TEST REPORT

Application No.:	KSCR2407001419AT
FCC ID:	2BHGF-0235C8GG
IC:	32743-0235C8GG
Applicant:	KeyLife International Technology Limited
Address of Applicant:	27th Floor, Alexandra House, 18 Chater Road,Central, Hong Kong
Manufacturer:	KeyLife International Technology Limited
Address of Manufacturer:	27th Floor, Alexandra House, 18 Chater Road,Central, Hong Kong
Factory:	Zhejiang Uniview Systems Technology Co., Ltd.
Address of Factory:	No.1277 South Qingfeng South Road, Tongxiang City, Jiaxing City, Zhejiang Province, China
Equipment Under Test (EUT):	
EUT Name:	Wireless Security Camera
Model No.:	S320,S320 XXX XXX(where X may be 0-9 A-Z a-z or blank. The differences no impact safety related constructions and EMC) ♣
♣	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
For IC Model No.:	S320
Standard(s) :	47 CFR Part 15, Subpart E 15.407 RSS-247 Issue 3, August 2023 RSS-Gen Issue 5 Amendment 2 (February 2021)
Date of Receipt:	2024-07-24
Date of Test:	2024-08-27 to 2024-09-05
Date of Issue:	2024-09-06
Test Result:	**Pass***

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Member of the SGS Group (SGS SA)

Revision Record			
Version	**Description**	***Date***	***Remark***
00	Original	2024-09-06	/

Authorized for issue by:				
Tested By		Maker Qi **Maker_Qi/Project Engineer**		
Approved By		Terry Hou **Terry Hou /Reviewer**		

2 Test Summary

Radio Spectrum Technical Requirement				
Item	**FCC Requirement**	**IC Requirement**	**Method**	**Result**
Antenna Requirement	47 CFR Part 15, Subpart C 15.203	RSS-Gen Clause 6.8	N/A	Customer Declaration
Transmission in the Absence of Data	47 CFR Part 15, Subpart E 15.407 (c)	RSS-247 Section 6.4(a)	N/A	Pass

N/A: Not applicable

Radio Spectrum Matter Part				
Item	**FCC Requirement**	**IC Requirement**	**Method**	**Result**
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(6)	RSS-Gen Section 8.8	ANSI C63.10 (2013) Section 6.2	Pass
99% Bandwidth	N/A	RSS-Gen Section 6.7	ANSI C63.10 Section 6.9.3	Pass
26dB Emission bandwidth	47 CFR Part 15, Subpart E 15.407 (a)	RSS-247 Section 6.2.1(1)	KDB 789033 D02 II C 1	Pass
Minimum 6 dB bandwidth (5.725-5.85 GHz band)	47 CFR Part 15, Subpart E 15.407 (e)	RSS-247 Section 6.2.4	KDB 789033 D02 II C 2	Pass
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407 (a)	RSS-247 Section 6.2.1&6.2.2&6.2.3&6.2.4	KDB 789033 D02 II E	Pass
Peak Power spectrum density	47 CFR Part 15, Subpart E 15.407 (a)	RSS-247 Section 6.2.1&6.2.2&6.2.3& 6.2.4	KDB 789033 D02 II F	Pass
Radiated Emissions	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	RSS-247 Section 3.3 & RSS-Gen Section 8.9	KDB 789033 D02 II G	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	RSS-247 Section 3.3 & RSS-Gen Section 8.9	KDB 789033 D02 II G	Pass
Frequency Stability	47 CFR Part 15, Subpart E 15.407 (g)	RSS-Gen Section 8.11	ANSI C63.10 (2013) Section 6.8& RSS-Gen Section 6.11	Pass
Channel Move Time	47 CFR Part 15, Subpart E 15.407	RSS-247	KDB 905462 D02 Section 7.8.3	Pass
Channel Closing Transmission Time	47 CFR Part 15, Subpart E 15.407	RSS-247	KDB 905462 D02 Section 7.8.3	Pass

Note: There are series models mentioned in this report, and they are identical in electrical and electronic characters. Only the model S320 was tested since their differences were the model number and appearance.

3 Contents

Page

1 COVER PAGE 1

2 Test Summary 3

3 Contents 4

4 General Information 5

4.1 Details of E.U.T. 5
4.2 Power level setting using in test: 5
4.3 Description of Support Units 6
4.4 Measurement Uncertainty 6
4.5 Test Location 7
4.6 Test Facility 7
4.7 Deviation from Standards 7
4.8 Abnormalities from Standard Conditions 7

5 Equipment List 8

6 Radio Spectrum Technical Requirement 9

6.1 Antenna Requirement 9
6.2 Transmission in the Absence of Data 10

7 Radio Spectrum Matter Test Results 11

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz) 11
7.2 Maximum Conducted output power 15
7.3 Radiated Emissions (Below 1GHz) 17
7.4 Radiated Emissions (Above 1GHz) 21
7.5 Radiated Emissions which fall in the restricted bands 132
7.6 Channel Move Time 215
7.7 Duty Cycle 217
7.8 99% Bandwidth 219
7.9 26dB Emission bandwidth 221
7.10 Minimum 6 dB bandwidth (5.725-5.85 GHz band) 223
7.11 Peak Power spectrum density 224
7.12 Frequency Stability 226
7.13 Channel Closing Transmission Time 228

8 Test Setup Photo 230

9 EUT Constructional Details (EUT Photos) 230

10 Appendix 231

4 General Information

4.1 Details of E.U.T.

Power supply:	AC 120V/60Hz
Operation Frequency/Number of channels (20MHz):	5180-5240MHz (4 Channels); U-NII-2A: 5260-5320MHz (4 Channels); U-NII-2C: 5500-5700MHz (11 Channels); U-NII-3: 5745-5825MHz (5 Channels)
Operation Frequency/Number of channels/(40MHz):	5190-5230MHz (2 Channels); U-NII-2A: 5270-5310MHz (2 Channels); U-NII-2C: 5510-5670MHz (5 Channels); U-NII-3: 5755-5795MHz (2 Channels)
Modulation Type:	OFDM (64QAM, 16QAM, QPSK, BPSK); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM); 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024-QAM)
Channel Spacing:	802.11a/n/ac/ax 20: 20MHz; 802.11n/ac/ax 40: 40MHz
DFS Function:	Slave without Radar detection
TPC Function:	Without TPC function
Antenna Type:	Internal antenna
Antenna Gain:	U-NII-1:2.9dBi(Provided by the manufacturer), U-NII-2A:2.9dBi(Provided by the manufacturer), U-NII-2C:2.7dBi(Provided by the manufacturer), U-NII-3:2.6dBi(Provided by the manufacturer)

Note: 5600MHz to 5650MHz band can not be operated in Canada.

4.2 Power level setting using in test:

Channel	802.11a	802.11ac(HT20)	802.11ax20
	Ant 1	Ant 1	Ant 1
36	12	14	14
40	14	14	14
48	14	14	14
52	14	14	14
60	14	14	14
64	14	14	14
100	11	12	12
116	11	12	12
140	11	12	12
149	14	14	14
157	14	14	14
165	14	14	14

Channel	802.11ac(HT40)	802.11ax40
	Ant 1	Ant 1
38	13	13
46	13	13
54	12	12
62	11	11

102	12	12
110	13	13
134	13	13
151	14	14
159	14	14

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
AC Adapter	/	/	/
Notebook	LENOVO	K27	EB24537645
Router	NETGEAR	RAX50	/

4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz)
		5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz)
		4.5dB (30MHz-1GHz)
		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%
Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.		

4.5 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.6 Test Facility

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

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

• VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals						
1	EMI Test Receive	R&S	ESCI	KS301101	01/15/2024	01/14/2025
2	LISN	R&S	ENV216	KS301197	01/15/2024	01/14/2025
3	LISN	Schwarzbeck	NNLK 8129	KS301091	01/15/2024	01/14/2025
4	Pulse Limiter	R&S	ESH3-Z2	KUS1902E001	01/15/2024	01/14/2025
5	CE test Cable	Thermax	/	CZ301102	01/15/2024	01/14/2025
6	Test Software	ESE	E3_V 6.111221a	/	N.C.R	N.C.R
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/01/2024	07/31/2025
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/01/2024	07/31/2025
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	01/15/2024	01/14/2025
4	Signal Generator	R&S	SMBV100B	KSEM032	03/19/2024	03/18/2025
5	Signal Generator	R&S	SMW200A	KSEM020-1	08/02/2024	08/01/2025
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/01/2024	07/31/2025
7	Signal Generator	Agilent	E8257C	KS301066	08/06/2024	08/05/2025
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/01/2024	07/31/2025
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	03/19/2024	03/18/2025
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/12/2024	08/11/2025
11	Switcher	TST	FY562	KUS2001M001-4	01/15/2024	01/14/2025
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	01/15/2024	01/14/2025
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	08/26/2024	08/25/2025
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	03/19/2024	03/18/2025
15	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	08/06/2024	08/05/2025
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	03/19/2024	03/18/2025
4	Loop Antenna	COM-POWER	AL-130R	KUS1806E001	03/18/2023	03/17/2025
5	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E005	06/29/2023	06/28/2025
6	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E006	03/19/2024	03/18/2025
7	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	03/23/2024	08/22/2026
8	Horn-antenna(1-18GHz)	ETS-LINDGREN	3117	KS301186	04/07/2023	04/06/2025
9	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/07/2024	01/06/2026
10	Amplifier(30MHz~18GHz)	PANSHAN TECHNOLOGY	LNA:1~18G	KSEM010-1	01/15/2024	01/14/2025
11	Amplifier(18~40GHz)	PANSHAN TECHNOLOGY	LNA180400G40	KSEM038	08/12/2024	08/11/2025
12	RE Test Cable	REBES MICROWAVE	/	CZ301097	08/12/2024	08/11/2025
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	03/21/2024	03/20/2025
14	Software	Faratronic	EZ_EMC-v 3A1	/	NCR	NCR
15	Software	ESE	E3_V 6.111221a	/	NCR	NCR

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 internal antenna and no consideration of replacement. The best case gain of the U-NII-1:2.9dBi, U-NII-2A:2.9dBi, U-NII-2C:2.7dBi, U-NII-3:2.6dBi.

Antenna location: Refer to internal photo.

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart E 15.407 (c)

6.2.2 Conclusion

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 & Subpart E 15.407 b(9)
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.		

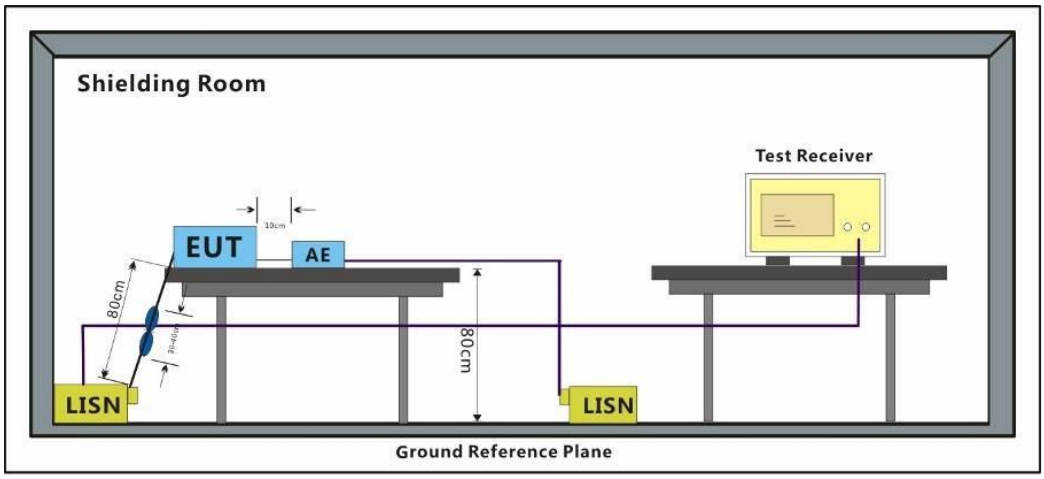
7.1.1 E.U.T. Operation

Operating Environment:
Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, 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.

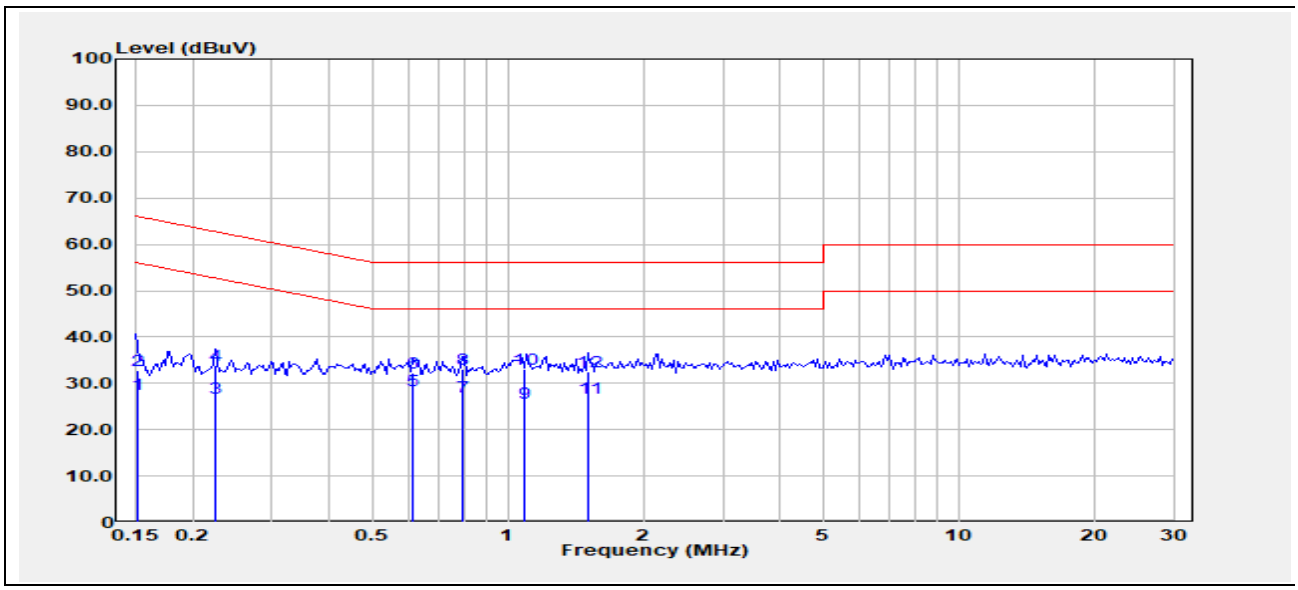
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

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.

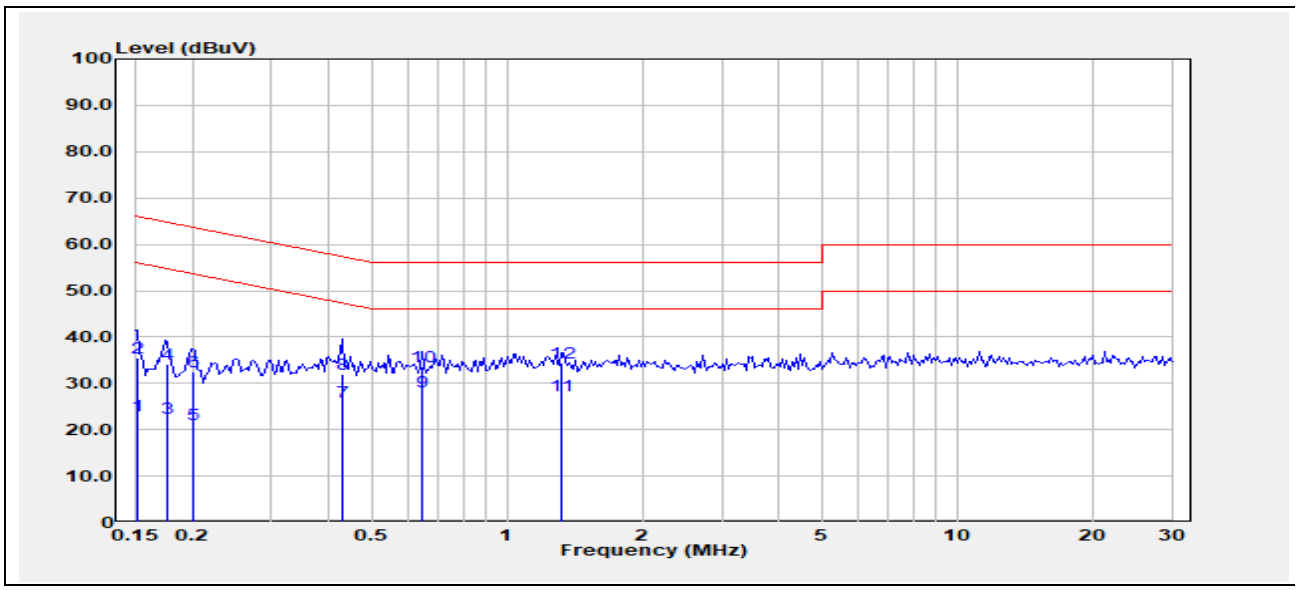
Remark: Level=Read Level+ Cable Loss+ LISN Factor

Test Mode: 03; Line: Live line



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1515	7.48	20.25	27.73	55.92	-28.19	Average
2	0.1515	12.67	20.25	32.92	65.92	-33.00	QP
3	0.2237	6.90	20.06	26.96	52.68	-25.72	Average
4	0.2237	13.82	20.06	33.88	62.68	-28.80	QP
5	0.6157	8.65	19.86	28.51	46.00	-17.49	Average
6	0.6157	12.33	19.86	32.19	56.00	-23.81	QP
7	0.7936	7.32	19.79	27.11	46.00	-18.89	Average
8	0.7936	13.39	19.79	33.18	56.00	-22.82	QP
9	1.0900	5.96	19.88	25.84	46.00	-20.16	Average
10	1.0900	13.29	19.88	33.17	56.00	-22.83	QP
11	1.5130	6.83	19.98	26.81	46.00	-19.19	Average
12	1.5130	12.57	19.98	32.55	56.00	-23.45	QP

Test Mode: 03; Line: Neutral Line



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1505	2.83	20.18	23.01	55.97	-32.96	Average
2	0.1505	15.42	20.18	35.60	65.97	-30.37	QP
3	0.1752	2.41	20.15	22.56	54.71	-32.15	Average
4	0.1752	14.13	20.15	34.28	64.71	-30.43	QP
5	0.1998	1.11	20.11	21.22	53.62	-32.40	Average
6	0.1998	12.40	20.11	32.51	63.62	-31.11	QP
7	0.4327	6.00	20.05	26.05	47.20	-21.15	Average
8	0.4327	11.81	20.05	31.86	57.20	-25.34	QP
9	0.6469	8.29	19.85	28.14	46.00	-17.86	Average
10	0.6469	13.67	19.85	33.52	56.00	-22.48	QP
11	1.3230	7.48	19.90	27.38	46.00	-18.62	Average
12	1.3230	14.63	19.90	34.53	56.00	-21.47	QP

7.2 Maximum Conducted output power

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

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) or 11dBm+10logB*
5470-5725	≤250mW(24dBm) 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.

7.2.1 E.U.T. Operation

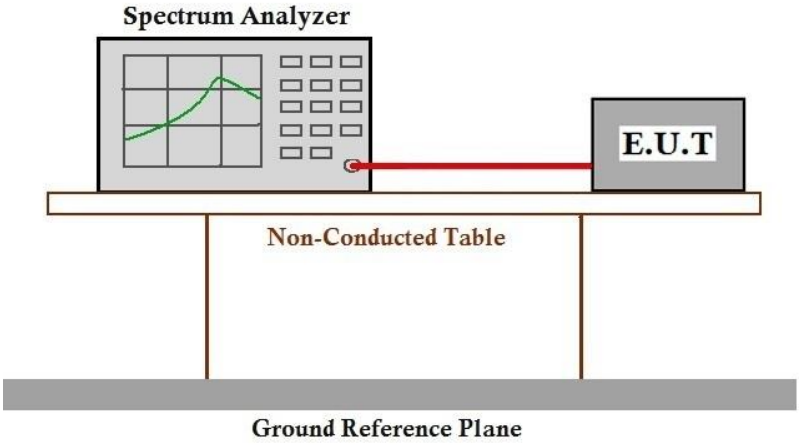
Operating Environment:

Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	05	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	06	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

Please Refer to Appendix for Details

7.3 Radiated Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 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
960-1000	500	3

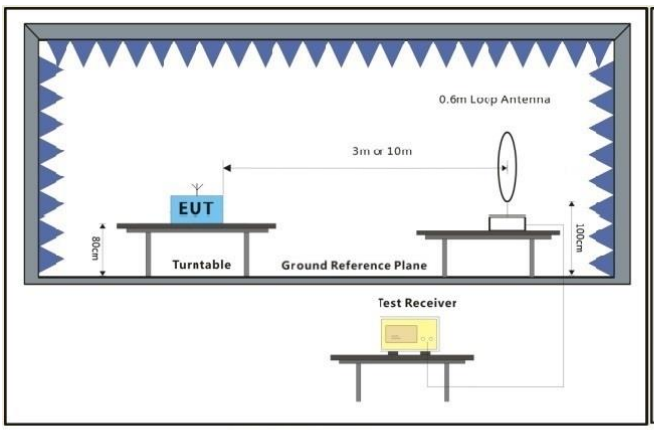
7.3.1 E.U.T. Operation

Operating Environment:
Temperature: 22.1 °C Humidity: 48.3 % RH Atmospheric Pressure: 1010 mbar

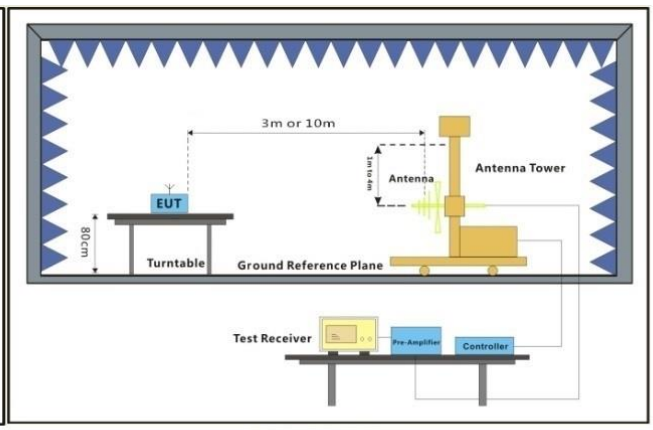
7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



Below 30MHz



30MHz-1GHz

7.3.4 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 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

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

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

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

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

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

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

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

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

Remark:

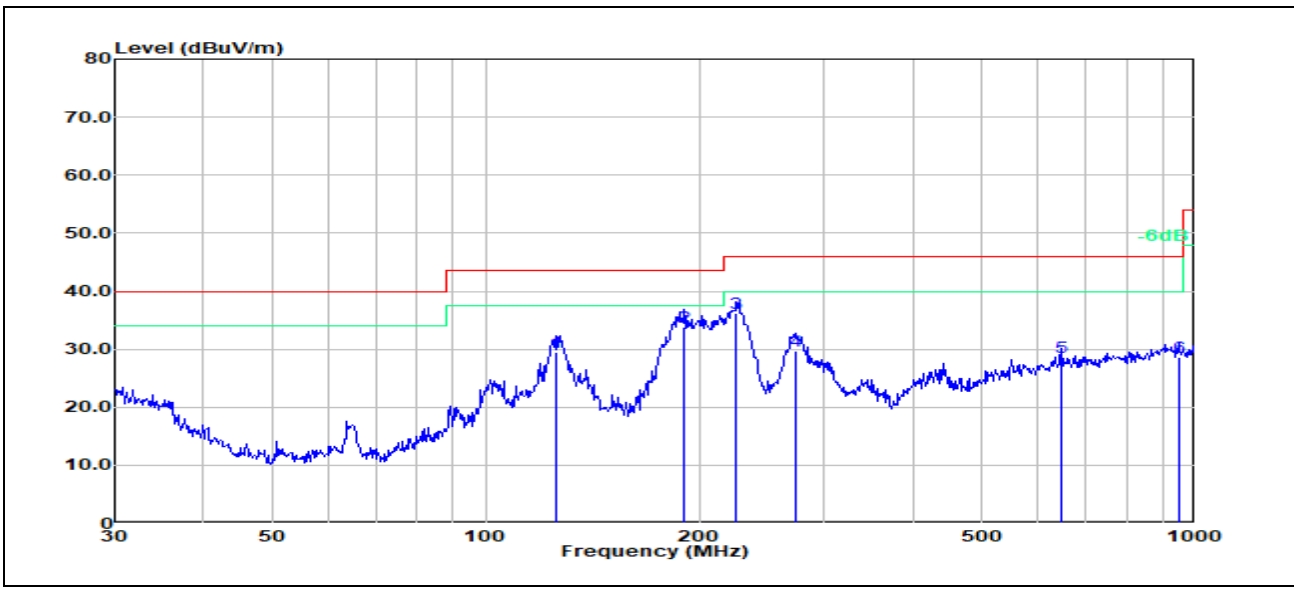
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

2. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of 802.11a. Only the worst case is recorded in the report.

3. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

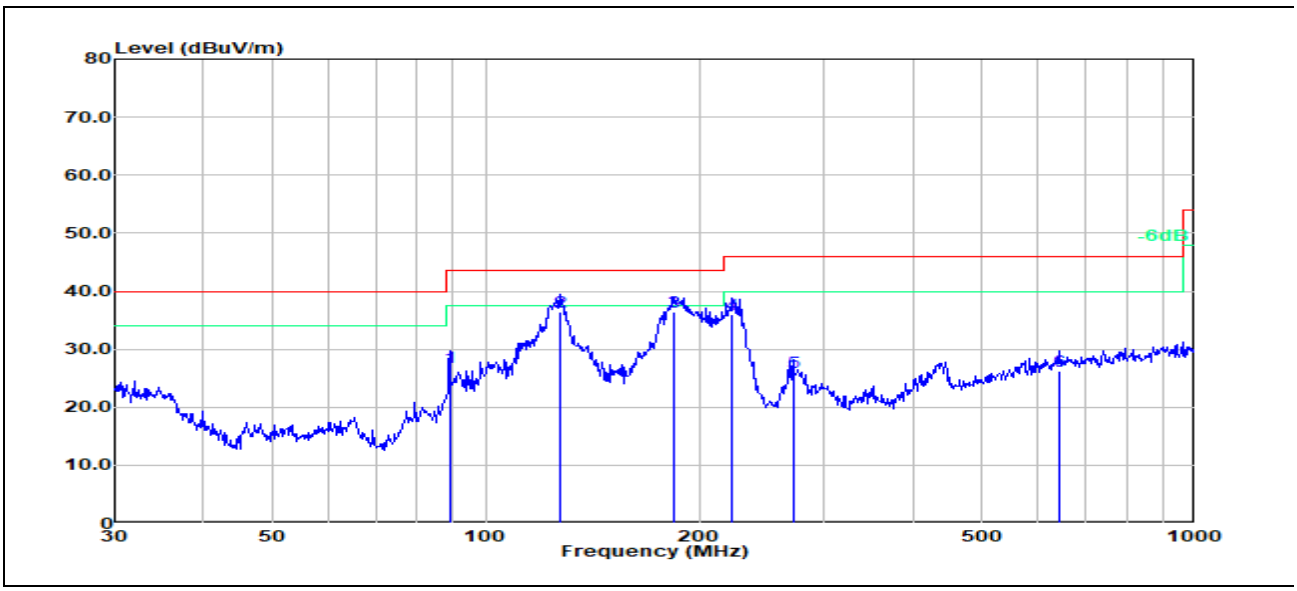
4. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

Test Mode: 03; Polarity: Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	125.8864	14.98	14.53	29.51	43.50	-13.99	100	25	QP
2	190.4050	22.14	11.60	33.74	43.50	-9.76	100	325	QP
3	225.3080	23.46	12.84	36.30	46.00	-9.70	100	86	QP
4	273.2341	14.41	15.20	29.61	46.00	-16.39	100	333	QP
5	649.6597	5.04	23.57	28.61	46.00	-17.39	100	359	QP
6	948.7610	3.16	25.38	28.54	46.00	-17.46	100	350	QP

Test Mode: 03; Polarity: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	88.9639	15.35	11.59	26.94	43.50	-16.56	200	282	QP
2	127.6645	22.02	14.32	36.34	43.50	-7.16	100	135	QP
3	184.4898	24.37	12.16	36.53	43.50	-6.97	100	0	QP
4	222.9502	23.17	12.79	35.96	46.00	-10.04	100	217	QP
5	271.3246	10.89	15.07	25.96	46.00	-20.04	100	35	QP
6	642.8613	2.76	23.41	26.17	46.00	-19.83	100	135	QP

7.4 Radiated Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)
Test Method: KDB 789033 D02 II G

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
Above 1GHz	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.

7.4.1 E.U.T. Operation

Operating Environment:

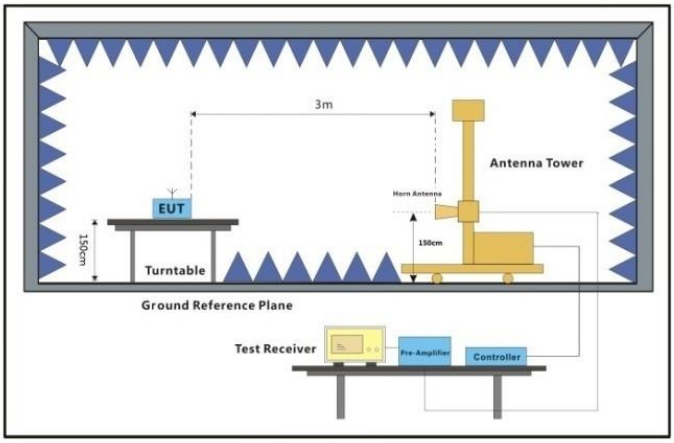
Temperature: 21.9 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	05	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	06	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



Above 1GHz

7.4.4 Measurement Procedure and Data

a. 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.

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

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

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

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

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

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

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

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

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

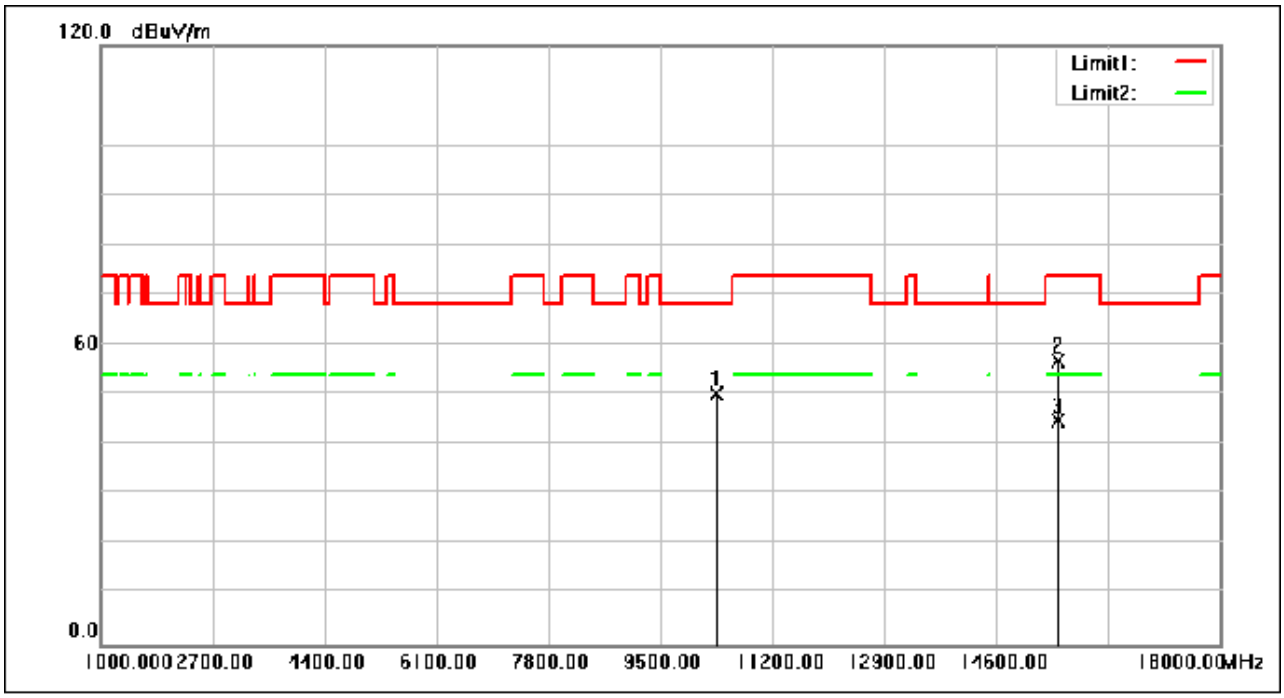
2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

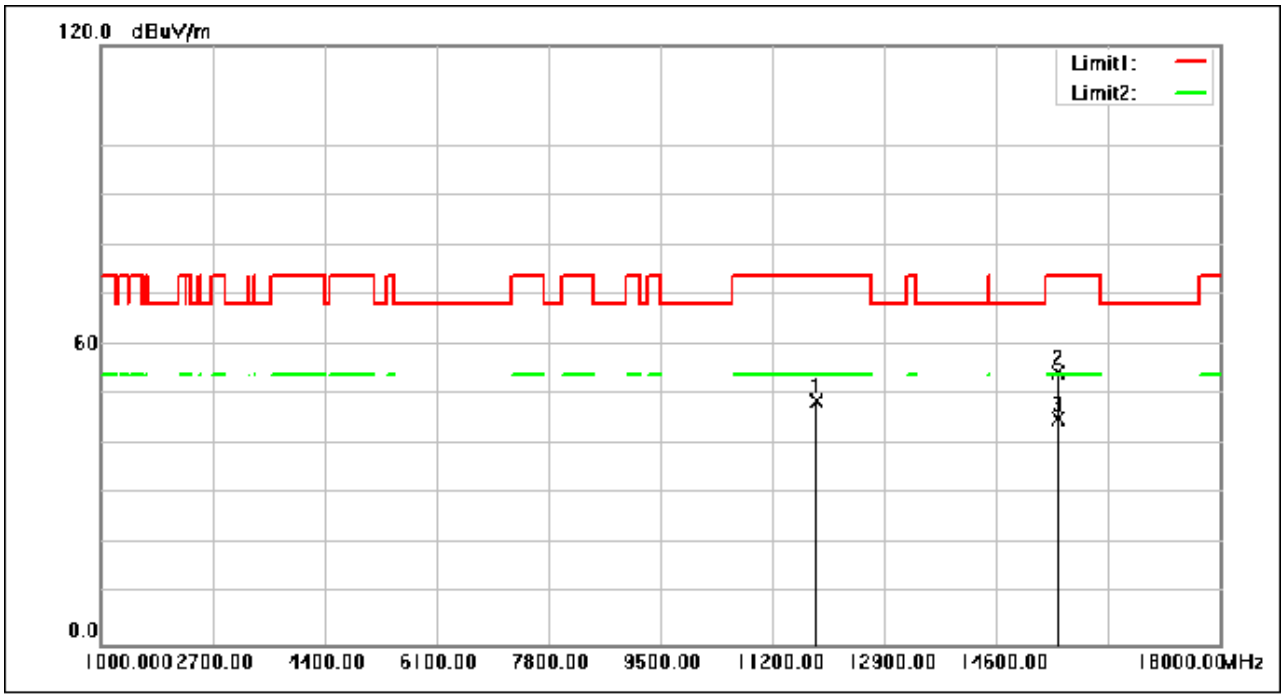
5. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.

Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



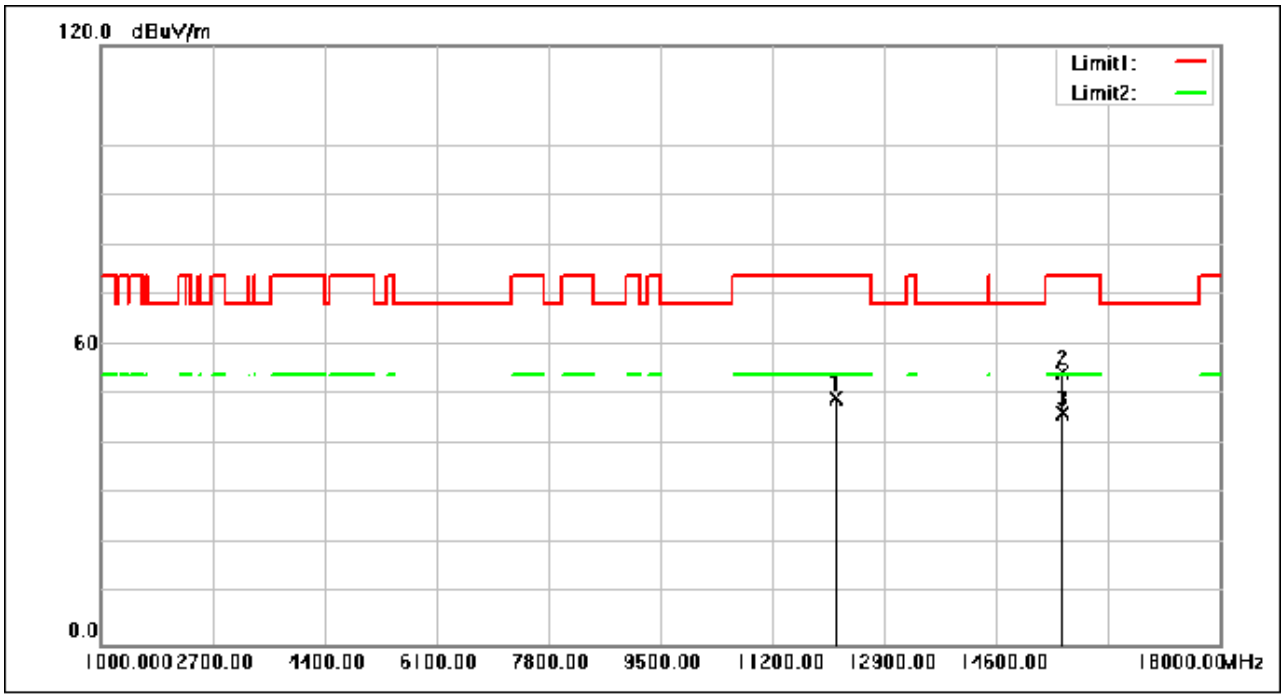
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10356.800	57.44	-7.12	50.32	68.30	-17.98	peak
2	15540.440	61.59	-4.61	56.98	74.00	-17.02	peak
3	15540.440	49.58	-4.61	44.97	54.00	-9.03	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



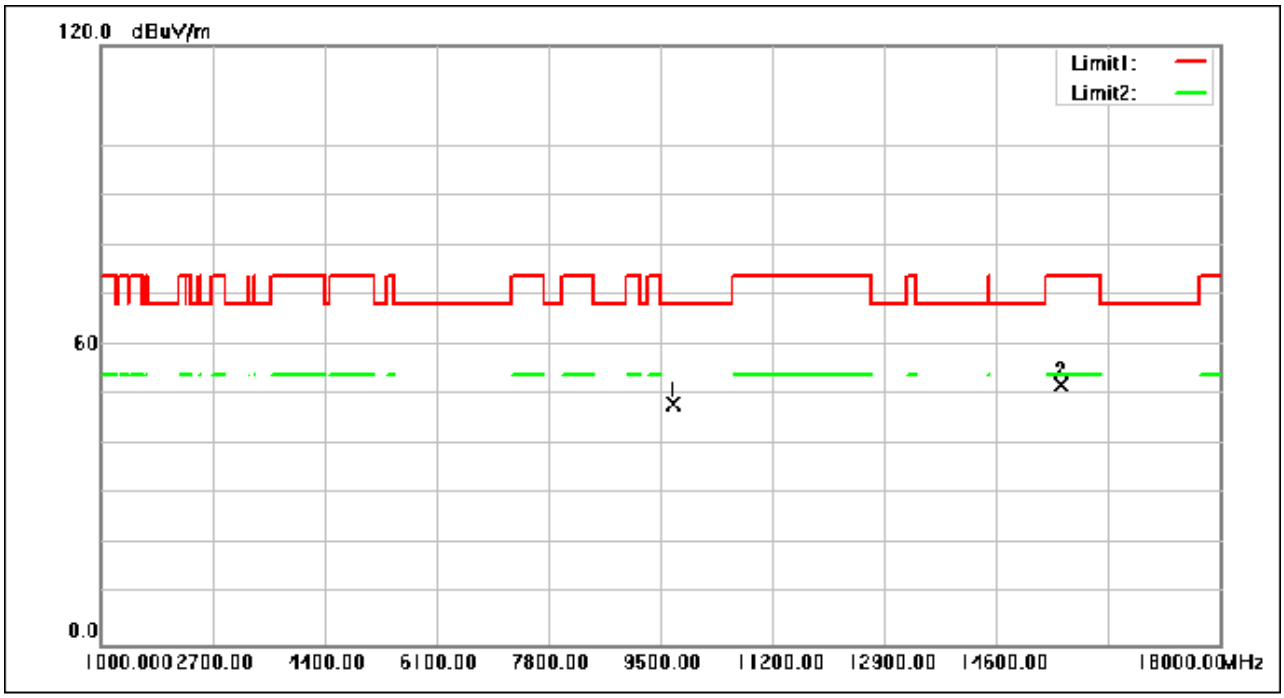
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11864.360	54.83	-6.07	48.76	74.00	-25.24	peak
2	15535.000	59.00	-4.62	54.38	74.00	-19.62	peak
3	15535.000	49.79	-4.62	45.17	54.00	-8.83	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



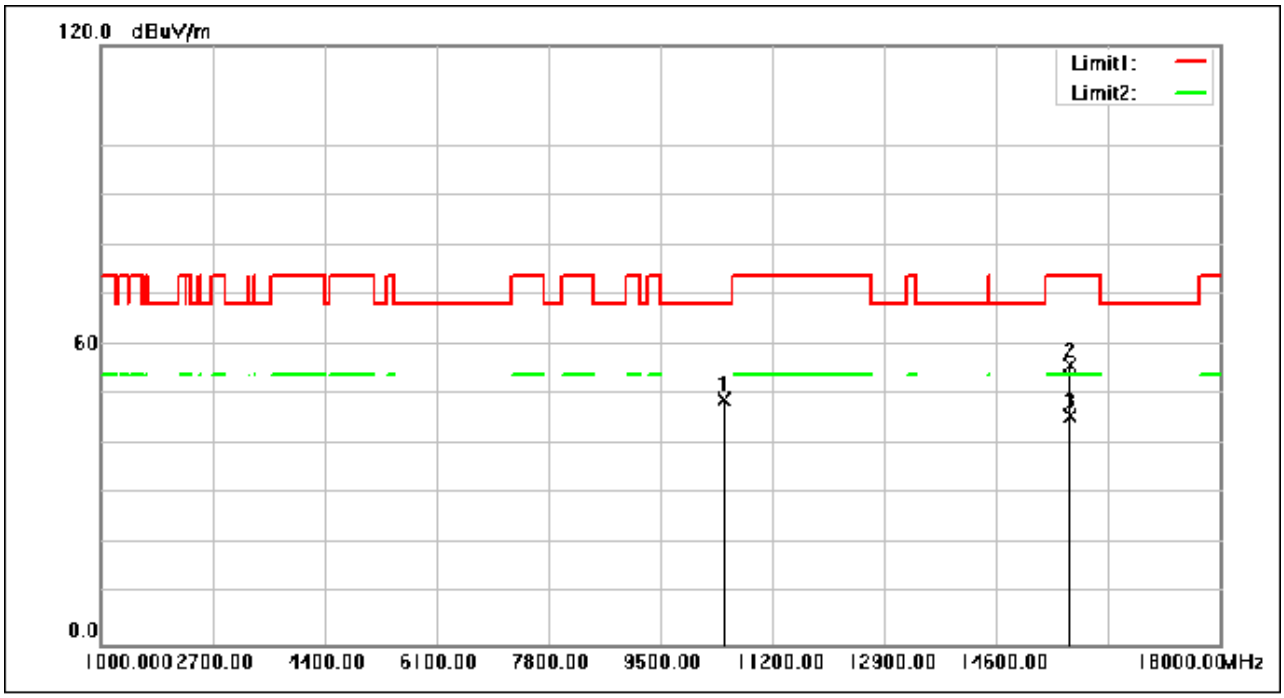
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12180.560	55.35	-5.97	49.38	74.00	-24.62	peak
2	15611.840	58.86	-4.55	54.31	74.00	-19.69	peak
3	15611.840	50.85	-4.55	46.30	54.00	-7.70	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



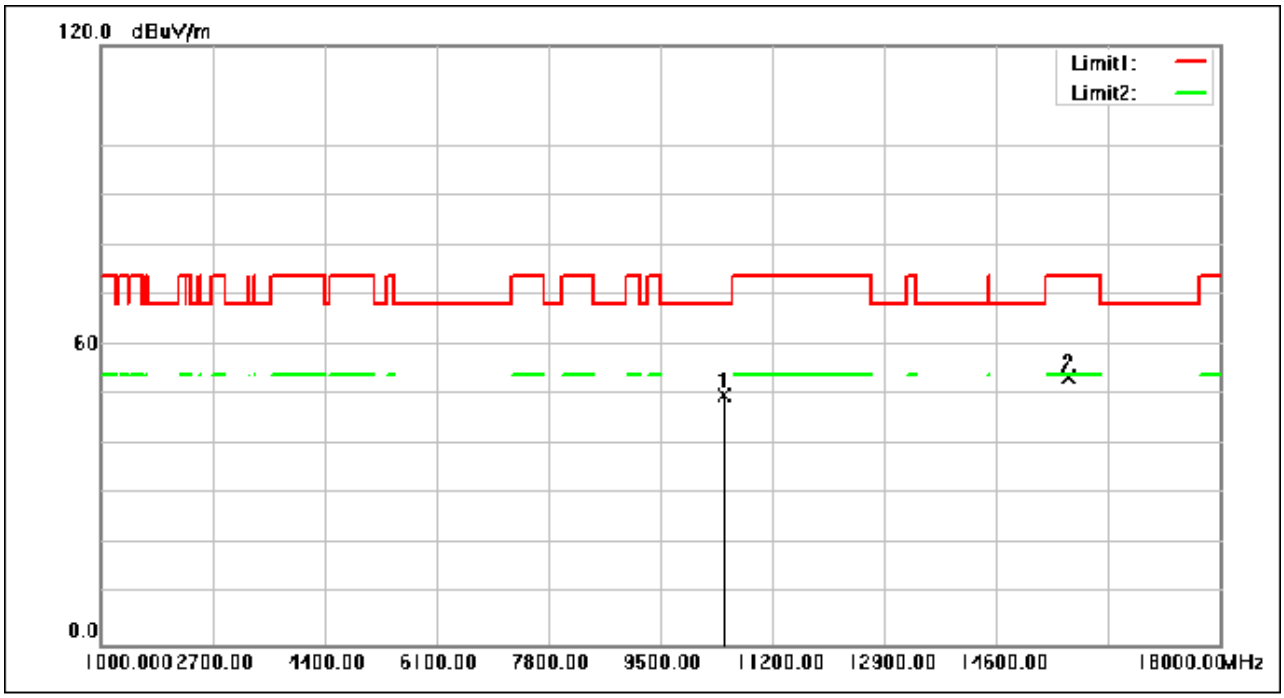
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9703.320	55.65	-7.57	48.08	68.30	-20.22	peak
2	15600.960	56.65	-4.56	52.09	74.00	-21.91	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



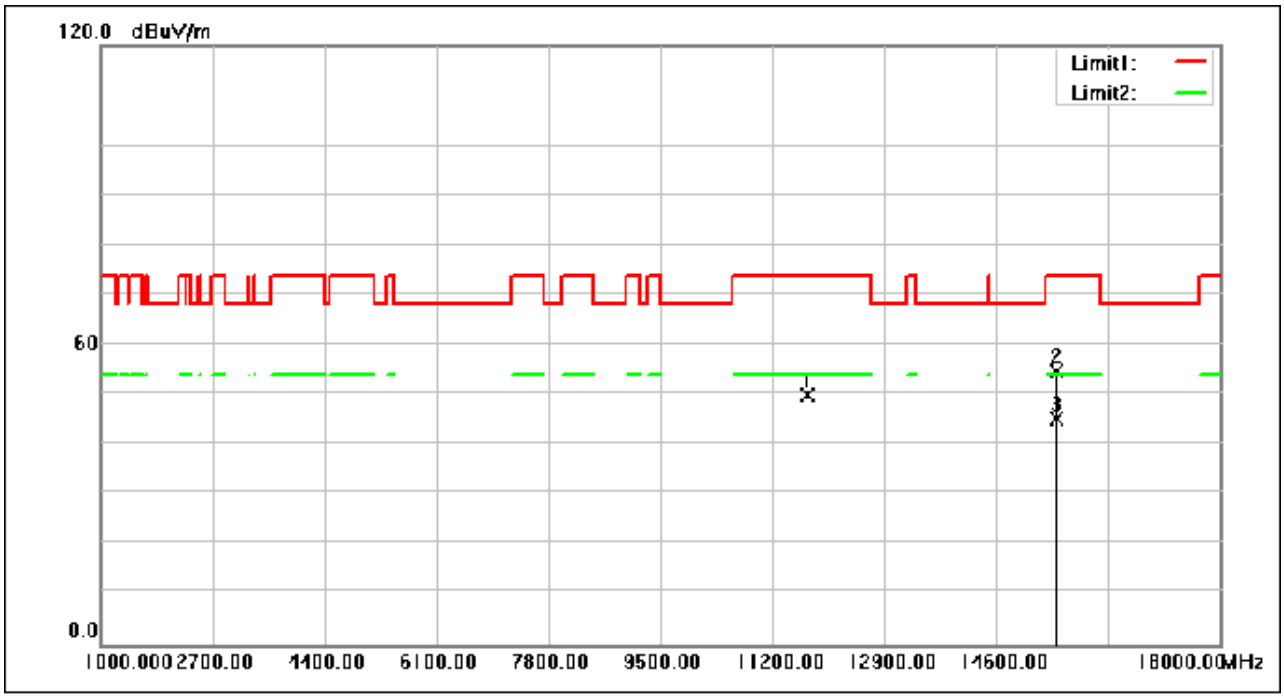
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10475.120	56.23	-7.06	49.17	68.30	-19.13	peak
2	15732.880	60.33	-4.44	55.89	74.00	-18.11	peak
3	15732.880	50.21	-4.44	45.77	54.00	-8.23	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



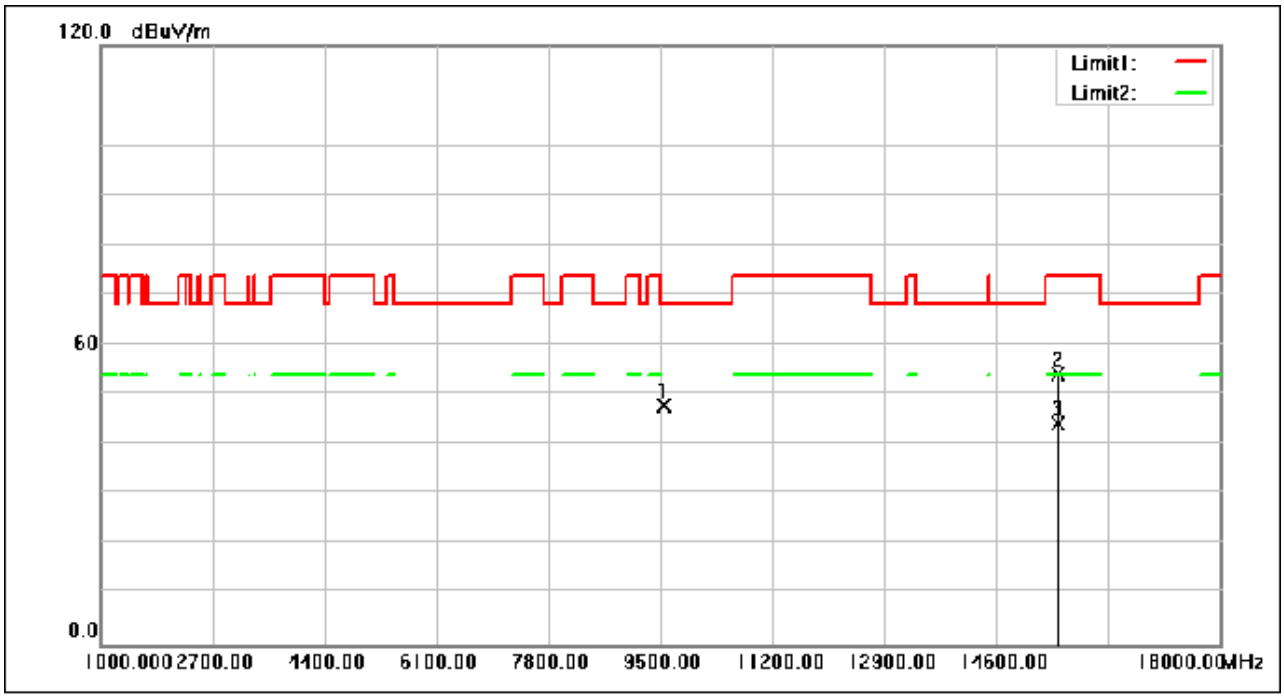
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10477.160	57.13	-7.06	50.07	68.30	-18.23	peak
2	15719.280	58.01	-4.46	53.55	74.00	-20.45	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



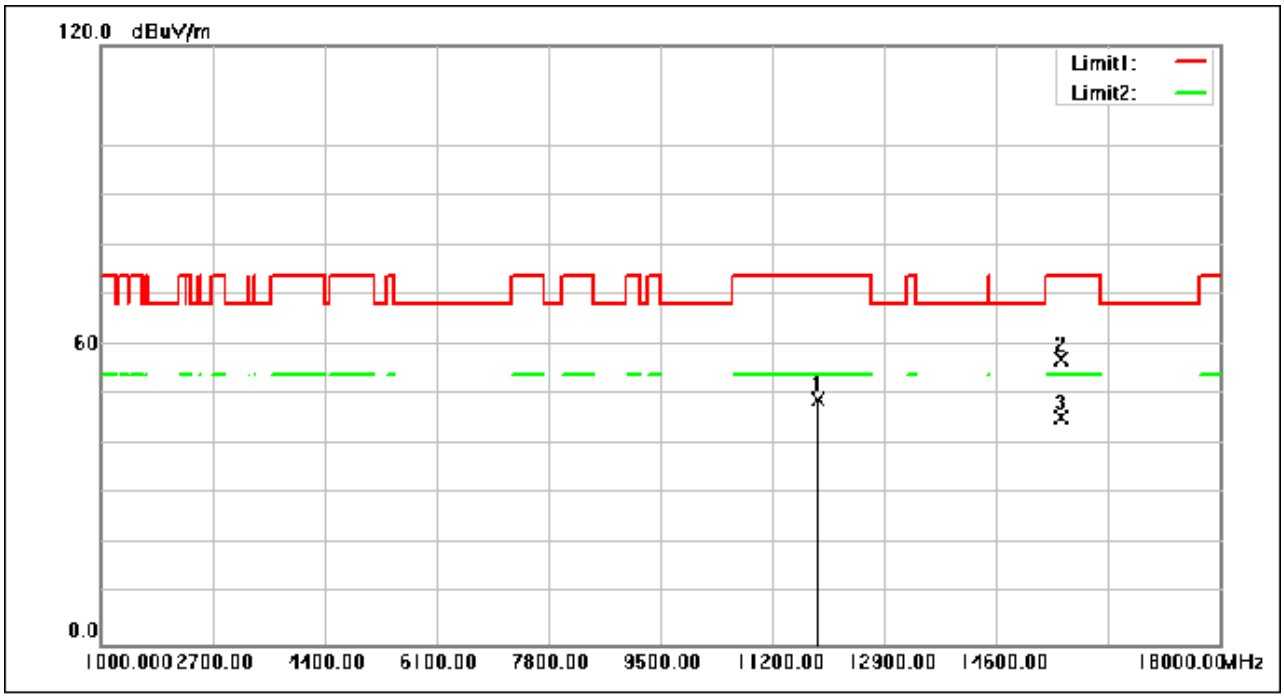
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11727.680	56.02	-6.17	49.85	74.00	-24.15	peak
2	15530.240	59.28	-4.62	54.66	74.00	-19.34	peak
3	15530.240	49.67	-4.62	45.05	54.00	-8.95	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



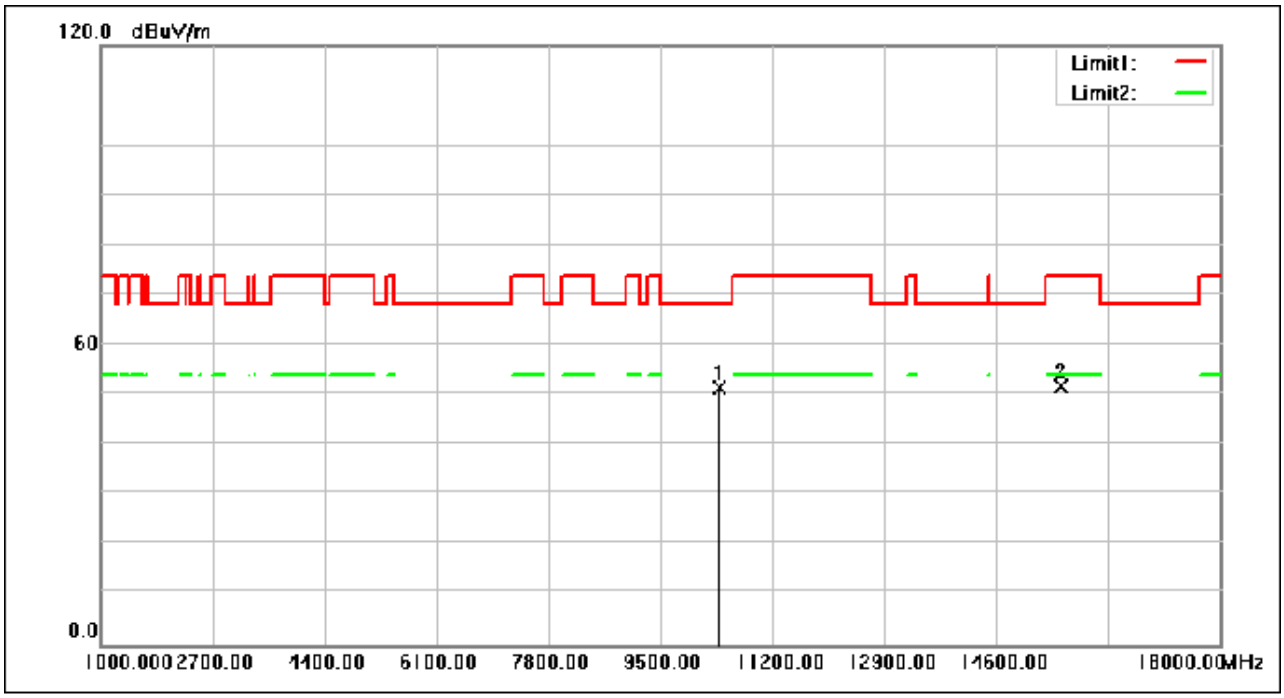
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9565.960	55.57	-7.83	47.74	68.30	-20.56	peak
2	15538.400	58.74	-4.62	54.12	74.00	-19.88	peak
3	15538.400	48.96	-4.62	44.34	54.00	-9.66	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



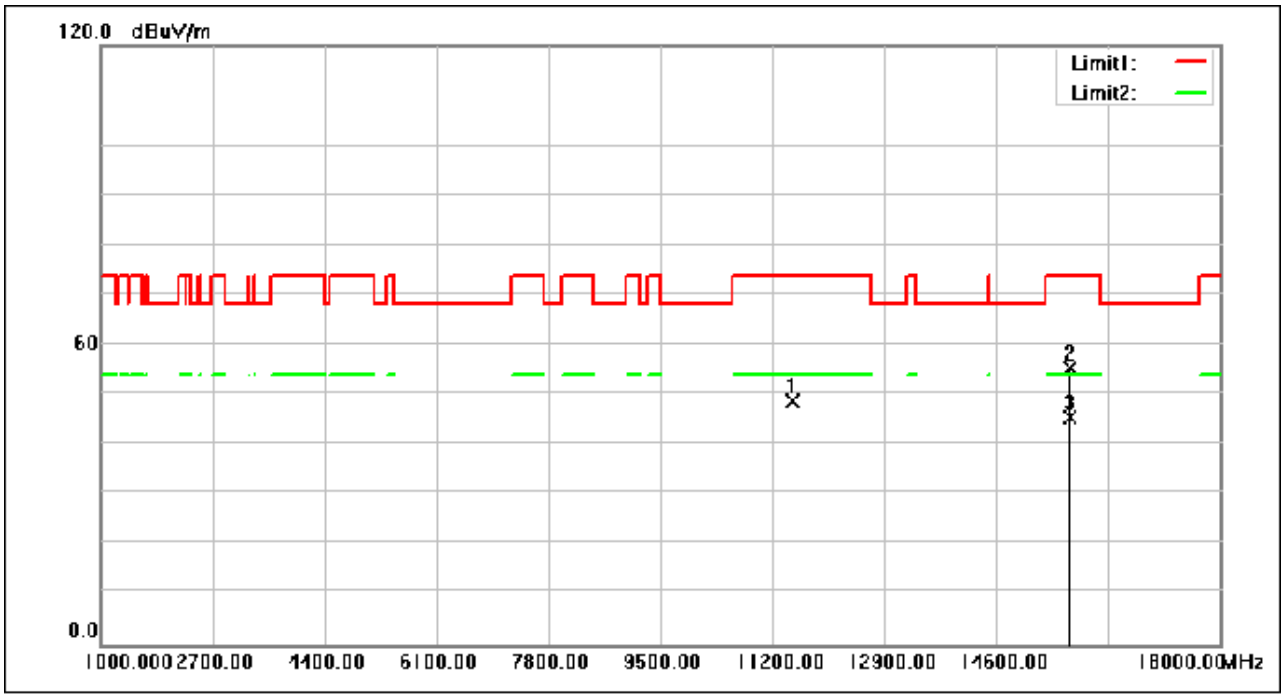
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11907.200	55.11	-6.03	49.08	74.00	-24.92	peak
2	15595.520	61.83	-4.57	57.26	74.00	-16.74	peak
3	15595.520	49.97	-4.57	45.40	54.00	-8.60	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



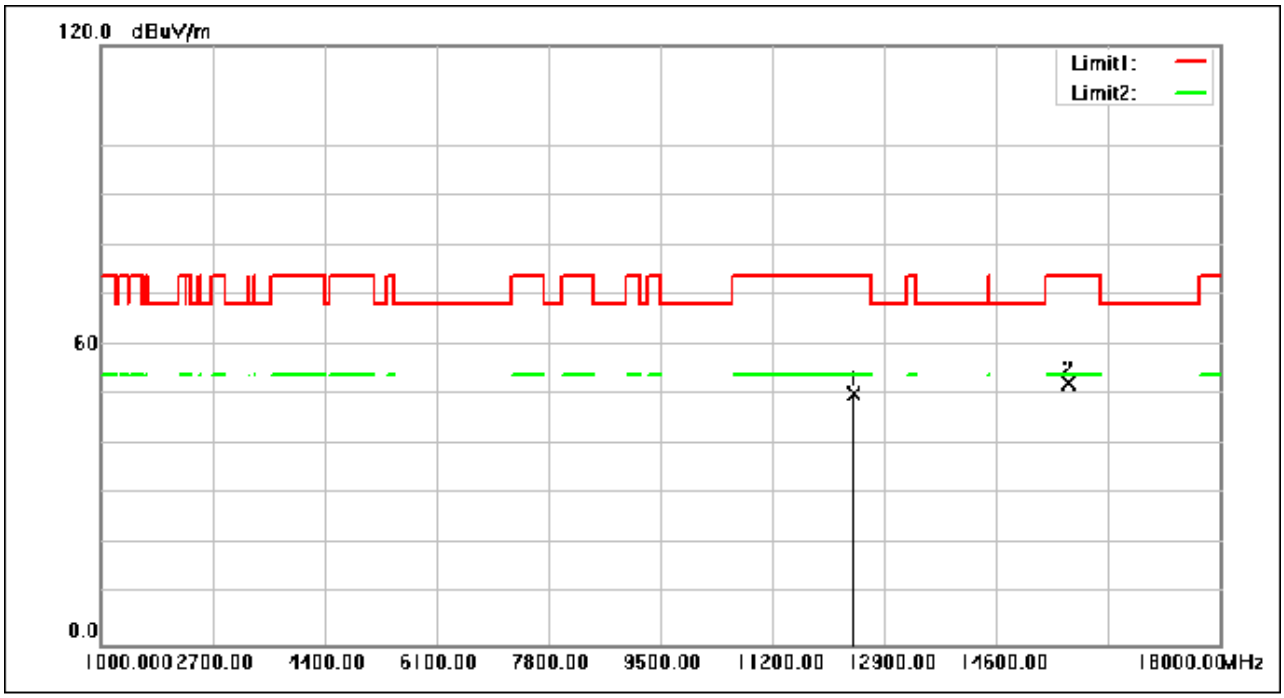
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10397.600	58.51	-7.10	51.41	68.30	-16.89	peak
2	15592.120	56.40	-4.57	51.83	74.00	-22.17	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



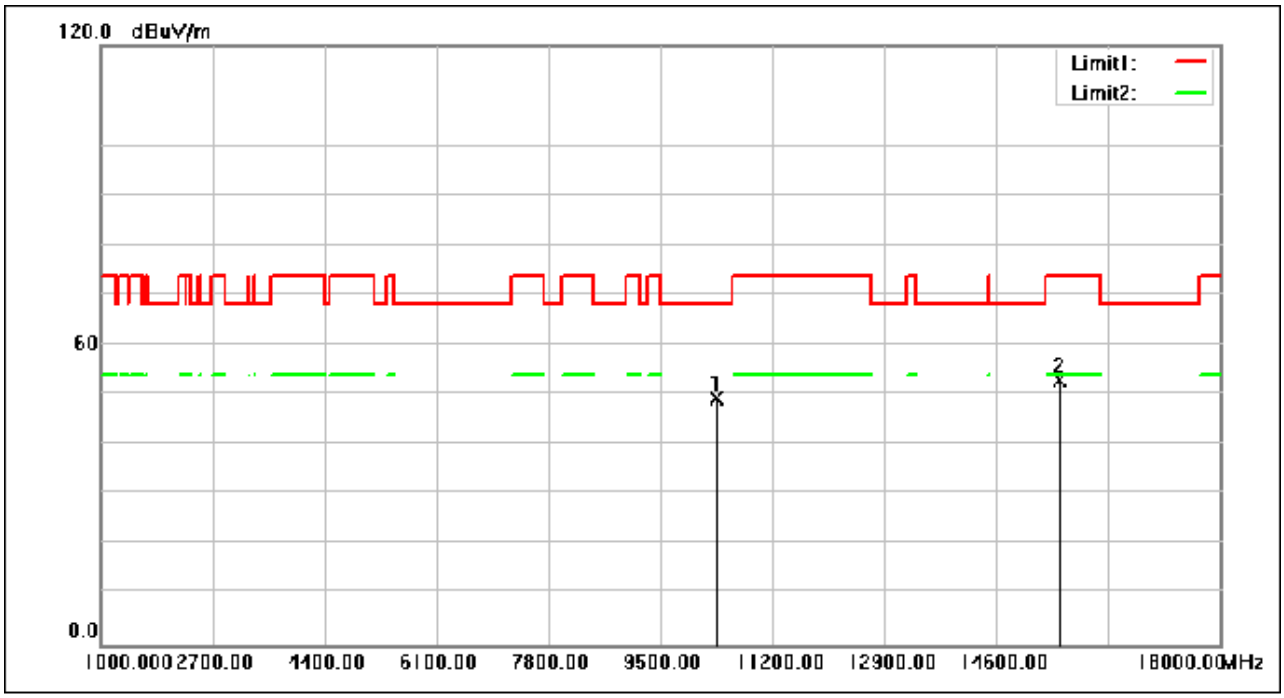
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11511.440	55.02	-6.35	48.67	74.00	-25.33	peak
2	15728.120	59.70	-4.44	55.26	74.00	-18.74	peak
3	15728.120	49.90	-4.44	45.46	54.00	-8.54	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



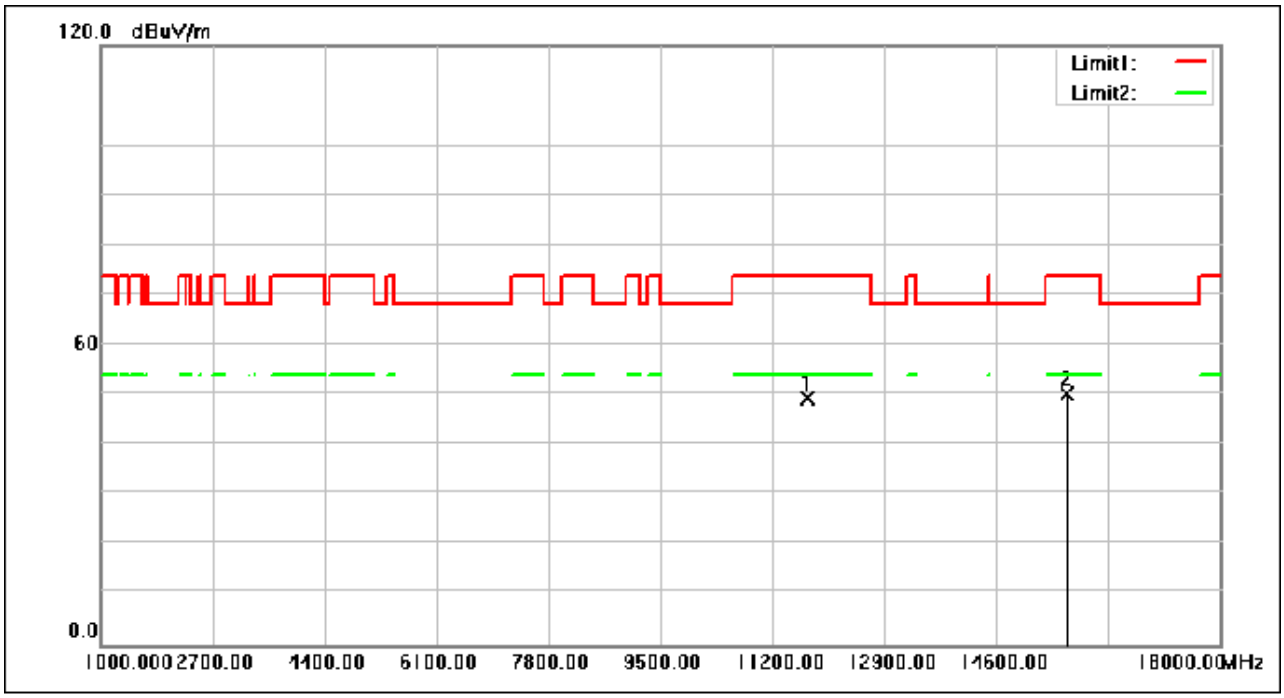
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12453.240	56.31	-6.09	50.22	74.00	-23.78	peak
2	15715.880	56.88	-4.46	52.42	74.00	-21.58	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



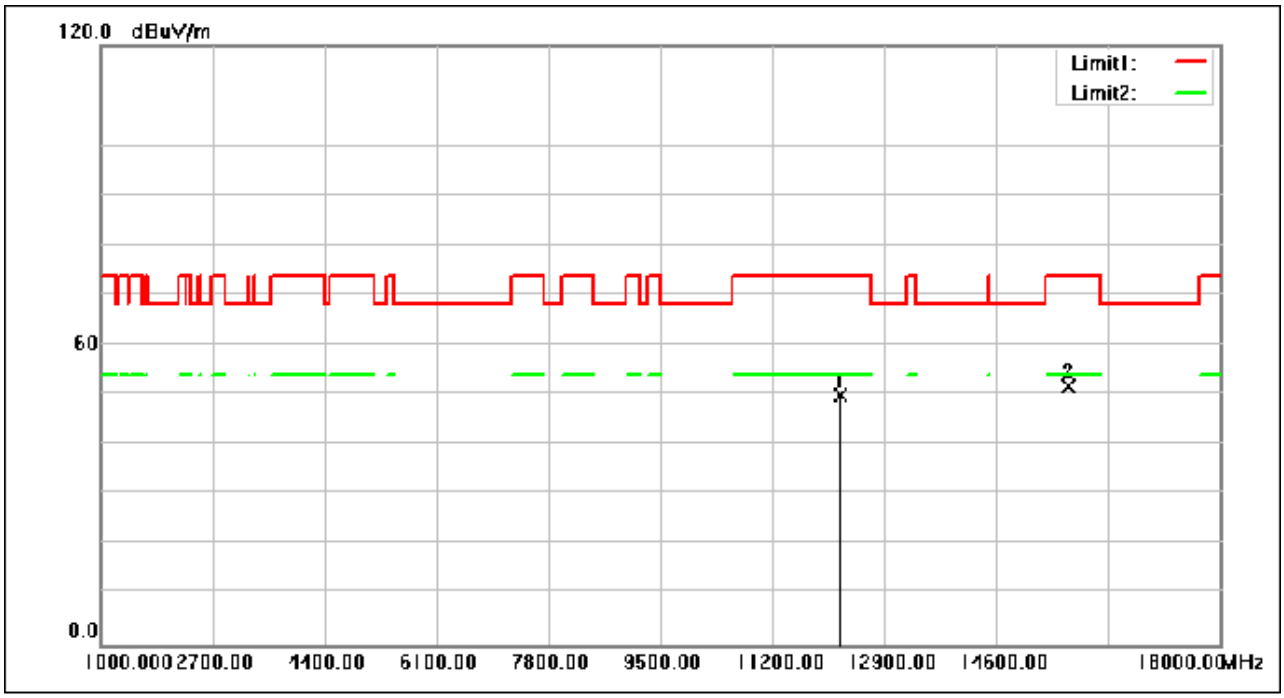
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10361.560	56.46	-7.12	49.34	68.30	-18.96	peak
2	15571.040	57.42	-4.59	52.83	74.00	-21.17	peak

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



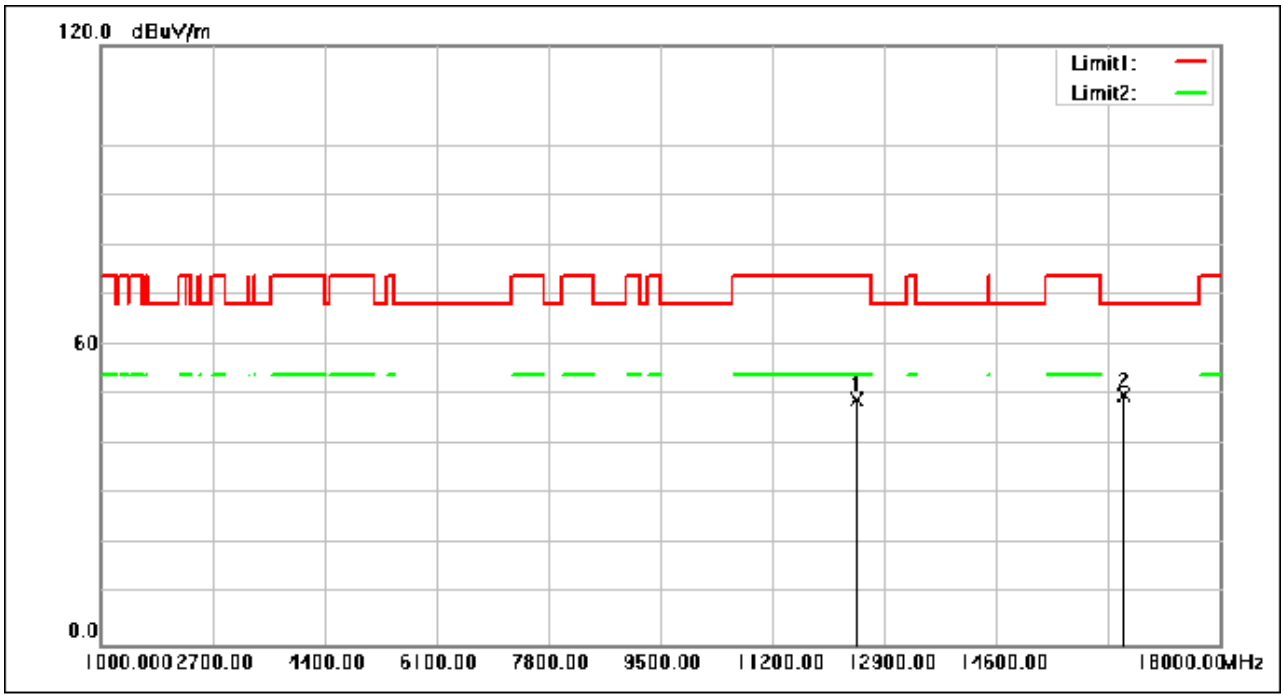
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11735.160	55.37	-6.16	49.21	74.00	-24.79	peak
2	15676.440	54.63	-4.49	50.14	74.00	-23.86	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



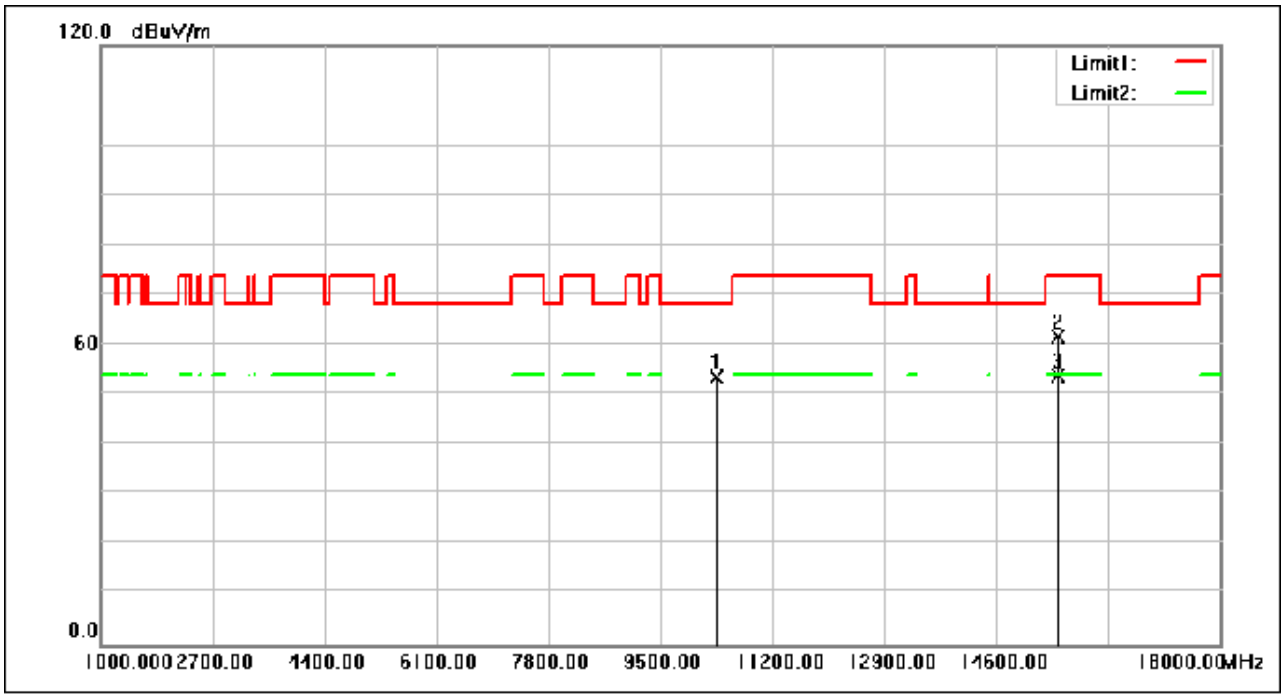
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12231.560	55.88	-5.99	49.89	74.00	-24.11	peak
2	15691.400	56.25	-4.48	51.77	74.00	-22.23	peak

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



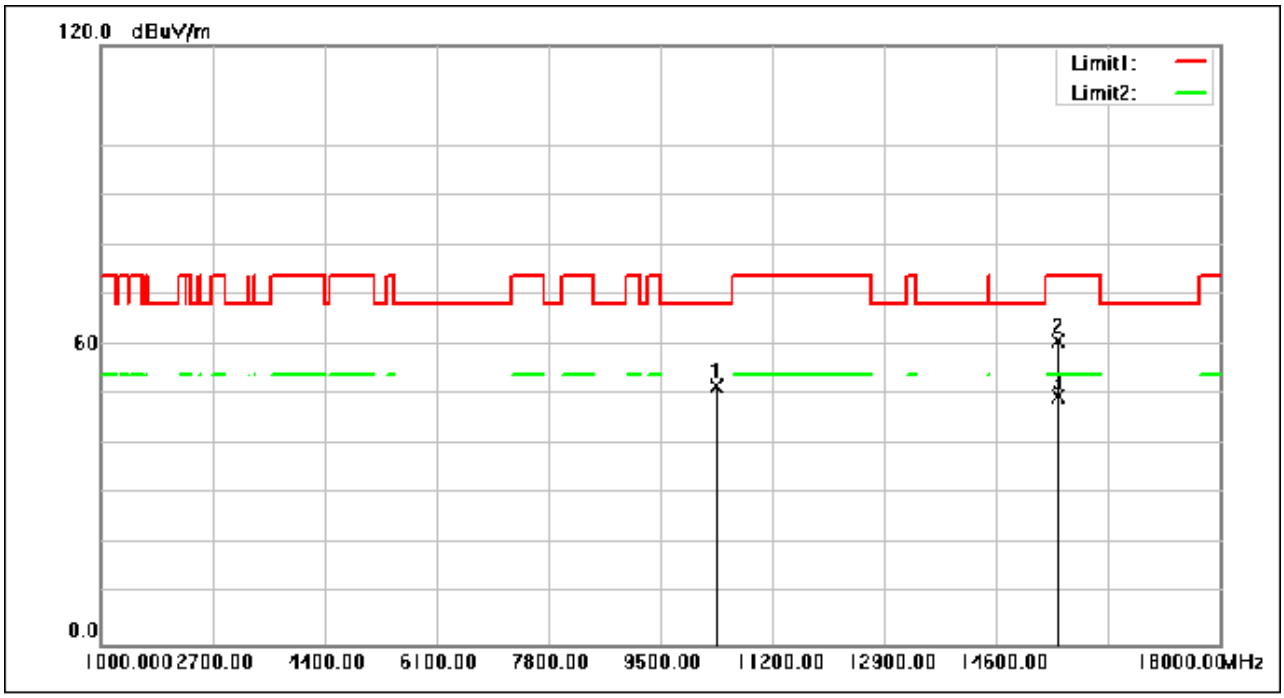
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12478.400	55.18	-6.11	49.07	74.00	-24.93	peak
2	16548.880	53.33	-3.45	49.88	68.30	-18.42	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



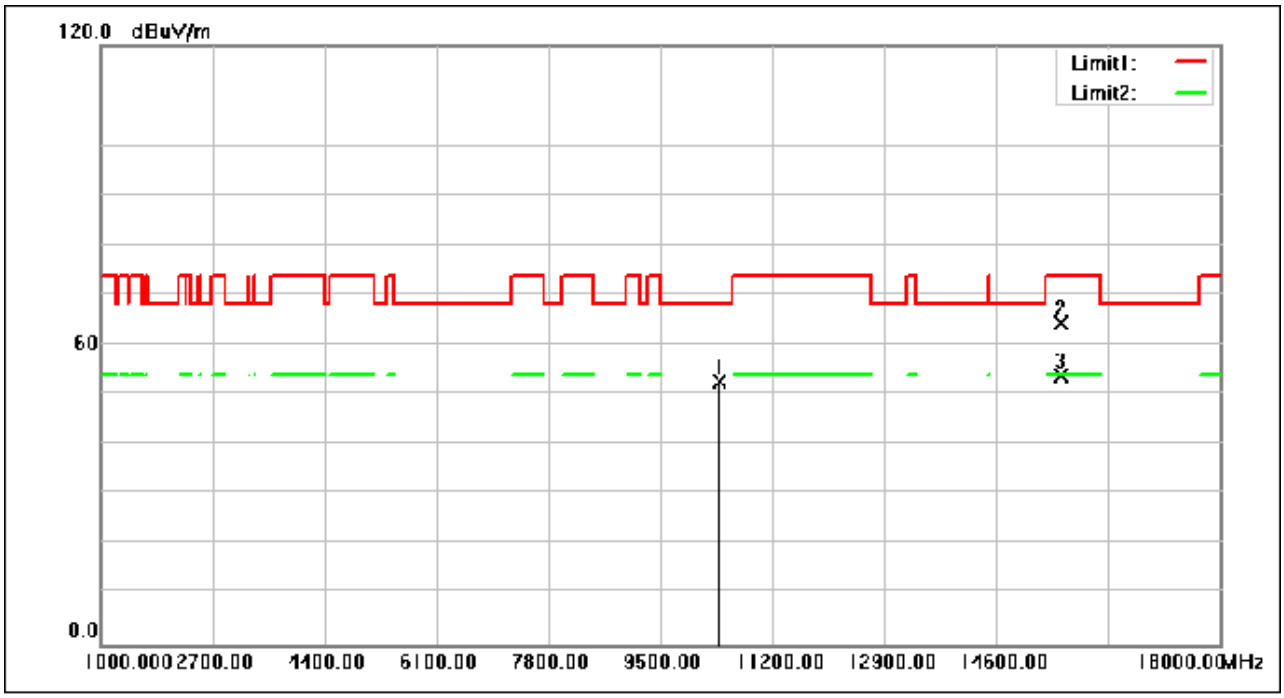
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.200	60.69	-7.12	53.57	68.30	-14.73	peak
2	15543.160	66.32	-4.61	61.71	74.00	-12.29	peak
3	15543.160	58.46	-4.61	53.85	54.00	-0.15	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



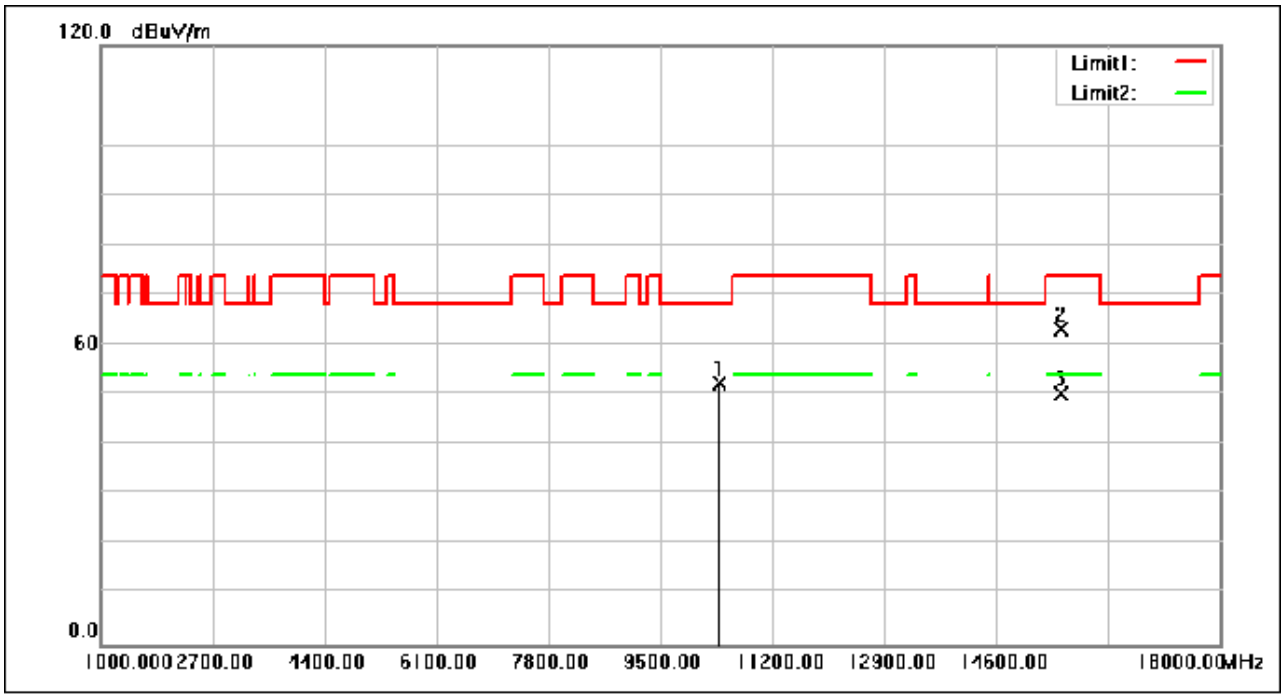
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.880	58.98	-7.12	51.86	68.30	-16.44	peak
2	15548.600	65.25	-4.61	60.64	74.00	-13.36	peak
3	15548.600	54.31	-4.61	49.70	54.00	-4.30	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



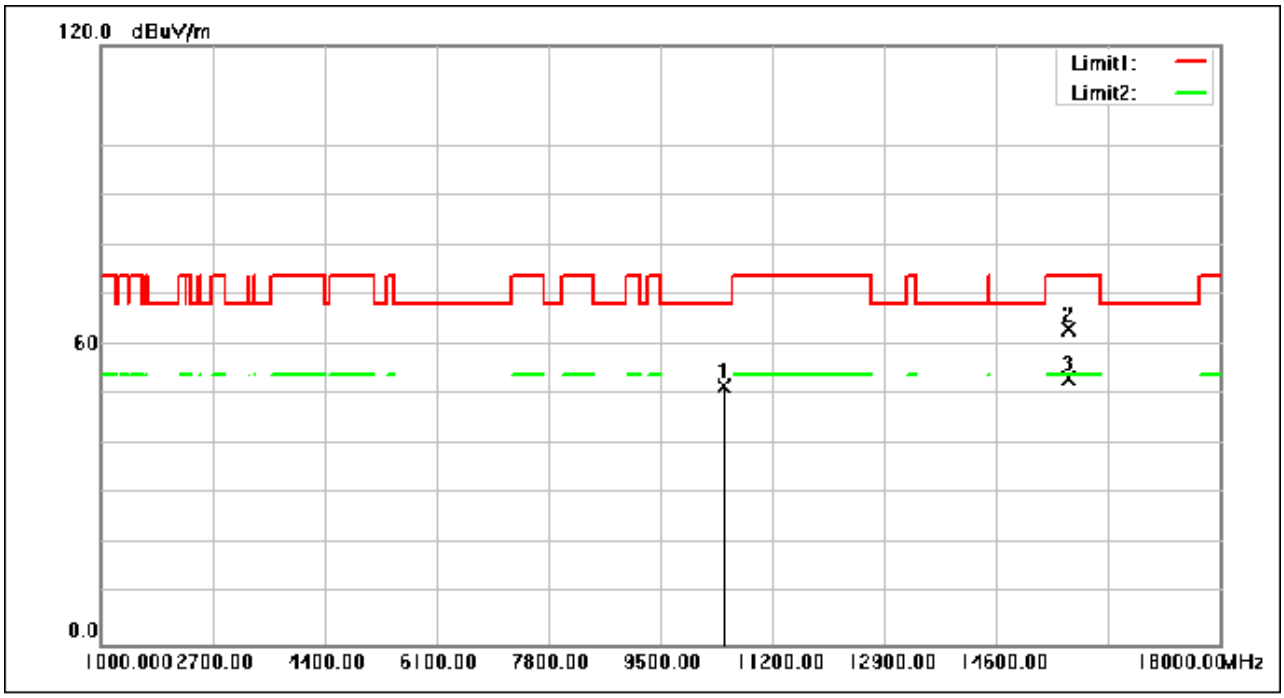
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10405.080	59.76	-7.10	52.66	68.30	-15.64	peak
2	15596.200	68.95	-4.57	64.38	74.00	-9.62	peak
3	15596.200	58.48	-4.57	53.91	54.00	-0.09	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



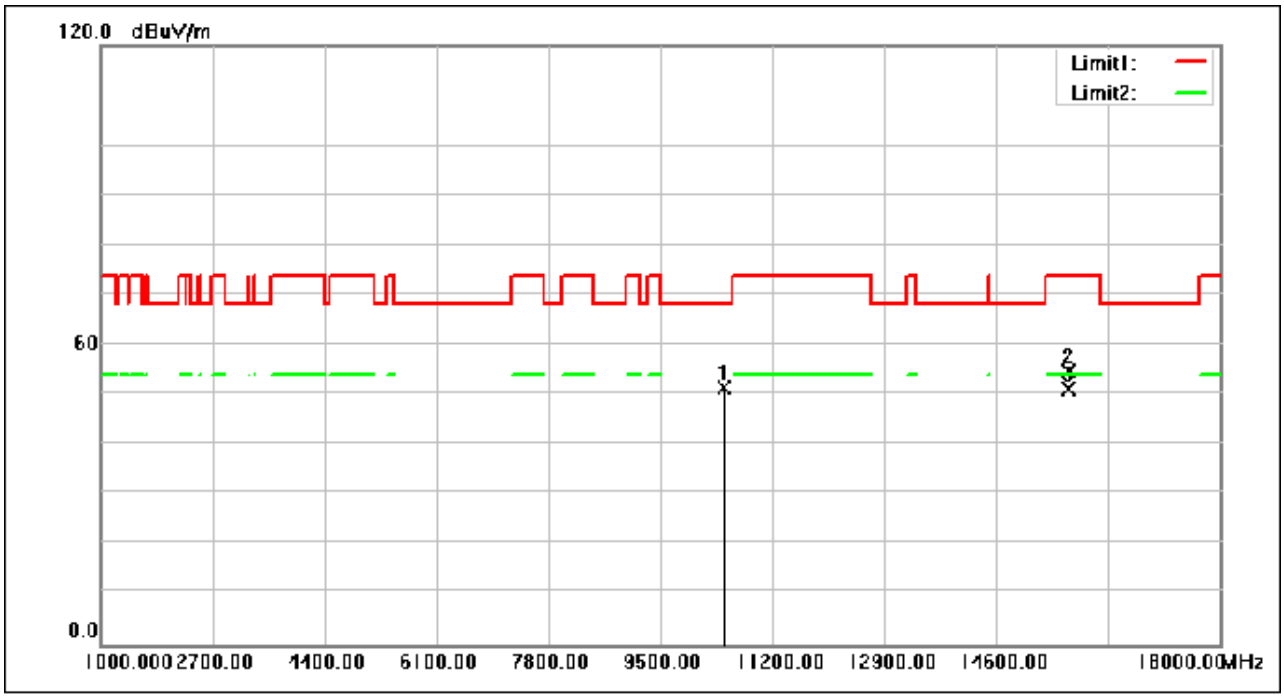
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10398.280	59.42	-7.10	52.32	68.30	-15.98	peak
2	15598.920	67.65	-4.56	63.09	74.00	-10.91	peak
3	15598.920	54.87	-4.56	50.31	54.00	-3.69	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



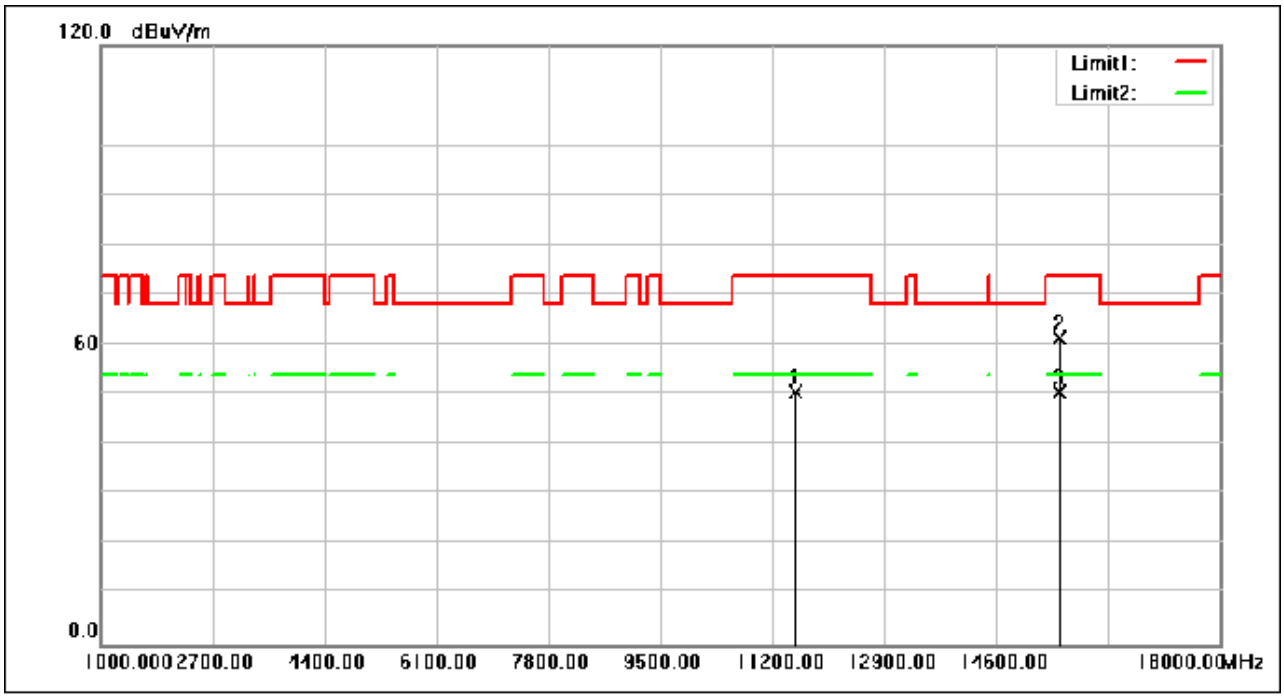
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10477.160	58.73	-7.06	51.67	68.30	-16.63	peak
2	15715.880	67.52	-4.46	63.06	74.00	-10.94	peak
3	15715.880	57.83	-4.46	53.37	54.00	-0.63	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



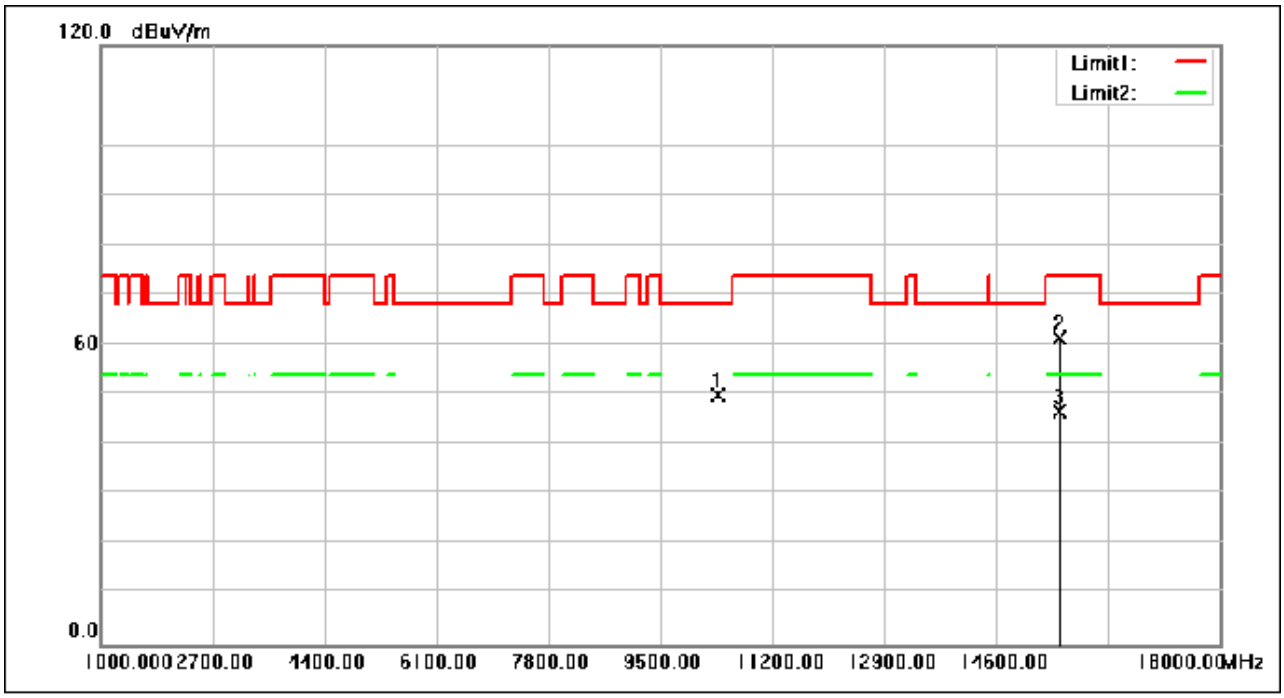
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10479.880	58.61	-7.05	51.56	68.30	-16.74	peak
2	15712.480	59.10	-4.46	54.64	74.00	-19.36	peak
3	15712.480	55.71	-4.46	51.25	54.00	-2.75	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



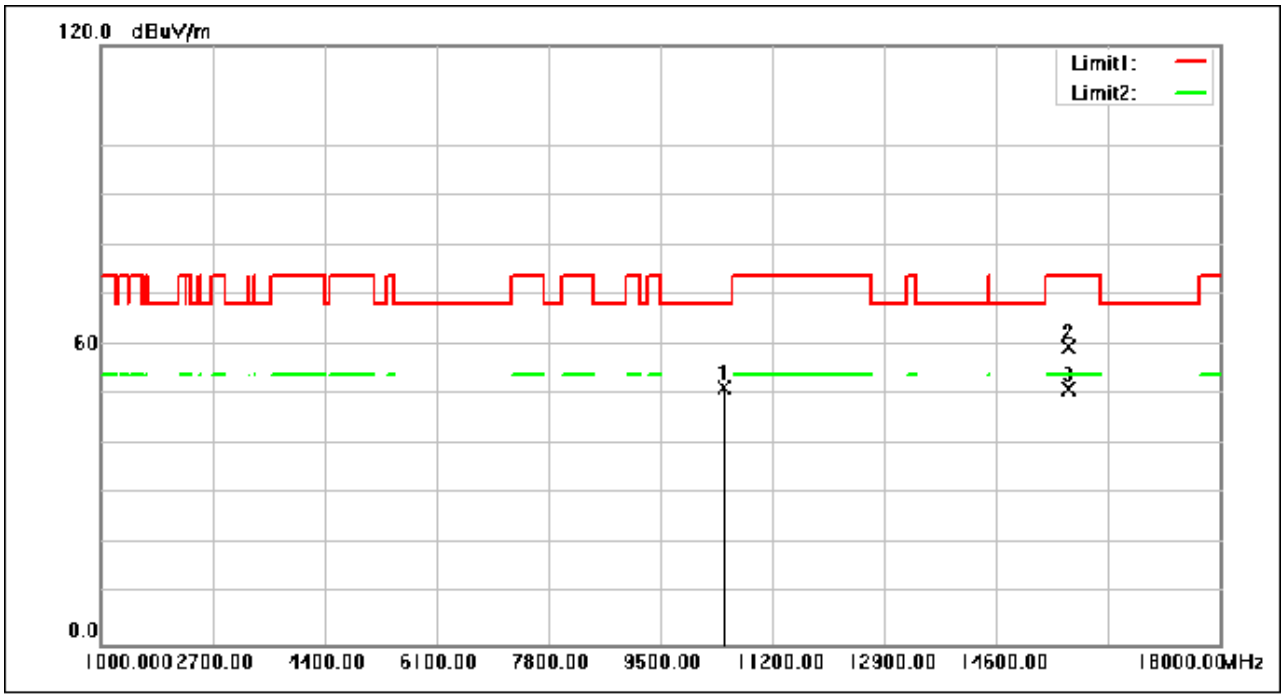
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11561.080	56.83	-6.31	50.52	74.00	-23.48	peak
2	15574.440	65.97	-4.59	61.38	74.00	-12.62	peak
3	15574.440	55.13	-4.59	50.54	54.00	-3.46	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



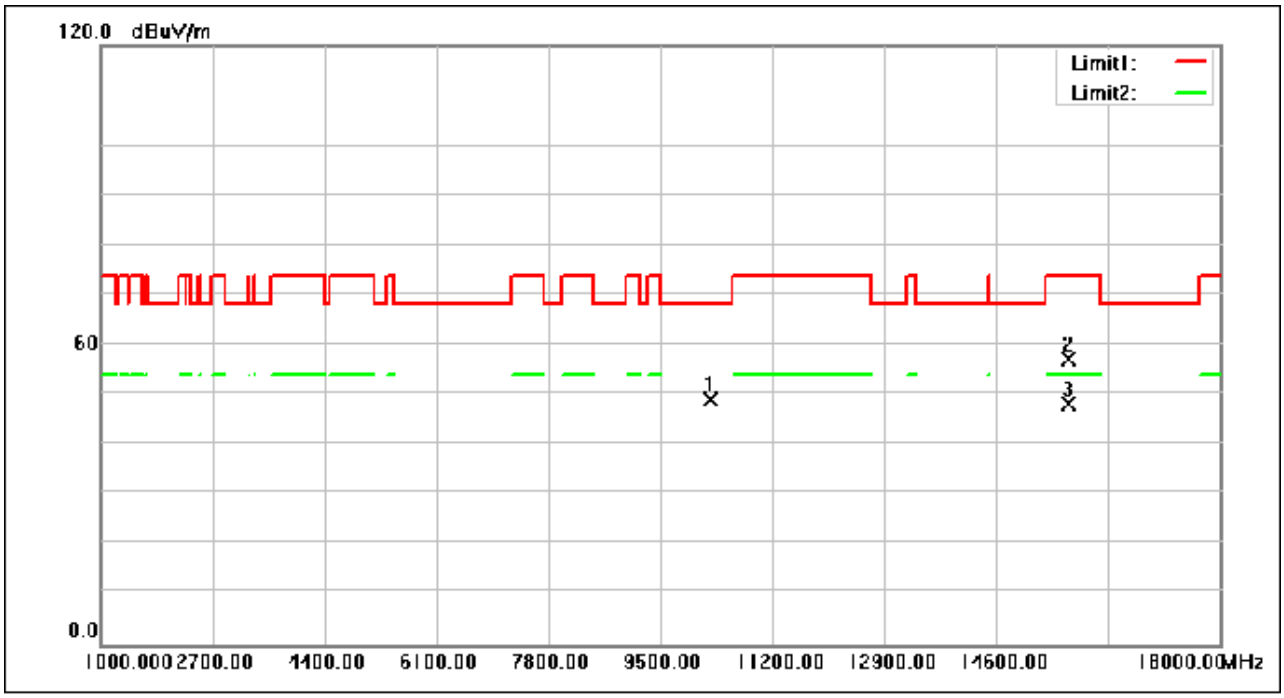
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10373.120	57.11	-7.11	50.00	68.30	-18.30	peak
2	15576.480	65.81	-4.58	61.23	74.00	-12.77	peak
3	15576.480	51.29	-4.58	46.71	54.00	-7.29	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



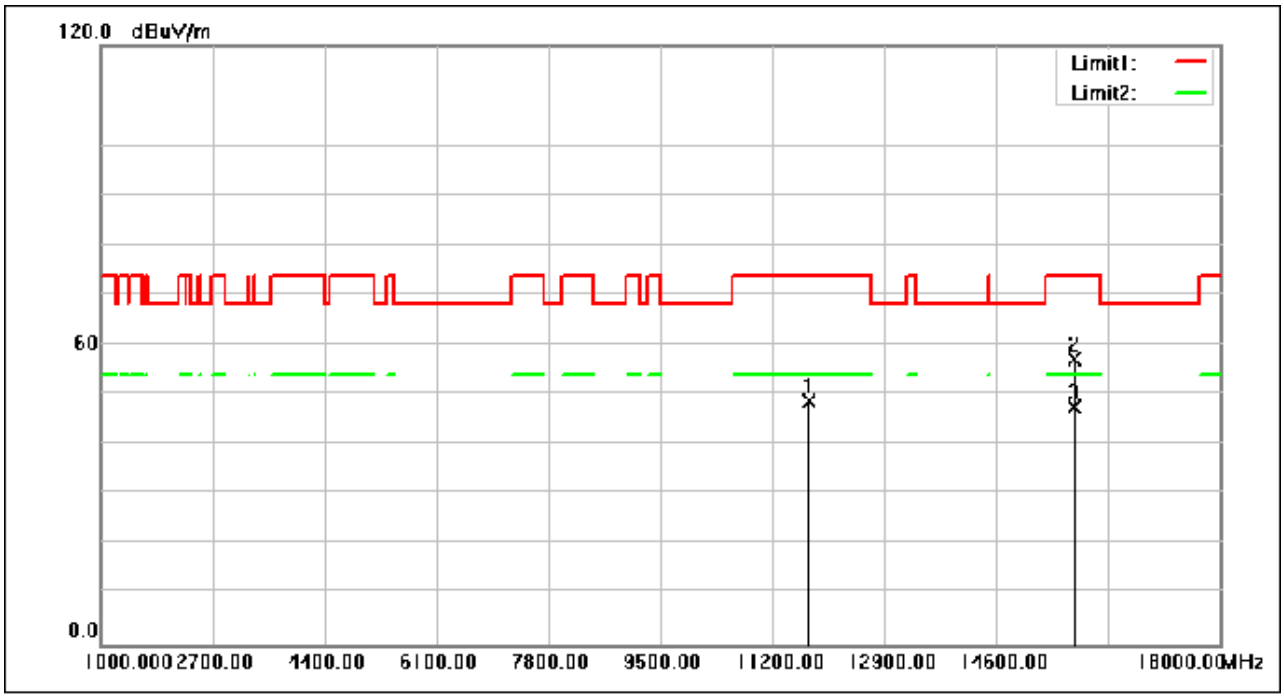
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10478.520	58.40	-7.06	51.34	68.30	-16.96	peak
2	15693.440	63.94	-4.48	59.46	74.00	-14.54	peak
3	15693.440	55.53	-4.48	51.05	54.00	-2.95	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



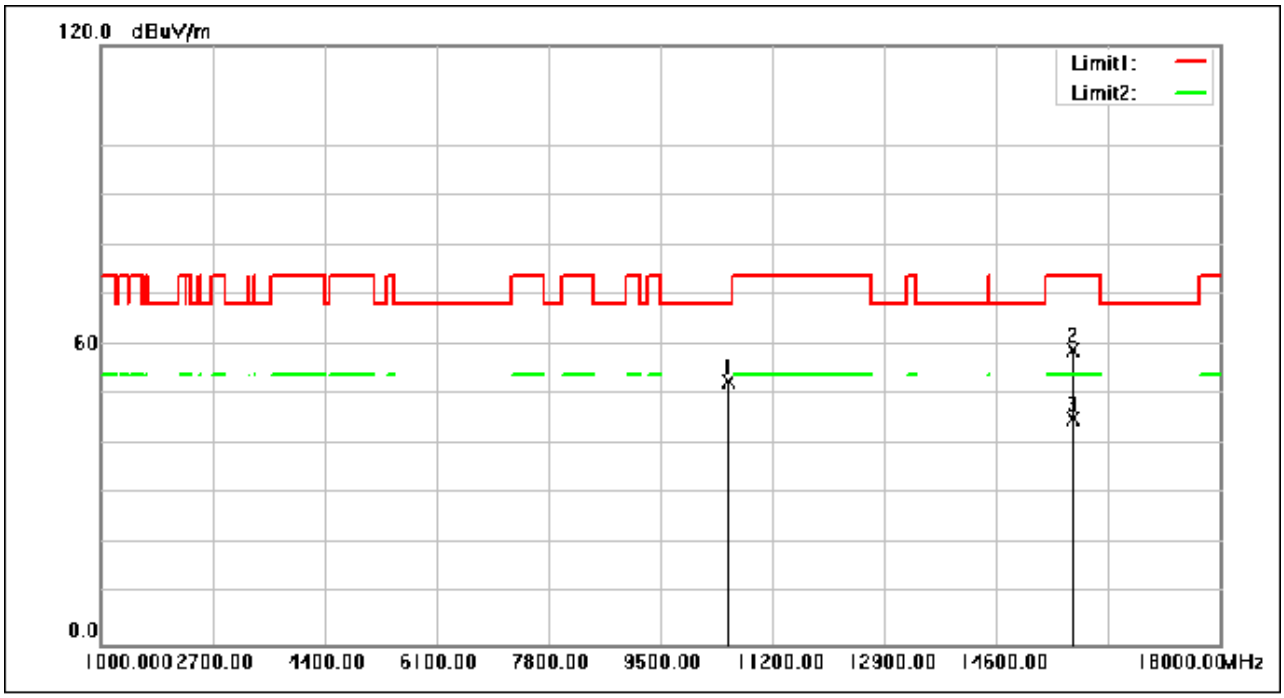
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10277.240	56.29	-7.17	49.12	68.30	-19.18	peak
2	15703.640	61.60	-4.47	57.13	74.00	-16.87	peak
3	15703.640	52.69	-4.47	48.22	54.00	-5.78	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



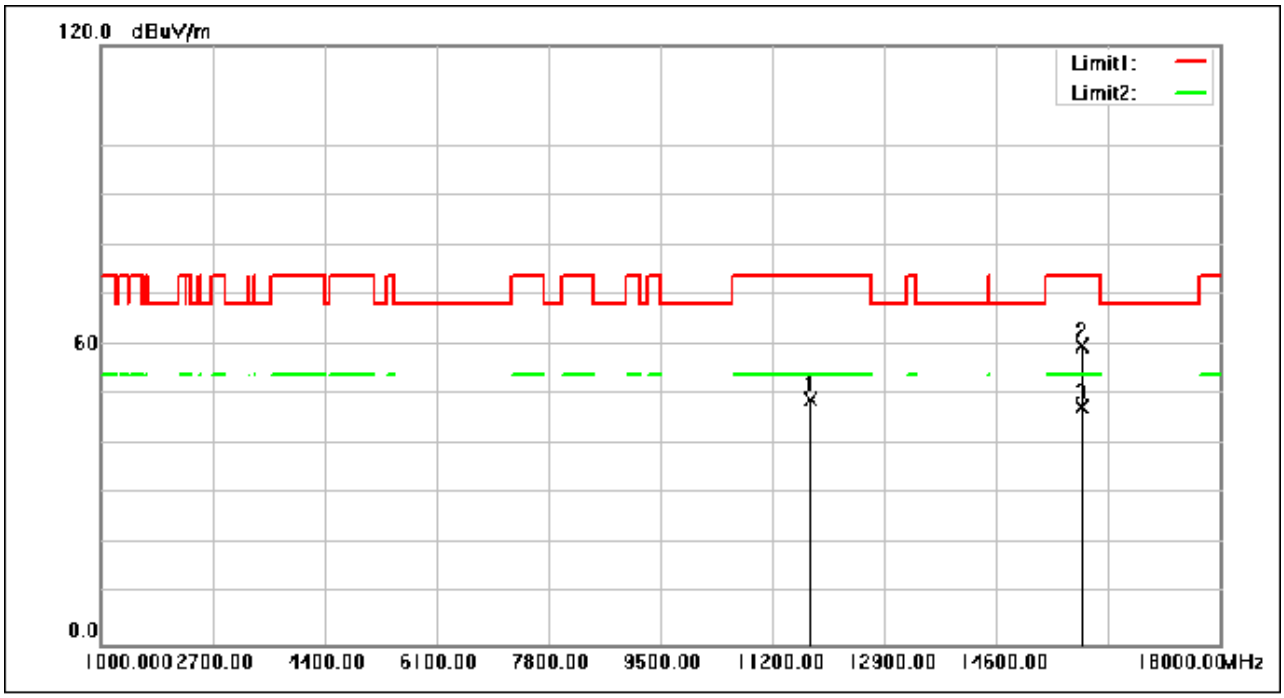
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11775.280	55.03	-6.13	48.90	74.00	-25.10	peak
2	15790.680	61.40	-4.39	57.01	74.00	-16.99	peak
3	15790.680	51.80	-4.39	47.41	54.00	-6.59	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



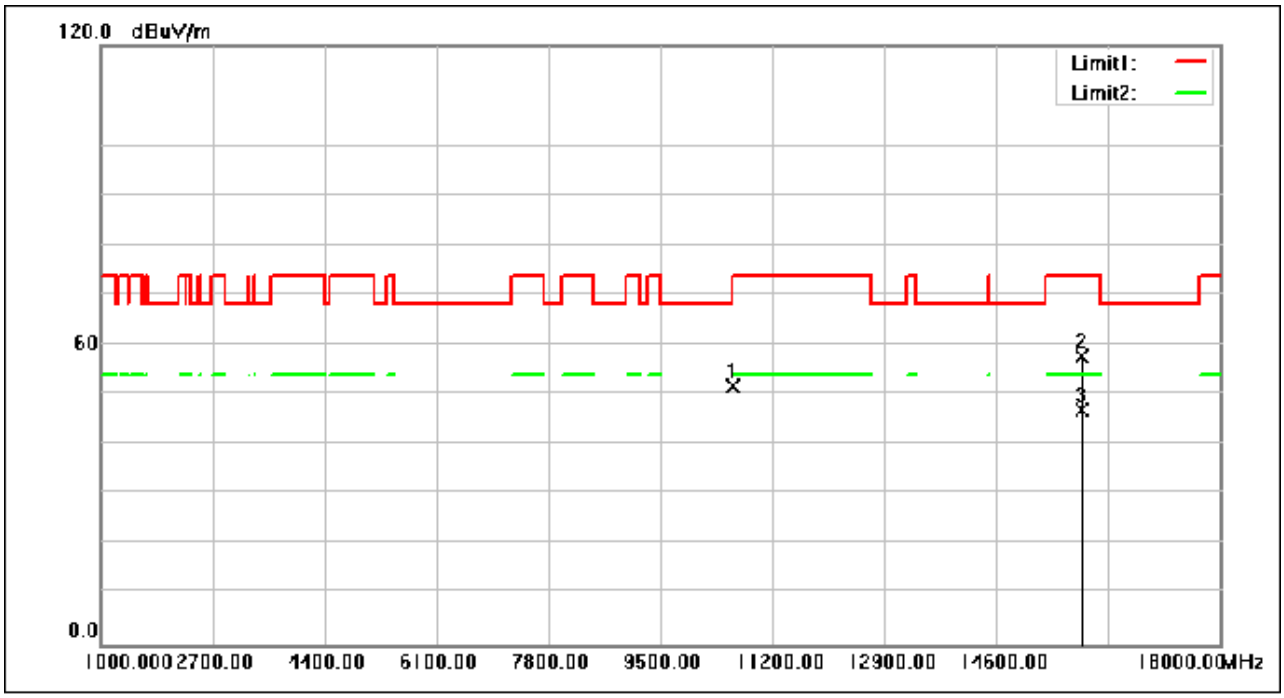
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10523.400	59.54	-7.02	52.52	68.30	-15.78	peak
2	15779.120	63.37	-4.40	58.97	74.00	-15.03	peak
3	15779.120	49.61	-4.40	45.21	54.00	-8.79	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



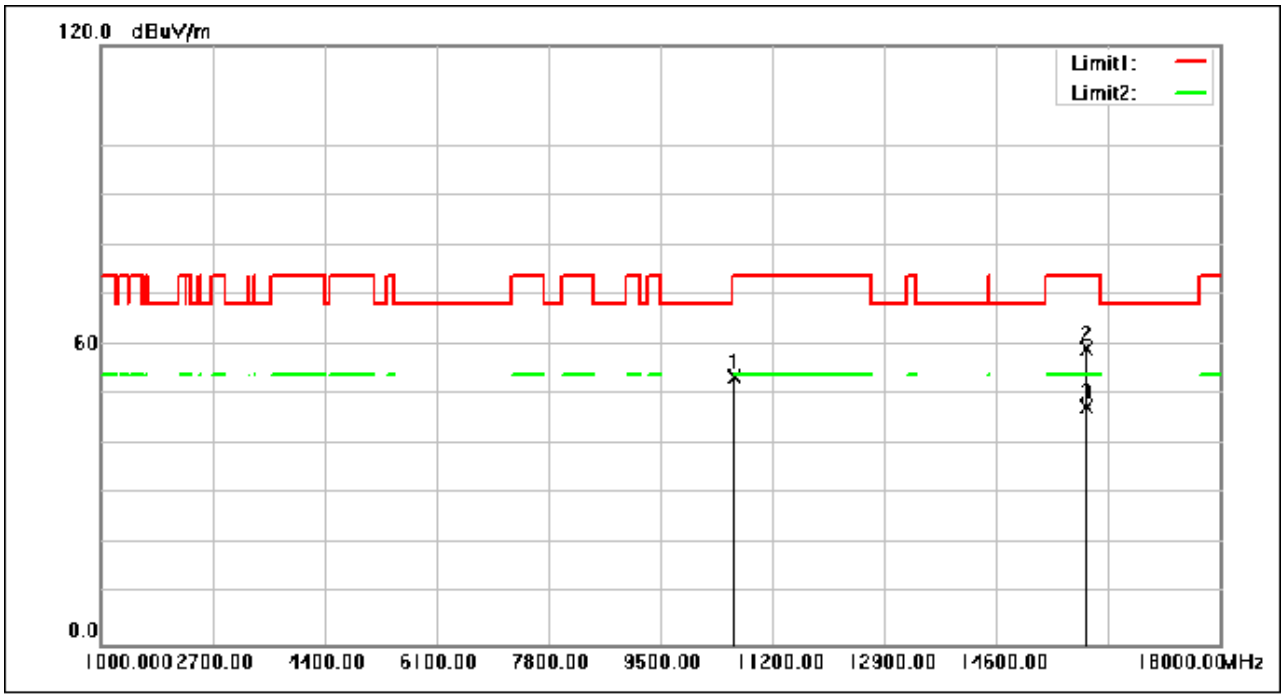
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11789.560	55.11	-6.13	48.98	74.00	-25.02	peak
2	15904.240	64.27	-4.28	59.99	74.00	-14.01	peak
3	15904.240	51.93	-4.28	47.65	54.00	-6.35	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



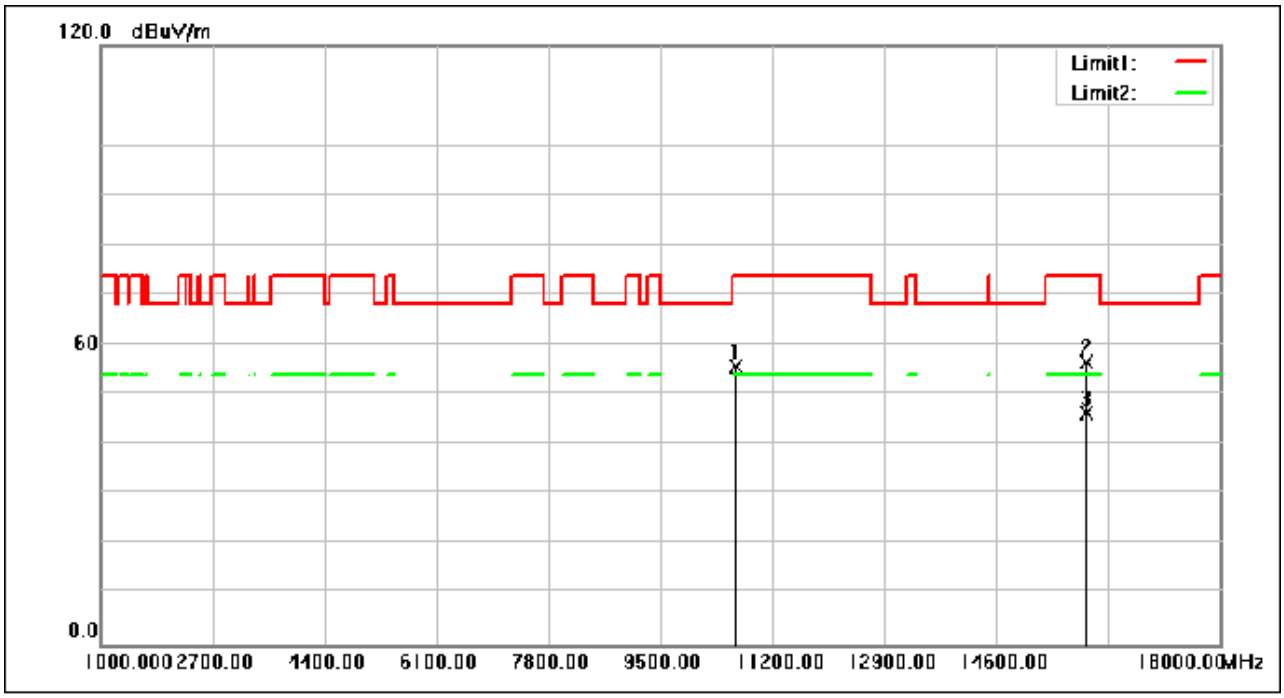
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10606.360	58.60	-6.98	51.62	74.00	-22.38	peak
2	15894.720	62.14	-4.29	57.85	74.00	-16.15	peak
3	15894.720	51.36	-4.29	47.07	54.00	-6.93	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



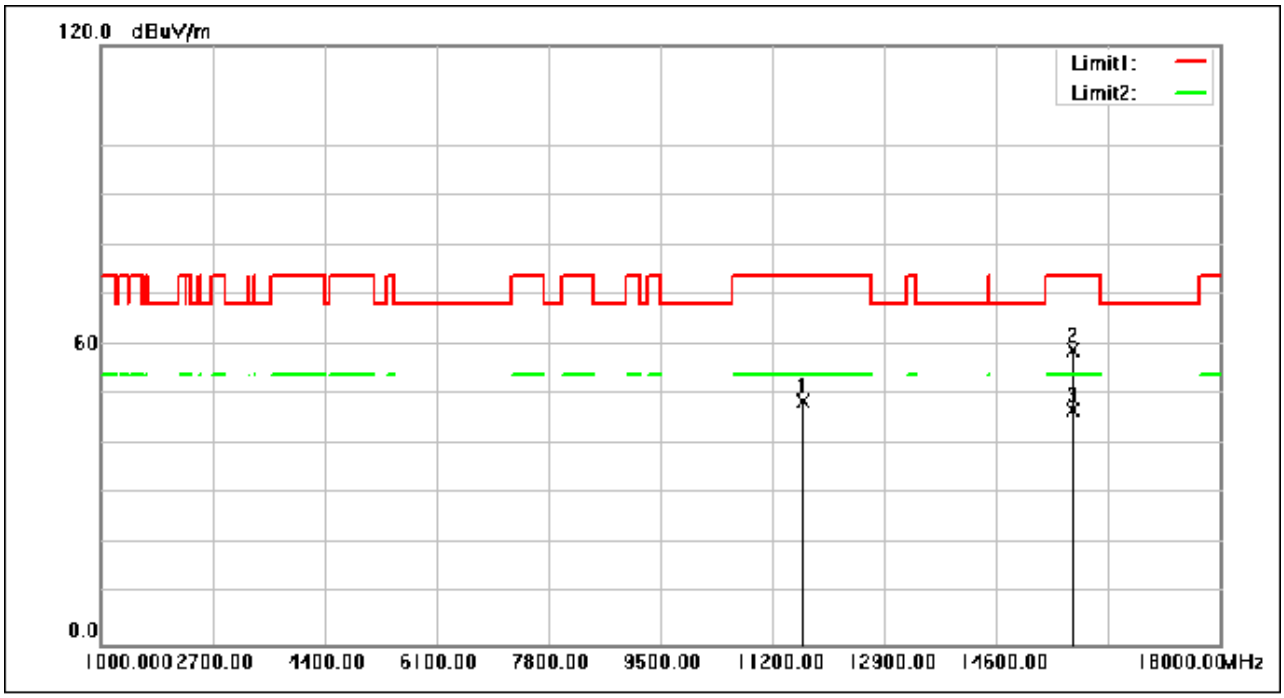
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10635.600	60.63	-6.97	53.66	74.00	-20.34	peak
2	15968.840	63.60	-4.20	59.40	74.00	-14.60	peak
3	15968.840	51.77	-4.20	47.57	54.00	-6.43	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



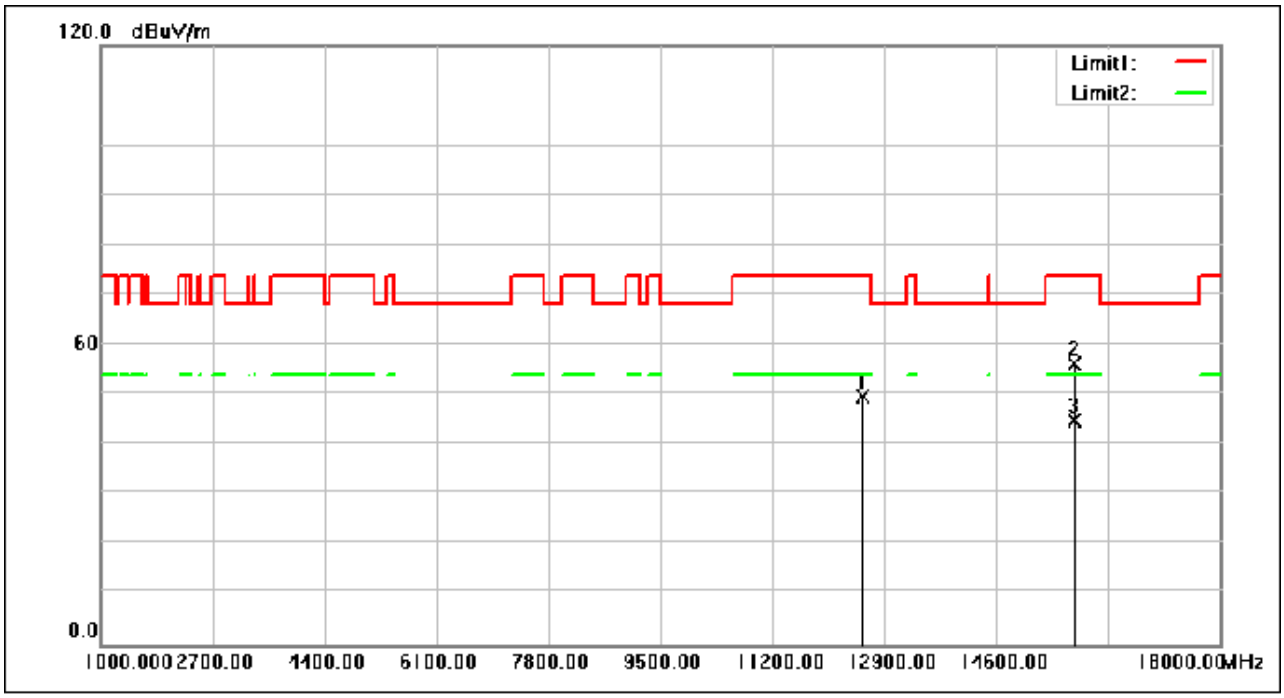
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.360	62.73	-6.96	55.77	74.00	-18.23	peak
2	15965.440	60.86	-4.21	56.65	74.00	-17.35	peak
3	15965.440	50.70	-4.21	46.49	54.00	-7.51	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



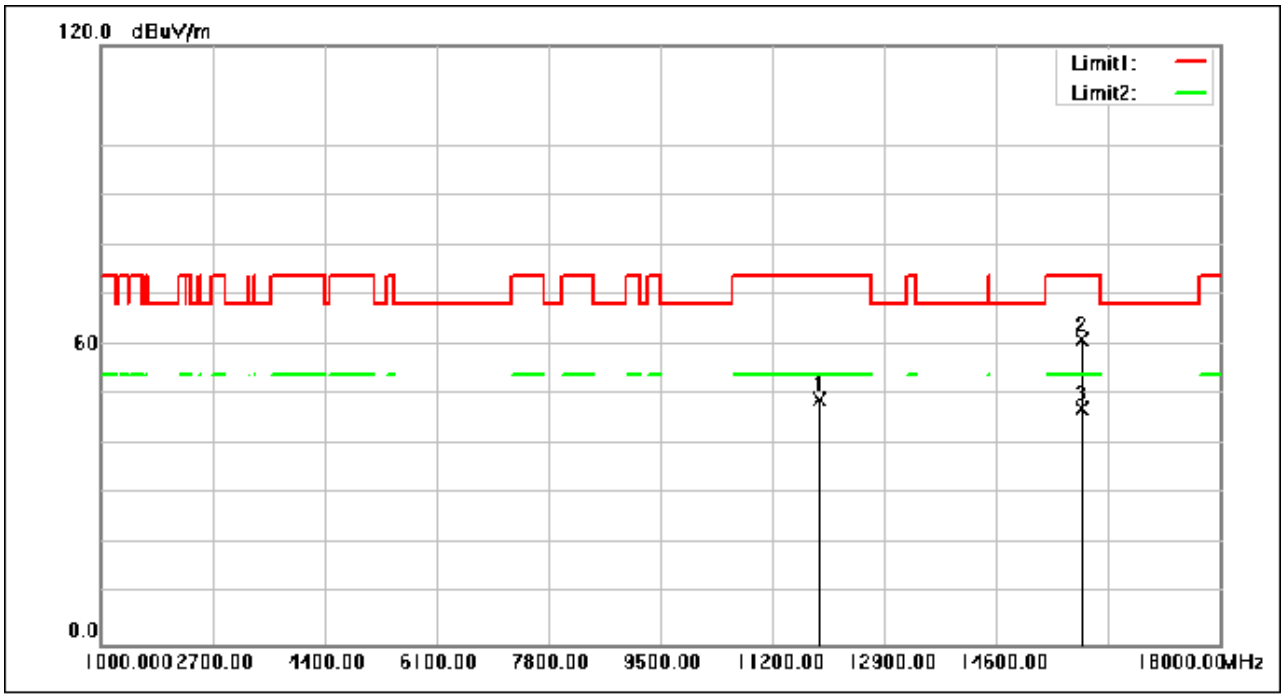
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11669.880	55.12	-6.22	48.90	74.00	-25.10	peak
2	15780.480	63.45	-4.40	59.05	74.00	-14.95	peak
3	15780.480	51.28	-4.40	46.88	54.00	-7.12	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



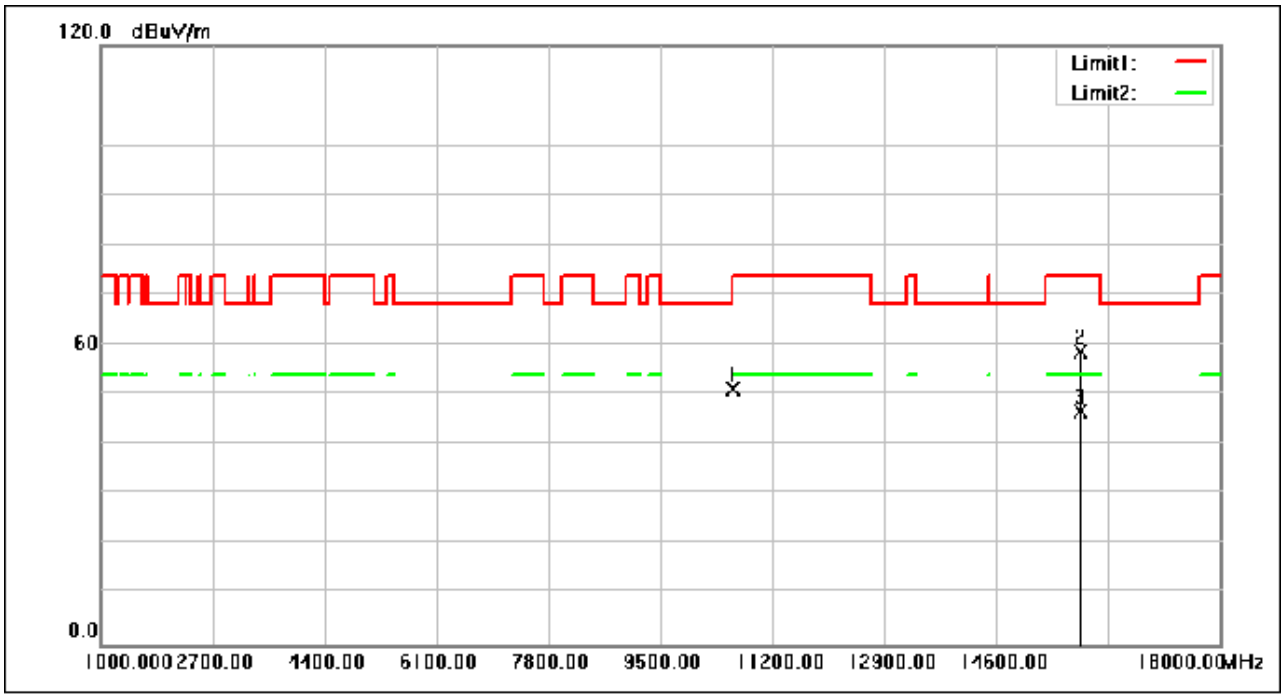
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12583.120	55.68	-6.15	49.53	74.00	-24.47	peak
2	15795.440	60.71	-4.39	56.32	74.00	-17.68	peak
3	15795.440	49.30	-4.39	44.91	54.00	-9.09	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



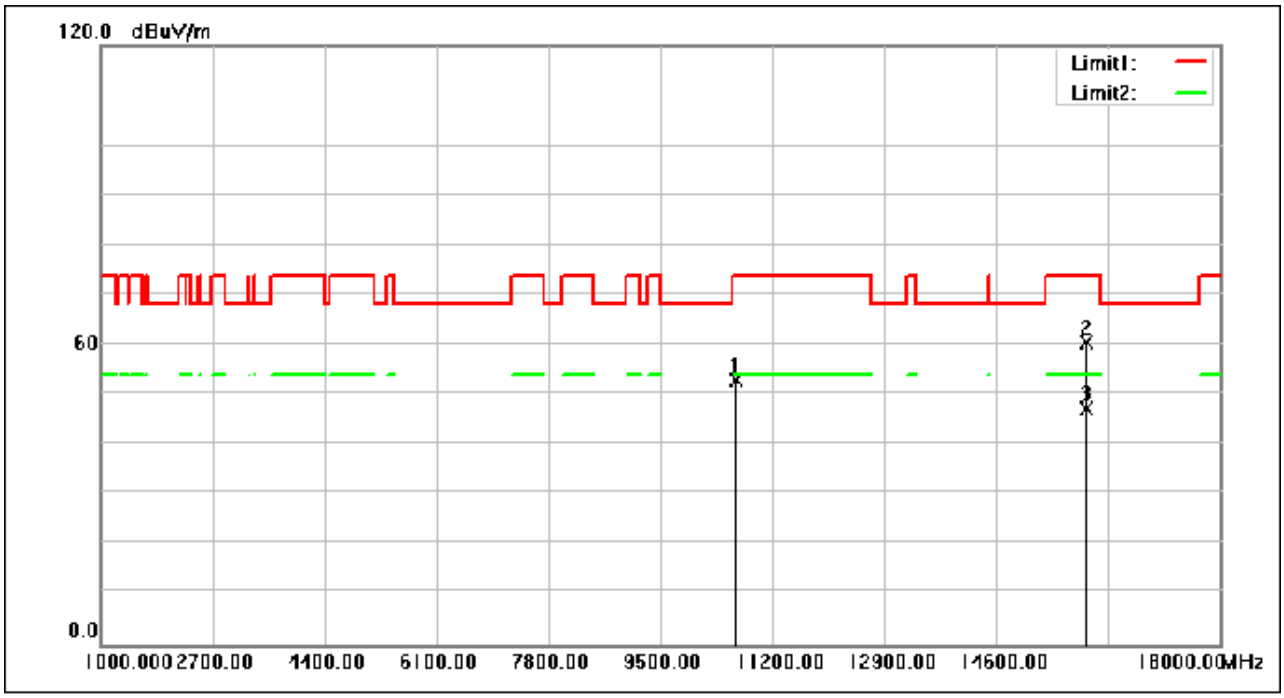
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11926.240	54.98	-6.00	48.98	74.00	-25.02	peak
2	15896.760	65.47	-4.29	61.18	74.00	-12.82	peak
3	15896.760	51.57	-4.29	47.28	54.00	-6.72	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



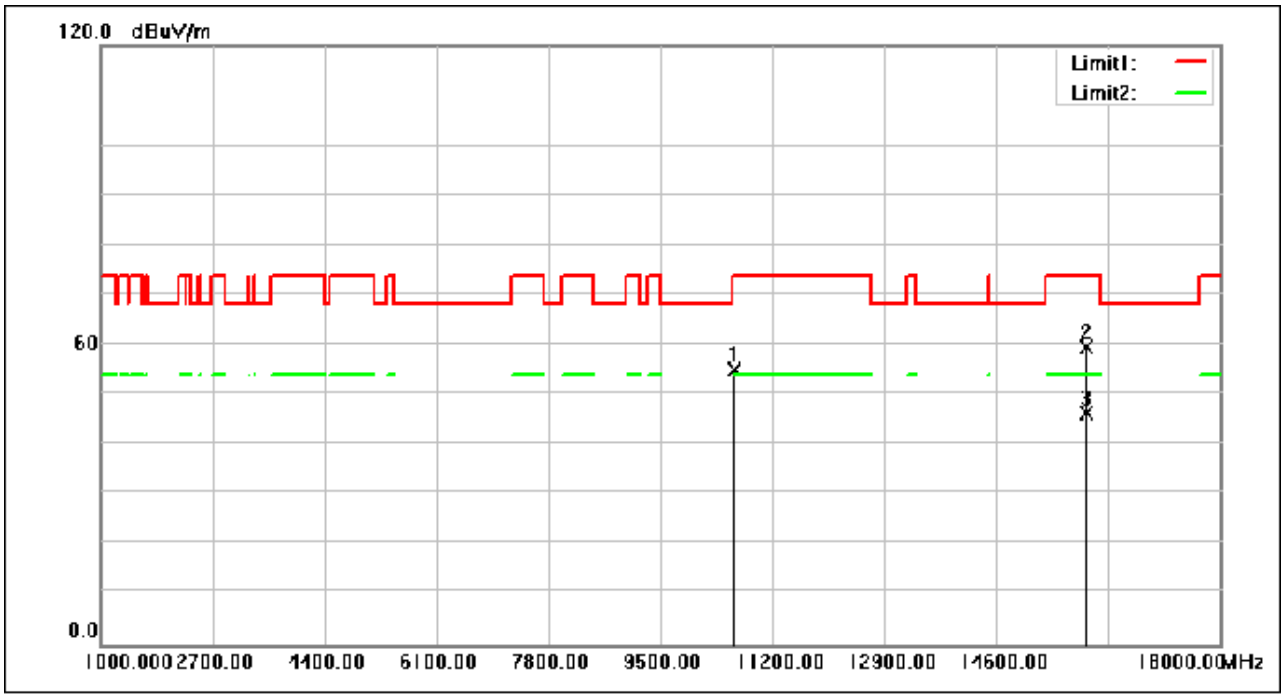
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10595.480	58.19	-6.98	51.21	68.30	-17.09	peak
2	15887.920	62.89	-4.30	58.59	74.00	-15.41	peak
3	15887.920	50.88	-4.30	46.58	54.00	-7.42	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



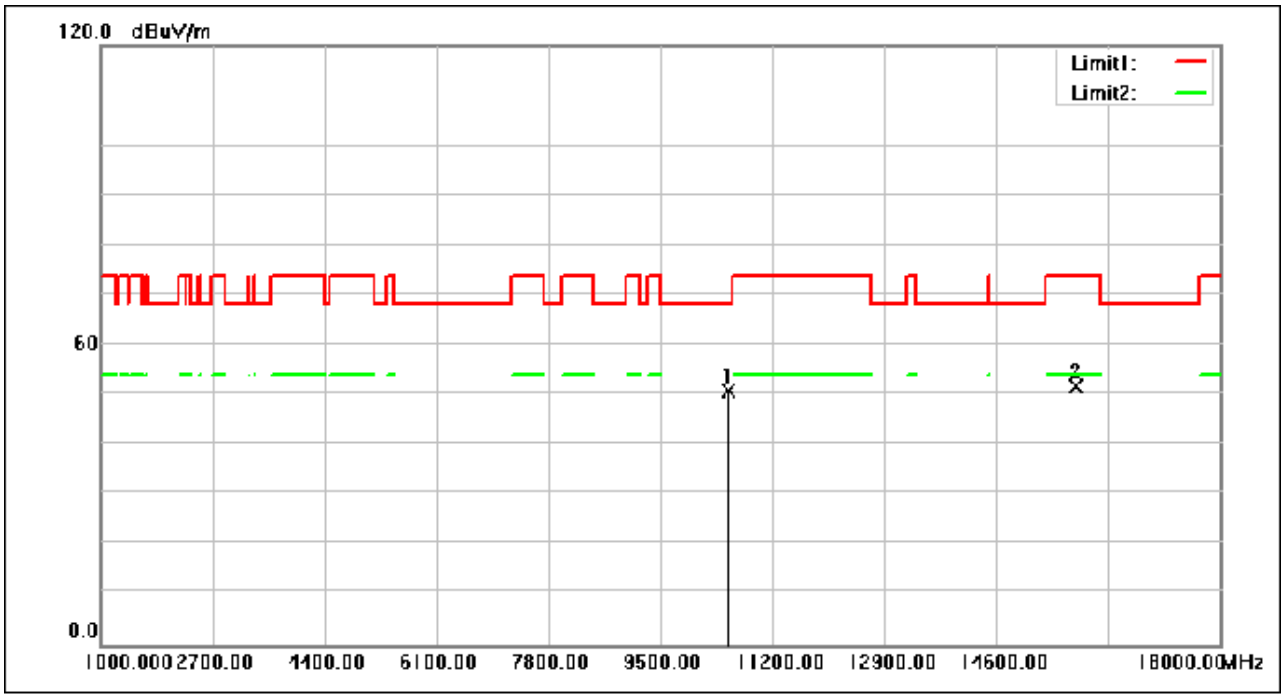
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10642.400	59.98	-6.96	53.02	74.00	-20.98	peak
2	15974.960	64.56	-4.20	60.36	74.00	-13.64	peak
3	15974.960	51.48	-4.20	47.28	54.00	-6.72	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



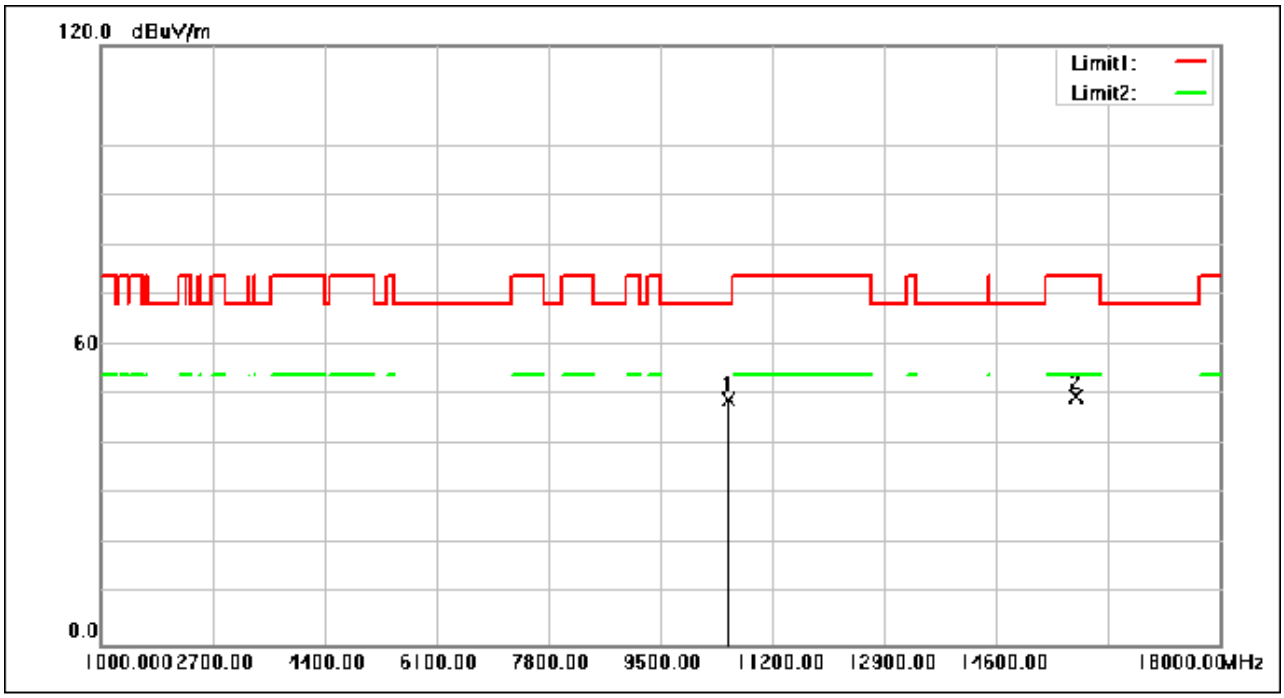
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10634.920	62.11	-6.97	55.14	74.00	-18.86	peak
2	15960.680	63.86	-4.21	59.65	74.00	-14.35	peak
3	15960.680	50.50	-4.21	46.29	54.00	-7.71	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



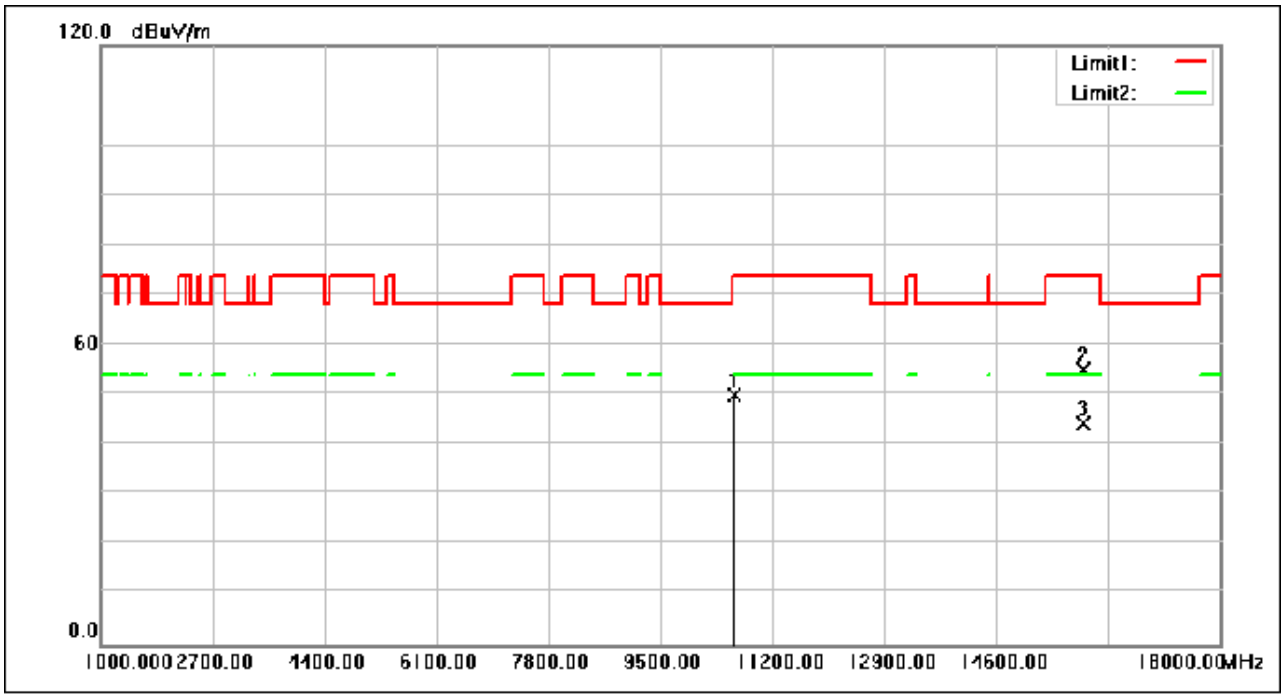
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10551.280	57.78	-7.01	50.77	68.30	-17.53	peak
2	15817.200	56.18	-4.37	51.81	74.00	-22.19	peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



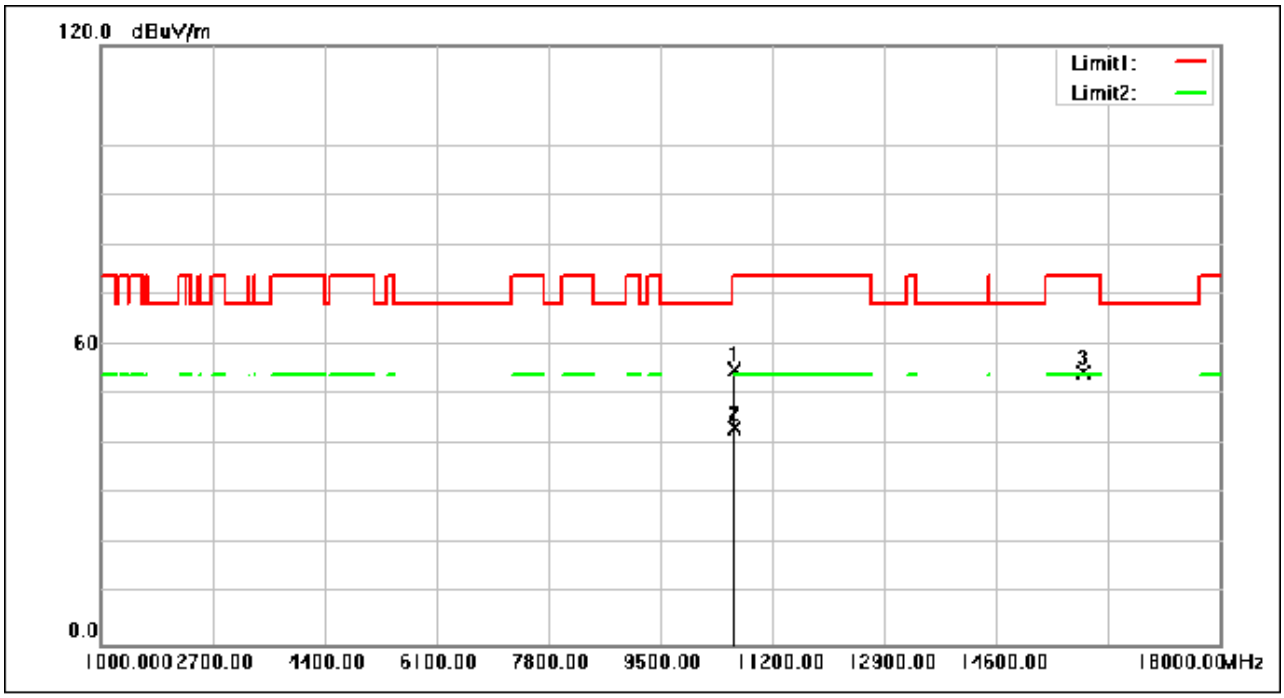
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10542.440	56.20	-7.01	49.19	68.30	-19.11	peak
2	15809.720	54.15	-4.38	49.77	74.00	-24.23	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



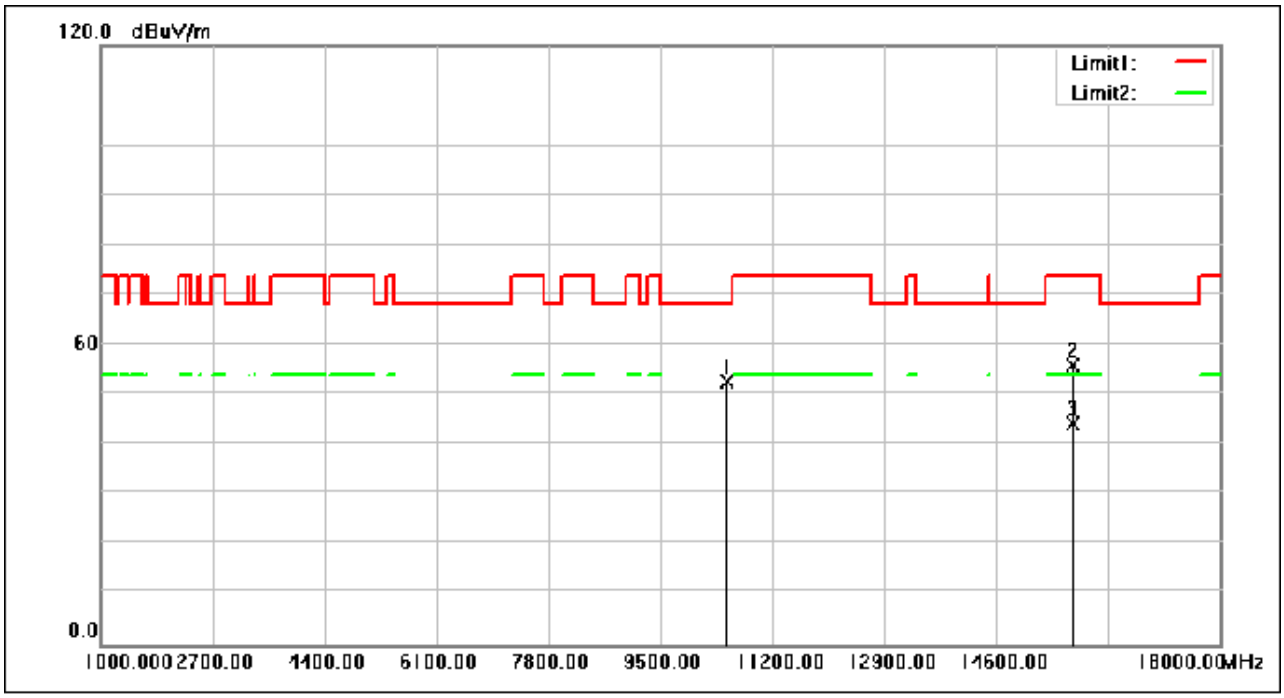
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10630.840	56.92	-6.97	49.95	74.00	-24.05	peak
2	15931.440	59.25	-4.24	55.01	74.00	-18.99	peak
3	15931.440	48.60	-4.24	44.36	54.00	-9.64	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



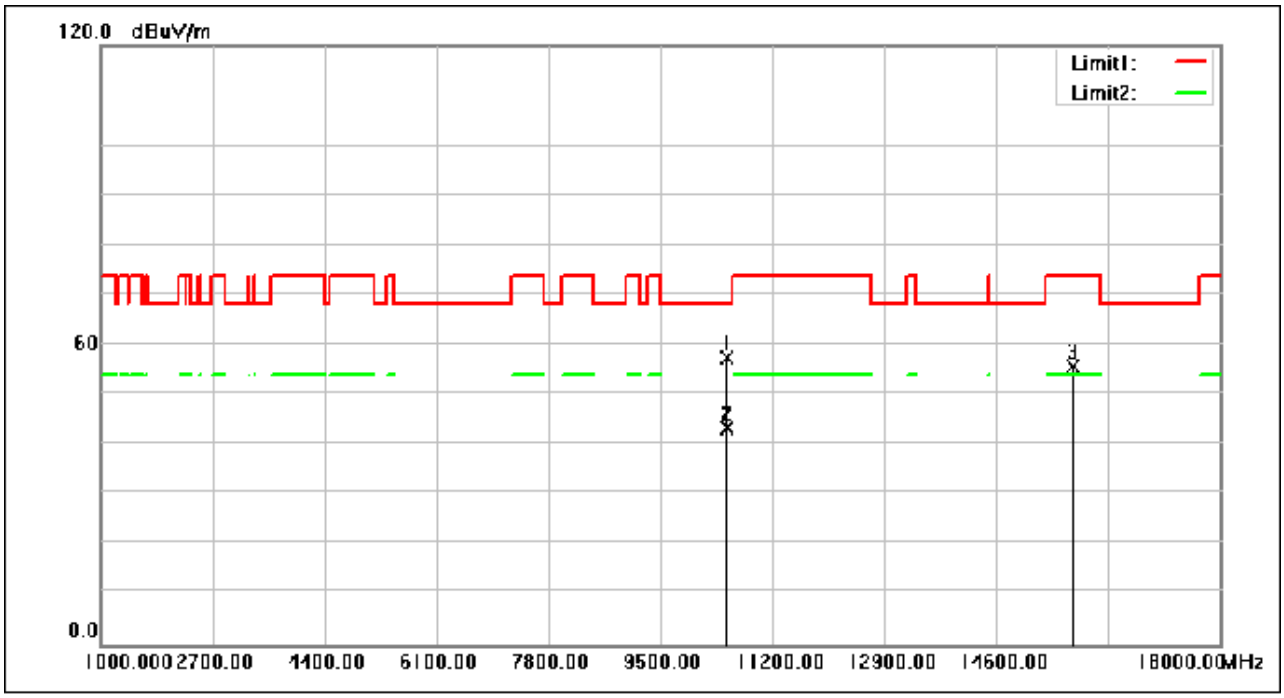
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10624.720	61.93	-6.96	54.97	74.00	-19.03	peak
2	10624.720	50.26	-6.96	43.30	54.00	-10.70	AVG
3	15934.160	58.71	-4.24	54.47	74.00	-19.53	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



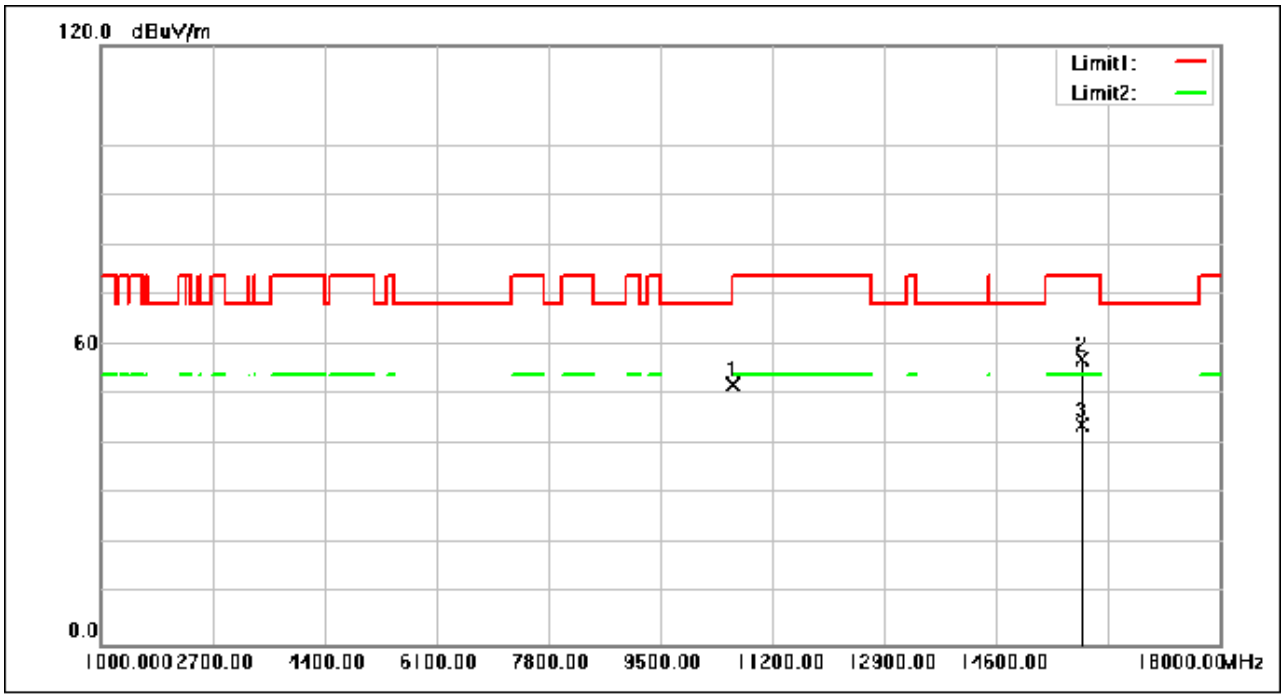
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10518.640	59.74	-7.03	52.71	68.30	-15.59	peak
2	15778.440	60.35	-4.40	55.95	74.00	-18.05	peak
3	15778.440	48.67	-4.40	44.27	54.00	-9.73	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



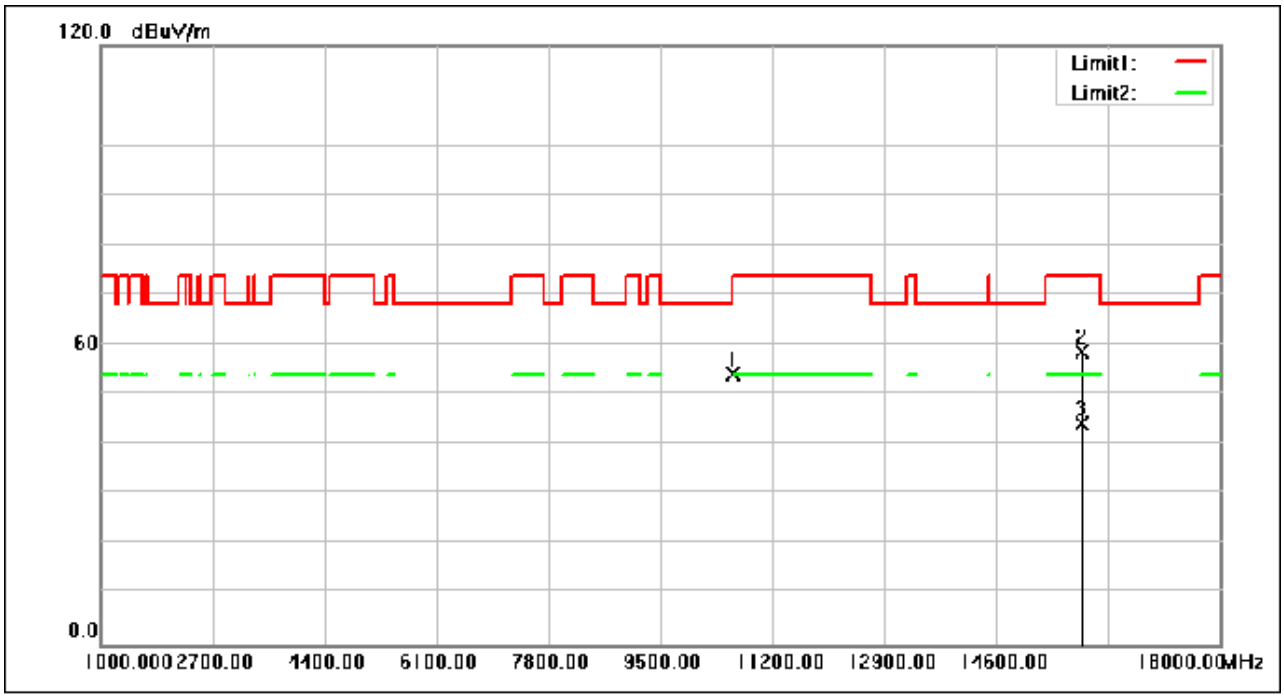
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10511.160	64.42	-7.03	57.39	68.30	-10.91	peak
2	10511.160	50.29	-7.03	43.26	999.00	-955.74	AVG
3	15783.880	60.02	-4.39	55.63	74.00	-18.37	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



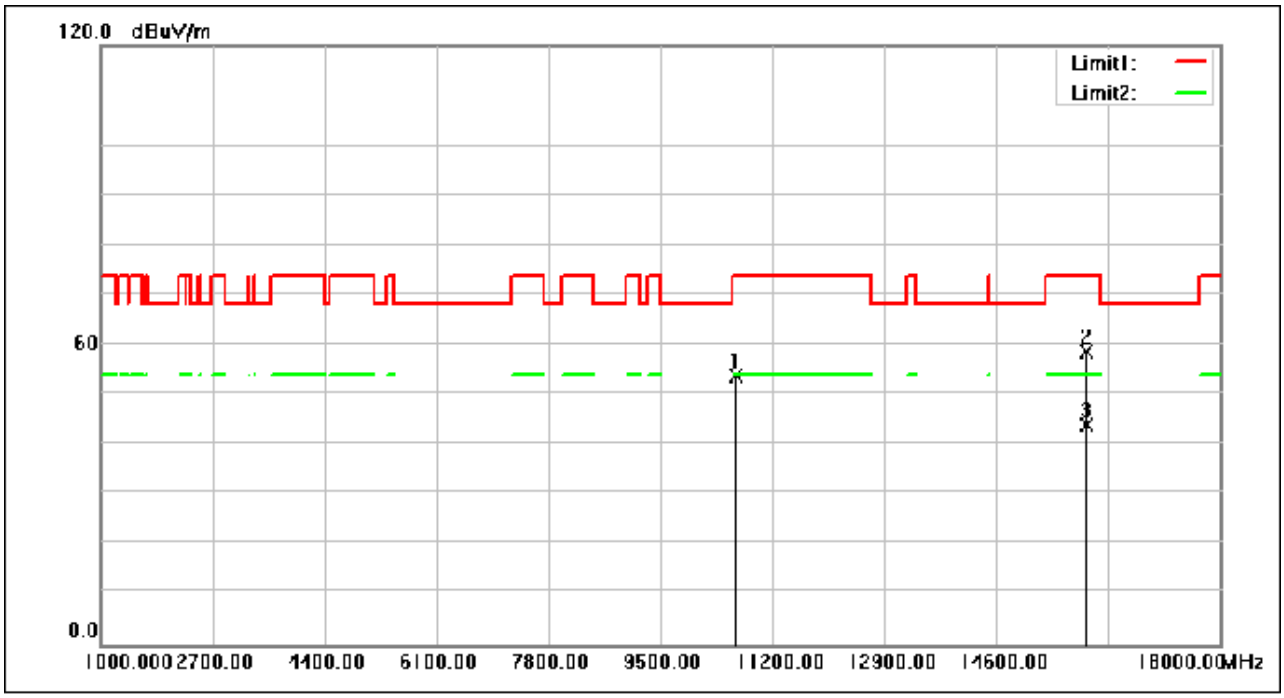
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10592.080	59.15	-6.99	52.16	68.30	-16.14	peak
2	15917.160	61.40	-4.27	57.13	74.00	-16.87	peak
3	15917.160	48.15	-4.27	43.88	54.00	-10.12	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



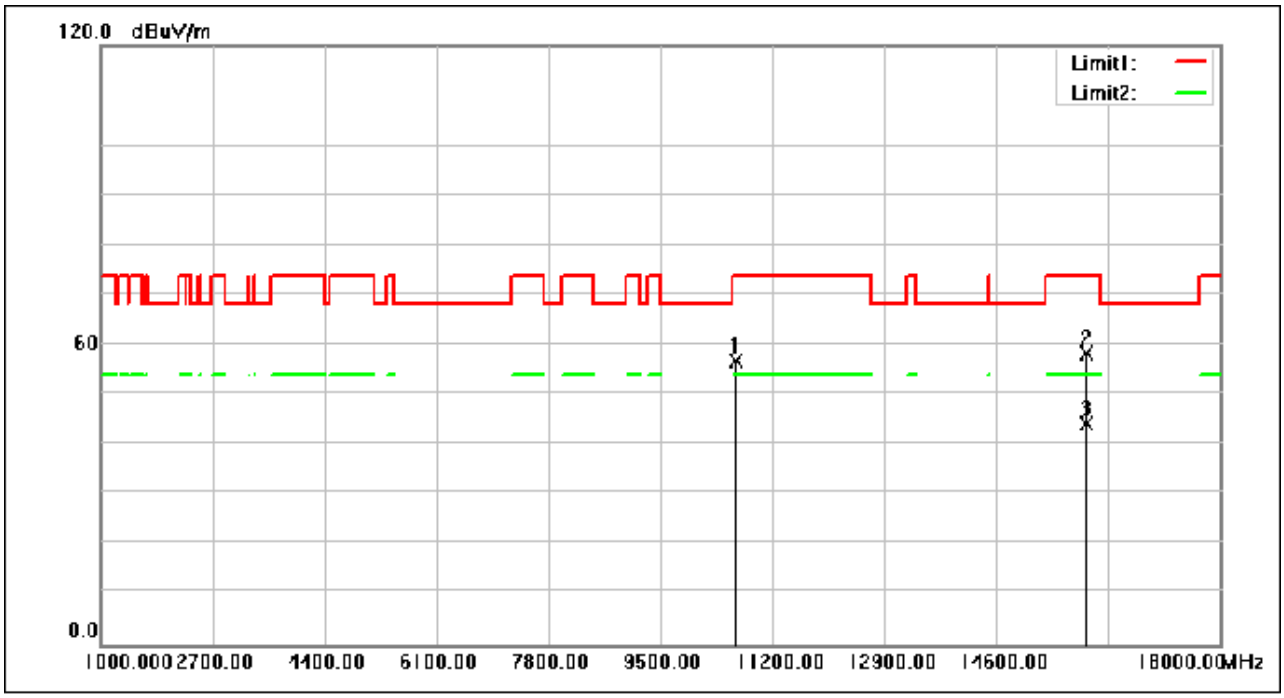
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10597.520	61.19	-6.98	54.21	68.30	-14.09	peak
2	15911.040	63.05	-4.27	58.78	74.00	-15.22	peak
3	15911.040	48.54	-4.27	44.27	54.00	-9.73	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



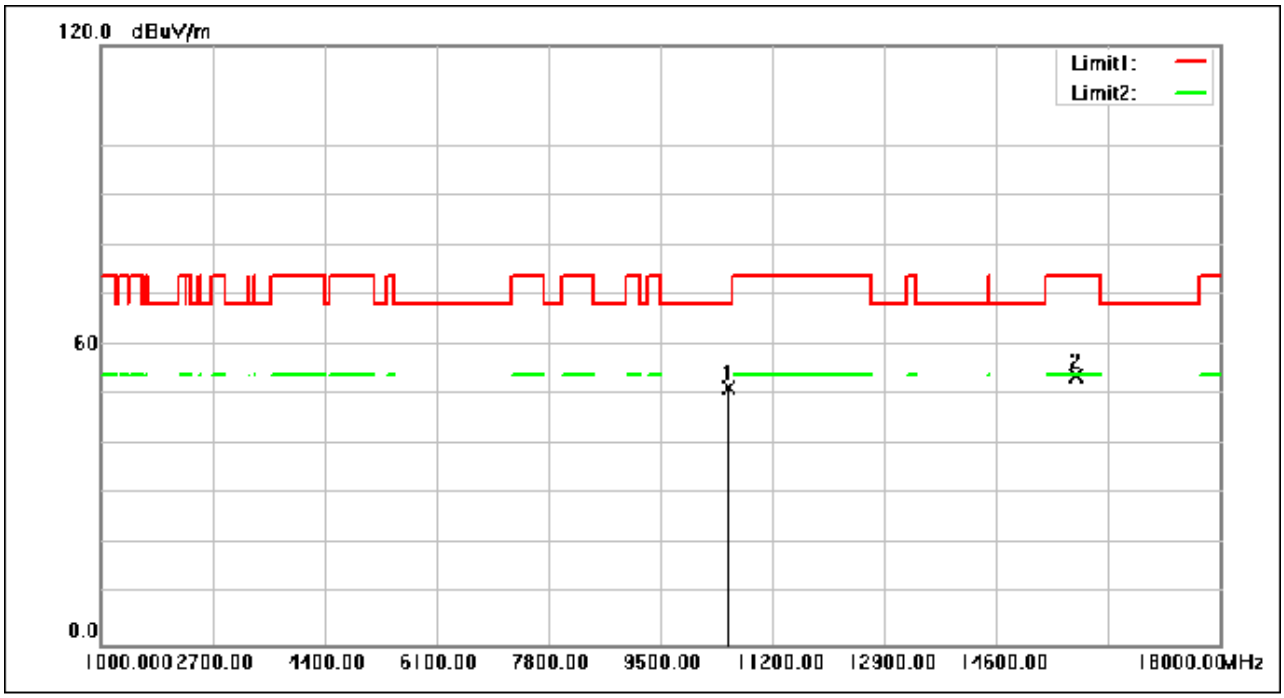
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10643.080	60.79	-6.96	53.83	74.00	-20.17	peak
2	15962.040	62.76	-4.21	58.55	74.00	-15.45	peak
3	15962.040	48.05	-4.21	43.84	54.00	-10.16	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



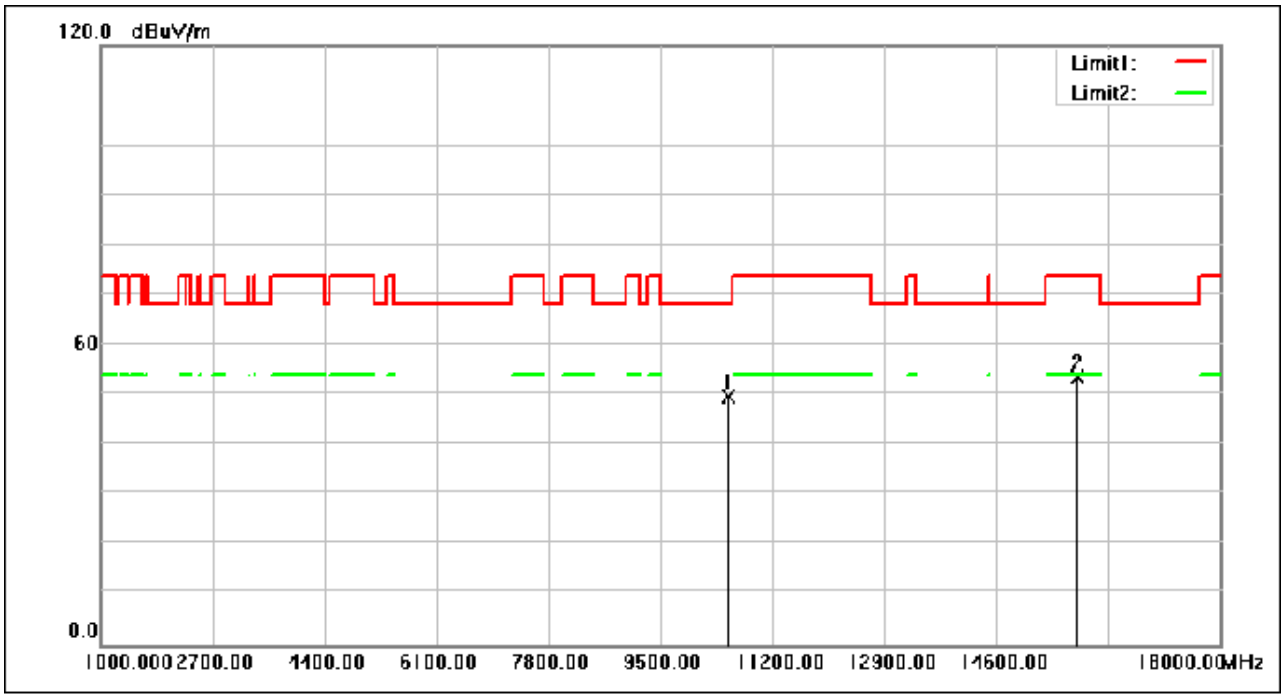
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10639.000	63.72	-6.96	56.76	74.00	-17.24	peak
2	15969.520	62.68	-4.20	58.48	74.00	-15.52	peak
3	15969.520	48.49	-4.20	44.29	54.00	-9.71	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



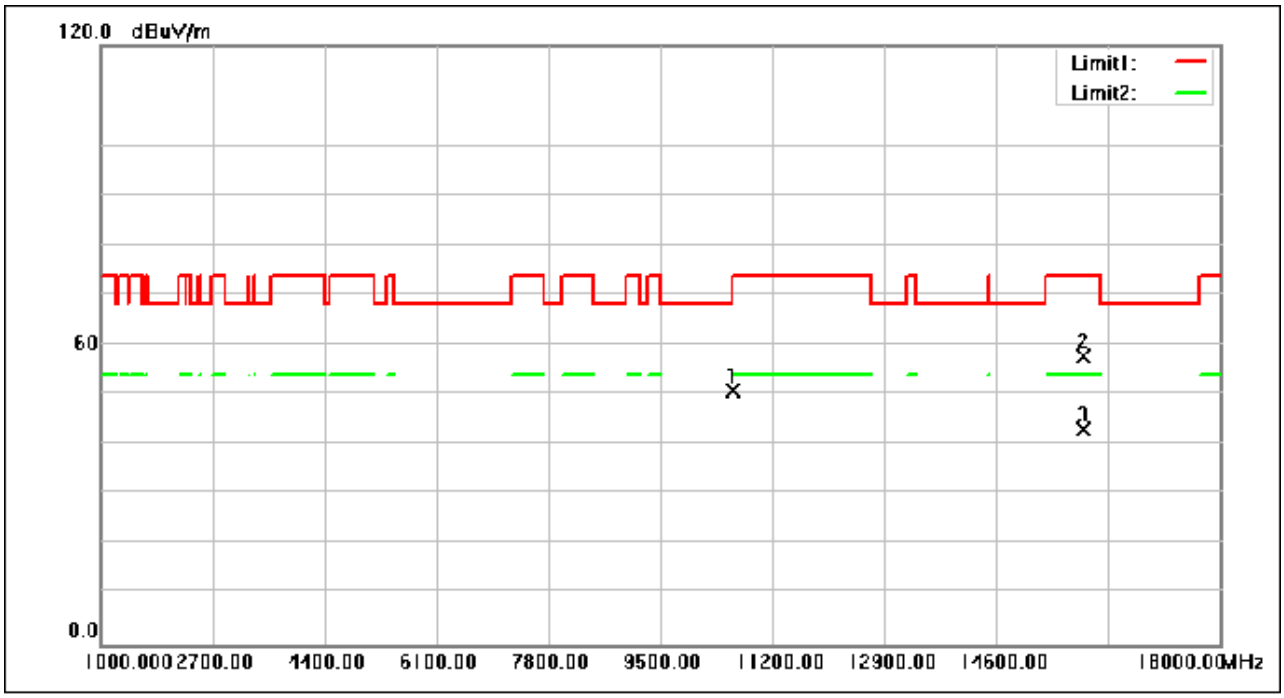
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10535.640	58.43	-7.02	51.41	68.30	-16.89	peak
2	15817.880	58.26	-4.37	53.89	74.00	-20.11	peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



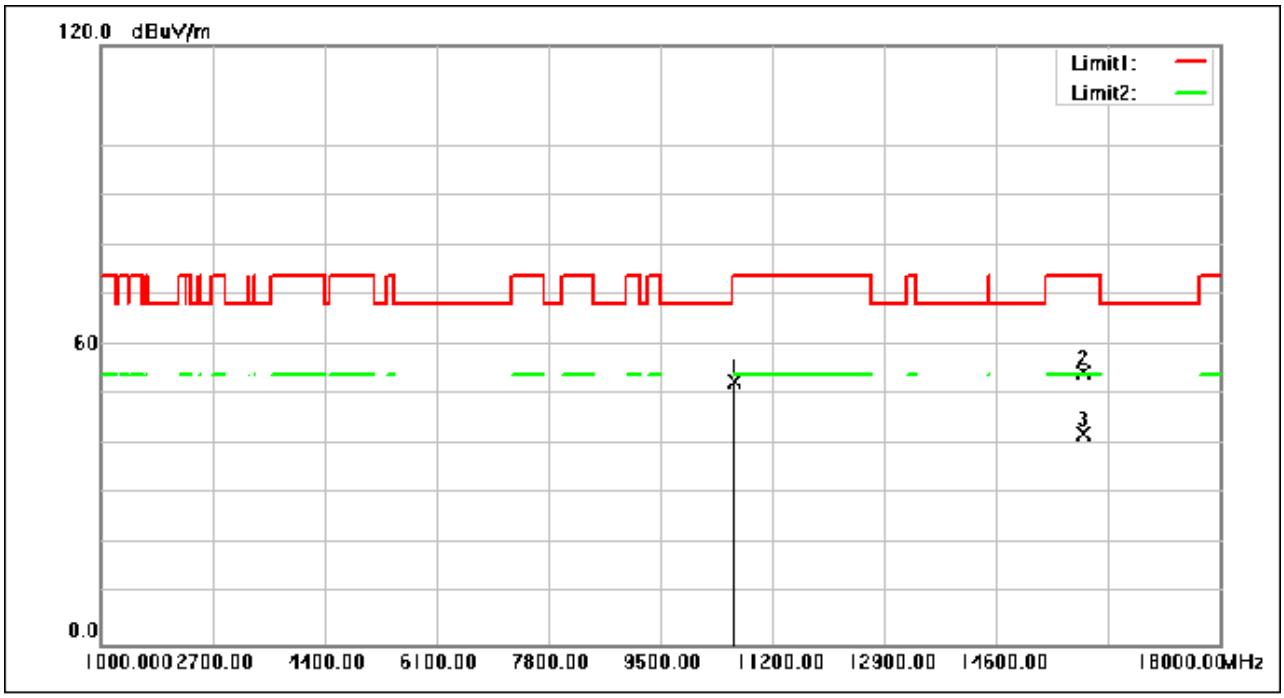
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10543.120	56.58	-7.01	49.57	68.30	-18.73	peak
2	15828.080	58.00	-4.35	53.65	74.00	-20.35	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



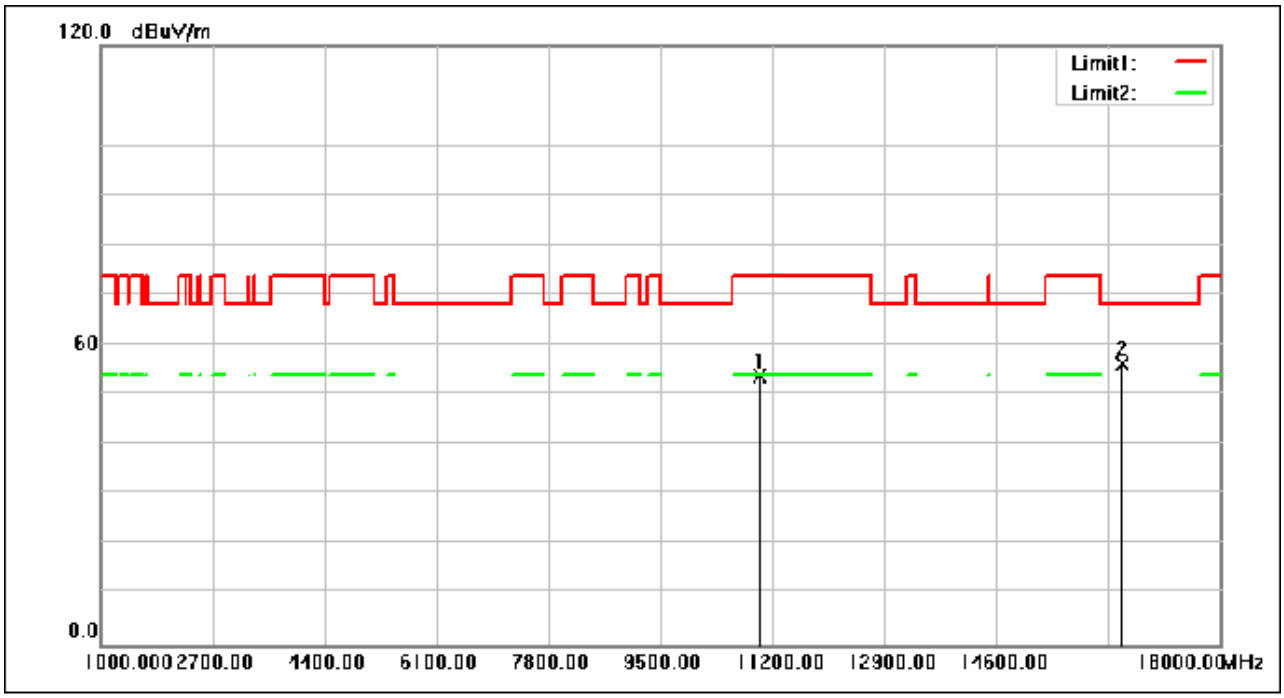
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10621.320	57.84	-6.97	50.87	74.00	-23.13	peak
2	15936.880	61.93	-4.24	57.69	74.00	-16.31	peak
3	15936.880	47.28	-4.24	43.04	54.00	-10.96	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



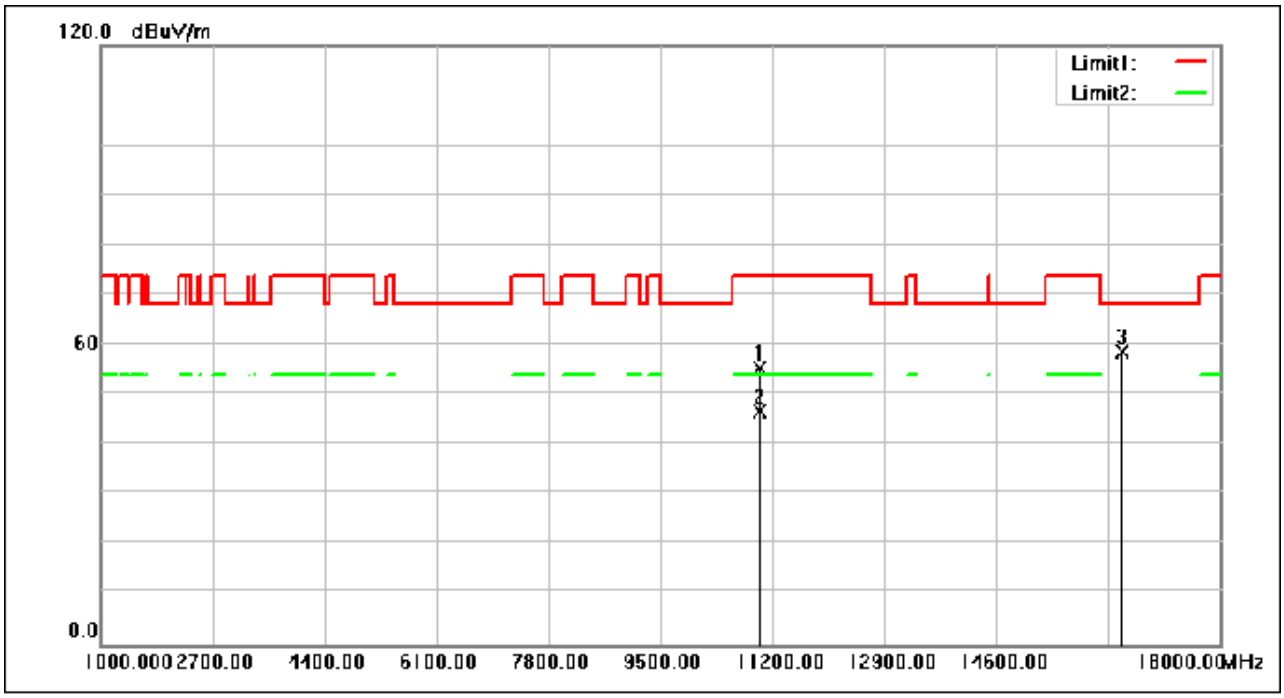
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10628.800	59.50	-6.96	52.54	74.00	-21.46	peak
2	15936.200	58.77	-4.24	54.53	74.00	-19.47	peak
3	15936.200	46.43	-4.24	42.19	54.00	-11.81	AVG

Test Mode: 05; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



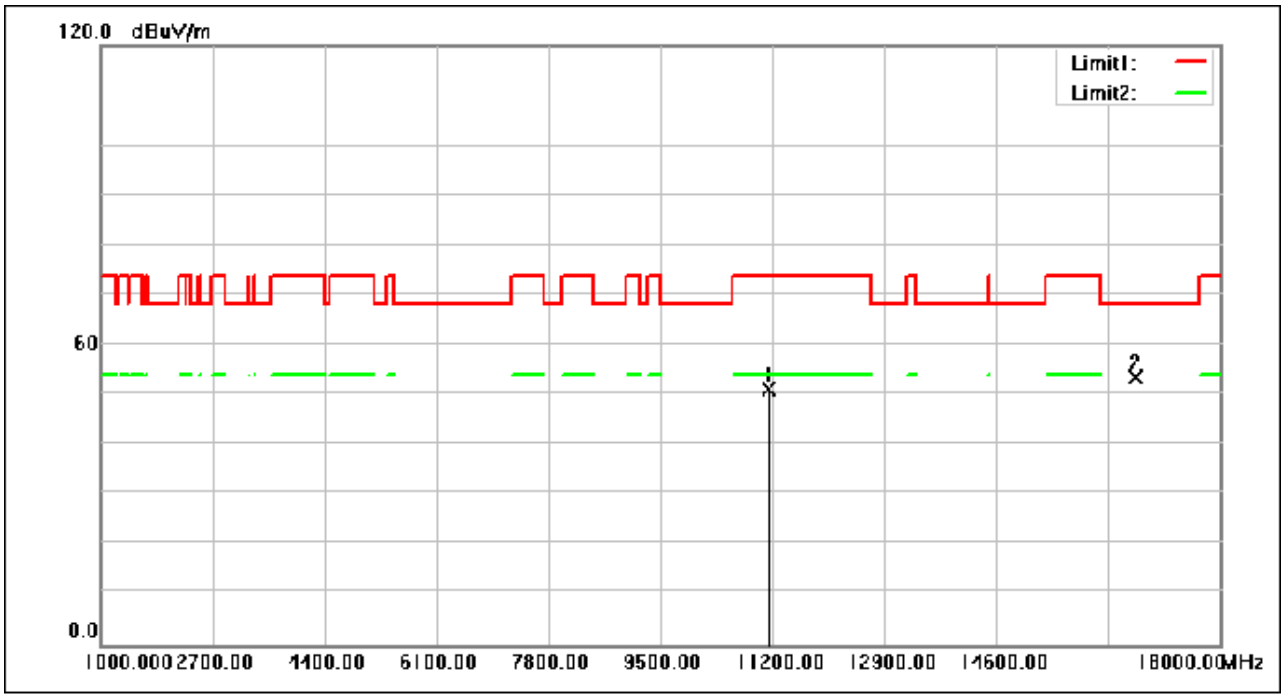
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.760	60.49	-6.76	53.73	74.00	-20.27	peak
2	16506.720	59.66	-3.50	56.16	68.30	-12.14	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



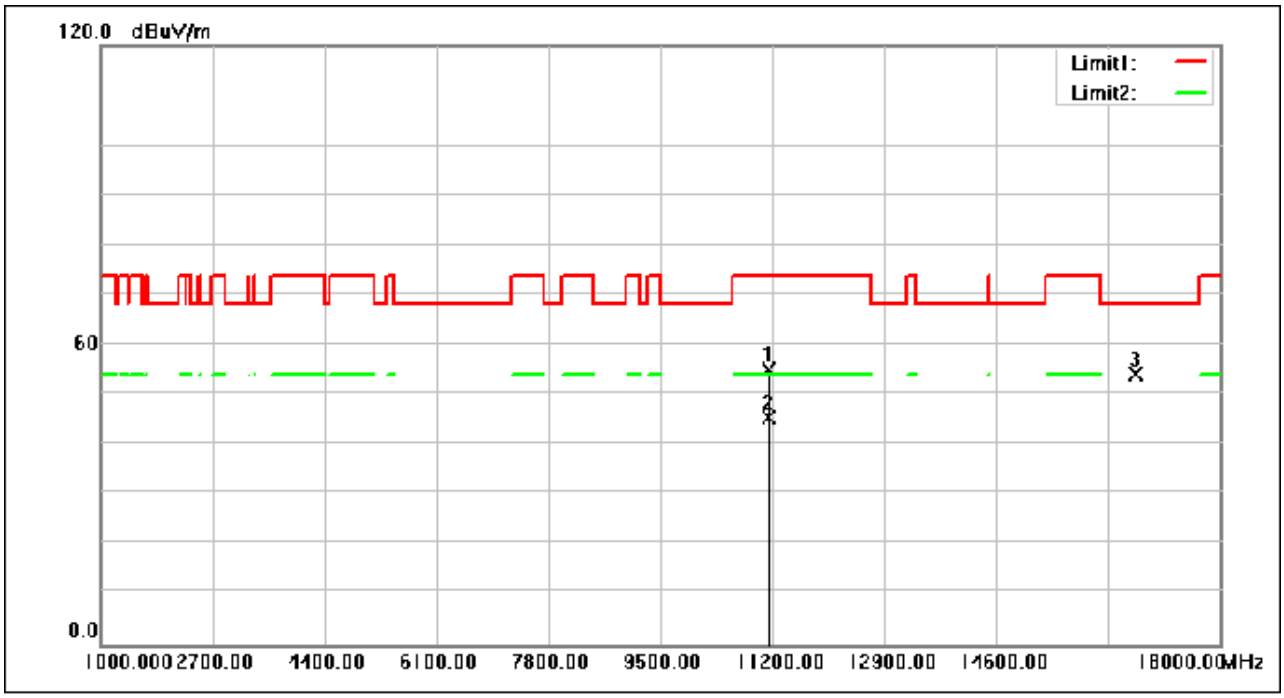
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11004.840	62.09	-6.76	55.33	74.00	-18.67	peak
2	11004.840	53.40	-6.76	46.64	54.00	-7.36	AVG
3	16504.680	62.13	-3.51	58.62	68.30	-9.68	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



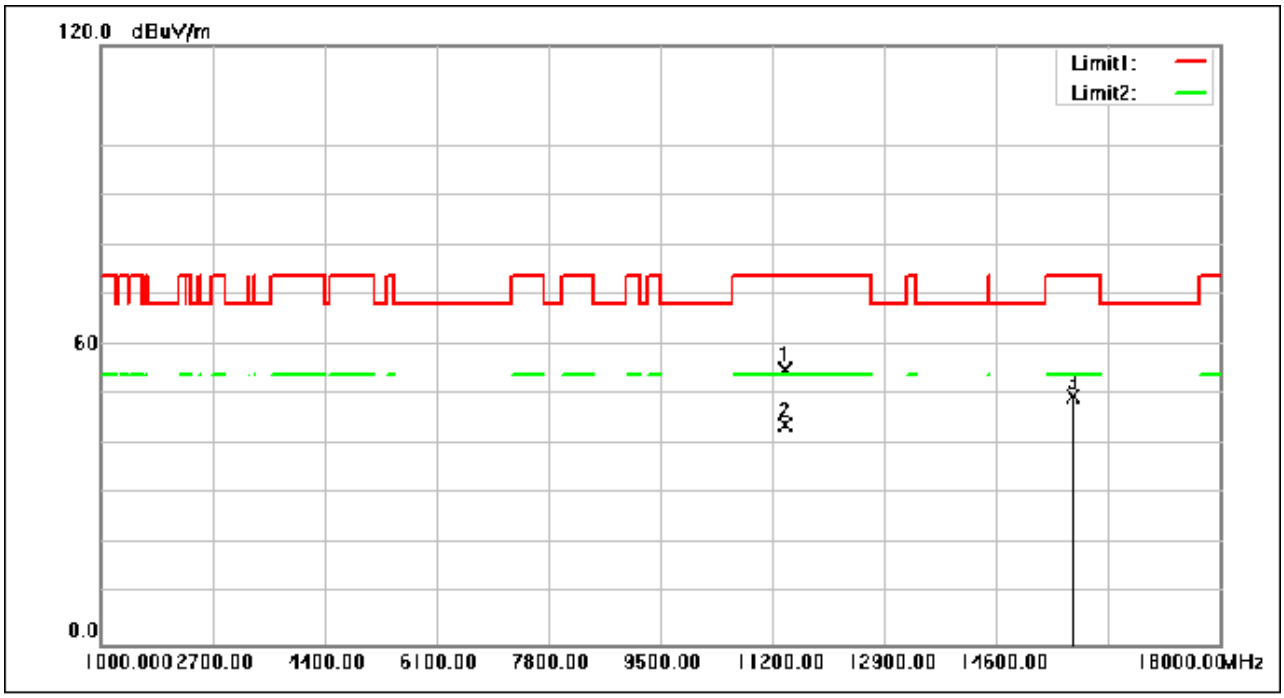
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11162.600	57.64	-6.63	51.01	74.00	-22.99	peak
2	16725.000	56.81	-3.22	53.59	68.30	-14.71	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



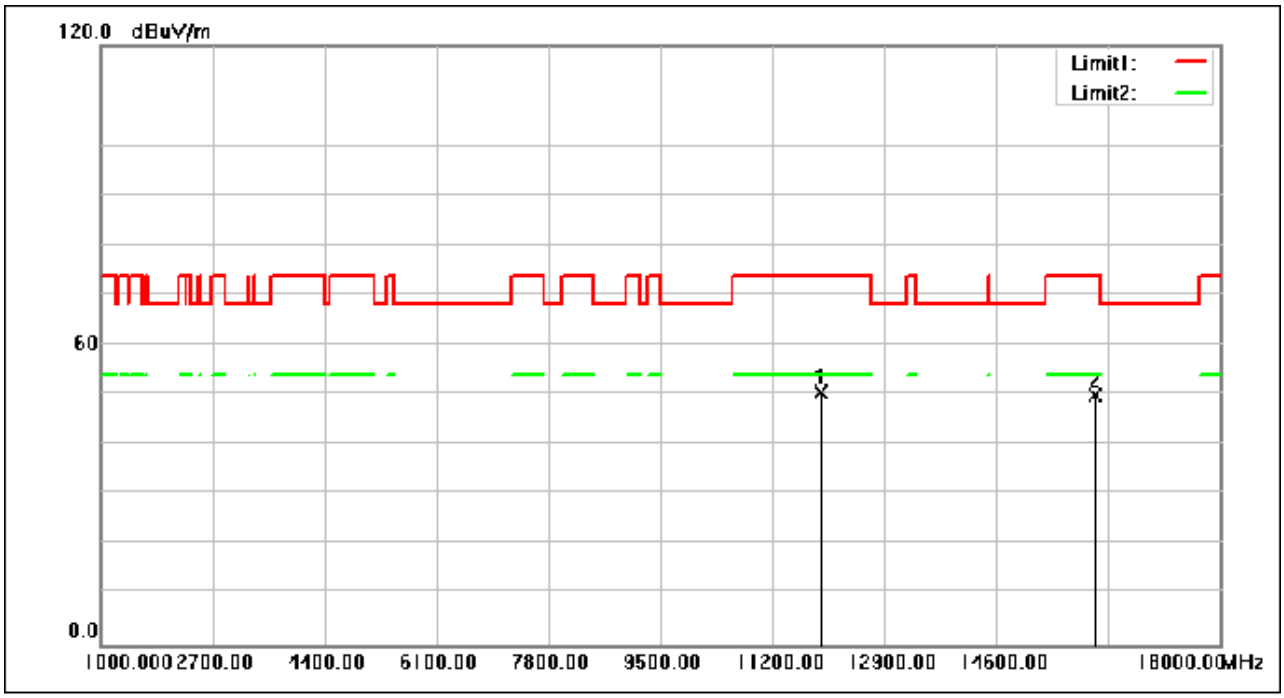
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11157.840	61.77	-6.63	55.14	74.00	-18.86	peak
2	11157.840	52.22	-6.63	45.59	54.00	-8.41	AVG
3	16740.640	57.28	-3.20	54.08	68.30	-14.22	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



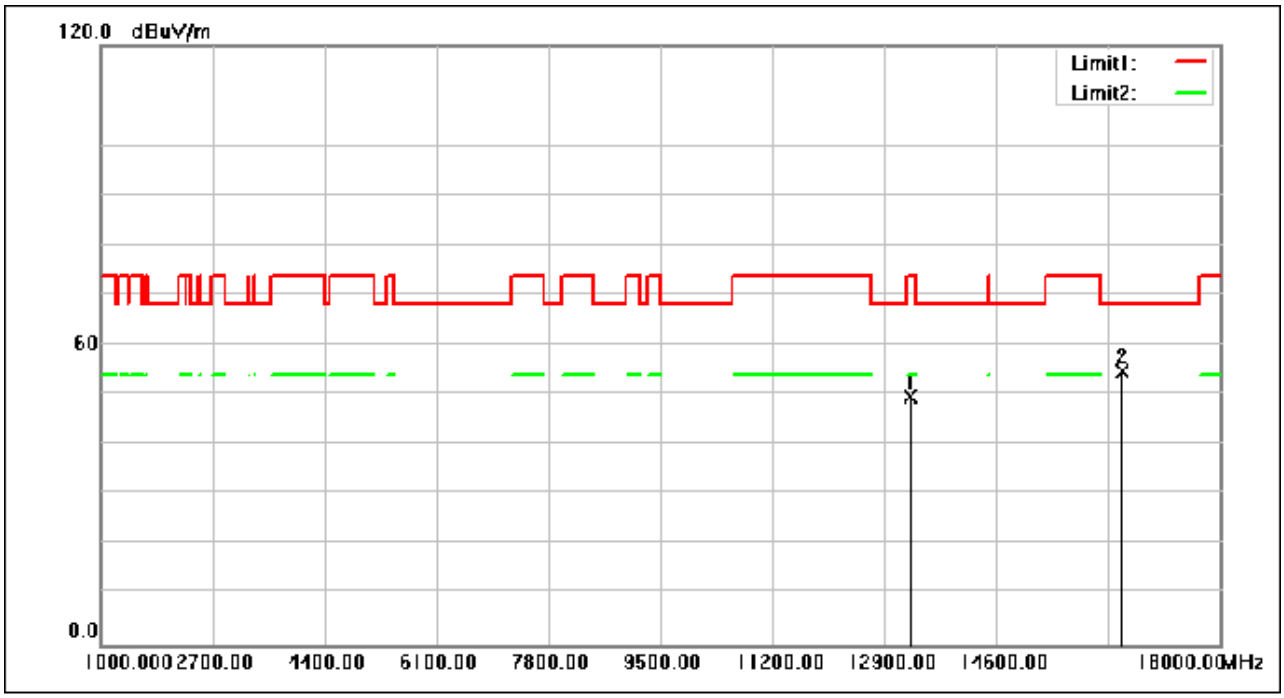
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11395.160	61.50	-6.44	55.06	74.00	-18.94	peak
2	11395.160	50.32	-6.44	43.88	54.00	-10.12	AVG
3	15782.520	54.14	-4.40	49.74	74.00	-24.26	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



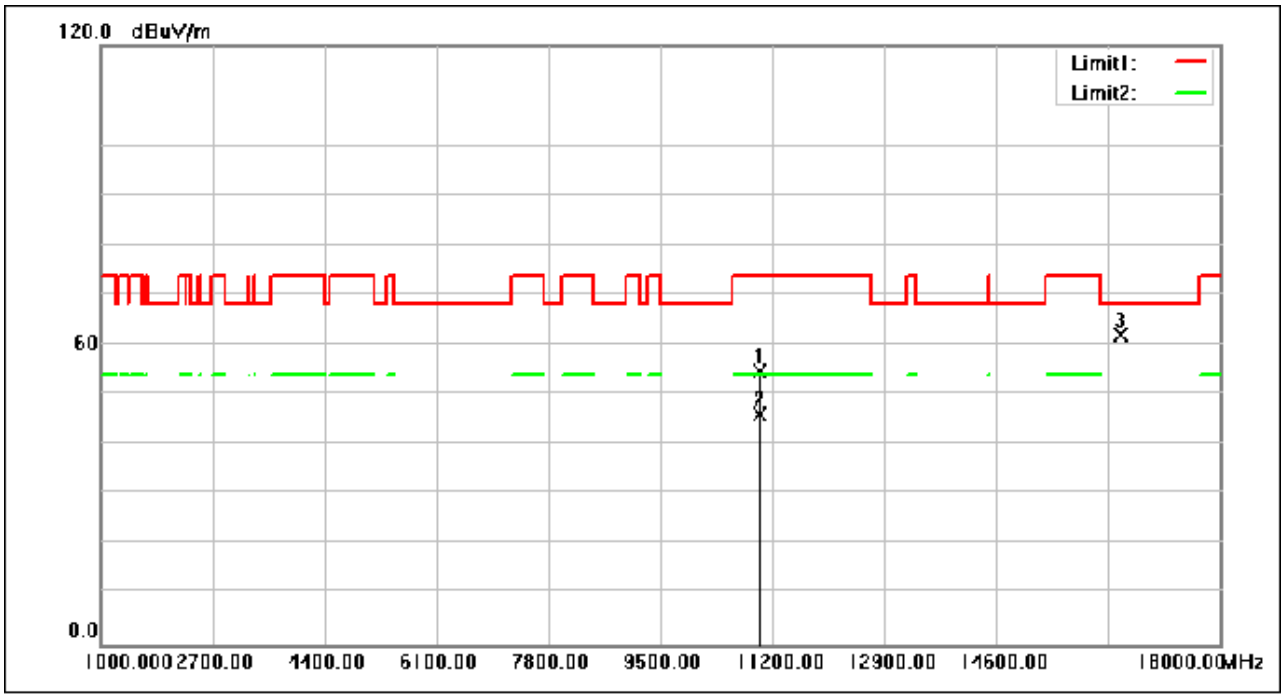
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11934.400	56.53	-6.00	50.53	74.00	-23.47	peak
2	16098.720	54.05	-4.03	50.02	74.00	-23.98	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



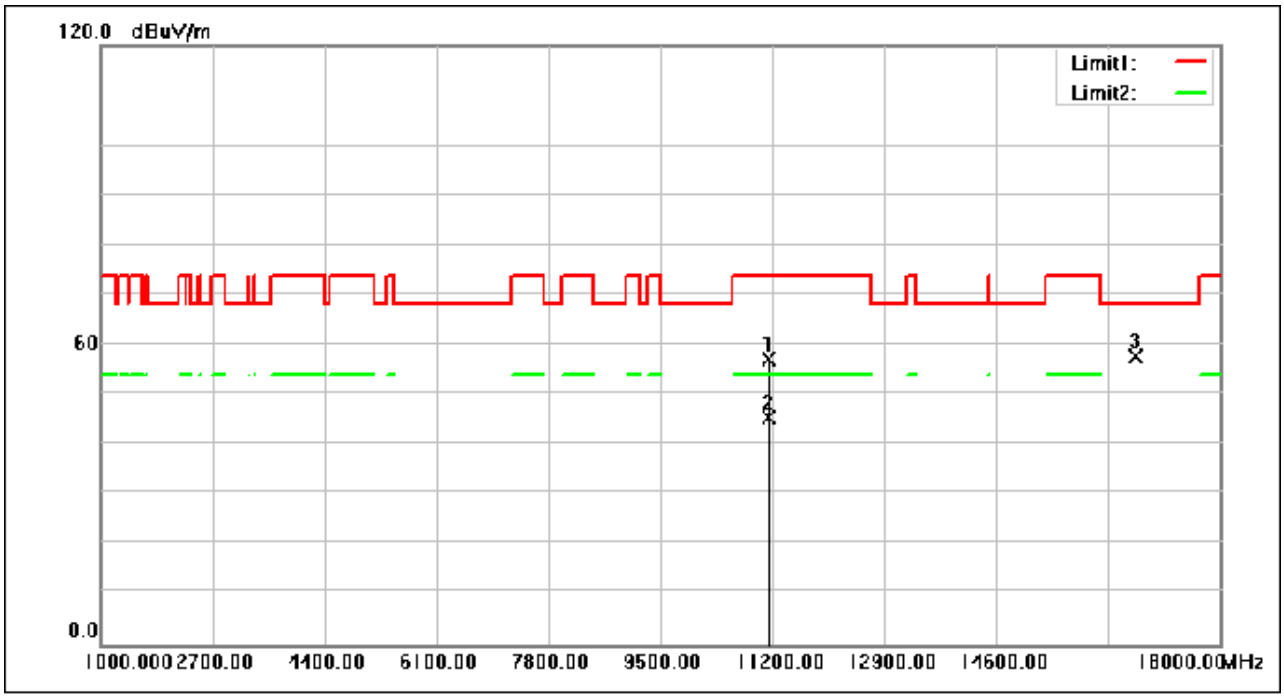
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13293.720	55.89	-6.30	49.59	74.00	-24.41	peak
2	16512.160	58.23	-3.50	54.73	68.30	-13.57	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



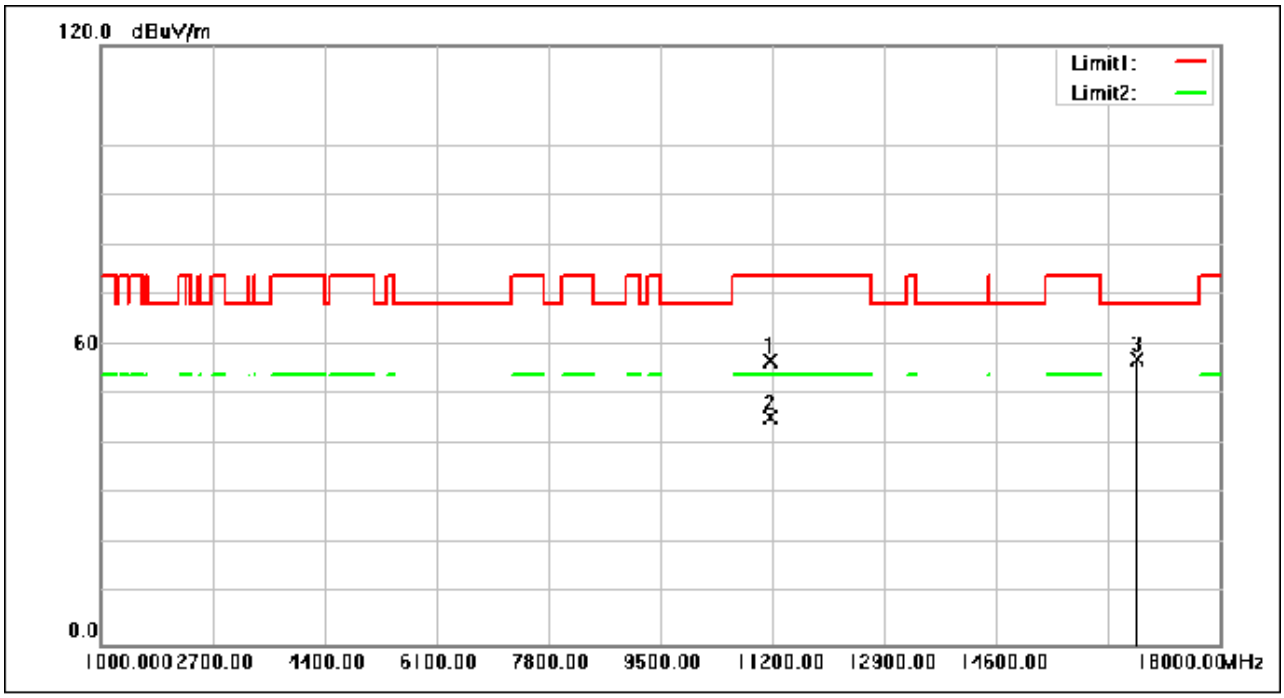
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10998.040	61.64	-6.76	54.88	74.00	-19.12	peak
2	10998.040	52.82	-6.76	46.06	54.00	-7.94	AVG
3	16494.480	65.44	-3.52	61.92	68.30	-6.38	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



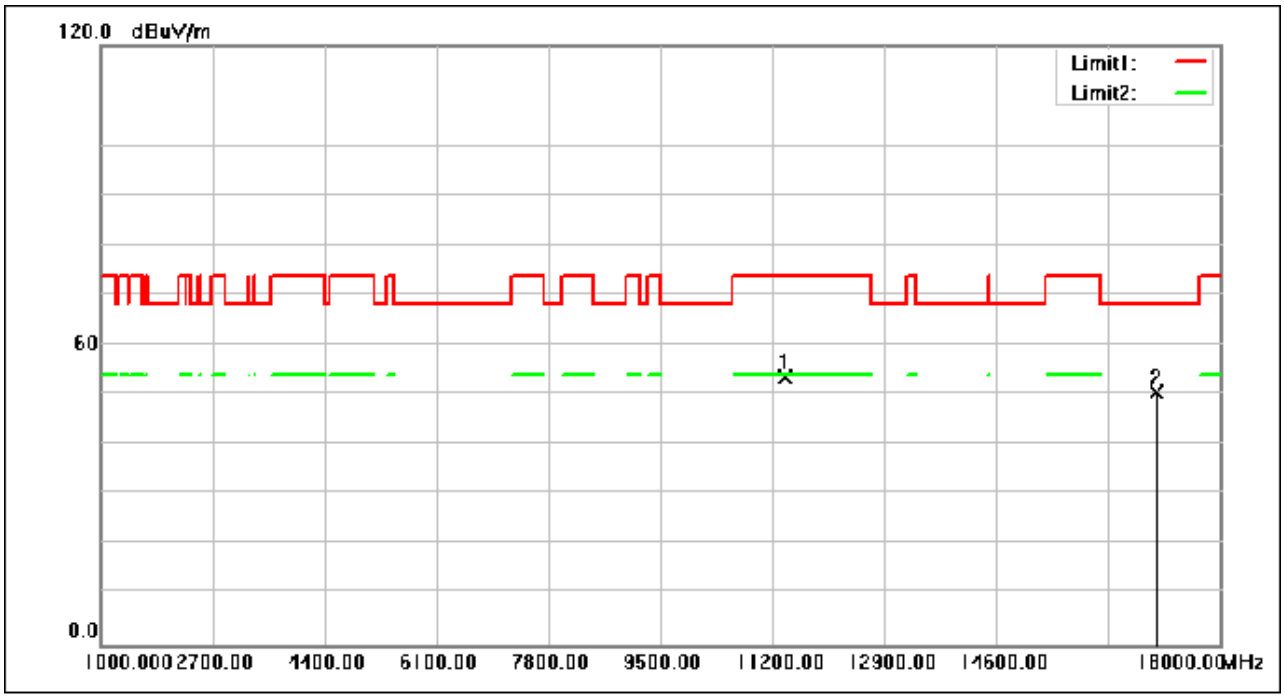
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11158.520	63.69	-6.63	57.06	74.00	-16.94	peak
2	11158.520	52.05	-6.63	45.42	54.00	-8.58	AVG
3	16737.240	60.90	-3.20	57.70	68.30	-10.60	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



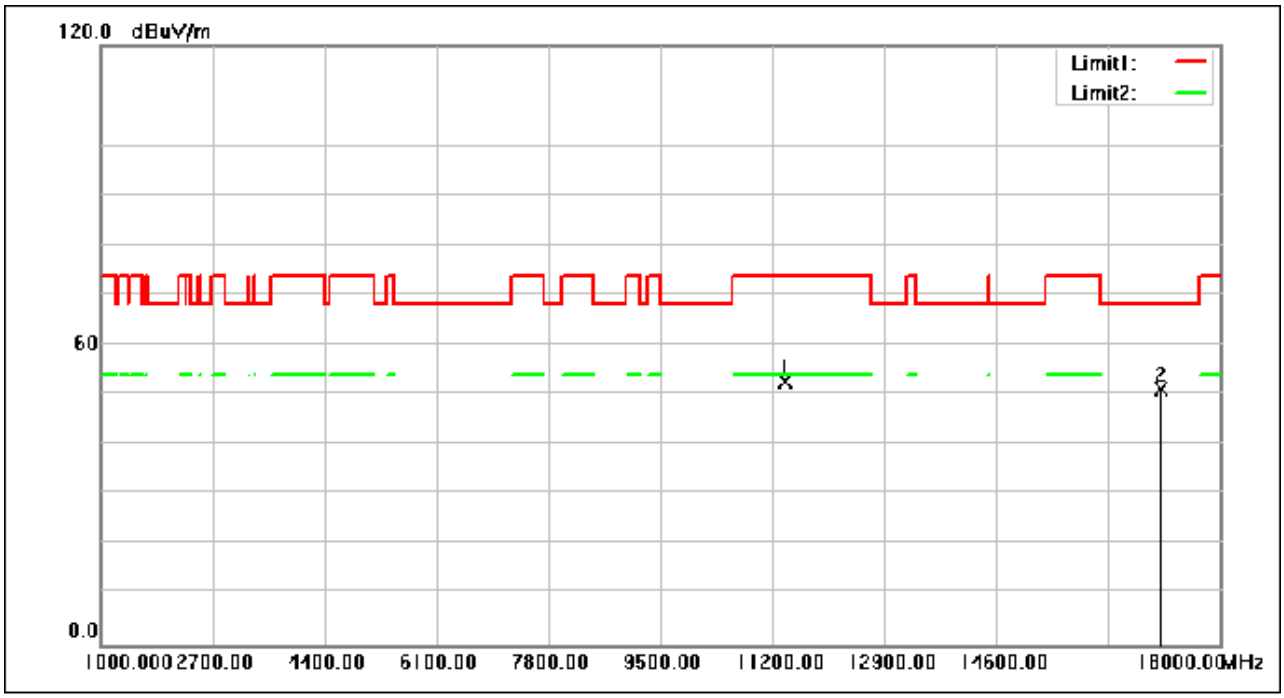
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11167.360	63.60	-6.62	56.98	74.00	-17.02	peak
2	11167.360	51.95	-6.62	45.33	54.00	-8.67	AVG
3	16742.000	60.34	-3.20	57.14	68.30	-11.16	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



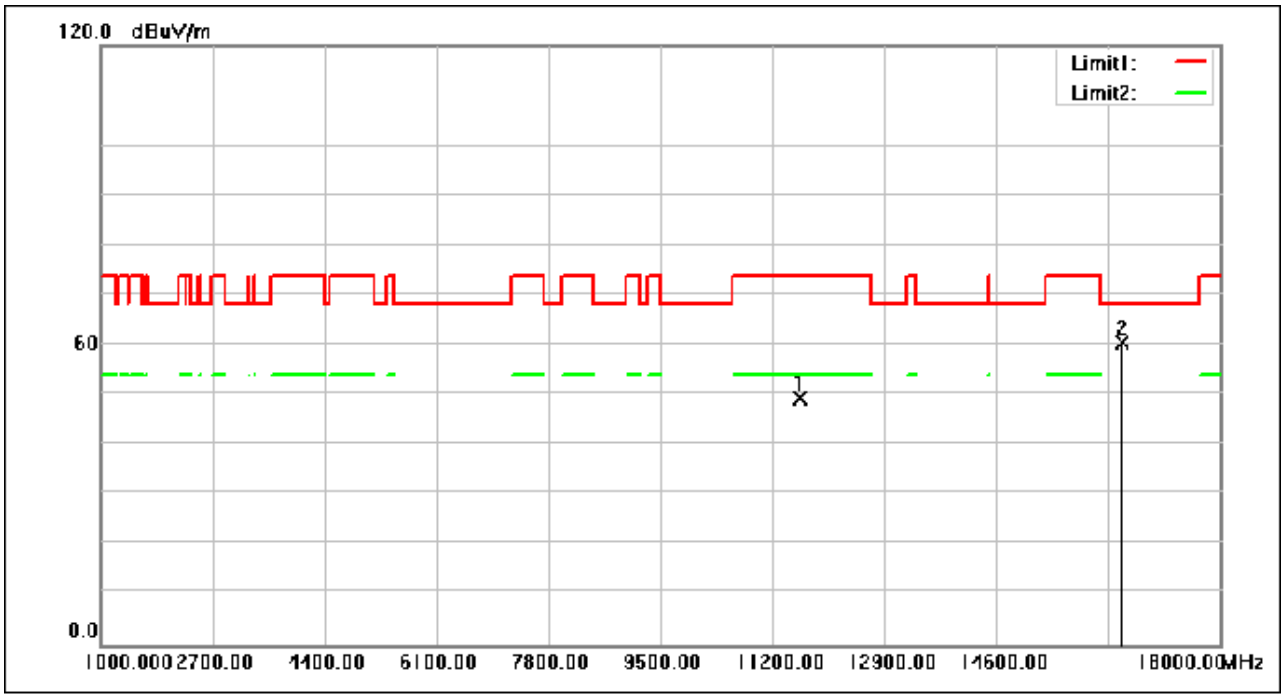
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11399.920	60.09	-6.44	53.65	74.00	-20.35	peak
2	17047.320	53.29	-2.79	50.50	68.30	-17.80	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



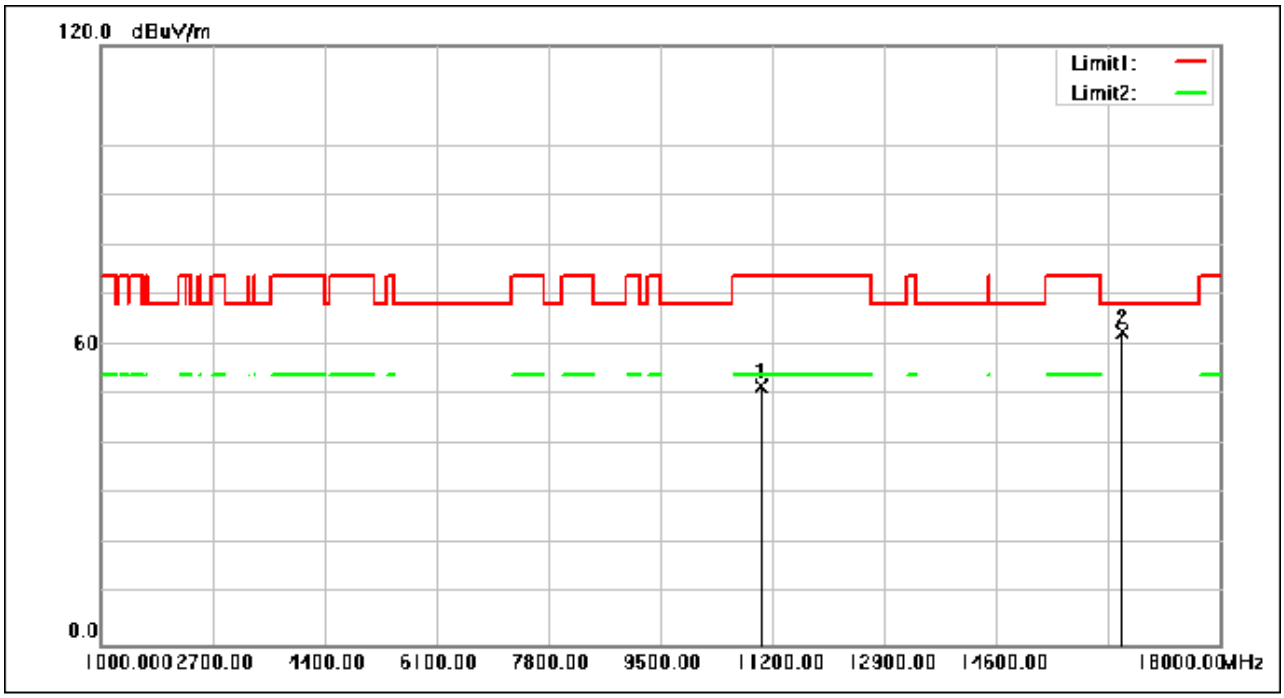
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11399.920	59.08	-6.44	52.64	74.00	-21.36	peak
2	17100.360	53.88	-2.71	51.17	68.30	-17.13	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



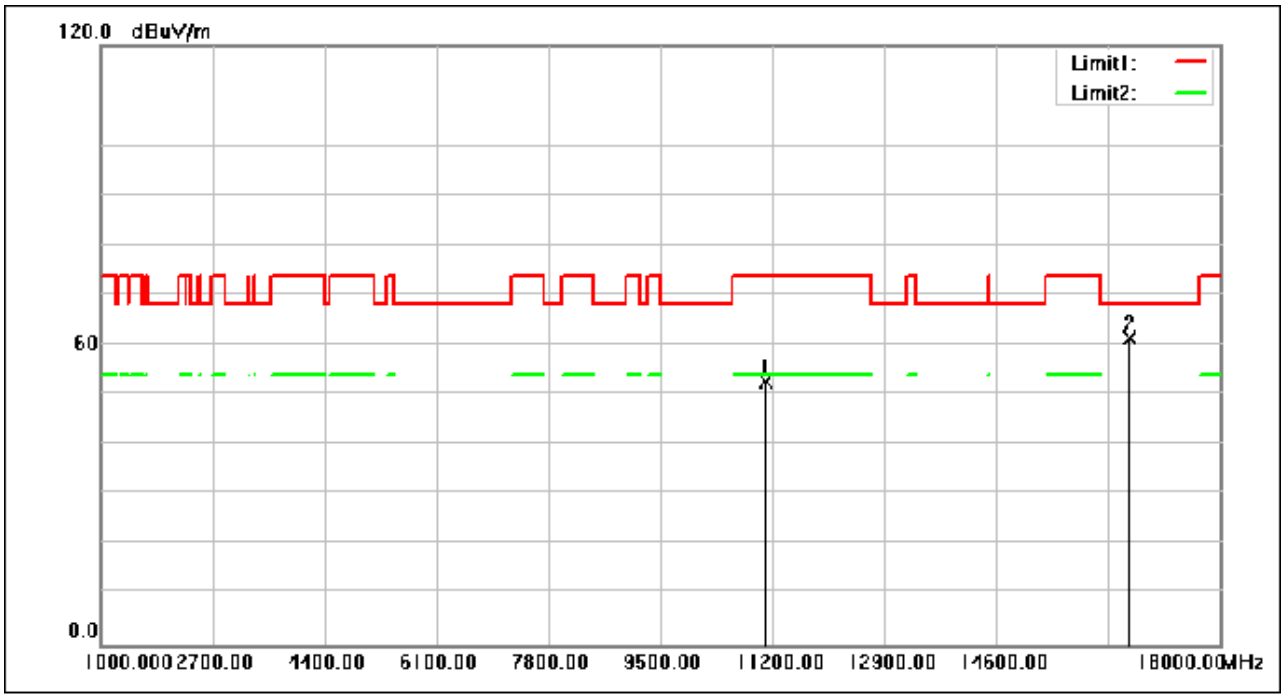
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11626.360	55.53	-6.25	49.28	74.00	-24.72	peak
2	16535.960	63.96	-3.47	60.49	68.30	-7.81	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



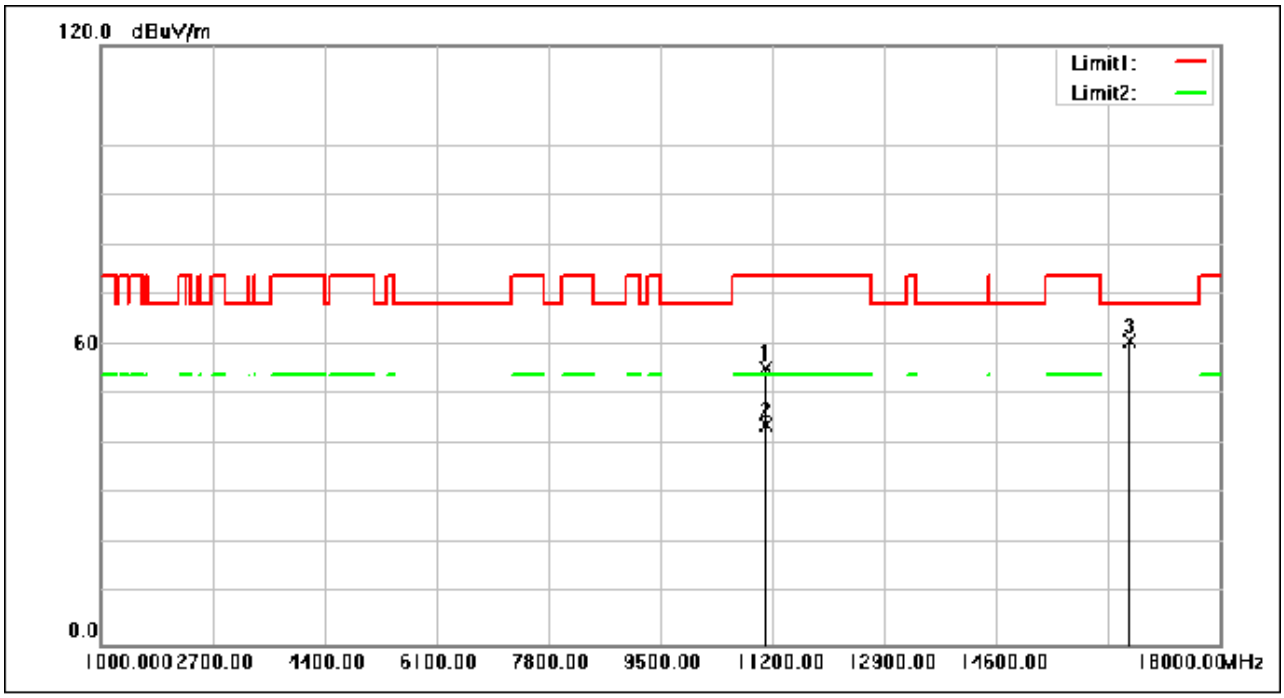
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11046.320	58.40	-6.72	51.68	74.00	-22.32	peak
2	16525.760	66.14	-3.48	62.66	68.30	-5.64	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:middle



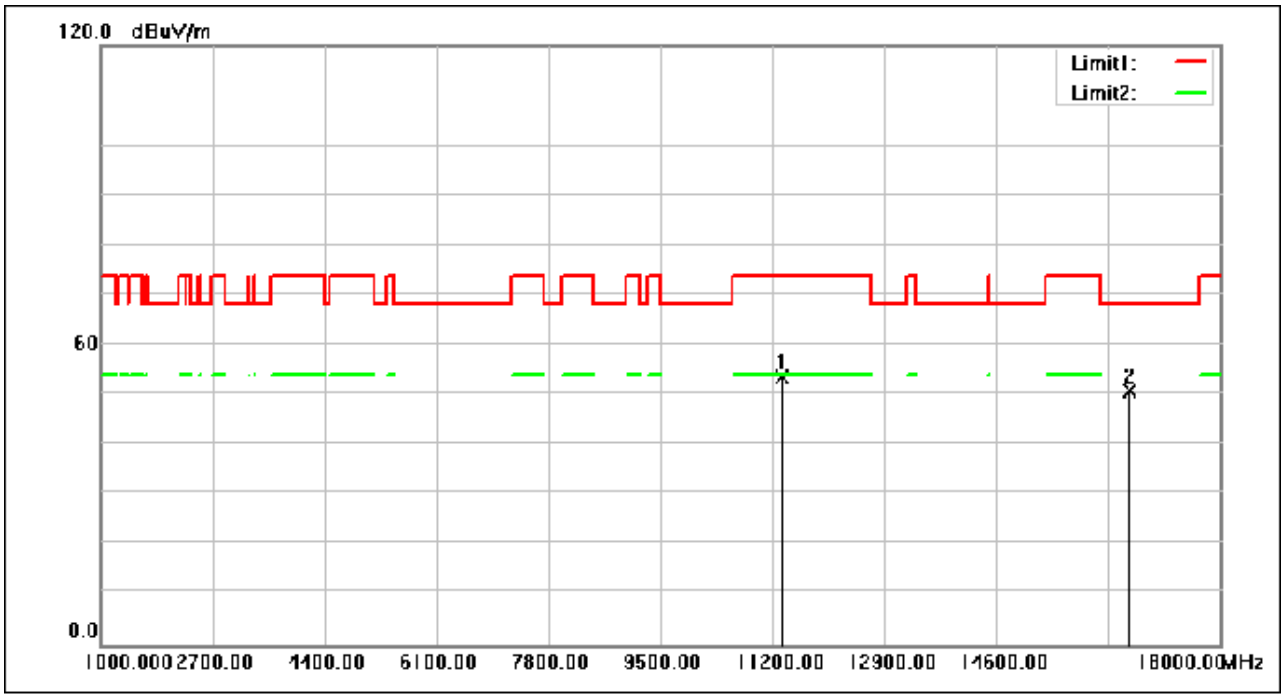
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11107.520	59.28	-6.67	52.61	74.00	-21.39	peak
2	16633.200	64.82	-3.34	61.48	68.30	-6.82	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:middle



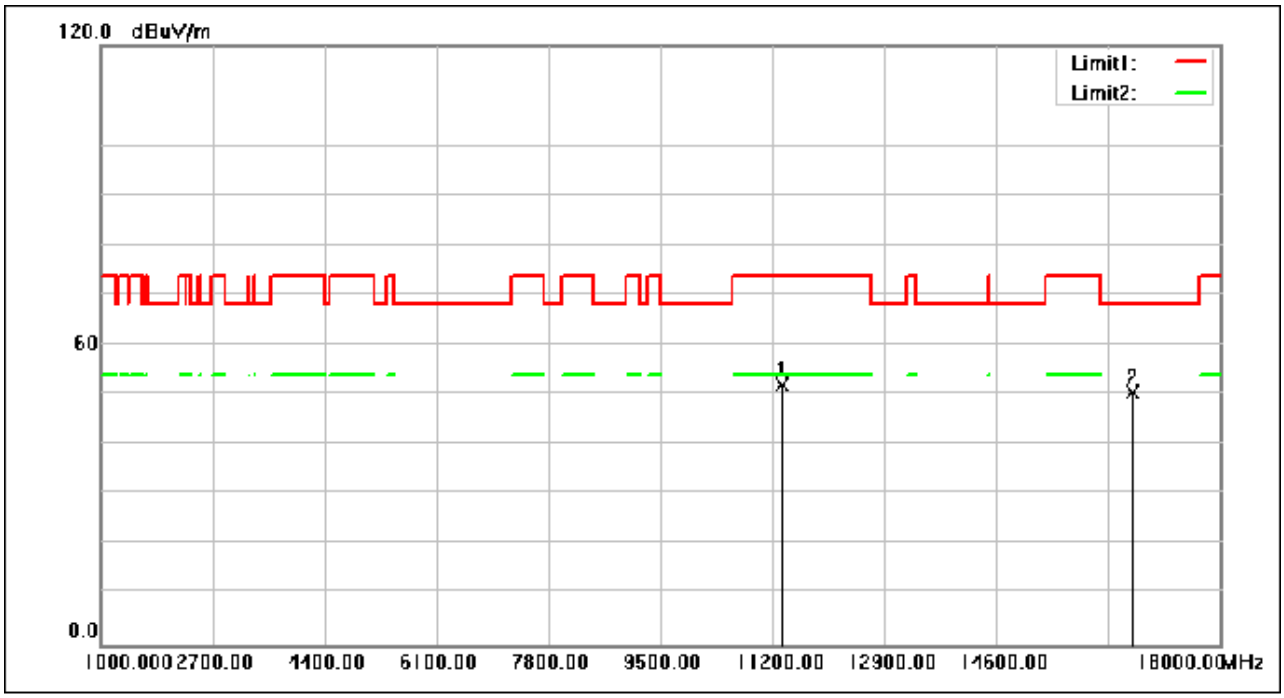
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11107.520	62.06	-6.67	55.39	74.00	-18.61	peak
2	11107.520	50.54	-6.67	43.87	54.00	-10.13	AVG
3	16635.920	64.00	-3.34	60.66	68.30	-7.64	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



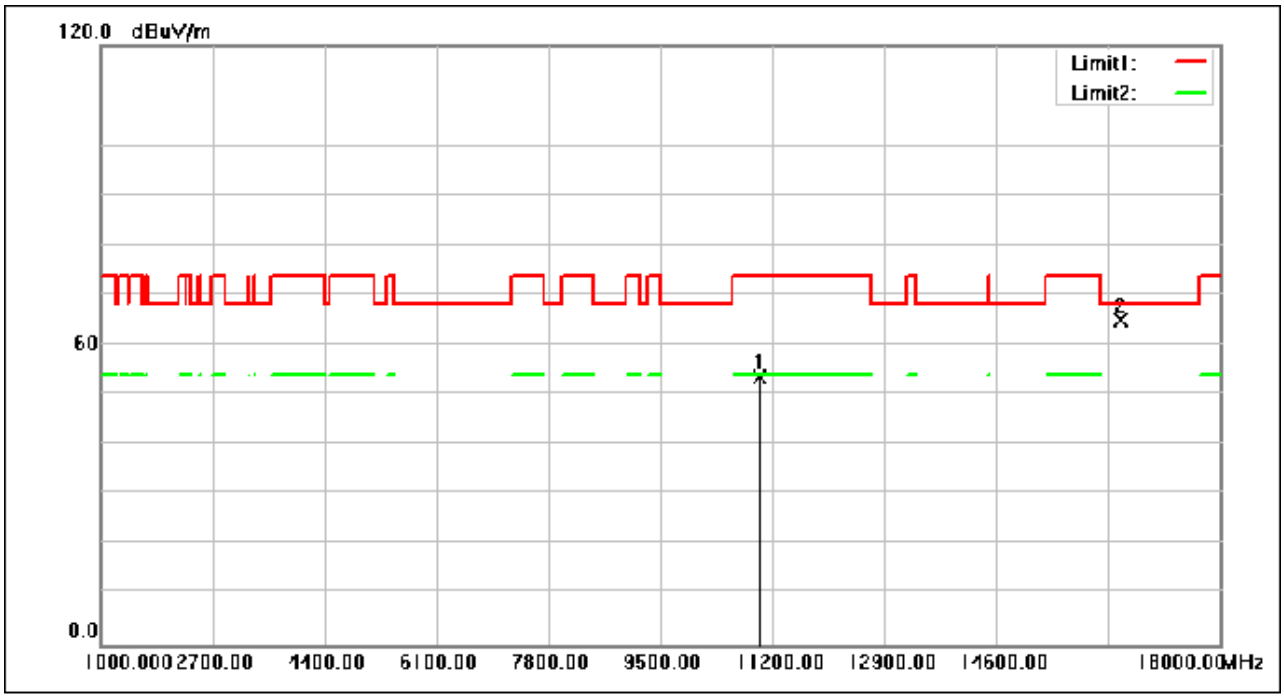
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11341.440	60.08	-6.49	53.59	74.00	-20.41	peak
2	16636.600	54.13	-3.33	50.80	68.30	-17.50	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



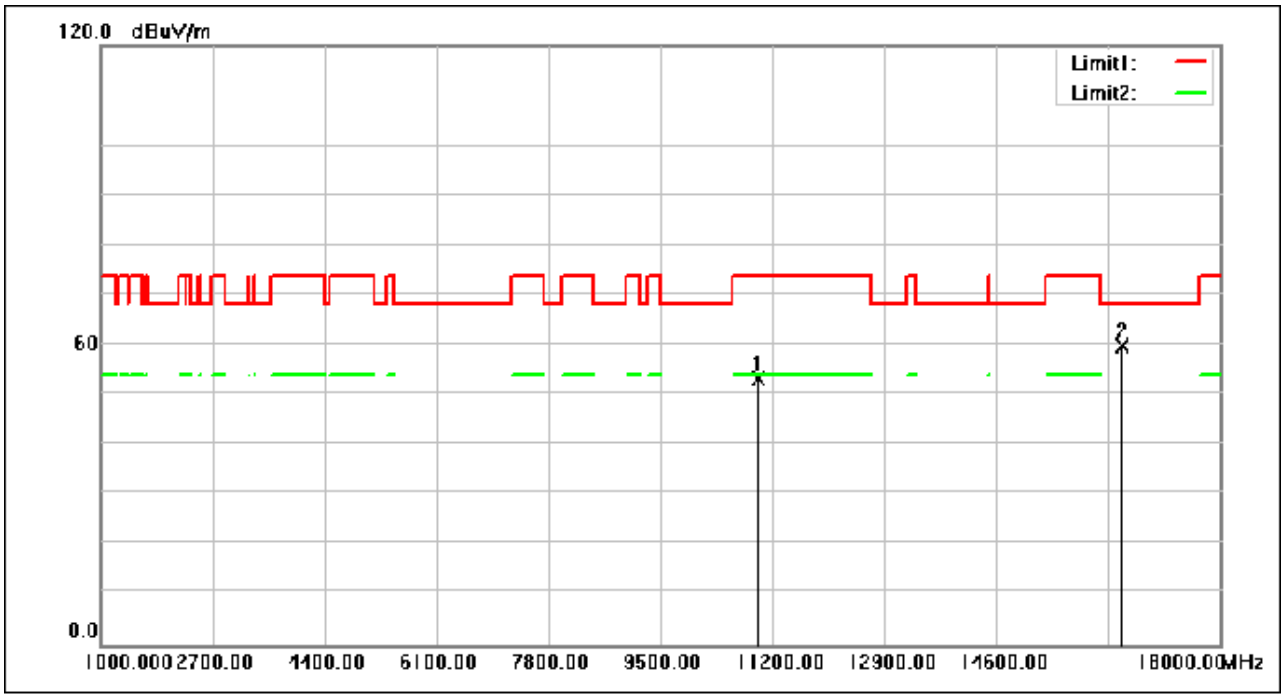
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11339.400	58.46	-6.49	51.97	74.00	-22.03	peak
2	16675.360	53.73	-3.29	50.44	68.30	-17.86	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



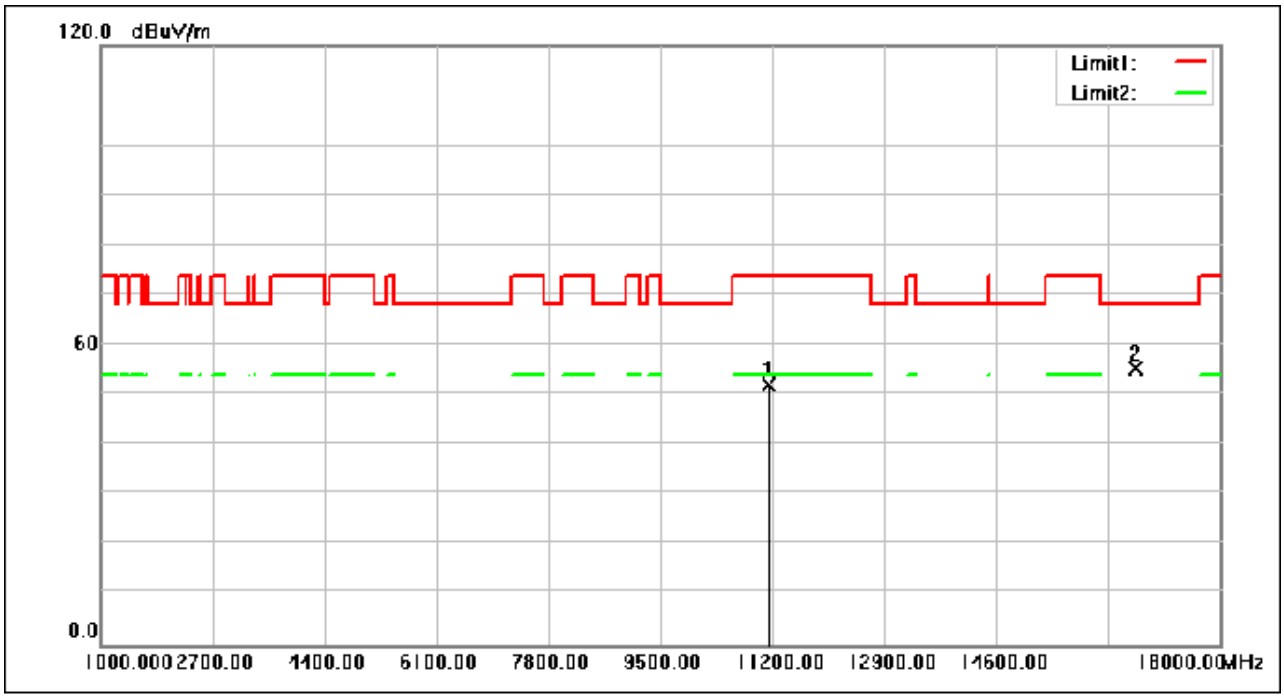
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10998.040	60.32	-6.76	53.56	74.00	-20.44	peak
2	16488.360	68.49	-3.52	64.97	68.30	-3.33	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



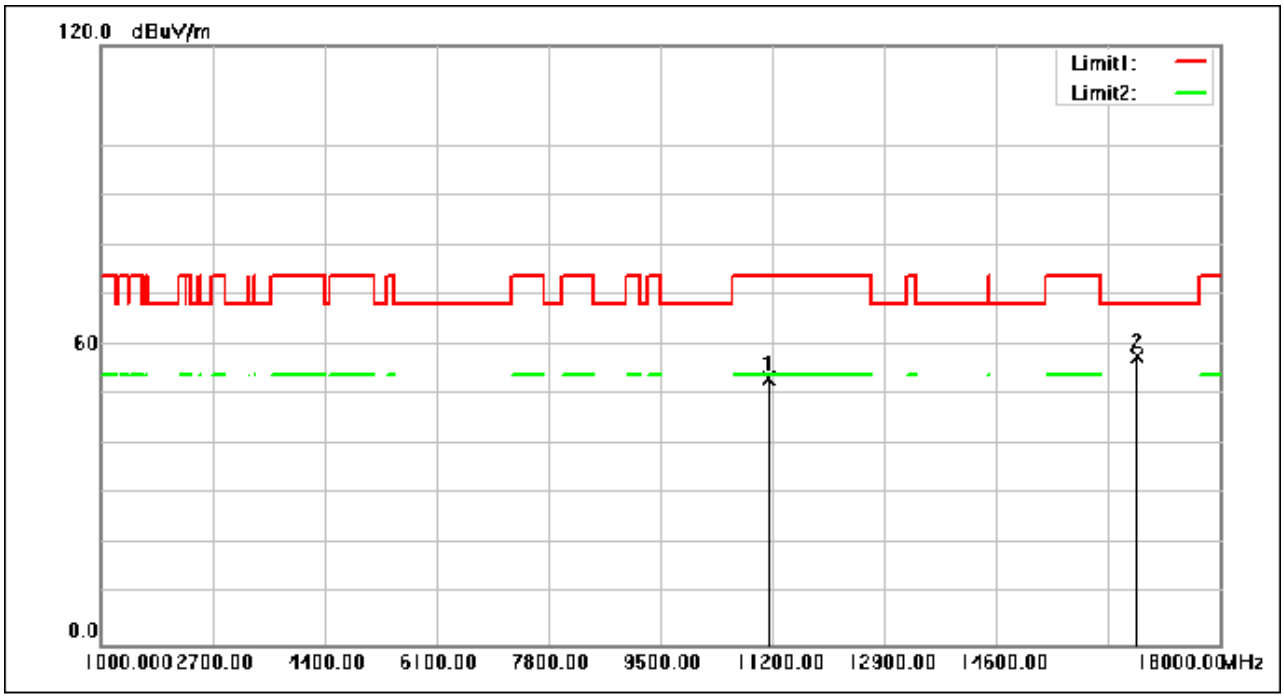
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10991.240	59.91	-6.77	53.14	74.00	-20.86	peak
2	16514.880	63.49	-3.50	59.99	68.30	-8.31	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



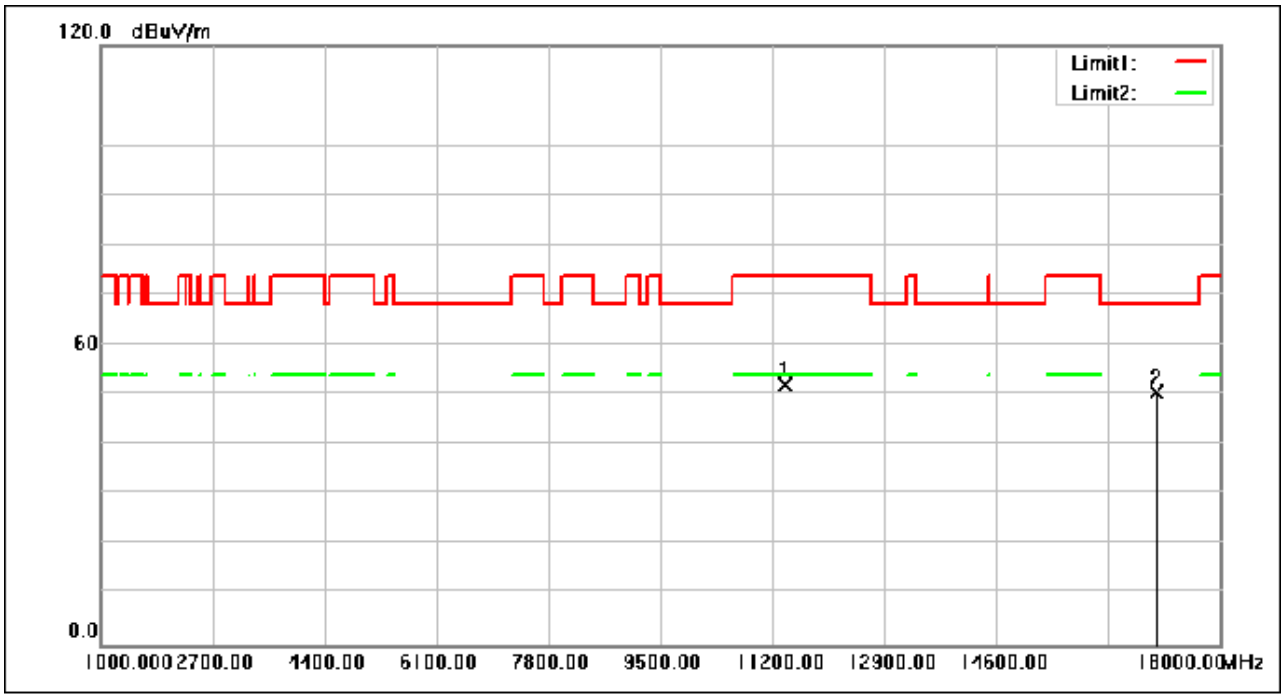
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11153.080	58.75	-6.64	52.11	74.00	-21.89	peak
2	16741.320	58.68	-3.20	55.48	68.30	-12.82	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



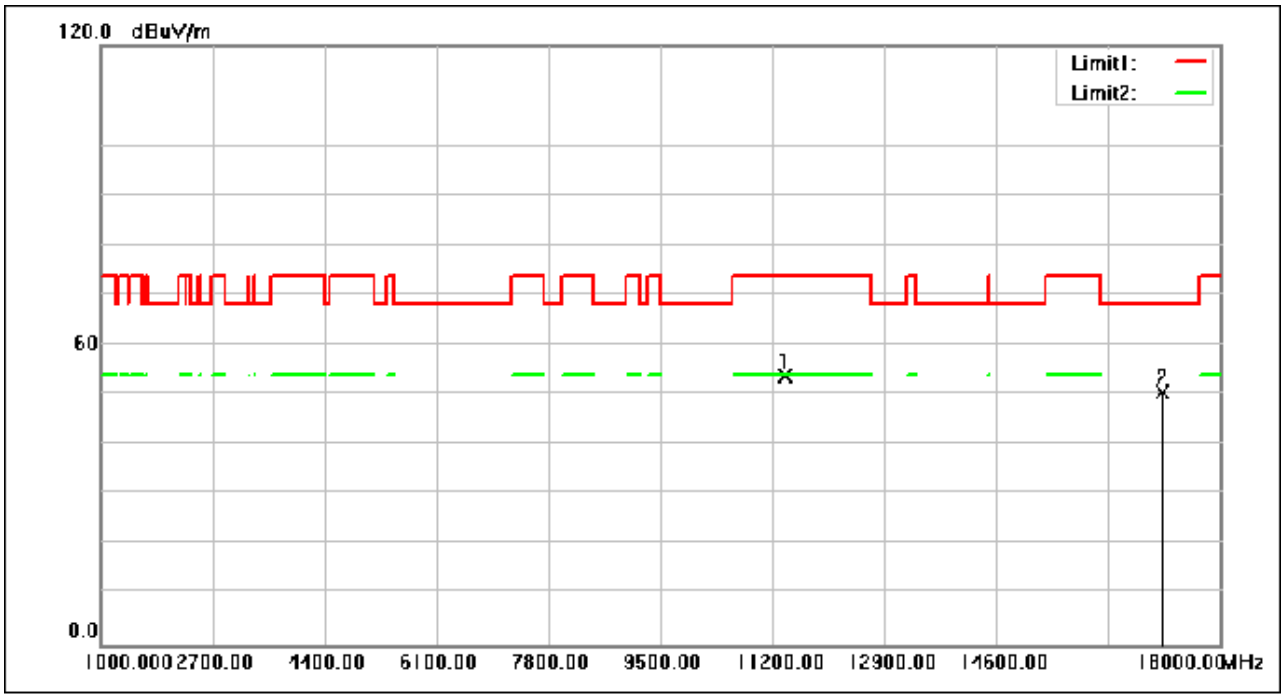
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11156.480	60.01	-6.63	53.38	74.00	-20.62	peak
2	16750.160	61.08	-3.18	57.90	68.30	-10.40	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



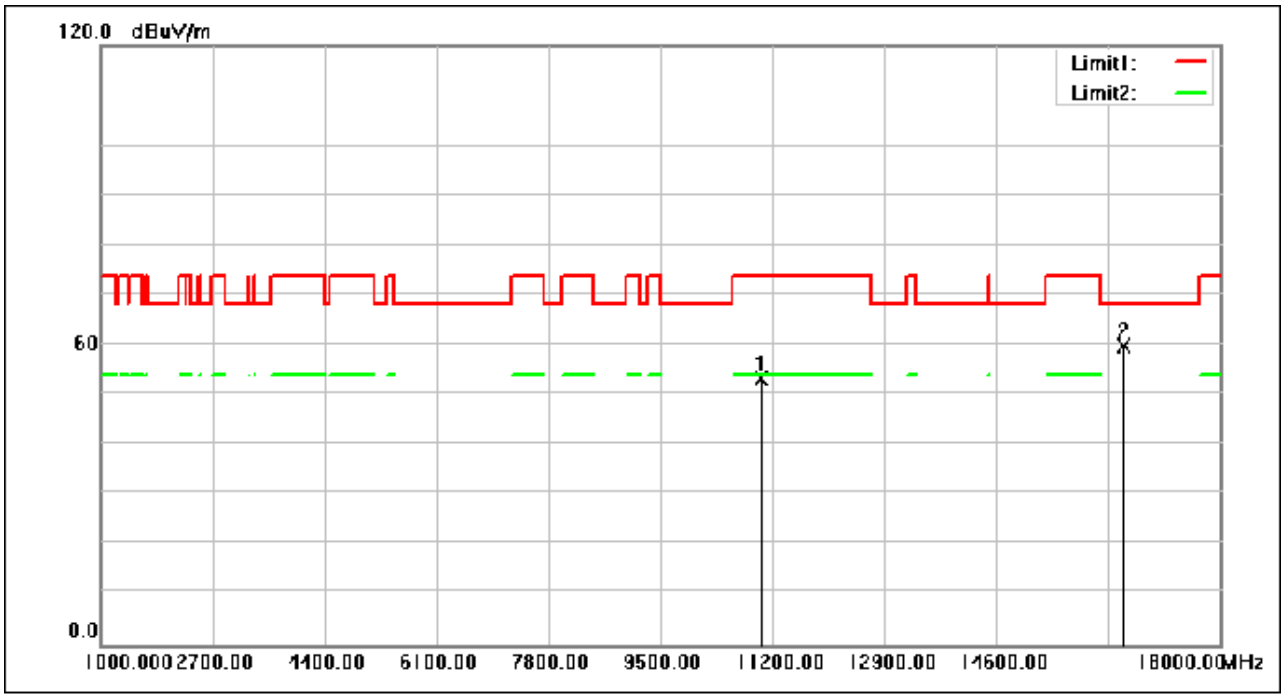
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11392.440	58.43	-6.45	51.98	74.00	-22.02	peak
2	17040.520	53.39	-2.80	50.59	68.30	-17.71	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



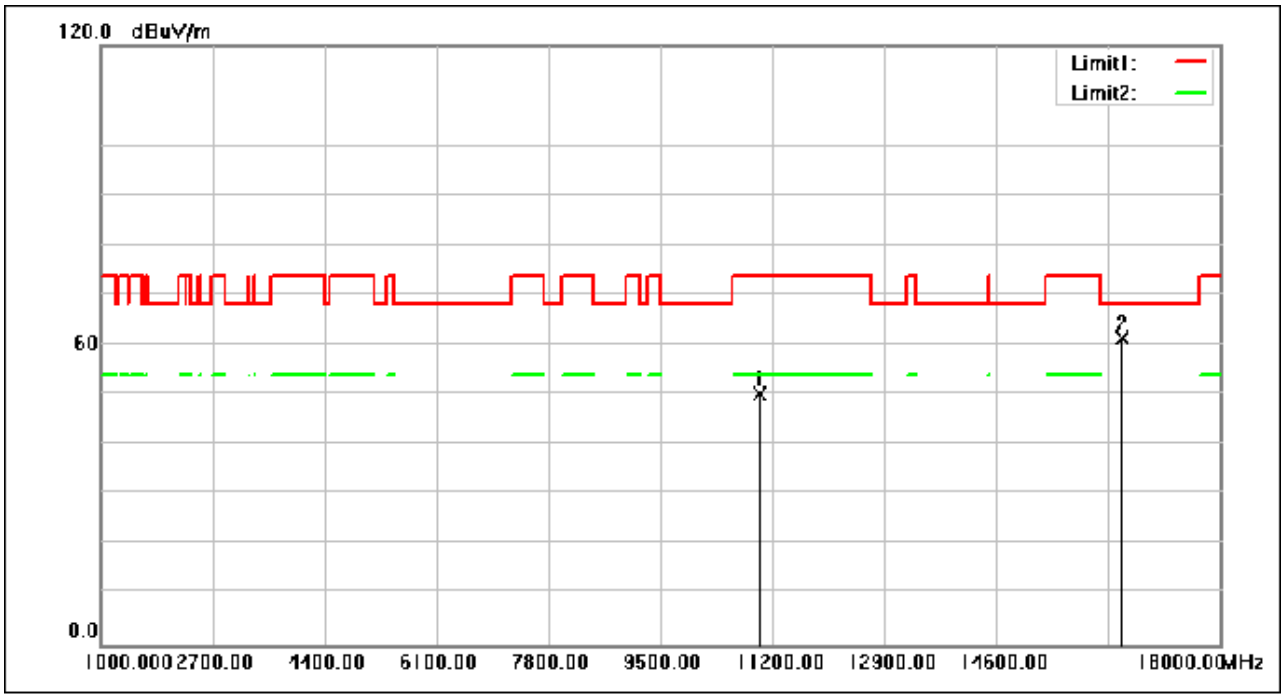
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11395.840	60.21	-6.44	53.77	74.00	-20.23	peak
2	17121.440	53.15	-2.68	50.47	68.30	-17.83	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



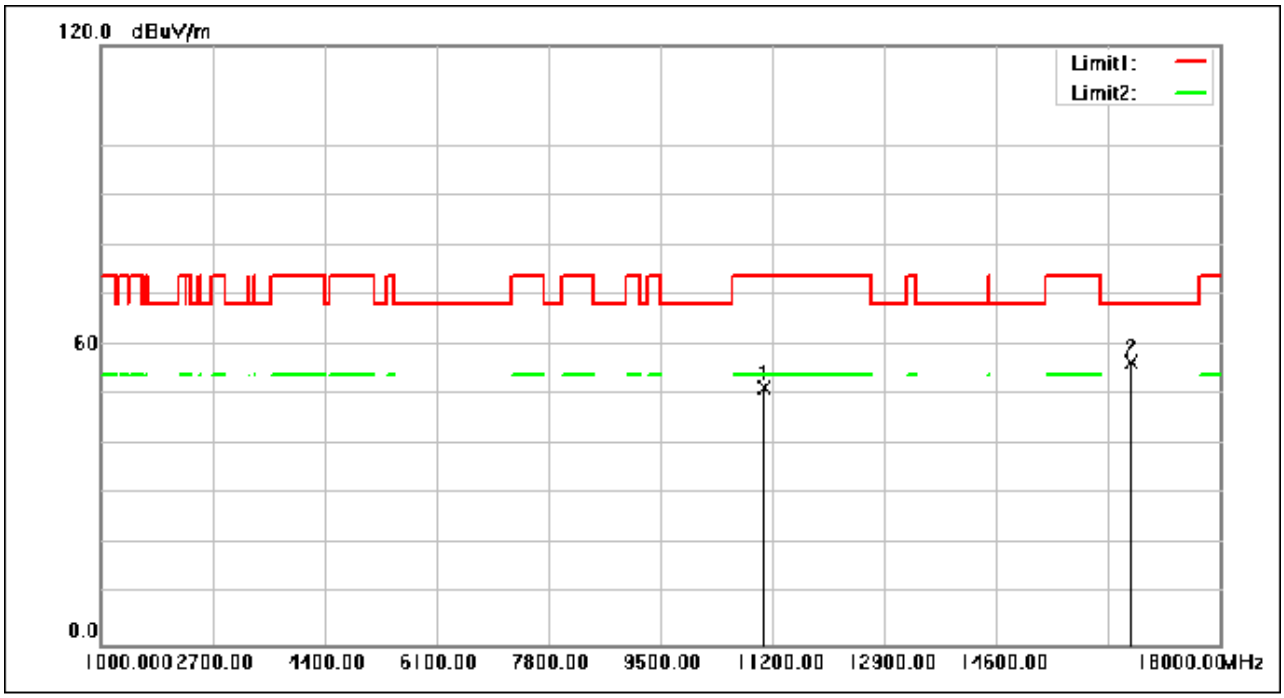
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11038.840	60.00	-6.73	53.27	74.00	-20.73	peak
2	16550.240	63.25	-3.44	59.81	68.30	-8.49	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



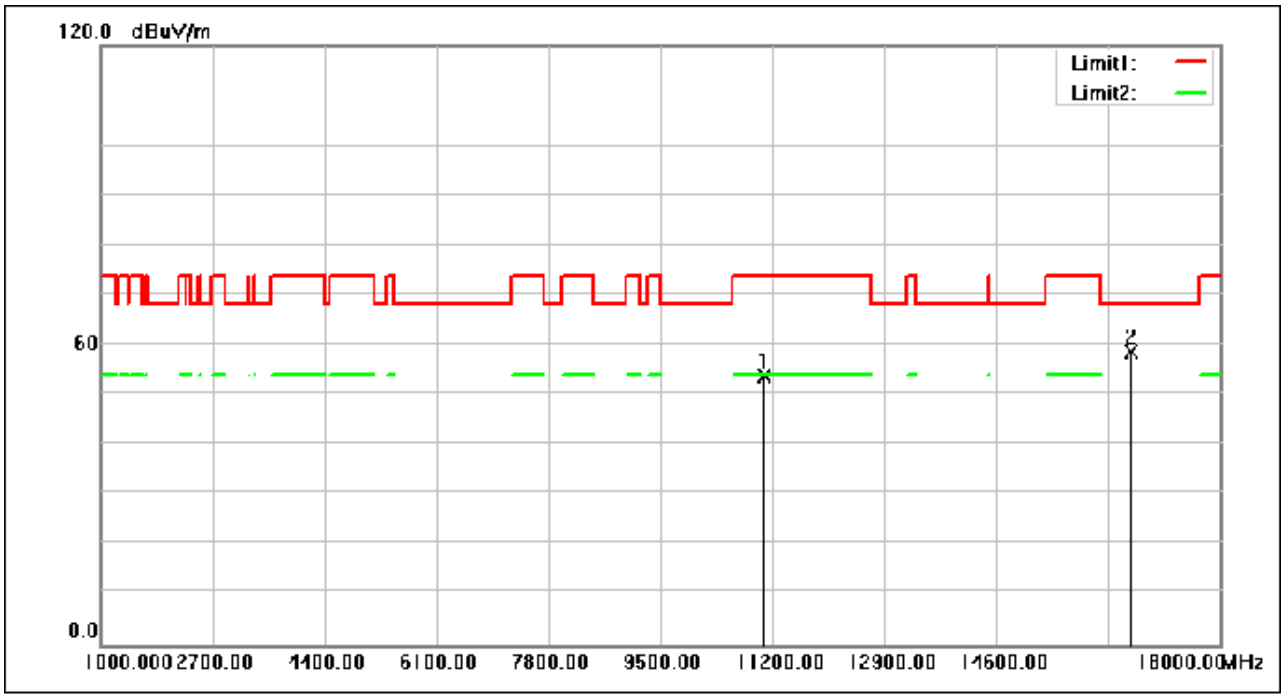
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11013.000	57.06	-6.75	50.31	74.00	-23.69	peak
2	16527.800	64.79	-3.47	61.32	68.30	-6.98	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



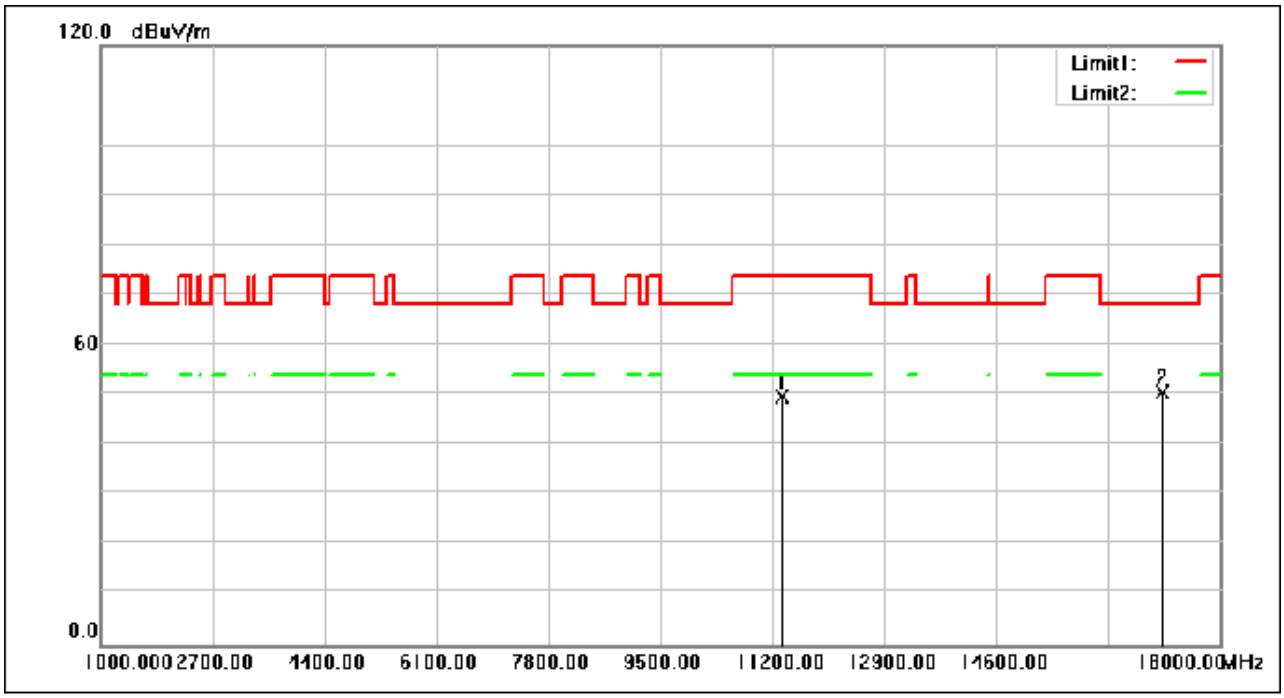
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11097.320	58.19	-6.68	51.51	74.00	-22.49	peak
2	16654.960	60.00	-3.31	56.69	68.30	-11.61	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



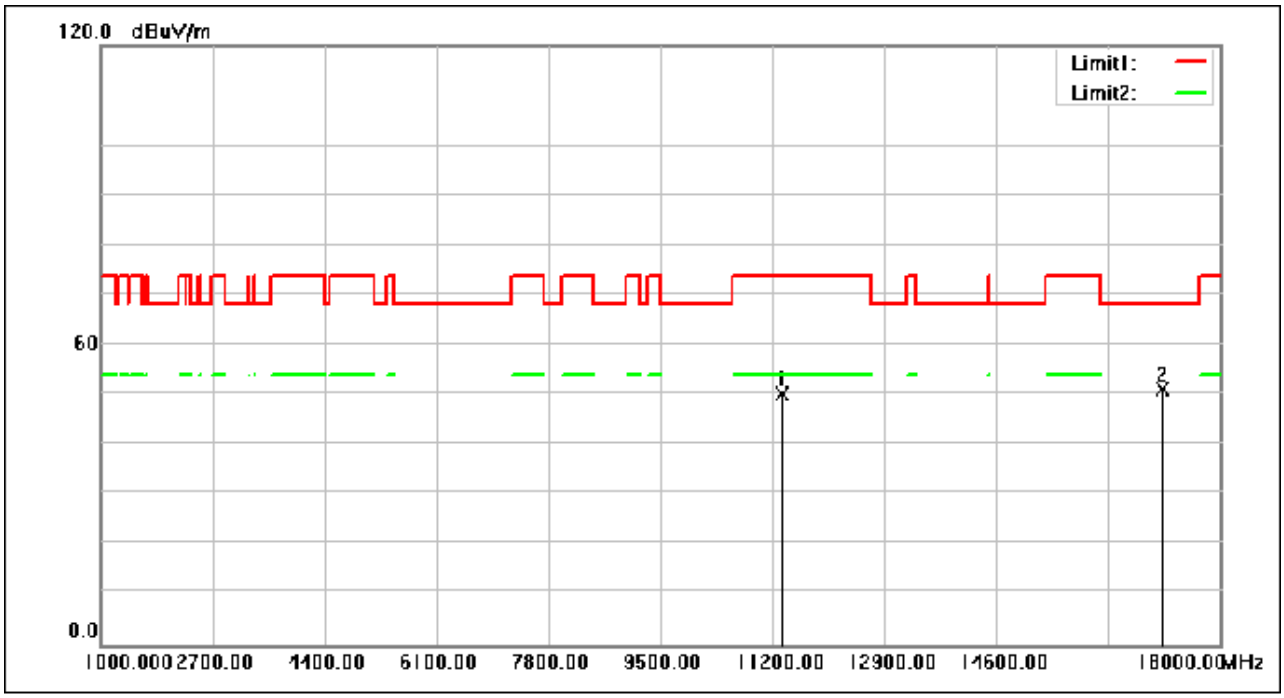
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11089.840	60.39	-6.69	53.70	74.00	-20.30	peak
2	16650.880	61.83	-3.31	58.52	68.30	-9.78	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



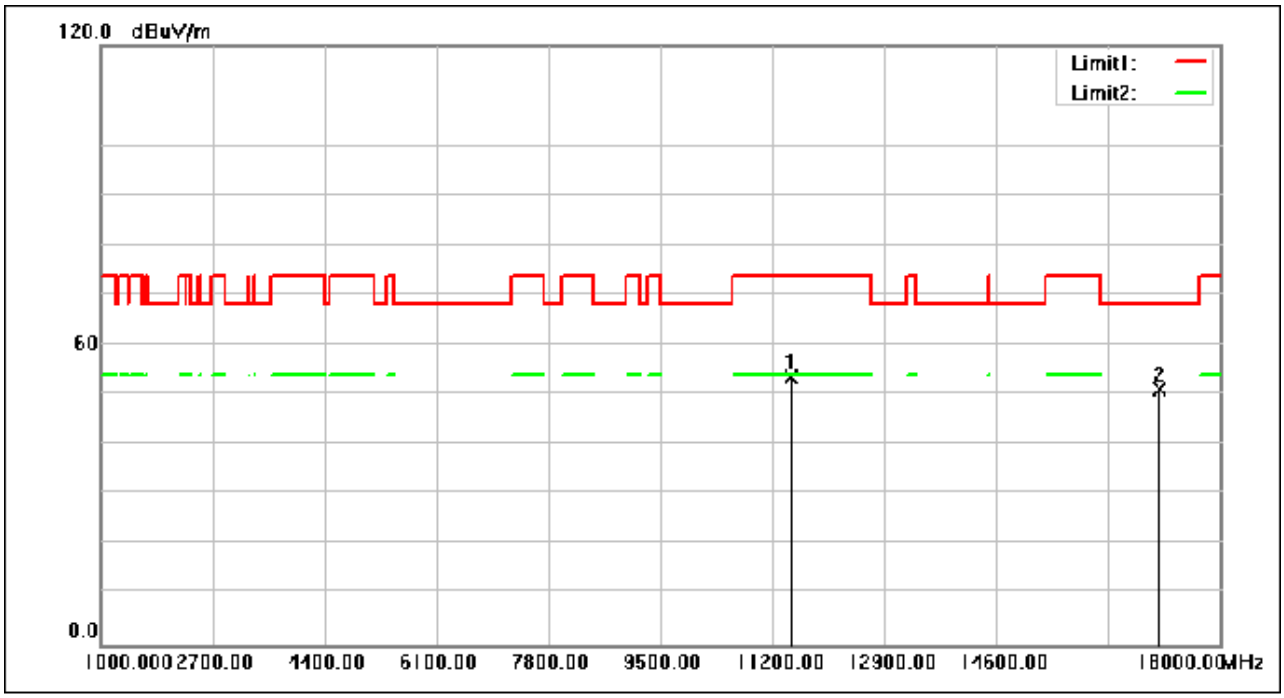
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11339.400	56.26	-6.49	49.77	74.00	-24.23	peak
2	17124.160	53.32	-2.68	50.64	68.30	-17.66	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



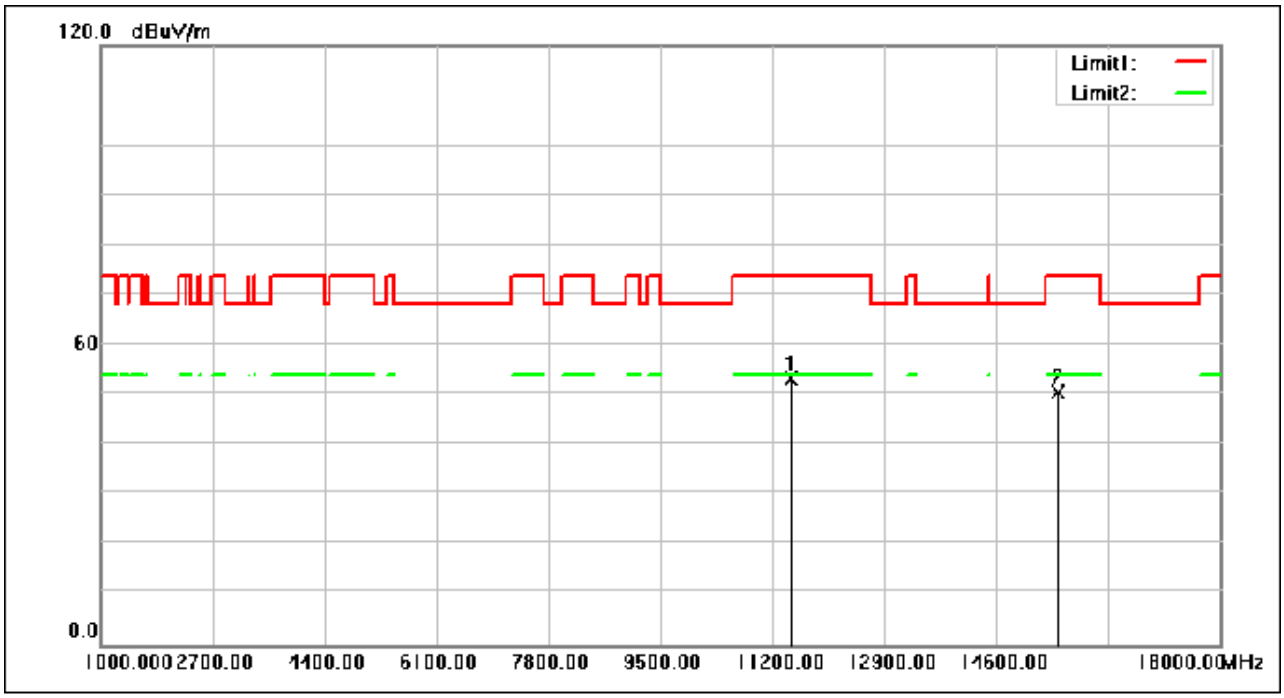
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11357.080	56.73	-6.47	50.26	74.00	-23.74	peak
2	17118.720	53.95	-2.68	51.27	68.30	-17.03	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



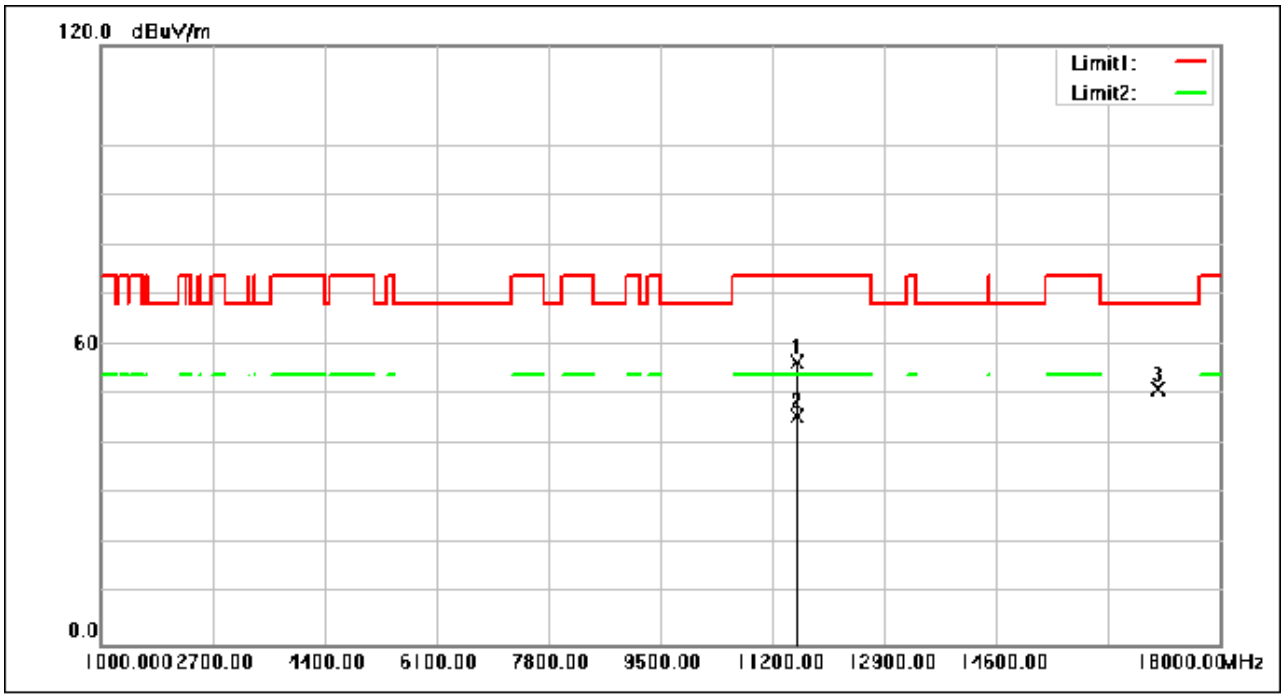
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11486.960	60.00	-6.37	53.63	74.00	-20.37	peak
2	17097.640	53.87	-2.71	51.16	68.30	-17.14	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



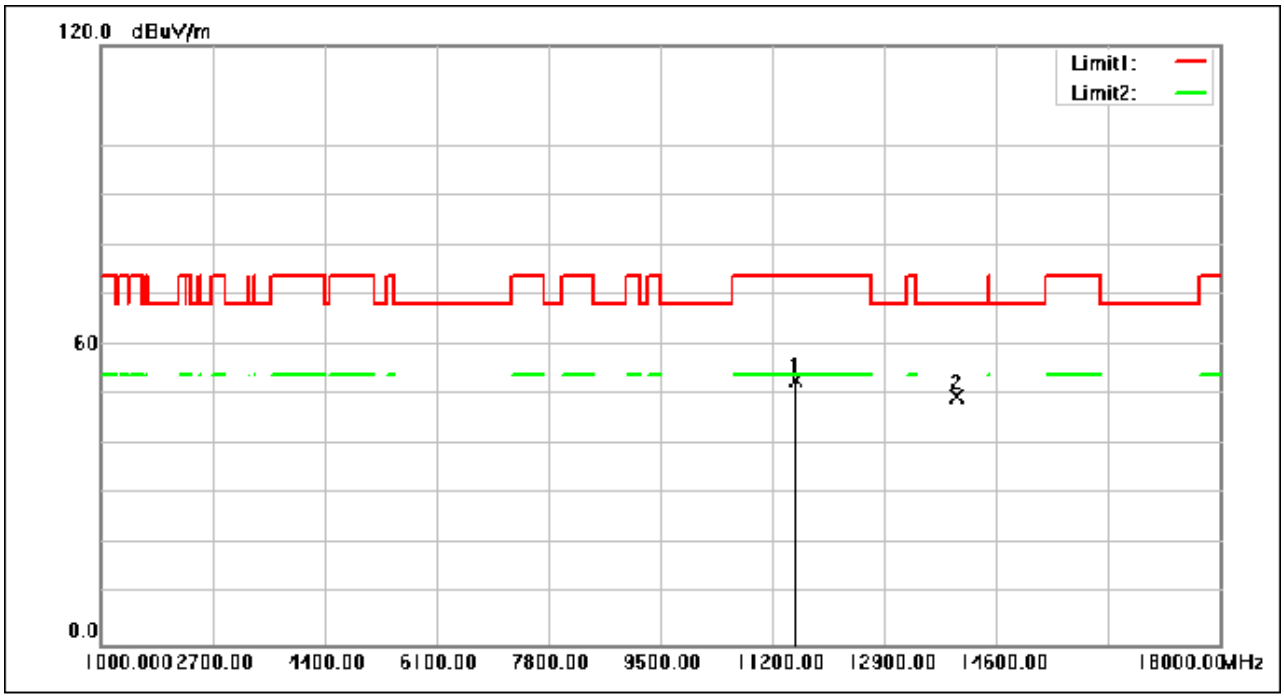
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11494.440	59.68	-6.37	53.31	74.00	-20.69	peak
2	15541.120	55.10	-4.61	50.49	74.00	-23.51	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



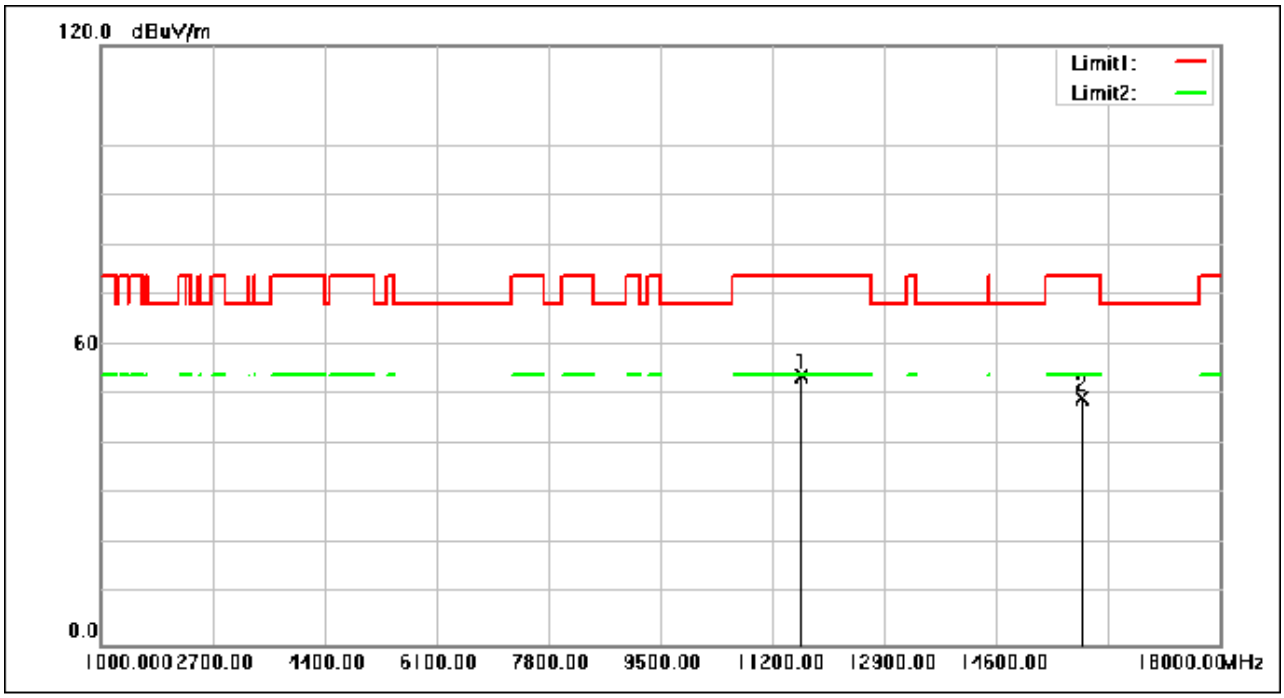
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11574.680	62.85	-6.30	56.55	74.00	-17.45	peak
2	11574.680	52.03	-6.30	45.73	54.00	-8.27	AVG
3	17050.720	53.83	-2.78	51.05	68.30	-17.25	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



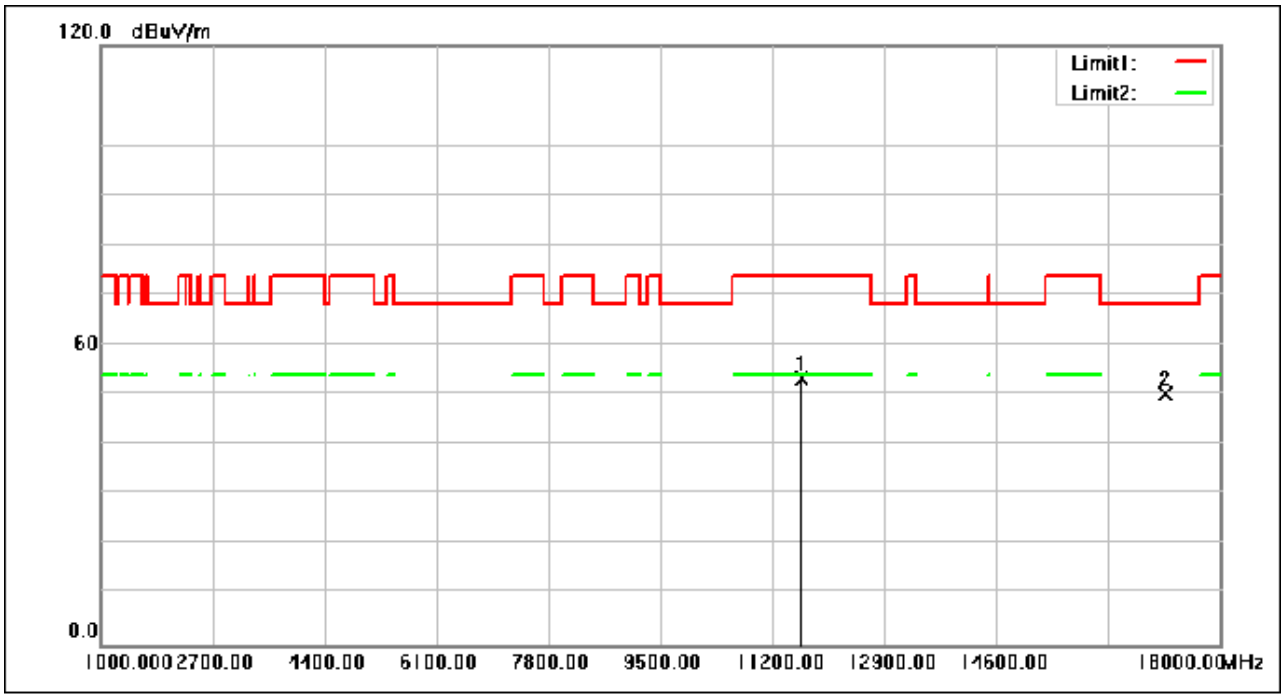
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11564.480	59.21	-6.31	52.90	74.00	-21.10	peak
2	14005.000	56.20	-6.42	49.78	68.30	-18.52	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



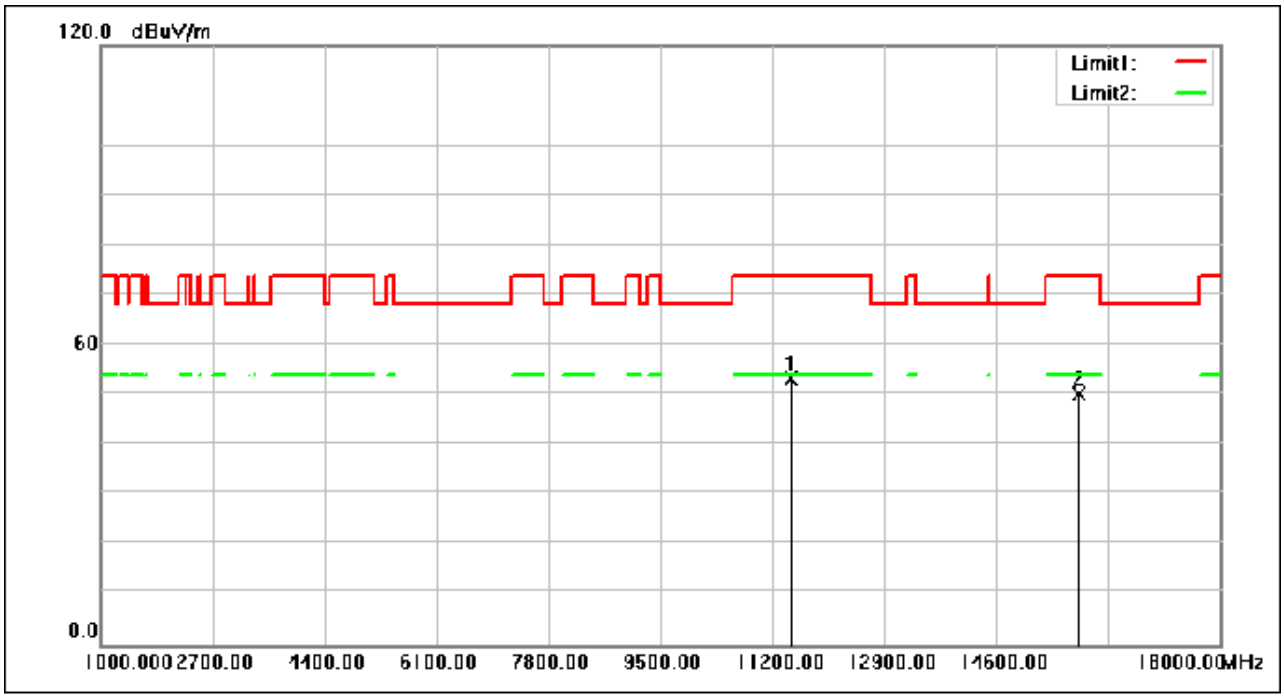
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11649.480	59.96	-6.24	53.72	74.00	-20.28	peak
2	15917.160	53.55	-4.27	49.28	74.00	-24.72	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



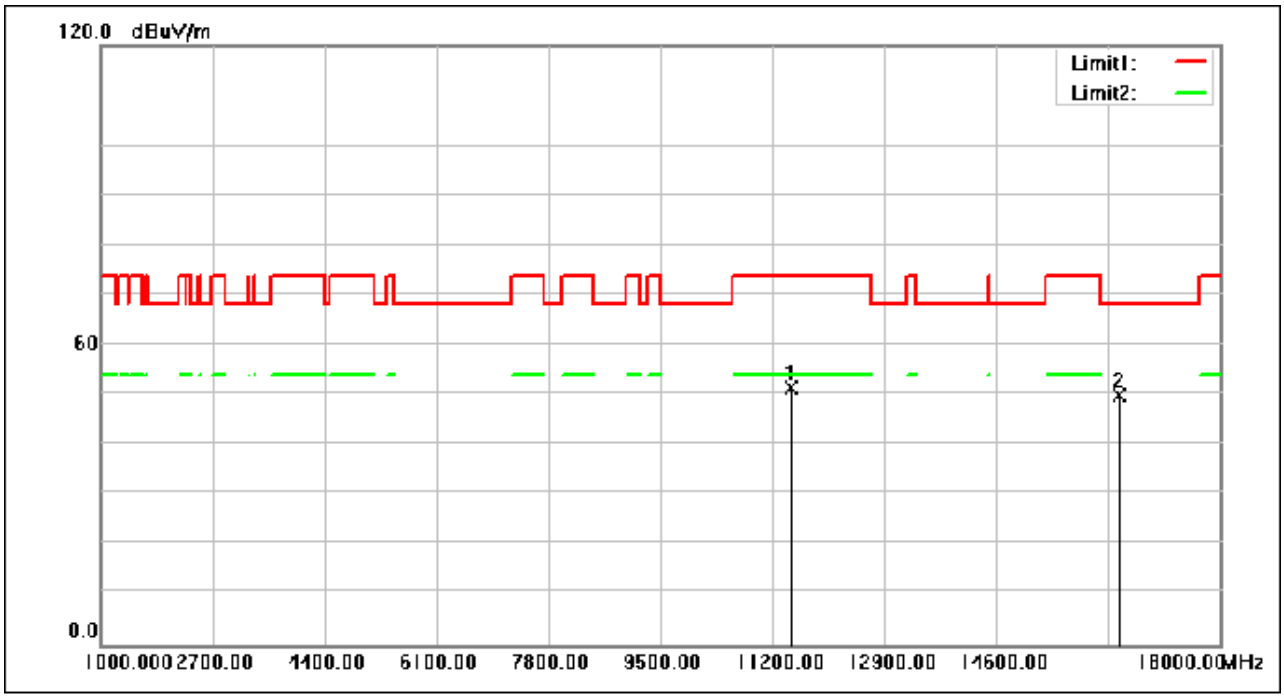
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11651.520	59.46	-6.24	53.22	74.00	-20.78	peak
2	17168.360	52.81	-2.61	50.20	68.30	-18.10	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



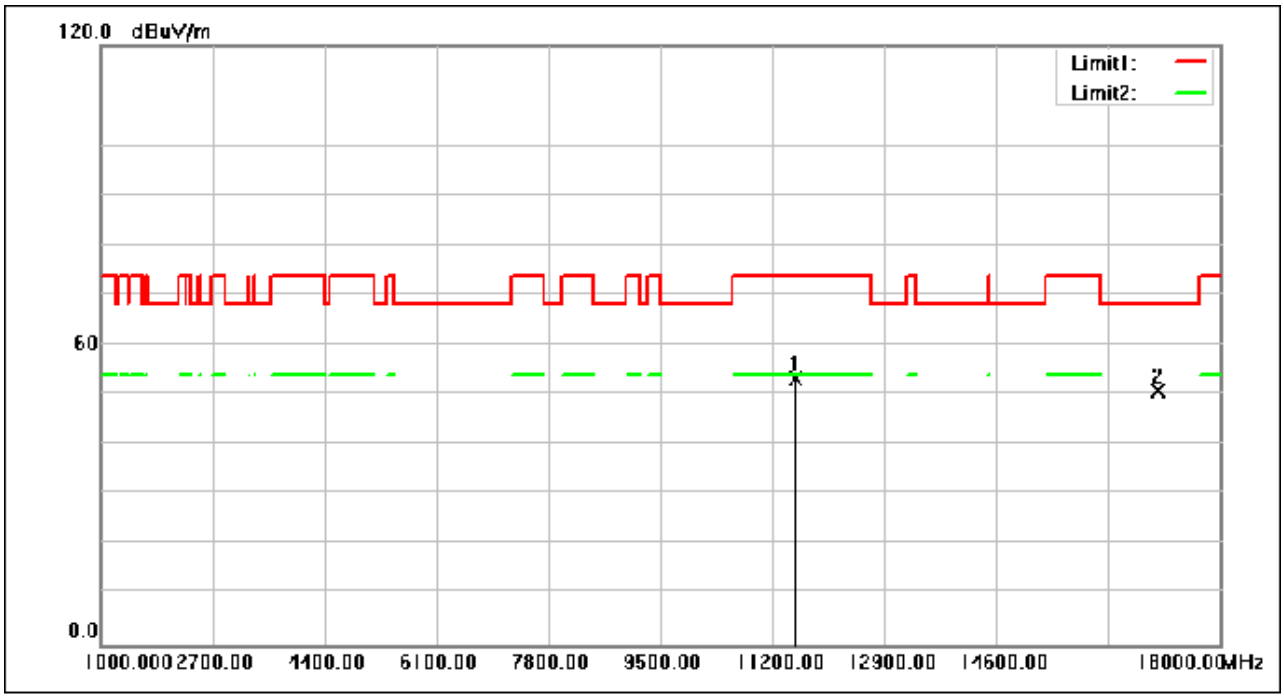
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11492.400	59.51	-6.37	53.14	74.00	-20.86	peak
2	15863.440	54.54	-4.33	50.21	74.00	-23.79	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



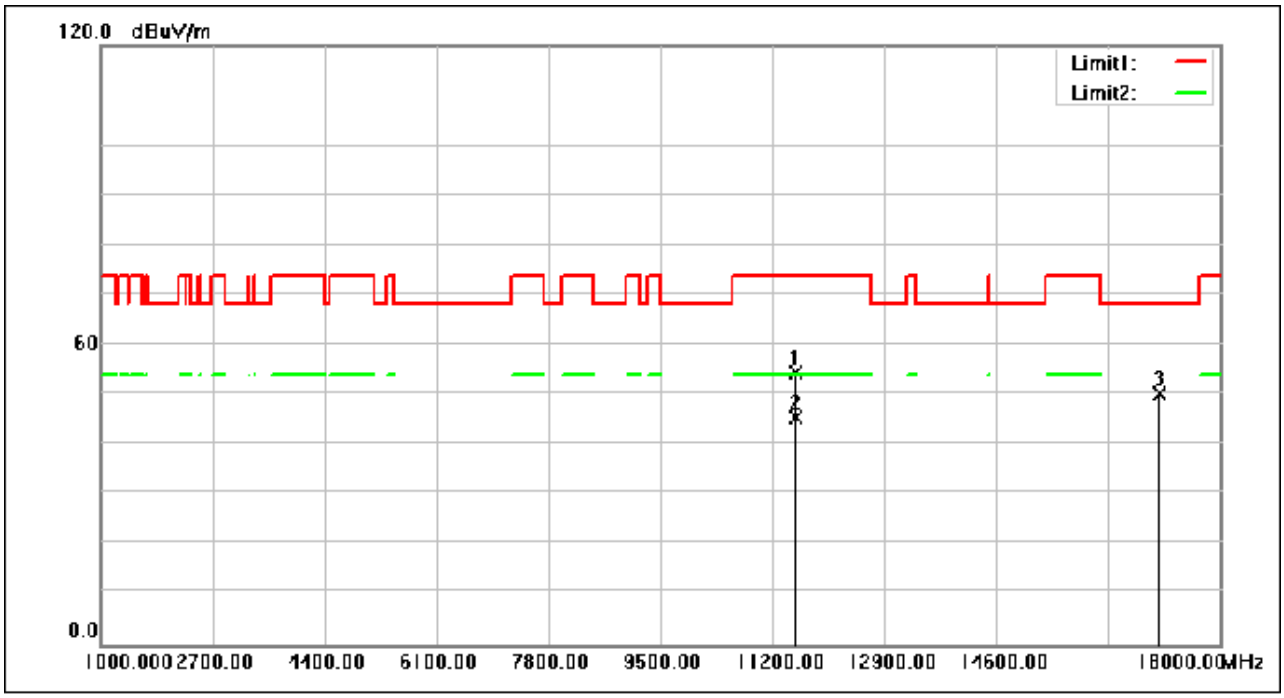
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11493.080	57.73	-6.37	51.36	74.00	-22.64	peak
2	16482.240	53.38	-3.54	49.84	68.30	-18.46	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



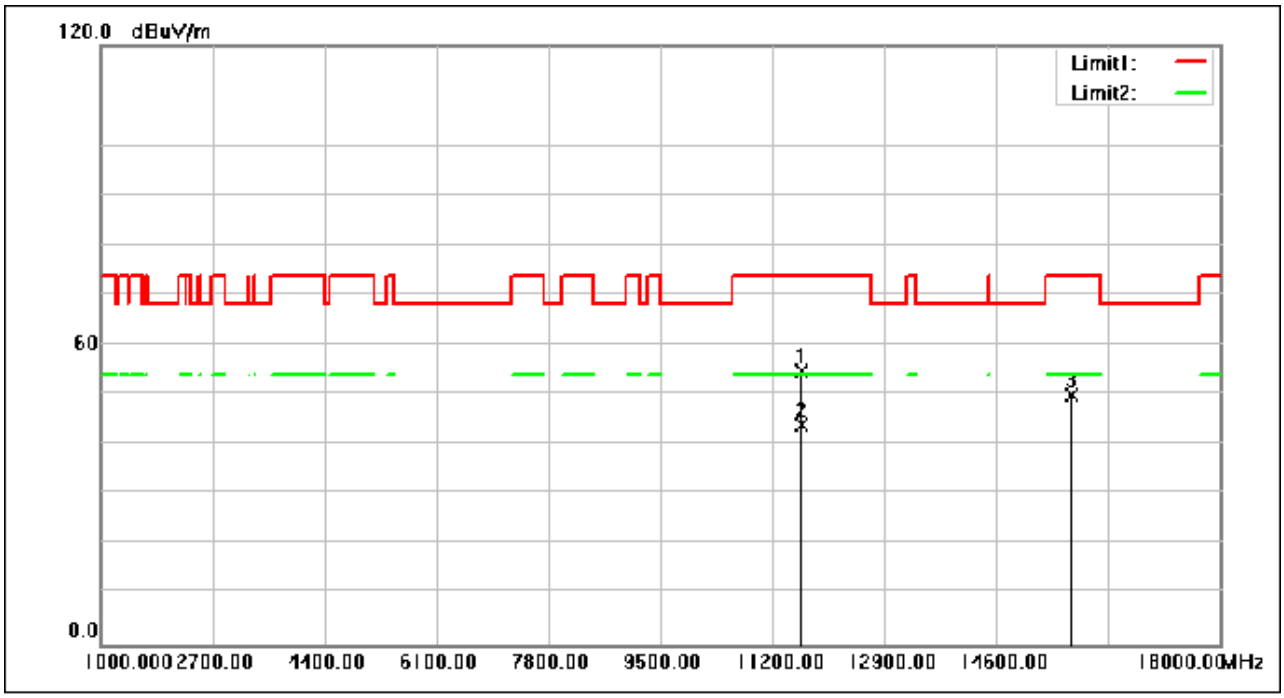
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.600	59.69	-6.30	53.39	74.00	-20.61	peak
2	17049.360	53.71	-2.79	50.92	68.30	-17.38	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



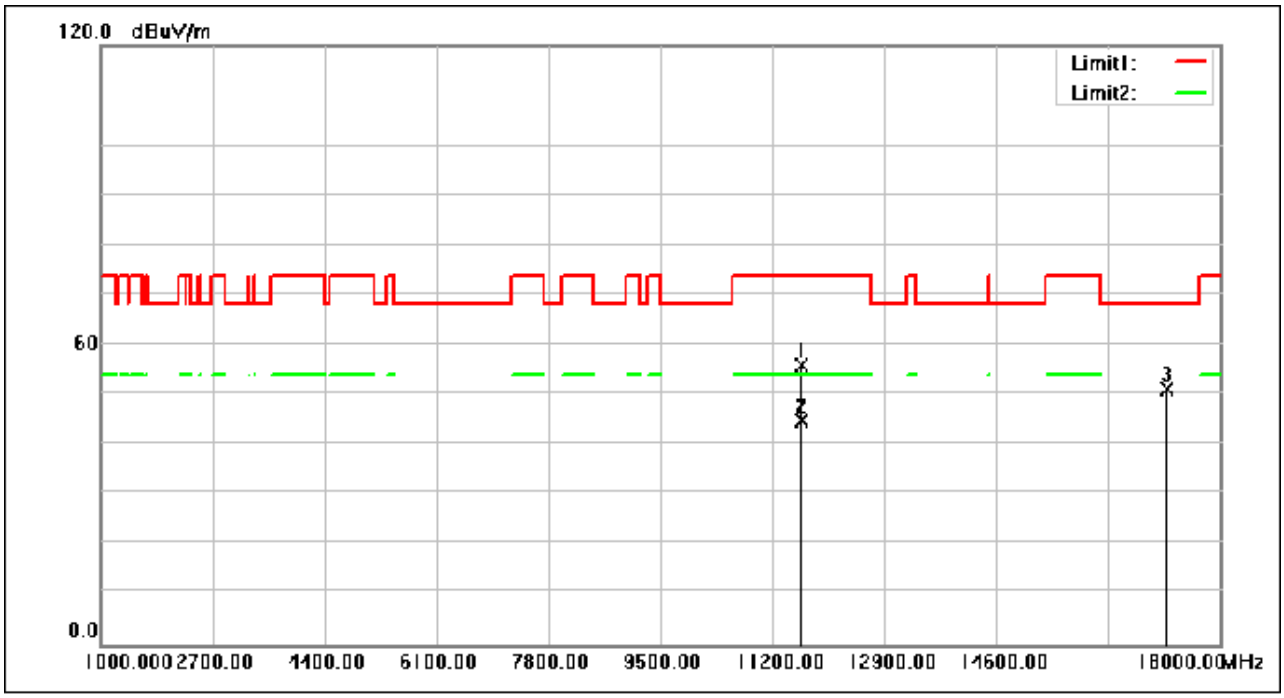
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11567.880	60.76	-6.30	54.46	74.00	-19.54	peak
2	11567.880	51.63	-6.30	45.33	54.00	-8.67	AVG
3	17090.160	52.95	-2.72	50.23	68.30	-18.07	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



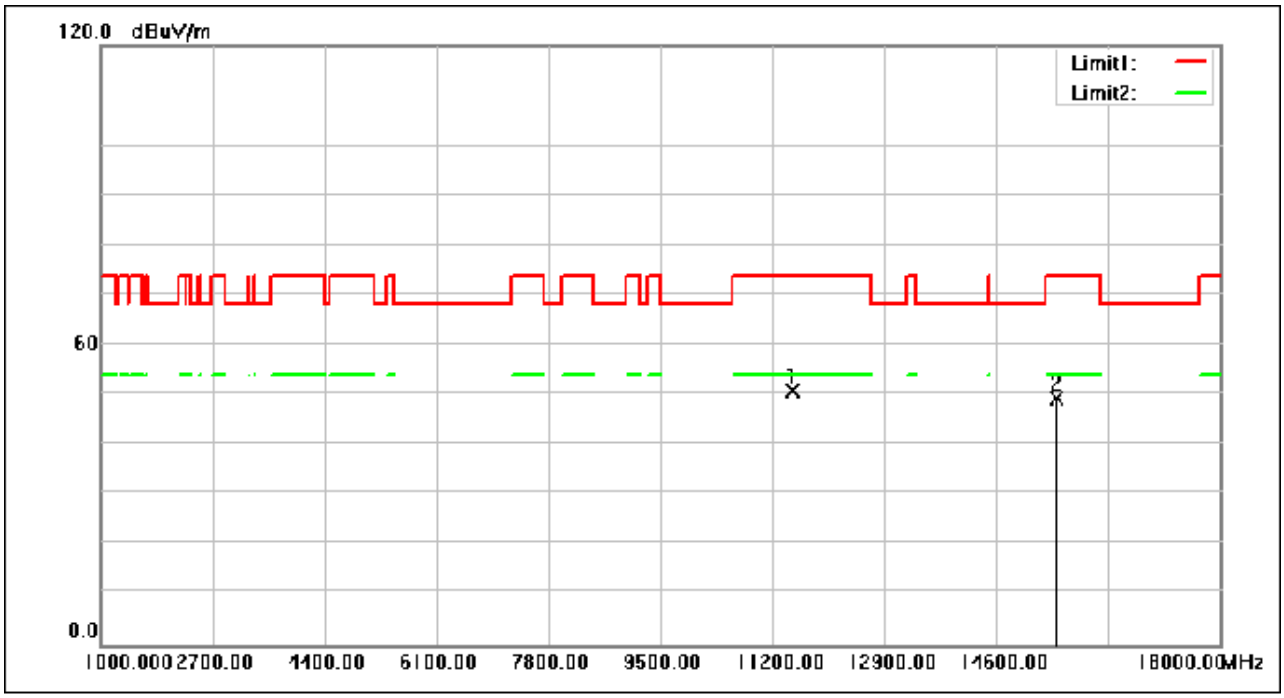
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11645.400	61.08	-6.24	54.84	74.00	-19.16	peak
2	11645.400	50.22	-6.24	43.98	54.00	-10.02	AVG
3	15747.840	54.38	-4.43	49.95	74.00	-24.05	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



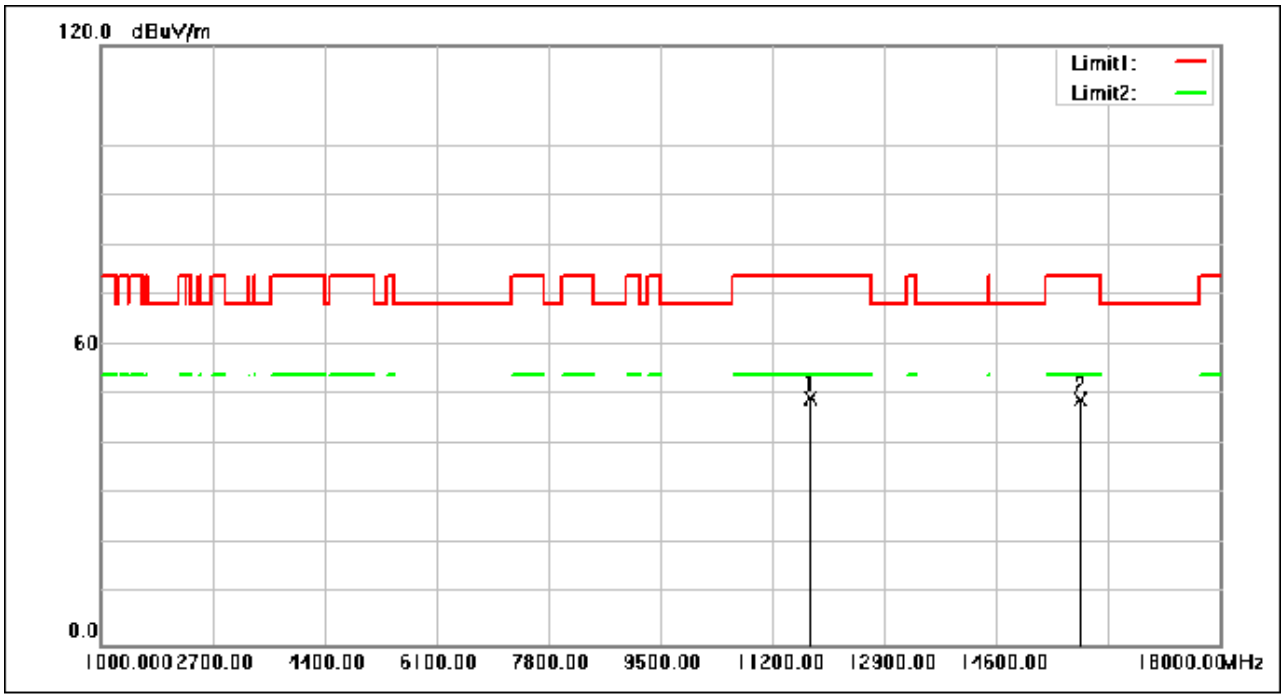
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11646.080	62.06	-6.24	55.82	74.00	-18.18	peak
2	11646.080	51.03	-6.24	44.79	54.00	-9.21	AVG
3	17208.480	53.71	-2.55	51.16	68.30	-17.14	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



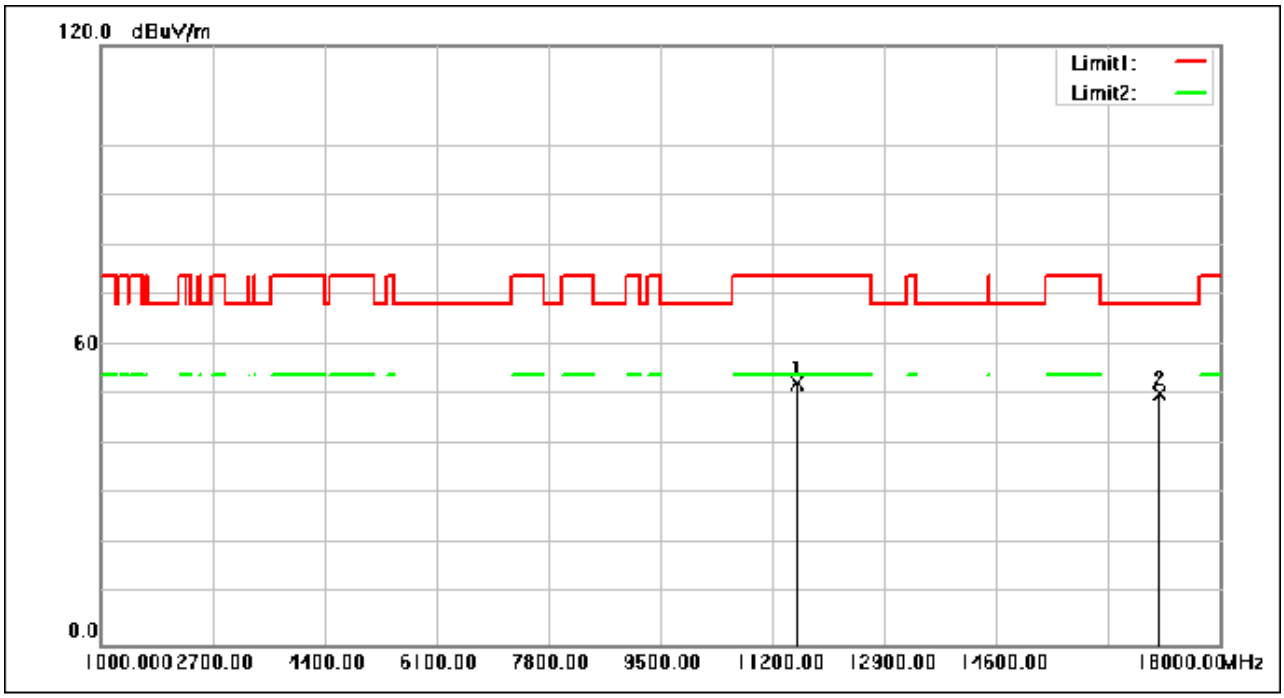
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11511.440	57.11	-6.35	50.76	74.00	-23.24	peak
2	15528.200	54.05	-4.62	49.43	74.00	-24.57	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



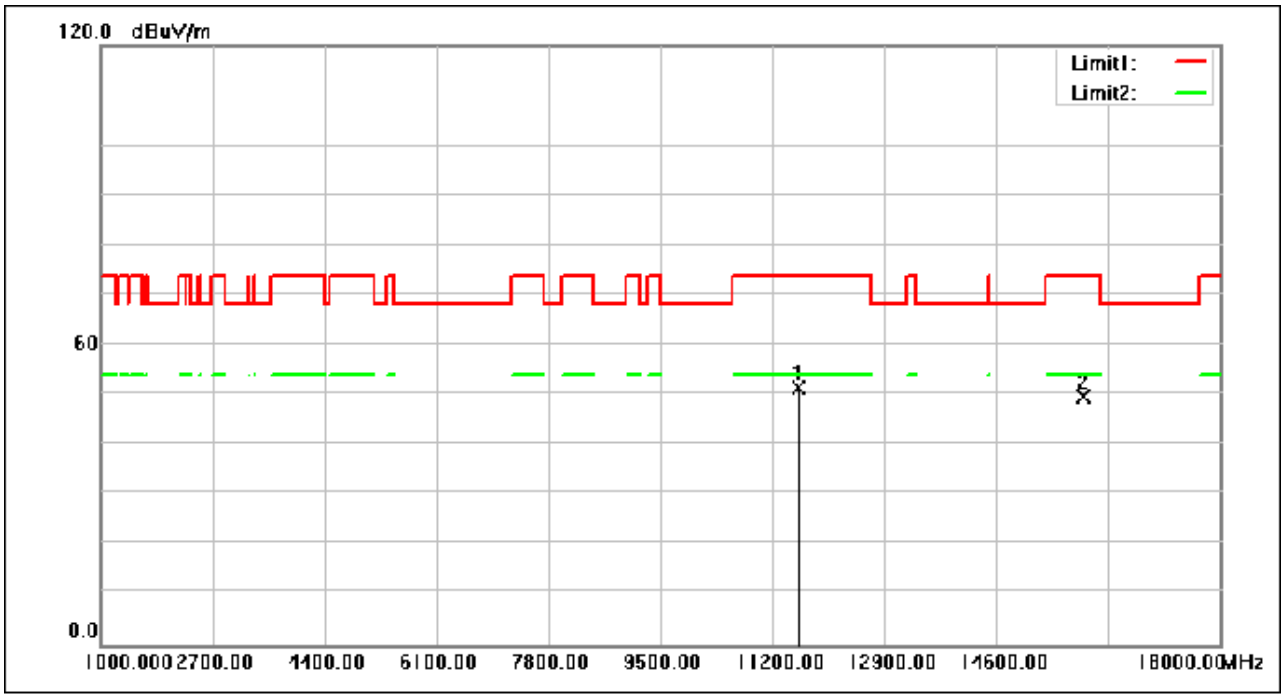
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11789.560	55.50	-6.13	49.37	74.00	-24.63	peak
2	15891.320	53.29	-4.29	49.00	74.00	-25.00	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



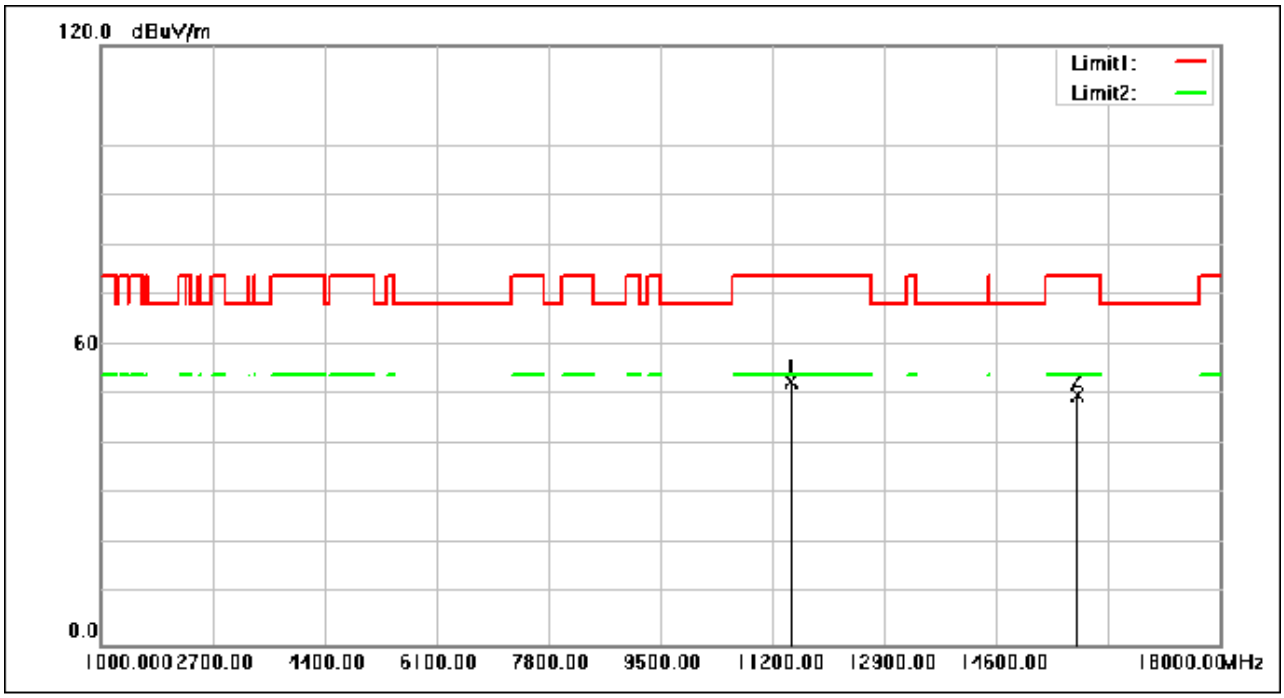
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11586.240	58.76	-6.29	52.47	74.00	-21.53	peak
2	17083.360	53.08	-2.74	50.34	68.30	-17.96	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



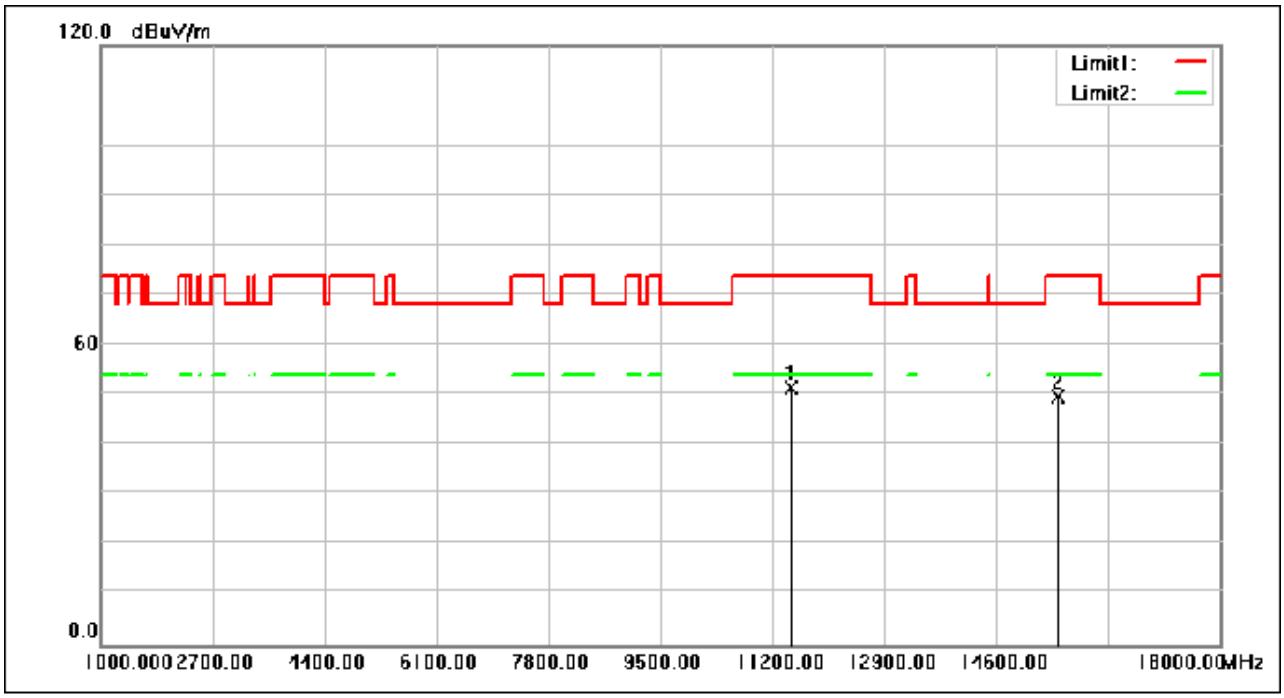
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11594.400	57.75	-6.29	51.46	74.00	-22.54	peak
2	15940.960	53.82	-4.23	49.59	74.00	-24.41	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



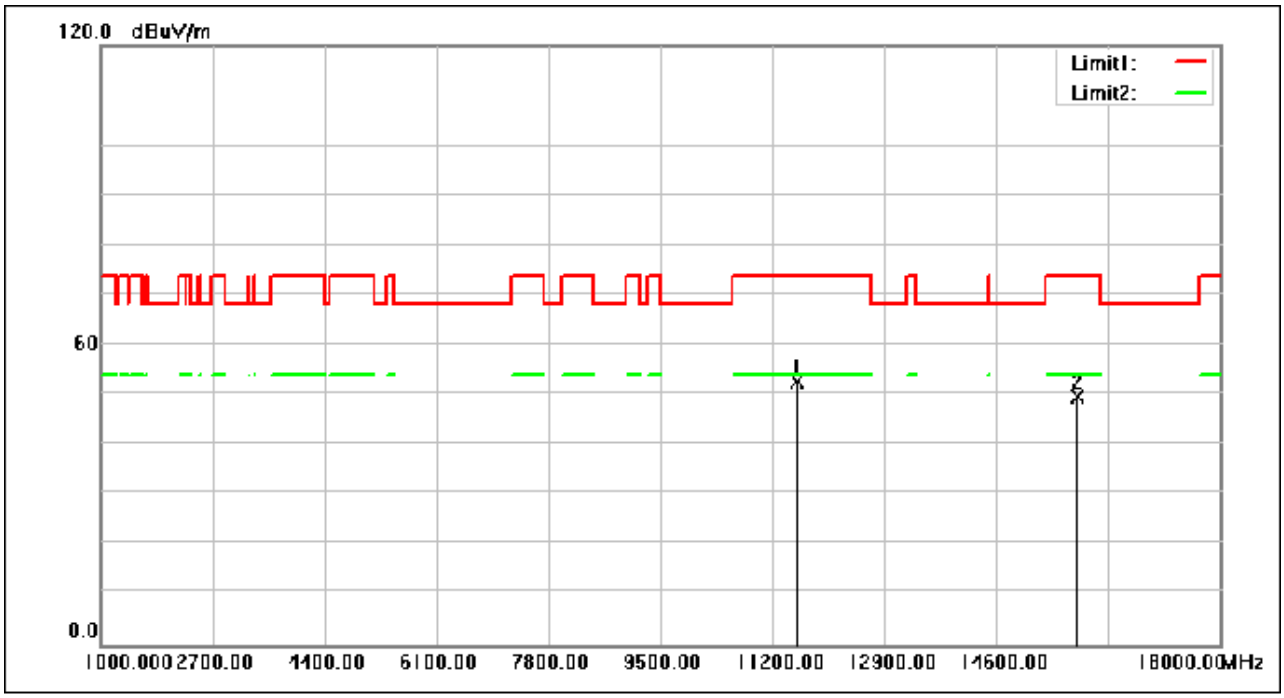
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11495.120	59.04	-6.36	52.68	74.00	-21.32	peak
2	15852.560	54.34	-4.34	50.00	74.00	-24.00	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



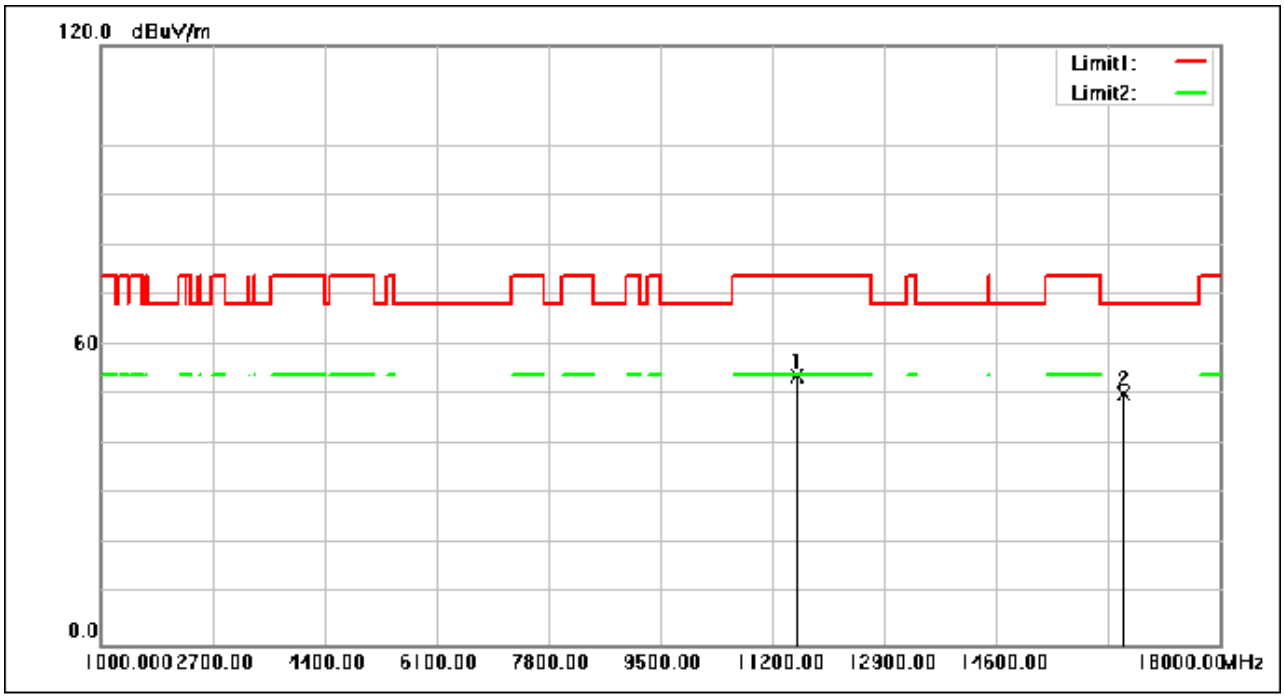
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11493.760	57.68	-6.37	51.31	74.00	-22.69	peak
2	15538.400	54.29	-4.62	49.67	74.00	-24.33	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



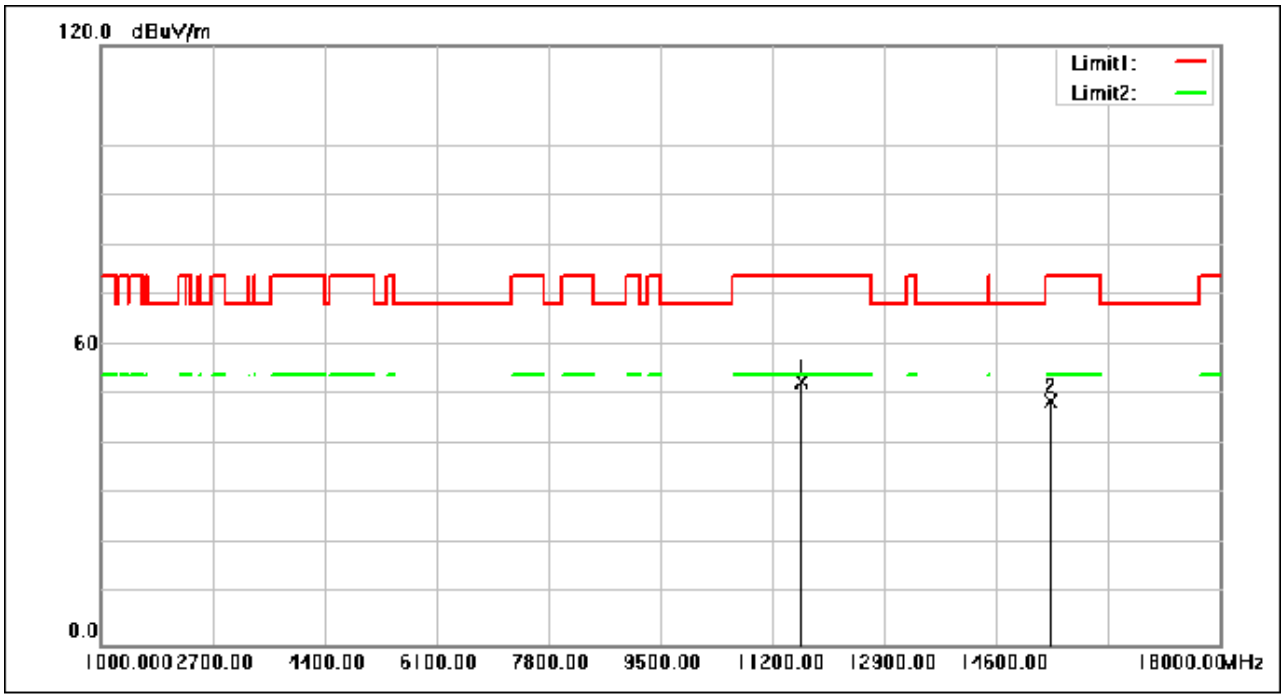
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11577.400	59.05	-6.29	52.76	74.00	-21.24	peak
2	15850.520	53.87	-4.34	49.53	74.00	-24.47	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



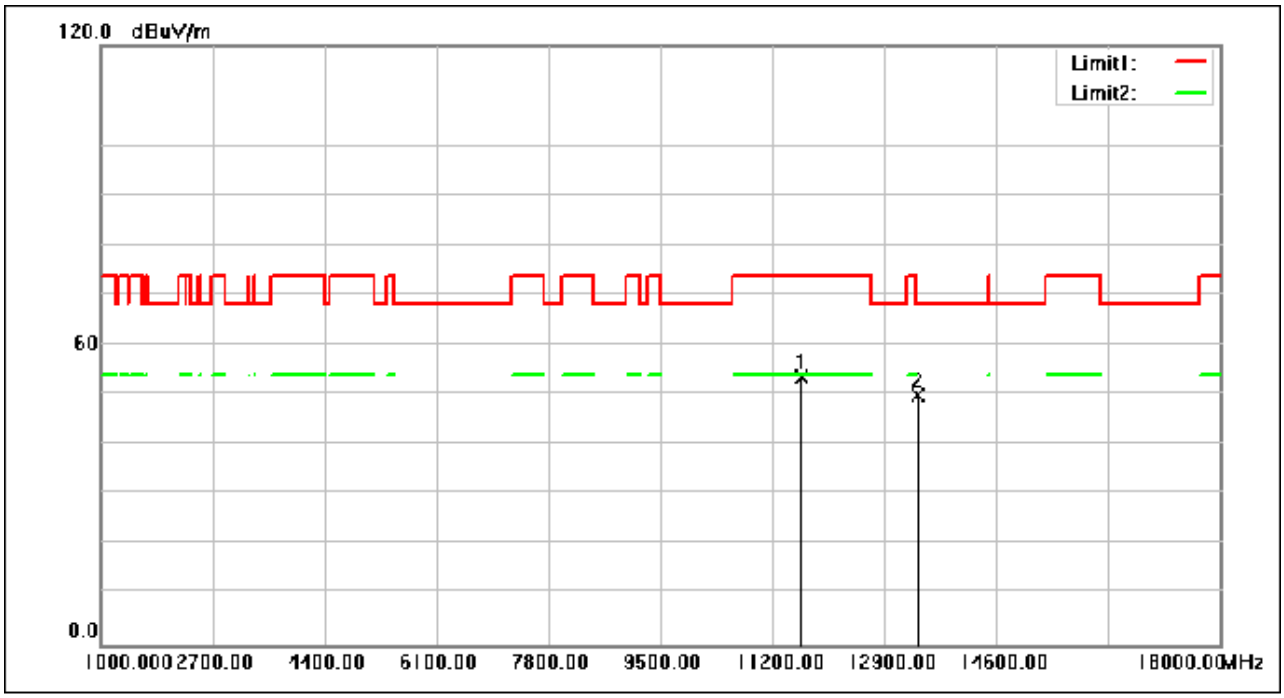
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11580.120	60.02	-6.29	53.73	74.00	-20.27	peak
2	16548.200	53.68	-3.45	50.23	68.30	-18.07	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



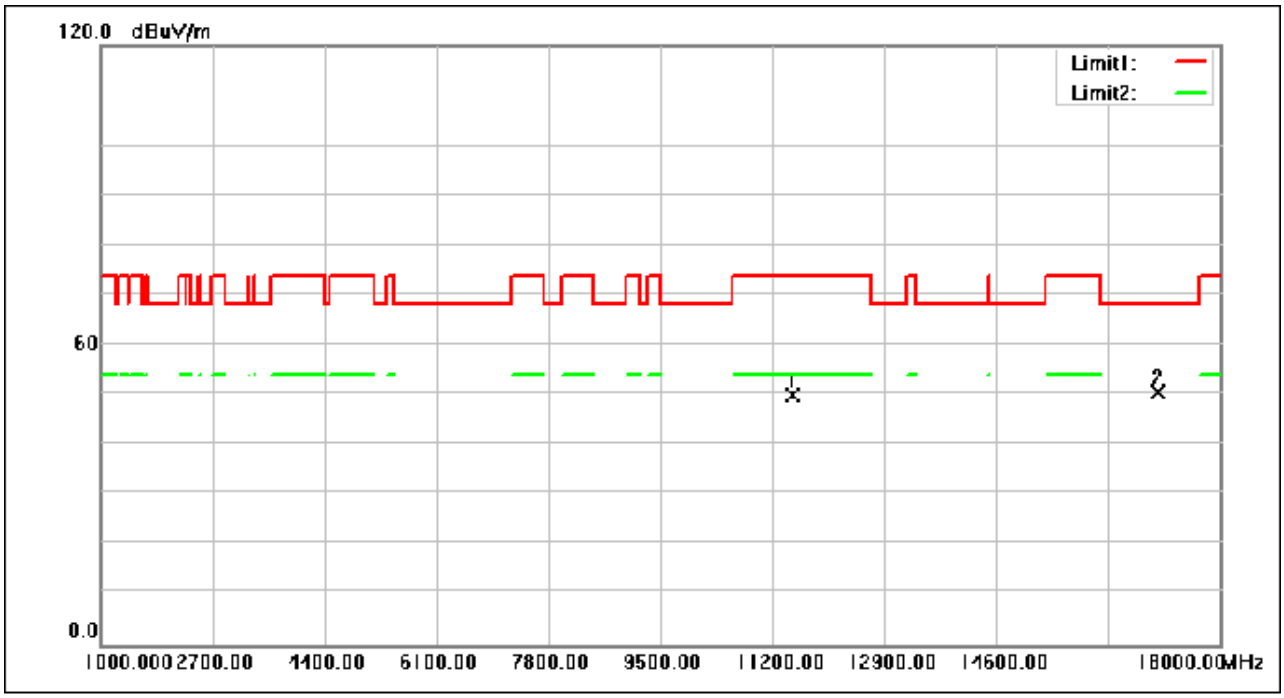
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11652.880	58.78	-6.24	52.54	74.00	-21.46	peak
2	15417.360	53.36	-4.73	48.63	74.00	-25.37	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



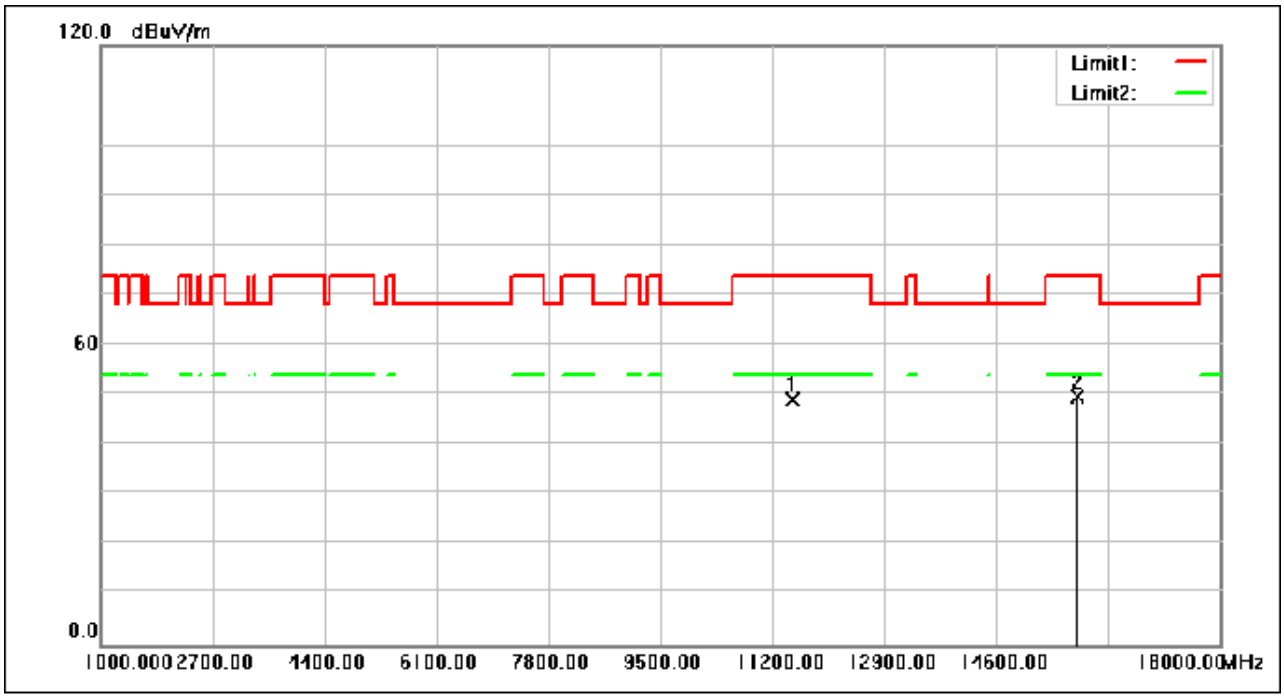
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11649.480	59.73	-6.24	53.49	74.00	-20.51	peak
2	13424.280	56.22	-6.33	49.89	68.30	-18.41	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



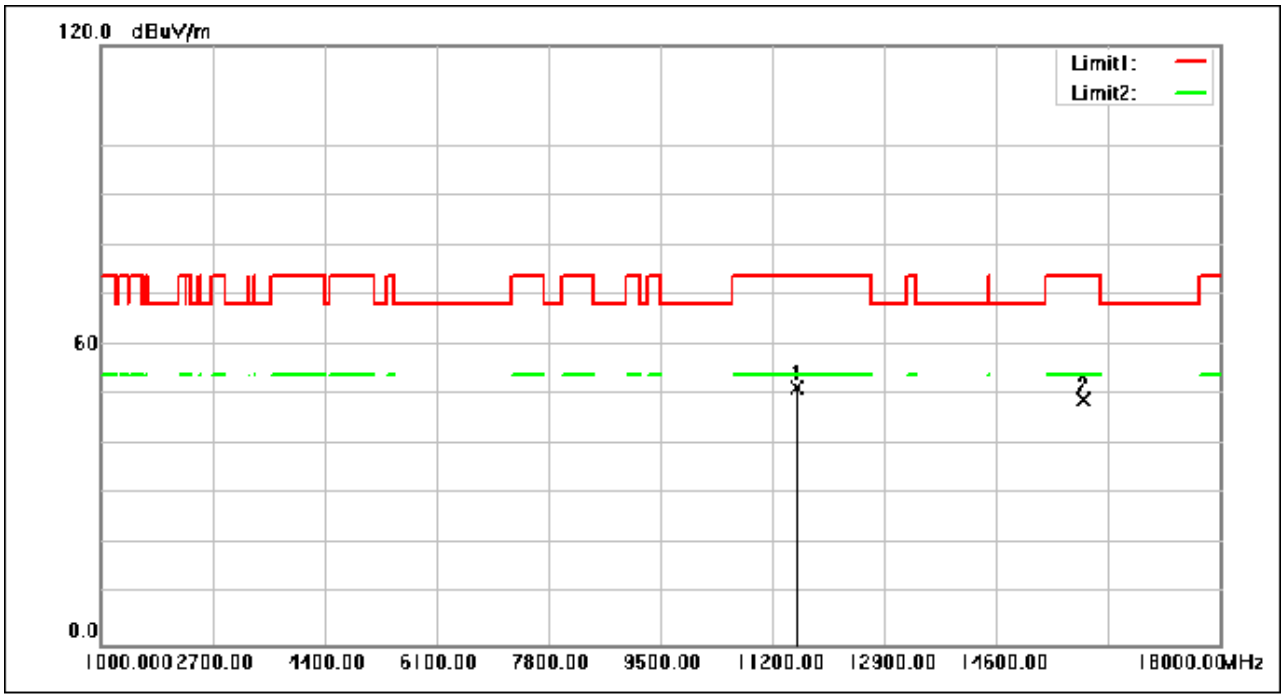
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.080	56.36	-6.35	50.01	74.00	-23.99	peak
2	17056.160	53.38	-2.77	50.61	68.30	-17.69	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



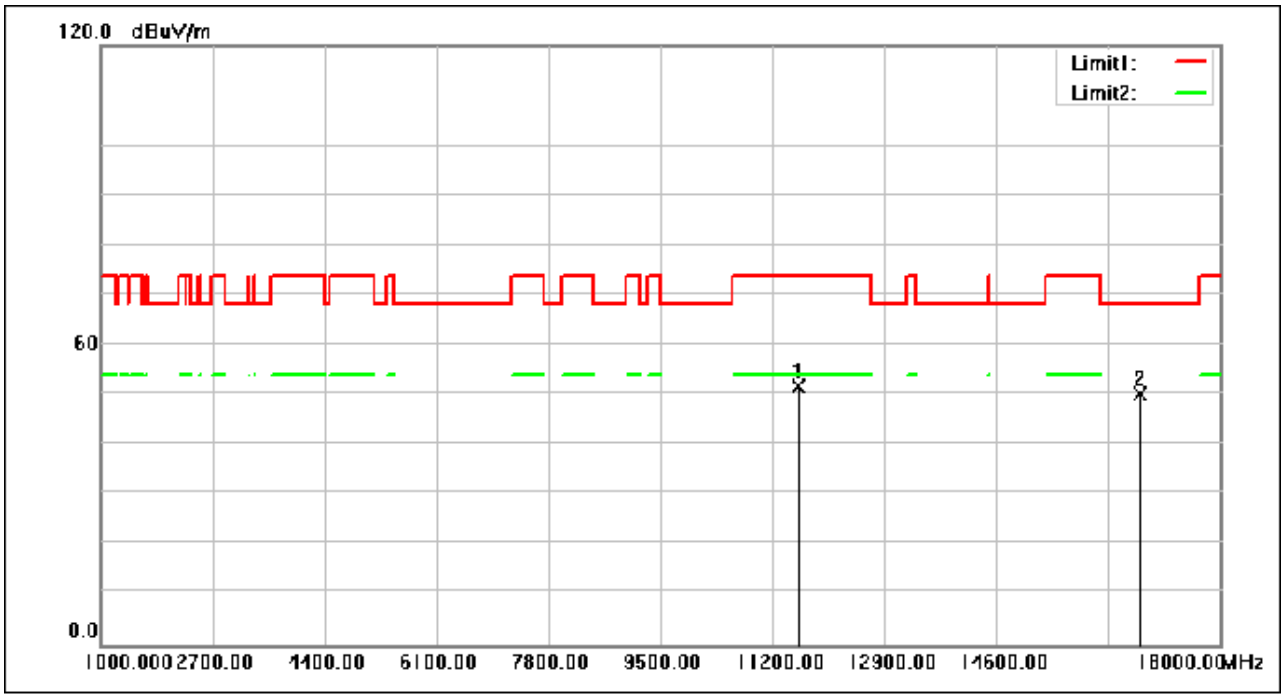
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11518.240	55.29	-6.34	48.95	74.00	-25.05	peak
2	15835.560	53.96	-4.35	49.61	74.00	-24.39	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11588.280	57.65	-6.29	51.36	74.00	-22.64	peak
2	15939.600	53.20	-4.23	48.97	74.00	-25.03	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11595.080	57.92	-6.28	51.64	74.00	-22.36	peak
2	16776.000	53.37	-3.15	50.22	68.30	-18.08	peak

7.5 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 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.

7.5.1 E.U.T. Operation

Operating Environment:

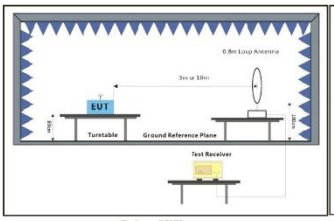
Temperature: 22.0 °C Humidity: 48.1 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

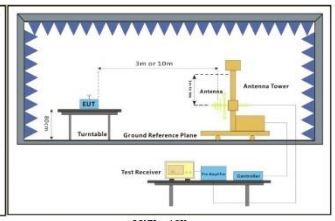
Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

Final test	04	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	05	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	06	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

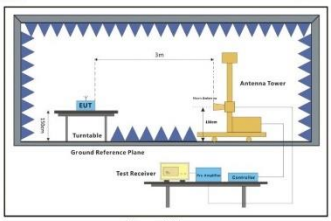
7.5.3 Test Setup Diagram



Below 30MHz



30MHz-1GHz



Above 1GHz

7.5.4 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.

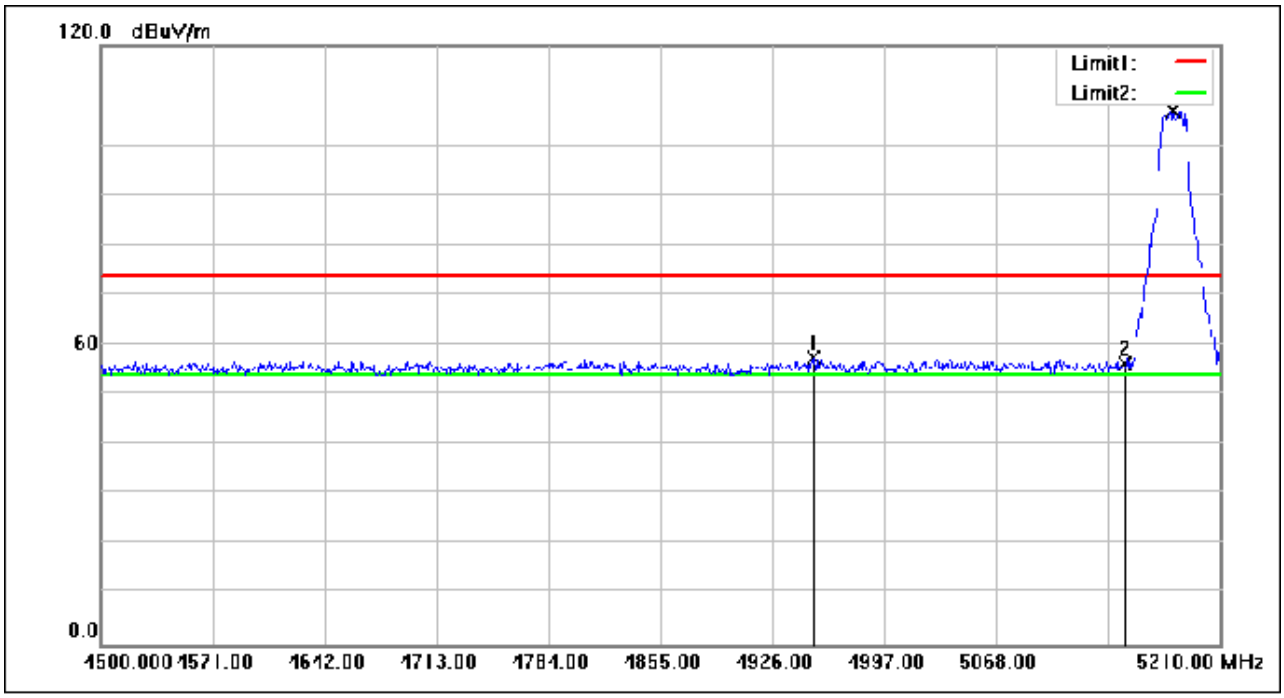
h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

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.

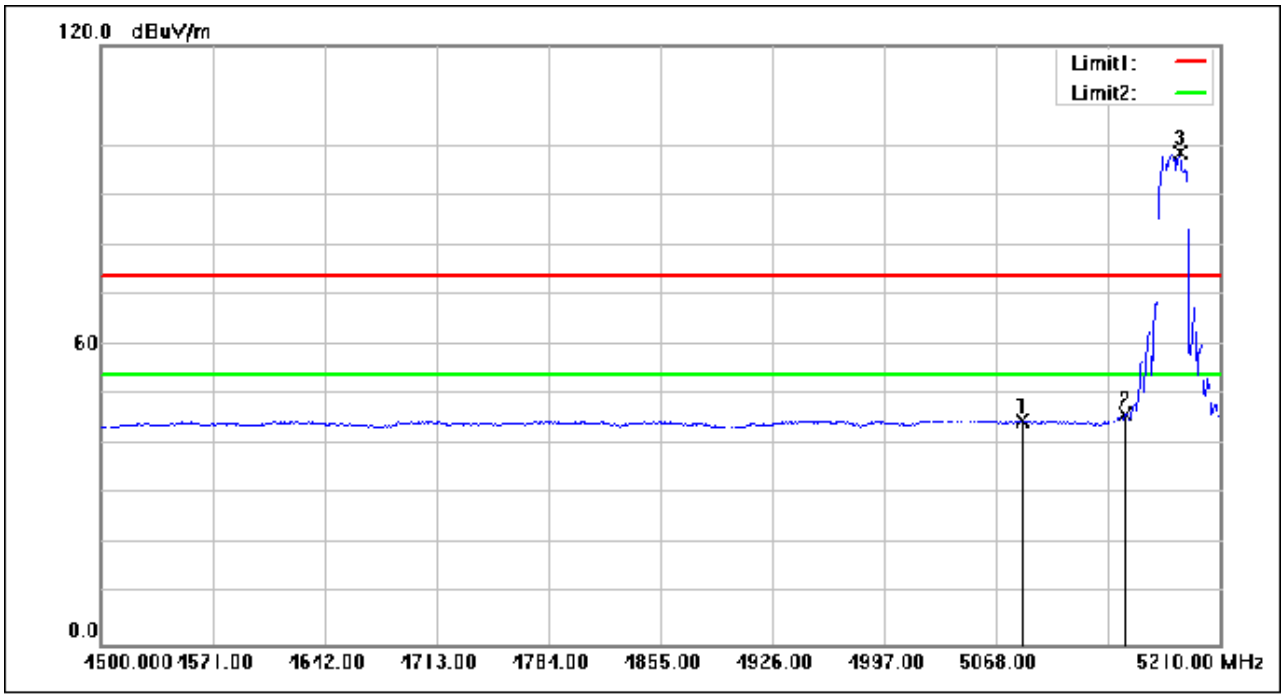
Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



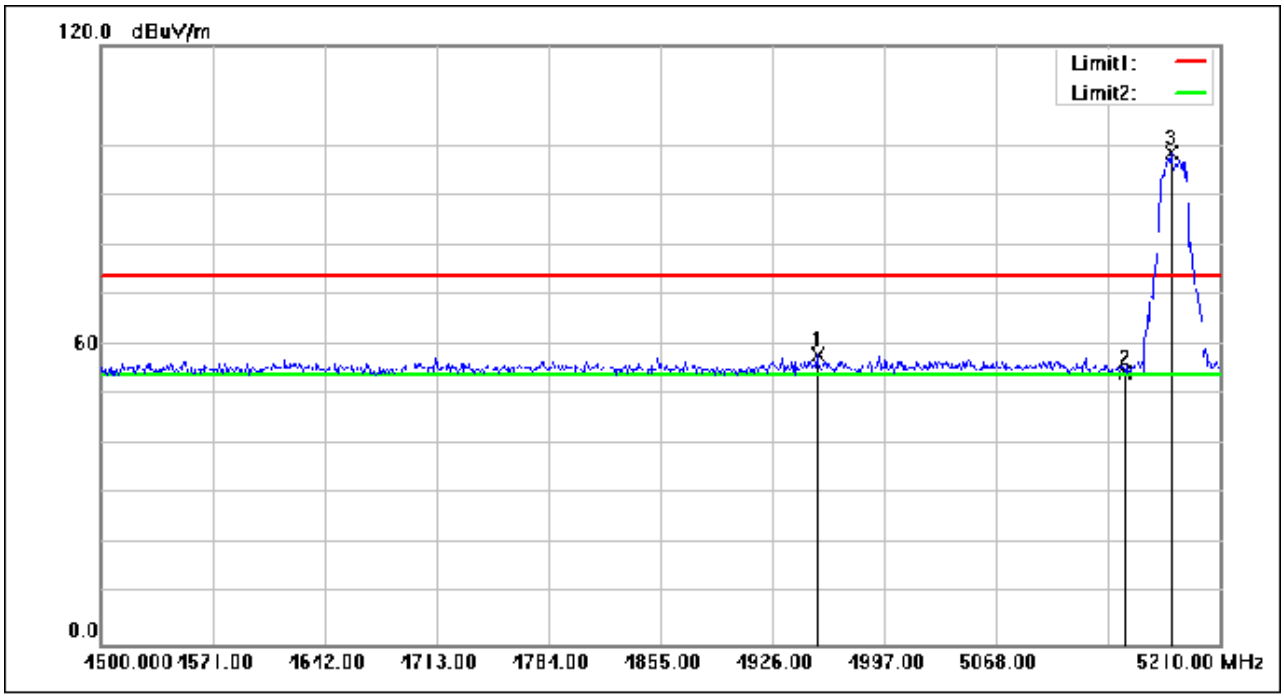
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4951.560	75.81	-18.47	57.34	74.00	-16.66	peak
2	5150.000	74.33	-18.21	56.12	74.00	-17.88	peak
3	5180.180	125.13	-18.17	106.96	74.00	32.96	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



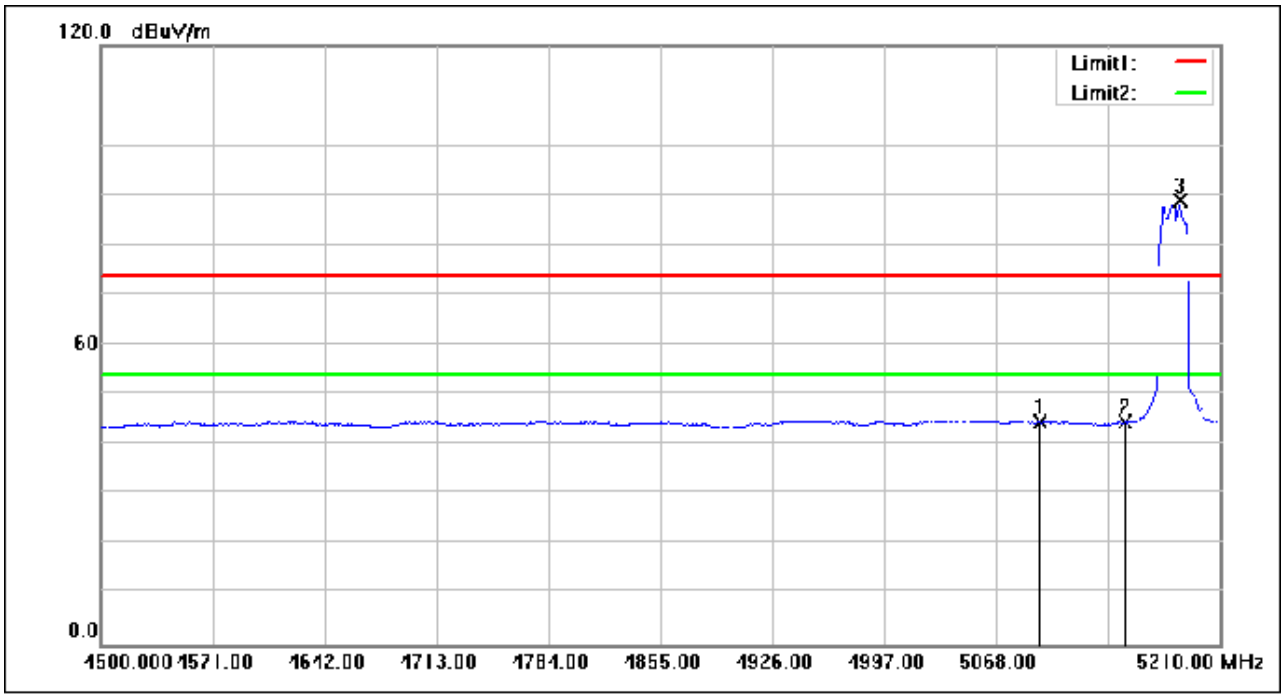
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5084.330	63.05	-18.31	44.74	54.00	-9.26	AVG
2	5150.000	64.31	-18.21	46.10	54.00	-7.90	AVG
3	5184.440	116.65	-18.16	98.49	54.00	44.49	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



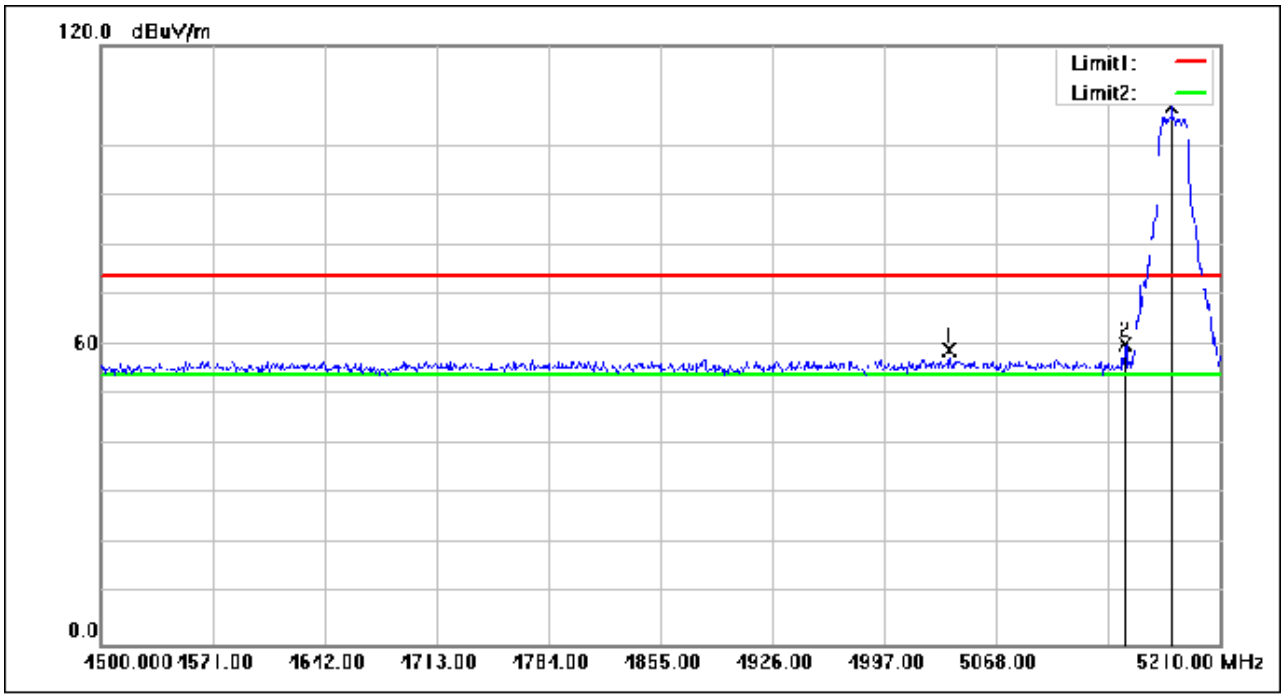
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4954.400	76.56	-18.47	58.09	74.00	-15.91	peak
2	5150.000	72.77	-18.21	54.56	74.00	-19.44	peak
3	5178.760	116.76	-18.17	98.59	74.00	24.59	peak

Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



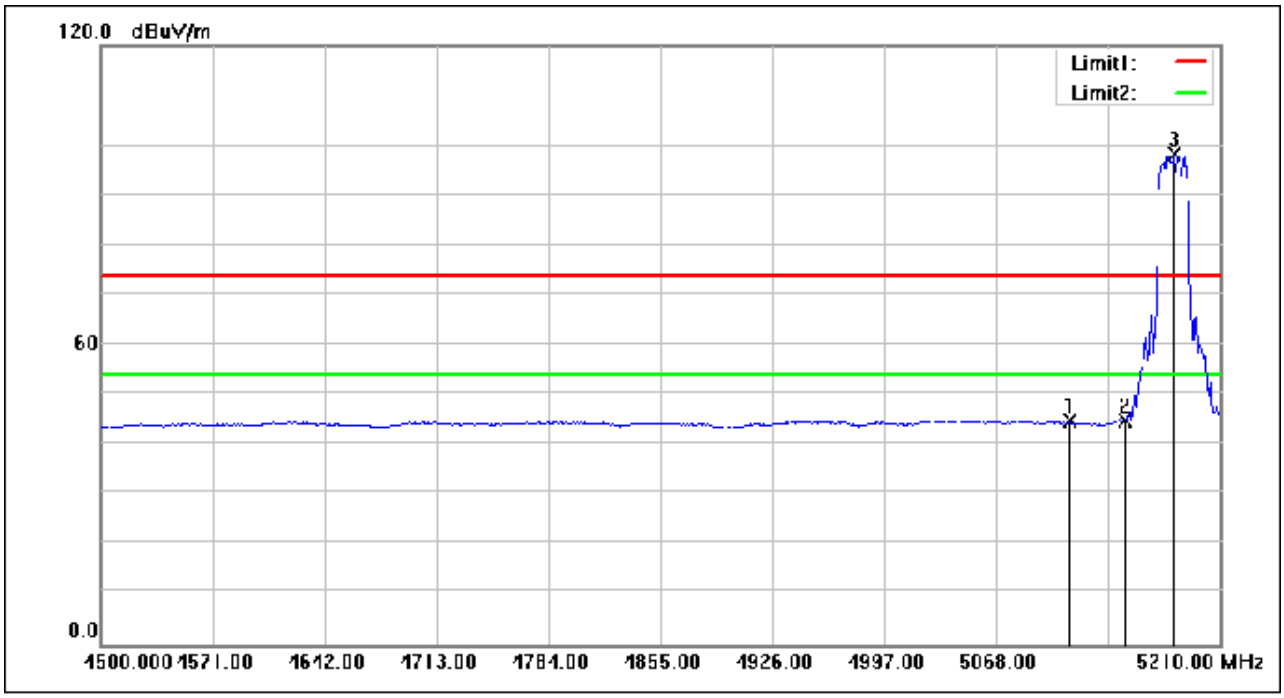
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5095.690	62.91	-18.29	44.62	54.00	-9.38	AVG
2	5150.000	62.67	-18.21	44.46	54.00	-9.54	AVG
3	5184.440	106.99	-18.16	88.83	54.00	34.83	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



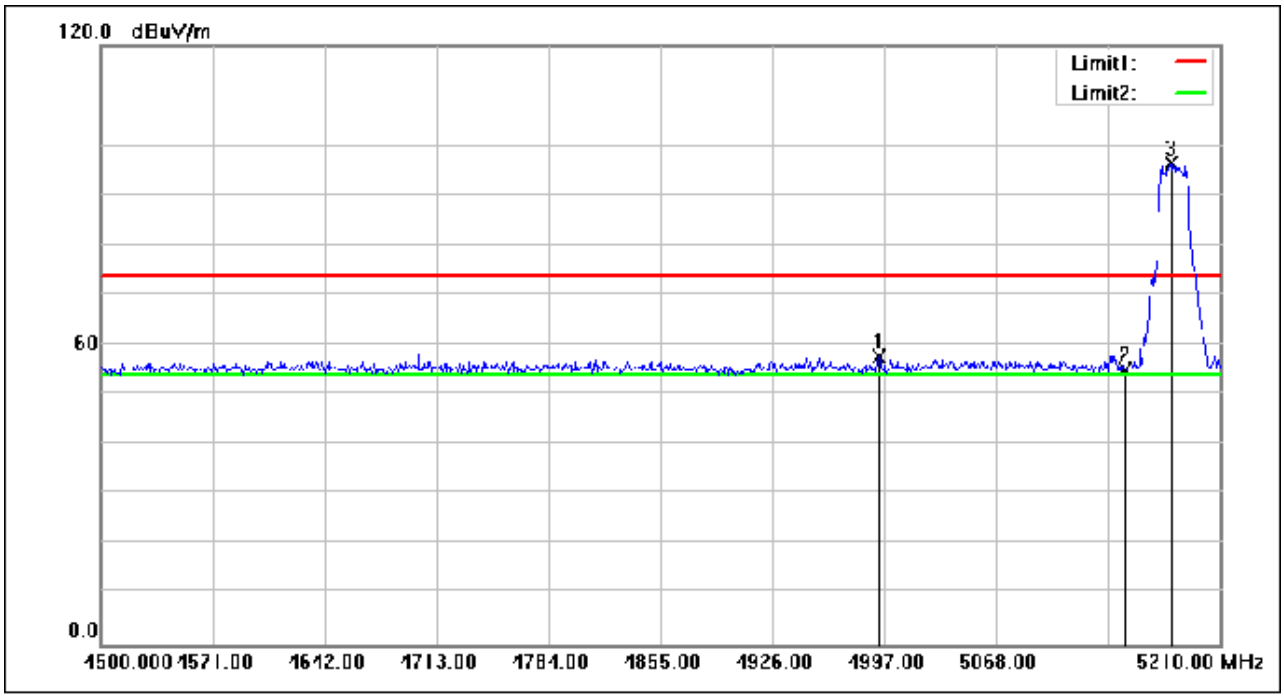
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5038.180	77.35	-18.38	58.97	74.00	-15.03	peak
2	5150.000	78.32	-18.21	60.11	74.00	-13.89	peak
3	5179.470	125.89	-18.17	107.72	74.00	33.72	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



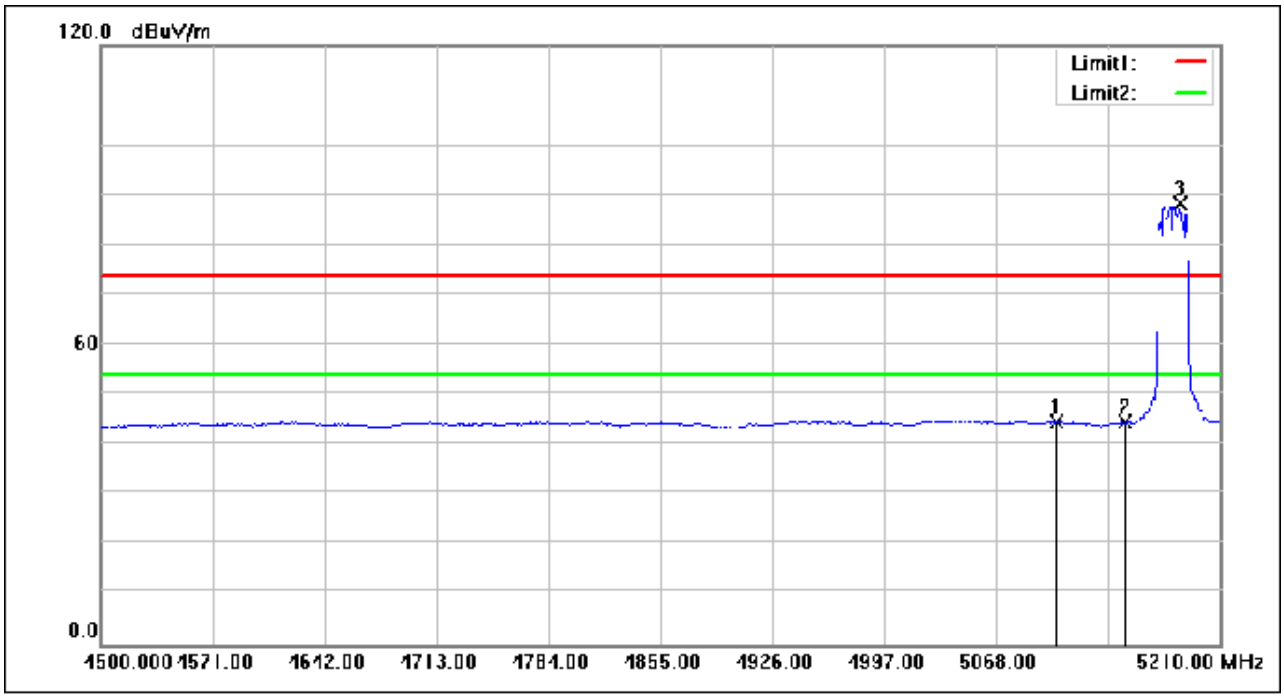
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5114.860	62.99	-18.26	44.73	54.00	-9.27	AVG
2	5150.000	63.14	-18.21	44.93	54.00	-9.07	AVG
3	5180.890	116.35	-18.17	98.18	54.00	44.18	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



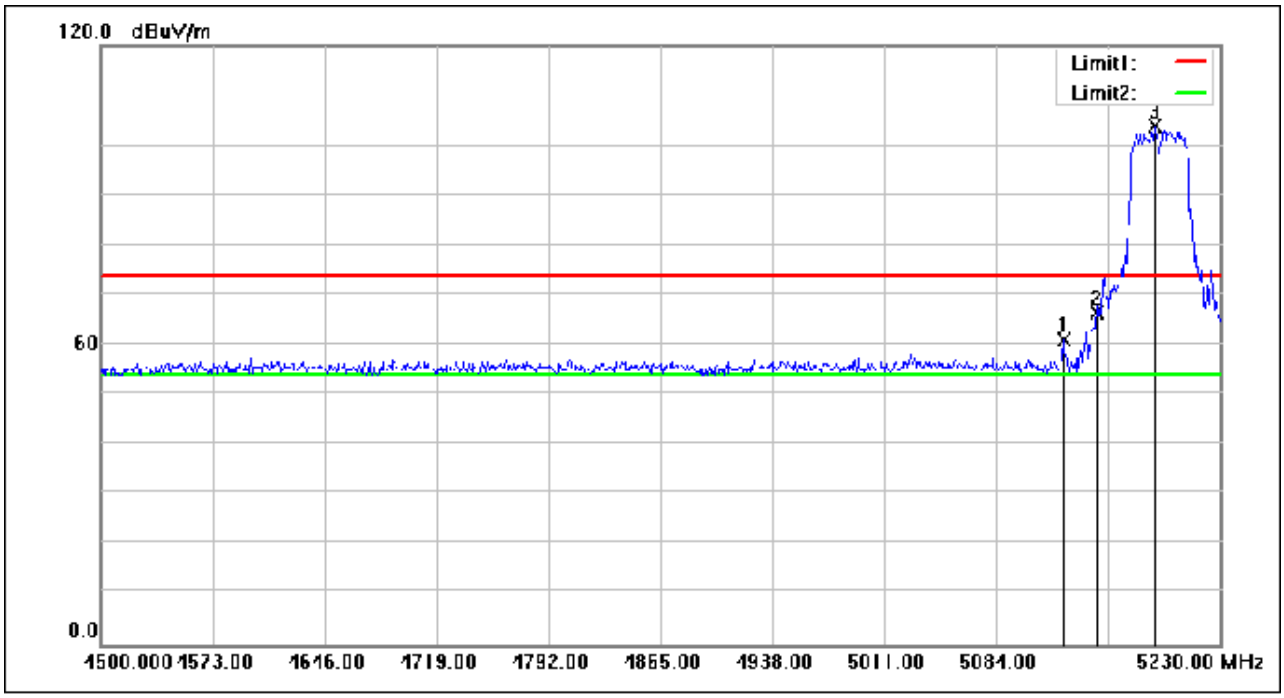
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4993.450	76.22	-18.45	57.77	74.00	-16.23	peak
2	5150.000	73.34	-18.21	55.13	74.00	-18.87	peak
3	5178.760	114.55	-18.17	96.38	74.00	22.38	peak

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



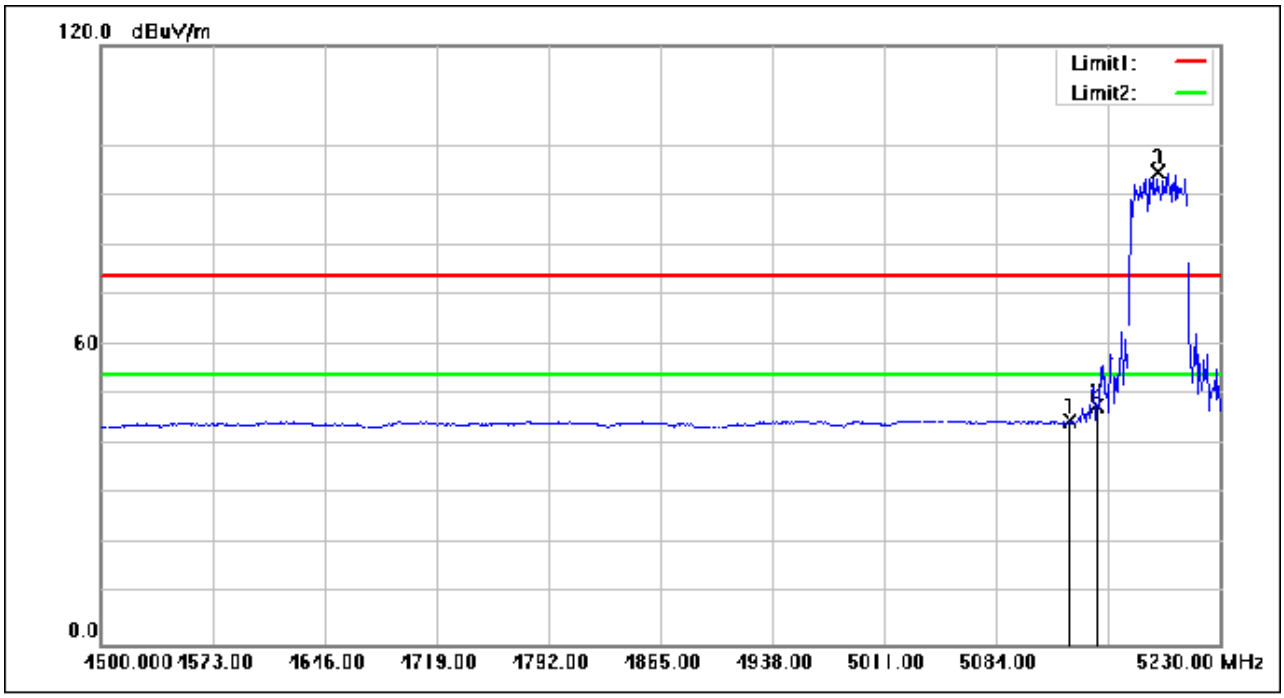
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5106.340	62.91	-18.28	44.63	54.00	-9.37	AVG
2	5150.000	62.75	-18.21	44.54	54.00	-9.46	AVG
3	5185.150	106.51	-18.16	88.35	54.00	34.35	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



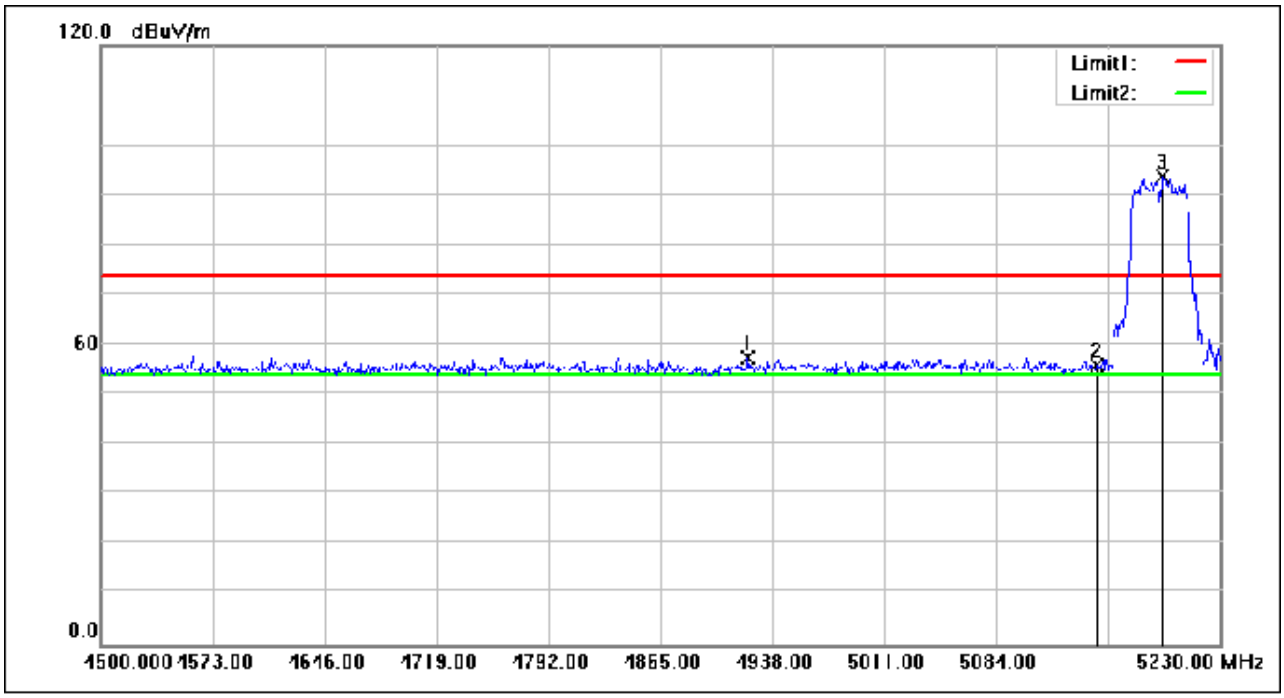
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5127.800	79.30	-18.25	61.05	74.00	-12.95	peak
2	5150.000	84.64	-18.21	66.43	74.00	-7.57	peak
3	5187.660	121.98	-18.16	103.82	74.00	29.82	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



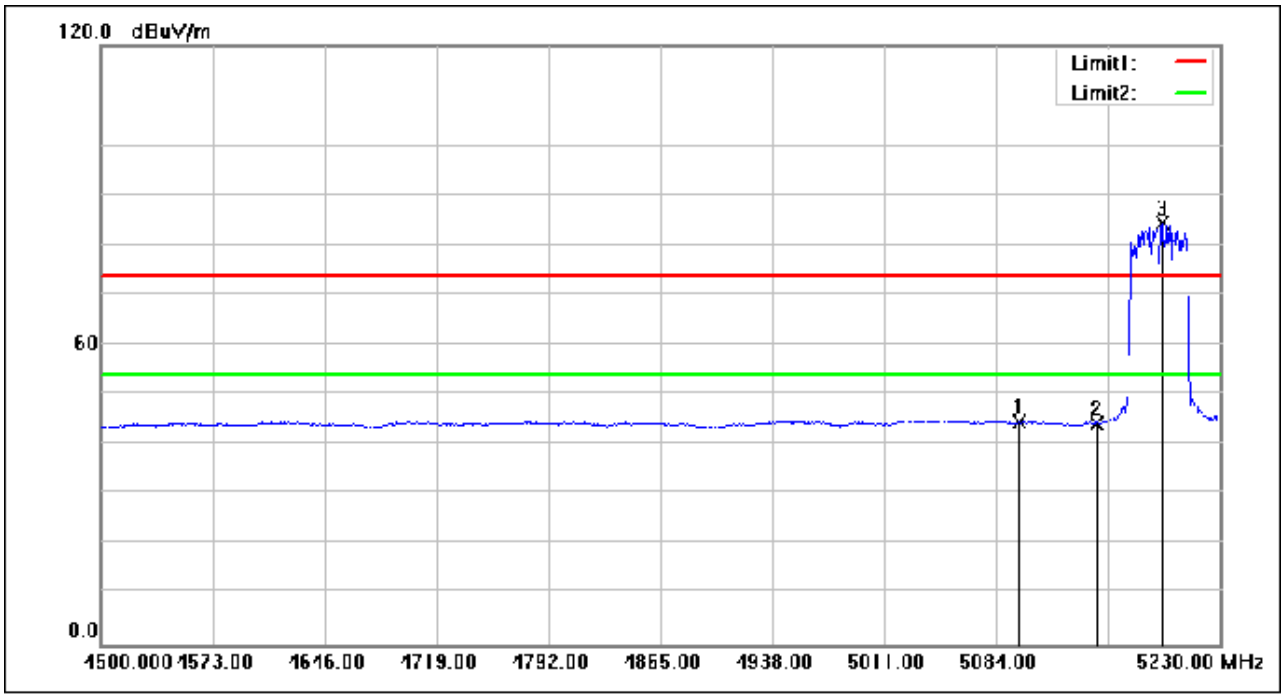
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5132.180	62.97	-18.23	44.74	54.00	-9.26	AVG
2	5150.000	66.14	-18.21	47.93	54.00	-6.07	AVG
3	5189.120	112.86	-18.16	94.70	54.00	40.70	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



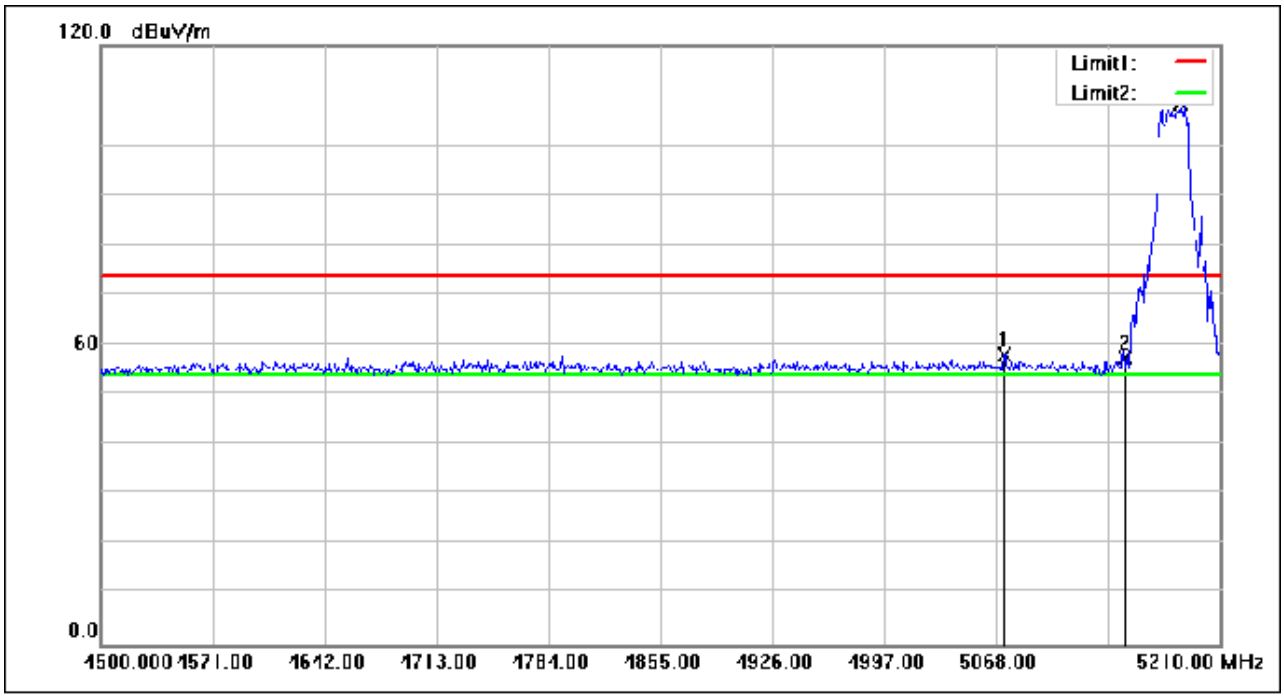
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4921.940	75.89	-18.49	57.40	74.00	-16.60	peak
2	5150.000	74.14	-18.21	55.93	74.00	-18.07	peak
3	5192.770	111.94	-18.15	93.79	74.00	19.79	peak

Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



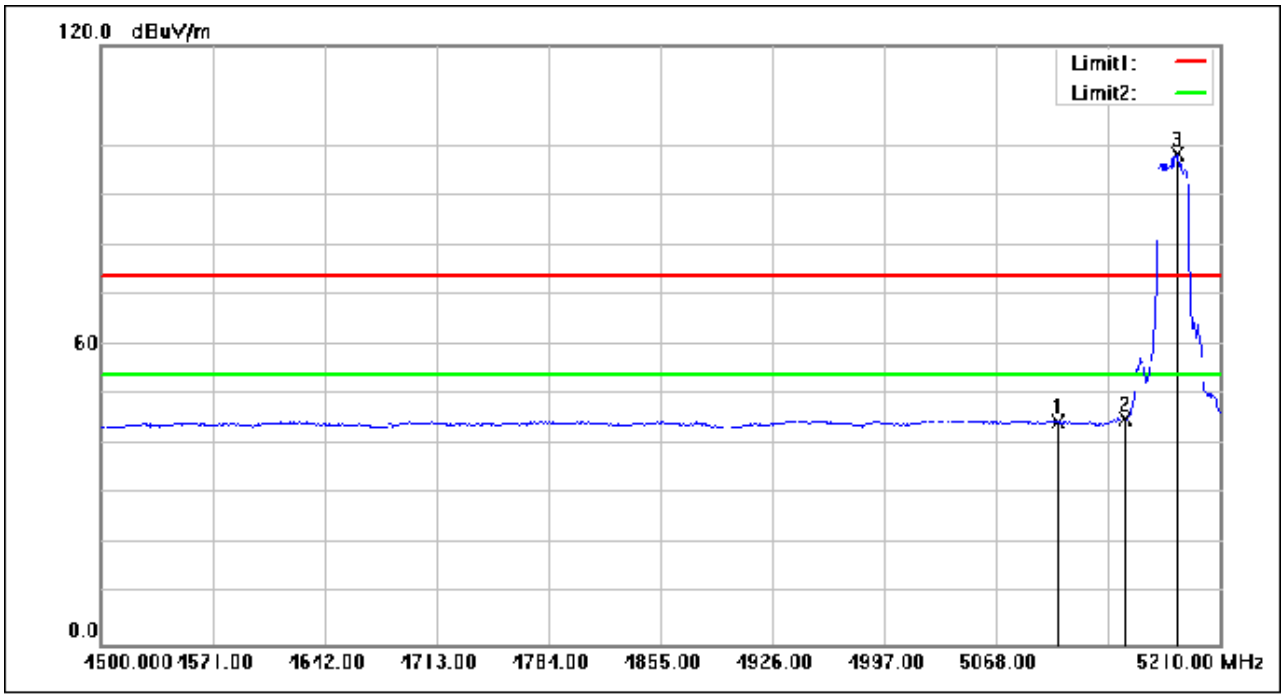
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5099.330	62.86	-18.29	44.57	54.00	-9.43	AVG
2	5150.000	62.59	-18.21	44.38	54.00	-9.62	AVG
3	5192.040	102.63	-18.15	84.48	54.00	30.48	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



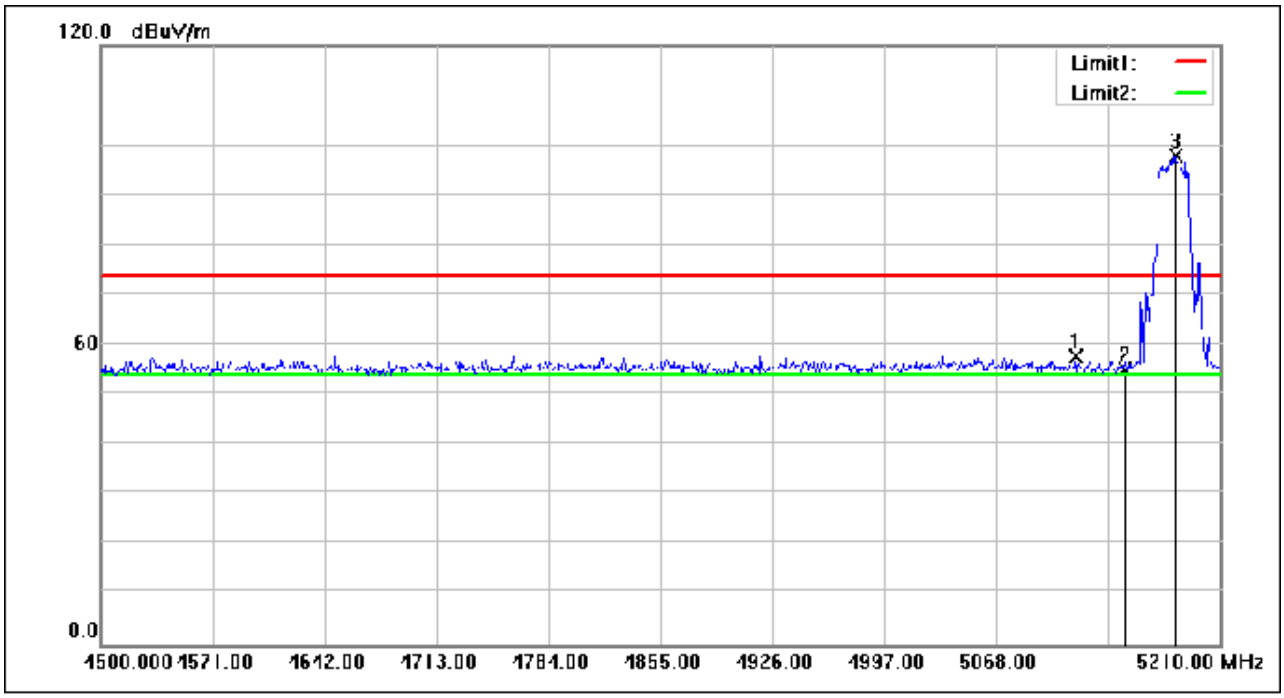
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5072.970	76.37	-18.32	58.05	74.00	-15.95	peak
2	5150.000	75.79	-18.21	57.58	74.00	-16.42	peak
3	5185.150	126.50	-18.16	108.34	74.00	34.34	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



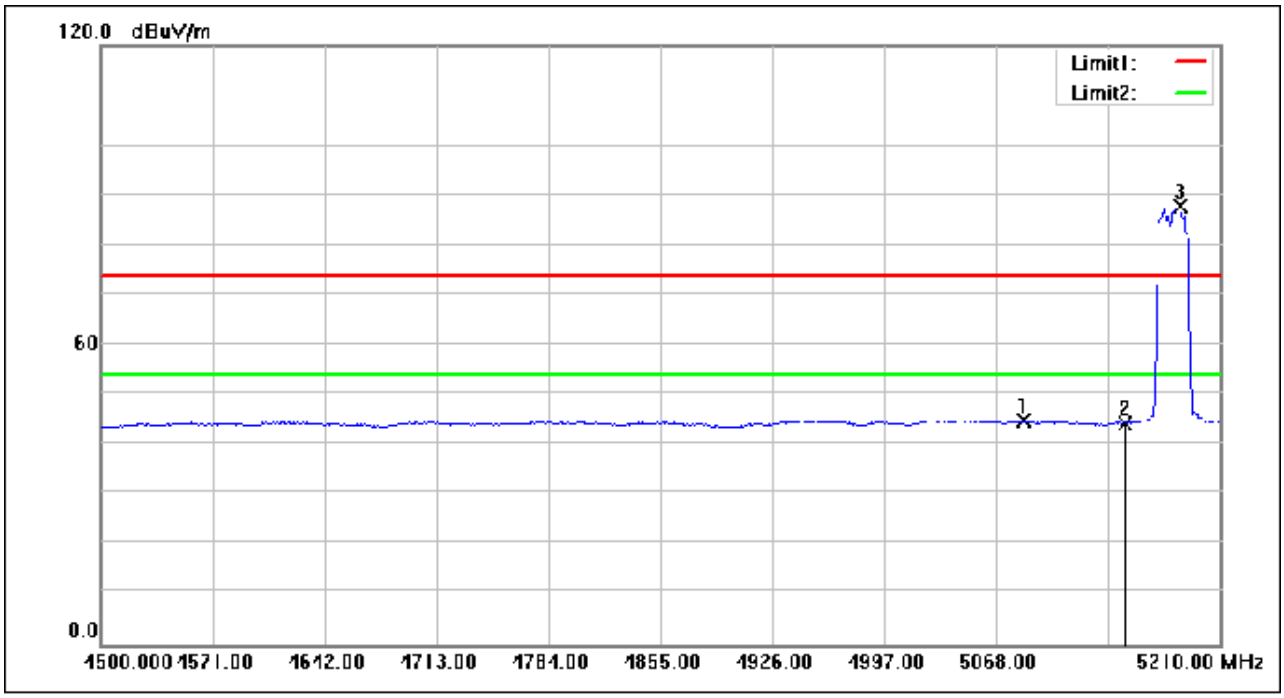
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5107.050	62.86	-18.28	44.58	54.00	-9.42	AVG
2	5150.000	63.40	-18.21	45.19	54.00	-8.81	AVG
3	5183.020	116.50	-18.16	98.34	54.00	44.34	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



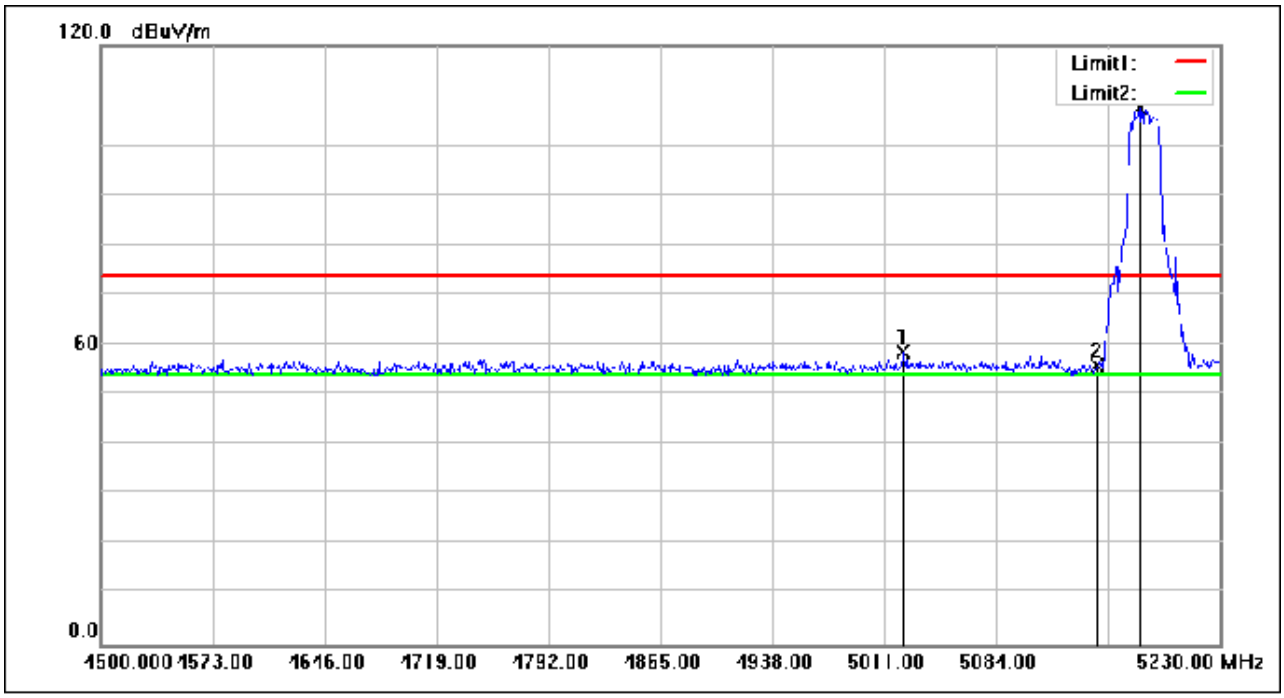
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5118.410	75.99	-18.26	57.73	74.00	-16.27	peak
2	5150.000	73.38	-18.21	55.17	74.00	-18.83	peak
3	5181.600	116.00	-18.17	97.83	74.00	23.83	peak

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



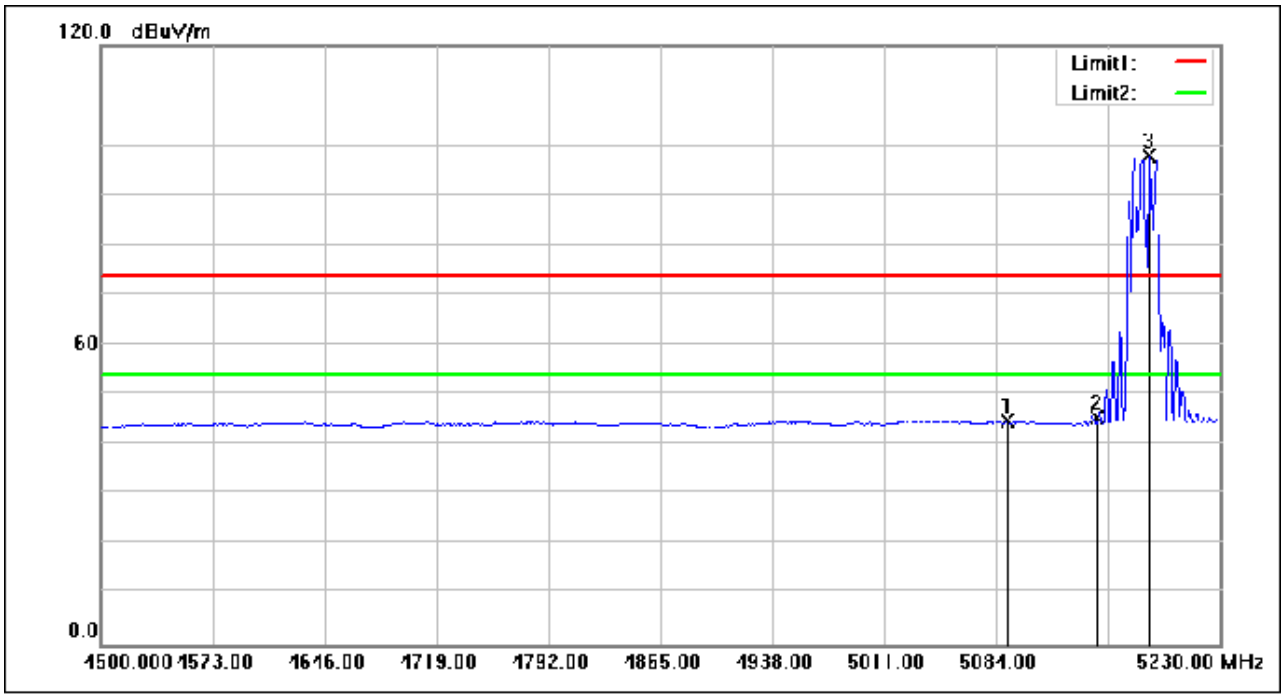
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5085.750	63.22	-18.31	44.91	54.00	-9.09	AVG
2	5150.000	62.61	-18.21	44.40	54.00	-9.60	AVG
3	5184.440	105.84	-18.16	87.68	54.00	33.68	AVG

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



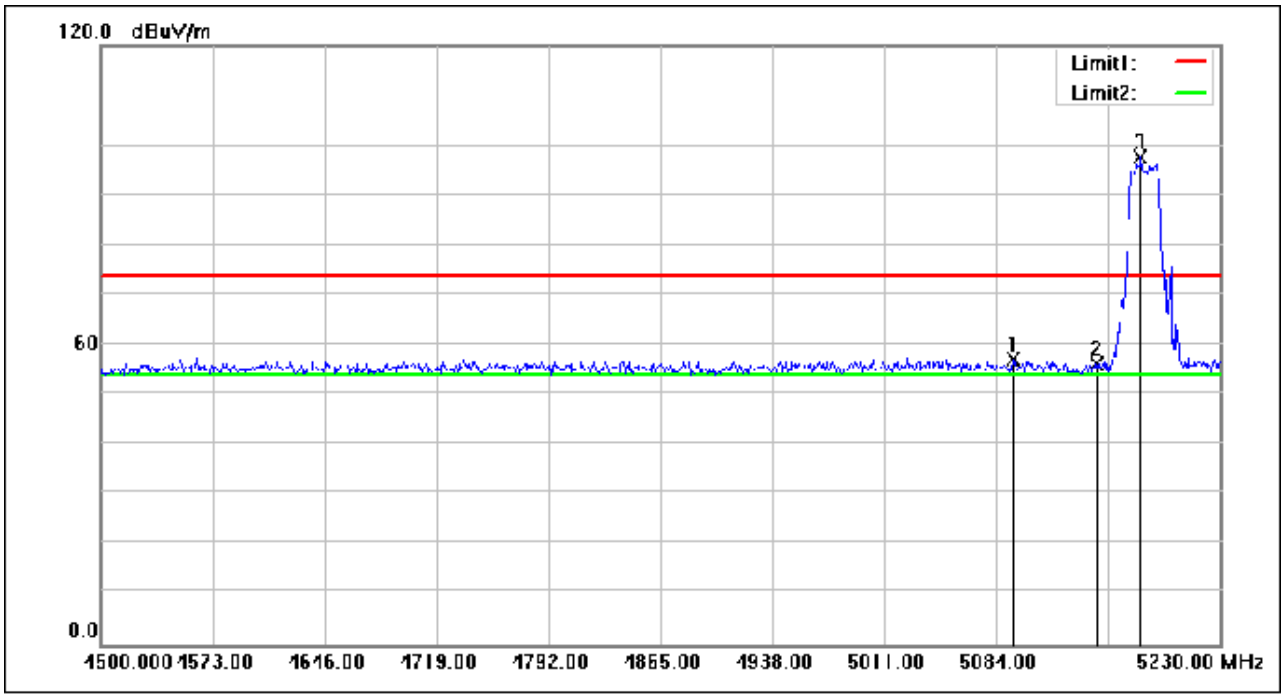
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5023.410	76.99	-18.41	58.58	74.00	-15.42	peak
2	5150.000	74.10	-18.21	55.89	74.00	-18.11	peak
3	5177.440	125.79	-18.17	107.62	74.00	33.62	peak

Test Mode: 03; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



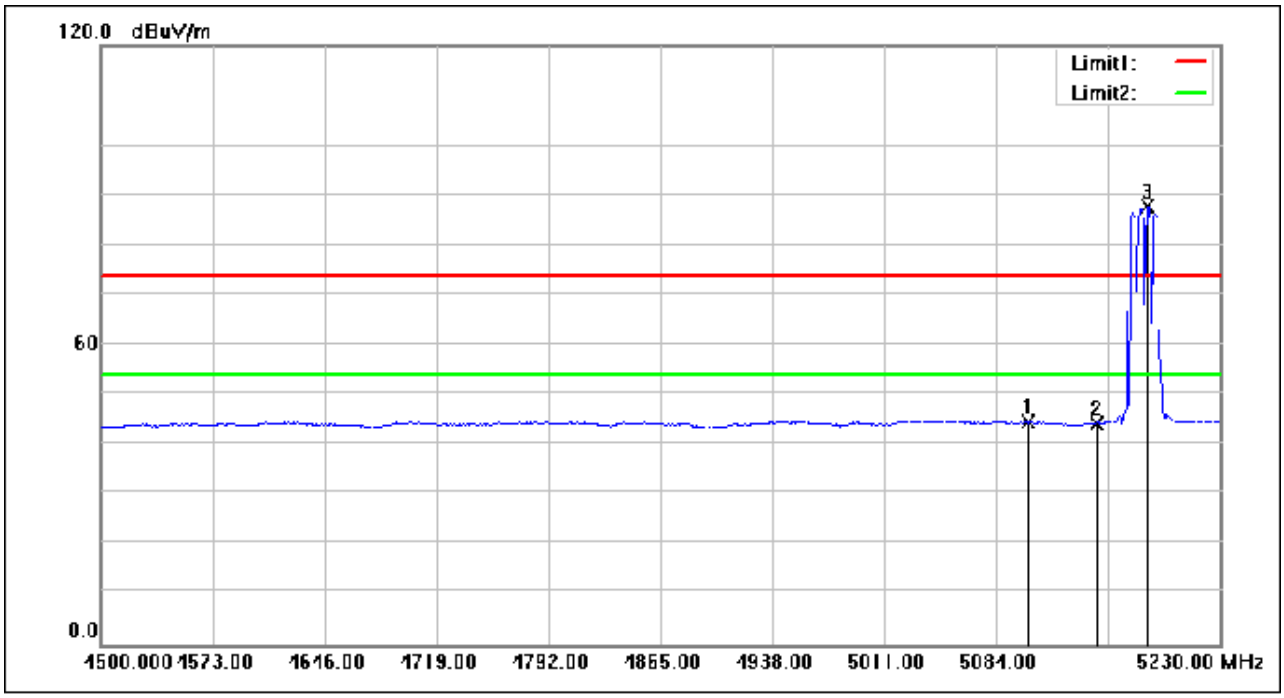
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5091.300	62.99	-18.29	44.70	54.00	-9.30	AVG
2	5150.000	63.52	-18.21	45.31	54.00	-8.69	AVG
3	5184.010	116.06	-18.16	97.90	54.00	43.90	AVG

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



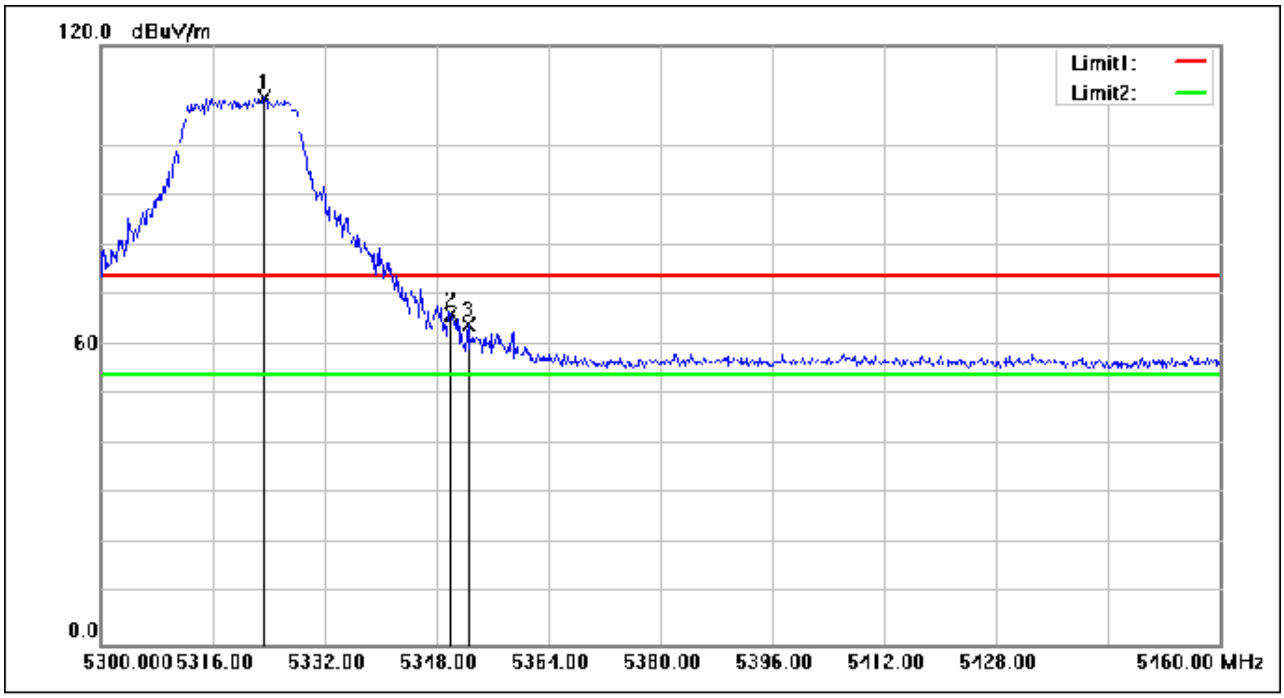
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5094.950	75.32	-18.29	57.03	74.00	-16.97	peak
2	5150.000	74.52	-18.21	56.31	74.00	-17.69	peak
3	5178.170	115.70	-18.17	97.53	74.00	23.53	peak

Test Mode: 03; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



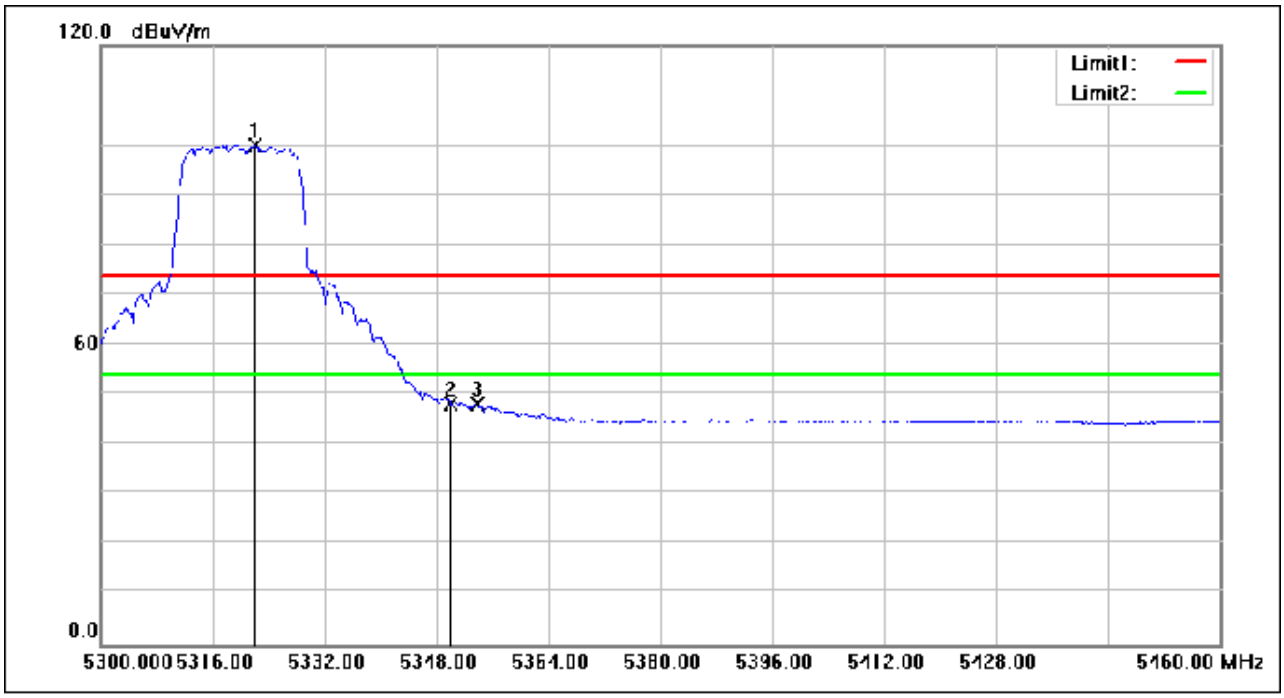
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5105.170	62.92	-18.28	44.64	54.00	-9.36	AVG
2	5150.000	62.59	-18.21	44.38	54.00	-9.62	AVG
3	5182.550	106.06	-18.17	87.89	54.00	33.89	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



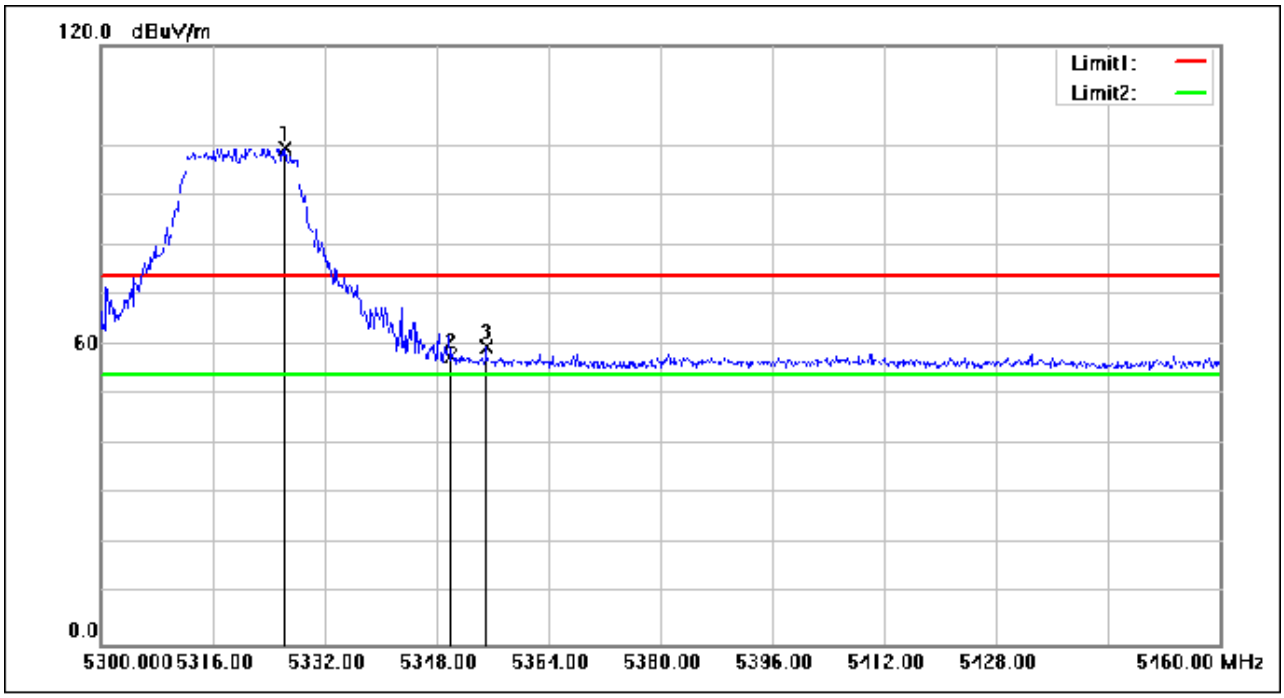
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5323.360	127.51	-17.96	109.55	74.00	35.55	peak
2	5350.000	83.96	-17.92	66.04	74.00	-7.96	peak
3	5352.480	81.98	-17.91	64.07	74.00	-9.93	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



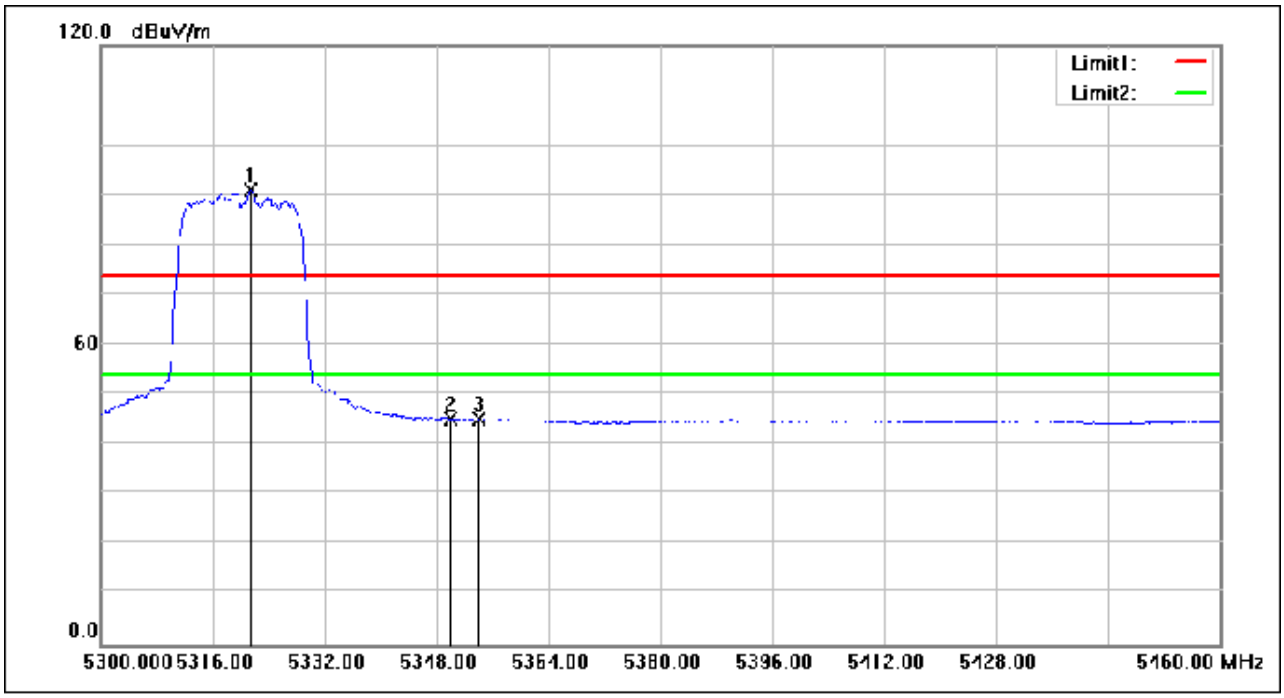
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5322.080	118.07	-17.96	100.11	54.00	46.11	AVG
2	5350.000	66.00	-17.92	48.08	54.00	-5.92	AVG
3	5353.760	66.06	-17.91	48.15	54.00	-5.85	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



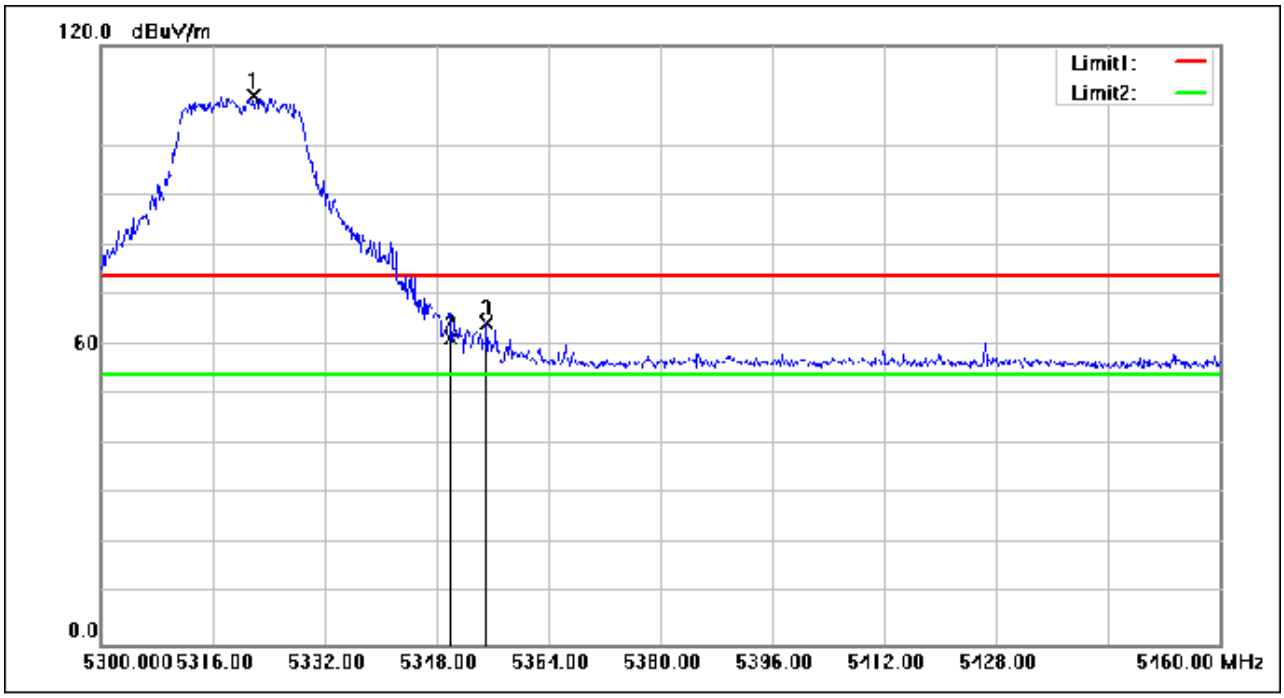
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5326.400	117.52	-17.96	99.56	74.00	25.56	peak
2	5350.000	75.74	-17.92	57.82	74.00	-16.18	peak
3	5355.040	77.36	-17.91	59.45	74.00	-14.55	peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



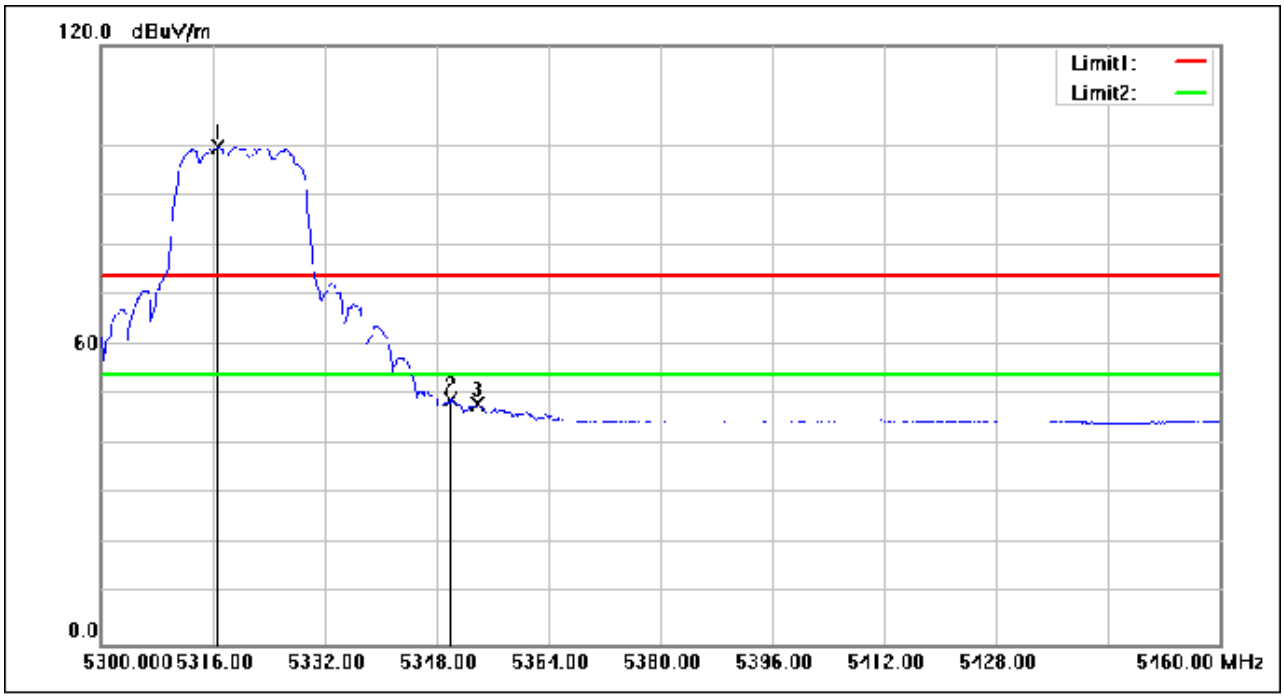
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5321.440	108.86	-17.96	90.90	54.00	36.90	AVG
2	5350.000	62.94	-17.92	45.02	54.00	-8.98	AVG
3	5354.080	63.12	-17.91	45.21	54.00	-8.79	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



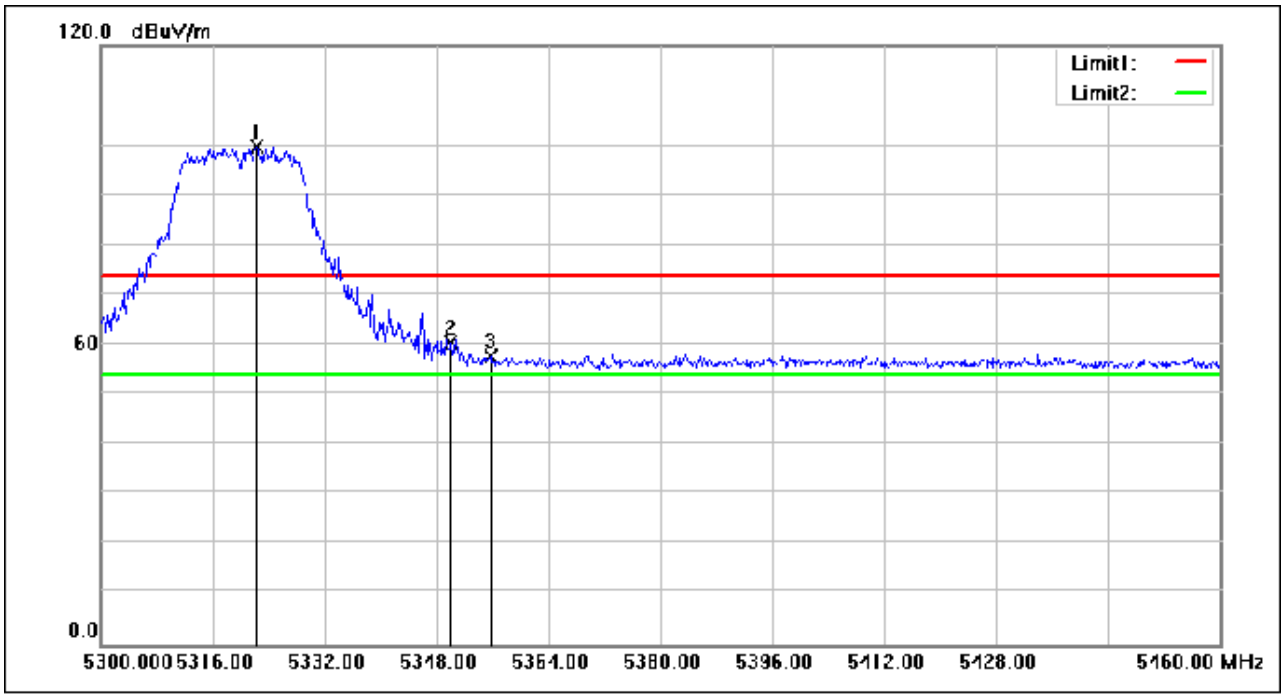
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5321.760	127.88	-17.96	109.92	74.00	35.92	peak
2	5350.000	79.23	-17.92	61.31	74.00	-12.69	peak
3	5355.200	82.25	-17.91	64.34	74.00	-9.66	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



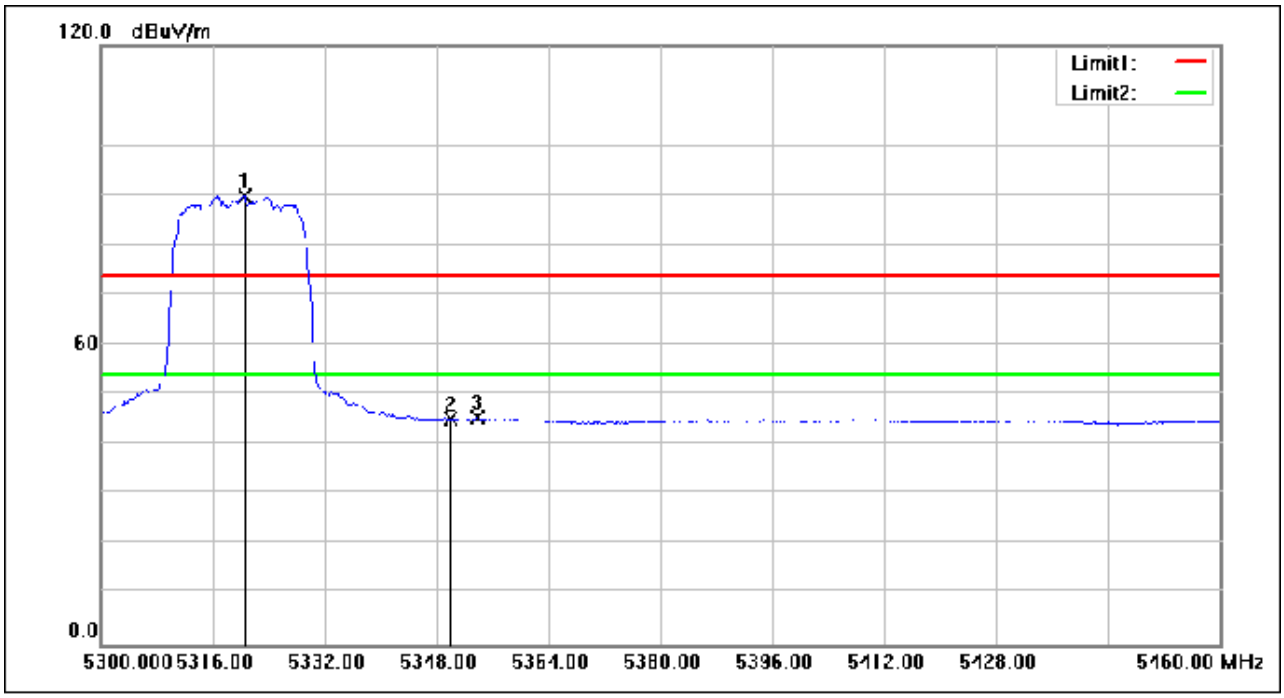
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5316.800	117.81	-17.97	99.84	54.00	45.84	AVG
2	5350.000	66.94	-17.92	49.02	54.00	-4.98	AVG
3	5353.920	65.96	-17.91	48.05	54.00	-5.95	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



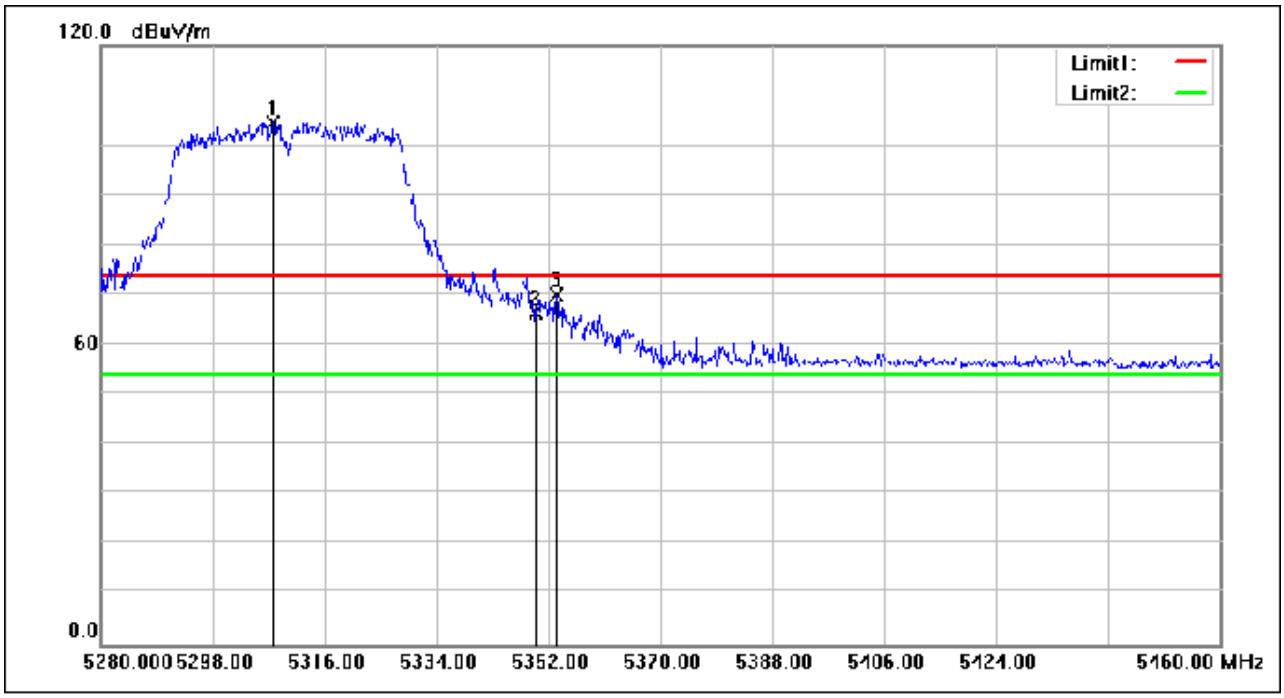
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5322.240	117.70	-17.96	99.74	74.00	25.74	peak
2	5350.000	78.28	-17.92	60.36	74.00	-13.64	peak
3	5355.680	75.66	-17.91	57.75	74.00	-16.25	peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



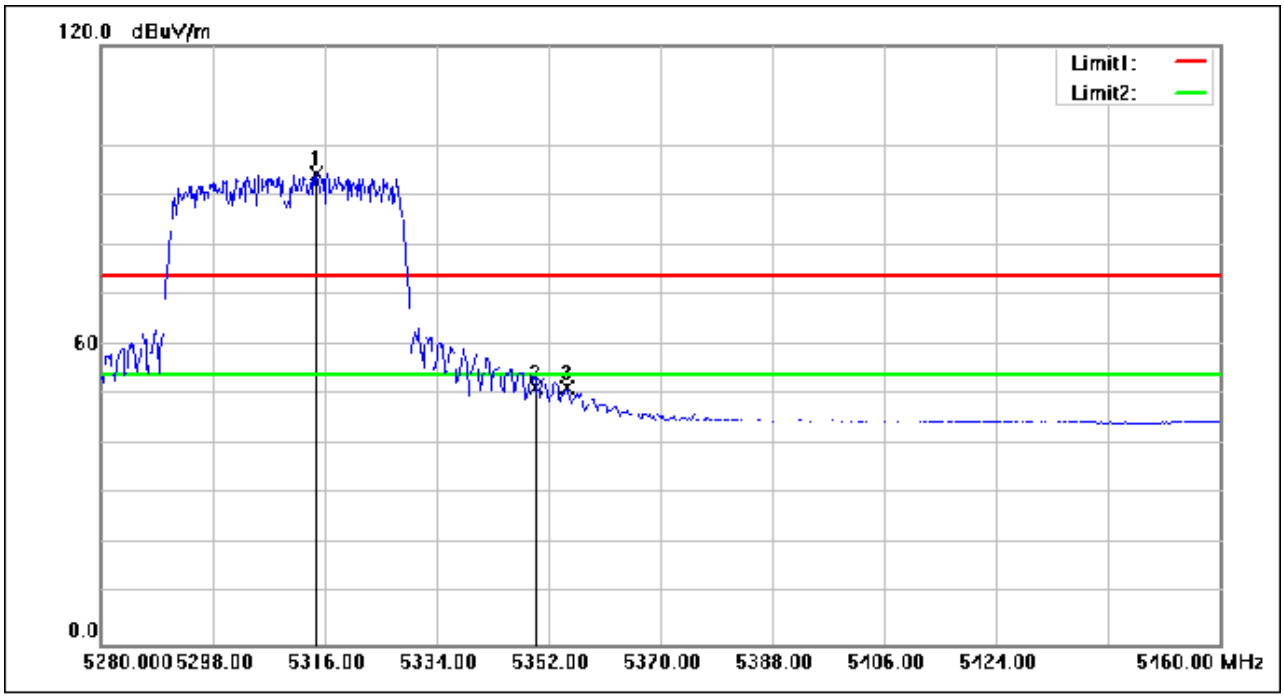
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5320.480	107.88	-17.96	89.92	54.00	35.92	AVG
2	5350.000	62.94	-17.92	45.02	54.00	-8.98	AVG
3	5353.760	63.25	-17.91	45.34	54.00	-8.66	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



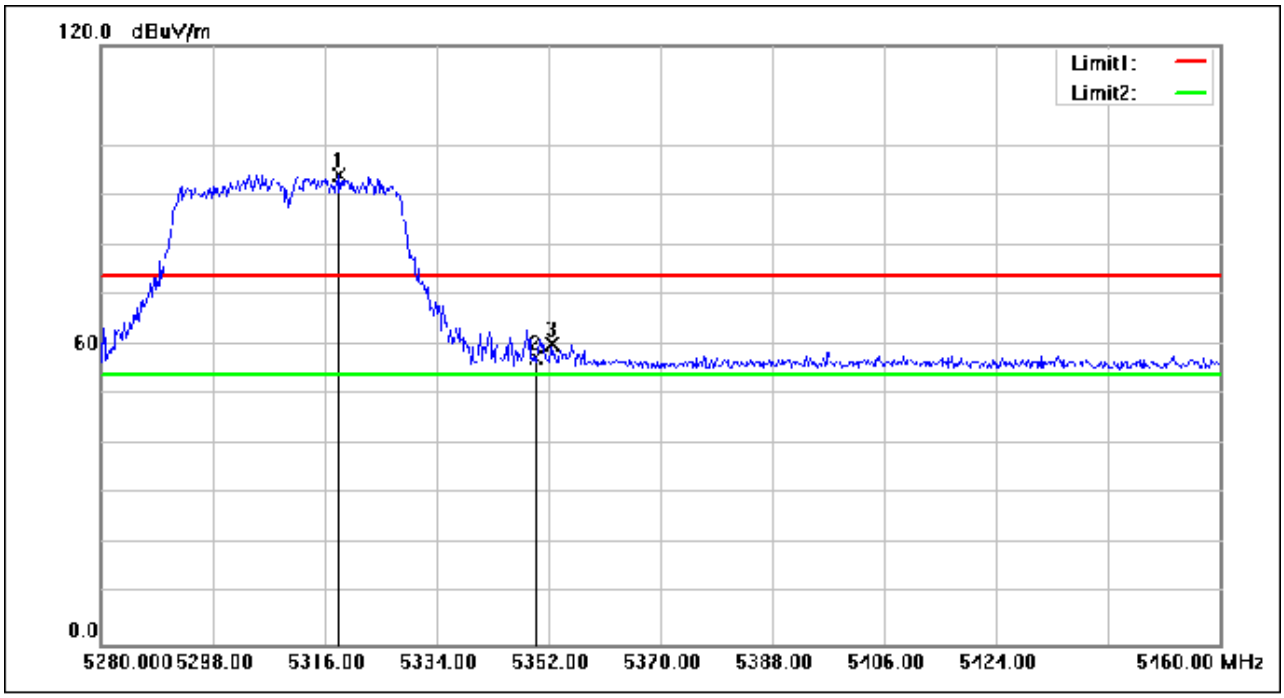
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5307.720	122.68	-17.98	104.70	74.00	30.70	peak
2	5350.000	84.39	-17.92	66.47	74.00	-7.53	peak
3	5353.260	87.87	-17.91	69.96	74.00	-4.04	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



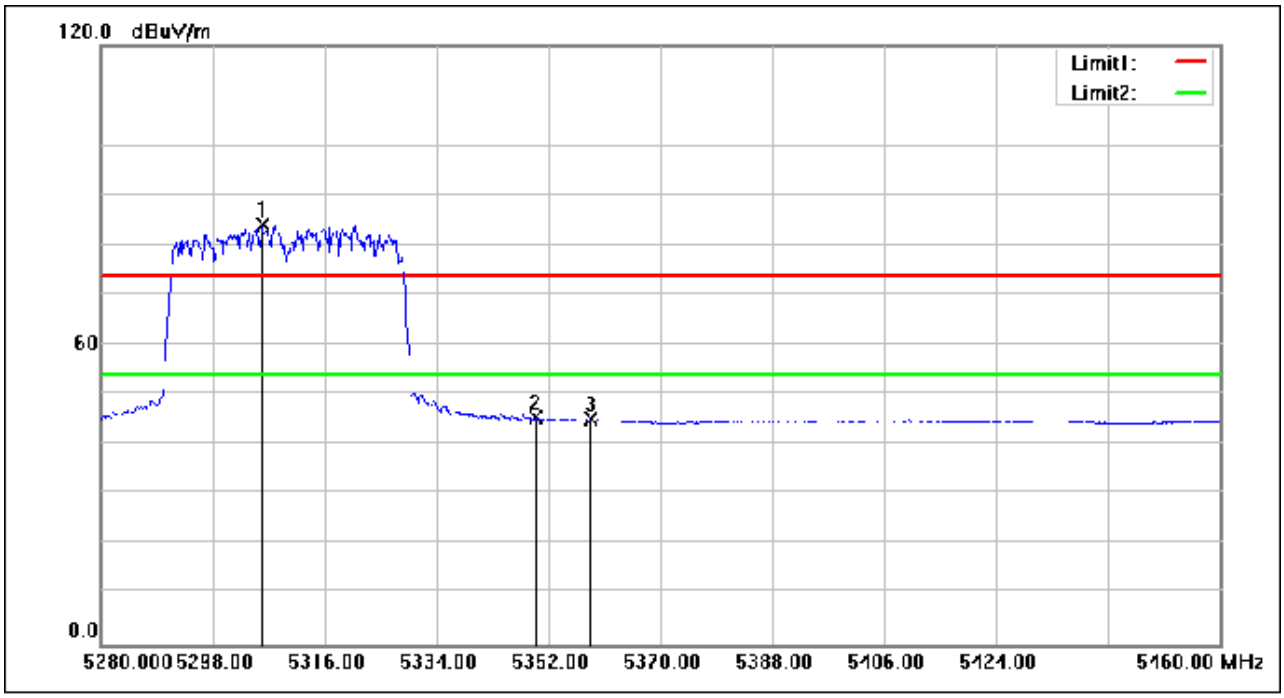
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5314.560	112.46	-17.97	94.49	54.00	40.49	AVG
2	5350.000	69.24	-17.92	51.32	54.00	-2.68	AVG
3	5355.060	69.28	-17.91	51.37	54.00	-2.63	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



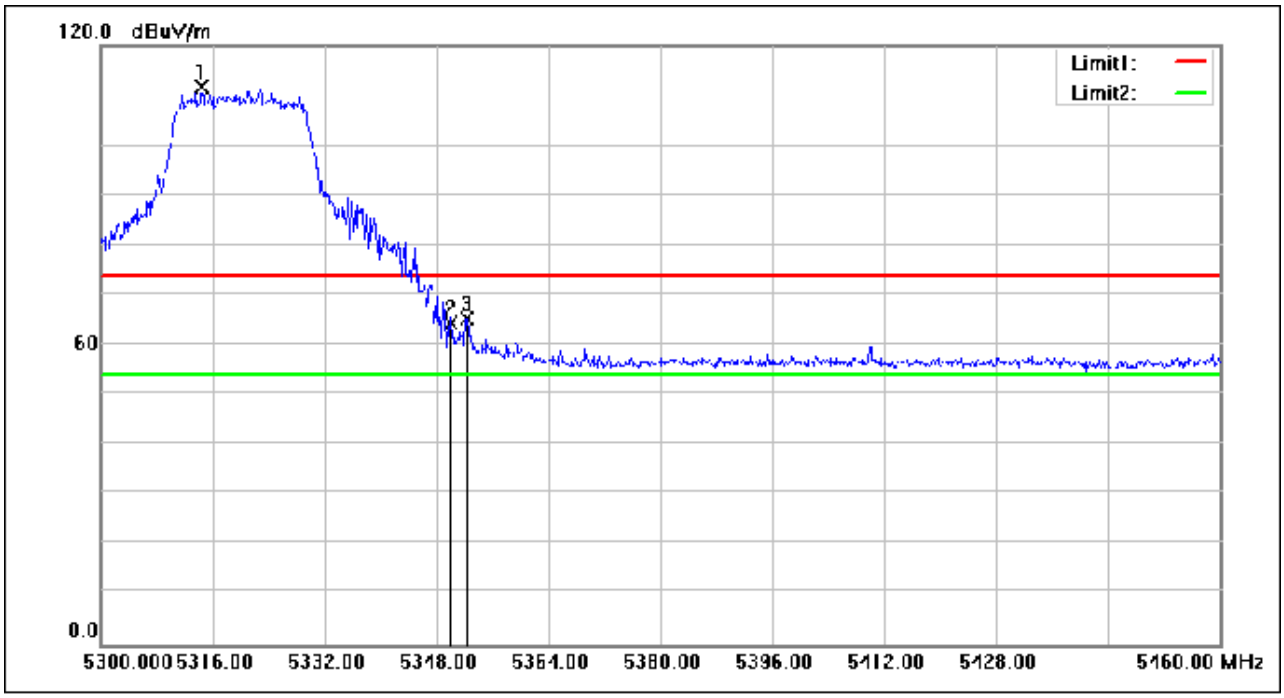
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5318.340	112.16	-17.96	94.20	74.00	20.20	peak
2	5350.000	75.41	-17.92	57.49	74.00	-16.51	peak
3	5352.540	77.93	-17.91	60.02	74.00	-13.98	peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



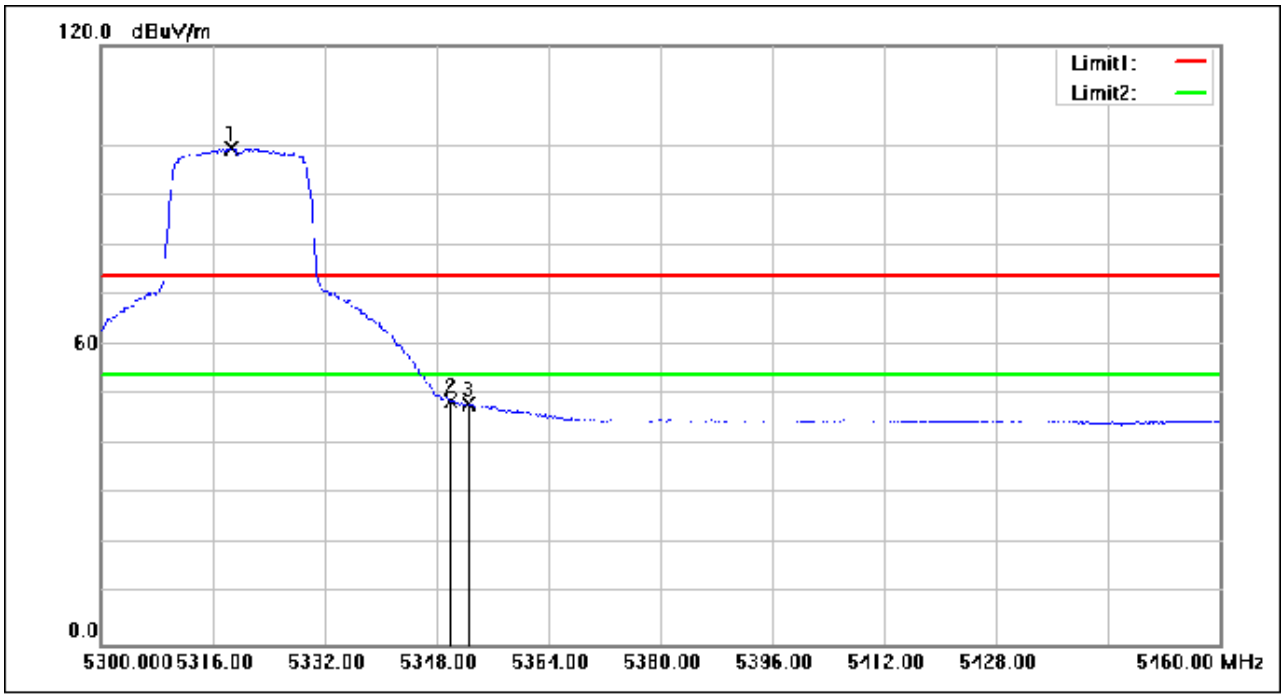
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5305.920	102.08	-17.99	84.09	54.00	30.09	AVG
2	5350.000	63.47	-17.92	45.55	54.00	-8.45	AVG
3	5358.840	62.99	-17.90	45.09	54.00	-8.91	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



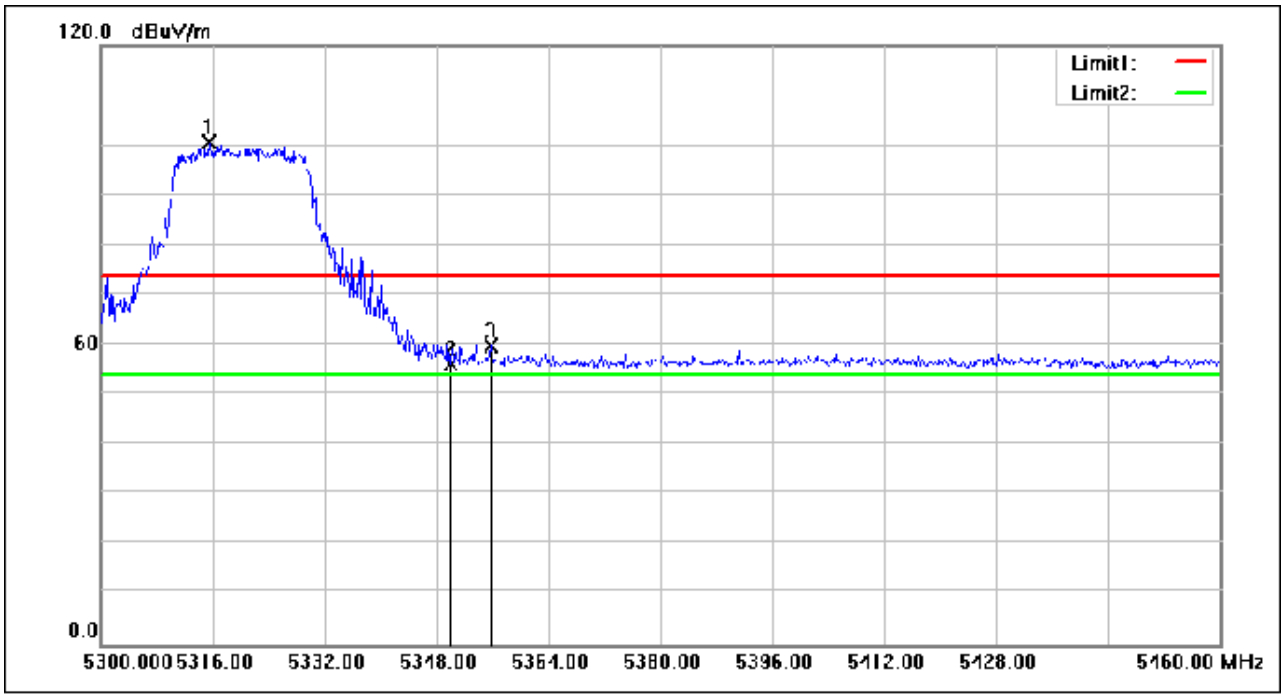
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5314.400	129.79	-17.97	111.82	74.00	37.82	peak
2	5350.000	82.31	-17.92	64.39	74.00	-9.61	peak
3	5352.320	83.25	-17.91	65.34	74.00	-8.66	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



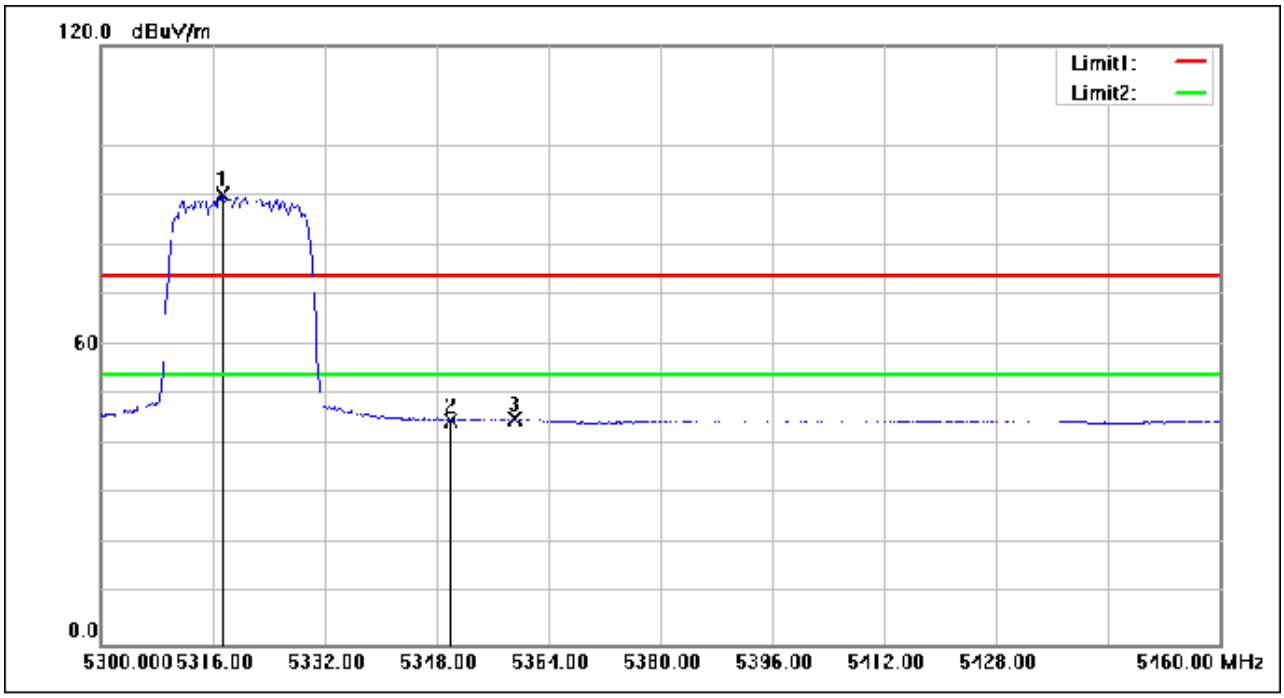
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5318.720	117.36	-17.96	99.40	54.00	45.40	AVG
2	5350.000	66.74	-17.92	48.82	54.00	-5.18	AVG
3	5352.480	66.07	-17.91	48.16	54.00	-5.84	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



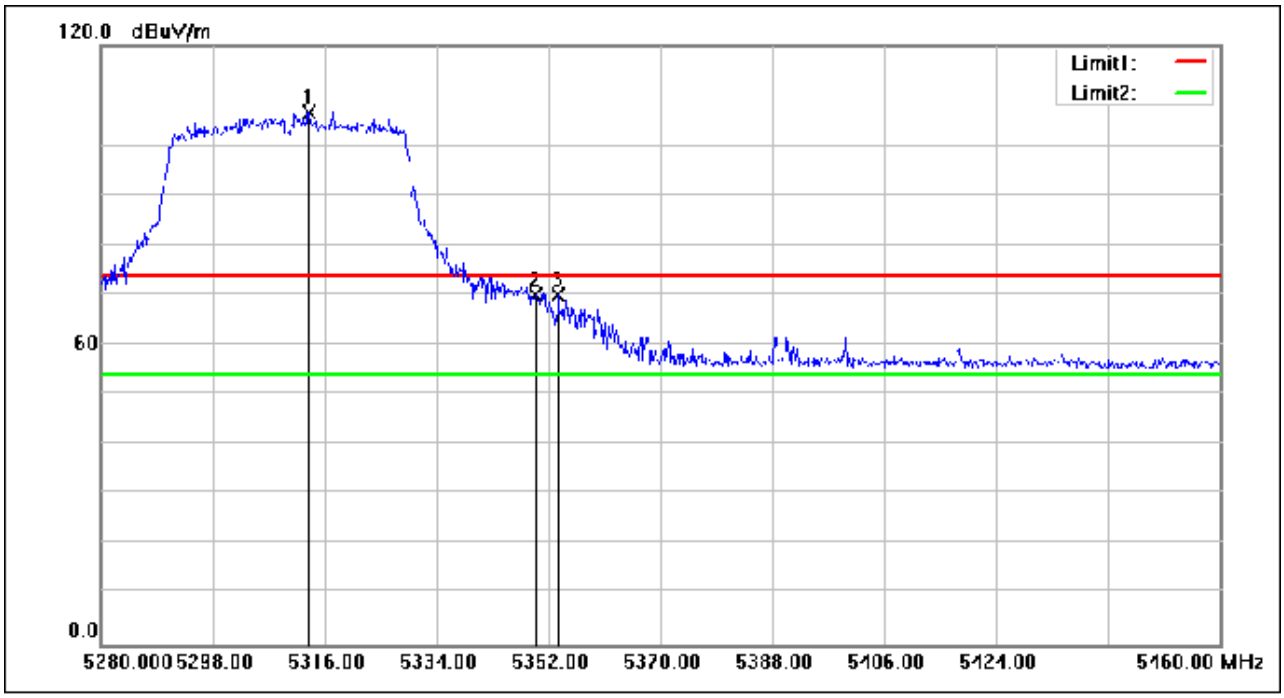
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5315.360	118.53	-17.97	100.56	74.00	26.56	peak
2	5350.000	74.19	-17.92	56.27	74.00	-17.73	peak
3	5355.680	77.83	-17.91	59.92	74.00	-14.08	peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



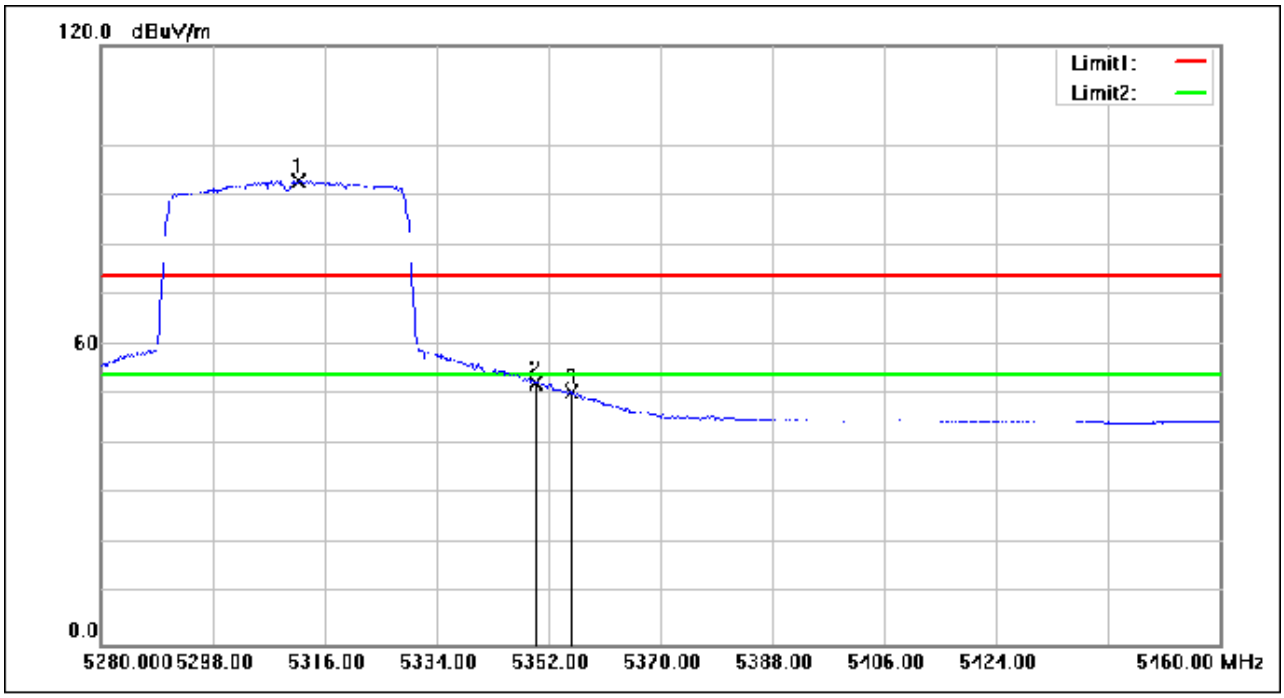
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5317.280	107.97	-17.96	90.01	54.00	36.01	AVG
2	5350.000	62.92	-17.92	45.00	54.00	-9.00	AVG
3	5359.200	63.02	-17.90	45.12	54.00	-8.88	AVG

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



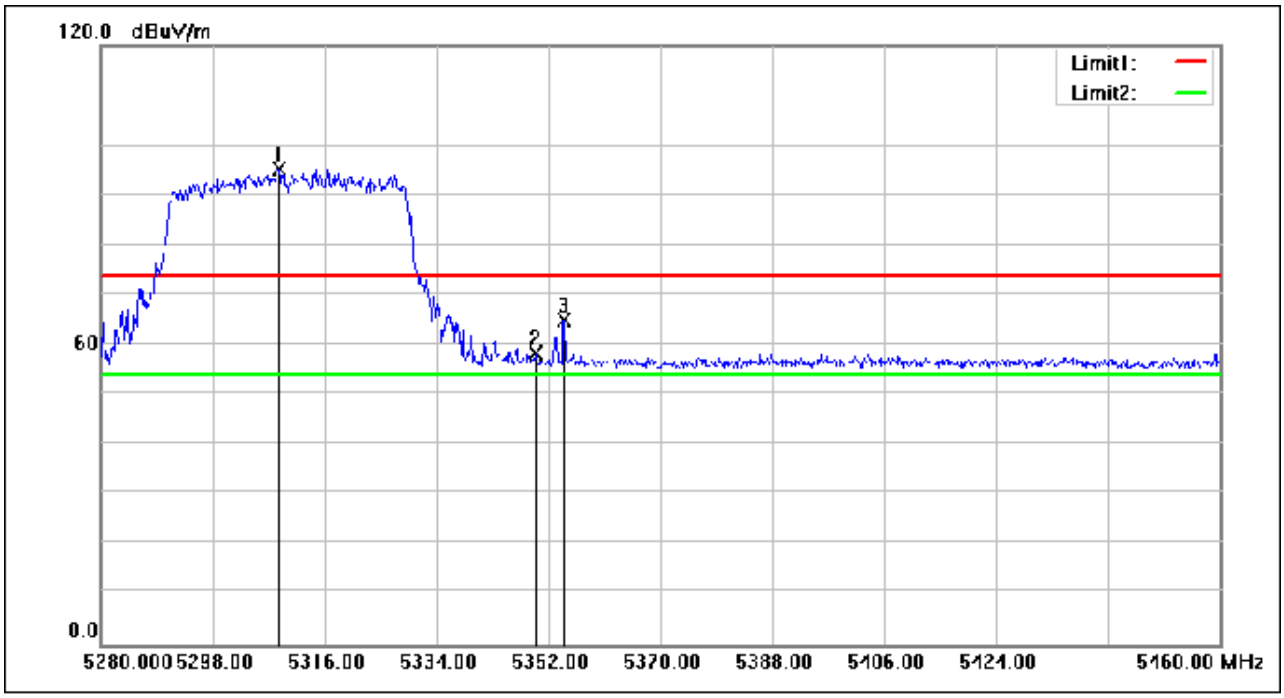
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5313.480	124.67	-17.97	106.70	74.00	32.70	peak
2	5350.000	87.90	-17.92	69.98	74.00	-4.02	peak
3	5353.620	87.86	-17.91	69.95	74.00	-4.05	peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



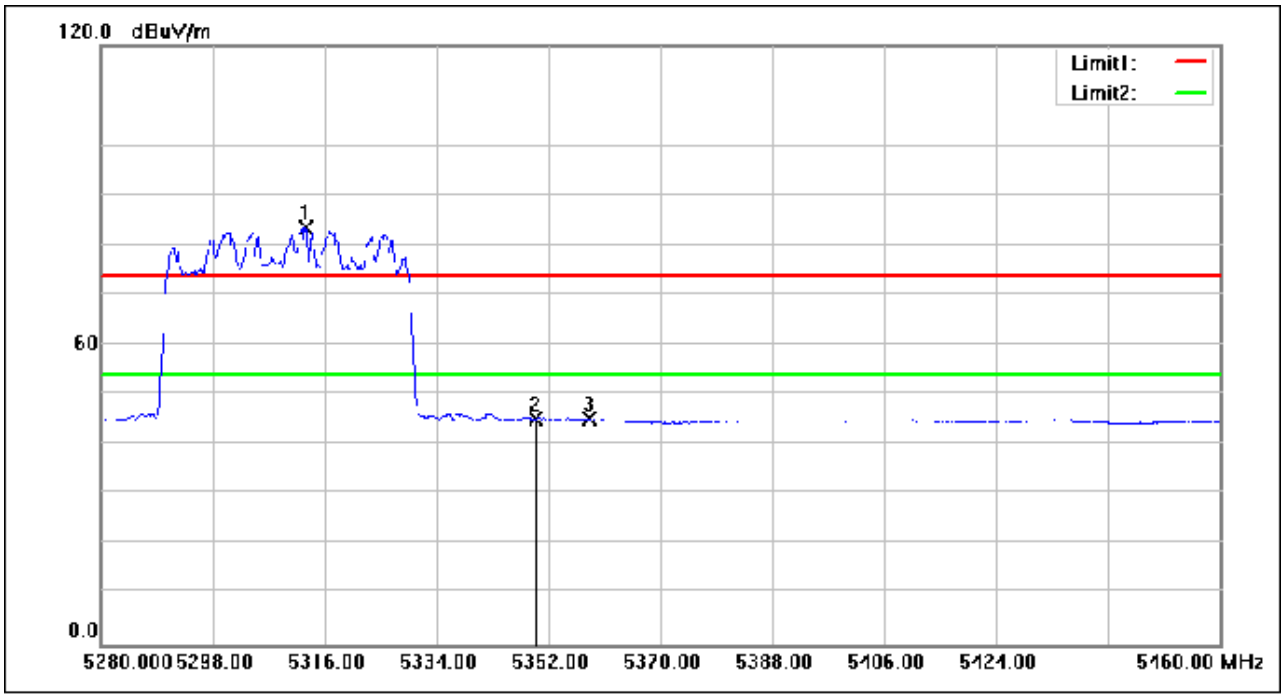
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5311.860	110.93	-17.97	92.96	54.00	38.96	AVG
2	5350.000	70.31	-17.92	52.39	54.00	-1.61	AVG
3	5355.780	68.53	-17.91	50.62	54.00	-3.38	AVG

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



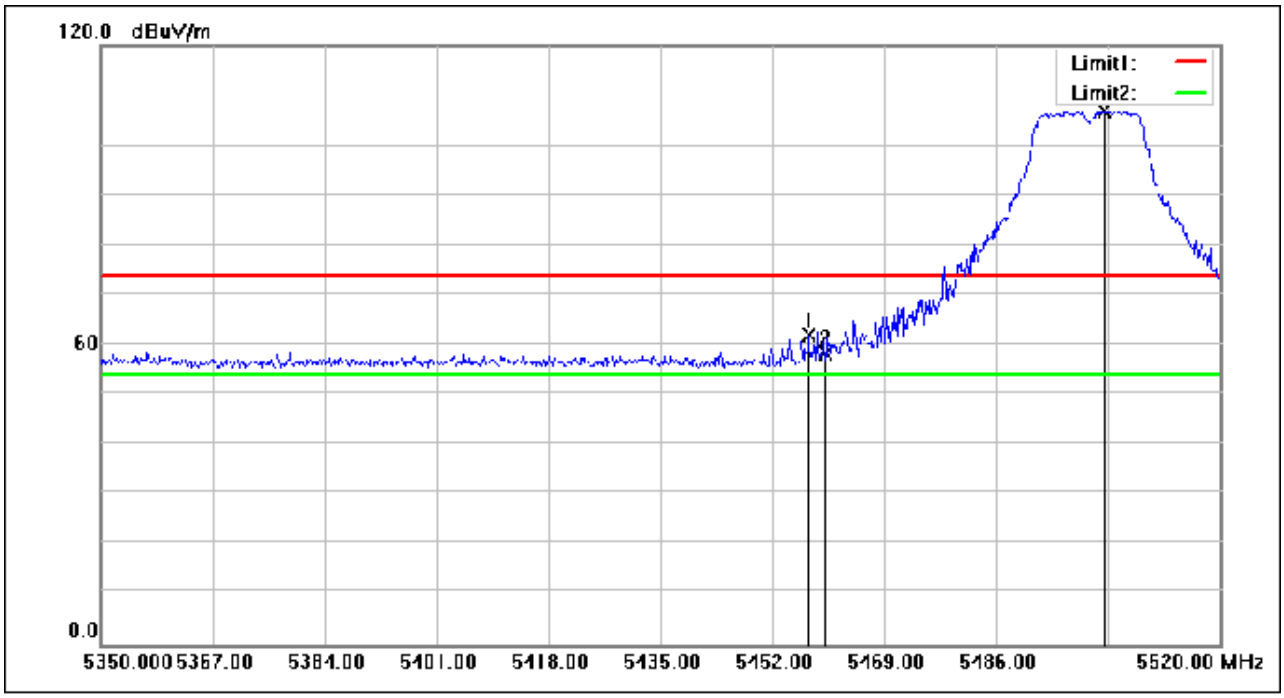
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5308.620	113.30	-17.98	95.32	74.00	21.32	peak
2	5350.000	76.21	-17.92	58.29	74.00	-15.71	peak
3	5354.520	82.92	-17.91	65.01	74.00	-8.99	peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



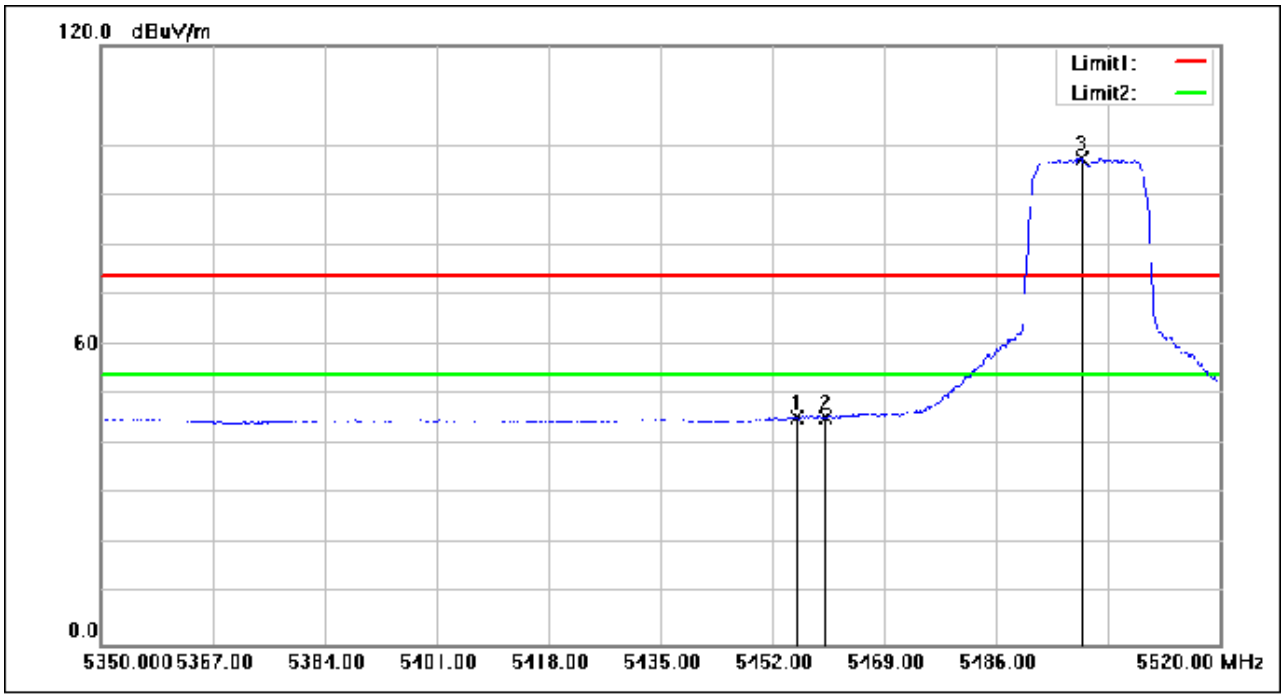
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5312.940	101.65	-17.97	83.68	54.00	29.68	AVG
2	5350.000	63.02	-17.92	45.10	54.00	-8.90	AVG
3	5358.480	63.01	-17.90	45.11	54.00	-8.89	AVG

Test Mode: 05; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



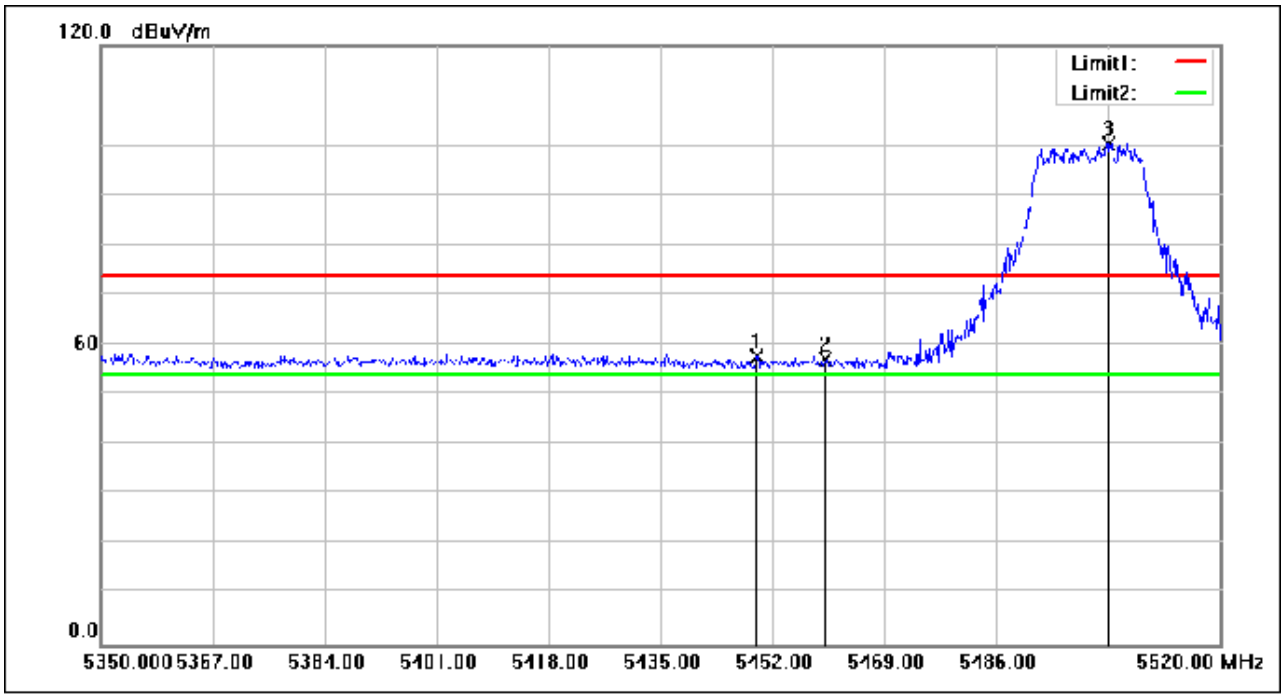
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5457.440	79.77	-17.76	62.01	74.00	-11.99	peak
2	5460.000	75.98	-17.76	58.22	74.00	-15.78	peak
3	5502.490	124.75	-17.69	107.06	74.00	33.06	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



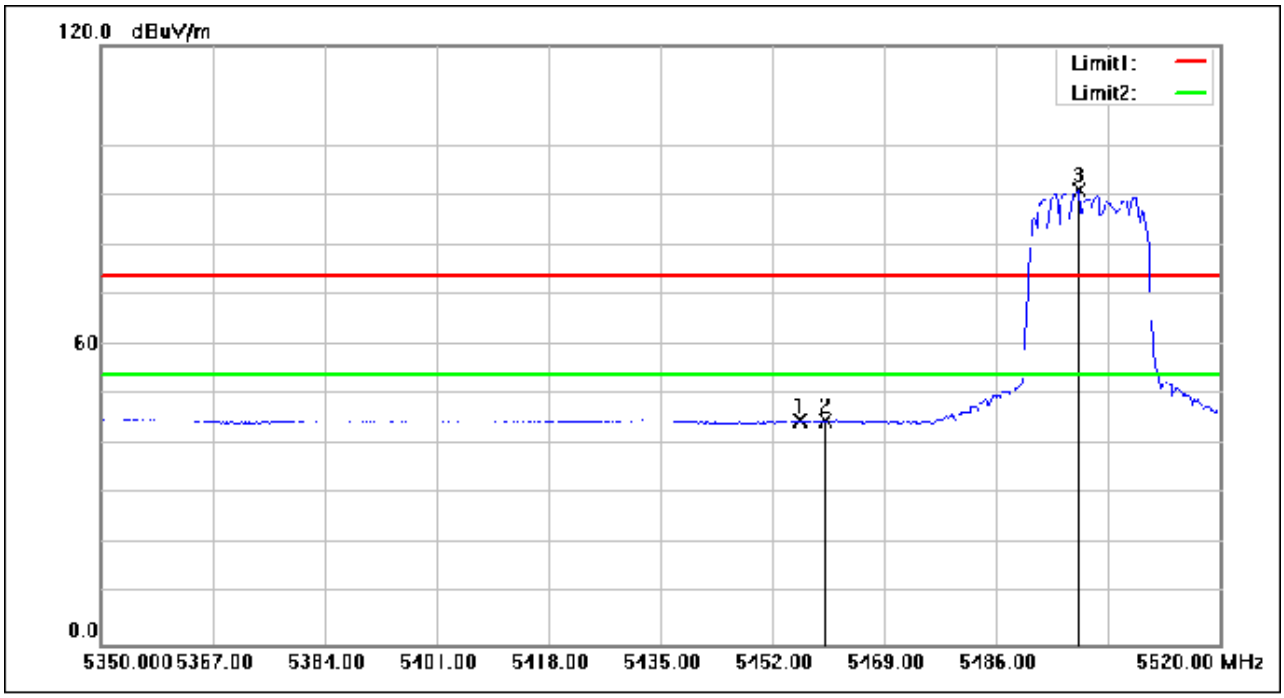
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5455.740	63.33	-17.76	45.57	54.00	-8.43	AVG
2	5460.000	63.26	-17.76	45.50	54.00	-8.50	AVG
3	5498.920	115.08	-17.70	97.38	54.00	43.38	AVG

Test Mode: 05; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



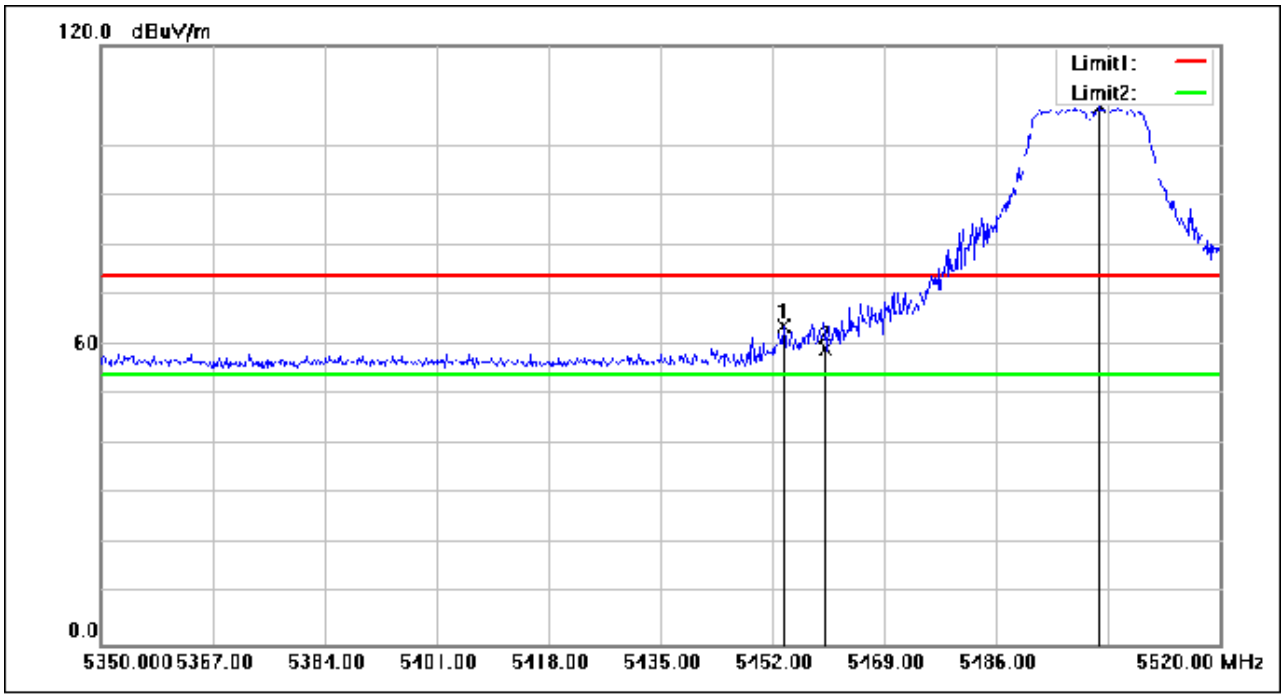
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5449.620	75.40	-17.78	57.62	74.00	-16.38	peak
2	5460.000	75.04	-17.76	57.28	74.00	-16.72	peak
3	5503.000	118.08	-17.69	100.39	74.00	26.39	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



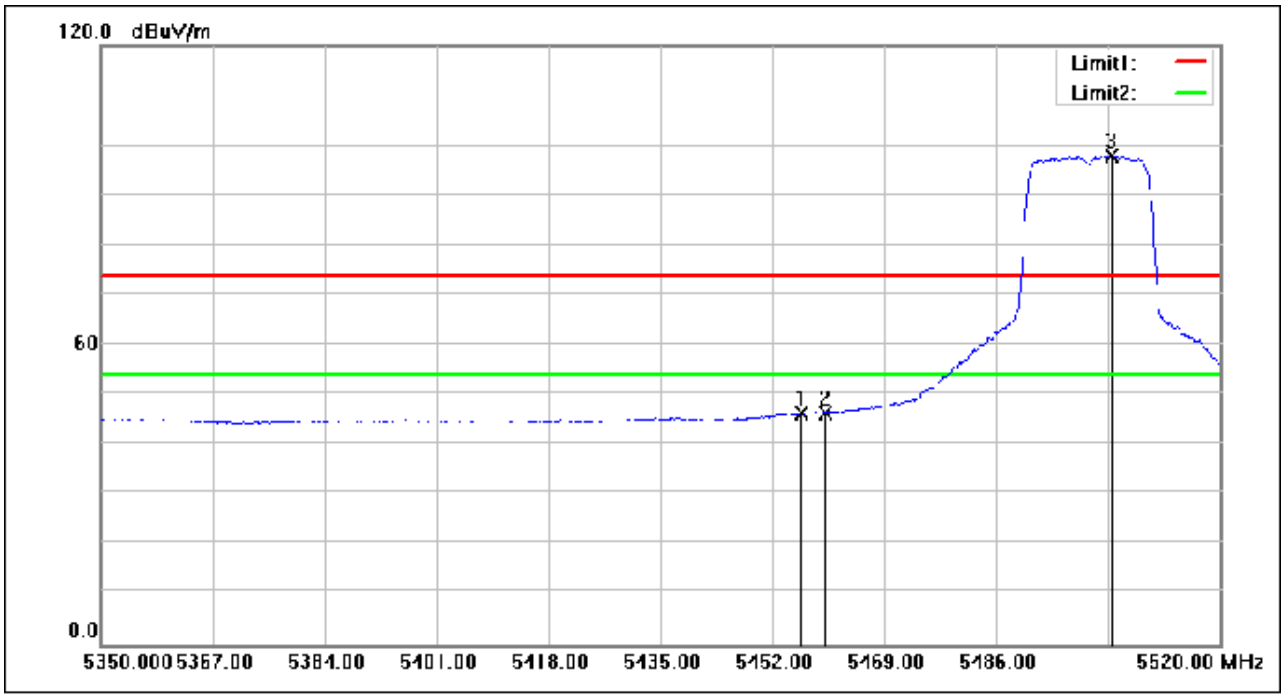
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5456.080	62.53	-17.76	44.77	54.00	-9.23	AVG
2	5460.000	62.52	-17.76	44.76	54.00	-9.24	AVG
3	5498.580	108.61	-17.70	90.91	54.00	36.91	AVG

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



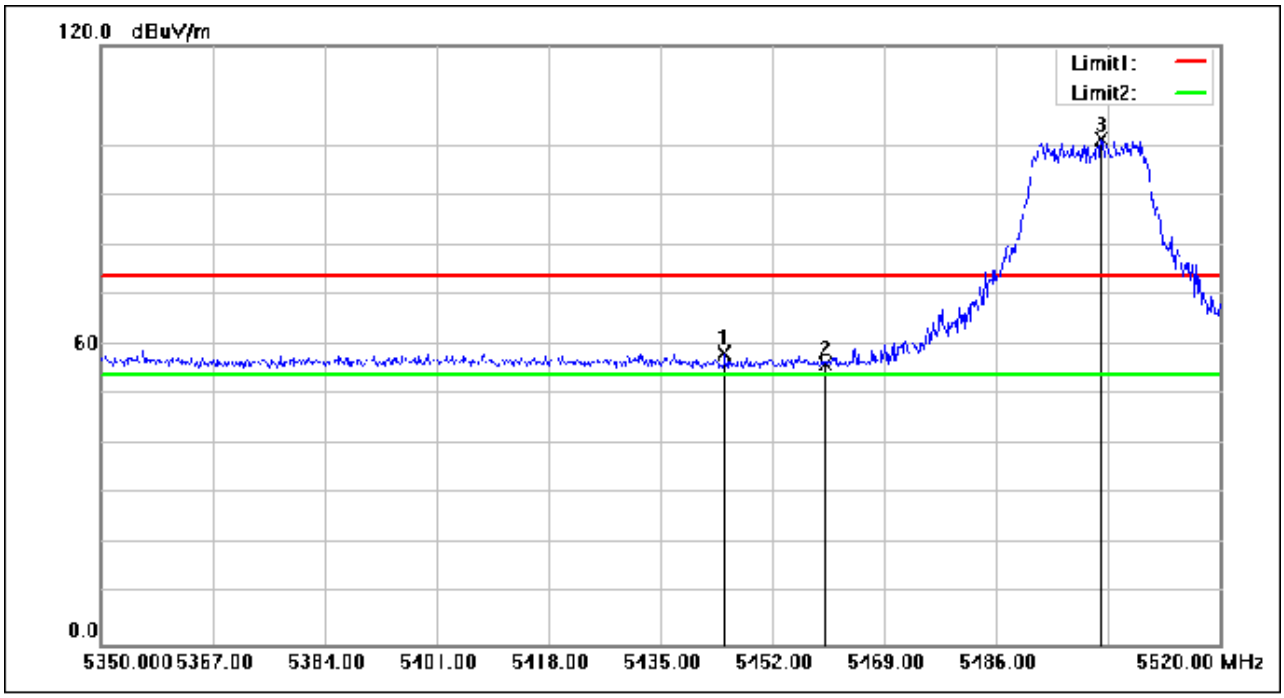
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5453.700	81.62	-17.76	63.86	74.00	-10.14	peak
2	5460.000	77.01	-17.76	59.25	74.00	-14.75	peak
3	5501.810	125.60	-17.70	107.90	74.00	33.90	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



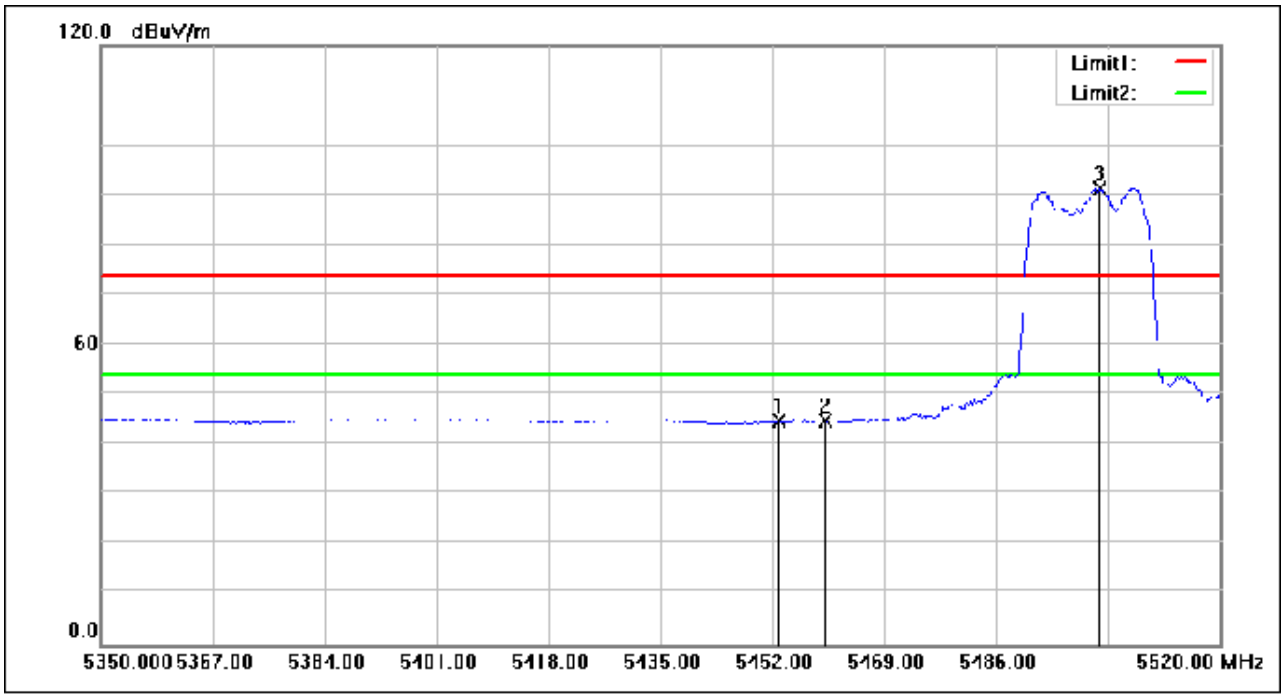
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5456.420	64.20	-17.76	46.44	54.00	-7.56	AVG
2	5460.000	64.03	-17.76	46.27	54.00	-7.73	AVG
3	5503.510	115.68	-17.69	97.99	54.00	43.99	AVG

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



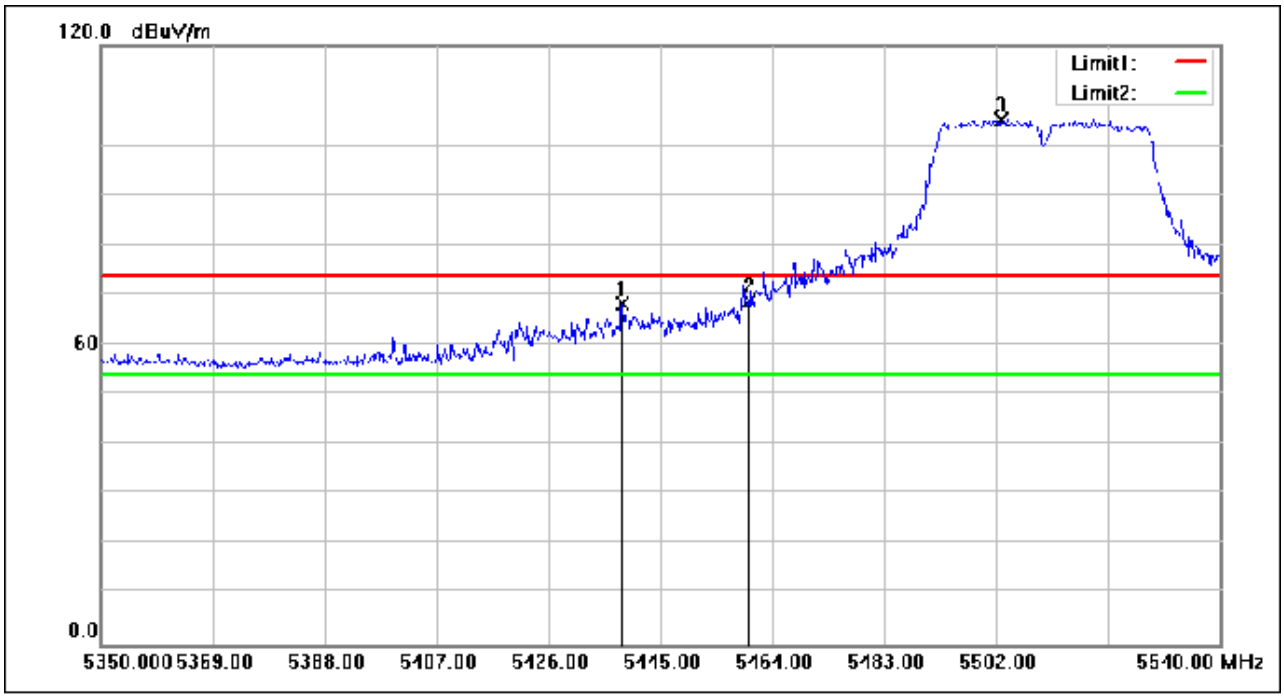
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5444.690	76.23	-17.78	58.45	74.00	-15.55	peak
2	5460.000	74.05	-17.76	56.29	74.00	-17.71	peak
3	5501.980	119.03	-17.70	101.33	74.00	27.33	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



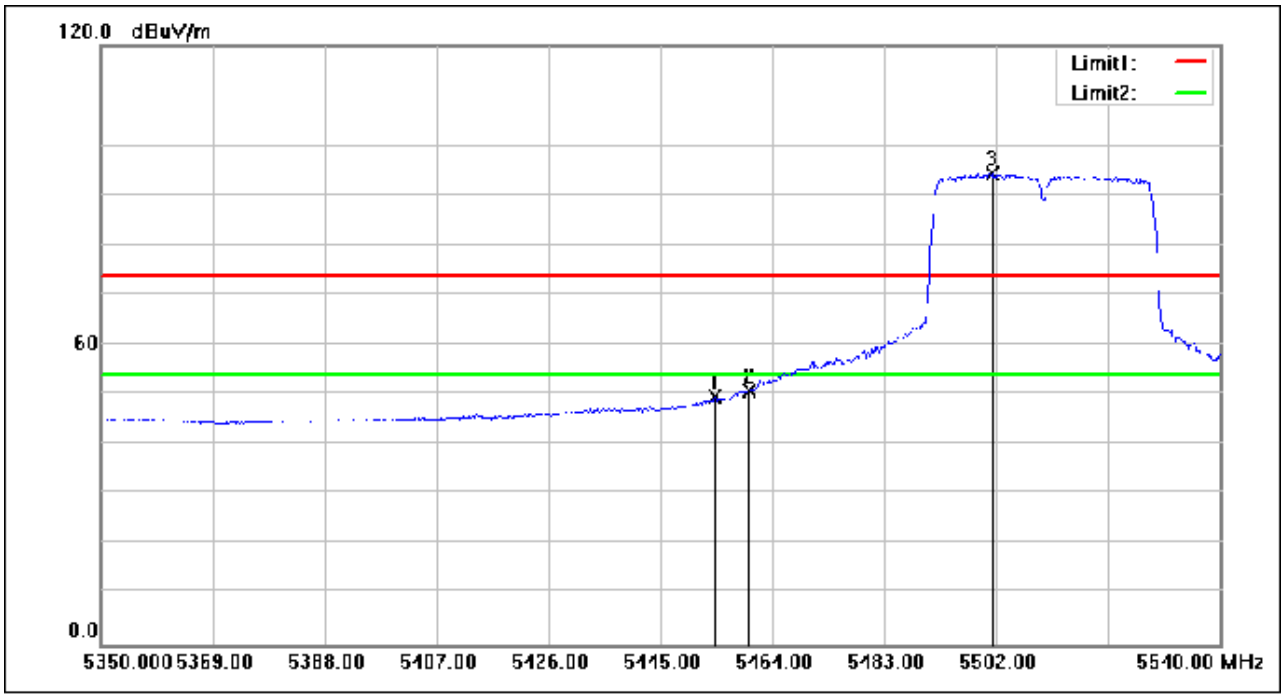
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5453.020	62.60	-17.76	44.84	54.00	-9.16	AVG
2	5460.000	62.58	-17.76	44.82	54.00	-9.18	AVG
3	5501.640	109.14	-17.70	91.44	54.00	37.44	AVG

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



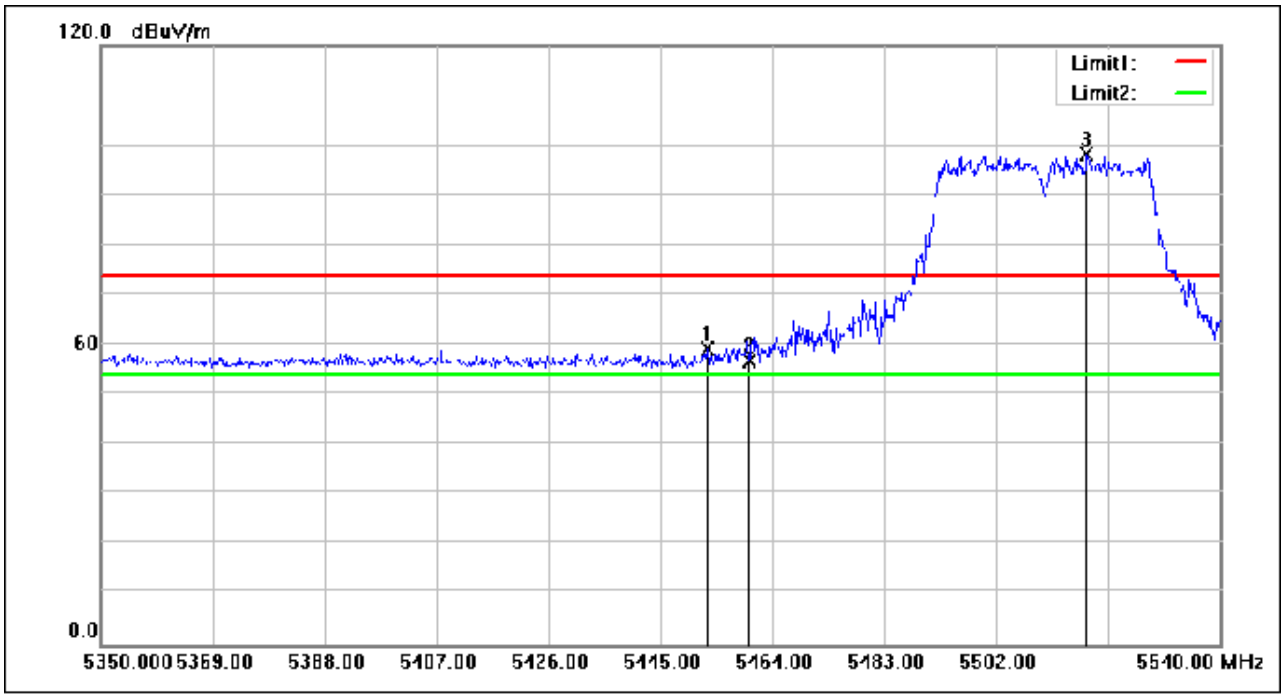
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5438.540	86.06	-17.79	68.27	74.00	-5.73	peak
2	5460.000	86.57	-17.76	68.81	74.00	-5.19	peak
3	5502.760	122.83	-17.69	105.14	74.00	31.14	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



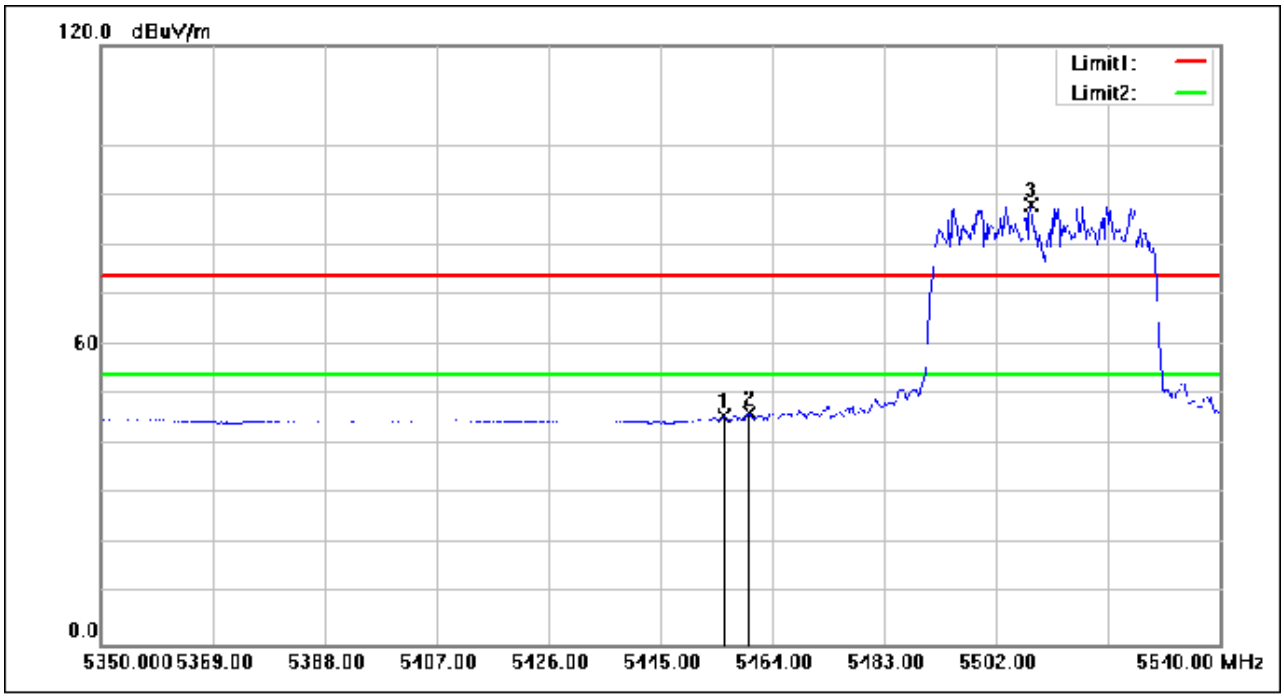
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5454.310	67.30	-17.76	49.54	54.00	-4.46	AVG
2	5460.000	68.71	-17.76	50.95	54.00	-3.05	AVG
3	5501.430	111.97	-17.70	94.27	54.00	40.27	AVG

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



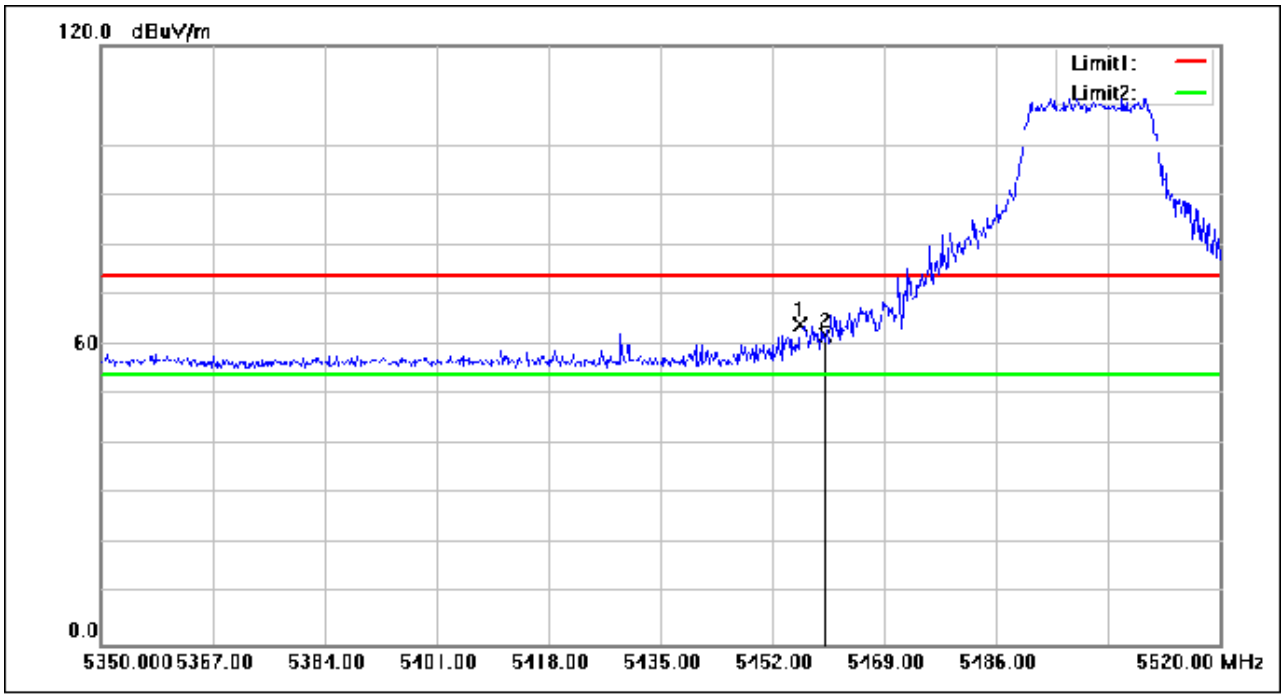
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5452.980	77.00	-17.76	59.24	74.00	-14.76	peak
2	5460.000	74.76	-17.76	57.00	74.00	-17.00	peak
3	5517.390	116.04	-17.67	98.37	74.00	24.37	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



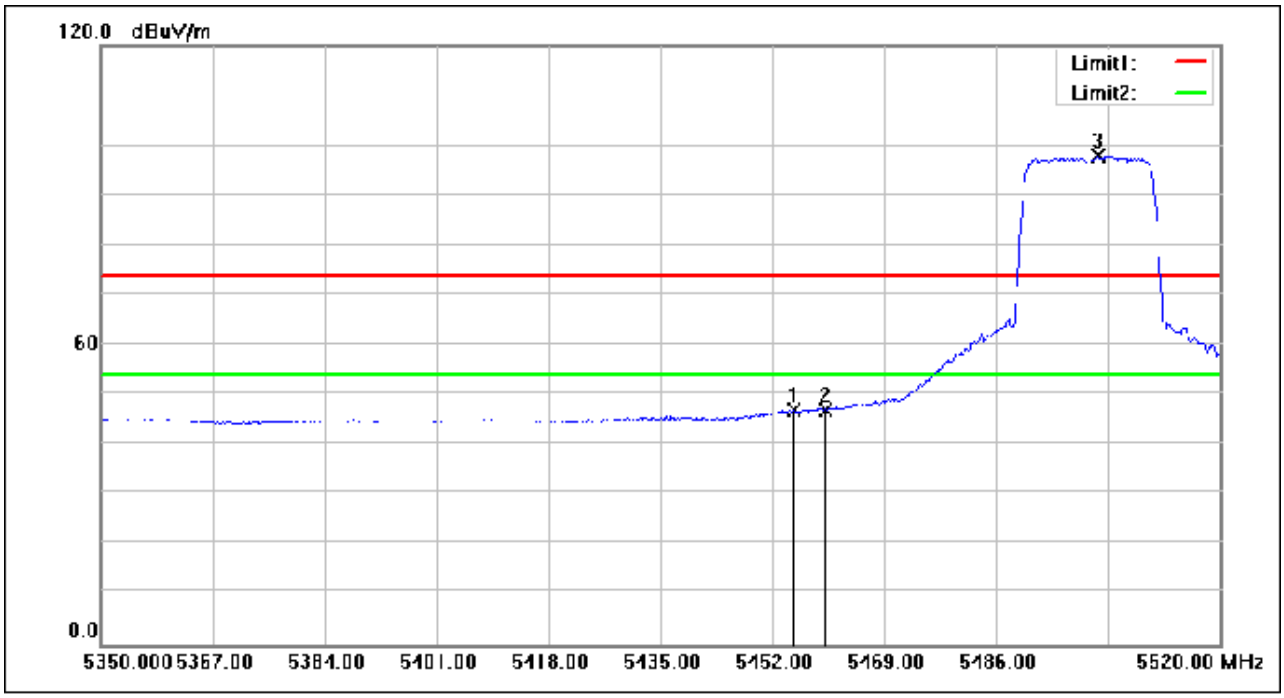
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5455.640	63.45	-17.76	45.69	54.00	-8.31	AVG
2	5460.000	64.05	-17.76	46.29	54.00	-7.71	AVG
3	5507.890	105.69	-17.69	88.00	54.00	34.00	AVG

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5456.080	81.74	-17.76	63.98	74.00	-10.02	peak
2	5460.000	79.86	-17.76	62.10	74.00	-11.90	peak
3	5497.050	127.21	-17.70	109.51	74.00	35.51	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low

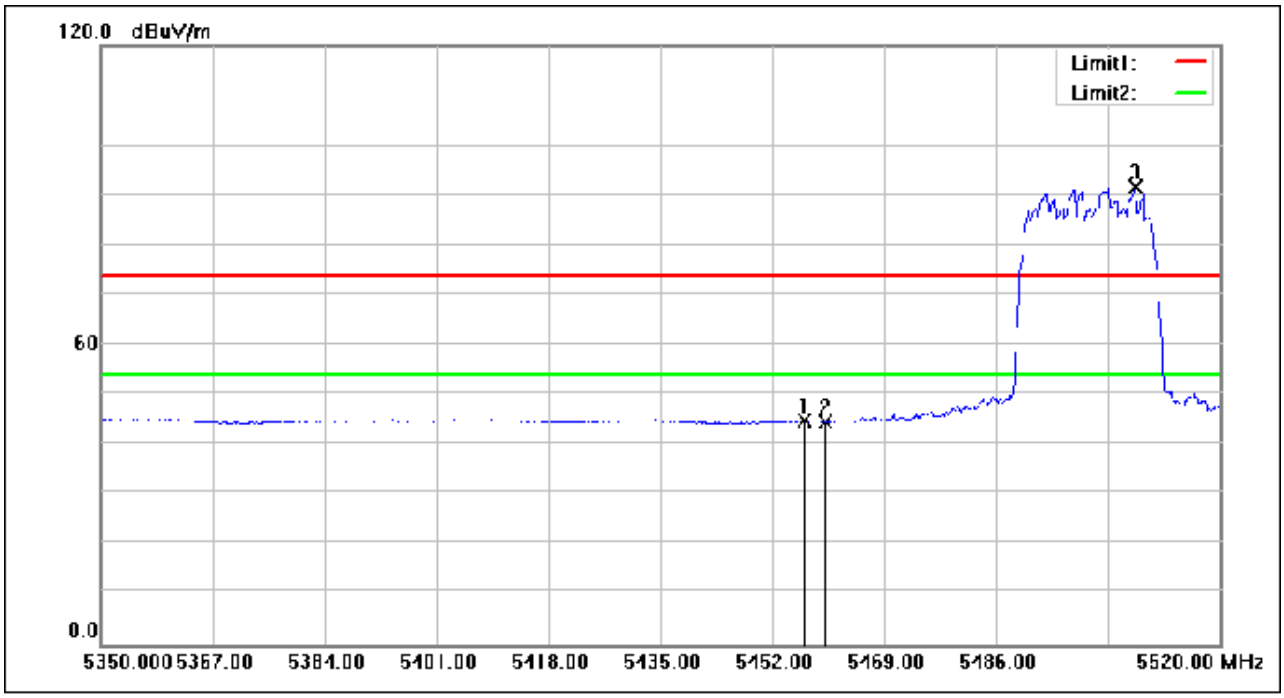


No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5455.230	64.81	-17.76	47.05	54.00	-6.95	AVG
2	5460.000	64.69	-17.76	46.93	54.00	-7.07	AVG
3	5501.470	115.64	-17.70	97.94	54.00	43.94	AVG

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low

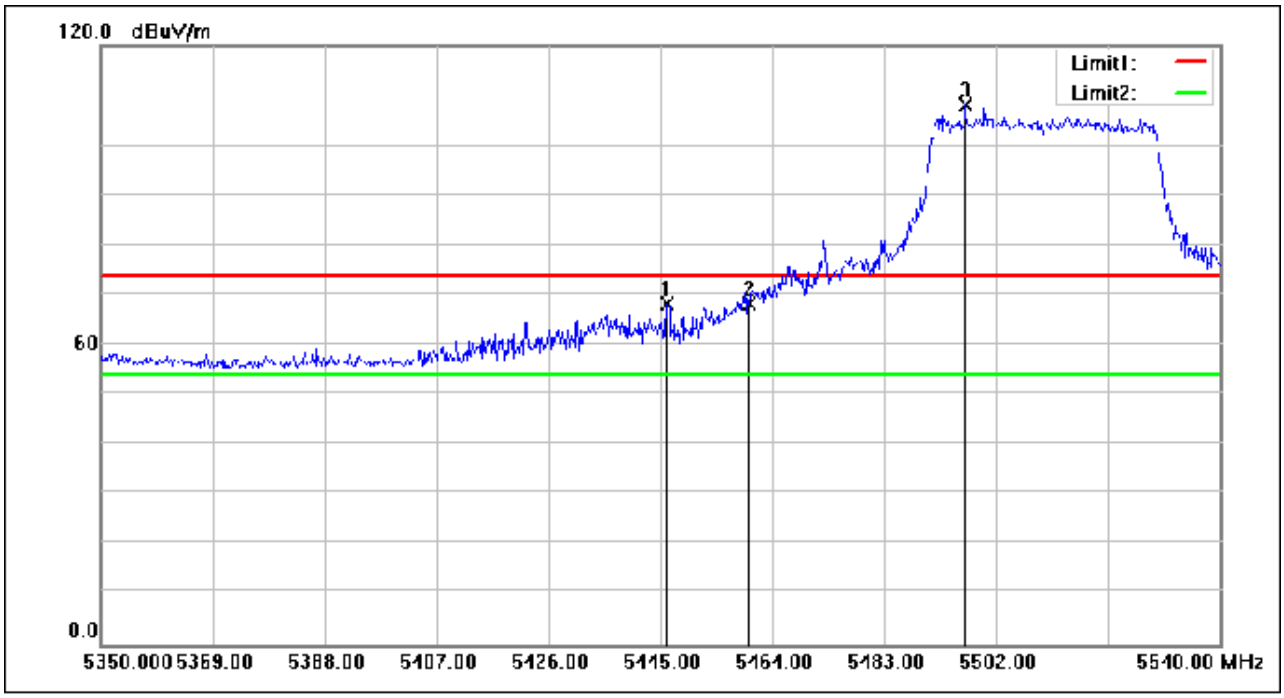
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5459.310	78.62	-17.76	60.86	74.00	-13.14	peak
2	5460.000	74.40	-17.76	56.64	74.00	-17.36	peak
3	5497.220	121.14	-17.70	103.44	74.00	29.44	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



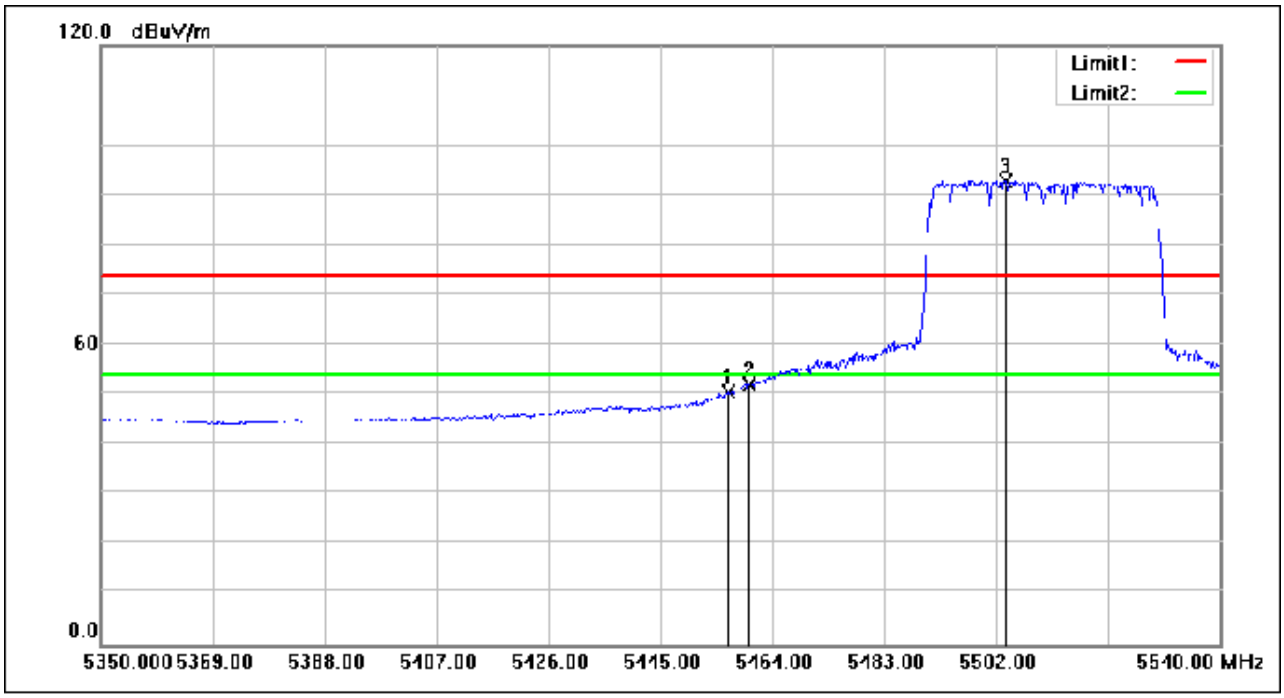
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5456.760	62.65	-17.76	44.89	54.00	-9.11	AVG
2	5460.000	62.43	-17.76	44.67	54.00	-9.33	AVG
3	5507.250	109.35	-17.69	91.66	54.00	37.66	AVG

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



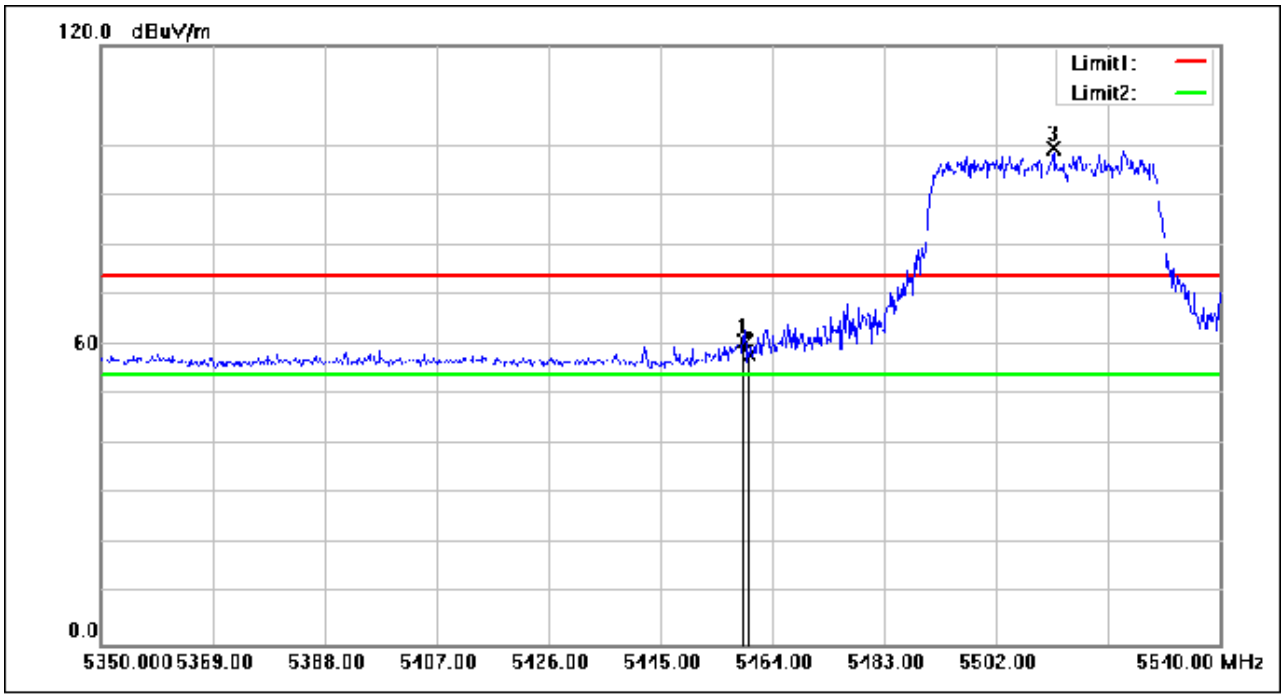
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5446.140	86.06	-17.78	68.28	74.00	-5.72	peak
2	5460.000	86.10	-17.76	68.34	74.00	-5.66	peak
3	5496.680	125.99	-17.70	108.29	74.00	34.29	peak

Test Mode: 05; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



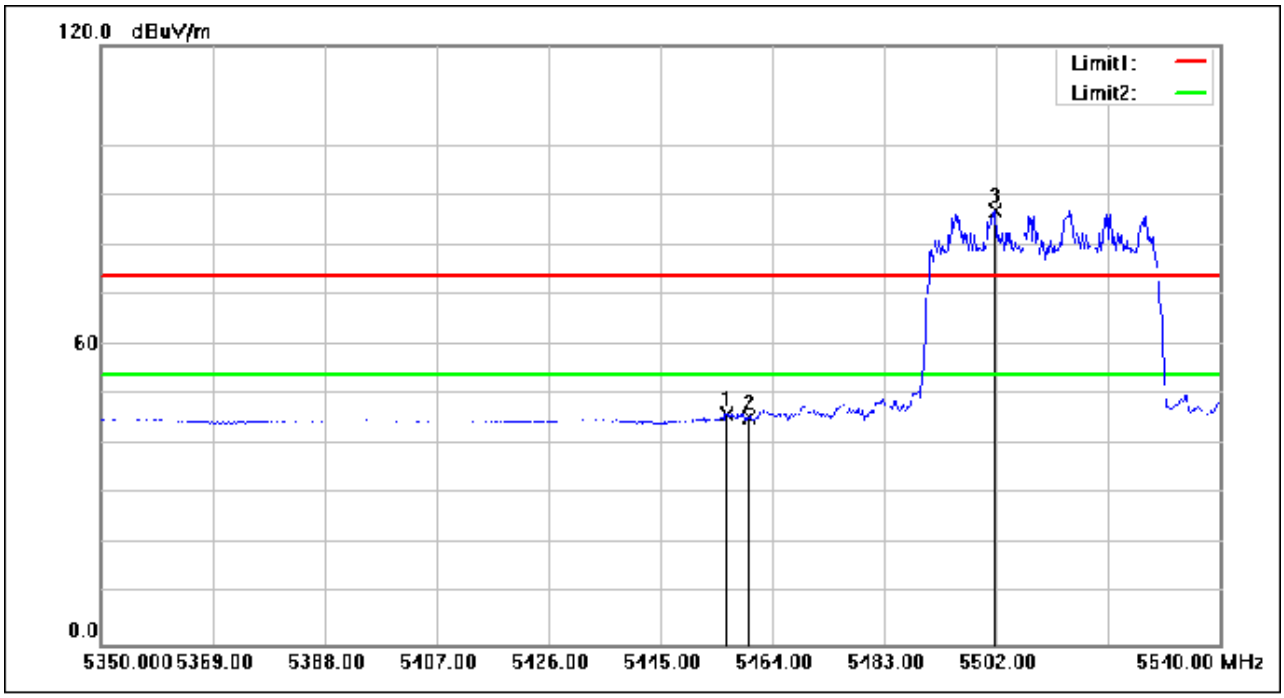
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5456.400	68.39	-17.76	50.63	54.00	-3.37	AVG
2	5460.000	69.86	-17.76	52.10	54.00	-1.90	AVG
3	5503.520	110.63	-17.69	92.94	54.00	38.94	AVG

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



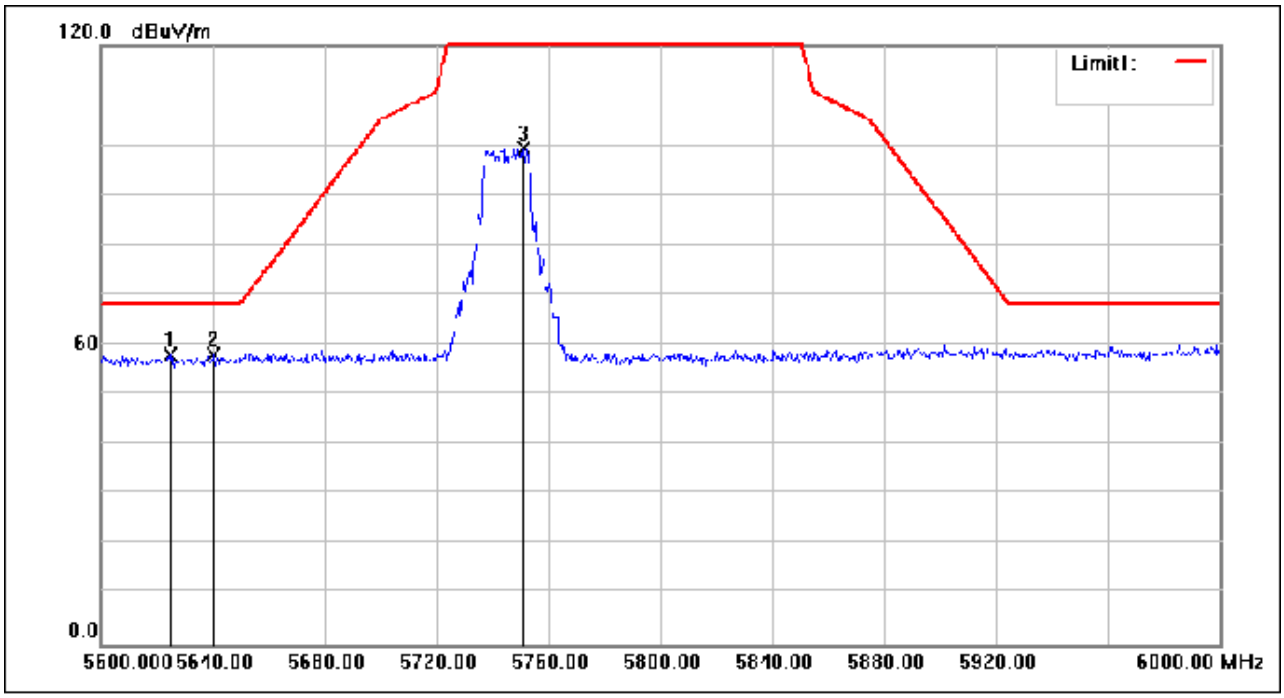
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5459.060	78.62	-17.76	60.86	74.00	-13.14	peak
2	5460.000	75.72	-17.76	57.96	74.00	-16.04	peak
3	5511.690	117.20	-17.68	99.52	74.00	25.52	peak

Test Mode: 05; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



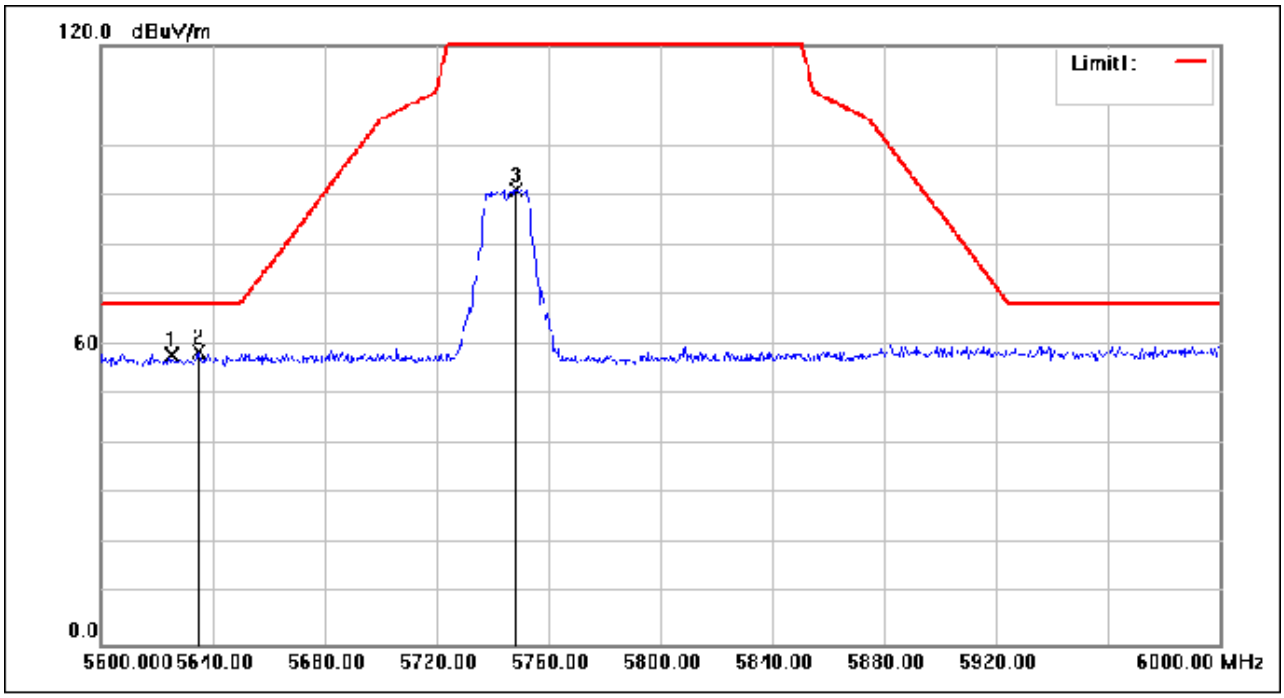
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5456.210	63.83	-17.76	46.07	54.00	-7.93	AVG
2	5460.000	63.28	-17.76	45.52	54.00	-8.48	AVG
3	5501.810	104.55	-17.70	86.85	54.00	32.85	AVG

Test Mode: 06; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



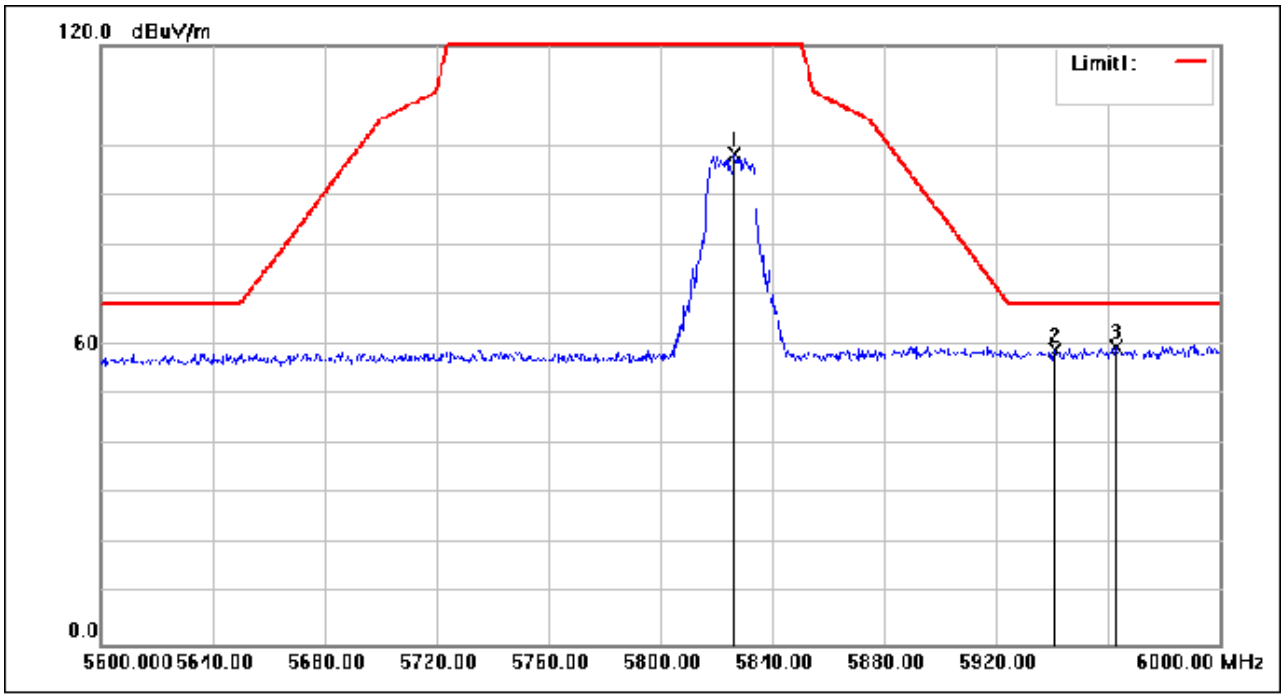
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5624.800	75.38	-17.34	58.04	68.20	-10.16	peak
2	5640.400	75.40	-17.27	58.13	68.20	-10.07	peak
3	5751.200	116.19	-16.81	99.38	135.00	-35.62	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



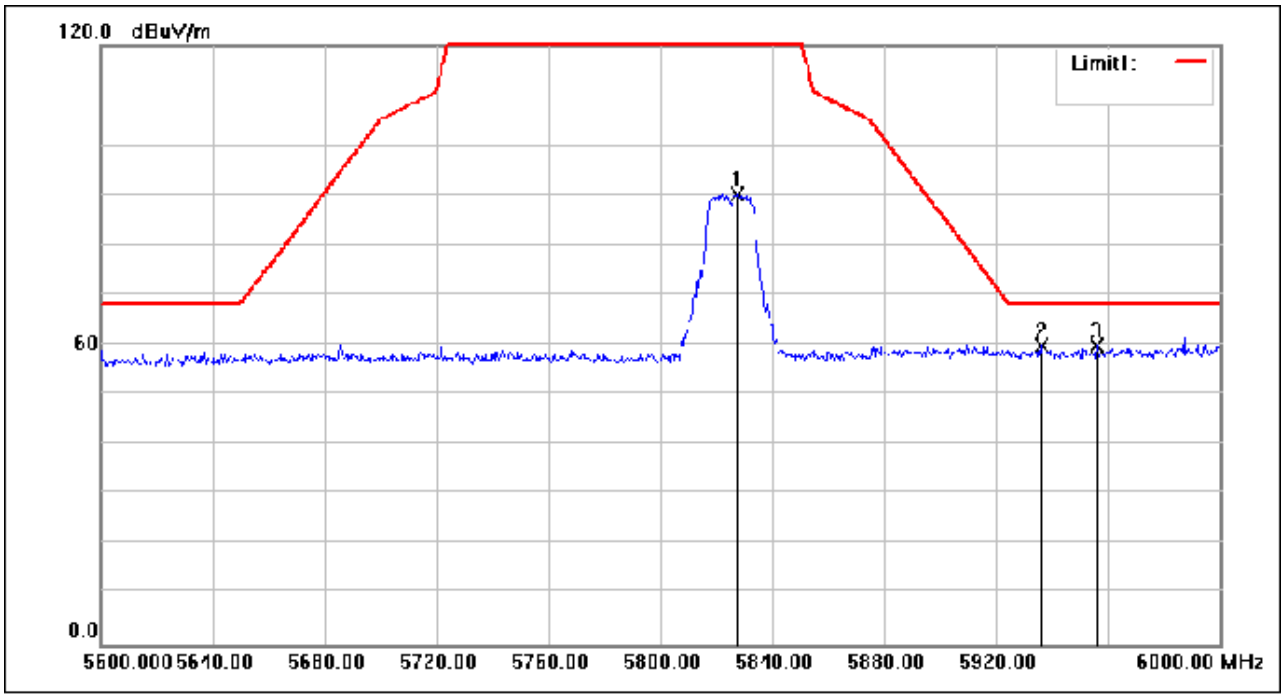
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5625.200	75.51	-17.34	58.17	68.20	-10.03	peak
2	5634.800	76.04	-17.29	58.75	68.20	-9.45	peak
3	5748.400	107.98	-16.83	91.15	135.00	-43.85	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



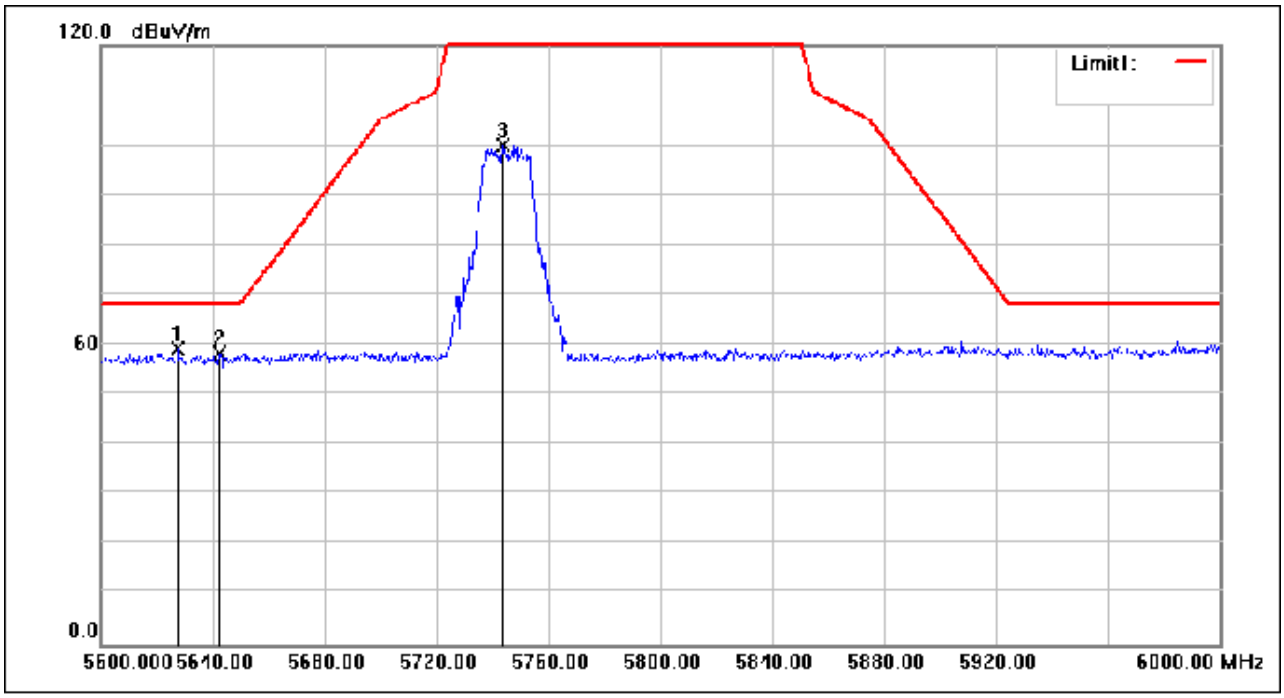
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5826.400	114.68	-16.50	98.18	135.00	-36.82	peak
2	5940.800	75.12	-16.03	59.09	68.20	-9.11	peak
3	5962.800	75.57	-15.94	59.63	68.20	-8.57	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



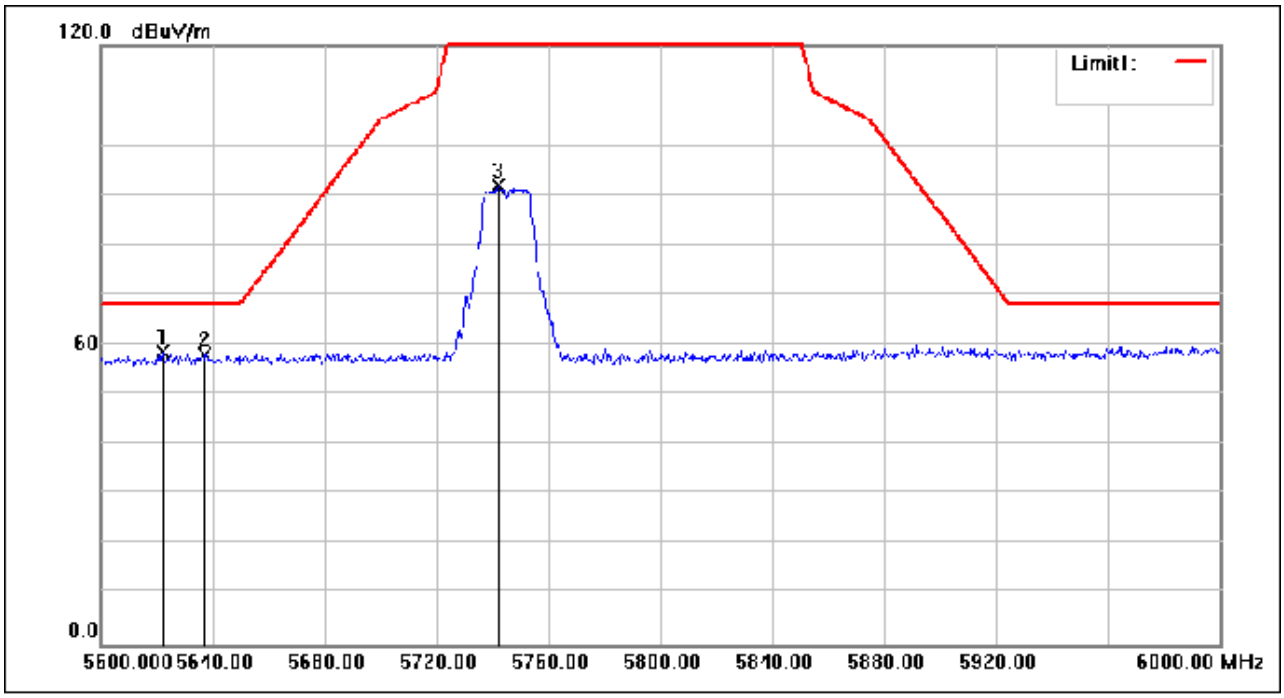
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5827.200	106.61	-16.50	90.11	135.00	-44.89	peak
2	5936.000	75.84	-16.04	59.80	68.20	-8.40	peak
3	5956.000	75.68	-15.96	59.72	68.20	-8.48	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



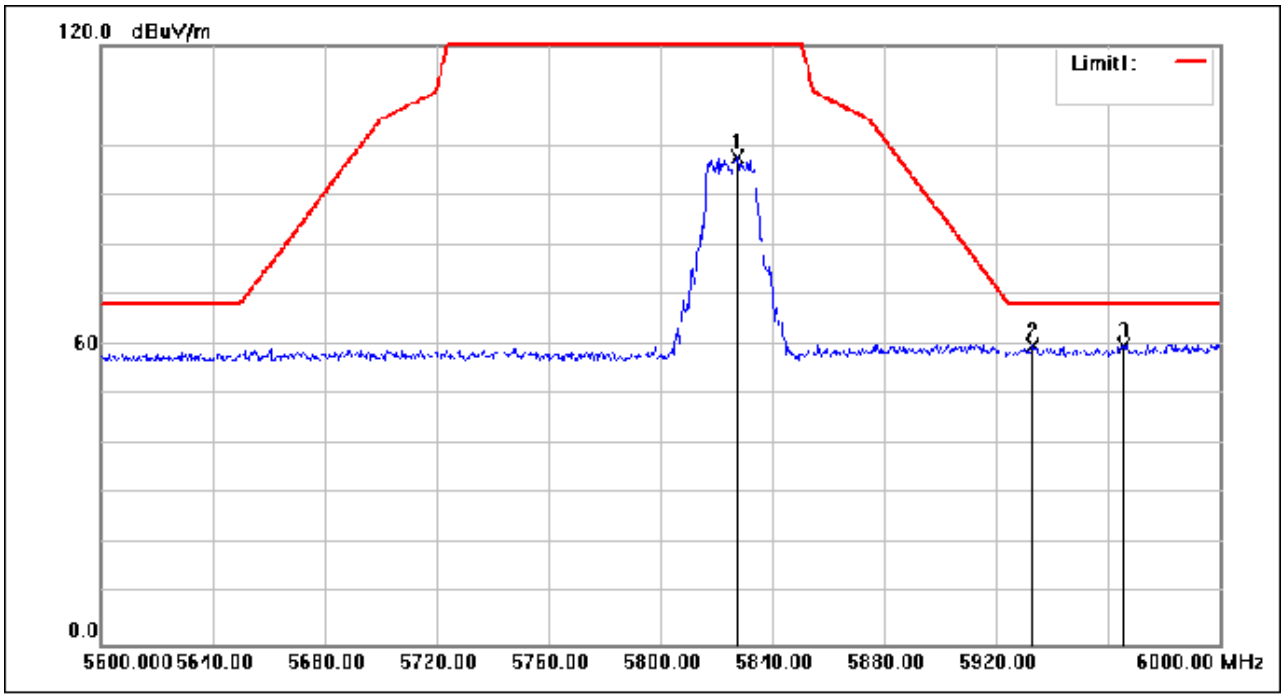
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5627.600	76.49	-17.33	59.16	68.20	-9.04	peak
2	5642.400	75.53	-17.27	58.26	68.20	-9.94	peak
3	5743.600	116.85	-16.85	100.00	135.00	-35.00	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



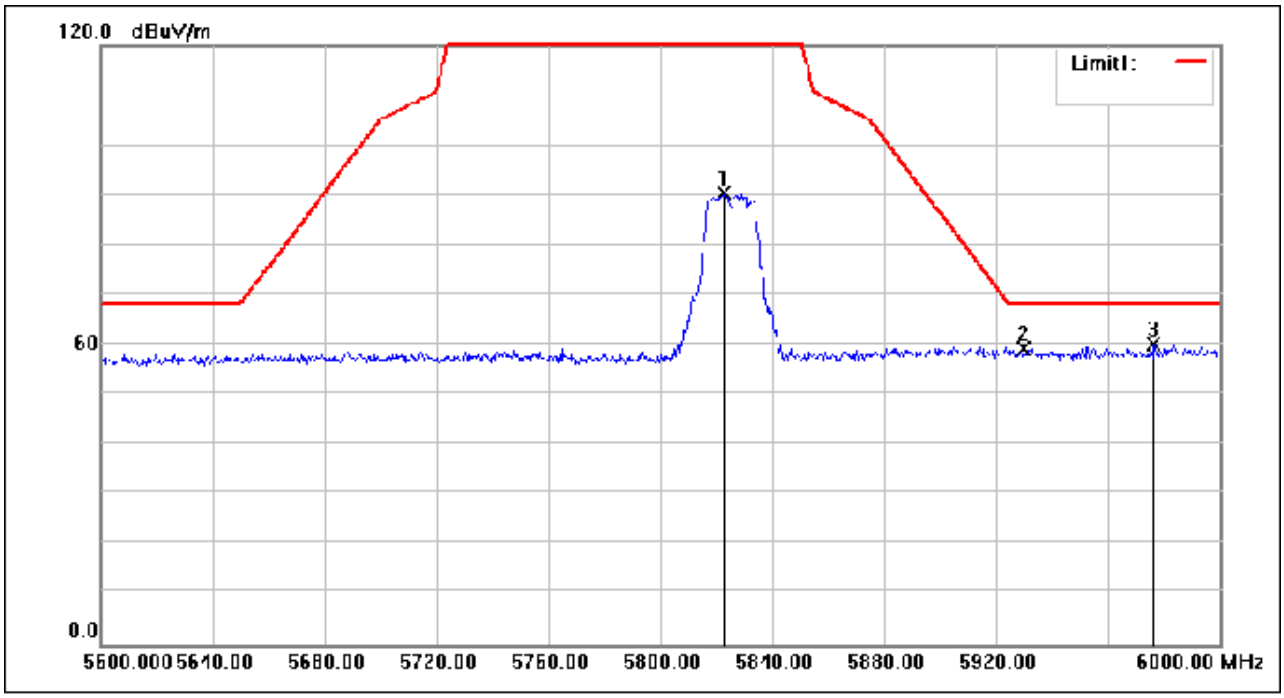
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5622.000	76.14	-17.35	58.79	68.20	-9.41	peak
2	5637.200	75.32	-17.28	58.04	68.20	-10.16	peak
3	5742.000	108.85	-16.85	92.00	135.00	-43.00	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



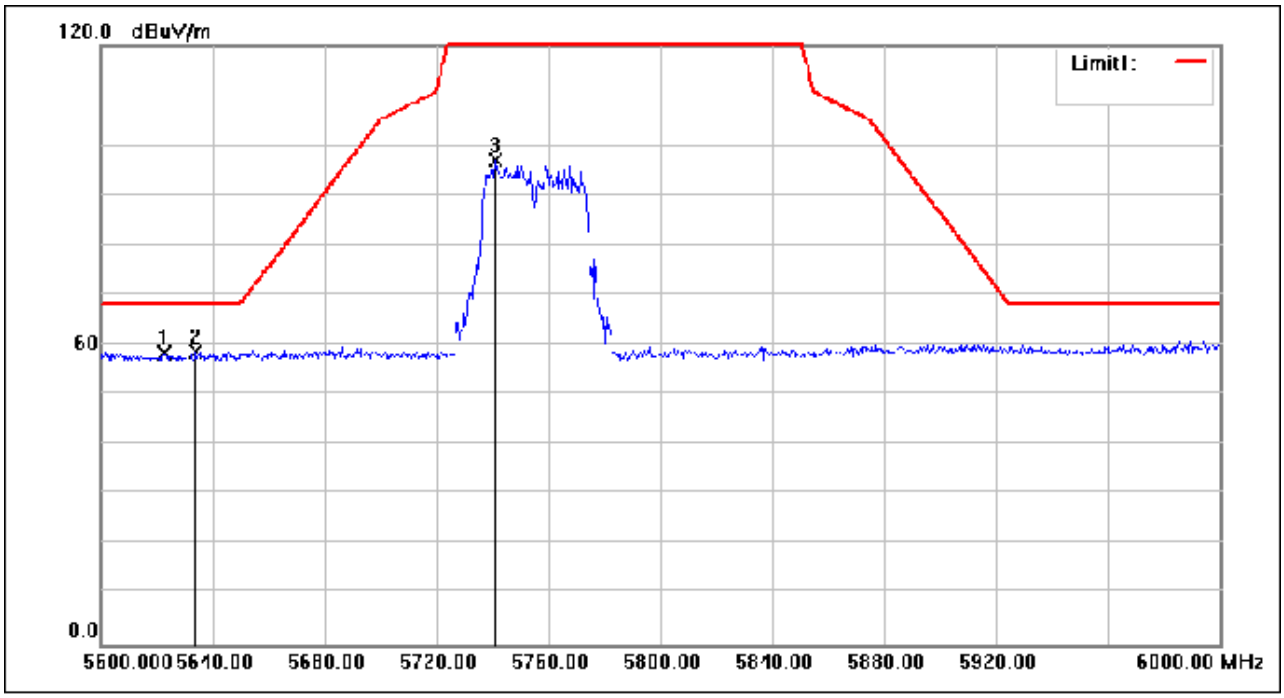
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5827.600	114.10	-16.50	97.60	135.00	-37.40	peak
2	5933.200	75.87	-16.05	59.82	68.20	-8.38	peak
3	5965.600	75.74	-15.93	59.81	68.20	-8.39	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



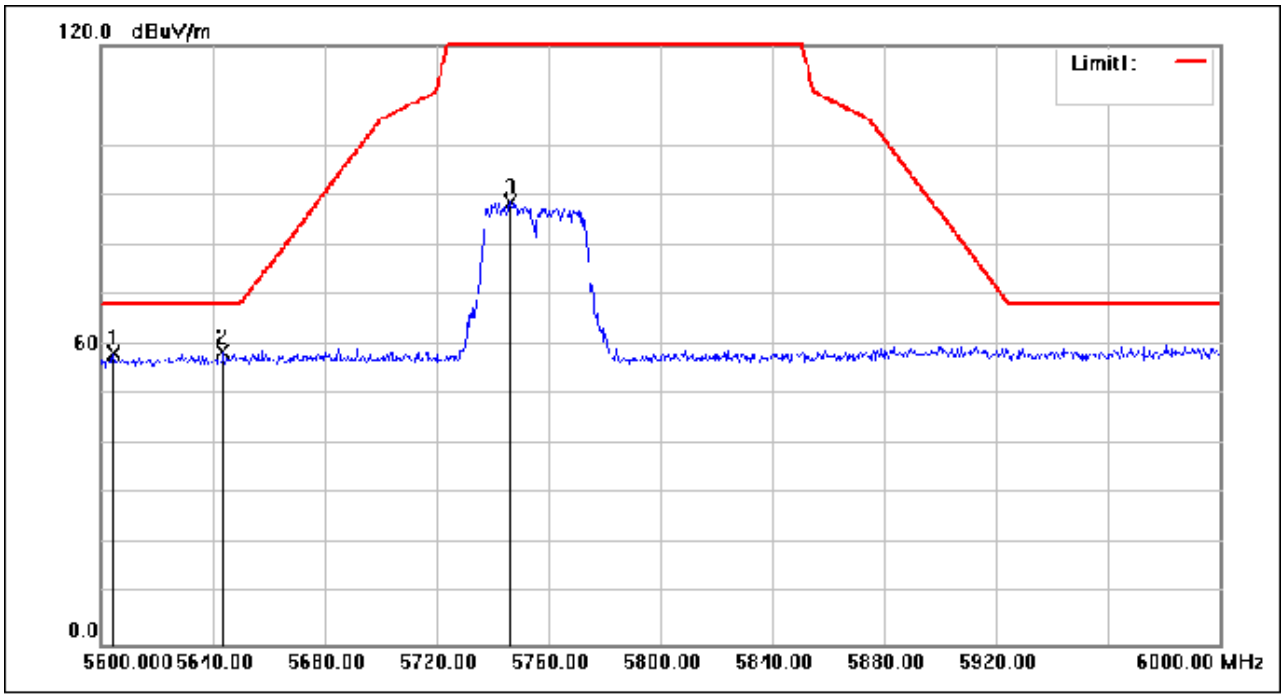
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5822.800	106.87	-16.52	90.35	135.00	-44.65	peak
2	5930.000	75.22	-16.07	59.15	68.20	-9.05	peak
3	5976.400	75.95	-15.88	60.07	68.20	-8.13	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



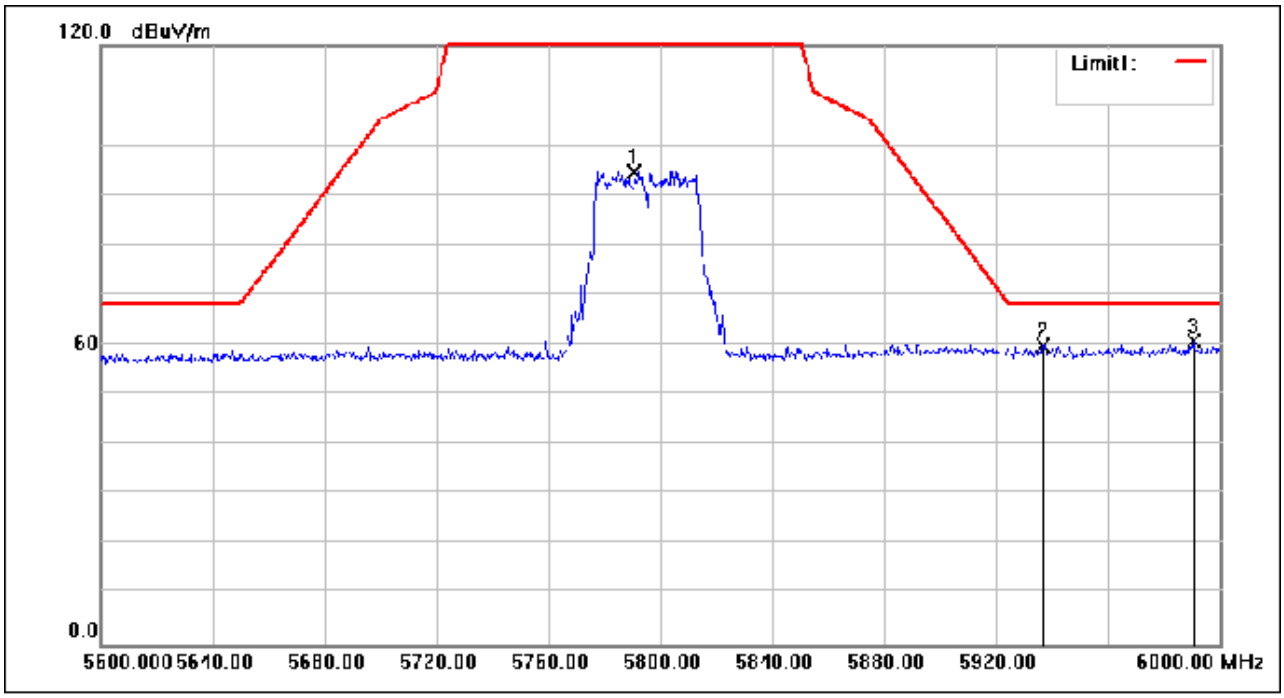
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5622.800	75.60	-17.35	58.25	68.20	-9.95	peak
2	5634.000	75.97	-17.30	58.67	68.20	-9.53	peak
3	5740.800	113.99	-16.86	97.13	135.00	-37.87	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



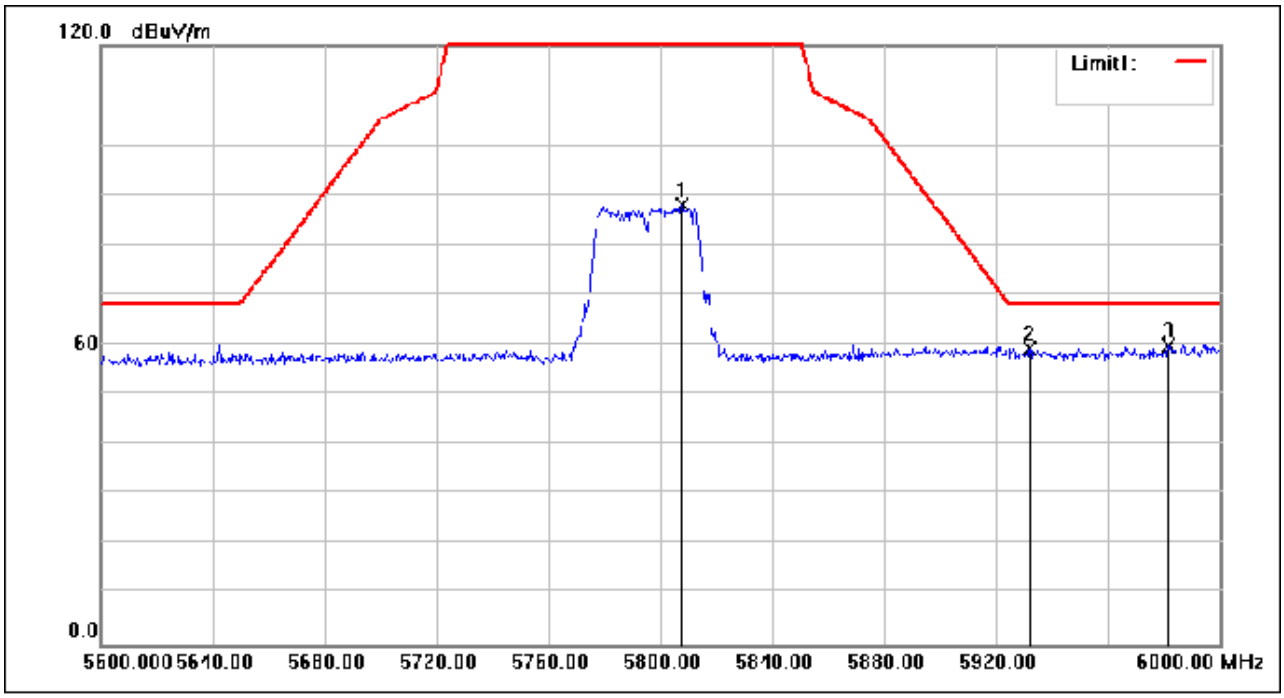
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5604.400	75.63	-17.42	58.21	68.20	-9.99	peak
2	5643.600	75.82	-17.26	58.56	68.20	-9.64	peak
3	5746.400	105.36	-16.84	88.52	135.00	-46.48	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



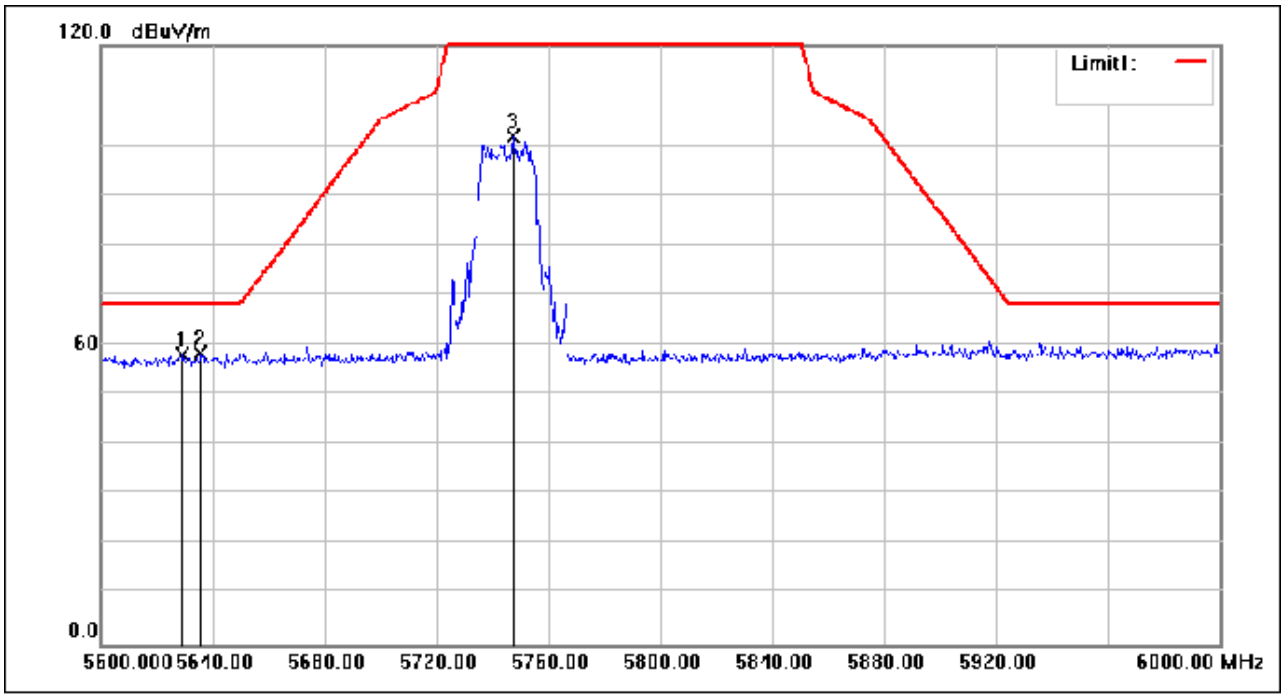
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5790.800	111.38	-16.64	94.74	135.00	-40.26	peak
2	5936.800	75.75	-16.04	59.71	68.20	-8.49	peak
3	5990.400	76.47	-15.81	60.66	68.20	-7.54	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



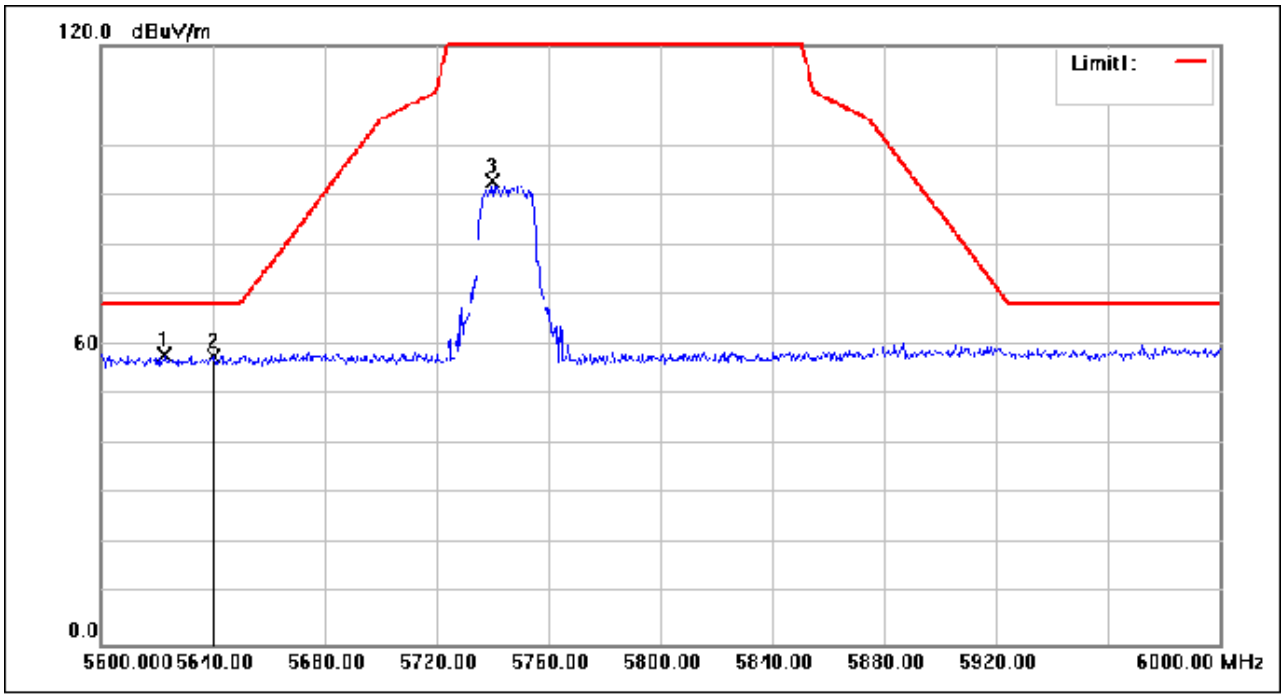
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5807.600	104.69	-16.58	88.11	135.00	-46.89	peak
2	5932.000	75.41	-16.06	59.35	68.20	-8.85	peak
3	5981.600	75.83	-15.86	59.97	68.20	-8.23	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



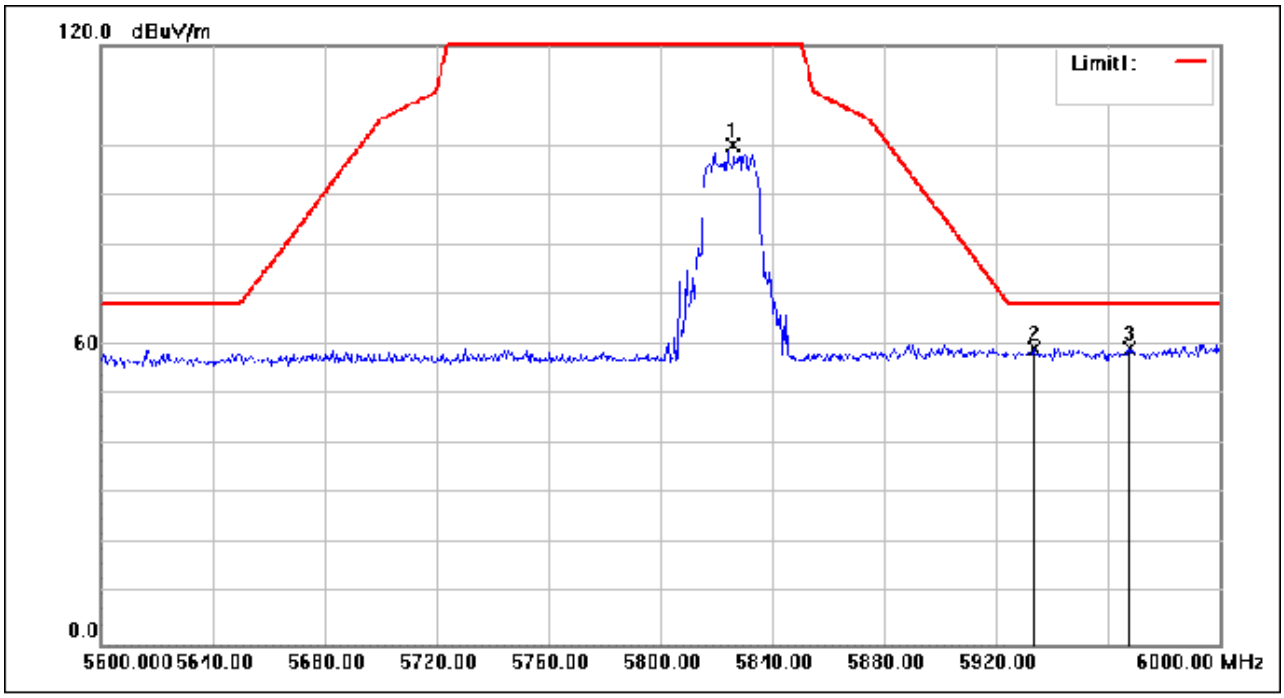
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5629.200	75.27	-17.32	57.95	68.20	-10.25	peak
2	5635.600	75.68	-17.29	58.39	68.20	-9.81	peak
3	5747.200	118.62	-16.83	101.79	135.00	-33.21	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



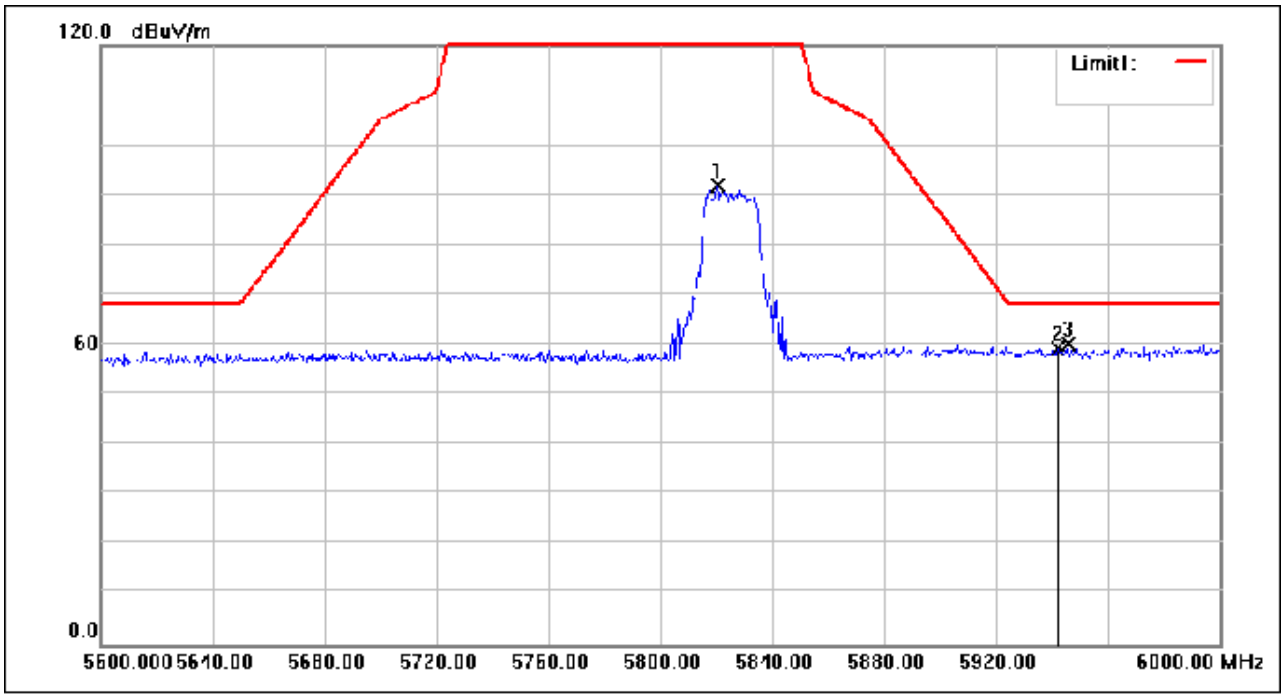
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5622.800	75.30	-17.35	57.95	68.20	-10.25	peak
2	5640.000	75.06	-17.27	57.79	68.20	-10.41	peak
3	5740.000	109.57	-16.86	92.71	135.00	-42.29	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



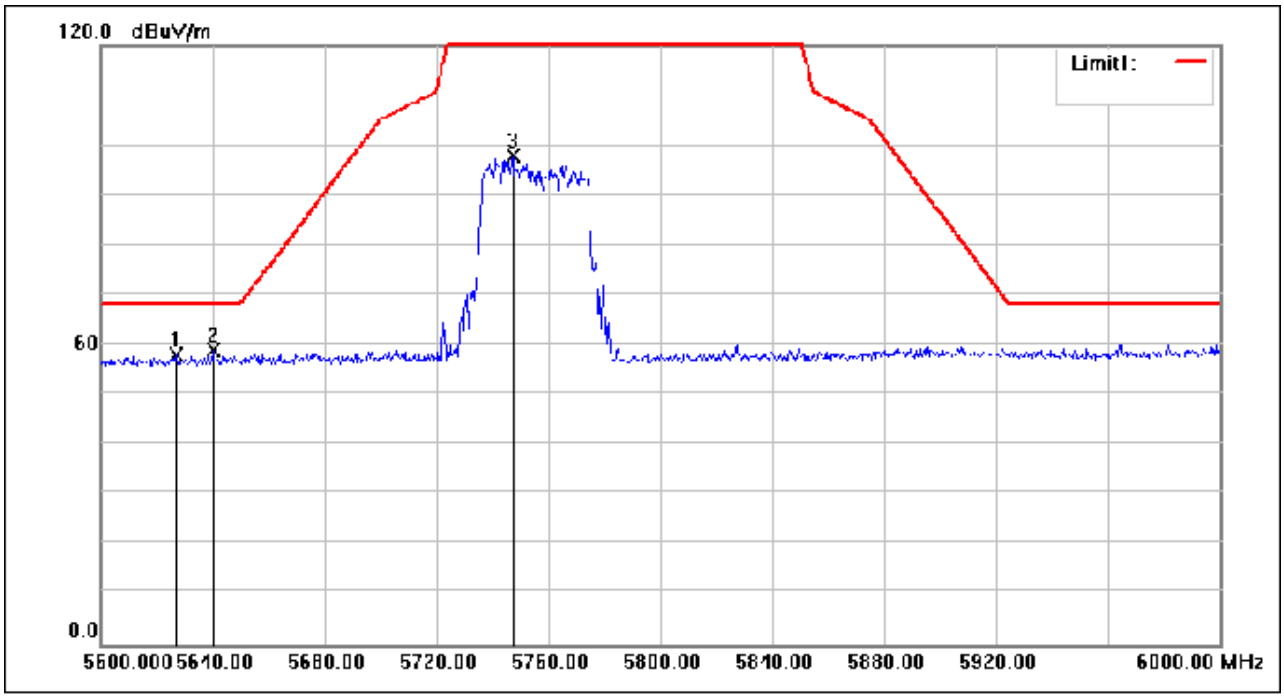
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5826.000	116.53	-16.51	100.02	135.00	-34.98	peak
2	5933.600	75.39	-16.05	59.34	68.20	-8.86	peak
3	5967.600	75.14	-15.92	59.22	68.20	-8.98	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



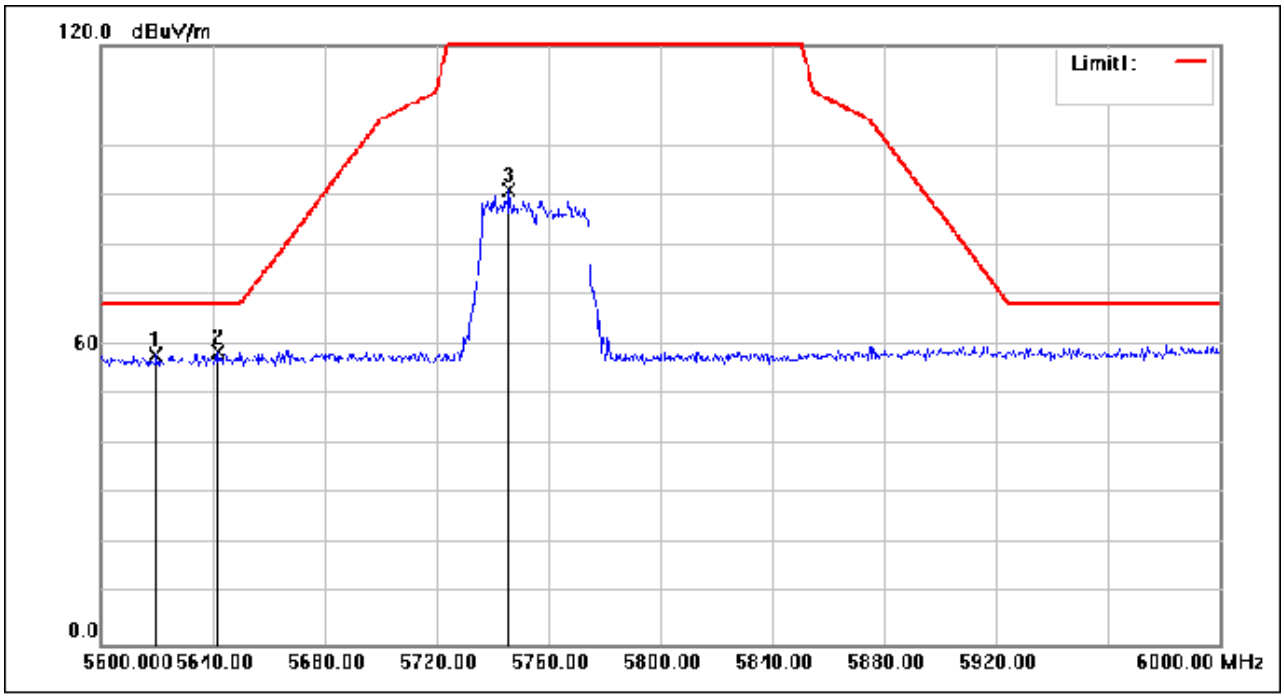
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5820.400	108.47	-16.53	91.94	135.00	-43.06	peak
2	5942.000	75.34	-16.02	59.32	68.20	-8.88	peak
3	5945.600	76.04	-16.01	60.03	68.20	-8.17	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



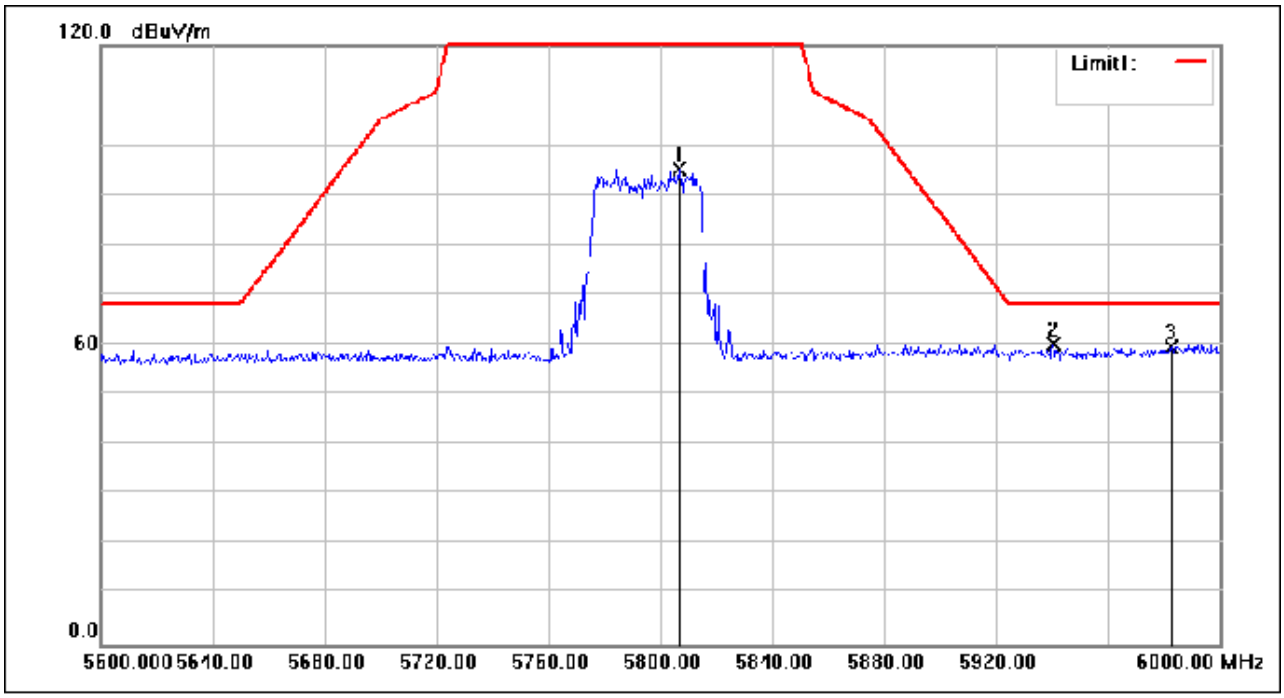
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5626.800	75.43	-17.33	58.10	68.20	-10.10	peak
2	5640.000	76.25	-17.27	58.98	68.20	-9.22	peak
3	5747.200	114.66	-16.83	97.83	135.00	-37.17	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



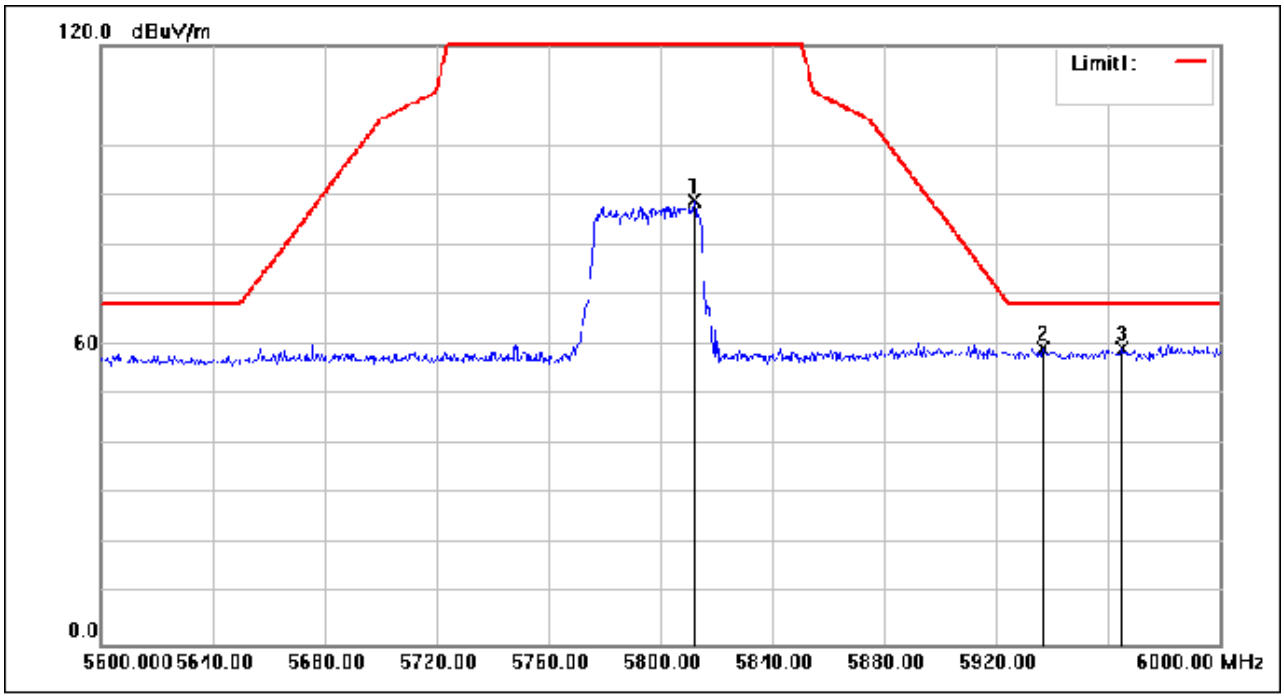
No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5619.600	75.39	-17.36	58.03	68.20	-10.17	peak
2	5642.000	75.83	-17.27	58.56	68.20	-9.64	peak
3	5746.000	108.04	-16.84	91.20	135.00	-43.80	peak

Test Mode: 06; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5806.400	111.85	-16.59	95.26	135.00	-39.74	peak
2	5940.400	76.18	-16.03	60.15	68.20	-8.05	peak
3	5982.400	75.32	-15.85	59.47	68.20	-8.73	peak

Test Mode: 06; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5812.000	105.37	-16.56	88.81	135.00	-46.19	peak
2	5936.800	75.41	-16.04	59.37	68.20	-8.83	peak
3	5965.200	75.24	-15.93	59.31	68.20	-8.89	peak

7.6 Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

7.6.1 E.U.T. Operation

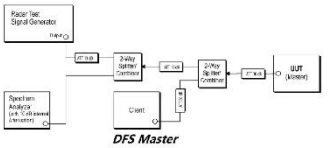
Operating Environment:

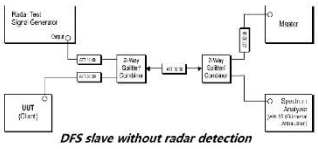
Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

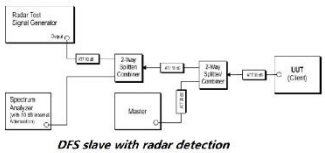
7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	Normal operating_Keep the EUT communication with the companion device.

7.6.3 Test Setup Diagram







7.6.4 Measurement Procedure and Data

1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.

2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.

3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.

4) EUT will associate with the master at channel. The file “iperf.exe” specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.

5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.

6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.

7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

7.7 Duty Cycle

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

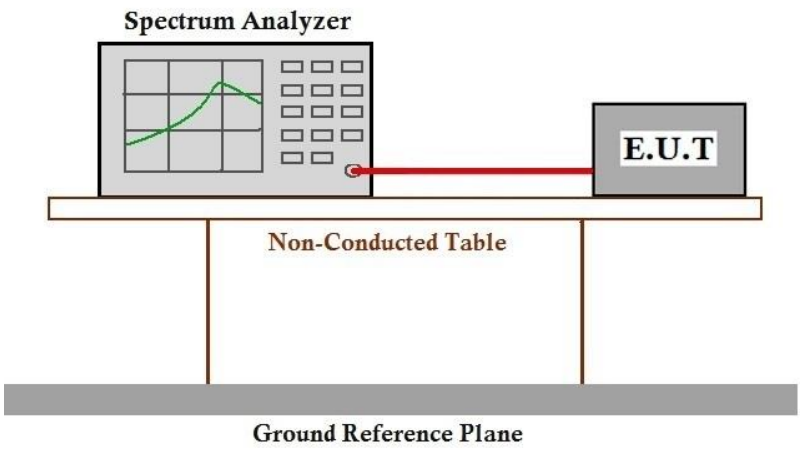
7.7.1 E.U.T. Operation

Operating Environment:
Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	05	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	06	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/ac/ax 20/40, 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 99% Bandwidth

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

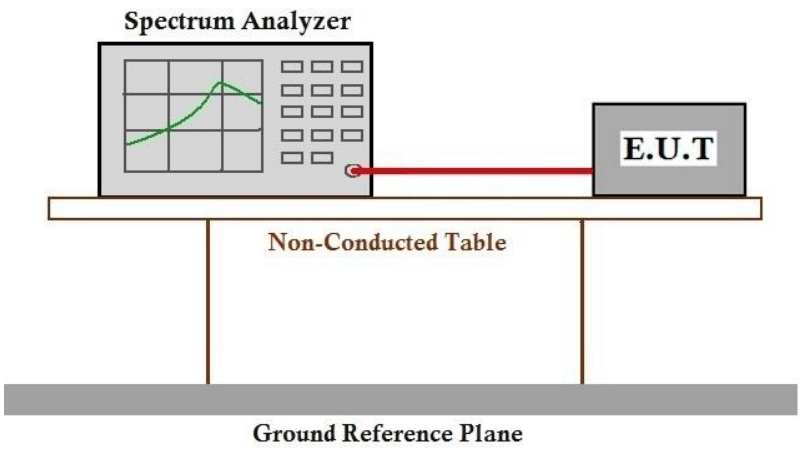
7.8.1 E.U.T. Operation

Operating Environment:
Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	05	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	06	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.9 26dB Emission bandwidth

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

7.9.1 E.U.T. Operation

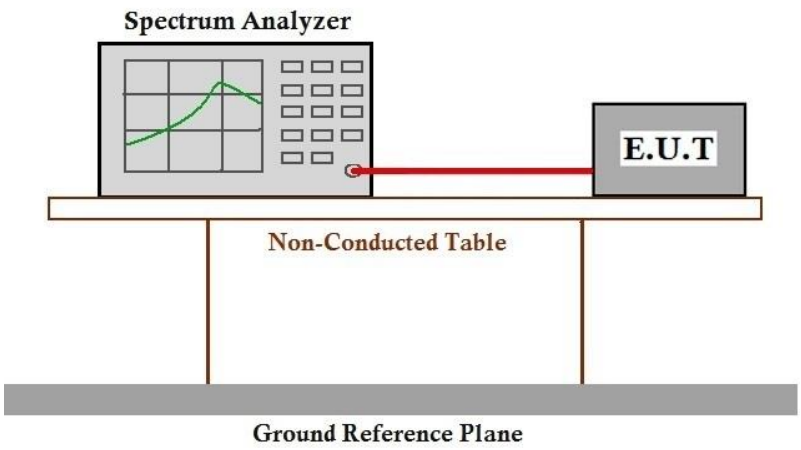
Operating Environment:

Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	05	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	06	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

Please Refer to Appendix for Details

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

Test Requirement 47 CFR Part 15, Subpart E 15.407 (e)
Test Method: KDB 789033 D02 II C 2

Limit:

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

7.10.1 E.U.T. Operation

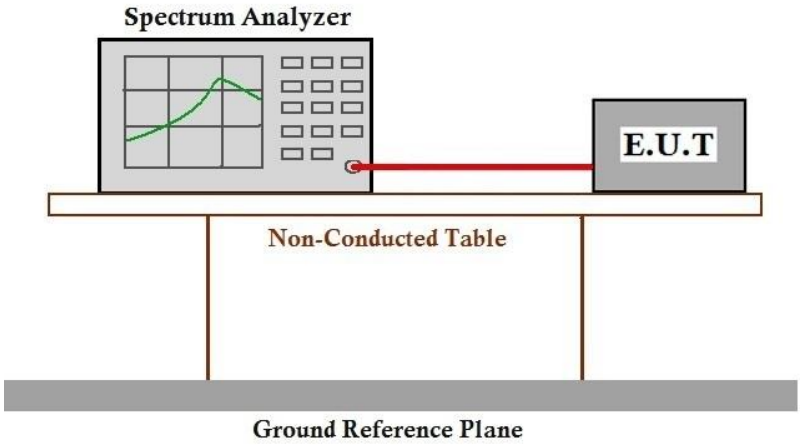
Operating Environment:

Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	06	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram



7.10.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.11 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart E 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.

7.11.1 E.U.T. Operation

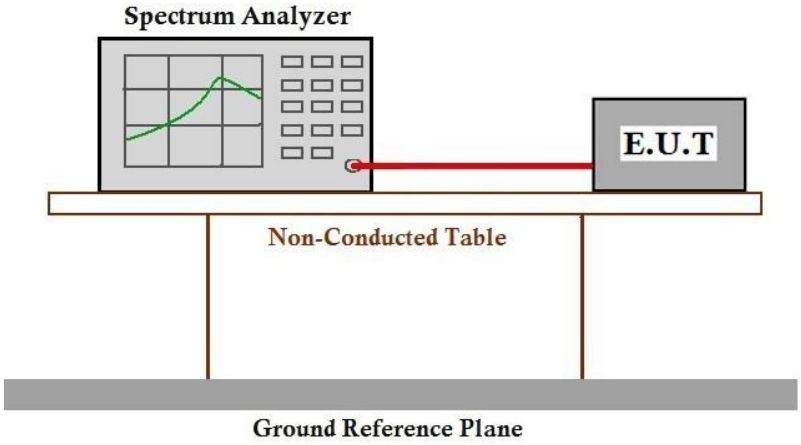
Operating Environment:

Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

7.11.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	05	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	06	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.11.3 Test Setup Diagram



7.11.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.12 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)
Test Method: ANSI C63.10 (2013) Section 6.8

7.12.1 E.U.T. Operation

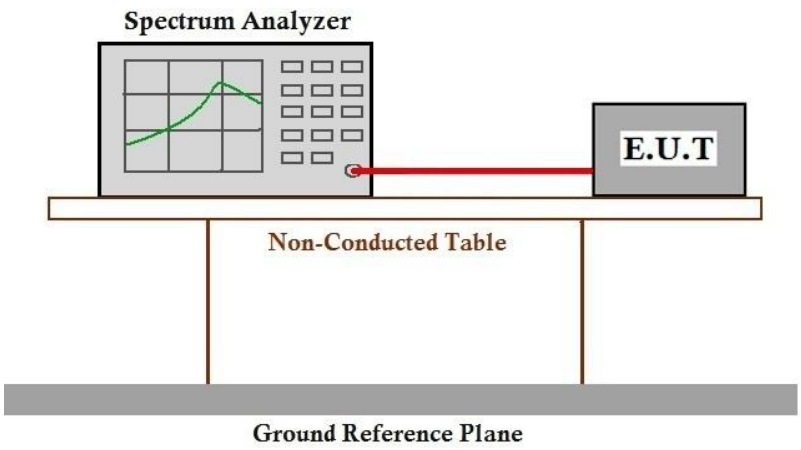
Operating Environment:

Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

7.12.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	05	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/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	06	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/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.12.3 Test Setup Diagram



7.12.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.13 Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

7.13.1 E.U.T. Operation

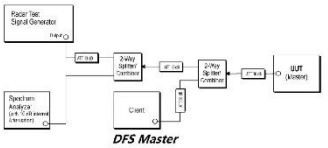
Operating Environment:

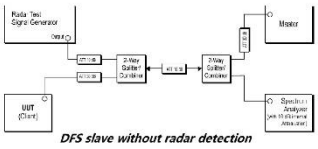
Temperature: 26 °C Humidity: 52.8 % RH Atmospheric Pressure: 1010 mbar

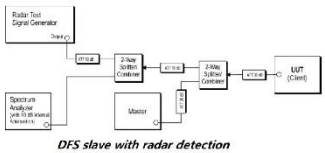
7.13.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	Normal operating_Keep the EUT communication with the companion device.

7.13.3 Test Setup Diagram







7.13.4 Measurement Procedure and Data

1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.

2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.

3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.

4) EUT will associate with the master at channel. The file “iperf.exe” specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.

5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.

6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.

7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2407001419AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2407001419AT

10 Appendix

1. Duty Cycle

1.1 Test Result

1.1.1 Ant1

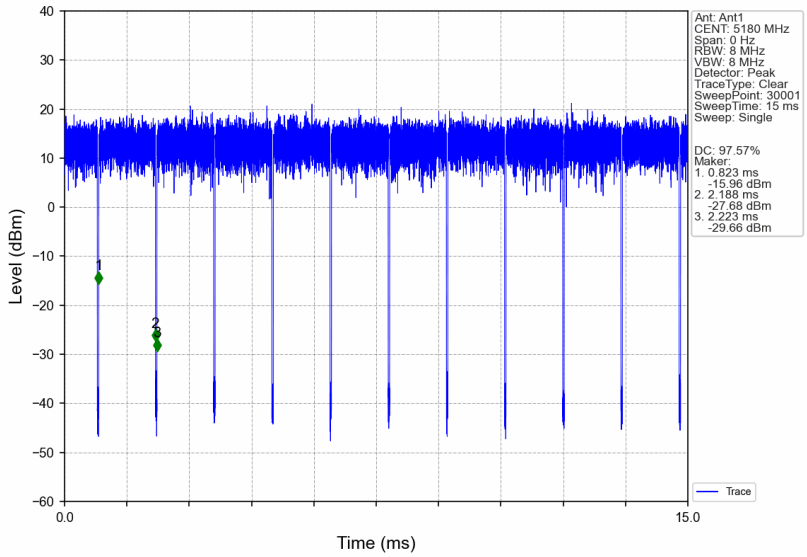
Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	/	/	1.366	1.400	97.57	0.11	0.04
		5200	/	/	1.366	1.400	97.57	0.11	0.03
		5240	/	/	1.366	1.467	93.12	0.31	0.03
		5260	/	/	1.366	1.467	93.12	0.31	0.03
		5300	/	/	1.366	1.467	93.12	0.31	0.03
		5320	/	/	1.366	1.468	93.05	0.31	0.03
		5500	/	/	1.366	1.467	93.12	0.31	0.03
		5580	/	/	1.363	1.467	92.91	0.32	0.03
		5700	/	/	1.367	1.467	93.18	0.31	0.03
		5745	/	/	1.366	1.400	97.57	0.11	0.04
		5785	/	/	1.366	1.400	97.57	0.11	0.07
		5825	/	/	1.365	1.568	87.05	0.60	5.99
802.11ac (VHT20)	SISO	5180	/	/	1.278	1.313	97.33	0.12	0.03
		5200	/	/	1.279	1.380	92.68	0.33	0.07
		5240	/	/	1.276	1.379	92.53	0.34	0.07
		5260	/	/	1.279	1.380	92.68	0.33	0.03
		5300	/	/	1.278	1.379	92.68	0.33	0.03
		5320	/	/	1.278	1.379	92.68	0.33	0.03
		5500	/	/	1.278	1.379	92.68	0.33	0.03
		5580	/	/	1.279	1.585	80.69	0.93	12.07
		5700	/	/	1.279	1.379	92.75	0.33	0.03
		5745	/	/	1.278	1.312	97.41	0.11	0.03
		5785	/	/	1.279	1.313	97.41	0.11	0.03
		5825	/	/	1.278	1.312	97.41	0.11	0.04
802.11ac (VHT40)	SISO	5190	/	/	0.640	0.742	86.25	0.64	0.06
		5230	/	/	0.641	0.743	86.27	0.64	0.06
		5270	/	/	0.641	0.675	94.96	0.22	0.03
		5310	/	/	0.642	0.760	84.47	0.73	0.00
		5510	/	/	0.641	0.760	84.34	0.74	0.03
		5550	/	/	0.640	0.742	86.25	0.64	0.03
		5670	/	/	0.642	0.742	86.52	0.63	0.03
		5755	/	/	0.640	0.675	94.81	0.23	0.03
		5795	/	/	0.640	0.675	94.81	0.23	0.04

802.11ax (HE20)	SISO	5180	RU242	Left	1.001	1.035	96.71	0.15	0.03
		5200	RU242	Left	0.999	1.102	90.65	0.43	0.03
		5240	RU242	Left	1.000	1.102	90.74	0.42	0.03
		5260	RU242	Left	1.000	1.036	96.53	0.15	0.04
		5300	RU242	Left	1.002	1.357	73.84	1.32	0.02
		5320	RU242	Left	1.001	1.103	90.75	0.42	0.06
		5500	RU242	Left	1.001	1.103	90.75	0.42	0.03
		5580	RU242	Left	1.001	1.102	90.83	0.42	0.03
		5700	RU242	Left	1.000	1.103	90.66	0.43	0.00
		5745	RU242	Left	1.001	1.035	96.71	0.15	0.04
		5785	RU242	Left	1.001	1.035	96.71	0.15	0.04
		5825	RU242	Left	1.000	1.199	83.40	0.79	7.29
802.11ax (HE40)	SISO	5190	RU484	Left	0.532	0.567	93.83	0.28	0.04
		5230	RU484	Left	0.532	0.567	93.83	0.28	0.04
		5270	RU484	Left	0.533	0.634	84.07	0.75	0.03
		5310	RU484	Left	0.532	0.651	81.72	0.88	0.04
		5510	RU484	Left	0.533	0.652	81.75	0.88	0.04
		5550	RU484	Left	0.532	0.633	84.04	0.75	0.01
		5670	RU484	Left	0.533	0.634	84.07	0.75	0.03
		5755	RU484	Left	0.533	0.567	94.00	0.27	0.04
		5795	RU484	Left	0.532	0.567	93.83	0.28	0.03

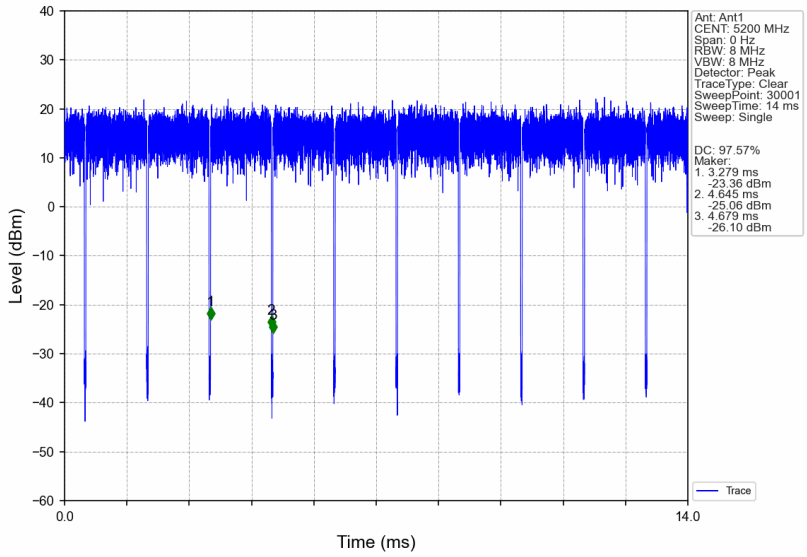
1.2 Test Graph

1.2.1 Ant1

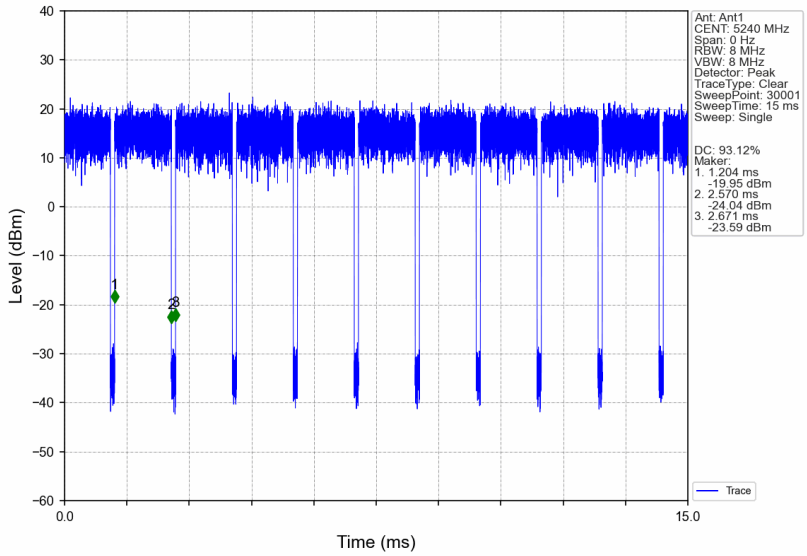
802.11a_LCH_5180MHz_Ant1_NTNV



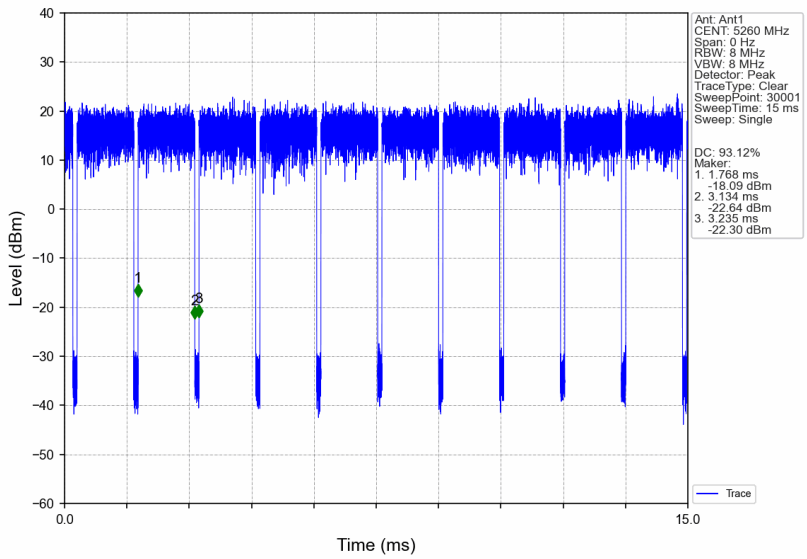
802.11a_MCH_5200MHz_Ant1_NTNV



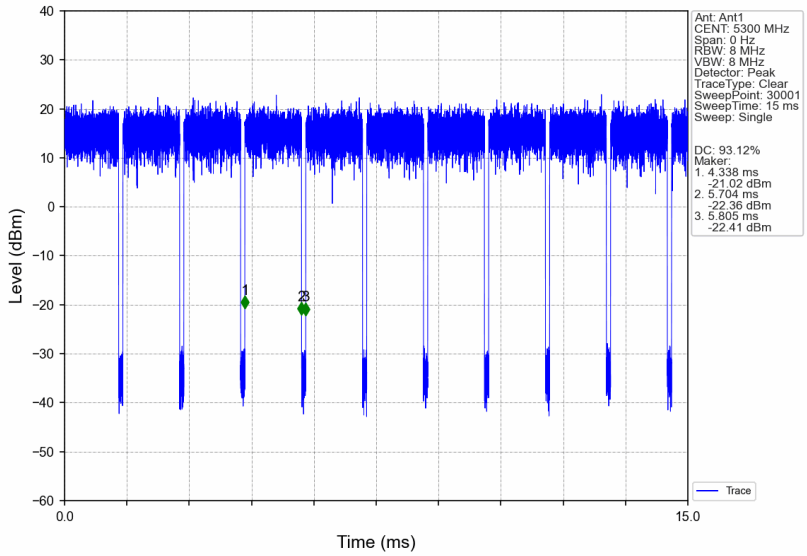
802.11a_HCH_5240MHz_Ant1_NTNV



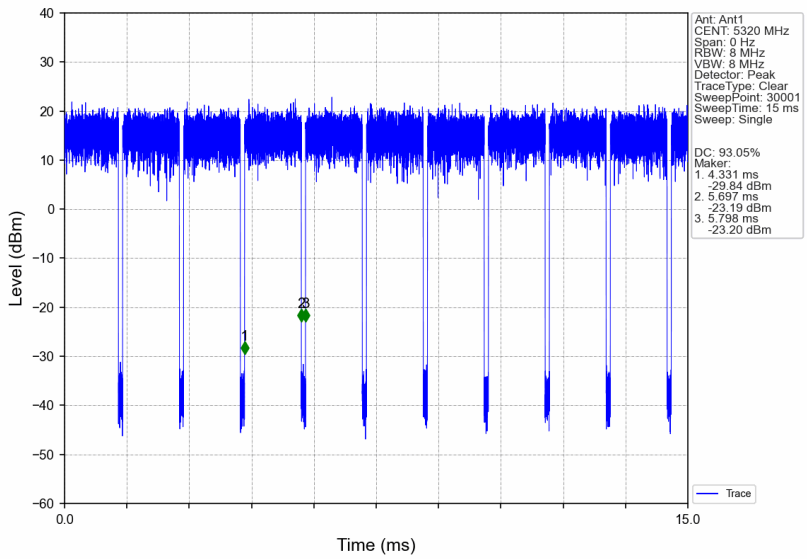
802.11a_LCH_5260MHz_Ant1_NTNV



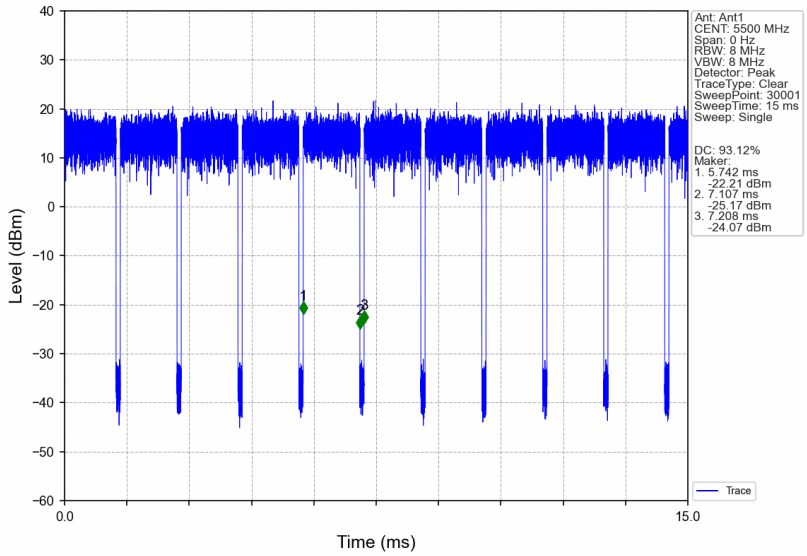
802.11a_MCH_5300MHz_Ant1_NTNV



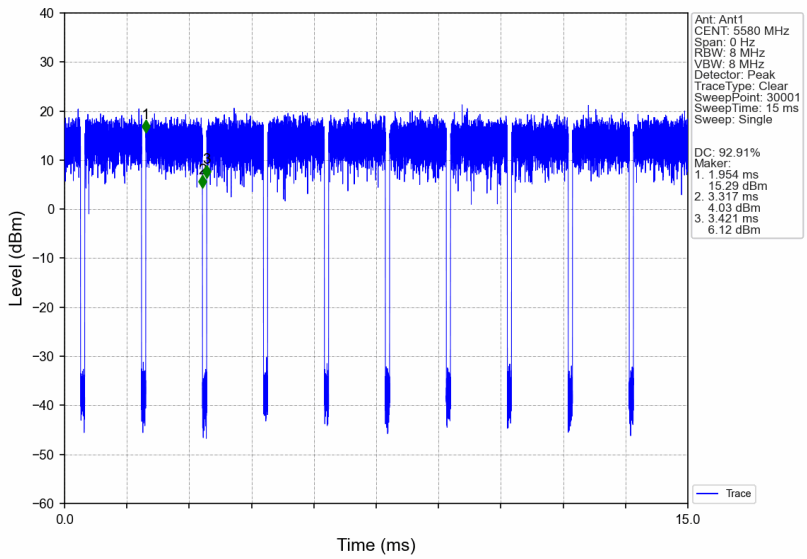
802.11a_HCH_5320MHz_Ant1_NTNV



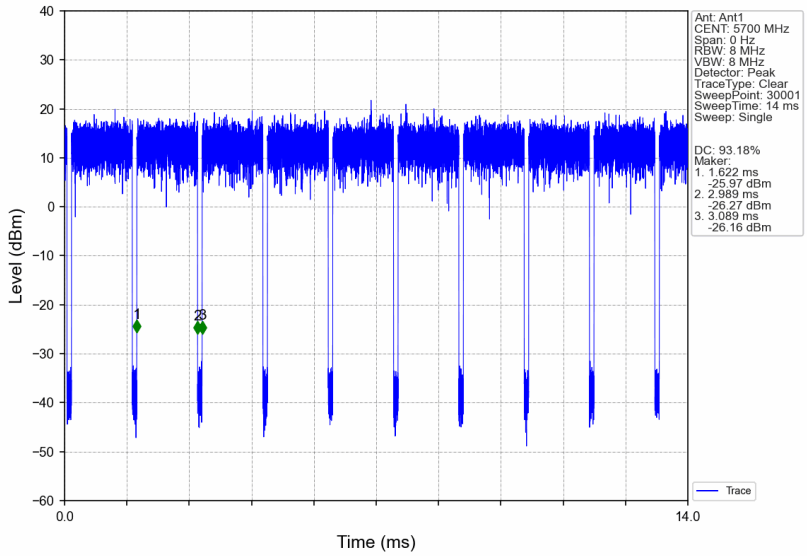
802.11a_LCH_5500MHz_Ant1_NTNV



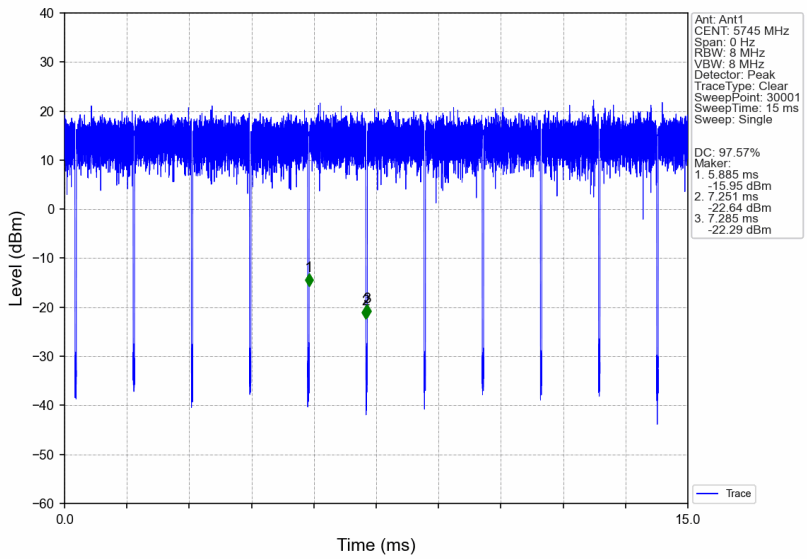
802.11a_MCH_5580MHz_Ant1_NTNV



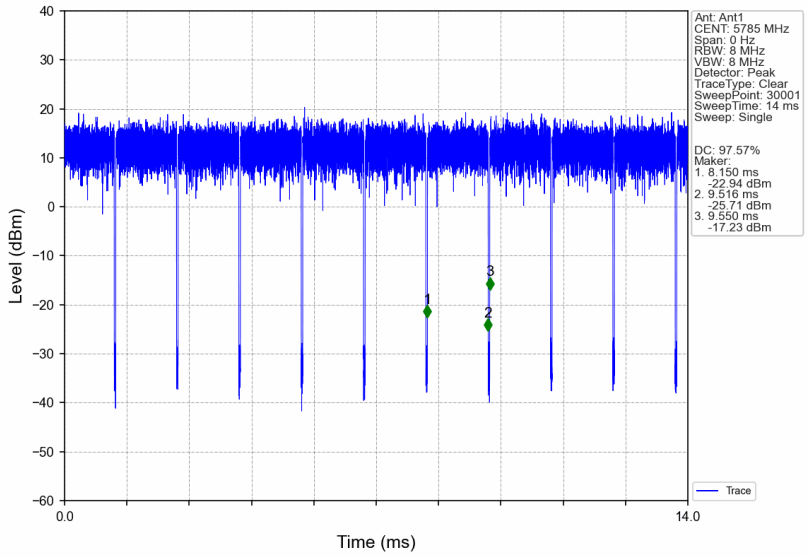
802.11a_HCH_5700MHz_Ant1_NTNV



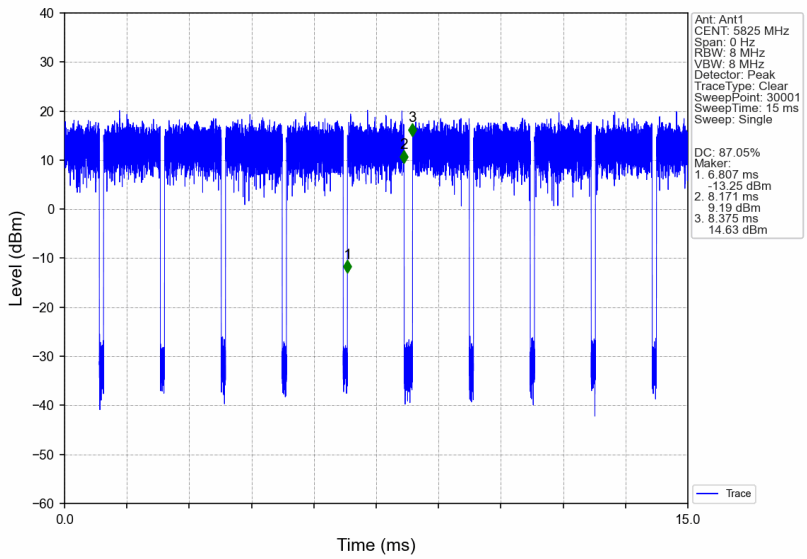
802.11a_LCH_5745MHz_Ant1_NTNV



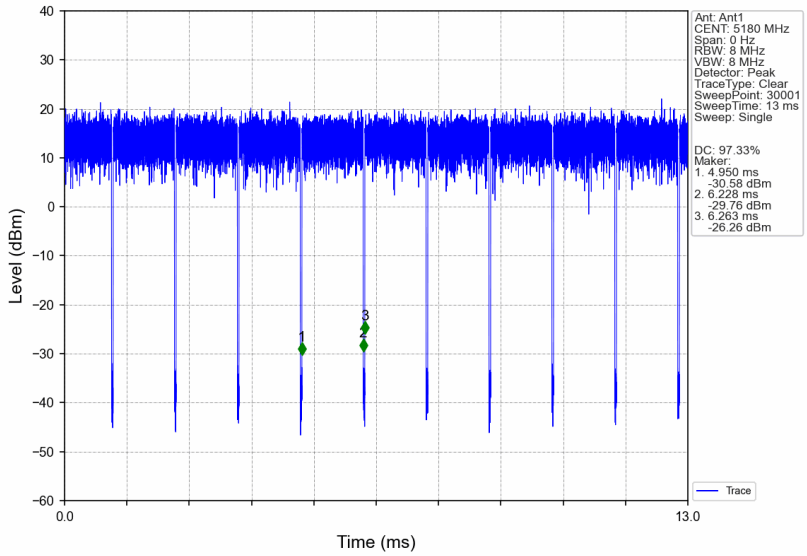
802.11a_MCH_5785MHz_Ant1_NTNV



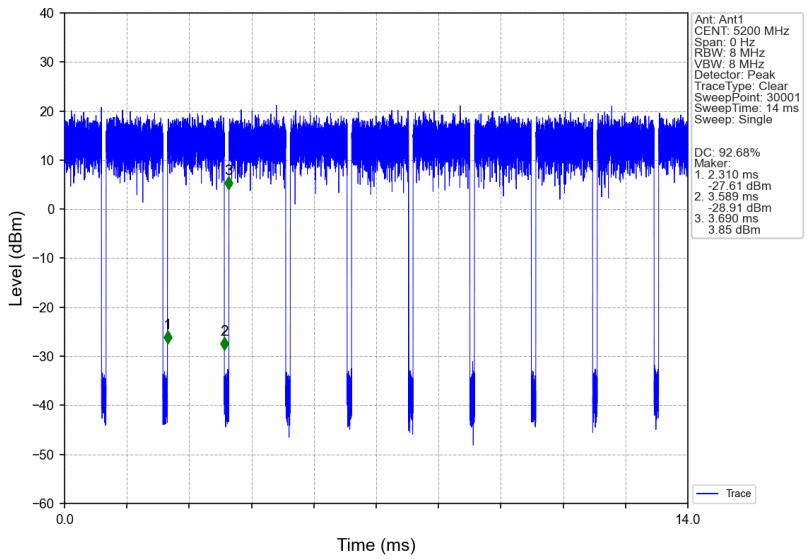
802.11a_HCH_5825MHz_Ant1_NTNV



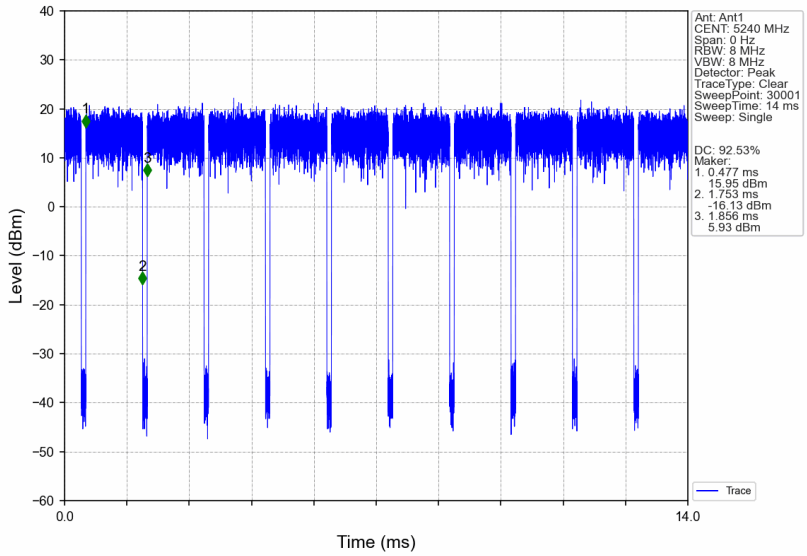
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



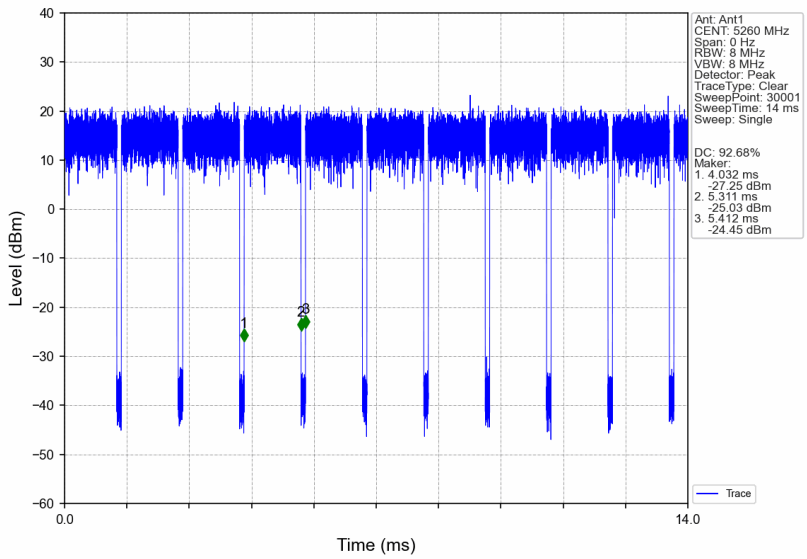
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



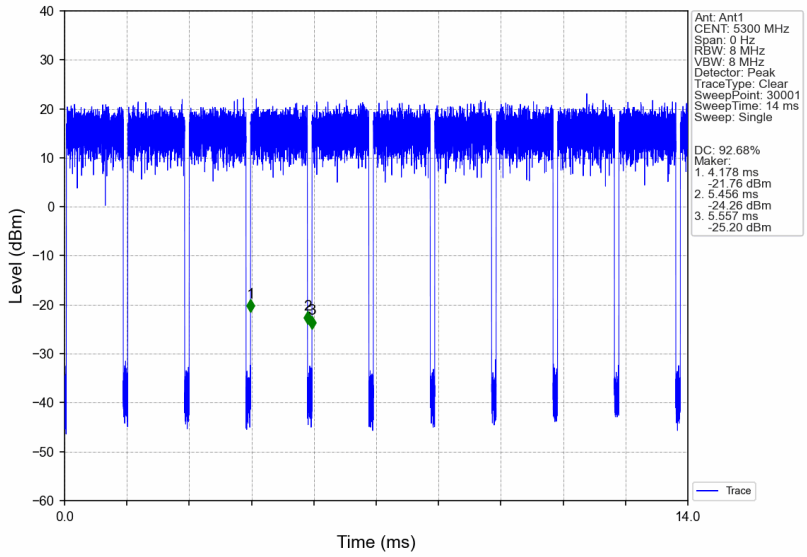
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



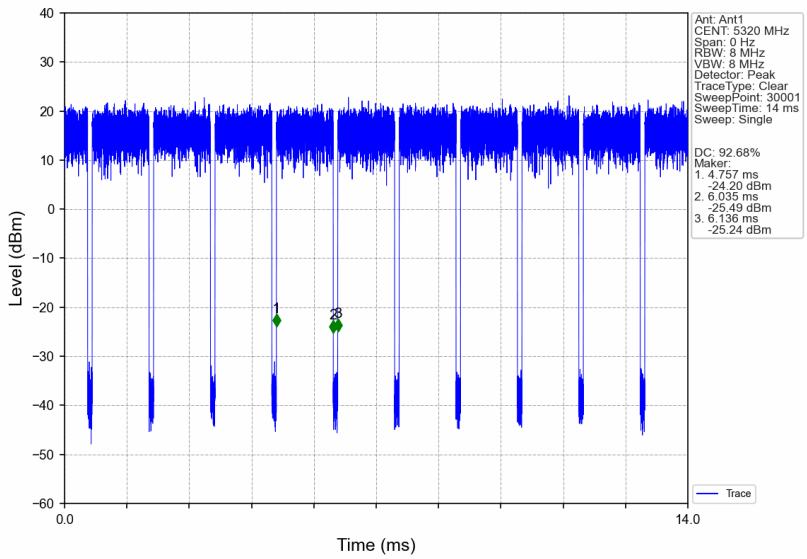
802.11ac(VHT20)_LCH_5260MHz_Ant1_NTNV



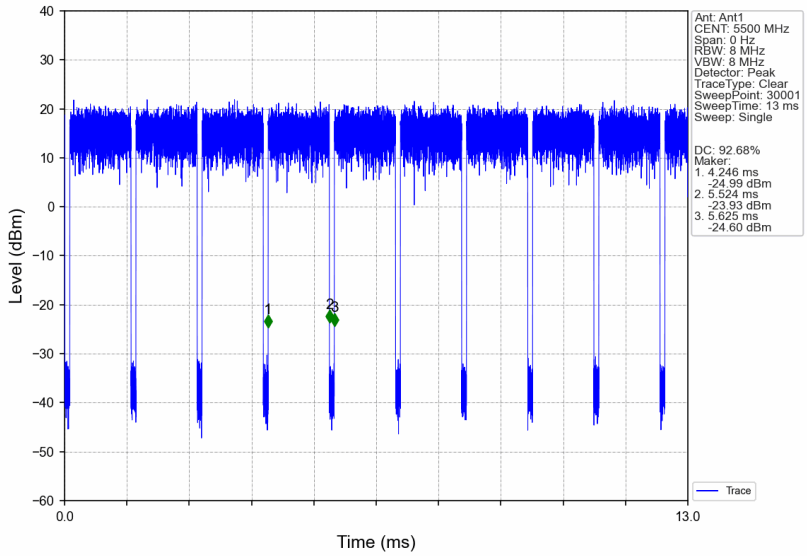
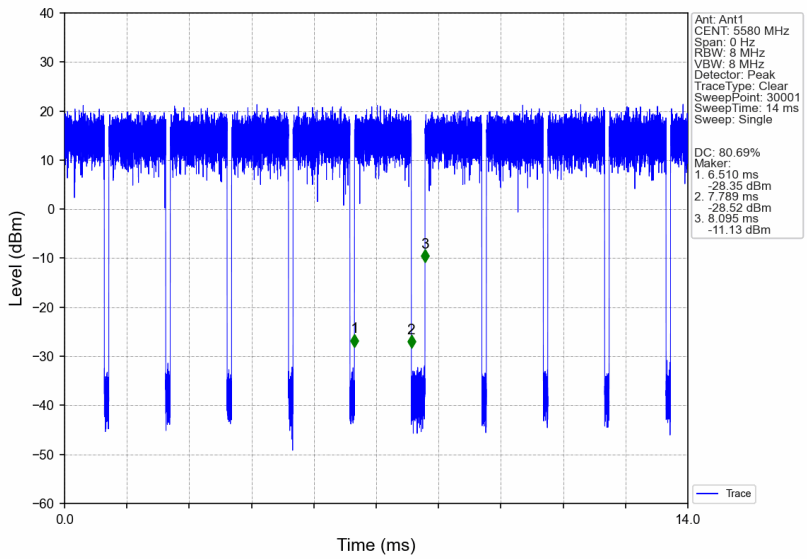
802.11ac(VHT20)_MCH_5300MHz_Ant1_NTNV



802.11ac(VHT20)_HCH_5320MHz_Ant1_NTNV



802.11ac(VHT20)_LCH_5500MHz_Ant1_NTNV



802.11ac(VHT20)_MCH_5580MHz_Ant1_NTNV