



TEST REPORT

Application No.: GZCR2206000734AT
Applicant: SZ DJI TECHNOLOGY CO., LTD
Address of Applicant: 14th floor, West Wing, Skyworth Semiconductor Design Building NO.18
Gaoxin South 4th Ave, Nanshan District, Shenzhen 518057, Guangdong,
China
Manufacturer: SZ DJI TECHNOLOGY CO., LTD
Address of Manufacturer: 14th floor, West Wing, Skyworth Semiconductor Design Building NO.18
Gaoxin South 4th Ave, Nanshan District, Shenzhen 518057, Guangdong,
China
Equipment Under Test (EUT):
EUT Name: RoboMaster Youth Tournament Base 01
Model No.: RMYTBA01
Trade Mark: DJI
Standard(s) : 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2022-06-08
Date of Test: 2022-06-09 to 2022-06-14
Date of Issue: 2022-06-15

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Kobe Jian
EMC Laboratory Manager



Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2022-06-15		Original

Authorized for issue by				
				
		Curry Wu/Project Engineer		
				
		Ricky Liu/Reviewer		

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data		N/A	47 CFR Part 15, Subpart C 15.407 (c)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207 & 15.407 b(6)	Pass
Duty Cycle		ANSI C63.10 (2013) Section 12.2	KDB 789033 D02 v02r01 II B 1	Pass
99% Bandwidth		KDB 789033 II D	N/A	Pass
26dB Emission bandwidth		KDB 789033 D02 II C 1	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Minimum 6 dB bandwidth (5.725-5.85 GHz band)		KDB 789033 D02 II C 2	47 CFR Part 15, Subpart C 15.407 (e)	Pass
Maximum Conducted output power		KDB 789033 D02 II E	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Peak Power spectrum density		KDB 789033 D02 II F	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Radiated Emissions which fall in the restricted bands		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Radiated Emissions (above 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Radiated Emissions (below 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Frequency Stability		ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart C 15.407 (g)	Pass

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.



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Guangzhou Branch EMC Laboratory

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4 General Information

4.1 Details of E.U.T.

Power supply: Input: 100-240V~ 50-60Hz 0.7A
Output: 12.0V/2A 24.0W
Adapter model: MX24W1-1202000T

Operation Frequency (20MHz): U-NII-1: 5180-5240MHz; U-NII-3: 5745-5825MHz

Operation Frequency (40MHz): U-NII-1: 5190-5230MHz; U-NII-3: 5755-5795MHz

Modulation Type: 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK)
802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM)

Channel Spacing: 802.11a/n(HT20)/ac(HT20): 20MHz
802.11n(HT40)/ac(HT40): 40MHz

DFS Function: Without DFS function

TPC Function: Without TPC function

Antenna Type: PCB Antenna

Antenna Gain: ANT0&ANT1: 4dBi declared by applicant

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
--	--	--	--
The EUT has been tested as an independent unit.			

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at AC Power Line (150kHz-30MHz)	±2.76dB
Duty Cycle	± 0.37%
99% Bandwidth	± 3%
26dB Emission bandwidth	± 3%
Minimum 6 dB bandwidth (5.725-5.85 GHz band)	± 3%
Maximum Conducted output power	± 0.75dB
Peak Power spectrum density	± 2.84dB
Radiated Emissions which fall in the restricted bands	±5.00dB (30MHz-1GHz; 3m); ± 5.12dB (1GHz-6GHz); ± 5.38dB (6GHz-18GHz); ± 5.61dB (18GHz-40GHz)
Radiated Emissions (above 1GHz)	± 5.12dB (1GHz-6GHz); ± 5.38dB (6GHz-18GHz); ± 5.61dB (18GHz- 40GHz)
Radiated Emissions (below 1GHz)	±5.00dB (30MHz-1GHz; 3m); ±4.38dB (30MHz-1GHz; 10m);
Frequency Stability	± 7.25 x 10-8
Remark: The U_{lab} (lab Uncertainty) is less than U_{CISPR} (CISPR Uncertainty), so the test results – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit; – non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.	

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,
Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

4.5 Test Facility

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

- **NVLAP (Lab Code: 200611-0)**

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **CNAS (Lab Code: L0167)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

- **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

- **VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.



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4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

Conducted Emissions at AC Power Line (150kHz-30MHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Shielding Room	ChangZhou ZhongYu	8m x 3m x 3.8m	EMC0306	N/A	N/A
Two-Line V-Network	Rohde & Schwarz	ENV216	EMC0118	2021-12-23	2022-12-22
Two-Line V-Network-GZ	Rohde & Schwarz	ENV216	EMC2135	2021-09-24	2022-09-23
Coaxial Cable	HangTianXing	2m	EMC0107	2020-09-09	2022-09-08
Test Software E3c	Audix	Ver. 5.4.1221b	GZE100-62	N/A	N/A
EMI Test Receiver(9kHz-3.6GHz)	Rohde & Schwarz	ESR3	EMC2221	2022-05-31	2023-05-30

Duty Cycle					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2022-03-29	2024-03-28
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A

99% Bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2022-03-29	2024-03-28
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A

26dB Emission bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2022-03-29	2024-03-28
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A



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Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2022-03-29	2024-03-28
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A

Maximum Conducted output power

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Power Meter (U2021XA_Ch2)	Agilent Technologies	U2021XA_Ch2	SEM009-02	2022-05-18	2023-05-17
Power Meter (U2021XA_Ch3)	Agilent Technologies	U2021XA_Ch3	SEM009-03	2022-05-18	2023-05-17
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2022-03-29	2024-03-28
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A

Peak Power spectrum density

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2022-03-29	2024-03-28
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2023-11-01
Test Software	TST	V2.0	GZE100-78	N/A	N/A

Radiated Emissions which fall in the restricted bands

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver(20Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2021-12-17	2022-12-16
Chamber cable(Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2020-09-09	2022-09-08
Horn Antenna(1GHz-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2019-09-25	2022-09-24
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2021-12-17	2022-12-16
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2020-12-20	2023-12-19
MXE EMI Receiver(10Hz-8.4GHz)	Keysight	N9038A	EMC2139	2021-11-01	2022-10-31



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EXA Signal Analyzer(10Hz-44GHz)	Keysight	N9010A	EMC2138	2021-09-16	2022-09-15
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Notch Filter (5150-5880)	Mico-Tronics	BRM50716	EMC2168	2021-07-29	2022-07-28
Horn Antenna(14-40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2020-06-28	2023-06-27
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2021-08-30	2022-08-29

Radiated Emissions (above 1GHz)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Chamber cable(Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2020-09-09	2022-09-08
Horn Antenna(1GHz-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2019-09-25	2022-09-24
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2021-12-17	2022-12-16
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2021-12-17	2022-12-16
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2020-12-20	2023-12-19
EXA Signal Analyzer(10Hz-44GHz)	Keysight	N9010A	EMC2138	2021-09-16	2022-09-15
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Notch Filter (5150-5880)	Mico-Tronics	BRM50716	EMC2168	2021-07-29	2022-07-28
Horn Antenna(14-40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2020-06-28	2023-06-27
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2021-08-30	2022-08-29

Radiated Spurious Emissions (Below 1GHz)

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver(10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2021-12-17	2022-12-16
Chamber cable	HangTianXing	N/A	EMC0542	2020-09-09	2022-09-08
Trilog Broadband Antenna(25MHz-1GHz)-Lab	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	SEM003-18	2019-08-08	2022-08-07
Amplifier(9kHz-1.3GHz)	HP	8447F	EMC2065	2022-05-16	2023-05-15



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High Pass Filter (915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2021-12-17	2022-12-16
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2019-10-20	2022-10-19
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Active Loop Antenna- GRAY	EMCO	6502	EMC0523	2022-5-19	2024-5-18

Frequency Stability					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15
6dB Attenuator	HP	8491A	EMC2062	2022-03-29	2024-03-28
MI CABLE	SGS-EMC	0.8M	EMC2136	2021-11-01	2022-10-31
Test Software	TST	V2.0	GZE100-78	N/A	N/A

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2021-07-05	2022-07-05
DMM	Fluke	73	EMC0007	2021-07-05	2022-07-05



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6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

15.203 Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of 15.211, 15.213, 15.217, 15.219, 15.221, or 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antennas are ANT0&ANT1: 4dBi.

Antenna location: Refer to internal photo.



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6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart C 15.407 (c)

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.



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7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207 & 15.407 b(6)

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

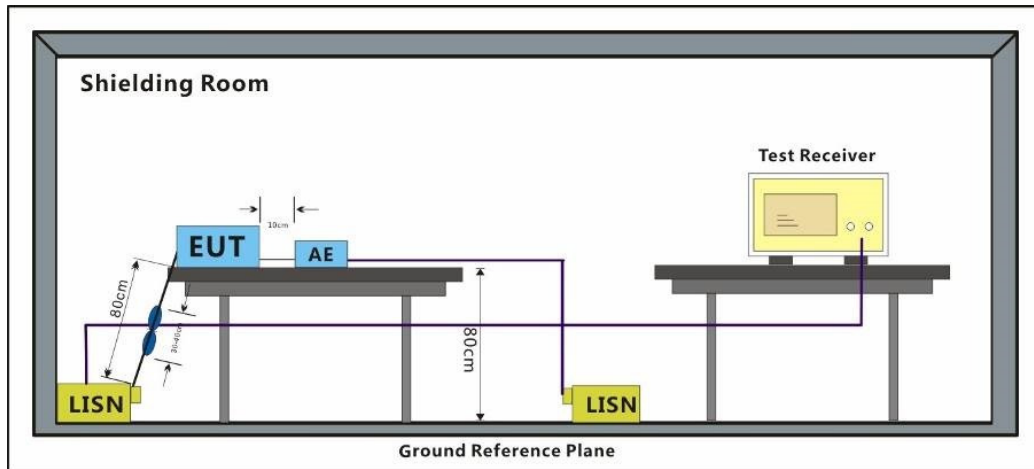
Humidity: 53.6 % RH

Atmospheric Pressure: 1003 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram

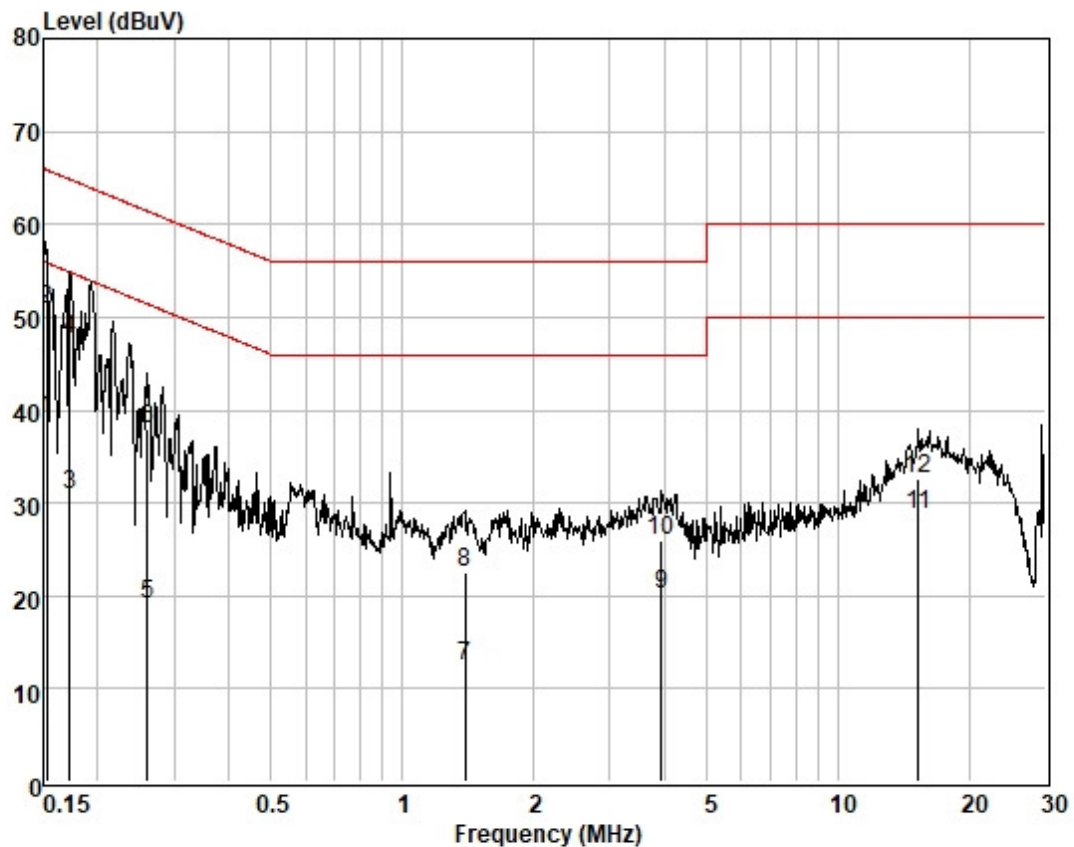


7.1.4 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: LISN=Read Level+ Cable Loss+ LISN Factor

Test Mode: 02; Line: Live line



Condition: LINE

Mode :

Model :

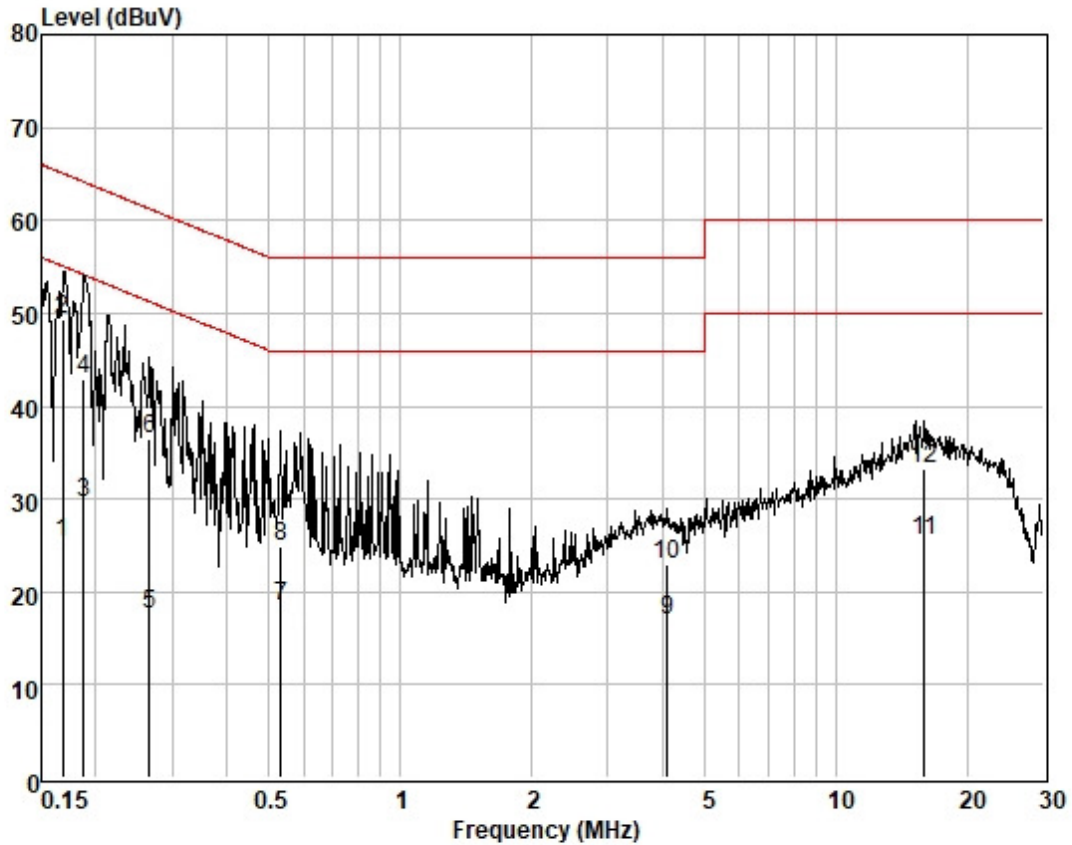
	Freq	Read Level	Cable Loss	LISN Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.152	29.49	0.06	9.54	39.09	55.87	-16.78	Average
2	0.152	41.16	0.06	9.54	50.76	65.87	-15.11	QP
3	0.172	21.37	0.06	9.55	30.98	54.86	-23.88	Average
4	0.172	37.91	0.06	9.55	47.52	64.86	-17.34	QP
5	0.260	9.43	0.06	9.57	19.06	51.42	-32.36	Average
6	0.260	28.36	0.06	9.57	37.99	61.42	-23.43	QP
7	1.396	2.84	0.09	9.60	12.53	46.00	-33.47	Average
8	1.396	12.85	0.09	9.60	22.54	56.00	-33.46	QP
9	3.943	10.38	0.17	9.64	20.19	46.00	-25.81	Average
10	3.943	16.14	0.17	9.64	25.95	56.00	-30.05	QP
11	15.307	18.59	0.31	9.83	28.73	50.00	-21.27	Average
12	15.307	22.37	0.31	9.83	32.51	60.00	-27.49	QP



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Test Mode: 02; Line: Neutral Line



Condition: NEUTRAL

Mode :

Model :

	Freq	Read Level	Cable Loss	LISN Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.168	15.61	0.06	9.54	25.21	55.08	-29.87	Average
2	0.168	39.73	0.06	9.54	49.33	65.08	-15.75	QP
3	0.187	20.05	0.06	9.55	29.66	54.15	-24.49	Average
4	0.187	33.18	0.06	9.55	42.79	64.15	-21.36	QP
5	0.266	7.91	0.06	9.56	17.53	51.25	-33.72	Average
6	0.266	26.78	0.06	9.56	36.40	61.25	-24.85	QP
7	0.532	8.73	0.07	9.58	18.38	46.00	-27.62	Average
8	0.532	15.32	0.07	9.58	24.97	56.00	-31.03	QP
9	4.114	7.16	0.17	9.63	16.96	46.00	-29.04	Average
10	4.114	13.10	0.17	9.63	22.90	56.00	-33.10	QP
11	15.970	15.39	0.32	9.87	25.58	50.00	-24.42	Average
12	15.970	22.99	0.32	9.87	33.18	60.00	-26.82	QP



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7.2 Duty Cycle

Test Requirement

KDB 789033 D02 v02r01 II B 1

Test Method:

ANSI C63.10 (2013) Section 12.2

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C

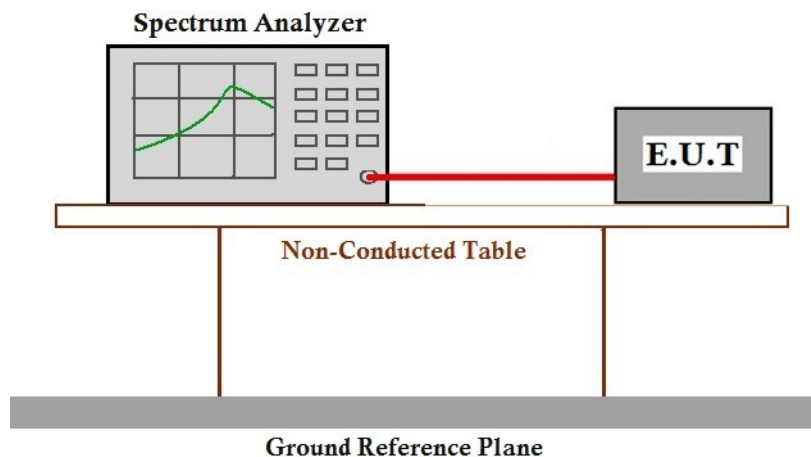
Humidity: 54.1 % RH

Atmospheric Pressure: 1003 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.3 99% Bandwidth

Test Requirement N/A
Test Method: KDB 789033 II D

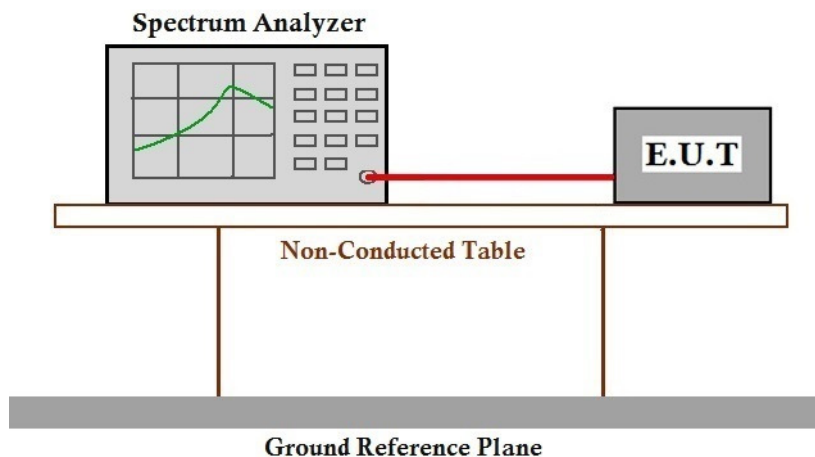
7.3.1 E.U.T. Operation

Operating Environment:
Temperature: 22.8 °C Humidity: 54.1 % RH Atmospheric Pressure: 1003 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.4 26dB Emission bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)
Test Method: KDB 789033 D02 II C 1

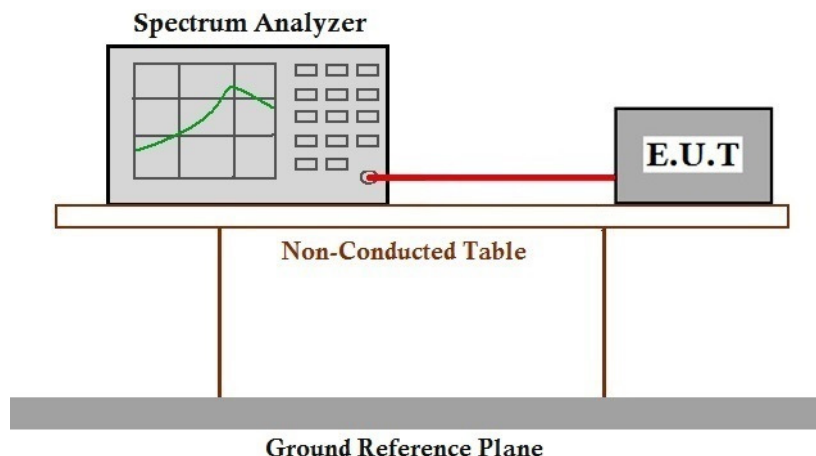
7.4.1 E.U.T. Operation

Operating Environment:
Temperature: 22.8 °C Humidity: 54.1 % RH Atmospheric Pressure: 1003 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.5 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart C 15.407 (e)

Test Method: KDB 789033 D02 II C 2

Limit:

Frequency band(MHz)	Limit
5725-5850	≥500 kHz

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C

Humidity: 54.1 % RH

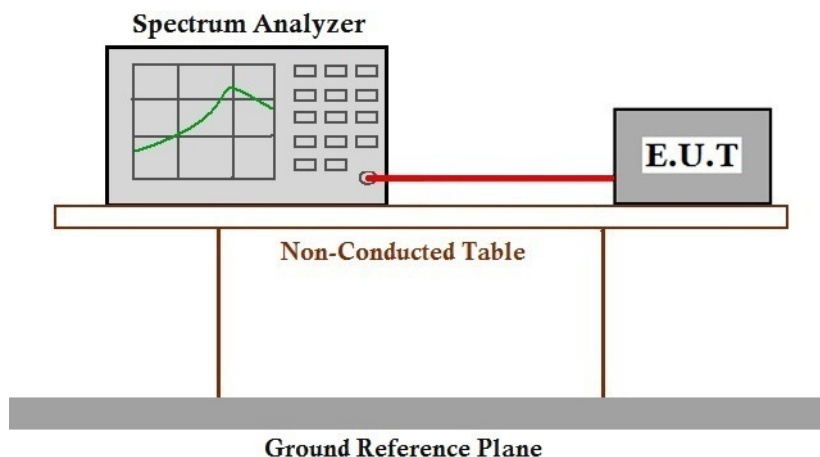
Atmospheric Pressure: 1003 mbar

7.5.2 Test Mode Description

Pre-scan /	Mode	Description
Final test	Code	

Final test	02	
------------	----	--

TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram**7.5.4 Measurement Procedure and Data**

Please Refer to Appendix for Details



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7.6 Maximum Conducted output power

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) for client device or 11dBm+10logB*
5470-5725	≤250mW(24dBm) for client device or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C

Humidity: 54.1 % RH

Atmospheric Pressure: 1003 mbar

7.6.2 Test Mode Description

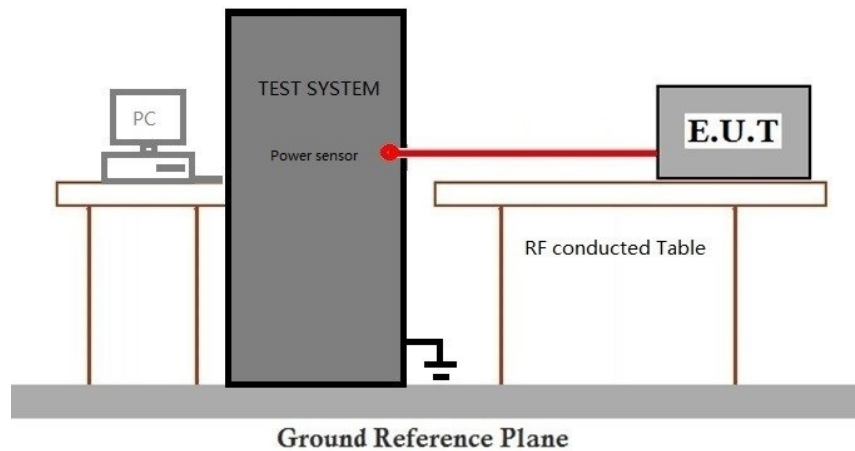
Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.



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7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II F

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C

Humidity: 54.1 % RH

Atmospheric Pressure: 1003 mbar

7.7.2 Test Mode Description

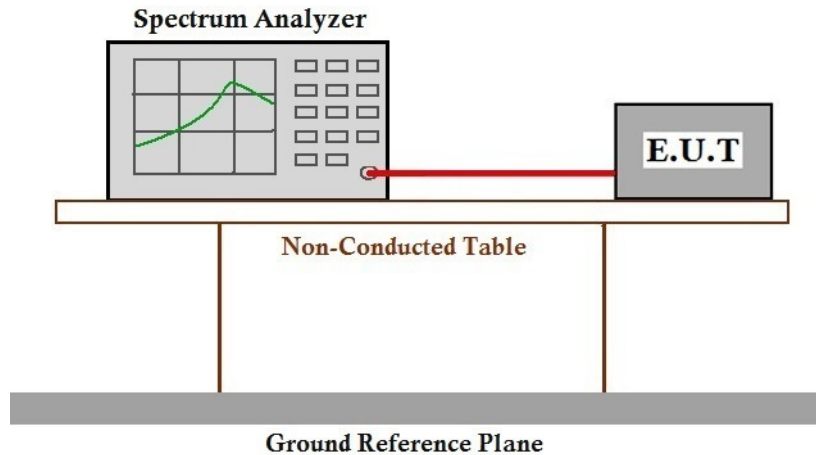
Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.



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7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

*(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:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.8.1 E.U.T. Operation

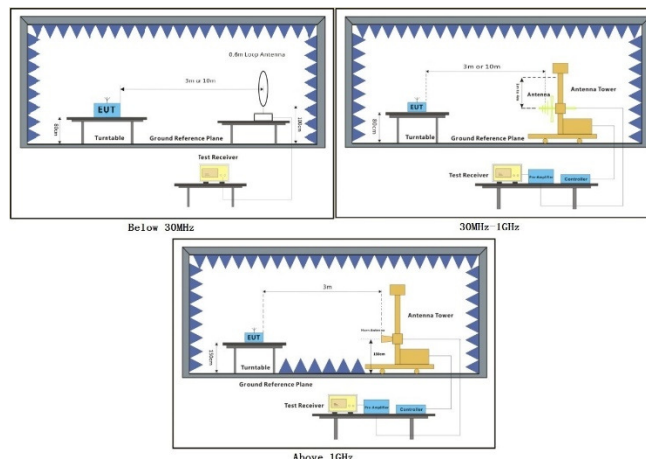
Operating Environment:

Temperature: 23.2 °C Humidity: 53.5 % RH Atmospheric Pressure: 1003 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

7.8.3 Test Setup Diagram



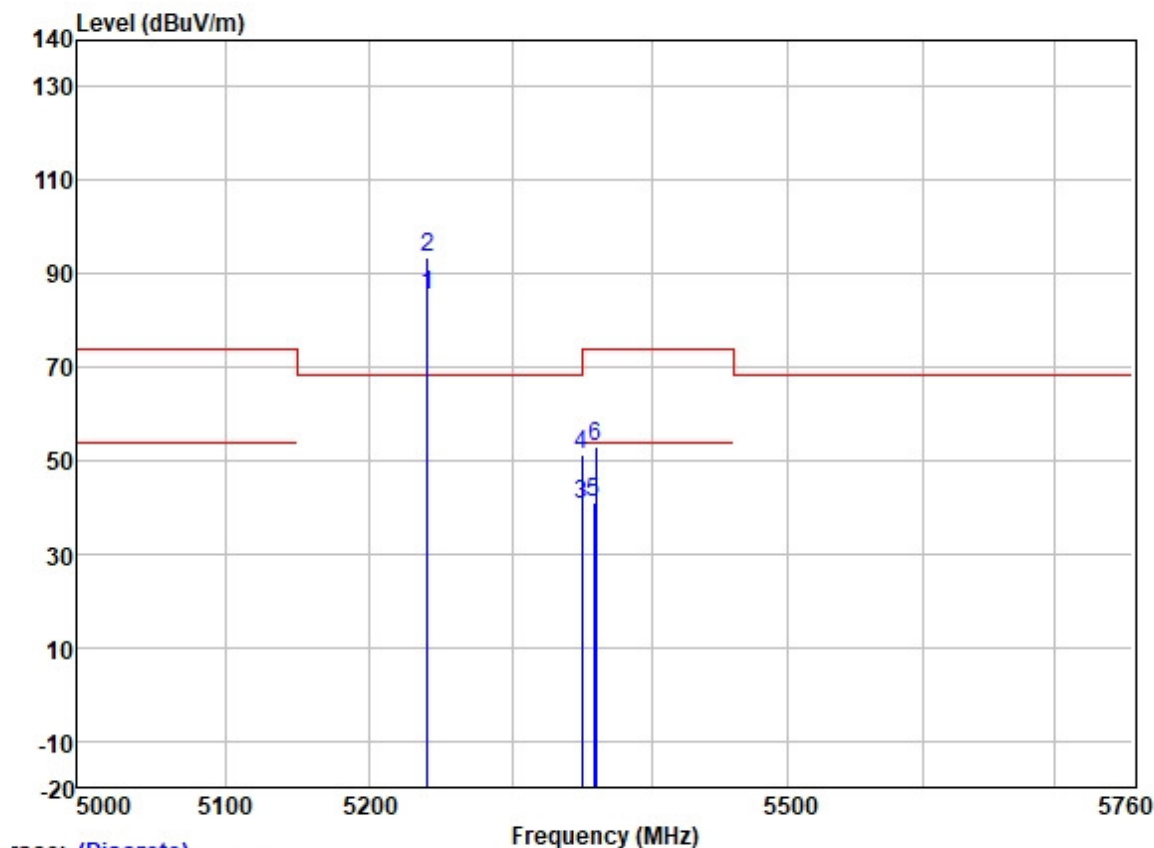
7.8.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



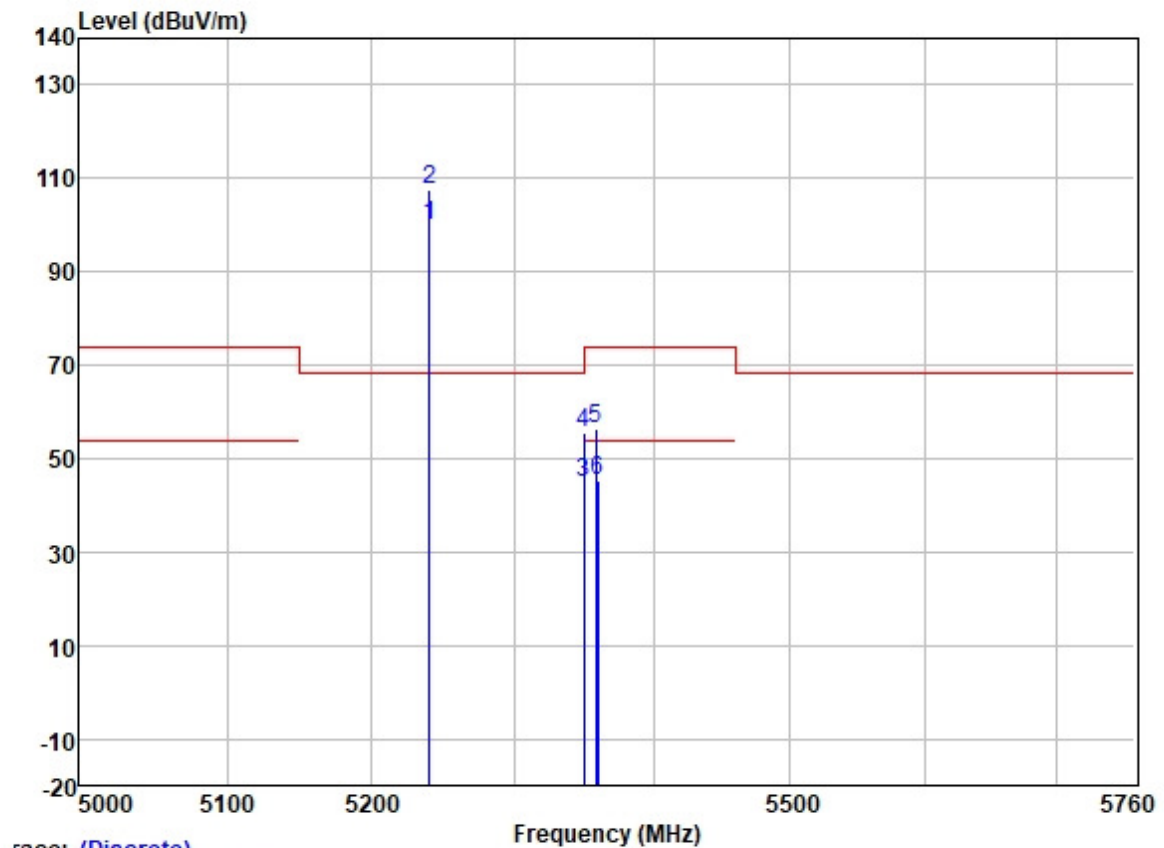
Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel: Low



race: (Discrete)

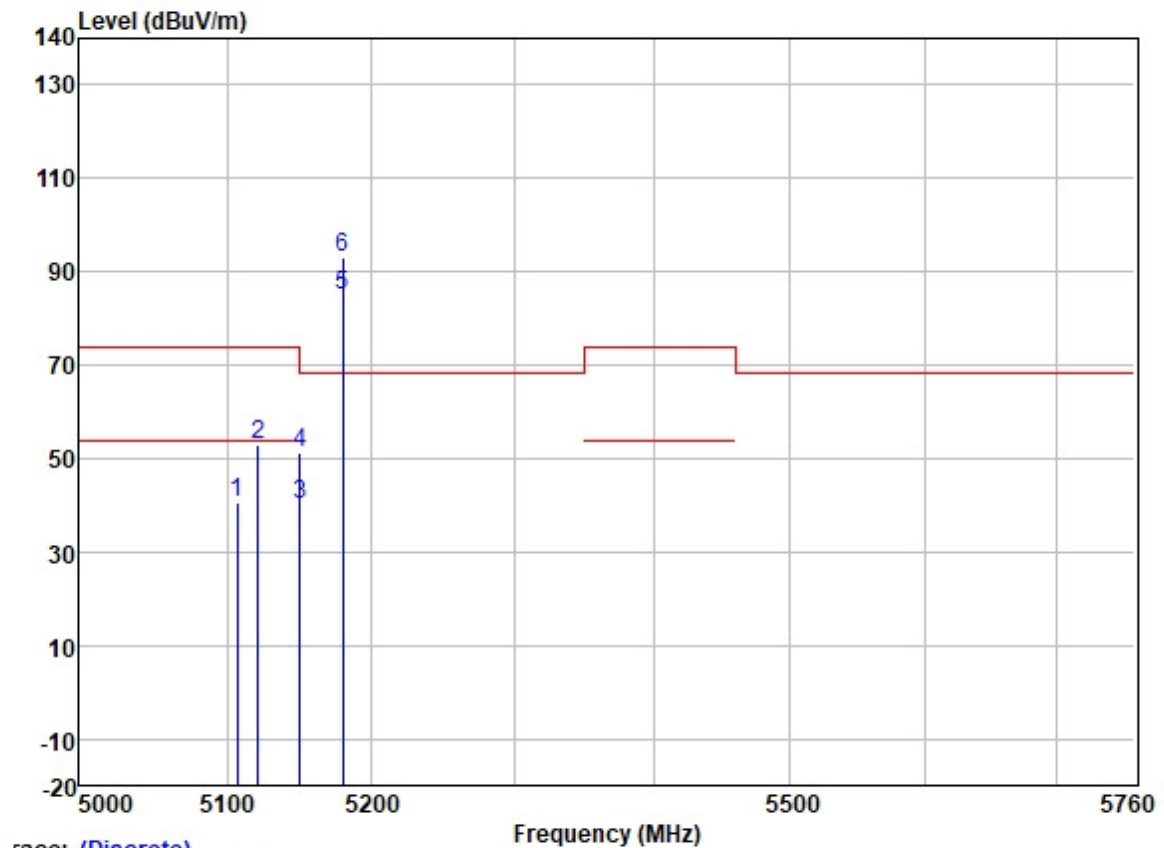
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5240.000	84.66	31.75	5.74	36.87	85.28	-----	-----	HORIZONTAL	Average
2 *	5240.000	92.79	31.75	5.74	36.87	93.41	68.20	25.21	HORIZONTAL	Peak
3	5350.020	39.71	31.77	6.05	36.88	40.65	54.00	-13.35	HORIZONTAL	Average
4	5350.020	50.23	31.77	6.05	36.88	51.17	74.00	-22.83	HORIZONTAL	Peak
5	5358.582	39.95	31.78	6.03	36.88	40.88	54.00	-13.12	HORIZONTAL	Average
6	5360.000	52.01	31.78	6.03	36.88	52.94	74.00	-21.06	HORIZONTAL	Peak

Test Mode: 01; Polarity: Vertical; Modulation: 802.11a; Bandwidth: 20MHz; Channel: Low



race: (Discrete)		Frequency (MHz)								
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5240.000	99.20	31.75	5.74	36.87	99.82	-----	-----	VERTICAL	Average
2 *	5240.000	106.97	31.75	5.74	36.87	107.59	68.20	39.39	VERTICAL	Peak
3	5350.020	43.97	31.77	6.05	36.88	44.91	54.00	-9.09	VERTICAL	Average
4	5350.020	54.58	31.77	6.05	36.88	55.52	74.00	-18.48	VERTICAL	Peak
5	5358.156	55.27	31.78	6.03	36.88	56.20	74.00	-17.80	VERTICAL	Peak
6	5360.000	44.33	31.78	6.03	36.88	45.26	54.00	-8.74	VERTICAL	Average

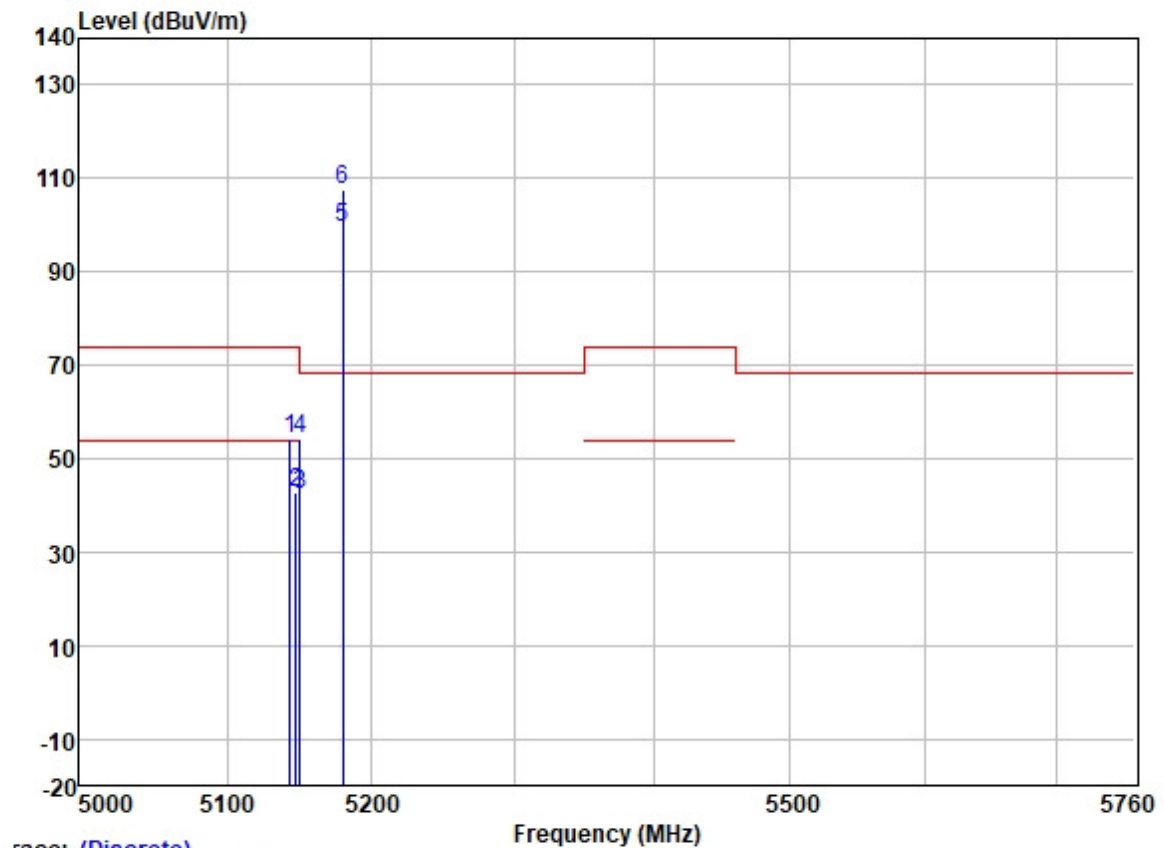
Test Mode: 01; Polarity: Horizontal; Modulation: 802.11a; Bandwidth: 20MHz; Channel: High



race: (Discrete)

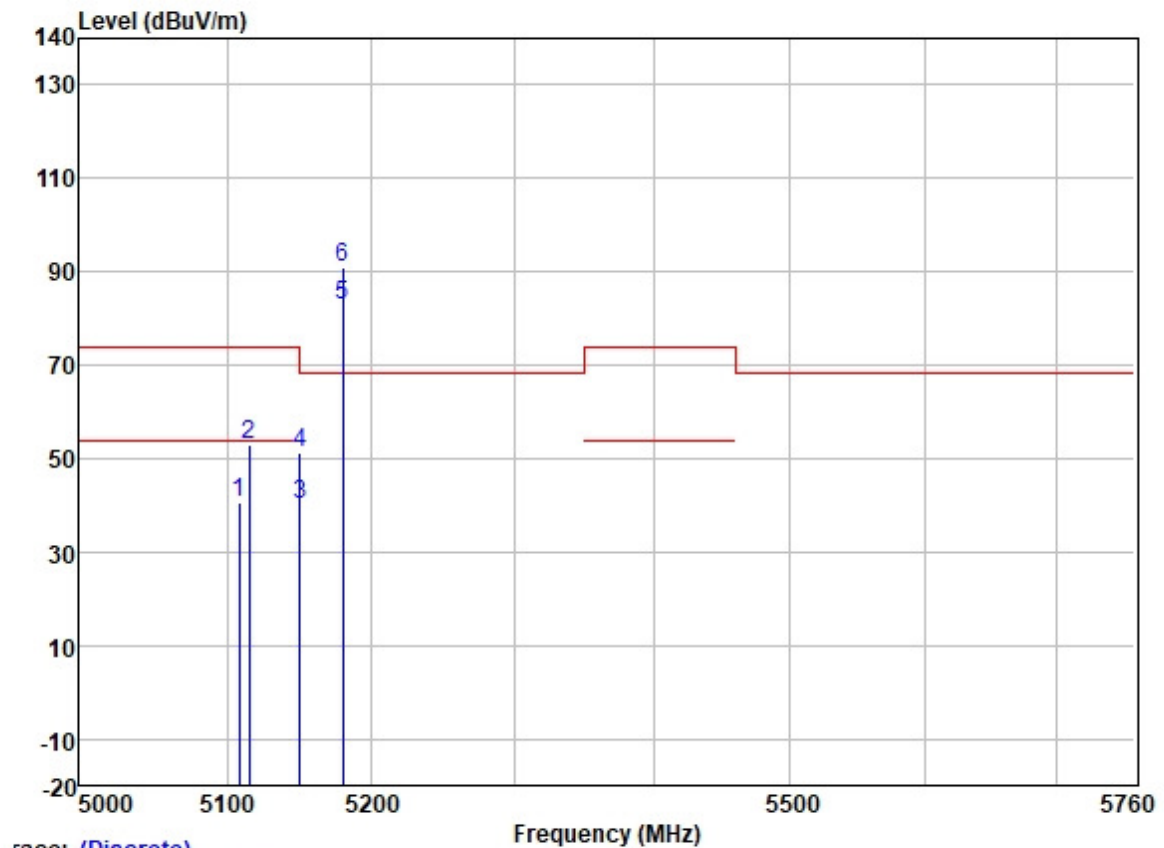
	Read	Antenna	Cable	Preamp		Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5107.036	39.89	31.72	5.65	36.86	40.40	54.00	-13.60	HORIZONTAL Average
2	5121.336	52.34	31.72	5.64	36.86	52.84	74.00	-21.16	HORIZONTAL Peak
3	5149.980	39.72	31.72	5.62	36.86	40.20	54.00	-13.80	HORIZONTAL Average
4	5149.980	50.78	31.72	5.62	36.86	51.26	74.00	-22.74	HORIZONTAL Peak
5	5180.000	84.28	31.73	5.61	36.87	84.75	-----	-----	HORIZONTAL Average
6 *	5180.000	92.72	31.73	5.61	36.87	93.19	68.20	24.99	HORIZONTAL Peak

Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel: High



race: (Discrete)	Frequency (MHz)									
	ReadAntenna	Cable	Preamp		Limit	Over	Pol/Phase	Remark		
	Freq	Level	Factor	Loss	Factor	Level			Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5143.361	53.83	31.72	5.62	36.86	54.31	74.00	-19.69	VERTICAL	Peak
2	5147.458	42.39	31.72	5.62	36.86	42.87	54.00	-11.13	VERTICAL	Average
3	5149.980	41.98	31.72	5.62	36.86	42.46	54.00	-11.54	VERTICAL	Average
4	5149.980	53.89	31.72	5.62	36.86	54.37	74.00	-19.63	VERTICAL	Peak
5	5180.000	99.20	31.73	5.61	36.87	99.67	-----	-----	VERTICAL	Average
6 *	5180.000	107.31	31.73	5.61	36.87	107.78	68.20	39.58	VERTICAL	Peak

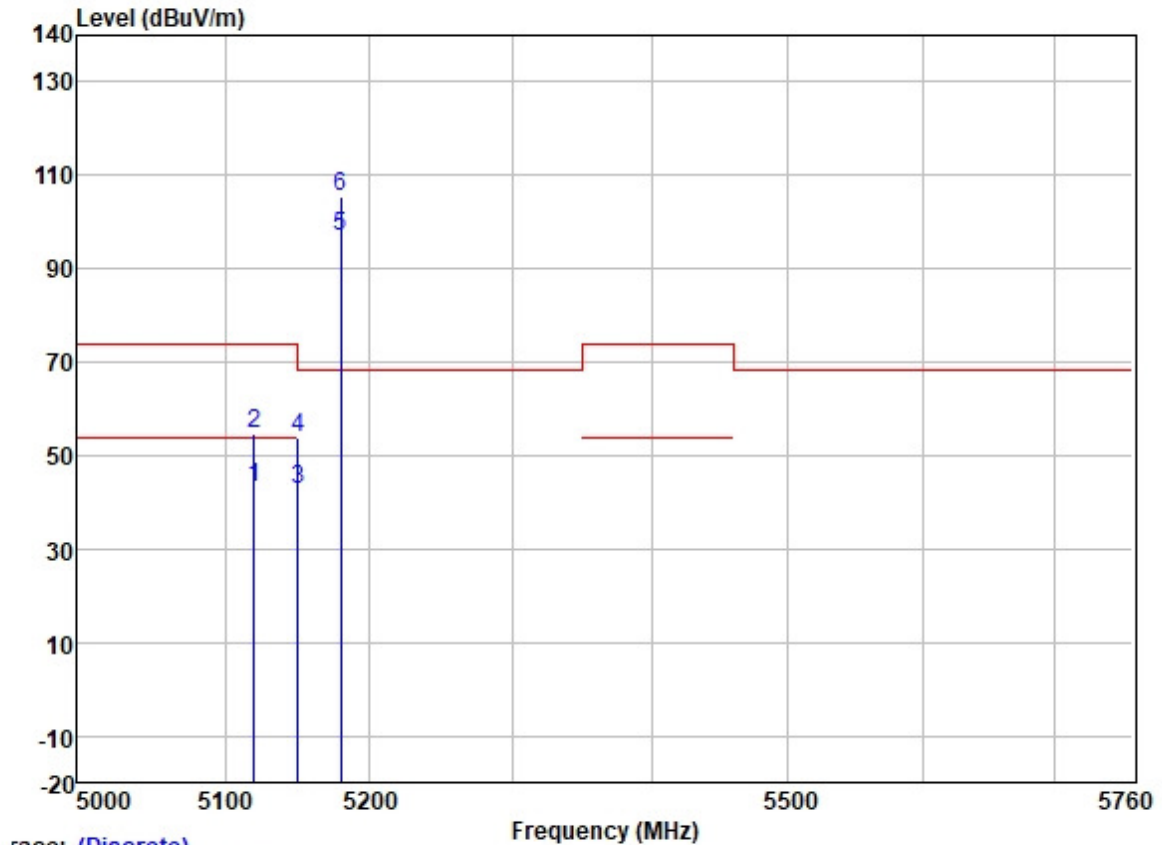
Test Mode: 01; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 20MHz; Channel: Low



race: (Discrete)

	Read	Antenna	Cable	Preamp		Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5108.326	40.26	31.72	5.65	36.86	40.77	54.00	-13.23	HORIZONTAL Average
2	5115.274	52.50	31.72	5.64	36.86	53.00	74.00	-21.00	HORIZONTAL Peak
3	5149.980	39.69	31.72	5.62	36.86	40.17	54.00	-13.83	HORIZONTAL Average
4	5149.980	50.85	31.72	5.62	36.86	51.33	74.00	-22.67	HORIZONTAL Peak
5	5180.000	82.19	31.73	5.61	36.87	82.66	-----	-----	HORIZONTAL Average
6 *	5180.000	90.58	31.73	5.61	36.87	91.05	68.20	22.85	HORIZONTAL Peak

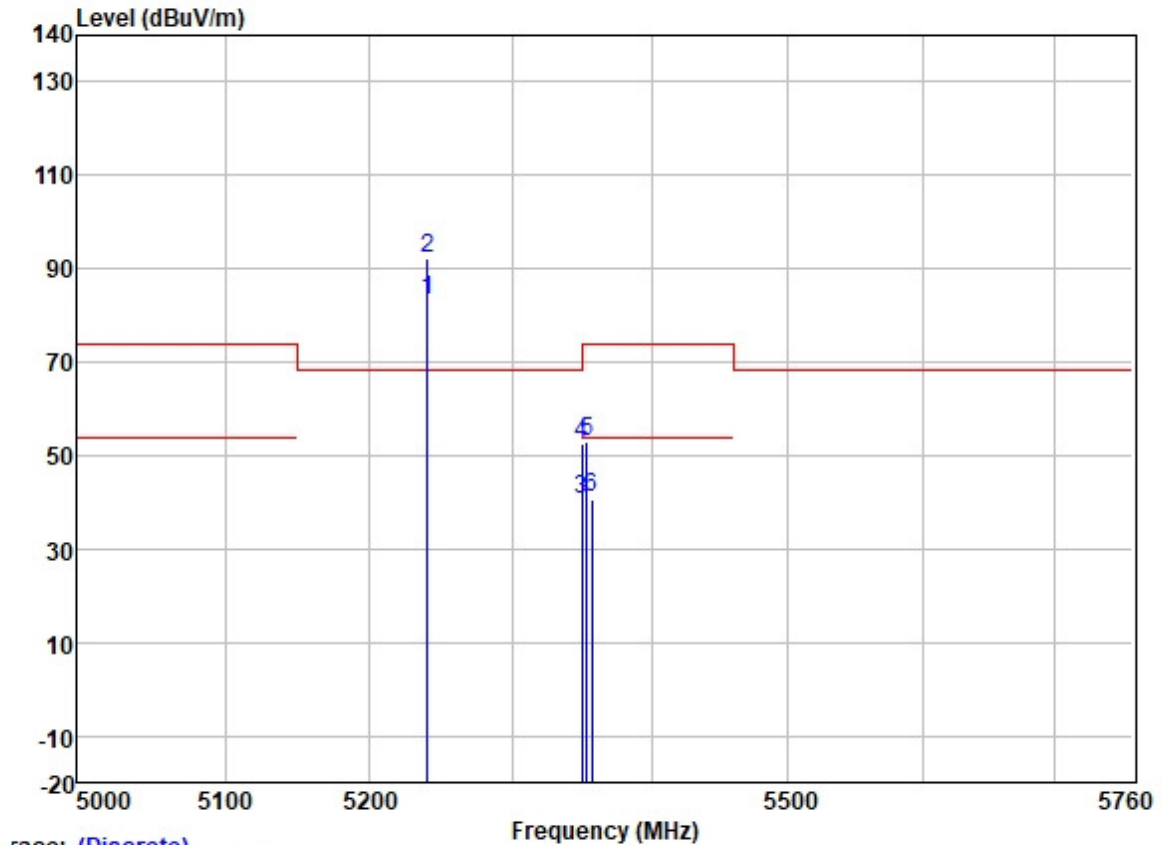
Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel: Low



race: (Discrete)

	Freq	Read	Antenna	Cable	Preamp	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5119.746	42.47	31.72	5.64	36.86	42.97	54.00	-11.03	VERTICAL Average
2	5119.746	54.17	31.72	5.64	36.86	54.67	74.00	-19.33	VERTICAL Peak
3	5149.980	42.16	31.72	5.62	36.86	42.64	54.00	-11.36	VERTICAL Average
4	5149.980	53.26	31.72	5.62	36.86	53.74	74.00	-20.26	VERTICAL Peak
5	5180.000	96.63	31.73	5.61	36.87	97.10	-----	-----	VERTICAL Average
6 *	5180.000	104.79	31.73	5.61	36.87	105.26	68.20	37.06	VERTICAL Peak

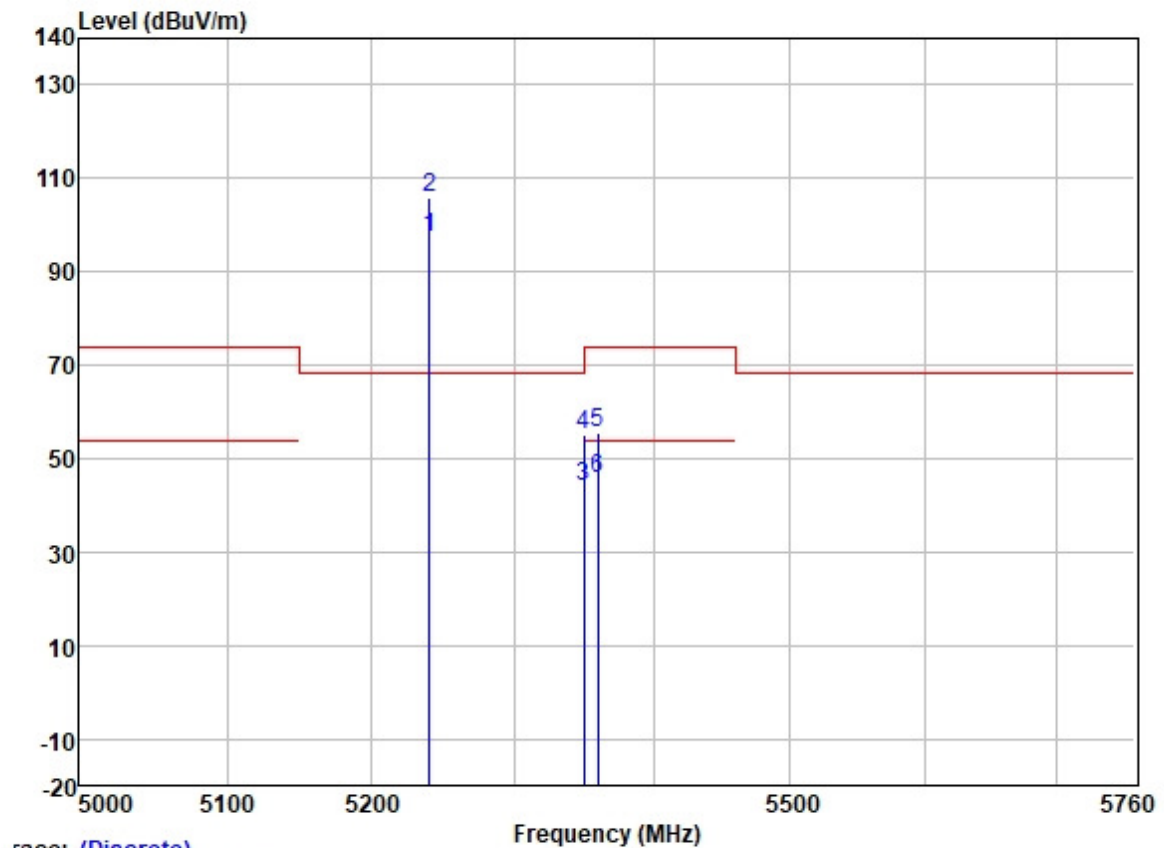
Test Mode: 01; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High



Trace: (Discrete)

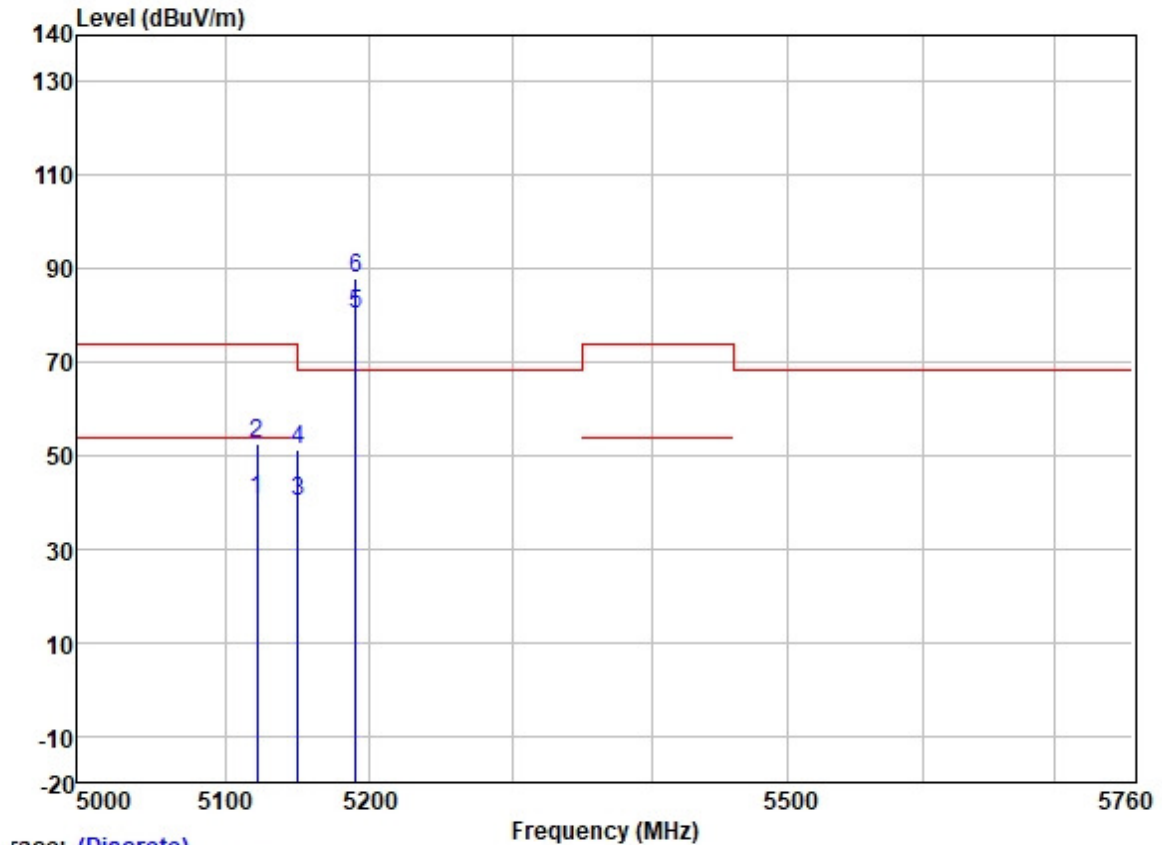
	Freq	Read	Antenna	Cable	Preamp	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5240.000	82.78	31.75	5.74	36.87	83.40	-----	-----	HORIZONTAL Average
2 *	5240.000	91.53	31.75	5.74	36.87	92.15	68.20	23.95	HORIZONTAL Peak
3	5350.020	39.52	31.77	6.05	36.88	40.46	54.00	-13.54	HORIZONTAL Average
4	5350.020	51.70	31.77	6.05	36.88	52.64	74.00	-21.36	HORIZONTAL Peak
5	5353.479	51.84	31.77	6.05	36.88	52.78	74.00	-21.22	HORIZONTAL Peak
6	5356.596	39.87	31.78	6.03	36.88	40.80	54.00	-13.20	HORIZONTAL Average

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel: High



race: (Discrete)		Frequency (MHz)								
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5240.000	96.74	31.75	5.74	36.87	97.36	-----	-----	VERTICAL	Average
2 *	5240.000	105.05	31.75	5.74	36.87	105.67	68.20	37.47	VERTICAL	Peak
3	5350.020	43.15	31.77	6.05	36.88	44.09	54.00	-9.91	VERTICAL	Average
4	5350.020	53.97	31.77	6.05	36.88	54.91	74.00	-19.09	VERTICAL	Peak
5	5359.433	54.45	31.78	6.03	36.88	55.38	74.00	-18.62	VERTICAL	Peak
6	5359.858	44.66	31.78	6.03	36.88	45.59	54.00	-8.41	VERTICAL	Average

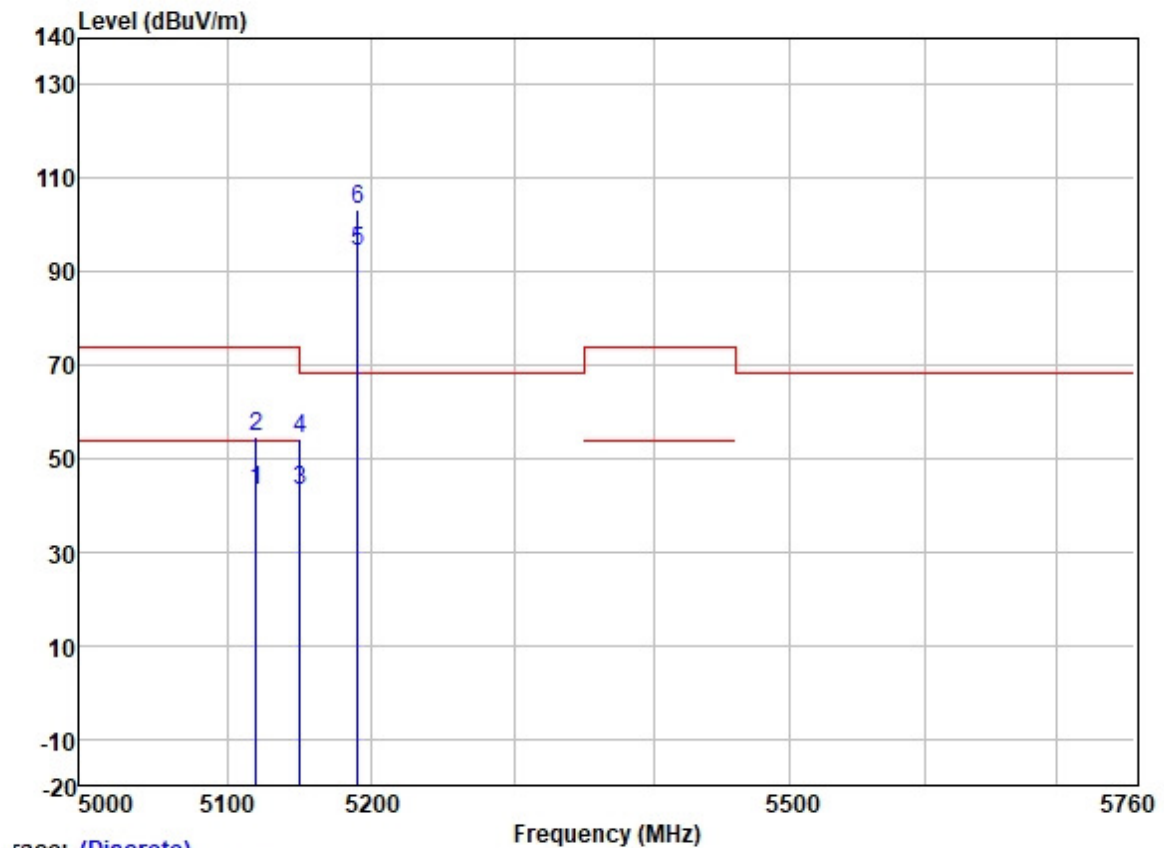
Test Mode: 01; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 40MHz; Channel: Low



Trace: (Discrete)

		ReadAntenna	Cable	Preamp		Limit	Over			
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5121.871	39.90	31.72	5.64	36.86	40.40	54.00	-13.60	HORIZONTAL	Average
2	5121.871	51.93	31.72	5.64	36.86	52.43	74.00	-21.57	HORIZONTAL	Peak
3	5149.980	39.52	31.72	5.62	36.86	40.00	54.00	-14.00	HORIZONTAL	Average
4	5149.980	50.58	31.72	5.62	36.86	51.06	74.00	-22.94	HORIZONTAL	Peak
5	5190.000	79.71	31.73	5.60	36.87	80.17	-----	-----	HORIZONTAL	Average
6 *	5190.000	87.41	31.73	5.60	36.87	87.87	68.20	19.67	HORIZONTAL	Peak

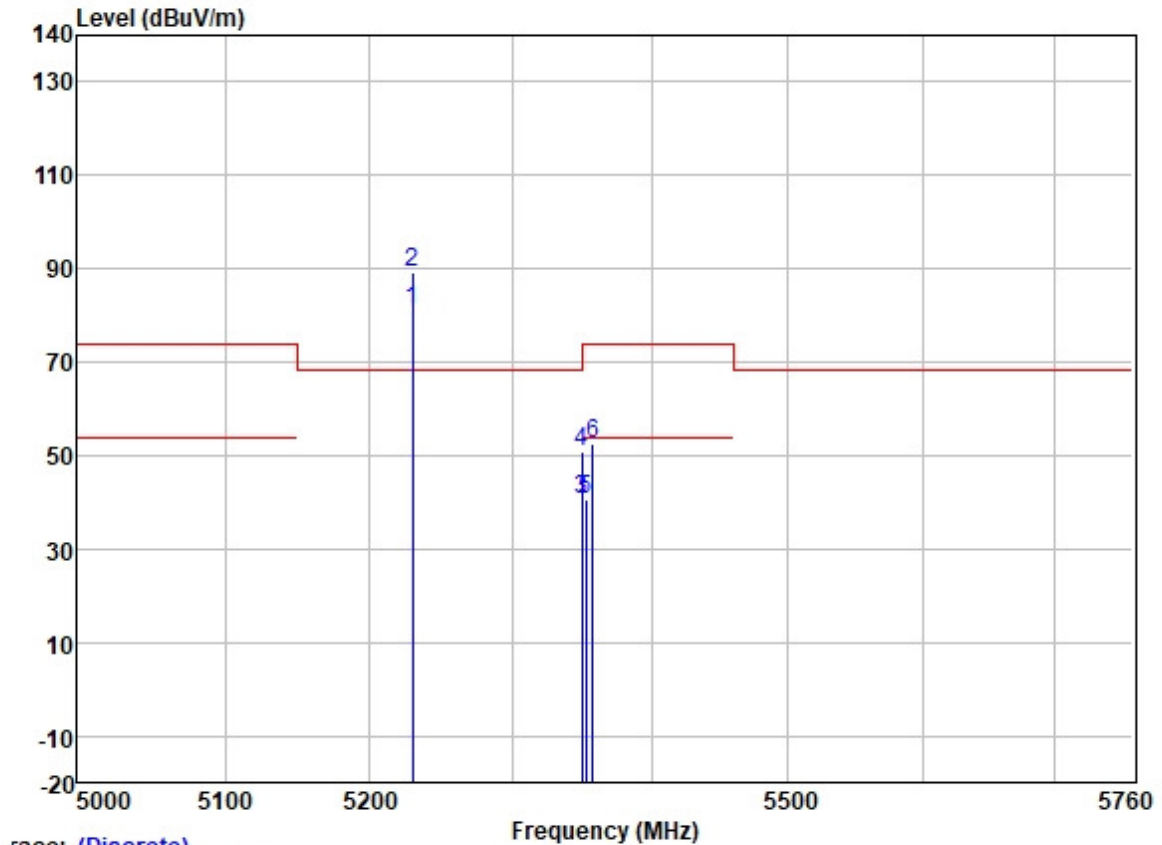
Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel: Low



race: (Discrete)

	Read	Antenna	Cable	Preamp		Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5119.846	42.76	31.72	5.64	36.86	43.26	54.00	-10.74	VERTICAL
2	5119.846	54.11	31.72	5.64	36.86	54.61	74.00	-19.39	VERTICAL
3	5149.980	42.74	31.72	5.62	36.86	43.22	54.00	-10.78	VERTICAL
4	5149.980	53.73	31.72	5.62	36.86	54.21	74.00	-19.79	VERTICAL
5	5190.000	93.82	31.73	5.60	36.87	94.28	-----	-----	VERTICAL
6 *	5190.000	102.68	31.73	5.60	36.87	103.14	68.20	34.94	VERTICAL

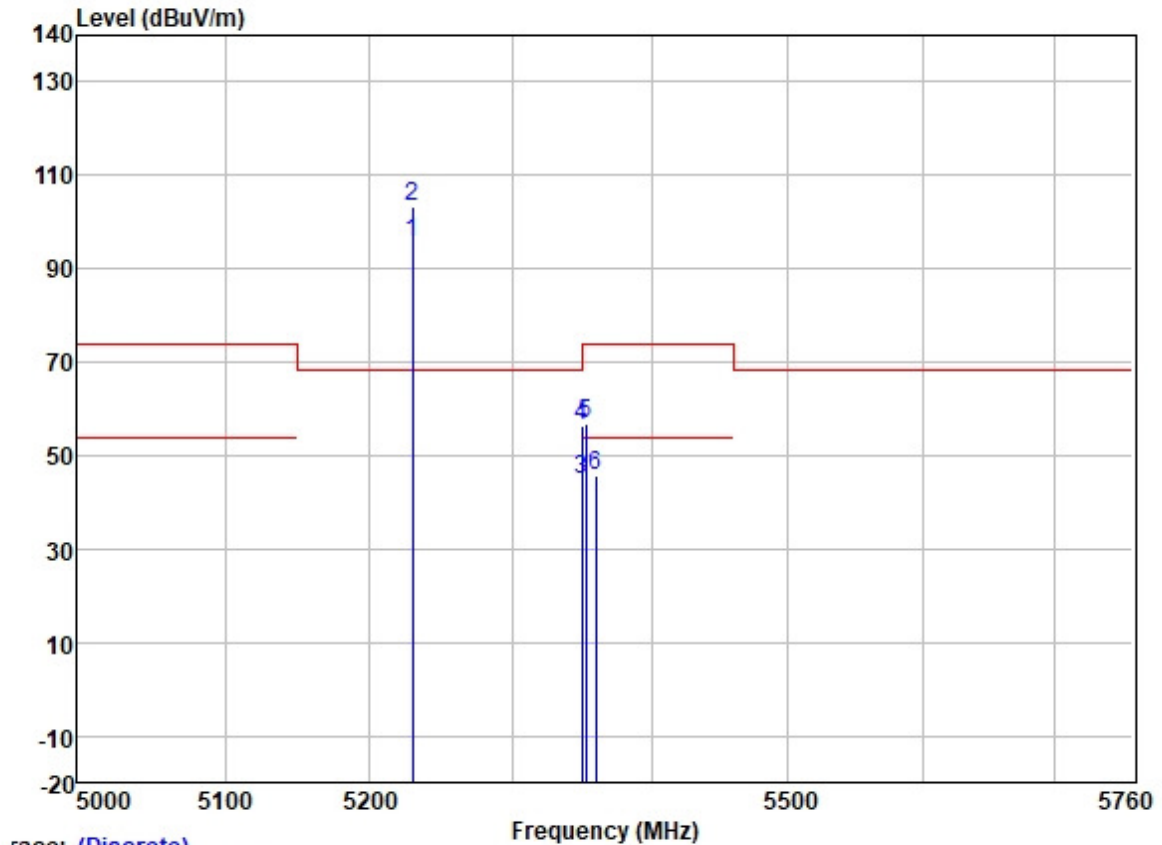
Test Mode: 01; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 40MHz; Channel: High



Trace: (Discrete)

	Freq	Read	Antenna	Cable	Preamp	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5230.000	80.62	31.74	5.70	36.87	81.19	-----	-----	HORIZONTAL Average
2	* 5230.000	88.84	31.74	5.70	36.87	89.41	68.20	21.21	HORIZONTAL Peak
3	5350.020	39.45	31.77	6.05	36.88	40.39	54.00	-13.61	HORIZONTAL Average
4	5350.020	49.95	31.77	6.05	36.88	50.89	74.00	-23.11	HORIZONTAL Peak
5	5352.533	39.76	31.77	6.05	36.88	40.70	54.00	-13.30	HORIZONTAL Average
6	5357.402	51.56	31.78	6.03	36.88	52.49	74.00	-21.51	HORIZONTAL Peak

Test Mode: 01; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 40MHz; Channel: High



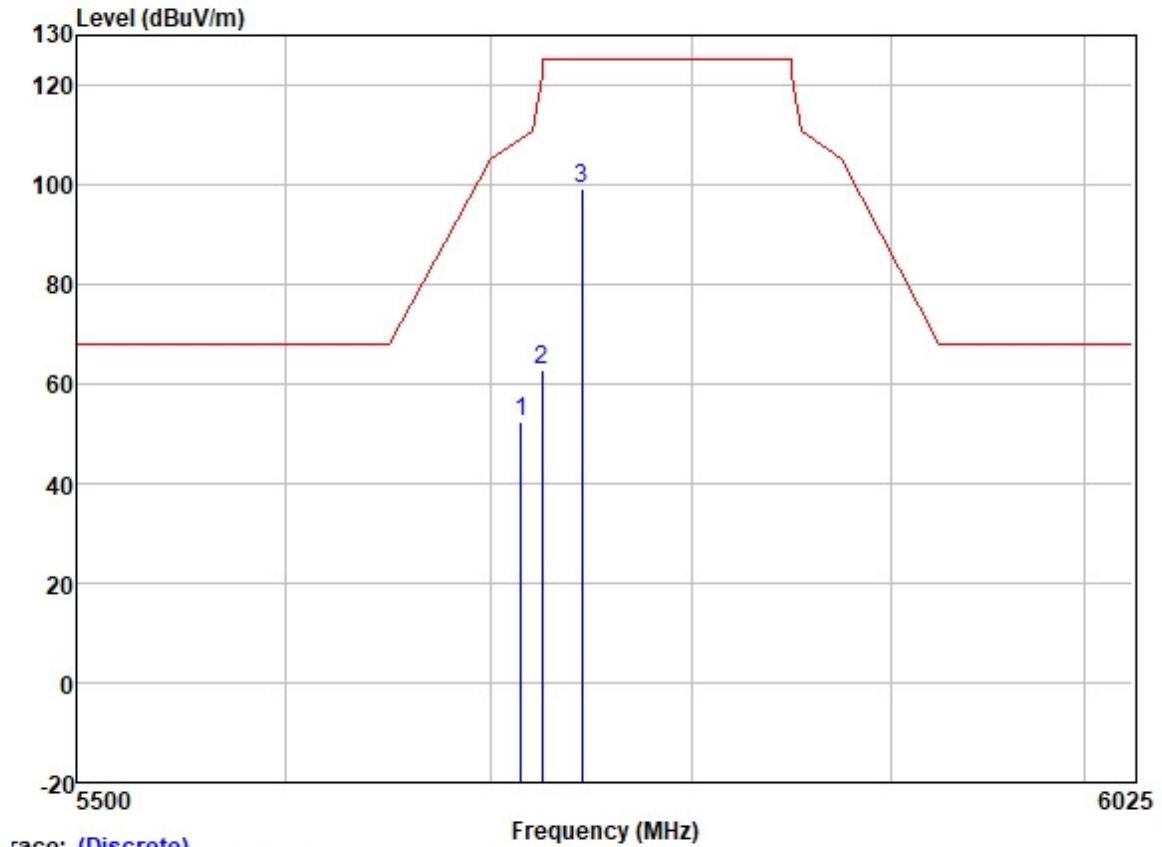
Trace: (Discrete)

		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5230.000	94.92	31.74	5.70	36.87	95.49	-----	-----	VERTICAL	Average
2 *	5230.000	102.83	31.74	5.70	36.87	103.40	68.20	35.20	VERTICAL	Peak
3	5350.020	43.97	31.77	6.05	36.88	44.91	54.00	-9.09	VERTICAL	Average
4	5350.020	55.25	31.77	6.05	36.88	56.19	74.00	-17.81	VERTICAL	Peak
5	5352.695	55.88	31.77	6.05	36.88	56.82	74.00	-17.18	VERTICAL	Peak
6	5360.000	44.84	31.78	6.03	36.88	45.77	54.00	-8.23	VERTICAL	Average



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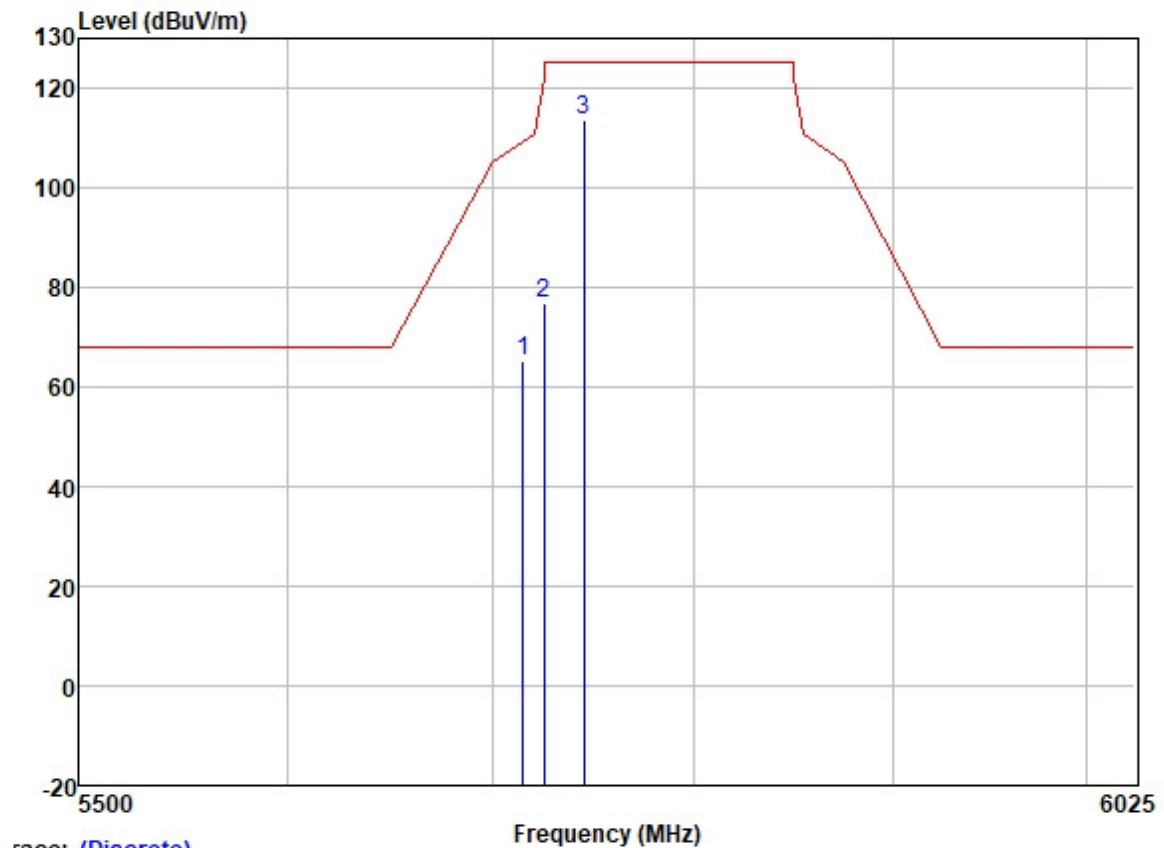
Test Mode: 02; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel: Low



Trace: (Discrete)

		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5715.000	50.88	32.04	6.33	36.89	52.36	109.40	-57.04	HORIZONTAL	Peak
2	5725.000	61.41	32.07	6.25	36.89	62.84	122.20	-59.36	HORIZONTAL	Peak
3	5745.000	97.86	32.10	6.20	36.89	99.27	125.20	-25.93	HORIZONTAL	Peak

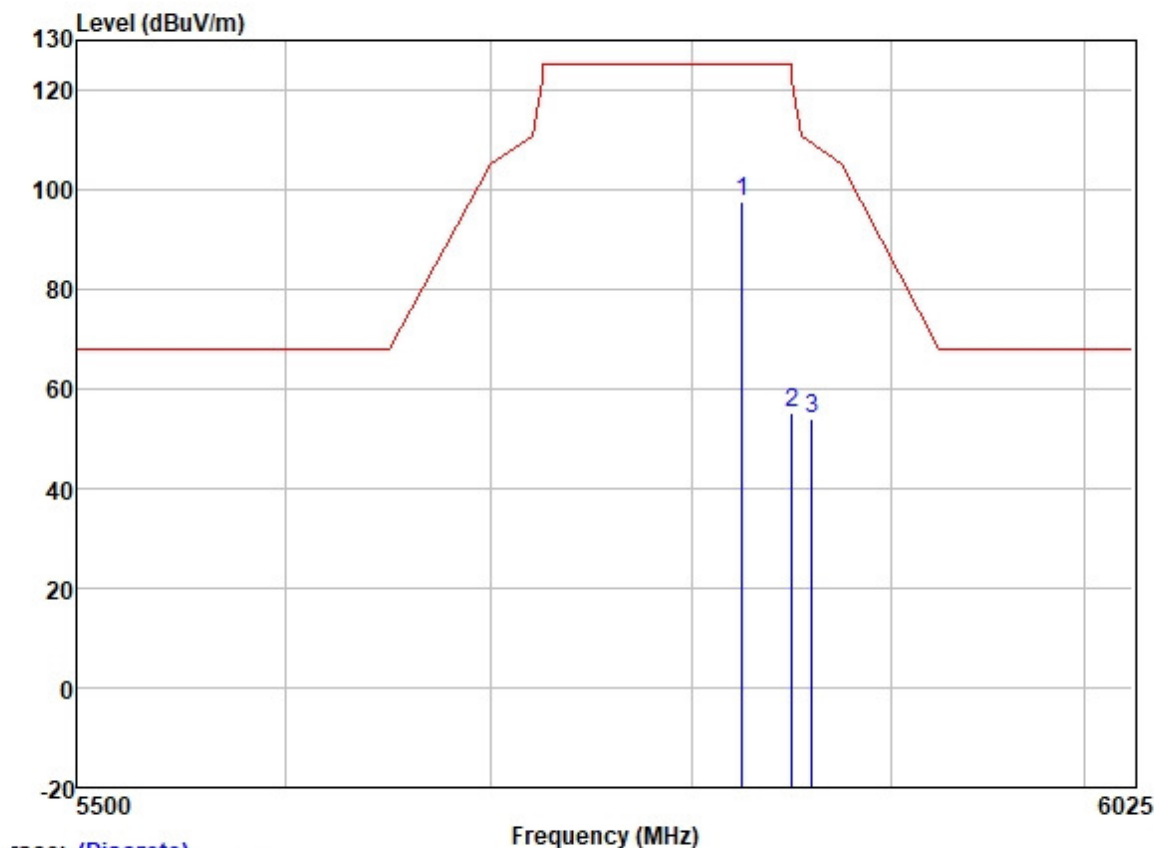
Test Mode: 02; Polarity: Vertical; Modulation: 802.11a; Bandwidth: 20MHz; Channel: Low



Trace: (Discrete)

		Read	Antenna	Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5715.000	63.72	32.04	6.33	36.89	65.20	109.40	-44.20	VERTICAL	Peak
2	5725.000	75.43	32.07	6.25	36.89	76.86	122.20	-45.34	VERTICAL	Peak
3	5745.000	112.24	32.10	6.20	36.89	113.65	125.20	-11.55	VERTICAL	Peak

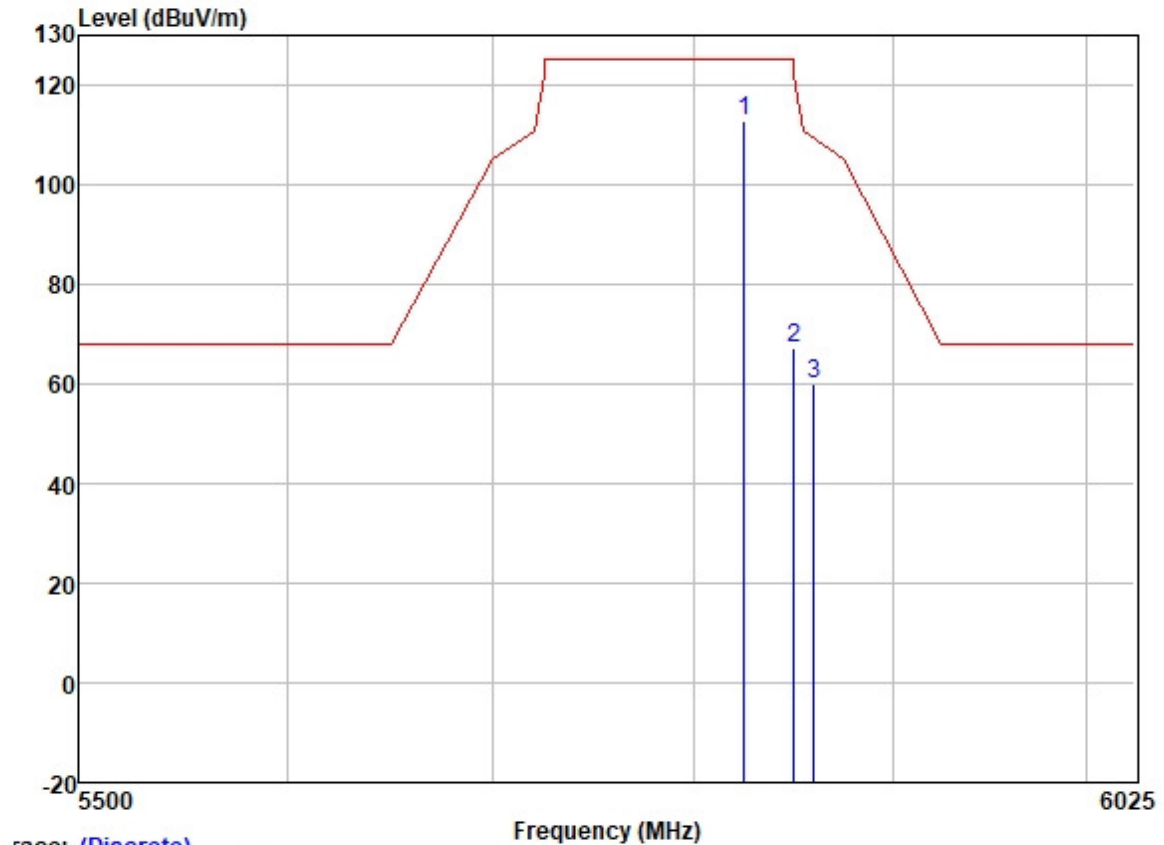
Test Mode: 02; Polarity: Horizontal; Modulation: 802.11a; Bandwidth: 20MHz; Channel: High



Trace: (Discrete)

	Freq	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5825.000	96.04	32.23	6.04	36.90	97.41	125.20	-27.79	HORIZONTAL Peak
2	5850.000	53.84	32.25	6.00	36.90	55.19	122.20	-67.01	HORIZONTAL Peak
3	5860.000	52.61	32.27	5.96	36.90	53.94	109.40	-55.46	HORIZONTAL Peak

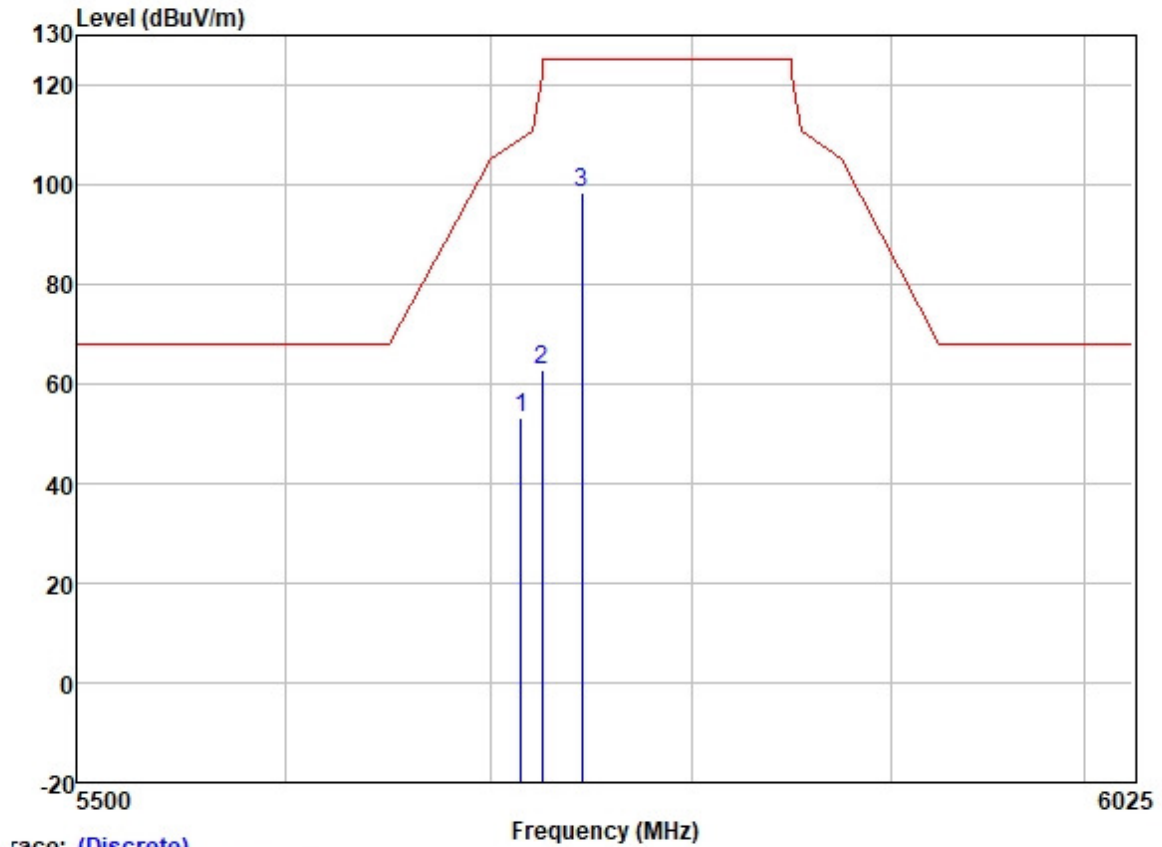
Test Mode: 02; Polarity: Vertical; Modulation: 802.11a; Bandwidth: 20MHz; Channel: High



Trace: (Discrete)

	Read	Antenna	Cable	Preamp		Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5825.000	111.36	32.23	6.04	36.90	112.73	125.20	-12.47	VERTICAL Peak
2	5850.000	65.88	32.25	6.00	36.90	67.23	122.20	-54.97	VERTICAL Peak
3	5860.000	58.83	32.27	5.96	36.90	60.16	109.40	-49.24	VERTICAL Peak

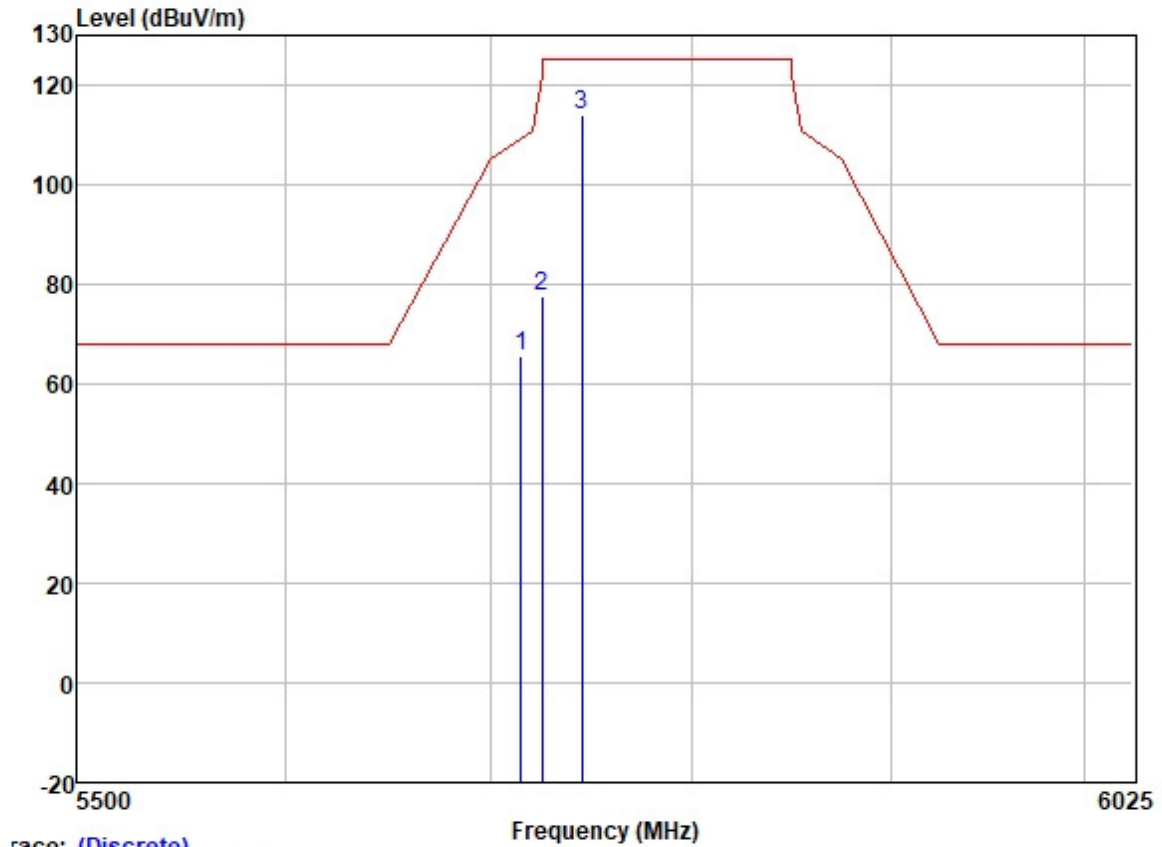
Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel: Low



Trace: (Discrete)

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5715.000	51.55	32.04	6.33	36.89	53.03	109.40	-56.37	HORIZONTAL	Peak
2	5725.000	61.56	32.07	6.25	36.89	62.99	122.20	-59.21	HORIZONTAL	Peak
3	5745.000	96.80	32.10	6.20	36.89	98.21	125.20	-26.99	HORIZONTAL	Peak

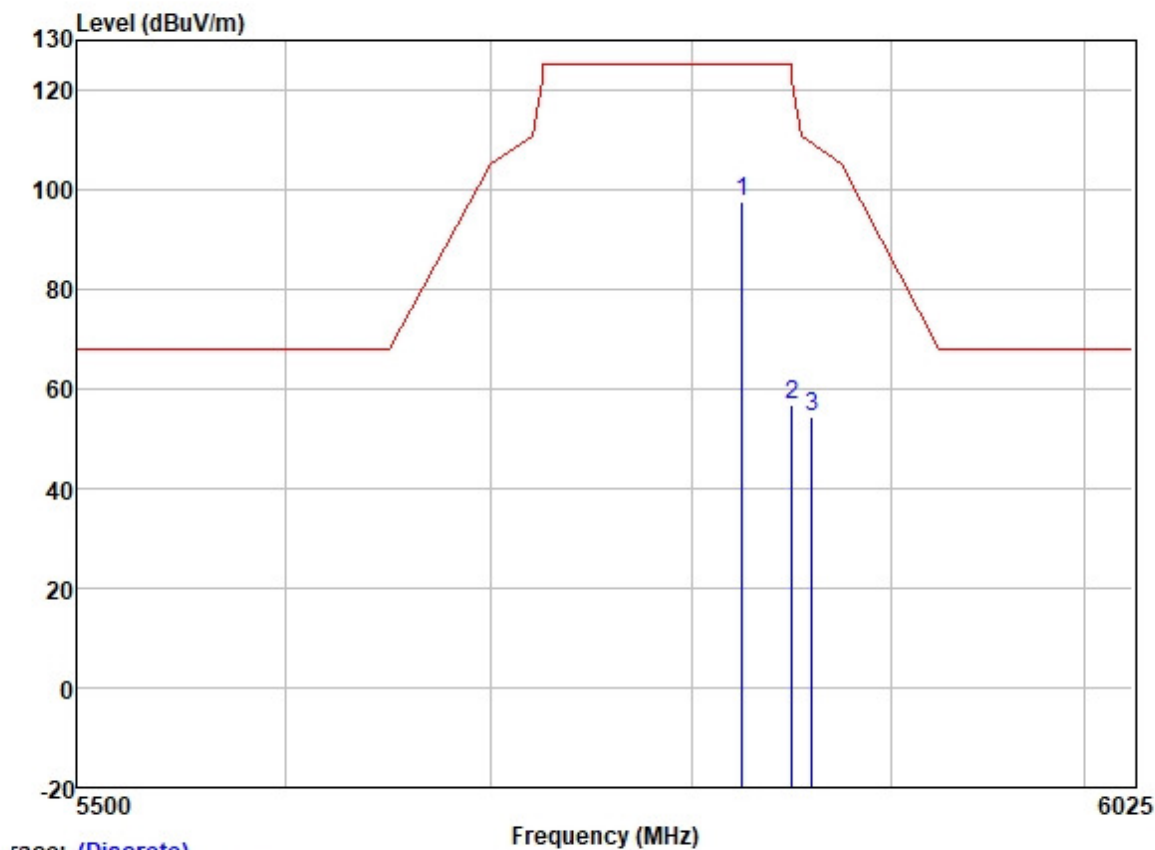
Test Mode: 02; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 20MHz; Channel: Low



Trace: (Discrete)

		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5715.000	64.10	32.04	6.33	36.89	65.58	109.40	-43.82	VERTICAL	Peak
2	5725.000	76.07	32.07	6.25	36.89	77.50	122.20	-44.70	VERTICAL	Peak
3	5745.000	112.40	32.10	6.20	36.89	113.81	125.20	-11.39	VERTICAL	Peak

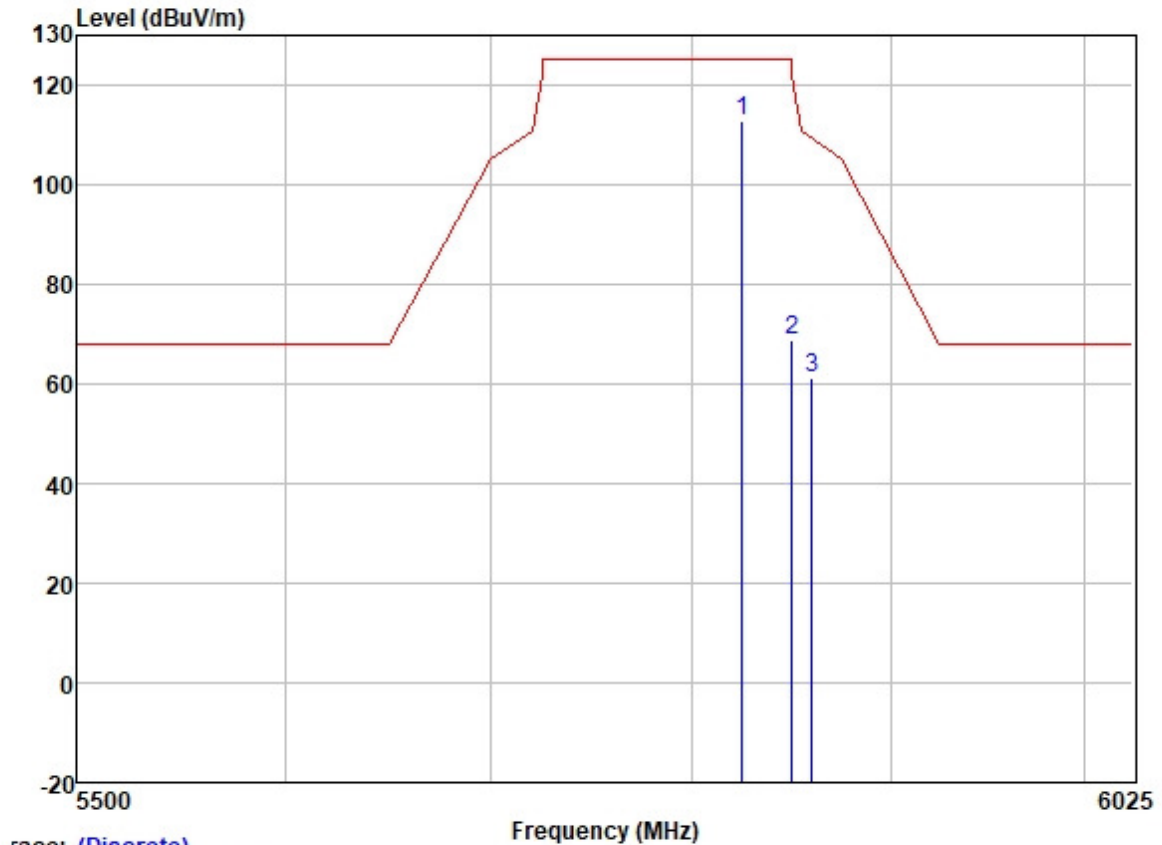
Test Mode: 02; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High



Trace: (Discrete)

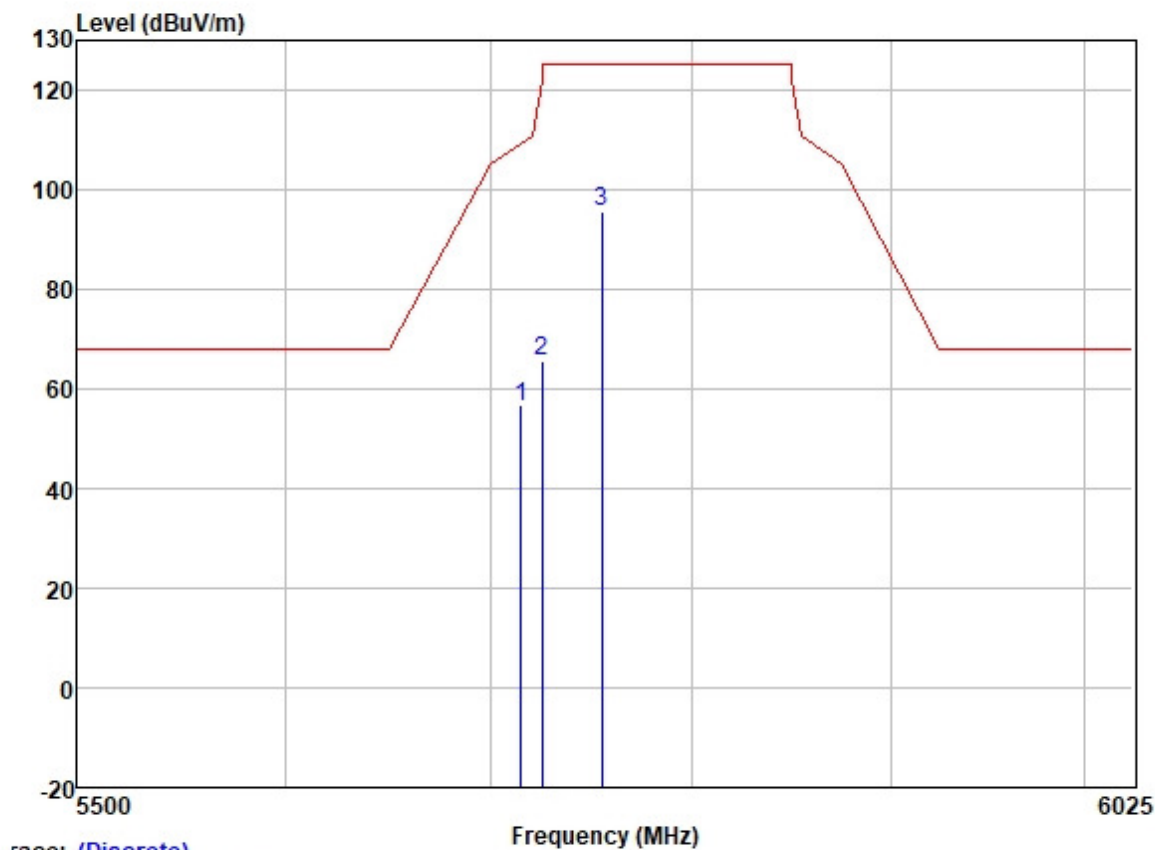
	Read	Antenna	Cable	Preamp		Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5825.000	96.09	32.23	6.04	36.90	97.46	125.20	-27.74	HORIZONTAL Peak
2	5850.000	55.35	32.25	6.00	36.90	56.70	122.20	-65.50	HORIZONTAL Peak
3	5860.000	52.97	32.27	5.96	36.90	54.30	109.40	-55.10	HORIZONTAL Peak

Test Mode: 02; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High



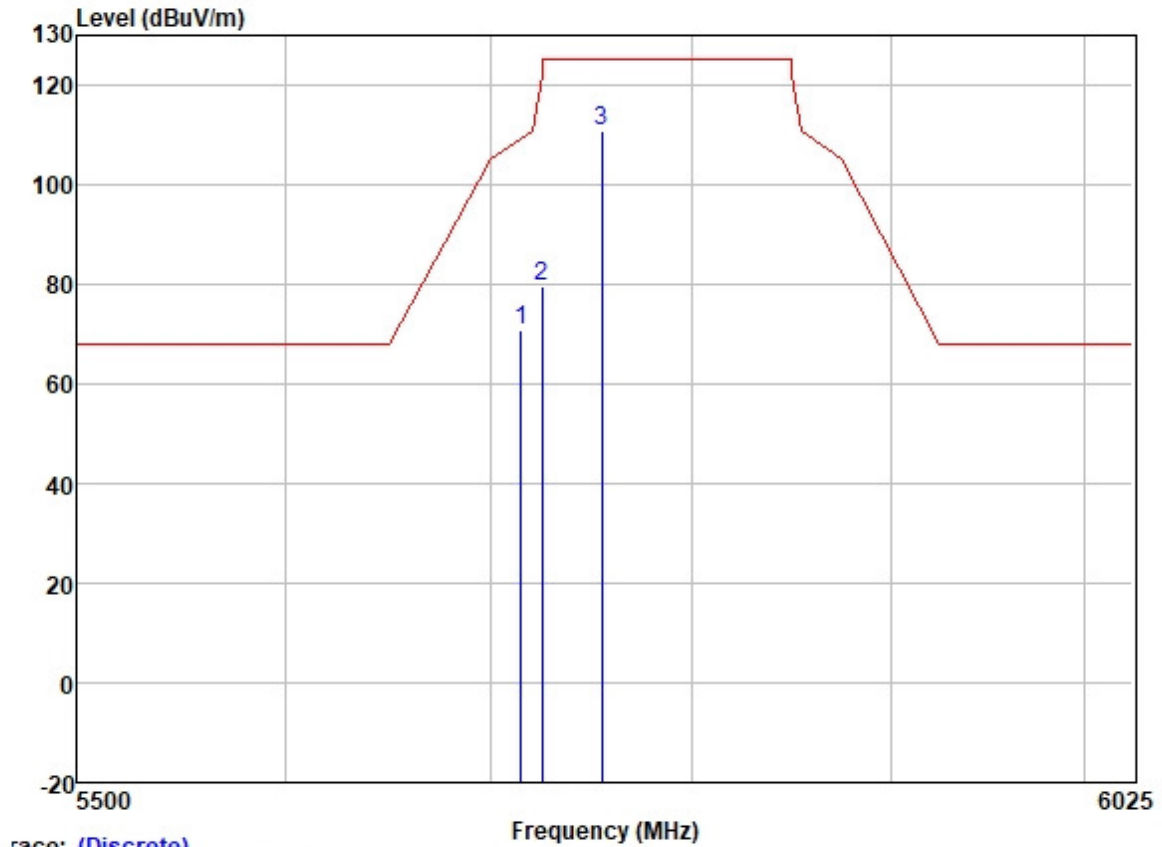
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5825.000	111.35	32.23	6.04	36.90	112.72	125.20	-12.48	VERTICAL	Peak
2	5850.000	67.45	32.25	6.00	36.90	68.80	122.20	-53.40	VERTICAL	Peak
3	5860.000	60.00	32.27	5.96	36.90	61.33	109.40	-48.07	VERTICAL	Peak

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel: Low



	Freq	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5715.000	55.12	32.04	6.33	36.89	56.60	109.40	-52.80	HORIZONTAL Peak
2	5725.000	64.24	32.07	6.25	36.89	65.67	122.20	-56.53	HORIZONTAL Peak
3	5755.000	94.20	32.10	6.20	36.89	95.61	125.20	-29.59	HORIZONTAL Peak

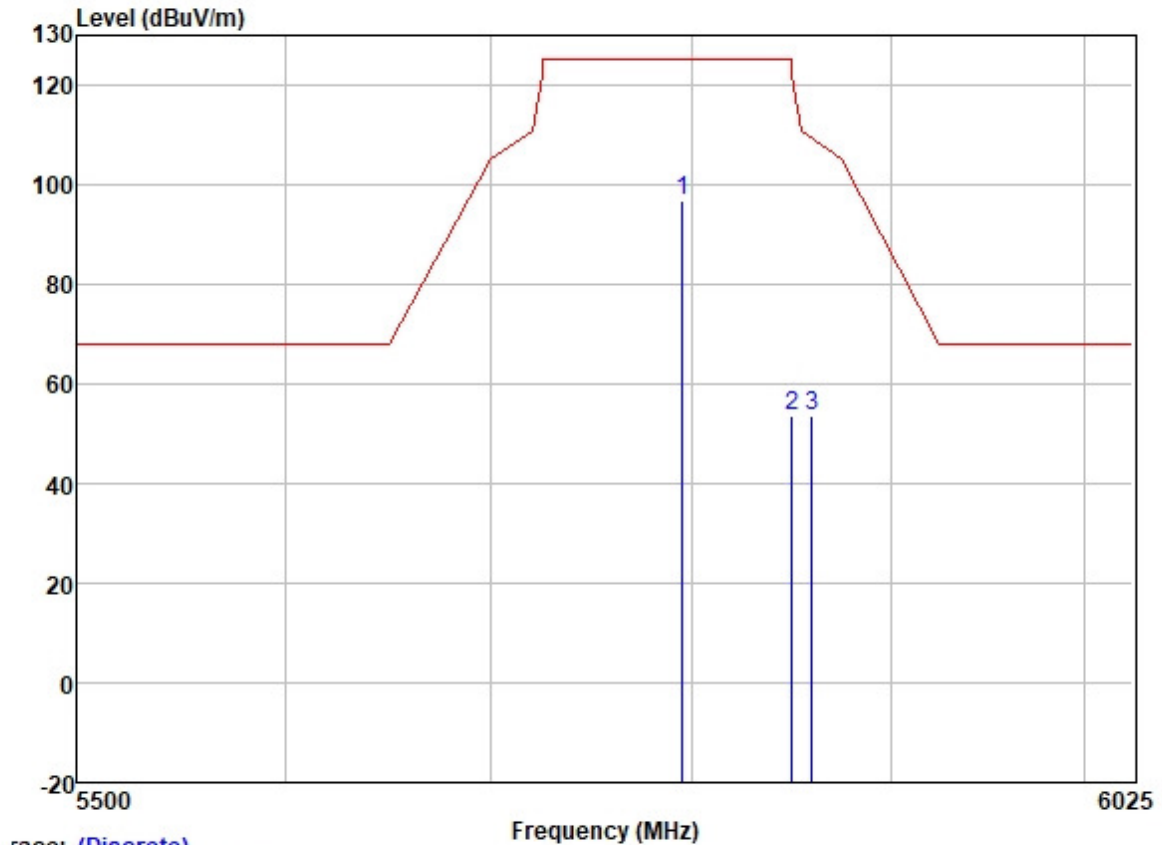
Test Mode: 02; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 40MHz; Channel: Low



Trace: (Discrete)

		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5715.000	69.31	32.04	6.33	36.89	70.79	109.40	-38.61	VERTICAL	Peak
2	5725.000	78.04	32.07	6.25	36.89	79.47	122.20	-42.73	VERTICAL	Peak
3	5755.000	109.28	32.10	6.20	36.89	110.69	125.20	-14.51	VERTICAL	Peak

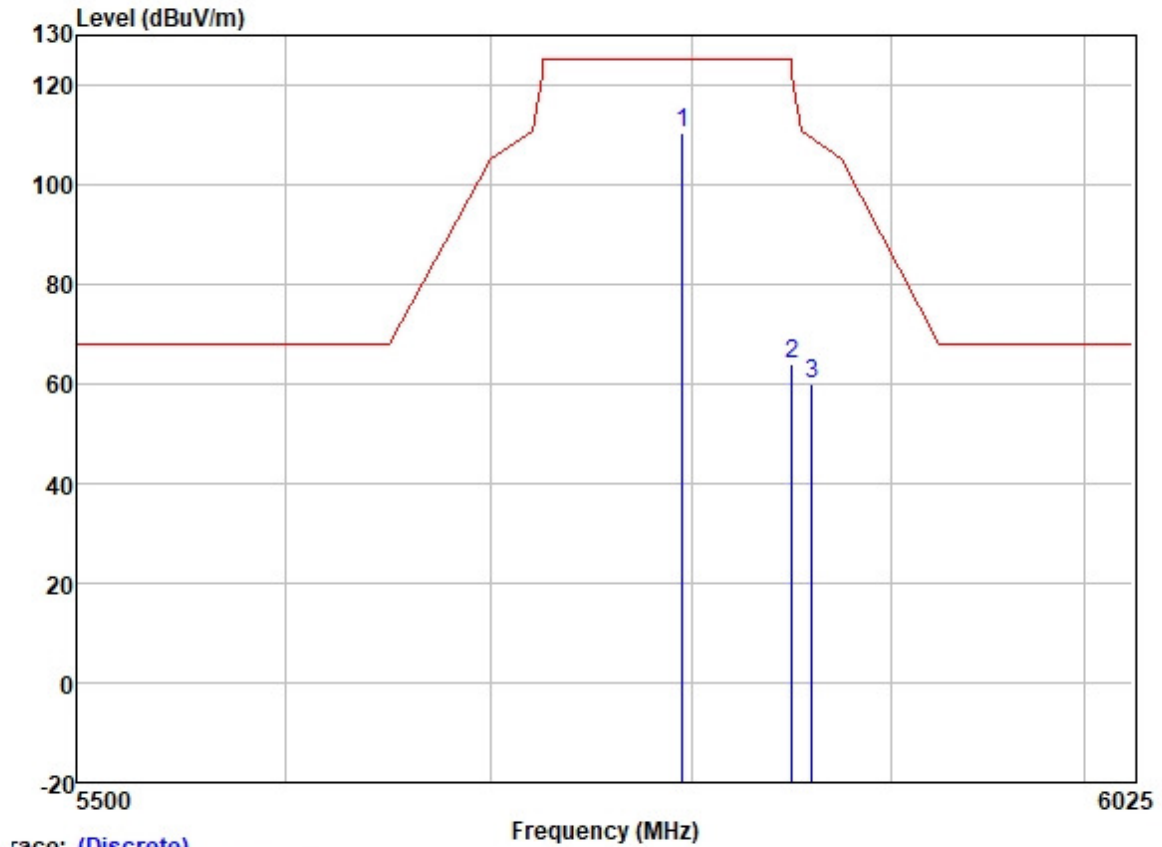
Test Mode: 02; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 40MHz; Channel: High



Trace: (Discrete)

		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5795.000	95.37	32.19	6.10	36.89	96.77	125.20	-28.43	HORIZONTAL	Peak
2	5850.000	52.20	32.25	6.00	36.90	53.55	122.20	-68.65	HORIZONTAL	Peak
3	5860.000	52.12	32.27	5.96	36.90	53.45	109.40	-55.95	HORIZONTAL	Peak

Test Mode: 02; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 40MHz; Channel: High



Trace: (Discrete)

	Read	Antenna	Cable	Preamp		Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5795.000	109.11	32.19	6.10	36.89	110.51	125.20	-14.69	VERTICAL Peak
2	5850.000	62.66	32.25	6.00	36.90	64.01	122.20	-58.19	VERTICAL Peak
3	5860.000	58.63	32.27	5.96	36.90	59.96	109.40	-49.44	VERTICAL Peak

7.9 Radiated Emissions (above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

* (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:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.9.1 E.U.T. Operation

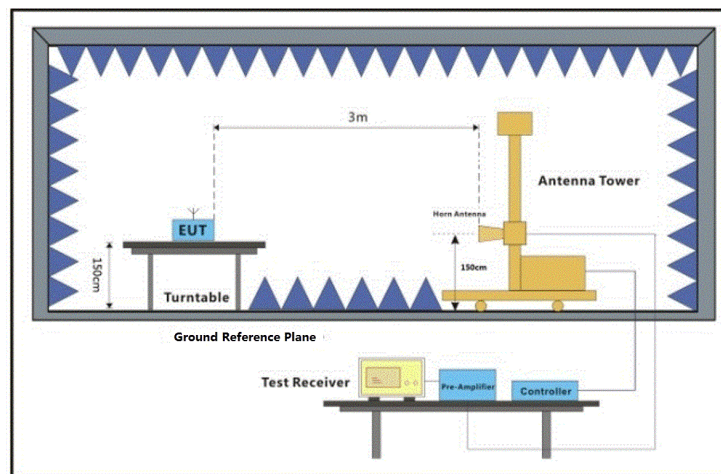
Operating Environment:

Temperature: 23.2 °C Humidity: 53.5 % RH Atmospheric Pressure: 1003 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40). Only the data of worst case is recorded in the report.

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

- a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

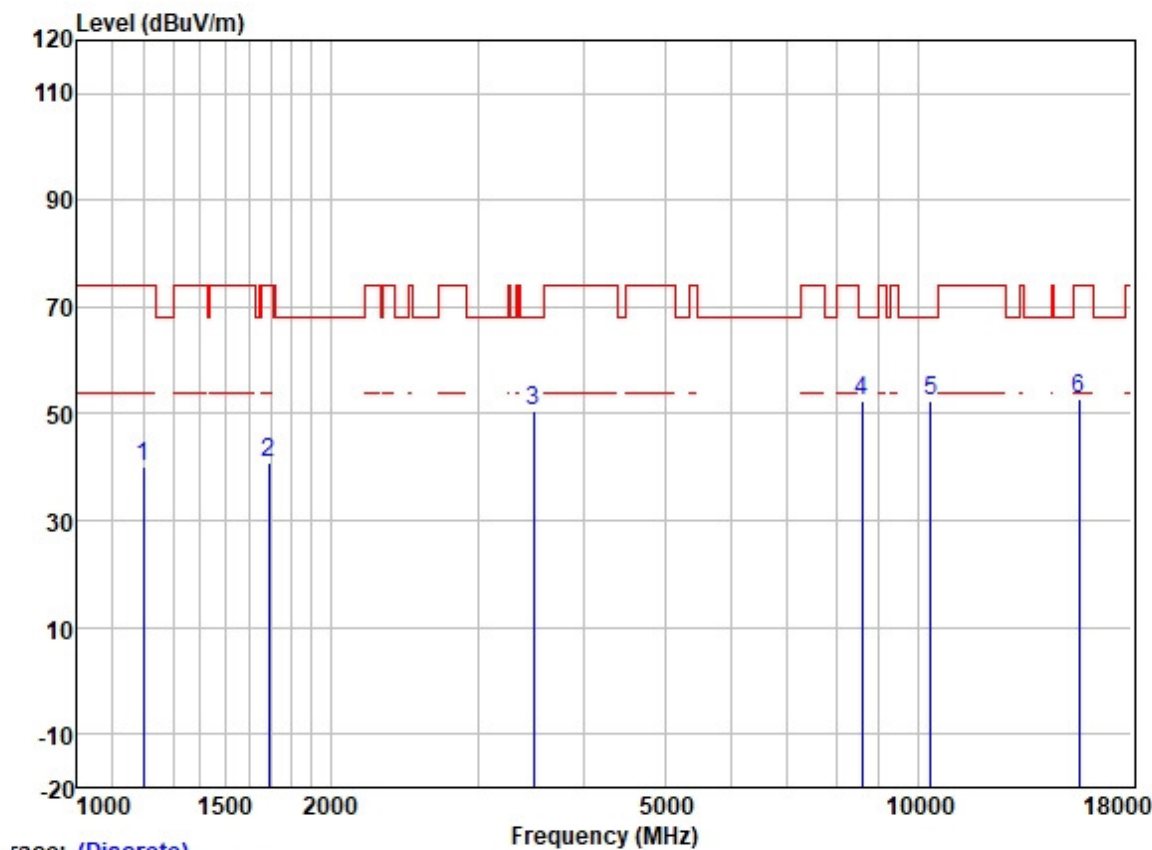
Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 1GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
4. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.



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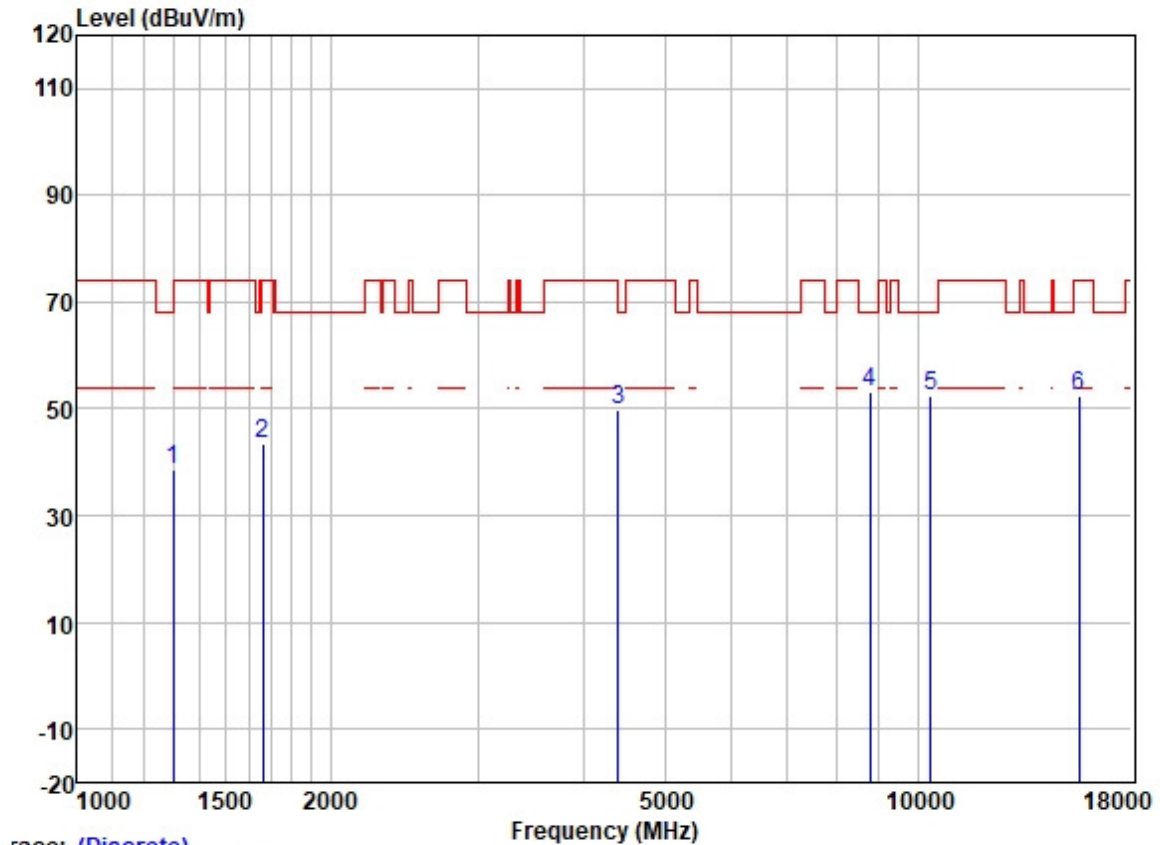
Test Mode: 01; Polarity: Horizontal; Modulation: 802.11a; Bandwidth: 20MHz; Channel: Low



Trace: (Discrete)

		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1199.726	51.54	24.68	2.34	38.39	40.17	74.00	-33.83	HORIZONTAL	Peak
2	1692.231	50.15	25.70	2.80	37.89	40.76	74.00	-33.24	HORIZONTAL	Peak
3	3495.691	54.22	28.90	4.30	36.94	50.48	68.20	-17.72	HORIZONTAL	Peak
4	8588.607	46.00	37.23	6.84	37.56	52.51	68.20	-15.69	HORIZONTAL	Peak
5	10360.000	43.19	39.28	7.29	37.37	52.39	68.20	-15.81	HORIZONTAL	Peak
6	15540.000	39.35	39.05	9.88	35.39	52.89	74.00	-21.11	HORIZONTAL	Peak

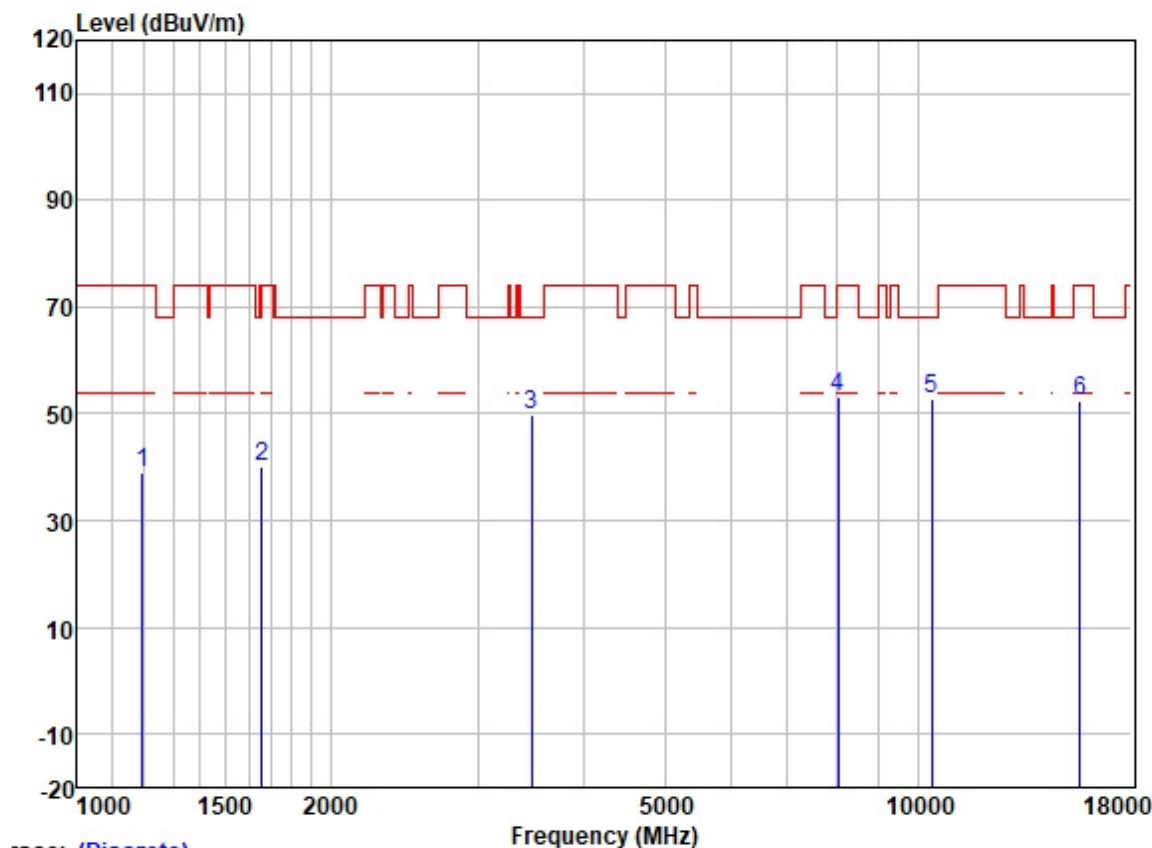
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Trace: (Discrete)

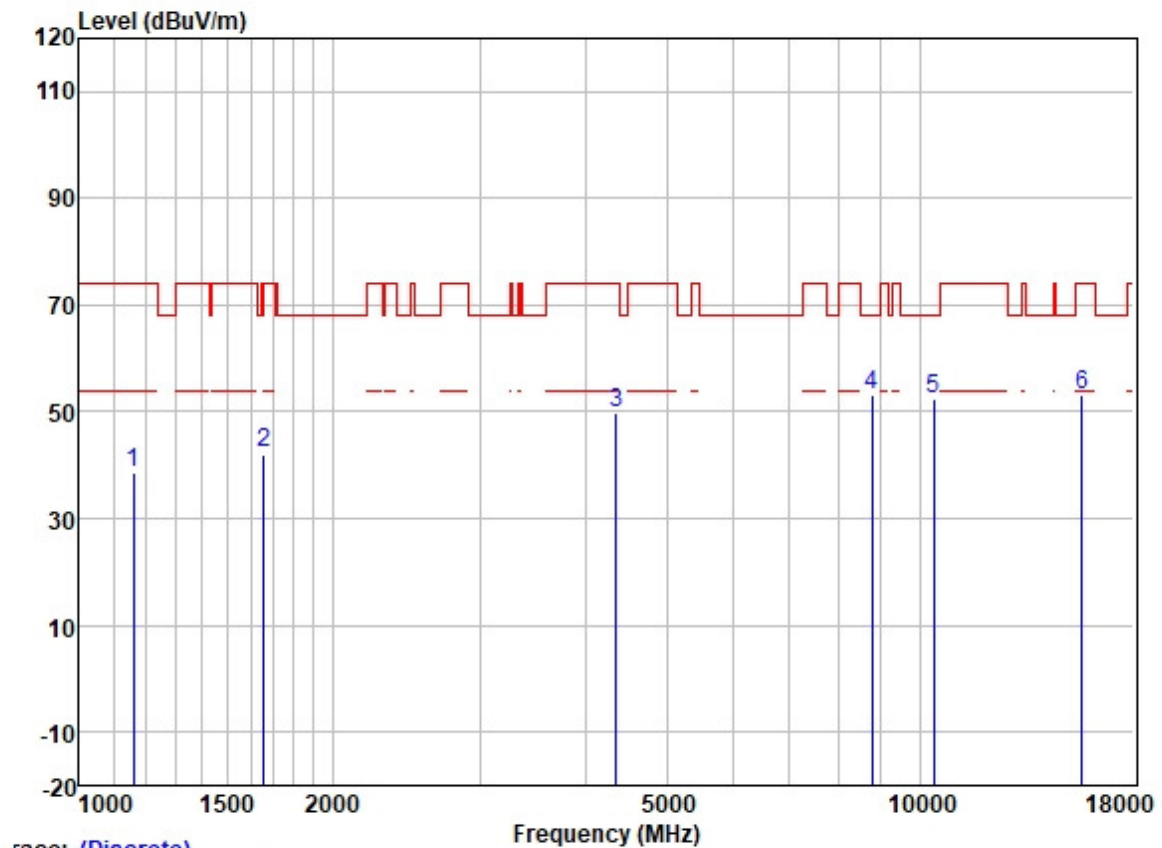
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	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1300.858	49.28	25.20	2.60	38.31	38.77	74.00	-35.23	VERTICAL	Peak
2	1663.137	52.81	25.65	2.80	37.91	43.35	74.00	-30.65	VERTICAL	Peak
3	4405.090	51.22	30.68	4.70	36.81	49.79	68.20	-18.41	VERTICAL	Peak
4	8764.146	46.20	37.32	7.19	37.54	53.17	68.20	-15.03	VERTICAL	Peak
5	10360.000	43.40	39.28	7.29	37.37	52.60	68.20	-15.60	VERTICAL	Peak
6	15540.000	38.93	39.05	9.88	35.39	52.47	74.00	-21.53	VERTICAL	Peak

Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel: middle



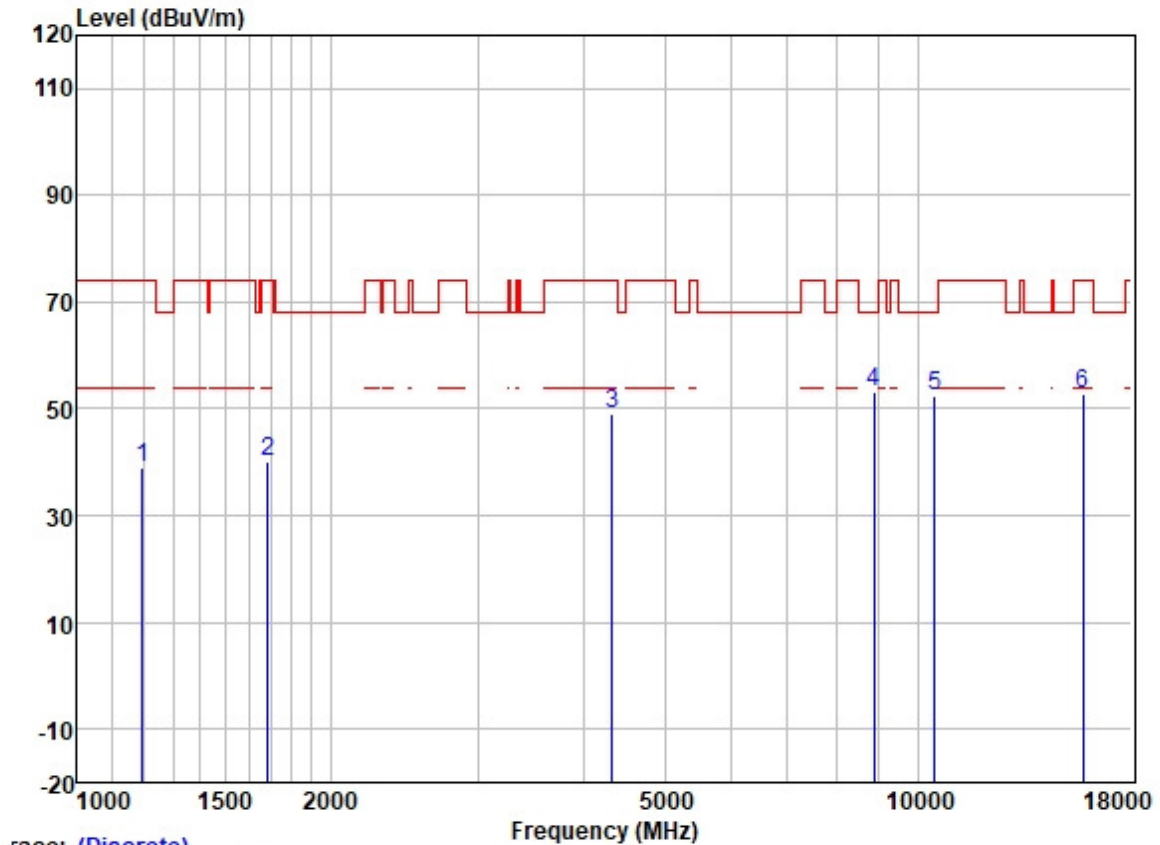
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1196.264	50.46	24.67	2.35	38.39	39.09	74.00	-34.91	HORIZONTAL	Peak
2	1658.337	49.51	25.65	2.80	37.93	40.03	68.20	-28.17	HORIZONTAL	Peak
3	3475.541	53.57	28.89	4.25	36.95	49.76	68.20	-18.44	HORIZONTAL	Peak
4	8036.214	47.69	36.91	6.19	37.60	53.19	74.00	-20.81	HORIZONTAL	Peak
5	10400.000	43.63	39.33	7.32	37.36	52.92	68.20	-15.28	HORIZONTAL	Peak
6	15600.000	38.99	38.99	9.88	35.39	52.47	74.00	-21.53	HORIZONTAL	Peak

Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel: middle



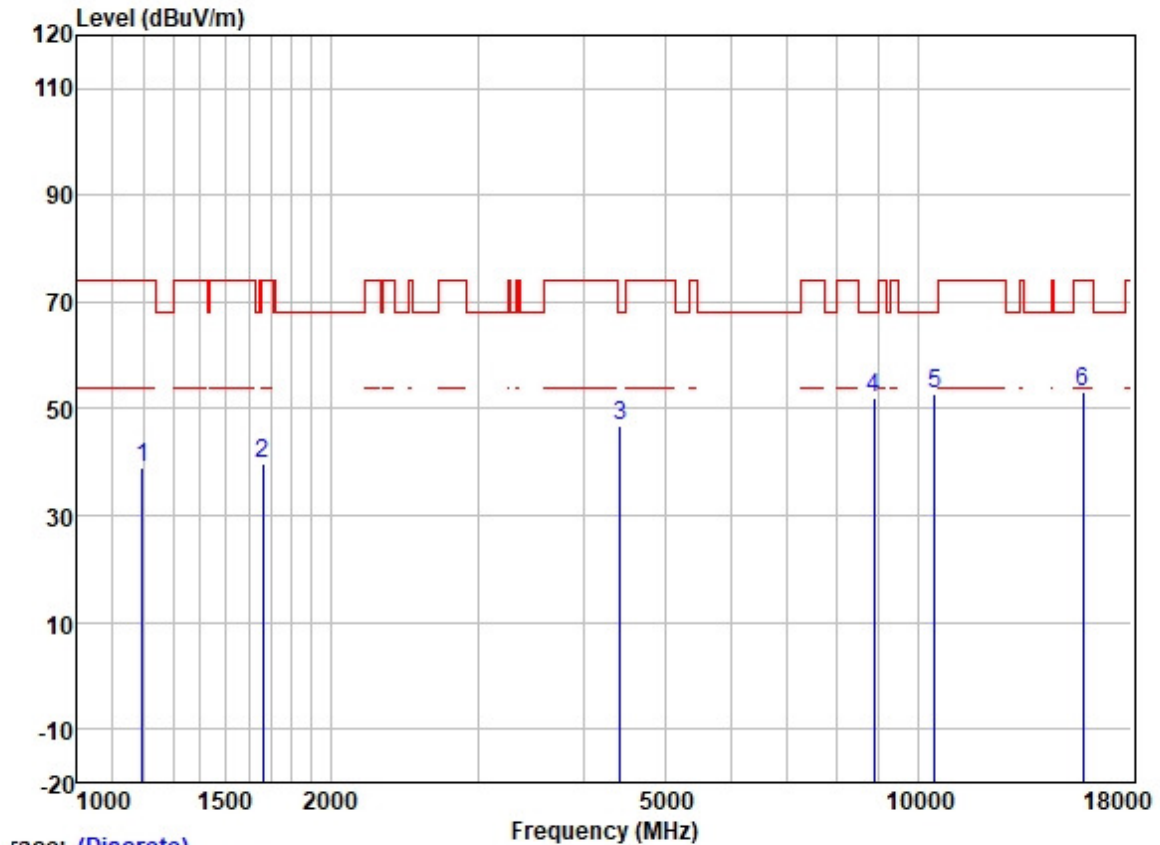
		Read	Antenna	Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1158.828	50.11	24.52	2.40	38.42	38.61	74.00	-35.39	VERTICAL	Peak
2	1658.337	51.64	25.65	2.80	37.93	42.16	68.20	-26.04	VERTICAL	Peak
3	4354.454	51.32	30.59	4.68	36.81	49.78	74.00	-24.22	VERTICAL	Peak
4	8764.146	46.31	37.32	7.19	37.54	53.28	68.20	-14.92	VERTICAL	Peak
5	10400.000	43.12	39.33	7.32	37.36	52.41	68.20	-15.79	VERTICAL	Peak
6	15600.000	39.78	38.99	9.88	35.39	53.26	74.00	-20.74	VERTICAL	Peak

Test Mode: 01; Polarity: Horizontal; Modulation: 802.11a; Bandwidth: 20MHz; Channel: High



		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1196.264	50.50	24.67	2.35	38.39	39.13	74.00	-34.87	HORIZONTAL	Peak
2	1687.347	49.40	25.69	2.80	37.91	39.98	74.00	-34.02	HORIZONTAL	Peak
3	4329.354	50.59	30.54	4.67	36.81	48.99	74.00	-25.01	HORIZONTAL	Peak
4	8866.062	45.94	37.36	7.38	37.53	53.15	68.20	-15.05	HORIZONTAL	Peak
5	10480.000	42.84	39.46	7.40	37.36	52.34	68.20	-15.86	HORIZONTAL	Peak
6	15720.000	39.41	38.78	9.87	35.39	52.67	74.00	-21.33	HORIZONTAL	Peak

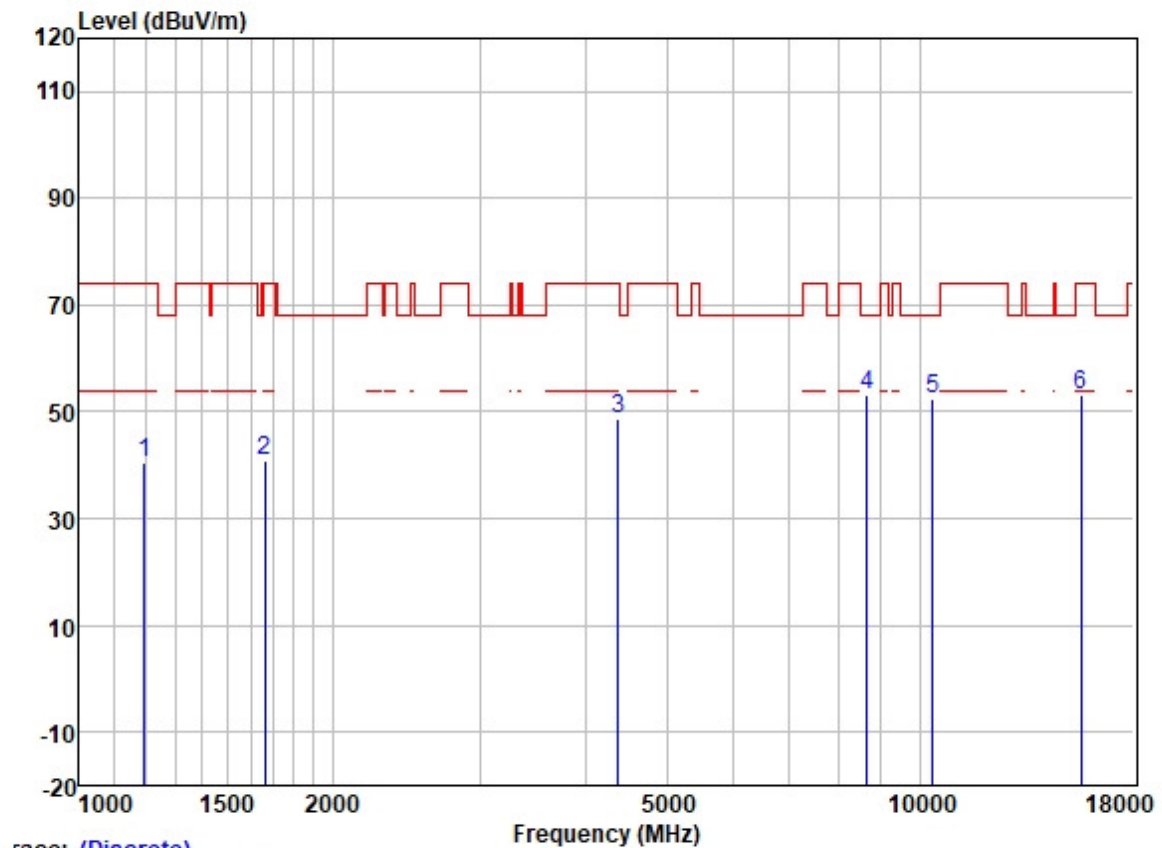
Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel: High



Trace: (Discrete)

		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1196.264	50.18	24.67	2.35	38.39	38.81	74.00	-35.19	VERTICAL	Peak
2	1663.137	49.23	25.65	2.80	37.91	39.77	74.00	-34.23	VERTICAL	Peak
3	4430.628	48.17	30.72	4.78	36.81	46.86	68.20	-21.34	VERTICAL	Peak
4	8866.062	44.72	37.36	7.38	37.53	51.93	68.20	-16.27	VERTICAL	Peak
5	10480.000	43.19	39.46	7.40	37.36	52.69	68.20	-15.51	VERTICAL	Peak
6	15720.000	39.88	38.78	9.87	35.39	53.14	74.00	-20.86	VERTICAL	Peak

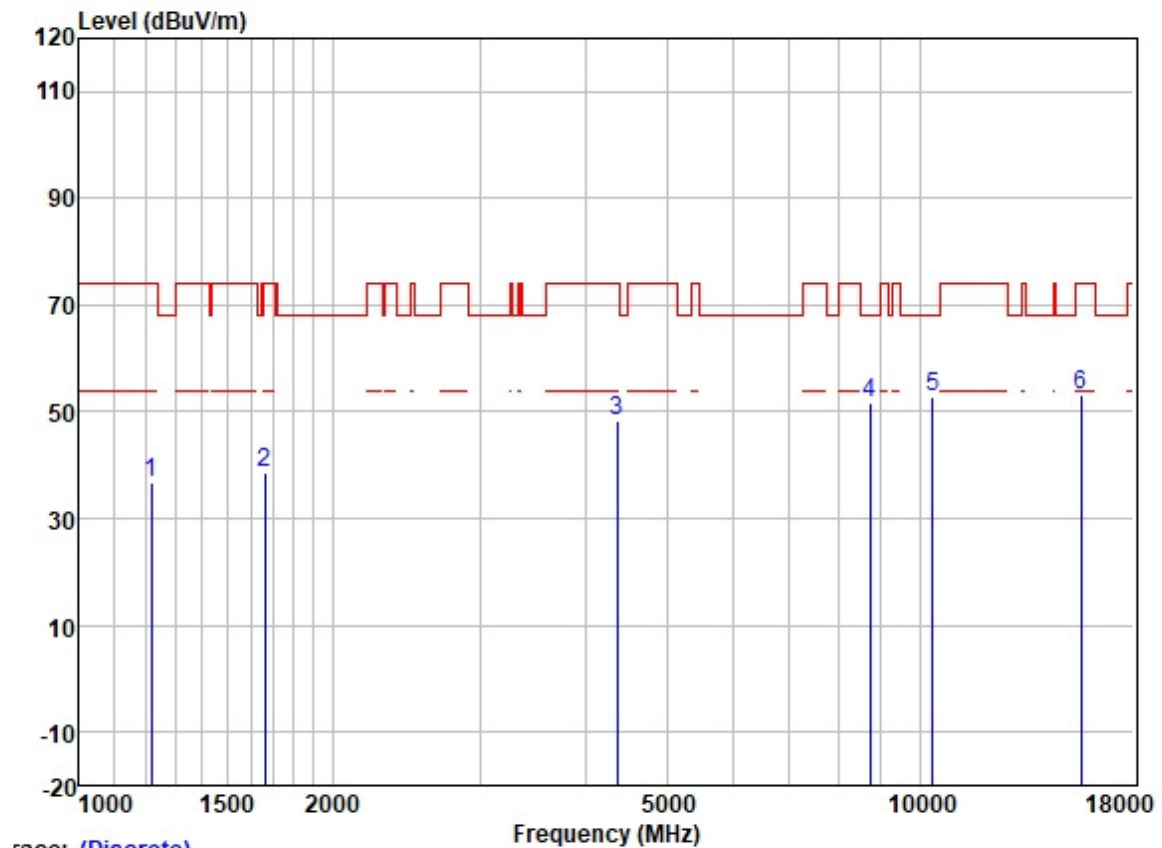
Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel: Low



Trace: (Discrete)

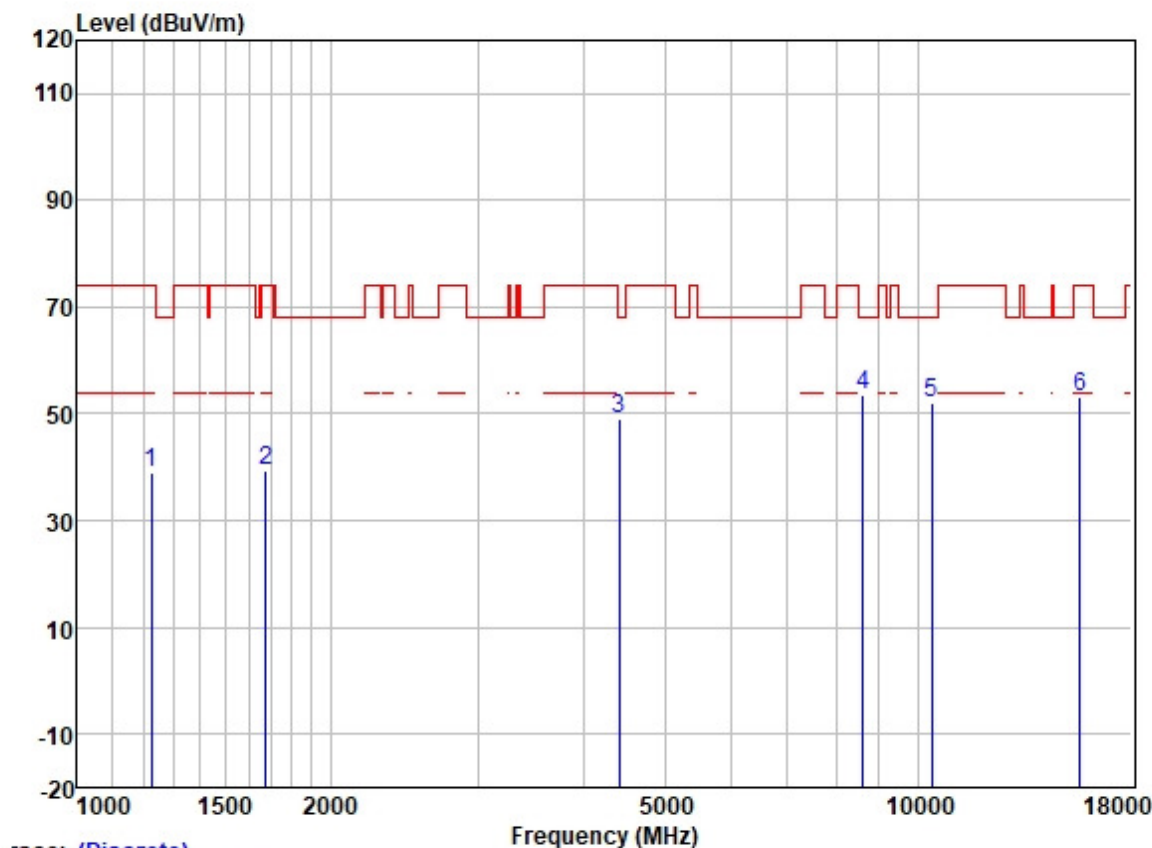
		Read	Antenna	Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1196.264	51.69	24.67	2.35	38.39	40.32	74.00	-33.68	HORIZONTAL	Peak
2	1663.137	50.29	25.65	2.80	37.91	40.83	74.00	-33.17	HORIZONTAL	Peak
3	4379.699	50.08	30.64	4.69	36.81	48.60	74.00	-25.40	HORIZONTAL	Peak
4	8663.404	46.41	37.27	6.97	37.55	53.10	68.20	-15.10	HORIZONTAL	Peak
5	10360.000	43.25	39.28	7.29	37.37	52.45	68.20	-15.75	HORIZONTAL	Peak
6	15540.000	39.58	39.05	9.88	35.39	53.12	74.00	-20.88	HORIZONTAL	Peak

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel: Low



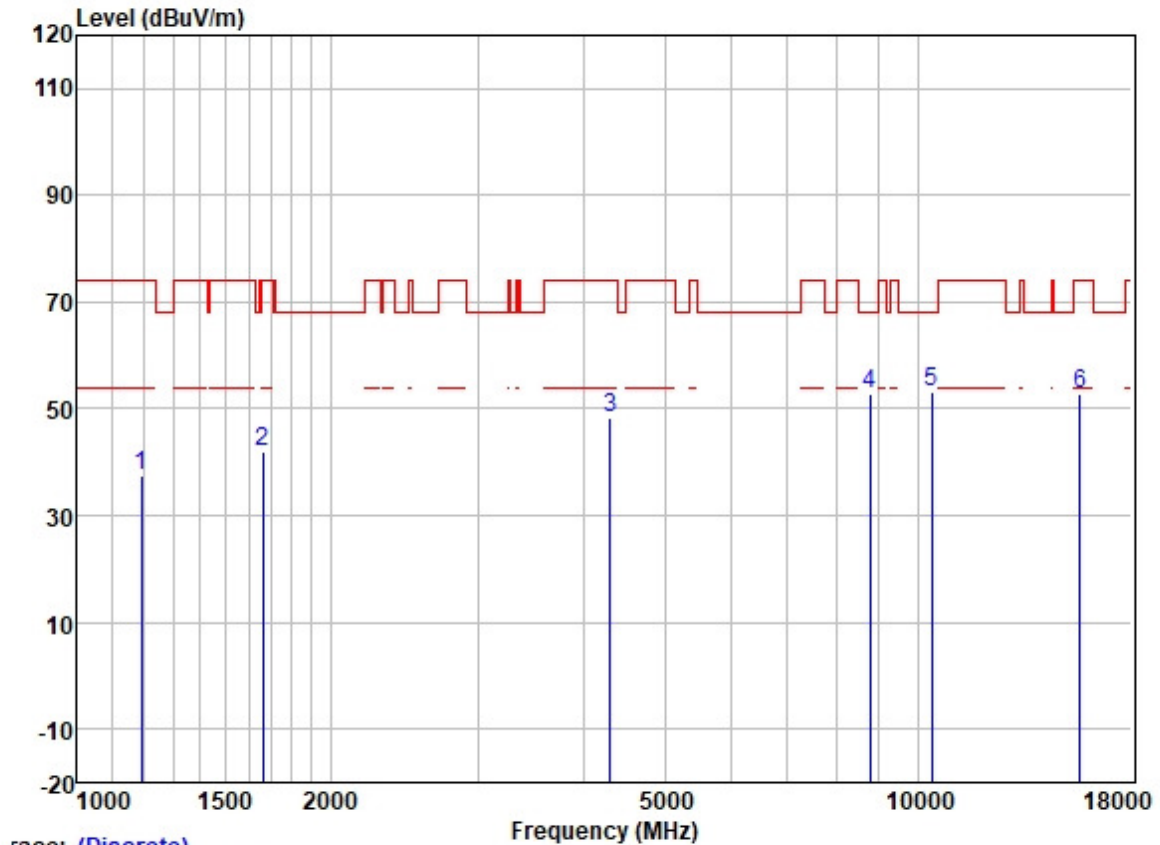
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1217.190	48.07	24.79	2.32	38.37	36.81	74.00	-37.19	VERTICAL	Peak
2	1663.137	48.24	25.65	2.80	37.91	38.78	74.00	-35.22	VERTICAL	Peak
3	4367.058	49.88	30.62	4.68	36.81	48.37	74.00	-25.63	VERTICAL	Peak
4	8738.852	44.79	37.31	7.13	37.54	51.69	68.20	-16.51	VERTICAL	Peak
5	10360.000	43.52	39.28	7.29	37.37	52.72	68.20	-15.48	VERTICAL	Peak
6	15540.000	39.61	39.05	9.88	35.39	53.15	74.00	-20.85	VERTICAL	Peak

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel: middle



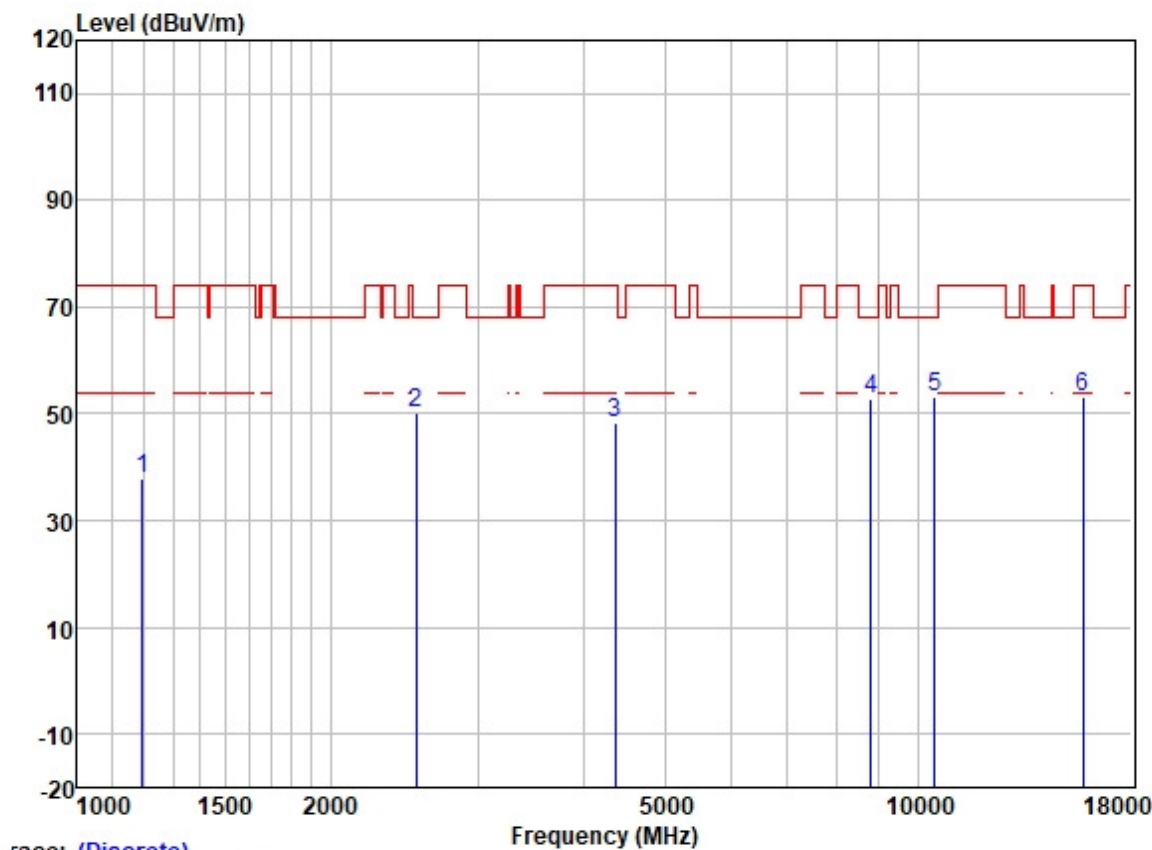
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1224.247	50.24	24.85	2.31	38.37	39.03	74.00	-34.97	HORIZONTAL	Peak
2	1677.621	48.97	25.68	2.80	37.91	39.54	74.00	-34.46	HORIZONTAL	Peak
3	4417.841	50.46	30.70	4.74	36.81	49.09	68.20	-19.11	HORIZONTAL	Peak
4	8613.468	46.81	37.24	6.88	37.56	53.37	68.20	-14.83	HORIZONTAL	Peak
5	10400.000	42.94	39.33	7.32	37.36	52.23	68.20	-15.97	HORIZONTAL	Peak
6	15600.000	39.59	38.99	9.88	35.39	53.07	74.00	-20.93	HORIZONTAL	Peak

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel: middle



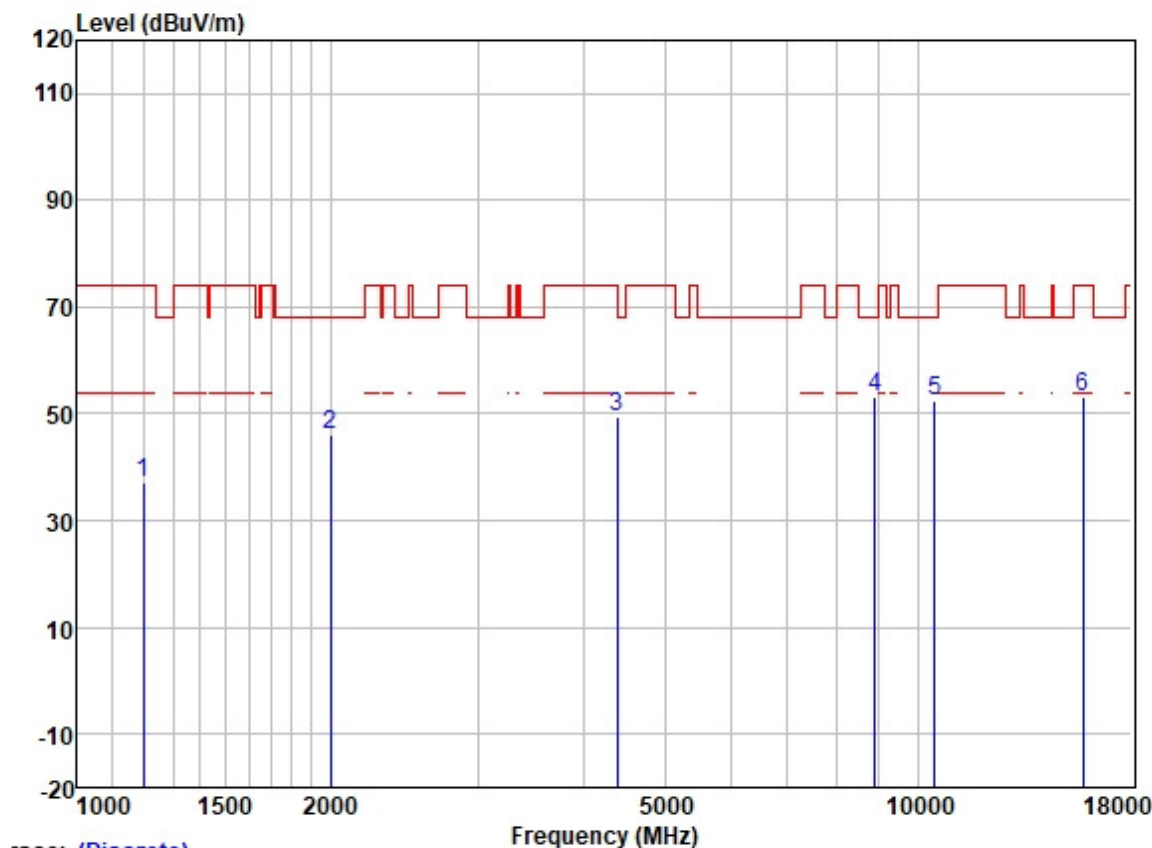
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1192.811	49.04	24.65	2.36	38.39	37.66	74.00	-36.34	VERTICAL	Peak
2	1663.137	51.36	25.65	2.80	37.91	41.90	74.00	-32.10	VERTICAL	Peak
3	4304.400	50.14	30.48	4.65	36.81	48.46	74.00	-25.54	VERTICAL	Peak
4	8764.146	45.69	37.32	7.19	37.54	52.66	68.20	-15.54	VERTICAL	Peak
5	10400.000	43.82	39.33	7.32	37.36	53.11	68.20	-15.09	VERTICAL	Peak
6	15600.000	39.48	38.99	9.88	35.39	52.96	74.00	-21.04	VERTICAL	Peak

Test Mode: 01; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High



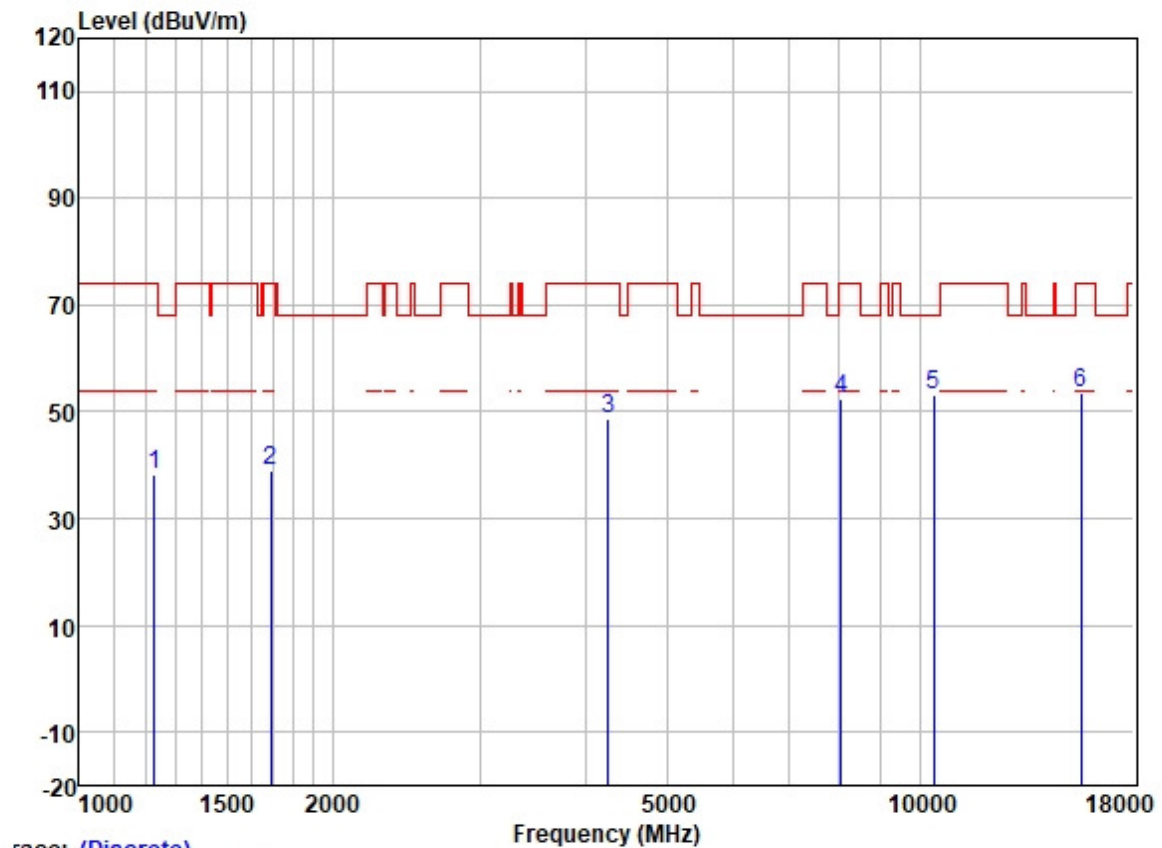
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1196.264	49.11	24.67	2.35	38.39	37.74	74.00	-36.26	HORIZONTAL	Peak
2	2528.963	56.86	27.53	3.43	37.55	50.27	68.20	-17.93	HORIZONTAL	Peak
3	4367.058	49.93	30.62	4.68	36.81	48.42	74.00	-25.58	HORIZONTAL	Peak
4	8789.516	45.62	37.33	7.24	37.54	52.65	68.20	-15.55	HORIZONTAL	Peak
5	10480.000	43.60	39.46	7.40	37.36	53.10	68.20	-15.10	HORIZONTAL	Peak
6	15720.000	39.84	38.78	9.87	35.39	53.10	74.00	-20.90	HORIZONTAL	Peak

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel: High



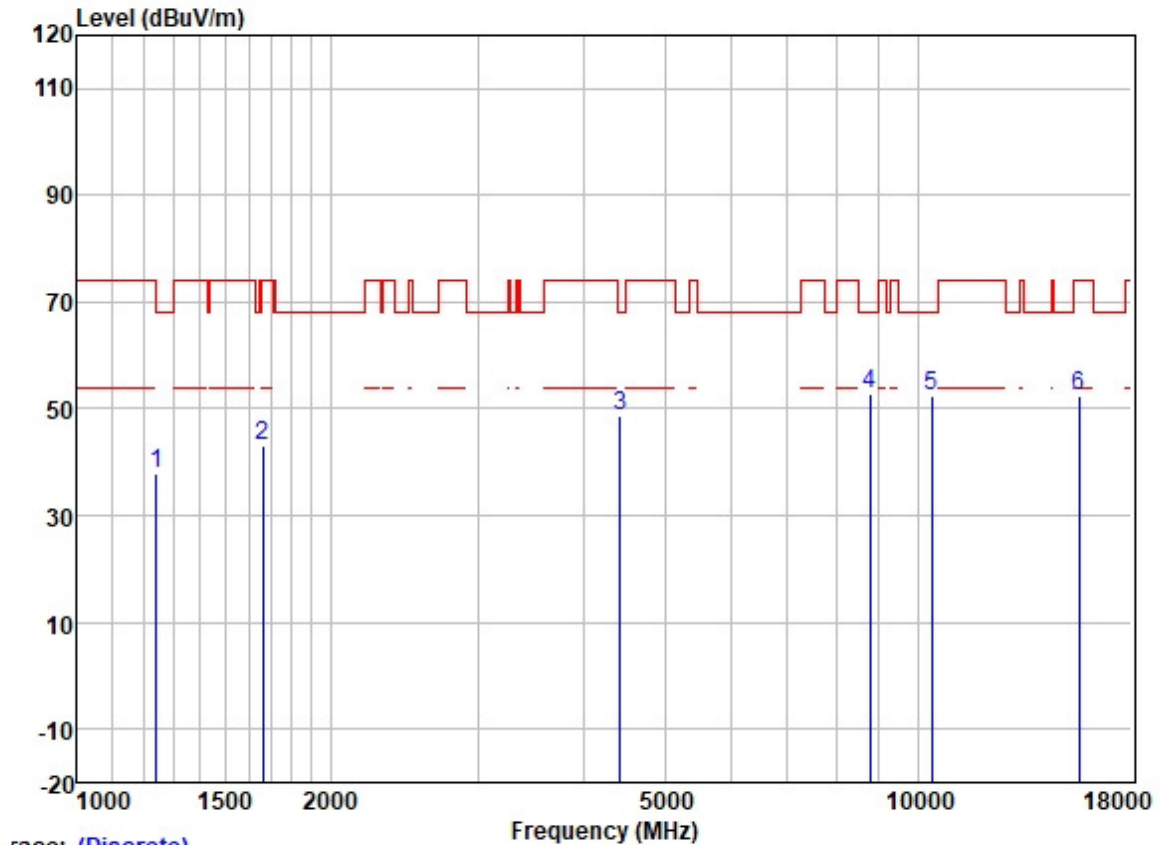
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1199.726	48.58	24.68	2.34	38.39	37.21	74.00	-36.79	VERTICAL	Peak
2	2001.084	54.66	26.10	3.10	37.70	46.16	68.20	-22.04	VERTICAL	Peak
3	4392.376	50.89	30.66	4.70	36.81	49.44	74.00	-24.56	VERTICAL	Peak
4	8891.725	45.78	37.37	7.42	37.52	53.05	68.20	-15.15	VERTICAL	Peak
5	10480.000	43.11	39.46	7.40	37.36	52.61	68.20	-15.59	VERTICAL	Peak
6	15720.000	39.79	38.78	9.87	35.39	53.05	74.00	-20.95	VERTICAL	Peak

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel: Low



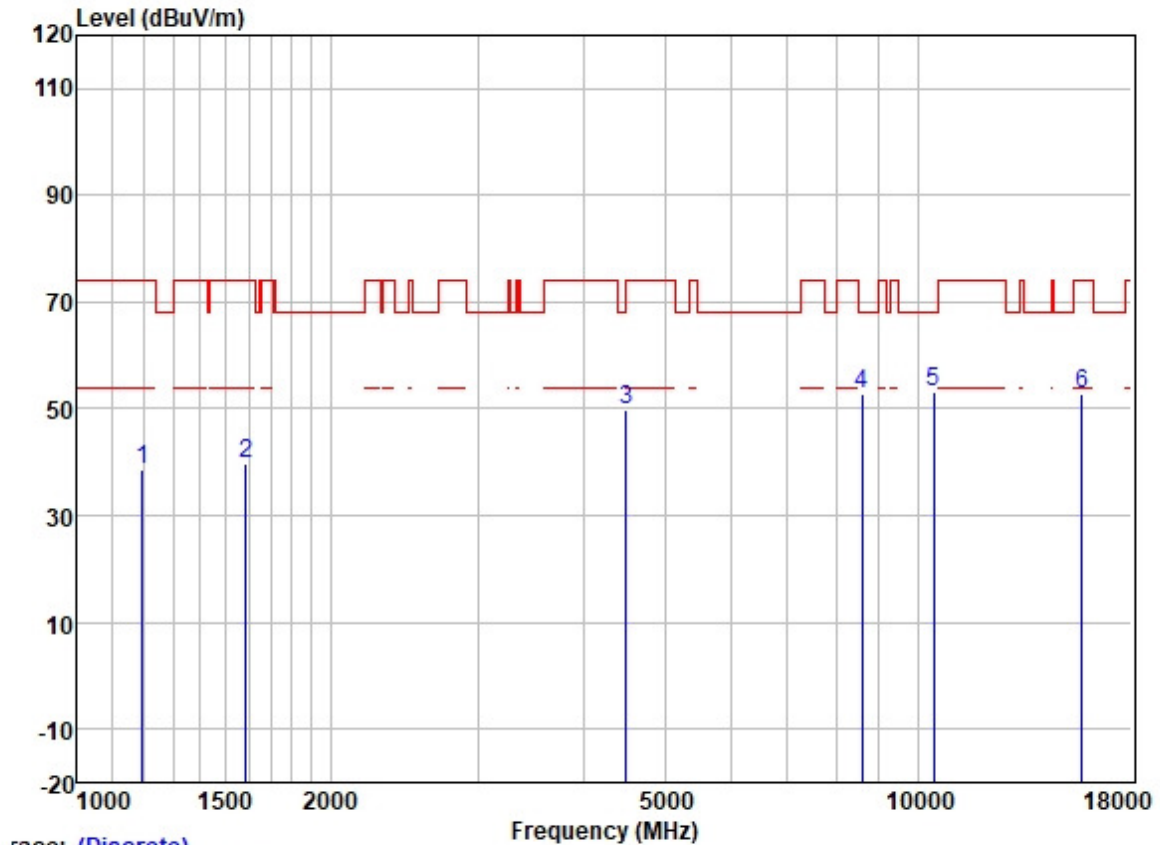
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1227.791	49.33	24.88	2.31	38.37	38.15	74.00	-35.85	HORIZONTAL	Peak
2	1692.231	48.39	25.70	2.80	37.89	39.00	74.00	-35.00	HORIZONTAL	Peak
3	4254.921	50.72	30.34	4.62	36.81	48.87	74.00	-25.13	HORIZONTAL	Peak
4	8059.475	46.88	36.92	6.21	37.60	52.41	74.00	-21.59	HORIZONTAL	Peak
5	10380.000	43.96	39.33	7.32	37.37	53.24	68.20	-14.96	HORIZONTAL	Peak
6	15570.000	39.89	38.99	9.88	35.39	53.37	74.00	-20.63	HORIZONTAL	Peak

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel: Low



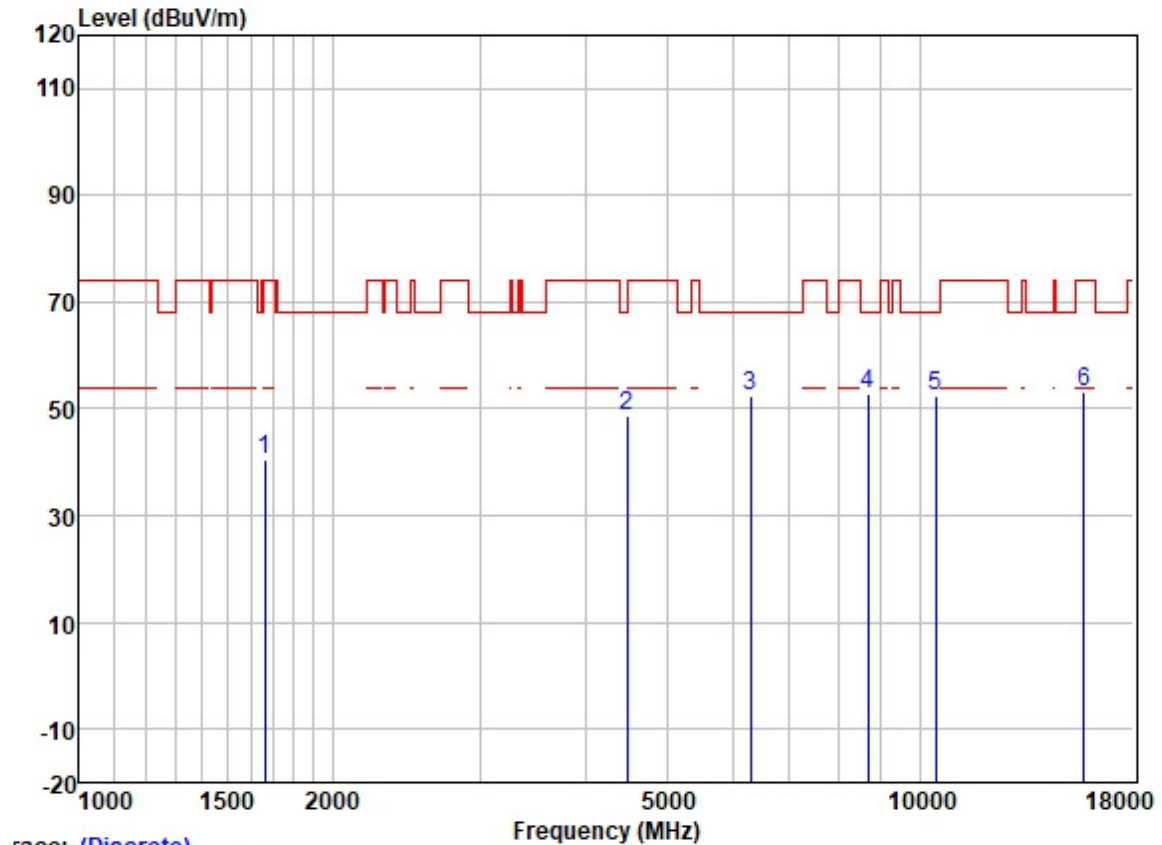
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1242.068	48.92	24.98	2.31	38.35	37.86	68.20	-30.34	VERTICAL	Peak
2	1663.137	52.51	25.65	2.80	37.91	43.05	74.00	-30.95	VERTICAL	Peak
3	4430.628	49.90	30.72	4.78	36.81	48.59	68.20	-19.61	VERTICAL	Peak
4	8764.146	45.70	37.32	7.19	37.54	52.67	68.20	-15.53	VERTICAL	Peak
5	10380.000	43.31	39.33	7.32	37.37	52.59	68.20	-15.61	VERTICAL	Peak
6	15570.000	39.01	38.99	9.88	35.39	52.49	74.00	-21.51	VERTICAL	Peak

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel: High



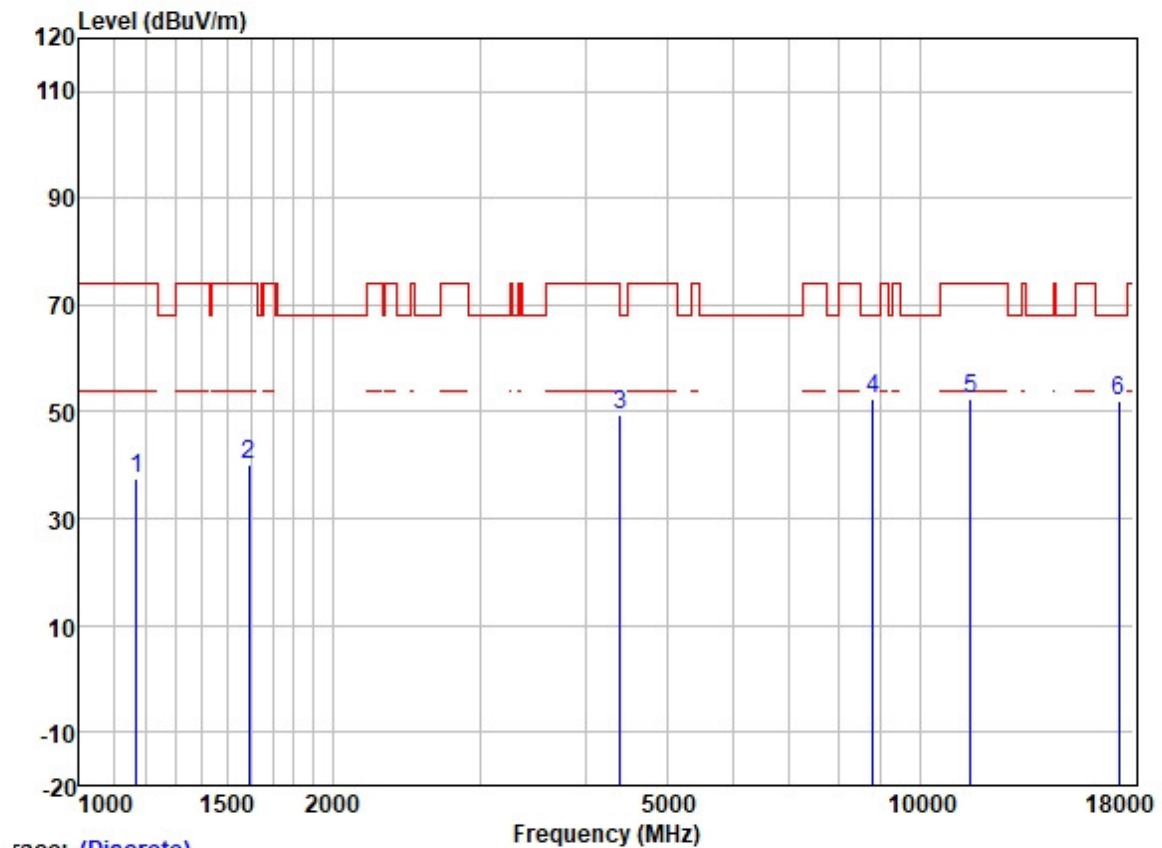
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1196.264	50.00	24.67	2.35	38.39	38.63	74.00	-35.37	HORIZONTAL	Peak
2	1587.975	49.30	25.57	2.80	37.98	39.69	74.00	-34.31	HORIZONTAL	Peak
3	4495.125	50.61	30.80	5.05	36.82	49.64	68.20	-18.56	HORIZONTAL	Peak
4	8588.607	46.21	37.23	6.84	37.56	52.72	68.20	-15.48	HORIZONTAL	Peak
5	10460.000	43.68	39.42	7.37	37.36	53.11	68.20	-15.09	HORIZONTAL	Peak
6	15690.000	39.32	38.86	9.87	35.39	52.66	74.00	-21.34	HORIZONTAL	Peak

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel: High



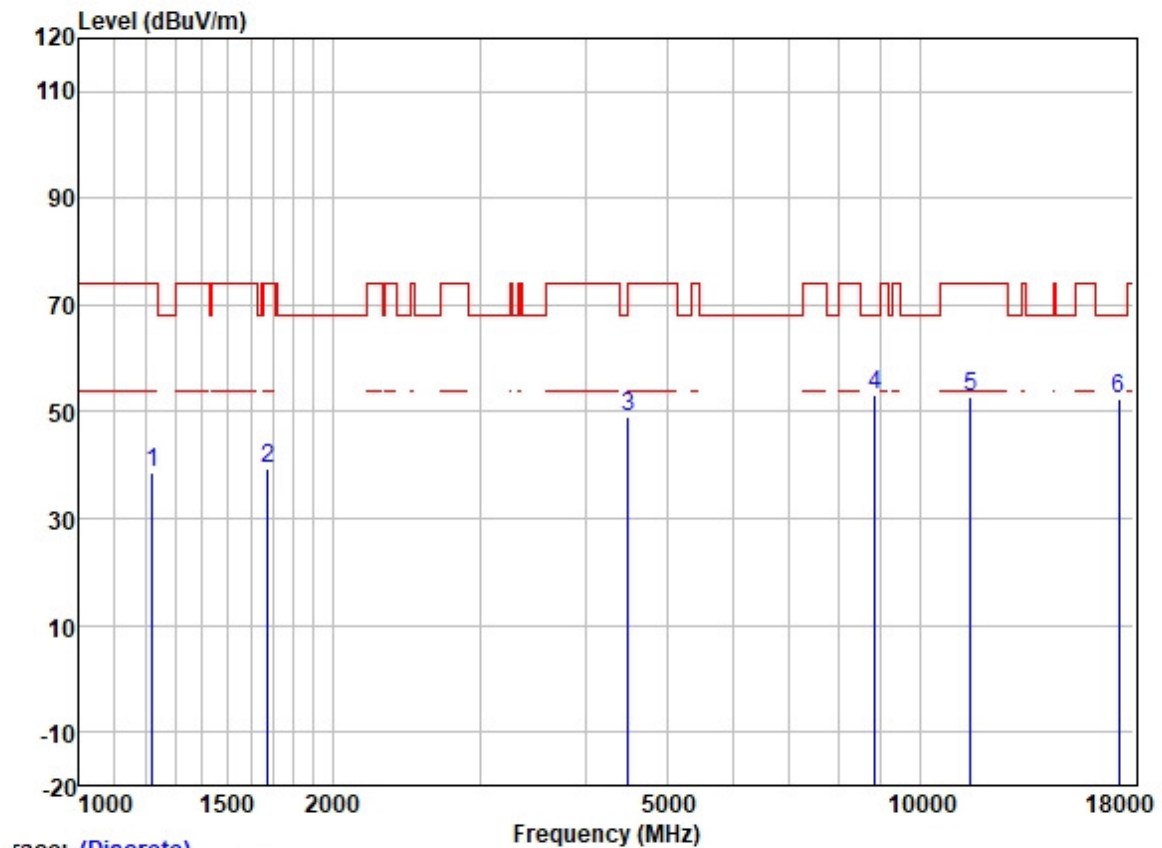
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1663.137	49.97	25.65	2.80	37.91	40.51	74.00	-33.49	VERTICAL	Peak
2	4482.150	49.55	30.78	4.99	36.81	48.51	68.20	-19.69	VERTICAL	Peak
3	6285.695	50.12	33.37	5.98	36.95	52.52	68.20	-15.68	VERTICAL	Peak
4	8688.480	46.17	37.28	7.02	37.55	52.92	68.20	-15.28	VERTICAL	Peak
5	10460.000	42.90	39.42	7.37	37.36	52.33	68.20	-15.87	VERTICAL	Peak
6	15690.000	39.71	38.86	9.87	35.39	53.05	74.00	-20.95	VERTICAL	Peak

Test Mode: 02; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel: Low



		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1168.920	48.79	24.55	2.39	38.40	37.33	74.00	-36.67	HORIZONTAL	Peak
2	1592.571	49.58	25.57	2.80	37.98	39.97	74.00	-34.03	HORIZONTAL	Peak
3	4405.090	50.93	30.68	4.70	36.81	49.50	68.20	-18.70	HORIZONTAL	Peak
4	8789.516	45.21	37.33	7.24	37.54	52.24	68.20	-15.96	HORIZONTAL	Peak
5	11490.000	41.30	39.90	8.41	37.15	52.46	74.00	-21.54	HORIZONTAL	Peak
6	17235.000	34.44	43.01	10.08	35.33	52.20	68.20	-16.00	HORIZONTAL	Peak

Test Mode: 02; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel: Low



		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1220.714	50.01	24.82	2.32	38.37	38.78	74.00	-35.22	VERTICAL	Peak
2	1677.621	48.63	25.68	2.80	37.91	39.20	74.00	-34.80	VERTICAL	Peak
3	4495.125	49.88	30.80	5.05	36.82	48.91	68.20	-19.29	VERTICAL	Peak
4	8840.473	45.95	37.35	7.34	37.53	53.11	68.20	-15.09	VERTICAL	Peak
5	11490.000	41.60	39.90	8.41	37.15	52.76	74.00	-21.24	VERTICAL	Peak
6	17235.000	34.62	43.01	10.08	35.33	52.38	68.20	-15.82	VERTICAL	Peak