TEST REPORT

Application No.:	GZCR2108020805AT
Applicant:	Poynt, LLC
Address of Applicant:	3032 Bunker Hill Lane Santa Clara California 95054 United States
Manufacturer:	Beijing Wiseasy Technology CO., Ltd.
Address of Manufacturer:	7thFloor, Block B, Wangxin Mansion, No.28 Xiaoyun Road, Chaoyang District, 100027, Beijing, China.
Factory:	BYD Precision Manufacture Co., Ltd.
Address of Factory:	Baolong Industrial Park, 3001 Baohe Rd., Longgang District, Shenzhen, P.R.C
Equipment Under Test (EUT):	
EUT Name:	Poynt Smart Terminal V3.0
Model No.:	PST3
Trade Mark:	POYNT
Standard(s) :	47 CFR Part 15, Subpart C 15.407
Date of Receipt:	2021-08-04
Date of Test:	2021-08-04 to 2021-08-24
Date of Issue:	2021-08-31
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Kobe Jian
EMC Laboratory Manager

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		*2021-08-31*		*Original*

Authorized for issue by				
		Lily Kuang **Lily Kuang/Project Engineer**		
		Ricky Liu **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 which fall in the restricted bands		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Radiated Emissions (below 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Radiated Emissions (above 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
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

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.

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply: Switching Adapter
Model: ASSA13W-050300
Input: AC 100-240V, 50/60Hz, 0.6A
Output: DC 5.0V, 3.0A, 15.0W

Battery
DESAY Model No.: 2532002
DC 3.7V, 5900mAh, 21.83Wh

DOCKING STATION
Rating: DC 5V, 3A

Test Voltage: AC 120V, 60Hz or AC 240V, 50Hz

Note: Both nominal AC 120V, 60Hz and AC 240 V, 50Hz are required for testing in accordance with FCC KDB174176, this report only shows the results of the worst test result(AC 120V, 60Hz);

Cable(s): USB cable:143cm unshielded

Operation Frequency:

Band	Mode	Frequency Range(MHz)	Number of channels
UNII Band I	802.11a/n(HT20)/ac(HT20)	5180-5240	4
	802.11n(HT40)/ac(HT40)	5190-5230	2
	802.11ac(HT80)	5210	1
UNII Band II-A	802.11a/n(HT20)/ac(HT20)	5260-5320	4
	802.11n(HT40)/ac(HT40)	5270-5310	2
	802.11ac(HT80)	5290	1
UNII Band II-C	802.11a/n(HT20)/ac(HT20)	5500-5700	8
	802.11n(HT40)/ac(HT40)	5510-5670	5
	802.11ac(HT80)	5530,5610	2
UNII Band III	802.11a/n(HT20)/ac(HT20)	5745-5825	5
	802.11n(HT40)/ac(HT40)	5755-5795	2
	802.11ac(HT80)	5775	1

Modulation Type: 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK)
802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM)
802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)

DFS Function: Slave without radar detection

TPC Function: Not support

Antenna Type: FPC

Antenna Gain: UNII Band I/UNII Band II-A/UNII Band II-C: 2.5dBi
UNII Band III: 1.5dBi

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Mobile Phone	SAMSUNG	SM-G9810	RFCN309Q9QF
Note Book PC	LENOVO	Lenovo Xiaoxinchao 5000	PF0TLJX7
Wireless Router	Honor	HiRouter-CD30	AWTEQ20C04001295

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 which fall in the restricted bands	± 4.5dB (below 1GHz); ± 4.8dB (above 1GHz);
Radiated Emissions (below 1GHz)	5.06dB （30MHz-1GHz；3m） 4.46dB （30MHz-1GHz；10m）
Radiated Emissions (above 1GHz)	5.08 dB (1-6GHz); 5.14 (above 6 GHz)
Frequency Stability	± 7.25 x 10-8

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,

198 Kezhu Road, Scientech 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**
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 Analzer(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

99% Bandwidth					
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 Analzer(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

26dB Emission bandwidth

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 Analzer(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

Minimum 6 dB bandwidth (5.725-5.85 GHz band)

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

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Power Meter (U2021XA_Ch3)	Agilent Technologies	U2021XA_Ch3	SEM009-03	2021-05-19	2022-05-18
EXA Signal Analzer(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

Maximum Conducted output power

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 Analzer(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

Peak Power spectrum density

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 Analzer(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

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
Notch Filter (5150-5880)	Mico-Tronics	BRM50716	EMC2168	2021-07-29	2022-07-28
Horn Antenna(14-40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2020-06-28	2023-06-27
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2020-09-09	2021-09-08

Radiated Spurious 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
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2020-12-20	2023-12-19
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
EXA Signal Analyzer(10Hz-44GHz)	Keysight	N9010A	EMC2138	2020-09-17	2021-09-16

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
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	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	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

Frequency Stability					
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 Analzer(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

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	2021-07-15	2022-07-14
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 Analzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	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 ATTEMUATOR	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	2021-07-15	2022-07-14
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 Analzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	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 ATTEMUATOR	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	2021-07-15	2022-07-14
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 Analzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2020-09-17	2021-09-16
6dB Attenuator	HP	8491A	EMC2062	2020-04-15	2022-04-14
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	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 ATTEMUATOR	JFW INDUSTRIES INC.	50BR-068 SMA	EMC02076	/	/

General used equipment

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

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 of UNII Band I/UNII Band II-A/UNII Band II-C: 2.5dBi, UNII Band III is 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 support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.

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(dBμV)	
	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: 22.2 °C Humidity: 60.5 % RH Atmospheric Pressure: 1010 mbar

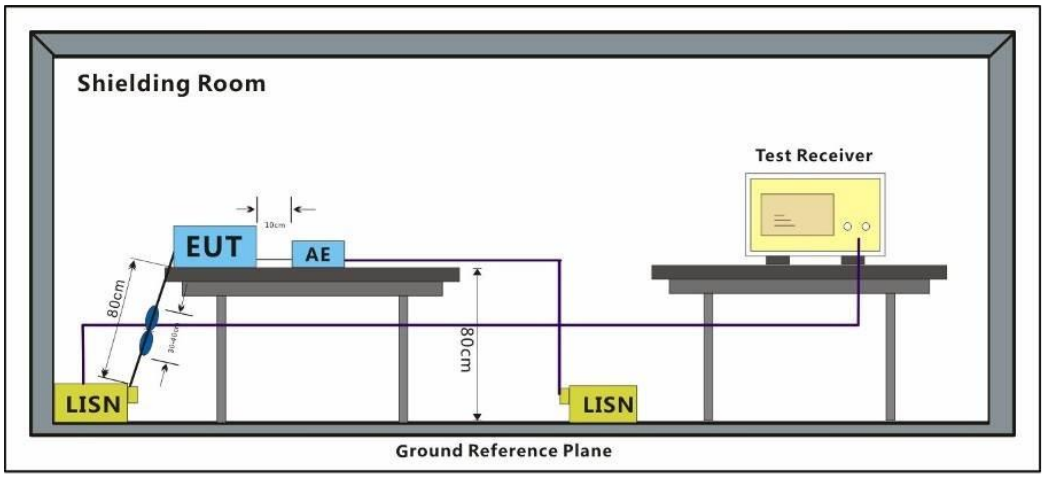
7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	34	Charge + TX mode (U-NII-1)_Keep the EUT in charging and 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	36	Charge + TX mode (U-NII-2A)_Keep the EUT in charging and 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	38	Charge + TX mode (U-NII-2C)_Keep the EUT in charging and 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	40	Charge + TX mode (U-NII-3)_Keep the EUT in charging and 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.

7.1.3 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.

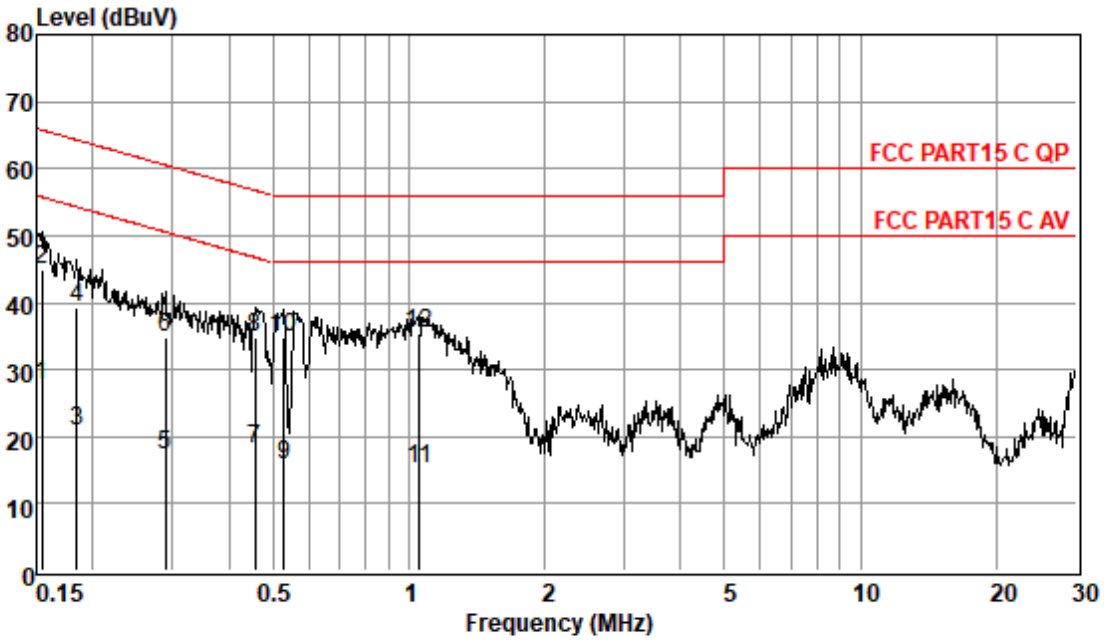
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

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

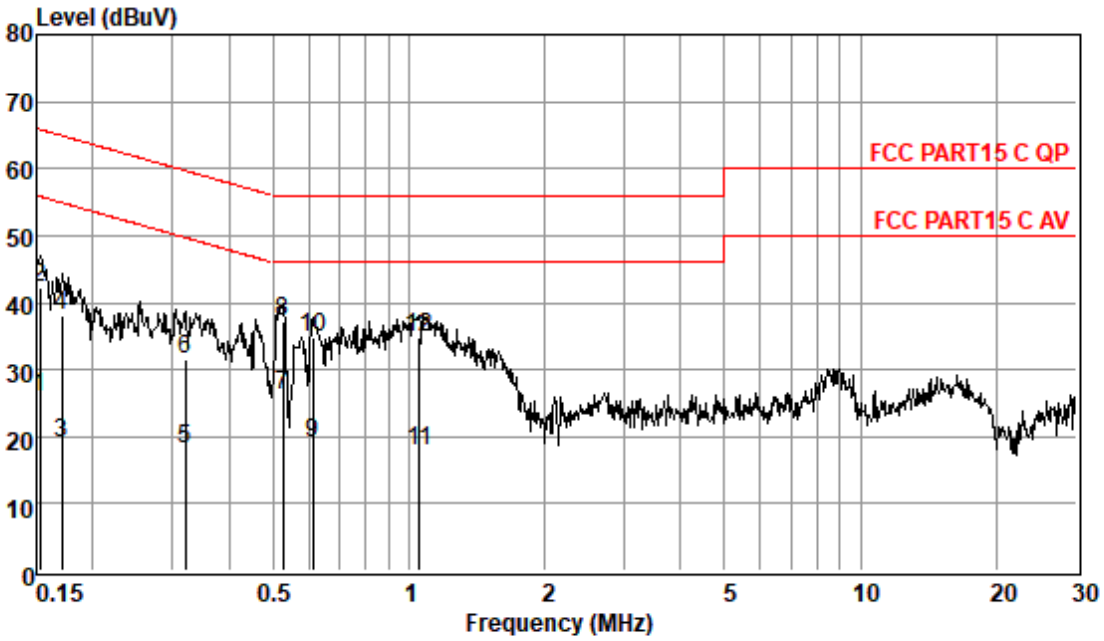
Test Mode: 34; Line: Live line; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



Pol :LINE
Mode :
Model :

Frequenc MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Measured Level dBuV	Limit Line dBuV	Over Limit dB	Remark
0.15	18.11	0.06	9.62	27.79	55.78	-27.99	Average
0.15	35.19	0.06	9.62	44.87	65.78	-20.91	QP
0.18	11.24	0.06	9.62	20.92	54.28	-33.36	Average
0.18	29.52	0.06	9.62	39.20	64.28	-25.08	QP
0.29	7.70	0.06	9.62	17.38	50.54	-33.16	Average
0.29	24.98	0.06	9.62	34.66	60.54	-25.88	QP
0.46	8.31	0.07	9.63	18.01	46.76	-28.75	Average
0.46	25.18	0.07	9.63	34.88	56.76	-21.88	QP
0.53	6.12	0.07	9.63	15.82	46.00	-30.18	Average
0.53	25.02	0.07	9.63	34.72	56.00	-21.28	QP
1.05	5.62	0.07	9.62	15.31	46.00	-30.69	Average
1.05	25.71	0.07	9.62	35.40	56.00	-20.60	QP

Test Mode: 34; Line: Neutral Line; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



Pol :NEUTRAL
Mode :
Model :

Frequenc MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Measured Level dBuV	Limit Line dBuV	Over Limit dB	Remark
0.15	16.27	0.06	9.55	25.88	55.87	-29.99	Average
0.15	32.50	0.06	9.55	42.11	65.87	-23.76	QP
0.17	9.38	0.06	9.55	18.99	54.94	-35.95	Average
0.17	28.36	0.06	9.55	37.97	64.94	-26.97	QP
0.32	8.45	0.06	9.54	18.05	49.71	-31.66	Average
0.32	21.95	0.06	9.54	31.55	59.71	-28.16	QP
0.53	16.62	0.07	9.55	26.24	46.00	-19.76	Average
0.53	27.69	0.07	9.55	37.31	56.00	-18.69	QP
0.61	9.43	0.07	9.54	19.04	46.00	-26.96	Average
0.61	25.07	0.07	9.54	34.68	56.00	-21.32	QP
1.05	8.36	0.07	9.55	17.98	46.00	-28.02	Average
1.05	25.13	0.07	9.55	34.75	56.00	-21.25	QP

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

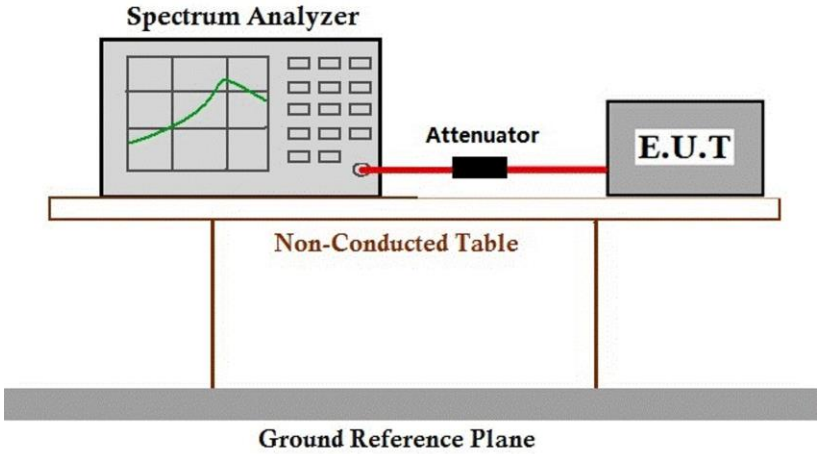
Operating Environment:
Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	33	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	34	Charge + TX mode (U-NII-1)_Keep the EUT in charging and 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	35	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	36	Charge + TX mode (U-NII-2A)_Keep the EUT in charging and 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	37	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	38	Charge + TX mode (U-NII-2C)_Keep the EUT in charging and 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	39	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.
Final test	40	Charge + TX mode (U-NII-3)_Keep the EUT in charging and 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:

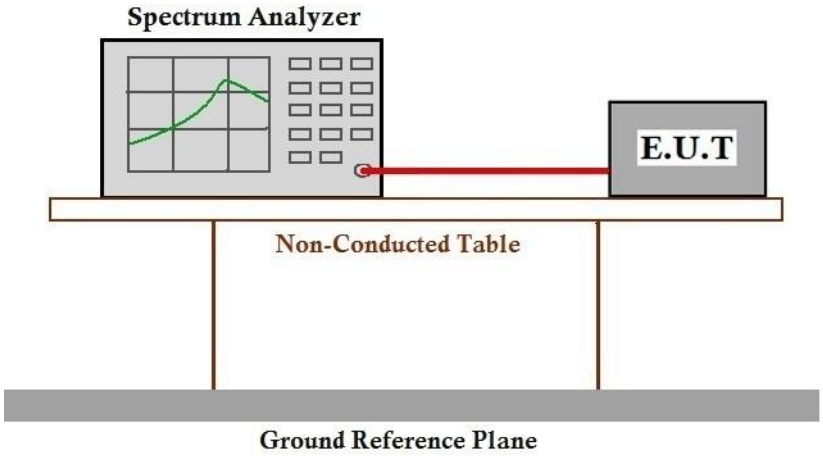
Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	33	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	34	Charge + TX mode (U-NII-1)_Keep the EUT in charging and 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	35	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	36	Charge + TX mode (U-NII-2A)_Keep the EUT in charging and 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	37	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	38	Charge + TX mode (U-NII-2C)_Keep the EUT in charging and 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	39	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.
Final test	40	Charge + TX mode (U-NII-3)_Keep the EUT in charging and 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

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:

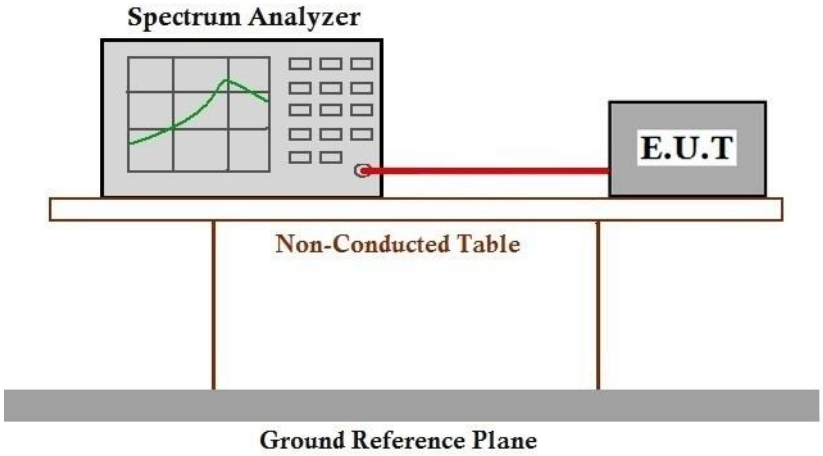
Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	33	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	34	Charge + TX mode (U-NII-1)_Keep the EUT in charging and 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	35	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	36	Charge + TX mode (U-NII-2A)_Keep the EUT in charging and 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	37	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	38	Charge + TX mode (U-NII-2C)_Keep the EUT in charging and 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	39	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.
Final test	40	Charge + TX mode (U-NII-3)_Keep the EUT in charging and 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

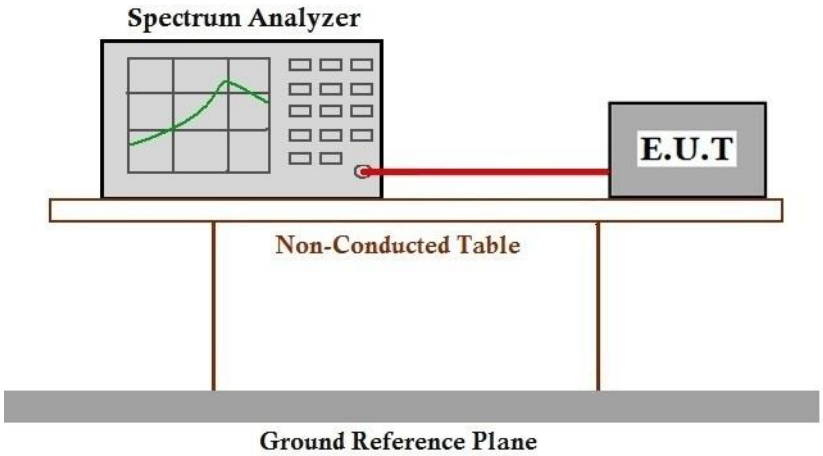
Operating Environment:

Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	39	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.
Final test	40	Charge + TX mode (U-NII-3)_Keep the EUT in charging and 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.

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details

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7.6 Maximum Conducted output power

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

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(23.98dBm) for client device
5250-5350	≤250mW(23.98dBm) for client device or 11dBm+10logB*
5470-5725	≤250mW(23.98dBm) 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:

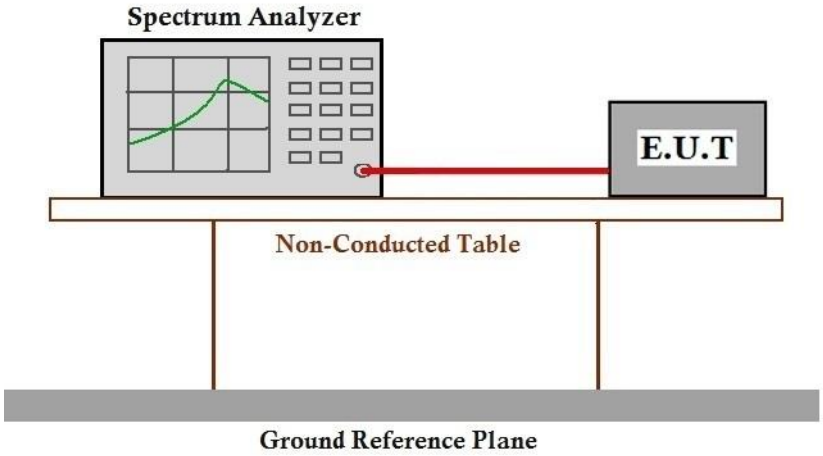
Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	33	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	34	Charge + TX mode (U-NII-1)_Keep the EUT in charging and 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	35	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	36	Charge + TX mode (U-NII-2A)_Keep the EUT in charging and 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	37	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	38	Charge + TX mode (U-NII-2C)_Keep the EUT in charging and 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	39	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.
Final test	40	Charge + TX mode (U-NII-3)_Keep the EUT in charging and 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:

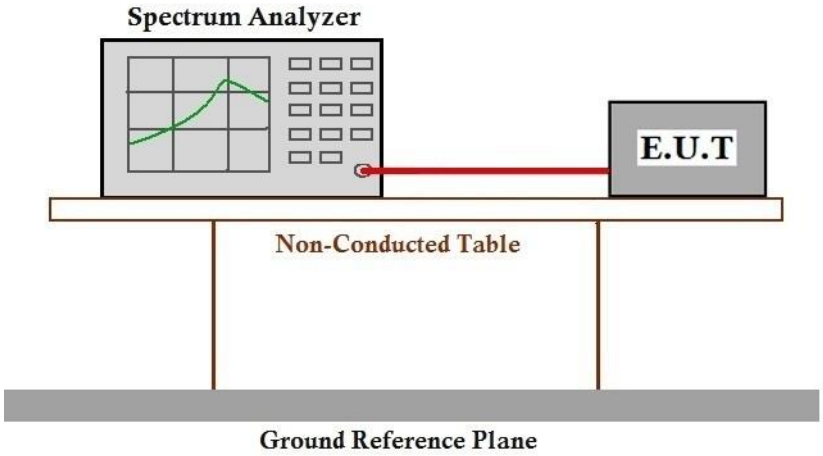
Temperature: 20.5 °C Humidity: 50.0 % RH Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	33	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	34	Charge + TX mode (U-NII-1)_Keep the EUT in charging and 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	35	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	36	Charge + TX mode (U-NII-2A)_Keep the EUT in charging and 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	37	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	38	Charge + TX mode (U-NII-2C)_Keep the EUT in charging and 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	39	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.
Final test	40	Charge + TX mode (U-NII-3)_Keep the EUT in charging and 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 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

*(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: 21.4 °C Humidity: 54.3 % RH Atmospheric Pressure: 1010 mbar

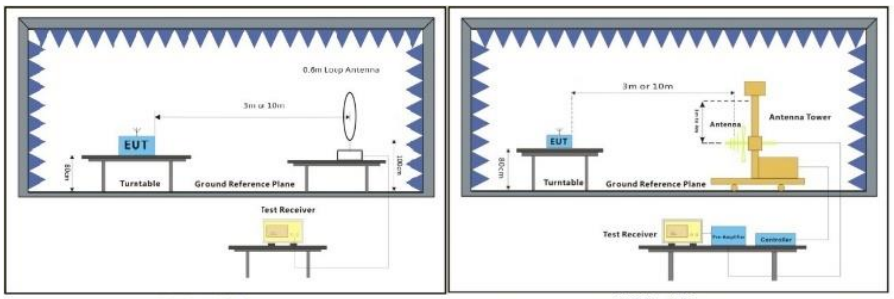
7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	33	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	34	Charge + TX mode (U-NII-1)_Keep the EUT in charging and 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	35	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	36	Charge + TX mode (U-NII-2A)_Keep the EUT in charging and 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	37	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	38	Charge + TX mode (U-NII-2C)_Keep the EUT in charging and 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	39	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.

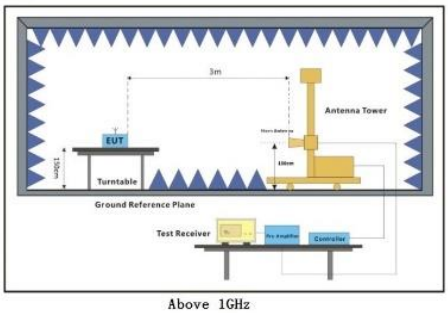
Final test	40	Charge + TX mode (U-NII-3)_Keep the EUT in charging and continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); 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



Below 30MHz

30MHz-1GHz



Above 1GHz

7.8.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

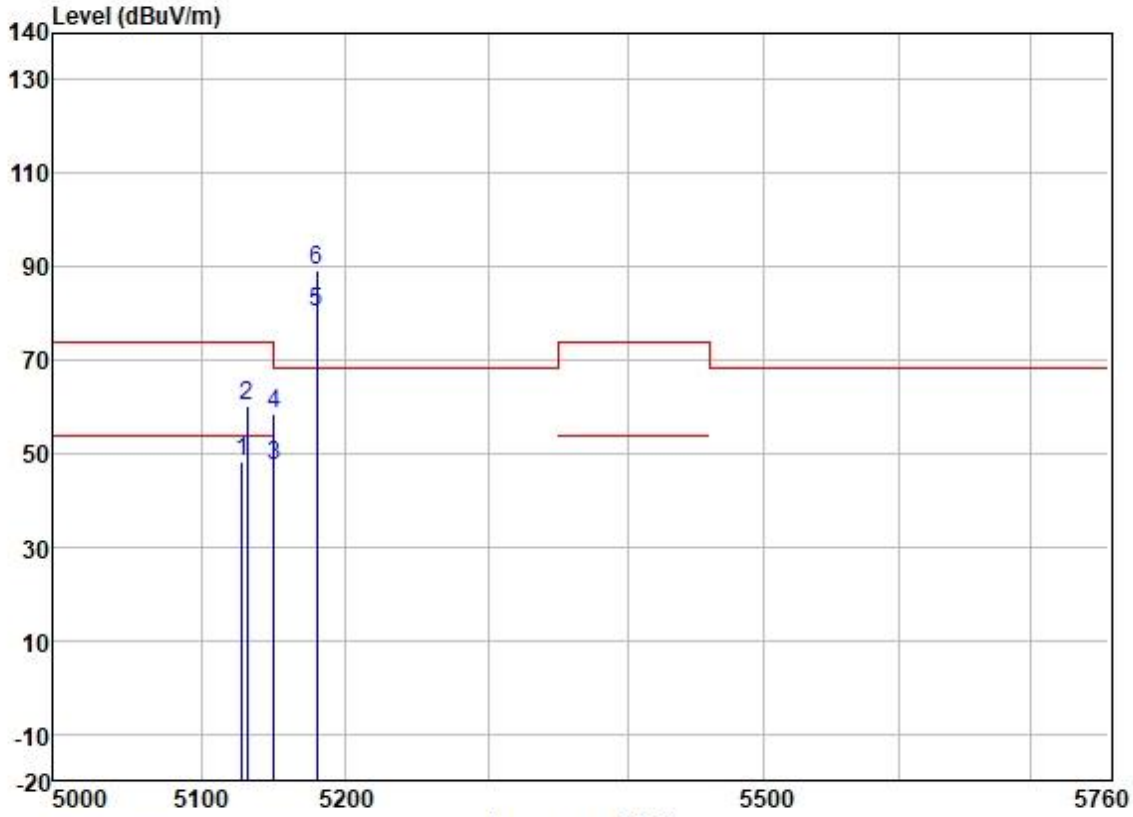
h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

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

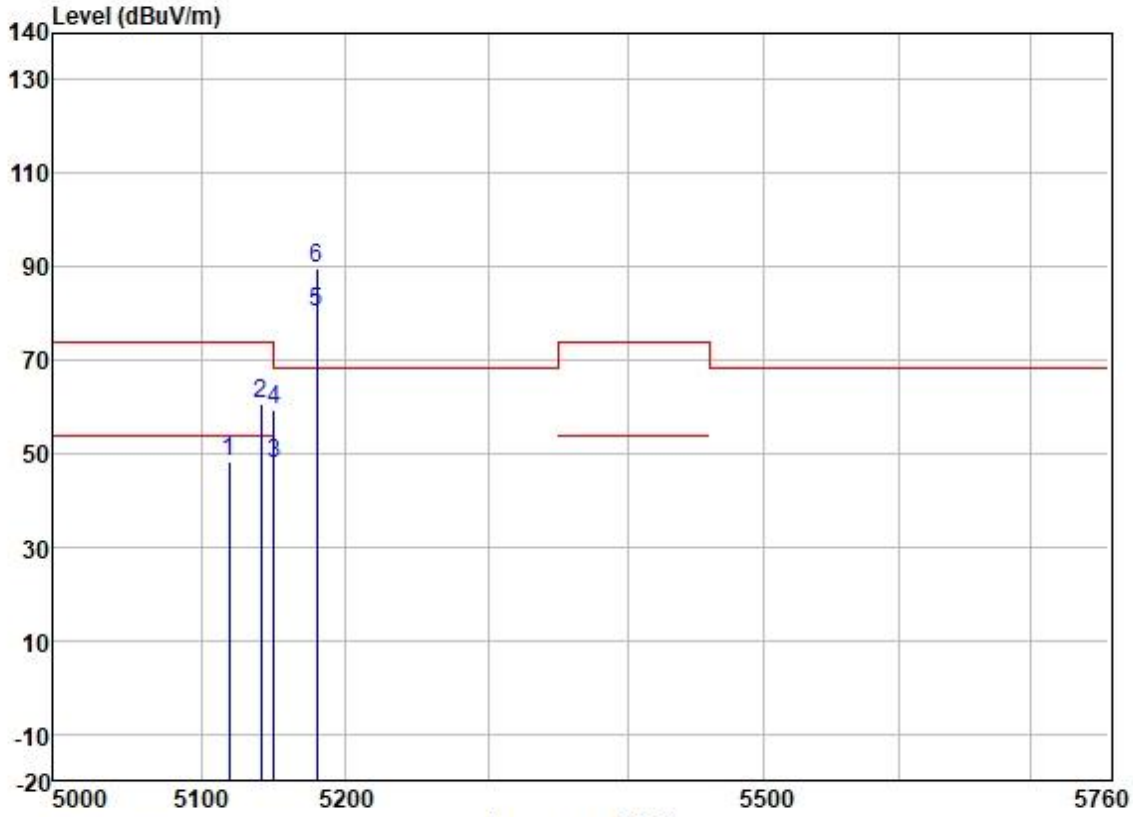
Test Mode: 34; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5127.805	47.63	31.72	5.63	36.86	48.12	54.00	-5.88	HORIZONTAL	Average
2		5131.789	59.55	31.72	5.63	36.86	60.04	74.00	-13.96	HORIZONTAL	Peak
3		5149.980	46.90	31.72	5.62	36.86	47.38	54.00	-6.62	HORIZONTAL	Average
4		5149.980	57.97	31.72	5.62	36.86	58.45	74.00	-15.55	HORIZONTAL	Peak
5		5180.000	79.98	31.73	5.61	36.87	80.45	------	------	HORIZONTAL	Average
6	*	5180.000	88.76	31.73	5.61	36.87	89.23	68.20	21.03	HORIZONTAL	Peak

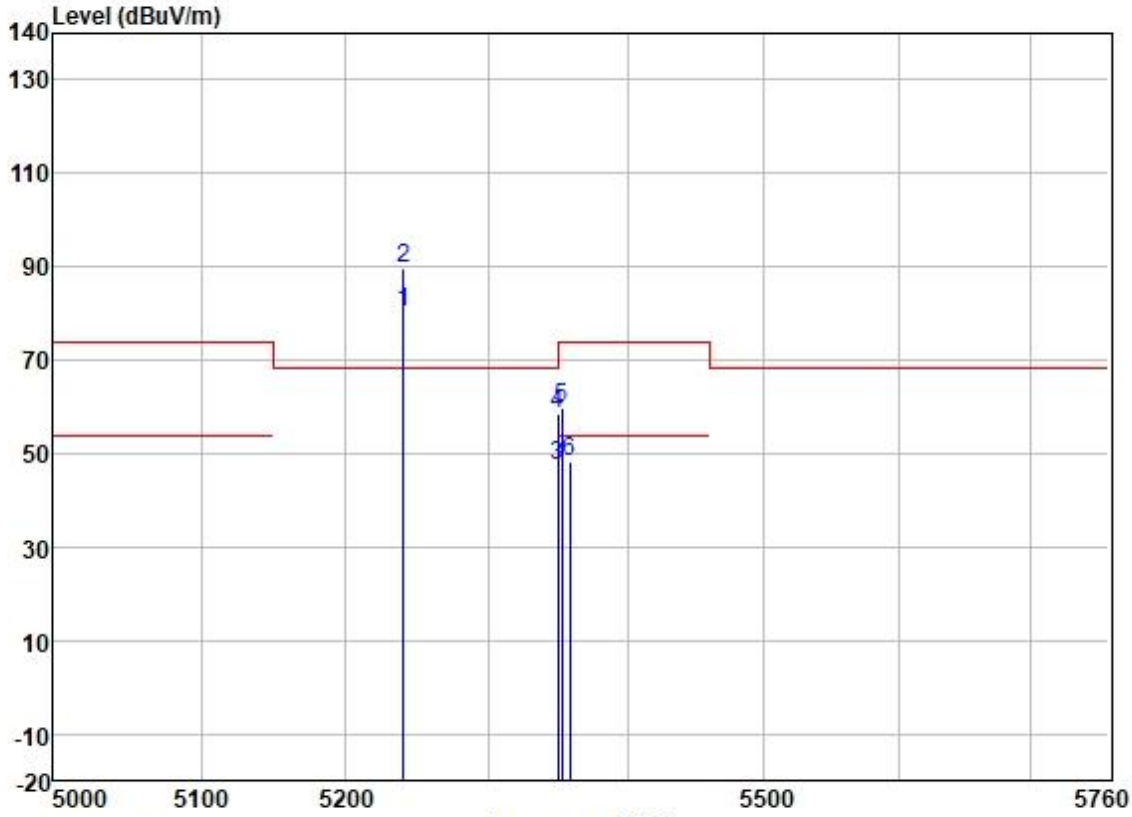
Test Mode: 34; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5119.447	47.67	31.72	5.64	36.86	48.17	54.00	-5.83	VERTICAL	Average
2	5141.065	60.18	31.72	5.63	36.86	60.67	74.00	-13.33	VERTICAL	Peak
3	5149.980	47.30	31.72	5.62	36.86	47.78	54.00	-6.22	VERTICAL	Average
4	5149.980	59.02	31.72	5.62	36.86	59.50	74.00	-14.50	VERTICAL	Peak
5	5180.000	79.84	31.73	5.61	36.87	80.31	------	------	VERTICAL	Average
6 *	5180.000	89.37	31.73	5.61	36.87	89.84	68.20	21.64	VERTICAL	Peak

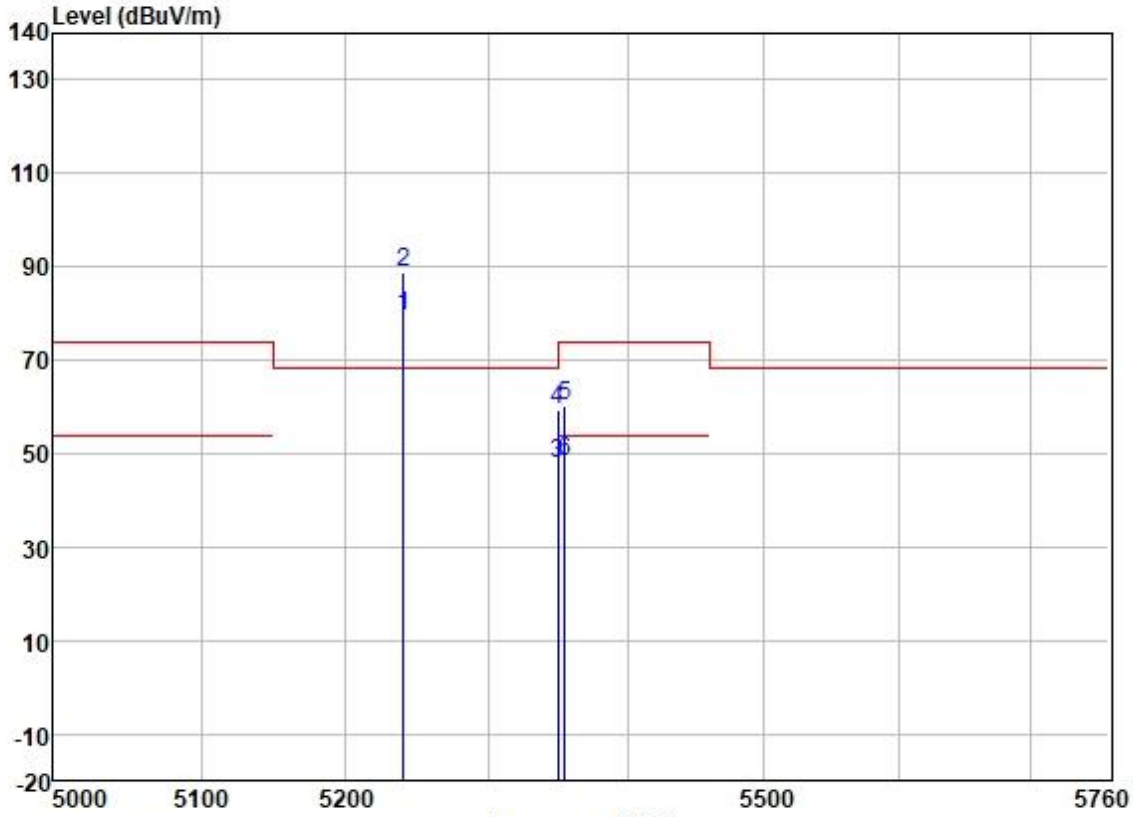
Test Mode: 34; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5240.000	79.49	31.75	5.74	36.87	80.11	------	------	HORIZONTAL	Average
2	*	5240.000	88.92	31.75	5.74	36.87	89.54	68.20	21.34	HORIZONTAL	Peak
3		5350.020	46.64	31.77	6.05	36.88	47.58	54.00	-6.42	HORIZONTAL	Average
4		5350.020	57.74	31.77	6.05	36.88	58.68	74.00	-15.32	HORIZONTAL	Peak
5		5352.912	59.04	31.77	6.05	36.88	59.98	74.00	-14.02	HORIZONTAL	Peak
6		5358.440	47.36	31.78	6.03	36.88	48.29	54.00	-5.71	HORIZONTAL	Average

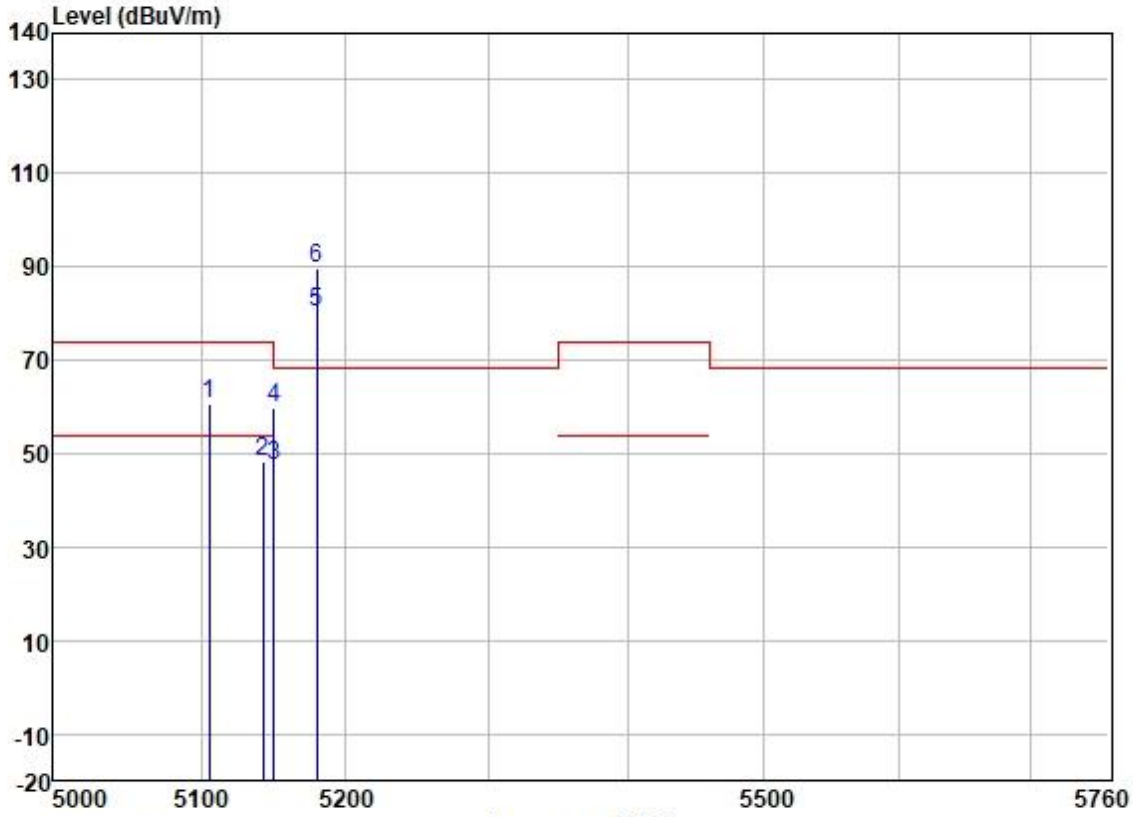
Test Mode: 34; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5240.000	78.94	31.75	5.74	36.87	79.56	------	------	VERTICAL	Average
2	*	5240.000	88.13	31.75	5.74	36.87	88.75	68.20	20.55	VERTICAL	Peak
3		5350.020	46.81	31.77	6.05	36.88	47.75	54.00	-6.25	VERTICAL	Average
4		5350.020	58.27	31.77	6.05	36.88	59.21	74.00	-14.79	VERTICAL	Peak
5		5354.470	59.18	31.78	6.03	36.88	60.11	74.00	-13.89	VERTICAL	Peak
6		5354.896	47.19	31.78	6.03	36.88	48.12	54.00	-5.88	VERTICAL	Average

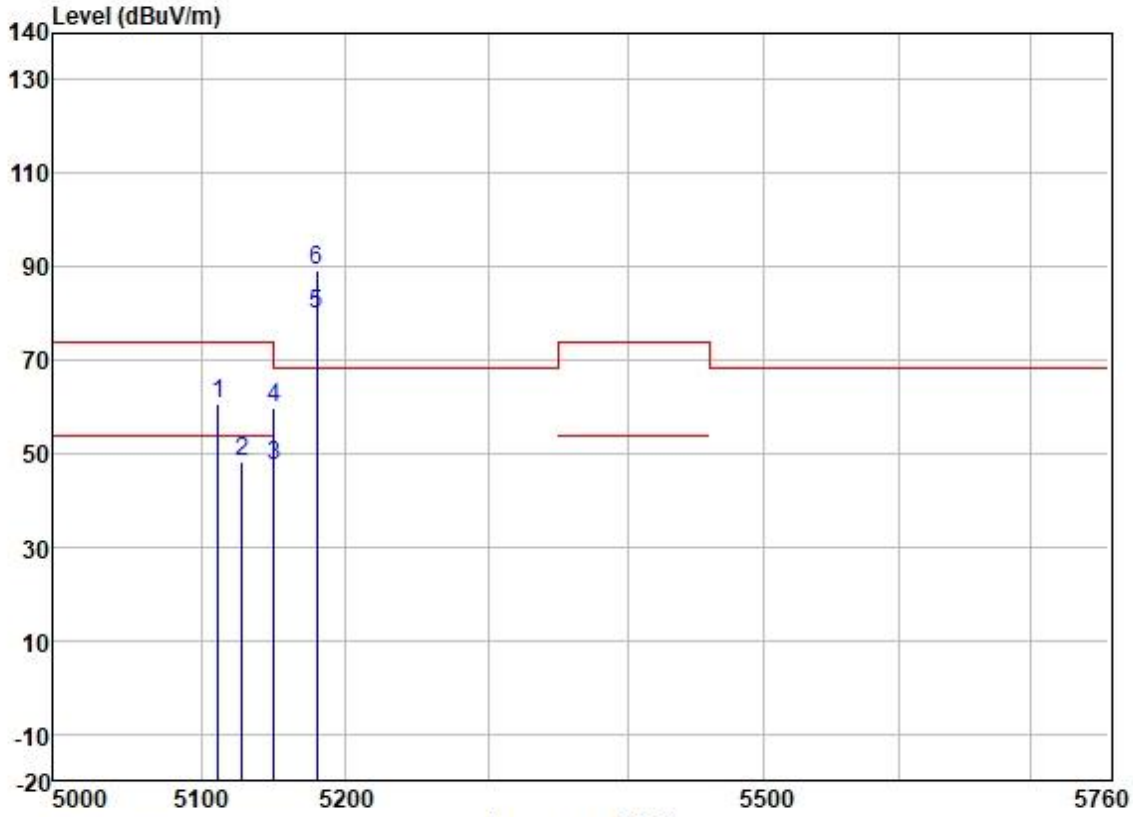
Test Mode: 34; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5105.351	60.31	31.72	5.65	36.86	60.82	74.00	-13.18	HORIZONTAL	Peak
2		5142.163	47.76	31.72	5.62	36.86	48.24	54.00	-5.76	HORIZONTAL	Average
3		5149.980	46.95	31.72	5.62	36.86	47.43	54.00	-6.57	HORIZONTAL	Average
4		5149.980	59.11	31.72	5.62	36.86	59.59	74.00	-14.41	HORIZONTAL	Peak
5		5180.000	79.64	31.73	5.61	36.87	80.11	------	------	HORIZONTAL	Average
6	*	5180.000	89.17	31.73	5.61	36.87	89.64	68.20	21.44	HORIZONTAL	Peak

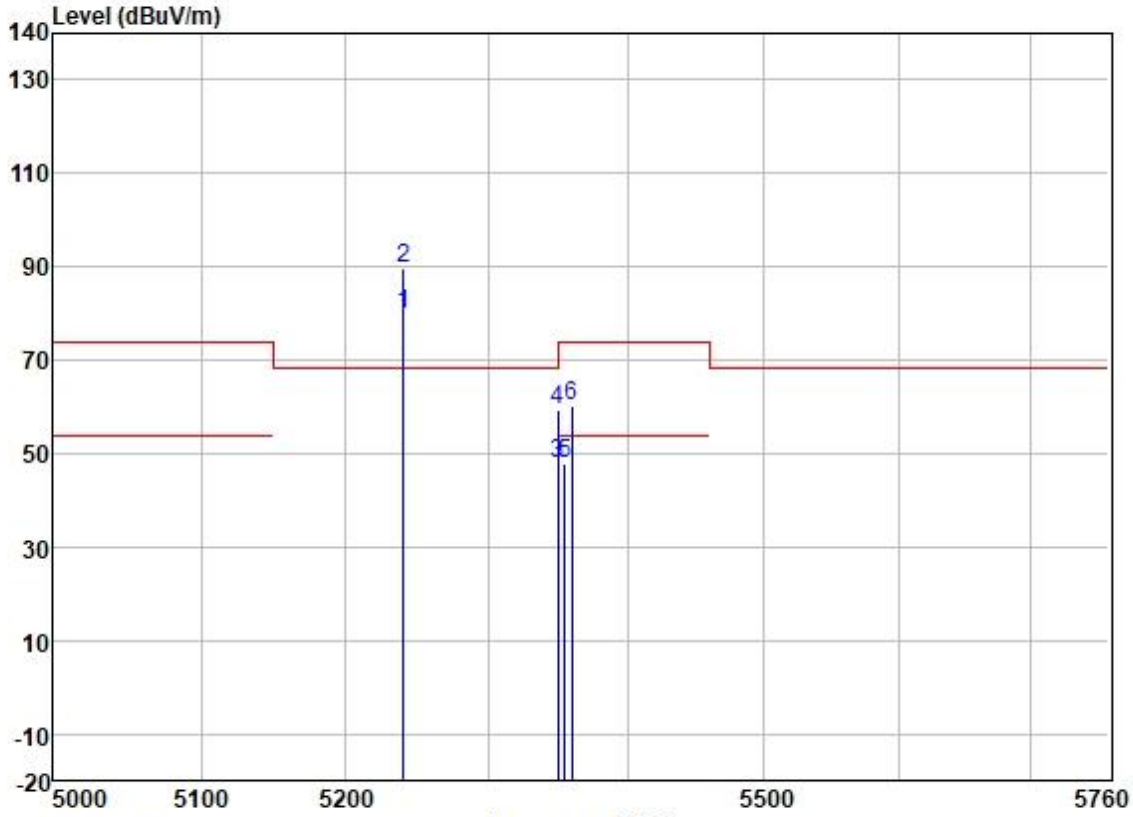
Test Mode: 34; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5111.898	60.18	31.72	5.65	36.86	60.69	74.00	-13.31	VERTICAL	Peak
2	5128.103	47.79	31.72	5.63	36.86	48.28	54.00	-5.72	VERTICAL	Average
3	5149.980	46.96	31.72	5.62	36.86	47.44	54.00	-6.56	VERTICAL	Average
4	5149.980	59.44	31.72	5.62	36.86	59.92	74.00	-14.08	VERTICAL	Peak
5	5180.000	79.26	31.73	5.61	36.87	79.73	------	------	VERTICAL	Average
6 *	5180.000	88.83	31.73	5.61	36.87	89.30	68.20	21.10	VERTICAL	Peak

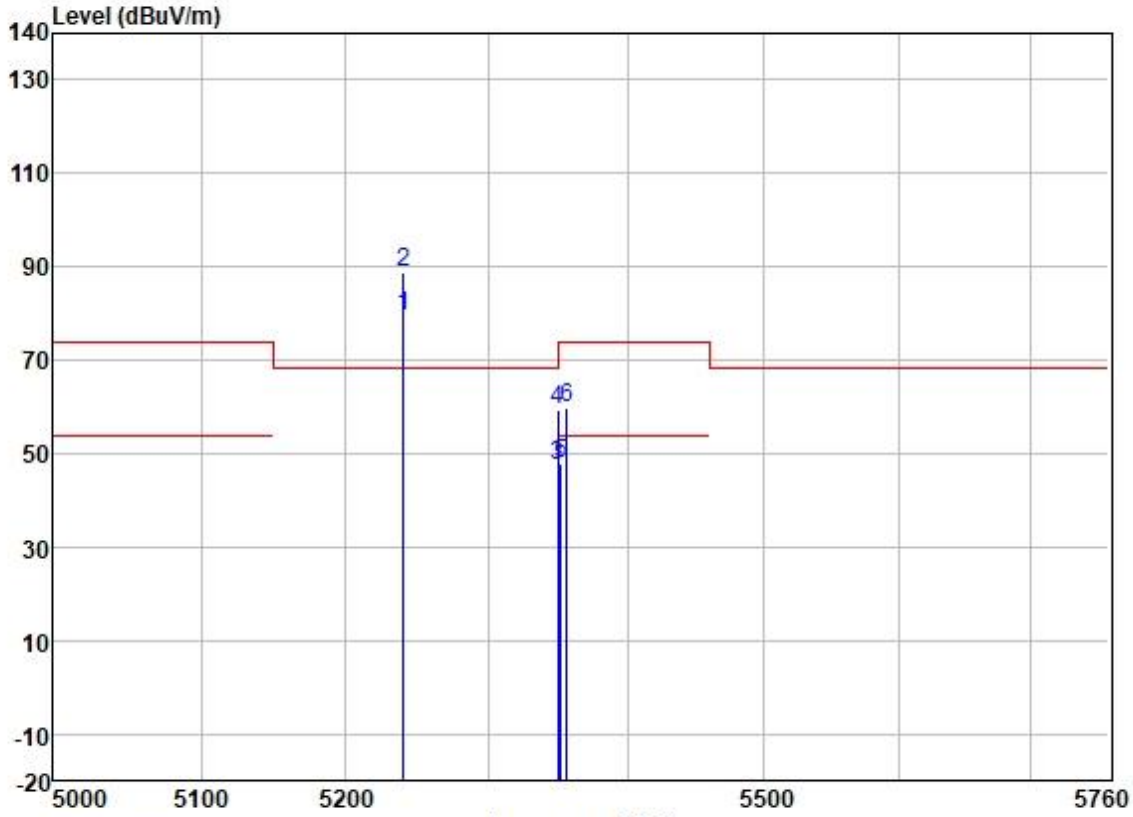
Test Mode: 34; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5240.000	79.39	31.75	5.74	36.87	80.01	------	------	HORIZONTAL	Average
2	*	5240.000	89.00	31.75	5.74	36.87	89.62	68.20	21.42	HORIZONTAL	Peak
3		5350.020	46.86	31.77	6.05	36.88	47.80	54.00	-6.20	HORIZONTAL	Average
4		5350.020	58.38	31.77	6.05	36.88	59.32	74.00	-14.68	HORIZONTAL	Peak
5		5355.037	47.08	31.78	6.03	36.88	48.01	54.00	-5.99	HORIZONTAL	Average
6		5359.433	59.35	31.78	6.03	36.88	60.28	74.00	-13.72	HORIZONTAL	Peak

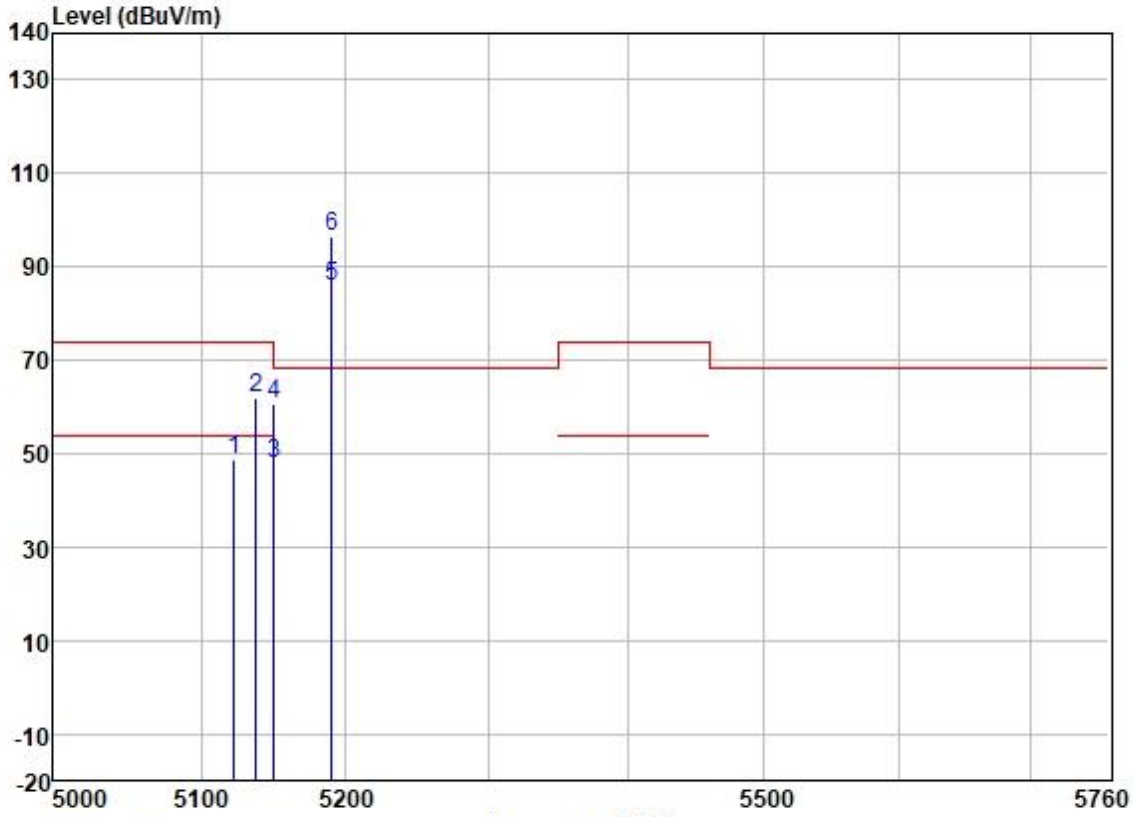
Test Mode: 34; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5240.000	78.60	31.75	5.74	36.87	79.22	------	------	VERTICAL	Average
2	*	5240.000	88.27	31.75	5.74	36.87	88.89	68.20	20.69	VERTICAL	Peak
3		5350.020	46.59	31.77	6.05	36.88	47.53	54.00	-6.47	VERTICAL	Average
4		5350.020	58.36	31.77	6.05	36.88	59.30	74.00	-14.70	VERTICAL	Peak
5		5352.203	46.92	31.77	6.05	36.88	47.86	54.00	-6.14	VERTICAL	Average
6		5356.171	58.93	31.78	6.03	36.88	59.86	74.00	-14.14	VERTICAL	Peak

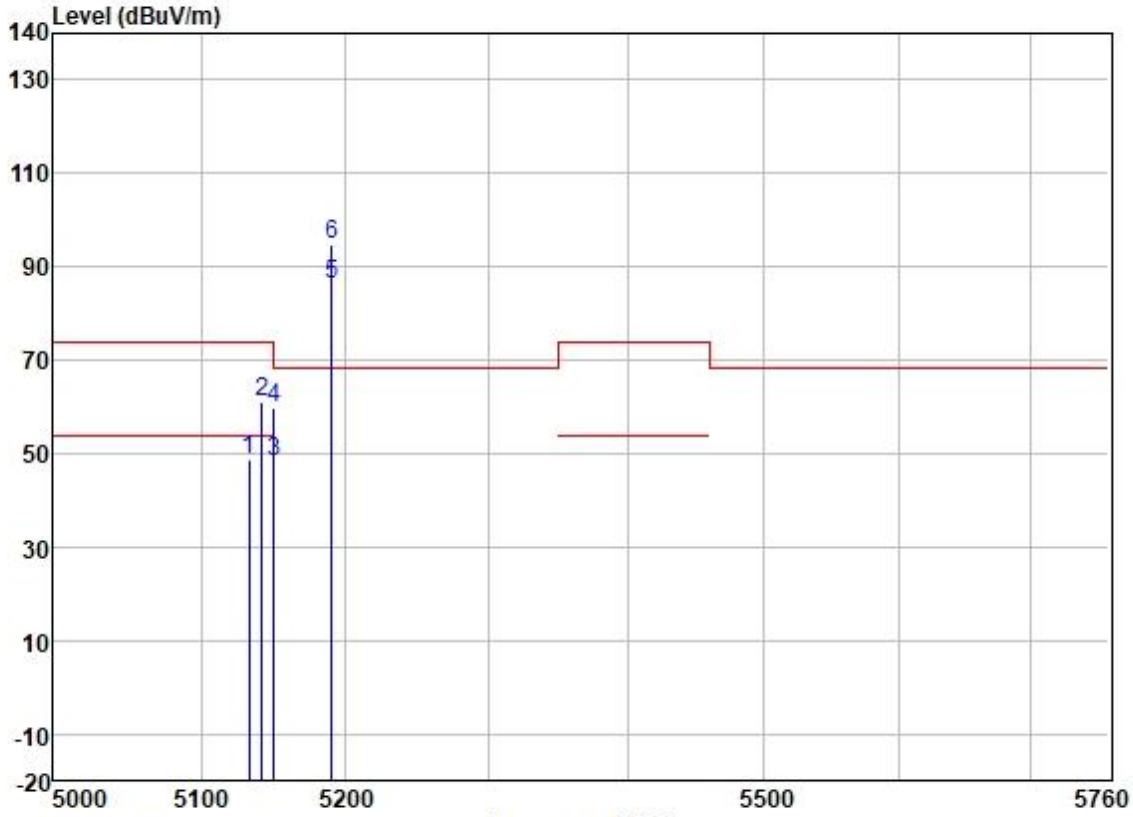
Test Mode: 34; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5122.586	48.06	31.72	5.64	36.86	48.56	54.00	-5.44	HORIZONTAL	Average
2		5137.738	61.42	31.72	5.63	36.86	61.91	74.00	-12.09	HORIZONTAL	Peak
3		5149.980	47.52	31.72	5.62	36.86	48.00	54.00	-6.00	HORIZONTAL	Average
4		5149.980	60.34	31.72	5.62	36.86	60.82	74.00	-13.18	HORIZONTAL	Peak
5		5190.000	85.51	31.73	5.60	36.87	85.97	------	------	HORIZONTAL	Average
6	*	5190.000	96.00	31.73	5.60	36.87	96.46	68.20	28.26	HORIZONTAL	Peak

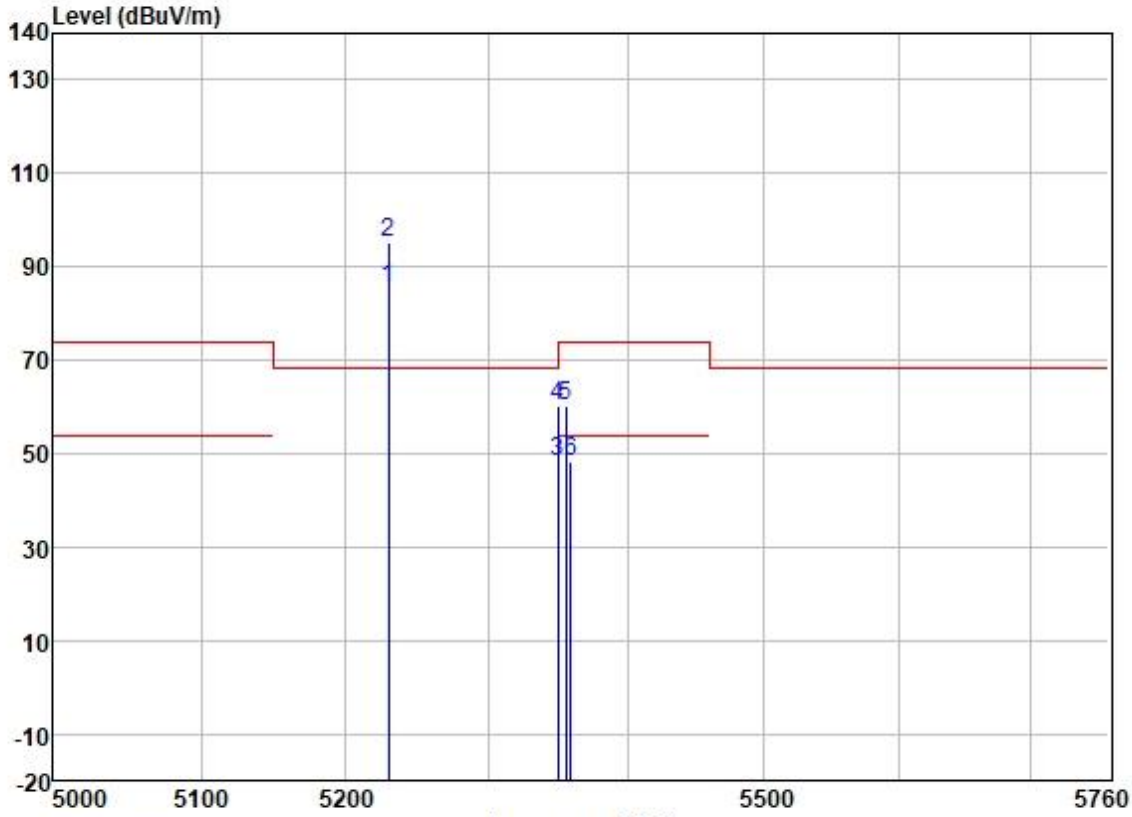
Test Mode: 34; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5133.081	48.08	31.72	5.63	36.86	48.57	54.00	-5.43	VERTICAL	Average
2	5141.563	60.73	31.72	5.63	36.86	61.22	74.00	-12.78	VERTICAL	Peak
3	5149.980	47.72	31.72	5.62	36.86	48.20	54.00	-5.80	VERTICAL	Average
4	5149.980	59.46	31.72	5.62	36.86	59.94	74.00	-14.06	VERTICAL	Peak
5	5190.000	85.99	31.73	5.60	36.87	86.45	------	------	VERTICAL	Average
6 *	5190.000	94.41	31.73	5.60	36.87	94.87	68.20	26.67	VERTICAL	Peak

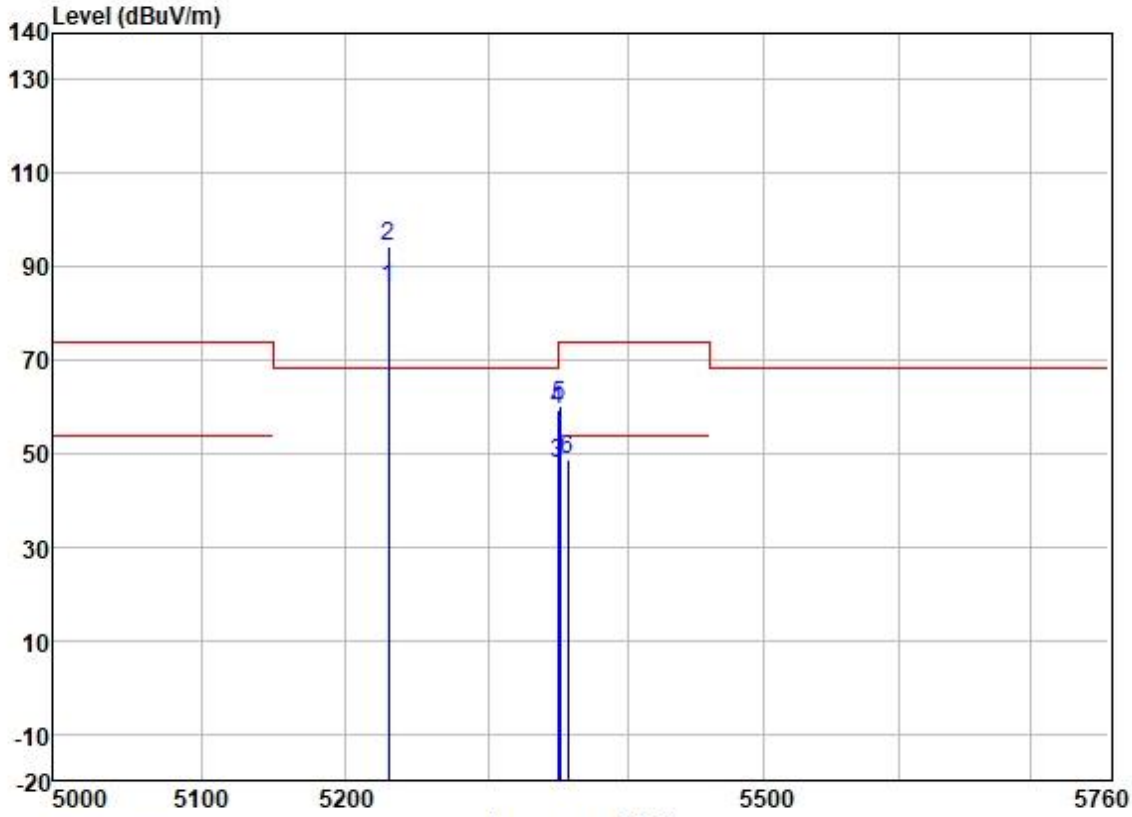
Test Mode: 34; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5230.000	84.91	31.74	5.70	36.87	85.48	------	------	HORIZONTAL	Average
2 *	5230.000	94.61	31.74	5.70	36.87	95.18	68.20	26.98	HORIZONTAL	Peak
3	5350.020	47.39	31.77	6.05	36.88	48.33	54.00	-5.67	HORIZONTAL	Average
4	5350.020	59.14	31.77	6.05	36.88	60.08	74.00	-13.92	HORIZONTAL	Peak
5	5355.778	59.28	31.78	6.03	36.88	60.21	74.00	-13.79	HORIZONTAL	Peak
6	5359.188	47.51	31.78	6.03	36.88	48.44	54.00	-5.56	HORIZONTAL	Average

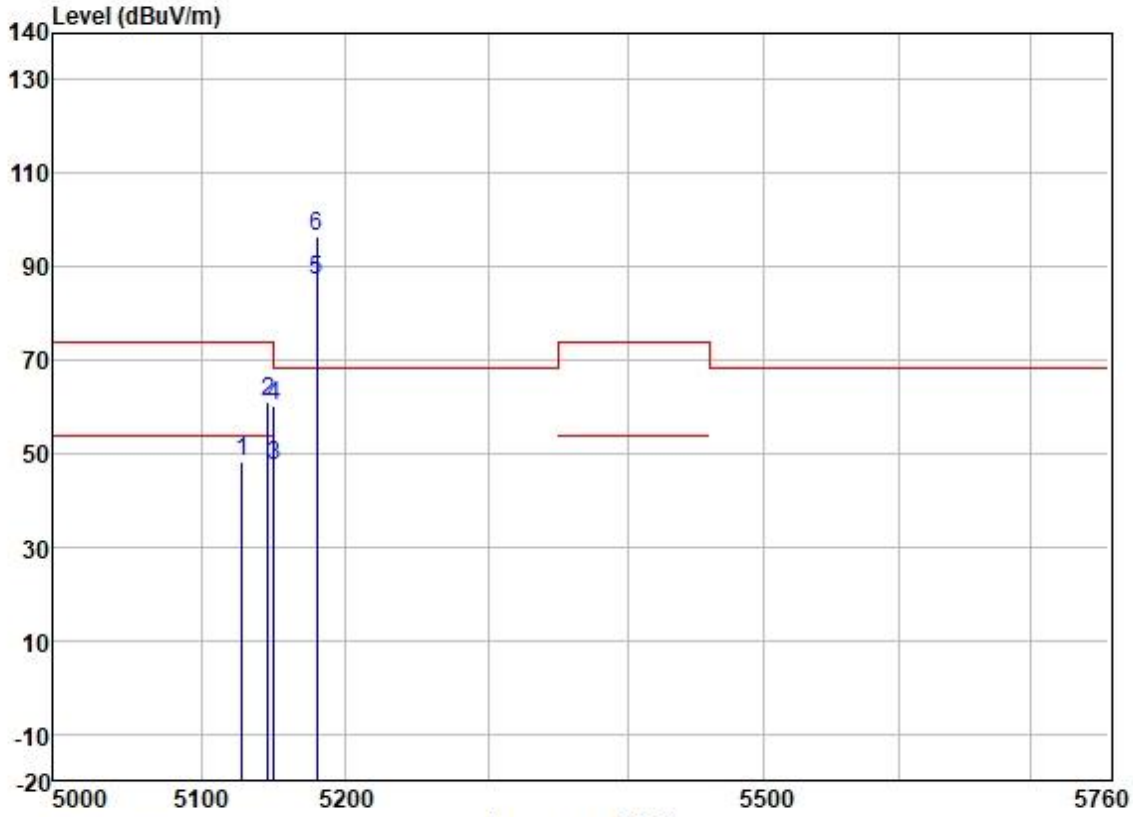
Test Mode: 34; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5230.000	84.83	31.74	5.70	36.87	85.40	------	------	VERTICAL	Average
2 *	5230.000	93.92	31.74	5.70	36.87	94.49	68.20	26.29	VERTICAL	Peak
3	5350.020	47.05	31.77	6.05	36.88	47.99	54.00	-6.01	VERTICAL	Average
4	5350.020	58.24	31.77	6.05	36.88	59.18	74.00	-14.82	VERTICAL	Peak
5	5351.398	59.15	31.77	6.05	36.88	60.09	74.00	-13.91	VERTICAL	Peak
6	5356.752	47.62	31.78	6.03	36.88	48.55	54.00	-5.45	VERTICAL	Average

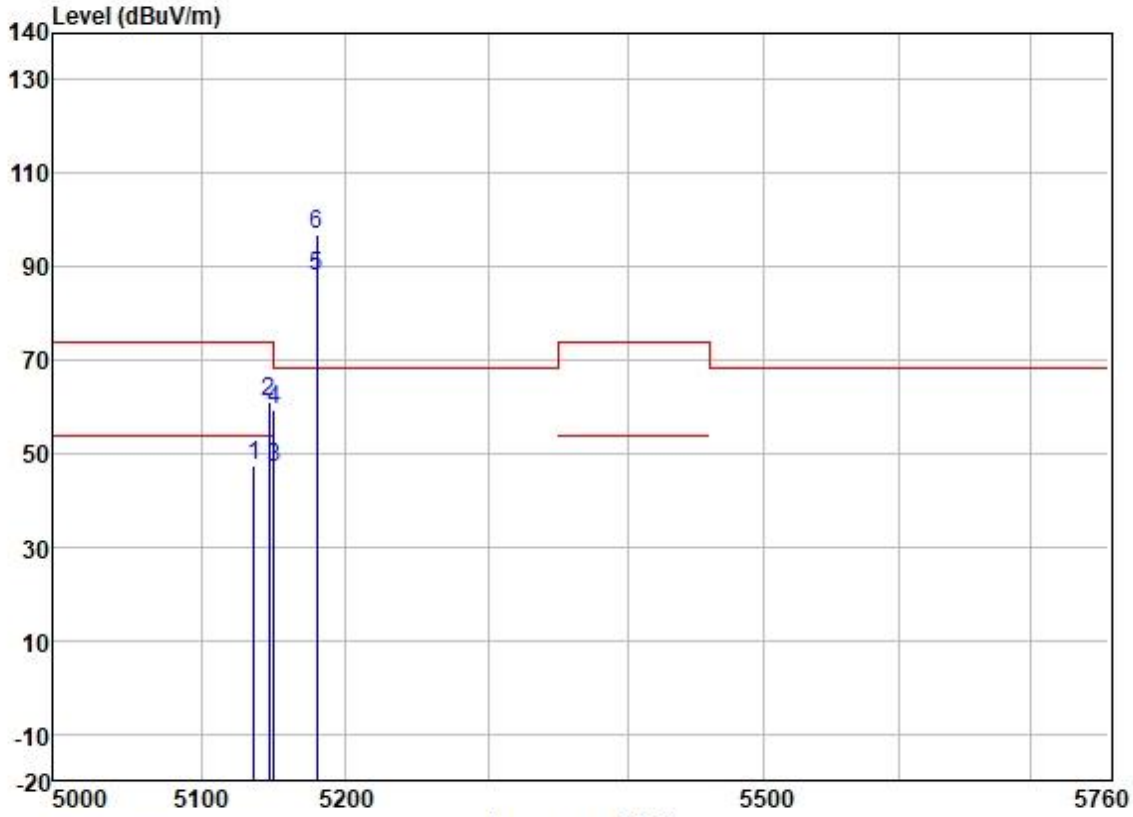
Test Mode: 34; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5128.004	47.58	31.72	5.63	36.86	48.07	54.00	-5.93	HORIZONTAL	Average
2	5146.059	60.40	31.72	5.62	36.86	60.88	74.00	-13.12	HORIZONTAL	Peak
3	5149.980	47.01	31.72	5.62	36.86	47.49	54.00	-6.51	HORIZONTAL	Average
4	5149.980	59.76	31.72	5.62	36.86	60.24	74.00	-13.76	HORIZONTAL	Peak
5	5180.000	86.78	31.73	5.61	36.87	87.25	------	------	HORIZONTAL	Average
6 *	5180.000	96.08	31.73	5.61	36.87	96.55	68.20	28.35	HORIZONTAL	Peak

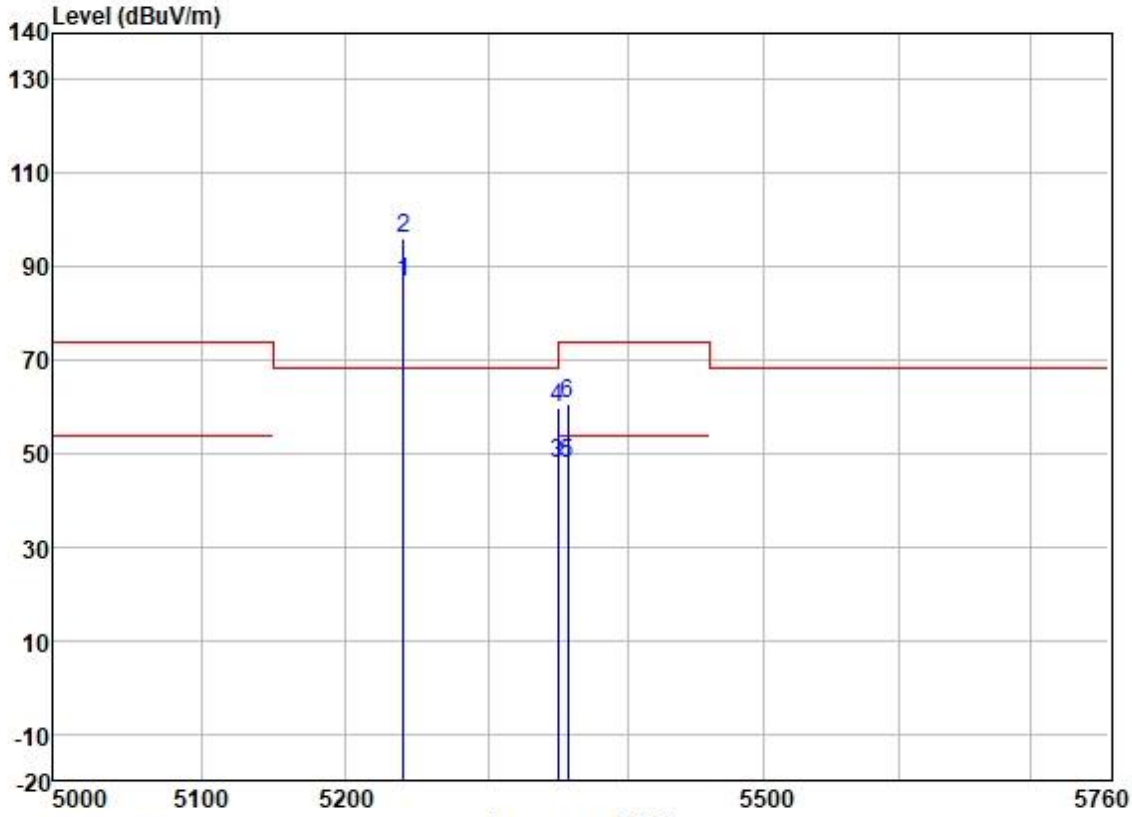
Test Mode: 34; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5136.375	47.04	31.72	5.63	36.86	47.53	54.00	-6.47	VERTICAL	Average
2	5146.658	60.60	31.72	5.62	36.86	61.08	74.00	-12.92	VERTICAL	Peak
3	5149.980	46.71	31.72	5.62	36.86	47.19	54.00	-6.81	VERTICAL	Average
4	5149.980	58.97	31.72	5.62	36.86	59.45	74.00	-14.55	VERTICAL	Peak
5	5180.000	87.58	31.73	5.61	36.87	88.05	------	------	VERTICAL	Average
6 *	5180.000	96.27	31.73	5.61	36.87	96.74	68.20	28.54	VERTICAL	Peak

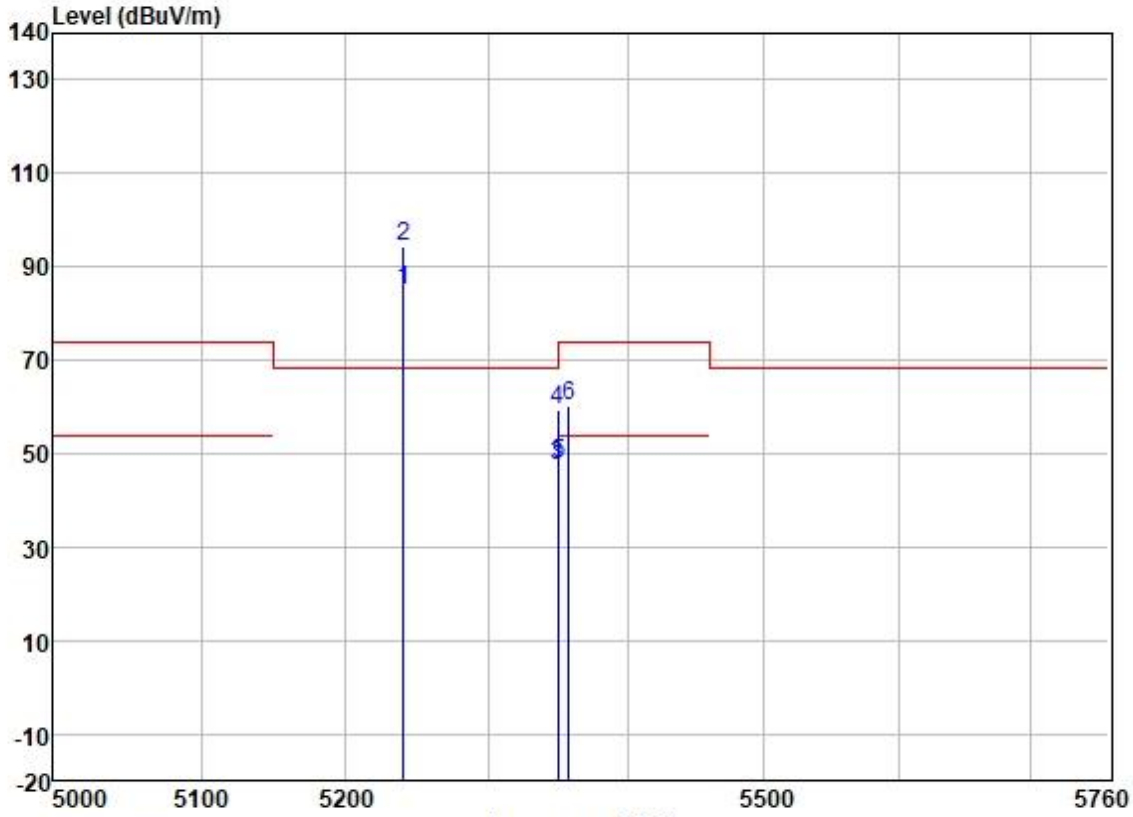
Test Mode: 34; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5240.000	86.04	31.75	5.74	36.87	86.66	------	------	HORIZONTAL	Average
2	*	5240.000	95.37	31.75	5.74	36.87	95.99	68.20	27.79	HORIZONTAL	Peak
3		5350.020	46.91	31.77	6.05	36.88	47.85	54.00	-6.15	HORIZONTAL	Average
4		5350.020	58.73	31.77	6.05	36.88	59.67	74.00	-14.33	HORIZONTAL	Peak
5		5356.596	46.89	31.78	6.03	36.88	47.82	54.00	-6.18	HORIZONTAL	Average
6		5357.164	59.76	31.78	6.03	36.88	60.69	74.00	-13.31	HORIZONTAL	Peak

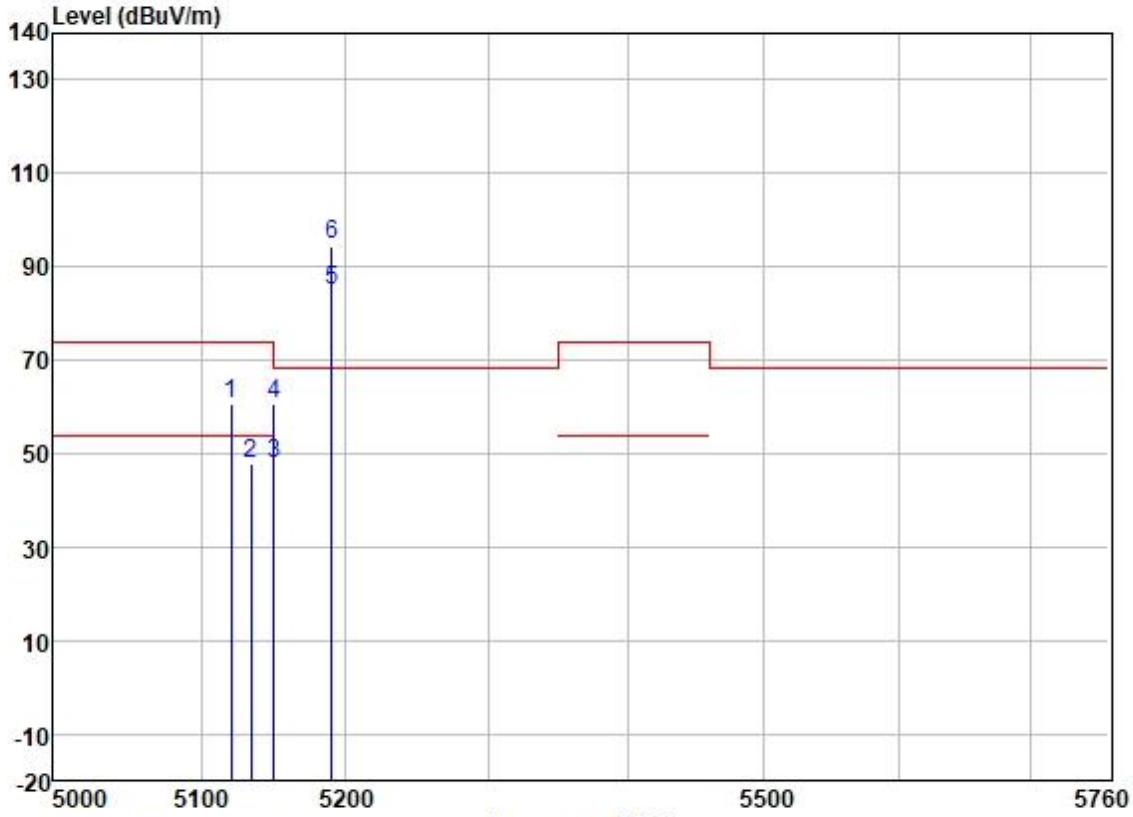
Test Mode: 34; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5240.000	84.52	31.75	5.74	36.87	85.14	------	------	VERTICAL	Average
2	*	5240.000	93.85	31.75	5.74	36.87	94.47	68.20	26.27	VERTICAL	Peak
3		5350.020	46.55	31.77	6.05	36.88	47.49	54.00	-6.51	VERTICAL	Average
4		5350.020	58.33	31.77	6.05	36.88	59.27	74.00	-14.73	VERTICAL	Peak
5		5350.504	46.83	31.77	6.05	36.88	47.77	54.00	-6.23	VERTICAL	Average
6		5357.873	59.19	31.78	6.03	36.88	60.12	74.00	-13.88	VERTICAL	Peak

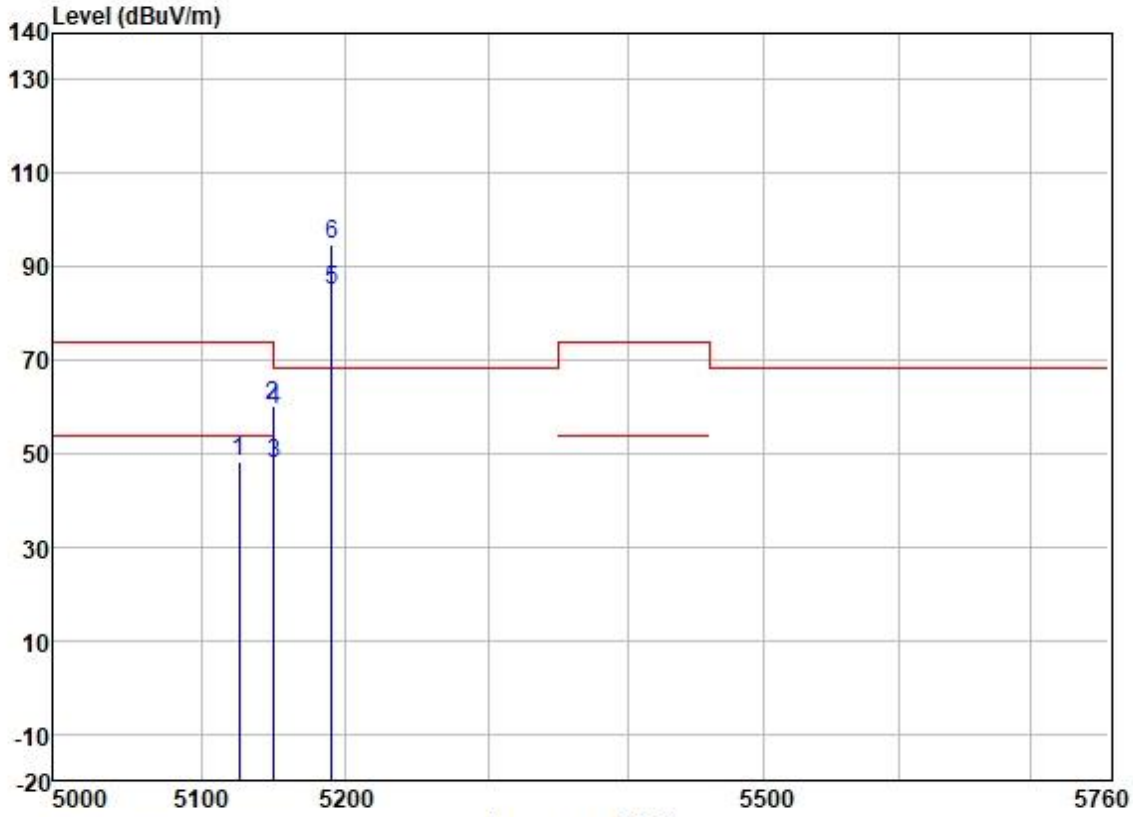
Test Mode: 34; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5120.680	60.02	31.72	5.64	36.86	60.52	74.00	-13.48	HORIZONTAL	Peak
2	5134.274	47.40	31.72	5.63	36.86	47.89	54.00	-6.11	HORIZONTAL	Average
3	5149.980	47.32	31.72	5.62	36.86	47.80	54.00	-6.20	HORIZONTAL	Average
4	5149.980	59.97	31.72	5.62	36.86	60.45	74.00	-13.55	HORIZONTAL	Peak
5	5190.000	84.50	31.73	5.60	36.87	84.96	------	------	HORIZONTAL	Average
6 *	5190.000	94.10	31.73	5.60	36.87	94.56	68.20	26.36	HORIZONTAL	Peak

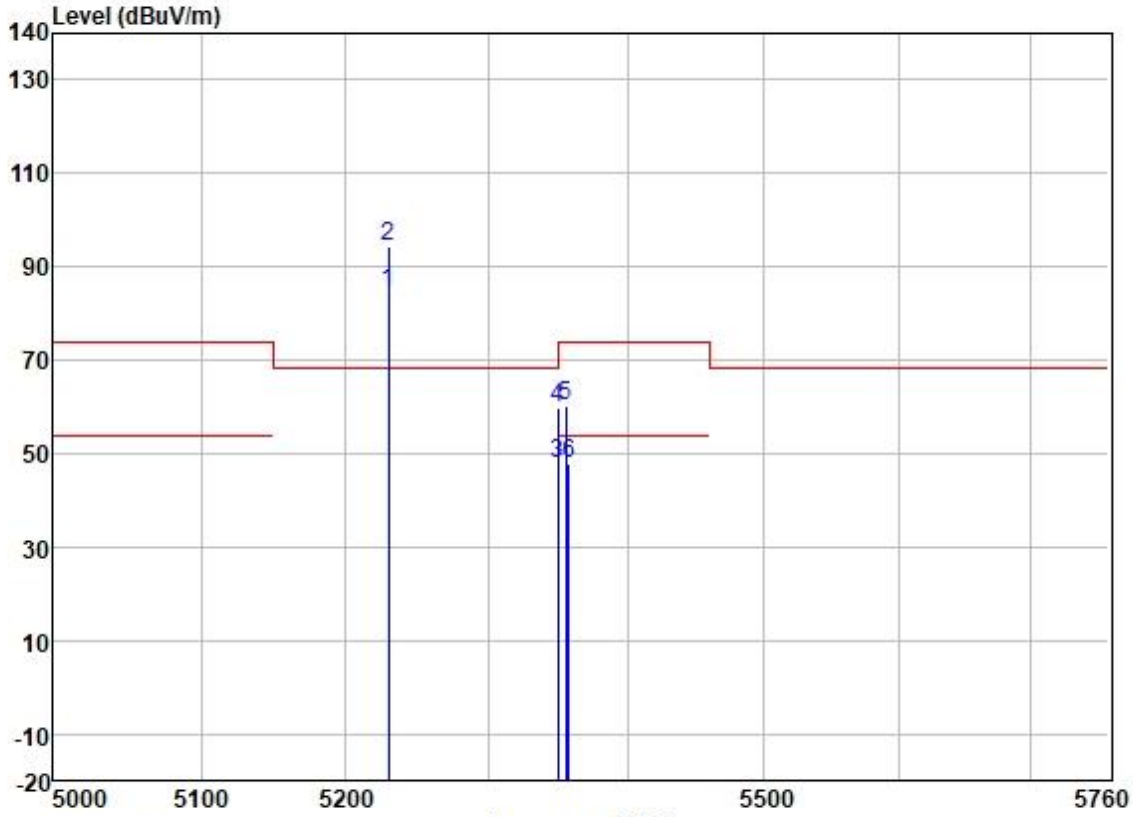
Test Mode: 34; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5126.161	47.80	31.72	5.64	36.86	48.30	54.00	-5.70	VERTICAL	Average
2	5149.102	59.62	31.72	5.62	36.86	60.10	74.00	-13.90	VERTICAL	Peak
3	5149.980	47.56	31.72	5.62	36.86	48.04	54.00	-5.96	VERTICAL	Average
4	5149.980	58.83	31.72	5.62	36.86	59.31	74.00	-14.69	VERTICAL	Peak
5	5190.000	84.68	31.73	5.60	36.87	85.14	------	------	VERTICAL	Average
6 *	5190.000	94.13	31.73	5.60	36.87	94.59	68.20	26.39	VERTICAL	Peak

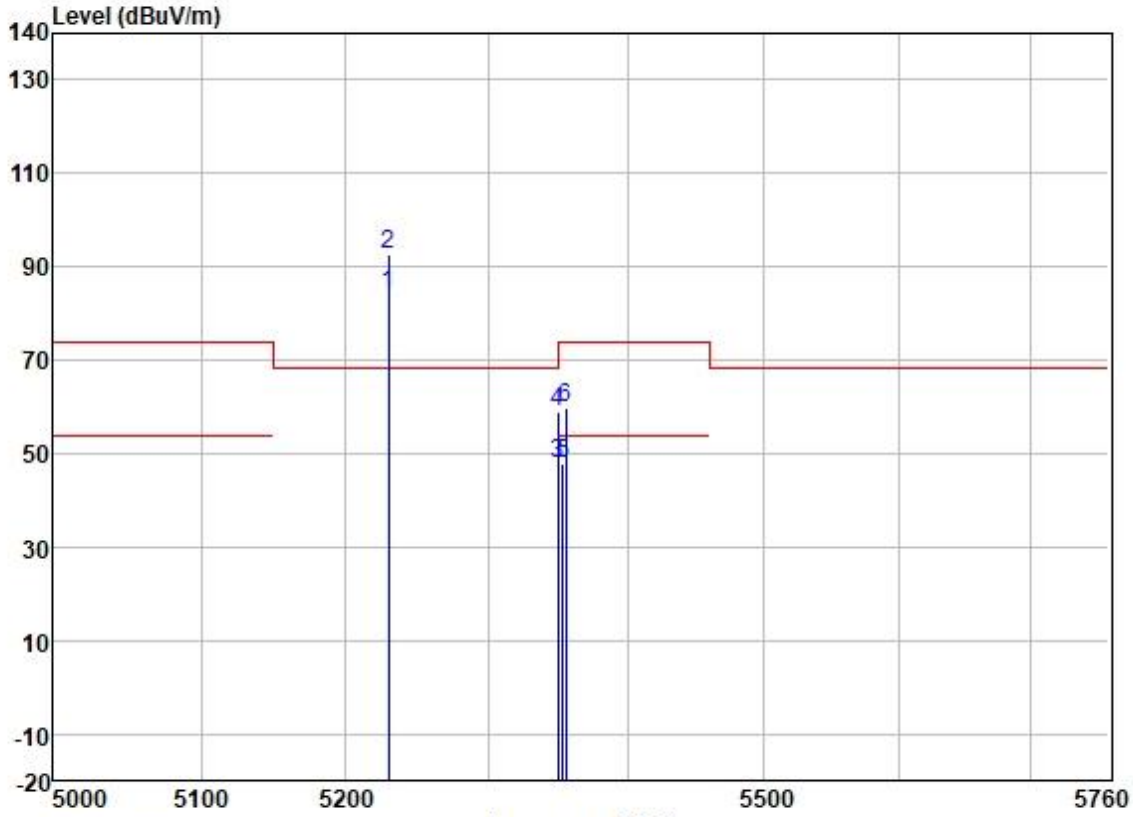
Test Mode: 34; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5230.000	83.93	31.74	5.70	36.87	84.50	------	------	HORIZONTAL	Average
2	*	5230.000	93.67	31.74	5.70	36.87	94.24	68.20	26.04	HORIZONTAL	Peak
3		5350.020	46.99	31.77	6.05	36.88	47.93	54.00	-6.07	HORIZONTAL	Average
4		5350.020	58.98	31.77	6.05	36.88	59.92	74.00	-14.08	HORIZONTAL	Peak
5		5355.292	59.14	31.78	6.03	36.88	60.07	74.00	-13.93	HORIZONTAL	Peak
6		5357.402	47.03	31.78	6.03	36.88	47.96	54.00	-6.04	HORIZONTAL	Average

Test Mode: 34; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5230.000	83.48	31.74	5.70	36.87	84.05	------	------	VERTICAL	Average
2	*	5230.000	92.05	31.74	5.70	36.87	92.62	68.20	24.42	VERTICAL	Peak
3		5350.020	46.76	31.77	6.05	36.88	47.70	54.00	-6.30	VERTICAL	Average
4		5350.020	57.79	31.77	6.05	36.88	58.73	74.00	-15.27	VERTICAL	Peak
5		5353.506	46.94	31.77	6.05	36.88	47.88	54.00	-6.12	VERTICAL	Average
6		5355.129	59.00	31.78	6.03	36.88	59.93	74.00	-14.07	VERTICAL	Peak

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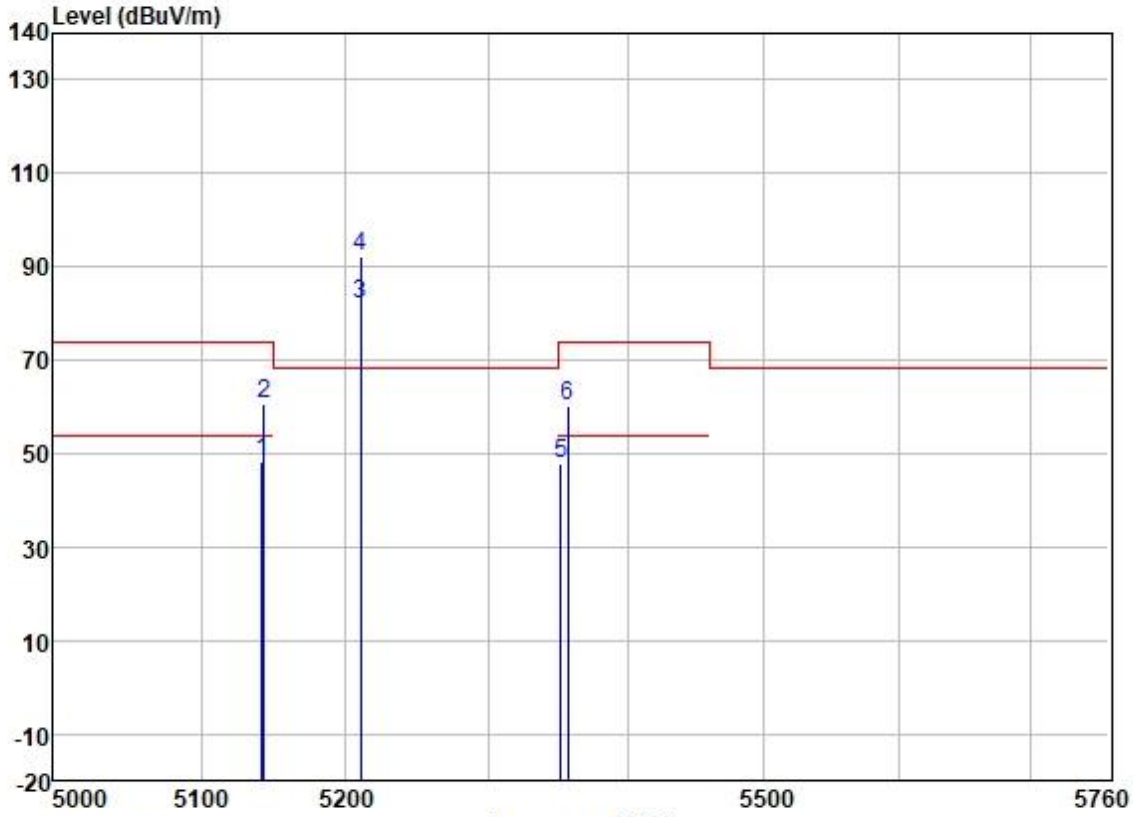
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com

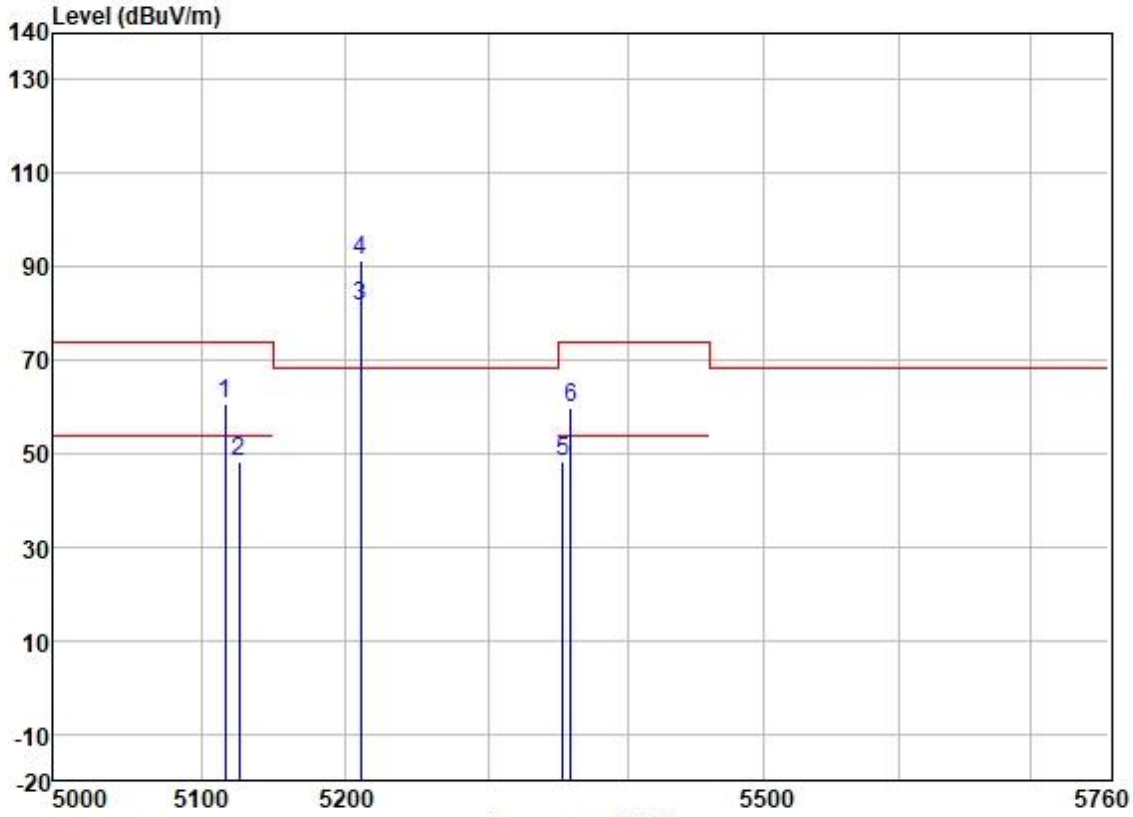
Test Mode: 34; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5141.759	47.78	31.72	5.63	36.86	48.27	54.00	-5.73	HORIZONTAL	Average
2		5143.037	59.98	31.72	5.62	36.86	60.46	74.00	-13.54	HORIZONTAL	Peak
3		5210.000	81.45	31.74	5.65	36.87	81.97	------	------	HORIZONTAL	Average
4	*	5210.000	91.64	31.74	5.65	36.87	92.16	68.20	23.96	HORIZONTAL	Peak
5		5351.744	47.10	31.77	6.05	36.88	48.04	54.00	-5.96	HORIZONTAL	Average
6		5357.069	59.37	31.78	6.03	36.88	60.30	74.00	-13.70	HORIZONTAL	Peak

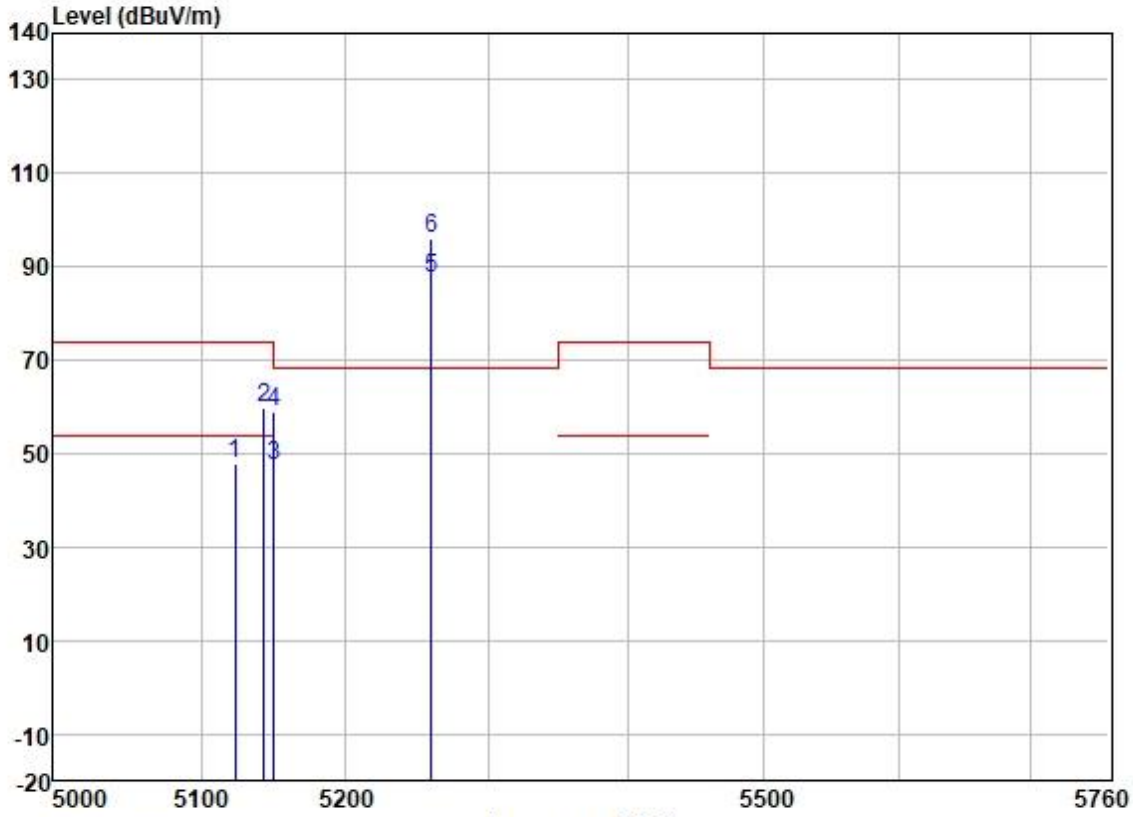
Test Mode: 34; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5116.764	59.98	31.72	5.64	36.86	60.48	74.00	-13.52	VERTICAL	Peak
2		5126.187	47.84	31.72	5.64	36.86	48.34	54.00	-5.66	VERTICAL	Average
3		5210.000	80.99	31.74	5.65	36.87	81.51	------	------	VERTICAL	Average
4	*	5210.000	90.73	31.74	5.65	36.87	91.25	68.20	23.05	VERTICAL	Peak
5		5353.607	47.30	31.77	6.05	36.88	48.24	54.00	-5.76	VERTICAL	Average
6		5359.201	58.98	31.78	6.03	36.88	59.91	74.00	-14.09	VERTICAL	Peak

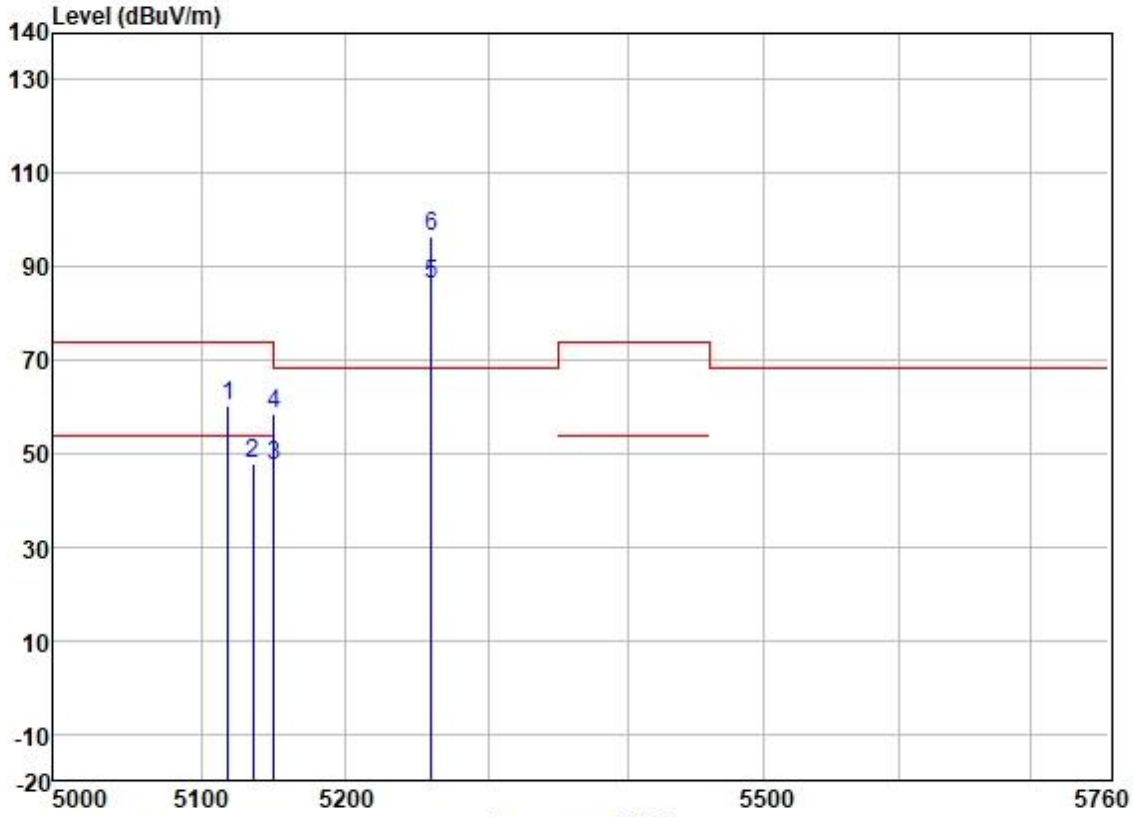
Test Mode: 36; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5123.226	47.43	31.72	5.64	36.86	47.93	54.00	-6.07	HORIZONTAL	Average
2	5143.346	59.46	31.72	5.62	36.86	59.94	74.00	-14.06	HORIZONTAL	Peak
3	5149.980	46.94	31.72	5.62	36.86	47.42	54.00	-6.58	HORIZONTAL	Average
4	5149.980	58.56	31.72	5.62	36.86	59.04	74.00	-14.96	HORIZONTAL	Peak
5	5260.000	86.72	31.75	5.77	36.87	87.37	------	------	HORIZONTAL	Average
6 *	5260.000	95.37	31.75	5.77	36.87	96.02	68.20	27.82	HORIZONTAL	Peak

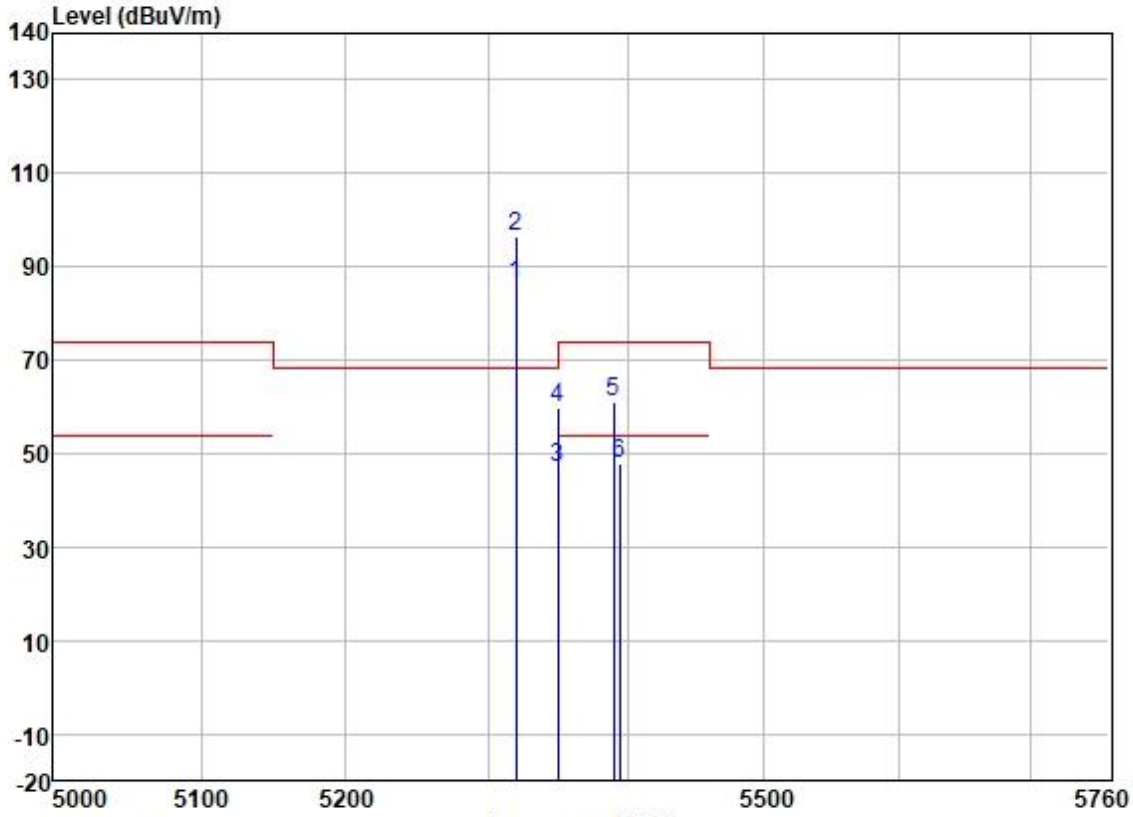
Test Mode: 36; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5118.431	59.90	31.72	5.64	36.86	60.40	74.00	-13.60	VERTICAL	Peak
2		5135.858	47.14	31.72	5.63	36.86	47.63	54.00	-6.37	VERTICAL	Average
3		5149.980	46.76	31.72	5.62	36.86	47.24	54.00	-6.76	VERTICAL	Average
4		5149.980	58.12	31.72	5.62	36.86	58.60	74.00	-15.40	VERTICAL	Peak
5		5260.000	85.78	31.75	5.77	36.87	86.43	------	------	VERTICAL	Average
6	*	5260.000	95.83	31.75	5.77	36.87	96.48	68.20	28.28	VERTICAL	Peak

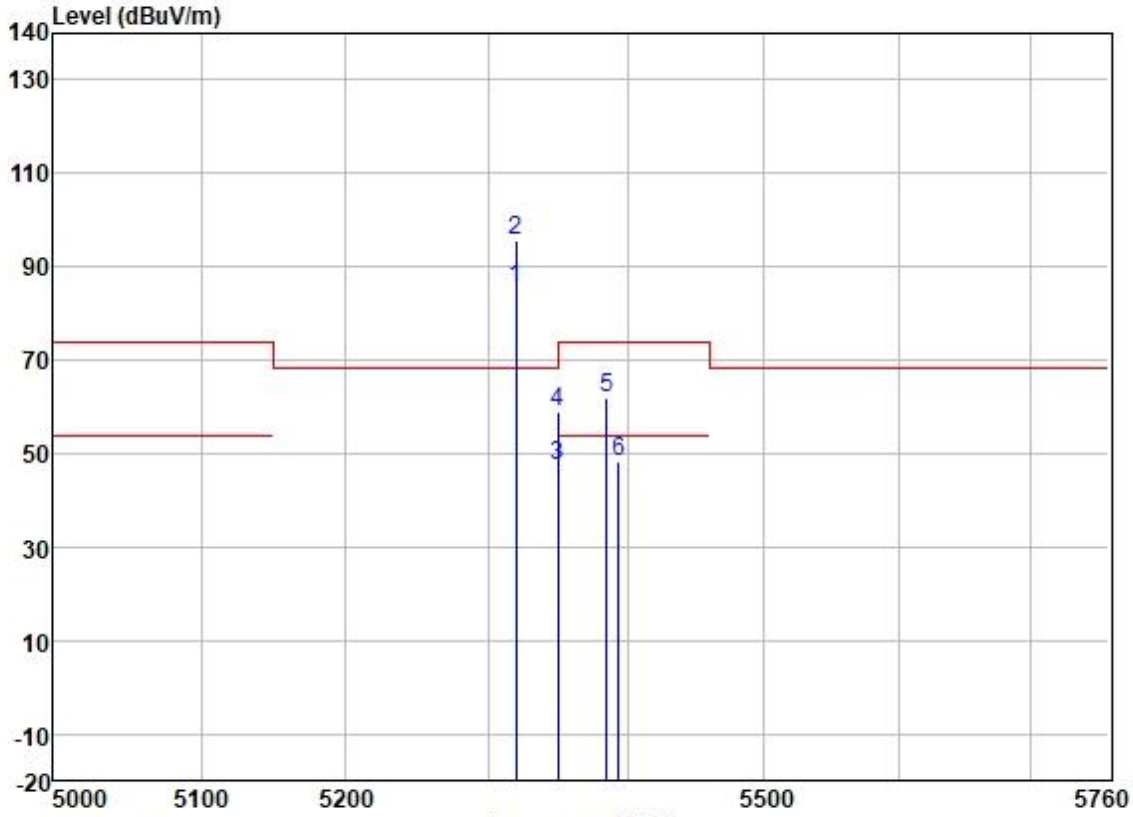
Test Mode: 36; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5320.000	85.30	31.77	6.08	36.88	86.27	------	------	HORIZONTAL	Average
2	*	5320.000	95.70	31.77	6.08	36.88	96.67	68.20	28.47	HORIZONTAL	Peak
3		5350.020	46.22	31.77	6.05	36.88	47.16	54.00	-6.84	HORIZONTAL	Average
4		5350.020	59.04	31.77	6.05	36.88	59.98	74.00	-14.02	HORIZONTAL	Peak
5		5390.117	60.23	31.78	6.00	36.88	61.13	74.00	-12.87	HORIZONTAL	Peak
6		5394.552	47.15	31.78	6.00	36.88	48.05	54.00	-5.95	HORIZONTAL	Average

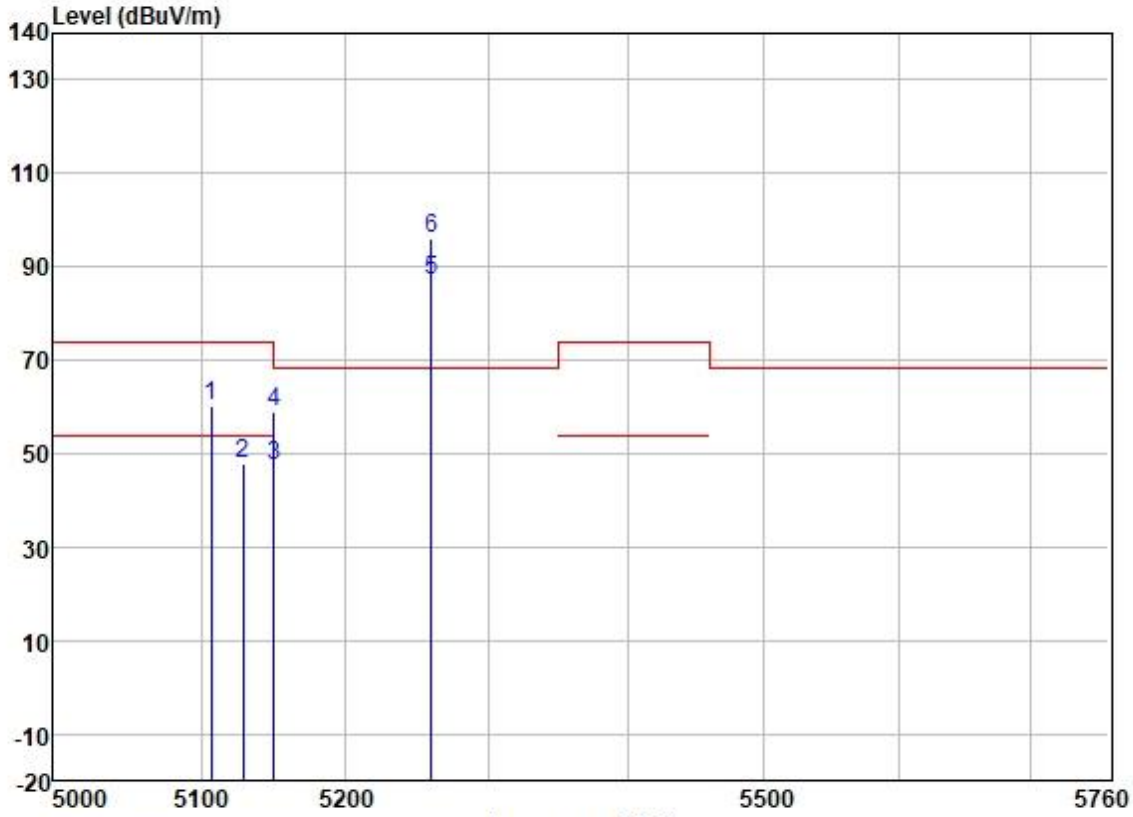
Test Mode: 36; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5320.000	84.62	31.77	6.08	36.88	85.59	------	------	VERTICAL	Average
2	*	5320.000	94.87	31.77	6.08	36.88	95.84	68.20	27.64	VERTICAL	Peak
3		5350.020	46.49	31.77	6.05	36.88	47.43	54.00	-6.57	VERTICAL	Average
4		5350.020	57.99	31.77	6.05	36.88	58.93	74.00	-15.07	VERTICAL	Peak
5		5384.981	60.83	31.78	6.02	36.88	61.75	74.00	-12.25	VERTICAL	Peak
6		5393.645	47.24	31.78	6.00	36.88	48.14	54.00	-5.86	VERTICAL	Average

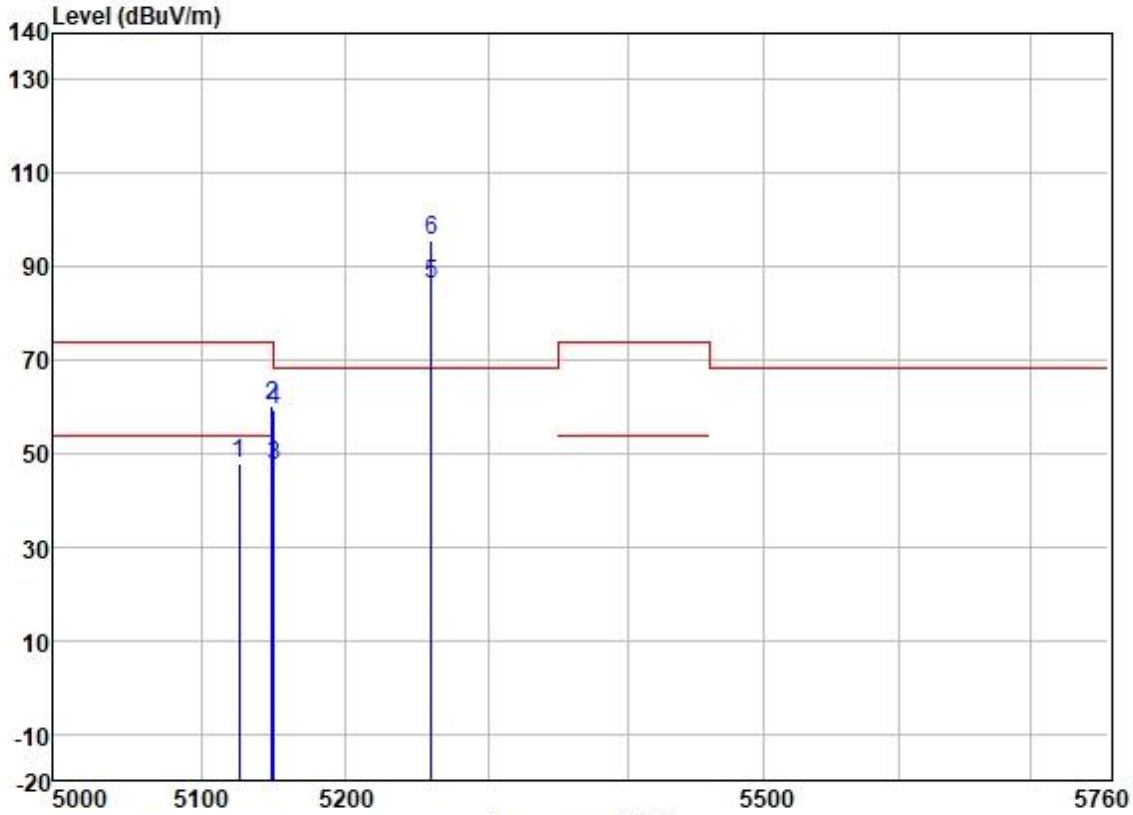
Test Mode: 36; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5107.081	59.87	31.72	5.65	36.86	60.38	74.00	-13.62	HORIZONTAL	Peak
2		5128.560	47.18	31.72	5.63	36.86	47.67	54.00	-6.33	HORIZONTAL	Average
3		5149.980	47.02	31.72	5.62	36.86	47.50	54.00	-6.50	HORIZONTAL	Average
4		5149.980	58.56	31.72	5.62	36.86	59.04	74.00	-14.96	HORIZONTAL	Peak
5		5260.000	86.35	31.75	5.77	36.87	87.00	------	------	HORIZONTAL	Average
6	*	5260.000	95.47	31.75	5.77	36.87	96.12	68.20	27.92	HORIZONTAL	Peak

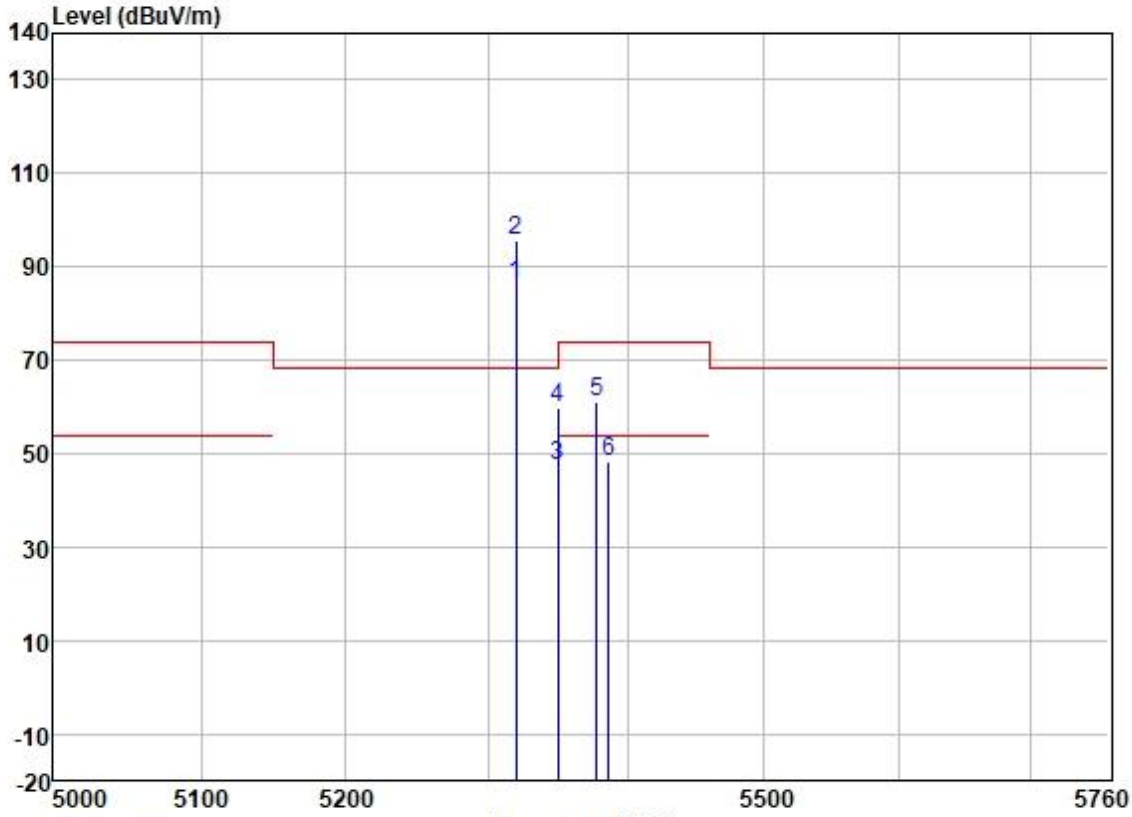
Test Mode: 36; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5126.070	47.29	31.72	5.64	36.86	47.79	54.00	-6.21	VERTICAL	Average
2		5148.343	59.75	31.72	5.62	36.86	60.23	74.00	-13.77	VERTICAL	Peak
3		5149.980	46.82	31.72	5.62	36.86	47.30	54.00	-6.70	VERTICAL	Average
4		5149.980	59.03	31.72	5.62	36.86	59.51	74.00	-14.49	VERTICAL	Peak
5		5260.000	85.65	31.75	5.77	36.87	86.30	------	------	VERTICAL	Average
6	*	5260.000	94.98	31.75	5.77	36.87	95.63	68.20	27.43	VERTICAL	Peak

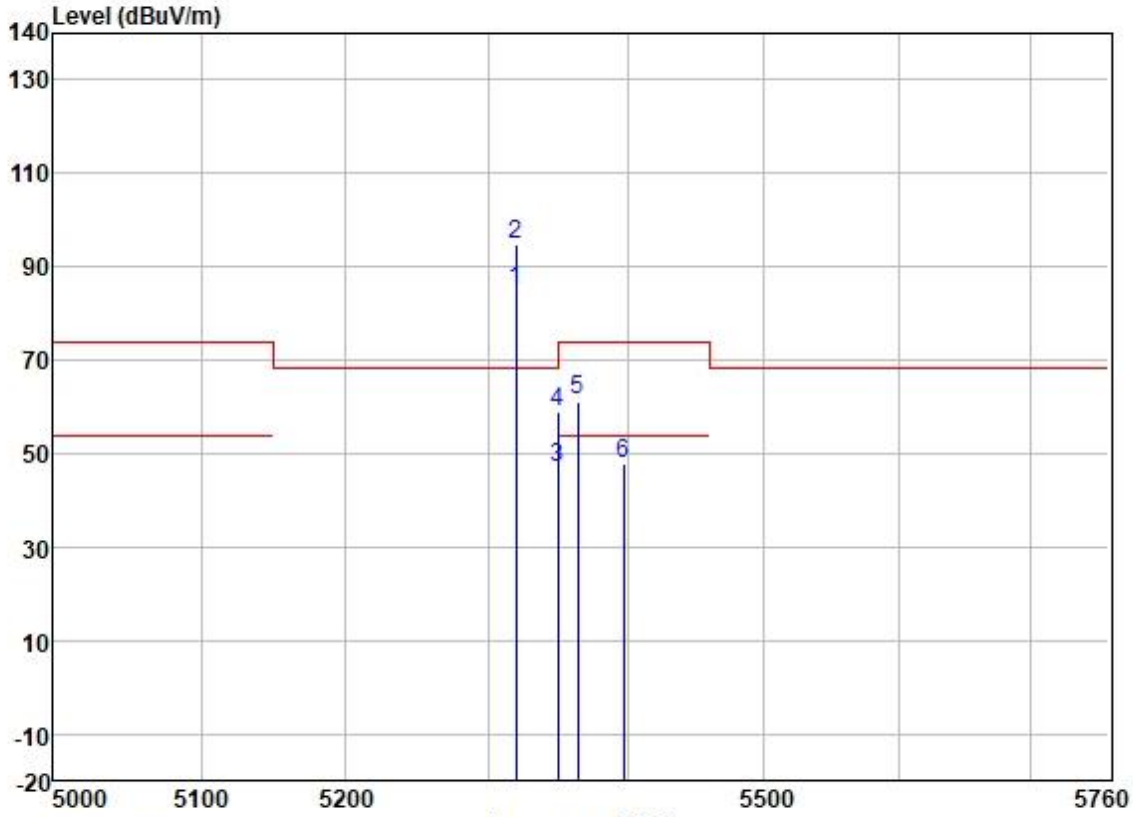
Test Mode: 36; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5320.000	85.29	31.77	6.08	36.88	86.26	------	------	HORIZONTAL	Average
2	*	5320.000	94.82	31.77	6.08	36.88	95.79	68.20	27.59	HORIZONTAL	Peak
3		5350.020	46.46	31.77	6.05	36.88	47.40	54.00	-6.60	HORIZONTAL	Average
4		5350.020	58.78	31.77	6.05	36.88	59.72	74.00	-14.28	HORIZONTAL	Peak
5		5377.438	60.29	31.78	6.02	36.88	61.21	74.00	-12.79	HORIZONTAL	Peak
6		5386.088	47.18	31.78	6.00	36.88	48.08	54.00	-5.92	HORIZONTAL	Average

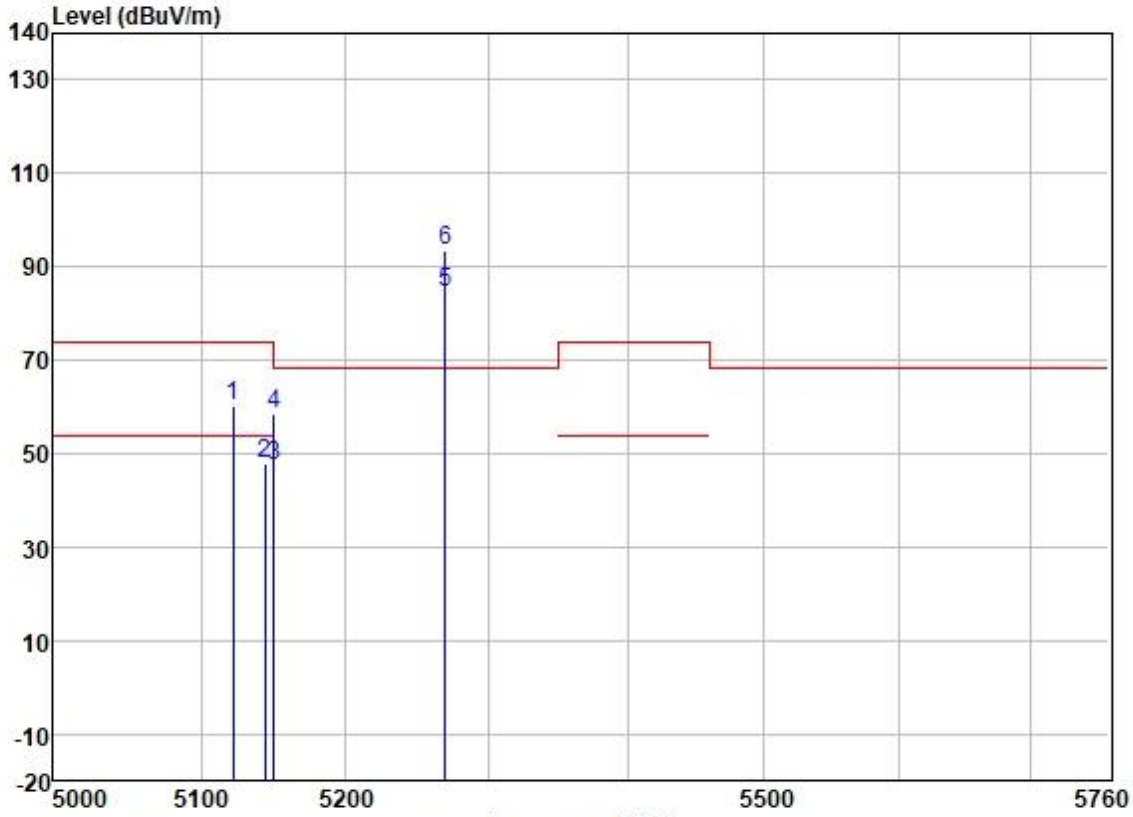
Test Mode: 36; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5320.000	84.10	31.77	6.08	36.88	85.07	------	------	VERTICAL	Average
2	*	5320.000	93.97	31.77	6.08	36.88	94.94	68.20	26.74	VERTICAL	Peak
3		5350.020	46.17	31.77	6.05	36.88	47.11	54.00	-6.89	VERTICAL	Average
4		5350.020	57.88	31.77	6.05	36.88	58.82	74.00	-15.18	VERTICAL	Peak
5		5363.785	60.35	31.78	6.03	36.88	61.28	74.00	-12.72	VERTICAL	Peak
6		5396.872	46.97	31.78	6.00	36.88	47.87	54.00	-6.13	VERTICAL	Average

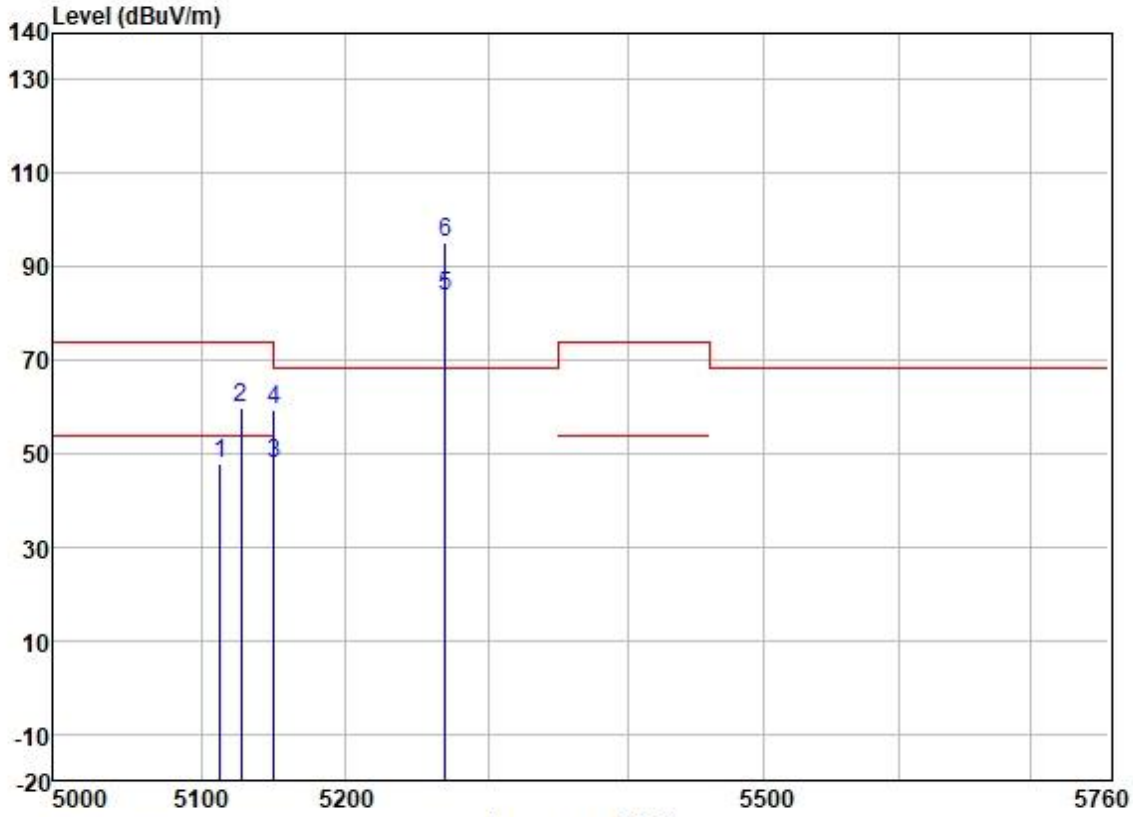
Test Mode: 36; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5122.020	59.86	31.72	5.64	36.86	60.36	74.00	-13.64	HORIZONTAL	Peak
2		5143.738	47.45	31.72	5.62	36.86	47.93	54.00	-6.07	HORIZONTAL	Average
3		5149.980	47.11	31.72	5.62	36.86	47.59	54.00	-6.41	HORIZONTAL	Average
4		5149.980	57.96	31.72	5.62	36.86	58.44	74.00	-15.56	HORIZONTAL	Peak
5		5270.000	83.64	31.75	5.80	36.87	84.32	------	------	HORIZONTAL	Average
6	*	5270.000	92.79	31.75	5.80	36.87	93.47	68.20	25.27	HORIZONTAL	Peak

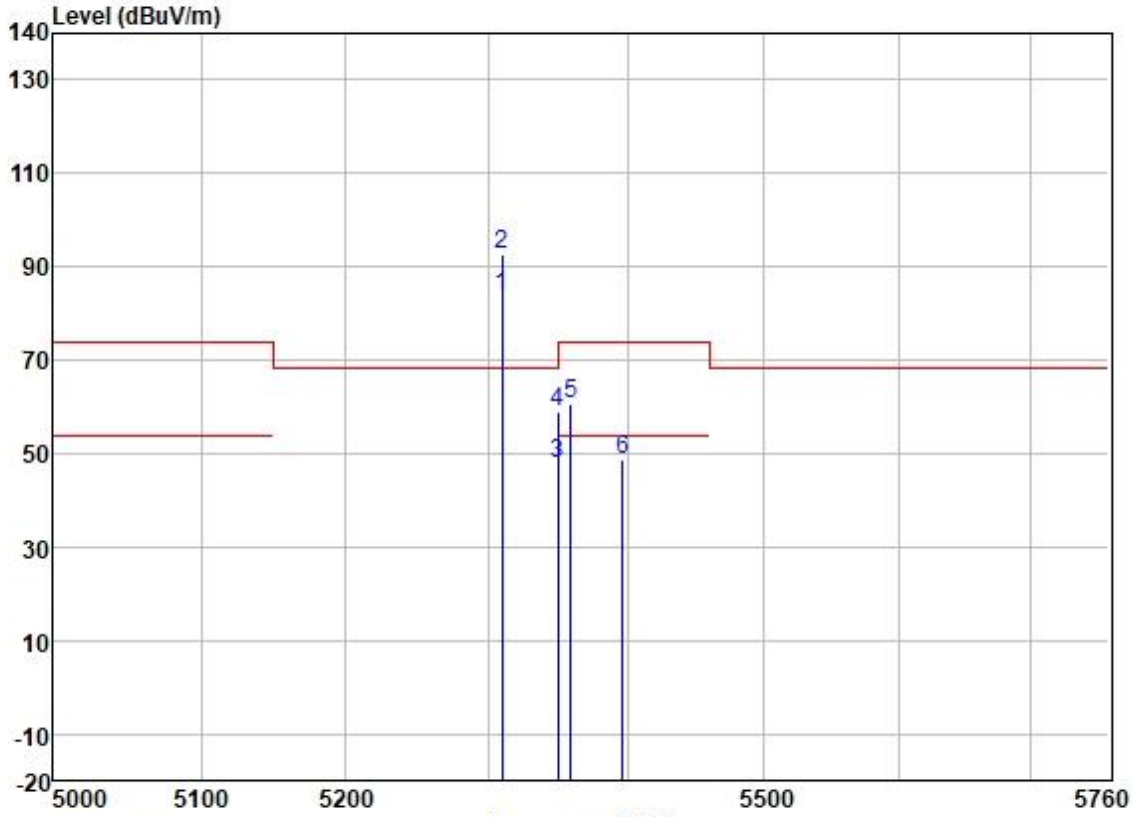
Test Mode: 36; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5112.768	47.44	31.72	5.64	36.86	47.94	54.00	-6.06	VERTICAL	Average
2	5127.145	59.42	31.72	5.63	36.86	59.91	74.00	-14.09	VERTICAL	Peak
3	5149.980	47.23	31.72	5.62	36.86	47.71	54.00	-6.29	VERTICAL	Average
4	5149.980	58.82	31.72	5.62	36.86	59.30	74.00	-14.70	VERTICAL	Peak
5	5270.000	83.01	31.75	5.80	36.87	83.69	------	------	VERTICAL	Average
6 *	5270.000	94.32	31.75	5.80	36.87	95.00	68.20	26.80	VERTICAL	Peak

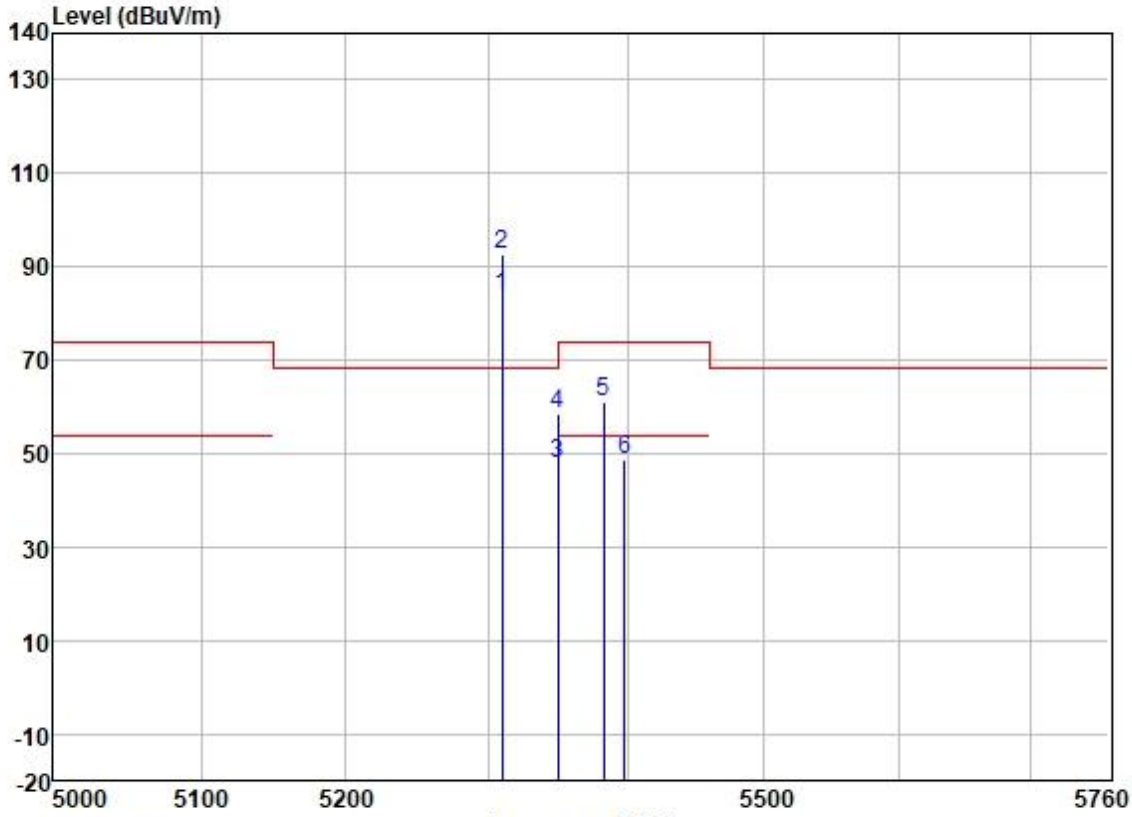
Test Mode: 36; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Trace: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5310.000	82.64	31.77	6.08	36.87	83.62	------	------	HORIZONTAL	Average
2	*	5310.000	91.80	31.77	6.08	36.87	92.78	68.20	24.58	HORIZONTAL	Peak
3		5350.020	46.79	31.77	6.05	36.88	47.73	54.00	-6.27	HORIZONTAL	Average
4		5350.020	58.15	31.77	6.05	36.88	59.09	74.00	-14.91	HORIZONTAL	Peak
5		5359.379	59.72	31.78	6.03	36.88	60.65	74.00	-13.35	HORIZONTAL	Peak
6		5396.118	47.64	31.78	6.00	36.88	48.54	54.00	-5.46	HORIZONTAL	Average

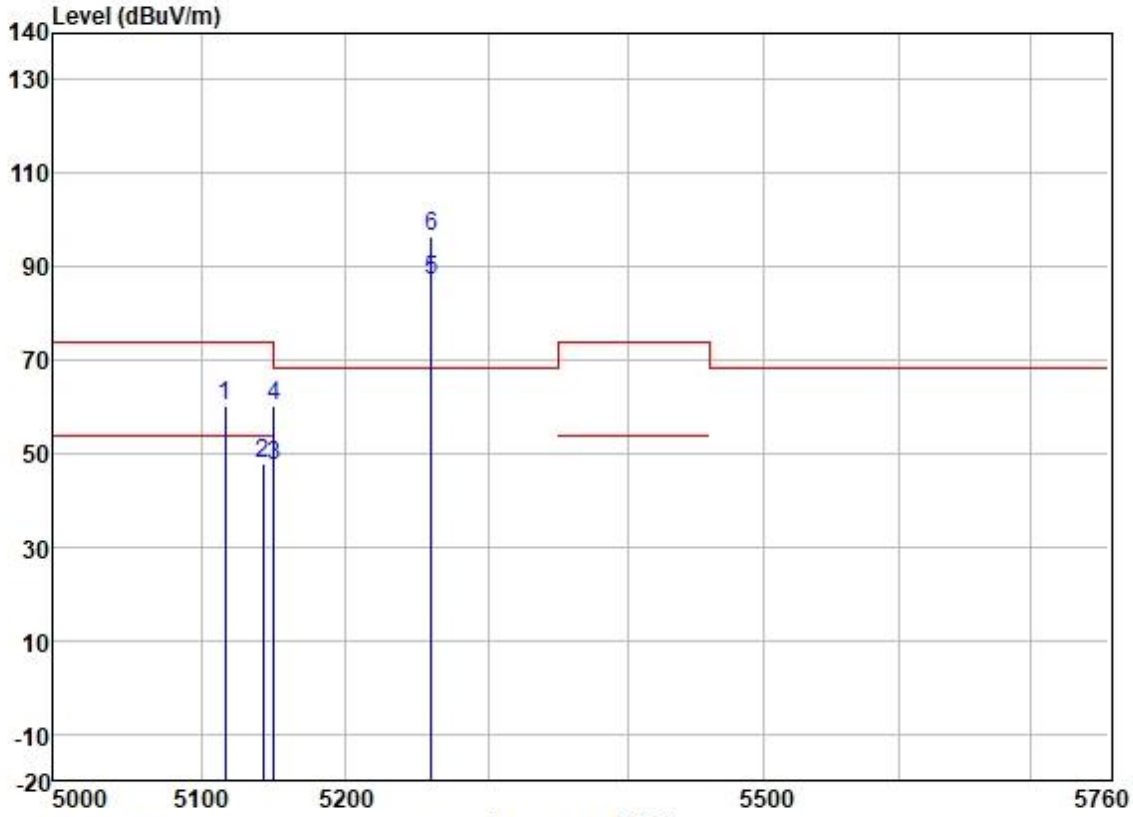
Test Mode: 36; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5310.000	82.72	31.77	6.08	36.87	83.70	------	------	VERTICAL	Average
2	*	5310.000	91.82	31.77	6.08	36.87	92.80	68.20	24.60	VERTICAL	Peak
3		5350.020	47.00	31.77	6.05	36.88	47.94	54.00	-6.06	VERTICAL	Average
4		5350.020	57.73	31.77	6.05	36.88	58.67	74.00	-15.33	VERTICAL	Peak
5		5383.037	60.27	31.78	6.02	36.88	61.19	74.00	-12.81	VERTICAL	Peak
6		5398.059	47.69	31.78	6.00	36.88	48.59	54.00	-5.41	VERTICAL	Average

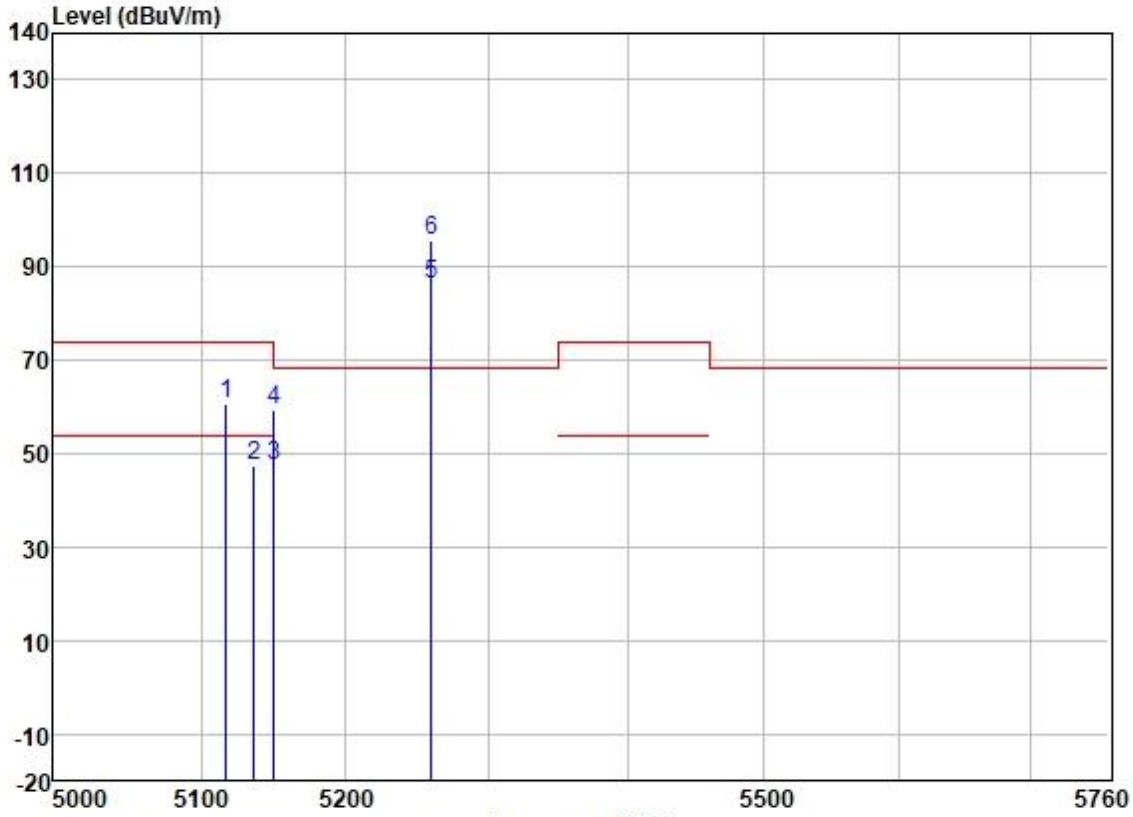
Test Mode: 36; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5116.655	59.91	31.72	5.64	36.86	60.41	74.00	-13.59	HORIZONTAL	Peak
2	5142.632	47.21	31.72	5.62	36.86	47.69	54.00	-6.31	HORIZONTAL	Average
3	5149.980	46.94	31.72	5.62	36.86	47.42	54.00	-6.58	HORIZONTAL	Average
4	5149.980	59.68	31.72	5.62	36.86	60.16	74.00	-13.84	HORIZONTAL	Peak
5	5260.000	86.57	31.75	5.77	36.87	87.22	------	------	HORIZONTAL	Average
6 *	5260.000	95.91	31.75	5.77	36.87	96.56	68.20	28.36	HORIZONTAL	Peak

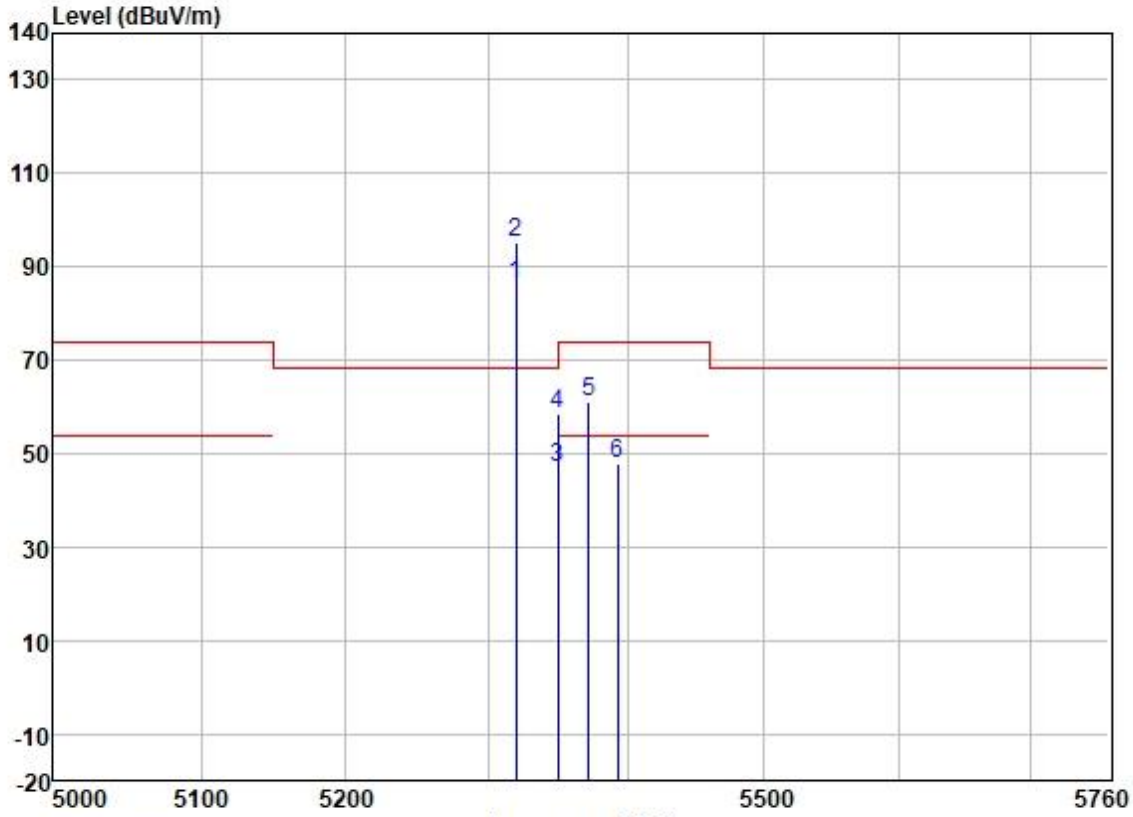
Test Mode: 36; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5117.010	60.27	31.72	5.64	36.86	60.77	74.00	-13.23	VERTICAL	Peak
2	5136.571	46.95	31.72	5.63	36.86	47.44	54.00	-6.56	VERTICAL	Average
3	5149.980	46.99	31.72	5.62	36.86	47.47	54.00	-6.53	VERTICAL	Average
4	5149.980	58.79	31.72	5.62	36.86	59.27	74.00	-14.73	VERTICAL	Peak
5	5260.000	85.41	31.75	5.77	36.87	86.06	------	------	VERTICAL	Average
6 *	5260.000	94.86	31.75	5.77	36.87	95.51	68.20	27.31	VERTICAL	Peak

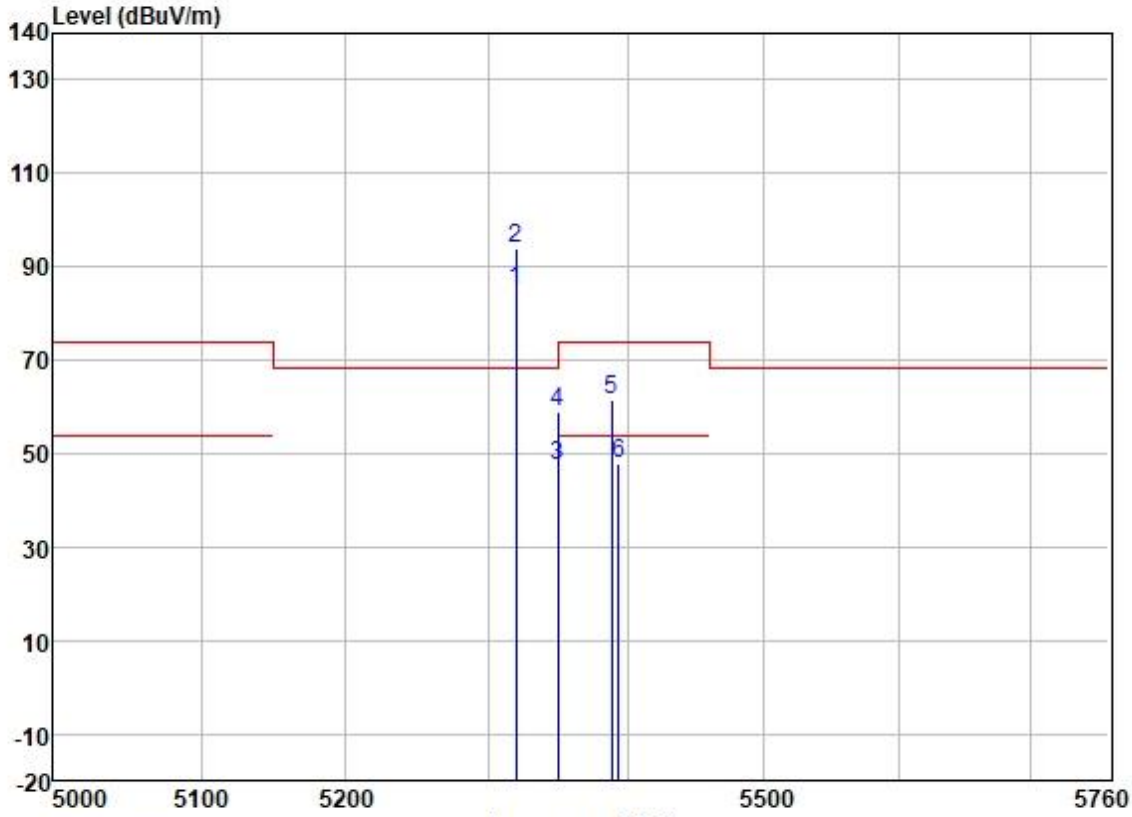
Test Mode: 36; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5320.000	85.13	31.77	6.08	36.88	86.10	------	------	HORIZONTAL	Average
2	*	5320.000	94.07	31.77	6.08	36.88	95.04	68.20	26.84	HORIZONTAL	Peak
3		5350.020	46.21	31.77	6.05	36.88	47.15	54.00	-6.85	HORIZONTAL	Average
4		5350.020	57.73	31.77	6.05	36.88	58.67	74.00	-15.33	HORIZONTAL	Peak
5		5372.012	60.19	31.78	6.02	36.88	61.11	74.00	-12.89	HORIZONTAL	Peak
6		5392.939	47.11	31.78	6.00	36.88	48.01	54.00	-5.99	HORIZONTAL	Average

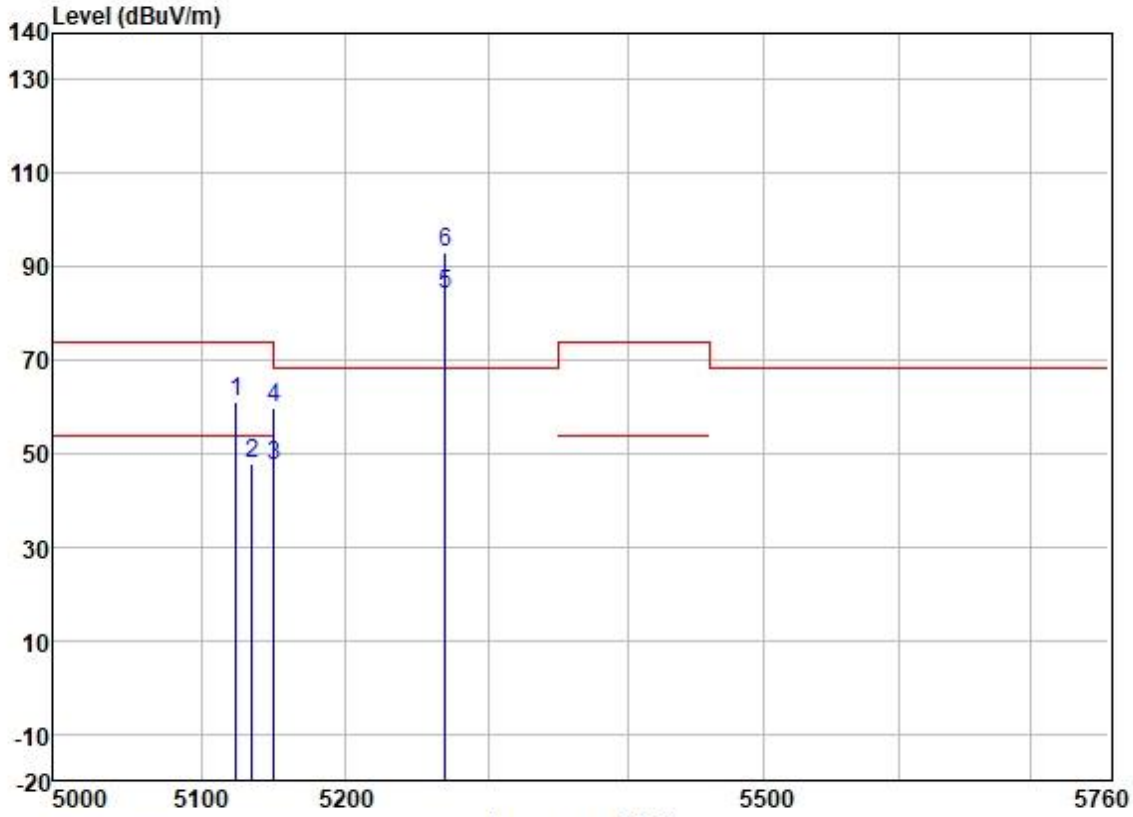
Test Mode: 36; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5320.000	83.92	31.77	6.08	36.88	84.89	------	------	VERTICAL	Average
2	*	5320.000	93.09	31.77	6.08	36.88	94.06	68.20	25.86	VERTICAL	Peak
3		5350.020	46.48	31.77	6.05	36.88	47.42	54.00	-6.58	VERTICAL	Average
4		5350.020	57.86	31.77	6.05	36.88	58.80	74.00	-15.20	VERTICAL	Peak
5		5388.405	60.58	31.78	6.00	36.88	61.48	74.00	-12.52	VERTICAL	Peak
6		5393.241	47.09	31.78	6.00	36.88	47.99	54.00	-6.01	VERTICAL	Average

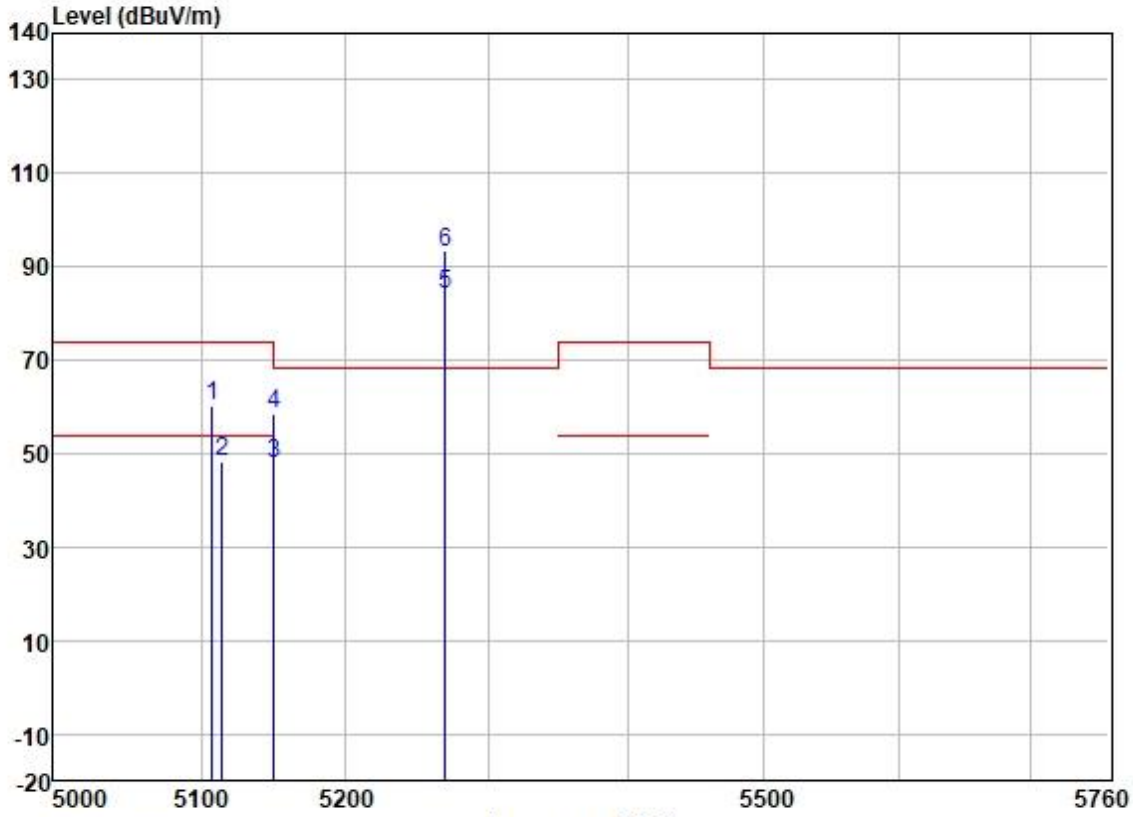
Test Mode: 36; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5123.990	60.38	31.72	5.64	36.86	60.88	74.00	-13.12	HORIZONTAL	Peak
2		5134.645	47.44	31.72	5.63	36.86	47.93	54.00	-6.07	HORIZONTAL	Average
3		5149.980	46.97	31.72	5.62	36.86	47.45	54.00	-6.55	HORIZONTAL	Average
4		5149.980	59.22	31.72	5.62	36.86	59.70	74.00	-14.30	HORIZONTAL	Peak
5		5270.000	83.53	31.75	5.80	36.87	84.21	------	------	HORIZONTAL	Average
6	*	5270.000	92.30	31.75	5.80	36.87	92.98	68.20	24.78	HORIZONTAL	Peak

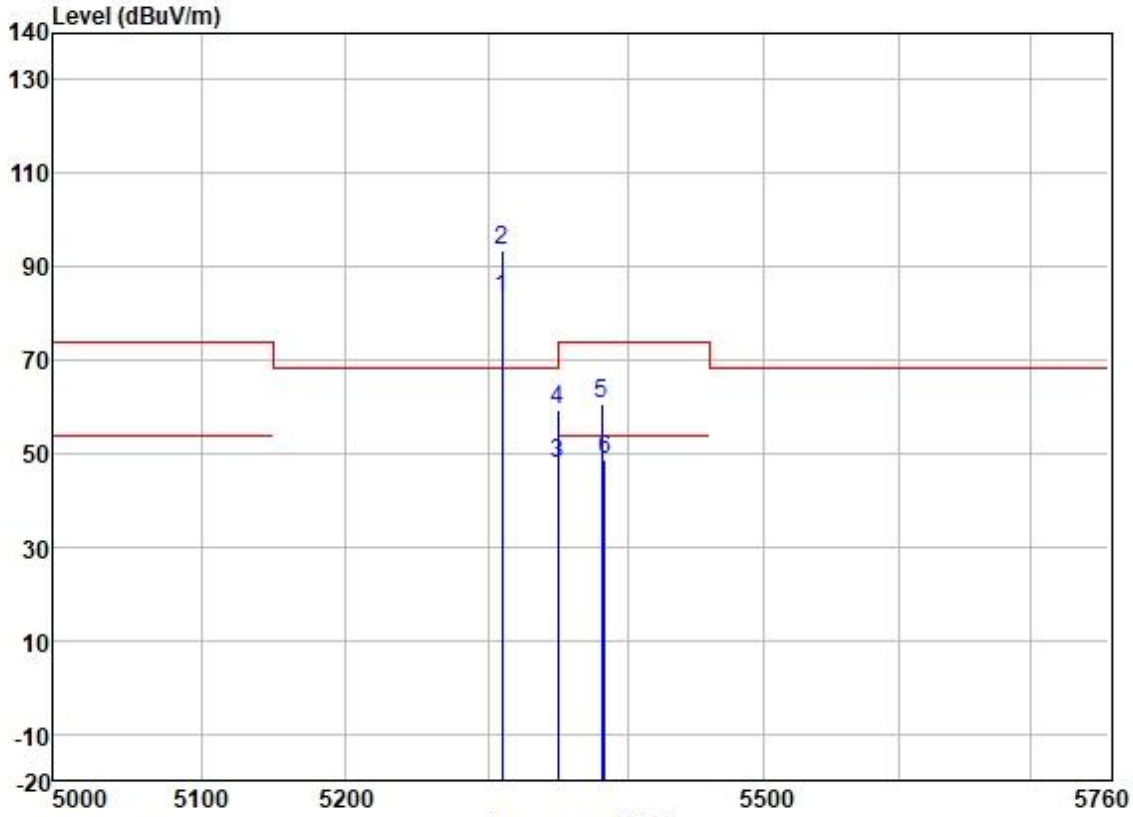
Test Mode: 36; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5107.264	59.89	31.72	5.65	36.86	60.40	74.00	-13.60	VERTICAL	Peak
2		5114.538	47.87	31.72	5.64	36.86	48.37	54.00	-5.63	VERTICAL	Average
3		5149.980	47.20	31.72	5.62	36.86	47.68	54.00	-6.32	VERTICAL	Average
4		5149.980	57.92	31.72	5.62	36.86	58.40	74.00	-15.60	VERTICAL	Peak
5		5270.000	83.49	31.75	5.80	36.87	84.17	------	------	VERTICAL	Average
6	*	5270.000	92.60	31.75	5.80	36.87	93.28	68.20	25.08	VERTICAL	Peak

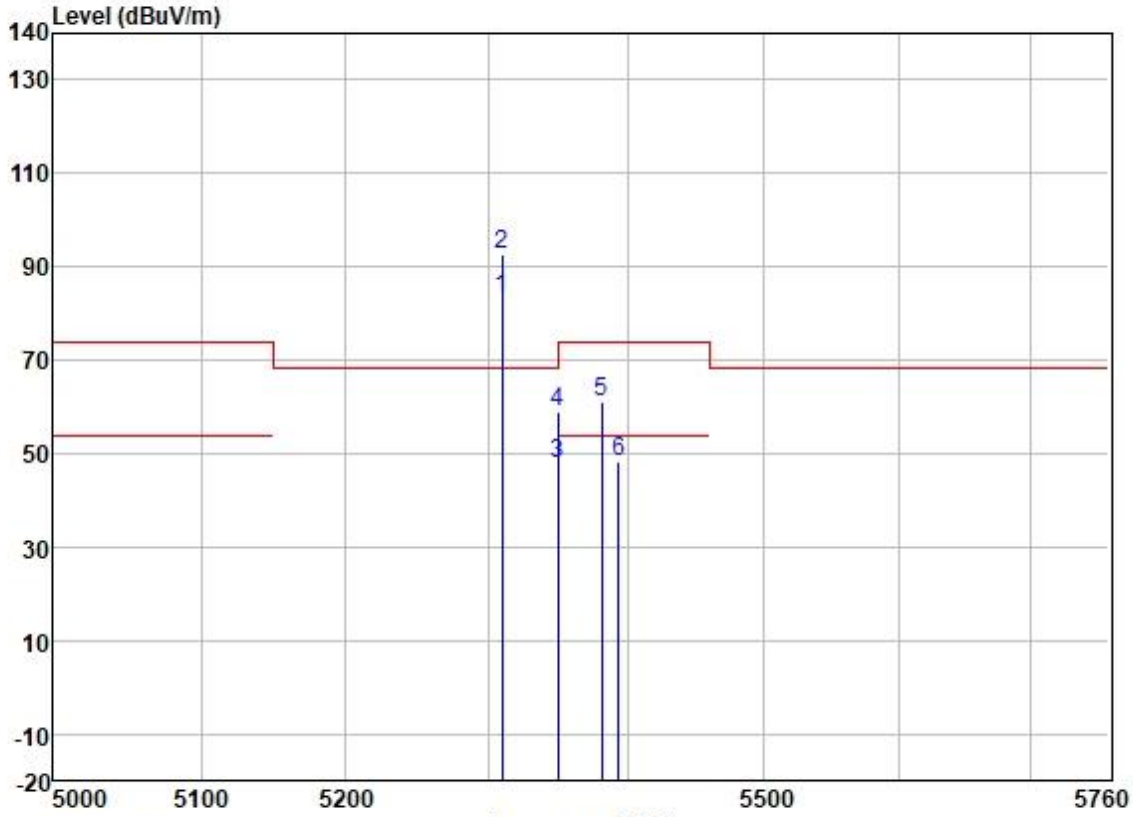
Test Mode: 36; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5310.000	82.27	31.77	6.08	36.87	83.25	------	------	HORIZONTAL	Average
2	*	5310.000	92.34	31.77	6.08	36.87	93.32	68.20	25.12	HORIZONTAL	Peak
3		5350.020	46.94	31.77	6.05	36.88	47.88	54.00	-6.12	HORIZONTAL	Average
4		5350.020	58.48	31.77	6.05	36.88	59.42	74.00	-14.58	HORIZONTAL	Peak
5		5381.344	59.67	31.78	6.02	36.88	60.59	74.00	-13.41	HORIZONTAL	Peak
6		5383.763	47.58	31.78	6.02	36.88	48.50	54.00	-5.50	HORIZONTAL	Average

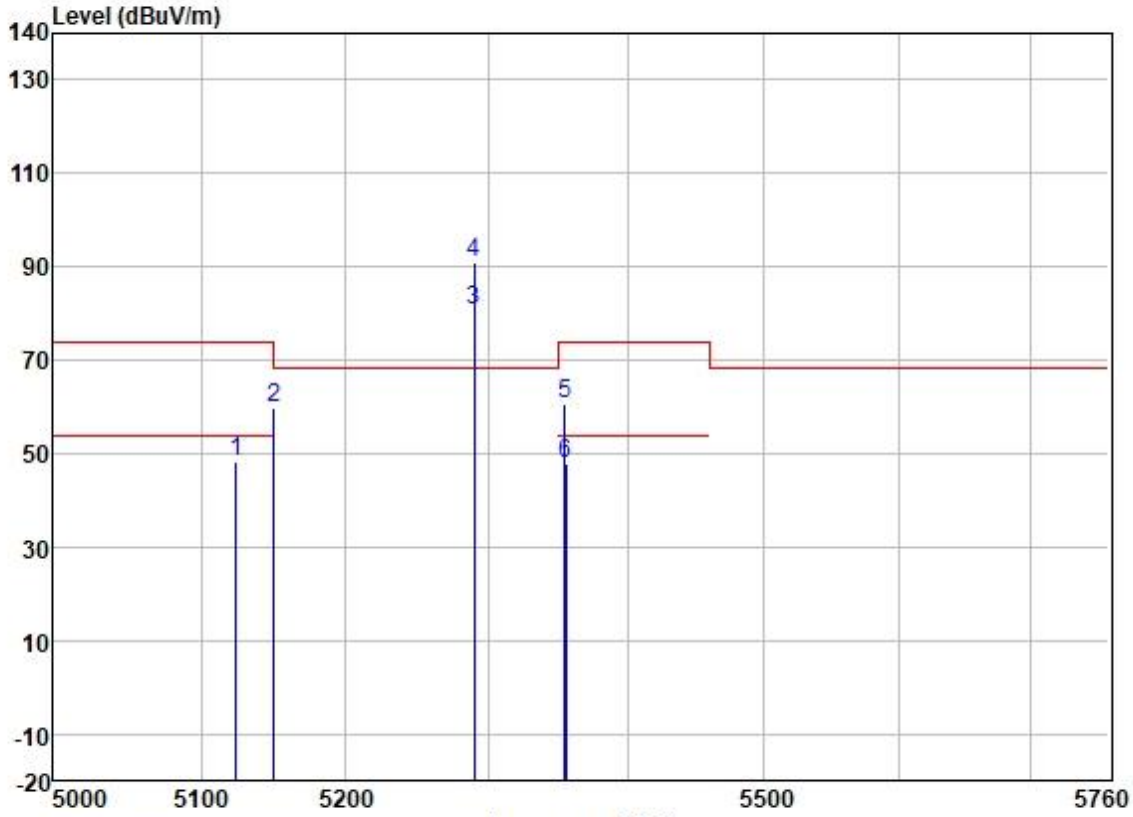
Test Mode: 36; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5310.000	82.25	31.77	6.08	36.87	83.23	------	------	VERTICAL	Average
2	*	5310.000	91.77	31.77	6.08	36.87	92.75	68.20	24.55	VERTICAL	Peak
3		5350.020	46.70	31.77	6.05	36.88	47.64	54.00	-6.36	VERTICAL	Average
4		5350.020	57.94	31.77	6.05	36.88	58.88	74.00	-15.12	VERTICAL	Peak
5		5381.465	60.25	31.78	6.02	36.88	61.17	74.00	-12.83	VERTICAL	Peak
6		5393.693	47.20	31.78	6.00	36.88	48.10	54.00	-5.90	VERTICAL	Average

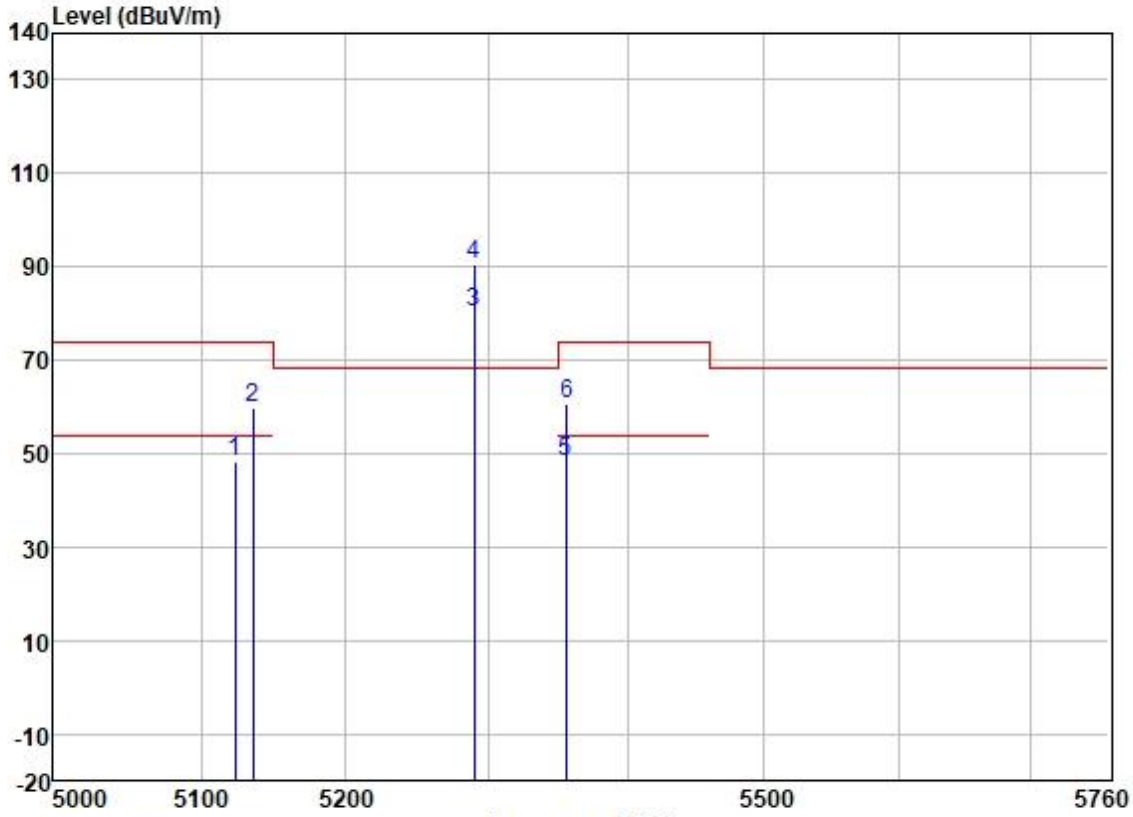
Test Mode: 36; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5124.252	47.70	31.72	5.64	36.86	48.20	54.00	-5.80	HORIZONTAL	Average
2		5149.798	59.20	31.72	5.62	36.86	59.68	74.00	-14.32	HORIZONTAL	Peak
3		5290.000	79.63	31.76	6.00	36.87	80.52	------	------	HORIZONTAL	Average
4	*	5290.000	90.23	31.76	6.00	36.87	91.12	68.20	22.92	HORIZONTAL	Peak
5		5354.512	59.57	31.78	6.03	36.88	60.50	74.00	-13.50	HORIZONTAL	Peak
6		5355.124	47.09	31.78	6.03	36.88	48.02	54.00	-5.98	HORIZONTAL	Average

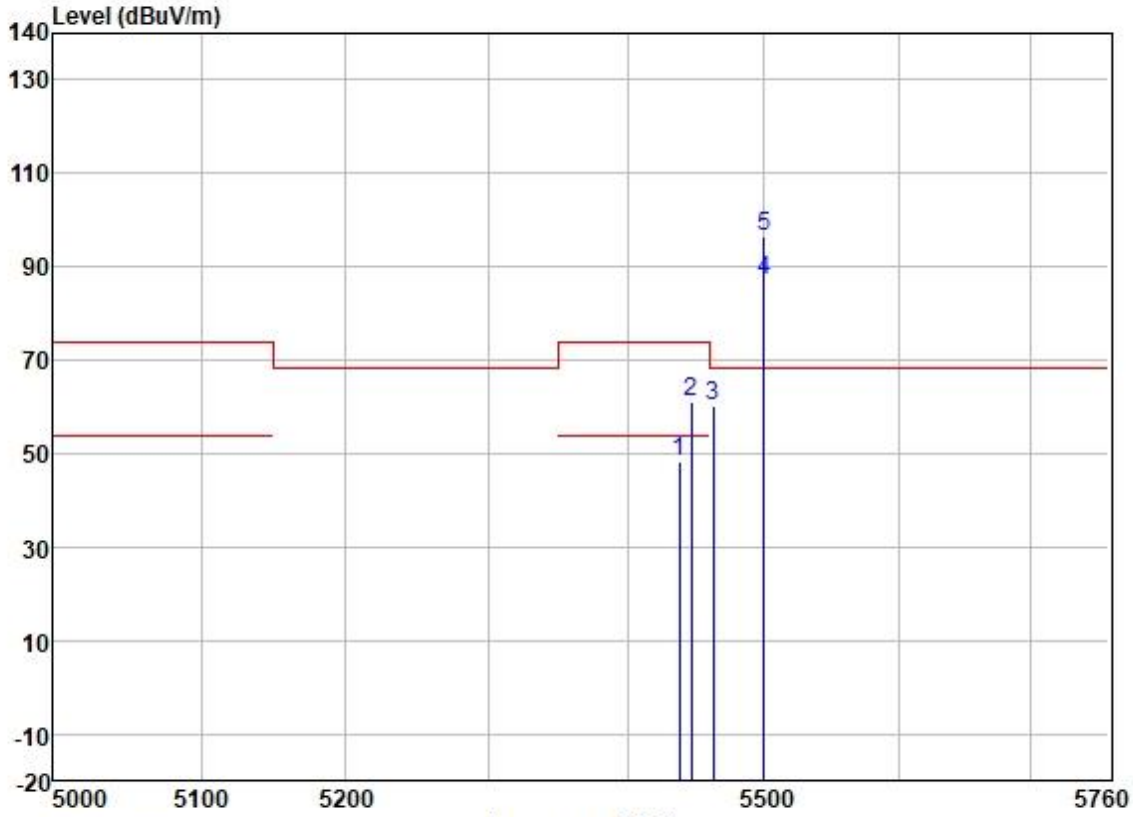
Test Mode: 36; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1		5123.081	47.62	31.72	5.64	36.86	48.12	54.00	-5.88	VERTICAL	Average
2		5135.395	59.27	31.72	5.63	36.86	59.76	74.00	-14.24	VERTICAL	Peak
3		5290.000	79.42	31.76	6.00	36.87	80.31	------	------	VERTICAL	Average
4	*	5290.000	89.72	31.76	6.00	36.87	90.61	68.20	22.41	VERTICAL	Peak
5		5355.736	47.29	31.78	6.03	36.88	48.22	54.00	-5.78	VERTICAL	Average
6		5356.348	59.63	31.78	6.03	36.88	60.56	74.00	-13.44	VERTICAL	Peak

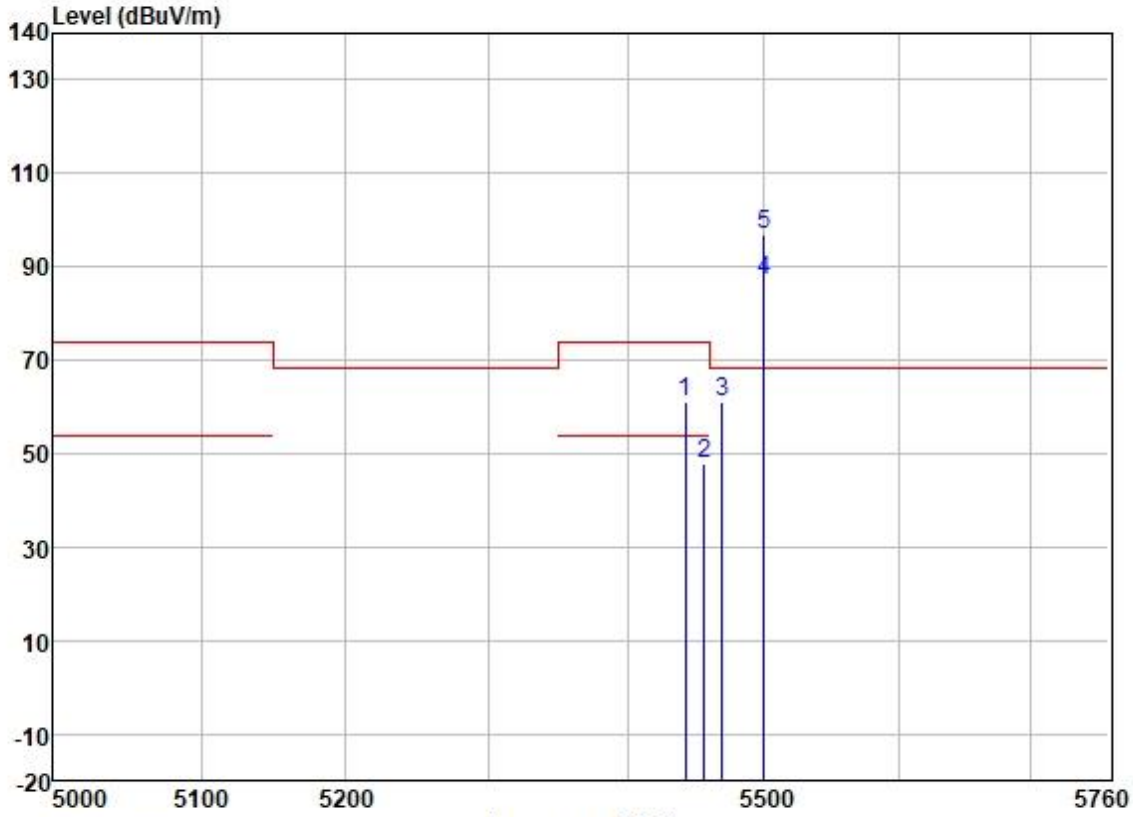
Test Mode: 38; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5437.755	47.10	31.79	6.20	36.88	48.21	54.00	-5.79	HORIZONTAL	Average
2	5446.486	60.10	31.79	6.20	36.88	61.21	74.00	-12.79	HORIZONTAL	Peak
3	5462.671	58.84	31.79	6.26	36.88	60.01	68.20	-8.19	HORIZONTAL	Peak
4	5500.000	85.78	31.80	6.40	36.88	87.10	------	------	HORIZONTAL	Average
5 *	5500.000	95.16	31.80	6.40	36.88	96.48	68.20	28.28	HORIZONTAL	Peak

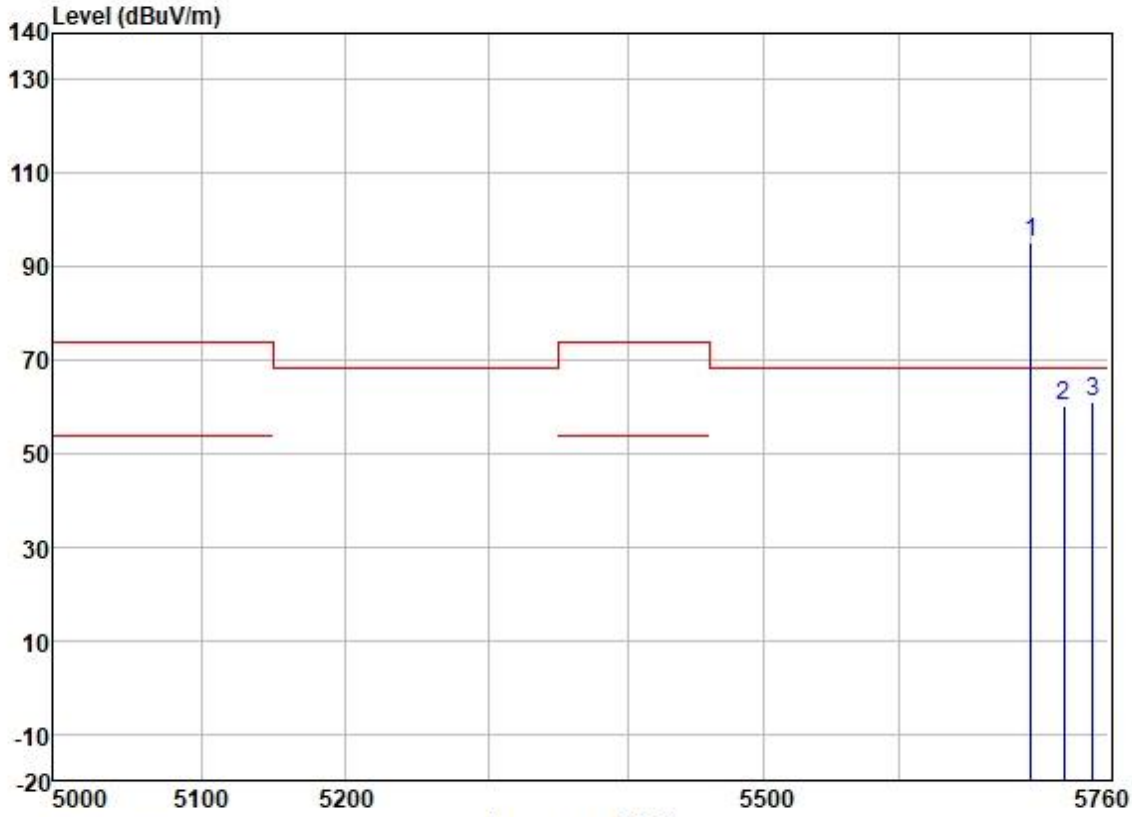
Test Mode: 38; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



race: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	5442.059	59.91	31.79	6.20	36.88	61.02	74.00	-12.98	VERTICAL	Peak
2	5455.712	46.87	31.79	6.26	36.88	48.04	54.00	-5.96	VERTICAL	Average
3	5469.038	59.89	31.80	6.31	36.88	61.12	68.20	-7.08	VERTICAL	Peak
4	5500.000	85.81	31.80	6.40	36.88	87.13	------	------	VERTICAL	Average
5 *	5500.000	95.71	31.80	6.40	36.88	97.03	68.20	28.83	VERTICAL	Peak

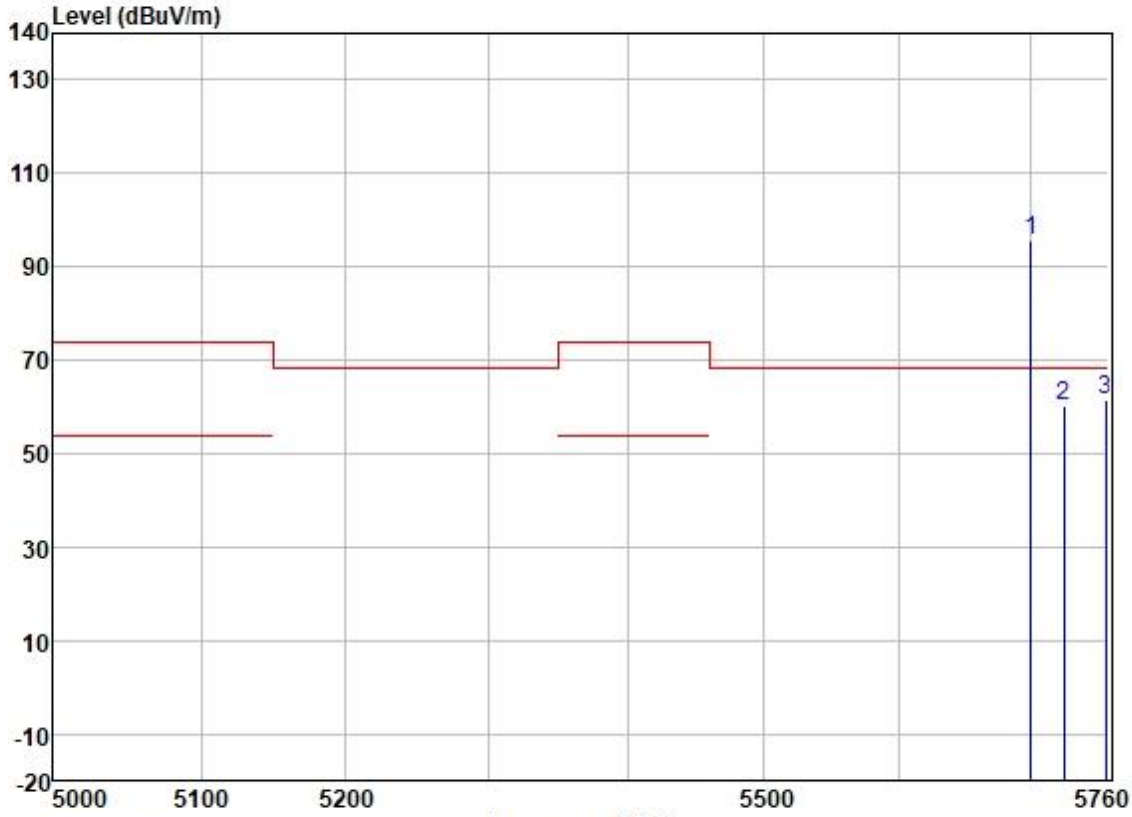
Test Mode: 38; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	*	5700.000	93.77	32.01	6.40	36.89	95.29	68.20	27.09	HORIZONTAL	Peak
2		5725.000	58.60	32.07	6.25	36.89	60.03	68.20	-8.17	HORIZONTAL	Peak
3		5747.309	59.70	32.10	6.20	36.89	61.11	68.20	-7.09	HORIZONTAL	Peak

Test Mode: 38; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



race: (Discrete)

		Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	*	5700.000	94.11	32.01	6.40	36.89	95.63	68.20	27.43	VERTICAL	Peak
2		5725.000	58.75	32.07	6.25	36.89	60.18	68.20	-8.02	VERTICAL	Peak
3		5757.247	60.05	32.13	6.15	36.89	61.44	68.20	-6.76	VERTICAL	Peak