



TEST REPORT

Application No.: GZCR2108020814AT
Applicant: PAX TECHNOLOGY LIMITED
Address of Applicant: Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour, Hong Kong, China
Manufacturer: PAX Computer Technology(Shenzhen) Co., Ltd.
Address of Manufacturer: 4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.

Equipment Under Test (EUT):

EUT Name: Smart Kiosk
Model No.: SK700
Trade Mark: PAX
Standard(s): 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2021-06-21
Date of Test: 2021-06-29 to 2021-08-25
Date of Issue: 2021-08-27

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

Kobe Jian
EMC Laboratory Manager



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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2021-08-27		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		KDB 789033 D02 II B 2	KDB 789033 D02 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 (below 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	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
Frequency Stability		ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart C 15.407 (g)	Pass
Non-occupancy period		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Channel Move Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Channel Closing Transmission Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Radiated Emissions (above 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	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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4 General Information

4.1 Details of E.U.T.

Power supply:	AC100-240V, 50/60Hz, 65W Max
Cable(s):	AC power cable: 1m unshielded cable without ferrite core
Operation Frequency (20MHz):	U-NII-1: 5180-5240MHz; U-NII-2A: 5260-5320MHz; U-NII-2C: 5500-5700MHz; U-NII-3: 5745-5825MHz
Operation Frequency (40MHz):	U-NII-1: 5190-5230MHz; U-NII-2A: 5270-5310MHz; U-NII-2C: 5510-5670MHz; U-NII-3: 5755-5795MHz
Operation Frequency (80MHz):	U-NII-1: 5210MHz; U-NII-2A: 5290MHz; U-NII-2C: 5530-5610MHz; U-NII-3: 5775MHz
Modulation Type:	802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Spacing:	802.11a/n(HT20)/ac(HT20): 20MHz; 802.11n(HT40)/ac(HT40): 40MHz; 802.11ac(HT80): 80MHz
DFS Function:	Slave without Radar detection
TPC Function:	Without TPC function
Antenna Type:	PIFA Antenna
Antenna Gain:	1.5dBi declared by applicant
Testing Software:	Type in !83781= in the calculator to enter engineering mode
Sample NO.:	2190000239
Power Setting:	11dBm can not be changed by user.
Function:	Smart Kiosk with 5G WIFI function

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Wireless Router	LINKSYS	WRT32X	22C10609709105
Laptop	Lenovo	L480	REF. No.SEA18C01F

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at AC Power Line (150kHz-30MHz)	3.12dB
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 (below 1GHz)	5.06dB (30MHz-1GHz ; 3m) 4.46dB (30MHz-1GHz ; 10m)
Radiated Emissions which fall in the restricted bands	± 4.5dB (below 1GHz); ± 4.8dB (above 1GHz);



Frequency Stability	$\pm 7.25 \times 10^{-8}$
Radiated Emissions (above 1GHz)	5.08 dB (1-6GHz); 5.14 (above 6 GHz)



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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.



4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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	2021-01-08	2022-01-06
Two-Line V-Network-GZ	Rohde & Schwarz	ENV216	EMC2135	2020-09-25	2021-09-24
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	ESR4	EMC2221	2021-06-01	2022-05-31

Duty Cycle					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01

99% Bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01

26dB Emission bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01



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	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01

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	2021-05-19	2022-05-18
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01

Peak Power spectrum density

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01

Frequency Stability

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01



Radiated Emissions (below 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
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	2019-02-22	2022-02-22
Amplifier(9kHz-1.3GHz)	HP	8447F	EMC2065	2021-05-19	2022-05-18
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
EMI Test Receiver(1Hz-8GHz)	Rohde & Schwarz	ESW8	EMC2220	2021-05-26	2022-05-25

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	2021-01-08	2022-01-07
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	2021-01-08	2022-01-07
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	2020-11-13	2021-11-12
EXA Signal Analyzer(10Hz-44GHz)	Keysight	N9010A	EMC2138	2020-09-17	2021-09-16
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Horn Antenna(14-40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2020-06-28	2023-06-27
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2020-09-09	2021-09-08



Non-occupancy period					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
MXA Signal Analyzer(10Hz-8.4GHz)	Agilent Technologies	N9020A	SEM004-10	2021-03-02	2022-03-01
ESG Vector Signal Generator(250kHz-6GHz)	Keysight	E4438C	SEM006-03	2021-03-12	2022-03-11
EXG Analog Signal Generator(9kHz-3GHz)	Agilent Technologies	N5171B	SEM006-04	2021-07-12	2022-07-11
Power Meter (U2021XA_Ch2)	Agilent Technologies	U2021XA_Ch2	SEM009-02	2021-05-19	2022-05-18
Power Meter (U2021XA_Ch3)	Agilent Technologies	U2021XA_Ch3	SEM009-03	2021-05-19	2022-05-18
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01
MI CABLE	SGS-EMC	0.8M	EMC2137	2019-11-02	2021-11-01
VARIABLE ATTENUATOR	TAMAGAWA ELECTRONICS CO.LTD	TRA-801	EMC02077	/	/
BENCHTOP ATTENUATOR	JFW INDUSTRIES INC.	50BR-068 SMA	EMC02076	/	/

Channel Move Time					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
MXA Signal Analyzer(10Hz-8.4GHz)	Agilent Technologies	N9020A	SEM004-10	2021-03-02	2022-03-01
ESG Vector Signal Generator(250kHz-6GHz)	Keysight	E4438C	SEM006-03	2021-03-12	2022-03-11
EXG Analog Signal Generator(9kHz-3GHz)	Agilent Technologies	N5171B	SEM006-04	2021-07-12	2022-07-11
Power Meter (U2021XA_Ch2)	Agilent Technologies	U2021XA_Ch2	SEM009-02	2021-05-19	2022-05-18
Power Meter (U2021XA_Ch3)	Agilent Technologies	U2021XA_Ch3	SEM009-03	2021-05-19	2022-05-18
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14



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Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01
MI CABLE	SGS-EMC	0.8M	EMC2137	2019-11-02	2021-11-01
VARIABLE ATTENUATOR	TAMAGAWA ELECTRONICS CO.LTD	TRA-801	EMC02077	/	/
BENCHTOP ATTENUATOR	JFW INDUSTRIES INC.	50BR-068 SMA	EMC02076	/	/

Channel Closing Transmission Time					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
MXA Signal Analyzer(10Hz-8.4GHz)	Agilent Technologies	N9020A	SEM004-10	2021-03-02	2022-03-01
ESG Vector Signal Generator(250kHz-6GHz)	Keysight	E4438C	SEM006-03	2021-03-12	2022-03-11
EXG Analog Signal Generator(9kHz-3GHz)	Agilent Technologies	N5171B	SEM006-04	2021-07-12	2022-07-11
Power Meter (U2021XA_Ch2)	Agilent Technologies	U2021XA_Ch2	SEM009-02	2021-05-19	2022-05-18
Power Meter (U2021XA_Ch3)	Agilent Technologies	U2021XA_Ch3	SEM009-03	2021-05-19	2022-05-18
EXA Signal Analyzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Measurement Software	TST	TST PASS V1.0.5	N/A	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01
MI CABLE	SGS-EMC	0.8M	EMC2137	2019-11-02	2021-11-01
VARIABLE ATTENUATOR	TAMAGAWA ELECTRONICS CO.LTD	TRA-801	EMC02077	/	/
BENCHTOP ATTENUATOR	JFW INDUSTRIES INC.	50BR-068 SMA	EMC02076	/	/



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	2021-01-08	2022-01-07
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	2020-09-17	2021-09-16
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Notch Filter (5150-5880)	Mico-Tronics	BRM50716	EMC2168	2020-07-30	2021-07-29
				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	2020-09-09	2021-09-08

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2020-07-06	2021-07-05
				2021-07-05	2022-07-04
DMM	Fluke	73	EMC0007	2020-07-06	2021-07-05
				2021-07-05	2022-07-04



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

Standard 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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the Antenna: 1.5dBi.



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

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 (UWE5623) support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detects 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: 25.5 °C Humidity: 48 % RH Atmospheric Pressure: 995 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Pre-scan	08	TX mode (U-NII-2A)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Pre-scan	09	TX mode (U-NII-2C)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Pre-scan	10	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all



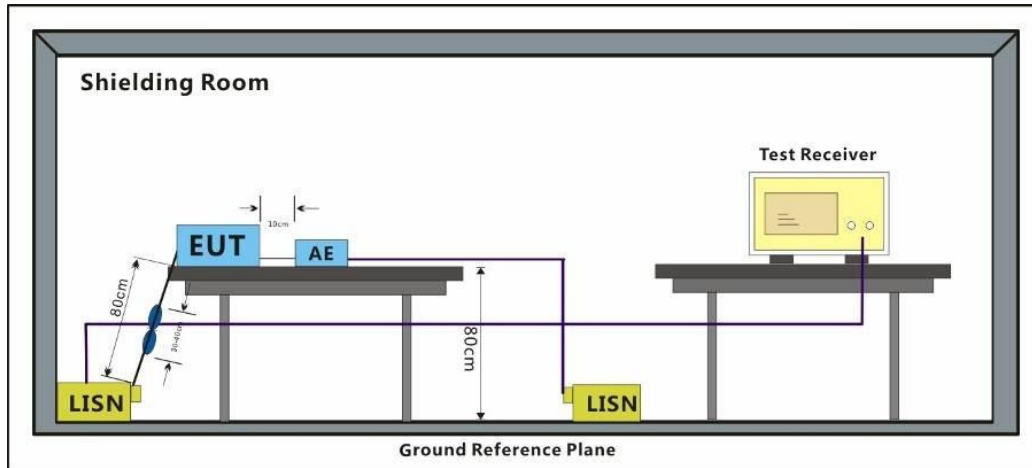
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modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



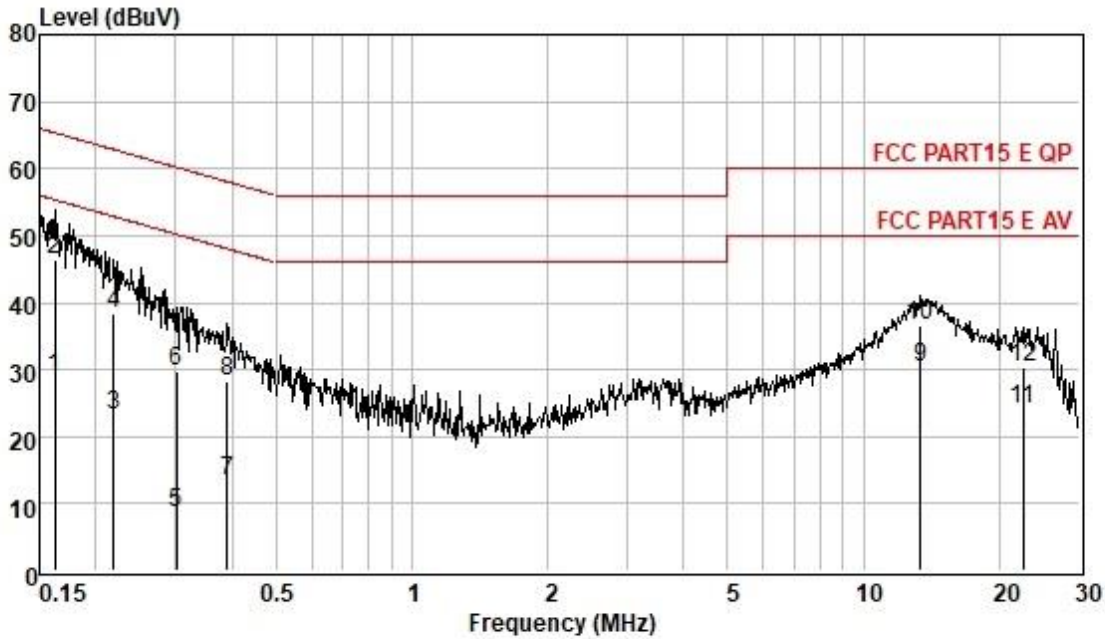
7.1.4 Measurement Procedure and Data

- 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: 07; Line: Live line



Pol : LINE
Mode :
Model :

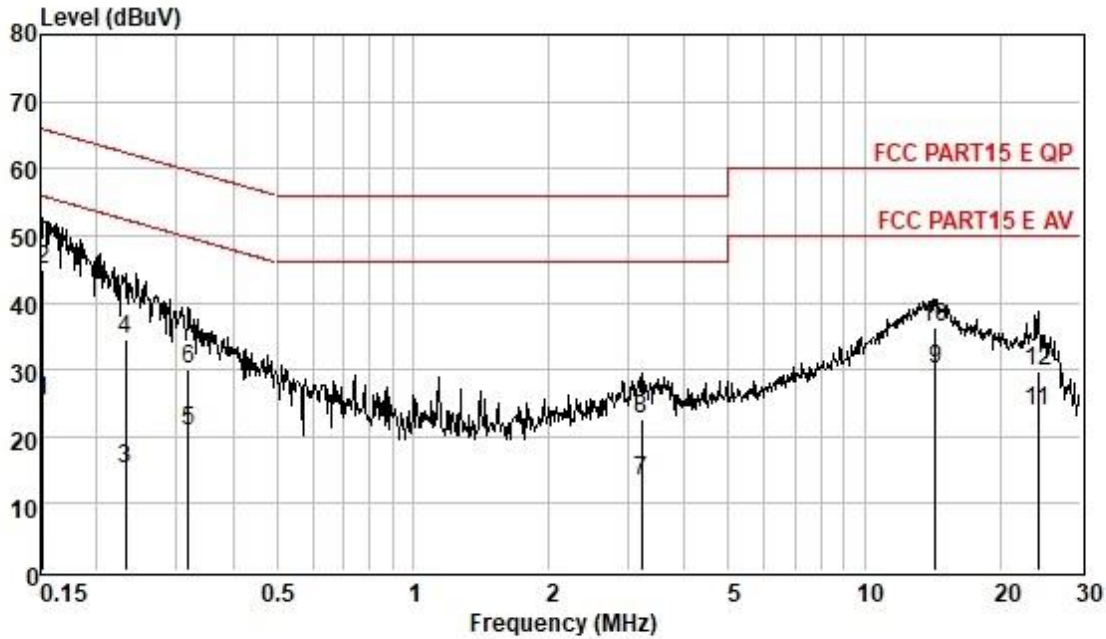
Frequency MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Measured Level dBuV	Limit Line dBuV	Over Limit dB	Remark
0.16	19.03	0.06	9.62	28.71	55.34	-26.63	Average
0.16	36.85	0.06	9.62	46.53	65.34	-18.81	QP
0.22	13.41	0.06	9.63	23.10	52.88	-29.78	Average
0.22	28.63	0.06	9.63	38.32	62.88	-24.56	QP
0.30	-1.12	0.06	9.62	8.56	50.19	-41.63	Average
0.30	19.93	0.06	9.62	29.61	60.19	-30.58	QP
0.39	3.83	0.06	9.62	13.51	48.03	-34.52	Average
0.39	18.45	0.06	9.62	28.13	58.03	-29.90	QP
13.34	20.35	0.29	9.72	30.36	50.00	-19.64	Average
13.34	26.45	0.29	9.72	36.46	60.00	-23.54	QP
22.54	13.75	0.39	9.83	23.97	50.00	-26.03	Average
22.54	20.15	0.39	9.83	30.37	60.00	-29.63	QP



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Test Mode: 07; Line: Neutral Line



Pol : NEUTRAL
Mode :
Model :

Frequency MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Measured Level dBuV	Limit Line dBuV	Over Limit dB	Remark
0.15	15.77	0.06	9.55	25.38	55.91	-30.53	Average
0.15	35.21	0.06	9.55	44.82	65.91	-21.09	QP
0.23	5.41	0.06	9.55	15.02	52.39	-37.37	Average
0.23	24.83	0.06	9.55	34.44	62.39	-27.95	QP
0.32	11.13	0.06	9.54	20.73	49.75	-29.02	Average
0.32	20.49	0.06	9.54	30.09	59.75	-29.66	QP
3.21	3.76	0.15	9.56	13.47	46.00	-32.53	Average
3.21	12.92	0.15	9.56	22.63	56.00	-33.37	QP
14.36	20.13	0.30	9.63	30.06	50.00	-19.94	Average
14.36	26.45	0.30	9.63	36.38	60.00	-23.62	QP
24.14	13.54	0.40	9.78	23.72	50.00	-26.28	Average
24.14	19.54	0.40	9.78	29.72	60.00	-30.28	QP



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7.2 Duty Cycle

Test Requirement KDB 789033 D02 II B 1
Test Method: KDB 789033 D02 II B 2

7.2.1 E.U.T. Operation

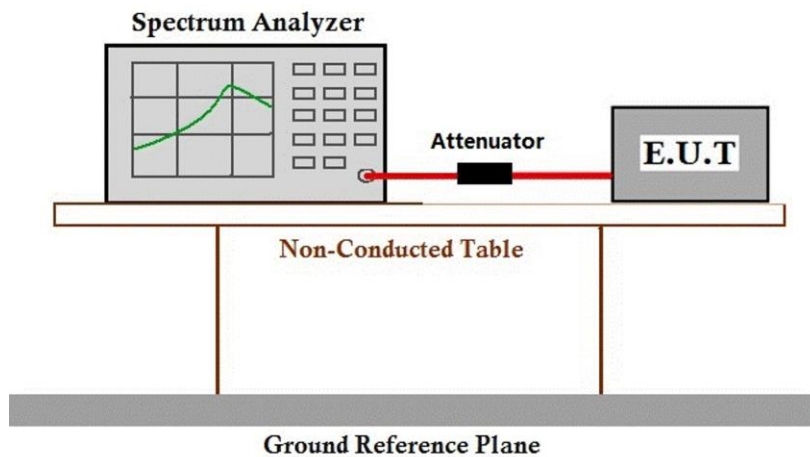
Operating Environment:
Temperature: 24.8 °C Humidity: 52 % RH Atmospheric Pressure: 995 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	08	TX mode (U-NII-2A)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	09	TX mode (U-NII-2C)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	10	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). 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

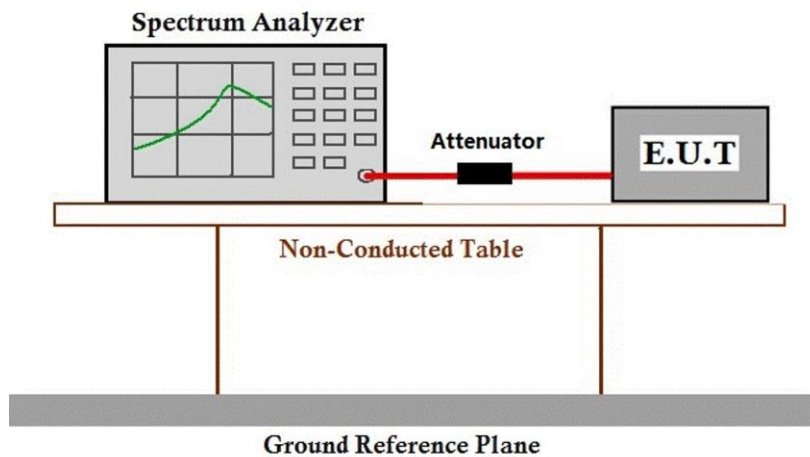
Operating Environment:
Temperature: 25.2 °C Humidity: 51 % RH Atmospheric Pressure: 995 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	08	TX mode (U-NII-2A)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	09	TX mode (U-NII-2C)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	10	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). 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



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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:

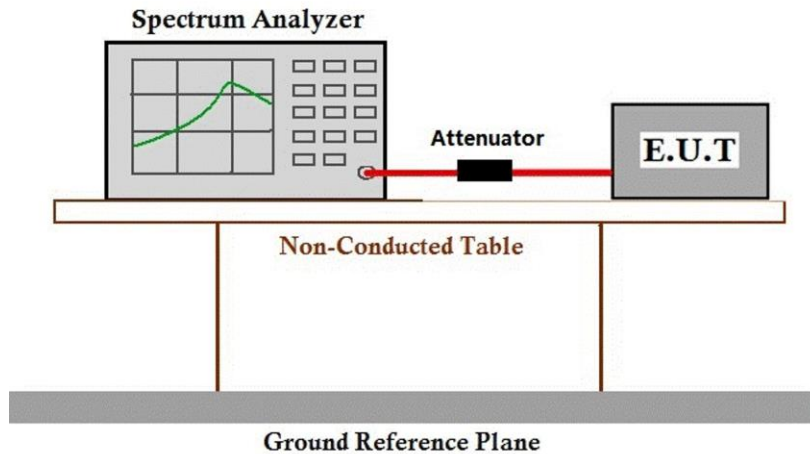
Temperature: 25 °C Humidity: 51 % RH Atmospheric Pressure: 995 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	08	TX mode (U-NII-2A)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	09	TX mode (U-NII-2C)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). 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: 25.1 °C

Humidity: 51 % RH

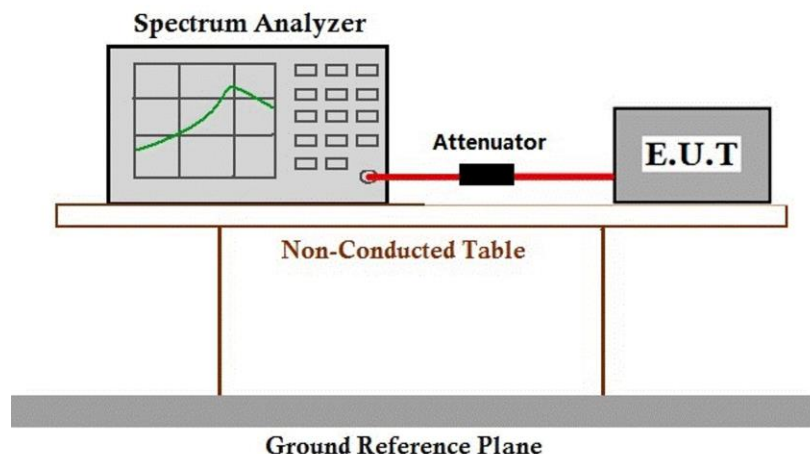
Atmospheric Pressure: 995 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
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Final test	10	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
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7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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: 25 °C

Humidity: 51 % RH

Atmospheric Pressure: 995 mbar

7.6.2 Test Mode Description

Pre-scan / Mode
Final test Code

Description

Final test 07

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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

Final test 08

TX mode (U-NII-2A)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

Final test 09

TX mode (U-NII-2C)_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 @

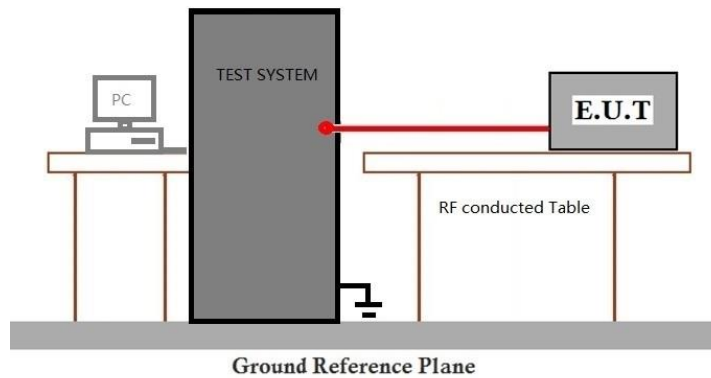


Final test 10

MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

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: 25 °C Humidity: 51 % RH Atmospheric Pressure: 995 mbar

7.7.2 Test Mode Description

Pre-scan / Mode
Final test Code

Description

Final test 07 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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

Final test 08 TX mode (U-NII-2A)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

Final test 09 TX mode (U-NII-2C)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

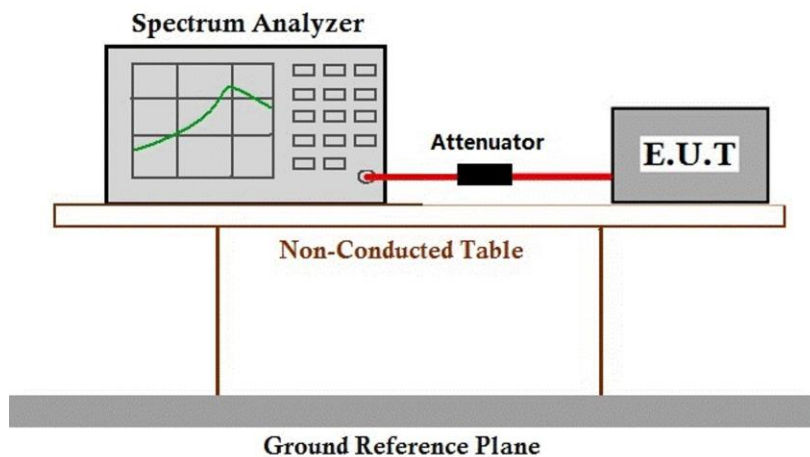


Final test 10

802.11ac(VHT80). Only the data of worst case is recorded in the report.

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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details



7.8 Radiated Emissions (below 1GHz)

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

Test Method: KDB 789033 D02 II G

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

* Frequency in CFR 15.205 Restricted Band.

Note: Frequency in non-Restricted Band:

(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: 25.4 °C

Humidity: 52 % RH

Atmospheric Pressure: 995 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
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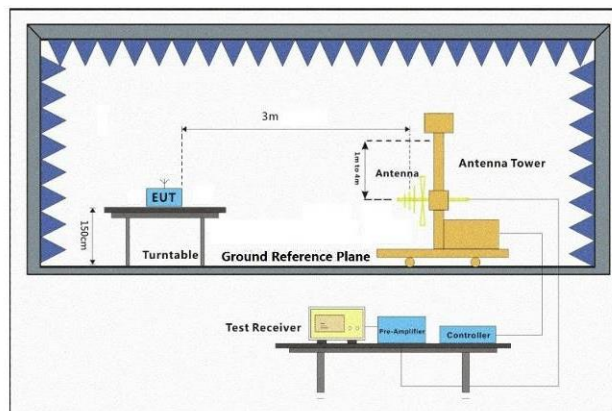
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Guangzhou Branch Testing Laboratory EEC Laboratory, 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com

Final test	07	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Pre-scan	08	TX mode (U-NII-2A)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Pre-scan	09	TX mode (U-NII-2C)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Pre-scan	10	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

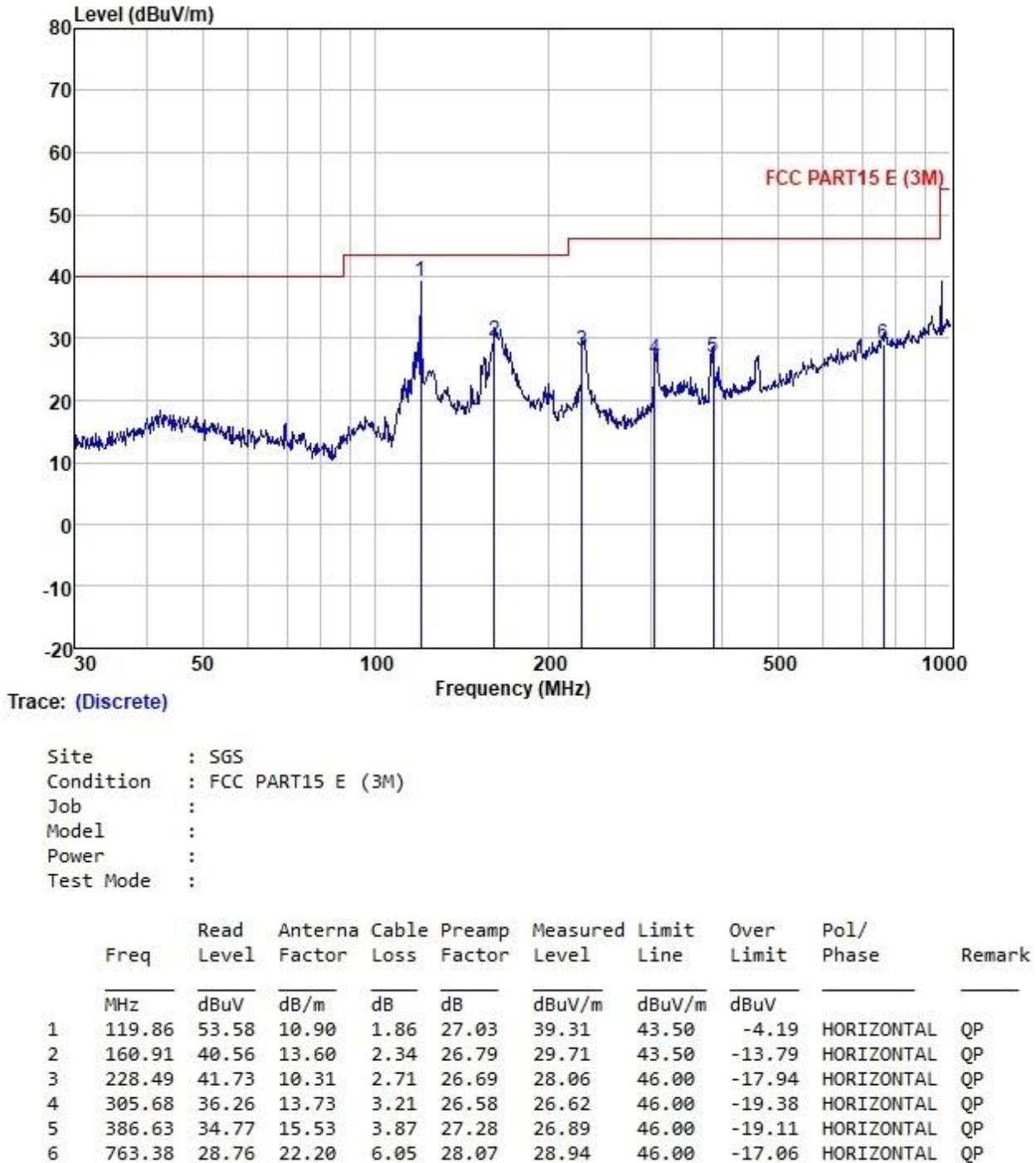
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted 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 (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.
- 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:

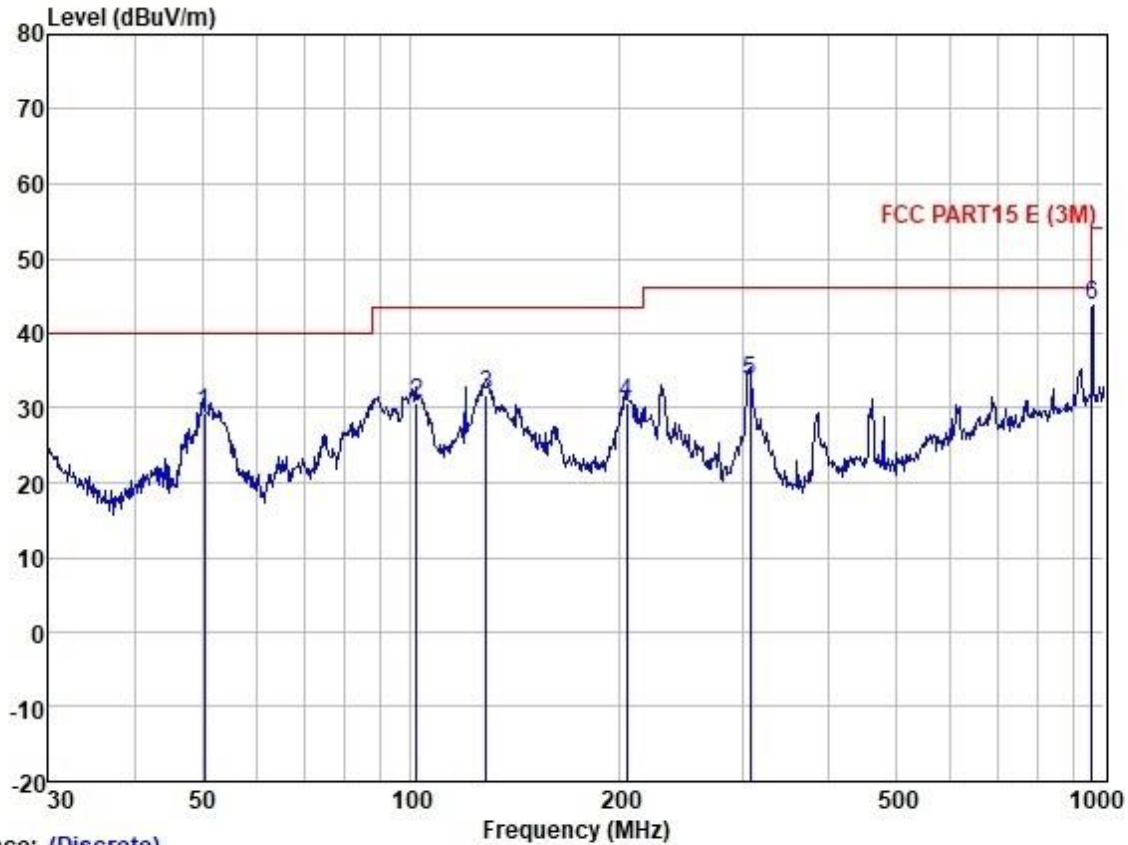
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamplifier Factor
2. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of 802.11a. Only the worst case is recorded in the report.
3. Scan from 9kHz to 1GHz, the disturbance below 30MHz was very low. The points 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.



Test Mode: 07; Polarity: Horizontal



Test Mode: 07; Polarity: Vertical



Site : SGS
Condition : FCC PART15 E (3M)
Job :
Model :
Power :
Test Mode :

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Measured Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dBuV		
1	50.41	41.36	13.91	1.15	27.17	29.25	40.00	-10.75	VERTICAL	QP
2	102.00	46.67	9.40	1.74	27.08	30.73	43.50	-12.77	VERTICAL	QP
3	128.56	44.94	11.87	1.94	27.00	31.75	43.50	-11.75	VERTICAL	QP
4	204.96	44.95	9.80	2.56	26.72	30.59	43.50	-12.91	VERTICAL	QP
5	308.91	43.07	13.85	3.23	26.60	33.55	46.00	-12.45	VERTICAL	QP
6	960.04	40.43	23.90	7.18	27.72	43.79	54.00	-10.21	VERTICAL	QP



7.9 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

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

* Frequency in CFR 15.205 Restricted Band.

Note: Frequency in non-Restricted Band:

(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: 25.5 °C

Humidity: 53 % RH

Atmospheric Pressure: 995 mbar



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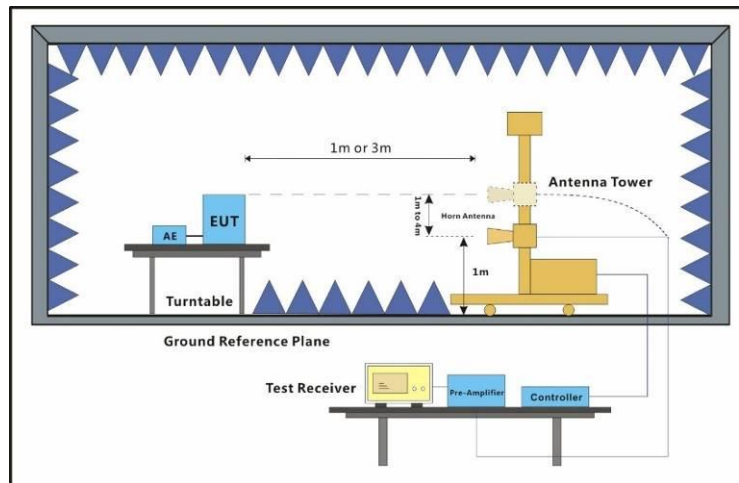
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Guangzhou Branch Testing Laboratory 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	08	TX mode (U-NII-2A)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	09	TX mode (U-NII-2C)_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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.
Final test	10	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); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.



7.9.3 Test Setup Diagram

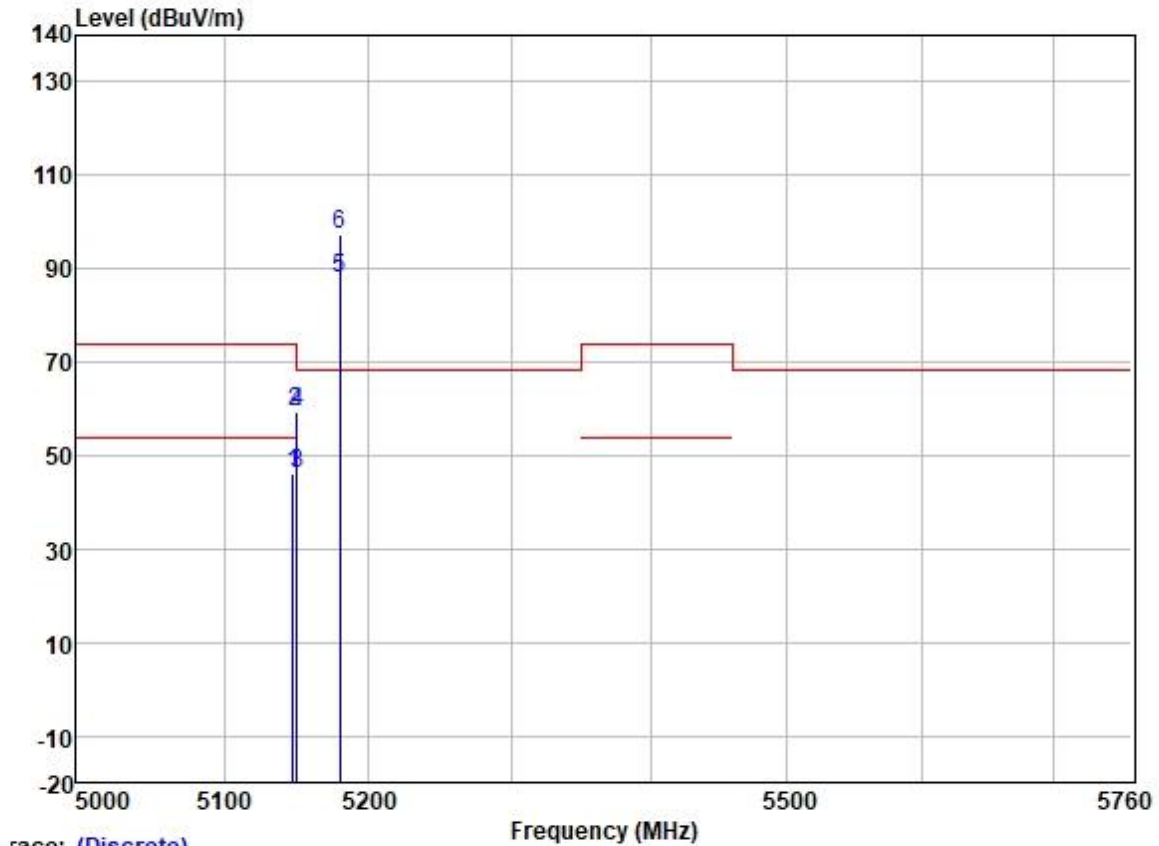


7.9.4 Measurement Procedure and Data

- 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.
- 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.
- 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.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 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.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- 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.
- Repeat above procedures until all frequencies measured was complete.

Remark: $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamp Factor}$

Test Mode: 07; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

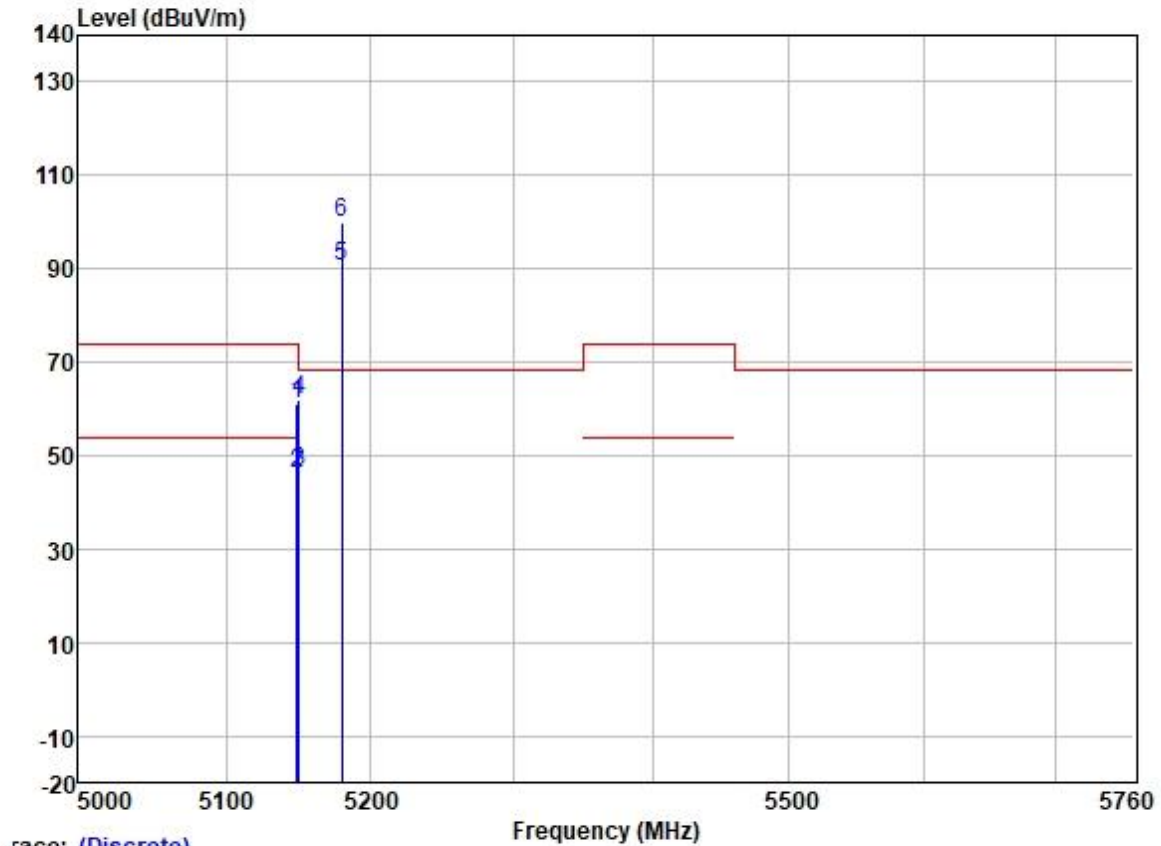


Trace: (Discrete)

	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	5146.958	45.65	31.72	5.62	36.86	46.13	54.00	-7.87	HORIZONTAL	Average
2	5149.257	58.83	31.72	5.62	36.86	59.31	74.00	-14.69	HORIZONTAL	Peak
3	5149.980	45.59	31.72	5.62	36.86	46.07	54.00	-7.93	HORIZONTAL	Average
4	5149.980	59.01	31.72	5.62	36.86	59.49	74.00	-14.51	HORIZONTAL	Peak
5	5180.000	87.50	31.73	5.61	36.87	87.97	-----	-----	HORIZONTAL	Average
6 *	5180.000	96.70	31.73	5.61	36.87	97.17	68.20	28.97	HORIZONTAL	Peak



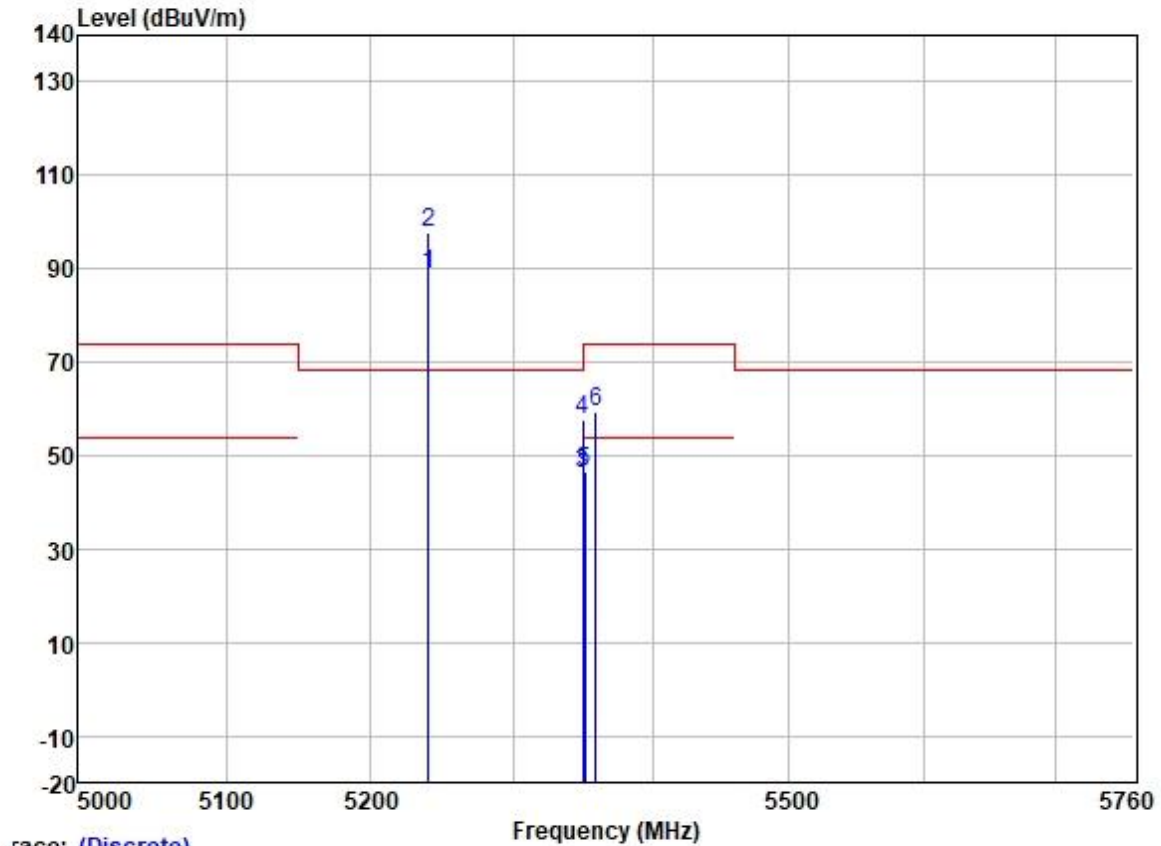
Test Mode: 07; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



	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	5148.458	60.39	31.72	5.62	36.86	60.87	74.00	-13.13	VERTICAL	Peak
2	5149.458	45.79	31.72	5.62	36.86	46.27	54.00	-7.73	VERTICAL	Average
3	5149.980	45.92	31.72	5.62	36.86	46.40	54.00	-7.60	VERTICAL	Average
4	5149.980	61.24	31.72	5.62	36.86	61.72	74.00	-12.28	VERTICAL	Peak
5	5180.000	90.08	31.73	5.61	36.87	90.55	-----	-----	VERTICAL	Average
6 *	5180.000	99.56	31.73	5.61	36.87	100.03	68.20	31.83	VERTICAL	Peak



Test Mode: 07; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High

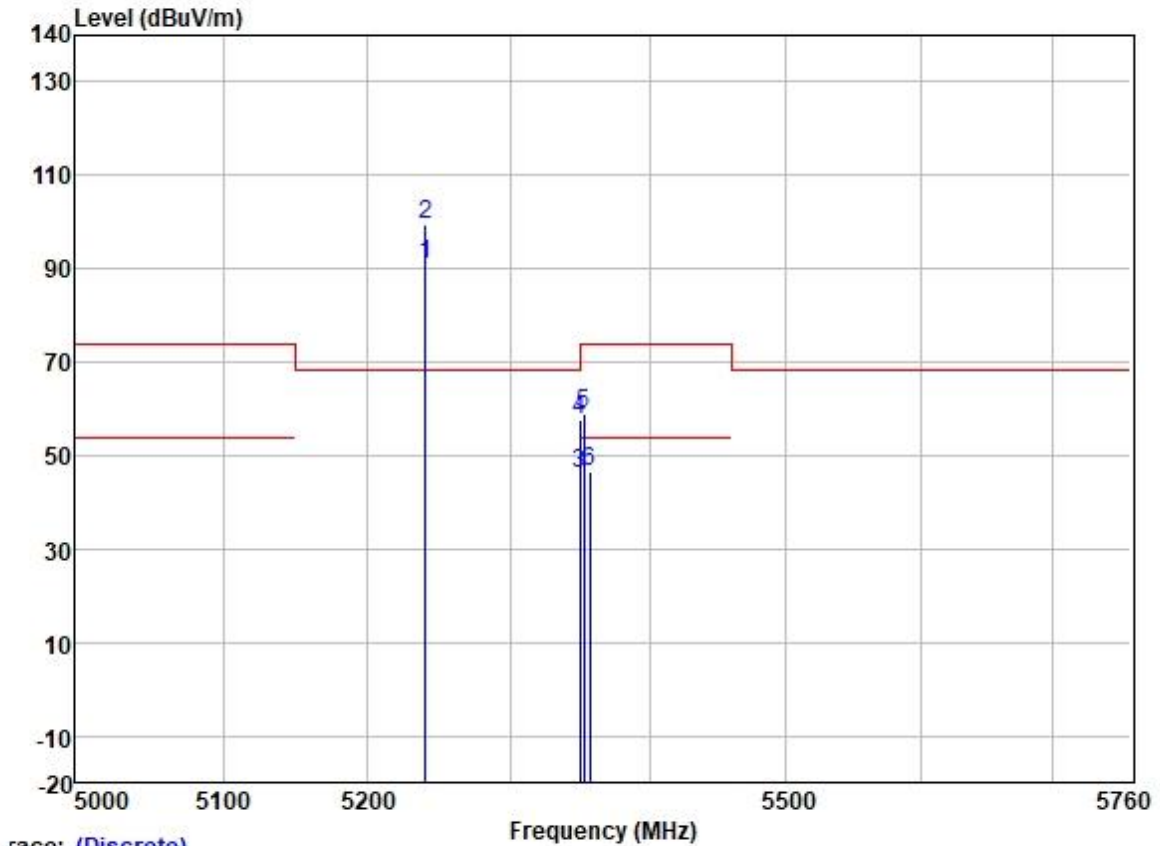


Trace: (Discrete)

	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	88.14	31.75	5.74	36.87	88.76	-----	-----	HORIZONTAL	Average
2 *	5240.000	97.17	31.75	5.74	36.87	97.79	68.20	29.59	HORIZONTAL	Peak
3	5350.020	45.22	31.77	6.05	36.88	46.16	54.00	-7.84	HORIZONTAL	Average
4	5350.020	56.75	31.77	6.05	36.88	57.69	74.00	-16.31	HORIZONTAL	Peak
5	5351.212	45.55	31.77	6.05	36.88	46.49	54.00	-7.51	HORIZONTAL	Average
6	5359.007	58.40	31.78	6.03	36.88	59.33	74.00	-14.67	HORIZONTAL	Peak



Test Mode: 07; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High

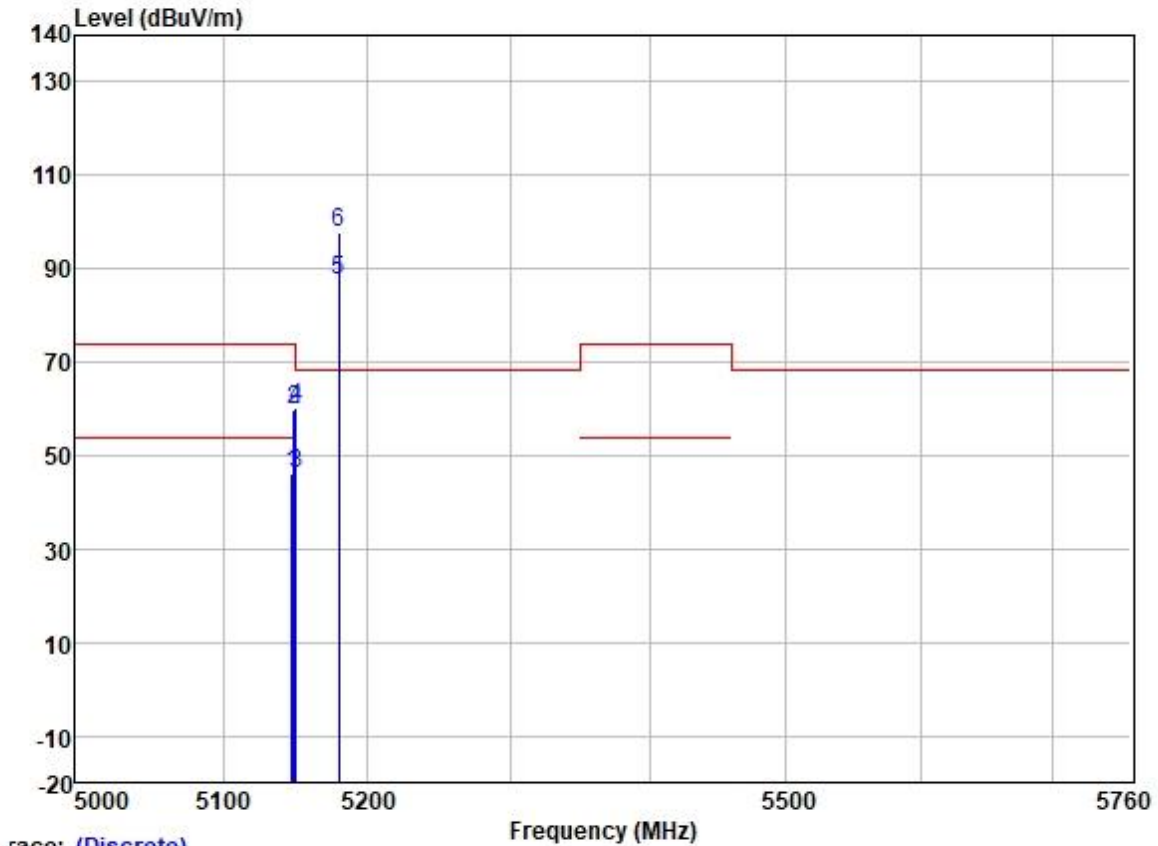


Trace: (Discrete)

	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	5240.000	90.15	31.75	5.74	36.87	90.77	-----	-----	VERTICAL	Average
2 *	5240.000	98.93	31.75	5.74	36.87	99.55	68.20	31.35	VERTICAL	Peak
3	5350.020	45.32	31.77	6.05	36.88	46.26	54.00	-7.74	VERTICAL	Average
4	5350.020	56.72	31.77	6.05	36.88	57.66	74.00	-16.34	VERTICAL	Peak
5	5352.487	58.09	31.77	6.05	36.88	59.03	74.00	-14.97	VERTICAL	Peak
6	5357.022	45.49	31.78	6.03	36.88	46.42	54.00	-7.58	VERTICAL	Average



Test Mode: 07; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

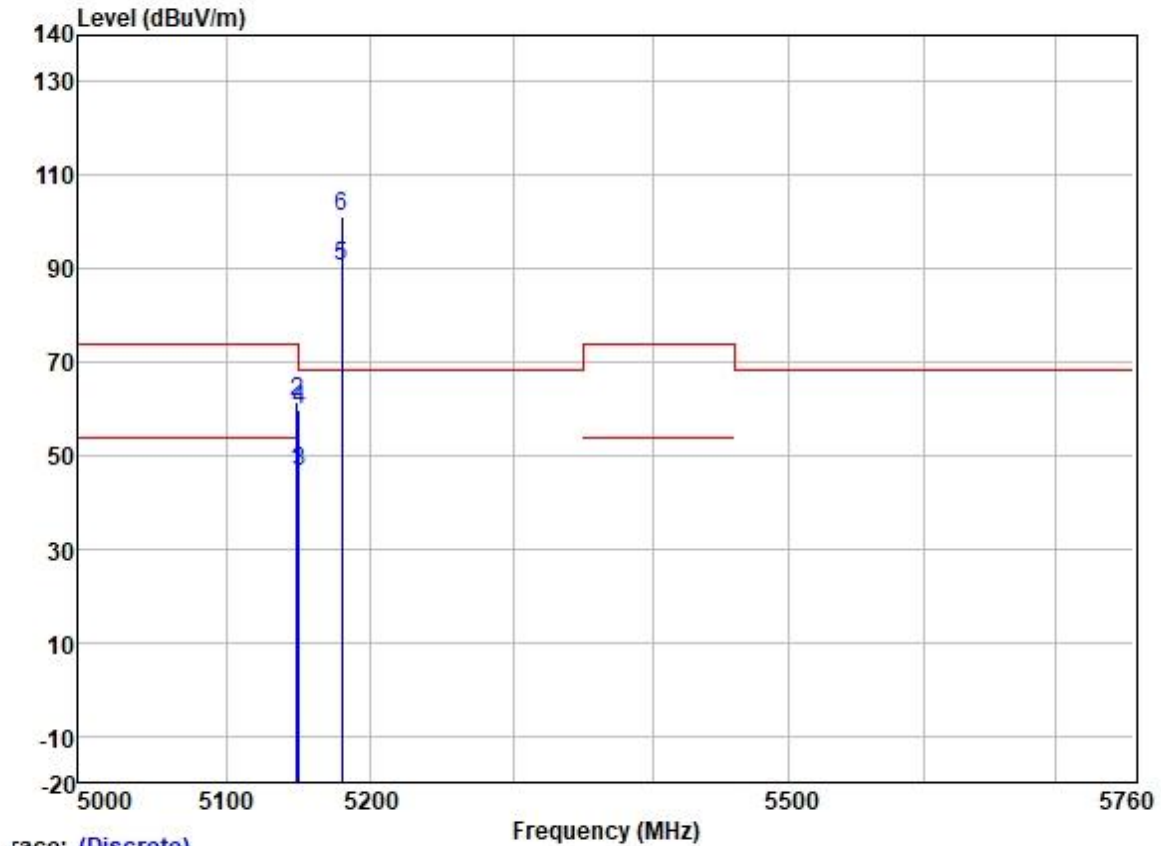
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5147.058	45.52	31.72	5.62	36.86	46.00	54.00	-8.00	HORIZONTAL	Average
2	5148.458	59.43	31.72	5.62	36.86	59.91	74.00	-14.09	HORIZONTAL	Peak
3	5149.980	45.57	31.72	5.62	36.86	46.05	54.00	-7.95	HORIZONTAL	Average
4	5149.980	59.83	31.72	5.62	36.86	60.31	74.00	-13.69	HORIZONTAL	Peak
5	5180.000	87.20	31.73	5.61	36.87	87.67	-----	-----	HORIZONTAL	Average
6 *	5180.000	97.32	31.73	5.61	36.87	97.79	68.20	29.59	HORIZONTAL	Peak



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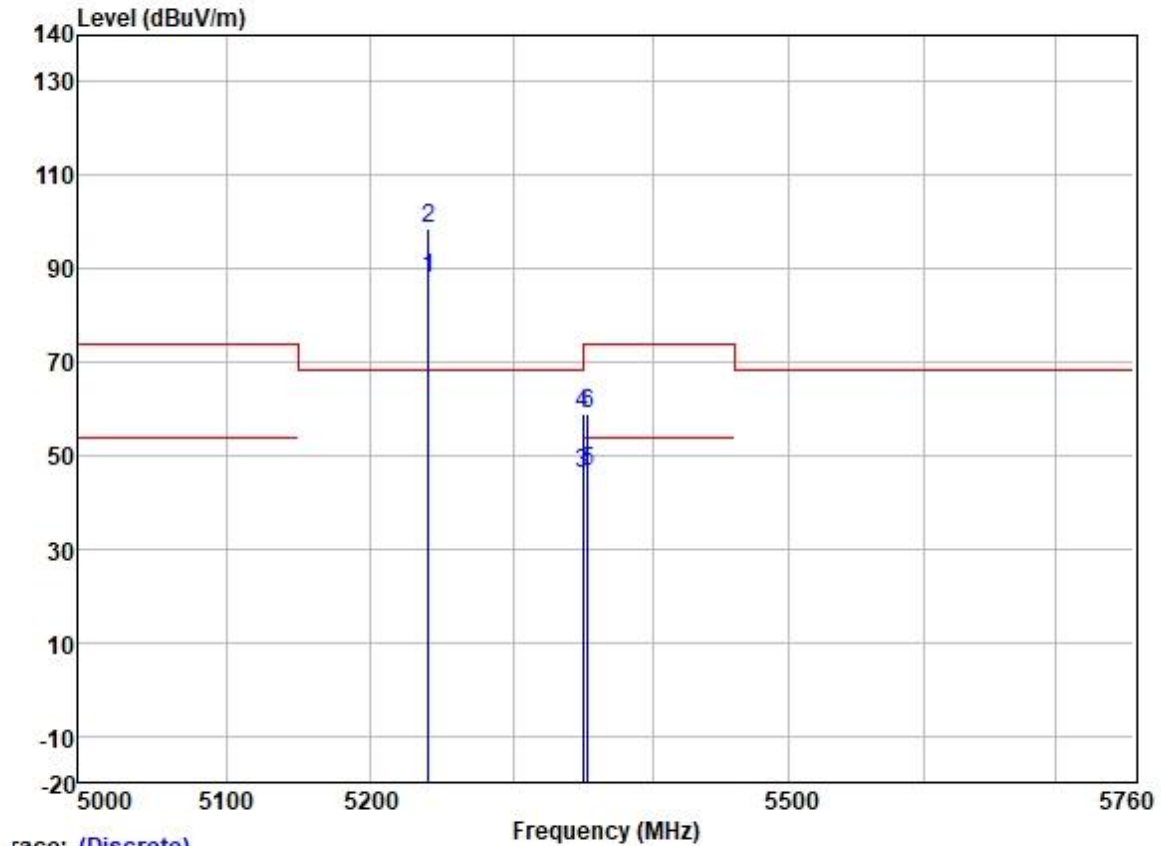
Test Mode: 07; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



	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	5148.857	45.90	31.72	5.62	36.86	46.38	54.00	-7.62	VERTICAL	Average
2	5148.958	60.97	31.72	5.62	36.86	61.45	74.00	-12.55	VERTICAL	Peak
3	5149.980	45.93	31.72	5.62	36.86	46.41	54.00	-7.59	VERTICAL	Average
4	5149.980	59.51	31.72	5.62	36.86	59.99	74.00	-14.01	VERTICAL	Peak
5	5180.000	89.94	31.73	5.61	36.87	90.41	-----	-----	VERTICAL	Average
6 *	5180.000	100.52	31.73	5.61	36.87	100.99	68.20	32.79	VERTICAL	Peak



Test Mode: 07; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High

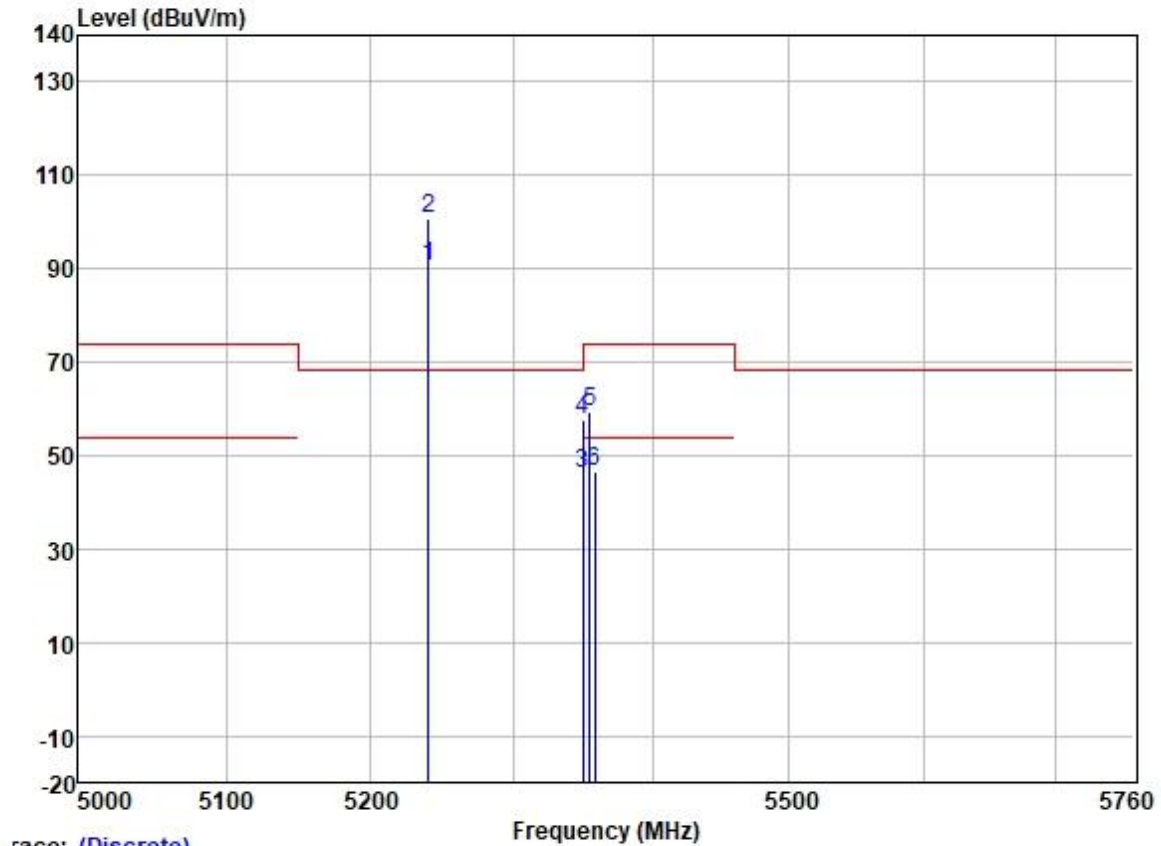


Trace: (Discrete)

	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	87.35	31.75	5.74	36.87	87.97	-----	-----	HORIZONTAL	Average
2 *	5240.000	97.80	31.75	5.74	36.87	98.42	68.20	30.22	HORIZONTAL	Peak
3	5350.020	45.40	31.77	6.05	36.88	46.34	54.00	-7.66	HORIZONTAL	Average
4	5350.020	57.79	31.77	6.05	36.88	58.73	74.00	-15.27	HORIZONTAL	Peak
5	5353.479	45.53	31.77	6.05	36.88	46.47	54.00	-7.53	HORIZONTAL	Average
6	5353.620	57.92	31.77	6.05	36.88	58.86	74.00	-15.14	HORIZONTAL	Peak



Test Mode: 07; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High

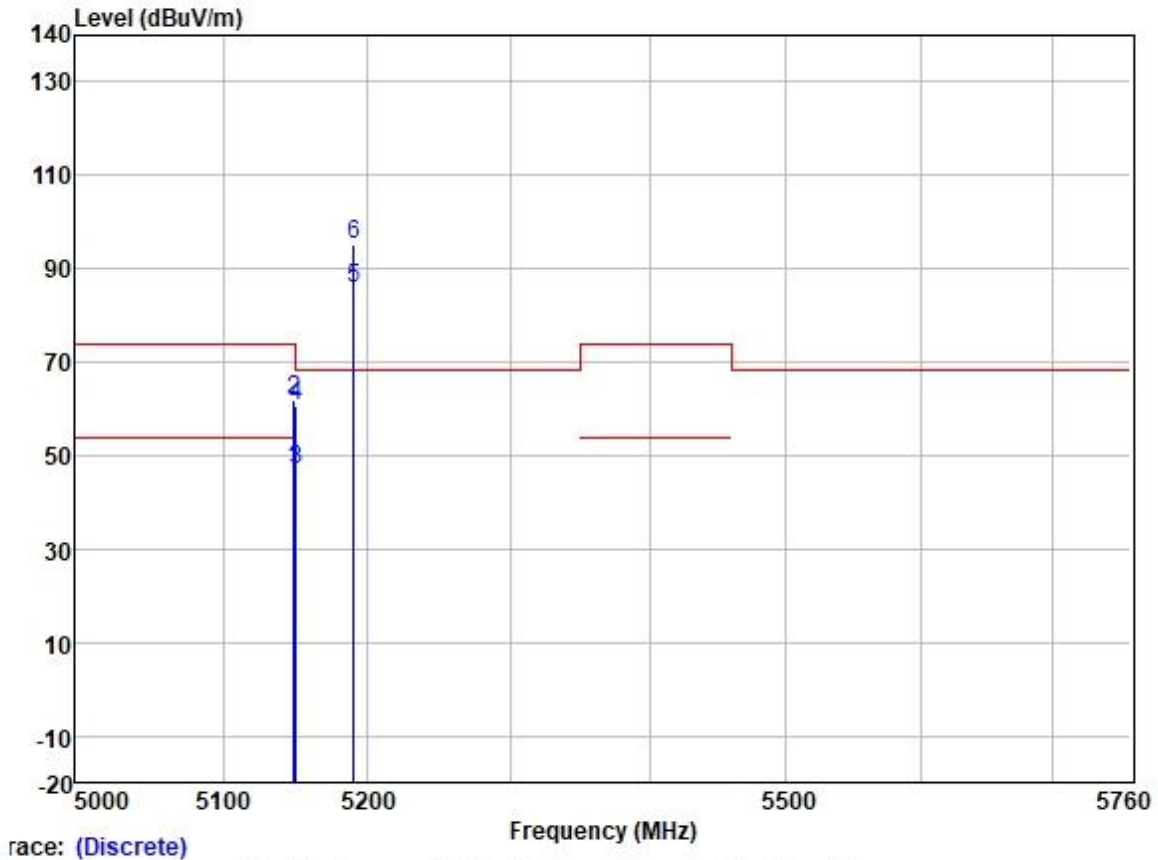


Trace: (Discrete)

	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	90.03	31.75	5.74	36.87	90.65	-----	-----	VERTICAL	Average
2 *	5240.000	100.30	31.75	5.74	36.87	100.92	68.20	32.72	VERTICAL	Peak
3	5350.020	45.25	31.77	6.05	36.88	46.19	54.00	-7.81	VERTICAL	Average
4	5350.020	56.73	31.77	6.05	36.88	57.67	74.00	-16.33	VERTICAL	Peak
5	5354.612	58.49	31.78	6.03	36.88	59.42	74.00	-14.58	VERTICAL	Peak
6	5358.582	45.51	31.78	6.03	36.88	46.44	54.00	-7.56	VERTICAL	Average

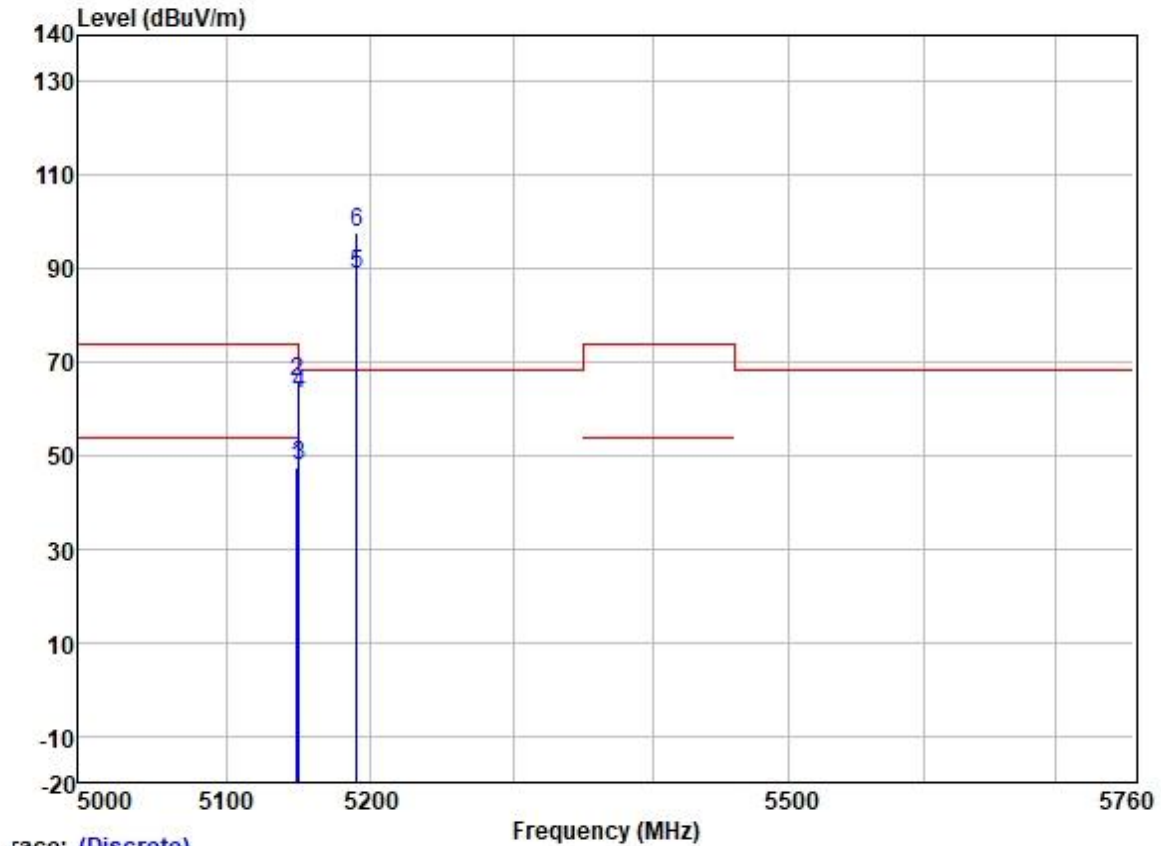


Test Mode: 07; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



		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	5148.863	46.51	31.72	5.62	36.86	46.99	54.00	-7.01	HORIZONTAL	Average
2	5148.982	61.62	31.72	5.62	36.86	62.10	74.00	-11.90	HORIZONTAL	Peak
3	5149.980	46.54	31.72	5.62	36.86	47.02	54.00	-6.98	HORIZONTAL	Average
4	5149.980	60.27	31.72	5.62	36.86	60.75	74.00	-13.25	HORIZONTAL	Peak
5	5190.000	85.53	31.73	5.60	36.87	85.99	-----	-----	HORIZONTAL	Average
6 *	5190.000	94.82	31.73	5.60	36.87	95.28	68.20	27.08	HORIZONTAL	Peak

Test Mode: 07; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

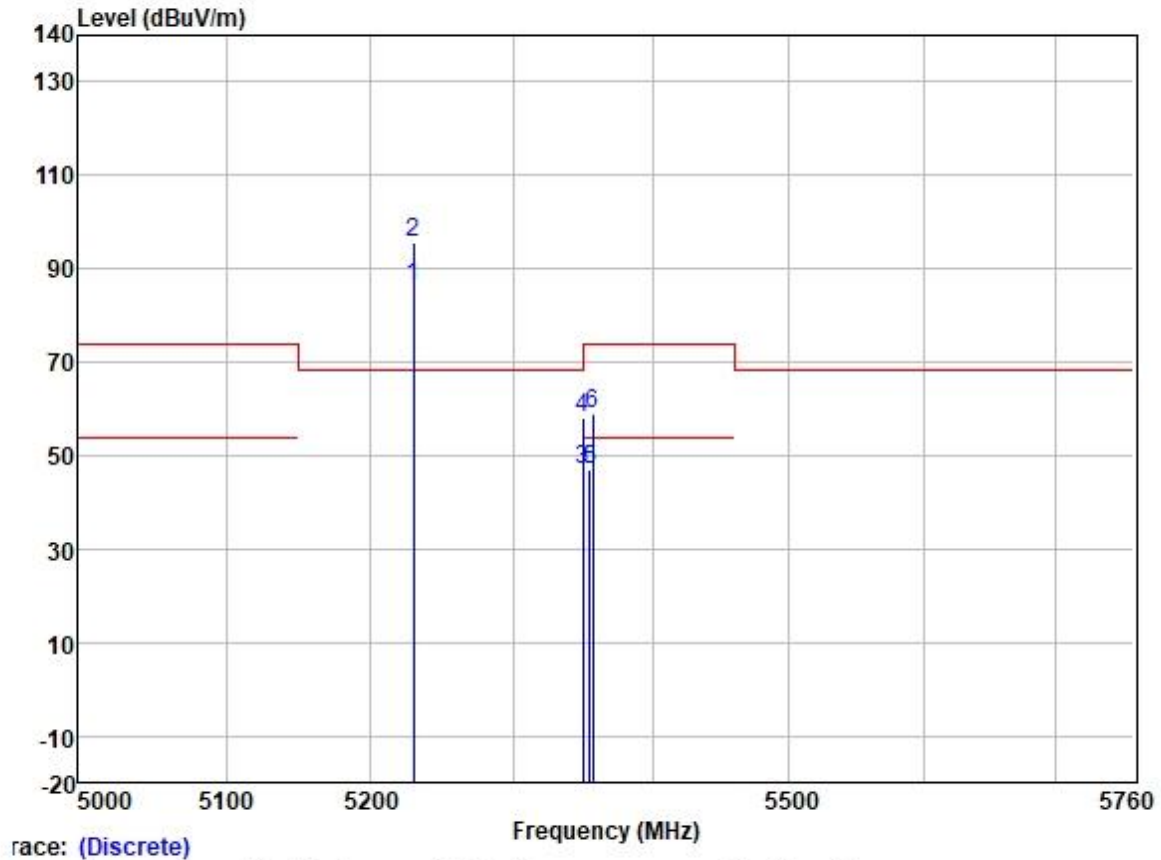


Trace: (Discrete)

		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		5148.503	47.07	31.72	5.62	36.86	47.55	54.00	-6.45	VERTICAL	Average
2		5149.342	65.14	31.72	5.62	36.86	65.62	74.00	-8.38	VERTICAL	Peak
3		5149.980	47.29	31.72	5.62	36.86	47.77	54.00	-6.23	VERTICAL	Average
4		5149.980	62.68	31.72	5.62	36.86	63.16	74.00	-10.84	VERTICAL	Peak
5		5190.000	88.26	31.73	5.60	36.87	88.72	-----	-----	VERTICAL	Average
6	*	5190.000	97.51	31.73	5.60	36.87	97.97	68.20	29.77	VERTICAL	Peak



Test Mode: 07; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High

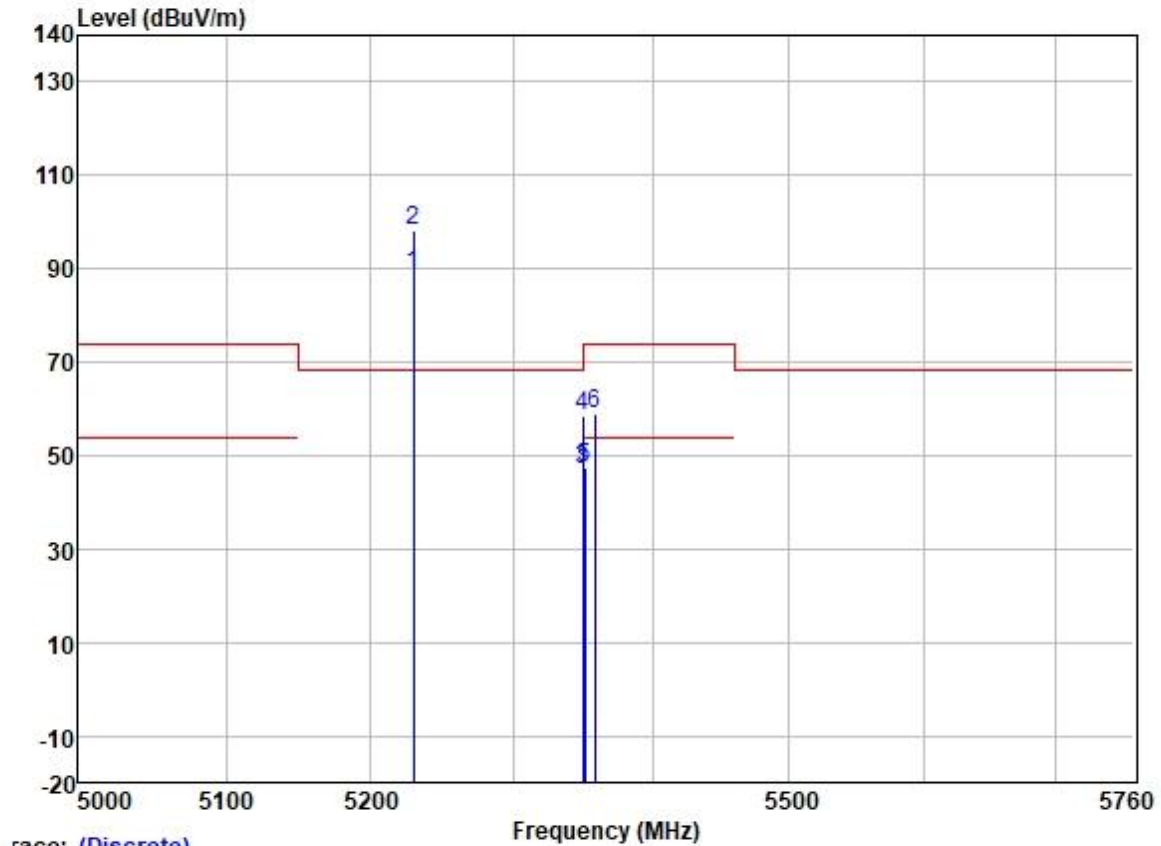


Trace: (Discrete)

	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	5230.000	85.46	31.74	5.70	36.87	86.03	-----	-----	HORIZONTAL	Average
2 *	5230.000	94.99	31.74	5.70	36.87	95.56	68.20	27.36	HORIZONTAL	Peak
3	5350.020	45.87	31.77	6.05	36.88	46.81	54.00	-7.19	HORIZONTAL	Average
4	5350.020	57.03	31.77	6.05	36.88	57.97	74.00	-16.03	HORIZONTAL	Peak
5	5354.805	46.23	31.78	6.03	36.88	47.16	54.00	-6.84	HORIZONTAL	Average
6	5356.915	57.92	31.78	6.03	36.88	58.85	74.00	-15.15	HORIZONTAL	Peak



Test Mode: 07; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High

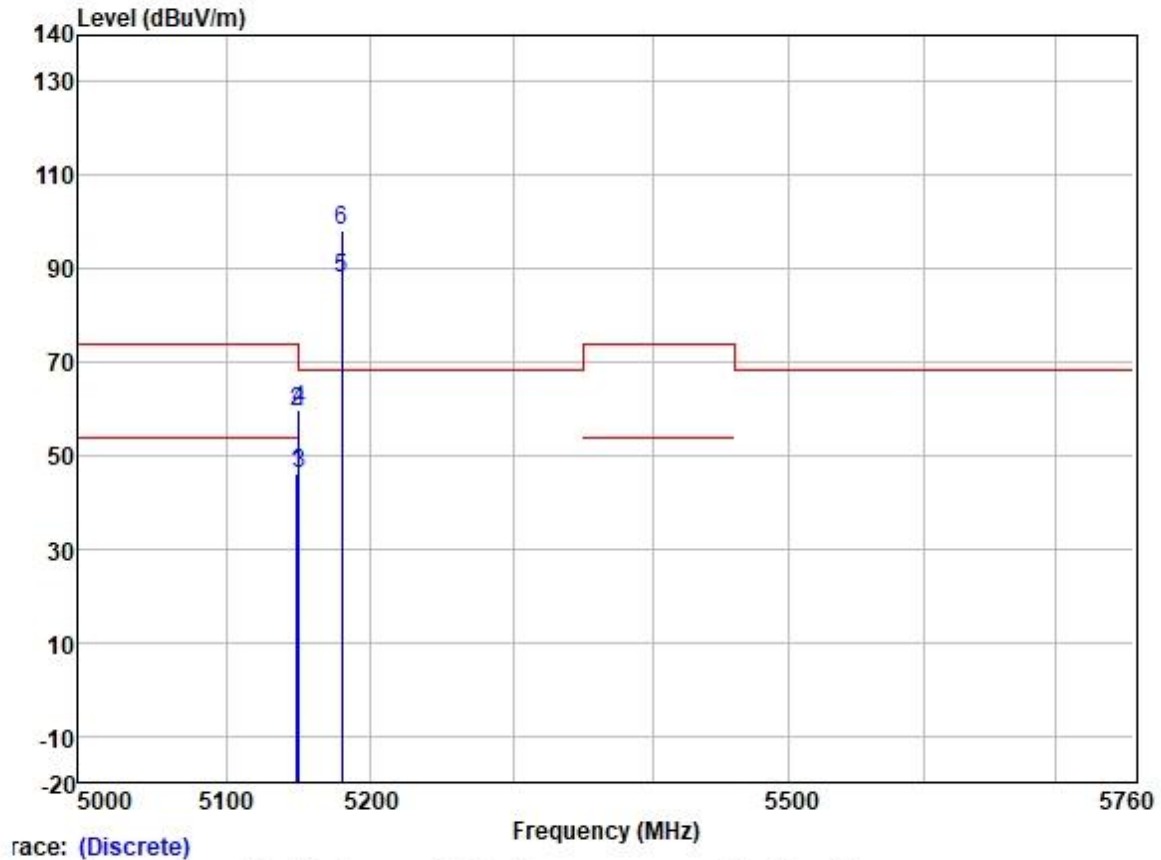


Trace: (Discrete)

	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	5230.000	88.43	31.74	5.70	36.87	89.00	-----	-----	VERTICAL	Average
2 *	5230.000	97.66	31.74	5.70	36.87	98.23	68.20	30.03	VERTICAL	Peak
3	5350.020	46.04	31.77	6.05	36.88	46.98	54.00	-7.02	VERTICAL	Average
4	5350.020	57.55	31.77	6.05	36.88	58.49	74.00	-15.51	VERTICAL	Peak
5	5351.235	46.28	31.77	6.05	36.88	47.22	54.00	-6.78	VERTICAL	Average
6	5358.538	58.04	31.78	6.03	36.88	58.97	74.00	-15.03	VERTICAL	Peak



Test Mode: 07; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low

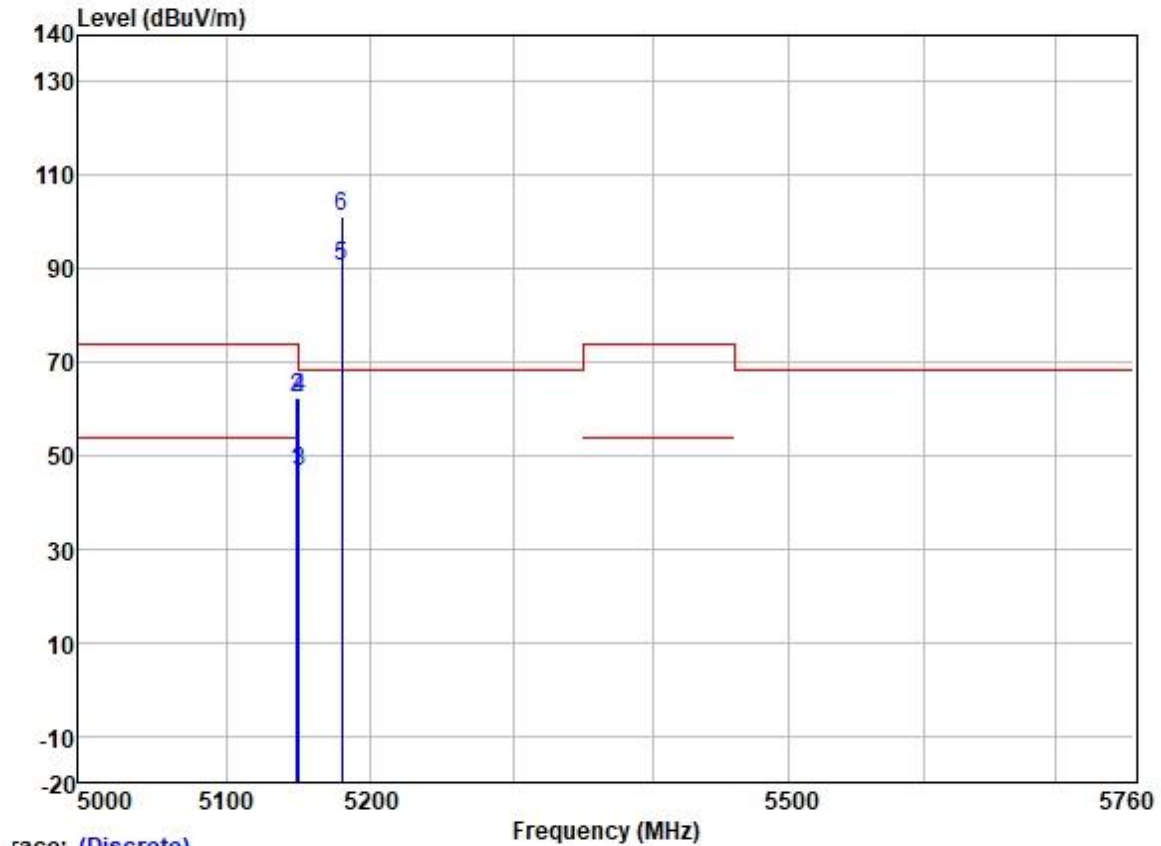


Trace: (Discrete)

	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	5148.958	45.66	31.72	5.62	36.86	46.14	54.00	-7.86	HORIZONTAL	Average
2	5149.157	59.03	31.72	5.62	36.86	59.51	74.00	-14.49	HORIZONTAL	Peak
3	5149.980	45.59	31.72	5.62	36.86	46.07	54.00	-7.93	HORIZONTAL	Average
4	5149.980	59.33	31.72	5.62	36.86	59.81	74.00	-14.19	HORIZONTAL	Peak
5	5180.000	87.36	31.73	5.61	36.87	87.83	-----	-----	HORIZONTAL	Average
6 *	5180.000	97.57	31.73	5.61	36.87	98.04	68.20	29.84	HORIZONTAL	Peak



Test Mode: 07; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: Low

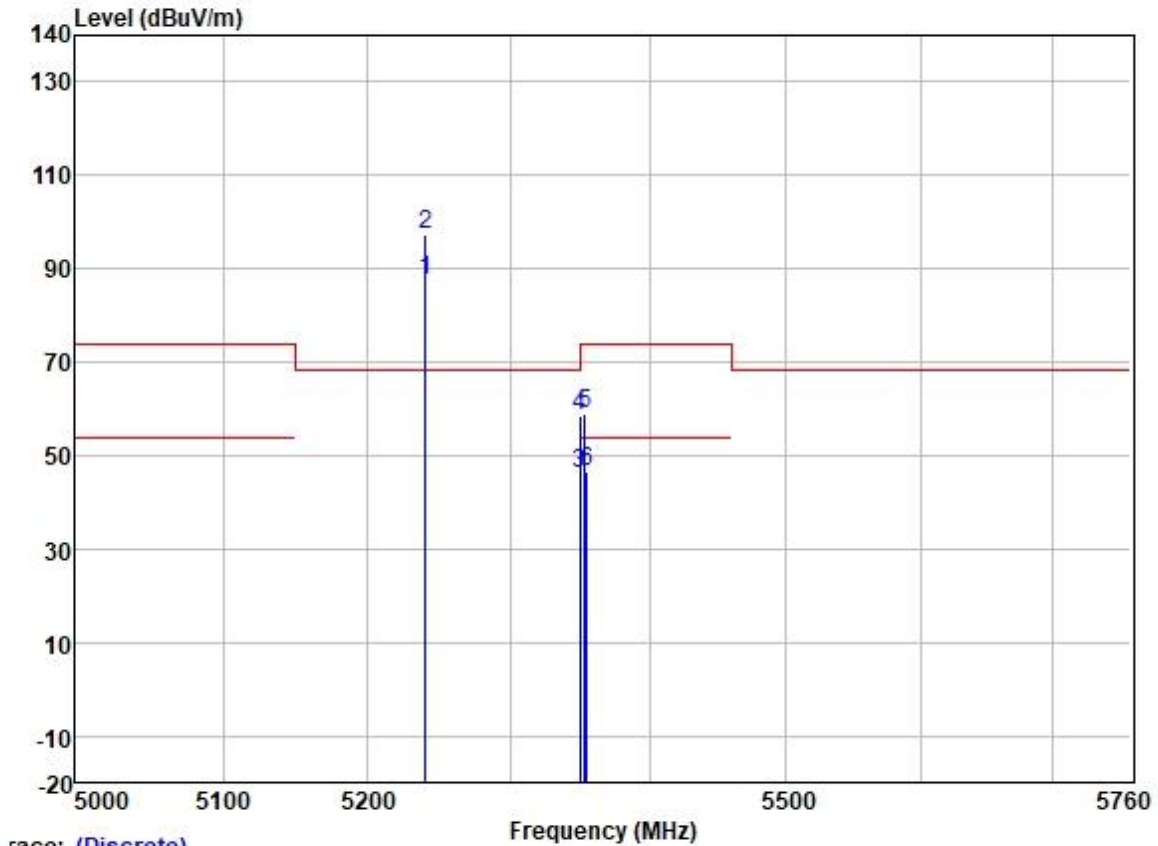


Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5148.357	45.87	31.72	5.62	36.86	46.35	54.00	-7.65	VERTICAL	Average
2	5148.857	61.80	31.72	5.62	36.86	62.28	74.00	-11.72	VERTICAL	Peak
3	5149.980	46.06	31.72	5.62	36.86	46.54	54.00	-7.46	VERTICAL	Average
4	5149.980	61.94	31.72	5.62	36.86	62.42	74.00	-11.58	VERTICAL	Peak
5	5180.000	90.04	31.73	5.61	36.87	90.51	-----	-----	VERTICAL	Average
6 *	5180.000	100.89	31.73	5.61	36.87	101.36	68.20	33.16	VERTICAL	Peak



Test Mode: 07; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

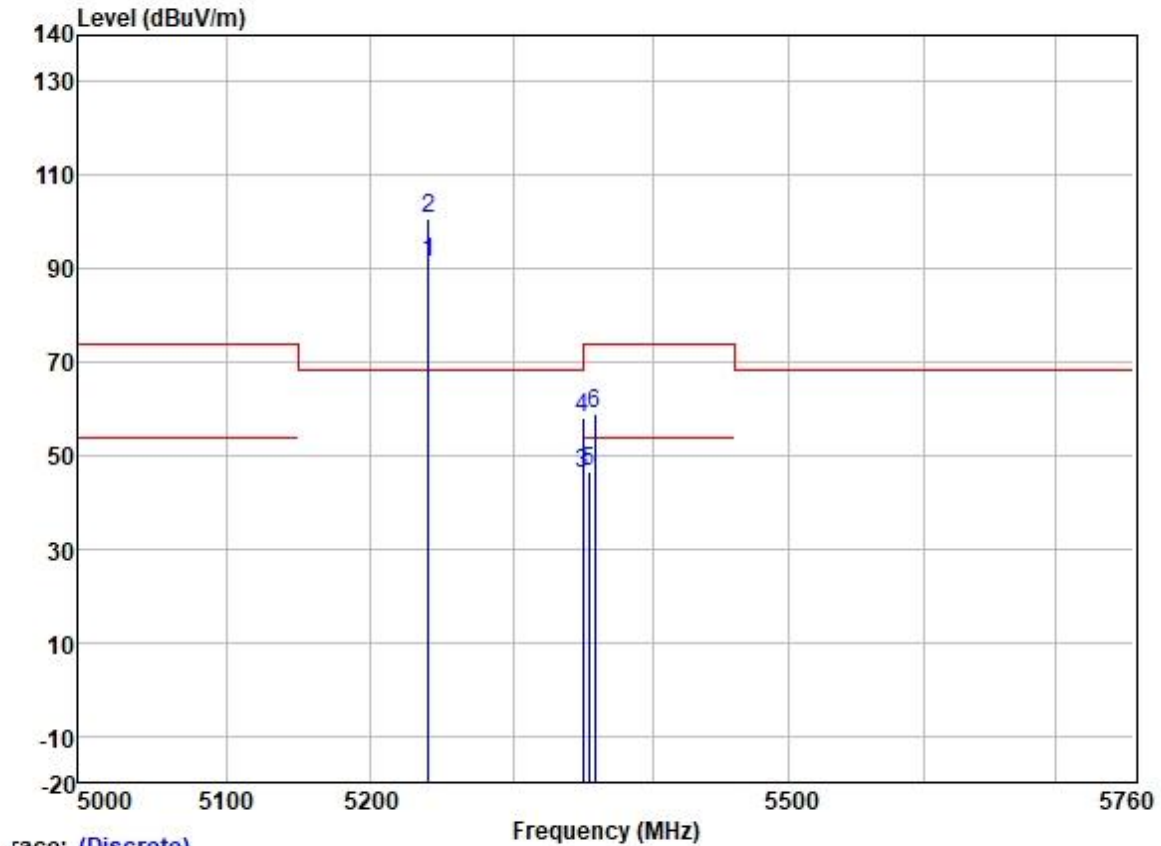
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5240.000	86.80	31.75	5.74	36.87	87.42	-----	-----	HORIZONTAL	Average
2 *	5240.000	96.89	31.75	5.74	36.87	97.51	68.20	29.31	HORIZONTAL	Peak
3	5350.020	45.23	31.77	6.05	36.88	46.17	54.00	-7.83	HORIZONTAL	Average
4	5350.020	57.38	31.77	6.05	36.88	58.32	74.00	-15.68	HORIZONTAL	Peak
5	5353.195	58.16	31.77	6.05	36.88	59.10	74.00	-14.90	HORIZONTAL	Peak
6	5354.754	45.68	31.78	6.03	36.88	46.61	54.00	-7.39	HORIZONTAL	Average



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Test Mode: 07; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

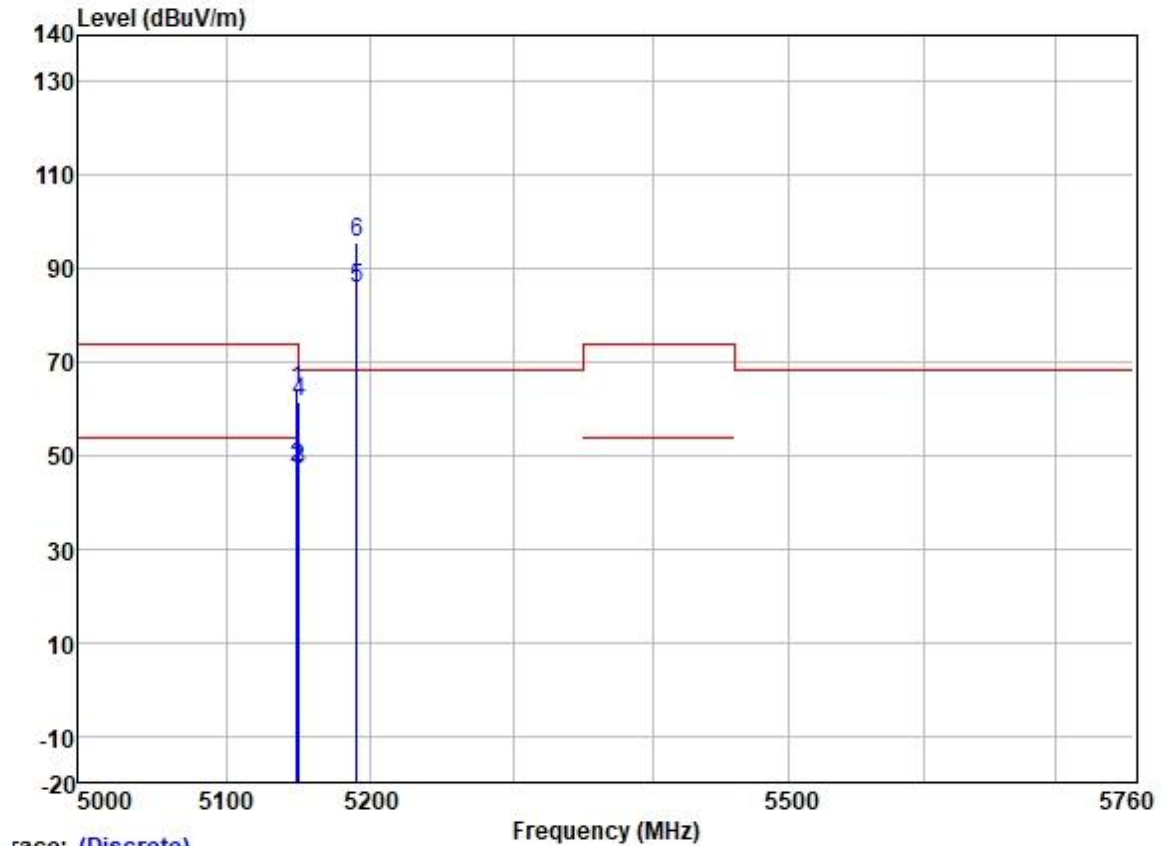
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5240.000	90.56	31.75	5.74	36.87	91.18	-----	-----	VERTICAL	Average
2 *	5240.000	100.02	31.75	5.74	36.87	100.64	68.20	32.44	VERTICAL	Peak
3	5350.020	45.22	31.77	6.05	36.88	46.16	54.00	-7.84	VERTICAL	Average
4	5350.020	57.16	31.77	6.05	36.88	58.10	74.00	-15.90	VERTICAL	Peak
5	5354.045	45.49	31.77	6.05	36.88	46.43	54.00	-7.57	VERTICAL	Average
6	5358.298	58.21	31.78	6.03	36.88	59.14	74.00	-14.86	VERTICAL	Peak



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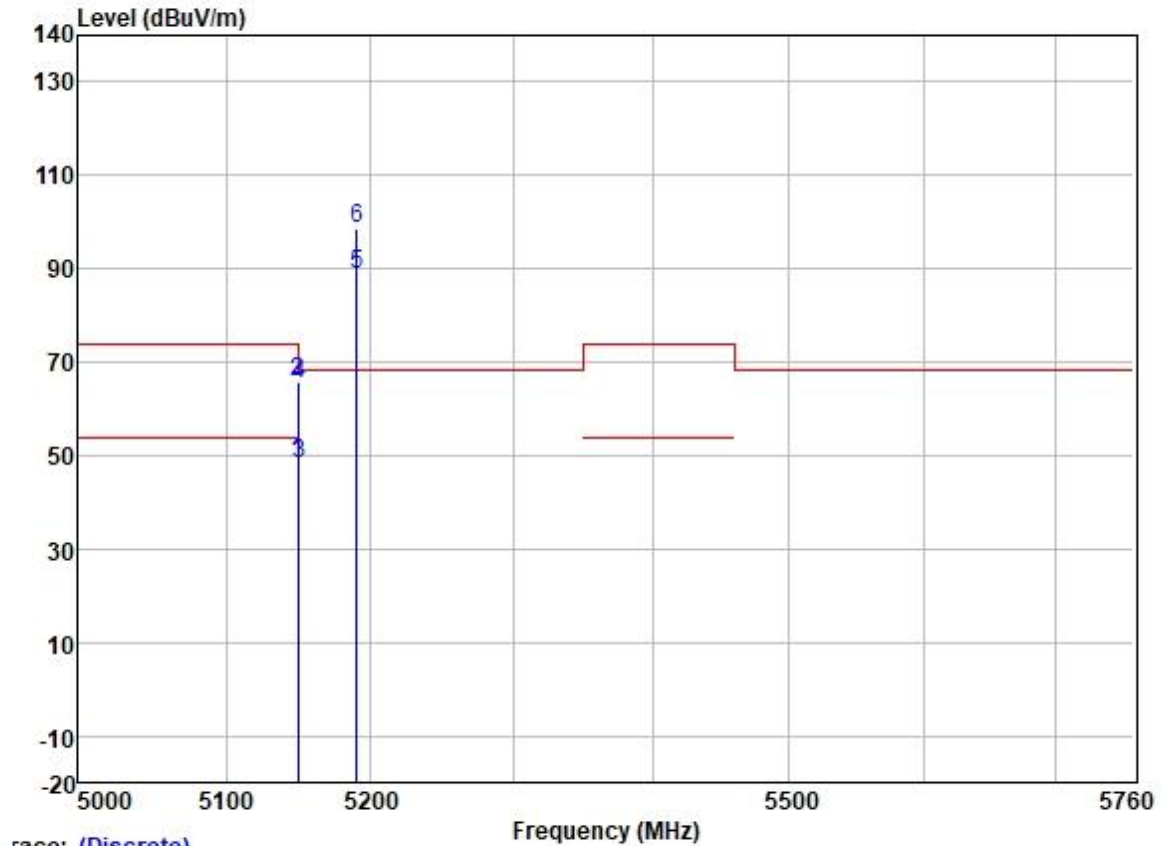
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Test Mode: 07; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



	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	5148.743	63.54	31.72	5.62	36.86	64.02	74.00	-9.98	HORIZONTAL	Peak
2	5149.461	46.73	31.72	5.62	36.86	47.21	54.00	-6.79	HORIZONTAL	Average
3	5149.980	46.71	31.72	5.62	36.86	47.19	54.00	-6.81	HORIZONTAL	Average
4	5149.980	61.15	31.72	5.62	36.86	61.63	74.00	-12.37	HORIZONTAL	Peak
5	5190.000	85.56	31.73	5.60	36.87	86.02	-----	-----	HORIZONTAL	Average
6 *	5190.000	94.96	31.73	5.60	36.87	95.42	68.20	27.22	HORIZONTAL	Peak

Test Mode: 07; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



Trace: (Discrete)

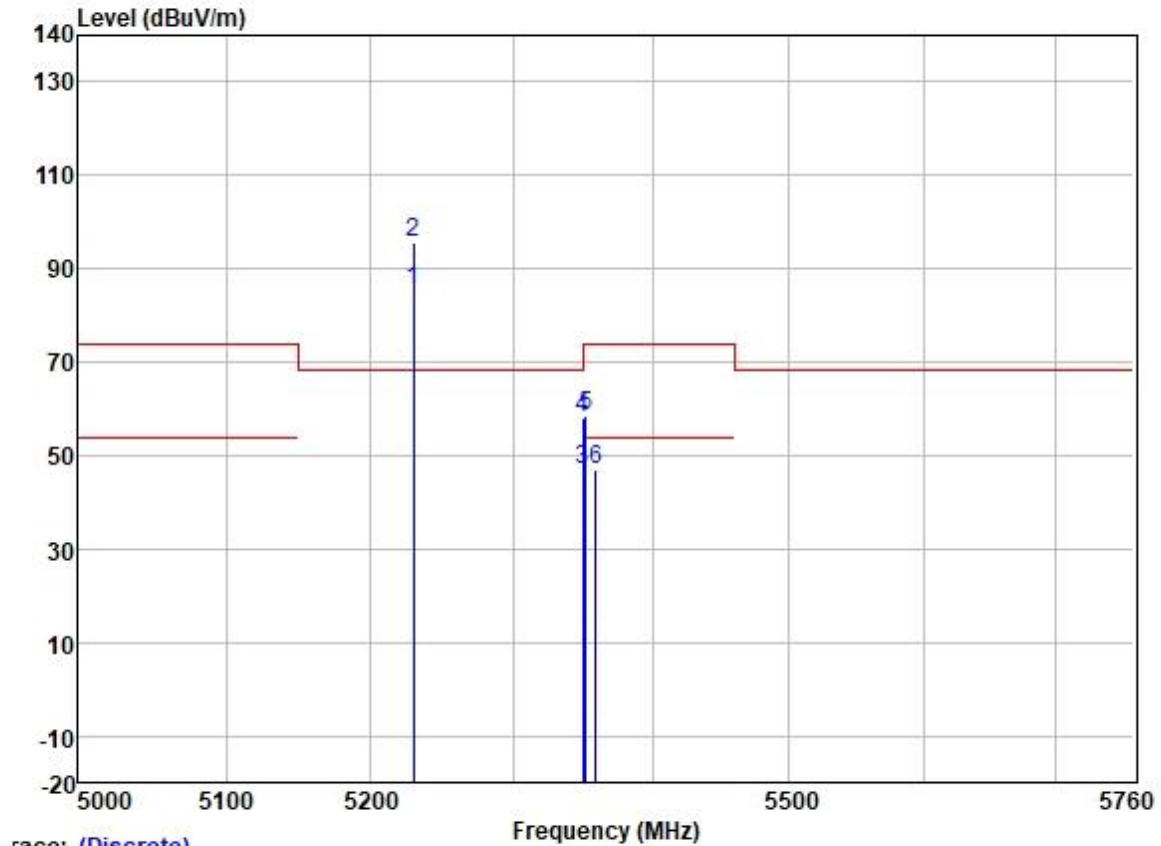
		Freq	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark	
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5149.461	47.69	31.72	5.62	36.86	48.17	54.00	-5.83	VERTICAL	Average
2		5149.461	65.45	31.72	5.62	36.86	65.93	74.00	-8.07	VERTICAL	Peak
3		5149.980	47.62	31.72	5.62	36.86	48.10	54.00	-5.90	VERTICAL	Average
4		5149.980	64.87	31.72	5.62	36.86	65.35	74.00	-8.65	VERTICAL	Peak
5		5190.000	88.52	31.73	5.60	36.87	88.98	-----	-----	VERTICAL	Average
6	*	5190.000	98.10	31.73	5.60	36.87	98.56	68.20	30.36	VERTICAL	Peak



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Test Mode: 07; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

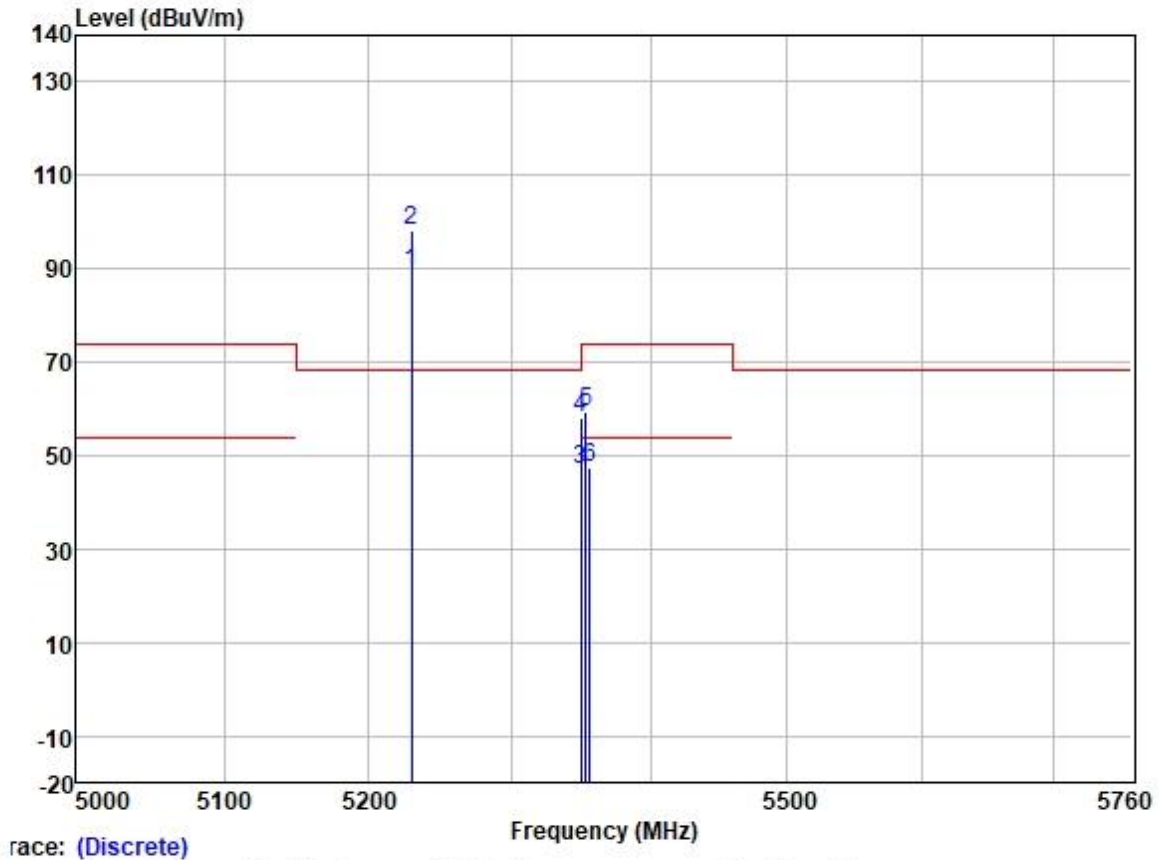


Trace: (Discrete)

	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	5230.000	85.03	31.74	5.70	36.87	85.60	-----	-----	HORIZONTAL	Average
2 *	5230.000	94.85	31.74	5.70	36.87	95.42	68.20	27.22	HORIZONTAL	Peak
3	5350.020	46.02	31.77	6.05	36.88	46.96	54.00	-7.04	HORIZONTAL	Average
4	5350.020	57.09	31.77	6.05	36.88	58.03	74.00	-15.97	HORIZONTAL	Peak
5	5351.560	57.66	31.77	6.05	36.88	58.60	74.00	-15.40	HORIZONTAL	Peak
6	5358.863	46.23	31.78	6.03	36.88	47.16	54.00	-6.84	HORIZONTAL	Average



Test Mode: 07; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



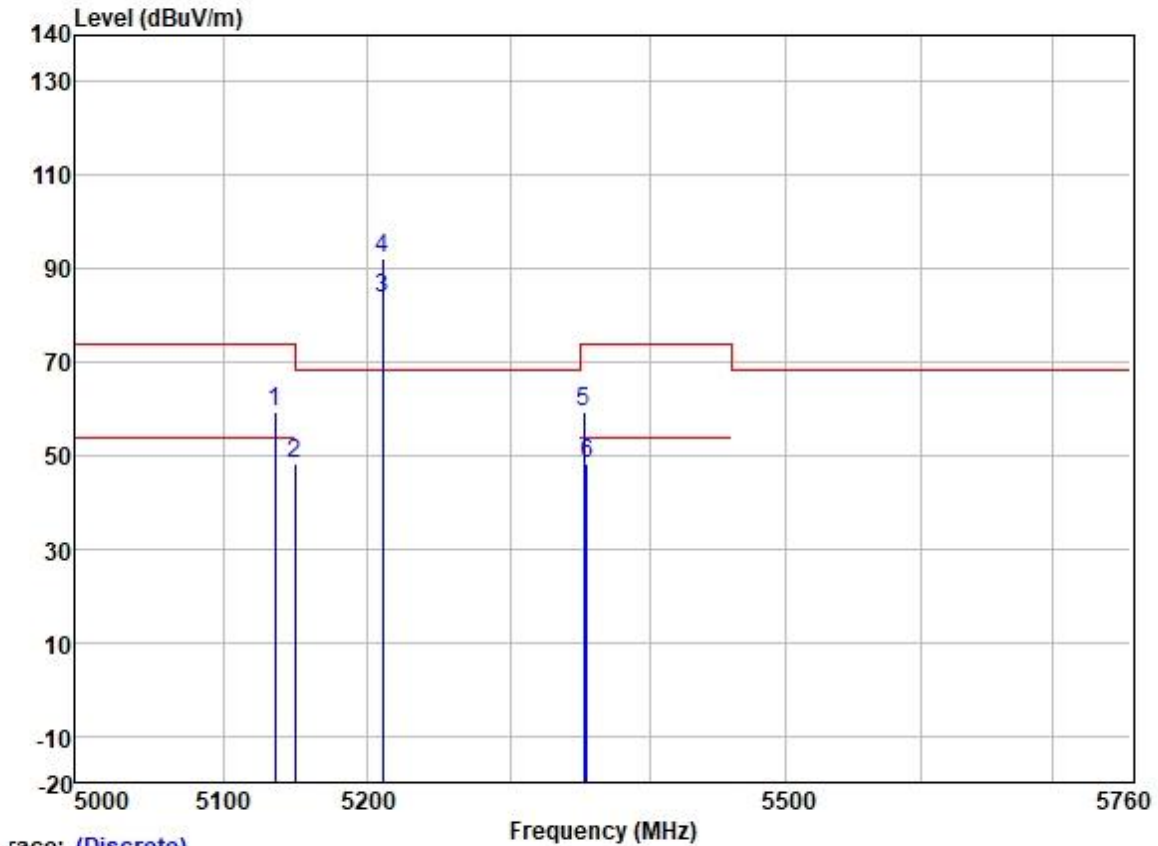
Trace: (Discrete)

	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	5230.000	88.72	31.74	5.70	36.87	89.29	-----	-----	VERTICAL	Average
2 *	5230.000	97.82	31.74	5.70	36.87	98.39	68.20	30.19	VERTICAL	Peak
3	5350.020	45.89	31.77	6.05	36.88	46.83	54.00	-7.17	VERTICAL	Average
4	5350.020	56.97	31.77	6.05	36.88	57.91	74.00	-16.09	VERTICAL	Peak
5	5353.020	58.31	31.77	6.05	36.88	59.25	74.00	-14.75	VERTICAL	Peak
6	5355.940	46.28	31.78	6.03	36.88	47.21	54.00	-6.79	VERTICAL	Average



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Test Mode: 07; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle

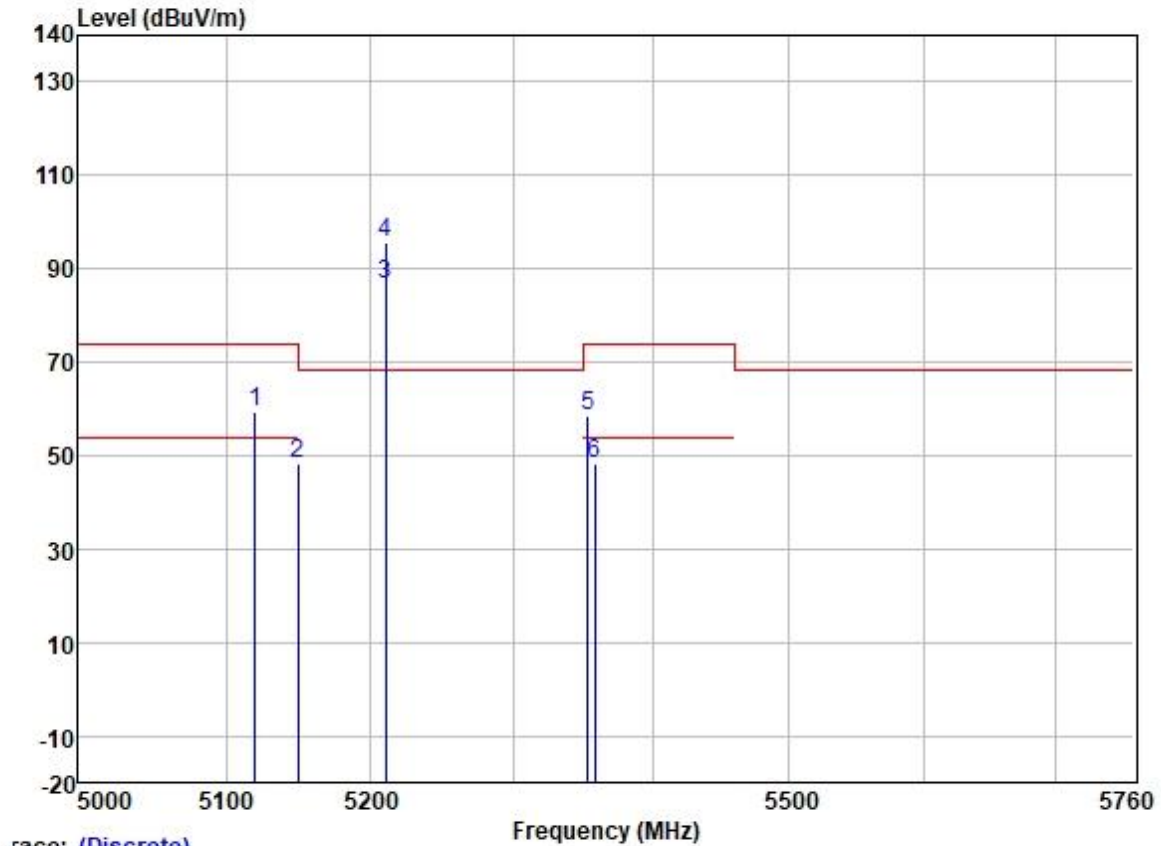


Trace: (Discrete)

	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	5135.882	58.82	31.72	5.63	36.86	59.31	74.00	-14.69	HORIZONTAL	Peak
2	5149.178	47.61	31.72	5.62	36.86	48.09	54.00	-5.91	HORIZONTAL	Average
3	5210.000	83.04	31.74	5.65	36.87	83.56	-----	-----	HORIZONTAL	Average
4 *	5210.000	91.82	31.74	5.65	36.87	92.34	68.20	24.14	HORIZONTAL	Peak
5	5352.809	58.41	31.77	6.05	36.88	59.35	74.00	-14.65	HORIZONTAL	Peak
6	5354.672	47.31	31.78	6.03	36.88	48.24	54.00	-5.76	HORIZONTAL	Average



Test Mode: 07; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle

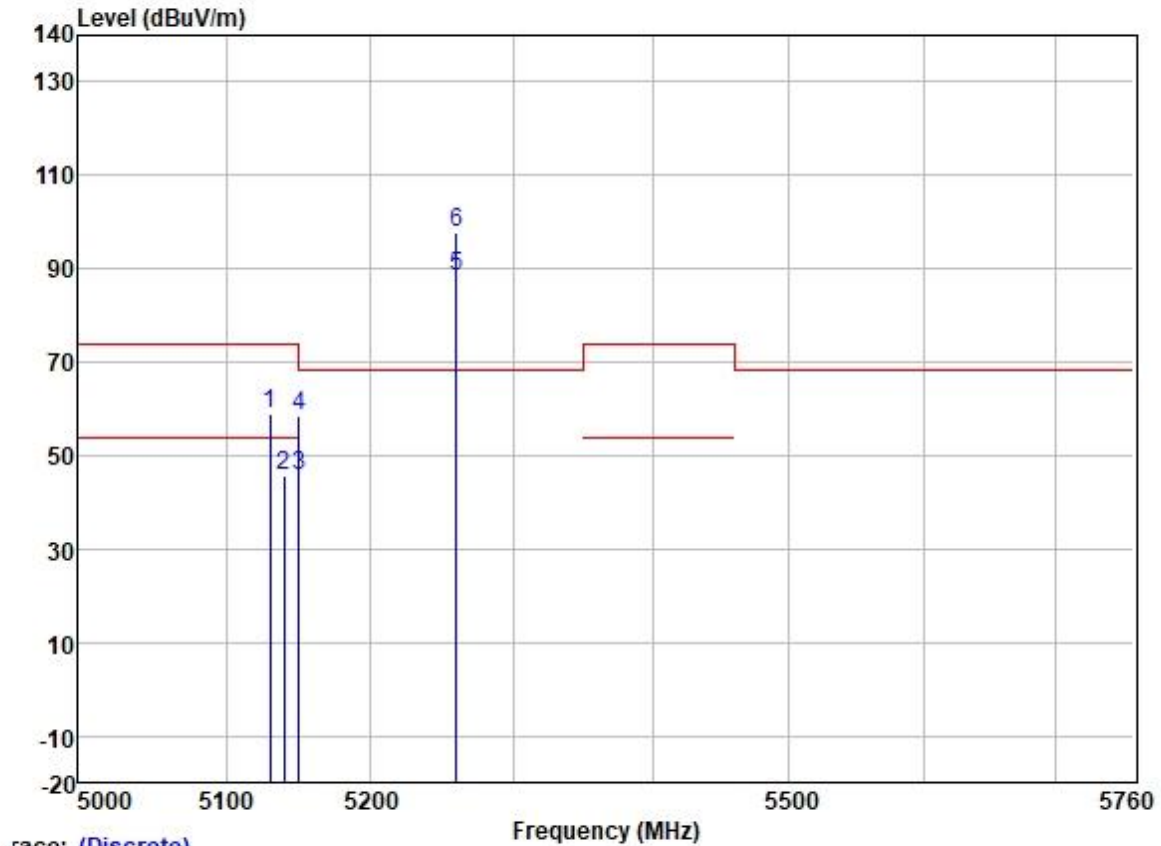


Trace: (Discrete)

	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	5120.073	58.80	31.72	5.64	36.86	59.30	74.00	-14.70	VERTICAL	Peak
2	5149.178	47.97	31.72	5.62	36.86	48.45	54.00	-5.55	VERTICAL	Average
3	5210.000	86.12	31.74	5.65	36.87	86.64	-----	-----	VERTICAL	Average
4 *	5210.000	95.27	31.74	5.65	36.87	95.79	68.20	27.59	VERTICAL	Peak
5	5353.341	57.73	31.77	6.05	36.88	58.67	74.00	-15.33	VERTICAL	Peak
6	5358.667	47.28	31.78	6.03	36.88	48.21	54.00	-5.79	VERTICAL	Average

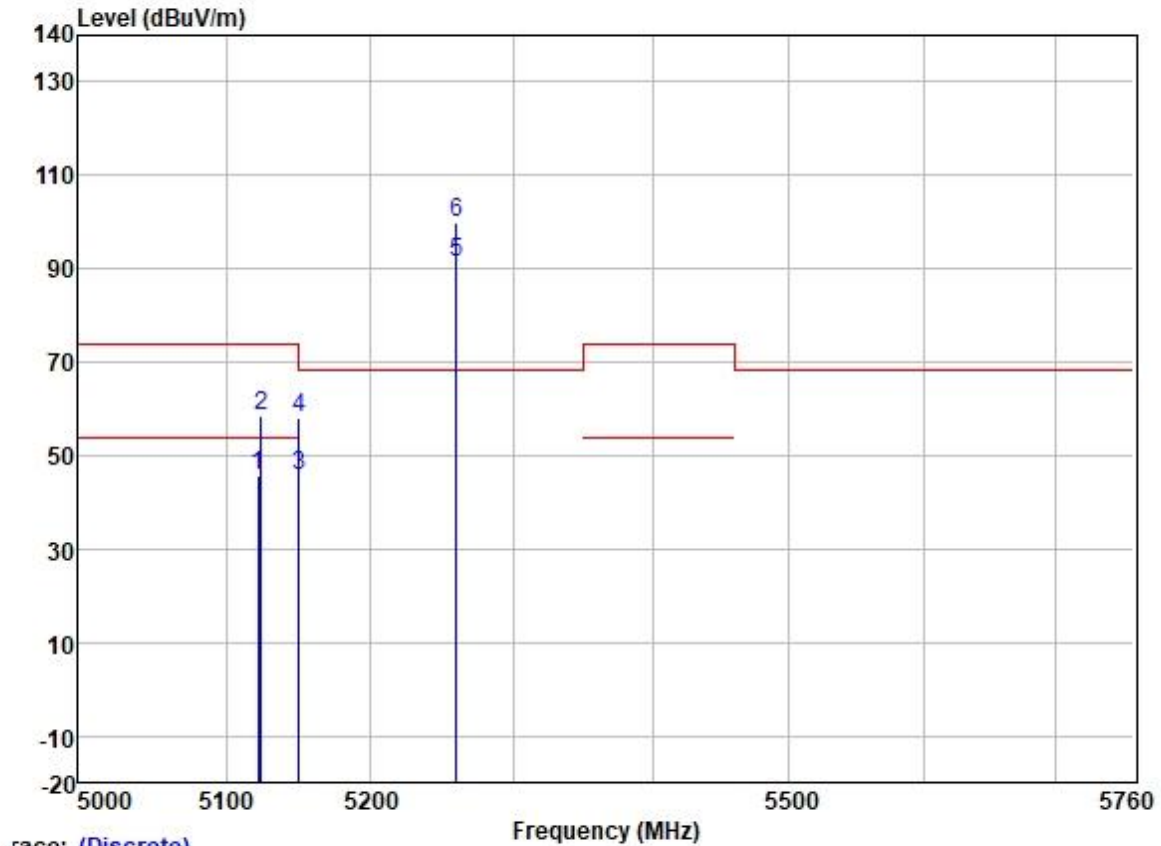


Test Mode: 08; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



	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	5129.983	58.25	31.72	5.63	36.86	58.74	74.00	-15.26	HORIZONTAL	Peak
2	5139.779	45.41	31.72	5.63	36.86	45.90	54.00	-8.10	HORIZONTAL	Average
3	5149.980	45.23	31.72	5.62	36.86	45.71	54.00	-8.29	HORIZONTAL	Average
4	5149.980	58.18	31.72	5.62	36.86	58.66	74.00	-15.34	HORIZONTAL	Peak
5	5260.000	87.74	31.75	5.77	36.87	88.39	-----	-----	HORIZONTAL	Average
6 *	5260.000	97.29	31.75	5.77	36.87	97.94	68.20	29.74	HORIZONTAL	Peak

Test Mode: 08; Polarity: Vertical; Modulation: 802.11a; Bandwidth: 20MHz; Channel: Low

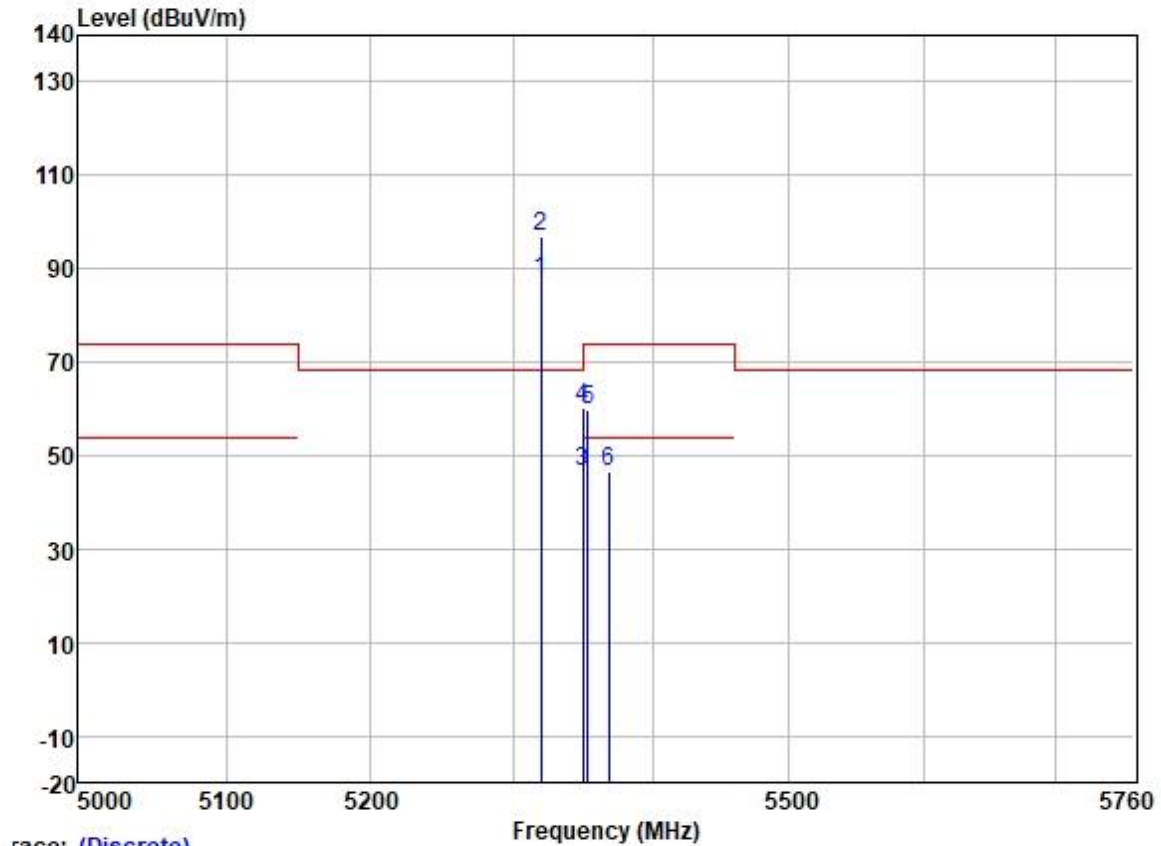


Trace: (Discrete)

	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	5122.160	45.40	31.72	5.64	36.86	45.90	54.00	-8.10	VERTICAL	Average
2	5123.759	57.92	31.72	5.64	36.86	58.42	74.00	-15.58	VERTICAL	Peak
3	5149.980	45.25	31.72	5.62	36.86	45.73	54.00	-8.27	VERTICAL	Average
4	5149.980	57.50	31.72	5.62	36.86	57.98	74.00	-16.02	VERTICAL	Peak
5	5260.000	90.62	31.75	5.77	36.87	91.27	-----	-----	VERTICAL	Average
6 *	5260.000	99.26	31.75	5.77	36.87	99.91	68.20	31.71	VERTICAL	Peak



Test Mode: 08; Polarity: Horizontal; Modulation: 802.11a; Bandwidth: 20MHz; Channel: High

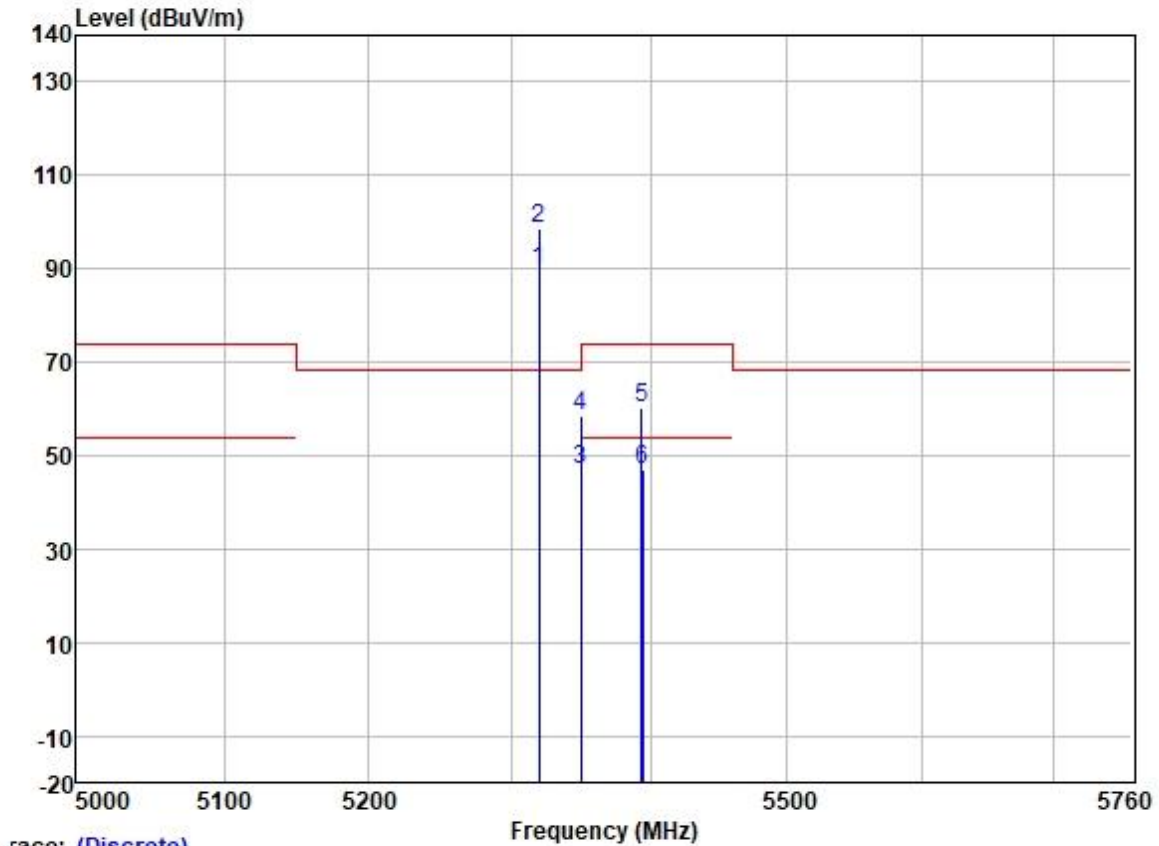


Trace: (Discrete)

	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	5320.000	86.76	31.77	6.08	36.88	87.73	-----	-----	HORIZONTAL	Average
2 *	5320.000	95.90	31.77	6.08	36.88	96.87	68.20	28.67	HORIZONTAL	Peak
3	5350.020	45.59	31.77	6.05	36.88	46.53	54.00	-7.47	HORIZONTAL	Average
4	5350.020	59.08	31.77	6.05	36.88	60.02	74.00	-13.98	HORIZONTAL	Peak
5	5353.568	58.69	31.77	6.05	36.88	59.63	74.00	-14.37	HORIZONTAL	Peak
6	5368.198	45.80	31.78	6.03	36.88	46.73	54.00	-7.27	HORIZONTAL	Average



Test Mode: 08; Polarity: Vertical; Modulation: 802.11a; Bandwidth: 20MHz; Channel: High

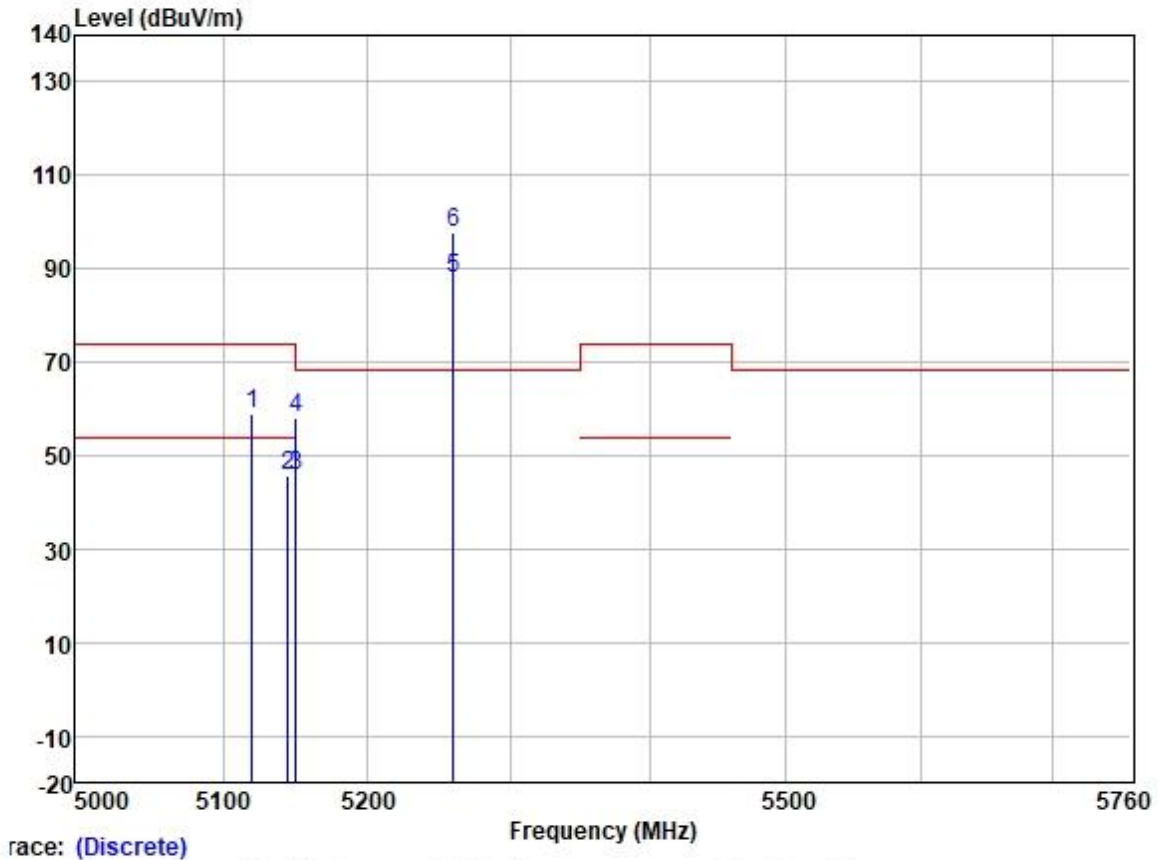


Trace: (Discrete)

	Freq	ReadAntenna	Cable	Preamp	Level	Limit	Over	Pol/Phase	Remark
	MHz	Level	Factor	Loss	Factor	Line	Limit		
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5320.000	88.60	31.77	6.08	36.88	89.57	-----	-----	VERTICAL Average
2 *	5320.000	97.48	31.77	6.08	36.88	98.45	68.20	30.25	VERTICAL Peak
3	5350.020	45.86	31.77	6.05	36.88	46.80	54.00	-7.20	VERTICAL Average
4	5350.020	57.59	31.77	6.05	36.88	58.53	74.00	-15.47	VERTICAL Peak
5	5393.342	59.14	31.78	6.00	36.88	60.04	74.00	-13.96	VERTICAL Peak
6	5393.947	45.95	31.78	6.00	36.88	46.85	54.00	-7.15	VERTICAL Average



Test Mode: 08; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

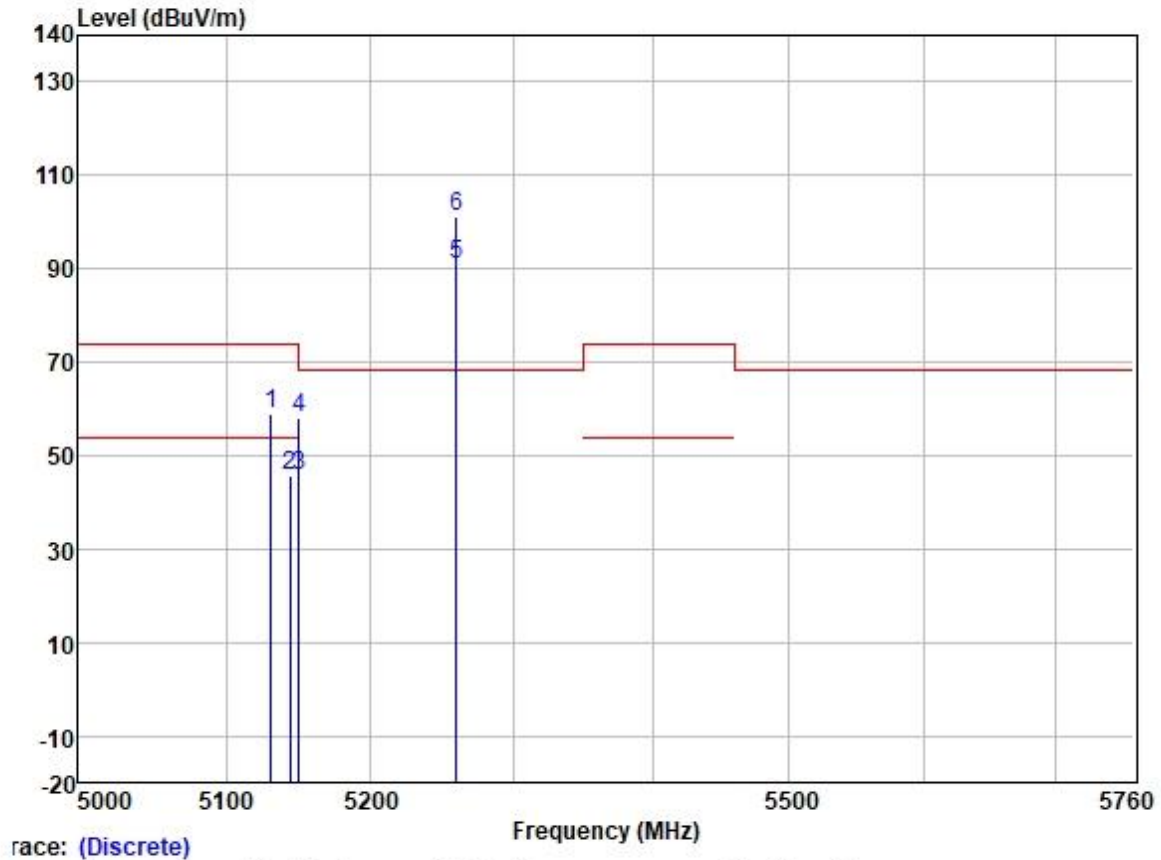
	Freq	ReadAntenna	Cable	Preamp	Level	Limit	Over	Pol/Phase	Remark
	MHz	Level	Factor	Loss	Factor	Line	Limit		
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5119.673	58.57	31.72	5.64	36.86	59.07	74.00	-14.93	HORIZONTAL Peak
2	5144.238	45.34	31.72	5.62	36.86	45.82	54.00	-8.18	HORIZONTAL Average
3	5149.980	45.27	31.72	5.62	36.86	45.75	54.00	-8.25	HORIZONTAL Average
4	5149.980	57.57	31.72	5.62	36.86	58.05	74.00	-15.95	HORIZONTAL Peak
5	5260.000	87.31	31.75	5.77	36.87	87.96	-----	-----	HORIZONTAL Average
6 *	5260.000	97.27	31.75	5.77	36.87	97.92	68.20	29.72	HORIZONTAL Peak



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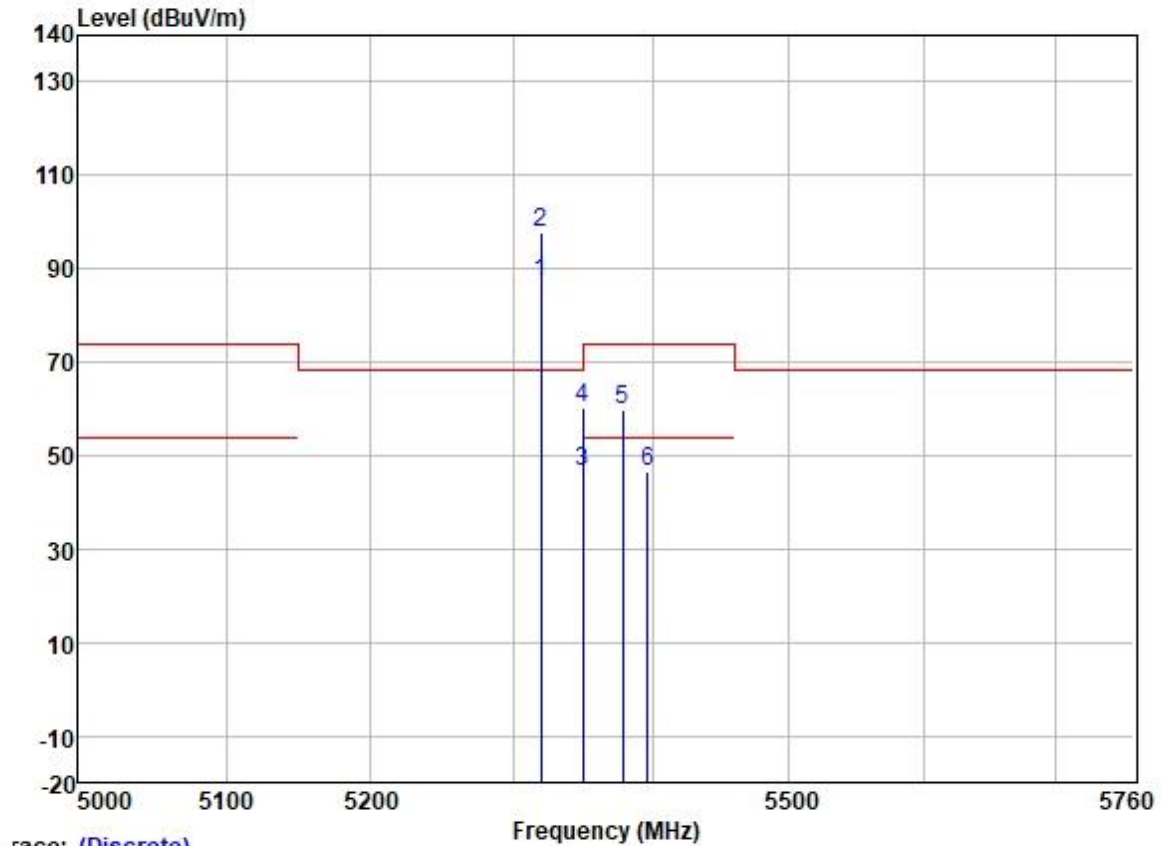
Test Mode: 08; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



	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	5130.517	58.52	31.72	5.63	36.86	59.01	74.00	-14.99	VERTICAL	Peak
2	5143.703	45.42	31.72	5.62	36.86	45.90	54.00	-8.10	VERTICAL	Average
3	5149.980	45.21	31.72	5.62	36.86	45.69	54.00	-8.31	VERTICAL	Average
4	5149.980	57.50	31.72	5.62	36.86	57.98	74.00	-16.02	VERTICAL	Peak
5	5260.000	90.08	31.75	5.77	36.87	90.73	-----	-----	VERTICAL	Average
6 *	5260.000	100.43	31.75	5.77	36.87	101.08	68.20	32.88	VERTICAL	Peak



Test Mode: 08; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High

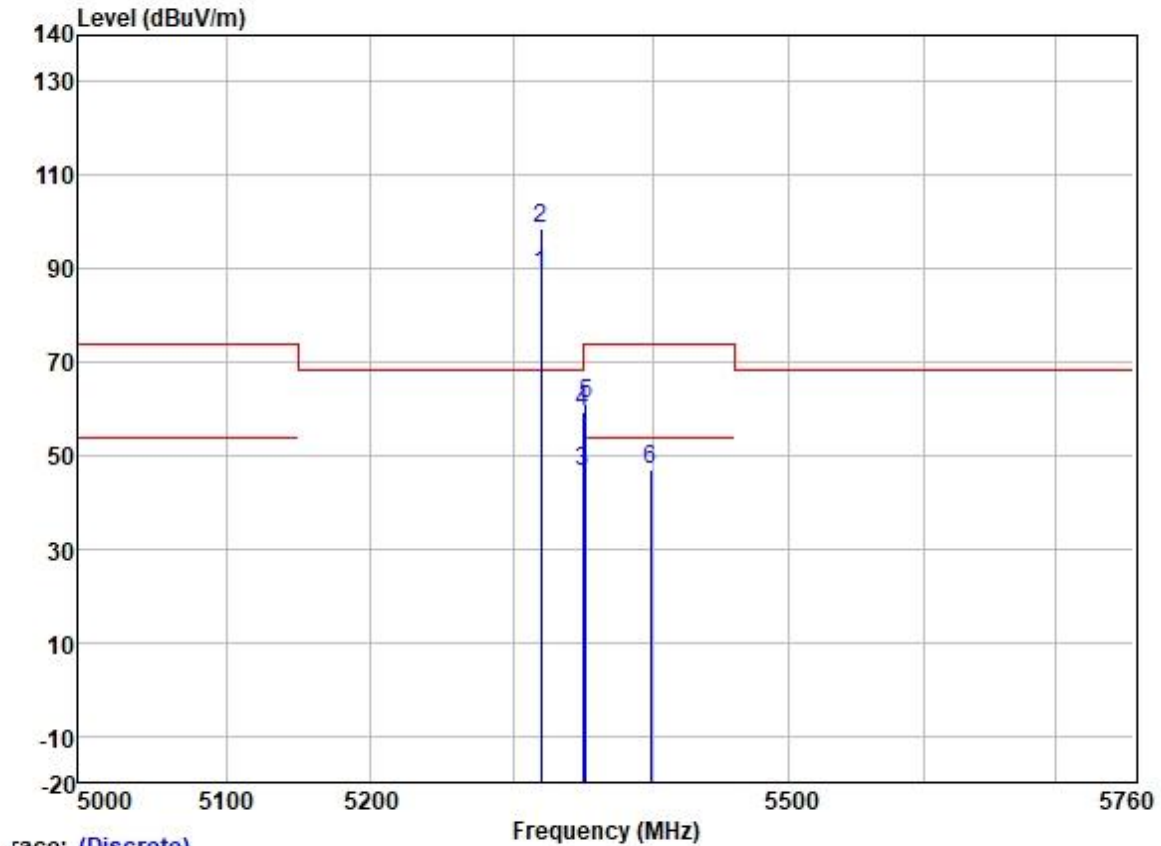


Trace: (Discrete)

	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	5320.000	86.27	31.77	6.08	36.88	87.24	-----	-----	HORIZONTAL	Average
2 *	5320.000	96.68	31.77	6.08	36.88	97.65	68.20	29.45	HORIZONTAL	Peak
3	5350.020	45.54	31.77	6.05	36.88	46.48	54.00	-7.52	HORIZONTAL	Average
4	5350.020	59.11	31.77	6.05	36.88	60.05	74.00	-13.95	HORIZONTAL	Peak
5	5378.241	58.80	31.78	6.02	36.88	59.72	74.00	-14.28	HORIZONTAL	Peak
6	5396.569	45.80	31.78	6.00	36.88	46.70	54.00	-7.30	HORIZONTAL	Average



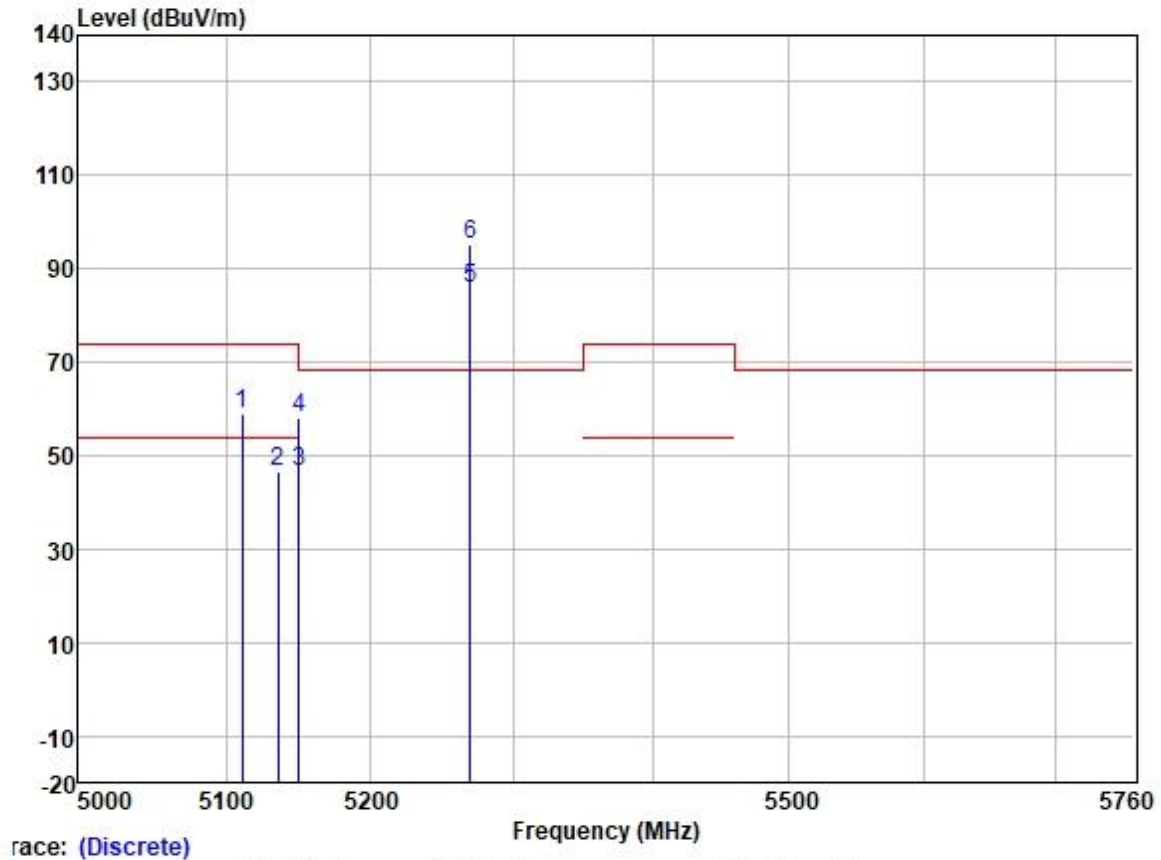
Test Mode: 08; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 20MHz; Channel: High



	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	5320.000	87.74	31.77	6.08	36.88	88.71	-----	-----	VERTICAL	Average
2 *	5320.000	97.75	31.77	6.08	36.88	98.72	68.20	30.52	VERTICAL	Peak
3	5350.020	45.65	31.77	6.05	36.88	46.59	54.00	-7.41	VERTICAL	Average
4	5350.020	58.46	31.77	6.05	36.88	59.40	74.00	-14.60	VERTICAL	Peak
5	5351.667	60.33	31.77	6.05	36.88	61.27	74.00	-12.73	VERTICAL	Peak
6	5398.890	45.92	31.78	6.00	36.88	46.82	54.00	-7.18	VERTICAL	Average



Test Mode: 08; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

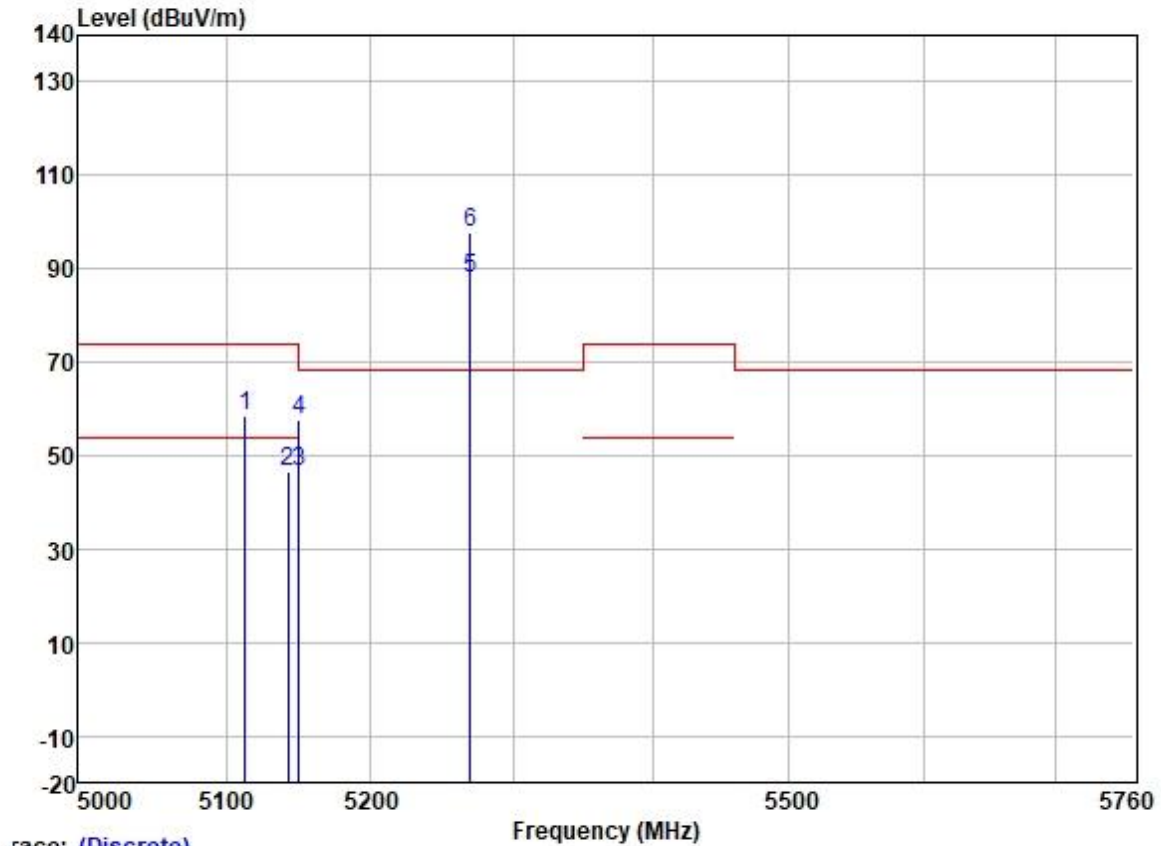


Trace: (Discrete)

	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	5111.194	58.28	31.72	5.65	36.86	58.79	74.00	-15.21	HORIZONTAL	Peak
2	5135.830	46.22	31.72	5.63	36.86	46.71	54.00	-7.29	HORIZONTAL	Average
3	5149.980	45.95	31.72	5.62	36.86	46.43	54.00	-7.57	HORIZONTAL	Average
4	5149.980	57.61	31.72	5.62	36.86	58.09	74.00	-15.91	HORIZONTAL	Peak
5	5270.000	85.31	31.75	5.80	36.87	85.99	-----	-----	HORIZONTAL	Average
6 *	5270.000	94.71	31.75	5.80	36.87	95.39	68.20	27.19	HORIZONTAL	Peak



Test Mode: 08; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 40MHz; Channel: Low



Trace: (Discrete)

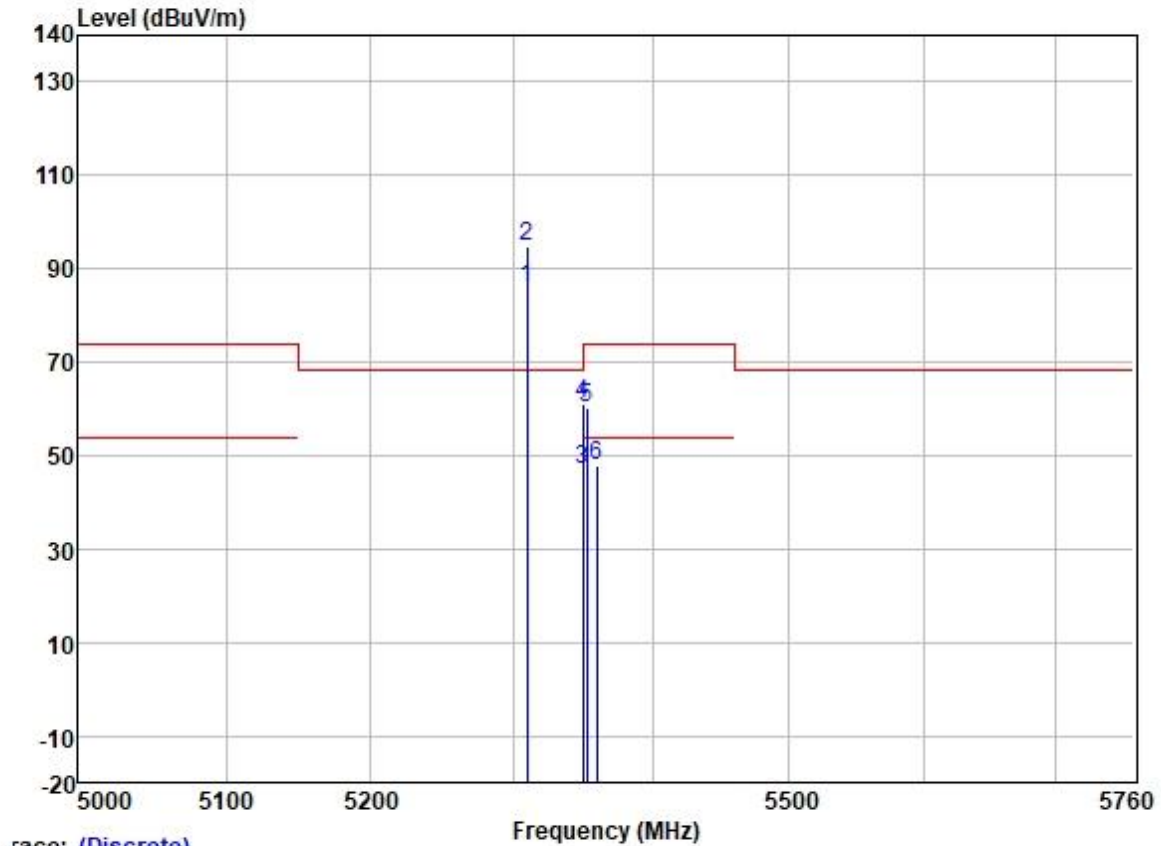
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5112.768	58.04	31.72	5.64	36.86	58.54	74.00	-15.46	VERTICAL	Peak
2	5142.155	46.12	31.72	5.62	36.86	46.60	54.00	-7.40	VERTICAL	Average
3	5149.980	46.21	31.72	5.62	36.86	46.69	54.00	-7.31	VERTICAL	Average
4	5149.980	57.36	31.72	5.62	36.86	57.84	74.00	-16.16	VERTICAL	Peak
5	5270.000	87.38	31.75	5.80	36.87	88.06	-----	-----	VERTICAL	Average
6 *	5270.000	97.03	31.75	5.80	36.87	97.71	68.20	29.51	VERTICAL	Peak



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Test Mode: 08; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 40MHz; Channel: High

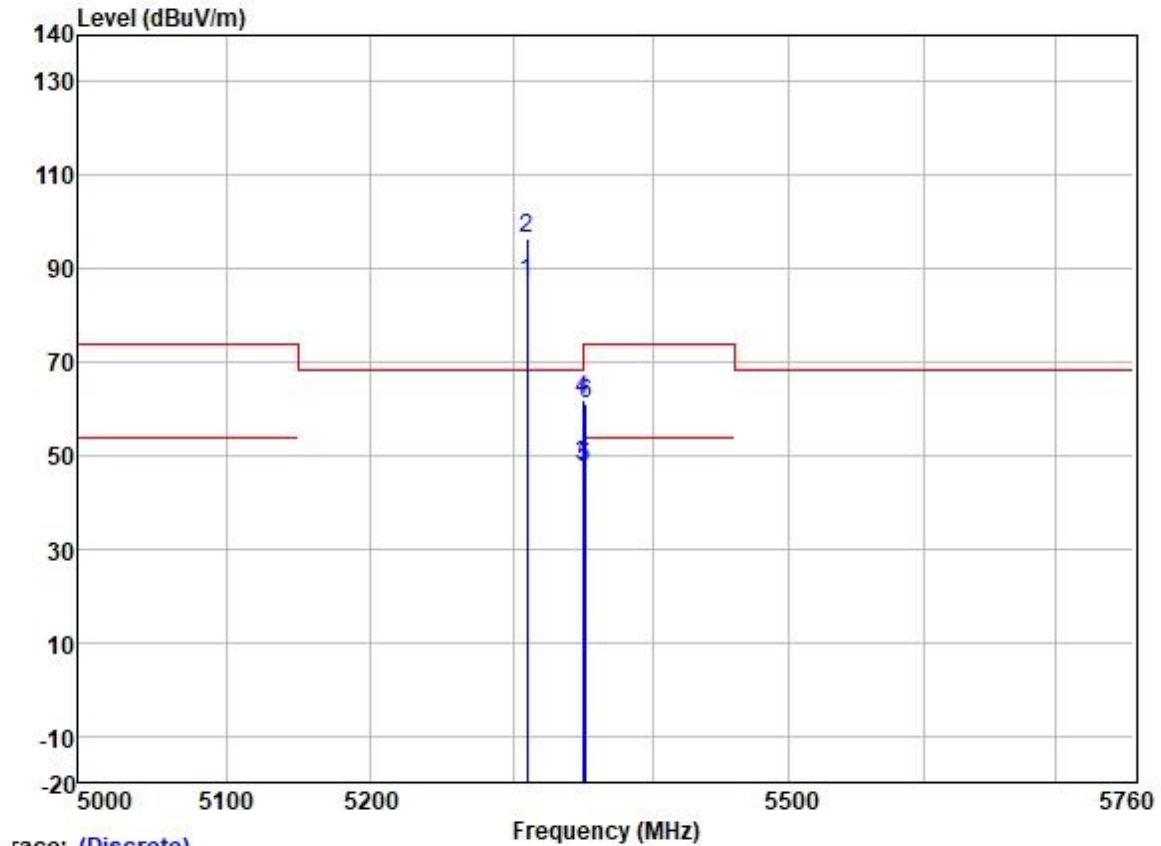


Trace: (Discrete)

	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	5310.000	84.77	31.77	6.08	36.87	85.75	-----	-----	HORIZONTAL	Average
2 *	5310.000	93.93	31.77	6.08	36.87	94.91	68.20	26.71	HORIZONTAL	Peak
3	5350.020	46.22	31.77	6.05	36.88	47.16	54.00	-6.84	HORIZONTAL	Average
4	5350.020	60.02	31.77	6.05	36.88	60.96	74.00	-13.04	HORIZONTAL	Peak
5	5352.759	59.42	31.77	6.05	36.88	60.36	74.00	-13.64	HORIZONTAL	Peak
6	5359.740	46.73	31.78	6.03	36.88	47.66	54.00	-6.34	HORIZONTAL	Average



Test Mode: 08; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 40MHz; Channel: High

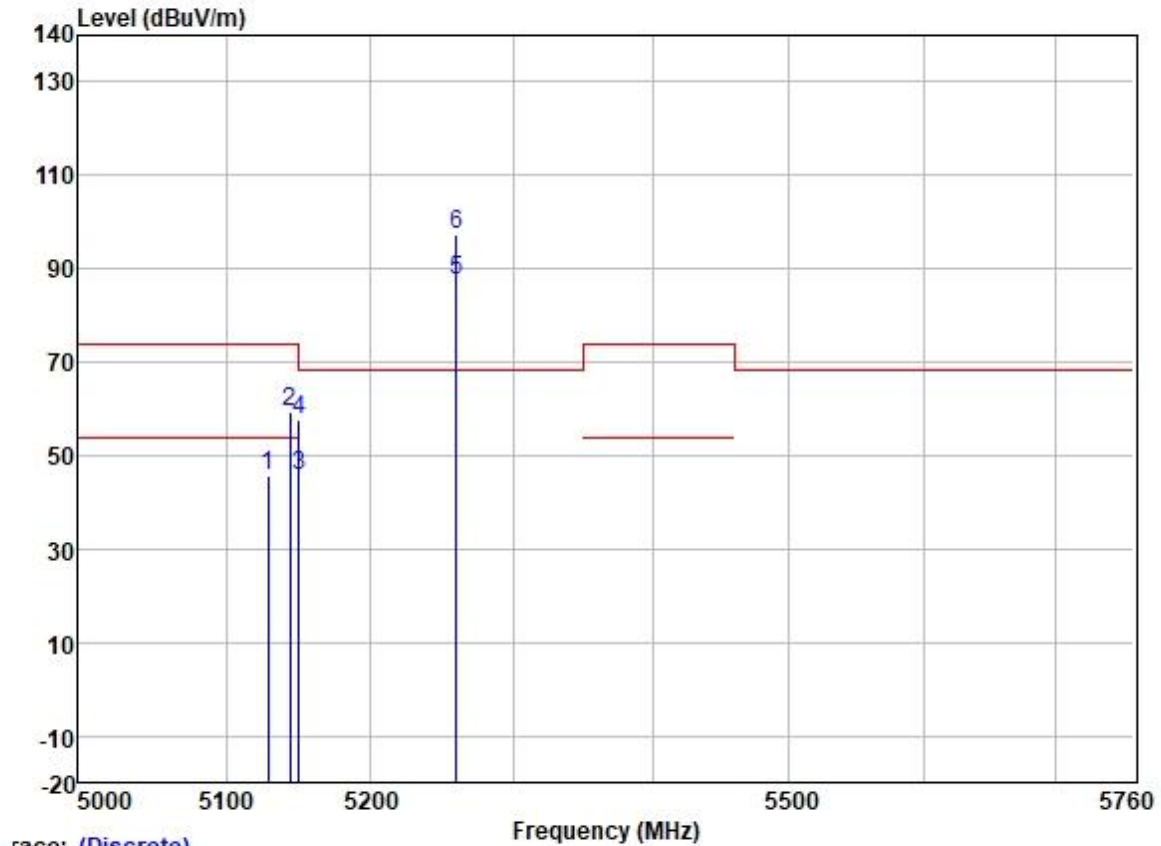


Trace: (Discrete)

	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	5310.000	86.22	31.77	6.08	36.87	87.20	-----	-----	VERTICAL	Average
2 *	5310.000	95.52	31.77	6.08	36.87	96.50	68.20	28.30	VERTICAL	Peak
3	5350.020	46.72	31.77	6.05	36.88	47.66	54.00	-6.34	VERTICAL	Average
4	5350.020	60.83	31.77	6.05	36.88	61.77	74.00	-12.23	VERTICAL	Peak
5	5351.195	46.57	31.77	6.05	36.88	47.51	54.00	-6.49	VERTICAL	Average
6	5351.796	60.06	31.77	6.05	36.88	61.00	74.00	-13.00	VERTICAL	Peak



Test Mode: 08; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



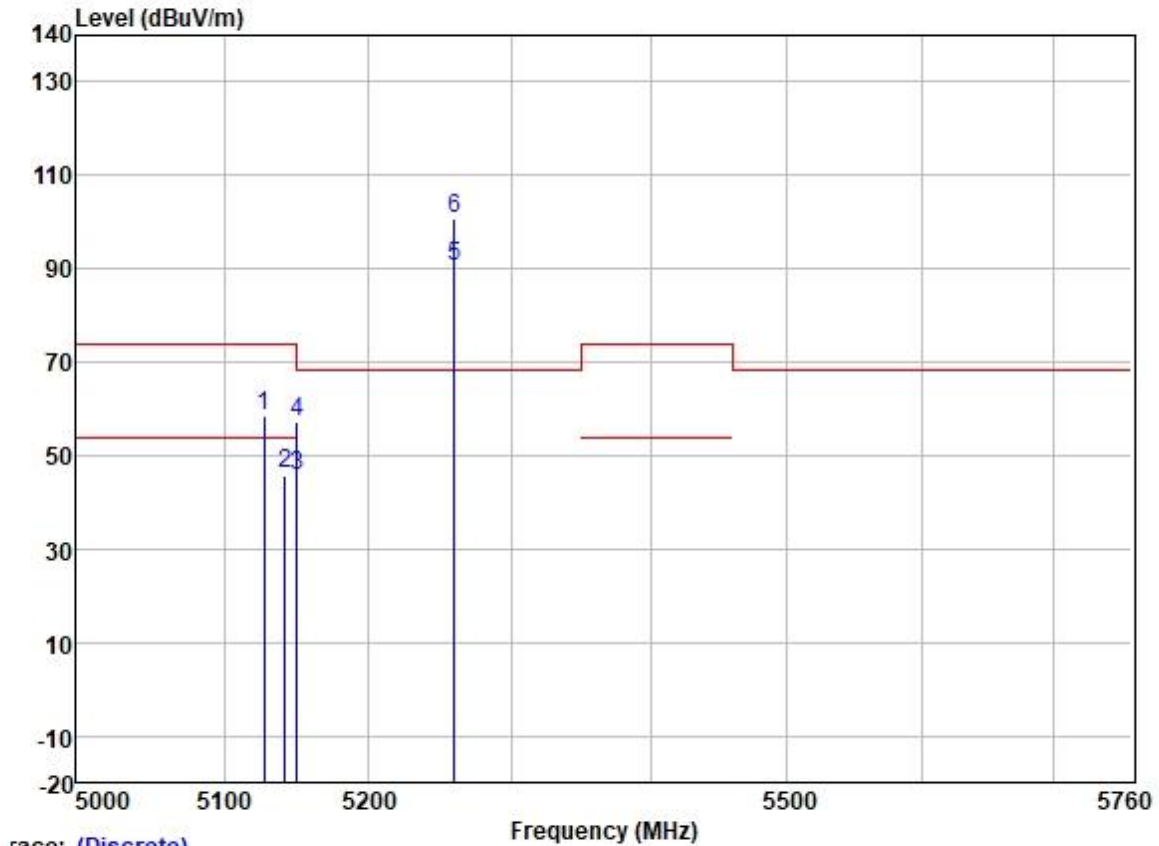
Trace: (Discrete)

	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	5128.738	45.36	31.72	5.63	36.86	45.85	54.00	-8.15	HORIZONTAL	Average
2	5143.524	58.77	31.72	5.62	36.86	59.25	74.00	-14.75	HORIZONTAL	Peak
3	5149.980	45.36	31.72	5.62	36.86	45.84	54.00	-8.16	HORIZONTAL	Average
4	5149.980	57.12	31.72	5.62	36.86	57.60	74.00	-16.40	HORIZONTAL	Peak
5	5260.000	86.97	31.75	5.77	36.87	87.62	-----	-----	HORIZONTAL	Average
6 *	5260.000	96.78	31.75	5.77	36.87	97.43	68.20	29.23	HORIZONTAL	Peak



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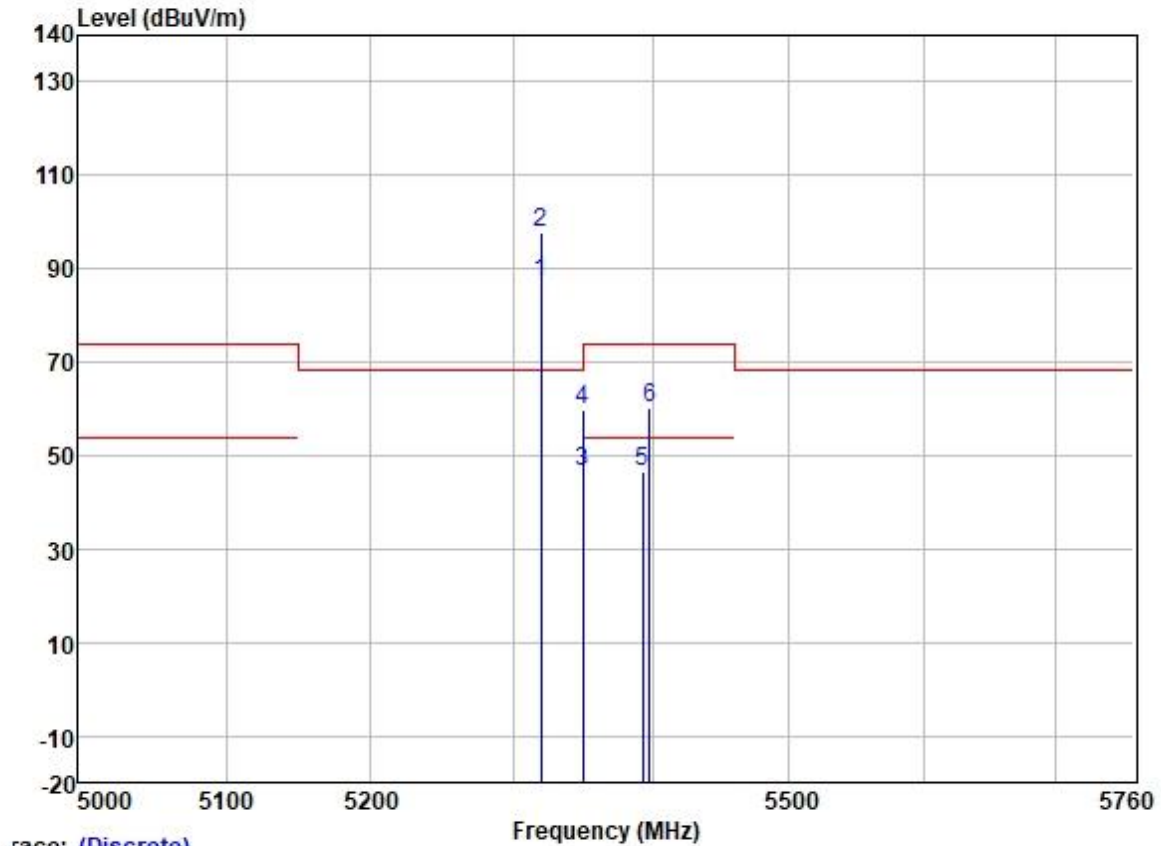
Test Mode: 08; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: Low



	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	5127.137	58.22	31.72	5.63	36.86	58.71	74.00	-15.29	VERTICAL	Peak
2	5141.562	45.43	31.72	5.63	36.86	45.92	54.00	-8.08	VERTICAL	Average
3	5149.980	45.30	31.72	5.62	36.86	45.78	54.00	-8.22	VERTICAL	Average
4	5149.980	56.77	31.72	5.62	36.86	57.25	74.00	-16.75	VERTICAL	Peak
5	5260.000	90.04	31.75	5.77	36.87	90.69	-----	-----	VERTICAL	Average
6 *	5260.000	100.11	31.75	5.77	36.87	100.76	68.20	32.56	VERTICAL	Peak



Test Mode: 08; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High

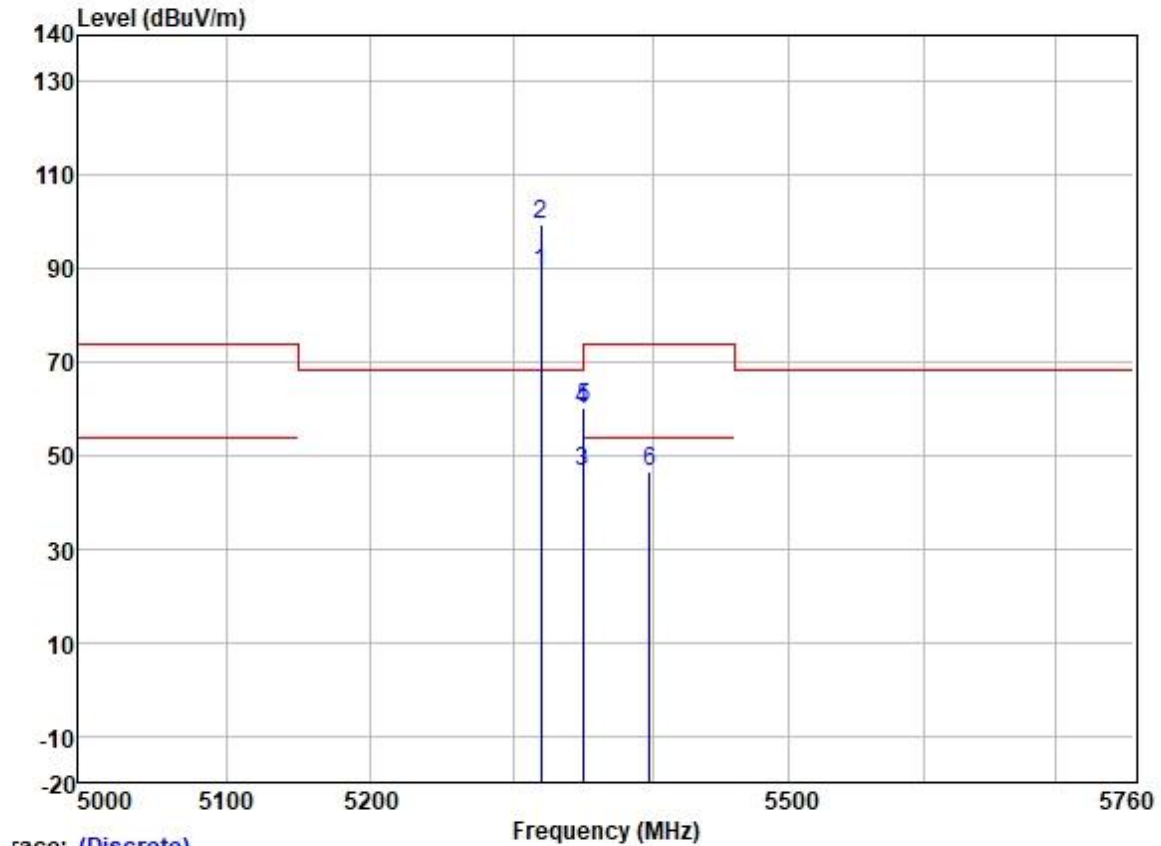


Trace: (Discrete)

	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	5320.000	86.31	31.77	6.08	36.88	87.28	-----	-----	HORIZONTAL	Average
2 *	5320.000	96.77	31.77	6.08	36.88	97.74	68.20	29.54	HORIZONTAL	Peak
3	5350.020	45.49	31.77	6.05	36.88	46.43	54.00	-7.57	HORIZONTAL	Average
4	5350.020	58.74	31.77	6.05	36.88	59.68	74.00	-14.32	HORIZONTAL	Peak
5	5392.435	45.83	31.78	6.00	36.88	46.73	54.00	-7.27	HORIZONTAL	Average
6	5397.679	59.16	31.78	6.00	36.88	60.06	74.00	-13.94	HORIZONTAL	Peak



Test Mode: 08; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: High

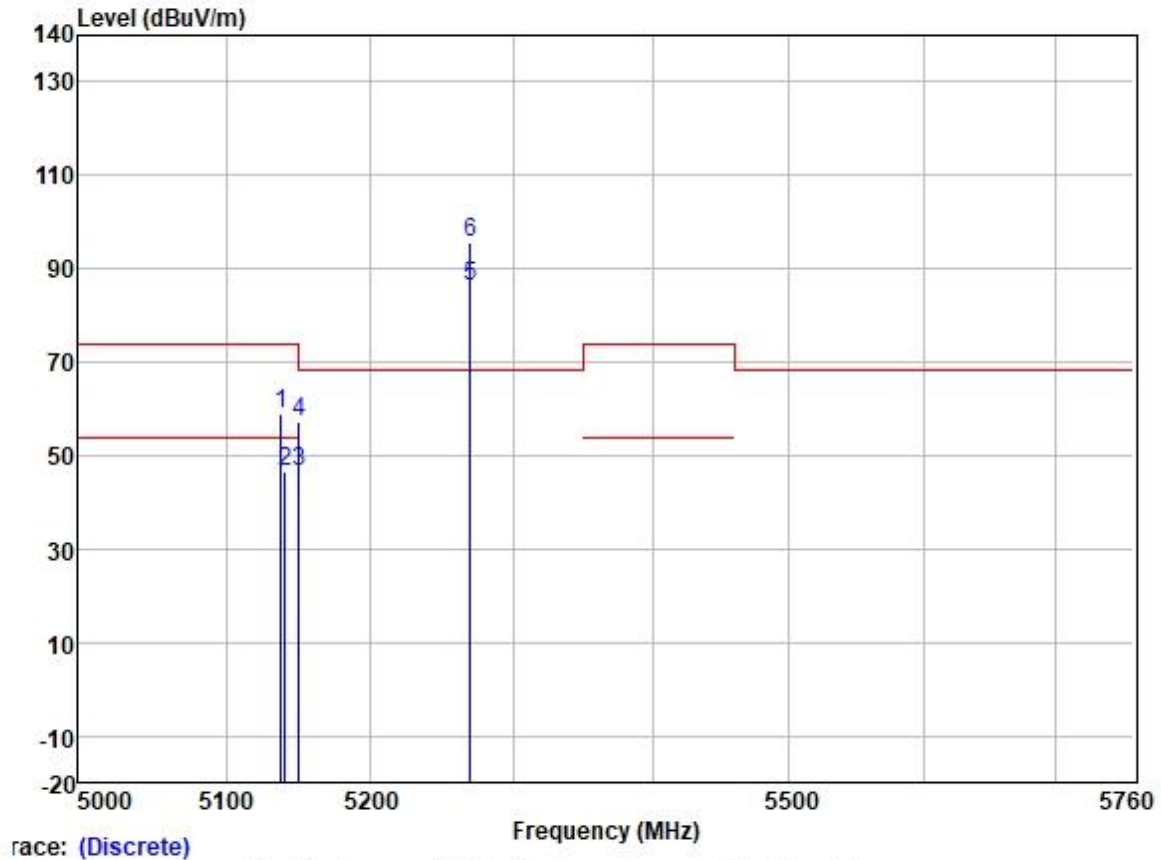


Trace: (Discrete)

	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	5320.000	88.05	31.77	6.08	36.88	89.02	-----	-----	VERTICAL	Average
2 *	5320.000	98.44	31.77	6.08	36.88	99.41	68.20	31.21	VERTICAL	Peak
3	5350.020	45.66	31.77	6.05	36.88	46.60	54.00	-7.40	VERTICAL	Average
4	5350.020	59.05	31.77	6.05	36.88	59.99	74.00	-14.01	VERTICAL	Peak
5	5350.767	59.38	31.77	6.05	36.88	60.32	74.00	-13.68	VERTICAL	Peak
6	5397.881	45.81	31.78	6.00	36.88	46.71	54.00	-7.29	VERTICAL	Average



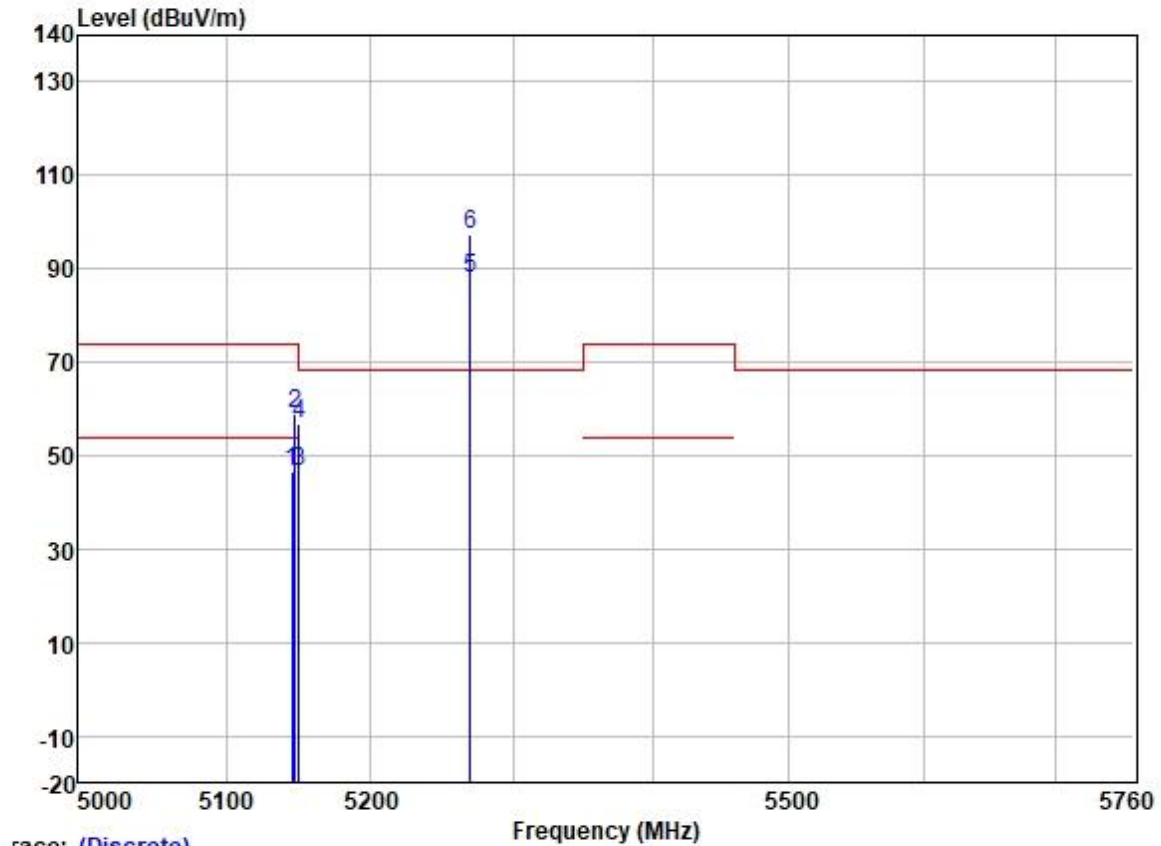
Test Mode: 08; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



	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	5137.410	58.56	31.72	5.63	36.86	59.05	74.00	-14.95	HORIZONTAL	Peak
2	5140.375	46.28	31.72	5.63	36.86	46.77	54.00	-7.23	HORIZONTAL	Average
3	5149.980	45.98	31.72	5.62	36.86	46.46	54.00	-7.54	HORIZONTAL	Average
4	5149.980	56.89	31.72	5.62	36.86	57.37	74.00	-16.63	HORIZONTAL	Peak
5	5270.000	85.37	31.75	5.80	36.87	86.05	-----	-----	HORIZONTAL	Average
6 *	5270.000	94.90	31.75	5.80	36.87	95.58	68.20	27.38	HORIZONTAL	Peak



Test Mode: 08; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



Trace: (Discrete)

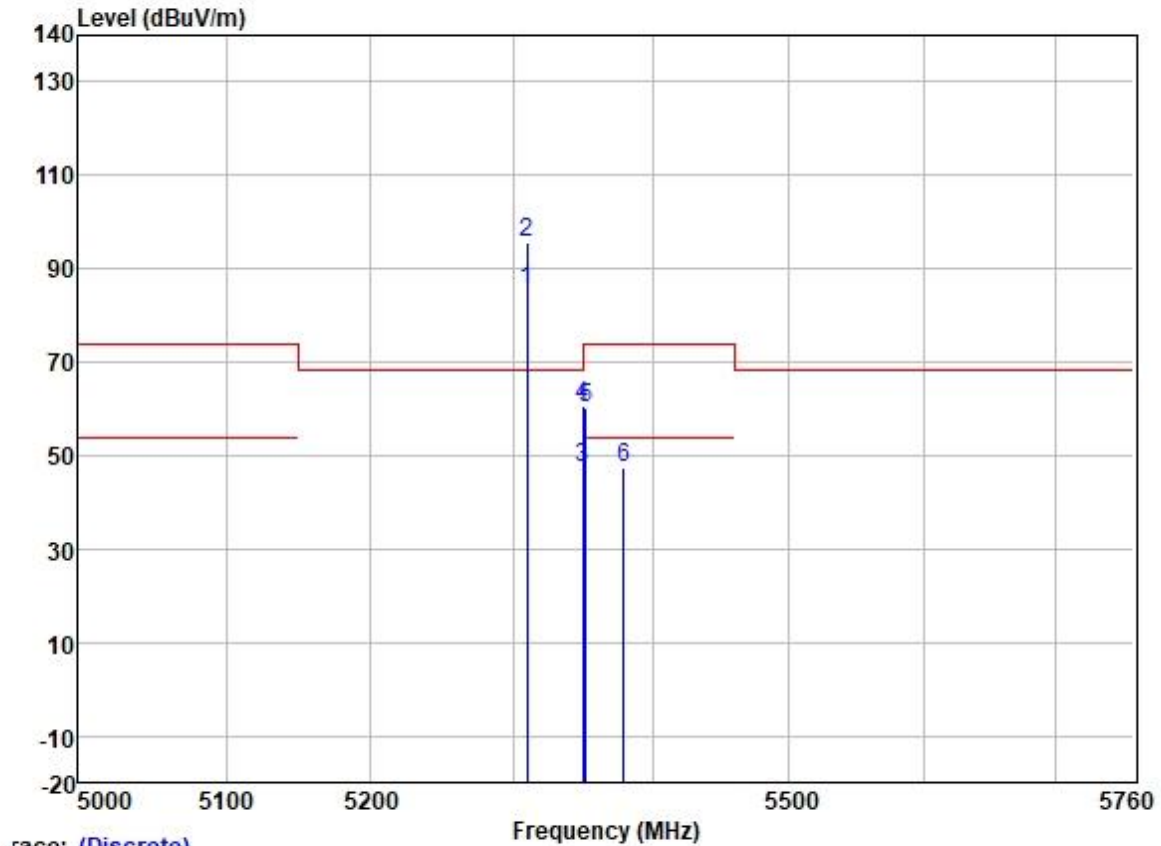
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5144.925	46.20	31.72	5.62	36.86	46.68	54.00	-7.32	VERTICAL	Average
2	5147.103	58.44	31.72	5.62	36.86	58.92	74.00	-15.08	VERTICAL	Peak
3	5149.980	46.01	31.72	5.62	36.86	46.49	54.00	-7.51	VERTICAL	Average
4	5149.980	56.43	31.72	5.62	36.86	56.91	74.00	-17.09	VERTICAL	Peak
5	5270.000	87.45	31.75	5.80	36.87	88.13	-----	-----	VERTICAL	Average
6 *	5270.000	96.79	31.75	5.80	36.87	97.47	68.20	29.27	VERTICAL	Peak



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Test Mode: 08; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

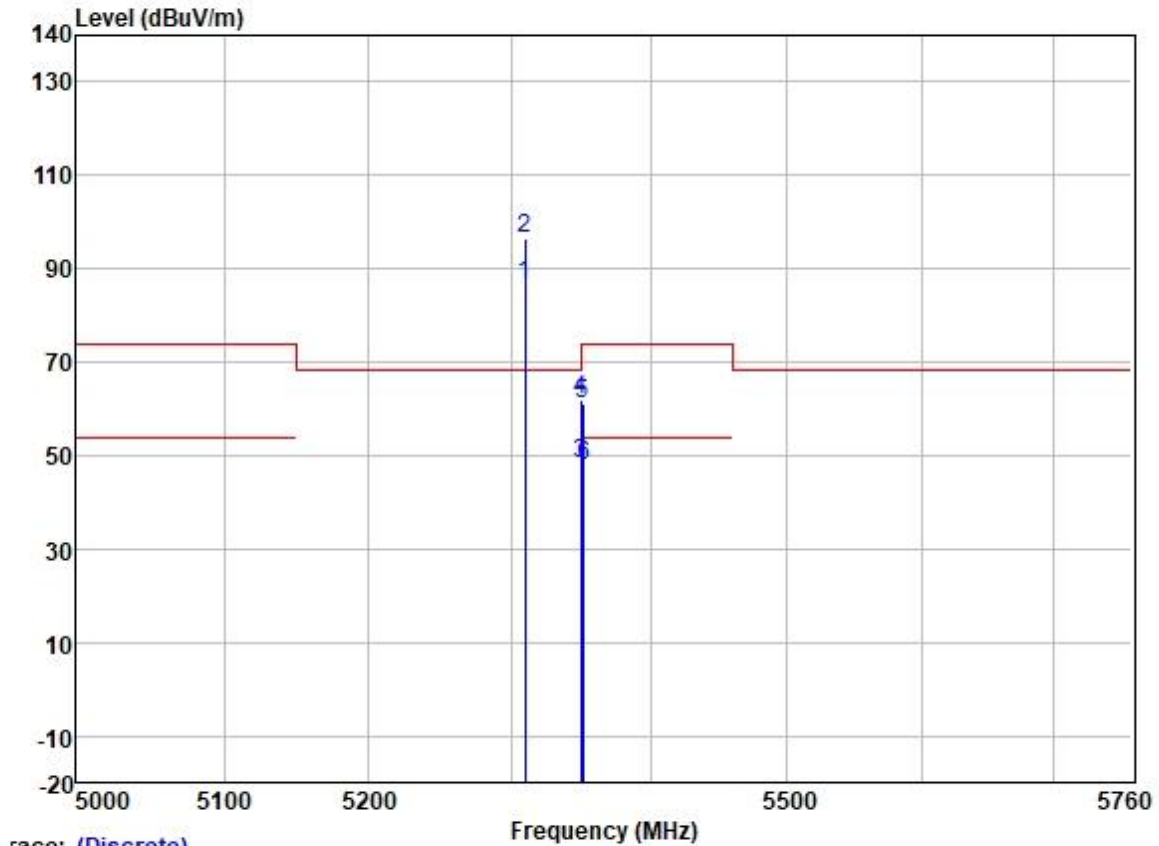


Trace: (Discrete)

	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	5310.000	84.39	31.77	6.08	36.87	85.37	-----	-----	HORIZONTAL	Average
2 *	5310.000	94.59	31.77	6.08	36.87	95.57	68.20	27.37	HORIZONTAL	Peak
3	5350.020	46.59	31.77	6.05	36.88	47.53	54.00	-6.47	HORIZONTAL	Average
4	5350.020	59.50	31.77	6.05	36.88	60.44	74.00	-13.56	HORIZONTAL	Peak
5	5351.556	59.22	31.77	6.05	36.88	60.16	74.00	-13.84	HORIZONTAL	Peak
6	5379.289	46.69	31.78	6.02	36.88	47.61	54.00	-6.39	HORIZONTAL	Average



Test Mode: 08; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

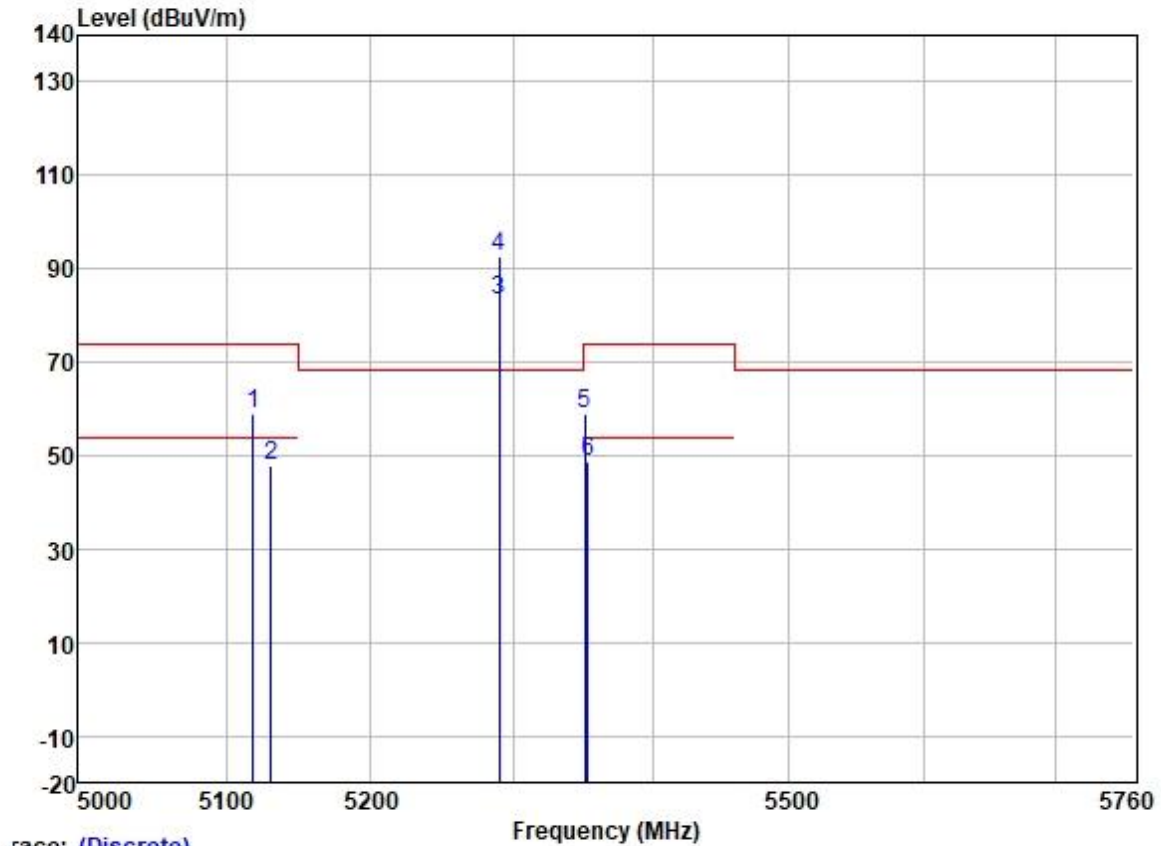


Trace: (Discrete)

	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	5310.000	85.89	31.77	6.08	36.87	86.87	-----	-----	VERTICAL	Average
2 *	5310.000	95.43	31.77	6.08	36.87	96.41	68.20	28.21	VERTICAL	Peak
3	5350.020	47.25	31.77	6.05	36.88	48.19	54.00	-5.81	VERTICAL	Average
4	5350.020	61.03	31.77	6.05	36.88	61.97	74.00	-12.03	VERTICAL	Peak
5	5351.436	60.08	31.77	6.05	36.88	61.02	74.00	-12.98	VERTICAL	Peak
6	5351.796	46.75	31.77	6.05	36.88	47.69	54.00	-6.31	VERTICAL	Average

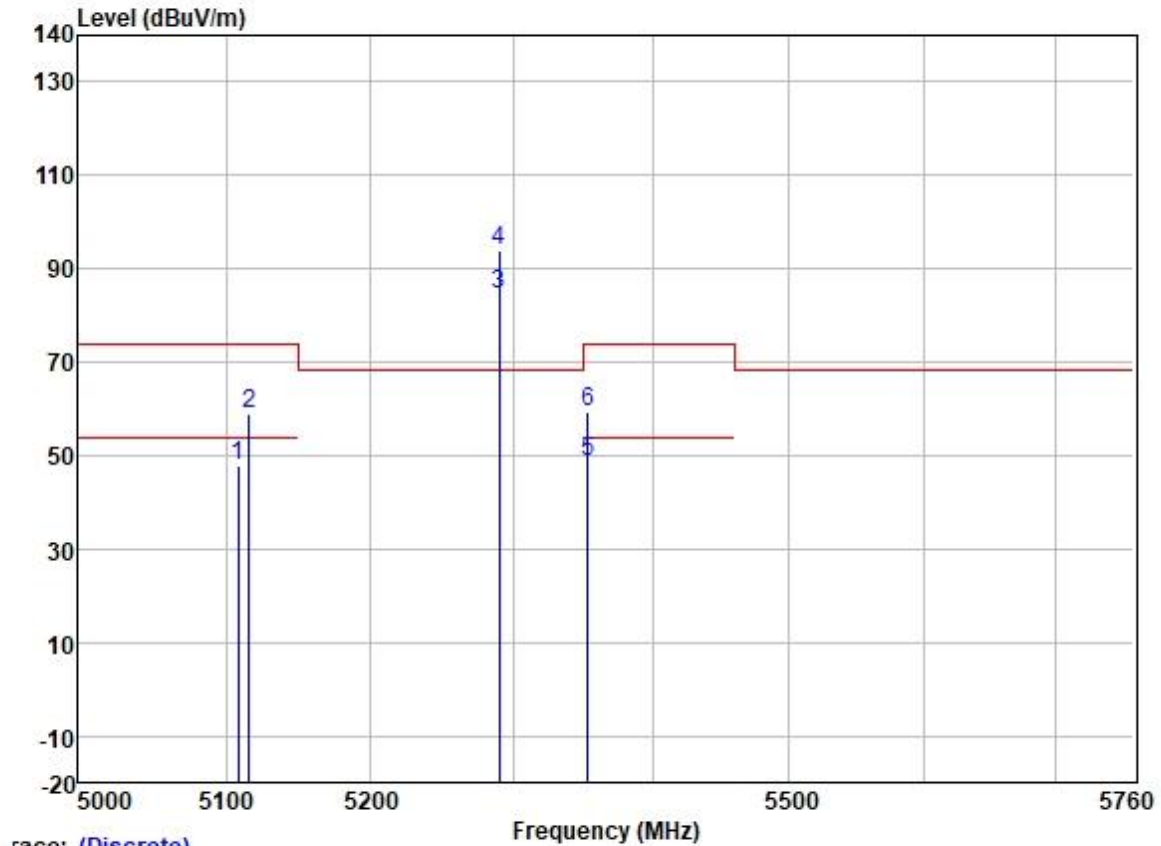


Test Mode: 08; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle



	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	5118.398	58.41	31.72	5.64	36.86	58.91	74.00	-15.09	HORIZONTAL	Peak
2	5130.700	47.42	31.72	5.63	36.86	47.91	54.00	-6.09	HORIZONTAL	Average
3	5290.000	82.41	31.76	6.00	36.87	83.30	-----	-----	HORIZONTAL	Average
4 *	5290.000	91.70	31.76	6.00	36.87	92.59	68.20	24.39	HORIZONTAL	Peak
5	5350.840	58.02	31.77	6.05	36.88	58.96	74.00	-15.04	HORIZONTAL	Peak
6	5353.288	47.62	31.77	6.05	36.88	48.56	54.00	-5.44	HORIZONTAL	Average

Test Mode: 08; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



Trace: (Discrete)

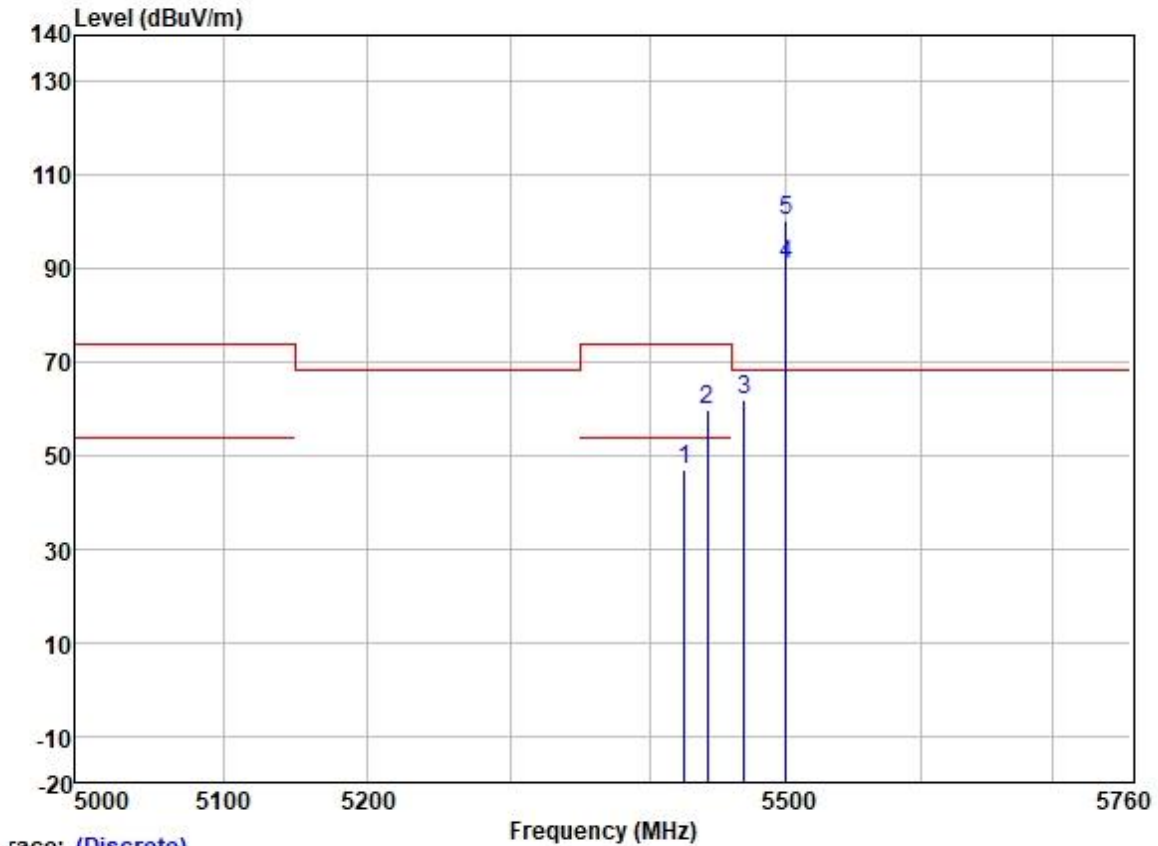
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5108.461	47.40	31.72	5.65	36.86	47.91	54.00	-6.09	VERTICAL	Average
2	5116.058	58.27	31.72	5.64	36.86	58.77	74.00	-15.23	VERTICAL	Peak
3	5290.000	83.80	31.76	6.00	36.87	84.69	-----	-----	VERTICAL	Average
4 *	5290.000	93.13	31.76	6.00	36.87	94.02	68.20	25.82	VERTICAL	Peak
5	5352.981	47.95	31.77	6.05	36.88	48.89	54.00	-5.11	VERTICAL	Average
6	5353.288	58.49	31.77	6.05	36.88	59.43	74.00	-14.57	VERTICAL	Peak



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Test Mode: 09; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

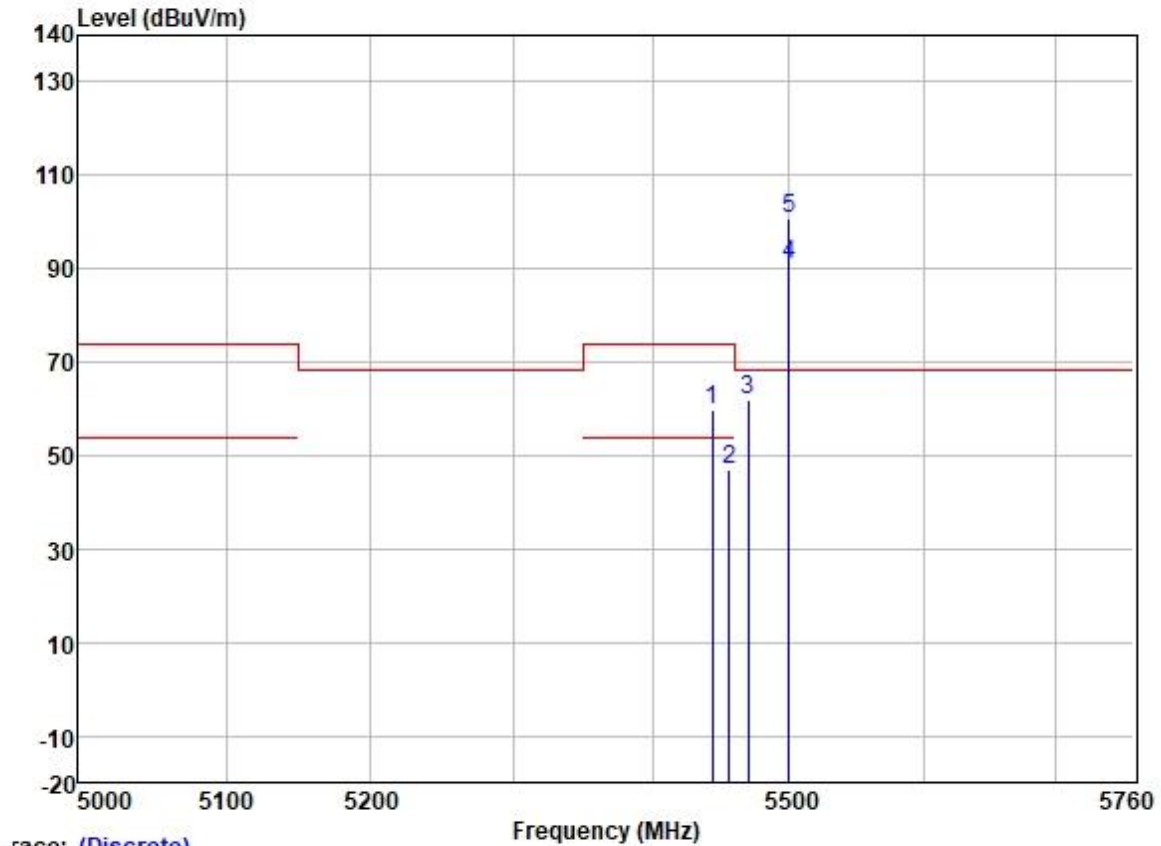
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
		Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5424.981	45.95	31.79	6.13	36.88	46.99	54.00	-7.01	HORIZONTAL	Average
2	5441.700	58.71	31.79	6.20	36.88	59.82	74.00	-14.18	HORIZONTAL	Peak
3	5468.678	60.60	31.80	6.31	36.88	61.83	68.20	-6.37	HORIZONTAL	Peak
4	5500.000	89.73	31.80	6.40	36.88	91.05	-----	-----	HORIZONTAL	Average
5 *	5500.000	98.83	31.80	6.40	36.88	100.15	68.20	31.95	HORIZONTAL	Peak



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Test Mode: 09; Polarity: Vertical; Modulation: 802.11a; Bandwidth: 20MHz; Channel: Low

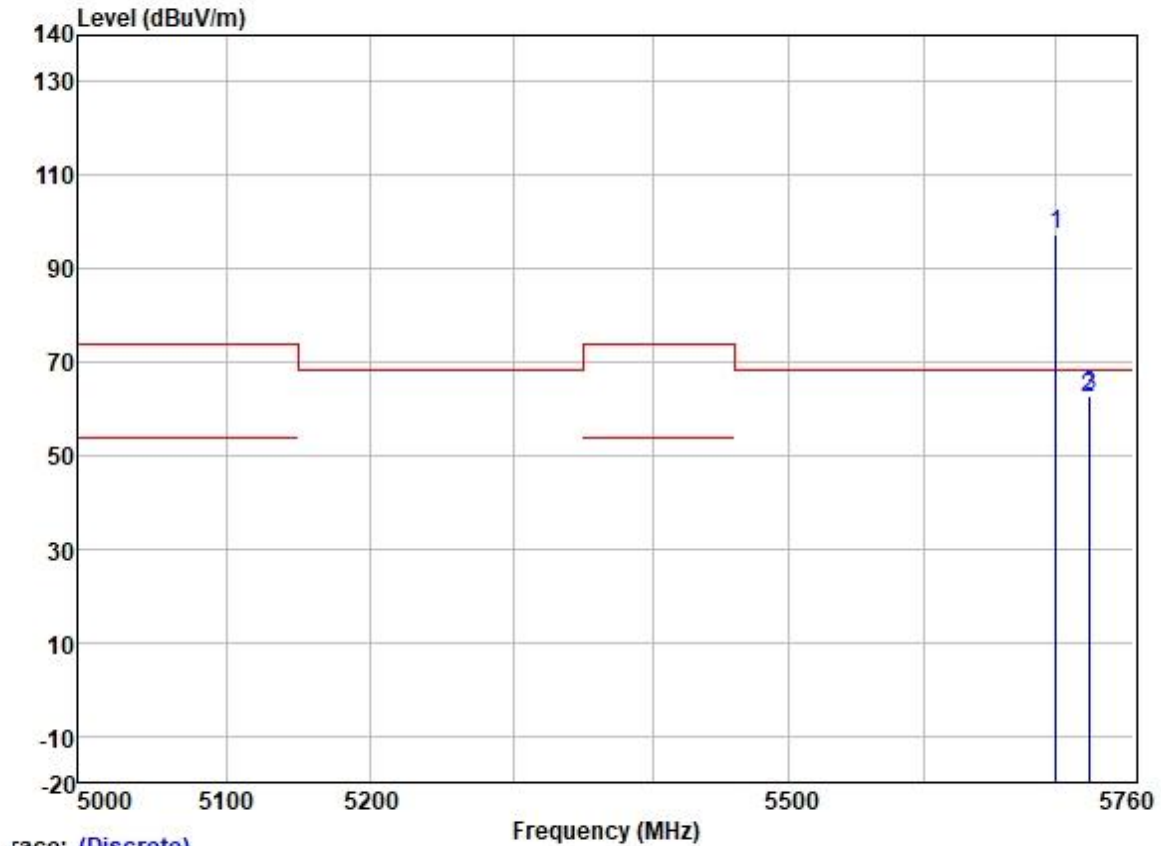


Trace: (Discrete)

	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	5443.734	58.78	31.79	6.20	36.88	59.89	74.00	-14.11	VERTICAL	Peak
2	5455.832	45.87	31.79	6.26	36.88	47.04	54.00	-6.96	VERTICAL	Average
3	5469.399	60.90	31.80	6.31	36.88	62.13	68.20	-6.07	VERTICAL	Peak
4	5500.000	89.80	31.80	6.40	36.88	91.12	-----	-----	VERTICAL	Average
5 *	5500.000	99.29	31.80	6.40	36.88	100.61	68.20	32.41	VERTICAL	Peak



Test Mode: 09; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

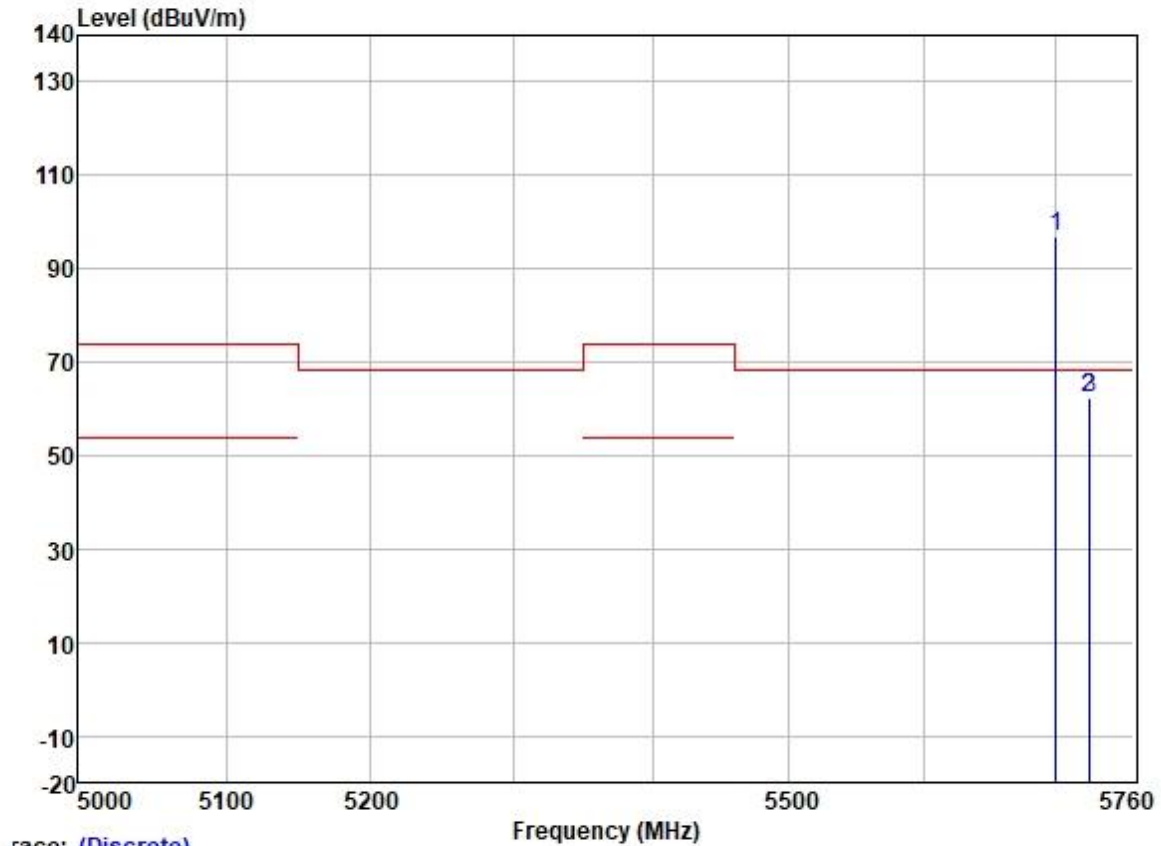
	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB		
1 *	5700.000	95.74	32.01	6.40	36.89	97.26	68.20	29.06	HORIZONTAL Peak
2	5725.000	60.88	32.07	6.25	36.89	62.31	68.20	-5.89	HORIZONTAL Peak
3	5726.183	61.27	32.07	6.25	36.89	62.70	68.20	-5.50	HORIZONTAL Peak



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Test Mode: 09; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

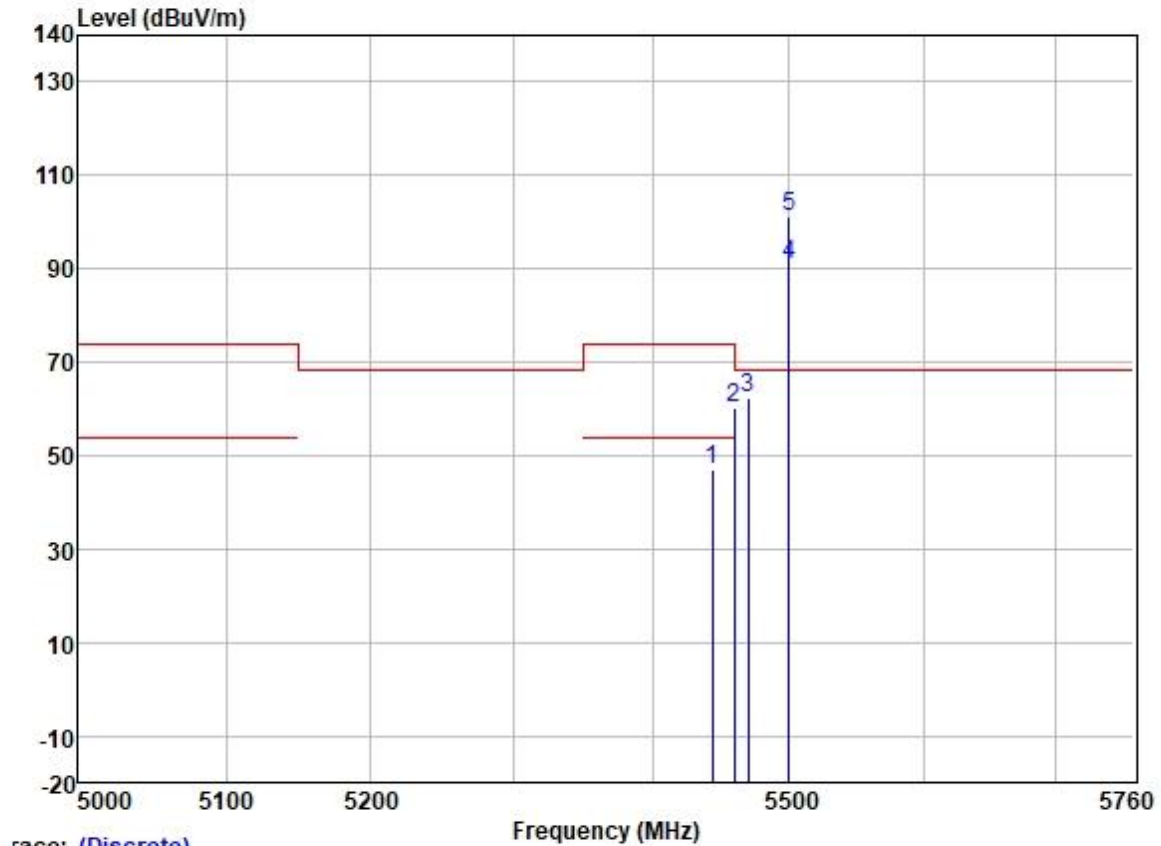
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
		Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1 *	5700.000	95.40	32.01	6.40	36.89	96.92	68.20	28.72	VERTICAL	Peak
2	5725.000	60.95	32.07	6.25	36.89	62.38	68.20	-5.82	VERTICAL	Peak
3	5725.983	61.11	32.07	6.25	36.89	62.54	68.20	-5.66	VERTICAL	Peak



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Test Mode: 09; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

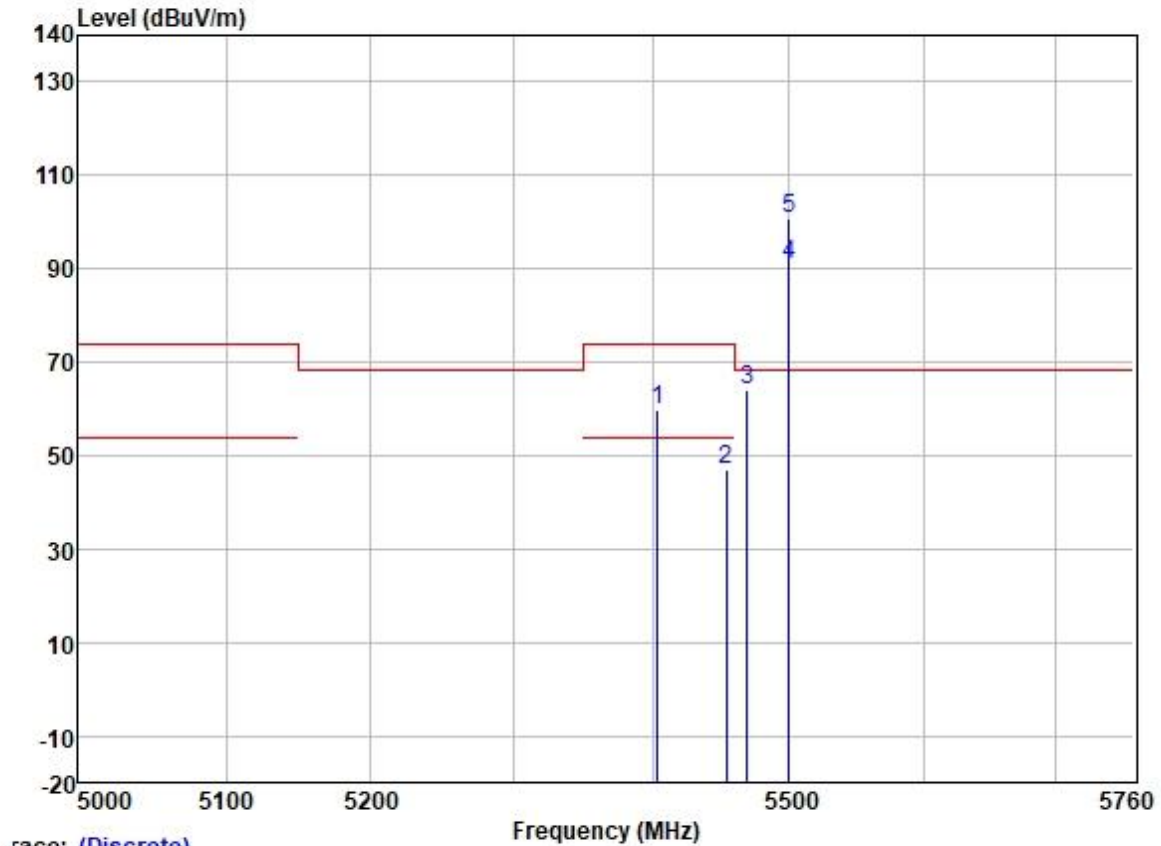
	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5443.255	45.98	31.79	6.20	36.88	47.09	54.00	-6.91	HORIZONTAL	Average
2	5459.070	58.99	31.79	6.26	36.88	60.16	74.00	-13.84	HORIZONTAL	Peak
3	5469.519	61.05	31.80	6.31	36.88	62.28	68.20	-5.92	HORIZONTAL	Peak
4	5500.000	89.74	31.80	6.40	36.88	91.06	-----	-----	HORIZONTAL	Average
5 *	5500.000	99.87	31.80	6.40	36.88	101.19	68.20	32.99	HORIZONTAL	Peak



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Test Mode: 09; Polarity: Vertical; Modulation: 802.11n; Bandwidth: 20MHz; Channel: Low

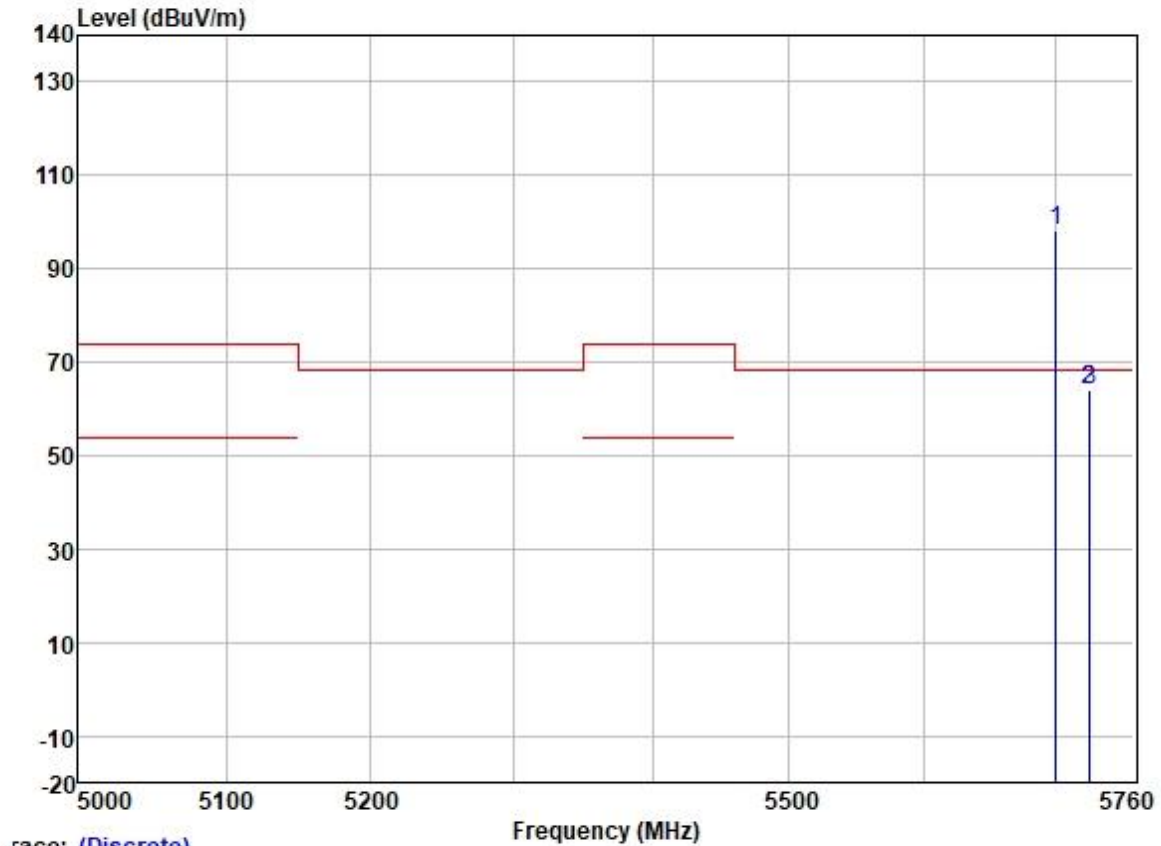


Trace: (Discrete)

	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	5403.681	58.82	31.79	6.06	36.88	59.79	74.00	-14.21	VERTICAL	Peak
2	5453.793	45.86	31.79	6.26	36.88	47.03	54.00	-6.97	VERTICAL	Average
3	5468.557	62.65	31.80	6.31	36.88	63.88	68.20	-4.32	VERTICAL	Peak
4	5500.000	89.46	31.80	6.40	36.88	90.78	-----	-----	VERTICAL	Average
5 *	5500.000	99.60	31.80	6.40	36.88	100.92	68.20	32.72	VERTICAL	Peak



Test Mode: 09; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

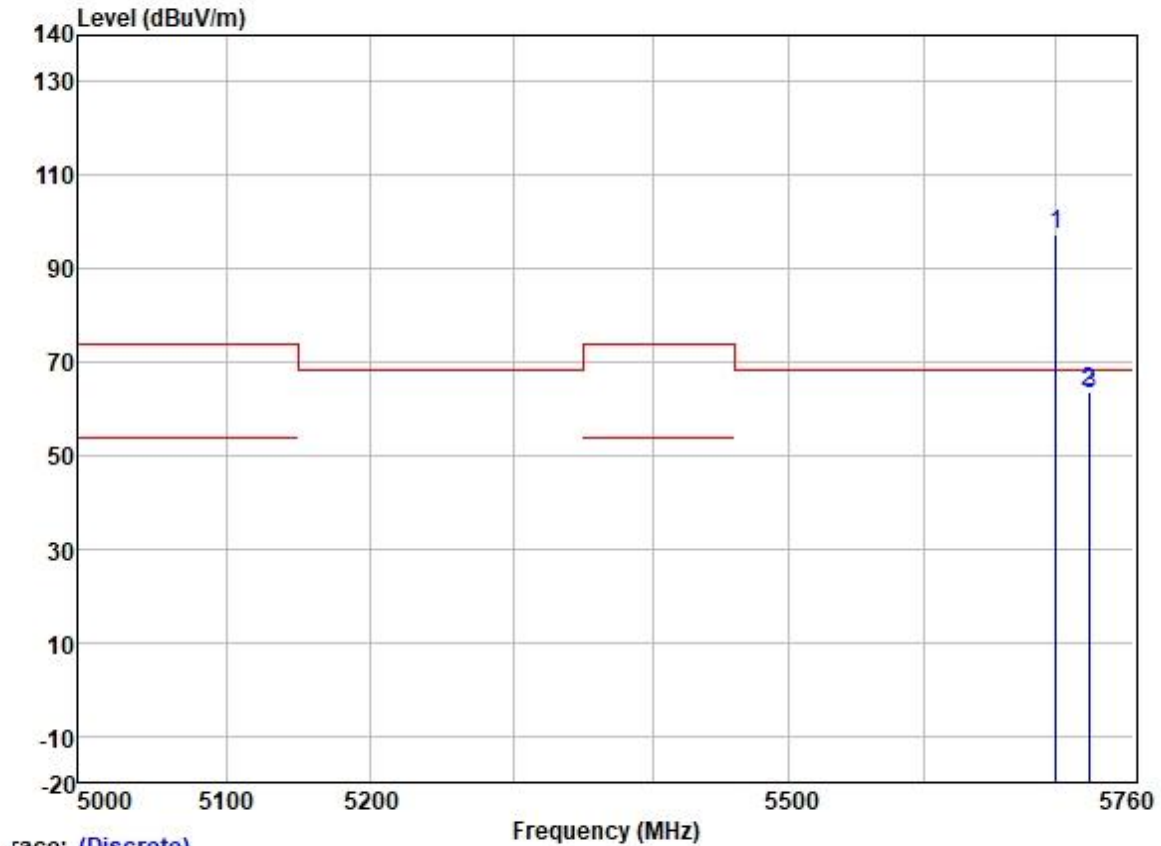
	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB		
1 *	5700.000	96.83	32.01	6.40	36.89	98.35	68.20	30.15	HORIZONTAL Peak
2	5725.000	62.80	32.07	6.25	36.89	64.23	68.20	-3.97	HORIZONTAL Peak
3	5725.983	62.50	32.07	6.25	36.89	63.93	68.20	-4.27	HORIZONTAL Peak



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Test Mode: 09; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



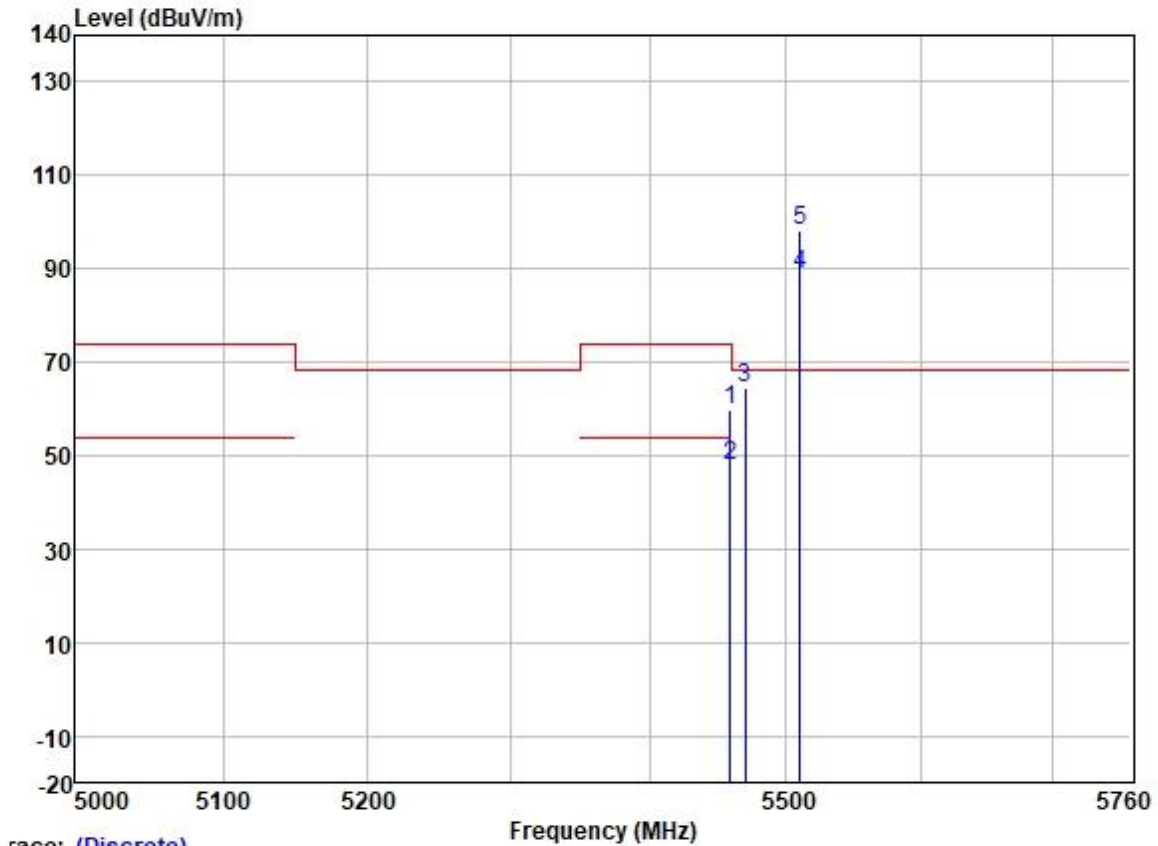
Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB		
1 *	5700.000	95.97	32.01	6.40	36.89	97.49	68.20	29.29	VERTICAL Peak
2	5725.000	62.28	32.07	6.25	36.89	63.71	68.20	-4.49	VERTICAL Peak
3	5725.883	61.84	32.07	6.25	36.89	63.27	68.20	-4.93	VERTICAL Peak



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Test Mode: 09; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Trace: (Discrete)

	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	5458.783	58.79	31.79	6.26	36.88	59.96	74.00	-14.04	HORIZONTAL	Peak
2	5458.923	46.78	31.79	6.26	36.88	47.95	54.00	-6.05	HORIZONTAL	Average
3	5469.692	63.23	31.80	6.31	36.88	64.46	68.20	-3.74	HORIZONTAL	Peak
4	5510.000	87.40	31.80	6.40	36.88	88.72	-----	-----	HORIZONTAL	Average
5 *	5510.000	96.81	31.80	6.40	36.88	98.13	68.20	29.93	HORIZONTAL	Peak

