

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240600099305

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TEST REPORT

Application No. : KSCR2406000993AT
FCC ID: 2AEIM-TAF68E
Applicant: TESLA INC
Address of Applicant: 3500 Deer Creek Rd, Palo Alto, CA 94304 USA
Manufacturer: TESLA INC
Address of Manufacturer: 3500 Deer Creek Rd, Palo Alto, CA 94304 USA
Equipment Under Test (EUT):
EUT Name: Wi-Fi & Bluetooth Module
Model No.: TAF68E
Trade Mark: Tesla
Standards: FCC 47 CFR Part 15, Subpart E
Date of Receipt: 2024-06-04
Date of Test: 2024-06-05 to 2024-07-31
Date of Issue: 2024-08-02

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

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Revision Record			
Version	Description	Date	Remark
00	Original	2024-08-02	/

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

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1 Test Summary

Test Item	FCC Rule No.	Test Requirements	Test Result	Result
Antenna Requirement	15.203/15.407(a)	--	Clause 5.1	PASS
AC Power Line Conducted Emissions	15.407(b)(8)	< FCC 15.207 limits	Clause 5.2	PASS
Duty Cycle	--	No limit.	Clause 5.3	For Report Purpose
Maximum e.i.r.p.	15.407(a)(8)	< 24dBm over the frequency band of Operation, e.i.r.p.(Controlled by indoor AP)	Clause 5.4	PASS
26dB Emission Bandwidth	15.407(a)(10)	The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.	Clause 5.5	PASS
99% Occupied Bandwidth	-	No limit.	Clause 5.6	For Report Purpose
Maximum Power Spectral Density	15.407(a)(8)	< -1dBm/MHz e.i.r.p. (Controlled by indoor AP)	Clause 5.7	PASS
In-Band Emissions	15.407(b)(5)	EUT must meet the limits detailed in 15.407(b)(6)	Clause 5.8	PASS
Contention Based Protocol	15.407(d)(6)	EUT must detect AWGN signal with 90% (or better) certainty	Clause 5.9	Note
Unwanted Emissions that fall Out of the Restricted Bands (Radiated)	15.407(b)(6) 15.205, 15.209	< -27dBm/MHz e.i.r.p. outside of the 5.925 - 7.125GHz band	Clause 5.10	PASS
Unwanted Emissions in the Restricted Bands (Radiated)	15.407(b)(6) 15.205, 15.209	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Clause 5.11	PASS

Note: The competition-based protocol test was performed by Hefei Panwin Technology Co., Ltd, Please refer to PD20240065-RF3A for test data.

2 General Information

2.1 Details of Client

Applicant:	TESLA INC
Address of Applicant:	3500 Deer Creek Rd, Palo Alto, CA 94304 USA
Manufacturer:	TESLA INC
Address of Manufacturer:	3500 Deer Creek Rd, Palo Alto, CA 94304 USA

2.2 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.

2.3 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.

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2.4 General Description of EUT

Power Supply:	DC 3.3-4.8V,Typ: 3.85V	
IEEE 802.11 WLAN Mode Supported:	☒ 802.11a (20 MHz channel bandwidth), ☒ 802.11ax (20 MHz channel bandwidth) ☒ 802.11ax (40 MHz channel bandwidth) ☒ 802.11ax (80 MHz channel bandwidth) ☒ 802.11ax (160 MHz channel bandwidth)	
Operation Frequency:	IEEE 802.11 a/ax(HE20/40/80/160): 5925 MHz ~ 6425 MHz IEEE 802.11 a/ax(HE20/40/80/160): 6425 MHz ~ 6525 MHz IEEE 802.11 a/ax(HE20/40/80/160): 6525 MHz ~ 6875 MHz IEEE 802.11 a/ax(HE20/40/80/160): 6875 MHz ~ 7125 MHz	
Type of Modulation:	OFDM/OFDMA	
Antenna Type:	☒ External, ☐ Integrated	
Antenna Ports:	☒ Ant 1, ☒ Ant 2	
Smart System:	☒ SISO	802.11a/ax
	☒ MIMO	802.11ax: 2Tx & 2Rx
Antenna Gain:	UNII-5: ANT5(WIFI0): 3.7dBi, ANT6(WIFI1): 2.9dBi(Provided by the manufacturer) UNII-6: ANT5(WIFI0): 2.2dBi, ANT6(WIFI1): 2.2dBi(Provided by the manufacturer) UNII-7: ANT5(WIFI0): 2.8dBi, ANT6(WIFI1): 2.8dBi(Provided by the manufacturer) UNII-8: ANT5(WIFI0): 3.2dBi, ANT6(WIFI1): 3.2dBi(Provided by the manufacturer) Directional Gain: UNII-5:3.32dBi (The transmitted signal is uncorrelated) UNII-6:2.2dBi (The transmitted signal is uncorrelated) UNII-7:2.8dBi (The transmitted signal is uncorrelated) UNII-8:3.2dBi (The transmitted signal is uncorrelated)	
RF Cable:	1.8dB	
Remark: 1. As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.		

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Remark:

In FCC 15.31, for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table, and the selected channel to perform the test as below:

Frequency range over which device operates	Number of Measurement Frequencies Required	Location of Measurement Frequency in Band of Operation
1 MHz or less	1	centre
1 MHz to 10 MHz	2	1 near high end, 1 near low end
Greater than 10 MHz	3	1 near high end, 1 near centre, 1 near low end

For UNII-5:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/ax 20MHz	The Lowest channel	5955
	The Middle channel	6175
	The Highest channel	6415
IEEE 802.11ax 40MHz	The Lowest channel	5965
	The Middle channel	6165
	The Highest channel	6405
IEEE 802.11ax 80MHz	The Lowest channel	5985
	The Middle channel	6145
	The Highest channel	6385
IEEE 802.11ax160MHz	The Lowest channel	6025
	The Middle channel	6185
	The Highest channel	6345

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For UNII-6:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/ax 20MHz	The Lowest channel	6435
	The Middle channel	6475
	The Highest channel	6515
IEEE 802.11ax 40MHz	The Lowest channel	6445
	The Highest channel	6485
	Straddle	6525
IEEE 802.11ax 80MHz	The Middle channel	6465
IEEE 802.11ax160MHz	Straddle	6505

For UNII-7:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/ax 20MHz	The Lowest channel	6535
	The Middle channel	6695
	The Highest channel	6855
IEEE 802.11ax 40MHz	The Lowest channel	6565
	The Middle channel	6685
	The Highest channel	6845
IEEE 802.11ax 80MHz	Straddle	6545
	The Lowest channel	6625
	The Middle channel	6705
	The Highest channel	6785
	Straddle	6865
IEEE 802.11ax160MHz	The Middle channel	6665
	Straddle	6825

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For UNII-8:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/ax 20MHz	The Lowest channel	6895
	The Middle channel	6995
	The Highest channel	7115
IEEE 802.11ax 40MHz	Straddle	6885
	The Lowest channel	6925
	The Middle channel	7005
	The Highest channel	7085
IEEE 802.11ax 80MHz	The Lowest channel	6945
	The Highest channel	7025
IEEE 802.11ax160MHz	The Middle channel	6985

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2.5 Test Environment and Mode

Environment Parameter	101.0 kPa Selected Values During Tests	
Relative Humidity	44-46 % RH Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	23-25	3.85
Remark: NV: Normal Voltage NT: Normal Temperature		

2.6 Description of Support Units

Description	Manufacturer	Model No.
Quectel	Mother board	V2X&5G-EVB
Qualcomm	Test Software	QRCT4 tool
Remark: all above the information of table are provided by client.		

2.7 Worst-case configuration and mode

Pre-scan / Final test	Mode Code	Description
Final test	12	TX mode (U-NII-5) _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 802.11ax 20/40/80/160, Only the data of worst case is recorded in the report.
Final test	13	TX mode (U-NII-6) _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 802.11ax 20/40/80/160, Only the data of worst case is recorded in the report.
Final test	14	TX mode (U-NII-7) _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 802.11ax 20/40/80/160, Only the data of worst case is recorded in the report.
Final test	15	TX mode (U-NII-8) _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 802.11ax 20/40/80/160, Only the data of worst case is recorded in the report.

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2.8 Power level setting using in test:

11a			11ax(HEW20)			11ax4(HEW40)		
Channel	ant1	ant2	Channel	ant1	ant2	Channel	ant1	ant2
5955	10	10	5955	7	7	5965	8	8
6175	7	7	6175	6	6	6165	7	7
6415	6	6	6415	4	4	6405	6	6
6435	6	6	6435	4	4	6445	6	6
6475	6	6	6475	4	4	6485	6	6
6515	6	6	6515	4	4	6525	6	6
6535	6	6	6535	3	3	6565	6	6
6695	6	6	6695	4	4	6685	6	6
6855	6	6	6855	4	4	6845	6	6
6875	6	6	6875	4	4	6885	6	6
6895	6	6	6895	3	3	6925	8	8
6995	6	6	6995	3	3	7005	6	6
7115	6	6	7115	-3	-3	7085	6	6
11ax(HEW80)			11ax(HEW160)					
Channel	ant1	ant2	Channel	ant1	ant2			
5985	10	10	6025	12	12			
6145	9	9	6185	11	11			
6385	9	9	6345	11	11			
6465	9	9	6505	11	11			
6545	9	9	6665	11	11			
6625	9	9	6825	11	11			
6705	9	9	6985	11	11			
6785	9	9						
6865	9	9						
6945	9	9						
7025	9	9						

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3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4 x 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.		

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4 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	Farad	EZ-EMC	/	N.C.R	N.C.R
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/24/2023	08/23/2024
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/24/2023	08/23/2024
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	08/24/2023	08/23/2024
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/24/2023	08/23/2024
7	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/24/2023	08/23/2024
8	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	03/19/2024	03/18/2025
9	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/24/2023	08/23/2024
10	Switcher	TST	FY562	KUS2001M001-4	01/15/2024	01/14/2025
11	AC Power Source	EXTECH	6605	KS301178	N.C.R	N.C.R
12	DC Power Supply	Aglient	E3632A	KS301180	N.C.R	N.C.R
13	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	01/15/2024	01/14/2025
14	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	08/24/2023	08/23/2024
15	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	03/19/2024	03/18/2025
16	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	08/24/2023	08/23/2024
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	03/19/2024	03/18/2025
3	Signal Generator	Agilent	E8257C	KS301066	08/24/2023	08/23/2024
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	08/24/2023	08/23/2024
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	08/24/2023	08/23/2024
12	RE Test Cable	REBES	/	CZ301097	08/24/2023	08/23/2024



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		MICROWAVE				
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	03/19/2024	03/18/2025
14	Software	Faratronic	EZ_EM C-v 3A1	/	NCR	NCR
15	Software	ESE	E3_V 6.111221a	/	NCR	NCR

5 Test results and Measurement Data

5.1 Antenna Requirement

5.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

5.1.2 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 antenna is:

UNII-5: 3.7dBi (WIFI0); 2.9dBi (WIFI1);

UNII-6: 2.2dBi (WIFI0); 2.2dBi (WIFI1);

UNII-7: 2.8dBi (WIFI0); 2.8dBi (WIFI1);

UNII-8: 3.2dBi (WIFI0); 3.2dBi (WIFI1).

Antenna location: Refer to internal photo.

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Directional Gain Calculations for MIMO:

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

Basic methodology with NANT transmit antennas, each with the same directional gain GANT dBi, being driven by NANT transmitter outputs of equal power. Directional gain is to be computed as follows:

- If any transmit signals are correlated with each other,
Directional gain = $G_{ANT} + 10 \log(NANT)$ dBi
- If all transmit signals are completely uncorrelated with each other,
Directional gain = G_{ANT}

Unequal antenna gains, with equal transmit powers. For antenna gains given by $G_1, G_2, \dots, G_N$ dBi

- If transmit signals are correlated, then
Directional gain = $10 \log[(10G_1/20 + 10G_2/20 + \dots + 10G_N/20)^2 / NANT]$ dBi [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]
- If all transmit signals are completely uncorrelated, then
Directional gain = $10 \log[(10G_1/10 + 10G_2/10 + \dots + 10G_N/10)/NANT]$ dBi

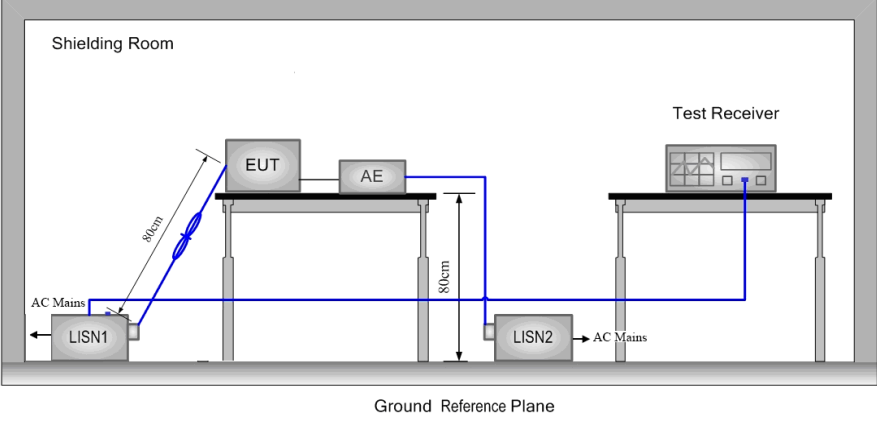
Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain.

All antennas have the same gain:

Operation Frequency	ANT5(WIFI0) (dBi)	ANT6(WIFI1) (dBi)	Directional gain For Power(dBi)	Directional gain For PSD(dBi)
5925 MHz to 6425 MHz	3.7	2.9	3.32	3.32
6425 MHz to 6525 MHz	2.2	2.2	2.20	2.20
6525 MHz to 6875 MHz	2.8	2.8	2.80	2.80
6875 MHz to 7115 MHz	3.2	3.2	3.20	3.20

5.2 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2013 Section 6.2		
Test Frequency Range:	150kHz to 30MHz		
Receiver Setup:	RBW = 9kHz, VBW = 30kHz		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		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.			
Test Procedure:	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 $50\Omega/50\mu\text{H} + 5\Omega$ 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: 2013 on conducted measurement.		

Test Setup:	 The diagram illustrates the test setup within a Shielding Room. A table is positioned on a Ground Reference Plane. On the table, an EUT (Equipment Under Test) and an AE (Antenna) are placed. A LISN1 (Line Impedance Stabilization Network) is connected to the AC Mains and the EUT via a 90cm cable. A LISN2 is connected to the AC Mains and the AE via an 80cm cable. A Test Receiver is connected to the AE. The entire setup is enclosed within a Shielding Room.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.
Final Test Mode:	Refer to section 2.7 for details. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 4 for details
Test Results:	Pass

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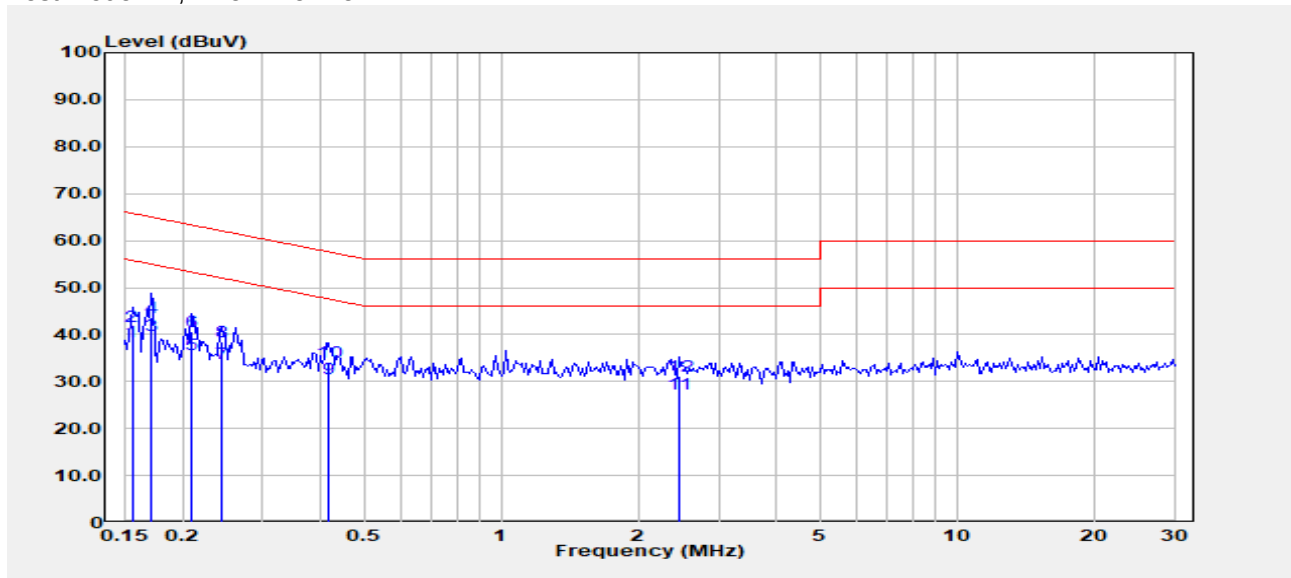
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Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Test Mode: 12; Line: Live line



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1549	18.25	20.23	38.48	55.74	-17.25	Average
2	0.1549	21.49	20.23	41.72	65.74	-24.02	QP
3	0.1703	19.65	20.17	39.82	54.94	-15.12	Average
4	0.1703	23.50	20.17	43.66	64.94	-21.28	QP
5	0.2083	15.69	20.06	35.75	53.27	-17.52	Average
6	0.2083	20.52	20.06	40.58	63.27	-22.69	QP
7	0.2442	13.92	20.07	33.99	51.95	-17.96	Average
8	0.2442	18.48	20.07	38.55	61.95	-23.40	QP
9	0.4193	10.69	20.06	30.75	47.46	-16.71	Average
10	0.4193	14.21	20.06	34.27	57.46	-23.20	QP
11	2.4606	7.53	19.96	27.49	46.00	-18.51	Average
12	2.4606	11.19	19.96	31.16	56.00	-24.84	QP

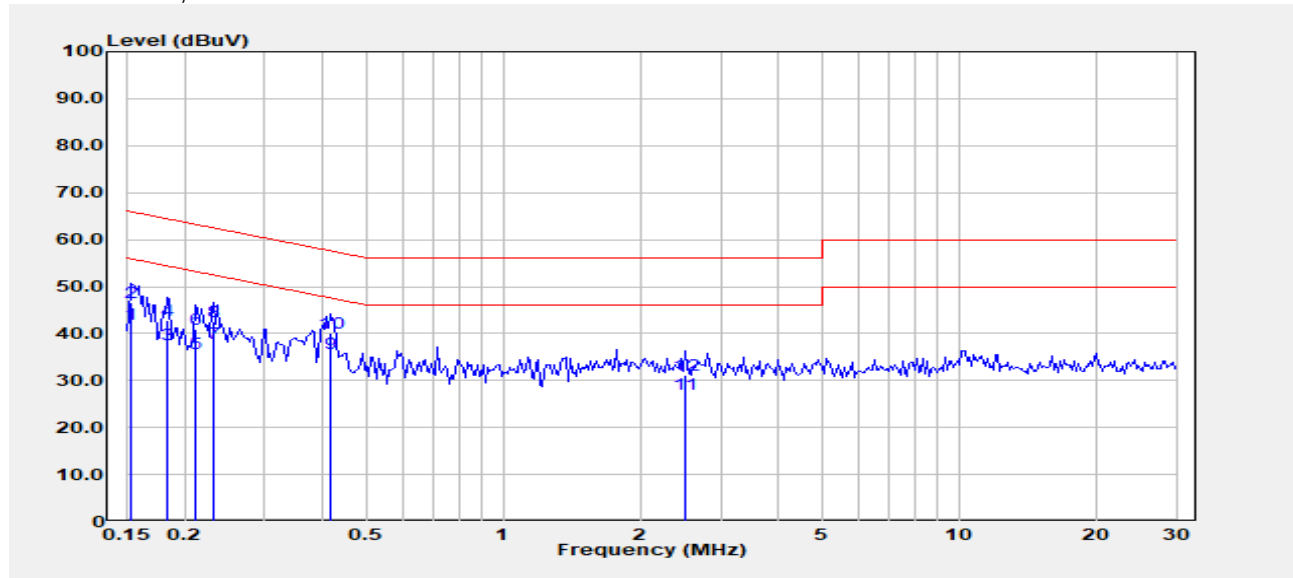
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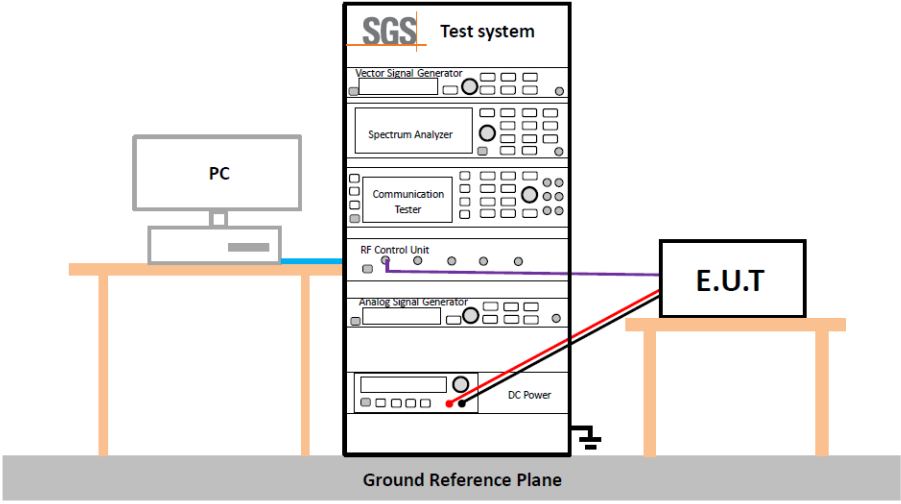
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Test Mode: 12; Line: Neutral Line

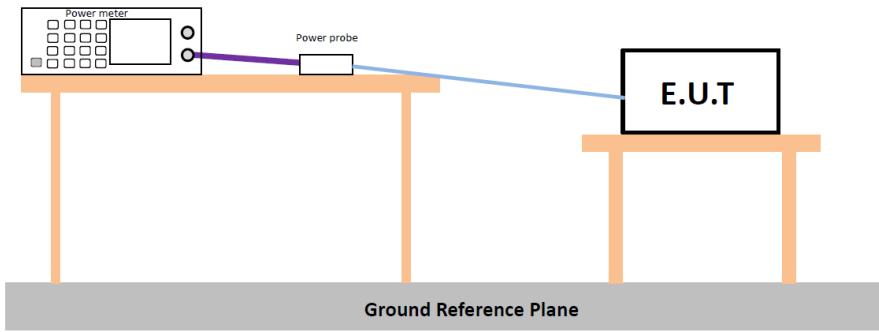


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1532	21.90	20.18	42.08	55.82	-13.74	Average
2	0.1532	26.57	20.18	46.75	65.82	-19.08	QP
3	0.1835	17.59	20.14	37.72	54.33	-16.61	Average
4	0.1835	22.69	20.14	42.82	64.33	-21.51	QP
5	0.2106	15.79	20.11	35.90	53.18	-17.28	Average
6	0.2106	20.83	20.11	40.94	63.18	-22.24	QP
7	0.2316	17.91	20.10	38.01	52.39	-14.38	Average
8	0.2316	22.45	20.10	42.55	62.39	-19.84	QP
9	0.4193	15.83	20.08	35.91	47.46	-11.56	Average
10	0.4193	20.10	20.08	40.18	57.46	-17.29	QP
11	2.5133	7.19	19.93	27.12	46.00	-18.88	Average
12	2.5133	11.34	19.93	31.26	56.00	-24.74	QP

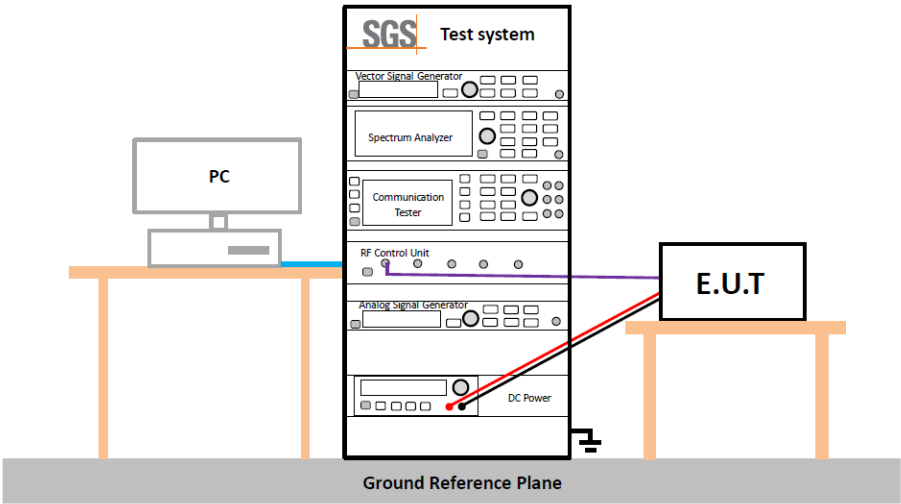
5.3 Duty Cycle

Test Requirement:	ANSI C63.10 :2013 Section 12.2
Test Method:	ANSI C63.10 :2013 Section 12.2
Test Setup:	 The diagram illustrates the test setup for duty cycle testing. A PC is connected to a test system stack. The stack includes a Vector Signal Generator, Spectrum Analyzer, Communication Tester, RF Control Unit, Analog Signal Generator, and DC Power. The RF Control Unit is connected to the E.U.T. (Equipment Under Test) via a red cable. The entire setup is on a Ground Reference Plane.
Instruments Used:	Refer to section 4 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	No restriction limits
Test Results:	For report purpose
The detailed test data see: Appendix	

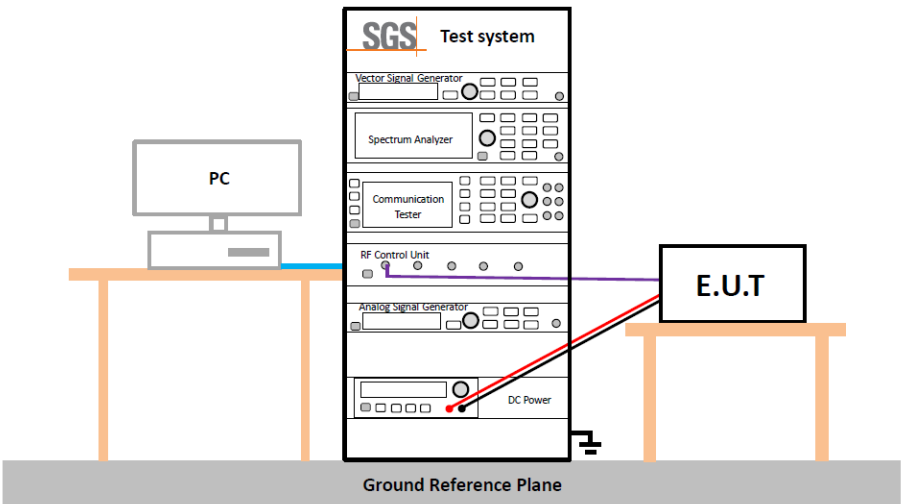
5.4 Maximum e.i.r.p.

Test Requirement:	47 CFR Part 15 Section 15.407(a) 15.407(a)(8)
Test Method:	ANSI C63.10 :2013 Section11.9.2.3
Test Setup:	 * Test with power meter (Detector function: Average)
Test Instruments:	Refer to section 4 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	For client devices operating under the control of an indoor access point in the 5.925-7.125GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.
Test Results:	Pass
The detailed test data see: Appendix	

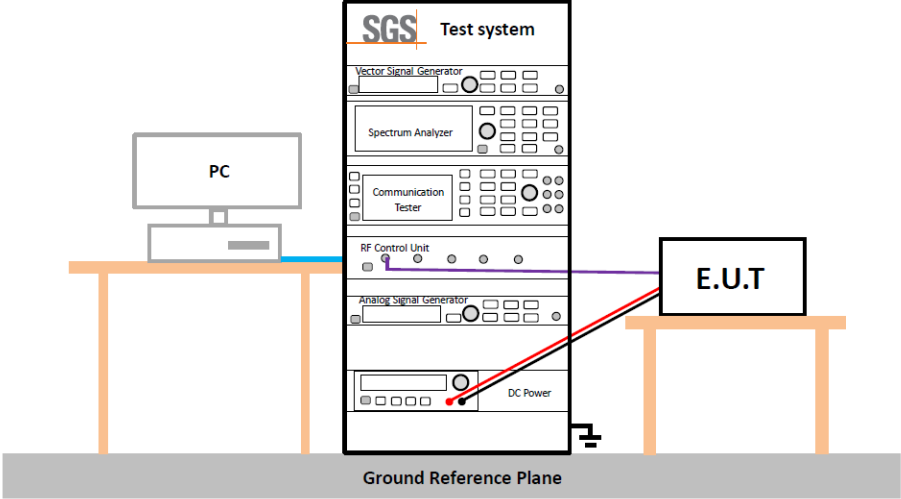
5.5 26dB Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(a), KDB 789033 D02
Test Method:	ANSI C63.10: 2013 Section 11.8 Option 2
Test Setup:	 The diagram illustrates the test setup for 26dB Emission Bandwidth. A PC is connected to a Test system. The Test system consists of several components: a Vector Signal Generator, a Spectrum Analyzer, a Communication Tester, an RF Control Unit, an Analog Signal Generator, and a DC Power source. The RF Control Unit is connected to the E.U.T. (Equipment Under Test). The entire setup is on a Ground Reference Plane.
Instruments Used:	Refer to section 4 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.
Test Results:	Pass
The detailed test data see: Appendix	

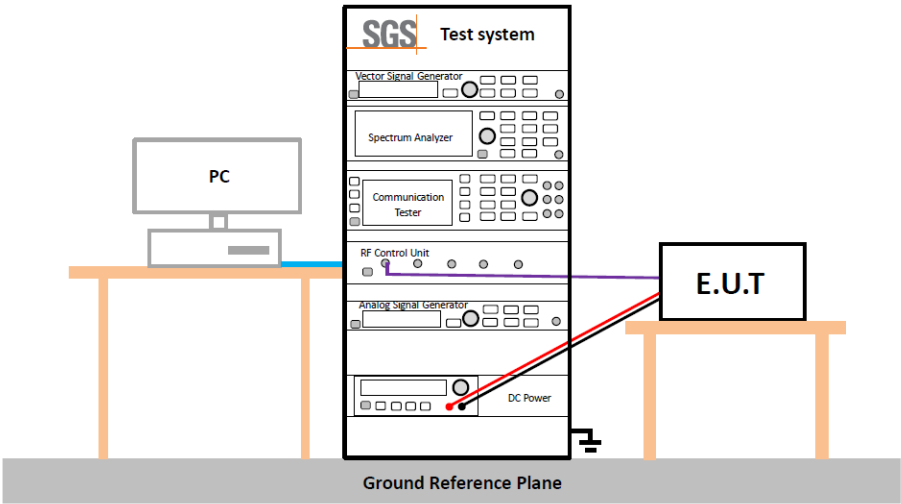
5.6 99% Occupied Bandwidth

Test Requirement:	KDB 789033 D02§ D
Test Method:	ANSI C63.10: 2013 Section 6.9.3
Test Setup:	 The diagram illustrates the test setup for 99% Occupied Bandwidth testing. A PC is connected to a Test system. The Test system consists of a Vector Signal Generator, Spectrum Analyzer, Communication Tester, RF Control Unit, Analog Signal Generator, and DC Power. The RF Control Unit is connected to the E.U.T. (Equipment Under Test). The entire setup is on a Ground Reference Plane.
Instruments Used:	Refer to section 4 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	No restriction limits
Test Results:	For report purpose
The detailed test data see: Appendix	

5.7 Power Spectral Density

Test Requirement:	47 CFR Part 15 Section 15.407(a) 15.407(a)(8)
Test Method:	ANSI C63.10: 2013 Section 11.10.2 KDB 789033 D02 v02r01, Section F.
Test Setup:	
Instruments Used:	Refer to section 4 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	For client devices operating under the control of an indoor access point in the 5.925-7.125GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band.
Test Results:	Pass
The detailed test data see: Appendix	

5.8 In-Band Emissions

Test Requirement:	47 CFR Part 15 Section 15.407(b)(6)
Test Method:	KDB 987594 D02 U-NII 6GHz EMC Measurement v01
Test Setup:	
Instruments Used:	Refer to section 4 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details. Only the worst case is recorded in the report.
Limit:	For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.
Test Results:	Pass
The detailed test data see: Appendix	

5.9 Contention Based Protocol

Test Requirement:	47 CFR Part 15 Section 15.407(d)
Test Method:	ANSI C63.10: 2013 KDB 987594 D02 U-NII 6GHz EMC Measurement v01
Test Setup:	
Instruments Used:	Refer to section 4 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Test Procedure:	1) Configure the EUT to transmit with a constant duty cycle. 2) Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth. 3) Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver. 4) Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two. 5) Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10MHz AWGN signal relative to the EUT's channel bandwidth and center frequency. 6) Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2. 7) Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1. 8) Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting. 9) (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.

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	10) Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.
Limit:	Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel and stay off the channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain. To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.
Test Results:	Pass
The competition-based protocol test was performed by Hefei Panwin Technology Co., Ltd, Please refer to PD20240065-RF3A for test data.	

5.10 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15 Section 15.205 and 15.209
Test Method:	ANSI C63.10: 2013 Section 6.4 / 6.5 / 6.6
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)
Test frequency:	9kHz ~ 40GHz(or 10 Harmonic)

Test Setup:

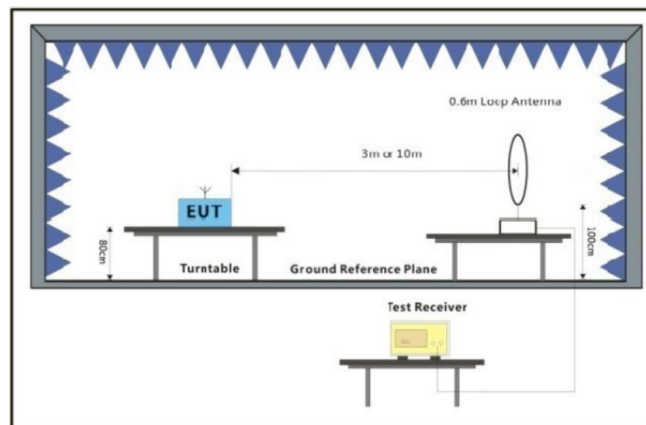


Figure 1. 9kHz to 30MHz

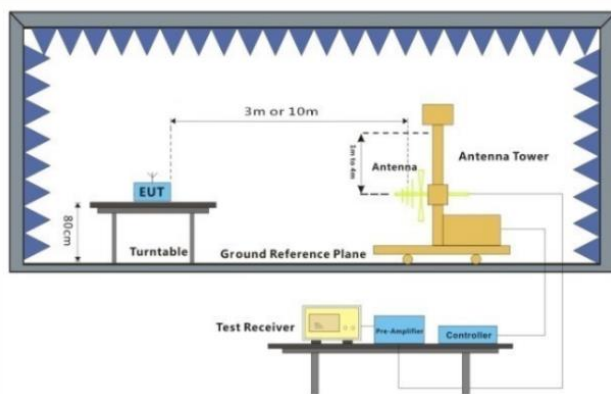


Figure 1. 30MHz to 1GHz

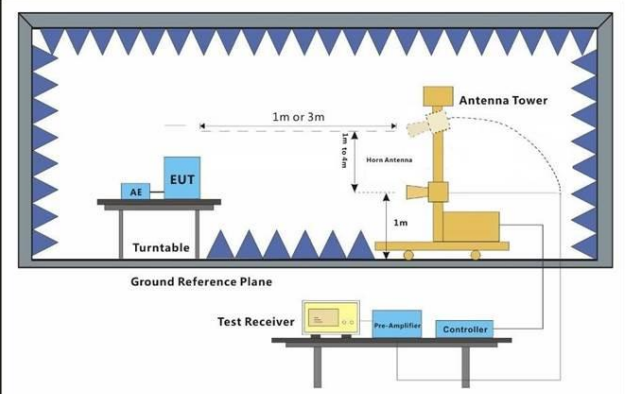


Figure 2. Above 1 GHz

Test Procedure:	a. For below 1GHz test, 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 test, the EUT was placed on the top of a rotating table 1.5 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
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	(Distance from antenna to EUT is 1m for measurements >18GHz). 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 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. Test the EUT in the outermost channels. h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. i. Repeat above procedures until all frequencies measured was complete. j. The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported k. The disturbance above 18GHz was very low, and the harmonics were the highest point could be found when testing, so only the harmonics had been displayed. l. At a measurement distance of 1 meter the limit line was increased by $20 \times \text{LOG}(3/1) = 9.54 \text{ dB}$. 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. 5. 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. 6. 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
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	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. 7. 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. 8. 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. 9. This test item was investigated while operating in SISO and MIMO mode, however, it was determined that SISO antenna 1 operation for a modulation and MiMO antenna operation for ax modulation produced the worst emissions. So the emissions produced from other operation are not recorded in report.
Test Configuration:	Measurements below 30MHz • RBW = 10 kHz • VBW = 30 kHz • Detector = Peak & Average & Quasi-peak • Trace mode = max hold Measurements Below 1000MHz • RBW = 120 kHz • VBW = 300 kHz • Detector = Quasi-peak • Trace mode = max hold Peak Measurements Above 1000 MHz • RBW = 1 MHz • VBW $\geq$ 3 MHz • Detector = Peak • Sweep time = auto • Trace mode = max hold Average Measurements Above 1000MHz • RBW = 1 MHz • VBW = 10Hz, when duty cycle is no less than 98 percent. • VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Refer to section 2.7 for details. For below 1GHz part, through pre-scan all channels, but only the worst case is recorded in the report.



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Instruments Used:	Refer to section 4 for details
Test Results:	Pass

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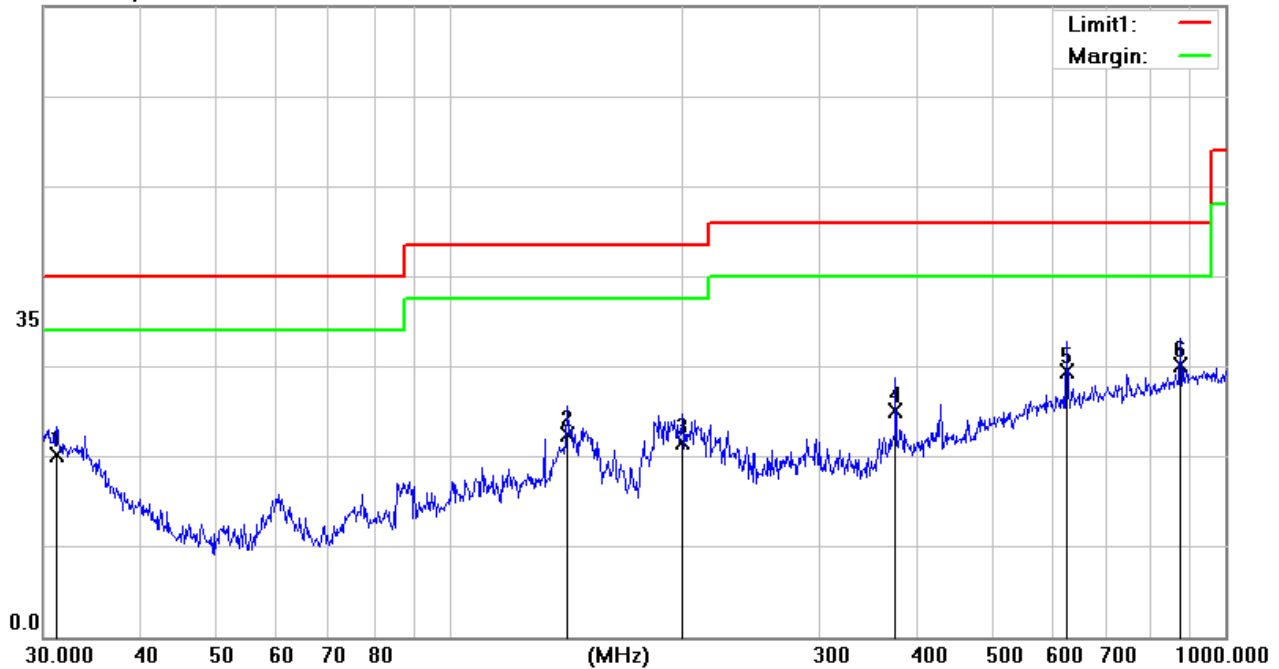
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Radiated emission below 1GHz

Test Mode: 12; Polarity: Horizontal;

70.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	31.1798	1.70	18.45	20.15	40.00	-19.85	100	39	QP
2	141.8262	8.59	13.87	22.46	43.50	-21.04	300	360	QP
3	199.9856	10.06	11.47	21.53	43.50	-21.97	100	359	QP
4	375.9385	8.17	16.99	25.16	46.00	-20.84	100	219	QP
5	625.0780	6.62	22.91	29.53	46.00	-16.47	100	348	QP
6	875.2470	4.99	25.26	30.25	46.00	-15.75	200	126	QP

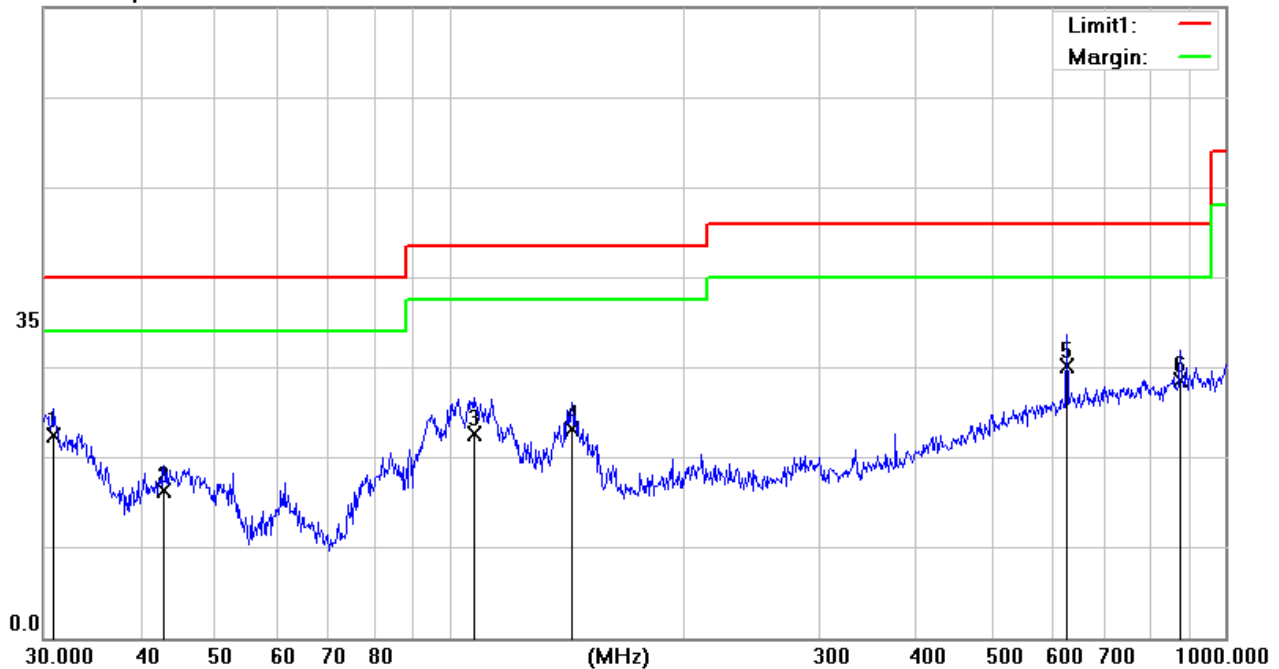
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Test Mode: 12; Polarity: Vertical;
70.0 dBuV/m



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	30.9619	3.80	18.66	22.46	40.00	-17.54	100	336	QP
2	42.8998	6.11	10.24	16.35	40.00	-23.65	100	210	QP
3	107.5101	9.22	13.36	22.58	43.50	-20.92	100	360	QP
4	143.8295	9.62	13.54	23.16	43.50	-20.34	200	357	QP
5	625.0780	7.24	22.91	30.15	46.00	-15.85	400	29	QP
6	875.2470	3.43	25.26	28.69	46.00	-17.31	100	354	QP

Remark:

All channels have been tested, but only the worst case data displayed in this report.

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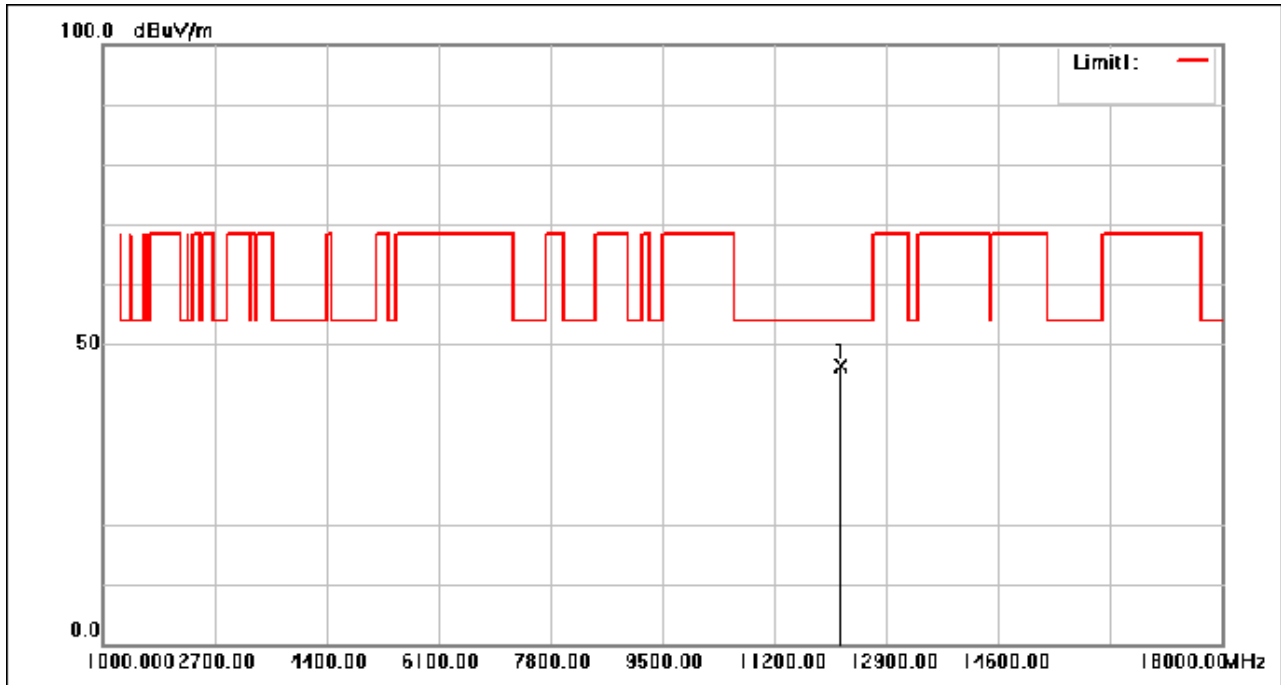
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Transmitter emission Above 1GHz

Band5

Test Mode: 12; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12210.050	44.04	2.38	46.42	54.00	-7.58	peak

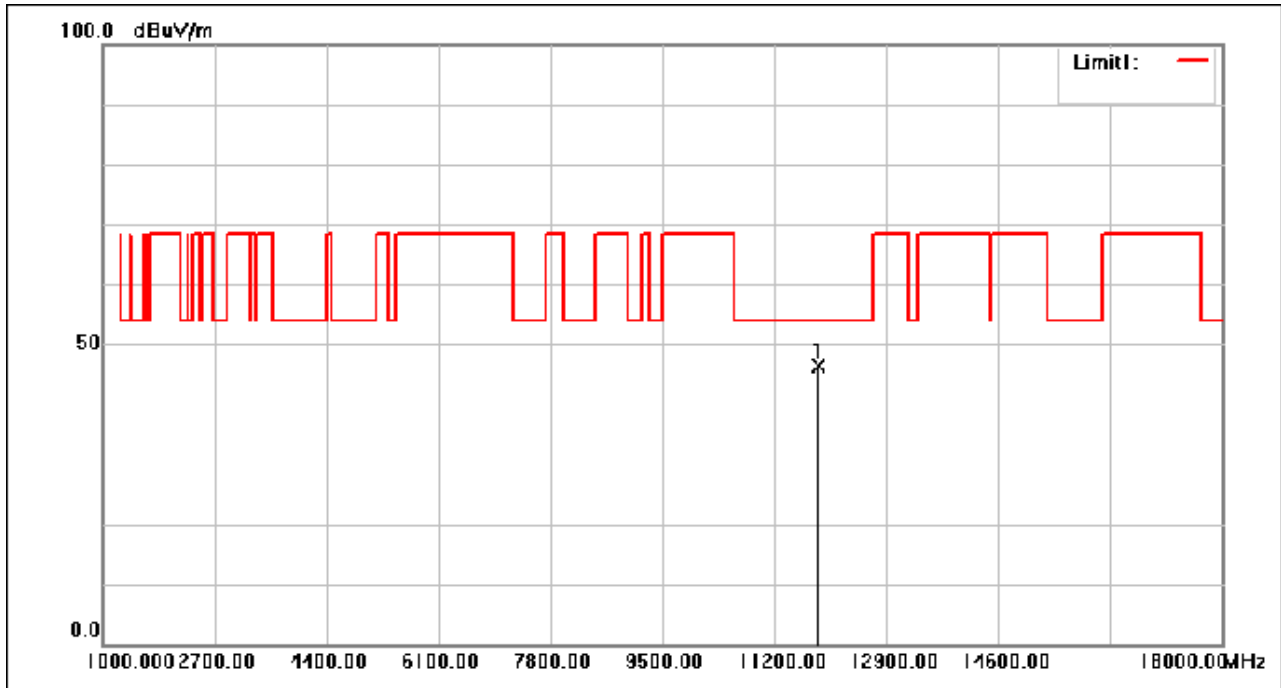
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Test Mode: 12; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11859.360	44.29	2.14	46.43	54.00	-7.57	peak

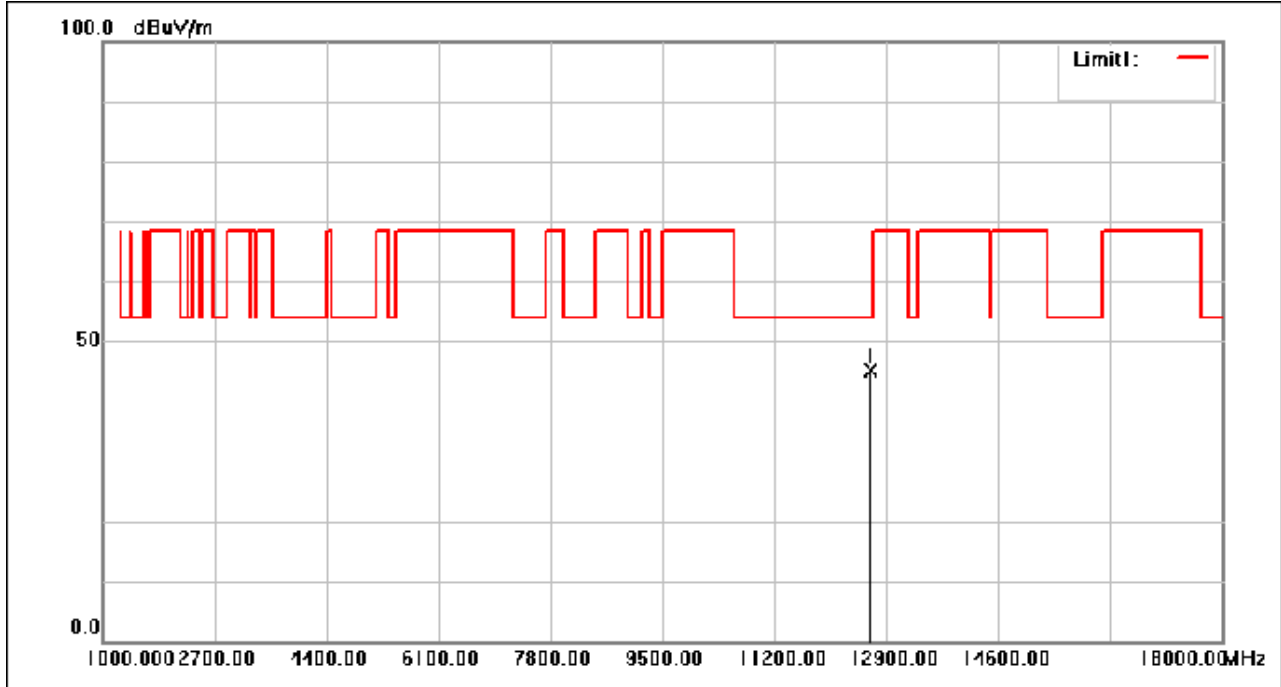
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12664.160	42.63	2.62	45.25	54.00	-8.75	peak

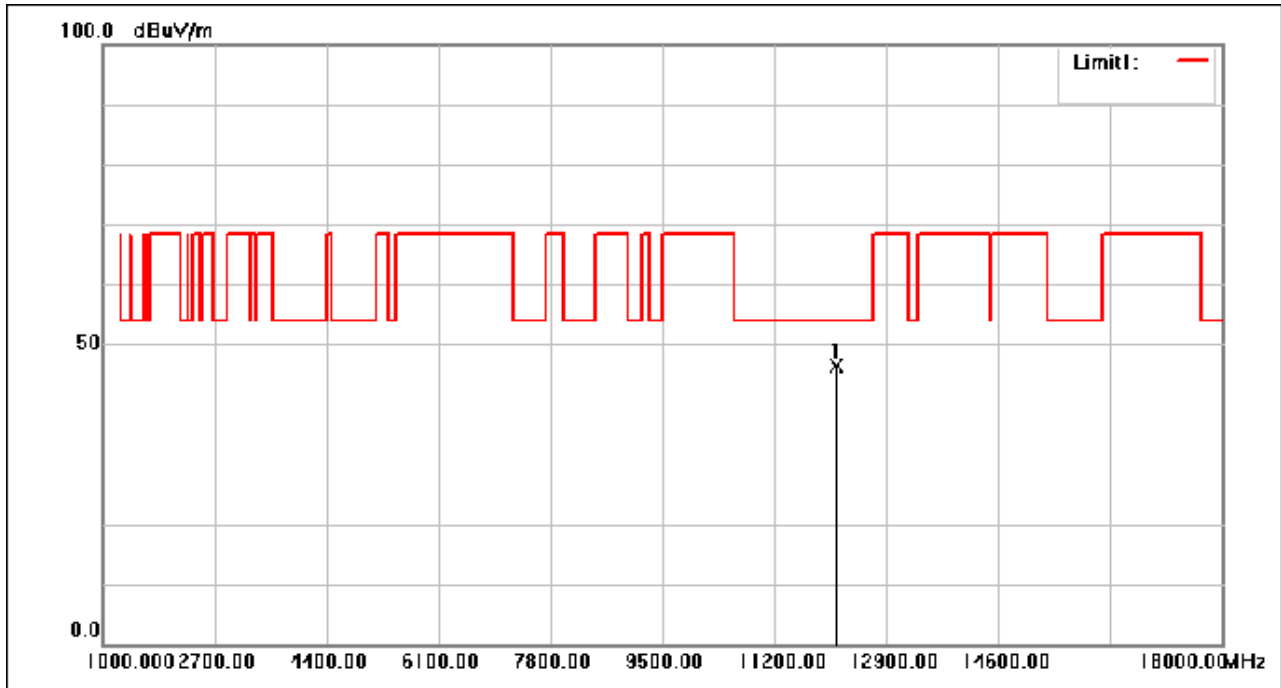
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Test Mode: 12; Polarity: Vertical; Modulation: 802.11a; Bandwidth: 20MHz; Channel: middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12149.660	44.04	2.45	46.49	54.00	-7.51	peak

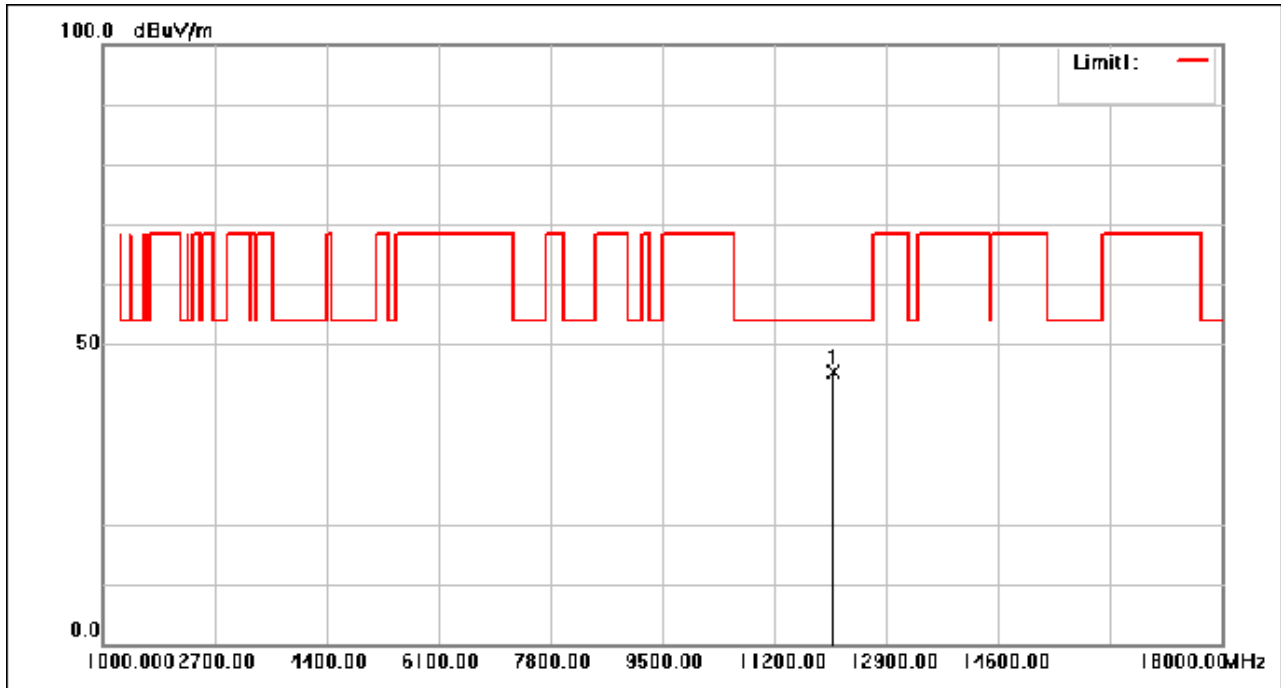
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1209.540	42.76	2.51	45.27	54.00	-8.73	peak

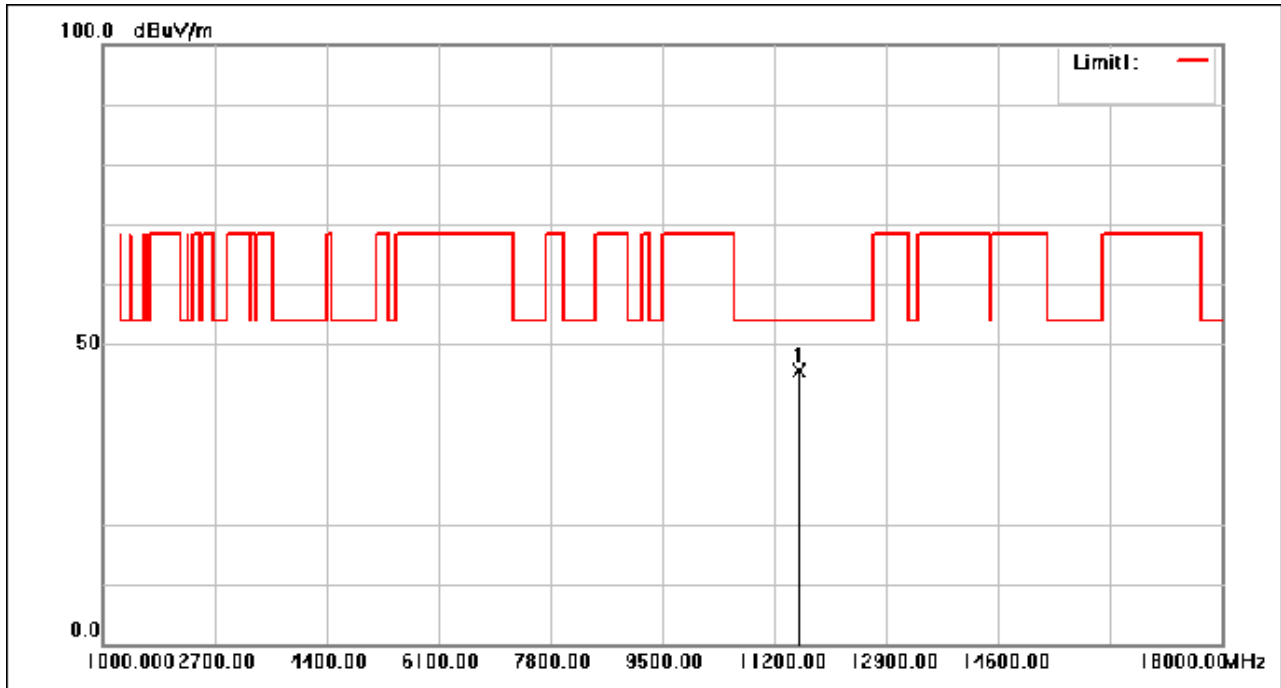
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11572.420	44.47	1.19	45.66	54.00	-8.34	peak

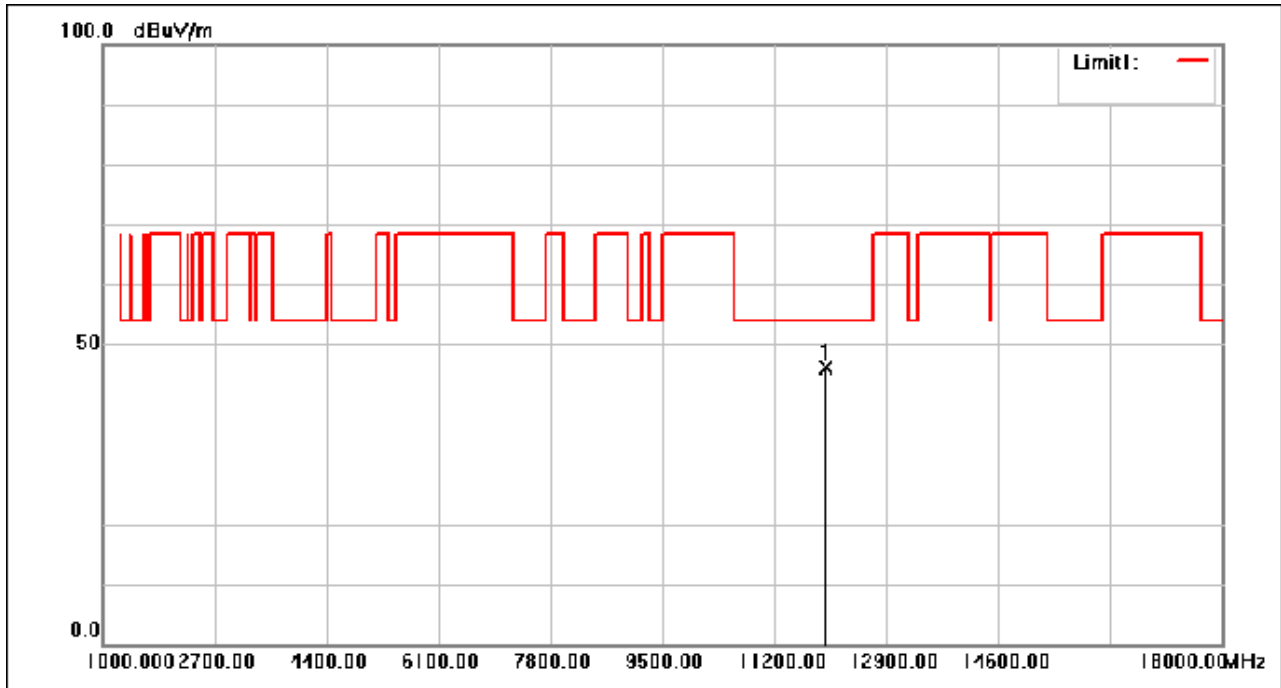
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11974.890	43.52	2.53	46.05	54.00	-7.95	peak

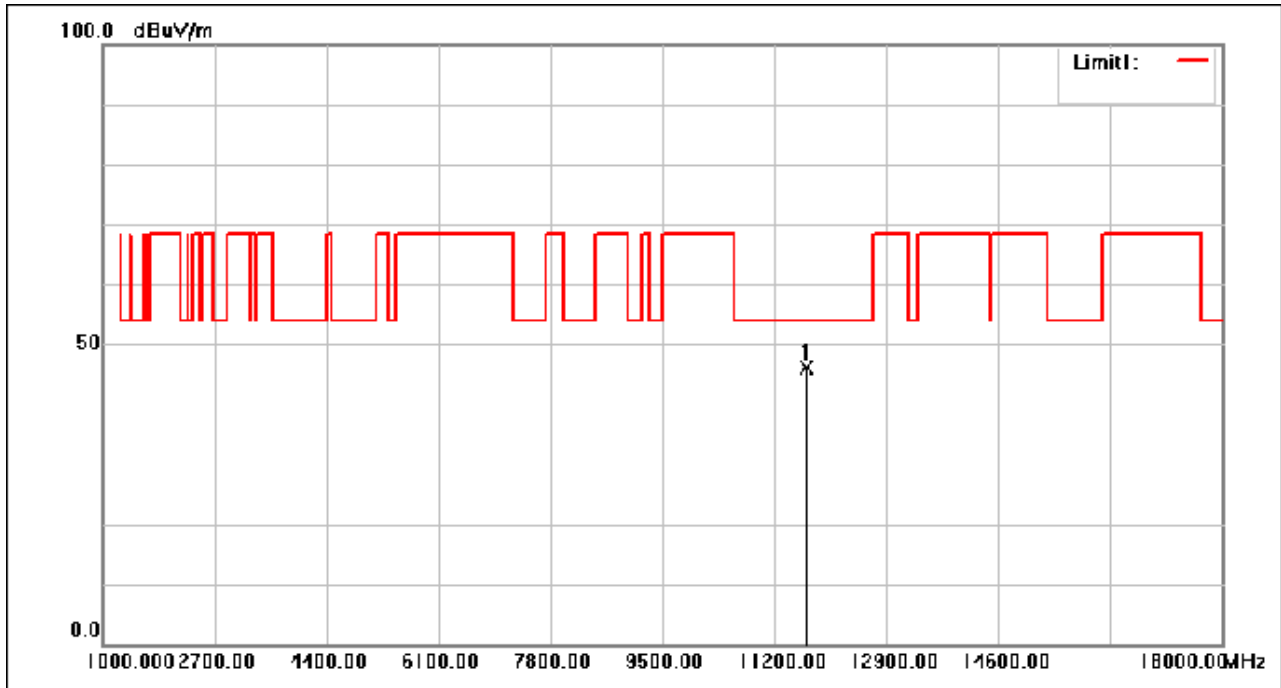
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11677.120	44.68	1.54	46.22	54.00	-7.78	peak

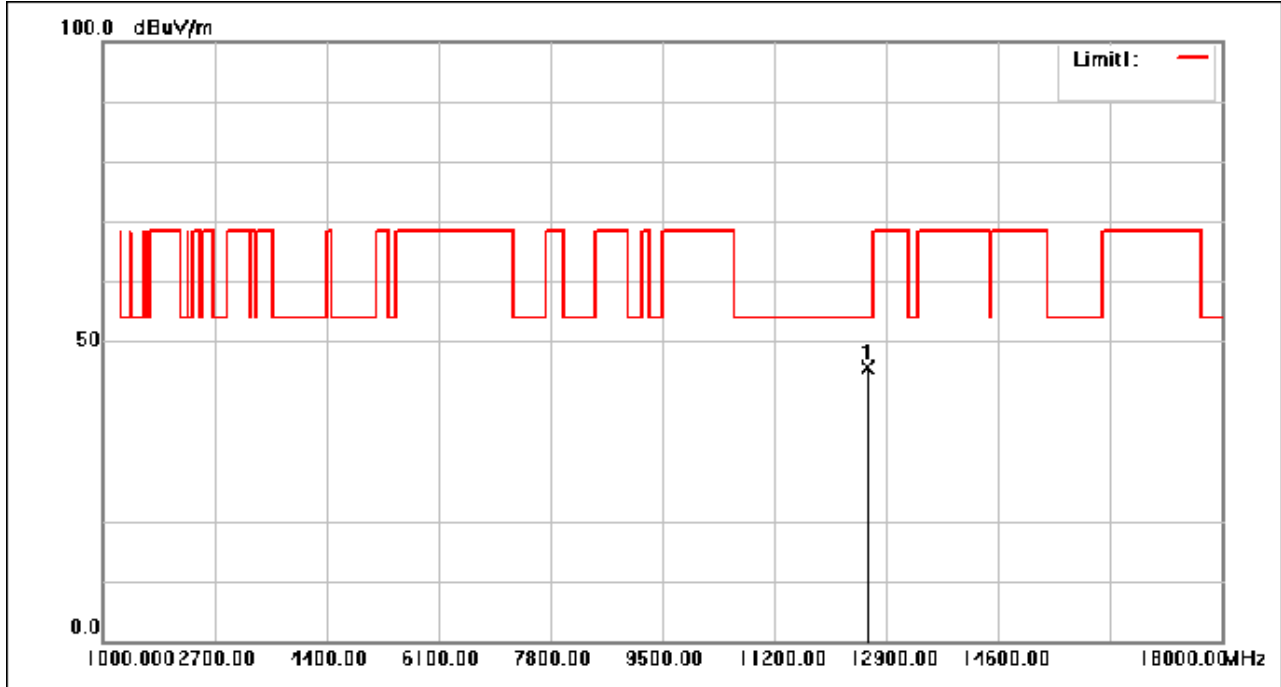
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12623.570	43.04	2.48	45.52	54.00	-8.48	peak

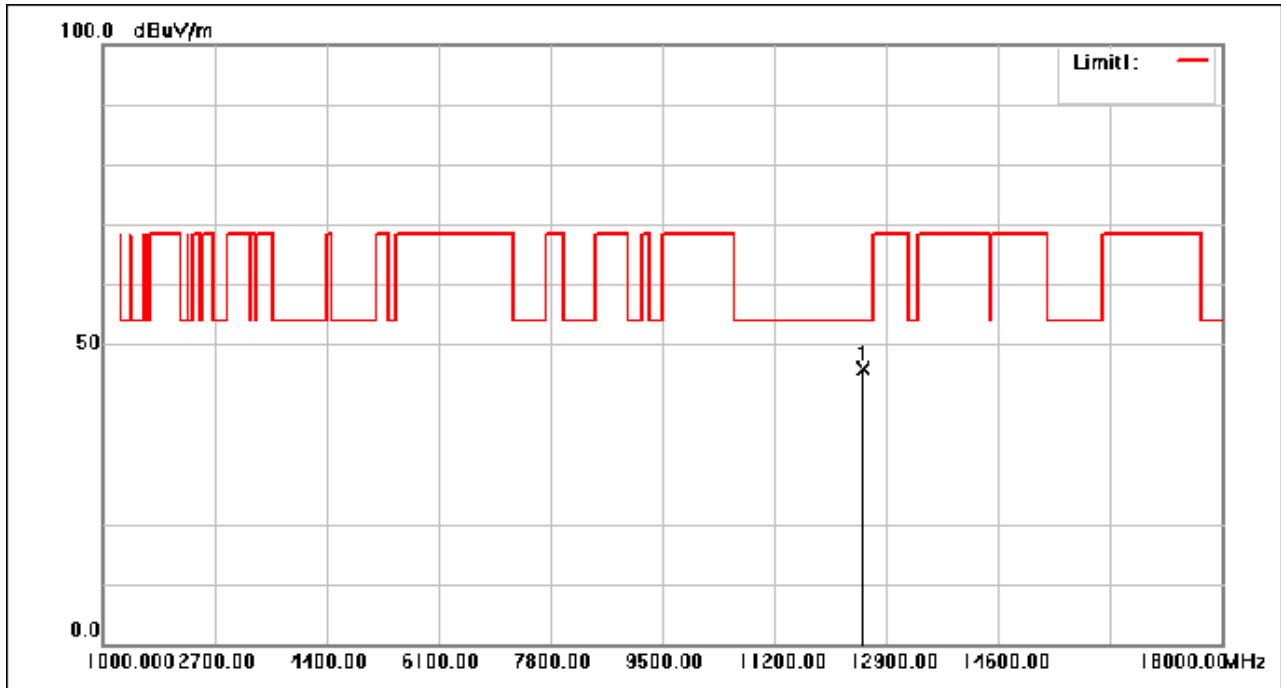
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12538.710	43.72	2.19	45.91	54.00	-8.09	peak

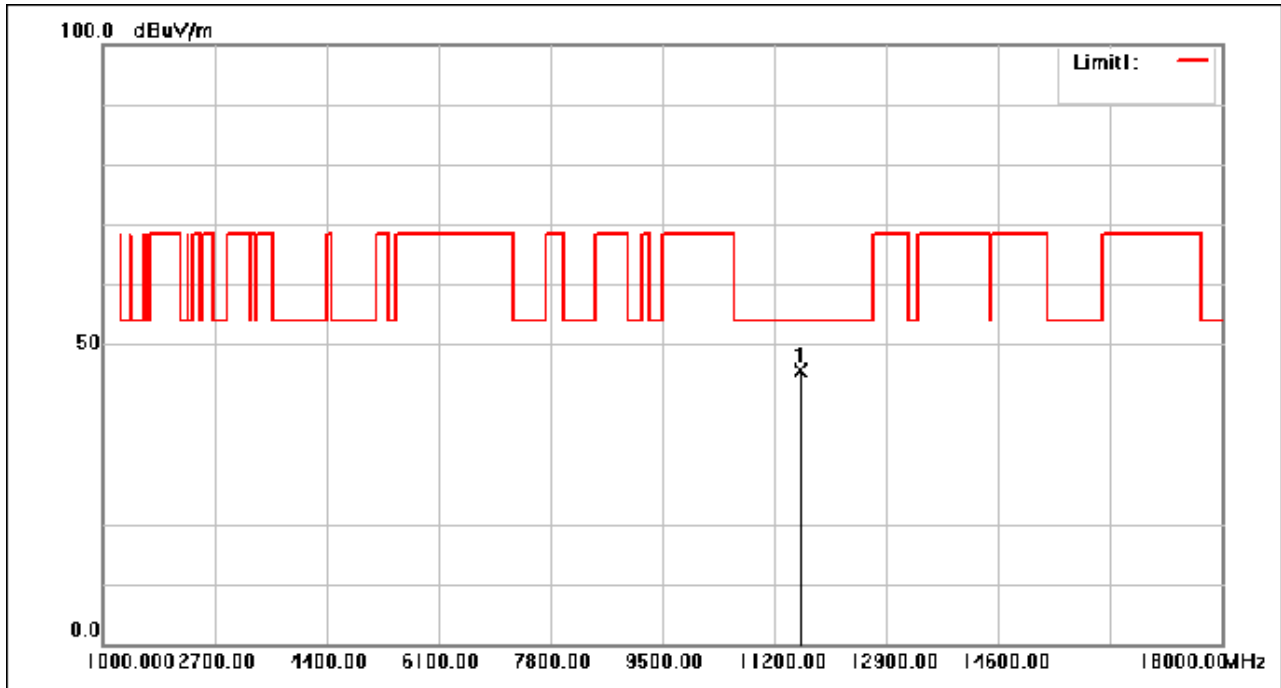
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Test Mode: 12; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11603.840	44.22	1.29	45.51	54.00	-8.49	peak

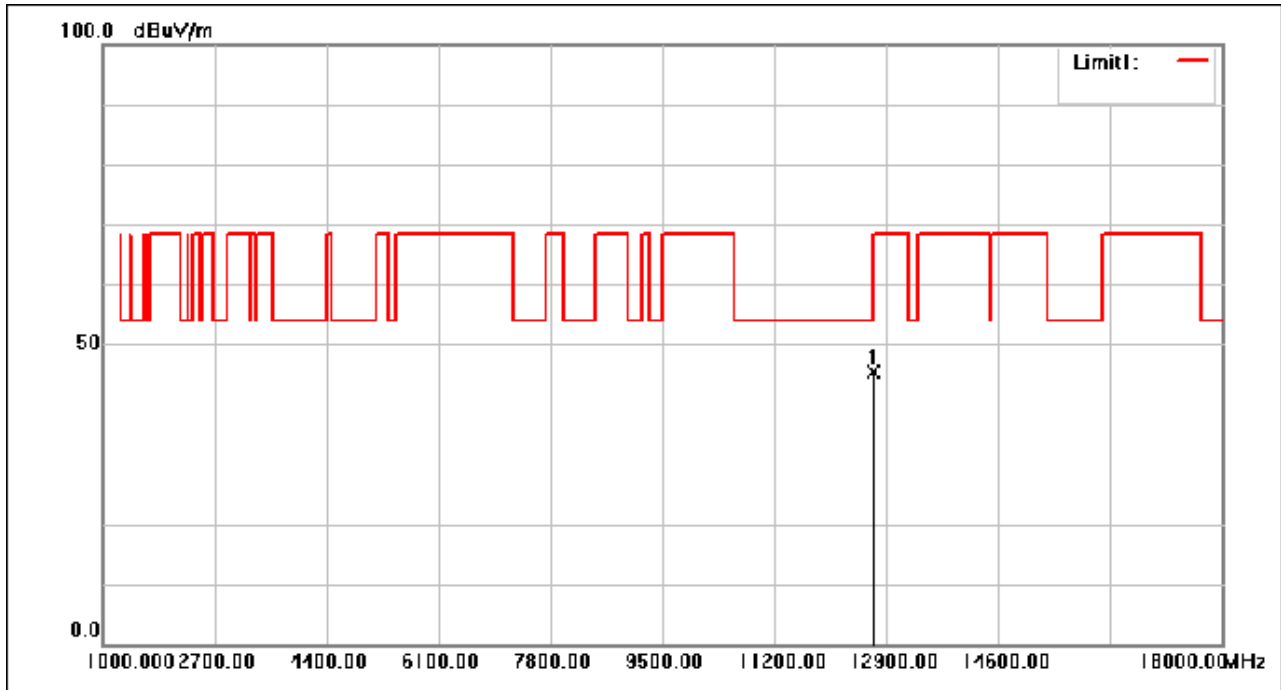
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12709.610	42.62	2.77	45.39	68.30	-22.91	peak

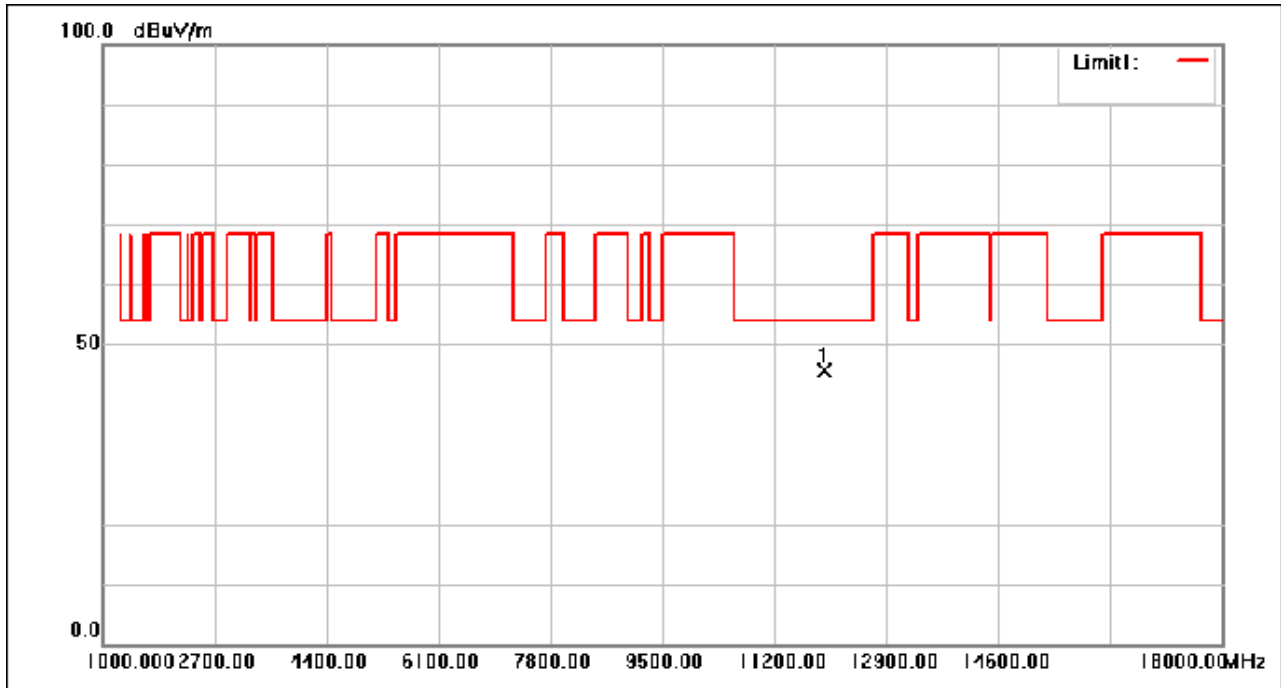
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11969.210	43.13	2.50	45.63	54.00	-8.37	peak

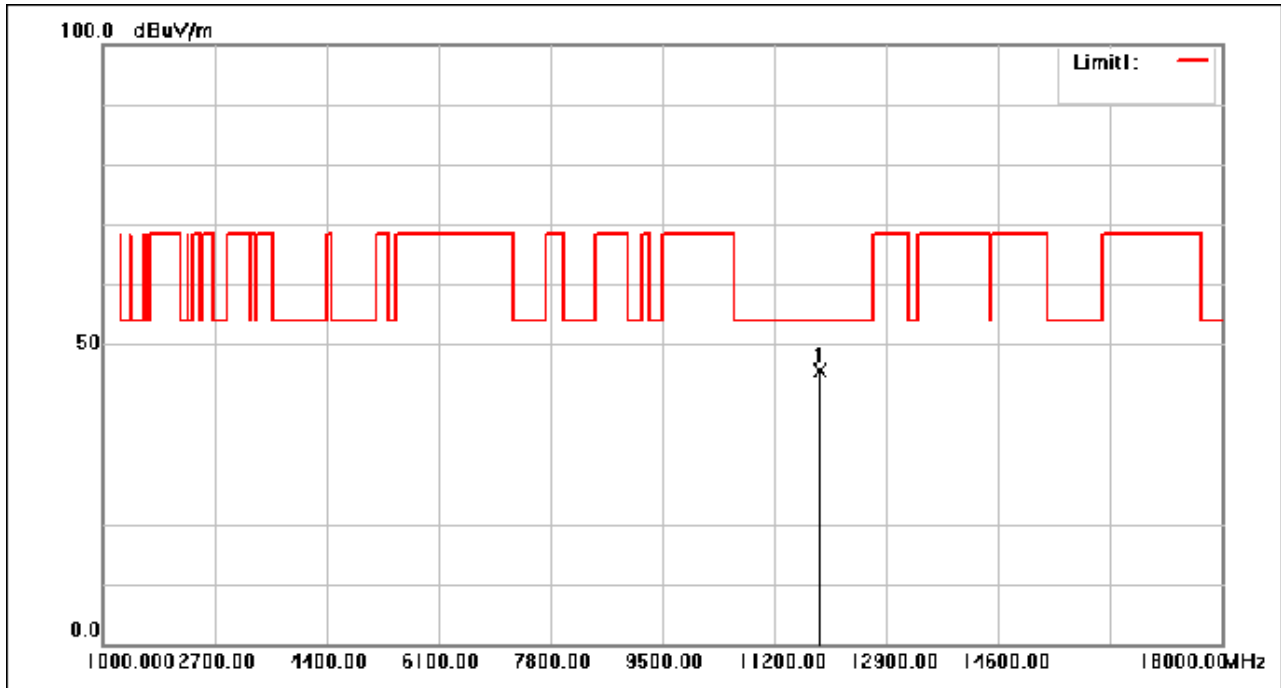
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11880.770	43.53	2.21	45.74	54.00	-8.26	peak

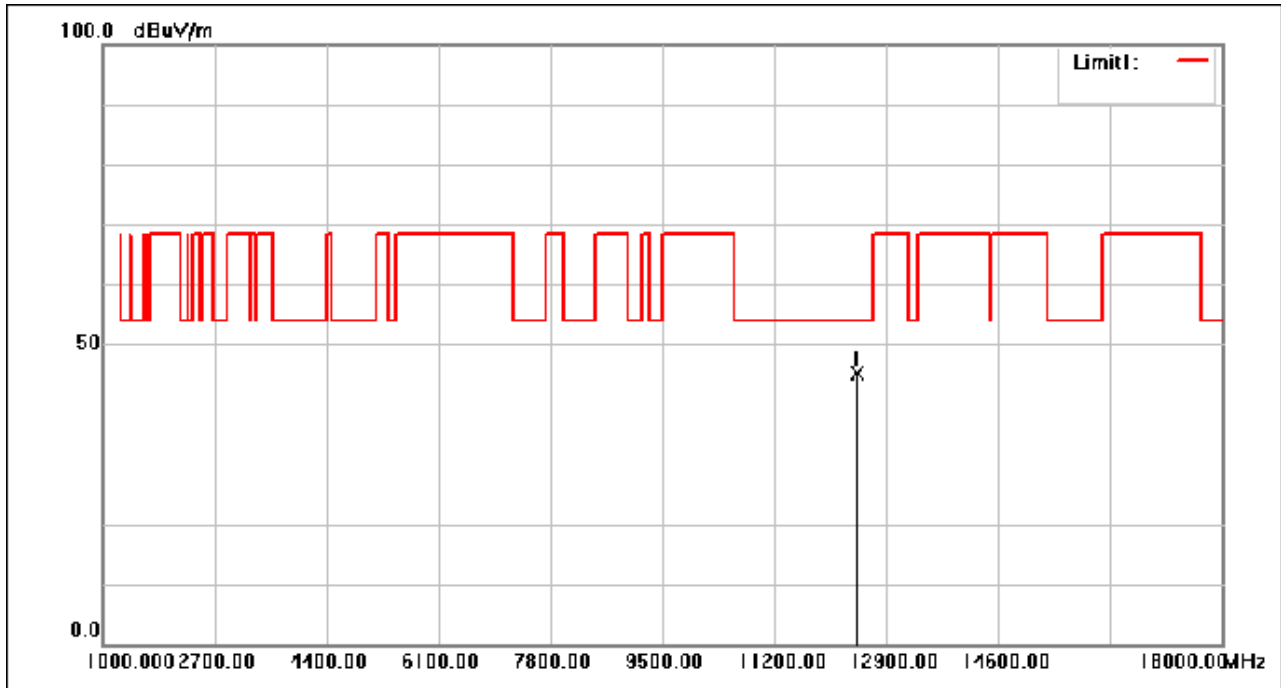
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12448.410	43.05	2.12	45.17	54.00	-8.83	peak

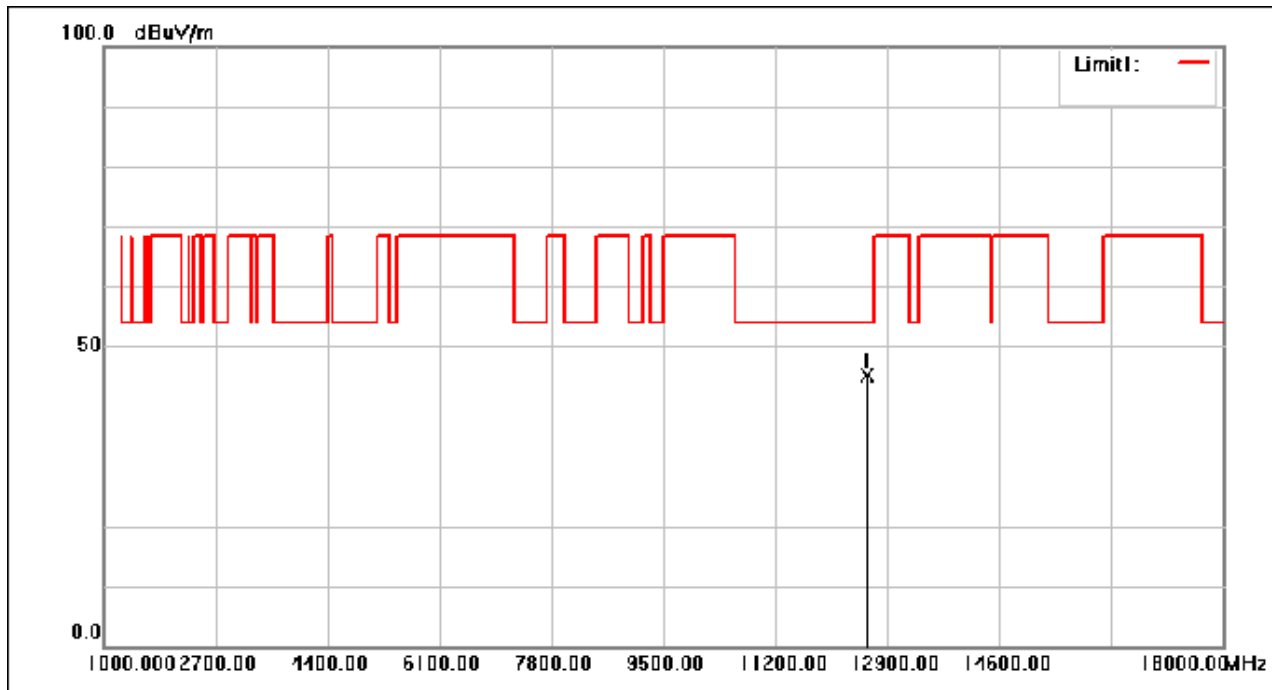
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12591.420	42.75	2.37	45.12	54.00	-8.88	peak

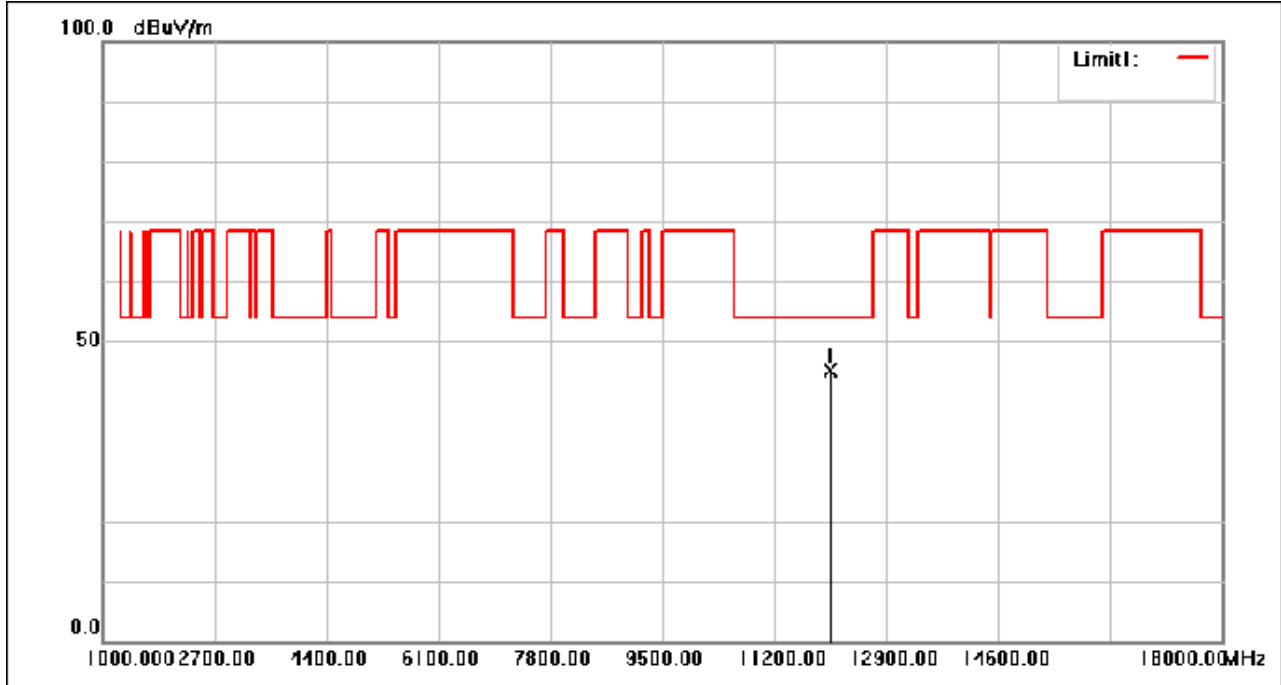
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Test Mode: 12; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12058.860	42.66	2.55	45.21	54.00	-8.79	peak

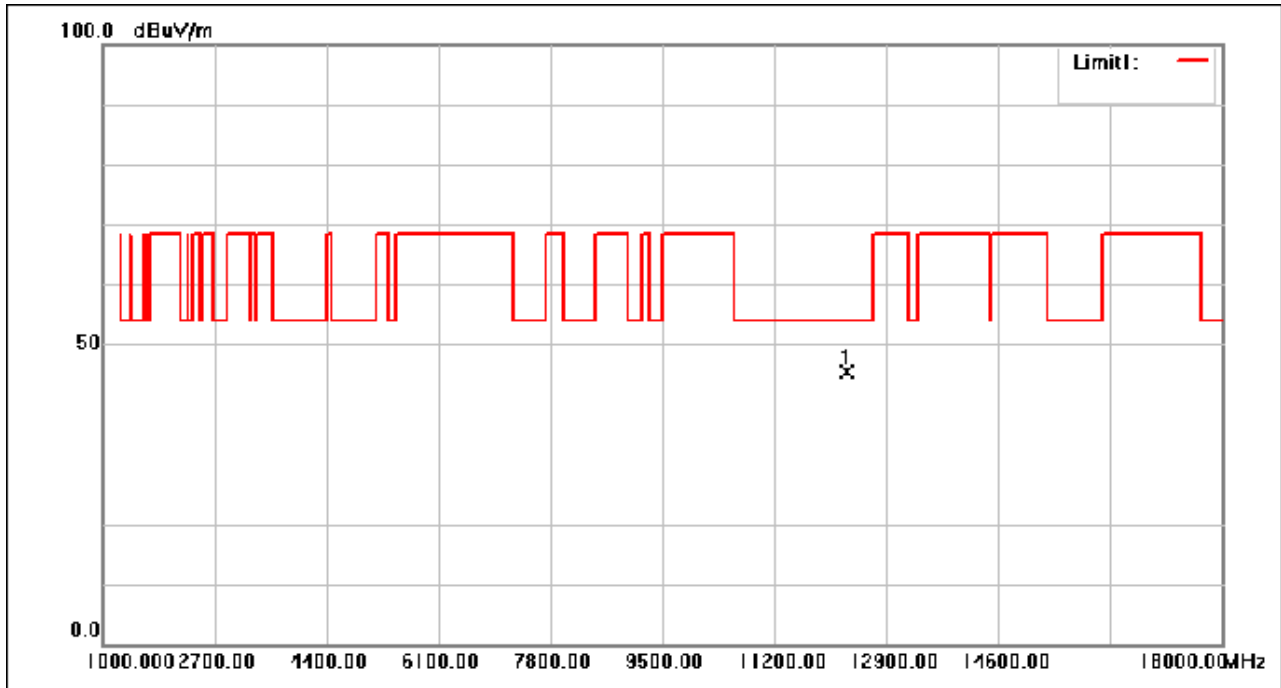
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Test Mode: 12; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12300.390	43.19	2.28	45.47	54.00	-8.53	peak

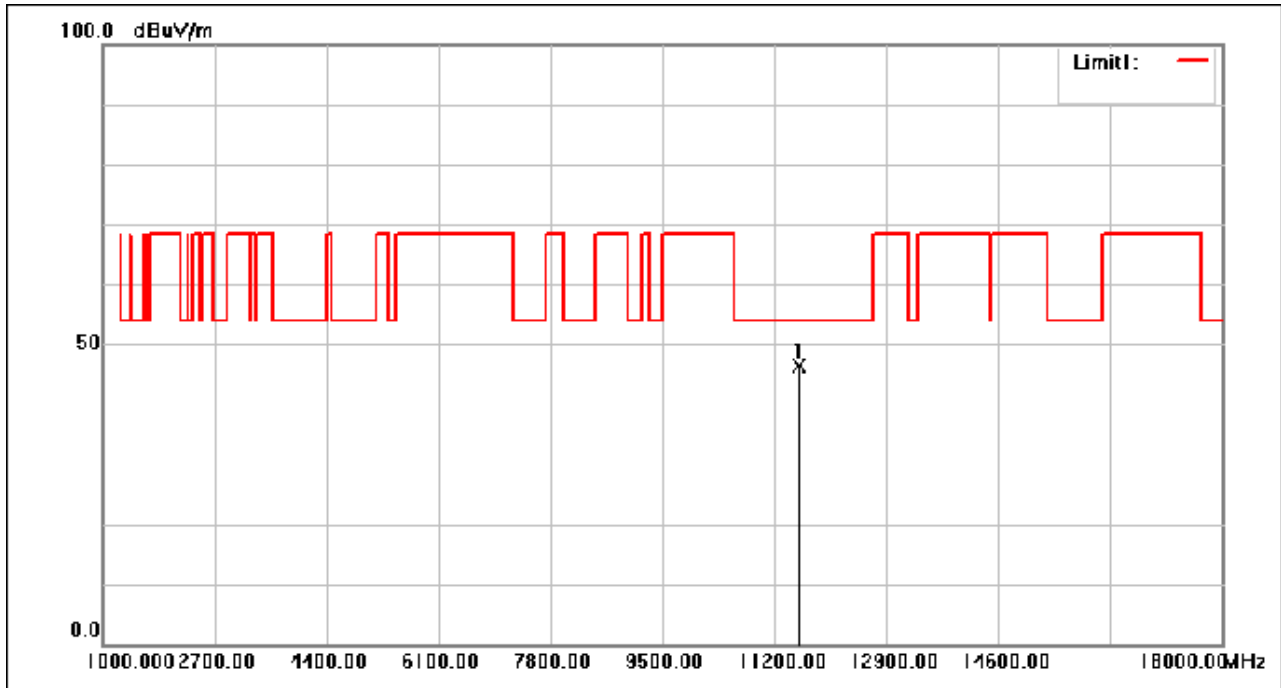
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11576.130	45.26	1.20	46.46	54.00	-7.54	peak

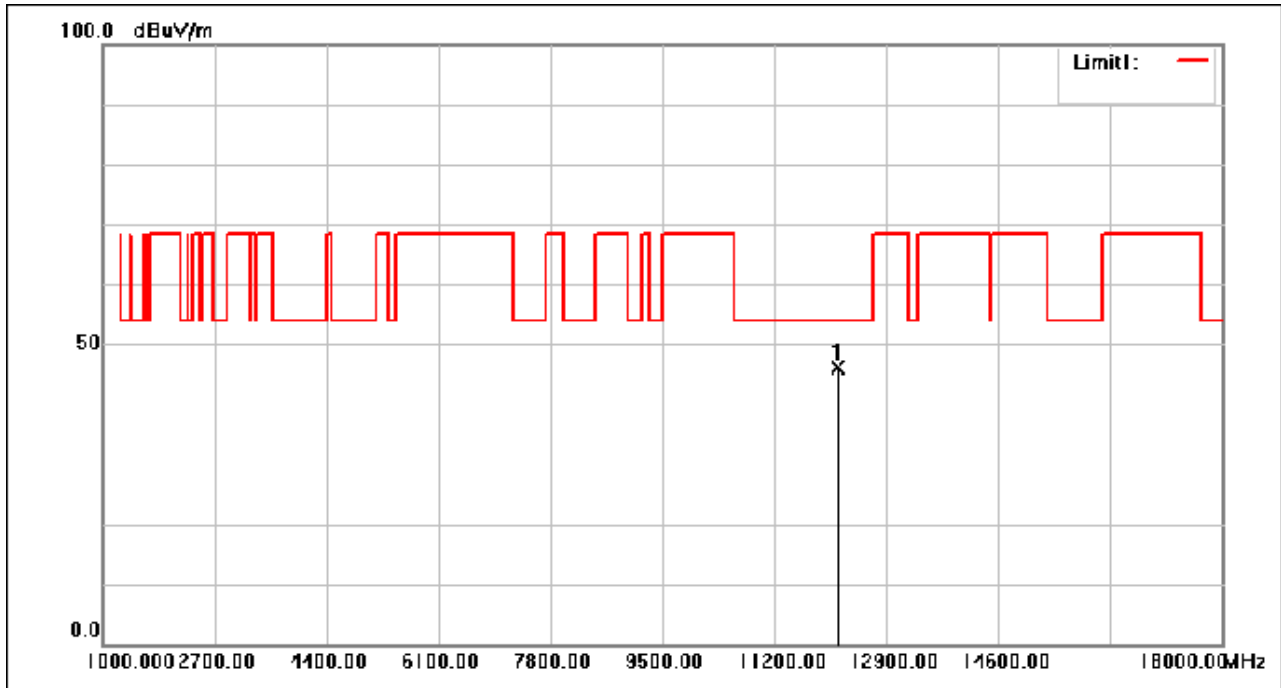
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12165.030	43.68	2.43	46.11	54.00	-7.89	peak

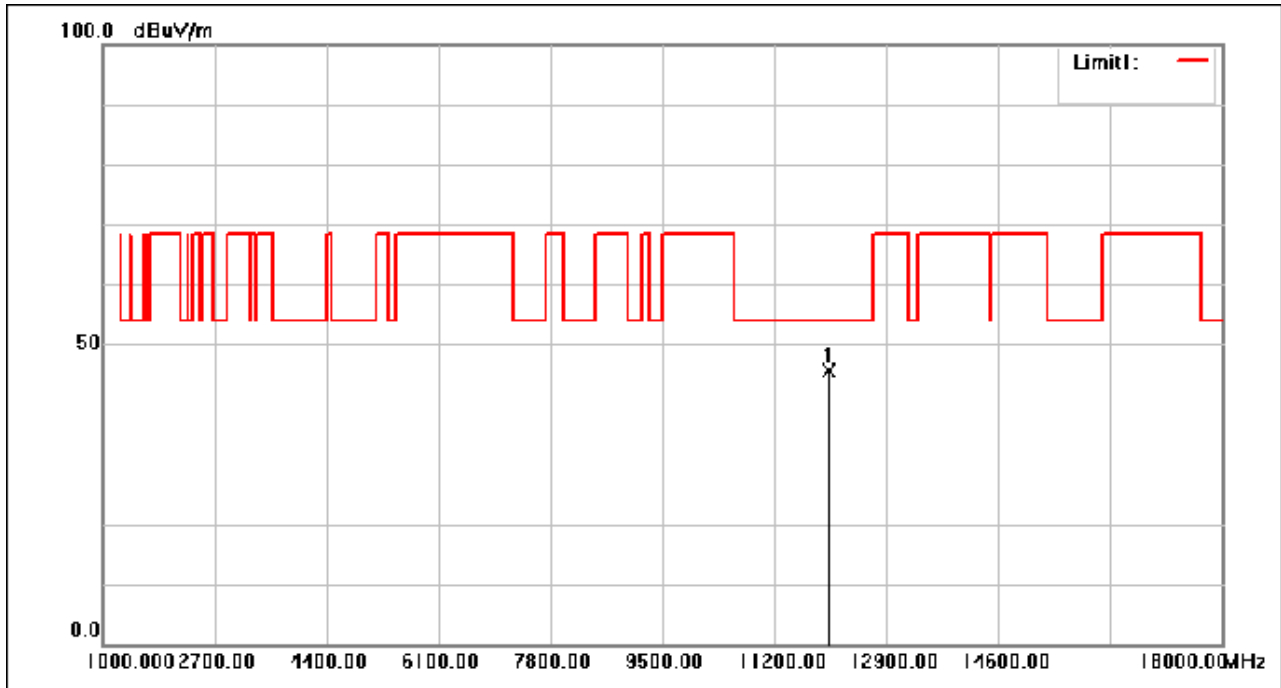
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12036.000	43.05	2.57	45.62	54.00	-8.38	peak

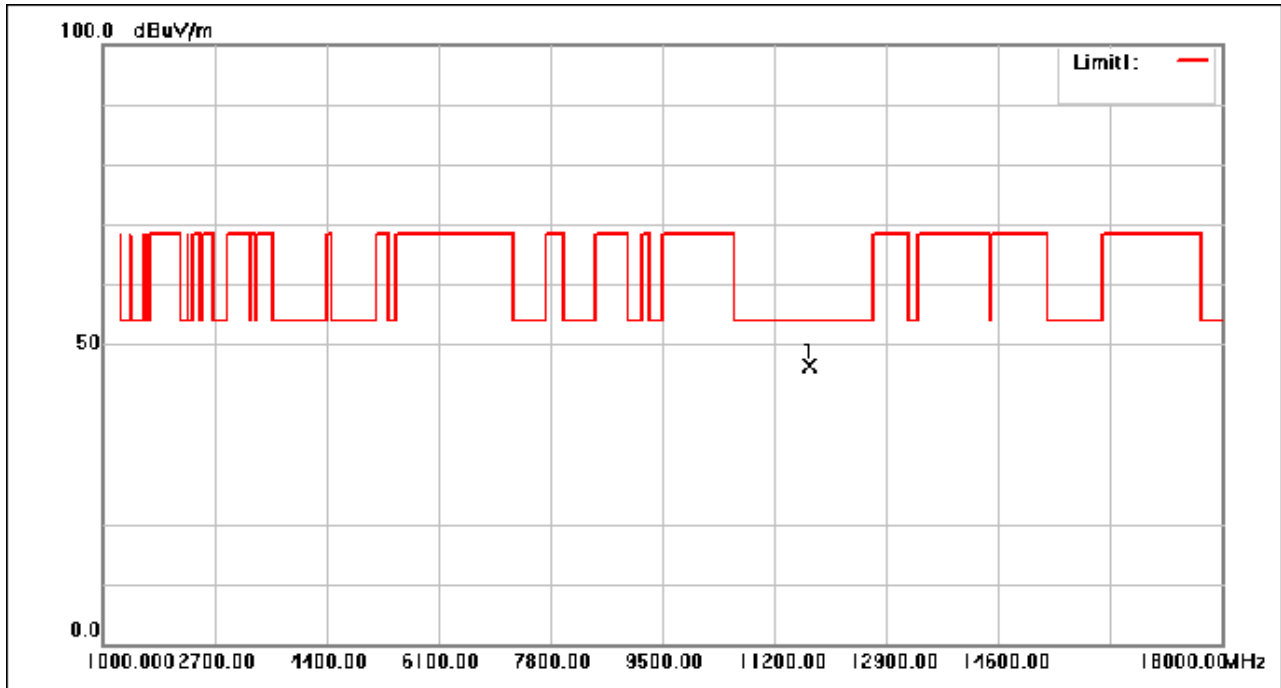
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11723.950	44.59	1.69	46.28	54.00	-7.72	peak

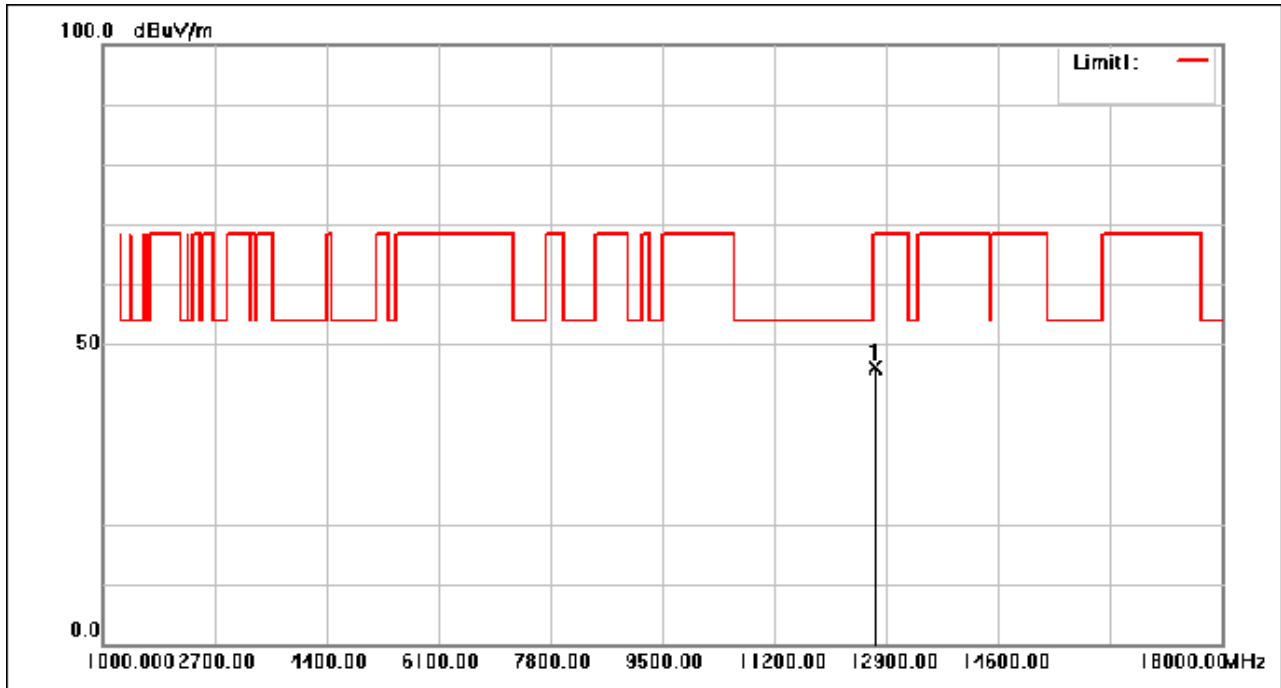
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12733.560	43.39	2.85	46.24	68.30	-22.06	peak

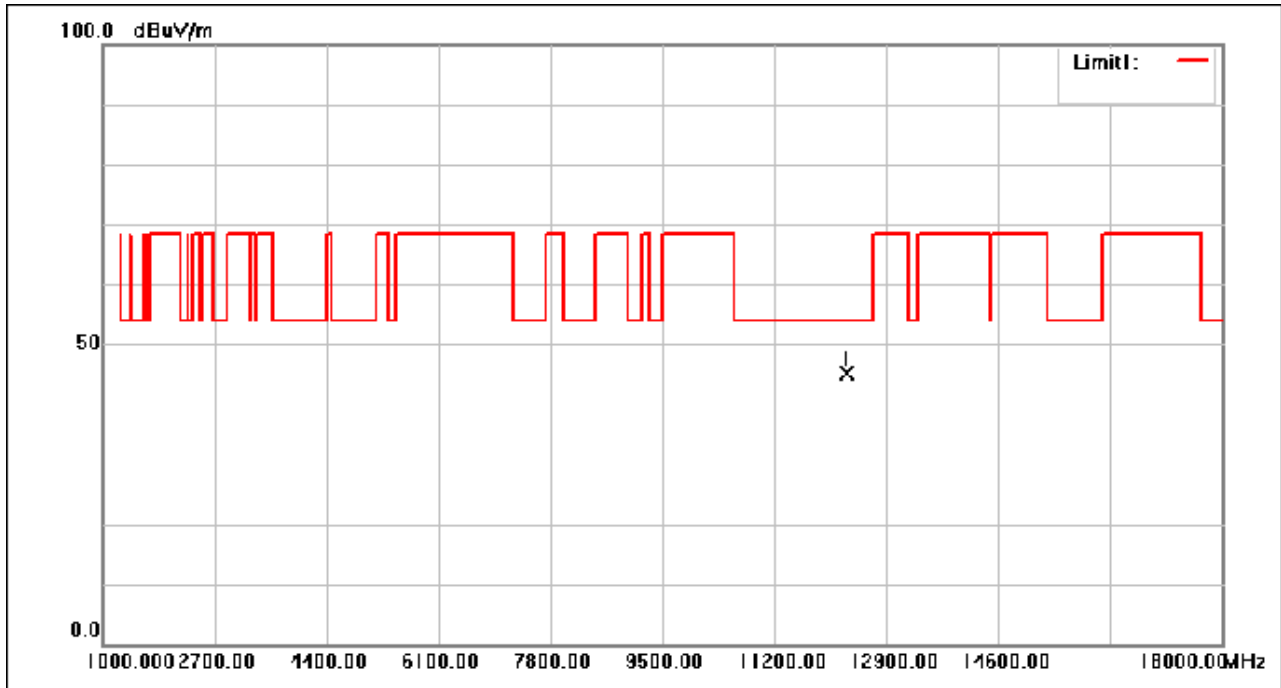
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12310.590	42.76	2.27	45.03	54.00	-8.97	peak

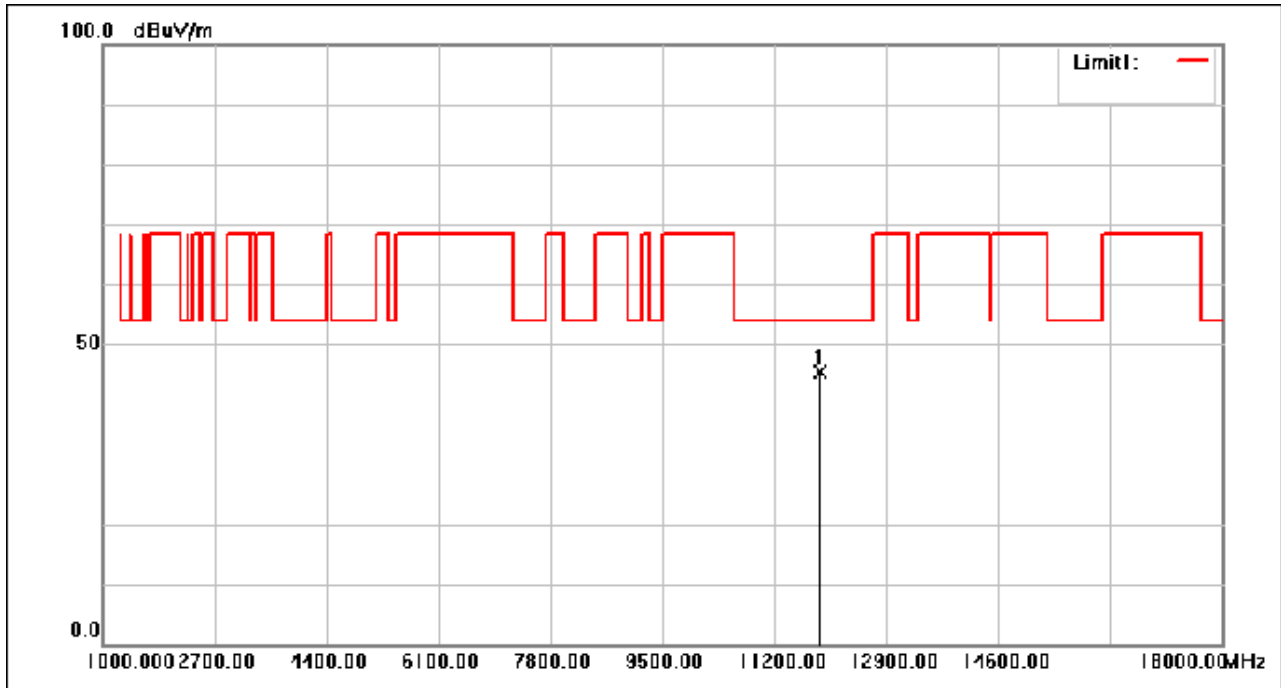
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11887.820	43.25	2.23	45.48	54.00	-8.52	peak

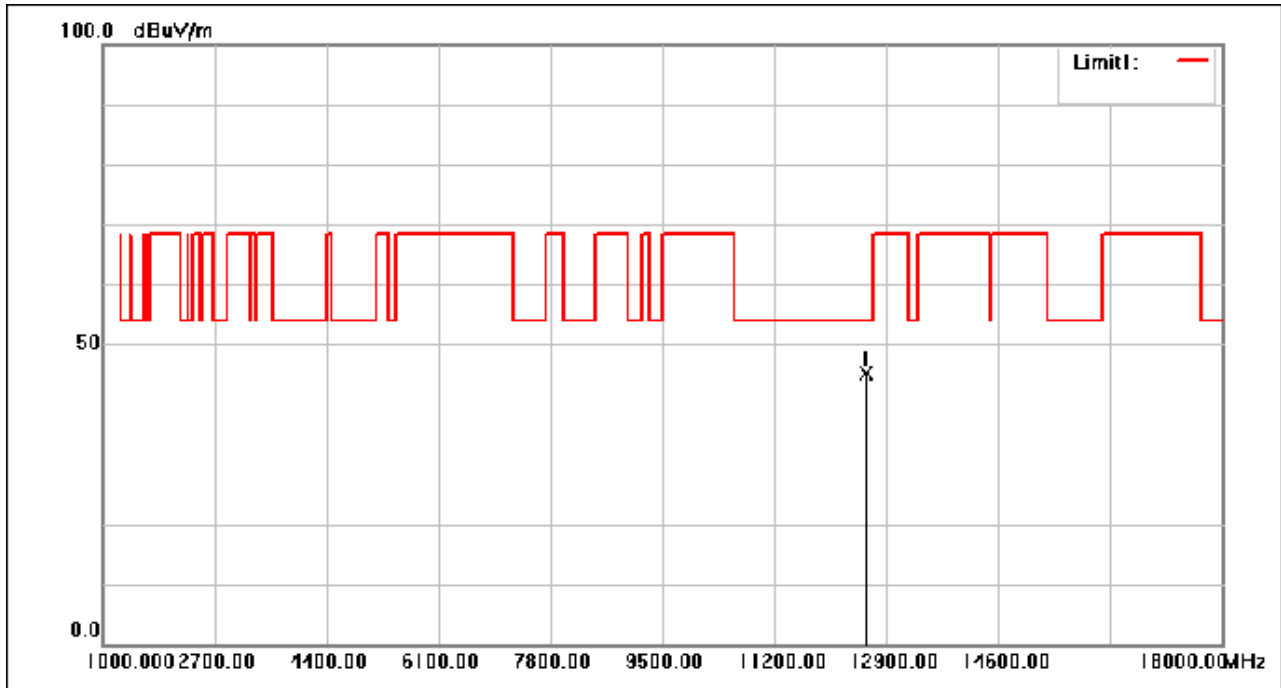
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Test Mode: 12; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 160MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12585.760	42.76	2.35	45.11	54.00	-8.89	peak

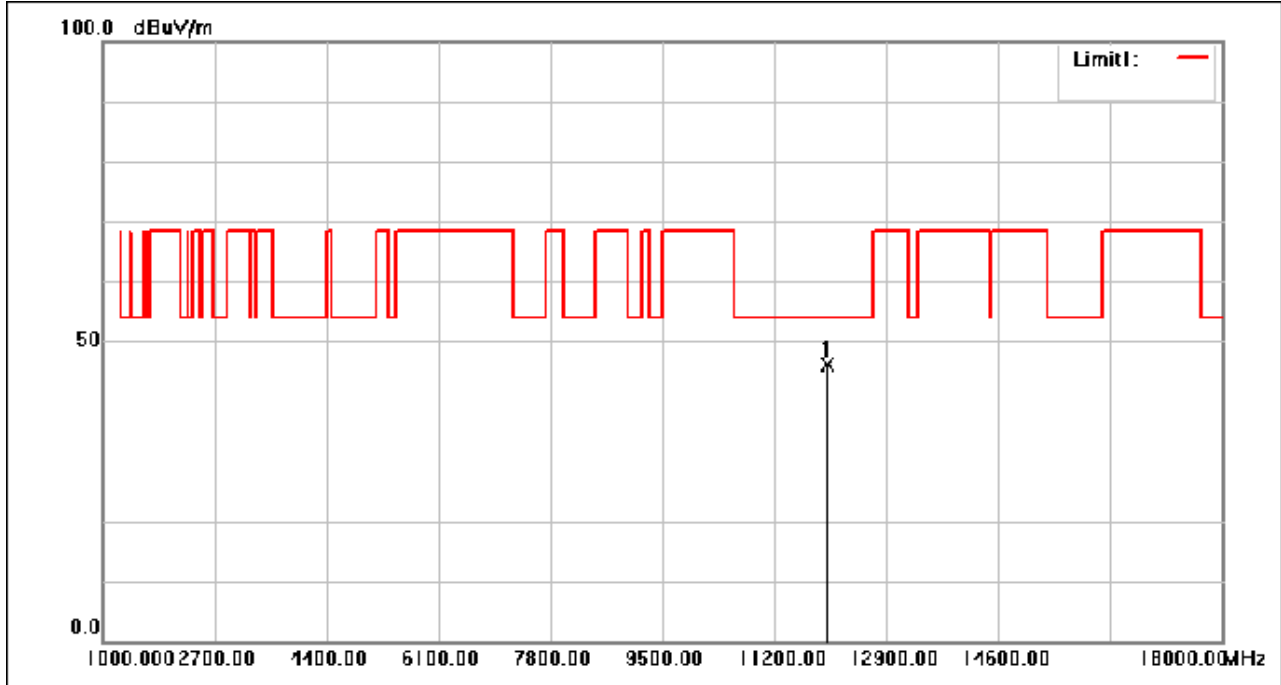
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12002.560	43.49	2.60	46.09	54.00	-7.91	peak

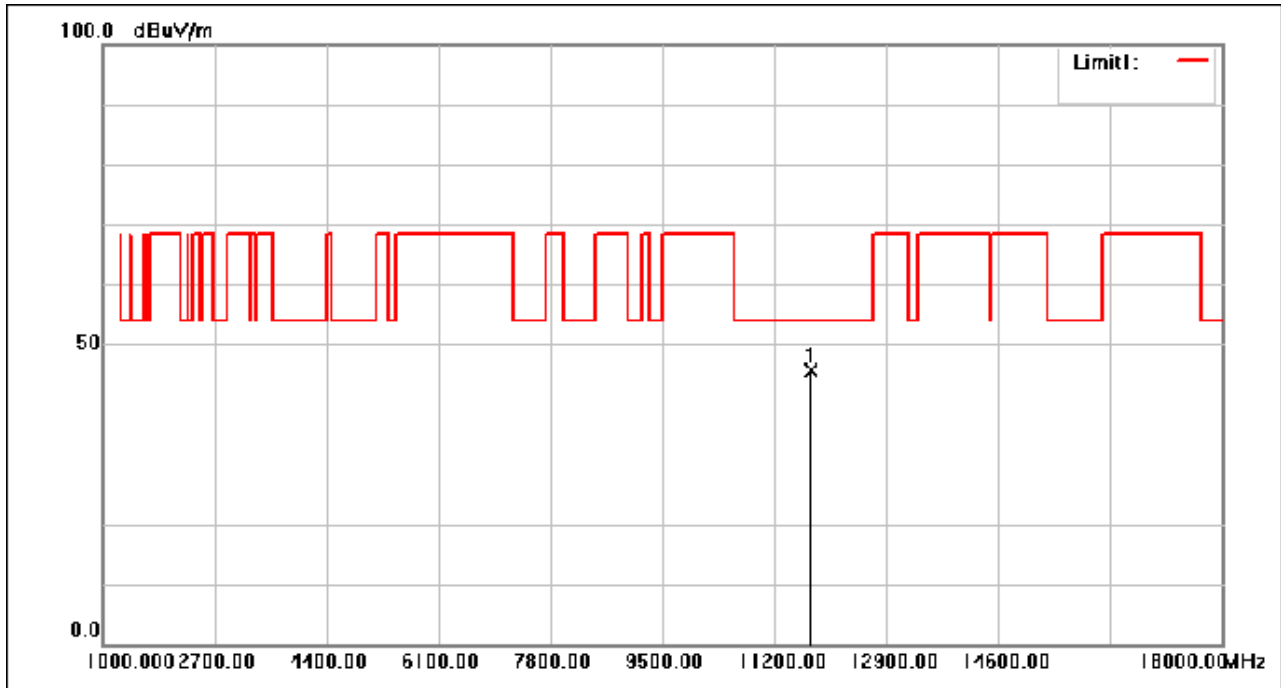
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11759.670	43.75	1.81	45.56	54.00	-8.44	peak

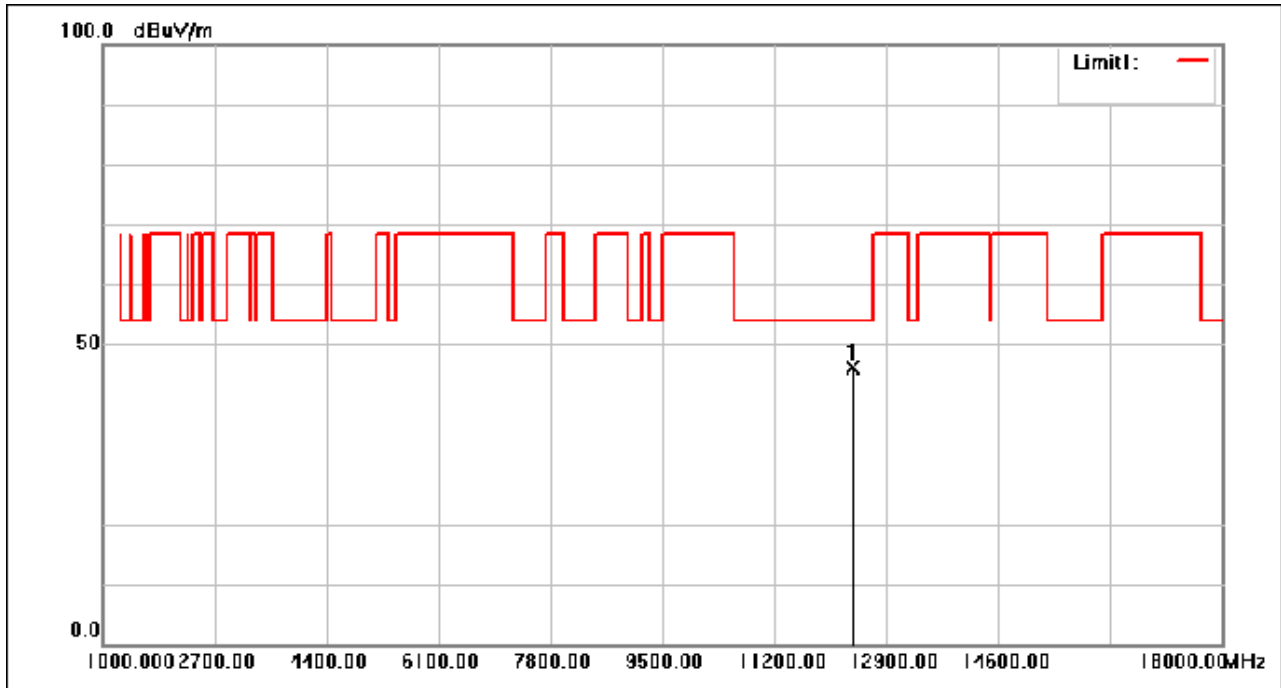
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12389.260	43.93	2.18	46.11	54.00	-7.89	peak

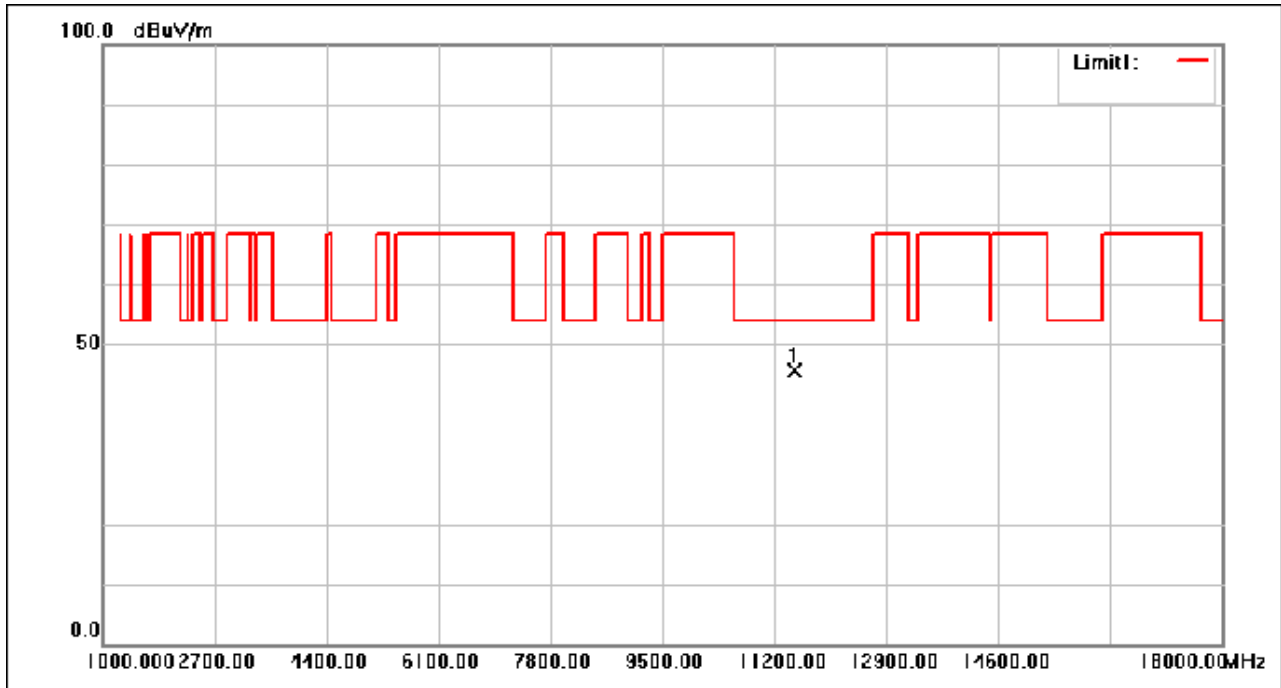
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11503.190	44.56	0.96	45.52	54.00	-8.48	peak

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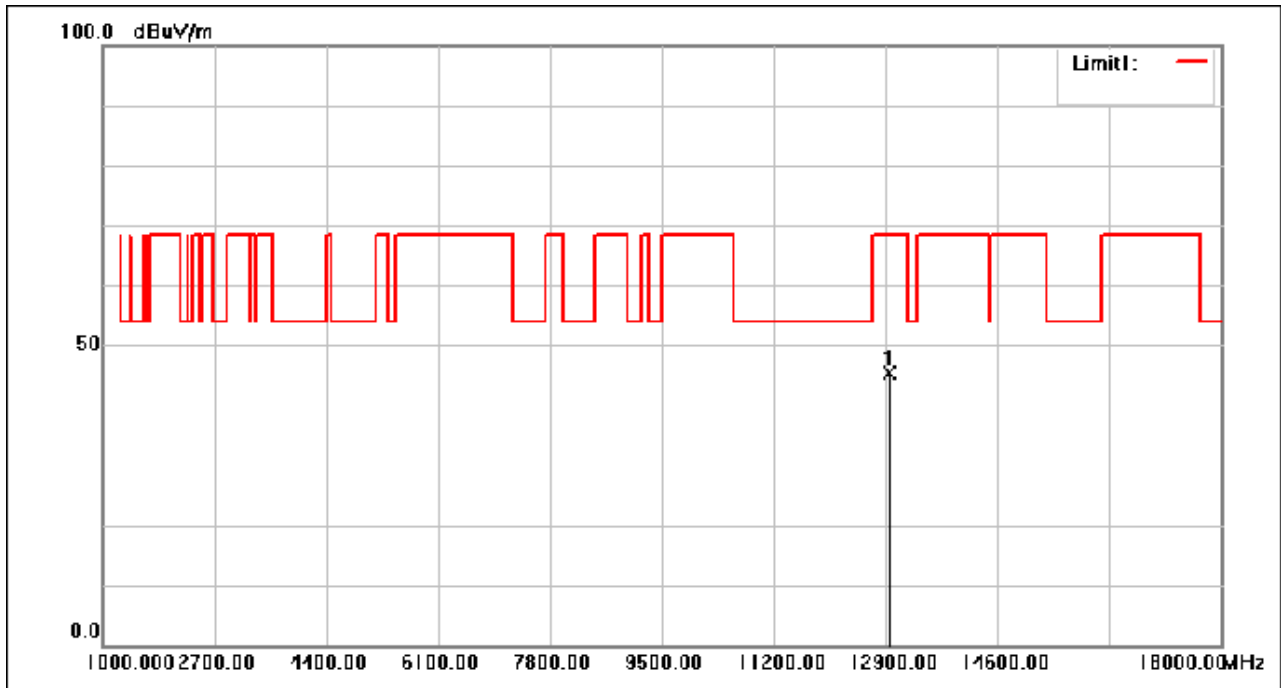
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Band6

Test Mode: 13; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12945.940	41.78	3.58	45.36	68.30	-22.94	peak

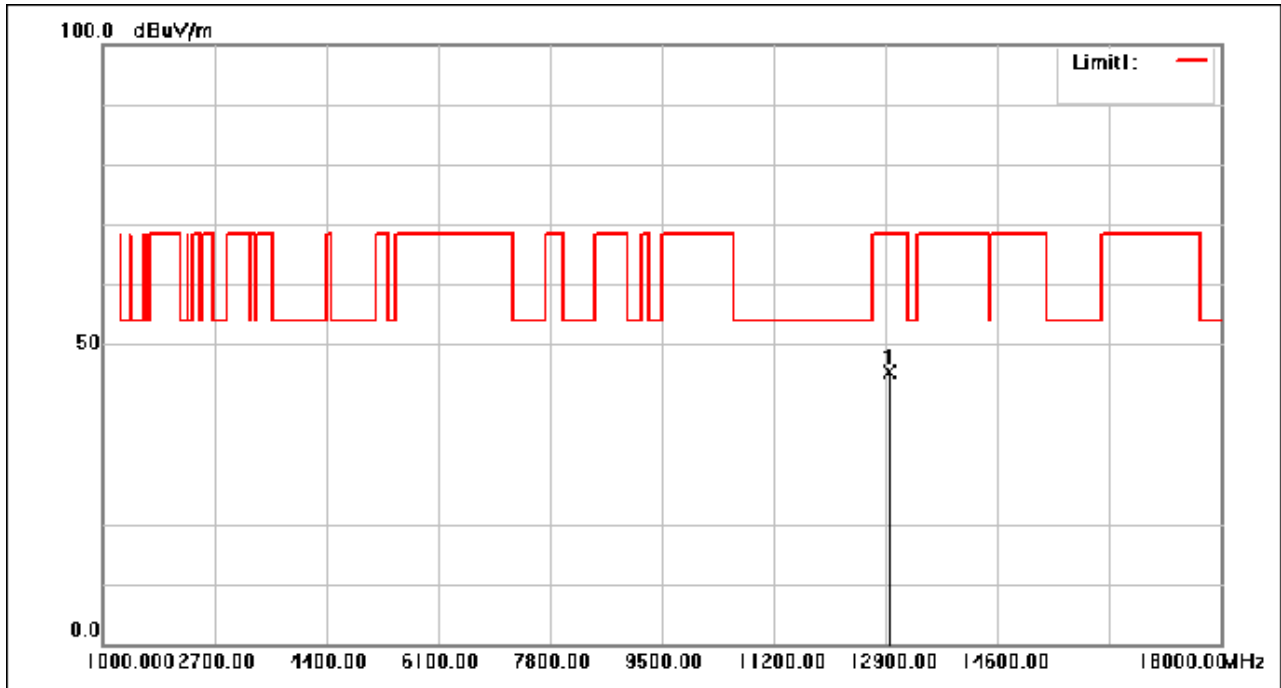
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Test Mode: 13; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12948.580	41.79	3.59	45.38	68.30	-22.92	peak

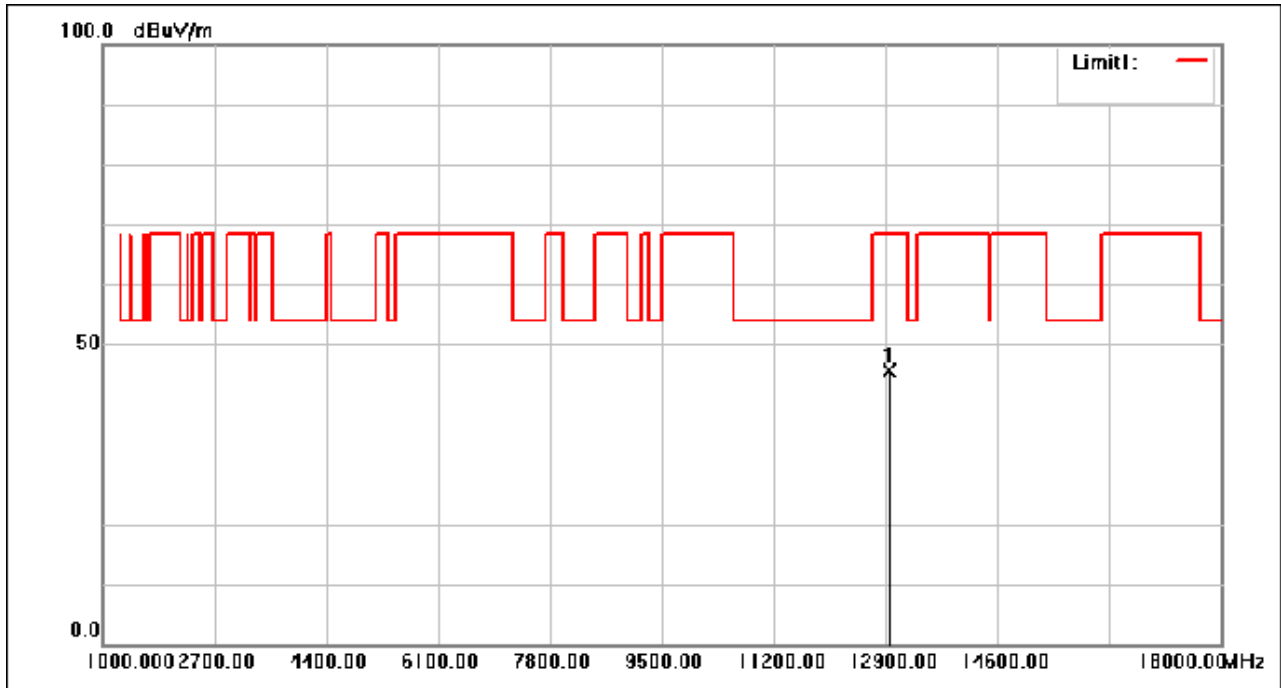
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 13; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12959.840	42.12	3.63	45.75	68.30	-22.55	peak

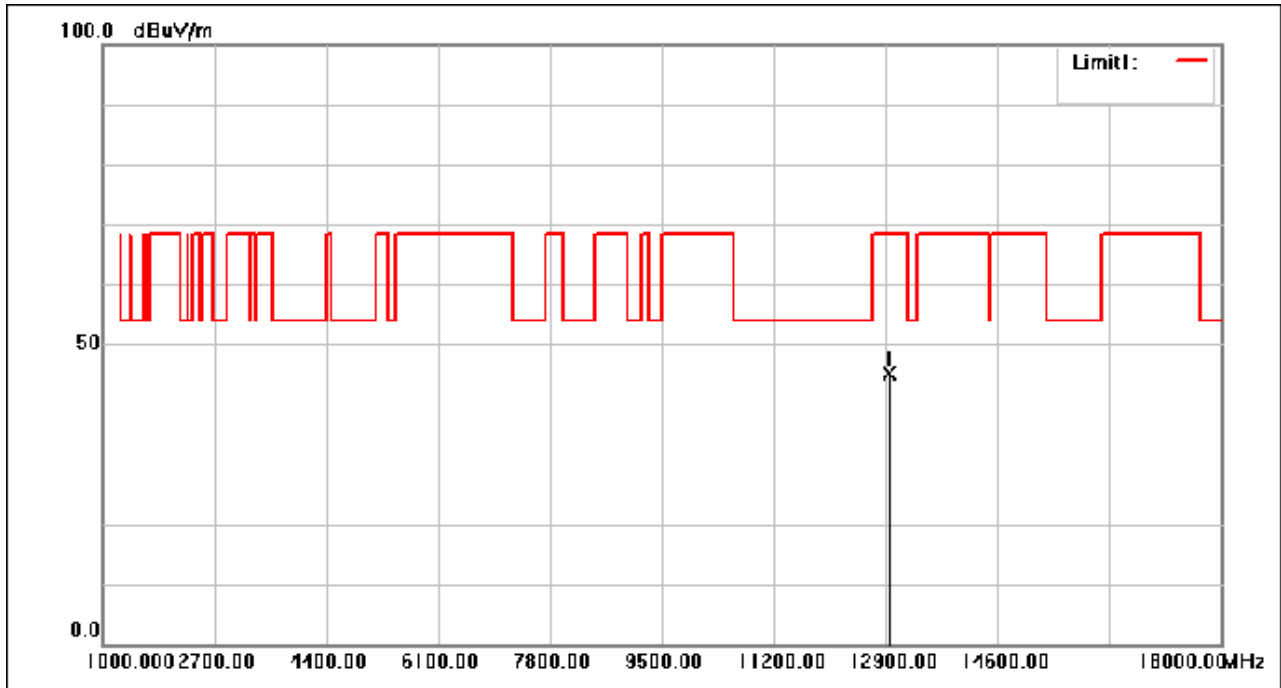
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 13; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12948.560	41.64	3.59	45.23	68.30	-23.07	peak

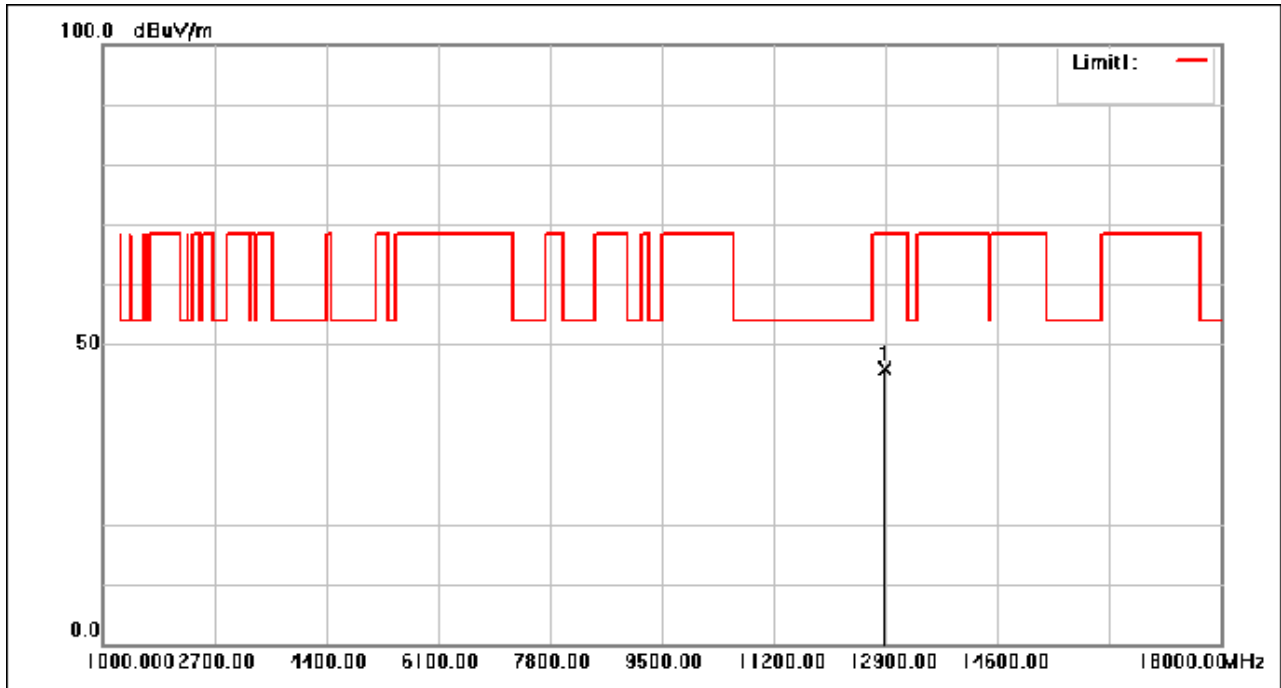
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Test Mode: 13; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12897.070	42.38	3.41	45.79	68.30	-22.51	peak

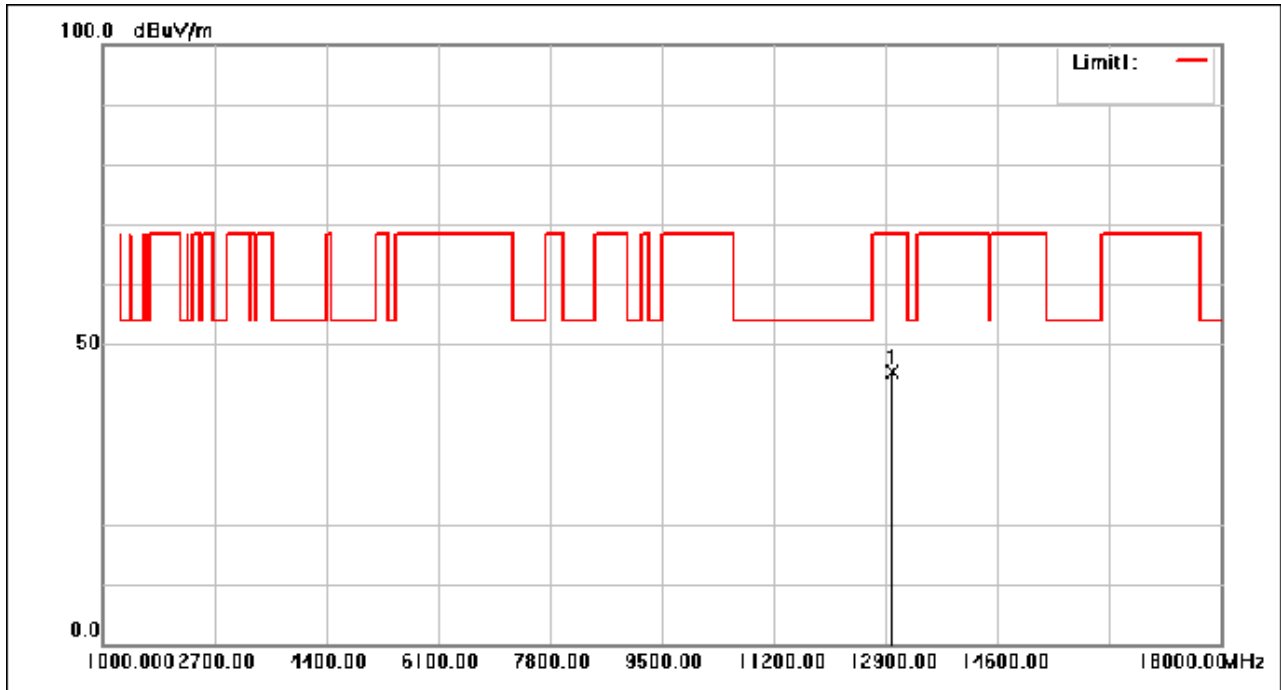
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Test Mode: 13; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12991.020	41.55	3.73	45.28	68.30	-23.02	peak

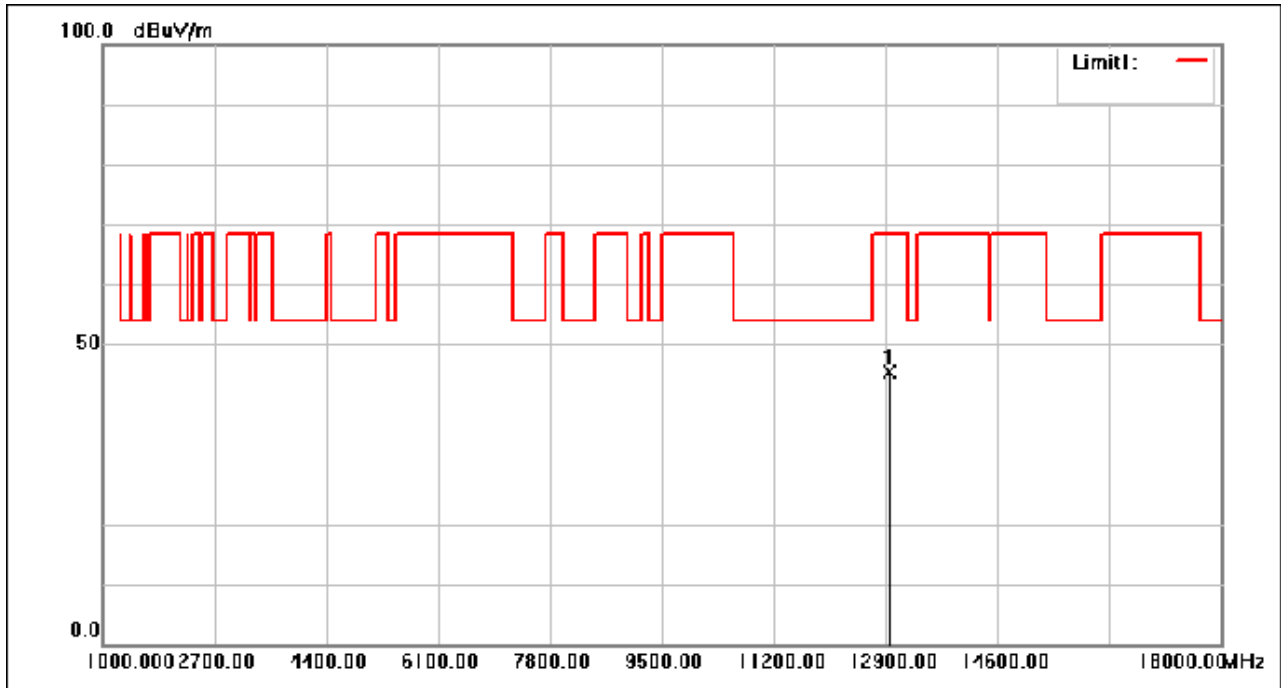
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 13; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12962.540	41.77	3.64	45.41	68.30	-22.89	peak

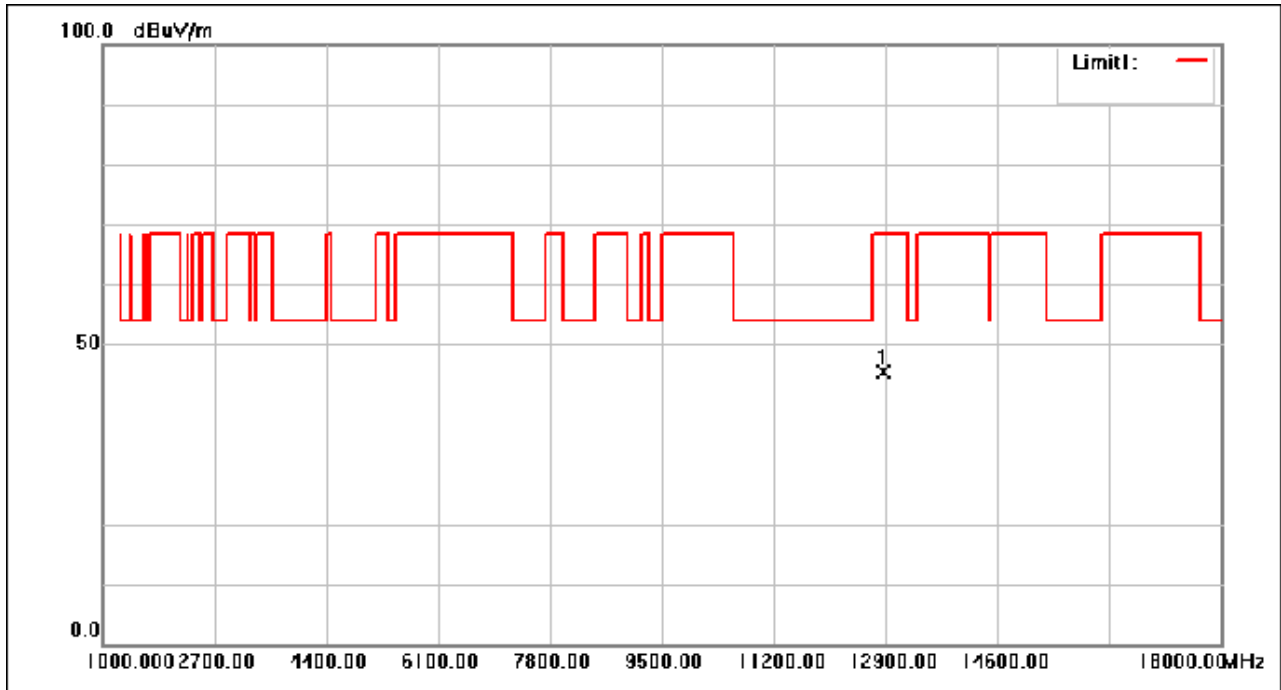
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12860.570	42.06	3.28	45.34	68.30	-22.96	peak

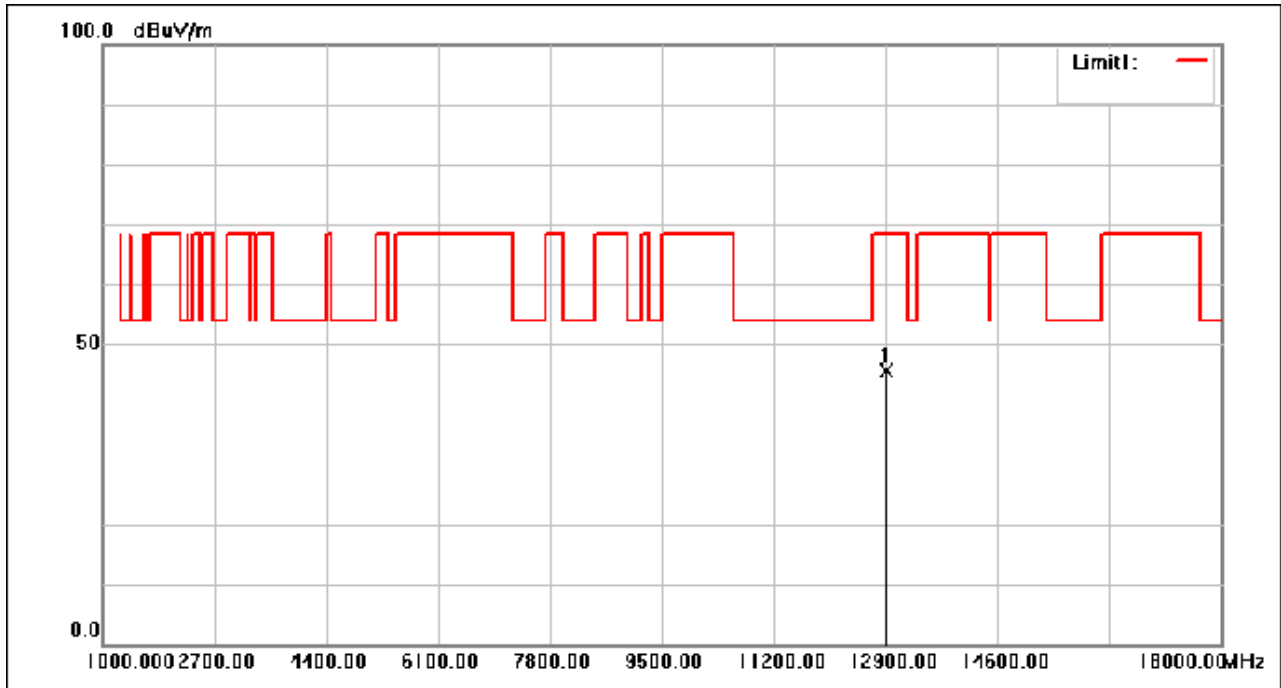
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 13; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12913.740	42.18	3.47	45.65	68.30	-22.65	peak

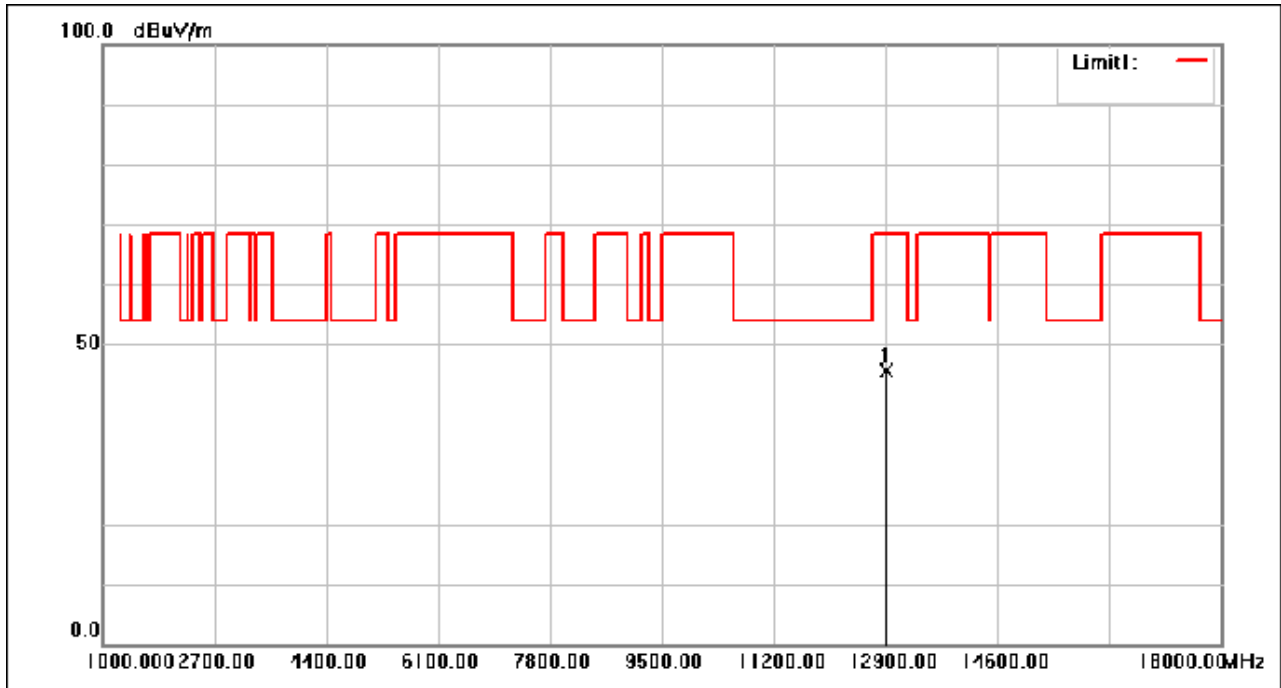
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12907.250	42.31	3.44	45.75	68.30	-22.55	peak

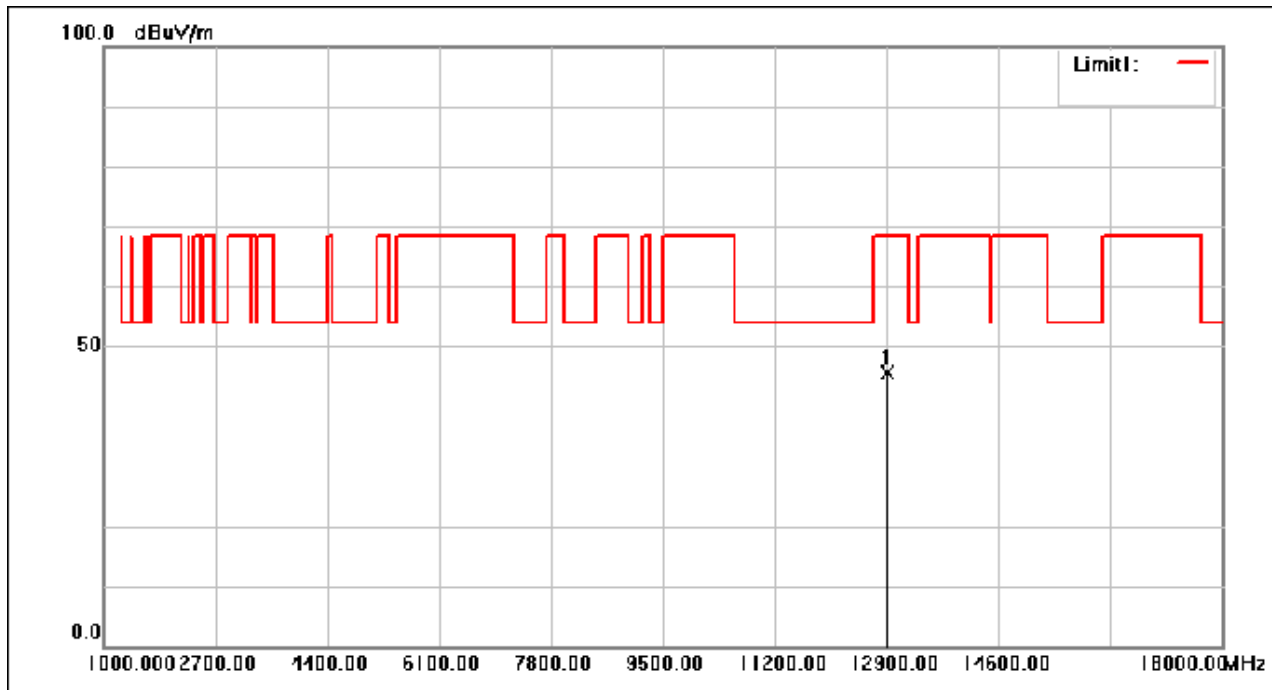
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Test Mode: 13; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12907.250	42.31	3.44	45.75	68.30	-22.55	peak

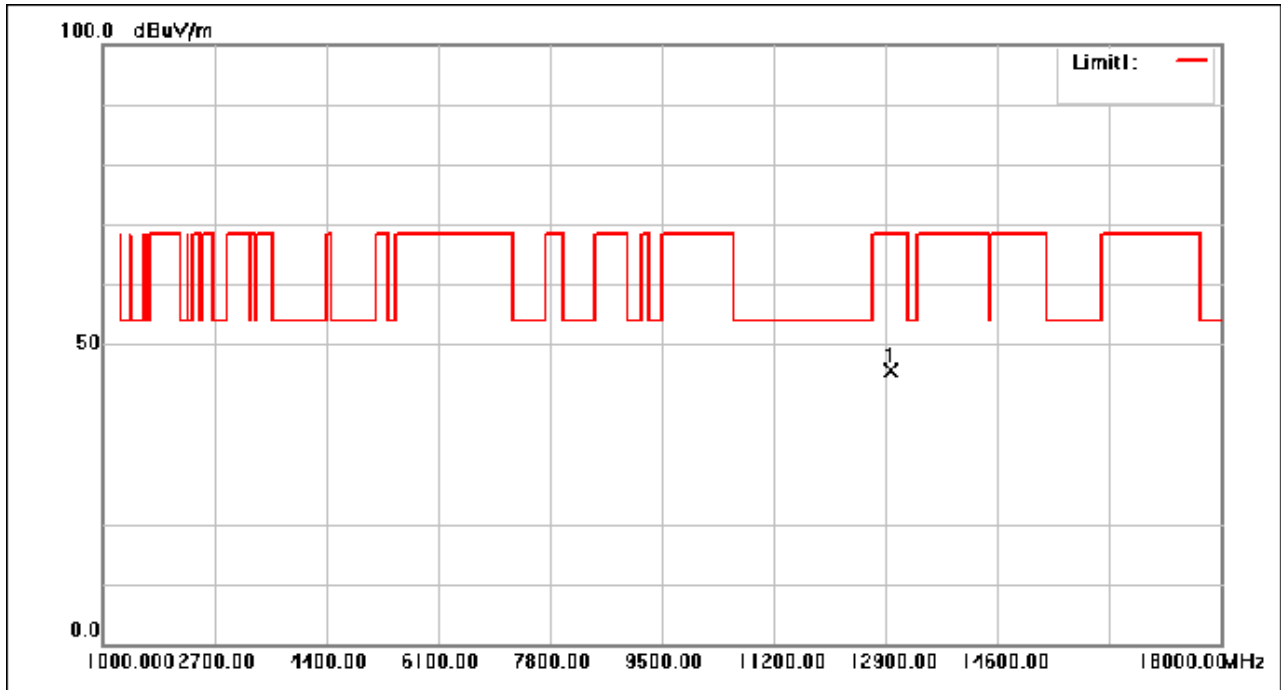
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 13; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12974.630	41.95	3.67	45.62	68.30	-22.68	peak

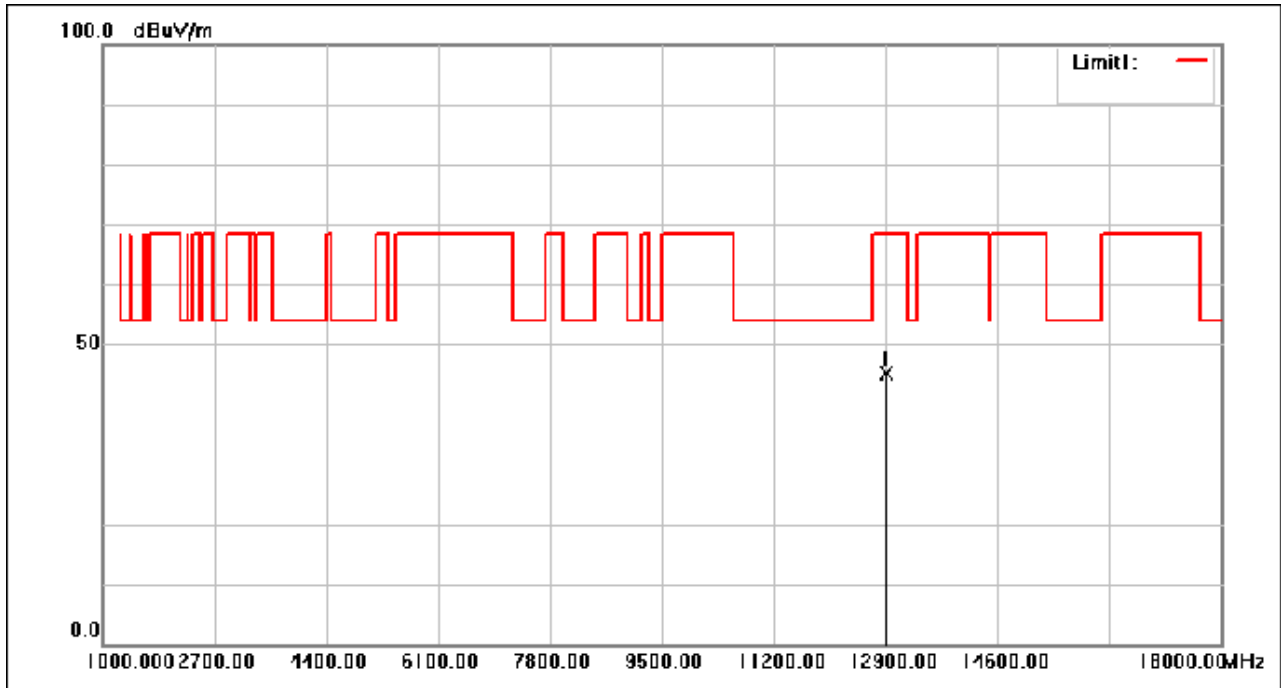
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Test Mode: 13; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12920.920	41.58	3.49	45.07	68.30	-23.23	peak

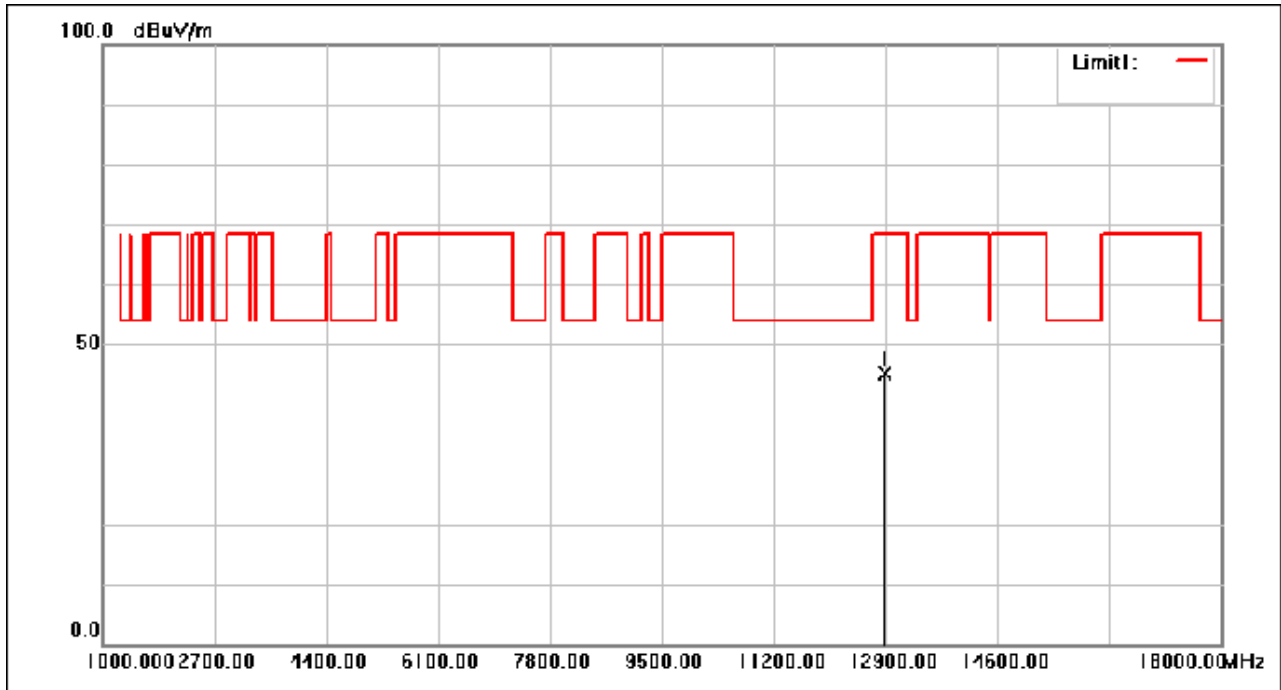
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12899.880	41.73	3.42	45.15	68.30	-23.15	peak

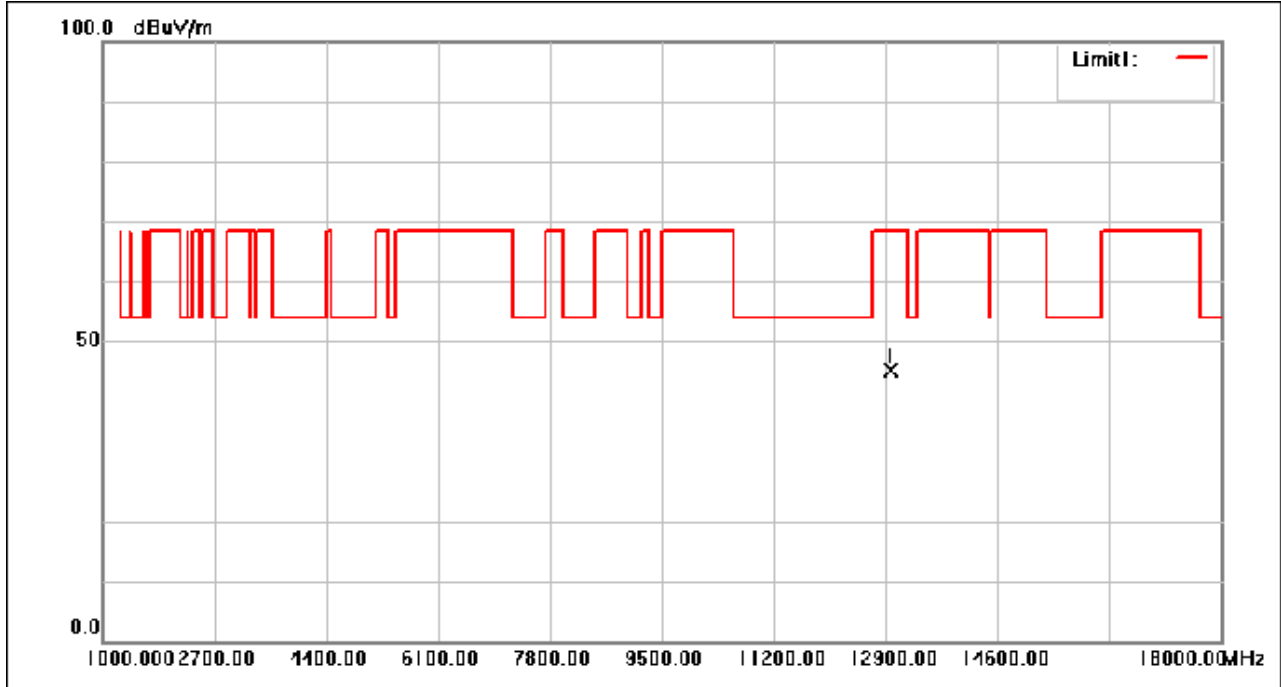
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Test Mode: 13; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12981.450	41.49	3.70	45.19	68.30	-23.11	peak

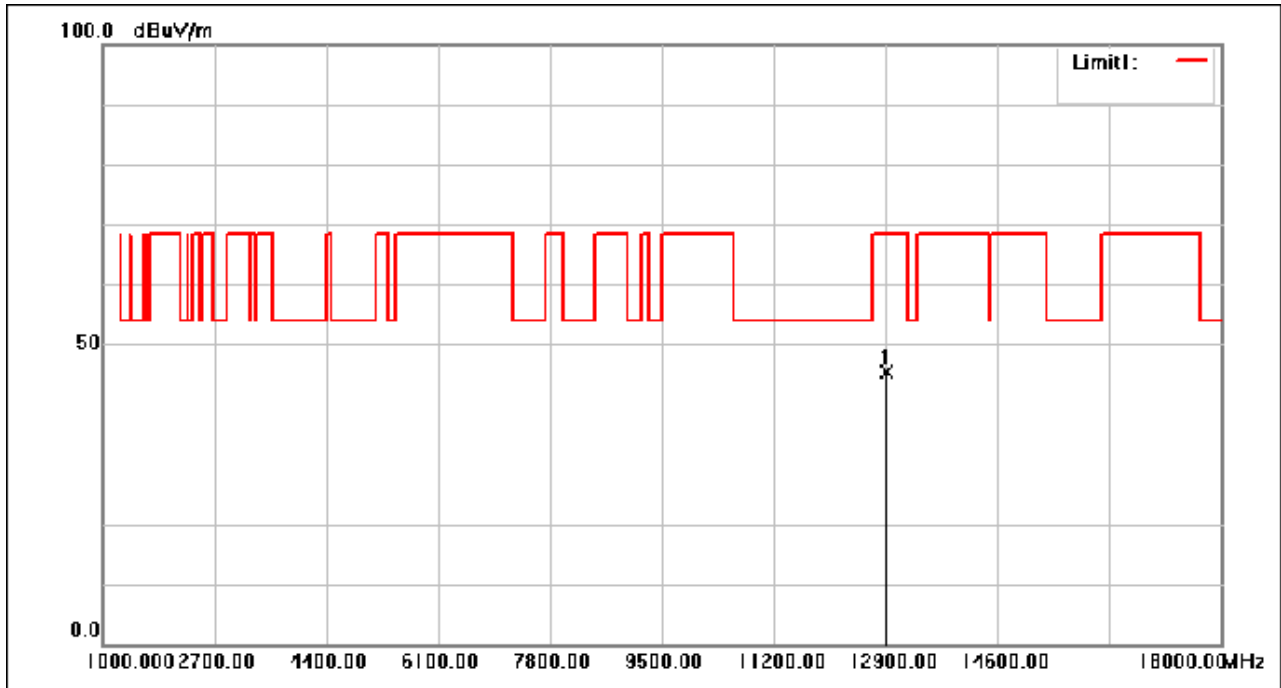
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12907.580	41.84	3.44	45.28	68.30	-23.02	peak

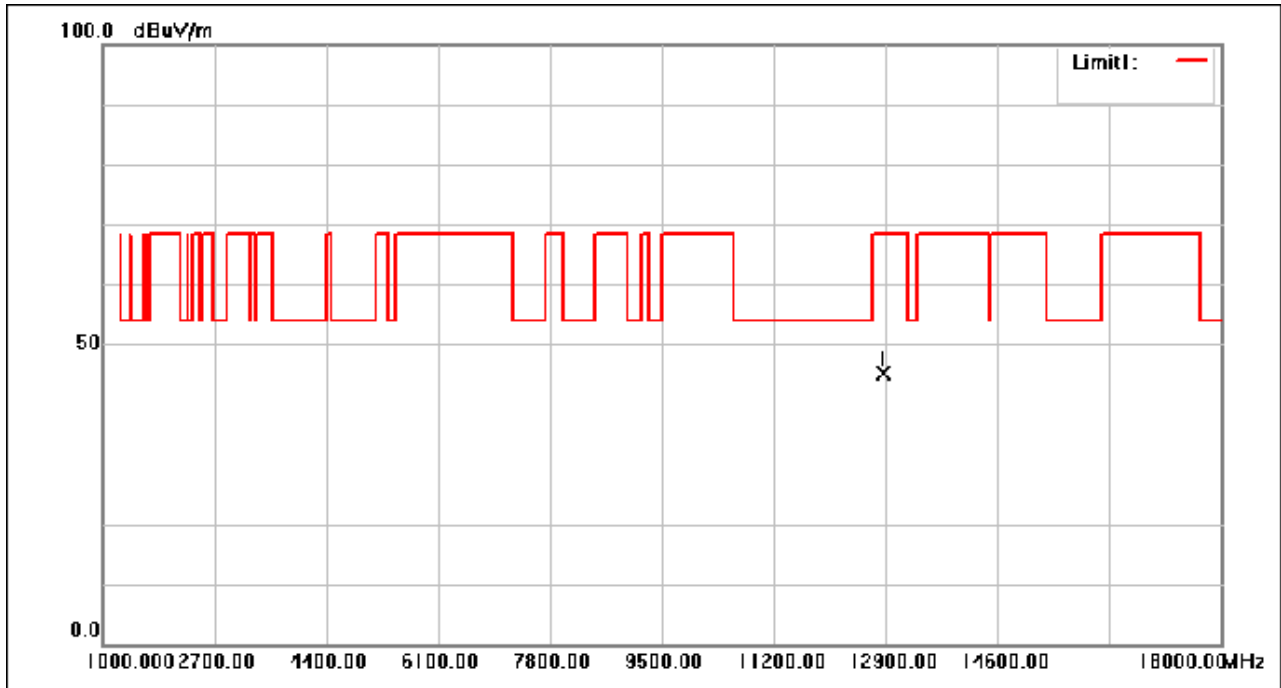
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Test Mode: 13; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12873.570	41.69	3.33	45.02	68.30	-23.28	peak

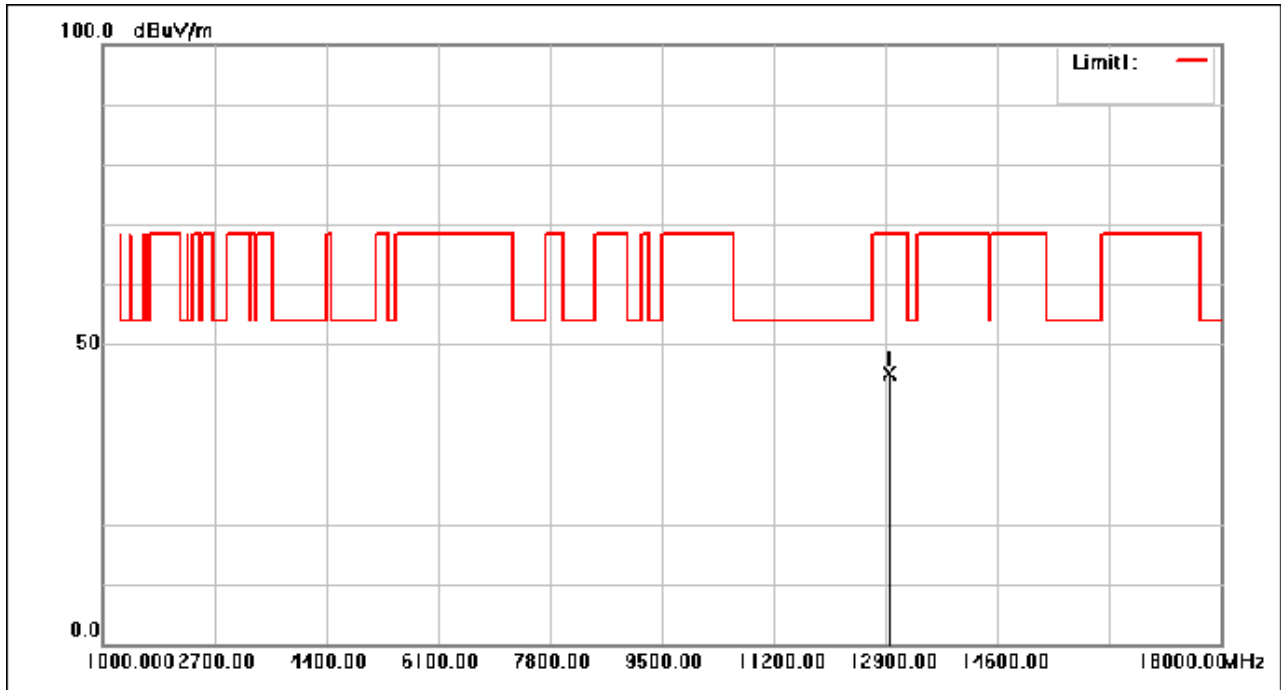
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12953.770	41.62	3.60	45.22	68.30	-23.08	peak

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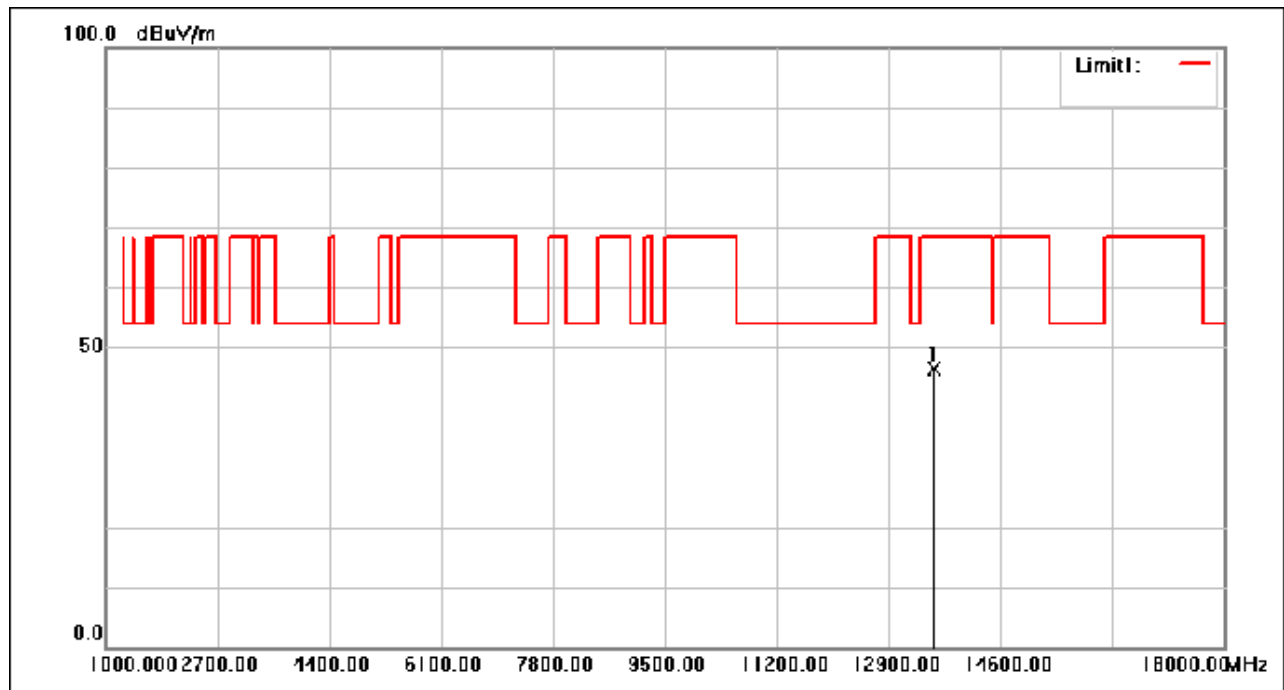
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Band7

Test Mode: 14; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13601.790	43.68	2.79	46.47	68.30	-21.83	peak

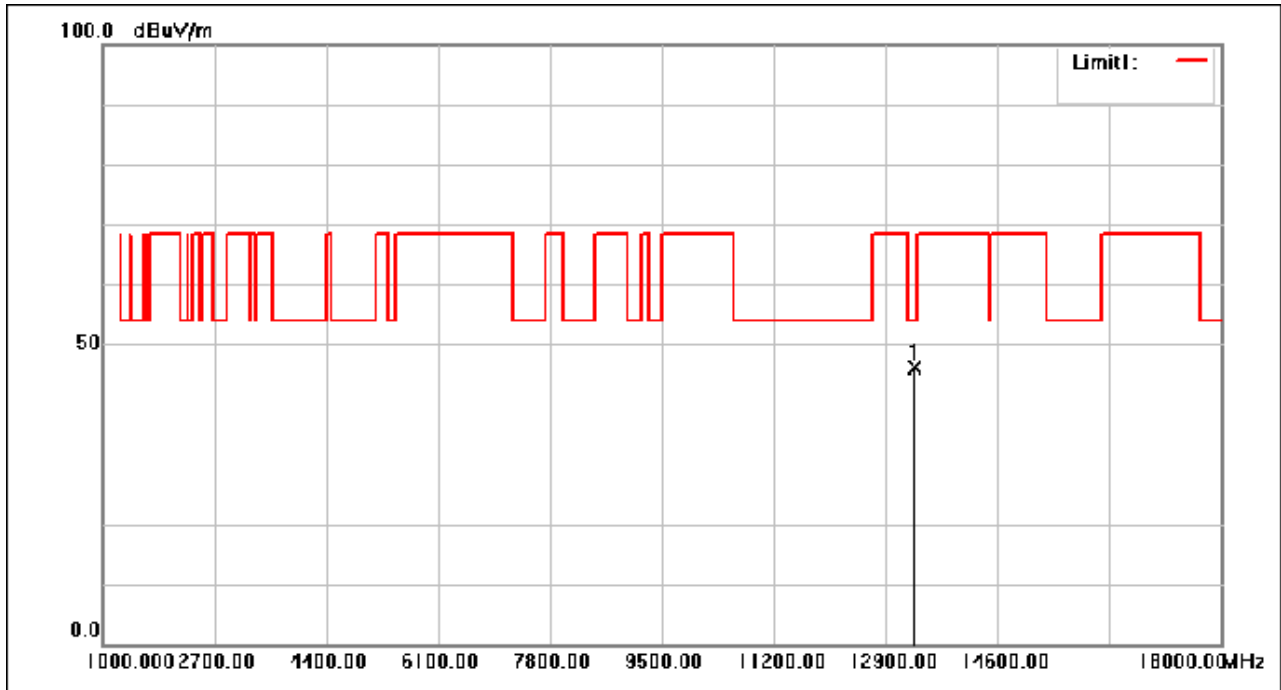
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Test Mode: 14; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13334.750	43.10	2.92	46.02	54.00	-7.98	peak

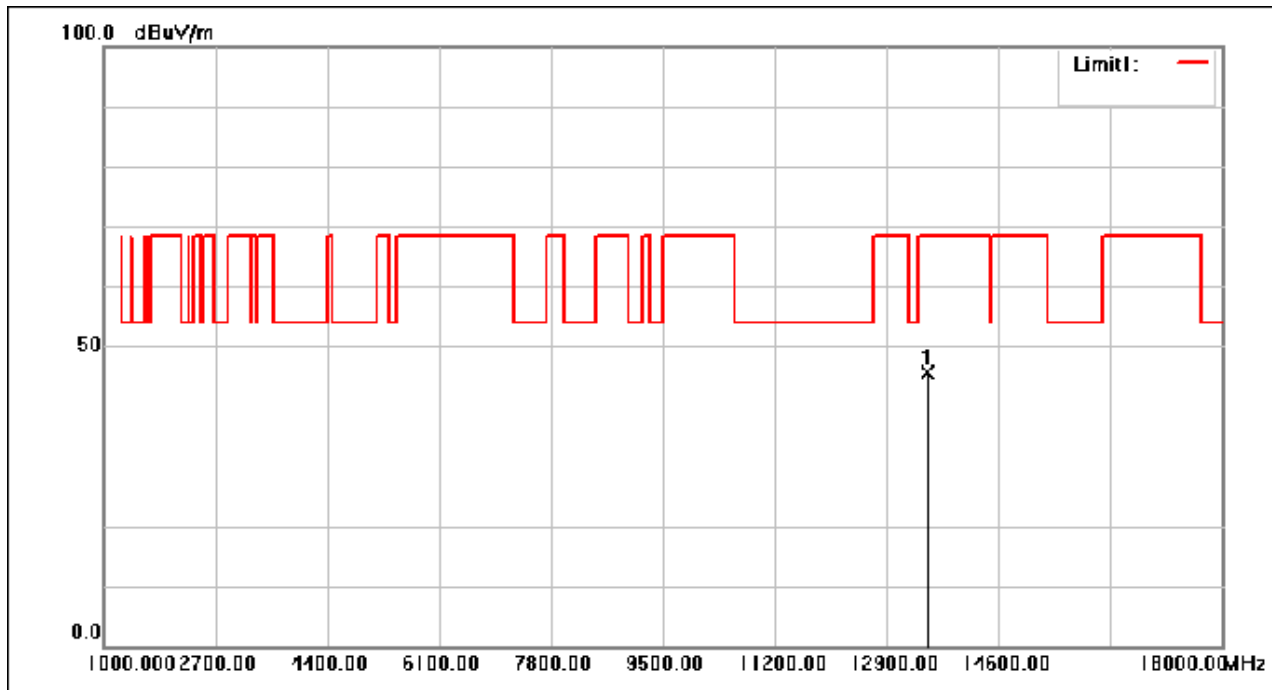
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 14; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13521.160	43.00	2.57	45.57	68.30	-22.73	peak

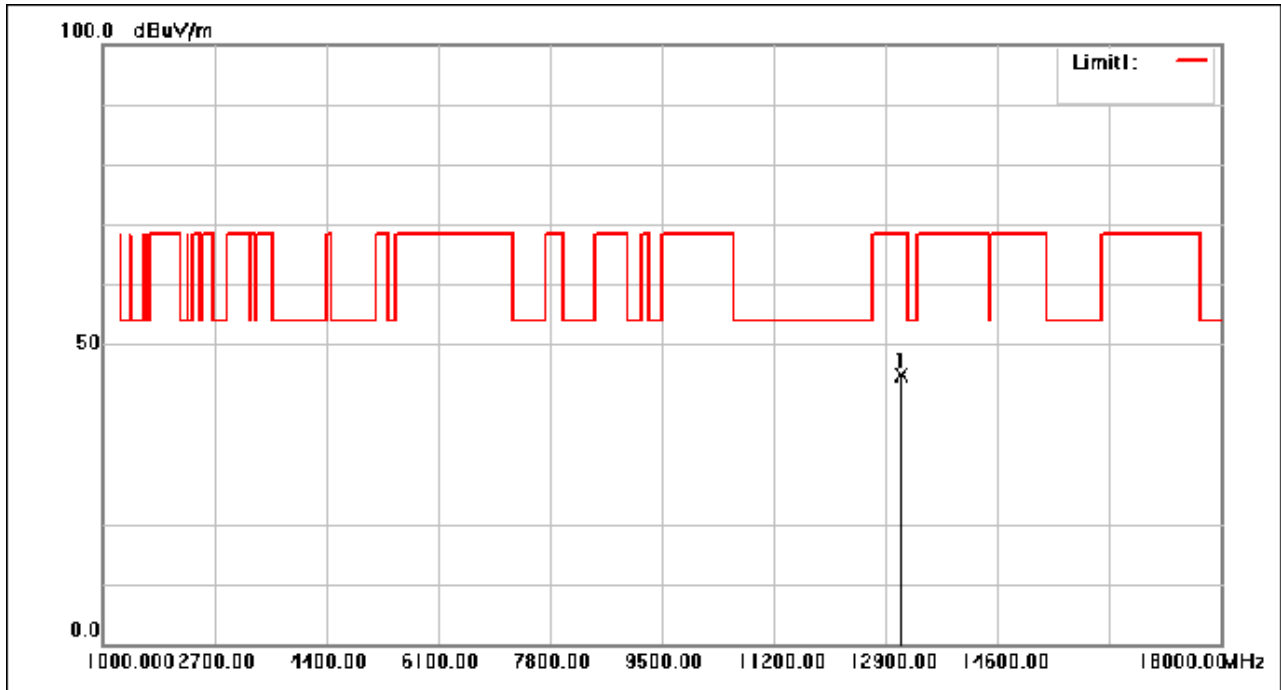
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Test Mode: 14; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13144.080	41.46	3.40	44.86	68.30	-23.44	peak

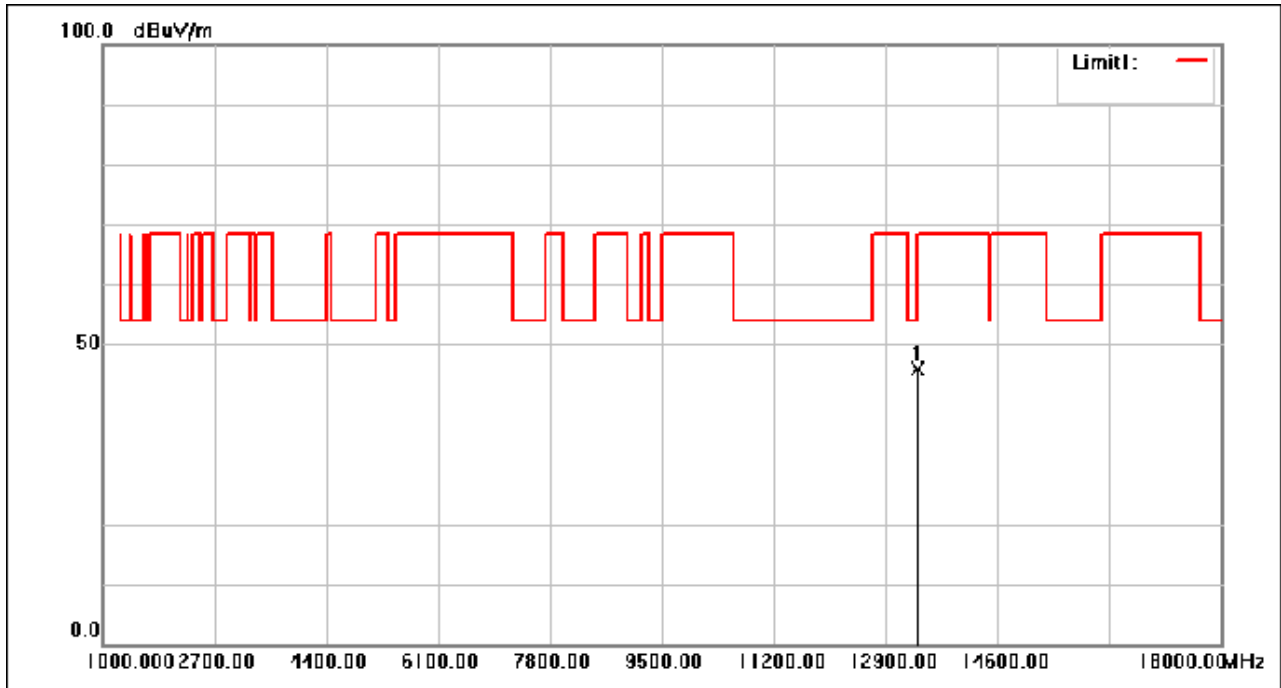
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13396.790	43.08	2.77	45.85	54.00	-8.15	peak

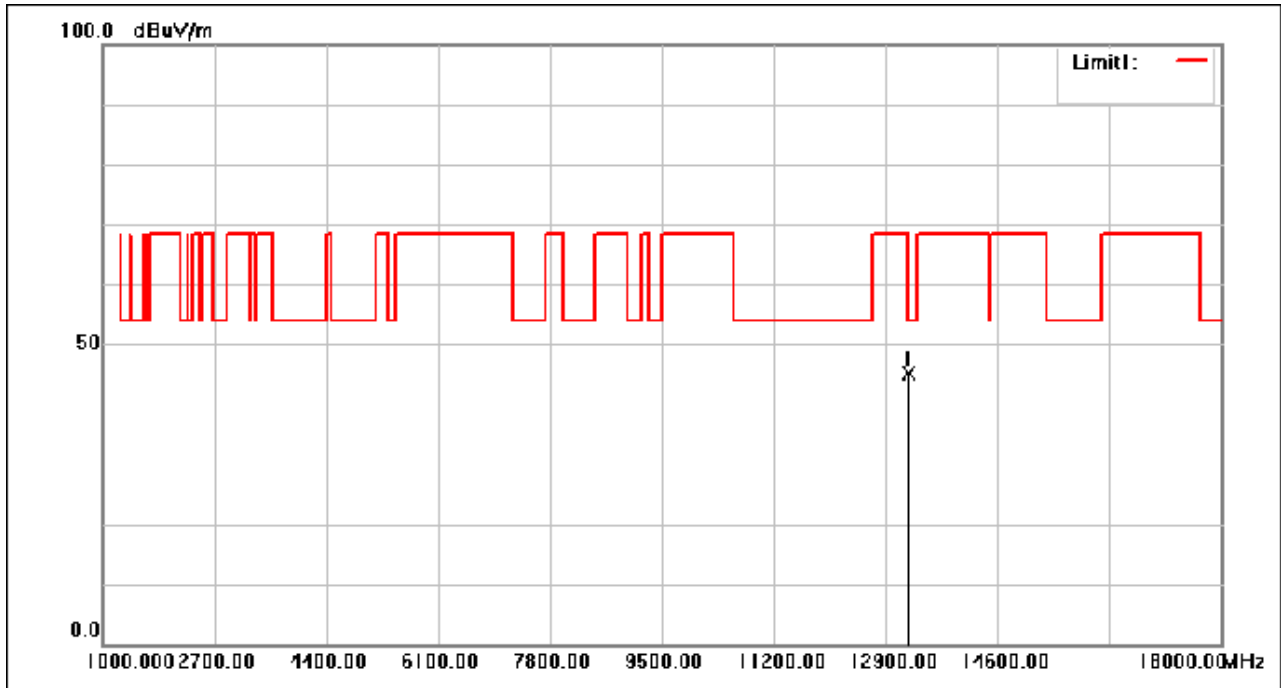
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Test Mode: 14; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1325.640	41.91	3.13	45.04	54.00	-8.96	peak

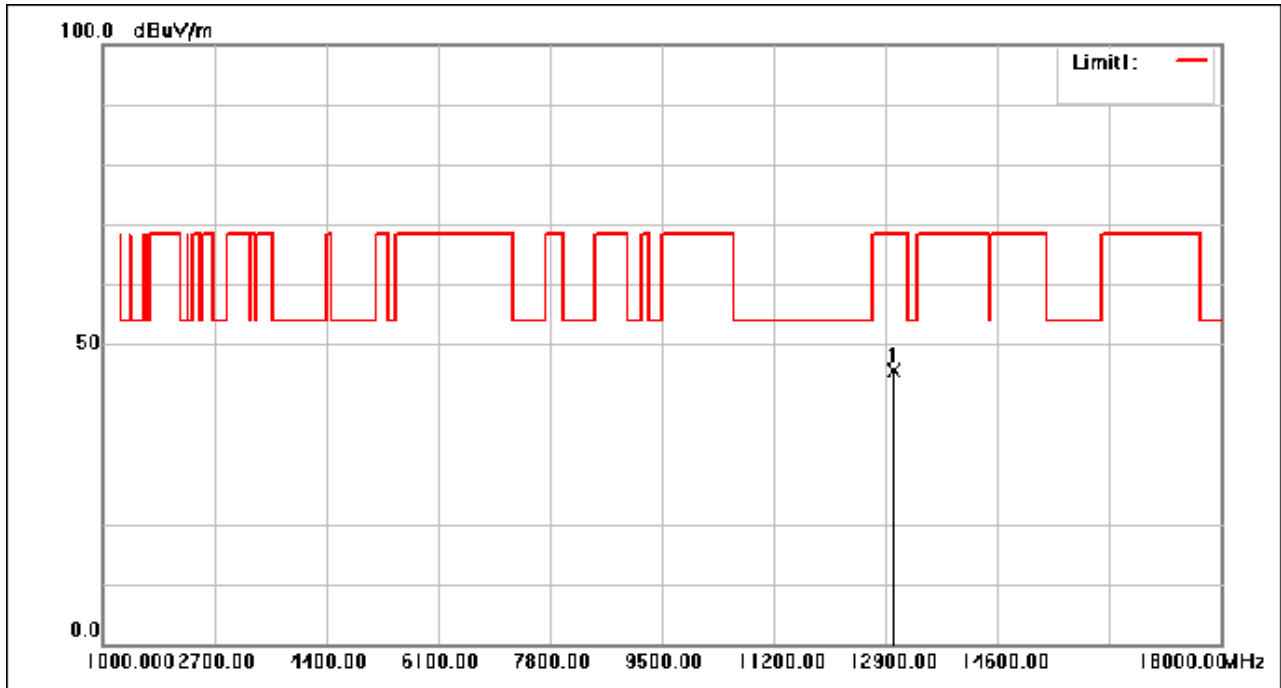
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13023.440	41.81	3.70	45.51	68.30	-22.79	peak

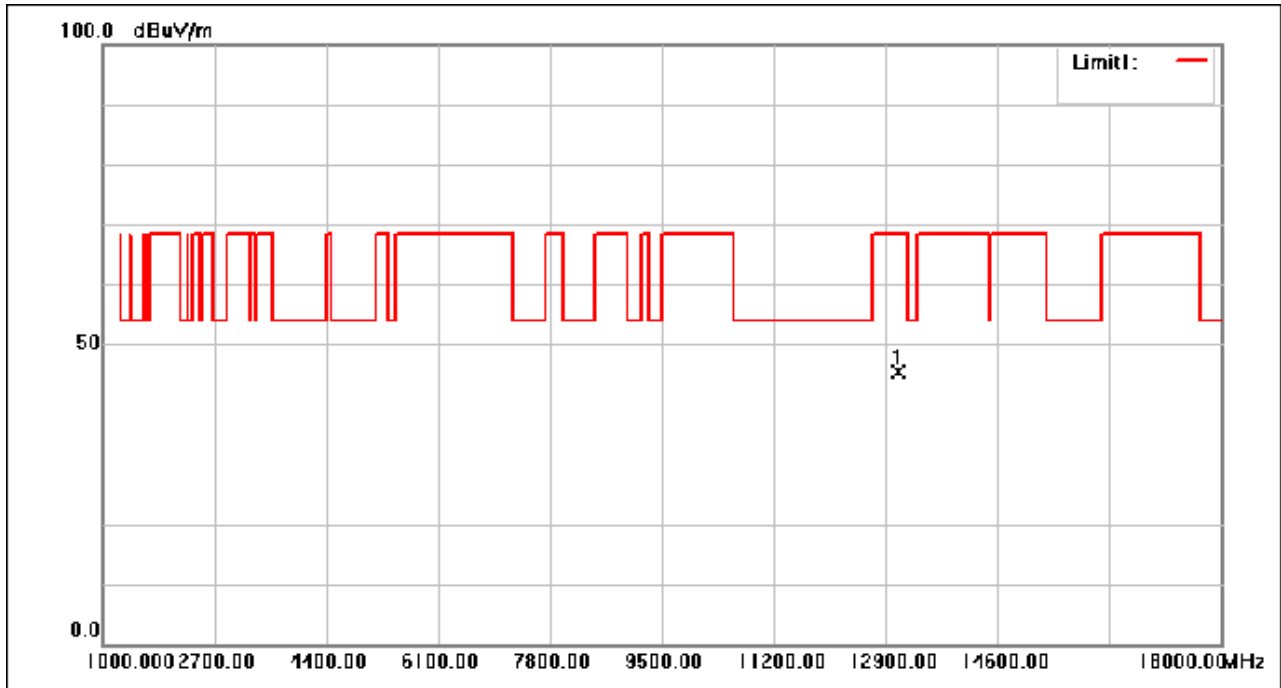
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13100.760	41.96	3.51	45.47	68.30	-22.83	peak

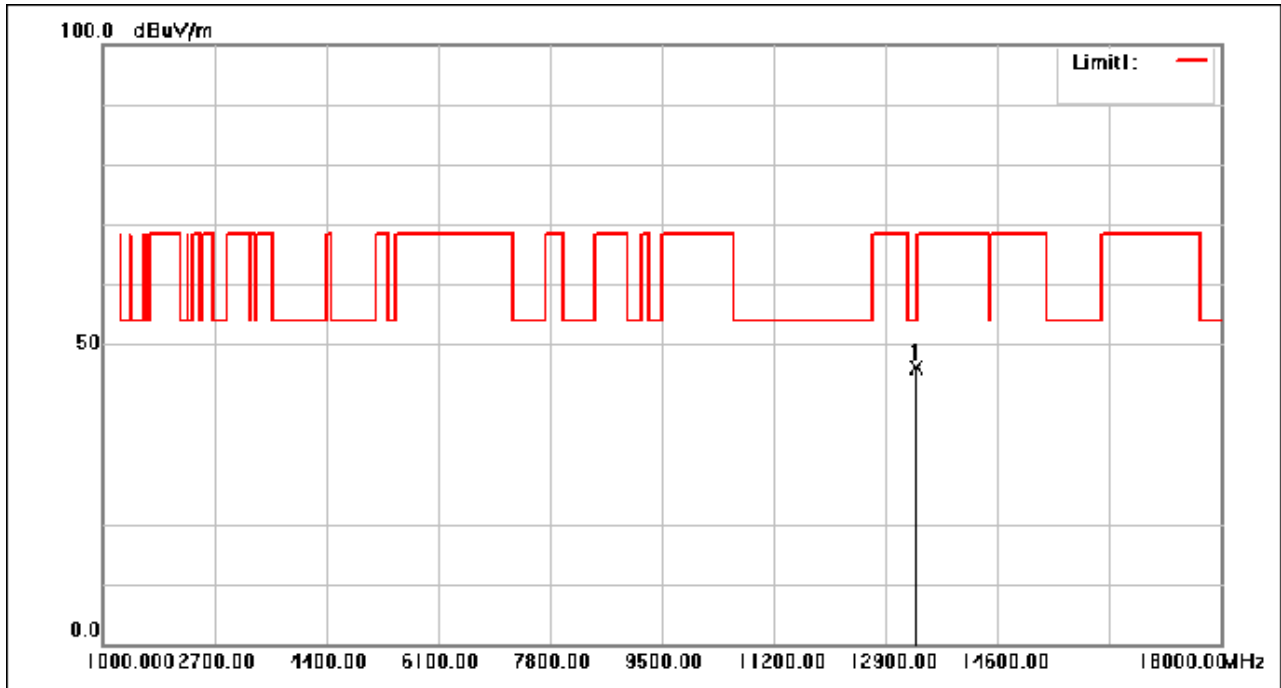
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13358.050	43.37	2.86	46.23	54.00	-7.77	peak

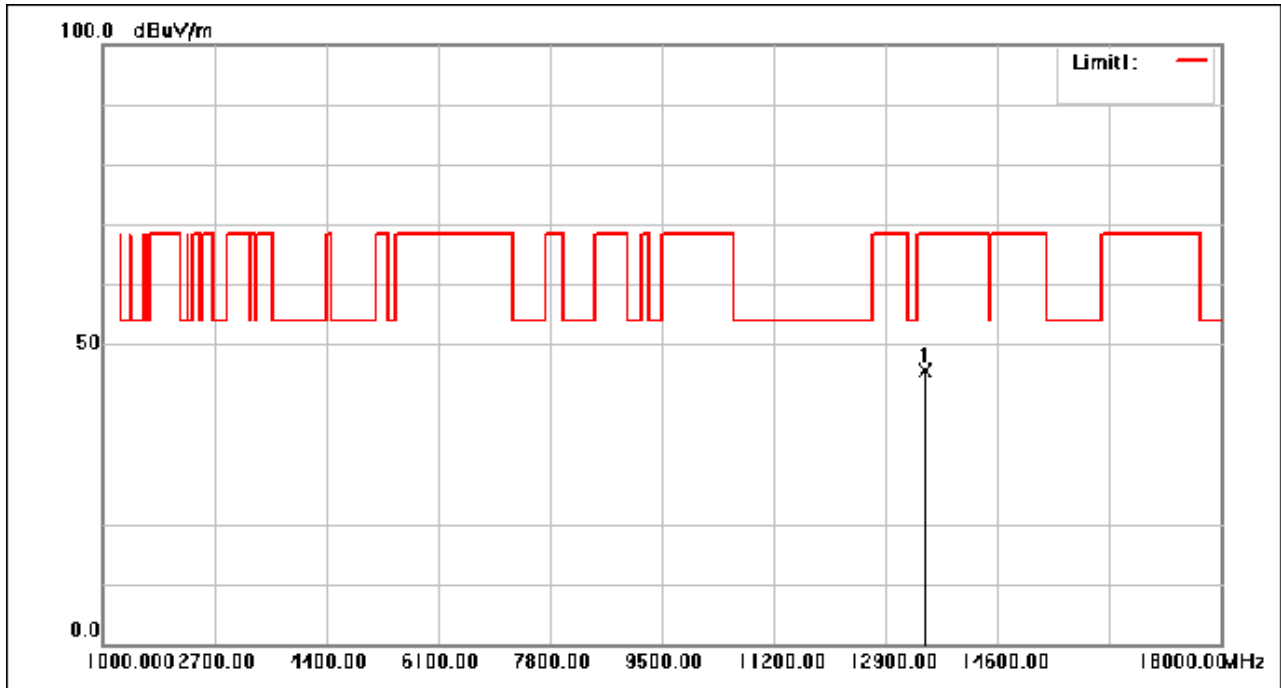
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13509.730	43.07	2.54	45.61	68.30	-22.69	peak

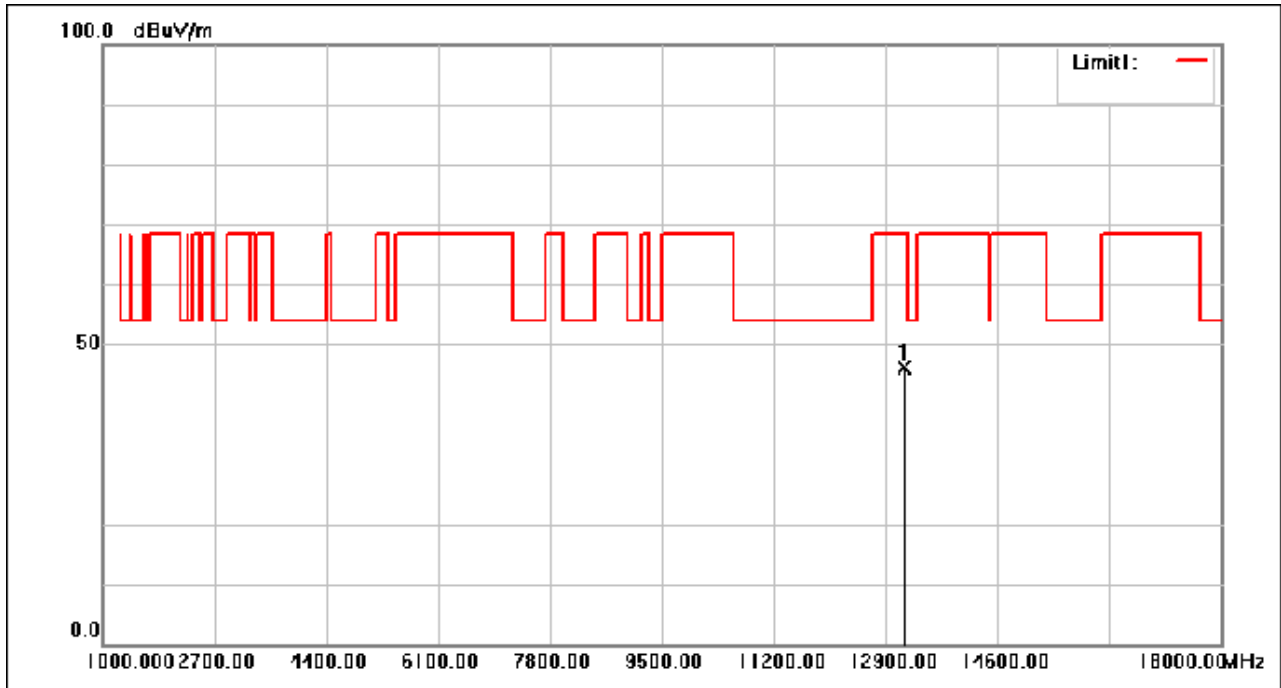
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Test Mode: 14; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13188.970	42.87	3.29	46.16	68.30	-22.14	peak

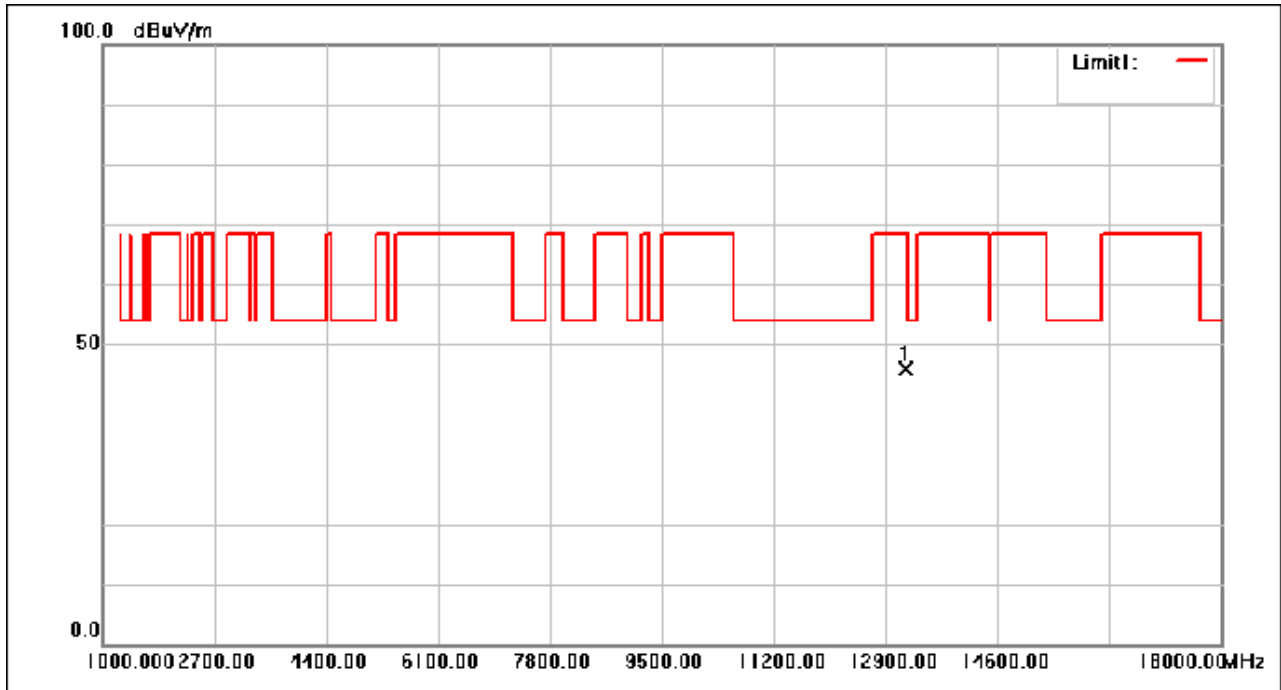
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13213.590	42.71	3.23	45.94	68.30	-22.36	peak

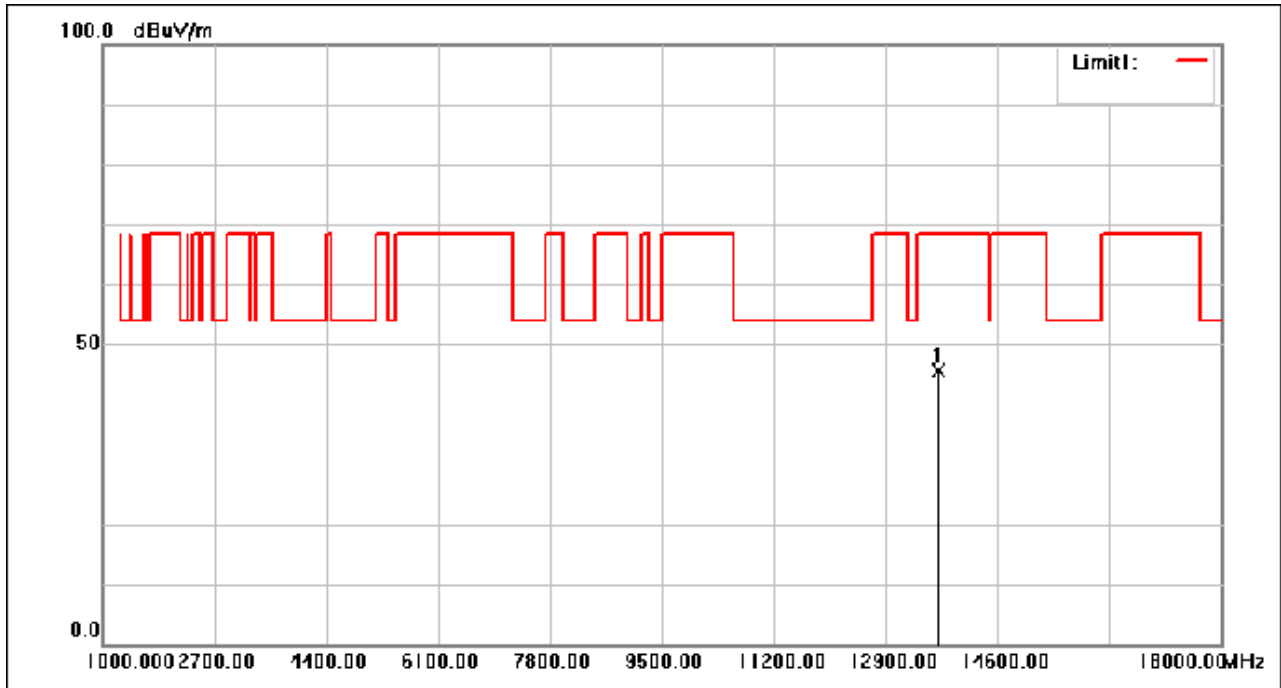
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13697.890	42.50	3.06	45.56	68.30	-22.74	peak

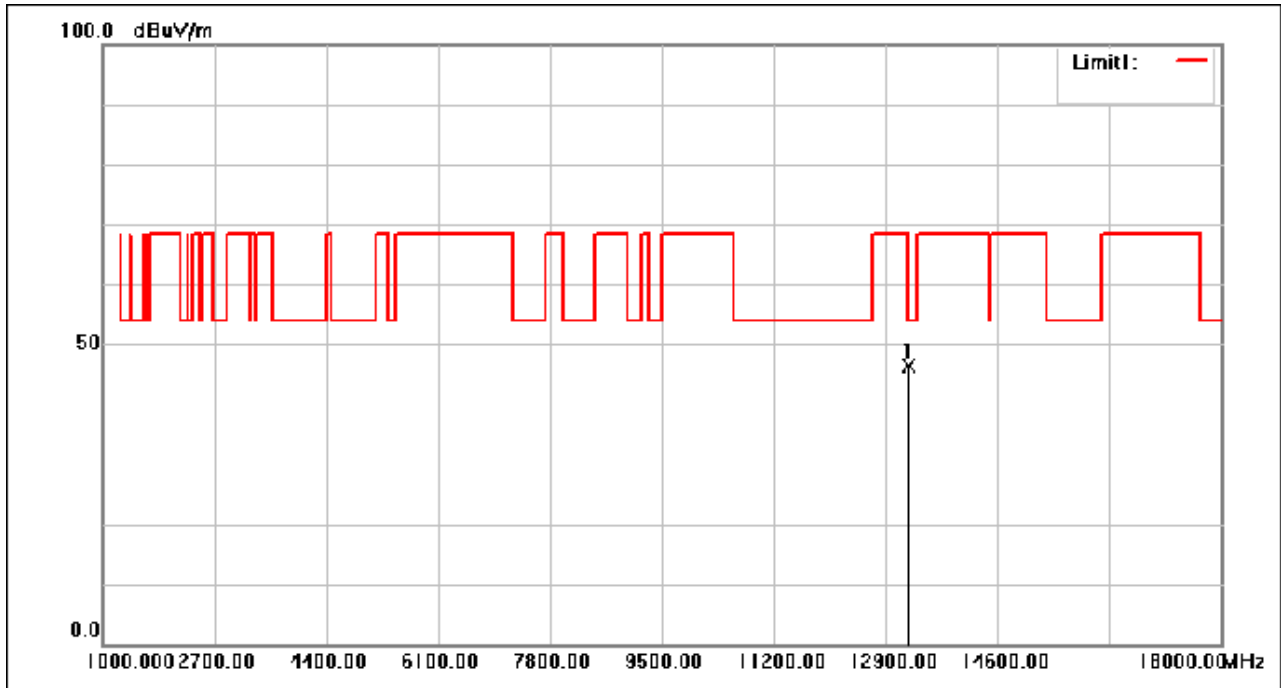
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13255.210	43.29	3.12	46.41	54.00	-7.59	peak

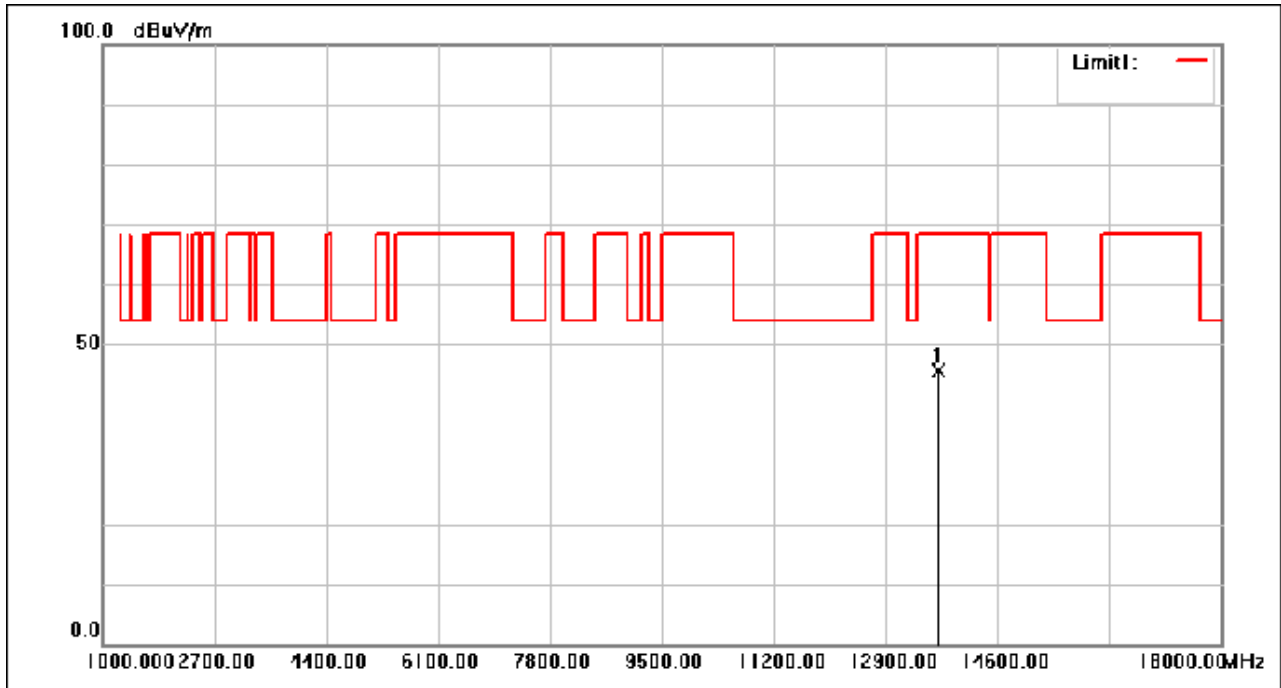
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13711.090	42.56	3.09	45.65	68.30	-22.65	peak

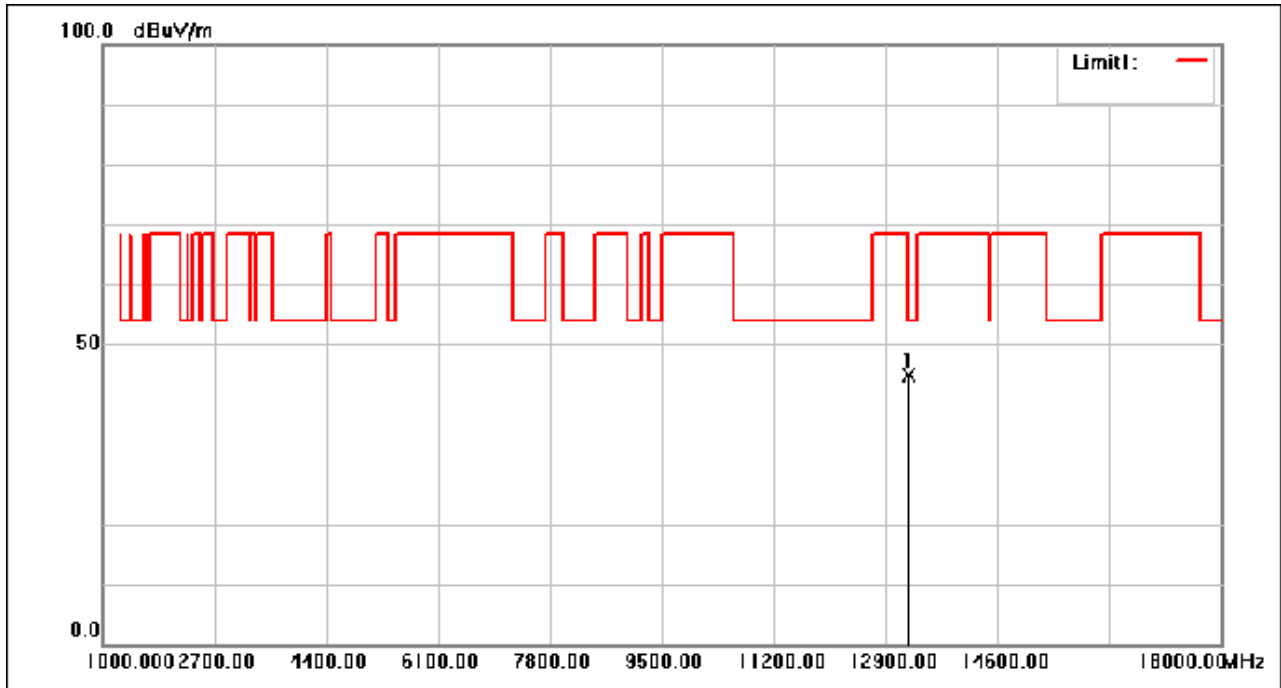
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13258.520	41.65	3.11	44.76	54.00	-9.24	peak

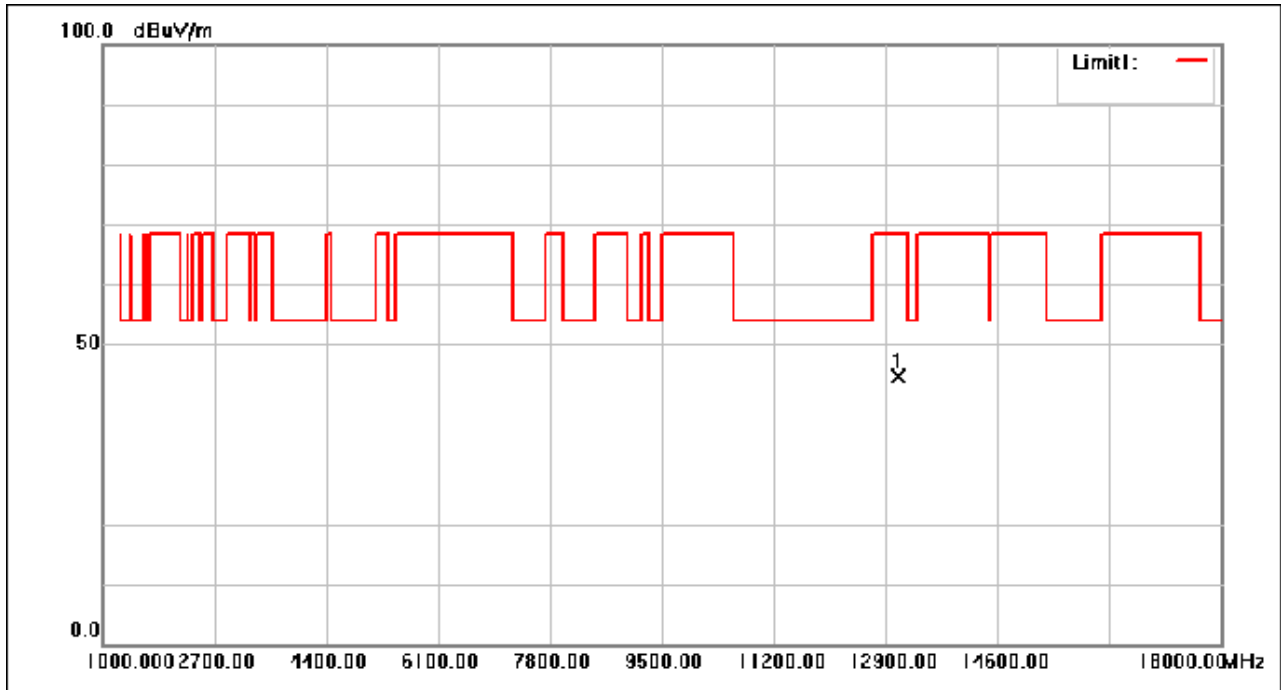
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Test Mode: 14; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13103.020	41.22	3.50	44.72	68.30	-23.58	peak

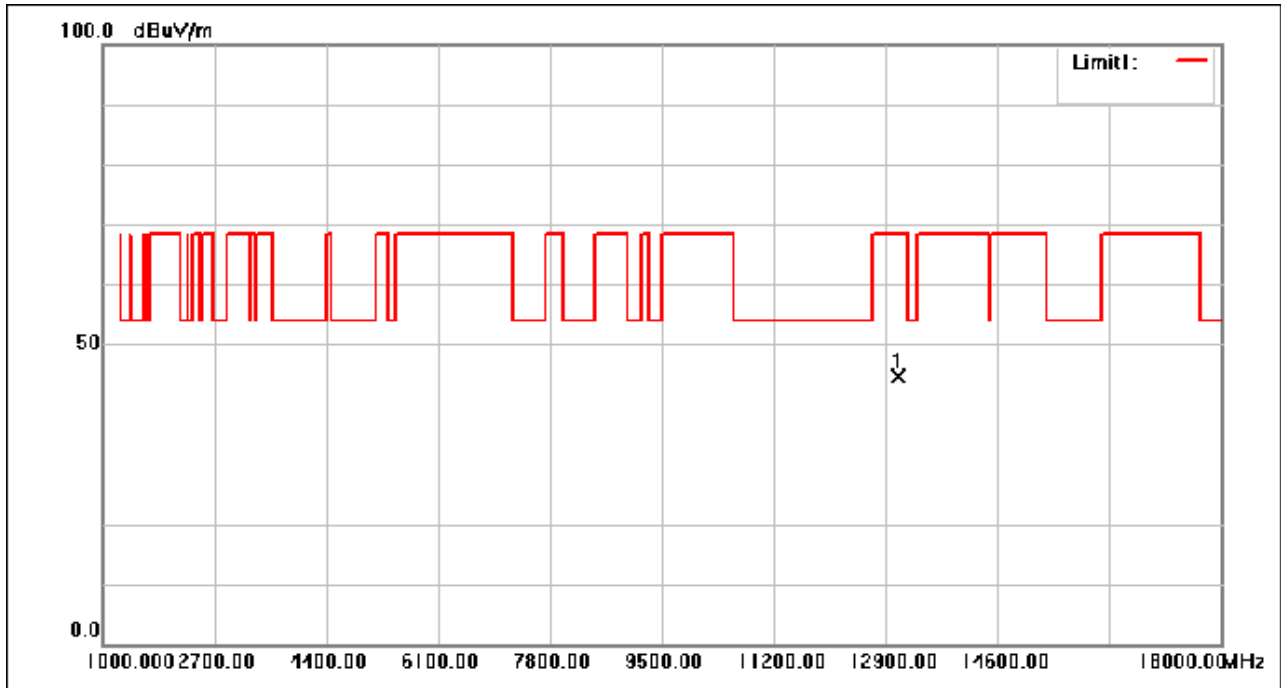
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13083.300	41.19	3.55	44.74	68.30	-23.56	peak

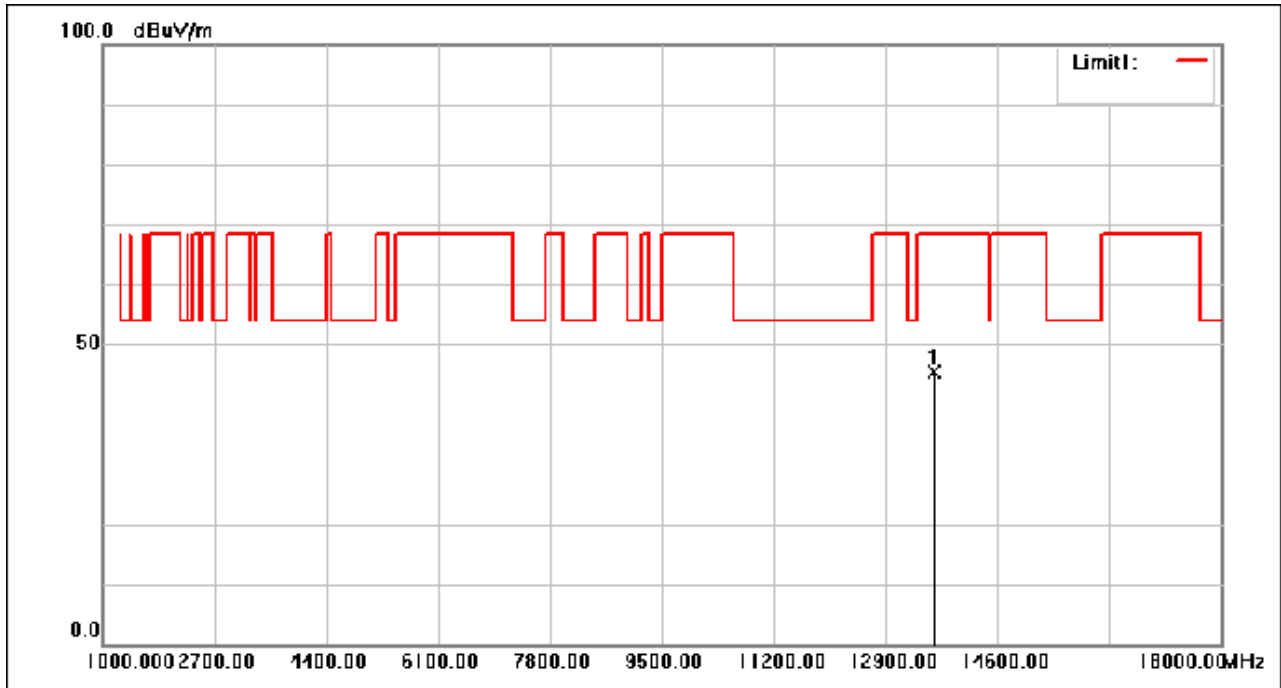
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13632.120	42.47	2.88	45.35	68.30	-22.95	peak

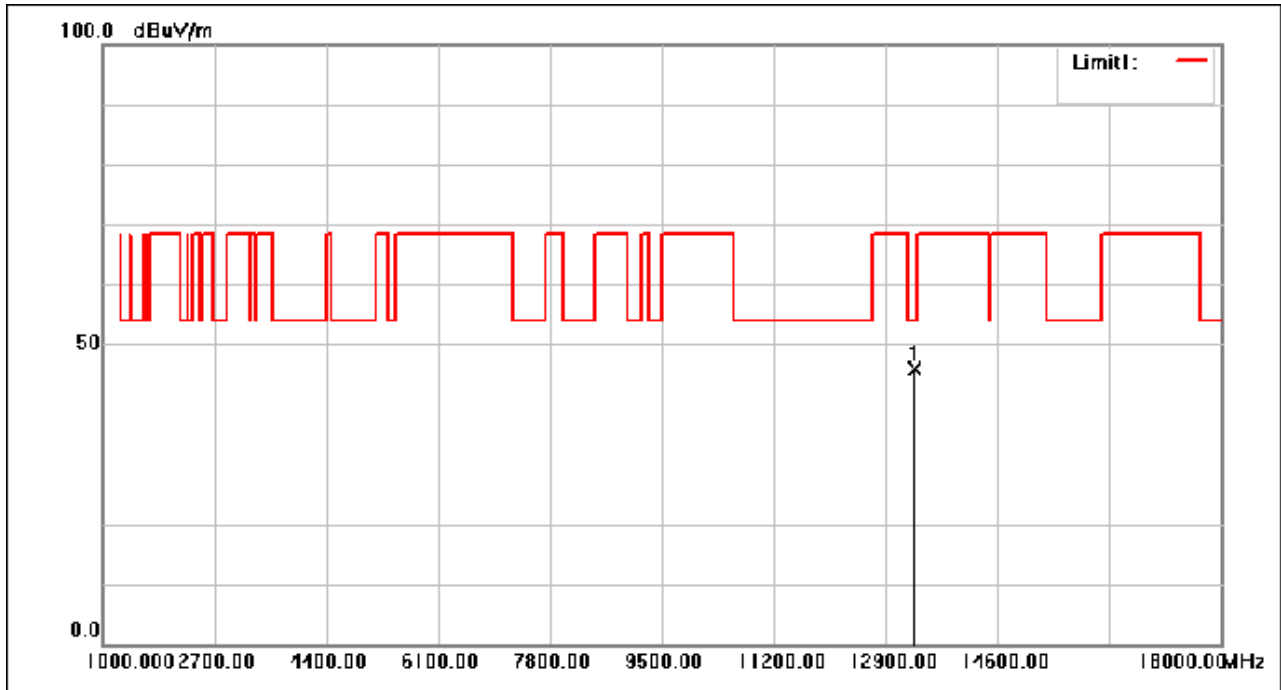
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13350.810	43.00	2.89	45.89	54.00	-8.11	peak

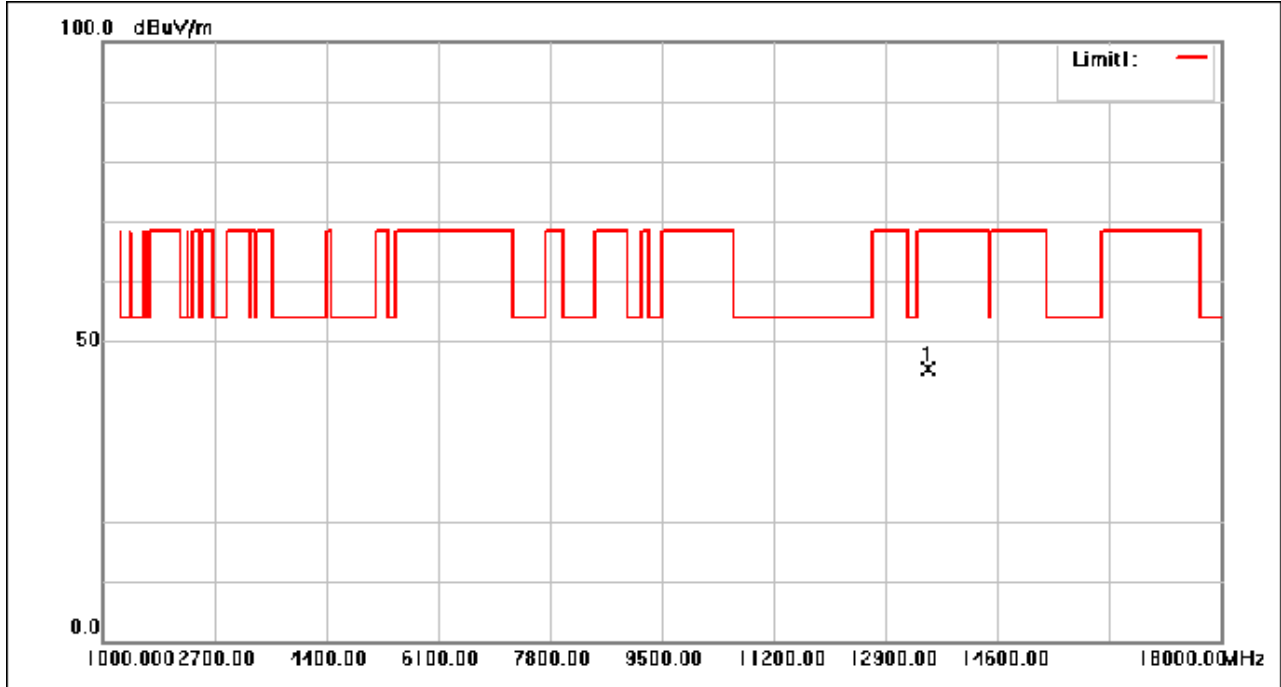
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13543.050	42.73	2.62	45.35	68.30	-22.95	peak

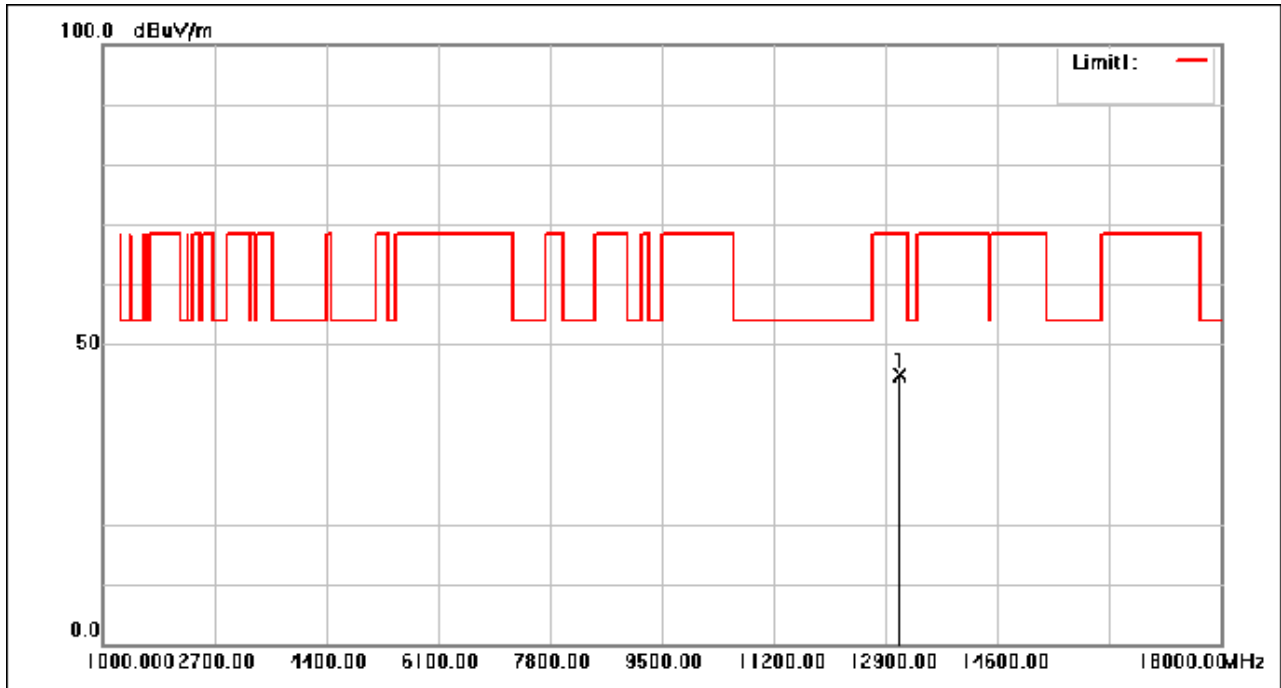
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13116.540	41.45	3.47	44.92	68.30	-23.38	peak

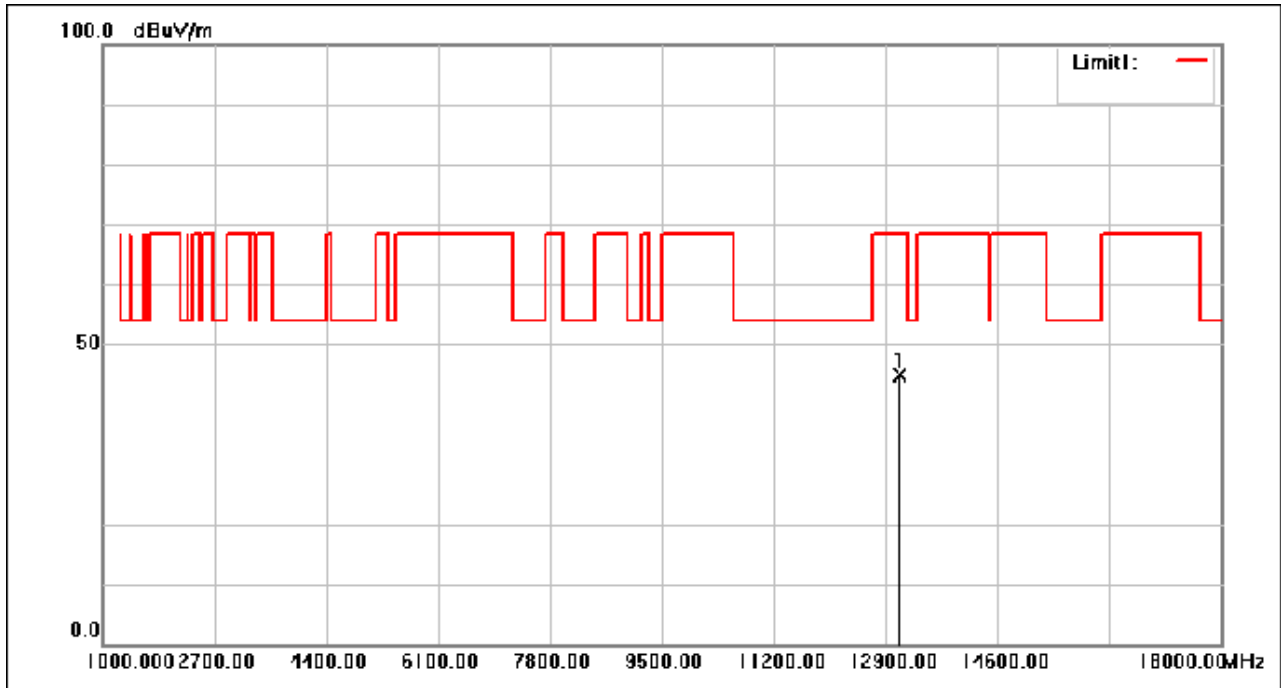
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Test Mode: 14; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13116.540	41.45	3.47	44.92	68.30	-23.38	peak

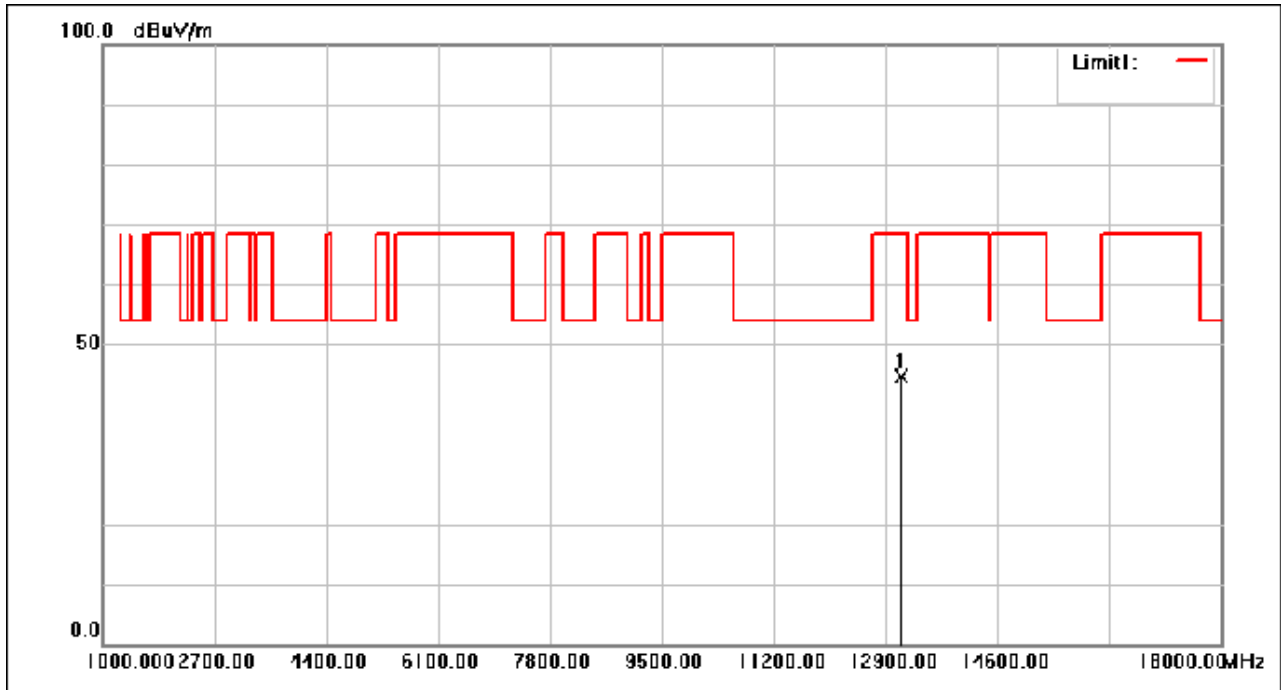
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13135.870	41.10	3.42	44.52	68.30	-23.78	peak

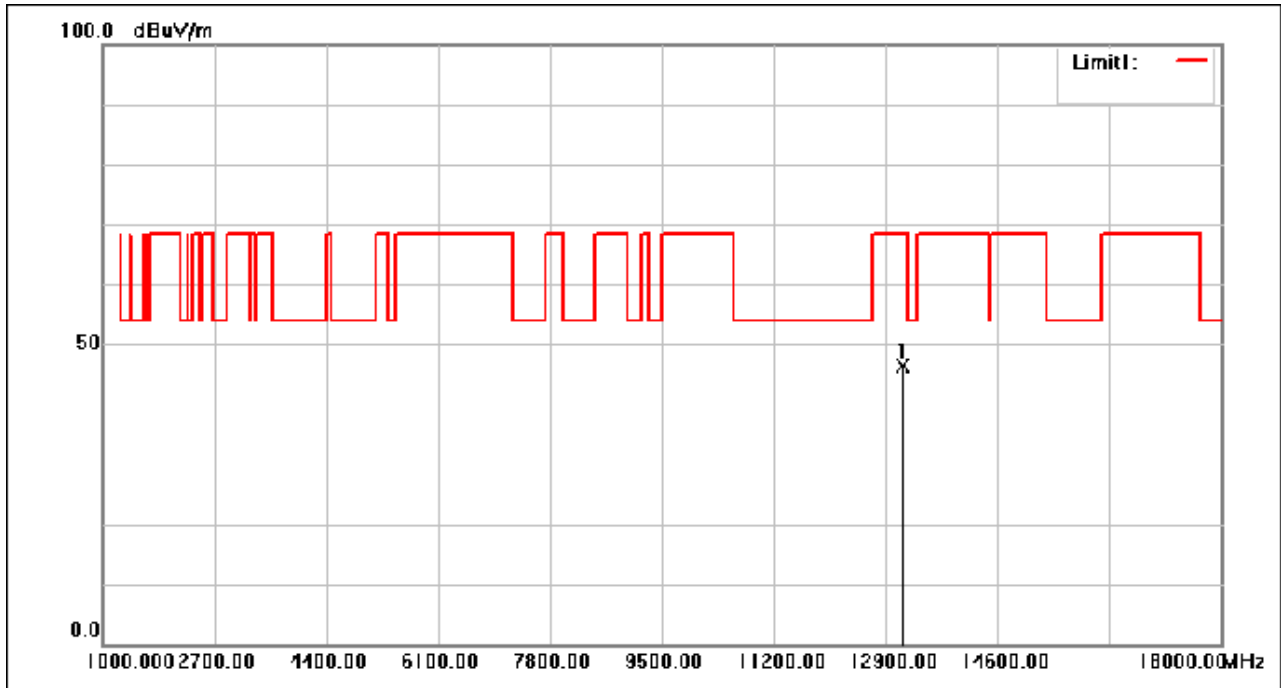
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13165.710	43.13	3.35	46.48	68.30	-21.82	peak

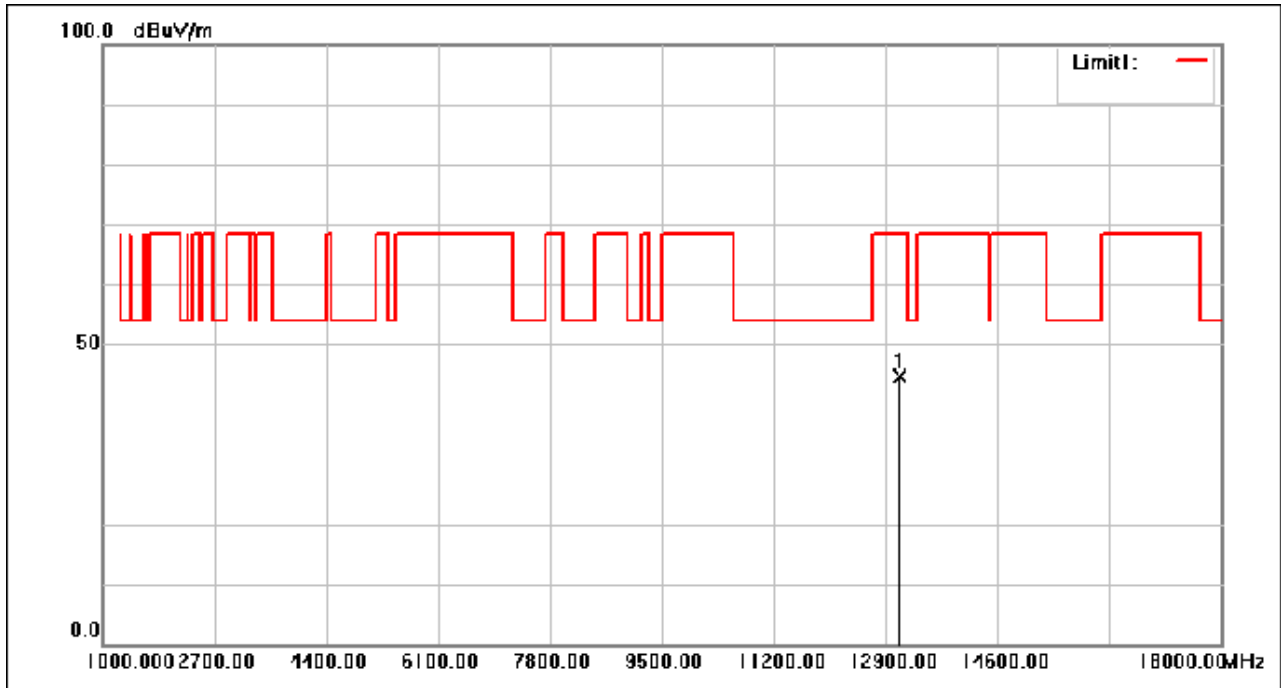
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13118.010	41.14	3.47	44.61	68.30	-23.69	peak

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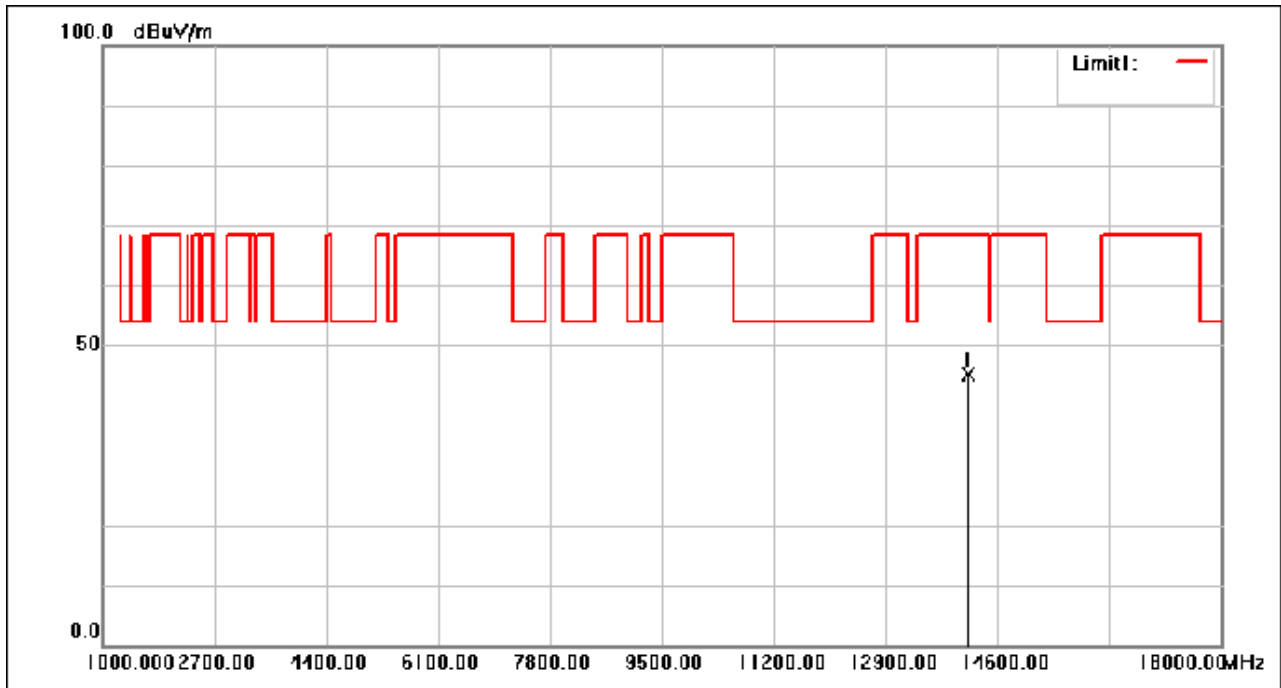
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Band8

Test Mode: 15; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14151.720	40.69	4.35	45.04	68.30	-23.26	peak

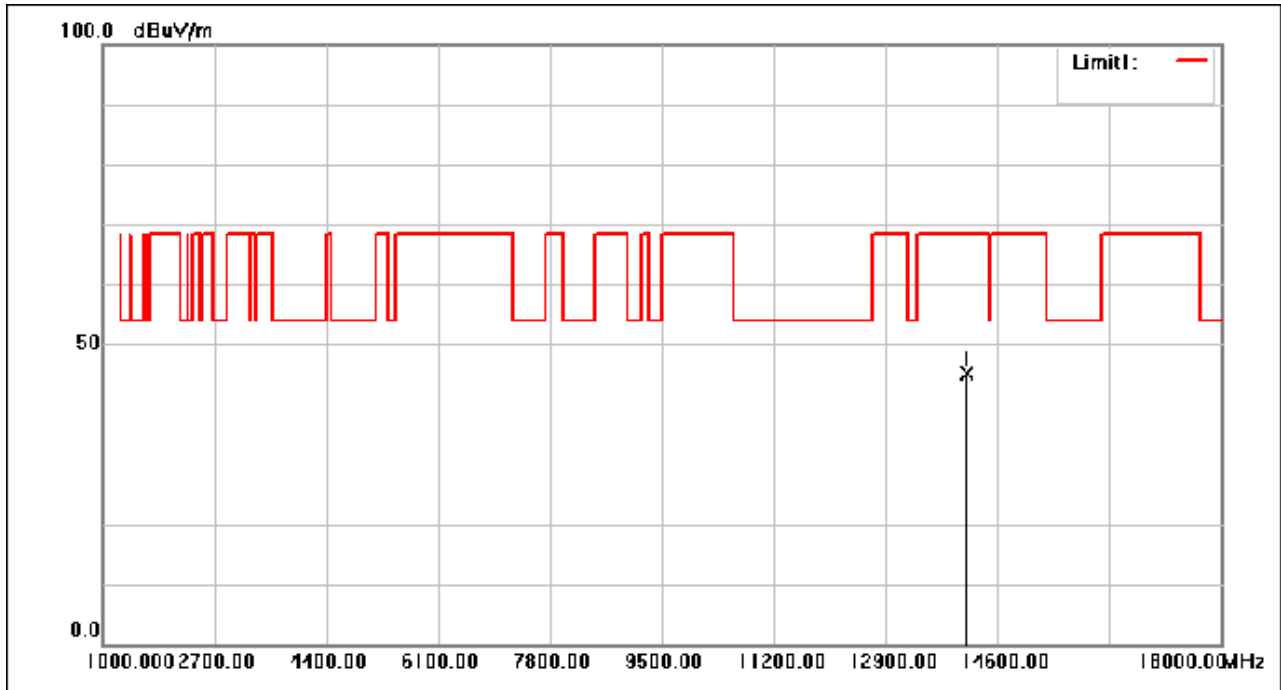
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Test Mode: 15; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14138.760	40.83	4.31	45.14	68.30	-23.16	peak

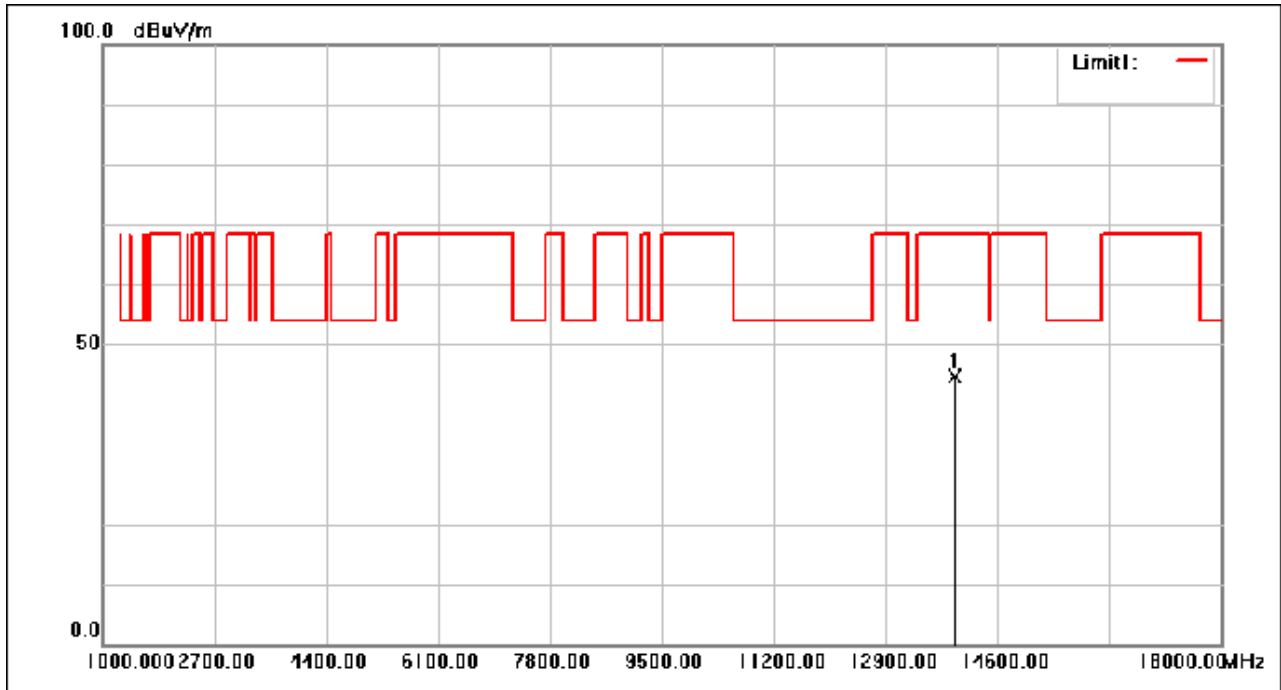
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13955.910	40.96	3.76	44.72	68.30	-23.58	peak

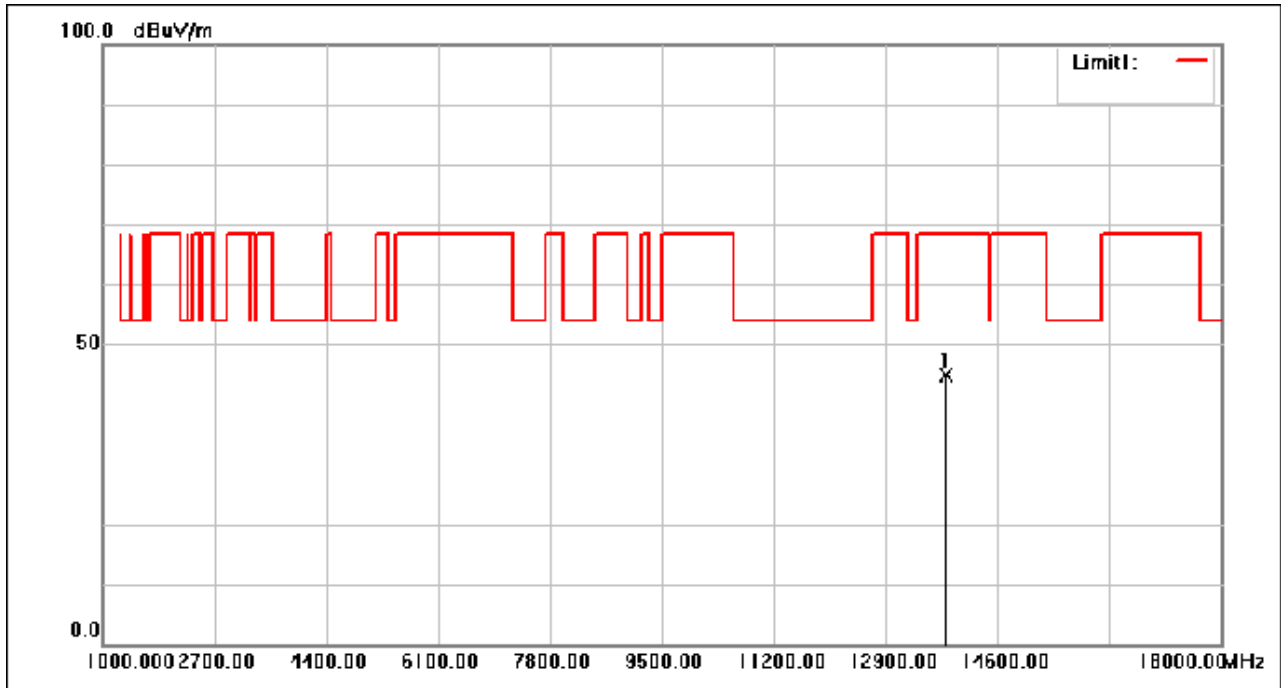
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Test Mode: 15; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13812.680	41.39	3.37	44.76	68.30	-23.54	peak

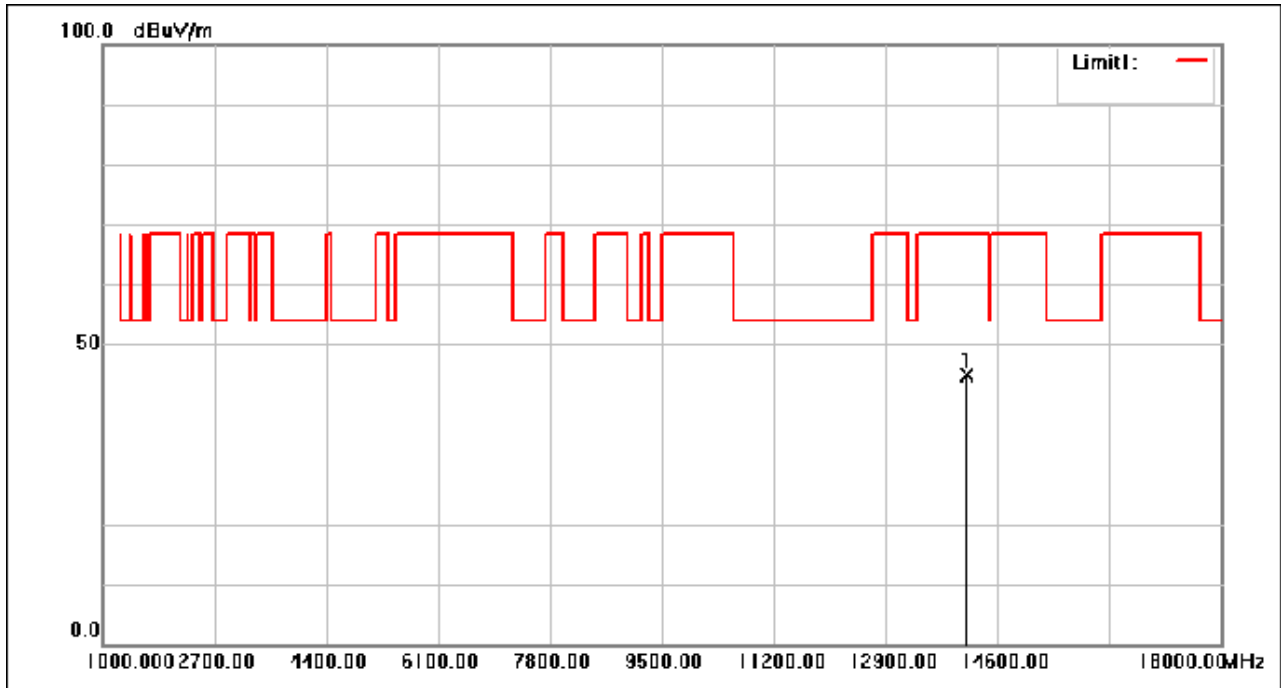
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14141.470	40.46	4.31	44.77	68.30	-23.53	peak

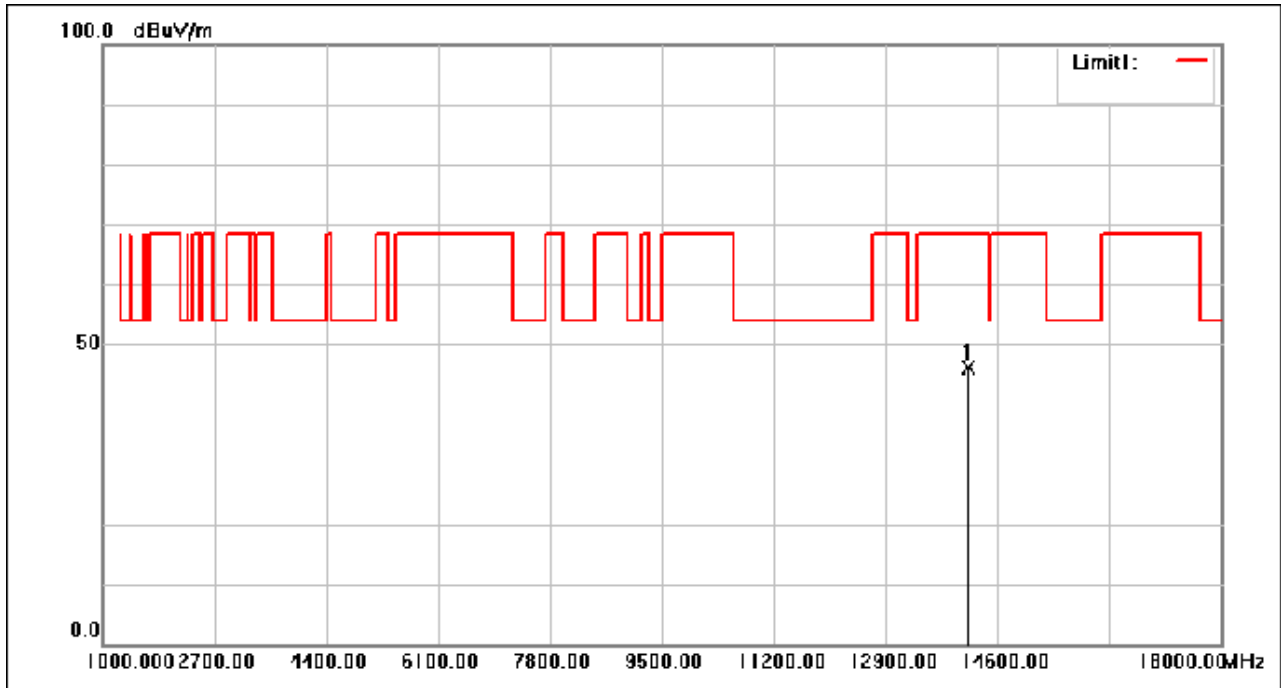
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Test Mode: 15; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14166.880	41.83	4.39	46.22	68.30	-22.08	peak

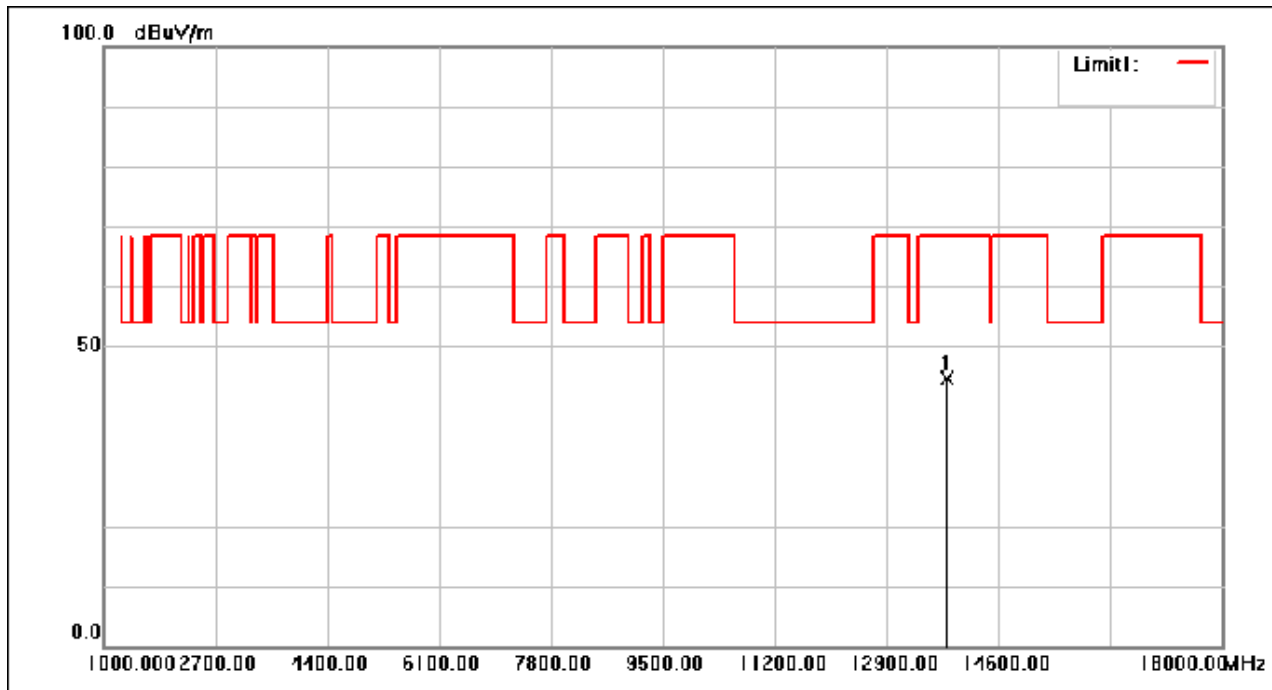
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13825.990	41.13	3.41	44.54	68.30	-23.76	peak

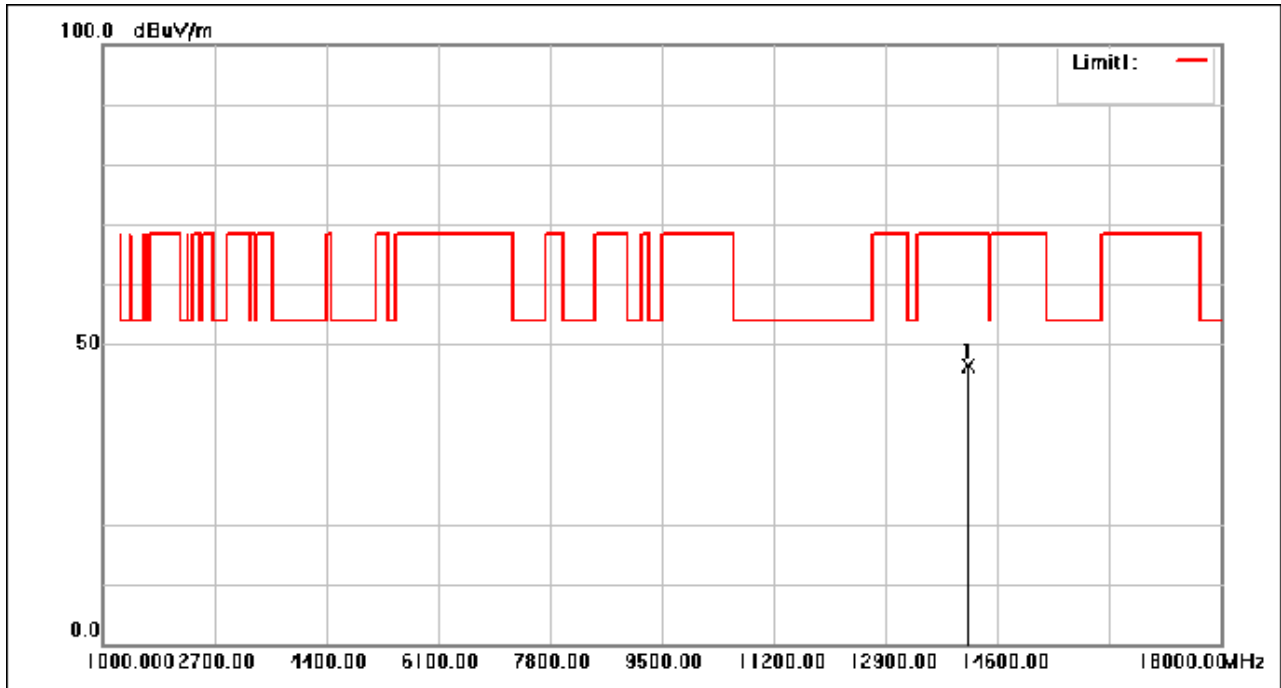
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14149.220	42.03	4.34	46.37	68.30	-21.93	peak

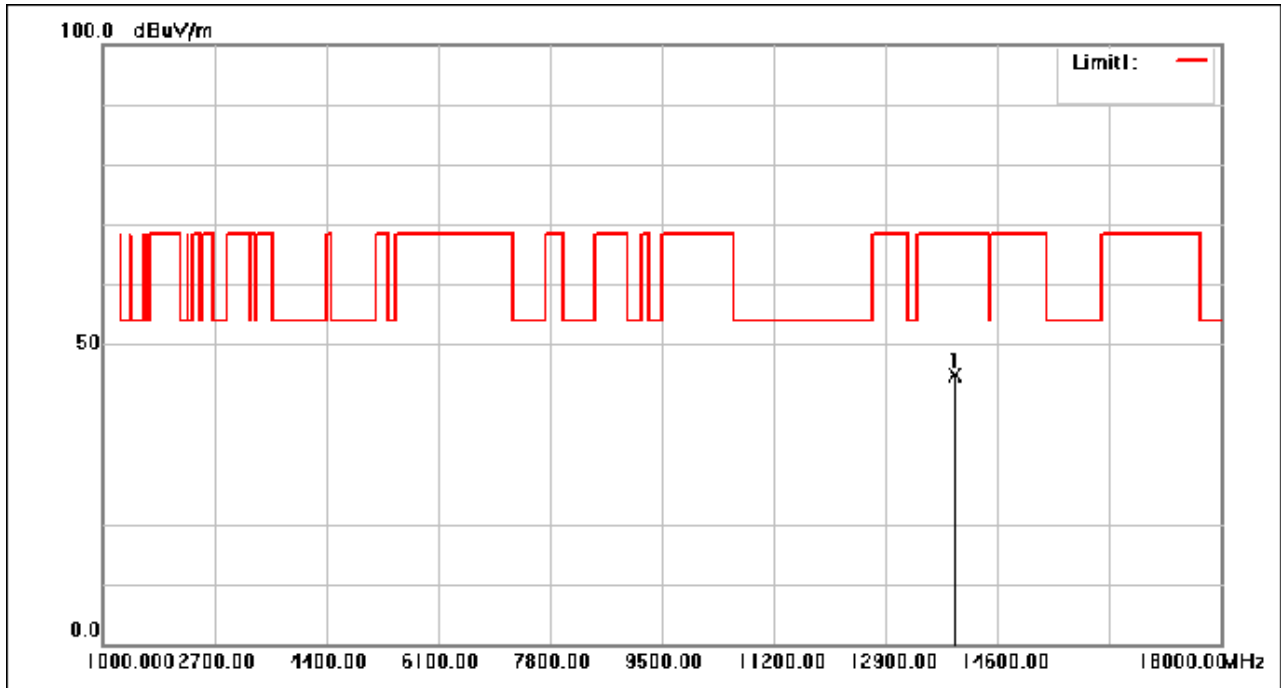
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13953.810	41.05	3.76	44.81	68.30	-23.49	peak

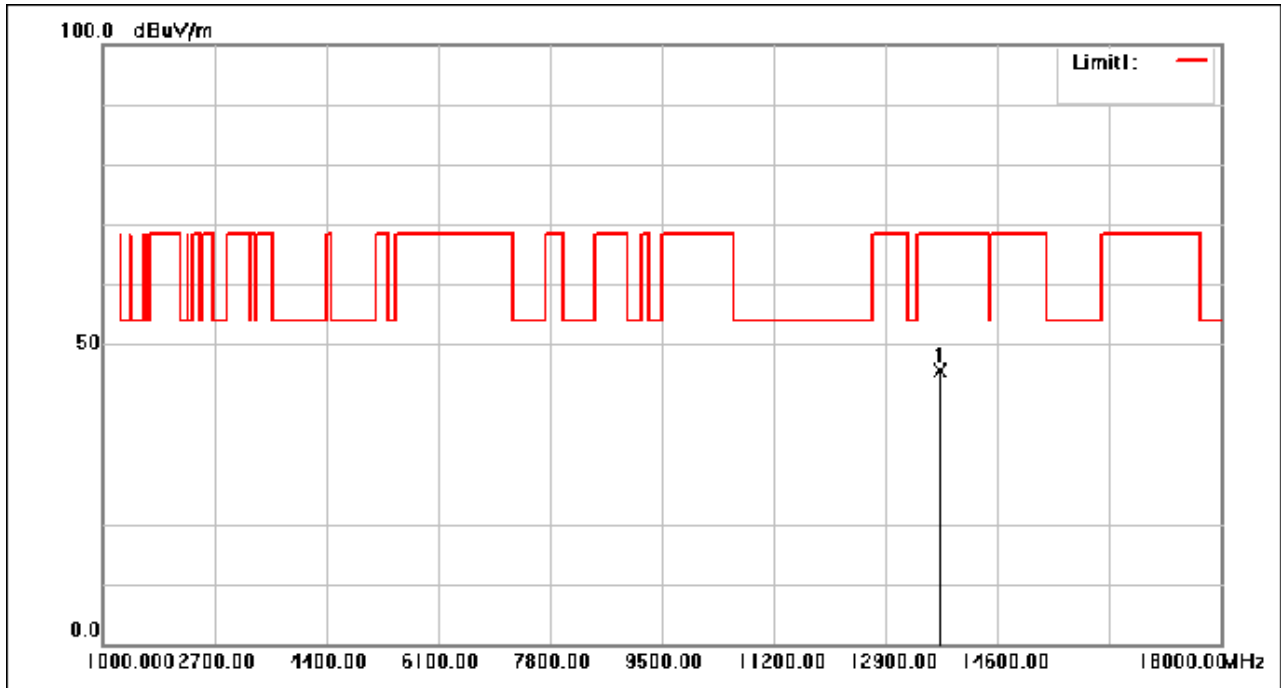
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13736.470	42.55	3.16	45.71	68.30	-22.59	peak

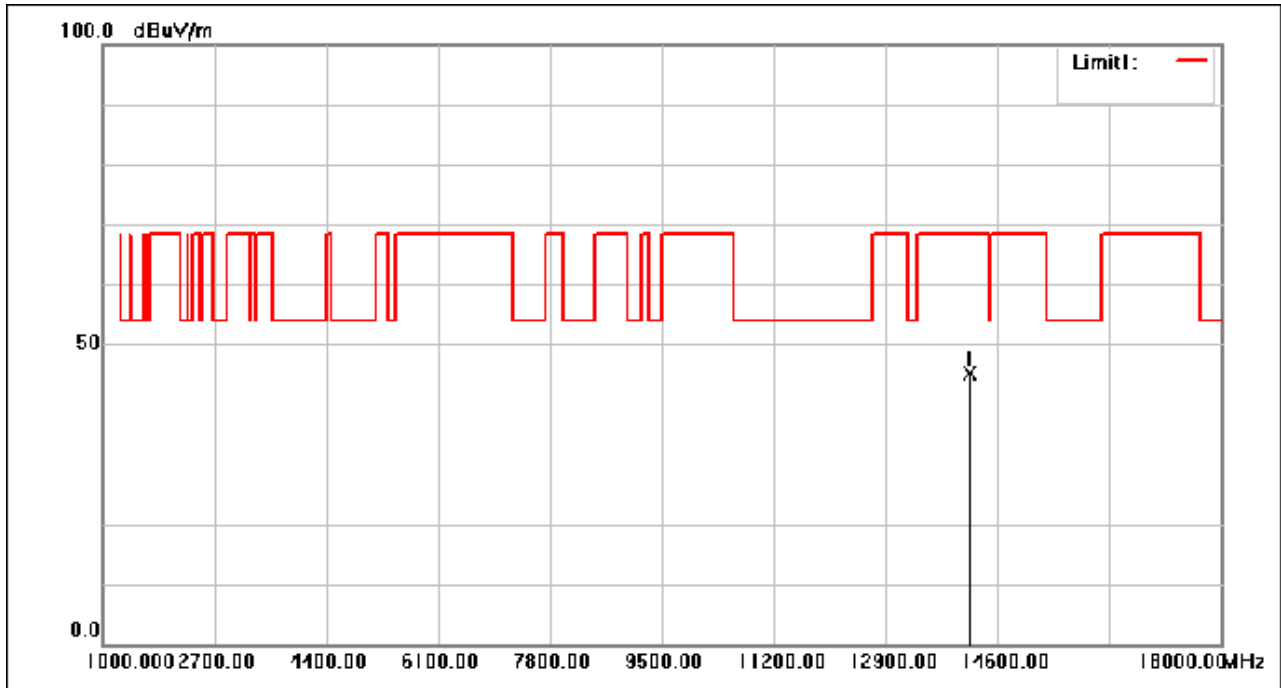
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Test Mode: 15; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14184.340	40.79	4.44	45.23	68.30	-23.07	peak

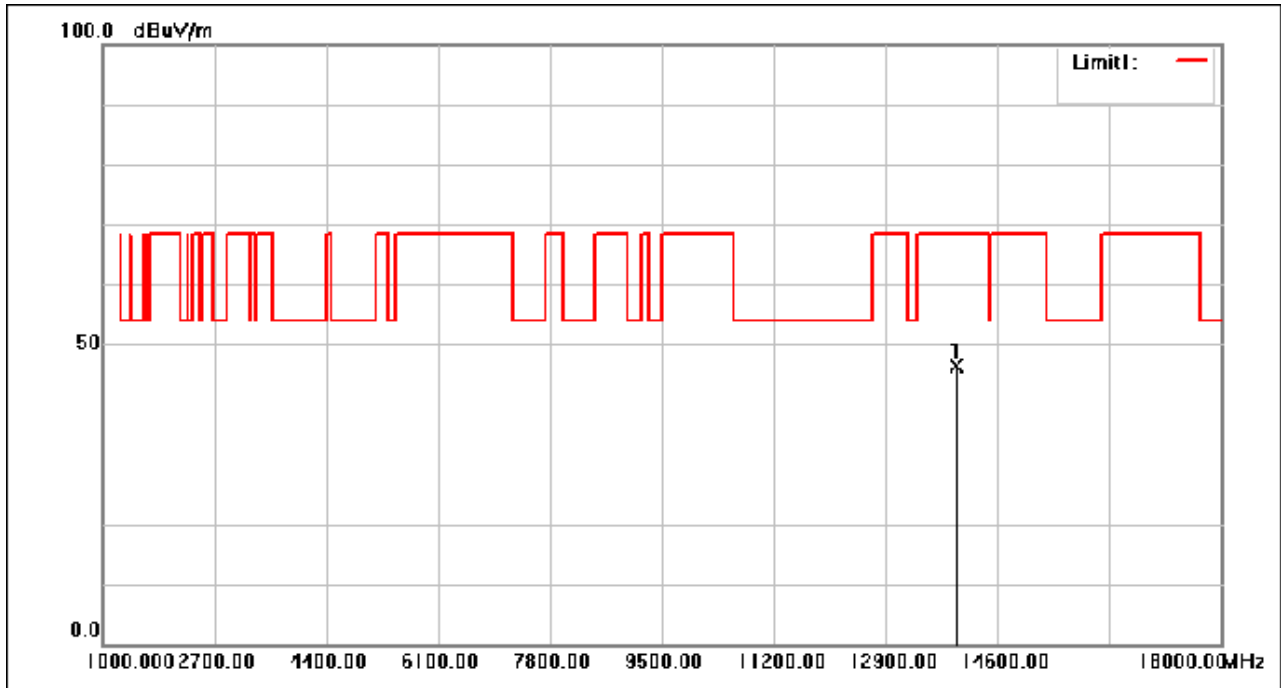
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13970.380	42.50	3.81	46.31	68.30	-21.99	peak

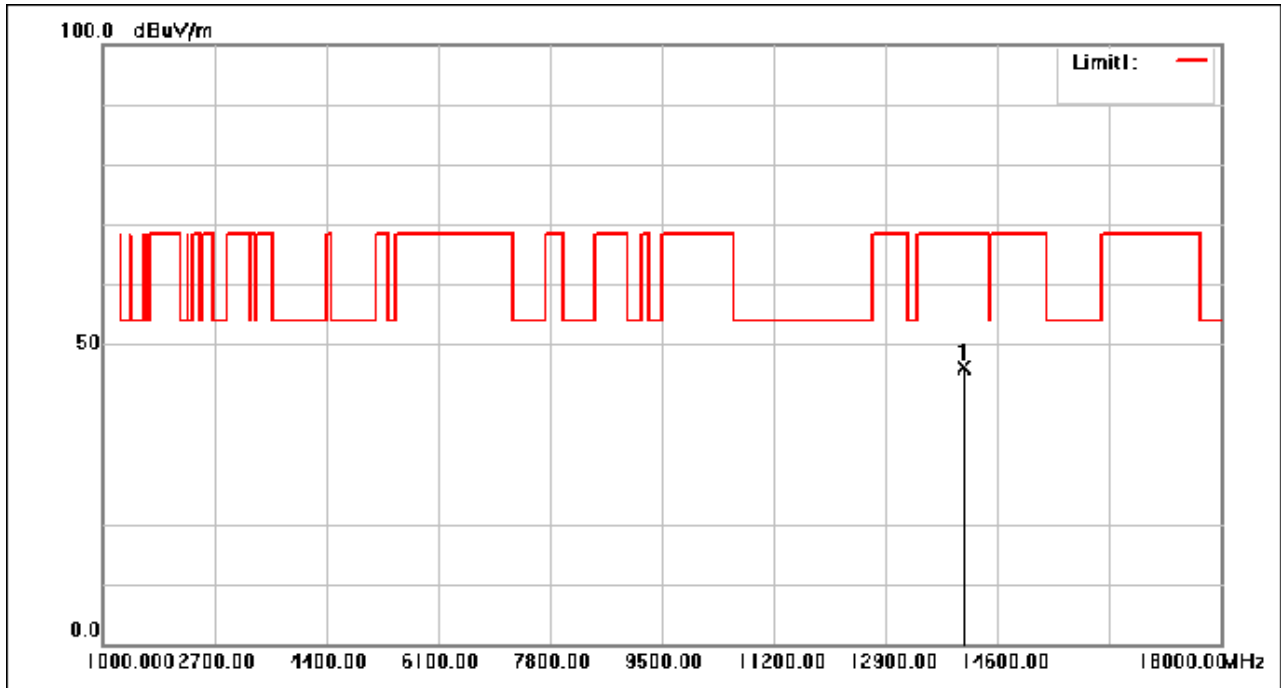
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14092.570	41.90	4.17	46.07	68.30	-22.23	peak

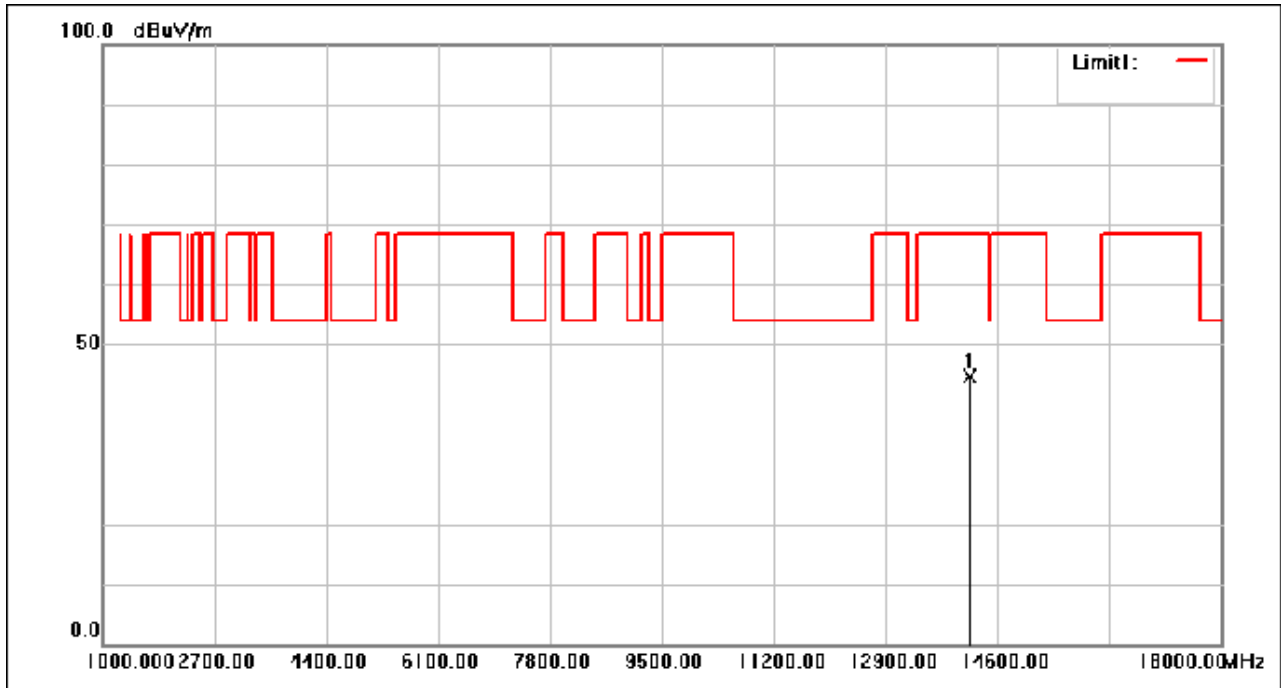
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14181.740	40.15	4.44	44.59	68.30	-23.71	peak

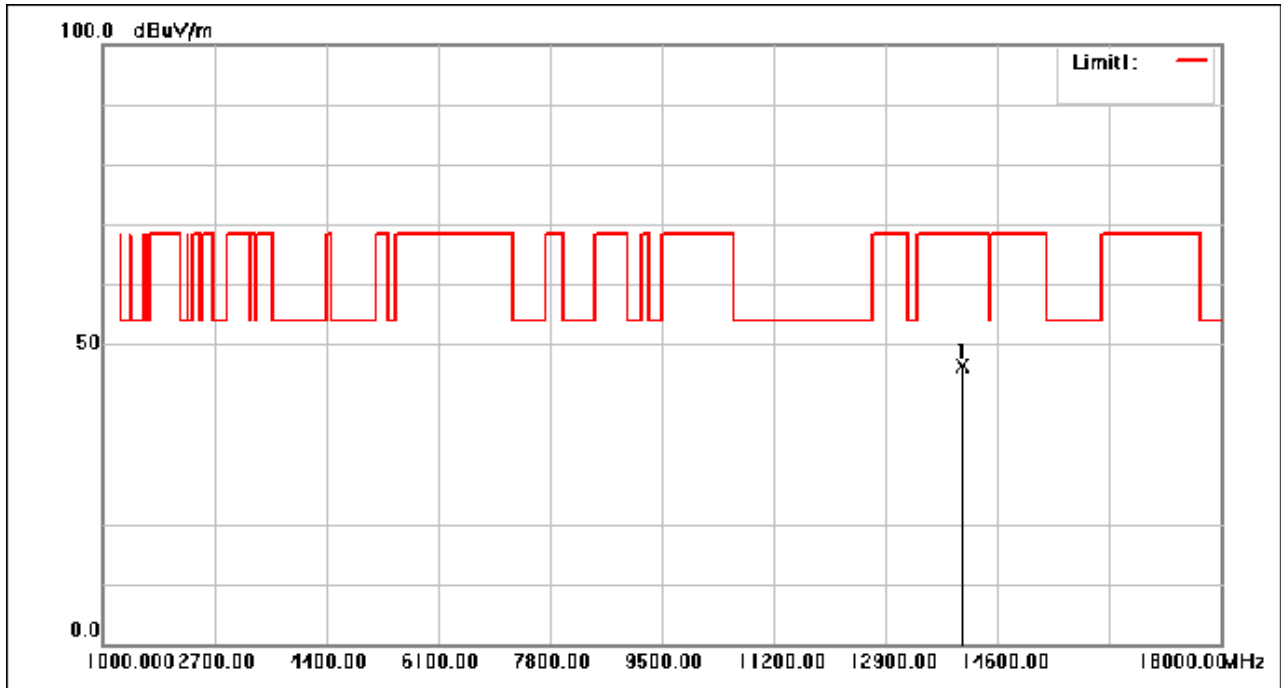
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14075.520	42.25	4.12	46.37	68.30	-21.93	peak

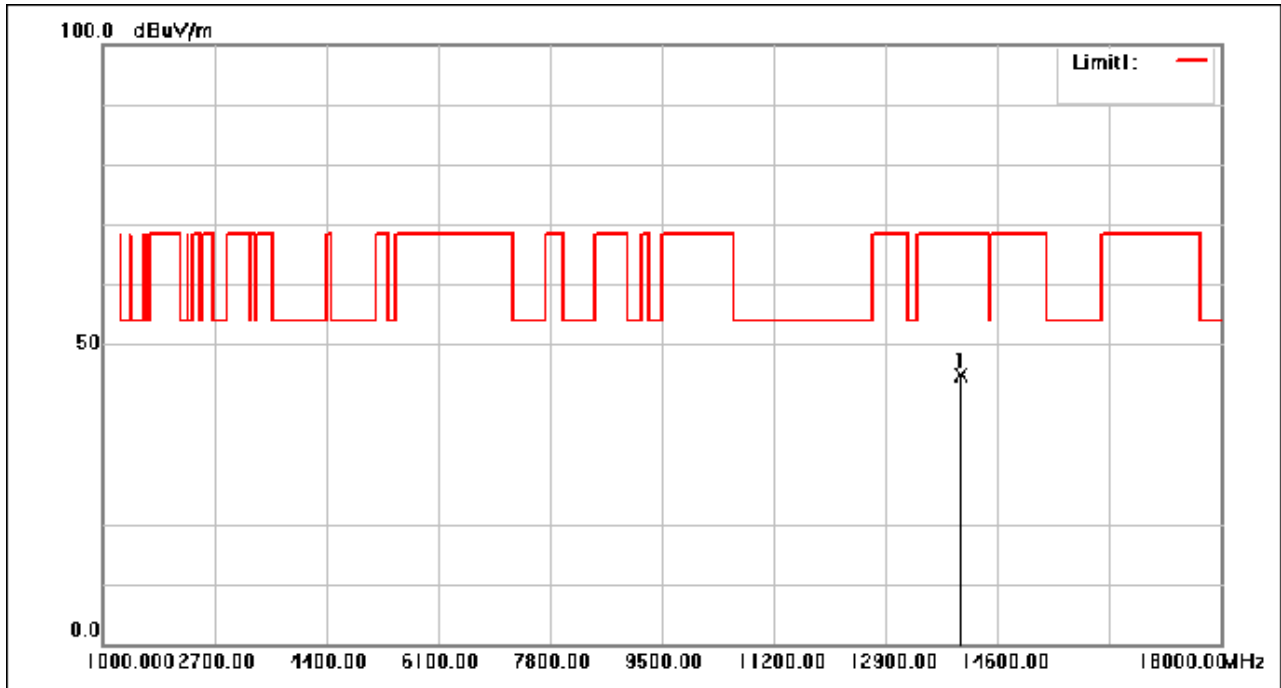
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1405.340	40.83	4.06	44.89	68.30	-23.41	peak

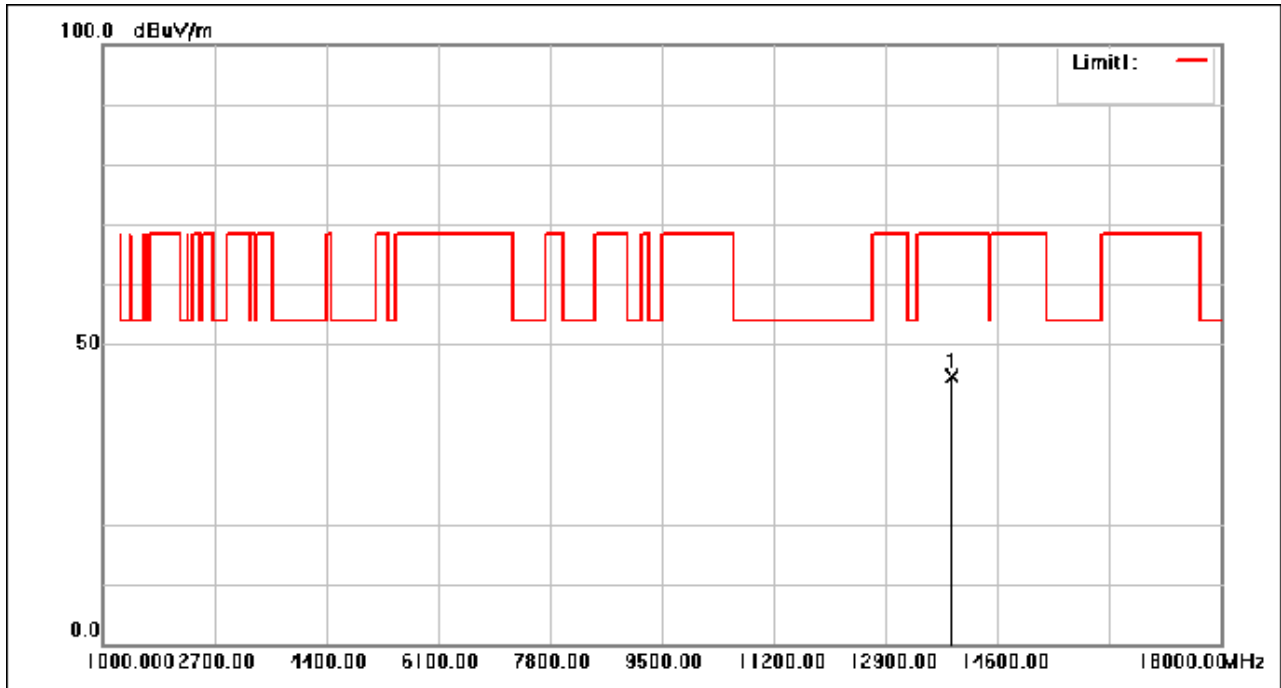
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Test Mode: 15; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13917.550	40.95	3.66	44.61	68.30	-23.69	peak

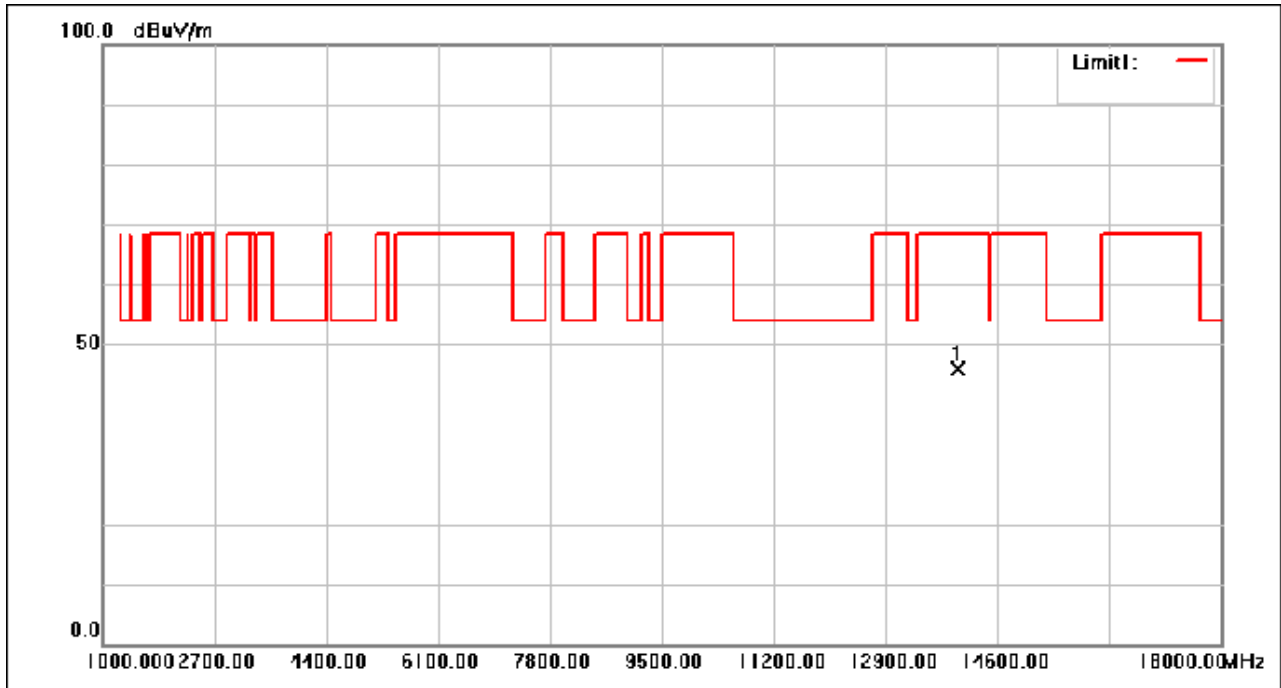
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13991.790	41.97	3.86	45.83	68.30	-22.47	peak

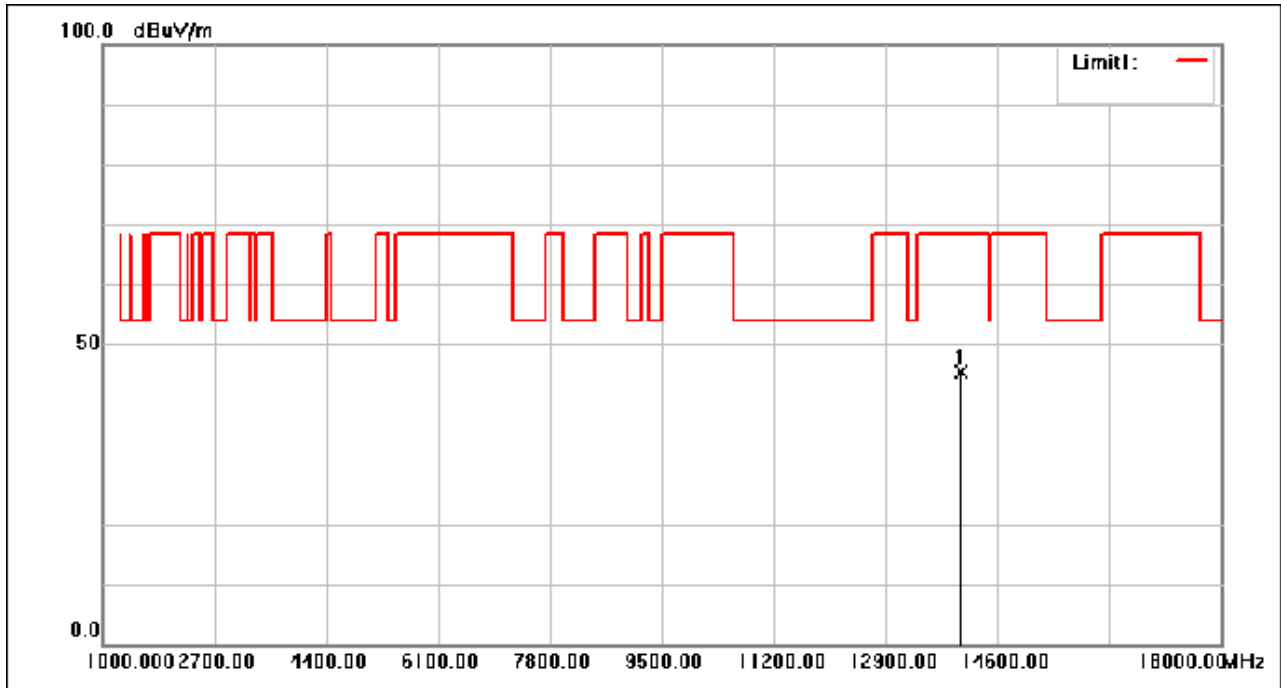
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14036.320	41.37	4.00	45.37	68.30	-22.93	peak

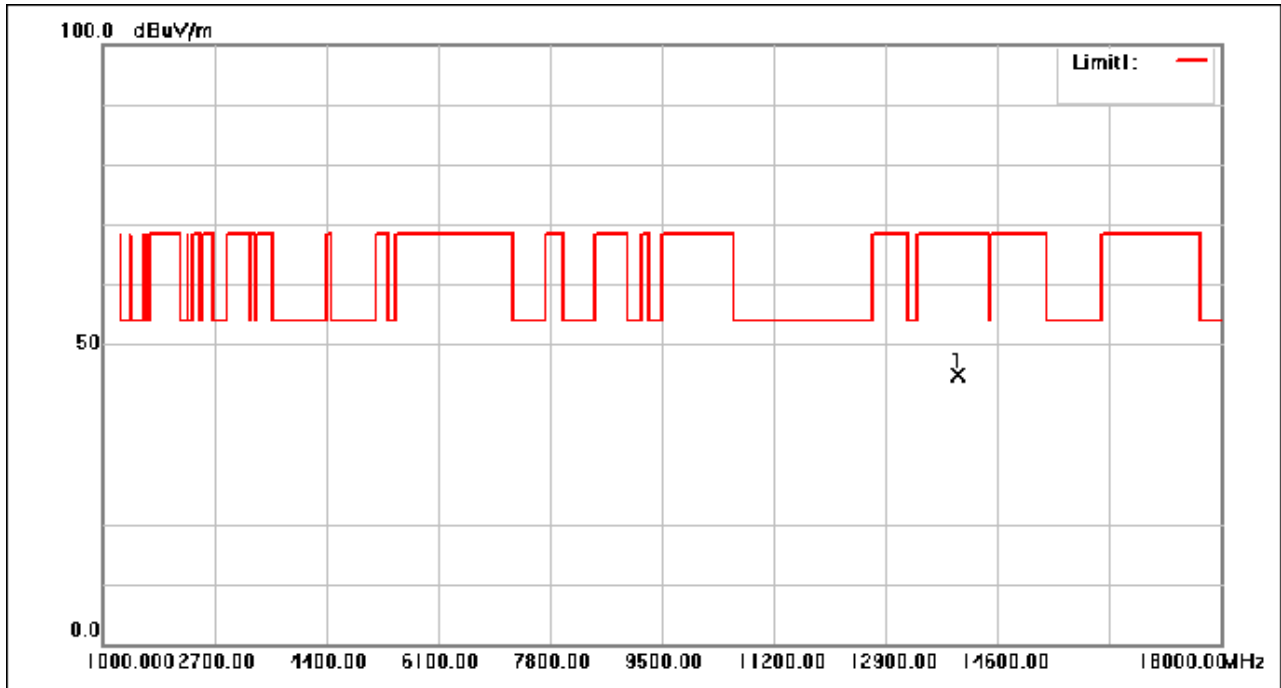
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14009.960	40.97	3.92	44.89	68.30	-23.41	peak

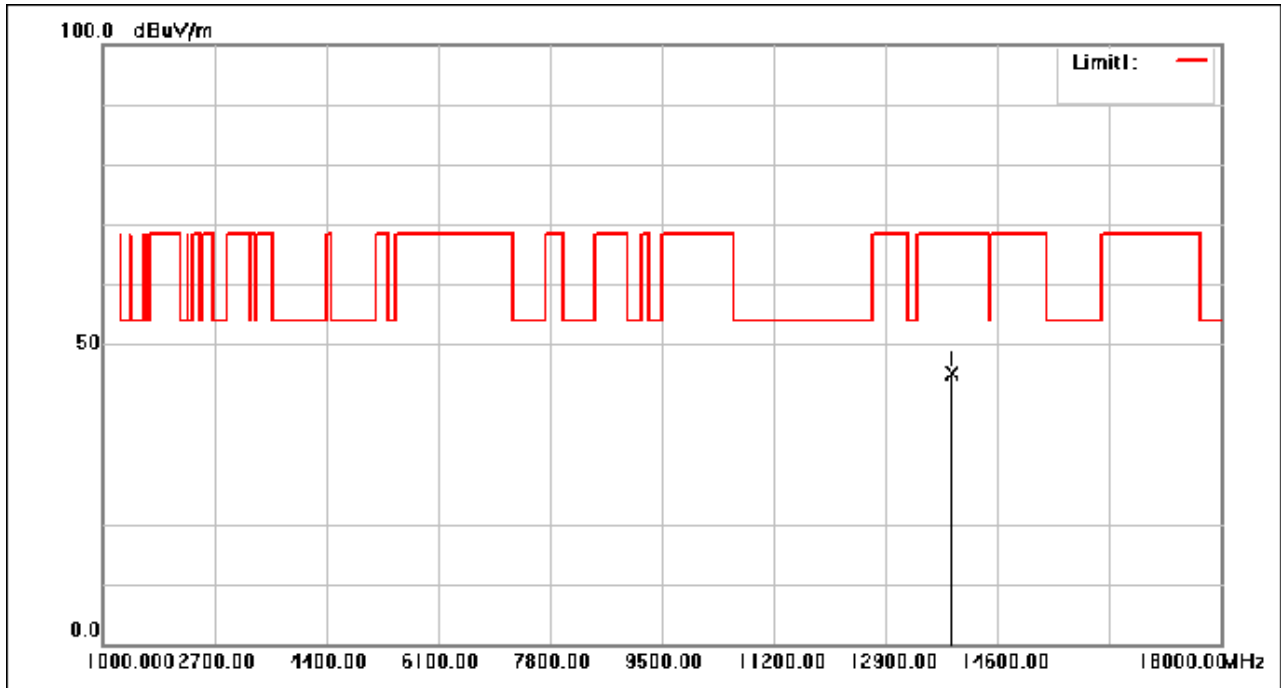
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Test Mode: 15; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13908.120	41.53	3.64	45.17	68.30	-23.13	peak

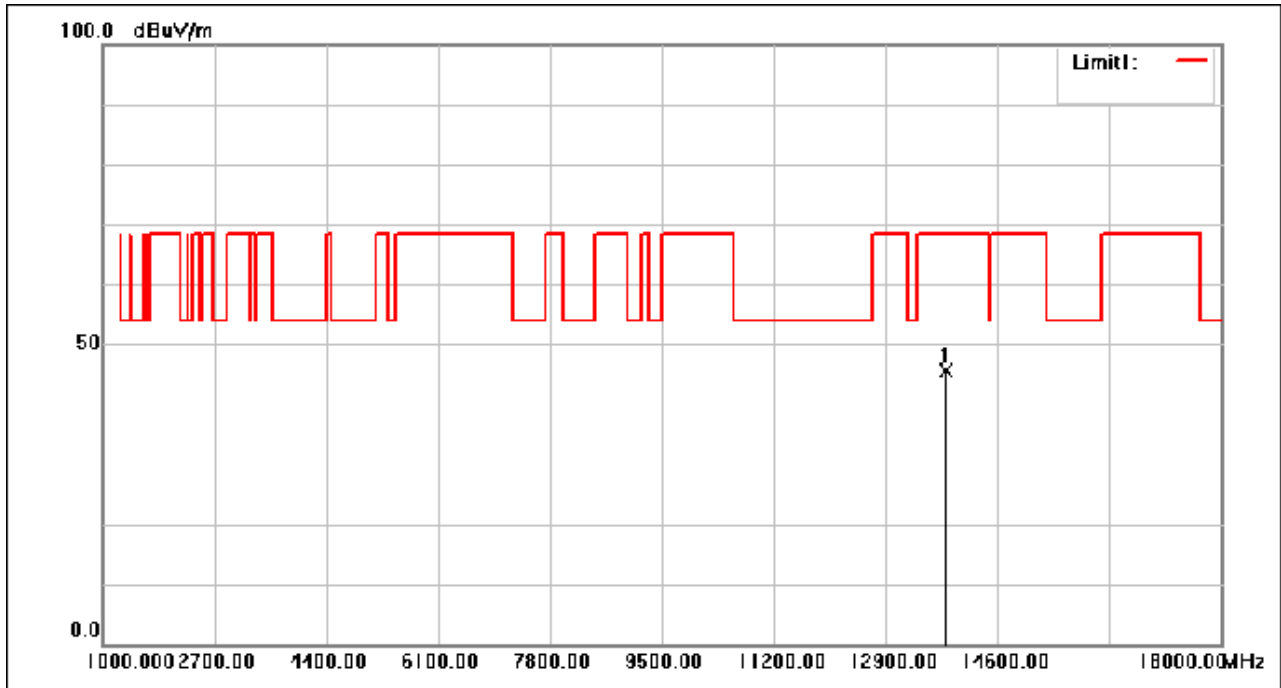
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13823.280	42.15	3.40	45.55	68.30	-22.75	peak

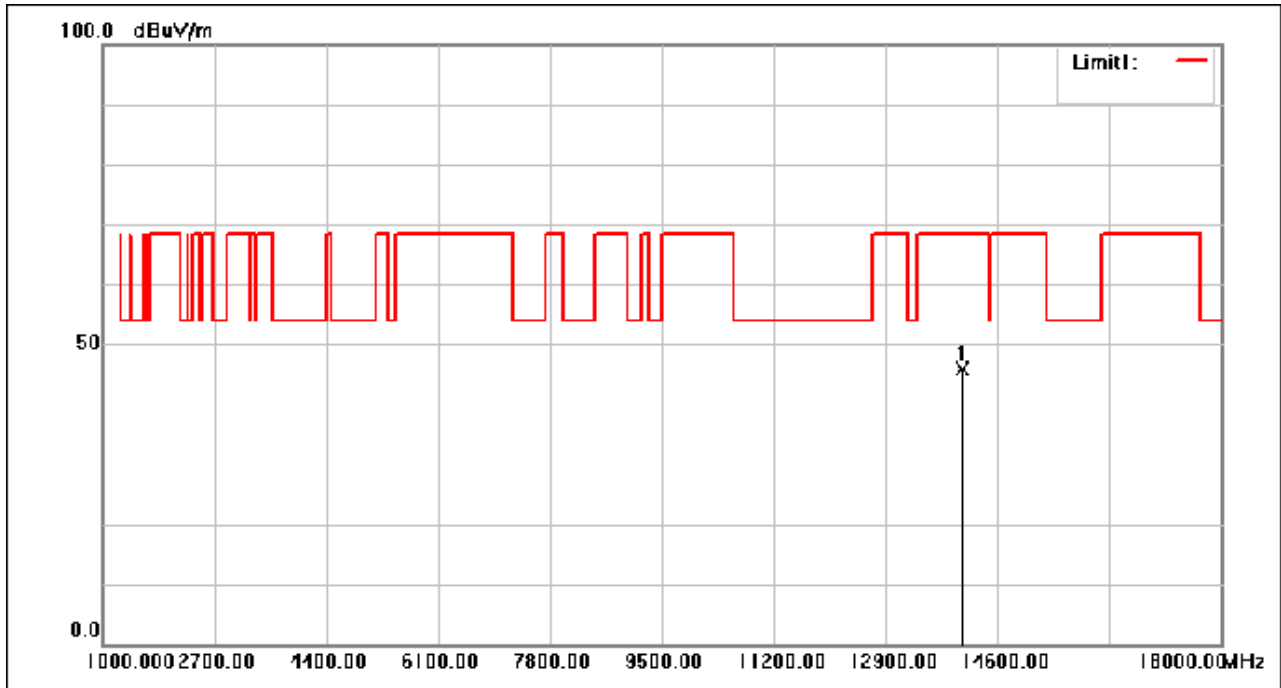
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14069.250	41.85	4.10	45.95	68.30	-22.35	peak

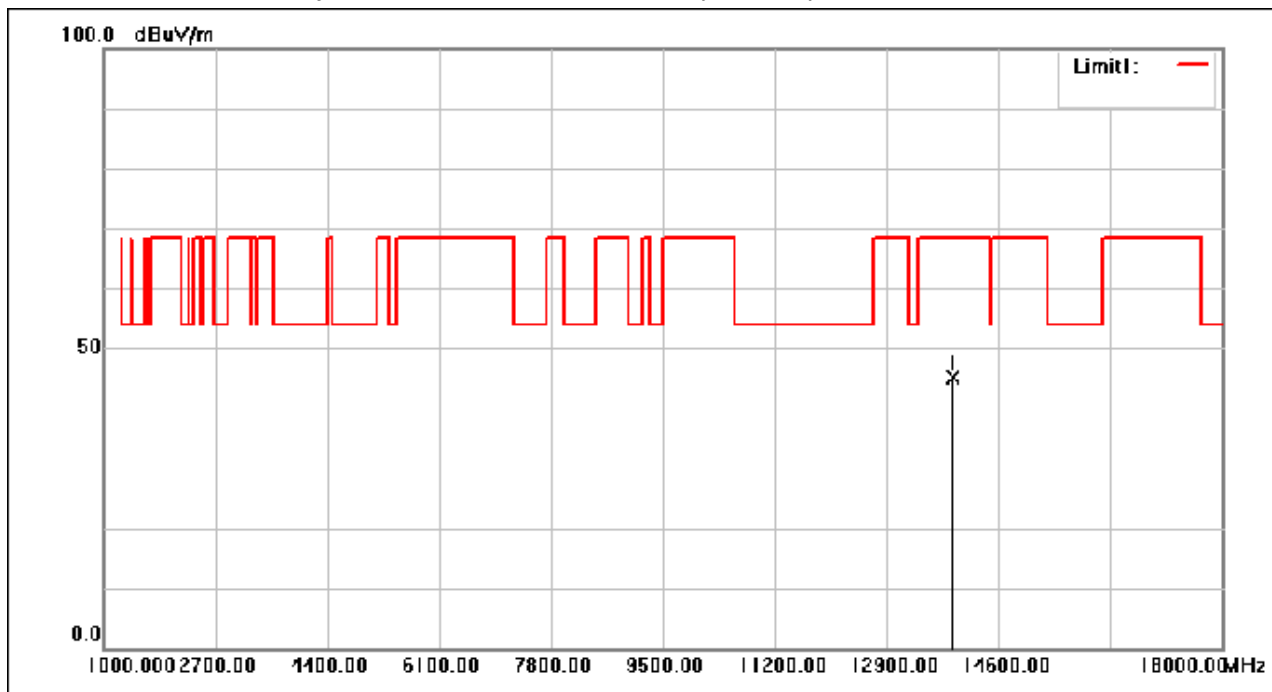
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Test Mode: 15; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 160MHz; Channel: Low

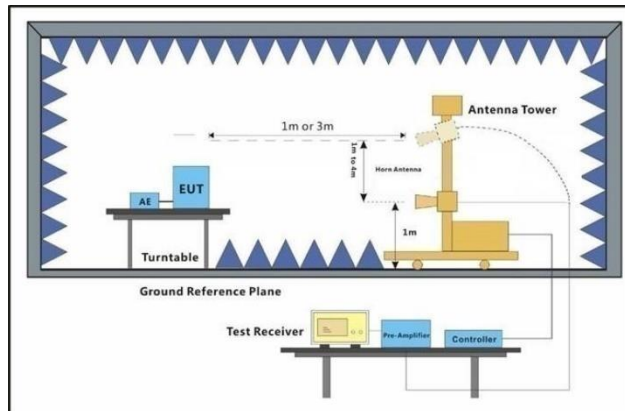


No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13918.450	41.50	3.66	45.16	68.30	-23.14	peak

5.11 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2013 Section 11.12		
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dBuV/m)	Remark
	30MHz-88MHz	40.0	Quasi-peak
	88MHz-216MHz	43.5	Quasi-peak
	216MHz-960MHz	46.0	Quasi-peak
	960MHz-1GHz	54.0	Quasi-peak
	Above 1GHz	54.0	Average Value
		74.0	Peak Value

Test Setup:



Test Procedure:

- The EUT was placed on the top of a rotating table 1.5 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.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

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	f. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel g. Test the EUT in the outermost channels. h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. i. Repeat above procedures until all frequencies measured was complete. Remark: 1. Level = Read Level + Cable Loss + Antenna Factor - Preamp Factor 2. This test item was investigated while operating in SISO and MIMO mode, however, it was determined that SISO antenna 1 operation for a modulation and MIMO antenna operation for n/ac/ax modulation produced the worst emissions. So the emissions produced from other operation are not recorded in report.
Test Configuration:	Measurements Below 1000MHz • RBW = 120 kHz • VBW = 300 kHz • Detector = Quasi-peak • Trace mode = max hold Peak Measurements Above 1000 MHz • RBW = 1 MHz • VBW $\geq$ 3 MHz • Detector = Peak • Sweep time = auto • Trace mode = max hold Average Measurements Above 1000MHz • RBW = 1 MHz • VBW = 10Hz, when duty cycle is no less than 98 percent. • VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Refer to section 2.7 for details.
Instruments Used:	Refer to section 4 for details
Test Results:	Pass

Compliance Certification Services (Kunshan) Inc.

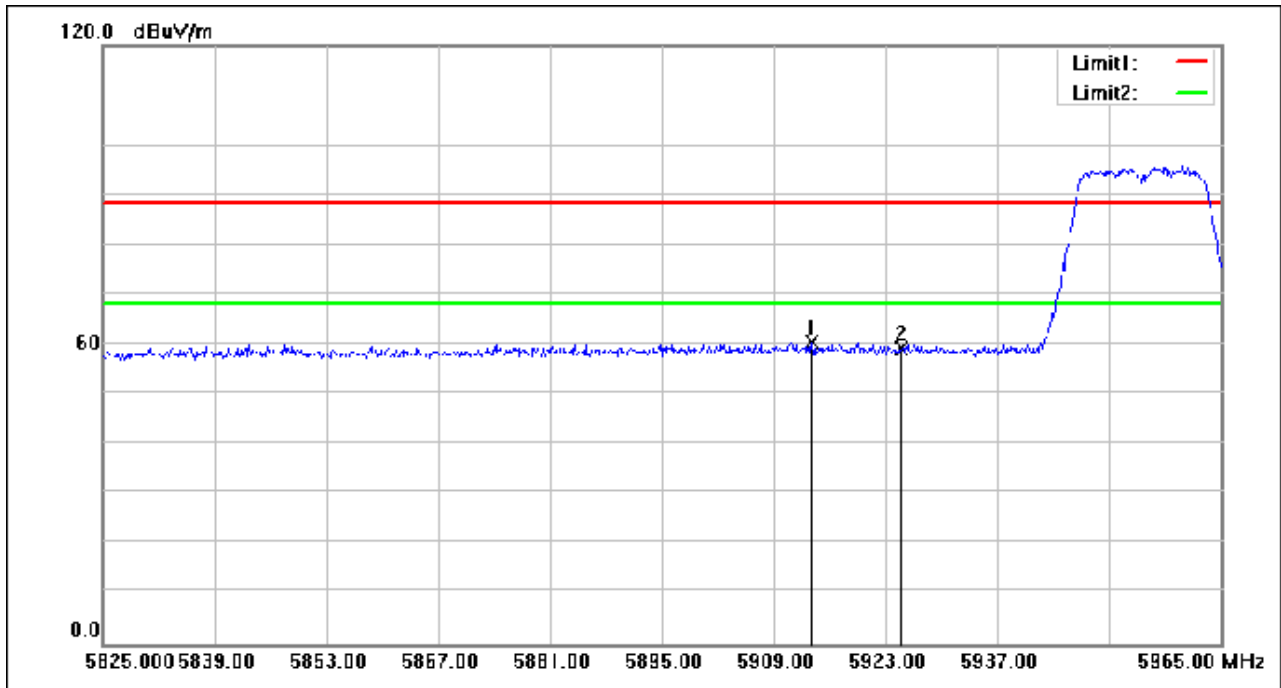
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Band5

Test Mode: 12; 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	5913.760	76.72	-16.13	60.59	88.30	-27.71	peak
2	5925.000	75.30	-16.09	59.21	88.30	-29.09	peak

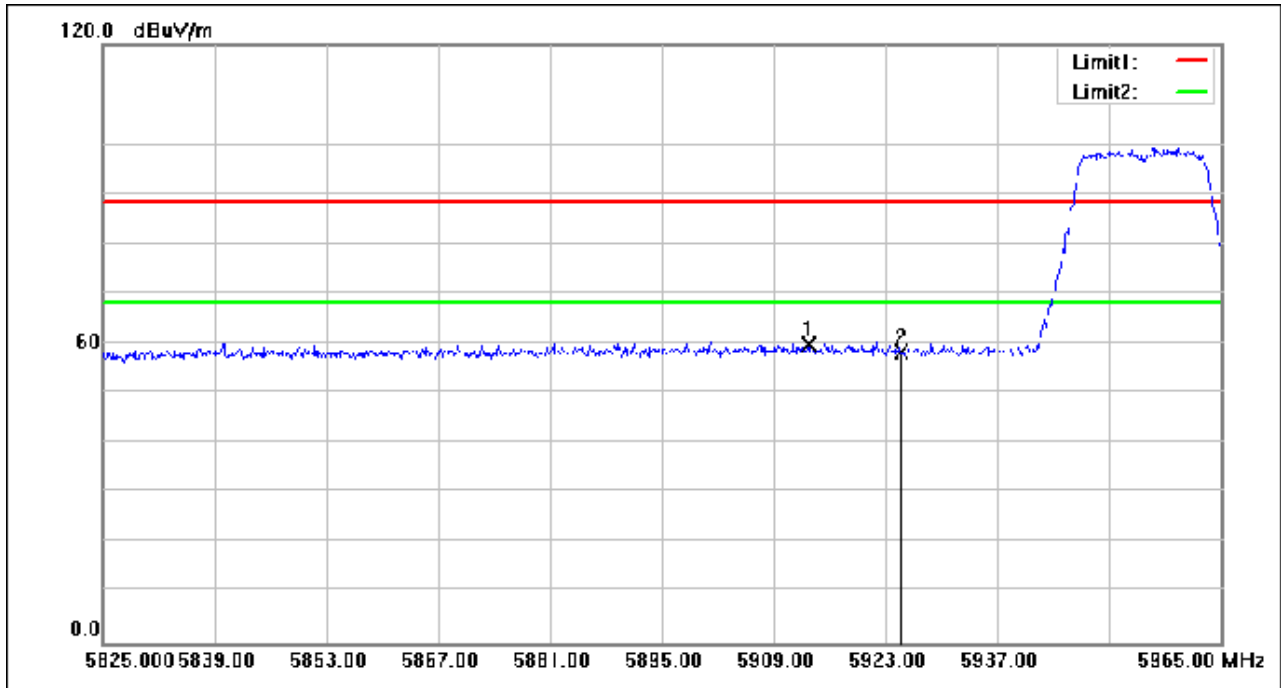
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Test Mode: 12; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5913.340	76.07	-16.14	59.93	88.30	-28.37	peak
2	5925.000	74.35	-16.09	58.26	88.30	-30.04	peak

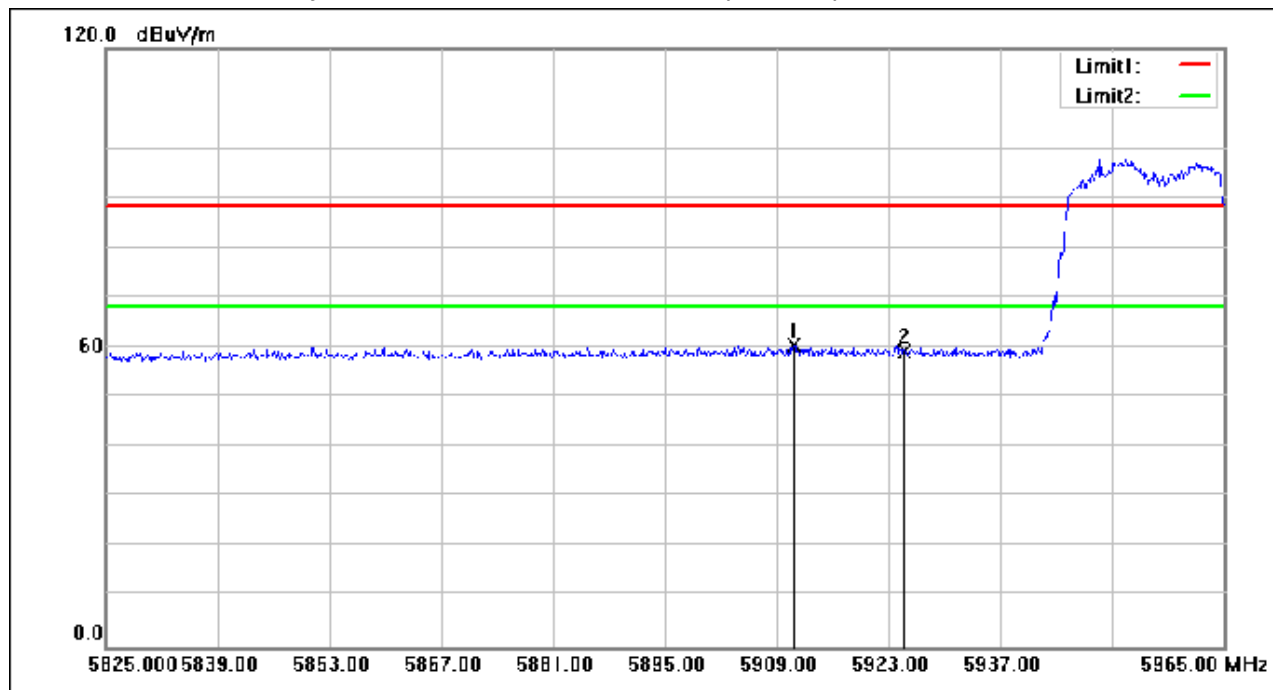
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Test Mode: 12; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5911.100	76.66	-16.14	60.52	88.30	-27.78	peak
2	5925.000	75.31	-16.09	59.22	88.30	-29.08	peak

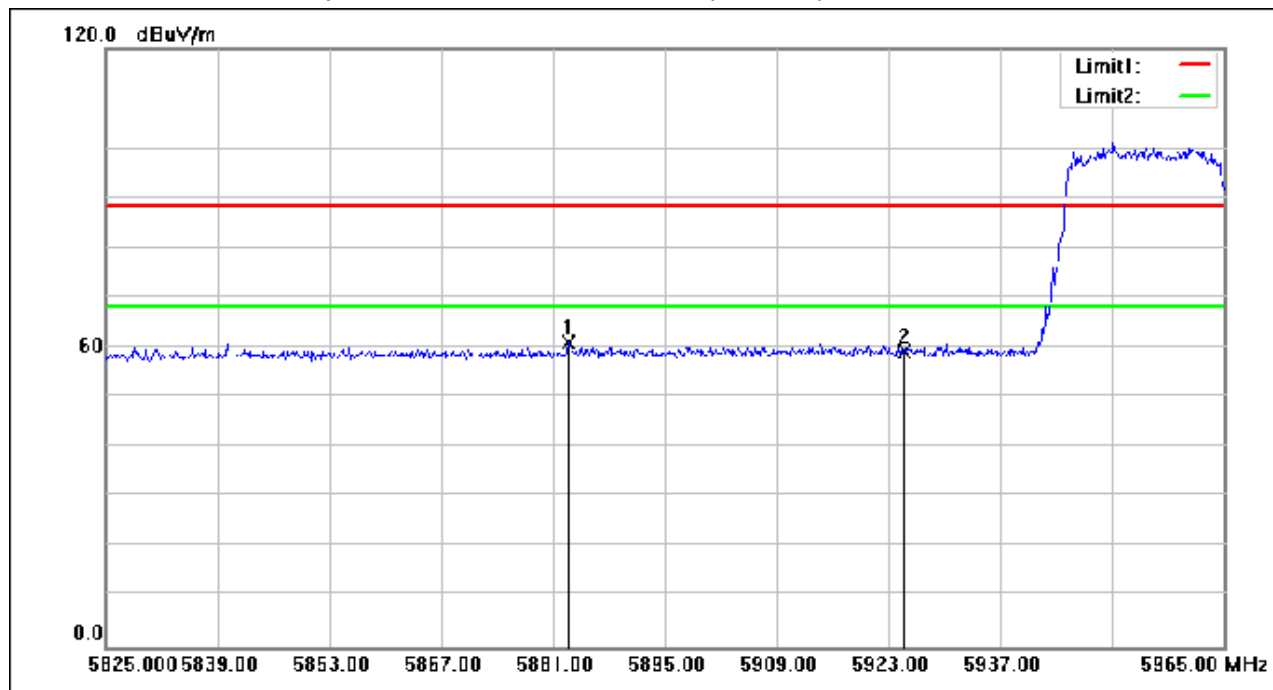
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; 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	5882.960	77.27	-16.27	61.00	88.30	-27.30	peak
2	5925.000	75.44	-16.09	59.35	88.30	-28.95	peak

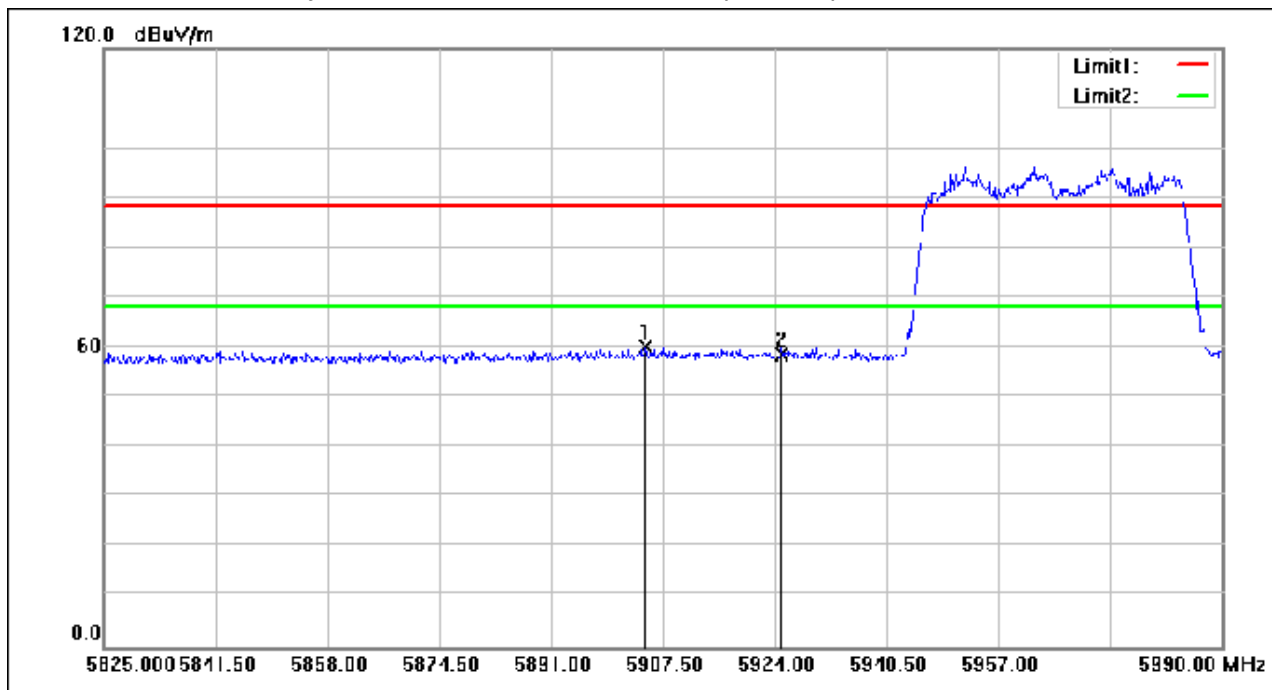
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5905.025	76.40	-16.18	60.22	88.30	-28.08	peak
2	5925.000	74.61	-16.09	58.52	88.30	-29.78	peak

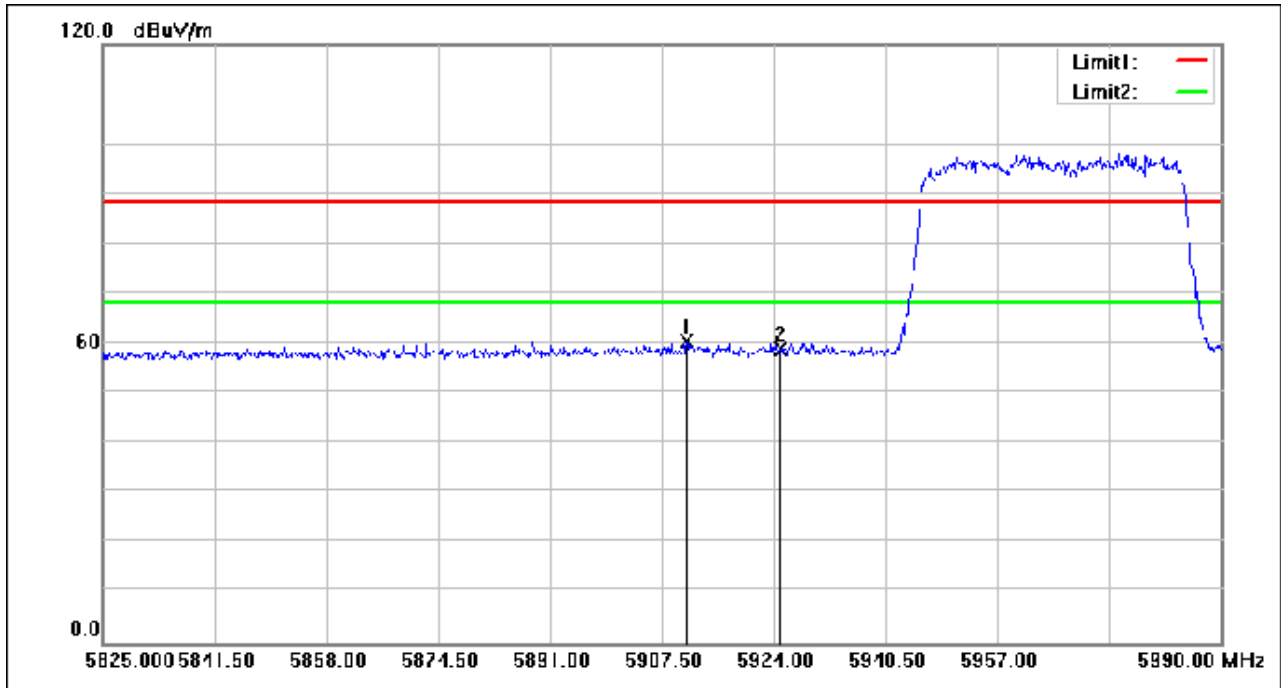
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 12; 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	5911.130	76.52	-16.14	60.38	88.30	-27.92	peak
2	5925.000	74.94	-16.09	58.85	88.30	-29.45	peak

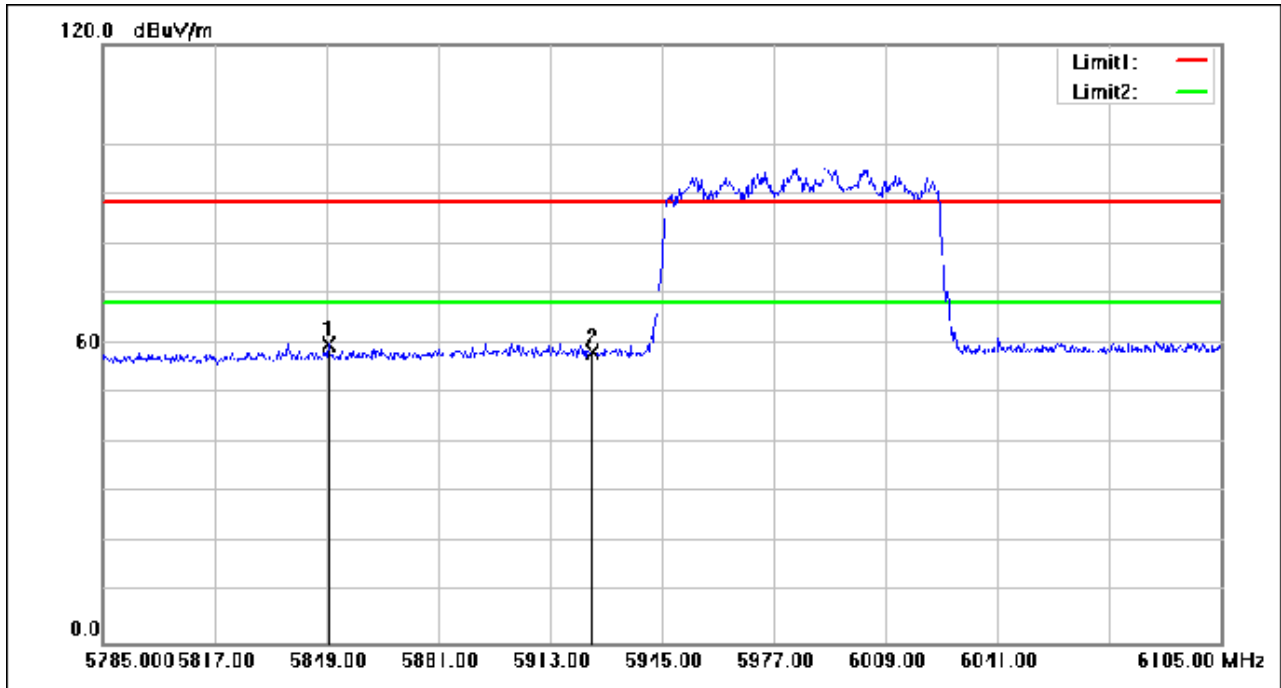
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5849.640	76.25	-16.41	59.84	88.30	-28.46	peak
2	5925.000	74.57	-16.09	58.48	88.30	-29.82	peak

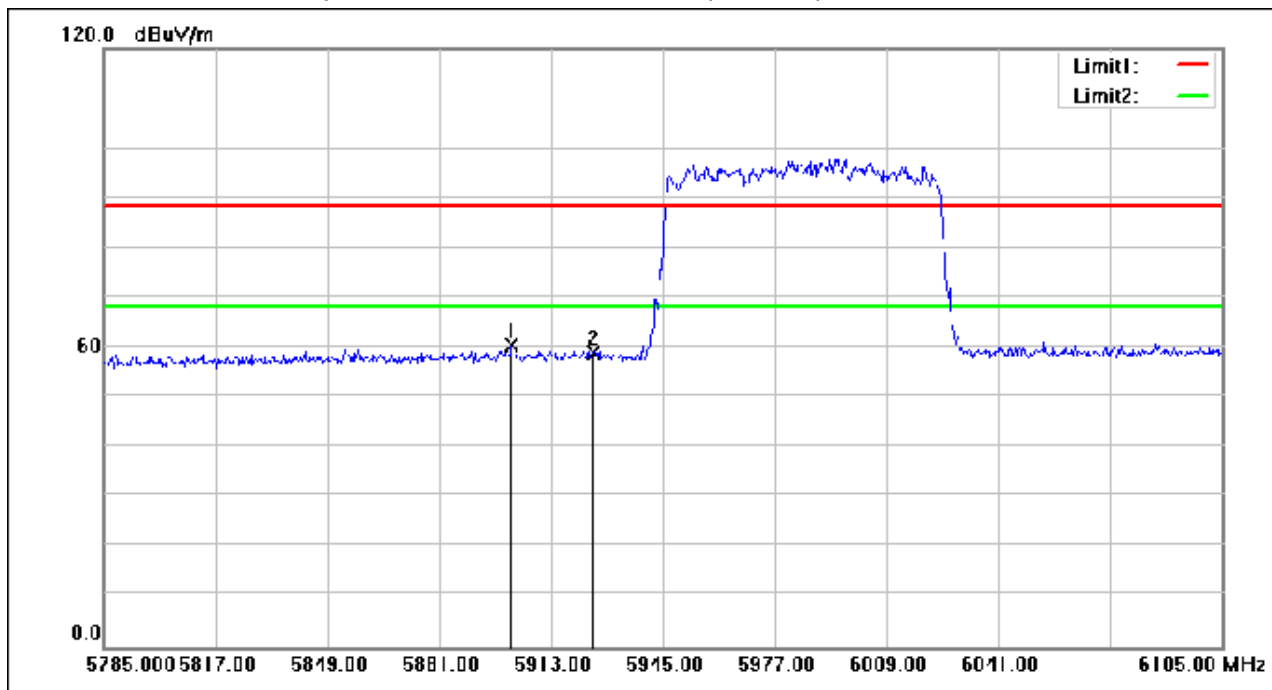
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5901.480	76.66	-16.19	60.47	88.30	-27.83	peak
2	5925.000	75.08	-16.09	58.99	88.30	-29.31	peak

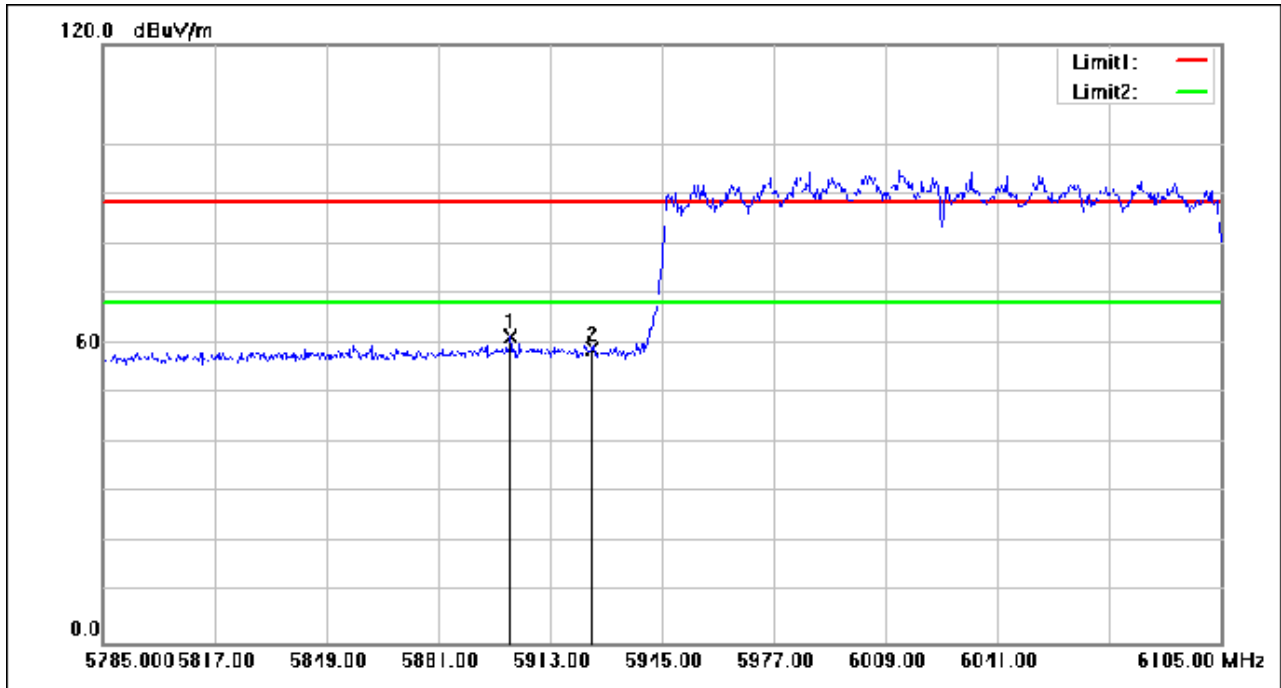
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5901.800	77.55	-16.19	61.36	88.30	-26.94	peak
2	5925.000	74.93	-16.09	58.84	88.30	-29.46	peak

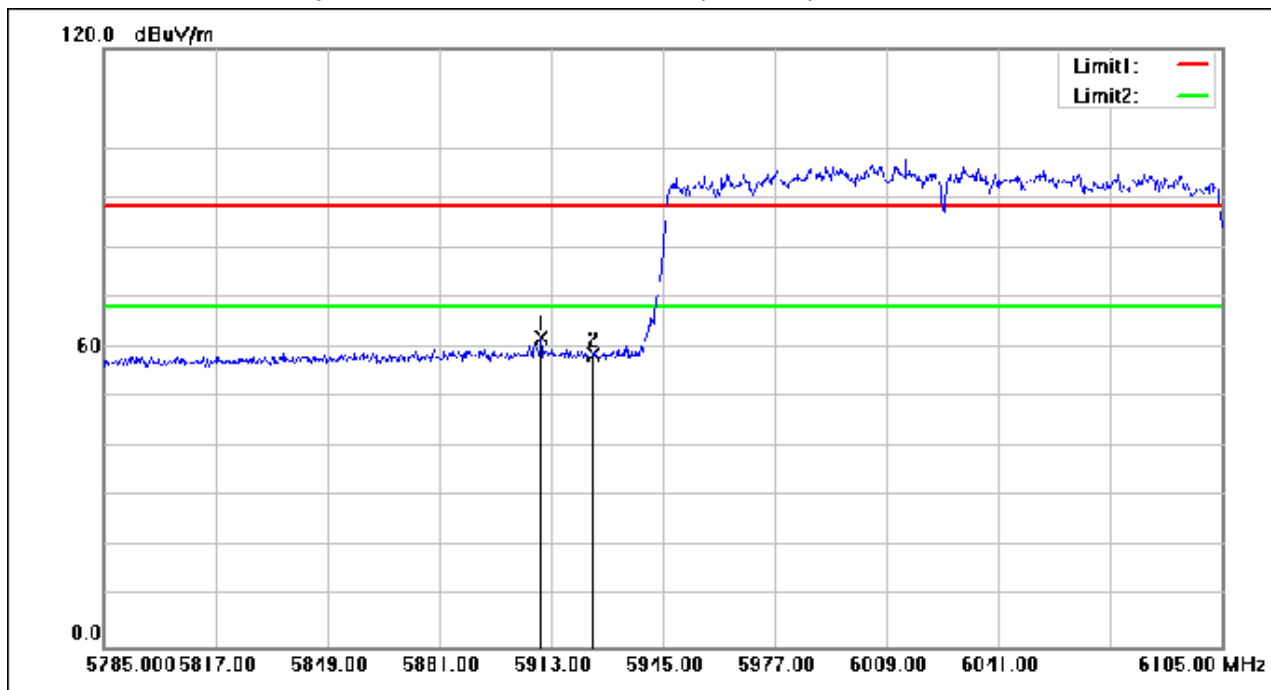
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Test Mode: 12; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 160MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5910.120	78.09	-16.15	61.94	88.30	-26.36	peak
2	5925.000	74.68	-16.09	58.59	88.30	-29.71	peak

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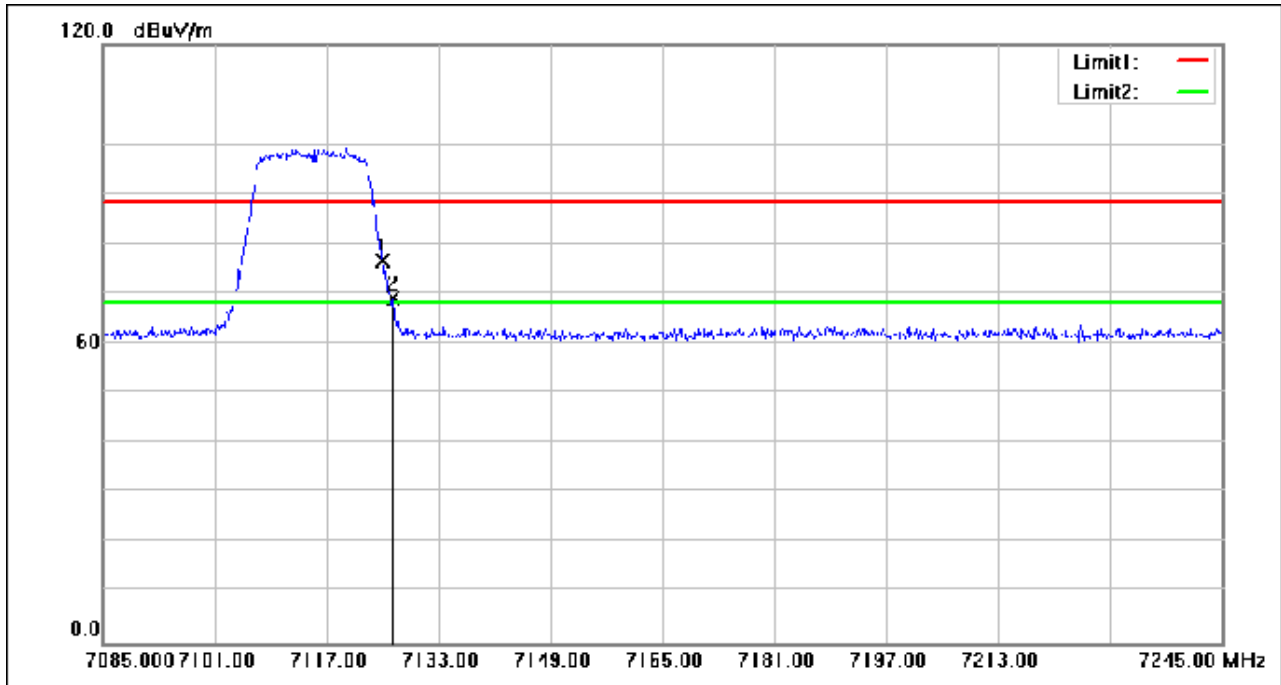
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Band8

Test Mode: 15; 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	7125.000	88.19	-11.51	76.68	88.30	-11.62	peak
2	7126.440	80.66	-11.51	69.15	88.30	-19.15	peak

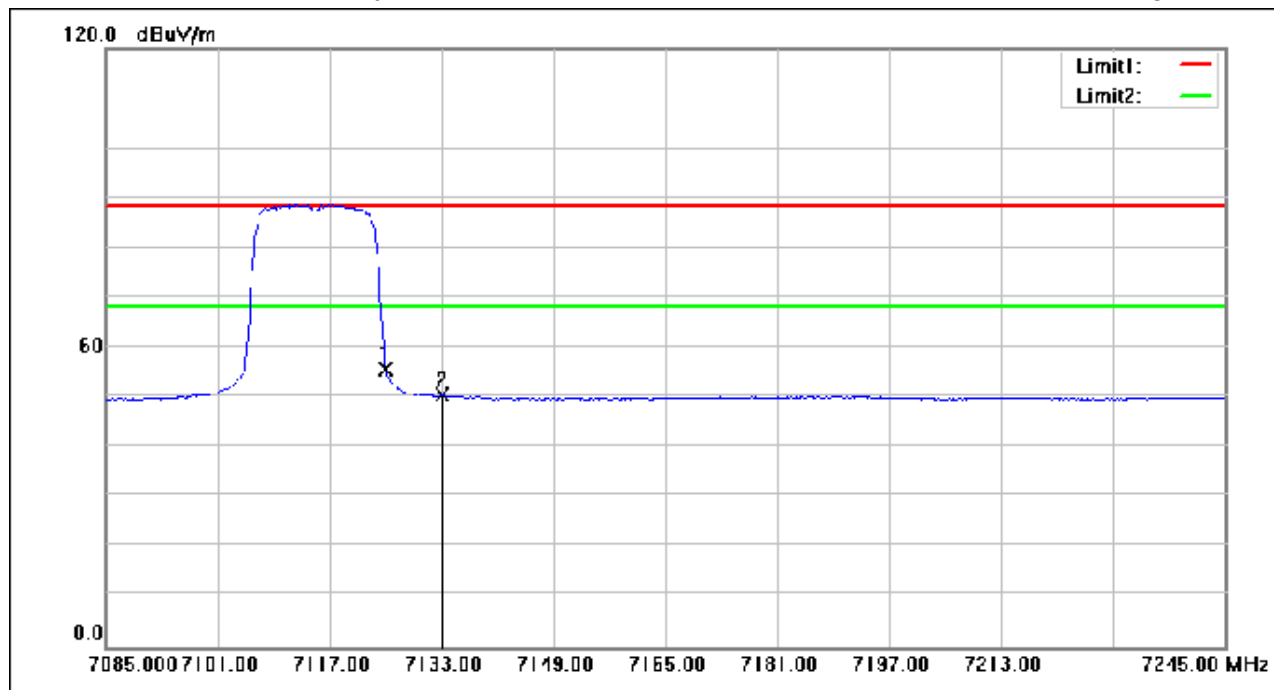
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	67.08	-11.51	55.57	68.30	-12.73	AVG
2	7133.000	62.00	-11.51	50.49	68.30	-17.81	AVG

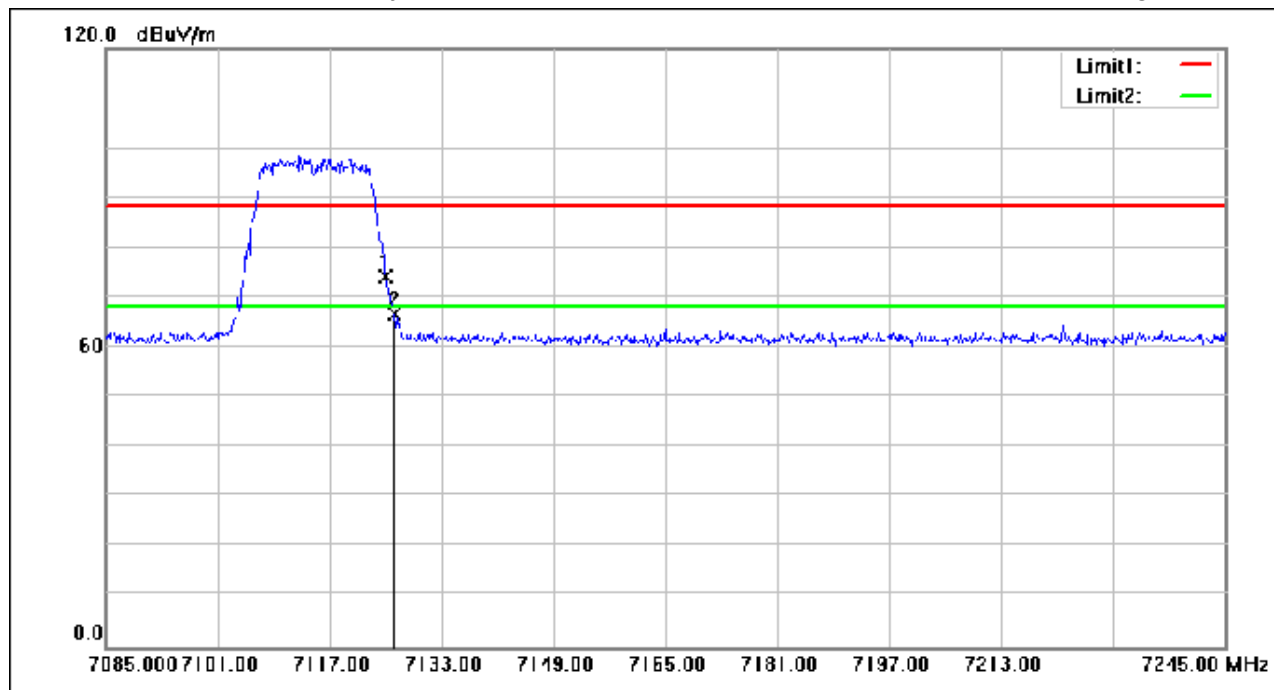
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Test Mode: 15; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	85.76	-11.51	74.25	88.30	-14.05	peak
2	7126.280	78.40	-11.51	66.89	88.30	-21.41	peak

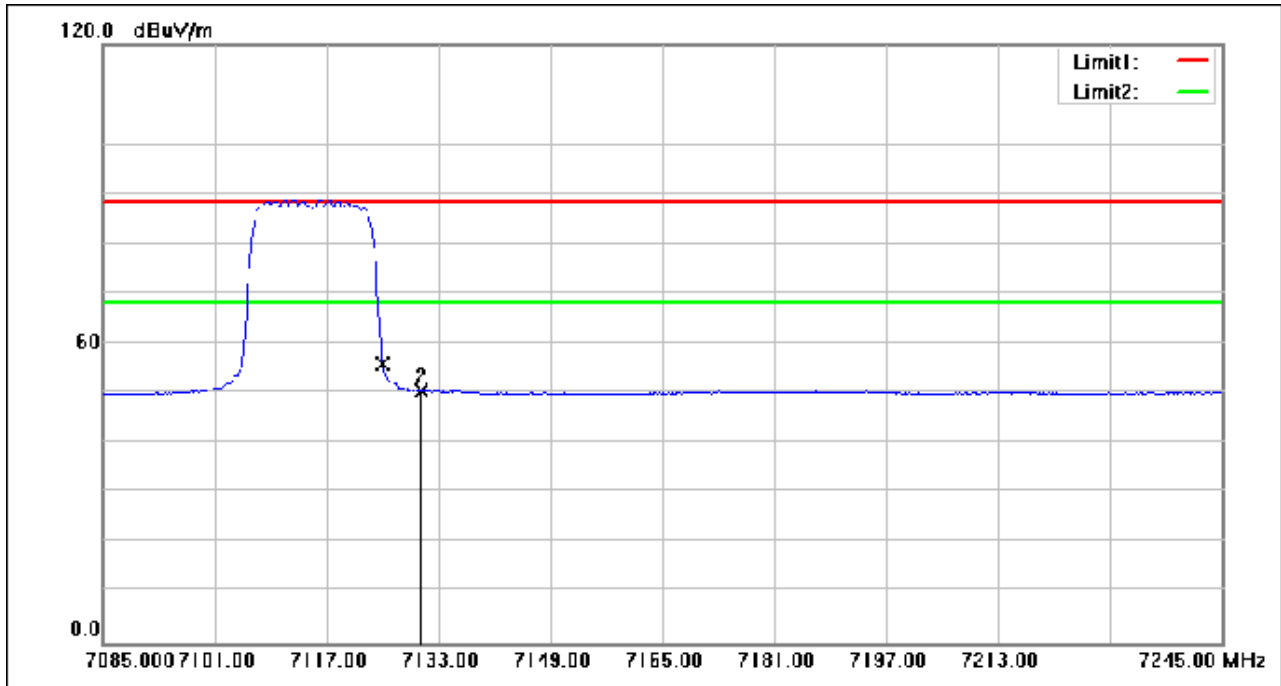
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Test Mode: 15; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	67.37	-11.51	55.86	68.30	-12.44	AVG
2	7130.600	62.19	-11.51	50.68	68.30	-17.62	AVG

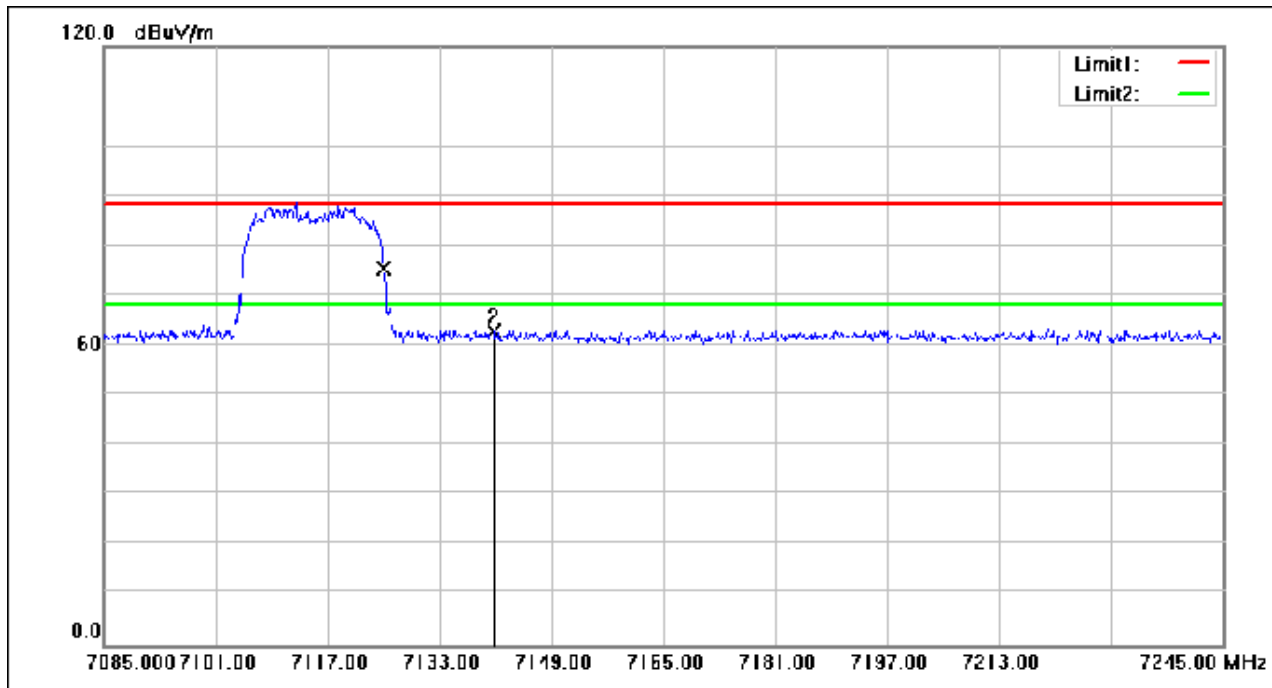
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Test Mode: 15; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	87.10	-11.51	75.59	88.30	-12.71	peak
2	7140.840	74.51	-11.51	63.00	88.30	-25.30	peak

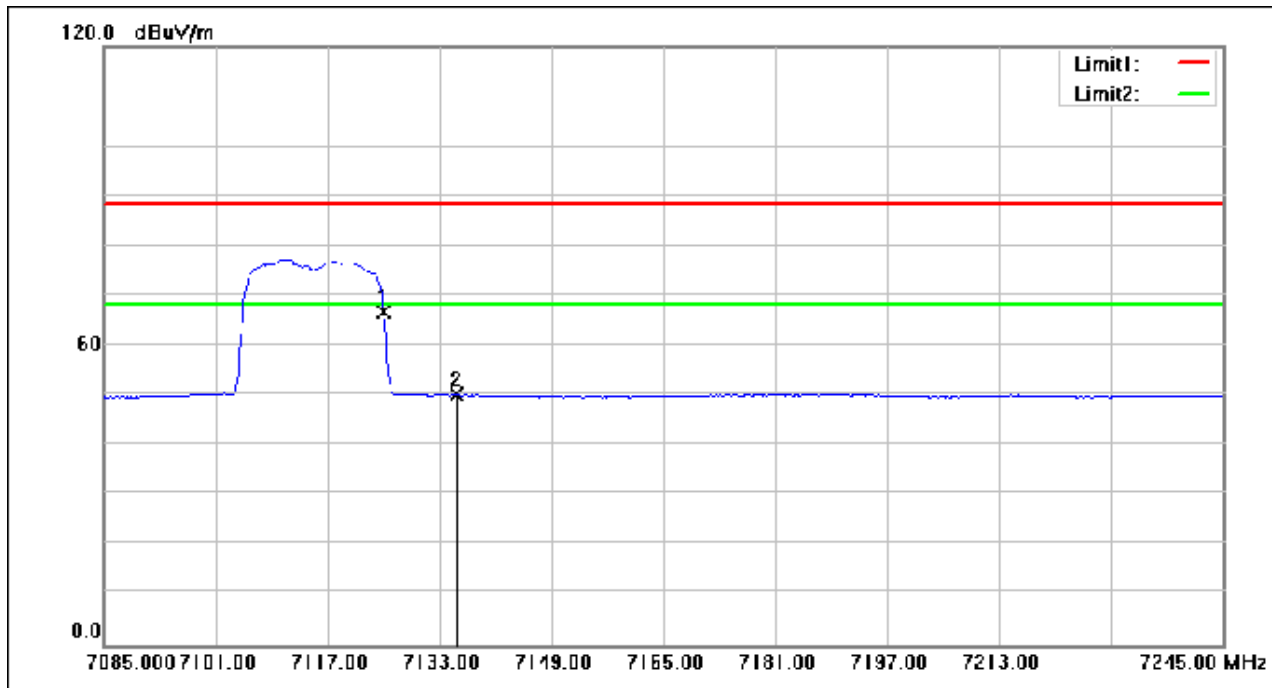
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 15; 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	7125.000	78.36	-11.51	66.85	68.30	-1.45	AVG
2	7135.400	61.77	-11.51	50.26	68.30	-18.04	AVG

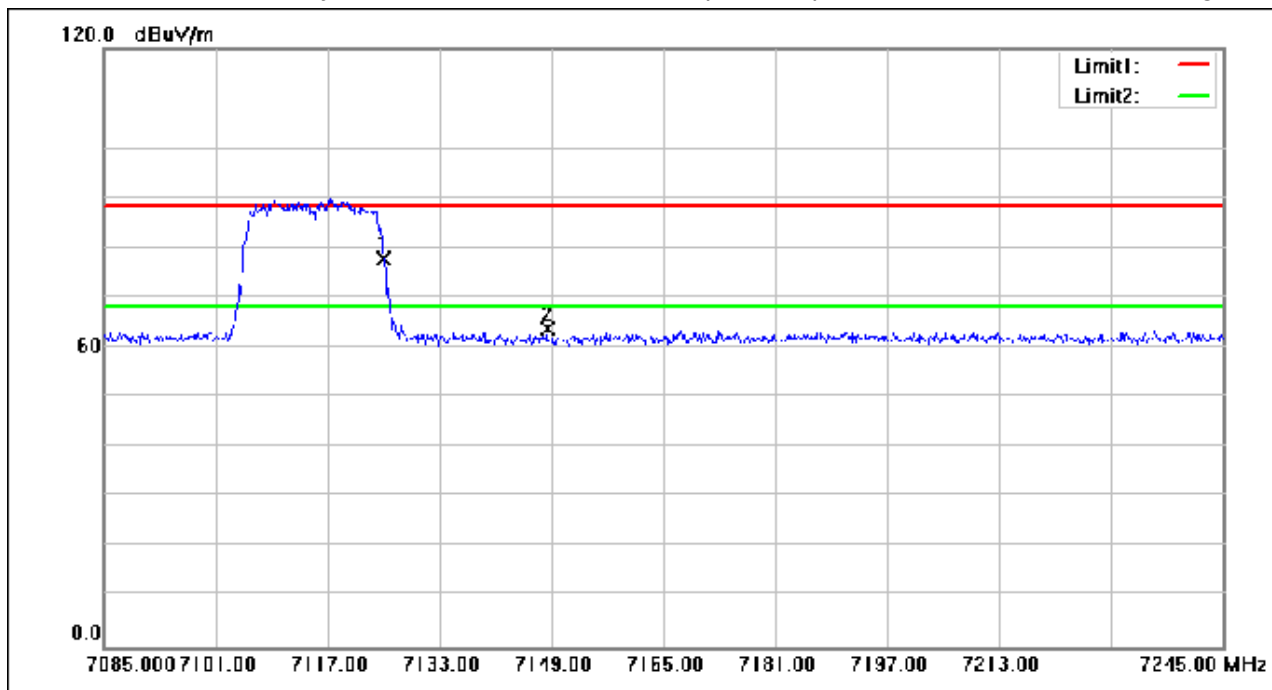
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	89.32	-11.51	77.81	88.30	-10.49	peak
2	7148.360	75.11	-11.50	63.61	88.30	-24.69	peak

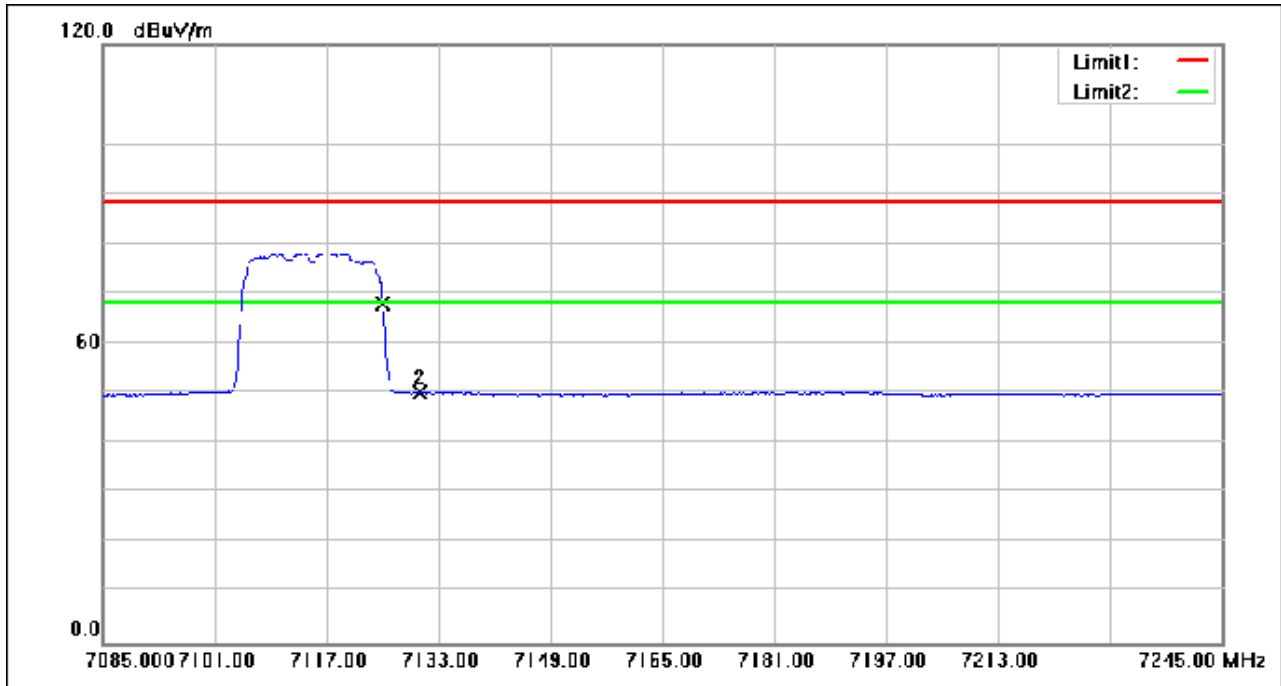
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	79.57	-11.51	68.06	68.30	-0.24	AVG
2	7130.280	61.86	-11.51	50.35	68.30	-17.95	AVG

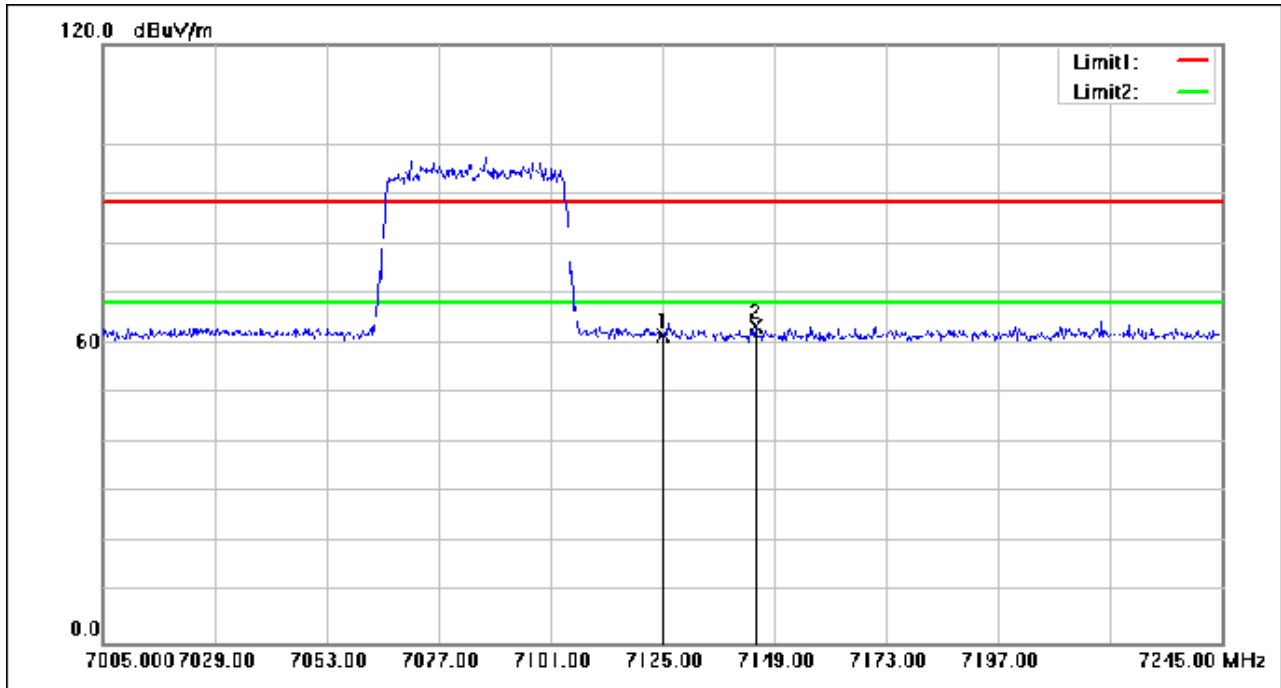
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	73.15	-11.51	61.64	88.30	-26.66	peak
2	7144.920	74.93	-11.50	63.43	88.30	-24.87	peak

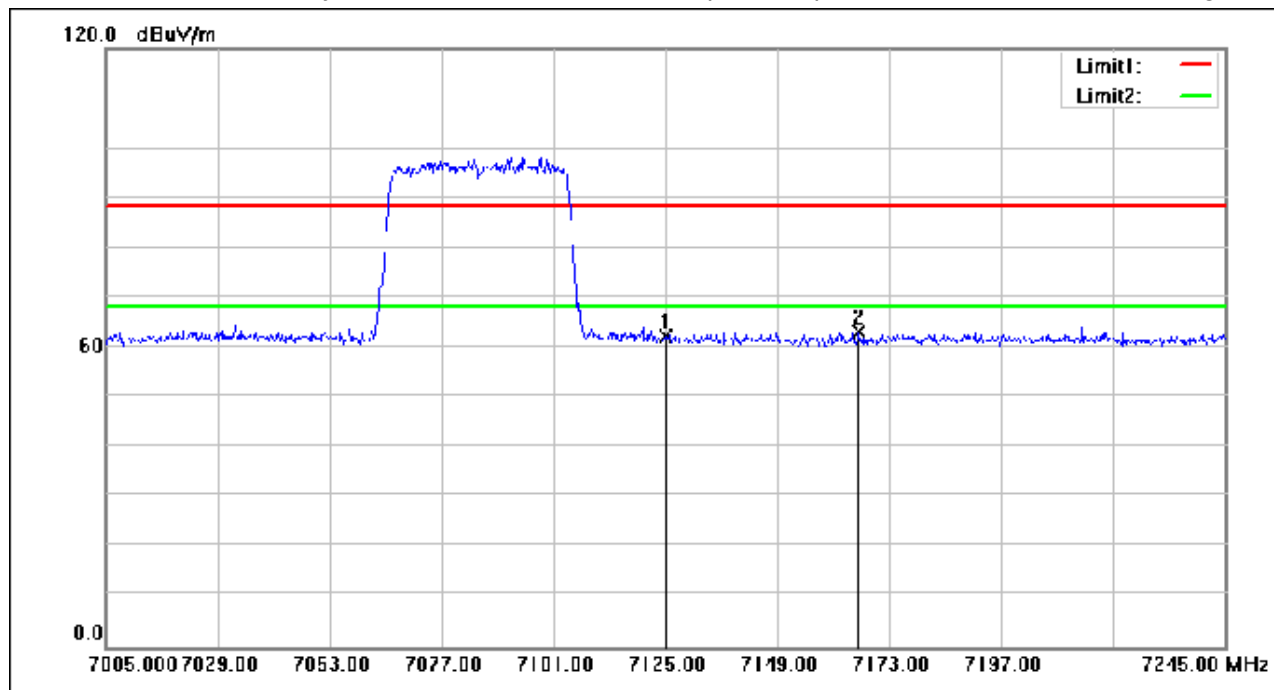
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Test Mode: 15; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	73.73	-11.51	62.22	88.30	-26.08	peak
2	7166.520	74.68	-11.49	63.19	88.30	-25.11	peak

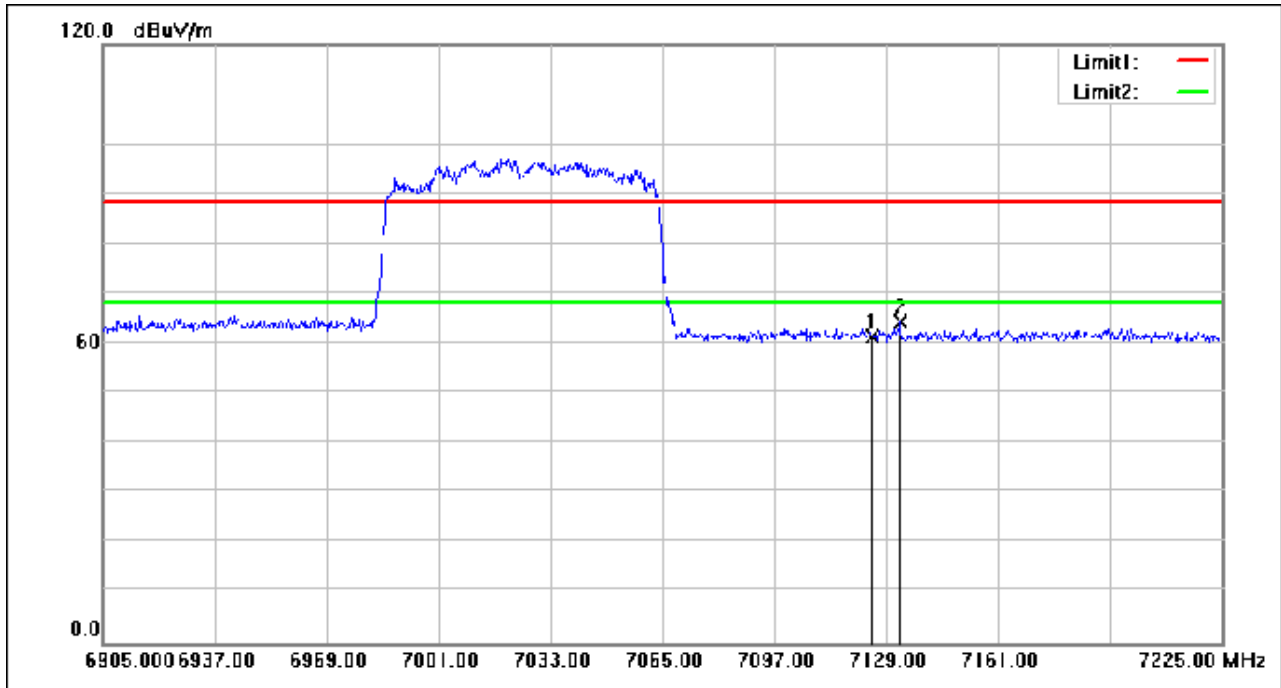
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Test Mode: 15; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	72.79	-11.51	61.28	88.30	-27.02	peak
2	7132.840	75.74	-11.51	64.23	88.30	-24.07	peak

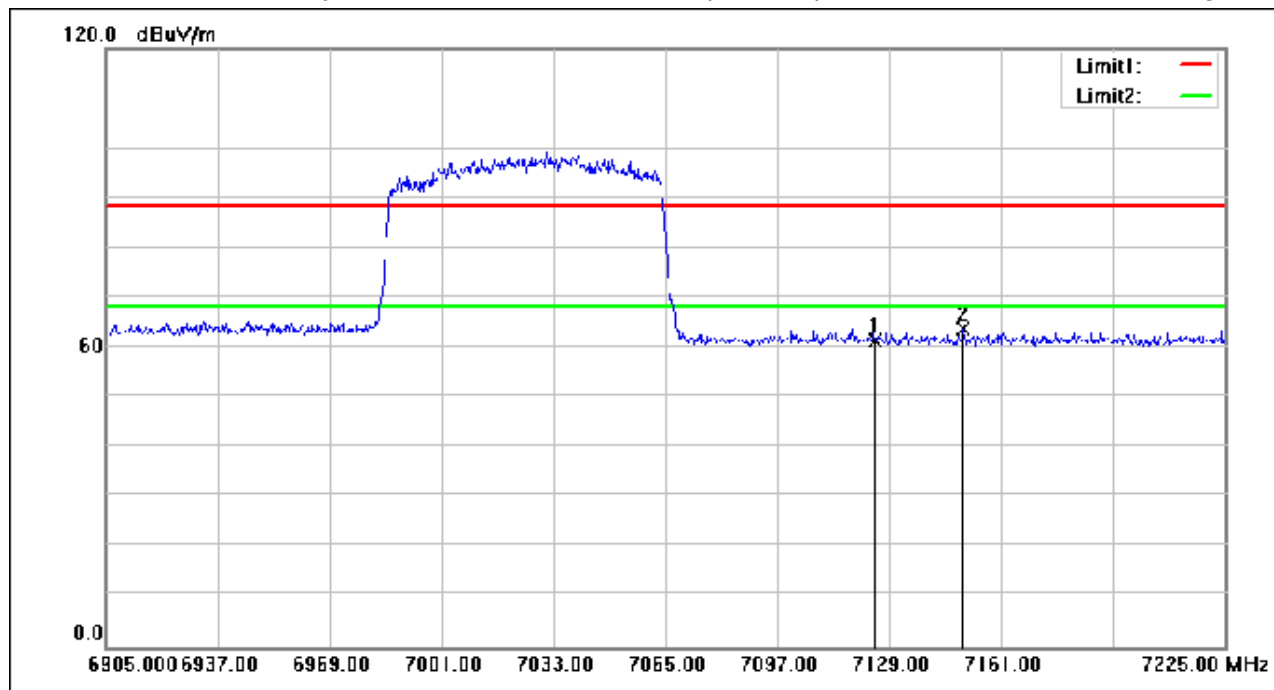
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Test Mode: 15; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	72.96	-11.51	61.45	88.30	-26.85	peak
2	7150.120	75.25	-11.50	63.75	88.30	-24.55	peak

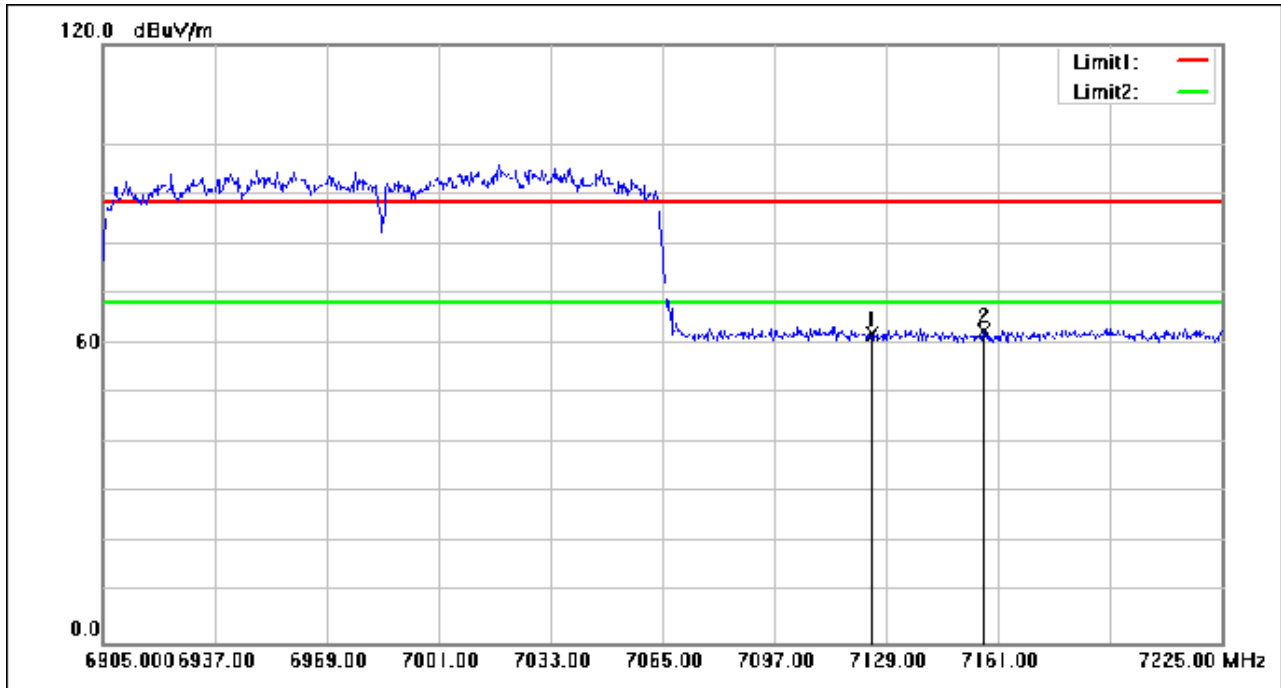
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Test Mode: 15; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	73.48	-11.51	61.97	88.30	-26.33	peak
2	7156.840	74.08	-11.50	62.58	88.30	-25.72	peak

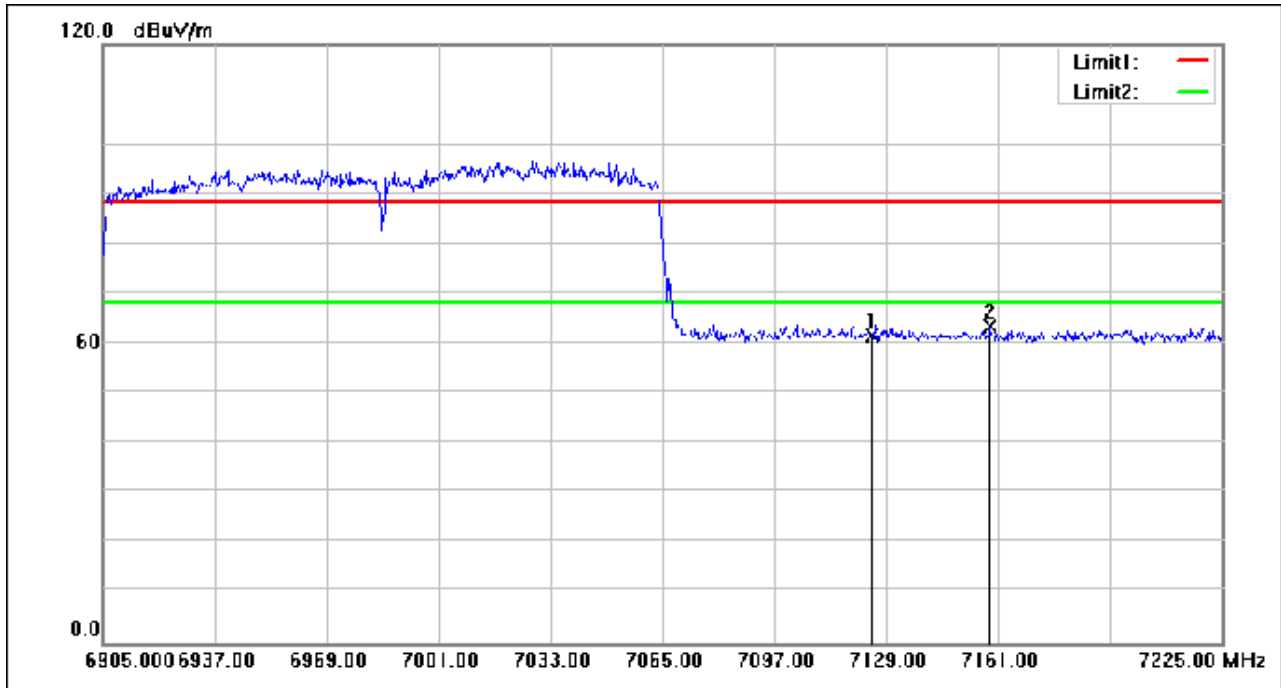
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Test Mode: 15; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7125.000	73.15	-11.51	61.64	88.30	-26.66	peak
2	7158.760	74.82	-11.49	63.33	88.30	-24.97	peak

6 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2406000993AT

7 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2406000993AT

- End of the Report -