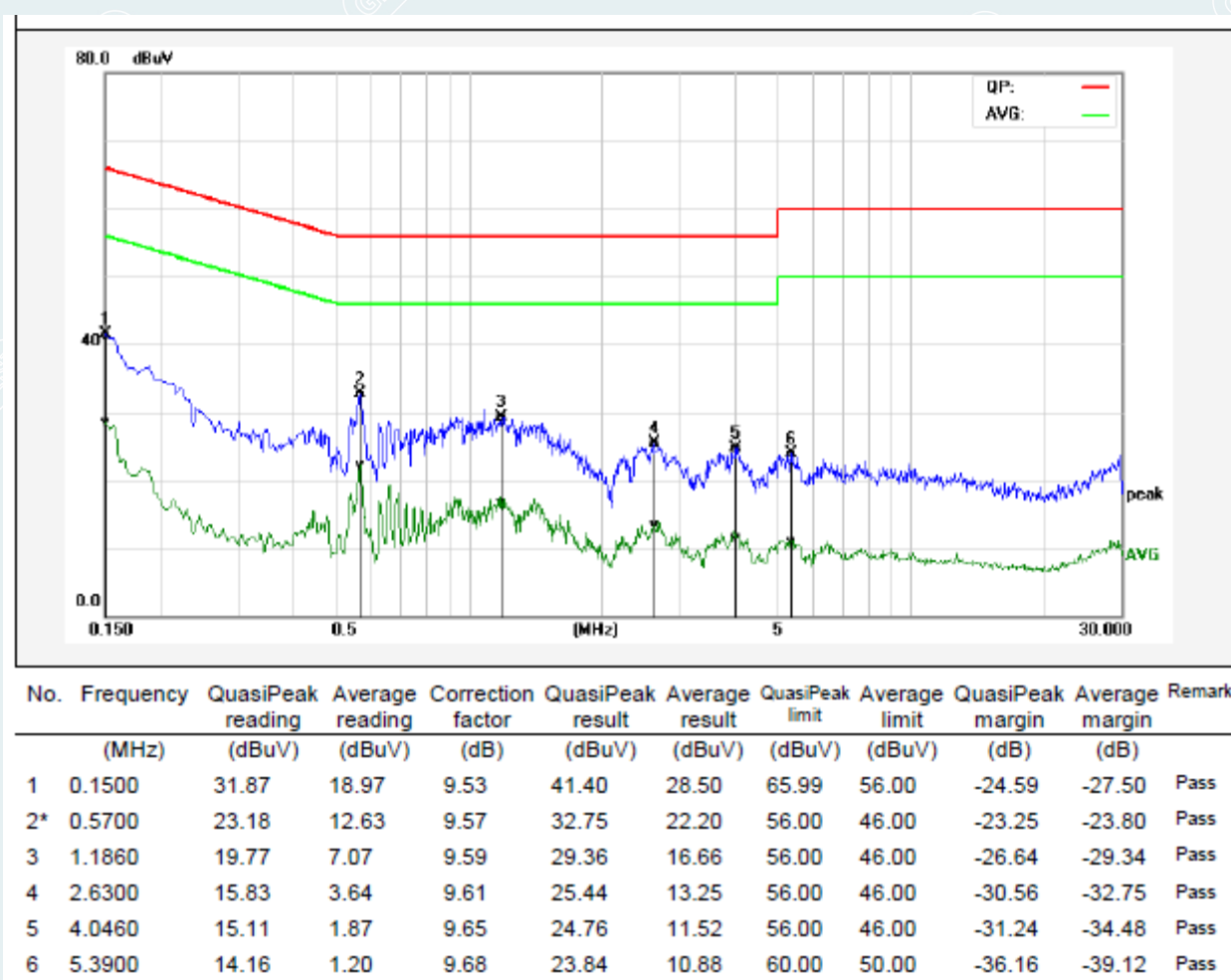


No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1	0.1539	28.21	12.36	9.51	37.72	21.87	65.78	55.79	-28.06	-33.92	Pass
2*	0.5420	20.35	8.86	9.69	30.04	18.55	56.00	46.00	-25.96	-27.45	Pass
3	1.2059	19.79	3.78	9.62	29.41	13.40	56.00	46.00	-26.59	-32.60	Pass
4	2.5620	14.57	1.48	9.60	24.17	11.08	56.00	46.00	-31.83	-34.92	Pass
5	4.3340	13.33	-1.11	9.64	22.97	8.53	56.00	46.00	-33.03	-37.47	Pass
6	10.9460	11.84	-1.47	9.81	21.65	8.34	60.00	50.00	-38.35	-41.66	Pass

Note: L = Live Line

EUT Name	Professional Key Tool	Model	MaxiIM KM100
Environmental Conditions	21.7°C/41%RH	Test Mode	Mode 1
Power supply	AC 120V/60Hz	Test Engineer	Tang Shenghui
Test Date	2022/04/08	Sample No.	E202112291004-0002

IEEE 802.11a:5200MHz



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(kHz)	300
0.490-1.705	24000/F(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.

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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: $E = -27 - 20\log 3 + 104.8 = 68.3 \text{ (dB}\mu\text{V/m)}$.
- (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*log(3/1)=83.54 (dB μ V/m).
 The Avg Limit=54+20*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*log(3/1)=77.84 (dB μ V/m).

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

6.3. TEST SETUP

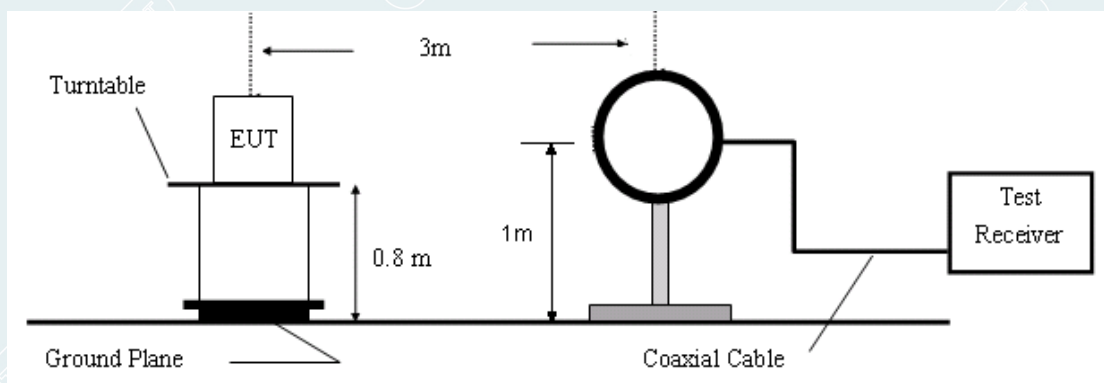


Figure 1. 9kHz to 30MHz radiated emissions test configuration

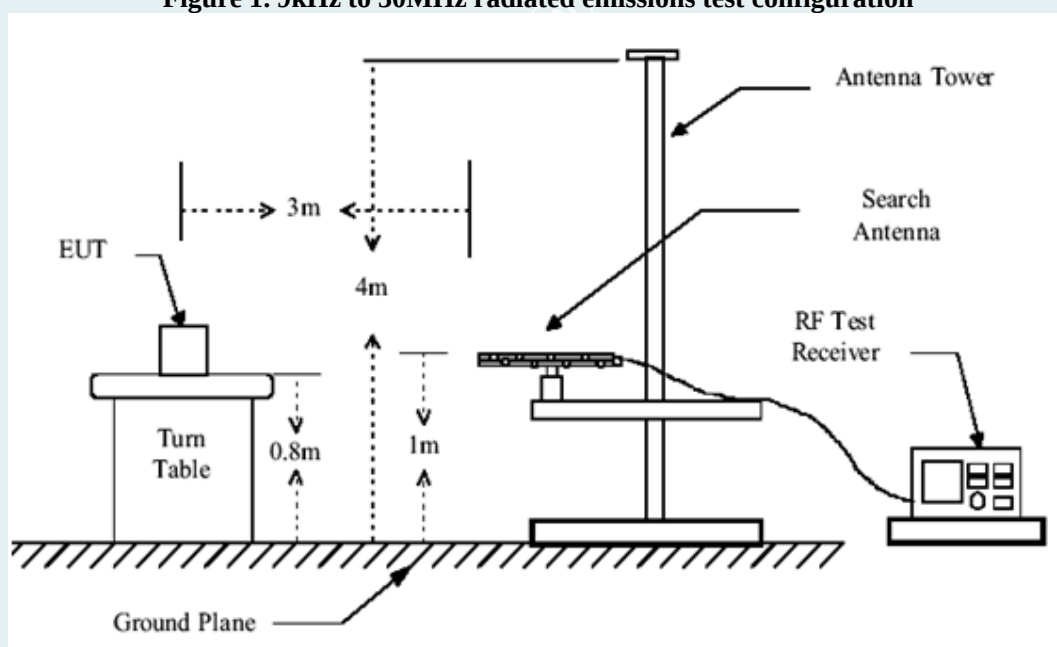


Figure 2. 30MHz to 1GHz radiated emissions test configuration

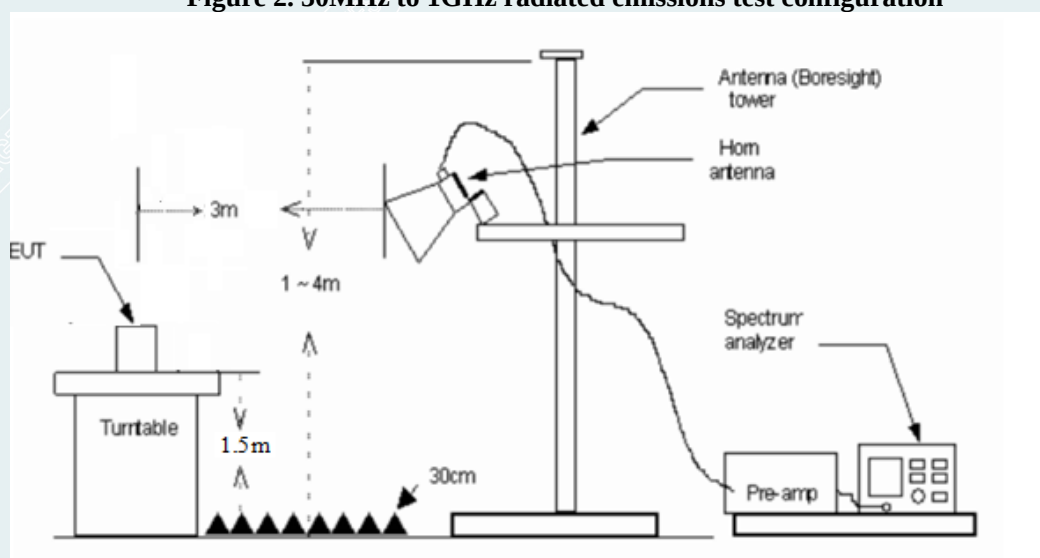


Figure 3. 1GHz-18GHz radiated emissions test configuration

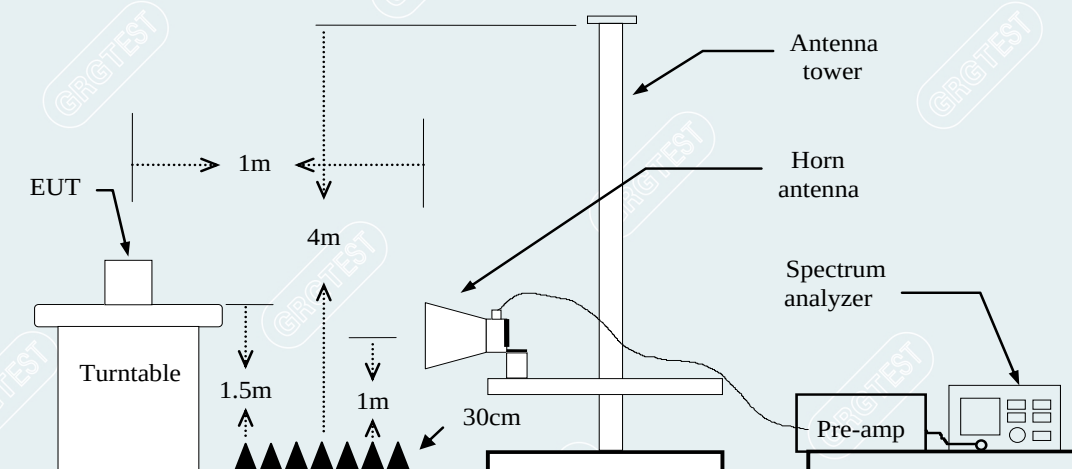


Figure 4. Above 18GHz radiated emissions test configuration

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-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. (IEEE 802.11a 5180MHz)

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:24.1°C/51%RH

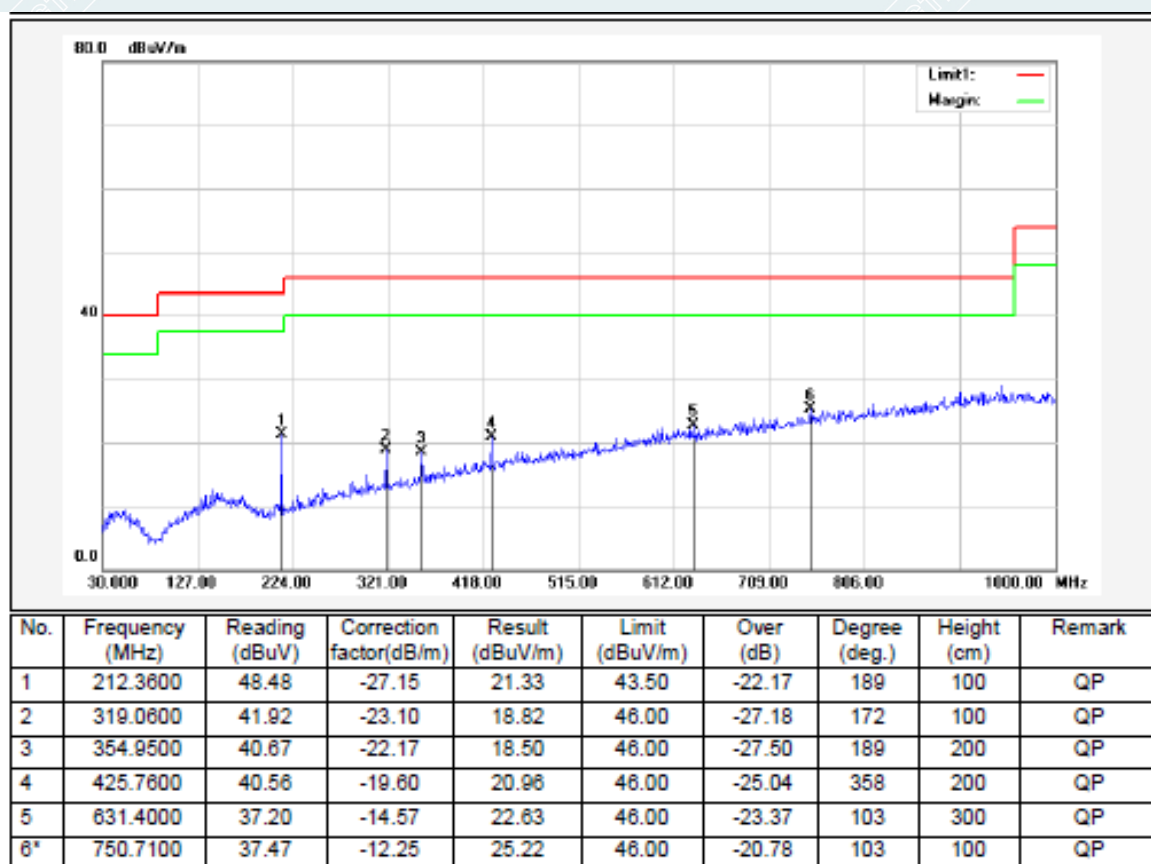
Test Engineer: Tang Shenghui

Frequency:5180MHz

Power supply:DC 3.85V

Test Date: 2022-04-01

Polarity: Horizontal



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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:24.1°C/51%RH

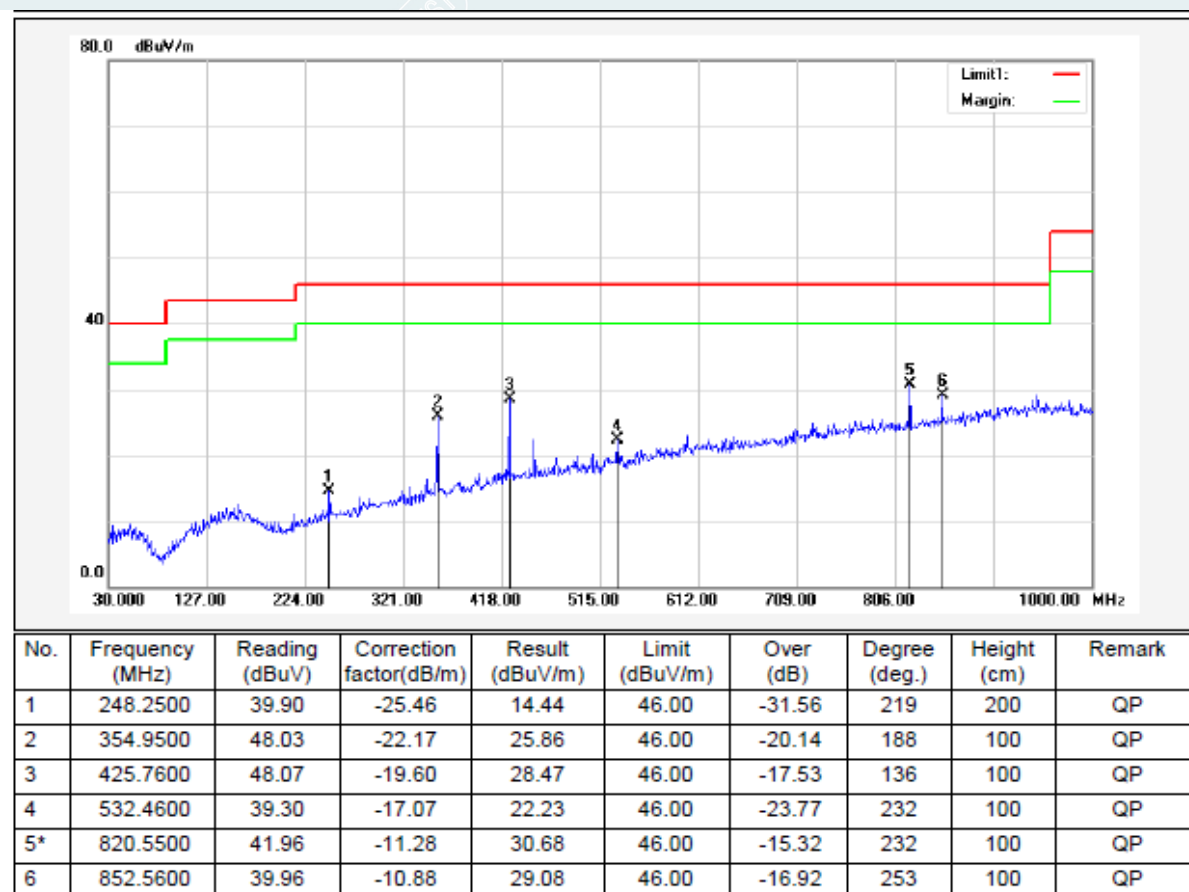
Test Engineer: Tang Shenghui

Frequency:5180MHz

Power supply:DC 3.85V

Test Date: 2022-04-01

Polarity: Vertical

**Remark:**

- 1 No emission found between lowest internal used/generated frequency to 30MHz.
- 2 Radiated emissions measured in frequency range from 9kHz 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

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5180MHz

Power supply:DC 3.85V

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	1254.4000	56.74	35.07	-21.67	68.30	33.23	200	76	Horizontal
2	2296.0000	59.83	41.14	-18.69	74.00	32.86	200	170	Horizontal
3	2532.4000	58.84	41.30	-17.54	68.30	27.00	200	84	Horizontal
4	4048.0000	53.64	39.18	-14.46	74.00	34.82	200	287	Horizontal
5	8129.7000	47.51	45.08	-2.43	74.00	28.92	100	267	Horizontal
6	14684.6000	41.37	49.73	8.36	68.30	18.57	100	142	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	1404.4000	56.25	35.14	-21.11	74.00	38.86	100	267	Vertical
2	2437.6000	61.91	42.89	-19.02	68.30	25.41	100	128	Vertical
3	3453.4000	57.64	41.62	-16.02	68.30	26.68	200	194	Vertical
4	6997.0000	47.87	44.86	-3.01	68.30	23.44	100	305	Vertical
5	9130.7000	46.80	47.26	0.46	74.00	26.74	100	37	Vertical
6	10759.8000	45.60	48.17	2.57	74.00	25.83	200	344	Vertical

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5200MHz

Power supply:DC 3.85V

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	1252.0000	56.22	34.58	-21.64	68.30	33.72	200	213	Horizontal
2	2438.2000	58.57	39.38	-19.19	68.30	28.92	100	354	Horizontal
3	4473.4000	54.01	41.52	-12.49	68.30	26.78	100	335	Horizontal
4	5901.4000	50.30	47.63	-2.67	68.30	20.67	100	93	Horizontal
5	6992.2000	47.89	44.91	-2.98	68.30	23.39	200	101	Horizontal
6	10160.3000	44.92	46.88	1.96	68.30	21.42	200	191	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	1049.8000	58.30	35.61	-22.69	74.00	38.39	100	314	Vertical
2	1974.4000	54.31	34.24	-20.07	68.30	34.06	200	220	Vertical
3	2435.8000	56.87	37.87	-19.00	68.30	30.43	100	15	Vertical
4	3466.6000	58.04	42.15	-15.89	68.30	26.15	200	183	Vertical
5	8164.9000	46.73	44.53	-2.20	74.00	29.47	100	114	Vertical
6	14692.3000	41.58	48.77	7.19	68.30	19.53	200	31	Vertical

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5240MHz

Power supply:DC 3.85V

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	1254.4000	56.70	35.03	-21.67	68.30	33.27	100	330	Horizontal
2	2532.4000	54.73	37.19	-17.54	68.30	31.11	100	258	Horizontal
3	3784.0000	54.10	38.89	-15.21	74.00	35.11	100	227	Horizontal
4	5844.4000	50.85	48.02	-2.83	68.30	20.28	100	133	Horizontal
5	9237.4000	46.04	46.40	0.36	68.30	21.90	100	299	Horizontal
6	14665.9000	40.94	49.33	8.39	68.30	18.97	200	135	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	1361.2000	55.85	34.61	-21.24	74.00	39.39	100	260	Vertical
2	2438.2000	57.94	38.91	-19.03	68.30	29.39	100	359	Vertical
3	3493.0000	57.31	41.67	-15.64	68.30	26.63	100	216	Vertical
4	5909.8000	50.86	47.55	-3.31	68.30	20.75	200	64	Vertical
5	9187.9000	45.97	47.01	1.04	74.00	26.99	100	283	Vertical
6	11402.2000	43.40	47.88	4.48	74.00	26.12	200	248	Vertical

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5745MHz

Power supply:DC 3.85V

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	1050.4000	57.30	32.82	-24.48	74.00	41.18	100	228	Horizontal
2	1518.4000	55.53	33.35	-22.18	74.00	40.65	200	176	Horizontal
3	2863.6000	54.56	37.75	-16.81	74.00	36.25	200	102	Horizontal
4	3830.2000	56.65	41.64	-15.01	74.00	32.36	100	265	Horizontal
5	6998.8000	47.60	44.82	-2.78	68.30	23.48	100	192	Horizontal
6	9169.2000	46.02	46.53	0.51	74.00	27.47	100	299	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	1096.6000	57.01	35.36	-21.65	74.00	38.64	200	229	Vertical
2	1400.8000	56.62	35.56	-21.06	74.00	38.44	100	128	Vertical
3	2529.4000	63.57	45.10	-18.47	68.30	23.20	200	227	Vertical
4	3830.2000	60.72	45.19	-15.53	74.00	28.81	100	183	Vertical
5	4997.8000	50.30	43.06	-7.24	74.00	30.94	100	2	Vertical
6	9800.6000	45.45	46.86	1.41	68.30	21.44	100	64	Vertical

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Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5785MHz

Power supply:DC 3.85V

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	1292.8000	56.23	34.13	-22.10	68.30	34.17	200	71	Horizontal
2	2521.0000	60.68	43.01	-17.67	68.30	25.29	200	98	Horizontal
3	3856.6000	56.42	41.61	-14.81	74.00	32.39	100	259	Horizontal
4	6982.6000	48.52	45.24	-3.28	68.30	23.06	200	136	Horizontal
5	9176.9000	46.80	47.41	0.61	74.00	26.59	200	206	Horizontal
6	11403.3000	43.07	47.37	4.30	74.00	26.63	200	121	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	1061.8000	57.70	35.28	-22.42	74.00	38.72	100	281	Vertical
2	1375.6000	56.12	34.95	-21.17	74.00	39.05	100	295	Vertical
3	2617.0000	57.21	39.02	-18.19	68.30	29.28	100	211	Vertical
4	3856.6000	60.12	44.97	-15.15	74.00	29.03	200	227	Vertical
5	9174.7000	45.72	46.70	0.98	74.00	27.30	100	360	Vertical
6	14819.9000	41.49	48.72	7.23	68.30	19.58	100	187	Vertical

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5825MHz

Power supply:DC 3.85V

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	1316.8000	56.71	34.39	-22.32	74.00	39.61	100	322	Horizontal
2	2199.4000	55.04	36.74	-18.30	68.30	31.56	200	354	Horizontal
3	2788.6000	55.30	38.30	-17.00	74.00	35.70	100	56	Horizontal
4	5043.4000	50.76	43.60	-7.16	74.00	30.40	200	197	Horizontal
5	6997.0000	48.00	45.17	-2.83	68.30	23.13	100	238	Horizontal
6	10891.8000	43.82	47.75	3.93	74.00	26.25	100	329	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	1050.4000	58.98	36.31	-22.67	74.00	37.69	200	319	Vertical
2	1409.2000	56.02	34.84	-21.18	74.00	39.16	100	302	Vertical
3	2723.8000	54.74	37.25	-17.49	74.00	36.75	200	224	Vertical
4	3883.6000	60.14	45.09	-15.05	74.00	28.91	100	191	Vertical
5	9125.2000	46.83	47.17	0.34	74.00	26.83	100	27	Vertical
6	11438.5000	43.85	47.96	4.11	74.00	26.04	100	87	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT20

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5180MHz

Power supply:DC 3.85V

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	1363.6000	57.12	34.42	-22.70	74.00	39.58	100	154	Horizontal
2	2528.8000	55.43	37.85	-17.58	68.30	30.45	100	221	Horizontal
3	4425.4000	53.03	40.91	-12.12	68.30	27.39	200	341	Horizontal
4	5785.0000	51.53	48.09	-3.44	68.30	20.21	200	185	Horizontal
5	7000.0000	48.50	45.76	-2.74	68.30	22.54	100	221	Horizontal
6	11492.4000	43.57	47.54	3.97	74.00	26.46	200	327	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	1397.8000	57.60	36.54	-21.06	74.00	37.46	200	294	Vertical
2	1937.8000	60.09	39.31	-20.78	68.30	28.99	100	359	Vertical
3	2543.8000	56.45	38.14	-18.31	68.30	30.16	100	54	Vertical
4	3453.4000	58.05	42.03	-16.02	68.30	26.27	100	208	Vertical
5	5898.4000	50.20	47.74	-2.46	68.30	20.56	200	126	Vertical
6	11302.1000	43.77	48.06	4.29	74.00	25.94	200	58	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT20

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5200MHz

Power supply:DC 3.85V

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	1246.0000	56.98	35.25	-21.73	68.30	33.05	200	177	Horizontal
2	2536.6000	59.83	42.34	-17.49	68.30	25.96	100	294	Horizontal
3	3466.6000	54.82	39.43	-15.39	68.30	28.87	200	251	Horizontal
4	5894.2000	50.56	47.99	-2.57	68.30	20.31	100	19	Horizontal
5	9257.2000	46.20	46.25	0.05	68.30	22.05	100	139	Horizontal
6	11418.7000	43.72	48.02	4.30	74.00	25.98	200	211	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	1369.6000	56.83	35.63	-21.20	74.00	38.37	100	229	Vertical
2	2330.8000	55.34	37.34	-18.00	74.00	36.66	100	8	Vertical
3	3466.6000	57.77	41.88	-15.89	68.30	26.42	200	180	Vertical
4	5898.4000	51.05	48.59	-2.46	68.30	19.71	100	208	Vertical
5	9469.5000	47.03	47.91	0.88	74.00	26.09	100	0	Vertical
6	11312.0000	43.41	47.63	4.22	74.00	26.37	100	153	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT20

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5240MHz

Power supply:DC 3.85V

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	1016.2000	57.66	33.67	-23.99	74.00	40.33	100	183	Horizontal
2	1938.4000	60.01	40.18	-19.83	68.30	28.12	100	56	Horizontal
3	2540.2000	54.95	37.50	-17.45	68.30	30.80	100	246	Horizontal
4	3713.2000	54.22	39.44	-14.78	74.00	34.56	200	28	Horizontal
5	5900.8000	50.71	48.10	-2.61	68.30	20.20	200	88	Horizontal
6	10880.8000	43.62	47.44	3.82	74.00	26.56	200	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	1064.2000	57.66	35.30	-22.36	74.00	38.70	100	268	Vertical
2	1380.4000	56.35	35.20	-21.15	74.00	38.80	200	91	Vertical
3	2335.0000	55.00	37.06	-17.94	74.00	36.94	100	296	Vertical
4	3493.0000	57.10	41.46	-15.64	68.30	26.84	200	181	Vertical
5	6988.0000	48.84	45.63	-3.21	68.30	22.67	200	31	Vertical
6	10402.3000	45.20	47.92	2.72	68.30	20.38	100	338	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT20

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5745MHz

Power supply:DC 3.85V

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	1252.6000	56.41	34.76	-21.65	68.30	33.54	200	248	Horizontal
2	2004.4000	55.37	34.94	-20.43	68.30	33.36	100	18	Horizontal
3	2545.0000	55.11	37.71	-17.40	68.30	30.59	200	67	Horizontal
4	3830.2000	57.62	42.61	-15.01	74.00	31.39	200	131	Horizontal
5	8126.4000	46.81	44.41	-2.40	74.00	29.59	200	106	Horizontal
6	10806.0000	44.96	47.77	2.81	74.00	26.23	100	222	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	1090.0000	57.21	35.42	-21.79	74.00	38.58	100	287	Vertical
2	2146.6000	56.45	36.83	-19.62	68.30	31.47	200	102	Vertical
3	2528.8000	56.79	38.31	-18.48	68.30	29.99	200	354	Vertical
4	3830.2000	60.58	45.05	-15.53	74.00	28.95	200	229	Vertical
5	8144.0000	47.11	45.32	-1.79	74.00	28.68	200	270	Vertical
6	14766.0000	41.36	49.01	7.65	68.30	19.29	200	115	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT20

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5785MHz

Power supply:DC 3.85V

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	1000.0000	57.47	33.72	-23.75	74.00	40.28	200	223	Horizontal
2	1942.6000	54.73	34.97	-19.76	68.30	33.33	100	309	Horizontal
3	2533.6000	57.57	40.04	-17.53	68.30	28.26	100	341	Horizontal
4	3883.6000	56.56	41.65	-14.91	74.00	32.35	100	265	Horizontal
5	8654.4000	46.59	45.08	-1.51	68.30	23.22	100	155	Horizontal
6	11403.3000	42.89	47.19	4.30	74.00	26.81	200	34	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	1049.8000	58.11	35.42	-22.69	74.00	38.58	200	359	Vertical
2	1324.6000	57.19	35.04	-22.15	74.00	38.96	200	131	Vertical
3	2263.0000	54.94	36.21	-18.73	74.00	37.79	100	166	Vertical
4	3883.6000	59.91	44.86	-15.05	74.00	29.14	100	182	Vertical
5	8838.1000	47.58	46.36	-1.22	68.30	21.94	200	5	Vertical
6	13899.2000	41.16	48.29	7.13	68.30	20.01	200	32	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT20

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5825MHz

Power supply:DC 3.85V

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	1292.2000	56.64	34.55	-22.09	68.30	33.75	200	61	Horizontal
2	2228.2000	55.00	36.74	-18.26	74.00	37.26	100	181	Horizontal
3	3883.6000	55.87	40.96	-14.91	74.00	33.04	100	269	Horizontal
4	5065.6000	50.26	43.26	-7.00	74.00	30.74	200	213	Horizontal
5	6997.0000	47.80	44.97	-2.83	68.30	23.33	100	219	Horizontal
6	11167.9000	44.28	47.70	3.42	74.00	26.30	100	234	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	1050.4000	58.03	35.36	-22.67	74.00	38.64	200	330	Vertical
2	1369.0000	55.98	34.77	-21.21	74.00	39.23	200	82	Vertical
3	1999.6000	55.12	35.43	-19.69	68.30	32.87	200	248	Vertical
4	2404.6000	56.22	37.65	-18.57	68.30	30.65	100	126	Vertical
5	3883.6000	60.19	45.14	-15.05	74.00	28.86	100	183	Vertical
6	9093.3000	46.87	46.69	-0.18	74.00	27.31	100	312	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT40

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5190MHz

Power supply:DC 3.85V

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	1215.4000	57.35	34.79	-22.56	74.00	39.21	100	87	Horizontal
2	2266.0000	55.10	36.70	-18.40	74.00	37.30	200	202	Horizontal
3	2527.0000	55.53	37.93	-17.60	68.30	30.37	200	260	Horizontal
4	4125.4000	54.81	40.74	-14.07	74.00	33.26	100	352	Horizontal
5	5903.8000	50.41	47.52	-2.89	68.30	20.78	200	86	Horizontal
6	9190.1000	45.80	46.57	0.77	74.00	27.43	100	262	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	1049.8000	58.33	35.64	-22.69	74.00	38.36	200	316	Vertical
2	3060.4000	53.90	38.00	-15.90	68.30	30.30	100	11	Vertical
3	3460.0000	57.86	41.91	-15.95	68.30	26.39	200	189	Vertical
4	5844.4000	50.77	47.74	-3.03	68.30	20.56	200	300	Vertical
5	6992.8000	47.69	44.59	-3.10	68.30	23.71	200	151	Vertical
6	9164.8000	45.32	46.26	0.94	74.00	27.74	200	176	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT40

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5230MHz

Power supply:DC 3.85V

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	1257.4000	57.15	35.45	-21.70	68.30	32.85	200	348	Horizontal
2	2118.4000	54.83	34.80	-20.03	68.30	33.50	200	240	Horizontal
3	2750.8000	56.04	38.43	-17.61	74.00	35.57	100	42	Horizontal
4	3635.2000	54.34	38.56	-15.78	74.00	35.44	100	58	Horizontal
5	5900.8000	49.98	47.37	-2.61	68.30	20.93	200	208	Horizontal
6	6986.8000	48.35	45.20	-3.15	68.30	23.10	100	77	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	1360.0000	57.29	36.04	-21.25	74.00	37.96	200	78	Vertical
2	2000.2000	55.04	35.36	-19.68	68.30	32.94	200	146	Vertical
3	3460.0000	57.43	41.48	-15.95	68.30	26.82	100	169	Vertical
4	5900.2000	50.36	47.90	-2.46	68.30	20.40	200	298	Vertical
5	6981.4000	48.31	44.95	-3.36	68.30	23.35	200	151	Vertical
6	8476.2000	46.87	44.83	-2.04	74.00	29.17	200	30	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT40

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5755MHz

Power supply:DC 3.85V

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	1236.4000	57.07	35.08	-21.99	74.00	38.92	200	176	Horizontal
2	2532.4000	55.30	37.76	-17.54	68.30	30.54	200	26	Horizontal
3	3701.8000	54.92	40.17	-14.75	74.00	33.83	100	37	Horizontal
4	5840.2000	51.02	48.14	-2.88	68.30	20.16	100	114	Horizontal
5	6997.0000	47.49	44.66	-2.83	68.30	23.64	200	257	Horizontal
6	9173.6000	45.64	46.21	0.57	74.00	27.79	200	185	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	1049.8000	57.74	35.05	-22.69	74.00	38.95	200	343	Vertical
2	1366.6000	56.26	35.04	-21.22	74.00	38.96	100	255	Vertical
3	3460.0000	56.92	40.97	-15.95	68.30	27.33	200	183	Vertical
4	5846.2000	50.38	47.37	-3.01	68.30	20.93	100	72	Vertical
5	6621.4000	49.57	45.26	-4.31	68.30	23.04	200	164	Vertical
6	9176.9000	45.64	46.63	0.99	74.00	27.37	200	253	Vertical

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

Mode: Mode 1/ IEEE 802.11n HT40

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5795MHz

Power supply:DC 3.85V

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	1243.0000	56.90	35.09	-21.81	68.30	33.21	100	127	Horizontal
2	2207.2000	55.10	36.82	-18.28	74.00	37.18	100	295	Horizontal
3	3863.2000	56.32	41.49	-14.83	74.00	32.51	100	260	Horizontal
4	6998.2000	48.65	45.85	-2.80	68.30	22.45	200	287	Horizontal
5	8738.0000	47.65	46.47	-1.18	68.30	21.83	200	233	Horizontal
6	10813.7000	43.63	46.56	2.93	74.00	27.44	200	195	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	1050.4000	58.05	35.38	-22.67	74.00	38.62	200	355	Vertical
2	1399.6000	56.68	35.63	-21.05	74.00	38.37	200	355	Vertical
3	3863.2000	60.55	45.42	-15.13	74.00	28.58	100	188	Vertical
4	6612.4000	49.17	44.86	-4.31	68.30	23.44	100	300	Vertical
5	9180.2000	45.80	46.81	1.01	74.00	27.19	100	316	Vertical
6	11293.3000	43.67	47.95	4.28	74.00	26.05	200	119	Vertical

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

Mode: Mode 1/ IEEE 802.11ac VHT80

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5210MHz

Power supply:DC 3.85V

Test Date: 2022-03-21

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1252.6000	57.17	35.52	-21.65	68.30	32.78	100	183	Horizontal
2	1894.0000	56.80	36.22	-20.58	68.30	32.08	200	77	Horizontal
3	2528.2000	57.09	39.50	-17.59	68.30	28.80	200	24	Horizontal
4	5845.6000	50.15	47.33	-2.82	68.30	20.97	200	0	Horizontal
5	9479.4000	45.80	46.23	0.43	74.00	27.77	200	64	Horizontal
6	11400.0000	43.51	47.81	4.30	74.00	26.19	100	199	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	1898.2000	61.39	39.52	-21.87	68.30	28.78	100	248	Vertical
2	2419.6000	57.23	38.45	-18.78	68.30	29.85	100	290	Vertical
3	3473.2000	56.63	40.80	-15.83	68.30	27.50	200	193	Vertical
4	7843.7000	46.73	43.58	-3.15	68.30	24.72	100	293	Vertical
5	10051.4000	45.30	46.74	1.44	68.30	21.56	200	297	Vertical
6	12288.8000	41.70	46.12	4.42	74.00	27.88	100	95	Vertical

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

Mode: Mode 1/ IEEE 802.11ac VHT80

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5775MHz

Power supply:DC 3.85V

Test Date: 2022-03-21

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1894.6000	60.09	39.53	-20.56	68.30	28.77	100	164	Horizontal
2	2534.8000	59.87	42.36	-17.51	68.30	25.94	200	92	Horizontal
3	3850.0000	56.43	41.65	-14.78	74.00	32.35	200	187	Horizontal
4	6997.6000	47.76	44.95	-2.81	68.30	23.35	100	55	Horizontal
5	9207.7000	45.42	46.20	0.78	68.30	22.10	200	156	Horizontal
6	12017.1000	42.65	46.97	4.32	74.00	27.03	200	302	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	1694.2000	54.38	32.83	-21.55	74.00	41.17	100	250	Vertical
2	2114.8000	56.37	36.48	-19.89	68.30	31.82	200	218	Vertical
3	2534.8000	57.59	39.18	-18.41	68.30	29.12	100	236	Vertical
4	3850.0000	60.72	45.54	-15.18	74.00	28.46	100	179	Vertical
5	8136.3000	46.82	45.01	-1.81	74.00	28.99	200	76	Vertical
6	11915.9000	42.77	47.27	4.50	74.00	26.73	200	161	Vertical

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

Above 18 GHz

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

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

Mode: Mode 1/ IEEE802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5180MHz

Power supply:DC 3.85V

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	18909.7000	56.84	45.66	-11.18	83.54	37.88	150	287	Horizontal
2	21503.5000	54.67	44.66	-10.01	77.84	33.18	150	341	Horizontal
3	23926.8000	54.22	45.88	-8.34	83.54	37.66	150	224	Horizontal
4	29652.3000	56.28	48.44	-7.84	77.84	29.40	150	351	Horizontal
5	37452.4000	55.23	50.02	-5.21	77.84	27.82	150	202	Horizontal
6	39771.2000	52.52	51.32	-1.20	77.84	26.52	150	127	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	20894.1000	54.57	44.26	-10.31	83.54	39.28	150	341	Vertical
2	24909.1000	53.59	45.61	-7.98	77.84	32.23	150	279	Vertical
3	26310.5000	53.41	45.74	-7.67	77.84	32.10	150	309	Vertical
4	28546.8000	56.72	48.64	-8.08	77.84	29.20	150	279	Vertical
5	32473.8000	57.61	48.95	-8.66	77.84	28.89	150	256	Vertical
6	37883.6000	53.53	49.91	-3.62	77.84	27.93	150	97	Vertical

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5200MHz

Power supply:DC 3.85V

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	19037.3000	56.19	45.10	-11.09	83.54	38.44	150	295	Horizontal
2	22979.7000	55.07	46.12	-8.95	83.54	37.42	150	136	Horizontal
3	25731.9000	54.07	46.02	-8.05	77.84	31.82	150	116	Horizontal
4	27891.2000	55.53	47.26	-8.27	77.84	30.58	150	211	Horizontal
5	32440.8000	58.40	49.79	-8.61	77.84	28.05	150	350	Horizontal
6	39733.8000	52.64	51.40	-1.24	77.84	26.44	150	191	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	18324.5000	56.30	44.75	-11.55	83.54	38.79	150	55	Vertical
2	20544.3000	54.81	44.35	-10.46	83.54	39.19	150	97	Vertical
3	24336.0000	53.88	45.70	-8.18	77.84	32.14	150	320	Vertical
4	28546.8000	56.72	48.64	-8.08	77.84	29.20	150	279	Vertical
5	34195.3000	58.16	49.17	-8.99	77.84	28.67	150	182	Vertical
6	38631.6000	53.68	51.25	-2.43	77.84	26.59	150	309	Vertical

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5240MHz

Power supply:DC 3.85V

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	18860.2000	56.52	45.29	-11.23	83.54	38.25	150	160	Horizontal
2	21323.1000	54.48	44.31	-10.17	83.54	39.23	150	256	Horizontal
3	24400.9000	53.94	45.78	-8.16	77.84	32.06	150	245	Horizontal
4	26658.1000	54.95	47.33	-7.62	77.84	30.51	150	129	Horizontal
5	34156.8000	58.62	49.62	-9.00	77.84	28.22	150	277	Horizontal
6	39233.3000	53.02	51.00	-2.02	77.84	26.84	150	341	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	18084.7000	56.69	45.06	-11.63	83.54	38.48	150	337	Vertical
2	19556.5000	55.94	45.05	-10.89	83.54	38.49	150	40	Vertical
3	23926.8000	54.11	45.77	-8.34	83.54	37.77	150	146	Vertical
4	27960.5000	55.75	47.44	-8.31	77.84	30.40	150	210	Vertical
5	32490.3000	57.55	48.87	-8.68	77.84	28.97	150	242	Vertical
6	39704.1000	52.91	51.64	-1.27	77.84	26.20	150	273	Vertical

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5745MHz

Power supply:DC 3.85V

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	18302.5000	56.62	45.06	-11.56	83.54	38.48	150	115	Horizontal
2	20233.0000	55.47	44.79	-10.68	83.54	38.75	150	338	Horizontal
3	22979.7000	54.72	45.77	-8.95	83.54	37.77	150	148	Horizontal
4	27334.6000	55.19	47.16	-8.03	77.84	30.68	150	305	Horizontal
5	32333.0000	57.81	49.17	-8.64	77.84	28.67	150	30	Horizontal
6	39685.4000	52.60	51.32	-1.28	77.84	26.52	150	156	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	18844.8000	56.92	45.67	-11.25	83.54	37.87	150	64	Vertical
2	20993.1000	54.10	43.79	-10.31	83.54	39.75	150	245	Vertical
3	23826.7000	54.19	45.75	-8.44	83.54	37.79	150	267	Vertical
4	28016.6000	56.22	47.90	-8.32	77.84	29.94	150	202	Vertical
5	31190.1000	58.46	50.11	-8.35	77.84	27.73	150	287	Vertical
6	38416.0000	53.95	51.31	-2.64	77.84	26.53	150	171	Vertical

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

Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5785MHz

Power supply:DC 3.85V

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	18305.8000	56.49	44.93	-11.56	83.54	38.61	150	317	Horizontal
2	19684.1000	55.50	44.63	-10.87	83.54	38.91	150	156	Horizontal
3	23139.2000	54.60	45.73	-8.87	77.84	32.11	150	156	Horizontal
4	30114.3000	57.57	49.21	-8.36	77.84	28.63	150	260	Horizontal
5	34689.2000	59.35	50.12	-9.23	77.84	27.72	150	330	Horizontal
6	39728.3000	52.55	51.31	-1.24	77.84	26.53	150	46	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	18583.0000	56.40	44.98	-11.42	83.54	38.56	150	270	Vertical
2	20851.2000	54.79	44.48	-10.31	83.54	39.06	150	68	Vertical
3	23276.7000	54.67	45.86	-8.81	77.84	31.98	150	4	Vertical
4	29611.6000	57.52	49.72	-7.80	77.84	28.12	150	302	Vertical
5	34005.0000	57.75	48.68	-9.07	77.84	29.16	150	0	Vertical
6	39678.8000	52.27	50.98	-1.29	77.84	26.86	150	348	Vertical

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Mode: Mode 1/ IEEE 802.11a

Temp. /Hum.:25℃/60%RH

Test Engineer:Lu Qiang

Frequency:5825MHz

Power supply:DC 3.85V

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	19369.5000	56.65	45.66	-10.99	83.54	37.88	150	358	Horizontal
2	21351.7000	54.29	44.15	-10.14	83.54	39.39	150	358	Horizontal
3	23299.8000	55.38	46.58	-8.80	77.84	31.26	150	149	Horizontal
4	26633.9000	53.78	46.18	-7.60	77.84	31.66	150	212	Horizontal
5	31047.1000	58.15	49.75	-8.40	77.84	28.09	150	190	Horizontal
6	39683.2000	52.90	51.61	-1.29	77.84	26.23	150	338	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	18277.2000	57.25	45.68	-11.57	83.54	37.86	150	34	Vertical
2	20501.4000	55.28	44.79	-10.49	83.54	38.75	150	353	Vertical
3	25192.9000	53.72	46.08	-7.64	77.84	31.76	150	214	Vertical
4	29339.9000	55.13	47.17	-7.96	77.84	30.67	150	129	Vertical
5	31799.5000	58.09	48.83	-9.26	83.54	34.71	150	34	Vertical
6	38054.1000	53.96	50.86	-3.10	77.84	26.98	150	161	Vertical

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7. RESTRICTED BANDS OF OPERATION

7.1. LIMITS

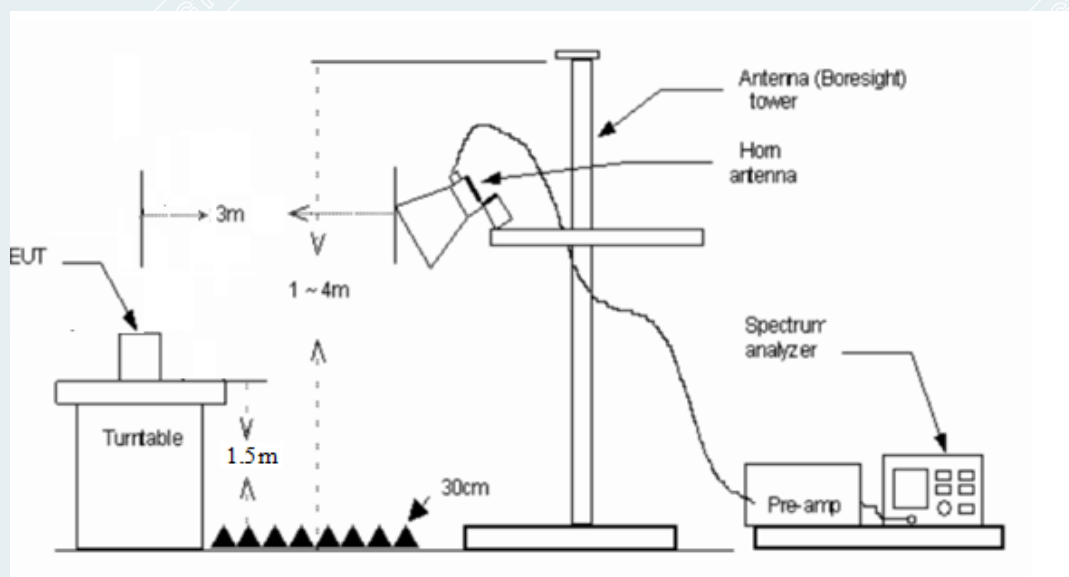
Section 15.407(b)(10) The provisions of §15.205 apply to intentional radiators operating under this section. 15.205(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

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 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

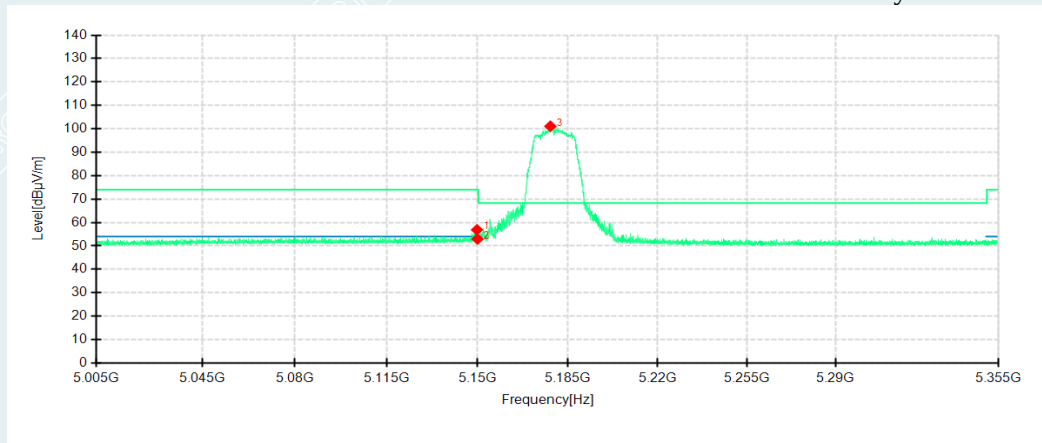
Pre-scanned in three orthogonal panels,X,Y,Z.The worst cases mode (Z plane) were recorded in this report.

Temp: 25°C ; Humi:60%	Power supply:DC 3.85V
Test Engineer: Lu Qiang	Test Date:2022-03-18

802.11a mode/5180MHz

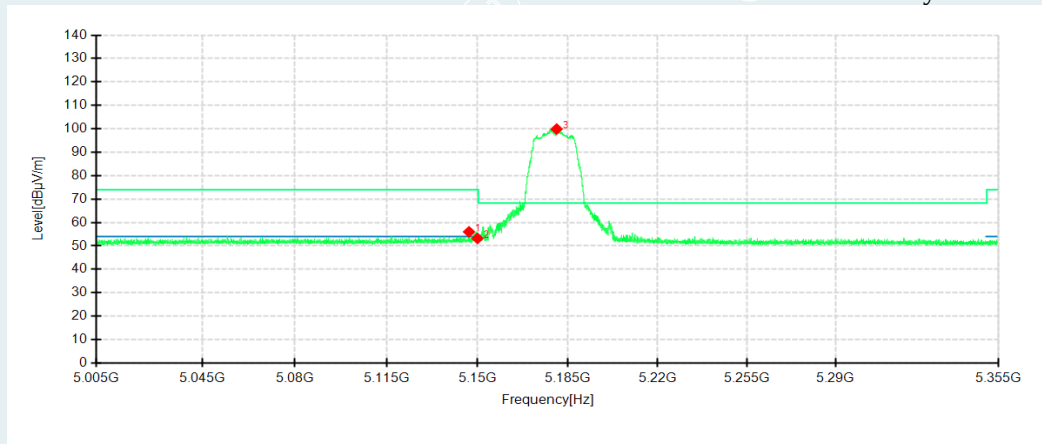
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical

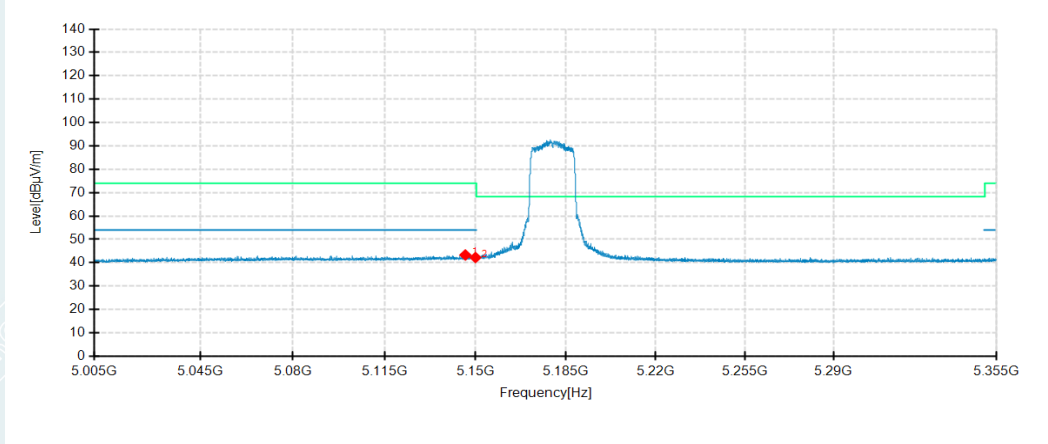


No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5149.7950	42.68	56.86	14.18	74.00	17.14	100	280	Horizontal	/
2	5150.0000	38.76	52.94	14.18	74.00	21.06	100	280	Horizontal	/
3	5178.2150	87.06	101.09	14.03	68.30	-32.79	100	280	Horizontal	No limit
1	5146.7150	41.93	56.01	14.08	74.00	17.99	100	180	Vertical	/
2	5150.0000	39.12	53.20	14.08	74.00	20.80	100	310	Vertical	/
3	5180.6300	85.85	99.89	14.04	68.30	-31.59	200	186	Vertical	No limit

802.11a mode/5180MHz

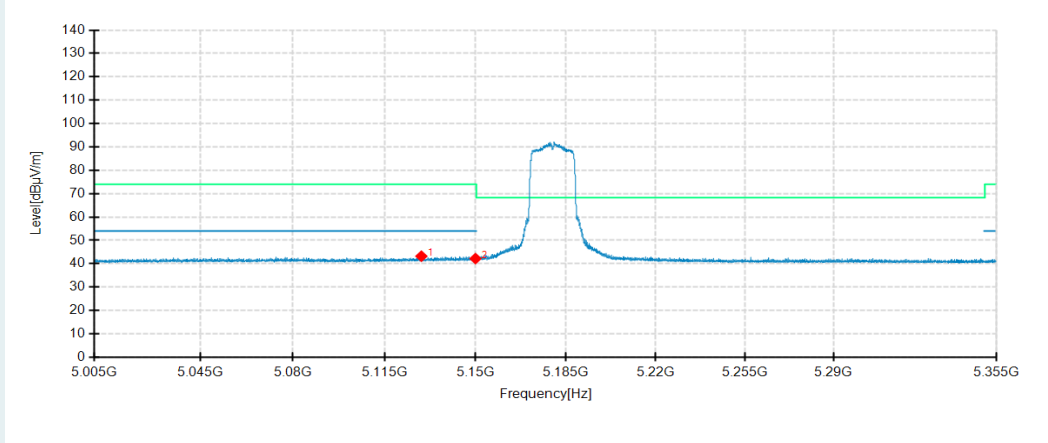
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical

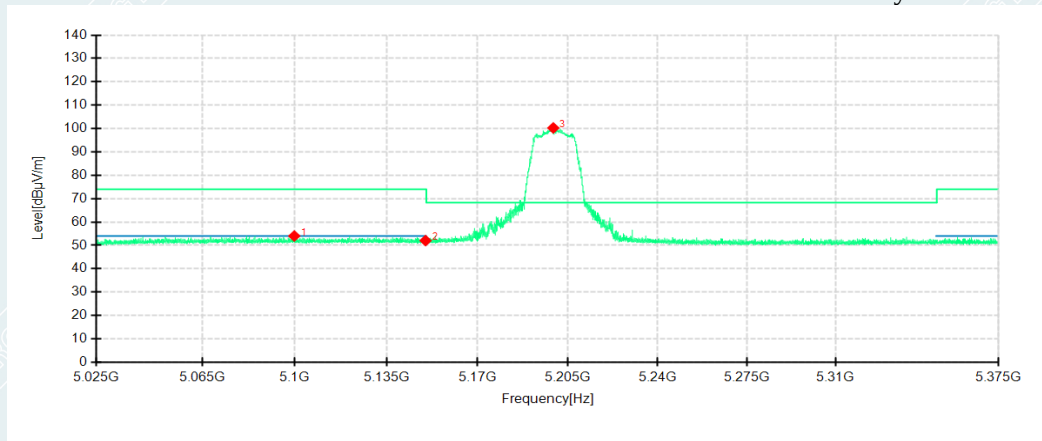


No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5146.0850	29.13	43.32	14.19	54.00	10.68	100	281	Horizontal	/
2	5150.0000	28.05	42.23	14.18	54.00	11.77	200	164	Horizontal	/
1	5129.1800	29.12	43.22	14.10	54.00	10.78	200	127	Vertical	/
2	5150.0000	28.13	42.21	14.08	54.00	11.79	100	188	Vertical	/

802.11a mode/5200MHz

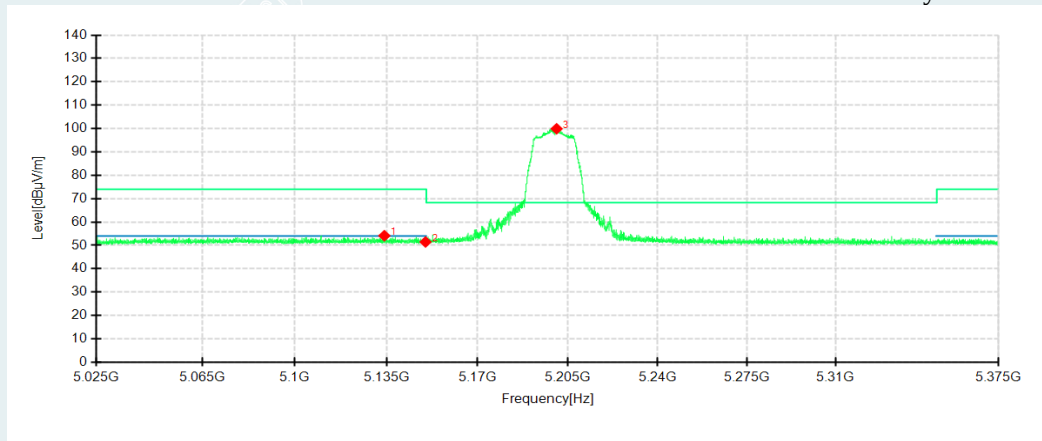
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

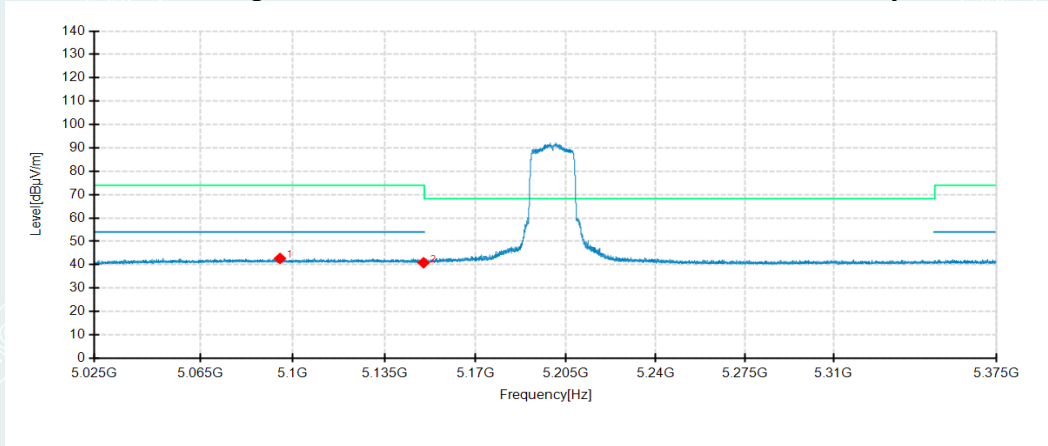
Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5099.7950	39.69	54.01	14.32	74.00	19.99	200	194	Horizontal	/
2	5150.0000	37.86	52.04	14.18	74.00	21.96	200	80	Horizontal	/
3	5199.3350	86.32	100.24	13.92	68.30	-31.94	100	280	Horizontal	No limit
1	5134.2000	40.03	54.12	14.09	74.00	19.88	100	334	Vertical	/
2	5150.0000	37.37	51.45	14.08	74.00	22.55	200	272	Vertical	/
3	5200.6300	85.88	99.90	14.02	68.30	-31.60	200	127	Vertical	No limit

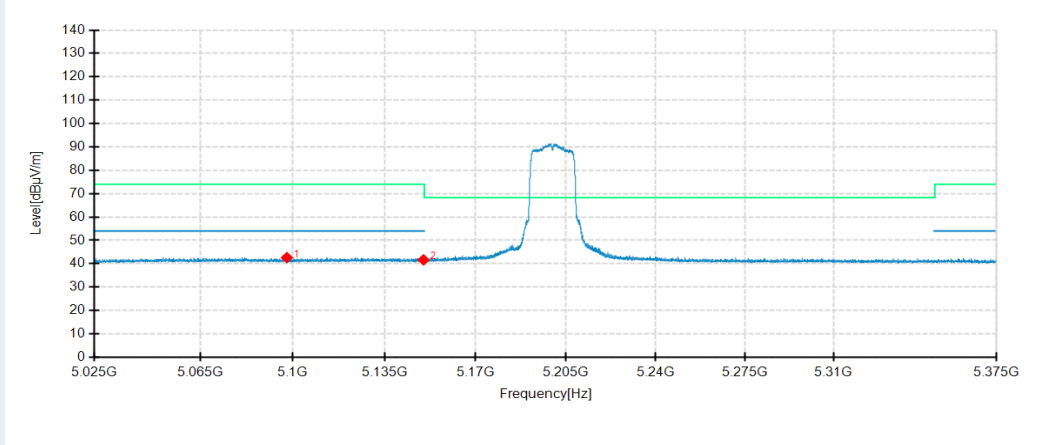
802.11a mode/5200MHz
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



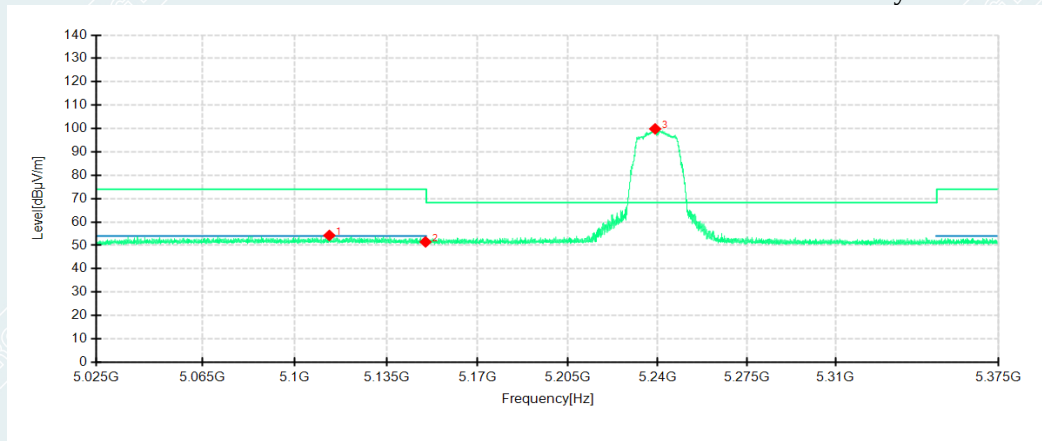
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5095.1400	28.42	42.70	14.28	54.00	11.30	200	315	Horizontal	/
2	5150.0000	26.66	40.84	14.18	54.00	13.16	200	173	Horizontal	/
1	5097.7650	28.51	42.62	14.11	54.00	11.38	100	117	Vertical	/
2	5150.0000	27.58	41.66	14.08	54.00	12.34	200	223	Vertical	/

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802.11a mode/5240MHz

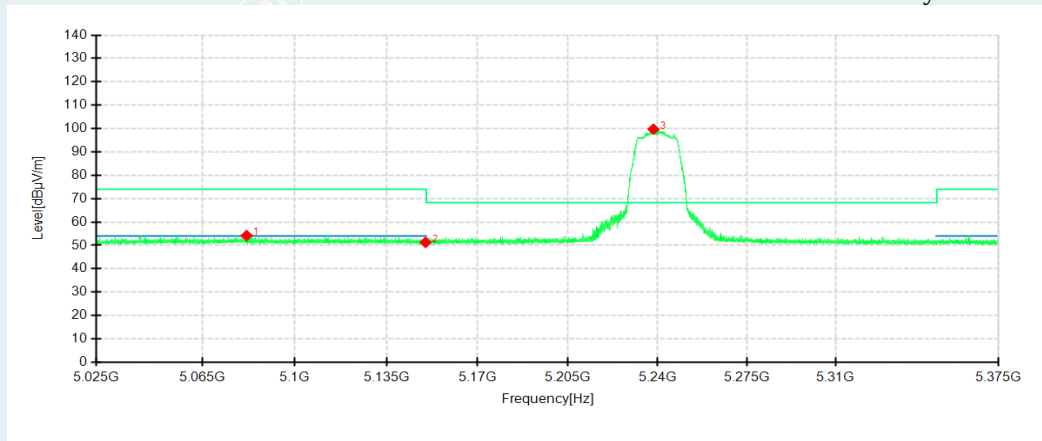
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical

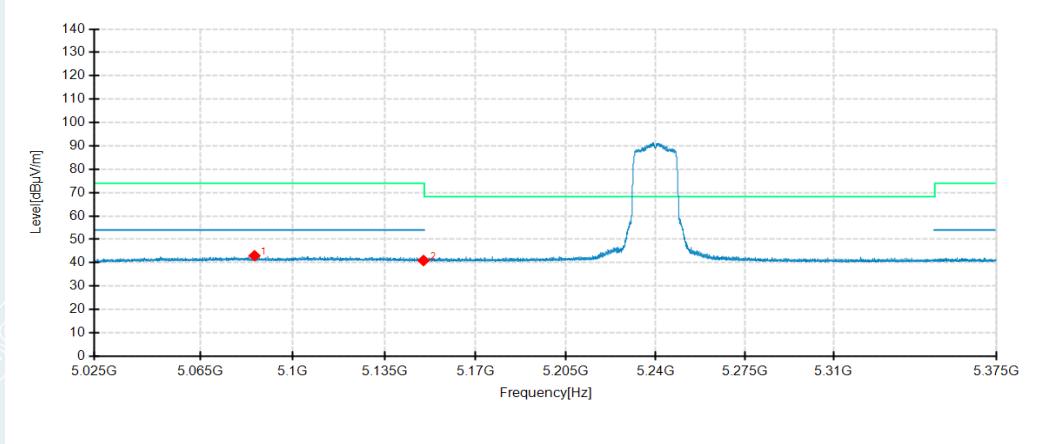


No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5113.1650	39.97	54.25	14.28	74.00	19.75	200	273	Horizontal	/
2	5150.0000	37.30	51.48	14.18	74.00	22.52	100	262	Horizontal	/
3	5239.0250	86.03	99.84	13.81	68.30	-31.54	200	91	Horizontal	No limit
1	5081.7000	40.12	54.18	14.06	74.00	19.82	200	253	Vertical	/
2	5150.0000	37.19	51.27	14.08	74.00	22.73	200	0	Vertical	/
3	5238.3600	85.62	99.69	14.07	68.30	-31.39	200	177	Vertical	No limit

802.11a mode/5240MHz

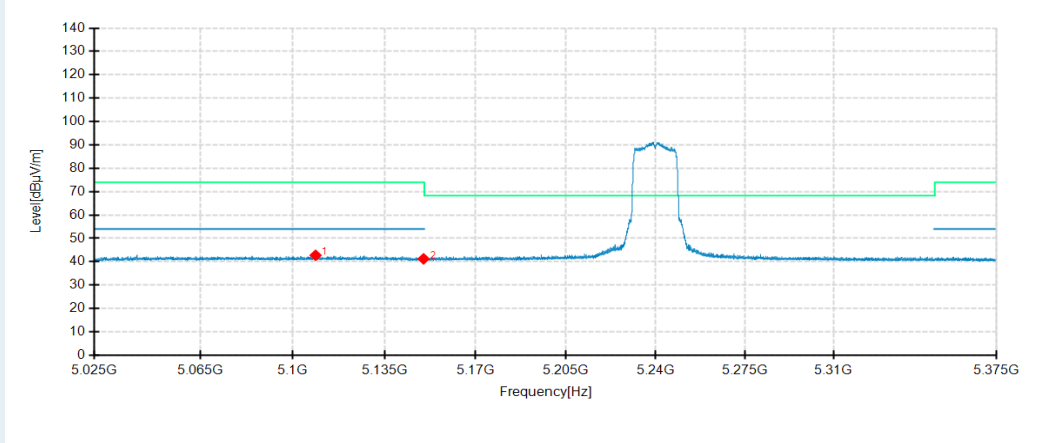
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



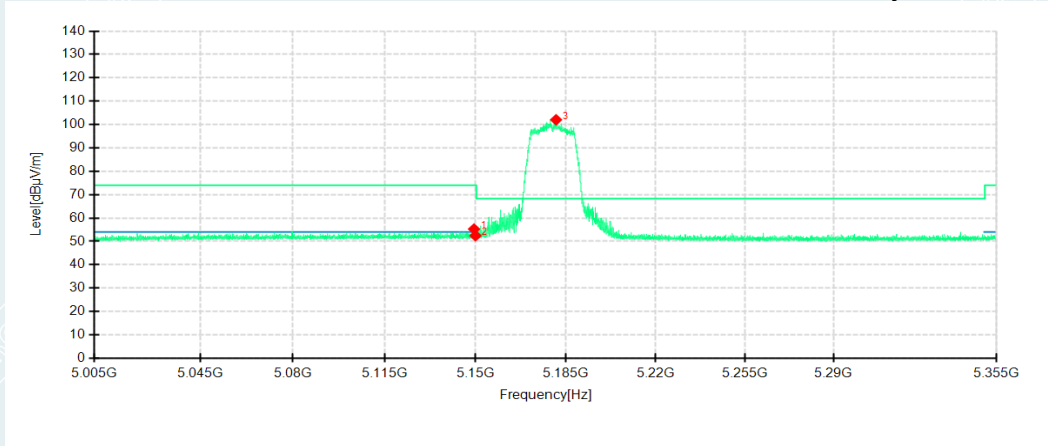
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5108.6850	28.65	42.76	14.11	54.00	11.24	200	174	Horizontal	/
2	5150.0000	27.15	41.23	14.08	54.00	12.77	100	80	Horizontal	/
1	5108.6850	28.65	42.76	14.11	54.00	11.24	200	174	Vertical	/
2	5150.0000	27.15	41.23	14.08	54.00	12.77	100	80	Vertical	/

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

802.11n HT20 mode/5180MHz

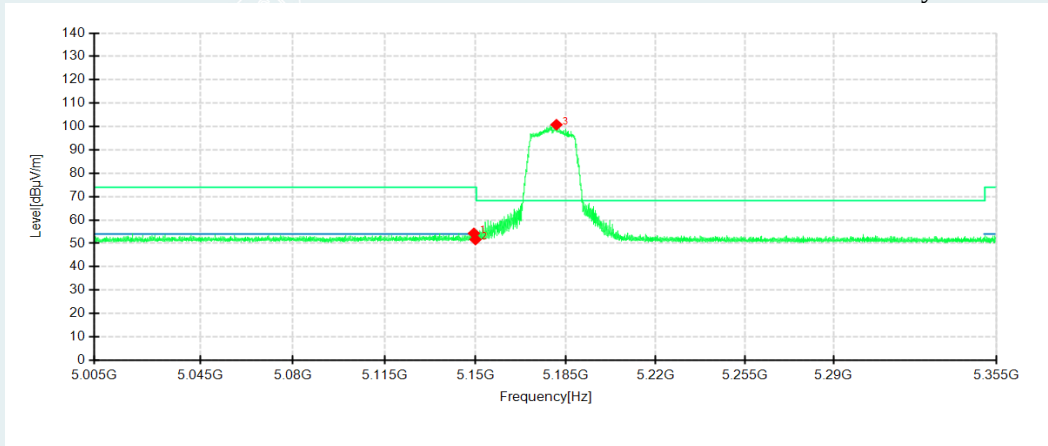
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



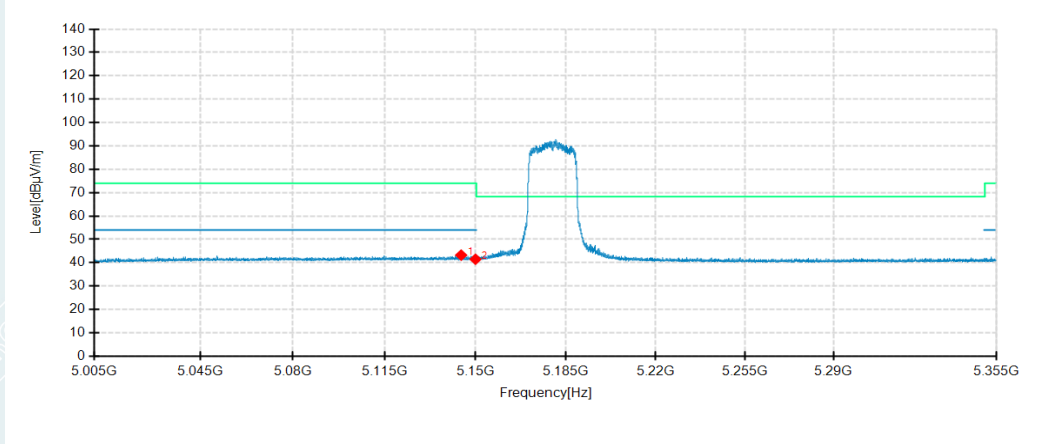
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5149.4450	41.08	55.26	14.18	74.00	18.74	200	89	Horizontal	/
2	5150.0000	38.23	52.41	14.18	74.00	21.59	100	190	Horizontal	/
3	5181.1900	88.02	102.04	14.02	68.30	-33.74	100	281	Horizontal	No limit
1	5149.3750	40.23	54.31	14.08	74.00	19.69	200	141	Vertical	/
2	5150.0000	37.55	51.63	14.08	74.00	22.37	200	188	Vertical	/
3	5181.3300	86.74	100.78	14.04	68.30	-32.48	200	185	Vertical	No limit

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

802.11n HT20 mode/5180MHz

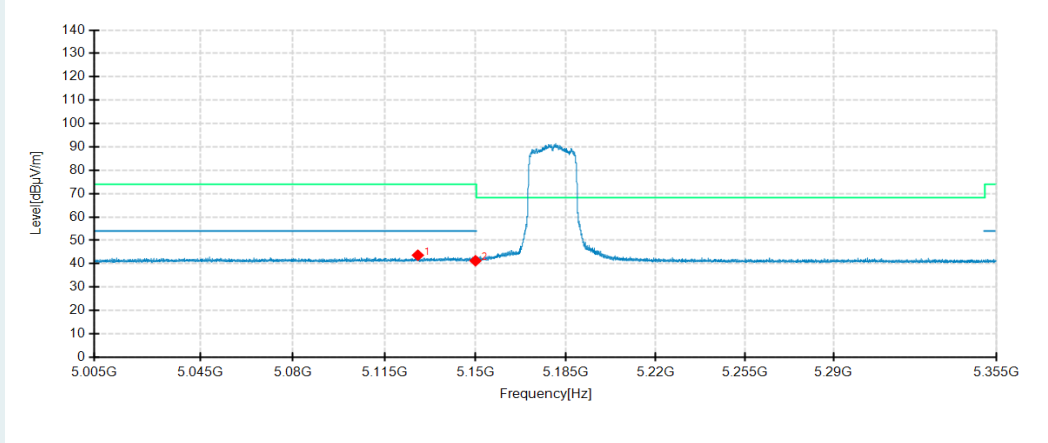
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



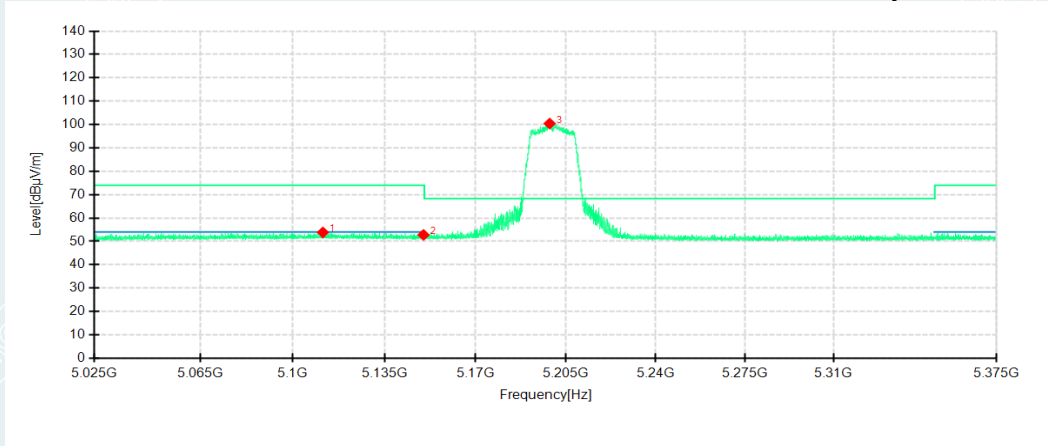
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5144.4750	29.06	43.26	14.20	54.00	10.74	100	281	Horizontal	/
2	5150.0000	27.32	41.50	14.18	54.00	12.50	100	281	Horizontal	/
1	5127.8150	29.54	43.64	14.10	54.00	10.36	200	185	Vertical	/
2	5150.0000	27.19	41.27	14.08	54.00	12.73	100	175	Vertical	/

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

802.11n HT20 mode/5200MHz

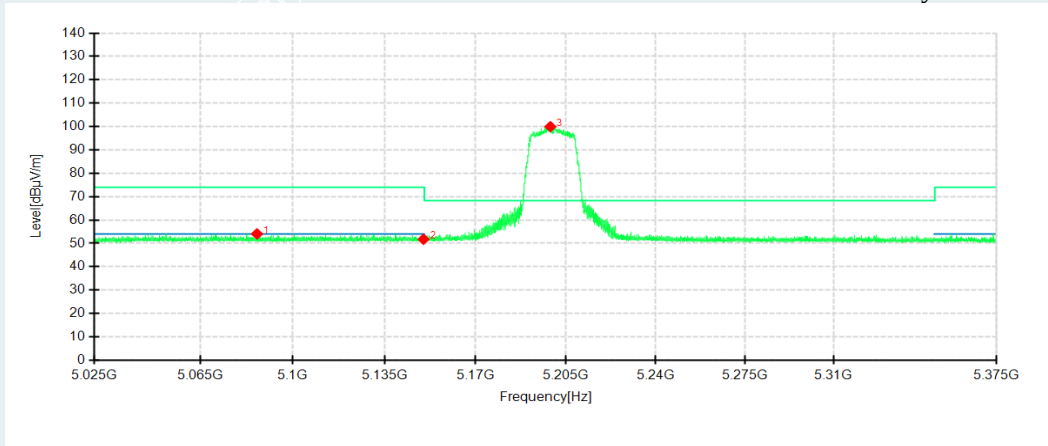
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



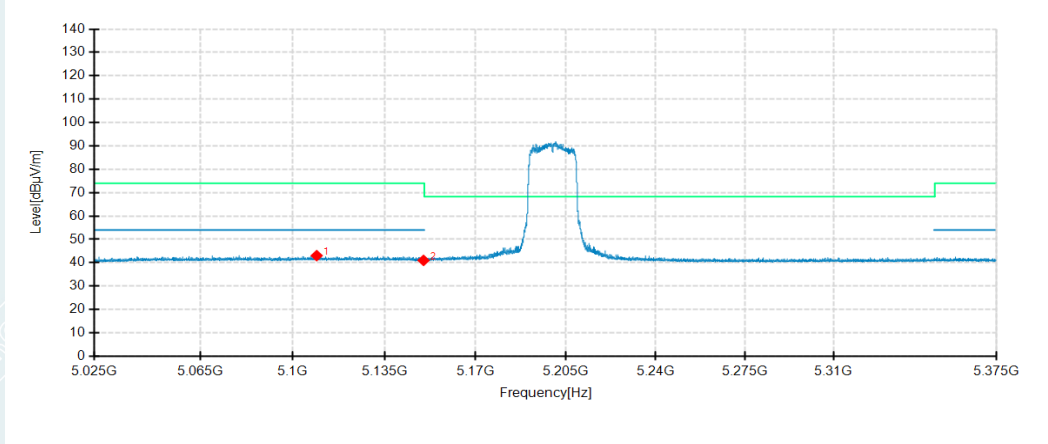
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5111.4500	39.53	53.82	14.29	74.00	20.18	200	91	Horizontal	/
2	5150.0000	38.60	52.78	14.18	74.00	21.22	100	280	Horizontal	/
3	5198.7050	86.49	100.42	13.93	68.30	-32.12	100	280	Horizontal	No limit
1	5086.3900	39.98	54.05	14.07	74.00	19.95	100	156	Vertical	/
2	5150.0000	37.68	51.76	14.08	74.00	22.24	200	120	Vertical	/
3	5198.9850	85.92	99.94	14.02	68.30	-31.64	200	178	Vertical	No limit

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

802.11n HT20 mode/5200MHz

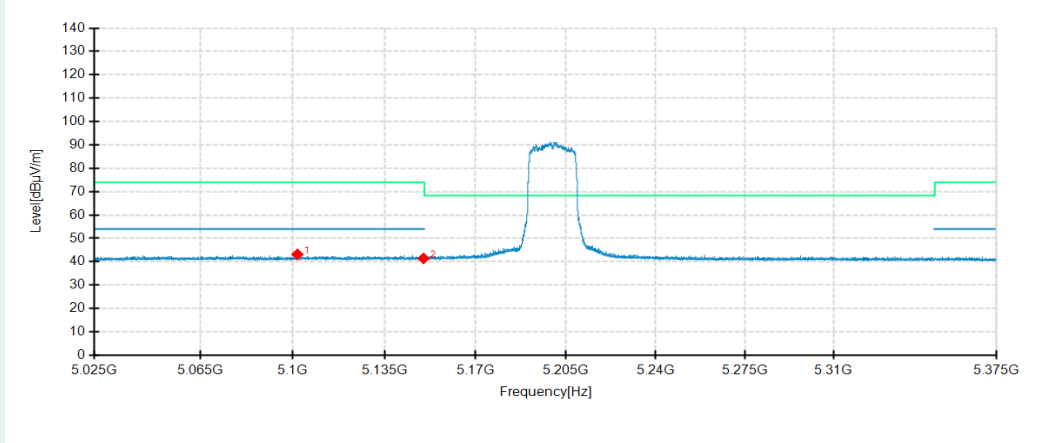
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



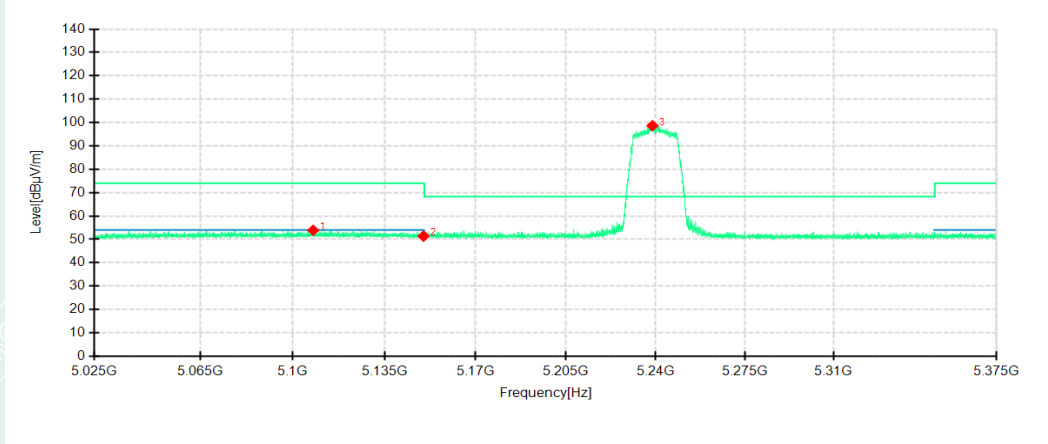
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5109.1050	28.75	43.04	14.29	54.00	10.96	200	128	Horizontal	/
2	5150.0000	26.83	41.01	14.18	54.00	12.99	100	166	Horizontal	/
1	5101.7550	29.02	43.14	14.12	54.00	10.86	200	136	Vertical	/
2	5150.0000	27.33	41.41	14.08	54.00	12.59	200	281	Vertical	/

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

802.11n HT20 mode/5240MHz

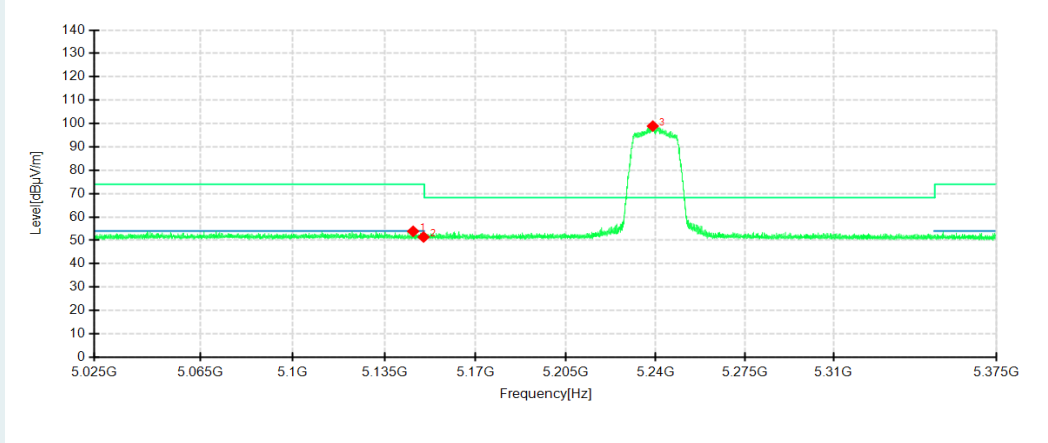
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



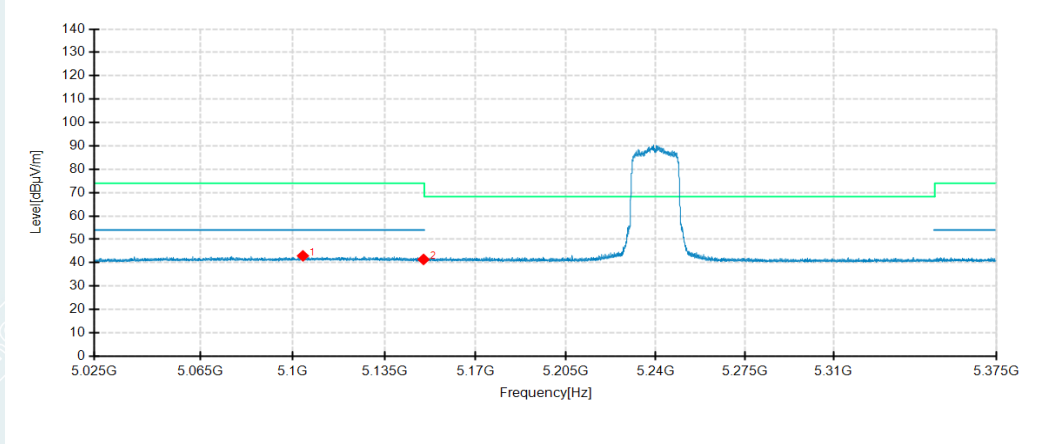
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5107.7400	39.57	53.87	14.30	74.00	20.13	100	104	Horizontal	/
2	5150.0000	37.19	51.37	14.18	74.00	22.63	200	360	Horizontal	/
3	5238.7450	84.82	98.63	13.81	68.30	-30.33	200	85	Horizontal	No limit
1	5145.9950	39.78	53.86	14.08	74.00	20.14	100	80	Vertical	/
2	5150.0000	37.36	51.44	14.08	74.00	22.56	100	80	Vertical	/
3	5238.8850	84.83	98.90	14.07	68.30	-30.60	200	177	Vertical	No limit

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

802.11n HT20 mode/5240MHz

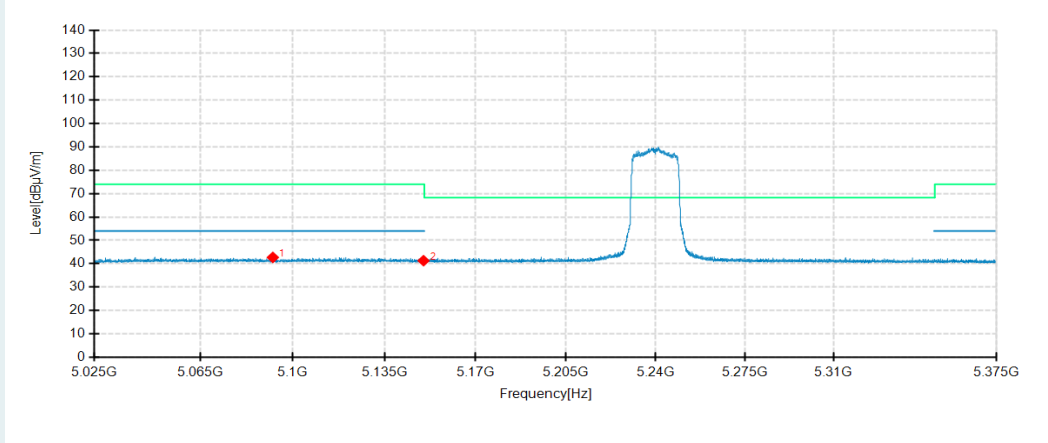
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



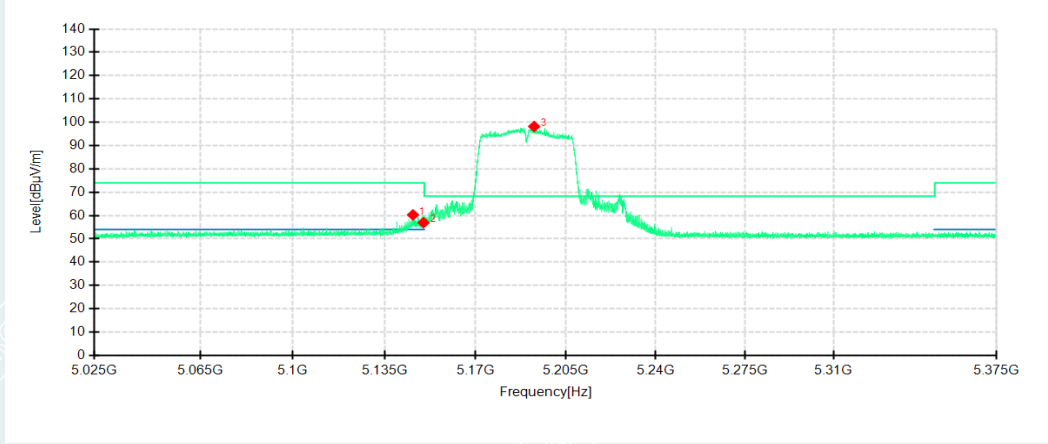
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5103.8550	28.64	42.95	14.31	54.00	11.05	100	108	Horizontal	/
2	5150.0000	27.23	41.41	14.18	54.00	12.59	200	80	Horizontal	/
1	5092.4100	28.62	42.71	14.09	54.00	11.29	100	206	Vertical	/
2	5150.0000	27.23	41.31	14.08	54.00	12.69	100	293	Vertical	/

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

802.11n HT40 mode/5190MHz

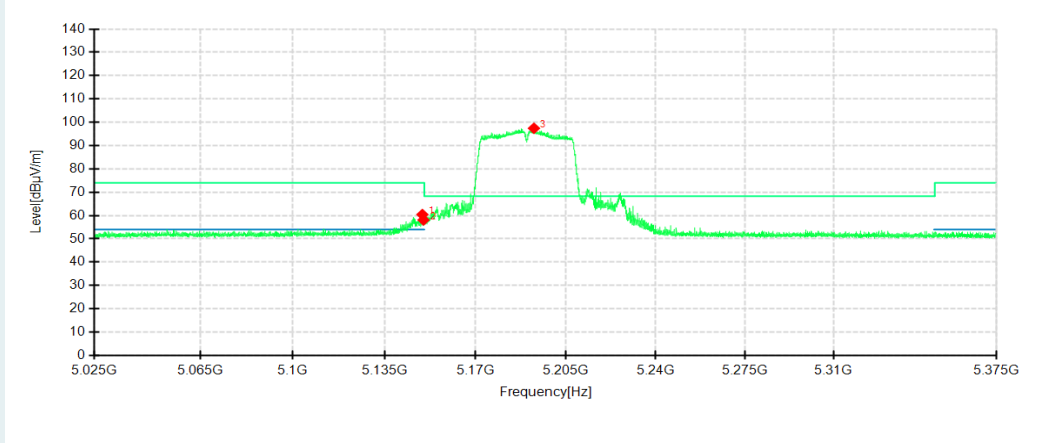
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



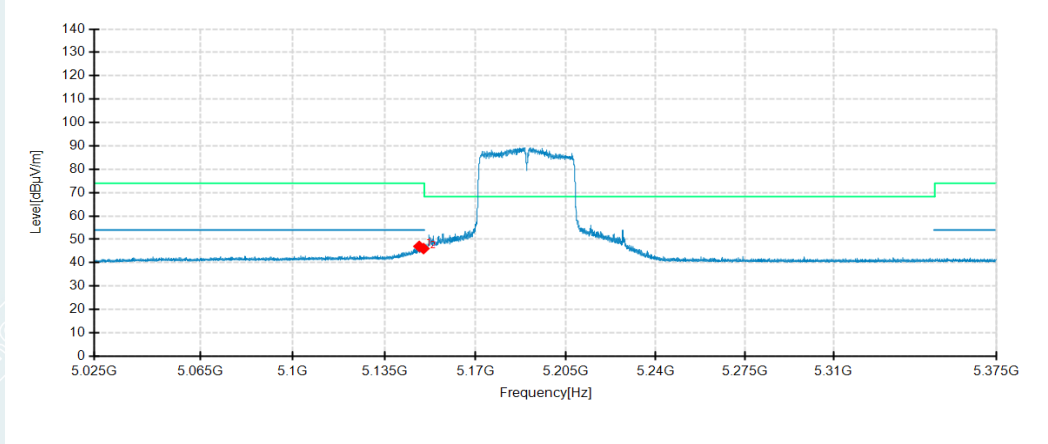
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5145.9250	46.07	60.26	14.19	74.00	13.74	100	280	Horizontal	/
2	5150.0000	42.74	56.92	14.18	74.00	17.08	100	242	Horizontal	/
3	5192.6850	84.22	98.18	13.96	68.30	-29.88	100	280	Horizontal	No limit
1	5149.5650	46.34	60.42	14.08	74.00	13.58	100	203	Vertical	/
2	5150.0000	43.99	58.07	14.08	74.00	15.93	100	184	Vertical	/
3	5192.6150	83.38	97.41	14.03	68.30	-29.11	200	191	Vertical	No limit

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802.11n HT40 mode/5190MHz

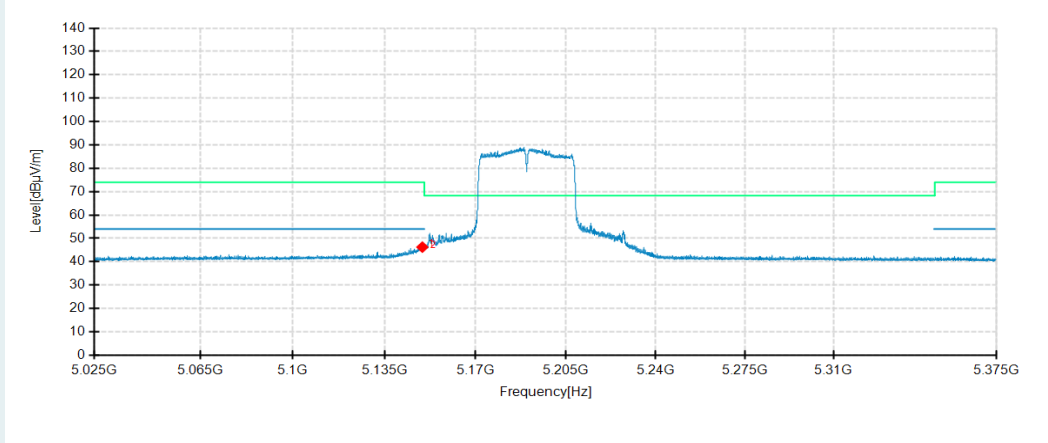
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



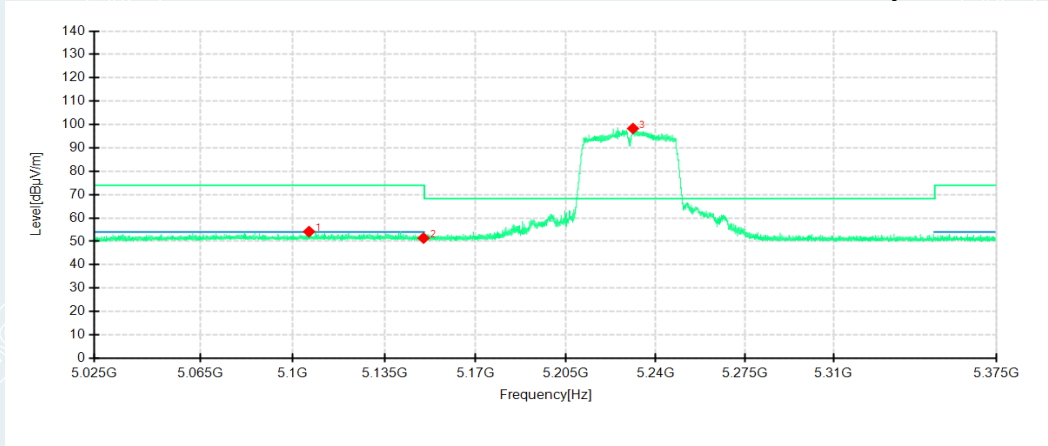
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5148.3400	32.82	47.00	14.18	54.00	7.00	100	280	Horizontal	/
2	5150.0000	31.87	46.05	14.18	54.00	7.95	100	280	Horizontal	/
1	5149.5650	32.17	46.25	14.08	54.00	7.75	100	336	Vertical	/
2	5150.0000	31.61	45.69	14.08	54.00	8.31	200	188	Vertical	/

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802.11n HT40 mode/5230MHz

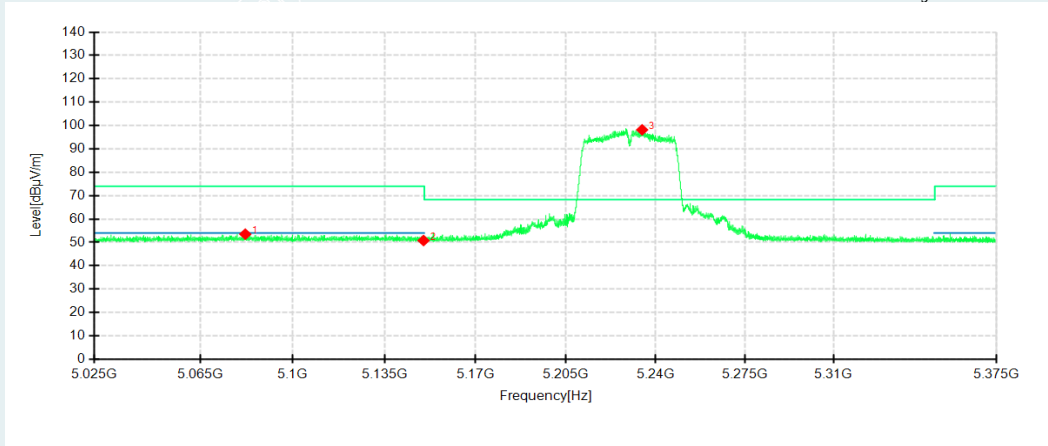
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



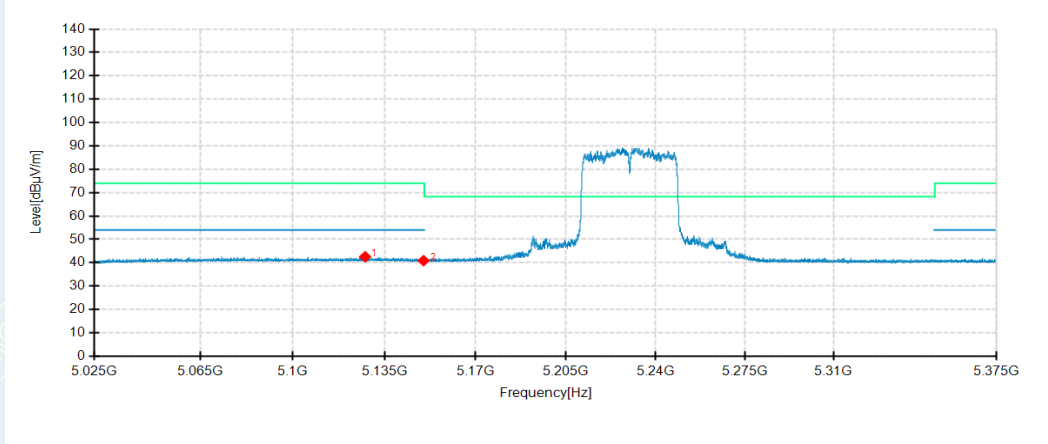
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5106.2000	39.87	54.17	14.30	74.00	19.83	200	309	Horizontal	/
2	5150.0000	37.21	51.39	14.18	74.00	22.61	100	39	Horizontal	/
	5231.1500	84.46	98.29	13.83	68.30	-29.99	200	90	Horizontal	No limit
1	5081.9450	39.45	53.51	14.06	74.00	20.49	200	256	Vertical	/
2	5150.0000	36.70	50.78	14.08	74.00	23.22	100	270	Vertical	/
3	5234.7200	84.11	98.17	14.06	68.30	-29.87	100	334	Vertical	No limit

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802.11n HT40 mode/5230MHz

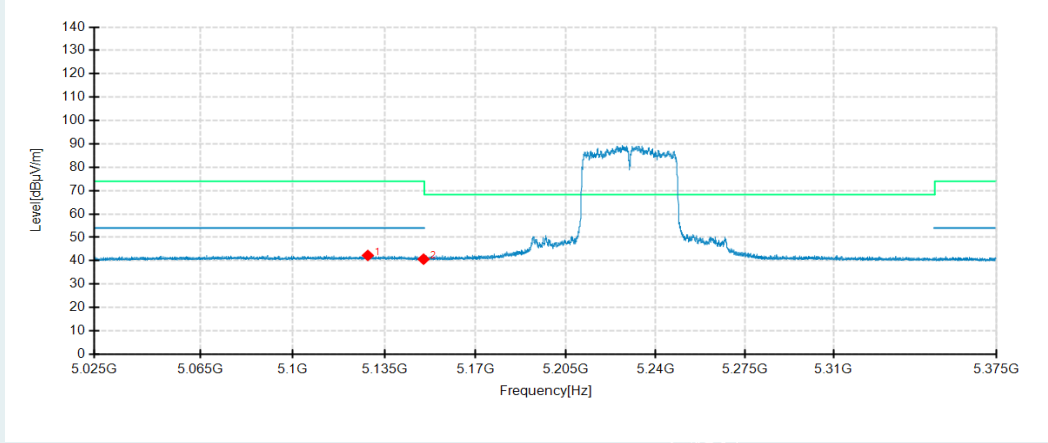
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



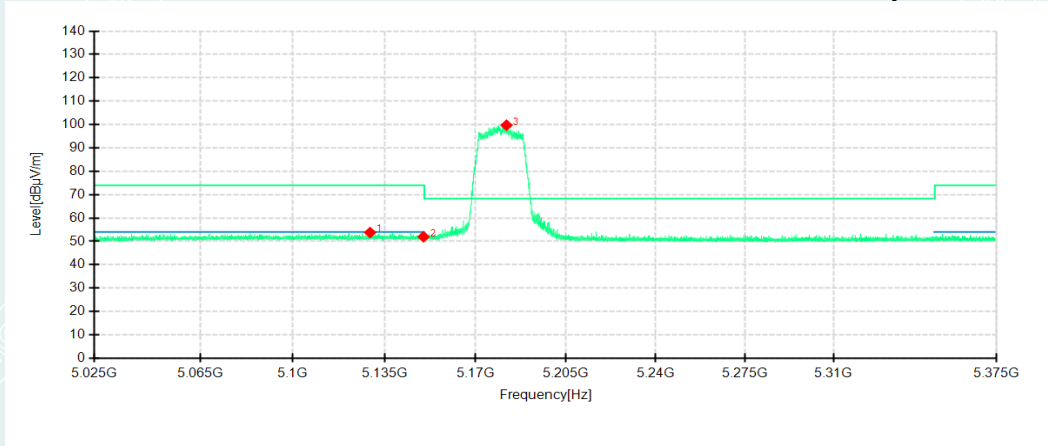
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5127.6200	28.29	42.53	14.24	54.00	11.47	200	153	Horizontal	/
2	5150.0000	26.72	40.90	14.18	54.00	13.10	200	139	Horizontal	/
1	5128.6350	28.17	42.27	14.10	54.00	11.73	100	184	Vertical	/
2	5150.0000	26.59	40.67	14.08	54.00	13.33	200	280	Vertical	/

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802.11ac VHT20 mode/5180MHz

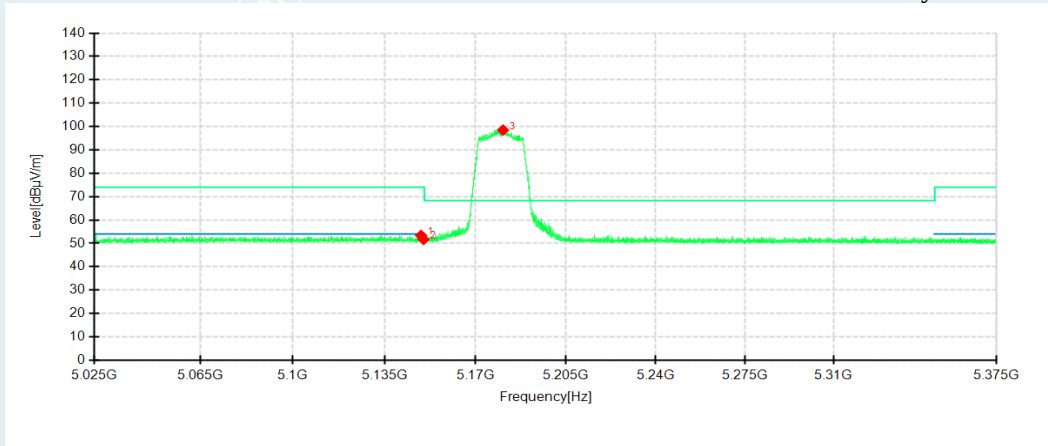
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



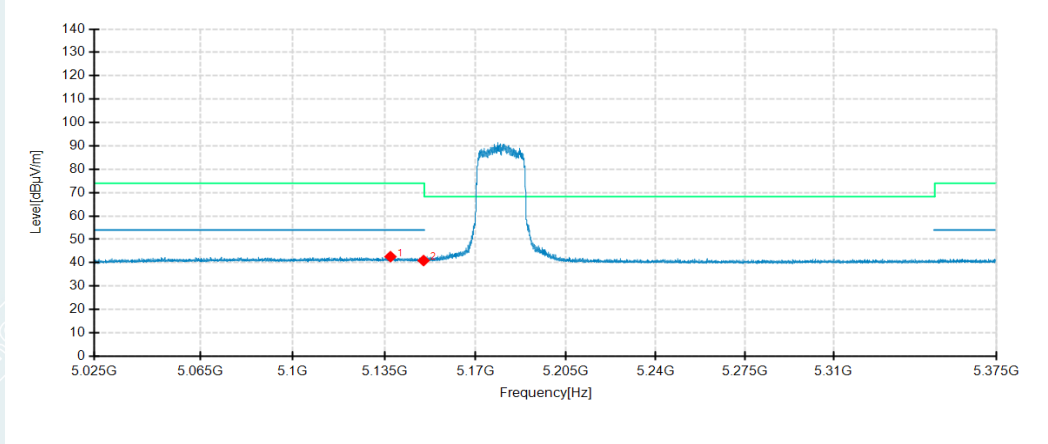
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5129.5100	39.55	53.79	14.24	74.00	20.21	200	85	Horizontal	/
2	5150.0000	37.77	51.95	14.18	74.00	22.05	200	181	Horizontal	/
3	5182.0100	85.69	99.70	14.01	68.30	-31.40	100	280	Horizontal	No limit
1	5149.0400	39.33	53.41	14.08	74.00	20.59	100	192	Vertical	/
2	5150.0000	37.62	51.70	14.08	74.00	22.30	100	353	Vertical	/
3	5180.6450	84.44	98.48	14.04	68.30	-30.18	200	175	Vertical	No limit

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802.11ac VHT20 mode/5180MHz

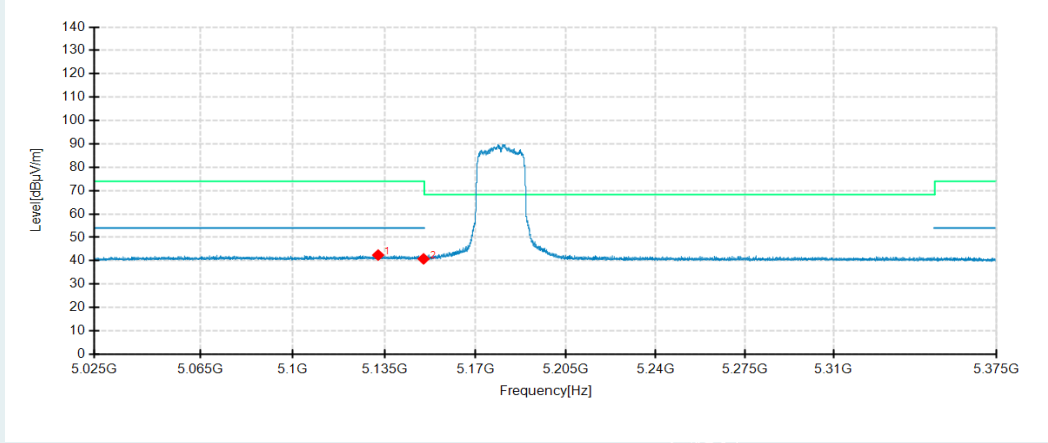
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	5137.3150	28.38	42.60	14.22	54.00	11.40	200	172	Horizontal	/
2	5150.0000	26.75	40.93	14.18	54.00	13.07	200	172	Horizontal	/
1	5132.5900	28.32	42.41	14.09	54.00	11.59	100	224	Vertical	/
2	5150.0000	26.72	40.80	14.08	54.00	13.20	200	224	Vertical	/

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